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ThinkPad®

*Personal Systems Reference
Lenovo ThinkPad Notebooks
2005 to present - withdrawn*

March 2008 - Version 337



lenovo.com

ThinkPad® X31 (2672) - October 2003 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X3 UltraBase™	Mini PCI wireless	CDC: modem/Bluetooth™	Sec Ethernet chip	Ethernet planar Preload	WH (W) Entry (E)	Gbl (G) TAA	Avail date
2672-27U	Pentium® M	1.4	256MB	12.1" XGA	20GB ⁸	None	Optional	Open; wireless upg ³⁶	Modem	Yes	10/100	XP Pro	E	Oct 03
2672-2BU	Pentium M	1.4	256MB	12.1" XGA	20GB	None	Optional	*Intel 11b Wi-Fi ³²	Modem	Yes	10/100	XP Pro	E	Oct 03
2672-N7U	Pentium M	1.6	256MB	12.1" XGA	40GB	None	Optional	Open; wireless upg	Modem	Yes	10/100	XP Pro	W G	Oct 03
2672-P7U	Pentium M	1.6	256MB	12.1" XGA	40GB	None	Optional	Open; wireless upg	Modem	Yes	Gigabit	XP Pro	W	Oct 03
2672-PBU	Pentium M	1.6	256MB	12.1" XGA	40GB	None	Optional	*Intel 11b Wi-Fi	Modem	Yes	Gigabit	XP Pro	W G	Oct 03
2672-PUU	Pentium M	1.6	256MB	12.1" XGA	40GB	None	Optional	11a/b/g Wi-Fi ³²	Modem	Yes	Gigabit	XP Pro	W	Oct 03
2672-PXU	Pentium M	1.6	256MB	12.1" XGA	40GB	None	Optional	Cisco® 802.11b ³²	Modem	Yes	Gigabit	XP Pro	W G	Oct 03
2672-REU	Pentium M	1.6	512MB	12.1" XGA	40HS	None	Optional	*Intel 11b Wi-Fi	Mod/Blue	Yes	Gigabit	XP Pro	W	Oct 03
2672-RHU	Pentium M	1.6	512MB	12.1" XGA	40HS	None	Optional	11a/b/g Wi-Fi ³²	Mod/Blue	Yes	Gigabit	XP Pro	W	Oct 03
2672-NYU	Pentium M	1.6	256MB	12.1" XGA	40GB	None	Optional	Open; wireless upg	Modem	Yes	10/100	XP Pro	W TAA	Dec03
Positioning Processor	Ultimate mobility in a versatile ultraportable; one spindle NYU: US Government model (Trade Act Agreement-compliant) Intel® Pentium® M Processor 1.4 or 1.6GHz with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus													
L2 cache	1MB / on die (at processor speed) / ECC													
Memory	256 or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (memory controller limits memory speed to 266MHz) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available													
Diskette drive	None standard / use optional Ultrabay™-based (inX3) or USB-based diskette drive													
Optical	None standard / optional USB-based optical, or optional Ultrabay 2000-based optical removable from optional X3 UltraBase, ThinkPad Dock, or ThinkPad Dock II													
Ultrabay™ 2000 Disk	Supports Ultrabay 2000 devices in optional X3 UltraBase (or optional ThinkPad Dock II) 20GB (4200 rpm), 40GB ⁸ (4200 rpm), or 40GB (HS 5400 rpm), 9.5mm, ATA-100 / removable and upgradable / 9.5mm high bay													
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits													
Graphics controller	ATI® Mobility RADEON® / AGP 4X / 16MB DDR1 (DDR-SDRAM)													
Graphics - external	External monitor support via analog DB-15 connector / up to 1280x1024x16.7M at 85Hz													
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	without X3 UltraBase: 10.7" x 8.8" x .98-1.19"; 273mm x 223mm x 24.9-30.2mm with X3 UltraBase and optical: 10.8" x 8.9" x 2.0-2.3"; 273 x 227 x 51-58mm													
Travel weight ²	with battery: 3.6 lb (1.65kg); with X3 UltraBase and optical: 5.6 lb (2.54kg)													
Case material	Color: black; All: titanium composite in the top cover / magnesium alloy bottom case													
Battery - type	Li-Ion 6-cell / intelligent / supports opt Extended Life Battery on base (for two batteries) supports Ultrabay battery or optional 6-cell battery in X3 UltraBase (for two batteries)													
Battery - life ¹⁰	5.3 to 6.0 hrs; with std battery and optional Extended Life Battery: up to 10.1 hrs													
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (Ricoh® R5C554 CardBus/1394 combo controller, Mini PCI, ext expansion) / LPC bus 33MHz (PC87392 Super I/O)													
Media slice	Optional X3 UltraBase media slice (see right side)													
Compact Flash slot	Compact Flash slot / 1 CF+ Type II / supports optional Microdrive™													
PC Card Std slot	One Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door													
IEEE 1394	IEEE 1394 (FireWire) port (4-pin)													
Ports	Two USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / parallel / IEEE 1394 (4-pin) / no serial, keyboard, or mouse ports													
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradeable													
Wireless upg ³⁶	Some: wireless upgradeable with wireless Mini PCI options													
11b Wi-Fi ³²	Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100 Network Connection 802.11b, Intel 82531 chipset													
Cisco 802.11b ³²	Some: 802.11b wireless ⁴ , Mini PCI, Cisco® Aironet® Wireless 802.11b													
11a/b/g Wi-Fi ³²	Some: 11a/b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5001X+ chipset													
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Agere® chipset													
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)													
Ethernet	Some: 10/100 ethernet on systemboard / Intel 82562EZ chipset (physical layer) / PXE													
Audio support	Some: Gigabit Ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE													
Security	Soft audio / ICH AC97 controller / DirectSound™ support / AD1981B AC97 codec / mono speaker / 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (pink) / headphone jack (green) / mic in (blue) [all 3.5mm]													
Security chip	Power-on password / dual hard disk password / supervisor password / security keyhole Embedded Security Subsystem 2.0 ³³ / hardware key storage / multi-factor authentication / local file encryption / enhances VPN security ¹⁶ / TCG-compliant													
Limited warranty ¹²	3 years/1 yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail													
128 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad X3 UltraBase media slice	46P7912											
256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad Port Replicator II	74P6733											
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad Mini Dock	287810U											
1 GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad Dock II	287710U											
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	USB Portable Diskette Drive	05K9276											
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad X30 Series Li-Ion Battery (6-cell)	92P1097											
11a/b/g Wireless CardBus Adapter	31P9101	ThinkPad X30 Series Extended Life Battery	02K7041											
11a/b/g Wireless Mini PCI Adapter	31P9701	ThinkPad Ultraportable 56W AC Adapter	02K6880											
ThinkVision® L192p 19" Monitor (black)	9419HB2	ServicePac®.22 2yr IOR 9x5 NBD	30L9190											
M400 Projector	0037A04	Other options at lenovo.com/options												
				56 watt AC Adapter										
				Asset ID™.34 (system-specific info in chip accessed over network)										
				PC 2001-compliant										
				ACPI 1.0b and 2.0-compliant										
				CIM and DMI 2.0-compliant										
				International Warranty Service ¹⁷										
				24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)										

See footnotes for important warranty information

* Powered by Intel Centrino™ mobile technology

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US models announced on October 7 or December 9, 2003

(X31O) October 2005

US models withdrawn effective April 2004, January 2005, or December 2005

ThinkPad® X31 (2884) - Express (February 2004) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X3 UltraBase™	Mini PCI wireless	CDC: modem/Bluetooth™	Security chip	Ethernet planar Preload	Avail date
2884-68U	Pentium® M	1.5	256MB	12.1" XGA	20GB ⁸		Optional	Open; wireless upg ³⁶	Modem	Yes	10/100 XP Pro	Feb 2004
2884-6KU	Pentium M	1.5	256MB	12.1" XGA	20GB		Optional	* Intel 11b Wi-Fi ³²	Modem	Yes	10/100 XP Pro	Feb 2004
2884-6LU	Pentium M	1.5	256MB	12.1" XGA	20GB	DVD	X3 UltraBase	* Intel 11b Wi-Fi	Modem	Yes	10/100 XP Pro	Feb 2004
2884-3UU	Pentium M	1.5	256MB	12.1" XGA	30GB		Optional	11b/g ³²	Modem	Yes	10/100 XP Pro	Feb 2004
2884-3WU	Pentium M	1.5	256MB	12.1" XGA	30GB	Combo	X3 UltraBase	11b/g	Modem	Yes	10/100 XP Pro	Feb 2004
2884-5KU	Pentium M	1.7	256MB	12.1" XGA	40GB		Optional	* Intel 11b Wi-Fi	Modem	Yes	Gigabit XP Pro	Feb 2004
2884-5LU	Pentium M	1.7	256MB	12.1" XGA	40GB	Combo	X3 UltraBase	* Intel 11b Wi-Fi	Modem	Yes	Gigabit XP Pro	Feb 2004
2884-4LU	Pentium M	1.7	256MB	12.1" XGA	40HS	Combo	X3 UltraBase	* Intel 11b Wi-Fi	Modem	Yes	Gigabit XP Pro	Feb 2004
2884-4WU	Pentium M	1.7	512MB	12.1" XGA	40HS	Combo	X3 UltraBase	11b/g	Modem	Yes	Gigabit XP Pro	Feb 2004
<p>• These small and medium business (SMB) models are part of the US Think Express Program • The 2884 has a 1 year limited warranty</p>												
Positioning Processor	<p><i>Ultimate mobility in a versatile ultraportable; one spindle</i> Intel® Pentium® M Processor 1.5 or 1.7GHz with enhanced Intel SpeedStep™ technology¹ and 400MHz system bus</p>											
L2 cache	<p>1MB / on die (at processor speed) / ECC</p>											
Memory	<p>256MB or 512MB std / 2GB max⁷ / PC2700 333MHz DDR1 (memory controller limits speed to 266MHz) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available</p>											
Diskette drive	<p>None standard / use optional Ultrabay™-based (inX3) or USB-based diskette drive</p>											
DVD	<p><i>Some:</i> DVD-ROM / 8X-3.3X⁹ speed / single-layer / removable from Ultrabay 2000 of X3</p>											
Combo	<p><i>Some:</i> DVD-ROM/CD-RW / 16X/10X/24X/8X²¹ speed / removable from Ultrabay 2000</p>											
Ultrabay™ 2000	<p>Supports Ultrabay 2000 devices in std or opt X3 UltraBase (or opt ThinkPad Dock II)</p>											
Disk	<p>20GB⁸ (4200 rpm), 30GB (4200 rpm), or 40GB (4200 rpm or HS 5400 rpm), 9.5mm, ATA-100 / removable, upgradable / 9.5mm high bay</p>											
Display	<p>12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</p>											
Graphics controller	<p>ATI® MOBILITY™ RADEON® / AGP 4X / 16MB DDR1 (DDR-SDRAM)</p>											
Graphics - external	<p>External monitor support via analog DB-15 connector / up to 1280x1024x16.7M at 85Hz</p>											
Keyboard	<p>Standard-size²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap</p>											
ThinkLight™	<p>Illuminates the keyboard to improve visibility in low-light conditions</p>											
Dimensions ³	<p><i>without X3 UltraBase:</i> 10.7" x 8.8" x .98-1.19"; 273mm x 223mm x 24.9-30.2mm <i>with X3 UltraBase and optical:</i> 10.8" x 8.9" x 2.0-2.3"; 273 x 227 x 51-58mm</p>											
Travel weight ²	<p><i>with battery:</i> 3.6 lb (1.65kg); <i>with X3 UltraBase and optical:</i> 5.6 lb (2.54kg)</p>											
Case material	<p>Color: black; All: titanium composite in the top cover / magnesium alloy bottom case</p>											
Battery - type	<p>Li-Ion 6-cell / intelligent / supports opt Extended Life Battery on base (for two batteries) supports Ultrabay battery or optional 6-cell battery in X3 UltraBase (for two batteries)</p>											
Battery - life ¹⁰	<p>Up to 5.5 hrs; <i>with std battery and optional Extended Life Battery:</i> up to 10.1 hrs</p>											
Architecture	<p>Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (Ricoch® R5C554 CardBus/1394 combo controller, Mini PCI, ext expansion) / LPC bus 33MHz (PC87392 Super I/O for infrared [dock-based diskette, serial, parallel])</p>											
Media slice	<p><i>Some:</i> X3 UltraBase media slice (see right side)</p>											
Docking Station	<p>Optional ThinkPad Dock or Dock II (includes Ultrabay 2000 and half-size PCI slot)</p>											
Compact Flash slot	<p>Compact Flash slot / 1 CF+ Type II / supports optional Microdrive™</p>											
PC Card Std slot	<p>One Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door</p>											
IEEE 1394	<p>IEEE 1394 (FireWire) port (4-pin)</p>											
Ports	<p>Two USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / parallel / IEEE 1394 (4-pin) / no serial, keyboard, or mouse ports</p>											
Wireless antenna	<p>UltraConnect™ antenna built into the display cover for optimal wireless signal reception</p>											
Mini PCI	<p>One Mini PCI type III slot (Communications Bay) / customer upgradeable</p>											
Wireless upg ³⁶	<p><i>Some:</i> wireless upgradable with wireless Mini PCI options</p>											
11b Wi-Fi ³²	<p><i>Some:</i> 11b Wi-Fi³² wireless⁴, Mini PCI, Intel PRO/Wireless 2100 Network Connection</p>											
11b/g ³²	<p>802.11b, Intel 82531 chipset</p>											
CDC	<p><i>Some:</i> 11b/g Wi-Fi³² wireless⁴, Mini PCI, Atheros™ AR5004G chipset</p>											
Modem	<p>One Communications Daughter Card (CDC) socket / customer accessible</p>											
Ethernet	<p>56K⁶ V.90 (V.92-designed²⁵) modem in CDC / Agere® chipset</p>											
Audio support	<p><i>Some:</i> 10/100 ethernet on systemboard / Intel 82562EZ chipset (physical layer) / PXE</p>											
Security	<p><i>Some:</i> Gigabit Ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE</p>											
Security chip	<p>Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (pink) / headphone jack (green) / mic in (blue) [all 3.5mm]</p>											
Limited warranty ¹²	<p>Power-on password / dual hard disk password / supervisor password / security keyhole Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant</p>											
	<p>1 year - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² available</p>											
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad X3 UltraBase media slice	46P7912									
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad Port Replicator II	74P6733									
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad Mini Dock	287810U									
USB Portable Diskette Drive	05K9276	ThinkPad Dock II	287710U									
USB Fingerprint Reader	73P4774	ThinkPad X30 Series Li-Ion Battery (6-cell)	92P1097									
USB 2.0 Memory Key 512MB	22P9230	ThinkPad X30 Series Extended Life Battery	02K7041									
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	ThinkPad 72W AC/DC Combo Adapter	22P9010									
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	Powered USB 2.0 Port Combo Drive	22P9194									
11a/b/g Wireless CardBus Adapter	31P9101	Carrying Case - Leather Ultraportable	73P5186									
11a/b/g Wireless Mini PCI Adapter	31P9701	ServicePac® ²² 1yr IOR 9x5 NBD	30L9188									
ThinkVision® L192p 19" Monitor (black)	9419HB2	ServicePac 3yr IOR 9x5 NBD	30L9195									
M400 Projector	0037A04	ServicePac 3yr P&L P/U Depot	30L9192									
Preferred Pro USB Fingerprint Keyboard	73P4730	Other options at lenovo.com/options										
				<p>56 watt AC Adapter Asset ID™³⁴ (system-specific info in chip accessed over network) PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²</p>								

See footnotes for important warranty information
US models announced February 10, 2004
US models withdrawn effective October 2004 or December 2005

* Powered by Intel Centrino™ mobile technology

ThinkPad® X32 (2672) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical	UltraBase X3	ThinkPad UltraBase™	Mini PCI wireless	CDC: modem/Bluetooth™	Sec Ethernet chip	WH (W) Gbl (G) Avail	Preload Entry TAA	date
2672-KBU	Pentium® M 755	2.0	512MB	12.1" XGA	60HS	None	Optional	* Intel 11a/b/g ³²		Mod/Blue	Yes	Gigabit XP Pro	W	Apr 05
2672-M2U	Pentium M 745	1.8	256MB	12.1" XGA	40HS	None	Optional	* Intel 11b/g ³²		Modem	Yes	Gigabit XP Pro	W	Apr 05
2672-KDU	Pentium M 755	2.0	512MB	12.1" XGA	80HS	None	Optional	* Intel 11a/b/g		Mod/Blue	Yes	Gigabit XP Pro	W	Apr 05
2672-8BU	Pentium M 735	1.7	512MB	12.1" XGA	40HS	None	Optional	* Intel 11b/g		Modem	Yes	Gigabit XP Pro	Entry	Apr 05
2672-A3U	Pentium M 725	1.6	512MB	12.1" XGA	40HS	None	Optional	* Intel 11b/g		Modem	Yes	Gigabit XP Pro	Entry	Apr 05
2672-M3U	Pentium M 745	1.8	256MB	12.1" XGA	40HS	None	Optional	Open; wireless upg ³⁶		Modem	Yes	Gigabit XP Pro	W G	Apr 05
2672-M4U	Pentium M 745	1.8	512MB	12.1" XGA	40HS	None	Optional	* Intel 11b/g		Modem	Yes	Gigabit XP Pro	W G	Apr 05
2672-L2U	Pentium M 745	1.8	256MB	12.1" XGA	40HS	None	Optional	Open; wireless upg		Modem	Yes	Gigabit XP Pro	W TAA	Apr 05
Positioning	<i>Ultimate mobility in a versatile ultraportable; one spindle</i>													
US Govt (TAA) ⁵	Model L1U: US Government model (Trade Act Agreement-compliant)													
Processor	Intel® Pentium® M Processor 725 (1.60GHz), 735 (1.70GHz), 745 (1.80GHz), or 755 (2.00GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus													
L2 cache	2MB / on die (at processor speed) / ECC													
Memory	256 or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (memory controller limits memory speed to 266MHz) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available													
Diskette drive	None standard / use optional Ultrabay™-based (inX3) or USB-based diskette drive													
Optical	None standard / optional USB-based optical, or optional Ultrabay 2000-based optical removable from optional X3 UltraBase, ThinkPad Dock, or ThinkPad Dock II													
Ultrabay™ 2000	Supports Ultrabay 2000 devices in optional X3 UltraBase (or optional ThinkPad Dock II)													
Disk	40GB ⁸ (HS 5400 rpm), 60GB (HS 5400 rpm), or 80GB (HS 5400 rpm), 9.5mm, ATA-100/removable and upgradable / 9.5mm high bay													
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits													
Graphics controller	ATI® MOBILITY™ RADEON® / AGP 4X / 16MB DDR1 (DDR-SDRAM)													
Graphics - external	External monitor support via analog DB-15 connector / up to 1280x1024x16.7M at 85Hz													
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	without X3 UltraBase: 10.7" x 8.8" x .98-1.19"; 273mm x 223mm x 24.9-30.2mm with X3 UltraBase and optical: 10.8" x 8.9" x 2.0-2.3"; 273 x 227 x 51-58mm with battery: 3.6 lb (1.65kg); with X3 UltraBase and optical: 5.6 lb (2.54kg)													
Travel weight ²	Color: black; All: titanium composite in the top cover / magnesium alloy bottom case													
Case material	Li-Ion 6-cell / intelligent / supports opt Extended Life Battery on base (for two batteries) supports Ultrabay battery or optional 6-cell battery in X3 UltraBase (for two batteries)													
Battery - type	Up to 5.7 hr; with std battery and optional Extended Life Battery: up to 10.0 hr													
Battery - life ¹⁰														
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (Ricoh® R5C554 CardBus/1394 combo controller, Mini PCI, ext expansion) / LPC bus 33MHz (PC87392 Super I/O)													
Media slice	Optional X3 UltraBase media slice (see right side)													
Compact Flash slot	Compact Flash slot / 1 CF+ Type II / supports optional Microdrive™													
PC Card Std slot	One Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door													
IEEE 1394	IEEE 1394 (FireWire) port (4-pin)													
Ports	Two USB (Version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / parallel / IEEE 1394 (4-pin) / no serial, keyboard, or mouse ports													
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable													
Wireless upg ³⁶	Some: wireless upgradable with wireless Mini PCI options													
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset													
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, Intel 82533 chipset													
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁸) modem in CDC / Agere® chipset													
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)													
Ethernet	Gigabit Ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (pink) / headphone jack (green) / mic in (blue) [all 3.5mm]													
Security	Power-on password / dual hard disk password / supervisor password / security keyhole													
Security chip	Embedded Security Subsystem 2.0 ³³ / Atmel® chip / TCG-compliant													
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad X3 UltraBase media slice	46P7912											
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad Port Replicator II	74P6733											
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad Mini Dock	287810U											
USB Fingerprint Reader	73P4774	ThinkPad Dock II	287710U											
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	USB Portable Diskette Drive	05K9276											
USB 2.0 Memory Key 512KB	40Y8596	ThinkPad X30 Series Li-Ion Battery (6-cell)	92P1097											
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad X30 Series Extended Life Battery	02K7041											
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	ThinkPad Ultraportable 56W AC Adapter	02K6880											
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	Carrying Case - Leather Ultraportable	73P5186											
11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus™ ²² 2-year LOR 9x5 NBD	41C9175											
Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ThinkPlus 3-year LOR 9x5 NBD	41C9176											
Preferred Pro USB Fingerprint Keyboard	73P4730	ThinkPlus 5-year LOR 9x5 NBD	41C9179											
Lenovo M500 Projector	0037A05	ThinkPlus 5-year P&L P/U Depot	41C9180											
ThinkVision® L201p 20.1" Monitor (black)	9320HB1	Other options at lenovo.com/options												
Software	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Update Connector™ ¹⁵ Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client Supports ThinkVantage™ technologies ThinkPad X3 UltraBase™ Right bay of X3 UltraBase supports most Ultrabay 2000 options: • Optional battery, CD-ROM, CD-RW, DVD-ROM, Zip 250MB, Combo • Optional HDD adapter for 2nd disk • Ultrabay Plus-compatible Ultrabay 2000 accessories: • CD-RW/DVD Combo IV Ultrabay 2000 22P6991 • Second HDD Adapter for Ultrabay 2000 08K6068 • Ultrabay 2000 Li-Ion battery 02K6646 • ThinkPad Multi-Burner Ultrabay 2000 Drive 22P7015 • Enhanced Drive Adapter for Ultrabay 2000 73P3268 X3 UltraBase bottom contains: • Bay for X30 battery (same as X31) Other features: • Second battery support (for Ultrabay battery or second 6-cell battery) • Stereo speakers (1 watt) • Security keyhole, UltraBase lock • Serial and parallel ports • PS/2 mouse port • Analog DB-15 monitor port • One USB port (Ver 2.0 only on X31) • Ethernet port and modem port • Retractable feet; 1.41 lb; 638g 56 watt AC Adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network) PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²													

See footnotes for important warranty information

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US models announced April 5, 2005

(X32) October 2006

US models withdrawn effective November 2005, April 2006, or October 2006

ThinkPad® X32 (2884) - Express - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical in	ThinkPad	Mini PCI	CDC: modem/	Sec	Ethernet	Limited	Avail
						UltraBase	X3 UltraBase™	wireless	Bluetooth™	chip	planar	warranty ¹²	date
2884-A2U	Pentium® M 725	1.6	256MB	12.1" XGA	40HS		Optional	* Intel 11b/g ³²	Modem	Yes	Gigabit	XP Pro	1 year Apr 05
2884-M2U	Pentium M 745	1.8	256MB	12.1" XGA	40HS	Combo	X3 UltraBase	* Intel 11b/g	Modem	Yes	Gigabit	XP Pro	1 year Apr 05
2884-M5U	Pentium M 745	1.8	512MB	12.1" XGA	40HS		Optional	* Intel 11b/g	Modem	Yes	Gigabit	XP Pro	1 year Apr 05
2884-K4U	Pentium M 755	2.0	512MB	12.1" XGA	60HS	Combo	X3 UltraBase	* Intel 11a/b/g ³²	Mod/Blue	Yes	Gigabit	XP Pro	1 year Apr 05

- These small and medium business (SMB) models are part of the US Think Express Program
- The 2884 has a 1 year limited warranty

Positioning	<i>Ultimate mobility in a versatile ultraportable; one spindle</i>										SOFTWARE¹⁴																																																																												
Processor	Intel® Pentium® M Processor 725 (1.60GHz), 745 (1.80GHz), or 755 (2.00GHz) with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										Windows XP Professional																																																																												
L2 cache	2MB / on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)																																																																												
Memory	256 or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (memory controller limits memory speed to 266MHz) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										◇ Disk-to-Disk Recovery (in hidden protected area)																																																																												
Diskette drive	None standard / use optional Ultrabay™-based (inX3) or USB-based diskette drive										Preloaded																																																																												
Combo	<i>Some: DVD-ROM/CD-RW / 16X/10X/24X/8X²¹ speed / removable from Ultrabay 2000 in X3 UltraBase</i>										• Rescue and Recovery™																																																																												
Ultrabay™ 2000	Supports Ultrabay 2000 devices in std or optional X3 UltraBase (or optional Dock II)										• Access IBM																																																																												
Disk	40GB⁸ (HS 5400 rpm) or 60GB (HS 5400 rpm), 9.5mm, ATA-100 / removable and upgradable / 9.5mm high bay										• Access Connections™																																																																												
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• Norton AntiVirus																																																																												
Graphics controller	ATI® MOBILITY™ RADEON® / AGP 4X / 16MB DDR1 (DDR-SDRAM)										• PC-Doctor™																																																																												
Graphics - external	External monitor support via analog DB-15 connector / up to 1280x1024x16.7M at 85Hz										• ThinkPad Utilities																																																																												
Keyboard	Standard-size ²⁶ keys / 97% size of T-Series / 87-key / 18.5mm pitch; 2.5mm stoke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										• Adobe Reader																																																																												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Update Connector™ ¹⁵																																																																												
Dimensions ³	<i>without X3 UltraBase: 10.7" x 8.8" x .98-1.19"; 273mm x 223mm x 24.9-30.2mm</i> <i>with X3 UltraBase and optical: 10.8" x 8.9" x 2.0-2.3"; 273 x 227 x 51-58mm</i> <i>with battery: 3.6 lb (1.65kg); with X3 UltraBase and optical: 5.6 lb (2.54kg)</i>										Downloadable																																																																												
Travel weight ²	<i>Color: black; All: titanium composite</i> in the top cover / magnesium alloy bottom case										• IBM Director Agent																																																																												
Case material	Li-Ion 6-cell / intelligent / supports opt Extended Life Battery on base (for two batteries)										• Software Delivery Assistant																																																																												
Battery - type	supports Ultrabay battery or optional 6-cell battery in X3 UltraBase (for two batteries)										• System Migration Assistant																																																																												
Battery - life ¹⁰	Up to 5.7 hr; <i>with std battery and optional Extended Life Battery: up to 10.0 hr</i>										• Client Security Software (for security chip)																																																																												
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (Ricoh® R5C554 CardBus/1394 combo controller, Mini PCI, ext expansion) / LPC bus 33MHz (PC87392 Super I/O)										License (CD not included)																																																																												
Media slice	<i>Some: X3 UltraBase media slice</i> (see right side)										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client																																																																												
Compact Flash slot	Compact Flash slot / 1 CF+ Type II / supports optional Microdrive™										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage																																																																												
PC Card Std slot	One Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door										ThinkPad X3 UltraBase™																																																																												
IEEE 1394	IEEE 1394 (FireWire) port (4-pin)										Right bay of X3 UltraBase supports most Ultrabay 2000 options:																																																																												
Ports	Two USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / parallel / IEEE 1394 (4-pin) / no serial, keyboard, or mouse ports										• Optional battery, CD-ROM, CD-RW, DVD-ROM, Zip 250MB, Combo																																																																												
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception										• Optional HDD adapter for 2nd disk																																																																												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradeable										• Ultrabay Plus-compatible																																																																												
Intel 11b/g ³²	<i>Some: 11b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset</i>										Ultrabay 2000 accessories:																																																																												
Intel 11a/b/g ³²	<i>Some: 11a/b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2915ABG, Intel 82533 chipset</i>										• CD-RW/DVD Combo IV Ultrabay 2000 22P6991																																																																												
CDC	One Communications Daughter Card (CDC) socket / customer accessible										• Second HDD Adapter for Ultrabay 2000 08K6068																																																																												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Agere® chipset										• Ultrabay 2000 Li-Ion battery 02K6646																																																																												
Bluetooth™	<i>Some: Bluetooth wireless technology / in CDC (with modem)</i>										• ThinkPad Multi-Burner Ultrabay 2000 Drive 22P7015																																																																												
Ethernet	Gigabit Ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE										• Enhanced Drive Adapter for Ultrabay 2000 73P3268																																																																												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (pink) / headphone jack (green) / mic in (blue) [all 3.5mm]										X3 UltraBase bottom contains:																																																																												
Security	Power-on password / dual hard disk password / supervisor password / security keyhole										• Bay for X30 battery (same as X31)																																																																												
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant										Other features:																																																																												
Limited warranty ¹²	1 year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available										• Second battery support (for Ultrabay battery or second 6-cell battery)																																																																												
128MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad X3 UltraBase media slice	46P7912	256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad Port Replicator II	74P6733	512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad Mini Dock	287810U	1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad Dock II	287710U	USB Fingerprint Reader	73P4774	USB Portable Diskette Drive	05K9276	USB 2.0 Portable Multi-Burner	22P9163	ThinkPad X30 Series Li-Ion Battery (6-cell)	92P1097	USB 2.0 Memory Key 256MB	22P9228	ThinkPad X30 Series Extended Life Battery	02K7041	USB 2.0 Memory Key 512MB	22P9230	ThinkPad Ultraportable 56W AC Adapter	02K6880	60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	Carrying Case - Leather Ultraportable	73P5186	80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ServicePac® ²² 1yr IOR 9x5 NBD	30L9188	100GB Hard Disk 9.5mm SATA (5400 rpm)	40Y8716	ServicePac 2yr IOR 9x5 NBD	30L9189	11a/b/g Wireless CardBus Adapter	31P9101	ServicePac 3yr IOR 9x5 NBD	30L9195	11a/b/g Wireless Mini PCI Adapter II	73P4301	ServicePac 4yr IOR 9x5 NBD	30L9194	Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ServicePac 5yr IOR 9x5 NBD	30L9196	Preferred Pro USB Fingerprint Keyboard	73P4730	ServicePac 2yr P&L P/U Depot	30L9191	M400 Projector	0037A04	ServicePac 3yr P&L P/U Depot	30L9192	ThinkVision® E500 Projector	0038A05	ServicePac 5yr P&L P/U Depot	69P9197	SonyEricsson® GC83 EDGE PC Card	26K3393	Other options at lenovo.com/options		56 watt AC Adapter		Asset ID™ ³⁴ (system-specific info in chip accessed over network)		PC 2001-compliant		ACPI 1.0b and 2.0-compliant		CIM and DMI 2.0-compliant		ENERGY STAR®-compliant		International Warranty Service ¹⁷		24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²	

See footnotes for important warranty information
US models announced April 5, 2005
US models withdrawn effective November 2005

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ThinkPad® X32 (2885) - Express - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical in	ThinkPad UltraBase X3 UltraBase™	Mini PCI wireless	CDC: modem/Bluetooth™	Sec chip	Ethernet planar	Limited Preload warranty ¹²	Avail date
2885-M2U	Pentium® M 745	1.8	256MB	12.1" XGA	40HS	Combo	X3 UltraBase *	Intel 11b/g ³²	Modem	Yes	Gigabit	XP Pro 3 year	Apr 05
2885-K4U	Pentium M 755	2.0	512MB	12.1" XGA	60HS	Combo	X3 UltraBase *	Intel 11a/b/g ³²	Mod/Blue	Yes	Gigabit	XP Pro 3 year	Apr 05

- These small and medium business (SMB) models are part of the US Think Express Program
- The 2885 has a 3 year limited warranty

Positioning Processor	<i>Ultimate mobility in a versatile ultraportable; one spindle</i> Intel® Pentium® M Processor 745 (1.80GHz) or 755 (2.00GHz) with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus							SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area)					
L2 cache	2MB / on die (at processor speed) / ECC												
Memory	256 or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (memory controller limits memory speed to 266MHz) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available												
Diskette drive	None standard / use optional Ultrabay™-based (inX3) or USB-based diskette drive							Preloaded • Rescue and Recovery™ • Access IBM • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Update Connector™ ¹⁵					
Combo	DVD-ROM/CD-RW / 16X/10X/24X/8X ²¹ speed / removable from Ultrabay 2000 in X3 UltraBase												
Ultrabay™ 2000	Supports Ultrabay 2000 devices in std or optional X3 UltraBase (or optional Dock II)												
Disk	40GB (HS 5400 rpm) or 60GB (HS 5400 rpm), 9.5mm, ATA-100 / removable and upgradable / 9.5mm high bay												
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits												
Graphics controller	ATI® MOBILITY™ RADEON® / AGP 4X / 16MB DDR1 (DDR-SDRAM)												
Graphics - external	External monitor support via analog DB-15 connector / up to 1280x1024x16.7M at 85Hz												
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stoke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap							Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip)					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	<i>without X3 UltraBase:</i> 10.7" x 8.8" x .98-1.19"; 273mm x 223mm x 24.9-30.2mm <i>with X3 UltraBase and optical:</i> 10.8" x 8.9" x 2.0-2.3"; 273 x 227 x 51-58mm <i>with battery:</i> 3.6 lb (1.65kg); <i>with X3 UltraBase and optical:</i> 5.6 lb (2.54kg)							License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client					
Travel weight ²	<i>Color:</i> black; <i>All: titanium composite</i> in the top cover / magnesium alloy bottom case												
Case material	Li-Ion 6-cell / intelligent / supports opt Extended Life Battery on base (for two batteries)												
Battery - type	supports Ultrabay battery or optional 6-cell battery in X3 UltraBase (for two batteries)												
Battery - life ¹⁰	Up to 5.7 hr; <i>with std battery and optional Extended Life Battery:</i> up to 10.0 hr							ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage					
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (Ricoh® R5C554 CardBus/1394 combo controller, Mini PCI, ext expansion) / LPC bus 33MHz (PC87392 Super I/O)							ThinkPad X3 UltraBase™ Right bay of X3 UltraBase supports most Ultrabay 2000 options: • Optional battery, CD-ROM, CD-RW, DVD-ROM, Zip 250MB, Combo • Optional HDD adapter for 2nd disk • Ultrabay Plus-compatible					
Media slice	X3 UltraBase media slice (see right side)							Ultrabay 2000 accessories: • CD-RW/DVD Combo IV Ultrabay 2000 22P6991 • Second HDD Adapter for Ultrabay 2000 08K6068 • Ultrabay 2000 Li-Ion battery 02K6646 • ThinkPad Multi-Burner Ultrabay 2000 Drive 22P7015 • Enhanced Drive Adapter for Ultrabay 2000 73P3268					
Compact Flash slot	Compact Flash slot / 1 CF+ Type II / supports optional Microdrive™												
PC Card Std slot	One Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door												
IEEE 1394	IEEE 1394 (FireWire) port (4-pin)												
Ports	Two USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / parallel / IEEE 1394 (4-pin) / no serial, keyboard, or mouse ports							X3 UltraBase bottom contains: • Bay for X30 battery (same as X31)					
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradeable												
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset												
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, Intel 82533 chipset												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Agere® chipset												
Bluetooth™	<i>Some:</i> Bluetooth wireless technology / in CDC (with modem)												
Ethernet	Gigabit Ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (pink) / headphone jack (green) / mic in (blue) [all 3.5mm]							Other features: • Second battery support (for Ultrabay battery or second 6-cell battery) • Stereo speakers (1 watt) • Security keyhole, UltraBase lock • Serial and parallel ports • PS/2 mouse port • Analog DB-15 monitor port • One USB port (Ver 2.0 only on X31) • Ethernet port and modem port • Retractable feet; 1.41 lb; 638g					
Security	Power-on password / dual hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant												
Limited warranty ¹²	3 years/1 yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail												
128MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad X3 UltraBase media slice	46P7912										
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad Port Replicator II	74P6733										
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad Mini Dock	287810U										
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad Dock II	287710U										
USB Fingerprint Reader	73P4774	USB Portable Diskette Drive	05K9276										
USB 2.0 Portable Multi-Burner	22P9163	ThinkPad X30 Series Li-Ion Battery (6-cell)	92P1097										
USB 2.0 Memory Key 256MB	22P9228	ThinkPad X30 Series Extended Life Battery	02K7041										
USB 2.0 Memory Key 512MB	22P9230	ThinkPad Ultraportable 56W AC Adapter	02K6880										
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	ThinkPad Carrying Case - Backpack	73P3599										
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Carrying Case - Leather	73P3600										
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	Carrying Case - Leather Ultraportable	73P5186										
11a/b/g Wireless CardBus Adapter	31P9101	ServicePac® ²² 2yr IOR 9x5 NBD	30L9190										
11a/b/g Wireless Mini PCI Adapter II	73P4301	ServicePac 3yr IOR 9x5 NBD	30L9197										
Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ServicePac 4yr IOR 9x5 NBD	69P9198										
Preferred Pro USB Fingerprint Keyboard	73P4730	ServicePac 5yr IOR 9x5 NBD	69P9200										
M400 Projector	0037A04	ServicePac 4yr P&L P/U Depot	69P9199										
ThinkVision® E500 Projector	0038A05	ServicePac 5yr P&L P/U Depot	69P9201										
C400 Projector	0039A04	Other options at lenovo.com/options											

See footnotes for important warranty information
US models announced April 5, 2005
US models withdrawn effective November 2005

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ThinkPad® X40 (2371) - May 2004 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical in	ThinkPad UltraBase X4	ThinkPad UltraBase™	Mini PCI wireless	CDC: modem/Sec Bluetooth™	Battery chip	Preload	Limited warranty ¹²	WH Gbl TAA	Avail date
2371-97U	Pentium® M 1.2	256MB	12.1" XGA	40GB	None	Optional	Open; wireless upg ³⁶	Modem	Yes	8	XP Pro	3-year	TAA	May 2004	
2371-6DU	Pentium M 1.3	256MB	12.1" XGA	40GB	None	Optional	* Intel 11b Wi-Fi ³²	Modem	Yes	8	XP Pro	3-year		May 2004	
2371-6FU	Pentium M 1.3	256MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g ³²	Modem	Yes	8	XP Pro	3-year		May 2004	
2371-7FU	Pentium M 1.3	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	4	XP Pro	3-year		May 2004	
Positioning	<i>Ultimate mobility in a versatile ultraportable; one spindle</i>										SOFTWARE¹⁴				
US Govt (TAA) ⁵ Processor	97U: US Government model (Trade Act Agreement-compliant) Intel® Pentium® M Processor Low Voltage 1.2 or 1.3GHz with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ ◇ Disk-to-Disk Recovery (in hidden protected area)				
L2 cache Memory	1MB / on die (at processor speed) / ECC 256 or 512MB std / 1.28 to 1.53GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / 97U/6DU/6FU: std memory soldered to systemboard; one 200-pin SO-DIMM socket available 7FU with 512MB: 256MB soldered to board; one 256MB SO-DIMM in 200-pin socket										• Access Program • Access Connections™ • Adobe Reader • Rescue and Recovery™ • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Update Connector™.15				
Diskette drive Ultrabay™ Slim Disk	None standard / use optional USB-based diskette drive Supports Ultrabay Slim devices in optional or standard X4 UltraBase 40GB⁸ (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)										• Preloaded • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip)				
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										Downloadable • Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 266MHz										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage				
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200x16.7M at 85Hz														
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap Illuminates the keyboard to improve visibility in low-light conditions														
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	4-cell without X4 UltraBase: 10.5" x 8.3" x .81-1.06"; 268mm x 211mm x 20.6-26.9mm 8-cell without X4 UltraBase: 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm 4-cell battery models: 2.7 lb (1.23kg); 8-cell battery models: 3.2 lb (1.44kg); with 8-cell battery and X4 UltraBase with combo: 5.0 lb (2.26kg)														
Weight ²	4-cell battery models: 2.7 lb (1.23kg); 8-cell battery models: 3.2 lb (1.44kg); with 8-cell battery and X4 UltraBase with combo: 5.0 lb (2.26kg)														
Case material	Color: black; All: magnesium alloy														
Battery - type	Li-Ion 4- or 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)														
Battery - life ¹⁰	with 4-cell: 3.5 hr; with 8-cell: 7.5 hr; with 8-cell and optional Extended Life Battery: up to 10 hr														
Architecture	Intel 855GME chipset / 82852GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (ethernet, Ricoh® R5C511 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for infrared [dock-based ports])										ThinkPad X4 UltraBase™ • Provides desktop expansion and cable management for the X40/X41 • Easily connects to the bottom of the X40/X41 for traveling • Converts the X40 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side: – Ultrabay Slim Li-Polymer Battery 3-cell 08K8190 – ThinkPad DVD-ROM Ultrabay Slim Drive 73P3270 – CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288 – Super Multi-Burner Ultrabay Slim Drive (curved bezel) 40Y8622 – Second HDD Adapter for Ultrabay Slim 41U3148 Disks supported: • 40GB HS Hard Disk 08K9816 • 60GB HS Hard Disk 39W9106 • 80GB HS Hard Disk 09N4273				
Mobile media base Secure Digital slot PC Card Std slot Ports	Supports optional X4 UltraBase (see right side) and X4 Dock One Secure Digital Card slot / supports SD memory cards used in consumer devices One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port														
Wireless antenna Mini PCI	UltraConnect™ antenna built into the display cover for optimal wireless signal reception One Mini PCI type III slot (Communications Bay) / customer upgradable														
Wireless upg ³⁶ Intel 11b Wi-Fi ³²	Some: wireless upgradable with wireless Mini PCI options Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100 Network Connection 802.11b, Intel 82531 chipset														
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset														
CDC	One Communications Daughter Card (CDC) socket / customer accessible														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset														
Bluetooth™	None														
Ethernet	Intel PRO/1000 Gigabit Ethernet / on systemboard / Intel 82541GI chipset (MAC/PHY) / Wake on LAN®														
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optical security screw • Serial and parallel ports • PS/2 port for keyboard or mouse • Analog DB-15 monitor port • Three USB 2.0 ports (via USB hub) • Ethernet port (Gigabit Ethernet) • Modem port • Retractable feet; 1.3 lb; 580g				
Security Security chip	Power-on password / dual hard disk password / supervisor password / security keyhole Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant														
Limited warranty ¹²	3-year/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail														
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad X4 UltraBase	92P3429												
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad X4 Dock	250610U												
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad X40 Series Li-Ion Battery (4-cell)	92P1009												
USB Portable Diskette Drive	05K9276	ThinkPad X40 Series Li-Ion Battery (8-cell)	92P1119												
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad X40 Series Extended Life Battery	92P1006												
USB 2.0 Portable 80GB Hard Disk	40Y8726	ThinkPad Multiple Battery Charger II	22P9040												
USB 2.0 Super Multi-Burner Drive	40Y8638	ThinkPad Ultraportable 56W AC Adapter	02K6880												
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358	72W Slim AC/DC Combo Adapter	73P4485												
11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus™.22 2-year LOR 9x5 NBD	41C9175												
Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ThinkPlus 3-year LOR 9x5 NBD	41C9176												
Carrying Case - Leather Ultraportable	73P5186	ThinkPlus 5-year LOR 9x5 NBD	41C9179												
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	ThinkPlus 4-year P&L P/U Depot	41C9178												
Lenovo M500 Projector	0037A05	ThinkPlus 5-year P&L P/U Depot	41C9180												
ThinkVision® L201p 20.1" Monitor (black)	9220HB1	Other options at lenovo.com/options													

See footnotes for important warranty information
US models announced May 18, 2004
US models withdrawn effective December 2006

* Powered by Intel Centrino® mobile technology

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ThinkPad® X40 (2371) - October 2004 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Optical in Disk	UltraBase	ThinkPad X4 UltraBase™	Mini PCI wireless	CDC: modem/Bluetooth™	Sec chip	Battery cells	Limited warranty ¹²	WH Entry	Gbl	Avail date	
2371-E8U	Pentium® M 738	1.4	2MB	256MB	12.1" XGA	40GB	None	Optional	Open; wireless upg ³⁶	Modem	Yes	8	3 years	W	G	Oct 04
2371-GHU	Pentium M 738	1.4	2MB	512MB	12.1" XGA	40GB	None	Optional * Intel 11b/g ³²	Modem	Yes	8	3 years	W	G	Oct 04	
2371-H8U	Pentium M 738	1.4	2MB	512MB	12.1" XGA	40GB	None	Optional * Intel 11b/g	Mod/Blue	Yes	8	3 years	W	G	Oct 04	
2371-G4U	Pentium M 738	1.4	2MB	512MB	12.1" XGA	40GB	None	Optional * Intel 11b/g	Modem	Yes	4	3 years	W		Oct 04	
2371-H9U	Pentium M 738	1.4	2MB	512MB	12.1" XGA	40GB	None	Optional 11a/b/g II ³²	Mod/Blue	Yes	8	3 years	W		Oct 04	
2371-E9U	Pentium M 738	1.4	2MB	256MB	12.1" XGA	40GB	None	Optional * Intel 11b/g	Modem	Yes	8	3 years	W		Oct 04	
2371-E5U	Pentium M 738	1.4	2MB	256MB	12.1" XGA	40GB	None	Optional * Intel 11b/g	Modem	Yes	4	3 years	W		Oct 04	
2371-A9U	Pentium M 713	1.1	1MB	256MB	12.1" XGA	30GB	None	Optional * Intel 11b/g	Modem	Yes	4	3 years	Entry		Oct 04	
Positioning Processor	<i>Ultimate mobility in a versatile ultraportable; one spindle Intel® Pentium® M Processor Ultra Low Voltage 713 (1.1GHz) or Low Voltage 738 (1.4GHz) with enhanced Intel SpeedStep™ technology¹ and 400MHz system bus 1.1GHz: 1MB; 1.4GHz: 2MB; All: on die (at processor speed) / ECC</i>										SOFTWARE¹⁴					
L2 cache Memory	256 or 512MB std / 1.28 to 1.53GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / std memory soldered to systemboard / one 200-pin SO-DIMM socket available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery (in hidden protected area)					
Diskette drive Ultrabay™ Slim Disk	None standard / use optional USB-based diskette drive Supports Ultrabay Slim devices in optional or standard X4 UltraBase 30GB⁸ or 40GB⁸ (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)										Preloaded • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Update Connector™ ¹⁵					
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits															
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 266MHz															
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200x16.7M at 85Hz															
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap															
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³	<i>4-cell without X4 UltraBase: 10.5" x 8.3" x .81-1.06"; 268mm x 211mm x 20.6-26.9mm</i> <i>8-cell without X4 UltraBase: 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm</i> <i>4-cell battery models: 2.7 lb (1.23kg); 8-cell battery models: 3.2 lb (1.44kg); with 8-cell battery and X4 UltraBase with combo: 5.0 lb (2.26kg)</i>															
Travel weight ²																
Case material	Color: black; All: magnesium alloy															
Battery - type	Li-Ion 4- or 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)															
Battery - life ¹⁰	<i>with 4-cell: up to 3.25 hr; with 8-cell: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr</i>															
Architecture	Intel 855GME chipset / 82852GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (ethernet, Ricoh® R5C511 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for infrared [dock-based ports])															
Mobile media base	Supports optional X4 UltraBase (see right side) and X4 Dock															
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices															
PC Card Std slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door															
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port															
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception															
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradeable															
Wireless upg ³⁶	<i>Some: wireless upgradable with wireless Mini PCI options</i>															
Intel 11b/g ³²	<i>Some: 11b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset</i>															
11a/b/g II ³²	<i>Some: 11a/b/g wireless⁴, 11a/b/g Mini PCI Adapter II, Atheros™ AR5004X chipset</i>															
CDC	One Communications Daughter Card (CDC) socket / customer accessible															
Modem	56K ⁹ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset															
Bluetooth™	<i>Some: Bluetooth wireless technology / in CDC (with modem)</i>															
Ethernet	Intel PRO/1000 Gigabit Ethernet / on systemboard / Intel 82541GI chipset (MAC/PHY) / Wake on LAN®															
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)															
Security	Power-on password / dual hard disk password / supervisor password / security keyhole															
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant															
Limited warranty ¹²	3-years/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail															
128MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad X4 UltraBase	92P3429													
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad X4 Dock	250610U													
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad X40 Series Li-Ion Battery (4-cell)	92P1009													
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad X40 Series Li-Ion Battery (8-cell)	92P1119													
USB Portable Diskette Drive	05K9276	ThinkPad X40 Series Extended Life Battery	92P1006													
USB Fingerprint Reader	73P4774	ThinkPad Multiple Battery Charger II	22P9040													
Powered USB 2.0 Port Combo Drive	22P9194	ThinkPad Ultraportable 56W AC Adapter	02K6880													
USB 2.0 Portable Multi-Burner Drive	22P9163	ThinkPad 72W AC/DC Combo Adapter	22P9010													
USB 2.0 Memory Key 512MB	22P9230	ThinkPlus™ ²² 2-year LOR 9x5 NBD	41C9175													
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358	ThinkPlus 3-year LOR 9x5 NBD	41C9176													
Kensington® MicroSaver® Security Cable	73P2582	ThinkPlus 5-year LOR 9x5 NBD	41C9179													
11a/b/g Wireless CardBus Adapter	31P9101	ThinkPlus 4-year P&L P/U Depot	41C9178													
11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 5-year P&L P/U Depot	41C9180													
ThinkVision® L192p 19" Monitor (black)	9419HB2	Other options at lenovo.com/options														
			56 watt AC Adapter													
			Asset ID™ ³⁴ (system-specific info in chip accessed over network)													
			ACPI 1.0b and 2.0-compliant													
			ENERGY STAR®-compliant													
			International Warranty Service ¹⁷													
			24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)													
			Other features:	<ul style="list-style-type: none"> • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optical security screw • Serial and parallel ports • PS/2 port for keyboard or mouse • Analog DB-15 monitor port • Three USB 2.0 ports (via USB hub) • Ethernet port (Gigabit Ethernet) • Modem port • Retractable feet; 1.3 lb; 580g 												

See footnotes for important warranty information
US models announced May 18, 2004
US models withdrawn effective March or November 2005

* Powered by Intel Centrino™ mobile technology

ThinkPad® X40 (2371) - February 2005 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Optical in Disk	ThinkPad UltraBase™	Mini PCI wireless	CDC: modem/ Bluetooth™	Sec chip	Battery cells	Limited warranty ¹²	WH Entry	Gbl	Avail date	
2371-BMU	Pentium® M 733	1.1	2MB	256MB	12.1" XGA	30GB	None	Optional	* Intel 11b/g ³²	Modem	Yes	4	3-yr	Entry	Mar 05
2371-J3U	Pentium M 758	1.5	2MB	256MB	12.1" XGA	40GB	None	Optional	Open; wireless upg ³⁶	Modem	Yes	8	3-yr	W G	Mar 05
2371-K3U	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	8	3-yr	W G	Mar 05
2371-K4U	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	4	3-yr	W	Mar 05
2371-LBU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	None	Optional	11a/b/g II ³²	Mod/Blue	Yes	8	3-yr	W	Mar 05
2371-J4U	Pentium M 758	1.5	2MB	256MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	8	3-yr	W	Mar 05
2371-KZU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	8	3-yr	W TAA	Mar 05
Positioning	<i>Ultimate mobility in a versatile ultraportable; one spindle</i>										SOFTWARE¹⁴				
US Govt (TAA) ⁵ Processor	KZU: US Government model (Trade Act Agreement-compliant) Intel® Pentium M Processor Ultra Low Voltage 733 (1.1GHz) or Low Voltage 758 (1.5GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area)				
L2 cache Memory	2MB / on die (at processor speed) / ECC 256 or 512MB std / 1.28 to 1.53GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / std memory soldered to systemboard / one 200-pin SO-DIMM socket available										Preloaded • Rescue and Recovery • Access Program • Access Connections™ • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Update Connector™.15				
Diskette drive Ultrabay™ Slim Disk	None standard / use optional USB-based diskette drive Supports Ultrabay Slim devices in optional or standard X4 UltraBase 30GB⁸ or 40GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)										Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip)				
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 266MHz										Supports ThinkVantage™ technologies				
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200x16.7M at 85Hz										ThinkPad X4 UltraBase™ • Provides desktop expansion and cable management for the X40/X41 • Easily connects to the bottom of the X40/X41 for traveling • Converts the X40 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side: – Ultrabay Slim Li-Polymer Battery 3-cell 08K8190 – CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288 – Super Multi-Burner Ultrabay Slim Drive (curved bezel) 40Y8622 – Second HDD Adapter for Ultrabay Slim 62P4554 Disks supported: • 40GB HS Hard Disk 08K9816 • 60GB HS Hard Disk 73P3357 • 80GB HS Hard Disk 09N4273				
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optical security screw • Serial and parallel ports • PS/2 port for keyboard or mouse • Analog DB-15 monitor port • Three USB 2.0 ports (via USB hub) • Ethernet port (Gigabit Ethernet) • Modem port • Retractable feet; 1.3 lb; 580g				
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions										56 watt AC Adapter Asset ID™.34 (system-specific info in chip accessed over network) ACPI 1.0b and 2.0-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)				
Dimensions ³	4-cell without X4 UltraBase: 10.5" x 8.3" x .81-1.06"; 268mm x 211mm x 20.6-26.9mm 8-cell without X4 UltraBase: 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm 4-cell battery models: 2.7 lb (1.23kg); 8-cell battery models: 3.2 lb (1.44kg); with 8-cell battery and X4 UltraBase with combo: 5.0 lb (2.26kg)														
Travel weight ²	Color: black; All: magnesium alloy														
Case material	Li-Ion 4- or 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries) with 4-cell: up to 3.25 hr; with 8-cell: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr														
Battery - type	Li-Ion 4- or 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries) with 4-cell: up to 3.25 hr; with 8-cell: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr														
Battery - life ¹⁰	Li-Ion 4- or 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries) with 4-cell: up to 3.25 hr; with 8-cell: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr														
Architecture	Intel 855GME chipset / 82852GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (ethernet, Ricoh® R5C511 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for infrared [dock-based ports])														
Mobile media base	Supports optional X4 UltraBase (see right side) and X4 Dock														
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices														
PC Card Std slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door														
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port														
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception														
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable														
Wireless upg ³⁶	Some: wireless upgradable with wireless Mini PCI options Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros™ AR5004X chip														
CDC	One Communications Daughter Card (CDC) socket / customer accessible														
Modem	56K ⁹ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset														
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)														
Ethernet	Intel PRO/1000 Gigabit Ethernet / on systemboard / Intel 82541GI chipset (MAC/PHY) / Wake on LAN®														
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)														
Security	Power-on password / dual hard disk password / supervisor password / security keyhole														
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant														
Limited warranty ¹²	3-year/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail														
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830		ThinkPad X4 UltraBase		92P3429										
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832		ThinkPad X4 Dock		250610U										
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834		ThinkPad X40 Series Li-Ion Battery (4-cell)		92P1009										
USB Portable Diskette Drive	05K9276		ThinkPad X40 Series Li-Ion Battery (8-cell)		92P1119										
USB Gemplus GemPC Smart Card Reader	41N3040		ThinkPad X40 Series Extended Life Battery		92P1006										
USB 2.0 Memory Key 1GB	40Y7421		ThinkPad Multiple Battery Charger II		22P9040										
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637		ThinkPad Ultraportable 56W AC Adapter		02K6880										
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358		ThinkPad Convertible Monitor Stand		40Y7620										
Kensington® MicroSaver® Security Cable	73P2582		ThinkPlus™.22 2-year LOR 9x5 NBD		41C9175										
11a/b/g Wireless Mini PCI Adapter II	73P4301		ThinkPlus 3-year LOR 9x5 NBD		41C9176										
Intel PRO/Wireless 2915ABG Mini PCI	41N2990		ThinkPlus 5-year LOR 9x5 NBD		41C9179										
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137		ThinkPlus 4-year P&L P/U Depot		41C9178										
Lenovo M500 Projector	0037A05		ThinkPlus 5-year P&L P/U Depot		41C9180										
ThinkVision® L201p 20.1" Monitor (black)	9320HB1		Other options at lenovo.com/options												

See footnotes for important warranty information
US models announced February 15 or March 22, 2005
US models withdrawn effective July 2005 or April 2006

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ThinkPad® X40 (2371) - October 2005 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Optical in Disk	UltraBase	ThinkPad X4 UltraBase™	Mini PCI wireless	CDC: modem/Bluetooth™ chip	Sec Battery cells	Limited warranty ¹²	WH Entry	Gbl	Avail date
2371-M6U	Pentium® M 753	1.2	2MB	256MB	12.1" XGA	30GB	None	Optional * Intel 11b/g ³²	Modem	Yes	4	3-yr	Entry	Oct 05
2371-N1U	Pentium M 778	1.6	2MB	256MB	12.1" XGA	40GB	None	Optional Open; wireless upg ³⁶	Modem	Yes	8	3-yr	Global	Oct 05
2371-QE1U	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	None	Optional * Intel 11b/g	Modem	Yes	8	3-yr	Global	Oct 05
2371-Q1U	Pentium M 778	1.6	2MB	512MB	12.1" XGA	60GB	None	Optional * Intel 11b/g	Modem	Yes	8	3-yr		Oct 05
2371-R1U	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	None	Optional 11a/b/g II ³²	Mod/Blue	Yes	4	3-yr		Oct 05
2371-N2U	Pentium M 778	1.6	2MB	256MB	12.1" XGA	40GB	None	Optional * Intel 11b/g	Modem	Yes	8	3-yr		Oct 05
Positioning	Ultimate mobility in a versatile ultraportable; one spindle													
US Govt (TAA) ⁵	None													
Processor	Intel® Pentium M Processor Ultra Low Voltage 753 (1.2GHz) or Low Voltage 778 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ , XD bit, and 400MHz bus													
L2 cache	2MB / on die (at processor speed) / ECC													
Memory	256 or 512MB std / 1.28 to 1.53GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / std memory soldered to systemboard / one 200-pin SO-DIMM socket available													
Diskette drive	None standard / use optional USB-based diskette drive													
Ultraplay™ Slim Disk	Supports Ultraplay Slim devices in optional X4 UltraBase 30GB ⁸ , 40GB, or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)													
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits													
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 266MHz													
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200x16.7M at 85Hz													
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint™, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap													
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	4-cell without X4 UltraBase: 10.5" x 8.3" x .81-1.06"; 268mm x 211mm x 20.6-26.9mm													
Travel weight ²	8-cell without X4 UltraBase: 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm													
Case material	4-cell battery models: 2.7 lb (1.23kg); 8-cell battery models: 3.2 lb (1.44kg); with 8-cell battery and X4 UltraBase with combo: 5.0 lb (2.26kg)													
Battery - type	Color: black; All: magnesium alloy													
Battery - life ¹⁰	Li-Ion 4- or 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries) with 4-cell: up to 3.25 hr; with 8-cell: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr													
Architecture	Intel 855GME chipset / 82852GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (ethernet, Ricoh® R5C511 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for infrared [dock-based ports])													
Mobile media base	Supports optional X4 UltraBase (see right side) and X4 Dock													
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices													
PC Card Std slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door													
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port													
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable													
Wireless upg ³⁶	Some: wireless upgradable with wireless Mini PCI options													
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset													
11a/b/g II ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros™ AR5004X													
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)													
Ethernet	Intel PRO/1000 Gigabit Ethernet / on systemboard / Intel 82541GI chipset (MAC/PHY) / Wake on LAN®													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / dual hard disk password / supervisor password / security keyhole													
Security chip	Embedded Security Subsystem 2.0 ³³ / Atmel® chip / TCG-compliant													
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad X4 UltraBase	92P3429											
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad X4 Dock	250610U											
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	X40 Series Li-Ion Battery (4-cell)	92P1009											
USB Portable Diskette Drive	05K9276	X40 Series Li-Ion Battery (8-cell)	92P1119											
USB Gemplus GemPC Smart Card Reader	41N3040	X40 Series Extended Life Battery	92P1006											
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad Multiple Battery Charger II	22P9040											
USB 2.0 Super Multi-Burner Drive	40Y8638	ThinkPad Ultraportable 56W AC Adapter	02K6880											
USB 2.0 Portable 80GB Hard Disk	40Y8726	Enh Perf Wireless Keyboard and Mouse	73P4067											
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358	ThinkPlus™ ²² 2-year LOR 9x5 NBD	41C9175											
11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 3-year LOR 9x5 NBD	41C9176											
Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ThinkPlus 5-year LOR 9x5 NBD	41C9179											
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	ThinkPlus 4-year P&L P/U Depot	41C9178											
Lenovo M500 Projector	0037A05	ThinkPlus 5-year P&L P/U Depot	41C9180											
ThinkVision® L201p 20.1" Monitor (black)	9320HB1	Other options at lenovo.com/options												
				SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Rescue and Recovery™ • Access Connections™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Client Security Solution™ (for security chip) Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client Supports ThinkVantage™ technologies ThinkPad X4 UltraBase™ • Provides desktop expansion and cable management for the X40/X41 • Easily connects to the bottom of the X40/X41 for traveling • Converts the X40 to a two-spindle system by supporting optional Ultraplay Slim accessories in left side - Ultraplay Slim Li-Polymer Battery 3-cell 08K8190 - CD-RW/DVD Combo II Ultraplay Slim Drive 73P3288 - Super Multi-Burner Ultraplay Slim Drive (curved bezel) 40Y8622 - Second HDD Adapter for Ultraplay Slim 62P4554 Disks supported: • 40GB HS Hard Disk 08K9816 • 60GB HS Hard Disk 73P3357 • 80GB HS Hard Disk 09N4273 Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optical security screw • Serial and parallel ports • PS/2 port for keyboard or mouse • Analog DB-15 monitor port • Three USB 2.0 ports (via USB hub) • Ethernet port (Gigabit Ethernet) • Modem port • Retractable feet; 1.3 lb; 580g 56 watt AC Adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network) ACPI 1.0b and 2.0-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)										

See footnotes for important warranty information
US models announced October 4, 2005
US models withdrawn effective May 2006

* Powered by Intel Centrino® mobile technology

ThinkPad® X40 (2382) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X4 UltraBase™	Mini PCI wireless	CDC: modem/ Bluetooth™	SecBattery chip	Limited cells	Avail warranty ¹²	Avail date
2382-1GU	Pentium® M	1.0	1MB	256MB	12.1" XGA	40GB	Optional	*Intel 11b Wi-Fi ³²	Modem	Yes	4	3-yr	Feb 04
2382-6UU	Pentium M	1.2	1MB	256MB	12.1" XGA	40GB	Combo X4 UltraBase	*Intel 11b Wi-Fi	Modem	Yes	8	3-yr	Feb 04
2382-8WU	Pentium M	1.2	1MB	512MB	12.1" XGA	40GB	Combo X4 UltraBase	11b/g ³²	Mod/Blue	Yes	8	3-yr	Feb 04
2382-8RU	Pentium M	1.3	1MB	512MB	12.1" XGA	40GB	Combo X4 UltraBase	*Intel 11b/g ³²	Modem	Yes	8	3-yr	May 04
2382-ECU	Pentium M 738	1.4	2MB	256MB	12.1" XGA	40GB	Combo X4 UltraBase	*Intel 11b/g	Modem	Yes	8	3-yr	Oct 04
2382-HCU	Pentium M 738	1.4	2MB	512MB	12.1" XGA	40GB	Combo X4 UltraBase	*Intel 11b/g	Mod/Blue	Yes	8	3-yr	Oct 04
2382-JEU	Pentium M 758	1.5	2MB	256MB	12.1" XGA	40GB	Combo X4 UltraBase	*Intel 11b/g	Modem	Yes	8	3-yr	Mar 05
2382-KPU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	Combo X4 UltraBase	*Intel 11b/g	Modem	Yes	8	3-yr	Mar 05
<ul style="list-style-type: none"> • These small and medium business (SMB) models are part of the US TopSeller™ Program • The 2382 has a 3-year limited warranty 													
Positioning	Ultimate mobility in a versatile ultraportable; one spindle										SOFTWARE¹⁴		
Processor	Intel® Pentium® M Processor Ultra Low Voltage 1.0GHz or Low Voltage 1.2, 1.3, 1.4 (738), or 1.5GHz (758) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz bus										Windows XP Professional		
L2 cache	1.0/1.2/1.3GHz: 1MB; 1.4/1.5GHz: 2MB; All: on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰		
Memory	256 or 512MB std / 1.28 to 1.53GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / 1GU/6UU/8WU/ECU/HCU: std memory soldered to systemboard; 8RU with 512MB: 256MB soldered to board; one 256MB SO-DIMM in 200-pin socket										- ECU/HCU/JEU/KPU: Serv Pack 2 ⇨ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded		
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X4 UltraBase										• Rescue and Recovery™		
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional or standard X4 UltraBase										• Access Program		
Disk	40GB ⁸ (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)										• Access Connections™		
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• Norton AntiVirus (OEM edition)		
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 266MHz										• PC-Doctor™		
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										• ThinkPad Utilities		
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions										• Adobe Reader		
Dimensions ³	4-cell without X4 UltraBase: 10.5" x 8.3" x .81-1.06"; 268mm x 211mm x 20.6-26.9mm 8-cell without X4 UltraBase: 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm 8-cell with X4 UltraBase and optical: 10.7" x 9.3" x 1.5-2.0"; 272 x 237 x 38.2-50.4mm 1GU with 4-cell battery: 2.7 lb (1.23kg); Others with 8-cell battery: 3.2 lb (1.44kg); Models with 8-cell battery and X4 UltraBase with combo: 5.0lb (2.26kg)										• Update Connector™ ¹⁵		
Weight ²											• InterVideo WinDVD (combo models)		
Battery - type	Li-Ion 4- or 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)										• RecordNow and DLA (combo)		
Battery - life ¹⁰	1GU with 4-cell: up to 3.25 hr; Models with 8-cell: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr										Downloadable		
Architecture	Intel 855GME chipset / 82852GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (ethernet, Ricoh® R5C511 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for infrared [dock-based ports])										• IBM Director Agent		
Mobile media base	Some: X4 UltraBase (see right side) / optional X4 Dock supported										• Software Delivery Assistant		
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices										• System Migration Assistant		
PC Card Std slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door										• Client Security Software (for security chip)		
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port										ThinkPad X4 UltraBase™ (standard with some models)		
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception										• Provides desktop expansion and cable management for the X40/X41		
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										• Easily connects to the bottom of the X40/X41 for traveling		
Intel 11b Wi-Fi ³²	Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100, Intel 82531 chipset										• Converts the X40 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side: - Ultrabay Slim Li-Polymer Battery 3-cell 08K8190 - CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288 - ThinkPad DVD-ROM Ultrabay Slim Drive 73P3270 - Second HDD Adapter for Ultrabay Slim 41U3148		
Intel 11b/g ³²	Some: 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset										Disks supported:		
CDC	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										• 40GB HS Hard Disk 08K9816		
Modem	One Communications Daughter Card (CDC) socket / customer accessible										• 60GB HS Hard Disk 39W9106		
Bluetooth™	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										• 80GB HS Hard Disk 09N4273		
Ethernet	Some: Bluetooth wireless technology / in CDC (with modem)										Other features:		
Audio support	Intel PRO/1000 Gigabit Ethernet / on systemboard / Intel 82541GI chipset (MAC/PHY)										• Power button (front)		
Security	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										• Stereo speakers (1 watt)		
Security chip	Power-on password / dual hard disk password / supervisor password / security keyhole										• Security key lock, security keyhole, and optical security screw		
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail										• Serial and parallel ports		
256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830			ThinkPad X4 UltraBase			92P3429			• PS/2 port for keyboard or mouse			
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832			ThinkPad X4 Dock			250610U			• Analog DB-15 monitor port			
1 GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834			ThinkPad X40 Series Li-Ion Battery (4-cell)			92P1009			• Three USB 2.0 ports (via USB hub)			
USB Portable Diskette Drive	05K9276			ThinkPad X40 Series Li-Ion Battery (8-cell)			92P1119			• Ethernet port (Gigabit Ethernet)			
USB 2.0 Memory Key 1GB	40Y7421			ThinkPad X40 Series Extended Life Battery			92P1006			• Modem port			
USB 2.0 Super Multi-Burner Drive	40Y8638			ThinkPad Ultraportable 56W AC Adapter			02K6880			• Retractable feet; 1.3 lb; 580g			
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358			ThinkPlus™.22 2-year LOR 9x5 NBD			41C9175			56-watt AC Adapter			
11a/b/g Wireless Mini PCI Adapter II	73P4301			ThinkPlus 3-year LOR 9x5 NBD			41C9176			Asset ID™.34 (system-specific info in chip accessed over network)			
Intel PRO/Wireless 2915ABG Mini PCI	41N2990			ThinkPlus 5-year LOR 9x5 NBD			41C9179			ACPI 1.0b and 2.0-compliant			
Lenovo M500 Projector	0037A05			ThinkPlus 5-year P&L P/U Depot			41C9180			International Warranty Service ¹⁷			
ThinkVision® L201p 20.1" Monitor (black)	9220HB1			Other options at lenovo.com/options						24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)			

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced February 10, May 18, or October 5, 2004 or February 15, 2005
US models withdrawn effective January 2005, July 2005, or December 2006

ThinkPad® X40 (2382) - TopSeller (October 2005) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X4 UltraBase™	Mini PCI wireless	CDC: modem/ Bluetooth™	Sec chip	Battery cells	Limited warranty ¹²	Avail date
2382-QDU	Pentium® M 778	1.6	2MB	512MB	12.1" XGA	40GB	Combo	X4 UltraBase * Intel 11b/g ³²	Modem	Yes	8-cell	3-year	Oct 05
2382-RFU	Pentium® M 778	1.6	2MB	512MB	12.1" XGA	60GB	DVD±RW	X4 UltraBase * Intel 11b/g ³²	Mod/Blue	Yes	8-cell	3-year	Oct 05

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **The 2382 has a 3-year limited warranty**

Positioning Processor	<i>Ultimate mobility in a versatile ultraportable; one spindle</i>										SOFTWARE¹⁴		
L2 cache	Intel® Pentium M Processor Low Voltage 778 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ , XD bit, and 400MHz bus										Windows XP Professional		
Memory	2MB / on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)		
Diskette drive	None standard / use optional USB-based diskette drive										◇ Disk-to-Disk Recovery (in hidden protected area)		
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X4 UltraBase										Preloaded		
DVD±RW	<i>Some:</i> DVD and CD burner / Multi-Burner Plus / removable from X4 UltraBase										• Rescue and Recovery™		
Ultrabay™ Slim	Supports Ultrabay Slim devices in standard X4 UltraBase										• Access Connections™		
Disk	40GB⁸ or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)										• ThinkVantage Productivity Center		
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• ThinkVantage System Update		
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 266MHz										• Symantec® Client Security		
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200x16.7M at 85Hz										• PC-Doctor™		
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										• ThinkPad Utilities		
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions										• Adobe Reader		
Dimensions ³	4-cell without X4 UltraBase: 10.5" x 8.3" x .81-1.06"; 268mm x 211mm x 20.6-26.9mm										• Client Security Solution™ (for security chip)		
Travel weight ²	8-cell without X4 UltraBase: 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm										• Sonic RecordNOW and Drive Letter Access (combo, DVD±RW)		
Case material	Color: black; All: magnesium alloy										• InterVideo WinDVD (combo, DVD±RW models)		
Battery - type	Li-Ion 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)										• InterVideo WinDVD Creator (DVD±RW models)		
Battery - life ¹⁰	with 4-cell: up to 3.25 hr; with 8-cell: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr										• Simple Backup (DVD±RW)		
Architecture	Intel 855GME chipset / 82852GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (ethernet, Ricoh® R5C511 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for infrared [dock-based ports])										License (CD not included)		
Mobile media base	X4 UltraBase (see right side) / optional X4 Dock supported										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices										Supports ThinkVantage™ technologies		
PC Card Std slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door										ThinkPad X4 UltraBase™		
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port										• Provides desktop expansion and cable management for the X40/X41		
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception										• Easily connects to the bottom of the X40/X41 for traveling		
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										• Converts the X40 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side:		
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										- Ultrabay Slim Li-Polymer Battery 3-cell 08K8190		
CDC	One Communications Daughter Card (CDC) socket / customer accessible										- CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										- Super Multi-Burner Ultrabay Slim Drive (curved bezel) 40Y8622		
Bluetooth™	<i>Some:</i> Bluetooth wireless technology / in CDC (with modem)										- Second HDD Adapter for Ultrabay Slim 62P4554		
Ethernet	Intel PRO/1000 Gigabit Ethernet / on systemboard / Intel 82541GI chipset (MAC/PHY) / Wake on LAN®										Disks supported:		
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										• 40GB HS Hard Disk 08K9816		
Security	Power-on password / dual hard disk password / supervisor password / security keyhole										• 60GB HS Hard Disk 73P3357		
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant										• 80GB HS Hard Disk 09N4273		
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail										Other features:		
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830					ThinkPad X4 UltraBase					92P3429		
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832					ThinkPad X4 Dock					250610U		
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834					X40 Series Li-Ion Battery (4-cell)					92P1009		
USB Portable Diskette Drive	05K9276					X40 Series Li-Ion Battery (8-cell)					92P1119		
USB 2.0 Memory Key 1GB	40Y7421					X40 Series Extended Life Battery					92P1006		
USB 2.0 Super Multi-Burner Drive	40Y8638					ThinkPad Multiple Battery Charger II					22P9040		
USB 2.0 Portable 80GB Hard Disk	40Y8726					ThinkPad Ultraportable 56W AC Adapter					02K6880		
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358					ThinkPad Convertible Monitor Stand					40Y7620		
11a/b/g Wireless Mini PCI Adapter II	73P4301					Kensington® MicroSaver® Security Cable					73P2582		
Intel PRO/Wireless 2915ABG Mini PCI	41N2990					ThinkPlus™ ²² 2-year LOR 9x5 NBD					41C9175		
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137					ThinkPlus 3-year LOR 9x5 NBD					41C9176		
Lenovo M500 Projector	0037A05					ThinkPlus 5-year LOR 9x5 NBD					41C9179		
ThinkVision® C400 Wireless Projector	0039WA1					ThinkPlus 4-year P&L P/U Depot					41C9178		
ThinkVision L171 17" Monitor (black)	9417AB1					ThinkPlus 5-year P&L P/U Depot					41C9180		
ThinkVision L201p 20.1" Monitor (black)	9320HB1					Other options at lenovo.com/options							

See footnotes for important warranty information
US models announced October 4, 2005
US models withdrawn effective May 2006

* Powered by Intel Centrino® mobile technology

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(SP35M2) April 2006

ThinkPad® X40 (2386) - Express (October 2004) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X4 UltraBase™	Mini PCI wireless	CDC: modem/ Bluetooth™	Sec chip	Battery cells	Limited warranty ¹²	Avail date	
2386-A4U	Pentium® M 713	1.1	1MB	256MB	12.1" XGA	20GB	None	Optional	*Intel 11b/g ³²	Modem	Yes	4	1 year	Oct 04
2386-GCU	Pentium M 738	1.4	2MB	512MB	12.1" XGA	40GB	Combo	X4 UltraBase	*Intel 11b/g	Modem	Yes	8	1 year	Oct 04
2386-E9U	Pentium M 738	1.4	2MB	256MB	12.1" XGA	40GB	None	Optional	*Intel 11b/g	Modem	Yes	8	1 year	Oct 04
2386-ECU	Pentium M 738	1.4	2MB	256MB	12.1" XGA	40GB	Combo	X4 UltraBase	*Intel 11b/g	Modem	Yes	8	1 year	Oct 04
2386-HCU	Pentium M 738	1.4	2MB	512MB	12.1" XGA	40GB	Combo	X4 UltraBase	*Intel 11b/g	Mod/Blue	Yes	8	1 year	Oct 04

- These small and medium business (SMB) models are part of the US Think Express Program
- The 2386 has a 1 year limited warranty

Positioning	<i>Ultimate mobility in a versatile ultraportable; one spindle</i>										SOFTWARE¹⁴		
Processor	Intel® Pentium® M Processor Ultra Low Voltage 713 (1.1GHz) or Low Voltage 738 (1.4GHz) with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area)		
L2 cache	1.1GHz: 1MB ; 1.4GHz: 2MB ; All: on die (at processor speed) / ECC										Preloaded		
Memory	256 or 512MB std / 1.28 to 1.53GB max ² / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / std memory soldered to systemboard / one 200-pin SO-DIMM socket available										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access IBM • Access Connections • Norton AntiVirus (OEM edition) • PC-Doctor™ • Adobe Reader • Update Connector™¹⁵ • InterVideo WinDVD (combo models) • RecordNow and DLA (combo) 		
Diskette drive	None standard / use optional USB-based diskette drive										Downloadable		
Combo	<i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from X4 UltraBase</i>										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional or standard X4 UltraBase Dock										License (CD not included)		
Disk	20GB⁸ or 40GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System (shock protection)										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										ThinkPad notebooks implement ThinkVantage™ technologies		
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 266MHz										ThinkPad X4 UltraBase™ Dock (standard with GCU/ECU/HCU)		
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										<ul style="list-style-type: none"> • Provides desktop expansion and cable management for the X40 • Easily connects to the bottom of the X40 for traveling • Converts the X40 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side: <ul style="list-style-type: none"> - Ultrabay Slim Li-Polymer Battery 3-cell 08K8190 - CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288 - Multi-Burner Plus Ultrabay Slim Drive 73P3342 - Second HDD Adapter for Ultrabay Slim 62P4554 		
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions										Disks supported:		
Dimensions ³	4-cell without X4 UltraBase: 10.5" x 8.3" x .81-1.06"; 268mm x 211mm x 20.6-26.9mm 8-cell without X4 UltraBase: 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm 8-cell with X4 UltraBase and optical: 10.7" x 9.3" x 1.5-2.0"; 272 x 237 x 38.2-50.4mm 4-cell with battery: 2.7 lb (1.23kg); 8-cell with battery: 3.2 lb (1.44kg); 8-cell battery and X4 UltraBase with combo: 5.0 lb (2.26kg)										<ul style="list-style-type: none"> • 40GB HS Hard Disk 08K9816 • 60GB HS Hard Disk 73P3357 • 80GB HS Hard Disk 09N4273 		
Weight ²	Color: black; All: magnesium alloy										Other features:		
Case material	Li-Ion 4- or 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase Dock (for two batteries)										<ul style="list-style-type: none"> • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optical security screw • Serial and parallel ports • PS/2 port for keyboard or mouse • Analog DB-15 monitor port • Three USB 2.0 ports (via USB hub) • Ethernet port (Gigabit Ethernet) • Modem port • Retractable feet; 1.3 lb; 580g 		
Battery - life ¹⁰	4-cell models: up to 3.25 hr; 8-cell models: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr										56 watt AC Adapter		
Architecture	Intel 855GME chipset / 82852GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (ethernet, Ricoh® R5C511 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for infrared [dock-based ports])										Asset ID™ ³⁴ (system-specific info in chip accessed over network)		
Mobile media base	<i>Some: X4 UltraBase Dock</i> (see right side) and X4 Dock										ACPI 1.0b and 2.0-compliant		
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices										ENERGY STAR®-compliant		
PC Card Std slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door										International Warranty Service ¹⁷		
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4) / no IEEE 1394 port										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)		
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradeable												
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Bluetooth™	<i>Some: Bluetooth wireless technology / in CDC (with modem)</i>												
Ethernet	Intel PRO/1000 Gigabit Ethernet / on systemboard / Intel 82541GI chipset (MAC/PHY)												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / dual hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant												
Limited warranty ¹²	1 year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available												
128MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad X4 UltraBase Dock	92P3429										
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad X4 Dock	250610U										
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad X40 Series Li-Ion Battery (4-cell)	92P1009										
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad X40 Series Li-Ion Battery (8-cell)	92P1119										
USB Portable Diskette Drive	05K9276	ThinkPad X40 Series Extended Life Battery	92P1006										
USB Fingerprint Reader	73P4774	ThinkPad Multiple Battery Charger II	22P9040										
Powered USB 2.0 Port Combo Drive	22P9194	ThinkPad Ultraportable 56W AC Adapter	02K6880										
USB 2.0 Portable Multi-Burner Drive	22P9163	Preferred Pro USB Fingerprint Keyboard	73P4730										
USB 2.0 Memory Key 128MB	73P4512	TrackPoint Cap Collection	73P2698										
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358	ServicePac® ²² 1yr IOR 9x5 NBD	30L9188										
Kensington® MicroSaver® Security Cable	73P2582	ServicePac 2yr IOR 9x5 NBD	30L9189										
11a/b/g Wireless CardBus Adapter	31P9101	ServicePac 3yr IOR 9x5 NBD	30L9195										
11a/b/g Wireless Mini PCI Adapter II	73P4301	ServicePac 5yr IOR 9x5 NBD	30L9196										
Intel PRO/Wireless 2200BG Mini PCI	73P2801	ServicePac 3yr P&L P/U Depot	30L9192										
SonyEricsson® GC83 EDGE PC Card	26K3393	ServicePac 5yr P&L P/U Depot	69P9197										
M400 Projector	0037A04	Other options at lenovo.com/options											

See footnotes for important warranty information
US models announced October 5, 2004
US models withdrawn effective January or July 2005

* Powered by Intel Centrino™ mobile technology

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(X4) July 2005

ThinkPad® X40 (2386) - TopSeller (February 2005) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X4 UltraBase™	Mini PCI wireless	CDC: modem/ Bluetooth™	Sec chip	Battery cells	Limited warranty ¹²	Avail date	
2386-BHU	Pentium® M 733	1.1	2MB	256MB	12.1" XGA	30GB	None	Optional	* Intel 11b/g ³²	Modem	Yes	4	1-year	Mar 05
2386-JBU	Pentium M 758	1.5	2MB	256MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	8	1-year	Mar 05
2386-KLU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	8	1-year	Mar 05
2386-JCU	Pentium M 758	1.5	2MB	256MB	12.1" XGA	40GB	Combo	X4 UltraBase	* Intel 11b/g	Modem	Yes	8	1-year	Mar 05
2386-KMU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	Combo	X4 UltraBase	* Intel 11b/g	Modem	Yes	8	1-year	Mar 05

• These small and medium business (SMB) models are part of the US TopSeller™ Program
• The 2386 has a 1-year limited warranty

Positioning	Ultimate mobility in a versatile ultraportable; one spindle												
Processor	Intel® Pentium® M Processor Ultra Low Voltage 733 (1.1GHz) or Low Voltage 758 (1.5GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus												
L2 cache	2MB / on die (at processor speed) / ECC												
Memory	256 or 512MB std / 1.28 to 1.53GB max ² / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / std memory soldered to systemboard / one 200-pin SO-DIMM socket available												
Diskette drive	None standard / use optional USB-based diskette drive												
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X4 UltraBase												
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional or standard X4 UltraBase												
Disk	20GB ⁸ or 40GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)												
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits												
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 266MHz												
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap												
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	4-cell without X4 UltraBase: 10.5" x 8.3" x .81-1.06"; 268mm x 211mm x 20.6-26.9mm 8-cell without X4 UltraBase: 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm 8-cell with X4 UltraBase and optical: 10.7" x 9.3" x 1.5-2.0"; 272 x 237 x 38.2-50.4mm												
Weight ²	4-cell with battery: 2.7 lb (1.23kg); 8-cell with battery: 3.2 lb (1.44kg); 8-cell battery and X4 UltraBase with combo: 5.0 lb (2.26kg)												
Case material	Color: black; All: magnesium alloy												
Battery - type	Li-Ion 4- or 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)												
Battery - life ¹⁰	4-cell models: up to 3.25 hr; 8-cell models: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr												
Architecture	Intel 855GME chipset / 82852GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (ethernet, Ricoh® R5C511 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for infrared [dock-based ports])												
Mobile media base	Some: X4 UltraBase (see right side) / optional X4 Dock supported												
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices												
PC Card Std slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door												
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port												
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Bluetooth™	None												
Ethernet	Intel PRO/1000 Gigabit Ethernet / on systemboard / Intel 82541GI chipset (MAC/PHY)												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / dual hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0 ³³ / Atmel® chip / TCG-compliant												
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available												
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad X4 UltraBase	92P3429										
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad X4 Dock	250610U										
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad X40 Series Li-Ion Battery (4-cell)	92P1009										
USB Portable Diskette Drive	05K9276	ThinkPad X40 Series Li-Ion Battery (8-cell)	92P1119										
USB Fingerprint Reader	41U3167	ThinkPad X40 Series Extended Life Battery	92P1006										
USB 2.0/Analog Headset by Sennheiser	40Y8518	ThinkPad Multiple Battery Charger II	22P9040										
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Ultraportable 56W AC Adapter	02K6880										
USB 2.0 Memory Key 1GB	40Y7421	72W Slim AC/DC Combo Adapter	73P4485										
USB 2.0 Super Multi-Burner Drive	40Y8638	Carrying Case - Leather Ultraportable	73P5186										
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358	ThinkPlus™ ²² 1-year LOR 9x5 NBD	41C9166										
Kensington® MicroSaver® Security Cable	73P2582	ThinkPlus 2-year LOR 9x5 NBD	41C9167										
11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 3-year LOR 9x5 NBD	41C9168										
Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ThinkPlus 5-year LOR 9x5 NBD	41C9173										
Lenovo M500 Projector	0037A05	ThinkPlus 3-year P&L P/U Depot	41C9170										
ThinkVision® L201p 20.1" Monitor (black)	9220HB1	ThinkPlus 5-year P&L P/U Depot	41C9174										
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	Other options at lenovo.com/options											

SOFTWARE¹⁴

- Windows XP Professional**
- Microsoft® Windows® XP Professional²⁰ (Service Pack 2)
◇ Disk-to-Disk Recovery (in hidden protected area)
- Preloaded**
- Rescue and Recovery™
 - Access Program
 - Access Connections™
 - Norton AntiVirus (OEM edition)
 - PC-Doctor™
 - Adobe Reader
 - Update Connector™¹⁵
 - InterVideo WinDVD (combo models)
 - RecordNow and DLA (combo)
- Downloadable**
- IBM Director Agent
 - Software Delivery Assistant
 - System Migration Assistant
 - Client Security Software (for security chip)
- License** (CD not included)
- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client

ThinkPad notebooks implement ThinkVantage® technologies

ThinkPad X4 UltraBase™ (standard with JCU/KMU)

- Provides desktop expansion and cable management for the X40/X41
- Easily connects to the bottom of the X40/X41 for traveling
- Converts the X40 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side:
 - Ultrabay Slim Li-Polymer Battery 3-cell 08K8190
 - CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288
 - Super Multi-Burner Ultrabay Slim Drive (curved bezel) 40Y8622
 - Second HDD Adapter for Ultrabay Slim 41U3148
- Disks supported:
 - 40GB HS Hard Disk 08K9816
 - 60GB HS Hard Disk 09Y86106
 - 80GB HS Hard Disk 09N4273

- Other features:
- Power button (front)
 - Stereo speakers (1 watt)
 - Security key lock, security keyhole, and optical security screw
 - Serial and parallel ports
 - PS/2 port for keyboard or mouse
 - Analog DB-15 monitor port
 - Three USB 2.0 ports (via USB hub)
 - Ethernet port (Gigabit Ethernet)
 - Modem port
 - Retractable feet; 1.3 lb; 580g

- 56-watt AC Adapter
- Asset ID™³⁴ (system-specific info in chip accessed over network)
- ACPI 1.0b and 2.0-compliant
- ENERGY STAR®-compliant
- International Warranty Service¹⁷
- 24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹² via 800-IBM-SERV (426-7378)

See footnotes for important warranty information
US models announced February 15, 2005
US models withdrawn effective December 2006

* Powered by Intel Centrino® mobile technology

ThinkPad® X40 (2386) - TopSeller (October 2005) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X4 UltraBase™	Mini PCI wireless	CDC: modem/ Bluetooth™	Sec chip	Battery cells	Limited warranty ¹²	Avail date	
2386-MCU	Pentium® M 753	1.2	2MB	256MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g ³²	Modem	Yes	4-cell	1-year	Oct 05
2386-N8U	Pentium M 778	1.6	2MB	256MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	8-cell	1-year	Oct 05
2386-QAU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	8-cell	1-year	Oct 05
2386-QBU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	Combo	X4 UltraBase	* Intel 11b/g	Modem	Yes	8-cell	1-year	Oct 05
2386-REU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	60GB	Combo	X4 UltraBase	* Intel 11b/g	Mod/Blue	Yes	8-cell	1-year	Oct 05

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- The 2386 has a 1-year limited warranty

Positioning Processor	Ultimate mobility in a versatile ultraportable; one spindle Intel® Pentium M Processor Ultra Low Voltage 753 (1.2GHz) or Low Voltage 778 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ , XD bit, and 400MHz bus							SOFTWARE¹⁴					
L2 cache	2MB / on die (at processor speed) / ECC							Windows XP Professional					
Memory	256 or 512MB std / 1.28 to 1.53GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / std memory soldered to systemboard / one 200-pin SO-DIMM socket available							- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area)					
Diskette drive	None standard / use optional USB-based diskette drive							Preloaded					
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X4 UltraBase							• Rescue and Recovery™					
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional or standard X4 UltraBase							• Access Connections™					
Disk	40GB ⁸ or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable, upgradable / 9.5mm high bay / Active Protection System™ (shock protection)							• ThinkVantage Productivity Center					
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits							• ThinkVantage System Update					
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 266MHz							• Symantec® Client Security					
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200x16.7M at 85Hz							• PC-Doctor™					
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap							• ThinkPad Utilities					
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions							• Adobe Reader					
Dimensions ³	4-cell without X4 UltraBase: 10.5" x 8.3" x .81-1.06"; 268mm x 211mm x 20.6-26.9mm 8-cell without X4 UltraBase: 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm 8-cell with X4 UltraBase and optical: 10.7" x 9.3" x 1.5-2.0"; 272 x 237 x 38.2-50.4mm							• Client Security Solution™ (for security chip)					
Travel weight ²	4-cell battery models: 2.7 lb (1.23kg); 8-cell battery models: 3.2 lb (1.44kg); with 8-cell battery and X4 UltraBase with combo: 5.0 lb (2.26kg)							Downloadable					
Case material	Color: black; All: magnesium alloy							• IBM Director Agent					
Battery - type	Li-Ion 4- or 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)							• Software Delivery Assistant					
Battery - life ¹⁰	with 4-cell: up to 3.25 hr; with 8-cell: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr							• System Migration Assistant					
Architecture	Intel 855GME chipset / 82852GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (ethernet, Ricoh® R5C511 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for infrared [dock-based ports])							License (CD not included)					
Mobile media base	Some: X4 UltraBase (see right side) / optional X4 Dock supported							- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client					
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices							Supports ThinkVantage™ technologies					
PC Card Std slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door							ThinkPad X4 UltraBase™					
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port							• Provides desktop expansion and cable management for the X40/X41					
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception							• Easily connects to the bottom of the X40/X41 for traveling					
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable							• Converts the X40 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side:					
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset							- Ultrabay Slim Li-Polymer Battery					
CDC	One Communications Daughter Card (CDC) socket / customer accessible							3-cell 08K8190					
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset							- CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288					
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)							- Super Multi-Burner Ultrabay Slim Drive (curved bezel) 40Y8622					
Ethernet	Intel PRO/1000 Gigabit Ethernet / on systemboard / Intel 82541GI chipset (MAC/PHY) / Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)							- Second HDD Adapter for Ultrabay Slim 62P4554					
Audio support	Power-on password / dual hard disk password / supervisor password / security keyhole							Disks supported:					
Security	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant							• 40GB HS Hard Disk 08K9816					
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant							• 60GB HS Hard Disk 73P3357					
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available							• 80GB HS Hard Disk 09N4273					
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830			ThinkPad X4 UltraBase				92P3429					
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832			ThinkPad X4 Dock				250610U					
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834			X40 Series Li-Ion Battery (4-cell)				92P1009					
USB Portable Diskette Drive	05K9276			X40 Series Li-Ion Battery (8-cell)				92P1119					
USB 2.0 Memory Key 1GB	40Y7421			X40 Series Extended Life Battery				92P1006					
USB 2.0 Super Multi-Burner Drive	40Y8638			ThinkPad Multiple Battery Charger II				22P9040					
USB 2.0 Portable 80GB Hard Disk	40Y8726			ThinkPad Ultraportable 56W AC Adapter				02K6880					
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358			ThinkVision® L171 17" Monitor (black)				9417AB1					
Kensington® MicroSaver® Security Cable	73P2582			ThinkPlus™ ²² 1-year LOR 9x5 NBD				41C9166					
11a/b/g Wireless Mini PCI Adapter II	73P4301			ThinkPlus 2-year LOR 9x5 NBD				41C9167					
Intel PRO/Wireless 2915ABG Mini PCI	41N2990			ThinkPlus 3-year LOR 9x5 NBD				41C9168					
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137			ThinkPlus 5-year LOR 9x5 NBD				41C9173					
Lenovo M500 Projector	0037A05			ThinkPlus 3-year P&L P/U Depot				41C9170					
ThinkVision® C400 Wireless Projector	0039WA1			ThinkPlus 5-year P&L P/U Depot				41C9174					
ThinkVision L201p 20.1" Monitor (black)	9320HB1			Other options at lenovo.com/options									
							Other features:						
							• Power button (front)						
							• Stereo speakers (1 watt)						
							• Security key lock, security keyhole, and optical security screw						
							• Serial and parallel ports						
							• PS/2 port for keyboard or mouse						
							• Analog DB-15 monitor port						
							• Three USB 2.0 ports (via USB hub)						
							• Ethernet port (Gigabit Ethernet)						
							• Modem port						
							• Retractable feet; 1.3 lb; 580g						
							56 watt AC Adapter						
							Asset ID™ ³⁴ (system-specific info in chip accessed over network)						
							ACPI 1.0b and 2.0-compliant						
							ENERGY STAR®-compliant						
							International Warranty Service ¹⁷						
							24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)						

See footnotes for important warranty information
US models announced October 4, 2005
US models withdrawn effective May 2006

* Powered by Intel Centrino® mobile technology

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ThinkPad® X40 (2371) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X4 UltraBase™	Mini PCI wireless	CDC: modem/ Bluetooth™	Sec chip	Limited warranty ¹²	Education software	Avail date	
2371-9EU	Pentium® M	1.2	1MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g ³²	Modem	Yes	EasyServ	No	Apr 2004
2371-GEU	Pentium M 738	1.4	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	EasyServ	Yes	Oct 2004
2371-KJU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	EasyServ	Yes	Mar 2005
2371-Q8U	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	EasyServ	Yes	Oct 2005

• **The 2371 has an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Ultimate mobility in a versatile ultraportable; one spindle</i> Intel® Pentium M Processor Low Voltage 1.2GHz, 738 (1.4GHz), 758 (1.5GHz), or 778 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										SOFTWARE¹⁴		
L2 cache	1.2GHz: 1MB; 1.4GHz: 2MB; All: on die (at processor speed) / ECC										Windows XP Professional		
Memory	512MB std / 1.53GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / std memory soldered to systemboard / one 200-pin SO-DIMM socket available										- Microsoft® Windows® XP Professional ²⁰ - GEU/KJU/Q8U only: Service Pack 2 ◆ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded		
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional X4 UltraBase										• GEU/KJU/Q8U only: Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™		
Disk	40GB⁸ (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)										• Rescue and Recovery™		
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• Access Connections™		
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 266MHz										• ThinkVantage Productivity Center		
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200x16.7M at 85Hz										• Norton AntiVirus (OEM edition)		
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										• PC-Doctor™		
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions										• ThinkPad Utilities		
Dimensions ³	4-cell without X4 UltraBase: 10.5" x 8.3" x .81-1.06"; 268mm x 211mm x 20.6-26.9mm										• Adobe Reader		
Weight ²	with battery: 2.7 lb (1.23kg)										• Update Connector™ ¹⁵		
Case material	Color: black; All: magnesium alloy										• Client Security Software (for security chip)		
Battery - type	Li-Ion 4-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)										Downloadable		
Battery - life ¹⁰	with 4-cell: up to 3.25 hr; with optional 8-cell: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr										• IBM Director Agent		
Architecture	Intel 855GME chipset / 82852GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (ethernet, Ricoh® R5C511 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for infrared [dock-based ports])										• Software Delivery Assistant		
Mobile media base	Optional: X4 UltraBase (see right side) and X4 Dock										• System Migration Assistant		
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices										License (CD not included)		
PC Card Std slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port										Supports ThinkVantage™ technologies		
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception										ThinkPad X4 UltraBase™		
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										• Provides desktop expansion and cable management for the X40/X41		
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										• Easily connects to the bottom of the X40/X41 for traveling		
CDC	One Communications Daughter Card (CDC) socket / customer accessible										• Converts the X40 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side:		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										- Ultrabay Slim Li-Polymer Battery		
Bluetooth™	None										3-cell 08K8190		
Ethernet	Intel PRO/1000 Gigabit Ethernet / on systemboard / Intel 82541GI chipset (MAC/PHY) / Wake on LAN®										- CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288		
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										- ThinkPad DVD-ROM Ultrabay Slim Drive 73P3270		
Security	Power-on password / dual hard disk password / supervisor password / security keyhole										- Second HDD Adapter for Ultrabay Slim 62P4554		
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant										Disks supported:		
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail										• 40GB HS Hard Disk 08K9816		
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830					ThinkPad X4 UltraBase					92P3429		
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832					ThinkPad X4 Dock					250610U		
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834					ThinkPad X40 Series Li-Ion Battery (4-cell)					92P1009		
USB Portable Diskette Drive	05K9276					ThinkPad X40 Series Li-Ion Battery (8-cell)					92P1119		
USB Serial Parallel Adapter	22P5298					ThinkPad X40 Series Extended Life Battery					92P1006		
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637					ThinkPad Multiple Battery Charger II					22P9040		
USB 2.0 Portable 80GB Hard Disk	40Y8726					ThinkPad Ultraportable 56W AC Adapter					02K6880		
USB 2.0 Memory Key 1GB	40Y7421					72W Slim AC/DC Combo Adapter					73P4485		
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358					Enh Perf Wireless Keyboard and Mouse					73P4067		
Kensington® MicroSaver® Security Cable	73P2582					USB Travel Keyboard with UltraNav®					31P9490		
11a/b/g Wireless Mini PCI Adapter II	73P4301					USB Fingerprint Reader					73P4774		
Intel PRO/Wireless 2915ABG Mini PCI	41N2990					ThinkVision L201p 20.1" Monitor (black)					9320HB1		
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137					ThinkPlus™ ²² 2-year LOR 9x5 NBD					41C9175		
Optical 3-Button Travel Wheel Mouse	31P7410					ThinkPlus 3-year LOR 9x5 NBD					41C9176		
ThinkPad Convertible Monitor Stand	40Y7620					ThinkPlus 4-year LOR 9x5 NBD					41C9177		
Lenovo M500 Projector	0037A05					ThinkPlus 5-year LOR 9x5 NBD					41C9179		
ThinkVision® C400 Wireless Projector	0039WA1					ThinkPlus 4-year P&L P/U Depot					41C9178		
Carrying Case - Leather Ultraportable	73P5186					ThinkPlus 5-year P&L P/U Depot					41C9180		
ThinkPad Carrying Case - BackPack	73P3599					Other options at lenovo.com/options							
											Other features:		
											• Power button (front)		
											• Stereo speakers (1 watt)		
											• Security key lock, security keyhole, and optical security screw		
											• Serial and parallel ports		
											• PS/2 port for keyboard or mouse		
											• Analog DB-15 monitor port		
											• Three USB 2.0 ports (via USB hub)		
											• Ethernet port (Gigabit Ethernet)		
											• Modem port		
											• Retractable feet; 1.3 lb; 580g		
											56 watt AC Adapter		
											Asset ID™ ³⁴ (system-specific info in chip accessed over network)		
											ACPI 1.0b and 2.0-compliant		
											International Warranty Service ¹⁷		
											24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced April 6 or October 5, 2004 or February 15 or October 4, 2005
US models withdrawn effective May 2005, April 2006, or May 2006

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ThinkPad® X40 (2372) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X4 UltraBase™	Mini PCI wireless	CDC: modem/ Bluetooth™	Sec chip	Limited warranty ¹²	Education software	Avail date	
2372-9EU	Pentium® M	1.2	1MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g ³²	Modem	Yes	Onsite	No	Apr 2004
2372-G4U	Pentium M 738	1.4	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	Onsite	Yes	Oct 2004
2372-KKU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	Onsite	Yes	Mar 2005
2372-Q9U	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Yes	Onsite	Yes	Oct 2005

• **The 2372 has a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Ultimate mobility in a versatile ultraportable; one spindle</i>										SOFTWARE¹⁴		
L2 cache Memory	Intel® Pentium® M Processor Low Voltage 1.2GHz, 738 (1.4GHz), 758 (1.5GHz), or 778 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus 1.2GHz; 1MB ; 1.4/1.5/1.6GHz; 2MB ; All: on die (at processor speed) / ECC 512MB std / 1.53GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / std memory soldered to systemboard / one 200-pin SO-DIMM socket available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ - <i>G4U/KKU/Q9U only</i> : Service Pack 2 ⇨ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive Ultrabay™ Slim Disk	None standard / use optional USB-based diskette drive Supports Ultrabay Slim devices in optional X4 UltraBase 40GB ⁸ (4200 rpm), 9.5mm, ATA-100/1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)										Preloaded • <i>G4U/KKU/Q9U only</i> : Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™ • Rescue and Recovery™ • Access Connections™ • ThinkVantage Productivity Center • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Update Connector™ ¹⁵ • Client Security Software (for security chip)		
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant		
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 266MHz										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200x16.7M at 85Hz										Supports ThinkVantage™ technologies		
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap Illuminates the keyboard to improve visibility in low-light conditions										ThinkPad X4 UltraBase™ • Provides desktop expansion and cable management for the X40/X41 • Easily connects to the bottom of the X40/X41 for traveling • Converts the X40 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side: – Ultrabay Slim Li-Polymer Battery 3-cell 08K8190 – CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288 – Super Multi-Burner Ultrabay Slim Drive (curved bezel) 40Y8622 – Second HDD Adapter for Ultrabay Slim 62P4554 Disks supported: • 60GB HS Hard Disk 73P3357 • 80GB HS Hard Disk 09N4273		
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³ Weight ² Case material Battery - type	4-cell without X4 UltraBase: 10.5" x 8.3" x .81-1.06"; 268mm x 211mm x 20.6-26.9mm with battery: 2.7 lb (1.23kg) Color: black; All: magnesium alloy Li-Ion 4-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries) 4-cell models: up to 3.25 hr; with optional 8-cell models: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr												
Battery - life ¹⁰	4-cell models: up to 3.25 hr; with optional 8-cell models: up to 7.0 hr; with 8-cell and optional Extended Life Battery: up to 10 hr												
Architecture	Intel 855GME chipset / 82852GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, Low Pin Count (LPC) interface, USB [Bluetooth]) / Intel 82802AC Firmware Hub / PCI bus 2.2 32-bit, 33MHz (ethernet, Ricoh® R5C511 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for infrared [dock-based ports])												
Mobile media base Secure Digital slot PC Card Std slot Ports	Optional: X4 UltraBase (see right side) and X4 Dock One Secure Digital Card slot / supports SD memory cards used in consumer devices One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port												
Wireless antenna Mini PCI Intel 11b/g ³² CDC Modem Bluetooth™ Ethernet	UltraConnect™ antenna built into the display cover for optimal wireless signal reception One Mini PCI type III slot (Communications Bay) / customer upgradable 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset One Communications Daughter Card (CDC) socket / customer accessible 56K ⁶ V.90 (V.92-designed ²⁸) modem in CDC / Conexant® chipset None Intel PRO/1000 Gigabit Ethernet / on systemboard / Intel 82541GI chipset (MAC/PHY) / Wake on LAN®												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security Security chip	Power-on password / dual hard disk password / supervisor password / security keyhole Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant												
Limited warranty ¹²	3-year/1-year battery, limited onsite service , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time ²⁴										Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optical security screw • Serial and parallel ports • PS/2 port for keyboard or mouse • Analog DB-15 monitor port • Three USB 2.0 ports (via USB hub) • Ethernet port (Gigabit Ethernet) • Modem port • Retractable feet; 1.3 lb; 580g		
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad X4 UltraBase	92P3429										
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad X4 Dock	250610U										
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad X40 Series Li-Ion Battery (4-cell)	92P1009										
USB Portable Diskette Drive	05K9276	ThinkPad X40 Series Li-Ion Battery (8-cell)	92P1119										
USB Serial Parallel Adapter	22P5298	ThinkPad X40 Series Extended Life Battery	92P1006										
USB 2.0 Super Multi-Burner Drive	40Y8638	ThinkPad Multiple Battery Charger II	22P9040										
USB 2.0 Portable 80GB Hard Disk	40Y8726	ThinkPad Ultraportable 56W AC Adapter	02K6880										
USB 2.0 Memory Key 1GB	40Y7421	72W Slim AC/DC Combo Adapter	73P4485										
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358	USB Travel Keyboard with UltraNav®	31P9490										
Kensington® MicroSaver® Security Cable	73P2582	Enh Perf Wireless Keyboard and Mouse	73P4067										
11a/b/g Wireless Mini PCI Adapter II	73P4301	Lenovo M500 Projector	0037A05										
Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ThinkVision® C400 Wireless Projector	0039WA1										
Optical 3-Button Travel Wheel Mouse	31P7410	ThinkVision L201p 20.1" Monitor (black)	9320HB1										
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	Other options at lenovo.com/options											
ThinkPad Monitor Stand	22P5265												
Carrying Case - Leather Ultraportable	73P5186												
Carrying Case - BackPack	73P3599	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty											

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced April 6 or October 5, 2004 or February 15 or October 4, 2005
US models withdrawn effective June 2005, August 2005, April 2006, or May 2006

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ThinkPad® X41 (2525) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	L2 Memory	Screen	Optical Disk	UltraBase	ThinkPad X4 UltraBase™	Mini PCI wireless	CDC: modem/Bluetooth™	Fingerprint reader	Limited warranty ¹²	WH Gbl Entry	Avail date	
2525-18U	Pentium® M 758	1.5	2MB	256MB	12.1" XGA	40GB	None	Optional	Open; wireless upg ³⁶	Modem	No	3-yr	W G	Apr 05
2525-3CU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g ³²	Modem	No	3-yr	W G	Apr 05
2525-54U	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Finger	3-yr	W G	Apr 05
2525-6NU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	60GB	None	Optional	* Intel 11a/b/g ³²	Mod/Blue	Finger	3-yr	W	Apr 05
2525-6HU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	60GB	Combo	UltraBase	* Intel 11a/b/g	Mod/Blue	Finger	3-yr	W	Apr 05
2525-5ZU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11b/g	Modem	Finger	3-yr	W TAA	Apr 05
Positioning	<i>Ultimate mobility in a versatile ultraportable; one spindle</i>													
US Govt (TAA) ⁵ Processor	5ZU: US Government model (Trade Act Agreement-compliant) Intel® Pentium® M Processor Low Voltage 758 (1.5GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 400MHz system bus													
L2 cache Memory	2MB / on die (at processor speed) / ECC 256 or 512MB std / 1.28 to 1.53GB max ⁷ / PC2-4200 533MHz DDR2 (limited to 400MHz because of low voltage processor) / non-parity / CL4 / dual channel capable / std memory soldered to systemboard / one 200-pin SO-DIMM socket available													
Diskette drive Combo	None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X4 UltraBase													
Ultrabay™ Slim Disk	Supports Ultrabay Slim devices in optional or standard X4 UltraBase 40GB⁸ or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)													
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits													
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz													
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap													
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³ Travel weight ²	<i>8-cell without X4 UltraBase:</i> 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm <i>8-cell battery models:</i> 3.3 lb (1.49kg) <i>with 8-cell battery and X4 UltraBase with combo:</i> 5.1 lb (2.31kg)													
Case material	Color: black; All: magnesium alloy													
Battery - type	Li-Ion 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)													
Battery - life ¹⁰	<i>with 8-cell:</i> up to 5.7 hr; <i>with 8-cell and optional Extended Life Battery:</i> up to 8.1 hr													
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C811 CardBus Plus controller, Mini PCI, external expansion) / LPC bus (PC87392 Super I/O for infrared [dock-based ports], Atmel® security chip) <i>Some:</i> X4 UltraBase (see right side) / optional X4 Dock supported													
Mobile media base	One Secure Digital Card slot / supports SD memory cards used in consumer devices													
Secure Digital slot	One Type I or one Type II / CardBus Plus 32-bit / PCMCIA 2.1 / integrated door													
PC Card Std slot	Two USB (version 2.0), plus one powered USB port for select options /													
Ports	external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use <i>X4 UltraBase</i>) / no IEEE 1394 port													
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable													
Wireless upg ³⁶	<i>Some:</i> wireless upgradable with wireless Mini PCI options													
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset													
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, Intel 82533 chipset													
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Bluetooth™	<i>Some:</i> Bluetooth wireless technology / in CDC (with modem)													
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE													
Audio support	Soft audio / ICH AC97 controller / DirectSound™ support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / dual hard disk password / supervisor password / security keyhole													
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant													
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip													
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad X4 UltraBase		92P3429									
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad X4 Dock		250610U									
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		ThinkPad X40 Series Li-Ion Battery (4-cell)		92P1009									
USB Portable Diskette Drive	05K9276		ThinkPad X40 Series Li-Ion Battery (8-cell)		92P1119									
USB Numeric Keypad (black)	33L3225		ThinkPad X40 Series Extended Life Battery		92P1006									
USB Fingerprint Reader	73P4774		ThinkPad Multiple Battery Charger II		22P9040									
USB 2.0 Super Multi-Burner Drive	40Y8638		ThinkPad Ultraportable 56W AC Adapter		02K6880									
USB 2.0 Memory Key 1GB	40Y7421		72W Slim AC/DC Combo Adapter		73P4485									
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358		Enh Perf Wireless Keyboard and Mouse		73P4067									
Kensington® MicroSaver® Security Cable	73P2582		ThinkPlus™ ²² 2-year LOR 9x5 NBD		41C9175									
11a/b/g Wireless Mini PCI Adapter II	73P4301		ThinkPlus 3-year LOR 9x5 NBD		41C9176									
Intel PRO/Wireless 2915ABG Mini PCI	41N2990		ThinkPlus 5-year LOR 9x5 NBD		41C9179									
Carrying Case - Leather Ultraportable	73P5186		ThinkPlus 4-year P&L P/U Depot		41C9178									
Carrying Case - Backpack	73P3599		ThinkPlus 5-year P&L P/U Depot		41C9180									
ThinkVision® L201p 20.1" Monitor (black)	9320HB1		Other options at lenovo.com/options											
SOFTWARE¹⁴														
Windows XP Professional														
- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)														
◇ Disk-to-Disk Recovery (in hidden protected area)														
Preloaded														
• Rescue and Recovery™														
• Access Program														
• Access Connections™														
• Norton AntiVirus (OEM edition)														
• PC-Doctor™														
• ThinkPad Utilities														
• Adobe Reader														
• Update Connector™ ¹⁵														
• Client Security Software (for security chip)														
Downloadable														
• IBM Director Agent														
• Software Delivery Assistant														
• System Migration Assistant														
License (CD not included)														
- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client														
Supports ThinkVantage™ technologies														
ThinkPad X4 UltraBase™ Dock														
• Provides desktop expansion and cable management for the X40/X41														
• Easily connects to the bottom of the X40/X41 for traveling														
• Converts the X40 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side:														
- Ultrabay Slim Li-Polymer Battery 3-cell 08K8190														
- CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288														
- ThinkPad DVD-ROM Ultrabay Slim Drive 73P3270														
- Super Multi-Burner Ultrabay Slim Drive (curved bezel) 40Y8622														
- Second HDD Adapter for Ultrabay Slim 62P4554														
Disks supported:														
• 40GB HS Hard Disk 08K9816														
• 60GB HS Hard Disk 73P3357														
• 80GB HS Hard Disk 09N4273														
Other features:														
• Power button (front)														
• Stereo speakers (1 watt)														
• Security key lock, security keyhole, and optical security screw														
• Serial and parallel ports														
• PS/2 port for keyboard or mouse														
• Analog DB-15 monitor port														
• Three USB 2.0 ports (via USB hub)														
• Ethernet port (Gigabit Ethernet)														
• Modem port														
• Retractable feet; 1.3 lb; 580g														
56 watt AC Adapter														
Asset ID™ ³⁴ (system-specific info in chip accessed over network)														
ACPI 1.0b and 2.0-compliant														
ENERGY STAR®-compliant														
International Warranty Service ¹⁷														
24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)														

See footnotes for important warranty information

* Powered by Intel Centrino® mobile technology

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US models announced April 5, 2005

(X1) April 2006

US models withdrawn effective November 2005 or May 2006

ThinkPad® X41 (2525) - October 2005 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Optical in Disk	UltraBase	ThinkPad X4 UltraBase™	Mini PCI wireless	CDC: modem/Bluetooth™	Fingerprint reader	Limited warranty ¹²	WH Entry	Gbl	Avail date
2525-A2U	Pentium® M 778	1.6	2MB	256MB	12.1" XGA	40GB	None	Optional	Open; wireless upg ³⁶	Modem	No	3-yr	W G	Oct 05
2525-C3U	Pentium M 778	1.6	2MB	512MB	12.1" XGA	60GB	None	Optional	* Intel 11b/g ³²	Modem	No	3-yr	W G	Oct 05
2525-E2U	Pentium M 778	1.6	2MB	512MB	12.1" XGA	60GB	None	Optional	* Intel 11b/g	Modem	Finger	3-yr	W G	Oct 05
2525-F6U	Pentium M 778	1.6	2MB	512MB	12.1" XGA	60GB	None	Optional	* Intel 11a/b/g ³²	Mod/Blue	Finger	3-yr	W	Oct 05
2525-FGU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	60GB	Combo	UltraBase	* Intel 11a/b/g	Mod/Blue	Finger	3-yr		Oct 05
2525-FUU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	60GB	Combo	UltraBase	11a/b/g II ³²	Mod/Blue	Finger	3-yr		Oct 05
Positioning US Govt (TAA) ⁵ Processor	Ultimate mobility in a versatile ultraportable; one spindle None Intel® Pentium® M Processor Low Voltage 778 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 400MHz system bus													
L2 cache Memory	2MB / on die (at processor speed) / ECC 256 or 512MB std / 1.28 to 1.53GB max ⁷ / PC2-4200 533MHz DDR2 (limited to 400MHz because of low voltage processor) / non-parity / CL4 / dual channel capable / std memory soldered to systemboard / one 200-pin SO-DIMM socket available													
Diskette drive Combo Ultrabay™ Slim Disk	None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X4 UltraBase Supports Ultrabay Slim devices in optional or standard X4 UltraBase 40GB⁸ or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)													
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits													
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz													
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap Illuminates the keyboard to improve visibility in low-light conditions													
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³ Weight ²	<i>8-cell without X4 UltraBase:</i> 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm <i>8-cell battery models:</i> 3.3 lb (1.49kg); <i>with 8-cell battery and X4 UltraBase with combo:</i> 5.1 lb (2.31kg)													
Case material Battery - type	<i>Color:</i> black; <i>All:</i> magnesium alloy Li-Ion 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)													
Battery - life ¹⁰	<i>with 8-cell:</i> up to 5.7 hr; <i>with 8-cell and optional Extended Life Battery:</i> up to 8.1 hr													
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoch® R5C811 CardBus Plus controller, Mini PCI, external expansion) / LPC bus (PC87392 Super I/O for infrared [dock-based ports], Atmel® security chip)													
Mobile media base	<i>Some:</i> X4 UltraBase (see right side) / optional X4 Dock supported													
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices													
PC Card Std slot	One Type I or one Type II / CardBus Plus 32-bit / PCMCIA 2.1 / integrated door													
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use <i>X4 UltraBase</i>) / no IEEE 1394 port													
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable <i>Some:</i> wireless upgradable with wireless Mini PCI options													
Wireless upg ³⁶	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset													
Intel 11b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, Intel 82533 chipset													
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip													
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Bluetooth™	<i>Some:</i> Bluetooth wireless technology / in CDC (with modem)													
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / dual hard disk password / supervisor password / security keyhole													
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant													
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip													
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad X4 UltraBase	92P3429											
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad X4 Dock	250610U											
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	X40 Series Li-Ion Battery (4-cell)	92P1009											
USB Portable Diskette Drive	05K9276	X40 Series Li-Ion Battery (8-cell)	92P1119											
USB Numeric Keypad (black)	33L3225	X40 Series Extended Life Battery	92P1006											
USB Fingerprint Reader	41U3167	ThinkPad Multiple Battery Charger II	22P9040											
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad Ultraportable 56W AC Adapter	02K6880											
USB 2.0 Portable 80GB Hard Disk	40Y8726	72W Slim AC/DC Combo Adapter	73P4485											
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358	ThinkVision™ L201p 20.1" Monitor (black)	9220HB1											
Kensington® MicroSaver® Security Cable	73P2582	ThinkPlus™ ²² 2-year LOR 9x5 NBD	41C9175											
11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 3-year LOR 9x5 NBD	41C9176											
Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ThinkPlus 5-year LOR 9x5 NBD	41C9179											
Carrying Case - Leather Ultraportable	73P5186	ThinkPlus 4-year P&L P/U Depot	41C9178											
Carrying Case - BackPack	73P3599	ThinkPlus 5-year P&L P/U Depot	41C9180											
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options												

SOFTWARE¹⁴

Windows XP Professional

- Microsoft® Windows® XP Professional²⁰ (Service Pack 2)
- ◆ Disk-to-Disk Recovery (in hidden protected area)

Preloaded

- Rescue and Recovery™
- Access Connections™
- ThinkVantage Productivity Center
- ThinkVantage System Update
- Symantec® Client Security
- PC-Doctor™
- ThinkPad Utilities
- Adobe Reader
- Update Connector™¹⁵
- Client Security Solution™ (for security chip)

Downloadable

- IBM Director Agent
- Software Delivery Assistant
- System Migration Assistant

License (CD not included)

- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client

Supports ThinkVantage® technologies

ThinkPad X4 UltraBase™

- Provides desktop expansion and cable management for the X40/X41
- Easily connects to the bottom of the X40/X41 for traveling
- Converts the X41 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side:
 - Ultrabay Slim Li-Polymer Battery 3-cell 08K8190
 - CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288
 - ThinkPad DVD-ROM Ultrabay Slim Drive 73P3270
 - Super Multi-Burner Ultrabay Slim Drive (curved bezel) 40Y8622
 - Second HDD Adapter for Ultrabay Slim 41U3148
- Disks supported:
 - 40GB HS Hard Disk 08K9816
 - 60GB HS Hard Disk 39W9106
 - 80GB HS Hard Disk 09N4273

Other features:

- Power button (front)
- Stereo speakers (1 watt)
- Security key lock, security keyhole, and optical security screw
- Serial and parallel ports
- PS/2 port for keyboard or mouse
- Analog DB-15 monitor port
- Three USB 2.0 ports (via USB hub)
- Ethernet port (Gigabit Ethernet)
- Modem port
- Retractable feet; 1.3 lb; 580g

56-watt AC Adapter
Asset ID™³⁴ (system-specific info in chip accessed over network)
ACPI 1.0b and 2.0-compliant
ENERGY STAR®-compliant
International Warranty Service¹⁷
24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹² via 800-IBM-SERV (426-7378)

See footnotes for important warranty information
US models announced October 4, 2005
US models withdrawn effective May or November 2006

* Powered by Intel Centrino® mobile technology

ThinkPad® X41 (2527) - Express - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 cache	Memory	Screen	Disk	Optical in	ThinkPad UltraBase™	Mini PCI wireless	CDC: modem/Bluetooth™	Fingerprint reader	Sec chip	Limited warranty ¹²	Avail date
2527-55U	Pentium® M 758	1.5 GHz	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11a/b/g ³²	Modem	Finger	Yes 1 year	Apr 05
2527-6NU	Pentium M 758	1.5 GHz	2MB	512MB	12.1" XGA	60GB	None	Optional	* Intel 11a/b/g	Mod/Blue	Finger	Yes 1 year	Apr 05
2527-5FU	Pentium M 758	1.5 GHz	2MB	512MB	12.1" XGA	40GB	Combo	UltraBase	* Intel 11a/b/g	Modem	Finger	Yes 1 year	Apr 05

- These small and medium business (SMB) models are part of the US Think Express Program
- The 2527 has a 1 year limited warranty

Positioning	Ultimate mobility in a versatile ultraportable; one spindle										SOFTWARE¹⁴				
US Govt (TAA) ⁵	None										Windows XP Professional				
Processor	Intel® Pentium® M Processor Low Voltage 758 (1.5GHz) with enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 400MHz system bus										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)				
L2 cache	2MB / on die (at processor speed) / ECC										◇ Disk-to-Disk Recovery (in hidden protected area)				
Memory	512MB std / 1.28 to 1.53GB max ⁷ / PC2-4200 533MHz DDR2 (limited to 400MHz because of low voltage processor) / non-parity / CL4 / dual channel capable / std memory soldered to systemboard / one 200-pin SO-DIMM socket available										Preloaded				
Diskette drive	None standard / use optional USB-based diskette drive										• Rescue and Recovery™				
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X4 UltraBase										• Access Program				
Ultraplay™ Slim	Supports Ultraplay Slim devices in optional or standard X4 UltraBase										• Access Connections™				
Disk	40GB ⁸ or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)										• Norton AntiVirus (OEM edition)				
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• PC-Doctor™				
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										• ThinkPad Utilities				
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										• Adobe Reader				
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions										• Update Connector™ ¹⁵				
Dimensions ³	8-cell without X4 UltraBase: 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm										• Client Security Software (for security chip)				
Travel weight ²	8-cell battery models: 3.3 lb (1.49kg); with 8-cell battery and X4 UltraBase with combo: 5.1 lb (2.31kg)										Downloadable				
Case material	Color: black; All: magnesium alloy										• IBM Director Agent				
Battery - type	Li-Ion 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)										• Software Delivery Assistant				
Battery - life ¹⁰	with 8-cell: up to 5.7 hr; with 8-cell and optional Extended Life Battery: up to 8.1 hr										• System Migration Assistant				
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C811 CardBus Plus controller, Mini PCI, external expansion) / LPC bus (PC87392 Super I/O for infrared [dock-based ports], Atmel® security chip)										ThinkPad X4 UltraBase™				
Mobile media base	Some: X4 UltraBase (see right side) / optional X4 Dock supported										• Provides desktop expansion and cable management for the X40/X41				
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices										• Easily connects to the bottom of the X40/X41 for traveling				
PC Card Std slot	One Type I or one Type II / CardBus Plus 32-bit / PCMCIA 2.1 / integrated door										• Converts the X41 to a two-spindle system by supporting optional Ultraplay Slim accessories in left side:				
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port										- Ultraplay Slim Li-Polymer Battery 3-cell 08K8190				
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception										- CD-RW/DVD Combo II Ultraplay Slim Drive 73P3288				
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradeable										- ThinkPad DVD-ROM Ultraplay Slim Drive 73P3270				
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, Intel 82533 chipset										- Multi-Burner Plus Ultraplay Slim Drive 73P3342				
CDC	One Communications Daughter Card (CDC) socket / customer accessible										- Second HDD Adapter for Ultraplay Slim 62P4554				
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										Disks supported:				
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)										• 40GB HS Hard Disk 08K9816				
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										• 60GB HS Hard Disk 73P3357				
Audio support	Soft audio / ICH AC97 controller / DirectSound™ support / AD1981B AC97 codec / mono speaker / 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										• 80GB HS Hard Disk 09N4273				
Security	Power-on password / dual hard disk password / supervisor password / security keyhole										Other features:				
Security chip	Embedded Security Subsystem 2.0 ³³ / Atmel® chip / TCG-compliant										• Power button (front)				
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / integrated with security chip										• Stereo speakers (1 watt)				
Limited warranty ¹²	1 year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available										• Security key lock, security keyhole, and optical security screw				
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad X4 UltraBase	92P3429	512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad X4 Dock	250610U	1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	ThinkPad X40 Series Li-Ion Battery (4-cell)	92P1009	USB Portable Diskette Drive	05K9276	ThinkPad X40 Series Li-Ion Battery (8-cell)	92P1119
USB Numeric Keypad (black)	33L3225	ThinkPad X40 Series Extended Life Battery	92P1006	USB Fingerprint Reader	73P4774	ThinkPad Multiple Battery Charger II	22P9040	Powered USB 2.0 Port Combo Drive	22P9194	ThinkPad Ultraportable 56W AC Adapter	02K6880	USB 2.0 Portable Multi-Burner Drive	22P9163	Enh Perf Wireless Keyboard and Mouse	73P4067
USB 2.0 Memory Key 512MB	22P9230	ThinkVision® C400 Wireless Projector	0039WA1	60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358	ThinkPlus™.22 1yr LOR 9x5 NBD	41C9166	Kensington® MicroSaver® Security Cable	73P2582	ThinkPlus 2yr LOR 9x5 NBD	41C9167	11a/b/g Wireless CardBus Adapter	31P9101	ThinkPlus 3yr LOR 9x5 NBD	41C9168
11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 5yr LOR 9x5 NBD	41C9173	Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ThinkPlus 2yr P&L P/U Depot	41C9169	ThinkPad Carrying Case - Backpack	73P3599	ThinkPlus 3yr P&L P/U Depot	41C9170	ThinkPad Carrying Case - Leather	73P3600	ThinkPlus 4yr P&L P/U Depot	41C9172
Carrying Case - Leather Ultraportable	73P5186	ThinkPlus 5yr P&L P/U Depot	41C9174	SonyEricsson® GC83 EDGE PC Card	26K3393	Other options at lenovo.com/options									

See footnotes for important warranty information
US models announced April 5, 2005
US models withdrawn effective November 2005

* Powered by Intel Centrino™ mobile technology

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ThinkPad® X41 (2527) - TopSeller (October 2005) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 cache	Memory	Screen	Disk	Optical in	ThinkPad UltraBase™	Mini PCI wireless	CDC: modem/Bluetooth™	Fingerprint reader	Sec chip	Limited warranty ¹²	Avail date	
2527-EJU	Pentium® M 778	1.6 GHz	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11a/b/g ³²	Modem	Finger	Yes	1-year	Oct 05
2527-FQU	Pentium M 778	1.6 GHz	2MB	512MB	12.1" XGA	60GB	None	Optional	* Intel 11a/b/g	Mod/Blue	Finger	Yes	1-year	Oct 05
2527-B4U	Pentium M 778	1.6 GHz	2MB	512MB	12.1" XGA	40GB	Combo	UltraBase	* Intel 11a/b/g	Modem	Finger	Yes	1-year	Oct 05

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- The 2527 has a 1-year limited warranty

Positioning	Ultimate mobility in a versatile ultraportable; one spindle												
US Govt (TAA) ⁵	None												
Processor	Intel® Pentium® M Processor Low Voltage 778 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 400MHz system bus												
L2 cache	2MB / on die (at processor speed) / ECC												
Memory	512MB std / 1.28 to 1.53GB max ⁷ / PC2-4200 533MHz DDR2 (limited to 400MHz because of low voltage processor) / non-parity / CL4 / dual channel capable / std memory soldered to systemboard / one 200-pin SO-DIMM socket available												
Diskette drive	None standard / use optional USB-based diskette drive												
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X4 UltraBase												
Ultrapabay™ Slim	Supports Ultrapabay Slim devices in optional or standard X4 UltraBase												
Disk	40GB ⁸ or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)												
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits												
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz												
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint™, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap												
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	8-cell without X4 UltraBase: 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm												
Travel weight ²	8-cell battery models: 3.3 lb (1.49kg); with 8-cell battery and X4 UltraBase with combo: 5.1 lb (2.31kg)												
Case material	Color: black; All: magnesium alloy												
Battery - type	Li-Ion 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)												
Battery - life ¹⁰	with 8-cell: up to 5.7 hr; with 8-cell and optional Extended Life Battery: up to 8.1 hr												
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C811 CardBus Plus controller, Mini PCI, external expansion) / LPC bus (PC87392 Super I/O for infrared [dock-based ports], Atmel® security chip)												
Mobile media base	Some: X4 UltraBase (see right side) / optional X4 Dock supported												
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices												
PC Card Std slot	One Type I or one Type II / CardBus Plus 32-bit / PCMCIA 2.1 / integrated door												
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port												
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, Intel 82533 chipset												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)												
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green) / Power-on password / dual hard disk password / supervisor password / security keyhole												
Security	Embedded Security Subsystem 2.0 ³³ / Atmel® chip / TCG-compliant												
Security chip	Fingerprint reader on palm rest / swipe sensor / integrated with security chip												
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / integrated with security chip												
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available												
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad X4 UltraBase	92P3429										
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad X4 Dock	250610U										
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	X40 Series Li-Ion Battery (4-cell)	92P1009										
USB Portable Diskette Drive	05K9276	X40 Series Li-Ion Battery (8-cell)	92P1119										
USB Numeric Keypad (black)	33L3225	X40 Series Extended Life Battery	92P1006										
USB Fingerprint Reader	73P4774	ThinkPad Multiple Battery Charger II	22P9040										
USB 2.0 Super Multi-Burner Drive	40Y8638	ThinkPad Ultraportable 56W AC Adapter	02K6880										
USB 2.0 Memory Key 1GB	40Y7421	Enh Perf Wireless Keyboard and Mouse	73P4067										
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358	SonyEricsson® GC83 EDGE PC Card	26K3393										
Kensington® MicroSaver® Security Cable	73P2582	ThinkPlus™ ²² 1-year LOR 9x5 NBD	41C9166										
11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 2-year LOR 9x5 NBD	41C9167										
Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ThinkPlus 3-year LOR 9x5 NBD	41C9168										
ThinkPad Carrying Case - BackPack	73P3599	ThinkPlus 5-year LOR 9x5 NBD	41C9173										
ThinkPad Carrying Case - Leather	73P3600	ThinkPlus 2-year P&L P/U Depot	41C9169										
Carrying Case - Leather Ultraportable	73P5186	ThinkPlus 3-year P&L P/U Depot	41C9170										
ThinkVision® C400 Wireless Projector	0039WA1	ThinkPlus 4-year P&L P/U Depot	41C9172										
ThinkVision L171 17" Monitor (black)	9417AB1	ThinkPlus 5-year P&L P/U Depot	41C9174										
ThinkVision L201p 20.1" Monitor (black)	9320HB1	Other options at lenovo.com/options											
SOFTWARE¹⁴													
Windows XP Professional													
- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)													
◇ Disk-to-Disk Recovery (in hidden protected area)													
Preloaded													
• Rescue and Recovery™													
• Access Connections™													
• ThinkVantage Productivity Center													
• ThinkVantage System Update													
• Symantec® Client Security													
• PC-Doctor™													
• ThinkPad Utilities													
• Adobe Reader													
• Update Connector™ ¹⁵													
• Client Security Solution™ (for security chip)													
License (CD not included)													
- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client													
ThinkPad notebooks implement ThinkVantage™ technologies and de-sign; visit thinkpad.com/thinkvantage													
ThinkPad X4 UltraBase™ Dock													
• Provides desktop expansion and cable management for the X40/X41													
• Easily connects to the bottom of the X40/X41 for traveling													
• Converts the X41 to a two-spindle system by supporting optional Ultrapabay Slim accessories in left side:													
- Ultrapabay Slim Li-Polymer Battery 3-cell 08K8190													
- CD-RW/DVD Combo II Ultrapabay Slim Drive 73P3288													
- ThinkPad DVD-ROM Ultrapabay Slim Drive 73P3270													
- Super Multi-Burner Ultrapabay Slim Drive (curved bezel) 40Y8622													
- Second HDD Adapter for Ultrapabay Slim 62P4554													
Disks supported:													
• 40GB HS Hard Disk 08K9816													
• 60GB HS Hard Disk 73P3357													
• 80GB HS Hard Disk 09N4273													
Other features:													
• Power button (front)													
• Stereo speakers (1 watt)													
• Security key lock, security keyhole, and optical security screw													
• Serial and parallel ports													
• PS/2 port for keyboard or mouse													
• Analog DB-15 monitor port													
• Three USB 2.0 ports (via USB hub)													
• Ethernet port (Gigabit Ethernet)													
• Modem port													
• Retractable feet; 1.3 lb; 580g													
56 watt AC Adapter													
Asset ID™ ³⁴ (system-specific info in chip accessed over network)													
ACPI 1.0b and 2.0-compliant													
ENERGY STAR®-compliant													
International Warranty Service ¹⁷													
24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)													

See footnotes for important warranty information
US models announced October 4, 2005
US models withdrawn effective May 2006

* Powered by Intel Centrino® mobile technology

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ThinkPad® X41 (2528) - Express - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 cache	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X4 UltraBase™	Mini PCI wireless	CDC: modem/Bluetooth™	Fingerprint reader	Sec chip	Limited warranty ¹²	Avail date	
2528-55U	Pentium® M 758	1.5	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11a/b/g ³²	Modem	Finger	Yes	3 years	Apr 05
2528-6NU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	60GB	None	Optional	* Intel 11a/b/g	Mod/Blue	Finger	Yes	3 years	Apr 05
2528-5FU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	Combo	UltraBase	* Intel 11a/b/g	Modem	Finger	Yes	3 years	Apr 05

- These small and medium business (SMB) models are part of the US Think Express Program
- The 2528 has a 3 year limited warranty

Positioning	Ultimate mobility in a versatile ultraportable; one spindle										SOFTWARE¹⁴		
US Govt (TAA) ⁵	None										Windows XP Professional		
Processor	Intel® Pentium® M Processor Low Voltage 758 (1.5GHz) with enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 400MHz system bus										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)		
L2 cache	2MB / on die (at processor speed) / ECC										◇ Disk-to-Disk Recovery (in hidden protected area)		
Memory	512MB std / 1.28 to 1.53GB max ⁷ / PC2-4200 533MHz DDR2 (limited to 400MHz because of low voltage processor) / non-parity / CL4 / dual channel capable / std memory soldered to systemboard / one 200-pin SO-DIMM socket available										Preloaded		
Diskette drive	None standard / use optional USB-based diskette drive										• Rescue and Recovery™		
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X4 UltraBase										• Access Program		
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional or standard X4 UltraBase										• Access Connections™		
Disk	40GB ⁸ or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)										• Norton AntiVirus (OEM edition)		
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• PC-Doctor™		
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										• ThinkPad Utilities		
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										• Adobe Reader		
ThinkLight®	Illuminates the keyboard to improve visibility in low-light conditions										• Update Connector™ ¹⁵		
Dimensions ³	8-cell without X4 UltraBase: 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm										• Client Security Software (for security chip)		
Travel weight ²	8-cell battery models: 3.3 lb (1.49kg); with 8-cell battery and X4 UltraBase with combo: 5.1 lb (2.31kg)										Downloadable		
Case material	Color: black; All: magnesium alloy										• IBM Director Agent		
Battery - type	Li-Ion 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)										• Software Delivery Assistant		
Battery - life ¹⁰	with 8-cell: up to 5.7 hr; with 8-cell and optional Extended Life Battery: up to 8.1 hr										• System Migration Assistant		
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C811 CardBus Plus controller, Mini PCI, external expansion) / LPC bus (PC87392 Super I/O for infrared [dock-based ports], Atmel® security chip)										ThinkPad X4 UltraBase™		
Mobile media base	Some: X4 UltraBase (see right side) / optional X4 Dock supported										• Provides desktop expansion and cable management for the X40/X41		
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices										• Easily connects to the bottom of the X40/X41 for traveling		
PC Card Std slot	One Type I or one Type II / CardBus Plus 32-bit / PCMCIA 2.1 / integrated door										• Converts the X41 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side:		
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port										- Ultrabay Slim Li-Polymer Battery 3-cell 08K8190		
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception										- CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288		
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradeable										- ThinkPad DVD-ROM Ultrabay Slim Drive 73P3270		
CDC	11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, Intel 82533 chipset										- Multi-Burner Plus Ultrabay Slim Drive 73P3342		
Modem	One Communications Daughter Card (CDC) socket / customer accessible										- Second HDD Adapter for Ultrabay Slim 62P4554		
Bluetooth™	56K V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										Disks supported:		
Ethernet	Some: Bluetooth wireless technology / in CDC (with modem)										• 40GB HS Hard Disk 08K9816		
Audio support	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										• 60GB HS Hard Disk 73P3357		
Security	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										• 80GB HS Hard Disk 09N4273		
Security chip	Power-on password / dual hard disk password / supervisor password / security keyhole										Other features:		
Fingerprint reader	Embedded Security Subsystem 2.0 ³³ / Atmel® chip / TCG-compliant										• Power button (front)		
Limited warranty ¹²	3 years/1 yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail										• Stereo speakers (1 watt)		
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad X4 UltraBase		92P3429								
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad X4 Dock		250610U								
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		ThinkPad X40 Series Li-Ion Battery (4-cell)		92P1009								
USB Portable Diskette Drive	05K9276		ThinkPad X40 Series Li-Ion Battery (8-cell)		92P1119								
USB Numeric Keypad (black)	33L3225		ThinkPad X40 Series Extended Life Battery		92P1006								
USB Fingerprint Reader	73P4774		ThinkPad Multiple Battery Charger II		22P9040								
Powered USB 2.0 Port Combo Drive	22P9194		ThinkPad Ultraportable 56W AC Adapter		02K6880								
USB 2.0 Portable Multi-Burner Drive	22P9163		ThinkPad 72W AC/DC Combo Adapter		22P9010								
USB 2.0 Portable 80GB Hard Disk	40Y8726		Enh Perf Wireless Keyboard and Mouse		73P4067								
USB 2.0 Memory Key 512MB	22P9230		Preferred Pro USB Fingerprint Keyboard		73P4730								
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358		M400 Projector		0037A04								
11a/b/g Wireless CardBus Adapter	31P9101		ThinkPlus™.22 2yr LOR 9x5 NBD		41C9175								
11a/b/g Wireless Mini PCI Adapter II	73P4301		ThinkPlus 3yr LOR 9x5 NBD		41C9176								
Intel PRO/Wireless 2915ABG Mini PCI	41N2990		ThinkPlus 4yr LOR 9x5 NBD		41C9177								
ThinkPad Carrying Case - BackPack	73P3599		ThinkPlus 5yr LOR 9x5 NBD		41C9179								
Carrying Case - Leather Ultraportable	73P5186		ThinkPlus 4yr P&L P/U Depot		41C9178								
SonyEricsson® GC83 EDGE PC Card	26K3393		ThinkPlus 5yr P&L P/U Depot		41C9180								
Verizon Wireless V620 WWAN PC Card	40Y9137		Other options at lenovo.com/options										

See footnotes for important warranty information
US models announced April 5, 2005
US models withdrawn effective November 2005

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ThinkPad® X41 (2528) - TopSeller (October 2005) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 cache	Memory	Screen	Disk	Optical in	ThinkPad UltraBase™	Mini PCI wireless	CDC: modem/Bluetooth™	Fingerprint reader	Sec chip	Limited warranty ¹²	Avail date	
2528-ELU	Pentium® M 778	1.6 GHz	2MB	512MB	12.1" XGA	40GB	None	Optional	* Intel 11a/b/g ³²	Modem	Finger	Yes	3-year	Oct 05
2528-FPU	Pentium M 778	1.6 GHz	2MB	512MB	12.1" XGA	60GB	None	Optional	* Intel 11a/b/g	Mod/Blue	Finger	Yes	3-year	Oct 05
2528-EMU	Pentium M 778	1.6 GHz	2MB	512MB	12.1" XGA	40GB	Combo	UltraBase	* Intel 11a/b/g	Modem	Finger	Yes	3-year	Oct 05
2528-FRU	Pentium M 778	1.6 GHz	2MB	512MB	12.1" XGA	60GB	DVD±RW	UltraBase	* Intel 11a/b/g	Mod/Blue	Finger	Yes	3-year	Oct 05
<p>• These small and medium business (SMB) models are part of the US TopSeller™ Program</p> <p>• The 2528 has a 3-year limited warranty</p>														
Positioning Processor	<p><i>Ultimate mobility in a versatile ultraportable; one spindle</i> Intel® Pentium® M Processor Low Voltage 778 (1.6GHz) with Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, and 400MHz system bus</p>										<p>SOFTWARE¹⁴</p> <p>Windows XP Professional</p> <ul style="list-style-type: none"> - Microsoft® Windows® XP Professional²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area) 			
L2 cache Memory	<p>2MB / on die (at processor speed) / ECC 512MB std / 1.28 to 1.53GB max⁷ / PC2-4200 533MHz DDR2 (limited to 400MHz because of low voltage processor) / non-parity / CL4 / dual channel capable / std memory soldered to systemboard / one 200-pin SO-DIMM socket available</p>										<p>Preloaded</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Update Connector™¹⁵ • Client Security Solution™ (for security chip) <p>License (CD not included)</p> <ul style="list-style-type: none"> - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client 			
Diskette drive	<p>None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from X4 UltraBase <i>Some:</i> DVD and CD burner / Multi-Burner Plus / removable from X4 UltraBase</p>										<p>ThinkPad X4 UltraBase™</p> <ul style="list-style-type: none"> • Provides desktop expansion and cable management for the X40/X41 • Easily connects to the bottom of the X40/X41 for traveling • Converts the X41 to a two-spindle system by supporting optional Ultrabay Slim accessories in left side: <ul style="list-style-type: none"> - Ultrabay Slim Li-Polymer Battery 3-cell 08K8190 - CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288 - ThinkPad DVD-ROM Ultrabay Slim Drive 73P3270 - Super Multi-Burner Ultrabay Slim Drive (curved bezel) 40Y8622 - Second HDD Adapter for Ultrabay Slim 62P4554 <p>Disks supported:</p> <ul style="list-style-type: none"> • 40GB HS Hard Disk 08K9816 • 60GB HS Hard Disk 73P3357 • 80GB HS Hard Disk 09N4273 			
DVD±RW Ultrabay™ Slim Disk	<p>Supports Ultrabay Slim devices in optional or standard X4 UltraBase 40GB⁸ or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)</p>										<p>ThinkPad notebooks implement ThinkVantage™ technologies and de-sign; visit thinkpad.com/thinkvantage</p>			
Display	<p>12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</p>													
Graphics	<p>Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz</p>													
Keyboard	<p>Standard-size²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint™, "Press-to-Select," Internet Scroll Bar¹³ / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap</p>													
ThinkLight®	<p>Illuminates the keyboard to improve visibility in low-light conditions</p>													
Dimensions ³	<p><i>8-cell without X4 UltraBase:</i> 10.5" x 9.3" x .81-1.06"; 268mm x 237mm x 20.6-26.9mm</p>													
Travel weight ²	<p><i>8-cell battery models:</i> 3.3 lb (1.49kg); <i>with 8-cell battery and X4 UltraBase with combo:</i> 5.1 lb (2.31kg)</p>													
Case material	<p><i>Color:</i> black; <i>All:</i> magnesium alloy</p>													
Battery - type	<p>Li-Ion 8-cell / intelligent / supports optional Extended Life Battery on base (for two batteries) / supports optional battery in X4 UltraBase (for two batteries)</p>													
Battery - life ¹⁰	<p><i>with 8-cell:</i> up to 5.7 hr; <i>with 8-cell and optional Extended Life Battery:</i> up to 8.1 hr</p>													
Architecture	<p>Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C811 CardBus Plus controller, Mini PCI, external expansion) / LPC bus (PC87392 Super I/O for infrared [dock-based ports], Atmel® security chip)</p>													
Mobile media base	<p><i>Some:</i> X4 UltraBase (see right side) / optional X4 Dock supported</p>													
Secure Digital slot	<p>One Secure Digital Card slot / supports SD memory cards used in consumer devices</p>													
PC Card Std slot	<p>One Type I or one Type II / CardBus Plus 32-bit / PCMCIA 2.1 / integrated door</p>													
Ports	<p>Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 UltraBase) / no IEEE 1394 port</p>													
Wireless antenna	<p>UltraConnect™ antenna built into the display cover for optimal wireless signal reception</p>													
Mini PCI	<p>One Mini PCI type III slot (Communications Bay) / customer upgradable</p>													
Intel 11a/b/g ³²	<p>11a/b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2915ABG, Intel 82533 chipset</p>													
CDC	<p>One Communications Daughter Card (CDC) socket / customer accessible</p>													
Modem	<p>56K⁶ V.90 (V.92-designed²⁹) modem in CDC / Conexant® chipset</p>													
Bluetooth™	<p><i>Some:</i> Bluetooth wireless technology / in CDC (with modem)</p>													
Ethernet	<p>Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE</p>													
Audio support	<p>Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green) / Power-on password / dual hard disk password / supervisor password / security keyhole</p>													
Security	<p>Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant</p>													
Security chip	<p>Fingerprint reader on palm rest / swipe sensor / integrated with security chip</p>													
Fingerprint reader	<p>Fingerprint reader on palm rest / swipe sensor / integrated with security chip</p>													
Limited warranty ¹²	<p>3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail</p>													
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad X4 UltraBase						92P3429					
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad X4 Dock						250610U					
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		X40 Series Li-Ion Battery (4-cell)						92P1009					
USB Portable Diskette Drive	05K9276		X40 Series Li-Ion Battery (8-cell)						92P1119					
USB Numeric Keypad (black)	33L3225		X40 Series Extended Life Battery						92P1006					
USB Fingerprint Reader	73P4774		ThinkPad Multiple Battery Charger II						22P9040					
USB Gemplus GemPC Smart Card Reader	41N3040		ThinkPad Ultraportable 56W AC Adapter						02K6880					
USB 2.0 Super Multi-Burner Drive	40Y8638		72W Slim AC/DC Combo Adapter						73P4485					
USB 2.0 Portable 80GB Hard Disk	40Y8726		Enh Perf Wireless Keyboard and Mouse						73P4067					
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358		Preferred Pro USB Fingerprint Keyboard						73P4730					
11a/b/g Wireless Mini PCI Adapter II	73P4301		Lenovo M500 Projector						0037A05					
Intel PRO/Wireless 2915ABG Mini PCI	41N2990		ThinkPlus™ ²² 2-year LOR 9x5 NBD						41C9175					
ThinkPad Carrying Case - BackPack	73P3599		ThinkPlus 3-year LOR 9x5 NBD						41C9176					
Carrying Case - Leather Ultraportable	73P5186		ThinkPlus 4-year LOR 9x5 NBD						41C9177					
SonyEricsson® GC83 EDGE PC Card	26K3393		ThinkPlus 5-year LOR 9x5 NBD						41C9179					
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137		ThinkPlus 4-year P&L P/U Depot						41C9178					
ThinkPad Convertible Monitor Stand	40Y7620		ThinkPlus 5-year P&L P/U Depot						41C9180					
ThinkVision® L171 17" Monitor (black)	9417AB1		Other options at lenovo.com/options						56 watt AC Adapter					
<p>Asset ID™³⁴ (system-specific info in chip accessed over network)</p> <p>ACPI 1.0b and 2.0-compliant</p> <p>ENERGY STAR®-compliant</p> <p>International Warranty Service¹⁷</p> <p>24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹² via 800-IBM-SERV (426-7378)</p>														

See footnotes for important warranty information
US models announced October 4, 2005
US models withdrawn effective May 2006

* Powered by Intel Centrino® mobile technology

ThinkPad® X41 Tablet - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Disk	Mini PCI wireless	CDC: modem/Bluetooth™	Fingerprint Sec reader chip	Battery cells	Limited warranty ¹²	WH Gbl Entry	Avail date		
1866-1CU	Pentium® M 753	1.2	2MB	256MB	12.1" XGA	40GB	*Intel 11b/g ³²	Modem	No	Yes	4-cell	3-yr	Entry	Jun 05
1866-2CU	Pentium M 758	1.5	2MB	256MB	12.1" XGA	40GB	*Intel 11b/g	Modem	No	Yes	4-cell	3-yr	WH Gbl	Jun 05
1866-3GU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	*Intel 11b/g	Modem	No	Yes	8-cell	3-yr	WH Gbl	Jun 05
1866-5GU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	*Intel 11b/g	Modem	Finger	Yes	8-cell	3-yr	WH Gbl	Jun 05
1866-2GU	Pentium M 758	1.5	2MB	256MB	12.1" XGA	40GB	*Intel 11b/g	Modem	No	Yes	8-cell	3-yr	WH	Jun 05
1866-6HU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	*Intel 11a/b/g ³²	Mod/Blue	Finger	Yes	8-cell	3-yr	WH	Jun 05
1866-3RU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	60GB	*Intel 11b/g	Modem	No	Yes	8-cell	3-yr	WH	Jun 05
1866-6SU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	60GB	*Intel 11a/b/g	Mod/Blue	Finger	Yes	8-cell	3-yr	WH	Jun 05
1866-6GU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	*Intel 11b/g	Mod/Blue	Finger	Yes	8-cell	3-yr	WH	Jun 05
1866-6JU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	11a/b/g II ³²	Mod/Blue	Finger	Yes	8-cell	3-yr	WH	Jun 05
1866-6TU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	60GB	11a/b/g II	Mod/Blue	Finger	Yes	8-cell	3-yr	WH	Jun 05
1866-3FU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	Open; wireless upg ³⁶	Modem	No	Yes	8-cell	3-yr	WH	Sep 05
Positioning	Convertible tablet; ultimate mobility in a versatile ultraportable; one spindle													
US Govt (TAA) ⁵	3FU: US Government model (Trade Act Agreement-compliant)													
Processor	Intel® Pentium® M Processor Ultra Low Voltage 753 or Low Voltage 758 with Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, and 400MHz system bus													
L2 cache	2MB / on die (at processor speed) / ECC													
Memory	256 or 512MB std / 1.28 to 1.53GB max⁷ / PC2-4200 533MHz DDR2 (limited to 400MHz because of low voltage processor) / non-parity / CL4 / dual channel capable / std memory soldered to systemboard / one 200-pin SO-DIMM socket available													
Ultrabay™ Slim Disk	Supports Ultrabay™ Slim devices in optional ThinkPad X4 Dock 40GB⁸ or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System (shock protection)													
Display	12.1" (307mm) Super Wide Angle FFS XGA (1024x768) TFT color / anti-reflective and anti-glare protective coatings / 180 nits / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / 8 buttons on display bottom (power, reboot, rotation, utility, Esc, enter, page up/down)													
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz													
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ /													
Dimensions ³	4-cell: 10.8" x 9.5" x 1.14-1.26"; 274mm x 242mm x 29-32mm 8-cell: 10.8" x 10.5" x 1.14-1.26"; 274mm x 266mm x 29-32mm													
Travel weight ²	4-cell battery models: 3.5 lb (1.61kg); 8-cell battery models: 4.0 lb (1.84kg)													
Case material	Color: black; All: magnesium alloy													
Battery - type	Li-Ion 4-cell or 8-cell / supports opt Extended Life Battery on base (for two batteries)													
Battery - life ¹⁰	with 4-cell: 2.6 hr; with 8-cell: up to 6.3 hr; with 8-cell and optional Extended Life Battery: up to 8.5 hr													
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoch® R5C811 CardBus Plus controller, Mini PCI, external expansion) / LPC bus (PC87392 Super I/O for infrared [dock-based ports], Atmel® security chip)													
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices													
PC Card Std slot	One Type I or one Type II / CardBus Plus 32-bit / PCMCIA 2.1 / integrated door													
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 Dock) / no IEEE 1394 port													
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable													
Wireless upg ³⁶	Some: wireless upgradable with wireless Mini PCI options													
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset													
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, Intel 82533 chipset													
11a/b/g II ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip													
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)													
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / dual hard disk password / supervisor password / security keyhole													
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant													
Fingerprint reader	Some: Fingerprint reader on right base of display / 2-way swipe sensor													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades²² avail													
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad X41 Tablet Digitizer Pen		73P5188									
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad X4 Dock		250610U									
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		X41 Tablet Li-Ion Battery (4-cell)		73P5167									
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637		X41 Tablet Li-Ion Battery (8-cell)		73P5168									
USB 2.0 Memory Key 1GB	40Y7421		ThinkPad X40 Series Extended Life Battery		92P1006									
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358		ThinkPad Ultraportable 56W AC Adapter		02K6880									
Intel PRO/Wireless 2915ABG Mini PCI	41N2990		72W Slim AC/DC Combo Adapter		73P4485									
11a/b/g Wireless Mini PCI Adapter II	73P4301		ThinkPlus™.22 2-year LOR 9x5 NBD		41C9175									
ThinkPad X41 Tablet Sleeve	30R4959		ThinkPlus 3-year LOR 9x5 NBD		41C9176									
ThinkVision® L201p 20.1" Monitor (black)	9320HB1		Other options at lenovo.com/options											
										SOFTWARE¹⁴				
										Windows XP Tablet				
										- Microsoft® Windows® XP Tablet PC Edition 2005 ²⁰				
										◇ Disk-to-Disk Recovery (in hidden protected area)				
										Preloaded				
										• Rescue and Recovery™				
										• Access Program				
										• Access Connections™				
										• Norton AntiVirus (OEM edition)				
										• PC-Doctor™				
										• ThinkPad Utilities				
										• Adobe Reader				
										• Update Connector™.15				
										• Fingerprint Software (fingerprint models)				
										• Client Security Software (for security chip)				
										• InterVideo VirtualDrive				
										Free trial				
										• Alias Sketchbook Pro				
										• Zinio Reader				
										• FranklinCovey PlanPlus (30 day trial)				
										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage				
										ThinkPad X4 Dock				
										• Provides desktop expansion and cable mgmt for X40/X41/X41 Tablet				
										• Connects to the bottom of notebook				
										• Supports optional Ultrabay™ Slim accessories in left side:				
										- ThinkPad DVD-ROM Ultrabay Slim Drive 73P3270				
										- CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288				
										- Super Multi-Burner Ultrabay Slim Drive (curved bezel) 40Y8622				
										- Second HDD Adapter for Ultrabay Slim 41U3148				
										Disks supported:				
										• 40GB HS Hard Disk 08K9816				
										• 80GB HS Hard Disk 09N4273				
										Other features:				
										• 56 watt AC adapter				
										• Power button				
										• Stereo speakers (1 watt)				
										• Security key lock, security keyhole, and Ultrabay Slim security screw				
										• Serial and parallel ports				
										• PS/2 port for keyboard or mouse				
										• Analog DB-15 monitor port				
										• Three USB 2.0 ports (via USB hub)				
										• Gigabit Ethernet port (RJ-45)				
										• Modem port (RJ-11)				
										• 2.4 lb; 1.1 kg				
										56 watt AC Adapter				
										ACPI 1.0b and 2.0-compliant				
										ENERGY STAR®-compliant				
										International Warranty Service ¹⁷				
										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced June 7, June 28, or August 30, 2005
US models withdrawn effective April or September 2006

ThinkPad® X41 Tablet (March 2006) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Disk	Mini PCI wireless	CDC: modem/Bluetooth™	Fingerprint Sec reader chip	Battery cells	Limited warranty ¹²	WH TAA	Gbl	Avail date	
1866-9MU	Pentium® M 778	1.6	2MB	512MB	12.1" XGA	60GB	*Intel 11b/g ³²	Modem	No	Yes	4-cell	3-yr	WH Gbl	Mar 06
1866-9GU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	*Intel 11b/g	Modem	No	Yes	8-cell	3-yr	WH Gbl	Mar 06
1866-BGU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	*Intel 11b/g	Modem	Finger	Yes	8-cell	3-yr	WH Gbl	Mar 06
1866-8GU	Pentium M 778	1.6	2MB	256MB	12.1" XGA	40GB	*Intel 11b/g	Modem	No	Yes	8-cell	3-yr	WH	Mar 06
1866-CHU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	*Intel 11a/b/g ³²	Mod/Blue	Finger	Yes	8-cell	3-yr	WH	Mar 06
1866-9RU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	60GB	*Intel 11b/g ³²	Modem	No	Yes	8-cell	3-yr	WH	Mar 06
1866-CTU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	60GB	11a/b/g II ³²	Mod/Blue	Finger	Yes	8-cell	3-yr	WH	Mar 06
1866-CRU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	60GB	*Intel 11a/b/g	Mod/Blue	Finger	Yes	8-cell	3-yr	WH	Mar 06
1866-AEU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	11a/b/g II	Mod/Blue	No	Yes	4-cell	3-yr	WH	Mar 06
1866-ADU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	*Intel 11a/b/g	Mod/Blue	No	Yes	4-cell	3-yr	WH	Mar 06
1866-CGU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	*Intel 11b/g	Mod/Blue	Finger	Yes	8-cell	3-yr	WH	Mar 06
1866-BFU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	Open; wireless upg ³⁶	Modem	Finger	Yes	8-cell	3-yr	WH TAA	Mar 06
Positioning US Govt (TAA) ⁵ Processor	Convertible tablet; ultimate mobility in a versatile ultraportable; one spindle BFU: US Government model (Trade Act Agreement-compliant) Intel® Pentium® M Processor Low Voltage 778 with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 400MHz system bus										SOFTWARE¹⁴ Windows XP Tablet - Microsoft® Windows® XP Tablet PC Edition 2005 ²⁰ ◇ Disk-to-Disk Recovery (in hidden protected area)			
L2 cache Memory	2MB / on die (at processor speed) / ECC 256 or 512MB std / 1.28 to 1.53GB max ⁷ / PC2-4200 533MHz DDR2 (limited to 400MHz because of low voltage processor) / non-parity / CL4 / dual channel capable / std memory soldered to systemboard / one 200-pin SO-DIMM socket available										Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskkeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Fingerprint Software (fingerprint models) • InterVideo VirtualDrive CD/DVD Emulator			
Ultrabay™ Slim Disk	Supports Ultrabay™ Slim devices in optional ThinkPad X4 Dock 40GB ⁸ or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System (shock protection)										Free trial • Alias Sketchbook Pro • Zinio Reader • FranklinCovey TabletPlanner			
Display	12.1" (307mm) Super Wide Angle FFS XGA (1024x768) TFT color / anti-reflective and anti-glare protective coatings / 180 nits / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / 8 buttons on display bottom (power, reboot, rotation, utility, Esc, enter, page up/down)													
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz													
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ /													
Dimensions ³	4-cell: 10.8" x 9.5" x 1.14-1.26"; 274mm x 242mm x 29-32mm 8-cell: 10.8" x 10.5" x 1.14-1.26"; 274mm x 266mm x 29-32mm 4-cell battery models: 3.5 lb (1.61kg); 8-cell battery models: 4.0 lb (1.84kg)													
Weight ² Case material Battery - type Battery - life ¹⁰	Color: black; All: magnesium alloy Li-Ion 4-cell or 8-cell / supports opt Extended Life Battery on base (for two batteries) with 4-cell: 2.6 hr; with 8-cell: up to 6.3 hr; with 8-cell and optional Extended Life Battery: up to 8.5 hr													
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoch® R5C811 CardBus Plus controller, Mini PCI, external expansion) / LPC bus (PC87392 Super I/O for infrared [dock-based ports], Atmel® security chip)										Supports ThinkVantage® technologies			
Secure Digital slot PC Card Std slot Ports	One Secure Digital Card slot / supports SD memory cards used in consumer devices One Type I or one Type II / CardBus Plus 32-bit / PCMCIA 2.1 / integrated door Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 Dock) / no IEEE 1394 port										ThinkPad X4 Dock • Provides desktop expansion and cable mgmt for X40/X41/X41 Tablet • Connects to the bottom of notebook • Supports optional Ultrabay™ Slim accessories in left side: – ThinkPad DVD-ROM Ultrabay Slim Drive 73P3270 – CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288 – Super Multi-Burner Ultrabay Slim Drive (curved bezel) 40Y8622 – Second HDD Adapter for Ultrabay Slim 41U3148 Disks supported (some listed): • 80GB HS Hard Disk 09N4273			
Wireless antenna Mini PCI	UltraConnect™ antenna built into the display cover for optimal wireless signal reception One Mini PCI type III slot (Communications Bay) / customer upgradable													
Wireless upg ³⁶ Intel 11b/g ³² Intel 11a/b/g ³² 11a/b/g II ³²	Some: wireless upgradable with wireless Mini PCI options Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, Intel 82533 chipset Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip													
CDC Modem Bluetooth™	One Communications Daughter Card (CDC) socket / customer accessible 56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset Some: Bluetooth wireless technology / in CDC (with modem)													
Ethernet Audio support	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security Security chip Fingerprint reader	Power-on password / dual hard disk password / supervisor password / security keyhole Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant Some: Fingerprint reader on right base of display / 2-way swipe sensor													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
256MB PC2-4200 DDR2 NP CL4 SOD 512MB PC2-4200 DDR2 NP CL4 SOD 1GB PC2-4200 DDR2 NP CL4 SOD USB 2.0 Super Multi-Burner Drive USB 2.0 Memory Key 1GB 60GB Mini Hard Disk 9.5mm (4200 rpm) Intel PRO/Wireless 2915ABG Mini PCI 11a/b/g Wireless Mini PCI Adapter II ThinkPad X41 Tablet Sleeve ThinkVision® L201p 20.1" Monitor (black)	73P3840 73P3842 73P3844 41N5565 40Y7421 73P3358 41N2990 73P4301 30R4959 9220HB1	ThinkPad X41 Tablet Digitizer Pen ThinkPad X4 Dock X41 Tablet Li-Ion Battery (4-cell) X41 Tablet Li-Ion Battery (8-cell) ThinkPad X40 Series Extended Life Battery ThinkPad Ultraportable 56W AC Adapter 72W Slim AC/DC Combo Adapter ThinkPlus™ ²² 2-year LOR 9x5 NBD ThinkPlus 3-year LOR 9x5 NBD Other options at lenovo.com/options	73P5188 250610U 73P5167 73P5168 92P1006 02K6880 73P4485 41C9175 41C9176	56-watt AC Adapter ACPI 1.0b and 2.0-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²										

See footnotes for important warranty information
US models announced March 14, 2006
US models withdrawn effective February 2007

* Powered by Intel Centrino® mobile technology

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(PH15-1) February 2007

ThinkPad® X41 Tablet (1866) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Disk	Mini PCI wireless	CDC: modem/Bluetooth™	Fingerprint reader	Sec chip	Limited warranty ¹²	OneNote® Education CD	Avail software date	
1866-1GU	Pentium® M 753	1.2	2MB	256MB	12.1" XGA	40GB	* Intel 11b/g ³²	Modem	No	Yes	EasyServ 3-yr	No	Yes Jun 05
1866-4GU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	* Intel 11b/g	Mod/Blue	No	Yes	EasyServ 3-yr	Yes	Yes Jun 05
1866-A7U	Pentium M 778	1.6	2MB	512MB	12.1" XGA	40GB	* Intel 11b/g	Mod/Blue	No	Yes	EasyServ 3-yr	Yes	Yes Mar 06
1866-CXU	Pentium M 778	1.6	2MB	512MB	12.1" XGA	60GB	* Intel 11b/g	Mod/Blue	Finger	Yes	EasyServ 3-yr	Yes	Yes Mar 06

• **The 1866 has an EasyServ™, onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	Convertible tablet; ultimate mobility in a versatile ultraportable; one spindle Intel® Pentium® M Processor Ultra Low Voltage 753 (1.2GHz) or Low Voltage 758 (1.5GHz) or Low Voltage 778 (1.6GHz) with Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, and 400MHz system bus										SOFTWARE¹⁴	
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Tablet	
Memory	256 or 512MB std / 1.28 to 1.53GB max⁷ / PC2-4200 533MHz DDR2 (limited to 400MHz because of low voltage processor) / non-parity / CL4 / dual channel capable / std memory soldered to systemboard / one 200-pin SO-DIMM socket available										- Microsoft® Windows® XP Tablet PC Edition 2005 ²⁰ ♦ Disk-to-Disk Recovery	
Ultrabay™ Slim Disk	Supports Ultrabay™ Slim devices in optional ThinkPad X4 Dock 40GB⁸ or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)										• Preloaded • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Model A7U/CXU: Microsoft Office OneNote 2003 • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Fingerprint Software (fingerprint) • InterVideo VirtualDrive CD/DVD Emulator	
Display	12.1" (307mm) Super Wide Angle FFS XGA (1024x768) TFT color / anti-reflective and anti-glare protective coatings / 180 nits / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / 8 buttons on display bottom (power, reboot, rotation, utility, Esc, enter, page up/down)										• CD included • Model 4GU/A7U/CXU: Microsoft Office OneNote 2003 • Adobe Photoshop Elements plus Adobe Premiere Elements	
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										• Free trial • Alias Sketchbook Pro • Zinio Reader • FranklinCovey TabletPlanner	
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ /										Supports ThinkVantage® technologies	
Dimensions ³	8-cell: 10.8" x 10.5" x 1.14-1.26"; 274mm x 266mm x 29-32mm										ThinkPad X4 Dock	
Weight ²	8-cell battery models: 4.0 lb (1.84kg)										• Provides desktop expansion and cable mgmt for X40/X41/X41 Tablet	
Case material	Color: black; All: magnesium alloy										• Connects to the bottom of notebook	
Battery - type	Li-Ion 8-cell / supports optional Extended Life Battery on base (for two batteries)										• Supports optional Ultrabay™ Slim accessories in left side: – CD-RW/DVD Combo II Ultrabay Slim Drive (flat bezel) 40Y8621 – ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 – Second HDD Adapter for Ultrabay Slim 41U3148	
Battery - life ¹⁰	with 4-cell: 2.6 hr; with 8-cell: up to 6.3 hr; with 8-cell and optional Extended Life Battery: up to 8.5 hr										Disks supported (some listed): • 80GB HS Hard Disk 09N4273	
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoch® R5C811 CardBus Plus controller, Mini PCI, external expansion) / LPC bus (PC87392 Super I/O for infrared [dock-based ports], Atmel® security chip) Optional ThinkPad X4 Dock (see right side)										Other features: • 56-watt AC adapter • Power button • Stereo speakers (1 watt) • Security key lock, security keyhole, and Ultrabay Slim security screw • Serial and parallel ports • PS/2 port for keyboard or mouse • Analog DB-15 monitor port • Three USB 2.0 ports (via USB hub) • Gigabit Ethernet port (RJ-45) • Modem port (RJ-11) • 2.4 lb; 1.1kg	
Docking station	One Secure Digital Card slot / supports SD memory cards used in consumer devices										• 56-watt AC Adapter ACPI 1.0b and 2.0-compliant	
Secure Digital slot	One Type I or one Type II / CardBus Plus 32-bit / PCMCIA 2.1 / integrated door										International Warranty Service ¹⁷	
PC Card Std slot	One USB (version 2.0), plus one powered USB port for select options /										24 hour x 7 day ¹⁸ toll-free warranty	
Ports	external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 Dock) / no IEEE 1394 port										support during the warranty ¹²	
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception											
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset											
CDC	One Communications Daughter Card (CDC) socket / customer accessible											
Modem	56K ⁶ V.90 (V.92-designed ²⁵) modem in CDC / Conexant® chipset											
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)											
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE											
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)											
Security	Power-on password / dual hard disk password / supervisor password / security keyhole											
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant											
Fingerprint reader	Some: Fingerprint reader on right base of display / 2-way swipe sensor											
Limited warranty ¹²	3-years/1-yr battery - EasyServ™, onsite pickup and delivery / service upgrades²² avail											
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ThinkPad X41 Tablet Digitizer Pen	73P5188									
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ThinkPad X4 Dock	250610U									
2GB PC2-5300 DDR2 SODIMM	40Y7735	X41 Tablet Li-Ion Battery (4-cell)	73P5167									
USB Portable Diskette Drive	05K9276	X41 Tablet Li-Ion Battery (8-cell)	73P5168									
USB Fingerprint Reader	41U3167	ThinkPad X40 Series Extended Life Battery	92P1006									
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad Multiple Battery Charger II	22P9040									
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Ultraportable 56W AC Adapter	02K6880									
USB 2.0 Security Memory Key 2GB	41U5119	72W Slim AC/DC Combo Adapter	73P4485									
USB 2.0 Security Memory Key 4GB	41U5120	Enh Perf Wireless Keyboard and Mouse	73P4067									
USB 2.0 Super Multi-Burner Drive	41N5565	Preferred Pro USB Fingerprint Keyboard	73P4730									
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358	Lenovo M500 Projector	0037A05									
Kensington® MicroSaver® Security Cable	73P2582	Lenovo C500 Projector	0039A05									
11a/b/g Wireless CardBus Adapter	31P9101	Lenovo L192 Wide 19" Monitor (black)	6920AB1									
11a/b/g Wireless Mini PCI Adapter II	73P4301	Lenovo D221 Wide 22" Monitor (black)	6622HB1									
ThinkPad X41 Tablet Sleeve	30R4959	ThinkPlus™, 2.2-year LOR 9x5 NBD	41C9175									
ThinkPad Carrying Case - Backpack	73P3599	ThinkPlus 3-year LOR 9x5 NBD	41C9176									
Carrying Case - Leather Ultraportable	73P5186	Other accessories at lenovo.com/accessories										

See footnotes for important warranty information

* Powered by Intel Centrino® mobile technology

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US models announced on June 7, 2005 or March 14, 2006

(PH3) August 2007

US models withdrawn effective August 2006 or August 2007

ThinkPad® X41 Tablet (1867) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Disk	Mini PCI wireless	CDC: modem/ Bluetooth™	Fingerprint reader	Sec chip	Limited warranty ¹²	OneNote® CD	Education software	Avail date
1867-1GU	Pentium® M 753	1.2	2MB	256MB	12.1" XGA	40GB	*Intel 11b/g ³²	Modem	No	Yes	Onsite 3-yr	No	Yes Jun 05
1867-4GU	Pentium M 758	1.5	2MB	512MB	12.1" XGA	40GB	*Intel 11b/g	Mod/Blue	No	Yes	Onsite 3-yr	Yes	Yes Jun 05
1867-AGU	Pentium M 778	1.5	2MB	512MB	12.1" XGA	40GB	*Intel 11b/g	Mod/Blue	No	Yes	Onsite 3-yr	Yes	Yes Mar 06

• **The 1867 has a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	Convertible tablet; ultimate mobility in a versatile ultraportable; one spindle Intel® Pentium® M Processor Ultra Low Voltage 753 (1.2GHz) or Low Voltage 758 (1.5GHz) or Low Voltage 778 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 400MHz system bus										SOFTWARE¹⁴																																																																
L2 cache Memory	2MB / on die (at processor speed) / ECC 256 or 512MB std / 1.28 to 1.53GB max ⁷ / PC2-4200 533MHz DDR2 (limited to 400MHz because of low voltage processor) / non-parity / CL4 / dual channel capable / std memory soldered to systemboard / one 200-pin SO-DIMM socket available										Windows XP Tablet - Microsoft® Windows® XP Tablet PC Edition 2005 ²⁰ ⇨ Disk-to-Disk Recovery Preloaded • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Model AGU: Microsoft Office OneNote 2003 • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security™ • Diskkeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • InterVideo VirtualDrive CD/DVD Emulator CD included • Model 4GU/AGU: Microsoft Office OneNote 2003 • Adobe Photoshop Elements plus Adobe Premiere Elements Free trial • Alias Sketchbook Pro • Zinio Reader • FranklinCovey TabletPlanner																																																																
Ultrabay™ Slim Disk	Supports Ultrabay™ Slim devices in optional ThinkPad X4 Dock 40GB⁸ (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)																																																																										
Display	12.1" (307mm) Super Wide Angle FFS XGA (1024x768) TFT color / anti-reflective and anti-glare protective coatings / 180 nits / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / 8 buttons on display bottom (power, reboot, rotation, utility, Esc, enter, page up/down)																																																																										
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz																																																																										
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ /																																																																										
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	8-cell: 10.8" x 10.5" x 1.14-1.26" ; 274mm x 266mm x 29-32mm 8-cell battery models: 4.0 lb (1.84kg) Color: black; All: magnesium alloy Li-Ion 8-cell / supports optional Extended Life Battery on base (for two batteries) with 4-cell: 2.6 hr; with 8-cell: up to 6.3 hr; with 8-cell and optional Extended Life Battery : up to 8.5 hr																																																																										
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoch® R5C811 CardBus Plus controller, Mini PCI, external expansion) / LPC bus (PC87392 Super I/O for infrared [dock-based ports], Atmel® security chip) Optional ThinkPad X4 Dock (see right side)																																																																										
Docking station Secure Digital slot PC Card Std slot Ports	One Secure Digital Card slot / supports SD memory cards used in consumer devices One Type I or one Type II / CardBus Plus 32-bit / PCMCIA 2.1 / integrated door Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 Dock) / no IEEE 1394 port										Supports ThinkVantage® technologies ThinkPad X4 Dock • Provides desktop expansion and cable mgmt for X40/X41/X41 Tablet • Connects to the bottom of notebook • Supports optional Ultrabay™ Slim accessories in left side: - ThinkPad DVD-ROM Ultrabay Slim Drive 73P3270 - CD-RW/DVD Combo II Ultrabay Slim Drive (flat bezel) 40Y8621 - ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 - Second HDD Adapter for Ultrabay Slim 41U3148 Disks supported (some listed): • 80GB HS Hard Disk 09N4273																																																																
Wireless antenna Mini PCI Intel 11b/g ³² CDC Modem Bluetooth™ Ethernet Audio support	UltraConnect™ antenna built into the display cover for optimal wireless signal reception One Mini PCI type III slot (Communications Bay) / customer upgradable 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset One Communications Daughter Card (CDC) socket / customer accessible 56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset Some: Bluetooth wireless technology / in CDC (with modem) Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)																																																																										
Security Security chip Fingerprint reader	Power-on password / dual hard disk password / supervisor password / security keyhole Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant None																																																																										
Limited warranty ¹²	3-years/1-year battery, limited onsite service, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time ²⁴																																																																										
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ThinkPad X41 Tablet Digitizer Pen	73P5188	1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ThinkPad X4 Dock	250610U	2GB PC2-5300 DDR2 SODIMM	40Y7735	X41 Tablet Li-Ion Battery (4-cell)	73P5167	USB Portable Diskette Drive	05K9276	X41 Tablet Li-Ion Battery (8-cell)	73P5168	USB Numeric Keypad (black)	33L3225	ThinkPad X40 Series Extended Life Battery	92P1006	USB Fingerprint Reader	41U3167	ThinkPad Multiple Battery Charger II	22P9040	USB 2.0 Security Memory Key 2GB	41U5119	ThinkPad Ultraportable 56W AC Adapter	02K6880	USB 2.0 Security Memory Key 4GB	41U5120	72W Slim AC/DC Combo Adapter	73P4485	USB 2.0 Super Multi-Burner Drive	41N5656	Enh Perf Wireless Keyboard and Mouse	73P4067	60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358	Preferred Pro USB Fingerprint Keyboard	73P4730	Kensington® MicroSaver® Security Cable	73P2582	Lenovo M500 Projector	0037A05	11a/b/g Wireless CardBus Adapter	31P9101	Lenovo C500 Projector	0039A05	11a/b/g Wireless Mini PCI Adapter II	73P4301	Optical 3-Button Travel Wheel Mouse	31P7410	ThinkPad X41 Tablet Sleeve	30R4959	Optical 3-Button ScrollPoint® Mouse	31P7405	ThinkPad Carrying Case - Backpack	73P3599	ThinkPlus™.22 2-year LOR 9x5 NBD	41C9175	Carrying Case - Leather Ultraportable	73P5186	ThinkPlus 3-year LOR 9x5 NBD	41C9176	Lenovo D221 Wide 22" Monitor (black)	6622HB1	Other accessories at lenovo.com/accessories		56-watt AC Adapter		ACPI 1.0b and 2.0-compliant		International Warranty Service ¹⁷		24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via	

See footnotes for important warranty information
US models announced on June 7, 2005 or March 14, 2006
US models withdrawn effective August 2006 or August 2007

* Powered by Intel Centrino® mobile technology

ThinkPad® X41 Tablet (1869) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	L2 GHz cache	Memory	Screen	Disk	Mini PCI wireless	CDC: modem/ Bluetooth™	Fingerprint reader	Sec chip	Battery cells	Limited warranty ¹²	WH Gbl Entry	Avail date
1869-5CU	Pentium® M 758	1.5 2MB	512MB	12.1" XGA	40GB	*Intel 11b/g ³²	Modem	Finger	Yes	4-cell	3-years	TopSeller	Jun 05
1869-BCU	Pentium M 778	1.6 2MB	512MB	12.1" XGA	40GB	*Intel 11b/g	Modem	Finger	Yes	4-cell	3-years	TopSeller	Mar 06
1869-CSU	Pentium M 778	1.6 2MB	512MB	12.1" XGA	60GB	*Intel 11a/b/g ³²	Mod/Blue	Finger	Yes	8-cell	3-years	TopSeller	Mar 06

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **The 1869 has a 3-year limited warranty**

Positioning Processor	Convertible tablet; ultimate mobility in a versatile ultraportable; one spindle Intel® Pentium® M Processor Low Voltage 758 or Low Voltage 778 with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 400MHz system bus										SOFTWARE¹⁴		
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Tablet		
Memory	512MB std / 1.53GB max ⁷ / PC2-4200 533MHz DDR2 (limited to 400MHz because of low voltage processor) / non-parity / CL4 / dual channel capable / std memory soldered to systemboard / one 200-pin SO-DIMM socket available										- Microsoft® Windows® XP Tablet PC Edition 2005 ²⁰ ◇ Disk-to-Disk Recovery (in hidden protected area)		
Ultrabay™ Slim Disk	Supports Ultrabay™ Slim devices in optional ThinkPad X4 Dock 40GB ⁸ or 60GB (4200 rpm), 9.5mm, ATA-100 / 1.8" platter / removable and upgradable / 9.5mm high bay / Active Protection System™ (shock protection)										Preloaded		
Display	12.1" (307mm) Super Wide Angle FFS XGA (1024x768) TFT color / anti-reflective and anti-glare protective coatings / 180 nits / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / 8 buttons on display bottom (power, reboot, rotation, utility, Esc, enter, page up/down)										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Fingerprint Software (fingerprint models) • InterVideo VirtualDrive CD/DVD Emulator 		
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										<ul style="list-style-type: none"> • Free trial • Alias Sketchbook Pro • Zinio Reader • FranklinCovey TabletPlanner 		
Keyboard	Standard-size ²⁶ keys / 97% size of T Series / 87-key / 18.5mm pitch; 2.5mm stroke / Access IBM button / palm rest / TrackPoint®, "Press-to-Select," Internet Scroll Bar ¹³ /										<ul style="list-style-type: none"> • License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client 		
Dimensions ³	4-cell: 10.8" x 9.5" x 1.14-1.26"; 274mm x 242mm x 29-32mm 8-cell: 10.8" x 10.5" x 1.14-1.26"; 274mm x 266mm x 29-32mm										Supports ThinkVantage® technologies		
Weight ²	4-cell battery models: 3.5 lb (1.61kg); 8-cell battery models: 4.0 lb (1.84kg)										ThinkPad X4 Dock		
Case material	Color: black; All: magnesium alloy										<ul style="list-style-type: none"> • Provides desktop expansion and cable mgmt for X40/X41/X41 Tablet • Connects to the bottom of notebook • Supports optional Ultrabay™ Slim accessories in left side: <ul style="list-style-type: none"> - ThinkPad DVD-ROM Ultrabay Slim Drive 73P3270 - CD-RW/DVD Combo II Ultrabay Slim Drive 73P3288 - Super Multi-Burner Ultrabay Slim Drive (curved bezel) 40Y8622 - Second HDD Adapter for Ultrabay Slim 41U3148 		
Battery - type	Li-Ion 4-cell or 8-cell / supports opt Extended Life Battery on base (for two batteries) with 4-cell: 2.6 hr; with 8-cell: up to 6.3 hr;										<ul style="list-style-type: none"> • Disks supported: <ul style="list-style-type: none"> • 60GB HS Hard Disk 39W9106 • 80GB HS Hard Disk 09N4273 		
Battery - life ¹⁰	with 8-cell and optional Extended Life Battery : up to 8.5 hr										<ul style="list-style-type: none"> • Other features: <ul style="list-style-type: none"> • 56 watt AC adapter • Power button • Stereo speakers (1 watt) • Security key lock, security keyhole, and Ultrabay Slim security screw • Serial and parallel ports • PS/2 port for keyboard or mouse • Analog DB-15 monitor port • Three USB 2.0 ports (via USB hub) • Gigabit Ethernet port (RJ-45) • Modem port (RJ-11) • 2.4 lb; 1.1kg 		
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoch® R5C811 CardBus Plus controller, Mini PCI, external expansion) / LPC bus (PC87392 Super I/O for infrared [dock-based ports], Atmel® security chip)										<ul style="list-style-type: none"> • 56-watt AC Adapter • ACPI 1.0b and 2.0-compliant • ENERGY STAR®-compliant • International Warranty Service¹⁷ • 24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹² via 800-IBM-SERV (426-7378) 		
Docking station	Optional ThinkPad X4 Dock (see right side)												
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices												
PC Card Std slot	One Type I or one Type II / CardBus Plus 32-bit / PCMCIA 2.1 / integrated door												
Ports	Two USB (version 2.0), plus one powered USB port for select options / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no serial, parallel, keyboard/mouse ports (use X4 Dock) / no IEEE 1394 port												
Wireless antenna	UltraConnect™ antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset												
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, Intel 82533 chipset												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁵) modem in CDC / Conexant® chipset												
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)												
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 0.5 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / dual hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant												
Fingerprint reader	Fingerprint reader on right base of display / use in tablet or notebook mode / 2-way swipe sensor / integrated with security chip												
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail												
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad X41 Tablet Digitizer Pen		73P5188								
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad X4 Dock		250610U								
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		X41 Tablet Li-Ion Battery (4-cell)		73P5167								
USB Portable Diskette Drive	05K9276		X41 Tablet Li-Ion Battery (8-cell)		73P5168								
USB Fingerprint Reader	41U3167		ThinkPad X40 Series Extended Life Battery		92P1006								
USB 2.0 Portable 80GB Hard Disk	40Y8726		ThinkPad Multiple Battery Charger II		22P9040								
USB 2.0 Memory Key 1GB	40Y7421		ThinkPad Ultraportable 56W AC Adapter		02K6880								
USB 2.0 Super Multi-Burner Drive	40Y8638		72W Slim AC/DK Combo Adapter		73P4485								
60GB Mini Hard Disk 9.5mm (4200 rpm)	73P3358		Enh Perf Wireless Keyboard and Mouse		73P4067								
Kensington® MicroSaver® Security Cable	73P2582		ThinkVision® E500 Projector		0038A05								
11a/b/g Wireless CardBus Adapter	31P9101		Lenovo M500 Projector		0037A05								
11a/b/g Wireless Mini PCI Adapter II	73P4301		ThinkVision C400 Wireless Projector		0039WA1								
Intel PRO/Wireless 2915ABG Mini PCI	41N2990		SonyEricsson® GC83 EDGE PC Card		26K3393								
ThinkPad X41 Tablet Sleeve	30R4959		Verizon Wireless V620 WWAN PC Card ²⁵		40Y9137								
ThinkPad Carrying Case - Backpack	73P3599		ThinkPlus™.22 2-year LOR 9x5 NBD		41C9175								
Carrying Case - Leather Ultraportable	73P5186		ThinkPlus 3-year LOR 9x5 NBD		41C9176								
ThinkVision® L171 17" Monitor (black)	9417AC1		Other options at lenovo.com/options										

See footnotes for important warranty information
US models announced June 7, 2005 or March 14, 2006
US models withdrawn effective December 2006

* Powered by Intel Centrino® mobile technology

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ThinkPad® X60 (1706) - withdrawn

Type-model	Processor	GHz	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X6 UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprt reader	Battery cells	Preload	Workhorse Global	Avail date
1706-5DU	Core Duo T2400	1.83	512MB	12.1" XGA	60GB	None	Optional	* Intel 11a/b/g ³²				8-cell	XP Pro	W G	Feb 06
1706-5KU	Core Duo T2400	1.83	512MB	12.1" XGA	60GB	None	Optional	* Intel 11a/b/g			Finger	8-cell	XP Pro	W G	Feb 06
1706-7AU	Core Duo T2400	1.83	512MB	12.1" XGA	60GB	None	Optional	* Intel 11a/b/g		Blue		8-cell	XP Pro	W	Feb 06
1706-85U	Core Duo T2400	1.83	512MB	12.1" XGA	80GB	None	Optional	* Intel 11a/b/g		Blue	Finger	4-cell	XP Pro	W	Feb 06
1706-86U	Core Duo T2400	1.83	512MB	12.1" XGA	80GB	None	Optional	* Intel 11a/b/g		Blue	Finger	8-cell	XP Pro	W	Feb 06
1706-8DU	Core Duo T2400	1.83	512MB	12.1" XGA	80GB	Combo	UltraBase*	Intel 11a/b/g		Blue	Finger	8-cell	XP Pro	W	Feb 06
1706-95U	Core Duo T2400	1.83	512MB	12.1" XGA	80GB	Combo	UltraBase*	Intel 11a/b/g	Verizon	Blue	Finger	4-cell	XP Pro		Feb 06
1706-AFU	Core Duo T2300E	1.66	512MB	12.1" XGA	60GB	None	Optional	* Intel 11a/b/g			Finger	8-cell	XP Pro		May 06
1706-ABU	Core Duo T2300E	1.66	512MB	12.1" XGA	40GB	None	Optional	11a/b/g ³²			Finger	8-cell	XP Pro		May 06
1706-A7U	Core Duo T2300E	1.66	512MB	12.1" XGA	60GB	None	Optional	* Intel 11a/b/g			Finger	4-cell	XP Pro		May 06
Positioning Processor	<i>Thinnest and lightest; one spindle</i>														
Memory	Intel® Core™ Duo processor T2300E or T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache 512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / std memory in 1 socket / one socket available														
Diskette drive	None standard / use optional USB-based diskette drive														
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X6 UltraBase														
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional or standard X6 UltraBase														
Serial ATA disk (SATA150)	40, 60 or 80GB⁸ (5400 rpm) / 9.5mm high / removable, upgradeable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional X6 UltraBase														
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / anti-glare														
Graphics controller	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz														
Graphics - external	External monitor support via analog DB-15 connector / no DVI-out support														
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys standard-size ²⁶ keys / 97% size of T Series / 18.5mm pitch; 2.5mm stroke /														
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Touch pad	None														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	<i>without X6 UltraBase:</i> 10.5" x 8.3" x .80-1.39"; 268mm x 211mm x 20-35mm														
Weight ²	<i>with 4-cell battery:</i> 3.15 lb (1.43kg); <i>with 8-cell battery:</i> 3.6 lb (1.64kg)														
Case material	Color: black; All: magnesium alloy														
Battery - type	Li-Ion 4- or 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional X6 UltraBase (for two batteries)														
Battery - life ¹⁰	<i>Enhanced 4-cell:</i> up to 3.9 hr; <i>8-cell:</i> up to 7.8 hr														
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprnt]) / PCI bus (Ricoh® R5C554 CardBus/1394 combo controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203)														
Media slice	Some: X6 UltraBase media slice (see right side)														
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices														
PC Card slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door														
IEEE 1394	IEEE 1394 (FireWire) port (4-pin)														
Ports	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 (4-pin) / no serial, parallel, keyboard, or mouse ports														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios														
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradeable														
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG														
11a/b/g ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX														
WWAN ¹⁶	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card / Conexant® chipset														
Bluetooth™	Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator														
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE														
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant														
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip														
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail														
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	X60 Enhanced Capacity Battery 4-cell	40Y7001												
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ThinkPad X60 High Capacity 8-cell	40Y7003												
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad X60 Extended Life Battery	40Y7005												
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ThinkPad External Battery Charger	40Y7625												
160GB Disk 9.5mm SATA150 (7200 rpm)	41N5737	ThinkPad 90W AC/DC Combo Adapter	40Y7630												
USB Portable Diskette Drive	05K9276	ThinkPad Carrying Case - Expander	73P3597												
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad Carrying Case - BackPack	73P3599												
USB 2.0 Security Memory Key 4GB	41U5120	ThinkVision® L193p 19" LCD Monitor	4431HB2												
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkVision L194 Wide 19" LCD Monitor	4434HB6												
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPlus™.22 2-year LOR 9x5 NBD	41C9175												
11a/b/g Wireless Mini PCI Express Adapter	40Y7026	ThinkPlus 3-year LOR 9x5 NBD	41C9176												
ThinkPad Adjustable Notebook Stand	40Y7676	ThinkPlus 4-year LOR 9x5 NBD	41C9177												
ThinkPad Convertible Monitor Stand	40Y7620	ThinkPlus 5-year LOR 9x5 NBD	41C9179												
ThinkPad X6 UltraBase	40Y8116	ThinkPlus 4-year P&L P/U Depot	41C9178												
Lenovo M500 Projector	0037A05	ThinkPlus 5-year P&L P/U Depot	41C9180												
Other accessories on O-X60 sheet	Other accessories at lenovo.com/accessories														

SOFTWARE¹⁴

Windows XP Professional

- Microsoft® Windows® XP Professional²⁰ (Service Pack 2)

Preloaded (only some listed)

- Rescue and Recovery™
- Access Connections™
- Client Security Solution™
- ThinkVantage Productivity Center with Maintenance Manager
- ThinkVantage System Update
- System Migration Assistant
- Symantec® Client Security™
- Diskeeper® Lite
- PC-Doctor™ (diagnostics)
- ThinkPad utilities
- Picasa from Google
- Fingerprint Software (fingerprint models)
- Multimedia Center for Think Offerings
- Sonic RecordNOW and Drive Letter Access (combo model)
- InterVideo WinDVD (combo model)

License - CD not included (all)

- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client

Supports ThinkVantage® technologies

ThinkPad X6 UltraBase™

- Provides desktop expansion and cable management for X60 Series
- Easily connects to the bottom of the X60 Series X60s for traveling
- Converts ThinkPad to a two-spindle system with optional flat bezel Ultrabay Slim options in left side:
 - ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789
 - CD-RW/DVD Combo II Ultrabay Slim Drive (flat bezel) 40Y8621
 - ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643
 - Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725
- Disks supported (only some listed):
 - 120GB Disk 5400 rpm 41N5691
 - 160GB Disk 5400 rpm 41N5692
 - 160GB Disk 7200 rpm 41N5737

Other features:

- Power button (front)
- Stereo speakers (1 watt)
- Security key lock, security keyhole, and optional security screw
- Serial and parallel ports
- Analog DB-15 monitor port
- Four USB 2.0 ports
- Gigabit ethernet port
- Modem port
- Microphone in and headphone out
- Requires 65 or 90 watt AC adapter
- Retractable feet; 1.48 lb; 670g

65-watt AC Adapter
ROHS-compliant
International Warranty Service¹⁷
24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²

ThinkPad® X60 (1706) - October 2006 - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical	UltraBase	ThinkPad	802.11	WWAN	Blue-tooth	Fingerprt	Battery	EW	9-month	Avail
								X6	wireless	wireless		reader	cells	Global		date
1706-B5U	Core Duo T2500	2.00	512MB	12.1" XGA	60GB	None	Optional	*Intel 11a/b/g ³²					4-cell	EW	Gbl	Oct 06
1706-C9U	Core Duo T2500	2.00	1GB	12.1" XGA	80GB	None	Optional	*Intel 11a/b/g			Blue	Finger	4-cell	EW	Gbl	Oct 06
1706-CEU	Core Duo T2500	2.00	2GB	12.1" XGA	120GB	None	Optional	*Intel 11a/b/g			Blue	Finger	8-cell	EW		Oct 06
1706-B8U	Core Duo T2500	2.00	1GB	12.1" XGA	80GB	None	Optional	*Intel 11a/b/g				Finger	8-cell	EW	Gbl	Oct 06
1706-AUU	Core Duo T2300E	1.66	1GB	12.1" XGA	60GB	None	Optional	*Intel 11a/b/g				Finger	8-cell	EW		Oct 06
1706-5VU	Core Duo T2400	1.83	1GB	12.1" XGA	60GB	None	Optional	*Intel 11a/b/g				Finger	8-cell	EW	Gbl	Oct 06
1706-E3U	Core Duo T2500	2.00	1GB	12.1" XGA	100GB	None	Optional	*Intel 11a/b/g		Verizon	Blue	Finger	8-cell	EW		Oct 06
1706-KEU	Core 2 Duo T5500	1.66	1GB	12.1" XGA	80GB	None	Optional	*Intel 11a/b/g					4-cell	EW		Oct 06
1706-M8U	Core 2 Duo T5600	1.83	1GB	12.1" XGA	100GB	None	Optional	*Intel 11a/b/g			Blue	Finger	8-cell	EW		Oct 06
Positioning	<i>Thinnest and lightest; one spindle</i>															
Processor	Intel® Core™ Duo processor T2300E, T2400, or T2500 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache or Intel Core 2 Duo processor T5500 or T5600 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache															
Memory	512MB, 1GB, or 2GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / <i>C9U/B8U/AUU/5VU</i> : std mem in both sockets (512MB each socket); no sockets avail; <i>Others</i> : standard memory in 1 socket; 1 socket available															
Diskette drive	None standard / use optional USB-based diskette drive															
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional or standard <i>X6 UltraBase</i>															
Serial ATA disk (SATA150)	60, 80, 100 or 120GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional <i>X6 UltraBase</i>															
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / anti-glare															
Graphics controller	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz															
Graphics - external	External monitor support via analog DB-15 connector / no DVI-out support															
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys standard-size ²⁶ keys / 97% size of T Series / 18.5mm pitch; 2.5mm stroke /															
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass															
Touch pad	None															
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³	<i>without X6 UltraBase</i> : 10.5" x 8.3" x .80-1.39"; 268mm x 211mm x 20-35mm															
Weight ²	<i>with 4-cell battery</i> : 3.15 lb (1.43kg); <i>with 8-cell battery</i> : 3.64 lb (1.65kg)															
Case material	Color: black; All: magnesium alloy															
Battery - type	Li-Ion 4- or 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional <i>X6 UltraBase</i> (for two batteries)															
Battery - life ¹⁰	<i>Enhanced 4-cell</i> : up to 4.1 hr; <i>8-cell</i> : up to 8.2 hr															
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C554 CardBus/1394 combo controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203)															
Media slice	Optional X6 UltraBase media slice (see right side)															
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices															
PC Card slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door															
IEEE 1394	IEEE 1394 (FireWire) port (4-pin)															
Ports	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 (4-pin) / no serial, parallel, keyboard, or mouse ports															
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios															
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable															
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG															
WWAN ¹⁶	<i>Some</i> : Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless															
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card / Conexant® chipset															
Bluetooth™	<i>Some</i> : Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator															
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE															
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)															
Security	Power-on password / hard disk password / supervisor password / security keyhole															
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant															
Fingerprint reader	<i>Some</i> : Fingerprint reader on palm rest / swipe sensor / supports the security chip															
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail															
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	X60 Enhanced Capacity Battery 4-cell	40Y7001													
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ThinkPad X60 High Capacity 8-cell	40Y7003													
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad X60 Extended Life Battery	40Y7005													
160GB Disk 9.5mm SATA150 (7200 rpm)	41N5737	ThinkPad External Battery Charger	40Y7625													
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad 90W AC/DC Combo Adapter	40Y7630													
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad Carrying Case - Expander	73P3597													
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Carrying Case - BackPack	73P3599													
11a/b/g Wireless Mini PCI Express Adapter	40Y7026	ThinkVision® L193p 19" LCD Monitor	4431HB2													
ThinkPad Adjustable Notebook Stand	40Y7676	ThinkPlus™.22 2-year LOR 9x5 NBD	41C9175													
ThinkPad Convertible Monitor Stand	40Y7620	ThinkPlus 3-year LOR 9x5 NBD	41C9176													
ThinkPad X6 UltraBase	40Y8116	ThinkPlus 5-year LOR 9x5 NBD	41C9179													
Lenovo M500 Projector	0037A05	ThinkPlus 5-year P&L P/U Depot	41C9180													
Other accessories on O-X60 sheet	Other accessories at lenovo.com/accessories															
SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) Preloaded (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Maintenance Manager • ThinkVantage System Update • System Migration Assistant • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad utilities • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client Supports ThinkVantage® technologies ThinkPad X6 UltraBase™ • Provides desktop expansion and cable management for X60 Series • Easily connects to the bottom of the X60 Series for traveling • Converts ThinkPad to a two-spindle system with optional flat bezel Ultrabay Slim options in left side: - ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789 - CD-RW/DVD Combo II Ultrabay Slim Drive (flat bezel) 40Y8621 - ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 - Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725 Disks supported (only some listed): • 120GB Disk 5400 rpm 41N5691 • 160GB Disk 5400 rpm 41N5692 • 160GB Disk 7200 rpm 41N5737 Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port • Four USB 2.0 ports • Gigabit ethernet port • Modem port • Microphone in and headphone out • Requires 65 or 90 watt AC adapter • Retractable feet; 1.48 lb; 670g 65-watt AC Adapter ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²																

See footnotes for important warranty information
 US models announced October 17, 2006
 US models withdrawn effective July, September, or October 2007

* Powered by Intel Centrino® Duo mobile technology

ThinkPad® X60 (1708) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical	UltraBase	802.11	WWAN	Blue-tooth	Fingerprt	Battery	Limited Avail
1708-5MU	Core Duo T2400	1.83	512MB	12.1" XGA	60GB	Combo	Ultrabase	* Intel 11a/b/g	None	None	Finger	8-cell XP Pro	3-yr Feb 06
<ul style="list-style-type: none"> • This small and medium business (SMB) model is part of the US TopSeller™ Program • This 1708 model has a 3-year limited warranty 													
Positioning Processor	<i>Thinnest and lightest; one spindle</i> Intel® Core™ Duo processor T2400 (1.83GHz) with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache											SOFTWARE¹⁴	
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / std memory in 1 socket / one socket available											Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery	
Diskette drive	None standard / use optional USB-based diskette drive											Preloaded <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Maintenance Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad utilities • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo model) • InterVideo WinDVD (combo model) 	
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X6 UltraBase												
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional or standard X6 UltraBase												
Serial ATA disk (SATA150)	60GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional X6 UltraBase												
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / anti-glare												
Graphics controller	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz												
Graphics - external	External monitor support via analog DB-15 connector / no DVI-out support												
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys standard-size ²⁶ keys / 97% size of T Series / 18.5mm pitch; 2.5mm stroke /												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	None												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	<i>without X6 UltraBase:</i> 10.5" x 8.3" x .80-1.39"; 268mm x 211mm x 20-35mm												
Weight ²	<i>with 8-cell battery:</i> 3.6 lb (1.64kg); <i>with optional 4-cell battery:</i> 3.15 lb (1.43kg)												
Case material	Color: black; All: magnesium alloy												
Battery - type	Li-Ion 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional X6 UltraBase (for two batteries)												
Battery - life ¹⁰	<i>8-cell:</i> up to 7.8 hr; <i>with std 8-cell battery and Extended Life Battery:</i> up to 10.7 hr												
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C554 CardBus/1394 combo controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203)												
Media slice	<i>Some: X6 UltraBase media slice (see right side)</i>											Supports ThinkVantage® technologies	
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices												
PC Card slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door												
IEEE 1394	IEEE 1394 (FireWire) port (4-pin)												
Ports	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 (4-pin) / no serial, parallel, keyboard, or mouse ports												
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios												
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable												
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG												
WWAN ¹⁶	None												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card / Conexant® chipset												
Bluetooth™	None												
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE												
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant												
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip												
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail												
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	X60 Enhanced Capacity Battery 4-cell	40Y7001										
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ThinkPad X60 High Capacity 8-cell	40Y7003										
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad X60 Extended Life Battery	40Y7005										
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad External Battery Charger	40Y7625										
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ThinkPad 65W AC Adapter	40Y7696										
USB Portable Diskette Drive	05K9276	ThinkPad 90W AC Adapter	40Y7659										
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad 90W AC/DC Combo Adapter	40Y7630										
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Carrying Case - Expander	73P3597										
USB 2.0 Security Memory Key 2GB	41U5119	ThinkPad Carrying Case - Organizer	73P3598										
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad Carrying Case - BackPack	73P3599										
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	Lenovo L171 17" Monitor (black)	9227AC1										
USB 2.0 Portable 120GB Hard Disk	41N8379	Lenovo L192 Wide 19" Monitor (black)	6920AB1										
USB 2.0 Super Multi-Burner Drive	41N5565	Lenovo D221 Wide 22" Monitor (black)	6622HB1										
11a/b/g Wireless Mini PCI Express Adpr	40Y7026	ThinkVision® L192p 19" Monitor (black)	9419HC2										
ThinkPad Adjustable Notebook Stand	40Y7676	ThinkVision L201p 20.1" Monitor (black)	9220HB1										
ThinkPad Convertible Monitor Stand	40Y7620	ThinkPlus™ ²² 2-year LOR 9x5 NBD	41C9175										
ThinkPad X6 UltraBase	40Y8116	ThinkPlus 3-year LOR 9x5 NBD	41C9176										
Lenovo Laser Mouse (USB, PS/2)	41U3074	ThinkPlus 4-year LOR 9x5 NBD	41C9177										
Lenovo M500 Projector	0037A05	ThinkPlus 5-year LOR 9x5 NBD	41C9179										
Lenovo C500 Projector	0039A05	ThinkPlus 4-year P&L P/U Depot	41C9178										
Kensington MicroSaver Security Cable	73P2582	ThinkPlus 5-year P&L P/U Depot	41C9180										
Other accessories on O-X60 sheet		Other accessories at lenovo.com/accessories											

See footnotes for important warranty information
US models announced January 31, 2006
US models withdrawn effective August 2007

* Powered by Intel Centrino® Duo mobile technology

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(SM1-2) August 2007

ThinkPad® X60 (1709) - TopSeller - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical in	ThinkPad	802.11	WWAN	Blue-	Fingerprt	Battery	Limited Avail
						UltraBase	X6 UltraBase	wireless	wireless	tooth	reader	cells	Preloadwarranty ¹² date
1709-24U	Core Solo T1300	1.66	512M	12.1"	XGA 40GB	Optional	Optional	*Intel 11a/b/g ³²	None	None	None	Enh 4-cell	Pro 1-yr Feb 06
1709-7HU	Core Duo T2400	1.83	512M	12.1"	XGA 60GB	Combo	UltraBase	*Intel 11a/b/g	None	Blue	Finger	8-cell	Pro 1-yr Feb 06
1709-47U	Core Duo T2300	1.66	512M	12.1"	XGA 60GB	Optional	Optional	*Intel 11a/b/g	None	None	None	Enh 4-cell	Pro 1-yr Feb 06
1709-96U	Core Duo T2400	1.83	512M	12.1"	XGA 80GB	Combo	UltraBase	11a/b/g ³²	Verizon	Blue	Finger	8-cell	Pro 1-yr Feb 06
1709-97U	Core Duo T2400	1.83	1GB	12.1"	XGA 100GB	DVD±RW	UltraBase	11a/b/g	Verizon	Blue	Finger	8-cell	Pro 1-yr Feb 06
1709-A7U	Core Duo T2300E	1.66	512M	12.1"	XGA 60GB	Optional	Optional	*Intel 11a/b/g	None	None	None	Enh 4-cell	Pro 1-yr May 06
<ul style="list-style-type: none"> • These small and medium business (SMB) models are part of the US TopSeller™ Program • These 1709 models have a 1-year limited warranty 													
Positioning Processor	<i>Thinnest and lightest; one spindle</i> Intel® Core™ Solo processor T1300 (1.66GHz) with single-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache or Intel Core Duo processor T2300, T2300E, or T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache											SOFTWARE¹⁴	
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / one socket available											Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery Preloaded <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Maintenance Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad utilities • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo model) • InterVideo WinDVD (combo model) License - CD not included (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client	
Diskette drive	None standard / use optional USB-based diskette drive												
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X6 UltraBase												
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner (40Y8623) / dual-layer / removable from X6												
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional or standard X6 UltraBase												
Serial ATA disk (SATA150)	40, 60, 80, or 100GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional X6 UltraBase												
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / anti-glare												
Graphics controller	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz												
Graphics - external	External monitor support via analog DB-15 connector / no DVI-out support												
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys standard-size ²⁶ keys / 97% size of T Series / 18.5mm pitch; 2.5mm stroke / TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
TrackPoint®	None												
Touch pad	Illuminates the keyboard to improve visibility in low-light conditions												
ThinkLight™													
Dimensions ³	<i>without X6 UltraBase:</i> 10.5" x 8.3" x .80-1.39"; 268mm x 211mm x 20-35mm												
Weight ²	<i>with 8-cell battery:</i> 3.6 lb (1.64kg); <i>with optional 4-cell battery:</i> 3.15 lb (1.43kg)												
Case material	Color: black; All: magnesium alloy												
Battery - type	Li-Ion Enhanced Cap Battery 4-cell, or Li-Ion 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional X6 UltraBase (for two batteries)												
Battery - life ¹⁰	Enh 4-cell: up to 3.9 hr; 8-cell: up to 7.8 hr												
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C554 CardBus/1394 combo controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203)											Supports ThinkVantage® technologies	
Media slice	Some: X6 UltraBase media slice (see right side)												
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices												
PC Card slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door												
IEEE 1394	IEEE 1394 (FireWire) port (4-pin)												
Ports	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 (4-pin) / no serial, parallel, keyboard, or mouse ports												
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios												
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable												
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG												
11a/b/g ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX												
WWAN ¹⁶	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card / Conexant® chipset												
Bluetooth™	Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator												
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE												
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant												
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip												
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available												
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	X60 Enhanced Capacity Battery 4-cell	40Y7001										
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ThinkPad X60 High Capacity 8-cell	40Y7003										
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad X60 Extended Life Battery	40Y7005										
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ThinkPad External Battery Charger	40Y7625										
160GB Disk 9.5mm SATA150 (7200 rpm)	41N5737	ThinkPad 90W AC/DC Combo Adapter	40Y7630										
USB Portable Diskette Drive	05K9276	ThinkPlus™ ²² 1-year LOR 9x5 NBD	41C9166										
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPlus 2-year LOR 9x5 NBD	41C9167										
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPlus 3-year LOR 9x5 NBD	41C9168										
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPlus 5-year LOR 9x5 NBD	41C9173										
11a/b/g Wireless Mini PCI Express Adapter	40Y7026	ThinkPlus 2-year P&L P/U Depot	41C9169										
ThinkPad X6 UltraBase	40Y8116	ThinkPlus 3-year P&L P/U Depot	41C9170										
Lenovo M500 Projector	0037A05	ThinkPlus 4-year P&L P/U Depot	41C9172										
Other accessories on O-X60 sheet	Other accessories at lenovo.com/accessories												
											Other features: <ul style="list-style-type: none"> • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port • Four USB 2.0 ports • Gigabit ethernet port • Modem port • Microphone in and headphone out • Requires 65 or 90 watt AC adapter • Retractable feet; 1.48 lb; 670g 65-watt AC Adapter ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		

See footnotes for important warranty information * Powered by Intel Centrino® Duo mobile technology
 US models announced January 31, February 28, or May 30, 2006
 US models withdrawn effective Nov 2006, Aug 2007, or Oct 2007

© Lenovo (SM1-3) October 2007

ThinkPad® X60 (1709) - TopSeller (October 2006) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical	UltraBase	802.11	WWAN	Blue-Fingerprnt	Battery	Limited Avail
							X6 UltraBase	wireless	wireless	tooth	cells	Preloadwarranty ¹² date
1709-H6U	Core 2 Duo T7200	2.00	1GB	12.1" XGA	120GB DVD±RW	UltraBase	*Intel 11a/b/g ³²	Verizon Blue	Finger	8-cell	XP Pro	1-yr Oct 06

- This small and medium business (SMB) model is part of the US TopSeller™ Program
- This 1709 model has a 1-year limited warranty

Positioning Processor	<i>Thinnest and lightest; one spindle</i> Intel® Core™ 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache																																																																																		
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / one socket available																																																																																		
Diskette drive	None standard / use optional USB-based diskette drive																																																																																		
EIDE DVD±RW	DVD burner / Super Multi-Burner (40Y8623) / dual-layer / removable from X6 UltraBase																																																																																		
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional or standard X6 UltraBase																																																																																		
Serial ATA disk (SATA150)	120GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional X6 UltraBase																																																																																		
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / anti-glare																																																																																		
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Graphics - external	External monitor support via analog DB-15 connector / no DVI-out support																																																																																		
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys standard-size ²⁶ keys / 97% size of T Series / 18.5mm pitch; 2.5mm stroke / TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass																																																																																		
TrackPoint®	None																																																																																		
Touch pad	Illuminates the keyboard to improve visibility in low-light conditions																																																																																		
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Dimensions ³	<i>without X6 UltraBase:</i> 10.5" x 8.3" x .80-1.39"; 268mm x 211mm x 20-35mm																																																																																		
Weight ²	<i>with 4-cell battery:</i> 3.15 lb (1.43kg); <i>with 8-cell battery:</i> 3.64 lb (1.65kg)																																																																																		
Case material	Color: black; All: magnesium alloy																																																																																		
Battery - type	Li-Ion 8-cell / supports optional Extended Life Battery on base (for two batteries) / supports optional Ultrabay Slim battery in X6 UltraBase (for two batteries)																																																																																		
Battery - life ¹⁰	<i>Enh 4-cell:</i> up to 3.9 hr; <i>8-cell:</i> up to 7.2 hr																																																																																		
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C554 CardBus/1394 combo controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203)																																																																																		
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Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG																																																																																		
WWAN ¹⁶	Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless																																																																																		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card / Conexant® chipset																																																																																		
Bluetooth™	Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator																																																																																		
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE																																																																																		
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)																																																																																		
Security	Power-on password / hard disk password / supervisor password / security keyhole																																																																																		
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant																																																																																		
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip																																																																																		
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available																																																																																		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	X60 Enhanced Capacity Battery 4-cell	40Y7001	1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ThinkPad X60 High Capacity 8-cell	40Y7003	2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad X60 Extended Life Battery	40Y7005	100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad External Battery Charger	40Y7625	120GB Disk 9.5mm SATA150 (5400 rpm)	41N5691	ThinkPad 65W AC Adapter	40Y7696	160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ThinkPad 90W AC Adapter	40Y7659	USB Portable Diskette Drive	05K9276	ThinkPad 90W AC/DC Combo Adapter	40Y7630	USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad Carrying Case - Expander	73P3597	USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Carrying Case - BackPack	73P3599	USB 2.0 Security Memory Key 4GB	41U5120	Lenovo L192 Wide 19" Monitor (black)	6920AB1	USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	Lenovo D221 Wide 22" Monitor (black)	6622HB1	USB 2.0 Portable 120GB Hard Disk	41N8379	ThinkVision® L192p 19" Monitor (black)	9419HC2	USB 2.0 Super Multi-Burner Drive	41N5565	ThinkVision L201p 20.1" Monitor (black)	9220HB1	11a/b/g Wireless Mini PCI Express Adpr	40Y7026	ThinkPlus™ ²² 1-year LOR 9x5 NBD	41C9166	ThinkPad Adjustable Notebook Stand	40Y7676	ThinkPlus 2-year LOR 9x5 NBD	41C9167	ThinkPad Convertible Monitor Stand	40Y7620	ThinkPlus 3-year LOR 9x5 NBD	41C9168	ThinkPad X6 UltraBase	40Y8116	ThinkPlus 5-year LOR 9x5 NBD	41C9173	Lenovo M500 Projector	0037A05	ThinkPlus 2-year P&L P/U Depot	41C9169	Lenovo C500 Projector	0039A05	ThinkPlus 3-year P&L P/U Depot	41C9170	Kensington MicroSaver Security Cable	73P2582	ThinkPlus 4-year P&L P/U Depot	41C9172	Other accessories on O-X60 sheet		Other accessories at lenovo.com/accessories	
												SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery Preloaded (only some listed) • Microsoft Office OneNote® 2003 • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Maintenance Manager • ThinkVantage System Update • Symantec® Client Security™ • DiskKeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad utilities • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (DVD±RW) • InterVideo WinDVD (DVD±RW) • InterVideo WinDVD Creator (DVD±RW models) CD included • Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client																																																																							
												Supports ThinkVantage® technologies																																																																							
												ThinkPad X6 UltraBase™ • Provides desktop expansion and cable management for X60 Series • Easily connects to the bottom of the X60 Series for traveling • Converts ThinkPad to a two-spindle system with optional flat bezel Ultrabay Slim options in left side: – ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789 – ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 – Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725 Disks supported: • 80GB Disk 5400 rpm 41N5662 • 100GB Disk 7200 rpm 41N3013 • 120GB Disk 5400 rpm 41N5691 • 160GB Disk 5400 rpm 41N5692 Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port • Four USB 2.0 ports • Gigabit ethernet port • Modem port • Microphone in and headphone out • Requires 65 or 90 watt AC adapter • Retractable feet; 1.48 lb; 670g																																																																							
												65-watt AC Adapter ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²																																																																							

See footnotes for important warranty information
US model announced October 17, 2006
US model withdrawn effective August 2007

* Powered by Intel Centrino® Duo mobile technology

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(SM2-2) August 2007

ThinkPad® X60s (1702) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical in	ThinkPad UltraBase X6 UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprt reader	Battery cells	Workhorse Global	Avail date
1702-3JU	Core Duo L2400	1.66	512MB	12.1" XGA	60GB	Optional	Optional	*Intel 11a/b/g ³²	None			8-cell	W G	Feb 06
1702-3LU	Core Duo L2400	1.66	512MB	12.1" XGA	60GB	Optional	Optional	11a/b/g ³²	None			8-cell	W	Feb 06
1702-3QU	Core Duo L2400	1.66	512MB	12.1" XGA	60GB	Optional	Optional	*Intel 11a/b/g	None		Finger	8-cell	W G	Feb 06
1702-24U	Core Duo L2300	1.50	512MB	12.1" XGA	40GB	Optional	Optional	*Intel 11a/b/g	None			Enh 4-cell	W	Feb 06
1702-4EU	Core Duo L2400	1.66	512MB	12.1" XGA	60GB	Optional	Optional	*Intel 11a/b/g	None	Blue	Finger	8-cell	W	Feb 06
1702-37U	Core Duo L2400	1.66	512MB	12.1" XGA	40GB	Optional	Optional	*Intel 11a/b/g	None			8-cell	W G	Feb 06
1702-94U	Core Duo L2400	1.66	512MB	12.1" UL XGA	40GB	Optional	Optional	11a/b/g	None			Slim 4-cell	W	Feb 06
1702-4GU	Core Duo L2400	1.66	512MB	12.1" XGA	60GB	Optional	Optional	11a/b/g	None	Blue	Finger	8-cell	W	Feb 06
1702-58U	Core Duo L2400	1.66	512MB	12.1" XGA	80GB	Optional	Optional	*Intel 11a/b/g	None	Blue	Finger	8-cell	W	Feb 06
1702-5JU	Core Duo L2400	1.66	512MB	12.1" XGA	80GB	Combo	UltraBase	*Intel 11a/b/g	None	Blue	Finger	8-cell	W	Feb 06
1702-63U	Core Duo L2400	1.66	512MB	12.1" XGA	60GB	Optional	Optional	*Intel 11a/b/g	Verizon	Blue	Finger	8-cell	W	Feb 06
1702-68U	Core Duo L2400	1.66	1GB	12.1" XGA	100GB DVD±RW	UltraBase	UltraBase	*Intel 11a/b/g	Verizon	Blue	Finger	Slim 4-cell	W	Feb 06
Positioning Processor	<i>Thinnest and lightest; one spindle</i>													
Memory	Intel® Core™ Duo processor L2300 (1.50GHz) or L2400 (1.66GHz) with low voltage, dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache 512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available													
Diskette drive	None standard / use optional USB-based diskette drive													
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X6 UltraBase													
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) / dual-layer / removable from X6													
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional or standard X6 UltraBase													
Serial ATA disk (SATA150)	40, 60, 80, or 100GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional X6 UltraBase													
Display	<i>Some:</i> 12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / anti-glare <i>Some:</i> [UL] 12.1" (308mm) UltraLight XGA (1024x768) TFT color / 180 nits / anti-glare													
Graphics controller	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz													
Graphics - external	External monitor support via analog DB-15 connector / no DVI-out support													
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys standard-size ²⁶ keys / 97% size of T Series / 18.5mm pitch; 2.5mm stroke /													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	None													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	<i>without X6 UltraBase:</i> 10.5" x 8.3" x 0.8-1.1"; 268mm x 211mm x 20-28mm													
Weight ²	<i>Model 94U with UltraLight display and Slim 4-cell:</i> 2.69 lb (1.22kg); <i>Slim 4-cell batt:</i> 2.89 lb (1.31kg); <i>Enh 4-cell:</i> 3.00 lb (1.36kg); <i>8-cell:</i> 3.46 lb (1.57kg)													
Case material	<i>Color:</i> black; <i>All:</i> magnesium alloy													
Battery - type	Li-Ion Enhanced Cap Battery 4-cell, Li-Ion Slim Line Battery 4-cell, or Li-Ion 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional X6 UltraBase (for two batteries)													
Battery - life ¹⁰	<i>Slim 4-cell:</i> up to 3.0 hr; <i>Enh 4-cell:</i> up to 4.0 hr; <i>8-cell:</i> up to 8.0 hr													
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C554 CardBus/1394 combo controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203)													
Media slice	<i>Some:</i> X6 UltraBase media slice (see right side)													
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices													
PC Card slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door													
IEEE 1394	IEEE 1394 (FireWire) port (4-pin)													
Ports	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 (4-pin) / no serial, parallel, keyboard, or mouse ports													
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios													
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable													
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG													
11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX													
WWAN ¹⁶	<i>Some:</i> Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card / Conexant® chipset													
Bluetooth™	<i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator													
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE													
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant													
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ onsite pickup and delivery / service upgrades ²² avail													
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ThinkPad X6 UltraBase	40Y8116											
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	X60 Enhanced Capacity Battery 4-cell	40Y7001											
2GB PC2-5300 DDR2 SODIMM	40Y7735	X60 High Capacity Battery 8-cell	40Y7003											
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad X60 Extended Life Battery	40Y7005											
160GB Disk 9.5mm SATA150 (7200 rpm)	41N5737	ThinkPlus™, 22 2-year LOR 9x5 NBD	41C9175											
ThinkVision® L220x Wide 22" LCD Monitor	4433HB2	ThinkPlus 3-year LOR 9x5 NBD	41C9176											
Lenovo M500 Projector	0037A05	ThinkPlus 5-year LOR 9x5 NBD	41C9179											
ThinkPad Adjustable Notebook Stand	40Y7676	ThinkPlus 5-year P&L P/U Depot	41C9180											
Other accessories on O-X60 sheet	Other accessories at lenovo.com/accessories													
											SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery Preloaded (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • System Migration Assistant • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW model)			
											Supports ThinkVantage® technologies			
											ThinkPad X6 UltraBase™ • Provides desktop expansion and cable management for X60 Series • Easily connects to the bottom of the X60 Series for traveling • Converts ThinkPad to a two-spindle system with optional flat bezel Ultrabay Slim options in left side: – ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789 – CD-RW/DVD Combo II Ultrabay Slim Drive (flat bezel) 40Y8621 – ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 – Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725 Disks supported (some listed): • 160GB Disk 7200 rpm 41N5737			
											Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port • Four USB 2.0 ports • Gigabit ethernet port • Modem port • Microphone in and headphone out • Requires 65 or 90 watt AC adapter • Retractable feet; 1.48 lb; 670g			
											65-watt AC Adapter ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			

See footnotes for important warranty information

* Powered by Intel Centrino® Duo mobile technology

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US models announced January 5, January 31, or February 28, 2006

(KB1-1) October 2007

US models withdrawn effective November 2006, August 2007, or October 2007

ThinkPad® X60s (1702) - October 2006 - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Optical in Disk	UltraBase	ThinkPad X6 UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprt reader	Battery cells	EW Global	9-month Avail date
1702-D5U	Core Duo L2500	1.83	512MB	12.1" XGA	60GB	None	Optional	*Intel 11a/b/g ³²				Enh 4-cell	EW	Oct 06
1702-D6U	Core Duo L2500	1.83	512MB	12.1" XGA	60GB	None	Optional	*Intel 11a/b/g				8-cell	EW Gbl	Oct 06
1702-3WU	Core Duo L2400	1.66	1GB	12.1" XGA	60GB	None	Optional	*Intel 11a/b/g			Finger	8-cell	EW Gbl	Oct 06
1702-D8U	Core Duo L2500	1.83	1GB	12.1" XGA	80GB	None	Optional	*Intel 11a/b/g				8-cell	EW Gbl	Oct 06
1702-E7U	Core Duo L2500	1.83	1GB	12.1" XGA	80GB	None	Optional	*Intel 11a/b/g		Blue	Finger	Enh 4-cell	EW Gbl	Oct 06
1702-F6U	Core Duo L2500	1.83	1GB	12.1" XGA	100G	None	Optional	*Intel 11a/b/g	Verizon	Blue	Finger	8-cell	EW	Oct 06
1702-7CU	Core Duo L2400	1.66	512MB	12.1" UL XGA	60GB	None	Optional	*Intel 11a/b/g				8-cell	EW	Oct 06
1702-H7U	Core Duo L2500	1.83	1GB	12.1" UL XGA	80GB	None	Optional	*Intel 11a/b/g			Finger	8-cell	EW	Oct 06
1702-L6U	Core 2 Duo L7400	1.50	512MB	12.1" XGA	60GB	None	Optional	*Intel 11a/b/g				8-cell	EW Gbl	Mar 07
1702-L8U	Core 2 Duo L7400	1.50	1GB	12.1" XGA	80GB	None	Optional	*Intel 11a/b/g				8-cell	EW Gbl	Mar 07
1702-M7U	Core 2 Duo L7400	1.50	1GB	12.1" XGA	80GB	None	Optional	*Intel 11a/b/g		Blue	Finger	Enh 4-cell	EW Gbl	Mar 07
Positioning	<i>Thinnest and lightest; one spindle</i>													
Processor	Intel® Core™ Duo processor L2400 or L2500 with low voltage, dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache or Intel® Core 2 Duo processor L7400 with low voltage, dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache													
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / 512MB models: standard memory in 1 socket; 1 socket available; <i>1GB models (italics):</i> std mem in both sockets (512MB each socket); no sockets avail													
Diskette drive	None standard / use optional USB-based diskette drive													
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional or standard <i>X6 UltraBase</i>													
Serial ATA disk (SATA150)	60, 80, or 100GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional <i>X6 UltraBase</i>													
Display	<i>Some:</i> 12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / anti-glare <i>Some:</i> [UL] 12.1" (308mm) UltraLight XGA (1024x768) TFT color / 180 nits / anti-glare													
Graphics controller	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz													
Graphics - external	External monitor support via analog DB-15 connector / no DVI-out support													
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys standard-size ²⁶ keys / 97% size of T Series / 18.5mm pitch; 2.5mm stroke / TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
TrackPoint®	None													
Touch pad	Illuminates the keyboard to improve visibility in low-light conditions													
ThinkLight™														
Dimensions ³	<i>without X6 UltraBase:</i> 10.5" x 8.3" x 0.8-1.1"; 268mm x 211mm x 20-28mm													
Weight ²	<i>Models 7CU/H7U with UltraLight display and 8-cell:</i> beginning at 3.33 lb (1.51kg); <i>Enhanced 4-cell:</i> 3.04 lb (1.38kg); <i>8-cell:</i> 3.53 lb (1.60kg)													
Case material	<i>Color:</i> black; <i>All:</i> magnesium alloy													
Battery - type	Li-Ion Enhanced Cap Battery 4-cell or Li-Ion 8-cell / supports optional Li-Ion Slim Line Battery 4-cell, supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional X6 UltraBase (for two batteries)													
Battery - life ¹⁰	<i>Slim 4-cell:</i> up to 3.2 hr; <i>Enh 4-cell:</i> up to 4.2 hr; <i>8-cell:</i> up to 8.4 hr													
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C554 CardBus/1394 combo controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203)													
Media slice	Optional X6 UltraBase media slice (see right side)													
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices													
PC Card slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door													
IEEE 1394	IEEE 1394 (FireWire) port (4-pin)													
Ports	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 (4-pin) / no serial, parallel, keyboard, or mouse ports													
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios													
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable													
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG													
WWAN ¹⁶	<i>Some:</i> Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card / Conexant® chipset													
Bluetooth™	<i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator													
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE													
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant													
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / supports the security chip													
Limited warranty ¹²	3-years /1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ThinkPad X6 UltraBase	40Y8116											
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	X60 Enhanced Capacity Battery 4-cell	40Y7001											
USB 2.0 Lenovo Multimedia Headset	40Y8518	X60 High Capacity Battery 8-cell	40Y7003											
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad X60 Extended Life Battery	40Y7005											
USB 2.0 Portable 120GB Hard Disk	41N8379	ThinkPad External Battery Charger	40Y7625											
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad 90W AC/DC Combo Adapter	40Y7630											
160GB Disk 9.5mm SATA150 (7200 rpm)	41N5737	ThinkPlus™ ²² 3-year LOR 9x5 NBD	41C9176											
ThinkVision® L220x Wide 22" LCD Monitor	4433HB2	ThinkPlus 5-year P&L P/U Depot	41C9180											
Other accessories on O-X60 sheet		Other accessories at lenovo.com/accessories												

SOFTWARE¹⁴

Windows XP Professional
 - Microsoft® Windows® XP Professional²⁰ (Service Pack 2)

Preloaded

- Rescue and Recovery™
- Access Connections™
- Client Security Solution™
- ThinkVantage Productivity Center with Away Manager
- ThinkVantage System Update
- System Migration Assistant
- Symantec® Client Security™
- Diskeeper® Lite
- PC-Doctor™ (diagnostics)
- ThinkPad Utilities (Power Manager and Presentation Director)
- Adobe® Reader
- Google Toolbar
- Google Desktop
- Picasa from Google
- Fingerprint Software (fingerprint models)
- Multimedia Center for Think Offerings

License - CD not included
 - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client

Supports ThinkVantage® technologies

ThinkPad X6 UltraBase™

- Provides desktop expansion and cable management for X60 Series
- Easily connects to the bottom of the X60 Series for traveling
- Converts ThinkPad to a two-spindle system with optional flat bezel Ultrabay Slim options in left side:
 - ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789
 - CD-RW/DVD Combo II Ultrabay Slim Drive (flat bezel) 40Y8621
 - ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643
 - Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725
- Disks supported (some listed):
 - 160GB Disk 7200 rpm 41N5737

Other features:

- Power button (front)
- Stereo speakers (1 watt)
- Security key lock, security keyhole, and optional security screw
- Serial and parallel ports
- Analog DB-15 monitor port
- Four USB 2.0 ports
- Gigabit ethernet port
- Modem port
- Microphone in and headphone out
- Requires 65 or 90 watt AC adapter
- Retractable feet; 1.48 lb; 670g

65-watt AC Adapter
 ROHS-compliant
 International Warranty Service¹⁷
 24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²

See footnotes for important warranty information
 US models announced October 17, 2006 or April 3, 2007
 US models withdrawn effective July or October 2007

* Powered by Intel Centrino® Duo mobile technology

ThinkPad® X60s (1704) - TopSeller - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X6 UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprt reader	Battery cells	OneNote	Avail date
1704-3TU	Core Duo L2400	1.66	512MB	12.1" XGA	60GB	Combo	UltraBase	*Intel 11a/b/g ³²			Finger	8-cell		Feb 06
1704-4DU	Core Duo L2400	1.66	512MB	12.1" XGA	60GB	Optional	Optional	*Intel 11a/b/g		Blue	Finger	Enh 4-cell		Feb 06
1704-4JU	Core Duo L2400	1.66	512MB	12.1" XGA	60GB	Combo	UltraBase	*Intel 11a/b/g		Blue	Finger	8-cell		Feb 06
1704-3DU	Core Duo L2400	1.66	256MB	12.1" XGA	60GB	Optional	Optional	*Intel 11a/b/g				8-cell		Feb 06
1704-63U	Core Duo L2400	1.66	512MB	12.1" XGA	60GB	Optional	Optional	*Intel 11a/b/g	Verizon	Blue	Finger	8-cell		Feb 06
1704-66U	Core Duo L2400	1.66	512MB	12.1" XGA	80GB	Combo	UltraBase	11a/b/g ³²	Verizon	Blue	Finger	8-cell		Feb 06
1704-69U	Core Duo L2400	1.66	1GB	12.1" XGA	100GB	DVD±RW	UltraBase	11a/b/g	Verizon	Blue	Finger	8-cell		Feb 06
1704-G3U	Core Duo L2500	1.83	1GB	12.1" XGA	120GB	DVD±RW	UltraBase	ThinkPad 11n ²⁸	Verizon		Finger	8-cell	Yes	Oct 06

• **These small and medium business (SMB) model is part of the US TopSeller™ Program**
 • **These 1704 models have a 3-year limited warranty**

Positioning	<i>Thinnest and lightest; one spindle</i>	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) Preloaded (only some listed) • Model G3U: Microsoft Office OneNote® 2003 • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • System Migration Assistant • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) CD included (Model G3U only) • Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client Supports ThinkVantage® technologies ThinkPad X6 UltraBase™ • Provides desktop expansion and cable management for X60 Series • Easily connects to the bottom of the X60 Series for traveling • Converts ThinkPad to a two-spindle system with optional flat bezel Ultrabay Slim options in left side: – ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789 – ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 – Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725 Disks supported (some listed): • 160GB Disk 7200 rpm 41N5737 Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port • Four USB 2.0 ports • Gigabit ethernet port • Modem port • Microphone in and headphone out • Requires 65 or 90 watt AC adapter • Retractable feet; 1.48 lb; 670g 65-watt AC Adapter ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²	
Processor	Intel® Core™ Duo processor L2400 or L2500 with low voltage, dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache		
Memory	256MB, 512MB, or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available		
Diskette drive	None standard / use optional USB-based diskette drive		
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X6 UltraBase		
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner (40Y8623) / dual-layer / removable from X6		
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional X6 UltraBase		
Serial ATA disk (SATA150)	60, 80, 100 or 120GB ⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional X6 UltraBase		
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / anti-glare		
Graphics controller	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz		
Graphics - external	External monitor support via analog DB-15 connector / no DVI-out support		
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys standard-size ²⁶ keys / 97% size of T Series / 18.5mm pitch; 2.5mm stroke / TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass		
Touch pad	None		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions		
Dimensions ³	without X6 UltraBase: 10.5" x 8.3" x 0.8-1.1"; 268mm x 211mm x 20-28mm		
Weight ²	with Enh 4-cell: 3.04 lb (1.38kg); with 8-cell: 3.53 lb (1.60kg)		
Case material	Color: black; All: magnesium alloy		
Battery - type	Li-Ion Enhanced Cap Battery 4-cell or Li-Ion 8-cell / supports optional Li-Ion Slim Line Battery 4-cell, supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional X6 UltraBase (for two batteries)		
Battery - life ¹⁰	4-cell: up to 4.2 hr; 8-cell: up to 8.4 hr; with std batt and Extend Life Batt: up to 11.0 hr		
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C554 CardBus/1394 combo controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203)		
Media slice	Some: X6 UltraBase media slice (see right side) One Secure Digital Card slot / supports SD memory cards used in consumer devices		
Secure Digital slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door		
PC Card slot	IEEE 1394 (FireWire) port (4-pin)		
IEEE 1394	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 (4-pin) / no serial, parallel, keyboard, or mouse ports		
Ports			
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios		
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable		
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG		
11a/b/g ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX		
ThinkPad 11n ²⁸	Some: 11a/b/g/n wireless ⁴ , ThinkPad 11a/b/g/n Mini PCI Express Adapter, Atheros AR5008 chipset, MIMO 2x3 for non-WWAN models		
WWAN ¹⁶	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card / Conexant® chipset		
Bluetooth™	Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator		
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE		
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)		
Security	Power-on password / hard disk password / supervisor password / security keyhole		
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant		
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip		
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	X60 Enhanced Cap Battery 4-cell (cyl)	40Y7001
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	X60 High Capacity 8-cell (cylindrical)	40Y7003
160GB Disk 9.5mm SATA150 (7200 rpm)	41N5737	X60 Extended Life Battery	40Y7005
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad X6 UltraBase	40Y8116
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad External Battery Charger	40Y7625
USB 2.0 Portable 120GB Hard Disk	41N8379	Carrying Case - Leather Attache	73P3600
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPlus™.22 2-year LOR 9x5 NBD	41C9175
ThinkVision® L194 Wide 19" LCD Monitor	4434HB6	ThinkPlus 3-year LOR 9x5 NBD	41C9176
Lenovo M500 Projector	0037A05	ThinkPlus 5-year P&L P/U Depot	41C9180
Other accessories on O-X60 sheet		Other accessories at lenovo.com/accessories	

See footnotes for important warranty information

* Powered by Intel Centrino® Duo mobile technology

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US models announced January 31, February 28, or October 17, 2006

(KB1-2) October 2007

US models withdrawn effective May or October 2007

ThinkPad® X60s (1705) - TopSeller - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Disk	Optical in UltraBase	ThinkPad X6 UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprt reader	Battery cells	Limited warranty ¹²	Avail date
1705-24U	Core Duo L2300	1.50	512MB	12.1" XGA	40GB	Optional	Optional	* Intel 11a/b/g	None	None	None	Enh 4-cell	1-yr	Feb 06
<ul style="list-style-type: none"> • This small and medium business (SMB) model is part of the US TopSeller™ Program • This 1705 model has a 1-year limited warranty 														
Positioning Processor	<i>Thinnest and lightest; one spindle</i> Intel® Core™ Duo processor L2300 (1.50GHz) with low voltage, dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery			
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • System Migration Assistant • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings			
Diskette drive	None standard / use optional USB-based diskette drive										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Ultrabay™ Slim	Supports Ultrabay Slim devices in optional X6 UltraBase													
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional X6 UltraBase													
Display	12.1" (308mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / anti-glare													
Graphics controller	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz													
Graphics - external	External monitor support via analog DB-15 connector / no DVI-out support													
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys standard-size ²⁶ keys / 97% size of T Series / 18.5mm pitch; 2.5mm stroke / TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
TrackPoint®	None													
Touch pad	Illuminates the keyboard to improve visibility in low-light conditions													
ThinkLight™														
Dimensions ³	<i>without X6 UltraBase:</i> 10.5" x 8.3" x 0.8-1.1"; 268mm x 211mm x 20-28mm													
Weight ²	<i>with Enh 4-cell:</i> 3.00 lb (1.36kg); <i>with optional 8-cell:</i> 3.46 lb (1.57kg)													
Case material	Color: black; All: magnesium alloy													
Battery - type	Li-Ion Enhanced Cap Battery 4-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional X6 UltraBase (for two batteries)													
Battery - life ¹⁰	Enh 4-cell: up to 4 hr; <i>with optional 8-cell battery and Extended Life Battery:</i> up to 11 hr													
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C554 CardBus/1394 combo controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203)													
Media slice	Optional X6 UltraBase media slice (see right side)										Supports ThinkVantage® technologies			
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices										ThinkPad X6 UltraBase™ • Provides desktop expansion and cable management for X60 Series • Easily connects to the bottom of the X60 Series for traveling • Converts ThinkPad to a two-spindle system with optional flat bezel Ultrabay Slim options in left side: - ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789 - CD-RW/DVD Combo II Ultrabay Slim Drive (flat bezel) 40Y8621 - DVD-ROM Ultrabay Slim Drive (curved bezel) 73P3270 - ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 - Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725 Disks supported: • 100GB Disk 7200 rpm 41N3013 • 120GB Disk 5400 rpm 41N5691 • 160GB Disk 5400 rpm 41N5692 • 160GB Disk 7200 rpm 41N5737			
PC Card slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door													
IEEE 1394	IEEE 1394 (FireWire) port (4-pin)													
Ports	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 (4-pin) / no serial, parallel, keyboard, or mouse ports													
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios													
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable													
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG													
WWAN ¹⁶	None													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card / Conexant® chipset													
Bluetooth™	None													
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE													
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant													
Fingerprint reader	None													
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	X60 Enhanced Cap Battery 4-cell (cyl)	40Y7001											
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	X60 High Capacity 8-cell (cylindrical)	40Y7003											
2GB PC2-5300 DDR2 SODIMM	40Y7735	X60 Extended Life Battery	40Y7005											
120GB Disk 9.5mm SATA150 (5400 rpm)	41N5691	ThinkPad External Battery Charger ⁴⁴	40Y7625											
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ThinkPad Adjustable Notebook Stand	40Y7676											
160GB Disk 9.5mm SATA150 (7200 rpm)	41N5737	ThinkPad X6 UltraBase	40Y8116											
USB Portable Diskette Drive	05K9276	ThinkPad 65W AC Adapter	40Y7696											
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad 90W AC Adapter	40Y7659											
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad 90W AC/DC Combo Adapter	40Y7630											
USB 2.0 Security Memory Key 2GB	41U5119	ThinkPad Carrying Case - Expander	73P3597											
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad Carrying Case - Organizer	73P3598											
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkPad Carrying Case - Backpack	73P3599											
USB 2.0 Portable 120GB Hard Disk	41N8379	Carrying Case - Leather Attache	73P3600											
USB 2.0 Super Multi-Burner Drive	41N5565	Kensington MicroSaver Security Cable	73P2582											
11a/b/g Wireless Mini PCI Express Adpr	40Y7026	ThinkPlus™ ²² 1-year LOR 9x5 NBD	41C9166											
ThinkVision® L171p 17" LCD Monitor	9417HC2	ThinkPlus 2-year LOR 9x5 NBD	41C9167											
ThinkVision L190x 19" LCD Monitor	4439HB2	ThinkPlus 3-year LOR 9x5 NBD	41C9168											
ThinkVision L193p 19" LCD Monitor	4431HB2	ThinkPlus 5-year LOR 9x5 NBD	41C9173											
ThinkVision L194 Wide 19" LCD Monitor	4434HB6	ThinkPlus 2-year P&L P/U Depot	41C9169											
ThinkVision L220x Wide 22" LCD Monitor	4433HB2	ThinkPlus 3-year P&L P/U Depot	41C9170											
ThinkPad Adjustable Notebook Stand	40Y7676	ThinkPlus 4-year P&L P/U Depot	41C9172											
Lenovo M500 Projector	0037A05	ThinkPlus 5-year P&L P/U Depot	41C9174											
Other accessories on O-X60 sheet		Other accessories at lenovo.com/accessories												

See footnotes for important warranty information
US model announced January 31, 2006
US model withdrawn effective October 2007

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(KB1-3) October 2007

ThinkPad® X60 Tablet (6363) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	SATA disk	Optical in UltraBase	X6 Tablet UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprt reader	Battery cells	WH TAA	Gbl	Avail date
6363-46U	Core Duo L2400	1.66	1GB	12.1" XGA	80GB			* Intel 11a/b/g ³²	None		Finger	8-cell	WH	Gbl	Dec 06
6363-54U	Core Duo L2500	1.83	1GB	12.1" XGA	60GB			* Intel 11a/b/g	None			8-cell	WH	Gbl	Dec 06
6363-64U	Core Duo L2500	1.83	1GB	12.1" XGA	80GB			* Intel 11a/b/g	None		Finger	8-cell	WH	Gbl	Dec 06
6363-A7U	Core Duo L2500	1.83	1GB	12.1" SXGA+	80GB			* Intel 11a/b/g	None	Blue	Finger	8-cell	WH	Gbl	Dec 06
6363-85U	Core Duo L2500	1.83	1GB	12.1" XGA Touch	80GB			* Intel 11a/b/g	None	Blue	Finger	8-cell	WH	Gbl	Dec 06
6363-34U	Core Duo L2400	1.66	512MB	12.1" XGA	60GB			* Intel 11a/b/g	None			4-cell	WH		Dec 06
6363-5BU	Core Duo L2400	1.66	1GB	12.1" XGA Touch	100G			* Intel 11a/b/g	None	Blue	Finger	8-cell	WH		Feb 07
6363-86U	Core Duo L2500	1.83	1GB	12.1" XGA Touch	100G			* Intel 11a/b/g	None	Blue	Finger	8-cell	WH		Dec 06
6363-2BU	Core Duo L2400	1.66	1GB	12.1" SXGA+	120G	DVD±RW	UltraBase	* Intel 11a/b/g	None	Blue	Finger	8-cell	WH		Feb 07
6363-A8U	Core Duo L2500	1.83	1GB	12.1" SXGA+	120G	DVD±RW	UltraBase	* Intel 11a/b/g	None	Blue	Finger	8-cell	WH		Dec 06
6363-4KU	Core Duo L2400	1.66	1GB	12.1" XGA	80GB	Combo	UltraBase	* Intel 11a/b/g	None	Blue	Finger	4-cell	WH		Feb 07
6363-65U	Core Duo L2500	1.83	1GB	12.1" XGA	80GB	Combo	UltraBase	* Intel 11a/b/g	None	Blue	Finger	4-cell	WH		Dec 06
6363-4GU	Core Duo L2400	1.66	1GB	12.1" XGA	60GB			* Intel 11a/b/g	None		Finger	8-cell	TAA		Dec 06
Positioning US Govt (TAA) ⁵ Processor	Convertible tablet; one spindle 4GU: US Government model (Trade Act Agreement-compliant) Intel® Core™ Duo processor L2400 or L2500 with low voltage, dual-core , Enhanced Intel SpeedStep® technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache											SOFTWARE¹⁴ Windows XP Tablet - Microsoft® Windows® XP Tablet PC Edition 2005 ²⁰ ◇ Disk-to-Disk Recovery Preloaded (only some listed) • Model 34U: Microsoft Office OneNote® 2003 • Microsoft Education Pack • Microsoft Experience Pack • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security™ • PC-Doctor™ (diagnostics) • Some: Fingerprt Software • InterVideo VirtualDrive CD/DVD Emulator Free trial • Zinio Reader CD included • Model 34U: Microsoft Office OneNote 2003			
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / Some: (italics) standard memory in both sockets; no sockets available; Some: standard memory in 1 socket; 1 socket available											Supports ThinkVantage® technologies			
Ultrabay™ Slim EIDE Combo EIDE DVD±RW Serial ATA disk (SATA150)	Supports Ultrabay™ Slim devices in optional ThinkPad X6 Tablet UltraBase Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X6 UltraBase Some: DVD burner / Super Multi-Burner (40Y8623) / dual-layer / removable from X6 60GB⁸ (5400 rpm), 80GB (5400 rpm), 100GB (7200 rpm), or 120GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional X6 Tablet UltraBase														
Display	Some: 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 185 nits / 170° viewing Some: 12.1" (307mm) SXGA+ (1400x1050) TFT color / 4:3 / 180 nits / 170° viewing Touch: 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 150 nits / 170° viewing / MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) All: Super Wide Angle FFS / anti-reflective and anti-glare protective coatings / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / buttons on display bottom (power, lock, reboot, rotation, utility, Esc, NavDial/enter)														
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz / external monitor support via analog DB-15 connector / no DVI-out support														
Keyboard TrackPoint® Dimensions ³	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass 4-cell: 10.8" x 9.6" x 1.1-1.3"; 274mm x 244mm x 27.4-33.1mm 8-cell: 10.8" x 10.5" x 1.1-1.3"; 274mm x 267mm x 27.4-33.1mm														
Weight ²	4-cell battery models: 3.7 to 4.1 lb (1.7 to 1.9kg); 8-cell battery models: 4.2 to 4.6lb (1.9 to 2.1kg)														
Case material Battery - type	Color: black; All: magnesium alloy Li-Ion 4-cell or 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional X6 Tablet UltraBase (for two batteries)														
Battery - life ¹⁰	4-cell: up to 3.3 hr; 8-cell: up to 7.5 hr; with 8-cell and Ultrabay Slim: up to 8.5 hr; with 8-cell and optional Extended Life Battery: up to 9.5 hr														
Chipset	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC bus, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C843 CardBus/1394/SD controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203 TPM) Some: ThinkPad X6 Tablet UltraBase (see right side)														
Media slice Secure Digital slot PC Card Std slot Ports	One Secure Digital Card slot / supports SD memory cards used in consumer devices One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 port (4-pin) / no serial, parallel, keyboard/mouse ports														
Wireless antenna Mini PCI Express Intel 11a/b/g ³² WWAN	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG None														
Modem Bluetooth™ Ethernet Audio support	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communication Daughter Card Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / mono speaker, 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)														
Security Security chip Fingerprt reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Some: Fingerprint reader on right base of display / use in tablet or notebook mode / 2-way swipe sensor / supports the security chip														
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available														
2GB PC2-5300 DDR2 SODIMM	40Y7735			ThinkPad X6 Tablet UltraBase				41U3120				65-watt AC Adapter			
Other accessories on O-X60-T sheet											Other accessories at lenovo.com/accessories				

See footnotes for important warranty information * Intel Centrino® processor technology
US models announced November 14, 2006 or February 22, 2007
US models withdrawn effective July 2007, Nov 2007, or April 2008

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(DL1-1) April 2008

ThinkPad® X60 Tablet (6363) - February 2007 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	SATA disk	Optical in UltraBase	X6 Tablet UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprt reader	Battery cells	WH Gbl	Avail date
6363-38U	Core Duo L2400	1.66	1GB	12.1" XGA	60GB			* Intel 11a/b/g ³²	None			8-cell	WH Gbl	Mar 07
6363-4JU	Core Duo L2400	1.66	1GB	12.1" XGA	80GB			* Intel 11a/b/g	None		Finger	8-cell	WH Gbl	Mar 07
6363-2AU	Core Duo L2400	1.66	1GB	12.1" SXGA+	80GB			* Intel 11a/b/g	None	Blue	Finger	8-cell	WH Gbl	Mar 07
6363-5AU	Core Duo L2400	1.66	1GB	12.1" XGA Touch	80GB			* Intel 11a/b/g	None	Blue	Finger	8-cell	WH Gbl	Mar 07
6363-9CU	Core 2 Duo L7400	1.50	1GB	12.1" XGA	60GB			* Intel 11a/b/g	None			8-cell	WH Gbl	Apr 07
6363-P3U	Core 2 Duo L7400	1.50	1GB	12.1" XGA	80GB			* Intel 11a/b/g	None		Finger	8-cell	WH Gbl	Apr 07
6363-J3U	Core 2 Duo L7400	1.50	1GB	12.1" XGA Touch	80GB			* Intel 11a/b/g	None	Blue	Finger	8-cell	WH Gbl	Apr 07
6363-C7U	Core 2 Duo L7400	1.50	1GB	12.1" SXGA+	80GB			* Intel 11a/b/g	None	Blue	Finger	8-cell	WH Gbl	Apr 07
6363-P5U	Core 2 Duo L7400	1.50	1GB	12.1" XGA	80GB	Combo	UltraBase	* Intel 11a/b/g	None	Blue	Finger	4-cell		Apr 07
<p>• These models have a 3-year limited warranty¹²</p>														
Positioning Processor	<p>Convertible tablet; one spindle Intel® Core™ Duo processor L2400 with low voltage, dual-core, Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache or Intel Core 2 Duo processor L7400 with low voltage, dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache</p>										<p>SOFTWARE¹⁴ Windows XP Tablet - Microsoft® Windows® XP Tablet PC Edition 2005²⁰ Preloaded • Microsoft Education Pack • Microsoft Experience Pack • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Windows Live™ Toolbar • Windows Live Search • Picasa from Google • Some: Fingerprint Software • InterVideo VirtualDrive CD/DVD Emulator</p>			
Memory	<p>1GB std / 4GB max³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / P5U: standard memory in both sockets (512MB each socket); no sockets available; Others: standard memory in 1 socket; 1 socket available</p>													
Ultrabay™ Slim EIDE Combo Serial ATA disk (SATA150)	<p>Supports Ultrabay™ Slim devices in optional ThinkPad X6 Tablet UltraBase Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from X6 UltraBase 60GB⁸ (5400 rpm) or 80GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional X6 Tablet UltraBase</p>													
Display	<p>Some: 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 185 nits / 170° viewing Some: 12.1" (307mm) SXGA+ (1400x1050) TFT color / 4:3 / 180 nits / 170° viewing Touch: 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 150 nits / 170° viewing / MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) All: Super Wide Angle FFS / anti-reflective and anti-glare protective coatings / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / buttons on display bottom (power, lock, reboot, rotation, utility, Esc, NavDial/enter)</p>													
Graphics	<p>Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz / external monitor support via analog DB-15 connector / no DVI-out support</p>										<p>Free trial • Zinio Reader</p>			
Keyboard TrackPoint®	<p>89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass</p>										<p>License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client</p>			
Dimensions ³	<p>4-cell: 10.8" x 9.6" x 1.1-1.3"; 274mm x 244mm x 27.4-33.1mm 8-cell: 10.8" x 10.5" x 1.1-1.3"; 274mm x 267mm x 27.4-33.1mm</p>													
Weight ²	<p>4-cell battery models: 3.7 to 4.1 lb (1.7 to 1.9kg); 8-cell battery models: 4.2 to 4.6lb (1.9 to 2.1kg)</p>													
Case material	<p>Color: black; All: magnesium alloy</p>													
Battery - type	<p>Li-Ion 4-cell or 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional X6 Tablet UltraBase (for two batteries)</p>										<p>Supports ThinkVantage® technologies</p>			
Battery - life ¹⁰	<p>4-cell: up to 3.3 hr; 8-cell: up to 7.5 hr; with 8-cell and Ultrabay Slim: up to 8.5 hr; with 8-cell and optional Extended Life Battery: up to 9.5 hr</p>										<p>ThinkPad X6 Tablet UltraBase • Provides desktop expansion and cable mgmt for X60 Tablet • Connects to the bottom of tablet • Converts tablet to a two-spindle system with optional flat bezel Ultrabay Slim options in right side: - ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789 - CD-RW/DVD Combo II Ultrabay Slim Drive (flat bezel) 40Y8621 - ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 - Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725 SATA disks supported (some): • 60GB Disk 7200 rpm 41N3012 • 80GB Disk 5400 rpm 41N5662 • 100GB Disk 7200 rpm 41N3013</p> <p>Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port (no DVI) • Four USB 2.0 ports • Gigabit ethernet port (RJ-45) • Modem port (RJ-11) • Microphone in and headphone out • Requires 65- or 90-watt AC adapter • 1.48 lb; 670g</p>			
Architecture	<p>Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C843 CardBus/1394/SD controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203 TPM) Some: ThinkPad X6 Tablet UltraBase (see right side)</p>													
Media slice	<p>One Secure Digital Card slot / supports SD memory cards used in consumer devices</p>													
Secure Digital slot	<p>One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door</p>													
PC Card Std slot	<p>Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 port (4-pin) / no serial, parallel, keyboard/mouse ports</p>													
Ports	<p>UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios</p>													
Wireless antenna	<p>Two Mini PCI Express slots / only 802.11 wireless is customer upgradable</p>													
Mini PCI Express	<p>Intel 11a/b/g³² / None</p>													
WWAN	<p>None</p>													
Modem	<p>56K⁶ V.90 (V.92-designed²⁹) modem in Communication Daughter Card</p>													
Bluetooth™	<p>Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator</p>													
Ethernet	<p>Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE</p>													
Audio support	<p>High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)</p>													
Security	<p>Power-on password / hard disk password / supervisor password / security keyhole</p>													
Security chip	<p>Trusted Platform Module / Atmel chip / TCG 1.2-compliant</p>													
Fingerprint reader	<p>Some: Fingerprint reader on right base of display / use in tablet or notebook mode / 2-way swipe sensor / supports the security chip</p>													
<p>Limited warranty¹² 3-years/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail</p>														
512 MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ThinkPad X6 Tablet UltraBase	41U3120											
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ThinkPad X60 Tablet Digitizer Pen	41U3143											
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad X60 Tether (3-pack)	41U4820											
Other accessories on O-X60-T sheet		Other accessories at lenovo.com/accessories												
<p>65-watt AC Adapter</p>														

See footnotes for important warranty information
 US models announced February 27 or April 3, 2007
 US models withdrawn effective July or November 2007

* Powered by Intel Centrino® Duo mobile technology

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 (DL1-8) October 2007

ThinkPad® X60 Tablet (6363) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	SATA disk	Optical in X6 Tablet UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprt reader	Limited warranty ¹²	WH Gbl	Avail date
6363-R3U	Core Duo L2400	1.66	1GB	12.1" TN XGA <i>Touch</i>	80GB	Optional	Optional	*Intel 11a/b/g ³²	None	Blue	Finger	EasyServ	WH Apr 07
6363-G4U	Core Duo L2400	1.66	1GB	12.1" TN XGA	80GB	Optional	Optional	*Intel 11a/b/g	None	Blue	Finger	EasyServ	WH Apr 07
6363-ADU	Core Duo L2500	1.83	1GB	12.1" SXGA+	80GB	Optional	Optional	*Intel 11a/b/g	None	Blue	Finger	EasyServ	WH Dec 06
6363-8DU	Core Duo L2500	1.83	1GB	12.1" XGA <i>Touch</i>	80GB	Optional	Optional	*Intel 11a/b/g	None	Blue	Finger	EasyServ	WH Dec 06
6363-6DU	Core Duo L2500	1.83	1GB	12.1" XGA	80GB	Optional	Optional	*Intel 11a/b/g	None	Blue	Finger	EasyServ	WH Dec 06

• **These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	Convertible tablet; one spindle Intel® Core™ Duo processor L2400 or L2500 with low voltage, dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										SOFTWARE¹⁴		
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in 1 socket; 1 socket available										Windows XP Tablet - Microsoft® Windows® XP Tablet PC Edition 2005 ²⁰ ⇨ Disk-to-Disk Recovery Preloaded (only some listed) • Microsoft Office OneNote® 2003 • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Microsoft Education Pack • Microsoft Experience Pack • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • Fingerprint Software • InterVideo VirtualDrive CD/DVD Emulator		
Ultrabay™ Slim Serial ATA disk (SATA150)	Supports Ultrabay™ Slim devices in optional <i>ThinkPad X60 Tablet UltraBase</i> 80GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional <i>X60 Tablet UltraBase</i>												
Display	<i>Some:</i> 12.1" (307mm) TN XGA (1024x768) TFT color / 4:3 / 190 nits / 100° viewing <i>Some:</i> 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 185 nits / 170° viewing <i>Some:</i> 12.1" (307mm) SXGA+ (1400x1050) TFT color / 4:3 / 180 nits / 170° viewing <i>Touch:</i> 12.1" (307mm) TN XGA (1024x768) TFT color / 4:3 / 155 nits / 100° viewing / MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) <i>Touch:</i> 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 150 nits / 170° viewing / MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) <i>All:</i> Super Wide Angle FFS or Twisted Nematic (TN) / anti-reflective and anti-glare protective coatings / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / buttons on display bottom (power, lock, reboot, rotation, utility, Esc, NavDial/enter)												
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz / external monitor support via analog DB-15 connector / no DVI-out support										Free trial • Zinio Reader		
Keyboard TrackPoint®	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										CD included • Adobe Photoshop Elements plus Adobe Premiere Elements • Microsoft Office OneNote 2003		
Dimensions ³	<i>8-cell:</i> 10.8" x 10.5" x 1.1-1.3"; 274mm x 267mm x 27.4-33.1mm										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Weight ²	<i>8-cell:</i> 4.2 to 4.6lb (1.9 to 2.1kg)												
Case material	<i>Color:</i> black; <i>All:</i> magnesium alloy												
Battery - type	Li-Ion 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional <i>X60 Tablet UltraBase</i> (for two batteries)										Supports ThinkVantage® technologies		
Battery - life ¹⁰	<i>8-cell:</i> up to 7.5 hr; <i>with optional Extended Life Battery:</i> up to 9.5 hr												
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C843 CardBus/1394/SD controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203 TPM) Optional ThinkPad X60 Tablet UltraBase (see right side)										ThinkPad X60 Tablet UltraBase • Provides desktop expansion and cable mgmt for X60 Tablet • Connects to the bottom of tablet • Converts tablet to a two-spindle system with optional flat bezel Ultrabay Slim options in right side: - ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789 - ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 - Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725 SATA disks supported (some): • 60GB Disk 7200 rpm 41N3012 • 80GB Disk 5400 rpm 41N5662 • 100GB Disk 7200 rpm 41N3013		
Media slice	One Secure Digital slot / supports SD memory cards used in consumer devices												
Secure Digital slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door												
PC Card Std slot	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 port (4-pin) / no serial, parallel, keyboard/mouse ports												
Ports													
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios												
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable												
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG												
WWAN	None												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communication Daughter Card												
Bluetooth™	<i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator												
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE												
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant												
Fingerprint reader	Fingerprint reader on right base of display / use in tablet or notebook mode / 2-way swipe sensor / supports the security chip										Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port (no DVI) • Four USB 2.0 ports • Gigabit ethernet port (RJ-45) • Modem port (RJ-11) • Microphone in and headphone out • Requires 65- or 90-watt AC adapter • 1.48 lb; 670g		
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail												
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ThinkPad X60 Tablet UltraBase							41U3120				
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ThinkPad X60 Tablet Digitizer Pen							41U3143				
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad X60 Tether (3-pack)							41U4820				
USB 2.0 Lenovo Multimedia Headset	40Y8518	X60 Tablet Li-ion Battery 8-cell							40Y8318				
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad X60 Extended Life Battery							40Y7005				
USB 2.0 Portable 120GB Hard Disk	41N8379	ThinkPad External Battery Charger							40Y7625				
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad X60 Tablet Sleeve							41U3142				
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ThinkPlus™ ²² 2-year LOR 9x5 NBD							41C9175				
Other accessories on O-X60-T sheet		ThinkPlus 3-year LOR 9x5 NBD							41C9176	65-watt AC Adapter			

See footnotes for important warranty information

* Powered by Intel Centrino® Duo mobile technology

US models announced November 14, 2006 or April 10, 2007

US models withdrawn effective July 2007

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(DL1-5) August 2007

ThinkPad® X60 Tablet (6363) - Education (Vista™) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	SATA disk	Optical in UltraBase	X60 Tablet UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprt reader	Limited warranty ¹²	Educ Avail preload date
6363-R5U	Core Duo L2400	1.66	1GB	12.1" TN XGA Touch	80GB	Optional	Optional	11a/b/g ³²	None	Blue	Finger	EasyServ HE	Apr 07
6363-G5U	Core Duo L2400	1.66	1GB	12.1" TN XGA	80GB	Optional	Optional	11a/b/g	None	Blue	Finger	EasyServ HE	Apr 07
6363-R6U	Core Duo L2400	1.66	1GB	12.1" TN XGA Touch	80GB	Optional	Optional	11a/b/g	None	Blue	Finger	EasyServ K12	Apr 07
6363-G6U	Core Duo L2400	1.66	1GB	12.1" TN XGA	80GB	Optional	Optional	11a/b/g	None	Blue	Finger	EasyServ K12	Apr 07
<p>• These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.</p>													
Positioning Processor	Convertible tablet; one spindle Intel® Core™ Duo processor L2400 with low voltage, dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										Preloaded operating system²⁰ - Microsoft® Windows® Vista™ Business Edition (32-bit)		
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / std mem in both sockets (512MB each socket); no sockets available										Preloaded applications¹⁴ (only some listed) • <i>Some (K12):</i> K-12 educ software - VitalSource Library School Edition - Adobe® Instruct Resource Center - Adobe Digital School Collection - Photoshop Elements 5 (and CD) - Premier Elements 3 (and DVD) - Acrobat 8 Professional (and CD) - Contribute 4 (and CD) • <i>Some (HE):</i> Higher ed software - VitalSource Library College Edition - Adobe® Instruct Resource Center - Adobe Photoshop Elements 5 (and CD) - Adobe Premier Elements 3 (and DVD) • Microsoft Education Pack • Microsoft Experience Pack • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Lenovo Multimedia Center • Norton Internet Security • Diskkeeper™ Home • PC-Doctor™ (diagnostics) • InterVideo VirtualDrive CD/DVD Emulator		
Ultrabay™ Slim Serial ATA disk (SATA150)	Supports Ultrabay™ Slim devices in optional <i>ThinkPad X60 Tablet UltraBase 80GB</i> (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional <i>X60 Tablet UltraBase</i>												
Display	<i>Some:</i> 12.1" (307mm) TN XGA (1024x768) TFT color / 4:3 / 190 nits / 100° viewing <i>Touch:</i> 12.1" (307mm) TN XGA (1024x768) TFT color / 4:3 / 155 nits / 100° viewing / MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) <i>All:</i> Twisted Nematic (TN) / anti-reflective and anti-glare protective coatings / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / buttons on display bottom (power, lock, reboot, rotation, utility, Esc, NavDial/enter)												
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz / external monitor support via analog DB-15 connector / no DVI-out support												
Keyboard TrackPoint®	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Dimensions ³	8-cell: 10.8" x 10.5" x 1.1-1.3"; 274mm x 267mm x 27.4-33.1mm												
Weight ²	8-cell: 4.2 to 4.6lb (1.9 to 2.1kg)												
Case material	Color: black; All: magnesium alloy												
Battery - type	Li-Ion 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in opt <i>X60 Tablet UltraBase</i> (for two batteries)												
Battery - life ¹⁰	8-cell: up to 7.5 hr; with optional <i>Extended Life Battery</i> : up to 9.5 hr												
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C843 CardBus/1394/SD controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203 TPM) Optional ThinkPad X60 Tablet UltraBase (see right side)												
Media slice	One Secure Digital slot / supports SD memory cards used in consumer devices												
PC Card Std slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door												
Ports	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 port (4-pin) / no serial, parallel, keyboard/mouse ports												
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios												
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable												
11a/b/g ³²	11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX												
WWAN	None												
Bluetooth™	Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator												
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE												
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant												
Fingerprint reader	Fingerprint reader on right base of display / use in tablet or notebook mode / 2-way swipe sensor / supports the security chip												
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available												
512 MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ThinkPad X60 Tablet UltraBase	41U3120										
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ThinkPad X60 Tablet Digitizer Pen	41U3143										
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad X60 Tether (3-pack)	41U4820										
USB Gemplus GemPC Smart Card Reader	41N3040	X60 Tablet Li-Ion Battery 4-cell	40Y8314										
USB 2.0 Lenovo Multimedia Headset	40Y8518	X60 Tablet Li-Ion Battery 8-cell	40Y8318										
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad X60 Extended Life Battery	40Y7005										
USB 2.0 Security Memory Key 2GB	41U5119	ThinkPad External Battery Charger	40Y7625										
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad 65W AC Adapter	40Y7696										
USB 2.0 Portable 120GB Hard Disk	41N8379	ThinkPad X60 Tablet Sleeve	41U3142										
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Carrying Case - Backpack	73P3599										
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad Carrying Case - Expander	73P3597										
TrackPoint Cap Collection	73P2698	ThinkPlus™ ²² 2-year LOR 9x5 NBD	41C9175										
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkPlus 3-year LOR 9x5 NBD	41C9176										
Other accessories on O-X60-T sheet											Other accessories at lenovo.com/accessories		
										Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port (no DVI) • Four USB 2.0 ports • Gigabit ethernet port (RJ-45) • Modem port (RJ-11) • Microphone in and headphone out • Requires 65- or 90-watt AC adapter • 1.48 lb; 670g			
										65-watt AC Adapter			

See footnotes for important warranty information
US models announced April 10, 2007
US models withdrawn effective July 2007

ThinkPad® X60 Tablet (6363) - Wireless WAN - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	SATA disk	Optical in UltraBase	X6 Tablet UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprnt reader	WH OneNote	Gbl TAA	Avail date
6363-HBU	Core Duo L2400	1.66	1GB	12.1" SXGA+	80GB			* Intel 11a/b/g ³²	Verizon	Blue	Finger	Yes	WH	Feb 07
6363-C3U	Core Duo L2500	1.83	1GB	12.1" SXGA+	80GB			* Intel 11a/b/g	Verizon	Blue	Finger	Yes	WH	Dec 06
6363-7BU	Core Duo L2400	1.66	1GB	12.1" XGA Touch	120G	DVD±RW	UltraBase	* Intel 11a/b/g	Verizon	Blue	Finger	Yes	WH	Feb 07
6363-94U	Core Duo L2500	1.83	1GB	12.1" XGA Touch	120G	DVD±RW	UltraBase	* Intel 11a/b/g	Verizon	Blue	Finger		WH	Dec 06
6363-74U	Core Duo L2500	1.83	1GB	12.1" XGA	100G	DVD±RW	UltraBase	11a/b/g ³²	Verizon		Finger		WH	Dec 06
6363-75U	Core Duo L2500	1.83	1GB	12.1" XGA	100G	DVD±RW	UltraBase	11a/b/g	Verizon		Finger	Yes	WH	Dec 06
6363-7CU	Core Duo L2400	1.66	1GB	12.1" XGA Touch	120G	DVD±RW	UltraBase	* Intel 11a/b/g	AT&T	Blue	Finger	Yes	WH	Feb 07
6363-95U	Core Duo L2500	1.83	1GB	12.1" XGA Touch	120G	DVD±RW	UltraBase	* Intel 11a/b/g	AT&T	Blue	Finger	Yes	WH	Dec 06
Positioning Processor	Convertible tablet; one spindle Intel® Core™ Duo processor L2400 or L2500 with low voltage, dual-core , Enhanced Intel SpeedStep® technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										SOFTWARE¹⁴			
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / <i>Some: (italics) standard memory in both sockets; no sockets available; Some: standard memory in 1 socket; 1 socket available</i>										Windows XP Tablet - Microsoft® Windows® XP Tablet PC Edition 2005 ²⁰ ♦ Disk-to-Disk Recovery Preloaded (only some listed) • <i>Some:</i> Microsoft Office OneNote® 2003 • Microsoft Education Pack • Microsoft Experience Pack • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • System Migration Assistant • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • Fingerprint Software • InterVideo VirtualDrive CD/DVD Emulator			
Ultrabay™ Slim EIDE DVD±RW Serial ATA disk (SATA150)	Supports Ultrabay™ Slim devices in optional ThinkPad X6 Tablet UltraBase <i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) / dual-layer / removable from X6 80GB⁸ (5400 rpm), 100GB (5400 rpm), or 120GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in X6 Tablet UltraBase										Free trial • Zinio Reader CD included • Microsoft Office OneNote 2003			
Display	<i>Some:</i> 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 185 nits / 170° viewing <i>Some:</i> 12.1" (307mm) SXGA+ (1400x1050) TFT color / 4:3 / 180 nits / 170° viewing <i>Touch:</i> 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 150 nits / 170° viewing / MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) All: Super Wide Angle FFS / anti-reflective and anti-glare protective coatings / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / buttons on display bottom (power, lock, reboot, rotation, utility, Esc, NavDial/enter)										Supports ThinkVantage® technologies			
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz / external monitor support via analog DB-15 connector / no DVI-out support										CD included • Microsoft Office OneNote 2003			
Keyboard TrackPoint®	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Dimensions ³ Weight ² Case material Battery - type	8-cell: 10.8" x 10.5" x 1.1-1.3"; 274mm x 267mm x 27.4-33.1mm 8-cell: 4.2 to 4.6lb (1.9 to 2.1kg) Color: black; All: magnesium alloy Li-Ion 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in X6 Tablet UltraBase (for two batteries)													
Battery - life ¹⁰	with 8-cell: up to 7.5 hr; with 8-cell and Ultrabay Slim: up to 8.5 hr; with 8-cell and optional Extended Life Battery: up to 9.5 hr													
Chipset	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC bus, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C843 CardBus/1394/SD controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203 TPM) <i>Some:</i> ThinkPad X6 Tablet UltraBase (see right side)													
Media slice	Secure Digital slot One Secure Digital Card slot / supports SD memory cards used in consumer devices													
PC Card Std slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door													
Ports	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 port (4-pin) / no serial, parallel, keyboard/mouse ports													
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios													
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable													
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG													
11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX													
WWAN ^{16,23}	<i>Some:</i> Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO Rev. 0, WWAN antenna on display, service contract reqd with Verizon® Wireless													
	<i>Some:</i> Wireless WAN, GPRS/EDGE/UMTS/HSDPA support, Mini PCIe adapter and SIM, WWAN antenna on display, service contract reqd with AT&T®													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communication Daughter Card													
Bluetooth™	<i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator													
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE													
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker, 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on right base of display / use in tablet or notebook mode / 2-way swipe sensor / supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™¹⁹ depot repair service / service upgrades²² available													
512MB PC2-5300 DDR2 SODIMM	40Y7733	ThinkPad X6 Tablet UltraBase										41U3120		
1GB PC2-5300 DDR2 SODIMM	40Y7734	ThinkPad X60 Tablet Digitizer Pen										41U3143		
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad X60 Tether (3-pack)										41U4820		
USB 2.0 Lenovo Webcam	40Y8519	X60 Tablet Li-ion Battery 4-cell										40Y8314		
USB 2.0 Security Memory Key 4GB	41U5120	X60 Tablet Li-ion Battery 8-cell										40Y8318		
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad X60 Tablet Sleeve										41U3142		
Other accessories on O-X60-T sheet	Other accessories at lenovo.com/accessories										65-watt AC Adapter			

See footnotes for important warranty information
 US models announced November 14, 2006 or February 22, 2007
 US models withdrawn effective July 2007 or April 2008

ThinkPad® X60 Tablet (6364) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	SATA disk	Optical UltraBase	X6 Tablet UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprt reader	Limited warranty	WH Global	Avail date
6364-38U	Core Duo L2400	1.66	1GB	12.1" XGA	60GB	Optional	Optional	*Intel 11a/b/g ³²	None			Onsite	WH Gbl	Mar 07
6364-4JU	Core Duo L2400	1.66	1GB	12.1" XGA	80GB	Optional	Optional	*Intel 11a/b/g	None		Finger	Onsite	WH Gbl	Mar 07
6364-2AU	Core Duo L2400	1.66	1GB	12.1" SXGA+	80GB	Optional	Optional	*Intel 11a/b/g	None	Blue	Finger	Onsite	WH Gbl	Mar 07
6364-5AU	Core Duo L2400	1.66	1GB	12.1" XGA Touch	80GB	Optional	Optional	*Intel 11a/b/g	None	Blue	Finger	Onsite	WH Gbl	Mar 07

• These models have a limited onsite service²⁴ 3-year limited warranty

Positioning Processor	Convertible tablet; one spindle Intel® Core™ Duo processor L2400 with low voltage, dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										SOFTWARE¹⁴			
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in 1 socket / 1 socket available										Windows XP Tablet - Microsoft® Windows® XP Tablet PC Edition 2005 ²⁰ ↳ Disk-to-Disk Recovery			
Ultrabay™ Slim Serial ATA disk (SATA150)	Supports Ultrabay™ Slim devices in optional <i>ThinkPad X6 Tablet UltraBase</i> 60GB⁸ (5400 rpm) or 80GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional <i>X6 Tablet UltraBase</i>										Preloaded • Microsoft Education Pack • Microsoft Experience Pack • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskkeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • <i>Some:</i> Fingerprint Software • InterVideo VirtualDrive CD/DVD Emulator			
Display	<i>Some:</i> 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 185 nits / 170° viewing <i>Some:</i> 12.1" (307mm) SXGA+ (1400x1050) TFT color / 4:3 / 180 nits / 170° viewing <i>Touch:</i> 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 150 nits / 170° viewing / MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) <i>All:</i> Super Wide Angle FFS / anti-reflective and anti-glare protective coatings / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / buttons on display bottom (power, lock, reboot, rotation, utility, Esc, NavDial/enter)										Free trial • Zinio Reader			
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz / external monitor support via analog DB-15 connector / no DVI-out support										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Keyboard TrackPoint®	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										Supports ThinkVantage® technologies			
Dimensions ³	<i>8-cell:</i> 10.8" x 10.5" x 1.1-1.3"; 274mm x 267mm x 27.4-33.1mm										ThinkPad X6 Tablet UltraBase			
Weight ²	<i>8-cell:</i> 4.2 to 4.6lb (1.9 to 2.1kg)										• Provides desktop expansion and cable mgmt for X60 Tablet			
Case material	<i>Color:</i> black; <i>All:</i> magnesium alloy										• Connects to the bottom of tablet			
Battery - type	Li-Ion 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional <i>X6 Tablet UltraBase</i> (for two batteries)										• Converts tablet to a two-spindle system with optional flat bezel Ultrabay Slim options in right side: - ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789 - CD-RW/DVD Combo II Ultrabay Slim Drive (flat bezel) 40Y8621 - ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 - Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725 SATA disks supported (some): • 60GB Disk 7200 rpm 41N3012 • 80GB Disk 5400 rpm 41N5662 • 100GB Disk 7200 rpm 41N3013			
Battery - life ¹⁰	<i>8-cell:</i> up to 7.5 hr; <i>with 8-cell and Ultrabay Slim:</i> up to 8.5 hr; <i>with 8-cell and optional Extended Life Battery:</i> up to 9.5 hr										Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port (no DVI) • Four USB 2.0 ports • Gigabit ethernet port (RJ-45) • Modem port (RJ-11) • Microphone in and headphone out • Requires 65- or 90-watt AC adapter • 1.48 lb; 670g			
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C843 CardBus/1394/SD controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203 TPM) Optional ThinkPad X6 Tablet UltraBase (see right side)										65-watt AC Adapter			
Media slice	One Secure Digital Card slot / supports SD memory cards used in consumer devices													
Secure Digital slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door													
PC Card Std slot	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 port (4-pin) / no serial, parallel, keyboard/mouse ports													
Ports	Wireless antenna UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios													
Wireless antenna	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable													
Mini PCI Express	Intel 11a/b/g ³² 11a/b/g wireless ³ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG													
Intel 11a/b/g ³²	None													
WWAN	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communication Daughter Card													
Modem	<i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator													
Bluetooth™	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE													
Ethernet	High Definition (HD) Audio / AD1981HD codec / mono speaker / 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)													
Audio support	Power-on password / hard disk password / supervisor password / security keyhole													
Security	Trusted Platform Module / Atmel chip / TCG 1.2-compliant													
Security chip	<i>Some:</i> Fingerprint reader on right base of display / use in tablet or notebook mode / 2-way swipe sensor / supports the security chip													
Fingerprint reader	Limited warranty ¹² 3-year/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time													
Limited warranty ¹²	512 MB PC2-5300 DDR2 CL5 SODIMM 40Y7733 ThinkPad X6 Tablet UltraBase 41U3120													
512 MB PC2-5300 DDR2 CL5 SODIMM	1GB PC2-5300 DDR2 CL5 SODIMM 40Y7734 ThinkPad X60 Tablet Digitizer Pen 41U3143													
1GB PC2-5300 DDR2 CL5 SODIMM	2GB PC2-5300 DDR2 SODIMM 40Y7735 ThinkPad X60 Tether (3-pack) 41U4820													
2GB PC2-5300 DDR2 SODIMM	USB Gemplus GemPC Smart Card Reader 41N3040 X60 Tablet Li-Ion Battery 4-cell 40Y8314													
USB Gemplus GemPC Smart Card Reader 41N3040	USB 2.0 Lenovo Multimedia Headset 40Y8518 X60 Tablet Li-Ion Battery 8-cell 40Y8318													
USB 2.0 Lenovo Multimedia Headset 40Y8518	USB 2.0 Lenovo Webcam 40Y8519 ThinkPad X60 Extended Life Battery 40Y7005													
USB 2.0 Lenovo Webcam 40Y8519	USB 2.0 Security Memory Key 2GB 41U5119 ThinkPad External Battery Charger 40Y7625													
USB 2.0 Security Memory Key 2GB 41U5119	USB 2.0 Security Memory Key 4GB 41U5120 ThinkPad 65W AC Adapter 40Y7696													
USB 2.0 Security Memory Key 4GB 41U5120	USB 2.0 Portable 120GB Hard Disk 41N8379 ThinkPad X60 Tablet Sleeve 41U3142													
USB 2.0 Portable 120GB Hard Disk 41N8379	USB 2.0 Super Multi-Burner Drive 41N5565 ThinkPad Carrying Case - Backpack 73P3599													
USB 2.0 Super Multi-Burner Drive 41N5565	100GB Disk 9.5mm SATA150 (7200 rpm) 41N3013 ThinkPad Carrying Case - Expander 73P3597													
100GB Disk 9.5mm SATA150 (7200 rpm) 41N3013	TrackPoint Cap Collection 73P2698 ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175													
TrackPoint Cap Collection 73P2698	Enh Perf Wireless Keyboard and Mouse 73P4067 ThinkPlus 3-year LOR 9x5 NBD 41C9176													
Enh Perf Wireless Keyboard and Mouse 73P4067	Other accessories on O-X60-T sheet										Other accessories at lenovo.com/accessories			

See footnotes for important warranty information
US models announced February 27, 2007
US models withdrawn effective November 2007

* Powered by Intel Centrino® Duo mobile technology

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(DL1-9) October 2007

ThinkPad® X60 Tablet (6364) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	SATA disk	Optical UltraBase	802.11 wireless	WWAN wireless tooth	Fingerprt reader	Limited warranty ¹²	WH Gbl	Avail date
6364-R3U	Core Duo L2400	1.66	1GB	12.1" TN XGA	80GB	Optional	Optional	*Intel 11a/b/g ³²	None	Blue	Finger	Onsite WH Apr 07
6364-G4U	Core Duo L2400	1.66	1GB	12.1" TN XGA	80GB	Optional	Optional	*Intel 11a/b/g	None	Blue	Finger	Onsite WH Apr 07
6364-ADU	Core Duo L2500	1.83	1GB	12.1" SXGA+	80GB	Optional	Optional	*Intel 11a/b/g	None	Blue	Finger	Onsite WH Dec 06
6364-8DU	Core Duo L2500	1.83	1GB	12.1" XGA Touch	80GB	Optional	Optional	*Intel 11a/b/g	None	Blue	Finger	Onsite WH Dec 06
6364-6DU	Core Duo L2500	1.83	1GB	12.1" XGA	80GB	Optional	Optional	*Intel 11a/b/g	None	Blue	Finger	Onsite WH Dec 06

• **These models have a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	Convertible tablet; one spindle Intel® Core™ Duo processor L2400 or L2500 with low voltage, dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache							SOFTWARE¹⁴ Windows XP Tablet - Microsoft® Windows® XP Tablet PC Edition 2005 ²⁰ ◇ Disk-to-Disk Recovery Preloaded (only some listed) • Microsoft Office OneNote® 2003 • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Microsoft Education Pack • Microsoft Experience Pack • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security™ • Diskkeeper Lite • PC-Doctor™ (diagnostics) • Fingerprint Software • InterVideo VirtualDrive CD/DVD Emulator					
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in 1 socket; 1 socket available												
Ultrabay™ Slim Serial ATA disk (SATA150)	Supports Ultrabay™ Slim devices in optional <i>ThinkPad X60 Tablet UltraBase 80GB</i> (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional <i>X60 Tablet UltraBase</i>												
Display	<i>Some:</i> 12.1" (307mm) TN XGA (1024x768) TFT color / 4:3 / 190 nits / 100° viewing <i>Some:</i> 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 185 nits / 170° viewing <i>Some:</i> 12.1" (307mm) SXGA+ (1400x1050) TFT color / 4:3 / 180 nits / 170° viewing <i>Touch:</i> 12.1" (307mm) TN XGA (1024x768) TFT color / 4:3 / 155 nits / 100° viewing / MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) <i>Touch:</i> 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 150 nits / 170° viewing / MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) <i>All:</i> Super Wide Angle FFS or Twisted Nematic (TN) / anti-reflective and anti-glare protective coatings / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / buttons on display bottom (power, lock, reboot, rotation, utility, Esc, NavDial/enter)												
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz / external monitor support via analog DB-15 connector / no DVI-out support							Free trial • Zinio Reader					
Keyboard TrackPoint®	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass							CD included • Adobe Photoshop Elements plus Adobe Premiere Elements • Microsoft Office OneNote 2003					
Dimensions ³ Weight ² Case material Battery - type	<i>8-cell:</i> 10.8" x 10.5" x 1.1-1.3"; 274mm x 267mm x 27.4-33.1mm <i>8-cell:</i> 4.2 to 4.6lb (1.9 to 2.1kg) <i>Color:</i> black; <i>All:</i> magnesium alloy Li-Ion 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in opt <i>X60 Tablet UltraBase</i> (for two batteries)							License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client					
Battery - life ¹⁰	<i>8-cell:</i> up to 7.5 hr; with optional <i>Extended Life Battery:</i> up to 9.5 hr												
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C843 CardBus/1394/SD controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203 TPM) Optional ThinkPad X60 Tablet UltraBase (see right side)							Supports ThinkVantage® technologies					
Media slice Secure Digital slot PC Card Std slot Ports	One Secure Digital Card slot / supports SD memory cards used in consumer devices One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 port (4-pin) / no serial, parallel, keyboard/mouse ports							ThinkPad X60 Tablet UltraBase • Provides desktop expansion and cable mgmt for X60 Tablet • Connects to the bottom of tablet • Converts tablet to a two-spindle system with optional flat bezel Ultrabay Slim options in right side: – ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789 – ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 – Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725 SATA disks supported (some): • 60GB Disk 7200 rpm 41N3012 • 80GB Disk 5400 rpm 41N5662 • 100GB Disk 7200 rpm 41N3013					
Wireless antenna Mini PCI Express Intel 11a/b/g ³² WWAN Modem Bluetooth™ Ethernet Audio support	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG None 56K ⁶ V.90 (V.92-designed ²⁹) modem in Communication Daughter Card <i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)												
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on right base of display / use in tablet or notebook mode / 2-way swipe sensor / supports the security chip							Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port (no DVI) • Four USB 2.0 ports • Gigabit ethernet port (RJ-45) • Modem port (RJ-11) • Microphone in and headphone out • Requires 65- or 90-watt AC adapter • 1.48 lb; 670g					
Limited warranty ¹²	3-year /1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time												
512MB PC2-5300 DDR2 CL5 SODIMM 1GB PC2-5300 DDR2 CL5 SODIMM 2GB PC2-5300 DDR2 SODIMM USB 2.0 Security Memory Key 4GB USB 2.0 Portable 120GB Hard Disk USB 2.0 Super Multi-Burner Drive 100GB Disk 9.5mm SATA150 (7200 rpm) Lenovo C500 Projector Other accessories on O-X60-T sheet	40Y7733 40Y7734 40Y7735 41U5120 41N8379 41N5565 41N3013 0039A05			ThinkPad X60 Tablet UltraBase ThinkPad X60 Tablet Digitizer Pen ThinkPad X60 Tether (3-pack) X60 Tablet LI-ion Battery 8-cell ThinkPad X60 Extended Life Battery ThinkPad X60 Tablet Sleeve ThinkPad Nylon Carrying Case ThinkPad Carrying Case - Expander			41U3120 41U3143 41U4820 40Y8318 40Y7005 41U3142 10K0207 73P3597			Other accessories at lenovo.com/accessories		65-watt AC Adapter	

See footnotes for important warranty information * Powered by Intel Centrino® Duo mobile technology
US models announced November 14, 2006 or April 10, 2007
US models withdrawn effective July 2007

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(DL1-6) August 2007

ThinkPad® X60 Tablet (6364) - Education (Vista™) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	SATA disk	Optical in UltraBase	X60 Tablet UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprt reader	Limited warranty ¹²	Educ Avail preload date
6364-R5U	Core Duo L2400	1.66	1GB	12.1" TN XGA Touch	80GB	Optional	Optional	11a/b/g ³²	None	Blue	Finger	Onsite	HE Apr 07
6364-G5U	Core Duo L2400	1.66	1GB	12.1" TN XGA	80GB	Optional	Optional	11a/b/g	None	Blue	Finger	Onsite	HE Apr 07
6364-R6U	Core Duo L2400	1.66	1GB	12.1" TN XGA Touch	80GB	Optional	Optional	11a/b/g	None	Blue	Finger	Onsite	K12 Apr 07
6364-G6U	Core Duo L2400	1.66	1GB	12.1" TN XGA	80GB	Optional	Optional	11a/b/g	None	Blue	Finger	Onsite	K12 Apr 07

• **These models have a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	Convertible tablet; one spindle Intel® Core™ Duo processor L2400 with low voltage, dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache								Preloaded operating system²⁰ - Microsoft® Windows® Vista™ Business Edition (32-bit)				
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / std mem in both sockets (512MB each socket); no sockets available								Preloaded applications¹⁴ (only some listed) • <i>Some (K12):</i> K-12 educ software - VitalSource Library School Edition - Adobe® Instruct Resource Center - Adobe Digital School Collection - Photoshop Elements 5 (and CD) - Premier Elements 3 (and DVD) - Acrobat 8 Professional (and CD) - Contribute 4 (and CD) • <i>Some (HE):</i> Higher ed software - VitalSource Library College Edition - Adobe® Instruct Resource Center - Adobe Photoshop Elements 5 (and CD) - Adobe Premier Elements 3 (and DVD) • Microsoft Education Pack • Microsoft Experience Pack • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Lenovo Multimedia Center • Norton Internet Security • Diskeeper™ Home • PC-Doctor™ (diagnostics) • InterVideo VirtualDrive CD/DVD Emulator				
Ultrabay™ Slim Serial ATA disk (SATA150)	Supports Ultrabay™ Slim devices in optional <i>ThinkPad X60 Tablet UltraBase 80GB</i> (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional <i>X60 Tablet UltraBase</i>												
Display	<i>Some:</i> 12.1" (307mm) TN XGA (1024x768) TFT color / 4:3 / 190 nits / 100° viewing <i>Touch:</i> 12.1" (307mm) TN XGA (1024x768) TFT color / 4:3 / 155 nits / 100° viewing / MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) <i>All:</i> Twisted Nematic (TN) / anti-reflective and anti-glare protective coatings / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / buttons on display bottom (power, lock, reboot, rotation, utility, Esc, NavDial/enter)												
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz / external monitor support via analog DB-15 connector / no DVI-out support												
Keyboard TrackPoint®	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Dimensions ³ Weight ² Case material Battery - type	8-cell: 10.8" x 10.5" x 1.1-1.3"; 274mm x 267mm x 27.4-33.1mm 8-cell: 4.2 to 4.6lb (1.9 to 2.1kg) <i>Color:</i> black; <i>All:</i> magnesium alloy Li-Ion 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in opt <i>X60 Tablet UltraBase</i> (for two batteries)												
Battery - life ¹⁰ Architecture	8-cell: up to 7.5 hr; with optional <i>Extended Life Battery</i> : up to 9.5 hr Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C843 CardBus/1394/SD controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203 TPM)												
Media slice	Optional ThinkPad X60 Tablet UltraBase (see right side)												
Secure Digital slot PC Card Std slot Ports	One Secure Digital Card slot / supports SD memory cards used in consumer devices One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 port (4-pin) / no serial, parallel, keyboard/mouse ports								License - CD not included - Lotus® Notes® Stand-alone Client				
Wireless antenna Mini PCI Express 11a/b/g ³² WWAN	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX None								Supports ThinkVantage® technologies				
Bluetooth™ Ethernet Audio support	Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)								ThinkPad X60 Tablet UltraBase • Provides desktop expansion and cable mgmt for X60 Tablet • Connects to the bottom of tablet • Converts tablet to a two-spindle system with optional flat bezel Ultrabay Slim options in right side: - ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789 - ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 - Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725 SATA disks supported (some): • 60GB Disk 7200 rpm 41N3012 • 80GB Disk 5400 rpm 41N5662 • 100GB Disk 7200 rpm 41N3013				
Security Security chip Fingerprintr reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on right base of display / use in tablet or notebook mode / 2-way swipe sensor / supports the security chip												
Limited warranty ¹²	3-year /1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time												
512 MB PC2-5300 DDR2 CL5 SODIMM 1GB PC2-5300 DDR2 CL5 SODIMM 2GB PC2-5300 DDR2 SODIMM USB Gemplus GemPC Smart Card Reader USB 2.0 Lenovo Multimedia Headset USB 2.0 Lenovo Webcam USB 2.0 Security Memory Key 2GB USB 2.0 Security Memory Key 4GB USB 2.0 Portable 120GB Hard Disk USB 2.0 Super Multi-Burner Drive 100GB Disk 9.5mm SATA150 (7200 rpm) TrackPoint Cap Collection Enh Perf Wireless Keyboard and Mouse Other accessories on O-X60-T sheet	40Y7733 40Y7734 40Y7735 41N3040 40Y8518 40Y8519 41U5119 41U5120 41N8379 41N5565 41N3013 73P2698 73P4067	ThinkPad X60 Tablet UltraBase ThinkPad X60 Tablet Digitizer Pen ThinkPad X60 Tether (3-pack) X60 Tablet Li-ion Battery 4-cell X60 Tablet Li-ion Battery 8-cell ThinkPad X60 Extended Life Battery ThinkPad External Battery Charger ThinkPad 65W AC Adapter ThinkPad X60 Tablet Sleeve ThinkPad Carrying Case - Backpack ThinkPad Carrying Case - Expander Lenovo L191 19" Monitor (black) Lenovo D221 Wide 22" Monitor (black) Other accessories at lenovo.com/accessories	41U3120 41U3143 41U4820 40Y8314 40Y8318 40Y7005 40Y7625 40Y7696 41U3142 73P3599 73P3597 6135AB1 6622HB1	Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port (no DVI) • Four USB 2.0 ports • Gigabit ethernet port (RJ-45) • Modem port (RJ-11) • Microphone in and headphone out • Requires 65- or 90-watt AC adapter • 1.48 lb; 670g									
								65-watt AC Adapter					

See footnotes for important warranty information
US models announced April 10, 2007
US models withdrawn effective July 2007

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(DL1-10) August 2007

ThinkPad® X60 Tablet (6366) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	SATA disk	Optical in	X6 Tablet UltraBase	802.11 wireless	WWAN wireless	Blue tooth	Fingerprt reader	Battery cells	Limited warranty ¹²	Avail date
6366-4DU	Core Duo L2400	1.66	1GB	12.1" XGA	80GB			*Intel 11a/b/g ³²			Finger	4-cell	3-yr	Dec 06
6366-AJU	Core Duo L2500	1.83	2GB	12.1" SXGA+	100G DVD±RW	UltraBase	*Intel 11a/b/g			Blue	Finger	8-cell	3-yr	Dec 06
6366-6AU	Core Duo L2500	1.83	1GB	12.1" XGA	80GB Combo	UltraBase	*Intel 11a/b/g			Blue	Finger	4-cell	3-yr	Dec 06
6366-8KU	Core Duo L2500	1.83	1GB	12.1" XGA Touch	100G		Thinkpad 11n ²⁸			Blue	Finger	8-cell	3-yr	Dec 06
6366-98U	Core Duo L2500	1.83	2GB	12.1" XGA Touch	120G DVD±RW	UltraBase	*Intel 11a/b/g		Verizon	Blue	Finger	8-cell	3-yr	Dec 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty¹²

Positioning Processor	Convertible tablet; one spindle Intel® Core™ Duo processor L2400 or L2500 with low voltage, dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										SOFTWARE¹⁴			
Memory	1GB or 2GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / 4DU/AJU/6AU/98U: standard memory in both sockets; no sockets avail; 8KU: standard memory in 1 socket; 1 socket available										Windows XP Tablet - Microsoft® Windows® XP Tablet PC Edition 2005 ²⁰ ⇨ Disk-to-Disk Recovery Preloaded (only some listed) • Microsoft Office OneNote® 2003 • Microsoft Education Pack • Microsoft Experience Pack • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • Fingerprint Software • InterVideo VirtualDrive CD/DVD Emulator Free trial • Zinio Reader CD included • Microsoft Office OneNote 2003 License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Ultrabay™ Slim EIDE DVD±RW Serial ATA disk (SATA150)	Supports Ultrabay™ Slim devices in optional ThinkPad X6 Tablet UltraBase Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from X6 UltraBase Some: DVD burner / Super Multi-Burner (40Y8623) / dual-layer / removable from X6 80GB (5400 rpm), 100GB (5400 rpm), or 120GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional X6 Tablet UltraBase													
Display	Some: 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 185 nits / 170° viewing Some: 12.1" (307mm) SXGA+ (1400x1050) TFT color / 4:3 / 180 nits / 170° viewing Touch: 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 150 nits / 170° viewing / MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) All: Super Wide Angle FFS / anti-reflective and anti-glare protective coatings / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / buttons on display bottom (power, lock, reboot, rotation, utility, Esc, NavDial/enter)													
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz / external monitor support via analog DB-15 connector / no DVI-out support													
Keyboard TrackPoint®	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Dimensions ³	4-cell: 10.8" x 9.6" x 1.1-1.3"; 274mm x 244mm x 27.4-33.1mm 8-cell: 10.8" x 10.5" x 1.1-1.3"; 274mm x 267mm x 27.4-33.1mm													
Weight ²	4-cell: 3.7 to 4.1 lb (1.7 to 1.9kg); 8-cell: 4.2 to 4.6lb (1.9 to 2.1kg)													
Case material	Color: black; All: magnesium alloy													
Battery - type	Li-Ion 4-cell or 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional X6 Tablet UltraBase (for two batteries)										Supports ThinkVantage® technologies			
Battery - life ¹⁰	with 4-cell: up to 3.3 hr; with 8-cell: up to 7.5 hr; 8-cell and Ultrabay Slim: up to 8.5 hr with 8-cell and optional Extended Life Battery : up to 9.5 hr										ThinkPad X6 Tablet UltraBase • Provides desktop expansion and cable mgmt for X60 Tablet • Connects to the bottom of tablet • Converts tablet to a two-spindle system with optional flat bezel Ultrabay Slim options in right side: - ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789 - CD-RW/DVD Combo II Ultrabay Slim Drive (flat bezel) 40Y8621 - DVD-ROM Ultrabay Slim Drive (curved bezel) 73P3270 - ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 - Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725 SATA disks supported (some): • 60GB Disk 7200 rpm 41N3012 • 80GB Disk 5400 rpm 41N5662 • 100GB Disk 7200 rpm 41N3013 Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port (no DVI) • Four USB 2.0 ports • Gigabit ethernet port (RJ-45) • Modem port (RJ-11) • Microphone in and headphone out • Requires 65- or 90-watt AC adapter • 1.48 lb; 670g 65-watt AC Adapter			
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C843 CardBus/1394/SD controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203 TPM)													
Docking station	Optional ThinkPad X6 Tablet UltraBase (see right side)													
Secure Digital slot	One Secure Digital Card slot / supports SD memory cards used in consumer devices													
PC Card Std slot	One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door													
Ports	Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 port (4-pin) / no serial, parallel, keyboard/mouse ports													
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios													
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable													
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG													
ThinkPad 11n ²⁸	Some: 11a/b/g/n wireless ⁴ , ThinkPad 11a/b/g/n Mini PCI Express Adapter, Atheros AR5008 chipset, MIMO 2x3													
WWAN ¹⁶	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless													
Modem	56K® V.90 (V.92-designed ²⁹) modem in Communication Daughter Card													
Bluetooth™	Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator													
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE													
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on right base of display / use in tablet or notebook mode / 2-way swipe sensor / supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733			ThinkPad X6 Tablet UltraBase			41U3120							
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734			ThinkPad X60 Tablet Sleeve			41U3142							
2GB PC2-5300 DDR2 SODIMM	40Y7735			ThinkPad X60 Tablet Digitizer Pen			41U3143							
Other accessories on O-X60-T sheet				Other accessories at lenovo.com/accessories										

See footnotes for important warranty information
US models announced November 14, 2006
US models withdrawn effective July 2007

* Powered by Intel Centrino® Duo mobile technology

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(DL1-4) August 2007

ThinkPad® X60 Tablet (6366) - TopSeller (January 2007) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	SATA disk	Optical in UltraBase	X6 Tablet UltraBase	802.11 wireless	WWAN wireless	Blue-tooth	Fingerprt reader	Battery cells	Limited warranty ¹²	Avail date
6366-F6U	Core Duo L2400	1.66	1GB	12.1" XGA	80GB	Optional	Optional	*Intel 11a/b/g ³²			Finger	4-cell	3-yr	Jan 07
6366-L5U	Core Duo L2400	1.66	1GB	12.1" XGA	80GB	Combo	UltraBase	*Intel 11a/b/g		Blue	Finger	4-cell	3-yr	Feb 07
6366-L6U	Core Duo L2400	1.66	2GB	12.1" SXGA+	100G	DVD±RW	UltraBase	*Intel 11a/b/g		Blue	Finger	4-cell	3-yr	Feb 07
6366-L4U	Core Duo L2400	1.66	2GB	12.1" XGA <i>Touch</i>	120G	DVD±RW	UltraBase	*Intel 11a/b/g	Verizon	Blue	Finger	8-cell	3-yr	Feb 07

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 3-year limited warranty¹²**

Positioning Processor	Convertible tablet; one spindle Intel® Core™ Duo processor L2400 with low voltage, dual-core , Enhanced Intel SpeedStep® technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										Preloaded operating system²⁰ - Microsoft® Windows® Vista™ Business Edition (32-bit) ↳ Vista Premium logo				
Memory	1GB or 2GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in both sockets / no sockets available										Preloaded applications¹⁴ • Microsoft Office OneNote® 2003 • Microsoft Education Pack • Microsoft Experience Pack • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • System Migration Assistant • Norton Internet Security™ (90 days of virus definitions) • Diskeeper® Home • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Picasa from Google • Fingerprint Software (fingerprint models) • InterVideo VirtualDrive CD/DVD Emulator				
Ultrabay™ Slim EIDE Combo EIDE DVD±RW Serial ATA disk (SATA150)	<i>Some:</i> Supports Ultrabay™ Slim devices in optional <i>ThinkPad X6 Tablet UltraBase</i> <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from <i>X6 UltraBase</i> <i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) / dual-layer / removable from <i>X6 80GB</i> (5400 rpm), 100GB (5400 rpm), or 120GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / ThinkPad Shock Mounted Hard Drive / Active Protection System™ / supports 2nd disk in optional <i>X6 Tablet UltraBase</i>										CD included • Microsoft Office OneNote 2003 Supports ThinkVantage® technologies ThinkPad X6 Tablet UltraBase • Provides desktop expansion and cable mgmt for X60 Tablet • Connects to the bottom of tablet • Converts tablet to a two-spindle system with optional flat bezel Ultrabay Slim options in right side: – ThinkPad Advanced Ultrabay Battery 3-cell (flat bezel) 40Y6789 – CD-RW/DVD Combo II Ultrabay Slim Drive (flat bezel) 40Y8621 – DVD-ROM Ultrabay Slim Drive (curved bezel) 73P3270 – ThinkPad DVD Ultrabay Slim Burner (flat bezel) 41N5643 – Serial Hard Drive Ultrabay Slim Adapter (flat bezel) 40Y8725 SATA disks supported (some): • 100GB Disk 7200 rpm 41N3013 • 160GB Disk 7200 rpm 41N5737 • 250GB Disk 5400 rpm 43R8152 Other features: • Power button (front) • Stereo speakers (1 watt) • Security key lock, security keyhole, and optional security screw • Serial and parallel ports • Analog DB-15 monitor port (no DVI) • Four USB 2.0 ports • Gigabit ethernet port (RJ-45) • Modem port (RJ-11) • Microphone in and headphone out • Requires 65- or 90-watt AC adapter • 1.48 lb; 670g 65-watt AC Adapter				
Display	<i>Some:</i> 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 185 nits / 170° viewing <i>Some:</i> 12.1" (307mm) SXGA+ (1400x1050) TFT color / 4:3 / 180 nits / 170° viewing <i>Touch:</i> 12.1" (307mm) XGA (1024x768) TFT color / 4:3 / 150 nits / 170° viewing / MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) <i>All:</i> Super Wide Angle FFS / anti-reflective and anti-glare protective coatings / write on screen with standard digitizer pen / pen holder in front base / rotate and swivel hinge in middle bottom of display for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user) / buttons on display bottom (power, lock, reboot, rotation, utility, Esc, NavDial/enter)														
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 200MHz / external monitor support via analog DB-15 connector / no DVI-out support														
Keyboard TrackPoint®	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Dimensions ³	4-cell: 10.8" x 9.6" x 1.1-1.3"; 274mm x 244mm x 27.4-33.1mm 8-cell: 10.8" x 10.5" x 1.1-1.3"; 274mm x 267mm x 27.4-33.1mm														
Weight ²	4-cell: 3.7 to 4.1 lb (1.7 to 1.9kg); 8-cell: 4.2 to 4.6lb (1.9 to 2.1kg)														
Case material Battery - type	Color: black; <i>All:</i> magnesium alloy Li-Ion 4-cell or 8-cell / supports optional Extended Life Battery on base (for two batteries); supports optional Ultrabay Slim battery in optional <i>X6 Tablet UltraBase</i> (for two batteries)														
Battery - life ¹⁰	<i>with 4-cell:</i> up to 3.3 hr; <i>with 8-cell:</i> up to 7.5 hr; <i>8-cell and Ultrabay Slim:</i> up to 8.5 hr <i>with 8-cell and optional Extended Life Battery:</i> up to 9.5 hr														
Chipset	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC bus, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C843 CardBus/1394/SD controller) / LPC bus (PC87382 Super I/O, Atmel® 97SC3203 TPM) Standard or optional ThinkPad X6 Tablet UltraBase (see right side)														
Docking station Secure Digital slot PC Card Std slot Ports	One Secure Digital Card slot / supports SD memory cards used in consumer devices One Type I or one Type II / CardBus Plus (34mm ExpressCard via adapter) / door Three USB (version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / IEEE 1394 port (4-pin) / no serial, parallel, keyboard/mouse ports														
Wireless antenna Mini PCI Express Intel 11a/b/g ³² WWAN ¹⁶	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG <i>Some:</i> Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO Rev. 0, WWAN antenna on display, service contract reqd with Verizon® Wireless 56K ⁶ V.90 (V.92-designed ²⁹) modem in Communication Daughter Card														
Modem Bluetooth™ Ethernet Audio support	<i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / mono speaker, 0.5 watt / volume down, up, mute buttons / internal microphone / mic input jack (pink) / headphone jack (green) Power-on password / hard disk password / supervisor password / security keyhole														
Security Security chip Fingerprint reader	Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on right base of display / use in tablet or notebook mode / 2-way swipe sensor / supports the security chip														
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available														
1GB PC2-5300 DDR2 SODIMM	40Y7734	ThinkPad X6 Tablet UltraBase	41U3120												
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad X60 Tablet Digitizer Pen	41U3143												
USB Portable Diskette Drive	05K9276	ThinkPad X60 Tether (3-pack)	41U4820												
USB 2.0 Security Memory Key 4GB	41U5120	X60 Tablet Li-Ion Battery 4-cell	40Y8314												
USB 2.0 Super Multi-Burner Drive	41N5565	X60 Tablet Li-Ion Battery 8-cell	40Y8318												
250GB Disk 9.5mm SATA150 (5400 rpm)	43R8152	ThinkPad X60 Tablet Sleeve	41U3142												
USB 2.0 Lenovo Enhanced Port Replicator	43R8770	ThinkPlus™.22 2-year LOR 9x5 NBD	41C9175												
Other accessories on O-X60-T sheet	Other accessories at lenovo.com/accessories														

See footnotes for important warranty information
US models announced January 30 or February 22, 2007
US models withdrawn effective July 2007 or April 2008

* Intel Centrino® processor technology

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(DL1-7) April 2008

ThinkPad® T41 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Ethernet on planar	Battery Security cells	Workhorse (W) or Global (G) Avail Entry (E)	date
2373-1HU	Pentium® M	1.4	256MB	14.1" XGA	7500	30GB	DVD	* Intel 11b Wi-Fi ³²	Modem	Gigabit	Yes	6	XP Pro G E Oct 2003
2373-1FU	Pentium M	1.4	256MB	14.1" XGA	7500	30GB	Combo	* Intel 11b Wi-Fi	Modem	Gigabit	Yes	6	XP Pro G E Oct 2003
2373-7FU	Pentium M	1.6	512MB	14.1" XGA	7500	40HS	Combo	* Intel 11b Wi-Fi	Modem	Gigabit	Yes	6	XP Pro W G Oct 2003
2373-7JU	Pentium M	1.6	512MB	14.1" XGA	7500	40HS	Combo	Cisco® 802.11b ³²	Modem	Gigabit	Yes	6	XP Pro W G Oct 2003
2373-3HU	Pentium M	1.6	512MB	14.1" SXGA+	9000	40HS	Combo	* Intel 11b Wi-Fi	Modem	Gigabit	Yes	6	XP Pro W G Oct 2003
2373-8RU	Pentium M	1.6	256MB	14.1" XGA	7500	40HS	DVD	Open; wireless upg ³⁶	Modem	Gigabit	Yes	6	XP Pro W G Oct 2003
2373-8SU	Pentium M	1.6	512MB	14.1" XGA	7500	40HS	DVD	Open; wireless upg	Modem	Gigabit	Yes	6	XP Pro W Oct 2003
2373-4GU	Pentium M	1.6	512MB	14.1" XGA	7500	40HS	Combo	11a/b/g Wi-Fi ³²	Mod/Blue	Gigabit	Yes	6	XP Pro W Oct 2003
2373-9EU	Pentium M	1.7	512MB	14.1" SXGA+	9000	60U	Combo	Open; wireless upg	Modem	Gigabit	Yes	6	XP Pro No Oct 2003
2373-9FU	Pentium M	1.7	512MB	14.1" SXGA+	9000	60U	Combo	11a/b/g Wi-Fi	Mod/Blue	Gigabit	Yes	6	XP Pro No Oct 2003
2373-9HU	Pentium M	1.7	1GB	14.1" SXGA+	9000	60U	Combo	* Intel 11b Wi-Fi	Mod/Blue	Gigabit	Yes	6	XP Pro No Oct 2003
2373-9KU	Pentium M	1.7	512MB	14.1" SXGA+	9000	60U	Combo	Cisco® 802.11b	Mod/Blue	Gigabit	Yes	6	XP Pro No Oct 2003
Positioning Processor	Perfect balance of performance and portability; two-spindle system											SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ ⇨ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Access IBM • Access Connections • Adobe Reader • Rapid Restore™ Ultra • RecordNOW and Drive Letter Access (combo models) • InterVideo WinDVD (combo models) • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Update Connector™.15 Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client	
L2 cache	Intel® Pentium® M Processor 1.4, 1.6 or 1.6GHz with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus												
Memory	1MB / on die (at processor speed) / ECC 256MB, 512MB, or 1GB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available												
Diskette drive	None standard / use optional USB-based diskette drive												
DVD	Some: DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim												
Combo	Some: DVD-ROM/CD-RW / 16X/10X/24X/8X ²¹ speed / removable from Ultrabay Slim												
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay												
Disk	30GB ⁸ (4200 rpm), 40GB HS (5400 rpm), or 60GB Ultra HS (7200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)												
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits												
Graphics	Some: ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 9000 / AGP 4X / 32MB DDR1 (DDR-SDRAM)												
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M at 75Hz												
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass / UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones												
Touch pad	Illuminates the keyboard to improve visibility in low-light conditions												
ThinkLight™													
Dimensions ³	(WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm												
Weight ²	with optical drive and battery: 4.9 to 5.0 lb (2.2 to 2.3 kg)												
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover												
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim												
Battery - life ¹⁰	6-cell models: 4.1 to 5.0 hr; Optional 9-cell: 7 hr; 9-cell plus Ultrabay Slim battery: 9 hr												
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports]) 2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door												
PC Card Std slots	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)												
Ports													
Video out	S-video out port (TV out) / one 4-pin industry standard connector												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Wireless upg ³⁶	Some: wireless upgradable with wireless Mini PCI options												
Intel 11b Wi-Fi ³²	Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100 Network Connection 802.11b, Intel 82531 chipset												
Cisco 802.11b ³²	Some: 802.11b wireless ⁴ , Mini PCI, Cisco® Aironet® Wireless 802.11b												
11a/b/g Wi-Fi ³²	Some: 11a/b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5001X+ chipset												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁵) modem in CDC / Agere® chipset												
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)												
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound™ support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant												
Limited warranty ¹²	3 years/1 yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail												
128MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101										
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102										
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ServicePac 4yr P&L P/U Depot									
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad 72W AC/DC Combo Adapter	22P9010	69P9199									
40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816	11a/b/g Wireless CardBus Adapter	31P9101	ServicePac 5yr P&L P/U Depot									
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	11a/b/g Wireless Mini PCI Adapter II	73P4301	69P9201									
ThinkPad Port Replicator II	74P6733	ThinkVision® L192p 19" Monitor (black)	9419HB2	Post-warranty annual maintenance agreements at									
ThinkPad Mini Dock	287810U	M400 Projector	0037A04	ibm.com/services/its/us/source/maspspleu.pdf									
ThinkPad Dock II	287710U	Other options at lenovo.com/options											

See footnotes for important warranty information

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(T41) October 2005

US models announced October 7, 2003

US models withdrawn effective July 2004, November 2004, January 2005, May 2005, or December 2005

ThinkPad® T41 (2379) - Express - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ^a	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Ethernet on planar chip	Battery Security cells	Limited Warranty	Avail date
2379-DJU	Pentium® M	1.6	256MB	14.1" SXGA+	9000	40HS	Combo	*Intel 11b Wi-Fi ³²	Modem	Gigabit	Yes	6-cell XP Pro	3 yrs Oct 2003
2379-DKU	Pentium M	1.6	512MB	14.1" XGA	7500	40HS	Combo	11a/b/g Wi-Fi ³²	Modem	Gigabit	Yes	6-cell XP Pro	3 yrs Oct 2003
<ul style="list-style-type: none"> • These small and medium business (SMB) models are part of the US Think Express Program • The 2379 has a 3 year limited warranty (other ThinkPad T41 2378 models have a 1 year limited warranty) 													
Positioning Processor	Perfect balance of performance and portability; two-spindle system Intel® Pentium® M Processor 1.6GHz with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus											SOFTWARE¹⁴	
L2 cache	1MB / on die (at processor speed) / ECC											Windows XP Professional	
Memory	256MB or 512MB standard / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available											- Microsoft® Windows® XP Professional ²⁰ ↳ Disk-to-Disk Recovery (in hidden protected area)	
Diskette drive	None standard / use optional USB-based diskette drive											Preloaded	
Combo	DVD-ROM/CD-RW / 16X/10X/24X/8X ²¹ speed / removable from Ultrabay™ Slim											• Access IBM	
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay											• Access Connections™	
Disk	40GB HS (5400 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)											• Adobe Reader	
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits All: one latch to unlatch and open with one hand											• Rapid Restore™ Ultra	
Graphics	Some: ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 9000 / AGP 4X / 32MB DDR1 (DDR-SDRAM)											• RecordNOW and Drive Letter Access (combo models)	
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M at 75Hz											• InterVideo WinDVD (combo mdl)	
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)											• Norton AntiVirus (OEM edition)	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass /											• PC-Doctor™	
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones											• ThinkPad Utilities	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											• Update Connector™ ¹⁵	
Dimensions ³	(WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm											Downloadable	
Weight ²	with optical drive and battery: <i>DKU</i> : 4.9 lb (2.2 kg); <i>DJU</i> : 5.0 lb (2.3kg)											• IBM Director Agent	
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover											• Software Delivery Assistant	
Battery - type	Lithium Ion 6-cell or 9-cell / intelligent / supports unique 2nd battery in Ultrabay Slim											• System Migration Assistant	
Battery - life ¹⁰	6-cell models: 4.4 to 4.7 hr; <i>Optional 9-cell</i> : 7 hr; <i>9-cell plus Ultrabay Slim battery</i> : 9 hr											• Client Security Software (for security chip)	
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports]) 2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1											License (CD not included)	
PC Card Std slots	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)											- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client	
Ports	S-video out port (TV out) / one 4-pin industry standard connector											ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage	
Video out	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											Universal 72 watt AC adapter	
Wireless antenna	One Mini PCI type III slot (Communications Bay) / customer upgradable											Asset ID™ ³⁴ (system-specific info in chip accessed over network)	
Mini PCI	Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100 Network Connection 802.11b, Intel 82531 chipset											PC 2001-compliant	
11b Wi-Fi ³²	Some: 11a/b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5001X+ chipset											ACPI 1.0b and 2.0-compliant	
11a/b/g Wi-Fi ³²	One Communications Daughter Card (CDC) socket / customer accessible											CIM and DMI 2.0-compliant	
CDC	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Agere® chipset											PXE 2.0-compliant	
Modem	None											ENERGY STAR®-compliant	
Bluetooth™	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE											ImageUltra™ Services available	
Ethernet	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)											International Warranty Service ¹⁷	
Audio support	Power-on password / hard disk password / supervisor password / security keyhole authentication / local file encryption / Atmel® chip / TCG-compliant											24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)	
Security	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant											ServicePac® ²² 2yr IOR 9x5 NBD 30L9190	
Security chip	3 years/1 yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail											ServicePac 3yr IOR 9x5 NBD 30L9197	
Limited warranty ¹²	128MB PC2700 DDR-SDRAM CL2.5 SOD 31P9828 ThinkPad T40/R50 Li-Ion Battery 6-cell 92P1101											ServicePac 4yr IOR 9x5 NBD 69P9198	
	256MB PC2700 DDR-SDRAM CL2.5 SOD 31P9830 ThinkPad T40/R50 Li-Ion Battery 9-cell 92P1102											ServicePac 5yr IOR 9x5 NBD 69P9200	
	512MB PC2700 DDR-SDRAM CL2.5 SOD 31P9832 Ultrabay Slim Li-Polymer Battery 3-cell 08K8190											ServicePac 4yr P&L P/U Depot 69P9199	
	1GB PC2700 DDR-SDRAM CL2.5 SOD 31P9834 ThinkPad Multiple Battery Charger II 22P9040											ServicePac 5yr P&L P/U Depot 69P9201	
	USB Portable Diskette Drive 05K9276 ThinkPad 72W AC Adapter 02K6699												
	USB 2.0 Combo Drive 73P4515 ThinkPad 72W AC/DC Combo Adapter 22P9010												
	USB 2.0 Portable Multi-Burner Drive 22P9163 11a/b/g Wireless CardBus Adapter 31P9101												
	USB 2.0 Memory Key 512MB 22P9230 11a/b/g Wireless Mini PCI Adptr II 73P4301												
	CD-RW/DVD II Combo Ultrabay Slim Drive 73P3288 ThinkVision® L192p 19" Monitor (black) 9419HB2												
	Multi-Burner Plus Ultrabay Slim Drive 73P3342 ThinkVision E500 Projector 0038A05												
	Second HDD Adapter for Ultrabay Slim 62P4554 C400 Projector 0039A04												
	60GB HS Hard Disk 9.5mm (5400 rpm) 73P3357 M400 Projector 0037A04												
	80GB HS Hard Disk 9.5mm (5400 rpm) 09N4273 GemPC400 Smart Card Reader/Writer 31P8901												
	100GB Hard Disk 9.5mm PATA (5400 rpm) 40Y8716 ThinkPad Port Replicator II 74P6733												
	Enh Perf Wireless Keyboard and Mouse 73P4067 ThinkPad Mini Dock 287810U												
	USB Travel Keyboard with UltraNav 31P9490 ThinkPad Dock II 287710U												
	ThinkPad Carrying Case - Expander 73P3597 Kensington® MicroSaver® Security Cable 73P2582												
	ThinkPad Carrying Case - BackPack 73P3599 Other options at lenovo.com/options												

See footnotes for important warranty information

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US models announced October 7, 2003

(T41B3) October 2005

US models withdrawn effective October 2004 or December 2005

ThinkPad® T41p (2373) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk memory GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Ethernet on planar chip	Battery Security cells	Workhorse (W) Global (G) Preload Entry (E)	Avail date
2373-GEU	Pentium® M	1.7	512MB	14.1" SXGA+	128MB	60U	Combo	11a/b/g Wi-Fi ³²	Mod/Blue	Gigabit	Yes	9-cell XP Pro W	Nov 2003
2373-GGU	Pentium M	1.7	512MB	14.1" SXGA+	128MB	60U	Combo	*Intel 11b Wi-Fi ³²	Mod/Blue	Gigabit	Yes	9-cell XP Pro W G	Nov 2003

Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i>											
L2 cache	Intel® Pentium® M Processor 1.7GHz with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus											
Memory	1MB / on die (at processor speed) / ECC 512MB standard / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available											
Diskette drive	None standard / use optional USB-based diskette drive											
Combo	DVD-ROM/CD-RW / 16X/10X/24X/8X ²¹ speed / removable from Ultrabay™ Slim											
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay											
Disk	60GB Ultra HS (7200 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)											
Display	14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits / 200:1 contrast ratio / one latch to unlatch and open with one hand											
Graphics	ATI® Mobility™ FireGL™ T2 / AGP 4X / 128MB DDR1 / OpenGL® support											
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M at 75Hz											
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass / UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones											
Touch pad	Illuminates the keyboard to improve visibility in low-light conditions											
ThinkLight™												
Dimensions ³	(WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm											
Weight ²	with optical drive and battery: 5.4 lb (2.4 kg)											
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover											
Battery - type	Lithium Ion 9-cell / intelligent / supports unique 2nd battery in Ultrabay Slim											
Battery - life ¹⁰	9-cell: 6.3 to 6.4 hr; 9-cell plus Ultrabay Slim battery: up to 8.6 hr											
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])											
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1											
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)											
Video out	S-video out port (TV out) / one 4-pin industry standard connector											
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											
11b Wi-Fi ³²	<i>Some:</i> 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100 Network Connection 802.11b, Intel 82531 chipset											
11a/b/g Wi-Fi ³²	<i>Some:</i> 11a/b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5001X+ chipset											
CDC	One Communications Daughter Card (CDC) socket / customer accessible											
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Agere® chipset											
Bluetooth™	Bluetooth wireless technology / in CDC (with modem)											
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE											
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)											
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant											
Limited warranty ¹²	3 years/1 yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail											
128MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101									
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102									
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190									
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad Multiple Battery Charger II	22P9040									
USB Portable Diskette Drive	05K9276	ThinkPad 72W AC Adapter	02K6699									
USB Serial Parallel Adapter	22P5298	ThinkPad 72W AC/DC Combo Adapter	22P9010									
USB 2.0 Portable CD-RW Drive	22P5297	11a/b/g Wireless CardBus Adapter	31P9101									
USB 2.0 Combo Drive	73P4515	11a/b/g Wireless Mini PCI Adptr II	73P4301									
USB 2.0 Portable Multi-Burner Drive	22P9163	SonyEricsson® GC83 EDGE PC Card	26K3393									
USB 2.0 Memory Key 256MB	22P9228	ThinkVision® L192p 19" Monitor (black)	9419HB2									
USB 2.0 Memory Key 512MB	22P9230	ThinkVision E500 Projector	0038A05									
USB 2.0 Portable 80GB Hard Disk	40Y8726	M400 Projector	0037A04									
CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288	C400 Projector	0039A04									
ThinkPad DVD-ROM Ultrabay Slim Drive	73P3270	GemPC400 Smart Card Reader/Writer	31P8901									
Second HDD Adapter for Ultrabay Slim	62P4554	ThinkPad Port Replicator II	74P6733									
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	ThinkPad Mini Dock	287810U									
80GB Hard Disk 9.5mm (4200 rpm)	08K9869	ThinkPad Dock II	287710U									
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Monitor Stand 2001	22P5265									
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkPad Carrying Case - Expander	73P3597									
Optical 3-Button Travel Wheel Mouse	31P7410	Other options at lenovo.com/options										
SOFTWARE¹⁴												
Windows XP Professional												
- Microsoft® Windows® XP Professional ²⁰												
↳ Disk-to-Disk Recovery (in hidden protected area)												
Preloaded												
• Access IBM												
• Access Connections™												
• Adobe Reader												
• Rapid Restore™ Ultra												
• RecordNOW and Drive Letter Access (combo models)												
• InterVideo WinDVD (combo mdl)												
• Norton AntiVirus (OEM edition)												
• PC-Doctor™												
• ThinkPad Utilities												
• Update Connector™.15												
Downloadable												
• IBM Director Agent												
• Software Delivery Assistant												
• System Migration Assistant												
• Client Security Software (for security chip)												
License (CD not included)												
- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client												
ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage												
Universal 72 watt AC adapter Asset ID™.34 (system-specific info in chip accessed over network)												
PC 2001-compliant												
ACPI 1.0b and 2.0-compliant												
CIM and DMI 2.0-compliant												
PXE 2.0-compliant												
ENERGY STAR®-compliant												
ImageUltra™ Services available												
International Warranty Service ¹⁷												
24 hour x 7 day ¹⁸ toll-free hardware support during the warranty ¹²												
ServicePac®.22 2yr IOR 9x5 NBD												
30L9190												
ServicePac 3yr IOR 9x5 NBD												
69P9198												
ServicePac 4yr IOR 9x5 NBD												
69P9200												
ServicePac 5yr IOR 9x5 NBD												
69P9199												
ServicePac 4yr P&L P/U Depot												
69P9199												
ServicePac 5yr P&L P/U Depot												
69P9201												
Other ServicePac options at ibm.com/services/its/us/source/wamomxeu.pdf												
Post-warranty annual maintenance agreements at ibm.com/services/its/us/source/maspspleu.pdf												

See footnotes for important warranty information
US models announced October 28, 2003
US models withdrawn effective October 2005

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ThinkPad® T42 (Entry) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ³	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Ethernet on planar	Battery Security cells chip	Workhorse (W) or Global (G) or Entry (E)	Avail date	
2373-1UU	Pentium® M	1.5	256MB	14.1" XGA	7500	30GB	DVD	* Intel 11b Wi-Fi ³²	Modem	Gigabit	Yes	6	XP Pro E	May 2004
2373-1YU	Pentium M	1.5	256MB	14.1" XGA	7500	30GB	DVD	* Intel 11b/g ³²	Modem	Gigabit	Yes	6	XP Pro E	May 2004
2373-1WU	Pentium M	1.5	256MB	14.1" XGA	7500	30GB	Combo	* Intel 11b Wi-Fi	Modem	Gigabit	Yes	6	XP Pro E G	May 2004
2373-5TU	Pentium M	725 1.6	512MB	14.1" XGA	9000	40HS	Combo	* Intel 11b/g	Modem	Gigabit	Yes	6	XP Pro E	Aug 2004
Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i>										SOFTWARE¹⁴			
L2 cache	Intel® Pentium® M Processor 1.5GHz or Intel Pentium M Processor 725 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										Windows XP Professional			
Memory	1.5GHz: 1MB; 1.6GHz: 2MB; All: on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰			
Diskette drive	None standard / use optional USB-based diskette drive										↔ Disk-to-Disk Recovery (in hidden protected area)			
DVD	<i>Some: DVD-ROM / 24X-8X³ speed / single-layer / removable from Ultrabay™ Slim</i>										Preloaded			
Combo	<i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay Slim</i>										• Access Program			
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay										• Access Connections			
Disk	30GB³ (4200 rpm) or 40GB HS (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™										• Rescue and Recovery™			
Display	14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• RecordNOW and Drive Letter Access powered by Sonic products (combo models)			
Graphics	<i>Some: ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM)</i>										• InterVideo WinDVD (combo models)			
Graphics external	<i>Some: ATI MOBILITY RADEON 9000 / AGP 4X / 64MB DDR1 (DDR-SDRAM)</i>										• Norton AntiVirus (OEM edition)			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• PC-Doctor™			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• ThinkPad Utilities			
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										• Adobe Reader			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Update Connector™ ¹⁵			
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm										Downloadable			
Weight ²	with optical drive and battery: 4.9 lb (2.2kg)										• IBM Director Agent			
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover										• Software Delivery Assistant			
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										• System Migration Assistant			
Battery - life ¹⁰	6-cell models: up to 5.0 hr; Optional 9-cell: 7 hr; 9-cell plus Ultrabay Slim battery: 9 hr										• Client Security Software (for security chip)			
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])										License (CD not included)			
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage			
Video out	S-video out port (TV out) / one 4-pin industry standard connector										Universal 72 watt AC adapter			
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										Asset ID™ ³⁴ (system-specific info in chip accessed over network)			
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										PC 2001-compliant			
Intel 11b Wi-Fi ³²	<i>Some: 11b Wi-Fi³² wireless⁴, Mini PCI, Intel PRO/Wireless 2100 Network Connection</i>										ACPI 1.0b and 2.0-compliant			
Intel 11b/g ³²	<i>Some: 11b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset</i>										CIM and DMI 2.0-compliant			
CDC	One Communications Daughter Card (CDC) socket / customer accessible										PXE 2.0-compliant			
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										ENERGY STAR®-compliant			
Bluetooth™	None										ImageUltra™ Services available			
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE										International Warranty Service ¹⁷			
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)			
Security	Power-on password / hard disk password / supervisor password / security keyhole										The Ultrabay Slim supports:			
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant										• standard or optional CD-RW/DVD combo drive			
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail										• optional DVD or DVD-RW drive			
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101											
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102											
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190											
USB Portable Diskette Drive	05K9276	ThinkPad Multiple Battery Charger II	22P9040											
USB Fingerprint Reader	73P4774	ThinkPad 72W AC Adapter	02K6699											
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	72W Slim AC/DC Combo Adapter	73P4485											
USB 2.0 Memory Key 1GB	40Y7421	11a/b/g Wireless Mini PCI Adptr II	73P4301											
USB 2.0 Portable 80GB Hard Disk	40Y8726	Intel PRO/Wireless 2915ABG Mini PCI	41N2990											
CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288	Kensington® MicroSaver® Security Cable	73P2582											
ThinkPad DVD-ROM Ultrabay Slim Drive	73P3270	TrackPoint Cap Collection	73P2698											
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622	Lenovo M500 Projector	0037A05											
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkVision® E500 Projector	0038A05											
40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816	ThinkVision L151p 15" Monitor (black)	9205HB2											
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkVision L201p 20.1" Monitor (black)	9320HB1											
USB Travel Keyboard with UltraNav	31P9490	PC Card Gemplus Smart Card Reader	41N3004											
Preferred Pro USB Fingerprint Keyboard	73P4730	ThinkPad Port Replicator II	74P6733											
SonyEricsson® GC83 EDGE PC Card	26K3393	ThinkPad Mini Dock	287810U											
ThinkPad Carrying Case - Leather	73P3600	ThinkPad Dock II	287710U											
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options												

See footnotes for important warranty information
US models announced May 11 or August 17, 2004
US models withdrawn effective August 2005 or October 2006

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ThinkPad® T42 (14.1" display) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁵	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Security chip	Workhorse (W) or Global (G) Preload or Entry (E)	Avail date
2373-3UU	Pentium® M 735	1.7	512MB	14.1" SXGA+	9600	40HS	Combo	11a/b/g Wi-Fi ³²	Mod/Blue	Yes	XP Pro W	May 2004
2373-4WU	Pentium M 735	1.7	512MB	14.1" XGA	7500	40HS	Combo	* Intel 11b Wi-Fi ³²	Modem	Yes	XP Pro W G	May 2004
2373-8XU	Pentium M 735	1.7	512MB	14.1" SXGA+	9600	40HS	Combo	* Intel 11b Wi-Fi	Modem	Yes	XP Pro W	May 2004
2373-8ZU	Pentium M 735	1.7	512MB	14.1" SXGA+	9600	40HS	Combo	* Intel 11b/g ³²	Modem	Yes	XP Pro W	May 2004
2373-8TU	Pentium M 735	1.7	256MB	14.1" XGA	7500	40HS	DVD	Open; wireless upg ³⁶	Modem	Yes	XP Pro W G	May 2004
2373-6UU	Pentium M 735	1.7	512MB	14.1" XGA	7500	40HS	DVD	Open; wireless upg	Modem	Yes	XP Pro W	May 2004
2373-6ZU	Pentium M 735	1.7	512MB	14.1" XGA	7500	40HS	Combo	11a/b/g Wi-Fi	Mod/Blue	Yes	XP Pro W	May 2004
2373-4TU	Pentium M 735	1.7	512MB	14.1" XGA	7500	40HS	Combo	Open; wireless upg	Modem	Yes	XP Pro W	May 2004
2373-JTU	Pentium M 735	1.7	512MB	14.1" XGA	7500	40HS	Combo	11b/g ³²	Modem	Yes	XP Pro W	May 2004
2373-9XU	Pentium M 745	1.8	512MB	14.1" SXGA+	9600	80HS	Combo	11a/b/g Wi-Fi	Mod/Blue	Yes	XP Pro	May 2004
2373-9VU	Pentium M 745	1.8	1GB	14.1" SXGA+	9600	80HS	Combo	* Intel 11b/g	Mod/Blue	Yes	XP Pro	May 2004
2373-9ZU	Pentium M 745	1.8	512MB	14.1" SXGA+	9600	80HS	DVD-RW	11a/b/g Wi-Fi	Mod/Blue	Yes	XP Pro	May 2004
Positioning Processor	Perfect balance of performance and portability; two-spindle system											
L2 cache	Intel® Pentium® M Processor 735 (1.7GHz) or 745 (1.8GHz)											
Memory	with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus											
Diskette drive	2MB / on die (at processor speed) / ECC											
DVD	256MB, 512MB or 1GB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available											
Combo DVD-RW	None standard / use optional USB-based diskette drive											
Ultra Slim Disk	Some: DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim											
Display	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim											
Graphics	Some: CD-RW/DVD-RW Multi-Burner / removable from Ultrabay Slim											
Graphics external	One modular bay for interchangeable devices (right side) / 9.5mm high bay											
Keyboard	40GB ⁸ HS (5400 rpm) or 80GB HS (5400 rpm) / 9.5mm high / removable, upgradeable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™											
TrackPoint®	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits											
Touch pad	Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits											
ThinkLight™	Some: ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM)											
Dimensions ³	Some: ATI MOBILITY RADEON 9600 / AGP 4X / 64MB DDR1 (DDR-SDRAM)											
Weight ²	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M / DDC2B											
Battery - type	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)											
Battery - life ¹⁰	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Architecture	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones											
PC Card Std slots	Illuminates the keyboard to improve visibility in low-light conditions											
Ports	Up to 4.6 hr; Optional 9-cell: up to 7.5 hr; 9-cell plus Ultrabay Slim battery: up to 9.5 hr											
Video out	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])											
Wireless antenna	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door											
Mini PCI	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)											
Wireless upg ³⁶	S-video out port (TV out) / one 4-pin industry standard connector											
Intel 11b Wi-Fi ³²	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											
Intel 11b/g ³²	One Mini PCI type III slot (Communications Bay) / customer upgradeable											
11a/b/g Wi-Fi ³²	Some: wireless upgradeable with wireless Mini PCI options											
11b/g ³²	Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100 Network Connection 802.11b, Intel 82531 chipset											
CDC	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip											
Modem	Some: 11a/b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5001X+ chipset											
Bluetooth™	Some: 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset											
Ethernet	One Communications Daughter Card (CDC) socket / customer accessible											
Audio support	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset											
Security	Some: Bluetooth wireless technology / in CDC (with modem)											
Security chip	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE											
Limited warranty ¹²	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)											
256MB PC2700 DDR-SDRAM CL2.5 SOD	Power-on password / hard disk password / supervisor password / security keyhole											
512MB PC2700 DDR-SDRAM CL2.5 SOD	Embedded Security Subsystem 2.0 ³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant											
1GB PC2700 DDR-SDRAM CL2.5 SOD	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail											
USB Portable Diskette Drive	ThinkPad T40/R50 Li-Ion Battery 6-cell 92P1101											
USB 2.0 CD-RW/DVD-ROM Combo II Drive	ThinkPad T40/R50 Li-Ion Battery 9-cell 92P1102											
Super Multi-Burner Ultrabay Slim Drv (curve)	Ultrabay Slim Li-Polymer Battery 3-cell 08K8190											
Second HDD Adapter for Ultrabay Slim	11a/b/g Wireless Mini PCI Adapter II 73P4301											
ThinkPad Carrying Case - Leather	Intel PRO/Wireless 2915ABG Mini PCI 41N2990											
80GB HS Hard Disk 9.5mm (5400 rpm)	ThinkPad Port Replicator II 74P6733											
ThinkPad Convertible Monitor Stand	ThinkPad Mini Dock 287810U											
	ThinkPad Dock II 287710U											
	ThinkVision® L201p 20.1" Monitor (black) 9320HB1											
	Other options at lenovo.com/options											
	<p>SOFTWARE¹⁴</p> <p>Windows XP Professional</p> <ul style="list-style-type: none"> Microsoft® Windows® XP Professional²⁰ Disk-to-Disk Recovery (in hidden protected area) <p>Preloaded</p> <ul style="list-style-type: none"> Access Program Access Connections Rescue and Recovery™ RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD-RW models) InterVideo WinDVD (combo, DVD, DVD-RW models) InterVideo WinDVD Creator (DVD-RW models) Norton AntiVirus (OEM edition) PC-Doctor™ ThinkPad Utilities Adobe Reader Update Connector™¹⁵ <p>Downloadable</p> <ul style="list-style-type: none"> IBM Director Agent Software Delivery Assistant System Migration Assistant Client Security Software (for security chip) <p>License (CD not included)</p> <ul style="list-style-type: none"> Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client <p>ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage</p> <p>Universal 72 watt AC adapter Asset ID™³⁴ (system-specific info in chip accessed over network)</p> <p>PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.0-compliant ENERGY STAR®-compliant ImageUltra™ Services available International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²</p> <p>ThinkPlus™²² 2-year LOR 9x5 NBD 41C9175</p> <p>ThinkPlus 3-year LOR 9x5 NBD 41C9176</p> <p>ThinkPlus 4-year LOR 9x5 NBD 41C9177</p> <p>ThinkPlus 5-year LOR 9x5 NBD 41C9179</p> <p>ThinkPlus 4-year P&L P/U Depot 41C9178</p> <p>ThinkPlus 5-year P&L P/U Depot 41C9180</p> <p>Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty</p>											

See footnotes for important warranty information
US models announced May 11, 2004
US models withdrawn effective May 2005 or May 2006

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ThinkPad® T42 (14.1" display) - October 2004 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	FingerSecu- print rity chip	Bat- tery life ⁹ or Entry (E)	Workhorse (W) or Global (G) Avail date
2373-J2U	Pentium® M 725	1.6	256MB	14.1" XGA	7500 30GB	DVD	* Intel 11b Wi-Fi ³²	Modem	No	Yes	5.3 hr	E Oct 04
2373-J3U	Pentium M 725	1.6	256MB	14.1" XGA	7500 30GB	DVD	* Intel 11b/g ³²	Modem	No	Yes	5.3 hr	E Oct 04
2373-J4U	Pentium M 725	1.6	256MB	14.1" XGA	7500 30GB	Combo	* Intel 11b/g	Modem	Finger	Yes	5.3 hr	E G Oct 04
2373-K1U	Pentium M 735	1.7	512MB	14.1" XGA	7500 40HS	Combo	* Intel 11b/g	Mod/Blue	Finger	Yes	5.1 hr	W G Oct 04
2373-KRU	Pentium M 735	1.7	512MB	14.1" XGA	7500 40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	5.1 hr	W G Nov 04
2373-K2U	Pentium M 735	1.7	256MB	14.1" XGA	7500 40HS	DVD	Open; wireless upg ³⁶	Modem	Finger	Yes	5.3 hr	W G Oct 04
2373-K3U	Pentium M 735	1.7	512MB	14.1" XGA	7500 40HS	DVD	* Intel 11b/g	Modem	Finger	Yes	5.1 hr	W Oct 04
2373-K5U	Pentium M 735	1.7	512MB	14.1" SXGA+	9600 40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	4.0 hr	W G Oct 04
2373-K9U	Pentium M 735	1.7	512MB	14.1" XGA	7500 40HS	Combo	11a/b/g II ³²	Mod/Blue	Finger	Yes	5.2 hr	W Oct 04
2373-KEU	Pentium M 735	1.7	512MB	14.1" XGA	7500 40HS	Combo	Open; wireless upg	Modem	Finger	Yes	5.3 hr	W Oct 04
2373-KFU	Pentium M 735	1.7	256MB	14.1" SXGA+	7500 80HS	Combo	* Intel 11a/b/g ³²	Mod/Blue	Finger	Yes	4.8 hr	W Feb 05
2373-KGU	Pentium M 735	1.7	512MB	14.1" XGA	7500 40HS	Combo	11b/g ³²	Modem	Finger	Yes	5.2 hr	W Oct 04
2373-KMU	Pentium M 735	1.7	256MB	14.1" XGA	7500 80HS	Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	5.2 hr	W Feb 05
2373-M1U	Pentium M 745	1.8	512MB	14.1" SXGA+	9600 80HS	Combo	11a/b/g II	Mod/Blue	Finger	Yes	4.1 hr	W Oct 04
2373-M2U	Pentium M 745	1.8	512MB	14.1" SXGA+	9600 80HS	Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	4.1 hr	W Feb 05
2373-M3U	Pentium M 745	1.8	512MB	14.1" SXGA+	9600 60U	Combo	* Intel 11b/g	Mod/Blue	Finger	Yes	4.0 hr	W Oct 04
2373-PPU	Pentium M 735	1.7	512MB	14.1" XGA	9600 40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	4.2 hr	W Nov 05
2373-PQU	Pentium M 735	1.7	256MB	14.1" XGA	9600 40HS	DVD	Open; wireless upg	Modem	Finger	Yes	4.4 hr	W Nov 05
2373-PRU	Pentium M 725	1.6	256MB	14.1" XGA	9600 40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	4.2 hr	W Nov 05
2373-PSU	Pentium M 735	1.7	512MB	14.1" XGA	9600 40HS	Combo	* Intel 11b/g	Mod/Blue	Finger	Yes	4.2 hr	W Nov 05
2373-PTU	Pentium M 735	1.7	512MB	14.1" XGA	9600 40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	4.2 hr	W Nov 05
2373-PUU	Pentium M 735	1.7	256MB	14.1" XGA	9600 40HS	DVD	Open; wireless upg	Modem	Finger	Yes	4.4 hr	W Nov 05
Positioning Processor	Perfect balance of performance and portability; two-spindle system Intel® Pentium® M Processor 725 (1.6GHz), 735 (1.7GHz) or 745 (1.8GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus											
L2 cache	2MB / on die (at processor speed) / ECC											
Memory	256MB or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available											
Diskette drive	None standard / use optional USB-based diskette drive											
DVD	Some: DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim											
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim											
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay											
Disk	30GB ⁸ (4200 rpm), 40GB HS (5400 rpm), 60GB Ultra HS (7200 rpm), or 80GB HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System™											
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits											
Graphics	Some: ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 9600 / AGP 4X / 64MB DDR1 (DDR-SDRAM)											
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm											
Weight ²	with optical drive and battery: XGA models: 4.9 lb (2.2kg); SXGA+ mod: 5.0 lb (2.3kg)											
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover											
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim											
Battery - life ¹⁰	Up to 4.9 hr; Optional 9-cell: up to 7.0 hr; 9-cell plus Ultrabay Slim battery: up to 9.0 hr											
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth], [fingerprint]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])											
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door											
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)											
Video out	S-video out port (TV out) / one 4-pin industry standard connector											
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											
Wireless upg ³⁶	Some: wireless upgradable with wireless Mini PCI options											
Intel 11b Wi-Fi ³²	Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100, Intel 82531 chipset											
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip											
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset											
11b/g ³²	Some: 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset											
11a/b/g II ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X											
CDC	One Communications Daughter Card (CDC) socket / customer accessible											
Modem	56K ⁵ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset											
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)											
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE											
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)											
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	Embedded Security Subsystem 2.0 ³³ / Atmel® chip / TCG-compliant											
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip											
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail											

SOFTWARE¹⁴

Windows XP Professional
- Microsoft® Windows® XP Professional²⁰ (Service Pack 2)
◇ Disk-to-Disk Recovery (in hidden protected area)

Preloaded

- Rescue and Recovery™
- Access Program
- Access Connections
- Norton AntiVirus
- PC-Doctor™
- ThinkPad Utilities
- Adobe Reader
- Update Connector™¹⁵
- RecordNOW and Drive Letter Access powered by Sonic products (combo models)
- InterVideo WinDVD (combo, DVD)
- Fingerprint Software (fingerprint models)
- Client Security Software (for security chip)

License (CD not included)
- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client

ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage

Universal 72 watt AC adapter
Asset ID™³⁴ (system-specific info in chip accessed over network)
PC 2001-compliant
ACPI 1.0b and 2.0-compliant
C1M and DMI 2.0-compliant
PXE 2.1-compliant
ENERGY STAR®-compliant
International Warranty Service¹⁷
24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²

ThinkPlus™²² 2-year LOR 9x5 NBD
41C9175

ThinkPlus 3-year LOR 9x5 NBD
41C9176

ThinkPlus 4-year LOR 9x5 NBD
41C9177

ThinkPlus 5-year LOR 9x5 NBD
41C9179

ThinkPlus 4-year P&L P/U Depot
41C9178

ThinkPlus 5-year P&L P/U Depot
41C9180

See footnotes for important warranty information * Powered by Intel Centrino™ mobile technology © Lenovo
US models announced October 5 or November 30, 2004 or January 11 or November 15, 2005 (T42140) April 2006
US models withdrawn effective May 2006

ThinkPad® T42 (15" display) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁵	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Security chip	Workhorse (W) or Global (G) Preload or Entry (E)	Avail date
2373-6YU	Pentium® M 735	1.7	512MB	15.0" XGA	7500	40HS	Combo	* Intel 11b Wi-Fi ³²	Modem	Yes	XP Pro	W G May 2004
2373-JXU	Pentium M 735	1.7	512MB	15.0" SXGA+	9600	40HS	Combo	11b/g ³²	Modem	Yes	XP Pro	W May 2004
2373-CWU	Pentium M 745	1.8	512MB	15.0" SXGA+	9600	80HS	Combo	11a/b/g Wi-Fi ³²	Mod/Blue	Yes	XP Pro	May 2004
2373-CXU	Pentium M 745	1.8	512MB	15.0" SXGA+	9600	80HS	Combo	* Intel 11b/g ³²	Mod/Blue	Yes	XP Pro	May 2004
2373-CVU	Pentium M 745	1.8	1GB	15.0" SXGA+	9600	80HS	Combo	11a/b/g Wi-Fi	Mod/Blue	Yes	XP Pro	May 2004
2373-CYU	Pentium M 745	1.8	512MB	15.0" SXGA+	9600	80HS	DVD-RW	11a/b/g Wi-Fi	Mod/Blue	Yes	XP Pro	May 2004
Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i>											
L2 cache	Intel® Pentium® M Processor 735 (1.7GHz) or 745 (1.8GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus											
Memory	2MB / on die (at processor speed) / ECC 512MB or 1GB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available											
Diskette drive	None standard / use optional USB-based diskette drive											
Combo DVD-RW	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Slim											
Ultrabay Slim Disk	<i>Some:</i> CD-RW/DVD-RW Multi-Burner / removable from Ultrabay Slim											
Display	One modular bay for interchangeable devices (right side) / 9.5mm high bay 40GB⁸ HS (5400 rpm) or 80GB HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)											
Graphics	<i>Some:</i> ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM) <i>Some:</i> ATI MOBILITY RADEON 9600 / AGP 4X / 64MB DDR1 (DDR-SDRAM)											
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M / DDC2B											
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	<i>(WxDxH):</i> 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm											
Weight ²	with optical drive and battery: <i>XGA models:</i> 5.7 lb (2.6kg); <i>SXGA+ mod:</i> 5.8 lb (2.7kg)											
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover											
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim											
Battery - life ¹⁰	Up to 4.4 hr; <i>Optional 9-cell:</i> up to 7 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 9 hr											
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])											
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door											
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)											
Video out	S-video out port (TV out) / one 4-pin industry standard connector											
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											
Intel 11b Wi-Fi ³²	<i>Some:</i> 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100 Network Connection 802.11b, Intel 82531 chipset											
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset											
11a/b/g Wi-Fi ³²	<i>Some:</i> 11a/b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5001X+ chipset											
11b/g ³²	<i>Some:</i> 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset											
CDC	One Communications Daughter Card (CDC) socket / customer accessible											
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset											
Bluetooth™	<i>Some:</i> Bluetooth wireless technology / in CDC (with modem)											
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE											
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)											
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant											
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades ²² avail											
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus™ ²² 2-year LOR 9x5 NBD								
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102		41C9175							
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ThinkPlus 3-year LOR 9x5 NBD								
USB Portable Diskette Drive	05K9276	ThinkPad 72W AC Adapter	02K6699		41C9176							
USB Gemplus GemPC Smart Card Reader	41N3040	72W Slim AC/DC Combo Adapter	73P4485	ThinkPlus 4-year LOR 9x5 NBD								
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	11a/b/g Wireless Mini PCI Adapter II	73P4301		41C9177							
CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288	Kensington® MicroSaver® Security Cable	73P2582	ThinkPlus 5-year LOR 9x5 NBD								
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622	Lenovo M500 Projector	0037A05		41C9179							
Second HDD Adapter for Ultrabay Slim	62P4554	ThinkVision® L151p 15" Monitor (black)	9205HB2	ThinkPlus 4-year P&L P/U Depot								
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkVision L201p 20.1" Monitor (black)	9320HB1		41C9178							
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Port Replicator II	74P6733	ThinkPlus 5-year P&L P/U Depot								
ThinkPad Premiere Leather Carrying Case	10K0209	ThinkPad Mini Dock	287810U		41C9180							
USB Travel Keyboard with UltraNav	31P9490	ThinkPad Dock II	287710U	Post-warranty annual maintenance agreements at								
SonyEricsson® GC83 EDGE PC Card	26K3393	TrackPoint Cap Collection	73P2698									
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options										

See footnotes for important warranty information
US models announced May 11, 2004
US models withdrawn effective May 2005 or May 2006

* Powered by Intel Centrino® mobile technology

ThinkPad® T42 (15" display) - October 2004 - withdrawn

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Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁵	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Finger print reader	Secu- rity chip	Bat- tery life ¹⁰	Workhorse (W) or Global (G) Avail Entry (E) date
2373-L1U	Pentium® M 735	1.7	512MB	15.0" XGA	7500	40HS	Combo	* Intel 11b/g ³²	Mod/Blue	Finger	Yes	5.0 hr	W G Oct 04
2373-LAU	Pentium M 735	1.7	512MB	15.0" XGA	7500	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	5.0 hr	W G Nov 04
2373-L4U	Pentium M 735	1.7	512MB	15.0" SXGA+	9600	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	3.9 hr	W Oct 04
2373-L5U	Pentium M 735	1.7	512MB	15.0" SXGA+	9600	40HS	Combo	* Intel 11b Wi-Fi ³²	Modem	Finger	Yes	3.9 hr	W Oct 04
2373-L6U	Pentium M 735	1.7	512MB	15.0" SXGA+	9600	40HS	Combo	11b/g ³²	Modem	Finger	Yes	3.9 hr	W Oct 04
2373-L7U	Pentium M 735	1.7	512MB	15.0" SXGA+	9600	40HS	Combo	* Intel 11a/b/g ³²	Modem	Finger	Yes	3.9 hr	W Feb 05
2373-N1U	Pentium M 745	1.8	512MB	15.0" SXGA+	9600	80HS	Combo	11a/b/g II ³²	Mod/Blue	Finger	Yes	3.9 hr	Oct 04
2373-N2U	Pentium M 745	1.8	512MB	15.0" SXGA+	9600	80HS	Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	3.9 hr	Feb 05
2373-N3U	Pentium M 745	1.8	512MB	15.0" SXGA+	9600	60U	Combo	* Intel 11b/g	Mod/Blue	Finger	Yes	3.9 hr	Oct 04
2373-LCU	Pentium M 735	1.7	512MB	15.0" XGA	9600	40HS	Combo	* Intel 11b/g	Modem		Yes	4.1 hr	Nov 05
Positioning Processor	Perfect balance of performance and portability; two-spindle system Intel® Pentium® M Processor 735 (1.7GHz) or 745 (1.8GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus												
L2 cache	2MB / on die (at processor speed) / ECC												
Memory	512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available												
Diskette drive	None standard / use optional USB-based diskette drive												
Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Slim												
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay												
Disk	40GB⁸ HS (5400rpm), 80GB HS (5400 rpm), or 60GB Ultra HS (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™												
Display	<i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology												
Graphics	<i>Some:</i> ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM) <i>Some:</i> ATI MOBILITY RADEON 9600 / AGP 4X / 64MB DDR1 (DDR-SDRAM)												
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M / DDC2B												
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm												
Weight ²	with optical drive and battery: XGA models: 5.7 lb (2.6kg); SXGA+ mod: 5.8 lb (2.7kg)												
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover												
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim												
Battery - life ¹⁰	Up to 4.9 hr; <i>Optional 9-cell:</i> up to 7.0 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 9.0 hr												
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth], fingerprint) / PCI bus 2.2 32-bit, 33MHz (T)® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])												
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door												
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)												
Video out	S-video out port (TV out) / one 4-pin industry standard connector												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI Type III slot (Communications Bay) / customer upgradable												
Intel 11b Wi-Fi ³²	<i>Some:</i> 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100, Intel 82531 chipset												
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset												
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset												
11b/g ³²	<i>Some:</i> 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset												
11a/b/g II ³²	<i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Bluetooth™	<i>Some:</i> Bluetooth wireless technology / in CDC (with modem)												
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant												
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip												
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail												
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus™ ²² 2-year LOR 9x5 NBD	41C9175								
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	ThinkPlus 3-year LOR 9x5 NBD	41C9176								
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ThinkPlus 4-year LOR 9x5 NBD	41C9177								
USB Fingerprint Reader	73P4774	ThinkPad Multiple Battery Charger II	22P9040	ThinkPlus 5-year LOR 9x5 NBD	41C9179								
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	72W Slim AC/DC Combo Adapter	73P4485	ThinkPlus 4-year P&L P/U Depot	41C9178								
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622	11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 5-year P&L P/U Depot	41C9180								
Second HDD Adapter for Ultrabay Slim	62P4554	Intel PRO/Wireless 2915ABG Mini PCI	41N2990	Post-warranty annual maintenance agreements at	lenovo.com/thinkplus/warranty								
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Port Replicator II	74P6733										
USB 2.0 Memory Key 512MB	22P9230	ThinkPad Mini Dock	287810U										
ThinkPad Carrying Case - Expander	73P3597	ThinkPad Dock II	287710U										
Preferred Pro USB Fingerprint Keyboard	73P4730	ThinkVision® L201p 20.1" Monitor (black)	9320HB1										
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options											

See footnotes for important warranty information
US models announced October 5 or November 30, 2004 or January 11 or November 15, 2005
US models withdrawn effective May 2006

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ThinkPad® T42 (2378) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Security chip	Workhorse (W) Global (G) Limited Avail Entry (E) warranty ¹²	date		
2378-DTU	Pentium® M	1.5	256MB	14.1" XGA	7500	30GB	DVD	* Intel 11b/g ³²	Modem	Yes	XP Pro	No	1-yr	May 2004
2378-DUU	Pentium M	1.5	256MB	14.1" XGA	7500	40HS	Combo	* Intel 11b/g	Modem	Yes	XP Pro	No	1-yr	May 2004
2378-FTU	Pentium M 735	1.7	256MB	14.1" XGA	7500	40HS	Combo	* Intel 11b/g	Modem	Yes	XP Pro	No	1-yr	May 2004
2378-FVU	Pentium M 735	1.7	256MB	14.1" SXGA+	9600	40HS	Combo	* Intel 11b/g	Modem	Yes	XP Pro	No	1-yr	May 2004
2378-FZU	Pentium M 735	1.7	512MB	15.0" XGA	7500	40HS	Combo	* Intel 11b/g	Modem	Yes	XP Pro	No	1-yr	May 2004
2378-DVU	Pentium M 735	1.7	256MB	15.0" XGA	7500	30GB	DVD	* Intel 11b/g	Modem	Yes	XP Pro	No	1-yr	May 2004
2378-DWU	Pentium M	1.5	256MB	15.0" XGA	7500	40HS	Combo	* Intel 11b/g	Modem	Yes	XP Pro	No	1-yr	May 2004
2378-DXU	Pentium M 735	1.7	512MB	15.0" SXGA+	9600	60U	Combo	* Intel 11b/g	Mod/Blue	Yes	XP Pro	No	1-yr	May 2004
2378-2ZU	Pentium M	1.5	256MB	15.0" XGA	7500	30GB	DVD	* Intel 11b Wi-Fi ³²	Modem	Yes	XP Pro	No	1-yr	May 2004
2378-5UU	Pentium M 725	1.6	256MB	14.1" XGA	9000	40HS	Combo	* Intel 11b/g	Modem	Yes	XP Pro	No	1-yr	Aug 2004
<ul style="list-style-type: none"> • These small and medium business (SMB) models are part of the US TopSeller™ Program • The 2378 has a 1-year limited warranty (other ThinkPad T42 2379 TopSeller models have a 3-year limited warranty) 														
Positioning	Perfect balance of performance and portability; two-spindle system													
Processor	Intel® Pentium® M Processor 1.5GHz or Intel Pentium M Processor 725 (1.6GHz) or 735 (1.7GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus													
L2 cache	1.5GHz: 1MB; 1.6/1.7GHz: 2MB; All: on die (at processor speed) / ECC													
Memory	256MB or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available													
Diskette drive	None standard / use optional USB-based diskette drive													
DVD	Some: DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim													
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim													
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay													
Disk	30GB ⁸ (4200 rpm), 40GB HS (5400 rpm), 60GB Ultra HS (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System													
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology													
Graphics	Some: ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 9000 / AGP 4X / 64MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 9600 / AGP 4X / 64MB DDR1 (DDR-SDRAM)													
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M / DDC2B													
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones													
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm; 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm with optical drive and battery: 14.1" XGA models: 4.9 lb (2.2kg); 14.1" SXGA+: 5.0 lb (2.3kg); 15.0" XGA: 5.7 lb (2.6kg); 15.0" SXGA+: 5.8 lb (2.7kg)													
Weight ²	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim													
Battery - type	4.0 to 5.0 hr; <i>Optional 9-cell</i> : up to 7.0 hr; <i>9-cell plus Ultrabay Slim battery</i> : up to 9.0 hr													
Battery - life ¹⁰														
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])													
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door													
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)													
Video out	S-video out port (TV out) / one 4-pin industry standard connector													
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable													
Intel 11b Wi-Fi ³²	Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100 Network Connection 802.11b, Intel 82531 chipset													
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset													
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)													
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant													
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus 2-year P&L P/U Depot										
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	41C9169										
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ThinkPlus 3-year P&L P/U Depot										
USB Portable Diskette Drive	05K9276	11a/b/g Wireless Mini PCI Adptr II	73P4301	41C9170										
USB 2.0 Super Multi-Burner Drive	40Y8638	ThinkPad Port Replicator II	74P6733	ThinkPlus 4-year P&L P/U Depot										
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622	ThinkPad Mini Dock	287810U	41C9172										
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Dock II	287710U	ThinkPlus 5-year P&L P/U Depot										
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options		41C9174										

See footnotes for important warranty information

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US models announced May 11 or August 17, 2004

(T42B) October 2006

US models withdrawn effective June 2005, August 2005, or October 2006

ThinkPad® T42 (2378) - TopSeller (October 2004) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁵	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Security chip	Bat-tery life ¹⁰	Bat-tery cells	Limited war-ranty ¹²	Avail date
2378-R1U	Pentium® M 725	1.6	256MB	14.1" XGA	7500	40HS	Combo	* Intel 11b/g ³²	Modem	Finger	Yes	5.1 hr	6	1-yr	Oct 04
2378-R2U	Pentium M 735	1.7	512MB	15.0" SXGA+	9600	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	3.9 hr	6	1-yr	Oct 04
2378-R3U	Pentium M 725	1.6	256MB	14.1" XGA	7500	30GB	DVD	* Intel 11b/g	Modem	No	Yes	5.3 hr	6	1-yr	Oct 04
2378-R4U	Pentium M 725	1.6	256MB	14.1" XGA	7500	40HS	Combo	* Intel 11b/g	Modem	No	Yes	5.1 hr	6	1-yr	Oct 04
2378-R5U	Pentium M 745	1.8	256MB	14.1" SXGA+	7500	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	7.2 hr	9	1-yr	Oct 04
2378-R6U	Pentium M 725	1.6	512MB	15.0" XGA	7500	40HS	Combo	* Intel 11b/g	Modem	No	Yes	5.0 hr	6	1-yr	Oct 04
2378-R7U	Pentium M 725	1.6	256MB	15.0" XGA	7500	30GB	DVD	* Intel 11b Wi-Fi ³²	Modem	No	Yes	5.3 hr	6	1-yr	Oct 04
2378-R8U	Pentium M 745	1.8	512MB	15.0" XGA	7500	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	5.0 hr	6	1-yr	Oct 04
2378-R9U	Pentium M 745	1.8	512MB	15.0" SXGA+	9600	60U	Combo	* Intel 11b/g	Mod/Blue	Finger	Yes	5.9 hr	9	1-yr	Oct 04
2378-RGU	Pentium M 735	1.7	256MB	14.1" XGA	9600	40HS	Combo	* Intel 11a/b/g ³²	Modem	Finger	Yes	4.3 hr	6	1-yr	Nov05
2378-RJU	Pentium M 735	1.7	512MB	15.0" XGA	9600	40HS	Combo	* Intel 11a/b/g	Modem	Finger	Yes	4.2 hr	6	1-yr	Nov05

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- The 2378 has a 1-year limited warranty (other ThinkPad T42 2379 TopSeller models have a 3-year limited warranty)

Positioning Processor	Perfect balance of performance and portability; two-spindle system Intel® Pentium® M Processor 725 (1.6GHz), 735 (1.7GHz), or 745 (1.8GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										SOFTWARE¹⁴				
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional				
Memory	256MB or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery				
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded				
DVD	Some: DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim										• Rescue and Recovery™				
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										• Access Program				
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay										• Access Connections™				
Disk	30GB ⁸ (4200 rpm), 40GB HS (5400 rpm), or 60GB Ultra HS (7200 rpm) / 9.5mm high / removable, upgradeable / 9.5mm high bay / supports 2nd disk in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™										• Norton AntiVirus				
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology										• PC-Doctor™				
Graphics	Some: ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 9600 / AGP 4X / 64MB DDR1 (DDR-SDRAM)										• ThinkPad Utilities				
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• Adobe® Reader				
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• Update Connector™ ¹⁵				
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										• RecordNOW and Drive Letter Access powered by Sonic products (combo models)				
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• InterVideo WinDVD (combo, DVD models)				
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm; 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm										• Fingerprint Software (fingerprint models)				
Weight ²	with optical drive and battery: 14.1" XGA models: 4.9 lb (2.2kg); 14.1" SXGA+: 5.4 lb (2.4kg); 15.0" XGA: 5.7 lb (2.6kg); 15.0" SXGA+: 5.8 lb [6-cell] or 6.2 lb [9-cell] (2.8kg)										• Client Security Software (for security chip)				
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover										Downloadable				
Battery - type	Lithium Ion 6- or 9-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										• IBM Director Agent				
Battery - life ¹⁰	6-cell: up to 4.9 hr; 9-cell: up to 7.0 hr; 9-cell plus Ultrabay Slim battery: up to 9.0 hr										• Software Delivery Assistant				
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth], [fingerprint]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])										• System Migration Assistant				
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door										License (CD not included)				
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
Video out	S-video out port (TV out) / one 4-pin industry standard connector										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage				
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										Universal 72 watt AC adapter				
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradeable										Asset ID™ ³⁴ (system-specific info in chip accessed over network)				
Intel 11b Wi-Fi ³²	Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100, Intel 82531 chipset										PC 2001-compliant				
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										ACPI 1.0b and 2.0-compliant				
11a/b/g II ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip										CIM and DMI 2.0-compliant				
CDC	One Communications Daughter Card (CDC) socket / customer accessible										PXE 2.1-compliant				
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										ENERGY STAR®-compliant				
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)										International Warranty Service ¹⁷				
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)				
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166				
Security	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus 2-year LOR 9x5 NBD 41C9167				
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant										ThinkPlus 3-year LOR 9x5 NBD 41C9168				
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip										ThinkPlus 5-year LOR 9x5 NBD 41C9173				
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available										ThinkPlus 2-year P&L P/U Depot 41C9169				
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830			ThinkPad T40/R50 Li-Ion Battery 6-cell			92P1101			ThinkPlus 3-year P&L P/U Depot 41C9170					
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832			ThinkPad T40/R50 Li-Ion Battery 9-cell			92P1102			41C9171					
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834			Ultrabay Slim Li-Polymer Battery 3-cell			08K8190			41C9172					
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622			ThinkPad Port Replicator II			74P6733			41C9173					
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273			ThinkPad Mini Dock			287810U			41C9174					
ThinkPad Carrying Case - Leather	73P3600			ThinkPad Dock II			287710U			Other ThinkPlus services at lenovo.com/thinkplus/warranty					
ThinkVision® L201p 20.1" Monitor (black)	9320HB1			Other options at lenovo.com/options											

See footnotes for important warranty information

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US models announced October 5, 2004 or November 15, 2005

(T42BO) October 2006

US models withdrawn effective May or October 2006

ThinkPad® T42 (2379) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ²	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Security chip	Workhorse (W) Global (G) Limited Avail Entry (E) warranty ¹² date
2379-DWU	Pentium® M	1.5	256MB	15.0" XGA	7500	40HS	Combo	* Intel 11b/g ³²	Modem	Yes	XP Pro No 3-yr May 2004
2379-5VU	Pentium M 725	1.6	512MB	14.1" XGA	9000	40HS	Combo	* Intel 11b/g	Modem	Yes	XP Pro No 3-yr Aug 2004
2379-DXU	Pentium M 735	1.7	512MB	15.0" SXGA+	9600	60U	Combo	* Intel 11b/g	Mod/Blue	Yes	XP Pro No 3-yr May 2004

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- The 2379 has a 3-year limited warranty (other ThinkPad T42 2378 TopSeller models have a 1-year limited warranty)

Positioning Processor	Perfect balance of performance and portability; two-spindle system										
L2 cache	Intel® Pentium® M Processor 1.5GHz or Intel Pentium M Processor 725 (1.6GHz) or 735 (1.7GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										
Memory	1.5GHz: 1MB; 1.6/1.7GHz: 2MB; All: on die (at processor speed) / ECC										
Diskette drive	None standard / use optional USB-based diskette drive										
Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Slim										
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay										
Disk	40GB⁸ HS (5400 rpm) or 60GB Ultra HS (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™										
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology										
Graphics	Some: ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 9000 / AGP 4X / 64MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 9600 / AGP 4X / 64MB DDR1 (DDR-SDRAM)										
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M / DDC2B										
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm; 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm										
Weight ²	with optical drive and battery: 14.1" XGA model: 4.9 lb (2.2kg); 15.0" XGA model: 5.7 lb (2.6kg); 15.0" SXGA+ model: 5.8 lb (2.7kg)										
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover										
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										
Battery - life ¹⁰	Up to 4.7 hr; <i>Optional 9-cell: up to 7.0 hr; 9-cell plus Ultrabay Slim battery: up to 9.0 hr</i>										
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])										
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door										
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										
Video out	S-video out port (TV out) / one 4-pin industry standard connector										
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										
CDC	One Communications Daughter Card (CDC) socket / customer accessible										
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)										
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE										
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										
Security	Power-on password / hard disk password / supervisor password / security keyhole										
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant										
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail										
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101								
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102								
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190								
USB Portable Diskette Drive	05K9276	ThinkPad Multiple Battery Charger II	22P9040								
USB Fingerprint Reader	73P4774	72W Slim AC/DC Combo Adapter	73P4485								
USB 2.0 Memory Key 1GB	40Y7421	11a/b/g Wireless Mini PCI Adapter II	73P4301								
USB 2.0 Super Multi-Burner Drive	40Y8638	Intel PRO/Wireless 2915ABG Mini PCI	41N2990								
CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288	Kensington® MicroSaver® Security Cable	73P2582								
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622	ThinkVision® E500 Projector	0038A05								
Second HDD Adapter for Ultrabay Slim	41U3148	Lenovo M500 Projector	0037A05								
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	ThinkVision C400 Wireless Projector	0039WA1								
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkVision L201p 20.1" Monitor (black)	9320HB1								
ThinkPad Carrying Case - Expander	73P3597	ThinkPad Port Replicator II	74P6733								
Preferred Pro USB Fingerprint Keyboard	73P4730	ThinkPad Mini Dock	287810U								
TrackPoint Cap Collection	73P2698	ThinkPad Dock II	287710U								
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options									
				SOFTWARE¹⁴							
				Windows XP Professional							
				- Microsoft® Windows® XP Professional ²⁰							
				↳ Disk-to-Disk Recovery (in hidden protected area)							
				Preloaded							
				• Access Program							
				• Access Connections™							
				• Rescue and Recovery™							
				• RecordNOW and Drive Letter Access powered by Sonic products (combo models)							
				• InterVideo WinDVD (combo models)							
				• Norton AntiVirus (OEM edition)							
				• PC-Doctor™							
				• ThinkPad Utilities							
				• Adobe® Reader							
				• Update Connector™ ¹⁵							
				Downloadable							
				• IBM Director Agent							
				• Software Delivery Assistant							
				• System Migration Assistant							
				• Client Security Software (for security chip)							
				License (CD not included)							
				- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client							
				ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage							
				Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network)							
				PC 2001-compliant							
				ACPI 1.0b and 2.0-compliant							
				CIM and DMI 2.0-compliant							
				PXE 2.0-compliant							
				ENERGY STAR®-compliant							
				ImageUltra™ Services available							
				International Warranty Service ¹⁷							
				24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)							
				ThinkPlus™. ²² 2-year LOR 9x5 NBD							
				41C9175							
				ThinkPlus 3-year LOR 9x5 NBD							
				41C9176							
				ThinkPlus 4-year LOR 9x5 NBD							
				41C9177							
				ThinkPlus 5-year LOR 9x5 NBD							
				41C9179							
				ThinkPlus 4-year P&L P/U Depot							
				41C9178							
				ThinkPlus 5-year P&L P/U Depot							
				41C9180							
				Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty							

See footnotes for important warranty information

US models announced May 11 or August 17, 2004

US models withdrawn effective August 2005 or October 2006

* Powered by Intel Centrino® mobile technology

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(T42B3) October 2006

ThinkPad® T42 (2379) - TopSeller (October 2004) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Security chip	Bat-tery life ¹⁰	Bat-tery cells	Limited war-ranty ¹²	Avail date
2379-R1U	Pentium® M 725	1.6	256MB	14.1" XGA	7500	40HS	Combo	* Intel 11b/g ³²	Modem	Finger	Yes	5.1 hr	6	3-yr	Oct 04
2379-R5U	Pentium M 745	1.8	256MB	14.1" SXGA+	7500	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	7.2 hr	9	3-yr	Oct 04
2379-R6U	Pentium M 725	1.6	512MB	15.0" XGA	7500	40HS	Combo	* Intel 11b/g	Modem	No	Yes	5.0 hr	6	3-yr	Oct 04
2379-R8U	Pentium M 745	1.8	512MB	15.0" XGA	7500	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	5.0 hr	6	3-yr	Oct 04
2379-R9U	Pentium M 745	1.8	512MB	15.0" SXGA+	9600	60U	Combo	* Intel 11b/g	Mod/Blue	Finger	Yes	5.9 hr	9	3-yr	Oct 04
2379-RFU	Pentium M 745	1.8	512MB	14.1" XGA	9000	60HS	Combo	* 11a/b/g II ³²	Modem	Finger	Yes	4.9 hr	6	3-yr	Sep05
2379-RHU	Pentium M 745	1.8	512MB	14.1" XGA	9600	60HS	Combo	* Intel 11a/b/g ³²	Modem	Finger	Yes	4.3 hr	6	3-yr	Nov05

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- The 2379 has a 3-year limited warranty (other ThinkPad T42 2378 TopSeller models have a 1-year limited warranty)

Positioning Processor	Perfect balance of performance and portability; two-spindle system Intel® Pentium® M Processor 725 (1.6GHz) or 745 (1.8GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										SOFTWARE¹⁴				
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional				
Memory	256MB or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)				
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded				
Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										• Rescue and Recovery™				
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay										• Access Program				
Disk	40GB ⁸ HS (5400 rpm), 60GB HS (5400 rpm), or 60GB Ultra HS (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System (shock protection)										• Access Connections™				
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology										• Norton AntiVirus (with 90 days of virus definitions)				
Graphics	Some: ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 9000 / AGP 4X / 32MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 9600 / AGP 4X / 64MB DDR1 (DDR-SDRAM)										• PC-Doctor™				
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• ThinkPad Utilities				
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• Adobe® Reader				
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										• Update Connector™ ¹⁵				
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• RecordNOW and Drive Letter Access powered by Sonic products (combo models)				
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm; 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm with optical drive and battery: 14.1" XGA models: 4.9 lb (2.2kg); 14.1" SXGA+: 5.4 lb (2.4kg); 15.0" XGA: 5.7 lb (2.6kg); 15.0" SXGA+: 6.2 lb (2.8kg)										• InterVideo WinDVD (combo models)				
Weight ²	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover										• Fingerprint Software (fingerprint models)				
Case material	Lithium Ion 6- or 9-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										• Client Security Software (for security chip)				
Battery - type	6-cell: up to 4.9 hr; 9-cell: up to 7.0 hr; 9-cell plus Ultrabay Slim battery: up to 9.0 hr										Downloadable				
Battery - life ¹⁰	6-cell: up to 4.9 hr; 9-cell: up to 7.0 hr; 9-cell plus Ultrabay Slim battery: up to 9.0 hr										• IBM Director Agent				
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth], [fingerprint]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])										• Software Delivery Assistant				
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door										• System Migration Assistant				
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
Video out	S-video out port (TV out) / one 4-pin industry standard connector										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage				
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										Universal 72 watt AC adapter				
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										Asset ID™ ³⁴ (system-specific info in chip accessed over network)				
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										PC 2001-compliant				
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset										ACPI 1.0b and 2.0-compliant				
11a/b/g II ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip										CIM and DMI 2.0-compliant				
CDC	One Communications Daughter Card (CDC) socket / customer accessible										PXE 2.1-compliant				
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										ENERGY STAR®-compliant				
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)										International Warranty Service ¹⁷				
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)				
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										ThinkPlus™ ²² 2-year LOR 9x5 NBD				
Security	Power-on password / hard disk password / supervisor password / security keyhole										41C9175				
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant										ThinkPlus 3-year LOR 9x5 NBD				
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip / can replace multiple passwords / UPEK® TCD41B controller with TCS3B sensor										41C9176				
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail										ThinkPlus 4-year LOR 9x5 NBD				
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830			ThinkPad T40/R50 Li-Ion Battery 6-cell			92P1101			41C9177					
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832			ThinkPad T40/R50 Li-Ion Battery 9-cell			92P1102			41C9178					
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834			Ultrabay Slim Li-Polymer Battery 3-cell			08K8190			41C9179					
USB 2.0 Memory Key 1GB	40Y7421			72W Slim AC/DC Combo Adapter			73P4485			41C9177					
USB 2.0 Super Multi-Burner Drive	40Y8638			11a/b/g Wireless Mini PCI Adapter II			73P4301			41C9179					
CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288			ThinkPad Port Replicator II			74P6733			41C9179					
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622			ThinkPad Mini Dock			287810U			41C9178					
Second HDD Adapter for Ultrabay Slim	62P4554			ThinkPad Dock II			287710U			41C9178					
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716			ThinkPad Carrying Case - Leather			73P3600			41C9180					
ThinkPad Convertible Monitor Stand	40Y7620			Other options at lenovo.com/options											

See footnotes for important warranty information * Powered by Intel Centrino™ mobile technology
US models announced October 5, 2004, September 13, 2005, or November 15, 2005
US models withdrawn effective May 2006

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(T42B30) April 2006

ThinkPad® T42 (2373) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Security chip	Preload	Limited warranty ¹²	Avail date
2373-6VU	Pentium® M 735	1.7	512MB	14.1" XGA	7500	40HS	Combo	* Intel 11b/g ³²	Modem	Yes	XP Pro	EasyServ	May 2004
2373-3VU	Pentium M 735	1.7	512MB	14.1" SXGA+	9600	80HS	DVD-RW	* Intel 11b/g	Modem	Yes	XP Pro	EasyServ	May 2004
2373-3XU	Pentium M 735	1.7	512MB	15.0" SXGA+	9600	40HS	Combo	* Intel 11b/g	Modem	Yes	XP Pro	EasyServ	May 2004

• **The 2373 has an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models of the ThinkPad notebook are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and/or teachers.

This model for education is for sale direct from Lenovo or through an Authorized Education Reseller.

The model or models for education are not available for resale to any other organization or individual.

Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i>												
L2 cache	Intel® Pentium® M Processor 735 (1.7GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus												
Memory	2MB / on die (at processor speed) / ECC 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available												
Diskette drive	None standard / use optional USB-based diskette drive												
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Slim												
DVD-RW	<i>Some:</i> CD-RW/DVD-RW Multi-Burner / removable from Ultrabay Slim												
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay												
Disk	40GB⁸ HS (5400 rpm) or 80GB HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™												
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology												
Graphics	<i>Some:</i> ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM) <i>Some:</i> ATI MOBILITY RADEON 9600 / AGP 4X / 64MB DDR1 (DDR-SDRAM)												
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M / DDC2B												
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	<i>14.1" models (WxDxH):</i> 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm; <i>15.0" models (WxDxH):</i> 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm with optical drive and battery: <i>14.1" XGA model:</i> 4.9 lb (2.2kg); <i>14.1" SXGA+ model:</i> 5.0 lb (2.3kg); <i>15.0" model:</i> 5.8 lb (2.7 kg)												
Weight ²													
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover												
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim												
Battery - life ¹⁰	Up to 4.5 hr; <i>Optional 9-cell:</i> up to 7.0 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 9.0 hr												
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])												
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door												
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)												
Video out	S-video out port (TV out) / one 4-pin industry standard connector												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Bluetooth™	None												
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant												
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail												
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus™ ²² 2-year LOR 9x5 NBD	41C9175								
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	ThinkPlus 3-year LOR 9x5 NBD	41C9176								
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ThinkPlus 4-year LOR 9x5 NBD	41C9177								
USB Portable Diskette Drive	05K9276	72W Slim AC/DC Combo Adapter	73P4485	ThinkPlus 5-year LOR 9x5 NBD	41C9179								
USB 2.0 Memory Key 1GB	40Y7421	11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 4-year P&L P/U Depot	41C9178								
USB 2.0 Super Multi-Burner Drive	40Y8638	Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ThinkPlus 5-year P&L P/U Depot	41C9180								
CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288	Kensington® MicroSaver® Security Cable	73P2582	Post-warranty annual maintenance agreements at									
Super Multi-Burner Ultrabay Slim Drive (curved)	40Y8622	ThinkPad Port Replicator II	74P6733	lenovo.com/thinkplus/warranty									
Second HDD Adapter for Ultrabay Slim	62P4554	ThinkPad Mini Dock	287810U										
80GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	ThinkPad Dock II	287710U										
60GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	TrackPoint Cap Collection	73P2698										
ThinkPad Carrying Case - Backpack	73P3599	ThinkVision® L201p 20.1" Monitor (black)	9320HB1										
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options											

See footnotes for important warranty information
US models announced May 11, 2004
US models withdrawn effective May 2006

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ThinkPad® T42 (2374) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Security chip	Preload	Limited warranty ¹²	Avail date
2374-6VU	Pentium® M 735	1.7	512MB	14.1" XGA	7500	40HS	Combo	* Intel 11b/g ³²	Modem	Yes	XP Pro	Onsite	May 2004
2374-3VU	Pentium M 735	1.7	512MB	14.1" SXGA+	9600	80HS	DVD-RW	* Intel 11b/g	Modem	Yes	XP Pro	Onsite	May 2004
2374-3XU	Pentium M 735	1.7	512MB	15.0" SXGA+	9600	40HS	Combo	* Intel 11b/g	Modem	Yes	XP Pro	Onsite	May 2004

• **The 2374 has a limited onsite service²⁴ 3-year limited warranty**

These educational models of the ThinkPad notebook are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and/or teachers.

Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i>										SOFTWARE¹⁴		
L2 cache	Intel® Pentium® M Processor 735 (1.7GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										Windows XP Professional		
Memory	2MB / on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰		
Diskette drive	None standard / use optional USB-based diskette drive										↳ Disk-to-Disk Recovery (in hidden protected area)		
Combo	<i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay™ Slim</i>										Preloaded		
DVD-RW	<i>Some: CD-RW/DVD-RW Multi-Burner / removable from Ultrabay Slim</i>										• Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™		
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay										• Access Program		
Disk	40GB⁹ HS (5400 rpm) or 80GB HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™										• Access Connections™		
Display	<i>Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</i> <i>Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits</i> <i>Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology</i>										• Rescue and Recovery™		
Graphics	<i>Some: ATI® MOBILITY™ RADEON® 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM)</i> <i>Some: ATI MOBILITY RADEON 9600 / AGP 4X / 64MB DDR1 (DDR-SDRAM)</i>										• RecordNOW and Drive Letter		
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M / DDC2B										• Access powered by Sonic products (combo, DVD-RW models)		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• InterVideo WinDVD (combo, DVD-RW models)		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• InterVideo WinDVD Creator (DVD-RW models)		
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										• Norton AntiVirus (OEM edition)		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• PC-Doctor™		
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm; 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm										• ThinkPad Utilities		
Weight ²	with optical drive and battery: 14.1 XGA model: 4.9 lb (2.2kg); 14.1" SXGA+ model: 5.0 lb (2.3kg); 15.0" model: 5.8 lb (2.7 kg)										• Adobe® Reader		
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover										• Update Connector™ ¹⁵		
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										Downloadable		
Battery - life ¹⁰	Up to 4.5 hr; <i>Optional 9-cell: up to 7.0 hr; 9-cell plus Ultrabay Slim battery: up to 9.0 hr</i>										• IBM Director Agent		
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])										• Software Delivery Assistant		
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door										• System Migration Assistant		
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										• Client Security Software (for security chip)		
Video out	S-video out port (TV out) / one 4-pin industry standard connector										License (CD not included)		
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage		
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										Universal 72 watt AC adapter		
CDC	One Communications Daughter Card (CDC) socket / customer accessible										Asset ID™ ³⁴ (system-specific info in chip accessed over network)		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										PC 2001-compliant		
Bluetooth™	None										ACPI 1.0b and 2.0-compliant		
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE										CIM and DMI 2.0-compliant		
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										PXE 2.0-compliant		
Security	Power-on password / hard disk password / supervisor password / security keyhole										ENERGY STAR®-compliant		
Security chip	Embedded Security Subsystem 2.0³⁵ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant										ImageUltra™ Services available		
Limited warranty ¹²	3-year/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time										International Warranty Service ¹⁷		
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)									
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty									
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190										
USB Portable Diskette Drive	05K9276	72W Slim AC/DC Combo Adapter	73P4485										
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	11a/b/g Wireless Mini PCI Adapter II	73P4301										
USB 2.0 Memory Key 1GB	40Y7421	Intel PRO/Wireless 2915ABG Mini PCI	41N2990										
CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288	Enh Perf Wireless Keyboard and Mouse	73P4067										
Super Multi-Burner Ultrabay Slim Drv (curv)	40Y8622	ThinkPad Port Replicator II	74P6733										
Second HDD Adapter for Ultrabay Slim	62P4554	ThinkPad Mini Dock	287810U										
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Dock II	287710U										
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	TrackPoint Cap Collection	73P2698										
ThinkPad Premiere Leather Carrying Case	10K0209	ThinkVision® L201p 20.1" Monitor (black)	9320HB1										
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options											

See footnotes for important warranty information
US models announced May 11, 2004
US models withdrawn effective May 2006

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ThinkPad® T42p (14.1" display) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics	Disk controller	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Security chip	Battery cells	Workhorse (W) or Global (G) Avail Preload or Entry (E)	date
2373-GVU	Pentium® M 745	1.8	512M	14.1" SXGA+	FireGL 60U	60U	Combo	11a/b/g Wi-Fi ³²	Mod/Blue	Yes	9	XP Pro No	May 2004
2373-GUU	Pentium M 745	1.8	1GB	14.1" SXGA+	FireGL 60U	60U	DVD-RW	11a/b/g Wi-Fi	Mod/Blue	Yes	9	XP Pro No	May 2004
2373-GTU	Pentium M 745	1.8	512M	14.1" SXGA+	FireGL 60U	60U	DVD-RW	* Intel 11b Wi-Fi ³²	Mod/Blue	Yes	9	XP Pro No	May 2004
2373-GRU	Pentium M 745	1.8	512M	14.1" SXGA+	FireGL 60U	60U	DVD-RW	* Intel 11b/g ³²	Mod/Blue	Yes	9	XP Pro No	May 2004
2373-KTU	Pentium M 755	2.0	1GB	14.1" SXGA+	FireGL 60U	60U	DVD-RW	11a/b/g Wi-Fi	Mod/Blue	Yes	9	XP Pro No	May 2004
2373-KUU	Pentium M 755	2.0	512M	14.1" SXGA+	FireGL 60U	60U	Combo	* Intel 11b/g	Mod/Blue	Yes	9	XP Pro No	May 2004
Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i>												
L2 cache	Intel® Pentium® M Processor 745 (1.8GHz) or 755 (2.0GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus												
Memory	2MB / on die (at processor speed) / ECC 512MB or 1GB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available												
Diskette drive	None standard / use optional USB-based diskette drive												
Combo DVD-RW	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Slim												
Ultrabay Slim Disk	<i>Some:</i> CD-RW/DVD-RW Multi-Burner / removable from Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay 60GB⁸ Ultra HS (7200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™												
Display	14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits												
Graphics	ATI® MOBILITY™ FireGL™ T2 / AGP 4X / 128MB DDR1 / OpenGL® support												
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M / DDC2B												
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2" ; 311mm x 255mm x 26.6-31.4mm												
Weight ²	with optical drive and battery: 5.4 lb (2.4kg)												
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover												
Battery - type	Lithium Ion 9-cell / intelligent / supports unique 2nd battery in Ultrabay Slim												
Battery - life ¹⁰	9-cell models: up to 6.4 hr; 9-cell plus Ultrabay Slim battery: 8.4 hr												
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])												
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door												
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)												
Video out	S-video out port (TV out) / one 4-pin industry standard connector												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Intel 11b Wi-Fi ³²	<i>Some:</i> 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100 Network Connection 802.11b, Intel 82531 chipset												
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset												
11a/b/g Wi-Fi ³²	<i>Some:</i> 11a/b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5001X+ chipset												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Bluetooth™	Bluetooth wireless technology / in CDC (with modem)												
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant												
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail												
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101										
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102										
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190										
USB Portable Diskette Drive	05K9276	ThinkPad Multiple Battery Charger II	22P9040										
USB Fingerprint Reader	73P4774	ThinkPad 72W AC Adapter	02K6699										
USB Gemplus GemPC Smart Card Reader	41N3040	72W Slim AC/DC Combo Adapter	73P4485										
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	11a/b/g Wireless Mini PCI Adapter II	73P4301										
USB 2.0 Memory Key 1GB	40Y7421	Intel PRO/Wireless 2915ABG Mini PCI	41N2990										
CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288	SonyEricsson® GC83 EDGE PC Card	26K3393										
Super Multi-Burner Ultrabay Slim (curve)	40Y8622	Lenovo M500 Projector	0037A05										
Second HDD Adapter for Ultrabay Slim	62P4554	ThinkVision® C400 Wireless Projector	0039WA1										
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkVision L201p 20.1" Monitor (black)	9320HB1										
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Port Replicator II	74P6733										
ThinkPad Carrying Case - Leather	73P3600	ThinkPad Mini Dock	287810U										
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkPad Dock II	287710U										
USB Travel Keyboard with UltraNav	31P9490	ThinkPad Monitor Stand	22P5265										
Preferred Pro USB Fingerprint Keyboard	73P4730	TrackPoint Cap Collection	73P2698										
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options											
											SOFTWARE¹⁴		
											Windows XP Professional		
											- Microsoft® Windows® XP Professional ²⁰		
											↔ Disk-to-Disk Recovery (in hidden protected area)		
											Preloaded		
											• Access Program		
											• Access Connections™		
											• Rescue and Recovery™		
											• RecordNOW and Drive Letter Access powered by Sonic products (combo models)		
											• InterVideo WinDVD (combo models)		
											• Norton AntiVirus (OEM edition)		
											• PC-Doctor™		
											• ThinkPad Utilities		
											• Adobe® Reader		
											• Update Connector™ ¹⁵		
											Downloadable		
											• IBM Director Agent		
											• Software Delivery Assistant		
											• System Migration Assistant		
											• Client Security Software (for security chip)		
											License (CD not included)		
											- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
											ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage		
											Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network)		
											PC 2001-compliant		
											ACPI 1.0b and 2.0-compliant		
											CIM and DMI 2.0-compliant		
											PXE 2.0-compliant		
											ENERGY STAR®-compliant		
											ImageUltra™ Services available		
											International Warranty Service ¹⁷		
											24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
											The Ultrabay Slim supports:		
											• standard or optional CD-RW/DVD combo drive or DVD-RW drive		
											• optional DVD		
											• optional second battery		
											• optional HDD adapter (for 2nd disk)		
											• optional travel bezel		
											ThinkPlus™ ²² 2-year LOR 9x5 NBD 41C9175		
											ThinkPlus 3-year LOR 9x5 NBD 41C9176		
											ThinkPlus 4-year LOR 9x5 NBD 41C9177		
											ThinkPlus 5-year LOR 9x5 NBD 41C9179		
											ThinkPlus 4-year P&L P/U Depot 41C9178		
											ThinkPlus 5-year P&L P/U Depot 41C9180		
											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information
US models announced May 11, 2004
US models withdrawn effective May 2006

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ThinkPad® T42p - October 2004 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Security chip	Battery life ¹⁰	Workhorse (W) or Global (G) Entry (E)	Availability date
2373-P1U	Pentium® M 765	2.1	1GB	14.1" SXGA+	FireGL	60U	DVD-RW	11a/b/g II ³²	Mod/Blue	Finger	Yes	5.8 hr		Oct 2004
2373-P2U	Pentium M 765	2.1	1GB	14.1" SXGA+	FireGL	60U	Combo	*Intel 11b/g ³²	Mod/Blue	Finger	Yes	6.0 hr		Oct 2004
2373-P3U	Pentium M 765	2.1	1GB	14.1" SXGA+	FireGL	60U	DVD-RW	*Intel 11a/b/g ³²	Mod/Blue	Finger	Yes	5.9 hr		Jan 2005
2373-Q1U	Pentium M 765	2.1	1GB	15.0" UXGA	FireGL	60U	DVD-RW	11a/b/g II	Mod/Blue	Finger	Yes	5.3 hr		Oct 2004
2373-Q2U	Pentium M 765	2.1	1GB	15.0" UXGA	FireGL	60U	Combo	*Intel 11b/g	Mod/Blue	Finger	Yes	5.4 hr	G	Oct 2004
2373-Q4U	Pentium M 765	2.1	1GB	15.0" UXGA	FireGL	60U	DVD-RW	*Intel 11a/b/g	Mod/Blue	Finger	Yes	5.3 hr		Jan 2005
Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i> Intel® Pentium® M Processor 765 (2.1GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										SOFTWARE¹⁴			
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional			
Memory	1GB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ✦ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
Combo DVD-RW	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Slim <i>Some:</i> CD-RW/DVD-RW Multi-Burner / writes to CD-R, CD-RW, DVD-RAM, DVD-R, DVD-RW / reads many formats / removable from Ultrabay Slim										• Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus (with 90 days of virus definitions) • PC-Doctor™			
Ultrabay Slim Disk	One modular bay for interchangeable devices (right side) / 9.5mm high bay 60GB⁸ Ultra HS (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)										• ThinkPad Utilities • Adobe® Reader • Update Connector™ ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD-RW) • InterVideo WinDVD (combo, DVD-RW) • InterVideo WinDVD Creator (DVD-RW) • Fingerprint Software • Client Security Software (for security chip)			
Display	<i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) UXGA (1600x1200) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology										Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant			
Graphics	ATI® MOBILITY™ FireGL™ T2 / AGP 4X / 128MB DDR1 / OpenGL® support										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M / DDC2B													
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm with optical drive and battery: 14.1" models: 5.4 lb (2.4kg); 15" models: 6.2 lb (2.8kg)													
Weight ²														
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover													
Battery - type	Lithium Ion 9-cell / intelligent / supports unique 2nd battery in Ultrabay Slim													
Battery - life ¹⁰	9-cell: up to 6.0 hr; 9-cell plus Ultrabay Slim battery: up to 8.5 hr													
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, Bluetooth, fingerprint) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])													
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door													
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)													
Video out	S-video out port (TV out) / one 4-pin industry standard connector													
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage			
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset													
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset													
11a/b/g II ³²	<i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip													
CDC	One Communications Daughter Card (CDC) socket / customer accessible										Universal 72 watt AC adapter			
Modem	56K ⁶ V.90 (V.92-designed ²⁵) modem in CDC / Conexant® chipset										Asset ID™ ³⁴ (system-specific info in chip accessed over network)			
Bluetooth™	Bluetooth wireless technology / in CDC (with modem)										PC 2001-compliant			
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE										ACPI 1.0b and 2.0-compliant			
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)			
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant													
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / integrated with security chip / can replace multiple passwords / UPEK® TCD41B controller with TCS3B sensor													
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades ²² avail										ThinkPlus™ ²² 2-year LOR 9x5 NBD 41C9175			
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101											
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102											
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190											
USB Portable Diskette Drive	05K9276	ThinkPad 72W AC Adapter	02K6699											
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	72W Slim AC/DC Combo Adapter	73P4485											
USB 2.0 Portable 80GB Hard Disk	40Y8726	11a/b/g Wireless Mini PCI Adapter II	73P4301											
USB 2.0 Memory Key 1GB	40Y7421	Intel PRO/Wireless 2915ABG Mini PCI	41N2990											
CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288	Kensington® MicroSaver® Security Cable	73P2582											
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622	Gemplus GemPC Smart Card Reader	41N3004											
Second HDD Adapter for Ultrabay Slim	62P4554	Lenovo M500 Projector	0037A05											
40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816	ThinkPad Port Replicator II	74P6733											
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Mini Dock	287810U											
SonyEricsson® GC83 EDGE PC Card	26K3393	ThinkPad Dock II	287710U											
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options												

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced October 20, 2004 or January 11, 2005
US models withdrawn effective May 2006

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(T42PO) April 2006

ThinkPad® T42p (2378 and 2379) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁵	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Security chip	Limited warranty ¹²	Avail date
2378-DYU	Pentium® M 745	1.8	512MB	15.0" UXGA	FireGL	80GB	DVD-RW	11a/b/g Wi-Fi ³²	Mod/Blue		Yes	XP Pro 1-year	May 2004
2379-RKU	Pentium M 755	2.0	1GB	15.0" UXGA	FireGL	60GB	DVD-RW	Intel 11a/b/g ³²	Mod/Blue	Finger	Yes	XP Pro 3-year	Nov 2005
<ul style="list-style-type: none"> • These small and medium business (SMB) models are part of the US TopSeller™ Program • The 2378 has a 1-year limited warranty; the 2379 has a 3-year limited warranty 													
Positioning Processor	Perfect balance of performance and portability; two-spindle system Intel® Pentium® M Processor 745 (1.8GHz) or 755 (2.0GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										SOFTWARE¹⁴		
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional		
Memory	512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ ↔ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive DVD-RW	None standard / use optional USB-based diskette drive CD-RW/DVD-RW Multi-Burner / writes to CD-R, CD-RW, DVD-RAM, DVD-R, DVD-RW / reads CD-ROM, CD-R, CD-RW, CD-Audio, DVD-ROM, DVD-R, DVD+R, DVD+RW, DVD-RW, DVD-Video, DVD-RAM / same as optional ThinkPad Multi-Burner Ultrabay Slim Drive Option / removable from Ultrabay™ Slim										Preloaded		
Ultrabay Slim Disk	One modular bay for interchangeable devices (right side) / 9.5mm high bay 60GB⁸ (7200 rpm) or 80GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)										<ul style="list-style-type: none"> • Access Program • Access Connections™ • Rescue and Recovery™ • RecordNOW and Drive Letter Access powered by Sonic products (DVD-RW) • InterVideo WinDVD (DVD-RW) • InterVideo WinDVD Creator (DVD-RW) • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • Update Connector™.15 		
Display	15.0" (381.0mm) UXGA (1600x1200) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Graphics Graphics external	ATI® MOBILITY™ FireGL™ T2 / AGP 4X / 128MB DDR1 / OpenGL® support External monitor support via analog DB-15 connector / up to 2048x1536 at 75Hz / DDC2B										Downloadable		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Dimensions ³	15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Weight ²	with optical drive and battery: 5.9 lb (2.7kg)										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Battery - life ¹⁰	Up to 3.5 hr; <i>Optional 9-cell</i> : up to 5.7 hr; <i>9-cell plus Ultrabay Slim battery</i> : up to 7.7 hr										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Video out	S-video out port (TV out) / one 4-pin industry standard connector										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
11a/b/g Wi-Fi ³²	<i>Some:</i> 11a/b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5001X+ chipset										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
CDC	One Communications Daughter Card (CDC) socket / customer accessible										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Bluetooth™	Bluetooth wireless technology / in CDC (with modem)										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Security	Power-on password / hard disk password / supervisor password / security keyhole										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
Limited warranty ¹²	<i>Some:</i> 1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail <i>Some:</i> 3-year - EasyServ onsite pickup and delivery / service upgrades avail										<ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) 		
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830										ThinkPad T40/R50 Li-Ion Battery 6-cell 92P1101		
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832										ThinkPad T40/R50 Li-Ion Battery 9-cell 92P1102		
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834										Ultrabay Slim Li-Polymer Battery 3-cell 08K8190		
USB Portable Diskette Drive	05K9276										ThinkPad Multiple Battery Charger II 22P9040		
USB Serial Parallel Adapter	22P5298										72W Slim AC/DC Combo Adapter 73P4485		
USB Fingerprint Reader	73P4774										11a/b/g Wireless Mini PCI Adapter II 73P4301		
USB 2.0 Memory Key 1GB	40Y7421										Intel PRO/Wireless 2915ABG Mini PCI 41N2990		
USB 2.0 Super Multi-Burner Drive	40Y8638										Kensington® MicroSaver® Security Cable 73P2582		
CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288										Lenovo M500 Projector 0037A05		
ThinkPad DVD-ROM Ultrabay Slim Drive	73P3270										ThinkVision® E500 Projector 0038A05		
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622										Lenovo C500 Projector 0039A05		
Second HDD Adapter for Ultrabay Slim	41U3148										ThinkVision C400 Wireless Projector 0039WA1		
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273										ThinkPad Port Replicator II 74P6733		
Enh Perf Wireless Keyboard and Mouse	73P4067										ThinkPad Mini Dock 287810U		
USB Keyboard with UltraNav	31P8950										ThinkPad Dock II 287710U		
Preferred Pro USB Fingerprint Keyboard	73P4730										ThinkPad Monitor Stand 2001 22P5265		
ThinkPad Convertible Monitor Stand	40Y7620										Other options at lenovo.com/options		
										2378: ThinkPlus™.22 1yr LOR 9x5 NBD 41C9166			
										2378: ThinkPlus 3-yr LOR 9x5 NBD 41C9168			
										2378: ThinkPlus 5-yr LOR 9x5 NBD 41C9173			
										2378: ThinkPlus 3-yr P&L P/U Depot 41C9170			
										2378: ThinkPlus 5-yr P&L P/U Depot 41C9174			
										2379: ThinkPlus 2-yr LOR 9x5 NBD 41C9175			
										2379: ThinkPlus 3-yr LOR 9x5 NBD 41C9176			
										2379: ThinkPlus 5-yr LOR 9x5 NBD 41C9179			
										2379: ThinkPlus 5-yr P&L P/U Depot 41C9180			
										Other ThinkPlus services at lenovo.com/thinkplus/warranty/			

See footnotes for important warranty information

* Powered by Intel Centrino™ mobile technology

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US models announced May 11, 2004 or November 15, 2005

(T42PB) October 2006

US models withdrawn effective May or October 2006

ThinkPad® T42p (2379) - Express - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Security chip	Workhorse (W) Global (G) Limited warranty ¹²	Avail date
2379-DYU	Pentium® M	745	1.8	512MB	15.0" UXGA	FireGL 80HS	DVD-RW	11a/b/g Wi-Fi ³²	Mod/Blue	Yes	XP Pro No	3 year May 2004
<ul style="list-style-type: none"> • These small and medium business (SMB) models are part of the US Think Express Program • The 2379 has a 3 year limited warranty (other ThinkPad T42p 2378 Express models have a 1 year limited warranty) 												
Positioning Processor	Perfect balance of performance and portability; two-spindle system Intel® Pentium® M Processor 745 (1.8GHz) with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus											
L2 cache	2MB / on die (at processor speed) / ECC											
Memory	512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available											
Diskette drive	None standard / use optional USB-based diskette drive											
DVD-RW	CD-RW/DVD-RW Multi-Burner / writes to CD-R, CD-RW, DVD-RAM, DVD-R, DVD-RW / reads CD-ROM, CD-R, CD-RW, CD-Audio, DVD-ROM, DVD-R, DVD+R, DVD+RW, DVD-RW, DVD-Video, DVD-RAM / same as optional ThinkPad Multi-Burner Ultrabay Slim Drive Option / removably from Ultrabay™ Slim											
Ultrabay Slim Disk	One modular bay for interchangeable devices (right side) / 9.5mm high bay 80GB⁸ HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System (shock protection)											
Display	15.0" (381.0mm) UXGA (1600x1200) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology											
Graphics	ATI® MOBILITY™ FireGL™ T2 / AGP 4X / 128MB DDR1 / OpenGL® support											
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536 at 75Hz / DDC2B											
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass /											
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm											
Weight ²	with optical drive and battery: 5.9 lb (2.7kg)											
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover											
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim											
Battery - life ¹⁰	Up to 3.5 hr; <i>Optional 9-cell:</i> up to 5.7 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 7.7 hr											
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])											
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door											
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)											
Video out	S-video out port (TV out) / one 4-pin industry standard connector											
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											
11a/b/g Wi-Fi ³²	11a/b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5001X+ chipset											
CDC	One Communications Daughter Card (CDC) socket / customer accessible											
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset											
Bluetooth™	Bluetooth wireless technology / in CDC (with modem)											
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE											
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)											
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant											
Limited warranty ¹²	3 years/1 yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail											
128MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad T40 Li-Ion Battery 6-cell	08K8214									
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	T40 High Capacity Li-Ion Battery 9-cell	08K8197									
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190									
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad Multiple Battery Charger II	22P9040									
USB Portable Diskette Drive	05K9276	ThinkPad 72W AC Adapter	02K6699									
USB Serial Parallel Adapter	22P5298	ThinkPad 72W AC/DC Combo Adapter	22P9010									
USB 2.0 Combo Drive	73P4515	11a/b/g Wireless CardBus Adapter	31P9101									
USB 2.0 Portable Multi-Burner Drive	22P9163	11a/b/g Wireless Mini PCI Adptr II	73P4301									
USB 2.0 Memory Key 512MB	22P9230	SonyEricsson® GC83 EDGE PC Card	26K3393									
CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288	Intel PRO/Wireless 2200BG Mini PCI	73P2801									
ThinkPad DVD-ROM Ultrabay Slim Drive	73P3270	Kensington® MicroSaver® Security Cable	73P2582									
Multi-Burner Plus Ultrabay Slim Drive	73P3342	M400 Projector	0037A04									
Second HDD Adapter for Ultrabay Slim	62P4554	E400 Projector	0038A04									
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	C400 Projector	0039A04									
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	GemPC400 Smart Card Reader/Writer	31P8901									
ThinkPad Carrying Case - Backpack	73P3599	ThinkPad Port Replicator II	74P6733									
ThinkPad Carrying Case - Leather	73P3600	ThinkPad Mini Dock	287810U									
ThinkPad Carrying Case - Organizer	73P3598	ThinkPad Dock II	287710U									
4GB Microdrive™ with PC Card	09N4280	ThinkPad Monitor Stand 2001	22P5265									
USB Keyboard with UltraNav	31P8950	TrackPoint Cap Collection	73P2698									
USB Travel Keyboard with UltraNav	31P9490	Other options at lenovo.com/options										
		SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ ⇨ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Access IBM • Access Connections • Rescue and Recovery™ • RecordNOW and Drive Letter Access powered by Sonic products (DVD-RW) • InterVideo WinDVD (DVD-RW) • InterVideo WinDVD Creator (DVD-RW) • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Update Connector™.15 Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client										
		ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage Universal 72 watt AC adapter Asset ID™.34 (system-specific info in chip accessed over network) PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.0-compliant ENERGY STAR®-compliant ImageUltra™ Services available International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378) ServicePac®.22 2yr IOR 9x5 NBD 30L9190 ServicePac 3yr IOR 9x5 NBD 30L9197 ServicePac 4yr IOR 9x5 NBD 69P9198 ServicePac 5yr IOR 9x5 NBD 69P9200 ServicePac 4yr P&L P/U Depot 69P9199 ServicePac 5yr P&L P/U Depot 69P9201 Post-warranty annual maintenance agreements at ibm.com/services/its/us/source/maspspleu.pdf										

See footnotes for important warranty information
US model announced May 11, 2004
US model withdrawn effective August 2005

* Powered by Intel Centrino™ mobile technology

ThinkPad® T42p (2373) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁶	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Security chip	Preload	Limited warranty ¹²	Avail date
2373-7XU	Pentium® M 745	1.8	512MB	15.0" UXGA	FireGL	80HS	DVD-RW	*Intel 11b/g ³²	Modem	Yes	XP Pro	EasyServ	May 2004

• **The 2373 has an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models of the ThinkPad notebook are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and/or teachers.

Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i>																																																																												
L2 cache	Intel® Pentium® M Processor 745 (1.8GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus																																																																												
Memory	2MB / on die (at processor speed) / ECC 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available																																																																												
Diskette drive	None standard / use optional USB-based diskette drive																																																																												
DVD-RW	CD-RW/DVD-RW Multi-Burner / writes to CD-R, CD-RW, DVD-RAM, DVD-R, DVD-RW / reads CD-ROM, CD-R, CD-RW, CD-Audio, DVD-ROM, DVD-R, DVD+R, DVD+RW, DVD-RW, DVD-Video, DVD-RAM / removable from Ultrabay™ Slim																																																																												
Ultrabay Slim Disk	One modular bay for interchangeable devices (right side) / 9.5mm high bay 80GB⁸ HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™																																																																												
Display	15.0" (381.0mm) UXGA (1600x1200) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology																																																																												
Graphics	ATI® MOBILITY™ FireGL™ T2 / AGP 4X / 128MB DDR1 / OpenGL® support																																																																												
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M / DDC2B																																																																												
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)																																																																												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass																																																																												
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones																																																																												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions																																																																												
Dimensions ³	<i>15.0" models (WxDxH):</i> 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm																																																																												
Weight ²	with optical drive and battery: 5.9 lb (2.7kg)																																																																												
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover																																																																												
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim																																																																												
Battery - life ¹⁰	Up to 3.5 hr; <i>Optional 9-cell:</i> up to 5.7 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 7.7 hr																																																																												
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])																																																																												
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door																																																																												
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)																																																																												
Video out	S-video out port (TV out) / one 4-pin industry standard connector																																																																												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception																																																																												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable																																																																												
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset																																																																												
CDC	One Communications Daughter Card (CDC) socket / customer accessible																																																																												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset																																																																												
Bluetooth™	None																																																																												
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE																																																																												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)																																																																												
Security	Power-on password / hard disk password / supervisor password / security keyhole																																																																												
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant																																																																												
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail																																																																												
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	USB Portable Diskette Drive	05K9276	ThinkPad Multiple Battery Charger II	22P9040	USB Gemplus GemPC Smart Card Reader	41N3040	ThinkPad 72W AC Adapter	02K6699	USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	72W Slim AC/DC Combo Adapter	73P4485	USB 2.0 Memory Key 1GB	40Y7421	11a/b/g Wireless Mini PCI Adapter II	73P4301	Intel PRO/Wireless 2915ABG Mini PCI	41N2990	CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288	Intel PRO/Wireless 2915ABG Mini PCI	41N2990	Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622	SonyEricsson® GC83 EDGE PC Card	26K3393	Second HDD Adapter for Ultrabay Slim	62P4554	Kensington® MicroSaver® Security Cable	73P2582	40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816	Lenovo M500 Projector	0037A05	60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	ThinkVision® E500 Projector	0038A05	80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkVision L201p 20.1" Monitor (black)	9320HB1	ThinkPad Premiere Leather Carrying Case	10K0209	Gemplus GemPC Smart Card Reader	41N3004	ThinkPad Carrying Case - Backpack	73P3599	ThinkPad Port Replicator II	74P6733	ThinkPad Carrying Case - Organizer	73P3598	ThinkPad Mini Dock	287810U	Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkPad Dock II	287710U	TrackPoint Cap Collection	73P2698	ThinkPad Monitor Stand	22P5265	ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options	
												ThinkPlus™ ²² 2-year LOR 9x5 NBD 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)																																																																	
												ThinkPlus 3-year LOR 9x5 NBD 41C9175																																																																	
												ThinkPlus 4-year LOR 9x5 NBD 41C9176																																																																	
												ThinkPlus 5-year LOR 9x5 NBD 41C9179																																																																	
												ThinkPlus 4-year P&L P/U Depot 41C9178																																																																	
												ThinkPlus 5-year P&L P/U Depot 41C9180																																																																	
												Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty																																																																	

See footnotes for important warranty information
US model announced May 11, 2004
US model withdrawn effective May 2006

* Powered by Intel Centrino® mobile technology

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ThinkPad® T42p (2374) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Security chip	Preload	Limited warranty ¹²	Avail date
2374-7XU	Pentium® M 745	1.8	512MB	15.0" UXGA	FireGL	80HS	DVD-RW	*Intel 11b/g ³²	Modem	Yes	XP Pro	Onsite	May 2004

• This model has a limited onsite service²⁴ 3-year limited warranty

These educational models of the ThinkPad notebook are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and/or teachers.

This model for education is for sale direct from Lenovo or through an Authorized Education Reseller.
The model or models for education are not available for resale to any other organization or individual.

Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i> Intel® Pentium® M Processor 745 (1.8GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ ⇨ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™ • Access Program • Access Connections™ • Rescue and Recovery™ • RecordNOW and Drive Letter Access powered by Sonic products (DVD-RW models) • InterVideo WinDVD (DVD-RW) • InterVideo WinDVD Creator (DVD-RW models) • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • Update Connector™ ¹⁵ Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
L2 cache	2MB / on die (at processor speed) / ECC												
Memory	512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available												
Diskette drive	None standard / use optional USB-based diskette drive												
DVD-RW	CD-RW/DVD-RW Multi-Burner / writes to CD-R, CD-RW, DVD-RAM, DVD-R, DVD-RW / reads CD-ROM, CD-R, CD-RW, CD-Audio, DVD-ROM, DVD-R, DVD+R, DVD+RW, DVD-RW, DVD-Video, DVD-RAM / removable from Ultrabay™ Slim												
Ultrabay Slim Disk	One modular bay for interchangeable devices (right side) / 9.5mm high bay 80GB⁹ HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)												
Display	15.0" (381.0mm) UXGA (1600x1200) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology												
Graphics	ATI® MOBILITY™ FireGL™ T2 / AGP 4X / 128MB DDR1 / OpenGL® support												
Graphics external	External monitor support via analog DB-15 connector / up to 2048x1536x16.7M / DDC2B												
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm												
Weight ²	with optical drive and battery: 5.9 lb (2.7kg)												
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover												
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim												
Battery - life ¹⁰	Up to 3.5 hr; <i>Optional 9-cell:</i> up to 5.7 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 7.7 hr												
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PC14520A CardBus controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])												
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / integrated door												
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)												
Video out	S-video out port (TV out) / one 4-pin industry standard connector												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Bluetooth™	None												
Ethernet	Gigabit ethernet on systemboard / Intel 82540EP chipset (MAC/PHY) / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant												
Limited warranty ¹²	3-year/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time												
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	Universal 72 watt AC adapter									
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	Asset ID™ ³⁴ (system-specific info in chip accessed over network)									
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	PC 2001-compliant									
USB Portable Diskette Drive	05K9276	ThinkPad Multiple Battery Charger II	22P9040	ACPI 1.0b and 2.0-compliant									
USB Gemplus GemPC Smart Card Reader	41N3040	72W Slim AC/DC Combo Adapter	73P4485	CIM and DMI 2.0-compliant									
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	11a/b/g Wireless Mini PCI Adptr II	73P4301	PXE 2.0-compliant									
USB 2.0 Memory Key 1GB	40Y7421	Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ENERGY STAR®-compliant									
CD-RW/DVD Combo II Ultrabay Slim Drive	73P3288	Kensington® MicroSaver® Security Cable	73P2582	ImageUltra™ Services available									
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622	Lenovo M500 Projector	0037A05	International Warranty Service ¹⁷									
Second HDD Adapter for Ultrabay Slim	62P4554	ThinkVision® E500 Projector	0038A05	24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)									
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	ThinkVision C400 Wireless Projector	0039WA1										
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkVision L201p 20.1" Monitor (black)	9320HB1										
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Port Replicator II	74P6733										
ThinkPad Carrying Case - Leather	73P3600	ThinkPad Mini Dock	287810U										
Enhanced Performance USB Keyboard	73P2620	ThinkPad Dock II	287710U										
TrackPoint Cap Collection	73P2698	ThinkPad Monitor Stand	22P5265										
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options		Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty									

See footnotes for important warranty information
US model announced May 11, 2004
US model withdrawn effective May 2006

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ThinkPad® T43 (Entry) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Security chip	Workhorse (W) or Global (G) Avail or Entry (E) date
1871-11U	Pentium® M 730	1.60	256MB	14.1" XGA	GMA 900	40HS	DVD	* Intel 11b/g ³²	Modem	No	Yes	XP Pro Entry Feb 05
1871-12U	Pentium M 730	1.60	256MB	14.1" XGA	GMA 900	40HS	Combo	* Intel 11b/g	Modem	No	Yes	XP Pro Entry Feb 05
1871-13U	Pentium M 730	1.60	256MB	14.1" XGA	GMA 900	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	XP Home Entry Feb 05
1871-16U	Pentium M 730	1.60	256MB	14.1" XGA	GMA 900	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	XP Pro Entry Feb 05
1871-22U	Pentium M 730	1.60	256MB	15.0" XGA	GMA 900	40HS	Combo	* Intel 11b/g	Modem	No	Yes	XP Pro Entry Feb 05
1871-24U	Pentium M 730	1.60	256MB	15.0" XGA	GMA 900	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	XP Pro Entry Feb 05
Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i> Intel® Pentium® M Processor 730 (1.60GHz) with enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴	
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional models	
Memory	256MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)	
Diskette drive	None standard / use optional USB-based diskette drive										Windows XP Home models	
DVD	<i>Some:</i> DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim										- Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)	
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim											
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay											
Disk	40GB⁸ HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System™											
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										Preloaded (all)	
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										• Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Update Connector™.15 • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo, DVD models) • Fingerprint Software (fingerprint models) • Client Security Software (for security chip)	
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass /											
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm											
Weight ²	with optical drive and battery: 14.1" models: up to 5.1 lb (2.3kg); 15": up to 5.8 lb (2.6 kg)											
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover											
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim											
Battery - life ¹⁰	Up to 4.0 hr; <i>Optional 9-cell:</i> up to 5.9 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 7.7 hr											
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										Downloadable (all) • IBM Director Agent • Software Delivery Assistant • System Migration Assistant	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										License (CD not included)	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client	
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)											
Video out	S-video out port (TV out) / one 4-pin industry standard connector											
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip											
CDC	One Communications Daughter Card (CDC) socket / customer accessible											
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset											
Bluetooth™	None										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage	
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE											
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										Universal 72 watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²	
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant											
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip											
Limited warranty ¹² 3 years/1 yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail												
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101									
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102									
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190									
USB 2.0 Portable Multi-Burner Drive	22P9163	ThinkPad Multi-Battery Charger II	22P9040									
USB 2.0 Memory Key 512MB	22P9230	72W Slim AC/DC Combo Adapter	73P4485									
USB 2.0 Memory Key 1GB	40Y7421	11a/b/g Wireless Mini PCI Adapter II	73P4301									
USB 2.0 Portable 80GB Hard Disk	40Y8726	Intel PRO/Wireless 2915ABG Mini PCI	41N2990									
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	11a/b/g Wireless CardBus Adapter	31P9101									
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Port Replicator II	74P6733									
USB Portable Diskette Drive	05K9276	ThinkPad Mini Dock	287810U									
Second HDD Adapter for Ultrabay Slim	62P4554	ThinkPad Dock II	287710U									
Multi-Burner Plus Ultrabay Slim Drive	73P3342	ThinkPad Carrying Case - Backpack	73P3599									
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkPad Carrying Case - Leather	73P3600									
USB Travel Keyboard with UltraNav	31P9490	ThinkPad Carrying Case - Organizer	73P3598									
Optical 3-Button Travel Wheel Mouse	31P7410	ThinkVision® E500 Projector	0038A05									
Kensington® MicroSaver® Security Cable	73P2582	M400 Projector	0037A04									
SonyEricsson® GC83 EDGE PC Card	26K3393	TrackPoint Cap Collection	73P2698									
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	Other options at lenovo.com/options										

See footnotes for important warranty information
US models announced January 19, 2005
US models withdrawn effective January 2006

* Powered by Intel Centrino® mobile technology

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ThinkPad® T43 (Entry) - August 2005 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Security chip	Workhorse (W) or Global (G) Avail Preload or Entry (E) date
1871-31U	Pentium® M 740	1.73	256MB	14.1" XGA	GMA 900	40HS	DVD	* Intel 11b/g ³²	Modem	No	Yes	XP Pro Entry Aug 05
1871-32U	Pentium M 740	1.73	256MB	14.1" XGA	GMA 900	40HS	Combo	* Intel 11b/g	Modem	No	Yes	XP Pro E Gbl Aug 05
1871-33U	Pentium M 740	1.73	256MB	14.1" XGA	GMA 900	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	XP Home Entry Aug 05
1871-36U	Pentium M 740	1.73	256MB	14.1" XGA	GMA 900	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	XP Pro Entry Aug 05
1871-51U	Pentium M 740	1.73	256MB	15.0" XGA	GMA 900	40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	XP Pro Entry Aug 05
Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i> Intel® Pentium® M Processor 740 (1.73GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴	
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional models	
Memory	256MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)	
Diskette drive	None standard / use optional USB-based diskette drive										Windows XP Home models	
DVD	<i>Some:</i> DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim										- Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)	
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim											
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay											
Disk	40GB⁸ HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System™											
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										Preloaded (all)	
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										• Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo, DVD models) • Fingerprint Software (fingerprint models) • Client Security Software (for security chip)	
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										Downloadable (all)	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• IBM Director Agent • Software Delivery Assistant • System Migration Assistant	
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										License (CD not included)	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client	
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm											
Weight ²	with optical drive and battery: 14.1" models: up to 5.1 lb (2.3kg); 15": up to 5.8 lb (2.6 kg)											
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover											
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim											
Battery - life ¹⁰	Up to 4.0 hr; <i>Optional 9-cell:</i> up to 5.9 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 7.7 hr											
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])											
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door											
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)											
Video out	S-video out port (TV out) / one 4-pin industry standard connector											
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip											
CDC	One Communications Daughter Card (CDC) socket / customer accessible											
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset											
Bluetooth™	None										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage	
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE											
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										Universal 72-watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²	
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant											
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip											
Limited warranty ¹² 3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail												
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101									
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102									
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190									
USB Portable Diskette Drive	05K9276	ThinkPad Multi-Battery Charger II	22P9040									
USB 2.0 Memory Key 1GB	40Y7421	72W Slim AC/DC Combo Adapter	73P4485									
USB 2.0 Portable 80GB Hard Disk	40Y8726	11a/b/g Wireless Mini PCI Adapter II	73P4301									
USB 2.0 Super Multi-Burner Drive	40Y8638	Intel PRO/Wireless 2915ABG Mini PCI	41N2990									
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Port Replicator II	74P6733									
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Mini Dock	287810U									
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Dock II	287710U									
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622	ThinkPad Carrying Case - BackPack	73P3599									
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkPad Carrying Case - Leather	73P3600									
USB Travel Keyboard with UltraNav	31P9490	ThinkPad Carrying Case - Organizer	73P3598									
Kensington® MicroSaver® Security Cable	73P2582	ThinkVision® E500 Projector	0038A05									
ExpressCard Gemplus Smart Card Reader	41N3043	ThinkVision C400 Wireless Projector	0039WA1									
SonyEricsson® GC83 EDGE PC Card	26K3393	ThinkVision L201p 20.1" Monitor (black)	9220HB1									
ThinkPad Monitor Stand	22P5265	TrackPoint Cap Collection	73P2698									
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options										

See footnotes for important warranty information
US models announced August 2, 2005
US models withdrawn effective May or November 2006

* Powered by Intel Centrino® mobile technology

ThinkPad® T43 (14.1" display) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁵	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Finger print reader	Secu- rity chip set	Workhorse (W) or Global (G) Entry (E)	Avail date
1871-48U	Pentium® M 750	1.86	512MB	14.1" XGA	GMA 40HS	DVD	* Intel 11a/b/g ³²	Modem	No	Yes	915GM	W	Feb 05
1871-4AU	Pentium M 750	1.86	512MB	14.1" XGA	GMA 40HS	Combo	* Intel 11b/g ³²	Modem	No	Yes	915GM	W G	Feb 05
1871-4BU	Pentium M 750	1.86	512MB	14.1" XGA	GMA 40HS	Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915GM	W	Feb 05
1871-4CU	Pentium M 750	1.86	512MB	14.1" XGA	GMA 40HS	Combo	* Intel 11a/b/g	Mod/Blue	No	Yes	915GM	W	Feb 05
1871-4PU	Pentium M 750	1.86	512MB	14.1" XGA	GMA 40HS	DVD	Open; wireless upg ³⁶	Modem	No	Yes	915GM	W	Mar 05
2668-41U	Pentium M 750	1.86	256MB	14.1" XGA	X300 40HS	DVD	Open; wireless upg	Modem	No	Yes	915PM	W	Feb 05
2668-42U	Pentium M 750	1.86	512MB	14.1" XGA	X300 40HS	DVD	Open; wireless upg	Modem	No	Yes	915PM	W G	Feb 05
2668-43U	Pentium M 750	1.86	512MB	14.1" XGA	X300 40HS	DVD	* Intel 11b/g	Modem	No	Yes	915PM	W G	Feb 05
2668-49U	Pentium M 750	1.86	512MB	14.1" XGA	X300 40HS	Combo	* Intel 11a/b/g	Modem	No	Yes	915PM	W	Feb 05
2668-44U	Pentium M 750	1.86	512MB	14.1" XGA	X300 40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	915PM	W G	Feb 05
2668-45U	Pentium M 750	1.86	512MB	14.1" XGA	X300 40HS	Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM	W	Feb 05
2668-46U	Pentium M 750	1.86	512MB	14.1" SXGA+	X300 40HS	Combo	* Intel 11b/g	Modem	No	Yes	915PM	W G	Feb 05
2668-4DU	Pentium M 750	1.86	512MB	14.1" SXGA+	X300 40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	915PM	W G	Feb 05
2668-4EU	Pentium M 750	1.86	512MB	14.1" SXGA+	X300 40HS	Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM	W	Feb 05
2668-71U	Pentium M 760	2.00	512MB	14.1" SXGA+	X300 80HS	Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM		Feb 05
2668-72U	Pentium M 760	2.00	512MB	14.1" SXGA+	X300 80HS	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM		Feb 05
2668-73U	Pentium M 760	2.00	512MB	14.1" SXGA+	X300 80HS	Combo	* Intel 11a/b/g	Mod/Blue	No	Yes	915PM		Feb 05
2668-74U	Pentium M 760	2.00	512MB	14.1" SXGA+	X300 80HS	Combo	11a/b/g II ³²	Mod/Blue	Finger	Yes	915PM		Feb 05
2668-75U	Pentium M 760	2.00	512MB	14.1" SXGA+	X300 80HS	DVD±RW	11a/b/g II	Mod/Blue	Finger	Yes	915PM		Feb 05
2668-76U	Pentium M 760	2.00	512MB	14.1" SXGA+	X300 80HS	Combo	11a/b/g II	Mod/Blue	No	Yes	915PM		Feb 05
Positioning Processor	Perfect balance of performance and portability; two-spindle system Intel® Pentium® M Processor 750 (1.86GHz) or 760 (2.00GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus												
L2 cache	2MB / on die (at processor speed) / ECC												
Memory	256MB or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail												
Diskette drive	None standard / use optional USB-based diskette drive												
DVD	Some: DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim												
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim												
DVD±RW	Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim												
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay												
Disk	40GB⁸ HS (5400 rpm) or 80GB HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System												
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits												
Graphics	Some: Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz Some: ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory												
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm												
Weight ²	with optical drive and battery: up to 5.2 lb (2.3kg)												
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover												
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim												
Battery - life ¹⁰	Up to 4.0 hr; <i>Optional 9-cell</i> : up to 6.0 hr; <i>9-cell plus Ultrabay Slim battery</i> : up to 7.8 hr												
Architecture	Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub Some: Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])												
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door												
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door												
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)												
Video out	S-video out port (TV out) / one 4-pin industry standard connector												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI Type III slot (Communications Bay) / customer upgradable												
Wireless upg ³⁶	Some: wireless upgradable with wireless Mini PCI options												
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip												
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset												
11a/b/g II ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)												
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant												
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip												
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades ²² avail												

SOFTWARE¹⁴

Windows XP Professional
- Microsoft® Windows® XP Professional²⁰ (Service Pack 2)
↔ Disk-to-Disk Recovery (in hidden protected area)

Preloaded

- Rescue and Recovery™
- Access Program
- Access Connections™
- Norton AntiVirus
- PC-Doctor™
- ThinkPad Utilities
- Adobe® Reader
- Update Connector™¹⁵
- RecordNow and Drive Letter Access powered by Sonic products (combo, DVD±RW)
- InterVideo WinDVD (combo, DVD±RW models)
- InterVideo WinDVD Creator (DVD±RW models)
- Simple Backup (DVD±RW)
- Fingerprint Software (fingerprint models)
- Client Security Software (for security chip)

Downloadable

- IBM Director Agent
- Software Delivery Assistant
- System Migration Assistant

ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage

Universal 72 watt AC adapter
PC 2001-compliant
ACPI 1.0b and 2.0-compliant
CIM and DMI 2.0-compliant
PXE 2.1-compliant
ENERGY STAR®-compliant
International Warranty Service¹⁷
24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²

ThinkPlus™.²² 2-year LOR 9x5 NBD
41C9175

ThinkPlus 3-year LOR 9x5 NBD
41C9176

ThinkPlus 4-year LOR 9x5 NBD
41C9177

ThinkPlus 5-year LOR 9x5 NBD
41C9179

ThinkPlus 4-year P&L P/U Depot
41C9178

ThinkPlus 5-year P&L P/U Depot
41C9180

ThinkPad® T43 (14.1" display) - August 2005 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁵	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Finger print reader	Secu- rity chip set	Workhorse (W) or Global (G) Entry (E)	Avail date
1871-62U	Pentium® M 760	2.00	512MB	14.1" XGA	GMA 40HS	DVD	* Intel 11a/b/g ³²	Modem	No	Yes	915GM	W	Aug 05
1871-63U	Pentium M 760	2.00	512MB	14.1" XGA	GMA 40HS	Combo	* Intel 11b/g ³²	Modem	No	Yes	915GM	W G	Aug 05
1871-64U	Pentium M 760	2.00	512MB	14.1" XGA	GMA 40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	915GM	W G	Aug 05
1871-65U	Pentium M 760	2.00	512MB	14.1" XGA	GMA 40HS	Combo	* Intel 11a/b/g	Modem	Finger	Yes	915GM	W	Aug 05
1871-66U	Pentium M 760	2.00	512MB	14.1" XGA	GMA 40HS	DVD	Open; wireless upg ³⁶	Modem	No	Yes	915GM	W	Aug 05
2668-68U	Pentium M 760	2.00	512MB	14.1" XGA	X300 40HS	DVD	Open; wireless upg	Modem	No	Yes	915PM	W G	Aug 05
2668-6AU	Pentium M 760	2.00	512MB	14.1" XGA	X300 40HS	DVD	* Intel 11b/g	Modem	No	Yes	915PM	W G	Aug 05
2668-6BU	Pentium M 760	2.00	512MB	14.1" XGA	X300 40HS	Combo	* Intel 11a/b/g	Modem	No	Yes	915PM	W	Aug 05
2668-61U	Pentium M 760	2.00	512MB	14.1" XGA	X300 40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	915PM	W G	Aug 05
2668-6CU	Pentium M 760	2.00	512MB	14.1" XGA	X300 60HS	Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM	W	Aug 05
2668-6DU	Pentium M 760	2.00	512MB	14.1" SXGA+	X300 40HS	Combo	* Intel 11a/b/g	Modem	No	Yes	915PM	W	Aug 05
2668-6EU	Pentium M 760	2.00	512MB	14.1" SXGA+	X300 40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	915PM	W G	Aug 05
2668-6ZU	Pentium M 750	1.86	512MB	14.1" XGA	X300 40HS	Combo	* Intel 11b/g	Modem	No	Yes	915PM	W G	Aug 05
2668-R1U	Pentium M 750	1.86	512MB	14.1" XGA	X300 40HS	Combo	* Intel 11b/g	Mod/Blue	No	Yes	915PM	W G	Sep 05
2668-6FU	Pentium M 760	2.00	512MB	14.1" SXGA+	X300 60HS	Combo	* Intel 11a/b/g	Modem	Finger	Yes	915PM	W	Aug 05
2668-6GU	Pentium M 760	2.00	512MB	14.1" SXGA+	X300 80HS	Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM	W	Aug 05
2668-J1U	Pentium M 770	2.13	512MB	14.1" SXGA+	X300 80U	Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM		Aug 05
2668-J2U	Pentium M 770	2.13	1GB	14.1" SXGA+	X300 80U	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM		Aug 05
2668-J3U	Pentium M 770	2.13	512MB	14.1" SXGA+	X300 100GBDVD±RW	* Intel 11a/b/g		Mod/Blue	Finger	Yes	915PM		Aug 05

Positioning Processor	<i>Perfect balance of performance and portability; two spindles</i> Intel® Pentium® M Processor 750 (1.86GHz), 760 (2.00GHz), or 770 (2.13GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)
L2 cache	2MB / on die (at processor speed) / ECC	Preloaded • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • RecordNow and Drive Letter Access powered by Sonic products (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) • Fingerprint Software (fingerprint models) • Client Security Software (for security chip)
Memory	512MB or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail	
Diskette drive	None standard / use optional USB-based diskette drive	Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant
DVD	<i>Some:</i> DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim	
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim	License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
DVD±RW	<i>Some:</i> DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim	
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay	ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage
Disk	40GB⁸ HS (5400 rpm), 60GB HS (5400 rpm), 80GB HS (5400 rpm), 80GB Ultra HS (7200 rpm), 100GB (5400 rpm) / 9.5mm high / removable, upgrade / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System	
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits	Universal 72 watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz <i>Some:</i> ATI® MOBILITY™ Radeon™ X300 / PCI Express x16 / 64MB GDDR1 memory	ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175 ThinkPlus 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm with optical drive and battery: up to 5.2 lb (2.3kg)	
Weight ²	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover	
Case material	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim	
Battery - type	Up to 4.0 hr; <i>Optional 9-cell:</i> up to 6.0 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 7.8 hr	
Battery - life ¹⁰		
Architecture	<i>Some:</i> Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub <i>Some:</i> Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub <i>All:</i> 82801FBM ICH6-M I/O Controller Hub (SATA15, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door	
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)	
Video out	S-video out port (TV out) / one 4-pin industry standard connector	
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception	
Mini PCI	One Mini PCI Type III slot (Communications Bay) / customer upgradable	
Wireless upg ³⁶	<i>Some:</i> wireless upgradable with wireless Mini PCI options	
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip	
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset	
CDC	One Communications Daughter Card (CDC) socket / customer accessible	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset	
Bluetooth™	<i>Some:</i> Bluetooth wireless technology / in CDC (with modem)	
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE	
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant	
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / supports the security chip	
Limited warranty ¹²	3-year/1-year battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available	

See footnotes for important warranty information
US models announced August 2 or August 30, 2005
US models withdrawn effective November 2006 or August 2007

* Powered by Intel Centrino® mobile technology

ThinkPad® T43 (15.0" display) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Security chip	Workhorse (W) or Global (G) set	Chip or Entry (E) Avail date
1871-86U	Pentium® M 750	1.86	512MB	15.0"	XGA	GMA	40HS Combo	* Intel 11a/b/g ³²	Modem	Finger	Yes	915GM W	Feb 05
2668-87U	Pentium M 750	1.86	512MB	15.0"	XGA	X300	40HS Combo	* Intel 11a/b/g	Modem	No	Yes	915PM W	Feb 05
2668-83U	Pentium M 750	1.86	512MB	15.0"	XGA	X300	40HS Combo	* Intel 11b/g ³²	Modem	Finger	Yes	915PM W G	Feb 05
2668-84U	Pentium M 750	1.86	512MB	15.0"	SXGA+	X300	40HS Combo	* Intel 11b/g	Mod/Blue	No	Yes	915PM W G	Feb 05
2668-88U	Pentium M 750	1.86	512MB	15.0"	SXGA+	X300	40HS Combo	* Intel 11a/b/g	Modem	No	Yes	915PM W	Feb 05
2668-85U	Pentium M 750	1.86	512MB	15.0"	SXGA+	X300	40HS Combo	* Intel 11a/b/g	Modem	Finger	Yes	915PM W	Feb 05
2668-89U	Pentium M 750	1.86	512MB	15.0"	SXGA+	X300	80HS Combo	* Intel 11a/b/g	Modem	Finger	Yes	915PM W	Feb 05
2668-91U	Pentium M 760	2.00	512MB	15.0"	SXGA+	X300	80HS Combo	* Intel 11a/b/g	Mod/Blue	No	Yes	915PM W	Feb 05
2668-93U	Pentium M 760	2.00	512MB	15.0"	SXGA+	X300	80HS Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM W	Feb 05
2668-92U	Pentium M 760	2.00	512MB	15.0"	SXGA+	X300	80HS DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM W	Feb 05
2668-94U	Pentium M 760	2.00	512MB	15.0"	SXGA+	X300	60U Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM W	Feb 05
2668-95U	Pentium M 760	2.00	512MB	15.0"	SXGA+	X300	80HS Combo	11a/b/g II ³²	Mod/Blue	No	Yes	915PM W	Feb 05
2668-96U	Pentium M 760	2.00	512MB	15.0"	SXGA+	X300	80HS Combo	11a/b/g II	Mod/Blue	Finger	Yes	915PM W	Feb 05
2668-97U	Pentium M 760	2.00	512MB	15.0"	SXGA+	X300	80HS DVD±RW	11a/b/g II	Mod/Blue	Finger	Yes	915PM W	Feb 05
2668-98U	Pentium M 760	2.00	512MB	15.0"	SXGA+	X300	60U Combo	11a/b/g II	Mod/Blue	Finger	Yes	915PM W	Feb 05
Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i> Intel® Pentium® M Processor 750 (1.86GHz) or 760 (2.00GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴		
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional		
Memory	512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded		
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										• Rescue and Recovery™		
DVD±RW	<i>Some:</i> DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim										• Access Program		
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay										• Access Connections™		
Disk	40GB⁸ HS (5400 rpm), 60GB⁸ Ultra HS (7200 rpm), or 80GB HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System										• Norton AntiVirus		
Display	<i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology										• PC-Doctor™		
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz <i>Some:</i> ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory										• ThinkPad Utilities		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• Adobe® Reader		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• Update Connector™ ¹⁵		
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										• RecordNOW and Drive		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										Letter Access powered by Sonic products (combo, DVD±RW)		
Dimensions ³	15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm										• InterVideo WinDVD (combo, DVD±RW models)		
Weight ²	with optical drive and battery: up to 5.9 lb (2.7kg)										• InterVideo WinDVD Creator (DVD±RW models)		
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover										• Simple Backup (DVD±RW)		
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										• FingerPrint Software (fingerprint models)		
Battery - life ¹⁰	Up to 3.9 hr; <i>Optional 9-cell:</i> up to 5.9 hr; <i>9-cell plus Ultrabay Slim Battery:</i> up to 7.7 hr										• Client Security Software (for security chip)		
Architecture	<i>Some:</i> Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub <i>Some:</i> Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub <i>All:</i> 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										Downloadable		
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										• IBM Director Agent		
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										• Software Delivery Assistant		
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										• System Migration Assistant		
Video out	S-video out port (TV out) / one 4-pin industry standard connector										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage		
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										Universal 72 watt AC adapter		
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										PC 2001-compliant		
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip										ACPI 1.0b and 2.0-compliant		
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset										CIM and DMI 2.0-compliant		
11a/b/g II ³²	<i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip										PXE 2.1-compliant		
CDC	One Communications Daughter Card (CDC) socket / customer accessible										ENERGY STAR®-compliant		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										International Warranty Service ¹⁷		
Bluetooth™	<i>Some:</i> Bluetooth wireless technology / in CDC (with modem)										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175		
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										ThinkPlus 3-year LOR 9x5 NBD 41C9176		
Security	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus 4-year LOR 9x5 NBD 41C9177		
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant										ThinkPlus 5-year LOR 9x5 NBD 41C9179		
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip										ThinkPlus 4-year P&L P/U Depot 41C9178		
Limited warranty ¹²	3-year/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail										ThinkPlus 5-year P&L P/U Depot 41C9180		
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty								
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102									
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	11a/b/g Wireless Mini PCI Adapter II		73P4301									
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Port Replicator II		74P6733									
Other options at lenovo.com/options		ThinkPad Dock II		287710U									

See footnotes for important warranty information
US models announced January 19, 2005
US models withdrawn effective May or November 2006

* Powered by Intel Centrino® mobile technology

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ThinkPad® T43 (15.0" display) - August 2005 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger-print reader	Secu-rity chip	Workhorse (W) or Global (G) or Entry (E) set	Avail date
1871-K1U	Pentium® M 760	2.00	512MB	15.0"	XGA	GMA 40HS	Combo	* Intel 11a/b/g ³²	Modem	Finger	Yes	915GM W	Aug 05
1871-K2U	Pentium M 760	2.00	512MB	15.0"	XGA	GMA 40HS	Combo	* Intel 11b/g ³²	Modem	Finger	Yes	915GM W G	Aug 05
2668-K5U	Pentium M 760	2.00	512MB	15.0"	XGA	X300 40HS	Combo	* Intel 11a/b/g	Modem	No	Yes	915PM W	Aug 05
2668-K6U	Pentium M 760	2.00	512MB	15.0"	XGA	X300 40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	915PM W G	Aug 05
2668-K7U	Pentium M 760	2.00	512MB	15.0"	SXGA+	X300 40HS	Combo	* Intel 11b/g	Modem	Finger	Yes	915PM W G	Aug 05
2668-K8U	Pentium M 760	2.00	512MB	15.0"	SXGA+	X300 60HS	Combo	* Intel 11a/b/g	Modem	Finger	Yes	915PM W	Aug 05
2668-K9U	Pentium M 760	2.00	512MB	15.0"	SXGA+	X300 80HS	Combo	* Intel 11a/b/g	Modem	Finger	Yes	915PM W	Aug 05
2668-L2U	Pentium M 780	2.26	1GB	15.0"	SXGA+	X300 100GB	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM	Aug 05
2668-L3U	Pentium M 770	2.13	1GB	15.0"	SXGA+	X300 80U	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM	Aug 05
2668-L4U	Pentium M 770	2.13	512MB	15.0"	SXGA+	X300 100GB	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	Yes	915PM	Aug 05
Positioning Processor	Perfect balance of performance and portability; two spindles Intel® Pentium® M Processor 760 (2.00GHz), 770 (2.13GHz), or 780 (2.26GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus											SOFTWARE¹⁴	
L2 cache	2MB / on die (at processor speed) / ECC											Windows XP Professional	
Memory	512MB or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail											- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)	
Diskette drive	None standard / use optional USB-based diskette drive											Preloaded	
Combo DVD±RW	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim											• Rescue and Recovery™	
Ultrabay Slim Disk	One modular bay for interchangeable devices (right side) / 9.5mm high bay 40GB ⁸ HS (5400 rpm), 60GB HS (5400 rpm), 80GB HS (5400 rpm), 80GB Ultra HS (7200 rpm), 100GB (5400 rpm) / 9.5mm high / removable, upgrade / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System™											• Access Program	
Display	Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology											• Access Connections™	
Graphics	Some: Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz Some: ATI® MOBILITY™ Radeon™ X300 / PCI Express x16 / 64MB GDDR1 memory											• Norton AntiVirus	
Keyboard TrackPoint®	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)											• PC-Doctor™	
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones											• ThinkPad Utilities	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											• Adobe® Reader	
Dimensions ³	15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm											• RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW)	
Weight ²	with optical drive and battery: up to 5.9 lb (2.7kg)											• InterVideo WinDVD (combo, DVD±RW models)	
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover											• DVD Video WinDVD Creator (DVD±RW models)	
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim											• Fingerprint Software (fingerprint models)	
Battery - life ¹⁰	Up to 3.9 hr; Optional 9-cell: up to 5.9 hr; 9-cell plus Ultrabay Slim battery: up to 7.7 hr											• Client Security Software (for security chip)	
Architecture	Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub Some: Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip [TPM], Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])											Downloadable	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door											• IBM Director Agent	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											• Software Delivery Assistant	
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)											• System Migration Assistant	
Video out	S-video out port (TV out) / one 4-pin industry standard connector											ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage	
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											Universal 72-watt AC adapter	
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											PC 2001-compliant	
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip											ACPI 1.0b and 2.0-compliant	
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset											CIM and DMI 2.0-compliant	
CDC	One Communications Daughter Card (CDC) socket / customer accessible											PXE 2.1-compliant	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset											International Warranty Service ¹⁷	
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)											24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²	
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE											ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175	
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)											ThinkPlus 3-year LOR 9x5 NBD 41C9176	
Security	Power-on password / hard disk password / supervisor password / security keyhole											ThinkPlus 4-year LOR 9x5 NBD 41C9177	
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant											ThinkPlus 5-year LOR 9x5 NBD 41C9179	
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip											ThinkPlus 4-year P&L P/U Depot 41C9178	
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail											ThinkPlus 5-year P&L P/U Depot 41C9180	
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus 5-year annual maintenance agreements at									
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102										
2GB PC2-5300 DDR2 SODIMM	40Y7735	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190										
USB 2.0 Security Memory Key 2GB	41U5119	ThinkPad Multiple Battery Charger II	22P9040										
USB 2.0 Security Memory Key 4GB	41U5120	11a/b/g Wireless Mini PCI Adapter II	73P4301										
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Port Replicator II	74P6733										
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Mini Dock	287810U										
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad Dock II	287710U										
Enh Perf Wireless Keyboard and Mouse	73P4067	Lenovo M500 Projector	0037A05										
USB Travel Keyboard with UltraNav	31P9490	ThinkVision® L201p 20.1" Monitor (blk)	9220HB1										
ExpressCard Gemplus Smart Card Reader	41N3043	Other accessories at lenovo.com/accessories											

See footnotes for important warranty information
US models announced August 2, 2005
US models withdrawn effective May 2006, Nov 2006, or Aug 2007

* Powered by Intel Centrino® mobile technology

ThinkPad® T43p - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk GB ⁵	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Security chip	Bat-tery life ⁶	Workhorse (W) or Global (G) Entry (E)	Avail date
2668-G1U	Pentium® M 770	2.13	1GB	14.1" SXGA+	128MB	60U	Combo	* Intel 11a/b/g ³²	Mod/Blue	Finger	Yes	5.2 hr		Apr 05
2668-G3U	Pentium M 770	2.13	1GB	14.1" SXGA+	128MB	60U	Combo	* Intel 11a/b/g	Mod/Blue	No	Yes	5.2 hr		Apr 05
2668-G2U	Pentium M 770	2.13	1GB	14.1" SXGA+	128MB	60U	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	Yes	5.1 hr		Apr 05
2668-G5U	Pentium M 770	2.13	1GB	14.1" SXGA+	128MB	60U	Combo	11a/b/g II ³²	Mod/Blue	Finger	Yes	5.2 hr		Apr 05
2668-G6U	Pentium M 770	2.13	1GB	14.1" SXGA+	128MB	60U	Combo	11a/b/g II	Mod/Blue	No	Yes	5.2 hr		Apr 05
2668-G7U	Pentium M 770	2.13	1GB	14.1" SXGA+	128MB	60U	DVD±RW	11a/b/g II	Mod/Blue	Finger	Yes	5.1 hr		Apr 05
2668-GDU	Pentium M 770	2.13	1GB	14.1" SXGA+	128MB	60U	Combo	* Intel 11b/g ³²	Mod/Blue	Finger	Yes	5.1 hr	Global	Jul 05
2668-GEU	Pentium M 770	2.13	1GB	14.1" SXGA+	128MB	60U	Combo	* Intel 11b/g	Mod/Blue	No	Yes	5.1 hr	Global	Jul 05
2668-H1U	Pentium M 770	2.13	1GB	15.0" UXGA	128MB	60U	Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	4.8 hr		Apr 05
2668-H3U	Pentium M 770	2.13	1GB	15.0" UXGA	128MB	60U	Combo	11a/b/g II	Mod/Blue	Finger	Yes	4.8 hr		Apr 05
2668-H2U	Pentium M 770	2.13	1GB	15.0" UXGA	128MB	60U	DVD±RW	* Intel 11b/g	Mod/Blue	Finger	Yes	4.7 hr	Global	Apr 05
2668-H4U	Pentium M 770	2.13	1GB	15.0" UXGA	128MB	60U	Combo	* Intel 11a/b/g	Mod/Blue	No	Yes	4.8 hr		Apr 05
2668-H5U	Pentium M 770	2.13	1GB	15.0" UXGA	128MB	60U	DVD±RW	* Intel 11a/b/g	Mod/Blue	No	Yes	4.7 hr		Apr 05
2668-H7U	Pentium M 770	2.13	1GB	15.0" UXGA	128MB	60U	Combo	11a/b/g II	Mod/Blue	No	Yes	4.8 hr		Apr 05
2668-H8U	Pentium M 770	2.13	1GB	15.0" UXGA	128MB	60U	DVD±RW	11a/b/g II	Mod/Blue	No	Yes	4.7 hr		Apr 05
Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i> Intel® Pentium® M Processor 770 (2.13GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴			
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional			
Memory	1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
DVD	<i>Some:</i> DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim										• Rescue and Recovery™			
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										• Access Program			
DVD±RW	<i>Some:</i> DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim										• Access Connections™			
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay										• Norton AntiVirus			
Disk	60GB⁸ Ultra HS (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System										• PC-Doctor™			
Display	<i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) UXGA (1600x1200) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology										• ThinkPad Utilities			
Graphics	ATI® MOBILITY™ FireGL™ V3200 / PCI Express x16 / 128MB GDDR1 memory										• Adobe® Reader			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW)			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• InterVideo WinDVD (combo, DVD±RW models)			
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										• InterVideo WinDVD Creator (DVD±RW models)			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Simple Backup (DVD±RW)			
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm										• Fingerprint Software (fingerprint models)			
Weight ²	with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg); 15": up to 6.3 lb (2.9 kg)										• Client Security Software (for security chip)			
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover										Downloadable			
Battery - type	Lithium Ion 9-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										• IBM Director Agent			
Battery - life ¹⁰	9-cell: up to 5.2 hr; 9-cell plus Ultrabay Slim battery: up to 7.7 hr										• Software Delivery Assistant			
Architecture	Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub (MCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										• System Migration Assistant			
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										License (CD not included)			
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										ThinkPad notebooks implement ThinkVantage™ technologies an design; visit thinkpad.com/thinkvantage			
Video out	S-video out port (TV out) / one 4-pin industry standard connector										Universal 72 watt AC adapter			
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										PC 2001-compliant			
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										ACPI 1.0b and 2.0-compliant			
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip										CIM and DMI 2.0-compliant			
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset										PXE 2.1-compliant			
11a/b/g II ³²	<i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip										ENERGY STAR®-compliant			
CDC	One Communications Daughter Card (CDC) socket / customer accessible										International Warranty Service ¹⁷			
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Bluetooth™	Bluetooth wireless technology / in CDC (with modem)										ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175			
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										ThinkPlus 3-year LOR 9x5 NBD 41C9176			
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										ThinkPlus 4-year LOR 9x5 NBD 41C9177			
Security	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus 5-year LOR 9x5 NBD 41C9179			
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant										ThinkPlus 4-year P&L P/U Depot 41C9178			
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip										ThinkPlus 5-year P&L P/U Depot 41C9180			
Limited warranty ¹²	3-year/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101									
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102									
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		11a/b/g Wireless Mini PCI Adapter II		73P4301									
ExpressCard Gemplus Smart Card Reader	41N3043		ThinkPad Port Replicator II		74P6733									
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716		ThinkPad Dock II		287710U									
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622		Other options at lenovo.com/options											

See footnotes for important warranty information
US models announced January 19 or July 19, 2005
US models withdrawn effective November 2006

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ThinkPad® T43p (August 2005) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk GB ⁸ and rpm	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Finger print reader	Secu- rity chip	Bat- tery cells	Workhorse or Global Entry	Avail date
2668-P3U	Pentium® M 780	2.26	1GB	14.1" SXGA+	128MB 80GB	7200	Combo	* Intel 11a/b/g ³²	Mod/Blue	Finger	Yes	9-cell		Aug 05
2668-P1U	Pentium M 780	2.26	1GB	14.1" SXGA+	128MB 80GB	7200	Combo	* Intel 11b/g ³²	Mod/Blue	No	Yes	9-cell	Global	Aug 05
2668-P4U	Pentium M 780	2.26	1GB	14.1" SXGA+	128MB 80GB	7200	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	Yes	9-cell		Aug 05
2668-P2U	Pentium M 780	2.26	1GB	14.1" SXGA+	128MB 100G	7200	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	Yes	9-cell		Aug 05
2668-Q3U	Pentium M 780	2.26	1GB	15.0" UXGA	128MB 80GB	7200	Combo	* Intel 11a/b/g	Mod/Blue	Finger	Yes	9-cell		Aug 05
2668-Q1U	Pentium M 780	2.26	1GB	15.0" UXGA	128MB 80GB	7200	DVD±RW	* Intel 11b/g	Mod/Blue	Finger	Yes	9-cell	Global	Aug 05
2668-Q2U	Pentium M 780	2.26	1GB	15.0" UXGA	128MB 100G	7200	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	Yes	9-cell		Aug 05
2668-Q6U	Pentium M 780	2.26	1GB	15.0" UXGA	128MB 80GB	7200	Combo	* Intel 11a/b/g	Mod/Blue	No	Yes	9-cell		Aug 05
2668-Q7U	Pentium M 780	2.26	1GB	15.0" UXGA	128MB 80GB	7200	DVD±RW	* Intel 11a/b/g	Mod/Blue	No	Yes	9-cell		Aug 05
2668-PDU	Pentium M 780	2.26	1GB	14.1" SXGA+	128MB 100G	7200	DVD±RW	* Intel 11b/g	Mod/Blue	Finger	Yes	9-cell	Global	Oct 05
Positioning Processor	Perfect balance of performance and portability; two-spindle system Intel® Pentium® M Processor 780 (2.26GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus													
L2 cache	2MB / on die (at processor speed) / ECC													
Memory	1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available													
Diskette drive	None standard / use optional USB-based diskette drive													
DVD	Some: DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim													
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim													
DVD±RW	Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim													
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay													
Disk	80GB ⁸ (7200 rpm) or 100GB ⁸ (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System													
Display	Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) UXGA (1600x1200) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology													
Graphics	ATI® MOBILITY™ FireGL™ V3200 / PCI Express x16 / 128MB GDDR1 memory													
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm													
Weight ²	with optical drive and battery: 14.1" models: up to 5.3 lb (2.4kg); 15": up to 6.1 lb (2.8 kg)													
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover													
Battery - type	Lithium Ion 9-cell / intelligent / supports unique 2nd battery in Ultrabay Slim													
Battery - life ¹⁰	9-cell: up to 5.0 hr; 9-cell plus Ultrabay Slim battery: up to 7.5 hr													
Architecture	Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub (MCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])													
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door													
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door													
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)													
Video out	S-video out port (TV out) / one 4-pin industry standard connector													
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable													
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip													
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset													
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Bluetooth™	Bluetooth wireless technology / in CDC (with modem)													
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE													
Audio support	Soft audio / ICH AC97 controller / DirectSound™ support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Embedded Security Subsystem 2.0 ³³ / in NS PC8394T chip / TCG-compliant													
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip													
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus 2-year LOR 9x5 NBD	41C9175									
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	ThinkPlus 3-year LOR 9x5 NBD	41C9176									
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ThinkPlus 4-year LOR 9x5 NBD	41C9177									
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad Multiple Battery Charger II	22P9040	ThinkPlus 5-year LOR 9x5 NBD	41C9178									
USB 2.0 Portable 80GB Hard Disk	40Y8726	72W Slim AC/DC Combo Adapter	73P4485	ThinkPlus 4-year P&L P/U Depot	41C9179									
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 5-year P&L P/U Depot	41C9178									
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Port Replicator II	74P6733	ThinkPlus 5-year P&L P/U Depot	41C9180									
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Mini Dock	287810U											
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622	ThinkPad Dock II	287710U											
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkVision® E500 Projector	0038A05											
USB Travel Keyboard with UltraNav	31P9490	ThinkVision L201p 20.1" Monitor (black)	9220HB1											
Optical 3-Button Travel Wheel Mouse	31P7410	Other options at lenovo.com/options												

See footnotes for important warranty information
US models announced August 2 or October 11, 2005
US models withdrawn effective November 2006

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ThinkPad® T43 and T43p (1871 and 2668) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Finger print reader	Chip set	Limited warranty ¹²	Avail date
T43 1871-C1U	Pentium® M 750	1.86	512MB	14.1" XGA	GMA	40HS	Combo	* Intel 11a/b/g ³²	Modem	No	915GM	EasyServ	Feb 05
T43 2668-C5U	Pentium M 760	2.00	512MB	14.1" XGA	X300	60HS	DVD±RW	* Intel 11a/b/g	Modem	No	915PM	EasyServ	Feb 05
T43 2668-C2U	Pentium M 760	2.00	512MB	14.1" SXGA+	X300	80HS	Combo	* Intel 11a/b/g	Modem	No	915PM	EasyServ	Feb 05
T43 2668-C6U	Pentium M 760	2.00	512MB	14.1" SXGA+	X300	80HS	DVD±RW	* Intel 11a/b/g	Modem	No	915PM	EasyServ	Feb 05
T43 2668-C3U	Pentium M 760	2.00	512MB	15.0" SXGA+	X300	60HS	Combo	* Intel 11a/b/g	Modem	No	915PM	EasyServ	Feb 05
T43p 2668-C4U	Pentium M 770	2.13	1GB	15.0" UXGA	V3200	80HS	DVD±RW	* Intel 11a/b/g	Modem	No	915PM	EasyServ	Apr 05
T43 1871-CBU	Pentium M 750	1.86	512MB	14.1" XGA	GMA	40HS	Combo	11a/b/g II ³²	Modem	No	915GM	EasyServ	Aug 05
T43 2668-CCU	Pentium M 760	2.00	512MB	14.1" XGA	X300	60HS	DVD±RW	11a/b/g II	Modem	No	915PM	EasyServ	Aug 05
T43 2668-CDU	Pentium M 760	2.00	512MB	14.1" SXGA+	X300	80HS	Combo	11a/b/g II	Modem	No	915PM	EasyServ	Aug 05
T43 2668-CEU	Pentium M 760	2.00	512MB	14.1" SXGA+	X300	80HS	DVD±RW	11a/b/g II	Modem	No	915PM	EasyServ	Aug 05
T43 2668-CFU	Pentium M 760	2.00	512MB	15.0" SXGA+	X300	60HS	Combo	11a/b/g II	Modem	No	915PM	EasyServ	Aug 05
T43p 2668-CGU	Pentium M 770	2.13	1GB	15.0" UXGA	V3200	80HS	DVD±RW	11a/b/g II	Modem	No	915PM	EasyServ	Aug 05

• **These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i> Intel® Pentium® M Processor 750 (1.86GHz), 760 (2.00GHz), or 770 (2.13GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz bus	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)
L2 cache	512MB / on die (at processor speed) / ECC	Preloaded • Education software from Vital Source Technologies®: vidualsource KEY™ and Personal Portable library™ • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) • Simple Backup (DVD±RW) • Client Security Software (for security chip)
Memory	2MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail	
Diskette drive	None standard / use optional USB-based diskette drive	Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant
Combo DVD±RW	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim <i>Some:</i> DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim	
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay	ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage
Disk	40GB⁸ HS (5400 rpm), 60GB⁸ HS (5400 rpm), or 80GB HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System	
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology <i>Some:</i> 15.0" (381.0mm) UXGA (1600x1200) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology	Universal 72 watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz <i>Some:</i> ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory <i>Some:</i> ATI MOBILITY FireGL™ V3200 / PCI Express x16 / 128MB GDDR1 memory	ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)	ThinkPlus 3-year LOR 9x5 NBD 41C9176
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	ThinkPlus 4-year LOR 9x5 NBD 41C9177
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones	ThinkPlus 5-year LOR 9x5 NBD 41C9179
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	ThinkPlus 4-year P&L P/U Depot 41C9178
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm	ThinkPlus 5-year P&L P/U Depot 41C9180
Weight ²	with optical drive and battery: 14.1" models: up to 5.2 lb (2.3kg); 15" models: up to 5.9 lb (2.7 kg)	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover	
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim	
Battery - life ¹⁰	Up to 4 hr; <i>Optional 9-cell:</i> up to 5.9 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 7.7 hr	
Architecture	<i>Some:</i> Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub <i>Some:</i> Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub <i>All:</i> 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door	
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)	
Video out	S-video out port (TV out) / one 4-pin industry standard connector	
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception	
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable	
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset	
11a/b/g II ³²	<i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip	
CDC	One Communications Daughter Card (CDC) socket / customer accessible	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset	
Bluetooth™	None	
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE	
Audio support	Soft audio / ICH AC97 controller / DirectSound™ support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant	
Fingerprint reader	None	
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail	

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced January 19, 2005 or August 16, 2005
US models withdrawn effective March, October, or November 2006

ThinkPad® T43 and T43p (1871 and 2668) - Education (Aug 05) - withdrawn Created by Lenovo Training Solutions Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Chip set	Limited warranty ¹²	Avail date
T43 1871-CJU	Pentium® M 760	2.00	512MB	14.1" XGA	GMA	40HS	Combo	* Intel 11a/b/g ³²	Modem	Finger	915GM	EasyServ	Aug 05
T43 2668-CKU	Pentium M 770	2.13	512MB	14.1" XGA	X300	60HS	DVD±RW	* Intel 11a/b/g	Modem	Finger	915PM	EasyServ	Aug 05
T43 2668-CLU	Pentium M 770	2.13	512MB	14.1" SXGA+	X300	80HS	Combo	* Intel 11a/b/g	Modem	Finger	915PM	EasyServ	Aug 05
T43 2668-CMU	Pentium M 770	2.13	512MB	14.1" SXGA+	X300	80HS	DVD±RW	* Intel 11a/b/g	Modem	Finger	915PM	EasyServ	Aug 05
T43 2668-CNU	Pentium M 770	2.13	512MB	15.0" SXGA+	X300	60HS	Combo	* Intel 11a/b/g	Modem	Finger	915PM	EasyServ	Aug 05
T43p 2668-CPU	Pentium M 780	2.26	1GB	15.0" UXGA	V3200	80HS	DVD±RW	* Intel 11a/b/g	Modem	Finger	915PM	EasyServ	Aug 05

• **These models have an EasyServ™.19 onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i> Intel® Pentium® M Processor 760 (2.00GHz), 770 (2.13GHz), or 780 (2.26GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz bus							SOFTWARE¹⁴					
L2 cache	2MB / on die (at processor speed) / ECC							Windows XP Professional					
Memory	512MB or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail							- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)					
Diskette drive	None standard / use optional USB-based diskette drive							Preloaded					
Combo DVD±RW	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim							• Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™					
Ultrabay Slim	<i>Some:</i> DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim							• Rescue and Recovery™					
Disk	One modular bay for interchangeable devices (right side) / 9.5mm high bay 40GB⁸ HS (5400 rpm), 60GB⁸ HS (5400 rpm), or 80GB HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System							• Access Program					
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology <i>Some:</i> 15.0" (381.0mm) UXGA (1600x1200) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology							• Access Connections™					
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz <i>Some:</i> ATI® MOBILITY RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory <i>Some:</i> ATI MOBILITY FireGL™ V3200 / PCI Express x16 / 128MB GDDR1 memory							• Norton AntiVirus					
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)							• PC-Doctor™					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass							• ThinkPad Utilities					
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones							• Adobe® Reader					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions							• RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW)					
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm							• InterVideo WinDVD (combo, DVD±RW models)					
Weight ²	with optical drive and battery: 14.1" models: up to 5.2 lb (2.3kg); 15.0": up to 6.0 lb (2.7 kg)							• InterVideo WinDVD Creator (DVD±RW models)					
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover							• Fingerprint Software					
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim							• Client Security Software (for security chip)					
Battery - life ¹⁰	Up to 4 hr; <i>Optional 9-cell:</i> up to 5.9 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 7.7 hr							Downloadable					
Architecture	<i>Some:</i> Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub <i>Some:</i> Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub <i>All:</i> 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])							• IBM Director Agent					
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door							• Software Delivery Assistant					
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door							• System Migration Assistant					
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)							ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage					
Video out	S-video out port (TV out) / one 4-pin industry standard connector							Universal 72 watt AC adapter					
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception							PC 2001-compliant					
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable							ACPI 1.0b and 2.0-compliant					
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset							CIM and DMI 2.0-compliant					
CDC	One Communications Daughter Card (CDC) socket / customer accessible							PXE 2.1-compliant					
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset							ENERGY STAR®-compliant					
Bluetooth™	None							International Warranty Service ¹⁷					
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE							24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²					
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)							ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175					
Security	Power-on password / hard disk password / supervisor password / security keyhole							ThinkPlus 3-year LOR 9x5 NBD 41C9176					
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant							ThinkPlus 4-year LOR 9x5 NBD 41C9177					
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / integrated with security chip							ThinkPlus 5-year LOR 9x5 NBD 41C9179					
Limited warranty ¹²	3-year/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail							ThinkPlus 4-year P&L P/U Depot 41C9178					
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101		ThinkPlus 5-year P&L P/U Depot 41C9180						
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102		Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		11a/b/g Wireless Mini PCI Adapter II		73P4301								
USB Fingerprint Reader	73P4774		ThinkPad Port Replicator II		74P6733								
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716		ThinkPad Dock II		287710U								
Second HDD Adapter for Ultrabay Slim	41U3148		ThinkVision® L201p 20.1" Monitor (black)		9320HB1								
Enh Perf Wireless Keyboard and Mouse	73P4067		Other options at lenovo.com/options										

See footnotes for important warranty information

* Powered by Intel Centrino® mobile technology

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US models announced August 2, 2005

(T16) October 2006

US models withdrawn effective May, October, or November 2006

ThinkPad® T43 and T43p (1872 and 2669) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Chip set	Limited warranty ¹²	Avail date
T43	1872-C1U	Pentium® M 750	1.86 512MB	14.1" XGA	GMA	40HS	Combo	* Intel 11a/b/g ³²	Modem	No	915GM	Onsite	Feb 05
T43	2669-C5U	Pentium M 760	2.00 512MB	14.1" XGA	X300	60HS	DVD±RW	* Intel 11a/b/g	Modem	No	915PM	Onsite	Feb 05
T43	2669-C2U	Pentium M 760	2.00 512MB	14.1" SXGA+	X300	80HS	Combo	* Intel 11a/b/g	Modem	No	915PM	Onsite	Feb 05
T43	2669-C6U	Pentium M 760	2.00 512MB	14.1" SXGA+	X300	80HS	DVD±RW	* Intel 11a/b/g	Modem	No	915PM	Onsite	Feb 05
T43	2669-C3U	Pentium M 760	2.00 512MB	15.0" SXGA+	X300	60HS	Combo	* Intel 11a/b/g	Modem	No	915PM	Onsite	Feb 05
T43p	2669-C4U	Pentium M 770	2.13 1GB	15.0" UXGA	V3200	80HS	DVD±RW	* Intel 11a/b/g	Modem	No	915PM	Onsite	Apr 05
T43	2669-C7U	Pentium M 750	1.86 512MB	14.1" XGA	X300	40HS	Combo	* Intel 11b/g ³²	Modem	No	915PM	Onsite	Feb 05
T43	2669-C8U	Pentium M 750	1.86 512MB	14.1" SXGA+	X300	80HS	Combo	* Intel 11b/g	Modem	No	915PM	Onsite	Feb 05
T43	2669-C9U	Pentium M 750	1.86 512MB	15.0" SXGA+	X300	40HS	DVD±RW	* Intel 11b/g	Modem	No	915PM	Onsite	Feb 05
T43p	2669-CAU	Pentium M 750	1.86 512MB	15.0" UXGA	V3200	80HS	DVD±RW	* Intel 11b/g	Mod/Blue	No	915PM	Onsite	Apr 05
T43	1872-CBU	Pentium M 750	1.86 512MB	14.1" XGA	GMA	40HS	Combo	* Intel 11a/b/g II ³²	Modem	No	915GM	Onsite	Aug 05
T43	2669-CCU	Pentium M 760	2.00 512MB	14.1" XGA	X300	60HS	DVD±RW	11a/b/g II	Modem	No	915PM	Onsite	Aug 05
T43	2669-CDU	Pentium M 760	2.00 512MB	14.1" SXGA+	X300	80HS	Combo	11a/b/g II	Modem	No	915PM	Onsite	Aug 05
T43	2669-CEU	Pentium M 760	2.00 512MB	14.1" SXGA+	X300	80HS	DVD±RW	11a/b/g II	Modem	No	915PM	Onsite	Aug 05
T43	2669-CFU	Pentium M 760	2.00 512MB	15.0" SXGA+	X300	60HS	Combo	11a/b/g II	Modem	No	915PM	Onsite	Aug 05
T43p	2669-CGU	Pentium M 770	2.13 1GB	15.0" UXGA	V3200	80HS	DVD±RW	11a/b/g II	Modem	No	915PM	Onsite	Aug 05

• **These models have a limited onsite service²⁴ 3-year limited warranty**

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Processor	Intel® Pentium® M Processor 750 (1.86GHz), 760 (2.00GHz), or 770 (2.13GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz bus	<p>SOFTWARE¹⁴</p> <p>Windows XP Professional</p> <ul style="list-style-type: none"> - Microsoft® Windows® XP Professional²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area) <p>Preloaded</p> <ul style="list-style-type: none"> • Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™ • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • Update Connector™¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) • Simple Backup (DVD±RW) • Client Security Software (for security chip) <p>Downloadable</p> <ul style="list-style-type: none"> • IBM Director Agent • Software Delivery Assistant • System Migration Assistant <p>License (CD not included)</p> <ul style="list-style-type: none"> - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
L2 cache	2MB / on die (at processor speed) / ECC	
Memory	512MB or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail	
Combo DVD±RW	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim	
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay	
Disk	40GB ⁸ HS (5400 rpm), 60GB ⁸ HS (5400 rpm), or 80GB HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System	
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology Some: 15.0" (381.0mm) UXGA (1600x1200) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology	
Graphics	Some: Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz Some: ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory Some: ATI® MOBILITY FireGL™ V3200 / PCI Express x16 / 128MB GDDR1 memory	
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm with optical drive and battery: 14.1" models: up to 5.2 lb (2.3kg); 15": up to 5.9 lb (2.7 kg)	
Weight ²		
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover	
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim	
Battery - life ¹⁰	Up to 3.9 hr; Optional 9-cell: up to 5.9 hr; 9-cell plus Ultrabay Slim battery: up to 7.7 hr	
Architecture	Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub Some: Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door	
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)	
Video out	S-video out port (TV out) / one 4-pin industry standard connector	
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable	
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip	
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset	
11a/b/g II ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip	
CDC	One Communications Daughter Card (CDC) socket / customer accessible	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset	
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)	
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE	
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Security chip	Embedded Security Subsystem 2.0 ³³ / in NS PC8394T chip / TCG-compliant	
Limited warranty ¹²	3-year/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time	
	ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage	
	Universal 72 watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²	
	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced January 19, 2005 or August 16, 2005
US models withdrawn effective March, October, or November 2006

ThinkPad® T43 and T43p (1872 and 2669) - Education (Aug 05) - withdrawn Created by Lenovo Training Solutions Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	GDC modem/Bluetooth™	Finger print reader	Chip set	Limited warranty ¹²	Avail date
T43 1872-CJU	Pentium® M 760	2.00	512MB	14.1" XGA	GMA	40HS	Combo	* Intel 11a/b/g ³²	Modem	Finger	915GM	Onsite	Aug 05
T43 2669-CKU	Pentium M 770	2.13	512MB	14.1" XGA	X300	60HS	DVD±RW	* Intel 11a/b/g	Modem	Finger	915PM	Onsite	Aug 05
T43 2669-CLU	Pentium M 770	2.13	512MB	14.1" SXGA+	X300	80HS	Combo	* Intel 11a/b/g	Modem	Finger	915PM	Onsite	Aug 05
T43 2669-CMU	Pentium M 770	2.13	512MB	14.1" SXGA+	X300	80HS	DVD±RW	* Intel 11a/b/g	Modem	Finger	915PM	Onsite	Aug 05
T43 2669-CNU	Pentium M 770	2.13	512MB	15.0" SXGA+	X300	60HS	Combo	* Intel 11a/b/g	Modem	Finger	915PM	Onsite	Aug 05
T43p 2669-CPU	Pentium M 780	2.26	1GB	15.0" UXGA	V3200	80HS	DVD±RW	* Intel 11a/b/g	Modem	Finger	915PM	Onsite	Aug 05
T43 2669-CQU	Pentium M 760	2.00	512MB	14.1" XGA	X300	40HS	Combo	* Intel 11b/g ³²	Modem	Finger	915PM	Onsite	Aug 05
T43 2669-CRU	Pentium M 760	2.00	512MB	14.1" SXGA+	X300	80HS	Combo	* Intel 11b/g	Modem	Finger	915PM	Onsite	Aug 05
T43 2669-CSU	Pentium M 760	2.00	512MB	15.0" SXGA+	X300	40HS	DVD±RW	* Intel 11b/g	Modem	Finger	915PM	Onsite	Aug 05
T43p 2669-CTU	Pentium M 760	2.00	512MB	15.0" UXGA	V3200	80HS	DVD±RW	* Intel 11b/g	Mod/Blue	Finger	915PM	Onsite	Aug 05

• **These models have a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Perfect balance of performance and portability; two-spindle system</i> Intel® Pentium® M Processor 760 (2.00GHz), 770 (2.13GHz), or 780 (2.26GHz) with Enhanced Intel SpeedStep™ technology ⁷ , Execute Disable Bit, and 533MHz bus	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)
L2 cache	2MB / on die (at processor speed) / ECC	Preloaded • Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™ • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) • Fingerprint Software • Client Security Software (for security chip)
Memory	512MB or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail	
Diskette drive	None standard / use optional USB-based diskette drive	Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant
Combo DVD±RW	<i>Some:</i> DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim	
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay	License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
Disk	40GB⁸ HS (5400 rpm), 60GB⁸ HS (5400 rpm), or 80GB HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System	
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology <i>Some:</i> 15.0" (381.0mm) UXGA (1600x1200) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology	ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz <i>Some:</i> ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory <i>Some:</i> ATI® MOBILITY FireGL™ V3200 / PCI Express x16 / 128MB GDDR1 memory	
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)	ENERGY STAR®-compliant International Warranty Service¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	<i>14.1" models (WxDxH):</i> 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm <i>15.0" models (WxDxH):</i> 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm with optical drive and battery: <i>14.1" models:</i> up to 5.2 lb (2.3kg); <i>15":</i> up to 6.0 lb (2.7 kg)	
Weight ²	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover	
Case material	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim	
Battery - type	Up to 3.9 hr; <i>Optional 9-cell:</i> up to 5.9 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 7.7 hr	
Battery - life ¹⁰		
Architecture	<i>Some:</i> Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub <i>Some:</i> Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub <i>All:</i> 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door	
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)	
Video out	S-video out port (TV out) / one 4-pin industry standard connector	
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception	
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable <i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip <i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset	
Intel 11b/g ³²		
Intel 11a/b/g ³²		
CDC	One Communications Daughter Card (CDC) socket / customer accessible	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset	
Bluetooth™	<i>Some:</i> Bluetooth wireless technology / in CDC (with modem)	
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE	
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant	
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / integrated with security chip	
Limited warranty ¹²	3-year/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time	

See footnotes for important warranty information
US models announced August 2, 2005
US models withdrawn effective May or October 2006

* Powered by Intel Centrino® mobile technology

ThinkPad® T43 (1875) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Limited warranty ¹² or TopSeller	Workhorse or Global TopSeller	Avail date
1875-D1U	Pentium® M 740	1.73	256MB	14.1" XGA	GMA 900	40HS	DVD	* Intel 11b/g ³²	Modem	No	1-year	TopSeller	Feb 05
1875-D2U	Pentium M 740	1.73	256MB	14.1" XGA	GMA 900	40HS	Combo	* Intel 11a/b/g ³²	Modem	No	1-year	TopSeller	Feb 05
1875-D6U	Pentium M 740	1.73	256MB	14.1" XGA	GMA 900	40HS	Combo	* Intel 11a/b/g	Modem	Finger	1-year	TopSeller	Feb 05
1875-D9U	Pentium M 740	1.73	256MB	15.0" XGA	GMA 900	40HS	Combo	* Intel 11a/b/g	Modem	No	1-year	TopSeller	Feb 05
1875-DAU	Pentium M 740	1.73	256MB	15.0" XGA	GMA 900	40HS	Combo	* Intel 11a/b/g	Modem	Finger	1-year	TopSeller	Feb 05
1875-DNU	Pentium M 740	1.73	512MB	14.1" XGA	GMA 900	60HS	Combo	* Intel 11a/b/g	Modem	Finger	1-year	TopSeller	Jun 05
1875-DPU	Pentium M 740	1.73	512MB	15.0" XGA	GMA 900	40HS	Combo	* Intel 11a/b/g	Modem	Finger	1-year	TopSeller	Jun 05
1875-DQU	Pentium M 750	1.86	512MB	15.0" XGA	GMA 900	60HS	Combo	* Intel 11a/b/g	Modem	Finger	1-year	TopSeller	Jun 05
1875-DLU	Pentium M 740	1.73	512MB	14.1" XGA	GMA 900	60HS	Combo	* Intel 11b/g	Modem	Finger	1-year	TopSeller	Aug 05
1875-DMU	Pentium M 740	1.73	512MB	15.0" XGA	GMA 900	60HS	Combo	* Intel 11b/g	Modem	Finger	1-year	TopSeller	Aug 05
1875-M1U	Pentium M 740	1.73	512MB	14.1" XGA	GMA 900	40HS	Combo	* Intel 11b/g	Modem	Finger	1-year	TopSeller	Aug 05
1875-M2U	Pentium M 750	1.86	512MB	14.1" XGA	GMA 900	60HS	Combo	* Intel 11b/g	Modem	Finger	1-year	TopSeller	Aug 05
1875-M3U	Pentium M 750	1.86	512MB	15.0" XGA	GMA 900	60HS	Combo	* Intel 11b/g	Modem	Finger	1-year	TopSeller	Aug 05
<ul style="list-style-type: none"> • These small and medium business (SMB) models are part of the US TopSeller™ Program • These 1875 models have a 1-year limited warranty (other ThinkPad T43/T43p 2687 TopSeller models have a 3-year limited warranty) 													
Processor	Intel® Pentium® M Processor 740 (1.73GHz) or 750 (1.86GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴		
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional		
Memory	256MB or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded		
DVD	Some: DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim										• Rescue and Recovery™		
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										• Access Program		
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay										• Access Connections™		
Disk	40GB⁸ HS (5400 rpm) or 60GB HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System										• Norton AntiVirus		
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										• PC-Doctor™		
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										• ThinkPad Utilities		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• Adobe® Reader		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• Update Connector™ ¹⁵		
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										• RecordNOW and Drive		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										Letter Access powered by Sonic products (combo models)		
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm with optical drive and battery: 14.1" models: up to 5.1 lb (2.3kg); 15": up to 5.8 lb (2.6 kg)										• InterVideo WinDVD (combo, DVD models)		
Weight ²											• Fingerprint Software (fingerprint models)		
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover										• Client Security Software (for security chip)		
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										Downloadable		
Battery - life ¹⁰	Up to 3.9 hr; <i>Optional 9-cell:</i> up to 5.9 hr; <i>9-cell plus Ultrabay Slim battery:</i> up to 7.7 hr										• IBM Director Agent		
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										• Software Delivery Assistant		
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										• System Migration Assistant		
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										License (CD not included)		
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Video out	S-video out port (TV out) / one 4-pin industry standard connector										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage		
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										Universal 72-watt AC adapter		
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										PC 2001-compliant		
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip										ACPI 1.0b and 2.0-compliant		
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset										CIM and DMI 2.0-compliant		
CDC	One Communications Daughter Card (CDC) socket / customer accessible										PXE 2.1-compliant		
Modem	56K ⁶ V.90 (V.92-designed ²⁵) modem in CDC / Conexant® chipset										International Warranty Service ¹⁷		
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										ThinkPlus™.22 1-year LOR 9x5 NBD		
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										41C9166		
Security	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus 2-year LOR 9x5 NBD		
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant										41C9167		
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip										ThinkPlus 3-year LOR 9x5 NBD		
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail										41C9168		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733			ThinkPad T40/R50 Li-Ion Battery 6-cell			92P1101			ThinkPlus 4-year LOR 9x5 NBD			
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734			Ultrabay T40/R50 Li-Ion Battery 9-cell			92P1102			41C9173			
2GB PC2-5300 DDR2 SODIMM	40Y7735			Ultrabay Slim Li-Polymer Battery 3-cell			08K8190			ThinkPlus 2-year P&L P/U Depot			
USB 2.0 Super Multi-Burner Drive	41N5565			72W Slim AC/DC Combo Adapter			73P4485			41C9169			
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716			ThinkPad Port Replicator II			74P6733			ThinkPlus 3-year P&L P/U Depot			
USB Portable Diskette Drive	05K9276			ThinkPad Mini Dock			287810U			41C9170			
Second HDD Adapter for Ultrabay Slim	41U3148			ThinkPad Dock II			287710U			ThinkPlus 4-year P&L P/U Depot			
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643			ThinkVision® L201p 20.1" Monitor (black)			9220HB1			41C9172			
ThinkPad Convertible Monitor Stand	40Y7620			Other accessories at lenovo.com/accessories						ThinkPlus 5-year P&L P/U Depot			
												41C9174	

See footnotes for important warranty information

* Powered by Intel Centrino® mobile technology

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US models announced January 19, June 7, or August 9, 2005

(T8) August 2007

US models withdrawn effective May 2006, Oct 2006, or Aug 2007

ThinkPad® T43 (1876 and 2687) - TopSeller and Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁵	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Security chip	Chip set	Limited warranty ¹²	Avail date
1876-DBU	Pentium® M 750	1.86	512MB	14.1" XGA	GMA 60HS	60HS	Combo	* Intel 11a/b/g ³²	Modem	No	Yes	915GM	3-yr EasyServ	Mar 05
2687-DCU	Pentium M 760	2.00	512MB	14.1" XGA	X300	60HS	Combo	* Intel 11a/b/g	Modem	No	Yes	915PM	3-yr EasyServ	Mar 05

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty (other ThinkPad T43 1875 TopSeller models have a 1-year limited warranty)
- These models have an EasyServ™,¹⁹ onsite pickup and delivery 3-year limited warranty

Positioning Processor	Perfect balance of performance and portability; two-spindle system Intel® Pentium® M Processor 750 (1.86GHz) or 760 (2.00GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus												
L2 cache	2MB / on die (at processor speed) / ECC												
Memory	512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available												
Diskette drive	None standard / use optional USB-based diskette drive												
Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim												
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay												
Disk	60GB⁸ HS (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)												
Display	14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits												
Graphics	Some: Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz Some: ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory												
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm												
Weight ²	with optical drive and battery: up to 5.1 lb (2.3kg)												
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover												
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim												
Battery - life ¹⁰	Up to 3.9 hr; <i>Optional 9-cell</i> : up to 5.9 hr; <i>9-cell plus Ultrabay Slim battery</i> : up to 7.7 hr												
Architecture	Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub Some: Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip [TPM], Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])												
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door												
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door												
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)												
Video out	S-video out port (TV out) / one 4-pin industry standard connector												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Bluetooth™	None												
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound™ support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant												
Fingerprint reader	None												
Limited warranty ¹²	3-year/1-yr battery - EasyServ™, ¹⁹ onsite pickup and delivery / service upgrades ²² avail												
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101										
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102										
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190										
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Multiple Battery Charger II	22P9040										
USB Portable Diskette Drive	05K9276	72W Slim AC/DC Combo Adapter	73P4485										
USB 2.0/Analog Headset by Sennheiser	40Y8518	11a/b/g Wireless Mini PCI Adapter II	73P4301										
USB 2.0 Memory Key 1GB	40Y7421	Intel PRO/Wireless 2915ABG Mini PCI	41N2990										
USB 2.0 Super Multi-Burner Drive	40Y8638	ThinkPad Port Replicator II	74P6733										
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Mini Dock	287810U										
Super Multi-Burner Ultrabay Slim Drv (curved)	40Y8622	ThinkPad Dock II	287710U										
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkPad Carrying Case - Backpack	73P3599										
USB Travel Keyboard with UltraNav	31P9490	ThinkPad Carrying Case - Organizer	73P3598										
Kensington® MicroSaver® Security Cable	73P2582	Lenovo M500 Projector	0037A05										
ExpressCard Gemplus Smart Card Reader	41N3043	TrackPoint Cap Collection	73P2698										
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	ThinkVision® L201p 20.1" Monitor (black)	9220HB1										
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options											
				SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™ • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • Update Connector™, ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo) • InterVideo WinDVD (combo) • Client Security Software (for security chip) Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client									
				ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage Universal 72-watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² ThinkPlus™, ²² 2-year LOR 9x5 NBD 41C9175 ThinkPlus 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty									

See footnotes for important warranty information
US models announced January 19, 2005
US models withdrawn effective October or December 2006

* Powered by Intel Centrino® mobile technology

ThinkPad® T43 (2686) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Discrete graphics controller	Disk GB ⁸ and rpm	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Battery cells	Limited warranty ¹²	Avail date
2686-DHU	Pentium® M 740	1.73	512MB	15.0" XGA	X300 64MB	60GB 5400	Combo	* Intel 11b/g ³²	Modem	Finger	6-cell	1-yr	Jun 05
2686-DFU	Pentium M 740	1.73	512MB	14.1" XGA	X300 64MB	60GB 5400	Combo	* Intel 11b/g	Modem	Finger	6-cell	1-yr	Aug 05
2686-DGU	Pentium M 750	1.86	512MB	14.1" SXGA+	X300 64MB	60GB 7200	DVD±RW	* Intel 11b/g	Modem	Finger	6-cell	1-yr	Aug 05
2686-DJU	Pentium M 750	1.86	512MB	15.0" SXGA+	X300 64MB	80GB 5400	DVD±RW	* Intel 11b/g	Modem	Finger	6-cell	1-yr	Aug 05
2686-M4U	Pentium M 750	1.86	512MB	14.1" XGA	X300 64MB	60GB 5400	Combo	* Intel 11b/g	Modem	Finger	6-cell	1-yr	Aug 05
2686-M5U	Pentium M 760	2.00	512MB	14.1" SXGA+	X300 64MB	60GB 5400	DVD±RW	* Intel 11b/g	Modem	Finger	6-cell	1-yr	Aug 05
2686-M6U	Pentium M 750	1.86	512MB	15.0" XGA	X300 64MB	60GB 5400	Combo	* Intel 11b/g	Modem	Finger	6-cell	1-yr	Aug 05
2686-M7U	Pentium M 760	2.00	512MB	15.0" SXGA+	X300 64MB	80GB 5400	DVD±RW	* Intel 11b/g	Modem	Finger	6-cell	1-yr	Aug 05
<ul style="list-style-type: none"> • These small and medium business (SMB) models are part of the US TopSeller Program • These 2686 models have a 1-year limited warranty (other ThinkPad T43 1867 and 2687 TopSeller models have a 3-year limited warranty) 													
Processor	Intel® Pentium® M Processor 740 (1.73GHz), 750 (1.86GHz), or 760 (2.00GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴		
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional		
Memory	512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)		
Diskette drive	None standard / use optional USB-based diskette drive										↔ Disk-to-Disk Recovery (in hidden protected area)		
Combo DVD±RW	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										Preloaded		
Ultrabay Slim	Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim										• Rescue and Recovery™		
Disk	One modular bay for interchangeable devices (right side) / 9.5mm high bay										• Access Program		
	60GB ⁸ (5400 or 7200 rpm) or 80GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System										• Access Connections™		
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• Norton AntiVirus		
	Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits										• PC-Doctor™		
	Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										• ThinkPad Utilities		
	Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology										• Adobe® Reader		
Graphics	ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory										• RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW)		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• InterVideo WinDVD (combo, DVD±RW models)		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• InterVideo WinDVD Creator (DVD±RW models)		
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										• Simple Backup (DVD±RW)		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Fingerprint Software		
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm										• Client Security Software		
	15.0" model (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm										Downloadable		
Weight ²	with optical drive and battery: 14.1" models: up to 5.2 lb (2.3kg); 15" models: 5.9 lb (2.7 kg)										• IBM Director Agent		
Case material	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover										• Software Delivery Assistant		
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										• System Migration Assistant		
Battery - life ¹⁰	6-cell: up to 3.3 hr; 9-cell: up to 5.6 hr; 9-cell plus Ultrabay Slim battery: up to 7.4 hr												
Architecture	Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub (MCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoch® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage		
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										Universal 72-watt AC adapter		
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										PC 2001-compliant		
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										ACPI 1.0b and 2.0-compliant		
Video out	S-video out port (TV out) / one 4-pin industry standard connector										CIM and DMI 2.0-compliant		
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										PXE 2.1-compliant		
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										ENERGY STAR®-compliant		
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip										International Warranty Service ¹⁷		
CDC	One Communications Daughter Card (CDC) socket / customer accessible										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus™.22 1-year LOR 9x5 NBD		
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant										41C9166		
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / integrated with security chip										ThinkPlus 2-year LOR 9x5 NBD		
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available										41C9167		
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840			ThinkPad T40/R50 Li-Ion Battery 6-cell				92P1101			ThinkPlus 3-year LOR 9x5 NBD		
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842			ThinkPad T40/R50 Li-Ion Battery 9-cell				92P1102			41C9168		
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844			Ultrabay Slim Li-Polymer Battery 3-cell				08K8190			ThinkPlus 4-year LOR 9x5 NBD		
USB 2.0 Memory Key 1GB	40Y7421			72W Slim AC/DC Combo Adapter				73P4485			41C9173		
USB 2.0 Super Multi-Burner Drive	40Y8638			11a/b/g Wireless Mini PCI Adapter II				73P4301			ThinkPlus 2-year P&L P/U Depot		
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716			ThinkPad Port Replicator II				74P6733			41C9169		
USB Portable Diskette Drive	05K9276			ThinkPad Mini Dock				287810U			ThinkPlus 3-year P&L P/U Depot		
Second HDD Adapter for Ultrabay Slim	41U3148			ThinkPad Dock II				287710U			41C9170		
Super Multi-Burner Ultrabay Slim Drv (curve)	40Y8622			ThinkPad Carrying Case - BackPack				73P3599			ThinkPlus 4-year P&L P/U Depot		
Enh Perf Wireless Keyboard and Mouse	73P4067			ThinkPad Carrying Case - Leather				73P3600			41C9172		
USB Travel Keyboard with UltraNav	31P9490			ThinkPad Carrying Case - Organizer				73P3598			ThinkPlus 5-year P&L P/U Depot		
Kensington® MicroSaver® Security Cable	73P2582			ThinkVision® E500 Projector				0038A05			41C9174		
ThinkPad Monitor Stand	22P5265			ThinkVision L201p 20.1" Monitor (black)				9220HB1			Post-warranty annual maintenance agreements at		
ThinkPad Convertible Monitor Stand	40Y7620			Other options at lenovo.com/options							lenovo.com/thinkplus/warranty		

See footnotes for important warranty information
US models announced June 7 or August 9, 2005
US models withdrawn effective May, October, or December 2006

* Powered by Intel Centrino® mobile technology

ThinkPad® T43 and T43p (2687) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk GB ^a	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	Finger print reader	Battery life ¹⁰	Battery Limited cells warranty ¹²	Avail date
T43	2687-DEU Pentium® M 750	1.86	512MB	14.1" XGA	64MB	40GB	Combo	* Intel 11a/b/g ³²	Modem	No	3.8 hr	6-cell 3-yr	Feb 05
T43	2687-D7U Pentium M 750	1.86	512MB	14.1" SXGA+	64MB	40GB	Combo	* Intel 11a/b/g	Modem	No	3.6 hr	6-cell 3-yr	Feb 05
T43	2687-D8U Pentium M 750	1.86	512MB	14.1" SXGA+	64MB	60GB	DVD±RW	* Intel 11a/b/g	Modem	No	3.6 hr	6-cell 3-yr	Feb 05
T43	2687-D3U Pentium M 750	1.86	512MB	14.1" SXGA+	64MB	60GB	DVD±RW	* Intel 11a/b/g	Modem	Finger	5.4 hr	9-cell 3-yr	Mar 05
T43	2687-D4U Pentium M 750	1.86	512MB	15.0" SXGA+	64MB	40GB	Combo	* Intel 11a/b/g	Modem	No	3.4 hr	6-cell 3-yr	Feb 05
T43	2687-DDU Pentium M 750	1.86	512MB	15.0" SXGA+	64MB	60GB	DVD±RW	* Intel 11a/b/g	Modem	No	3.4 hr	6-cell 3-yr	Feb 05
T43	2687-DRU Pentium M 750	1.86	512MB	14.1" SXGA+	64MB	60GB	Combo	* Intel 11a/b/g	Modem	Finger	3.6 hr	6-cell 3-yr	Jun 05
T43	2687-DSU Pentium M 760	2.00	512MB	14.1" SXGA+	64MB	80GB	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	5.4 hr	9-cell 3-yr	Jun 05
T43	2687-DTU Pentium M 750	1.86	512MB	15.0" SXGA+	64MB	60GB	Combo	* Intel 11a/b/g	Mod/Blue	Finger	5.1 hr	9-cell 3-yr	Jun 05
T43	2687-DUU Pentium M 750	1.86	512MB	15.0" SXGA+	64MB	60GB	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	5.1 hr	9-cell 3-yr	Jun 05
T43	2687-DVU Pentium M 760	2.00	512MB	15.0" SXGA+	64MB	80GB	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	5.1 hr	9-cell 3-yr	Jun 05
T43p	2687-D5U Pentium M 760	2.00	1GB	15.0" UXGA	128MB	80GB	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	4.7 hr	9-cell 3-yr	Apr 05
T43p	2687-M8U Pentium M 760	2.00	1GB	15.0" UXGA	128MB	80GB	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	4.7 hr	9-cell 3-yr	Jul 06
T43p	2687-M9U Pentium M 760	2.00	2GB	15.0" UXGA	128MB	100GB	DVD±RW	* Intel 11a/b/g	Mod/Blue	Finger	4.7 hr	9-cell 3-yr	Jul 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty (other ThinkPad T43 1875 TopSeller models have a 1-year limited warranty)

Positioning Processor	Perfect balance of performance and portability; two spindles Intel® Pentium® M Processor 750 (1.86GHz) or 760 (2.00GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) Preloaded • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • Update Connector™ ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) • Simple Backup (DVD±RW) • Fingerprint Software (fingerprint models) • Client Security Software (for security chip) Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
L2 cache Memory	2MB / on die (at processor speed) / ECC 512MB, 1GB , or 2GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / <i>Others:</i> standard memory in 1 socket; 1 socket available; <i>M9U:</i> standard memory in both sockets (1GB in each); no sockets available	
Diskette drive Combo DVD±RW Ultrabay Slim Disk	None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim <i>Some:</i> DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay 40GB⁸ (5400 rpm), 60GB (5400 rpm), 80GB (5400 rpm), or 100GB (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System	
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology <i>Some:</i> 15.0" (381.0mm) UXGA (1600x1200) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology	
Graphics	<i>Some:</i> ATI® MOBILITY™ Radeon™ X300 / PCI Express x16 / 64MB GDDR1 memory <i>Some:</i> ATI MOBILITY FireGL™ V3200 / PCI Express x16 / 128MB GDDR1 memory	
Keyboard TrackPoint® Touch pad ThinkLight™	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys) TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31.4mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm with optical drive and battery: 14.1" models: up to 5.2 lb (2.3kg); 15": up to 6.3 lb (2.8 kg)	
Weight ² Case material Battery - type Battery - life ¹⁰	Magnesium composite in the top cover, titanium-reinforced CFRP in bottom cover Lithium Ion 6- or 9-cell / intelligent / supports unique 2nd battery in Ultrabay Slim 6-cell: up to 3.9 hr; 9-cell: up to 5.9 hr; 9-cell plus Ultrabay Slim battery: up to 7.7 hr	
Architecture	Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub (MCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)]) One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)	Supports ThinkVantage® technologies; visit thinkpad.com/thinkvantage Universal 72-watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²
PC Card Std slot ExpressCard slot Ports	Video out S-video out port (TV out) / one 4-pin industry standard connector Wireless antenna UltraConnect™ Antenna built into the display cover for optimal wireless signal reception Mini PCI One Mini PCI type III slot (Communications Bay) / customer upgradable Intel 11a/b/g ³² 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset CDC One Communications Daughter Card (CDC) socket / customer accessible Modem 56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset Bluetooth™ <i>Some:</i> Bluetooth wireless technology / in CDC (with modem) Ethernet Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE Audio support Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)	ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175 ThinkPlus 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant <i>Some:</i> Fingerprint reader on palm rest / swipe sensor / supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹²	3-year/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available	

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced January 19, March 15, or June 7, 2005 or June 30, 2006
US models withdrawn effective October 2006 or August 2007

ThinkPad® T60 (Entry) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Workhorse (W) Chip or Global (G) Avail or Entry (E) date
1951-28U	Core Duo T2300	1.66	512MB	14.1" XGA	GMA 950	40G 5400	Combo *	Intel 11a/b/g ³²	None	None	Finger	945GM E Feb 06
1951-24U	Core Duo T2300	1.66	512MB	14.1" XGA	GMA 950	40G 5400	Combo *	Intel 11a/b/g	None	None	Finger	945GM G E Feb 06
1951-26U	Core Duo T2300	1.66	512MB	14.1" XGA	GMA 950	40G 5400	DVD *	Intel 11a/b/g	None	None	Finger	945GM E Feb 06
1951-29U	Core Solo T1300	1.66	512MB	14.1" XGA	GMA 950	40G 5400	Combo *	Intel 11a/b/g	None	None	Finger	945GM E Feb 06
2007-23U	Core Solo T1300	1.66	512MB	14.1" XGA	X1300	40G 5400	Combo *	Intel 11a/b/g	None	None	Finger	945PM E Feb 06
1951-35U	Core Duo T2300	1.66	512MB	15.0" XGA	GMA 950	40G 5400	Combo *	Intel 11a/b/g	None	None	Finger	945GM E Feb 06
1951-37U	Core Duo T2300	1.66	512MB	15.0" XGA	GMA 950	40G 5400	Combo *	Intel 11a/b/g	None	None	Finger	945GM E Feb 06
1951-2JU	Core Duo T2400	1.83	512MB	14.1" XGA	GMA 950	40G 5400	Combo *	Intel 11a/b/g	None	None	Finger	945GM E July 06
1951-2KU	Core Solo T1400	1.83	512MB	14.1" XGA	GMA 950	40G 5400	Combo *	Intel 11a/b/g	None	None	Finger	945GM E July 06
1951-2LU	Core Duo T2300E	1.66	512MB	14.1" XGA	GMA 950	40G 5400	Combo *	Intel 11a/b/g	None	None	Finger	945GM E July 06
1951-2NU	Core Duo T2300E	1.66	512MB	14.1" XGA	GMA 950	40G 5400	Combo Open; upg ³⁶	None	None	None	Finger	945GM E July 06
1951-3DU	Core Duo T2300E	1.66	512MB	15.0" XGA	GMA 950	40G 5400	Combo *	Intel 11a/b/g	None	None	Finger	945GM E July 06
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ Solo processor T1300 or T1400 with single-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache or Intel Core Duo processor T2300, T2300E or T2400 with dual-core, enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache											
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail											
Diskette drive	None standard / use optional USB-based diskette drive											
EIDE DVD	<i>Some:</i> DVD-ROM / 24X-8X9 speed / single-layer / removable from Ultrabay™ Slim											
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim											
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel											
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™											
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare											
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some:</i> ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1 <i>All:</i> DVI pass-through support to optional Advanced Mini Dock or Advanced Dock											
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm											
Weight ²	with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg); 15": up to 6.3 lb (2.8 kg)											
Case material	14.1": magnesium composite in top cover, CFRP bottom cover; 15": CFRP in top/bottom											
Battery - type	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Slim											
Battery - life ¹⁰	6-cell: up to 6.0 hr; <i>opt 9-cell:</i> up to 9.0 hr; 9-cell plus Ultrabay battery: up to 11.5 hr											
Architecture	<i>Some:</i> Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some:</i> Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub <i>All:</i> 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 75C3203)											
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door											
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)											
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios											
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable											
Wireless upg ³⁶	<i>Some:</i> wireless upgradable with wireless Mini PCI Express options											
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG											
WWAN ¹⁶	None											
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset											
Bluetooth™	None											
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE											
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speaker, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack											
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant											
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / supports the security chip											
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail											
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60 Series Li-Ion Battery 6-cell	40Y6799									
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797									
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789									
Serial Hard Drive Ultrabay Slim Adapter(flat)	40Y8725	ThinkPad External Battery Charger	40Y7625									
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad 90W AC/DC Combo Adapter	40Y7630									
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad Carrying Case - Expander	73P3597									
Intel PRO/Wireless 3945ABG Mini PCIe Ad	41N3008	ThinkPad Carrying Case - BackPack	73P3599									
ThinkPad Essential Port Replicator	250510W	Lenovo D221 Wide 22" Monitor (black)	6622HB1									
ThinkPad Advanced Mini Dock	250410U	ThinkVision® L201p 20.1" Monitor (blk)	9220HB1									
ThinkPad Advanced Dock	250310U	Lenovo M500 Projector	0037A05									
Other accessories on O-T60 sheet	Other accessories at lenovo.com/accessories											
SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskkeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo) • InterVideo WinDVD (combo, DVD, models) License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client												
Supports ThinkVantage® technologies												
65-watt (1951) or 90-watt (2007) AC adapter												
ThinkPad Roll Cage (one-piece magnesium frame)												
RoHS-compliant												
International Warranty Service ¹⁷												
24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²												
ThinkPlus™.22 2-year LOR 9x5 NBD												
41C9175												
ThinkPlus 3-year LOR 9x5 NBD												
41C9176												
ThinkPlus 4-year LOR 9x5 NBD												
41C9177												
ThinkPlus 5-year LOR 9x5 NBD												
41C9179												
ThinkPlus 4-year P&L P/U Depot												
41C9178												
ThinkPlus 5-year P&L P/U Depot												
41C9180												
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty												

See footnotes for important warranty information
US models announced January 31 or July 11, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® mobile technology
* Powered by Intel Centrino Duo mobile

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(DV1-1) September 2007

ThinkPad® T60 (1951) - 14.1" display - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk SATA GB ³	rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger-print reader	Workhorse (W) or Global (G) or Entry (E)	Avail date
1951-43U	Core Duo T2400	1.83	512MB	14.1" XGA	GMA 950	60GB	5400	Combo	* Intel 11a/b/g ³²				W G	Feb 06
1951-44U	Core Duo T2400	1.83	512MB	14.1" XGA	GMA 950	60GB	5400	Combo	* Intel 11a/b/g			Finger	W G	Feb 06
1951-45U	Core Duo T2400	1.83	512MB	14.1" XGA	GMA 950	60GB	5400	Combo	* Intel 11a/b/g		Blue	Finger	W	May 06
1951-46U	Core Duo T2400	1.83	512MB	14.1" XGA	GMA 950	60GB	5400	DVD	* Intel 11a/b/g				W	Feb 06
1951-47U	Core Duo T2400	1.83	512MB	14.1" XGA	GMA 950	60GB	5400	DVD	Open; upg ³⁶				W	Feb 06
1951-48U	Core Duo T2400	1.83	512MB	14.1" XGA	GMA 950	60GB	7200	Combo	* Intel 11a/b/g			Finger	W	Feb 06
1951-4DU	Core Duo T2400	1.83	512MB	14.1" XGA	GMA 950	60GB	5400	Combo	* Intel 11a/b/g	AT&T		Finger	W	Jun 06
1951-4TU	Core Duo T2400	1.83	1GB	14.1" XGA	GMA 950	60GB	5400	Combo	* Intel 11a/b/g				W G	Aug 06
Positioning Processor	<i>Premiere performance; two spindles</i> Intel Core Duo processor T2400 (1.83GHz) with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache													
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail													
Diskette drive	None standard / use optional USB-based diskette drive													
EIDE DVD	<i>Some:</i> DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim													
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim													
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel													
Serial ATA disk (SATA150)	60GB³ (5400 or 7200 rpm) / 9.5mm high / removable,upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™													
Display	14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare													
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz / DVI pass-through support to optional Advanced Mini Dock or Advanced Dock													
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31mm													
Weight ²	with optical drive and battery: up to 5.5 lb (2.5kg)													
Case material	Magnesium composite top cover, Carbon Fiber Reinforced Plastic (CFRP) bottom cover													
Battery - type	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Slim													
Battery - life ¹⁰	6-cell: up to 6.0 hr; opt 9-cell: up to 9.0 hr; 9-cell plus Ultrabay battery: up to 11.5 hr													
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)													
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door													
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door													
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)													
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios													
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable													
Wireless upg ³⁶	<i>Some:</i> wireless upgradable with wireless Mini PCI Express options													
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG													
WWAN ²³	<i>Some:</i> Wireless WAN, GPRS/EDGE/UMTS/HSDPA support, Mini PCIe adapter and SIM, WWAN antenna on display, service contract required with AT&T®													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset													
Bluetooth™	<i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator													
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE													
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant													
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60 Series Li-Ion Battery 6-cell	40Y6799											
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797											
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789											
Serial/Parallel Port Bay Adapter (flat bezel)	40Y8121	ThinkPad External Battery Charger	40Y7625											
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad 65W AC Adapter	40Y7696											
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad 90W AC Adapter	40Y7659											
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad 90W AC/DC Combo Adapter	40Y7630											
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ThinkPad Nylon Carrying Case	10K0207											
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad Carrying Case - Expander	73P3597											
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Carrying Case - Organizer	73P3598											
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad Carrying Case - Backpack	73P3599											
USB 2.0 Super Multi-Burner Drive	41N5565	Carrying Case - Leather Attache	73P3600											
11a/b/g Wireless Mini PCI Express Adpr	40Y7026	ThinkPad Women's Leather Trim Tote	22P8856											
Intel PRO/Wireless 3945ABG Mini PCIe Ad	41N3008	Lenovo L192 Wide 19" Monitor (black)	6920AB1											
ThinkPad Adjustable Notebook Stand	40Y7676	Lenovo D221 Wide 22" Monitor (black)	6622HB1											
ThinkPad Convertible Monitor Stand	40Y7620	ThinkVision® L192p 19" Monitor (black)	9419HC2											
ThinkPad Essential Port Replicator	250510W	ThinkVision L201p 20.1" Monitor (black)	9220HB1											
ThinkPad Advanced Mini Dock	250410U	Lenovo M500 Projector	0037A05											
ThinkPad Advanced Dock	250310U	Lenovo C500 Projector	0039A05											
Other accessories on O-T60 sheet	Other accessories at lenovo.com/accessories													
	SOFTWARE¹⁴													
	Windows XP Professional													
	- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)													
	↔ Disk-to-Disk Recovery (in hidden protected area)													
	Preloaded													
	<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo models) • InterVideo WinDVD (combo, DVD, models) 													
	License - CD not included													
	- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client													
	Supports ThinkVantage® technologies													
	65-watt AC adapter (GMA graphics)													
	ThinkPad Roll Cage (one-piece magnesium frame)													
	RoHS-compliant													
	International Warranty Service ¹⁷													
	24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²													
	ThinkPlus™ ²² 2-yr LOR 9x5 NBD													
	41C9175													
	ThinkPlus 3-yr LOR 9x5 NBD													
	41C9176													
	ThinkPlus 4-yr LOR 9x5 NBD													
	41C9177													
	ThinkPlus 5-yr LOR 9x5 NBD													
	41C9179													
	ThinkPlus 4-yr P&L P/U Depot													
	41C9178													
	ThinkPlus 5-yr P&L P/U Depot													
	41C9180													
	Post-warranty annual maintenance agreements at													
	lenovo.com/thinkplus/warranty													

See footnotes for important warranty information
US models announced Jan 5, Jan 31, May 16, June 20, or August 1, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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(DV1-2) September 2007

ThinkPad® T60 (2007) - 14.1" display - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Workhorse (W) or Global (G) Entry (E)	Avail date
2007-42U	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	60GB 5400	DVD	*Intel 11a/b/g ³²				W G	Feb 06
2007-43U	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	60GB 5400	Combo	*Intel 11a/b/g		Blue	Finger	W G	May 06
2007-46U	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	60GB 5400	Combo	*Intel 11a/b/g			Finger	W G	Feb 06
2007-47U	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	60GB 5400	Combo	*Intel 11a/b/g	Verizon	Blue	Finger	W	Feb 06
2007-49U	Core Duo T2400	1.83	512MB	14.1" SXGA+	64MB	60GB 5400	Combo	*Intel 11a/b/g				W G	Feb 06
2007-4AU	Core Duo T2400	1.83	512MB	14.1" SXGA+	64MB	60GB 5400	Combo	*Intel 11a/b/g			Finger	W G	Feb 06
2007-4CU	Core Duo T2400	1.83	512MB	14.1" SXGA+	64MB	60GB 5400	Combo	*Intel 11a/b/g		Blue	Finger	W	Feb 06
2007-44U	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	60GB 5400	DVD	Open; upg ³⁶				W G	Feb 06
2007-48U	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	60GB 5400	Combo	*Intel 11a/b/g				W	Feb 06
2007-4BU	Core Duo T2400	1.83	512MB	14.1" SXGA+	64MB	80GB 5400	Combo	*Intel 11a/b/g	Verizon	Blue	Finger	W	Feb 06
2007-4DU	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	80GB 5400	Combo	*Intel 11a/b/g			Finger	W	Feb 06
2007-4EU	Core Duo T2400	1.83	512MB	14.1" SXGA+	64MB	60GB 7200	Combo	*Intel 11a/b/g			Finger	W	Feb 06
2007-62U	Core Duo T2500	2.00	1GB	14.1" SXGA+	128MB	100G 5400	DVD±RW	11a/b/g ³²		Blue	Finger		Feb 06
2007-63U	Core Duo T2500	2.00	1GB	14.1" SXGA+	128MB	100G 5400	DVD±RW	*Intel 11a/b/g		Blue	Finger		Feb 06
2007-64U	Core Duo T2500	2.00	1GB	14.1" SXGA+	128MB	100G 5400	DVD±RW	*Intel 11a/b/g	Verizon	Blue	Finger		Feb 06
2007-67U	Core Duo T2500	2.00	1GB	14.1" SXGA+	128MB	100G 5400	Combo	*Intel 11a/b/g	Verizon	Blue	Finger		Feb 06
2007-66U	Core Duo T2500	2.00	1GB	14.1" SXGA+	128MB	100G 5400	Combo	*Intel 11a/b/g		Blue		G	Feb 06
2007-68U	Core Duo T2500	2.00	1GB	14.1" SXGA+	128MB	100G 7200	DVD±RW	*Intel 11a/b/g		Blue	Finger		Feb 06
2007-05U	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	60GB 5400	Combo	*Intel 11a/b/g		Blue		W	May 06
2007-4WU	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	60GB 5400	Combo	*Intel 11a/b/g	AT&T	Blue	Finger	W	Jun 06
2007-4XU	Core Duo T2400	1.83	512MB	14.1" SXGA+	64MB	80GB 5400	Combo	*Intel 11a/b/g	AT&T	Blue	Finger	W	Jun 06
2007-6GU	Core Duo T2500	2.00	1GB	14.1" SXGA+	128MB	100G 5400	DVD±RW	*Intel 11a/b/g	AT&T	Blue	Finger		Jun 06
2007-6HU	Core Duo T2500	2.00	1GB	14.1" SXGA+	128MB	100G 5400	Combo	*Intel 11a/b/g	AT&T	Blue	Finger		Jun 06

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ Duo processor T2400 (1.83GHz) or T2500 (2.00GHz) with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB shared L2 cache	SOFTWARE ¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area) Preloaded (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • System Migration Assistant • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail	
Diskette drive	None standard / use optional USB-based diskette drive	
EIDE DVD	<i>Some:</i> DVD-ROM / 24X-8X9 speed / single-layer / removable from Ultrabay™ Slim	
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim	
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim	
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel	
Serial ATA disk (SATA150)	60GB⁸ (5400 or 7200 rpm), 80GB (5400 rpm), or 100GB (5400 or 7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™	
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare	
Graphics	<i>Some:</i> ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1 <i>Some:</i> ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB GDDR1 <i>All:</i> DVI pass-through support to optional Advanced Mini Dock or Advanced Dock	
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.0" x 1.0-1.2"; 316mm x 255mm x 26.6-31mm	
Weight ²	With optical drive and battery: up to 5.5 lb (2.5kg)	
Case material	Magnesium composite top cover, Carbon Fiber Reinforced Plastic (CFRP) bottom cover	
Battery - type	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Slim	
Battery - life ¹⁰	6-cell: up to 6.0 hr; opt 9-cell: up to 9.0 hr; 9-cell plus Ultrabay battery: up to 11.5 hr	
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door	
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)	
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios	
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable	
Wireless upg ³⁶	<i>Some:</i> wireless upgradable with wireless Mini PCI Express options	
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG	
11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX	
WWAN ¹⁶	<i>Some:</i> Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless	
WWAN ²³	<i>Some:</i> Wireless WAN, GPRS/EDGE/UMTS/HSDPA support, Mini PCIe adapter and SIM, WWAN antenna on display, service contract reqd with AT&T®	Supports ThinkVantage® technologies
Modem	56K ⁶ V.90 (V.92-designed ²³) modem in Com Daughter Card socket / Conexant® chipset	90-watt AC adapter (discrete graphics)
Bluetooth™	<i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator	ThinkPad Roll Cage (one-piece magnesium frame)
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE	RoHS-compliant
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack	International Warranty Service ¹⁷
Security	Power-on password / hard disk password / supervisor password / security keyhole	24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant	
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / supports the security chip	ThinkPlus services at lenovo.com/thinkplus/warranty
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail	

See footnotes for important warranty information * Powered by Intel Centrino® Duo mobile technology
US models announced January 31, May 16, May 25, or June 20, 2006
US models withdrawn effective September or December 2007

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(DV1-3) December 2007

ThinkPad® T60 (1951 and 2007) - 14.1" display - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk SATA GB ⁵	EIDE rpm	optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Chip set	Bat-Whorse (W) Cells	Gbl (G) Avail Entry date
1951-4GU	Core Duo T2500	2.00	1GB	14.1" XGA	GMA	60G	5400	Combo	*Intel 11a/b/g ³²				GM	6	W G July 06
1951-4MU	Core Duo T2400	1.83	1GB	14.1" XGA	GMA	60G	7200	Combo	*Intel 11a/b/g				GM	6	W G July 06
2007-GAU	Core Duo T2500	2.00	1GB	14.1" XGA	X1300	60G	5400	Combo	*Intel 11a/b/g				PM	6	W G July 06
1951-4HU	Core Duo T2500	2.00	1GB	14.1" XGA	GMA	60G	5400	Combo	*Intel 11a/b/g			Finger	GM	6	W July 06
1951-4KU	Core Duo T2500	2.00	1GB	14.1" XGA	GMA	60G	5400	Combo	*Intel 11a/b/g	AT&T		Finger	GM	6	W July 06
2007-G3U	Core Duo T2500	2.00	1GB	14.1" SXGA+	X1400	80G	5400	Combo	*Intel 11a/b/g				PM	6	W G July 06
2007-G4U	Core Duo T2500	2.00	1GB	14.1" SXGA+	X1400	80G	5400	Combo	*Intel 11a/b/g			Finger	PM	6	W G July 06
2007-G5U	Core Duo T2500	2.00	512M	14.1" SXGA+	X1400	80G	5400	Combo	*Intel 11a/b/g			Blue Finger	PM	6	W G July 06
2007-GBU	Core Duo T2500	2.00	1GB	14.1" SXGA+	X1400	80G	5400	Combo	*Intel 11a/b/g			Blue Finger	PM	6	W G July 06
1951-4LU	Core Duo T2500	2.00	1GB	14.1" XGA	GMA	60G	5400	DVD	Open; upg ³⁶				GM	6	W July 06
2007-G9U	Core Duo T2500	2.00	1GB	14.1" XGA	X1300	60G	5400	Combo	*Intel 11a/b/g			Finger	PM	6	W July 06
2007-6KU	Core Duo T2600	2.16	1GB	14.1" SXGA+	X1400	100G	5400	DVD±RW	*Intel 11a/b/g	AT&T		Blue Finger	PM	9	July 06
2007-6LU	Core Duo T2600	2.16	1GB	14.1" SXGA+	X1400	100G	5400	DVD±RW	*Intel 11a/b/g			Blue Finger	PM	9	July 06
2007-6MU	Core Duo T2600	2.16	1GB	14.1" SXGA+	X1400	100G	5400	Combo	*Intel 11a/b/g			Blue	PM	9	July 06
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ Duo processor T2400, T2500 or T2600 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache											SOFTWARE¹⁴			
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / 4GU, 4MU, 4HU, 4KU, 4LU: standard memory in both sockets; no sockets available; Others: standard memory in 1 socket; 1 socket available											Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive											Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (DVD, combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
EIDE DVD	<i>Some:</i> DVD-ROM / 24X-8X ⁹ speed / single-layer / removable from Ultrabay™ Slim														
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim														
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim														
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel														
Serial ATA disk (SATA150)	60GB⁸ (5400 or 7200 rpm), 80GB (5400 rpm), or 100GB (5400 or 7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™														
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare														
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some:</i> ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1 <i>Some:</i> ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB GDDR1 <i>All:</i> DVI pass-through support to optional Advanced Mini Dock or Advanced Dock														
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys														
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.0" x 1.0-1.2"; 316mm x 255mm x 26.6-31mm														
Weight ²	With optical drive and battery: up to 5.5 lb (2.5kg)														
Case material	Magnesium composite top cover, Carbon Fiber Reinforced Plastic (CFRP) bottom cover														
Battery - type	Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Slim														
Battery - life ¹⁰	6-cell: up to 6.0 hr; 9-cell: up to 9.0 hr; 9-cell plus Ultrabay battery: up to 11.5 hr														
Architecture	<i>Some:</i> Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some:</i> Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub <i>All:</i> 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 7SC3203)														
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door														
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door														
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios														
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable														
Wireless upg	<i>Some:</i> wireless upgradable with wireless Mini PCI Express options														
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG														
WWAN ²³	<i>Some:</i> Wireless WAN, GPRS/EDGE/UMTS/HSDPA support, Mini PCIe adapter and SIM, WWAN antenna on display, service contract required with AT&T®														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset														
Bluetooth™	<i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator														
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE														
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant														
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip														
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail														
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733			T60 Series Li-Ion Battery 6-cell			40Y6799								
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734			Z60m/T60/R60 Li-Ion Battery 9-cell			40Y6797								
2GB PC2-5300 DDR2 SODIMM	40Y7735			Advanced Ultrabay Battery 3-cell			40Y6789								
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643			ThinkPad 90W AC Adapter			40Y7659								
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013			ThinkPad 90W AC/DC Combo Adapter			40Y7630								
11a/b/g Wireless Mini PCI Express Adpr	40Y7026			ThinkPad Carrying Case - Expander			73P3597								
Other accessories on O-T60 sheet												Other accessories at lenovo.com/accessories			

See footnotes for important warranty information
US models announced July 11, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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(DV11-1) September 2007

ThinkPad® T60 (1951 and 2007) - 14.1" display (October 2006) - withdrawn Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk SATA GB ⁸	EIDE rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger print reader	Bat- tery Cells	Workhorse Global Avail
1951-2QU	Core™ 2 Duo T5500	1.66	512M	14.1" XGA	GMA	40G	5400	Combo	*Intel 11a/b/g ³²	None		GM 6	Entry Oct 06
1951-2RU	Core 2 Duo T5600	1.83	512M	14.1" XGA	GMA	40G	5400	Combo	*Intel 11a/b/g	None	Finger	GM 6	Entry Oct 06
1951-2SU	Core 2 Duo T5500	1.66	512M	14.1" XGA	GMA	60G	5400	Combo	*Intel 11a/b/g	None	Blue Finger	GM 6	Entry Oct 06
1951-4NU	Core 2 Duo T7200	2.00	1GB	14.1" XGA	GMA	60G	5400	Combo	*Intel 11a/b/g	None		GM 6	Gbl Oct 06
2007-GCU	Core 2 Duo T7200	2.00	1GB	14.1" SXGA+	X1300	80G	5400	Combo	*Intel 11a/b/g	None	Finger	PM 6	Gbl Oct 06
2007-GDU	Core 2 Duo T7200	2.00	1GB	14.1" XGA	X1300	80G	5400	Combo	*Intel 11a/b/g	None	Finger	PM 6	Gbl Oct 06
1951-4PU	Core 2 Duo T5600	1.83	1GB	14.1" XGA	GMA	60G	5400	Combo	*Intel 11a/b/g	None		GM 6	Gbl Nov06
2007-GEU	Core 2 Duo T5600	1.83	1GB	14.1" SXGA+	X1300	80G	5400	Combo	*Intel 11a/b/g	None	Blue Finger	PM 6	Gbl Nov06
2007-6PU	Core 2 Duo T7400	2.16	1GB	14.1" SXGA+	X1400	120G	5400	Combo	*Intel 11a/b/g	None	Blue Finger	PM 9	Oct 06
2007-6QU	Core 2 Duo T7400	2.16	1GB	14.1" SXGA+	X1400	120G	5400	DVD±RW	*Intel 11a/b/g	None	Blue Finger	PM 9	Gbl Nov06

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core 2 Duo processor T5500, T5600, T7200, or 7400 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz system bus;	SOFTWARE ¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • System Migration Assistant • Symantec® Client Security™ • Diskkeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
Memory	T5500/T5600: 2MB shared L2 cache; T7200/T7400: 4MB shared L2 cache 512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / 4NU: standard memory in both sockets (512MB each socket); no sockets available; Others: standard memory in 1 socket; 1 socket available	
Diskette drive	None standard / use optional USB-based diskette drive	
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim	
EIDE DVD±RW	<i>Some:</i> DVD burner / super Multi-Burner (40Y8623) dual layer, removable Ultrabay Slim	
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel	
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm), 60GB (5400 rpm), 80GB (5400 rpm), or 120GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™	
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare	
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some:</i> ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB memory <i>Some:</i> ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB memory <i>All:</i> DVI pass-through support to optional Advanced Mini Dock or Advanced Dock	
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.0" x 1.0-1.2"; 316mm x 255mm x 26.6-31mm	
Weight ²	With optical drive and battery: up to 5.5 lb (2.5kg)	
Case material	Magnesium composite top cover, Carbon Fiber Reinforced Plastic (CFRP) bottom cover	
Battery - type	Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Slim	
Battery - life ¹⁰	6-cell: up to 5.9 hr; 9-cell: up to 6.9 hr; 9-cell plus Ultrabay battery: up to 8.5 hr	
Architecture	<i>Some:</i> Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some:</i> Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub <i>All:</i> 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 75C3203) One Type I or Type II slot / CardBus 32-bit / integrated door	
PC Card Std slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door	
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)	
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios	
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable	
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG	
WWAN ¹⁶	None	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset	
Bluetooth™	<i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator	
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE	
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant	
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / supports the security chip	
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail	

512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60 Series Li-Ion Battery 6-cell	40Y6799	ThinkPlus 3-yr LOR 9x5 NBD
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	41C9176
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789	ThinkPlus 4-yr LOR 9x5 NBD
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad External Battery Charger	40Y7625	41C9177
160GB Disk 9.5mm SATA150 (7200 rpm)	41N5737	ThinkPad 90W AC/DC Combo Adapter	40Y7630	ThinkPlus 5-yr LOR 9x5 NBD
11a/b/g Wireless Mini PCI Express Adpr	40Y7026	ThinkPad Carrying Case - Expander	73P3597	41C9179
ThinkPad Essential Port Replicator	250510W	ThinkPad Carrying Case - Backpack	73P3599	ThinkPlus 4-yr P&L P/U Depot
ThinkPad Advanced Mini Dock	250410U	ThinkVision® L193p 19" LCD Monitor	4431HB2	41C9178
ThinkPad Advanced Dock	250310U	Lenovo M500 Projector	0037A05	ThinkPlus 5-yr P&L P/U Depot
Other accessories on O-T60 sheet		Other accessories at lenovo.com/accessories		41C9180

See footnotes for important warranty information
 US models announced October 17 or November 28, 2006
 US models withdrawn effective September or December 2007

* Powered by Intel Centrino® Duo mobile technology

ThinkPad® T60 (15.0" display) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk SATA GB ⁵	EIDE rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Chip set	Bat-tery Cells	Whorse (W) Gbl (G) Avail date
2007-55U	Core Duo T2400	1.83	512M	15.0"	SXGA+	X1300	60G	5400	Combo	*Intel 11a/b/g ³²		Finger	PM	6	W G Feb 06
1951-52U	Core Duo T2400	1.83	512M	15.0"	XGA	GMA	60G	5400	Combo	*Intel 11a/b/g		Finger	GM	6	W G Feb 06
2007-56U	Core Duo T2400	1.83	512M	15.0"	XGA	X1300	60G	5400	Combo	*Intel 11a/b/g		Finger	PM	6	W G Feb 06
2007-57U	Core Duo T2400	1.83	512M	15.0"	XGA	X1300	60G	5400	Combo	*Intel 11a/b/g			PM	6	W Feb 06
2007-58U	Core Duo T2400	1.83	512M	15.0"	SXGA+	X1300	60G	5400	Combo	*Intel 11a/b/g	Verizon	Blue Finger	PM	6	W Feb 06
2007-59U	Core Duo T2400	1.83	512M	15.0"	XGA	X1300	60G	7200	Combo	*Intel 11a/b/g		Finger	PM	6	W Feb 06
2007-5BU	Core Duo T2400	1.83	512M	15.0"	SXGA+	X1300	60G	7200	Combo	*Intel 11a/b/g		Blue Finger	PM	6	W Feb 06
2007-5CU	Core Duo T2400	1.83	512M	15.0"	XGA	X1300	80G	5400	Combo	*Intel 11a/b/g		Blue Finger	PM	6	W Feb 06
2007-72U	Core Duo T2500	2.00	1GB	15.0"	SXGA+	X1400	100G	5400	DVD±RW	*Intel 11a/b/g		Blue Finger	PM	6	W Feb 06
2007-74U	Core Duo T2500	2.00	1GB	15.0"	SXGA+	X1400	100G	5400	DVD±RW	*Intel 11a/b/g	Verizon	Blue Finger	PM	6	Feb 06
2007-73U	Core Duo T2500	2.00	1GB	15.0"	SXGA+	X1400	100G	5400	Combo	*Intel 11a/b/g		Blue	PM	6	Feb 06
2007-76U	Core Duo T2500	2.00	1GB	15.0"	SXGA+	X1400	100G	7200	DVD±RW	*Intel 11a/b/g		Blue Finger	PM	6	Feb 06
1951-58U	Core Duo T2500	2.00	1GB	15.0"	XGA	GMA	60G	5400	Combo	*Intel 11a/b/g		Finger	GM	6	W G July 06
2007-58U	Core Duo T2500	2.00	1GB	15.0"	SXGA+	X1300	80G	5400	Combo	*Intel 11a/b/g ³²			PM	6	W July 06
2007-5SU	Core Duo T2500	2.00	1GB	15.0"	SXGA+	X1300	80G	5400	Combo	*Intel 11a/b/g	AT&T	Finger	PM	6	W July 06
2007-5TU	Core Duo T2500	2.00	1GB	15.0"	SXGA+	X1400	80G	5400	Combo	*Intel 11a/b/g		Blue Finger	PM	6	W G July 06
2007-7DU	Core Duo T2600	2.16	1GB	15.0"	SXGA+	X1400	100G	5400	DVD±RW	*Intel 11a/b/g		Blue Finger	PM	9	July 06
2007-7GU	Core Duo T2600	2.16	1GB	15.0"	SXGA+	X1400	100G	5400	DVD±RW	*Intel 11a/b/g	AT&T	Blue Finger	PM	9	July 06
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ Duo processor T2400, T2500 or T2600 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache											SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area)			
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / 58U: standard memory in both sockets; no sockets available; Others: standard memory in 1 socket; 1 socket available											Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)			
Diskette drive EIDE Combo EIDE DVD±RW Ultrabay Slim Serial ATA disk (SATA150)	None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim <i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel 60GB⁸ (5400 or 7200 rpm), 80GB (5400 rpm), or 100GB (5400 or 7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™														
Display	<i>Some:</i> 15.0" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare / FlexView display with wide viewing angle and high density using IPS technology														
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some:</i> ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1 <i>Some:</i> ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB GDDR1 All: DVI pass-through support to optional Advanced Mini Dock or Advanced Dock														
Keyboard TrackPoint® Touch pad ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	15.0" models (WxDxH): 13.2" x 10.6" x 1.2-1.4"; 334mm x 268mm x 31-36mm with optical drive and battery: up to 6.3 lb (2.8 kg) CFRP in top/bottom Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.0 hr; 9-cell: up to 9.0 hr; 9-cell plus Ultrabay battery: up to 11.5 hr														
Architecture	<i>Some:</i> Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some:</i> Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 75C3203) One Type I or Type II slot / CardBus 32-bit / integrated door														
PC Card Std slot ExpressCard slot Ports	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)														
Wireless antenna Mini PCI Express Intel 11a/b/g ³² 11a/b/g ³² WWAN ¹⁶ WWAN ²³	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable <i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG <i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX <i>Some:</i> Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® <i>Some:</i> Wireless WAN, GPRS/EDGE/UMTS/HSDPA support, Mini PCIe adapter and SIM, WWAN antenna on display, service contract required with AT&T®											Supports ThinkVantage® technologies			
Modem Bluetooth™ Ethernet Audio support Security Security chip	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset <i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant											65-watt (1951) or 90-watt (2007) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip											ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175			
Limited warranty ¹² 3-years/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail												ThinkPlus 3-year LOR 9x5 NBD 41C9176 ThinkPlus 5-year LOR 9x5 NBD 41C9179 Other ThinkPlus services at lenovo.com/thinkplus/warranty			

See footnotes for important warranty information * Powered by Intel Centrino® Duo mobile technology
US models announced January 31 or July 11, 2006
US models withdrawn effective October 2006 or September 2007

ThinkPad® T60 (15.0" display) - October 2006 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN Blue-tooth	Finger print reader	Bat- tery Cells	Workhorse Global Avail Entry date	
1951-3GU	Core™ 2 Duo T5600	1.83	512M	15.0" XGA	GMA	40GB 5400	Combo	*Intel 11a/b/g ³²	None	Finger GM 6	6	Entry Oct 06	
2007-J2U	Core 2 Duo T7200	2.00	1GB	15.0" XGA	X1300	80GB 5400	Combo	*Intel 11a/b/g	None	Finger PM 6	6	Gbl Oct 06	
2007-J3U	Core 2 Duo T5600	1.83	1GB	15.0" SXGA+	X1300	80GB 5400	DVD±RW	*Intel 11a/b/g	None	Blue Finger GM 6	6	Gbl Nov 06	
2007-7JU	Core 2 Duo T7400	2.16	1GB	15.0" SXGA+	X1400	120G 5400	Combo	*Intel 11a/b/g	None	Blue Finger PM 9	9	Gbl Oct 06	
2007-7KU	Core 2 Duo T7400	2.16	1GB	15.0" SXGA+	X1400	120G 5400	DVD±RW	*Intel 11a/b/g	None	Blue Finger PM 9	9	Gbl Nov 06	
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core 2 Duo processor T5600, T7200, or T7400 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz system bus; <i>T5600: 2MB shared L2 cache; Others: 4MB shared L2 cache</i>												
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / std memory in 1 socket / 1 socket available												
Diskette drive	None standard / use optional USB-based diskette drive												
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim												
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim												
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel												
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm), 80GB (5400 rpm), or 120GB (5400 rpm) / 9.5mm high / upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™												
Display	Some: 15.0" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare / FlexView display with wide viewing angle and high density using IPS technology												
Graphics	Some: Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz Some: ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB memory Some: ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB memory All: DVI pass-through support to optional Advanced Mini Dock or Advanced Dock												
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	<i>15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"</i> ; 329mm x 268mm x 31-36mm												
Weight ²	With optical drive and battery: up to 6.2 lb (2.8kg)												
Case material	Carbon Fiber Reinforced Plastic (CFRP) in top/bottom cover												
Battery - type	Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Slim												
Battery - life ¹⁰	<i>6-cell</i> : up to 5.9 hr; <i>9-cell</i> : up to 6.3 hr; <i>9-cell plus Ultrabay battery</i> : up to 8.5 hr												
Architecture	Some: Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub Some: Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint] / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 75C3203)												
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door												
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door												
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)												
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios												
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable												
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG												
WWAN ¹⁶	None												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset												
Bluetooth™	Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator												
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE												
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant												
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip												
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail												
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60 Series Li-Ion Battery 6-cell							40Y6799				
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell							40Y6797				
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell							40Y6789				
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad 90W AC Adapter							40Y7659				
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad 90W AC/DC Combo Adapter							40Y7630				
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ThinkPad Carrying Case - Expander							73P3597				
11a/b/g Wireless Mini PCI Express Adpr	40Y7026	ThinkPad External Battery Charger							40Y7625				
Intel PRO/Wireless 3945ABG Mini PCIe Ad	41N3008	ThinkPad Nylon Carrying Case							10K0207				
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad Carrying Case - Organizer							73P3598				
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Carrying Case - BackPack							73P3599				
ThinkPad Adjustable Notebook Stand	40Y7676	Lenovo L192 Wide 19" Monitor (black)							6920AB1				
ThinkPad Convertible Monitor Stand	40Y7620	Lenovo D221 Wide 22" Monitor							6622HB1				
ThinkPad Essential Port Replicator	250510W	ThinkVision® L201p 20.1" Monitor (blk)							9220HB1				
ThinkPad Advanced Mini Dock	250410U	Lenovo M500 Projector							0037A05				
ThinkPad Advanced Dock	250310U	Lenovo C500 Projector							0039A05				
Other accessories on O-T60 sheet	Other accessories at lenovo.com/accessories												
											SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area)		
											Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)		
											License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
											Supports ThinkVantage® technologies		
											65-watt (1951) or 90-watt (2007) AC adapter		
											ThinkPad Roll Cage (one-piece magnesium frame)		
											RoHS-compliant		
											International Warranty Service ¹⁷		
											24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
											ThinkPlus™. ²² 2-year LOR 9x5 NBD		
											41C9175		
											ThinkPlus 3-year LOR 9x5 NBD		
											41C9176		
											ThinkPlus 4-year LOR 9x5 NBD		
											41C9177		
											ThinkPlus 5-year LOR 9x5 NBD		
											41C9179		
											ThinkPlus 4-year P&L P/U Depot		
											41C9178		
											ThinkPlus 5-year P&L P/U Depot		
											41C9180		
											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information
US models announced October 17 or November 28, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

ThinkPad® T60p - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Workhorse (W) or Global (G) or Entry (E)	Avail date
2007-82U	Core Duo T2600	2.16	1GB	14.1" SXGA+	256MB	100G 7200	Combo	* Intel 11a/b/g ³²		Blue	Finger		Feb 06
2007-83U	Core Duo T2600	2.16	1GB	14.1" SXGA+	256MB	100G 7200	DVD±RW	* Intel 11a/b/g		Blue	Finger	G	Feb 06
2007-84U	Core Duo T2600	2.16	1GB	14.1" SXGA+	256MB	100G 7200	DVD±RW	* Intel 11a/b/g	Verizon	Blue	Finger		Feb 06
2007-86U	Core Duo T2600	2.16	1GB	14.1" SXGA+	256MB	100G 7200	DVD±RW	11a/b/g ³²		Blue	Finger		Feb 06
2007-87U	Core Duo T2600	2.16	1GB	14.1" SXGA+	256MB	100G 7200	Combo	* Intel 11a/b/g		Blue	Finger	G	Feb 06
2007-92U	Core Duo T2600	2.16	1GB	15.0" UXGA	256MB	100G 7200	DVD±RW	11a/b/g		Blue	Finger		Feb 06
2007-93U	Core Duo T2600	2.16	1GB	15.0" UXGA	256MB	100G 7200	DVD±RW	* Intel 11a/b/g		Blue	Finger	G	Feb 06
2007-94U	Core Duo T2600	2.16	1GB	15.0" UXGA	256MB	100G 7200	DVD±RW	* Intel 11a/b/g	Verizon	Blue	Finger		Feb 06
2007-95U	Core Duo T2600	2.16	1GB	15.0" UXGA	256MB	100G 7200	Combo	* Intel 11a/b/g		Blue	Finger		Feb 06
2007-96U	Core Duo T2600	2.16	1GB	15.0" UXGA	256MB	100G 7200	Combo	* Intel 11a/b/g		Blue	Finger		Feb 06
2007-8CU	Core Duo T2600	2.16	1GB	14.1" SXGA+	256MB	100G 7200	DVD±RW	* Intel 11a/b/g		Blue	Finger	G	Jun 06
2007-8DU	Core Duo T2700	2.33	1GB	14.1" SXGA+	256MB	100G 7200	DVD±RW	* Intel 11a/b/g		Blue	Finger	G	July 06
2007-8EU	Core Duo T2700	2.33	1GB	14.1" SXGA+	256MB	100G 7200	DVD±RW	* Intel 11a/b/g	AT&T	Blue	Finger		July 06
2007-8FU	Core Duo T2700	2.33	1GB	14.1" SXGA+	256MB	100G 7200	Combo	* Intel 11a/b/g		Blue	Finger		July 06
2007-8GU	Core Duo T2700	2.33	2GB	14.1" SXGA+	256MB	60G 5400	DVD±RW	* Intel 11a/b/g		Blue	Finger		July 06
2007-9EU	Core Duo T2700	2.33	1GB	15.0" UXGA	256MB	100G 7200	DVD±RW	* Intel 11a/b/g		Blue	Finger	G	July 06
2007-9FU	Core Duo T2700	2.33	1GB	15.0" UXGA	256MB	100G 7200	DVD±RW	* Intel 11a/b/g	AT&T	Blue	Finger		July 06
2007-9GU	Core Duo T2700	2.33	1GB	15.0" UXGA	256MB	100G 7200	Combo	* Intel 11a/b/g		Blue	Finger		July 06
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ Duo processor T2600 or T2700 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB shared L2 cache												
Memory	1GB or 2GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / dual-channel capable / two 200-pin SO-DIMM sockets / std memory in 1 socket / 1 socket available												
Diskette drive	None standard / use optional USB-based diskette drive												
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim												
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim												
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel												
Serial ATA disk (SATA150)	60GB (5400rpm) or 100GB (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™												
Display	Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare Some: 15.0" (381.0mm) UXGA (1600x1200) TFT color / 200 nits / anti-glare / FlexView display with wide viewing angle and high density using IPS technology												
Graphics	ATI® MOBILITY™ FireGL™ V5200 M56 / PCI Express x16 / 256MB GDDR3 / DVI pass-through support to optional Advanced Mini Dock or Advanced Dock												
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.0" x 1.0-1.2"; 316mm x 255mm x 26.6-31mm 15.0" models (WxDxH): 13.2" x 10.6" x 1.2-1.4"; 334mm x 268mm x 31-36mm with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg); 15": up to 6.3 lb (2.8kg)												
Weight ²													
Case material	14.1": magnesium composite in top cover, CFRP bottom cover; 15": CFRP in top/bottom												
Battery - type	Lithium Ion 9-cell / supports unique 2nd battery in Ultrabay Slim												
Battery - life ¹⁰	9-cell: up to 5.4 hr; 9-cell plus Ultrabay battery: up to 6.9 hr												
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)												
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door												
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door												
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)												
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios												
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable												
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG												
11a/b/g ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX												
WWAN ¹⁶	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon®												
WWAN ²³	Some: Wireless WAN, GPRS/EDGE/UMTS/HSDPA support, Mini PCIe adapter and SIM, WWAN antenna on display, service contract required with AT&T®												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset												
Bluetooth™	Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator												
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE												
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant												
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip												
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail												
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	T60 Series Li-Ion Battery 6-cell	40Y6799										
2GB PC2-5300 DDR2 SODIMM	40Y7735	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797										
ThinkPad Essential Port Replicator	250510W	Advanced Ultrabay Battery 3-cell	40Y6789										
ThinkPad Advanced Mini Dock	250410U	ThinkPad Carrying Case - Backpack	73P3599										
Other accessories on O-T60 sheet	Other accessories at lenovo.com/accessories												

SOFTWARE¹⁴

Windows XP Professional

- Microsoft® Windows® XP Professional²⁰ (Service Pack 2)
- ↳ Disk-to-Disk Recovery (in hidden protected area)

Preloaded

- Rescue and Recovery™
- Access Connections™
- Client Security Solution™
- ThinkVantage Productivity Center with Away Manager
- ThinkVantage System Update
- Symantec® Client Security™
- Diskeeper® Lite
- PC-Doctor™ (diagnostics)
- ThinkPad Utilities (Power Manager and Presentation Director)
- Adobe® Reader
- Google Toolbar
- Google Desktop
- Picasa from Google
- Fingerprint Software (fingerprint models)
- Multimedia Center for Think Offerings
- Sonic RecordNOW and Drive Letter Access (combo, DVD±RW)
- InterVideo WinDVD (combo, DVD, DVD±RW models)
- InterVideo WinDVD Creator (DVD±RW models)

License - CD not included

- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client

Supports ThinkVantage® technologies

- 90-watt AC adapter
- ThinkPad Roll Cage (one-piece magnesium frame)
- RoHS-compliant
- International Warranty Service¹⁷
- 24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²

ThinkPlus™.²² 2-year LOR 9x5 NBD 41C9175

ThinkPlus 3-year LOR 9x5 NBD 41C9176

ThinkPlus 4-year LOR 9x5 NBD 41C9177

ThinkPlus 5-year LOR 9x5 NBD 41C9179

ThinkPlus 4-year P&L P/U Depot 41C9178

ThinkPlus 5-year P&L P/U Depot 41C9180

See footnotes for important warranty information * Powered by Intel Centrino® Duo mobile technology
 US models announced January 31, June 20, or July 11, 2006
 US models withdrawn effective October 2006 or September 2007

ThinkPad® T60p 2007 (October 2006) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Workhorse or Global Entry	Avail date	
2007-8LU	Core™ 2 Duo T7400	2.16	2GB	14.1" SXGA+	256MB	100G 7200	DVD±RW	* Intel 11a/b/g ³²	None	Blue	Finger	Gbl	Nov 06	
2007-8JU	Core 2 Duo T7600	2.33	1GB	14.1" SXGA+	256MB	100G 7200	DVD±RW	* Intel 11a/b/g	None	Blue	Finger	Gbl	Oct 06	
2007-8HU	Core 2 Duo T7600	2.33	2GB	14.1" SXGA+	256MB	100G 7200	DVD±RW	* Intel 11a/b/g	None	Blue	Finger	Gbl	Nov 06	
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core 2 Duo processor T7400 or T7600 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache													
Memory	1GB or 2GB std / 4GB max ³¹ / non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Models 8LU/8HU: PC2-4200 533MHz DDR2; Others: PC2-5300 667MHz DDR2; Non-italics: standard memory in one socket; one socket available</i>													
Diskette drive	None standard / use optional USB-based diskette drive													
EIDE DVD±RW	DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim													
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel													
Serial ATA disk (SATA150)	100GB (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™													
Display	14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare													
Graphics	ATI® MOBILITY™ FireGL™ V5250 M66GL-256 / PCI Express x16 / 256MB memory / DVI pass-through support to optional Advanced Mini Dock or Advanced Dock													
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.0" x 1.0-1.2" ; 316mm x 255mm x 26.6-31mm													
Weight ²	with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg)													
Case material	14.1" : magnesium composite in top cover, CFRP bottom cover													
Battery - type	Lithium Ion 9-cell / supports unique 2nd battery in Ultrabay Slim													
Battery - life ¹⁰	9-cell: up to 6.3 hr; 9-cell plus Ultrabay battery: up to 7.8 hr													
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)													
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door													
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door													
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)													
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios													
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable													
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG													
WWAN ¹⁶	None													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset													
Bluetooth™	Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator													
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE													
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60 Series Li-Ion Battery 6-cell						40Y6799	90-watt AC adptr (discrete graphics)					
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell						40Y6797	ThinkPad Roll Cage (one-piece magnesium frame)					
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell						40Y6789	RoHS-compliant					
Serial/Parallel Port Bay Adapter (flat bezel)	40Y8121	ThinkPad External Battery Charger						40Y7625	International Warranty Service ¹⁷					
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad 65W AC Adapter						40Y7696	24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²					
DVD-ROM Ultrabay Slim Drive (curved)	73P3270	ThinkPad 90W AC Adapter						40Y7659	ThinkPlus™ ²² 2-year LOR 9x5 NBD					
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad 90W AC/DC Combo Adapter						40Y7630	41C9175					
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad Nylon Carrying Case						10K0207	ThinkPlus 3-year LOR 9x5 NBD					
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ThinkPad Carrying Case - Expander						73P3597	41C9176					
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad Carrying Case - Organizer						73P3598	ThinkPlus 4-year LOR 9x5 NBD					
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Carrying Case - BackPack						73P3599	41C9177					
USB 2.0 Security Memory Key 4GB	41U5120	Carrying Case - Leather Attache						73P3600	ThinkPlus 5-year LOR 9x5 NBD					
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Women's Leather Trim Tote						22P8856	41C9179					
11a/b/g Wireless Mini PCI Express Adpr	40Y7026	Kensington MicroSaver Security Cable						73P2582	ThinkPlus 4-year P&L P/U Depot					
Intel PRO/Wireless 3945ABG Mini PCIe Ad	41N3008	Lenovo L192 Wide 19" Monitor (black)						6920AB1	41C9178					
ThinkPad Adjustable Notebook Stand	40Y7676	Lenovo D221 Wide 22" Monitor						6622HB1	ThinkPlus 5-year P&L P/U Depot					
ThinkPad Convertible Monitor Stand	40Y7620	ThinkVision® L192p 19" Monitor (black)						9419HC2	41C9180					
ThinkPad Essential Port Replicator	250510W	ThinkVision L201p 20.1" Monitor (black)						9220HB1	Post-warranty annual maintenance agreements at					
ThinkPad Advanced Mini Dock	250410U	Lenovo M500 Projector						0037A05	lenovo.com/thinkplus/warranty					
ThinkPad Advanced Dock	250310U	Lenovo C500 Projector						0039A05						
Other accessories on O-T60 sheet	Other accessories at lenovo.com/accessories													

See footnotes for important warranty information
US models announced October 17 or November 28, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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(DV2-2) September 2007

ThinkPad® T60p (Linux-ready) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Workhorse (W) or Global (G) or Entry (E)	Avail date
2007-8ZU	Core Duo T2700	2.33	1GB	14.1" SXGA+	256MB	100G 7200	DVD±RW	* Intel 11a/b/g ³²	None	Blue	Finger	Gbl	Aug 06
2007-9ZU	Core Duo T2700	2.33	1GB	15.0" UXGA	256MB	100G 7200	DVD±RW	* Intel 11a/b/g	None	Blue	Finger	Gbl	Aug 06

• **Linux-ready with DOS entitlement**

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ Duo processor T2700 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache											
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / dual-channel capable / two 200-pin SO-DIMM sockets / std memory in 1 socket / 1 socket available											
Diskette drive	None standard / use optional USB-based diskette drive											
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim											
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim											
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel											
Serial ATA disk (SATA150)	100GB (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™											
Display	<i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare <i>Some:</i> 15.0" (381.0mm) UXGA (1600x1200) TFT color / 200 nits / anti-glare / FlexView display with wide viewing angle and high density using IPS technology											
Graphics	ATI® MOBILITY™ FireGL™ V5200 M56 / PCI Express x16 / 256MB GDDR3 / DVI pass-through support to optional Advanced Mini Dock or Advanced Dock											
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.0" x 1.0-1.2"; 316mm x 255mm x 26.6-31mm 15.0" models (WxDxH): 13.2" x 10.6" x 1.2-1.4"; 334mm x 268mm x 31-36mm											
Weight ²	with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg); 15": up to 6.3 lb (2.8kg)											
Case material	14.1": magnesium composite in top cover, CFRP bottom cover; 15": CFRP in top/bottom											
Battery - type	Lithium Ion 9-cell / supports unique 2nd battery in Ultrabay Slim											
Battery - life ¹⁰	9-cell: up to 5.4 hr; 9-cell plus Ultrabay battery: up to 6.9 hr											
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)											
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door											
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)											
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios											
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable											
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG											
WWAN	None											
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset											
Bluetooth™	Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator											
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE											
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack											
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant											
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip											
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail											
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60 Series Li-Ion Battery 6-cell	40Y6799	ThinkPad Roll Cage (one-piece magnesium frame)								
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	RoHS-compliant								
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789	International Warranty Service ¹⁷								
Serial/Parallel Port Bay Adapter (flat bezel)	40Y8121	ThinkPad External Battery Charger	40Y7625	24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²								
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad 65W AC Adapter	40Y7696	ThinkPlus™ ²² 2-year LOR 9x5 NBD								
DVD-ROM Ultrabay Slim Drive (curved)	73P3270	ThinkPad 90W AC Adapter	40Y7659	41C9175								
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad 90W AC/DC Combo Adapter	40Y7630	ThinkPlus 3-year LOR 9x5 NBD								
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad Nylon Carrying Case	10K0207	41C9176								
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ThinkPad Carrying Case - Expander	73P3597	41C9177								
USB Fingerprint Reader	41U3167	ThinkPad Carrying Case - Organizer	73P3598	ThinkPlus 4-year LOR 9x5 NBD								
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Carrying Case - BackPack	73P3599	41C9177								
USB 2.0 Security Memory Key 4GB	41U5120	Carrying Case - Leather Attache	73P3600	ThinkPlus 5-year LOR 9x5 NBD								
USB 2.0 Super Multi-Burner Drive	41N5565	Kensington® MicroSaver® Security Cable	73P2582	41C9178								
ExpressCard Gemplus Smart Card Reader	41N3043	Lenovo L171 17" Monitor (black)	9227AC1	41C9179								
11a/b/g Wireless Mini PCI Express Adpr	40Y7026	Lenovo L192 Wide 19" Monitor (black)	6920AB1	ThinkPlus 4-year P&L P/U Depot								
ThinkPad Adjustable Notebook Stand	40Y7676	Lenovo D221 Wide 22" Monitor (black)	6622HB1	41C9178								
ThinkPad Convertible Monitor Stand	40Y7620	ThinkVision® L192p 19" Monitor (black)	9419HC2	ThinkPlus 5-year P&L P/U Depot								
ThinkPad Essential Port Replicator	250510W	ThinkVision L201p 20.1" Monitor (black)	9220HB1	41C9180								
ThinkPad Advanced Mini Dock	250410U	Lenovo M500 Projector	0037A05	Post-warranty annual maintenance agreements at								
ThinkPad Advanced Dock	250310U	Lenovo C500 Projector	0039A05	lenovo.com/thinkplus/warranty								
Other accessories on O-T60 sheet		Other accessories at lenovo.com/accessories										

See footnotes for important warranty information
US models announced August 15, 2006
US models withdrawn effective December 2006 or September 2007

* Powered by Intel Centrino® Duo mobile technology

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(DV11-2) September 2007

ThinkPad® T60p (Linux-ready) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Workhorse or Global Entry	Avail date
2623-8YU	Core Duo T2500	2.00	1GB	14.1" SXGA+	256MB	100G 7200	DVD±RW	* Intel 11a/b/g ³²	None	Blue	Finger	None	Oct 06

- **Linux-ready with DOS entitlement**
- **This small and medium business (SMB) model is part of the US TopSeller™ Program**

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ Duo processor T2500 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache												SOFTWARE
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / dual-channel capable / two 200-pin SO-DIMM sockets / std memory in 1 socket / 1 socket available												Linux operating system and software applications are provided by the customer.
Diskette drive	None standard / use optional USB-based diskette drive												Although this system has hardware for the following security features, the Linux operating system does not support them: • Fingerprint reader • Active Protection System • Client Security Solution
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim												
EIDE DVD±RW Ultrabay Slim	Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim												
Serial ATA disk (SATA150)	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel 100GB (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™												
Display	14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare												
Graphics	ATI® MOBILITY™ FireGL™ V5200 M56 / PCI Express x16 / 256MB GDDR3 / DVI pass-through support to optional Advanced Mini Dock or Advanced Dock												See lenovo.com/linux for more information
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.0" x 1.0-1.2"; 316mm x 255mm x 26.6-31mm												
Weight ²	with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg)												
Case material	14.1": magnesium composite in top cover, CFRP bottom cover;												
Battery - type	Lithium Ion 9-cell / supports unique 2nd battery in Ultrabay Slim												
Battery - life ¹⁰	9-cell: up to 5.4 hr; 9-cell plus Ultrabay battery: up to 6.9 hr												
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)												
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door												
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door												
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)												
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios												
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable												
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG												
WWAN	None												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset												
Bluetooth™	Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator												
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE												
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant												
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip												
Limited warranty ¹²	3-years/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail												Supports ThinkVantage® technologies
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60 Series Li-Ion Battery 6-cell	40Y6799	90-watt AC adapter									
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	ThinkPad Roll Cage (one-piece magnesium frame)									
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789	RoHS-compliant									
Serial/Parallel Port Bay Adapter (flat bezel)	40Y8121	ThinkPad External Battery Charger	40Y7625	International Warranty Service ¹⁷									
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad 90W AC Adapter	40Y7659	24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²									
DVD-ROM Ultrabay Slim Drive (curved)	73P3270	ThinkPad 90W AC/DC Combo Adapter	40Y7630	ThinkPlus™ ²² 2-year LOR 9x5 NBD									
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad Nylon Carrying Case	10K0207	41C9175									
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad Carrying Case - Expander	73P3597	ThinkPlus 3-year LOR 9x5 NBD									
100GB Hard Disk 9.5mm SATA (7200 rpm)	41N3013	ThinkPad Carrying Case - Organizer	73P3598	41C9176									
USB Portable Diskette Drive	05K9276	ThinkPad Carrying Case - Backpack	73P3599	41C9177									
USB Fingerprint Reader	41U3167	Carrying Case - Leather Attache	73P3600	41C9178									
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Women's Microfiber Tote	22P8855	ThinkPlus 4-year LOR 9x5 NBD									
USB 2.0 Security Memory Key 4GB	41U5120	Kensington® MicroSaver® Security Cable	73P2582	41C9179									
USB 2.0 Super Multi-Burner Drive	41N5565	Lenovo L171 17" Monitor (black)	9227AC1	ThinkPlus 5-year LOR 9x5 NBD									
ExpressCard Gemplus Smart Card Reader	41N3043	Lenovo L192 Wide 19" Monitor (black)	6920AB1	41C9179									
11a/b/g Wireless Mini PCI Express Adpr	40Y7026	Lenovo D221 Wide 22" Monitor (black)	6622HB1	ThinkPlus 4-year P&L P/U Depot									
ThinkPad Adjustable Notebook Stand	40Y7676	ThinkVision® L192p 19" Monitor (black)	9419HC2	41C9178									
ThinkPad Convertible Monitor Stand	40Y7620	ThinkVision L201p 20.1" Monitor (black)	9220HB1	ThinkPlus 5-year P&L P/U Depot									
ThinkPad Essential Port Replicator	250510W	Lenovo M500 Projector	0037A05	41C9180									
ThinkPad Advanced Mini Dock	250410U	Lenovo C500 Projector	0039A05	Post-warranty annual maintenance agreements at									
ThinkPad Advanced Dock	250310U	Lenovo Laser Mouse (USB, PS/2)	41U3074	lenovo.com/thinkplus/warranty									
Other accessories on O-T60 sheet		Other accessories at lenovo.com/accessories											

See footnotes for important warranty information
US model announced October 17, 2006
US model withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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(DV11-3) September 2007

ThinkPad® T60 and T60p (1951 and 2007) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Finger Bat- Blue- tooth reader Cell	Chip set	Limited warranty ¹²	Avail date
T60 1951-C2U	Core™ Duo T2400	1.83	512M	14.1" XGA	GMA	60G 5400	Combo	* Intel 11a/b/g ³²	Blue Finger 6	GM EasyServ	Feb 06	
T60 2007-C2U	Core Duo T2400	1.83	512M	14.1" XGA	X1300	60G 5400	DVD±RW	* Intel 11a/b/g	Blue Finger 6	PM EasyServ	Feb 06	
T60 2007-C3U	Core Duo T2400	1.83	512M	14.1" SXGA+	X1300	80G 5400	Combo	* Intel 11a/b/g	Blue Finger 6	PM EasyServ	Feb 06	
T60 2007-C4U	Core Duo T2500	2.00	512M	14.1" SXGA+	X1300	80G 5400	DVD±RW	* Intel 11a/b/g	Blue Finger 6	PM EasyServ	Feb 06	
T60 2007-C5U	Core Duo T2500	2.00	512M	14.1" SXGA+	X1400	80G 5400	DVD±RW	* Intel 11a/b/g	Blue Finger 6	PM EasyServ	Feb 06	
T60 2007-C6U	Core Duo T2400	1.83	512M	15.0" SXGA+	X1300	60G 5400	Combo	* Intel 11a/b/g	Blue Finger 6	PM EasyServ	Feb 06	
T60 2007-C7U	Core Duo T2500	2.00	512M	15.0" SXGA+	X1400	80G 5400	Combo	* Intel 11a/b/g	Blue Finger 6	PM EasyServ	Feb 06	
T60p 2007-C8U	Core Duo T2600	2.16	1GB	15.0" UXGA+	V5200	100G 7200	DVD±RW	* Intel 11a/b/g	Blue Finger 9	PM EasyServ	Feb 06	
T60 1951-01U	Core Duo T2500	2.00	512M	14.1" XGA	GMA	80G 5400	DVD±RW	* Intel 11a/b/g	Blue Finger 6	GM EasyServ	Apr 06	
T60 2007-01U	Core Duo T2500	2.00	512M	14.1" XGA	X1300	80G 5400	DVD±RW	* Intel 11a/b/g	Blue Finger 6	PM EasyServ	Apr 06	
T60 2007-02U	Core Duo T2500	2.00	512M	14.1" SXGA+	X1300	80G 5400	Combo	* Intel 11a/b/g	Blue Finger 6	PM EasyServ	Apr 06	
T60 2007-03U	Core Duo T2500	2.00	512M	14.1" SXGA+	X1400	100G 7200	DVD±RW	* Intel 11a/b/g	Blue Finger 6	PM EasyServ	Apr 06	
T60 2007-04U	Core Duo T2500	2.00	512M	15.0" SXGA+	X1400	100G 5400	Combo	* Intel 11a/b/g	Blue Finger 6	PM EasyServ	Apr 06	

• **These models have an EasyServ™, onsite pickup and delivery 3-year limited warranty**
These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ Duo processor T2400 (1.83GHz), T2500 (2.0GHz), or T2600 (2.16GHz) with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) Preloaded (only some listed) • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Fingerprint Software • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) CD • Adobe Photoshop Elements plus Adobe Premiere Elements License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client	
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail		
Diskette drive	None standard / use optional USB-based diskette drive		
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim		
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim		
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel		
Serial ATA disk (SATA150)	60GB⁸ (5400 rpm), 80GB (5400 rpm), or 100GB (5400 or 7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™		
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare FlexView display with wide viewing angle and high density using IPS technology <i>Some:</i> 15.0" (381.0mm) UXGA (1600x1200) TFT color / 200 nits / anti-glare FlexView display with wide viewing angle and high density using IPS technology		
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some:</i> ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1 <i>Some:</i> ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB GDDR1 <i>Some:</i> ATI MOBILITY FireGL™ V5200 M56 / PCI Express x16 / 256MB GDDR3 <i>All:</i> DVI pass-through support to optional Advanced Mini Dock or Advanced Dock		
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass		
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions		
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm		
Weight ²	with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg); 15": up to 6.3 lb (2.8 kg)		
Case material	14.1": magnesium composite in top cover, CFRP bottom cover; 15": CFRP in top/bottom		
Battery - type	Lithium Ion 6- or 9-cell / supports unique 2nd battery in Ultrabay Slim		
Battery - life ¹⁰	6-cell: up to 6.0 hr; T60p 9-cell: up to 5.2 hr; T60 9-cell plus Ultrabay battery: up to 11.5		
Architecture	<i>Some:</i> Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some:</i> Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub <i>All:</i> 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3203)		
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door		
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door		
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)		
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios		
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable		
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG		
WWAN ¹⁶	None		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset		
Bluetooth™	Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator		
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE		
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speaker / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack		
Security	Power-on password / hard disk password / supervisor password / security keyhole		
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant		
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip		
Limited warranty ¹²	3-years/1-yr battery - EasyServ™, onsite pickup and delivery / service upgrades²² avail		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60 Series Li-Ion Battery 6-cell	40Y6799
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797
ThinkPad Advanced Dock	250310U	ThinkPad 90W AC/DC Combo Adapter	40Y7630
Other accessories on O-T60 sheet		Other accessories at lenovo.com/accessories	

See footnotes for important warranty information
US models announced January 31 or April 4, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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ThinkPad® T60 and T60p (1952 and 2008) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Blue-tooth	Finger-print reader	Battery Cell	Chip set	Limited warranty ¹²	Avail date
T60 1952-C2U	Core™ Duo T2400	1.83	512M	14.1" XGA	GMA	60G 5400	Combo	* Intel 11a/b/g ³²	Blue	Finger	6	GM	Onsite	Feb 06
T60 2008-C2U	Core Duo T2400	1.83	512M	14.1" XGA	X1300	60G 5400	DVD±RW	* Intel 11a/b/g	Blue	Finger	6	PM	Onsite	Feb 06
T60 2008-C3U	Core Duo T2400	1.83	512M	14.1" SXGA+	X1300	80G 5400	Combo	* Intel 11a/b/g	Blue	Finger	6	PM	Onsite	Feb 06
T60 2008-C4U	Core Duo T2500	2.00	512M	14.1" SXGA+	X1300	80G 5400	DVD±RW	* Intel 11a/b/g	Blue	Finger	6	PM	Onsite	Feb 06
T60 2008-C5U	Core Duo T2500	2.00	512M	14.1" SXGA+	X1400	80G 5400	DVD±RW	* Intel 11a/b/g	Blue	Finger	6	PM	Onsite	Feb 06
T60 2008-C6U	Core Duo T2400	1.83	512M	15.0" SXGA+	X1300	60G 5400	Combo	* Intel 11a/b/g	Blue	Finger	6	PM	Onsite	Feb 06
T60 2008-C7U	Core Duo T2500	2.00	512M	15.0" SXGA+	X1400	80G 5400	Combo	* Intel 11a/b/g	Blue	Finger	6	PM	Onsite	Feb 06
T60p 2008-C8U	Core Duo T2600	2.16	1GB	15.0" UXGA+	V5200	100G 7200	DVD±RW	* Intel 11a/b/g	Blue	Finger	9	PM	Onsite	Feb 06
T60 1952-01U	Core Duo T2500	2.00	512M	14.1" XGA	GMA	80G 5400	DVD±RW	* Intel 11a/b/g	Blue	Finger	6	GM	Onsite	Apr 06
T60 2008-01U	Core Duo T2500	2.00	512M	14.1" XGA	X1300	80G 5400	DVD±RW	* Intel 11a/b/g	Blue	Finger	6	PM	Onsite	Apr 06
T60 2008-02U	Core Duo T2500	2.00	512M	14.1" SXGA+	X1300	80G 5400	Combo	* Intel 11a/b/g	Blue	Finger	6	PM	Onsite	Apr 06
T60 2008-03U	Core Duo T2500	2.00	512M	14.1" SXGA+	X1400	100G 7200	DVD±RW	* Intel 11a/b/g	Blue	Finger	6	PM	Onsite	Apr 06
T60 2008-04U	Core Duo T2500	2.00	512M	15.0" SXGA+	X1400	100G 5400	Combo	* Intel 11a/b/g	Blue	Finger	6	PM	Onsite	Apr 06

These models have a limited onsite service²⁴ 3-year limited warranty

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ Duo processor T2400 (1.83GHz), T2500 (2.0GHz), or T2600 (2.16GHz) with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area) Preloaded • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) CD • Adobe Photoshop Elements plus Adobe Premiere Elements License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail	
Diskette drive	None standard / use optional USB-based diskette drive	
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim	
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim	
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel	
Serial ATA disk (SATA150)	60GB⁸ (5400 rpm), 80GB (5400 rpm), or 100GB (5400 or 7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™	
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare FlexView display with wide viewing angle and high density using IPS technology <i>Some:</i> 15.0" (381.0mm) UXGA (1600x1200) TFT color / 200 nits / anti-glare FlexView display with wide viewing angle and high density using IPS technology	
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some:</i> ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1 <i>Some:</i> ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB GDDR1 <i>Some:</i> ATI MOBILITY FireGL™ V5200 M56 / PCI Express x16 / 256MB GDDR3 <i>All:</i> DVI pass-through support to optional Advanced Mini Dock or Advanced Dock	
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm	
Weight ²	with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg); 15": up to 6.3 lb (2.8 kg)	
Case material	14.1": magnesium composite in top cover, CFRP bottom cover; 15": CFRP in top/bottom	
Battery - type	Lithium Ion 6- or 9-cell / supports unique 2nd battery in Ultrabay Slim	
Battery - life ¹⁰	6-cell: up to 6.0 hr; T60p 9-cell: up to 5.2 hr; T60 9-cell plus Ultrabay battery: up to 11.5	
Architecture	<i>Some:</i> Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some:</i> Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub <i>All:</i> 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3203)	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door	
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)	
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios	
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable	
Intel 11a/b/g ³²	11a/b/g wireless ¹ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG	
WWAN ¹⁶	None	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset	
Bluetooth™	Bluetooth 2.0 wireless technology / USB 2.0 interface via ICH7-M / LED indicator	
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE	
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speaker / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant	
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip	
Limited warranty ¹²	3-year/1-year battery, limited onsite service , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time ²⁴	
	Supports ThinkVantage® technologies 65-watt (1952) or 90 watt (2008) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	

See footnotes for important warranty information
US models announced January 31 or April 4, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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(DV1-7) September 2007

ThinkPad® T60 (2007) - Education (Vista™) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk SATA GB ³ rpm	EIDE optical	Mini PCIe 802.11 wireless	Finger Bat- print tery reader Cell set	Educ pre- load	Limited warranty ¹²	Avail date
T60	2007-QXU	Core 2 Duo T7200	2.00	1GB	14.1" SXGA+	X1400	100G 7200 DVD±RW	11a/b/g ³²	Finger 9	PM	HE	EasyServ Apr 07
<p>• This model has an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty This educational model is available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.</p>												
Positioning Processor	<p><i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache</p>									<p>Preloaded operating system²⁰ - Microsoft® Windows® Vista™ Business Edition (32-bit) ◇ Vista Basic logo</p>		
Memory	<p>1GB std / 4GB max³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available</p>									<p>Preloaded applications¹⁴ • Higher education software - VitalSource Library College Edition - Adobe® Instructor Resource Center - Adobe Photoshop Elements 5 (and CD) - Adobe Premier Elements 3 (and DVD) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • System Migration Assistant • Norton Internet Security™ (90 days of virus definitions) • Diskeeper® Home • PC-Doctor™ (diagnostics) • ThinkPad Utilities • Adobe Reader • Picasa from Google • Fingerprint Software License - CD not included - Lotus® Notes® Stand-alone Client</p>		
Diskette drive EIDE DVD±RW Ultra Slim Serial ATA disk (SATA150)	<p>None standard / use optional USB-based diskette drive DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel 100GB⁸ (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™</p>											
Display	<p>14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare</p>											
Graphics	<p>ATI® MOBILITY™ Radeon™ X1400 M54 / PCI Express x16 / 128MB GDDR1 / DVI pass-through support to optional Advanced Mini Dock or Advanced Dock</p>											
Keyboard TrackPoint® Touch pad ThinkLight™	<p>89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions</p>											
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<p>14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31mm with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg) 14.1": magnesium composite in top cover, CFRP bottom cover Lithium Ion 9-cell / supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.0 hr; 9-cell: up to 6.8 hr; 9-cell plus Ultrabay battery: up to 11.5</p>											
Architecture	<p>Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3203)</p>											
PC Card Std slot ExpressCard slot Ports	<p>One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)</p>									<p>Supports ThinkVantage® technologies</p>		
Wireless antenna Mini PCI Express 11a/b/g ³² WWAN ¹⁶	<p>UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless⁴, ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX None</p>									<p>90 watt (2007)AC adapter ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²</p>		
Modem Bluetooth™ Ethernet Audio support	<p>56K⁶ V.90 (V.92-designed²⁹) modem in Com Daughter Card socket / Conexant® chipset Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speaker / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack</p>									<p>ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175 ThinkPlus 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179</p>		
Security Security chip Fingerprint reader	<p>Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on palm rest / swipe sensor / supports the security chip</p>											
Limited warranty ¹²	<p>3-years/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail</p>											
512MB PC2-5300 DDR2 CL5 SODIMM 1GB PC2-5300 DDR2 CL5 SODIMM ThinkPad Advanced Dock Other accessories on O-T60 sheet	40Y7733 40Y7734 250310U	T60 Series Li-Ion Battery 6-cell Z60m/T60/R60 Li-Ion Battery 9-cell ThinkPad 90W AC/DC Combo Adapter	40Y6799 40Y6797 40Y7630	<p>ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180</p>								

See footnotes for important warranty information
US model announced April 17, 2007
US model withdrawn effective September 2007

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(DV2-6) September 2007

ThinkPad® T60 (2008) - Education (Vista™) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk SATA GB ³ rpm	EIDE optical	Mini PCIe 802.11 wireless	Finger print reader	Bat- tery Cell	Educ Chip pre- load	Limited warranty ¹²	Avail date
T60	2008-QXU	Core 2 Duo T7200	2.00	1GB	14.1" SXGA+	X1400	100G 7200 DVD±RW	11a/b/g ³²	Finger	9	PM	HE	Onsite Apr 07
<p>This model has a limited onsite service²⁴ 3-year limited warranty This educational model is available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.</p>													
Positioning Processor	<p><i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache</p>										<p>Preloaded operating system²⁰ - Microsoft® Windows® Vista™ Business Edition (32-bit) ↳ Vista Basic logo</p>		
Memory	<p>1GB std / 4GB max³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available</p>										<p>Preloaded applications¹⁴ • Higher education software - VitalSource Library College Edition - Adobe® Instructor Resource Center - Adobe Photoshop Elements 5 (and CD) - Adobe Premier Elements 3 (and DVD) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • System Migration Assistant • Norton Internet Security™ (90 days of virus definitions) • Diskeeper® Home • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe Reader • Picasa from Google • Fingerprint Software (fingerprint models) • Microsoft Office 2007 Trial</p>		
Diskette drive	None standard / use optional USB-based diskette drive										<p>License - CD not included - Lotus® Notes® Stand-alone Client</p>		
EIDE DVD±RW	DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim												
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel												
Serial ATA disk (SATA150)	100GB⁸ (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™												
Display	<p>14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare</p>												
Graphics	<p>ATI® MOBILITY™ Radeon™ X1400 M54 / PCI Express x16 / 128MB GDDR1 / DVI pass-through support to optional Advanced Mini Dock or Advanced Dock</p>												
Keyboard	<p>89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys</p>												
TrackPoint®	<p>TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass</p>												
Touch pad	<p>UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones</p>												
ThinkLight™	<p>Illuminates the keyboard to improve visibility in low-light conditions</p>												
Dimensions ³	<p>14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31mm</p>												
Weight ²	<p>with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg)</p>												
Case material	<p>14.1": magnesium composite in top cover, CFRP bottom cover</p>												
Battery - type	<p>Lithium Ion 9-cell / supports unique 2nd battery in Ultrabay Slim</p>												
Battery - life ¹⁰	<p>6-cell: up to 6.0 hr; 9-cell: up to 6.8 hr; 9-cell plus Ultrabay battery: up to 11.5</p>												
Architecture	<p>Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3203)</p>												
PC Card Std slot	<p>One Type I or Type II slot / CardBus 32-bit / integrated door</p>												
ExpressCard slot	<p>One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door</p>												
Ports	<p>Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)</p>												
Wireless antenna	<p>UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios</p>												
Mini PCI Express	<p>Two Mini PCI Express slots / only 802.11 wireless is customer upgradable</p>												
11a/b/g ³²	<p>11a/b/g wireless⁴, ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX</p>												
WWAN ¹⁶	<p>None</p>												
Modem	<p>56K⁶ V.90 (V.92-designed²⁹) modem in Com Daughter Card socket / Conexant® chipset</p>												
Bluetooth™	<p>Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator</p>												
Ethernet	<p>Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE</p>												
Audio support	<p>High Definition (HD) Audio / AD1981HD codec / stereo speaker / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack</p>												
Security	<p>Power-on password / hard disk password / supervisor password / security keyhole</p>												
Security chip	<p>Trusted Platform Module / Atmel chip / TCG 1.2-compliant</p>												
Fingerprint reader	<p>Fingerprint reader on palm rest / swipe sensor / supports the security chip</p>												
Limited warranty ¹²	<p>3-year/1-year battery, limited onsite service, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time²⁴</p>										<p>Supports ThinkVantage® technologies</p>		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733		T60 Series Li-Ion Battery 6-cell		40Y6799								
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734		Z60m/T60/R60 Li-Ion Battery 9-cell		40Y6797								
ThinkPad Advanced Dock	250310U		ThinkPad 90W AC/DC Combo Adapter		40Y7630								
Other accessories on O-T60 sheet	<p>Other accessories at lenovo.com/accessories</p>												
											<p>Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty</p>		

See footnotes for important warranty information

US model announced April 17, 2007

US model withdrawn effective September 2007

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(DV2-7) September 2007

ThinkPad® T60 (1953) - TopSeller - withdrawn

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk SATA GB ³	rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger-print reader	Bat-tery	Limited warranty ¹²	Avail date
1953-D5U	Core Solo T1300	1.66	256MB	14.1" XGA	GMA 950	40GB	5400	Combo	* Intel 11a/b/g ³²		None		6-cell	1-yr	Feb 06
1953-D6U	Core Duo T2300	1.66	512MB	14.1" XGA	GMA 950	60GB	5400	Combo	* Intel 11a/b/g		None	Finger	6-cell	1-yr	Feb 06
1953-D7U	Core Duo T2300	1.66	512MB	15.0" XGA	GMA 950	60GB	5400	Combo	* Intel 11a/b/g		None	Finger	6-cell	1-yr	Feb 06
1953-D8U	Core Duo T2400	1.83	512MB	14.1" XGA	GMA 950	80GB	5400	Combo	* Intel 11a/b/g	AT&T	None	Finger	6-cell	1-yr	May 06
1953-D9U	Core Duo T2300E	1.66	512MB	14.1" XGA	GMA 950	60GB	5400	Combo	* Intel 11a/b/g		None	Finger	6-cell	1-yr	July 06
1953-DAU	Core Duo T2300E	1.66	512MB	15.0" XGA	GMA 950	60GB	5400	Combo	* Intel 11a/b/g		None	Finger	6-cell	1-yr	July 06
<ul style="list-style-type: none"> • These small and medium business (SMB) models are part of the US TopSeller™ Program • These 1953 models have a 1-year limited warranty 															
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ Solo processor T1300 (1.66GHz) with single-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache or Intel Core Duo processor T2300, T2300E, or T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										SOFTWARE¹⁴				
Memory	256MB or 512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area)				
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • System Migration Assistant • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD 				
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim														
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel														
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm) or 60GB⁸ (5400 rpm) or 80GB⁸ (5400 rpm) / 9.5mm high / removable,upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™														
Display	<i>Some: 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare</i> <i>Some: 15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare</i>														
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz / DVI pass-through support to optional Advanced Mini Dock or Advanced Dock														
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg); 15" models: up to 6.3 lb (2.8 kg)														
Weight ²	14.1": magnesium composite in top cover, CFRP bottom cover; 15": CFRP in top/bottom														
Case material	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Slim														
Battery - type	6-cell: up to 6.0 hr; <i>opt 9-cell:</i> up to 9.0 hr; <i>9-cell plus Ultrabay battery:</i> up to 11.5 hr														
Battery - life ¹⁰															
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)														
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										Supports ThinkVantage® technologies 65-watt AC adapter (GMA graphics) ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166 ThinkPlus 2-year LOR 9x5 NBD 41C9167 ThinkPlus 3-year LOR 9x5 NBD 41C9168 ThinkPlus 4-year LOR 9x5 NBD 41C9171 ThinkPlus 5-year LOR 9x5 NBD 41C9173 ThinkPlus 2-year P&L P/U Depot 41C9169 ThinkPlus 3-year P&L P/U Depot 41C9170 ThinkPlus 4-year P&L P/U Depot 41C9172 ThinkPlus 5-year P&L P/U Depot 41C9174				
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door														
Ports	Three USB (Version 2.0) / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, or 1394 (use USB)														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios														
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable														
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG														
WWAN ²³	Some: Wireless WAN, GPRS/EDGE/UMTS/HSDPA support, Mini PCIe adapter and SIM, WWAN antenna on display, service contract required with AT&T®														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset														
Bluetooth™	None														
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE														
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant														
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip														
Limited warranty ¹² 1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available															
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733				T60 Series Li-Ion Battery 6-cell				40Y6799						
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734				Z60m/T60/R60 Li-Ion Battery 9-cell				40Y6797						
2GB PC2-5300 DDR2 SODIMM	40Y7735				Advanced Ultrabay Battery 3-cell				40Y6789						
Serial Hard Drive Ultrabay Slim Adapter(flat)	40Y8725				ThinkPad External Battery Charger				40Y7625						
DVD-ROM Ultrabay Slim Drive (curved)	73P3270				ThinkPad 90W AC Adapter				40Y7659						
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621				ThinkPad 90W AC/DC Combo Adapter				40Y7630						
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643				ThinkPad Nylon Carrying Case				10K0207						
160GB Disk 9.5mm SATA150 (7200 rpm)	41N5737				ThinkPad Carrying Case - Expander				73P3597						
USB 2.0 Security Memory Key 4GB	41U5120				ThinkPad Carrying Case - Organizer				73P3598						
USB 2.0 Super Multi-Burner Drive	41N5565				ThinkPad Carrying Case - Backpack				73P3599						
ExpressCard Gemplus Smart Card Reader	41N3043				Kensington® MicroSaver® Security Cable				73P2582						
11a/b/g Wireless Mini PCI Express Adpr	40Y7026				ThinkVision® L171p 17" LCD Monitor				9417HC2						
ThinkPad Essential Port Replicator	250510W				ThinkVision L190x 19" LCD Monitor				4439HB2						
ThinkPad Advanced Mini Dock	250410U				ThinkVision L193p 19" LCD Monitor				4431HB2						
ThinkPad Advanced Dock	250310U				Lenovo M500 Projector				0037A05						
Other accessories on O-T60 sheet				Other accessories at lenovo.com/accessories											

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology © Lenovo (DV1-8) December 2007
 US models announced Jan 31, June 20, or July 11, 2006 * Powered by Intel Centrino® Duo mobile technology
 US models withdrawn effective Oct 2006, Sept 2007, or Dec 2007

ThinkPad® T60 (1953 and 2623) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless tooth	Bat- tery set	Limited warranty ¹²	Avail date
T60 1953-DDU	Core™ 2 Duo T5500	1.66	512M	14.1" XGA	GMA 60GB	5400	Combo	*Intel 11a/b/g ³²		GM 6	1-yr	Oct 06
T60 2623-KEU	Core 2 Duo T5600	1.83	1GB	14.1" SXGA+	64MB	80GB 5400	DVD±RW	*Intel 11a/b/g	Blue	PM 6	3-yr	Oct 06
T60 2623-KFU	Core 2 Duo T7200	2.00	1GB	14.1" SXGA+	128MB	120GB 5400	DVD±RW	*Intel 11a/b/g	Verizon	Blue PM 9	3-yr	Oct 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year or 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T5500, T5600, or T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz system bus; <i>T5500/T5600: 2MB shared L2 cache; T7200: 4MB shared L2 cache</i> 512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in 1 socket / 1 socket available										
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in 1 socket / 1 socket available										
Diskette drive EIDE Combo Ultrabay Slim Serial ATA disk (SATA150)	None standard / use optional USB-based diskette drive <i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay Slim</i> <i>Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim</i> <i>Some: One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel</i> 60GB⁸ (5400 rpm), 80GB (5400 rpm), or 120GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™										
Display	<i>Some: 14.1"</i> (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare <i>Some: 14.1"</i> (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare										
Graphics	<i>Some: Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz</i> <i>Some: ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB memory</i> <i>Some: ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB memory</i> <i>All: DVI pass-through support to optional Advanced Mini Dock or Advanced Dock</i>										
Keyboard TrackPoint® Touch pad ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar™, magnifying glass UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31mm</i> with optical drive and battery: <i>14.1" models: up to 5.5 lb (2.5kg)</i> <i>14.1": magnesium composite in top cover, CFRP bottom cover</i> Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Slim <i>6-cell: up to 6.3 hr; 9-cell: up to 6.8 hr; 9-cell plus Ultrabay battery: up to 7.8 hr</i>										
Architecture	<i>Some: Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub</i> <i>Some: Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub</i> <i>All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 75C3203)</i>										
PC Card Std slot ExpressCard slot Ports	One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)										
Wireless antenna Mini PCI Express Intel 11a/b/g ³² WWAN ¹⁶	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG <i>Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon®</i>										
Modem Bluetooth™ Ethernet Audio support	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset <i>Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator</i> Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack										
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on palm rest / swipe sensor / supports the security chip										
Limited warranty ¹²	1953: 1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available 2623: 3-year/1-year battery - EasyServ onsite pickup and delivery / srv upgrades ²² avail										
512MB PC2-5300 DDR2 CL5 SODIMM 1GB PC2-5300 DDR2 CL5 SODIMM 2GB PC2-5300 DDR2 SODIMM Serial Hard Drive Ultrabay Slim Adapter (flat) Combo II Ultrabay Slim Drive (flat bezel) ThinkPad DVD Ultrabay Slim Burner (flat) 160GB Disk 9.5mm SATA150 (5400 rpm) USB 2.0 Lenovo Webcam USB 2.0 Security Memory Key 4GB USB 2.0 Super Multi-Burner Drive 11a/b/g Wireless Mini PCI Express Adpr ThinkPad Essential Port Replicator ThinkPad Advanced Mini Dock ThinkPad Advanced Dock Other accessories on O-T60 sheet	40Y7733 40Y7734 40Y7735 40Y8725 40Y8621 41N5643 41N5692 40Y8519 41U5120 41N5565 40Y7026 250510W 250410U 250310U	T60 Series Li-Ion Battery 6-cell Z60m/T60/R60 Li-Ion Battery 9-cell Advanced Ultrabay Battery 3-cell ThinkPad 90W AC Adapter ThinkPad 90W AC/DC Combo Adapter ThinkPad Carrying Case - Expander ThinkPad Carrying Case - Organizer ThinkPad Carrying Case - Backpack Carrying Case - Leather Attache Kensington MicroSaver Security Cable Lenovo L192 Wide 19" Monitor (black) ThinkVision® L201p 20.1" Monitor (blk) Lenovo M500 Projector Lenovo C500 Projector Other accessories at lenovo.com/accessories	40Y6799 40Y6797 40Y6789 40Y7659 40Y7630 73P3597 73P3598 73P3599 73P3600 73P2582 6920AB1 9220HB1 0037A05 0039A05	Supports ThinkVantage® technologies 90-watt AC adapter (discrete graphics) ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² ThinkPlus™ options at lenovo.com/thinkplus/warranty Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty							

See footnotes for important warranty information
US models announced October 17, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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ThinkPad® T60 (1953 and 2623) - TopSeller (January 2007) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Graphics controller memory	SATA disk GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless tooth	Blue-Chip-set	Battery cells	Vista preload	Limited warranty ¹²	Avail date
1953-P3U	Core™ 2 Duo T5500	1.66	1GB	14.1" XGA	GMA	60GB	Combo	*Intel 11a/b/g ³²		GM	6	Business	1-yr	Jan 07
2623-P2U	Core 2 Duo T5600	1.83	1GB	14.1" SXGA+	64MB	80GB	DVD±RW	*Intel 11a/b/g		Blue PM	6	Business	3-yr	Jan 07
2623-P3U	Core 2 Duo T7200	2.00	1GB	14.1" SXGA+	128MB	120GB	DVD±RW	*Intel 11a/b/g	Verizon	Blue PM	9	Business	3-yr	Jan 07
2623-QWU	Core 2 Duo T7200	2.00	1GB	14.1" SXGA+	128MB	120GB	DVD±RW	*Intel 11a/b/g		Blue PM	9	Ultimate	3-yr	Mar 07

• **These small and medium business (SMB) models are part of the US TopSeller™ Program**
 • **These models have a 1-year or 3-year limited warranty**

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T5500, T5600, or T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz system bus; <i>T5500/T5600: 2MB shared L2 cache; T7200: 4MB shared L2 cache</i>	Preloaded operating system²⁰ - Some: Microsoft® Windows® Vista™ Business Edition (32-bit) - Some: Microsoft Windows Vista Ultimate Edition (32-bit) ◇ 2623-P2U: Vista Basic logo ◇ Others: Vista Premium logo Preloaded applications¹⁴ (all) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Norton Internet Security™ (90 days of virus definitions) • Diskeeper® Home • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Picasa from Google • Fingerprint Software (fingerprint models) • Microsoft Office 2007 Trial License - CD not included (all) - Lotus® Notes® Stand-alone Client		
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in 1 socket / 1 socket available <i>1953-P3U: standard memory in both sockets; no sockets available; Others: standard memory in 1 socket; 1 socket available</i>			
Diskette drive	None standard / use optional USB-based diskette drive			
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/8X ²¹ speed / removable from Ultrabay Slim			
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim			
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel			
Serial ATA disk (SATA150)	60GB⁹ (5400 rpm), 80GB (5400 rpm), or 120GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™			
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare			
Graphics	Some: Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz Some: ATI MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB memory Some: ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB memory All: DVI pass-through support to optional Advanced Mini Dock or Advanced Dock			
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass			
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions			
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2" ; 311mm x 255mm x 26.6-31mm			
Weight ²	with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg)			
Case material	14.1" : magnesium composite in top cover, CFRP bottom cover			
Battery - type	Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Slim			
Battery - life ¹⁰	6-cell: up to 6.3 hr; 9-cell: up to 6.8 hr; 9-cell plus Ultrabay battery: up to 7.8 hr			
Architecture	Some: Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub Some: Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 75C3203)			
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door			
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door			
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)			
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios			
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable			
Intel 11a/b/g ³² WWAN ¹⁶	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon®			
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset			
Bluetooth™	Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator			
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE			
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack			
Security	Power-on password / hard disk password / supervisor password / security keyhole			
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant			
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip			
Limited warranty ¹²	1953: 1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available 2623: 3-year/1-year battery - EasyServ onsite pickup and delivery / srv upgrades ²² avail	Supports ThinkVantage® technologies		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60 Series Li-Ion Battery 6-cell	40Y6799	90-watt AC adapter (discrete graphics)
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	ThinkPad Roll Cage (one-piece magnesium frame)
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789	RoHS-compliant
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad 90W AC Adapter	40Y7659	International Warranty Service ¹⁷
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad 90W AC/DC Combo Adapter	40Y7630	24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad Carrying Case - Organizer	73P3598	
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ThinkPad Carrying Case - Backpack	73P3599	
USB 2.0 Super Multi-Burner Drive	41N5565	Lenovo L192 Wide 19" Monitor (black)	6920AB1	
11a/b/g Wireless Mini PCI Express Adpr	40Y7026	Lenovo D221 Wide 22" Monitor	6622HB1	ThinkPlus™ options at
ThinkPad Essential Port Replicator	250510W	ThinkVision® L201p 20.1" Monitor (blk)	9220HB1	lenovo.com/thinkplus/warranty
ThinkPad Advanced Mini Dock	250410U	Lenovo M500 Projector	0037A05	Post-warranty annual maintenance agreements at
ThinkPad Advanced Dock	250310U	Lenovo C500 Projector	0039A05	lenovo.com/thinkplus/warranty
Other accessories on O-T60 sheet		Other accessories at lenovo.com/accessories		

See footnotes for important warranty information
US models announced January 30 or March 27, 2007
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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(DV2-5) September 2007

ThinkPad® T60 and T60p (2623) - TopSeller - withdrawn

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk SATA GB ³ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Bat-tery	Limited warranty ¹²	Avail date
T60	2623-D2U	Core Duo T2300	1.66	512MB	14.1" SXGA+	64MB	80GB 5400	DVD±RW	11a/b/g ³²	Verizon	Blue	9-cell 3-yrs	Feb 06
T60	2623-D3U	Core Duo T2500	2.00	1GB	15.0" SXGA+	128MB	100GB 5400	DVD±RW	* Intel 11a/b/g ³²	Verizon	Blue	9-cell 3-yrs	Feb 06
T60	2623-D4U	Core Duo T2300	1.66	512MB	14.1" SXGA+	64MB	80GB 5400	Combo	* Intel 11a/b/g			6-cell 3-yrs	Feb 06
T60	2623-D5U	Core Duo T2300	1.66	512MB	14.1" XGA	64MB	60GB 5400	Combo	* Intel 11a/b/g	Verizon		6-cell 3-yrs	Feb 06
T60	2623-D6U	Core Duo T2400	1.83	512MB	14.1" SXGA+	64MB	80GB 5400	DVD±RW	* Intel 11a/b/g		Blue	6-cell 3-yrs	Feb 06
T60	2623-D7U	Core Duo T2500	2.00	512MB	14.1" SXGA+	128MB	100GB 5400	DVD±RW	* Intel 11a/b/g	Verizon	Blue	9-cell 3-yrs	Feb 06
T60p	2623-D8U	Core Duo T2500	2.00	1GB	14.1" SXGA+	256MB	100GB 7200	DVD±RW	* Intel 11a/b/g	Verizon	Blue	9-cell 3-yrs	Feb 06
T60	2623-D9U	Core Duo T2300	1.66	512MB	15.0" XGA	64MB	60GB 5400	Combo	* Intel 11a/b/g			6-cell 3-yrs	Feb 06
T60	2623-DAU	Core Duo T2400	1.83	512MB	15.0" XGA	64MB	80GB 5400	Combo	* Intel 11a/b/g			6-cell 3-yrs	Feb 06
T60	2623-DBU	Core Duo T2400	1.83	512MB	15.0" SXGA+	64MB	80GB 5400	Combo	* Intel 11a/b/g	Verizon	Blue	6-cell 3-yrs	Feb 06
T60	2623-DCU	Core Duo T2500	2.00	512MB	15.0" SXGA+	128MB	100GB 5400	DVD±RW	* Intel 11a/b/g	Verizon	Blue	9-cell 3-yrs	Feb 06
T60p	2623-DDU	Core Duo T2500	2.00	1GB	15.0" UXGA	256MB	100GB 7200	DVD±RW	* Intel 11a/b/g	Verizon	Blue	9-cell 3-yrs	Feb 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These 2623 models have a 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ Duo processor T2300 (1.66GHz), T2400 (1.83GHz), or T2500 (2.00GHz) with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache	SOFTWARE ¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area)
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail	Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Maintenance Manager • ThinkVantage System Update • System Migration Assistant • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)
Diskette drive	None standard / use optional USB-based diskette drive	
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim	
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim	
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel	
Serial ATA disk (SATA150)	60GB ⁸ (5400 rpm), 80GB (5400 rpm), or 100GB (5400 or 7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™	
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare FlexView display with wide viewing angle and high density using IPS technology <i>Some:</i> 15.0" (381.0mm) UXGA (1600x1200) TFT color / 200 nits / anti-glare FlexView display with wide viewing angle and high density using IPS technology	
Graphics	<i>Some:</i> ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1 <i>Some:</i> ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB GDDR1 <i>Some:</i> ATI MOBILITY FireGL™ V5200 M56 / PCI Express x16 / 256MB GDDR3 All: DVI pass-through support to optional Advanced Mini Dock or Advanced Dock	
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.0" x 1.0-1.2"; 316mm x 255mm x 26.6-31mm 15.0" models (WxDxH): 13.2" x 10.6" x 1.2-1.4"; 334mm x 268mm x 31-36mm with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg); 15": up to 6.3 lb (2.8 kg)	
Weight ²	14.1": magnesium composite in top cover, CFRP bottom cover; 15": CFRP in top/bottom	
Case material	Lithium Ion 6- or 9-cell / supports unique 2nd battery in Ultrabay Slim	
Battery - type	6-cell: up to 6.0 hr; 9-cell: up to 9.0 hr; 9-cell plus Ultrabay battery: up to 11.5 hr	
Battery - life ¹⁰		
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door	
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)	
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios	
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable	
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG	
11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX	
WWAN ¹⁶	<i>Some:</i> Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless 56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset	
Modem	<i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator	
Bluetooth™	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE	
Ethernet	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack	
Audio support	Power-on password / hard disk password / supervisor password / security keyhole	
Security	Trusted Platform Module / Atmel chip / TCG 1.2-compliant	
Security chip	Fingerprint reader on palm rest / swipe sensor / supports the security chip	
Fingerprint reader		
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail	
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60 Series Li-Ion Battery 6-cell 40Y6799
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell 40Y6797
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	Advanced Ultrabay Battery 3-cell 40Y6789
160GB Disk 9.5mm SATA150 (7200 rpm)	41N5737	ThinkPad 90W AC Adapter 40Y7659
ThinkPad Advanced Mini Dock	250410U	ThinkPad Carrying Case - Expander 73P3597
ThinkPad Advanced Dock	250310U	Other accessories at lenovo.com/accessories
		lenovo.com/thinkplus/warranty

See footnotes for important warranty information

* Powered by Intel Centrino® Duo mobile technology

ThinkPad® T60 and T60p (2623) - TopSeller (June 2006) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller memory	Disk SATA GB ³ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Bat-tery	Limited warranty ¹²	Avail date
T60	2623-DGU	Core Duo T2300	1.66	512MB	14.1" SXGA+	64MB	80GB 5400	DVD±RW	11a/b/g ³²	AT&T		9-cell	3-yrs Jun 06
T60	2623-DJU	Core Duo T2300	1.66	512MB	14.1" XGA	64MB	60GB 5400	Combo	* Intel 11a/b/g	AT&T		6-cell	3-yrs Jun 06
T60	2623-DKU	Core Duo T2500	2.00	512MB	14.1" SXGA+	128MB	100GB 5400	DVD±RW	* Intel 11a/b/g	AT&T	Blue	9-cell	3-yrs Jun 06
T60p	2623-DLU	Core Duo T2500	2.00	1GB	14.1" SXGA+	256MB	100GB 7200	DVD±RW	* Intel 11a/b/g	AT&T	Blue	9-cell	3-yrs Jun 06
T60	2623-DQU	Core Duo T2300E	1.66	512MB	14.1" XGA	64MB	60GB 5400	Combo	* Intel 11a/b/g	Verizon		6-cell	3-yrs July 06
T60	2623-DRU	Core Duo T2300E	1.66	512MB	14.1" SXGA+	64MB	80GB 5400	Combo	* Intel 11a/b/g			6-cell	3-yrs July 06
T60	2623-DSU	Core Duo T2500	2.00	512MB	14.1" SXGA+	128MB	100GB 5400	DVD±RW	* Intel 11a/b/g	AT&T	Blue	9-cell	3-yrs July 06
T60	2623-DTU	Core Duo T2300E	1.66	512MB	15.0" XGA	64MB	60GB 5400	Combo	* Intel 11a/b/g			6-cell	3-yrs July 06
T60	2623-01U	Core Duo T2300E	1.66	1GB	15.0" SXGA+	128MB	120GB 5400	DVD±RW	* Intel 11a/b/g		Blue	6-cel	3-yrs Jun 07

• These small and medium business (SMB) models are part of the US TopSeller™ Program
 • These 2623 models have a 3-year limited warranty

Positioning Processor	Premiere performance; two spindles Intel® Core™ Duo processor T2300, T2300E, or T2500 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Maintenance Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail	
Diskette drive	None standard / use optional USB-based diskette drive	
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim	
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim	
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel	
Serial ATA disk (SATA150)	60GB ⁸ (5400 rpm), 80GB (5400 rpm), 100GB (5400 or 7200 rpm), 120GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™	
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare Some: 15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare / FlexView display with wide viewing angle and high density using IPS technology	
Graphics	Some: ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1 Some: ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB GDDR1 Some: ATI MOBILITY FireGL™ V5200 M56 / PCI Express x16 / 256MB GDDR3 All: DVI pass-through support to optional Advanced Mini Dock or Advanced Dock	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	14.1" models (WxDxH): 12.2" x 10.0" x 1.0-1.2"; 311mm x 255mm x 26.6-31mm 15.0" models (WxDxH): 13.0" x 10.6" x 1.2-1.4"; 329mm x 268mm x 31-36mm	
Weight ²	with optical drive and battery: 14.1" models: up to 5.5 lb (2.5kg); 15": up to 6.3 lb (2.8 kg)	
Case material	14.1": magnesium composite in top cover, CFRP bottom cover; 15": CFRP in top/bottom)	
Battery - type	Lithium Ion 6- or 9-cell / supports unique 2nd battery in Ultrabay Slim	
Battery - life ¹⁰	6-cell: up to 6.0 hr; 9-cell: up to 9.0 hr; 9-cell plus Ultrabay battery: up to 11.5 hr	
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door	
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)	
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios	
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable	
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG	
11a/b/g ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX	
WWAN ¹⁶	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon®	
WWAN ²³	Some: Wireless WAN, GPRS/EDGE/UMTS/HSDPA support, Mini PCIe adapter and SIM, WWAN antenna on display, service contract required with AT&T®	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset	
Bluetooth™	Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator	
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE	
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant	
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip	
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail	

1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	T60 Series Li-Ion Battery 6-cell	40Y6799
2GB PC2-5300 DDR2 SODIMM	40Y7735	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797
Serial Hard Drive Ultrabay Slim Adapter(flat)	40Y8725	Advanced Ultrabay Battery 3-cell	40Y6789
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad External Battery Charger	40Y7625
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad 90W AC Adapter	40Y7659
Other accessories on O-T60 sheet		Other accessories at lenovo.com/accessories	

ThinkPlus 4-year P&L P/U Depot 41C9178
 ThinkPlus 5-year P&L P/U Depot 41C9180
 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information * Powered by Intel Centrino® Duo mobile technology
 US models announced June 20 or July 11, 2006 or July 24, 2007
 US models withdrawn effective October 2006 or September 2007

ThinkPad® T60 15W - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Graphics controller	Disk SATA GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger print reader	Bat-Whorse (W) Chip set	Whorse (W) Gbl Entry (E)	Avail date
6369-6XU	Core 2 Duo T5500	1.66	512M	15.4" WXGA	GMA 40G	5400	DVD	*Intel 11a/b/g ³²			GM 6	G E	Dec06
6369-6FU	Core 2 Duo T5500	1.66	512M	15.4" WXGA	GMA 60G	5400	Combo	*Intel 11a/b/g		Finger	GM 6	G E	Dec06
6369-6RU	Core 2 Duo T7200	2.00	1GB	15.4" WXGA	GMA 80G	5400	Combo	*Intel 11a/b/g		Finger	GM 6	G	Dec06
8741-85U	Core 2 Duo T7200	2.00	1GB	15.4" WXGA	X1400	80G	5400	Combo	*Intel 11a/b/g	Blue Finger	PM 6	G	Dec06
6369-3HU	Core 2 Duo T7200	2.00	1GB	15.4" WSXGA+	GMA 80G	5400	Combo	*Intel 11a/b/g		Finger	GM 6	G	Dec06
6369-38U	Core 2 Duo T7200	2.00	1GB	15.4" WSXGA+	GMA 80G	5400	Combo	*Intel 11a/b/g		Blue Finger	GM 6		Dec06
8741-4GU	Core 2 Duo T7200	2.00	1GB	15.4" WSXGA+	X1400	80G	5400	Combo	*Intel 11a/b/g	Blue Finger	PM 6	G	Dec06
6369-69U	Core 2 Duo T7200	2.00	1GB	15.4" WXGA	GMA 80G	5400	Combo	*Intel 11a/b/g		Blue Finger	GM 6	G	Dec06
8741-55U	Core 2 Duo T7600	2.33	1GB	15.4" WSXGA+	X1400	120G	5400	DVD±RW	*Intel 11a/b/g	Blue Finger	PM 9	G	Dec06
8741-4SU	Core 2 Duo T7400	2.16	1GB	15.4" WSXGA+	X1400	120G	5400	DVD±RW	*Intel 11a/b/g	Blue Finger	PM 9	G	Dec06
8741-4RU	Core 2 Duo T7400	2.16	1GB	15.4" WSXGA+	X1400	120G	5400	DVD±RW	*Intel 11a/b/g	Blue Finger	PM 9		Dec06
8741-4YU	Core 2 Duo T7400	2.16	1GB	15.4" WSXGA+	X1400	120G	5400	DVD±RW	*Intel 11a/b/g	Blue Finger	PM 9		Dec06
8741-52U	Core 2 Duo T7600	2.33	1GB	15.4" WSXGA+	X1400	100G	7200	DVD±RW	*Intel 11a/b/g	Blue Finger	PM 9	G	Dec06

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T5500, T7200, T7400, or T7600 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz system bus / <i>T5500: 2MB L2 cache (shared); Others: 4MB L2 cache (shared)</i>	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client Supports ThinkVantage® technologies
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in 1 socket / 1 socket available	
Diskette drive	None standard / use optional USB-based diskette drive	
EIDE DVD	<i>Some: DVD-ROM / 24X-8X9 speed / single-layer / removable from Ultrabay™ Slim</i>	
EIDE Combo	<i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay Slim</i>	
EIDE DVD±RW	<i>Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim</i>	
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel	
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm), 60GB (5400 rpm), 80GB (5400 rpm), 100GB (7200 rpm), or 120GB (5400 rpm) / 9.5mm high / removable, upgradable, up to 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™	
Widescreen display (anti-glare)	<i>Some: 15.4" (391mm) WXGA (1280x800) TFT color / 150 nits / 16:10 aspect ratio</i> <i>Some: 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect</i> <i>All: stainless steel hinges / one hand activates dual latches</i>	
Graphics	<i>Some: Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz</i> <i>Some: ATI® MOBILITY™ Radeon™ X1400 / PCI Express x16 / 128MB memory</i> <i>All: DVI pass-through support to optional Advanced Mini Dock or Advanced Dock</i>	
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	<i>15.4" models (WxDxH): 14.1" x 10.0" x 1.13–1.34"; 357.5mm x 255mm x 28.7–34mm</i> with optical drive and battery: up to 6.06 lb (2.75kg)	
Weight ²		
Case material	Carbon-Fiber Reinforced Plastic (CFRP) in top/bottom	
Battery - type	Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Slim	
Battery - life ¹⁰	<i>6-cell: up to 5.5 hr; 9-cell: up to 6.1 hr; 9-cell plus Ultrabay battery: up to 7.6 hr</i>	
Architecture	<i>Some: Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub</i> <i>Some: Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub</i> <i>All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (T[®] PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 7SC3203)</i>	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door	
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)	
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios	
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable	
Intel 11a/b/g ³²	<i>Some: 11a/b/g wireless⁴, Mini PCI Express adapter, Intel PRO/Wireless 3945ABG</i>	
WWAN ¹⁶	<i>Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, retractable WWAN antenna, service contract reqd with Verizon®</i>	
WWAN ²³	<i>Some: Wireless WAN, GPRS/EDGE/UMTS/HSDPA support, Mini PCIe adapter and SIM, retractable WWAN antenna, service contract required with AT&T®</i>	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset	
Bluetooth™	<i>Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator</i>	
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE	
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant	
Fingerprint reader	<i>Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip</i>	
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail	

See footnotes for important warranty information
US models announced November 28 or December 19, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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(CR2-1) September 2007

ThinkPad® T60p 15W 8741 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Graphics controller memory	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Finger print reader	Bat-Chip set	Whorse (W) Gbl (G) Avail Entry (E) date
8741-C2U	Core 2 Duo T7400	2.16	2GB	15.4" WSXGA+	256MB	100G 7200	DVD±RW	*Intel 11a/b/g ³²	None	Blue Finger	PM 9	Dec06
8741-C3U	Core 2 Duo T7600	2.33	2GB	15.4" WSXGA+	256MB	100G 7200	DVD±RW	*Intel 11a/b/g	None	Blue Finger	PM 9	Dec06
8741-C4U	Core 2 Duo T7600	2.33	1GB	15.4" WSXGA+	256MB	100G 7200	DVD±RW	*Intel 11a/b/g	None	Blue Finger	PM 9	G Dec06
8741-C5U	Core 2 Duo T7600	2.33	1GB	15.4" WSXGA+	256MB	100G 7200	DVD±RW	11a/b/g ³²	None	Blue Finger	PM 9	G Dec06
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T7400 or T7600 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz system bus / 4MB L2 cache (shared)											
Memory	1GB or 2GB std / 4GB max ³¹ / non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Model C3U:</i> PC2-4200 533MHz DDR2; <i>Others:</i> PC2-5300 667MHz DDR2; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available											
Diskette drive EIDE DVD±RW Ultrabay Slim Serial ATA disk (SATA150)	None standard / use optional USB-based diskette drive DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable from Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel 100GB⁹ (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™											
Widescreen display	15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect / anti-glare / stainless steel hinges / one hand activates dual latches											
Graphics	ATI® MOBILITY™ FireGL™ V5250 / PCI Express x16 / 256MB memory / DVI pass-through support to optional Advanced Mini Dock or Advanced Dock											
Keyboard TrackPoint® Touch pad ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>15.4" models (WxDxH):</i> 14.1" x 10.0" x 1.13-1.34"; 357.5mm x 255mm x 28.7-34mm with optical drive and battery: up to 6.07 lb (2.76kg) Carbon-Fiber Reinforced Plastic (CFRP) in top/bottom Lithium Ion 9-cell / supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 5.7 hr; <i>9-cell plus Ultrabay battery:</i> up to 7.2 hr											
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (T [®] PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel [®] 7SC3203)											
PC Card Std slot ExpressCard slot Ports	One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)											
Wireless antenna Mini PCI Express Intel 11a/b/g ³² 11a/b/g ³² WWAN ¹⁶	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable <i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG <i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX None											
Modem Bluetooth™ Ethernet Audio support	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset <i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack											
Security Security chip Fingerprint reader	Trusted Platform Module / Atmel chip / TCG 1.2-compliant Power-on password / hard disk password / supervisor password / security keyhole Fingerprint reader on palm rest / swipe sensor / supports the security chip											
Limited warranty ¹² 3-years/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail	Supports ThinkVantage® technologies											
512MB PC2-5300 DDR2 CL5 SODIMM 1GB PC2-5300 DDR2 CL5 SODIMM 2GB PC2-5300 DDR2 SODIMM Serial/Parallel Port Bay Adapter (flat bezel) Serial Hard Drive Ultrabay Slim Adapter (flat) Combo II Ultrabay Slim Drive (flat bezel) ThinkPad DVD Ultrabay Slim Burner (flat) USB Gemplus GemPC Smart Card Reader USB 2.0 Lenovo Multimedia Headset USB 2.0 Lenovo Webcam USB 2.0 Security Memory Key 4GB USB 2.0 Portable 120GB Hard Disk USB 2.0 Super Multi-Burner Drive 11a/b/g Wireless Mini PCI Express Adpr ThinkPad Adjustable Notebook Stand ThinkPad Convertible Monitor Stand ThinkPad Essential Port Replicator ThinkPad Advanced Mini Dock ThinkPad Advanced Dock TrackPoint Cap Collection Other accessories on O-T60 sheet	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² ThinkPlus™. ²² 2-year LOR 9x5 NBD 41C9175 ThinkPlus 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty											
T60 Series Li-Ion Battery 6-cell 40Y6799 Z60m/T60/R60 Li-Ion Battery 9-cell 40Y6797 Advanced Ultrabay Battery 3-cell 40Y6789 ThinkPad External Battery Charger 40Y7625 ThinkPad 65W AC Adapter 40Y7696 ThinkPad 90W AC Adapter 40Y7659 ThinkPad 90W AC/DC Combo Adapter 40Y7630 ThinkPad Nylon Carrying Case 10K0207 ThinkPad Carrying Case - Expander 73P3597 ThinkPad Carrying Case - Organizer 73P3598 ThinkPad Carrying Case - BackPack 73P3599 Carrying Case - Leather Attache 73P3600 ThinkPad Women's Microfiber Tote 22P8855 Kensington® MicroSaver® Security Cable 73P2582 Lenovo L192 Wide 19" Monitor (black) 6920AB1 6622HB1 6622HB1 ThinkVision® L192p 19" Monitor (black) 9419HC2 ThinkVision L201p 20.1" Monitor (black) 9220HB1 0037A05 0039A05 Other accessories at lenovo.com/accessories												

See footnotes for important warranty information
US models announced November 28, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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ThinkPad® T60 and T60p 15W (6369 and 8741) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Graphics controller	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless tooth	Blue-Chip set	Bat-Chip tery cells	Limited warranty ¹²	Avail date
T60 6369-6BU	Core 2 Duo T7200	2.00	1GB	15.4" WXGA	GMA	80GB 5400	Combo	*Intel 11a/b/g ³²	None	Blue	GM 6	EasyServ	Dec 06
T60 8741-49U	Core 2 Duo T7200	2.00	1GB	15.4" WSXGA+	X1400	100G 7200	DVD±RW	*Intel 11a/b/g	None	Blue	PM 6	EasyServ	Dec 06
T60 8741-4BU	Core 2 Duo T7200	2.00	1GB	15.4" WSXGA+	X1400	100G 7200	DVD±RW	*Intel 11a/b/g	None	Blue	PM 9	EasyServ	Dec 06
T60 8741-4PU	Core 2 Duo T7400	2.16	1GB	15.4" WSXGA+	X1400	100G 7200	DVD±RW	*Intel 11a/b/g	None	Blue	PM 9	EasyServ	Dec 06
T60p 8741-C6U	Core 2 Duo T7600	2.33	1GB	15.4" WSXGA+	V5250	100G 7200	DVD±RW	*Intel 11a/b/g	None	Blue	PM 9	EasyServ	Dec 06

• **These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T7200, T7400, or T7600 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz system bus / 4MB L2 cache (shared)		SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Microsoft Office OneNote® 2003 • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) CD included • Adobe Photoshop Elements plus Adobe Premiere Elements • Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / standard memory in 1 socket / 1 socket available		
Diskette drive EIDE Combo EIDE DVD±RW Ultrabay Slim Serial ATA disk (SATA150)	None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim <i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel 80GB⁸ (5400 rpm) or 100GB (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™		
Widescreen display (anti-glare)	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) TFT color / 150 nits / 16:10 aspect ratio <i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect ratio <i>All:</i> stainless steel hinges / one hand activates dual latches		
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some:</i> ATI® MOBILITY™ Radeon™ X1400 / PCI Express x16 / 128MB memory <i>Some:</i> ATI MOBILITY FireGL™ V5250 / PCI Express x16 / 256MB memory <i>All:</i> DVI pass-through support to optional Advanced Mini Dock or Advanced Dock		
Keyboard TrackPoint® Touch pad ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions		
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	15.4" models (WxDxH): 14.1" x 10.0" x 1.13–1.34"; 357.5mm x 255mm x 28.7–34mm with optical drive and battery: up to 6.05 lb (2.75kg) Carbon-Fiber Reinforced Plastic (CFRP) in top/bottom Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 5.2 hr; <i>9-cell:</i> up to 6.0 hr; <i>9-cell plus Ultrabay battery:</i> up to 7.5 hr		
Architecture	<i>Some:</i> Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some:</i> Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub <i>All:</i> 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 7SC3203)		
PC Card Std slot ExpressCard slot Ports	One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)		
Wireless antenna Mini PCI Express Intel 11a/b/g ³² WWAN ¹⁶	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG None		
Modem Bluetooth™ Ethernet Audio support	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack		
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on palm rest / swipe sensor / supports the security chip		
Limited warranty ¹² 3-years/1-year battery - EasyServ™ ¹⁹ onsite pickup and delivery / srv upgrades ²² avail			
512MB PC2-5300 DDR2 CL5 SODIMM 1GB PC2-5300 DDR2 CL5 SODIMM 2GB PC2-5300 DDR2 SODIMM Serial Hard Drive Ultrabay Slim Adapter (flat) Combo II Ultrabay Slim Drive (flat bezel) USB Gemplus GempC Smart Card Reader USB 2.0 Lenovo Webcam USB 2.0 Security Memory Key 4GB USB 2.0 Super Multi-Burner Drive ThinkPad Essential Port Replicator ThinkPad Advanced Mini Dock ThinkPad Advanced Dock Other accessories on O-T60 sheet	T60 Series Li-Ion Battery 6-cell Z60m/T60/R60 Li-Ion Battery 9-cell ThinkPad External Battery Charger ThinkPad 65W AC Adapter ThinkPad 90W AC Adapter ThinkPad 90W AC/DC Combo Adapter ThinkPad Carrying Case - Organizer ThinkPad Carrying Case - Backpack Lenovo L192 Wide 19" Monitor (black) Lenovo D221 Wide 22" Monitor Lenovo M500 Projector Lenovo C500 Projector	40Y7733 40Y7734 40Y7735 40Y8725 40Y8621 41N3040 40Y8519 41U5120 41N5565 250510W 250410U 250310U 40Y6799 40Y6797 40Y7625 40Y7696 40Y7659 40Y7630 73P3598 73P3599 6920AB1 6622HB1 0037A05 0039A05	
ThinkPlus™, ²² 2-year LOR 9x5 NBD 41C9175 ThinkPlus 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			

See footnotes for important warranty information
US models announced November 28, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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(CR2-4) September 2007

ThinkPad® T60 and T60p 15W (6370 and 8742) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Graphics controller	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Bat-Chip set	tery cells	Limited warranty ¹²	Avail date
T60 6370-6BU	Core 2 Duo T7200	2.00	1GB	15.4" WXGA	GMA	80GB 5400	Combo	*Intel 11a/b/g ³²	None	Blue	GM	6	Onsite	Dec 06
T60 8742-49U	Core 2 Duo T7200	2.00	1GB	15.4" WSXGA+	X1400	100G 7200	DVD±RW	*Intel 11a/b/g	None	Blue	PM	6	Onsite	Dec 06
T60 8742-4BU	Core 2 Duo T7200	2.00	1GB	15.4" WSXGA+	X1400	100G 7200	DVD±RW	*Intel 11a/b/g	None	Blue	PM	9	Onsite	Dec 06
T60 8742-4PU	Core 2 Duo T7400	2.16	1GB	15.4" WSXGA+	X1400	100G 7200	DVD±RW	*Intel 11a/b/g	None	Blue	PM	9	Onsite	Dec 06
T60p 8742-C6U	Core 2 Duo T7600	2.33	1GB	15.4" WSXGA+	V5250	100G 7200	DVD±RW	*Intel 11a/b/g	None	Blue	PM	9	Onsite	Dec 06

• **These models have a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T7200, T7400, or T7600 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz system bus / 4MB L2 cache (shared)										SOFTWARE¹⁴			
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / standard memory in 1 socket / 1 socket available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive EIDE Combo EIDE DVD±RW Ultrabay Slim Serial ATA disk (SATA150)	None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim <i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel 80GB⁸ (5400 rpm) or 100GB⁸ (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™										Preloaded • Microsoft Office OneNote® 2003 • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskkeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)			
Widescreen display (anti-glare)	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) TFT color / 150 nits / 16:10 aspect ratio <i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect <i>All:</i> stainless steel hinges / one hand activates dual latches										• ThinkPad Utilities (Power Manager and Presentation Director) • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)			
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some:</i> ATI® MOBILITY™ Radeon™ X1400 / PCI Express x16 / 128MB memory <i>Some:</i> ATI MOBILITY FireGL™ V5250 / PCI Express x16 / 256MB memory <i>All:</i> DVI pass-through support to optional Advanced Mini Dock or Advanced Dock										• Adobe Photoshop Elements plus Adobe Premiere Elements • Microsoft Office OneNote 2003			
Keyboard TrackPoint® Touch pad ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions										CD included • Adobe Photoshop Elements plus Adobe Premiere Elements • Microsoft Office OneNote 2003			
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	15.4" models (WxDxH): 14.1" x 10.0" x 1.13–1.34"; 357.5mm x 255mm x 28.7–34mm with optical drive and battery: up to 6.05 lb (2.75kg) Carbon-Fiber Reinforced Plastic (CFRP) in top/bottom Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Slim 6-cell: up to 5.2 hr; 9-cell: up to 6.0 hr; 9-cell plus Ultrabay battery: up to 7.5 hr										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Architecture	<i>Some:</i> Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some:</i> Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub <i>All:</i> 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 75C3203)													
PC Card Std slot ExpressCard slot Ports	One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)													
Wireless antenna Mini PCI Express Intel 11a/b/g ³² WWAN ¹⁶ Modem Bluetooth™ Ethernet Audio support	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG None 56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack													
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on palm rest / swipe sensor / supports the security chip													
Limited warranty ¹²	3-year/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time													
512MB PC2-5300 DDR2 CL5 SODIMM 1GB PC2-5300 DDR2 CL5 SODIMM 2GB PC2-5300 DDR2 SODIMM Serial Hard Drive Ultrabay Slim Adapter (flat) Combo II Ultrabay Slim Drive (flat bezel) USB Gemplus GempC Smart Card Reader USB 2.0 Security Memory Key 4GB USB 2.0 Super Multi-Burner Drive 160GB Disk 9.5mm SATA150 (5400 rpm) ThinkPad Essential Port Replicator ThinkPad Advanced Mini Dock ThinkPad Advanced Dock Other accessories on O-T60 sheet	40Y7733 40Y7734 40Y7735 40Y8725 40Y8621 41N3040 41U5120 41N5565 41N5692 250510W 250410U 250310U			T60 Series Li-Ion Battery 6-cell Z60m/T60/R60 Li-Ion Battery 9-cell ThinkPad External Battery Charger ThinkPad 65W AC Adapter ThinkPad 90W AC Adapter ThinkPad 90W AC/DC Combo Adapter ThinkPad Carrying Case - Organizer ThinkPad Carrying Case - Backpack Lenovo L192 Wide 19" Monitor (black) Lenovo D221 Wide 22" Monitor Lenovo M500 Projector Lenovo C500 Projector Other accessories at lenovo.com/accessories			40Y6799 40Y6797 40Y7625 40Y7696 40Y7659 40Y7630 73P3598 73P3599 6920AB1 6622HB1 0037A05 0039A05			Supports ThinkVantage® technologies 65-watt (GMA graphics) or 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				

See footnotes for important warranty information
US models announced November 28, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

ThinkPad® T60 15W (8741) - Education (Vista™) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Graphics controller	Disk SATA GB ⁸	EIDE rpm	optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Bat- set	Educ erty cells	pre-load	Limited warranty ¹²	Avail date
T60 8741-HHU	Core 2 Duo T7200	2.00	1GB	15.4"	WSXGA+	X1400	100G	7200	DVD±RW	11a/b/g ³²	None	PM	9	HE	EasyServ Apr 07
T60 8741-HJU	Core 2 Duo T7200	2.00	1GB	15.4"	WSXGA+	X1400	100G	7200	DVD±RW	11a/b/g	None	PM	9	K12	EasyServ Apr 07

• **These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB L2 cache (shared)										Preloaded operating system²⁰ - Microsoft® Windows® Vista™ Business Edition (32-bit) ↔ Vista Basic logo				
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / standard memory in 1 socket / 1 socket available										Preloaded applications¹⁴ • <i>Some (K12):</i> K-12 education software - VitalSource Library School Edition - Adobe® Instructor Resource Center - Adobe Digital School Collection - Photoshop Elements 5 (and CD) - Premier Elements 3 (and DVD) - Acrobat 8 Professional (and CD) - Contribute 4 (and CD) • <i>Some (HE):</i> Higher education software - VitalSource Library College Edition - Adobe Instructor Resource Center - Adobe Photoshop Elements 5 (and CD) - Adobe Premier Elements 3 (and DVD) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • System Migration Assistant • Norton Internet Security™ (90 days of virus definitions) • Diskeeper® Home • PC-Doctor® (diagnostics) • ThinkPad Utilities • Adobe Reader • Picasa from Google • Fingerprint Software • Microsoft Office 2007 Trial				
Diskette drive	None (use optional USB-based diskette drive)														
EIDE DVD±RW	DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim														
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel														
Serial ATA disk (SATA150)	100GB⁹ (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™														
Widescreen display (anti-glare)	15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect / stainless steel hinges / one hand activates dual latches														
Graphics	ATI® MOBILITY™ Radeon™ X1400 / PCI Express x16 / 128MB memory / DVI pass-through support to optional Advanced Mini Dock or Advanced Dock														
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys														
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	<i>15.4" models (WxDxH):</i> 14.1" x 10.0" x 1.13–1.34"; 357.5mm x 255mm x 28.7–34mm														
Weight ²	with optical drive and battery: up to 6.05 lb (2.75kg)														
Case material	Carbon-Fiber Reinforced Plastic (CFRP) in top/bottom														
Battery - type	Lithium Ion 9-cell / supports unique 2nd battery in Ultrabay Slim														
Battery - life ¹⁰	<i>9-cell:</i> up to 6.0 hr; <i>9-cell plus Ultrabay battery:</i> up to 7.5 hr														
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 75C3203)														
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door														
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door														
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios														
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable														
11a/b/g ³²	11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX														
WWAN ¹⁶	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset														
Bluetooth™	Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator														
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE														
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant														
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip														
Limited warranty ¹²	3-years/1-year battery - EasyServ™ ¹⁹ onsite pickup and delivery / srv upgrades ²² avail														
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733			T60 Series Li-Ion Battery 6-cell			40Y6799								
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734			Z60m/T60/R60 Li-Ion Battery 9-cell			40Y6797								
2GB PC2-5300 DDR2 SODIMM	40Y7735			ThinkPad External Battery Charger			40Y7625								
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725			ThinkPad 65W AC Adapter			40Y7696								
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621			ThinkPad 90W AC Adapter			40Y7659								
USB 2.0 Lenovo Webcam	40Y8519			ThinkPad 90W AC/DC Combo Adapter			40Y7630								
USB 2.0 Security Memory Key 4GB	41U5120			ThinkPad Carrying Case - Organizer			73P3598								
USB 2.0 Super Multi-Burner Drive	41N5565			ThinkPad Carrying Case - BackPack			73P3599								
ThinkPad Essential Port Replicator	250510W			Lenovo L192 Wide 19" Monitor (black)			6920AB1								
ThinkPad Advanced Mini Dock	250410U			Lenovo D221 Wide 22" Monitor			6622HB1								
ThinkPad Advanced Dock	250310U			Lenovo C500 Projector			0039A05								
Other accessories on O-T60 sheet											Other accessories at lenovo.com/accessories				
											ThinkPlus™, ²² 2-year LOR 9x5 NBD 41C9175				
											ThinkPlus 3-year LOR 9x5 NBD 41C9176				
											ThinkPlus 4-year LOR 9x5 NBD 41C9177				
											ThinkPlus 5-year LOR 9x5 NBD 41C9179				
											ThinkPlus 4-year P&L P/U Depot 41C9178				
											ThinkPlus 5-year P&L P/U Depot 41C9180				
											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				

See footnotes for important warranty information
US models announced April 17, 2007
US models withdrawn effective September 2007

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(CR2-7) September 2007

ThinkPad® T60 15W (8742) - Education (Vista™) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Graphics controller	Disk SATA GB ⁸	rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Bat-tery set cells	Educ pre-load	Limited warranty ¹²	Avail date
T60 8742-HHU	Core 2 Duo T7200	2.00	1GB	15.4" WSXGA+	X1400	100G	7200	DVD±RW	11a/b/g ³²	None	PM 9	HE	Onsite	Apr 07
T60 8742-HJU	Core 2 Duo T7200	2.00	1GB	15.4" WSXGA+	X1400	100G	7200	DVD±RW	11a/b/g	None	PM 9	K12	Onsite	Apr 07

These models have a limited onsite service²⁴ 3-year limited warranty

These educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB L2 cache (shared)										Preloaded operating system²⁰ - Microsoft® Windows® Vista™ Business Edition (32-bit) ↔ Vista Basic logo	
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / standard memory in 1 socket / 1 socket available										Preloaded applications¹⁴ • <i>Some (K12):</i> K-12 education software - VitalSource Library School Edition - Adobe® Instructor Resource Center - Adobe Digital School Collection - Photoshop Elements 5 (and CD) - Premier Elements 3 (and DVD) - Acrobat 8 Professional (and CD) - Contribute 4 (and CD) • <i>Some (HE):</i> Higher education software - VitalSource Library College Edition - Adobe Instructor Resource Center - Adobe Photoshop Elements 5 (and CD) - Adobe Premier Elements 3 (and DVD) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • System Migration Assistant • Norton Internet Security (90 days of virus definitions) • Diskeeper® Home • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Picasa from Google • Fingerprint Software (fingerprint models) • Microsoft Office 2007 Trial License - CD not included - Lotus® Notes® Stand-alone Client	
Diskette drive	None (use optional USB-based diskette drive)											
EIDE DVD±RW	DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim											
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel											
Serial ATA disk (SATA150)	100GB⁸ (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™											
Widescreen display (anti-glare)	15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect / stainless steel hinges / one hand activates dual latches											
Graphics	ATI® MOBILITY™ Radeon™ X1400 / PCI Express x16 / 128MB memory / DVI pass-through support to optional Advanced Mini Dock or Advanced Dock											
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	<i>15.4" models (WxDxH):</i> 14.1" x 10.0" x 1.13–1.34"; 357.5mm x 255mm x 28.7–34mm											
Weight ²	with optical drive and battery: up to 6.05 lb (2.75kg)											
Case material	Carbon-Fiber Reinforced Plastic (CFRP) in top/bottom											
Battery - type	Lithium Ion 9-cell / supports unique 2nd battery in Ultrabay Slim											
Battery - life ¹⁰	<i>9-cell:</i> up to 6.0 hr; <i>9-cell plus Ultrabay battery:</i> up to 7.5 hr											
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 7SC3203)											
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door											
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)											
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios											
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable											
11a/b/g ³²	11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX											
WWAN ¹⁶	None											
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset											
Bluetooth™	Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator											
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE											
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack											
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant											
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip											
Limited warranty ¹²	3-year/1-year battery, limited onsite service , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time ²⁴											
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733			T60 Series Li-Ion Battery 6-cell			40Y6799			Supports ThinkVantage® technologies		
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734			Z60m/T60/R60 Li-Ion Battery 9-cell			40Y6797			90-watt (ATI graphics) AC adapter		
2GB PC2-5300 DDR2 SODIMM	40Y7735			ThinkPad External Battery Charger			40Y7625			ThinkPad Roll Cage (one-piece magnesium frame)		
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725			ThinkPad 65W AC Adapter			40Y7696			RoHS-compliant		
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621			ThinkPad 90W AC Adapter			40Y7659			International Warranty Service ¹⁷		
USB 2.0 Lenovo Webcam	40Y8519			ThinkPad 90W AC/DC Combo Adapter			40Y7630			24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
USB 2.0 Security Memory Key 4GB	41U5120			ThinkPad Carrying Case - Organizer			73P3598					
USB 2.0 Super Multi-Burner Drive	41N5565			ThinkPad Carrying Case - Backpack			73P3599					
ThinkPad Essential Port Replicator	250510W			Lenovo L192 Wide 19" Monitor (black)			6920AB1					
ThinkPad Advanced Mini Dock	250410U			Lenovo D221 Wide 22" Monitor			6622HB1					
ThinkPad Advanced Dock	250310U			Lenovo C500 Projector			0039A05			Post-warranty annual maintenance agreements at		
Other accessories on O-T60 sheet	Other accessories at lenovo.com/accessories										lenovo.com/thinkplus/warranty	

See footnotes for important warranty information
US models announced April 17, 2007
US models withdrawn effective September 2007

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ThinkPad® T60 and T60p 15W (TopSeller) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Graphics controller	Disk SATA GB ³ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Chip set	tery cells	Bat- Limited war- ranty ¹²	Avail date
T60 6371-7DU	Core Duo T2300E	1.66	512MB	15.4"	WSXGA	GMA 80GB 5400	Combo	*Intel 11a/b/g ³²	None	GM 6	1-yr	Mar 07		
T60 6371-74U	Core 2 Duo T5500	1.66	512MB	15.4"	WXGA	GMA 80GB 5400	Combo	*Intel 11a/b/g	None	GM 6	1-yr	Dec 06		
T60 8744-5BU	Core 2 Duo T7200	2.00	1GB	15.4"	WSXGA+	X1400 120G 5400	DVD±RW	Thinkpad 11n ²⁸	None	Blue PM 6	3-yr	Dec 06		
T60p 8744-C9U	Core 2 Duo T7200	2.00	2GB	15.4"	WSXGA+	V5250 100G 7200	DVD±RW	Thinkpad 11n	None	Blue PM 9	3-yr	Dec 06		

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have a 1-year or 3-year limited warranty**

Positioning Processor	<p><i>Premiere performance; two spindles</i> Intel® Core™ Duo processor T2300E with dual-core, Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, 667MHz system bus, and 2MB L2 cache (shared) or Intel Core 2 Duo processor T5500 or T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, and 667MHz system bus / T5500: 2MB L2 cache (shared); T7200: 4MB L2 cache (shared)</p>											
Memory	<p>512MB, 1GB, or 2GB std / 4GB max³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / C9U: standard memory in both sockets; no sockets available; Others: standard memory in 1 socket; 1 socket available</p>											
Diskette drive EIDE Combo EIDE DVD±RW Ultrabay Slim Serial ATA disk (SATA150)	<p>None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay Slim <i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel 80GB⁸ (5400 rpm), 100GB (7200 rpm), or 120GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™</p>											
Widescreen display (anti-glare)	<p><i>Some:</i> 15.4" (391mm) WXGA (1280x800) TFT color / 150 nits / 16:10 aspect ratio <i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect All: stainless steel hinges / one hand activates dual latches</p>											
Graphics	<p><i>Some:</i> Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some:</i> ATI® MOBILITY™ Radeon™ X1400 / PCI Express x16 / 128MB memory <i>Some:</i> ATI MOBILITY FireGL™ V5250 / PCI Express x16 / 256MB memory All: DVI pass-through support to optional Advanced Mini Dock or Advanced Dock</p>											
Keyboard TrackPoint® Touch pad ThinkLight™	<p>89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions</p>											
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<p>15.4" models (WxDxH): 14.1" x 10.0" x 1.13-1.34"; 357.5mm x 255mm x 28.7-34mm with optical drive and battery: up to 6.08 lb (2.76kg) Carbon-Fiber Reinforced Plastic (CFRP) in top/bottom Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Slim 6-cell: up to 5.5 hr; 9-cell: up to 6.0 hr; 9-cell plus Ultrabay battery: up to 7.0 hr</p>											
Architecture	<p><i>Some:</i> Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some:</i> Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 7SC3203)</p>											
PC Card Std slot ExpressCard slot Ports	<p>One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)</p>											
Wireless antenna Mini PCI Express Intel 11a/b/g ³² ThinkPad 11n ²⁸	<p>UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable <i>Some:</i> 11a/b/g wireless⁴, Mini PCI Express adapter, Intel PRO/Wireless 3945ABG <i>Some:</i> 11a/b/g/n wireless⁴, ThinkPad 11a/b/g/n Mini PCI Express Adapter, Atheros AR5008 chipset, MIMO 2x3</p>											
WWAN ¹⁶ Modem Bluetooth™ Ethernet Audio support	<p>None 56K⁶ V.90 (V.92-designed²⁹) modem in Com Daughter Card socket / Conexant® chipset <i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack Power-on password / hard disk password / supervisor password / security keyhole</p>											
Security Security chip Fingerprint reader	<p>Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on palm rest / swipe sensor / supports the security chip</p>											
Limited warranty ¹²	<p>6371: 1-year - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² available 8744: 3-year/1-year battery - EasyServ onsite pickup and delivery / srv upgrades²² avail</p>											
1GB PC2-5300 DDR2 CL5 SODIMM 2GB PC2-5300 DDR2 SODIMM USB 2.0 Super Multi-Burner Drive ThinkPad Essential Port Replicator ThinkPad Advanced Mini Dock ThinkPad Advanced Dock Other accessories on O-T60 sheet	<p>40Y7734 40Y7735 41N5565 250510W 250410U 250310U</p>			<p>T60 Series Li-Ion Battery 6-cell Z60m/T60/R60 Li-Ion Battery 9-cell ThinkPad 90W AC Adapter ThinkPad 90W AC/DC Combo Adapter ThinkPad Carrying Case - Organizer Lenovo L192 Wide 19" Monitor (black)</p>			<p>40Y6799 40Y6797 40Y7659 40Y7630 73P3598 6920AB1</p>			<p>Other accessories at lenovo.com/accessories</p>		
											<p>SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional²⁰ (Service Pack 2) ↻ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Microsoft Office OneNote® 2003 or 2007 • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskkeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) CD included • Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client</p>	
											<p>Supports ThinkVantage® technologies</p>	
											<p>65-watt (GMA graphics) or 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²</p>	
											<p>Onsite service upgrade options²² and post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty</p>	

See footnotes for important warranty information * Powered by Intel Centrino® Duo mobile technology
US models announced November 28, 2006 or March 27, 2007

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ThinkPad® T60 and T60p 15W (TopSeller) - Vista™ - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Screen	Graphics controller	SATA disk GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Blue-tooth	Chip-set	Battery cells	Vista preload	Limited warranty ¹²	Avail date
T60 6371-E4U	Core 2 Duo T5500	1.66	1GB	15.4" WXGA	GMA 80GB	80GB	Combo	*Intel 11a/b/g ³²	GM	6	Business	1-yr	Jan 07	
T60 8744-H3U	Core 2 Duo T5500	1.66	1GB	15.4" WXGA	X1400 120G	120G	DVD±RW	*Intel 11a/b/g	PM	9	Business	3-yr	Jan 07	
T60 6371-E5U	Core 2 Duo T5600	1.83	1GB	15.4" WXGA	GMA 120G	120G	DVD±RW	*Intel 11a/b/g	GM	9	Business	1-yr	Jan 07	
T60p 8744-J2U	Core 2 Duo T7200	2.00	2GB	15.4" WSXGA+	V5250 100G	100G	DVD±RW	*Intel 11a/b/g	Blue	PM	9	Business	3-yr	Jan 07
T60p 8744-JVU	Core 2 Duo T7200	2.00	2GB	15.4" WSXGA+	V5250 100G	100G	DVD±RW	ThinkPad 11n ²⁸	Blue	PM	9	Ultimate	3-yr	Mar 07

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year or 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T5500, T5600, or T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz system bus / [T5600/T7200: Virtualization Technology not supported] / T5500/T5600: 2MB L2 cache (shared); T7200: 4MB L2 cache (shared)										SOFTWARE¹⁴				
Memory	1GB or 2GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel capable / two 200-pin SO-DIMM sockets / E4U/J2U/JVU: standard memory in both sockets; no sockets available; Others: standard memory in 1 socket; 1 socket available										Preloaded operating system - Some: Microsoft® Windows® Vista Business Edition ²⁰ (32-bit) - Some: Microsoft Windows Vista Ultimate Edition (32-bit) ◇ E5U: Vista Basic logo ◇ Others: Vista Premium logo				
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded applications (all)				
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										• Rescue and Recovery™				
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim										• Access Connections™				
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel										• Client Security Solution™				
Serial ATA disk (SATA150)	80GB⁸ (5400 rpm), 100GB (7200 rpm), or 120GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / ThinkPad Shock Mounted Hard Drive / Active Protection System™										• ThinkVantage Productivity Center with Away Manager				
Widescreen display (anti-glare)	Some: 15.4" (391mm) WXGA (1280x800) TFT color / 150 nits / 16:10 aspect ratio Some: 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect All: stainless steel hinges / one hand activates dual latches										• ThinkVantage System Update				
Graphics	Some: Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz Some: ATI® MOBILITY™ Radeon™ X1400 / PCI Express x16 / 128MB memory Some: ATI MOBILITY FireGL™ V5250 / PCI Express x16 / 256MB memory All: DVI pass-through support to optional Advanced Mini Dock or Advanced Dock										• Norton Internet Security™ (90 days of virus definitions)				
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys										• Diskeeper® Home				
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• PC-Doctor™ (diagnostics)				
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										• ThinkPad Utilities (Power Manager and Presentation Director)				
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Adobe® Reader				
Dimensions ³	<i>15.4" models (WxDxH): 14.1" x 10.0" x 1.13-1.34"</i> ; 357.5mm x 255mm x 28.7-34mm										• Picasa from Google				
Weight ²	with optical drive and battery: up to 6.08 lb (2.76kg)										• Microsoft Office 2007 Trial				
Case material	Carbon-Fiber Reinforced Plastic (CFRP) in top/bottom										License - CD not included (all)				
Battery - type	Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Slim										- Lotus® Notes® Stand-alone Client				
Battery - life ¹⁰	6-cell : up to 5.2 hr; 9-cell : up to 6.0 hr; 9-cell plus Ultrabay battery : up to 7.0 hr														
Architecture	Some: Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub Some: Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI1512 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 75C3203)														
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door														
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door														
Ports	Three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial ports, parallel port, 1394, or S-video (use USB)														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios														
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable														
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG														
ThinkPad 11n ²⁸	Some: 11a/b/g/n wireless ⁴ , ThinkPad 11a/b/g/n Mini PCI Express Adapter, Atheros AR5008 chipset, MIMO 2x3														
WWAN ¹⁶	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Com Daughter Card socket / Conexant® chipset														
Bluetooth™	Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator														
Ethernet	Gigabit ethernet on systemboard / Intel 82573L (MAC/PHY) / PCIe x1 / PXE														
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant														
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip										Supports ThinkVantage® technologies				
Limited warranty ¹²	6371: 1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail 8744: 3-year/1-year battery - EasyServ onsite pickup and delivery / srv upgrades ²² avail										65-watt (GMA graphics) or 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60 Series Li-Ion Battery 6-cell	40Y6799												
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797												
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad External Battery Charger	40Y7625												
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad 65W AC Adapter	40Y7696												
ThinkPad Essential Port Replicator	250510W	ThinkPad 90W AC Adapter	40Y7659												
ThinkPad Advanced Mini Dock	250410U	ThinkPad 90W AC/DC Combo Adapter	40Y7630												
ThinkPad Advanced Dock	250310U	Lenovo D221 Wide 22" Monitor	6622HB1												
Other accessories on O-T60 sheet	Other accessories at lenovo.com/accessories														

See footnotes for important warranty information
US models announced January 30 or March 27, 2007
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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Partial list of accessories supported on ThinkPad T60 and T60p originally announced on January 5, 2006

Memory

512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ann 01/05/06
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ann 01/05/06
2GB PC2-5300 DDR2 SODIMM	40Y7735	ann 11/28/06

Ultrabay Slim 9.5mm (best to use flat bezel options)

Serial/Parallel Port Bay Adapter (flat bezel)	40Y8121	ann 01/31/06
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ann 09/20/05
DVD-ROM Ultrabay Slim Drive (curved)	73P3270	ann 10/07/03
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ann 09/20/05
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ann 05/31/07

Ultrabay Enhanced 12.7mm

None

Storage and removable storage

80GB Disk 9.5mm SATA150 (5400 rpm) ⁴¹	41N5662	ann 08/15/06
100GB Disk 9.5mm SATA150 (7200 rpm) ⁴¹	41N3013	ann 01/05/06
120GB Disk 9.5mm SATA150 (5400 rpm) ⁴¹	41N5691	ann 03/20/07
160GB Disk 9.5mm SATA150 (5400 rpm) ⁴¹	41N5692	ann 03/20/07
160GB Disk 9.5mm SATA150 (7200 rpm) ⁴¹	41N5737	ann 10/16/07

⁴¹ Can be used as the main HDD or with ThinkPad Serial ATA Hard Drive Ultrabay Slim Adapter 40Y8725 in the Ultrabay or in the ThinkPad Advanced Dock 250310U.

USB 2.0 Essential Memory Key 1GB	41U4940	ann 01/23/07
USB 2.0 Essential Memory Key 2GB	41U4944	ann 01/23/07
USB 2.0 Security Memory Key 1GB	41U5118	ann 07/17/07
USB 2.0 Security Memory Key 2GB	41U5119	ann 07/17/07
USB 2.0 Security Memory Key 4GB	41U5120	ann 07/17/07

USB Portable Diskette Drive	05K9276	ann 06/05/00
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ann 01/05/06
USB 2.0 Portable 80GB Hard Disk	41N8378	ann 04/17/07
USB 2.0 Portable 120GB Hard Disk	41N8379	ann 04/17/07
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07

Wireless LAN (Mini PCI Express)

11a/b/g Wireless Mini PCI Express Adpr ⁴²	40Y7026	ann 09/20/05
Intel PRO/Wireless 3945ABG Mini PCIe Ad ⁴²	41N3008	ann 01/05/06

⁴² System must be wireless upgradable.

ThinkPad Expansion

ThinkPad Adjustable Notebook Stand	40Y7676	ann 09/20/05
ThinkPad Essential Port Replicator	250510W	ann 09/20/05
ThinkPad Advanced Mini Dock	250410U	ann 09/20/05
ThinkPad Advanced Dock ⁴⁷	250310U	ann 09/20/05

⁴⁷ ThinkPad Advanced Dock supports dual-head graphics adapters:
- ATI® X1300 256MB Dual Head/TV-out 41U5028

External Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Enh Perf Wireless Keyboard and Mouse	73P4067	ann 12/07/04
USB Keyboard with UltraNav	31P8950	ann 01/28/03
USB Travel Keyboard with UltraNav	31P9490	ann 04/27/04
Preferred Pro USB Fingerprint Keyboard	73P4730	ann 02/22/05

External Mouse

USB Optical Wheel Mouse	06P4069	ann 05/21/03
Optical 3-Button ScrollPoint® Mouse	31P7405	ann 08/27/02
Optical 3-Button Travel Wheel Mouse	31P7410	
Lenovo Laser Mouse (USB, PS/2)	41U3074	ann 01/23/07

Security

Kensington® Cable Lock from Lenovo	73P2582	ann 12/29/03
USB Gemplus Smart Card Reader	41N3040	ann 02/21/06
PC Card Gemplus Smart Card Reader	41N3004	ann 12/13/05
ExpressCard Gemplus Smart Card Reader	41N3043	ann 06/27/06
USB Fingerprint Reader	41U3167	ann 10/24/06

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann 06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06

Data/Video Projectors

Lenovo M500 Projector	0037A05	ann 02/28/06
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Batteries

T60/R60 Series Li-Ion Battery 6-cell	40Y6799	ann 01/05/06
Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	ann 09/20/05
ThinkPad Advanced Ultrabay Battery 3-cell ⁴³	40Y6789	ann 09/20/05

⁴³ Used in Ultrabay Slim bay.

ThinkPad External Battery Charger ⁴⁴	40Y7625	ann 09/20/05
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⁴⁴ Requires the ThinkPad 90W AC Adapter 40Y7659 (adapter provided with some systems).

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	
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⁴⁵ Only compatible with the 945GM and GM965 chipset models.

ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
ThinkPad 90W AC/DC Combo Adapter	40Y7630	ann 12/13/05
Belkin 1 Outlet Notebook Surge	31P7658	
Belkin Universal Notebook Travel Surge	22P7127	
Belkin 8-outlet 6-foot Surge Protector	31P7659	

Carrying Cases

Lenovo Carrying Case - Messenger Max	41U5253	ann 05/01/07
Lenovo Carry Case - Performance Backpack	41U5254	ann 05/01/07
ThinkPad Nylon Carrying Case	10K0207	
ThinkPad Carrying Case - Expander	73P3597	
ThinkPad Carrying Case - Organizer	73P3598	
ThinkPad Carrying Case - Backpack	73P3599	
ThinkPad Carrying Case - Leather Attache	73P3600	
ThinkPad Premiere Leather Carrying Case	10K0209	
ThinkPad Women's Microfiber Tote	22P8855	
ThinkPad Women's Leather Trim Tote	22P8856	
ThinkPad Women's Executive Leather Tote	22P8857	
Women's Executive Red Leather Tote	22P8858	
ThinkPad Convertible Carrying Case	22P8860	
ThinkPad Convertible Back Pack	22P8859	

Monitors

Lenovo E75 17" CRT Monitor (16.0" vis) blk	6307BTN	ann 01/16/07
ThinkVision® L151 15" LCD Monitor	9165AC6	ann 10/23/07
ThinkVision L171 17" LCD Monitor	9227AD1	ann 10/23/07
ThinkVision L171p 17" LCD Monitor	9417HC2	ann 10/31/06
ThinkVision L190x 19" LCD Monitor	4439HB2	ann 10/23/07
ThinkVision L193p 19" LCD Monitor	4431HB2	ann 10/23/07
ThinkVision L194 Wide 19" LCD Monitor	4434HB6	ann 10/23/07
ThinkVision L220x Wide 22" LCD Monitor	4433HB2	ann 10/23/07

Monitor Accessories⁴⁶

ThinkVision USB Soundbar	40Y7616	ann 08/23/05
Kensington Cable Lock from Lenovo	73P2582	ann 12/29/03
ThinkPad Convertible Monitor Stand	40Y7620	ann 01/05/06
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

Other accessories at lenovo.com/accessories

Accessories Guide pdf at lenovo.com/accessoriesguide

Need to buy accessories no longer marketed by Lenovo? See www.itxchange.com/lenovo for the Options Continuation Program.

ThinkPlus™, ²² service upgrade options²² for 1-year warranty models:

1-year Lenovo Onsite Repair 9x5 Next Business Day	41C9166
2-year Lenovo Onsite Repair 9x5 Next Business Day	41C9167
3-year Lenovo Onsite Repair 9x5 Next Business Day	41C9168
4-year Lenovo Onsite Repair 9x5 Next Business Day	41C9171
5-year Lenovo Onsite Repair 9x5 Next Business Day	41C9173
2-year Parts and Labor (P&L) Pickup Depot	41C9169
3-year Parts and Labor (P&L) Pickup Depot	41C9170
4-year Parts and Labor (P&L) Pickup Depot	41C9172
5-year Parts and Labor (P&L) Pickup Depot	41C9174

ThinkPlus™, ²² service upgrade options²² for 3-year warranty models:

2-year Lenovo Onsite Repair 9x5 Next Business Day	41C9175
3-year Lenovo Onsite Repair 9x5 Next Business Day	41C9176
4-year Lenovo Onsite Repair 9x5 Next Business Day	41C9177
5-year Lenovo Onsite Repair 9x5 Next Business Day	41C9179
4-year Parts and Labor (P&L) Pickup Depot	41C9178
5-year Parts and Labor (P&L) Pickup Depot	41C9180

Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

ThinkPad® R40e - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Ethernet on planar	Security chip	Preload	Workhorse (W) or Global (G) or Entry (E)	Avail date
2684-22U	Celeron®	1.7	128MB	13.3" XGA	20GB	CD	None	Modem	10/100	No	Windows XP Home	E	Mar 2003
2684-G2U	Celeron	1.8	128MB	14.1" XGA	20GB	CD	None	Modem	10/100	No	Windows XP Home	E	May 2003
2684-G8U	Celeron	1.8	128MB	14.1" XGA	20GB	CD	None	Modem	10/100	No	Windows XP Pro	No	May 2003
2684-CAU	Pentium® 4-M	1.7	256MB	14.1" XGA	20GB	Combo	None	Modem	10/100	No	Windows XP Pro	No	Mar 2003
2684-B2U	Pentium 4-M	1.8	128MB	14.1" XGA	20GB	CD	None	Modem	10/100	No	Windows XP Home	No	Mar 2003
2684-Q2U	Pentium 4-M	2.2	128MB	14.1" XGA	20GB	CD	None	Modem	10/100	No	Windows XP Home	E	May 2003
2684-QQU	Pentium 4-M	2.2	256MB	14.1" XGA	30GB	Combo	None	Modem	10/100	No	Windows XP Pro	No	May 2003
2684-QBU	Pentium 4-M	2.2	256MB	14.1" XGA	40GB	Combo	11b Wi-Fi ³²	Modem	10/100	No	Windows XP Pro	No	May 2003
Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Mobile Intel® Celeron 1.7 or 1.8GHz with 400MHz frontside bus or Mobile Intel Pentium 4 Processor-M 1.8 or 2.2GHz with enhanced Intel SpeedStep™ technology ¹ and 400MHz frontside bus										SOFTWARE¹⁴		
L2 cache	<i>Celeron: 256KB; Pentium 4-M: 512KB; All: on die (at processor speed) / ECC</i>										Windows XP Home models		
Memory	128 or 256MB std / 1GB max ⁷ / PC2100 266MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										- Microsoft® Windows® XP Home Edition ²⁰ ◆ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Windows XP Pro models		
CD	<i>Some: CD-ROM / 24X-10X⁹ speed / fixed, not removable</i>										- Microsoft Windows XP Professional ²⁰		
Combo	<i>Some: Combo / 24X/10X/24X/8X²¹ speed / fixed, not removable</i>										◆ Disk-to-Disk Recovery (in hidden protected area)		
Ultrabay™ 2000	None												
Disk	20, 30, or 40GB⁸ , 4200 rpm, 9.5mm, S.M.A.R.T. / removable and upgradable / 9.5mm high bay												
Display	<i>Some: 13.3" (337.8mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</i> <i>Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</i> <i>All: Easy-open cover to unlatch and open with one hand (two latches)</i>										Preloaded		
Graphics	ATI® RADEON™ IGP 330M / integrated in northbridge / 16MB DDR1 (DDR-SDRAM)										• Access IBM		
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										• Adobe Reader		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										• Rapid Restore™ PC		
TrackPoint®	TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										• RecordNow and DLA by Veritas® (combo models)		
Touch pad	No UltraNav™ multi-pointing system										• InterVideo WinDVD (combo models)		
ThinkLight™	None										• Norton® AntiVirus (OEM edition)		
Dimensions ³	12.3 x 10.0 x 1.53" / 313mm x 254mm x 38.9mm										• PC-Doctor™		
Weight ²	with optical drive and battery: <i>G2U/G8U/B2U/Q2U: 5.9 lb (2.67kg); 22U/CAU/QQU/QBU: 6.0 lb (2.72kg)</i>										• ThinkPad Utilities		
Case material	<i>Color: Black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic</i>										• Update Connector™.15		
Battery - type	Lithium Ion 6-cell / intelligent										Downloadable		
Battery - life ¹⁰	<i>Celeron models: 2.1 hrs; Pentium 4-M models: 2.6 hrs</i>										• IBM Director Agent		
Architecture	ATI RADEON IGP 330M chipset / IGP 330M northbridge (memory controller, graphics controller, PCI bus) / ALI® M1535+ southbridge (ATA-100 EIDE, Low Pin Count [LPC] interface, USB, parallel, audio) / PCI 2.1, 32-bit 33MHz (TI® PCI1510 CardBus controller) / LPC bus 33MHz (PC87392 Super I/O for parallel)										• Software Delivery Assistant		
Port replicator	No port replicator support										• System Migration Assistant		
Docking station	No docking station support										License (CD not included)		
PC Card Std slots	One Type II or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Ports	Two USB (Version 1.1) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial or infrared port										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage		
Video out	None										Universal 72 watt AC adapter		
IEEE 1394	None										PC 2001 and PXE 2.0-compliant		
Wireless antenna	<i>Some (non-wireless models): None / can upgrade to wireless via optional PC Cards</i> <i>Some (wireless model QBU): UltraConnect™ Antenna built into the display cover</i> <i>Some (non-wireless models): No Mini PCI slot (Communications Bay)</i> <i>Some (wireless model QBU): 11b Wi-Fi³² wireless⁴, Mini PCI, Intersil® Prism 2.5 chipset</i>										ACPI 1.0b and 2.0-compliant		
Mini PCI	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										CIM and DMI 2.0-compliant		
11b Wi-Fi ³²	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										International Warranty Service ¹⁷		
CDC	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Agere® chipset										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)		
Modem	10/100 ethernet on planar / Broadcom® BCM5901 (PHY/MAC) / PXE / Wake on LAN®										ServicePac®.22 1yr IOR 9x5 NBD 30L9188		
Ethernet	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speakers / 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm; mono) / headphone jack (3.5 mm; stereo) / no line-in jack										ServicePac 2 yr IOR 9x5 NBD 30L9189		
Audio support	Power-on password / hard disk password / supervisor password / security keyhole										ServicePac 3 yr IOR 9x5 NBD 30L9195		
Security	None										ServicePac 4 yr IOR 9x5 NBD 30L9194		
Security chip	None										ServicePac 5 yr IOR 9x5 NBD 30L9196		
Limited warranty ¹²	1 year - EasyServ™.19 onsite pickup and delivery courier service										ServicePac 2 yr P&L P/U Depot 30L9191		
Service options	Service upgrades ²² provide up to five years of onsite or depot repair service coverage from date of ThinkPad purchase (including warranty period)										ServicePac 3 yr P&L P/U Depot 30L9192		
128 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0028	ThinkPad R40e Li-Ion Battery (6-cell)	08K8218										
256 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0030	Multiple Multiple Battery Charger II	22P9040										
512 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0032	ThinkPad 72W AC Adapter	02K6699										
40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816	ThinkPad 72W AC/DC Combo Adapter	22P9010										
USB Portable Diskette Drive	05K9276	Enh Perf Wireless Keyboard and Mouse	73P4067										
USB Serial Parallel Adapter	22P5298	USB Travel Keyboard with UltraNav	31P9490										
USB 2.0 Combo Drive	73P4515	ThinkPad Monitor Stand 2001	22P5265										
USB 2.0 Memory Key 256MB	22P9228	11a/b/g Wireless CardBus Adapter	31P9101										
USB 2.0 Memory Key 512MB	22P9230	Optical 3-Button Travel Wheel Mouse	31P7410										
USB 2.0 Portable 80GB Hard Disk	40Y8726	Optical 3-Button ScrollPoint® Mouse	31P7405										
GemPC400 Smart Card Reader/Writer	31P8901	Nylon Carrying Case	10K0207										
M400 Projector	0037A04	Leather Carrying Case	10K0209										
C400 Projector	0039A04	ThinkPad Carrying Case - Expander	73P3597										
ThinkVision® E500 Projector	0038A05	Other options at lenovo.com/options											

See footnotes for important warranty information
US models announced March 12 or May 21, 2003
US models withdrawn effective July 2003, January 2004, October 2004, or December 2005

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ThinkPad® R40 (2723) - withdrawn

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Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics	Disk memory	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Ethernet on planar	IEEE 1394 port	Security Chip	Workhorse (W) or Global (G) Avail date
2723-2FU	Pentium® M	1.3	256MB	14.1" XGA	16MB	20G	DVD	*Intel 11b Wi-Fi ³²	Modem	10/100		Yes	XP Pro	W G Mar 2003
2723-26U	Pentium M	1.3	256MB	14.1" XGA	16MB	20G	DVD	Open; wireless upg ³⁶	Modem	10/100		Yes	XP Pro	W G Mar 2003
2723-27U	Pentium M	1.3	256MB	14.1" XGA	16MB	20G	DVD	Open; wireless upg	Modem	10/100	1394	Yes	XP Pro	W Mar 2003
2723-2SU	Pentium M	1.3	256MB	14.1" XGA	16MB	20G	DVD	Cisco® 802.11b ³²	Modem	10/100	1394	Yes	XP Pro	W Mar 2003
2723-3LU	Pentium M	1.3	256MB	14.1" XGA	32MB	40G	Combo	11a/b Wi-Fi ²⁷	Modem	10/100	1394	Yes	XP Pro	W Apr 2003
2723-58U	Pentium M	1.3	256MB	15.0" XGA	32MB	40G	DVD	Open; wireless upg	Modem	10/100	1394	Yes	XP Pro	W Apr 2003
2723-5TU	Pentium M	1.3	256MB	15.0" XGA	32MB	40G	DVD	Cisco 802.11b	Modem	10/100	1394	Yes	XP Pro	W Apr 2003
2723-6LU	Pentium M	1.3	256MB	15.0" SXGA+	32MB	40G	Combo	11a/b Wi-Fi	Modem	10/100	1394	Yes	XP Pro	W Apr 2003
2723-BSU	Pentium M	1.4	256MB	15.0" XGA	32MB	40G	DVD	Cisco 802.11b	Modem	10/100		Yes	XP Pro	W G Apr 2003
2723-B4U	Pentium M	1.4	256MB	15.0" XGA	32MB	40G	DVD	Open; wireless upg	Modem	10/100		Yes	XP Pro	W G Apr 2003
2723-F2U	Pentium M	1.5	256MB	15.0" XGA	32MB	40G	DVD	Open; wireless upg	Modem	10/100	1394	Yes	XP Pro	W Apr 2003
2723-BAU	Pentium M	1.4	256MB	15.0" XGA	32MB	40G	DVD	*Intel 11b Wi-Fi	Modem	10/100		Yes	XP Pro	W G Apr 2003
2723 models have a 3 year limited warranty (other 2722 ThinkPad R40 systems have a 1 year limited warranty)														
Positioning	Mainstream performance and features; two-spindle system											SOFTWARE¹⁴		
Processor	Intel® Pentium® M Processor 1.3, 1.4, or 1.5GHz with enhanced Intel SpeedStep™ technology ¹ and 400MHz frontside bus											Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ ♦ Disk-to-Disk Recovery (in hidden protected area)		
L2 cache	1MB / on die (at processor speed) / ECC													
Memory	256MB std / 2GB max ⁷ / PC2100 266MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available											Preloaded • Access Program • Access Connections™ • Adobe Reader • Rapid Restore™ PC • RecordNOW and DLA by Veritas (combo models) • InterVideo WinDVD (Combo, DVD) • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Update Connector™ ¹⁵		
Diskette drive	None standard / use optional Ultrabay™-based or USB-based diskette drive													
DVD	Some: DVD-ROM / 8X-3.3X ⁹ speed / bootable / removable from Ultrabay 2000											Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip)		
Combo	Some: DVD-ROM/CD-RW / 24X/10X/24X/8X ²¹ speed / removable from Ultrabay 2000													
Ultrabay 2000	One modular bay for interchangeable devices / Ultrabay Plus-compatible / 12.7 mm high											License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Disk	20GB ⁹ or 40GB, 4200 rpm, 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay 2000													
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits All: Easy-open cover to unlatch and open with one hand (two latches)											Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network) PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ImageUltra™ Services available International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
Graphics	Some: ATI® MOBILITY™ RADEON™ / AGP 4X / 16MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM)													
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B											ServicePac® , ²² 2 yr IOR 9x5 NBD 30L9190 ServicePac 3 yr IOR 9x5 NBD 30L9197 ServicePac 5 yr IOR 9x5 NBD 69P9200 ServicePac 5 yr P&L P/U Depot 69P9201 Other ServicePac options at ibm.com/services/its/us/source/wamomxeu.pdf Post-warranty annual maintenance agreements at ibm.com/services/its/us/source/maspspleu.pdf		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											ThinkPad Port Replicator II 74P6733 ThinkPad Mini Dock 287810U ThinkPad 72W AC Adapter 02K6699 72W Slim AC/DC Combo Adapter 73P4485 USB 2.0 Portable CD-RW Drive 22P5297 Other options at lenovo.com/options		
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											Other options at lenovo.com/options		
Dimensions ³	14.1" models: 12.3" x 10.0" x 1.53"; 15.0" models: 13.0" x 10.5" x 1.59"													
Weight ²	with optical drive and battery: 14.1" models: 6.0 to 6.1 lb; 15.0": 6.6 to 6.7 lb (3.0 to 3.4kg)											See footnotes for important warranty information US models announced March 12, 2003 US models withdrawn effective October 2003, January 2004, April 2004, or October 2004		
Case material	Color: Black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic													
Battery - type	Lithium Ion 8-cell / intelligent / supports unique 2nd battery in Ultrabay 2000											* Powered by Intel Centrino™ mobile technology		
Battery - life ¹⁰	Model BAU: 5.0 hr; Others: 5.7 to 6.2 hr													
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB, Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, TSB43AB21 1394 (some), Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared)											© Lenovo (R403M) October 2005		
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door													
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port											See footnotes for important warranty information		
Video out	S-video out port (TV out) / one 4-pin industry standard connector													
IEEE 1394	Some: IEEE 1394 (FireWire) port / 4-pin connector											See footnotes for important warranty information		
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											See footnotes for important warranty information		
Wireless upg ³⁶	Some: Wireless upgradable with wireless Mini PCI options													
11b Wi-Fi ³²	Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100, Intel 82531 chipset											See footnotes for important warranty information		
Cisco 802.11b ³²	Some: 802.11b wireless ⁴ , Mini PCI, Cisco® Aironet® Wireless 802.11b													
11a/b Wi-Fi ²⁷	Some: 11a/b Wi-Fi ²⁷ wireless ⁴ , Mini PCI, Atheros™ AR5001X chipset											See footnotes for important warranty information		
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Agere® chipset											See footnotes for important warranty information		
Bluetooth	None													
Ethernet	10/100 ethernet on motherboard / Intel 82562EZ chipset (physical layer) / PXE											See footnotes for important warranty information		
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1891A AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack													
Security	Power-on password / hard disk password / supervisor password / security keyhole											See footnotes for important warranty information		
Security chip	Embedded Security Subsystem 2.0 ³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant													
Limited warranty ¹²	3 years/1 year battery - EasyServ™ ¹⁹ onsite pickup and delivery											See footnotes for important warranty information		
128MB PC2100 DDR-SDRAM CL2.5 SOD	10K0028		40GB HS Hard Disk 9.5mm (5400 rpm)		08K9816									
256MB PC2100 DDR-SDRAM CL2.5 SOD	10K0030		GemPC400 Smart Card Reader/Writer		31P8901									
512MB PC2100 DDR-SDRAM CL2.5 SOD	10K0032		ThinkPad R32/R40 Series Li-Ion Battery		02K7052									
1GB PC2100 DDR-SDRAM CL2.5 SOD	10K0034		Ultrabay 2000 Li-Ion battery		02K6646									
CD-RW/DVD Combo IV Ultrabay 2000	22P6991		ThinkPad Multiple Battery Charger II		22P9040									
Second HDD Adapter for Ultrabay 2000	08K6068		11a/b/g Wireless CardBus Adapter		31P9101									
USB Portable Diskette Drive	05K9276		11a/b/g Wireless Mini PCI Adapter		31P9701									
Optical 3-Button Travel Wheel Mouse	31P7410		C400 Projector		0039A04									
USB 2.0 Memory Key 256MB	22P9228		ThinkVision® E500 Projector		0038A05									
USB 2.0 Memory Key 512MB	22P9230		ThinkPad Carrying Case - Expander		73P3597									

See footnotes for important warranty information
US models announced March 12, 2003
US models withdrawn effective October 2003, January 2004, April 2004, or October 2004

* Powered by Intel Centrino™ mobile technology

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ThinkPad® R40 (XP Home) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics memory	Disk GB ⁹	Optical	Mini PCI Comm Bay wireless	CDC modem	Ethernet on planar	IEEE Security 1394 Chip port	Workhorse (W) or Global (G) Avail Preload or Entry (E) date
2681-15U	Celeron®	1.6	128MB	13.3" XGA	16MB	20GB	CD	Open; wireless upg ³⁶	Modem	10/100	1394 No	XP Home E Jan 2003
2681-25U	Celeron	1.6	128MB	14.1" XGA	16MB	20GB	CD	Open; wireless upg	Modem	10/100	1394 No	XP Home E Jan 2003
2681-43U	Celeron	1.8	128MB	14.1" XGA	16MB	20GB	DVD	Open; wireless upg	Modem	10/100	1394 No	XP Home No Jan 2003
2681-35U	Celeron	1.6	128MB	15.0" XGA	16MB	20GB	CD	Open; wireless upg	Modem	10/100	1394 No	XP Home No Jan 2003
2681-4FU	Celeron	1.8	128MB	14.1" XGA	16MB	20GB	CD	Open; wireless upg	Modem	10/100	1394 No	XP Home E May 2003
2681-5FU	Celeron	1.8	128MB	15.0" XGA	16MB	20GB	CD	Open; wireless upg	Modem	10/100	1394 No	XP Home No May 2003
2681-7CU	Celeron	2.0	128MB	15.0" XGA	16MB	20GB	CD	Open; wireless upg	Modem	10/100	1394 No	XP Home No Nov 2003
2681-C1U	Pentium® 4-M	1.9	128MB	14.1" XGA	16MB	20GB	CD	Open; wireless upg	Modem	10/100	1394 No	XP Home No Jan 2003
2681-J5U	Pentium 4-M	2.2	128MB	14.1" XGA	16MB	20GB	CD	Open; wireless upg	Modem	10/100	1394 No	XP Home E May 2003
Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Mobile Intel® Celeron 1.6, 1.8, or 2.0GHz with 400MHz system bus or Mobile Intel Pentium 4 Processor-M 1.9 or 2.2GHz with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus <i>Celeron: 256KB; Pentium 4-M: 512KB; All: on die (at processor speed) / ECC</i> 128MB std / 1GB max ⁷ / PC2100 266MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										SOFTWARE¹⁴ Windows XP Home models - Microsoft® Windows® XP Home Edition ²⁰ ♦ Disk-to-Disk Recovery (in hidden protected area)	
L2 cache Memory												
Diskette drive CD DVD Ultrabay 2000 Disk	None standard / use optional Ultrabay™-based or USB-based diskette drive <i>Some:</i> CD-ROM / 24X-10X ⁹ speed / bootable / removable from Ultrabay 2000 <i>Some:</i> DVD-ROM / 8X-3.3X ⁹ speed / bootable / removable from Ultrabay 2000 One modular bay for interchangeable devices / Ultrabay Plus -compatible / 12.7mm high 20GB⁸ , 4200 rpm, 9.5mm high, S.M.A.R.T. / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay 2000										Preloaded • Access IBM - Access Connections - Access Help - Access Support • Adobe Reader • Rapid Restore™ PC • InterVideo WinDVD (DVD models) • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Update Connector™.15	
Display	<i>Some: 13.3"</i> (337.8mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / <i>Some: 14.1"</i> (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / <i>Some: 15.0"</i> (381mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / <i>All:</i> Easy-open cover to unlatch and open with one hand (two latches)										Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant	
Graphics Graphics external	ATI® Mobility™ RADEON™ / AGP 4X / 16MB DDR1 (DDR-SDRAM) External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client	
Keyboard TrackPoint® Touch pad ThinkLight™	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys) TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage	
Dimensions ³ Weight ²	13.3/14.1" models: 12.3" x 10" x 1.5"; 15.0" models: 13" x 10.5" x 1.6" with optical drive and battery: 43U/C1U/4FU/J5U: 6.0 lb; 25U: 6.1 lb; 15U: 6.2 lb; 7CU: 6.6 lb; 35U/5FU: 6.7 lb										Universal 72 watt AC adapter Asset ID (system-specific info in chip accessed over network) PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)	
Case material Battery - type Battery - life ¹⁰	<i>Color:</i> Black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 8-cell / intelligent / supports unique 2nd battery in Ultrabay 2000 13.3/14.1" models: 3.8 to 4.0 hrs; 15.0" models: 3.4 to 3.6 hrs										ServicePac ²² 1yr IOR 9x5 NBD 30L9188	
Architecture	Intel 845MP chipset / 82845MP Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB, Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, TSB43AB21 1394 (some), Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared)										ServicePac 2 yr IOR 9x5 NBD 30L9189	
Port Replicator PC Card Std slots Ports	Optional Port Replicator and Mini Dock (no ThinkPad Dock support) One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port										ServicePac 3 yr IOR 9x5 NBD 30L9195	
Video out IEEE 1394 Wireless antenna Mini PCI Wireless upg ³⁶ CDC Modem Ethernet Audio support	S-video out port (TV out) / one 4-pin industry standard connector IEEE 1394 (FireWire) port / 4-pin connector UltraConnect™ Antenna built into the display cover for optimal wireless signal reception One Mini PCI type III slot (Communications Bay) / customer upgradable <i>All:</i> Wireless upgradable with wireless Mini PCI options One Communications Daughter Card (CDC) socket (used by modem) / not accessible <i>All:</i> 56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Agere® chipset 10/100 ethernet on motherboard / Intel 82562EZ chipset (physical layer) Soft audio / ICH AC97 controller / DirectSound® support / AD1891A AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										ServicePac 4 yr IOR 9x5 NBD 30L9194	
Security	Power-on password / hard disk password / supervisor password / security keyhole										ServicePac 5 yr IOR 9x5 NBD 30L9196	
Limited warranty ¹²	1 year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available										ServicePac 2 yr P&L P/U Depot 30L9191	
128MB PC2100 DDR-SDRAM CL2.5 SOD	10K0028	ThinkPad R32/R40 Series Li-Ion Battery	02K7052	256MB PC2100 DDR-SDRAM CL2.5 SOD	10K0030	Ultrabay 2000 Li-Ion battery	02K6646	512MB PC2100 DDR-SDRAM CL2.5 SOD	10K0032	ThinkPad Multiple Battery Charger II	22P9040	ServicePac 3 yr P&L P/U Depot 30L9192
UltraLight 8X Max DVD Ultrabay 2000	22P9102	USB Keyboard with UltraNav	31P8950	CD-RW/DVD Combo IV Ultrabay 2000	22P6991	ThinkPad Monitor Stand 2001	22P5265	24X-10X CD-ROM Ultrabay 2000 Drive	05K9233	40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816	ServicePac 4 yr P&L P/U Depot 69P9195
Second HDD Adapter for Ultrabay 2000	08K6068	ThinkPad Monitor Stand 2001	22P5265	Multi-Burner Plus Ultrabay Enhanced Drive	73P3312	11a/b/g Wireless Mini PCI Adapter	31P9701	USB Portable Diskette Drive	05K9276	11a/b/g Wireless CardBus Adapter	31P9101	ServicePac 5 yr P&L P/U Depot 69P9197
USB 2.0 Portable Multi-Burner Drive	22P9163	ThinkPad 72W AC Adapter	02K6699	USB Serial Parallel Adapter	22P5298	ThinkPad 72W AC/DC Combo Adapter	22P9010	Optical 3-Button Travel Wheel Mouse	31P7410	ThinkPad Port Replicator II	74P6733	ServicePac 5 yr P&L P/U Depot 69P9197
M400 Projector	0037A04	ThinkPad Mini Dock	287810U	C400 Projector	0039A04	GemPC400 Smart Card Reader/Writer	31P8901	ThinkVision® E500 Projector	0038A05	Optical 3-Button Travel Wheel Mouse	31P7410	Other ServicePac options at ibm.com/services/its/us/source/wamomxeu.pdf
ThinkPad Ultrabay Plus Carrier	22P5737	ThinkPad Carrying Case - Expander	73P3597	ThinkPad Ultrabay Plus Numeric Keypad	22P7330	Other options at lenovo.com/options						

See footnotes for important warranty information

US models announced on January 28, May 21, or November 11, 2003

US models withdrawn effective January 2004, April 2004, or December 2005

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ThinkPad® R40 (2682) - October 2003 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics memory	Disk GB ³	Optical	Mini PCI Comm Bay wireless	CDC modem	Ethernet on planar	IEEE 1394 port	Security chip	Workhorse (W) Global (G) Preload Entry (E)	Avail date	
2682-N7U	Pentium® 4-M	2.4	256MB	14.1" XGA	16MB	30G	Combo	Open; wireless upg ³⁶	Modem	10/100		Yes	XP Pro	No	Oct 2003
2682-NAU	Pentium 4-M	2.4	256MB	14.1" XGA	16MB	30G	DVD	Open; wireless upg	Modem	10/100		Yes	XP Pro	No	Oct 2003
2682-PAU	Pentium 4-M	2.4	256MB	15.0" XGA	32MB	40G	Combo	Open; wireless upg	Modem	10/100	1394	Yes	XP Pro	No	Oct 2003

2682 models have a 3 year limited warranty (other 2681 and 2896 ThinkPad R40 systems have a 1 year limited warranty)

Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Mobile Intel® Pentium 4 Processor-M 2.4GHz with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus											SOFTWARE¹⁴					
L2 cache	512KB / on die (at processor speed) / ECC											Windows XP Professional					
Memory	256MB std / 1GB max ⁷ / PC2100 266MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available											- Microsoft® Windows® XP Professional ²⁰ ♦ Disk-to-Disk Recovery (in hidden protected area)					
Diskette drive	None standard / use optional Ultrabay™-based or USB-based diskette drive											Preloaded					
DVD	<i>Some:</i> DVD-ROM / 8X-3.3X ⁹ speed / bootable / removable from Ultrabay 2000											• Access IBM					
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/10X/24X/8X ²¹ speed / removable from Ultrabay 2000											• Access Connections™					
Ultrabay 2000	One modular bay for interchangeable devices / Ultrabay Plus -compatible / 12.7 mm high											• Adobe Reader					
Disk	30GB⁸ or 40GB , 4200 rpm, 9.5mm high, S.M.A.R.T. / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay 2000											• Rapid Restore™ PC					
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / <i>Some:</i> 15.0" (381mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / <i>All:</i> easy-open cover to unlatch and open with one hand (two latches)											• RecordNOW and DLA by Veritas (combo models)					
Graphics	<i>Some:</i> ATI® MOBILITY™ RADEON™ / AGP 4X / 16MB DDR1 (DDR-SDRAM) <i>Some:</i> ATI MOBILITY RADEON 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM)											• Norton AntiVirus (OEM edition)					
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B											• PC-Doctor™					
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)											• ThinkPad Utilities					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											• Update Connector™ ¹⁵					
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones											Downloadable					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											• IBM Director Agent					
Dimensions ³	<i>14.1" models:</i> 12.3" x 10" x 1.5"; 313mm x 254mm x 38.9mm <i>15.0" models:</i> 13" x 10.5" x 1.6"; 329mm x 267.5mm x 40.5mm											• Software Delivery Assistant					
Weight ²	with optical drive and battery: <i>N7U:</i> 6.1 lb (2.7kg); <i>NAU:</i> 6.0 lb (2.7kg); <i>PAU:</i> 6.7 lb (3.0kg)											• System Migration Assistant					
Case material	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic											• Client Security Software (for security chip)					
Battery - type	Lithium Ion 8-cell / intelligent / supports unique 2nd battery in Ultrabay 2000											License (CD not included)					
Battery - life ¹⁰	4.02 hrs											- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client					
Architecture	Intel 845MP chipset / 82845MP Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB, Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, TSB43AB21 1394 (some), Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared)																
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door																
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port																
Video out	S-video out port (TV out) / one 4-pin industry standard connector											ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage					
IEEE 1394	<i>Some:</i> IEEE 1394 (FireWire) port / 4-pin connector											Universal 72 watt AC adapter					
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											Asset ID (system-specific info in chip accessed over network)					
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											PC 2001 and PXE 2.0-compliant					
Wireless upg ³⁶	Wireless upgradable with wireless Mini PCI options											ACPI 1.0b and 2.0-compliant					
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible											CIM and DMI 2.0-compliant					
Modem	56K ⁶ V.90 (V.92-designed ²³) modem in CDC / Agere® chipset											ENERGY STAR®-compliant					
Ethernet	10/100 ethernet on motherboard / Intel 82562EZ chipset (physical layer)											ImageUltra™ Services available					
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1891A AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack											International Warranty Service ¹⁷					
Security	Power-on password / hard disk password / supervisor password / security keyhole											24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)					
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant																
Limited warranty ¹²	3 years/1 year battery - EasyServ™ ¹⁹ onsite pickup and delivery																
Service options	Service upgrades ²² provide up to five years of onsite or depot repair service coverage from date of ThinkPad purchase (including warranty period)																
128 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0028	ThinkPad R32/R40 Series Li-Ion Battery	02K7052	256 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0030	Ultrabay 2000 Li-Ion battery	02K6646	512 MB PC2100 DDR-SDRAM CL2.5 SOD	10K0032	ThinkPad Multiple Battery Charger II	22P9040	CD-RW/DVD Combo IV Ultrabay 2000	22P6991	80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ServicePac 3 yr IOR 9x5 NBD	30L9190
Ultralight 8X Max DVD Ultrabay 2000	22P9102	100GB Hard Disk 9.5mm (5400 rpm)	40Y8716	24X-10X CD-ROM Ultrabay 2000 Drive	05K9233	Cisco Aironet Wireless 802.11b Mini PCI	31P8301	Second HDD Adapter for Ultrabay 2000	08K6068	11a/b/g Wireless Mini PCI Adapter	31P9701	Multi-Burner Plus Ultrabay Enhanced Drive	73P3312	11a/b/g Wireless CardBus Adapter	31P9101	ServicePac 4 yr IOR 9x5 NBD	69P9198
USB Portable Diskette Drive	05K9276	ThinkPad 72W AC Adapter	02K6699	USB Serial Parallel Adapter	22P5298	ThinkPad 72W AC/DC Combo Adapter	22P9010	USB 2.0 Combo Drive	73P4515	ThinkPad Monitor Stand 2001	22P5265	USB 2.0 Portable 80GB Hard Disk	40Y8726	M400 Projector	0037A04	ServicePac 5 yr IOR 9x5 NBD	69P9200
USB 2.0 Memory Key 256MB	22P9228	C400 Projector	0039A04	USB 2.0 Memory Key 512MB	22P9230	ThinkVision® E500 Projector	0038A05	Optical 3-Button Travel Wheel Mouse	31P7410	ThinkPad Port Replicator II	74P6733	USB 2.0 Memory Key 512MB	22P9230	ThinkPad Mini Dock	287810U	ServicePac 4 yr P&L P/U Depot	69P9199
Optical 3-Button Travel Wheel Mouse	31P7405	ThinkPad Carrying Case - Expander	73P3597	Optical 3-Button ScrollPoint® Mouse	31P9490	Other options at lenovo.com/options		USB Travel Keyboard with UltraNav	31P9490			GemPC400 Smart Card Reader/Writer	31P8901			ServicePac 5 yr P&L P/U Depot	69P9201
GemPC400 Smart Card Reader/Writer	31P8901															Other ServicePac options at ibm.com/services/its/us/source/wamomxeu.pdf	

See footnotes for important warranty information
US models announced October 7, 2003
US models withdrawn effective October 2004 or December 2005

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ThinkPad® R40 (2682) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics memory	Disk GB ⁵	Optical	Mini PCI Comm Bay wireless	CDC modem	Ethernet on planar	IEEE 1394 port	Security chip	Workhorse (W) or Global (G) Entry (E)	Avail date	
2682-48U	Celeron®	1.8	128MB	14.1" XGA	16MB	20GB	CD	11a/b Wi-Fi ²⁷	Modem	10/100	1394	XP Pro	No	Mar 2003	
2682-FXU	Pentium® 4-M	2.0	256MB	14.1" XGA	32MB	40GB	Combo	11a/b Wi-Fi	Modem	10/100	1394	Yes	XP Pro	No	Mar 2003
2682-LAU	Pentium 4-M	2.2	256MB	15.0" SXGA+	32MB	40GB	Combo	11a/b Wi-Fi	Modem	10/100	1394	Yes	XP Pro	No	Mar 2003
2682-6GU	Celeron	2.0	128MB	14.1" XGA	16MB	20GB	CD	11a/b Wi-Fi	Modem	10/100	1394	Yes	XP Pro	No	Oct 2003
2682-RDU	Pentium 4-M	2.2	256MB	14.1" XGA	32MB	40GB	Combo	11a/b Wi-Fi	Modem	10/100	1394	Yes	XP Pro	No	Oct 2003
2682-QGU	Pentium 4-M	2.4	256MB	15.0" SXGA+	32MB	40GB	Combo	11a/b Wi-Fi	Modem	10/100	1394	Yes	XP Pro	No	Oct 2003

These educational models of the ThinkPad R40 notebook are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and/or teachers.

This model for education is for sale direct from Lenovo or through an Authorized Education Reseller.

The model or models for education are not available for resale to any other organization or individual.

2682 models have a 3 year limited warranty (other 2681 and 2896 ThinkPad R40 systems have a 1 year limited warranty)

Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Mobile Intel® Celeron 1.8 or 2.0GHz with 400MHz system bus or Mobile Intel® Pentium 4 Processor-M 2.0, 2.2, or 2.4GHz with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus <i>Celeron: 256KB; Pentium 4-M: 512KB; All: on die (at processor speed) / ECC</i>										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ ♦ Disk-to-Disk Recovery (in hidden protected area)			
L2 cache	128 or 256MB std / 1GB max ⁷ / PC2100 266MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										Preloaded • Access IBM • Access Connections™ • Adobe Reader • Rapid Restore™ PC • RecordNOW and DLA by Veritas (combo models) • InterVideo WinDVD (combo mlds) • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Update Connector™ ¹⁵			
Memory	None standard / use optional Ultrabay™-based or USB-based diskette drive <i>Some: CD-ROM / 24X-10X⁹ speed / bootable / removable from Ultrabay 2000</i> <i>Some: DVD-ROM/CD-RW / 24X/10X/24X/8X²¹ speed / removable from Ultrabay 2000</i> One modular bay for interchangeable devices / Ultrabay Plus -compatible / 12.7 mm high 20GB⁸ or 40GB , 4200 rpm, 9.5mm high, S.M.A.R.T. / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay 2000										Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (models with security chip)			
Diskette drive	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
CD-ROM	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										UltraBay Plus integrated modular bay supports most Ultrabay 2000 devices including CD-RW/DVD Combo drive, diskette drive, or Zip drive; the optional Ultrabay Plus Device Carrier adds potential functionality by supporting the Ultrabay Plus Numeric Keypad			
Combo	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										Universal 72 watt AC adapter Asset ID (system-specific info in chip accessed over network) PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ImageUltra™ Services available International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)			
Ultrabay 2000	Illuminates the keyboard to improve visibility in low-light conditions										ServicePac®. ²² 2 yr IOR 9x5 NBD 30L9190			
Disk	Some: ATI® MOBILITY™ RADEON™ / AGP 4X / 16MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM)										ServicePac 3 yr IOR 9x5 NBD 30L9197			
Display	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										ServicePac 4 yr IOR 9x5 NBD 69P9198			
Graphics	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door										ServicePac 5 yr IOR 9x5 NBD 69P9200			
Graphics external	Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port										ServicePac 4 yr P&L P/U Depot 69P9199			
Keyboard	Soft audio / ICH AC97 controller / DirectSound® support / AD1891A AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										ServicePac 5 yr P&L P/U Depot 69P9201			
TrackPoint®	Power-on password / hard disk password / supervisor password / security keyhole										Post-warranty annual maintenance agreements at ibm.com/services/its/us/source/maspspleu.pdf			
Touch pad	Some: Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant													
ThinkLight™	Limited warranty ¹² 3 years/1 year battery - EasyServ™ ¹⁹ onsite pickup and delivery													
Dimensions ³	128 MB PC2100 DDR-SDRAM CL2.5 SOD 10K0028										ThinkPad R32/R40 Series Li-Ion Battery 02K7052			
Weight ²	256 MB PC2100 DDR-SDRAM CL2.5 SOD 10K0030										Ultrabay 2000 Li-Ion Battery 02K6646			
Case material	512 MB PC2100 DDR-SDRAM CL2.5 SOD 10K0032										ThinkPad Multiple Battery Charger II 22P9040			
Battery - type	CD-RW/DVD Combo IV Ultrabay 2000 22P6991										80GB HS Hard Disk 9.5mm (5400 rpm) 09N4273			
Battery - life ¹⁰	Ultralight 8X Max DVD Ultrabay 2000 22P9102										100GB Hard Disk 9.5mm (5400 rpm) 40Y8716			
Architecture	24X-10X CD-ROM Ultrabay 2000 Drive 05K9233										11a/b/g Wireless Mini PCI Adapter 31P9701			
PC Card Std slots	Second HDD Adapter for Ultrabay 2000 08K6068										11a/b/g Wireless CardBus Adapter 31P9101			
Ports	Multi-Burner Plus Ultrabay Enhanced Drive 73P3312										ThinkPad 72W AC Adapter 02K6699			
Video out	ThinkPad Slim Drive Adpr for Ultrabay 2000 62P4557										ThinkPad 72W AC/DC Combo Adapter 22P9010			
IEEE 1394	USB Portable Diskette Drive 05K9276										ThinkPad Port Replicator II 74P6733			
Wireless antenna	USB 2.0 Portable Combo Drive 22P9194										ThinkPad Mini Dock 287810U			
Mini PCI	USB 2.0 Memory Key 512MB 22P9230										ThinkPad Carrying Case - Expander 73P3597			
11a/b Wi-Fi ²⁷	M400 Projector 0037A04										Other options at lenovo.com/options			

See footnotes for important warranty information

US models announced March 25 or October 7, 2003

US models withdrawn effective April 2004, October 2004, or December 2005

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ThinkPad® R40 (March 2003) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics	Disk memory GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Ethernet on planar	IEEE 1394 port	Security chip	Workhorse (W) or Global (G) Entry (E)	Avail date	
2722-5JU	Pentium® M1.3	256MB	15.0"	XGA	32MB	40G	Combo	Open; wireless upg ³⁶	Modem	10/100	1394	Yes	XP Pro	Apr 2003	
2722-58U	Pentium M	1.3	256MB	15.0"	XGA	32MB	40G	DVD	Open; wireless upg	Modem	10/100	1394	Yes	XP Pro	Apr 2003
2722-F2U	Pentium M	1.5	256MB	15.0"	XGA	32MB	40G	DVD	Open; wireless upg	Modem	10/100	1394	Yes	XP Pro	W Apr 2003
2722-G3U	Pentium M	1.5	256MB	15.0"	SXGA+	32MB	60G	Combo	Open; wireless upg	Modem	10/100	1394	Yes	XP Pro	Apr 2003
2722-GAU	Pentium M	1.5	256MB	15.0"	SXGA+	32MB	40G	Combo	*Intel 11b Wi-Fi ³²	Mod/Blu	10/100	1394	Yes	XP Pro	Apr 2003
2722-GDU	Pentium M	1.5	256MB	15.0"	SXGA+	32MB	60G	Combo	11a/b Wi-Fi ²⁷	Modem	10/100	1394	Yes	XP Pro	Apr 2003
2722-22U	Pentium M	1.3	128MB	14.1"	XGA	16MB	20G	CD	Open; wireless upg	Modem	10/100	1394	Yes	XP Pro	Mar 2003
2722-2QU	Pentium M	1.3	256MB	14.1"	XGA	16MB	20G	DVD	*Intel 11b Wi-Fi	Modem	10/100	1394	Yes	XP Pro	Mar 2003
2722-27U	Pentium M	1.3	256MB	14.1"	XGA	16MB	20G	DVD	Open; wireless upg	Modem	10/100	1394	Yes	XP Pro	W Mar 2003
2722-2JU	Pentium M	1.3	256MB	14.1"	XGA	16MB	40G	Combo	Open; wireless upg	Modem	10/100	1394	Yes	XP Pro	Mar 2003
2722-47U	Pentium M	1.3	256MB	15.0"	XGA	16MB	20G	DVD	Open; wireless upg	Modem	10/100	1394	Yes	XP Pro	Mar 2003
2722-24U	Pentium M	1.3	128MB	14.1"	XGA	16MB	20G	CD	Open; wireless upg	Modem	10/100	1394	Yes	XP Home	Mar 2003
2722-9FU	Pentium M	1.4	128MB	14.1"	XGA	16MB	20G	CD	*Intel 11b Wi-Fi	Modem	10/100	1394	Yes	XP Home E	Oct 2003
2722-8FU	Pentium M	1.4	128MB	15.0"	XGA	16MB	20G	CD	*Intel 11b Wi-Fi	Modem	10/100	1394	Yes	XP Home E	Nov2003
Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Intel® Pentium® M Processor 1.3, 1.4, or 1.5GHz with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus											SOFTWARE¹⁴			
L2 cache	1MB / on die (at processor speed) / ECC											Windows XP Pro models			
Memory	128 or 256MB std / 2GB max ⁷ / PC2100 266MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available											- Microsoft® Windows® XP Professional ²⁰ ♦ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional Ultrabay™-based or USB-based diskette drive											Windows XP Home models			
CD	<i>Some:</i> CD-ROM / 24X-10X ⁹ speed / bootable / removable from Ultrabay 2000											- Microsoft Windows XP Home Edition ²⁰			
DVD	<i>Some:</i> DVD-ROM / 8X-3.3X ⁹ speed / bootable / removable from Ultrabay 2000											♦ Disk-to-Disk Recovery (in hidden protected area)			
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/10X/24X/8X ²¹ speed / removable from Ultrabay 2000											INCLUDED SOFTWARE¹⁴ (all)			
Ultrabay 2000	One modular bay for interchangeable devices / Ultrabay Plus -compatible / 12.7 mm high 20GB³, 40GB³, or 60GB³ , 4200 rpm, 9.5mm / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay 2000											Preloaded			
Disk	One modular bay for interchangeable devices / Ultrabay Plus -compatible / 12.7 mm high 20GB³, 40GB³, or 60GB³ , 4200 rpm, 9.5mm / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional HDD Adapter in Ultrabay 2000											• Access IBM • Access Connections • Adobe Reader • Rapid Restore™ PC • RecordNOW and DLA by Veritas (combo models) • InterVideo WinDVD (Combo, DVD) • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Update Connector™ ¹⁵			
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1450x1050) TFT color / Active Matrix / 150 nits											Downloadable			
Graphics	<i>Some:</i> ATI® MOBILITY™ RADEON™ / AGP 4X / 16MB DDR1 (DDR-SDRAM) <i>Some:</i> ATI MOBILITY RADEON 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM)											• IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip)			
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B											License (CD not included)			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)											- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network) PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones											ServicePac® ²² 1yr IOR 9x5 NBD 30L9188			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											ServicePac 3 yr IOR 9x5 NBD 30L9195			
Dimensions ³	<i>14.1" models:</i> 12.3" x 10.0" x 1.53"; <i>15.0" models:</i> 13.0" x 10.5" x 1.59"											ServicePac 3yr P&L P/U Depot 30L9192			
Weight ²	with optical drive and battery: <i>14.1" models:</i> 6.0 to 6.7 lb; <i>15.0":</i> 6.6 to 6.7 lb (3.0 to 3.4kg)											ServicePac 5yr P&L P/U Depot 69P9197			
Case material	<i>Color:</i> Black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic											Other ServicePac options at ibm.com/services/its/us/source/wamomxeu.pdf			
Battery - type	Lithium Ion 8-cell / intelligent / supports unique 2nd battery in Ultrabay 2000											ThinkPad Port Replicator II 74P6733			
Battery - life ¹⁰	<i>Model GAU:</i> 5.0 hr; <i>Others:</i> 5.7 to 6.2 hr											ThinkPad Mini Dock 287810U			
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB, Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (TI® PC11510 CardBus controller, TSB43AB21 1394 (some), Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared)											ThinkPad 72W AC Adapter 02K6699			
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door											ThinkPad 72W AC/DC Combo Adapter 22P9010			
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port											Other options at lenovo.com/options			
Video out	S-video out port (TV out) / one 4-pin industry standard connector														
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector														
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception														
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable														
Wireless upg ³⁶	<i>Some:</i> Wireless upgradable with wireless Mini PCI options														
11b Wi-Fi ³²	<i>Some:</i> 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100 Network Connection 802.11b, Intel 82531 chipset														
11a/b Wi-Fi ²⁷	<i>Some:</i> 11a/b Wi-Fi ²⁷ wireless ⁴ , Mini PCI, Atheros™ AR5001X chipset														
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible														
Modem	56K ⁶ V.90 (V.92-designed ²⁵) modem in CDC / Agere® chipset														
Bluetooth™	<i>Some:</i> Bluetooth wireless technology / in CDC (with modem)														
Ethernet	10/100 ethernet on motherboard / Intel 82562EZ chipset (physical layer) / PXE														
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1891A AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal mic / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant														
Limited warranty ¹²	1 year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available														
128MB PC2100 DDR-SDRAM CL2.5 SOD	10K0028		40GB HS Hard Disk 9.5mm (5400 rpm)		08K9816										
256MB PC2100 DDR-SDRAM CL2.5 SOD	10K0030		80GB HS Hard Disk 9.5mm (5400 rpm)		09N4273										
512MB PC2100 DDR-SDRAM CL2.5 SOD	10K0032		ThinkPad R32/R40 Series Li-Ion Battery		02K7052										
1GB PC2100 DDR-SDRAM CL2.5 SOD	10K0034		Ultrabay 2000 Li-Ion battery		02K6646										
CD-RW/DVD Combo Iv Ultrabay 2000	22P6991		ThinkPad Multiple Battery Charger II		22P9040										
Second HDD Adapter for Ultrabay 2000	08K6068		11a/b/g Wireless CardBus Adapter		31P9101										
USB Portable Diskette Drive	05K9276		11a/b/g Wireless Mini PCI Adapter		31P9701										
USB 2.0 Combo Drive	73P4515		ThinkPad Carrying Case - Expander		73P3597										
USB 2.0 Memory Key 512MB	22P9230		M400 Projector		0037A04										

See footnotes for important warranty information * Powered by Intel Centrino™ mobile technology

US models announced March 12, October 21, or November 11, 2003

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(R40M) October 2005

US models withdrawn effective January 2004, April 2004, October 2004, or December 2005

ThinkPad® R50e (1834) - September 2004 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed	L2 cache	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Integrated graphics	Security chip	Limited warranty ¹²	Workhorse (W) Global (G) Avail Entry (E) date		
1834-ELU	Celeron® M 330	1.4	512K	128MB	14.1" XGA	30GB	CD	None	Modem	Extreme™ 2	No	XP Home	1 yr	E	Dec 04
1834-EKU	Celeron M 330	1.4	512K	256MB	14.1" XGA	30GB	CD	None	Modem	Extreme 2	No	XP Home	1 yr		Dec 04
1834-GPU	Celeron M 330	1.4	512K	256MB	15.0" XGA	30GB	CD	None	Modem	Extreme 2	No	XP Home	1 yr		Dec 04
1834-E2U	Celeron M 340	1.5	512K	128MB	14.1" XGA	30GB	CD	None	Modem	Extreme 2	No	XP Home	1 yr	E	Sep 04
1834-E9U	Celeron M 350	1.3	1MB	128MB	14.1" XGA	30GB	CD	None	Modem	Extreme 2	No	XP Home	1 yr	E	Sep 04
1834-E4U	Celeron M 340	1.5	512K	256MB	14.1" XGA	30GB	CD	None	Modem	Extreme 2	No	XP Home	1 yr		Sep 04
1834-E7U	Celeron M 340	1.5	512K	256MB	14.1" XGA	30GB	Combo	None	Modem	Extreme 2	No	XP Pro	1 yr		Sep 04
1834-G4U	Celeron M 340	1.5	512K	256MB	15.0" XGA	30GB	CD	None	Modem	Extreme 2	No	XP Home	1 yr		Sep 04
1834-G7U	Celeron M 340	1.5	512K	256MB	15.0" XGA	30GB	Combo	None	Modem	Extreme 2	No	XP Pro	1 yr		Sep 04
1834-PEU	Pentium® M 710	1.4	2MB	128MB	14.1" XGA	30GB	CD	* Intel 11b/g ³²	Modem	Extreme 2	No	XP Home	1 yr	E	Oct 04
1834-PMU	Pentium M 715a	1.5	2MB	256MB	14.1" XGA	30GB	Combo	* Intel 11b/g	Modem	Extreme 2	No	XP Home	1 yr	E	Jan 05
1834-FEU	Pentium M 725	1.6	2MB	128MB	14.1" XGA	30GB	CD	* Intel 11b/g	Modem	Extreme 2	No	XP Home	1 yr	E	Sep 04
1834-FKU	Pentium M 725	1.6	2MB	256MB	14.1" XGA	30GB	Combo	* Intel 11b/g	Modem	Extreme 2	No	XP Pro	1 yr		Sep 04
1834-HRU	Pentium M 725	1.6	2MB	256MB	15.0" XGA	30GB	Combo	* Intel 11b/g	Modem	Extreme 2	No	XP Pro	1 yr		Sep 04
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Celeron M Processor 330 (1.4GHz), 340 (1.5GHz) or 350 (1.3GHz) with 400MHz system bus or Intel Pentium M Processor 710 (1.4GHz), 715/715a (1.5GHz), or 725 (1.6GHz) with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus <i>Celeron M 330/340: 512KB; Celeron M 350: 1MB; Pentium M 710/725: 2 MB; All: ECC</i>											SOFTWARE¹⁴			
L2 cache	None											Windows XP Home models			
Memory	128MB or 256MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (memory controller limits speed to 266MHz) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available											- Microsoft® Windows® XP Home Edition ²⁰ - <i>Dec/Jan models: Service Pack 2</i> ♦ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive											Windows XP Pro models			
CD	Some: CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7 mm high											- Microsoft Windows XP Professional ²⁰ ♦ Disk-to-Disk Recovery (in hidden protected area)			
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / fixed, not removable / 12.7 mm														
Ultrabay Enhanced Disk	None / no support for removable Ultrabay™ options 30GB⁸ (4200 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber														
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits											Preloaded (all) • Rescue and Recovery™ • Access IBM • Access Connections • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Update Connector™ ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo models)			
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GM GMCH / uses main memory (up to 64MB) / 200MHz											Downloadable (all) • IBM Director Agent • Software Delivery Assistant • System Migration Assistant			
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B											License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)											Supports ThinkVantage™ technologies			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network)			
Touch pad	No UltraNav™ multi-pointing system											PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											ServicePac®. ²² 1yr IOR 9x5 NBD 30L9188			
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.0 lb (2.7kg); 15.0" models: 6.6 lb (3.0kg)											ServicePac 2 yr IOR 9x5 NBD 30L9189			
Weight ²												ServicePac 3 yr IOR 9x5 NBD 30L9195			
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic											ServicePac 4 yr IOR 9x5 NBD 30L9194			
Battery - type	Lithium Ion 6-cell / intelligent / supports optional 9-cell battery											ServicePac 5 yr IOR 9x5 NBD 30L9196			
Battery - life ¹⁰	Celeron M models: up to 3.4 hr; Pentium M models: up to 4.0 hr; Optional High Capacity 9-cell: up to 5.4 hr											ServicePac 2 yr P&L P/U Depot 30L9191			
Architecture	Intel 855GM chipset / 82855GM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for parallel)											ServicePac 3 yr P&L P/U Depot 30L9192			
Port replicator	No port replicator support											ServicePac 4 yr P&L P/U Depot 69P9195			
Docking station	No docking station support											ServicePac 5 yr P&L P/U Depot 69P9197			
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door														
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial or infrared port														
Wireless antenna	Some: none / can upgrade to wireless via optional PC Cards Some: UltraConnect™ Antenna built into the display cover														
Mini PCI	Some: no Mini PCI slot (Communications Bay) Some: one Mini PCI slot (Communications Bay) / not customer upgradable														
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset														
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible														
Modem	56K® V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset														
Ethernet	10/100 ethernet on planar / Intel 82562EZ chipset (physical layer) / Wake on LAN®														
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	None														
Limited warranty ¹²	1 year - EasyServ™¹⁹ onsite pickup and delivery courier service														
128MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828				T40/R50 Series Li-Ion Battery 6-cell				08K8214			ServicePac 2 yr P&L P/U Depot			
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830				T40/R50 High Capacity Li-Ion Batt 9-cell				08K8197			30L9191			
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832				ThinkPad Multiple Battery Charger II				22P9040			ServicePac 3 yr P&L P/U Depot			
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834				60GB HS Hard Disk 9.5mm (5400 rpm)				73P3357			30L9192			
USB Portable Diskette Drive	05K9276				80GB HS Hard Disk 9.5mm (5400 rpm)				09N4273			ServicePac 4 yr P&L P/U Depot			
USB 2.0 Combo Drive	73P4515				11a/b/g Wireless CardBus Adapter				31P9101			69P9195			
USB 2.0 Portable Multi-Burner Drive	22P9163				ThinkPad 72W AC/DC Combo Adapter				22P9010			ServicePac 5 yr P&L P/U Depot			
USB 2.0 Memory Key 512MB	22P9230				Other options at lenovo.com/options										

See footnotes for important warranty information * Powered by Intel Centrino™ mobile technology
US models announced Sept 14, Oct 12, or Dec 21, 2004, or Jan 11, 2005
US models withdrawn effective September 2005

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(1834S) July 2005

ThinkPad® R50e (1834) - March 2005 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed	L2 cache	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Integrated graphics	Security chip	Preload	Limited warranty ¹²	Global Entry	Avail date
1834-K5U	Celeron® M 350	1.3	1MB	256MB	14.1" XGA	30GB	CD	None	Modem	Extreme™ 2	No	XP Home	1 yr	No	Mar 05
1834-M4U	Celeron M 350	1.3	1MB	256MB	15.0" XGA	30GB	CD	None	Modem	Extreme 2	No	XP Home	1 yr	No	Mar 05
1834-L7U	Pentium® M 735	1.7	2MB	256MB	14.1" XGA	30GB	Combo	*Intel 11b/g ³²	Modem	Extreme 2	No	XP Pro	1 yr	No	Mar 05
1834-R3U	Pentium M 735	1.7	2MB	256MB	15.0" XGA	30GB	Combo	*Intel 11b/g	Modem	Extreme 2	No	XP Pro	1 yr	No	Mar 05
Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Intel® Celeron M Processor 350 (1.3GHz) with 400MHz system bus or Intel Pentium M Processor 735 (1.7GHz) with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus											SOFTWARE¹⁴			
L2 cache	<i>Celeron M 350: 1MB; Pentium M 735: 2 MB; All: on die (at processor speed) / ECC</i>											Windows XP Home models			
Memory	256MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (memory controller limits speed to 266MHz) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available											- Microsoft® Windows® XP Home Edition ²⁰ (Service Pack 2) ✦ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive											Windows XP Professional models			
CD	<i>Some: CD-ROM / 24X-10X⁹ speed / fixed, not removable / 12.7 mm high</i>											- Microsoft Windows XP Professional ²⁰ (Service Pack 2) ✦ Disk-to-Disk Recovery (in hidden protected area)			
Combo	<i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / fixed, not removable / 12.7 mm</i>														
Ultradisk Enhanced Disk	None / no support for removable Ultradisk™ options 30GB⁸ (4200 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber														
Display	<i>Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</i> <i>Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits</i>											Preloaded (all) • Rescue and Recovery™ • Access IBM • Access Connections • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Update Connector™ ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo models)			
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GM GMCH / uses main memory (up to 64MB) / 200MHz											Downloadable (all) • IBM Director Agent • Software Delivery Assistant • System Migration Assistant			
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B											License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)														
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Touch pad	No UltraNav™ multi-pointing system														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm														
Weight ²	with optical drive and battery: 14.1" models: 6.0 lb (2.7kg); 15.0" models: 6.6 lb (3.0kg)														
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic														
Battery - type	Lithium Ion 6-cell / intelligent / supports optional 9-cell battery														
Battery - life ¹⁰	<i>Celeron M models: up to 3.4 hr; Pentium M models: up to 4.0 hr; Optional High Capacity 9-cell: up to 5.4 hr</i>														
Architecture	Intel 855GM chipset / 82855GM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for parallel)														
Port replicator	No port replicator support														
Docking station	No docking station support														
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door														
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial or infrared port											ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage			
Wireless antenna	<i>Some: none / can upgrade to wireless via optional PC Cards</i> <i>Some: UltraConnect™ Antenna built into the display cover</i>											Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network) PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Mini PCI	<i>Some: no Mini PCI slot (Communications Bay)</i> <i>Some: one Mini PCI slot (Communications Bay) / not customer upgradable</i> <i>Some: 11b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset</i>														
Intel 11b/g ³²	One Communications Daughter Card (CDC) socket (used by modem) / not accessible														
CDC	56K ⁵ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset														
Modem	10/100 ethernet on planar / Intel 82562EZ chipset (physical layer) / Wake on LAN®														
Ethernet	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack														
Audio support	Power-on password / hard disk password / supervisor password / security keyhole														
Security	None											ServicePac®. ²² 1yr IOR 9x5 NBD 30L9188			
Security chip	None											ServicePac 2 yr IOR 9x5 NBD 30L9189			
Limited warranty ¹²	1 year - EasyServ™. ¹⁹ onsite pickup and delivery courier service											ServicePac 3 yr IOR 9x5 NBD 30L9195			
128 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ServicePac 4 yr IOR 9x5 NBD	30L9194										
256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	ServicePac 5 yr IOR 9x5 NBD	30L9196										
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad Multiple Battery Charger II	22P9040	ServicePac 2 yr P&L P/U Depot	30L9191										
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Kensington® MicroSaver® Security Cable	73P2582	ServicePac 3 yr P&L P/U Depot	30L9192										
USB Portable Diskette Drive	05K9276	GemPC400 Smart Card Reader/Writer	31P8901	ServicePac 4 yr P&L P/U Depot	69P9195										
USB 2.0 Portable 80GB Hard Disk	40Y8726	11a/b/g Wireless CardBus Adapter	31P9101	ServicePac 5 yr P&L P/U Depot	69P9197										
USB 2.0 Combo Drive	73P4515	ThinkPad 72W AC Adapter	02K6699	Post-warranty annual maintenance agreements at	ibm.com/services/its/us/source/maspspleu.pdf										
USB 2.0 Portable Multi-Burner Drive	22P9163	ThinkPad 72W AC/DC Combo Adapter	22P9010												
USB 2.0 Memory Key 256MB	22P9228	Optical 3-Button Travel Wheel Mouse	31P7410												
USB 2.0 Memory Key 512MB	22P9230	Optical 3-Button ScrollPoint® Mouse	31P7405												
USB Keyboard with UltraNav	31P8950	Optical 3-Button ScrollPoint Pro Mouse	31P8700												
USB Travel Keyboard with UltraNav	31P9490	USB Optical Wheel Mouse (black)	06P4069												
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkPad Nylon Carrying Case	10K0207												
Preferred Pro PS/2 Keyboard (black)	31P7415	ThinkPad Carrying Case - Organizer	73P3598												
C400 Projector	0039A04	ThinkPad Carrying Case - Expander	73P3597												
M400 Projector	0037A04	ThinkPad Carrying Case - BackPack	73P3599												
40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816	ThinkPad Carrying Case - Leather	73P3600												
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	Other options at lenovo.com/options													

See footnotes for important warranty information
US models announced March 1, 2005
US models withdrawn effective November 2005

* Powered by Intel Centrino™ mobile technology

ThinkPad® R50e (1834) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Integrated graphics	Security chip	Limited warranty ¹²	Workhorse (W) Global (G) Avail Education date
1834-FWU	Celeron® M 320	1.3	512KB	256MB	14.1" XGA	30GB	CD	Intel 11b/g ³²	Modem	Extreme™ 2	No	XP Pro	1 yr Educ Sep 04
1834-FXU	Celeron M 340	1.5	512KB	256MB	14.1" XGA	30GB	CD	Intel 11b/g	Modem	Extreme 2	No	XP Pro	1 yr Educ Sep 04
1834-KQU	Celeron M 350	1.3	1MB	256MB	14.1" XGA	30GB	CD	Intel 11b/g	Modem	Extreme 2	No	XP Pro	1 yr Educ Mar 05
1834-LJU	Celeron M 360	1.4	1MB	256MB	14.1" XGA	40GB	CD	Intel 11b/g	Modem	Extreme 2	No	XP Pro	1 yr Educ Jul 05
1834-L4U	Pentium® M 725	1.6	2MB	256MB	14.1" XGA	30GB	Combo	* Intel 11b/g	Modem	Extreme 2	No	XP Pro	1 yr Educ Mar 05

• **The 1834 has a 1 year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning	<i>Mainstream performance and features; two-spindle system</i>										SOFTWARE¹⁴		
Processor	Intel® Celeron M Processor 320 (1.3GHz), 340 (1.5GHz), 350 (1.3GHz), or 360 (1.4GHz) with 400MHz system bus or Intel Pentium M Processor 725 (1.6GHz) with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										Windows XP Professional		
L2 cache	<i>Celeron M 320/340: 512KB; Celeron M 350/360: 1MB; Pentium M 725: 2 MB; All: ECC</i>										- Microsoft® Windows® XP Professional ²⁰		
Memory	256MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (memory controller limits speed to 266MHz) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										◆ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded		
CD	<i>Some: CD-ROM / 24X-10X⁹ speed / fixed, not removable / 12.7 mm high</i>										• Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™		
Combo	<i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / fixed, not removable / 12.7 mm</i>										• Access IBM		
Ultrabay Enhanced Disk	None / no support for removable Ultrabay™ options										• Access Connections™		
Disk	30GB⁸ (4200 rpm) or 40GB (5400 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber										• Rescue and Recovery™		
Display	14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits / one latch to unlatch and open with one hand										• Norton AntiVirus (OEM edition)		
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GM GMCH / uses main memory (up to 64MB) / 200MHz										• PC-Doctor™		
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										• ThinkPad Utilities		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										• Adobe Reader		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• Update Connector™ ¹⁵		
Touch pad	No UltraNav™ multi-pointing system										• RecordNOW and Drive Letter Access powered by Sonic products (combo models)		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• InterVideo WinDVD (combo models)		
Dimensions ³	<i>14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm</i>										Downloadable		
Weight ²	<i>with optical drive and battery: 14.1" models: 6.0 lb (2.7kg)</i>										• IBM Director Agent		
Case material	<i>Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic</i>										• Software Delivery Assistant		
Battery - type	Lithium Ion 6-cell / intelligent / supports optional 9-cell battery										• System Migration Assistant		
Battery - life ¹⁰	<i>Celeron M models: up to 3.4 hr; Pentium M: up to 4.0 hr; Optional 9-cell: up to 5.4 hr</i>										License (CD not included)		
Architecture	Intel 855GM chipset / 82855GM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for parallel)										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Port replicator	No port replicator support										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage		
Docking station	No docking station support										Universal 72 watt AC adapter		
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door										Asset ID™ ³⁴ (system-specific info in chip accessed over network)		
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial or infrared port										PC 2001 and PXE 2.0-compliant		
IEEE 1394	None										ACPI 1.0b and 2.0-compliant		
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										CIM and DMI 2.0-compliant		
Mini PCI	One Mini PCI slot (Communications Bay) / not customer upgradable										ENERGY STAR®-compliant		
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										ImageUltra™ Services available		
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										International Warranty Service ¹⁷		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)		
Bluetooth	None										ServicePac®. ²² 1yr IOR 9x5 NBD		
Ethernet	10/100 ethernet on planar / Intel 82562EZ chipset (physical layer) / Wake on LAN®										30L9188		
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										ServicePac 2 yr IOR 9x5 NBD		
Security	Power-on password / hard disk password / supervisor password / security keyhole										30L9189		
Security chip	None										ServicePac 3 yr IOR 9x5 NBD		
Limited warranty ¹²	1 year - EasyServ™. ¹⁹ onsite pickup and delivery courier service										30L9195		
128MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828					ThinkPad T40/R50 Li-Ion Battery 6-cell					92P1101		
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830					ThinkPad T40/R50 Li-Ion Battery 9-cell					92P1102		
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832					ThinkPad Multiple Battery Charger II					22P9040		
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834					Kensington® MicroSaver® Security Cable					73P2582		
USB Portable Diskette Drive	05K9276					GemPC400 Smart Card Reader/Writer					31P8901		
USB 2.0 Portable 80GB Hard Disk	40Y8726					11a/b/g Wireless CardBus Adapter					31P9101		
USB 2.0 Combo Drive	73P4515					ThinkPad 72W AC Adapter					02K6699		
USB 2.0 Portable Multi-Burner Drive	22P9163					ThinkPad 72W AC/DC Combo Adapter					22P9010		
USB 2.0 Memory Key 512MB	22P9230					Optical 3-Button Travel Wheel Mouse					31P7410		
USB Keyboard with UltraNav	31P8950					Optical 3-Button ScrollPoint® Mouse					31P7405		
USB Travel Keyboard with UltraNav	31P9490					Optical 3-Button ScrollPoint Pro Mouse					31P8700		
Enh Perf Wireless Keyboard and Mouse	73P4067					USB Optical Wheel Mouse (black)					06P4069		
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357					ThinkPad Carrying Case - Organizer					73P3598		
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716					ThinkPad Carrying Case - Backpack					73P3599		
M400 Projector	0037A04					Other options at lenovo.com/options							

See footnotes for important warranty information
US models announced September 14, 2004, March 1, 2005, or July 6, 2005
US models withdrawn effective September or November 2005

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ThinkPad® R50e (1842) - Express - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Integrated graphics	Security chip	Limited warranty ¹²	Workhorse (W) Global (G) Avail Entry (E) date		
1842-2QU	Celeron® M	1.3	512K	256MB	15.0" XGA	20GB	CD	None	Modem	Extreme™ 2	No	XP Pro	1 yr	No	May 04
1842-2RU	Celeron M	1.3	512K	256MB	15.0" XGA	30GB	Combo	None	Modem	Extreme 2	No	XP Pro	1 yr	No	May 04
1842-BJU	Pentium® M 715	1.5	2MB	256MB	15.0" XGA	30GB	Combo	*Intel 11b/g ³²	Modem	Extreme 2	No	XP Pro	1 yr	No	July 04
1842-PPU	Pentium M 715a	1.5	2MB	256MB	15.0" XGA	30GB	Combo	*Intel 11b/g	Modem	Extreme 2	No	XP Pro	1 yr	No	Jan 05
1842-GQU	Celeron M 330	1.4	512K	256MB	15.0" XGA	30GB	CD	None	Modem	Extreme 2	No	XP Pro	1 yr	No	Dec 04
1842-GRU	Celeron M 330	1.4	512K	256MB	15.0" XGA	30GB	Combo	None	Modem	Extreme 2	No	XP Pro	1 yr	No	Dec 04
1842-G3U	Celeron M 340	1.5	512K	256MB	15.0" XGA	30GB	CD	None	Modem	Extreme 2	No	XP Pro	1 yr	No	Sep 04
1842-G7U	Celeron M 340	1.5	512K	256MB	15.0" XGA	30GB	Combo	None	Modem	Extreme 2	No	XP Pro	1 yr	No	Sep 04
1842-GBU	Celeron M 350	1.3	1MB	256MB	15.0" XGA	30GB	CD	None	Modem	Extreme 2	No	XP Pro	1 yr	No	Sep 04
1842-GDU	Celeron M 350	1.3	1MB	256MB	15.0" XGA	30GB	Combo	None	Modem	Extreme 2	No	XP Pro	1 yr	No	Sep 04
1842-HRU	Pentium M 725	1.6	2MB	256MB	15.0" XGA	30GB	Combo	*Intel 11b/g	Modem	Extreme 2	No	XP Pro	1 yr	No	Sep 04

• These small and medium business (SMB) models are part of the US Think Express Program • The 1842 has a 1 year limited warranty

Positioning	Mainstream performance and features; two-spindle system	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ - Dec/Jan models: Service Pack 2 ✦ Disk-to-Disk Recovery (in hidden protected area)	
Processor	Intel® Celeron M Processor 1.3GHz, 330 (1.4GHz), 340 (1.5GHz) or 350 (1.3GHz) with 400MHz system bus or Intel Pentium M Processor 715/715a (1.5GHz) or 725 (1.6GHz) with enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus		
L2 cache	Celeron M and M 330/340: 512KB; Celeron M 350: 1MB; Pentium M 715/715a/725: 2 MB	Preloaded <ul style="list-style-type: none"> Access IBM Access Connections Rescue and Recovery™ Norton AntiVirus (OEM edition) PC-Doctor™ ThinkPad Utilities Adobe Reader Update Connector™¹⁵ RecordNOW and Drive Letter Access powered by Sonic products (combo models) InterVideo WinDVD (combo models) 	
Memory	256MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (memory controller limits speed to 266MHz) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available		
Diskette drive	None standard / use optional USB-based diskette drive	Downloadable <ul style="list-style-type: none"> IBM Director Agent Software Delivery Assistant System Migration Assistant 	
CD	Some: CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7 mm high		
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / fixed, not removable / 12.7 mm	License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client	
Ultrabay Enhanced Disk	None / no support for removable Ultrabay™ options 20GB ⁸ or 30GB (4200 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber		
Display	15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits / one latch to unlatch and open with one hand	ThinkPad notebooks implement ThinkVantage™ technologies and design; visit ibm.com/thinkvantage	
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GM GMCH / uses main memory (up to 64MB) / 200MHz	Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network) PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant ImageUltra™ Services available International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)	
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)	ServicePac®. ²² 1yr IOR 9x5 NBD 30L9188 ServicePac 2 yr IOR 9x5 NBD 30L9189 ServicePac 3 yr IOR 9x5 NBD 30L9195 ServicePac 4 yr IOR 9x5 NBD 30L9194 ServicePac 5 yr IOR 9x5 NBD 30L9196 ServicePac 2 yr P&L P/U Depot 30L9191 ServicePac 3 yr P&L P/U Depot 30L9192 ServicePac 4 yr P&L P/U Depot 08K9816 69P9195 ServicePac 5 yr P&L P/U Depot 09N4273 31P9101 31P7410 22P9010 10K0209	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass		
Touch pad	No UltraNav™ multi-pointing system	Post-warranty annual maintenance agreements at ibm.com/services/its/us/source/maspspleu.pdf	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions		
Dimensions ³	15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm		
Weight ²	with optical drive and battery: 15.0" models: 6.6 lb (3.0kg)		
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic		
Battery - type	Lithium Ion 6-cell / intelligent / supports optional 9-cell battery		
Battery - life ¹⁰	Celeron M models: up to 3.5 hr; Pentium M models: 4.0 hr; Optional 9-cell: up to 5.4 hr		
Architecture	Intel 855GM chipset / 82855GM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for parallel)		
Port replicator	No port replicator support		
Docking station	No docking station support		
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door		
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial or infrared port		
IEEE 1394	None		
Wireless antenna	Some: none / can upgrade to wireless via optional PC Cards Some: UltraConnect™ Antenna built into the display cover		
Mini PCI	Some: no Mini PCI slot (Communications Bay) Some: one Mini PCI slot (Communications Bay) / not customer upgradable Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset		
Intel 11b/g ³²	One Communications Daughter Card (CDC) socket (used by modem) / not accessible		
CDC	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset		
Modem	None		
Bluetooth	None		
Ethernet	10/100 ethernet on planar / Intel 82562EZ chipset (physical layer) / Wake on LAN®		
Audio support	Soft audio / ICH AC97 controller / DirectSound™ support / AD1981B AC97 codec / mono speaker / 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack		
Security	Power-on password / hard disk password / supervisor password / security keyhole		
Security chip	None		
Limited warranty ¹²	1 year - EasyServ™ ¹⁹ onsite pickup and delivery courier service		
128MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	T40/R50 Series Li-Ion Battery 6-cell	08K8214
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	T40/R50 High Capacity Li-Ion Batt 9-cell	08K8197
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad Multiple Battery Charger II	22P9040
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816
4GB Microdrive™ with PC Card	09N4280	60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357
USB Portable Diskette Drive	05K9276	80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273
USB 2.0 Portable Multi-Burner Drive	22P9163	11a/b/g Wireless CardBus Adapter	31P9101
USB 2.0 Portable 40GB Hard Disk	22P7196	Optical 3-Button Travel Wheel Mouse	31P7410
USB 2.0 Memory Key 512MB	22P9230	ThinkPad 72W AC/DC Combo Adapter	22P9010
M400 Projector	0037A04	ThinkPad Premiere Leather Carrying Case	10K0209
Kensington® MicroSaver® Security Cable	73P2582	Other options at lenovo.com/options	

See footnotes for important warranty information * Powered by Intel Centrino™ mobile technology
US models announced May 18, July 13, Sept 14, or Dec 21, 2004, or Jan 11, 2005
US models withdrawn effective January or September 2005

ThinkPad® R50e (1842) - TopSeller (June 2005) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed	L2 cache	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Integrated graphics	Security chip	Limited warranty ¹²	Workhorse Global Entry	Avail date	
1842-QDU	Pentium® M 725a	1.6 GHz	2MB	256MB	15.0" XGA	40GB	Combo	*Intel 11b/g ³²	Modem	Extreme™ 2	No	XP Pro	1-yr	No	Jun 05
1842-QUE	Pentium M 725a	1.6 GHz	2MB	512MB	15.0" XGA	60GB	DVD±RW	*Intel 11b/g	Modem	Extreme 2	No	XP Pro	1-yr	No	Jun 05
1842-QFU	Pentium M 725a	1.6 GHz	2MB	256MB	15.0" XGA	40GB	Combo	*Intel 11b/g	Modem	Extreme 2	No	XP Home	1-yr	No	Jun 05
1842-STU	Pentium M 725	1.6 GHz	2MB	256MB	15.0" XGA	40GB	Combo	*Intel 11b/g	Modem	Extreme 2	No	XP Pro	1-yr	No	Aug 05
1842-SUU	Pentium M 725	1.6 GHz	2MB	512MB	15.0" XGA	60GB	DVD±RW	*Intel 11b/g	Modem	Extreme 2	No	XP Pro	1-yr	No	Aug 05
1842-SVU	Pentium M 725	1.6 GHz	2MB	256MB	15.0" XGA	40GB	Combo	*Intel 11b/g	Modem	Extreme 2	No	XP Home	1-yr	No	Aug 05
1842-SKU	Celeron® M 360J	1.4 GHz	1MB	256MB	15.0" XGA	40GB	CD	Intel 11b/g	Modem	Extreme 2	No	XP Home	1-yr	No	Aug 05
1842-SLU	Celeron M 360J	1.4 GHz	1MB	256MB	15.0" XGA	40GB	Combo	Intel 11b/g	Modem	Extreme 2	No	XP Home	1-yr	No	Aug 05
1842-SMU	Celeron M 370	1.5 GHz	1MB	256MB	15.0" XGA	40GB	CD	Intel 11b/g	Modem	Extreme 2	No	XP Home	1-yr	No	Aug 05
1842-STU	Celeron M 370	1.5 GHz	1MB	256MB	15.0" XGA	40GB	Combo	Intel 11b/g	Modem	Extreme 2	No	XP Home	1-yr	No	Aug 05
1842-SPU	Celeron M 360J	1.4 GHz	1MB	256MB	15.0" XGA	40GB	CD	Intel 11b/g	Modem	Extreme 2	No	XP Pro	1-yr	No	Aug 05
1842-SQU	Celeron M 370	1.5 GHz	1MB	256MB	15.0" XGA	40GB	CD	Intel 11b/g	Modem	Extreme 2	No	XP Pro	1-yr	No	Aug 05
1842-SRU	Celeron M 360J	1.4 GHz	1MB	256MB	15.0" XGA	40GB	Combo	Intel 11b/g	Modem	Extreme 2	No	XP Pro	1-yr	No	Aug 05
1842-SSU	Celeron M 370	1.5 GHz	1MB	256MB	15.0" XGA	40GB	Combo	Intel 11b/g	Modem	Extreme 2	No	XP Pro	1-yr	No	Aug 05
1842-T4U	Celeron M 360J	1.4 GHz	1MB	256MB	14.1" XGA	40GB	CD	Intel 11b/g	Modem	Extreme 2	No	XP Home	1-yr	No	Aug 05
1842-T5U	Celeron M 370	1.5 GHz	1MB	256MB	14.1" XGA	40GB	CD	Intel 11b/g	Modem	Extreme 2	No	XP Home	1-yr	No	Aug 05

• These small and medium business (SMB) models are part of the US TopSeller™ Program
 • The 1842 has a 1-year limited warranty

Processor	Intel® Celeron M Processor 360J or 370 with Execute Disable Bit and 400MHz bus or Intel Pentium M Processor 725a or 725 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus	SOFTWARE¹⁴ Windows XP Home models - Microsoft® Windows® XP Home Edition ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery (in hidden protected area) Windows XP Professional models - Microsoft® Windows XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery (in hidden protected area) Preloaded (all) • Access Program • Access Connections™ • Rescue and Recovery™ • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) • Simple Backup (DVD±RW)
L2 cache	Celeron M: 1MB; Pentium M 725a: 2 MB; All: on die (at processor speed) / ECC	
Memory	256MB or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (memory controller limits speed to 266MHz) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available	
Diskette drive	None standard / use optional USB-based diskette drive	
CD	Some: CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7 mm high	
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / fixed, not removable / 12.7 mm	
DVD±RW	Some: DVD and CD burner / Multi-Burner Plus / fixed, not removable / 12.7 mm	
Ultrad Enhanced	None / no support for removable Ultrabay™ options	
Disk	40GB ⁸ or 60GB (4200 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber	
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits	
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GM / uses main memory / 200MHz	
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	No UltraNav™ multi-pointing system	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm	
Weight ²	with optical drive and battery: 15.0" models: 6.6 lb (3.0kg)	
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type	Lithium Ion 6-cell / intelligent / supports optional 9-cell battery	
Battery - life ¹⁰	Celeron M models: 3.4 hr; Pentium M models: 4.0 hr; Optional 9-cell: up to 5.4 hr	
Architecture	Intel 855GM chipset / 82855GM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for parallel)	
Docking station	No port replicator or docking station support	
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door	
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial or infrared port	
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception	
Mini PCI	One Mini PCI slot (Communications Bay) / not customer upgradable	
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset	
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset	
Ethernet	10/100 ethernet on planar / Intel 82562EZ chipset (physical layer) / Wake on LAN®	
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker, 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery courier service	

256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus 3-year LOR 9x5 NBD	41C9166
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	ThinkPlus 4-year LOR 9x5 NBD	41C9168
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	ThinkPad Multiple Battery Charger II	22P9040	ThinkPlus 5-year LOR 9x5 NBD	41C9171
USB Portable Diskette Drive	05K9276	Kensington® MicroSaver® Security Cable	73P2582	ThinkPlus 2-year P&L P/U Depot	41C9173
USB Gemplus GemPC Smart Card Reader	41N3040	72W Slim AC/DC Combo Adapter	73P4485	ThinkPlus 3-year P&L P/U Depot	41C9169
USB 2.0 Portable 80GB Hard Disk	40Y8726	Optical 3-Button Travel Wheel Mouse	31P7410	ThinkPlus 3-year P&L P/U Depot	41C9170
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	Optical 3-Button ScrollPoint® Mouse	31P7405	ThinkPlus 4-year P&L P/U Depot	41C9172
USB 2.0 Memory Key 1GB	40Y7421	USB Optical Wheel Mouse (black)	06P4069	ThinkPlus 5-year P&L P/U Depot	41C9174
USB Keyboard with UltraNav	31P8950	ThinkPad Carrying Case - Expander	73P3597	Other options at lenovo.com/options	
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkPad Carrying Case - BackPack	73P3599		
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Carrying Case - Leather	73P3600		
ThinkVision® L171 17" Monitor (black)	9417AC1	ThinkPad Convertible Monitor Stand	40Y7620		
ThinkVision L201p 20.1" Monitor (black)	9320HB1				

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
 US models announced June 28, August 9, or August 23, 2005
 US models withdrawn effective March or October 2006

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 (1842N) October 2006

ThinkPad® R51e (1843) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Disk GB ⁹	Optical	Mini PCI 802.11 wireless	CDC modem	Integrated graphics	Security chip	Limited warranty ¹²	Global Entry	Avail date	
1843-2HU	Celeron® M 360J	1.4	1MB	256MB	14.1" XGA	40GB	CD	None	Modem	Xpress 200M	No	XP Home	1-yr	No	Sep 05
1843-2YU	Celeron M 370	1.5	1MB	256MB	14.1" XGA	40GB	CD	None	Modem	Xpress 200M	No	XP Home	1-yr	No	Sep 05
1843-35U	Celeron M 360J	1.4	1MB	256MB	14.1" XGA	40GB	Combo	11b/g ³²	Modem	Xpress 200M	No	XP Pro	1-yr	No	Sep 05
1843-3CU	Celeron M 370	1.5	1MB	256MB	14.1" XGA	40GB	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	No	Sep 05
1843-3HU	Pentium® M 740	1.73	2MB	256MB	14.1" XGA	40GB	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	No	Sep 05
1843-3PU	Celeron M 360J	1.4	1MB	256MB	15.0" XGA	40GB	CD	None	Modem	Xpress 200M	No	XP Home	1-yr	No	Sep 05
1843-3QU	Celeron M 370	1.5	1MB	256MB	15.0" XGA	40GB	CD	None	Modem	Xpress 200M	No	XP Home	1-yr	No	Sep 05
1843-42U	Celeron M 360J	1.4	1MB	256MB	15.0" XGA	40GB	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	No	Sep 05
1843-47U	Celeron M 370	1.5	1MB	256MB	15.0" XGA	40GB	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	No	Sep 05
1843-4SU	Pentium M 740	1.73	2MB	256MB	15.0" XGA	40GB	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	No	Sep 05
Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Intel® Celeron M Processor 360 (1.4GHz) or 370 (1.5GHz) with 400MHz system bus or Intel Pentium M Processor 740 (1.73GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus											SOFTWARE¹⁴			
L2 cache	Celeron M: 1MB; Pentium M: 2 MB; All: on die (at processor speed) / ECC											Windows XP Professional models			
Memory	256MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / single channel / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available											- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◆ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive											Windows XP Home models			
CD	<i>Some: CD-ROM / 24X-10X⁹ speed / fixed, not removable / 12.7mm high</i>											- Microsoft Windows XP Home Edition ²⁰ (Service Pack 2)			
Combo	<i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / fixed, not removable / 12.7mm</i>											◆ Disk-to-Disk Recovery (in hidden protected area)			
Ultrabay Enhanced Disk	None / no support for removable Ultrabay™ options											Preloaded (all)			
Disk	40GB⁸ (5400 rpm), 9.5mm high / EIDE / removable and upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber											• Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • PC-Doctor™ • ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo) • InterVideo WinDVD (combo)			
Display	<i>Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</i> <i>Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits</i>											License - CD not included (all)			
Graphics	ATI® RADEON® Xpress 200M / integrated graphics / in memory controller (RC410MD) / uses main memory (32MB up to 511MB main memory; 64MB over 511MB)											- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)											ThinkPad notebooks implement ThinkVantage™ technologies and design; thinkpad.com/thinkvantage			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											Universal 72 watt AC adapter			
Touch pad	None											PC 2001 and PXE 2.0-compliant			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											ACPI 1.0b and 2.0-compliant			
Dimensions ³	<i>14.1" models (WxDxH): 12.4" x 10.2" x 1.3-1.4"; 314mm x 260mm x 34-37mm</i> <i>15.0" models (WxDxH): 13.1" x 10.6" x 1.4-1.5"; 332mm x 269mm x 37-40mm</i>											CIM and DMI 2.0-compliant			
Weight ²	with optical drive and battery: <i>14.1" models: 6.2 lb (2.8kg); 15.0" models: 6.7 lb (3.0kg)</i>											ENERGY STAR®-compliant			
Case material	<i>Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic</i>											International Warranty Service ¹⁷			
Battery - type	Lithium Ion 6-cell / intelligent / supports optional 9-cell battery											24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Battery - life ¹⁰	<i>6-cell Celeron models: up to 2.2 hr; 6-cell Pentium models: up to 4.0 hr; optional 9-cell Celeron models: up to 3.2 hr; optional 9-cell Pentium models: up to 6.0 hr</i>											ThinkPlus™.22 1-year LOR 9x5 NBD			
Architecture	ATI RC410MD chipset (integrated graphics, PCI Express x1 for ethernet and ExpressCard) / ATI SB400 southbridge (ATA-100 EIDE, PCI bus, USB, Low Pin Count [LPC] interface) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for parallel)											41C9166			
Docking station	No port replicator or docking station support											ThinkPlus 2-year LOR 9x5 NBD			
PC Card Std slot	One Type I or Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door											41C9167			
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											ThinkPlus 3-year LOR 9x5 NBD			
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial or infrared port											41C9168			
Wireless antenna	<i>Some: none / can upgrade to wireless via optional PC Cards or ExpressCards</i> <i>Some: UltraConnect™ Antenna built into the display cover (models with 802.11 wireless)</i> <i>Some: no Mini PCI slot (Communications Bay)</i>											ThinkPlus 4-year LOR 9x5 NBD			
Mini PCI	<i>Some: one Mini PCI slot (Communications Bay) / not customer upgradable / ThinkPad 11b/g Wi-Fi³² wireless⁴, Mini PCI, Atheros™ AR5004G chipset</i>											ThinkPlus 5-year LOR 9x5 NBD			
11b/g ³²	<i>Some: one Mini PCI slot (Communications Bay) / not customer upgradable / ThinkPad 11b/g Wi-Fi³² wireless⁴, Mini PCI, Atheros™ AR5004G chipset</i>											41C9173			
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible											ThinkPlus 2-year P&L P/U Depot			
Modem	56K ⁹ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset											41C9169			
Ethernet	10/100 ethernet on systemboard / Broadcom® BCM5751F (MAC/PHY) / PCIe x1											ThinkPlus 3-year P&L P/U Depot			
Audio support	AC97 controller / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack											41C9170			
Security	Power-on password / hard disk password / supervisor password / security keyhole											ThinkPlus 4-year P&L P/U Depot			
Security chip	None											41C9172			
Fingerprint reader	None											ThinkPlus 5-year P&L P/U Depot			
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery courier service											41C9174			
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840				ThinkPad T40/R50 Li-Ion Battery 6-cell				92P1101						
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842				ThinkPad T40/R50 Li-Ion Battery 9-cell				92P1102						
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844				ThinkPad Multiple Battery Charger II				22P9040						
USB Serial Parallel Adapter	22P5298				SonyEricsson® GC83 EDGE PC Card				26K3393						
USB Portable Diskette Drive	05K9276				Verizon Wireless V620 WWAN PC Card ²⁵				40Y9137						
USB 2.0 Portable 80GB Hard Disk	40Y8726				72W Slim AC/DC Combo Adapter				73P4485						
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637				Optical 3-Button Travel Wheel Mouse				31P7410						
USB 2.0 Memory Key 1GB	40Y7421				ThinkPad Nylon Carrying Case				10K0207						
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716				ThinkPad Carrying Case - Backpack				73P3599						
USB Travel Keyboard with UltraNav	31P9490				ThinkPad Carrying Case - Organizer				73P3598						
Enh Perf Wireless Keyboard and Mouse	73P4067				ThinkPad Convertible Monitor Stand				40Y7620						
ThinkVision® E500 Projector	0038A05				Kensington® MicroSaver® Security Cable				73P2582						
ThinkVision L171 17" Monitor (black)	9417AB1				TrackPoint Cap Collection				73P2698						
ThinkVision L192p 19" Monitor (black)	9419HB2				Other options at lenovo.com/options				Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty						

See footnotes for important warranty information
US models announced September 20, 2005
US models withdrawn effective April 2006

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ThinkPad® R51e (1843) - January 2006 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Disk GB ⁹	Optical	Mini PCI 802.11 wireless	CDC modem	Integrated graphics	Security chip	Limited warranty ¹²	Workhorse Global Entry	Avail date	
1843-AJU	Celeron® M 380	1.6	1MB	256MB	14.1" XGA	40GB	CD	11a/b/g ³²	Modem	Xpress 200M	No	XP Pro	1-yr	No	Jan 06
1843-ALU	Celeron M 380	1.6	1MB	256MB	14.1" XGA	40GB	Combo	11a/b/g	Modem	Xpress 200M	No	XP Pro	1-yr	No	Jan 06
1843-ATU	Pentium® M 750	1.86	2MB	256MB	14.1" XGA	40GB	Combo	11a/b/g	Modem	Xpress 200M	No	XP Pro	1-yr	No	Jan 06
1843-D6U	Pentium M 750	1.86	2MB	512MB	15.0" XGA	60GB	DVD±RW	11a/b/g	Modem	Xpress 200M	No	XP Pro	1-yr	No	Jan 06
1843-D8U	Pentium M 760	2.0	2MB	512MB	15.0" XGA	60GB	DVD±RW	11a/b/g	Modem	Xpress 200M	No	XP Pro	1-yr	No	Jan 06
• These models have an EasyServ™¹⁹ onsite pickup and delivery 1-year limited warranty.															
Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Intel® Celeron M Processor 380 (1.6GHz) with 400MHz system bus or Intel Pentium M Processor 750 (1.86GHz) or 760 (2.0GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴				
L2 cache	Celeron M: 1MB; Pentium M: 2 MB; All: on die (at processor speed) / ECC										Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◆ Disk-to-Disk Recovery (in hidden protected area)				
Memory	256 or 512MBstd / 2GB max⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available														
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • PC-Doctor™ • ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo) • InterVideo WinDVD (combo)				
CD	<i>Some: CD-ROM / 24X-10X⁹ speed / fixed, not removable / 12.7mm high</i>														
Combo	<i>Some: DVD-ROM/CD-RW / 24X/24X/8X²¹ speed / fixed, not removable / 12.7mm</i>										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
DVD±RW	<i>Some: DVD and CD burner / Multi-Burner Plus / fixed, not removable / 12.7mm high</i>														
Ultrabay Enhanced	None / no support for removable Ultrabay™ options										ThinkPad notebooks implement ThinkVantage™ technologies and design; thinkpad.com/thinkvantage				
Disk	40 or 60GB⁸ (5400 rpm), 9.5mm high / EIDE / removable and upgradable / 9.5mm bay / Hard Disk Drive Shock Absorber														
Display	<i>Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</i> <i>Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits</i>										Universal 72 watt AC adapter PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant RoHS - compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
Graphics	ATI® RADEON® Xpress 200M / integrated graphics / in memory controller (RC410MD) / uses main memory (32MB up to 511MB main memory; 64MB over 511MB)														
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166				
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Touch pad	None										ThinkPlus 2-year LOR 9x5 NBD 41C9167				
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	<i>14.1" models (WxDxH): 12.4" x 10.2" x 1.3-1.4"; 314mm x 260mm x 34-37mm</i> <i>15.0" models (WxDxH): 13.1" x 10.6" x 1.4-1.5"; 332mm x 269mm x 37-40mm</i>										ThinkPlus 3-year LOR 9x5 NBD 41C9168				
Weight ²	with optical drive and battery: <i>14.1" models: 6.2 lb (2.8kg); 15.0" models: 6.7 lb (3.0kg)</i>														
Case material	<i>Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic</i>										ThinkPlus 4-year LOR 9x5 NBD 41C9171				
Battery - type	Lithium Ion 6-cell / 2.4Ah / intelligent / supports optional 9-cell battery														
Battery - life ¹⁰	<i>6-cell Celeron models: up to 2.2 hr; 6-cell Pentium models: up to 3.5 hr; optional 9-cell Celeron models: up to 3.2 hr; optional 9-cell Pentium models: up to 5.0 hr</i>										ThinkPlus 5-year LOR 9x5 NBD 41C9173				
Architecture	ATI RC410MD chipset (integrated graphics, PCI Express x1 for ethernet and ExpressCard) / ATI SB400 southbridge (ATA-100 EIDE, PCI bus, USB, Low Pin Count [LPC] interface) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for parallel)														
Docking station	No port replicator or docking station support										ThinkPlus 2-year P&L P/U Depot 41C9169				
PC Card Std slot	One Type I or Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door														
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										ThinkPlus 3-year P&L P/U Depot 41C9170				
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial or infrared port														
Wireless antenna	UltraConnect™ Antenna built into the display cover (models with 802.11 wireless)										ThinkPlus 4-year P&L P/U Depot 41C9172				
Mini PCI	One Mini PCI slot (Communications Bay) / not customer upgradable / 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI, Adapter II, Atheros™ AR5004X chip														
11a/b/g ³²	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										ThinkPlus 5-year P&L P/U Depot 41C9174				
CDC	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset														
Modem	10/100 ethernet on systemboard / Broadcom® BCM5751F (MAC/PHY) / PCIe x1										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Ethernet	AC97 controller / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack														
Audio support	Power-on password / hard disk password / supervisor password / security keyhole														
Security	None														
Security chip	None														
Fingerprint reader	None														
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery courier service														
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101		ThinkPlus 4-year LOR 9x5 NBD								
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102		ThinkPlus 5-year LOR 9x5 NBD								
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		ThinkPad Multiple Battery Charger II		22P9040		ThinkPlus 2-year P&L P/U Depot								
USB Serial Parallel Adapter	22P5298		SonyEricsson® GC83 EDGE PC Card		26K3393		ThinkPlus 3-year P&L P/U Depot								
USB Portable Diskette Drive	05K9276		Verizon Wireless V620 WWAN PC Card ²⁵		40Y9137		ThinkPlus 4-year P&L P/U Depot								
USB 2.0 Memory Key 1GB	40Y7421		72W Slim AC/DC Combo Adapter		73P4485		ThinkPlus 5-year P&L P/U Depot								
USB 2.0 Portable 80GB Hard Disk	40Y8726		Optical 3-Button Travel Wheel Mouse		31P7410		ThinkPlus 2-year P&L P/U Depot								
USB 2.0 Super Multi-Burner Drive	40Y8638		ThinkPad Nylon Carrying Case		10K0207		ThinkPlus 3-year P&L P/U Depot								
60GB Hard Disk 9.5mm (5400 rpm)	73P3357		ThinkPad Carrying Case - Backpack		73P3599		ThinkPlus 4-year P&L P/U Depot								
80GB Hard Disk 9.5mm (5400 rpm)	09N4273		ThinkPad Carrying Case - Organizer		73P3598		ThinkPlus 5-year P&L P/U Depot								
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716		ThinkVision® E500 Projector		0038A05		ThinkPlus 2-year P&L P/U Depot								
USB Travel Keyboard with UltraNav	31P9490		ThinkVision L171 17" Monitor (black)		9417AC1		ThinkPlus 3-year P&L P/U Depot								
Enh Perf Wireless Keyboard and Mouse	73P4067		ThinkVision L192p 19" Monitor (black)		9419HB2		ThinkPlus 4-year P&L P/U Depot								
Kensington® MicroSaver® Security Cable	73P2582		ThinkPad Convertible Monitor Stand		40Y7620		ThinkPlus 5-year P&L P/U Depot								
Trackpoint Cap Collection	73P2698		Other options at lenovo.com/options				ThinkPlus 2-year P&L P/U Depot								

See footnotes for important warranty information
US models announced January 10, 2006
US models withdrawn effective October 2006

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ThinkPad® R51e (1843) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Disk GB ⁵	Optical	Mini PCI 802.11 wireless	CDC modem	Integrated graphics	Security chip	Limited warranty ¹²	Workhorse Global Entry	Avail date	
1843-A2U	Celeron® M 380	1.6	1MB	256MB	14.1" XGA	40GB	CD	11a/b/g II ³²	Modem	Xpress 200M	No	XP Pro	1-yr	No	Jan 06
1843-A3U	Pentium® M 750	1.86	2MB	512MB	14.1" XGA	40GB	Combo	11a/b/g II	Modem	Xpress 200M	No	XP Pro	1-yr	No	Jan 06

• **These models have an EasyServ™¹⁹ onsite pickup and delivery 1-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Intel® Celeron M Processor 380 (1.6 GHz) with 400MHz system bus or Intel Pentium M Processor 750 (1.86 GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◆ Disk-to-Disk Recovery (in hidden protected area)			
L2 cache Memory	Celeron M: 1MB; Pentium M: 2 MB; All: on die (at processor speed) / ECC 256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										◆ Preloaded • Education software from Vital Source Technologies®: vidualsource KEY™ and Personal Portable library™ • Rescue and Recovery™ • Access Connections™ • Client Security Solution • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • PC-Doctor™ • ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo) • InterVideo WinDVD (combo)			
Diskette drive	None standard / use optional USB-based diskette drive										◆ License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
CD	<i>Some:</i> CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7mm high													
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / fixed, not removable / 12.7mm													
Ultrabay Enhanced Disk	None / no support for removable Ultrabay™ options 40GB⁸ (5400 rpm), 9.5mm high / EIDE / removable and upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber													
Display	14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits													
Graphics	ATI® RADEON® Xpress 200M / integrated graphics / in memory controller (RC410MD) / uses main memory (32MB up to 511MB main memory; 64MB over 511MB)													
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	None													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	<i>(WxDxH):</i> 12.4" x 10.2" x 1.3-1.4"; 314mm x 260mm x 34-37mm													
Weight ²	with optical drive and battery: 6.2 lb (2.8kg)													
Case material	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic													
Battery - type	Lithium Ion 6-cell / 2.4Ah / intelligent / supports optional 9-cell battery													
Battery - life ¹⁰	<i>6-cell Celeron models:</i> up to 2.2 hr; <i>6-cell Pentium models:</i> up to 3.5 hr; <i>optional 9-cell Celeron models:</i> up to 3.2 hr; <i>optional 9-cell Pentium models:</i> up to 5.0 hr													
Architecture	ATI RC410MD chipset (integrated graphics, PCI Express x1 for ethernet and ExpressCard) / ATI SB400 southbridge (ATA-100 EIDE, PCI bus, USB, Low Pin Count [LPC] interface) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for parallel)													
Docking station	No port replicator or docking station support													
PC Card Std slot	One Type I or Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door													
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door													
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial or infrared port										ThinkPad notebooks implement ThinkVantage™ technologies and design; thinkpad.com/thinkvantage			
Wireless antenna	UltraConnect™ Antenna built into the display cover (models with 802.11 wireless)										Universal 72-watt AC adapter PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Mini PCI	One Mini PCI slot (Communications Bay) / not customer upgradable / 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros™ AR5004X chip													
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Ethernet	10/100 ethernet on systemboard / Broadcom® BCM5751F (MAC/PHY) / PCIe x1													
Audio support	AC97 controller / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	None													
Fingerprint reader	None													
Limited warranty ¹²	1-year - EasyServ™¹⁹ onsite pickup and delivery courier service										ThinkPlus™ ²² 1-year LOR 9x5 NBD 41C9166			
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101		ThinkPlus 2-year LOR 9x5 NBD		41C9167					
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102		ThinkPlus 3-year LOR 9x5 NBD		41C9168					
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		ThinkPad Multiple Battery Charger II		22P9040		ThinkPlus 4-year LOR 9x5 NBD		41C9171					
USB Portable Diskette Drive	05K9276		SonyEricsson® GC83 EDGE PC Card		26K3393		ThinkPlus 5-year LOR 9x5 NBD		41C9173					
USB 2.0/Analog Headset by Sennheiser	40Y8518		Verizon Wireless V620 WWAN PC Card ²⁵		40Y9137		ThinkPlus 2-year P&L P/U Depot		41C9169					
USB 2.0 Lenovo Webcam	40Y8519		72W Slim AC/DC Combo Adapter		73P4485		ThinkPlus 3-year P&L P/U Depot		41C9170					
USB 2.0 Portable 80GB Hard Disk	40Y8726		Optical 3-Button Travel Wheel Mouse		31P7410		ThinkPlus 4-year P&L P/U Depot		41C9172					
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637		Optical 3-Button ScrollPoint® Mouse		31P7405		ThinkPlus 5-year P&L P/U Depot		41C9174					
USB 2.0 Memory Key 1GB	40Y7421		Optical 3-Button ScrollPoint Pro Mouse		31P8700		Post-warranty annual maintenance agreements at							
60GB Hard Disk 9.5mm (5400 rpm)	73P3357		ThinkPad Nylon Carrying Case		10K0207		lenovo.com/thinkplus/warranty							
80GB Hard Disk 9.5mm (5400 rpm)	09N4273		ThinkPad Carrying Case - Backpack		73P3599									
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716		ThinkPad Carrying Case - Organizer		73P3598									
USB Travel Keyboard with UltraNav	31P9490		ThinkVision® L171 17" Monitor (black)		9417AC1									
USB Keyboard with UltraNav	31P8950		ThinkVision L171p 17" Monitor (black)		9417HB2									
Enh Perf Wireless Keyboard and Mouse	73P4067		ThinkVision L192p 19" Monitor (black)		9419HB2									
Kensington® MicroSaver® Security Cable	73P2582		ThinkVision L201p 20.1" Monitor (black)		9320HB1									
Trackpoint Cap Collection	73P2698		PC Card Gemplus Smart Card Reader		41N3004									
ThinkVision® E500 Projector	0038A05		ThinkPad Monitor Stand		22P5265									
ThinkVision C400 Wireless Projector	0039WA1		Other options at lenovo.com/options											

See footnotes for important warranty information
US models announced January 10, 2006
US models withdrawn effective October 2006

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ThinkPad® R51e (1844) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Disk GB ⁹	Optical	Mini PCI 802.11 wireless	CDC modem	Integrated graphics	Security chip	Preload	Limited warranty ¹²	Avail date
1844-5FU	Celeron® M 360J	1.4	1MB	256MB	14.1" XGA	40GB 4200	DVD	None	Modem	Xpress 200M	No	XP Home	1-yr	Sep 05
1844-5GU	Pentium® M 740	1.73	2MB	512MB	15.0" XGA	40GB 4200	Combo	11b/g ³²	Modem	Xpress 200M	No	XP Pro	1-yr	Sep 05
1844-68U	Celeron M 360J	1.4	1MB	256MB	15.0" XGA	40GB 5400	CD	11b/g	Modem	Xpress 200M	No	XP Home	1-yr	Oct 05
1844-69U	Celeron M 360J	1.4	1MB	256MB	15.0" XGA	40GB 5400	Combo	11b/g	Modem	Xpress 200M	No	XP Home	1-yr	Oct 05
1844-6AU	Celeron M 370	1.5	1MB	256MB	15.0" XGA	40GB 5400	CD	11b/g	Modem	Xpress 200M	No	XP Home	1-yr	Oct 05
1844-6BU	Celeron M 370	1.5	1MB	256MB	15.0" XGA	40GB 5400	Combo	11b/g	Modem	Xpress 200M	No	XP Home	1-yr	Oct 05
1844-6CU	Celeron M 360J	1.4	1MB	256MB	15.0" XGA	40GB 5400	CD	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Oct 05
1844-6DU	Celeron M 370	1.5	1MB	256MB	15.0" XGA	40GB 5400	CD	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Oct 05
1844-6EU	Celeron M 360J	1.4	1MB	256MB	15.0" XGA	40GB 5400	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Oct 05
1844-6FU	Celeron M 370	1.5	1MB	256MB	15.0" XGA	40GB 5400	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Oct 05
1844-6GU	Celeron M 360J	1.4	1MB	256MB	14.1" XGA	40GB 5400	CD	11b/g	Modem	Xpress 200M	No	XP Home	1-yr	Oct 05
1844-6HU	Celeron M 370	1.5	1MB	256MB	14.1" XGA	40GB 5400	CD	11b/g	Modem	Xpress 200M	No	XP Home	1-yr	Oct 05

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These 1844 models have a 1-year limited warranty

Positioning	Mainstream performance and features; two-spindle system										SOFTWARE¹⁴			
Processor	Intel® Celeron M Processor 360 (1.4GHz) or 370 (1.5GHz) with 400MHz system bus or Intel Pentium M Processor 740 (1.73GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										Windows XP Professional models			
L2 cache	Celeron M: 1MB; Pentium M: 2 MB; All: on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)			
Memory	256MB or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / single channel / two 200-pin SO-DIMM sockets / std memory in 1 socket / one socket available										◆ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Windows XP Home models			
CD	Some: CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7mm high										- Microsoft Windows XP Home Edition ²⁰ (Service Pack 2)			
DVD	Some: DVD-ROM / 8X-3.3X ⁹ speed / single-layer / fixed, not removable / 12.7mm										◆ Disk-to-Disk Recovery (in hidden protected area)			
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / fixed, not removable / 12.7mm										Preloaded (all)			
Ultrabay Enhanced Disk	None / no support for removable Ultrabay™ options										• Rescue and Recovery™			
Disk	40GB ⁸ (4200 or 5400 rpm), 9.5mm high / EIDE / removable and upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber										• Access Connections™			
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• Client Security Solution™			
	Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										• ThinkVantage Productivity Center			
Graphics	ATI® RADEON® Xpress 200M / integrated graphics / in memory controller (RC410MD) / uses main memory (32MB up to 511MB main memory; 64MB over 511MB)										• ThinkVantage System Update			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										• Symantec® Client Security			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , (no touch pad)										• PC-Doctor™			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• ThinkPad utilities			
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.3-1.4"; 314mm x 260mm x 34-37mm										• Adobe® Reader			
	15.0" models (WxDxH): 13.1" x 10.6" x 1.4-1.5"; 332mm x 269mm x 37-40mm										• Multimedia Center for Think Offerings			
Weight ²	with optical drive and battery: 14.1" models: 6.2 lb (2.8kg); 15.0" models: 6.7 lb (3.0kg)										• Sonic RecordNOW and Drive Letter Access (combo)			
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										• InterVideo WinDVD (combo)			
Battery - type	Lithium Ion 6-cell / intelligent / supports optional 9-cell battery										License - CD not included (all)			
Battery - life ¹⁰	6-cell Celeron models: up to 2.2 hr; 6-cell Pentium models: up to 4.0 hr; optional 9-cell Celeron models: up to 3.2 hr; optional 9-cell Pentium models: up to 6.0 hr										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)			
Architecture	ATI RC410MD chipset (integrated graphics, PCI Express x1 for ethernet and ExpressCard) / ATI SB400 southbridge (ATA-100 EIDE, PCI bus, USB, Low Pin Count [LPC] interface) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for parallel)										ThinkPad notebooks implement ThinkVantage™ technologies and design; thinkpad.com/thinkvantage			
Docking station	No port replicator or docking station support										Universal 72 watt AC adapter			
PC Card Std slot	One Type I or Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door										PC 2001 and PXE 2.0-compliant			
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										ACPI 1.0b and 2.0-compliant			
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial or infrared port										CIM and DMI 2.0-compliant			
Wireless antenna	Some: none / can upgrade to wireless via optional PC Cards or ExpressCards										ENERGY STAR®-compliant			
Mini PCI	Some: UltraConnect™ Antenna built into the display cover (models with 802.11 wireless)										International Warranty Service ¹⁷			
11b/g ³²	Some: no Mini PCI slot (Communications Bay)										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
CDC	Some: one Mini PCI slot (Communications Bay) / not customer upgradable / ThinkPad 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset										ThinkPlus™.22 1-year LOR 9x5 NBD			
Modem	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										41C9166			
Ethernet	56K V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										ThinkPlus 2-year LOR 9x5 NBD			
Audio support	10/100 ethernet on systemboard / Broadcom® BCM5751F (MAC/PHY) / PCIe x1										41C9167			
	AC97 controller / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										ThinkPlus 3-year LOR 9x5 NBD			
Security	Power-on password / hard disk password / supervisor password / security keyhole										41C9168			
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery courier service										ThinkPlus 4-year LOR 9x5 NBD			
	256MB PC2-4200 DDR2 NP CL4 SOD		73P3840		ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101				ThinkPlus 5-year LOR 9x5 NBD		41C9171	
	512MB PC2-4200 DDR2 NP CL4 SOD		73P3842		ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102						41C9173	
	1GB PC2-4200 DDR2 NP CL4 SOD		73P3844		ThinkPad Multiple Battery Charger II		22P9040						41C9169	
	USB Portable Diskette Drive		05K9276		Verizon Wireless V620 WWAN PC Card ²⁵		40Y9137						41C9170	
	USB 2.0 Portable 80GB Hard Disk		40Y8726		72W Slim AC/DC Combo Adapter		73P4485						41C9172	
	USB 2.0 Memory Key 1GB		40Y7421		ThinkPad Monitor Stand		22P5265						41C9174	
	USB 2.0 Super Multi-Burner Drive		40Y8638		ThinkPad Carrying Case - Expander		73P3597							
	80GB HS Hard Disk 9.5mm (5400 rpm)		09N4273		ThinkPad Carrying Case - BackPack		73P3599							
	100GB Hard Disk 9.5mm PATA (5400 rpm)		40Y8716		ThinkPad Carrying Case - Organizer		73P3598							
	Kensington® MicroSaver® Security Cable		73P2582		ThinkPad Convertible Monitor Stand		40Y7620							
	ThinkVision® E500 Projector		0038A05		Other options at lenovo.com/options									

See footnotes for important warranty information
US models announced September 20 or October 18, 2005
US models withdrawn effective April 2006

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ThinkPad® R51e (1844) - TopSeller (January 2006) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Disk GB ⁵	Optical	Mini PCI 802.11 wireless	CDC modem	Integrated graphics	Security chip	Preload	Limited warranty ²	Avail date
1844-DGU	Celeron® M 370	1.5	1MB	256MB	14.1" XGA	40GB 4200	CD	11b/g ³²	Modem	Xpress 200M	No	XP Home	1-yr	Jan 06
1844-DHU	Celeron M 370	1.5	1MB	256MB	14.1" XGA	40GB 4200	CD	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Jan 06
1844-DJU	Celeron M 380	1.6	1MB	256MB	14.1" XGA	40GB 4200	Combo	11b/g	Modem	Xpress 200M	No	XP Home	1-yr	Jan 06
1844-DKU	Celeron M 380	1.6	1MB	256MB	14.1" XGA	40GB 4200	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Jan 06
1844-DLU	Pentium® M 750	1.86	2MB	512MB	14.1" XGA	40GB 4200	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Jan 06
1844-DMU	Pentium M 750	1.86	2MB	512MB	14.1" XGA	60GB 5400	DVD±RW	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Jan 06
1844-DNU	Celeron M 370	1.5	1MB	256MB	15.0" XGA	40GB 4200	CD	11b/g	Modem	Xpress 200M	No	XP Home	1-yr	Jan 06
1844-DPU	Celeron M 370	1.5	1MB	256MB	15.0" XGA	40GB 4200	CD	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Jan 06
1844-DRU	Celeron M 380	1.6	1MB	256MB	15.0" XGA	40GB 4200	Combo	11b/g	Modem	Xpress 200M	No	XP Home	1-yr	Jan 06
1844-DSU	Celeron M 380	1.6	1MB	256MB	15.0" XGA	40GB 4200	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Jan 06
1844-DXU	Pentium M 750	1.86	2MB	512MB	15.0" XGA	40GB 4200	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Jan 06
1844-DZU	Pentium M 760	2.0	2MB	512MB	15.0" XGA	60GB 5400	DVD±RW	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Jan 06
1844-E9U	Pentium M 740	1.73	2MB	512MB	15.0" XGA	40GB 5400	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Mar 06
1844-EUJ	Pentium M 730	1.60	2MB	512MB	15.0" XGA	40GB 5400	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Apr 06
1844-EVU	Pentium M 730	1.60	2MB	512MB	15.0" XGA	60GB 5400	Combo	11b/g	Modem	Xpress 200M	No	XP Pro	1-yr	Apr 06
1844-EWU	Pentium M 730	1.60	2MB	512MB	15.0" XGA	40GB 5400	DVD±RW	11b/g	Modem	Xpress 200M	No	XP Home	1-yr	Apr 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty

Positioning Processor	Mainstream performance and features; two-spindle system Intel® Celeron M Processor 370 (1.5GHz) or 380 (1.6GHz) with 400MHz system bus or Intel® Pentium M Processor 730, 740, 750, or 760 with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus <i>Celeron M: 1MB; Pentium M: 2MB; All: on die (at processor speed) / ECC</i>										SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◆ Disk-to-Disk Recovery Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ◆ Disk-to-Disk Recovery Preloaded (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • PC-Doctor™ • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo) • InterVideo WinDVD (combo) License - CD not included (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)			
L2 cache Memory	256MB or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / single channel / two 200-pin SO-DIMM sockets / std memory in 1 socket / one socket available													
Diskette drive CD Combo DVD±RW Ultrabay Enhanced Disk	None standard / use optional USB-based diskette drive <i>Some: CD-ROM / 24X-10X⁹ speed / fixed, not removable / 12.7mm high</i> <i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / fixed, not removable / 12.7mm</i> <i>Some: DVD and CD burner / Multi-Burner Plus / fixed, not removable / 12.7mm high</i> None / no support for removable Ultrabay™ options 40GB⁸ (4200 or 5400 rpm) or 60GB (5400 rpm), 9.5mm high / EIDE / removable and upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber													
Display	<i>Some: 14.1"</i> (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some: 15.0"</i> (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits													
Graphics	ATI® RADEON® Xpress 200M / integrated graphics / in memory controller (RC410MD) / uses main memory (32MB up to 511MB main memory; 64MB over 511MB)													
Keyboard TrackPoint™ ThinkLight™	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys) TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , (no touch pad) Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.3-1.4"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.4-1.5"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.2 lb (2.8kg); 15.0" models: 6.7 lb (3.0kg) <i>Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic</i>													
Weight ² Case material Battery - type Battery - life ¹⁰	Lithium Ion 6-cell / 2.4Ah / intelligent / supports optional 9-cell battery <i>6-cell Celeron models: up to 2.2 hr; 6-cell Pentium models: up to 3.5 hr; optional 9-cell Celeron models: up to 3.2 hr; optional 9-cell Pentium models: up to 5.0 hr</i>													
Architecture	ATI RC410MD chipset (integrated graphics, PCI Express x1 for ethernet and ExpressCard) / ATI SB400 southbridge (ATA-100 EIDE, PCI bus, USB, Low Pin Count [LPC] interface) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1510 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87392 Super I/O for parallel)										ThinkPad notebooks implement ThinkVantage™ technologies and design; thinkpad.com/thinkvantage			
Docking station PC Card Std slot ExpressCard slot Ports	No port replicator or docking station support One Type I or Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door Two USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial or infrared port										Universal 72 watt AC adapter PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant RoHS - compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Wireless antenna Mini PCI 11b/g ³² CDC Modem Ethernet Audio support	UltraConnect™ Antenna built into the display cover (models with 802.11 wireless) One Mini PCI slot (Communications Bay) / not customer upgradable / ThinkPad 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset One Communications Daughter Card (CDC) socket (used by modem) / not accessible 56K® V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset 10/100 ethernet on systemboard / Broadcom® BCM5751F (MAC/PHY) / PCIe x1 AC97 controller / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166 ThinkPlus 2-year LOR 9x5 NBD 41C9167 ThinkPlus 3-year LOR 9x5 NBD 41C9168 ThinkPlus 4-year LOR 9x5 NBD 41C9171 ThinkPlus 5-year LOR 9x5 NBD 41C9173			
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery courier service													
256MB PC2-4200 DDR2 NP CL4 SOD 512MB PC2-4200 DDR2 NP CL4 SOD 1GB PC2-4200 DDR2 NP CL4 SOD USB Portable Diskette Drive USB 2.0 Memory Key 1GB 100GB Hard Disk 9.5mm PATA (5400 rpm) ThinkVision® L201p 20.1" Monitor (black) ThinkPad Convertible Monitor Stand	73P3840 73P3842 73P3844 05K9276 40Y7421 40Y8716 9320HB1 40Y7620		ThinkPad T40/R50 Li-Ion Battery 6-cell 92P1101 ThinkPad T40/R50 Li-Ion Battery 9-cell 92P1102 ThinkPad Multiple Battery Charger II 22P9040 Verizon Wireless V620 WWAN PC Card ²⁵ 40Y9137 72W Slim AC/DC Combo Adapter 73P4485 ThinkPad Carrying Case - BackPack 73P3599 ThinkPad Carrying Case - Organizer 73P3598 Other options at lenovo.com/options				ThinkPlus 2-year P&L P/U Depot 41C9169 ThinkPlus 3-year P&L P/U Depot 41C9170 ThinkPlus 4-year P&L P/U Depot 41C9172 ThinkPlus 5-year P&L P/U Depot 41C9174							

See footnotes for important warranty information
US models announced January 10, March 21, or April 4, 2006
US models withdrawn effective October 2006

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(KD6-5) October 2006

ThinkPad® R51 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory GB	Screen	Graphics controller	Disk GB ^B	Optical	Mini PCI Comm Bay wireless	Ethernet on planar	IEEE 1394 port	Security chip	Workhorse (W) Global (G) Preload Entry (E)	Avail date	
1830-ADU	Pentium® M	1.6	256MB	14.1" XGA	7500	40GB	Combo	*Intel 11b/g ³²	Modem	Gigabit	1394	Yes	XP Pro W	Apr 2004
1830-AKU	Pentium M	1.6	512MB	14.1" XGA	7500	40HS	Combo	11a/b/g Wi-Fi ³²	Modem	Gigabit	1394	Yes	XP Pro	Apr 2004
1830-ALU	Pentium M	1.6	256MB	14.1" XGA	7500	40GB	Combo	11b/g ³²	Modem	Gigabit	1394	Yes	XP Pro W	Apr 2004
1830-BLU	Pentium M	1.6	256MB	15.0" XGA	7500	40GB	Combo	*Intel 11b Wi-Fi ³²	Modem	Gigabit	1394	Yes	XP Pro W G	Apr 2004
1830-BQU	Pentium M	1.6	256MB	15.0" SXGA+	9000	40GB	Combo	*Intel 11b/g	Modem	Gigabit	1394	Yes	XP Pro W	Apr 2004
1830-BVU	Pentium M	1.6	256MB	15.0" XGA	7500	40GB	Combo	11b/g	Modem	Gigabit	1394	Yes	XP Pro W	Apr 2004

1830 models have a 3-year limited warranty (other 1829/1836 ThinkPad R51 systems have a 1-year limited warranty)

Positioning	Mainstream performance and features; two-spindle system										SOFTWARE¹⁴		
Processor	Intel® Pentium® M Processor 1.6GHz with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										Windows XP Professional		
L2 cache	1MB / on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰		
Memory	256 or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										◇ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded		
Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced										• Access Program		
Ultrabay Enhanced	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7 mm high										• Access Connections™		
Disk	40GB ⁸ (4200 rpm) or 40GB (HS 5400 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™										• Rescue and Recovery™		
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology										• RecordNOW and Drive Letter Access powered by Sonic products (combo models)		
Graphics	Some: ATI® MOBILITY™ RADEON™ 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM) Some: ATI MOBILITY RADEON 9000 / AGP 4X / 32MB DDR1 (DDR-SDRAM)										• Norton AntiVirus (OEM edition)		
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										• PC-Doctor™		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										• ThinkPad Utilities		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• Adobe® Reader		
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										• Update Connector™ ¹⁵		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										Downloadable		
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: ADU/AKU/ALU: 6.0 lb (2.7kg); BLU/BQU/BVU: 6.6 lb (3.0kg)										• IBM Director Agent		
Weight ²	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										• Software Delivery Assistant		
Case material	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										• System Migration Assistant		
Battery - type	Model BQU with SXGA+: up to 4.0 hr; Others: up to 4.7 hr; Optional 9-cell: up to 6.9 hr										• Client Security Software (for security chip)		
Battery - life ¹⁰											License (CD not included)		
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for parallel, infrared, [docking-based ports])										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door												
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port												
Video out	S-video out port (TV out) / one 4-pin industry standard connector										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage		
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network)		
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										PC 2001 and PXE 2.0-compliant		
11b Wi-Fi ³²	Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intel PRO/Wireless 2100, Intel 82531 chipset										ACPI 1.0b and 2.0-compliant		
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										CIM and DMI 2.0-compliant		
11b/g ³²	Some: 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset										ENERGY STAR®-compliant		
11a/b/g Wi-Fi ³²	Some: 11a/b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5001X+ chipset										ImageUltra™ Services available		
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										International Warranty Service ¹⁷		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)		
Bluetooth	None standard												
Ethernet	Gigabit Ethernet on planar / Intel 82540EP chipset (MAC/PHY) / Wake on LAN®												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0 ³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant												
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail										ThinkPlus™. 22 2-year LOR 9x5 NBD 41C9175		
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus 3-year LOR 9x5 NBD	41C9176								
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	ThinkPlus 4-year LOR 9x5 NBD	41C9177								
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ThinkPlus 5-year LOR 9x5 NBD	41C9179								
Second HDD Adapter for Ultrabay Slim	41U3148	11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 4-year P&L P/U Depot	41C9180								
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	72W Slim AC/DC Combo Adapter	73P4485	Post-warranty annual maintenance agreements at									
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	ThinkPad Port Replicator II	74P6733	lenovo.com/thinkplus/warranty									
USB Portable Diskette Drive	05K9276	ThinkPad Mini Dock	287810U										
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkPad Dock II	287710U										
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad Convertible Monitor Stand	40Y7620										
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	ThinkVision® C400 Wireless Projector	0039W1										
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkVision L201p 20.1" Monitor (black)	9220HB1										
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	Lenovo Laser Mouse (USB, PS/2)	41U3074										
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	Other options at lenovo.com/options											

See footnotes for important warranty information

* Powered by Intel Centrino® mobile technology

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US models announced April 6, 2004

(R51) February 2007

US models withdrawn effective January 2005 or February 2007

ThinkPad® R51 (July 2004) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Ethernet on planar	IEEE 1394 port	Security chip	Workhorse (W) Global (G) Avail
1830-G7U	Pentium® M 725	1.6	256MB	14.1" XGA	7500	40GB	Combo	* Intel 11b/g ³²	Modem	Gigabit	1394	Yes	XP Pro No Jul 04
1830-H3U	Pentium M 725	1.6	256MB	15.0" XGA	7500	40GB	Combo	* Intel 11b/g	Modem	Gigabit	1394	Yes	XP Pro No Jul 04
1830-8MU	Pentium M 735	1.7	256MB	14.1" XGA	7500	40GB	Combo	* Intel 11b/g	Modem	Gigabit	1394	Yes	XP Pro W G Sep 04
1830-8TU	Pentium M 735	1.7	512MB	14.1" XGA	7500	40GB	Combo	* Intel 11b/g	Modem	Gigabit	1394	Yes	XP Pro W Sep 04
1830-9TU	Pentium M 735	1.7	512MB	15.0" SXGA+	9000	40GB	Combo	* Intel 11b/g	Modem	Gigabit	1394	Yes	XP Pro W Sep 04
1830-PVU	Pentium M 735	1.7	256MB	15.0" XGA	7500	40GB	Combo	* Intel 11b/g	Modem	Gigabit	1394	Yes	XP Pro W G Sep 04
1830-F4U	Pentium M 735	1.7	512MB	15.0" XGA	7500	40GB	Combo	* Intel 11b/g	Modem	Gigabit	1394	Yes	XP Pro W Sep 04

1830 models have a 3-year limited warranty (other 1829/1836 ThinkPad R51 systems have a 1-year limited warranty)

Positioning Processor	Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 725 (1.6GHz) or 735 (1.7GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										SOFTWARE¹⁴		
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional		
Memory	256 or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ ♦ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded		
Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced										• Access Program		
Ultrabay Enhanced	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7 mm high										• Access Connections™		
Disk	40GB (4200 rpm) or 40GB (HS 5400 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™										• Rescue and Recovery™		
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										• Norton AntiVirus (OEM edition)		
Graphics	<i>Some:</i> ATI® MOBILITY™ RADEON™ 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM) <i>Some:</i> ATI MOBILITY RADEON 9000 / AGP 4X / 32MB DDR1 (DDR-SDRAM)										• PC-Doctor™		
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										• ThinkPad Utilities		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										• Adobe Reader		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• Update Connector™ ¹⁵		
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										• RecordNOW and Drive Letter Access powered by Sonic products (combo models)		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• InterVideo WinDVD (combo)		
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery; 14.1" models: 6.0 lb (2.7kg); 15.0" models: 6.6 lb (3.0kg)										Downloadable		
Weight ²											• IBM Director Agent		
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										• Software Delivery Assistant		
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										• System Migration Assistant		
Battery - life ¹⁰	Model with SXGA+: up to 3.7 hr; Others: up to 4.0 hr; Optional 9-cell: up to 6.2 hr										• Client Security Software (for security chip)		
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for parallel, infrared, [docking-based ports])										License (CD not included)		
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port												
Video out	S-video out port (TV out) / one 4-pin industry standard connector												
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage		
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset												
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible												
Modem	56K ⁵ V.90 (V.92-designed ²⁵) modem in CDC / Conexant® chipset												
Bluetooth	None standard												
Ethernet	Gigabit Ethernet on planar / Intel 82540EP chipset (MAC/PHY) / Wake on LAN®												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										Universal 72-watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network)		
Security	Power-on password / hard disk password / supervisor password / security keyhole										PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant ImageUltra™ Services available International Warranty Service ¹⁷		
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)		
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail												
256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101										
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102										
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190										
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Multiple Battery Charger II	22P9040										
DVD-ROM Ultrabay Enhanced Drive	39X2642	Kensington® MicroSaver® Security Cable	73P2582										
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	ThinkPad Monitor Stand	22P5265										
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	ThinkPad Convertible Monitor Stand	40Y7620										
USB Portable Diskette Drive	05K9276	11a/b/g Wireless Mini PCI Adapter II	73P4301										
USB Fingerprint Reader	41U3167	72W Slim AC/DC Combo Adapter	73P4485										
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Port Replicator II	74P6733										
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkPad Mini Dock	287810U										
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad Dock II	287710U										
Enh Perf Wireless Keyboard and Mouse	73P4067	SonyEricsson® GC83 EDGE PC Card	26K3393										
USB Travel Keyboard with UltraNav	31P9490	Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137										
Preferred Pro USB Fingerprint Keyboard	73P4730	Lenovo M500 Projector	0037A05										
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Carrying Case - Organizer	73P3598										
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Carrying Case - Expander	73P3597										
ThinkVision® L201p 20.1" Monitor (black)	9220HB1	Other options at lenovo.com/options											

See footnotes for important warranty information
US models announced July 13 or September 14, 2004
US models withdrawn effective March 2005 or February 2007

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ThinkPad® R51 (1830) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Ethernet planar	Secu- rity chip	Preload	Workhorse (W) Limited warranty ¹²	Global (G) Education	Avail date
1830-AHU	Pentium® M	1.5	512MB	14.1" XGA	40GB	Combo	*Intel 11b/g ³²	Modem	Gigabit	Yes	XP Pro	EasyServ	Educ	Apr 04
1830-AJU	Pentium M	1.5	512MB	14.1" XGA	60GB	DVD-RW	*Intel 11b/g	Modem	Gigabit	Yes	XP Pro	EasyServ	Educ	Apr 04
1830-BTU	Pentium M	1.5	512MB	15.0" XGA	40GB	Combo	*Intel 11b/g	Modem	Gigabit	Yes	XP Pro	EasyServ	Educ	Apr 04
1830-BUU	Pentium M	1.5	512MB	15.0" SXGA+	60GB	Combo	*Intel 11b/g	Modem	Gigabit	Yes	XP Pro	EasyServ	Educ	Apr 04
1830-8KU	Pentium M 725	1.6	512MB	14.1" XGA	40GB	Combo	*Intel 11b/g	Modem	Gigabit	Yes	XP Pro	EasyServ	Educ	Sep 04
1830-8LU	Pentium M 725	1.6	512MB	14.1" XGA	60GB	DVD±RW	*Intel 11b/g	Modem	Gigabit	Yes	XP Pro	EasyServ	Educ	Sep 04
1830-PUU	Pentium M 725	1.6	512MB	15.0" XGA	40GB	Combo	*Intel 11b/g	Modem	Gigabit	Yes	XP Pro	EasyServ	Educ	Sep 04
1830-9QU	Pentium M 725	1.6	512MB	15.0" SXGA+	60GB	Combo	*Intel 11b/g	Modem	Gigabit	Yes	XP Pro	EasyServ	Educ	Sep 04

• The 1830 has an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty

Positioning Processor	Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 1.5GHz or Intel Pentium M Processor 725 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus											SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ ♦ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™ • Access Program • Access Connections™ • Rescue and Recovery™ • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • Update Connector™ ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD-RW, DVD±RW) • InterVideo WinDVD (combo, DVD-RW, DVD±RW) • InterVideo WinDVD Creator (DVD-RW, DVD±RW) • Simple Backup (DVD-RW, DVD±RW) Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network) PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378) ThinkPlus™ options at lenovo.com/thinkplus/warranty		
L2 cache	1.5GHz: 1MB ; 1.6GHz: 2MB ; All: on die (at processor speed) / ECC													
Memory	512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available													
Diskette drive	None standard / use optional USB-based diskette drive													
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced													
DVD-RW	Some: CD-RW/DVD-RW Multi-Burner / removable from Ultrabay Enhanced													
DVD±RW	Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced													
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7 mm high 40GB⁹ or 60GB , 4200 rpm, 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)													
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using in plane switching (IPS) technology													
Graphics	ATI® MOBILITY™ RADEON™ 9000 / AGP 4X / 32MB DDR1 (DDR-SDRAM)													
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B													
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.0 lb (2.7kg); 15.0" models: 6.6 lb (3.0kg)													
Weight ²	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic													
Case material	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced													
Battery - type	Models with SXGA+: up to 3.7 hr; Others: up to 4.0 hr; <i>Optional 9-cell: up to 6.2 hr</i>													
Battery - life ¹⁰														
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for parallel, infrared, [docking-based ports]) One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port													
PC Card Std slots														
Ports														
Video out	S-video out port (TV out) / one 4-pin industry standard connector													
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard													
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable													
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset													
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Bluetooth	None standard													
Ethernet	Gigabit Ethernet on planar / Intel 82540EP chipset (MAC/PHY) / Wake on LAN®													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant													
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101											
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102											
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190											
Second HDD Adapter for Ultrabay Slim	41U3148	11a/b/g Wireless Mini PCI Adapter II	73P4301											
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	72W Slim AC/DC Combo Adapter	73P4485											
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	Kensington® MicroSaver® Security Cable	73P2582											
USB Portable Diskette Drive	05K9276	ThinkPad Port Replicator II	74P6733											
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkPad Mini Dock	287810U											
40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816	ThinkPad Dock II	287710U											
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Convertible Monitor Stand	40Y7620											
Lenovo D221 Wide 22" Monitor (black)	6622HB1	Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137											
ThinkVision® L201p 20.1" Monitor (black)	9220HB1	Other options at lenovo.com/options												
See footnotes for important warranty information US models announced April 6 or September 14, 2004 US models withdrawn effective November 2005 or February 2007														

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(R51E) February 2007

ThinkPad® R51 (1831) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Ethernet on planar	Security chip	Preload	Workhorse (W) Limited Global (G) Education	Avail date
1831-AHU	Pentium® M	1.5	512MB	14.1" XGA	40GB	Combo	* Intel 11b/g ³²	Modem	Gigabit	Yes	XP Pro	Onsite Educ	Apr 2004
1831-AJU	Pentium M	1.5	512MB	14.1" XGA	60GB	DVD-RW	* Intel 11b/g	Modem	Gigabit	Yes	XP Pro	Onsite Educ	Apr 2004
1831-BTU	Pentium M	1.5	512MB	15.0" XGA	40GB	Combo	* Intel 11b/g	Modem	Gigabit	Yes	XP Pro	Onsite Educ	Apr 2004
1831-BUU	Pentium M	1.5	512MB	15.0" SXGA+	60GB	Combo	* Intel 11b/g	Modem	Gigabit	Yes	XP Pro	Onsite Educ	Apr 2004
1831-8KU	Pentium M 725	1.6	512MB	14.1" XGA	40GB	Combo	* Intel 11b/g	Modem	Gigabit	Yes	XP Pro	Onsite Educ	Sep 2004
1831-8LU	Pentium M 725	1.6	512MB	14.1" XGA	60GB	DVD±RW	* Intel 11b/g	Modem	Gigabit	Yes	XP Pro	Onsite Educ	Sep 2004
1831-PUU	Pentium M 725	1.6	512MB	15.0" XGA	40GB	Combo	* Intel 11b/g	Modem	Gigabit	Yes	XP Pro	Onsite Educ	Sep 2004
1831-9QU	Pentium M 725	1.6	512MB	15.0" SXGA+	60GB	Combo	* Intel 11b/g	Modem	Gigabit	Yes	XP Pro	Onsite Educ	Sep 2004

• The 1831 has a limited onsite service²⁴ 3-year limited warranty

Positioning Processor	Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 1.5GHz or Intel Pentium M Processor 725 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ ♦ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™ • Access Program • Access Connections™ • Rescue and Recovery™ • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • Update Connector™ ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD-RW, DVD±RW) • InterVideo WinDVD (combo, DVD-RW, DVD±RW) • InterVideo WinDVD Creator (DVD-RW, DVD±RW) • Simple Backup (DVD-RW, DVD±RW) Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip) License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network) PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free hardware support during the warranty ¹² via 800-IBM-SERV (426-7378) Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty These educational models of the ThinkPad notebook are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers. This model for education is for sale direct from Lenovo or through an Authorized Education Reseller. The model or models for education are not available for resale to any other organization or individual.
L2 cache	1.5GHz: 1MB ; 1.6GHz: 2MB ; All: on die (at processor speed) / ECC										
Memory	512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										
Diskette drive	None standard / use optional USB-based diskette drive										
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced										
DVD-RW	Some: CD-RW/DVD-RW Multi-Burner / removable from Ultrabay Enhanced										
DVD±RW	Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced										
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7 mm high 40GB⁹ or 60GB , 4200 rpm, 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)										
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology										
Graphics	ATI® MOBILITY™ RADEON™ 9000 / AGP 4X / 32MB DDR1 (DDR-SDRAM)										
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm										
Weight ²	with optical drive and battery: 14.1" models: 6.0 lb (2.7kg); 15.0" models: 6.6 lb (3.0kg)										
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										
Battery - life ¹⁰	Models with SXGA+: up to 3.7 hr; Others: up to 4.0 hr; Optional 9-cell: up to 6.2 hr										
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for parallel, infrared, [docking-based ports])										
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door										
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port										
Video out	S-video out port (TV out) / one 4-pin industry standard connector										
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard										
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										
Modem	56K ⁵ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										
Bluetooth	None standard										
Ethernet	Gigabit Ethernet on planar / Intel 82540EP chipset (MAC/PHY) / Wake on LAN®										
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										
Security	Power-on password / hard disk password / supervisor password / security keyhole										
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant										
Limited warranty ¹²	3-year/1-year battery, limited onsite service , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time ²⁴										
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101								
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102								
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190								
Second HDD Adapter for Ultrabay Slim	41U3148	11a/b/g Wireless Mini PCI Adapter II	73P4301								
DVD-ROM Ultrabay Enhanced Drive	39X2642	72W Slim AC/DC Combo Adapter	73P4485								
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	Lenovo M500 Projector	0037A05								
USB Portable Diskette Drive	05K9276	ThinkPad Port Replicator II	74P6733								
USB Fingerprint Reader	41U3167	ThinkPad Mini Dock	287810U								
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkPad Dock II	287710U								
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Convertible Monitor Stand	40Y7620								
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137								
ThinkVision® L201p 20.1" Monitor (black)	9220HB1	Other options at lenovo.com/options									

See footnotes for important warranty information
US models announced April 6 or September 14, 2004
US models withdrawn effective February 2007

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ThinkPad® R51 (1836) - TopSeller (September 2004) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ³	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	Ethernet on planar	IEEE 1394 port	Security chip	Workhorse (W) Global (G) Entry (E)	Avail date
1836-Q2U	Pentium® M 725	1.6	256MB	14.1" XGA	7500	40GB	Combo	* Intel 11b/g ³²	Modem	10/100		Yes	No	Sep 2004
1836-Q3U	Pentium M 725	1.6	256MB	14.1" XGA	7500	60GB	DVD±RW	11a/b/g II ³²	Modem	Gigabit	1394	Yes	No	Sep 2004
1836-Q4U	Pentium M 725	1.6	256MB	15.0" XGA	7500	40GB	Combo	* Intel 11b/g	Modem	10/100		Yes	No	Sep 2004
1836-Q5U	Pentium M 725	1.6	256MB	15.0" SXGA+	7500	40GB	Combo	* Intel 11b/g	Modem	Gigabit	1394	Yes	No	Sep 2004
1836-Q6U	Pentium M 735	1.7	256MB	15.0" SXGA+	9000	60GB	Combo	* Intel 11b/g	Modem	Gigabit	1394	Yes	No	Sep 2004
1836-Q7U	Pentium M 735	1.7	512MB	15.0" SXGA+	9000	80GB	DVD±RW	11a/b/g II	Mod/Blue	Gigabit	1394	Yes	No	Sep 2004
These small and medium business (SMB) models are part of the US TopSeller™ Program														
Positioning	Mainstream performance and features; two-spindle system										SOFTWARE¹⁴			
Processor	Intel® Pentium® M Processor 725 (1.6GHz) or 735 (1.7GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										Windows XP Professional			
L2 cache	2MB / on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰			
Memory	256 or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										♦ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
Combo DVD±RW	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance										• Access Program			
Ultrabay Enhanced Disk	Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced										• Access Connections™			
	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7 mm high										• Rescue and Recovery™			
	40GB ⁸ (4200 rpm), 60GB (4200 rpm), or 80GB (4200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' /										• Norton AntiVirus (OEM edition)			
	Hard Disk Drive Shock Absorber / Active Protection System™										• PC-Doctor™			
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• ThinkPad Utilities			
	Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										• Adobe® Reader			
	Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits / FlexView display with wide viewing angle and high density using IPS technology										• Update Connector™ ¹⁵			
Graphics	Some: ATI® MOBILITY™ RADEON™ 7500 / AGP 4X / 32MB DDR1 (DDR-SDRAM)										• RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW)			
	Some: ATIMOBILITY RADEON 9000 / AGP 4X / 32MB DDR1 (DDR-SDRAM)										• InterVideo WinDVD (combo, DVD±RW)			
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										• InterVideo WinDVD Creator (DVD±RW)			
Keyboard	87-key / Accs IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										• Simple Backup (DVD±RW)			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										Downloadable			
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										• IBM Director Agent			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Software Delivery Assistant			
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm										• System Migration Assistant			
	15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm										• Client Security Software (for security chip)			
Weight ²	with optical drive and battery: 14.1" models: 6.0 lb (2.7kg); 15.0" models: 6.6 lb (3.0kg)										License (CD not included)			
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced													
Battery - life ¹⁰	Models with SXGA+: up to 3.7 hr; Others: up to 4.0 hr; Optional 9-cell: up to 6.2 hr													
Architecture	Intel 855PM chipset / 82855PM Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB, [Bluetooth]) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4520A CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for parallel, infrared, [docking-based ports])										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage			
PC Card Std slots	One Type I, or one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door										Universal 72 watt AC adapter			
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port										Asset ID™ ³⁴ (system-specific info in chip accessed over network)			
Video out	S-video out port (TV out) / one 4-pin industry standard connector										PC 2001 and PXE 2.0-compliant			
IEEE 1394	Some: IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard										ACPI 1.0b and 2.0-compliant			
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										CIM and DMI 2.0-compliant			
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										ENERGY STAR®-compliant			
	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										ImageUltra™ Services available			
	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros™ AR5004X chip										International Warranty Service ¹⁷			
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Bluetooth	Some: Bluetooth wireless technology / in CDC (with modem)													
Ethernet	Some: 10/100 ethernet on planar / Intel 82562EZ chipset (physical layer) / Wake on LAN®													
	Some: Gigabit Ethernet on planar / Intel 82540EP chipset (MAC/PHY) / Wake on LAN													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166			
Security	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus 2-year LOR 9x5 NBD 41C9167			
Security chip	Embedded Security Subsystem 2.0 ³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant										ThinkPlus 3-year LOR 9x5 NBD 41C9168			
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available										ThinkPlus 4-year LOR 9x5 NBD 41C9171			
											ThinkPlus 5-year LOR 9x5 NBD 41C9173			
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830			ThinkPad T40/R50 Li-Ion Battery 6-cell			92P1101							
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832			ThinkPad T40/R50 Li-Ion Battery 9-cell			92P1102			ThinkPlus 2-year P&L P/U Depot 41C9169				
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834			Ultrabay Slim Li-Polymer Battery 3-cell			08K8190							
Second HDD Adapter for Ultrabay Slim	41U3148			11a/b/g Wireless Mini PCI Adapter II			73P4301			ThinkPlus 3-year P&L P/U Depot 41C9170				
CD-RW/DVD Combo Ultrabay Enhanced	73P3275			72W Slim AC/DC Combo Adapter			73P4485							
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624			ThinkPad Port Replicator II			74P6733			ThinkPlus 4-year P&L P/U Depot 41C9172				
USB Portable Diskette Drive	05K9276			ThinkPad Mini Dock			287810U							
USB 2.0 Super Multi-Burner Drive	41N5565			ThinkPad Dock II			287710U			ThinkPlus 5-year P&L P/U Depot 41C9174				
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273			ThinkPad Carrying Case - Organizer			73P3598							
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716			ThinkPad Convertible Monitor Stand			40Y7620			Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Lenovo D221 Wide 22" Monitor (black)	6622HB1			Verizon Wireless V620 WWAN PC Card ²⁵			40Y9137							
ThinkVision® L201p 20.1" Monitor (black)	9220HB1			Other options at lenovo.com/options										

See footnotes for important warranty information
US models announced September 14, 2004
US models withdrawn effective February 2007

* Powered by Intel Centrino® mobile technology

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ThinkPad® R51 (2887) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Disk GB ³	Optical	Mini PCI Comm Bay wireless	Integrated graphics	Ethernet IEEE 1394 port	Secu- rity chip	Limited warranty ¹²	Workhorse (W) Global (G) Avail Entry (E) date	
2887-45U	Celeron® M	1.3	128MB	14.1" XGA	20GB	CD	Open; wireless upg ³⁶	Extreme™ 2	10/100	No	Yes	XP Home 1-yr	Apr 04
2887-67U	Celeron M	1.3	128MB	15.0" XGA	20GB	CD	Open; wireless upg	Extreme 2	10/100	No	Yes	XP Home 1-yr	Apr 04
2887-EXU	Celeron M 330	1.4	256MB	14.1" XGA	30GB	CD	Open; wireless upg	Extreme 2	10/100	No	Yes	XP Home 1-yr	Dec 04
2887-GWU	Celeron M 330	1.4	256MB	15.0" XGA	30GB	CD	Open; wireless upg	Extreme 2	10/100	No	Yes	XP Home 1-yr	Dec 04
2887-E3U	Celeron M 340	1.5	256MB	14.1" XGA	30GB	CD	Open; wireless upg	Extreme 2	10/100	No	Yes	XP Home 1-yr	Sep 04
2887-GAU	Celeron M 340	1.5	256MB	15.0" XGA	30GB	CD	Open; wireless upg	Extreme 2	10/100	No	Yes	XP Home 1-yr	Sep 04
2887-2KU	Pentium® M	1.5	128MB	14.1" XGA	20GB	CD	* Intel 11b/g ³²	Extreme 2	10/100	No	Yes	XP Home 1-yr	E Apr 04
2887-2LU	Pentium M	1.5	128MB	15.0" XGA	20GB	CD	* Intel 11b/g	Extreme 2	10/100	No	Yes	XP Home 1-yr	E Apr 04
2887-8PU	Pentium M 715	1.5	128MB	14.1" XGA	30GB	CD	* Intel 11b/g	Extreme 2	10/100	No	Yes	XP Home 1-yr	E July 04
2887-P2U	Pentium M 710	1.4	256MB	15.0" XGA	40GB	Combo	* Intel 11b/g	Extreme 2	10/100	No	Yes	XP Pro 1-yr	Nov 04
2887-P3U	Pentium M 710	1.4	256MB	15.0" XGA	40GB	Combo	* Intel 11b/g	Extreme 2	Gigabit	Yes	Yes	XP Pro 1-yr	Nov 04
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Celeron M Processor 1.3GHz or 330 (1.4GHz), 340 (1.5GHz) with 400MHz bus or Intel Pentium M Processor 1.5GHz or Intel Pentium M Processor 710 (1.4GHz) or 715 (1.5GHz) with Enhanced Intel SpeedStep™ technology¹ and 400MHz system bus Celeron M: 512KB; Pentium M: 1MB; Pentium M 710/715: 2 MB; All: ECC										SOFTWARE¹⁴		
L2 cache Memory	128 or 256MB std / 2GB max⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket avail										- Microsoft® Windows® XP Home Edition ²⁰ ♦ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive CD Combo Ultrabay Enhanced Disk	None standard / use optional USB-based diskette drive <i>Some:</i> CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay Enhanced <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7 mm high 20GB⁸, 30GB, or 40GB (4200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™										- Microsoft Windows XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery (in hidden protected area)		
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										Preloaded (all) • Access Program • Access Connections™ • Rescue and Recovery™ • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • Update Connector™ ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo)		
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 250MHz										Downloadable (all) • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip)		
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Keyboard TrackPoint® Touch pad ThinkLight™	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys) TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage		
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.0 lb (2.7kg); 15.0" models: 6.6 lb (3.0kg)										Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network) PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant ImageUltra™ Services available International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)		
Weight ² Case material Battery - type Battery - life ¹⁰	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced <i>Celeron M models:</i> up to 3.5 hr; <i>Pentium M models:</i> up to 4.0 hr; <i>Optional High Capacity 9-cell:</i> up to 6.0 hr										ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166		
Architecture	Intel 855GME chipset / 82855GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4510 CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for parallel, infrared, [docking-based ports])										ThinkPlus 3-year LOR 9x5 NBD 41C9168		
PC Card Std slots Ports	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port										ThinkPlus 5-year LOR 9x5 NBD 41C9173		
Video out IEEE 1394 Wireless antenna Mini PCI Wireless upg ³⁶ Intel 11b/g ³² CDC Modem Ethernet	S-video out port (TV out) / one 4-pin industry standard connector <i>Some:</i> IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard UltraConnect™ Antenna built into the display cover for optimal wireless signal reception One Mini PCI type III slot (Communications Bay) / customer upgradable <i>Some:</i> wireless upgradable with wireless Mini PCI options <i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset One Communications Daughter Card (CDC) socket (used by modem) / not accessible 56K ⁵ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset <i>Some:</i> 10/100 ethernet on planar / Intel 82562EZ chipset (physical layer) / Wake on LAN® <i>Some:</i> Gigabit Ethernet on planar / Intel 82540EP chipset (MAC/PHY) / Wake on LAN Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus 3-year P&L P/U Depot 41C9170		
Audio support	Super Multi-Burner Ultrabay Enh Drv (curved) 40Y8624 USB 2.0 CD-RW/DVD-ROM Combo II Drive 40Y8637 80GB HS Hard Disk 9.5mm (5400 rpm) 09N4273 Verizon Wireless V620 WWAN PC Card ²⁵ 40Y9137 ThinkVision® L201p 20.1" Monitor (black) 9220HB1										ThinkPlus 5-year P&L P/U Depot 41C9174		
Security Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades²² available												
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830			ThinkPad T40/R50 Li-Ion Battery 6-cell			92P1101			ThinkPlus 5-year LOR 9x5 NBD			
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832			ThinkPad T40/R50 Li-Ion Battery 9-cell			92P1102			41C9173			
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834			Ultrabay Slim Li-Polymer Battery 3-cell			08K8190			ThinkPlus 3-year P&L P/U Depot			
Second HDD Adapter for Ultrabay Slim	41U3148			ThinkPad Multiple Battery Charger II			22P9040			41C9170			
ThinkPad DVD-ROM Ultrabay Slim Drive	73P3270			11a/b/g Wireless Mini PCI Adapter II			73P4301			ThinkPlus 4-year P&L P/U Depot			
CD-RW/DVD Combo Ultrabay Enhanced	73P3275			ThinkPad Port Replicator II			74P6733			41C9172			
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624			ThinkPad Mini Dock			287810U			ThinkPlus 5-year P&L P/U Depot			
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637			ThinkPad Dock II			287710U			41C9174			
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273			ThinkPad Convertible Monitor Stand			40Y7620			Post-warranty annual maintenance agreements at			
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137			Verizon Wireless V620 WWAN PC Card ²⁵			40Y9137			at lenovo.com/thinkplus/warranty			
ThinkVision® L201p 20.1" Monitor (black)	9220HB1			Other options at lenovo.com/options									

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced on April 6, July 13, September 14, November 30, or December 21, 2004
US models withdrawn effective January 2005, March 2005, or February 2007

ThinkPad® R51 (2888) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	Ethernet CDC modem planar	IEEE 1394 port	Security chip	Limited warranty ¹² Preload	Workhorse (W) Global (G) Entry (E)	Avail date	
2888-4AU	Pentium® M	1.6	256MB	14.1" XGA	30GB	CD	*Intel 11b/g ³²	Mod 10/100	No	Yes	XP Pro	3-yr	W	Apr 2004
2888-47U	Pentium M	1.5	256MB	14.1" XGA	20GB	DVD	Open; wireless upg ³⁶	Mod 10/100	No	Yes	XP Pro	3-yr	W G	Apr 2004
2888-5RU	Pentium M	1.6	256MB	14.1" XGA	40GB	Combo	*Intel 11b/g	Mod Gigabit	Yes	Yes	XP Pro	3-yr	W	Apr 2004
2888-4BU	Pentium M	1.6	256MB	14.1" XGA	30GB	DVD	11b/g ³²	Mod 10/100	No	Yes	XP Pro	3-yr	W	Apr 2004
2888-6AU	Pentium M	1.6	256MB	15.0" XGA	30GB	DVD	11b/g	Mod 10/100	No	Yes	XP Pro	3-yr	W	Apr 2004
2888-68U	Pentium M	1.6	256MB	15.0" XGA	30GB	CD	*Intel 11b/g	Mod 10/100	No	Yes	XP Pro	3-yr	W	Apr 2004
2888-69U	Pentium M	1.6	256MB	15.0" XGA	30GB	DVD	Open; wireless upg	Mod 10/100	No	Yes	XP Pro	3-yr	W	Apr 2004
2888-7JU	Pentium M	1.6	256MB	15.0" XGA	40GB	Combo	*Intel 11b/g	Mod Gigabit	Yes	Yes	XP Pro	3-yr	W	Apr 2004
2888-BQU	Pentium M 725	1.6	256MB	15.0" XGA	40GB	Combo	*Intel 11b/g	Mod Gigabit	Yes	Yes	XP Pro	3-yr		July 2004
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 1.5 or 1.6GHz or Intel Pentium M Processor 725 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus Pentium M 1MB; Pentium M 725: 2MB; All: on die (at processor speed) / ECC										SOFTWARE¹⁴			
L2 cache	Some: DVD-ROM / 8X-3.3X ⁹ speed / single-layer / removable from Ultrabay Enhanced										Windows XP Professional			
Memory	256MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ ♦ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
CD	Some: CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay Enhanced										• Access Connections™			
DVD	Some: DVD-ROM / 8X-3.3X ⁹ speed / single-layer / removable from Ultrabay Enhanced										• Rescue and Recovery™			
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced										• Norton AntiVirus (OEM edition)			
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7 mm high 20GB⁸, 30GB⁸, or 40GB⁸ (4200 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™										• PC-Doctor™			
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										• ThinkPad Utilities			
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 250MHz										• Adobe® Reader			
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										• Update Connector™ ¹⁵			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										• RecordNOW and Drive Letter Access powered by Sonic products (combo models)			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• InterVideo WinDVD (combo, DVD models)			
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										Downloadable			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• IBM Director Agent			
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.0 lb (2.7kg); 15.0" models: 6.6 lb (3.0kg) Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										• Software Delivery Assistant			
Weight ²	with optical drive and battery: 14.1" models: 6.0 lb (2.7kg); 15.0" models: 6.6 lb (3.0kg)										• System Migration Assistant			
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										• Client Security Software (for security chip)			
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										Licence (CD not included)			
Battery - life ¹⁰	Up to 4.7 hr; <i>Optional High Capacity 9-cell:</i> up to 6.9 hr										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Architecture	Intel 855GME chipset / 82855GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4510 CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])													
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door													
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port													
Video out	S-video out port (TV out) / one 4-pin industry standard connector										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage			
IEEE 1394	Some: IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard										Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network)			
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										PC 2001 and PXE 2.0-compliant			
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										ACPI 1.0b and 2.0-compliant			
Wireless upg ³⁶	Some: wireless upgradable with wireless Mini PCI options										CIM and DMI 2.0-compliant			
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										ENERGY STAR®-compliant			
11b/g ³²	Some: 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset										ImageUltra™ Services available			
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										International Warranty Service ¹⁷			
Modem	56K ⁹ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Bluetooth	None										ThinkPlus™ ²² 2-year LOR 9x5 NBD			
Ethernet	Some: 10/100 ethernet on planar / Intel 82562EZ chipset (physical layer) / Wake on LAN®										41C9175			
Audio support	Some: Gigabit Ethernet on planar / Intel 82540EP chipset (MAC/PHY) / Wake on LAN Soft audio / ICH AC97 controller / DirectSound™ support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										ThinkPlus 3-year LOR 9x5 NBD			
Security	Power-on password / hard disk password / supervisor password / security keyhole										41C9176			
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant										41C9177			
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades ²² avail										ThinkPlus 5-year LOR 9x5 NBD			
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101											
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102											
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190											
Second HDD Adapter for Ultrabay Slim	41U3148	11a/b/g Wireless Mini PCI Adapter II	73P4301											
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	ThinkVision® E500 Projector	0038A05											
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	72W Slim AC/DC Combo Adapter	73P4485											
USB Portable Diskette Drive	05K9276	ThinkPad Port Replicator II	74P6733											
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkPad Mini Dock	287810U											
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	ThinkPad Dock II	287710U											
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Convertible Monitor Stand	40Y7620											
ThinkPad Carrying Case - BackPack	73P3599	Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137											
ThinkVision® L201p 20.1" Monitor (black)	9220HB1	Other options at lenovo.com/options												

See footnotes for important warranty information

* Powered by Intel Centrino® mobile technology

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US models announced April 6 or July 13, 2004

(2888) February 2007

US models withdrawn effective March 2005 or February 2007

ThinkPad® R51 (2888) - September 2004 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	GHz Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	Ethernet IEEE CDC on 1394 port	Security chip	Limited Workhorse (W) warranty ¹²	Global (G) Entry (E)	Avail date
2888-P9U	Pentium® M 715a	1.5	256MB	14.1" XGA	40GB	Combo	*Intel 11b/g ³²	Mod 10/100	No	Yes XP Pro	3-yr	Jan 2005
2888-PAU	Pentium M 715a	1.5	256MB	15.0" XGA	40GB	Combo	*Intel 11b/g	Mod 10/100	No	Yes XP Pro	3-yr	Jan 2005
2888-PBU	Pentium M 715a	1.5	256MB	15.0" XGA	40GB	Combo	*Intel 11b/g	Mod Gigabit	Yes	Yes XP Pro	3-yr	Jan 2005
2888-ESU	Pentium M 735	1.7	256MB	14.1" XGA	30GB	DVD	*Intel 11b/g	Mod 10/100	No	Yes XP Pro	3-yr	W G Sep 2004
2888-ETU	Pentium M 735	1.7	256MB	14.1" XGA	30GB	CD	*Intel 11b/g	Mod 10/100	No	Yes XP Pro	3-yr	W Sep 2004
2888-EUU	Pentium M 735	1.7	256MB	14.1" XGA	30GB	DVD	Open; wireless upg ³⁶	Mod 10/100	No	Yes XP Pro	3-yr	W Sep 2004
2888-FMU	Pentium M 735	1.7	256MB	14.1" XGA	40GB	Combo	*Intel 11b/g	Mod Gigabit	Yes	Yes XP Pro	3-yr	W Sep 2004
2888-GRU	Pentium M 735	1.7	256MB	15.0" XGA	30GB	CD	*Intel 11b/g	Mod 10/100	No	Yes XP Pro	3-yr	W Sep 2004
2888-GSU	Pentium M 735	1.7	256MB	15.0" XGA	30GB	DVD	Open; wireless upg	Mod 10/100	No	Yes XP Pro	3-yr	W Sep 2004
2888-GTU	Pentium M 735	1.7	256MB	15.0" XGA	30GB	DVD	*Intel 11b/g	Mod 10/100	No	Yes XP Pro	3-yr	W Sep 2004
2888-M9U	Pentium M 735	1.7	256MB	15.0" XGA	40GB	Combo	*Intel 11b/g	Mod Gigabit	Yes	Yes XP Pro	3-yr	W Sep 2004
Positioning Processor	<i>Mainstream performance and features; two-spindle system</i>											
L2 cache	Intel® Pentium® M Processor 715 /715a (1.5GHz) or 735 (1.7GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus											
Memory	2MB / on die (at processor speed) / ECC											
Diskette drive	None standard / use optional USB-based diskette drive											
CD	<i>Some:</i> CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay Enhanced											
DVD	<i>Some:</i> DVD-ROM / 8X-3.3X ⁹ speed / single-layer / removable from Ultrabay Enhanced											
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced											
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7 mm high 30GB⁸ or 40GB (4200 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™											
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits											
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 250MHz											
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B											
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm											
Weight ²	with optical drive and battery: 14.1" models: 6.0 lb (2.7kg); 15.0" models: 6.6 lb (3.0kg)											
Case material	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic											
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced											
Battery - life ¹⁰	Up to 4.0 hr; <i>Optional High Capacity 9-cell:</i> up to 6.2 hr											
Architecture	Intel 855GME chipset / 82855GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB) / PCI bus 2.2 32-bit, 33MHz (TI® PCI14510 CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])											
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door											
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port											
Video out	S-video out port (TV out) / one 4-pin industry standard connector											
IEEE 1394	<i>Some:</i> IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard											
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											
Wireless upg ³⁶	<i>Some:</i> wireless upgradable with wireless Mini PCI options											
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset											
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible											
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset											
Bluetooth	None											
Ethernet	<i>Some:</i> 10/100 ethernet on planar / Intel 82562EZ chipset (physical layer) / Wake on LAN® <i>Some:</i> Gigabit Ethernet on planar / Intel 82540EP chipset (MAC/PHY) / Wake on LAN											
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack											
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	Embedded Security Subsystem 2.0³³ / Atmel® chip / TCG-compliant											
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail											
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus 4-year LOR 9x5 NBD	41C9175							
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	ThinkPlus 4-year LOR 9x5 NBD	41C9177							
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ThinkPlus 5-year LOR 9x5 NBD	41C9178							
Second HDD Adapter for Ultrabay Slim	41U3148	11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 4-year P&L P/U Depot	41C9179							
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	72W Slim AC/DC Combo Adapter	73P4485	ThinkPlus 5-year P&L P/U Depot	41C9180							
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	ThinkPad Port Replicator II	74P6733	Post-warranty annual maintenance agreements at								
USB Fingerprint Reader	41U3167	ThinkPad Mini Dock	287810U	lenovo.com/thinkplus/warranty								
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkPad Dock II	287710U									
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Convertible Monitor Stand	40Y7620									
ThinkPad Carrying Case - Organizer	73P3598	Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137									
ThinkVision® L201p 20.1" Monitor (black)	9220HB1	Other options at lenovo.com/options										

See footnotes for important warranty information
US models announced September 14, 2004 or January 11, 2005
US models withdrawn effective November 2005 or February 2007

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ThinkPad® R51 (2887/2888) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Integrated graphics	IEEE1394 port	Secu- rity chip	Limited warranty ¹²	Workhorse (W) Global (G) Avail Entry (E) date
2887-2RU	Celeron® M	1.3	256MB	14.1" XGA	30GB	CD	Intel 11b/g ³²	Modem	Extreme™ 2	No	Yes	1-year	XP Pro Educ Apr 04
2888-2RU	Celeron M	1.3	256MB	14.1" XGA	30GB	CD	Intel 11b/g	Modem	Extreme™ 2	No	Yes	3-year	XP Pro Educ Apr 04
2888-EVU	Celeron M 340	1.5	256MB	14.1" XGA	30GB	CD	Intel 11b/g	Modem	Extreme™ 2	No	Yes	3-year	XP Pro Educ Sep 04
2888-2WU	Pentium® M	1.5	256MB	14.1" XGA	40GB	Combo	*Intel 11b/g	Modem	Extreme™ 2	No	Yes	3-year	XP Pro Educ Apr 04
2888-EWU	Pentium M 725	1.6	256MB	14.1" XGA	40GB	Combo	*Intel 11b/g	Modem	Extreme™ 2	No	Yes	3-year	XP Pro Educ Sep 04

• **The 2887 has an EasyServ™¹⁹ onsite pickup and delivery 1-year limited warranty**

• **The 2888 has an EasyServ™ onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Intel® Celeron M Processor 1.3GHz or 340 (1.5GHz) with 400MHz system bus or Intel Pentium M Processor 1.5GHz or Intel Pentium M Processor 725 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										SOFTWARE¹⁴			
L2 cache	Celeron M: 512KB; Pentium M 1.5GHz: 1MB; Pentium M 725: 2MB; All: on die / ECC										Windows XP Professional			
Memory	256MB std / 2GB max⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ ◆ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
CD	<i>Some: CD-ROM / 24X-10X⁹ speed / removable from Ultrabay Enhanced</i>										• Access Program			
Combo	<i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay Enhanced</i>										• Access Connections™			
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7 mm high 30GB⁸ or 40GB (4200 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™										• Rescue and Recovery™			
Display	14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• Norton AntiVirus (OEM edition)			
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 250MHz										• PC-Doctor™			
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										• ThinkPad Utilities			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										• Adobe® Reader			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• Update Connector™ ¹⁵			
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										• RecordNOW and Drive Letter			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										Access powered by Sonic products (combo model)			
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm										• InterVideo WinDVD (combo model)			
Weight ²	with optical drive and battery: 6.0 lb (2.7kg)										Downloadable			
Case material	<i>Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic</i>										• IBM Director Agent			
Battery - type	Lithium Ion 6-cell / intelligent / supports optional 2nd battery in Ultrabay Enhanced										• Software Delivery Assistant			
Battery - life ¹⁰	<i>Celeron models: up to 3.4 hr; Pentium model: up to 4.0 hr; Optional 9-cell: up to 6.2 hr</i>										• System Migration Assistant			
Architecture	Intel 855GME chipset / 82855GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI-bus, ethernet MAC, Low Pin Count [LPC] interface, USB) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4510 CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for diskette, parallel, infrared, [docking-based ports])										• Client Security Software (for security chip)			
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door										License (CD not included)			
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Video out	S-video out port (TV out) / one industry standard connector										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network) PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant ImageUltra™ Services available International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)			
IEEE 1394	None													
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable													
Wireless upg ³⁶	<i>Some: wireless upgradable with wireless Mini PCI options</i>													
Intel 11b/g ³²	<i>Some: 11b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset</i>													
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Bluetooth	None													
Ethernet	10/100 ethernet on planar / Intel 82562EZ chipset (physical layer) / Wake on LAN®													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant													
Limited warranty ¹²	2887: 1-year - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² available 2888: 3-year/1-year battery - EasyServ onsite pickup and delivery / srv upgrades²² avail													
256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus™ options at										
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	lenovo.com/thinkplus/warranty										
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	Post-warranty annual maintenance agreements at										
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Multiple Battery Charger II	22P9040	lenovo.com/thinkplus/warranty										
DVD-ROM Ultrabay Enhanced Drive	39X2642	Preferred Pro USB Fingerprint Keyboard	73P4730											
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	Kensington® MicroSaver® Security Cable	73P2582											
Super Multi-Burner Ultrabay Enh Drv (curve)	40Y8624	80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273											
USB Fingerprint Reader	41U3167	100GB Hard Disk 9.5mm (5400 rpm)	40Y8716											
USB 2.0/Analog Headset by Sennheiser	40Y8518	11a/b/g Wireless Mini PCI Adapter II	73P4301											
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkPad 72W AC Adapter	02K6699	ThinkPad Port Replicator II 74P6733										
USB 2.0 Memory Key 1GB	40Y7421	72W Slim AC/DC Combo Adapter	73P4485	ThinkPad Mini Dock 287810U										
Lenovo M500 Projector	0037A05	ThinkPad Convertible Monitor Stand	40Y7620	ThinkPad Dock II 287710U										
ThinkPad Carrying Case - Leather	73P3600	Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	TrackPoint Cap Collection 73P2698										
Lenovo D221 Wide 22" Monitor (black)	6622HB1	Other options at lenovo.com/options		ThinkPad Monitor Stand 2001 22P5265										

See footnotes for important warranty information

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US models announced April 6 or September 14, 2004

(2887E) February 2007

US models withdrawn effective January 2005, November 2005, or February 2007

ThinkPad® R51 (2889) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Integrated graphics	IEEE Secu- 1394 port	Preload chip	Workhorse (W) Limited Global (G) Avail Entry (E) date
2889-2RU	Celeron® M	1.3	256MB	14.1" XGA	30GB	CD	Intel 11b/g ³²	Modem	Extreme™ 2	No	Yes	XP Pro Onsite Educ Apr 04
2889-EVU	Celeron M 340	1.5	256MB	14.1" XGA	30GB	CD	Intel 11b/g	Modem	Extreme 2	No	Yes	XP Pro Onsite Educ Sep 04
2889-2WU	Pentium® M	1.5	256MB	14.1" XGA	40GB	Combo	*Intel 11b/g	Modem	Extreme 2	No	Yes	XP Pro Onsite Educ Apr 04
2889-EWU	Pentium M 725	1.6	256MB	14.1" XGA	40GB	Combo	*Intel 11b/g	Modem	Extreme 2	No	Yes	XP Pro Onsite Educ Sep 04

• **The 2889 has a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Intel® Celeron M Processor 1.3GHz or 340 (1.5GHz) with 400MHz system bus or Intel Pentium M Processor 1.5GHz or Intel Pentium M Processor 725 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										SOFTWARE¹⁴
L2 cache Memory	<i>Celeron M: 512KB; Pentium M 1.5GHz: 1MB; Pentium M 725: 2MB; All: on die / ECC</i> 256MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ ✦ Disk-to-Disk Recovery (in hidden protected area)
Diskette drive CD Combo	None standard / use optional USB-based diskette drive <i>Some: CD-ROM / 24X-10X⁹ speed / removable from Ultrabay Enhanced</i> <i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay Enhance</i>										Preloaded • Access Program • Access Connections™ • Rescue and Recovery™ • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • Update Connector™ ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo model) • InterVideo WinDVD (combo model)
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7 mm high 30GB⁸ or 40GB (4200 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™										
Display	14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 250MHz										
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										
Keyboard TrackPoint® Touch pad ThinkLight™	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys) TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions										Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant • Client Security Software (for security chip)
Dimensions ³ Weight ² Case material	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm with optical drive and battery: 6.0 lb (2.7kg) <i>Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic</i>										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced <i>Celeron models: up to 3.5 hr; Pentium model: up to 4.0 hr; Optional 9-cell: up to 6.2 hr</i>										
Architecture	Intel 855GME chipset / 82855GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4150 CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for parallel, infrared, [docking-based ports])										
PC Card Std slots Ports	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port										
Video out IEEE 1394	S-video out port (TV out) / one 4-pin industry standard connector None										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage
Wireless antenna Mini PCI	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception One Mini PCI type III slot (Communications Bay) / customer upgradable										
CDC Modem Bluetooth	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset One Communications Daughter Card (CDC) socket (used by modem) / not accessible 56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset None										Universal 72 watt AC adapter Asset ID™ ³⁴ (system-specific info in chip accessed over network) PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR™-compliant ImageUltra™ Services available International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)
Ethernet Audio support	10/100 ethernet on planar / Intel 82562EZ chipset (physical layer) / Wake on LAN® Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										
Security Security chip	Power-on password / hard disk password / supervisor password / security keyhole Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant										
Limited warranty ¹²	3-year/1-year battery, limited onsite service, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time ²⁴										
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty							
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102								
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190								
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Multiple Battery Charger II	22P9040								
ThinkPad DVD-ROM Ultrabay Slim Drive	73P3270	80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273								
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	100GB Hard Disk 9.5mm (5400 rpm)	40Y8716								
Super Multi-Burner Ultrabay Enh Drv (curve)	40Y8624	Intel PRO/Wireless 2915ABG Mini PCI	41N2990								
USB Portable Diskette Drive	05K9276	11a/b/g Wireless Mini PCI Adapter II	73P4301								
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkPad 72W AC Adapter	02K6699								
USB 2.0 Memory Key 1GB	40Y7421	72W Slim AC/DC Combo Adapter	73P4485								
Enh Perf Wireless Keyboard and Mouse	73P4067	Lenovo M500 Projector	0037A05								
Kensington® MicroSaver® Security Cable	73P2582	Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137								
ThinkPad Carrying Case - Organizer	73P3598	ThinkPad Convertible Monitor Stand	40Y7620								
Lenovo D221 Wide 22" Monitor (black)	6622HB1	PC Card Gemplus Smart Card Reader	41N3004								
ThinkVision® L201p 20.1" Monitor (black)	9220HB1	Other options at lenovo.com/options									
ThinkPad Port Replicator II			74P6733								
ThinkPad Mini Dock			287810U								
ThinkPad Dock II			287710U								
TrackPoint Cap Collection			73P2698								
ThinkPad Monitor Stand			22P5265								

See footnotes for important warranty information

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US models announced April 6 or September 14, 2004

(2889E) February 2007

US models withdrawn effective January 2005, November 2005, or February 2007

ThinkPad® R51 (2883) - TopSeller (September 2004) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Integrated graphics	Secu- rity chip	Limited warranty ¹²	Workhorse (W) Global (G) Avail Preload Entry (E) date
2883-GXU	Celeron® M 330	1.4	512KB	256MB	15.0" XGA	30GB	Combo	Intel 11b/g ³²	Modem	Extreme™ 2	Yes	1-yr XP Pro	No Dec 04
2883-GHU	Celeron M 340	1.5	512KB	256MB	15.0" XGA	30GB	Combo	Intel 11b/g	Modem	Extreme 2	Yes	1-yr XP Pro	No Sep 04
2883-GJU	Celeron M 350	1.3	1MB	256MB	15.0" XGA	30GB	Combo	Intel 11b/g	Modem	Extreme 2	Yes	1-yr XP Pro	No Sep 04
2883-ELU	Pentium® M 725	1.6	2MB	256MB	14.1" XGA	30GB	Combo	*Intel 11b/g	Modem	Extreme 2	Yes	1-yr XP Pro	No Sep 04
2883-GKU	Pentium M 725	1.6	2MB	256MB	15.0" XGA	30GB	Combo	*Intel 11b/g	Modem	Extreme 2	Yes	1-yr XP Pro	No Sep 04

• These small and medium business (SMB) models are part of the US TopSeller™ Program • The 2883 has a 1-year limited warranty

Positioning	Mainstream performance and features; two-spindle system										
Processor	Intel® Celeron M Processor 330 (1.4GHz), 340 (1.5GHz) or 350 (1.3GHz) with 400MHz system bus or Intel Pentium M Processor 725 (1.6GHz) with Enhanced Intel SpeedStep™ technology ¹ and 400MHz system bus										
L2 cache	Celeron M 330/340: 512KB; Celeron M 350: 1MB; Pentium M 725: 2 MB; All: ECC										
Memory	256MB std / 2GB max ⁷ / PC2700 333MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										
Diskette drive	None standard / use optional USB-based diskette drive										
Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance										
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7 mm high 30GB⁸ (4200 rpm), 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™										
Display	<i>Some: 14.1"</i> (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some: 15.0"</i> (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										
Graphics	Integrated Intel Extreme™ Graphics 2 / in 855GME GMCH / uses main memory (up to 64MB) / 250MHz										
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³	<i>14.1" models (WxDxH):</i> 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm <i>15.0" models (WxDxH):</i> 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: <i>14.1" models:</i> 6.0 lb (2.7kg); <i>15.0" models:</i> 6.6 lb (3.0kg)										
Weight ²											
Case material	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic										
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										
Battery - life ¹⁰	<i>Celeron M models:</i> up to 3.4 hr; <i>Pentium M models:</i> up to 4.0 hr; <i>Optional High Capacity 9-cell:</i> up to 6.2 hr										
Architecture	Intel 855GME chipset / 82855GME Memory Controller Hub (MCH-M) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count [LPC] interface, USB) / PCI bus 2.2 32-bit, 33MHz (TI® PCI4510 CardBus and 1394 controller, Mini PCI, external expansion) / LPC bus 33MHz (security chip; PC87392 Super I/O for parallel, infrared, [docking-based ports])										
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door										
Ports	Two USB (Version 2.0) / parallel / external monitor (DB-15) / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial port										
Video out	S-video out port (TV out) / one 4-pin industry standard connector										
IEEE 1394	None										
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chipset										
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										
Modem	56K ⁵ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										
Bluetooth	None										
Ethernet	10/100 ethernet on planar / Intel 82562EZ chipset (physical layer) / Wake on LAN®										
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										
Security	Power-on password / hard disk password / supervisor password / security keyhole										
Security chip	Embedded Security Subsystem 2.0³³ / hardware key storage / multi-factor authentication / local file encryption / Atmel® chip / TCG-compliant										
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available										
256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus™ ²² 1-year LOR 9x5 NBD							
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	41C9166							
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	41C9167							
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Multiple Battery Charger II	22P9040	ThinkPlus 3-year LOR 9x5 NBD							
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	41C9168							
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	100GB Hard Disk 9.5mm (5400 rpm)	40Y8716	ThinkPlus 4-year LOR 9x5 NBD							
USB Fingerprint Reader	41U3167	11a/b/g Wireless Mini PCI Adapter II	73P4301	41C9171							
USB Portable Diskette Drive	05K9276	72W Slim AC/DC Combo Adapter	73P4485	ThinkPlus 5-year LOR 9x5 NBD							
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Port Replicator II	74P6733	41C9173							
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad Mini Dock	287810U	ThinkPlus 2-year P&L P/U Depot							
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Dock II	287710U	41C9169							
Kensington® MicroSaver® Security Cable	73P2582	PC Card Gemplus Smart Card Reader	41N3004	ThinkPlus 3-year P&L P/U Depot							
SonyEricsson® GC83 EDGE PC Card	26K3393	Lenovo D221 Wide 22" Monitor (black)	6622HB1	41C9172							
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	ThinkVision® L201p 20.1" Monitor (black)	9220HB1	ThinkPlus 4-year P&L P/U Depot							
ThinkPad Carrying Case - Expander	73P3597	Lenovo M500 Projector	0037A05	41C9174							
ThinkPad Carrying Case - BackPack	73P3599	Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	Post-warranty annual maintenance agreements at							
ThinkPad Convertible Monitor Stand	40Y7620	Other options at lenovo.com/options		lenovo.com/thinkplus/warranty							

See footnotes for important warranty information
US models announced September 14 or December 21, 2004
US models withdrawn effective March 2005 or February 2007

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ThinkPad® R52 (1846) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller and memory	Disk GB ⁶	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	IEEE Finger 1394 print port reader	Secu- rity chip	Workhorse or Global Entry	Avail date	
1846-59U	Pentium® M 740	1.73	256MB	14.1" XGA	X300 64MB	40GB	Combo	* Intel 11b/g ³²	Modem	No	No	Yes	No	Mar 05
<p align="center">• This model has a 1 year limited warranty</p>														
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 740 (1.73GHz) with enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴			
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional			
Memory	256MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced										• Rescue and Recovery™ • Access IBM			
Ultrabay Enhanced	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high										• Access Connections • Norton AntiVirus			
Disk	40GB⁸ (4200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System (shock protection)										• PC-Doctor™ • ThinkPad Utilities • Adobe Reader			
Display	14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• Update Connector™ ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo model)			
Graphics	ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory										• InterVideo WinDVD (combo model) • Client Security Software (for security chip)			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										Downloadable			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass /										• IBM Director Agent • Software Delivery Assistant • System Migration Assistant			
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										License (CD not included)			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage			
Weight ²	with optical drive and battery: 14.1" model: 6.1 lb (2.8kg)										Universal 72 watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										ServicePac® ²² 1yr IOR 9x5 NBD 30L9188			
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										ServicePac 2 yr IOR 9x5 NBD 30L9189			
Battery - life ¹⁰	Up to 3.6 hr; Optional 9-cell: up to 5.6 hr										ServicePac 3 yr IOR 9x5 NBD 30L9195			
Architecture	Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (Ricoch® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										ServicePac 4 yr IOR 9x5 NBD 30L9194			
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										ServicePac 5 yr IOR 9x5 NBD 30L9196			
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										ServicePac 2 yr P&L P/U Depot 30L9191			
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										ServicePac 3 yr P&L P/U Depot 30L9192			
Video out	S-video out port (TV out) / one 4-pin industry standard connector										ServicePac 4 yr P&L P/U Depot 69P9195			
IEEE 1394	Some: IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard										ServicePac 5 yr P&L P/U Depot 69P9197			
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										Other ServicePac options at ibm.com/services/its/us/source/wamomxeu.pdf			
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										Post-warranty annual maintenance agreements at ibm.com/services/its/us/source/maspspleu.pdf			
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip													
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Bluetooth™	None													
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant													
Fingerprint reader	None													
Limited warranty ¹² 1 year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available														
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101											
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102											
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190											
USB 2.0 Portable Multi-Burner Drive	22P9163	ThinkPad Multiple Battery Charger II	22P9040											
USB 2.0 Memory Key 128MB	73P4512	ThinkPad 72W AC/DC Combo Adapter	22P9010											
USB 2.0 Memory Key 256MB	22P9228	11a/b/g Wireless Mini PCI Adapter II	73P4301											
USB 2.0 Memory Key 512MB	22P9230	Intel PRO/Wireless 2200BG Mini PCI	73P2801											
USB 2.0 Portable 40GB Hard Disk	22P7196	11a/b/g Wireless CardBus Adapter	31P9101											
4GB Microdrive® with PC Card	09N4280	ThinkPad Port Replicator II	74P6733											
40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816	ThinkPad Mini Dock	287810U											
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Dock II	287710U											
USB Portable Diskette Drive	05K9276	ThinkPad Carrying Case - Expander	73P3597											
USB Fingerprint Reader	73P4774	ThinkPad Carrying Case - Backpack	73P3599											
Second HDD Adapter for Ultrabay Slim	62P4554	ThinkPad Carrying Case - Leather	73P3600											
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	ThinkPad Carrying Case - Organizer	73P3598											
Multi-Burner Plus Ultrabay Enhanced Drive	73P3312	M400 Projector	0037A04											
Enh Perf Wireless Keyboard and Mouse	73P4067	E400 Projector	0038A04											
USB Travel Keyboard with UltraNav	31P9490	TrackPoint Cap Collection	73P2698											
Preferred Pro USB Fingerprint Keyboard	73P4730	ThinkPad Monitor Stand 2001	22P5265											
Optical 3-Button Travel Wheel Mouse	31P7410	SonyEricsson® GC83 EDGE PC Card	26K3393											
Kensington® MicroSaver® Security Cable	73P2582	Other options at lenovo.com/options												

See footnotes for important warranty information
US model announced March 1, 2005
US model withdrawn effective September 2005

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ThinkPad® R52 (1846) - August 2005 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller and memory	Disk GB ⁶	Optical	Mini PCI Comm Bay wireless	CDC modem/ TM Bluetooth	IEEE 1394 port	Finger print reader	Limited warranty ¹²	Workhorse or Global Entry	Avail date
1846-96U	Pentium® M 750	1.86	256MB	15.0" XGA	X300 64MB	40GB	Combo *	Intel 11b/g ³²	Modem	1394	No	1-yr	No	Aug 05
1846-9AU	Pentium M 740	1.73	256MB	15.0" XGA	X300 64MB	40GB	Combo *	Intel 11b/g	Modem	1394	Finger	1-yr	No	Aug 05
1846-9BU	Pentium M 740	1.73	256MB	15.0" XGA	X300 64MB	40GB	Combo *	Intel 11b/g	Modem	1394	Finger	1-yr	No	Aug 05
1846-9CU	Pentium M 740	1.73	256MB	15.0" XGA	X300 64MB	40GB	Combo *	Intel 11b/g	Mod/Blue	1394	Finger	1-yr	No	Aug 05
• These models have a 1-year limited warranty														
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 740 (1.73GHz) or 750 (1.86GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴			
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional			
Memory	256MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
Combo DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high										• Rescue and Recovery™			
Ultrabay Enhanced Disk	40GB⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)										• Access Program			
Display	15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										• Access Connections™			
Graphics	ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory										• Norton AntiVirus			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• PC-Doctor™			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• ThinkPad Utilities			
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										• Adobe® Reader			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• RecordNOW and Drive Letter Access powered by Sonic products (combo model)			
Dimensions ³	15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm										• InterVideo WinDVD (combo model)			
Weight ²	with optical drive and battery: 14.1" model: 6.1 lb (2.8kg)										• Fingerprint Software (fingerprint models)			
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										• Client Security Software (for security chip)			
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										Downloadable			
Battery - life ¹⁰	Up to 3.6 hr; <i>Optional 9-cell:</i> up to 5.6 hr										• IBM Director Agent			
Architecture	Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (RICH® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										• Software Delivery Assistant			
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										• System Migration Assistant			
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										License (CD not included)			
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Video out	S-video out port (TV out) / one 4-pin industry standard connector										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage			
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard													
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										Universal 72-watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable													
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip										ThinkPlus™, ²² 1-year LOR 9x5 NBD 41C9166			
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										ThinkPlus 2-year LOR 9x5 NBD 41C9167			
Bluetooth™	<i>Some:</i> Bluetooth wireless technology / in CDC (with modem)													
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										ThinkPlus 3-year LOR 9x5 NBD 41C9168			
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus 4-year LOR 9x5 NBD 41C9171			
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant													
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip										ThinkPlus 5-year LOR 9x5 NBD 41C9173			
Limited warranty ¹²	1-year - EasyServ™. ¹⁹ onsite pickup and delivery / service upgrades ²² available													
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus™, ²² 1-year LOR 9x5 NBD	41C9166									
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	41C9166										
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ThinkPlus 2-year LOR 9x5 NBD										
USB Portable Diskette Drive	05K9276	ThinkPad Multiple Battery Charger II	22P9040	41C9167										
USB Fingerprint Reader	41U3167	72W Slim AC/DC Combo Adapter	73P4485	ThinkPlus 3-year LOR 9x5 NBD										
USB Gemplus GemPC Smart Card Reader	41N3040	11a/b/g Wireless Mini PCI Adapter II	73P4301	41C9168										
USB 2.0/Analog Headset by Sennheiser	40Y8518	Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ThinkPlus 4-year LOR 9x5 NBD										
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Port Replicator II	74P6733	41C9171										
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad Mini Dock	287810U	ThinkPlus 5-year LOR 9x5 NBD										
USB 2.0 Portable 80GB Hard Disk	40Y8726	ThinkPad Dock II	287710U	41C9173										
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkPad Carrying Case - Expander	73P3597	ThinkPlus 2-year P&L P/U Depot										
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Carrying Case - Backpack	73P3599	41C9169										
ExpressCard Gemplus Smart Card Reader	41N3043	ThinkPad Carrying Case - Leather	73P3600	ThinkPlus 3-year P&L P/U Depot										
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Carrying Case - Organizer	73P3598	41C9170										
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkVision® E500 Projector	0038A05	ThinkPlus 4-year P&L P/U Depot										
Second HDD Adapter for Ultrabay Slim	41U3148	Lenovo M500 Projector	0037A05	41C9172										
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	TrackPoint Cap Collection	73P2698	ThinkPlus 5-year P&L P/U Depot										
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	ThinkPad Monitor Stand	22P5265	41C9174										
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkPad Convertible Monitor Stand	40Y7620	Post-warranty annual maintenance										
USB Travel Keyboard with UltraNav	31P9490	Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	agreements at										
Kensington® MicroSaver® Security Cable	73P2582	Other accessories at lenovo.com/accessories		lenovo.com/thinkplus/warranty										

See footnotes for important warranty information
US models announced August 2, 2005
US models withdrawn effective February 2007

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ThinkPad® R52 (1847) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller and memory	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	IEEE 1394 port	Security chip	Warranty Limited ¹²	Global Entry (E)	Workhorse (W)	Avail date
1847-22U	Pentium® M 740	1.73	512MB	14.1" XGA	X300 64MB	40GB	Combo	* Intel 11b/g ³²	Modem	No	Yes	3-year	W	G	Mar 05
1847-28U	Pentium M 750	1.86	256MB	14.1" XGA	X300 32MB	40GB	Combo	* Intel 11a/b/g ³²	Modem	No	Yes	3-year	W		Mar 05
1847-29U	Pentium M 750	1.86	512MB	14.1" XGA	X300 64MB	40GB	Combo	* Intel 11a/b/g	Modem	No	Yes	3-year	W		Mar 05
1847-2BU	Pentium M 750	1.86	512MB	14.1" XGA	X300 64MB	60GB	Combo	* Intel 11a/b/g	Modem	No	Yes	3-year	W		Mar 05
1847-32U	Pentium M 740	1.73	512MB	15.0" XGA	X300 64MB	40HS	Combo	* Intel 11b/g	Modem	No	Yes	3-year	W	G	Mar 05
1847-38U	Pentium M 750	1.86	256MB	15.0" XGA	X300 32MB	40GB	Combo	* Intel 11a/b/g	Modem	No	Yes	3-year	W		Mar 05
1847-39U	Pentium M 750	1.86	512MB	15.0" XGA	X300 64MB	40GB	Combo	* Intel 11a/b/g	Modem	No	Yes	3-year	W		Mar 05
1847-3CU	Pentium M 740	1.73	256MB	15.0" XGA	X300 64MB	40GB	Combo	* Intel 11b/g	Modem	No	Yes	3-year	W		Mar 05
1847-3JU	Pentium M 750	1.86	512MB	15.0" XGA	X300 64MB	60GB	Combo	* Intel 11b/g	Modem	No	Yes	3-year	W		Mar 05
1847-46U	Pentium M 750	1.86	512MB	15.0" SXGA+	X300 64MB	40GB	Combo	* Intel 11a/b/g	Modem	1394	Yes	3-year	W		Mar 05
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 740 (1.73GHz) or 750 (1.86GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • Update Connector™ ¹⁵ • RecordNow and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo models) • Client Security Software (for security chip) Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
L2 cache	2MB / on die (at processor speed) / ECC														
Memory	256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail														
Diskette drive	None standard / use optional USB-based diskette drive														
Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced														
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 40GB⁸ (4200 rpm), 40GB (HS 5400 rpm), or 60GB (4200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)														
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits														
Graphics	<i>Some:</i> ATI™ MOBILITY™ RADEON™ X300 / PCI Express x16 / 32MB GDDR1 memory <i>Some:</i> ATI MOBILITY RADEON X300 / PCI Express x16 / 64MB GDDR1 memory														
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)														
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.1 lb (2.8kg); 15" models: 6.6 lb (3.0kg)														
Weight ²															
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic														
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced														
Battery - life ¹⁰	Up to 3.6 hr; Optional 9-cell: up to 5.6 hr														
Architecture	Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (Ricoh® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])														
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door														
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door														
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)														
Video out	S-video out port (TV out) / one 4-pin industry standard connector														
IEEE 1394	<i>Some:</i> IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard														
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception														
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable														
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip														
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset														
CDC	One Communications Daughter Card (CDC) socket / customer accessible														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset														
Bluetooth™	None														
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE														
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant														
Fingerprint reader	None														
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail														
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus™ ²² 2-year LOR 9x5 NBD	41C9175										
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	ThinkPlus 3-year LOR 9x5 NBD	41C9176										
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ThinkPlus 4-year LOR 9x5 NBD	41C9177										
USB Portable Diskette Drive	05K9276	72W Slim AC/DC Combo Adapter	73P4485	ThinkPlus 5-year LOR 9x5 NBD	41C9179										
USB Fingerprint Reader	41U3167	11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 4-year P&L P/U Depot	41C9178										
USB 2.0 Memory Key 1GB	40Y7421	Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ThinkPlus 5-year P&L P/U Depot	41C9180										
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Port Replicator II	74P6733	Post-warranty annual maintenance agreements at											
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Mini Dock	287810U												
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Dock II	287710U												
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Carrying Case - Expander	73P3597												
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	ThinkVision® L201p 20.1" Monitor (black)	9220HB1												
Preferred Pro USB Fingerprint Keyboard	73P4730	Other accessories at lenovo.com/accessories													

See footnotes for important warranty information
US models announced March 1, 2005
US models withdrawn effective September 2005 or February 2007

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ThinkPad® R52 (1847) - August 2005 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller and memory	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	IEEE Finger 1394 print port reader	Limited warranty ¹²	Workhorse (W) Global (G) Avail (E) date	
1847-82U	Pentium® M 750	1.86	512MB	14.1" XGA	X300 64MB	40GB	Combo	* Intel 11b/g ³²	Modem	No	3-year	W G Aug 05	
1847-83U	Pentium M 750	1.86	512MB	14.1" XGA	X300 64MB	40GB	Combo	* Intel 11b/g	Modem	No	Finger 3-year	W G Aug 05	
1847-92U	Pentium M 750	1.86	512MB	15.0" XGA	X300 64MB	60GB	Combo	* Intel 11b/g	Modem	No	3-year	W G Aug 05	
1847-93U	Pentium M 750	1.86	512MB	15.0" XGA	X300 64MB	60GB	Combo	* Intel 11b/g	Modem	No	Finger 3-year	W G Aug 05	
1847-8EU	Pentium M 760	2.00	512MB	14.1" XGA	X300 64MB	60GB	Combo	* Intel 11a/b/g ³²	Modem	No	3-year	W Aug 05	
1847-8FU	Pentium M 750	1.86	512MB	14.1" XGA	X300 64MB	40GB	Combo	* Intel 11a/b/g	Modem	No	Finger 3-year	W Aug 05	
1847-8GU	Pentium M 750	1.86	512MB	14.1" XGA	X300 64MB	60GB	Combo	* Intel 11a/b/g	Modem	No	Finger 3-year	W Aug 05	
1847-8HU	Pentium M 760	2.00	512MB	14.1" XGA	X300 64MB	60GB	Combo	* Intel 11a/b/g	Modem	No	Finger 3-year	W Aug 05	
1847-AFU	Pentium M 750	1.86	512MB	15.0" SXGA+	X300 64MB	60GB	Combo	* Intel 11a/b/g	Modem	1394 Finger	3-year	W Aug 05	
1847-AGU	Pentium M 760	2.00	512MB	15.0" SXGA+	X300 64MB	80GB	DVD±RW	* Intel 11a/b/g	Modem	1394 Finger	3-year	W Aug 05	
1847-9PU	Pentium M 750	1.86	512MB	15.0" XGA	X300 64MB	60GB	Combo	* Intel 11a/b/g	Modem	No	Finger 3-year	W Aug 05	
1847-9QU	Pentium M 750	1.86	512MB	15.0" XGA	X300 64MB	40GB	Combo	* Intel 11a/b/g	Modem	No	Finger 3-year	W Aug 05	
1847-9SU	Pentium M 760	2.00	512MB	15.0" XGA	X300 64MB	60GB	Combo	* Intel 11a/b/g	Modem	No	Finger 3-year	W Aug 05	
1847-9TU	Pentium M 760	2.00	512MB	15.0" XGA	X300 64MB	60GB	Combo	* Intel 11a/b/g	Modem	No	Finger 3-year	W Aug 05	
1847-B2U	Pentium M 750	1.86	512MB	14.1" XGA	X300 64MB	40GB	Combo	Open; upg ³⁶	Modem	No	3-year	W Aug 05	
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 750 (1.86GHz) or 760 (2.00GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴		
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional		
Memory	512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded		
Combo DVD±RW	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced										• Rescue and Recovery™		
Ultrabay Enhanced Disk	<i>Some:</i> DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 40GB⁸ (5400 rpm), 60GB (5400 rpm), or 80GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)										• Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW)		
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits										• InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) • Fingerprint Software (fingerprint models) • Client Security Software (for security chip)		
Graphics	ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory										Downloadable		
Keyboard TrackPoint®	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys) TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• IBM Director Agent • Software Delivery Assistant • System Migration Assistant		
Touch pad ThinkLight™	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.1 lb (2.8kg); 15" models: 6.6 lb (3.0kg)										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage		
Weight ²	with optical drive and battery: 14.1" models: 6.1 lb (2.8kg); 15" models: 6.6 lb (3.0kg)										Universal 72 watt AC adapter PC 2001-compliant		
Case material	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic										ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175		
Battery - life ¹⁰	Up to 3.6 hr; <i>Optional 9-cell:</i> up to 5.6 hr										ThinkPlus 3-year LOR 9x5 NBD 41C9176		
Architecture	Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (Ricoch® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										ThinkPlus 4-year LOR 9x5 NBD 41C9177		
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										ThinkPlus 5-year LOR 9x5 NBD 41C9179		
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										ThinkPlus 4-year P&L P/U Depot 41C9178		
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Video out	S-video out port (TV out) / one 4-pin industry standard connector												
IEEE 1394	<i>Some:</i> IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Wireless upg ³⁶	<i>Some:</i> wireless upgradable with wireless Mini PCI options												
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip												
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Bluetooth™	None												
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant												
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip												
Limited warranty ¹²	3-year /1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail												
256MB PC2-4200 DDR2 NP CL4 SOD				73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell				92P1101				
512MB PC2-4200 DDR2 NP CL4 SOD				73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell				92P1102	ThinkPlus 5-year P&L P/U Depot 41C9180			
1GB PC2-4200 DDR2 NP CL4 SOD				73P3844	11a/b/g Wireless Mini PCI Adapter II				73P4301				
100GB Hard Disk 9.5mm PATA (5400 rpm)				40Y8716	Intel PRO/Wireless 2915ABG Mini PCI				41N2990				
Second HDD Adapter for Ultrabay Slim				41U3148	ThinkPad Port Replicator II				74P6733				
Super Multi-Burner Ultrabay Enh Drv (curved)				40Y8624	Other options at lenovo.com/options								

See footnotes for important warranty information
US models announced August 2, 2005
US models withdrawn effective June or November 2006

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ThinkPad® R52 (1847) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller and memory	Disk GB ³ and rpm	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	IEEE 1394 port	Finger print reader	Limited warranty ¹²	Avail date
1847-2FU	Pentium® M 740	1.73	512MB	14.1" XGA	X300 64MB	40GB 4200	Combo	* Intel 11a/b/g ³²	Modem 1394	No	EasyServ	Mar 05	
1847-2GU	Pentium M 740	1.73	512MB	14.1" XGA	X300 64MB	60GB 4200	DVD±RW	* Intel 11a/b/g	Modem 1394	No	EasyServ	Mar 05	
1847-4BU	Pentium M 740	1.73	1GB	15.0" SXGA+	X300 64MB	60GB 4200	DVD±RW	* Intel 11a/b/g	Modem 1394	No	EasyServ	Mar 05	
1847-2KU	Pentium M 740	1.73	512MB	14.1" XGA	X300 64MB	40GB 4200	Combo	11a/b/g II ³²	Modem 1394	No	EasyServ	Aug 05	
1847-2LU	Pentium M 740	1.73	512MB	14.1" XGA	X300 64MB	60GB 4200	DVD±RW	11a/b/g II	Modem 1394	No	EasyServ	Aug 05	
1847-4XU	Pentium M 740	1.73	1GB	15.0" SXGA+	X300 64MB	60GB 4200	DVD±RW	11a/b/g II	Modem 1394	No	EasyServ	Aug 05	
1847-8JU	Pentium M 750	1.86	512MB	14.1" XGA	X300 64MB	40GB 5400	Combo	* Intel 11a/b/g	Modem 1394	Finger	EasyServ	Aug 05	
1847-8KU	Pentium M 750	1.86	512MB	14.1" XGA	X300 64MB	60GB 5400	DVD±RW	* Intel 11a/b/g	Modem 1394	Finger	EasyServ	Aug 05	
1847-AJU	Pentium M 750	1.86	1GB	15.0" SXGA+	X300 64MB	60GB 5400	DVD±RW	* Intel 11a/b/g	Modem 1394	Finger	EasyServ	Aug 05	
<p>• These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.</p>													
Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Intel® Pentium® M Processor 740 (1.73GHz) or 750 (1.86GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴		
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional		
Memory	512MB or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded		
Combo DVD±RW	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance										• Education software from Vital Source Technologies®: vidualsource KEY™ and Personal Portable library™		
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 40GB⁸ (4200 or 5400 rpm) or 60GB (4200 or 5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System										• Rescue and Recovery™		
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits										• Access Program		
Graphics	ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory										• Access Connections™		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• Norton AntiVirus		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• PC-Doctor™		
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										• ThinkPad Utilities		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Adobe® Reader		
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and batt: 14.1" models: up to 6.2 lb; 15" models: up to 6.6 lb (3.0kg)										• RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW)		
Weight ²	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic										• InterVideo WinDVD (combo, DVD±RW models)		
Case material	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										• InterVideo WinDVD Creator (DVD±RW models)		
Battery - type	Up to 3.6 hr; <i>Optional 9-cell:</i> up to 5.6 hr										• Client Security Software (for security chip)		
Battery - life ¹⁰	Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (Richtek® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										Downloadable		
Architecture	One Type I or Type II slot / CardBus 32-bit / integrated door										• IBM Director Agent		
PC Card Std slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										• Software Delivery Assistant		
ExpressCard slot	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										• System Migration Assistant		
Ports	S-video out port (TV out) / one 4-pin industry standard connector										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Video out	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage		
IEEE 1394	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										Universal 72 watt AC adapter		
Wireless antenna	One Mini PCI type III slot (Communications Bay) / customer upgradable										PC 2001-compliant		
Mini PCI	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset										ACPI 1.0b and 2.0-compliant		
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros™ AR5004X chip										CIM and DMI 2.0-compliant		
11a/b/g II ³²	One Communications Daughter Card (CDC) socket / customer accessible										PXE 2.1-compliant		
CDC	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										ENERGY STAR®-compliant		
Modem	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										International Warranty Service ¹⁷		
Ethernet	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
Audio support	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175		
Security	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant										ThinkPlus 3-year LOR 9x5 NBD 41C9176		
Security chip	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip										ThinkPlus 4-year LOR 9x5 NBD 41C9177		
Fingerprint reader	Limited warranty ¹² 3-year/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail										ThinkPlus 5-year LOR 9x5 NBD 41C9179		
Limited warranty ¹²											ThinkPlus 4-year P&L P/U Depot 41C9178		
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840										ThinkPlus 5-year P&L P/U Depot 41C9180		
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844												
USB Portable Diskette Drive	05K9276												
USB Fingerprint Reader	41U3167												
USB 2.0 Memory Key 1GB	40Y7421												
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716												
CD-RW/DVD Combo Ultrabay Enhanced	73P3275												
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624												
Kensington® MicroSaver® Security Cable	73P2582												
ThinkPad Convertible Monitor Stand	40Y7620												

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced March 1, August 2, or August 16, 2005
US models withdrawn effective November 2005, June 2006, or February 2007

ThinkPad® R52 (1848) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller and memory	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	IEEE Finger 1394 print port	3 year limited warranty ¹²	Workhorse (W) or Global Entry	Avail date	
1848-83U	Pentium® M 750	1.86	512MB	14.1" XGA	X300 64MB	40GB	Combo	* Intel 11b/g ³²	Modem	No	Finger	Onsite	W Gbl	Aug 05
1848-93U	Pentium M 750	1.86	512MB	15.0" XGA	X300 64MB	60GB	Combo	* Intel 11b/g	Modem	No	Finger	Onsite	W Gbl	Aug 05
<p>• These models have a limited onsite service²⁴ 3-year limited warranty</p>														
Positioning Processor	<p>Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 750 (1.86GHz) with Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, and 533MHz system bus</p>										<p>SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area)</p>			
L2 cache	<p>2MB / on die (at processor speed) / ECC</p>										<p>Preloaded • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo models) • Fingerprint Software (fingerprint models) • Client Security Software (for security chip)</p>			
Memory	<p>512MB std / 2GB max⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available</p>										<p>Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant</p>			
Diskette drive	<p>None standard / use optional USB-based diskette drive</p>										<p>License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client</p>			
Combo	<p>DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay Enhance</p>													
Ultrabay Enhanced Disk	<p>One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 40GB⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™</p>													
Display	<p><i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits</p>													
Graphics	<p>ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory</p>													
Keyboard	<p>87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)</p>													
TrackPoint®	<p>TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass</p>													
Touch pad	<p>UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones</p>													
ThinkLight™	<p>Illuminates the keyboard to improve visibility in low-light conditions</p>													
Dimensions ³	<p><i>14.1" models (WxDxH):</i> 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm <i>15.0" models (WxDxH):</i> 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and batt: <i>14.1" mod:</i> 6.1 lb (2.8kg); <i>2GU:</i> 6.2 lb; <i>15" mod:</i> 6.6 lb (3.0kg)</p>													
Weight ²														
Case material	<p><i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic</p>													
Battery - type	<p>Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced</p>													
Battery - life ¹⁰	<p>Up to 3.6 hr; <i>Optional 9-cell:</i> up to 5.6 hr</p>													
Architecture	<p>Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (Ricoch® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])</p>													
PC Card Std slot	<p>One Type I or Type II slot / CardBus 32-bit / integrated door</p>													
ExpressCard slot	<p>One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door</p>													
Ports	<p>Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)</p>													
Video out	<p>S-video out port (TV out) / one 4-pin industry standard connector</p>													
IEEE 1394	<p>None</p>													
Wireless antenna	<p>UltraConnect™ Antenna built into the display cover for optimal wireless signal reception</p>													
Mini PCI	<p>One Mini PCI type III slot (Communications Bay) / customer upgradable</p>													
Intel 11b/g ³²	<p>11b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip</p>													
CDC	<p>One Communications Daughter Card (CDC) socket / customer accessible</p>													
Modem	<p>56K⁶ V.90 (V.92-designed²⁹) modem in CDC / Conexant® chipset</p>													
Bluetooth™	<p>None</p>													
Ethernet	<p>Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE</p>													
Audio support	<p>Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)</p>													
Security	<p>Power-on password / hard disk password / supervisor password / security keyhole</p>													
Security chip	<p>Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant</p>													
Fingerprint reader	<p>Fingerprint reader on palm rest / swipe sensor / integrated with security chip</p>													
Limited warranty ¹²	<p>3-year/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time</p>													
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101											
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102											
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190											
USB Portable Diskette Drive	05K9276	ThinkPad Multiple Battery Charger II	22P9040											
USB Fingerprint Reader	41U3167	72W Slim AC/DC Combo Adapter	73P4485											
USB 2.0/Analog Headset by Sennheiser	40Y8518	11a/b/g Wireless Mini PCI Adapter II	73P4301											
USB 2.0 Lenovo Webcam	40Y8519	Intel PRO/Wireless 2915ABG Mini PCI	41N2990											
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad Port Replicator II	74P6733											
USB 2.0 Portable 80GB Hard Disk	40Y8726	ThinkPad Mini Dock	287810U											
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkPad Dock II	287710U											
ExpressCard Gemplus Smart Card Reader	41N3043	ThinkPad Carrying Case - Expander	73P3597											
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Carrying Case - BackPack	73P3599											
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Carrying Case - Leather	73P3600											
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Carrying Case - Organizer	73P3598											
DVD-ROM Ultrabay Enhanced Drive	39X2642	ThinkVision® E500 Projector	0038A05											
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	TrackPoint Cap Collection	73P2698											
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	ThinkPad Monitor Stand	22P5265											
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkPad Convertible Monitor Stand	40Y7620											
USB Travel Keyboard with UltraNav	31P9490	SonyEricsson® GC83 EDGE PC Card	26K3393											
Optical 3-Button Travel Wheel Mouse	31P7410	Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137											
Kensington® MicroSaver® Security Cable	73P2582	Other options at lenovo.com/options												

See footnotes for important warranty information
 US models announced August 2, 2005
 US models withdrawn effective November 2006

* Powered by Intel Centrino® mobile technology

ThinkPad® R52 (1848) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller and memory	Disk GB ⁸ and rpm	Optical	Mini PCI Comm Bay wireless	CDC modem/ ⁹ Bluetooth™	IEEE 1394 port	Finger print reader	Limited warranty ¹²	Avail date
1848-2FU Pentium M 740	1.73	512MB	14.1" XGA	X300 64MB	40GB 4200	Combo	* Intel 11a/b/g ³²	Modem 1394	No	Onsite Mar 05			
1848-2GU Pentium M 740	1.73	512MB	14.1" XGA	X300 64MB	60GB 4200	DVD±RW	* Intel 11a/b/g	Modem 1394	No	Onsite Mar 05			
1848-4BU Pentium M 740	1.73	1GB	15.0" SXGA+	X300 64MB	60GB 4200	DVD±RW	* Intel 11a/b/g	Modem 1394	No	Onsite Mar 05			
1848-2KU Pentium M 740	1.73	512MB	14.1" XGA	X300 64MB	40GB 4200	Combo	11a/b/g II ³²	Modem 1394	No	Onsite Aug 05			
1848-2LU Pentium M 740	1.73	512MB	14.1" XGA	X300 64MB	60GB 4200	DVD±RW	11a/b/g II	Modem 1394	No	Onsite Aug 05			
1848-4XU Pentium M 740	1.73	1GB	15.0" SXGA+	X300 64MB	60GB 4200	DVD±RW	11a/b/g II	Modem 1394	No	Onsite Aug 05			
1848-8MU Pentium M 750	1.86	512MB	14.1" XGA	X300 64MB	40GB 5400	Combo	* Intel 11a/b/g	Modem 1394	Finger	Onsite Aug 05			
1848-8NU Pentium M 750	1.86	512MB	14.1" XGA	X300 64MB	60GB 5400	DVD±RW	* Intel 11a/b/g	Modem 1394	Finger	Onsite Aug 05			
1848-ALU Pentium M 750	1.86	1GB	15.0" SXGA+	X300 64MB	60GB 5400	DVD±RW	* Intel 11a/b/g	Modem 1394	Finger	Onsite Aug 05			

• **These models have a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Intel® Pentium® M Processor 740 (1.73GHz) or 750 (1.86GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus							SOFTWARE¹⁴					
L2 cache	2MB / on die (at processor speed) / ECC							Windows XP Professional					
Memory	512MB or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail							- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)					
Diskette drive	None standard / use optional USB-based diskette drive							Preloaded					
Combo DVD±RW	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance							• Education software from Vital Source Technologies®: vidualsource KEY™ and Personal Portable library™					
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 40GB⁸ (4200 or 5400 rpm) or 60GB (4200 or 5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System							• Rescue and Recovery™					
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits							• Access Program					
Graphics	ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB GDDR1 memory							• Access Connections™					
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)							• Norton AntiVirus					
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass							• PC-Doctor™					
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones							• ThinkPad Utilities					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions							• Adobe® Reader					
Dimensions ³	<i>14.1" models (WxDxH):</i> 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm <i>15.0" models (WxDxH):</i> 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and batt: <i>14.1" models:</i> up to 6.2 lb; <i>15" models:</i> up to 6.6 lb (3.0kg)							• RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW)					
Weight ²	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic							• InterVideo WinDVD (combo, DVD±RW models)					
Case material	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced							• InterVideo WinDVD Creator (DVD±RW models)					
Battery - type	Up to 3.6 hr; <i>Optional 9-cell:</i> up to 5.6 hr							• Client Security Software (for security chip)					
Battery - life ¹⁰	Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count (LPC) interface, [Bluetooth]) / PCI bus (Ricoch® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])							Downloadable					
Architecture	One Type I or Type II slot / CardBus 32-bit / integrated door							• IBM Director Agent					
PC Card Std slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door							• Software Delivery Assistant					
ExpressCard slot	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)							• System Migration Assistant					
Ports	S-video out port (TV out) / one 4-pin industry standard connector							License (CD not included)					
Video out	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard							- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client					
IEEE 1394	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Wireless antenna	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Mini PCI	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset												
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros™ AR5004X chip												
11a/b/g II ³²	One Communications Daughter Card (CDC) socket / customer accessible												
CDC	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Modem	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Ethernet	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Audio support	Power-on password / hard disk password / supervisor password / security keyhole							ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage					
Security	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant												
Security chip	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip												
Fingerprint reader	3-year/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time							Universal 72 watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²					
Limited warranty ¹²								Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty					
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101								
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102								
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		Ultrabay Slim Li-Polymer Battery 3-cell		08K8190								
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273		ThinkPad Multiple Battery Charger II		22P9040								
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716		72W Slim AC/DC Combo Adapter		73P4485								
Second HDD Adapter for Ultrabay Slim	41U3148		ThinkPad Port Replicator II		74P6733								
CD-RW/DVD Combo Ultrabay Enhanced	73P3275		ThinkPad Mini Dock		287810U								
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624		ThinkPad Dock II		287710U								
Enh Perf Wireless Keyboard and Mouse	73P4067		ThinkVision® L201p 20.1" Monitor (black)		9220HB1								
ThinkPad Convertible Monitor Stand	40Y7620		Other accessories at lenovo.com/accessories										

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology

US models announced March 1, August 2, or August 16, 2005

US models withdrawn effective November 2005, June 2006, or February 2007

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ThinkPad® R52 (1849) - Express - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller and memory	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	IEEE Finger 1394 port	Secu- rity chip	Workhorse or Global Entry	Avail date
1849-2JU	Pentium® M 750	1.86	512MB	14.1" XGA	X300 64MB	60GB	DVD±RW	* Intel 11a/b/g ³²	Mod/Blue	1394	No	Yes	Mar 05
1849-3VU	Pentium M 740	1.73	512MB	15.0" XGA	X300 64MB	40GB	Combo	* Intel 11a/b/g	Modem	1394	No	Yes	Mar 05
1849-4VU	Pentium M 750	1.86	512MB	15.0" SXGA+	X300 64MB	60GB	Combo	* Intel 11a/b/g	Modem	1394	No	Yes	Mar 05
1849-4WU	Pentium M 750	1.86	512MB	15.0" SXGA+	X300 64MB	80HS	DVD±RW	* Intel 11a/b/g	Mod/Blue	1394	No	Yes	Mar 05
1849-5SU	Pentium M 740	1.73	512MB	14.1" XGA	X300 64MB	40HS	Combo	* Intel 11b/g ³²	Modem	1394	No	Yes	Mar 05
1849-5UU	Pentium M 740	1.73	256MB	14.1" XGA	X300 64MB	40GB	Combo	* Intel 11b/g	Modem	No	No	Yes	Mar 05
1849-5ZU	Pentium M 740	1.73	256MB	14.1" XGA	X300 64MB	40GB	Combo	* Intel 11b/g	Modem	1394	No	Yes	Mar 05
1849-6VU	Pentium M 740	1.73	512MB	15.0" XGA	X300 64MB	60GB	Combo	* Intel 11b/g	Modem	No	No	Yes	Mar 05
1849-4PU	Pentium M 760	2.00	512MB	15.0" SXGA+	X300 64MB	80GB	Combo	* Intel 11b/g	Modem	No	No	Yes	Mar 05
1849-4QU	Pentium M 750	1.86	512MB	15.0" SXGA+	X300 64MB	80HS	DVD±RW	* Intel 11a/b/g	Mod/Blue	1394	No	Yes	Mar 05
1849-4RU	Pentium M 760	2.00	512MB	15.0" SXGA+	X300 64MB	80GB	DVD±RW	* Intel 11b/g	Modem	1394	No	Yes	Mar 05

- These small and medium business (SMB) models are part of the US Think Express Program
- These 1849 models have a 1 year limited warranty

Positioning Processor	Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 740 (1.73GHz), 750 (1.86GHz), or 760 (2.00GHz) with enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus								SOFTWARE¹⁴				
L2 cache	2MB / on die (at processor speed) / ECC								Windows XP Professional				
Memory	256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail								- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)				
Diskette drive	None standard / use optional USB-based diskette drive								Preloaded				
Combo DVD±RW	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced								• Rescue and Recovery™				
Ultrabay Enhanced Disk	Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced								• Access IBM				
	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high								• Access Connections				
	40GB ⁸ (4200 rpm), 40GB (HS 5400 rpm), 60GB (4200 rpm), 80GB ⁸ (4200 rpm), or 80GB (HS 5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' /								• Norton AntiVirus				
	Hard Disk Drive Shock Absorber / Active Protection System (shock protection)								• PC-Doctor™				
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits								• ThinkPad Utilities				
	Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits								• Adobe Reader				
	Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits								• Update Connector™ ¹⁵				
Graphics	ATI® MOBILITY™ RADEON X300 / PCI Express x16 / 64MB GDDR1 memory								• RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW)				
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)								• InterVideo WinDVD (combo, DVD±RW models)				
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass /								• InterVideo WinDVD Creator (DVD±RW models)				
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones								• Simple Backup (DVD±RW)				
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions								• Client Security Software (for security chip)				
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm								Downloadable				
Weight ²	15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm								• IBM Director Agent				
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic								• Software Delivery Assistant				
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced								• System Migration Assistant				
Battery - life ¹⁰	Up to 3.6 hr; Optional 9-cell: up to 5.6 hr								License (CD not included)				
Architecture	Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (Ricoh® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])								- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door								ThinkPad notebooks implement ThinkVantage™ technologies and design; visit ibm.com/thinkvantage				
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door								Universal 72 watt AC adapter				
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)								PC 2001-compliant				
Video out	S-video out port (TV out) / one 4-pin industry standard connector								ACPI 1.0b and 2.0-compliant				
IEEE 1394	Some: IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard								CIM and DMI 2.0-compliant				
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception								PXE 2.1-compliant				
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable								ENERGY STAR®-compliant				
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip								International Warranty Service ¹⁷				
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset								24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
CDC	One Communications Daughter Card (CDC) socket / customer accessible								ServicePac [®] , ²² 1yr IOR 9x5 NBD				
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset								30L9188				
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)								ServicePac 2 yr IOR 9x5 NBD				
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE								30L9189				
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)								ServicePac 3 yr IOR 9x5 NBD				
Security	Power-on password / hard disk password / supervisor password / security keyhole								30L9195				
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant								ServicePac 4 yr IOR 9x5 NBD				
Fingerprint reader	None								30L9194				
Limited warranty ¹²	1 year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available								ServicePac 5 yr IOR 9x5 NBD				
	256MB PC2-4200 DDR2 NP CL4 SOD		73P3840		ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101		30L9196				
	512MB PC2-4200 DDR2 NP CL4 SOD		73P3842		ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102		ServicePac 2 yr P&L P/U Depot				
	1GB PC2-4200 DDR2 NP CL4 SOD		73P3844		Ultrabay Slim Li-Polymer Battery 3-cell		08K8190		30L9191				
	USB 2.0 Memory Key 512MB		22P9230		ThinkPad Port Replicator II		74P6733		ServicePac 3 yr P&L P/U Depot				
	60GB HS Hard Disk 9.5mm (5400 rpm)		73P3357		ThinkPad Mini Dock		287810U		30L9192				
	80GB HS Hard Disk 9.5mm (5400 rpm)		09N4273		ThinkPad Dock II		287710U		ServicePac 5 yr P&L P/U Depot				
	Second HDD Adapter for Ultrabay Slim		62P4554		ThinkPad Carrying Case - Backpack		73P3599		69P9197				
	Multi-Burner Plus Ultrabay Enhanced Drive		73P3312		Other options at lenovo.com/options								

See footnotes for important warranty information
US models announced March 1, 2005
US models withdrawn effective September 2005

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ThinkPad® R52 (1849) - Express (August 2005) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller and memory	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	IEEE 1394 port	Finger print reader	Security chip	Workhorse or Global Entry	Avail date
1849-8CU	Pentium® M 7401	1.73	512MB	14.1" XGA	X300 64MB	40GB	Combo	* Intel 11b/g ³²	Modem	1394	Finger	Yes	No	Aug 05
1849-8DU	Pentium M 750	1.86	512MB	14.1" XGA	X300 64MB	60GB	DVD±RW	* Intel 11a/b/g ³²	Mod/Blue	1394	Finger	Yes	No	Aug 05
1849-9WU	Pentium M 740	1.73	512MB	15.0" XGA	X300 64MB	60GB	Combo	* Intel 11b/g	Modem	1394	Finger	Yes	No	Aug 05
1849-ADU	Pentium M 750	1.86	512MB	15.0" SXGA+	X300 64MB	80GB	DVD±RW	* Intel 11a/b/g	Mod/Blue	1394	Finger	Yes	No	Aug 05

- These small and medium business (SMB) models are part of the US Think Express Program
- These 1849 models have a 1 year limited warranty

Positioning Processor	Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 740 (1.73GHz) or 750 (1.86GHz) with enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴			
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional			
Memory	256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
Combo DVD±RW	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance										• Rescue and Recovery™			
Ultrabay Enhanced Disk	Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 40GB⁸ (5400 rpm), 60GB (5400 rpm), 80GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System (shock protection)										• Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) • Fingerprint Software (fingerprint models) • Client Security Software (for security chip)			
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits										• Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant			
Graphics	ATI® MOBILITY™ RADEON X300 / PCI Express x16 / 64MB GDDR1 memory										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										Universal 72 watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and batt: 14.1" mod: 6.1 lb (2.8kg); 2JU: 6.2 lb; 15" mod: 6.6 lb (3.0kg) Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166			
Weight ²	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced Up to 3.6 hr; <i>Optional 9-cell</i> : up to 5.6 hr													
Case material	Up to 3.6 hr; <i>Optional 9-cell</i> : up to 5.6 hr										ThinkPlus 2-year LOR 9x5 NBD 41C9167			
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced													
Battery - life ¹⁰	Up to 3.6 hr; <i>Optional 9-cell</i> : up to 5.6 hr										ThinkPlus 3-year LOR 9x5 NBD 41C9168			
Architecture	Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (Ricoch® R5C811 CardBus controller, Mini PCI, external expansion) / LPC bus (NS PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])													
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										ThinkPlus 4-year LOR 9x5 NBD 41C9171			
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door													
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										ThinkPlus 5-year LOR 9x5 NBD 41C9173			
Video out	S-video out port (TV out) / one 4-pin industry standard connector													
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard										ThinkPlus 2-year P&L P/U Depot 41C9169			
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										ThinkPlus 3-year P&L P/U Depot 41C9170			
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip													
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset										ThinkPlus 4-year P&L P/U Depot 41C9172			
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										ThinkPlus 5-year P&L P/U Depot 41C9174			
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)													
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Audio support	Soft audio / ICH AC97 controller / DirectSound™ support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant													
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / integrated with security chip										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available													
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101											
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102											
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190											
USB 2.0 Portable Multi-Burner Drive	22P9163	ThinkPad Multiple Battery Charger II	22P9040											
USB 2.0 Memory Key 1GB	40Y7421	11a/b/g Wireless CardBus Adapter	31P9101											
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Port Replicator II	74P6733											
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Mini Dock	287810U											
USB Portable Diskette Drive	05K9276	ThinkPad Dock II	287710U											
USB Fingerprint Reader	73P4774	ThinkPad Carrying Case - Expander	73P3597											
Second HDD Adapter for Ultrabay Slim	62P4554	ThinkPad Carrying Case - BackPack	73P3599											
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	ThinkPad Carrying Case - Leather	73P3600											
Multi-Burner Plus Ultrabay Enhanced Drive	73P3312	ThinkPad Carrying Case - Organizer	73P3598											
Optical 3-Button Travel Wheel Mouse	31P7410	ThinkVision® E500 Projector	0038A05											
Kensington® MicroSaver® Security Cable	73P2582	ThinkPad Monitor Stand	22P5265											

See footnotes for important warranty information
US models announced August 2, 2005
US models withdrawn effective June 2006

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ThinkPad® R52 (1858) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁶	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	IEEE Secu-1394 port	rity Chipset 91x	Preload	Workhorse or Global Avail date
1858-22U	Celeron® M 360	1.4	256MB	14.1" XGA	GMA 900	40GB	CD	Open; upg ³⁶	Modem	No	Yes	GML	Home No Mar 05
1858-4UU	Celeron M 360	1.4	256MB	15.0" XGA	GMA 900	40GB	CD	Open; upg	Modem	No	Yes	GML	Home No Mar 05
1858-3BU	Pentium® M 740	1.73	512MB	14.1" XGA	GMA 900	40HS	Combo	*Intel 11b/g ³²	Mod/Blue	1394	Yes	GM	Pro No Mar 05
1858-4MU	Pentium M 760	2.00	512MB	15.0" SXGA+	GMA 900	80GB	DVD±RW	*Intel 11a/b/g ³²	Mod/Blue	1394	Yes	GM	Pro No Mar 05
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Celeron M Processor 360 (1.4GHz) with 400MHz system bus or Intel Pentium M Processor 740 (1.73GHz) or 760 (2.00GHz) with enhanced Intel SpeedStep™ technology ¹ . Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴		
L2 cache	Celeron M: 1 MB ; Pentium M: 2MB ; All: on die (at processor speed) / ECC										Windows XP Home models		
Memory	256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										- Microsoft® Windows® XP Home Edition ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Windows XP Professional models		
CD	Some: CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay Enhanced										- Microsoft Windows XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area)		
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced										◇ Disk-to-Disk Recovery (in hidden protected area)		
DVD±RW	Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced										◇ Disk-to-Disk Recovery (in hidden protected area)		
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high / 40GB⁸ (4200 rpm), 40GB (HS 5400 rpm), or 80GB (4200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / Hard Disk Drive Shock Absorber / Active Protection System (shock protection)										Preloaded (all) • Rescue and Recovery™ • Access IBM • Access Connections • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Update Connector™ ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) • Simple Backup (DVD±RW) • Client Security Software (for security chip)		
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits										Downloadable (all) • IBM Director Agent • Software Delivery Assistant • System Migration Assistant		
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit ibm.com/thinkvantage		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass / UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										Universal 72 watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
Touch pad	Illuminates the keyboard to improve visibility in low-light conditions										ServicePac ²² 1yr IOR 9x5 NBD 30L9188		
ThinkLight™											ServicePac 2 yr IOR 9x5 NBD 30L9189		
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.1 lb (2.8kg); 15" models: 6.6 lb (3.0kg)										ServicePac 3 yr IOR 9x5 NBD 30L9195		
Weight ²	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										ServicePac 4 yr IOR 9x5 NBD 30L9194		
Case material	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										ServicePac 5 yr IOR 9x5 NBD 30L9196		
Battery - type	Celeron models: up to 2.2 hr; Pentium models: up to 3.8 hr; <i>Optional 9-cell: up to 5.8 hr</i>										ServicePac 2 yr P&L P/U Depot 30L9191		
Battery - life ¹⁰											ServicePac 3 yr P&L P/U Depot 30L9192		
Architecture	Some: Mobile Intel 910GML Express Chipset / 82910GML Graphics Mem Cont Hub Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										ServicePac 4 yr P&L P/U Depot 69P9195		
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										ServicePac 5 yr P&L P/U Depot 69P9197		
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										Post-warranty annual maintenance agreements at ibm.com/services/its/us/source/maspspleu.pdf		
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)												
Video out	S-video out port (TV out) / one 4-pin industry standard connector												
IEEE 1394	Some: IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Wireless upg ³⁶	Some: wireless upgradable with wireless Mini PCI options												
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip												
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92 designed ²⁹) modem in CDC / Conexant® chipset												
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)												
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant												
Fingerprint reader	None												
Limited warranty ¹²	1 year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available												
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101								
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102								
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		Ultrabay Slim Li-Polymer Battery 3-cell		08K8190								
USB 2.0 Portable Multi-Burner Drive	22P9163		ThinkPad 72W AC/DC Combo Adapter		22P9010								
USB 2.0 Memory Key 512MB	22P9230		11a/b/g Wireless Mini PCI Adapter II		73P4301								
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357		Intel PRO/Wireless 2200BG Mini PCI		73P2801								
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273		11a/b/g Wireless CardBus Adapter		31P9101								
USB Fingerprint Reader	73P4774		ThinkPad Port Replicator II		74P6733								
Second HDD Adapter for Ultrabay Slim	62P4554		ThinkPad Mini Dock		287810U								
Multi-Burner Plus Ultrabay Enhanced Drive	73P3312		ThinkPad Dock II		287710U								
Enh Perf Wireless Keyboard and Mouse	73P4067		ThinkPad Carrying Case - Organizer		73P3598								
Preferred Pro USB Fingerprint Keyboard	73P4730		E400 Projector		0038A04								
Kensington® MicroSaver® Security Cable	73P2582		Other options at lenovo.com/options										

See footnotes for important warranty information
US models announced March 1, 2005
US models withdrawn effective September 2005

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ThinkPad® R52 (1858) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Integrated graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	IEEE 1394 port	Finger print reader	Chip set 91x	Bat- tery cells	Limited war- ranty ¹²	Workhorse or Global Entry	Avail date
1858-9EU	Celeron® M 370	1.5	256MB	14.1" XGA	GMA 40GB	CD		Open; upg ³⁶	Modem	No	No	GML	6-cell	1 yr	No	Aug 05
1858-9FU	Pentium® M 740	1.73	256MB	14.1" XGA	GMA 40GB	Combo	* Intel 11b/g ³²		Modem	No	Finger	GM	6-cell	1 yr	No	Aug 05
1858-9GU	Pentium M 750	1.86	256MB	14.1" XGA	GMA 40GB	Combo	* Intel 11b/g		Modem	No	Finger	GM	6-cell	1 yr	No	Aug 05
1858-9HU	Pentium M 750	1.86	256MB	15.0" XGA	GMA 40GB	Combo	* Intel 11b/g		Modem	No	Finger	GM	6-cell	1 yr	No	Aug 05
1858-9LU	Pentium M 750	1.86	512MB	15.0" XGA	GMA 40GB	Combo	* Intel 11b/g		Modem	Yes	No	GM	6-cell	1 yr	No	Aug 05
1858-AAU	Pentium M 770	2.13	512MB	15.0" XGA	GMA 80GB	DVD±RW	* Intel 11a/b/g ³²	Mod/Blue	Yes	Finger	GM	6-cell	1 yr	No	Aug 05	
1858-AKU	Pentium M 780	2.26	512MB	15.0" SXGA+	GMA 100G	DVD±RW	* Intel 11a/b/g	Mod/Blue	Yes	No	GM	9-cell	1 yr	No	Aug 05	
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Celeron M Processor 370 with Execute Disable Bit and 400MHz system bus or Intel® Pentium® M Processor 740, 750, 770, 780 with enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus											SOFTWARE¹⁴				
L2 cache	Celeron M: 1 MB ; Pentium M: 2MB ; All: on die (at processor speed) / ECC											Windows XP Professional				
Memory	256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail											- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)				
Diskette drive	None standard / use optional USB-based diskette drive											Preloaded				
CD	Some: CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay Enhanced											• Rescue and Recovery™				
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced											• Access Program				
DVD±RW	Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced											• Access Connections™				
Ultrabay Enhanced	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high											• Norton AntiVirus				
Disk	40GB⁸ (5400 rpm), 60GB (5400 rpm), 80GB (5400 rpm), or 100GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk in Ultrabay Enhanced with option / Hard Disk Drive Shock Absorber / Active Protection System											• PC-Doctor™				
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits											• ThinkPad Utilities				
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz											• Adobe Reader				
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)											• RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD±RW)				
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											• InterVideo WinDVD (combo, DVD±RW models)				
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones											• InterVideo WinDVD Creator (DVD±RW models)				
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											• FingerPrint Software (fingerprint models)				
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.1 lb (2.8kg); 15" models: 6.6 lb (3.0kg)											• Client Security Software (for security chip)				
Weight ²												Downloadable				
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic											• IBM Director Agent				
Battery - type	Lithium Ion 6- or 9-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced											• Software Delivery Assistant				
Battery - life ¹⁰	6-cell: up to 3.9 hr; 9-cell: up to 5.7 hr											• System Migration Assistant				
Architecture	Some: Mobile Intel 910GML Express Chipset / 82910GML Graphics Mem Cont Hub Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])											- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door											ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage				
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											Universal 72 watt AC adapter				
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)											PC 2001-compliant				
Video out	S-video out port (TV out) / one 4-pin industry standard connector											ACPI 1.0b and 2.0-compliant				
IEEE 1394	Some: IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard											CIM and DMI 2.0-compliant				
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											PXE 2.1-compliant				
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											ENERGY STAR®-compliant				
Wireless upg ³⁶	Some: wireless upgradable with wireless Mini PCI options											International Warranty Service ¹⁷				
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip											24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset															
CDC	One Communications Daughter Card (CDC) socket / customer accessible															
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset															
Bluetooth™	Some: Bluetooth wireless technology / in CDC (with modem)											ThinkPlus™.22 1yr LOR 9x5 NBD 41C9166				
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE											ThinkPlus 2 yr LOR 9x5 NBD 41C9167				
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)											ThinkPlus 3 yr LOR 9x5 NBD 41C9168				
Security	Power-on password / hard disk password / supervisor password / security keyhole											ThinkPlus 4 yr LOR 9x5 NBD 41C9171				
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant											ThinkPlus 5 yr LOR 9x5 NBD 41C9173				
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip															
Limited warranty ¹²	1 year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available															
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101											
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102											
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		Ultrabay Slim Li-Polymer Battery 3-cell		08K8190											
USB Fingerprint Reader	73P4774		72W Slim AC/DC Combo Adapter		73P4485											
USB 2.0 Portable Multi-Burner Drive	22P9163		11a/b/g Wireless Mini PCI Adptr II		73P4301											
USB 2.0 Memory Key 1GB	40Y7421		11a/b/g Wireless CardBus Adapter		31P9101											
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273		ThinkPad Port Replicator II		74P6733											
Second HDD Adapter for Ultrabay Slim	62P4554		ThinkPad Mini Dock		287810U											
Multi-Burner Plus Ultrabay Enhanced Drive	73P3312		ThinkPad Dock II		287710U											
Kensington® MicroSaver® Security Cable	73P2582		Other options at lenovo.com/options													

See footnotes for important warranty information
US models announced August 2, 2005
US models withdrawn effective February 2006

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ThinkPad® R52 (1859) - Express - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁶	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	IEEE 1394 port	Security chip	Chipset 91x	Workhorse or Global Avail or Entry date
1859-28U	Pentium® M 740	1.73	256MB	14.1" XGA	GMA 900	40GB	Combo	* Intel 11b/g ³²	Modem	1394	Yes	915GM	No Mar 05
1859-4YU	Celeron® M 350	1.3	256MB	15.0" XGA	GMA 900	40GB	Combo	Intel 11b/g	Modem	1394	Yes	910GML	No Mar 05
1859-5RU	Pentium M 740	1.73	256MB	15.0" XGA	GMA 900	40GB	Combo	* Intel 11b/g	Modem	1394	Yes	915GM	No Mar 05
1859-4AU	Pentium M 740	1.73	512MB	15.0" SXGA+	GMA 900	60GB	Combo	* Intel 11a/b/g ³²	Modem	1394	Yes	915GM	No Mar 05
<ul style="list-style-type: none"> • These small and medium business (SMB) models are part of the US Think Express Program • These 1859 models have a 1 year limited warranty 													
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Celeron M Processor 350 (1.3GHz) with 400MHz system bus or Intel Pentium M Processor 740 (1.73GHz) with enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴		
L2 cache	Celeron M: 1 MB ; Pentium M: 2MB ; All: on die (at processor speed) / ECC										Windows XP Professional		
Memory	256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded		
Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced										• Rescue and Recovery™		
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 40GB⁸ (4200 rpm) or 60GB (4200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System										• Access IBM		
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits										• Access Connections™		
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										• Norton AntiVirus		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• PC-Doctor™		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass /										• ThinkPad Utilities		
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										• Adobe Reader		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Update Connector™ ¹⁵		
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.1 lb (2.8kg); 15" models: 6.6 lb (3.0kg)										• RecordNOW and Drive Letter Access powered by Sonic products (combo models)		
Weight ²	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										• InterVideo WinDVD (combo models)		
Case material	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										• Client Security Software (for security chip)		
Battery - type	Celeron models: up to 2.2 hr; Pentium models: up to 3.8 hr; <i>Optional 9-cell</i> : up to 5.8 hr										Downloadable		
Battery - life ¹⁰	Some: Mobile Intel 910GML Express Chipset / 82910GML Graphics Mem Cont Hub Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub										• IBM Director Agent		
Architecture	All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										• Software Delivery Assistant		
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										• System Migration Assistant		
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										License (CD not included)		
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Video out	S-video out port (TV out) / one 4-pin industry standard connector										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage		
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard										Universal 72 watt AC adapter		
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										PC 2001-compliant		
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										ACPI 1.0b and 2.0-compliant		
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip										CIM and DMI 2.0-compliant		
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset										PXE 2.1-compliant		
CDC	One Communications Daughter Card (CDC) socket / customer accessible										ENERGY STAR®-compliant		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										International Warranty Service ¹⁷		
Bluetooth™	None										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										ServicePac ²² 1yr IOR 9x5 NBD		
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										30L9188		
Security	Power-on password / hard disk password / supervisor password / security keyhole										ServicePac 2 yr IOR 9x5 NBD		
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant										30L9189		
Fingerprint reader	None										ServicePac 3 yr IOR 9x5 NBD		
Limited warranty ¹²	1 year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available										30L9195		
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ServicePac 4 yr IOR 9x5 NBD	30L9194	ServicePac 5 yr IOR 9x5 NBD	30L9196	ServicePac 2 yr P&L P/U Depot	30L9191	ServicePac 3 yr P&L P/U Depot	30L9192	ServicePac 4 yr P&L P/U Depot	69P9195
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	ServicePac 5 yr P&L P/U Depot	69P9195	Other ServicePac options at	ibm.com/services/its/us/source/wamomxeu.pdf						
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ServicePac 2 yr P&L P/U Depot	30L9192	Post-warranty annual maintenance agreements at	ibm.com/services/its/us/source/maspspleu.pdf						
USB 2.0 Portable Multi-Burner Drive	22P9163	ThinkPad 72W AC/DC Combo Adapter	22P9010	ServicePac 3 yr P&L P/U Depot	69P9195								
USB 2.0 Memory Key 512MB	22P9230	11a/b/g Wireless Mini PCI Adptr II	73P4301	ServicePac 4 yr P&L P/U Depot	69P9195								
USB 2.0 Portable 40GB Hard Disk	22P7196	Intel PRO/Wireless 2200BG Mini PCI	73P2801	ServicePac 5 yr P&L P/U Depot	69P9197								
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	11a/b/g Wireless CardBus Adapter	31P9101										
USB Fingerprint Reader	73P4774	ThinkPad Port Replicator II	74P6733										
Second HDD Adapter for Ultrabay Slim	62P4554	ThinkPad Mini Dock	287810U										
Multi-Burner Plus Ultrabay Enhanced Drive	73P3312	ThinkPad Dock II	287710U										
Enh Perf Wireless Keyboard and Mouse	73P4067	M400 Projector	0037A04										
Preferred Pro USB Fingerprint Keyboard	73P4730	ThinkPad Carrying Case - Leather	73P3600										
Kensington® MicroSaver® Security Cable	73P2582	Other options at lenovo.com/options											

See footnotes for important warranty information
US models announced March 1, 2005
US models withdrawn effective September 2005

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ThinkPad® R52 (1859) - TopSeller (July 2005) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁶	Optical	Mini PCI Comm Bay wireless	CDC modem/ TM Bluetooth TM	IEEE 1394 port	Security chip	Chipset or 91x	Workhorse or Global Entry	Avail date
1859-6VU	Celeron® M 360	1.4	256MB	15.0" XGA	GMA 900	40GB	Combo	Intel 11b/g ³²	Modem	1394	Yes	910GML	No	July 05
1859-6WU	Celeron M 370	1.5	256MB	15.0" XGA	GMA 900	40GB	Combo	Intel 11b/g	Modem	1394	Yes	910GML	No	July 05

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These 1859 models have a 1-year limited warranty

Positioning	Mainstream performance and features; two-spindle system												
Processor	Intel® Celeron M Processor 360 (1.4GHz) or 370 (1.5GHz) with 400MHz system bus												
Features	<i>Celeron M Processor 370: Execute Disable Bit</i>												
L2 cache	1 MB / on die (at processor speed) / ECC												
Memory	256MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available												
Diskette drive	None standard / use optional USB-based diskette drive												
Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced												
Ultrabay Enhanced	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high												
Disk	40GB⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™												
Display	15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits												
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz												
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm												
Weight ²	with optical drive and battery: 15" models: 6.6 lb (3.0kg)												
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic												
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced												
Battery - life ¹⁰	Optional 6-cell: up to 2.2 hr; Optional 9-cell: up to 4.2 hr												
Architecture	Mobile Intel 910GML Express Chipset / 82910GML Graphics Memory Cont Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])												
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door												
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door												
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)												
Video out	S-video out port (TV out) / one 4-pin industry standard connector												
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Intel 11b/g ³²	11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Bluetooth™	None												
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant												
Fingerprint reader	None												
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available												
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus 2-year LOR 9x5 NBD	41C9166								
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	ThinkPlus 2-year LOR 9x5 NBD	41C9167								
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ThinkPlus 3-year LOR 9x5 NBD	41C9168								
USB Portable Diskette Drive	05K9276	ThinkPad Multiple Battery Charger II	22P9040	ThinkPlus 4-year LOR 9x5 NBD	41C9171								
USB Gemplus GemPC Smart Card Reader	41N3040	72W Slim AC/DC Combo Adapter	73P4485	ThinkPlus 5-year LOR 9x5 NBD	41C9173								
USB 2.0/Analog Headset by Sennheiser	40Y8518	11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 2-year P&L P/U Depot	41C9169								
USB 2.0 Memory Key 1GB	40Y7421	Intel PRO/Wireless 2915ABG Mini PCI	41N2990	ThinkPlus 3-year P&L P/U Depot	41C9170								
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkPad Port Replicator II	74P6733	ThinkPlus 4-year P&L P/U Depot	41C9172								
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Mini Dock	287810U	ThinkPlus 5-year P&L P/U Depot	41C9174								
ExpressCard Gemplus Smart Card Reader	41N3043	ThinkPad Dock II	287710U	Post-warranty annual maintenance agreements at									
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Carrying Case - Expander	73P3597	agreements at									
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Carrying Case - Backpack	73P3599	lenovo.com/thinkplus/warranty									
DVD-ROM Ultrabay Enhanced Drive	39X2642	ThinkPad Carrying Case - Leather	73P3600										
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	ThinkPad Carrying Case - Organizer	73P3598										
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	ThinkVision® C400 Wireless Projector	0039WA1										
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkPad Monitor Stand	22P5265										
USB Travel Keyboard with UltraNav	31P9490	Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137										
Preferred Pro USB Fingerprint Keyboard	73P4730	ThinkPad Convertible Monitor Stand	40Y7620										
Kensington® MicroSaver® Security Cable	73P2582	Other accessories at lenovo.com/accessories											

See footnotes for important warranty information
US models announced July 6, 2005
US models withdrawn effective February 2007

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ThinkPad® R52 (1859) - TopSeller (August 2005) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁶	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	IEEE 1394 port	Finger print reader	Limited warranty ¹²	Workhorse or Global Entry	Avail date
1859-B6U	Pentium® M 740	1.73	256MB	14.1" XGA	GMA 900	40GB	DVD	Open; upg ³⁶	Modem	1394	No	1-year	No	Aug 05
1859-B7U	Pentium M 740	1.73	256MB	14.1" XGA	GMA 900	40GB	Combo	* Intel 11b/g ³²	Modem	1394	Finger	1-year	No	Aug 05
1859-B8U	Pentium M 740	1.73	512MB	14.1" XGA	GMA 900	60GB	Combo	* Intel 11b/g	Modem	1394	Finger	1-year	No	Aug 05
1859-B9U	Pentium M 740	1.73	256MB	15.0" XGA	GMA 900	40GB	Combo	* Intel 11b/g	Modem	1394	Finger	1-year	No	Aug 05
1859-BAU	Pentium M 740	1.73	512MB	15.0" SXGA+	GMA 900	60GB	Combo	* Intel 11b/g	Modem	1394	Finger	1-year	No	Aug 05
<ul style="list-style-type: none"> • These small and medium business (SMB) models are part of the US TopSeller™ Program • These 1859 models have a 1-year limited warranty 														
Positioning	Mainstream performance and features; two-spindle system										SOFTWARE¹⁴			
Processor	Intel® Pentium® M Processor 740 (1.73GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus													
Features	2MB / on die (at processor speed) / ECC										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area)			
L2 cache	256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail													
Memory	None standard / use optional USB-based diskette drive										Preloaded • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo models) • Fingerprint Software (fingerprint models) • Client Security Software (for security chip)			
Diskette drive	Some: DVD-ROM / 8X-3.3X ⁹ speed / single-layer / removable from Ultrabay™ Enhance													
DVD	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance										Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant			
Combo	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high													
Ultrabay Enhanced	40GB ⁸ (5400 rpm) or 60GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Disk	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits													
Display	Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage			
Graphics	Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits													
Keyboard	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										Universal 72 watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
TrackPoint®	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)													
Touch pad	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166			
ThinkLight™	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones													
Dimensions ³	Illuminates the keyboard to improve visibility in low-light conditions										ThinkPlus 2-year LOR 9x5 NBD 41C9167			
Weight ²	15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery; 15" models: 6.6 lb (3.0kg)													
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										ThinkPlus 3-year LOR 9x5 NBD 41C9168			
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced													
Battery - life ¹⁰	Optional 6-cell: up to 2.2 hr; Optional 9-cell: up to 4.2 hr										ThinkPlus 4-year LOR 9x5 NBD 41C9171			
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (TI® PCI1150 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])													
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										ThinkPlus 5-year LOR 9x5 NBD 41C9173			
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door													
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										ThinkPlus 2-year P&L P/U Depot 41C9169			
Video out	S-video out port (TV out) / one 4-pin industry standard connector													
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard										ThinkPlus 3-year P&L P/U Depot 41C9170			
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										ThinkPlus 4-year P&L P/U Depot 41C9172			
Wireless upg ³⁶	Some: wireless upgradable with wireless Mini PCI options													
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip										ThinkPlus 5-year P&L P/U Depot 41C9174			
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus 2-year P&L P/U Depot 41C9172			
Security chip	Embedded Security Subsystem 2.0 ³³ / in NS PC8394T chip / TCG-compliant													
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip										ThinkPlus 3-year P&L P/U Depot 41C9173			
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available													
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840			ThinkPad T40/R50 Li-Ion Battery 6-cell			92P1101			ThinkPlus 4-year LOR 9x5 NBD				
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842			ThinkPad T40/R50 Li-Ion Battery 9-cell			92P1102			ThinkPlus 5-year LOR 9x5 NBD				
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844			Ultrabay Slim Li-Polymer Battery 3-cell			08K8190			ThinkPlus 2-year P&L P/U Depot				
USB Portable Diskette Drive	05K9276			72W Slim AC/DC Combo Adapter			73P4485			41C9173				
USB Fingerprint Reader	41U3167			11a/b/g Wireless Mini PCI Adapter II			73P4301			41C9169				
USB 2.0 Memory Key 1GB	40Y7421			ThinkPad Port Replicator II			74P6733			41C9170				
USB 2.0 Super Multi-Burner Drive	41N5565			ThinkPad Mini Dock			287810U			41C9171				
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716			ThinkPad Dock II			287710U			41C9172				
Second HDD Adapter for Ultrabay Slim	41U3148			ThinkPad Carrying Case - Expander			73P3597			41C9173				
CD-RW/DVD Combo Ultrabay Enhanced	73P3275			ThinkPad Carrying Case - BackPack			73P3599			41C9174				
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624			ThinkPad Carrying Case - Leather			73P3600			41C9175				
Enh Perf Wireless Keyboard and Mouse	73P4067			ThinkPad Carrying Case - Organizer			73P3598			41C9176				
USB Travel Keyboard with UltraNav	31P9490			ThinkPad Monitor Stand			22P5265			41C9177				
Preferred Pro USB Fingerprint Keyboard	73P4730			ThinkPad Convertible Monitor Stand			40Y7620			41C9178				
ThinkVision® L201p 20.1" Monitor (black)	9220HB1			Other accessories at lenovo.com/accessories						41C9179				

See footnotes for important warranty information
US models announced August 2, 2005
US models withdrawn effective February 2007

* Powered by Intel Centrino® mobile technology

ThinkPad® R52 (1860) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	IEEE 1394 port	Security chip	Warranty ¹²	Workhorse (W) Limited or Global (G) or Entry (E)	Avail date
1860-2BU	Pentium® M 740	1.73	256MB	14.1" XGA	GMA 900	40GB	Combo	* Intel 11b/g ³²	Modem	No	Yes	3-year	W G	Mar 05
1860-2MU	Pentium M 750	1.86	256MB	14.1" XGA	GMA 900	40GB	CD	* Intel 11a/b/g ³²	Modem	No	Yes	3-year	W	Mar 05
1860-2NU	Pentium M 750	1.86	512MB	14.1" XGA	GMA 900	40GB	Combo	* Intel 11a/b/g	Modem	No	Yes	3-year	W	Mar 05
1860-4QU	Pentium M 750	1.86	512MB	15.0" SXGA+	GMA 900	40GB	Combo	* Intel 11a/b/g	Modem	No	Yes	3-year	W	Mar 05
1860-5EU	Pentium M 740	1.73	512MB	15.0" XGA	GMA 900	40HS	Combo	* Intel 11b/g	Modem	No	Yes	3-year	W G	Mar 05
1860-5BU	Pentium M 750	1.86	256MB	15.0" XGA	GMA 900	40GB	CD	* Intel 11a/b/g	Modem	No	Yes	3-year	W	Mar 05
1860-5CU	Pentium M 750	1.86	512MB	15.0" XGA	GMA 900	40GB	Combo	* Intel 11a/b/g	Modem	No	Yes	3-year	W	Mar 05
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 740 (1.73GHz) or 750 (1.86GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴			
L2 cache	2MB / on die (at processor speed) / ECC										Windows XP Professional			
Memory	256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
CD	<i>Some:</i> CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay Enhanced										• Rescue and Recovery™			
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced										• Access Program			
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 40GB⁸ (4200 rpm) or 40GB (HS 5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™										• Access Connections™			
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits										• Norton AntiVirus			
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										• PC-Doctor™			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• ThinkPad Utilities			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• Adobe® Reader			
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										• Update Connector™ ¹⁵			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• RecordNOW and Drive Letter Access powered by Sonic products (combo models)			
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.1 lb (2.8kg); 15" models: 6.6 lb (3.0kg)										• Client Security Software (for security chip)			
Weight ²	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic										Downloadable			
Case material	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										• IBM Director Agent			
Battery - type	Up to 3.8 hr; <i>Optional 9-cell:</i> up to 5.8 hr										• Software Delivery Assistant			
Battery - life ¹⁰											• System Migration Assistant			
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door													
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door													
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)													
Video out	S-video out port (TV out) / one 4-pin industry standard connector													
IEEE 1394	None													
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage			
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip													
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset													
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Bluetooth™	None										Universal 72 watt AC adapter PC 2001-compliant			
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										ACPI 1.0b and 2.0-compliant			
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										CIM and DMI 2.0-compliant			
Security	Power-on password / hard disk password / supervisor password / security keyhole										PXE 2.1-compliant			
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant										ENERGY STAR®-compliant			
Fingerprint reader	None										International Warranty Service ¹⁷			
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101		ThinkPlus™ ²² 2-year LOR 9x5 NBD							
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102		41C9175							
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		Ultrabay Slim Li-Polymer Battery 3-cell		08K8190		41C9176							
USB Portable Diskette Drive	05K9276		72W Slim AC/DC Combo Adapter		73P4485		ThinkPlus 4-year LOR 9x5 NBD							
USB Fingerprint Reader	41U3167		11a/b/g Wireless Mini PCI Adapter II		73P4301		41C9177							
USB 2.0 Portable Multi-Burner Drive	22P9163		Intel PRO/Wireless 2915ABG Mini PCI		41N2990		ThinkPlus 5-year LOR 9x5 NBD							
USB 2.0 Memory Key 1GB	40Y7421		ThinkPad Port Replicator II		74P6733		41C9179							
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716		ThinkPad Mini Dock		287810U		ThinkPlus 4-year P&L P/U Depot							
Second HDD Adapter for Ultrabay Slim	41U3148		ThinkPad Dock II		287710U		41C9178							
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624		ThinkPad Carrying Case - Expander		73P3597		ThinkPlus 5-year P&L P/U Depot							
Enh Perf Wireless Keyboard and Mouse	73P4067		ThinkPad Carrying Case - Leather		73P3600		41C9180							
Preferred Pro USB Fingerprint Keyboard	73P4730		Lenovo M500 Projector		0037A05		Post-warranty annual maintenance agreements at							
Kensington® MicroSaver® Security Cable	73P2582		ThinkVision® L201p 20.1" Monitor (black)		9220HB1		lenovo.com/thinkplus/warranty							
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137		Other accessories at lenovo.com/accessories											

See footnotes for important warranty information
US models announced March 1, 2005
US models withdrawn effective February 2007

* Powered by Intel Centrino® mobile technology

ThinkPad® R52 (1860) - August 2005 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Integrated graphics controller	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	IEEE Finger 1394 print port reader	Workhorse (W) Limited or Global (G) or Entry (E)	Avail date
1860-9GU	Pentium® M 750	1.86	256MB	14.1" XGA	GMA 900	40GB	Combo	* Intel 11b/g ³²	Modem	No	Finger 3-year	W G Aug 05
1860-BQU	Pentium M 750	1.86	512MB	14.1" XGA	GMA 900	40GB	Combo	* Intel 11a/b/g ³²	Modem	No	Finger 3-year	W Aug 05
1860-BRU	Pentium M 760	2.00	512MB	14.1" XGA	GMA 900	40GB	Combo	* Intel 11a/b/g	Modem	No	No 3-year	W Aug 05
1860-BSU	Pentium M 760	2.00	256MB	14.1" XGA	GMA 900	40GB	CD	* Intel 11a/b/g	Modem	No	No 3-year	W Aug 05
1860-BTU	Pentium M 750	1.86	512MB	15.0" XGA	GMA 900	40GB	Combo	* Intel 11a/b/g	Modem	No	Finger 3-year	W Aug 05
1860-BUU	Pentium M 750	1.86	512MB	15.0" XGA	GMA 900	40GB	Combo	* Intel 11b/g	Modem	No	No 3-year	W G Aug 05
1860-BZU	Pentium M 750	1.86	512MB	15.0" XGA	GMA 900	40GB	Combo	* Intel 11b/g	Modem	No	Finger 3-year	W G Aug 05
1860-C2U	Pentium M 760	2.00	512MB	15.0" XGA	GMA 900	40GB	Combo	* Intel 11a/b/g	Modem	No	No 3-year	W Aug 05
1860-C3U	Pentium M 760	2.00	256MB	15.0" XGA	GMA 900	40GB	CD	* Intel 11a/b/g	Modem	No	No 3-year	W Aug 05
1860-C4U	Pentium M 750	1.86	512MB	15.0" SXGA+	GMA 900	40GB	Combo	* Intel 11a/b/g	Modem	Yes	Finger 3-year	W Aug 05
1860-C5U	Pentium M 760	2.00	512MB	15.0" SXGA+	GMA 900	60GB	Combo	* Intel 11a/b/g	Modem	Yes	Finger 3-year	W Aug 05
1860-CDU	Pentium M 750	1.86	512MB	14.1" XGA	GMA 900	40GB	Combo	Open; upg ³⁶	Modem	No	No 3-year	W Aug 05
1860-CPU	Pentium M 750	1.86	1GB	15.0" XGA	GMA 900	40GB	Combo	* Intel 11b/g	Modem	No	No 3-year	W Jan 06
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Pentium® M Processor 750 (1.86GHz) or 760 (2.00GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo models) • Fingerprint Software (fingerprint models) • Client Security Software (for security chip) Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client	
L2 cache	2MB / on die (at processor speed) / ECC											
Memory	256MB, 512MB, or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / dual-channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail											
Diskette drive	None standard / use optional USB-based diskette drive											
CD	Some: CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay Enhanced											
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced											
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 40GB ⁸ (5400 rpm) or 60GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System											
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 200 nits											
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM											
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm											
Weight ²	with optical drive and battery: 14.1" models: 6.1 lb (2.8kg); 15" models: 6.6 lb (3.0kg)											
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic											
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced											
Battery - life ¹⁰	Up to 3.8 hr; <i>Optional 9-cell</i> : up to 5.8 hr											
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graph Mem Cont Hub (GMCH-M) / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])											
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door											
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)											
Video out	S-video out port (TV out) / one 4-pin industry standard connector											
IEEE 1394	Some: IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard											
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception											
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable											
Wireless upg ³⁶	Some: wireless upgradable with wireless Mini PCI options											
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip											
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset											
CDC	One Communications Daughter Card (CDC) socket / customer accessible											
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset											
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE											
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)											
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	Embedded Security Subsystem 2.0³⁵ / in NS PC8394T chip / TCG-compliant											
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip											
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail											
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101	ThinkPlus 5-year LOR 9x5 NBD								
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102	ThinkPlus 5-year LOR 9x5 NBD								
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190	ThinkPlus 4-year P&L P/U Depot								
USB Fingerprint Reader	41U3167	11a/b/g Wireless Mini PCI Adapter II	73P4301	ThinkPlus 4-year P&L P/U Depot								
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad Port Replicator II	74P6733	ThinkPlus 5-year P&L P/U Depot								
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Mini Dock	287810U	ThinkPlus 5-year P&L P/U Depot								
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Dock II	287710U	Post-warranty annual maintenance agreements at								
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Carrying Case - Expander	73P3597	lenovo.com/thinkplus/warranty								
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	Other accessories at lenovo.com/accessories										

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology

US models announced August 2, 2005 or January 17, 2006

US models withdrawn effective August 2006, November 2006, or February 2007

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(YK62) February 2007

ThinkPad® R52 (1860) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸ rpm	Optical	Mini PCI Comm Bay wireless	CDC modem/ TM Bluetooth	IEEE 1394 port	Security chip	Chipset 91x	Limited warranty ¹²	Avail date
1860-25U	Celeron® M 350	1.3	256MB	14.1" XGA	GMA	40GB 4200	CD	Intel 11b/g ³²	Modem	1394	Yes	GML	EasyServ	Mar 05
1860-26U	Celeron M 350	1.3	256MB	14.1" XGA	GMA	40GB 4200	Combo	Intel 11b/g	Modem	1394	Yes	GML	EasyServ	Mar 05
1860-3RU	Celeron M 360	1.4	256MB	14.1" XGA	GMA	40GB 5400	CD	Intel 11b/g	Modem	1394	Yes	GML	EasyServ	July 05
1860-3SU	Celeron M 360	1.4	256MB	14.1" XGA	GMA	40GB 5400	Combo	Intel 11b/g	Modem	1394	Yes	GML	EasyServ	July 05
1860-3MU	Pentium® M 725a	1.60	256MB	14.1" XGA	GMA	60GB 5400	Combo	*Intel 11a/b/g ³²	Modem	1394	Yes	GM	EasyServ	Jun 05
1860-2YU	Pentium M 740	1.73	256MB	14.1" XGA	GMA	40GB 4200	Combo	*Intel 11a/b/g	Modem	1394	Yes	GM	EasyServ	Mar 05
1860-5SU	Pentium M 740	1.73	512MB	15.0" XGA	GMA	40GB 4200	Combo	*Intel 11a/b/g	Modem	1394	Yes	GM	EasyServ	Mar 05
<p>• These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.</p>														
Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Intel® Celeron M Processor 350 or 360 or Pentium M Processor 725a (1.60GHz) with 400MHz system bus or Intel Pentium M Processor 740 (1.73GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴			
L2 cache	Celeron M: 1 MB; Pentium M: 2MB; All: on die (at processor speed) / ECC										Windows XP Professional			
Memory	256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
CD	<i>Some:</i> CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay Enhanced										• Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™			
Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enh										• Rescue and Recovery™			
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 40GB⁸ (4200 or 5400 rpm) or 60GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System										• Access Program			
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits										• Access Connections™			
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										• Norton AntiVirus			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• PC-Doctor™			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• ThinkPad Utilities			
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										• Adobe® Reader			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Update Connector™ ¹⁵			
Dimensions ³	<i>14.1" models (WxDxH):</i> 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm <i>15.0" models (WxDxH):</i> 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm										• RecordNOW and Drive Letter Access powered by Sonic products (combo models)			
Weight ²	with optical drive and battery: <i>14.1" models:</i> 6.1 lb (2.8kg); <i>15" models:</i> 6.6 lb (3.0kg)										• InterVideo WinDVD (combo models)			
Case material	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic										• Client Security Software (for security chip)			
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										Downloadable			
Battery - life ¹⁰	<i>Celeron models:</i> up to 2.2 hr; <i>Pentium models:</i> up to 3.8 hr; <i>Optional 9-cell:</i> up to 5.8 hr										• IBM Director Agent			
Architecture	<i>Some:</i> Mobile Intel 910GML Express Chipset / 82910GML Graphics Mem Cont Hub <i>Some:</i> Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub <i>All:</i> 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										• Software Delivery Assistant			
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										• System Migration Assistant			
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										License (CD not included)			
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Video out	S-video out port (TV out) / one 4-pin industry standard connector										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage			
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard										Universal 72 watt AC adapter			
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception										PC 2001-compliant			
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable										ACPI 1.0b and 2.0-compliant			
Intel 11b/g ³²	<i>Some:</i> 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip										CIM and DMI 2.0-compliant			
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset										PXE 2.1-compliant			
CDC	One Communications Daughter Card (CDC) socket / customer accessible										ENERGY STAR®-compliant			
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										International Warranty Service ¹⁷			
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus™. ²² 2-year LOR 9x5 NBD			
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant										41C9175			
Fingerprint reader	None										ThinkPlus 3-year LOR 9x5 NBD			
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail										41C9176			
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840			ThinkPad T40/R50 Li-Ion Battery 6-cell			92P1101			ThinkPlus 4-year LOR 9x5 NBD				
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842			ThinkPad T40/R50 Li-Ion Battery 9-cell			92P1102			41C9177				
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844			Ultrabay Slim Li-Polymer Battery 3-cell			08K8190			ThinkPlus 5-year LOR 9x5 NBD				
USB Fingerprint Reader	41U3167			11a/b/g Wireless Mini PCI Adapter II			73P4301			41C9179				
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637			ThinkPad Port Replicator II			74P6733			ThinkPlus 4-year P&L P/U Depot				
USB 2.0 Portable 80GB Hard Disk	40Y8726			ThinkPad Mini Dock			287810U			41C9178				
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273			ThinkPad Dock II			287710U			ThinkPlus 5-year P&L P/U Depot				
Second HDD Adapter for Ultrabay Slim	41U3148			ThinkPad Carrying Case - Expander			73P3597			41C9180				
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624			ThinkVision® L201p 20.1" Monitor (black)			9220HB1			Post-warranty annual maintenance agreements at				
Preferred Pro USB Fingerprint Keyboard	73P4730			Other accessories at lenovo.com/accessories						lenovo.com/thinkplus/warranty				

See footnotes for important warranty information

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US models announced March 1, June 28, or July 6, 2005

(RY4) February 2007

US models withdrawn effective January 2006 or February 2007

ThinkPad® R52 (1860) - Education (August 2005) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸ rpm	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	IEEE Finger 1394 print reader	Chipset 91x	Limited warranty ¹²	Avail date
1860-C6U	Celeron® M 360	1.4	256MB	14.1" XGA	GMA	40GB 5400	CD	Intel 11b/g ³²	Modem	1394 No	GML	EasyServ	Aug 05
1860-C7U	Celeron M 360	1.4	256MB	14.1" XGA	GMA	40GB 5400	Combo	Intel 11b/g	Modem	1394 No	GML	EasyServ	Aug 05
1860-3VU	Pentium® M 740	1.73	256MB	14.1" XGA	GMA	40GB 4200	Combo	11a/b/g II ³²	Modem	1394 No	GM	EasyServ	Aug 05
1860-86U	Pentium M 740	1.73	512MB	15.0" XGA	GMA	40GB 4200	Combo	11a/b/g II	Modem	1394 No	GM	EasyServ	Aug 05
1860-C8U	Pentium M 750	1.86	256MB	14.1" XGA	GMA	40GB 5400	Combo	* Intel 11a/b/g ³²	Modem	1394 No	GM	EasyServ	Aug 05
1860-C9U	Pentium M 750	1.86	256MB	14.1" XGA	GMA	40GB 5400	Combo	* Intel 11a/b/g	Modem	1394 Finger	GM	EasyServ	Aug 05
1860-CAU	Pentium M 750	1.86	512MB	15.0" XGA	GMA	40GB 5400	Combo	* Intel 11a/b/g	Modem	1394 No	GM	EasyServ	Aug 05
1860-CBU	Pentium M 750	1.86	512MB	15.0" XGA	GMA	40GB 5400	Combo	* Intel 11a/b/g	Modem	1394 Finger	GM	EasyServ	Aug 05

• **These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**
These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Processor	Intel® Celeron M Processor 360 with 400MHz system bus or Intel Pentium M Processor 740 (1.73GHz) or 750 (1.86GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)	
L2 cache	Celeron M: 1 MB; Pentium M: 2MB; All: on die (at processor speed) / ECC		
Memory	256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail	Preloaded • Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™ • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo models) • Fingerprint Software (fingerprint models) • Client Security Software (for security chip)	
Diskette drive	None standard / use optional USB-based diskette drive		
CD	Some: CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay Enhanced	Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client	
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enh		
Ultrabay Enhanced	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high	ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage	
Disk	40GB ⁸ (4200 or 5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System		
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits	Universal 72 watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²	
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)	ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass		
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones	ThinkPlus 3-year LOR 9x5 NBD 41C9176	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions		
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.1 lb (2.8kg); 15" models: 6.6 lb (3.0kg)	ThinkPlus 4-year LOR 9x5 NBD 41C9177	
Weight ²			
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic	ThinkPlus 5-year LOR 9x5 NBD 41C9179	
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced		
Battery - life ¹⁰	Celeron models: up to 2.2 hr; Pentium models: up to 3.8 hr; Optional 9-cell: up to 5.8 hr	ThinkPlus 4-year P&L P/U Depot 41C9178	
Architecture	Some: Mobile Intel 910GML Express Chipset / 82910GML Graphics Mem Cont Hub Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])		
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	ThinkPlus 5-year P&L P/U Depot 41C9180	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door		
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	
Video out	S-video out port (TV out) / one 4-pin industry standard connector		
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard		
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception		
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable		
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip		
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset		
11a/b/g II ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros™ AR5004X chip		
CDC	One Communications Daughter Card (CDC) socket / customer accessible		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset		
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE		
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)		
Security	Power-on password / hard disk password / supervisor password / security keyhole		
Security chip	Embedded Security Subsystem 2.0 ³³ / in NS PC8394T chip / TCG-compliant		
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip		
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail		
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell	92P1101
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell	92P1102
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell	08K8190
USB Fingerprint Reader	41U3167	ThinkPad Port Replicator II	74P6733
USB 2.0 Portable 80GB Hard Disk	40Y8726	ThinkPad Mini Dock	287810U
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Dock II	287710U
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Carrying Case - Expander	73P3597
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	ThinkVision® L201p 20.1" Monitor (black)	9220HB1
ThinkPad Convertible Monitor Stand	40Y7620	Other accessories at lenovo.com/accessories	

See footnotes for important warranty information
US models announced August 2 or August 16, 2005
US models withdrawn effective June 2006 or February 2007

* Powered by Intel Centrino® mobile technology

ThinkPad® R52 (1861) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ³ rpm	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	IEEE 1394 port	Security chip	Chipset 91x	Limited warranty ¹²	Avail date
1861-25U	Celeron® M 350	1.3	256MB	14.1" XGA	GMA	40GB 4200	CD	Intel 11b/g ³²	Modem	1394	Yes	GML	Onsite	Mar 05
1861-26U	Celeron M 350	1.3	256MB	14.1" XGA	GMA	40GB 4200	Combo	Intel 11b/g	Modem	1394	Yes	GML	Onsite	Mar 05
1861-3TU	Celeron M 360	1.4	256MB	14.1" XGA	GMA	40GB 5400	CD	Intel 11b/g	Modem	1394	Yes	GML	Onsite	Mar 05
1861-3UU	Celeron M 360	1.4	256MB	14.1" XGA	GMA	40GB 5400	Combo	Intel 11b/g	Modem	1394	Yes	GML	Onsite	Mar 05
1861-2YU	Pentium® M 740	1.73	256MB	14.1" XGA	GMA	40GB 4200	Combo	*Intel 11a/b/g ³²	Modem	1394	Yes	GM	Onsite	Mar 05
1861-5SU	Pentium M 740	1.73	512MB	15.0" XGA	GMA	40GB 4200	Combo	*Intel 11a/b/g	Modem	1394	Yes	GM	Onsite	Mar 05

• **These models have a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Intel® Celeron M Processor 350 (1.3) or 360 (1.4GHz) with 400MHz system bus or Intel Pentium M Processor 740 (1.73GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴			
L2 cache	<i>Celeron M: 1 MB; Pentium M: 2MB; All: on die (at processor speed) / ECC</i>										Windows XP Professional			
Memory	256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
CD	<i>Some: CD-ROM / 24X-10X⁹ speed / removable from Ultrabay Enhanced</i>										• Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™			
Combo	<i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay Enh</i>										• Rescue and Recovery™			
Ultrabay Enhanced	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high										• Access Program			
Disk	40GB³ (4200 or 5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System™ (shock protection)										• Access Connections™			
Display	<i>Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</i> <i>Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits</i>										• Norton AntiVirus			
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										• PC-Doctor™			
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)										• ThinkPad Utilities			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• Adobe® Reader			
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones										• Update Connector™ ¹⁵			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• RecordNOW and Drive Letter Access powered by Sonic products (combo models)			
Dimensions ³	<i>14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm</i> <i>15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm</i> <i>with optical drive and battery: 14.1" models: 6.1 lb (2.8kg); 15" models: 6.6 lb (3.0kg)</i>										• InterVideo WinDVD (combo models)			
Weight ²	<i>Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic</i>										• Client Security Software (for security chip)			
Case material	<i>Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic</i>										Downloadable			
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced										• IBM Director Agent			
Battery - life ¹⁰	<i>Celeron models: up to 2.2 hr; Pentium models: up to 3.8 hr; Optional 9-cell: up to 5.8 hr</i>										• Software Delivery Assistant			
Architecture	<i>Some: Mobile Intel 910GML Express Chipset / 82910GML Graphics Mem Cont Hub</i> <i>Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub</i> <i>All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])</i>										• System Migration Assistant			
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										License (CD not included)			
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)													
Video out	S-video out port (TV out) / one 4-pin industry standard connector													
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard													
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable													
Intel 11b/g ³²	<i>Some: 11b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip</i>													
Intel 11a/b/g ³²	<i>Some: 11a/b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset</i>													
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant™ chipset													
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage			
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant													
Fingerprint reader	None													
Limited warranty ¹²	3-year/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time										Universal 72 watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101									
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102									
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		Ultrabay Slim Li-Polymer Battery 3-cell		08K8190									
USB Fingerprint Reader	41U3167		11a/b/g Wireless Mini PCI Adapter II		73P4301									
USB 2.0 Memory Key 1GB	40Y7421		Intel PRO/Wireless 2915ABG Mini PCI		41N2990									
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716		ThinkPad Port Replicator II		74P6733									
Second HDD Adapter for Ultrabay Slim	41U3148		ThinkPad Mini Dock		287810U									
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624		ThinkPad Dock II		287710U									
Preferred Pro USB Fingerprint Keyboard	73P4730		ThinkVision® L201p 20.1" Monitor (black)		9220HB1		Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty							
ThinkPad Convertible Monitor Stand	40Y7620		Other accessories at lenovo.com/accessories											

See footnotes for important warranty information
US models announced March 1 or July 6, 2005
US models withdrawn effective February 2007

* Powered by Intel Centrino® mobile technology

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ThinkPad® R52 (1861) - Education (August 2005) - withdrawn

Created by Lenovo Training Solution
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸ rpm	Optical	Mini PCI Comm Bay wireless	CDC modem/ Bluetooth™	IEEE Finger 1394 print reader	Chipset 91x	Limited warranty ¹²	Avail date
1861-C6U	Celeron® M 360	1.4	256MB	14.1" XGA	GMA	40GB 5400	CD	Intel 11b/g ³²	Modem	1394 No	GML	Onsite	Aug 05
1861-C7U	Celeron M 360	1.4	256MB	14.1" XGA	GMA	40GB 5400	Combo	Intel 11b/g	Modem	1394 No	GML	Onsite	Aug 05
1861-3VU	Pentium® M 740	1.73	256MB	14.1" XGA	GMA	40GB 4200	Combo	11a/b/g II ³²	Modem	1394 No	GM	Onsite	Aug 05
1861-86U	Pentium M 740	1.73	512MB	15.0" XGA	GMA	40GB 4200	Combo	11a/b/g II	Modem	1394 No	GM	Onsite	Aug 05
1861-C8U	Pentium M 750	1.86	256MB	14.1" XGA	GMA	40GB 5400	Combo	* Intel 11a/b/g ³²	Modem	1394 No	GM	Onsite	Aug 05
1861-C9U	Pentium M 750	1.86	256MB	14.1" XGA	GMA	40GB 5400	Combo	* Intel 11a/b/g	Modem	1394 Finger	GM	Onsite	Aug 05
1861-CAU	Pentium M 750	1.86	512MB	15.0" XGA	GMA	40GB 5400	Combo	* Intel 11a/b/g	Modem	1394 No	GM	Onsite	Aug 05
1861-CBU	Pentium M 750	1.86	512MB	15.0" XGA	GMA	40GB 5400	Combo	* Intel 11a/b/g	Modem	1394 Finger	GM	Onsite	Aug 05
<p>• These models have a limited onsite service²⁴ 3-year limited warranty These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.</p>													
Processor	Intel® Celeron M Processor 360 with 400MHz system bus or Intel Pentium M Processor 740 (1.73GHz) or 750 (1.86GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus L2 cache Memory 256 or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded • Education software from Vital Source Technologies®: vidualsource KEY™ and Personal Portable library™ • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo models) • Fingerprint Software (fingerprint models) • Client Security Software (for security chip)		
CD	Some: CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay Enhanced												
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enh												
Ultrabay Enhanced	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high												
Disk	40GB⁸ (4200 or 5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System												
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits												
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz												
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.1 lb (2.8kg); 15" models: 6.6 lb (3.0kg) Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic												
Weight ²													
Case material	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced												
Battery - type	Celeron models: up to 2.2 hr; Pentium models: up to 3.8 hr; Optional 9-cell: up to 5.8 hr												
Battery - life ¹⁰													
Architecture	Some: Mobile Intel 910GML Express Chipset / 82910GML Graphics Mem Cont Hub Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])										Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door												
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door												
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)												
Video out	S-video out port (TV out) / one 4-pin industry standard connector												
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard												
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception												
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable												
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip												
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset												
11a/b/g II ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros™ AR5004X chip												
CDC	One Communications Daughter Card (CDC) socket / customer accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers / 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage		
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Embedded Security Subsystem 2.0³³ / in NS PC8394T chip / TCG-compliant												
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip												
Limited warranty ¹²	3-year/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time										Universal 72 watt AC adapter PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101									
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102									
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Ultrabay Slim Li-Polymer Battery 3-cell		08K8190									
USB Fingerprint Reader	41U3167	11a/b/g Wireless Mini PCI Adptr II		73P4301									
USB 2.0 Portable 80GB Hard Disk	40Y8726	ThinkPad Port Replicator II		74P6733									
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716	ThinkPad Mini Dock		287810U									
Second HDD Adapter for Ultrabay Slim	41U3148	ThinkPad Dock II		287710U									
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624	ThinkPad Carrying Case - Expander		73P3597									
ThinkPad Convertible Monitor Stand	40Y7620	Other accessories at lenovo.com/accessories											

See footnotes for important warranty information
 US models announced August 2 or August 16, 2005
 US models withdrawn effective February 2007

* Powered by Intel Centrino® mobile technology

ThinkPad® R52 (1958) - TopSeller and Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Graphics controller	Disk GB ⁸ rpm	Optical	Mini PCI Comm Bay wireless	CDC modem/Bluetooth™	IEEE 1394 port	Security chip	Chipset 91x	Limited warranty ¹²	Avail date
1958-3FU	Celeron® M 350	1.3	256MB	14.1" XGA	GMA 60GB	4200	CD	Intel 11b/g ³²	Modem	1394	Yes	GML EasyServ	Mar 05	
1958-3QU	Celeron M 360	1.4	256MB	14.1" XGA	GMA 60GB	5400	Combo	Intel 11b/g	Modem	1394	Yes	GML EasyServ	July 05	
1958-3LU	Pentium® M 725a	1.60	256MB	14.1" XGA	GMA 40GB	5400	Combo *Intel	11a/b/g ³²	Modem	1394	Yes	GM EasyServ	Jun 05	
1958-3GU	Pentium M 740	1.73	256MB	14.1" XGA	GMA 60GB	4200	Combo *Intel	11a/b/g	Modem	1394	Yes	GM EasyServ	Mar 05	
1958-6QU	Pentium M 740	1.73	512MB	15.0" XGA	GMA 60GB	4200	Combo *Intel	11a/b/g	Modem	1394	Yes	GM EasyServ	Mar 05	
<ul style="list-style-type: none"> • These small and medium business (SMB) models are part of the US TopSeller™ Program • These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty 														
Positioning Processor	Mainstream performance and features; two-spindle system Intel® Celeron M Processor 350 (1.3GHz), 360 (1.4GHz) or Pentium M Processor 725a (1.60GHz) with 400MHz system bus or Intel Pentium M Processor 740 (1.73GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus L2 cache Memory Celeron M: 1 MB; Pentium M: 2MB; All: on die (at processor speed) / ECC 256 or 512MB std / 2GB max⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™ • Rescue and Recovery™ • Access Program • Access Connections™ • Norton AntiVirus • PC-Doctor™ • ThinkPad Utilities • Adobe® Reader • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo models) • Client Security Software (for security chip) Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Diskette drive	None standard / use optional USB-based diskette drive													
CD	Some: CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay Enhanced													
Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enh													
Ultrabay Enhanced Disk	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 40GB ⁸ (5400 rpm), 60GB (4200 rpm), or 60GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with opt Second HDD Adapter for Ultrabay Slim / Hard Disk Drive Shock Absorber / Active Protection System™													
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 200 nits													
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 91x GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz													
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.5mm (std-size keys)													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav® multi-pointing system / touch pad below keyboard / Tap Zones													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34-37mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37-40mm with optical drive and battery: 14.1" models: 6.1 lb (2.8kg); 15" models: 6.6 lb (3.0kg)													
Weight ²	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic													
Case material	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced													
Battery - type	Celeron models: up to 2.2 hr; Pentium models: up to 3.8 hr; Optional 9-cell: up to 5.8 hr													
Battery - life ¹⁰														
Architecture	Some: Mobile Intel 910GML Express Chipset / 82910GML Graphics Mem Cont Hub Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet MAC, USB, Low Pin Count [LPC] interface, [Bluetooth]) / PCI bus (TI® PCI1510 CardBus controller, Mini PCI, external expansion) / LPC bus (National Semiconductor® PC8394T Super I/O for security chip (TPM), Asset ID, hardware event log, parallel, infrared, [docking-based ports (serial, diskette)])													
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door													
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door													
Ports	Two USB (Version 2.0) / parallel / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or serial ports (use USB)													
Video out	S-video out port (TV out) / one 4-pin industry standard connector													
IEEE 1394	IEEE 1394 (FireWire) port / 4-pin connector / 1394a-2000 standard													
Wireless antenna	UltraConnect™ Antenna built into the display cover for optimal wireless signal reception													
Mini PCI	One Mini PCI type III slot (Communications Bay) / customer upgradable													
Intel 11b/g ³²	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip													
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset													
CDC	One Communications Daughter Card (CDC) socket / customer accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset													
Bluetooth™	None													
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack (3.5 mm; pink) / headphone jack (3.5 mm; green)													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Embedded Security Subsystem 2.0 ³³ / in NS PC8394T chip / TCG-compliant													
Fingerprint reader	None													
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		ThinkPad T40/R50 Li-Ion Battery 6-cell		92P1101		ThinkPlus™ ²² 2-year LOR 9x5 NBD		41C9175					
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		ThinkPad T40/R50 Li-Ion Battery 9-cell		92P1102		ThinkPlus 3-year LOR 9x5 NBD		41C9176					
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		Ultrabay Slim Li-Polymer Battery 3-cell		08K8190		ThinkPlus 4-year LOR 9x5 NBD		41C9177					
USB Fingerprint Reader	41U3167		11a/b/g Wireless Mini PCI Adapter II		73P4301		ThinkPlus 5-year LOR 9x5 NBD		41C9179					
USB 2.0 Memory Key 1GB	40Y7421		Intel PRO/Wireless 2915ABG Mini PCI		41N2990		ThinkPlus 4-year P&L P/U Depot		41C9178					
USB 2.0 Super Multi-Burner Drive	41N5565		ThinkPad Port Replicator II		74P6733		ThinkPlus 5-year P&L P/U Depot		41C9180					
100GB Hard Disk 9.5mm PATA (5400 rpm)	40Y8716		ThinkPad Mini Dock		287810U		Post-warranty annual maintenance agreements at		lenovo.com/thinkplus/warranty					
Second HDD Adapter for Ultrabay Slim	41U3148		ThinkPad Dock II		287710U									
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624		ThinkPad Carrying Case - Expander		73P3597									
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137		ThinkVision® L201p 20.1" Monitor (black)		9220HB1									
ThinkPad Convertible Monitor Stand	40Y7620		Other accessories at lenovo.com/accessories											

See footnotes for important warranty information

* Powered by Intel Centrino® mobile technology

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US models announced April 12, June 28, or July 6, 2005

(RY6) February 2007

US models withdrawn effective September 2005 or February 2007

ThinkPad® R60e (0657) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Graphics controller MHz	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger-print reader	Chip-set	Preload	Avail date
0657-4HU	Celeron® M 410	1.46	256MB	15.0"	XGA GMA166	40GB 5400	CD	11a/b/g ³²	None	None	None	GML	Home	May 06
0657-4JU	Celeron M 410	1.46	256MB	15.0"	XGA GMA166	40GB 5400	CD	11a/b/g	None	None	None	GML	XP Pro	May 06
0657-4KU	Celeron M 410	1.46	256MB	15.0"	XGA GMA166	40GB 5400	Combo	11a/b/g	None	None	None	GML	Home	May 06
0657-4LU	Celeron M 410	1.46	512MB	15.0"	XGA GMA166	60GB 5400	DVD±RW	11a/b/g	None	None	None	GML	XP Pro	May 06
0657-33U	Celeron M 420	1.60	256MB	15.0"	XGA GMA166	40GB 5400	CD	11a/b/g	None	None	None	GML	Home	May 06
0657-34U	Celeron M 420	1.60	256MB	15.0"	XGA GMA166	40GB 5400	CD	11a/b/g	None	None	None	GML	XP Pro	May 06
0657-35U	Celeron M 420	1.60	256MB	15.0"	XGA GMA166	40GB 5400	Combo	11a/b/g	None	None	None	GML	Home	May 06
0657-3AU	Celeron M 420	1.60	512MB	15.0"	XGA GMA166	60GB 5400	DVD±RW	11a/b/g	None	None	None	GML	XP Pro	May 06
0657-01U	Celeron M 430	1.73	512MB	15.0"	XGA GMA166	80GB 5400	DVD±RW	11a/b/g	None	None	None	GML	XP Pro	May 07
0657-3TU	Core Duo T2400	1.83	256MB	15.0"	XGA GMA250	40GB 5400	Combo	* Intel 11a/b/g ³²	None	None	None	GM	XP Pro	May 06
0657-45U	Core Solo T1300	1.66	256MB	15.0"	XGA GMA250	40GB 5400	Combo	* Intel 11a/b/g	None	None	None	GM	XP Pro	May 06
0657-46U	Core Solo T1300	1.66	256MB	15.0"	XGA GMA250	40GB 5400	Combo	* Intel 11a/b/g	None	None	None	GM	Home	May 06
0657-48U	Core Solo T1300	1.66	512MB	15.0"	XGA GMA250	60GB 5400	DVD±RW	* Intel 11a/b/g	None	None	None	GM	XP Pro	May 06
0657-4NU	Core Solo T1400	1.83	256MB	15.0"	XGA GMA250	40GB 5400	Combo	* Intel 11a/b/g	None	None	None	GM	XP Pro	Jul 06
0657-4PU	Core Solo T1400	1.83	256MB	15.0"	XGA GMA250	40GB 5400	Combo	* Intel 11a/b/g	None	None	None	GM	Home	Jul 06
0657-3EU	Core Duo T2300E	1.66	256MB	15.0"	XGA GMA250	40GB 5400	Combo	* Intel 11a/b/g	None	None	None	GM	XP Pro	May 06
0657-3FU	Core Duo T2300E	1.66	256MB	15.0"	XGA GMA250	40GB 5400	Combo	* Intel 11a/b/g	None	None	None	GM	Home	May 06
0657-4MU	Core Duo T2300E	1.66	512MB	15.0"	XGA GMA250	60GB 5400	DVD±RW	* Intel 11a/b/g	None	None	None	GM	XP Pro	May 06
0657-3JU	Core Duo T2300E	1.66	512MB	15.0"	XGA GMA250	60GB 5400	DVD±RW	* Intel 11a/b/g	None	None	None	GM	Home	May 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty²

Positioning Processor	Everyday computing; two spindles Intel® Celeron M Processor 410, 420, or 430 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Solo processor T1300 or T1400 with single-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache or Intel Core Duo processor T2300E or T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache	SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery Preloaded (all) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) License - CD not included (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)
Memory	256MB or 512MB std / 940GML models: 2GB max; 945GM models: 4GB max³¹ / PC2-5300 667MHz DDR2 / 940GML models: PC2-5300 memory supported at slower 533MHz (not 667MHz) speed / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available	
Diskette drive	None standard / use optional USB-based diskette drive	
EIDE CD	Some: CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7mm high	
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / fixed, not removable / 12.7mm	
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner DL (40Y8624) / fixed, not removable	
Ultrabay Enhanced	None / no support for removable Ultrabay™ options	
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm) or 60GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber	
Display	15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect ratio	
Graphics	Some: Intel Graphics Media Accelerator 950 (GMA 950) / in 940GML / 166MHz Some: Intel Graphics Media Accelerator 950 (GMA 950) / in 945GM / 250MHz	
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ (no touch pad)	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58" ; 332mm x 269mm x 37.3-40.2mm	
Weight ²	with optical drive and battery: up to 6.3 lb (2.8 kg)	
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type	Lithium Ion 6-cell / supports optional 9-cell battery	
Battery - life ¹⁰	6-cell : up to 5.2 hr; optional 9-cell : up to 7.8 hr	
Architecture	Some: Mobile Intel 940GML Express Chipset / 82940GML Graphics Mem Cont Hub Some: Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface) / PCI bus (TI PC1512 CardBus controller) / no Super I/O	
Docking station	No port replicator or docking station support	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	
ExpressCard slot	None	
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial, parallel, infrared, S-video out, or 1394 FireWire port (use USB)	
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios	
Mini PCI Express	One Mini PCI Express slot / not customer upgradable	
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG	
11a/b/g ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX	
WWAN ¹⁶	None	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket	
Bluetooth™	None	
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE	
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Security chip	None	
Fingerprint reader	None	
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available	Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² ThinkPlus™ ²² 1-year LOR 9x5 NBD 41C9166 ThinkPlus 3-year LOR 9x5 NBD 41C9168 Other ThinkPlus services at lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced May 16, May 30, or July 18, 2006 or May 11, 2007
US models withdrawn effective October 2006 or September 2007

* Powered by Intel Centrino® mobile technology
* Powered by Intel Centrino® Duo mobile technology

ThinkPad® R60e (0657) - TopSeller (October 2006) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Anti-glare screen	Graphics controller MHz	Disk SATA GB ³ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger-print reader	Chip-set	Preload	Avail date
0657-HQU	Core 2 Duo T5500	1.66	512MB	15.0" XGA	GMA250	80GB 5400	Combo	* Intel 11a/b/g ³²	None	None	GM	XP Pro	Oct 06
0657-HRU	Core 2 Duo T5500	1.66	1GB	15.0" XGA	GMA250	120GB 5400	DVD±RW	ThinkPad 11n ²⁸	None	None	GM	XP Pro	Oct 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty¹²

Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Core™ 2 Duo processor T5500 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache											
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / <i>512MB model:</i> std memory in one socket; one socket available; <i>1GB model:</i> std memory in two sockets; no sockets available											
Diskette drive	None standard / use optional USB-based diskette drive											
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/8X ²¹ speed / fixed, not removable / 12.7mm											
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner DL (40Y8624) / fixed, not removable											
Ultrabay Enhance	None / no support for removable Ultrabay™ options											
Serial ATA disk (SATA150)	80GB⁸ or 120GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber											
Display	15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect ratio											
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / in 945GM / 250MHz											
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ (no touch pad)											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	<i>15.0" models (WxDxH):</i> 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm											
Weight ²	with optical drive and battery: up to 6.6 lb (3.0kg)											
Case material	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic											
Battery - type	Lithium Ion 6-cell / supports optional 9-cell battery											
Battery - life ¹⁰	<i>6-cell:</i> up to 5.2 hr; <i>optional 9-cell:</i> up to 7.8 hr											
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface) / PCI bus (TI PCI1512 CardBus controller) / no Super I/O											
Docking station	No port replicator or docking station support											
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door											
ExpressCard slot	None											
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial, parallel, infrared, S-video out, or 1394 FireWire port (use USB)											
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios											
Mini PCI Express	One Mini PCI Express slot / not customer upgradable											
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG											
ThinkPad 11n ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , ThinkPad 11a/b/g/n Mini PCI Express Adapter, Atheros AR5008 chipset, MIMO 2x2											
WWAN ¹⁶	None											
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket											
Bluetooth™	None											
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE											
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack											
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	None											
Fingerprint reader	None											
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available											
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battery 6-cell	40Y6799									
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797									
60GB Disk 9.5mm SATA150 (7200 rpm)	41N3012	ThinkPad External Battery Charger	40Y7625									
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad 90W AC Adapter	40Y7659									
120GB Disk 9.5mm SATA150 (5400 rpm)	41N5691	ThinkPad 90W AC/DC Combo Adapter	40Y7630									
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	Lenovo M500 Projector	0037A05									
USB Numeric Keypad	33L3225	Lenovo C500 Projector	0039A05									
USB Portable Diskette Drive	05K9276	ThinkPad Carrying Case - Expander	73P3597									
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad Carrying Case - Backpack	73P3599									
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Carrying Case - Organizer	73P3598									
USB 2.0 Security Memory Key 2GB	41U5119	Premiere Leather Carrying Case	10K0209									
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad Convertible Carrying Case	22P8860									
USB 2.0 Port Replicator with Video	40Y8132	USB Fingerprint Reader	73P4774									
USB 2.0 Portable 80GB Hard Disk	41N8378	ThinkPad Convertible Monitor Stand	40Y7620									
USB 2.0 Portable 120GB Hard Disk	41N8379	Lenovo L171 17" Monitor (black)	9227AC1									
USB 2.0 Super Multi-Burner Drive	41N5565	Lenovo L192 Wide 19" Monitor (black)	6920AB1									
USB Keyboard with UltraNav	31P8950	ThinkVision® L171p 17" Monitor (black)	9417HC2									
USB Travel Keyboard with UltraNav	31P9490	ThinkVision L192p 19" Monitor (black)	9419HC2									
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkVision L201p 20.1" Monitor (black)	9220HB1									
TrackPoint Cap Collection	73P2698	Other accessories at lenovo.com/accessories										
<p>SOFTWARE¹⁴</p> <p>Windows XP Professional</p> <ul style="list-style-type: none"> - Microsoft® Windows® XP Professional²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area) <p>Preloaded</p> <ul style="list-style-type: none"> • Microsoft Office OneNote® 2003 • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) <p>CD included</p> <ul style="list-style-type: none"> • Microsoft Office OneNote 2003 <p>License - CD not included</p> <ul style="list-style-type: none"> - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client <p>Supports ThinkVantage® technologies</p> <p>65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²</p> <p>ThinkPlus™²² 1-year LOR 9x5 NBD 41C9166 ThinkPlus 2-year LOR 9x5 NBD 41C9167 ThinkPlus 3-year LOR 9x5 NBD 41C9168 ThinkPlus 4-year LOR 9x5 NBD 41C9171 ThinkPlus 5-year LOR 9x5 NBD 41C9173 ThinkPlus 2-year P&L P/U Depot 41C9169 ThinkPlus 3-year P&L P/U Depot 41C9170 ThinkPlus 4-year P&L P/U Depot 41C9172 ThinkPlus 5-year P&L P/U Depot 41C9174</p>												

See footnotes for important warranty information
US models announced October 17, 2006
US models withdrawn effective July 2007

* Powered by Intel Centrino® Duo mobile technology

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ThinkPad® R60e (0658) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Anti-glare screen	Graphics controller MHz	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger-print reader	Chip-set	Workhorse Global (G)	Avail date
0658-53U	Celeron® M 420	1.60	256MB	15.0" XGA	GMA166	40GB 5400	DVD	None; no upg	None	None	GML	XP Pro	May 06
0658-5HU	Celeron M 420	1.60	256MB	15.0" XGA	GMA166	40GB 5400	DVD	None; no upg	None	None	GML	Home	May 06
0658-5YU	Celeron M 420	1.60	256MB	15.0" XGA	GMA166	40GB 5400	Combo	11a/b/g ³²	None	None	GML	XP Pro	May 06
0658-G3U	Celeron M 420	1.60	256MB	15.0" XGA	GMA166	40GB 5400	CD	None; no upg	None	None	GML	Home	G Oct 06
0658-6HU	Core Duo T2300E	1.66	512MB	15.0" XGA	GMA250	40GB 5400	Combo	*Intel 11a/b/g ³²	None	None	GM	XP Pro	May 06
0658-6KU	Core Duo T2300E	1.66	512MB	15.0" XGA	GMA250	60GB 5400	DVD±RW	*Intel 11a/b/g	None	None	GM	XP Pro	May 06
0658-7PU	Core Solo T1300	1.66	256MB	15.0" XGA	GMA250	40GB 5400	Combo	*Intel 11a/b/g	None	None	GM	XP Pro	May 06
0658-G4U	Core Solo T1400	1.83	512MB	15.0" XGA	GMA250	60GB 5400	Combo	*Intel 11a/b/g	None	None	GM	XP Pro	G Oct 06
0658-CKU	Core Duo T2400	1.83	512MB	15.0" XGA	GMA250	60GB 5400	Combo	*Intel 11a/b/g	None	None	GM	XP Pro	G Oct 06
0658-CLU	Core Duo T2500	2.00	512MB	15.0" XGA	GMA250	80GB 5400	DVD±RW	*Intel 11a/b/g	None	None	GM	XP Pro	G Oct 06
Positioning Processor	Everyday computing; two spindles Intel® Celeron M Processor 420 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Solo processor T1300 or T1400 with single-core, Enhanced Intel Speed-Step™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache or Intel Core Duo processor T2300E, T2400, or T2500 with dual-core, Enhanced Intel SpeedStep technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache												
Memory	256MB or 512MB std / 940GML models: 2GB max; 945GM models: 4GB max³¹ / PC2-5300 667MHz DDR2 / 940GML models: PC2-5300 memory supported at slower 533MHz [not 667MHz] speed / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available												
Diskette drive	None standard / use optional USB-based diskette drive												
EIDE CD	Some: CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7mm high												
EIDE DVD	Some: DVD-ROM / 8X-3.3X ⁹ speed / single-layer / fixed, not removable / 12.7mm high												
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / fixed, not removable / 12.7mm												
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner DL (40Y8624) / fixed, not removable / 12.7mm												
Ultrabay Enhanced	None / no support for removable Ultrabay™ options												
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm), 60GB (5400 rpm), or 80GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber												
Display	15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect ratio												
Graphics	Some: Intel Graphics Media Accelerator 950 (GMA 950) / in 940GML / 166MHz Some: Intel Graphics Media Accelerator 950 (GMA 950) / in 945GM / 250MHz												
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys												
TrackPoint™	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ (no touch pad)												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58" ; 332mm x 269mm x 37.3-40.2mm												
Weight ²	with optical drive and battery: up to 6.3 lb (2.8 kg)												
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic												
Battery - type	Lithium Ion 6-cell / supports optional 9-cell battery												
Battery - life ¹⁰	6-cell : up to 5.2 hr; optional 9-cell : up to 7.8 hr												
Architecture	Some: Mobile Intel 940GML Express Chipset / 82940GML Graphics Mem Cont Hub Some: Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface) / PCI bus (TI PCI1512 CardBus controller) / no Super I/O												
Docking station	No port replicator or docking station support												
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door												
ExpressCard slot	None												
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial, parallel, infrared, S-video out, or 1394 FireWire port (use USB)												
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios												
Mini PCI Express	53U/5HU : no Mini PCI Express slot / no internal 802.11 wireless upg (use PC Card) Others : one Mini PCI Express slot / not customer upgradable Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX												
Intel 11a/b/g ³²	None												
11a/b/g ³²	None												
WWAN ¹⁶	None												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket												
Bluetooth™	None												
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	None												
Fingerprint reader	None												
Limited warranty ¹²	1-year - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² available												
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battry 6-cell	40Y6799										
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battry 9-cell	40Y6797										
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad 90W AC Adapter	40Y7659										
USB Portable Diskette Drive	05K9276	ThinkPad 90W AC/DC Combo Adapter	40Y7630										
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad Carrying Case - Expander	73P3597										
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Carrying Case - Organizer	73P3598										
USB 2.0 Security Memory Key 2GB	41U5119	Premiere Leather Carrying Case	10K0209										
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad Convertible Monitor Stand	40Y7620										
USB 2.0 Port Replicator with Video	40Y8132	Lenovo L192 Wide 19" Monitor (black)	6920AB1										
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkVision® L201p 20.1" Monitor (blk)	9220HB1										
TrackPoint Cap Collection	73P2698	Other accessories at lenovo.com/accessories											
65-watt AC adapter	Supports ThinkVantage® technologies												
ThinkPad Roll Cage (one-piece magnesium frame)													
RoHS-compliant													
International Warranty Service ¹⁷	24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²												
ThinkPlus™.22 1-year LOR 9x5 NBD	41C9166												
ThinkPlus 2-year LOR 9x5 NBD	41C9167												
ThinkPlus 3-year LOR 9x5 NBD	41C9168												
ThinkPlus 4-year LOR 9x5 NBD	41C9171												
ThinkPlus 5-year LOR 9x5 NBD	41C9173												
ThinkPlus 2-year P&L P/U Depot	41C9169												
ThinkPlus 3-year P&L P/U Depot	41C9170												
ThinkPlus 4-year P&L P/U Depot	41C9172												
ThinkPlus 5-year P&L P/U Depot	41C9174												

See footnotes for important warranty information * Powered by Intel Centrino® Duo mobile technology
 US models announced May 16, May 30, or October 17, 2006
 US models withdrawn effective May, July, or September 2007

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ThinkPad® R60e (0658) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz Memory	Anti-glare screen	Graphics controller MHz	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue- tooth	Finger- print reader	Chip- set	1-year limited warranty ¹²	Avail date
0658-5XU	Celeron M 420	1.60 256MB	15.0" XGA	GMA166	40GB 5400 CD		11a/b/g ³²	None	None	None	GML	EasyServ	May 06
0658-6GU	Core Duo T2300E	1.66 512MB	15.0" XGA	GMA250	40GB 5400	Combo *	Intel 11a/b/g ³²	None	None	None	GM	EasyServ	May 06
<p>• This model has an EasyServ™¹⁹ onsite pickup and delivery 1-year limited warranty These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.</p>													
Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Celeron M Processor 420 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Duo processor T2300E or T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area)		
Memory	256MB or 512MB std / <i>940GML models: 2GB max; 945GM models: 4GB max³¹</i> / PC2-5300 667MHz DDR2 / <i>940GML models: PC2-5300</i> memory supported at slower 533MHz [not 667MHz] speed) / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										Preloaded • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo model) • InterVideo WinDVD (combo model)		
Diskette drive	None standard / use optional USB-based diskette drive												
EIDE CD	Some: CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7mm high												
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / fixed, not removable / 12.7mm												
Ultrabay Enhanced	None / no support for removable Ultrabay™ options												
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber												
Display	15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect ratio												
Graphics	Some: Intel Graphics Media Accelerator 950 (GMA 950) / in 940GML / 166MHz Some: Intel Graphics Media Accelerator 950 (GMA 950) / in 945GM / 250MHz												
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ (no touch pad)												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	<i>15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"</i> ; 332mm x 269mm x 37.3-40.2mm												
Weight ²	with optical drive and battery: up to 6.3 lb (2.8 kg)												
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic												
Battery - type	Lithium Ion 6-cell / supports optional 9-cell battery												
Battery - life ¹⁰	<i>6-cell: up to 5.2 hr; optional 9-cell: up to 7.8 hr</i>												
Architecture	Some: Mobile Intel 940GML Express Chipset / 82940GML Graphics Mem Cont Hub Some: Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface) / PCI bus (TI PCI1512 CardBus controller) / no Super I/O												
Docking station	No port replicator or docking station support												
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door												
ExpressCard slot	None												
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial, parallel, infrared, S-video out, or 1394 FireWire port (use USB)												
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios												
Mini PCI Express	One Mini PCI Express slot / not customer upgradable												
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG												
11a/b/g ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX												
WWAN ¹⁶	None												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket												
Bluetooth™	None												
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	None												
Fingerprint reader	None												
Limited warranty ¹² 1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available													
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battry 6-cell	40Y6799										
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battry 9-cell	40Y6797										
60GB Disk 9.5mm SATA150 (7200 rpm)	41N3012	ThinkPad External Battery Charger	40Y7625										
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad 90W AC Adapter	40Y7659										
120GB Disk 9.5mm SATA150 (5400 rpm)	41N5691	ThinkPad 90W AC/DC Combo Adapter	40Y7630										
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	Lenovo M500 Projector	0037A05										
USB Portable Diskette Drive	05K9276	Lenovo C500 Projector	0039A05										
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad Carrying Case - Expander	73P3597										
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Carrying Case - Organizer	73P3598										
USB 2.0 Security Memory Key 2GB	41U5119	Premiere Leather Carrying Case	10K0209										
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad Convertible Carrying Case	22P8860										
USB 2.0 Port Replicator with Video	40Y8132	USB Fingerprint Reader	73P4774										
USB 2.0 Portable 80GB Hard Disk	41N8378	ThinkPad Convertible Monitor Stand	40Y7620										
USB 2.0 Portable 120GB Hard Disk	41N8379	Lenovo L171 17" Monitor (black)	9227AC1										
USB 2.0 Super Multi-Burner Drive	41N5565	Lenovo L192 Wide 19" Monitor (black)	6920AB1										
USB Travel Keyboard with UltraNav	31P9490	Lenovo D221 Wide 22" Monitor (black)	6622HB1										
Preferred Pro USB Keyboard	73P5220	ThinkVision® L171p 17" Monitor (black)	9417HC2										
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkVision L192p 19" Monitor (black)	9419HC2										
TrackPoint Cap Collection	73P2698	ThinkVision L201p 20.1" Monitor (black)	9220HB1										
Lenovo Laser Mouse (USB, PS/2)	41U3074	Other accessories at lenovo.com/accessories											
												ThinkPlus™ ²² 1-year LOR 9x5 NBD 41C9166	
												ThinkPlus 2-year LOR 9x5 NBD 41C9167	
												ThinkPlus 3-year LOR 9x5 NBD 41C9168	
												ThinkPlus 4-year LOR 9x5 NBD 41C9171	
												ThinkPlus 5-year LOR 9x5 NBD 41C9173	
												ThinkPlus 2-year P&L P/U Depot 41C9169	
												ThinkPlus 3-year P&L P/U Depot 41C9170	
												ThinkPlus 4-year P&L P/U Depot 41C9172	
												ThinkPlus 5-year P&L P/U Depot 41C9174	
												Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	

See footnotes for important warranty information
 US models announced May 16 or May 30, 2006
 US models withdrawn effective May or September 2007

* Powered by Intel Centrino® Duo mobile technology

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ThinkPad® R60e (0659) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Anti-glare screen	Graphics controller MHz	Disk SATA GB ⁸ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger-print reader	Chip-set	Limited warranty ¹²	Avail date
0659-9DU	Core Duo T2300E	1.66	512MB	15.0" XGA	GMA250	40GB 5400	Combo *	Intel 11a/b/g ³²	None	None	None	GM	3-year	May 06
0659-94U	Core Duo T2300E	1.66	512MB	15.0" XGA	GMA250	80GB 5400	Combo *	Intel 11a/b/g	None	None	None	GM	3-year	May 06
0659-H7U	Core 2 Duo T5500	1.66	512MB	15.0" XGA	GMA250	80GB 5400	Combo *	Intel 11a/b/g	None	None	None	GM	3-year	Oct 06

Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Core™ Duo processor T2300E with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache or Intel Core 2 Duo processor T5500 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo model) • InterVideo WinDVD (combo model) License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available	
Diskette drive	None standard / use optional USB-based diskette drive	
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / fixed, not removable / 12.7mm high	
Ultrabay Enhanced	None / no support for removable Ultrabay™ options	
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm) or 80GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / Hard Disk Drive Shock Absorber	
Display	15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect ratio	
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / in 945GM / 250MHz	
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ (no touch pad) Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ²	<i>15.0" models (WxDxH):</i> 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm with optical drive and battery: up to 6.3 lb (2.9 kg)	
Case material	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type	Lithium Ion 6-cell / supports optional 9-cell battery	
Battery - life ¹⁰	<i>6-cell:</i> up to 5.2 hr; <i>optional 9-cell:</i> up to 7.8 hr	
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface) / PCI bus (TI PCI1512 CardBus controller) / no Super I/O	
Docking station	No port replicator or docking station support	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	
ExpressCard slot	None	
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard, mouse, serial, parallel, infrared, S-video out, or 1394 FireWire port (use USB)	
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios	
Mini PCI Express	One Mini PCI Express slot / not customer upgradable	
Intel 11a/b/g ³² WWAN ¹⁶	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket	
Bluetooth™	None	
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE	
Audio support	High Definition (HD) Audio / AD1981HD codec / mono speaker, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Security chip	None	
Fingerprint reader	None	
Limited warranty ¹² 3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail		

512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battry 6-cell	40Y6799
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battry 9-cell	40Y6797
80GB Disk 9.5mm SATA150 (5400 rpm)	41N5662	ThinkPad External Battery Charger	40Y7625
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad 90W AC Adapter	40Y7659
120GB Disk 9.5mm SATA150 (5400 rpm)	41N5691	ThinkPad 90W AC/DC Combo Adapter	40Y7630
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	Lenovo M500 Projector	0037A05
USB Numeric Keypad	33L3225	Lenovo C500 Projector	0039A05
USB Portable Diskette Drive	05K9276	ThinkPad Carrying Case - Expander	73P3597
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad Carrying Case - Organizer	73P3598
USB 2.0 Lenovo Webcam	40Y8519	Premiere Leather Carrying Case	10K0209
USB 2.0 Security Memory Key 2GB	41U5119	ThinkPad Convertible Carrying Case	22P8860
USB 2.0 Security Memory Key 4GB	41U5120	USB Fingerprint Reader	73P4774
USB 2.0 Port Replicator with Video	40Y8132	ThinkPad Convertible Monitor Stand	40Y7620
USB 2.0 Portable 80GB Hard Disk	41N8378	Lenovo L171 17" Monitor (black)	9227AC1
USB 2.0 Portable 120GB Hard Disk	41N8379	Lenovo L192 Wide 19" Monitor (black)	6920AB1
USB 2.0 Super Multi-Burner Drive	41N5565	Lenovo D221 Wide 22" Monitor (black)	6622HB1
USB Travel Keyboard with UltraNav	31P9490	ThinkVision® L171p 17" Monitor (black)	9417HC2
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkVision L192p 19" Monitor (black)	9419HC2
TrackPoint Cap Collection	73P2698	ThinkVision L201p 20.1" Monitor (black)	9220HB1
Lenovo Laser Mouse (USB, PS/2)	41U3074	Other accessories at lenovo.com/accessories	

See footnotes for important warranty information
US models announced May 30 or October 17, 2006
US models withdrawn effective July or September 2007

* Powered by Intel Centrino® Duo mobile technology

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(PC-13) September 2007

ThinkPad® R60e Accessories - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Partial list of accessories supported on ThinkPad R60e originally announced on May 16, 2006

Memory

512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ann 01/05/06
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ann 01/05/06

Ultrabay Slim 9.5mm

None (no removable bay options)

Ultrabay Enhanced 12.7mm

None (no removable bay options)

Storage and removable storage

60GB Disk 9.5mm SATA150 (7200 rpm)	41N3012	ann 01/05/06
80GB Disk 9.5mm SATA150 (5400 rpm)	41N5662	ann 08/15/06
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ann 01/05/06
120GB Disk 9.5mm SATA150 (5400 rpm)	41N5691	ann 03/20/07
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ann 03/20/07

USB 2.0 Essential Memory Key 1GB	41U4940	ann 01/23/07
USB 2.0 Essential Memory Key 2GB	41U4944	ann 01/23/07
USB 2.0 Security Memory Key 1GB	41U5118	ann 07/17/07
USB 2.0 Security Memory Key 2GB	41U5119	ann 07/17/07
USB 2.0 Security Memory Key 4GB	41U5120	ann 07/17/07

USB Portable Diskette Drive	05K9276	ann 06/05/00
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ann 01/05/06
USB 2.0 Portable 80GB Hard Disk	41N8378	ann 04/17/07
USB 2.0 Portable 120GB Hard Disk	41N8379	ann 04/17/07
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07

Wireless LAN (Mini PCI Express)

No Mini PCI Express upgrade supported (use PC Card)

ThinkPad Expansion

USB Serial Parallel Adapter	22P5298	ann 10/09/01
USB 2.0 Port Replicator with Video	40Y8132	ann 02/23/06
ThinkPad Adjustable Notebook Stand ⁴¹	40Y7676	ann 09/20/05

⁴¹ System will not physically attach to stand but can be placed on the ledge of the stand.

External Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Enh Perf Wireless Keyboard and Mouse	73P4067	ann 12/07/04
USB Keyboard with UltraNav	31P8950	ann 01/28/03
USB Travel Keyboard with UltraNav	31P9490	ann 04/27/04
Preferred Pro USB Fingerprint Keyboard	73P4730	ann 02/22/05

External Mouse

USB Optical Wheel Mouse	06P4069	ann 05/21/03
Optical 3-Button ScrollPoint® Mouse	31P7405	ann 08/27/02
Optical 3-Button ScrollPoint Pro Mouse	31P8700	ann 10/01/02
Optical 3-Button Travel Wheel Mouse	31P7410	
Lenovo Laser Mouse (USB, PS/2)	41U3074	ann 01/23/07

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann 06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06

Batteries

ThinkPad T60/R60 Series Li-Ion Battery 6-cell	40Y6799	ann 01/05/06
ThinkPad Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	ann 09/20/05
ThinkPad External Battery Charger ⁴²	40Y7625	ann 09/20/05

⁴² Requires the *ThinkPad 90W AC Adapter* 40Y7659.

ThinkPad 65W AC Adapter ⁴³	40Y7696	
⁴³ Only compatible with the 945GM and GM965 chipset models.		
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
ThinkPad 90W AC/DC Combo Adapter	40Y7630	ann 12/13/05
Belkin 1 Outlet Notebook Surge	31P7658	
Belkin Universal Notebook Travel Surge	22P7127	
Belkin 8-outlet 6-foot Surge Protector	31P7659	

Data/Video Projectors

Lenovo M500 Projector	0037A05	ann 02/28/06
Lenovo C500 Projector	0039A05	ann 07/11/06

Carrying Cases

Lenovo Carrying Case - Messenger Max	41U5253	ann 05/01/07
Lenovo Carry Case - Performance Backpack	41U5254	ann 05/01/07
ThinkPad Nylon Carrying Case	10K0207	
ThinkPad Carrying Case - Expander	73P3597	
ThinkPad Carrying Case - Backpack	73P3599	
ThinkPad Premiere Leather Carrying Case	10K0209	
ThinkPad Convertible Carrying Case	22P8860	

Security

Kensington® Cable Lock from Lenovo	73P2582	ann 12/29/03
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
PC Card Gemplus Smart Card Reader	41N3004	ann 12/13/05
USB Fingerprint Reader	41U3167	ann 10/24/06

Monitors

Lenovo E75 17" CRT Monitor (16.0" vis) blk	6307BTN	ann 01/16/07
Lenovo L151 15" Monitor (black)	9165AB6	ann 02/28/06
Lenovo L171 17" Monitor (black)	9227AC1	ann 11/07/06
Lenovo L191 19" Monitor (black)	6135AB1	ann 06/27/06
Lenovo L192 Wide 19" Monitor (black)	6920AB1	ann 09/19/06
Lenovo D221 Wide 22" Monitor (black)	6622HB1	ann 11/21/06
ThinkVision® L171p 17" Monitor (black)	9417HC2	ann 10/31/06
ThinkVision L192p 19" Monitor (black)	9419HC2	ann 10/31/06
ThinkVision L201p 20.1" Monitor (black)	9220HB1	ann 10/31/06

Monitor Accessories⁴⁶

ThinkVision USB Soundbar	40Y7616	ann 08/23/05
Kensington Cable Lock from Lenovo	73P2582	ann 12/29/03
ThinkPad Convertible Monitor Stand	40Y7620	ann 01/05/06
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

Other accessories at lenovo.com/accessories

Need to buy accessories no longer marketed by Lenovo? See www.itxchange.com/lenovo for the Options Continuation Program.

ThinkPad® R60 (9455) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Graphics controller	Disk SATA GB ⁸	rpm	EIDE Optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Blue-tooth	Finger-print reader	Touch pad	1394/ S-Video port	Workhorse Global (G) Avail date			
9455-4MU	Celeron® M 410	1.46	256	15.0"	XGA	GMA 40G	5400	CD	11a/b/g ³²	None				/S	Home G May 06			
9455-ACU	Celeron M 420	1.60	256	15.0"	XGA	GMA 40G	5400	CD	Open; upg ³⁶	None				/S	Home G Oct 06			
9455-2CU	Core Solo T1300	1.66	256	14.1"	XGA	GMA 40G	5400	Combo	Intel 11a/b/g ³²	None		T		XP Pro	May 06			
9455-C8U	Core Solo T1400	1.83	512	15.0"	XGA	GMA 60G	5400	Combo	11a/b/g	None				XP Pro G	Oct 06			
9455-C9U	Core Solo T1400	1.83	512	15.0"	XGA	GMA 60G	5400	Combo	*Intel 11a/b/g	None		T		XP Pro G	Oct 06			
9455-22U	Core Duo T2300E	1.66	512	14.1"	SXGA+	GMA 60G	5400	Combo	*Intel 11a/b/g	None		T	1394	XP Pro	May 06			
9455-23U	Core Duo T2400	1.83	1GB	14.1"	SXGA+	GMA 100G	5400	DVD±RW	*Intel 11a/b/g	None	Blue Finger	T	1394	XP Pro	May 06			
9455-2DU	Core Duo T2300E	1.66	512	14.1"	XGA	GMA 60G	5400	DVD±RW	*Intel 11a/b/g	None		T		XP Pro	May 06			
9455-2JU	Core Duo T2400	1.83	512	14.1"	XGA	GMA 60G	5400	DVD±RW	*Intel 11a/b/g	None	Blue Finger	T	1394	XP Pro	May 06			
9455-38U	Core Duo T2400	1.83	1GB	15.0"	SXGA+	GMA 100G	7200	DVD±RW	*Intel 11a/b/g	None	Blue Finger	T	1394 /S	XP Pro	May 06			
9455-39U	Core Duo T2500	2.00	1GB	15.0"	SXGA+	GMA 100G	7200	DVD±RW	*Intel 11a/b/g	None	Blue Finger	T	1394 /S	XP Pro	May 06			
9455-3KU	Core Duo T2300E	1.66	512	15.0"	XGA	GMA 60G	5400	Combo	*Intel 11a/b/g	None		T	/S	XP Pro	May 06			
9455-49U	Core Duo T2400	1.83	512	15.0"	XGA	GMA 60G	5400	DVD±RW	*Intel 11a/b/g	None		Finger T	1394 /S	XP Pro	May 06			
Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Celeron M Processor 410 or 420 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Solo processor T1300 or T1400 with single-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB L2 cache or Intel Core Duo processor T2300E, T2400, or T2500 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										SOFTWARE¹⁴							
Memory	256MB, 512MB, or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available										Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery							
EIDE CD	<i>Some:</i> CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay™ Enhanced										Preloaded (all; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) License - CD not included (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)							
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanc																	
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner DL (40Y8624) / removable Ultrabay Enhanced																	
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel																	
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm), 60GB (5400 rpm), or 100GB (5400 or 7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System																	
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare / 4:3 aspect <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare / 4:3 aspect																	
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz																	
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys																	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass																	
Touch pad	<i>Some:</i> UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones																	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions																	
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm with optical drive and battery: 14.1" models: up to 5.8 lb (2.6kg); 15": up to 6.3 lb (2.9 kg)																	
Weight ²																		
Case material	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic																	
Battery - type	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Enhanced																	
Battery - life ¹⁰	6-cell: up to 5.2 hr; <i>optional 9-cell:</i> up to 7.8 hr; 9-cell plus Ultrabay battery: up to 10 hr																	
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCIx512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)																	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door																	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door																	
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / <i>some:</i> 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / 15" models: S-video out / no keyboard, mouse, serial, parallel, or infrared port																	
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios																	
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable																	
Wireless upg ³⁶	<i>Some:</i> wireless upgradable with wireless Mini PCI Express options																	
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG																	
11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX																	
WWAN ¹⁶	None																	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket																	
Bluetooth™	<i>Some:</i> Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator																	
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE																	
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack																	
Security	Power-on password / hard disk password / supervisor password / security keyhole																	
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant																	
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / supports the security chip																	
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available																	
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	T60/R60 Series Li-Ion Battery 6-cell										40Y6799	ThinkPlus 3-year P&L P/U Depot					
ThinkPad Essential Port Replicator	250510W	Z60m/T60/R60 Li-Ion Battery 9-cell										40Y6797	41C9166					
ThinkPad Advanced Mini Dock	250410U	ThinkPad 90W AC/DC Combo Adapter										40Y7630	41C9167					
Other accessories on O-R60 sheet	Other accessories at lenovo.com/accessories															41C9168		
															41C9171			
															41C9173			
															41C9169			
															41C9170			
															Other ThinkPlus services at lenovo.com/thinkplus/warranty			

See footnotes for important warranty information

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US models announced May 16, May 30, or Oct 17, 2006

* Powered by Intel Centrino Duo mobile technology

(RC1-1) September 2007

US models withdrawn effective February, July, or September 2007

ThinkPad® R60 (9456) - TopSeller (Celeron) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Graphics controller	Disk SATA GB ⁸	rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger-print reader	1394/S-Video port	Bat-tery cells	Preload	Avail date
9456-59U	Celeron® M 420	1.60	256MB	14.1" XGA	GMA	40GB	5400	Combo	11a/b/g ³²	None	None	None	None	6	XP Home	May 06
9456-5BU	Celeron M 420	1.60	256MB	14.1" XGA	GMA	40GB	5400	Combo	11a/b/g	None	None	None	None	6	XP Pro	May 06
9456-5AU	Celeron M 420	1.60	512MB	14.1" XGA	GMA	60GB	5400	DVD±RW	11a/b/g	None	None	None	None	6	XP Pro	May 06
9456-5RU	Celeron M 410	1.46	256MB	14.1" XGA	GMA	40GB	5400	Combo	11a/b/g	None	None	None	None	6	XP Home	May 06
9456-5SU	Celeron M 410	1.46	256MB	14.1" XGA	GMA	40GB	5400	Combo	11a/b/g	None	None	None	None	6	XP Pro	May 06
9456-5TU	Celeron M 410	1.46	512MB	14.1" XGA	GMA	60GB	5400	DVD±RW	11a/b/g	None	None	None	None	6	XP Pro	May 06
9456-5UU	Celeron M 410	1.46	256MB	14.1" XGA	GMA	40GB	5400	CD	11a/b/g	None	None	None	None	6	XP Pro	May 06
9456-5VU	Celeron M 410	1.46	512MB	14.1" XGA	GMA	60GB	5400	CD	11a/b/g	None	None	None	None	6	XP Pro	May 06

• These small and medium business (SMB) models are part of the US TopSeller™ Program
 • These models have a 1-year limited warranty¹²

Positioning Processor	Everyday computing; two spindles Intel® Celeron M Processor 410 or 420 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache	SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery Preloaded (all) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) License - CD not included (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)	
Memory	256MB or 512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available		
Diskette drive	None standard / use optional USB-based diskette drive		
EIDE CD	Some: CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay™ Enhanced		
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance		
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner DL (40Y8624) / removable Ultrabay Enhanced		
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel		
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm) or 60GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System		
Display	14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect		
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz		
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass		
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions		
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm		
Weight ²	with optical drive and battery: 14.1" models: up to 5.8 lb (2.6kg)		
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic		
Battery - type	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Enhanced		
Battery - life ¹⁰	6-cell: up to 2.5 hr; opt 9-cell: up to 3.8 hr; 9-cell plus Ultrabay battery: up to 4.7 hr		
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (T [®] PCIx512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)		
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door		
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door		
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / no 1394 FireWire 400 / no S-video out / no keyboard, mouse, serial, parallel, or infrared port		
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios		
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable		
WWAN ¹⁶	11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket		
Bluetooth™	None		
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE		
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack		
Security	Power-on password / hard disk password / supervisor password / security keyhole		
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant		
Fingerprint reader	None		
Limited warranty ¹² 1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available			
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battery 6-cell	40Y6799
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad External Battery Charger	40Y7625
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad 90W AC/DC Combo Adapter	40Y7630
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	Lenovo M500 Projector	0037A05
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	Lenovo C500 Projector	0039A05
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad Carrying Case - Organizer	73P3598
USB 2.0 Lenovo Webcam	40Y8519	Premiere Leather Carrying Case	10K0209
USB 2.0 Security Memory Key 2GB	41U5119	ThinkPad Convertible Carrying Case	22P8860
USB 2.0 Security Memory Key 4GB	41U5120	USB Fingerprint Reader	73P4774
USB 2.0 Portable 120GB Hard Disk	41N8379	ThinkPad Adjustable Notebook Stand	40Y7676
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Convertible Monitor Stand	40Y7620
ExpressCard Gemplus Smart Card Reader	41N3043	Lenovo D221 Wide 22" Monitor (black)	6622HB1
11a/b/g Wireless Mini PCI Express Adapter	40Y7026	ThinkVision® L171p 17" Monitor (black)	9417HC2
ThinkPad Essential Port Replicator	250510W	ThinkVision L192p 19" Monitor (black)	9419HC2
ThinkPad Advanced Mini Dock	250410U	ThinkVision L201p 20.1" Monitor (black)	9220HB1
ThinkPad Advanced Dock	250310U	Other accessories at lenovo.com/accessories	

Supports ThinkVantage® technologies
 65-watt AC adapter (GMA graphics)
 ThinkPad Roll Cage (one-piece magnesium frame)
 RoHS-compliant
 International Warranty Service¹⁷
 24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²
 ThinkPlus™²² 1-year LOR 9x5 NBD
 41C9166
 ThinkPlus 2-year LOR 9x5 NBD
 0037A05
 41C9167
 ThinkPlus 3-year LOR 9x5 NBD
 0039A05
 41C9168
 ThinkPlus 5-year LOR 9x5 NBD
 10K0209
 41C9173
 ThinkPlus 2-year P&L P/U Depot
 73P4774
 41C9169
 ThinkPlus 3-year P&L P/U Depot
 40Y7620
 41C9170
 ThinkPlus 5-year P&L P/U Depot
 9417HC2
 41C9174
 Other ThinkPlus services at lenovo.com/thinkplus/warranty

See footnotes for important warranty information
 US models announced May 16 or May 30, 2006
 US models withdrawn effective October 2006 or September 2007

ThinkPad® R60 (9456) - TopSeller (Core™ Processor) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Graphics controller	Disk SATA GB ³	EIDE rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN Blue-tooth	Finger-print reader	1394/S-Video port	Bat-tery cells	Preload	Avail date
9456-54U	Core Duo T2300E	1.66	512MB	14.1" SXGA+	GMA	60GB	5400	Combo	11a/b/g ³²			1394	6	XP Pro	May 06
9456-5DU	Core Solo T1300	1.66	256MB	14.1" XGA	GMA	40GB	5400	Combo	11a/b/g				6	Home	May 06
9456-5EU	Core Solo T1300	1.66	256MB	14.1" XGA	GMA	40GB	5400	Combo	11a/b/g				6	XP Pro	May 06
9456-5GU	Core Duo T2300E	1.66	512MB	14.1" XGA	GMA	40GB	5400	Combo	11a/b/g				6	Home	May 06
9456-5HU	Core Duo T2300E	1.66	512MB	14.1" XGA	GMA	40GB	5400	Combo	11a/b/g				6	XP Pro	May 06
9456-5KU	Core Duo T2300E	1.66	256MB	14.1" XGA	GMA	40GB	5400	DVD±RW	11a/b/g				6	XP Pro	May 06
9456-5JU	Core Duo T2300E	1.66	512MB	14.1" XGA	GMA	60GB	5400	DVD±RW	11a/b/g		Finger		6	XP Pro	May 06
9456-5MU	Core Duo T2400	1.83	512MB	14.1" XGA	GMA	60GB	5400	DVD±RW	11a/b/g		Finger		6	XP Pro	May 06
9456-63U	Core Duo T2400	1.83	1GB	15.0" SXGA+	GMA	100G	7200	DVD±RW	11a/b/g		Blue	1394 /S	6	XP Pro	May 06
9456-66U	Core Duo T2500	2.00	1GB	15.0" SXGA+	GMA	100G	7200	DVD±RW	11a/b/g		Blue	1394 /S	9	XP Pro	May 06
9456-68U	Core Solo T1300	1.66	512MB	15.0" XGA	GMA	60GB	5400	Combo	11a/b/g			/S	6	XP Pro	May 06
9456-6XU	Core Solo T1400	1.83	512MB	15.0" XGA	GMA	60GB	5400	Combo	11a/b/g			/S	6	XP Pro	Jul 06
9456-6AU	Core Duo T2300E	1.66	256MB	15.0" XGA	GMA	40GB	5400	DVD±RW	11a/b/g			/S	6	XP Pro	May 06
9456-6JU	Core Duo T2300E	1.66	256MB	15.0" XGA	GMA	40GB	5400	DVD±RW	11a/b/g			1394 /S	6	XP Pro	May 06
9456-6KU	Core Duo T2400	1.83	512MB	15.0" XGA	GMA	60GB	5400	Combo	11a/b/g		Finger	1394 /S	6	XP Pro	May 06
9456-6NU	Core Duo T2300E	1.66	256MB	15.0" SXGA+	GMA	60GB	5400	Combo	*Intel 11a/b/g ³²	Verizon		1394 /S	6	XP Pro	May 06
9456-6PU	Core Duo T2400	1.83	1GB	15.0" SXGA+	GMA	100G	5400	DVD±RW	*Intel 11a/b/g	Verizon		1394 /S	6	XP Pro	May 06
9456-01U	Core Duo T2300E	1.66	1GB	15.0" XGA	GMA	80GB	5400	DVD±RW	*Intel 11a/b/g		Finger	1394 /S	6	XP Pro	Jan 07

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty²

Positioning Processor	Everyday computing; two spindles Intel® Core™ Solo processor T1300 or T1400 with single-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache or Intel Core Duo processor T2300E, T2400, or T2500 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache	SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) Preloaded (all) • 01U only: Microsoft Office OneNote® 2003 • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Desktop • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) CD included • 01U only: Microsoft Office OneNote License - CD not included (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)
Memory	256MB, 512MB, or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / 01U: standard memory in both sockets (512MB each socket); no sockets available; Others: standard memory in 1 socket; 1 socket available	
Diskette drive	None standard / use optional USB-based diskette drive	
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Enhance	
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner DL (40Y8624) / removable Ultrabay Enhanced	
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel	
Serial ATA disk (SATA150)	40GB⁸, 60GB, 80GB (5400 rpm) or 100GB (5400 or 7200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk with option / Hard Disk Drive Shock Absorber / Active Protection System	
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare / 4:3 Some: 15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare / 4:3	
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz	
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	14.1" models (WxDxH) : 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm 15.0" models (WxDxH) : 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm with optical drive and battery: 14.1" models : up to 6.2 lb (2.6kg); 15" : up to 6.8 lb (3.1 kg)	
Weight ²		
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type	Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Enhanced	
Battery - life ¹⁰	6-cell : up to 5.2 hr; 9-cell : up to 7.8 hr; 9-cell plus Ultrabay battery : up to 10.0 hr	
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PC1x512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)	
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door	
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door	
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / some: 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / 15" models: S-video out / no keyboard, mouse, serial, parallel, or infrared port	
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios	
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable	
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG	
11a/b/g ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX	
WWAN ¹⁶	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket	
Bluetooth™	Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator	
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE	
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant	
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip	
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available	
		Supports ThinkVantage® technologies 65-watt AC adapter (GMA graphics) ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166 ThinkPlus 3-year LOR 9x5 NBD 41C9168 Other ThinkPlus services at lenovo.com/thinkplus/warranty

See footnotes for important warranty information * Powered by Intel Centrino® Duo mobile technology
US models announced May 16, May 30, July 18, or December 29, 2006
US models withdrawn effective October 2006, May 2007, or September 2007

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(RC1-3) September 2007

ThinkPad® R60 (9456) - TopSeller (Core™ 2 Duo Processor) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Graphics controller	Graphics GB	Disk SATA rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger-print reader	1394/S-Video port	OneNote preload and CD	Avail date
9456-FBU	Core 2 Duo T5500	1.66	1GB	15.0" XGA	GMA	80GB	5400	Combo	*Intel 11a/b/g ³²	None	None	Finger	1394 /S	OneNote	Oct 06
9456-FCU	Core 2 Duo T5500	1.66	1GB	15.0" XGA	GMA	100G	5400	DVD±RW	*Intel 11a/b/g	None	None	Finger	1394 /S	OneNote	Oct 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty²

Positioning	Everyday computing; two spindles													
Processor	Intel® Core™ 2 Duo processor T5500 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache													
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in both sockets (512MB each socket) / no sockets available													
Diskette drive	None standard / use optional USB-based diskette drive													
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Enhance													
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner DL (40Y8624) / removable Ultrabay Enhanced													
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel													
Serial ATA disk (SATA150)	80GB⁸ (5400 rpm) or 100GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System													
Display	15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect													
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz													
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm													
Weight ²	with optical drive and battery: 15" models: up to 6.8 lb (3.1 kg)													
Case material	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic													
Battery - type	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Enhanced													
Battery - life ¹⁰	6-cell: up to 5.2 hr; <i>optional 9-cell:</i> up to 7.8 hr; 9-cell plus Ultrabay battery: up to 10.0 hr													
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (T ¹⁶ PCIx512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)													
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door													
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door													
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / 15" models only: S-video out / no keyboard, mouse, serial, parallel, or infrared port													
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios													
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable													
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG													
WWAN ¹⁶	None													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket													
Bluetooth™	None													
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE													
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip													
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available													
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battery 6-cell	40Y6799	ThinkPlus™.22 1-year LOR 9x5 NBD										
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	41C9166										
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789	ThinkPlus 2-year LOR 9x5 NBD										
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad External Battery Charger	40Y7625	41C9167										
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad 90W AC Adapter	40Y7659	ThinkPlus 3-year LOR 9x5 NBD										
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad 90W AC/DC Combo Adapter	40Y7630	41C9168										
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	Lenovo M500 Projector	0037A05	ThinkPlus 4-year LOR 9x5 NBD										
USB 2.0 Lenovo Multimedia Headset	40Y8518	Lenovo C500 Projector	0039A05	41C9171										
USB 2.0 Lenovo Webcam	40Y8519	Premiere Leather Carrying Case	10K0209	ThinkPlus 5-year LOR 9x5 NBD										
USB 2.0 Security Memory Key 4GB	41U5120	USB Fingerprint Reader	73P4774	41C9173										
USB 2.0 Portable 120GB Hard Disk	41N8379	ThinkPad Adjustable Notebook Stand	40Y7676	ThinkPlus 2-year P&L P/U Depot										
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Convertible Monitor Stand	40Y7620	41C9169										
ExpressCard Gemplus Smart Card Reader	41N3043	Lenovo L171 17" Monitor (black)	9227AC1	ThinkPlus 3-year P&L P/U Depot										
11a/b/g Wireless Mini PCI Express Adapter	40Y7026	Lenovo L192 Wide 19" Monitor (black)	6920AB1	41C9170										
ThinkPad Essential Port Replicator	250510W	ThinkVision® L192p 19" Monitor (black)	9419HC2	ThinkPlus 4-year P&L P/U Depot										
ThinkPad Advanced Mini Dock	250410U	ThinkVision L201p 20.1" Monitor (black)	9220HB1	41C9172										
ThinkPad Advanced Dock	250310U	TrackPoint Cap Collection	73P2698	ThinkPlus 5-year P&L P/U Depot										
Other accessories on O-R60 sheet		Other accessories at lenovo.com/accessories		41C9174										

See footnotes for important warranty information
US models announced October 17, 2006
US models withdrawn effective July 2007

* Powered by Intel Centrino® Duo mobile technology

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(RC2-1) August 2007

ThinkPad® R60 (9457) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Graphics controller	Disk SATA GB ³	rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger-print reader	1394/S-Video port	Workhorse (W) Gbl (G) Avail date		
9457-72U	Core Duo T2300E	1.66	512MB	14.1"	SXGA+	GMA	60GB 5400	Combo	* Intel 11a/b/g ³²				1394	XP Pro	May 06	
9457-73U	Core Duo T2400	1.83	512MB	14.1"	SXGA+	GMA	60GB 5400	Combo	* Intel 11a/b/g				1394	XP Pro W	May 06	
9457-76U	Core Duo T2400	1.83	512MB	14.1"	SXGA+	GMA	60GB 5400	DVD±RW	* Intel 11a/b/g			Finger	1394	XP Pro W	May 06	
9457-92U	Core Duo T2300E	1.66	512MB	14.1"	XGA	GMA	60GB 5400	Combo	* Intel 11a/b/g					XP Pro G	May 06	
9457-93U	Core Duo T2400	1.83	512MB	14.1"	XGA	GMA	60GB 5400	Combo	* Intel 11a/b/g			Finger		XP Pro WG	May 06	
9457-7PU	Core Solo T1300	1.66	512MB	14.1"	XGA	GMA	40GB 5400	Combo	* Intel 11a/b/g					XP Pro G	May 06	
9457-83U	Core Duo T2400	1.83	512MB	15.0"	SXGA+	GMA	100G 5400	DVD±RW	* Intel 11a/b/g			Blue Finger	/S	XP Pro W	May 06	
9457-82U	Core Duo T2400	1.83	512MB	15.0"	SXGA+	GMA	60GB 5400	Combo	* Intel 11a/b/g			Finger	/S	XP Pro W	May 06	
9457-94U	Core Solo T1300	1.66	512MB	15.0"	XGA	GMA	40GB 5400	Combo	* Intel 11a/b/g					/S	XP Pro G	May 06
9457-95U	Core Duo T2300E	1.66	512MB	15.0"	XGA	GMA	60GB 5400	Combo	* Intel 11a/b/g					/S	XP Pro G	May 06
9457-96U	Core Duo T2400	1.83	512MB	15.0"	XGA	GMA	60GB 5400	Combo	* Intel 11a/b/g			Finger	/S	XP Pro WG	May 06	
9457-8EU	Core Duo T2400	1.83	512MB	15.0"	XGA	GMA	60GB 5400	Combo	* Intel 11a/b/g					/S	XP Pro W	May 06
9457-97U	Core Duo T2300E	1.66	512MB	15.0"	XGA	GMA	60GB 5400	Combo	* Intel 11a/b/g			Blue Finger	1394 /S	XP Pro G	May 06	
9457-98U	Core Duo T2400	1.83	512MB	15.0"	XGA	GMA	60GB 5400	Combo	* Intel 11a/b/g			Blue	1394 /S	Home G	May 06	
9457-8PU	Core Duo T2400	1.83	512MB	15.0"	SXGA+	GMA	60GB 5400	Combo	* Intel 11a/b/g	Verizon			1394 /S	XP Pro W	May 06	
9457-8WU	Core Duo T2300E	1.66	512MB	15.0"	XGA	GMA	60GB 5400	DVD±RW	* Intel 11a/b/g			Finger	1394 /S	XP Pro G	May 06	
9457-G5U	Core Duo T2400	1.83	512MB	15.0"	XGA	GMA	80GB 5400	Combo	* Intel 11a/b/g			Blue Finger	1394 /S	XP Pro G	May 06	
Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Core™ Solo processor T1300 with single-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache or Intel Core Duo processor T2300E or T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache												SOFTWARE¹⁴			
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available												Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery			
EIDE Combo	<i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay™ Enhn</i> <i>Some: DVD burner / Super Multi-Burner DL (40Y8624) / removable Ultrabay Enhanced</i>												Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery			
Ultrabay Enhanced Serial ATA disk (SATA150)	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel 40GB⁸ (5400 rpm), 60GB (5400 rpm), or 100GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System												Preloaded (all) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)			
Display	<i>Some: 14.1"</i> (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect <i>Some: 14.1"</i> (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare / 4:3 aspect <i>Some: 15.0"</i> (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect <i>Some: 15.0"</i> (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare / 4:3 aspect												License - CD not included (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)			
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz												Supports ThinkVantage™ technologies			
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys												65 watt AC adapter (GMA graphics) ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass															
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones												ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³	<i>14.1" models (WxDxH):</i> 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm <i>15.0" models (WxDxH):</i> 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm with optical drive and battery: <i>14.1" models:</i> up to 5.8 lb (2.6kg); <i>15":</i> up to 6.3 lb (2.9 kg)												ThinkPlus 3-year LOR 9x5 NBD 41C9176			
Weight ²	with optical drive and battery: <i>14.1" models:</i> up to 5.8 lb (2.6kg); <i>15":</i> up to 6.3 lb (2.9 kg)															
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic												ThinkPlus 5-year LOR 9x5 NBD 41C9179			
Battery - type	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Enhanced															
Battery - life ¹⁰	<i>6-cell:</i> up to 5.2 hr; <i>optional 9-cell:</i> up to 7.8 hr; <i>9-cell plus Ultrabay battery:</i> up to 10 hr												Other ThinkPlus services at lenovo.com/thinkplus/warranty			
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (T ¹⁶ PCIx512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)															
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door															
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door															
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / <i>some:</i> 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / <i>15" models:</i> S-video out / no keyboard, mouse, serial, parallel, or infrared port															
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios															
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable															
Intel 11a/b/g ³² WWAN ¹⁶	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG <i>Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless</i> <i>56K⁶ V.90 (V.92-designed²⁹) modem in Communications Daughter Card socket</i> <i>Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator</i> Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE															
Modem	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack															
Bluetooth™	<i>Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator</i>															
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE															
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack															
Security	Power-on password / hard disk password / supervisor password / security keyhole															
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant															
Fingerprint reader	<i>Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip</i>															
Limited warranty ¹²	3-year/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail															
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	T60/R60 Series Li-Ion Battery 6-cell		40Y6799												
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	Z60m/T60/R60 Li-Ion Battery 9-cell		40Y6797												
ThinkPad Essential Port Replicator	250510W	Lenovo L192 Wide 19" Monitor (black)		6920AB1												
ThinkPad Advanced Dock	250310U	Other accessories at lenovo.com/accessories														

See footnotes for important warranty information

* Powered by Intel Centrino® mobile technology

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US models announced May 16, May 30, or Oct 17, 2006

* Powered by Intel Centrino® Duo mobile technology

(RC1-4) September 2007

US models withdrawn effective May, July, or September 2007

ThinkPad® R60 (9457) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Graphics controller	Disk SATA GB ⁸	EIDE rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger-IIEEE print reader	S-Video 1394 port	3-year limited warranty ¹²	Avail date
9457-74U	Core Duo T2400	1.83	512MB	14.1" SXGA+	GMA	80GB	5400	DVD±RW	* Intel 11a/b/g ³²	None	None	1394	EasyServ	May 06
9457-7GU	Celeron® M 420	1.60	512MB	14.1" XGA	GMA	60GB	5400	Combo	Intel 11a/b/g	None	None	1394	EasyServ	May 06
9457-7HU	Core Duo T2400	1.83	512MB	14.1" XGA	GMA	60GB	5400	Combo	* Intel 11a/b/g	None	None	1394	EasyServ	May 06
9457-8JU	Core Duo T2400	1.83	512MB	15.0" XGA	GMA	60GB	5400	Combo	* Intel 11a/b/g	None	None	1394	S-Vid EasyServ	May 06
9457-8KU	Core Duo T2400	1.83	512MB	15.0" XGA	GMA	80GB	5400	DVD±RW	* Intel 11a/b/g	None	None	1394	S-Vid EasyServ	May 06

• **These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Celeron M Processor 420 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Duo processor T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										SOFTWARE¹⁴			
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery Preloaded • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)			
Diskette drive	None standard / use optional USB-based diskette drive										CD • Adobe Photoshop Elements plus Adobe Premiere Elements License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance													
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner DL (40Y8624) / removable Ultrabay Enhanced										Supports ThinkVantage® technologies 65-watt AC adapter (GMA graphics) ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel													
Serial ATA disk (SATA150)	60GB⁸ (5400 rpm) or 80GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare / 4:3 aspect Some: 15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect													
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz										CD • Adobe Photoshop Elements plus Adobe Premiere Elements License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm with optical and 6-cell battery: 14.1" models: up to 5.8 lb (2.6kg); 15": up to 6.3 lb (2.9kg)													
Weight ²	with optical and 6-cell battery: 14.1" models: up to 5.8 lb (2.6kg); 15": up to 6.3 lb (2.9kg)										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic													
Battery - type	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Enhanced										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Battery - life ¹⁰	6-cell: up to 5.2 hr; optional 9-cell: up to 7.8 hr; 9-cell plus Ultrabay battery: up to 10 hr													
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCIx512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door													
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / 15" models: S-video out / no keyboard, mouse, serial, parallel, or infrared port (use USB)													
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable													
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
WWAN ¹⁶	None													
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Bluetooth™	None													
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack													
Security	Power-on password / hard disk password / supervisor password / security keyhole										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant													
Fingerprint reader	None										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Limited warranty ¹²	3-year /1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail													
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battery 6-cell	40Y6799	ThinkPlus™ ²² 2-year LOR 9x5 NBD 41C9175 ThinkPlus 3-year LOR 9x5 NBD 40Y6797 41C9176 ThinkPlus 4-year LOR 9x5 NBD 40Y7735 41C9177 ThinkPlus 5-year LOR 9x5 NBD 40Y8725 41C9179 ThinkPlus 4-year P&L P/U Depot 40Y8621 41C9178 ThinkPlus 5-year P&L P/U Depot 40Y7625 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty										
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797											
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789											
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad External Battery Charger	40Y7625											
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad 90W AC/DC Combo Adapter	40Y7630											
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	Lenovo M500 Projector	0037A05											
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	Lenovo C500 Projector	0039A05											
USB Portable Diskette Drive	05K9276	Premiere Leather Carrying Case	10K0209											
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad Convertible Carrying Case	22P8860											
11a/b/g Wireless Mini PCI Express Adapter	40Y7026	ThinkPad Adjustable Notebook Stand	40Y7676											
ThinkPad Essential Port Replicator	250510W	Lenovo L192 Wide 19" Monitor (black)	6920AB1											
ThinkPad Advanced Mini Dock	250410U	ThinkVision® L171p 17" Monitor (black)	9417HC2											
ThinkPad Advanced Dock	250310U	ThinkVision L201p 20.1" Monitor (black)	9220HB1											
Lenovo Laser Mouse (USB, PS/2)	41U3074	Other accessories at lenovo.com/accessories												

See footnotes for important warranty information
US models announced May 16, 2006
US models withdrawn effective May or September 2007

* Powered by Intel Centrino® Duo mobile technology

ThinkPad® R60 (9457) - Education (Vista™) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Graphics controller	Disk SATA GB ⁵	rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger- print reader	S-Video out port	Educ pre- load	3-year limited warranty ¹²	Avail date
9457-LSU	Core 2 Duo T7200	2.00	1GB	15.0" XGA	GMA	80GB	5400	Combo	11a/b/g ³²	None	None	S-Vid	K12	EasyServ	Apr 07

• **These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Core 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache										Preloaded operating system²⁰ - Microsoft® Windows® Vista™ Business Edition (32-bit) ↳ Vista Basic logo				
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available										Preloaded applications¹⁴ • K-12 education software - VitalSource Library School Edition - Adobe® Instructor Resource Center - Adobe Digital School Collection - Photoshop Elements 5 (and CD) - Premier Elements 3 (and DVD) - Acrobat 8 Professional (and CD) - Contribute 4 (and CD) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • System Migration Assistant • Norton Internet Security (90 days of virus definitions) • Diskeeper™ Home • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Picasa from Google				
Diskette drive	None (use optional USB-based diskette drive)										License - CD not included - Lotus® Notes® Stand-alone Client				
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced														
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel														
Serial ATA disk (SATA150)	80GB ⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System														
Display	15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect														
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz														
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys														
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	<i>15.0" models (WxDxH):</i> 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm														
Weight ²	with optical and 6-cell battery: <i>14.1" models:</i> up to 5.8 lb (2.6kg); <i>15":</i> up to 6.3 lb (2.9kg)														
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic														
Battery - type	Lithium Ion 9-cell / supports unique 2nd battery in Ultrabay Enhanced														
Battery - life ¹⁰	<i>9-cell:</i> up to 7.8 hr; <i>9-cell plus Ultrabay battery:</i> up to 10 hr														
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCIx512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)														
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door														
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door														
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / <i>15" models:</i> S-video out / no keyboard, mouse, serial, parallel, or infrared port (use USB)														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios														
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable														
11a/b/g ³²	11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX														
WWAN ¹⁶	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket										Supports ThinkVantage® technologies				
Bluetooth™	None														
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE										65-watt AC adapter (GMA graphics)				
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack										ThinkPad Roll Cage (one-piece magnesium frame)				
Security	Power-on password / hard disk password / supervisor password / security keyhole										RoHS-compliant				
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant										International Warranty Service ¹⁷				
Fingerprint reader	None										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
Limited warranty ¹² 3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail															
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battery 6-cell	40Y6799												
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797												
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789												
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad External Battery Charger	40Y7625												
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad 90W AC/DC Combo Adapter	40Y7630												
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	Lenovo M500 Projector	0037A05												
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad Carrying Case - Organizer	73P3598												
USB Portable Diskette Drive	05K9276	Premiere Leather Carrying Case	10K0209												
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad Convertible Carrying Case	22P8860												
11a/b/g Wireless Mini PCI Express Adapter	40Y7026	ThinkPad Adjustable Notebook Stand	40Y7676												
ThinkPad Essential Port Replicator	250510W	Lenovo L192 Wide 19" Monitor (black)	6920AB1												
ThinkPad Advanced Mini Dock	250410U	ThinkVision® L171p 17" Monitor (black)	9417HC2												
ThinkPad Advanced Dock	250310U	ThinkVision L201p 20.1" Monitor (black)	9220HB1												
Lenovo Laser Mouse (USB, PS/2)	41U3074	Other accessories at lenovo.com/accessories													
												ThinkPlus™. ²² 2-year LOR 9x5 NBD 41C9175			
												ThinkPlus 3-year LOR 9x5 NBD 41C9176			
												ThinkPlus 4-year LOR 9x5 NBD 41C9177			
												ThinkPlus 5-year LOR 9x5 NBD 41C9179			
												ThinkPlus 4-year P&L P/U Depot 41C9178			
												ThinkPlus 5-year P&L P/U Depot 41C9180			
												Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			

See footnotes for important warranty information
US model announced April 24, 2007
US model withdrawn effective July 2007

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(RC2-3) August 2007

ThinkPad® R60 (9458) - TopSeller and Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Graphics controller	Disk SATA GB ⁸	rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger-print reader	S-Video port	3-year limited warranty ¹²	Avail date
9458-7MU	Core Duo T2400	1.83	512MB	14.1" XGA	GMA	60GB	5400	Combo	* Intel 11a/b/g ³²	None	None	None	None	EasyServ	May 06
9458-8QU	Core Duo T2400	1.83	512MB	15.0" XGA	GMA	60GB	5400	Combo	* Intel 11a/b/g	None	None	None	S-Vid	EasyServ	May 06

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Mainstream performance and features; two-spindle system</i> Intel® Core™ Duo processor T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB L2 cache (shared)										SOFTWARE¹⁴				
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery				
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded • VitalSource Library education software				
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Enhanced										• Adobe® Photoshop® Elements plus				
Ultrabay Enhance	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel										• Adobe Premiere® Elements				
Serial ATA disk (SATA150)	60GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System										• Rescue and Recovery™				
Display	<i>Some: 14.1"</i> (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect <i>Some: 15.0"</i> (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect										• Access Connections™				
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz										• Client Security Solution™				
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys										• ThinkVantage Productivity Center with Away Manager				
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• ThinkVantage System Update				
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										• Symantec® Client Security™				
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Diskeeper Lite				
Dimensions ³	<i>14.1" models (WxDxH):</i> 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm <i>15.0" models (WxDxH):</i> 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm										• PC-Doctor™ (diagnostics)				
Weight ²	with optical and 6-cell battery: <i>14.1" models:</i> up to 6.2 lb (2.8kg); <i>15":</i> up to 6.8 lb (3.1 kg)										• ThinkPad Utilities (Power Manager and Presentation Director)				
Case material	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic										• Adobe® Reader				
Battery - type	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Enhanced										• Google Toolbar				
Battery - life ¹⁰	<i>6-cell:</i> up to 5.2 hr; <i>optional 9-cell:</i> up to 7.8 hr; <i>9-cell plus Ultrabay battery:</i> up to 10 hr										• Google Desktop				
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCIx512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)										• Picasa from Google				
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										• Multimedia Center for Think Offerings				
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										• Sonic RecordNOW and Drive Letter Access (combo models)				
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / <i>15" models:</i> S-video out / no keyboard, mouse, serial, parallel, or infrared port (use USB)										• InterVideo WinDVD (combo models)				
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios										CD • Adobe Photoshop Elements plus Adobe Premiere Elements				
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG														
WWAN ¹⁶	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket														
Bluetooth™	None														
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage				
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant														
Fingerprint reader	None														
Limited warranty ¹² 3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail															
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battery 6-cell	40Y6799												
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797												
2GB PC2-4200 DDR2 CL4 SODIMM	73P3846	Advanced Ultrabay Battery 3-cell	40Y6789												
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad External Battery Charger	40Y7625												
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad 90W AC Adapter	40Y7659												
Combo II Ultrabay Slim Drive (curved bezel)	73P3288	ThinkPad 90W AC/DC Combo Adapter	40Y7630												
Super Multi-Burner Ultrabay Enh Drv (curve)	40Y8624	Lenovo M500 Projector	0037A05												
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	Lenovo C500 Projector	0039A05												
USB Portable Diskette Drive	05K9276	ThinkPad Education Backpack	31P8640												
USB 2.0/Analog Headset by Sennheiser	40Y8518	Premiere Leather Carrying Case	10K0209												
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad Convertible Carrying Case	22P8860												
USB 2.0 Portable 80GB Hard Disk	40Y8726	USB Fingerprint Reader	73P4774												
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Adjustable Notebook Stand	40Y7676												
11a/b/g Wireless Mini PCI Express Adapter	40Y7026	ThinkPad Convertible Monitor Stand	40Y7620												
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	Lenovo L192 Wide 19" Monitor (black)	6920AB1												
ThinkPad Essential Port Replicator	250510W	ThinkVision® L192p 19" Monitor (black)	9419HC2												
ThinkPad Advanced Mini Dock	250410U	ThinkVision L201p 20.1" Monitor (black)	9220HB1												
ThinkPad Advanced Dock	250310U	TrackPoint Cap Collection	73P2698												
Enh Perf Wireless Keyboard and Mouse	73P4067	Lenovo Laser Mouse (USB, PS/2)	41U3074												
Other accessories on O-R60 sheet		Other accessories at lenovo.com/accessories													
ENERGY STAR®-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²															
ThinkPlus™. ²² 2-year LOR 9x5 NBD 41C9175															
ThinkPlus 3-year LOR 9x5 NBD 41C9176															
ThinkPlus 4-year LOR 9x5 NBD 41C9177															
ThinkPlus 5-year LOR 9x5 NBD 41C9179															
ThinkPlus 4-year P&L P/U Depot 41C9178															
ThinkPlus 5-year P&L P/U Depot 41C9180															
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty															

See footnotes for important warranty information
US models announced May 16, 2006
US models withdrawn effective May 2007

* Powered by Intel Centrino® Duo mobile technology

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(RC1-6) March 2007

ThinkPad® R60 (9459) - Education (Vista™) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Graphics controller	Disk SATA GB ⁵	EIDE rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger- print reader	S-Video out port	Educ pre- load	3-year limited warranty ¹²	Avail date
9459-LTU	Core 2 Duo T7200	2.00	1GB	15.0" XGA	GMA	80GB	5400	Combo	11a/b/g ³²	None	None	S-Vid	K12	Onsite	Apr 07

These models have a limited onsite service²⁴ 3-year limited warranty

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Core 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache											Preloaded operating system²⁰ - Microsoft® Windows® Vista™ Business Edition (32-bit) ↳ Vista Basic logo							
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available											Preloaded applications¹⁴ • K-12 education software - VitalSource Library School Edition - Adobe® Instructor Resource Center - Adobe Digital School Collection - Photoshop Elements 5 (and CD) - Premier Elements 3 (and DVD) - Acrobat 8 Professional (and CD) - Contribute 4 (and CD) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • System Migration Assistant • Norton Internet Security (90 days of virus definitions) • Diskeeper™ Home • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe Reader • Picasa from Google							
Diskette drive	None (use optional USB-based diskette drive)											License - CD not included - Lotus® Notes® Stand-alone Client							
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced																		
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel											Supports ThinkVantage® technologies 65-watt AC adapter (GMA graphics) ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²							
Serial ATA disk (SATA150)	80GB ⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System																		
Display	15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect											ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175 ThinkPlus 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty							
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) / integrated in 945GM / 250MHz																		
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys											ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²							
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass																		
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones																		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions																		
Dimensions ³	15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm																		
Weight ²	with optical and 6-cell battery: 14.1" models: up to 5.8 lb (2.6kg); 15": up to 6.3 lb (2.9kg)																		
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic																		
Battery - type	Lithium Ion 9-cell / supports unique 2nd battery in Ultrabay Enhanced																		
Battery - life ¹⁰	9-cell: up to 7.8 hr; 9-cell plus Ultrabay battery: up to 10 hr																		
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCIx512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)																		
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door											ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175 ThinkPlus 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty							
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door																		
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / 15" models: S-video out / no keyboard, mouse, serial, parallel, or infrared port (use USB)																		
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios																		
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable																		
11a/b/g ³²	11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX																		
WWAN ¹⁶	None																		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket																		
Bluetooth™	None																		
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE																		
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack																		
Security	Power-on password / hard disk password / supervisor password / security keyhole											ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175 ThinkPlus 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty							
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant																		
Fingerprint reader	None																		
Limited warranty ¹²	3-year/1-year battery, limited onsite service , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time ²⁴																		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battery 6-cell	40Y6799																
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797																
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789																
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad External Battery Charger	40Y7625																
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad 90W AC/DC Combo Adapter	40Y7630																
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	Lenovo M500 Projector	0037A05																
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	Lenovo C500 Projector	0039A05																
USB Portable Diskette Drive	05K9276	Premiere Leather Carrying Case	10K0209																
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad Convertible Carrying Case	22P8860																
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad Adjustable Notebook Stand	40Y7676																
11a/b/g Wireless Mini PCI Express Adapter	40Y7026	Lenovo L192 Wide 19" Monitor (black)	6920AB1																
ThinkPad Essential Port Replicator	250510W	ThinkVision® L171p 17" Monitor (black)	9417HC2																
ThinkPad Advanced Mini Dock	250410U	ThinkVision L201p 20.1" Monitor (black)	9220HB1																
ThinkPad Advanced Dock	250310U	Other accessories at lenovo.com/accessories																	

See footnotes for important warranty information
US model announced April 24, 2007
US model withdrawn July 2007

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(RC2-4) August 2007

ThinkPad® R60 (9460) - ATI® graphics - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Discrete graphics memory	Disk SATA GB ³	rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger- print reader	S- Video out	Bat- tery cells	Lim- mited warranty ¹²	Workhorse Gbl Avail date	
9460-25U	Core Duo T2400	1.83	512MB	14.1" SXGA+	64MB	80GB	5400	DVD±RW	* Intel 11a/b/g ³²		Finger		6	1-yr	None	May 06
9460-26U	Core Duo T2300E	1.66	512MB	14.1" SXGA+	64MB	60GB	5400	Combo	* Intel 11a/b/g		Blue		6	1-yr	None	May 06
9460-27U	Core Duo T2300E	1.66	512MB	14.1" XGA	128MB	60GB	5400	DVD±RW	* Intel 11a/b/g				6	1-yr	None	May 06
9460-2BU	Core Solo T1300	1.66	512MB	14.1" XGA	64MB	40GB	5400	Combo	* Intel 11a/b/g				6	1-yr	None	May 06
9460-2KU	Core Duo T2300E	1.66	512MB	14.1" XGA	64MB	60GB	5400	Combo	* Intel 11a/b/g	Verizon			6	1-yr	None	May 06
9460-34U	Core Duo T2500	2.00	1GB	15.0" SXGA+	128MB	100GB	5400	DVD±RW	* Intel 11a/b/g		Blue Finger	S	9	1-yr	None	May 06
9460-35U	Core Duo T2300E	1.66	512MB	15.0" SXGA+	64MB	60GB	5400	Combo	* Intel 11a/b/g			S	6	1-yr	None	May 06
9460-3FU	Core Duo T2300E	1.66	512MB	15.0" XGA	64MB	60GB	5400	DVD±RW	* Intel 11a/b/g			S	6	1-yr	None	May 06
Positioning Processor	Everyday computing; two spindles Intel® Core™ Solo processor T1300 with single-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache or Intel Core Duo processor T2300E, T2400, or T2500 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache											SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery				
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available											Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)				
Diskette drive	None standard / use optional USB-based diskette drive											• Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance															
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner DL (40Y8624) / removable Ultrabay Enhanced											• InterVideo WinDVD Creator (DVD±RW models)				
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel															
Serial ATA disk (SATA150)	40GB ⁸ (5400 rpm), 60GB (5400 rpm), 80GB (5400 rpm), or 100GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System											• License - CD not included				
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare / 4:3 Some: 15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare / 4:3															
Graphics	Some: ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1 Some: ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB GDDR1											• ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage				
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys															
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											90-watt AC adapter (discrete graphics) ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones															
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166 ThinkPlus 2-year LOR 9x5 NBD 41C9167 ThinkPlus 3-year LOR 9x5 NBD 41C9168 ThinkPlus 4-year LOR 9x5 NBD 41C9171 ThinkPlus 5-year LOR 9x5 NBD 41C9173 ThinkPlus 2-year P&L P/U Depot 41C9169 ThinkPlus 3-year P&L P/U Depot 41C9170 ThinkPlus 4-year P&L P/U Depot 41C9172 ThinkPlus 5-year P&L P/U Depot 41C9174				
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm with optical and 6-cell battery: 14.1" models: up to 5.8 lb (2.6kg); 15": up to 6.4 lb (2.9kg) Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic															
Weight ²	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Enhanced											• Trusted Platform Module / Atmel chip / TCG 1.2-compliant				
Case material	6-cell: up to 3.1 hr; 9-cell: up to 4.6 hr; 9-cell plus Ultrabay battery: up to 6.6 hr															
Battery - type	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI4512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)											• Finger print reader on palm rest / swipe sensor / supports the security chip				
Battery - life ¹⁰	One Type I or Type II slot / CardBus 32-bit / integrated door															
Architecture	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											Other accessories at lenovo.com/accessories				
PC Card Std slot	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / 15" models: S-video out / no keyboard, mouse, serial, parallel, or infrared port (use USB)															
ExpressCard slot	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios											See footnotes for important warranty information US models announced May 16 or May 30, 2006 US models withdrawn effective September 2007				
Ports	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable															
Wireless antenna	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG											* Powered by Intel Centrino® mobile technology * Powered by Intel Centrino® Duo processor technology				
Mini PCI Express	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless 56K V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket															
Intel 11a/b/g ³² WWAN ¹⁶	Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator											© Lenovo (RC1-E) September 2007				
Modem	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE															
Bluetooth™	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack															
Ethernet	Power-on password / hard disk password / supervisor password / security keyhole															
Audio support	Security chip															
Security	Fingerprint reader															
Security chip	Limited warranty ¹² 1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available															
Fingerprint reader	512MB PC2-5300 DDR2 CL5 SODIMM 40Y7733															
Limited warranty ¹² 1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available	1GB PC2-5300 DDR2 CL5 SODIMM 40Y7734															
512MB PC2-5300 DDR2 CL5 SODIMM	2GB PC2-5300 DDR2 SODIMM 40Y7735															
1GB PC2-5300 DDR2 CL5 SODIMM	Combo II Ultrabay Slim Drive (flat bezel) 40Y8621															
2GB PC2-5300 DDR2 SODIMM	ThinkPad DVD Ultrabay Slim Burner (flat) 41N5643															
Combo II Ultrabay Slim Drive (flat bezel)	100GB Disk 9.5mm SATA150 (7200 rpm) 41N3013															
ThinkPad DVD Ultrabay Slim Burner (flat)	USB Portable Diskette Drive 05K9276															
100GB Disk 9.5mm SATA150 (7200 rpm)	USB 2.0 Super Multi-Burner Drive 41N5565															
USB Portable Diskette Drive	11a/b/g Wireless Mini PCI Express Adapter 40Y7026															
USB 2.0 Super Multi-Burner Drive	ThinkPad Essential Port Replicator 250510W															
11a/b/g Wireless Mini PCI Express Adapter	ThinkPad Advanced Mini Dock 250410U															
ThinkPad Essential Port Replicator	ThinkPad Advanced Dock 250310U															
ThinkPad Advanced Mini Dock	ThinkPad Advanced Dock 250310U															
ThinkPad Advanced Dock																

See footnotes for important warranty information
US models announced May 16 or May 30, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® mobile technology
* Powered by Intel Centrino® Duo processor technology

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ThinkPad® R60 (9461) - ATI® graphics (TopSeller) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Discrete graphics memory	Disk SATA GB ⁸	rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger-print reader	S-Video out port	Bat-tery cells	Preload	Avail date
9461-42U	Core Duo T2300E	1.66	256MB	14.1" SXGA+	64MB	40GB	5400	Combo	* Intel 11a/b/g ³²				6	XP Pro	May 06
9461-47U	Core Duo T2300E	1.66	256MB	14.1" SXGA+	64MB	40GB	5400	Combo	* Intel 11a/b/g				6	XP Home	May 06
9461-4XU	Core Duo T2300E	1.66	512MB	14.1" XGA	128MB	100GB	5400	DVD±RW	* Intel 11a/b/g		Finger		6	XP Pro	May 06
9461-4HU	Core Solo T1300	1.66	256MB	14.1" XGA	64MB	40GB	5400	Combo	* Intel 11a/b/g ³²				6	XP Home	May 06
9461-4JU	Core Solo T1300	1.66	256MB	14.1" XGA	64MB	40GB	5400	Combo	* Intel 11a/b/g				6	XP Pro	May 06
9461-4LU	Core Duo T2300E	1.66	256MB	14.1" XGA	64MB	40GB	5400	Combo	* Intel 11a/b/g				6	XP Home	May 06
9461-4MU	Core Duo T2300E	1.66	256MB	14.1" XGA	64MB	40GB	5400	Combo	* Intel 11a/b/g				6	XP Pro	May 06
9461-4NU	Core Duo T2300E	1.66	512MB	14.1" XGA	64MB	60GB	5400	DVD±RW	* Intel 11a/b/g				6	XP Pro	May 06
9461-4SU	Core Duo T2300E	1.66	512MB	14.1" XGA	64MB	60GB	5400	Combo	* Intel 11a/b/g	Verizon			6	XP Pro	May 06
9461-4TU	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	100GB	5400	DVD±RW	* Intel 11a/b/g	Verizon			6	XP Pro	May 06
9461-52U	Core Duo T2300E	1.66	512MB	15.0" SXGA+	128MB	100GB	5400	DVD±RW	* Intel 11a/b/g		Finger	S-Vid	6	XP Pro	May 06
9461-56U	Core Duo T2500	2.00	1GB	15.0" SXGA+	128MB	100GB	7200	DVD±RW	* Intel 11a/b/g		Finger	S-Vid	9	XP Pro	May 06
9461-5BU	Core Solo T1300	1.66	256MB	15.0" XGA	64MB	40GB	5400	Combo	* Intel 11a/b/g			S-Vid	6	XP Home	May 06
9461-5CU	Core Solo T1300	1.66	256MB	15.0" XGA	64MB	40GB	5400	Combo	* Intel 11a/b/g			S-Vid	6	XP Pro	May 06
9461-5EU	Core Duo T2300E	1.66	512MB	15.0" XGA	64MB	60GB	5400	DVD±RW	* Intel 11a/b/g			S-Vid	6	XP Pro	May 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty²

Positioning	<i>Everyday computing; two spindles</i>											SOFTWARE¹⁴			
Processor	Intel® Core™ Solo processor T1300 with single-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache or Intel Core Duo processor T2300E, T2400, or T2500 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache											Windows XP Professional models			
Memory	256MB, 512MB, or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available											- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery			
Diskette drive	None standard / use optional USB-based diskette drive											Windows XP Home models			
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Enh											- Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery			
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner DL (40Y8624) / removable Ultrabay Enhanced											Preloaded (all)			
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel											• Rescue and Recovery™			
Serial ATA disk (SATA150)	40GB ⁸ (5400 rpm), 60GB (5400 rpm), or 100GB (5400 or 7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System											• Access Connections™			
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare / 4:3 Some: 15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare / 4:3											• Client Security Solution™			
Graphics	Some: ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1 Some: ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB GDDR1											• ThinkVantage Productivity Center with Away Manager			
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys											• ThinkVantage System Update			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											• Symantec® Client Security™			
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones											• Diskkeeper Lite			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											• PC-Doctor™ (diagnostics)			
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm											• ThinkPad Utilities (Power Manager and Presentation Director)			
Weight ²	with optical and 6-cell battery: 14.1" models: up to 6.2 lb (2.8kg); 15": up to 6.8 lb (3.1 kg)											• Adobe® Reader			
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic											• Google Toolbar			
Battery - type	Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Enhanced											• Google Desktop			
Battery - life ¹⁰	6-cell: up to 3.1 hr; 9-cell: up to 4.6 hr; 9-cell plus Ultrabay battery: up to 6.6 hr											• Picasa from Google			
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI4512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)											• Fingerprint Software (fingerprint models)			
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door											• Multimedia Center for Think Offerings			
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											• Sonic RecordNOW and Drive Letter Access (combo, DVD±RW)			
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / 15" models: S-video out / no keyboard, mouse, serial, parallel, or infrared port (use USB)											• InterVideo WinDVD (combo, DVD±RW models)			
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios											• InterVideo WinDVD Creator (DVD±RW models)			
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable											License - CD not included (all)			
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG											- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)			
11a/b/g ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCIe Adapter, Atheros AR5006EX											Supports ThinkVantage® technologies			
WWAN ¹⁶	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless 56K V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket											90-watt AC adapter (discrete graphics)			
Modem	None											ThinkPad Roll Cage (one-piece magnesium frame)			
Bluetooth™	None											RoHS-compliant			
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE											International Warranty Service ¹⁷			
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack											24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Security	Power-on password / hard disk password / supervisor password / security keyhole											ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166			
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant											ThinkPlus 3-year LOR 9x5 NBD 41C9168			
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip											Other ThinkPlus services at lenovo.com/thinkplus/warranty			
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available														

See footnotes for important warranty information
US models announced May 16 or May 30, 2006
US models withdrawn effective October 2006, May 2007, or September 2007

* Powered by Intel Centrino® mobile technology
* Powered by Intel Centrino® Duo processor technology

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ThinkPad® R60 (9461) - ATI® graphics (TopSeller) - Oct 2006 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Discrete graphics memory	Disk SATA GB ⁹ rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger-print reader	S-Video out port	Pre-load and CD	OneNote preload and CD	Avail date
9461-CKU	Core 2 Duo T5500	1.66	512	14.1" XGA	64MB	40GB 5400	CD	*Intel 11a/b/g ³²	Verizon		Home	OneNote	Nov06	
9461-DUU	Core 2 Duo T7200	2.00	1GB	15.0" SXGA+	128MB	120GB 5400	DVD±RW	ThinkPad 11n ²⁸		Finger S-Vid Pro	OneNote	Oct 06		

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty¹²

Positioning	<i>Everyday computing; two spindles</i>										SOFTWARE¹⁴			
Processor	Intel® Core 2 Duo processor T5500 or T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz bus; T5500: 2MB shared L2 cache; T7200: 4MB shared L2 cache										Windows XP Professional models			
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery			
Diskette drive	None standard / use optional USB-based diskette drive										Windows XP Home models			
EIDE CD	Some: CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay™ Enhanced										- Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery			
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner DL (40Y8624) / removable Ultrabay™ Enhanced										Preloaded (all; only some listed)			
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel										• Microsoft Office OneNote® 2003			
Serial ATA disk (SATA150)	40GB or 120GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System										• Rescue and Recovery™			
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare / 4:3										• Access Connections™			
Graphics	Some: ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB memory Some: ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB memory										• Client Security Solution™			
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys										• ThinkVantage Productivity Center with Away Manager			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										• ThinkVantage System Update			
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										• Symantec® Client Security™			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Diskeeper Lite			
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm with optical and 6-cell battery: 14.1" models: up to 6.2 lb (2.8kg); 15": up to 6.8 lb (3.1 kg)										• PC-Doctor™ (diagnostics)			
Weight ²	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										• ThinkPad Utilities (Power Manager and Presentation Director)			
Case material	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Enhanced										• Adobe® Reader			
Battery - type	6-cell: up to 3.1 hr; opt 9-cell: up to 4.6 hr; 9-cell plus Ultrabay battery: up to 6.6 hr										• Google Toolbar			
Battery - life ¹⁰											• Fingerprint Software (fingerprint models)			
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI4512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)										• Multimedia Center for Think Offerings			
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										• Sonic RecordNOW and Drive Letter Access (DVD±RW models)			
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										• InterVideo WinDVD (DVD±RW)			
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / 15" models: S-video out / no keyboard, mouse, serial, parallel, or infrared port (use USB)										• InterVideo WinDVD Creator (DVD±RW models)			
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios										CD included			
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable										• Microsoft Office OneNote 2003			
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG										License - CD not included			
ThinkPad 11n ²⁸	Some: 11a/b/g/n wireless ⁴ , ThinkPad 11a/b/g/n Mini PCI Express Adapter, Atheros AR5008 chipset, MIMO 2x2										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
WWAN ¹⁶	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless 56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket										Supports ThinkVantage® technologies			
Modem	None										90-watt AC adapter (discrete graphics)			
Bluetooth™	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE										ThinkPad Roll Cage (one-piece magnesium frame)			
Ethernet	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack										RoHS-compliant			
Audio support	Power-on password / hard disk password / supervisor password / security keyhole										International Warranty Service ¹⁷			
Security	Trusted Platform Module / Atmel chip / TCG 1.2-compliant										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Security chip	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip										ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166			
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip										ThinkPlus 2-year LOR 9x5 NBD 41C9167			
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades²² available										ThinkPlus 3-year LOR 9x5 NBD 41C9168			
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battery 6-cell	40Y6799	512MB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789	ThinkPlus 4-year LOR 9x5 NBD	41C9171	
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad External Battery Charger	40Y7625	Combo II Ultrabay Slim Drive (curved bezel)	73P3288	ThinkPad 90W AC Adapter	40Y7659	ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad 90W AC/DC Combo Adapter	40Y7630	ThinkPlus 5-year LOR 9x5 NBD	41C9173	
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	Lenovo M500 Projector	0037A05	USB 2.0 Lenovo Multimedia Headset	40Y8518	Lenovo C500 Projector	0039A05	ThinkPad Advanced Mini Dock	250510W	ThinkPad Carrying Case - Backpack	73P3599	ThinkPlus 2-year P&L P/U Depot	41C9169	
USB 2.0 Security Memory Key 2GB	41U5119	Premiere Leather Carrying Case	10K0209	USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad Adjustable Notebook Stand	40Y7676	ThinkPad Advanced Dock	250410U	ThinkPad Convertible Monitor Stand	40Y7620	ThinkPlus 3-year P&L P/U Depot	41C9170	
ExpressCard Gemplus Smart Card Reader	41N3043	ThinkPad Vision® L192p 19" Monitor (black)	6920AB1	11a/b/g Wireless Mini PCI Express Adapter	40Y7026	ThinkPad Vision L201p 20.1" Monitor (black)	9220HB1	ThinkPad Essential Port Replicator	250510W	Lenovo L192p 19" Monitor (black)	9419HC2	ThinkPlus 4-year P&L P/U Depot	41C9172	
ThinkPad Essential Port Replicator	250510W	TrackPoint Cap Collection	73P2698	ThinkPad Advanced Mini Dock	250410U	Other accessories at lenovo.com/accessories		ThinkPad Advanced Dock	250310U	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		ThinkPlus 5-year P&L P/U Depot	41C9174	

See footnotes for important warranty information
US models announced October 17 or November 21, 2006
US models withdrawn effective July 2007

*Powered by Intel Centrino® Duo processor technology

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ThinkPad® R60 (9462) - ATI® graphics - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Discrete graphics memory	Disk SATA GB ³	EIDE rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger-Blue-tooth	S-Video port	Lim- mited warranty ¹²	Workhorse Gbl Avail date	
9462-62U	Core Duo T2400	1.83	512MB	14.1" SXGA+	64MB	80GB	5400	DVD±RW	* Intel 11a/b/g ³²				3-yr W	May 06	
9462-68U	Core Duo T2300E	1.66	512MB	14.1" SXGA+	64MB	60GB	5400	Combo	* Intel 11a/b/g				3-yr	May 06	
9462-6AU	Core Duo T2400	1.83	512MB	14.1" XGA	128MB	60GB	5400	Combo	* Intel 11a/b/g				3-yr W	May 06	
9462-6DU	Core Solo T1300	1.66	512MB	14.1" XGA	64MB	40GB	5400	Combo	* Intel 11a/b/g				3-yr	May 06	
9462-92U	Core Duo T2300E	1.66	512MB	14.1" XGA	64MB	60GB	5400	Combo	* Intel 11a/b/g				3-yr	Gbl May 06	
9462-93U	Core Duo T2300E	1.66	512MB	14.1" XGA	64MB	60GB	5400	Combo	* Intel 11a/b/g		Finger		3-yr	Gbl May 06	
9462-94U	Core Duo T2300E	1.66	512MB	14.1" XGA	64MB	60GB	5400	Combo	* Intel 11a/b/g		Blue		3-yr	Gbl May 06	
9462-92U	Core Duo T2300E	1.66	512MB	14.1" XGA	64MB	60GB	5400	Combo	* Intel 11a/b/g	Verizon			3-yr	May 06	
9462-6RU	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	80GB	5400	DVD±RW	* Intel 11a/b/g	Verizon			3-yr W	May 06	
9462-72U	Core Duo T2400	1.83	512MB	15.0" SXGA+	128MB	80GB	5400	DVD±RW	* Intel 11a/b/g		Finger	S-Vid	3-yr W	May 06	
9462-78U	Core Duo T2300E	1.66	512MB	15.0" SXGA+	64MB	60GB	5400	Combo	* Intel 11a/b/g			S-Vid	3-yr	May 06	
9462-7AU	Core Duo T2400	1.83	512MB	15.0" XGA	128MB	60GB	5400	Combo	* Intel 11a/b/g		Finger	S-Vid	3-yr W	May 06	
9462-7DU	Core Solo T1300	1.66	512MB	15.0" XGA	64MB	40GB	5400	Combo	* Intel 11a/b/g			S-Vid	3-yr	May 06	
9462-97U	Core Duo T2300E	1.66	512MB	15.0" XGA	64MB	60GB	5400	Combo	* Intel 11a/b/g			S-Vid	3-yr	Gbl May 06	
9462-7EU	Core Duo T2300E	1.66	512MB	15.0" XGA	64MB	60GB	5400	DVD±RW	* Intel 11a/b/g			S-Vid	3-yr	May 06	
9462-7XU	Core Duo T2300E	1.66	512MB	15.0" XGA	64MB	80GB	5400	Combo	* Intel 11a/b/g		Blue Finger	S-Vid	3-yr	Gbl May 06	
9462-95U	Core Duo T2400	1.83	512MB	15.0" XGA	64MB	60GB	5400	Combo	* Intel 11a/b/g			S-Vid	3-yr W	Gbl May 06	
9462-96U	Core Duo T2400	1.83	512MB	15.0" XGA	64MB	60GB	5400	Combo	* Intel 11a/b/g			Finger	S-Vid	3-yr W	Gbl May 06
9462-98U	Core Duo T2400	1.83	512MB	15.0" XGA	64MB	80GB	5400	Combo	* Intel 11a/b/g		Blue Finger	S-Vid	3-yr W	Gbl May 06	

Positioning Processor *Everyday computing; two spindles*
Intel® Core™ Solo processor T1300 with single-core, Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, 667MHz bus, and 2MB L2 cache or **Intel Core Duo processor T2300E or T2400** with dual-core, Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache

Memory **512MB** std / 4GB max³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available

Diskette drive None standard / use optional USB-based diskette drive

EIDE Combo *Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay™ Enh*

EIDE DVD±RW *Some: DVD burner / Super Multi-Burner (40Y8624) dual-layer, removable Ultrabay Enh*

Ultrabay Enhanced One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel

Serial ATA disk (SATA150) **40GB⁸** (5400 rpm), **60GB** (5400 rpm), or **80GB** (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / **Hard Disk Drive Shock Absorber / Active Protection System**

Display *Some: 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect*
Some: 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare / 4:3 aspect
Some: 15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect
Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare / 4:3 aspect

Graphics *Some: ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1*
Some: ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB GDDR1

Keyboard 89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys

TrackPoint® TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass

Touch pad UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones

ThinkLight™ Illuminates the keyboard to improve visibility in low-light conditions

Dimensions³ *14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm*
15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm

Weight² with optical and 6-cell battery: *14.1" models: up to 6.2 lb (2.8kg); 15": up to 6.8 lb (3.1 kg)*

Case material *Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic*

Battery - type Lithium Ion **6-cell** / supports unique 2nd battery in Ultrabay Enhanced

Battery - life¹⁰ *6-cell: up to 3.1 hr; optional 9-cell: up to 4.6 hr; 9-cell plus Ultrabay battery: up to 6.6 hr*

Architecture **Mobile Intel 945PM Express Chipset** / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI4512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)

PC Card Std slot One Type I or Type II slot / CardBus 32-bit / integrated door

ExpressCard slot One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door

Ports Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / 15" models: S-video out / no keyboard, mouse, serial, parallel, or infrared port (use USB)

Wireless antenna UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios

Mini PCI Express Two Mini PCI Express slots / only 802.11 wireless is customer upgradable

Intel 11a/b/g³² 11a/b/g wireless⁴, Mini PCI Express adapter, Intel PRO/Wireless 3945ABG

WWAN¹⁶ *Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless*

Modem 56K⁶ V.90 (V.92-designed²⁹) modem in Communications Daughter Card socket

Bluetooth™ *Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator*

Ethernet Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE

Audio support High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack

Security Power-on password / hard disk password / supervisor password / security keyhole

Security chip **Trusted Platform Module** / Atmel chip / TCG 1.2-compliant

Fingerprint reader *Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip*

Limited warranty¹² **3-year**/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² available

SOFTWARE¹⁴

Windows XP Professional

- Microsoft® Windows® XP Professional²⁰ (Service Pack 2)
- ↳ Disk-to-Disk Recovery

Preloaded

- Rescue and Recovery™
- Access Connections™
- Client Security Solution™
- ThinkVantage Productivity Center with Away Manager
- ThinkVantage System Update
- Symantec® Client Security™
- Diskkeeper Lite
- PC-Doctor™ (diagnostics)
- ThinkPad Utilities (Power Manager and Presentation Director)
- Adobe® Reader
- Google Toolbar
- Google Desktop
- Picasa from Google
- Fingerprint Software (fingerprint models)
- Multimedia Center for Think Offerings
- Sonic RecordNOW and Drive Letter Access (combo, DVD±RW)
- InterVideo WinDVD (combo, DVD±RW models)
- InterVideo WinDVD Creator (DVD±RW models)

License - CD not included

- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client

Supports ThinkVantage® technologies

90 watt AC adapter (discrete graphics)

ThinkPad Roll Cage (one-piece magnesium frame)

RoHS-compliant

International Warranty Service¹⁷

24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²

ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175

ThinkPlus 3-year LOR 9x5 NBD 41C9176

ThinkPlus 4-year LOR 9x5 NBD 41C9177

ThinkPlus 5-year LOR 9x5 NBD 41C9179

ThinkPlus 4-year P&L P/U Depot 41C9178

ThinkPlus 5-year P&L P/U Depot 41C9180

See footnotes for important warranty information
 US models announced May 16 or May 30, 2006
 US models withdrawn effective September 2007

* Powered by Intel Centrino® mobile technology
 * Powered by Intel Centrino® Duo mobile technology

ThinkPad® R60 (9462) - ATI® graphics (October 2006) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Discrete graphics memory	Disk SATA GB ^a	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger-S-Video print out port	Bat- tery cells	Lim- workhorse warranty ¹²	Global/Avail date
9462-G9U	Core 2 Duo T7200	2.00	1GB	14.1" XGA	128MB	80GB	Combo	*Intel 11a/b/g ³²	None	Finger	S-Vid	6	3-yr Gbl Oct 06
9462-GAU	Core 2 Duo T7200	2.00	512MB	15.0" SXGA+	128MB	100GB	DVD±RW	*Intel 11a/b/g	None	Finger	S-Vid	9	3-yr Gbl Oct 06
Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Core™ 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache										SOFTWARE¹⁴		
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual channel / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)		
Diskette drive	None standard / use optional USB-based diskette drive										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Enh												
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner (40Y8624) dual-layer, removable Ultrabay Enh										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Ultrabay Enhanced Serial ATA disk (SATA150)	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel 80GB⁸ (5400 rpm) or 100GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System												
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare / 4:3										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Graphics	ATI® MOBILITY™ Radeon™ X1400 M54 / PCI Express x16 / 128MB GDDR1												
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Weight ²	with optical and 6-cell battery: 14.1" models: up to 6.2 lb (2.8kg); 15": up to 6.8 lb (3.1 kg)												
Case material	<i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Battery - type	Lithium Ion 6-cell or 9-cell / supports unique 2nd battery in Ultrabay Enhanced												
Battery - life ¹⁰	6-cell: up to 3.1 hr; 9-cell: up to 4.6 hr; 9-cell plus Ultrabay battery: up to 6.6 hr										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI4512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)												
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door												
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / 15" models: S-video out / no keyboard, mouse, serial, parallel, or infrared port (use USB)										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios												
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG												
WWAN ¹⁶	None										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket												
Bluetooth™	Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE												
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / supports the security chip												
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battery 6-cell	40Y6799	Supports ThinkVantage® technologies 90 watt AC adapter (discrete graphics) ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² ThinkPlus™ ²² 2-year LOR 9x5 NBD 41C9175 ThinkPlus 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty									
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797										
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789										
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad External Battery Charger	40Y7625										
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad 90W AC Adapter	40Y7659										
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad 90W AC/DC Combo Adapter	40Y7630										
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	Lenovo M500 Projector	0037A05										
USB Portable Diskette Drive	05K9276	Lenovo C500 Projector	0039A05										
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad Carrying Case - Organizer	73P3598										
USB 2.0 Lenovo Webcam	40Y8519	Premiere Leather Carrying Case	10K0209										
USB 2.0 Security Memory Key 2GB	41U5119	ThinkPad Convertible Carrying Case	22P8860										
USB 2.0 Security Memory Key 4GB	41U5120	USB Fingerprint Reader	73P4774										
USB 2.0 Portable 120GB Hard Disk	41N8379	ThinkPad Adjustable Notebook Stand	40Y7676										
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Convertible Monitor Stand	40Y7620										
ExpressCard Gemplus Smart Card Reader	41N3043	Lenovo L192 Wide 19" Monitor (black)	6920AB1										
11a/b/g Wireless Mini PCI Express Adapter	40Y7026	ThinkVision® L192p 19" Monitor (black)	9419HC2										
ThinkPad Essential Port Replicator	250510W	ThinkVision L201p 20.1" Monitor (black)	9220HB1										
ThinkPad Advanced Mini Dock	250410U	TrackPoint Cap Collection	73P2698										
ThinkPad Advanced Dock	250310U	Lenovo Laser Mouse (USB, PS/2)	41U3074										
Other accessories on O-R60 sheet		Other accessories at lenovo.com/accessories											

See footnotes for important warranty information
US models announced October 17, 2006
US models withdrawn effective July 2007

* Powered by Intel Centrino® Duo processor technology

ThinkPad® R60 (9462) - ATI® graphics (Education) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Discrete graphics memory	Disk SATA GB ⁸	rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN Blue-tooth	Finger-print reader	S-Video out port	3-year limited warranty ¹²	Avail date
9462-63U	Core Duo T2500	2.00	512MB	14.1" SXGA+	64MB	80GB	5400	DVD±RW	* Intel 11a/b/g ³²	None	None	Finger	EasyServ	May 06
9462-69U	Core Duo T2400	1.83	512MB	14.1" SXGA+	64MB	60GB	5400	Combo	* Intel 11a/b/g	None	None	Finger	EasyServ	May 06
9462-73U	Core Duo T2500	2.00	1GB	15.0" SXGA+	128MB	100GB	7200	DVD±RW	* Intel 11a/b/g	None	None	Finger S-Vid	EasyServ	May 06
9462-7BU	Core Duo T2400	1.83	512MB	15.0" XGA	128MB	60GB	5400	Combo	* Intel 11a/b/g	None	None	S-Vid	EasyServ	May 06
9462-6WU	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	60GB	5400	Combo	* Intel 11a/b/g	None	None	Finger	EasyServ	May 06

• **These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Everyday computing; two-spindle system</i> Intel® Core™ Duo processor T2400 or T2500 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										SOFTWARE¹⁴				
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery				
Diskette drive EIDE DVD±RW Ultrabay Enhanced Serial ATA disk (SATA150)	None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enh <i>Some:</i> DVD burner / Super Multi-Burner (40Y8624) dual-layer, removable Ultrabay Enh One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel 60GB⁸ (5400 rpm), 80GB (5400 rpm), or 100GB (7200 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System										Preloaded • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)				
Display	<i>Some:</i> 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect <i>Some:</i> 14.1" (358.1mm) SXGA+ (1400x1050) TFT color / 150 nits / anti-glare / 4:3 <i>Some:</i> 15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect <i>Some:</i> 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / 200 nits / anti-glare / 4:3										• CD • Adobe Photoshop Elements plus Adobe Premiere Elements License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
Graphics	<i>Some:</i> ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1 <i>Some:</i> ATI MOBILITY Radeon X1400 M54 / PCI Express x16 / 128MB GDDR1										Supports ThinkVantage® technologies				
Keyboard TrackPoint® Touch pad ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions										90-watt AC adapter (discrete graphics) ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
Dimensions ³	14.1" models (WxDxH): 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm 15.0" models (WxDxH): 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm with optical and 6-cell battery: 14.1" models: up to 6.2 lb (2.8kg); 15.0": up to 6.8 lb (3.1 kg) <i>Color:</i> black; <i>All:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic										ThinkPlus™. ²² 2-year LOR 9x5 NBD 41C9175				
Weight ²	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Enhanced 6-cell: up to 3.1 hr; optional 9-cell: up to 4.6 hr; 9-cell plus Ultrabay battery: up to 6.6 hr										ThinkPlus 3-year LOR 9x5 NBD 41C9176				
Case material	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Enhanced										ThinkPlus 4-year LOR 9x5 NBD 41C9177				
Battery - type	6-cell: up to 3.1 hr; optional 9-cell: up to 4.6 hr; 9-cell plus Ultrabay battery: up to 6.6 hr										ThinkPlus 5-year LOR 9x5 NBD 41C9179				
Battery - life ¹⁰	6-cell: up to 3.1 hr; optional 9-cell: up to 4.6 hr; 9-cell plus Ultrabay battery: up to 6.6 hr										ThinkPlus 4-year P&L P/U Depot 41C9178				
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI4512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)										ThinkPlus 5-year P&L P/U Depot 41C9180				
PC Card Std slot ExpressCard slot	One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / 15" models: S-video out / no keyboard, mouse, serial, parallel, or infrared port (use USB)														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios														
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable														
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG														
WWAN ¹⁶	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket														
Bluetooth™	None														
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE														
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant														
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / supports the security chip														
Limited warranty ¹²	3-year/1-yr battery - EasyServ™. ¹⁹ onsite pickup and delivery / service upgrades ²² avail														
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	T60/R60 Series Li-Ion Battery 6-cell	40Y6799												
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797												
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789												
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ThinkPad External Battery Charger	40Y7625												
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad 90W AC/DC Combo Adapter	40Y7630												
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	Lenovo M500 Projector	0037A05												
USB 2.0 Lenovo Multimedia Headset	40Y8518	Lenovo C500 Projector	0039A05												
USB 2.0 Webcam	40Y8519	ThinkPad Convertible Carrying Case	22P8860												
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad Adjustable Notebook Stand	40Y7676												
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Convertible Monitor Stand	40Y7620												
11a/b/g Wireless Mini PCI Express Adapter	40Y7026	Lenovo L192 Wide 19" Monitor (black)	6920AB1												
ThinkPad Essential Port Replicator	250510W	ThinkVision® L201p 20.1" Monitor (blk)	9220HB1												
ThinkPad Advanced Mini Dock	250410U	TrackPoint Cap Collection	73P2698												
ThinkPad Advanced Dock	250310U	Other accessories at lenovo.com/accessories													

See footnotes for important warranty information
US models announced May 16, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo processor technology

ThinkPad® R60 (9463) - ATI® graphics (TopSeller and Educ) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Anti-glare screen	Discrete graphics memory	Disk SATA GB ⁵	rpm	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger-print reader	S-Video out port	3-year limited warranty ¹²	Avail date
9463-82U	Core Duo T2400	1.83	512MB	14.1" XGA	64MB	60GB	5400	Combo	* Intel 11a/b/g ³²	None	None	None	None	EasyServ	May 06
9463-7RU	Core Duo T2400	1.83	512MB	15.0" XGA	64MB	60GB	5400	Combo	* Intel 11a/b/g	None	None	None	S-Vid	EasyServ	May 06

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Core™ Duo processor T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache										SOFTWARE¹⁴				
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery				
Diskette drive EIDE Combo	None standard / use optional USB-based diskette drive										Preloaded				
UltraBay Enhanced Serial ATA disk (SATA150)	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel 60GB⁸ (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk with optional 'Second HDD Adapter for Ultrabay Slim' / Hard Disk Drive Shock Absorber / Active Protection System										<ul style="list-style-type: none"> • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo models) • InterVideo WinDVD (combo models) 				
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect Some: 15.0" (381.0mm) XGA (1024x768) TFT color / 150 nits / anti-glare / 4:3 aspect										<ul style="list-style-type: none"> • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo models) • InterVideo WinDVD (combo models) 				
Graphics	ATI® MOBILITY™ Radeon™ X1300 M52 / PCI Express x16 / 64MB GDDR1										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Keyboard TrackPoint®	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Touch pad ThinkLight™	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™ multi-pointing system / touch pad below keyboard / Tap Zones Illuminates the keyboard to improve visibility in low-light conditions										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Dimensions ³	<i>14.1" models (WxDxH):</i> 12.4" x 10.2" x 1.35-1.46"; 314mm x 260mm x 34.3-37.2mm <i>15.0" models (WxDxH):</i> 13.1" x 10.6" x 1.47-1.58"; 332mm x 269mm x 37.3-40.2mm										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Weight ²	with optical and 6-cell battery: <i>14.1" models:</i> up to 6.2 lb (2.8kg); <i>15":</i> up to 6.8 lb (3.1 kg)										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene (ABS) plastic										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Battery - type	Lithium Ion 6-cell / supports unique 2nd battery in Ultrabay Enhanced										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Battery - life ¹⁰	<i>6-cell:</i> up to 3.1 hr; <i>optional 9-cell:</i> up to 4.6 hr; <i>9-cell plus Ultrabay battery:</i> up to 6.6 hr										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI4512 CardBus controller) / LPC bus (National Semiconductor® PC87382 Super I/O, Atmel® 97SC3203)										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
PC Card Std slot	One Type I or Type II slot / CardBus 32-bit / integrated door										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Ports	Three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) / <i>15" models:</i> S-video out / no keyboard, mouse, serial, parallel, or infrared port (use USB)										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
WWAN ¹⁶	None										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Bluetooth™	None										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5751M (MAC/PHY) / PCIe x1 / PXE										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Audio support	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Security	Power-on password / hard disk password / supervisor password / security keyhole										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Fingerprint reader	None										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail										<ul style="list-style-type: none"> • Adobe Photoshop Elements plus Adobe Premiere Elements 				
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733										90-watt AC adapter (discrete graphics)				
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734										ThinkPad Roll Cage (one-piece magnesium frame)				
2GB PC2-5300 DDR2 SODIMM	40Y7735										RoHS-compliant				
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725										International Warranty Service ¹⁷				
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643										ThinkPlus™ ²² 2-year LOR 9x5 NBD				
80GB Disk 9.5mm SATA150 (5400 rpm)	41N5662										41C9175				
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013										ThinkPlus 3-year LOR 9x5 NBD				
USB Portable Diskette Drive	05K9276										41C9176				
USB 2.0 Lenovo Multimedia Headset	40Y8518										ThinkPlus 4-year LOR 9x5 NBD				
USB 2.0 Lenovo Webcam	40Y8519										41C9177				
USB 2.0 Security Memory Key 4GB	41U5120										ThinkPlus 5-year LOR 9x5 NBD				
USB 2.0 Portable 120GB Hard Disk	41N8379										41C9179				
USB 2.0 Super Multi-Burner Drive	41N5565										ThinkPlus 4-year P&L P/U Depot				
ExpressCard Gemplus Smart Card Reader	41N3043										41C9178				
11a/b/g Wireless Mini PCI Express Adapter	40Y7026										ThinkPlus 5-year P&L P/U Depot				
ThinkPad Essential Port Replicator	250510W										41C9180				
ThinkPad Advanced Mini Dock	250410U										Post-warranty annual maintenance agreements at				
ThinkPad Advanced Dock	250310U										lenovo.com/thinkplus/warranty				
Lenovo Laser Mouse (USB, PS/2)	41U3074										Other accessories at lenovo.com/accessories				

See footnotes for important warranty information
US models announced May 16, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo processor technology

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(RC1-D) September 2007

Partial list of accessories supported on ThinkPad R60 originally announced on May 16, 2006

Memory

512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ann 01/05/06
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ann 01/05/06
2GB PC2-5300 DDR2 SODIMM	40Y7735	ann 11/28/06

Ultrabay Slim 9.5mm (best to use curved bezel options)

Serial Hard Drive Ultrabay Slim Adapter (flat) ⁴⁰	40Y8725	ann 09/20/05
⁴⁰ Supported, but not recommended because flat bezel.		
DVD-ROM Ultrabay Slim Drive (curved bezel)	73P3270	ann 10/07/03
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ann 09/20/05
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ann 05/31/07

Ultrabay Enhanced 12.7mm (best to use curved bezel options)

DVD-ROM Ultrabay Enhanced Drive (curved)	39X2642	ann 03/14/06
CD-RW/DVD Combo Ultrabay Enhanced (cur)	73P3275	ann 10/07/03

Storage and removable storage

60GB Disk 9.5mm SATA150 (7200 rpm) ⁴¹	41N3012	ann 01/05/06
80GB Disk 9.5mm SATA150 (5400 rpm) ⁴¹	41N5662	ann 08/15/06
100GB Disk 9.5mm SATA150 (7200 rpm) ⁴¹	41N3013	ann 01/05/06
120GB Disk 9.5mm SATA150 (5400 rpm) ⁴¹	41N5691	ann 03/20/07
160GB Disk 9.5mm SATA150 (5400 rpm) ⁴¹	41N5692	ann 03/20/07

⁴¹ Can be used as the main HDD or with ThinkPad Serial ATA Hard Drive Ultrabay Slim Adapter 40Y8725 in the Ultrabay or in the ThinkPad Advanced Dock 250310U.

USB 2.0 Essential Memory Key 1GB	41U4940	ann 01/23/07
USB 2.0 Essential Memory Key 2GB	41U4944	ann 01/23/07
USB 2.0 Security Memory Key 1GB	41U5118	ann 07/17/07
USB 2.0 Security Memory Key 2GB	41U5119	ann 07/17/07
USB 2.0 Security Memory Key 4GB	41U5120	ann 07/17/07

USB Portable Diskette Drive	05K9276	ann 06/05/00
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ann 01/05/06
USB 2.0 Portable 80GB Hard Disk	41N8378	ann 04/17/07
USB 2.0 Portable 120GB Hard Disk	41N8379	ann 04/17/07
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07

Wireless LAN (Mini PCI Express)

11a/b/g Wireless Mini PCI Express Adpr ⁴²	40Y7026	ann 09/20/05
Intel PRO/Wireless 3945ABG Mini PCIe Ad ⁴²	41N3008	ann 01/05/06
⁴² System must be wireless upgradable.		
Kensington WiFi Finder Plus	40Y7717	

ThinkPad Expansion

USB Serial Parallel Adapter	22P5298	ann 10/09/01
ThinkPad Adjustable Notebook Stand	40Y7676	ann 09/20/05
ThinkPad Essential Port Replicator	250510W	ann 09/20/05
ThinkPad Advanced Mini Dock	250410U	ann 09/20/05
ThinkPad Advanced Dock ⁴⁷	250310U	ann 09/20/05
⁴⁷ ThinkPad Advanced Dock supports dual-head graphics adapters:		
- ATI® X1300 256MB Dual Head/TV-out	41U5028	
- ATI Radeon™ X300 SE 128MB Dual Head	41U4813	

External Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Enh Perf Wireless Keyboard and Mouse	73P4067	ann 12/07/04
USB Keyboard with UltraNav	31P8950	ann 01/28/03
USB Travel Keyboard with UltraNav	31P9490	ann 04/27/04
Preferred Pro USB Fingerprint Keyboard	73P4730	ann 02/22/05

External Mouse

USB Optical Wheel Mouse	06P4069	ann 05/21/03
Optical 3-Button ScrollPoint® Mouse	31P7405	ann 08/27/02
Optical 3-Button ScrollPoint Pro Mouse	31P8700	ann 10/01/02
Optical 3-Button Travel Wheel Mouse	31P7410	
Lenovo Laser Mouse (USB, PS/2)	41U3074	ann 01/23/07

Batteries

T60/R60 Series Li-Ion Battery 6-cell	40Y6799	ann 01/05/06
Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	ann 09/20/05
ThinkPad Advanced Ultrabay Battery 3-cell ⁴³	40Y6789	ann 09/20/05
⁴³ Used in Ultrabay Enhanced bay.		
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann 09/20/05
⁴⁴ Requires the ThinkPad 90W AC Adapter 40Y7659 (adapter provided with some systems).		
ThinkPad 65W AC Adapter ⁴⁵	40Y7696	
⁴⁵ Only compatible with the 945GM and GM965 chipset models.		
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
ThinkPad 90W AC/DC Combo Adapter	40Y7630	ann 12/13/05
Belkin 1 Outlet Notebook Surge	31P7658	
Belkin Universal Notebook Travel Surge	22P7127	
Belkin 8-outlet 6-foot Surge Protector	31P7659	

Data/Video Projectors

Lenovo M500 Projector	0037A05	ann 02/28/06
Lenovo C500 Projector	0039A05	ann 07/11/06

Carrying Cases

Lenovo Carrying Case - Messenger Max	41U5253	ann 05/01/07
Lenovo Carry Case - Performance Backpack	41U5254	ann 05/01/07
ThinkPad Nylon Carrying Case	10K0207	
ThinkPad Carrying Case - Expander	73P3597	
ThinkPad Carrying Case - Backpack	73P3599	
ThinkPad Premiere Leather Carrying Case	10K0209	
ThinkPad Convertible Carrying Case	22P8860	

Security

Kensington® Cable Lock from Lenovo	73P2582	ann 12/29/03
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
PC Card Gemplus Smart Card Reader	41N3004	ann 12/13/05
ExpressCard Gemplus Smart Card Reader	41N3043	ann 06/27/06
USB Fingerprint Reader	41U3167	ann 10/24/06

Monitors

Lenovo E75 17" CRT Monitor (16.0" vis) blk	6307BTN	ann 01/16/07
Lenovo L151 15" Monitor (black)	9165AB6	ann 02/28/06
Lenovo L171 17" Monitor (black)	9227AC1	ann 11/07/06
Lenovo L191 19" Monitor (black)	6135AB1	ann 06/27/06
Lenovo L192 Wide 19" Monitor (black)	6920AB1	ann 09/19/06
Lenovo D221 Wide 22" Monitor (black)	6622HB1	ann 11/21/06
ThinkVision® L171p 17" Monitor (black)	9417HC2	ann 10/31/06
ThinkVision L192p 19" Monitor (black)	9419HC2	ann 10/31/06
ThinkVision L201p 20.1" Monitor (black)	9220HB1	ann 10/31/06

Monitor Accessories⁴⁶

ThinkVision USB Soundbar	40Y7616	ann 08/23/05
Kensington Cable Lock from Lenovo	73P2582	ann 12/29/03
ThinkPad Convertible Monitor Stand	40Y7620	ann 01/05/06
Radial Arm	19K4464	ann 05/05/00
⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.		

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann 06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06

Other accessories at lenovo.com/accessories

Need to buy accessories no longer marketed by Lenovo? See www.itxchange.com/lenovo for the Options Continuation Program.

ThinkPad® R61 15W (GMA Graphics) - 1-year (TopSeller) - withdrawn

Personal Systems Reference (PSREF)

Proc- Type-model	essor GHz Memory	Wide- screen display	Cam- era	Graphics controller	Disk SATA GB ² rpm	EIDE optical	Mini PCIe 802.11 wireless	Card slot	Finger print reader	Bat- tery Blue- tooth cells	Workhorse (W) Vista Global (G) Avail preload date
8932-A8U T7100	1.80 1GB	15.4" WXGA	None	GMA	120G 5400	DVD±RW	*Intel 11a/b/g ³²	Smart	Finger	Blue	6 Business64 No Jul 07
<ul style="list-style-type: none"> • This small and medium business (SMB) model is part of the US TopSeller™ Program • This model has a 1-year limited warranty¹² 											
Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Core™ 2 Duo processor T7100 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep technology ¹ , Intel Dynamic Acceleration, Execute Disable Bit, Virtualization Technology, 800MHz system bus, and 2MB shared L2 cache										Preloaded operating system²⁰ - Microsoft® Windows® Vista™ Business Edition (64-bit) ⇨ Vista Basic logo
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2, non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications¹⁴ <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • System Migration Assistant • Norton Internet Security (90 days of virus definitions) • Diskeeper™ Home • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Windows Live™ Toolbar • Windows Live Search • Picasa from Google • Fingerprint Software (fingerprint models) • Microsoft Office 2007 Trial • Sonic RecordNow and Drive Letter Access (DVD±RW) • InterVideo WinDVD (DVD±RW)
Diskette drive DVD burner UltraBay Enhanced Serial ATA disk (SATA150)	None (use optional USB-based diskette drive) DVD burner, Super Multi-Burner (40Y8624) dual-layer, removable UltraBay™ Enhanced One bay for removable devices, UltraBay Slim-compatible, 12.5mm high, flat or curved 120GB⁸ (5400 rpm) / 9.5mm high, removable, upgradable, 9.5mm high bay, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™										
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio, anti-glare None										
Graphics	Intel Graphics Media Accelerator X3100 (GMA X3100) , integrated in GM965, no DVI pass-through support to optional Advanced Mini Dock or Advanced Dock										
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows/Apl keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™ multi-pointing system, touch pad below keyboard, Tap Zones Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10.2" x 1.39–1.52"; 358.5 x 260.0mm x 35.3–38.5mm 6-cell: starting at 6.4 lb (2.9kg); 9-cell: starting at 6.7 lb (3.1kg) Black color, Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell , supports unique 2nd battery in UltraBay Enhanced 6-cell: up to 5.0 hr; 9-cell: up to 7.0 hr; 6-cell plus UltraBay battery: up to 8.5 hr										License - CD not included - Lotus® Notes® Stand-alone Client
Architecture	Mobile Intel GM965 Express Chipset (Graphics Memory Controller Hub); ICH8M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C847 Cardbus/1394/Multicard) / LPC bus (WPCN385 Super I/O, Atmel® 97SC3203 TPM)										
PC Card Std slot ExpressCard slot Smart Card Read Multicard Reader Ports	One Type I or Type II slot, CardBus 32-bit None Smart Card Reader 4-in-1 reader (MultiMediaCard, Mem Stick PRO, Secure Digital, xD-Picture Card™) Three USB 2.0, external DB-15 monitor, RJ-11 (modem), RJ-45 (ethernet), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard), S-Video out										
Wireless antenna Mini PCI Express Intel 11a/b/g ³² WWAN ¹⁶ Turbo Memory Modem Bluetooth™ Ethernet Intel AMT Audio support	UltraConnect™ II antenna / on-off switch for all wireless radios One Mini PCI Express slot / 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , Mini PCIe adapter, Intel PRO/Wireless 3945ABG None None 56K ⁶ V.90 (V.92-designed ²⁹) modem, on systemboard, Conexant® CX20548 Bluetooth 2.0 wireless, USB 2.0 interface via ICH8M, LED indicator Gigabit ethernet on systemboard, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE None High Definition (HD) Audio, CX20549 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone, microphone input jack, headphone jack										Supports ThinkVantage® technologies 65-watt (GMA graphics) ThinkPad Roll Cage (one-piece magnesium frame) ENERGY STAR® 4.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module , Atmel chip, TCG 1.2-compliant Fingerprint reader on palm rest , swipe sensor, supported with security chip										ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166 ThinkPlus 2-year LOR 9x5 NBD 41C9167 ThinkPlus 3-year LOR 9x5 NBD 41C9168 ThinkPlus 4-year LOR 9x5 NBD 41C9171 ThinkPlus 5-year LOR 9x5 NBD 41C9173 ThinkPlus 2-year P&L P/U Depot 41C9169 ThinkPlus 3-year P&L P/U Depot 41C9170 ThinkPlus 4-year P&L P/U Depot 41C9172 ThinkPlus 5-year P&L P/U Depot 41C9174 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available										
512MB PC2-5300 DDR2 CL5 SODIMM 1GB PC2-5300 DDR2 CL5 SODIMM 2GB PC2-5300 DDR2 SODIMM Serial Hard Drive UltraBay Slim Adapter (flat) ThinkPad DVD UltraBay Slim Burner (flat) 160GB Disk 9.5mm SATA150 (5400 rpm) 160GB Disk 9.5mm SATA150 (7200 rpm) 200GB Disk FDE SATA150 (7200 rpm) USB 2.0 Super Multi-Burner Drive ThinkPad Convertible Monitor Stand ThinkPad Essential Port Replicator ThinkPad Advanced Mini Dock ThinkPad Advanced Dock Other accessories on O-R61-15W sheet	40Y7733 40Y7734 40Y7735 40Y8725 41N5643 41N5692 41N5737 41N5738 41N5565 40Y7620 250510W 250410U 250310U	T60/R60 Series Li-Ion Battery 6-cell Z60m/T60/R60 Li-Ion Battery 9-cell Advanced UltraBay Battery 3-cell ThinkPad External Battery Charger ThinkPad 90W AC Adapter ThinkPad 90W AC/DC Combo Adapter ThinkPad Carrying Case - Expander ThinkPad Carrying Case - Backpack ThinkVision® L171p 17" LCD Monitor ThinkVision L190x 19" LCD Monitor ThinkVision L193p 19" LCD Monitor ThinkVision L220x Wide 22" LCD Lenovo M500 Projector Other accessories at lenovo.com/accessories	40Y6799 40Y6797 40Y6789 40Y7625 40Y7659 40Y7630 73P3597 73P3599 9417HC2 4439HB2 4431HB2 4433HB2 0037A05								

See footnotes for important warranty information
 US model announced July 10, 2007
 US model withdrawn effective December 2007

* Powered by Intel Centrino® Duo processor technology

ThinkPad® R61 15W (GMA Graphics) - 1-year - withdrawn

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Graphics controller	Disk SATA GB ²	EIDE rpm	EIDE optical	Mini PCIe 802.11 wireless	Card slot	Finger print reader	Blue- tooth	Bat- tery cells	Workhorse (W) Vista Global (G) preload	Avail date
8930-23U	T7300	2.00	1GB	15.4" WXGA	None	GMA	80GB	5400	Combo	*Intel 11a/b/g ³²	Smart	None	None	6	Business32 G	Jul 07

• *This model has a 1-year limited warranty¹²*

Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Core™ 2 Duo processor T7300 with dual-core. Intel 64 Technology, Enhanced Intel SpeedStep technology ¹ , Intel Dynamic Acceleration, Execute Disable Bit, Virtualization Technology, 800MHz system bus, and 4MB shared L2 cache										Preloaded operating system²⁰ - Microsoft® Windows® Vista™ Business Edition (32-bit) ♦ Vista Premium logo					
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2, non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available;										Preloaded applications¹⁴ • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • System Migration Assistant • Norton Internet Security (90 days of virus definitions) • Diskeeper™ Home • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Windows Live™ Toolbar • Windows Live Search • Picasa from Google • Microsoft Office 2007 Trial • Sonic RecordNow and Drive Letter Access (combo) • InterVideo WinDVD (combo)					
Diskette drive	None (use optional USB-based diskette drive)										License - CD not included - Lotus® Notes® Stand-alone Client					
EIDE Combo	DVD-ROM/CD-RW (73P3288), 24X/24X/24X/8X ²¹ , removable from Ultrabay Enhanced															
Ultrabay Enhanced	One bay for removable devices, Ultrabay Slim-compatible, 12.5mm high, flat or curved															
Serial ATA disk (SATA150)	80GB⁸ (5400 rpm) / 9.5mm high, removable, upgradable, 9.5mm high bay, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™															
Widescreen display	15.4" (391mm) WXGA (1280x800) color , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio, anti-glare															
Camera	None															
Graphics	Intel Graphics Media Accelerator X3100 (GMA X3100) , integrated in GM965, no DVI pass-through support to optional Advanced Mini Dock or Advanced Dock															
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows/Appl keys															
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass															
Touch pad	UltraNav™ multi-pointing system, touch pad below keyboard, Tap Zones															
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10.2" x 1.39–1.52"; 358.5 x 260.0mm x 35.3–38.5mm															
Weight ²	<i>6-cell:</i> starting at 6.4 lb (2.9kg); <i>9-cell:</i> starting at 6.7 lb (3.1kg)															
Case material	Black color, Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic															
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced															
Battery - life ¹⁰	<i>6-cell:</i> up to 5.0 hr; <i>9-cell:</i> up to 7.0 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.5 hr															
Architecture	Mobile Intel GM965 Express Chipset (Graphics Memory Controller Hub); ICH8M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C847 Cardbus/1394/Multicard) / LPC bus (WPCN385 Super I/O, Atmel® 97SC3203 TPM)															
PC Card Std slot	One Type I or Type II slot, CardBus 32-bit															
ExpressCard slot	None															
Smart Card Read	Smart Card Reader															
Multicard Reader	4-in-1 reader (MultiMediaCard, Mem Stick PRO, Secure Digital, xD-Picture Card™)															
Ports	Three USB 2.0, external DB-15 monitor, RJ-11 (modem), RJ-45 (ethernet), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard), S-Video out										Supports ThinkVantage® technologies					
Wireless antenna	UltraConnect™ II antenna / on-off switch for all wireless radios										65-watt (GMA graphics) ThinkPad Roll Cage (one-piece magnesium frame) ENERGY STAR® 4.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²					
Mini PCI Express	One Mini PCI Express slot / 802.11 wireless is customer upgradable															
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCIe adapter, Intel PRO/Wireless 3945ABG															
WWAN ¹⁶	None															
Turbo Memory	None															
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem, on systemboard, Conexant® CX20548															
Bluetooth™	None															
Ethernet	Gigabit ethernet on systemboard, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE															
Intel AMT	None															
Audio support	High Definition (HD) Audio, CX20549 codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone, microphone input jack, headphone jack															
Security	Power-on password, hard disk password, supervisor password, security keyhole															
Security chip	Trusted Platform Module , Atmel chip, TCG 1.2-compliant															
Fingerprint reader	None															
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available															
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733			T60/R60 Series Li-Ion Battery 6-cell			40Y6799									
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734			Z60m/T60/R60 Li-Ion Battery 9-cell			40Y6797									
2GB PC2-5300 DDR2 SODIMM	40Y7735			Advanced Ultrabay Battery 3-cell			40Y6789									
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725			ThinkPad External Battery Charger			40Y7625			ThinkPlus 2-year P&L P/U Depot						
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643			ThinkPad 90W AC Adapter			40Y7659			41C9169						
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692			ThinkPad 90W AC/DC Combo Adapter			40Y7630			ThinkPlus 3-year P&L P/U Depot						
160GB Disk 9.5mm SATA150 (7200 rpm)	41N5737			ThinkPad Carrying Case - Expander			73P3597			41C9170						
200GB Disk FDE SATA150 (7200 rpm)	41N5738			ThinkPad Carrying Case - Backpack			73P3599			ThinkPlus 4-year P&L P/U Depot						
USB 2.0 Super Multi-Burner Drive	41N5565			ThinkVision® L171p 17" LCD Monitor			9417HC2			41C9172						
ThinkPad Convertible Monitor Stand	40Y7620			ThinkVision L193p 19" LCD Monitor			4431HB2			ThinkPlus 5-year P&L P/U Depot						
ThinkPad Essential Port Replicator	250510W			ThinkVision L194 Wide 19" LCD			4434HB6			41C9174						
ThinkPad Advanced Mini Dock	250410U			ThinkVision L220x Wide 22" LCD			4433HB2			Post-warranty annual maintenance agreements at						
ThinkPad Advanced Dock	250310U			Lenovo M500 Projector			0037A05			lenovo.com/thinkplus/warranty						
Other accessories on O-R61-15W sheet											Other accessories at lenovo.com/accessories					

See footnotes for important warranty information
 US model announced July 10, 2007
 US model withdrawn effective December 2007

* Powered by Intel Centrino® Duo processor technology

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 (WKK11-3) December 2007

ThinkPad® R61 15W (NVIDIA Graphics) - 1-year - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	Graphics controller	memory	Disk SATA GB ³	rpm	EIDE optical	Mini PCIe 802.11 wireless	Finger print reader	Blue-tooth	Battery 1394 port cells	Vista preload	Whorse (W) Global (G) Avail date
8914-23U	T7300	2.00	1GB	15.4" WXGA	128MB	80GB	5400	Combo	*Intel 11a/b/g ³²	None	None	1394	6	Business32	G Jun 07

• **This model has a 1-year limited warranty²**

Positioning Processor	<i>Everyday computing; two spindles</i> Intel® Core™ 2 Duo processor T7300 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep technology ¹ , Intel Dynamic Acceleration, Execute Disable Bit, Virtualization Technology, 800MHz system bus, and 4MB shared L2 cache										Preloaded operating system²⁰ - Microsoft® Windows® Vista™ Business Edition (32-bit) ◇ Vista Premium logo				
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2, non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available										Preloaded applications¹⁴ • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • System Migration Assistant • Norton Internet Security (90 days of virus definitions) • Diskeeper™ Home • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Windows Live™ Toolbar • Windows Live Search • Picasa from Google • Fingerprint Software (fingerprint models) • Microsoft Office 2007 Trial • Sonic RecordNow and Drive Letter Access (combo) • InterVideo WinDVD (combo)				
Diskette drive	None (use optional USB-based diskette drive)														
EIDE Combo	DVD-ROM/CD-RW (73P3288), 24X/24X/24X/8X ²¹ , removable Ultrabay™ Enh, curved														
Ultrabay Enhanced	One bay for removable devices, Ultrabay Slim-compatible, 12.5mm high, flat or curved														
Serial ATA disk (SATA150)	80GB⁸ (5400 rpm) / 9.5mm high, removable, upgradable, 9.5mm high bay, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™														
Widescreen display	15.4" (391mm) WXGA (1280x800) color , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio, anti-glare														
Camera	None														
Graphics	NVIDIA® Quadro® NVS 140M , PCI Express x16, 128MB memory, TurboCache, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock														
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows/Appl keys														
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Touch pad	UltraNav™ multi-pointing system, touch pad below keyboard, Tap Zones														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10.2" x 1.39–1.52"; 358.5 x 260.0mm x 35.3–38.5mm														
Weight ²	<i>6-cell:</i> starting at 6.4 lb (2.9kg); <i>9-cell:</i> starting at 6.7 lb (3.1kg)														
Case material	Black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic														
Battery - type	Lithium Ion 6-cell 2.4 Ah, supports unique 2nd battery in Ultrabay Enhanced														
Battery - life ¹⁰	<i>6-cell:</i> up to 5.0 hr; <i>9-cell:</i> up to 7.0 hr; <i>2-cell plus Ultrabay battery:</i> up to 8.5 hr														
Architecture	Mobile Intel PM965 Express Chipset (Memory Controller Hub); ICH8M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C847 Cardbus/1394/Multicard) / LPC bus (WPCN385 Super I/O, Atmel® 97SC3203 TPM)														
PC Card Std slot	One Type I or Type II slot, CardBus 32-bit														
ExpressCard slot	None														
Smart Card Read	Smart Card Reader (under PC Card slot)														
Multicard Reader	4-in-1 reader (MultiMediaCard, Mem Stick PRO, Secure Digital, xD-Picture Card™)														
Ports	Three USB 2.0, external DB-15 monitor, RJ-11 (modem), RJ-45 (ethernet), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard), S-Video out														
Wireless antenna	UltraConnect™ II antenna / on-off switch for all wireless radios														
Mini PCI Express	One Mini PCI Express slot / 802.11 wireless is customer upgradable														
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCIe adapter, Intel PRO/Wireless 3945ABG														
WWAN ¹⁶	None														
Turbo Memory	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Communications Daughter Card socket														
Bluetooth™	None														
Ethernet	Gigabit ethernet on systemboard, Intel 82566MC Ninevah (PHY), PCIe x1 (GLCI), PXE														
Intel AMT	None														
Audio support	High Definition (HD) Audio, AD1984JCP codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone, microphone input jack, headphone jack														
Security	Power-on password, hard disk password, supervisor password, security keyhole														
Security chip	Trusted Platform Module , Atmel chip, TCG 1.2-compliant														
Fingerprint reader	None														
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available														
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733				T60/R60 Series Li-Ion Battery 6-cell				40Y6799						
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734				Z60m/T60/R60 Li-Ion Battery 9-cell				40Y6797						
2GB PC2-5300 DDR2 SODIMM	40Y7735				Advanced Ultrabay Battery 3-cell				40Y6789						
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643				ThinkPad External Battery Charger				40Y7625						
Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725				ThinkPad 90W AC Adapter				40Y7659						
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692				ThinkPad 90W AC/DC Combo Adapter				40Y7630						
160GB Disk 9.5mm SATA150 (7200 rpm)	41N5737				ThinkPad Carrying Case - Expander				73P3597						
200GB Disk FDE SATA150 (7200 rpm)	41N5738				ThinkPad Carrying Case - BackPack				73P3599						
USB 2.0 Super Multi-Burner Drive	41N5565				ThinkVision® L171p 17" LCD Monitor				9417HC2						
ThinkPad Convertible Monitor Stand	40Y7620				ThinkVision L190x 19" LCD Monitor				4439HB2						
ThinkPad Essential Port Replicator	250510W				ThinkVision L194 Wide 19" LCD				4434HB6						
ThinkPad Advanced Mini Dock	250410U				ThinkVision L220x Wide 22" LCD				4433HB2						
ThinkPad Advanced Dock	250310U				Lenovo M500 Projector				0037A05						
Other accessories on O-R61-15W sheet											Other accessories at lenovo.com/accessories				
											ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166				
											ThinkPlus 2-year LOR 9x5 NBD 41C9167				
											ThinkPlus 3-year LOR 9x5 NBD 41C9168				
											ThinkPlus 4-year LOR 9x5 NBD 41C9171				
											ThinkPlus 5-year LOR 9x5 NBD 41C9173				
											ThinkPlus 2-year P&L P/U Depot 41C9169				
											ThinkPlus 3-year P&L P/U Depot 41C9170				
											ThinkPlus 4-year P&L P/U Depot 41C9172				
											ThinkPlus 5-year P&L P/U Depot 41C9174				
											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				

See footnotes for important warranty information
US model announced May 31, 2007
US model withdrawn effective December 2007

* Powered by Intel Centrino® Duo processor technology

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(WKK1-1) December 2007

ThinkPad® G40 (January 2004) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Ethernet on planar	Battery	Workhorse (W) or Global (G) or Entry (E)	Avail date
2388-DAU	Celeron®	2.4	128MB	14.1" XGA	20GB	CD	None	Modem	10/100	6-cell Li-Ion	XP Pro Entry	Jan 2004
2388-DGU	Celeron	2.4	256MB	14.1" XGA	30GB	CD	None	Modem	10/100	12-cell Li-Ion	XP Pro No	Jan 2004
2388-DMU	Celeron	2.4	256MB	14.1" XGA	30GB	Combo	None	Modem	10/100	12-cell Li-Ion	XP Pro No	Jan 2004
2388-DVU	Celeron	2.4	256MB	15.0" XGA	30GB	Combo	None	Modem	10/100	12-cell Li-Ion	XP Pro No	Jan 2004
2388-DXU	Celeron	2.4	256MB	15.0" XGA	40GB	Combo	11b Wi-Fi ³²	Modem	10/100	12-cell Li-Ion	XP Pro No	Jan 2004
2388-EJU	Pentium® 4	2.8	256MB	15.0" XGA	60GB	Combo	11a/b Wi-Fi ²⁷	Modem	10/100	12-cell Li-Ion	XP Pro No	Jan 2004
2388-EKU	Pentium 4	2.8	256MB	15.0" SXGA+	60GB	Combo	11a/b Wi-Fi	Modem	10/100	12-cell Li-Ion	XP Pro No	Jan 2004
2388-ENU	Pentium 4	3.0	256MB	15.0" XGA	40GB	Combo	11a/b Wi-Fi	Modem	10/100	12-cell Li-Ion	XP Pro No	Jan 2004
Positioning Processor	Powerful desktop replacement; three-spindle system Intel® Celeron 2.4GHz³⁷ with 400MHz system bus or Intel Pentium 4 at 2.8 or 3.0GHz³⁷ with 400MHz system bus										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ ◇ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Access IBM • Access Connections • Adobe Reader • Rapid Restore™ PC • RecordNOW and Drive Letter Access (combo models) • InterVideo WinDVD (combo) • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Update Connector™ ¹⁵ Downloadable • IBM Director Agent • Software Delivery Assistant • System Migration Assistant License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client	
L2 cache	Celeron: 128KB ; Pentium 4: 512KB ; All: on die (at processor speed) / ECC											
Memory	128 or 256MB std / 1GB max ⁷ / PC2100 266MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available											
Diskette drive	3.5" 1.44MB / fixed, not removable / 12.7mm high											
CD	Some: CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7mm high											
Combo	Some: DVD-ROM/CD-RW / 24X/10X/24X/8X ²¹ speed / fixed, not removable / 12.7mm											
Disk	20GB⁸ or 40GB or 60GB , 4200 rpm, 9.5mm high / removable / 9.5mm high bay											
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits All: one latch to unlatch and open with one hand											
Graphics	Integrated Intel Extreme™ Graphics / Direct AGP / in 852GM GMCH / uses main memory (8 to 32MB with 128MB memory; 8 to 64MB with 256MB+) / 133MHz / DMVT											
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B											
EasyPivot	ThinkPad EasyPivot base allows smooth positioning for a comfortable viewing angle											
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)											
ComfortSlant	ThinkPad ComfortSlant keyboard with built-in incline provides maximum typing comfort											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap											
Touch pad	No touch pad (UltraNav™ multi-pointing system) / no ThinkLight™											
Dimensions ³	12.9" x 11.1" x 1.5-2.0"; 329mm x 282.5mm x 37.1-50.9mm; Volume : 4 liters											
Weight ²	with optical drive and battery: DAU : 7.64 lb (3.47kg); DGU : 8.24 lb (3.75kg); DMU : 8.36 lb (3.80kg); DVU/DXU/EJU : 8.54 lb (3.88kg); EKU : 8.58 lb (3.90kg); ENU : 8.85 lb (4.02kg);											
Case material	Color : black; All : Acrylonitrile-Butadiene-Styrene/Polycarbonate (ABS/PC) plastic											
Battery - type	Lithium Ion 6 or 12-cell / intelligent / removable											
Battery - life ¹⁰	DAU : 1.50 hr; DGU/DMU/DVU/DXU : 3.0 hr; EJU/EKU : 2.8 hr; ENU : 2.0 hr											
Architecture	Intel 852GM chipset / 82852GM Graphics Memory Controller Hub (GMCH) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB, Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1410A CardBus controller, Mini PCI) / LPC bus 33MHz (PC87393F Super I/O for diskette, parallel, PS/2)											
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door											
Ports	Four USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / PS/2 (for keyboard or mouse) / no serial or infrared											
Video out	No video out port											
IEEE 1394	None											
Wireless antenna	Some (wireless models): UltraConnect™ Antenna built into the display cover											
Mini PCI	One Mini PCI type III slot (Communications Bay) / not customer upgradable											
None	Some: empty / not customer upgradable											
11b Wi-Fi ³²	Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intersil® Prism 2.5 chipset											
11a/b Wi-Fi ²⁷	Some: 11a/b Wi-Fi ²⁷ wireless ⁴ , Mini PCI, Atheros™ AR5001X chipset											
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible											
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Agere® chipset											
Bluetooth	None											
Ethernet	10/100 ethernet on planar / Broadcom® BCM5901 (PHY/MAC) / PXE / Wake on LAN®											
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 2 watt / volume up, down, mute buttons / no internal mic / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack											
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	None											
Limited warranty ¹²	1 year - EasyServ™ ¹⁹ onsite pickup and delivery											
128 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad G40 Li-Ion Battery 12-cell	08K8178	ServicePac® ²² 1yr IOR 9x5 NBD	30L9188							
256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad 120W AC Adapter	22P9150	ServicePac 2 yr IOR 9x5 NBD	30L9189							
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	H Rate Wireless LAN PC Card 128	09N9904	ServicePac 3 yr IOR 9x5 NBD	30L9195							
USB 2.0 Combo Drive	73P4515	11a/b/g Wireless CardBus Adapter	31P9101	ServicePac 4 yr IOR 9x5 NBD	30L9194							
USB 2.0 Portable Multi-Burner	22P9163	ThinkPad Monitor Stand 2001	22P5265	ServicePac 5 yr IOR 9x5 NBD	30L9196							
USB 2.0 Portable 80GB Hard Disk	40Y8726	ThinkPad Nylon Carrying Case	10K0207	ServicePac 2 yr P&L P/U Depot	30L9191							
USB 2.0 Memory Key 256MB	22P9228	ThinkPad Leather Carrying Case	10K0209	ServicePac 3 yr P&L P/U Depot	30L9192							
USB 2.0 Memory Key 512MB	22P9230	Keyboard/Mouse Connector	07G3793	ServicePac 4 yr P&L P/U Depot	69P9195							
Optical 3-Button Travel Wheel Mouse	31P7410	USB Keyboard with UltraNav	31P8950	ServicePac 5 yr P&L P/U Depot	69P9197							
Optical 3-Button ScrollPoint Pro Mouse	31P8700	Enhanced Performance USB Keyboard	73P2620	Other ServicePac options at								
USB Serial Parallel Adapter	22P5298	ThinkVision® E500 Projector	0038A04	ibm.com/services/its/us/source/wamomxeu.pdf								
TrackPoint Cap Collection	73P2698	Other options at lenovo.com/options		Post-warranty annual maintenance agreements at								
GemPC400 Smart Card Reader/Writer	31P8901			ibm.com/services/its/us/source/maspspleu.pdf								

See footnotes for important warranty information
US models announced January 20, 2004
US models withdrawn effective January or December 2005

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(G40J) October 2005

ThinkPad® G40 (Express) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	Memory	Screen	Disk GB ⁸	Optical	Mini PCI Comm Bay wireless	CDC modem	Ethernet on planar	Battery	Preload	Small and medium business	Avail date
2384-31U	Celeron®	2.0	256MB	15.0" XGA	20GB	DVD	None	Modem	10/100	12-cell Li-Ion	XP Pro	Yes	May 2003
2384-32U	Pentium® 4	2.4	256MB	15.0" XGA	40GB	Combo	None	Modem	10/100	12-cell Li-Ion	XP Pro	Yes	May 2003
2384-33U	Pentium 4	2.4	256MB	15.0" XGA	40GB	Combo	11b Wi-Fi ³²	Modem	10/100	12-cell Li-Ion	XP Pro	Yes	May 2003
2384-34U	Pentium 4	2.2	256MB	15.0" XGA	40GB	Combo	None	Modem	10/100	12-cell Li-Ion	XP Pro	Yes	Aug 2003
2384-89U	Celeron	2.2	256MB	15.0" XGA	30GB	DVD	None	Modem	10/100	12-cell Li-Ion	XP Pro	Yes	Oct 2003
2384-A9U	Pentium 4	2.6	256MB	15.0" XGA	40GB	Combo	None	Modem	10/100	12-cell Li-Ion	XP Pro	Yes	Oct 2003
2384-B9U	Pentium 4	3.0	256MB	15.0" XGA	40GB	Combo	11a/b Wi-Fi ²⁷	Modem	10/100	12-cell Li-Ion	XP Pro	Yes	Oct 2003
2384-7NU	Celeron	2.2	256MB	14.1" XGA	30GB	Combo	None	Modem	10/100	12-cell Li-Ion	XP Pro	Yes	Oct 2003
2384-9JU	Pentium 4	2.6	256MB	14.1" XGA	30GB	Combo	None	Modem	10/100	12-cell Li-Ion	XP Pro	Yes	Oct 2003
2384-ATU	Pentium 4	2.6	256MB	15.0" XGA	40GB	Combo	11a/b Wi-Fi	Modem	10/100	12-cell Li-Ion	XP Pro	Yes	Oct 2003
2384-ANU	Pentium 4	2.6	256MB	15.0" XGA	30GB	Combo	None	Modem	10/100	12-cell Li-Ion	XP Pro	Yes	Oct 2003

These small and medium business (SMB) models are part of the US Think Express Program

Positioning	<i>Powerful desktop replacement; three-spindle system</i>										SOFTWARE¹⁴		
Processor	Intel® Celeron 2.0 or 2.2GHz ³⁷ with 400MHz system bus or Intel Pentium 4 at 2.2, 2.4, 2.6, or 3.0GHz ³⁷ with 400MHz system bus										Windows XP Professional		
L2 cache	Celeron: 128MB; Pentium 4: 512KB; All: on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰		
Memory	256MB std / 1GB max ⁷ / PC2100 266MHz DDR1 (DDR-SDRAM) / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										◇ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	3.5" 1.44MB / fixed, not removable / 12.7mm high										Preloaded		
DVD	Some: DVD-ROM / 24X-8X ⁹ speed / fixed, not removable / 12.7mm high										• Access IBM		
Combo Disk	Some: DVD-ROM/CD-RW / 24X/10X/24X/8X ²¹ speed / fixed, not removable / 12.7mm 20GB ⁸ , 30GB, or 40GB / 4200 rpm / 9.5mm high / removable / 9.5mm high bay										- Access Connections		
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 150 nits All: one latch to unlatch and open with one hand										• Adobe Reader		
Graphics	Integrated Intel Extreme™ Graphics / Direct AGP / in 852GM GMCH / uses main memory (8 to 32MB with 128MB memory; 8 to 64MB with 256MB+) / 133MHz / DMVT										• Rapid Restore™ PC		
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B										• RecordNOW and DLA by Veritas (combo models)		
EasyPivot	ThinkPad EasyPivot base allows smooth positioning for a comfortable viewing angle										• Norton AntiVirus (OEM edition)		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										• PC-Doctor™		
ComfortSlant	ThinkPad ComfortSlant keyboard with built-in incline provides maximum typing comfort										• ThinkPad Utilities		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										• Update Connector™ ¹⁵		
Touch pad	No touch pad (UltraNav™ multi-pointing system) / no ThinkLight™										Downloadable		
Dimensions ³	12.9" x 11.1" x 1.5-2.0"; 329mm x 282.5mm x 37.1-50.9mm; Volume: 4 liters										• IBM Director Agent		
Weight ²	with optical drive and battery: 34U: 7.9 lb (3.6kg); Others: 8.36 to 8.54 lb (3.79 to 3.87kg)										• Software Delivery Assistant		
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene/Polycarbonate (ABS/PC) plastic										• System Migration Assistant		
Battery - type	Lithium Ion 12-cell / intelligent / removable										License (CD not included)		
Battery - life ¹⁰	89U: 3.0 hr; 32U/33U: 3.3 hr; Others: 3.0 hr										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Architecture	Intel 852GM chipset / 82852GM Graphics Memory Controller Hub (GMCH) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB, Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1410A CardBus controller, Mini PCI) / LPC bus 33MHz (PC87393F Super I/O for diskette, parallel, PS/2)										Universal 120 watt AC adapter		
PC Card Std slots	One Type I, one Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door										Asset ID™ ³⁴ (system-specific info in chip accessed over network)		
Ports	Four USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / PS/2 (for keyboard or mouse) / no serial or infrared port										PC 2001 and PXE 2.0-compliant		
Video out	No video out port										ACPI 1.0b and 2.0-compliant		
IEEE 1394	None										CIM and DMI 2.0-compliant		
Wireless antenna	None										ImageUltra™ Services available		
Mini PCI	One Mini PCI type III slot (Communications Bay) / not customer upgradable										International Warranty Service ¹⁷		
None	Some: empty / not customer upgradable										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹² via 800-IBM-SERV (426-7378)		
11b Wi-Fi ³²	Some: 11b Wi-Fi ³² wireless ⁴ , Mini PCI, Intersil® Prism 2.5 chipset										ServicePac® ²² 1yr IOR 9x5 NBD		
11a/b Wi-Fi ²⁷	Some: 11a/b Wi-Fi ²⁷ wireless ⁴ , Mini PCI, Atheros™ AR5001X chipset										30L9188		
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										ServicePac 2 yr IOR 9x5 NBD		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Agere® chipset										30L9189		
Bluetooth	None										ServicePac 3 yr IOR 9x5 NBD		
Ethernet	10/100 ethernet on planar / Broadcom® BCM5901 (PHY/MAC) / PXE / Wake on LAN®										30L9195		
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD1981B AC97 codec / mono speaker / 2 watt / volume up, down, mute buttons / no internal mic / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										ServicePac 4 yr IOR 9x5 NBD		
Security	Power-on password / hard disk password / supervisor password / security keyhole										30L9194		
Security chip	None										ServicePac 5 yr IOR 9x5 NBD		
Limited warranty ¹²	1 year - EasyServ™ ¹⁹ onsite pickup and delivery										30L9196		
Service options	Service upgrades ²² provide up to five years of onsite or depot repair service coverage from date of ThinkPad purchase (including warranty period)										ServicePac 2 yr P&L P/U Depot		
128 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828				ThinkPad G40 Li-Ion Battery 12-cell				08K8178				
256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830				ThinkPad 120W AC Adapter				22P9150				
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832				11a/b/g Wireless CardBus Adapter				31P9101				
USB Portable Diskette Drive	05K9276				ThinkPad Monitor Stand				22P5265				
USB 2.0 Portable Multi-Burner Drive	22P9163				ThinkPad Nylon Carrying Case				10K0207				
USB 2.0 Portable 80GB Hard Disk	40Y8726				ThinkPad Premiere Leather Carrying Case				10K0209				
USB 2.0 Memory Key 256MB	22P9228				Keyboard/Mouse Connector				07G3793				
USB 2.0 Memory Key 512MB	22P9230				USB Keyboard with UltraNav				31P8950				
Optical 3-Button ScrollPoint Pro Mouse	31P8700				M400 Projector				0037A04				
USB Serial Parallel Adapter	22P5298				Other options at lenovo.com/options								
										Other ServicePac options at ibm.com/services/its/us/source/wamomxeu.pdf			
										Post-warranty annual maintenance agreements at ibm.com/services/its/us/source/maspspleu.pdf			

See footnotes for important warranty information
US models announced May 6, July 29, or October 7, 2003
US models withdrawn effective October 2003, April 2004, January 2005, or December 2005

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Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Diskette drive	Disk GB ⁸	Optical	Graphics	Mini PCI Comm Bay wireless	Ethernet on planar	Battery	Preload	Workhorse (W) Global (G) Avail Entry (E) date
2881-26U	Celeron® D 320	2.40	256K	256MB	14.1" XGA	Yes	30GB	Combo	Extreme™ 2	None	10/100	6-cell	XP Pro	No Oct 04
2881-27U	Celeron D 320	2.40	256K	256MB	14.1" XGA	No	30GB	DVD	Extreme 2	None	10/100	12-cell	XP Home	No Oct 04
2881-2GU	Celeron D 320	2.40	256K	256MB	15.0" XGA	Yes	30GB	Combo	Extreme 2	11b/g ³²	10/100	12-cell	XP Pro	No Oct 04
2881-36U	Celeron D 325	2.53	256K	256MB	14.1" XGA	Yes	30GB	Combo	Extreme 2	None	10/100	6-cell	XP Pro	No Oct 04
2881-3GU	Celeron D 325	2.53	256K	256MB	15.0" XGA	Yes	30GB	Combo	Extreme 2	11b/g	10/100	12-cell	XP Pro	No Oct 04
2881-3QU	Celeron D 325	2.53	256K	256MB	15.0" XGA	No	40GB	Combo	Extreme 2	None	10/100	12-cell	XP Pro	No Oct 04
2881-3NU	Celeron D 325	2.53	256K	128MB	15.0" XGA	No	40HS	CD	Extreme 2	None	10/100	6-cell	XP Home	No Oct 04
2881-46U	Celeron D 330	2.66	256K	256MB	14.1" XGA	Yes	30GB	Combo	Extreme 2	None	10/100	6-cell	XP Pro	No Oct 04
2881-4AU	Celeron D 330	2.66	256K	256MB	14.1" XGA	Yes	30GB	Combo	Extreme 2	11b/g	10/100	6-cell	XP Pro	No Oct 04
2881-4CU	Celeron D 330	2.66	256K	256MB	15.0" XGA	Yes	40HS	Combo	Extreme 2	None	10/100	12-cell	XP Pro	No Oct 04
2881-4FU	Celeron D 330	2.66	256K	256MB	15.0" XGA	Yes	30GB	Combo	Extreme 2	11b/g	10/100	12-cell	XP Pro	No Oct 04
2881-58U	Pentium® 4 532	3.06	1MB	256MB	14.1" XGA	Yes	30GB	DVD	Extreme 2	None	10/100	6-cell	XP Pro	No Oct 04
2881-59U	Pentium 4 532	3.06	1MB	256MB	14.1" XGA	Yes	40GB	Combo	Extreme 2	11b/g	10/100	6-cell	XP Pro	No Oct 04
2881-5AU	Pentium 4 532	3.06	1MB	256MB	15.0" SXGA+	No	40HS	Combo	Extreme 2	11b/g	10/100	12-cell	XP Pro	No Oct 04
2881-5LU	Pentium 4 532	3.06	1MB	256MB	15.0" XGA	Yes	40GB	Combo	Extreme 2	11b/g	10/100	12-cell	XP Pro	No Oct 04
2881-5MU	Pentium 4 532	3.06	1MB	256MB	15.0" XGA	Yes	30GB	Combo	Extreme 2	None	10/100	6-cell	XP Pro	No Oct 04
2881-65U	Pentium 4 538	3.2	1MB	256MB	14.1" XGA	Yes	30GB	Combo	Extreme 2	None	10/100	6-cell	XP Pro	No Oct 04
2881-67U	Pentium 4 538	3.2	1MB	256MB	14.1" XGA	Yes	40GB	Combo	Extreme 2	11b/g	10/100	12-cell	XP Pro	No Oct 04
2881-68U	Pentium 4 538	3.2	1MB	256MB	15.0" SXGA+	No	30GB	Combo	Extreme 2	None	10/100	12-cell	XP Pro	No Oct 04
2881-69U	Pentium 4 538	3.2	1MB	256MB	15.0" XGA	Yes	40HS	Combo	Extreme 2	None	10/100	6-cell	XP Pro	No Oct 04
2881-6CU	Pentium 4 538	3.2	1MB	256MB	15.0" XGA	Yes	40HS	Combo	Extreme 2	11b/g	10/100	12-cell	XP Pro	No Oct 04
2881-6JU	Pentium 4 548	3.33	1MB	256MB	14.1" XGA	Yes	40HS	Combo	Extreme 2	None	10/100	12-cell	XP Pro	No Oct 04
Positioning Processor ³⁷	Powerful desktop replacement; two (models without diskette drive) or three-spindle system Intel® Celeron D Processor 320 (2.40GHz), 325 (2.53GHz), or 330 (2.66GHz) with 533MHz system bus or Mobile Intel Pentium 4 Processor 532 (3.06GHz), 538 (3.2GHz), or 548 (3.33GHz) with enhanced Intel SpeedStep™ technology ¹ , Hyper-Threading technology, and 533MHz bus											SOFTWARE¹⁴		
L2 cache	Celeron: 256KB ; Pentium 4: 1MB ; All: on die (at processor speed) / ECC											Windows XP Home models		
Memory	128 or 256MB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available											- Microsoft® Windows® XP Home Edition ²⁰ (Service Pack 2) ◆ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	Some: 3.5" 1.44MB / fixed, not removable / 12.7mm high											Windows XP Pro models		
CD	Some: CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7mm high											- Microsoft Windows XP Professional ²⁰ (Service Pack 2) ◆ Disk-to-Disk Recovery (in hidden protected area)		
DVD	Some: DVD-ROM / 24X-8X ⁹ speed / single-layer / fixed, not removable / 12.7mm high											◆ Disk-to-Disk Recovery (in hidden protected area)		
Combo	Some: DVD-ROM/CD-RW / 24X/10X/24X/8X ²¹ speed / fixed, not removable / 12.7mm											Preloaded (all)		
Disk	30GB⁸ (4200 rpm), 40GB (4200 rpm), or 40GB HS (5400 rpm), 9.5mm high / removable / 9.5mm high bay											• Rescue and Recovery™ • Access IBM • Access Connections • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Update Connector™ ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo, DVD)		
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits All: one latch to unlatch and open with one hand											Downloadable (all) • IBM Director Agent • Software Delivery Assistant • System Migration Assistant		
Graphics	Integrated Intel Extreme™ Graphics 2 / Direct AGP / in 852GME GMCH / uses main memory (up to 64MB) / 266MHz / DMVT											License (CD not included) (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Graphics external	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B											Supports ThinkVantage™ technologies; visit thinkpad.com/thinkvantage		
EasyPivot	ThinkPad EasyPivot base allows smooth positioning for a comfortable viewing angle											Universal 120 watt AC adapter PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant ImageUltra™ Services available International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)											ServicePac®. ²² 1yr IOR 9x5 NBD 30L9188		
ComfortSlant	ThinkPad ComfortSlant keyboard with built-in incline provides maximum typing comfort											ServicePac 3 yr P&L P/U Depot 30L9192		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap											ServicePac 5 yr P&L P/U Depot 69P9197		
TrackPoint®	soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap											Other ServicePac options at ibm.com/services/its/us/source/wamomxeu.pdf		
Touch pad	No touch pad (UltraNav™ multi-pointing system) / no ThinkLight™											Limited warranty ¹² 1 year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available		
Dimensions ³	12.9" x 11.1" x 1.5-2.0"; 329mm x 282.5mm x 37.1-50.9mm; <i>Volume</i> : 4 liters													
Weight ²	with optical drive and battery: <i>6-cell</i> : up to 7.71 lb (3.5kg); <i>12-cell</i> : up to 8.31 lb (3.8kg)													
Case material	<i>Color</i> : black; <i>All</i> : Acrylonitrile-Butadiene-Styrene/Polycarbonate (ABS/PC) plastic													
Battery - type	Lithium Ion 6-cell or 12-cell / intelligent / removable													
Battery - life	Not published													
Architecture	Intel 852GME chipset / 82852GME Graphics Memory Controller Hub (GMCH) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB, Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1520 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87391 Super I/O for [diskette], parallel, PS/2)													
PC Card Std slots	Two Type I, two Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door													
Ports	Four USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / PS/2 (for keyboard or mouse) / no serial or infrared													
Video out or in	None													
IEEE 1394	None													
Wireless antenna	None (<i>wireless models</i>): UltraConnect™ Antenna built into the display cover													
Mini PCI	One Mini PCI type III slot (Communications Bay) / not customer upgradable													
None	Some: empty / not customer upgradable													
11b/g ³²	Some: 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset													
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible													
Modem	56K ⁶ V.90 (V.92-designed ²⁵) modem in CDC / Conexant® chipset													
Ethernet	10/100 ethernet on planar / Broadcom® BCM5901 (PHY/MAC) / PXE / Wake on LAN®													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD90764 AC97 codec / mono speaker / 2 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	None													

See footnotes for important warranty information
US models announced October 19, 2004
US models withdrawn effective January or December 2005

ThinkPad® G41 (November 2004) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Diskette drive	Disk GB ⁸	Optical	Graphics	Mini PCI Comm Bay wireless	Ethernet on planar	Battery	Preload	Workhorse (W) Global (G) Avail Entry (E) date
2881-2CU	Celeron® D 320	2.40	256K	256MB	15.0" XGA	Yes	40GB	Combo	Extreme™ 2	11b/g ³²	10/100	6-cell	XP Pro	No Nov 04
2881-2PU	Celeron D 320	2.40	256K	256MB	14.1" XGA	Yes	30GB	Combo	Extreme 2	None	10/100	12-cell	XP Pro	No Nov 04
2881-2QU	Celeron D 325	2.53	256K	256MB	14.1" XGA	Yes	30GB	Combo	Extreme 2	None	10/100	12-cell	XP Pro	No Nov 04
2881-2RU	Celeron D 330	2.66	256K	256MB	14.1" XGA	Yes	30GB	Combo	Extreme 2	None	10/100	12-cell	XP Pro	No Nov 04
2881-2SU	Celeron D 330	2.66	256K	256MB	14.1" XGA	Yes	30GB	Combo	Extreme 2	11b/g	10/100	12-cell	XP Pro	No Nov 04
2881-A6U	Celeron D 335	2.80	256K	256MB	14.1" XGA	No	30GB	CD	Extreme 2	None	10/100	12-cell	XP Pro	No Jan 05
2881-AFU	Celeron D 335	2.80	256K	256MB	15.0" XGA	Yes	30GB	Combo	Extreme 2	11b/g	10/100	12-cell	XP Pro	No Jan 05
2881-5PU	Pentium® 4 532	3.06	1MB	256MB	14.1" XGA	Yes	40GB	Combo	Extreme 2	11b/g	10/100	12-cell	XP Pro	No Nov 04
Positioning Processor ³⁷	<i>Powerful desktop replacement; two (models without diskette drive) or three-spindle system</i>										SOFTWARE¹⁴			
L2 cache Memory	Intel® Celeron D Processor 320 (2.40GHz), 325 (2.53GHz), 330 (2.66GHz), or 335 (2.80GHz) with 533MHz system bus or Mobile Intel Pentium 4 Processor 532 (3.06GHz) with enhanced Intel SpeedStep™ technology ¹ , Hyper-Threading technology, and 533MHz system bus Celeron: 256KB; Pentium 4: 1MB; All: on die (at processor speed) / ECC 256MB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	Some: 3.5" 1.44MB / fixed, not removable / 12.7mm high										Preloaded			
CD Combo Disk	Some: CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7mm high Some: DVD-ROM/CD-RW / 24X/10X/24X/8X ²¹ speed / fixed, not removable / 12.7mm 30GB ⁸ (4200 rpm) or 40GB (4200 rpm), 9.5mm high / removable / 9.5mm high bay										• Rescue and Recovery™ • Access IBM • Access Connections • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Update Connector™ ¹⁵ • RecordNOW and Drive Letter Access powered by Sonic products (combo models) • InterVideo WinDVD (combo)			
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 150 nits All: one latch to unlatch and open with one hand										Downloadable			
Graphics	Integrated Intel Extreme™ Graphics 2 / Direct AGP / in 852GME GMCH / uses main memory (up to 64MB) / 266MHz / DMVT										• IBM Director Agent • Software Delivery Assistant • System Migration Assistant			
Graphics external EasyPivot	External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B ThinkPad EasyPivot base allows smooth positioning for a comfortable viewing angle										License (CD not included) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Keyboard ComfortSlant TrackPoint®	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys) ThinkPad ComfortSlant keyboard with built-in incline provides maximum typing comfort TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage			
Touch pad	No touch pad (UltraNav™ multi-pointing system) / no ThinkLight™										Universal 120 watt AC adapter PC 2001 and PXE 2.0-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant ENERGY STAR®-compliant ImageUltra™ Services available International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Dimensions ³ Weight ²	12.9" x 11.1" x 1.5-2.0"; 329mm x 282.5mm x 37.1-50.9mm; Volume: 4 liters with optical drive and battery: 6-cell: up to 7.71 lb (3.5kg); 12-cell: up to 8.31 lb (3.8kg)										ServicePac®. ²² 1yr IOR 9x5 NBD 30L9188			
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene/Polycarbonate (ABS/PC) plastic										ServicePac 2 yr IOR 9x5 NBD 30L9189			
Battery - type	Lithium Ion 6-cell or 12-cell / intelligent / removable										ServicePac 3 yr IOR 9x5 NBD 30L9195			
Battery - life	Not published										ServicePac 4 yr IOR 9x5 NBD 30L9194			
Architecture	Intel 852GME chipset / 82852GME Graphics Memory Controller Hub (GMCH) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB, Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1520 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87391 Super I/O for [diskette], parallel, PS/2)										ServicePac 5 yr IOR 9x5 NBD 30L9196			
PC Card Std slots	Two Type I, two Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door										ServicePac 2 yr P&L P/U Depot 30L9191			
Ports	Four USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / PS/2 (for keyboard or mouse) / no serial or infrared										ServicePac 3 yr P&L P/U Depot 30L9192			
Video out or in IEEE 1394	None										ServicePac 4 yr P&L P/U Depot 69P9195			
Wireless antenna	None										ServicePac 5 yr P&L P/U Depot 69P9197			
Mini PCI	One Mini PCI type III slot (Communications Bay) / not customer upgradable										Post-warranty annual maintenance agreements at ibm.com/services/us/its/pdf/maspspleu.pdf			
None	Some: empty / not customer upgradable													
11b/g ³²	Some: 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset													
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible													
Modem	56K ⁶ V.90 (V.92 designed ²⁵) modem in CDC / Conexant® chipset													
Ethernet	10/100 ethernet on planar / Broadcom® BCM5901 (PHY/MAC) / PXE / Wake on LAN®													
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD90764 AC97 codec / mono speaker / 2 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	None													
Limited warranty ¹² 1 year - EasyServ™. ¹⁹ onsite pickup and delivery / service upgrades ²² available														
128 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad G41 Li-Ion Battery 12-cell	08K8178	ServicePac 4 yr IOR 9x5 NBD	30L9194									
256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad Multiple Battery Charger II	22P9040	ServicePac 5 yr IOR 9x5 NBD	30L9196									
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad 120W AC Adapter	22P9150	ServicePac 2 yr P&L P/U Depot	30L9191									
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	11a/b/g Wireless CardBus Adapter	31P9101	ServicePac 3 yr P&L P/U Depot	30L9192									
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	GemPC400 Smart Card Reader/Writer	31P8901	ServicePac 4 yr P&L P/U Depot	69P9195									
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Monitor Stand 2001	22P5265	ServicePac 5 yr P&L P/U Depot	69P9197									
USB Numeric Keypad	33L3225	ThinkPad Carrying Case - Expander	73P3597											
USB Portable Diskette Drive	05K9276	ThinkPad Carrying Case - Backpack	73P3599											
USB 2.0 Combo Drive	73P4515	ThinkPad Carrying Case - Organizer	73P3598											
USB 2.0 Portable Multi-Burner Drive	22P9163	USB Keyboard with UltraNav	31P8950											
USB 2.0 Memory Key 256MB	22P9228	USB Travel Keyboard with UltraNav	31P9490											
USB 2.0 Memory Key 512MB	22P9230	Enhanced Performance USB Keyboard	73P2620											
USB Optical Wheel Mouse	06P4069	M400 Projector	0037A04											
Optical 3-Button ScrollPoint Pro Mouse	31P8700	C400 Projector	0039A04											
Kensington® MicroSaver® Security Cable	73P2582	ThinkVision® E500 Projector	0038A05											
SonyEricsson® GC83 EDGE PC Card	26K3393	Other options at lenovo.com/options												

See footnotes for important warranty information
US models announced November 23, 2004 or January 11, 2005
US models withdrawn effective December 2005

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ThinkPad® G41 (NVIDIA Graphics) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Diskette drive	Disk GB ⁸	Optical	Graphics controller and memory	Mini PCI Comm Bay wireless	Ethernet on planar	Battery	Preload	Workhorse (W) Global (G) Avail Entry (E) date
2881-73U	Pentium® 4 538	3.2	1MB	512MB	15.0" SXGA+	No	80HS	Combo	Go5200 128M	11b/g ³²	Gb	12-cell XP Pro	No	Oct 04
2881-87U	Pentium 4 532	3.06	1MB	256MB	15.0" XGA	No	30GB	Combo	Go5200 64MB	None	Gb	6-cell XP Pro	No	Oct 04
2881-88U	Pentium 4 532	3.06	1MB	256MB	15.0" XGA	No	40GB	Combo	Go5200 64MB	11b/g	Gb	12-cell XP Pro	No	Oct 04
2881-8DU	Pentium 4 538	3.2	1MB	256MB	15.0" SXGA+	No	40HS	Combo	Go5200 64MB	11b/g	Gb	12-cell XP Pro	No	Oct 04
2881-8JU	Pentium 4 538	3.2	1MB	512MB	15.0" XGA	No	40HS	Combo	Go5200 64MB	None	Gb	12-cell XP Pro	No	Oct 04
2881-8MU	Pentium 4 548	3.33	1MB	512MB	15.0" SXGA+	No	80HS	DVD±RW	Go5200 128M	11a/b/g II ³²	Gb	12-cell XP Pro	No	Oct 04
2881-8NU	Pentium 4 548	3.33	1MB	256MB	15.0" SXGA+	No	80HS	Combo	Go5200 64MB	None	Gb	12-cell XP Pro	No	Oct 04
2881-8PU	Pentium 4 548	3.33	1MB	256MB	15.0" XGA	No	40HS	Combo	Go5200 64MB	11b/g	Gb	12-cell XP Pro	No	Oct 04
2881-8QU	Pentium 4 548	3.33	1MB	256MB	15.0" XGA	No	40HS	Combo	Go5200 64MB	None	Gb	12-cell XP Pro	No	Oct 04
2881-D2U	Pentium 4 552	3.46	1MB	512MB	15.0" SXGA+	No	80HS	DVD±RW	Go5200 128M	11a/b/g II	Gb	12-cell XP Pro	No	Jan 05
2881-D9U	Pentium 4 552	3.46	1MB	256MB	15.0" XGA	No	40HS	Combo	Go5200 64MB	11b/g	Gb	12-cell XP Pro	No	Jan 05
Positioning Processor ³⁷	<i>Powerful desktop replacement; two (models without diskette drive) or three-spindle system</i>										SOFTWARE¹⁴			
L2 cache	Mobile Intel® Pentium 4 Processor 532 (3.06GHz), 538 (3.2GHz), 548 (3.33GHz), or 552 (3.46GHz) with enhanced Intel SpeedStep™ technology ¹ , Hyper-Threading technology, and 533MHz system bus										Windows XP Professional			
Memory	1MB / on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)			
Diskette drive	None / use optional USB-based diskette drive										◆ Disk-to-Disk Recovery (in hidden protected area)			
DVD±RW	Some: DVD-ROM/CD-RW / 24X/10X/24X/8X ²¹ speed / fixed, not removable / 12.7mm										Preloaded			
Disk	Some: DVD and CD burner / writes to + and - formats / Multi-Burner Plus / not removable										• Rescue and Recovery™			
Display	Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 150 nits										• Access IBM			
Graphics	Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits										• Access Connections			
Graphics external	All: one latch to unlatch and open with one hand										• Norton AntiVirus (OEM edition)			
EasyPivot	External monitor support via analog DB-15 connector / up to 2048x1536 at 72Hz / DDC2B										• PC-Doctor™			
Keyboard	ThinkPad EasyPivot base allows smooth positioning for a comfortable viewing angle										• ThinkPad Utilities			
ComfortSlant	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										• Adobe Reader			
TrackPoint®	ThinkPad ComfortSlant keyboard with built-in incline provides maximum typing comfort										• Update Connector™ ¹⁵			
Touch pad	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										• RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD-RW models)			
Dimensions ³	No touch pad (UltraNav™ multi-pointing system) / no ThinkLight™										• InterVideo WinDVD (combo, DVD±RW models)			
Weight ²	12.9" x 11.1" x 1.5-2.0"; 329mm x 282.5mm x 37.1-50.9mm; Volume: 4 liters										• InterVideo WinDVD Creator (DVD±RW models)			
Case material	with optical drive and battery: 6-cell: up to 7.55 lb (3.4kg); 12-cell: up to 8.18 lb (3.7kg)										• Simple Backup (DVD±RW)			
Battery - type	Color: black; All: Acrylonitrile-Butadiene-Styrene/Polycarbonate (ABS/PC) plastic										Downloadable			
Battery - life	Lithium Ion 6-cell or 12-cell / intelligent / removable										• IBM Director Agent			
Architecture	Not published										• Software Delivery Assistant			
PC Card Std slots	Intel 852GME chipset / 82852GME Graphics Memory Controller Hub (GMCH) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB, Firmware Hub) /										• System Migration Assistant			
Ports	PCI bus 2.2 32-bit, 33MHz (TI® PCI1520 CardBus controller, Mini PCI) /										Licence (CD not included)			
IEEE 1394	LPC bus 33MHz (PC87391 Super I/O for [diskette], parallel, PS/2)										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Wireless antenna	Two Type I, two Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage			
Mini PCI	Four USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / PS/2 (for keyboard or mouse) / no serial or infrared										Universal 120 watt AC adapter			
None	None										PC 2001 and PXE 2.0-compliant			
11b/g ³²	Some (wireless models): UltraConnect™ Antenna built into the display cover										ACPI 1.0b and 2.0-compliant			
11a/b/g II ³²	One Mini PCI type III slot (Communications Bay) / not customer upgradable										CIM and DMI 2.0-compliant			
CDC	Some: empty / not customer upgradable										ENERGY STAR®-compliant			
Modem	Some: 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset										ImageUltra™ Services available			
Ethernet	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros™ AR5004X chip										International Warranty Service ¹⁷			
Audio support	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Security	56K ⁶ V.90 (V.92-designed ²⁵) modem in CDC / Conexant® chipset										ServicePac®. ²² 1yr IOR 9x5 NBD			
Security chip	Gigabit (Gb) ethernet on planar / Broadcom® BCM5705M (PHY/MAC) / PXE, Wake on LAN®										30L9188			
Limited warranty ¹²	Soft audio / ICH AC97 controller / DirectSound® support / AD90764 AC97 codec / mono speaker / 2 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										ServicePac 2 yr IOR 9x5 NBD			
	Power-on password / hard disk password / supervisor password / security keyhole										30L9189			
	None										ServicePac 3 yr IOR 9x5 NBD			
	None										30L9195			
	None										ServicePac 4 yr IOR 9x5 NBD			
	None										30L9194			
	None										ServicePac 5 yr IOR 9x5 NBD			
	None										30L9196			
	None										ServicePac 2 yr P&L P/U Depot			
	None										30L9191			
	None										ServicePac 3 yr P&L P/U Depot			
	None										30L9192			
	None										ServicePac 4 yr P&L P/U Depot			
	None										69P9195			
	None										ServicePac 5 yr P&L P/U Depot			
	None										69P9197			
	None										Post-warranty annual maintenance agreements at ibm.com/services/us/its/pdf/maspspleu.pdf			
128 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad G41 Li-Ion Battery 12-cell	08K8178											
256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad Multiple Battery Charger II	22P9040											
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad 120W AC Adapter	22P9150											
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	11a/b/g Wireless CardBus Adapter	31P9101											
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	ThinkPad Monitor Stand 2001	22P5265											
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Carrying Case - Organizer	73P3598											
USB Portable Diskette Drive	05K9276	ThinkPad Carrying Case - Backpack	73P3599											
USB 2.0 Combo Drive	73P4515	ThinkPad Carrying Case - Leather	73P3600											
USB 2.0 Portable Multi-Burner Drive	22P9163	Enh Perf Wireless Keyboard and Mouse	73P4067											
USB 2.0 Memory Key 512MB	22P9230	USB Travel Keyboard with UltraNav	31P9490											
USB Optical Wheel Mouse	06P4069	Enhanced Performance USB Keyboard	73P2620											
Optical 3-Button ScrollPoint Pro Mouse	31P8700	M400 Projector	0037A04											
Kensington® MicroSaver® Security Cable	73P2582	ThinkVision® E500 Projector	0038A05											
SonyEricsson® GC83 EDGE PC Card	26K3393	Other options at lenovo.com/options												

See footnotes for important warranty information
US models announced October 19, 2004 or January 11, 2005
US models withdrawn effective December 2005

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ThinkPad® G41 (Education) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Diskette drive	Disk GB ⁸	Optical	Graphics	Mini PCI Comm Bay wireless	Ethernet on planar	Battery	Preload software	Education	Availability date
2882-2TU	Celeron® D 320	2.40	256K	256MB	14.1" XGA	Yes	30GB	CD	Extreme™ 2	11b/g ³²	10/100	12-cell	XP Pro	No	Oct 04
2882-3TU	Celeron D 325	2.53	256K	256MB	14.1" XGA	Yes	30GB	CD	Extreme 2	11b/g	10/100	12-cell	XP Pro	No	Oct 04
2882-4UU	Celeron D 330	2.66	256K	256MB	14.1" XGA	Yes	30GB	CD	Extreme 2	11b/g	10/100	12-cell	XP Pro	No	Oct 04
2882-ASU	Celeron D 335	2.80	256K	256MB	14.1" XGA	Yes	30GB	CD	Extreme 2	11b/g	10/100	12-cell	XP Pro	Yes	Jan 05
2882-8XU	Pentium® 4 532	3.06	1MB	256MB	15.0" XGA	No	40HS	Combo	Go5200 64MB	11b/g	Gigabit	12-cell	XP Pro	No	Oct 04

• **The 2882 has an EasyServ™.19 onsite pickup and delivery 3 year limited warranty**

These educational models of the ThinkPad notebook are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

This model for education is for sale direct from Lenovo or through an Authorized Education Reseller.

The model or models for education are not available for resale to any other organization or individual.

Positioning Processor ³⁷	<i>Powerful desktop replacement; two (models without diskette drive) or three-spindle system</i>										SOFTWARE¹⁴				
L2 cache	Intel® Celeron D Processor 320 (2.40GHz), 325 (2.53GHz), 330 (2.66GHz), or 335 (2.80GHz) with 533MHz system bus or										Windows XP Professional				
Memory	Mobile Intel Pentium 4 Processor 532 (3.06GHz) with enhanced Intel SpeedStep™ technology ¹ , Hyper-Threading technology, and 533MHz system bus										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)				
Diskette drive	Celeron: 256KB; Pentium 4: 1MB; All: on die (at processor speed) / ECC										♦ Disk-to-Disk Recovery (in hidden protected area)				
CD	256MB std / 2GB max⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										Preloaded				
Combo	<i>Some: 3.5" 1.44MB / fixed, not removable / 12.7mm high</i>										• ASU only: Education software from Vital Source Technologies®: vitalSource KEY™ and Personal Portable library™				
Disk	<i>Some: CD-ROM / 24X-10X⁹ speed / fixed, not removable / 12.7mm high</i>										• Rescue and Recovery™				
Display	<i>Some: DVD-ROM/CD-RW / 24X/10X/24X/8X²¹ speed / fixed, not removable / 12.7mm</i>										• Access IBM				
	30GB⁸ (4200 rpm) or 40GB HS (5400 rpm), 9.5mm high / removable / 9.5mm high bay										• Access Connections				
	<i>Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</i>										• Norton AntiVirus (OEM edition)				
	<i>Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</i>										• PC-Doctor™				
	<i>All: one latch to unlatch and open with one hand</i>										• ThinkPad Utilities				
Graphics	<i>Some: Integrated Intel Extreme™ Graphics 2 / Direct AGP / in 852GME GMCH / uses main memory (up to 64MB) / 266MHz / DMVT</i>										• Adobe Reader				
EasyPivot	<i>Some: NVIDIA® GeForce™ FX Go5200 / NV34M / AGP 4X / 350MHz / 64MB memory</i>										• Update Connector™.15				
Keyboard	ThinkPad EasyPivot base allows smooth positioning for a comfortable viewing angle										• RecordNOW and Drive Letter				
ComfortSlant	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										• Access powered by Sonic products (combo model)				
TrackPoint®	ThinkPad ComfortSlant keyboard with built-in incline provides maximum typing comfort										• InterVideo WinDVD (combo model)				
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										Downloadable				
Touch pad	No touch pad (UltraNav™ multi-pointing system) / no ThinkLight™										• IBM Director Agent				
Dimensions ³	12.9" x 11.1" x 1.5-2.0"; 329mm x 282.5mm x 37.1-50.9mm; Volume: 4 liters										• Software Delivery Assistant				
Weight ²	with optical drive and battery: 12-cell: up to 8.15 lb (3.7kg)										• System Migration Assistant				
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene/Polycarbonate (ABS/PC) plastic										License (CD not included)				
Battery - type	Lithium Ion 12-cell / intelligent / removable										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
Battery - life	Not published														
Architecture	Intel 852GME chipset / 82852GME Graphics Memory Controller Hub (GMCH) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB, Firmware Hub) /														
PC Card Std slots	PCI bus 2.2 32-bit, 33MHz (TI® PCI1520 CardBus controller, Mini PCI) /														
Ports	LPC bus 33MHz (PC87391 Super I/O for [diskette], parallel, PS/2)										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage				
Video out or in	None														
IEEE 1394	None														
Wireless antenna	UltraConnect™ Antenna built into the display cover										Universal 120 watt AC adapter				
Mini PCI	One Mini PCI type III slot (Communications Bay) / not customer upgradable										PC 2001 and PXE 2.0-compliant				
11b/g ³²	11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset										ACPI 1.0b and 2.0-compliant				
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										CIM and DMI 2.0-compliant				
Modem	56K ^v V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset										ENERGY STAR®-compliant				
Ethernet	<i>Some: 10/100 ethernet on planar / Broadcom® BCM5901 (PHY/MAC) / Wake on LAN®</i>										ImageUltra™ Services available				
	<i>Some: Gigabit ethernet on planar / Broadcom® BCM5705M (PHY/MAC) / Wake on LAN</i>										International Warranty Service ¹⁷				
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD90764 AC97 codec /										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
	mono speaker / 2 watt / volume up, down, mute buttons / no internal microphone /														
	microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole										ServicePac®.22 2 yr IOR 9x5 NBD				
Security chip	None										30L9190				
Limited warranty ¹²	3 years/1 yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail										ServicePac 3 yr IOR 9x5 NBD				
											30L9197				
128 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828			ThinkPad G41 Li-Ion Battery 12-cell			08K8178			ServicePac 4 yr IOR 9x5 NBD					
256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830			ThinkPad Multiple Battery Charger II			22P9040			69P9198					
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832			ThinkPad 120W AC Adapter			22P9150			ServicePac 5 yr IOR 9x5 NBD					
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834			11a/b/g Wireless CardBus Adapter			31P9101			69P9200					
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357			ThinkPad Carrying Case - Expander			73P3597			ServicePac 4 yr P&L P/U Depot					
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273			ThinkPad Carrying Case - BackPack			73P3599			69P9199					
USB Portable Diskette Drive	05K9276			ThinkPad Carrying Case - Leather			73P3600			ServicePac 5 yr P&L P/U Depot					
USB 2.0 Combo Drive	73P4515			Enh Perf Wireless Keyboard and Mouse			73P4067			69P9201					
USB 2.0 Portable Multi-Burner Drive	22P9163			USB Travel Keyboard with UltraNav			31P9490			ServicePac options at					
USB 2.0 Memory Key 512MB	22P9230			Enhanced Performance USB Keyboard			73P2620			ibm.com/services/its/us/source/wamomxeu.pdf					
USB 2.0 Portable 80GB Hard Disk	40Y8726			M400 Projector			0037A04			Post-warranty annual maintenance					
TrackPoint Cap Collection	73P2698			C400 Projector			0039A04			agreements at					
Kensington® MicroSaver® Security Cable	73P2582			ThinkVision® E500 Projector			0038A05			ibm.com/services/its/us/source/maspspleu.pdf					
SonyEricsson® GC83 EDGE PC Card	26K3393			Other options at lenovo.com/options											

See footnotes for important warranty information
US models announced October 19, 2004 or January 11, 2005
US models withdrawn effective December 2005

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ThinkPad® G41 (TopSeller) - withdrawn

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Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Diskette drive	Disk drive GB ⁸	Optical	Graphics	Mini PCI Comm Bay wireless	Ethernet on Battery planar cells	Workhorse (W) Global (G) Avail Entry (E)	date
2886-2UU	Celeron® D 320	2.40	256K	256MB	15.0" XGA	No	30GB	Combo	Extreme™ 2	11b/g ³²	10/100 12-c	XP Pro	No Oct 04
2886-23U	Celeron D 320	2.40	256K	256MB	14.1" XGA	No	30GB	Combo	Extreme 2	None	10/100 12-c	XP Pro	No Oct 04
2886-2VU	Celeron D 320	2.40	256K	256MB	14.1" XGA	No	30GB	CD	Extreme 2	None	10/100 12-c	XP Pro	No Nov 04
2886-2WU	Celeron D 320	2.40	256K	256MB	14.1" XGA	No	30GB	DVD	Extreme 2	None	10/100 12-c	XP Pro	No Nov 04
2886-3UU	Celeron D 325	2.53	256K	256MB	15.0" XGA	No	30GB	Combo	Extreme 2	11b/g	10/100 12-c	XP Pro	No Oct 04
2886-5TU	Pentium® 4 532	3.06	1MB	256MB	15.0" XGA	Yes	40GB	Combo	Extreme 2	11b/g	10/100 6-c	XP Pro	No Oct 04
2886-78U	Pentium 4 538	3.2	1MB	512MB	15.0" SXGA+	No	80HS	Combo	Go5200 128M	11b/g	Gigabit 12-c	XP Pro	No Oct 04
2886-79U	Pentium 4 548	3.33	1MB	512MB	15.0" SXGA+	No	80HS	DVD±RW	Go5200 128M	11b/g	Gigabit 12-c	XP Pro	No Oct 04
2886-92U	Pentium 4 532	3.06	1MB	256MB	15.0" XGA	No	40HS	Combo	Go5200 64MB	11b/g	Gigabit 12-c	XP Pro	No Oct 04
2886-93U	Pentium 4 538	3.2	1MB	512MB	15.0" SXGA+	No	40HS	Combo	Go5200 64MB	11b/g	Gigabit 12-c	XP Pro	No Oct 04

These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor ³⁷	Powerful desktop replacement; two (models without diskette drive) or three-spindle system Intel® Celeron D Processor 320 (2.40GHz) or 325 (2.53GHz) with 533MHz system bus or Mobile Intel Pentium 4 Processor 532 (3.06GHz), 538 (3.2GHz), or 548 (3.33GHz) with Enhanced Intel SpeedStep™ technology ¹ , Hyper-Threading technology, and 533MHz bus <i>Celeron: 256KB; Pentium 4: 1MB; All: on die (at processor speed) / ECC</i>										SOFTWARE¹⁴		
L2 cache	256 or 512MB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available										Windows XP Professional		
Memory											- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ✦ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	Some: 3.5" 1.44MB / fixed, not removable / 12.7mm high										Preloaded		
CD	Some: CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7mm high										• Rescue and Recovery™		
DVD	Some: DVD-ROM / 24X-8X ⁹ speed / single-layer / fixed, not removable / 12.7mm high										• Access Program		
Combo	Some: DVD-ROM/CD-RW / 24X/10X/24X/8X ²¹ speed / fixed, not removable / 12.7mm										• Access Connections™		
DVD±RW	Some: DVD and CD burner / writes to + and - formats / Multi-Burner Plus / not removable										• Norton AntiVirus (OEM edition)		
Disk	Some: DVD and CD burner / writes to + and - formats / Multi-Burner Plus / not removable 30GB⁸ (4200 rpm), 40GB (4200 rpm), 40GB HS (5400 rpm), or 80GB HS (5400 rpm) / 9.5mm high / removable / 9.5mm high bay										• PC-Doctor™		
Display	Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 150 nits Some: 15.0" (381.0mm) SXGA+ (1400x1050) TFT color / Active Matrix / 150 nits All: one latch to unlatch and open with one hand										• ThinkPad Utilities		
Graphics	Some: Integrated Intel Extreme™ Graphics 2 / Direct AGP / in 852GME GMCH / uses main memory (up to 64MB) / 266MHz / DMVT Some: NVIDIA® GeForce™ FX Go5200 / NV34M / AGP 4X / 64 or 128MB memory										• Adobe® Reader		
EasyPivot	ThinkPad EasyPivot base allows smooth positioning for a comfortable viewing angle										• Update Connector™ ¹⁵		
Keyboard	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys)										• RecordNOW and Drive Letter Access powered by Sonic products (combo, DVD-RW models)		
ComfortSlant	ThinkPad ComfortSlant keyboard with built-in incline provides maximum typing comfort										• InterVideo WinDVD (combo, DVD, DVD±RW models)		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap										• InterVideo WinDVD Creator (DVD±RW models)		
Touch pad	No touch pad (UltraNav™ multi-pointing system) / no ThinkLight™										• Simple Backup (DVD±RW)		
Dimensions ³	12.9" x 11.1" x 1.5-2.0"; 329mm x 282.5mm x 37.1-50.9mm; Volume: 4 liters										Downloadable		
Weight ²	with optical drive and battery: 6-cell: up to 7.71 lb (3.5kg); 12-cell: up to 7.67 lb (3.5 kg)										• IBM Director Agent		
Case material	Color: black; All: Acrylonitrile-Butadiene-Styrene/Polycarbonate (ABS/PC) plastic										• Software Delivery Assistant		
Battery - type	Lithium Ion 6-cell or 12-cell / intelligent / removable										• System Migration Assistant		
Battery - life	Not published										License (CD not included)		
Architecture	Intel 852GME chipset / 82852GME Graphics Memory Controller Hub (GMCH) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB, Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1520 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87391 Super I/O for [diskette], parallel, PS/2)										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
PC Card Std slots	Two Type I, two Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door										Supports ThinkVantage™ technologies;		
Ports	Four USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / PS/2 (for keyboard or mouse) / no serial or infrared										visit thinkpad.com/thinkvantage		
Wireless antenna	Some (wireless models): UltraConnect™ Antenna built into the display cover										Universal 120 watt AC adapter		
Mini PCI	One Mini PCI type III slot (Communications Bay) / not customer upgradable										PC 2001 and PXE 2.0-compliant		
None	Some: empty / not customer upgradable										ACPI 1.0b and 2.0-compliant		
11b/g ³²	Some: 11b/g Wi-Fi ³² wireless ⁴ , Mini PCI, Atheros™ AR5004G chipset										CIM and DMI 2.0-compliant		
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible										ENERGY STAR®-compliant		
Modem	56K ⁶ V.90 (V.92-designed ²⁵) modem in CDC / Conexant® chipset										ImageUltra™ Services available		
Ethernet	Some: 10/100 ethernet on planar / Broadcom® BCM5901 (PHY/MAC) / Wake on LAN®										International Warranty Service ¹⁷		
Audio support	Some: Gigabit ethernet on planar / Broadcom® BCM5705M (PHY/MAC) / Wake on LAN										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
Security	Soft audio / ICH AC97 controller / DirectSound® support / AD90764 AC97 codec / mono speaker, 2 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack										ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166		
Security chip	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus 2-year LOR 9x5 NBD 41C9167		
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available										ThinkPlus 3-year LOR 9x5 NBD 41C9168		
256 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830				ThinkPad G41 Li-Ion Battery 12-cell				08K8178				
512 MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832				ThinkPad Multiple Battery Charger II				22P9040				
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834				ThinkPad 120W AC Adapter				22P9150				
40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816				ThinkPad Monitor Stand				22P5265				
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357				ThinkPad Carrying Case - Leather				73P3600				
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273				USB Keyboard with UltraNav				31P8950				
USB Portable Diskette Drive	05K9276				USB Travel Keyboard with UltraNav				31P9490				
USB 2.0 Combo Drive	73P4515				Enhanced Performance USB Keyboard				73P2620				
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637				Lenovo M500 Projector				0037A05				
USB 2.0 Memory Key 512KB	22P9230				ThinkVision® L201p 20.1" Monitor (black)				9320HB1				
USB 2.0 Memory Key 1GB	40Y7421				Other options at lenovo.com/options								
											ThinkPlus 4-year LOR 9x5 NBD 41C9169		
											ThinkPlus 5-year LOR 9x5 NBD 41C9170		
											ThinkPlus 2-year P&L P/U Depot 41C9171		
											ThinkPlus 3-year P&L P/U Depot 41C9172		
											ThinkPlus 4-year P&L P/U Depot 41C9173		
											ThinkPlus 5-year P&L P/U Depot 41C9174		
											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information
US models announced on October 19 or November 23, 2004
US models withdrawn effective October 2006

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ThinkPad® G41 (Entry) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Processor	Speed GHz	L2 cache	Memory	Screen	Diskette drive	Disk GB ⁸	Optical	Graphics	Mini PCI Comm Bay wireless	Ethernet on planar	Battery cells	Workhorse (W) Global (G) Avail
2881-22U	Celeron® D 320	2.40	256K	128MB	14.1" XGA	No	30GB	CD	Extreme™ 2	None	10/100	6-cell XP Home	Entry Oct 04
2881-2AU	Celeron D 320	2.40	256K	256MB	14.1" XGA	No	30GB	CD	Extreme 2	None	10/100	6-cell XP Home	Entry Nov 04
2881-28U	Celeron D 320	2.40	256K	128MB	14.1" XGA	Yes	30GB	DVD	Extreme 2	None	10/100	6-cell XP Home	Entry Oct 04
2881-2BU	Celeron D 320	2.40	256K	256MB	14.1" XGA	Yes	30GB	CD	Extreme 2	11b/g ³²	10/100	6-cell XP Pro	Entry Oct 04
2881-2NU	Celeron D 320	2.40	256K	128MB	15.0" XGA	No	30GB	CD	Extreme 2	None	10/100	6-cell XP Home	Entry Oct 04
2881-32U	Celeron D 325	2.53	256K	128MB	14.1" XGA	Yes	30GB	CD	Extreme 2	None	10/100	6-cell XP Home	Entry Oct 04
2881-38U	Celeron D 325	2.53	256K	128MB	14.1" XGA	Yes	30GB	DVD	Extreme 2	None	10/100	6-cell XP Home	Entry Oct 04
2881-3BU	Celeron D 325	2.53	256K	256MB	14.1" XGA	No	30GB	CD	Extreme 2	11b/g	10/100	6-cell XP Pro	Entry Oct 04
2881-42U	Celeron D 330	2.66	256K	128MB	14.1" XGA	Yes	30GB	CD	Extreme 2	None	10/100	6-cell XP Home	Entry Oct 04
2881-47U	Celeron D 330	2.66	256K	128MB	14.1" XGA	Yes	30GB	DVD	Extreme 2	None	10/100	6-cell XP Home	Entry Oct 04
2881-57U	Pentium® 4 532	3.06	1MB	128MB	14.1" XGA	No	30GB	CD	Extreme 2	None	10/100	6-cell XP Home	Entry Oct 04
Positioning Processor ³⁷	<i>Powerful desktop replacement; two (models without diskette drive) or three-spindle system</i>											SOFTWARE¹⁴ Windows XP Home models - Microsoft® Windows® XP Home Edition ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery (in hidden protected area) Windows XP Pro models - Microsoft Windows XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery (in hidden protected area) Preloaded (all) • Rescue and Recovery™ • Access IBM • Access Connections • Norton AntiVirus (OEM edition) • PC-Doctor™ • ThinkPad Utilities • Adobe Reader • Update Connector™ ¹⁵ • InterVideo WinDVD (DVD) Downloadable (all) • IBM Director Agent • Software Delivery Assistant • System Migration Assistant License (CD not included) (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client	
L2 cache Memory	Intel® Celeron D Processor 320 (2.40GHz), 325 (2.53GHz), or 330 (2.66GHz) with 533MHz system bus or Mobile Intel Pentium 4 Processor 532 (3.06GHz) with enhanced Intel SpeedStep™ technology ¹ , Hyper-Threading technology, and 533MHz system bus Celeron: 256KB ; Pentium 4: 1MB ; All: on die (at processor speed) / ECC 128 or 256MB std / 2GB max ⁷ / PC2700 333MHz DDR1 / non-parity / CL2.5 / two 200-pin SO-DIMM sockets / std memory in one socket / one socket available												
Diskette drive CD	<i>Some: 3.5" 1.44MB / fixed, not removable / 12.7mm high</i>												
DVD	<i>Some: CD-ROM / 24X-10X⁹ speed / fixed, not removable / 12.7mm high</i>												
Disk	<i>Some: DVD-ROM / 24X-8X⁹ speed / single-layer / fixed, not removable / 12.7mm high</i>												
Display	30GB⁸ (4200 rpm) / 9.5mm high / removable / 9.5mm high bay												
Graphics	<i>Some: 14.1" (358.1mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</i> <i>Some: 15.0" (381.0mm) XGA (1024x768) TFT color / Active Matrix / 150 nits</i> <i>All: one latch to unlatch and open with one hand</i>												
Graphics external EasyPivot	Integrated Intel Extreme™ Graphics 2 / Direct AGP / in 852GME GMCH / uses main memory (up to 64MB) / 266MHz / DMVT External monitor support via analog DB-15 connector / up to 1600x1200 at 85Hz / DDC2B ThinkPad EasyPivot base allows smooth positioning for a comfortable viewing angle												
Keyboard ComfortSlant TrackPoint®	87-key / Access IBM button / palm rest / pitch: 19mm; stroke: 2.7mm (std-size keys) ThinkPad ComfortSlant keyboard with built-in incline provides maximum typing comfort TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass / soft dome TrackPoint cap / ships with classic dome and soft rim TrackPoint cap												
Touch pad	No touch pad (UltraNav™ multi-pointing system) / no ThinkLight™												
Dimensions ³ Weight ²	12.9" x 11.1" x 1.5-2.0"; 329mm x 282.5mm x 37.1-50.9mm; <i>Volume: 4 liters</i> with optical drive and battery: <i>6-cell: up to 7.52 lb (3.4kg)</i>												
Case material	<i>Color: black; All: Acrylonitrile-Butadiene-Styrene/Polycarbonate (ABS/PC) plastic</i>												
Battery - type	Lithium Ion 6-cell / intelligent / removable												
Battery - life	Not published												
Architecture	Intel 852GME chipset / 82852GME Graphics Memory Controller Hub (GMCH) / 82801DBM ICH4-M I/O Controller Hub (ATA-100 EIDE, PCI bus, ethernet MAC, Low Pin Count (LPC) interface, USB, Firmware Hub) / PCI bus 2.2 32-bit, 33MHz (TI® PCI1520 CardBus controller, Mini PCI) / LPC bus 33MHz (PC87391 Super I/O for [diskette], parallel, PS/2)												
PC Card Std slots	Two Type I, two Type II, or one Type III / CardBus 32-bit / PCMCIA 2.1 / integrated door												
Ports	Four USB (Version 2.0) / parallel / external monitor (DB-15) / RJ-11 (modem) / RJ-45 (ethernet) / PS/2 (for keyboard or mouse) / no serial or infrared												
Wireless antenna	<i>Some (wireless models): UltraConnect™ Antenna built into the display cover</i>												
Mini PCI	One Mini PCI type III slot (Communications Bay) / not customer upgradable												
None	<i>Some: empty / not customer upgradable</i>												
11b/g ³²	<i>Some: 11b/g Wi-Fi³² wireless⁴, Mini PCI, Atheros® AR5004G chipset</i>												
CDC	One Communications Daughter Card (CDC) socket (used by modem) / not accessible												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in CDC / Conexant® chipset												
Ethernet	10/100 ethernet on planar / Broadcom® BCM5901 (PHY/MAC) / PXE / Wake on LAN®												
Audio support	Soft audio / ICH AC97 controller / DirectSound® support / AD90764 AC97 codec / mono speaker / 2 watt / volume up, down, mute buttons / no internal microphone / microphone input jack (3.5 mm) / headphone jack (3.5 mm) / no line in jack												
Security	Power-on password / hard disk password / supervisor password / security keyhole												
Security chip	None												
Limited warranty ¹²	1 year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available												
128MB PC2700 DDR-SDRAM CL2.5 SOD	31P9828	ThinkPad G41 Li-Ion Battery 12-cell	08K8178	ServicePac 4 yr IOR 9x5 NBD	30L9194								
256MB PC2700 DDR-SDRAM CL2.5 SOD	31P9830	ThinkPad Multiple Battery Charger II	22P9040	ServicePac 5 yr IOR 9x5 NBD	30L9196								
512MB PC2700 DDR-SDRAM CL2.5 SOD	31P9832	ThinkPad 120W AC Adapter	22P9150	ServicePac 2 yr P&L P/U Depot	30L9191								
1GB PC2700 DDR-SDRAM CL2.5 SOD	31P9834	11a/b/g Wireless CardBus Adapter	31P9101	ServicePac 3 yr P&L P/U Depot	30L9192								
40GB HS Hard Disk 9.5mm (5400 rpm)	08K9816	GemPC400 Smart Card Reader/Writer	31P8901	ServicePac 4 yr P&L P/U Depot	69P9195								
60GB HS Hard Disk 9.5mm (5400 rpm)	73P3357	ThinkPad Monitor Stand 2001	22P5265	ServicePac 5 yr P&L P/U Depot	69P9197								
80GB HS Hard Disk 9.5mm (5400 rpm)	09N4273	ThinkPad Carrying Case - Expander	73P3597	Post-warranty annual maintenance agreements at									
USB Portable Diskette Drive	05K9276	ThinkPad Carrying Case - Organizer	73P3598	ibm.com/services/us/its/pdf/maspspleu.pdf									
USB 2.0 Combo Drive	73P4515	ThinkPad Carrying Case - Leather	73P3600										
USB 2.0 Portable Multi-Burner Drive	22P9163	USB Keyboard with UltraNav	31P8950										
USB 2.0 Memory Key 512MB	22P9230	USB Travel Keyboard with UltraNav	31P9490										
Optical 3-Button Travel Wheel Mouse	31P7410	Enhanced Performance USB Keyboard	73P2620										
TrackPoint Cap Collection	73P2698	C400 Projector	0039A04										
Kensington® MicroSaver® Security Cable	73P2582	ThinkVision® E500 Projector	0038A05										
SonyEricsson® GC83 EDGE PC Card	26K3393	Other options at lenovo.com/options											

See footnotes for important warranty information
US models announced October 19 or November 23, 2004
US models withdrawn effective December 2005

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ThinkPad® Z60m (2529) - TopSeller - withdrawn

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Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB ⁸	Optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless tooth	Finger print reader	Bat-Chip set	Pre-load	Limited warranty ¹²	Avail date
2529-E1U	Black	Celeron® M 360J	1.4	256	15.4" WXGA	GMA 40G	Combo	Intel 11a/b/g ³²	None		GM 6	XP Pro	1-yr	Oct 05	
2529-E2U	Black	Celeron M 360J	1.4	512	15.4" WXGA	GMA 60G	DVD±RW	Intel 11a/b/g	None		GM 6	XP Pro	1-yr	Oct 05	
2529-E3U	Black	Pentium® M 740	1.73	512	15.4" WXGA	GMA 40G	Combo	*Intel 11a/b/g	None		GM 6	XP Pro	1-yr	Oct 05	
2529-E6U	Black	Pentium M 740	1.73	512	15.4" WXGA	GMA 60G	DVD±RW	*Intel 11a/b/g	None	Finger	GM 6	XP Pro	1-yr	Oct 05	
2529-E7U	Black	Pentium M 750	1.86	512	15.4" WXGA	X300 60G	Combo	*Intel 11b/g ³²	None	Finger	PM 6	XP Pro	1-yr	Oct 05	
2529-E8U	Black	Pentium M 750	1.86	512	15.4" WSXGA+	X300 80G	DVD±RW	*Intel 11b/g	None	Finger	PM 6	XP Pro	1-yr	Oct 05	
2529-E9U	Silver	Pentium M 760	2.00	512	15.4" WSXGA+	X600 80G	DVD±RW	*Intel 11a/b/g	None	Blue Finger	PM 9	XP Pro	1-yr	Oct 05	
2529-EAU	Silver	Pentium M 760	2.00	1GB	15.4" WSXGA+	X600 100	DVD±RW	*Intel 11a/b/g	None	Blue Finger	PM 9	XP Pro	1-yr	Oct 05	
2529-F1U	Black	Celeron M 360J	1.4	256	15.4" WXGA	GMA 40G	Combo	Intel 11a/b/g	None		GM 6	Home	1-yr	Oct 05	
2529-F3U	Black	Celeron M 370	1.5	256	15.4" WXGA	GMA 40G	Combo	Intel 11a/b/g	None		GM 6	Home	1-yr	Oct 05	
2529-F4U	Black	Celeron M 370	1.5	256	15.4" WXGA	GMA 40G	Combo	Intel 11a/b/g	None		GM 6	XP Pro	1-yr	Oct 05	
2529-F5U	Black	Pentium M 740	1.73	256	15.4" WXGA	GMA 40G	Combo	*Intel 11a/b/g	None		GM 6	Home	1-yr	Oct 05	
2529-FVU	Black	Celeron M 370	1.5	256	15.4" WXGA	GMA 40G	CD	Intel 11a/b/g	None		GM 6	Home	1-yr	Oct 05	
2529-FWU	Black	Celeron M 370	1.5	256	15.4" WXGA	GMA 40G	Combo	Intel 11b/g	None		GM 6	XP Pro	1-yr	Oct 05	
2529-FZU	Black	Pentium M 740	1.73	512	15.4" WXGA	GMA 60G	DVD±RW	*Intel 11b/g	None		GM 6	XP Pro	1-yr	Oct 05	
2529-01U	Silver	Pentium M 740	1.73	512	15.4" WX MaxB	X300 40G	Combo	*Intel 11a/b/g	None		PM 6	XP Pro	1-yr	Oct 05	
2529-02U	Silver	Pentium M 750	1.86	512	15.4" WX MaxB	X300 80G	DVD±RW	*Intel 11a/b/g	None		PM 6	Home	1-yr	Oct 05	
2529-03U	Black	Pentium M 740	1.73	512	15.4" WXGA	GMA 40G	Combo	*Intel 11a/b/g	None		GM 6	Home	1-yr	Oct 05	
2529-04U	Black	Pentium M 740	1.73	512	15.4" WXGA	GMA 80G	DVD±RW	*Intel 11a/b/g	None		GM 6	Home	1-yr	Oct 05	

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These 2529 models have a 1-year limited warranty

Positioning Processor	Stylish notebooks for work and life; widescreen display; two-spindle system Intel® Celeron M Processor 360J or 370 with XD Bit and 400MHz system bus or Intel Pentium M Processor 740, 750, or 760 with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus <i>Celeron M: 1 MB; Pentium M: 2MB; All: on die (at processor speed) / ECC</i>	SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◆ Disk-to-Disk Recovery Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ◆ Disk-to-Disk Recovery Preloaded (all) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • Diskeeper Lite • PC-Doctor™ • ThinkPad utilities • Adobe® Reader • Fingerprint Software (some) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) License - CD not included (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
L2 cache Memory	256MB, 512MB, or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail	
CD Combo DVD±RW Ultrabay Enhanced Serial ATA disk (SATA150)	<i>Some: CD-ROM / 24X-10X⁹ speed / removable from Ultrabay™ Enhanced</i> <i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay Enhanced</i> <i>Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced</i> One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel 40GB⁸ (5400 rpm), 60GB (5400 rpm), 80GB (5400 rpm), or 100GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™	
Widescreen display	<i>Some: 15.4" (391.0mm) WXGA (1280x800) TFT color / 200 nits / 16:10 aspect ratio</i> <i>Some: 15.4" (391.0mm) WXGA (1280x800) TFT color / MaxBright™ / 300 nits / 16:10</i> <i>Some: 15.4" (391.0mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect</i> <i>All: stainless steel hinges / one hand activates dual latches / secure screen surround</i>	
Graphics	<i>Some: Intel Graphics Media Accelerator 900 (GMA 900) / integrated in 915GM</i> <i>Some: ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB memory</i> <i>Some: ATI MOBILITY RADEON X600 / PCI Express x16 / 128MB memory</i>	
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm with optical drive and battery: 6-cell: up to 7.0 lb (3.2kg); 9-cell: up to 7.3 lb (3.3kg) <i>Some: black color; Acrylonitrile-Butadiene-Styrene (ABS) plastic</i> <i>Some: top cover: silver color; ABS, aluminum, titanium material; bottom: black, ABS</i>	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell or 9-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced <i>6-cell: up to 4.0 hr; 9-cell: up to 6.0 hr; 9-cell plus Ultrabay battery: up to 8.0 hr</i>	
Architecture	<i>Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub</i> <i>Some: Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub</i> <i>All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus, Mini PCI) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)</i>	
PC Card slot ExpressCard slot Ports	One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door 3-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)	ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage
Wireless antenna Mini PCI Intel 11b/g ³² Intel 11a/b/g ³² Mini PCI Express WWAN ¹⁶	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios One Mini PCI slot / customer upgradable <i>Some: 11b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip</i> <i>Some: 11a/b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset</i> One Mini PCI Express slot / not customer upgradable	Universal 90 watt AC adapter ThinkPad Roll Cage PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²
Modem Bluetooth™ Ethernet Audio	56K ⁵ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip <i>Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH6-M / LED indicator</i> Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE	ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.1-compliant <i>Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip</i>	ThinkPlus 3-year LOR 9x5 NBD 41C9168
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available	Other ThinkPlus services at lenovo.com/thinkplus/warranty

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced September 20 or October 19, 2005
US models withdrawn effective June 2006

ThinkPad® Z60m (2529) - TopSeller (November 2005) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Olympic logo on cover	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB ⁶	Optical	Mini PCI 802.11 wireless	Finger print reader	Battery Pre-load	Limit-ed wnty ¹²	Avail date
2529-FYU	Black		Celeron® M 360J	1.4	256	15.4" WXGA	GMA 40G	40G	CD	Intel 11b/g ³²		GM 6 Home	1-yr Nov05	
2529-EEU	Black		Pentium® M 740	1.73	256	15.4" WXGA	GMA 40G	40G	CD	* Intel 11b/g		GM 6 Home	1-yr Nov05	
2529-EFU	Silver		Pentium M 740	1.73	512	15.4" WX MaxB	X600	60G	DVD±RW	* Intel 11a/b/g ³²	Blue Finger	PM 6 Pro	1-yr Nov05	
2529-EHU	Silver		Celeron M 370	1.5	512	15.4" WXGA	GMA 40G	60G	DVD±RW	Intel 11b/g		GM 6 Home	1-yr Nov05	
2529-EJU	Silver		Pentium M 740	1.73	256	15.4" WXGA	GMA 40G	40G	Combo	* Intel 11b/g		GM 6 Home	1-yr Nov05	
2529-EKU	Silver		Pentium M 740	1.73	512	15.4" WXGA	GMA 40G	40G	Combo	* Intel 11a/b/g		GM 6 Pro	1-yr Nov05	
2529-ELU	Silver		Pentium M 740	1.73	512	15.4" WXGA	GMA 40G	60G	DVD±RW	* Intel 11a/b/g		GM 6 Pro	1-yr Nov05	
2529-EMU	Silver		Pentium M 740	1.73	1GB	15.4" WX MaxB	X300	100	DVD±RW	* Intel 11a/b/g	Blue Finger	PM 6 Pro	1-yr Nov05	
2529-EZU	Silver	Logo	Pentium M 740	1.73	512	15.4" WX MaxB	X300	80G	DVD±RW	* Intel 11b/g	Blue Finger	PM 6 Home	1-yr Jan 06	

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These 2529 models have a 1-year limited warranty

Positioning Processor	Stylish notebooks for work and life; widescreen display; two-spindle system Intel® Celeron M Processor 360J or 370 with Execute Disable Bit and 400MHz bus or Intel Pentium M Processor 740 with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)			
L2 cache Memory	Celeron M: 1 MB ; Pentium M: 2MB ; All: on die (at processor speed) / ECC 256MB, 512MB, or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / dual channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available										Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2)			
CD Combo DVD±RW Ultrabay Enhanced Serial ATA disk (SATA150)	Some: CD-ROM / 24X-10X ⁹ speed / removable from Ultrabay™ Enhanced Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel 40GB⁸, 60GB, 80GB, or 100GB (all 5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™										Preloaded (all; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • Diskeeper Lite • PC-Doctor™ • Fingerprint Software (some) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)			
Widescreen display	Some: 15.4" (391.0mm) WXGA (1280x800) TFT color / 200 nits / 16:10 aspect ratio Some: 15.4" (391.0mm) WXGA (1280x800) TFT color / MaxBright™ / 300 nits / 16:10 All: stainless steel hinges / one hand activates dual latches / secure screen surround										License - CD not included (all) - Lotus® SmartSuite® Millennium and - Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)			
Olympic logo	Some: Olympic logo on titanium top cover													
Graphics	Some: Intel Graphics Media Accelerator 900 (GMA 900) / integrated in 915GM Some: ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB memory Some: ATI MOBILITY RADEON X600 / PCI Express x16 / 128MB memory										ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage			
Keyboard TrackPoint™ ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³ Weight ² Case material	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm with optical drive and battery: 6-cell : up to 7.0 lb (3.2kg) Some: black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Some: top cover: silver color; ABS, aluminum, titanium material; bottom: black, PC/ABS										Universal 90 watt AC adapter ThinkPad Roll Cage PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced 6-cell : up to 4.0 hr; optional 9-cell : up to 6.0 hr; 9-cell plus Ultrabay battery : up to 8.0 hr													
Architecture	Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub Some: Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus, Mini PCI) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)										ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166 ThinkPlus 2-year LOR 9x5 NBD 41C9167 ThinkPlus 3-year LOR 9x5 NBD 41C9168 ThinkPlus 4-year LOR 9x5 NBD 41C9171 ThinkPlus 5-year LOR 9x5 NBD 41C9173 ThinkPlus 2-year P&L P/U Depot 41C9169 ThinkPlus 3-year P&L P/U Depot 41C9170 ThinkPlus 4-year P&L P/U Depot 41C9172 ThinkPlus 5-year P&L P/U Depot 41C9174			
PC Card slot ExpressCard slot Ports	One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door 3-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)													
Wireless antenna Mini PCI Intel 11b/g ³² Intel 11a/b/g ³² Mini PCI Express WWAN ¹⁶ Modem Bluetooth™ Ethernet Audio Security Security chip Fingerprint reader	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios One Mini PCI slot / customer upgradable Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset One Mini PCI Express slot / not customer upgradable None 56K ⁵ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH6-M / LED indicator Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.1-compliant Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip										Other options at lenovo.com/options			
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available													
256MB PC2-4200 DDR2 NP CL4 SOD 512MB PC2-4200 DDR2 NP CL4 SOD 1GB PC2-4200 DDR2 NP CL4 SOD Super Multi-Burner Ultrabay Enh Drv (curved) Serial Hard Drive Ultrabay Slim Adptr (flat) 100GB Disk 9.5mm SATA150 (5400 rpm) Other options on O-Z60M sheet	73P3840 73P3842 73P3844 40Y8624 40Y8725 40Y8721		Z60m/R60 Series Li-Ion Battery 6-cell Z60m/T60/R60 Li-Ion Battery 9-cell Advanced Ultrabay Battery 3-cell ThinkPad Essential Port Replicator ThinkPad Advanced Mini Dock ThinkPad Advanced Dock		40Y6795 40Y6797 40Y6789 250510W 250410U 250310U									

See footnotes for important warranty information
US models announced November 22, 2005 or January 24, 2006
US models withdrawn effective May or September 2006

* Powered by Intel Centrino™ mobile technology
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(WR6) August 2006

ThinkPad® Z60m (2529) - TopSeller (January 2006) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB ⁶	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth reader	Finger print	Battery Chip set	Pre-load	Limited warranty ¹²	Avail date
2529-H2U	Black	Celeron® M 380	1.6	256	15.4" WXGA	GMA 40G	40G	Combo	Intel 11b/g ³²	None			GM 6	Home	1-yr	Jan 06
2529-H3U	Black	Pentium® M 760	2.00	512	15.4" WXGA	GMA 100	100	DVD±RW	11a/b/g ³²	None			GM 6	Pro	1-yr	Jan 06
2529-HMU	Black	Celeron M 380	1.6	512	15.4" WXGA	GMA 40G	40G	Combo	11a/b/g	None			GM 6	Home	1-yr	Jan 06
2529-HPU	Black	Pentium M 760	2.00	512	15.4" WXGA	GMA 80G	80G	DVD±RW	11a/b/g	None		Finger	GM 9	Pro	1-yr	Jan 06
2529-HUU	Black	Pentium M 770	2.13	512	15.4" WXGA	X600	100	DVD±RW	11a/b/g	Verizon Blue	Finger	PM 9	Pro	1-yr	Jan 06	
2529-HWU	Black	Pentium M 770	2.13	512	15.4" WXGA	X600	100	DVD±RW	11a/b/g	Verizon Blue	Finger	PM 6	Pro	1-yr	Jan 06	
2529-R2U	Black	Celeron M 380	1.6	256	15.4" WXGA	GMA 40G	40G	Combo	Intel 11b/g	None			GM 6	Pro	1-yr	Jan 06
2529-R3U	Silver	Pentium M 750	1.86	512	15.4" WX	MaxB X600	80G	DVD±RW	* Intel 11a/b/g ³²	None		Finger	PM 6	Pro	1-yr	Jan 06
2529-R5U	Black	Celeron M 380	1.6	512	15.4" WXGA	GMA 60G	60G	DVD±RW	Intel 11b/g	None			GM 6	Pro	1-yr	Jan 06
2529-R6U	Silver	Celeron M 380	1.6	256	15.4" WXGA	GMA 40G	40G	Combo	Intel 11b/g	None			GM 6	Pro	1-yr	Jan 06
2529-R7U	Silver	Pentium M 750	1.86	512	15.4" WXGA	GMA 60G	60G	Combo	* Intel 11a/b/g	None			GM 6	Pro	1-yr	Jan 06
2529-R8U	Silver	Pentium M 750	1.86	512	15.4" WXGA	GMA 80G	80G	DVD±RW	* Intel 11a/b/g	None			GM 6	Pro	1-yr	Jan 06
2529-R9U	Silver	Pentium M 750	1.86	512	15.4" WX	MaxB X300	60G	Combo	* Intel 11a/b/g	None			PM 6	Pro	1-yr	Jan 06
2529-RAU	Black	Pentium M 750	1.86	512	15.4" WXGA	X300	60G	Combo	* Intel 11a/b/g	None			PM 6	Pro	1-yr	Jan 06
2529-RCU	Silver	Pentium M 770	2.13	1GB	15.4" WX	MaxB X600	100	DVD±RW	* Intel 11a/b/g	None	Blue	Finger	PM 9	Pro	1-yr	Jan 06
2529-RBU	Black	Pentium M 750	1.86	512	15.4" WXGA	GMA 80G	80G	Combo	* Intel 11a/b/g	None			GM 6	Pro	1-yr	Feb 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These 2529 models have a 1-year limited warranty

Positioning	Stylish notebooks for work and life; widescreen display; two-spindle system										SOFTWARE¹⁴					
Processor	Intel® Celeron M Processor 380 with XD Bit and 400MHz system bus or Intel® Pentium M Processor 750, 760, or 770 with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										Windows XP Professional models					
L2 cache	Celeron M: 1 MB; Pentium M: 2MB; All: on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)					
Memory	256MB, 512MB, or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										◇ Disk-to-Disk Recovery					
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enh										Windows XP Home models					
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Enh										- Microsoft Windows XP Home Edition ²⁰ (Service Pack 2)					
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel										◇ Disk-to-Disk Recovery					
Serial ATA disk (SATA150)	40GB ⁸ (5400 rpm), 60GB (5400 rpm), 80GB (5400 rpm), or 100GB (H3U: 5400 rpm; others: 7200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™										Preloaded (all)					
Widescreen display	Some: 15.4" (391.0mm) WXGA (1280x800) TFT color / 200 nits / 16:10 aspect ratio										• Rescue and Recovery™					
Graphics	Some: Intel Graphics Media Accelerator 900 (GMA 900) / integrated in 915GM										• Access Connections™					
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys										• Client Security Solution™					
TrackPoint®	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)										• ThinkVantage Productivity Center					
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• ThinkVantage System Update					
Dimensions ³	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm										• Symantec® Client Security					
Weight ²	with optical drive and battery: 6-cell: up to 7.0 lb (3.2kg); 9-cell: up to 7.3 lb (3.3kg)										• Diskeeper Lite					
Case material	Some: black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										• PC-Doctor™					
Battery - type	Lithium Ion 6-cell or 9-cell / intelligent / supports unique 2nd battery in Ultrabay Enh										• ThinkPad utilities					
Battery - life ¹⁰	6-cell: up to 4.0 hr; 9-cell: up to 6.0 hr; 9-cell plus Ultrabay battery: up to 8.0 hr										• Adobe® Reader					
Architecture	Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub										• Fingerprint Software (some)					
PC Card slot	Some: Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub										• Multimedia Center for Think Offerings					
ExpressCard slot	All: 82801F8M ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841										• Sonic RecordNOW and Drive Letter Access (combo, DVD±RW)					
Ports	CardBus, Mini PCI) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)										• InterVideo WinDVD (combo, DVD±RW models)					
Wireless antenna	One Type I or Type II slot / CardBus 32-bit / integrated door										• InterVideo WinDVD Creator (DVD±RW models)					
Mini PCI	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										License - CD not included (all)					
Mini PCI Express	3-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client					
Modem	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage					
Bluetooth™	One Mini PCI slot / customer upgradable										Universal 90 watt AC adapter					
Ethernet	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip										ThinkPad Roll Cage					
Audio	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset										PC 2001-compliant					
Security	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip										ACPI 1.0b and 2.0-compliant					
Security chip	One Mini PCI Express slot / not customer upgradable										CIM and DMI 2.0-compliant					
Fingerprint reader	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless										PXE 2.1-compliant					
Limited warranty ¹²	56K ⁹ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip										ENERGY STAR®-compliant					
	Some: Bluetooth 2.0 wireless technology / USB 2.0 interface via ICH6-M / LED indicator										RoHS-compliant					
	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										International Warranty Service ¹⁷					
	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²					
	Power-on password / hard disk password / supervisor password / security keyhole										ThinkPlus™.22 1-year LOR 9x5 NBD					
	Trusted Platform Module / Atmel chip / TCG 1.1-compliant										41C9166					
	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip										ThinkPlus 3-year LOR 9x5 NBD					
	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available										41C9168					

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced January 31 or February 28, 2006
US models withdrawn effective October 2006

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(WR7) October 2006

ThinkPad® Z60m (2530) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	SATA GB ⁸	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Finger print reader	Battery Pre-load	Lim-ited warranty ¹²	Avail date
2530-11U	Black	Pentium® M 740	1.73	512	15.4" WXGA	X300	40G	Combo	*Intel 11b/g ³²			PM 6	XP Pro 1-yr	Oct 05
2530-13U	Black	Pentium M 740	1.73	256	15.4" WXGA	GMA 60G	60G	Combo	*Intel 11b/g			GM 6	XP Pro 1-yr	Oct 05
2530-34U	Black	Pentium M 750	1.86	512	15.4" WXGA	X300	60G	DVD±RW	*Intel 11b/g		Blue	PM 9	XP Pro 1-yr	Oct 05
2530-35U	Black	Pentium M 750	1.86	512	15.4" WXGA	X600	80G	Combo	*Intel 11a/b/g ³²			PM 9	XP Pro 1-yr	Oct 05
2530-36U	Black	Pentium M 760	2.00	1GB	15.4" WXGA	X600	80G	DVD±RW	*Intel 11a/b/g	Verizon	Blue Finger	PM 9	XP Pro 1-yr	Oct 05
2530-37U	Black	Pentium M 760	2.00	1GB	15.4" WXGA	X600	80G	DVD±RW	11a/b/g II ³²	Verizon	Blue Finger	PM 9	XP Pro 1-yr	Oct 05
2530-38U	Silver	Pentium M 760	2.00	1GB	15.4" W MaxB	X600	100	DVD±RW	11a/b/g II		Blue Finger	PM 9	XP Pro 1-yr	Oct 05
2530-E4U	Black	Celeron® M 360J	1.4	256	15.4" WXGA	GMA 40G	40G	DVD	Intel 11b/g			GM 6	Home 1-yr	Oct 05
2530-E9U	Silver	Pentium M 760	2.00	512	15.4" WSXGA+	X600	80G	DVD±RW	*Intel 11a/b/g		Blue Finger	PM 9	XP Pro 1-yr	Oct 05
2530-ELU	Silver	Pentium M 740	1.73	512	15.4" WXGA	GMA 60G	60G	DVD±RW	*Intel 11a/b/g			GM 6	XP Pro 1-yr	Nov 05
2530-EMU	Silver	Pentium M 740	1.73	1GB	15.4" W MaxB	X300	100	DVD±RW	*Intel 11a/b/g		Blue Finger	PM 6	XP Pro 1-yr	Nov 05
2530-R7U	Silver	Pentium M 750	1.86	512	15.4" WXGA	GMA 60G	60G	Combo	*Intel 11a/b/g			GM 6	XP Pro 1-yr	Jan 06
2530-R8U	Silver	Pentium M 750	1.86	512	15.4" WXGA	GMA 80G	80G	DVD±RW	*Intel 11a/b/g			GM 6	XP Pro 1-yr	Jan 06
Positioning Processor	Stylish notebooks for work and life; widescreen display; two-spindle system											SOFTWARE¹⁴		
L2 cache	Intel® Celeron M Processor 360J (1.4GHz) with XD Bit and 400MHz system bus or Intel Pentium M Processor 740, 750, or 760 with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus											Windows XP Professional models		
Memory	Celeron M: 1MB; Pentium M: 2MB; All: on die (at processor speed) / ECC											- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)		
EIDE DVD	Some: DVD-ROM / 8X-3.3X ⁹ speed / single-layer / removable from Ultrabay™ Enhanced											Windows XP Home models		
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance											- Microsoft Windows XP Home Edition ²⁰ (Service Pack 2)		
EIDE DVD±RW	Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced											Reloaded (all)		
EIDE DVD±RW	R8U: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim											• Rescue and Recovery™		
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel											• Access Connections™		
Serial ATA disk (SATA150)	40GB ⁸ (5400 rpm), 60GB (5400 rpm), 80GB (5400 rpm), or 100GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™											• Client Security Solution™		
Widescreen display	Some: 15.4" (391.0mm) WXGA (1280x800) TFT color / 200 nits / 16:10 aspect ratio											• ThinkVantage Productivity Center		
Graphics	Some: ATI Graphics Media Accelerator 900 (GMA 900) / integrated in 915GM											• ThinkVantage System Update		
Keyboard	Some: 15.4" (391.0mm) WXGA (1280x800) TFT color / MaxBright™ / 300 nits / 16:10											• Symantec® Client Security		
TrackPoint®	Some: 15.4" (391.0mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect											• Diskeeper Lite		
ThinkLight™	All: stainless steel hinges / one hand activates dual latches / secure screen surround											• PC-Doctor™		
Dimensions ³	Some: Intel® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB memory											• Fingerprint Software (some)		
Weight ²	Some: ATI MOBILITY RADEON X600 / PCI Express x16 / 128MB memory											• Multimedia Center for Think Offerings		
Case material	X300/X600: DVI pass-through support to opt Advanced Mini Dock and Advanced Dock											• Sonic RecordNOW and Drive Letter Access (combo, DVD±RW)		
Battery - type	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys											• InterVideo WinDVD (combo, DVD, DVD±RW models)		
Battery - life ¹⁰	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)											• InterVideo WinDVD Creator (DVD±RW models)		
Architecture	Illuminates the keyboard to improve visibility in low-light conditions											License - CD not included (all)		
PC Card slot	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm											- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)		
ExpressCard slot	With optical drive and battery: 6-cell: up to 7.0 lb (3.2kg); 9-cell: up to 7.3 lb (3.3kg)											ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage		
Ports	Some: black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic											Universal 90-watt AC adapter		
Wireless antenna	Some: top cover: silver color; ABS, aluminum, titanium material; bottom: black, PC/ABS											ThinkPad Roll Cage (one-piece magnesium frame)		
Mini PCI	Lithium Ion 6-cell or 9-cell / intelligent / supports unique 2nd battery in Ultrabay Enhance											ACPI 1.0b and 2.0-compliant		
Intel 11b/g ³²	6-cell: up to 4.0 hr; 9-cell: up to 6.0 hr; 9-cell plus Ultrabay battery: up to 8.0 hr											CIM and DMI 2.0-compliant		
Intel 11a/b/g ³²	Architecture											PXE 2.1-compliant		
Intel 11a/b/g II ³²	Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub											ENERGY STAR®-compliant		
Mini PCI Express	Some: Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub											RoHS-compliant		
WWAN ¹⁶	All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus, Mini PCI) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)											International Warranty Service ¹⁷		
Modem	One Type I or Type II slot / CardBus 32-bit / integrated door											24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
Bluetooth™	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											ThinkPlus™.22 1-yr LOR 9x5 NBD		
Ethernet	3-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)											41C9166		
Audio	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios											ThinkPlus 3-yr LOR 9x5 NBD		
Security	One Mini PCI slot / customer upgradable											41C9168		
Security chip	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip											ThinkPlus 4-yr LOR 9x5 NBD		
Fingerprint reader	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset											41C9171		
Limited warranty ¹²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X chip											ThinkPlus 5-yr LOR 9x5 NBD		
	One Mini PCI Express slot / not customer upgradable											41C9173		
	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on systemboard / service contract reqd with Verizon® Wireless											ThinkPlus 3-yr P&L P/U Depot		
	56K® V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip											41C9170		
	Some: Bluetooth 2.0 wireless technology / USB 2.0 interface via ICH6-M / LED indicator											ThinkPlus 5-yr P&L P/U Depot		
	Gigabit ethernet on systemboard / Broadcom BCM5751A0 (MAC/PHY) / PCIe x1 / PXE											41C9174		
	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack											Other ThinkPlus services at lenovo.com/thinkplus/warranty		
	Power-on password / hard disk password / supervisor password / security keyhole													
	Trusted Platform Module / Atmel chip / TCG 1.1-compliant													
	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip													
	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available													

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced September 20 or November 22, 2005, or January 31, 2006
US models withdrawn effective June, September, or October 2006

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ThinkPad® Z60m (2531) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB ⁸	Optical	Mini PCI 802.11 wireless	Mini PCIe WWAN Blue-tooth	Finger print reader	Battery Chip set	Workhorse (W) Limited Gbl	Workhorse (W) (G) Avail date
2531-4HU	Black	Pentium® M 740	1.73	512	15.4" WXGA	X300 60G	Combo	* Intel 11b/g ³²			PM 6	3-yr		Oct 05
2531-4QU	Black	Pentium M 740	1.73	256	15.4" WXGA	GMA 40G	Combo	* Intel 11a/b/g ³²			GM 6	3-yr	W	Oct 05
2531-68U	Black	Pentium M 740	1.73	512	15.4" WSXGA+	GMA 40G	Combo	* Intel 11a/b/g			Finger GM 6	3-yr	W	Oct 05
2531-6DU	Black	Pentium M 750	1.86	512	15.4" WSXGA+	GMA 40G	Combo	* Intel 11a/b/g			Finger GM 6	3-yr	W	Oct 05
2531-6EU	Black	Pentium M 760	2.00	512	15.4" WSXGA+	GMA 40G	Combo	* Intel 11a/b/g			Finger GM 6	3-yr	W	Oct 05
2531-6FU	Black	Pentium M 740	1.73	512	15.4" WXGA	X300 60G	Combo	* Intel 11a/b/g			PM 6	3-yr	W	Oct 05
2531-6GU	Black	Pentium M 750	1.86	512	15.4" WXGA	X300 60G	DVD±RW	* Intel 11a/b/g			PM 6	3-yr	W	Oct 05
2531-6JU	Black	Pentium M 740	1.73	512	15.4" WXGA	X300 60G	Combo	* Intel 11a/b/g			Finger PM 6	3-yr	W	Oct 05
2531-75U	Black	Pentium M 740	1.73	512	15.4" WXGA	X300 60G	DVD±RW	* Intel 11a/b/g			Finger PM 6	3-yr	W	Oct 05
2531-76U	Silver	Pentium M 750	1.86	512	15.4" WSXGA+	X600 80G	DVD±RW	* Intel 11a/b/g			Blue Finger PM 9	3-yr	W	Oct 05
2531-78U	Black	Pentium M 750	1.86	512	15.4" WXGA	X300 60G	DVD±RW	* Intel 11a/b/g			Blue Finger PM 6	3-yr	W	Oct 05
2531-E1U	Black	Celeron® M 360J	1.4	256	15.4" WXGA	GMA 40G	Combo	Intel 11a/b/g			GM 6	3-yr	W	Oct 05
2531-81U	Black	Pentium M 750	1.86	512	15.4" WSXGA+	GMA 40G	Combo	* Intel 11a/b/g			Finger GM 6	3-yr	W	Oct 05
2531-82U	Black	Pentium M 760	2.00	512	15.4" WSXGA+	GMA 40G	Combo	* Intel 11b/g			Finger GM 6	3-yr	W	Oct 05
2531-83U	Black	Pentium M 750	1.86	512	15.4" WXGA	X600 60G	DVD±RW	* Intel 11a/b/g	Verizon Blue		PM 6	3-yr	W	Oct 05
2531-84U	Black	Pentium M 750	1.86	512	15.4" WXGA	X300 60G	DVD±RW	* Intel 11b/g			PM 6	3-yr	W	Oct 05
Positioning Processor	Stylish notebooks for work and life; widescreen display; two-spindle system											SOFTWARE¹⁴		
L2 cache	Intel® Celeron M Processor 360J (1.4GHz) with XD Bit and 400MHz system bus or Intel Pentium M Processor 740, 750, or 760 with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus											Windows XP Professional models		
Memory	Celeron M: 1 MB; Pentium M: 2MB; All: on die (at processor speed) / ECC											- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)		
Combo DVD±RW	256MB or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail											◇ Disk-to-Disk Recovery (in hidden protected area)		
Ultrabay Enhanced Serial ATA disk (SATA150)	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel											Preloaded		
Widescreen display	40GB ⁸ (5400 rpm), 60GB (5400 rpm), or 80GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™											• Rescue and Recovery™		
Graphics	Some: 15.4" (391.0mm) WXGA (1280x800) TFT color / 200 nits / 16:10 aspect ratio											• Access Connections™		
Keyboard TrackPoint® ThinkLight™	Some: 15.4" (391.0mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect All: stainless steel hinges / one hand activates dual latches / secure screen surround											• Client Security Solution™		
Dimensions ³ Weight ² Case material	Some: Intel Graphics Media Accelerator 900 (GMA 900) / integrated in 915GM											• ThinkVantage Productivity Center		
Battery - type Battery - life ¹⁰	Some: ATI MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB memory											• ThinkVantage System Update		
Architecture	Some: ATI MOBILITY RADEON X600 / PCI Express x16 / 128MB memory											• Symantec® Client Security		
PC Card slot ExpressCard slot Ports	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions											• Diskeeper Lite		
Wireless antenna Mini PCI	All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus, Mini PCI) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)											• PC-Doctor™		
Modem Bluetooth™ Ethernet Audio	One Type I or Type II slot / CardBus 32-bit / integrated door											• ThinkPad utilities		
Security Security chip	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											• Adobe® Reader		
Fingerprint reader	3-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)											• Fingerprint Software (fingerprint models)		
Limited warranty ¹²	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios											• Multimedia Center for Think Offerings		
256MB PC2-4200 DDR2 NP CL4 SOD	One Mini PCI slot / customer upgradable											• Sonic RecordNOW and Drive Letter Access		
512MB PC2-4200 DDR2 NP CL4 SOD	Some: 11b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2200BG, Intel 82532 chip											• InterVideo WinDVD		
1GB PC2-4200 DDR2 NP CL4 SOD	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset											• InterVideo WinDVD Creator (DVD±RW models)		
CD-RW/DVD Combo Ultrabay Enhanced	One Mini PCI Express slot / not customer upgradable											License - CD not included		
Super Multi-Burner Ultrabay Enh Drv (curved) 40Y8624	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless 56K® V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip											- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Other options on O-Z60M sheet	Some: Bluetooth 2.0 wireless / USB 2.0 interface via ICH6-M / LED indicator Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack											ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage		
	Power-on password / hard disk password / supervisor password / security keyhole											Universal 90 watt AC adapter		
	Trusted Platform Module / Atmel chip / TCG 1.1-compliant											ThinkPad Roll Cage (one-piece magnesium frame)		
	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip											PC 2001-compliant		
	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail											ACPI 1.0b and 2.0-compliant		
	250Y6795											CIM and DMI 2.0-compliant		
	250Y6797											PXE 2.1-compliant		
	250510U											ENERGY STAR™-compliant		
	250410U											RoHS-compliant		
	250310U											International Warranty Service ¹⁷		
	Other options at lenovo.com/options											24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
												ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175		
												ThinkPlus 3-year LOR 9x5 NBD 41C9176		
												ThinkPlus 4-year LOR 9x5 NBD 41C9177		
												ThinkPlus 5-year LOR 9x5 NBD 41C9179		
												ThinkPlus 4-year P&L P/U Depot 41C9178		
												ThinkPlus 5-year P&L P/U Depot 41C9180		
												Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information
US models announced September 20, 2005
US models withdrawn effective June or September 2006

* Powered by Intel Centrino® mobile technology

ThinkPad® Z60m (2531) - January 2006 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB ⁸	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Finger print reader	Battery Pre-load	Limited warranty ¹²	Avail date	
2531-M7U	Silver	Pentium® M 780	2.26	1GB	15.4" WSXGA+	X600	100G	DVD±RW	* Intel 11a/b/g	None	Blue Finger	9 XP Pro	3-yr	Jan 06	
2531-RAU	Black	Pentium M 750	1.86	512	15.4" WXGA	X300	60G	Combo	* Intel 11a/b/g	None	PM	6 XP Pro	3-yr	Jan 06	
2531-MGU	Black	Pentium M 750	1.86	512	15.4" WXGA	GMA	60G	DVD±RW	* Intel 11a/b/g	None	Finger	GM	6 XP Pro	3-yr	Jan 06
2531-R7U	Silver	Pentium M 750	1.86	512	15.4" WXGA	GMA	60G	Combo	* Intel 11a/b/g	None	GM	6 XP Pro	3-yr	Jan 06	
2531-MJU	Black	Pentium M 750	1.86	512	15.4" WSXGA+	X300	60G	DVD±RW	* Intel 11a/b/g	None	PM	6 XP Pro	3-yr	Jan 06	
2531-MKU	Black	Pentium M 760	2.00	512	15.4" WSXGA+	X300	60G	DVD±RW	* Intel 11a/b/g	None	PM	6 XP Pro	3-yr	Jan 06	
2531-RBU	Black	Pentium M 750	1.86	512	15.4" WXGA	GMA	80G	Combo	* Intel 11a/b/g	None	GM	6 XP Pro	3-yr	Feb 06	
Positioning Processor	Stylish notebooks for work and life; widescreen display; two-spindle system Intel Pentium M Processor 750, 760 or 780 with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										SOFTWARE¹⁴				
L2 cache Memory	2MB; on die (at processor speed) / ECC 512MB or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery (in hidden protected area)				
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced										Preloaded				
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Enhanced										<ul style="list-style-type: none"> Rescue and Recovery™ Access Connections™ Client Security Solution™ ThinkVantage Productivity Center ThinkVantage System Update Symantec® Client Security Diskeeper Lite PC-Doctor™ ThinkPad utilities Adobe® Reader Fingerprint Software (fingerprint models) 				
Ultrabay Enhanced Serial ATA disk (SATA150)	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel 60GB (5400 rpm), or 100GB (7200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™										<ul style="list-style-type: none"> Multimedia Center for Think Offerings Sonic RecordNOW and Drive Letter Access InterVideo WinDVD InterVideo WinDVD Creator (DVD±RW models) 				
Widescreen display	Some: 15.4" (391.0mm) WXGA (1280x800) TFT color / 200 nits / 16:10 aspect ratio Some: 15.4" (391.0mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect All: stainless steel hinges / one hand activates dual latches / secure screen surround										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
Graphics	Some: Intel Graphics Media Accelerator 900 (GMA 900) / integrated in 915GM Some: ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB memory Some: ATI MOBILITY RADEON X600 / PCI Express x16 / 128MB memory X300/X600: DVI pass-through support to opt Advanced Mini Dock and Advanced Dock										<ul style="list-style-type: none"> Multimedia Center for Think Offerings Sonic RecordNOW and Drive Letter Access InterVideo WinDVD InterVideo WinDVD Creator (DVD±RW models) 				
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys														
TrackPoint™	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm														
Weight ²	with optical drive and battery: 6-cell : up to 7.0 lb (3.2kg); 9-cell : up to 7.3 lb (3.3kg)														
Case material	Some: black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Some: top cover: silver color; ABS, aluminum, titanium material; bottom: black, PC/ABS														
Battery - type	Lithium Ion 6-cell or 9-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced														
Battery - life ¹⁰	6-cell : up to 4.0 hr; 9-cell : up to 6.0 hr; 9-cell plus Ultrabay battery : up to 8.0 hr														
Architecture	Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub Some: Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus, Mini PCI) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)														
PC Card slot	One Type I or Type II slot / CardBus 32-bit / integrated door														
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door														
Ports	3-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage				
Mini PCI	One Mini PCI slot / customer upgradable										Universal 90-watt AC adapter				
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset										ThinkPad Roll Cage (one-piece magnesium frame)				
Mini PCI Express	One Mini PCI Express slot / not customer upgradable										PC 2001-compliant				
WWAN ¹⁶	None										ACPI 1.0b and 2.0-compliant				
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip										CIM and DMI 2.0-compliant				
Bluetooth™	Some: Bluetooth 2.0 wireless technology / USB 2.0 interface via ICH6-M / LED indicator										PXE 2.1-compliant				
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										ENERGY STAR®-compliant				
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack										RoHS-compliant				
Security	Power-on password / hard disk password / supervisor password / security keyhole										International Warranty Service ¹⁷				
Security chip	Trusted Platform Module / Atmel chip / TCG 1.1-compliant										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip														
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail														
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		Z60m/R60 Series Li-Ion Battery 6-cell		40Y6795										
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		Z60m/T60/R60 Li-Ion Battery 9-cell		40Y6797										
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		ThinkPad Essential Port Replicator		250510W										
DVD-ROM Ultrabay Enhanced Drive	39X2642		ThinkPad Advanced Mini Dock		250410U										
CD-RW/DVD Combo Ultrabay Enhanced	73P3275		ThinkPad Advanced Dock		250310U										
Super Multi-Burner Ultrabay Enh Drv (curved)	40Y8624		ThinkPad External Battery Charger		40Y7625										
USB Portable Diskette Drive	05K9276		ThinkPad 90W AC Adapter		40Y7659										
USB 2.0/Analog Headset by Sennheiser	40Y8518		11a/b/g Wireless Mini PCI Adapter II		73P4301										
USB 2.0 Memory Key 1GB	40Y7421		Intel PRO/Wireless 2915ABG Mini PCI		41N2990										
USB 2.0 Super Multi-Burner Drive	40Y8638		Verizon Wireless V620 WWAN PC Card ²⁵		40Y9137										
Serial Hard Drive Ultrabay Slim Adapter	40Y8725		ThinkVision® E500 Projector		0038A05										
ExpressCard Gemplus Smart Card Reader	41N3043		ThinkPad Nylon Carrying Case		10K0207										
80GB Disk 9.5mm SATA150 (5400 rpm)	41N5662		ThinkPad Carrying Case - BackPack		73P3599										
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013		ThinkPad Advanced Mini Dock		250410U										
Kensington® MicroSaver® Security Cable	73P2582		ThinkVision L201p 20.1" Monitor (black)		9320HB1										
Other options on O-Z60M sheet			Other options at lenovo.com/options												

See footnotes for important warranty information
US models announced January 31 or February 28, 2006
US models withdrawn effective October 2006

* Powered by Intel Centrino® mobile technology

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ThinkPad® Z60m (2531) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB ^a	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Chip set	Battery cells	Limited warranty ¹²	Avail date
2531-1PU	Black	Pentium® M 750	1.86	512	15.4" WXGA	X300	80G	DVD±RW	* Intel 11a/b/g ³²	None	None	Finger	PM 6	EasyServ	Oct 05	
2531-MWU	Black	Pentium M 750	1.86	512	15.4" WXGA	GMA 80G	DVD±RW	11a/b/g ³²	None	None	None	Finger	GM 9	EasyServ	Jan 06	
2531-MSU	Black	Pentium M 750	1.86	512	15.4" WXGA	GMA 60G	Combo	11a/b/g	None	None	None	None	GM 6	EasyServ	Jan 06	
2531-MTU	Black	Pentium M 760	2.00	1GB	15.4" WSXGA+	X600	100G	DVD±RW	* Intel 11a/b/g	None	Blue	Finger	PM 9	EasyServ	Jan 06	
2531-MUW	Black	Pentium M 750	1.86	512	15.4" WXGA	X300	60G	Combo	11a/b/g	None	None	None	PM 6	EasyServ	Jan 06	
<p>• This model has an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.</p>																
Positioning Processor	<p><i>Stylish notebooks for work and life; widescreen display; two-spindle system</i> Intel® Pentium M Processor 750 or 760 with Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, and 533MHz system bus</p>											<p>SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery (in hidden protected area)</p>				
L2 cache	<p>2MB / on die (at processor speed) / ECC</p>											<p>Preloaded • Education software from Vital Source Technologies®: vitalSource KEY™ and Personal Portable library™ • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • Diskeeper Lite • PC-Doctor™ • ThinkPad utilities • Adobe® Reader</p>				
Memory	<p>two 200-pin SO-DIMM sockets / std mem in one socket / one socket available</p>											<p>• Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)</p>				
Diskette drive	<p>None standard / use optional USB-based diskette drive</p>											<p>License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client</p>				
EIDE Combo	<p><i>Some: DVD-ROM/CD-RW / 24X/24X/24X/8X²¹ speed / removable from Ultrabay Enhance</i></p>															
EIDE DVD±RW	<p><i>1PU: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced</i></p>															
EIDE DVD±RW	<p><i>Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Enh</i></p>															
Ultrabay Enhanced	<p>One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel</p>															
Serial ATA disk (SATA150)	<p>60 or 80 or 100GB^b (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™</p>															
Widescreen display	<p><i>Some: 15.4" (391.0mm) WXGA (1280x800) TFT color / 200 nits / 16:10 aspect ratio</i> <i>Some: 15.4" (391.0mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect</i> All: stainless steel hinges / one hand activates dual latches / secure screen surround</p>															
Graphics	<p><i>Some: Intel Graphics Media Accelerator 900 (GMA 900) / integrated in 915GM</i> <i>Some: ATI MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB memory</i> <i>Some: ATI MOBILITY RADEON X600 / PCI Express x16 / 128MB memory</i> X300/X600: DVI pass-through support to opt Advanced Mini Dock and Advanced Dock</p>															
Keyboard	<p>89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys</p>															
TrackPoint®	<p>TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)</p>															
ThinkLight™	<p>Illuminates the keyboard to improve visibility in low-light conditions</p>															
Dimensions ³	<p>(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm</p>															
Weight ²	<p>with optical drive and battery: <i>6-cell</i>: up to 7.0 lb (3.2kg); <i>9-cell</i>: up to 7.3 lb (3.3kg)</p>															
Case material	<p>Black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic</p>															
Battery - type	<p>Lithium Ion 6-cell or 9-cell / intelligent / supports unique 2nd battery in Ultrabay Enhance</p>															
Battery - life ¹⁰	<p><i>6-cell</i>: up to 4.0 hr; <i>9-cell</i>: up to 6.0 hr; <i>9-cell plus Ultrabay battery</i>: up to 8.0 hr</p>															
Architecture	<p><i>Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub</i> <i>Some: Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub</i> All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus, Mini PCI) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)</p>															
PC Card slot	<p>One Type I or Type II slot / CardBus 32-bit / integrated door</p>															
ExpressCard slot	<p>One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door</p>															
Ports	<p>3-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)</p>											<p>ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage</p>				
Wireless antenna	<p>UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios</p>											<p>Universal 90-watt AC adapter</p>				
Mini PCI	<p>One Mini PCI slot / customer upgradable</p>											<p>ThinkPad Roll Cage (one-piece magnesium frame)</p>				
Intel 11a/b/g ³²	<p><i>Some: 11a/b/g wireless⁴, Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset</i></p>											<p>PC 2001-compliant</p>				
11a/b/g II ³²	<p><i>Some: 11a/b/g wireless⁴, ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X</i></p>											<p>ACPI 1.0b and 2.0-compliant</p>				
Mini PCI Express	<p>One Mini PCI Express slot / not customer upgradable</p>											<p>CIM and DMI 2.0-compliant</p>				
WWAN	<p>None</p>											<p>PXE 2.1-compliant</p>				
Modem	<p>56K⁶ V.90 (V.92-designed²⁹) modem in Comm Daughter Card socket / Conexant® chip</p>											<p>ENERGY STAR®-compliant</p>				
Bluetooth™	<p>56K⁶ V.90 (V.92-designed²⁹) modem in Comm Daughter Card socket / Conexant® chip</p>											<p>RoHS-compliant</p>				
Ethernet	<p>Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE</p>											<p>International Warranty Service¹⁷</p>				
Audio	<p>High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack</p>											<p>24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²</p>				
Security	<p>Power-on password / hard disk password / supervisor password / security keyhole</p>															
Security chip	<p>Trusted Platform Module / Atmel chip / TCG 1.1-compliant</p>															
Fingerprint reader	<p><i>Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip</i></p>															
Limited warranty ¹²	<p>3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail</p>															
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		Z60m/R60 Series Li-Ion Battery 6-cell		40Y6795											
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		Z60m/T60/R60 Li-Ion Battery 9-cell		40Y6797											
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		Advanced Ultrabay Battery 3-cell		40Y6789											
USB Portable Diskette Drive	05K9276		ThinkPad External Battery Charger		40Y7625											
USB Fingerprint Reader	73P4774		ThinkPad 90W AC Adapter		40Y7659											
USB 2.0 Lenovo Webcam	40Y8519		11a/b/g Wireless Mini PCI Adapter II		73P4301											
USB 2.0 Memory Key 1GB	40Y7421		Intel PRO/Wireless 2915ABG Mini PCI		41N2990											
USB 2.0 Portable 80GB Hard Disk	40Y8726		Verizon Wireless V620 WWAN PC Card ²⁵		40Y9137											
Serial Hard Drive Ultrabay Slim Adapter	40Y8725		ThinkPad Nylon Carrying Case		10K0207											
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013		ThinkPad Advanced Mini Dock		250410U											
Kensington® MicroSaver® Security Cable	73P2582		Lenovo L192 Wide 19" Monitor (black)		6920AB1											
Other options on O-Z60M sheet												<p>Other options at lenovo.com/options</p>				

See footnotes for important warranty information

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US models announced September 20, 2005 or January 31, 2006

US models withdrawn effective June or October 2006

ThinkPad® Z60m (2532) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB ⁸	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Battery Chip set	Limited warranty ¹²	Avail date
2532-1PU	Black	Pentium® M 750	1.86	512	15.4" WXGA	X300 80G	DVD±RW	* Intel 11a/b/g ³²	None	None	None	Finger	PM 6	Onsite	Oct 05
2532-MWU	Black	Pentium M 750	1.86	512	15.4" WXGA	GMA 80G	DVD±RW	11a/b/g ³²	None	None	None	Finger	GM 9	Onsite	Jan 06
2532-MSU	Black	Pentium M 750	1.86	512	15.4" WXGA	GMA 60G	Combo	11a/b/g	None	None	None	None	GM 6	Onsite	Jan 06
2532-MTU	Black	Pentium M 760	2.00	1GB	15.4" WSXGA+	X600 100G	DVD±RW	* Intel 11a/b/g	None	Blue	Finger	PM 9	Onsite	Jan 06	
2532-MUJ	Black	Pentium M 750	1.86	512	15.4" WXGA	X300 60G	Combo	11a/b/g	None	None	None	PM 6	Onsite	Jan 06	

• **This model has a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Stylish notebooks for work and life; widescreen display; two-spindle system</i>										SOFTWARE¹⁴				
L2 cache	Intel® Pentium M Processor 750 or 760 with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery (in hidden protected area)				
Memory	2MB / on die (at processor speed) / ECC 512MB or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / CL4 / dual channel capable two 200-pin SO-DIMM sockets / std mem in one socket / one socket available														
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded • Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™ • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • Diskeeper Lite • PC-Doctor™ • ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance														
EIDE DVD±RW	1PU: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Enhanced										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Enh														
Ultrabay Enhanced	One bay for removable devices / Ultrabay Slim-compatible / 12.7mm high / curved bezel										• ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage				
Serial ATA disk (SATA150)	60 or 80 or 100GB ⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™														
Widescreen display	Some: 15.4" (391.0mm) WXGA (1280x800) TFT color / 200 nits / 16:10 aspect ratio Some: 15.4" (391.0mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect All: stainless steel hinges / one hand activates dual latches / secure screen surround										Universal 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
Graphics	Some: Intel Graphics Media Accelerator 900 (GMA 900) / integrated in 915GM Some: ATI® MOBILITY™ RADEON® X300 / PCI Express x16 / 64MB memory Some: ATI MOBILITY RADEON X600 / PCI Express x16 / 128MB memory X300/X600: DVI pass-through support to opt Advanced Mini Dock and Advanced Dock														
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
TrackPoint®	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Multimedea Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
Dimensions ³	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm														
Weight ²	with optical drive and battery: 6-cell: up to 7.0 lb (3.2kg); 9-cell: up to 7.3 lb (3.3kg)										• ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
Case material	Black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic														
Battery - type	Lithium Ion 6-cell or 9-cell / intelligent / supports unique 2nd battery in Ultrabay Enhance										• ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
Battery - life ¹⁰	6-cell: up to 4.0 hr; 9-cell: up to 6.0 hr; 9-cell plus Ultrabay battery: up to 8.0 hr														
Architecture	Some: Mobile Intel 915GM Express Chipset / 82915GM Graphics Mem Cont Hub Some: Mobile Intel 915PM Express Chipset / 82915PM Memory Controller Hub All: 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus, Mini PCI) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)										• ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
PC Card slot	One Type I or Type II slot / CardBus 32-bit / integrated door														
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door										• ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
Ports	3-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios										• ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
Mini PCI	One Mini PCI slot / customer upgradable														
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI, Intel PRO/Wireless 2915ABG, 82533 chipset										• ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
11a/b/g II ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Adapter II, Atheros AR5004X														
Mini PCI Express	One Mini PCI Express slot / not customer upgradable										• ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
WWAN	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip										• ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
Bluetooth™	Some: Bluetooth 2.0 wireless technology / USB 2.0 interface via ICH6-M / LED indicator														
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										• ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole										• ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
Security chip	Trusted Platform Module / Atmel chip / TCG 1.1-compliant														
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip										• ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access • InterVideo WinDVD • InterVideo WinDVD Creator (DVD±RW models)				
Limited warranty ¹²	3-year/1-yr battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time														
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		Z60m/R60 Series Li-Ion Battery 6-cell		40Y6795										
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		Z60m/T60/R60 Li-Ion Battery 9-cell		40Y6797										
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		Advanced Ultrabay Battery 3-cell		40Y6789										
USB Portable Diskette Drive	05K9276		ThinkPad External Battery Charger		40Y7625										
USB Fingerprint Reader	73P4774		ThinkPad 90W AC Adapter		40Y7659										
USB 2.0 Memory Key 1GB	40Y7421		11a/b/g Wireless Mini PCI Adapter II		73P4301										
USB 2.0 Super Multi-Burner Drive	40Y8638		Intel PRO/Wireless 2915ABG Mini PCI		41N2990										
Serial Hard Drive Ultrabay Slim Adapter	40Y8725		Verizon Wireless V620 WWAN PC Card ²⁵		40Y9137										
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013		ThinkPad Advanced Mini Dock		250410U										
Kensington® MicroSaver® Security Cable	73P2582		ThinkVision® L201p 20.1" Monitor (blk)		9320HB1										
Other options on O-Z60M sheet											Other options at lenovo.com/options				

See footnotes for important warranty information * Powered by Intel Centrino® mobile technology
US models announced September 20, 2005 or January 31, 2006
US models withdrawn effective June or October 2006

ThinkPad® Z61m (9450) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN Blue-tooth	Finger print reader	Chip set	Cam-Preload	Workhorse (W) Gbl (G) Avail date
9450-32U	Silver	Celeron® M 410	1.46	512	15.4" WXGA	GMA 80G	80G	Combo	11a/b/g ³²			GM	Home	May06
9450-33U	Silver	Core Duo T2300E	1.66	512	15.4" WXGA	GMA 60G	60G	Combo	*Intel 11a/b/g ³²		Finger	GM	Pro	W
9450-32U	Silver	Core Duo T2300E	1.66	512	15.4" WXGA	GMA 60G	60G	Combo	*Intel 11a/b/g		Finger	GM	Pro	W
9450-34U	Silver	Core Duo T2300E	1.66	512	15.4" WXGA	GMA 60G	60G	Combo	*Intel 11a/b/g	Verizon Blue	Finger	GM	Pro	W
9450-35U	Silver	Core Duo T2300E	1.66	512	15.4" WXGA	GMA 80G	80G	DVD±RW	*Intel 11a/b/g		Finger	GM	Pro	W
9450-36U	Silver	Core Duo T2300E	1.66	512	15.4" WSXGA+	X1400	100	DVD±RW	*Intel 11a/b/g		Finger	PM Cam	Pro	W
9450-37U	Silver	Core Duo T2300E	1.66	1GB	15.4" WXGA	GMA 100	100	DVD±RW	*Intel 11a/b/g	Verizon Blue	Finger	GM	Pro	W
9450-38U	Silver	Core Duo T2300E	1.66	1GB	15.4" WSXGA+	X1400	100	DVD±RW	*Intel 11a/b/g	Verizon Blue	Finger	PM Cam	Pro	W
9450-39U	Silver	Core Duo T2500	2.00	1GB	15.4" WSXGA+	X1400	100	DVD±RW	*Intel 11a/b/g	Verizon Blue	Finger	PM Cam	Pro	W
9450-3TU	Black	Celeron M 410	1.46	256	15.4" WXGA	GMA 40G	40G	Combo	11a/b/g			GM	Pro	Gbl

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty¹²

Positioning	Widescreen multimedia; two spindles											SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery Preloaded (all) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) License - CD not included (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)
Processor	Intel® Celeron M Processor 410 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Duo processor T2300E or T2500 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB shared L2 cache											
Memory	256MB, 512MB, or 1GB std / 4GB max ²¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / 256/512MB models: std memory in one socket; one socket available / 1GB models: std memory in two sockets; none available											
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Enh											
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Enh											
Ultrabay Enhanced	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high											
Serial ATA disk (SATA150)	40GB® (5400 rpm), 60GB (5400 rpm), 80GB (5400 rpm), or 100GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™											
Widescreen display (anti-glare)	Some: 15.4" (391mm) WXGA (1280x800) TFT color / 150 nits / 16:10 / 300:1 contrast 3ZU: 15.4" (391mm) WXGA (1280x800) TFT color / 200 nits / 16:10 / 500:1 contrast Some: 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect All: stainless steel hinges / one hand activates dual latches											
Graphics	Some: Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz Some: ATI® MOBILITY™ Radeon™ X1400 M54 / PCI Express x16 / 128MB GDDR1 / DVI pass-through support to opt Advanced Mini Dock and Advanced Dock											
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys											
TrackPoint®	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm											
Weight ²	with optical drive and battery: 6-cell black: starting at 5.94 lb (2.7kg)/6.33 lb (2.9kg); 6-cell titanium: starting at 6.47 lb (2.9kg)/6.85 lb (3.1kg)											
Case material	Some: black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Some: top cover: silver color; ABS, aluminum, titanium material; bottom: black, PC/ABS											
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced											
Battery - life ¹⁰	Celeron models: up to 3.7 hr; 6-cell GMA graphics: up to 5.6 hr; 6-cell ATI graphics: up to 4.0 hr; 9-cell: up to 8.3 hr; 9-cell plus Ultrabay batt: up to 10.3											
Architecture	Some: Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub Some: Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)											
PC Card slot	One Type I or Type II slot / CardBus 32-bit / integrated door											
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door											
Ports	4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394a-2000 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)											
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios											
Integrated camera	Some: camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0											
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable											
11a/b/g ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adp, Atheros AR5006EX											
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG											
WWAN	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless											
Modem	56K® V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip											
Bluetooth™	Some: Bluetooth 2.0 wireless technology / USB 2.0 via ICH7-M / LED indicator											
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE											
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / GMA models: mono microphone; ATI graphics models: stereo microphone / microphone input jack / headphone jack											
Security	Power-on password / hard disk password / supervisor password / security keyhole											
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant											
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip											
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available											

See footnotes for important warranty information
US models announced May 16 or 30, 2006
US models withdrawn effective February or September 2007

* Powered by Intel Centrino® Duo mobile technology

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(WR2-1) September 2006

ThinkPad® Z61m (9450) - TopSeller (October 2006) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Top cover color	Processor	Mem-Speed GHz	Mem-ory MB	Wide-screen display	Disk Graphics controller	SATA GB	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Finger print reader	Chip set	Cam- era	Note CD	Work- horse Gbl	Avail date
9450-D5U Silver	Core 2 Duo T5500	1.66	1GB	15.4" WXGA	GMA 120	DVD±RW	*Intel 11a/b/g ³²	None	Blue	Finger	GM	CD	No	Oct 06	
9450-D6U Silver	Core 2 Duo T5500	1.66	1GB	15.4" WSXGA+	X1400	120 DVD±RW	*Intel 11a/b/g	None	Blue	Finger	PM	Cam	No	Oct 06	
9450-D9U Silver	Core 2 Duo T7200	2.00	1GB	15.4" WSXGA+	X1400	120 DVD±RW	ThinkPad 11n ²⁸	None	Blue	Finger	PM	Cam	No	Oct 06	

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty¹²

Positioning Processor	<i>Widescreen multimedia; two spindles</i> Intel® Core™ 2 Duo processor T5500 or T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz system bus; <i>T5500</i> : 2MB shared L2 cache; <i>T7200</i> : 4MB shared L2 cache										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ✦ Disk-to-Disk Recovery Preloaded • <i>Model D5U</i> : Microsoft Office OneNote® 2003 • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (DVD±RW models) • InterVideo WinDVD (DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) CD included • <i>Model D5U</i> : Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / <i>Model D5U</i> : std memory in two sockets; no sockets available; <i>Models D6U/D9U</i> : std memory in one socket; one socket available														
EIDE DVD±RW Ultrabay Enhanced Serial ATA disk (SATA150)	DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay™ Enhanced One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 120GB⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™														
Widescreen display (anti-glare)	<i>Some</i> : 15.4" (391mm) WXGA (1280x800) TFT color / 200 nits / 16:10 / 500:1 contrast <i>Some</i> : 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect <i>All</i> : stainless steel hinges / one hand activates dual latches														
Graphics	<i>Some</i> : Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some</i> : ATI® MOBILITY™ Radeon™ X1400 M54 / PCI Express x16 / 128MB GDDR1 / DVI pass-through support to optional Advanced Mini Dock and Advanced Dock														
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>(WxDxH)</i> : 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm with optical drive and battery: <i>6-cell titanium</i> : starting at 6.47 lb (2.9kg)/6.85 lb (3.1kg) <i>Top cover</i> : silver color; ABS, aluminum, titanium material; <i>bottom</i> : black, PC/ABS Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced <i>6-cell GMA graphics</i> : up to 5.6 hr; <i>6-cell ATI graphics</i> : up to 4.0 hr; <i>9-cell GMA</i> : up to 8.3 hr; <i>9-cell ATI</i> : up to 5.9 hr; <i>9-cell plus Ultrabay batt</i> : up to 10.3														
Architecture	<i>Some</i> : Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some</i> : Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub <i>All</i> : 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)														
PC Card slot ExpressCard slot Ports	One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door 4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394a-2000 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)														
Wireless antenna Integrated camera Mini PCI Express Intel 11a/b/g ³² ThinkPad 11n ²⁸	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios <i>Some</i> : camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0 Two Mini PCI Express slots / only 802.11 wireless is customer upgradable <i>Some</i> : 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG <i>Some</i> : 11a/b/g/n wireless ⁴ , ThinkPad 11a/b/g/n Mini PCI Express Adapter, Atheros AR5008 chipset, MIMO 2x3										Supports ThinkVantage® technologies				
WWAN Modem Bluetooth™ Ethernet Audio	None 56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip Bluetooth 2.0 wireless technology / USB 2.0 via ICH7-M / LED indicator Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / <i>GMA models</i> : mono microphone; <i>ATI graphics models</i> : stereo microphone / microphone input jack / headphone jack										65-watt (GMA graphics) or 90 watt (ATI graphics) AC adapter ThinkPad Roll Cage RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on palm rest / swipe sensor / supports the security chip										ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166 ThinkPlus 2-year LOR 9x5 NBD 41C9167 ThinkPlus 3-year LOR 9x5 NBD 41C9168 ThinkPlus 4-year LOR 9x5 NBD 41C9171 ThinkPlus 5-year LOR 9x5 NBD 41C9173 ThinkPlus 2-year P&L P/U Depot 41C9169 ThinkPlus 3-year P&L P/U Depot 41C9170 ThinkPlus 5-year P&L P/U Depot 41C9174 Other ThinkPlus services at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available														
512MB PC2-5300 DDR2 CL5 SODIMM 1GB PC2-5300 DDR2 CL5 SODIMM 2GB PC2-5300 DDR2 SODIMM CD-RW/DVD Combo Ultrabay Enhanced ThinkPad DVD Ultrabay Slim Burner (flat) Serial Hard Drive Ultrabay Slim Adapter 160GB Disk 9.5mm SATA150 (5400 rpm) USB 2.0 Lenovo Multimedia Headset USB 2.0 Security Memory Key 4GB USB 2.0 Super Multi-Burner Drive Other accessories on O-Z60M sheet	40Y7733 40Y7734 40Y7735 73P3275 41N5643 40Y8725 41N5692 40Y8518 41U5120 41N5565		Z60m/R60 Series Li-Ion Battery 6-cell Z60m/T60/R60 Li-Ion Battery 9-cell ThinkPad Essential Port Replicator ThinkPad Advanced Mini Dock ThinkPad Advanced Dock ThinkPad 90W AC Adapter 11a/b/g Wireless Mini PCI Express Adpr Intel PRO/Wireless 3945ABG Mini PCIe ThinkPad Carrying Case - BackPack Lenovo D221 Wide 22" Monitor (black) Other accessories at lenovo.com/accessories		40Y6795 40Y6797 250510W 250410U 250310U 40Y7659 40Y7026 41N3008 73P3599 6622HB1										

See footnotes for important warranty information
US models announced October 17, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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(WR25-1) September 2007

ThinkPad® Z61m (9451) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Chip set	Cam- era	Pre- load	Workhorse (W) Gbl (G)	Avail date
9451-NPU	Black	Celeron® M 420	1.60	256	15.4" WXGA	GMA 40G	40G	Combo	11a/b/g ³²	None	None	Finger	GM	No	XP Pro	G	Oct 06
9451-5UU	Black	Core Duo T2400	1.83	512	15.4" WXGA	GMA 60G	60G	Combo	* Intel 11a/b/g ³²	None	None	Finger	GM	No	XP Pro	W	May06
9451-5VU	Silver	Core Duo T2400	1.83	512	15.4" WXGA	GMA 60G	60G	Combo	* Intel 11a/b/g	None	None	Finger	GM	No	XP Pro	W	May06
9451-5WU	Black	Core Duo T2400	1.83	512	15.4" WSXGA+	X1400	60G	Combo	* Intel 11a/b/g	None	None	Finger	PM	No	XP Pro	W	May06

• **These models have a 1-year limited warranty¹²**

Positioning	<i>Widescreen multimedia; two spindles</i>	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◆ Disk-to-Disk Recovery Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo models) • InterVideo WinDVD (combo models) License - CD not included (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Processor	Intel® Celeron M Processor 420 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Duo processor T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache				
Memory	256MB or 512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available				
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhanced				
Ultrabay Enhanced	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high				
Serial ATA disk (SATA150)	40GB ⁸ or 60GB (5400 rpm) / 9.5mm high / removable, upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™				
Widescreen display (anti-glare)	<i>Some: 15.4" (391mm) WXGA (1280x800) TFT color / 150 nits / 16:10 aspect / 300:1</i> <i>Some: 15.4" (391mm) WXGA (1280x800) TFT color / 200 nits / 16:10 aspect / 500:1</i> <i>Some: 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect</i> <i>All: stainless steel hinges / one hand activates dual latches</i>				
Graphics	<i>Some: Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz</i> <i>Some: ATI® MOBILITY™ Radeon™ X1400 M54 / PCI Express x16 / 128MB GDDR1 / DVI pass-through support to opt Advanced Mini Dock and Advanced Dock</i>				
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys				
TrackPoint™	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)				
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions				
Dimensions ³	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm				
Weight ²	with optical drive and battery: <i>6-cell black:</i> starting at 5.94 lb (2.7kg)/6.33 lb (2.9kg); <i>6-cell titanium:</i> starting at 6.47 lb (2.9kg)/6.85 lb (3.1kg)				
Case material	<i>Some: black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic</i> <i>Some: top cover: silver color; ABS, aluminum, titanium material; bottom: black, PC/ABS</i>				
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced				
Battery - life ¹⁰	<i>6-cell Celeron:</i> up to 3.7 hr; <i>6-cell GMA graphics:</i> up to 5.6 hr; <i>6-cell ATI graphics:</i> up to 4.0 hr; <i>optional 9-cell GMA graphics:</i> up to 8.3 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.3 hr				
Architecture	<i>Some: Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub</i> <i>Some: Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub</i> <i>All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)</i>				
PC Card slot	One Type I or Type II slot / CardBus 32-bit / integrated door				
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door				
Ports	4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394a-2000 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)				
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios				
Integrated camera	None				
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable <i>Some: 11a/b/g wireless⁴, ThinkPad 11a/b/g Mini PCI Express Adp, Atheros AR5006EX</i> <i>Some: 11a/b/g wireless⁴, Mini PCI Express adapter, Intel PRO/Wireless 3945ABG</i>				
11a/b/g ³²					
Intel 11a/b/g ³²					
WWAN	None				
Modem	56K ⁹ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip				
Bluetooth™	None				
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE				
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / <i>GMA models:</i> mono microphone; <i>ATI graphics models:</i> stereo microphone / microphone input jack / headphone jack				
Security	Power-on password / hard disk password / supervisor password / security keyhole				
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant				
Fingerprint reader	<i>Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip</i>				
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available				
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	Z60m/R60 Series Li-Ion Battery 6-cell	40Y6795	ThinkPlus™ ²² 1-year LOR 9x5 NBD	41C9166
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	ThinkPlus 2-year LOR 9x5 NBD	41C9167
2GB PC2-4200 DDR2 CL4 SODIMM	73P3846	ThinkPad Essential Port Replicator	250510W	ThinkPlus 3-year LOR 9x5 NBD	41C9168
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	ThinkPad Advanced Mini Dock	250410U	ThinkPlus 4-year LOR 9x5 NBD	41C9171
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad Advanced Dock	250310U	ThinkPlus 5-year LOR 9x5 NBD	41C9173
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad 90W AC Adapter	40Y7659	ThinkPlus 2-year P&L P/U Depot	41C9169
USB 2.0 Security Memory Key 4GB	41U5120	11a/b/g Wireless Mini PCI Express Adpr	40Y7026	ThinkPlus 3-year P&L P/U Depot	41C9170
USB 2.0 Super Multi-Burner Drive	41N5565	Intel PRO/Wireless 3945ABG Mini PCIe	41N3008	ThinkPlus 4-year P&L P/U Depot	41C9172
Serial Hard Drive Ultrabay Slim Adapter	40Y8725	ThinkPad Carrying Case - Backpack	73P3599	ThinkPlus 5-year P&L P/U Depot	41C9174
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	Lenovo D221 Wide 22" Monitor (black)	6622HB1	Post-warranty annual maintenance agreements at	
Other accessories on O-Z60M sheet		Other accessories at lenovo.com/accessories		lenovo.com/thinkplus/warranty	

See footnotes for important warranty information
US models announced May 16 or October 17, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo processor technology

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(WR2-2) September 2007

ThinkPad® Z61m (9451) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Finger print reader	Chip set	Camera era	Limited warranty ¹²	Workhorse (W) Gbl (G) Avail date
9451-E1U	Silver	Celeron® M 410	1.46	512	15.4" WXGA	GMA 60G Combo	60G Combo	Intel 11a/b/g ³²	None	Finger GM	GM	EasyServ	W	May06	
9451-E2U	Black	Celeron M 410	1.46	512	15.4" WXGA	GMA 60G Combo	60G Combo	Intel 11a/b/g	None	Finger GM	GM	EasyServ	W	May06	
9451-E3U	Silver	Core Duo T2400	1.83	512	15.4" WSXGA+	X1400 80G DVD±RW	* Intel 11a/b/g	None	Finger PM	Cam	EasyServ	W	May06		
9451-E4U	Black	Core Duo T2400	1.83	512	15.4" WSXGA+	X1400 80G DVD±RW	* Intel 11a/b/g	None	Finger PM	PM	EasyServ	W	May06		
<p>• These models have an EasyServ™.19 onsite pickup and delivery 1-year limited warranty These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.</p>															
Positioning Processor	Widescreen multimedia; two spindles Intel® Celeron M Processor 410 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Duo processor T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache											<p>SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery</p> <p>Preloaded • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)</p> <p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p> <p>License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client</p>			
Memory	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Enh Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Enh One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available														
EIDE Combo EIDE DVD±RW Ultrabay Enhanced Serial ATA disk (SATA150)	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Enh Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Enh One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 60GB ⁸ (5400 rpm) or 80GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™														
Widescreen display (anti-glare)	Some: 15.4" (391mm) WXGA (1280x800) TFT color / 150 nits / 16:10 aspect ratio Some: 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect All: stainless steel hinges / one hand activates dual latches														
Graphics	Some: Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz Some: ATI® MOBILITY™ Radeon™ X1400 M54 / PCI Express x16 / 128MB GDDR1 / DVI pass-through support to opt Advanced Mini Dock and Advanced Dock														
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ²	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm with optical drive and battery: 6-cell black: starting at 5.94 lb (2.7kg)/6.33 lb (2.9kg); 6-cell titanium: starting at 6.47 lb (2.9kg)/6.85 lb (3.1kg)														
Case material	Some: black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Some: top cover: silver color; ABS, aluminum, titanium material; bottom: black, PC/ABS														
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced 6-cell GMA graphics: up to 5.6 hr; 6-cell ATI graphics: up to 4.0 hr; optional 9-cell GMA graphics: up to 8.3 hr; 9-cell plus Ultrabay battery: up to 10.3 hr														
Architecture	Some: Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub Some: Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)														
PC Card slot ExpressCard slot Ports	One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door 4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394a-2000 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)														
Wireless antenna Integrated camera Mini PCI Express Intel 11a/b/g ³² WWAN	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Some: camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0 Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG None														
Modem Bluetooth™ Ethernet Audio	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip None Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / GMA models: mono microphone; ATI graphics models: stereo microphone / microphone input jack / headphone jack														
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on palm rest / swipe sensor / supports the security chip														
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available														
512MB PC2-5300 DDR2 CL5 SODIMM 1GB PC2-5300 DDR2 CL5 SODIMM 2GB PC2-4200 DDR2 CL4 SODIMM DVD-ROM Ultrabay Enhanced Drive CD-RW/DVD Combo Ultrabay Enhanced ThinkPad DVD Ultrabay Slim Burner (flat) USB Portable Diskette Drive USB 2.0 Security Memory Key 4GB USB 2.0 Super Multi-Burner Drive 100GB Disk 9.5mm SATA150 (7200 rpm) Other accessories on O-Z60M sheet	40Y7733 40Y7734 73P3846 39X2642 73P3275 41N5643 05K9276 41U5120 41N5565 41N3013				Z60m/R60 Series Li-Ion Battery 6-cell Z60m/T60/R60 Li-Ion Battery 9-cell ThinkPad Essential Port Replicator ThinkPad Advanced Mini Dock ThinkPad Advanced Dock 11a/b/g Wireless Mini PCI Express Adpr Intel PRO/Wireless 3945ABG Mini PCIe ThinkPad Carrying Case - Backpack Lenovo D221 Wide 22" Monitor (black) ThinkVision® L201p 20.1" Monitor (black) Other accessories at lenovo.com/accessories				40Y6795 40Y6797 250510W 250410U 250310U 40Y7026 41N3008 73P3599 6622HB1 9220HB1						
ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166															
ThinkPlus 2-year LOR 9x5 NBD 41C9167															
ThinkPlus 3-year LOR 9x5 NBD 41C9168															
ThinkPlus 4-year LOR 9x5 NBD 41C9171															
ThinkPlus 5-year LOR 9x5 NBD 41C9173															
Other ThinkPlus services at lenovo.com/thinkplus/warranty															

See footnotes for important warranty information
 US models announced May 16 or 30, 2006
 US models withdrawn effective February or September 2007

* Powered by Intel Centrino® Duo processor technology

ThinkPad® Z61m (9452) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Finger print reader	Chip set	Camera	Pre-load	Workhorse (W) Gbl (G) Avail date
9452-5UU	Black	Core Duo T2400	1.83	512	15.4" WXGA	GMA 60G	60G	Combo	* Intel 11a/b/g ³²	None	None	Finger GM	No	Pro G W	May06
9452-5VU	Silver	Core Duo T2400	1.83	512	15.4" WXGA	GMA 60G	60G	Combo	* Intel 11a/b/g	None	None	Finger GM	No	Pro G W	May06
9452-9NU	Black	Core Duo T2400	1.83	512	15.4" WSXGA+	X1400	80G	Combo	* Intel 11a/b/g	None	None	Finger PM	No	Pro G W	May06

• **These models have a 3-year limited warranty¹²**

Positioning	<i>Stylish notebooks for work and life; widescreen display; two-spindle system</i>										SOFTWARE¹⁴				
Processor	Intel® Core™ Duo processor T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB L2 cache (shared)										Windows XP Professional models				
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery				
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Enhance										Preloaded				
Ultrabay Enhanced Serial ATA disk (SATA150)	One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 60GB⁸ (5400 rpm) or 80GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™										• Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director)				
Widescreen display (anti-glare)	<i>Some: 15.4" (391mm) WXGA (1280x800) TFT color / 150 nits / 16:10 aspect ratio</i> <i>Some: 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect</i> <i>All: stainless steel hinges / one hand activates dual latches</i>										• Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo models) • InterVideo WinDVD (combo models)				
Graphics	<i>Some: Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz</i> <i>Some: ATI® MOBILITY™ RADEON® X1400 M54 / PCI Express x16 / 128MB GDDR1 / DVI pass-through support to opt Advanced Mini Dock and Advanced Dock</i>										• License - CD not included (all) • Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys														
TrackPoint®	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm														
Weight ²	with optical drive and battery: <i>6-cell black:</i> starting at 5.94 lb (2.7kg)/6.33 lb (2.9kg); <i>6-cell titanium:</i> starting at 6.47 lb (2.9kg)/6.85 lb (3.1kg)														
Case material	<i>Some: black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic</i> <i>Some: top cover: silver color; ABS, aluminum, titanium material; bottom: black, PC/ABS</i>														
Battery - type	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced														
Battery - life ¹⁰	<i>6-cell GMA graphics:</i> up to 5.6 hr; <i>6-cell ATI graphics:</i> up to 4.0 hr; <i>optional 9-cell GMA graphics:</i> up to 8.3 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.3 hr														
Architecture	<i>Some: Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub</i> <i>Some: Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub</i> <i>All: 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)</i>														
PC Card slot	One Type I or Type II slot / CardBus 32-bit / integrated door														
ExpressCard slot	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door														
Ports	4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD Picture Card) / S-video out port (TV out) / IEEE 1394a-2000 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios														
Integrated camera	None														
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable														
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG														
WWAN	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage				
Bluetooth™	None														
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE														
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / <i>GMA models:</i> mono microphone; <i>ATI graphics models:</i> stereo microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant														
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / integrated with security chip														
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail														
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733			Z60m/R60 Series Li-Ion Battery 6-cell			40Y6795								
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734			Z60m/T60/R60 Li-Ion Battery 9-cell			40Y6797								
2GB PC2-4200 DDR2 CL4 SODIMM	73P3846			ThinkPad Essential Port Replicator			250510W			ThinkPlus™ ²² 2-year LOR 9x5 NBD 41C9175					
2GB PC2-5300 DDR2 SODIMM	40Y7735			ThinkPad Advanced Mini Dock			250410U			ThinkPlus 3-year LOR 9x5 NBD 41C9176					
DVD-ROM Ultrabay Enhanced Drive	39X2642			ThinkPad Advanced Dock			250310U			ThinkPlus 4-year LOR 9x5 NBD 41C9177					
CD-RW/DVD Combo Ultrabay Enhanced	73P3275			ThinkPad External Battery Charger			40Y7625			ThinkPlus 5-year LOR 9x5 NBD 41C9179					
Super Multi-Burner Ultrabay Enh Drv (curv)	40Y8624			ThinkPad 90W AC Adapter			40Y7659			ThinkPlus 4-year P&L P/U Depot 41C9178					
USB Portable Diskette Drive	05K9276			11a/b/g Wireless Mini PCI Express Adpr			40Y7026			ThinkPlus 5-year P&L P/U Depot 41C9178					
USB Fingerprint Reader	41U3167			Intel PRO/Wireless 3945ABG Mini PCIe			41N3008			ThinkPlus 4-year P&L P/U Depot 41C9178					
USB 2.0 Memory Key 1GB	40Y7421			Verizon Wireless V620 WWAN PC Card ²⁵			40Y9137			ThinkPlus 5-year P&L P/U Depot 41C9180					
USB 2.0 Super Multi-Burner Drive	41N5565			Lenovo M500 Projector			0037A05			Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty					
Serial Hard Drive Ultrabay Slim Adapter	40Y8725			ThinkPad Nylon Carrying Case			10K0207								
ExpressCard Gemplus Smart Card Reader	41N3043			ThinkPad Carrying Case - Expander			73P3597								
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013			ThinkPad Carrying Case - Backpack			73P3599								
Kensington® MicroSaver® Security Cable	73P2582			Lenovo L192 Wide 19" Monitor (black)			6920AB1								
Other options on O-Z60M sheet															

See footnotes for important warranty information
US models announced May 16, 2006
US models withdrawn effective February 2007

* Powered by Intel Centrino® Duo mobile technology

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(WR2-3) February 2007

ThinkPad® Z61m (9452) - October 2006 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Mem-ory	Wide-screen display	Graphics controller	Disk SATA GB	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Chip Cam- era	Workhorse (W) Gbl (G) Avail date	
9452-J3U	Black	Core 2 Duo T5600	1.83	1GB	15.4" WXGA	GMA	100	DVD±RW	* Intel 11a/b/g ³²	None	Blue	Finger	GM	No	G W Oct 06
9452-J4U	Black	Core 2 Duo T7200	2.00	1GB	15.4" WSXGA+	X1400	120	DVD±RW	* Intel 11a/b/g	None	Blue	Finger	PM	No	G W Oct 06
9452-JNU	Black	Core 2 Duo T7200	2.00	1GB	15.4" WXGA	GMA	80G	Combo	* Intel 11a/b/g	None	Blue		GM	No	G W Oct 06
9452-JPU	Black	Core 2 Duo T7200	2.00	1GB	15.4" WSXGA+	X1400	80G	Combo	* Intel 11a/b/g	None	Blue		PM	No	G W Oct 06

• **These models have a 3-year limited warranty¹²**

Positioning Processor	<i>Widescreen multimedia; two spindles</i> Intel® Core™ 2 Duo processor T5600 or T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz system bus; T5600 : 2MB shared L2 cache; T7200 : 4MB shared L2 cache											SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) License - CD not included (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / J4U/JNU : standard memory in both sockets (512MB each socket); no sockets avail; J3U/JPU : standard memory in 1 socket; 1 socket available											
EIDE Combo EIDE DVD±RW Ultrabay Enhanced Serial ATA disk (SATA150)	<i>Some</i> : DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Enh <i>Some</i> : DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Enh One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 80GB⁸ (5400 rpm), 100GB (7200 rpm), or 120GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™											
Widescreen display (anti-glare)	<i>Some</i> : 15.4" (391mm) WXGA (1280x800) TFT color / 200 nits / 16:10 aspect / 500:1 <i>Some</i> : 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect <i>All</i> : stainless steel hinges / one hand activates dual latches											
Graphics	<i>Some</i> : Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some</i> : ATI® MOBILITY™ Radeon™ X1400 M54 / PCI Express x16 / 128MB GDDR1 / DVI pass-through support to opt Advanced Mini Dock and Advanced Dock											
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>(WxDxH)</i> : 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm with optical drive and battery: <i>6-cell black</i> : starting at 5.94 lb (2.7kg)/6.33 lb (2.9kg); Black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced <i>6-cell GMA graphics</i> : up to 5.6 hr; <i>6-cell ATI graphics</i> : up to 4.0 hr; <i>optional 9-cell GMA graphics</i> : up to 8.3 hr; <i>9-cell plus Ultrabay battery</i> : up to 10.3 hr											
Architecture	<i>Some</i> : Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some</i> : Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub <i>All</i> : 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203) One Type I or Type II slot / CardBus 32-bit / integrated door											
PC Card slot ExpressCard slot Ports	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door 4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394a-2000 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)											
Wireless antenna Integrated camera Mini PCI Express Intel 11a/b/g ³² WWAN Modem Bluetooth™ Ethernet Audio	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios None Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG None 56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip Bluetooth 2.0 wireless technology / USB 2.0 via ICH7-M / LED indicator Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / <i>GMA models</i> : mono microphone; <i>ATI graphics models</i> : stereo microphone / microphone input jack / headphone jack Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant											
Security Security chip Fingerprint reader	Trusted Platform Module / Atmel chip / TCG 1.2-compliant <i>Some</i> : Fingerprint reader on palm rest / swipe sensor / supports the security chip											
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail											
512MB PC2-5300 DDR2 CL5 SODIMM 1GB PC2-5300 DDR2 CL5 SODIMM 2GB PC2-4200 DDR2 CL4 SODIMM DVD-ROM Ultrabay Enhanced Drive CD-RW/DVD Combo Ultrabay Enhanced ThinkPad DVD Ultrabay Slim Burner (flat) USB Fingerprint Reader USB 2.0 Security Memory Key 4GB USB 2.0 Super Multi-Burner Drive Serial Hard Drive Ultrabay Slim Adapter ExpressCard Gemplus Smart Card Reader 100GB Disk 9.5mm SATA150 (7200 rpm) Other accessories on O-Z60M sheet	40Y7733 40Y7734 73P3846 39X2642 73P3275 41N5643 41U3167 41U5120 41N5565 40Y8725 41N3043 41N3013	Z60m/R60 Series Li-Ion Battery 6-cell Z60m/T60/R60 Li-Ion Battery 9-cell ThinkPad Essential Port Replicator ThinkPad Advanced Mini Dock ThinkPad Advanced Dock ThinkPad External Battery Charger 11a/b/g Wireless Mini PCI Express Adpr Intel PRO/Wireless 3945ABG Mini PCIe Lenovo M500 Projector Lenovo C500 Projector ThinkPad Carrying Case - Backpack Lenovo L192 Wide 19" Monitor (black) Other accessories at lenovo.com/accessories	40Y6795 40Y6797 250510W 250410U 250310U 40Y7625 40Y7026 41N3008 0037A05 0039A05 73P3599 6920AB1	ThinkPlus™ ²² 2-year LOR 9x5 NBD 41C9175 ThinkPlus 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty								

See footnotes for important warranty information
US models announced October 17, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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(WR25-2) September 2007

ThinkPad® Z61m (9452) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Finger print reader	Chip set	Camera	Limited warranty ¹²	Workhorse (W) Gbl (G) Avail date
9452-E1U	Silver	Celeron® M 410	1.46	512	15.4" WXGA	GMA 60G	60G	Combo	Intel 11a/b/g ³²	None	Finger	GM		EasyServ	May06
9452-E2U	Black	Celeron M 410	1.46	512	15.4" WXGA	GMA 60G	60G	Combo	Intel 11a/b/g	None	Finger	GM		EasyServ	May06
9452-E3U	Silver	Core Duo T2400	1.83	512	15.4" WSXGA+	X1400	80G	DVD±RW *	Intel 11a/b/g	None	Finger	PM	Cam	EasyServ	W May06
9452-E4U	Black	Core Duo T2400	1.83	512	15.4" WSXGA+	X1400	80G	DVD±RW *	Intel 11a/b/g	None	Finger	PM		EasyServ	W May06
9452-E7U	Black	Celeron M 420	1.60	512	15.4" WXGA	GMA 80G	80G	Combo	Intel 11a/b/g	None	Finger	GM		EasyServ	May06
9452-E8U	Black	Core Duo T2500	2.00	512	15.4" WSXGA+	X1400	80G	DVD±RW *	Intel 11a/b/g	None	Finger	PM		EasyServ	W May06
9452-E9U	Black	Core Duo T2500	2.00	1GB	15.4" WSXGA+	X1400	100	DVD±RW *	Intel 11a/b/g	None	Finger	PM		EasyServ	W May06
9452-EAU	Silver	Celeron M 420	1.60	512	15.4" WXGA	GMA 80G	80G	Combo	Intel 11a/b/g	None	Finger	GM		EasyServ	May06
9452-EBU	Silver	Core Duo T2500	2.00	512	15.4" WSXGA+	X1400	80G	DVD±RW *	Intel 11a/b/g	None	Finger	PM	Cam	EasyServ	W May06
9452-ECU	Silver	Core Duo T2500	2.00	1GB	15.4" WSXGA+	X1400	100	DVD±RW *	Intel 11a/b/g	None	Finger	PM	Cam	EasyServ	W May06

• **These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Widescreen multimedia; two spindles</i> Intel® Celeron M Processor 410 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Duo processor T2400 or T2500 with dual-core, Enhanced Intel Speed-Step™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache (shared)										SOFTWARE¹⁴				
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / 512MB models: std memory in one socket; one socket available / 1GB models: std memory in two sockets; none available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery Preloaded • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)				
EIDE Combo EIDE DVD±RW Ultrabay Enhanced Serial ATA disk (SATA150)	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Enh <i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Enh One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 60GB ⁸ (5400 rpm), 80GB (5400 rpm), or 100GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™														
Widescreen display (anti-glare)	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) TFT color / 150 nits / 16:10 aspect ratio <i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect <i>All:</i> stainless steel hinges / one hand activates dual latches														
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some:</i> ATI® MOBILITY™ Radeon™ X1400 M54 / PCI Express x16 / 128MB GDDR1 / DVI pass-through support to opt Advanced Mini Dock and Advanced Dock														
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ²	<i>(WxDxH):</i> 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm with optical drive and battery: <i>6-cell black:</i> starting at 5.94 lb (2.7kg)/6.33 lb (2.9kg); <i>6-cell titanium:</i> starting at 6.47 lb (2.9kg)/6.85 lb (3.1kg)														
Case material	<i>Some:</i> black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic <i>Some:</i> top cover: silver color; ABS, aluminum, titanium material; bottom: black, PC/ABS														
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced <i>6-cell GMA graphics:</i> up to 5.6 hr; <i>6-cell ATI graphics:</i> up to 4.0 hr; <i>optional 9-cell GMA graphics:</i> up to 8.3 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.3 hr														
Architecture	<i>Some:</i> Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some:</i> Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub <i>All:</i> 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203) One Type I or Type II slot / CardBus 32-bit / integrated door														
PC Card slot ExpressCard slot Ports	One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door 4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394a-2000 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)														
Wireless antenna Integrated camera Mini PCI Express Intel 11a/b/g ³² WWAN	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios <i>Some:</i> camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0 Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG														
Modem Bluetooth™ Ethernet Audio	56K ⁹ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip None Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / <i>GMA models:</i> mono microphone; <i>ATI graphics models:</i> stereo microphone / microphone input jack / headphone jack Power-on password / hard disk password / supervisor password / security keyhole										Supports ThinkVantage® technologies				
Security Security chip Fingerprint reader	Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on palm rest / swipe sensor / supports the security chip										65-watt (GMA graphics) or 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available										ThinkPlus™ services at lenovo.com/thinkplus/warranty				

See footnotes for important warranty information
US models announced May 16 or 30, 2006
US models withdrawn effective February or September 2007

* Powered by Intel Centrino® Duo mobile technology

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(WR2-5) September 2007

ThinkPad® Z61m (9453) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory MB	Wide-screen display	Graphics controller	Disk SATA GB	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Finger print reader	Chip set	Camera	Limited warranty ¹²	Workhorse (W) Gbl (G) Avail date	
9453-E1U	Silver	Celeron® M 410	1.46	512	15.4" WXGA	GMA 60G	60G	Combo	Intel 11a/b/g ³²	None	Finger	GM	Onsite		May06	
9453-E2U	Black	Celeron M 410	1.46	512	15.4" WXGA	GMA 60G	60G	Combo	Intel 11a/b/g	None	Finger	GM	Onsite		May06	
9453-E3U	Silver	Core Duo T2400	1.83	512	15.4" WSXGA+	X1400	80G	DVD±RW *	Intel 11a/b/g	None	Finger	PM	Cam	Onsite	W	May06
9453-E4U	Black	Core Duo T2400	1.83	512	15.4" WSXGA+	X1400	80G	DVD±RW *	Intel 11a/b/g	None	Finger	PM	Cam	Onsite	W	May06
9453-E7U	Black	Celeron M 420	1.60	512	15.4" WXGA	GMA 80G	80G	Combo	Intel 11a/b/g	None	Finger	GM	Onsite		May06	
9453-E8U	Black	Core Duo T2500	2.00	512	15.4" WSXGA+	X1400	80G	DVD±RW *	Intel 11a/b/g	None	Finger	PM	Onsite	W	May06	
9453-E9U	Black	Core Duo T2500	2.00	1GB	15.4" WSXGA+	X1400	100	DVD±RW *	Intel 11a/b/g	None	Finger	PM	Onsite	W	May06	
9453-EAU	Silver	Celeron M 420	1.60	512	15.4" WXGA	GMA 80G	80G	Combo	Intel 11a/b/g	None	Finger	GM	Onsite		May06	
9453-EBU	Silver	Core Duo T2500	2.00	512	15.4" WSXGA+	X1400	80G	DVD±RW *	Intel 11a/b/g	None	Finger	PM	Cam	Onsite	W	May06
9453-ECU	Silver	Core Duo T2500	2.00	1GB	15.4" WSXGA+	X1400	100	DVD±RW *	Intel 11a/b/g	None	Finger	PM	Cam	Onsite	W	May06

• **These models have a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Widescreen multimedia; two spindles</i> Intel® Celeron M Processor 410 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Duo processor T2400 or T2500 with dual-core, Enhanced Intel Speed-Step™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache (shared)										SOFTWARE¹⁴				
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / 512MB models: std memory in one socket; one socket available / 1GB models: std memory in two sockets; none available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) Preloaded • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)				
EIDE Combo EIDE DVD±RW UltraBay Enhanced Serial ATA disk (SATA150)	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay™ Enh <i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Enh One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 60GB ⁸ (5400 rpm), 80GB (5400 rpm), or 100GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™										CD • Adobe Photoshop Elements plus Adobe Premiere Elements License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
Widescreen display (anti-glare)	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) TFT color / 150 nits / 16:10 aspect ratio <i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) TFT color / 200 nits / 16:10 aspect <i>All:</i> stainless steel hinges / one hand activates dual latches														
Graphics	<i>Some:</i> Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz <i>Some:</i> ATI® MOBILITY™ Radeon™ X1400 M54 / PCI Express x16 / 128MB GDDR1 / DVI pass-through support to opt Advanced Mini Dock and Advanced Dock										Supports ThinkVantage® technologies 65-watt (GMA graphics) or 90-watt (ATI graphics) AC adapter ThinkPad Roll Cage RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ²	<i>(WxDxH):</i> 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm with optical drive and battery: <i>6-cell black:</i> starting at 5.94 lb (2.7kg)/6.33 lb (2.9kg); <i>6-cell titanium:</i> starting at 6.47 lb (2.9kg)/6.85 lb (3.1kg)										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Case material	<i>Some:</i> black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic <i>Some:</i> top cover: silver color; ABS, aluminum, titanium material; bottom: black, PC/ABS Lithium Ion 6-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced <i>6-cell GMA graphics:</i> up to 5.6 hr; <i>6-cell ATI graphics:</i> up to 4.0 hr; <i>optional 9-cell GMA graphics:</i> up to 8.3 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.3 hr														
Battery - type Battery - life ¹⁰	Architecture <i>Some:</i> Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Cont Hub <i>Some:</i> Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub <i>All:</i> 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203) One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door 4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394a-2000 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)										Supports ThinkVantage® technologies				
Wireless antenna Integrated camera Mini PCI Express Intel 11a/b/g ³² WWAN	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios <i>Some:</i> camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0 Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG None 56K® V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip None Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / <i>GMA models:</i> mono microphone; <i>ATI graphics models:</i> stereo microphone / microphone input jack / headphone jack Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant														
Modem Bluetooth™ Ethernet Audio	Security Security chip Fingerprint reader Fingerprint reader on palm rest / swipe sensor / supports the security chip										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	3-year/1-yr battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time														

See footnotes for important warranty information

* Powered by Intel Centrino® Duo mobile technology

US models announced May 16 or 30, 2006

US models withdrawn effective February or September 2007

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(WR2-6) September 2007

Partial list of accessories supported on:

- ThinkPad Z60m announced on September 20, 2005
- ThinkPad Z61m announced on May 16, 2006
- ThinkPad Z61p announced on July 18, 2006

Memory (Z60m)

512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ann 01/05/06
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ann 01/05/06

Memory (Z61m and Z61p)

512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ann 01/05/06
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ann 01/05/06
2GB PC2-5300 DDR2 SODIMM	40Y7735	ann 11/28/06

Ultrabay Slim 9.5mm (best to use curved bezel options)

Serial Hard Drive Ultrabay Slim Adapter (flat) ⁴⁰	40Y8725	ann 09/20/05
⁴⁰ Supported, but not recommended because flat bezel.		
DVD-ROM Ultrabay Slim Drive (curved bezel)	73P3270	ann 10/07/03
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ann 09/20/05
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ann 05/31/07

Ultrabay Enhanced 12.7mm (best to use curved bezel options)

DVD-ROM Ultrabay Enhanced Drive (curved)	39X2642	ann 03/14/06
CD-RW/DVD Combo Ultrabay Enhanced (cur)	73P3275	ann 10/07/03

Storage and removable storage

60GB Disk 9.5mm SATA150 (7200 rpm) ⁴¹	41N3012	ann 01/05/06
80GB Disk 9.5mm SATA150 (5400 rpm) ⁴¹	41N5662	ann 08/15/06
100GB Disk 9.5mm SATA150 (7200 rpm) ⁴¹	41N3013	ann 01/05/06
120GB Disk 9.5mm SATA150 (5400 rpm) ⁴¹	41N5691	ann 03/20/07
160GB Disk 9.5mm SATA150 (5400 rpm) ⁴¹	41N5692	ann 03/20/07

⁴¹ Can be used as the main HDD or with ThinkPad Serial ATA Hard Drive Ultrabay Slim Adapter 40Y8725 in the Ultrabay or in the ThinkPad Advanced Dock 250310U.

USB 2.0 Essential Memory Key 1GB	41U4940	ann 01/23/07
USB 2.0 Essential Memory Key 2GB	41U4944	ann 01/23/07
USB 2.0 Security Memory Key 1GB	41U5118	ann 07/17/07
USB 2.0 Security Memory Key 2GB	41U5119	ann 07/17/07
USB 2.0 Security Memory Key 4GB	41U5120	ann 07/17/07

USB Portable Diskette Drive	05K9276	ann 06/05/00
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ann 01/05/06
USB 2.0 Portable 80GB Hard Disk	41N8378	ann 04/17/07
USB 2.0 Portable 120GB Hard Disk	41N8379	ann 04/17/07
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07

Wireless LAN (Mini PCI) [Z60m]

11a/b/g Wireless Mini PCI Adapter II ⁴²	73P4301	
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⁴² System must be wireless upgradable.

Wireless LAN (Mini PCI Express) [Z61m and Z61p]

11a/b/g Wireless Mini PCI Express Adpr ⁴²	40Y7026	ann 09/20/05
Intel PRO/Wireless 3945ABG Mini PCIe Ad ⁴²	41N3008	ann 01/05/06

⁴² System must be wireless upgradable.

ThinkPad Expansion

USB Serial Parallel Adapter	22P5298	ann 10/09/01
ThinkPad Adjustable Notebook Stand	40Y7676	ann 09/20/05
ThinkPad Essential Port Replicator	250510W	ann 09/20/05
ThinkPad Advanced Mini Dock	250410U	ann 09/20/05
ThinkPad Advanced Dock ⁴⁷	250310U	ann 09/20/05

⁴⁷ ThinkPad Advanced Dock supports dual-head graphics adapters:

- ATI® X1300 256MB Dual Head/TV-out 41U5028
- ATI Radeon™ X300 SE 128MB Dual Head 41U4813

Batteries

Z60m/R60 Series Li-Ion Battery 6-cell	40Y6795	ann 09/20/05
Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	ann 09/20/05
ThinkPad Advanced Ultrabay Battery 3-cell ⁴³	40Y6789	ann 09/20/05

⁴³ Used in Ultrabay Enhanced bay.

ThinkPad External Battery Charger ⁴⁴	40Y7625	ann 09/20/05
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⁴⁴ Requires the ThinkPad 90W AC Adapter

40Y7659 (adapter provided with some systems).

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	
⁴⁵ Only compatible with the 945GM and GM965 chipset models.		
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
ThinkPad 90W AC/DC Combo Adapter	40Y7630	ann 12/13/05
Belkin 1 Outlet Notebook Surge	31P7658	
Belkin Universal Notebook Travel Surge	22P7127	
Belkin Surge Protector	31P7659	

Data/Video Projectors

Lenovo M500 Projector	0037A05	ann 02/28/06
Lenovo C500 Projector	0039A05	ann 07/11/06

Carrying Cases

Lenovo Carrying Case - Messenger Max	41U5253	ann 05/01/07
Lenovo Carry Case - Performance Backpack	41U5254	ann 05/01/07
ThinkPad Nylon Carrying Case	10K0207	
ThinkPad Carrying Case - Expander	73P3597	
ThinkPad Carrying Case - Backpack	73P3599	
ThinkPad Premiere Leather Carrying Case	10K0209	
ThinkPad Convertible Carrying Case	22P8860	

Security

Kensington® Cable Lock from Lenovo	73P2582	ann 12/29/03
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
PC Card Gemplus Smart Card Reader	41N3004	ann 12/13/05
ExpressCard Gemplus Smart Card Reader	41N3043	ann 06/27/06
USB Fingerprint Reader	41U3167	ann 10/24/06

External Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Targus Wireless Keypad and Mouse Combo	40Y7721	
Enh Perf Wireless Keyboard and Mouse	73P4067	ann 12/07/04
USB Keyboard with UltraNav	31P8950	ann 01/28/03
USB Travel Keyboard with UltraNav	31P9490	ann 04/27/04
Preferred Pro USB Fingerprint Keyboard	73P4730	ann 02/22/05

External Mouse

USB Optical Wheel Mouse	06P4069	ann 05/21/03
Optical 3-Button ScrollPoint® Mouse	31P7405	ann 08/27/02
Optical 3-Button ScrollPoint Pro Mouse	31P8700	ann 10/01/02
Optical 3-Button Travel Wheel Mouse	31P7410	
Lenovo Laser Mouse (USB, PS/2)	41U3074	ann 01/23/07

Monitors

Lenovo E75 17" CRT Monitor (16.0" vis) blk	6307BTN	ann 01/16/07
Lenovo L151 15" Monitor (black)	9165AB6	ann 02/28/06
Lenovo L171 17" Monitor (black)	9227AC1	ann 11/07/06
Lenovo L191 19" Monitor (black)	6135AB1	ann 06/27/06
Lenovo L192 Wide 19" Monitor (black)	6920AB1	ann 09/19/06
Lenovo D221 Wide 22" Monitor (black)	6622HB1	ann 11/21/06
ThinkVision® L171p 17" Monitor (black)	9417HC2	ann 10/31/06
ThinkVision L192p 19" Monitor (black)	9419HC2	ann 10/31/06
ThinkVision L201p 20.1" Monitor (black)	9220HB1	ann 10/31/06

Monitor Accessories⁴⁶

ThinkVision USB Soundbar	40Y7616	ann 08/23/05
Kensington Cable Lock from Lenovo	73P2582	ann 12/29/03
ThinkPad Convertible Monitor Stand	40Y7620	ann 01/05/06
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann 06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06

Other accessories at lenovo.com/accessories

Need to buy accessories no longer marketed by Lenovo? See www.itxchange.com/lenovo for the Options Continuation Program.

ThinkPad® Z60t (2511) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Olympic logo on cover	Processor	Speed GHz	Memory	Wide-screen display	Disk SATA GB ^a	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Bat-tery cells	Lim-ited warranty ¹²	Avail date
2511-3BU	Silver		Pentium® M 760	2.00	512MB	14.0" WXGA	80GB	DVD±RW	11a/b/g ³²		Blue	Finger	7-cell	XP Pro	1-yr Sep 05
2511-E2U	Black		Celeron® M 360J	1.4	256MB	14.0" WXGA	40GB	Combo	11a/b/g			Finger	7-cell	XP Pro	1-yr Sep 05
2511-E3U	Black		Celeron M 360J	1.4	512MB	14.0" WXGA	60GB	DVD±RW	11a/b/g			Finger	7-cell	XP Pro	1-yr Sep 05
2511-E4U	Black		Pentium M 740	1.73	512MB	14.0" WXGA	40GB	Combo	11a/b/g			Finger	7-cell	XP Pro	1-yr Sep 05
2511-E5U	Black		Pentium M 740	1.73	512MB	14.0" WXGA	60GB	DVD±RW	11a/b/g			Finger	7-cell	XP Pro	1-yr Sep 05
2511-E6U	Black		Pentium M 750	1.86	512MB	14.0" WXGA	80GB	DVD±RW	11a/b/g			Finger	7-cell	XP Pro	1-yr Sep 05
2511-E7U	Silver		Pentium M 760	2.00	1GB	14.0" WXGA	100GB	DVD±RW	11a/b/g	Verizon	Blue	Finger	7-cell	XP Pro	1-yr Oct 05
2511-EAU	Black		Celeron M 360	1.4	256MB	14.0" WXGA	40GB	Combo	11a/b/g			Finger	4-cell	XP Home	1-yr Sep 05
2511-EBU	Black		Celeron M 370	1.5	256MB	14.0" WXGA	40GB	Combo	11a/b/g			Finger	4-cell	XP Home	1-yr Sep 05
2511-ECU	Black		Celeron M 370	1.5	256MB	14.0" WXGA	40GB	Combo	11a/b/g			Finger	7-cell	XP Pro	1-yr Sep 05
2511-EDU	Black		Celeron M 370	1.5	512MB	14.0" WXGA	60GB	DVD±RW	11a/b/g			Finger	7-cell	XP Pro	1-yr Sep 05
2511-EEU	Black		Pentium M 740	1.73	256MB	14.0" WXGA	40GB	Combo	11a/b/g			Finger	4-cell	XP Home	1-yr Sep 05
2511-EGU	Black		Pentium M 750	1.86	512MB	14.0" WXGA	60GB	Combo	11a/b/g	Verizon	Blue	Finger	7-cell	XP Pro	1-yr Oct 05
2511-FDU	Silver		Pentium M 750	1.86	512MB	14.0" WXGA	80GB	DVD±RW	11a/b/g	Verizon	Blue	Finger	7-cell	XP Pro	1-yr Oct 05
2511-FEU	Silver		Pentium M 740	1.73	512MB	14.0" WXGA	80GB	DVD±RW	11a/b/g	Verizon	Blue	Finger	7-cell	XP Pro	1-yr Oct 05
2511-FFU	Silver	Logo	Pentium M 760	2.00	512MB	14.0" WXGA	80GB	DVD±RW	11a/b/g		Blue	Finger	4-cell	XP Pro	1-yr Jan 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These 2511 models have a 1-year limited warranty

Positioning	Stylish notebooks for work and life; thin and light; two-spindle system										SOFTWARE¹⁴				
Processor	Intel® Celeron M Processor 360J or 370 with XD Bit and 400MHz system bus or Intel® Pentium M Processor 740 (1.73GHz), 750 (1.86GHz), or 760 (2.00GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										Windows XP Professional models				
L2 cache	Celeron M: 1 MB; Pentium M: 2MB; All: on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)				
Memory	256MB, 512MB, or 1GB std / 2GB max ¹ / PC2-4200 533MHz DDR2 / non-parity / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail										↔ Disk-to-Disk Recovery (in hidden protected area)				
Diskette drive	None standard / use optional USB-based diskette drive										Windows XP Home models				
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										- Microsoft Windows XP Home Edition ²⁰ (Service Pack 2)				
EIDE DVD±RW	Some: DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim										↔ Disk-to-Disk Recovery (in hidden protected area)				
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel										Preloaded (all)				
Serial ATA disk (SATA150)	40GB ⁸ (5400 rpm), 60GB (5400 rpm), 80GB (5400 rpm), 100GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™										• Rescue and Recovery™				
Display	Widescreen / 14.0" (356mm) WXGA (1280x768) TFT color / 200 nits / 15:9 ratio / stainless steel hinges / one hand activates dual latches / secure screen surround										• Access Connections™				
Olympic logo	Some: Olympic logo on titanium top cover										• Client Security Solution™				
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										• ThinkVantage Productivity Center				
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys										• ThinkVantage System Update				
TrackPoint®	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)										• Symantec® Client Security				
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Diskeeper Lite				
Dimensions ³	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm										• PC-Doctor™				
Weight ²	with optical drive and battery: 4-cell: up to 4.8 lb (2.2kg); 7-cell: up to 5.15 lb (2.34 kg)										• ThinkPad utilities				
Case material	Some: black color; hybrid carbon fiber reinforced polymer (CFRP) material										• Adobe® Reader				
Battery - type	Lithium Ion 4-cell or 7-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										• FingerPrint Software				
Battery - life ¹⁰	4-cell: up to 3.0 hr; 7-cell: up to 5.0 hr; 7-cell plus Ultrabay Slim battery: up to 7.0 hr										• Multimedia Center for Think Offerings				
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graphics Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)										• Sonic RecordNOW and Drive Letter Access (combo, DVD±RW)				
PC Card slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door										• InterVideo WinDVD (combo, DVD±RW models)				
Ports	S-video out port (TV out) / Secure Digital (SD) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)										• InterVideo WinDVD Creator (DVD±RW models)				
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios										License - CD not included				
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
11a/b/g ³²	11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adapter, Atheros AR5006EX chip										ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage				
WWAN ¹⁶	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless										Universal 90-watt AC adapter				
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chipset										ThinkPad Roll Cage (one-piece magnesium frame)				
Bluetooth™	Some: Bluetooth 2.0 wireless technology / USB 2.0 interface via ICH6-M / LED indicator										PC 2001-compliant				
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE										ACPI 1.0b and 2.0-compliant				
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack										CIM and DMI 2.0-compliant				
Security	Power-on password / hard disk password / supervisor password / security keyhole										PXE 2.1-compliant				
Security chip	Trusted Platform Module / Atmel chip / TCG 1.1-compliant										ENERGY STAR®-compliant				
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / integrated with security chip										RoHS-compliant				
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available										International Warranty Service ¹⁷				
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840			Z60t Series Li-Ion Battery 4-cell			40Y6791			ThinkPlus™ ²² 1-year LOR 9x5 NBD					
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842			Z60t Series Li-Ion Battery 7-cell			40Y6793			41C9166					
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844			Advanced Ultrabay Battery 3-cell			40Y6789			ThinkPlus 2-year LOR 9x5 NBD					
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621			ThinkPad 90W AC Adapter 40Y7659						41C9167					
Super Multi-Burner Ultrabay Slim Drive (flat)	40Y8623			ThinkPad Essential Port Replicator			250510W			ThinkPlus 3-year LOR 9x5 NBD					
Serial Hard Drive Ultrabay Slim Adptr (flat)	40Y8725			ThinkPad Advanced Mini Dock			250410U			41C9168					
100GB Disk 9.5mm SATA150 (5400 rpm)	40Y8721			ThinkPad Advanced Dock			250310U			Other ThinkPlus services at lenovo.com/thinkplus/warranty					
Other options on O-Z60T sheet															

See footnotes for important warranty information
US models announced September 20, 2005 or January 24, 2006
US models withdrawn effective June or October 2006

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ThinkPad® Z60t (2511) - TopSeller (January 2006) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	SATA GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Bat-tery Preload	Lim-ited warranty ¹²	Avail date
2511-H1U	Black	Celeron® M 380	1.6	512MB	14.0" WXGA	GMA 40GB	Combo	11a/b/g ³²					4-cell	Home	1-yr Jan 06
2511-H2U	Black	Pentium M 760	2.0	512MB	14.0" WXGA	GMA 80GB	DVD±RW	11a/b/g				Finger	7-cell	Pro	1-yr Jan 06
2511-H8U	Silver	Pentium M 770	2.13	512MB	14.0" WXGA	GMA 100GB	DVD±RW	11a/b/g		Verizon		Blue Finger	7-cell	Pro	1-yr Jan 06
2511-H9U	Silver	Pentium M 750	1.86	512MB	14.0" WXGA	GMA 80GB	DVD±RW	11a/b/g				Blue Finger	7-cell	Pro	1-yr Jan 06
2511-HAU	Silver	Pentium M 740	1.73	512MB	14.0" WXGA	GMA 80GB	DVD±RW	11a/b/g				Blue Finger	7-cell	Pro	1-yr Jan 06
2511-HBU	Black	Celeron M 370	1.5	256MB	14.0" WXGA	GMA 40GB	Combo	Open; upg ³⁶		Verizon			4-cell	Home	1-yr Jan 06
2511-HCU	Black	Pentium M 740	1.73	256MB	14.0" WXGA	GMA 40GB	Combo	Open; upg		Verizon			4-cell	Home	1-yr Jan 06
2511-HDU	Silver	Pentium M 370	1.5	256MB	14.0" WXGA	GMA 40GB	Combo	Open; upg					4-cell	Home	1-yr Jan 06
2511-HEU	Silver	Pentium M 740	1.73	256MB	14.0" WXGA	GMA 40GB	Combo	Open; upg					4-cell	Home	1-yr Jan 06
2511-HGU	Silver	Celeron M 370	1.5	256MB	14.0" WXGA	GMA 40GB	Combo	Open; upg		Verizon			4-cell	Home	1-yr Jan 06
2511-HHU	Silver	Pentium M 740	1.73	256MB	14.0" WXGA	GMA 40GB	Combo	Open; upg		Verizon			4-cell	Home	1-yr Jan 06

• These small and medium business (SMB) models are part of the US TopSeller™ Program
 • These 2511 models have a 1-year limited warranty

Positioning Processor	Stylish notebooks for work and life; thin and light; two-spindle system Intel® Celeron M Processor 370 or 380 with XD Bit and 400MHz system bus or Intel® Pentium M Processor 740, 750, 760 or 770 with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 800MHz system bus	SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)
L2 cache Memory	Celeron M: 1 MB; Pentium M: 2MB; All: on die (at processor speed) / ECC 256MB, or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail	Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)
Diskette drive EIDE Combo EIDE DVD±RW Ultrabay Slim Serial ATA disk (SATA150)	None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim <i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel 40GB⁸ (5400 rpm), 80GB (5400 rpm), 100GB (7200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™	Preloaded (all) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • Diskkeeper Lite • PC-Doctor™ • ThinkPad utilities • Adobe® Reader • Fingerprint Software • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)
Display	Widescreen / 14.0" (356mm) WXGA (1280x768) TFT color / 200 nits / 15:9 ratio / stainless steel hinges / one hand activates dual latches / secure screen surround	License - CD not included (all) - Lotus® SmartSuite® Millennium and - Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz	ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions	Universal 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²
Dimensions ³ Weight ² Case material	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm with optical drive and battery: <i>4-cell:</i> up to 4.8 lb (2.2kg); <i>7-cell:</i> up to 5.1 lb (2.3 kg) <i>Some:</i> black color; hybrid carbon fiber reinforced polymer (CFRP) material <i>Some:</i> top cover: silver color; CFRP, aluminum, titanium material; bottom: black, CFRP	ThinkPlus 2-year LOR 9x5 NBD 41C9167 ThinkPlus 3-year LOR 9x5 NBD 41C9168
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell or 7-cell / intelligent / supports unique 2nd battery in Ultrabay Slim <i>4-cell:</i> up to 3.0 hr; <i>7-cell:</i> up to 5.0 hr; <i>7-cell plus Ultrabay Slim battery:</i> up to 7.0 hr	Other ThinkPlus services at lenovo.com/thinkplus/warranty
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graphics Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)	
PC Card slot Ports	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door S-video out port (TV out) / Secure Digital (SD) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)	
Wireless antenna Mini PCI Express Wireless upg ³⁶ 11a/b/g ³² WWAN ¹⁶	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable <i>Some:</i> wireless upgradable with wireless Mini PCI Express options <i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adptr, Atheros AR5006EX <i>Some:</i> Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless 56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chipset <i>Some:</i> Bluetooth 2.0 wireless technology / USB 2.0 interface via ICH6-M / LED indicator Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE	
Modem Bluetooth™ Ethernet Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack Power-on password / hard disk password / supervisor password / security keyhole	
Security Security chip Fingerprint reader	Trusted Platform Module / Atmel chip / TCG 1.1-compliant Fingerprint reader on palm rest / swipe sensor / integrated with security chip	
Limited warranty ¹² 1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available		
256MB PC2-4200 DDR2 NP CL4 SOD 512MB PC2-4200 DDR2 NP CL4 SOD 1GB PC2-4200 DDR2 NP CL4 SOD Combo II Ultrabay Slim Drive (flat bezel) Super Multi-Burner Ultrabay Slim Drive (flat) Serial Hard Drive Ultrabay Slim Adptr (flat) 100GB Disk 9.5mm SATA150 (7200 rpm) USB Portable Diskette Drive USB Serial Parallel Adapter USB 2.0 Memory Key 1GB USB 2.0 Super Multi-Burner Drive Other options on O-Z60T sheet	73P3840 73P3842 73P3844 40Y8621 40Y8623 40Y8725 41N3013 05K9276 22P5298 40Y7421 40Y8638	Z60t Series Li-Ion Battery 4-cell 40Y6791 Z60t Series Li-Ion Battery 7-cell 40Y6793 Advanced Ultrabay Battery 3-cell 40Y6789 ThinkPad 90W AC Adapter 40Y7659 ThinkPad Essential Port Replicator 250510W ThinkPad Advanced Mini Dock 250410U ThinkPad Advanced Dock 250310U ThinkVision® L201p 20.1" Monitor (blk) 9320HB1 ThinkPad Adjustable Notebook Stand 40Y7676 ThinkPad Convertible Monitor Stand 40Y7620 Premiere Leather Carrying Case 10K0209 Other options at lenovo.com/options

See footnotes for important warranty information
US models announced January 24, 2005
US models withdrawn effective October 2006

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ThinkPad® Z60t (2512) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	Disk SATA GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Battery cells	Preload	Lim-ited warranty ¹²	Avail date
2512-11U	Black	Pentium® M 740	1.73	512MB	14.0" WXGA	GMA	40GB	Combo	11a/b/g ³²	None	None	None	4-cell	XP Pro	1-yr	Sep 05
2512-13U	Black	Celeron® M 360J	1.4	256MB	14.0" WXGA	GMA	40GB	Combo	11a/b/g	None	None	None	4-cell	XP Home	1-yr	Sep 05
2512-JGU	Black	Celeron® M 370	1.5	256MB	14.0" WXGA	GMA	40GB	Combo	11a/b/g	None	None	None	4-cell	XP Home	1-yr	Feb 06

Positioning Processor	<i>Stylish notebooks for work and life; thin and light; two-spindle system</i> Intel® Celeron M Processor 360J or 370 with XD Bit and 400MHz system bus or Intel® Pentium M Processor 740 (1.73GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus											SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)				
L2 cache Memory	Celeron M: 1 MB; Pentium M: 2MB; All: on die (at processor speed) / ECC 256MB or 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail											Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)				
Diskette drive	None standard / use optional USB-based diskette drive											Preloaded (all) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • Diskkeeper Lite • PC-Doctor™ • ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) License - CD not included (all) - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim															
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel											visit thinkpad.com/thinkvantage				
Serial ATA disk (SATA150)	40GB⁹ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™															
Display	Widescreen / 14.0" (356mm) WXGA (1280x768) TFT color / 200 nits / 15:9 ratio / stainless steel hinges / one hand activates dual latches / secure screen surround											Universal 90-watt AC adapter ThinkPad Roll Case (one-piece magnesium frame) PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz															
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys											ThinkPad notebooks implement ThinkVantage® technologies and design;				
TrackPoint®	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)															
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											visit thinkpad.com/thinkvantage				
Dimensions ³	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm															
Weight ²	with optical drive and battery: 4-cell : up to 4.8 lb (2.2kg)											ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166				
Case material	Black color; hybrid carbon fiber reinforced polymer (CFRP) material															
Battery - type	Lithium Ion 4-cell / intelligent / supports unique 2nd battery in Ultrabay Slim											ThinkPlus 2-year LOR 9x5 NBD 41C9167				
Battery - life ¹⁰	4-cell : up to 2.4 hr; Opt 7-cell : up to 5.0 hr; 7-cell plus Ultrabay Slim battery : up to 7.0 hr															
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graphics Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)											ThinkPlus 3-year LOR 9x5 NBD 41C9168				
PC Card slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door															
Ports	S-video out port (TV out) / Secure Digital (SD) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)											ThinkPlus 4-year LOR 9x5 NBD 41C9171				
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios															
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable											ThinkPlus 5-year LOR 9x5 NBD 41C9173				
11a/b/g ³²	11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adapter, Atheros AR5006EX chip															
WWAN	None											ThinkPlus 2-year P&L P/U Depot 41C9169				
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chipset															
Bluetooth™	None											ThinkPlus 3-year P&L P/U Depot 41C9170				
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE															
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack											ThinkPlus 4-year P&L P/U Depot 41C9172				
Security	Power-on password / hard disk password / supervisor password / security keyhole															
Security chip	Trusted Platform Module / Atmel chip / TCG 1.1-compliant											ThinkPlus 5-year P&L P/U Depot 41C9174				
Fingerprint reader	None															
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available															
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840			Z60t Series Li-Ion Battery 4-cell				40Y6791								
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842			Z60t Series Li-Ion Battery 7-cell				40Y6793								
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844			Advanced Ultrabay Battery 3-cell				40Y6789								
USB Portable Diskette Drive	05K9276			ThinkPad External Battery Charger				40Y7625								
USB Fingerprint Reader	73P4774			ThinkPad 90W AC Adapter				40Y7659								
USB 2.0/Analog Headset by Sennheiser	40Y8518			ThinkPad 90W AC/DC Combo Adapter				40Y7630								
USB 2.0 Lenovo Webcam	40Y8519			11a/b/g Wireless Mini PCI Express Adpr				40Y7026								
USB 2.0 Super Multi-Burner Drive	40Y8638			ThinkVision® E500 Projector				0038A05								
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637			ThinkVision C400 Wireless Projector				0039WA1								
USB 2.0 Portable 80GB Hard Disk	40Y8726			ThinkPad Nylon Carrying Case				10K0207								
USB 2.0 Memory Key 1GB	40Y7421			Premiere Leather Carrying Case				10K0209								
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621			ThinkPad Carrying Case - Expander				73P3597								
Super Multi-Burner Ultrabay Slim Drive (flat)	40Y8623			ThinkPad Carrying Case - Backpack				73P3599								
Serial Hard Drive Ultrabay Slim Adptr (flat)	40Y8725			ThinkPad Essential Port Replicator				250510W								
80GB Disk 9.5mm SATA150 (5400 rpm)	41N5662			ThinkPad Advanced Mini Dock				250410U								
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013			ThinkPad Advanced Dock				250310U								
Intel PRO/Wireless 3945ABG Mini PCIe	41N3008			ThinkPad Adjustable Notebook Stand				40Y7676								
Enh Perf Wireless Keyboard and Mouse	73P4067			ThinkPad Convertible Monitor Stand				40Y7620								
Preferred Pro USB Fingerprint Keyboard	73P4730			Lenovo L192 Wide 19" Monitor (black)				6920AB1								
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137			ThinkVision L192p 19" Monitor (black)				9419HB2								
Other options on O-Z60T sheet	Other options at lenovo.com/options															

See footnotes for important warranty information
US models announced September 20, 2005 or February 28, 2006
US models withdrawn effective June or October 2006

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ThinkPad® Z60t (2513) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Disk Graphics controller	SATA GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Bat-tery cells	Lim-Workhorse (W) mited warranty ¹²	Workhorse (W) Gbl (G) Avail date
2513-63U	Black	Pentium® M 740	1.73	512MB	14.0" WXGA	GMA	60GB	Combo	11a/b/g ³²		Blue	Finger	7-cell	3-yr	Sep 05
2513-6PU	Black	Celeron® M 360J	1.4	256MB	14.0" WXGA	GMA	40GB	Combo	11a/b/g				4-cell	3-yr	Sep 05
2513-6RU	Black	Pentium M 750	1.86	512MB	14.0" WXGA	GMA	60GB	DVD±RW	11a/b/g			Finger	7-cell	3-yr	W Sep 05
2513-79U	Black	Pentium M 750	1.86	512MB	14.0" WXGA	GMA	40GB	Combo	11a/b/g			Finger	7-cell	3-yr	W G Sep 05
2513-7BU	Black	Pentium M 750	1.86	512MB	14.0" WXGA	GMA	100GB	DVD±RW	11a/b/g	Verizon	Blue	Finger	7-cell	3-yr	W Oct 05
2513-7DU	Black	Pentium M 750	1.86	512MB	14.0" WXGA	GMA	40GB	Combo	11a/b/g	Verizon	Blue	Finger	7-cell	3-yr	W Oct 05
2513-7EU	Black	Pentium M 750	1.86	512MB	14.0" WXGA	GMA	60GB	DVD±RW	11a/b/g	Verizon	Blue	Finger	7-cell	3-yr	W Oct 05
2513-7FU	Silver	Pentium M 760	2.00	512MB	14.0" WXGA	GMA	60GB	Combo	11a/b/g			Finger	7-cell	3-yr	W Sep 05
2513-7GU	Silver	Pentium M 760	2.00	512MB	14.0" WXGA	GMA	80GB	DVD±RW	11a/b/g			Finger	7-cell	3-yr	W Sep 05
2513-MCU	Silver	Pentium M 780	2.26	1GB	14.0" WXGA	GMA	100GB	DVD±RW	11a/b/g		Blue	Finger	7-cell	3-yr	Jan 06
2513-MHU	Black	Pentium M 740	1.73	512MB	14.0" WXGA	GMA	60GB	Combo	11a/b/g				4-cell	3-yr	Jan 06
2513-MJU	Silver	Pentium M 760	2.00	512MB	14.0" WXGA	GMA	80GB	Combo	11a/b/g			Finger	7-cell	3-yr	Feb 06
Positioning Processor	Stylish notebooks for work and life; thin and light; two-spindle system Intel® Celeron M Processor 360J (1.4GHz) with XD Bit and 400MHz system bus or Intel® Pentium M Processor 740, 750, 760, or 780 with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 800 MHz system bus											SOFTWARE¹⁴			
L2 cache Memory	Celeron M: 1 MB ; Pentium M: 2MB ; All: on die (at processor speed) / ECC 256, 512MB or 1GB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in 1 socket / 1 socket avail											Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive EIDE Combo EIDE DVD±RW EIDE DVD±RW Ultrabay Slim Serial ATA disk (SATA150)	None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim <i>Some:</i> DVD and CD burner / Multi-Burner Plus / removable from Ultrabay Slim <i>MCU:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel 40GB⁸ (5400 rpm), 60GB (5400 rpm), 80GB (5400 rpm), 100GB (7200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™											Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • Diskeeper Lite • PC-Doctor™ • ThinkPad utilities • Adobe® Reader • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)			
Display	Widescreen / 14.0" (356mm) WXGA (1280x768) TFT color / 200 nits / 15:9 ratio / stainless steel hinges / one hand activates dual latches / secure screen surround											• License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz											ThinkPad notebooks implement ThinkVantage® technologies and design; visit thinkpad.com/thinkvantage			
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions											Universal 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) PC 2001-compliant ACPI 1.0b and 2.0-compliant CIM and DMI 2.0-compliant PXE 2.1-compliant ENERGY STAR®-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Dimensions ³ Weight ² Case material	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm with optical drive and battery: 4-cell: up to 4.8 lb (2.2kg); 7-cell: up to 5.1 lb (2.3 kg) <i>Some:</i> black color; hybrid carbon fiber reinforced polymer (CFRP) material <i>Some:</i> top cover: silver color; CFRP, aluminum, titanium material; bottom: black, CFRP											ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175			
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell or 7-cell / intelligent / supports unique 2nd battery in Ultrabay Slim 4-cell: up to 2.4 hr; 7-cell: up to 5.0 hr; 7-cell plus Ultrabay Slim battery: up to 7.0 hr											ThinkPlus 3-year LOR 9x5 NBD 41C9176			
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graphics Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoch® R5C841 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)											ThinkPlus 4-year LOR 9x5 NBD 41C9177			
PC Card slot Ports	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door S-video out port (TV out) / Secure Digital (SD) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)											ThinkPlus 5-year LOR 9x5 NBD 41C9179			
Wireless antenna Mini PCI Express 11a/b/g ³² WWAN ¹⁶	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adapter, Atheros AR5006EX chip <i>Some:</i> Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless 56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chipset <i>Some:</i> Bluetooth 2.0 wireless technology / USB 2.0 interface via ICH6-M / LED indicator Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack											ThinkPlus 4-year P&L P/U Depot 41C9178			
Modem Bluetooth™ Ethernet Audio	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.1-compliant <i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip											ThinkPlus 5-year P&L P/U Depot 41C9180			
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.1-compliant <i>Some:</i> Fingerprint reader on palm rest / swipe sensor / integrated with security chip											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Limited warranty ¹²	3-year/1-yr battery - EasyServ™.19 onsite pickup and delivery / service upgrades ²² avail														
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840		Z60t Series Li-Ion Battery 4-cell		40Y6791										
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842		Z60t Series Li-Ion Battery 7-cell		40Y6793										
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844		Advanced Ultrabay Battery 3-cell		40Y6789										
USB Portable Diskette Drive	05K9276		ThinkPad 90W AC Adapter		40Y7659										
USB Fingerprint Reader	73P4774		ThinkPad 90W AC/DC Combo Adapter		40Y7630										
USB 2.0 Memory Key 1GB	40Y7421		11a/b/g Wireless Mini PCI Express Adpr		40Y7026										
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637		ThinkVision® E500 Projector		0038A05										
USB 2.0 Super Multi-Burner Drive	40Y8638		ThinkPad Nylon Carrying Case		10K0207										
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621		ThinkPad Carrying Case - Expander		73P3597										
Super Multi-Burner Ultrabay Slim Drive (flat)	40Y8623		ThinkPad Essential Port Replicator		250510W										
Serial Hard Drive Ultrabay Slim Adptr (flat)	40Y8725		ThinkPad Advanced Mini Dock		250410U										
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013		ThinkPad Advanced Dock		250310U										
Intel PRO/Wireless 3945ABG Mini PCIe	41N3008		ThinkPad Adjustable Notebook Stand		40Y7676										
Kensington® MicroSaver® Security Cable	73P2582		Lenovo L192 Wide 19" Monitor (black)		6920AB1										
Other options on O-Z60T sheet															

See footnotes for important warranty information
US models announced September 20, 2005 and January 24 or February 28, 2006
US models withdrawn effective June, September, or October 2006

ThinkPad® Z60t (2513) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	Disk SATA GB ⁸	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Bat-tery cells	Lim-ited warranty ¹²	Education software	Avail date
2513-2GU	Black	Pentium® M 750	1.86	512MB	14.0" WXGA	GMA 60GB	Combo	11a/b/g ³²	None	None	None	7-cell	EasyServ	Yes	Sep 05

• **This model has an EasyServ™,19 onsite pickup and delivery 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Stylish notebooks for work and life; thin and light; two-spindle system</i>										SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Education software from Vital Source Technologies®: vitalsource KEY™ and Personal Portable library™ • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Symantec® Client Security • Diskeeper Lite • PC-Doctor™ • ThinkPad utilities • Adobe® Reader • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
L2 cache	Intel® Pentium M Processor 750 (1.86GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus														
Memory	2MB / on die (at processor speed) / ECC 512MB std / 2GB max ⁷ / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available														
Diskette drive Combo	None standard / use optional USB-based diskette drive DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim														
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel														
Serial ATA disk (SATA150)	60GB ⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™														
Display	Widescreen / 14.0" (358.4mm) WXGA (1280x768) TFT color / 200 nits / 15:9 ratio / stainless steel hinges / one hand activates dual latches / secure screen surround														
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz														
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys														
TrackPoint™	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm														
Weight ²	with optical drive and battery: 7-cell: up to 5.1 lb (2.3 kg)														
Case material	Black color; hybrid carbon fiber reinforced polymer (CFRP) material														
Battery - type	Lithium Ion 7-cell / intelligent / supports unique 2nd battery in Ultrabay Slim														
Battery - life ¹⁰	7-cell: up to 5.0 hr; 7-cell plus Ultrabay Slim battery: up to 7.0 hr														
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graphics Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)														
PC Card slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door														
Ports	S-video out port (TV out) / Secure Digital (SD) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios														
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable														
11a/b/g ³²	11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adapter, Atheros AR5006EX chip														
WWAN	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chipset														
Bluetooth™	None														
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE														
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Trusted Platform Module / Atmel chip / TCG 1.1-compliant														
Fingerprint reader	None														
Limited warranty ¹²	3-year/1-yr battery - EasyServ™,19 onsite pickup and delivery / service upgrades ²² avail														
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	Z60t Series Li-Ion Battery 4-cell	40Y6791												
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	Z60t Series Li-Ion Battery 7-cell	40Y6793												
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Advanced Ultrabay Battery 3-cell	40Y6789												
USB Portable Diskette Drive	05K9276	ThinkPad External Battery Charger	40Y7625												
USB Fingerprint Reader	73P4774	ThinkPad 90W AC Adapter	40Y7659												
USB Gemplus GemPC Smart Card Reader	41N3040	ThinkPad 90W AC/DC Combo Adapter	40Y7630												
USB 2.0 Memory Key 1GB	40Y7421	11a/b/g Wireless Mini PCI Express Adpr	40Y7026												
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ThinkVision® E500 Projector	0038A05												
USB 2.0 Super Multi-Burner Drive	40Y8638	ThinkPad Nylon Carrying Case	10K0207												
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	Premiere Leather Carrying Case	10K0209												
Super Multi-Burner Ultrabay Slim Drive (flat)	40Y8623	ThinkPad Carrying Case - Backpack	73P3599												
Serial Hard Drive Ultrabay Slim Adptr (flat)	40Y8725	Gemplus GemPC Smart Card Reader	41N3004												
60GB Hard Disk 9.5mm SATA (7200 rpm)	41N3012	ThinkPad Essential Port Replicator	250510W												
100GB Hard Disk 9.5mm SATA (5400 rpm)	40Y8721	ThinkPad Advanced Mini Dock	250410U												
100GB Hard Disk 9.5mm SATA (7200 rpm)	41N3013	ThinkPad Advanced Dock	250310U												
Intel PRO/Wireless 3945ABG Mini PCIe	41N3008	ThinkPad Adjustable Notebook Stand	40Y7676												
Optical 3-Button ScrollPoint Pro Mouse	31P8700	ThinkPad Convertible Monitor Stand	40Y7620												
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkVision L171 17" Monitor (black)	9417AB1												
Preferred Pro USB Fingerprint Keyboard	73P4730	ThinkVision L192p 19" Monitor (black)	9419HB2												
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	ThinkVision L201p 20.1" Monitor (black)	9320HB1												
Other options on O-Z60T sheet	Other options at lenovo.com/options														
ThinkPlus™,22 2-year LOR 9x5 NBD	41C9175														
ThinkPlus 3-year LOR 9x5 NBD	41C9176														
ThinkPlus 4-year LOR 9x5 NBD	41C9177														
ThinkPlus 5-year LOR 9x5 NBD	41C9179														
ThinkPlus 4-year P&L P/U Depot	41C9178														
ThinkPlus 5-year P&L P/U Depot	41C9180														
Post-warranty annual maintenance agreements at	lenovo.com/thinkplus/warranty														

See footnotes for important warranty information
US model announced September 20, 2005
US model withdrawn effective June 2006

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ThinkPad® Z60t (2514) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	Disk SATA GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Bat-tery cells	3-year Limited warranty ¹²	Avail date
2514-MHU	Black	Pentium® M 740	1.73	512MB	14.0" WXGA	GMA	60GB	Combo	11a/b/g ³²	None	None	None	4-cell	Onsite Jan 06	
2514-MJU	Silver	Pentium M 760	2.0	512MB	14.0" WXGA	GMA	80GB	Combo	11a/b/g	None	None	Finger	7-cell	Onsite Feb 06	

• These models have a limited onsite service²⁴ 3-year limited warranty

Positioning Processor	Stylish notebooks for work and life; thin and light; two-spindle system Intel® Pentium M Processor 740 or 760 with Enhanced Intel SpeedStep™ Technology ¹ , Execute Disable Bit, and 533MHz system bus											SOFTWARE¹⁴			
L2 cache	2MB / on die (at processor speed) / ECC											Windows XP Professional models			
Memory	512MB std / 2GB max ² / PC2-4200 533MHz DDR2 / non-parity / CL4 / dual-channel capable / two 200-pin SO-DIMM sockets / std mem in one socket / one socket available											- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive											Preloaded			
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim											• Rescue and Recovery™			
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel											• Access Connections™			
Serial ATA disk (SATA150)	60 or 80GB ⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™											• Client Security Solution™			
Display	Widescreen / 14.0" (356mm) WXGA (1280x768) TFT color / 200 nits / 15:9 ratio / stainless steel hinges / one hand activates dual latches / secure screen surround											• ThinkVantage Productivity Center			
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz											• ThinkVantage System Update			
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys											• Symantec® Client Security			
TrackPoint®	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)											• Diskkeeper Lite			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											• PC-Doctor™			
Dimensions ³	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm											• ThinkPad utilities			
Weight ²	with optical drive and battery: 4-cell: up to 4.8 lb (2.2 kg)											• Adobe® Reader			
Case material	Some: black color; hybrid carbon fiber reinforced polymer (CFRP) material											• Multimedia Center for Think Offerings			
Battery - type	Lithium Ion 4-cell or 7-cell / intelligent / supports unique 2nd battery in Ultrabay Slim											• Sonic RecordNOW and Drive Letter Access (combo, model)			
Battery - life ¹⁰	4-cell: up to 2.4 hr; 7-cell: up to 5 hr; 7-cell plus Ultrabay Slim battery: up to 7.0 hr											• InterVideo WinDVD (combo, model)			
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graphics Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)											License - CD not included			
PC Card slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door											- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Ports	S-video out port (TV out) / Secure Digital (SD) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios														
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable														
11a/b/g ³²	11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adapter, Atheros AR5006EX chip														
WWAN	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chipset														
Bluetooth™	None														
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE														
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Trusted Platform Module / Atmel chip / TCG 1.1-compliant														
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / integrated with security chip														
Limited warranty ¹²	3-year/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time														
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	Z60t Series Li-Ion Battery 4-cell	40Y6791	ThinkPad notebooks implement											
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	Z60t Series Li-Ion Battery 7-cell	40Y6793	ThinkVantage® technologies and design;											
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Advanced Ultrabay Battery 3-cell	40Y6789	visit thinkpad.com/thinkvantage											
USB Portable Diskette Drive	05K9276	ThinkPad External Battery Charger	40Y7625												
USB Serial Parallel Adapter	22P5298	ThinkPad 90W AC Adapter	40Y7659												
USB Fingerprint Reader	73P4774	ThinkPad 90W AC/DC Combo Adapter	40Y7630												
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	11a/b/g Wireless Mini PCI Express Adpr	40Y7026												
USB 2.0 Portable 80GB Hard Disk	40Y8726	ThinkVision® E500 Projector	0038A05												
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad Nylon Carrying Case	10K0207												
USB 2.0 Super Multi-Burner Drive	40Y8638	Premiere Leather Carrying Case	10K0209												
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad Carrying Case - Expander	73P3597												
Super Multi-Burner Ultrabay Slim Drive (flat)	40Y8623	ThinkPad Carrying Case - Backpack	73P3599												
Serial Hard Drive Ultrabay Slim Adptr (flat)	40Y8725	ThinkPad Essential Port Replicator	250510W												
100GB Disk 9.5mm SATA150 (5400 rpm)	40Y8721	ThinkPad Advanced Mini Dock	250410U												
Intel PRO/Wireless 3945ABG Mini PCIe	41N3008	ThinkPad Advanced Dock	250310U												
Optical 3-Button Travel Wheel Mouse	31P7410	ThinkPad Adjustable Notebook Stand	40Y7676												
USB Travel Keyboard with UltraNav®	31P9490	Lenovo L192 Wide 19" Monitor (black)	6920AB1												
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkVision L192p 19" Monitor (black)	9419HB2												
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	ThinkVision L201p 20.1" Monitor (black)	9320HB1												
Other options on O-Z60T sheet		Other options at lenovo.com/options		Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty											

See footnotes for important warranty information
US models announced January 24 or February 28, 2006
US models withdrawn effective October 2006

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ThinkPad® Z60t (2514) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Disk Graphics controller	SATA GB ⁸	Optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Finger print reader	Bat-tery cells	Lim-ited warranty ¹²	Education software	Avail date
2514-2GU Black	Pentium® M 750	1.86	512MB	14.0" WXGA	GMA	60GB	Combo	11a/b/g ³²	None	None	None	7-cell	Onsite	Yes	Sep 05

• **This model has a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Stylish notebooks for work and life; thin and light; two-spindle system</i>										SOFTWARE¹⁴				
L2 cache	Intel® Pentium M Processor 750 (1.86GHz) with Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 533MHz system bus										Windows XP Professional models				
Memory	2MB / on die (at processor speed) / ECC										- Microsoft® Windows® XP Professional ²⁰ (Service Pack 2)				
Diskette drive	None standard / use optional USB-based diskette drive										↔ Disk-to-Disk Recovery (in hidden protected area)				
Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										Preloaded				
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel										• Education software from Vital Source Technologies®: vidualsource KEY™ and Personal Portable library™				
Serial ATA disk (SATA150)	60GB ⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™										• Rescue and Recovery™				
Display	Widescreen / 14.0" (358.4mm) WXGA (1280x768) TFT color / 200 nits / 15:9 ratio / stainless steel hinges / one hand activates dual latches / secure screen surround										• Access Connections™				
Graphics	Intel Graphics Media Accelerator 900 (GMA 900) / integrated graphics in 915GM GMCH / uses main memory (up to 128MB with 256MB+) / 200MHz										• Client Security Solution™				
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys										• ThinkVantage Productivity Center				
TrackPoint™	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)										• ThinkVantage System Update				
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• Symantec® Client Security				
Dimensions ³	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm										• Diskkeeper Lite				
Weight ²	with optical drive and battery: 7-cell: up to 5.1 lb (2.3 kg)										• PC-Doctor™				
Case material	Black color; hybrid carbon fiber reinforced polymer (CFRP) material										• ThinkPad utilities				
Battery - type	Lithium Ion 7-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										• Adobe® Reader				
Battery - life ¹⁰	7-cell: up to 5.0 hr; 7-cell plus Ultrabay Slim battery: up to 7.0 hr										• Multimedia Center for Think Offerings				
Architecture	Mobile Intel 915GM Express Chipset / 82915GM Graphics Memory Controller Hub / 82801FBM ICH6-M I/O Controller Hub (SATA150, ATA-100 EIDE, PCI Express x1, PCI bus, ethernet, USB, [Bluetooth], [fingerprint]) / PCI bus (Ricoh® R5C841 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® 97SC3201TPM)										• Sonic RecordNOW and Drive Letter Access (combo, DVD±RW)				
PC Card slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door										• InterVideo WinDVD (combo, DVD±RW models)				
Ports	S-video out port (TV out) / Secure Digital (SD) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)										License - CD not included				
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios										- Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client				
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable														
11a/b/g ³²	11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adapter, Atheros AR5006EX chip														
WWAN	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chipset														
Bluetooth™	None														
Ethernet	Gigabit ethernet on systemboard / Broadcom BCM5751M (MAC/PHY) / PCIe x1 / PXE														
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers, 1 watt / volume up, down, mute buttons / internal microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Trusted Platform Module / Atmel chip / TCG 1.1-compliant														
Fingerprint reader	None														
Limited warranty ¹²	3-years/1-yr battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time														
256MB PC2-4200 DDR2 NP CL4 SOD	73P3840	Z60t Series Li-Ion Battery 4-cell	40Y6791	ThinkPad notebooks implement ThinkVantage™ technologies and design; visit thinkpad.com/thinkvantage											
512MB PC2-4200 DDR2 NP CL4 SOD	73P3842	Z60t Series Li-Ion Battery 7-cell	40Y6793												
1GB PC2-4200 DDR2 NP CL4 SOD	73P3844	Advanced Ultrabay Battery 3-cell	40Y6789												
USB Portable Diskette Drive	05K9276	ThinkPad External Battery Charger	40Y7625												
USB Serial Parallel Adapter	22P5298	ThinkPad 90W AC Adapter	40Y7659												
USB Fingerprint Reader	73P4774	ThinkPad 90W AC/DC Combo Adapter	40Y7630												
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	11a/b/g Wireless Mini PCI Express Adpr	40Y7026												
USB 2.0 Portable 80GB Hard Disk	40Y8726	ThinkVision® E500 Projector	0038A05												
USB 2.0 Memory Key 1GB	40Y7421	ThinkPad Nylon Carrying Case	10K0207												
USB 2.0 Super Multi-Burner Drive	40Y8638	Premiere Leather Carrying Case	10K0209												
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad Carrying Case - Expander	73P3597												
Super Multi-Burner Ultrabay Slim Drive (flat)	40Y8623	ThinkPad Carrying Case - Backpack	73P3599												
Serial Hard Drive Ultrabay Slim Adptr (flat)	40Y8725	ThinkPad Essential Port Replicator	250510W												
100GB Hard Disk 9.5mm SATA (5400 rpm)	40Y8721	ThinkPad Advanced Mini Dock	250410U												
Intel PRO/Wireless 3945ABG Mini PCIe	41N3008	ThinkPad Advanced Dock	250310U												
Optical 3-Button Travel Wheel Mouse	31P7410	ThinkPad Adjustable Notebook Stand	40Y7676												
USB Travel Keyboard with UltraNav®	31P9490	ThinkVision L171 17" Monitor (black)	9417AB1												
Enh Perf Wireless Keyboard and Mouse	73P4067	ThinkVision L192p 19" Monitor (black)	9419HB2												
Verizon Wireless V620 WWAN PC Card ²⁵	40Y9137	ThinkVision L201p 20.1" Monitor (black)	9320HB1												
Other options on O-Z60T sheet		Other options at lenovo.com/options		Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty											

See footnotes for important warranty information
US model announced September 20, 2005
US model withdrawn effective June 2006

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ThinkPad® Z61t (9440) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Disk SATA GB ⁶	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Camera	Finger print reader	Security 1394 chip	Workhorse (W) Gbl (G) Avail date
9440-25U Silver	Celeron® M 410	1.46	512M	14.1" WXGA	60GB Combo		11a/b/g ³²				Finger 1394	Yes	Home May 06
9440-25U Black	Celeron M 410	1.46	256M	14.1" WXGA	40GB Combo		11a/b/g						Home GMay 06
9440-A4U Black	Celeron M 420	1.60	256M	14.0" WXGA	40GB Combo		11a/b/g						Pro WG Oct 06
9440-A5U Black	Celeron M 420	1.60	256M	14.0" WXGA	40GB Combo		11a/b/g				1394	Yes	Pro WG Oct 06
9440-26U Silver	Core Duo T2300E	1.66	512M	14.1" WXGA	60GB Combo		*Intel 11a/b/g ³²				Finger 1394	Yes	Pro W May 06
9440-27U Silver	Core Duo T2300E	1.66	512M	14.0" WXGA	60GB Combo		*Intel 11a/b/g				Finger 1394	Yes	Pro W May 06
9440-27U Silver	Core Duo T2300E	1.66	512M	14.1" WXGA	80GB Combo		*Intel 11a/b/g	Verizon Blue			Finger 1394	Yes	Pro W May 06
9440-28U Silver	Core Duo T2300E	1.66	512M	14.1" WXGA	80GB DVD±RW		*Intel 11a/b/g				Finger 1394	Yes	Pro W May 06
9440-29U Silver	Core Duo T2300E	1.66	512M	14.1" WXGA+	100G DVD±RW		*Intel 11a/b/g			Cam	Finger 1394	Yes	Pro W May 06
9440-2AU Silver	Core Duo T2300E	1.66	1GB	14.1" WXGA	100G DVD±RW		*Intel 11a/b/g	Verizon Blue			Finger 1394	Yes	Pro W May 06
9440-2BU Silver	Core Duo T2300E	1.66	1GB	14.1" WXGA+	100G DVD±RW		*Intel 11a/b/g	Verizon Blue	Cam		Finger 1394	Yes	Pro W May 06
9440-2CU Silver	Core Duo T2500	2.00	1GB	14.1" WXGA+	100G DVD±RW		*Intel 11a/b/g	Verizon Blue	Cam		Finger 1394	Yes	Pro May 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty

Positioning Processor	Widescreen multimedia; two spindles Intel® Celeron M Processor 410 or 420 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Duo processor T2300E or T2500 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB shared L2 cache										SOFTWARE¹⁴		
Memory	256MB, 512MB, or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / 512MB models: std mem in one socket; 1 socket available / 1GB models: std memory in 2 sockets; none available										Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery (in hidden protected area)		
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										Preloaded (all) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)		
EIDE DVD±RW	Some: DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim												
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel												
Serial ATA disk (SATA150)	40, 60, 80, or 100GB ⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™												
Display (anti-glare)	Some: Widescreen / 14.0" (356mm) WXGA (1280x768) TFT color / 200 nits / 15:9 Some: Widescreen / 14.1" (358mm) WXGA (1280x800) TFT color / 185 nits / 16:10 Some: Widescreen / 14.1" (358mm) WXGA+ (1440x900) TFT color / 200 nits / 16:10 All: stainless steel hinges / one hand activates dual latches												
Graphics	Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz												
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys												
TrackPoint®	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm												
Weight ²	with optical drive and battery: 4-cell black: 4.63 lb (2.1kg); 4-cell titanium: 4.88/4.92 lb (2.2/2.2kg)												
Case material	Some: black color; hybrid carbon fiber reinforced polymer (CFRP) material Some: top cover: silver color; CFRP, aluminum, titanium material; bottom: black, CFRP												
Battery - type	Lithium Ion 4-cell / intelligent / supports unique 2nd battery in Ultrabay Slim												
Battery - life ¹⁰	Celeron 4-cell: up to 2.3 hr; Core 4-cell: up to 3.7 hr; optional 7-cell: up to 6.25 hr												
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)												
PC Card slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door												
Ports	3-in-1 Multicard Reader (MultiMedia Card, Secure Digital, xD-Picture Card™) / S-external db port (TV out) / some: IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / all except 2SU: infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)												
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios												
Integrated camera	Some: camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0												
Mini PCI Express	One (2SU) or two Mini PCI Express slots / only 802.11 wireless is customer upgradable												
11a/b/g ³²	Some: 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adp, Atheros AR5006EX												
Intel 11a/b/g ³²	Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG												
WWAN ¹⁶	Some: Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless 56K ⁹ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip												
Modem	Some: Bluetooth 2.0 wireless technology / USB 2.0 interface via ICH7-M / LED indicator										Supports ThinkVantage® technologies		
Bluetooth™	Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE										Universal 65-watt AC adapter		
Ethernet	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / 2SU: mono microphone; others: stereo microphone / microphone input jack / headphone jack										ThinkPad Roll Case (one-piece magnesium frame)		
Audio	Power-on password / hard disk password / supervisor password / security keyhole										RoHS-compliant		
Security	Some: Trusted Platform Module / Atmel chip / TCG 1.2-compliant										International Warranty Service ¹⁷		
Security chip	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip										24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²		
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip												
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available										ThinkPlus™ ²² 1-year LOR 9x5 NBD 41C9166		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733			Z60t Series Li-Ion Battery 4-cell			40Y6791			ThinkPlus 2-year LOR 9x5 NBD			
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734			Z60t Series Li-Ion Battery 7-cell			40Y6793			41C9167			
2GB PC2-5300 DDR2 SODIMM	40Y7735			Advanced Ultrabay Battery 3-cell			40Y6789			ThinkPlus 3-year LOR 9x5 NBD			
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643			ThinkPad Essential Port Replicator			250510W			41C9168			
100GB Disk 9.5mm SATA 150 (7200 rpm)	41N3013			ThinkPad Advanced Mini Dock			250410U			Other ThinkPlus services at			
Other accessories on O-Z60T sheet				ThinkPad Advanced Dock			250310U			lenovo.com/thinkplus/warranty			

See footnotes for important warranty information * Powered by Intel Centrino® Duo processor technology
US models announced May 16, May 30, or October 17, 2006
US models withdrawn effective February, April, or September 2007

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ThinkPad® Z61t (9440) - TopSeller (October 2006) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Disk SATA GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Blue-tooth	Cam-era	Finger print reader	One Note CD	Workhorse Global	Avail date
9440-A8U <i>Silver</i>	Core 2 Duo T5500	1.66	1GB	14.0" WXGA	80GB	Combo	* Intel 11a/b/g ³²		Blue	Finger	CD	No	Oct 06	
9440-ACU <i>Silver</i>	Core 2 Duo T5500	1.66	1GB	14.1" WXGA+	120GB	DVD±RW	* Intel 11a/b/g		Blue	Cam	Finger	CD	No	Oct 06
9440-ADU <i>Silver</i>	Core 2 Duo T7200	2.00	2GB	14.1" WXGA+	120GB	DVD±RW	* Intel 11a/b/g	Verizon	Blue	Cam	Finger	CD	No	Oct 06
9440-AMU <i>Silver</i>	Core 2 Duo T7200	2.00	2GB	14.0" WXGA	120GB	DVD±RW	ThinkPad 11n ²⁸		Blue	Cam	Finger		No	Oct 06

• **These small and medium business (SMB) models are part of the US TopSeller™ Program**
• **These models have a 1-year limited warranty**

Positioning Processor	<i>Widescreen multimedia; two spindles</i> Intel® Core™ 2 Duo processor T5500 or T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, and 667MHz system bus; <i>T5500: 2MB shared L2 cache; T7200: 4MB shared L2 cache</i>	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↔ Disk-to-Disk Recovery (in hidden protected area) Preloaded • <i>Model A8U/ACU/ADU:</i> Microsoft Office OneNote® 2003 • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) CD included • <i>Model A8U/ACU/ADU:</i> Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
Memory	1GB or 2GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / <i>All:</i> std memory in 2 sockets; no sockets available	
Diskette drive	None standard / use optional USB-based diskette drive	
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim	
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim	
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel	
Serial ATA disk (SATA150)	80GB or 120GB⁹ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™	
Display (anti-glare)	<i>Some:</i> Widescreen / 14.0" (356mm) WXGA (1280x768) TFT color / 200 nits / 15:9 <i>Some:</i> Widescreen / 14.1" (358mm) WXGA+ (1440x900) TFT color / 200 nits / 16:10 <i>All:</i> stainless steel hinges / one hand activates dual latches	
Graphics	Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz / DVI pass-through support to optional Advanced Mini Dock and Advanced Dock	
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys	
TrackPoint®	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm	
Weight ²	with optical drive and battery: <i>4-cell titanium:</i> starting at 4.88/4.92 lb (2.2/2.2kg)	
Case material	<i>Top cover:</i> silver color; CFRP, aluminum, titanium material; <i>Bottom:</i> black, CFRP	
Battery - type	Lithium Ion 4-cell / intelligent / supports unique 2nd battery in Ultrabay Slim	
Battery - life ¹⁰	<i>4-cell:</i> up to 3.7 hr; <i>optional 7-cell:</i> up to 6.25 hr	
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)	
PC Card slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door	
Ports	3-in-1 Multicard Reader (MultiMedia Card, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)	
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios	
Integrated camera	<i>Some:</i> camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0	
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable	
Intel 11a/b/g ³²	<i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG	
ThinkPad 11n ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , ThinkPad 11a/b/g/n Mini PCI Express Adapter, Atheros AR5008 chipset, MIMO 2x3	
WWAN ¹⁶	<i>Some:</i> Wireless WAN, Sierra Wireless 1xEV-DO Network Adapter, Mini PCIe Adapter, EV-DO/1xRTT, WWAN antenna on display, service contract reqd with Verizon® Wireless	
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip	
Bluetooth™	Bluetooth 2.0 wireless technology / USB 2.0 interface via ICH7-M / LED indicator	
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE	
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / 2SU: mono microphone; <i>others:</i> stereo microphone / microphone input jack / headphone jack	
Security	Power-on password / hard disk password / supervisor password / security keyhole	
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant	
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip	
Limited warranty ¹²	1-year - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² available	

512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	Z60t Series Li-Ion Battery 4-cell	40Y6791
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60t Series Li-Ion Battery 7-cell	40Y6793
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad External Battery Charger	40Y7625
USB 2.0 Lenovo Webcam	40Y8519	ThinkPad 90W AC/DC Combo Adapter	40Y7630
USB 2.0 Security Memory Key 4GB	41U5120	11a/b/g Wireless Mini PCI Express Adpr	40Y7026
USB 2.0 Portable 120GB Hard Disk	41N8379	Intel PRO/Wireless 3945ABG Mini PCIe	41N3008
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	Lenovo M500 Projector	0037A05
USB 2.0 Super Multi-Burner Drive	41N5565	Premiere Leather Carrying Case	10K0209
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad Essential Port Replicator	250510W
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad Advanced Mini Dock	250410U
Preferred Pro USB Fingerprint Keyboard	73P4730	ThinkPad Advanced Dock	250310U
Other accessories on O-Z60T sheet		Other accessories at lenovo.com/accessories	

ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166
ThinkPlus 2-year LOR 9x5 NBD 41C9167
ThinkPlus 3-year LOR 9x5 NBD 41C9168
ThinkPlus 4-year LOR 9x5 NBD 41C9171
ThinkPlus 2-year P&L P/U Depot 41C9169
ThinkPlus 3-year P&L P/U Depot 41C9170
Other ThinkPlus services at lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced October 17, 2006
US models withdrawn effective April or September 2007

* Powered by Intel Centrino® Duo processor technology

ThinkPad® Z61t (9441) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	Disk SATA GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Finger print reader	1394 port	Security chip	Battery cells	Lim- mited warranty ¹²	Workhorse (W) Gbl (G) Avail date
9441-4FU	Silver	Core™ Duo T2400	1.83	512MB	14.1" WXGA	GMA	60GB	Combo *	Intel 11a/b/g ³²	Finger	1394	Yes	4-cell	1-yr	W May 06
9441-4GU	Black	Core Duo T2400	1.83	512MB	14.1" WXGA	GMA	80GB	Combo *	Intel 11a/b/g	Finger	1394	Yes	4-cell	1-yr	W May 06
9441-4HU	Silver	Celeron® M 420	1.60	512MB	14.1" WXGA	GMA	60GB	Combo	Intel 11a/b/g				7-cell	1-yr	W May 06
Positioning Processor	<i>Widescreen multimedia; two spindles</i> Intel® Celeron M Processor 420 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Duo processor T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache											SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)			
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / std memory in 1 socket / 1 socket available											Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo models) • InterVideo WinDVD (combo models)			
Diskette drive	None standard / use optional USB-based diskette drive											License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim														
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel											Supports ThinkVantage® technologies			
Serial ATA disk (SATA150)	60 or 80GB ⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™														
Display (anti-glare)	Widescreen / 14.1" (358mm) WXGA (1280x800) TFT color / 185 nits / 16:10 ratio / stainless steel hinges / one hand activates dual latches											Universal 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Graphics	Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz														
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys											ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166			
TrackPoint®	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											ThinkPlus 2-year LOR 9x5 NBD 41C9167			
Dimensions ³	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm														
Weight ²	with optical drive and battery: 4-cell black: starting at 4.17 lb/4.57 lb (1.9kg/2.1kg); 4-cell titanium: starting at 4.42/4.81 lb (2.0/2.2kg); 7-cell titanium: starting at 4.77/5.17 lb											ThinkPlus 3-year LOR 9x5 NBD 41C9168			
Case material	Some: black color; hybrid carbon fiber reinforced polymer (CFRP) material Some: top cover: silver color; CFRP, aluminum, titanium material; bottom: black, CFRP														
Battery - type	Lithium Ion 4-cell or 7-cell / intelligent / supports unique 2nd battery in Ultrabay Slim											ThinkPlus 4-year LOR 9x5 NBD 41C9171			
Battery - life ¹⁰	4-cell: up to 3.7 hr; Celeron 7-cell: up to 3.9 hr; 7-cell plus Ultrabay battery: up to 8.0 hr														
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)											ThinkPlus 5-year LOR 9x5 NBD 41C9173			
PC Card slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door														
Ports	3-in-1 Multicard Reader (MultiMedia Card, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / 4FU/4GU: IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / 4FU/4GU: infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)											ThinkPlus 2-year P&L P/U Depot 41C9169			
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios														
Integrated camera	None											ThinkPlus 3-year P&L P/U Depot 41C9170			
Mini PCI Express	One (4HU) or two Mini PCI Express slots / only 802.11 wireless is customer upgradable														
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG											ThinkPlus 4-year P&L P/U Depot 41C9172			
WWAN	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip											ThinkPlus 5-year P&L P/U Depot 41C9174			
Bluetooth™	None														
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE											Other accessories on O-Z60T sheet			
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / 4HU: mono microphone; others: stereo microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole											Other accessories at lenovo.com/accessories			
Security chip	Some: Trusted Platform Module / Atmel chip / TCG 1.2-compliant														
Fingerprint reader	Some: Fingerprint reader on palm rest / swipe sensor / supports the security chip											See footnotes for important warranty information US models announced May 16, 2006 US models withdrawn effective April or September 2007			
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available														

See footnotes for important warranty information
US models announced May 16, 2006
US models withdrawn effective April or September 2007

* Powered by Intel Centrino® Duo processor technology

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(MN2-1) September 2007

ThinkPad® Z61t (9441) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	Disk SATA GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Finger print reader	1-year limited warranty ¹²	Workhorse (W) Education Gbl	(G) Avail date
9441-E1U Black	Core™ Duo T2300E	1.66	512MB	14.1" WXGA	GMA 60GB	Combo	11a/b/g ³²	Finger	EasyServ	Yes	W	May 06
9441-E2U Black	Core Duo T2400	1.83	512MB	14.1" WXGA	GMA 60GB	DVD±RW *	Intel 11a/b/g ³²	Finger Cam	EasyServ	Yes	W	May 06
9441-E3U Silver	Core Duo T2300E	1.66	512MB	14.1" WXGA	GMA 60GB	Combo	11a/b/g	Finger	EasyServ	Yes	W	May 06
9441-E4U Silver	Core Duo T2400	1.83	512MB	14.1" WXGA	GMA 60GB	DVD±RW *	Intel 11a/b/g	Finger Cam	EasyServ	Yes	W	May 06
<p>• These models have an EasyServ™¹⁹ onsite pickup and delivery 1-year limited warranty These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.</p>												
Positioning Processor	<i>Widescreen multimedia; two spindles</i> Intel® Core Duo processor T2300E or T2400 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache									SOFTWARE¹⁴		
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available									Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery Preloaded • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)		
Diskette drive EIDE Combo EIDE DVD±RW Ultrabay Slim Serial ATA disk (SATA150)	None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/8X ²¹ speed / removable from Ultrabay Slim <i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel 60GB⁹ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™											
Display (anti-glare)	Widescreen / 14.1" (358mm) WXGA (1280x800) TFT color / 185 nits / 16:10 ratio / stainless steel hinges / one hand activates dual latches											
Graphics	Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz											
Keyboard TrackPoint™ ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³ Weight ²	<i>(WxDxH):</i> 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm with optical drive and battery: <i>4-cell black:</i> starting at 4.17 lb/4.57 lb (1.9kg/2.1kg); <i>4-cell titanium:</i> starting at 4.42/4.81 lb (2.0/2.2kg)											
Case material	<i>Some:</i> black color; hybrid carbon fiber reinforced polymer (CFRP) material <i>Some:</i> top cover: silver color; CFRP, aluminum, titanium material; bottom: black, CFRP											
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell / intelligent / supports unique 2nd battery in Ultrabay Slim <i>4-cell:</i> up to 3.7 hr; <i>7-cell:</i> up to 6.25 hr; <i>7-cell plus Ultrabay Slim battery:</i> up to 8.25 hr											
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PC18412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)											
PC Card slot Ports	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door 3-in-1 Multicard Reader (MultiMedia Card, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)											
Wireless antenna Integrated camera	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios <i>Some:</i> camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0											
Mini PCI Express 11a/b/g ³² Intel 11a/b/g ³² WWAN	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable <i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adp, Atheros AR5006EX <i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG None											
Modem Bluetooth™ Ethernet	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip None Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE											
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / stereo microphone / microphone input jack / headphone jack											
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on palm rest / swipe sensor / supports the security chip											
Limited warranty ¹²	1-year - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² available											
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	Z60t Series Li-Ion Battery 4-cell		40Y6791								
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60t Series Li-Ion Battery 7-cell		40Y6793								
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell		40Y6789								
USB Portable Diskette Drive	05K9276	ThinkPad External Battery Charger		40Y7625								
USB Serial Parallel Adapter	22P5298	ThinkPad 90W AC/DC Combo Adapter		40Y7630								
USB Gemplus GemPC Smart Card Reader	41N3040	11a/b/g Wireless Mini PCI Express Adpr		40Y7026								
USB 2.0 Lenovo Webcam	40Y8519	Intel PRO/Wireless 3945ABG Mini PCIe		41N3008								
USB 2.0 Security Memory Key 4GB	41U5120	Lenovo M500 Projector		0037A05								
USB 2.0 Super Multi-Burner Drive	41N5565	Premiere Leather Carrying Case		10K0209								
USB 2.0 Portable 120GB Hard Disk	41N8379	ThinkPad Carrying Case - Expander		73P3597								
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad Carrying Case - BackPack		73P3599								
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad Essential Port Replicator		250510W								
Serial Hard Drive Ultrabay Slim Adptr (flat)	40Y8725	ThinkPad Advanced Mini Dock		250410U								
80GB Disk 9.5mm SATA150 (5400 rpm)	41N5662	ThinkPad Advanced Dock		250310U								
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	Lenovo L192 Wide 19" Monitor (black)		6920AB1								
Preferred Pro USB Fingerprint Keyboard	73P4730	ThinkVision® L192p 19" Monitor (black)		9419HC2								
Other accessories on O-Z60T sheet	Other accessories at lenovo.com/accessories											
												ThinkPlus™ ²² 1-year LOR 9x5 NBD 41C9166
												ThinkPlus 2-year LOR 9x5 NBD 41C9167
												ThinkPlus 3-year LOR 9x5 NBD 41C9168
												ThinkPlus 4-year LOR 9x5 NBD 41C9171
												ThinkPlus 5-year LOR 9x5 NBD 41C9173
												ThinkPlus 2-year P&L P/U Depot 41C9169
												ThinkPlus 3-year P&L P/U Depot 41C9170
												ThinkPlus 4-year P&L P/U Depot 41C9172
												ThinkPlus 5-year P&L P/U Depot 41C9174

See footnotes for important warranty information
US models announced May 16 or 30, 2006
US models withdrawn effective February, April, or September 2007

* Powered by Intel Centrino® Duo processor technology

ThinkPad® Z61t (9442) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	Disk SATA GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Finger print reader	Camera	Security chip	Battery cells	Lim- mited warranty ¹²	Workhorse (W) Gbl (G) Avail date
9442-4FU	Silver	Core™ Duo T2400	1.83	512MB	14.1" WXGA	GMA 60GB	Combo *	Intel 11a/b/g ³²	Finger	Yes	4-cell	3-yr	W	May 06	
9442-4GU	Black	Core Duo T2400	1.83	512MB	14.1" WXGA	GMA 80GB	Combo *	Intel 11a/b/g	Finger	Yes	4-cell	3-yr	W	May 06	
9442-88U	Black	Core Duo T2400	1.83	512MB	14.1" WXGA+	GMA 80GB	Combo *	Intel 11a/b/g	Finger	Yes	4-cell	3-yr	W	May 06	
9442-89U	Silver	Core Duo T2400	1.83	512MB	14.1" WXGA+	GMA 60GB	Combo *	Intel 11a/b/g	Finger	Yes	4-cell	3-yr	W	May 06	
<p>• These models have a 3-year limited warranty</p>															
Positioning Processor	<p>Widescreen multimedia; two spindles Intel® Core Duo processor T2400 with dual-core, Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache</p>										<p>SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)</p>				
Memory	<p>512MB std / 4GB max³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / std memory in 1 socket / 1 socket available</p>										<p>Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskkeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo models) • InterVideo WinDVD (combo models)</p>				
Diskette drive	None standard / use optional USB-based diskette drive														
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim														
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel														
Serial ATA disk (SATA150)	60 or 80GB ⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™														
Display (anti-glare)	Some: Widescreen / 14.1" (358mm) WXGA (1280x800) TFT color / 185 nits / 16:10 Some: Widescreen / 14.1" (358mm) WXGA+ (1440x900) TFT color / 200 nits / 16:10 All: stainless steel hinges / one hand activates dual latches														
Graphics	Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz														
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys														
TrackPoint®	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm														
Weight ²	with optical drive and battery: 4-cell black: starting at 4.17 lb/4.57 lb (1.9kg/2.1kg); 4-cell titanium: starting at 4.42/4.81 lb (2.0/2.2kg)														
Case material	Some: black color; hybrid carbon fiber reinforced polymer (CFRP) material Some: top cover: silver color; CFRP, aluminum, titanium material; bottom: black, CFRP														
Battery - type	Lithium Ion 4-cell / intelligent / supports unique 2nd battery in Ultrabay Slim														
Battery - life ¹⁰	4-cell: up to 3.7 hr; 7-cell: up to 6.25 hr; 7-cell plus Ultrabay Slim battery: up to 8.25 hr														
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)														
PC Card slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door														
Ports	3-in-1 Multicard Reader (MultiMedia Card, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)														
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios														
Integrated camera	Some: camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0														
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable														
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG														
WWAN	None														
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip														
Bluetooth™	None														
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE														
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / stereo microphone / microphone input jack / headphone jack														
Security	Power-on password / hard disk password / supervisor password / security keyhole														
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant														
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip														
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail														
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	Z60t Series Li-Ion Battery 4-cell	40Y6791												
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60t Series Li-Ion Battery 7-cell	40Y6793												
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789												
USB Portable Diskette Drive	05K9276	ThinkPad External Battery Charger	40Y7625												
USB Fingerprint Reader	41U3167	ThinkPad 65W AC Adapter	40Y7696												
USB Gemplus GemPC Smart Card Reader	41N3040	ThinkPad 90W AC Adapter	40Y7659												
USB 2.0 Lenovo Multimedia Headset	40Y8518	ThinkPad 90W AC/DC Combo Adapter	40Y7630												
USB 2.0 Security Memory Key 2GB	41U5119	11a/b/g Wireless Mini PCI Express Adpr	40Y7026												
USB 2.0 Security Memory Key 4GB	41U5120	Lenovo C500 Projector	0039A05												
USB 2.0 Portable 120GB Hard Disk	41N8379	Premiere Leather Carrying Case	10K0209												
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Carrying Case - Expander	73P3597												
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad Carrying Case - Backpack	73P3599												
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad Essential Port Replicator	250510W												
Serial Hard Drive Ultrabay Slim Adptr (flat)	40Y8725	ThinkPad Advanced Mini Dock	250410U												
80GB Disk 9.5mm SATA150 (5400 rpm)	41N5662	ThinkPad Advanced Dock	250310U												
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	Lenovo L192 Wide 19" Monitor (black)	6920AB1												
Preferred Pro USB Fingerprint Keyboard	73P4730	ThinkVision® L192p 19" Monitor (black)	9419HC2												
Other accessories on O-Z60T sheet	Other accessories at lenovo.com/accessories														
<p>Supports ThinkVantage® technologies</p> <p>Universal 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free warranty support during the warranty¹²</p> <p>ThinkPlus™.22 2-year LOR 9x5 NBD 41C9175</p> <p>ThinkPlus 3-year LOR 9x5 NBD 41C9176</p> <p>ThinkPlus 4-year LOR 9x5 NBD 41C9177</p> <p>ThinkPlus 5-year LOR 9x5 NBD 41C9179</p> <p>ThinkPlus 4-year P&L P/U Depot 41C9178</p> <p>ThinkPlus 5-year P&L P/U Depot 41C9180</p> <p>Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty</p>															

See footnotes for important warranty information
US models announced May 16, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo processor technology

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(MN2-3) September 2007

ThinkPad® Z61t (9442) - October 2006 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	Disk SATA GB ^a	EIDE optical	Mini PCIe 802.11 wireless	Finger print reader	Camera	Battery cells	Workhorse (W) Limited Gbl (G) Avail date
9442-P6U	Black	Core 2 Duo T7200	2.00	1GB	14.0" WXGA	GMA 80GB	DVD±RW	* Intel 11a/b/g ³²	Finger	Cam	4-cell	3-yr	W G Oct 06
9442-PMU	Black	Core 2 Duo T7200	2.00	1GB	14.0" WXGA	GMA 80GB	Combo	* Intel 11a/b/g	Finger	Cam	4-cell	3-yr	W G Oct 06

• **These models have a 3-year limited warranty**

Positioning Processor	<i>Widescreen multimedia; two spindles</i> Intel® Core™ 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache										SOFTWARE¹⁴		
Memory	1GB / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / <i>1GB models:</i> std memory in both sockets (512MB each socket); no sockets avail										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)		
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded		
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										• Rescue and Recovery™		
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim										• Access Connections™		
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel										• Client Security Solution™		
Serial ATA disk (SATA150)	80GB^a (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™										• ThinkVantage Productivity Center with Away Manager		
Display (anti-glare)	Widescreen / 14.0" (356mm) WXGA (1280x768) TFT color / 200 nits / 15:9 / stainless steel hinges / one hand activates dual latches										• ThinkVantage System Update		
Graphics	Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz / DVI pass-through support to optional Advanced Mini Dock and Advanced Dock										• Symantec® Client Security™		
Keyboard	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys										• Diskeeper Lite		
TrackPoint®	TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad)										• PC-Doctor™ (diagnostics)		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										• ThinkPad Utilities (Power Manager and Presentation Director)		
Dimensions ³	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm										• Adobe® Reader		
Weight ²	with optical drive and battery: <i>4-cell black:</i> starting at 4.23 lb/4.63 lb (1.9kg/2.1kg)										• Google Toolbar		
Case material	<i>Some:</i> black color; hybrid carbon fiber reinforced polymer (CFRP) material										• Google Desktop		
Battery - type	Lithium Ion 4-cell / intelligent / supports unique 2nd battery in Ultrabay Slim										• Picasa from Google		
Battery - life ¹⁰	<i>4-cell:</i> up to 3.7 hr; <i>7-cell:</i> up to 6.25 hr; <i>7-cell plus Ultrabay Slim battery:</i> up to 8.25 hr										• Fingerprint Software (fingerprint models)		
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)										• Multimedia Center for Think Offerings		
PC Card slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door										• Sonic RecordNOW and Drive Letter Access (combo, DVD±RW)		
Ports	3-in-1 Multicard Reader (MultiMedia Card, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)										• InterVideo WinDVD (combo, DVD±RW models)		
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios										• InterVideo WinDVD Creator (DVD±RW models)		
Integrated camera	<i>Some:</i> camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0										License - CD not included		
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable										• Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client		
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG												
WWAN	None												
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip												
Bluetooth™	Bluetooth 2.0 wireless / USB 2.0 interface via ICH7-M / LED indicator												
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE												
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / stereo microphone / microphone input jack / headphone jack												
Security	Power-on password / hard disk password / supervisor password / security keyhole										Supports ThinkVantage® technologies		
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant										Universal 65-watt AC adapter		
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest / swipe sensor / supports the security chip										ThinkPad Roll Cage (one-piece magnesium frame)		
Limited warranty ¹²	3-year/1-yr battery - EasyServ™ ¹⁹ onsite pickup and delivery / service upgrades ²² avail										RoHS-compliant		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733			Z60t Series Li-Ion Battery 4-cell			40Y6791			International Warranty Service ¹⁷			
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734			Z60t Series Li-Ion Battery 7-cell			40Y6793			24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
2GB PC2-5300 DDR2 SODIMM	40Y7735			Advanced Ultrabay Battery 3-cell			40Y6789						
USB Fingerprint Reader	41U3167			ThinkPad External Battery Charger			40Y7625			ThinkPlus™ ²² 2-year LOR 9x5 NBD			
USB 2.0 Lenovo Multimedia Headset	40Y8518			ThinkPad 65W AC Adapter			40Y7696			41C9175			
USB 2.0 Lenovo Webcam	40Y8519			ThinkPad 90W AC Adapter			40Y7659			ThinkPlus 3-year LOR 9x5 NBD			
USB 2.0 Security Memory Key 2GB	41U5119			ThinkPad 90W AC/DC Combo Adapter			40Y7630			41C9176			
USB 2.0 Security Memory Key 4GB	41U5120			11a/b/g Wireless Mini PCI Express Adpr			40Y7026			ThinkPlus 4-year LOR 9x5 NBD			
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637			Lenovo M500 Projector			0037A05			41C9177			
USB 2.0 Super Multi-Burner Drive	41N5565			Premiere Leather Carrying Case			10K0209			ThinkPlus 5-year LOR 9x5 NBD			
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621			ThinkPad Carrying Case - BackPack			73P3599			41C9179			
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643			ThinkPad Essential Port Replicator			250510W			ThinkPlus 4-year P&L P/U Depot			
Serial Hard Drive Ultrabay Slim Adptr (flat)	40Y8725			ThinkPad Advanced Mini Dock			250410U			41C9178			
120GB Disk 9.5mm SATA150 (5400 rpm)	41N5691			ThinkPad Advanced Dock			250310U			ThinkPlus 5-year P&L P/U Depot			
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692			Lenovo L192 Wide 19" Monitor (black)			6920AB1			41C9180			
Preferred Pro USB Fingerprint Keyboard	73P4730			ThinkVision® L192p 19" Monitor (black)			9419HC2			Post-warranty annual maintenance agreements at			
Other accessories on O-Z60T sheet											lenovo.com/thinkplus/warranty		

See footnotes for important warranty information
US models announced October 17, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo processor technology

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(MN25-1) September 2007

ThinkPad® Z61t (9442) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	Disk SATA GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Finger print reader	3-year limited warranty ¹²	Workhorse (W) Education Gbl software	(G) Avail date
9442-E1U Black	Core™ Duo T2300E	1.66	512MB	14.1" WXGA	GMA 60GB	Combo	11a/b/g ³²	Finger	EasyServ	Yes	W	May 06
9442-E2U Black	Core Duo T2400	1.83	512MB	14.1" WXGA	GMA 60GB	DVD±RW	* Intel 11a/b/g ³²	Finger Cam	EasyServ	Yes	W	May 06
9442-E3U Silver	Core Duo T2300E	1.66	512MB	14.1" WXGA	GMA 60GB	Combo	11a/b/g	Finger	EasyServ	Yes	W	May 06
9442-E4U Silver	Core Duo T2400	1.83	512MB	14.1" WXGA	GMA 60GB	DVD±RW	* Intel 11a/b/g	Finger Cam	EasyServ	Yes	W	May 06
9442-E5U Black	Core Duo T2500	2.00	512MB	14.1" WXGA	GMA 80GB	Combo	* Intel 11a/b/g	Finger	EasyServ	Yes	W	May 06
9442-E6U Black	Core Duo T2500	2.00	512MB	14.1" WXGA	GMA 80GB	DVD±RW	* Intel 11a/b/g	Finger	EasyServ	Yes	W	May 06
9442-E7U Black	Core Duo T2500	2.00	1GB	14.1" WXGA	GMA 100G	DVD±RW	* Intel 11a/b/g	Finger Cam	EasyServ	Yes	W	May 06
9442-E8U Silver	Core Duo T2500	2.00	512MB	14.1" WXGA	GMA 80GB	Combo	* Intel 11a/b/g	Finger	EasyServ	Yes	W	May 06
9442-E9U Silver	Core Duo T2500	2.00	512MB	14.1" WXGA	GMA 80GB	DVD±RW	* Intel 11a/b/g	Finger	EasyServ	Yes	W	May 06
9442-EAU Silver	Core Duo T2500	2.00	1GB	14.1" WXGA	GMA 100G	DVD±RW	* Intel 11a/b/g	Finger Cam	EasyServ	Yes	W	May 06

• **These models have an EasyServ™¹⁹ onsite pickup and delivery 3-year limited warranty**
These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Widescreen multimedia; two spindles</i> Intel® Core Duo processor T2300E, T2400, or T2500 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache	SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery Preloaded (only some listed) • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models) CD • Adobe Photoshop Elements plus Adobe Premiere Elements License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client
Memory	512MB or 1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / 512MB models : std mem in one socket; one socket available / 1GB models : std memory in two sockets; none available	
Diskette drive EIDE Combo EIDE DVD±RW Ultrabay Slim Serial ATA disk (SATA150)	None standard / use optional USB-based diskette drive <i>Some</i> : DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim <i>Some</i> : DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel 60, 80, or 100GB⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™	
Display (anti-glare)	Widescreen / 14.1" (358mm) WXGA (1280x800) TFT color / 185 nits / 16:10 ratio / stainless steel hinges / one hand activates dual latches	
Graphics	Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz	
Keyboard TrackPoint™ ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ²	(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm with optical drive and battery: <i>4-cell black</i> : starting at 4.17 lb/4.57 lb (1.9kg/2.1kg); <i>4-cell titanium</i> : starting at 4.42/4.81 lb (2.0/2.2kg)	
Case material	<i>Some</i> : black color; hybrid carbon fiber reinforced polymer (CFRP) material <i>Some</i> : top cover: silver color; CFRP, aluminum, titanium material; bottom: black, CFRP	
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell / intelligent / supports unique 2nd battery in Ultrabay Slim <i>4-cell</i> : up to 3.7 hr; <i>7-cell</i> : up to 6.25 hr; <i>7-cell plus Ultrabay Slim battery</i> : up to 8.25 hr	
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)	
PC Card slot Ports	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door 3-in-1 Multicard Reader (MultiMedia Card, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)	
Wireless antenna Integrated camera	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios <i>Some</i> : camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0	
Mini PCI Express 11a/b/g ³² Intel 11a/b/g ³² WWAN	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable <i>Some</i> : 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adp, Atheros AR5006EX <i>Some</i> : 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG	
Modem Bluetooth™ Ethernet Audio	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip None Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / stereo microphone / microphone input jack / headphone jack	
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on palm rest / swipe sensor / supports the security chip	
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail	

512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	Z60t Series Li-Ion Battery 4-cell	40Y6791
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60t Series Li-Ion Battery 7-cell	40Y6793
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell	40Y6789
USB Fingerprint Reader	41U3167	ThinkPad External Battery Charger	40Y7625
USB 2.0 Security Memory Key 4GB	41U5120	ThinkPad 90W AC Adapter	40Y7659
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	11a/b/g Wireless Mini PCI Express Adpr	40Y7026
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Essential Port Replicator	250510W
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad Advanced Mini Dock	250410U
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad Advanced Dock	250310U
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkVision® L192p 19" Monitor (black)	9419HC2
Other accessories on O-Z60T sheet		Other accessories at lenovo.com/accessories	

ThinkPlus™ ²² 2-year LOR 9x5 NBD	41C9175
ThinkPlus 3-year LOR 9x5 NBD	41C9176
ThinkPlus 4-year LOR 9x5 NBD	41C9177
ThinkPlus 5-year LOR 9x5 NBD	41C9179
ThinkPlus 4-year P&L P/U Depot	41C9178
ThinkPlus 5-year P&L P/U Depot	41C9180

See footnotes for important warranty information
US models announced May 16 or May 30, 2006
US models withdrawn effective April or September 2007

* Powered by Intel Centrino® Duo processor technology

ThinkPad® Z61t (9443) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	Disk SATA GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Finger print reader	Camera	Battery cells	3-year limited warranty ¹²	Workhorse (W) Gbl (G)	Avail date
9443-96U Black	Core™ Duo T2300E	1.66	512MB	14.1" WXGA	GMA 60GB	Combo		11a/b/g ³²	Finger		4-cell	Onsite	W	May 06
9443-97U Black	Core Duo T2400	1.83	512MB	14.1" WXGA	GMA 60GB	DVD±RW	*	Intel 11a/b/g ³²	Finger	Cam	4-cell	Onsite	G	May 06
9443-98U Silver	Core Duo T2300E	1.66	512MB	14.1" WXGA	GMA 60GB	Combo		11a/b/g	Finger		4-cell	Onsite	W	May 06
9443-99U Silver	Core Duo T2400	1.83	512MB	14.1" WXGA	GMA 60GB	DVD±RW	*	Intel 11a/b/g	Finger	Cam	4-cell	Onsite	G	May 06
9443-4FU Silver	Core Duo T2400	1.83	512MB	14.1" WXGA	GMA 60GB	Combo	*	Intel 11a/b/g	Finger		4-cell	Onsite	W	May 06
9443-4GU Black	Core Duo T2400	1.83	512MB	14.1" WXGA	GMA 80GB	Combo	*	Intel 11a/b/g	Finger		4-cell	Onsite	W	May 06
9443-88U Black	Core Duo T2400	1.83	512MB	14.1" WXGA+	GMA 80GB	Combo	*	Intel 11a/b/g	Finger		4-cell	Onsite	W	May 06
9443-89U Silver	Core Duo T2400	1.83	512MB	14.1" WXGA+	GMA 60GB	Combo	*	Intel 11a/b/g	Finger	Cam	4-cell	Onsite	W	May 06
• These models have a limited onsite service²⁴ 3-year limited warranty														
Positioning Processor	<i>Widescreen multimedia; two spindles</i> Intel® Core Duo processor T2300E or T2400 with dual-core, Enhanced Intel Speed-Step™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB shared L2 cache										SOFTWARE¹⁴			
Memory	512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / std memory in 1 socket / 1 socket available										Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										• Rescue and Recovery™			
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim										• Access Connections™			
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel										• Client Security Solution™			
Serial ATA disk (SATA150)	60 or 80GB³ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™										• ThinkVantage Productivity Center with Away Manager			
Display (anti-glare)	<i>Some:</i> Widescreen / 14.1" (358mm) WXGA (1280x800) TFT color / 185 nits / 16:10 <i>Some:</i> Widescreen / 14.1" (358mm) WXGA+ (1440x900) TFT color / 200 nits / 16:10 <i>All:</i> stainless steel hinges / one hand activates dual latches										• ThinkVantage System Update			
Graphics	Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz										• Symantec® Client Security™			
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia F n keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions										• Diskeeper® Lite			
Dimensions ³ Weight ²	<i>(WxDxH):</i> 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm with optical drive and battery: <i>4-cell black:</i> starting at 4.17 lb/4.57 lb (1.9kg/2.1kg); <i>4-cell titanium:</i> starting at 4.42/4.81 lb (2.0/2.2kg)										• PC-Doctor™ (diagnostics)			
Case material	<i>Some:</i> black color; hybrid carbon fiber reinforced polymer (CFRP) material <i>Some:</i> top cover: silver color; CFRP, aluminum, titanium material; bottom: black, CFRP										• ThinkPad Utilities (Power Manager and Presentation Director)			
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell / intelligent / supports unique 2nd battery in Ultrabay Slim <i>4-cell:</i> up to 3.7 hr; <i>7-cell:</i> up to 6.25 hr; <i>7-cell plus Ultrabay Slim battery:</i> up to 8.25 hr										• Adobe® Reader			
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)										• Google Toolbar			
PC Card slot	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door										• Google Desktop			
Ports	3-in-1 Multicard Reader (MultiMedia Card, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)										• Picasa from Google			
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios										• Fingerprint Software (fingerprint models)			
Integrated camera	<i>Some:</i> camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0										• Multimedia Center for Think Offerings			
Mini PCI Express 11a/b/g ³²	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable <i>Some:</i> 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adp, Atheros AR5006EX <i>Some:</i> 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG										• Sonic RecordNOW and Drive Letter Access (combo, DVD±RW)			
WWAN	None										• InterVideo WinDVD (combo, DVD±RW models)			
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip										• InterVideo WinDVD Creator (DVD±RW models)			
Bluetooth™	None										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE													
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / stereo microphone / microphone input jack / headphone jack													
Security	Power-on password / hard disk password / supervisor password / security keyhole													
Security chip	Trusted Platform Module / Atmel chip / TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on palm rest / swipe sensor / supports the security chip													
Limited warranty ¹²	3-year/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time													
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	Z60t Series Li-Ion Battery 4-cell								40Y6791				
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60t Series Li-Ion Battery 7-cell								40Y6793				
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell								40Y6789				
USB Portable Diskette Drive	05K9276	ThinkPad External Battery Charger								40Y7625	Supports ThinkVantage® technologies			
USB Fingerprint Reader	41U3167	ThinkPad 90W AC Adapter								40Y7659				
USB 2.0 Security Memory Key 2GB	41U5119	11a/b/g Wireless Mini PCI Express Adpr								40Y7026	Universal 65-watt AC adapter			
USB 2.0 Security Memory Key 4GB	41U5120	Intel PRO/Wireless 3945ABG Mini PCIe								41N3008	ThinkPad Roll Cage (one-piece magnesium frame)			
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	Lenovo M500 Projector								0037A05	RoHS-compliant			
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Carrying Case - Expander								73P3597	International Warranty Service ¹⁷			
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad Carrying Case - BackPack								73P3599	24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad Essential Port Replicator								250510W				
Serial Hard Drive Ultrabay Slim Adptr (flat)	40Y8725	ThinkPad Advanced Mini Dock								250410U				
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad Advanced Dock								250310U				
Preferred Pro USB Fingerprint Keyboard	73P4730	Lenovo L192 Wide 19" Monitor (black)								6920AB1	Post-warranty annual maintenance agreements at			
Other accessories on O-Z60T sheet		Other accessories at lenovo.com/accessories									lenovo.com/thinkplus/warranty			

See footnotes for important warranty information
US models announced May 16 or May 30, 2006
US models withdrawn effective April or September 2007

* Powered by Intel Centrino® Duo processor technology

ThinkPad® Z61t (9443) - October 2006 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Mem-ory	Wide-screen display	Graphics con-troller	Disk SATA GB ⁶	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN wireless	Finger print reader	3-year limited warranty ¹²	Workhorse (W) Gbl (G)	Avail date
9443-XAU	Black	Core 2 Duo T7200	2.00	1GB	14.0" WXGA	GMA 80GB	DVD±RW	* Intel	11a/b/g ³²	None	Finger Cam	Onsite	W G	Oct 06
9443-XBU	Black	Core 2 Duo T7200	2.00	2GB	14.0" WXGA	GMA 120GB	DVD±RW	* Intel	11a/b/g	None	Finger Cam	Onsite	W G	Oct 06
9443-XCU	Black	Core 2 Duo T7200	2.00	1GB	14.0" WXGA	GMA 80GB	Combo	* Intel	11a/b/g	None		Onsite	W G	Oct 06
9443-XDU	Black	Core 2 Duo T7200	2.00	1GB	14.1" WXGA+	GMA 80GB	Combo	* Intel	11a/b/g	None		Onsite	W G	Oct 06

• **These models have a limited onsite service²⁴ 3-year limited warranty**

Positioning Processor	<i>Widescreen multimedia; two spindles</i> Intel® Core™ 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache										SOFTWARE¹⁴			
Memory	1GB or 2GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / <i>1GB models:</i> std memory in both sockets (512MB each socket); no sockets available; <i>2GB model:</i> standard memory in 1 socket; 1 socket available										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ↳ Disk-to-Disk Recovery (in hidden protected area)			
Diskette drive	None standard / use optional USB-based diskette drive										Preloaded			
EIDE Combo	<i>Some:</i> DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / removable from Ultrabay Slim										• Rescue and Recovery™			
EIDE DVD±RW	<i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim										• Access Connections™			
Ultrabay Slim	One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel										• Client Security Solution™			
Serial ATA disk (SATA150)	80GB⁸ or 120GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™										• ThinkVantage Productivity Center with Away Manager			
Display (anti-glare)	<i>Some:</i> Widescreen / 14.0" (356mm) WXGA (1280x768) TFT color / 200 nits / 15:9 <i>Some:</i> Widescreen / 14.1" (358mm) WXGA+ (1440x900) TFT color / 200 nits / 16:10 <i>All:</i> stainless steel hinges / one hand activates dual latches										• ThinkVantage System Update			
Graphics	Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz / DVI pass-through support to optional Advanced Mini Dock and Advanced Dock										• Symantec® Client Security™			
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys / TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) / Illuminates the keyboard to improve visibility in low-light conditions										• Diskeeper® Lite			
Dimensions ³ Weight ² Case material	<i>(WxDxH):</i> 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm with optical drive and battery: <i>4-cell black:</i> starting at 4.63 lb/4.67 lb (2.1kg/2.1kg) <i>Some:</i> black color; hybrid carbon fiber reinforced polymer (CFRP) material <i>Some:</i> top cover: silver color; CFRP, aluminum, titanium material; bottom: black, CFRP										• PC-Doctor™ (diagnostics)			
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell / intelligent / supports unique 2nd battery in Ultrabay Slim <i>4-cell:</i> up to 3.7 hr; <i>7-cell:</i> up to 6.25 hr; <i>7-cell plus Ultrabay Slim battery:</i> up to 8.25 hr										• ThinkPad Utilities (Power Manager and Presentation Director)			
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)										• Adobe® Reader			
PC Card slot Ports	One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door 3-in-1 Multicard Reader (MultiMedia Card, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)										• Google Toolbar			
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios										• Google Desktop			
Integrated camera	<i>Some:</i> camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0										• Picasa from Google			
Mini PCI Express	Two Mini PCI Express slots / only 802.11 wireless is customer upgradable										• Fingerprint Software (fingerprint models)			
Intel 11a/b/g ³² WWAN	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG										• Multimedia Center for Think Offerings			
Modem	None										• Sonic RecordNOW and Drive Letter Access (combo, DVD±RW)			
Bluetooth™	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip										• InterVideo WinDVD (combo, DVD±RW models)			
Ethernet	Bluetooth 2.0 wireless technology / USB 2.0 interface via ICH7-M / LED indicator										• InterVideo WinDVD Creator (DVD±RW models)			
Audio	Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Security	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / stereo microphone / microphone input jack / headphone jack													
Security chip	Power-on password / hard disk password / supervisor password / security keyhole													
Fingerprint reader	Trusted Platform Module / Atmel chip / TCG 1.2-compliant													
Limited warranty ¹²	3-year/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time													
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733			Z60t Series Li-Ion Battery 4-cell			40Y6791			Supports ThinkVantage® technologies				
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734			Z60t Series Li-Ion Battery 7-cell			40Y6793							
2GB PC2-5300 DDR2 SODIMM	40Y7735			Advanced Ultrabay Battery 3-cell			40Y6789			Universal 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²				
USB Portable Diskette Drive	05K9276			ThinkPad External Battery Charger			40Y7625							
USB Fingerprint Reader	41U3167			ThinkPad 90W AC Adapter			40Y7659			Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
USB 2.0 Lenovo Webcam	40Y8519			11a/b/g Wireless Mini PCI Express Adpr			40Y7026							
USB 2.0 Security Memory Key 4GB	41U5120			Intel PRO/Wireless 3945ABG Mini PCIe			41N3008							
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637			Lenovo M500 Projector			0037A05							
USB 2.0 Super Multi-Burner Drive	41N5565			ThinkPad Carrying Case - Expander			73P3597							
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621			ThinkPad Carrying Case - BackPack			73P3599							
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643			ThinkPad Essential Port Replicator			250510W							
Serial Hard Drive Ultrabay Slim Adptr (flat)	40Y8725			ThinkPad Advanced Mini Dock			250410U							
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692			ThinkPad Advanced Dock			250310U							
Preferred Pro USB Fingerprint Keyboard	73P4730			Lenovo L192 Wide 19" Monitor (black)			6920AB1							
Other accessories on O-Z60T sheet				Other accessories at lenovo.com/accessories										

See footnotes for important warranty information
US models announced October 17, 2006
US models withdrawn effective September 2007

* Powered by Intel Centrino® Duo mobile technology

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ThinkPad® Z61t (9443) - Education - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	Disk SATA GB ⁸	EIDE optical	Mini PCIe 802.11 wireless	Finger print reader	3-year limited warranty ¹²	Education software	Workhorse (W) Gbl (G) Avail date
9443-E1U Black	Core™ Duo T2300E	1.66	512MB	14.1" WXGA GMA	60GB	Combo	11a/b/g ³²	Finger	Onsite	Yes	W	May 06
9443-E2U Black	Core Duo T2400	1.83	512MB	14.1" WXGA GMA	60GB	DVD±RW*	Intel 11a/b/g ³²	Finger Cam	Onsite	Yes	W	May 06
9443-E3U Silver	Core Duo T2300E	1.66	512MB	14.1" WXGA GMA	60GB	Combo	11a/b/g	Finger	Onsite	Yes	W	May 06
9443-E4U Silver	Core Duo T2400	1.83	512MB	14.1" WXGA GMA	60GB	DVD±RW*	Intel 11a/b/g	Finger Cam	Onsite	Yes		May 06
9443-E5U Black	Core Duo T2500	2.00	512MB	14.1" WXGA GMA	80GB	Combo	* Intel 11a/b/g	Finger	Onsite	Yes		May 06
9443-E6U Black	Core Duo T2500	2.00	512MB	14.1" WXGA GMA	80GB	DVD±RW*	Intel 11a/b/g	Finger	Onsite	Yes		May 06
9443-E7U Black	Core Duo T2500	2.00	1GB	14.1" WXGA GMA	100G	DVD±RW*	Intel 11a/b/g	Finger Cam	Onsite	Yes		May 06
9443-E8U Silver	Core Duo T2500	2.00	512MB	14.1" WXGA GMA	80GB	Combo	* Intel 11a/b/g	Finger	Onsite	Yes		May 06
9443-E9U Silver	Core Duo T2500	2.00	512MB	14.1" WXGA GMA	80GB	DVD±RW*	Intel 11a/b/g	Finger	Onsite	Yes		May 06
9443-EAU Silver	Core Duo T2500	2.00	1GB	14.1" WXGA GMA	100G	DVD±RW*	Intel 11a/b/g	Finger Cam	Onsite	Yes		May 06
<p>• This model has a limited onsite service²⁴ 3-year limited warranty These educational models are available only to public or private K-12 (or higher) accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.</p>												
Positioning Processor	<p><i>Widescreen multimedia; two spindles</i> Intel® Core Duo processor T2300E, T2400, or T2500 with dual-core, Enhanced Intel SpeedStep™ technology¹, Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache</p>									<p>SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional²⁰ (Service Pack 2) ⇨ Disk-to-Disk Recovery</p>		
Memory	<p>512MB or 1GB std / 4GB max³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / 512MB models: std mem in one socket; one socket available / 1GB models: std memory in two sockets; none available</p>									<p>Preloaded • VitalSource Library education software • Adobe® Photoshop® Elements plus Adobe Premiere® Elements • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo, DVD±RW) • InterVideo WinDVD (combo, DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)</p>		
Diskette drive EIDE Combo EIDE DVD±RW Ultrabay Slim Serial ATA disk (SATA150)	<p>None standard / use optional USB-based diskette drive <i>Some:</i> DVD-ROM/CD-RW / 24X/24X/8X²¹ speed / removable from Ultrabay Slim <i>Some:</i> DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Slim One modular bay for interchangeable devices (right side) / 9.5mm high bay / flat bezel 60, 80, or 100GB⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™</p>									<p>• Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client</p>		
Display (anti-glare)	<p>Widescreen / 14.1" (358mm) WXGA (1280x800) TFT color / 185 nits / 16:10 ratio / stainless steel hinges / one hand activates dual latches</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements License - CD not included</p>		
Graphics	<p>Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p>		
Keyboard TrackPoint™ ThinkLight™	<p>89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p>		
Dimensions ³ Weight ²	<p>(WxDxH): 13.1" x 9.0" x 1.05-1.22"; 334mm x 228mm x 26.6-30.9mm with optical drive and battery: 4-cell black: starting at 4.17 lb/4.57 lb (1.9kg/2.1kg); 4-cell titanium: starting at 4.42/4.81 lb (2.0/2.2kg)</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p>		
Case material	<p><i>Some:</i> black color; hybrid carbon fiber reinforced polymer (CFRP) material <i>Some:</i> top cover: silver color; CFRP, aluminum, titanium material; bottom: black, CFRP</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p>		
Battery - type Battery - life ¹⁰	<p>Lithium Ion 4-cell / intelligent / supports unique 2nd battery in Ultrabay Slim 4-cell: up to 3.7 hr; 7-cell: up to 6.25 hr; 7-cell plus Ultrabay Slim battery: up to 8.25 hr</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p>		
Architecture	<p>Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p>		
PC Card slot Ports	<p>One Type I or one Type II / CardBus 32-bit / PCMCIA 2.1 / integrated door 3-in-1 Multicard Reader (MultiMedia Card, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / docking / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / no keyboard or mouse or parallel or serial ports (use USB)</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p>		
Wireless antenna Integrated camera	<p>UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios <i>Some:</i> camera on top of screen / 0.3-megapixel / fixed focus / USB 2.0</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p>		
Mini PCI Express 11a/b/g ³² Intel 11a/b/g ³² WWAN	<p>Two Mini PCI Express slots / only 802.11 wireless is customer upgradable <i>Some:</i> 11a/b/g wireless⁴, ThinkPad 11a/b/g Mini PCI Express Adp, Atheros AR5006EX <i>Some:</i> 11a/b/g wireless⁴, Mini PCI Express adapter, Intel PRO/Wireless 3945ABG</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p>		
Modem Bluetooth™ Ethernet	<p>56K⁶ V.90 (V.92-designed²⁹) modem in Comm Daughter Card socket / Conexant® chip None Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p>		
Audio	<p>High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / stereo microphone / microphone input jack / headphone jack</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p>		
Security Security chip Fingerprint reader	<p>Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on palm rest / swipe sensor / supports the security chip</p>									<p>CD • Adobe Photoshop Elements plus Adobe Premiere Elements</p>		
Limited warranty ¹²	<p>3-years/1-yr battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time</p>									<p>Supports ThinkVantage® technologies</p>		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	Z60t Series Li-Ion Battery 4-cell				40Y6791						
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60t Series Li-Ion Battery 7-cell				40Y6793						
2GB PC2-5300 DDR2 SODIMM	40Y7735	Advanced Ultrabay Battery 3-cell				40Y6789						
USB Portable Diskette Drive	05K9276	ThinkPad 90W AC Adapter				40Y7659						
USB 2.0 Security Memory Key 4GB	41U5120	11a/b/g Wireless Mini PCI Express Adpr				40Y7026						
USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Essential Port Replicator				250510W						
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ThinkPad Advanced Mini Dock				250410U						
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad Advanced Dock				250310U						
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkVision® L192p 19" Monitor (black)				9419HC2						
Other accessories on O-Z60T sheet												

See footnotes for important warranty information
 US models announced May 16 or May 30, 2006
 US models withdrawn effective April or September 2007

* Powered by Intel Centrino® Duo processor technology

ThinkPad® Z60t and Z61t Accessories - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Partial list of accessories supported on ThinkPad Z60t (and Z61t) originally announced on September 20, 2005 (and May 16, 2006)

Memory (Z60t)

512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ann 01/05/06
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ann 01/05/06

Memory (Z61t)

512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ann 01/05/06
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ann 01/05/06
2GB PC2-5300 DDR2 SODIMM	40Y7735	ann 11/28/06

Ultrabay Slim 9.5mm (best to use flat bezel options)

Serial Hard Drive Ultrabay Slim Adapter (flat)	40Y8725	ann 09/20/05
Combo II Ultrabay Slim Drive (flat bezel)	40Y8621	ann 09/20/05
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ann 05/31/07

Ultrabay Enhanced 12.7mm

None

Storage and removable storage

60GB Disk 9.5mm SATA150 (7200 rpm) ⁴¹	41N3012	ann 01/05/06
80GB Disk 9.5mm SATA150 (5400 rpm) ⁴¹	41N5662	ann 08/15/06
100GB Disk 9.5mm SATA150 (7200 rpm) ⁴¹	41N3013	ann 01/05/06
120GB Disk 9.5mm SATA150 (5400 rpm) ⁴¹	41N5691	ann 03/20/07
160GB Disk 9.5mm SATA150 (5400 rpm) ⁴¹	41N5692	ann 03/20/07

⁴¹ Can be used as the main HDD or with ThinkPad Serial ATA Hard Drive Ultrabay Slim Adapter 40Y8725 in the Ultrabay or in the ThinkPad Advanced Dock 250310U.

USB 2.0 Essential Memory Key 1GB	41U4940	ann 01/23/07
USB 2.0 Essential Memory Key 2GB	41U4944	ann 01/23/07
USB 2.0 Security Memory Key 1GB	41U5118	ann 07/17/07
USB 2.0 Security Memory Key 2GB	41U5119	ann 07/17/07
USB 2.0 Security Memory Key 4GB	41U5120	ann 07/17/07

USB Portable Diskette Drive	05K9276	ann 06/05/00
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ann 01/05/06
USB 2.0 Portable 80GB Hard Disk	41N8378	ann 04/17/07
USB 2.0 Portable 120GB Hard Disk	41N8379	ann 04/17/07
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07

Wireless LAN (Mini PCI Express)

11a/b/g Wireless Mini PCI Express Adpr ⁴²	40Y7026	ann 09/20/05
Intel PRO/Wireless 3945ABG Mini PCIe Ad ⁴²	41N3008	ann 01/05/06
⁴² System must be wireless upgradable.		
Kensington WiFi Finder Plus	40Y7717	

ThinkPad Expansion

USB Serial Parallel Adapter	22P5298	ann 10/09/01
ThinkPad Adjustable Notebook Stand	40Y7676	ann 09/20/05
ThinkPad Essential Port Replicator	250510W	ann 09/20/05
ThinkPad Advanced Mini Dock	250410U	ann 09/20/05
ThinkPad Advanced Dock ⁴⁷	250310U	ann 09/20/05

⁴⁷ ThinkPad Advanced Dock supports dual-head graphics adapters:
- ATI® X1300LE 256MB Dual Head/TV-out 41U5028
- ATI Radeon™ X300 SE 128MB Dual Head 41U4813

External Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Targus Wireless Keypad and Mouse Combo	40Y7721	
Enh Perf Wireless Keyboard and Mouse	73P4067	ann 12/07/04
USB Keyboard with UltraNav	31P8950	ann 01/28/03
USB Travel Keyboard with UltraNav	31P9490	ann 04/27/04
Preferred Pro USB Fingerprint Keyboard	73P4730	ann 02/22/05

External Mouse

USB Optical Wheel Mouse	06P4069	ann 05/21/03
Optical 3-Button ScrollPoint® Mouse	31P7405	ann 08/27/02
Optical 3-Button ScrollPoint Pro Mouse	31P8700	ann 10/01/02
Optical 3-Button Travel Wheel Mouse	31P7410	
Lenovo Laser Mouse (USB, PS/2)	41U3074	ann 01/23/07

Batteries

ThinkPad Z60t Series Li-Ion Battery 4-cell	40Y6791	ann 09/20/05
ThinkPad Z60t Series Li-Ion Battery 7-cell	40Y6793	ann 09/20/05
ThinkPad Advanced Ultrabay Battery 3-cell ⁴³	40Y6789	ann 09/20/05

⁴³ Used in Ultrabay Slim bay.

ThinkPad External Battery Charger ⁴⁴	40Y7625	ann 09/20/05
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⁴⁴ Requires the ThinkPad 90W AC Adapter 40Y7659 (adapter provided with some systems).

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	
⁴⁵ Only compatible with the 945GM and GM965 chipset models.		
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
ThinkPad 90W AC/DC Combo Adapter	40Y7630	ann 12/13/05
Belkin 1 Outlet Notebook Surge	31P7658	
Belkin Universal Notebook Travel Surge	22P7127	
Belkin Surge Protector	31P7659	

Data/Video Projectors

Lenovo M500 Projector	0037A05	ann 02/28/06
Lenovo C500 Projector	0039A05	ann 07/11/06

Carrying Cases

Lenovo Carrying Case - Messenger Max	41U5253	ann 05/01/07
Lenovo Carry Case - Performance Backpack	41U5254	ann 05/01/07
ThinkPad Nylon Carrying Case	10K0207	
ThinkPad Carrying Case - Expander	73P3597	
ThinkPad Carrying Case - Backpack	73P3599	
ThinkPad Premiere Leather Carrying Case	10K0209	
ThinkPad Convertible Carrying Case	22P8860	
ThinkPad Convertible Back Pack	22P8859	

Security

Kensington® Cable Lock from Lenovo	73P2582	ann 12/29/03
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
PC Card Gemplus Smart Card Reader	41N3004	ann 12/13/05
ExpressCard Gemplus Smart Card Reader	41N3043	ann 06/27/06
USB Fingerprint Reader	41U3167	ann 10/24/06

Monitors

Lenovo E75 17" CRT Monitor (16.0" vis) blk	6307BTN	ann 01/16/07
Lenovo L151 15" Monitor (black)	9165AB6	ann 02/28/06
Lenovo L171 17" Monitor (black)	9227AC1	ann 11/07/06
Lenovo L191 19" Monitor (black)	6135AB1	ann 06/27/06
Lenovo L192 Wide 19" Monitor (black)	6920AB1	ann 09/19/06
Lenovo D221 Wide 22" Monitor (black)	6622HB1	ann 11/21/06
ThinkVision® L171p 17" Monitor (black)	9417HC2	ann 10/31/06
ThinkVision L192p 19" Monitor (black)	9419HC2	ann 10/31/06
ThinkVision L201p 20.1" Monitor (black)	9220HB1	ann 10/31/06

Monitor Accessories⁴⁶

ThinkVision USB Soundbar	40Y7616	ann 08/23/05
Kensington Cable Lock from Lenovo	73P2582	ann 12/29/03
ThinkPad Convertible Monitor Stand Radial Arm	40Y7620	ann 01/05/06
	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann 06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06

Other accessories at lenovo.com/accessories

Need to buy accessories no longer marketed by Lenovo? See www.itxchange.com/lenovo for the Options Continuation Program.

ThinkPad® Z61e (0672) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	Disk SATA GB	EIDE optical	Mini PCI wireless	Mini PCIe wireless	Blue-tooth	Finger print reader	Chip set	Camera	Pre-load	Workhorse (W) Gbl (G)	Avail date
0672-21U	Black	Celeron® M 410	1.46	256MB	15.4" WXGA	GMA	40GB	Combo	11a/b/g ³²	No	No	No	GM	No	XP Home	Gbl	May06
0672-23U	Black	Celeron M 410	1.46	512MB	15.4" WXGA	GMA	60GB	Combo	11a/b/g	No	No	No	GM	No	XP Home	Gbl	May06
0672-24U	Silver	Celeron M 410	1.46	512MB	15.4" WXGA	GMA	60GB	Combo	11a/b/g	No	No	No	GM	No	XP Home	Gbl	May06
0672-B3U	Black	Celeron M 420	1.60	256MB	15.4" WXGA	GMA	40GB	CD	11a/b/g	No	No	No	GM	No	XP Pro	Gbl	Oct 06
0672-25U	Black	Core Solo T1300	1.66	512MB	15.4" WXGA	GMA	60GB	Combo	11a/b/g	No	No	No	GM	No	XP Home	Gbl	May06
0672-26U	Silver	Core Solo T1300	1.66	512MB	15.4" WXGA	GMA	60GB	Combo	11a/b/g	No	No	No	GM	No	XP Home	Gbl	May06
0672-2UU	Black	Core Solo T1400	1.83	512MB	15.4" WXGA	GMA	60GB	Combo	11a/b/g	No	No	No	GM	No	XP Home	Gbl	May06
0672-2VU	Silver	Core Solo T1400	1.83	512MB	15.4" WXGA	GMA	60GB	Combo	11a/b/g	No	No	No	GM	No	XP Home	Gbl	May06

• These small and medium business (SMB) models are part of the US TopSeller™ Program
 • These models have a 1-year limited warranty¹²

Positioning Processor	Widescreen multimedia; two spindles Intel® Celeron M Processor 410 or 420 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Solo processor T1300 or T1400 with single-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache	SOFTWARE¹⁴ Windows XP Professional models - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery Windows XP Home models - Microsoft Windows XP Home Edition ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery Preloaded (all) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo models) • InterVideo WinDVD (combo models) License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)	
Memory	256MB or 512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available		
EIDE CD	Some: CD-ROM / 24X-10X ⁹ speed / fixed, not removable / 12.7mm high		
EIDE Combo	Some: DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / fixed, not removable / 12.7mm		
Ultrabay Enhanced	None / no support for removable Ultrabay™ options		
Serial ATA disk (SATA150)	40GB⁸ (5400 rpm) or 60GB (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / no support for 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™		
Widescreen display	15.4" (391mm) WXGA (1280x800) TFT color / 16:10 aspect ratio / anti-glare / <i>Model B3U</i> : 200 nits, 500:1 contrast ratio; <i>Other models</i> : 150 nits, 300:1 contrast ratio / stainless steel hinges / one hand activates dual latches		
Graphics	Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz		
Keyboard (7-row) TrackPoint®	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device		
Touch pad ThinkLight™	No UltraNav® multi-pointing system Illuminates the keyboard to improve visibility in low-light conditions		
Dimensions ³	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm		
Weight ²	with optical drive and battery: <i>6-cell</i> : starting at 5.3 lb/5.8 lb (2.40kg/2.64kg)		
Case material	Some: black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Some: top cover: silver color; ABS, aluminum, titanium material; bottom: black, PC/ABS		
Battery - type	Lithium Ion 6-cell / intelligent / no support for 2nd battery in Ultrabay Enhanced		
Battery - life ¹⁰	<i>6-cell</i> : up to 5.6 hr; <i>optional 9-cell</i> : up to 8.3 hr		
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)		
Docking station	No port replicator or docking station support		
PC Card slot	One Type I or Type II slot / CardBus 32-bit / integrated door		
ExpressCard slot	None		
Ports	4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / no infrared port / no docking connector / no keyboard or mouse or parallel or serial ports (use USB)		
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios		
Integrated camera	None		
Mini PCI Express	One Mini PCI Express slot / 802.11 wireless is customer upgradable		
11a/b/g ³²	11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adapter, Atheros® AR5006EX		
WWAN	None		
Modem	56K® V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip		
Bluetooth™	None		
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE		
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack		
Security	Power-on password / hard disk password / supervisor password / security keyhole		
Security chip	None		
Fingerprint reader	None		
Limited warranty ¹²	1-year - EasyServ™¹⁹ onsite pickup and delivery / service upgrades ²² available		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	Z60m/R60 Series Li-Ion Battery 6-cell	40Y6795
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad External Battery Charger	40Y7625
USB Portable Diskette Drive	05K9276	ThinkPad 90W AC Adapter	40Y7659
USB Fingerprint Reader	41U3167	11a/b/g Wireless Mini PCI Adapter II	73P4301
USB 2.0 Security Memory Key 4GB	41U5120	Lenovo M500 Projector	0037A05
USB 2.0 Super Multi-Burner Drive	41N5565	Lenovo C500 Projector	0039A05
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	Lenovo D221 Wide 22" Monitor (black)	6622HB1
Kensington® MicroSaver® Security Cable	73P2582	ThinkPad Carrying Case - Backpack	73P3599
Other accessories on O-Z60M sheet		Other accessories at lenovo.com/accessories	

See footnotes for important warranty information
 US models announced May 16, May 30, or October 17, 2006
 US models withdrawn effective February, April, or September 2007

ThinkPad® Z61e (0673) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Memory	Wide-screen display	Graphics controller	Disk SATA GB	EIDE optical	Mini PCI wireless	Mini PCIe WWAN	Blue-tooth	Finger print reader	Chip set	Camera	Pre-load	Workhorse (W) Gbl (G)	Avail date
0673-23U	Black	Celeron® M 410	1.46	512MB	15.4" WXGA	GMA	60GB	Combo	11a/b/g ³²	No	No	No	GM	No	XP Home	No	May06
0673-24U	Silver	Celeron M 410	1.46	512MB	15.4" WXGA	GMA	60GB	Combo	11a/b/g	No	No	No	GM	No	XP Home	No	May06
0673-25U	Black	Core Solo T1300	1.66	512MB	15.4" WXGA	GMA	60GB	Combo	11a/b/g	No	No	No	GM	No	XP Home	No	May06
0673-26U	Silver	Core Solo T1300	1.66	512MB	15.4" WXGA	GMA	60GB	Combo	11a/b/g	No	No	No	GM	No	XP Home	No	May06

• **These models have a 1-year limited warranty¹²**

Positioning Processor	<i>Stylish notebooks for work and life; widescreen display; two-spindle system</i> Intel® Celeron M Processor 410 with Execute Disable Bit, 533MHz system bus, and 1MB L2 cache or Intel Core™ Solo processor T1300 with single-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz bus, and 2MB L2 cache	SOFTWARE¹⁴ Windows XP Home models - Microsoft® Windows® XP Home Edition ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo models) • InterVideo WinDVD (combo models) License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)
Memory	None / no support for removable Ultrabay™ options 256MB or 512MB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in one socket / one socket available	
EIDE Combo Ultrabay Enhanced Serial ATA disk (SATA150)	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / fixed, not removable / 12.7 mm high None / no support for removable Ultrabay™ options 60GB⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / no support for 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™	
Widescreen display	15.4" (391mm) WXGA (1280x800) TFT color / 150 nits / 16:10 aspect ratio / anti-glare / stainless steel hinges / one hand activates dual latches	
Graphics	Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz	
Keyboard (7-row) TrackPoint® Touch pad ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device No UltraNav® multi-pointing system Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm with optical drive and battery: <i>6-cell</i> : starting at 5.3 lb/5.8 lb (2.40kg/2.64kg) <i>Some</i> : black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic <i>Some</i> : top cover: silver color; ABS, aluminum, titanium material; bottom: black, PC/ABS	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell / intelligent / no support for 2nd battery in Ultrabay Enhanced <i>6-cell</i> : up to 5.6 hr; <i>optional 9-cell</i> : up to 8.3 hr	
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)	
Docking station PC Card slot ExpressCard slot Ports	No port replicator or docking station support One Type I or Type II slot / CardBus 32-bit / integrated door None 4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD Picture Card) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / no infrared port / no docking connector / no keyboard or mouse or parallel or serial ports (use USB)	
Wireless antenna Integrated camera Mini PCI Express 11a/b/g ³² WWAN Modem Bluetooth™ Ethernet Audio	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios None One Mini PCI Express slot / 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , ThinkPad 11a/b/g Mini PCI Express Adapter, Atheros® AR5006EX None 56K® V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip None Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack	
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole None None	
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available	
512MB PC2-5300 DDR2 CL5 SODIMM 1GB PC2-5300 DDR2 CL5 SODIMM 2GB PC2-4200 DDR2 CL4 SODIMM 2GB PC2-5300 DDR2 SODIMM USB Portable Diskette Drive USB Fingerprint Reader USB 2.0 Memory Key 1GB USB 2.0 CD-RW/DVD-ROM Combo II Drv USB 2.0 Super Multi-Burner Drive 100GB Disk 9.5mm SATA150 (7200 rpm) USB Keyboard with UltraNav Kensington® MicroSaver® Security Cable USB Optical Wheel Mouse Optical 3-Button ScrollPoint® Mouse Optical 3-Button ScrollPoint Pro Mouse Optical 3-Button Travel Wheel Mouse Other options on O-Z60M sheet	Z60m/R60 Series Li-Ion Battery 6-cell 40Y6795 Z60m/T60/R60 Li-Ion Battery 9-cell 40Y6797 ThinkPad External Battery Charger 40Y7625 ThinkPad 90W AC Adapter 40Y7659 11a/b/g Wireless Mini PCI Adapter II 73P4301 Intel PRO/Wireless 2915ABG Mini PCI 41N2990 Verizon Wireless V620 WWAN PC Card ²⁵ 40Y9137 ThinkVision® E500 Projector 0038A05 Lenovo M500 Projector 0037A05 ThinkPad Nylon Carrying Case 10K0207 ThinkPad Carrying Case - Expander 73P3597 ThinkPad Carrying Case - Backpack 73P3599 Lenovo L171 17" Monitor (black) 9227AC1 Lenovo L192 Wide 19" Monitor (black) 6920AB1 ThinkVision L171p 17" Monitor (black) 9417HC2 ThinkVision L201p 20.1" Monitor (black) 9220HB1 Other options at lenovo.com/options	
ThinkPlus™.22 1-year LOR 9x5 NBD 41C9166 ThinkPlus 2-year LOR 9x5 NBD 41C9167 ThinkPlus 3-year LOR 9x5 NBD 41C9168 ThinkPlus 4-year LOR 9x5 NBD 41C9171 ThinkPlus 5-year LOR 9x5 NBD 41C9173 ThinkPlus 2-year P&L P/U Depot 41C9169 ThinkPlus 3-year P&L P/U Depot 41C9170 ThinkPlus 4-year P&L P/U Depot 41C9172 ThinkPlus 5-year P&L P/U Depot 41C9174 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information
US models announced May 16 or 30, 2006
US models withdrawn effective February 2007

ThinkPad® Z61e (0673) - October 2006 - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Mem-ory	Wide-screen display	Graphics controller	Disk SATA GB	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN wireless	Finger print reader	Chip set	Cam-era	Pre-load	Workhorse Global	Avail date
0673-BHU	Black	Core™ 2 Duo T7200	2.00	1GB	15.4" WXGA	GMA	80GB	Combo	*Intel 11a/b/g ³²	No	No	GM	No	XP Pro	No	Oct 06

• **This model has a 1-year limited warranty¹²**

Positioning Processor	<i>Widescreen multimedia; two spindles</i> Intel® Core 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery (in hidden protected area) Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (combo models) • InterVideo WinDVD (combo models) License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client (Notes client not supported on XP Home)																								
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / standard memory in both sockets (512MB each socket) / no sockets available																																		
EIDE Combo	DVD-ROM/CD-RW / 24X/24X/24X/8X ²¹ speed / fixed, not removable / 12.7 mm high																																		
Ultrabay Enhanced	None / no support for removable Ultrabay™ options																																		
Serial ATA disk (SATA150)	80GB⁸ (5400 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / no support for 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™																																		
Widescreen display	15.4" (391mm) WXGA (1280x800) TFT color / 200 nits / 500:1 / 16:10 / anti-glare / stainless steel hinges / one hand activates dual latches																																		
Graphics	Intel Graphics Media Accelerator 950 / integrated in 945GM / 250MHz																																		
Keyboard (7-row)	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys																																		
TrackPoint®	TrackPoint® pointing device																																		
Touch pad	No UltraNav® multi-pointing system																																		
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions																																		
Dimensions ³	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm																																		
Weight ²	with optical drive and battery: <i>6-cell</i> : starting at 5.3 lb/5.8 lb (2.40kg/2.64kg)																																		
Case material	Black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic																																		
Battery - type	Lithium Ion 6-cell / intelligent / no support for 2nd battery in Ultrabay Enhanced																																		
Battery - life ¹⁰	<i>6-cell</i> : up to 5.6 hr; <i>optional 9-cell</i> : up to 8.3 hr																																		
Architecture	Mobile Intel 945GM Express Chipset / 82945GM Graphics Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)																																		
Docking station	No port replicator or docking station support																																		
PC Card slot	One Type I or Type II slot / CardBus 32-bit / integrated door																																		
ExpressCard slot	None																																		
Ports	4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394 (FireWire 400) / three USB 2.0 / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / no infrared port / no docking connector / no keyboard or mouse or parallel or serial ports (use USB)																																		
Wireless antenna	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios																																		
Integrated camera	None																																		
Mini PCI Express	One Mini PCI Express slot / 802.11 wireless is customer upgradable																																		
Intel 11a/b/g ³²	11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG																																		
WWAN	None																																		
Modem	56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip																																		
Bluetooth™	None																																		
Ethernet	Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE																																		
Audio	High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / mono microphone / microphone input jack / headphone jack																																		
Security	Power-on password / hard disk password / supervisor password / security keyhole																																		
Security chip	None																																		
Fingerprint reader	None																																		
Limited warranty ¹²	1-year - EasyServ™¹⁹ onsite pickup and delivery / service upgrades ²² available																																		
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	Z60m/R60 Series Li-Ion Battery 6-cell	40Y6795	1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad External Battery Charger	40Y7625	USB Portable Diskette Drive	05K9276	ThinkPad 90W AC Adapter	40Y7659	USB Fingerprint Reader	41U3167	11a/b/g Wireless Mini PCI Adapter II	73P4301	USB 2.0 Lenovo Multimedia Headset	40Y8518	Lenovo M500 Projector	0037A05	USB 2.0 Security Memory Key 4GB	41U5120	Lenovo C500 Projector	0039A05	ThinkPad Nylon Carrying Case	10K0207	ThinkPlus 2-year P&L P/U Depot	41C9169				
USB 2.0 CD-RW/DVD-ROM Combo II Drv	40Y8637	ThinkPad Carrying Case - Expander	73P3597	USB 2.0 Super Multi-Burner Drive	41N5565	ThinkPad Carrying Case - Organizer	73P3598	120GB Disk 9.5mm SATA150 (5400 rpm)	41N5691	ThinkPad Carrying Case - Backpack	73P3599	160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	USB Keyboard with UltraNav	31P8950	Lenovo L171 17" Monitor (black)	9227AC1	ThinkPlus 4-year P&L P/U Depot	41C9172	USB Optical Wheel Mouse	06P4069	Lenovo L192 Wide 19" Monitor (black)	6920AB1	Kensington® MicroSaver® Security Cable	73P2582	Lenovo D221 Wide 22" Monitor (black)	6622HB1	ThinkPlus 5-year P&L P/U Depot	41C9174	Optical 3-Button ScrollPoint® Pro Mouse	31P8700	ThinkVision® L171p 17" Monitor (black)	9417HC2	Post-warranty annual maintenance agreements at	
Lenovo Laser Mouse (USB, PS/2)	41U3074	ThinkVision L201p 20.1" Monitor (black)	9220HB1	Other accessories on O-Z60M sheet		Other accessories at lenovo.com/accessories																													

See footnotes for important warranty information
US model announced October 17, 2006
US model withdrawn effective September 2007

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(WR25E-1) September 2007

ThinkPad® Z61e Accessories - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Partial list of accessories supported on ThinkPad Z61e originally announced on May 16, 2005

Memory

512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	ann 01/05/06
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	ann 01/05/06
2GB PC2-5300 DDR2 SODIMM	40Y7735	ann 11/28/06

Ultrabay Slim 9.5mm

None (no removable bay options)

Ultrabay Enhanced 12.7mm

None (no removable bay options)

Storage and removable storage

60GB Disk 9.5mm SATA150 (7200 rpm)	41N3012	ann 01/05/06
80GB Disk 9.5mm SATA150 (5400 rpm)	41N5662	ann 08/15/06
100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ann 01/05/06
120GB Disk 9.5mm SATA150 (5400 rpm)	41N5691	ann 03/20/07
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ann 03/20/07

USB 2.0 Essential Memory Key 1GB	41U4940	ann 01/23/07
USB 2.0 Essential Memory Key 2GB	41U4944	ann 01/23/07
USB 2.0 Security Memory Key 1GB	41U5118	ann 07/17/07
USB 2.0 Security Memory Key 2GB	41U5119	ann 07/17/07
USB 2.0 Security Memory Key 4GB	41U5120	ann 07/17/07

USB Portable Diskette Drive	05K9276	ann 06/05/00
USB 2.0 CD-RW/DVD-ROM Combo II Drive	40Y8637	ann 01/05/06
USB 2.0 Portable 80GB Hard Disk	41N8378	ann 04/17/07
USB 2.0 Portable 120GB Hard Disk	41N8379	ann 04/17/07
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07

Wireless LAN (Mini PCI Express)

11a/b/g Wireless Mini PCI Adapter II ⁴²	73P4301	ann 09/20/05
⁴² System must be wireless upgradable. Kensington WiFi Finder Plus	40Y7717	

ThinkPad Expansion

USB Serial Parallel Adapter	22P5298	ann 10/09/01
USB 2.0 Port Replicator with Video	40Y8132	ann 02/23/06
ThinkPad Adjustable Notebook Stand	40Y7676	ann 09/20/05

External Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Targus Wireless Keypad and Mouse Combo	40Y7721	
Enh Perf Wireless Keyboard and Mouse	73P4067	ann 12/07/04
USB Keyboard with UltraNav	31P8950	ann 01/28/03
USB Travel Keyboard with UltraNav	31P9490	ann 04/27/04
Preferred Pro USB Fingerprint Keyboard	73P4730	ann 02/22/05

External Mouse

USB Optical Wheel Mouse	06P4069	ann 05/21/03
Optical 3-Button ScrollPoint® Mouse	31P7405	ann 08/27/02
Optical 3-Button ScrollPoint Pro Mouse	31P8700	ann 10/01/02
Optical 3-Button Travel Wheel Mouse	31P7410	
Lenovo Laser Mouse (USB, PS/2)	41U3074	ann 01/23/07

Multimedia

USB 2.0 Lenovo Multimedia Headset	40Y8518	ann 06/27/06
USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06

Batteries

Z60m/R60 Series Li-Ion Battery 6-cell	40Y6795	ann 09/20/05
Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	ann 09/20/05
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann 09/20/05
⁴⁴ Requires the ThinkPad 90W AC Adapter 40Y7659.		

ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
ThinkPad 90W AC/DC Combo Adapter	40Y7630	ann 12/13/05
Belkin 1 Outlet Notebook Surge	31P7658	
Belkin Universal Notebook Travel Surge	22P7127	
Belkin Surge Protector	31P7659	

Data/Video Projectors

Lenovo M500 Projector	0037A05	ann 02/28/06
Lenovo C500 Projector	0039A05	ann 07/11/06

Carrying Cases

Lenovo Carrying Case - Messenger Max	41U5253	ann 05/01/07
Lenovo Carry Case - Performance Backpack	41U5254	ann 05/01/07
ThinkPad Nylon Carrying Case	10K0207	
ThinkPad Carrying Case - Expander	73P3597	
ThinkPad Carrying Case - Backpack	73P3599	
ThinkPad Premiere Leather Carrying Case	10K0209	
ThinkPad Convertible Carrying Case	22P8860	

Security

Kensington® Cable Lock from Lenovo	73P2582	ann 12/29/03
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
PC Card Gemplus Smart Card Reader	41N3004	ann 12/13/05
USB Fingerprint Reader	41U3167	ann 10/24/06

Monitors

Lenovo E75 17" CRT Monitor (16.0" vis) blk	6307BTN	ann 01/16/07
Lenovo L151 15" Monitor (black)	9165AB6	ann 02/28/06
Lenovo L171 17" Monitor (black)	9227AC1	ann 11/07/06
Lenovo L191 19" Monitor (black)	6135AB1	ann 06/27/06
Lenovo L192 Wide 19" Monitor (black)	6920AB1	ann 09/19/06
Lenovo D221 Wide 22" Monitor (black)	6622HB1	ann 11/21/06
ThinkVision® L171p 17" Monitor (black)	9417HC2	ann 10/31/06
ThinkVision L192p 19" Monitor (black)	9419HC2	ann 10/31/06
ThinkVision L201p 20.1" Monitor (black)	9220HB1	ann 10/31/06

Monitor Accessories⁴⁶

ThinkVision USB Soundbar	40Y7616	ann 08/23/05
Kensington Cable Lock from Lenovo	73P2582	ann 12/29/03
ThinkPad Convertible Monitor Stand	40Y7620	ann 01/05/06
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

Other accessories at lenovo.com/accessories

Need to buy accessories no longer marketed by Lenovo? See www.itxchange.com/lenovo for the Options Continuation Program.

ThinkPad® Z61p (9450) - TopSeller - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Mem-ory	Wide-screen display	Disk controller	SATA GB	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN Blue-tooth	Finger-print reader	Bat-tery cells	One Note CD	Work-horse Gbl	Avail date
9450-3AU	Black	Core Duo T2500	2.00	1GB	15.4" WUXGA	256MB	100G	DVD±RW*	Intel 11a/b/g ³²	None	Blue Finger	6	No	No	Jul 06
9450-A1U	Black	Core 2 Duo T7200	2.00	1GB	15.4" WUXGA	256MB	100G	DVD±RW	ThinkPad 11n ²⁸	None	Blue Finger	9	CD	No	Oct 06

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty¹²

Positioning Processor	Widescreen multimedia; two spindles Intel® Core™ Duo processor T2500 with dual-core, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 2MB shared L2 cache or Intel Core 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache										SOFTWARE¹⁴ Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ◇ Disk-to-Disk Recovery																																																														
Memory	1GB std / 4GB max ³¹ / PC2-5300 667MHz DDR2 / non-parity / CL5 / dual-channel capable / two 200-pin SO-DIMM sockets / 3AU: standard memory in both sockets (512MB each socket); no sockets available; A1U: standard memory in 1 socket; 1 socket available										Preloaded • Model A1U: Microsoft Office OneNote® 2003 • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models) • Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (DVD±RW models) • InterVideo WinDVD (DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)																																																														
EIDE DVD±RW Ultrabay Enhanced Serial ATA disk (SATA150)	DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Enhanced One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 100GB⁸ (7200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™										CD included • Model A1U: Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client																																																														
Widescreen display (anti-glare)	15.4" (391mm) WUXGA (1920x1200) TFT color / 175 nits / 500:1 contrast ratio / 16:10 aspect ratio / stainless steel hinges / one hand activates dual latches										CD included • Model A1U: Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client																																																														
Graphics	ATI® MOBILITY™ FireGL™ V5200 M56 / PCI Express x16 / 256MB memory / DVI pass-through support to optional Advanced Mini Dock and Advanced Dock										CD included • Model A1U: Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client																																																														
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions										CD included • Model A1U: Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client																																																														
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm with optical drive and battery: 6-cell: up to 7.0 lb (3.2kg); 9-cell: up to 7.3 lb (3.3kg) Black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell or 9-cell / intelligent / supports unique 2nd battery in Ultrabay Enhan 6-cell ATI graphics: up to 4.0 hr; 9-cell ATI graphics: up to 5.9 hr; 9-cell plus Ultrabay battery: up to 7.9 hr										CD included • Model A1U: Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client																																																														
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)										CD included • Model A1U: Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client																																																														
PC Card slot ExpressCard slot Ports	One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door 4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394a-2000 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)										CD included • Model A1U: Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client																																																														
Wireless antenna Integrated camera Mini PCI Express Intel 11a/b/g ³² ThinkPad 11n ²⁸ WWAN Modem Bluetooth™ Ethernet Audio	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios None Two Mini PCI Express slots / only 802.11 wireless is customer upgradable Some: 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG Some: 11a/b/g/n wireless ⁴ , ThinkPad 11a/b/g/n Mini PCI Express Adapter, Atheros AR5008 chipset, MIMO 2x3 None 56K ⁹ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip Bluetooth 2.0 wireless technology / USB 2.0 via ICH7-M / LED indicator Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons / ATI graphics models: stereo microphone / microphone input jack / headphone jack										CD included • Model A1U: Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client																																																														
Security Security chip Fingerprint reader	Power-on password / hard disk password / supervisor password / security keyhole Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader on palm rest / swipe sensor / supports the security chip										CD included • Model A1U: Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client																																																														
Limited warranty ¹²	1-year - EasyServ™.19 onsite pickup and delivery / service upgrades ²² available										CD included • Model A1U: Microsoft Office OneNote 2003 License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client																																																														
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	Z60m/R60 Series Li-Ion Battery 6-cell	40Y6795	1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797	2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad Essential Port Replicator	250510W	ThinkPlus 2-year LOR 9x5 NBD	41C9166	DVD-ROM Ultrabay Enhanced Drive	39X2642	ThinkPad Advanced Mini Dock	250410U	ThinkPlus 2-year P&L P/U Depot	41C9173	CD-RW/DVD Combo Ultrabay Enhanced	73P3275	ThinkPad Advanced Dock	250310U	ThinkPlus 3-year LOR 9x5 NBD	41C9168	ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad External Battery Charger	40Y7625	ThinkPlus 4-year LOR 9x5 NBD	41C9171	USB Fingerprint Reader	41U3167	ThinkPad 90W AC Adapter	40Y7659	ThinkPlus 5-year LOR 9x5 NBD	41C9174	USB 2.0 Security Memory Key 4GB	41U5120	11a/b/g Wireless Mini PCI Express Adpr	40Y7026	ThinkPlus 2-year P&L P/U Depot	41C9169	USB 2.0 Super Multi-Burner Drive	41N5565	Intel PRO/Wireless 3945ABG Mini PCIe	41N3008	ThinkPlus 3-year P&L P/U Depot	41C9170	Serial Hard Drive Ultrabay Slim Adapter	40Y8725	Lenovo M500 Projector	0037A05	ThinkPlus 4-year P&L P/U Depot	41C9172	100GB Disk 9.5mm SATA150 (7200 rpm)	41N3013	ThinkPad Carrying Case - Backpack	73P3599	ThinkPlus 5-year P&L P/U Depot	41C9174	USB Keyboard with UltraNav	31P8950	Lenovo L192 Wide 19" Monitor (black)	6920AB1	Post-warranty annual maintenance agreements at		Other accessories on O-Z60M sheet	73P2582	Lenovo D221 Wide 22" Monitor (black)	6622HB1	lenovo.com/thinkplus/warranty	

See footnotes for important warranty information
US models announced July 18 or October 17, 2006
US models withdrawn effective April or September 2007

* Powered by Intel Centrino® Duo processor technology

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(WR2W-1) September 2007

ThinkPad® Z61p (9452) - withdrawn

Created by Lenovo Training Solutions
Personal Systems Reference (PSREF)

Type-model	Top cover color	Processor	Speed GHz	Mem-ory	Wide-screen display	Graphics controller	Disk SATA GB	EIDE optical	Mini PCI 802.11 wireless	Mini PCIe WWAN Blue-tooth	Finger-print reader	Bat-tery Pre-load	Work-horse Gbl	Avail date
9452-JRU	Black	Core 2 Duo T7200	2.00	1GB	15.4" WUXGA	256MB	100G	DVD±RW*	Intel 11a/b/g ³²	None	Blue Finger	9	Pro W G	Oct06

- This model has a 3-year limited warranty¹²

Positioning Processor	<i>Widescreen multimedia; two spindles</i>										SOFTWARE¹⁴			
Memory	Intel® Core™ 2 Duo processor T7200 with dual-core, Intel 64 Technology, Enhanced Intel SpeedStep™ technology ¹ , Execute Disable Bit, 667MHz system bus, and 4MB shared L2 cache [Virtualization Technology not supported]										Windows XP Professional - Microsoft® Windows® XP Professional ²⁰ (Service Pack 2) ♦ Disk-to-Disk Recovery			
EIDE DVD±RW Ultrabay Enhanced Serial ATA disk (SATA150)	DVD burner / Super Multi-Burner (40Y8623) dual-layer, removable Ultrabay Enhanced One modular bay for interchangeable devices / Ultrabay Slim-compatible / 12.7mm high 100GB⁴ (7200 rpm) / 9.5mm high / removable and upgradable / 9.5mm high bay / supports 2nd disk / HDD Protection Pack (shock absorber) / Active Protection System™										Preloaded • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center with Away Manager • ThinkVantage System Update • Symantec® Client Security™ • Diskeeper® Lite • PC-Doctor™ (diagnostics) • ThinkPad Utilities (Power Manager and Presentation Director)			
Widescreen display (anti-glare)	15.4" (391mm) WUXGA (1920x1200) TFT color / 175 nits / 500:1 contrast ratio / 16:10 aspect ratio / stainless steel hinges / one hand activates dual latches										• Adobe® Reader • Google Toolbar • Google Desktop • Picasa from Google • Fingerprint Software (fingerprint models)			
Graphics	ATI® MOBILITY™ FireGL™ V5200 M56 / PCI Express x16 / 256MB memory / DVI pass-through support to optional Advanced Mini Dock and Advanced Dock										• Multimedia Center for Think Offerings • Sonic RecordNOW and Drive Letter Access (DVD±RW models)			
Keyboard TrackPoint® ThinkLight™	89-key / ThinkVantage button / spill-resistant / multimedia Fn keys / Windows, Appl keys TrackPoint® pointing device / UltraNav® multi-pointing system (touchpad) Illuminates the keyboard to improve visibility in low-light conditions										• InterVideo WinDVD (DVD±RW models) • InterVideo WinDVD Creator (DVD±RW models)			
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>(WxDxH): 14.1" x 10.3" x 1.47-1.58"; 357mm x 263mm x 37.3-40.2mm with optical drive and battery: 9-cell: up to 7.3 lb (3.3kg)</i> Black color; Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 9-cell / intelligent / supports unique 2nd battery in Ultrabay Enhanced <i>6-cell ATI graphics: up to 4.0 hr; 9-cell ATI graphics: up to 5.9 hr; 9-cell plus Ultrabay battery: up to 7.9 hr</i>										License - CD not included - Lotus® SmartSuite® Millennium and Lotus Notes® Stand-alone Client			
Architecture	Mobile Intel 945PM Express Chipset / 82945PM Memory Controller Hub / 82801GBM ICH7-M I/O Controller Hub (SATA300, ATA-100 EIDE, PCI Express x1, PCI bus, USB, LPC interface, [Bluetooth], [fingerprint]) / PCI bus (TI® PCI8412 CardBus controller) / LPC bus (NS PC87382 Super I/O, Atmel® AT97SC3203)										Supports ThinkVantage® technologies			
PC Card slot ExpressCard slot Ports	One Type I or Type II slot / CardBus 32-bit / integrated door One ExpressCard/34 or ExpressCard/54 / PCI Express x1 or USB 2.0 / integrated door 4-in-1 digital media reader (MultiMediaCard, Memory Stick, Secure Digital, xD-Picture Card™) / S-video out port (TV out) / IEEE 1394a-2000 (FireWire 400) / three USB 2.0 / external DB-15 monitor / infrared (4Mbps) / RJ-11 (modem) / RJ-45 (ethernet) / docking connector / no keyboard or mouse or parallel or serial ports (use USB)										90-watt (ATI graphics) AC adapter ThinkPad Roll Cage RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free warranty support during the warranty ¹²			
Wireless antenna Integrated camera Mini PCI Express Intel 11a/b/g ³² WWAN Modem Bluetooth™ Ethernet Audio	UltraConnect™ Antenna built into the display cover / on-off switch for all wireless radios None Two Mini PCI Express slots / only 802.11 wireless is customer upgradable 11a/b/g wireless ⁴ , Mini PCI Express adapter, Intel PRO/Wireless 3945ABG None 56K ⁶ V.90 (V.92-designed ²⁹) modem in Comm Daughter Card socket / Conexant® chip Bluetooth 2.0 wireless technology / USB 2.0 via ICH7-M / LED indicator Gigabit ethernet on systemboard / Broadcom® BCM5752M (MAC/PHY) / PCIe x1 / PXE High Definition (HD) Audio / AD1981HD codec / stereo speakers / 1 watt / volume up, down, mute buttons /										Security Power-on password / hard disk password / supervisor password / security keyhole Security chip Trusted Platform Module / Atmel chip / TCG 1.2-compliant Fingerprint reader Fingerprint reader on palm rest / swipe sensor / supports the security chip			
Limited warranty ¹²	3-year/1-yr battery - EasyServ™¹⁹ onsite pickup and delivery / service upgrades²² avail													
512MB PC2-5300 DDR2 CL5 SODIMM	40Y7733	Z60m/R60 Series Li-Ion Battery 6-cell	40Y6795											
1GB PC2-5300 DDR2 CL5 SODIMM	40Y7734	Z60m/T60/R60 Li-Ion Battery 9-cell	40Y6797											
2GB PC2-5300 DDR2 SODIMM	40Y7735	ThinkPad Essential Port Replicator	250510W											
DVD-ROM Ultrabay Enhanced Drive	39X2642	ThinkPad Advanced Mini Dock	250410U											
CD-RW/DVD Combo Ultrabay Enhanced	73P3275	ThinkPad Advanced Dock	250310U											
ThinkPad DVD Ultrabay Slim Burner (flat)	41N5643	ThinkPad External Battery Charger	40Y7625											
USB Fingerprint Reader	41U3167	ThinkPad 90W AC Adapter	40Y7659											
USB 2.0 Lenovo Multimedia Headset	40Y8518	11a/b/g Wireless Mini PCI Express Adpr	40Y7026											
USB 2.0 Security Memory Key 4GB	41U5120	Intel PRO/Wireless 3945ABG Mini PCIe	41N3008											
USB 2.0 Super Multi-Burner Drive	41N5565	Lenovo M500 Projector	0037A05											
Serial Hard Drive Ultrabay Slim Adapter	40Y8725	Lenovo C500 Projector	0039A05											
160GB Disk 9.5mm SATA150 (5400 rpm)	41N5692	ThinkPad Carrying Case - BackPack	73P3599											
USB Keyboard with UltraNav	31P8950	Lenovo L192 Wide 19" Monitor (black)	6920AB1											
Kensington® MicroSaver® Security Cable	73P2582	Lenovo D221 Wide 22" Monitor (black)	6622HB1											
Lenovo Laser Mouse (USB, PS/2)	41U3074	ThinkVision® L201p 20.1" Monitor (black)	9220HB1											
Other accessories on O-Z60M sheet		Other accessories at lenovo.com/accessories												

See footnotes for important warranty information
US model announced October 17, 2006
US model withdrawn effective September 2007

* Powered by Intel Centrino® Duo processor technology

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Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. Lenovo makes no representation or warranty regarding third party products or services.

Footnotes:

- ¹ With Intel SpeedStep, processor speed may be reduced to conserve battery power.
- ² **Weight** includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.
- ³ **Thinness** may vary at certain points on the system.
- ⁴ **Wireless capability:** Requires compatible wireless-enabled options sold separately.
- ⁵ **TAA:** ThinkPad notebook is compliant with the U.S. Federal Government's country-of-origin requirements prescribed in 48 C.F.R. Subpart 25.4; Trade Act Agreement (TAA) model.
- ⁶ **Public network download speeds** are limited to 53Kbps. Upload speeds are limited to 31.2Kbps. Compatible phone line and server equipment required. Actual speeds depend on many factors and are often less than the maximum possible.
- ⁷ **Maximum memory and hard disk drive capacity** may require the replacement of standard component with largest supported component available.
- ⁸ **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.
- ⁹ **CD/DVD drive speeds** list maximum rates; rates are variable and are often less than the maximum.
- ¹⁰ **Battery:** These model numbers achieved Battery Rundown Time of at least the time shown during testing. A description of the testing available at lenovo.com/pc/www/thinkpad/batterylife. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.
- ¹¹ **Memory:** For ThinkPad models without a separate video card, memory supports both system and video. Accessible system memory may be up to 64MB less than the amount stated, depending on video mode.
- ¹² **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.
- ¹³ **Internet access not included.**
- ¹⁴ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.
- ¹⁵ **Update Connector** is available to registered ThinkPad customers during the limited warranty period at no charge. Line charges may apply.
- ¹⁶ **Activating Verizon Wireless Service:** Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service and airtime charges will apply; \$175 early termination fee. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.
- ¹⁷ **International Warranty Service** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.
- ¹⁸ **Telephone support** may be subject to additional charges, even during the limited warranty period. Response times may vary. May exclude some holidays. If a machine is listed as having "On-site service for select repairs", this means that onsite service is available only for the replacement of select parts. For all other warranty repairs, Lenovo will provide the customer a replacement part for customer installation. The parts for which onsite service is available varies by machine, but may include the processor, power supply, heat sink, system board, or base cover. For ThinkPad notebooks with EasyServ or Courier service, Lenovo will attempt to diagnose and resolve the problem remotely before sending a courier.
- ¹⁹ **EasyServ depot repair:** In the United States call 1-800-426-7378. The customer may be asked certain diagnostic questions before a courier is sent. Your ThinkPad purchase includes this depot repair service, available in the U.S. during the limited warranty period.
- ²⁰ **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.
- ²¹ **For combination drives**, maximum possible speeds only are given in the following order: CD write, CD rewrite, CD read, DVD read.
- ²² **ThinkPlus Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. For ThinkPad notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor. P/U means pick-up. See ThinkPlus terms and conditions for complete details and restrictions.

- ²³ **Activating AT&T Wireless Service:** Requires separate agreement with AT&T, subject to service agreement, rate plan and coverage maps. AT&T, not Lenovo, is solely responsible for service. Coverage not available in all areas; AT&T BroadbandConnect available in select metropolitan markets. Special credit and tenure restrictions and additional charges may apply to international roaming. A network connection, third-party software, additional hardware, and/or subscription to a third-party service may be required for certain solutions/applications. Additional restrictions apply, including early termination fee; see www.wireless.att.com for details. To activate call Lenovo Wireless Activation Hot Line at 1-877-299-4710.
- ²⁴ **Systems with limited onsite service** are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.
- ²⁵ **Wireless WAN Cards:** Wireless data service requires separate agreement with Verizon Wireless. Verizon Wireless, not Lenovo, is solely responsible for service. Monthly and airtime charges may apply. Service may not be available in all areas; purchaser is responsible for verifying with Verizon Wireless that service is available for the intended location before the purchase of the card. For complete details, including service plans, additional required hardware or software, and service coverage, visit www.verizonwireless.com.
- ²⁶ **Full-size keyboard:** As defined by ISO/IEC 15412.
- ²⁷ **Based on IEEE 802.11a and 802.11b.** A customer can not upgrade to a different wireless Mini PCI adapter due to FCC regulations. Security screws prevent removal of this adapter. This wireless LAN product has been designed to permit legal operation world-wide in regions which it is approved. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi logo.
- ²⁸ **The IEEE 802.11n specification (MIMO)** has not been finalized and is currently in draft release. The ThinkPad 11a/b/g/n (11n) Wireless LAN Mini PCI Express Adapters are based on the Draft Release, Version 1.02, of the IEEE 802.11n specification. The Intel Wireless WiFi Link 4965AGN Mini PCI Express Adapters are based on the Draft Release, Version 2.0 of the IEEE 802.11n specification. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, or 11a/b/g/n can communicate on any of its supported formats.
- ²⁹ **Modem speeds:** Public network download speeds are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.
- ³⁰ **Measures only maximum** data transfer rate, not application performance. Many factors affect application performance.
- ³¹ **Maximum memory capacity** may require the replacement of standard component with largest supported component available. On ThinkPad systems with an Intel 945GM, 945PM, GM965, or PM965 chipset, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by an operating system will be limited to 3GB. This limitation does not exist with the Intel GM965 and PM965 with the 64-bit operating systems Windows XP Professional 64-bit and Windows Vista 64-bit Editions.
- ³² **Wireless:** Based on IEEE 802.11a, 802.11b, and 802.11g respectively. An adapter with 11a/b, 11b/g, or 11a/b/g can communicate on either/any of these listed formats respectively, the actual connection will be based on the access point to which it connects.

- ³³ **Embedded Security Subsystem** may require download of client security software from the Web and requires Internet access, not included.
- ³⁴ **Asset ID** allows system-specific information to be stored in a chip inside the system; it does not have any radio frequency support.
- ³⁵ **Operating system:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/think/support and enter your machine type and model number for more information.
- ³⁶ **Wireless upgradable** allows the system to be wireless-enabled with an optional wireless Mini PCI or Mini PCI Express card. Designed to operate only with Lenovo options.
- ³⁷ **Mobile processors:** Power management reduces processor speed when in battery mode.

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