

New ThinkPad T60 notebook computers offer fingerprint reader and new Intel processor and graphics

Overview

The new ThinkPad® T60 notebook computer is the ideal solution for frequent travelers who need high performance in a lightweight package.

What's new on these systems

- Intel™ Core Duo processor T2400
- Intel PRO/Wireless 3945ABG⁸ wireless connection.
- Intel Graphics Media Accelerator 950

Data protection

Integrated fingerprint reader technology helps to prevent unauthorized access to your ThinkPad notebook and data.

Exciting technology

- Intel Duo mobile technology has:
 - Intel Core Duo processor family
 - Intel PRO/Wireless family
 - Intel 945GM chipset family
- Intel Graphics Media Accelerator 950 chipset
- Intel 11a/b/g wireless network connection
- UltraNav dual-pointing system, featuring TrackPoint® and customized touch pad for pointing flexibility
- ThinkPad T60 has long battery operation: Up to 6.0 hours⁹ on the six-cell system battery and up to 9.0 hours with optional batteries
- UltraConnect antenna for optimal frequency coverage and performance for improved wireless LAN connectivity around the world; support for 2.4 GHz frequency band for 802.11b networks and for four sub-bands

in 5 GHz frequency band to meet unique country spectrum requirements

Features and options

- Integrated communications: Modem and 1 Gigabit Ethernet LAN connection standard
- Wireless LAN LED indicator
- Access Connections utility to help manage wired and wireless communications
- Microsoft™ Windows™ XP Professional with selected applications
- Ultrabay™ Slim for fast and easy hot- and warm-swapping of selected options
- 358.1-mm (14.1-in) with 1024 x 768 resolution

Planned availability date

February 14, 2006

At a glance

The new ThinkPad T60 notebooks feature:

- Intel Core Duo processor T2400 (1.83 GHz¹, 2 MB L2 cache, 667 MHz FSB)
- Sleek profile and light weight
- 512 MB² PC2-5300 DDR2 SDRAM 667 MHz SO DIMM memory, expandable to 3 GB
- ThinkVantage™ Rescue and Recovery™
- UltraNav dual-pointing system, featuring TrackPoint and customized touch pad
- ThinkPad HDD Shock Absorber™
- 60 GB³ (5400 rpm) HDD
- 24x-24x-24x-8x maximum CD-RW/DVD drive^{4,5}
- Standard integrated communications of V.90⁶ modem (V.92⁷-designed) and 1 Gigabit Ethernet in selected models
- Embedded Security Subsystem 2.0 and Trusted Computing Group (TCG)-compliant
- Three-year limited warranty; one-year limited warranty on battery
- IBM Support Center: 800-426-7378

This announcement is provided for your information only. For additional information, contact your sales representative, call 800-426-4968, or visit <http://www.thinkpad.com>.

Description

ThinkPad T60 notebook

Integrated fingerprint reader technology on all systems helps to prevent unauthorized access to your ThinkPad notebook and data.

- Fingerprint reader is integrated into the palm rest.
- Combine the integrated fingerprint reader with Password Manager and the Embedded Security Subsystem for strong security measures that are easy to follow.
- Fingerprint reader offers users a convenient solution — authenticate at system startup and log on to Windows with a swipe of your finger.

The Active Protection System™, a ThinkVantage technology, helps protect your HDD from some damage that could be caused by shock. A system board-mounted sensor continuously monitors your ThinkPad notebook for sudden movement, and temporarily stops the HDD when a fall or similar event is predicted.

Light and portable: The ThinkPad T60 notebooks are approximately 26.6 mm to 31 mm (1.0 to 1.2 in) thin¹⁰ with optimal travel weight starting at 2.17 to 2.54 kg (4.8 to 5.6 lb)¹¹ with travel bezel. The titanium and magnesium composite covers give added strength.

ENERGY STAR: All ThinkPad notebook models are designed to meet the EPA ENERGY STAR¹² requirements for using less than 15 watts of power in sleep mode when enabled by the power management software provided with the systems.

Robust system manageability: This notebook features support for IBM Director Agent and is designed to the PXE 2.1 manageability requirements for mobile systems.

ImageUltra™ services: Help reduce your IT costs and simplify client deployment and management.

For more information, visit

<http://www.ibm.com/pc/us/pc/um/migration>

Leadership design

- Shock absorber to help prevent some HDD crashes when a system is placed on a hard surface while in use
- UltraConnect antenna to help optimize frequency coverage and performance for improved wireless LAN connectivity around the world; the antenna supports a 2.4 GHz frequency band for 802.11b networks and for four sub-bands in the 5 GHz frequency band to meet unique country spectrum requirements
- Great graphics chipset for clear images
- ThinkVantage Access Connections software to easily manage wired and wireless connections
- Disk-to-disk recovery of preloaded software
- 667 MHz FSB
- All memory modules are 667 MHz double data rate (DDR) except for 2 GHz 533 MHz double data rate (DDR) memory modules
- Embedded Security Subsystem 2.0 (TCG-compliant)
- Wi-Fi wireless (802.11a/b/g)

Processor technology: These new ThinkPad T60 notebook computers feature the Intel Core Duo processor T2400, with floating-point decimal for exceptional performance. Enhanced Intel SpeedStep technology has two performance modes:

- Maximum performance mode for top performance while connected to ac external power using the ac power adapter.
- Battery-optimized performance mode for balance between performance and battery life when operating on battery power. In this mode the MHz speed is reduced to conserve battery power.

Excellent security and manageability

- Designed to the PXE 2.1 manageability requirements for mobile systems
- Support for IBM Director Agent, a comprehensive set of superior, standards-based PC hardware manageability tools that work with and complement existing systems management products
- Compliant with the industry-standard Common Information Model
- Local and remote asset management, and early detection of HDD failure via IBM Director Agent
- Remote setup and low-level maintenance via IBM Remote Deployment Manager™
- Asset and data security via multiple passwords and locks

ThinkVantage Rescue and Recovery, an enhanced support environment accessible via the Access Program using the blue button, enables user self-help and self-recovery. You get:

- Improved features and performance of Rescue and Recovery
- Broader recovery and diagnostic tools when your primary operating system is failing:
 - Rescue and restore your files, folders, or backups using ThinkVantage Rescue and Recovery
 - Restore the HDD to the same contents it held when the computer was manufactured.
 - Communicate using the Internet and link to the IBM support site (Internet access required, not included).
 - Troubleshoot by using diagnostics.

Operating system: Microsoft Windows XP Professional with selected applications.

Communications: Modem and 1 Gigabit Ethernet LAN connection are standard.

Wi-Fi wireless lets you connect to a LAN without wires or cables. To connect to the Internet, the Cisco AP1200 (or similar device) and an Internet connection are required. 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.

LCD TFT display: 358.1-mm (14.1-in) TFT display with resolution of 1024 x 768

All displays are measured diagonally.

Video modes

Intel Graphics Media Accelerator 950 chipset with 1024 x 768 TFT display resolution

Resolution	TFT LCD		
	Color depth		
640 x 480	256,	64K,	16M
800 x 600	256,	64K,	16M
1024 x 768	256,	64K,	16M
1280 x 1024	256(13),	64K(13),	16M(13)
1400 x 1050	256(13),	64K(13),	16M(13)
1600 x 1200	256(13),	64K(13),	16M(13)

Resolution	Color	External monitor			
		Refresh rate (Hz)			
640 x 480	256	60,	75,	85,	100, 120
640 x 480	64K	60,	75,	85,	100, 120
640 x 480	16M	60,	75,	85,	100, 120
800 x 600	256	60,	75,	85,	100, 120
800 x 600	64K	60,	75,	85,	100, 120
800 x 600	16M	60,	75,	85,	100, 120
1024 x 768	256	60,	70,	75,	85, 100, 120
1024 x 768	64K	60,	70,	75,	85, 100, 120
1024 x 768	16M	60,	70,	75,	85, 100, 120
1280 x 1024	256	60,	75,	85,	100, 120
1280 x 1024	64K	60,	75,	85,	100, 120
1280 x 1024	16M	60,	75,	85,	100, 120
1400 x 1050	256	60,	75,		
1400 x 1050	64K	60,	75,		
1400 x 1050	16M	60,	75,		
1600 x 1200	256	60,	75,	85,	100
1600 x 1200	64K	60,	75,	85,	100
1600 x 1200	16M	60,	75,	85,	100
2048 x 1536	256	60,	75,		
2048 x 1536	64K	60,	75,		
2048 x 1536	16M	60,	75,		

Keyboard with TrackPoint and enhanced features: The keyboard has the familiar layout of a ThinkPad notebook with function keys for quick access to system functions such as power management control.

- UltraNav, which combines the advantages of the TrackPoint device, center-scrolling button, and a touch pad, is standard.
- With ThinkLight®, you can easily view your keyboard in low-light conditions.
- ThinkPad button for one-button access to critical information. You can choose from three different caps for the TrackPoint.
- The TrackPoint with enhanced features includes the Press-to-Select and Release-to-Select function.

Tap the TrackPoint to speed icon launches and help reduce keystrokes. The programmable center button enables fast scrolling of Web sites and documents or fast panning across wide spreadsheets. Switch to the innovative magnifying glass feature to enlarge screen views in any application.

Memory: The ThinkPad T60 systems have 512 MB SDRAM 667 MHz SO DIMM memory standard, expandable to 3 GB. These systems can be configured for up to 3 GB of addressable memory. Memory options up to 1 GB DDR2 SDRAM 667 MHz SO DIMM and one 2 GB DDR2 SDRAM 533 MHz SO DIMM can be added in the two slots for memory expansion.

To achieve the maximum 3 GB to which memory can be expanded, you need to replace the 256 MB or 512 MB card with a 1 GB DDR2 SDRAM 667 MHz SO DIMM card and add a 2 GB DDR2 SDRAM 533 MHz SO DIMM card in the extra slot.

On the ThinkPad T60 systems, even though it is possible to physically install memory size to 4 GB, actual usable memory size is limited to 3 GB. This limitation comes from the current 32-bit PC architecture.

Recommended for memory expansion are 2 GB PC2-4200 DDR2 SDRAM 533 MHz SO DIMM or 256 MB, 512 MB, and 1 GB PC2-5300 DDR2 SDRAM 667 MHz SO DIMM.

If PC2-4200 DDR2 SDRAM 533 MHz SO DIMM and PC2-5300 DDR2 SDRAM 667 MHz SO DIMM are used at the same time, actual memory access speed is aligned to 533 MHz.

PC card: One Type II slot and one ExpressCard/54 slot.

Storage: The customer-removable HDD is 60 GB (5400 rpm).

An optional second HDD in the UltraBay Slim expands storage. The second HDD option, requiring an adapter, can be used with all ThinkPad T60 models.

Drives: 24x-24x-24x-8x maximum CD-RW/DVD drive

Audio: Full-duplex audio on the system board and the integrated microphone allow voice annotation and audio. The system is equipped with audio in/out jacks for stereo speakers, headphone, or external microphone. The system supports Microsoft DirectSound applications.

Infrared (IR): The system has one fast IR transceiver (up to 4 Mbps) for wireless file and data transfer and printing. The ThinkPad T60 notebooks comply with the Infrared Data Association (IrDA) IR data link specification V1.1.

Other features: Included ports:

- External display
- Built-in RJ-11 and RJ-45 connectors for telephony and LAN connections
- IR
- Microphone
- Headphone
- Three USB 2.0 ports

A PS/2® or serial port is not included, but both can be obtained through the optional, ThinkPad Advanced Dock or ThinkPad Advanced Mini Dock.

The USB 2.0 ports, which connect external drives and other devices, are supported with Windows XP Professional.

The 168-pin connector supports these optional docking solutions:

- ThinkPad Advanced Mini-Dock for port replication, additional USB capability, and security
- ThinkPad Advanced Dock for a more advanced docking solution

AC adapter: The ac adapter is an ac-to-dc converter that supplies the necessary power to the computer. The ac adapter also charges the battery pack when it is installed in the computer.

Li-Ion battery pack

- A Li-Ion battery pack with six-cells is shipped with the system.
- The optional ThinkPad Ultrabay Slim Li-Polymer battery with three cells fits into the Ultrabay Slim.
- An optional ThinkPad Z60m/T60 Series High Capacity Li-Ion battery with nine cells is available for even longer battery hours of operation for systems that come standard with the six-cell battery. Two batteries can be installed to increase battery operating time.

- The battery pack is an internal power source to the computer when the ac adapter is not available. The battery pack is rechargeable and is charged using the ac adapter with the system.
- You can determine how much battery power remains by using the Fuel-Gauge ThinkPad utility program. This displays the percent charge remaining, whether one or two batteries are in the system.

Approximate operation and charging hours:

- Power off/suspend charging¹⁴: 3.6 hr (six-cell), 4.5 hr (nine-cell)
- Charging during operation¹⁴: 3.6 to 6.0 hr (six-cell), 4.5 to 6.0 hr (nine-cell)
- Battery operation:
 - Six-cell battery: Up to 5.8 to 6.0 hr
 - Six-cell plus optional bay battery: Up to 8.5 hr
 - Nine-cell battery (optional on some systems): Up to 8.7 to 9.0 hr
 - Optional nine-cell plus bay battery: Up to 11.5 hr

Software

Non-Lenovo™ software: The non-Lenovo software programs listed in this section may be licensed to you under the non-Lenovo manufacturer's, supplier's, or publisher's terms and conditions. The non-Lenovo manufacturers, suppliers, or publishers are responsible for providing any service or support associated with these programs. The descriptions of these programs were obtained from information made available by these companies to the general public. Lenovo does not warrant these products. Some software may differ from its separately available version (if available), and may not include user manuals or all program function.

Software available for download from the Web

- Client Security software updates
<http://www.pc.ibm.com/us/security/secdownload.html>
- Note: For models with Embedded Security Subsystem
- IBM Director Agent
http://www.pc.ibm.com/us/eserver/xseries/systems_management/dwnl.html
- IBM Remote Deployment Manager
http://www.pc.ibm.com/us/eserver/xseries/systems_management/dwnl.html

Software that may be included or preloaded on the system

Standard preload for T60 systems

- Microsoft Windows XP Professional
- InterVideo WinDVD Player — only for systems with DVD drive or DVD/CD-RW
- InterVideo WinDVD Creator — only for systems with DVD-RW/CD-RW drive
- ThinkVantage Productivity Center
- ThinkVantage System Update
- PC-Doctor diagnostics

- Think Multimedia — only for systems with DVD-RW/CD-RW drive
- ThinkVantage Access Connections
- Adobe Acrobat Reader
- ThinkVantage Rescue and Recovery 3.0
- Symantec Client Security Software (OEM Edition) with 90 days of virus definition updates
- ThinkVantage Client Security Software
- ThinkVantage fingerprint software

Warranty information

For a copy of applicable product warranties, contact your authorized Lenovo reseller or Lenovo representative. Lenovo makes no representation or warranty regarding third-party products or services.

Telephone support may be subject to additional charges, even during the limited warranty period. For Lenovo machines with on-site labor, Lenovo will attempt to diagnose and resolve the problem remotely before sending a technician. For Lenovo machines with courier or depot service, Lenovo will attempt to diagnose and resolve the problem remotely before sending a courier.

All offers are 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.

Accessibility by people with disabilities

The following features support use by people with disabilities:

- Controls and latches operable with one hand and minimal dexterity
- Keys discernible by touch without activating them
- Ports and connectors for connection of industry-standard devices

Reference information

- ¹ Power management reduces processor speed when in battery mode.
- ² Maximum capacity: May require the replacement of standard component with largest supported component available.
- ³ GB equals one billion bytes when referring to HDD. Accessible capacity is less. Up to 4 GB is used in the service partition.
- ⁴ Variable read rate. Actual playback speed varies and is often less than the maximum possible.
- ⁵ For combination drives, maximum speeds are given in the following order: CD-W, CD-RW, CD-R, and DVD-R.
- ⁶ The V.90 modem can receive data at up to 56 Kbps from a compatible service provider and transmit data at up to 31.2 Kbps. Public networks currently limit maximum download speeds to about 53 Kbps. Actual speeds depend on many factors and are often less than the maximum possible.
- ⁷ Upload speeds are limited to 48 Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require a compatible phone line and server equipment, and download of a V.92 support device driver when available. Check with your telephone and Internet service providers for availability.
- ⁸ 11a, 11b, and 11g wireless are based on IEEE 802.11a, 802.11b, and 802.11g. An adapter with 11 a/b or 11a/b/g can communicate on any of these formats; the actual connection is based on the access point to which it connects.

⁹ These model numbers achieved the Ziff Davis Media Inc.'s Business Winstone 2002 BatteryMark V1.0, battery rundown time of at least the time shown. This test was performed without independent verification by the VeriTest testing division of Lionbridge Technologies, Inc. (VeriTest) nor Ziff Davis Media Inc.; neither Ziff Davis Media Inc., nor VeriTest makes any representations or warranties as to these test results. For a description of the environment under which the test was performed, visit <http://www.ibm.com/pc/ww/thinkpad/batterylife>

Battery life (and recharge times) varies based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.

- ¹⁰ Thickness may vary at certain points on the system.
- ¹¹ Actual weight may vary depending on vendor components, manufacturing process, or options. Weight includes battery and optional travel bezel instead of the standard optical drive in the Ultrabay Slim.
- ¹² As an ENERGY STAR partner, Lenovo has determined that all models of this product meet the ENERGY STAR guidelines for energy efficiency.
- ¹³ Supported in panning mode.
- ¹⁴ Recharge time varies.

Trademarks

Remote Deployment Manager is a trademark of International Business Machines Corporation in the United States or other countries or both.

PS/2, xSeries, and eServer are registered trademarks of International Business Machines Corporation in the United States or other countries or both.

Intel is a trademark of Intel Corporation.

Microsoft and Windows are trademarks of Microsoft Corporation.

Ultrabay, Rescue and Recovery, ThinkVantage, ThinkPad HDD Shock Absorber, Active Protection System, ImageUltra, and Lenovo are trademarks of Lenovo in the United States, other countries, or both

ThinkPad, TrackPoint, and ThinkLight are registered trademarks of Lenovo in the United States, other countries, or both

Other company, product, and service names may be trademarks or service marks of others.

United States Announcement Supplemental Information

January 5, 2006

Optional features

For the latest information on options available for the ThinkPad® T60 models and other ThinkPad notebooks, visit

<http://www.pc.ibm.com/us/accessories/thinkpad/index.html>

Services

IBM Integrated Technology Services

IBM services include business consulting, outsourcing, hosting services, applications, and other technology management.

These services help you learn about, plan, install, manage, or optimize your IT infrastructure to be an On Demand Business. They can help you integrate your high-speed networks, storage systems, application servers, wireless protocols, and an array of platforms, middleware, and communications software for Lenovo™ and many non-Lenovo offerings.

For details on available services, contact your IBM representative or visit

<http://www.ibm.com/services/>

For details on available IBM Business Continuity and Recovery Services, contact your IBM representative or visit

<http://www.ibm.com/services/continuity>

For details on education offerings related to specific products, visit

<http://www.ibm.com/services/learning/index.html>

Select your country, and then select the product as the category.

Technical information

Physical specifications

Note: Actual specifications and weights may vary based on features, vendor components, or manufacturing processes. All weights and dimensions are approximate.

For systems with 358.1-mm (14.1-in) TFT display:

- Width: 311 mm (12.2 in)
- Depth: 255 mm (10.0 in)
- Height: 26.6 to 31 mm (1.0 to 1.2 in)
- Weight:
 - With travel bezel: 2.17 kg (4.8 lb)
 - Configured system: 2.34 kg (5.2 lb)

Accessories

- Li-Ion battery pack:
 - Six-cell: 340 g (0.75 lb)
 - Nine-cell: 490 g (1.08 lb)
- 65W ac adapter (two-pin or three-pin): 260 g (0.573 lb)
- Power cord for ac adapter: 90 g (0.19 lb)
- DVD drive: 345 g (0.76 lb)

Electrical specifications

- Universal ac adapter (90 W 2-pin):
 - Input: 100/240 V ac, 2.5A (max), 50/60 Hz
 - Output: 20 V dc, 4.5 A
- Universal ac adapter (65 W 2-pin/3-pin):
 - Input: 100/240 V ac, 1.5A (max), 50/60 Hz
 - Output: 20 V dc, 3.25 A
- Li-Ion battery packs:
 - Six-cell: 10.8 V, 5.2 Ah
 - Nine-cell: 10.8 V, 7.8 Ah

Heat dissipation: 222 Btu/hr maximum

Heat emissions: 65 watts maximum

Air temperature for shipping and storage: -20° to 60°C (-4° to 140°F)

Acoustic noise level: Category 3D (office environment)

- Low cooling fan speed:
 - Sound power level: 3.7 bels (idling), 4.0 bels (HDD seeking)
 - Sound pressure level at the operator position: 31 dB (idling), 34 dB (HDD seeking)
- Middle cooling fan speed:
 - Sound power level: 3.9 bels (idling), 4.0 bels (HDD seeking)
 - Sound pressure level at the operator position: 33 dB (idling), 34 dB (HDD seeking)
- High cooling fan speed:
 - Sound power level: 4.0 bels (idling), 4.1 bels (HDD seeking)
 - Sound pressure level at the operator position: 36 dB (idling), 37 dB (HDD seeking)

Note: All measurements are made in accordance with ISO 7779 and reported in conformance with ISO 9296.

Operating environment: ThinkPad computers are designed, built, and tested for high quality and reliability. When used properly in standard business environments, a ThinkPad system should be a reliable computing asset for many years. Harsh environments and abuse can damage ThinkPad systems since they are not intended to withstand extreme temperatures, dust, shock, or other severe physical environments. ThinkPad systems should not be used in unsuitable environments. For example, a ThinkPad system should not be used in non-stationary

This announcement is provided for your information only.

environments, such as in-vehicle installations, without additional casing or shock dissipation. Lenovo warrants that the ThinkPad notebook will conform to its Official Published Specifications when used in a suitable physical operating environment.

Air temperature

- 0 to 8,000 ft:
 - Operating: 5° to 35°C (41° to 95°F)
 - System off: 5° to 43°C (41° to 110°F)
 - Storage/shipment: -20° to 60°C (-4° to 140°F)
 - Wet bulb (maximum): 29.4° C (85°F)
- 8,000 to 10,000 ft:
 - Operating: 5° to 31.3°C (41° to 88°F)
 - System off: 5° to 43°C (41° to 110°F)
 - Storage/shipment: -20° to 60°C (-4° to 140°F)
 - Wet bulb (maximum): 25.7°C (78°F)

Note: The maximum temperature when the system is on is linearly decreased from 8,000 ft to 10,000 ft.

Relative humidity

- Operating: 8% to 95%
- Storage/shipment: 5% to 95%

Altitude: 10,000 ft maximum (3,048 m)

Agency approvals: System unit approvals:

- FCC Part 15 Class-B (Doc)
- VCCI Class 2
- UL-60950
- C-UL
- CCC (for China)
- BSMI (for Taiwan)
- SMA 3548 (Australia and New Zealand)
- MPR-II (Sweden)
- CE Mark
- CB Report
- NOM (Mexico)
- MIC (Korea)

Software requirements: The following operating systems support the ThinkPad T60 computer:

- Microsoft™ Windows™ 2000 Professional (SP4¹⁵) with USB 2.0 support
- Microsoft Windows XP Professional (SP1a¹⁵, or SP2) with USB 2.0 support
- Microsoft Windows XP Home (SP1a¹⁵, or SP2) with USB 2.0 support

¹⁵ Supported only when Core multiprocessing is disabled.

For information about support for these operating systems, visit

<http://www.lenovo.com/think/support>

Note: Previous versions of these operating systems are not supported.

For a list of completed Linux™ certifications, visit

<http://www.lenovo.com/think/support/site.wss/MIGR-48NT8D.html>

Operating systems other than those preinstalled on the systems may not provide full-feature function. To view considerations or service hints and tips by operating system, visit

<http://www.lenovo.com/think/support>

- In the middle of the page, in the Quick path to a product field, enter your system's four-digit machine type and three-digit model number, such as 2007-123.
- On the left side of the page, click Hints and Tips.
- In middle of the page, select a category such as Windows 2000 to see the list of considerations or hints and tips for your machine type.

Compatibility and supported products

Contact your ThinkPad representative for a list of supported features and options.

PC card: The ThinkPad T60 notebook conforms to the PC Card Standard Release 8. The PC Card Standard encompasses both the former 16-bit Release 2.1 card standard and the 32-bit CardBus card. Other PC card adapters that comply with the PC Card Standard may also function, but have not been tested by Lenovo.

Vendor software compatibility

Lenovo tests a large number of commonly used and available applications for compatibility with its ThinkPad systems using supporting operating systems and configurations. In general, you can expect that most vendor applications designed to run on supported operating systems and Intel™-compatible system architectures should be compatible with a ThinkPad system. Some configurations, however, may not be compatible.

Lenovo does not warrant or support vendor software products, nor guarantee compatibility of those products with Lenovo systems. Refer to the applicable warranty and license terms provided by the respective vendors.

ThinkPad T60 systems contain BIOS in their flash ROM and a GUI to set up the system and power-management features for Windows users. BIOS provides the hardware instructions and interfaces designed to support the standard features of the ThinkPad T60 computer and to maintain compatibility with many software programs currently operating under Windows XP.

Limitations: For a list of tips about running various versions of operating systems, visit

<http://www.lenovo.com/think/support>

General

- ThinkPad 11a/b/g Wi-Fi wireless LAN PCI Express Mini Card (ThinkPad 11a/b/g), Intel PRO/Wireless 3945ABG, support ad hoc wireless connection mode for 2.4 GHz 802.11b connections. ThinkPad 11a/b/g, and Intel PRO/Wireless 3945ABG wireless adapters support ad hoc wireless connections for 2.4 GHz 802.11g connections at 802.11b data rates (up to 11 Mbps) as defined in the IEEE 802.11g standard.
- Do not use the RJ-11, RJ-45, or VGA port when the computer is docked on ThinkPad Advanced Dock, ThinkPad Advanced Mini Dock, or ThinkPad Essential Port Replicator.
- Always place the RJ-11 cover on its connector.
- Selected systems are wireless upgradable with wireless LAN PCI Express Mini Card options sold by Lenovo. Systems are not wireless upgradable in all countries.
- Systems with the wireless LAN product permit legal operation worldwide in regions in 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 brand.

- Using Wi-Fi wireless and optional Bluetooth products together may impact the performance of both.
- Support for a DVI monitor is through the ThinkPad docking options and is limited to a resolution of 1600 x 1200, 60 Hz mode.
- The Active Protection System™ is automatically disabled while the computer is:
 - Loading the operating system
 - In standby or hibernation mode
 - Resuming from normal operation after being in standby or hibernation
 - Being shut down

On the ThinkPad T60 systems, even though it is possible to physically install 4 GB of memory, the actual amount of memory addressable by an operating system is limited to 3 GB. This limitation comes from the current 32-bit PC architecture.

Planning information

Cable orders: All required cables are included in the shipment group.

Installability: ThinkPad notebook systems require approximately 20 minutes for installation. Installation includes unpacking, setting up, and powering on the system. Additional time is required to install optional memory and other features.

Packaging

- System unit with the appropriate processor, HDD, and display
- 512 MB of memory
- Proper optical drive installed
- Modem and Ethernet
- Embedded Security Subsystem 2.0
- Wi-Fi wireless card
- Appropriate preloaded software

Shipment group

- System unit with U.S. English keyboard
- AC adapter
- Rechargeable battery pack (Li-Ion)
- Power cord
- TrackPoint® caps
- ThinkPad T Series Service and Troubleshooting Guide
- ThinkPad T Series Setup Guide
- License agreement and supporting documentation
- Lotus SmartSuite® Millennium license of use
- Lotus Notes® stand-alone client license of use
- Envelope Group BM (miscellaneous envelope): Insurance brochure

Security, auditability, and control

Passwords: These password protection mechanisms are available:

- Power-on passwords to help protect the system from unauthorized use
- Supervisor password for use by a system administrator
- HDD password to help protect data on the removable HDD

In addition, an optional locking device in the IBM security slot provides physical security.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

Terms and conditions

IBM Global Financing: Yes

To obtain copies of the Lenovo Statement of Limited Warranty, contact your reseller or Lenovo.

In the United States, call 800-426-7378 or write to:

Warranty Information
P.O. Box 12195
Research Triangle Park, NC 27709
Attn: Dept ZPYA/B676

Warranty period

- System hardware — Three years on parts and labor
- System battery — One year

Optional Lenovo features initially installed in a Lenovo system carry the same warranty period as the system. If installed after the initial system installation, they carry the balance of the system warranty or the optional feature warranty, whichever is greater.

Warranty service: If required, your service provider provides repair or exchange service depending on the type of warranty service specified for the machine. A service technician will attempt to resolve your problem over the telephone. You must follow the problem determination and resolution procedures. Scheduling of service will depend upon the time of your call and is subject to parts availability. Service levels are response time objectives and are not guaranteed. The specified level of warranty service may not be available in all worldwide locations. Additional charges may apply outside your service providers normal service area. Contact your local service provider representative or your reseller for country- and location-specific information.

Customer replaceable unit (CRU) service: Lenovo will ship CRUs to you for you to install, Tier 1 CRUs are easy to install whereas Tier 2 CRUs require some technical skill and tools. CRU information and replacement instructions are shipped with your machine and are available from Lenovo at any time on your request. You may request that a service provider install CRUs at no additional charge under the type of warranty service designated for your machine. Lenovo specifies in the materials shipped with a replacement CRU whether a defective CRU must be returned. When return is required, return instructions and a container are shipped with the replacement CRU, and you may be charged for the replacement CRU if Lenovo does not receive the defective CRU within 30 days of your receipt of the replacement.

Courier or depot service: You will disconnect the failing machine for collection arranged by your service provider. A shipping container will be provided to you for you to return your machine to a designated service center. A courier will pick up your machine and deliver it to the designated service center. Following its repair or exchange, the service center will arrange the return

delivery of the machine to your location. You are responsible for its installation and verification.

This type of service is called EasyServ in the U.S. and Canada.

Call 800-426-7378 to assist with problem isolation for hardware to determine if warranty service is required. Telephone support may be subject to additional charges, even during the limited warranty period. If a hardware problem is identified, the Customer Support Center will either initiate the shipment of a CRU or arrange for a courier to pick up the system for overnight delivery (where available) to the repair location. Most repairs should be made within 48 hours after the system is received at the repair location (actual repair time may vary). Keep the original shipping carton for shipping to the repair location. If the original shipping carton is not available, the courier will deliver a shipping carton and return to pick up the system for delivery to the repair location.

International Warranty Service (IWS): IWS is available during the warranty period to customers who travel or relocate to countries where their computer is sold and serviced by a service provider authorized to perform warranty service. Eligible Lenovo computers are identified by their four-digit machine type.

You can obtain IWS through the method of service, such as CRU, depot, carry-in or on-site, provided in the servicing country. Service methods and procedures vary by country, and some service or parts may not be available in all countries. Service centers in certain countries may not be able to service all models of a particular machine type. In addition, some countries may have fees and restrictions that apply at the time of service.

Note: Due to the earth's magnetic field, CRT monitors are manufactured to work in northern, southern, and equatorial regions of the earth and may not produce a satisfactory image when moved between them. Any required adjustment (if possible) is not covered under IWS and may be subject to a chargeable action. The magnetic field does not affect flat-panel LCD monitors and ThinkPad LCD displays.

Licensing: Programs included with this product are licensed under the terms and conditions of the license agreements that are shipped with the system.

ThinkPlus™ services

Warranty and maintenance options: The announced products may be eligible for ThinkPlus maintenance services, convenient prepackaged offerings for warranty service upgrades and maintenance services.

Installation services: The announced products may be eligible for ThinkPlus installation services, convenient prepackaged offerings for installation services.

Refer to the **Prices** section for information on the availability of ThinkPlus services.

Field-installable features: Yes

Model conversions: No

Machine installation: Customer setup: customers are responsible for installation according to the instructions Lenovo provides with the machine.

Graduated program license charges apply: No, This product does not contain licensed internal code or licensed machine code.

Educational allowance: None

Prices

Mobile products — ThinkPad T60

All systems include: Modem, 1 Gigabit Ethernet, ThinkPad UltraNav pointing system, and Embedded Security Subsystem 2.0, and fingerprint reader.

Systems that have Intel PRO/Wireless 3945ABG and have Intel 11a/b/g wireless in their description, have Intel Centrino Duo mobile technology.

Note: Preloads are described in the **Description** sections of this document.

Description	Order number	Machine type/ model	List price ¹⁶
-------------	--------------	------------------------	--------------------------

U.S. English machines standard preinstalled software

Windows XP Professional

60.0 GB, Intel Core Duo Processor T2400, 512 MB, Intel Graphics Media Accelerator 950 graphics chipset, Intel 11a/b/g wireless, 6-cell battery, 24x/24x/24x/8x max CD-RW/DVD drive, fingerprint reader, 14.1-in TFT 1024 x 768	195144U	1951-44U	\$2,049
--	---------	----------	---------

¹⁶ List price; does not include tax or shipping and is subject to change without notice. Reseller prices may vary.

ThinkPlus services for warranty and maintenance

Description	Part number
2-year IOR 9 x 5 NBD	41C9175
3-year IOR 9 x 5 NBD	41C9176
4-year IOR 9 x 5 NBD	41C9177
5-year IOR 9 x 5 NBD	41C9179
4-year P&L P/U Depot	41C9178
5-year P&L P/U Depot	41C9180

ThinkPlus MA for post warranty/warranty service upgrade service

Description	Part number
1-year IOR 9 x 5 NBD	41C9279
1-year P&L P/U Depot	41C9278
2-year IOR 9 X 5 NBD	41C9281
2-year P&L P/U Depot	41C9280

IBM Global Services is the preferred, authorized warranty service, warranty service upgrade, and post-warranty service provider for Lenovo products (excluding mainland China).

For ServiceElect (ESA) maintenance service charges, contact IBM Global Services at 888-426-4343.

IBM Global Financing: IBM Global Financing offers competitive financing to credit-qualified customers to assist them in acquiring IT solutions. Offerings include financing for IT acquisition, including hardware, software, and services, both from IBM and other manufacturers or vendors. Offerings (for all customer segments: small, medium, and large enterprise), rates, terms, and availability can vary by country. Contact your local IBM Global Financing organization or visit

<http://www.ibm.com/financing>

IBM Global Financing offerings are provided through IBM Credit LLC in the United States and other IBM subsidiaries and divisions worldwide to qualified commercial and government customers. Rates are based on a customer's credit rating, financing terms, offering type, equipment type, and options, and may vary by country. Other restrictions may apply. Rates and offerings are subject to change, extension, or withdrawal without notice.

Financing solutions from IBM Global Financing can help you stretch your budget and affordably acquire the new product. But beyond the initial acquisition, our end-to-end approach to IT management can also help keep your technologies current, reduce costs, minimize risk, and preserve your ability to make flexible equipment decisions throughout the entire technology life cycle.

For more financing information, visit

<http://www.ibm.com/financing>

Trademarks

Lotus SmartSuite and Lotus Notes are registered trademarks of International Business Machines Corporation in the United States or other countries or both.

Intel is a trademark of Intel Corporation.

Microsoft and Windows are trademarks of Microsoft Corporation.

Linux is a trademark of Linus Torvalds in the United States, other countries or both.

Lenovo, Active Protection System, and ThinkPlus are trademarks of Lenovo in the United States, other countries, or both

ThinkPad and TrackPoint are registered trademarks of Lenovo in the United States, other countries, or both

Other company, product, and service names may be trademarks or service marks of others.