# TopSeller ThinkPad T61 notebook models include one- and three-year depot warranty

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# At a glance

New TopSeller ThinkPad models of the ThinkPad T61 notebook feature:

- New Core 2 Duo (64-bit) processors with up to 2.4 GHz
- New Intel GM/PM965 chipset
- Choose a new 32- or 64-bit Vista or XP Professional operating system
- Improved wireless LAN (WLAN) and wireless WAN (WWAN) communications
- Roll cage
- · Faster hard drives
- Selected models with Intel Turbo Card for improved performance
- Full hard disk encryption available
- Balance of performance and portability with NVIDIA graphics
- SmartCard on select models
- · Leadership thin and light dimensions
- Available memory<sup>2</sup>: 512 MB, 1 GB<sup>3</sup> (or 2 x 512 MB), or 2 GB (or 2 x 1024 MB)
- DVD, CD-RW/DVD, or Multi-Burner DVD Recordable dual layer, Ultrabay Slim drive<sup>4,5</sup>

#### Overview

The new TopSeller ThinkPad® T61 notebook computer offers the ultimate choice for uncompromised performance. It is thin and light for improved portability.

# What's new

ThinkPad T61 notebooks feature:

- New faster Intel® Core 2 Duo processors
- Microsoft<sup>™</sup> Windows<sup>™</sup> Vista
- New high-speed, higher capacity HDDs
- Full Disk Encryption (FDE) HDD
- Top cover LCD roll cage
- · New four-in-one media card reader on selected models
- Integrated SmartCard reader on selected models

- IEEE 1394a
- Latest NVIDIA discrete graphics offerings

#### Unique data protection

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

The Active Protection System<sup>™</sup>, a ThinkVantage<sup>™</sup> 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 parks the HDD read/write head when a fall or similar event is predicted.

## Latest technology

- Intel Centrino® Duo mobile technology on selected models:
  - Intel Core 2 Duo processor family<sup>1</sup> T7100, T7300, T7500, and T7700 processors with up to 800 MHz front-size bus (FSB) and up to 4 MB L2 cache
  - Intel PRO/Wireless family
  - Intel GM/PM965 Express chipset families
- Integrated Intel Graphics Media Accelerator X3100 graphics for clear images (models with GM965 chipset)
- Intel Wireless Wi-Fi Link 4965AGN LAN or Intel 3945ABG Wi-Fi Wireless or ThinkPad 11a/b/g6
- UltraConnect II antenna to help optimize frequency coverage and performance for improved wireless LAN (WLAN) connectivity around the world, when used with compatible options
- · Intel Turbo Memory Card
- Microsoft Windows Vista, which facilitates better security
- ThinkVantage Access Connections utility to help manage wired and wireless communications
- ThinkVantage Rescue and Recovery<sup>™</sup> 3.0
- Widescreen TFT display starting at 358-mm (14.1-in) has WXGA (1280 x 800) or WXGA+ (1440 x 900) resolution
- Ultrabay<sup>™</sup> Slim for fast and easy hot- and warm-swapping of selected options
- The ThinkPad T61 notebook is approximately 1.1-in thin (27.6 mm)<sup>7</sup> with optimal weight starting at approximately 5 lb<sup>8</sup>

**Robust system manageability:** The ThinkPad T61 notebook features support for IBM Director Agent and is designed to PXE manageability requirements for mobile systems.

**Note:** Certain product family features are limited to selected models that may not be available in all countries. Some combinations of features are not supported. Refer to the Prices or Product number section of this announcement for the models and features available in your country.

Product number: For details, refer to the Product number section in this announcement.

# Planned availability

May 2007

WWAN models with Vodafone or Cingular (with integrated graphics) will be available in June 2007.

WWAN models with Vodacom, Swisscom, Telenor, Telus, or Cingular (with discrete graphics) will be available in July 2007.

Models with NVIDIA graphics and Windows Vista 64-bit or XP Pro will be available in July 2007.

Models with 160 GB (5400 rpm) FDE hard drives will be available July 2007.

**Machine types 6480 and 6481:** Configurations for machine types 6480 and 6481 are expected to be available later in 2007.

Country/Regi on	Announced
ACTANA	**
ASEAN*	Yes
Indi a/South Asi a**	Yes
Australia	Yes
People's Republic of China	Yes
Tai wan	Yes
Korea	Yes
Japan	Yes
New Zeal and	Yes

<sup>\*</sup> Brunei Darussalam, Indonesia, Cambodia, Lao People's Democratic Republic, Malaysia, Philippines, Singapore, Thailand, Vietnam

# Description

**Microsoft Windows Vista:** The new Vista operating system offers a wealth of features. For example, there are security improvements, new graphics, a new method of searching and organizing information, and the availability of virtual folders that can automatically update. Improved API connections are a key new feature. This new operating system is an important step up in technology.

**Unique data protection:** Selected models include integrated fingerprint reader technology from ThinkVantage technologies to help protect access to your ThinkPad notebook and data.

- Because fingerprints are unique, using them along with other security measures can provide strong security.
- Fingerprint reader is built right into the palm rest area of the computer. When used with Password Manager and the Client Security Solution, pass your finger over the reader instead of typing passwords or combine it with passwords.
- Combine the integrated fingerprint reader with Password Manager and the Client Security Solution for strong security measures that are easy to follow. Security software is preloaded for an integrated solution out of the box.
- Administrators can implement strong security policies and users can meet ongoing password requirements easily.

ImageUltra™ services: Selected ThinkPad notebooks are enabled for ImageUltra.

For more information, visit

http://www.pc.ibm.com/us/thinkvantagetech/imageultra.html

#### ThinkPad T61 features

#### Features available for this family of ThinkPad notebooks

Certain product family features are limited to select models that may not be available in all countries. Refer to the models and features available in your country.

# Intel Core 2 processors for 64-bit computing

Intel Core 2 Duo processors T7100, T7300, T7500, or T7700

- Up to 2.4 GHz clock speed
- 800 MHz FSB speed
- Up to 4 MB L2 cache

# Leadership design

<sup>\*\*</sup> Bangladesh, Bhutan, India, Sri Lanka, Maldives, Nepal, Afghanistan

- With the introduction of Windows Vista, Lenovo<sup>™</sup> combines thoughtful engineering with bold design, delivering systems that help lower your total cost of ownership.
  - Lenovo password management is easy to use. It enables secure access to your system as well as your Web pages. It is also integrated with the fingerprint reader available on many Lenovo systems.
  - Lenovo systems include a fully integrated recovery environment that works even when the Windows Vista operating system is not working.
  - Lenovo systems manage everything that changes when your location changes, not just your Internet connection.
- The Active Protection System, a ThinkVantage technology, including a shock absorber to help prevent some HDD crashes that can occur when the system is placed on a hard surface while in use
- UltraConnect II antenna to help optimize frequency coverage and performance for improved WLAN connectivity around the world; support for 2.4 GHz frequency band for 802.11b networks and four sub-bands in 5 GHz frequency band to meet unique country spectrum requirements for 802.11a networks
- Integrated Bluetooth wireless technology with Bluetooth wireless technology antenna on selected models
- Integrated Verizon Sierra Wireless CDMA2000 Network Adapter for Verizon Broadband Wireless Access on selected model or Cingular Integrated 3G WWAN
- Intel Graphics Media Accelerator X3100 for clear images or NVIDIA Quadro NVS 140M
- ThinkVantage Access Connections software to easily manage wired and wireless connections
- · Disk-to-disk recovery of preloaded software
- 800 MHz FSB on Core 2 Duo models
- PC2-5300 DDR2 SDRAM 667 MHz SO DIMM memory
- Client Security Solution (TCG-compliant)
- WLAN wireless technology:
  - Integrated Intel 4965AGN Wi-Fi wireless technology or
  - Integrated Intel PRO/wireless 3945ABG or
  - ThinkPad 11a/b/g

**Note:** The IEEE 802.11n specification has not been finalized and is currently in draft release. The integrated Intel Wireless Wi-Fi Link 4965AGN Mini-PCI Express Adapter is based on the draft release, V1.0 of the IEEE 802.11n specification. The maximum speed depends on the access point device and the number of integrated antennas used for connection.

# Security and manageability

- 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 through IBM Director Agent
- Remote setup and low-level maintenance through IBM Remote Deployment Manager™
- Asset and data security through multiple passwords and locks

ThinkVantage Rescue and Recovery is a one-button recovery and restore solution that includes a set of self-recovery tools for you to diagnose, get help, and recover from system crashes quickly, even if the primary operating system will not boot and you are remote from your support team.

- System Rejuvenation keeps data and system personality settings current when you restore.
- Antidote Delivery Manager allows IT staff to deliver fixes and updates to users wherever they

are, even if their systems are down because of a worm or virus.

- Point-and-click wizard makes creating antidote scripts easy.
- Integration with other ThinkVantage technologies allows migration from backup and chip-encrypted backups, combining our great technologies to create an even more robust environment.

**Operating system:** Microsoft Windows Vista Home Basic 32-bit, Vista Home Premium 32-bit, Vista Business 32-bit or 64-bit, or Vista Ultimate 32-bit are available depending on model.

Windows Vista makes it easier to build "safe" applications that are secure, stable, and maintainable. It introduces advances such as User Account Protection (UAP) to enable developers to easily create applications that can be installed and run without requiring users to log in as an administrator. In addition, ClickOnce and the new Windows Installer enable developers to create applications that are simple to deploy and update, making it as easy to update a client application as it is to visit a Web page.

Windows Vista also empowers developers and designers to create visually appealing applications that improve usability and enable greater differentiation. The new Windows Vista shell and presentation system make it simple for developers and designers to integrate their applications into Windows and into each other to create more usable and better looking user interfaces.

Finally, Windows Vista makes it easy to connect to information, connect to systems, and connect to customers. Additionally, Windows Vista provides Rich Site Summary (RSS) support to enable developers to create experiences that aggregate information from multiple sources.

Communications: Choice of communications:

- 56 Kbps V.90 modem (V.92-designed) and 1 Gigabit Ethernet LAN connection
- Integrated Bluetooth wireless technology on selected models

**LCD TFT display:** Widescreen TFT displays at 358-mm (14.1-in); display is measured diagonally.

**Keyboard with TrackPoint® and enhanced features:** The keyboard has the familiar layout of a ThinkPad notebook with function keys that allow you to quickly access system functions such as power management control.

- UltraNav combines the advantages of the TrackPoint device, center-scrolling button, and a touch pad.
- ThinkLight® makes viewing your keyboard in low-light conditions easy.
- ThinkVantage button provides one-button access to critical information.
- The TrackPoint with enhanced features includes the Press-to-Select and Release-to-Select function.

Just 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: Available memory<sup>2</sup>: 512 MB, 1 GB<sup>3</sup> (or 2 x 512 MB), or 2 GB (or 2 x 1024 MB)

**Important information about memory:** Lenovo notebooks announced April 2007, or after, have a new 64-bit architecture.

The standard memory can be expanded to 3 GB or 4 GB of addressable memory, depending on whether the operating system is a 32-bit or 64-bit operating system. The new notebooks with a Windows Vista 32-bit or previous Windows 32-bit operating system can support up to 3 GB of addressable memory. The new notebooks that have a Windows Vista 64-bit operating system can support up to 4 GB of addressable memory.

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

**Storage:** 60, 80, 120, or 160 GB (5400 rpm) HDD in selected systems and 60 or 100 GB (7200 rpm) in selected systems

**Expansion slots** can accommodate any of the following:

- · ExpressCard/PC card
- SmartCard/PC card
- Four-in-one media/PC card

An optional second HDD in the Ultrabay Slim expands storage. The second HDD option, requiring an adapter, can be used with all ThinkPad T61 models.

**Drives:** DVD, CD-RW/DVD, or Multi-Burner DVD Recordable dual layer, Ultrabay Slim drive<sup>4,5</sup>

**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.

**Video:** Digital visual interface (DVI) for digital displays is supported on selected models supported through the optional ThinkPad Advanced Dock, ThinkPad Advanced Mini-Dock, or ThinkPad Essential Port Replicator stations at up to 1600 x 1200, 60 Hz supported resolution.

Other features: The ThinkPad T61 systems include these ports:

- External display
- Built-in RJ-11 and RJ-45 connectors for telephony and LAN connections
- Microphone
- Headphone
- Three USB 2.0 ports
- IEEE 1394a

ExpressCard/54 slot, PS/2® port, and serial port are not included, but they can be obtained through the optional ThinkPad Essential Port Replicator, ThinkPad Advanced Dock, or ThinkPad Advanced Mini-Dock.

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

The 240-pin connector supports these optional docking solutions:

- ThinkPad Essential Port Replicator for simple port replication and cable management
- 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-lon battery pack

- A four- or six-cell Li-lon battery pack is shipped with the system.
- An optional Li-Ion battery pack, the Ultrabay Slim Li-Polymer battery, fits into the Ultrabay Slim so that 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 percentage of charge remaining, whether one or two batteries are
  in the system.

#### 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 that may be included or preloaded on the system

- ThinkVantage Fingerprint software
- Higher education or K-12 education software (U.S. education models only)

# Standard preload systems

# Software preload

#### Microsoft Windows Vista 32-bit or Vista 64-bit

- Windows Vista Home Basic (Vista 32-bit)
- · Windows Vista Home Premium (Vista 32-bit)
- Windows Vista Business with DVD Playback (Vista 32- or 64-bit)
- Windows Vista Ultimate (Vista 32-bit)
- Windows XP Professional, preloaded = SP2, supported = SP1a, SP2
- Windows XP Home Edition, not preloaded = SP2, supported = SP1a, SP2
- Windows 2000 Professional, not preloaded = SP2
- ThinkVantage Productivity Center (Vista 32- or 64-bit)
- ThinkVantage Access Connections (Vista 32- or 64-bit)
- ThinkVantage Rescue and Recovery (Vista 32- or 64-bit)
- ThinkVantage Client Security Solution (Vista 32-bit)
- ThinkVantage System Update (Vista 32- or 64-bit)
- PC-Doctor diagnostics (Vista 32- or 64-bit)
- Adobe Acrobat Reader (Vista 32- or 64-bit)
- Diskeeper 9.0 Home Addition (Vista 32-bit)
- Picasa by Google (Vista 32-bit)
- Norton Internet Security 2007 (OEM Edition) with 90 days of virus definition updates (Vista 32or 64-bit)
- VZAccess Manager only for systems in U.S. with Verizon wireless card
- Mobile Connect Dashboard for Vodafone support (U.S. and selected EMEA) and only for systems with Vodafone wireless card
- Cingular Communications Manager (Vista 32- or 64-bit) in U.S. only
- Telus (Vista 32- or 64-bit) in U.S. and French Canada preloads only
- Telenor (Vista 32- or 64-bit) (SV preload only Sweden)
- Swisscom (Vista 32- or 64-bit) in U.S., France, and Italy preloads only
- Vodacom (Vista 32- or 64-bit) in U.S., France, Great Britain, and Italy
- ThinkVantage Fingerprint Software on selected systems preload only on models with FingerPrint Reader
- Sun JRE

#### **Microsoft Office**

- Microsoft Office Professional 2007 (Vista 32- or 64-bit)
  - North America, Latin America, EMEA and some geographies refer to Microsoft contract for details
  - CTO Preloading a Hybrid image that will support this offering
- Microsoft Office Pro Hybrid image (Vista 32- or 64- bit)
  - North America, Latin America, EMEA, and some geographies refer to Microsoft contract for details
  - Preloading a Hybrid image that will support this offering
- Microsoft Office 2007 Personal (Vista 32- or 64-bit)
  - Japan only
  - Preload model-specific

#### Other

- Lotus Notes® Stand-alone Client (Vista 32- or 64-bit) License
- Linux<sup>™</sup> Red Hat Enterprise Workstation 4.0 Certified
- Linux TurboLinux Desktop 10 Certified
- Linux SUSE Linux Enterprise Desktop 10 Certified and supported

# 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

A U.S. Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at

http://www-03.ibm.com/research/accessibilit y/requests/accvpat.nsf/lenovo-bidx?OpenForm

#### **Product number**

# **Mobile products**

## Australia / New Zealand machines

Microsoft Windows Vista Business

 Description
 Order Number
 Machine Type
 Model

 ThinkPad T61
 765813M
 7658
 13M

 (14 1-inch WXCA TFT (1280 x 800)
 13M
 13M
 13M

(14.1-inch WXGA TFT (1280 x 800), Integrated Fingerprint Reader, Intel Core 2 Duo processor T7100,

Mobile Intel GM965 Express Chipset, Intel GMA X3100 Integrated Graphics, 60 GB / 5400 rpm, CD-RW/DVD-ROM Combo, 1 GB (2 x 512 MB), Intel PRO/Wireless 3945ABG, 4-cell battery, IEEE 1394, Express Card, Microsoft Windows Vista Business)

Thi nkPad T61 765814M 7658

(14.1-inch WXGA TFT (1280 x 800), Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7100, Mobile Intel GM965 Express Chipset, Intel GMA X3100 Integrated Graphics, 60 GB / 5400 rpm, CD-RW/DVD-ROM Combo, 1 GB (2 x 512 MB), Intel PRO/Wireless 3945ABG, 4-cell battery, IEEE 1394, Express Card, Microsoft Windows Vista Business)

Thi nkPad T61 7658X8M 7658 X8M

(14.1-inch WXGA TFT (1280 x 800), Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7300, Mobile Intel GM965 Express Chipset, Intel GMA X3100 Integrated Graphics, 120 GB / 5400 rpm, CD-RW/DVD-ROM Combo, 1 GB, Intel PRO/Wireless WiFi 4965AGN, 4-cell battery, IEEE 1394, Vodafone, Express Card, Microsoft Windows Vista Business)

Thi nkPad T61 766211M 7662 11M

(14.1-inch WXGA+ TFT (1440 x 900), Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7100, Mobile Intel PM965 Express Chipset, NVIDIA Quadro NVS 140M, 60 GB / 5400 rpm, CD-RW/DVD-ROM Combo, 1 GB (2 x 512 MB), Intel PRO/Wireless 3945ABG, 4-cell battery, IEEE 1394, Express Card, Microsoft Windows Vista Business)

Thi nkPad T61 766212M 7662 12M

(14.1-inch WXGA+ TFT (1440 x 900), Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7100, Mobile Intel PM965 Express Chipset, NVIDIA Quadro NVS 140M, 60 GB / 5400 rpm, CD-RW/DVD-ROM Combo, 1 GB (2 x 512 MB), Intel PRO/Wireless 3945ABG, 4-cell battery, IEEE 1394, Vodafone WWAN, Express Card, Microsoft Windows Vista Business)

Thi nkPad T61 766415M 7664 15M

(14.1-inch WXGA TFT (1280 x 800), Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7300, Mobile Intel PM965 Express Chipset, 14M

NVIDIA Quadro NVS 140M, 120 GB / 5400 rpm, DVD Recordable, 1 GB, Intel PRO/Wireless 3945ABG, 6-cell battery, IEEE 1394, Express Card, Microsoft Windows Vista Business)

India machines

Microsoft Windows Vista Business

ThinkPad T61 (1280 x 800),

Integrated Fingerprint Reader,
Intel Core 2 Duo processor T7100,
Mobile Intel GM965 Express Chipset,
Intel GMA X3100 Integrated Graphics,
60 GB / 5400 rpm, CD-RW/DVD-ROM Combo,
1 GB (2 x 512 MB),
Intel PRO/Wireless 3945ABG,
4-cell battery, IEEE 1394, Express Card,
Microsoft Windows Vista Business)

ThinkPad T61 (1280 x 800),

Bluetooth wireless technology,
Integrated Fingerprint Reader,
Intel Core 2 Duo processor T7100,
Mobile Intel GM965 Express Chipset,
Intel GMA X3100 Integrated Graphics,
60 GB / 5400 rpm, CD-RW/DVD-ROM Combo,
1 GB (2 x 512 MB),
Intel PRO/Wireless 3945ABG,
4-cell battery, IEEE 1394, Express Card,
Microsoft Windows Vista Business)

Thi nkPad T61 766211Q 7662 11Q (14.1-inch WXGA+ TFT (1440 x 900),Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7100, Mobile Intel PM965 Express Chipset, NVI DI A Quadro NVS 140M, 60 GB / 5400 rpm, CD-RW/DVD-ROM Combo, 1 GB (2 x 512 MB), Intel PRO/Wireless 3945ABG, 4-cell battery, IEEE 1394, Express Card, Microsoft Windows Vista Business)

ASEAN English machines

Microsoft Windows Vista Business

ThinkPad T61 765813A 7658 13A (14.1-inch WXGA TFT (1280 x 800),
Integrated Fingerprint Reader,
Intel Core 2 Duo processor T7100,
Mobile Intel GM965 Express Chipset,
Intel GMA X3100 Integrated Graphics,
60 GB / 5400 rpm, CD-RW/DVD-ROM Combo,
1 GB (2 x 512 MB),
Intel PRO/Wireless 3945ABG,
4-cell battery, IEEE 1394, Express Card,
Microsoft Windows Vista Business)

13Q

140

Thi nkPad T61 765814A 7658 14A

(14.1-inch WXGA TFT (1280 x 800), Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7100, Mobile Intel GM965 Express Chipset, Intel GMA X3100 Integrated Graphics, 60 GB / 5400 rpm, CD-RW/DVD-ROM Combo, 1 GB (2 x 512 MB), Intel PRO/Wireless 3945ABG, 4-cell battery, IEEE 1394, Express Card, Microsoft Windows Vista Business)

Thi nkPad T61 766014A 7660 14A

(14.1-inch WXGA+ TFT (1440 x 900), Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7300, Mobile Intel GM965 Express Chipset, Intel GMA X3100 Integrated Graphics, 120 GB / 5400 rpm, DVD Recordable, 1 GB, Intel PRO/Wireless 3945ABG, 6-cell battery, IEEE 1394, Express Card, Microsoft Windows Vista Business)

Thi nkPad T61 766211A 7662 11A

(14.1-inch WXGA+ TFT (1440 x 900), Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7100, Mobile Intel PM965 Express Chipset, NVIDIA Quadro NVS 140M, 60 GB / 5400 rpm, CD-RW/DVD-ROM Combo, 1 GB (2 x 512 MB), Intel PRO/Wireless 3945ABG, 4-cell battery, IEEE 1394, Express Card, Microsoft Windows Vista Business)

China (GCG) machines

Microsoft Windows Vista Business 64

ThinkPad T61 7660 11C (14.1-inch WXGA TFT (1280 x 800),
Integrated Fingerprint Reader,
Intel Core 2 Duo processor T7100,
Mobile Intel GM965 Express Chipset,
Intel GMA X3100 Integrated Graphics,
80 GB / 5400 rpm, CD-RW/DVD-ROM Combo,
1 GB (2 x 512 MB),
Intel PRO/Wireless Wi Fi 4965AGN,
4-cell battery, IEEE 1394, Express Card,
Microsoft Windows Vi sta Business 64)

Japan machines

Windows XP Professional

ThinkPad T61 765812J 7658 12J (14.1-inch WXGA+ TFT (1440 x 900), Integrated Fingerprint Reader, Intel Core 2 Duo processor T7100,

Mobile Intel GM965 Express Chipset, Intel GMA X3100 Integrated Graphics, 80 GB / 5400 rpm, CD-RW/DVD-ROM Combo, 1 GB (2 x 512 MB), Intel PRO/Wireless 3945ABG, 4-cell battery, IEEE 1394, Express Card, Windows XP Professional)

Microsoft Windows Vista Business 64

ThinkPad T61 (1440 x 900),

Integrated Fingerprint Reader,

Intel Core 2 Duo processor T7100,

Mobile Intel GM965 Express Chipset,

Intel GMA X3100 Integrated Graphics,

80 GB / 5400 rpm, CD-RW/DVD-ROM Combo,

1 GB (2 x 512 MB),

Intel PRO/Wireless 3945ABG,

4-cell battery, IEEE 1394, Express Card,

Mi crosoft Windows Vista Business 64)

Korea machines

Microsoft Windows Vista Home Premium

Thi nkPad T61 766012K 7660 12K (14. 1-inch WXGA+ TFT (1440 x 900), Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7300, Mobile Intel GM965 Express Chipset, Intel GMA X3100 Integrated Graphics, 120 GB / 5400 rpm, DVD Recordable, 1 GB (2 x 512 MB), Intel PRO/Wireless 3945ABG, 4-cell battery, IEEE 1394, Smart Card Reader, Microsoft Windows Vista Home Basic)

ThinkPad T61
(14.1-inch WXGA TFT (1280 x 800),
Integrated Fingerprint Reader,
Intel Core 2 Duo processor T7100,
Mobile Intel GM965 Express Chipset,
Intel GMA X3100 Integrated Graphics,
80 GB / 5400 rpm, CD-RW/DVD-ROM Combo,
1 GB (2 x 512 MB),
Intel PRO/Wireless 3945ABG,
4-cell battery, IEEE 1394,
Smart Card Reader,
Microsoft Windows Vista Home Basic)

ThinkPad T61
(14.1-inch WXGA TFT (1280 x 800),
Bluetooth wireless technology,
Integrated Fingerprint Reader,
Intel Core 2 Duo processor T7500,
Mobile Intel PM965 Express Chipset,
NVIDIA Quadro NVS 140M,
120 GB / 5400 rpm,
DVD Recordable, 1 GB (2 x 512 MB),
Intel PRO/Wireless 3945ABG,
4-cell battery,
IEEE 1394, Express Card,
Microsoft Windows Vista Home Premium)

766412K 7664 12K

13K

Thi nkPad T61 766413K 7664 13K

(14.1-inch WXGA TFT (1280 x 800), Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7300, Mobile Intel PM965 Express Chipset, NVI DI A Quadro NVS 140M, 120 GB / 5400 rpm, DVD Recordable, 1 GB (2 x 512 MB), Intel PRO/Wireless 3945ABG, 4-cell battery, IEEE 1394, Smart Card Reader, Microsoft Windows Vista Home Premium)

Microsoft Windows Vista Business

Thi nkPad T61 766411K (14. 1-inch WXGA+ TFT (1440 x 900), Bluetooth wireless technology, Integrated Fingerprint Reader,

Intel Core 2 Duo processor T7700, Mobile Intel PM965 Express Chipset, NVI DI A Quadro NVS 140M, 160 GB / 5400 rpm,

DVD Recordable, 1 GB (2 x 512 MB), Intel PRO/Wireless 3945ABG,

6-cell battery, IEEE 1394, 4-1 Multi-Card Reader, Microsoft Windows Vista Business)

Thi nkPad T61 766414K 7664 14K

7664

11K

(14.1-inch WXGA+ TFT (1440 x 900),Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7300, Mobile Intel PM965 Express Chipset, NVI DI A Quadro NVS 140M, 160 GB / 5400 rpm, DVD Recordable, 1 GB, Intel PRO/Wireless 3945ABG, 6-cell battery, IEEE 1394, Express Card, Microsoft Windows Vista Business)

Taiwan - Traditional Chinese machines

Microsoft Windows Vista Business

Thi nkPad T61 765813V 7658 13V

(14. 1-inch WXGA TFT (1280 x 800), Integrated Fingerprint Reader, Intel Core 2 Duo processor T7100, Mobile Intel GM965 Express Chipset, Intel GMA X3100 Integrated Graphics, 60 GB / 5400 rpm, CD-RW/DVD-ROM Combo, 1 GB (2 x 512 MB), Intel PRO/Wireless 3945ABG, 4-cell battery, IEEE 1394, Express Card,

Microsoft Windows Vista Business)

Thi nkPad T61 765814V 7658 14V

(14.1-inch WXGA TFT (1280 x 800),Bluetooth wireless technology, Integrated Fingerprint Reader, Intel Core 2 Duo processor T7100, Mobile Intel GM965 Express Chipset, Intel GMA X3100 Integrated Graphics, 60 GB / 5400 rpm, CD-RW/DVD-ROM Combo,

```
1 GB (2 x 512 MB),
Intel PRO/Wireless 3945ABG,
4-cell battery, IEEE 1394, Express Card,
Microsoft Windows Vista Business)
```

ThinkPad T61

(14.1-inch WXGA+ TFT (1440 x 900),
Bluetooth wireless technology,
Integrated Fingerprint Reader,
Intel Core 2 Duo processor T7100,
Mobile Intel PM965 Express Chipset,
NVI DI A Quadro NVS 140M,
60 GB / 5400 rpm,
CD-RW/DVD-ROM Combo, 1 GB (2 x 512 MB),
Intel PRO/Wireless 3945ABG,
4-cell battery,
IEEE 1394, Express Card,
Microsoft Windows Vista Business)

ThinkPad T61
(14.1-inch WXGA TFT (1280 x 800),
Bluetooth wireless technology,
Integrated Fingerprint Reader,
Intel Core 2 Duo processor T7300,
Mobile Intel PM965 Express Chipset,
NVIDIA Quadro NVS 140M,
120 GB / 5400 rpm,
DVD Recordable, 1 GB,
Intel PRO/Wireless 3945ABG,
6-cell battery,
IEEE 1394, Express Card,
Microsoft Windows Vista Business)

#### Reference information

- Power management reduces processor speed when in battery mode.
- Maximum capacity may require the replacement of standard component with largest supported component available.
- GB equals one billion bytes when referring to HDD. Accessible capacity is less. Up to 4 GB is used in the service partition.

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- 4 Maximum CD and DVD rates: rates are variable and are often less than the maximum.
- 5 For combination drives, maximum speeds are given in the following order: CD-W, CD-RW, CD-R, and DVD-R.
- 6 11a, 11b, and 11g wireless are based on IEEE 802.11a, 802.11b, and 802.11g. An adapter with 11/a/b/g can communicate on any of these formats; the actual connection is based on the access point to which it connects.
- Thickness may vary at certain points on the system.
- 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 Plus<sup>TM</sup>.

#### **Trademarks**

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# **Optional features**

For the latest information on options available for the ThinkPad® T61 models and other ThinkPad notebooks, visit

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

## **Services**

# **Global 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<sup>™</sup> 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 356-mm (14.0-in) widescreen TFT display:

• Width: 335 mm (13.2 in)

• Depth: 237 mm (9.3 in)

Height: 27.6 to 31.9 mm (1.09 to 1.26 in)

· Weight: As light as 5 lb

#### **Accessories**

- 4-cell Li-Ion battery pack: 221 g (0.49 lb)
- 6-cell Li-lon battery pack: 325 g (0.72 lb)
- AC adapter (two-pin or three-pin): 360 g (0.795 lb) 90W
- Power cord for ac adapter: 90 g (0.19 lb)
- AC adapter (two-pin or three-pin): 260 g (0.57 lb) 65W
- DVD/CD-RW drive: 195 g (0.43 lb)
- Multi-Burner DVD Recordable drive: 195 g (0.43 lb)

#### **Electrical specifications**

- Universal ac adapter (90 W):
  - Input: 100/240 V ac, 1.7/0.6 A, 50/60 Hz
  - Output: 20 V dc, 4.5 A
- Universal ac adapter (65 W):
  - Input: 100/240 V ac, 1.7/0.6 A, 50/60 Hz
  - Output: 20 V dc, 3.25 A
- · Li-Ion battery packs:
  - Four-cell: 14.4 V, 37.44 WhSix-cell: 10.8 V, 56.16 Wh

Heat dissipation: 222 Btu/hr maximum

Heat emissions: 65 watts maximum (65-watt adapter)

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 nonstationary 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.

For additional information about supported environments, refer to the Physical specifications section.

# Agency approvals: System unit

- FCC Part 15 Class-B (Doc) (U.S.)
- VCCI Class 2 (Japan)
- UL-60950 (U.S.)
- C-UL (Canada)
- · CCC (China)
- BSMI (Taiwan)
- MPR-II/MPR-III (Sweden)
- CE Mark (EMEA)
- CB Report (EMEA)
- NOM (Mexico)
- MIC (Korea)
- ACA (Australia)
- SASO (Saudi Arabia)
- CER (Eastern Europe)
- GOST (Russia)

#### Software requirements

- Windows<sup>™</sup> XP Professional SP2 with USB 2.0 support
- Windows Vista 32-bit and 64-bit with USB 2.0 support

For information about support for these operating systems, visit

http://www.lenovo.com/support

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

For a list of completed Linux™ certifications, visit

http://www.lenovo.com/pc/support/site.wss/MIGR-48NT8D.html

Operating systems other than those preinstalled on the system may not perform all functions at an optimal level. To view considerations or Service Hints and Tips by operating system, visit

# http://www.lenovo.com/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 2687-123.
- 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 T61 notebook conforms to the PC Card Standard 95. The new PC Card Standard encompasses both the former 16-bit Release 2.1 card standard and the new 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 T61 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 Z60t computer and to maintain compatibility with many software programs currently operating under Windows 2000.

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

http://www.lenovo.com/support

**I/O Port Access:** User can limit accessible I/O ports on the system by "I/O Port Access" menu in BIOS setup. This feature prevents unexpected information leak through the I/O ports. The following I/O devices are supported:

- Ethernet LAN
- Wireless LAN
- Bluetooth
- Modem
- USB Port
- IEEE Port
- Parallel Port
- CardBus Slot
- PCI Express Slot
- Bay Option (HDD/Optical)
- · Memory Card Slot
- Microphone

# General

- The Ultrabay<sup>™</sup> does not support the combination of PATA HDD and ThinkPad 2nd HDD
  Adapter Option (62P4554) though the second HDD adapter can be attached to the Ultrabay
  physically.
- Do not use the RJ-11, RJ-45, or VGA port on the computer when it is docked on the ThinkPad Advanced Dock, ThinkPad Advanced Mini-Dock, or ThinkPad Essential Port Replicator.
- Selected systems are wireless upgradable with WLAN Mini-PCI Express options sold by Lenovo. Systems are not wireless upgradable in all countries.
- Systems with the WLAN 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.
- ThinkVantage<sup>™</sup> Active Protection System<sup>™</sup> 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

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

**Installability:** ThinkPad T61 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 optional features.

#### Security, auditability, and control

# Standard security features

**I/O Port Access:** User can limit accessible I/O ports on the system by "I/O Port Access" menu in BIOS setup. This feature prevents unexpected information leak through the I/O ports. The following I/O devices are supported:

- Ethernet LAN
- WLAN
- Bluetooth
- Modem
- USB Port
- IEEE Port
- Parallel Port
- CardBus Slot
- PCI Express Slot
- Bay Option (HDD/Optical)
- · Memory Card Slot
- Microphone

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 ThinkPad 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

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

## 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 provider's normal service area. Contact your local service provider representative or your reseller for country- and location-specific information.

**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. 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.

Customer carry-in or mail-in service: You will deliver or mail as your service provider specifies (prepaid unless specified otherwise) the failing machine suitably packaged to a designated location. After the machine has been repaired or exchanged, it will be made available for your collection or, for mail-in service, the machine will be returned to you at Lenovo's expense, unless your service provider specifies otherwise. You are responsible for the subsequent installation and verification of the machine.

**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 and Lenovo Care maintenance services

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

Refer to the Prices section for information on the availability of ThinkPlus and Lenovo Care Maintenance 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

For all local charges, contact your sales representative.

## ThinkPlus services for warranty and maintenance

Three-year depot warranty: The offerings below apply to all models of machine type 7664.

Description	ThinkPlus 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

Description	ThinkPlus 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

#### ThinkPlus services for installation services

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

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# http://www.ibm.com/financing

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