# New ThinkCentre M58p Eco ultra small form factor models are ENERGY STAR 4.0 compliant

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## At a glance



Benefits of the ThinkCentre® M58p systems include:

- Support Intel® 2008 vPro technology including, AMT 5.0

- DDR3 and on-board DisplayPort

- Green Power product

- Hardware password manager

- Support the latest Intel dual core processors

- PCI slot, 10 USB ports, and PS/2 port

- ENERGY STAR 4.0 compliant for models of all form factors

- Great security:

  - TPM 1.2:

    -- Supports Windows® Vista BitLocker

    -- Provides a way to manage credentials and technologies to allow specific users access to computer, applications, and data

  - Computrace ready:

    -- A cost-effective solution for computer tracking and loss control

    -- Ensures that computers and the data they contain are secure and locatable

  - USB ports can be individually switched on and off in hardware level[1]

  - Chassis intrusion switch available: Once the chassis is opened, the switch will detect it and alert via ASF

## Overview

The ThinkCentre M58p series offers models with the latest Intel Core 2 Duo processors, TPM Security Chip, and Intel Advanced Management Technology. All models include ThinkVantage® Technologies and are Microsoft® Windows Vista capable. Select models are preloaded with Windows Vista.

These models include new technologies to ensure ENERGY STAR 4.0 compliance, offering additional configurations with lower power consumption and heat emissions to protect the environment.

### Leadership design

- eSATA support
  - Offers up to five times higher transfer speeds with external HDD than USB
- Two dual in-line memory module (DIMM) with support for up to 4 GB of system memory
  - Expandable with memory flexibility
  - Higher performance
- Support dual-core processors

### Easy to use and manage

- ThinkVantage Rescue and Recovery® software with a new interface and quick restore
- ThinkVantage Productivity Center: Easy access to key ThinkVantage technologies and IBM service and support
- ThinkVantage System Update with Lenovo® Extras
- ThinkVantage Client Security Solution
- Hardware password manager

### Optimized for connectivity

Integrated Gigabit Ethernet

### IBM service and support

Worldwide service and support[3]

For up-to-date marketing and technical information, visit

http://www.lenovo.com

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.

[1]
Hardware level means USB Ports can be individually disable/enable in BIOS

[2]
Requires Internet access account, not included. Support is available during the limited warranty period.

[3]
International Warranty Service (IWS) 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.

## Planned availability date

December 2008

## Description

New models of ThinkCentre M58p systems offer industry-leading technologies, excellent management capabilities, and IBM service and support.

Lenovo combines thoughtful engineering with bold design, delivering systems that help lower your total cost of ownership.

- ENERGY STAR 4.0 compliant
- Lenovo password management is easy to use, enables secure access to your system and Web pages, and is integrated with the fingerprint reader available on many Lenovo systems
- Lenovo systems include a fully integrated recovery environment that works when your operating system is not working
- Lenovo systems manage everything that changes when your location changes, not just your Internet connection

### Industry-leading technologies

- Intel Q45 core chipset
- Intel Core 2 Quad processors
- Intel Gigabit Ethernet
- Innovative toolless mechanical design for easy upgrades and service support
- Integrated Intel Graphics Media Accelerator 4500 support (selected models)
- DisplayPort
- DDR3 SDRAM

### Leading business tools and data protection software

McAfee VirusScan Plus with 30 days of virus definitions is a comprehensive antivirus product for Microsoft Windows operating systems that can simply and reliably detect and remove viruses from your computer.

### Diagnostics

PC-Doctor diagnoses common problems on major system components. Diagnostic tests are run either locally or remotely through the Internet or an intranet.

### Hardware

- Support for up to 4 GB of DDR3 SDRAM
- Integrated Gigabit Ethernet
- 16x/48x max DVD-ROM (selected models)
- DVD Recordable (selected models)
- Standard audio onboard
- Advanced Configuration and Power Interface (ACPI) support
- One 25-pin parallel port by PCI parallel
- Eight USB 2.0 ports - two front and six rear for easy connection of peripherals
- Mouse, keyboard, VGA monitor ports, and DisplayPort
- Line-out, line-in, microphone audio jack-in, and headphone-out ports

### Ultra small form factor (1 x 2)

#### *Expansion slot and bays*

- One half-height, half-length (short card) PCI slot
- One 5.25-in standard size height optical (populated)

- One 3.5-inch HDD (hidden)
- One Single Slot SD Media Card Reader Bay

## Preinstalled operating systems

- Windows Vista Business 32
- Microsoft Windows Vista Business with Windows XP Professional downgrade

## Other software tools

The ThinkCentre M58p includes a unique set of software tools to help you manage your desktop computing assets.

### *Backup copies of your software*

The ThinkCentre M58p has a product recovery program resident on the system HDD. The ThinkVantage Rescue and Recovery program can back up your system and restore it to its previously saved level.

A hidden service partition will provide preload recovery.

For up-to-date marketing and technical information on your ThinkCentre M58p systems, visit

http://www.lenovo.com/support

Following are the M58p series product family features. Certain product family features are sometimes limited to selected models that may not be available in all countries. Refer to the models and features available in your country.

- Core chipset: Intel Q45
- Intel EM64T (Intel only)
- Intel vPro technology, Intel VT, TXT, EIST, Execute Disable Bit

```
Processor                 Speed              L2 cache

Intel Core 2 Quad Q9550   2.83GHz/1333MHz    12MB
Intel Core 2 Quad Q9400   2.66GHz/1333MHz     6MB

Intel Core 2 Duo E8600    3.33GHz/1333MHz     6MB
Intel Core 2 Duo E8500    3.16GHz/1333MHz     6MB
Intel Core 2 Duo E8400    3.00GHz/1333MHz     6MB
Intel Core 2 Duo E8300    2.83GHz/1333MHz     6MB
Intel Core 2 Duo E8200    2.66GHz/1333MHz     6MB
```

- Memory speed:
  - PC3 8500 DDR3
- System memory:
  - 1024 MB
  - 2048 MB
- HDD: SATA 7200 (rpm)
  - 160 GB
  - 250 GB
  - 320 GB
  - 500 GB
  - 1 TB
- Opticals:
  - 16x maximum DVD-ROM
  - DVD Recordable
- Integrated audio

- IEEE 1394 Adapter LP
- Integrated Intel Pro 1000T Gigabit Adapter
- Video:
  - Integrated Graphics Support
- Keyboards:
  - USB Preferred Pro full size keyboard
  - Preferred Pro full size keyboard PS/2
  - USB Fingerprint Keyboard
  - None
- Mouse:
  - USB optical wheel mouse
  - PS/2 three-button ball mouse
  - None
- 56K fax/modem
- Single Slow Media Card Reader
- Diskette drive:
  - Floppy drive
  - None
- Speakers:
  - External
  - Internal
- Operating system:
  - Windows XP Home Edition
  - Windows XP Professional Edition
  - Windows Vista Business 32
  - Windows Vista Home Basic 32
  - Windows Vista Business 64
  - Windows Vista Ultimate
  - DOS License

## 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, your service provider will attempt to diagnose and resolve the problem remotely before sending a technician.

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.

## Product number

```
ThinkCentre M58p (1x2 Ultra Small Form Factor)

                                  Mach.  Model Ordering
                                  Type         Part No.

Core 2 Duo E8400, 3.0GHz/1333MHz,     7479  A1G   SJZA1XX
6MB Cache, 2048MB Memory(5), 160GB HDD(6),
Windows Vista Business 32(7),Premium label,
DVD Recordable SATA, Intel AMT,
Gigabit Ethernet Adapter, Security Chip,
Chassis Intrusion Switch, floor stand,
Integrated Intel Graphics Media Accelerator 4500,
Integrated Audio,
USB Preferred Pro Full-size Keyboard, Audio Front Panel,
Optical Mouse, Internal Mono Speaker

Core 2 Duo E8500, 3.16GHz/1333MHz,    7479  A2G   SJZA2XX
6MB Cache, 2048MB Memory, 160GB HDD,
Windows Vista Business 32, Premium label,
DVD Recordable SATA, Intel AMT,
Gigabit Ethernet Adapter, Security Chip,
Chassis Intrusion Switch, floor stand,
Integrated Intel Graphics Media Accelerator 4500,
Integrated Audio,
USB Preferred Pro Full-size Keyboard, Audio Front Panel,
Optical Mouse, Internal Mono Speaker
```

**4**
 Second memory slot populated.

**5**
 For models without a separate video card, memory supports both system and video. Accessible system memory may be up to 64 MB less than the amount stated, depending on video mode.

**6**
 GB equals 1,000,000,000 bytes when referring to storage capacity. Accessible capacity is less; up to 4 GB is used in service partition.

**7**
 Some software may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

**8**
 For Combo drives, maximum speeds are given in the following order: CD write, CD re-write, CD read, DVD read.

## Technical information

### Specified operating environment

#### HDD specifications

```
Formatted capacity(6) 160 GB
Interface             Serial ATA
Rotational Speed      7200 rpm
Read/write cache      Yes
```

**6**
 GB equals 1,000,000,000 bytes when referring to storage capacity. Accessible capacity is less; up to 4 GB is used in service partition.

### Mechanical specifications

#### Ultra small form factor dimensions/weights

- Width: 275 mm (10.83 in)
- Depth: 238 mm ( 9.37 in)
- Height: 80 mm ( 3.15 in)
- Weight: Maximum configuration: 4.18 kg (9.22 lb)

#### Electrical power specifications

- 280-watt 80 plus auto-sensing power supply unit
- 110- or 220-volt operation

#### Ultra small form factor

- Input voltage:
  - Low range:
    - -- Minimum:100 V ac
    - -- Maximum:127 V ac
    - -- Input frequency range: 50-60 Hz
  - High range:
    - -- Minimum: 200 V ac
    - -- Maximum: 240 V ac
    - -- Input frequency range: 50-60 Hz

To ensure installability and serviceability in non-Lenovo industry standard racks, review the installation planning information for any product specific installation requirements.

**Note:** Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use.

#### Air temperature specifications:

- Operating: 10 to 35° C (50 to 95° F)
- Non-operating: -40 to 60° C (-40 to 140° F)
- Maximum altitude:
  - Operating:-50 to 10,000 ft (-15.2 to 3048 m)
  - Non-operating:-50 to 35,000 ft (-15.2 to 10,668 m)

**Note:** The maximum altitude, is the maximum altitude at which the specified air temperatures apply. At higher altitudes, the maximum air temperatures are lower than those specified.

#### Noise level specifications

Declared acoustical noise emissions

#### Ultra small form factor

- Declared (upper-limit) sound-power levels:
  - Idle: 3.7 bels
  - Operating: 4.0 bels
- Average sound-pressure levels at operator position:
  - Idle: 25.0 dBA
  - Operating: 28.0 dBA

**Note:** These levels were measured in controlled acoustical environments according to the procedures specified by the American National Standards Institute (ANSI) S12.10 and ISO 7779

and are reported in accordance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average values stated because of room reflections and other nearby noise sources. The declared sound-power levels indicate an upper limit, below which a large number of computers will operate.

Selected models of the ThinkCentre M58p systems are designed to meet the EPA ENERGY STAR requirements[9].

[9]
As an ENERGY STAR partner, Lenovo has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

### Industry standards

ThinkCentre M58p systems conforms to the following industry standards:

- ACPI v2.3
- ATAPI
- DMI v2.0
- IEEE 1284 (enhanced parallel port)
- IEEE 1294 (parallel port)
- IEEE 802.3 (Ethernet)
- JEDEC 240-pin DIMM memory
- SmBios v2.6a
- PC 2001
- PCI v2.3/ PnP 1.0b support/PCIe 2.0
- Serial ATA
- PXE v2.1
- USB v2.0
- VESA Display Port 1.1a
- TCPA(TPM1.2)

### Certifications

ThinkCentre M58p systems carry the following certifications:

- Operating systems
  - Linux-Red hat Enterprise Workstation 5.0
  - Linux-SuSE Linux® Desktop 10
  - Linux-Ubunto
- EMC
  - FCC - Part 15, Class B (US, Canada)
  - CE Mark (Europe)
  - VCCI V-3/V-4, Class B (Japan, radiated)
  - ACA C-Tick (Australia, New Zealand)
  - BSMI - CNS13438, Class B (Taiwan)
  - MIC (Korea)
- Safety
  - UL (US)
  - CUL (Canada)
  - CB Certificate (Worldwide)
  - GS (Europe)
  - NOM (Mexico)
  - SABS (South Africa)

- Hong Kong SAR
  - IRAM (Argentina)
- EMC and Safety
  - CCC (China)
  - GOST (Russia)
  - SASO (Saudi Arabia)
- Other
  - ENERGY STAR (US)
  - PC Green Label (Japan)
  - China RoHS
  - EU RoHS
  - EU WEEE
  - Japan J-MOSS
  - California RoHS
  - New York RoHS
  - Japan Energy Saving
  - US Chemical Emission Test
  - China Energy Saving

ThinkCentre M58p systems may carry other certifications that are not listed above.

### Operating environment

### Ultra small form factor

- Humidity:
  - operating: 10% to 80% (10% per hour, non-condensing)
  - Non-operating: 10% to 90% (10% per hour)
- Maximum altitude:
  - Operating:-50 to 10,000 ft (-15.2 to 3048 m)
  - Non-operating: -50 to 35,000 ft (-15.2 to 10,668 m)

### Operating system support

ThinkCentre M58p systems are either preloaded or tested for compatibility with the following operating systems. Lenovo will provide problem determination for these operating systems and provide device driver support for the hardware installed from the factory.

Preloaded software:

- Windows Vista Business 32
- Microsoft Windows Vista Business with Windows XP Professional downgrade

Tested software:

- Microsoft Windows Vista Home Basic 32
- Microsoft Windows Vista Business 32
- Microsoft Windows Vista Business 64
- Microsoft Windows Vista Ultimate 32
- Microsoft Windows XP Professional Edition
- Microsoft Windows XP Home Edition
- Microsoft Windows Vista Enterprise 32
- Microsoft Windows Vista Enterprise 64

- Microsoft Windows 2000 Professional
- Windows 2000 Professional

Operating system video graphics driver support is required for graphics capabilities. Although these systems have been compatibility tested with the above operating systems, additional video driver support may be required from the operating system vendor.

Other operating systems have not been tested and Lenovo does not provide problem determination or device driver support.

### BIOS

Flash ROM supports Compatibility BIOS (CBIOS) and POST.

### Plug-and-play support

Systems support the plug-and-play specifications that make it easier for you to install, upgrade, and make changes to the PC. Plug-and-play systems that use plug-and-play adapter cards are self-configuring.

### ACPI

ACPI provides an industry-standard method to control system-level resources via the operating system.

### BIOS setup utility

The BIOS setup utility program implements power-saving functions.

### Desktop Management Interface (DMI)

The ThinkCentre systems are DMI V2.0-compliant.

### Configuration Installation and Distribution (CID)

ThinkCentre M58p systems support CID.

## Planning information

### Cable orders

Except for system power, keyboard, and mouse connections, there are no cabling requirements. All cables are provided with the system unit. Instructions are provided as part of initial setup.

### Installability

Following the set up instructions, attach the keyboard and peripherals then turn on the power. Setup is run after the computer has successfully completed its initial self tests.

The setup utility resides in flash ROM. In some instances, you are prompted to run this utility, or you can invoke it by pressing the F1 key when prompted during system startup.

All power supplies have built-in overload and surge protection.

## Security, auditability, and control

The ThinkCentre M58p systems support the following security and management features:

- Intel vPro (AMT 5.0, TXT, VT (VT-d,VT-x), VA)
- Centralized Managed Password
- Alert Standard Format-2(ASF2.0)
- HDCP support

- Computrace support
- DASH1.0
- Intel Matrix Storage Technology
- Security chip
- One lock to secure both cover and entire system to fixed object:
  - Security slot (in rear for optional Kensington Microsaver cable)
  - No keylock
- Power-on password
- Administrator password
- Hard disk password (user and master)
- Boot sequence control
- Boot without keyboard, mouse, diskette
- USB/Ethernet/serial/parallel/SATA/diskette enable or disable
- Disk, removable, and network device password
- Diskette write protect
- Front USB port disablement
- Fingerprint access (selected models)
- Individual USB port disablement
- Cover intrusion switch (selected models)

The following is also visible on the outside of the system unit:

- Machine type and model
- System serial number

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

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

### *Warranty period for machine type 7479*

- System hardware - Three years on parts and labor

### *Warranty period for machine type 7479*

- System hardware - Three years on site on parts and labor - second business day

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 below 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.

### On-site service

Your service provider will either repair or exchange the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the machine. The area must be clean, well-lit, and suitable for the purpose. For some machines, certain repairs may require sending the machine to a designated service center.

### 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.

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```
LENOVO THINKPLUS WARRANTY UPGRADES

The announced Lenovo ThinkCentre machine types are eligible for
Lenovo ThinkPlus® Warranty Upgrades and Post Warranty offerings.
Lenovo ThinkPlus provides a higher level of warranty service
than that provided by the Lenovo Base Warranty.

Note :-  Only one Warranty Upgrade per Machine Serial Number can
be active. A Post Warranty offering can be added when a Warranty
Upgrade is active. The Post Warranty offering will only become
active at the end date of the Warranty upgrade or Base Warranty

LENOVO BUSINESS PARTNERS AND DISTRIBUTOR CHANNELS EMEA
Region 1
Lenovo ThinkPlus offerings are specific to the Machines Types
 and products listed.

Lenovo ThinkPlus                          Upgrade     Ordering
Offering                          L No    Type        P/N

For 7479 with 3 Yr On-Site Service 2ndBD** Base Warranty:

3 Yr On-Site Service NBD*         L374    ThinkPlus   41C9429
3 Yr On-Site Service NBD*+ HDD*** L653    ThinkPlus   46D5021
```

```
4 Yr On-Site Service NBD*          L516   ThinkPlus   41E9871
1 Yr On-site Service NBD*          L160   ThinkPlus   41C9550
     Post warranty
```

Notes
*    NBD = Next Business Day Response Target
**    2ndBD = Second Business Day Response Target
***    HDD = The customer or his appointed representative may
      retain any or all Hard Disk Drives or Solid State Drives
      removed from the machine if it has been replaced as part
      of the repair process or if the machine is to be removed
      from the customers control or presence any or all HDD's
      or SSD's can be removed and retained by the customer
      or his appointed representative.


EMEA Region 1 ANNOUNCEMENT COUNTRIES FOR THE INCLUDED
LENOVO THINKPLUS L.No PACS.

Announcement is restricted to the following countries:

```
Austria      Belgium     Denmark      Finland     France*
Germany      Ireland     Israel       Italy       Luxemburg
Netherlands  Norway      Portugal     Spain       Sweden
Switzerland  UK**
```
Notes
*  Excludes DOM/TOM and all other overseas territories and
   dependencies.
** Mainland UK only for On Site Services.

LENOVO BUSINESS PARTNERS AND DISTRIBUTOR CHANNELS -
EMEA Region 2

Lenovo ThinkPlus offerings are specific to the machines &
products listed.

```
Lenovo ThinkPlus                        Upgrade   Ordering
Offering                      C No      Type      P/N
```

For 7479 with 3 Yr On-Site Service 2ndBD**
Base Warranty:

```
4 Yr On-Site Service NBD*          C618   ThinkPlus   12X6419
3 Yr On-Site Service NBD* + HDD**** C649  ThinkPlus   46D5017
```
Notes
*    NBD = Next Business Day Response Target.
**    2ndBD = Second Business Day Response Target.
**** HDD = The customer or his appointed representative
     may retain  any or all Hard Disk Drives or Solid State
     Drives removed from the machine if it has been replaced
     as part of the repair process or if the machine is to be
     removed from the customers control or presence any or
     all HDD's or SSD's can be removed and retained by the
     customer or his appointed representative.

EMEA Region 2 ANNOUNCEMENT COUNTRIES FOR THE INCLUDED LENOVO
THINKPLUS C No. PACS.

Announcement is restricted to the following countries:
```
Bulgaria*    Croatia      Czech Republic      Greece
Hungary      Poland       Romania             Slovakia
Slovenia**   South Africa Turkey
```
Notes
*    Bulgaria is limited to Sofia for On-Site Service
**    Slovenia is limited to 50 Km of Ljubljana for On-Site
     Service

One,
Two,
Three,
Four

### 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

### Licensed internal code and licensed machine code

These products do not contain Licensed Internal Code or Licensed Machine Code.

## Prices

For all local charges, contact your Sales representative.

### 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, from both 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

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## Announcement countries

All European, Middle Eastern and African Countries.

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http://www.lenovo.com/legal/us/en/

## Corrections

**(Corrected on March 16, 2009)**
The description of Expansion slot and bays under the Hardware section has been updated.