# Overview - ThinkPad T23

↓ Applicable countries and regions

The new ThinkPad T23 notebook is the ideal computer for frequent travelers who need reliable performance in a lightweight package.

# At a glance

The ThinkPad T23 features:

- Intel Mobile Pentium III Processor-M at 866MHz (1), 1.13GHz, 1.0GHz or 1.2GHz with 512KB onboard cache, depending on model
- Sleek profile and light weight
- Microsoft Windows 98 Second Edition, Microsoft Windows XP Professional, or Microsoft Windows 2000 Professional, depending on model
- 133MHz front-side system bus with 133MHz memory modules
- 128MB or 256MB of memory is standard, depending on model, expandable to 1.0GB
- S-Video out port (TV out) on all models
- 15, 20, 30, 48 or 60GB (2) hard disk drive and 30GB for selected Korean systems
- Integrated 802.11b wireless, v.90 modem (3), Ethernet, and/or Secure Chip, depending on model
- Enhanced graphics enabling multiple monitor (4) support
- 8x-3.3x DVD (5) drive, 24x-10x CD-ROM drive, 8x4x24x maximum CD-RW drive, or 4x4x24x/6x DVD-ROM/CD-RW drive, depending on model
- Advanced system manageability
- (United States, Latin America, Canada, Europe, Middle East, Africa) Threeyear, limited warranty (6)
- (United States, Canada) Support Center (800-426-7378)
- LifeCycle Care support services and financing

### **Features**

# Latest processor technology

The new ThinkPad T23 notebook computer features the Intel Mobile Pentium III Processor-M at 866MHz, 1.13GHz, 1.0GHz or 1.2GHz with 512KB onboard cache, depending on model, and floating-point decimal for exceptional performance. All models include enhanced Intel SpeedStep technology with 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 approximately 80% of the maximum performance with approximately 50% of the power consumption to conserve battery power.
- (United States, Asia Pacific, Canada, Europe, Middle East, Africa) Selected models have Microsoft Office XP Small Business installed.

### Superior security and manageability

- Designed to the WfM 2.0 and PXE 2.0 manageability requirements for mobile systems
- Supports UM Services, a comprehensive set of superior, standards-based PC hardware manageability tools that work with and complement existing systemsmanagement products
- Complies with the industry-standard Common Information Model
- Designed to the Wired for Management baseline requirements for mobile systems
- Local and remote asset management, and early detection of hard disk drive failure via UM Services
- · Remote setup and low-level maintenance via LANClient Control Manager
- Asset and data security via multiple passwords and locks
- Asset ID, an advanced radio-frequency-based tool to secure and protect assets, keep accurate inventories, and facilitate fast deployment of your ThinkPad notebooks

into the enterprise

**NOTES**: Asset ID allows your computer to be scanned by various radio- frequency-emitting devices that must be purchased separately from independent companies. Asset ID requires the separate purchase of the ThinkPad RF-ID antenna option and is available for all ThinkPad T23 systems.

# **Operating system**

Preinstalled Windows 98 Second Edition, Windows XP Professional, or Windows 2000 Professional, depending on model.

#### **Communications**

Combination of the following, depending on model:

- Mini-PCI V.90 56K modem
- 10/100 Ethernet LAN connection
- 802.11b wireless LAN
- · Secure Chip for authentication and encryption of data communications

Integrated 802.11b wireless lets you connect to a LAN without wires or cables. To connect to the Internet, the High Rate Wireless Access Point 500 and an Internet connection are required.

# Multimedia

DVD movie playback does not require complementary graphics hardware on ThinkPad T23 systems that have a DVD drive and Windows 98 Second Edition, Windows XP Professional, or Windows 2000 Professional installed.

# LCD TFT display

The ThinkPad T23 notebook comes with one of the following displays:

- 337.8-mm (13.3-in) TFT display with 1024 x 768 resolution
- 358.1-mm (14.1-in) TFT display with 1024 X 768 resolution
- 358.1-mm (14.1-in) TFT display with 1400 x 1050 resolution

All displays are measured diagonally.

#### Video Modes -- T23 (16M SDRAM)

For systems having 1400 x 1050 resolution LCD displays.

	LCD	External Monitor (CRT only mode)				
Resolution	TFT	85 Hz	75 Hz	72 Hz	70 Hz	60 Hz
640 X 480	16M	16M	16M	16M	NA	16M
800 x 600	16M	16M	16M	16M	NA	16M
1024 x 768	16M	16M	16M	NA	16M	16M
1280 x 1024	16M	16M	16M	NA	NA	16M
1400 x 1050	16M	NA	NA	NA	NA	NA
1600 x 1200	16M(*)	64K	64K	NA	NA	64K

(\*): Panning on LCD

**NOTE**: All modes are common for each operating system.

## Video Modes -- T23 (16M SDRAM)

LCD with 1024 x 768 resolution

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1024 x 768	16M	16M	16M	NA	16M	16M
1280 x 1024	16M(*)	16M	16M	NA	NA	16M

Ŀ	1400 x 1050	NA	NA	NA	NA	NA	NA
	1600 x 1200	16M(*)	64K	64K	NA	NA	64K

(\*): Panning on LCD

**NOTE**: All modes are common for each operating system.

# **Keyboard and TrackPoint with 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.

(**Europe, Middle East, Africa**) The ThinkPad T23 is euro hardware ready.

The TrackPoint with enhanced features incorporates the Press-to-Select and Release-to-Select function.

Just tap the TrackPoint to speed icon launches and help reduce keystrokes. The new 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 system has 128MB or 256MB of memory standard and can be configured for up to 1GB of addressable memory. Memory options up to 512MB SDRAM SO DIMMs each can be added in the two available slots for memory expansion. The standard 128MB of memory is expandable up to 640MB and the 256MB of memory is expandable up to 768 MB of addressable memory with 64, 128, 256, or 512MB SO DIMMs without removing the 128MB SO DIMM that is standard in one of the internal slots for memory. For customers that need the maximum 1GB to which memory can be expanded, it is necessary to replace the 128MB or 256MB card with a 512MB card plus add another 512MB card in the extra slot. Only 133MHz DIMM memory can be used in this system. The use of 100MHz DIMM memory is not supported in the T23 systems.

#### **PC Card**

The Type III slot accommodates either two Type I, two Type II, or one Type III PC card. The slot supports CardBus adapters and PC card adapters.

Currently available with Windows 98 SE, Windows XP Professional, and Windows 2000 Professional

# Storage

Depending on model, the customer-removable hard disk drive is 15, 30, or 48GB.

# **Drives**

 $8x-3.3x\ DVD(5)$  drive,  $24x-10x\ CD-ROM$  drive, 8x4x24x maximum CD-RW drive, or  $4x4x24x/6x\ DVD-ROM/CD-RW$  drive, depending on model, is installed in the system.

An optional SuperDisk (LS240) drive or a second hard disk drive in the Ultrabay 2000 or Ultrabay Plus expands storage. The second hard disk drive option, requiring an adapter, can be used with all ThinkPad T23 models. The 1.44MB diskette drive (FDD) can be plugged directly into the ThinkPad T23 Ultrabay 2000 or Ultrabay Plus or attached externally for added flexibility by using an optional adapter and cable.

# **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 eternal microphone. The system supports Sound Blaster audio applications.

#### Video

Models with Windows 98 Second Edition, and Windows XP Professional support a system display and an external monitor simultaneously while different applications are on each screen. Move the cursor from one screen to the other and drag and drop items from the application on one screen to the application on the second screen.

#### **Infrared**

The system has one fast IR transceiver (up to 4Mbps) for wireless file and data transfer and printing. The ThinkPad T23 is designed for compliance with the Infrared Data Association (IrDA) IR data link specification Version 1.1.

#### Other features

The ThinkPad T23 systems include these ports:

- Enhanced parallel
- Serial
- External display
- PS/2 port for mouse or keyboard connection
- Microphone
- Line in
- Headphone
- Two USB ports
- S-video out

The USB ports, which connects external drives and other devices, are supported by Windows 2000 Professional, Windows XP Professional, Windows 98, Windows 98 Second Edition, or Windows 95 OSR2.1, or later.

The 240-pin connector supports these optional docking solutions:

- ThinkPad Port Replicator for simple port replication and cable management
- ThinkPad Dock for a more advanced docking solution

## AC adapter

The AC adapter is an alternating current (AC) to direct current (DC) converter to supply 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 is shipped with the system. This same battery is also available as an optional feature.
- A different Li-Ion Battery Pack fits into the Ultrabay 2000 or Ultrabay Plus 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 percent charge remaining, whether there
  is one or two batteries in the system. This feature is not available on systems using
  OS/2 operating system.

Approximate operation and charging hours are:

#### ThinkPad T23 systems

Power off/suspend charging (8) 1.5 to 2.5 hour

Charging during operation (7) (8) 2.0 to 6.0 hour

Battery operation  $(\underline{7})$  3 hours and 30 minutes to 2 hours and 50 minutes, depending on model

**NOTE**: BatteryMark is a trademark of ZD Inc. in the U.S. and other countries.

## **NOTES:**

- MHz and GHz only measures microprocessor internal clock speed, not application
  performance. Many factors affect application performance. For Intel Mobile Pentium
  III processors with SpeedStep technology, MHz speed denotes maximum
  performance mode; battery-optimized performance mode is approximately 80% of
  maximum performance.
- 2. GB equals one billion bytes when referring to hard disk drive. Accessible capacity may vary.
- 3. 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.
- 4. External device must support the same maximum resolution and refresh rate as that of the built-in notebook display. Available video memory may limit resolution and/or color depth. Individual application support for this feature will vary.

- 5. Variable read rate. Actual playback speed will vary and is often less than the maximum possible.
- 6. Refer to the Statement of Limited Warranty for terms governing support obligations. For a copy of the Statement of Limited Warranty, customers can contact their authorized Business Partner or customer representative. The ThinkPad battery is covered by a separate one-year limited warranty. (United States, Canada) Copies of the Statement of Limited Warranty can be obtained by contacting your reseller or calling the Support Center. In the United States, call 800-426-7378. In Canada, call 800-565-3344.
- 7. Results obtained using ZD BatteryMark Version 4.0.1 Benchmark test with battery maximizer off. Battery life will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.
- 8. Recharge time will also vary.

# Applicable countries and regions

Worldwide

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