

New Lenovo ThinkVision L2251x Wide Flat Panel Monitor -- The perfect balance between productivity, comfort, and environmental responsibility

Table of contents

2 Overview	8 Product number
3 Planned availability date	9 Technical information
3 Description	15 Prices
7 Product positioning	

At a glance



The new Lenovo® ThinkVision® L2251x Wide LCD monitor offers:

- Viewable image size: 22.0 inch (559 mm)
- Brightness: 250 cd/m2 (typical)
- Contrast ratio: 1000:1 (typical)
- Viewing angles:
 - Horizontal:
 - 170° contrast ratio greater than 10:1
 - 176° contrast ratio greater than 5:1
 - Vertical:
 - 160° contrast ratio greater than 10:1
 - 170° contrast ratio greater than 5:1
- Response time: 5 ms (typical)
- Environmentally-responsible:
 - Up to 33% less power consumption and 100% less mercury content (mercury free) than conventional LCD monitors with the same size and resolution
 - TCO Certified Edge Display 1.0 compliance
 - Rated EPEAT Gold
 - Arsenic-free glass
 - Meets low halogen requirement¹
- Pivot capable (graphics card dependent)

- Tilt, swivel, and height-adjustable stand
- Native resolution of 1680 x 1050 (automatically scales lower resolution to fill the screen)
- Integrated camera (3.0 megapixel) and microphone
- Ambient Light Sensor and Proximity Sensor²
- Attached 1.8-meter (5.9-feet) VGA cable
- Included 1.8-meter (5.9-feet) DisplayPort cable
- Included 1.8-meter (5.9-feet) USB cable
- Direct access for automatic image setup, brightness, and input select
- Analog and digital system attachment
- Integrated USB hub
- Internal power 21 watts power consumption (typical)
- 100 mm Video Electronic Standards Association (VESA) standard for mounting
- Kensington lock slot
- Optional ThinkVision Soundbar slot
- Business black

Overview

The Lenovo ThinkVision L2251x Wide enables you to be environmentally conscious without compromising performance. Pioneering new energy conservation and ergonomic technologies, the new L2251x Wide monitor is the world's first TCO Certified Edge product. It is a low halogen, mercury-free product, has arsenic-free glass, and uses up to 33% less power than conventional models (29.7% more efficient than the ENERGY STAR 5.0 standard). 30% of the total weight of all plastics in the product consist of post-consumer content plastic resins³ and its packaging contains up to 92% recycled materials. With an ambient light sensor and a proximity sensor, the L2251x Wide can save more energy and make viewing more comfortable. The Electronic Product Environmental Assessment Tool (EPEAT) rates the ThinkVision L2551x Wide in the Gold category (in the US, UK, France, Germany, China, Japan, and others⁴), making it the most environmentally friendly monitor available today.

The L2251x Wide is the ideal choice for mobile users in need of an excellent screen display for increased productivity when working at the office and an integrated Webcam solution to reduce travel time and expense. The incorporated ThinkVantage® design enhances usability and makes the monitor easy to use. It complements the design of the ThinkPad®, ThinkStation®, and ThinkCentre® systems and includes attachments for the ThinkVision Soundbar (sold separately).

Features and benefits:

- 22 in (559 mm) viewable image size
- Native resolution of 1680 x 1050
- Internal power with 21 watts / 28 watts power consumption (typical/ maximum)
- mercury free and reduces power consumption by up to 33% over conventional monitors of the same size and resolution
- ThinkVantage design
 - Tilt, swivel, and height adjustable stand for optimum viewing comfort
 - Pivot for portrait or landscape viewing (graphics card dependent)
 - Direct access button for automatic image setup and brightness allows quick and easy monitor setup
 - Analog and DisplayPort video signal connectors
 - Integrated USB hub
 - Supports High Definition Content Protection (HDCP)

- Compliance with ENERGY STAR 5.0 requirements
- Kensington Lock slot for security
- TCO Certified Edge compliance
- Rated EPEAT Gold
- Offers attachment points for optional ThinkVision Soundbar (sold separately)
- Direct access for input selection allows easy movement between applications when attached to two systems simultaneously
- Matching design to ThinkPad, ThinkCentre, and ThinkStation systems
- Analog and digital connectors allow attachment flexibility
- Wide viewing angles enlarge the workspace for comfortable viewing
- Dual input connectors allow attachment to two systems simultaneously
- Certified for Microsoft® Windows® XP, Vista, and Windows 7
- Meets 100 mm VESA standard for mounting
- Detachable base for wall- or arm-mounting (sold separately)
- Available in business black

¹ Low halogen is defined in accordance with IPC-4101B and draft IPC-J-STD 709 Class 1 requirements.

² Ambient Light Sensor and Proximity Sensor are components of Environment Sensing Utility (ESU) software. ESU is in the User's Guide CD in the monitor packaging carton. ESU will be downloadable on listing by visiting

<http://www-307.ibm.com/pc/support/site.wss/document.do?Indocid=ENVR-SENSING>

³ As defined by EPEAT verification criteria for calculation of post-consumer recycled content. Many plastic parts used in this product consists of (by weight) 65% post-consumer content from sources like home appliances, computers, vehicles, and office equipment and 20% post-industrial content.

⁴ EPEAT registration status varies by location. For complete country listing, visit <http://www.epeat.net>

Planned availability date

November 25, 2009

Note: For regions using the US power cord, EU power cord, UK power cord, together with Japan, Denmark, Switzerland, Italy, Australia, and New Zealand, Monitors will ship with 'low halogen' power cords at time of general availability. For all other regions where the products are made available by this announcement, monitors will ship with regular RoHS-compliant power cords at time of general availability. Lenovo plans to ship 'low halogen' power cords with monitors to all other regions where the products are made available, upon approval process finalization for 'low halogen' power cords for each country, subject to change based on Lenovo's business and technical judgement.

Description

VESA high refresh video signal timings

This Lenovo ThinkVision L2251x Wide monitor supports a wide range of display modes, including a selection of the VESA timings of incoming video signals at up to 75 Hz (non-interlaced) for the following screen resolutions:

- 640 x 480
- 800 x 600
- 1024 x 768
- 1280 x 1024

- 1440 x 900
- 1600 x 1200
- 1680 x 1050

Appropriate video-adaptor hardware and software must be installed in the attaching system unit (not included).

Monitors are compatible with popular Lenovo PC system units.

VESA Data Display Channel (DDC)

This Lenovo ThinkVision L2251x Wide monitor supports the DDC protocol to level command interface (CI). Basic configuration information can be passed to a system unit from its attached monitor. Often referred to as Plug and Play, the protocol enables a DDC-enabled system unit to automatically configure the video adapter to drive the attached monitor at its optimum display mode without user intervention. For best use, the attaching system unit must also be hardware- and software-enabled for DDC operation.

The capabilities of the monitor are held in nonvolatile monitor memory in an encoded format. The data is received from the monitor by the system unit during boot-up and system configuration.

The extended display identification data (EDID) sent by the monitor to the attached system unit also includes the monitor's serial number and other identification information. This can be held in the system unit until requested; for example, by a department local area network (LAN) administrator needing to assess the location of all equipment connected to the LAN.

Date information transmitted in the monitor EDID data conforms to VESA EDID standard V2. This requires the year of manufacture (YOM) to be stored in a one-byte field as an offset from 1990 as derived from the following equation:

$$\text{value stored} = (\text{YOM} - 1990)$$

Year of manufacture	value stored
2004	14
2005	15
2006	16
2007	17

An international industrial standard by the name of DDC/CI was developed by VESA to expand upon an existing DDC standard. This new standard adds control functionality without the need for additional connections.

The main advantage of DDC/CI is its bi-directional communication structure between PC and monitor, which does not require a separate cable. All data are transmitted in both directions via the video graphics card and the standard VGA or DisplayPort signal cable. This capability allows for functions like monitor control, adjustments, and diagnostics to be conducted via software using the mouse and keyboard. In an enterprise or firm, this capability also allows the potential of remote diagnostics and asset management by a technician via the LAN. Customer-supplied software is needed to implement these functions.

International Organization for Standardization (ISO)/DIS 9241-307

ISO 9241-307 ensures ergonomic requirements are met when the ThinkVision L2251x Wide LCD monitor forms part of an ISO-compliant system. ISO 9241-307 is an international standard addressing ergonomic factors for flat-panel displays.

ISO-capable elements do not necessarily make an ISO-compliant system when put together. To satisfy the requirements of ISO 9241-307, a complete platform must be

tested and must comply with all applicable elements of ISO 9241-307. The platform includes:

- System unit
- Operating system
- Fonts
- Video subsystem
- Monitor
- Keyboard
- Mouse

When all contributing platform components satisfy their portion of the requirements, as verified by the required total system testing, the platform is ISO 9241-307 compliant.

Low frequency electromagnetic emissions

The Lenovo ThinkVision L2251x Wide LCD monitor meets the Swedish Board for Technical Accreditation (SWEDAC) MPR-2 requirements. MPR-2 is a guideline developed by the SWEDAC to limit the electromagnetic emissions and electrostatic fields generated by workstations.

Electric and magnetic fields with frequencies between 5 Hz and 2 kHz are called extremely low frequency (ELF) fields. Those with frequencies between 2 and 400 kHz are called very low frequency (VLF) fields.

TCO Certified Edge compliance

- Environment
- Ergonomics
- Usability
- Reduction of electric and magnetic fields
- Energy consumption
- Electrical safety

VESA Display Power Management Signaling (DPMS)

The Lenovo ThinkVision L2251x Wide LCD monitor meets ENERGY STAR power consumption requirements through implementation of the DPMS protocol. For effective power management, the attaching system unit must also be hardware- and software-enabled for DPMS operation.

As an ENERGY STAR Partner, Lenovo has determined that this product meets ENERGY STAR guidelines for energy efficiency.

HelpWare

HelpWare® is a comprehensive set of service and support offerings for a more productive and enjoyable computing experience. Many HelpWare services are included with the purchase of your Lenovo system, and additional services are available from the HelpWare support family.

Technical characteristics

Feature	LCD monitor
Monitor size	22.0-inch (559 mm)
Viewable image size	22.0-inch (559 mm)
Maximum viewable area (W x H)	437.8 mm x 296.1 mm

Native resolution	1680 x 1050
Contrast ratio (typical)	1000 : 1
Brightness (typical)	250 cd/m ²
Colors	16.7 million
Horizontal Viewing Angle	170 degrees (at 10:1 contrast ratio)
Vertical viewing Angle	160 degrees (at 10:1 contrast ratio)
Response time (typical)	5 ms
Pixel pitch	0.282 mm
Video input	15-pin D, DisplayPort
Signal cable - 15-pin D	1.8 m
Signal cable - DisplayPort	1.8 m
USB cable	1.8 m
SYNC type	Composite/Separate TTL
SYNC on green	No
USB input	1
USB output	3
Bezel width (Side)	15.3 mm
Tilt	0 degrees forward 30 degrees backward
Swivel	+/- 45 degrees
Height adjustment	110 mm
Pivot	Yes (graphic card dependent)
Soundbar attachment	ThinkVision Soundbar
Webcam+Mic	Yes
Kensington Lock slot	Yes
User controls	Digital
Lockable controls	Yes
OSD	Yes
OSD languages	8
Preset display modes	24
User defined display modes	20
VESA DDC capable	2B/CI
ISO 9241-307 capable	Yes
Power management capable	Yes - VESA DPMS
Power supply	Universal Voltage (100 to 240 Vac)
Power cord	1.8 m (detachable)
JEIDA compliance	Yes
FCC B compliance	Yes
MPR-2 Emission compliance	Yes
TCO Certified Edge Compliance	Yes
EU Directive 2002/95/EC (RoHS)	Yes
EU Directive 2002/96/EC (WEEE)	Yes
EU Directive 2005/32/EC (EuP)	Yes

On-Screen Display (OSD) menu control

Digital user controls are located on the front bezel, to the left of the power pushbutton. Make adjustments in conjunction with the on-screen displays. With the exception of brightness, contrast, and auto adjust, you can lock the controls to prevent further changes. User setup values are stored automatically. For ease of use, there is direct access for auto setup and brightness.

Monitor controls and features include:

- Brightness/contrast
- Image position:
 - Horizontal position
 - Vertical position
- Image setup:
 - Automatic
 - Manual
 - Scaling
- Image properties: Color
- Options:
 - Information
 - Menu language

- Menu position
- Factory default
- Accessibility
- Exit

OSD languages include: English, French, German, Italian, Spanish, Japanese, simplified Chinese, and Russian.

Indicators

The power indicator LED indicates the operational state of the monitor:

Indicator	Operating state
Green LED	Normal operation
Amber LED	Active Off
Green blinking	Frequency out of range

The WebCam indicator LED indicates the operational state of the WebCam:

Indicator	Operating state
Green LED	Normal operation
off	No connection / off

Section 508 of the U.S. Rehabilitation Act

This monitor is capable when used in accordance with Lenovo's associated documentation, of satisfying the applicable requirements of Section 508 of the Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it.

Product positioning

The Lenovo ThinkVision L2251x Wide LCD monitor is a member of the ThinkVision Performance series flat-panel LCD monitor family. The flat-panel LCD family includes ThinkVision Performance and Lenovo Essential monitors. The Lenovo essential series offers quality monitors at affordable prices. ThinkVision Performance series monitors include p and x models. The p models offer a wide range of adjustability, while x models add other specialized features, such as USB connectivity, wider viewing angles, and automatic pivot adjustment.

Monitor	Machine type	Monitor size	Viewable image size	Addressability (horizontal by vertical)
Lenovo Essential				
D186 wide	2580	18.5-inch	18.5 inch (470 mm)	1366 x 768
D185 wide	6318	18.5-inch	18.5 inch (470 mm)	1366 x 768
L2060 wide	2120	20.1-inch	20.1 inch (511mm)	1600 x 900
L215 wide	6325	21.5-inch	21.5 inch (546mm)	1920 x 1080
ThinkVision Performance				
L151	9165	15.0-inch	15.0-inch (381 mm)	1024 x 768
L174	9227	17.0-inch	17.0-inch (432 mm)	1280 x 1024
L1700p	9417	17.0-inch	17.0-inch (432 mm)	1280 x 1024
L1711p	5047	17.0-inch	17.0-inch (432 mm)	1280 x 1024
L197 wide	4434	19.0-inch	19.0-inch (481 mm)	1440 x 900
L1940p wide	4424	19.0-inch	19.0-inch (481 mm)	1440 x 900

L1900p	4431	19.0-inch	19.0-inch (483 mm)	1280 x 1024
L2250p wide	2572	22.0-inch	22.0-inch (569 mm)	1680 x 1050
L2251p wide	2572	22.0-inch	22.0-inch (569 mm)	1680 x 1050
L2240p wide	4422	22.0-inch	22.0-inch (569 mm)	1680 x 1050
L2251x wide	2578	22.0-inch	22.0-inch (569 mm)	1680 x 1050
L2440p wide	4420	24.0-inch	24-inch (610 mm)	1920 x 1200
L2440x wide	4421	24.0-inch	24.0-inch (610 mm)	1920 x 1200

ThinkVision flat-panel monitors by application:

Application/Usage	Size/Resolution	Product
General Purpose: Rugged, back office or infrequent usage	15" (1024 x 768) 17" (1280 x 1024) 19" wide (1440 x 900)	L151 L174 L197 wide
Advanced Business: Business & mobile users with office	17" (1280 x 1024) 19" (1280 x 1024) 19" wide (1440 x 900) 22" wide (1680 x 1050) 24" wide (1920 x 1200)	L1700p, L1711p L1900p L1940p wide L1951p wide L2240p wide L2250p wide L2251pwide L2440p Wide
Specialized Usage: Narrow/slim head or bezel, most environmentally responsible offerings with bright vivid images	22" wide (1680 x 1050)	L2251x wide

Product number

For pricing information, refer to the [Prices](#) section.

Description	Machine type/model	Part number	Code (UPC/EAN/JAN)
Lenovo ThinkVision L2251x wide	2578-HB6	2578HB6	884942-26369-9

Publications

The following publications are shipped with each monitor (2572HD6):

Title	Part Number	Languages
User's Guide	57Y2409	U.S. English, French, Spanish, German, Italian, Japanese, Russian, Polish, Traditional Chinese, Simplified Chinese, Croatian, Czech, Hungarian, Romanian, Slovakian, Slovenian, Korean, Turkish, Bulgarian, Arabic, Portuguese,
Setup Poster	57Y2410	
Safety, Troubleshooting and warranty Guide	41U5172	

Technical information

Specified operating environment

Physical specifications

Dimensions and weight of the monitor and stand:

Parameter	Unpacked	Packed
Height	14.97 inch (380.3 mm)	9.17 inch (233 mm)
Width	19.92 inch (506.0 mm)	23.27 inch (591 mm)
Depth	9.50 inch (241.2 mm)	17.83 inch (453 mm)
Weight	12.39 lb (5.63 kg)	18.96 lb (8.62 kg)

Operating environment

Conservation: Energy can be saved by switching monitors off overnight and whenever they are not in use for extended periods during the day.

Power requirements

- Input voltage: 100 to 240 V ac +/- 10% (universal voltage)
- Frequency: 50/60 Hz
- Power consumption:
 - Maximum: 28 watts
 - Typical: 21 watts typical⁽⁴⁾
 - Standby: <1 watts
 - Suspend: <1 watts
 - Off: <0.5 watts at 100 V ac
 - Maximum earth leakage current:
 - <3.5 mA at 264 Vac
 - <0.25 mA at 100 Vac

⁴ Typical power consumption is tested under EPA 5.0 standard.

Actual power consumption depends on the chosen display mode, the images displayed, and user control settings.

Ambient temperature and relative humidity

Parameter	Temperature	Relative humidity	Altitude
Operating	0 to 40 deg.C	10 to 80 %	0 to 8,000 ft
Shipping	-20 to 60 deg.C	5 to 95 %	0 to 40,000 ft
Storage	-20 to 60 deg.C	5 to 95 %	0 to 40,000 ft

Acoustics: Declared acoustical noise emissions LWAU = 4.5 bels or less. The noise emission level stated is the declared (upper limit) A-weighted sound power level, in bels, for a random sample of monitors. All measurements are made in accordance with ANSI S12.10 and reported in conformance with ISO/DIS 7779.

Emissions:

All models meet the Swedish Board for Technical Accreditation (SWEDAC) emission guidelines contained in MPR 1990:10 when tested using the MPR 1990:08 test method.

All models meet TCO Display 5.0 Environmental Label from the Swedish Confederation of Professional Employees (TCO), and the emission, power management, and electrical safety requirements of the Environmental Label.

Ergonomics

Compliance to the ISO standard ISO/DIS 9241-307 provides that ergonomic requirements are met when the monitor forms part of an ISO-compliant system.

Regulatory agency approvals

- Safety
 - UL (U.S.)
 - CSA/cUL (Canada)
 - IEC950 CB Report
 - NEMKO (Norway)
 - TUV (Germany)
 - TUV-S (Argentina)
 - CCC (China)
 - NOM (Mexico)
 - SASO (Saudi Arabia)
 - GOST (Russia)
 - Ukraine
 - PSB (Singapore)
 - KC (Korea)
 - GS
 - BSMI (Taiwan)
 - KVALITET (Serbia)
 - ISC (Cambodia)
- EMC
 - FCC B (United States)
 - IC (Canada)
 - CE (Europe)
 - KC (Korea)
 - Australia
 - VCCI Class B (Japan)
 - New Zealand
 - BSMI (Taiwan)
 - CCC (China)
 - SABS (South Africa)

Environmental/energy/ergonomic/compatibility approvals

- Emissions:
 - TCO Certified Edge
 - MPR-2 (Sweden)
- Power management: ENERGY STAR 5.0 (United States)
- Ergonomics: ISO 9241-307
- Environmental:
 - EU Directive 2002/95/EC (RoHS)
 - China Energy Efficiency Standard Tier 1
 - WEEE
 - e-standby (Korea)
 - EPEAT Gold

- RoHS/China RoHS/Turkey RoHS
- Software: Windows Hardware Logo Program

Hardware requirements

The Lenovo ThinkVision L2251x Wide flat panel monitor operates with system units or video adapters that generate a video output signal falling within the following specification:

Parameter	Values
Native Resolution	1680 x 1050 pixels
Maximum pixel rate	VGA: 205 Mhz DP: 10.8 Gbps

The monitor supports VESA Standard Timings as detailed in "Display Monitor Timing Specification," Version 1.8, dated September 17, 1998, for the following modes:

- VGA: 640 x 480 at 60, 66, 72, and 75 Hz
- SVGA: 800 x 600 at 60, 72, and 75 Hz
- XGA: 1024 x 768 at 60, 70, and 75 Hz
- SXGA: 1280 x 1024 at 60, 72 and 75 Hz
- WXGA: 1440 x 900 at 60, 75 Hz
- UXGA: 1680 x 1050 at 60, 75 Hz

This monitor supports the following modes:

- 640 x 350 at 70 Hz
- 640 x 500 at 58 Hz
- 720 x 400 at 70 Hz
- 1152 x 864 at 75Hz
- 1360 x 768 at 60Hz
- 1600 x 1000 at 60Hz

Software requirements

The monitor features preset display modes. The actual display modes used depend on the attaching system unit, the operating system, and application software.

- Microsoft Windows XP
- Microsoft Windows Vista
- Microsoft Windows 7

Preset display modes

Addressability (Horizontal x vertical)	Incoming video Refresh Rate
640 x 350 pixels	70 Hz
640 x 480 pixels	60 Hz
640 x 480 pixels	66 Hz
640 x 480 pixels	72 Hz
640 x 480 pixels	75 Hz
720 x 400 pixels	70 Hz
800 x 600 pixels	60 Hz
800 x 600 pixels	72 Hz
800 x 600 pixels	75 Hz
1024 x 768 pixels	60 Hz
1024 x 768 pixels	70 Hz
1024 x 768 pixels	75 Hz
1152 x 864 pixels	75 Hz NI
1280 x 1024 pixels	60 Hz
1280 x 1024 pixels	72 Hz

1280 x 1024 pixels	75 Hz
1440 x 900 pixels	60 Hz
1440 x 900 pixels	75 Hz
1600 x 1000 pixels	60 Hz
1680 x 1050 pixels	60 Hz
1680 x 1050 pixels	75 Hz

- User modes: 20

The preset modes cannot be overwritten, but can be adjusted to personal choice. The new settings are stored automatically in one of the user locations and are recalled each time that mode is used. The factory settings for the mode in use, if any, can be restored by operating the reset control.

Information about the current incoming display mode is shown in the on-screen displays. However, it is displayed at the LCD panel's optimum refresh rate of 60 Hz.

It may be necessary to make some adjustments to the displayed image to compensate for variations in video signal timings. The user controls can be used to make these adjustments.

Compatibility

The monitor is supplied with an attached 1.8-meter video signal cable. This cable has the widely used 15-pin, D-Sub video connector for system unit connection.

This model has been tested with ThinkPad and ThinkCentre systems. It is compatible with systems and graphics adapters that comply with the relevant parts of "VESA and industry standards and guidelines for computer display monitor timing" Version 1.8, adopted September 17, 1998. Supported display modes and number of colors are a function of the attaching system unit. The full range of display modes, refresh rates, and number of colors available with this monitor may not be available or supported with all combinations of system units, their operating systems, and application software. Implementation of monitor plug and play follows the VESA DDC standard. This standard must also be implemented in the attaching system unit hardware and software to be effective.

Limitations

- Supported display modes are a function of the attaching system unit and video subsystem. The full range of display modes available with these monitors may not be available or supported with all combinations of system units, their operating systems, video adapter cards, and application software.
- Horizontal- and vertical-synchronization signal timings are critical in order to achieve acceptable screen images. As a consequence, support for all possible variations in H- and V-sync timings for any display mode cannot be assumed.
- Adjustment of the user controls to enlarge the image to its maximum size requires that the signal timings of the display mode being used fall within the monitor-timing specifications.
- This monitor provides FCC class B - residential installation - compliance in all display modes.
- Implementation of monitor power management follows the VESA DPMS standard. This standard must also be implemented in the attaching system unit hardware and software for monitor power management to be effective. The system implementation must provide user-adjustable, power-down delay periods. The monitor power management function is invoked only after appropriate signals are received from an attached system unit or video adapter.
- Implementation of monitor Plug and Play follows the VESA DDC standard. This standard must also be implemented in the attaching system unit hardware and software for monitor Plug and Play to be effective.
- Certain functions require the system unit to be similarly configured, so all monitor functions may not be enabled when attached to a particular system unit.
- A 22.0-inch (558.8 mm) flat-panel LCD monitor has nearly 5.3 million subpixel transistors laid over an area exceeding 217 square inches. Cost-effective manufacturing processes introduce a small number of defective subpixel

transistors. The Lenovo ThinkVision L2251x Wide meets the ISO 9241-307 Pixel Defect follows:

- The Auto-Setup "test pattern" can be used with Microsoft Windows XP, Windows Vista, Windows 7, and DOS 7.0 only.

Planning information

Cable orders

No additional cables are required. A 1.8-meter (5.9-feet) power cord appropriate to the country will be supplied by Lenovo.

Shipment group

- One monitor
- An attached stand that provides tilt
- An attached 1.8 m (5.9-feet) analog video cable (15-pin D to 15-pin D)
- An detached 1.8 m (5.9-feet) DisplayPort video cable
- An detached 1.8 m (5.9-feet) USB cable
- A power cord
- A CD containing multilingual User's Guide, Set-Up Test Pattern, and .INF File.
- Setup Guide
- Safety and Warranty Information

With the exception of the models for U.S., Canada, and Japan, the power cords (based on the country order code) are supplied by distribution centers.

Security, auditability, and control

These products use the security and auditability features of the system unit to which they are attached.

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

No

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
1009 Think Place
Morrisville, NC 27560
Attn: Dept ZPYA/B3.

Warranty period

Three years

Warranty service

Customer Carry-in or Mail-in using Rapid Replacement Service

If warranty service is required, call the Customer Support Center. The Customer Support Center will assist with problem determination and initiate shipment of a replacement unit, if needed, to the customer's location by express delivery. For calls received by 5:00 p.m. customer's time, in most cases, the replacement unit will arrive within two business days (excluding holidays). The replacement unit becomes the property of the customer in exchange for the failed unit, which becomes the property of Lenovo. Pack the failed unit into the shipping carton that contained the replacement unit and return to Lenovo.

Transportation charges, both ways, are paid by Lenovo.

Failure to use the carton in which the replacement unit was received could result in charges incurred by the customer for damage to the failed unit during shipment.

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

No

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

This product does not contain licensed internal code or licensed machine code.

Prices

For product descriptions, refer to the [Product number](#) section.

Description	Order number	List price*
ThinkVision	2578HB6	\$299.99

* 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

The offerings below apply to model HB6 of machine type 2578.

Description	ThinkPlus part number
3-year IOE 9 x 5	41C9209
3-year IOE 24 x 7 4-hour average response	41C9212
4-year IOE 9 x5	41C9233
4-year IOE 24x7 4-hour average response	41C9234

ThinkPlus MA for post warranty

Description	ThinkPlus part number
1-year IOE 9 x 5 NBD	41C9310
1-year IOE 24 x 7	41C9311
2-year IOE 9 x 5 NBD	41C9330
2-year IOE 24 x 7	41C9331

For additional Lenovo Care Maintenance Services information, visit

<http://www.lenovo.com>

Trademarks

Lenovo, ThinkVision, ThinkVantage, ThinkPad, ThinkStation, ThinkCentre and ThinkPlus are registered trademarks of Lenovo Corporation in the United States, other countries, or both.

Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States, other countries, or both.

HelpWare is a registered trademark of IBM Corporation in the United States, other countries, or both.

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

Terms of use

Information may be changed or updated without notice. Lenovo may also make improvements and/or changes in the products and/or the programs described in this information at any time without notice. Lenovo assumes no responsibility regarding the accuracy of the information that is provided by Lenovo and use of such information is at the recipient's own risk. Information Lenovo publishes on the World Wide Web may contain references or cross references to Lenovo products, programs and services that are not announced or available in your country. Such references do not imply that Lenovo intends to announce such products, programs or services in your country. Consult your local Lenovo business contact for information regarding the products, programs and services which may be available to you. Lenovo's obligations with respect to its products and services are governed solely by the agreements under which they are provided. Additional terms of use are located at:

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