

IBM ThinkPad® 390 - withdrawn

IBM® ThinkPad®				
Processor	Intel® Pentium® 233MHz ¹ with MMX™ technology or Mobile Pentium II 233 or 266MHz / 66MHz system bus			
Processor features	No upgrade / processor, L2 cache, and MTXC (North Bridge) on Intel Mobile Module			
L2 cache	512KB / sync pipelined burst (66MHz for Pentium / ECC and 150MHz for Pentium II)			
Diskette drive	Internal 3.5" 1.44MB / removable from UltraBay FX / on right side / integrated with CD-ROM			
External FDD port	None since diskette internal			
CD-ROM	CD-ROM / 24X-10X ⁵ speed / ATAPI / bootable / removable from UltraBay FX / on right side / integrated with diskette drive			
DVD-ROM	Option: Removable UltraBay FX option / 2X ⁵ integrated with diskette drive / not supported in Pentium systems (2xx)			
Type - model	2626-20U	2626-50U	2626-70U	
Processor	Pentium 233MHz	Pentium II 233MHz	Pentium II 266MHz	
Disk - size / ms	3.2GB ⁴ / 13ms read / 14ms write / S.M.A.R.T. ²⁹			
Disk controller	EIDE / PCI 2.1 / supports one internal disk / disk can be removed to upgrade by customer / supports two internal disks			
Avail / withdrawn date	November 1998 / March 1999			
Display - size and type	12.1" TFT color / Active Matrix		14.1" TFT color / Active Matrix	
Display - technology	SVGA / 640x480 or 800x600 / 30ms / 150 nits		XGA / 640x480 or 800x600 or 1024x768 / 30ms / 120 nits	
	16.7 million simultaneous colors / 100 to 1 contrast		16.7 million simultaneous colors / 150 to 1 contrast ratio	
Graphics - controller	NeoMagic™ MagicMedia256AV™ (NM2200) / PCI 2.1 / 128-bit engine, 256-bit memory interface / DDC2B / Direct3D			
Graphics - external	2.5MB / SDRAM (embedded) / motion compensation / color space conversion / interpolation in X and Y axis			
Graphics - features	External SVGA to 1024x768 with 16.7 million colors at 85Hz			
Memory - std / max	32MB / 256MB ³³		64MB / 256MB ³³	
Memory - features	SDRAM / non-parity / 66MHz / 3.3 volt / 64-bit			
	2 sockets for JEDEC 144-pin SO DIMMs / one socket used by std memory sockets accessed from bottom via removing cover held by phillips-head screw			
Keyboard	Full-size 85-key (7 Fn key functions) / palm rest / keyboard slope with tilt feet			
Pointing	TrackPoint® / Press-to-Select / Release-to-Select / dragging / click pace center button for scrolling (Internet Scroll Bar) or magnifying glass / spare caps			
Dimensions	12.4 x 10.1 x 1.8" (225 cubic inches)		12.4 x 10.2 x 1.8" (227 cubic inches)	
Weight ²	7.5 lbs (3.4 kg) with battery and disk		7.7 lbs (3.5 kg) with battery and disk	
Case material	PC/ABS plastic		PC/ABS plastic	
Battery - type / life ¹⁰	NiMH / intelligent / 3.25 hrs (1 battery) / left side		Li-Ion / intelligent / 4 hrs / left side	
Charge time ¹⁰ - on / off	5 hrs on / 2.5 hrs off		6 hrs on / 3 hrs off	
Architecture	Intel Triton 430TX for Pentium system / Intel 440BX PCiset for Pentium II			
	Intel PIIX4E (EIDE, PCI to ISA bridge, USB)			
	Texas Instruments® TI1250A PCMCIA controller / NS PC97338 (FDC, IR, I/O)			
	PCI 2.1 / 32-bit / 33MHz (EIDE, graphics, PCMCIA, USB, audio)			
	ISA (audio, diskette, serial, parallel, infrared, modem)			
Docking station	None			
Port replicator	ThinkPad Port Replicator with Advanced EtherJet™ / ThinkPad 560 Port Replic			
PC Card Std slots	2 Type I, 2 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1 / Zoomed video			
USB / serial / parallel	One USB / one 9 pin; 16550A / one (IEEE P1284-A, EPP, ECP, bidirectional)			
Other features	APM-aware BIOS / Universal AC adapter; barrel (56 watts)			
Video in/out	None			
MPEG decoder	None (software support for MPEG-1 in Windows 98)			
Data/fax/modem	56Kbps ²⁴ / V.90 / integrated in system / Lucent 1644 / not voice-capable			
Audio	16-bit SoundBlaster Pro™ compatible / NeoMagic NMA2 / ISA / full duplex			
Speakers	Two Altec Lansing® stereo speakers on display (1 watt)			
Audio features	Dial volume control (right side) / internal microphone			
Audio in/out jacks	Microphone jack (stereo) / headphone jack (stereo) / line-in jack			
Infrared ports	Infrared port on left side / IrDA 1.1 compatible / up to 4Mbps			
Security	Power-on password / setup password / disk password / security keyhole / security screw for UltraBay FX			
Limited warranty ¹¹	1 year - carry-in or ThinkPad EasyServ™ ³¹ (door-to-door depot repair service)			
Service options ¹⁵	On-site ³² , M-F, 8-5, next bus day (72 cities) / serv up to 5 yrs from purchase date			
	LCD	External Monitor		
	TFT	60Hz	75Hz	85Hz
Resolution				
640x480	16M	16M	16M	16M
800x600	16M	16M	16M	16M
1024x768	16M	16M	16M	16M
1280x1024	--	256	--	--
	OPTIONS			
	- 32MB SO DIMM 3.3v NP SDRAM 76H0294			
	- 64MB SO DIMM 3.3v NP SDRAM 20L0241			
	- 128MB SO DIMM 3.3v NP SDRAM 01K1150			
	- ThinkPad 560 Port Replicator 46H4209			
	- Port Replicator w/ Advanced EtherJet 05K4872			
	- ThinkPad 390/i Series Li-Ion Battery 02K6513			
	- 56 watt AC Adapter (barrel; 3 prong) 83H6739			
	- 6.4GB disk with UltraBay FX adapter 05K8923			
	- 10GB disk with UltraBay FX adapter 05K8983			
	- 900MHz Cordless Computer Conn 04K0064			
	- V.90 PC Card Modem with XJACK ²⁴ 10L7393			
	- 10/100 Ethernet CardBus PC Card 08L3147			
	- Smart Card Security Kit 10L7333			
	- DVD/Diskette (for UltraBay FX) 05K8921			
	- Visit www.ibm.com/pc/us/accessories (U.S.) or www.ibm.com/pc/ca/accessories (CA)			
	- ThinkPad Proven™ solutions ¹² (visit www.ibm.com/pc/us/thinkpad/proven)			
	Pressing F1 during startup brings up IBM BIOS Setup Utility			
	3.2GB = Ultra DMA/33 or PIO Mode 4			
	4.3GB = Ultra DMA/33 or PIO Mode 4			
	6.4GB = Ultra DMA/33 or PIO Mode 4			
	10GB = Ultra DMA/33 or PIO Mode 4			
	All disks are S.M.A.R.T. ²⁹ compliant			
	FEATURES			
	Wired for Management 1.1a compliant			
	DMI 2.0 compliant			
	PC 97 compliant			
	ACPI ready (APM enabled)			
	Wake on LAN™ support²⁸			
	Setup Guide, User's Reference, Windows 98 manual, and Quick Reference Card			
	System Status Indicators			
	Plug and Play 1.0a			
	Standby, suspend, and hibernation modes			
	ENERGY STAR compliant			
	International Warranty Service¹⁴			
	IBM SystemXtra™³⁵			
	24 hour / 7 day telephone³⁰, bulletin board, fax, electronic, and Internet (www.ibm.com/pc/us) support			
<p>The ThinkPad Port Replicator with Advanced EtherJet Feature provides cable management, additional I/O ports, CardBus PC Card slots, and 10/100 ethernet with Wake on LAN™²⁸. Features:</p> <ul style="list-style-type: none"> • 10/100 ethernet (Intel 82558, Wake on LAN) • Dual IBM lock slots to secure the ThinkPad, PC Cards, and Port Replicator • USB, serial (RS-232, 9 pin), parallel (25 pin), external display, keyboard, mouse • Audio in and out (3.5 mm) • Joystick/MIDI port (15 pin) - not on system • Power connector • Two Type III PC Card slots (side by side) <ul style="list-style-type: none"> - PC Card Standard 95 compliant - CardBus compliant (PCI 2.1 / 32-bit) - PCMCIA 2.1 (no Zoomed Video) 				
<p>The right bay (UltraBay FX) has a device lock on the bottom of the system and a bay LED which should be off to safely remove a device; it supports:</p> <ul style="list-style-type: none"> • standard diskette/CD-ROM (warm swap) • optional second battery (hot swap); same battery as main one • optional second disk (cold swap) • optional ThinkPad Proven™ solutions¹² 				