

# IBM ThinkPad® 600X - withdrawn

<b>IBM® ThinkPad®</b>						<b>WINDOWS 98 PRELOAD<sup>16</sup></b>		
Processor	<b>Intel® Mobile Pentium® III 450 or 500MHz<sup>1</sup> / 100MHz system bus</b>					<ul style="list-style-type: none"> <li>- Microsoft® Windows® 98 Second Ed</li> <li>• ThinkPad Utilities</li> <li>• Online User's Guide</li> <li>• ThinkPad Configuration Program</li> <li>• PC-Doctor</li> <li>• IBM Registration</li> <li>• RingCentral Fax</li> <li>• IBM Global Network Dialer</li> <li>• Netscape Communicator</li> <li>• Lotus® SmartSuite® Millennium<sup>20</sup></li> <li>• Universal Manageability Services</li> <li>• ThinkPad on the Net</li> <li>• ConfigSafe®</li> <li>• Norton AntiVirus™ (OEM Version)</li> <li>• Mediamatics DVD Express (5/9EU)</li> <li>• IBM Update Connector</li> <li>• Access ThinkPad</li> <li>◇ Software Selections CD-ROM</li> <li>◇ Recovery CD-ROM (Windows 98)</li> <li>◇ Recovery CD-ROM (Windows 95)<sup>40</sup></li> </ul>		
Processor features	No upgrade / processor, L2 cache, and mem cntr (North Bridge) on Mobile Module							
L2 cache	<b>256KB / onboard (at processor speed)</b> / sync pipelined burst / write-back / ECC							
Diskette (removable)	3.5" 1.44MB / use in UltralimBay™ / ships in external diskette enclosure with a cable							
External FDD port	External diskette port on right side (can use simultaneously with internal CD/DVD)							
CD-ROM (removable)	<i>Std or option:</i> CD-ROM / 24X-10X <sup>5</sup> speed / bootable / removable from UltralimBay							
DVD (removable)	<i>Std or option:</i> DVD-ROM / bootable / removable from UltralimBay							
Type - model	<b>2645-3EU</b>	<b>2645-7EU</b>	<b>2645-4EU</b>	<b>2645-8EU</b>	<b>2645-5EU</b>			<b>2645-9EU</b>
Preload (see side)	<b>Win 98</b>	<b>NT 4.0</b>	<b>Win 98</b>	<b>Win 2000</b>	<b>Win 98</b>			<b>NT 4.0</b>
Processor	<b>Pentium III 450MHz</b>		<b>Pentium III 500MHz</b>		<b>Pentium III 500MHz</b>			
CD or DVD-ROM	<b>CD-ROM</b>		<b>CD-ROM</b>		<b>6X-2.3X<sup>5</sup> DVD / RPC II</b>			
Disk (removable)	<b>6.0GB<sup>4</sup> / 12ms seek read</b>		<b>12.0GB / 12ms seek read</b>		<b>12.0GB / 12ms seek (read)</b>			
	PIO4 or Ultra DMA/33		PIO4 or Ultra DMA/33		PIO4 or Ultra DMA/33			
Avail / withdrawn date	Dec 1999 / Jan 2001		Dec 1999 / Jan 2001		Dec 1999 / Jan 2001			
Memory (std / max)	<b>64MB / 576MB</b>							
	SDRAM / non-parity / <b>100MHz</b> / 3.3v / sockets accessed by removing screw on base / two 144-pin sockets / 64MB on planar / 2 sockets available							
Display	<b>13.3"</b> (337.8mm) <b>TFT color</b> / Active Matrix / XGA / 75ms / 100 to 1 contrast ratio / 640x480, 800x600, or 1024x768 (up to 16.7 million colors) / 150 nits (AC), 90 nits (battery) / 180 degree tilt							
Graphics - controller	<b>NeoMagic™ MagicGraph256ZX™</b> (NM2360) / Accelerated Graphics Port / <b>4MB</b> / SGRAM (embedded) / 128-bit engine, 256-bit memory interface / AGP 2X							
Graphics - features	<b>Motion compensation</b> / multiple-monitor support <sup>26</sup> for Windows 98 / simultaneous LCD and CRT <sup>26</sup> / DDC2B							
Graphics - external	External SVGA to 1024x768x16.7 million colors at 85Hz and 1280x1024x256 colors							
Disk	Left front / remove via coin screw or 2.5mm Allen wrench / SMART <sup>29</sup> / upgradeable							
Disk controller	Enhanced IDE / busmaster / PCI 2.1 / South Bridge / DMA Mode 2, Ultra DMA/33, or PIO Mode 4 / supports 2nd disk in opt HDD adapter							
Keyboard / Fn keys	Full-size 85-key keyboard / 10 Fn key functions / integrated palm rest							
Keyboard slope	Flat keyboard (does not lift up) / optional Port Replicator adds slope							
Pointing device	<b>TrackPoint®</b> / Press-to-Select / Release-to-Select / dragging / click pace / center click button for scrolling or magnifying glass / suspension top / spare caps							
Dimensions <sup>36</sup>	Approximately 11.8 x 9.4 x 1.4" (155 cubic inches); 300mm x 240mm x 36.5mm							
Approximate weight <sup>2</sup>	5.0 lbs (2.25 kg) w/ travel cover and battery only / IBM ThinkPad UltraCarbon™ case							
Battery - type	Lithium Ion / intelligent / remove from base / locked with latch							
Battery - life <sup>10</sup>	3.0 hrs / no non-disruptive battery exchange / supports 2nd battery in UltralimBay							
Charge time <sup>10</sup> - on / off	2 to 3 hrs / 1.5 to 2.5 hrs							
Architecture	<b>Intel 440BX AGPset</b> / Intel PIII4M (EIDE, ISA Bridge, USB) / TI® PCI1450 for CardBus / AGP 2X for graphics / PCI 2.1 / 32-bit / 33MHz (EIDE, CardBus, audio, USB, ext expansion) / PC97338 Super I/O / ISA (diskette, serial, parallel, infrared, ext exp)							
Port replicator	<b>SelectaBase 600</b> / PC Card Enabler <sup>17</sup> / PC Card Enabler with Advanced EtherJet <sup>17</sup>							
Docking Station	<b>SelectaDock III<sup>17</sup></b> / SelectaDock I and II							
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 serial; 16550A / one (IEEE P1284-A, EPP, ECP, bidirectional)							
Other features	APM-aware BIOS / Ultralim 56 watt AC Adapter barrel, 3 prong / selectable boot							
Video (TV) out	<b>5EU/9EU:</b> Video out (composite) / cable ships std with RCA jack / Chronel CH7004							
MPEG decoder	None (W98 support for MPEG-2 because 300MHz with motion compensation)							
Data/fax modem	<b>56K<sup>37</sup></b> V.90 / 14.4Kbps fax / telephony / voice-capable / Mini-PCI Type IIIb / Lucent® 1646 / international programmable DAA / modem cable							
Audio support	16-bit playback and record / full duplex / SoundBlaster Pro™ support / PCI / CS4624 / CS4297A AC97 codec							
Jacks	Int stereo speakers (front) / .5 watt / Fn+PgUp and PgDn (volume) / int microphone input jack (3.5 mm) / output jack (3.5 mm) / line in / full duplex							
Infrared ports	Infrared port (on right) / IrDA 1.1 compatible / up to 4Mbps							
Security	Power-on password / hard disk password / supervisor password / security keyhole / personalization / phillips-head screw on base for memory / opt Allen screw for disk							
Limited warranty <sup>11</sup>	<b>3 year</b> - carry-in or ThinkPad EasyServ™ <sup>31</sup> Rapid Depot Repair (3 business day average turnaround)							
Service options <sup>15</sup>	On-site <sup>32</sup> , M-F, 8-5, next bus day (72 cities) / serv up to 5 yrs from purchase date							
- IBM Portable Drive Bay	33L1511	- 6.0GB disk, 12ms, ATA-66				05K9199		
- 10/100 EtherJet CardBus with 56K <sup>22</sup> modem	08L3167	- 12.0GB disk, 12ms, ATA-66				05K9200		
- IBM 10/100 EtherJet CardBus PC Card	08L3147	- 18.0GB disk, 12ms, ATA-66				37L2993		
		- SelectaBase 600				12J2467		
		- PC Card Enabler with Adv EtherJet <sup>17</sup>				05K4820		
		- SelectaDock III <sup>17</sup>				3547003		
		- Ultralim 56 watt AC Adapter (3 prong)				02K6545		
		- 24X-10X <sup>5</sup> CD-ROM (UltralimBay)				12J2471		
		- 32MB SO DIMM 100MHz NP SDRAM				20L0253		
		- 64MB SO DIMM 100MHz NP SDRAM				20L0254		
		- 128MB SO DIMM 100MHz NP SDRAM				20L0255		
		- 256MB SO DIMM 100MHz NP SDRAM				33L3069		
		- UltralimBay HDD adaptr (for 2nd disk)				05K5336		
		- SuperDisk LS-120 (UltralimBay)				20L1929		
		- 6X-2X <sup>5</sup> DVD Drive (UltralimBay)				05K9169		
		- Zip 100MB UltralimBay Drive (570/600)				37L1507		
		- UltralimBay Battery (600E/X only)				02K6504		
		- ThinkPad 600 Li-Ion Battery				12J2464		
<b>Color depth</b>	<b>LCD</b>	<b>External Monitor</b>						
<b>Resolution</b>	<b>TFT</b>	<b>60Hz</b>	<b>70Hz</b>	<b>75Hz</b>	<b>85Hz</b>			
640x480	16M	16M	--	16M	16M			
800x600	16M	16M	--	16M	16M			
1024x768	16M	16M	16M	16M	16M			
1280x1024	--	256	--	--	--			
All models:								
- C: drive is FAT16 of 2GB								
- D: drive is FAT32 (if W98) or FAT16 (if NT) of remaining space								
<b>WINDOWS NT PRELOAD<sup>16</sup></b>								
- Microsoft Windows NT® 4.0								
- Service Pack 5								
• ThinkPad Utilities								
• Online User's Guide								
• ThinkPad Configuration Program								
• IBM Registration								
• RingCentral Fax								
• IBM Global Network Dialer								
• Netscape Communicator								
• Lotus® SmartSuite Millennium <sup>20</sup>								
• Universal Manageability Services								
• ThinkPad on the Net								
• ConfigSafe®								
• Norton AntiVirus™ (OEM Version)								
• Mediamatics DVD Express (5/9EU)								
• IBM Update Connector								
• Access ThinkPad								
◇ Software Selections CD-ROM								
◇ Recovery CD-ROM (Windows 98)								
◇ Recovery CD-ROM (Windows 95) <sup>40</sup>								
<b>PC 99-compliant</b>								
<b>CIM and DMI 2.0 compliant</b>								
<b>Wired for Management 1.1a</b>								
<b>Wake on LAN® support<sup>28</sup></b>								
APM enabled (ACPI ready)								
Local and remote asset management via the IBM Universal Manageability Services								
Setup Guide, User's Reference, Quick Reference and Service Information Card, Options by IBM Catalog, Windows 98 or NT manual								
Plug and Play 1.0a								
Standby, suspend, safe suspend, and hibernation modes								
ENERGY STAR compliant								
Asset ID™ wireless RF technology (available as special bid option; Atmel® AT24RF08 EEPROM)								
International Warranty Service <sup>14</sup>								
<b>IBM SystemXtra®<sup>35</sup></b>								
24 hour / 7 day <sup>30</sup> telephone, bulletin board, fax, electronic, and Internet (www.ibm.com/pc/us) support								

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 × 2645-8EU withdrawn effective July 2000

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# IBM ThinkPad® 600X (2000) - withdrawn

<b>IBM® ThinkPad®</b>		<b>WINDOWS 98 PRELOAD<sup>16</sup></b>	
Processor	<b>Intel® Mobile Pentium® III 500MHz<sup>1</sup> with 100MHz system bus or Pentium® III 650MHz<sup>1,41</sup> with SpeedStep™ technology and 100MHz system bus</b>		
Processor features	No upgrade / processor, L2 cache, and mem cntr (North Bridge) on Mobile Module		
L2 cache	<b>256KB / onboard (at processor speed)</b> / sync pipelined burst / write-back / ECC		
Diskette (removable)	3.5" 1.44MB / use in UltralimBay™ / ships in external diskette enclosure with a cable		
External FDD port	External diskette port on right side (can use simultaneously with internal CD/DVD)		
CD-ROM (removable)	<i>Std or option:</i> CD-ROM / 24X-10X <sup>5</sup> speed / bootable / removable from UltralimBay		
DVD (removable)	<i>Std or option:</i> DVD-ROM / bootable / removable from UltralimBay		
Type - model	<b>2645-8PU</b>	<b>2645-5FU</b>	<b>2645-9FU</b>
Preload (see side)	<b>Windows 2000 Pro</b>	<b>Windows 98 SE</b>	<b>Windows 2000 Pro</b>
Processor	<b>Pentium III 500MHz</b>	<b>Pentium III 650MHz</b>	<b>Pentium III 650MHz</b>
CD or DVD-ROM	<b>CD-ROM</b>	<b>6X-2X<sup>5</sup> DVD / RPC II</b>	<b>CD-ROM</b>
Disk (removable)	<b>12.0GB<sup>4</sup> / 12ms seek read / 14ms write / ATA-66 or PIO Mode 4 / S.M.A.R.T.<sup>29</sup></b>		
Avail / withdrawn date	February 2000 / February 2001		
Memory (std / max)	<b>64MB / 576MB</b> <b>SDRAM</b> / non-parity / <b>100MHz</b> / 3.3v / sockets accessed by removing screw on base / two 144-pin sockets / 64MB on planar / 2 sockets available		
Display	<b>13.3"</b> (337.8mm) <b>TFT color</b> / Active Matrix / XGA / 75ms / 100 to 1 contrast ratio / 640x480, 800x600, or 1024x768 (up to 16.7 million colors) / 150 nits (AC), 90 nits (battery) / 180 degree tilt		
Graphics - controller	<b>NeoMagic™ MagicGraph256ZX™</b> (NM2360) / Accelerated Graphics Port / <b>AGP 2X 4MB</b> / SGRAM (embedded) / 128-bit engine, 256-bit memory interface		
Graphics - features	<b>Motion compensation</b> / multiple-monitor support <sup>26</sup> for Windows 98 SE only / simultaneous LCD and CRT <sup>26</sup> / DDC2B		
Graphics - external	External SVGA to 1024x768x16.7 million colors at 85Hz and 1280x1024x256 colors		
Disk	Left front / remove via coin screw or 2.5mm Allen wrench / SMART <sup>29</sup> / upgradeable		
Disk controller	Enhanced IDE / busmaster / PCI 2.1 / South Bridge / DMA Mode 2, Ultra DMA/33, or PIO Mode 4 / supports 2nd disk in opt HDD adapter		
Keyboard / Fn keys	Full-size 85-key keyboard / 10 Fn key functions / integrated palm rest		
Keyboard slope	Flat keyboard (does not lift up) / optional Port Replicator adds slope		
Pointing device	<b>TrackPoint®</b> / Press-to-Select / Release-to-Select / dragging / click pace / center click button for scrolling or magnifying glass / suspension top / spare caps		
Dimensions <sup>36</sup>	Approximately 11.8 x 9.4 x 1.4" (155 cubic inches); 300mm x 240mm x 36.5mm		
Approximate weight <sup>2</sup>	4.99 lbs (2.25 kg) w/ travel cover and battery only / IBM ThinkPad UltraCarbon™ case		
Battery - type	Lithium Ion / intelligent / remove from base / locked with latch		
Battery - life <sup>10</sup>	3.0 hrs / no non-disruptive battery exchange / supports 2nd battery in UltralimBay		
Charge time <sup>10</sup> - on / off	2 to 3 hrs / 1.5 to 2.5 hrs		
Architecture	<b>Intel 440BX AGPset</b> / Intel PIII4M (EIDE, ISA Bridge, USB) / TI® PCI1450 for CardBus / AGP 2X for graphics / PCI 2.1 / 32-bit / 33MHz (EIDE, CardBus, audio, USB, ext expansion) / PC97338 Super I/O / ISA (diskette, serial, parallel, infrared, ext exp)		
Port replicator	<b>SelectaBase 600</b> / PC Card Enabler <sup>17</sup> / PC Card Enabler with Advanced EtherJet <sup>17</sup>		
Docking Station	<b>SelectaDock III<sup>17</sup></b> / SelectaDock I and II		
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 serial; 16550A / one (IEEE P1284-A, EPP, ECP, bidirectional)		
Other features	APM-aware BIOS / Ultralim 56 watt AC Adapter barrel, 3 prong / selectable boot		
Video (TV) out	<b>5FU/9FU:</b> Video out (composite) / cable ships std with RCA jack / Chronlet CH7004		
MPEG decoder	None (W98 support for MPEG-2 because 300MHz with motion compensation)		
Data/fax modem	<b>56K<sup>37</sup></b> V.90 / 14.4Kbps fax / telephony / voice-capable / Mini-PCI Type IIIb / Lucent® 1646 / international programmable DAA / modem cable		
Audio support	16-bit playback and record / full duplex / SoundBlaster Pro™ support / PCI / CS4624 / CS4297A AC97 codec		
Jacks	Int stereo speakers (front) / .5 watt / Fn+PgUp and PgDn (volume) / int microphone		
Infrared ports	Input jack (3.5 mm) / output jack (3.5 mm) / line in / full duplex		
Security	Power-on password / hard disk password / supervisor password / security keyhole / personalization / phillips-head screw on base for memory / opt Allen screw for disk		
Limited warranty <sup>11</sup>	<b>3 year</b> - carry-in or ThinkPad EasyServ™ <sup>31</sup> Rapid Depot Repair (3 business day average turnaround)		
Service options <sup>15</sup>	On-site <sup>32</sup> , M-F, 8-5, next bus day (72 cities) / serv up to 5 yrs from purchase date		
- IBM Portable Drive Bay	33L1511	- 6.0GB disk, 12ms, ATA-66	05K9199
- 10/100 EtherJet CardBus with 56K <sup>22</sup> modem	08L3167	- 12.0GB disk, 12ms, ATA-66	05K9200
- IBM 10/100 EtherJet CardBus PC Card	08L3147	- 18.0GB disk, 12ms, ATA-66	37L2993
		- SelectaBase 600	12J2467
		- PC Card Enabler with Adv EtherJet <sup>17</sup>	05K4820
		- SelectaDock III <sup>17</sup>	3547003
		- Ultralim 56 watt AC Adapter (3 prong)	02K6545
		- 24X-10X <sup>5</sup> CD-ROM (UltralimBay)	12J2471
		- 64MB SO DIMM 100MHz NP SDRAM	20L0254
		- 128MB SO DIMM 100MHz NP SDRAM	20L0255
		- 256MB SO DIMM 100MHz NP SDRAM	33L3069
		- UltralimBay HDD adaptr (for 2nd disk)	05K5336
		- SuperDisk LS-120 (UltralimBay)	20L1929
		- 6X-2X <sup>5</sup> DVD Drive (UltralimBay); RPC II	05K9169
		- Zip 100MB UltralimBay Drive (570/600)	37L1507
		- UltralimBay Battery (600E/X only)	02K6504
		- ThinkPad 600 Li-Ion Battery	12J2464
		- IBM 340MB microdrive	00N8073
Windows 98 model:			
- C: drive is FAT16 of 2GB			
- D: drive is FAT32 of remaining space			
Windows 2000 models:			
- C: drive is FAT32 of entire drive			
			<b>WINDOWS 2000 PRELOAD<sup>16</sup></b>
			- Windows 2000® Professional
			• ThinkPad Utilities
			• Online User's Guide
			• ThinkPad Configuration Program
			• IBM Registration
			• RingCentral Fax
			• Netscape Communicator
			• Lotus® SmartSuite® Millennium
			• ThinkPad on the Net
			• ConfigSafe®
			• Norton AntiVirus™ (OEM Version)
			• Mediomatics DVD Express (5/9FU)
			• IBM Update Connector
			• Access ThinkPad
			◇ Software Selections CD-ROM
			◇ Recovery CD-ROM (Windows 98 SE)
			◇ Recovery CD-ROM (Windows 95) <sup>40</sup>
			<b>WINDOWS 2000 PRELOAD<sup>16</sup></b>
			- Windows 2000® Professional
			• ThinkPad Utilities
			• Online User's Guide
			• ThinkPad Configuration Program
			• IBM Registration
			• PC-Doctor
			• RingCentral Fax
			• Netscape Communicator
			• Lotus SmartSuite Millennium
			• ConfigSafe
			• IBM Update Connector
			• SystemSoft CardWizard
			◇ Software Selections CD-ROM
			◇ Recovery CD-ROM (Windows 2000)
			◇ Recovery CD-ROM (Windows NT) <sup>40</sup>
			The right bay (UltralimBay) has LED on release latch to provide status; supports warm swapping:
			• std diskette and travel cover
			• std or optional CD-ROM
			• std or optional DVD drive
			• optional UltralimBay battery (cold swap only; 600E and 600X only)
			• optional LS-120 SuperDisk drive (cold swap only)
			• optional Zip 100MB drive (cold swap)
			• optional HDD adapter; for second disk (cold swap only)
			• optional ThinkPad Proven™ solutions <sup>12</sup>
			<b>PC 99-compliant</b>
			<b>CIM and DMI 2.0 compliant</b>
			<b>Wired for Management 1.1a</b>
			<b>Wake on LAN® support<sup>28</sup></b>
			APM enabled (ACPI ready)
			Local and remote asset management via the IBM Universal Manageability Services
			Remote setup and low-level maintenance via IBM LANclient Control Manager™
			Setup Guide, User's Reference, Quick Reference and Service Information Card, Options by IBM Catalog, Windows 98 or 2000 manual
			Plug and Play 1.0a
			Standby, suspend, safe suspend, and hibernation modes
			ENERGY STAR compliant
			Asset ID™ wireless RF technology (available as special bid option; Atmel® AT24RF08 EEPROM)
			International Warranty Service <sup>14</sup>
			<b>IBM SystemXtra®<sup>35</sup></b>
			24 hour / 7 day <sup>30</sup> telephone, bulletin board, fax, electronic, and Internet (www.ibm.com/pc/us) support

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