

IBM ThinkPad 760ED (SVGA) - withdrawn

IBM® ThinkPad®: ≈ 760ED 12.1" SVGA TFT- 4 x CD-ROM - Enhanced Video - MPEG		ThinkPad 760ED strengths over 760CD: <ul style="list-style-type: none"> ➤ Pentium 133/66 MHz (vs 120/60 MHz) ➤ PCI bus (vs VL-Bus) ➤ 16 MB EDO memory (vs 8 MB fast page) ➤ 64 bit path to memory (vs 32 bit) ➤ 9385 64 bit graphics with 2 MB EDO ➤ CardBus PC Card support (32 bit PCI) 	
Processor type	Pentium® 133/66 (P54CSLM) / 64 bit to L2 cache / 64 bit to memory	Integrated Mwave™ DSP provides: ① Data modem function - V.22bis, V.32, V.32bis, v.34 (28.8 Kbps) ② Fax modem function - G3 fax send/receive (14.4 Kbps) ③ Audio function - Stereo waveform record and playback - Qsound support (3-D effect) - 32 voice MIDI wave table synthesizer - SoundBlaster™ support / text to speech - MPEG audio decode ④ Telephone function - Full telephone (can use opt headset) - Telephone answering machine - Full duplex speakerphone ⑤ Digital Simultaneous Voice Data	
Processor upgrade	None		
L2 cache	256 KB / write-back / direct mapped / 10 ns / synchronous pipelined burst		
Removable diskette	3.5" 1.44 MB ○ / use in UltraBay or attach externally via rear ext FDD port	WINDOWS 95 PRELOAD - Microsoft Windows 95 - Online User's Guide - ThinkPad Features - PC Card Director 4.0 - Diskette Factory 1. Triton CoSession™ Host; 2. PRODIGY® 3. SofNet FaxWorks™ Voice™ 4. Puma TranXit™ 5. Compuserp for Windows 6. NetFinity for Windows 95 7. Asymetrix® Digital Video Producer™ 8. MPEG Sampler (CD-ROM) - Lotus SmartSuite 96 CD-ROM	
External FDD port	External FDD port (requires External FDD Attachment Kit 66G3618)		
Removable CD-ROM	5.25" CD-ROM ○ / 4 x speed / multi-session / XA / play with eject button EIDE / PIO Mode 3 (ATAPI) / in UltraBay which supports several devices		
Type - model	9546-U3A	Easy-Setup is entered by holding F1 when turning on. ThinkPad 760ED supported batteries: - 760 NiMH Battery (black) 41H9720 - Li-Ion Battery Pack II (gray) 29H9329 - Travel Quick Charger 85G1522 - Car Battery Adapter 49G2167 ThinkPad 760E supported disks: - (360/750/755 IDE disks not supported) - 720 MB HDD II EIDE 12.5mm 29H9383 - 810 MB HDD II EIDE 12.5 mm 29H9313 - 1.08 GB HDD II EIDE 12.5mm 29H9319 - 1.2 GB (1.96" or higher models) 29H9325 - 1.4 GB HDD 3L EIDE 12.5 mm 69H8412 - 2.1 GB (1.96" or higher models) 69H8414	
Preload (see side)	Windows 95		
Remv disk - size / ms	1.2 GB / 12 ms ○ / DMA Mode 1 or PIO Mode 3		
Disk controller	Enhanced IDE / busmaster / PCI 2.1 / supports two internal disks	FEATURES OF 760 MODELS Setup Pointer (single page) LCD indicator panel Plug and Play 1.0a Discharge battery via mouse click Non-disruptive battery exchange Standby, suspend, safe suspend, and hibernation modes US EPA Energy Star compliant Personalized nameplate in indentation Personalization screen at startup International Warranty Service 24 hour / 7 day telephone, bulletin board, fax, electronic, and Internet (http://www.pc.ibm.com) support IBM and dealer warranty/service Online Housecall (remote diagnostics)	
Avail / withdrawn date	May 1996 / January 1997		
Display - size and type	12.1 inch SVGA color / 640 x 480 or 800 x 600 / 262,166 simultaneous colors		
Display - technology	Black Matrix TFT - active matrix / 100 to 1 contrast ratio	Compatible in ThinkPad 760ED family: - Second HDD Adapter 29H9333 - Dock I (1 slot / 1 bay) 3545001 - Dock II (2 slot / 2 bay) 3546001 - IDE Conversion Card (for Dock I/II) 46H5994 - SelectaDock I 3547001 - SelectaDock II 3547002 - Port Replicator I (w/ PCMCIA slots) 66G3510 - Port Replicator II 66G3520 - SelectaDock Base Model I 39H7405 - 2.88 MB diskette drive 66G0108 - PCMCIA Cartridge (one Type III) 84G1301 - FDD External Attachment Kit 66G3618 - 35 watt AC Adapter (slim, 4 pin) 76H0119 - 4 x CD-ROM (UltraBay) 39H7413 - 6 x CD-ROM (UltraBay) 85G1957 - 8 MB SO DIMM 3.3v NP EDO 64 bit 92G7340 - 16 MB SO DIMM 3.3v NP EDO 64 bit 92G7341 - 32 MB SO DIMM 3.3v NP EDO 64 bit 92G7342	
Graphics - controller	Trident™ CYBER9385 / 64 bit SVGA accelerator / 2 MB EDO DRAM / 70 ns		
Graph - arch/data path	PCI 2.1 / 32 bit / DCI, DirectDraw, EnDIVE support		
Graphics - features	Simultaneous LCD and CRT / 180 degree tilt	Enhanced Video Card in 760ED provides: - Composite in and S-Video in (NTSC or PAL) for video capture (capture and digitize video from a TV or VCR), still image capture (capture and digitize still photo images), and overlay. - Composite out and S-Video out to TV (connect to video out port; NTSC or PAL); or record on VCR the screen of ThinkPad. - Mini game port for MIDI or joystick - Includes video in and video out ports (includes one video in/out cable) - Use software called Digital Video Producer™ - Hardware acceleration of 'Video for Windows'™ formerly done by a separate ASCII chip (as in 755CD and 760CD) has now been integrated into the 9385 graphics controller; interpolation in X and Y axis; color space conversion when DCI enabled - Plays back MPEG motion videos, CD-I movies, video CDs, and Karaoke MPEG video titles (at 640 x 480, 800 x 600, or externally at 1024 x 768)	
Graphics - external	External SVGA to 1280 x 1024 w/ 256 colors or 1024 x 768 w/ 65,536 colors		
Memory - std / max	16 MB / 80 MB (104 MB with ThinkPad Proven option) 70 ns / non-parity / 3.3v		
Memory - upgrade	2 sockets for two JEDEC 144 pin EDO SO DIMMs of 8, 16, 32 MB	Liftable (pop-up) keyboard to access and remove CD-ROM, diskette drive, 1st/2nd disk, and 1st/2nd battery	
Keyboard / # of keys	Full size alp/num / 85 (8 Fn key functions)		
Keyboard slope	Automated tilt up keyboard (5.5 degrees)		
Pointing / palm rest	TrackPoint III™ / integrated palm rest	The left bay (UltraBay™) supports: ① 2nd disk; ② 2nd battery ③ std diskette drive; ④ CD-ROM ⑤ 2.88 MB diskette (option) ⑥ PCMCIA Cartridge (option) ⑦ IBM Wireless Modem ARDIS (option) ⑧ IBM Wireless Modem for Cellular/ CDPD (option)	
Ext keyboard support	Yes (with option cable)		
Dimensions	11.7 x 8.3 x 2.14" (208 cubic inches)		
Weight (with CD-ROM)	7.38 pounds (3.35 kg)	Architecture ISA (audio, diskette, serial, parallel, infrared, ext expansion) PCI 2.1 / 32 bit / 33 Mhz (EIDE, graphics, CardBus, MPEG, ext expansion) Dock I and II / SelectaDock I and II Port Replicator I and II / SelectaDock Base Model I and II PC Card Standard slots 2 Type I or 2 Type II or 1 Type III / CardBus 32 bit PCI / PCMCIA 2.1 compatible Serial / parallel ports One 9 pin; 16550A / one (IEEE P1284-A, EPP, ECP, bidirectional) Other features APM-aware BIOS / Slim AC Adapter 2 prong (35 watts) / Selectable boot	
Battery - type	Lithium Ion / intelligent <i>optional</i>		
Battery - life (1 batt)	2.8 hours <i>NiMH</i>		
Battery - life (2 batt)	5.6 hours	Video in/out MPEG-1 & MPEG-2 Half Horizontal Resolution (HHR) decoder (MPEGCD1) Mwave MDSP2780 DSP with modem, fax, audio, telephony function Data/fax modem function via DSP (v.34 to 28.8 Kbps) / Mwave 2.1 16 bit audio chip on planar with Mwave DSP Int stereo speakers / .5 watt / slide volume control / internal microphone Input jack (3.5 mm) / Output jack (3.5 mm) / Joystick/MIDI port (includes cable) Telephone / answering machine / full duplex speakerphone / DSVD Infrared ports (front and back) / IrDA 1.0 compatible / up to 115 kbs	
Charge time - on / off	2 to 3 hrs / 1.5 to 2.5 hrs		
Architecture	ISA (audio, diskette, serial, parallel, infrared, ext expansion)		
Docking Station	PCI 2.1 / 32 bit / 33 Mhz (EIDE, graphics, CardBus, MPEG, ext expansion)	Jacks Telephone Infrared ports Security Power-on password / Hard disk password / Supervisor password / Locking device keyhole (Kensington™ cable lock) / Security latch for keyboard and DIMMs (requires Kensington) / PC Card lock / Personalization / Security Plate	
Port replicator	Dock I and II / SelectaDock I and II		
PC Card Standard slots	Port Replicator I and II / SelectaDock Base Model I and II		
Serial / parallel ports	2 Type I or 2 Type II or 1 Type III / CardBus 32 bit PCI / PCMCIA 2.1 compatible	Preinstalled software Windows 95 with applications (listed on right) Warranty 3 year - ThinkPad EasyServ (optional Overnight Repair Option) or carry-in	
Other features	One 9 pin; 16550A / one (IEEE P1284-A, EPP, ECP, bidirectional)		
Video in/out	APM-aware BIOS / Slim AC Adapter 2 prong (35 watts) / Selectable boot		
MPEG decoder	Composite and S-Video in/out / game port		
DSP function	MPEG-1 & MPEG-2 Half Horizontal Resolution (HHR) decoder (MPEGCD1)		
Data/fax modem	Mwave MDSP2780 DSP with modem, fax, audio, telephony function		
Audio support	Data/fax modem function via DSP (v.34 to 28.8 Kbps) / Mwave 2.1		
Jacks	16 bit audio chip on planar with Mwave DSP		
Telephone	Int stereo speakers / .5 watt / slide volume control / internal microphone		
Infrared ports	Input jack (3.5 mm) / Output jack (3.5 mm) / Joystick/MIDI port (includes cable)		
Security	Telephone / answering machine / full duplex speakerphone / DSVD		
	Infrared ports (front and back) / IrDA 1.0 compatible / up to 115 kbs		
Preinstalled software	Windows 95 with applications (listed on right)		
Warranty	3 year - ThinkPad EasyServ (optional Overnight Repair Option) or carry-in		

ThinkPad EasyServ™: customer calls 1-800-772-2227, courier service picks up ThinkPad at any location, IBM repairs and mails back (no shipping charges, most shipping is overnight, 3 business day average turnaround). Overnight repair option in US available for \$99.
 ○ = Removable

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 (760ED) Compiled by Roger Dodson, IBM. December 1996

IBM ThinkPad 760ED (XGA) - withdrawn

IBM® ThinkPad®: ≈ 760ED		ThinkPad 760ED strengths over 760CD:	
12.1" XGA TFT - 6 x CD-ROM - Enhanced Video - MPEG		➤ Pentium 133/66 MHz (vs 120/60 MHz)	
Processor type	Pentium® 133/66 (P54CSLM) / 64 bit to L2 cache / 64 bit to memory	➤ PCI bus (vs VL-Bus)	
Processor upgrade	None	➤ 16 MB EDO memory (vs 8 MB fast page)	
L2 cache	256 KB / write-back / direct mapped / 10 ns / synchronous pipelined burst	➤ 64 bit path to memory (vs 32 bit)	
Removable diskette	3.5" 1.44 MB ○ / use in UltraBay or attach externally via rear ext FDD port	➤ 9385 64 bit graphics with 2 MB EDO	
External FDD port	External FDD port (includes Floppy Disk Drive Enclosure)	➤ CardBus PC Card support (32 bit PCI)	
Removable CD-ROM	5.25" CD-ROM ○ / 6 x speed / multi-session / XA / play with eject button		
	EIDE / PIO Mode 3 (ATAPI) / in UltraBay which supports several devices		
Type - model	9546-U9A	Integrated Mwave™ DSP provides:	
Preload (see side)	Windows 95	① Data modem function	
Remv disk - size / ms	2.1 GB / 12 ms ○ / DMA Mode 2 or PIO Mode 4	- V.22bis, V.32, V.32bis, v.34 (28.8 Kbps)	
Disk controller	Enhanced IDE / busmaster / PCI 2.1 / supports two internal disks for 4.2 GB	② Fax modem function	
Avail / withdrawn date	October 1996 / October 1997	- G3 fax send/receive (14.4 Kbps)	
Display - size and type	12.1 inch XGA color / 640 x 480, 800 x 600 or 1024 x 768 / 65,536 siml colors	③ Audio function	
Display - technology	Black Matrix TFT - active matrix / 100 to 1 contrast ratio	- Stereo waveform record and playback	
Graphics - controller	Trident™ CYBER9385 / 64 bit SVGA accelerator / 2 MB EDO DRAM / 70 ns	- Qsound support (3-D effect)	
Graph - arch/data path	PCI 2.1 / 32 bit / DCI, DirectDraw, EnDIVE support	- 32 voice MIDI wave table synthesizer	
Gaphics - features	Simultaneous LCD and CRT / 180 degree tilt	- SoundBlaster™ support / text to speech	
Graphics - external	External SVGA to 1280 x 1024 w/ 256 colors or 1024 x 768 w/ 65,536 colors	- MPEG audio decode	
Memory - std / max	16 MB / 80 MB (104 MB w/ ThinkPad Proven option) 70 ns / non-parity / 3.3v / EDO	④ Telephone function	
Memory - upgrade	2 sockets for two JEDEC 144 pin EDO SO DIMMs of 8, 16, 32 MB	- Full telephone (can use opt headset)	
Keyboard / # of keys	Full size alp/num / 85 (8 Fn key functions)	- Telephone answering machine	
Keyboard slope	Automated tilt up keyboard (5.5 degrees)	- Full duplex speakerphone	
Pointing / palm rest	TrackPoint III™ / integrated palm rest	⑤ Digital Simultaneous Voice Data	
Ext keyboard support	Yes (with option cable)		
Dimensions	11.7 x 8.3 x 2.0" (194 cubic inches)		
Weight (with CD-ROM)	6.65 pounds (3.02 kg)		
Battery - type	Lithium Ion / intelligent		
Battery - life (1 batt)	2.2 hours		
Battery - life (2 batt)	4.4 hours		
Charge time - on / off	2 to 3 hrs / 1.5 to 2.5 hrs		
Architecture	ISA (audio, diskette, serial, parallel, infrared, ext expansion)		
	PCI 2.1 / 32 bit / 33 Mhz (EIDE, graphics, CardBus, MPEG, ext expansion)		
Docking Station	Dock I and II / SelectaDock I and II and III		
Port replicator	Port Replicator I and II / SelectaDock Base Model I		
PC Card Standard slots	2 Type I or 2 Type II or 1 Type III / CardBus 32 bit PCI / PCMCIA 2.1 compatible		
Serial / parallel ports	One 9 pin; 16550A / one (IEEE P1284-A, EPP, ECP, bidirectional)		
Other features	APM-aware BIOS / Slim AC Adapter 2 prong (35 watts) / Selectable boot		
Video in/out	Composite and S-Video in/out / game port		
MPEG decoder	MPEG-1 & MPEG-2 Half Horizontal Resolution (HHR) decoder (MPEGCD1)		
DSP function	Mwave MDSP2780 DSP with modem, fax, audio, telephony function		
Data/fax modem	Data/fax modem function via DSP (v.34 to 33.6 Kbps) / Mwave 2.1		
Audio support	16 bit audio chip on planar with Mwave DSP		
	Int stereo speakers / .5 watt / slide volume control / internal microphone		
Jacks	Input jack (3.5 mm) / Output jack (3.5 mm) / Joystick/MIDI port (includes cable)		
Telephone	Telephone / answering machine / full duplex speakerphone / DSVD		
Infrared ports	Infrared ports (front and back) / IrDA 1.0 compatible / up to 115 kbs		
Security	Power-on password / Hard disk password / Supervisor password / Security keyhole (requires cable) / Security latch for keyboard and DIMMS (requires cable) / PC Card lock / Personalization / Security Plate		
Preinstalled software	Windows 95 with applications (listed on right)		
Warranty			
Enhanced Video Card in 760ED provides:		Compatible in ThinkPad 760ED family:	
- Composite in and S-Video in (NTSC or PAL) for video capture (capture and digitize video from a TV or VCR), still image capture (capture and digitize still photo images), and overlay.		- Second HDD Adapter 29H9333	
- Composite out and S-Video out to TV (connect to video out port; NTSC or PAL); or record on VCR the screen of ThinkPad.		- Dock I (1 slot / 1 bay) 3545001	
- Mini game port for MIDI or joystick		- Dock II (2 slot / 2 bay) 3546001	
- Includes video in and video out ports (includes one video in/out cable)		- IDE Conversion Card (for Dock I/II) 46H5994	
- Use software called Digital Video Producer™		- SelectaDock I 3547001	
- Hardware acceleration of Video for Windows™ formerly done by a separate ASCII chip (as in 755CD and 760CD) has now been integrated into the 9385 graphics controller; interpolation in X and Y axis; color space conversion when DCI enabled		- SelectaDock II 3547002	
- Plays back MPEG motion videos, CD-I movies, video CD's, and Karaoke MPEG video titles		- SelectaDock III 3547003	
		- Port Replicator I (w/ PCMCIA slots) 66G3510	
		- Port Replicator II 66G3520	
		- SelectaDock Base Model I 39H7405	
		- 2.88 MB diskette drive 66G0108	
		- PCMCIA Cartridge (one Type III) 84G1301	
		- FDD External Attachment Kit 66G3618	
		- 35 watt AC Adapter (slim, 4 pin) 76H0119	
		- 4 x CD-ROM (UltraBay) 39H7413	
		- 6 x CD-ROM (UltraBay) 85G1957	
		- 8 x CD-ROM (UltraBay) 45H8786	
		- 8 - 20 x CD-ROM (UltraBay) 00K7903	
		- 8 MB SO DIMM 3.3v NP EDO 64 bit 92G7340	
		- 16 MB SO DIMM 3.3v NP EDO 64 bit 92G7341	
		- 32 MB SO DIMM 3.3v NP EDO 64 bit 92G7342	
		FEATURES OF 760 MODELS	
		Setup Pointer (single page)	
		LCD indicator panel	
		Plug and Play 1.0a	
		Discharge battery via mouse click	
		Non-disruptive battery exchange	
		Standby, suspend, safe suspend, and hibernation modes	
		US EPA Energy Star compliant	
		Personalized nameplate in indentation	
		Personalization screen at startup	
		International Warranty Service	
		24 hour / 7 day telephone, bulletin board, fax, electronic, and Internet (http://www.pc.ibm.com) support	
		IBM and dealer warranty/service	
		Online Housecall (remote diagnostics)	

ThinkPad EasyServ™: customer calls 1-800-772-2227, courier service picks up ThinkPad at any location, IBM repairs and mails back (no shipping charges, most shipping is overnight, 3 business day average turnaround). Overnight repair option in US available for \$99.
○ = Removable

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(760ED96) Compiled by Roger Dodson, IBM. October 1997