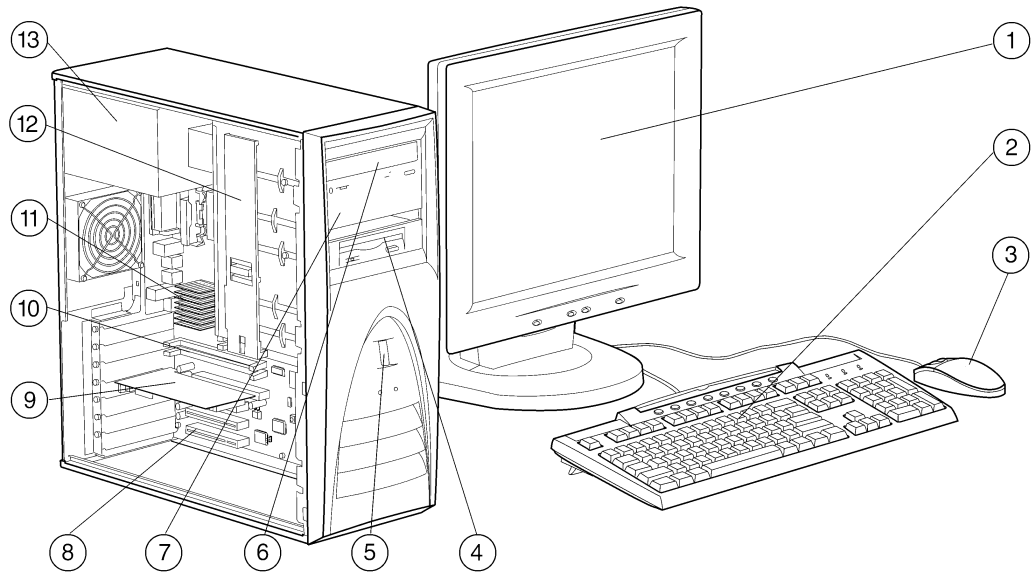


### Overview

#### At A Glance

- Convertible minitower form factor
- Supports up to two Intel® Xeon™ processors, up to 2.8-GHz (400 MHz Front Side Bus)
- Intel 860 chipset with 400-MHz front side bus and dual memory channels
- 512-KB L2 cache integrated on processor
- ECC RDRAM expandable to 2 GB
- High-performance Ultra160 SCSI 10,000 rpm or 15,000 rpm hard drives or UATA/100 7200 rpm hard drives
- Integrated Ultra160 SCSI and Ultra ATA/100 controllers
- Up to 360 GB of high-performance internal storage
- Choice of NVIDIA® Quadro2 EX, NVIDIA Quadro4 750 XGL, NVIDIA Quadro4 200 NVS, NVIDIA Quadro4 400 NVS, NVIDIA Quadro4 550 XGL, NVIDIA Quadro4 750 XGL, NVIDIA Quadro4 900 XGL, Matrox® Millennium® G450, Matrox G200 Quad Multi-monitor Series, Matrox Millennium G550, ATI Fire GL 8800, or 3DLabs Wildcat™ III 6110 Graphics Controller
- Multiple display support
- Integrated Intel PRO/100+ Management Adapter
- Four total slots (three PCI and one AGP Pro 4X)
- Five bays (three external and two internal)
- CD-ROM, DVD-ROM, DVD+RW, CD-RW, or combo drive (depending on model)
- SoundBlaster 128 audio
- Windows® XP Professional or Windows 2000 Professional and Compaq support software pre-installed
- Protected by Compaq Services, including a three-year, limited warranty — certain restrictions and exclusions apply. Consult the Compaq Customer Support Center for details. Three-year onsite and labor not available in all countries.



1. Compaq Monitor (optional)
2. Compaq Keyboard
3. Compaq 3-button Mouse
4. 1.44-MB Diskette Drive
5. On-Off Button
6. CD-ROM Drive or DVD-ROM Drive
7. 5.25-in Drive Bay (available)
8. PCI Slots
9. AGP Pro 4x slot
10. Memory Sockets
11. Processors
12. Drivelock
13. 460-Watt Power Supply

**COMPAQ**

### Standard Features - Pre-configured Models

<b>Models</b>	<b>Compaq Evo Workstation W6000</b> Available in multiple configurations. Not all configurations available in all countries. Check with your Authorized Compaq Reseller or Compaq.	
<b>Processor</b> <i>One of the following:</i>	Intel Xeon processor 2.0 GHz, 512-KB cache Intel Xeon processor 2.2 GHz, 512-KB cache Intel Xeon processor 2.4 GHz, 512-KB cache Intel Xeon processor 2.6 GHz, 512-KB cache Intel Xeon processor 2.8 GHz, 512-KB cache	
<b>Cache Memory</b>	512-KB integrated, full speed Level 2 cache per processor	
<b>Upgradability</b>	Upgradable to dual processor	
<b>Memory</b> <i>One of the following:</i>	Standard	1 GB of 800-MHz ECC RDRAM
	Standard	512 MB of 800-MHz ECC RDRAM
	Maximum	2 GB of 800-MHz ECC RDRAM
<b>Network Controller</b>	Integrated Intel PRO/100+Management Adapter	
<b>Expansion Slots</b>	I/O (Total)	4, up to 3 available
	32-bit/33-MHz PCI	3, up to 3 depending on model
	AGP Pro 4X	1, up to 1 depending on model
<b>Expansion Bays</b>	(Total/Available)	5/2
	Internal	2/1
	External	3/1
<b>Storage</b>	Diskette Drive	1.44 MB
	Removable Media	DVD-ROM Drive
	Hard Drive	18-GB Ultra160 SCSI (10,000 rpm or 15,000) or 36-GB Ultra160 SCSI (10,000 rpm) 80-GB or 40-GB Ultra ATA/100 (7200 rpm)
<b>Interfaces</b>	Parallel	1
	USB	4
	Serial	2
	Ultra160 SCSI	1 (68-pin internal)
	Ultra ATA/100	2
	Keyboard (PS/2)	1
	Pointing Device (PS/2 mouse)	1
	Video	1
	Microphone Jack	1
	Headphone Jack	1
	Line-In Jack	1
	Line-Out Jack	1
	RJ-45	1

### Standard Features - Pre-configured Models

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<b>Graphics</b> <i>One of the following:</i>	Matrox Millennium G550 (AGP) Matrox Millennium G450 (AGP) Matrox G200 Quad Multi-monitor Series (PCI) NVIDIA Quadro2 EX (AGP) NVIDIA Quadro4 550 XGL (AGP) NVIDIA Quadro4 750 XGL (AGP) NVIDIA Quadro4 900 XGL (AGP) NVIDIA Quadro4 200 NVS (AGP) NVIDIA Quadro4 400 NVS (PCI) ATI Fire GL 8800 (AGP) 3Dlabs Wildcat III 6110 (AGP)
<b>Audio</b>	Integrated SoundBlaster 128 Audio
<b>Software</b>	Windows XP Professional Windows 2000 Professional Microsoft® Service Pack 2 for Windows 2000 Professional Compaq Restore CD Compaq Management Agents via the web Compaq PC Diagnostics via the Web ROM-based Setup Diagnostics for Windows 2000 and Windows XP Professional Microsoft Internet Explorer System Software Manager via the Web Altiris eXpress (Limited Time License)
<b>Intelligent Manageability</b>	Asset Control Alert on LAN (AoL) hardware ready Wake on LAN (WoL) Fault Management Lite Console Security Management Pre-Failure Warranty (processors, hard drives and memory) <b>Remote Management</b> Remote Wakeup via Magic Packet Support Remote ROM Flash Remote Security Remote Shut Down <b>Bios Features</b> Advanced Configuration and Power Interface (ACPI) 1.0b Advanced Power Management (APM) 1.2 Desktop Management Interface (DMI) 2.1 System Management (SM) Bios 2.3
<b>Security</b>	Diskette write and boot control Flash ROM lock Keyboard password Network server mode Parallel interface control Power-on password Serial interface control Setup password Cable lock provision
<b>Power Supply</b>	460-Watt, with Power Factor Correction
<b>Service and Support</b>	Protected by Compaq Services including a three-year, limited warranty with three-year parts coverage, three year, on-site service, and three-year labor; 7 x 24 hardware technical phone support and on-line support through the Internet; Pre-Failure Warranty coverage of hard drives, memory, and processors. <b>Note:</b> Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center for details. Three-year, onsite and labor not available in all countries.

### Standard Features – Global Series Pre-configured Models

<b>W6P/2.4/18S/512/Xd</b> <i>xxxxxx-xxx and graphics option</i>	<b>Processor</b>	Intel Xeon 2.4 GHz
	<b>Cache Memory</b>	512-KB integrated L2
	<b>Memory</b>	512-MB 800-MHz ECC RDRAM
	<b>Optical Drive</b>	16X/40X DVD-ROM Drive
	<b>Hard Drive</b>	18-GB Ultra160 SCSI 10,000 rpm
	<b>Graphics</b>	Choice of graphics option: Matrox Millennium G550 (AGP) (250227-B21) Matrox Millennium G450 (AGP) (202389-B21) Matrox G200 Quad MMS with analog cables (PCI) (159513-B21) Matrox G200 Quad MMS with DVI cables (PCI) (179597-B21) NVIDIA Quadro2 EX (250066-B21) NVIDIA Quadro4 550 XGL (AGP) (290648-B21) NVIDIA Quadro4 750 XGL (AGP) (270731-B21) NVIDIA Quadro4 900 XGL (AGP) (284279-B21) NVIDIA Quadro4 200 NVS (AGP) (273304-B21) NVIDIA Quadro4 400 NVS (PCI) (273305-B21) ATI Fire GL 8800 (AGP) (271686-B21) 3DLabs Wildcat III 6110 (AGP) (271685-B21)
	<b>Audio</b>	Integrated SoundBlaster 128 Audio
	<b>OS</b>	Windows 2000 SP2/Windows XP Professional

<b>W6P/2.4/18S/1/Xd</b> <i>xxxxxx-xxx and graphics option</i>	<b>Processor</b>	Intel Xeon 2.4 GHz
	<b>Cache Memory</b>	512-KB integrated L2
	<b>Memory</b>	1-GB (2 x 512-MB) 800-MHz ECC RDRAM
	<b>Optical Drive</b>	16X/40X DVD-ROM Drive
	<b>Hard Drive</b>	18-GB Ultra160 SCSI 10,000 rpm
	<b>Graphics</b>	Choice of graphics option: Matrox Millennium G550 (AGP) (250227-B21) Matrox Millennium G450 (AGP) (202389-B21) Matrox G200 Quad MMS with analog cables (PCI) (159513-B21) Matrox G200 Quad MMS with DVI cables (PCI) (179597-B21) NVIDIA Quadro2 EX (250066-B21) NVIDIA Quadro4 550 XGL (AGP) (290648-B21) NVIDIA Quadro4 750 XGL (GPU) (270731-B21) NVIDIA Quadro4 900 XGL (AGP) (284279-B21) NVIDIA Quadro4 200 NVS (GPU) (273304-B21) NVIDIA Quadro4 400 NVS (PCI) (273305-B21) ATI Fire GL 8800 (AGP) (271686-B21) 3DLabs Wildcat III 6110 (AGP) (271685-B21)
	<b>Audio</b>	Integrated SoundBlaster 128 Audio
	<b>OS</b>	Windows 2000 SP2/Windows XP Professional

### Standard Features – Global Series Pre-configured Models

<b>W6P/2.2/18S/512/Xd</b> <i>xxxxxx-xxx and graphics option</i>	<b>Processor</b>	Intel Xeon 2.2 GHz	
	<b>Cache Memory</b>	512-KB integrated L2	
	<b>Memory</b>	512-MB 800-MHz ECC RDRAM	
	<b>Optical Drive</b>	16X/40X DVD-ROM Drive	
	<b>Hard Drive</b>	18-GB Ultra160 SCSI 10,000 rpm	
	<b>Graphics</b>	Choice of graphics option: Matrox Millennium G550 (AGP) (250227-B21) Matrox Millennium G450 (AGP) (202389-B21) Matrox G200 Quad MMS with analog cables (PCI) (159513-B21) Matrox G200 Quad MMS with DVI cables (PCI) (179597-B21) NVIDIA Quadro2 EX (250066-B21) NVIDIA Quadro4 550 XGL (AGP) (290648-B21) NVIDIA Quadro4 750 XGL (AGP) (270731-B21) NVIDIA Quadro4 900 XGL (AGP) (284279-B21) NVIDIA Quadro4 200 NVS (AGP) (273304-B21) NVIDIA Quadro4 400 NVS (PCI) (273305-B21) ATI Fire GL 8800 (AGP) (271686-B21) 3Dlabs Wildcat III 6110 (AGP) (271685-B21)	
	<b>Audio</b>	Integrated SoundBlaster 128 Audio	
	<b>OS</b>	Windows 2000/Windows XP Professional	
	<hr/>		
	<b>W6P/2.2/18S/1/Xd</b> <i>xxxxxx-xxx and graphics option</i>	<b>Processor</b>	Intel Xeon 2.2 GHz
<b>Cache Memory</b>		512-KB integrated L2	
<b>Memory</b>		1-GB (2 x 512-MB) 800-MHz ECC RDRAM	
<b>Optical Drive</b>		16X/40X DVD-ROM Drive	
<b>Hard Drive</b>		18-GB Ultra160 SCSI 10,000 rpm	
<b>Graphics</b>		Choice of graphics option: Matrox Millennium G550 (AGP) (250227-B21) Matrox Millennium G450 (AGP) (202389-B21) Matrox G200 Quad MMS with analog cables (PCI) (159513-B21) Matrox G200 Quad MMS with DVI cables (PCI) (179597-B21) NVIDIA Quadro2 EX (250066-B21) NVIDIA Quadro4 550 XGL (AGP) (290648-B21) NVIDIA Quadro4 750 XGL (GPU) (270731-B21) NVIDIA Quadro4 900 XGL (AGP) (284279-B21) NVIDIA Quadro4 200 NVS (GPU) (273304-B21) NVIDIA Quadro4 400 NVS (PCI) (273305-B21) ATI Fire GL 8800 (AGP) (271686-B21) 3Dlabs Wildcat III 6110 (AGP) (271685-B21)	
<b>Audio</b>		Integrated SoundBlaster 128 Audio	
<b>OS</b>		Windows 2000/Windows XP Professional	

### Standard Features – Global Series Pre-configured Models

<b>W6P/2.0/18S/512/Xd</b> <i>xxxxxx-xxx and graphics option</i>	<b>Processor</b>	Intel Xeon 2.0 GHz
	<b>Cache Memory</b>	512-KB integrated L2
	<b>Memory</b>	512-MB 800-MHz ECC RDRAM
	<b>Optical Drive</b>	16X/40X DVD-ROM Drive
	<b>Hard Drive</b>	18-GB Ultra160 SCSI 10,000 rpm
	<b>Graphics</b>	Choice of graphics option: Matrox Millennium G550 (AGP) (250227-B21) Matrox Millennium G450 (AGP) (202389-B21) Matrox G200 Quad MMS with analog cables (PCI) (159513-B21) Matrox G200 Quad MMS with DVI cables (PCI) (179597-B21) NVIDIA Quadro2 EX (AGP) (250066-B21) NVIDIA Quadro4 550 XGL (AGP) (290648-B21) NVIDIA Quadro4 750 XGL (AGP) (270731-B21) NVIDIA Quadro4 900 XGL (AGP) (284279-B21) NVIDIA Quadro4 200 NVS (GPU) (273304-B21) NVIDIA Quadro4 400 NVS (PCI) (273305-B21) ATI FireGL 8800 (GPU) (271686-B21) 3DLabs Wildcat III 6110 (AGP) (271685-B21)
	<b>Audio</b>	Integrated SoundBlaster 128 Audio
	<b>OS</b>	Windows 2000 SP2/Windows XP Professional

<b>W6P/2.0/18S/1/Xd</b> <i>xxxxxx-xxx and graphics option</i>	<b>Processor</b>	Intel Xeon 2.0 GHz
	<b>Cache Memory</b>	512-KB integrated, L2
	<b>Memory</b>	1-GB 800-MHz ECC RDRAM
	<b>Optical Drive</b>	16X/40X DVD-ROM Drive
	<b>Hard Drive</b>	18-GB Ultra160 SCSI 10,000 rpm
	<b>Graphics</b>	Choice of graphics option: Matrox Millennium G550 (AGP) (250227-B21) Matrox Millennium G450 (AGP) (202389-B21) Matrox G200 Quad MMS with analog cables (PCI) (159513-B21) Matrox G200 Quad MMS with DVI cables (PCI) (179597-B21) NVIDIA Quadro2 EX (AGP) (250066-B21) NVIDIA Quadro4 550 XGL (AGP) (290648-B21) NVIDIA Quadro4 750 XGL (AGP) (270731-B21) NVIDIA Quadro4 900 XGL (AGP) (284279-B21) NVIDIA Quadro4 200 NVS (AGP) (273304-B21) NVIDIA Quadro4 400 NVS (PCI) (273305-B21) ATI Fire GL 8800 (AGP) (271686-B21) 3DLabs Wildcat III 6110 (271685-B21)
	<b>Audio</b>	Integrated SoundBlaster 128 Audio
	<b>OS</b>	Windows 2000 Professional/Windows XP Professional

### Standard Features – Global Series Pre-configured Models

<b>W6P/1.8/18S/512/Xd</b> <i>xxxxxx--xxx and graphics option</i>	<b>Processor</b>	Intel Xeon 1.8-GHz
	<b>Cache Memory</b>	512-KB integrated L2
	<b>Memory</b>	512-MB 800-MHz ECC RDRAM
	<b>Optical Drive</b>	16X/40X DVD-ROM Drive
	<b>Hard Drive</b>	18-GB Ultra160 SCSI 10,000 rpm
	<b>Graphics</b>	Choice of graphics option: Matrox Millennium G550 (AGP) (250227-B21) Matrox Millennium G450 (AGP) (202389-B21) Matrox G200 Quad MMS with analog cables (PCI) (159513-B21) Matrox G200 Quad MMS with DVI cables (PCI) (179597-B21) NVIDIA Quadro2 EX (AGP) (250066-B21) NVIDIA Quadro4 550 XGL (AGP) (290648-B21) NVIDIA Quadro4 750 XGL (AGP) (270731-B21) NVIDIA Quadro4 900 XGL (AGP) (284279-B21) NVIDIA Quadro4 200 NVS (AGP) (273304-B21) NVIDIA Quadro4 400 NVS (PCI) (273305-B21) ATI Fire GL 8800 (AGP) (271686-B21) 3Dlabs Wildcat III 6110 (AGP) (271685-B21)
	<b>Audio</b>	Integrated SoundBlaster 128 Audio
	<b>OS</b>	Windows 2000 Professional/Windows XP Professional
<b>W6P/1.8/18S/1/Xd</b> <i>xxxxxx--xxx and graphics option</i>	<b>Processor</b>	Intel Xeon 1.8-GHz
	<b>Cache Memory</b>	512-KB integrated L2
	<b>Memory</b>	1-GB 800-MHz ECC RDRAM
	<b>Optical Drive</b>	16X/40X DVD-ROM Drive
	<b>Hard Drive</b>	18-GB Ultra160 SCSI 10,000 rpm
	<b>Graphics</b>	Choice of graphics option: Matrox Millennium G550 (AGP) (250227-B21) Matrox Millennium G450 (AGP) (202389-B21) Matrox G200 Quad MMS with analog cables (PCI) (159513-B21) Matrox G200 Quad MMS with DVI cables (PCI) (179597-B21) NVIDIA Quadro2 EX (250066-B21) NVIDIA Quadro4 550 XGL (AGP) (290648-B21) NVIDIA Quadro4 750 XGL (AGP) (270731-B21) NVIDIA Quadro4 900 XGL (AGP) (284279-B21) NVIDIA Quadro4 200 NVS (AGP) (273304-B21) NVIDIA Quadro4 400 NVS (PCI) (273305-B21) ATI Fire GL 8800 (AGP) (271686-B21) 3Dlabs Wildcat III 6110 (AGP) (271685-B21)
	<b>Audio</b>	Integrated SoundBlaster 128 Audio
	<b>OS</b>	Windows 2000 Professional/Windows XP Professional (dual install)

### Standard Features – Custom Configuration Models

<b>Processor</b> <i>One of the following:</i>	Intel Xeon processor 2.0 GHz, 512-KB cache	
	Intel Xeon processor 2.2 GHz, 512-KB cache	
	Intel Xeon processor 2.4 GHz, 512-KB cache	
	Intel Xeon processor 2.6 GHz, 512-KB cache	
	Intel Xeon processor 2.8 GHz, 512-KB cache	
<b>Cache Memory</b>	512-KB integrated, full speed Level 2 cache per processor	
<b>Upgradability</b>	Upgradable to dual processor	
<b>Memory</b>	Maximum 2 GB of 800-MHz ECC RDRAM	
<b>Network Controller</b>	Integrated Intel PRO/100+ Management Adapter 3COM 3C920C PCI card	
<b>Expansion Slots</b>	I/O (Total) 4, up to 3 available	
	32-bit/33-MHz PCI 3, up to 3 depending on model	
	AGP Pro 4X 1, up to 1 depending on model	
<b>Expansion Bays</b>	(Total/Available) 5/2	
	Internal 2/1	
	External 3/1	
<b>Storage</b>	Diskette Drive 1.44 MB	
	Removable Media CD-ROM, CD-RW, DVD-ROM, Combo CD-RW and DVD-ROM, or DVD+RW drive	
	Hard Drives	73-GB, 36.4-GB, 18-GB Ultra160 SCSI (10,000 rpm)
		36-GB, 18-GB Ultra160 SCSI (15,000 rpm)
	Tape Drives	120-GB, 80-GB, 40-GB or 20-GB Ultra ATA/100 (7200 rpm)
TR5 10/20-GB 250-MB ATAPI ZIP Ecrix 33/66 GB VXA-1 Tape Drive (SCSI or IDE)		
<b>Interfaces</b>	Parallel 1	
	USB 4	
	Serial 2	
	Ultra160 SCSI 1 (68-pin internal)	
	Ultra ATA/100 2	
	Keyboard (PS/2) 1	
	Pointing Device (PS/2 mouse) 1	
	Video 1	
	Microphone Jack 1	
	Headphone Jack 1	
	Line-In 1	
	Line-Out 1	
	RJ-45 1	
<b>Graphics</b> <i>One of the following:</i>	Matrox Millennium G550 (AGP)	
	Matrox Millennium G450 (AGP)	
	Matrox G200 Quad Multi-monitor Series (PCI)	
	NVIDIA Quadro2 EX (AGP)	
	NVIDIA Quadro4 550 XGL (AGP)	
	NVIDIA Quadro4 750 XGL (AGP)	
	NVIDIA Quadro4 900 XGL (AGP)	
	NVIDIA Quadro4 200 NVS (AGP)	
	NVIDIA Quadro4 400 NVS (PCI)	
	ATI Fire GL 8800 (AGP)	
	3DLabs Wildcat III 6110 (AGP)	

### Options

<b>Processor</b>	Intel Xeon processor 1.8 GHz, 512-KB cache	277599-B21	
	Intel Xeon processor 2.0 GHz, 512-KB cache	277600-B21	
	Intel Xeon processor 2.2 GHz, 512-KB cache	267805-B21	
	Intel Xeon processor 2.4 GHz, 512-KB cache	284033-B21	
	Intel Xeon processor 2.6 GHz, 512-KB cache	310563-B21	
	Intel Xeon processor 2.8 GHz, 512-KB cache	284035-B21	
	<b>Note:</b> When adding an additional processor, both processors must have the same speed and cache size.		
<b>Memory (RDRAM)</b>	512-MB Memory Module Upgrade Kit (800-MHz ECC)	103996-B21	
	256-MB Memory Module Upgrade Kit (800-MHz ECC)	157341-B21	
	128-MB Memory Module Upgrade Kit (800-MHz ECC)	157338-B21	
	<b>Note:</b> Memory must be installed in like pairs. Option kits contain one memory module. Only 800-MHz speed is qualified.		
<b>Monitors</b>	TFT8030 Flat Panel Color Monitor (18-inch, Carbon/Silver)	234362-xxx	
	TFT7020 Flat Panel Color (Monitor 17-inch, Carbon/Silver, baseless)	253218-xxx	
	TFT7020 Flat Panel Color Monitor (17-inch, Carbon/Silver, built in speakers)	253217-xxx	
	TFT5030 Flat Panel Color Monitor (15-inch, Carbon/Silver)	228134-xxx	
	TFT5030 Flat Panel Monitor (15-inch, Carbon/Silver, baseless)	250198-xxx	
	TFT5017 Flat Panel Color Monitor (15-inch, Carbon/Silver)	263874-xxx	
	TFT5017 Flat Panel Color Monitor (15-inch, built-in speakers)	279414-xxx	
	P1220 CRT Color Monitor (22-inch, Carbon/Silver)	244374-xxx	
	P920 CRT Color Monitor (19-inch, Carbon/Silver)	244375-xxx	
	P720 CRT Color Monitor (17-inch, Carbon/Silver)	244373-xxx	
	V7550 CRT Color Monitor (17-inch, Carbon/Silver)	261611-xxx	
	S9500 CRT Monitor (19-inch, Carbon/Silver)	261615-xxx	
	S7500 CRT Monitor (17-inch, Carbon/Silver)	261606-xxx	
	S5500 CRT Monitor (15-inch Carbon/Silver)	261602-xxx	
	<b>Note:</b> AssetControl monitor. AssetControl features are accessible with Compaq Workstations featuring Intelligent Manageability.		
<b>Graphics</b>	Matrox G200 Quad Multi-monitor Series with cables for analog output (PCI)	159513-B21	
	Matrox G200 Quad Multi-monitor Series with cables for DVI output (PCI)	179597-B21	
	Matrox G200 Quad MMS DVI Upgrade Cable Kit (for option kit 159513-B21)	170840-B21	
	Matrox Millennium G550 with analog and DVI cables (AGP)	250227-B21	
	Matrox Millennium G450 (AGP)	202389-B21	
	NVIDIA Quadro2 EX (AGP)	250066-B21	
	NVIDIA Quadro4 550 XGL (AGP)	290648-B21	
	NVIDIA Quadro4 750 XGL (AGP)	270731-B21	
	NVIDIA Quadro4 900 XGL (AGP)	284279-B21	
	NVIDIA Quadro4 200 NVS (AGP)	273304-B21	
	DVI pigtail cable upgrade kit (used with Quadro4 200 NVS)	284281-B21	
	NVIDIA Quadro4 400 NVS (PCI)	273305-B21	
	DVI pigtail cable upgrade kit, quantity 2 (used with Quadro4 400 NVS)	284282-B21	
	ATI Fire GL 8800 (AGP)	271686-B21	
	3DLabs Wildcat III 6110 (AGP Pro 4X)	271685-B21	
	<b>Diskette Drives</b>	250-MB ATAPI ZIP	294416-B22
		250-MB ATAPI ZIP Media 3-Pack	217896-B21

### Options

<b>Tape Drives</b>	TR5 10/20-GB	294243-B22	
	TR5 10/20-GB Media 3-pack	125782-B21	
	33/66GB VXA-1 IDE	237109-B22	
	33/66GB VXA-1 SCSI	237108-B22	
	33/66GB VXA-1 Media 2-pack	237111-B21	
	VXA-1 Cleaning Cartridge	237110-B21	
<b>Hard Drives</b>	<b>Ultra3 (Ultra160) SCSI Drives</b>		
	73-GB Ultra160 SCSI 10,000 rpm	250023-B21	
	36-GB Ultra160 SCSI 10,000 rpm	191189-B21	
	36-GB Ultra 160 SCSI 15,000 rpm	250022-B21	
	18-GB Ultra160 SCSI 15,000 rpm	191188-B21	
	18-GB Ultra160 SCSI 10,000 rpm	159764-B21	
	<b>Ultra ATA Drives</b>		
	120-GB Ultra ATA 100 7200 rpm Quiet Seek and Quiet Idle	250021-B21	
	80-GB Ultra ATA 100 7200 rpm Quiet Seek and Quiet Idle	250020-B21	
	40-GB Ultra ATA 100 7200 rpm Quiet Seek and Quiet Idle	201066-B21	
	20-GB Ultra ATA 100 7200 rpm Quiet Seek and Quiet Idle	251974-B21	
	<b>Storage Controllers</b>	Adaptec 29160N Ultra160 Single Channel SCSI Controller	157810-B21
		Adaptec 2100S Ultra160 (U3) Single Channel RAID Controller	192842-B21
		5 Device SCSI Cable	230777-B21
<b>Biometrics</b>	USB Biometric FIT Device (Carbon)	240238-B21	
<b>Multimedia</b>	48X CD-ROM	187217-B22	
	16X/40X DVD-ROM Read	280625-B22	
	16X Combo CD-RW/DVD-ROM	273504-B22	
	40X/12X/40X CD-RW	268985-B22	
	4.7-GB DVD-RW Drive	272851-B22	
	4.7-GB DVD+RW Drive (2.4X/2.4X/8X DVD-RW and 12X10X32X CD-RW)	306816-B22	
	Labtec Spin-22 Carbon Speakers (NA)	246637-001	
	Labtec Spin-22 Carbon Speakers (EMEA)	246637-022	
	Labtec Spin-22 Carbon Speakers (APD)	246637-031	
	1394 PCI DV and Adobe Software Kit	229966-xxx	
<b>Communications</b>	Compaq NC6136 Fiber Gbit NIC	203539-B21	
	Compaq NC7131 Gigabit Server Adapter PCI (64/44 10/100/1000-T)	158575-B21	
	Lucent V.90 56K PCI Win Modem	239137-xxx	
	Broadcom NetXtreme Based 10/100/1000 Management Gb Adapter	266997-B21	
	V.92 56K SftWin Modem (Philippines, India, Hungary, Russia, Slovakia)	259032-B24	

### Options

<b>Uninterruptible Power Systems</b>	Compaq Tower UPS Model T1500h (high voltage, not available in North America)	242688-004
	Compaq Tower UPS Model T1500 (low voltage)	242688-003
	Compaq Tower UPS Model T1000h (high voltage, not available in North America)	242688-002
	Compaq Tower UPS Model T1000 (low voltage)	242688-001
	Compaq Tower UPS Model T700h (high voltage, not available in North America)	295372-B22
	Compaq Tower UPS Model T700 (low voltage)	295372-B21
<b>Other</b>	PS/2 2-Button Scroll Mouse (carbon)	170299-B22
	PS/2 3-Button Scroll Mouse (carbon)	269192-B23
	USB 2-Button Scroll Mouse	195255-B25
	USB 2-Button Optical Scroll Mouse	265985-B21
	PS/2 Easy Access Keyboard	267145-xx8
	USB Easy Access Smartcard Keyboard	267147-xx8
	PS/2 Easy Access Keyboard 8-Button (Carbon)	202109-xx8
	Logitech Cordless Desktop (Keyboard and Mouse)	251385-xx8
	Spaceball 4000 3D Motion Controller (carbon)	112138-B22
	1394 Firewire PCI Card	277824-B21
	Rack Fixed Shelf	303606-B21
	Kensington Security Lock	294316-B21
	High-speed USB 2.0 PCI Card	287636-B21
	<b>Support Software CD</b>	Annual Subscription
Single CD-ROM (current month)		272505-001

### Memory

#### Compaq Evo Workstation W6000

##### STANDARD MEMORY

256-MB of 800-MHz ECC RDRAM is standard. Memory must be installed in like pairs. (Only 800-MHz memory speed is supported.)

##### STANDARD MEMORY PLUS OPTIONAL MEMORY

Support for up to 1280 MB of 800-MHz ECC RDRAM is available with the installation of optional Memory Kits. Memory must be installed in like pairs.

##### STANDARD MEMORY REPLACED WITH OPTIONAL MEMORY

Support for up to 2 GB of 800-MHz ECC RDRAM is available with the removal of the standard 128-MB RDRAM modules and the installation of optional 512MB 800-MHz ECC RDRAM Kits. Memory must be installed in like pairs

**Note:** This chart does not represent all possible memory configurations. Memory must be installed in like pairs. Option kits contain one memory module.

Memory		Memory Channel A		Memory Channel B	
		XMM1	XMM2	XMM3	XMM4
<b>Standard</b>	<b>256 MB</b>	128 MB	CRIMM	128 MB	CRIMM
<b>Optional</b>	<b>512 MB</b>	128 MB	128 MB	128 MB	128 MB
<b>Optional</b>	<b>768 MB</b>	128 MB	256 MB	128 MB	256 MB
<b>Maximum</b>	<b>1024 MB</b>	256 MB	256 MB	256 MB	256 MB
<b>Maximum</b>	<b>2048 MB</b>	512 MB	512 MB	512 MB	512 MB

Following are memory options available from Compaq:

- 512-MB Memory Kit (800 MHz ECC RDRAM) 103996-B21
- 256-MB Memory Kit (800 MHz ECC RDRAM) 157341-B21
- 128-MB Memory Kit (800 MHz ECC RDRAM) 157338-B21

### Memory

#### Compaq Evo Workstation W6000

##### STANDARD MEMORY

512-MB of 800-MHz ECC RDRAM is standard. Memory must be installed in like pairs. (Only 800-MHz memory speed is supported.)

##### STANDARD MEMORY PLUS OPTIONAL MEMORY

Support for up to 1536 MB of 800-MHz ECC RDRAM is available with the installation of optional ECC RDRAM Kits. Memory must be installed in like pairs.

##### STANDARD MEMORY REPLACED WITH OPTIONAL MEMORY

Support for up to 2 GB of 800-MHz ECC RDRAM is available with the removal of the standard 128-MB RDRAM modules and the installation of optional 512MB 800-MHz ECC RDRAM Kits. Memory must be installed in like pairs.

**Note:** This chart does not represent all possible memory configurations. Memory must be installed in like pairs. Option kits contain one memory module.

Memory		Memory Channel A		Memory Channel B	
		XMM1	XMM2	XMM3	XMM4
Standard	512 MB	256 MB	CRIMM	256 MB	CRIMM
Optional	1024 MB	256 MB	256 MB	256 MB	256 MB
Optional	2048 MB	512 MB	512 MB	512 MB	512 MB

Following are memory options available from Compaq:

- 512-MB Memory Kit (800 MHz ECC RDRAM) 103996-B21
- 256-MB Memory Kit (800 MHz ECC RDRAM) 157341-B21
- 128-MB Memory Kit (800 MHz ECC RDRAM) 157338-B21

### Memory

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#### Compaq Evo Workstation W6000

##### STANDARD MEMORY

1 GB of 800-MHz ECC RDRAM is standard. Memory must be installed in like pairs. (Only 800-MHz memory speed is supported.)

##### STANDARD MEMORY PLUS OPTIONAL MEMORY

Support for up to 2 GB of ECC RDRAM. Memory must be installed in like pairs.

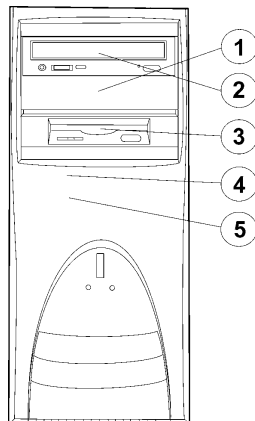
**Note:** This chart does not represent all possible memory configurations. Memory must be installed in like pairs. Option kits contain one memory module.

Memory		Memory Channel A		Memory Channel B	
		XMM1	XMM2	XMM3	XMM4
Standard	1024 MB	512 MB	CRIMM	512 MB	CRIMM
Optional	2048 MB	512 MB	512 MB	512 MB	512 MB

Following are memory options available from Compaq:

- 512-MB Memory Kit (RDRAM RIMM, 800 MHz) 103996-B21
- 256-MB Memory Kit (RDRAM RIMM, 800 MHz) 157341-B21
- 128-MB Memory Kit (RDRAM RIMM, 800 MHz) 157338-B21

## Storage



### DRIVE SUPPORT

	Quantity Supported	Position Supported	Controller
1.44-MB Diskette Drive	Up to 1	1, 2, 3	Integrated
CD-ROM Drive	Up to 1	1, 2	Integrated EIDE
ATAPI ZIP Drive	Up to 1	1, 2	Integrated EIDE
DVD-ROM Drive	Up to 1	1, 2	Integrated EIDE
CD-RW Drive	Up to 1	1, 2	Integrated EIDE
DVD+RW	Up to 1	1	Integrated EIDE
Combo CD-RW/DVD-ROM	Up to 1	1, 2	Integrated EIDE
Tape Drive	Up to 1	1, 2	Integrated EIDE

#### Hard Drives

##### *Ultra3 (Ultra160) SCSI Drives*

<b>1-inch</b>	Quantity Supported	Position Supported	Controller
73-GB 10,000 rpm	Up to 3	1, 2, 4, 5	Integrated Ultra160 SCSI Controller
36-GB 10,000 rpm			
36-GB 15,000 rpm			
18-GB 15,000 rpm			
18-GB 10,000 rpm			

##### *Ultra ATA Drives*

<b>1-inch</b>	Quantity Supported	Position Supported	Controller
20-GB 7200 rpm	Up to 3	1, 2, 4, 5	Integrated EIDE
40-GB 7200 rpm			
40-GB 7200 rpm			
80-GB 7200 rpm			
120-GB 7200 rpm			

#### Maximum Storage Capacity

Internal	360 GB (assumes two removable media drives installed)
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### Technical Specifications

<b>System Unit</b>	<b>Tower Dimensions (HxWxD)</b>	17.65 x 6.6 x 17.61 in/44.83 x 16.76 x 44.73 cm		
	<b>Weight</b> (standard configuration)	26 lb/12 kg		
	<b>Power Supply</b>	Operating Voltage Range	90 VAC to 264 VAC	
		Rated Voltage Range	100 VAC to 120 VAC; 200 VAC to 240 VAC	
		Rated Line Frequency	50 Hz to 60 Hz	
		Rated Input Current	8.6A @ 115 VAC; 4.3A @ 230 VAC	
		Maximum Rated Power	460-Watt output	
		Physical Dimensions	5.9 x 3.85 x 6.3 in/15 x 9.8 x 16 cm	
		Weight	4.5 lb/2.05 kg	
	<b>Temperature</b> (Values are subject to change)	Operating	50° to 95°F/10° to 35°C	
		Non-operating	4° to 140°F/-15° to 60°C	
<b>Humidity</b> (non-condensing) (Values are subject to change)	Operating	20% to 80%		
	Non-operating	10% to 90%		
<b>Maximum Altitude</b> (nonpressurized)	Operating	10,000 ft/3,048 m		
	Non-operating	30,000 ft/9,144 m		
<b>Compaq Easy Access Keyboard</b>	<b>Dimensions (HxWxD)</b>	18.3 x 6.3 x 1.4 in/46.48 x 16.0 x 3.56 cm		
	<b>Weight</b>	Approximately 2 lb/0.9 kg		
	<b>Electrical</b>	Operating Voltage	+5VDC ± 5%	
		Power Consumption	50 mA maximum (with 3 LEDs on)	
		System Interface	PS/2 mini-din connector	
		ESD	CE level 4, 15 kV air discharge	
		EMI-RFI	Conforms to FCC rules for a Class B computing device	
		PC98	Functionally compliant	
	<b>Mechanical</b>	Languages	30+ available	
		Keycaps	Low-profile design	
		Switch Actuation	55 g nominal peak force with tactile feedback	
		Switch Life	20 million keystrokes (using Hasco modified tester)	
		Switch Type	Contamination resistant membrane	
		Key Leveling Mechanism	For all double wide and greater length keys	
		Cable Length	6 ft/1.8 m	
		PC98-99	Mechanically compliant	
		Acoustics	50 dBA maximum sound pressure level	
	<b>Environmental</b>	Operating Temperature	50° to 122° F/10° to 50° C	
		Non-operating Temperature	-22° to 140° F/-30° to 60° C	
		Operating Humidity	10% to 90% (non condensing at ambient)	
		Non-operating Humidity	20% to 80% (non condensing at ambient)	
Operating Shock		40 g, 6 surfaces		
Non-operating Shock		80 g, 6 surfaces		
Operating Vibration		2 g peak acceleration		
Non-operating Vibration		4 g peak acceleration		

### Technical Specifications

<b>1.44-MB Diskette Drive</b>	<b>Diskette Size</b>	3.5 in/8.89 cm		
	<b>LED Indicators (front panel)</b>	Green		
	<b>Read/Write Capacity per Diskette (high/low)</b>	1.44 MB/720 KB		
	<b>Drive Height</b>	One-third		
	<b>Drive Rotation</b>	300 rpm		
	<b>Transfer Rate (high/low)</b>	500/250 Kb/s		
	<b>Bytes/Sector</b>	512		
	<b>Sectors/Track (high/low)</b>	18/9		
	<b>Tracks/Side (high/low)</b>	80/80		
	<b>Access Times</b>	Track-to-Track (high/low)	3/6 ms	
		Average (high/low)	94/173 ms	
		Settling Time	15 ms	
		Latency Average	100 ms	
	<b>Cylinders (high/low)</b>	80/80		
<b>Read/Write Heads</b>	Two			
<b>Compaq 3-Button Mouse</b>	<b>Dimensions/Weight</b>	Height	1.42 in/3.6 cm	
		Length	4.17 in/10.7 cm	
		Width	2.87 in/7.4 cm	
		Weight	5.20 oz/150 g	
	<b>Environmental</b>	Operating Temperature	32° to 104° F/0° to 40° C	
		Non-operating Temperature	-4° to 140° F/-20° to 60°C	
		Operating Humidity	10% to 90% (non condensing at ambient)	
	<b>Mechanical</b>	Resolution	400 ± 20% DPI	
		Tracking Speed	10 in/s Maximum	
		Switch Life	1,000,000 operations (using Hasco modified tester)	
		Switch Type	Micro-switches	
		Tracking Mechanism Life	155 miles/250 km at average speed of 10 in/s	
		Cable Length	6 ft/1.8 m	
		PC98-99	Mechanically compliant	
	<b>Regulatory Approvals</b>	Compliant	UL, CSA, FCC, CE Mark, TUV, TUV GS, VCCI, BSMI, C-Tick	

### Technical Specifications

Ultra160 SCSI Hard Drives <i>250023-B21</i>	<b>73 GB</b>	<b>Capacity</b>	73,000 MB	
		<b>Height</b>	1.0 in/40.64 mm	
		<b>Width</b>	3.5 in/88.9 mm	
		<b>Interface</b>	Ultra160 SCSI	
		<b>Synchronous Transfer Rate (Maximum)</b>	160 MB/s	
		<b>Seek Time</b> (typical reads, including settling)	Single Track	0.6 ms
			Average	5.2 ms
			Full-Stroke	12 ms
			Rotational Speed	10,000 rpm
		<b>Logical Blocks</b>	142,264,000	
	<b>Operating Temperature</b>	50° to 95°F/10° to 35°C		
	<b>36 GB</b>	<b>Capacity</b>	36,400 MB	
	<i>191189-B21</i>	<b>Height</b>	1.0 in/25.4 mm	
		<b>Width</b>	3.5 in/88.9 mm	
		<b>Interface</b>	Ultra160 SCSI	
		<b>Synchronous Transfer Rate (Maximum)</b>	160 MB/s	
		<b>Seek Time</b> (typical reads, including settling)	Single Track	0.6 ms
			Average	4.7 ms
			Full-Stroke	12 ms
			Rotational Speed	10,000 rpm
		<b>Logical Blocks</b>	71,132,000	
	<b>Operating Temperature</b>	50° to 95°F/10° to 35°C		
	<b>36 GB</b>	<b>Capacity</b>	36419.2 MB	
	<i>250022-B21</i>	<b>Height</b>	1 in/25.4mm	
		<b>Width</b>	4.0in/101.6mm	
		<b>Interface</b>	Wide Ultra3 SCSI	
		<b>Transfer Rate Synchronous (Maximum)</b>	160 MB/s	
		<b>Seek Time</b> (typical reads, including settling)	Single Track	0.4 ms
			Average	3.8 ms
			Full-Stroke	7 ms
			Rotational Speed	15,000 rpm
		<b>Physical Configuration</b>	Bytes/Sector	512
	Logical Blocks		71,132,000	
	<b>Operating Temperature</b>	50° to 95°F/10° to 35°C		

### Technical Specifications

<b>Ultra160 SCSI Hard Drives</b> <i>(continued)</i>	<b>18 GB</b>	<b>Capacity</b>	18,209 MB	
	<i>191188-B21</i>	<b>Height</b>	1 in/25.4 mm	
		<b>Width</b>	3.5 in/88.9 mm	
		<b>Interface</b>	Ultra160 SCSI	
		<b>Synchronous Transfer Rate (Maximum)</b>	160 MB/s	
		<b>Seek Time</b> (typical reads, including settling)	Single Track	0.8 ms
			Average	4.1 ms
			Full-Stroke	7.7 ms
			Rotational Speed	15,000 rpm
		<b>Logical Blocks</b>	35,566,000	
	<b>Operating Temperature</b>	50° to 95°F/10° to 35°C		
	<b>18 GB</b>	<b>Capacity</b>	18,209 MB	
	<i>159764-B21</i>	<b>Height</b>	1 in/25.4 mm	
		<b>Width</b>	3.5 in/88.9 mm	
		<b>Interface</b>	Ultra160 SCSI	
		<b>Synchronous Transfer Rate (Maximum)</b>	160 MB/s	
		<b>Seek Time</b> (typical reads, including settling)	Single Track	0.6 ms
			Average	4.7 ms
			Full-Stroke	12 ms
			Rotational Speed	10,000 rpm
		<b>Logical Blocks</b>	35,566,000	
	<b>Operating Temperature</b>	50° to 95°F/10° to 35°C		
<b>Ultra ATA Hard Drives</b>	<b>120 GB</b>	<b>Capacity</b>	120,000 MB	
	<i>250021-B21</i>	<b>Height</b>	1 in/2.54 cm	
		<b>Width</b>	3.5 in/8.89 cm	
		<b>Interface</b>	Ultra ATA/100	
		<b>Synchronous Transfer Rate (Maximum)</b>	100 MB/s	
		<b>Seek Time</b> (typical reads, including settling)	Single Track	1.2 ms (2.7 ms quiet seek)
			Average	8.0 ms (14.3 ms quiet seek)
			Full-Stroke	18.0 ms (24.1 ms quiet seek)
			Rotational Speed	7200 rpm
		<b>Logical Blocks</b>	234,441,648	
	<b>Operating Temperature</b>	41° to 131° F/5° to 55° C		

### Technical Specifications

Ultra ATA Hard Drives (continued) 250020-B21	<b>80 GB</b>	<b>Capacity</b>	80,000 MB	
		<b>Height</b>	1 in/2.54 cm	
		<b>Width</b>	3.5 in/8.89 cm	
		<b>Interface</b>	Ultra ATA/100	
		<b>Synchronous Transfer Rate (Maximum)</b>	100 MB/s	
		<b>Seek Time</b> (typical reads, including settling)	Single Track	1.2 ms (2.7 ms quiet seek)
			Average	8.0 ms (14.3 ms quiet seek)
			Full-Stroke	18.0 ms (24.1 ms quiet seek)
			Rotational Speed	7200 rpm
		<b>Logical Blocks</b>	157,278,240	
	<b>Operating Temperature</b>	41° to 131° F/5° to 55° C		
	<b>40 GB</b>	<b>Capacity</b>	40,000 MB	
	201066-B21	<b>Height</b>	1 in/2.54 cm	
		<b>Width</b>	3.5 in/8.89 cm	
		<b>Interface</b>	Ultra ATA	
		<b>Synchronous Transfer Rate (Maximum)</b>	100 MB/s	
		<b>Seek Time</b> (typical reads, including settling)	Single Track	1.2 ms (2.7 ms quiet seek)
			Average	8 ms (10.1 ms quiet seek)
			Full-Stroke	18.0 ms (21.1 ms quiet seek)
			Rotational Speed	7200 rpm
		<b>Logical Blocks</b>	78,165,360	
	<b>Operating Temperature</b>	41° to 131° F/5° to 55° C		
	<b>20 GB</b>	<b>Capacity</b>	20,000 MB	
	251974-B21	<b>Height</b>	1 in/2.54 cm	
		<b>Width</b>	3.5 in/8.89 cm	
		<b>Interface</b>	Ultra ATA	
		<b>Synchronous Transfer Rate (Maximum)</b>	100 MB/s	
		<b>Seek Time</b> (typical reads, including settling)	Single Track	1.2 ms (2.7 ms quiet seek)
			Average	8 ms (10.1 ms quiet seek)
			Full-Stroke	18.0 ms (21.1 ms quiet seek)
			Rotational Speed	7200 rpm
		<b>Logical Blocks</b>	39,102,336	
	<b>Operating Temperature</b>	41° to 131°F/5° to 55°C		

### Technical Specifications

<b>16X/40X DVD-ROM Read</b>	<b>Height</b>	5.25-inch, half-height		
	<b>Interface type</b>	ATAPI		
	<b>Dimensions— External, Excluding Bezel (W x H)</b>	5.88 x 1.71 (149.5 x 43.5 mm)		
	<b>Disc diameter</b>	5 in, 3 in (12 cm, 8 cm)		
	<b>Disc thickness</b>	0.05 inch (1.2 mm)		
	<b>Track pitch</b>	1.6 $\mu$ m (CD), 0.74 $\mu$ m (DVD)		
	<b>Disc center hole diameter</b>	0.6 inch (15 mm)		
	<b>Disc formats</b>	DVD-ROM (single and dual layer); DVD-video; DVD-R version 1.0 and 2.0; DVD-RW version 1.0 and 1.1; DVD-R/RW multi-border; DVD+RW; CD-ROM Mode 1 and 2; CD-DA; CD-ROM XA Mode 2, Form 1 and 2; CD-extra; CD-text; CD-I Mode 2, Form 1 and 2; CD-I ready; video CD, CD-bridge; PhotoCD (single and multi-session); CD-R; CD-RW		
	<b>Disc capacity</b>	<b>DVD-ROM</b>	4.7 GB (DVD-5), 8.54 GB (DVD-9), 9.4 GB (DVD-10), 3.95 GB (DVD-R version 1.0), 4.7 GB (DVD-R version 2.0), 4.7 GB (DVD-RW version 1.0 and 1.1), 4.7 GB (DVD+RW)	
		<b>CD-ROM</b>	540 MB (Mode 1, 12 cm), 640 MB (Mode 2, 12 cm), 700 MB (80 minimum CD-R and CD-RW), 180 MB (8 cm)	
	<b>Block size (bytes)</b>	DVD-ROM – 2048; CD-ROM Mode 0 – 2352; CD-ROM Mode 1 – 2352, 2340, 2336, 2048; CD-ROM Mode 2 – 2352, 2340, 2336, 2048		
	<b>Access times (typical reads, including settling)</b>	<b>DVD-ROM single layer</b>	< 120 ms	
		<b>CD-ROM Mode 1</b>	< 90 ms	
		<b>Full stroke DVD</b>	< 240 ms (seek)	
		<b>Full stroke CD</b>	< 160 ms (seek)	
	<b>Data transfer rates</b>	2600 – 6000 KB/s (40X CAV CD-ROM mode)		
		8100 – 21,600 KB/s (16X CAV DVD-ROM mode)		
	<b>Data transfer modes</b>	PIO Mode 4 (16.6 MB/s); Multi-word DMA mode 2 (16.6 MB/s); UltraDMA Mode 3 (44.4 MB/s)		
	<b>Power</b>	<b>Source</b>	Four-pin, DC power receptacle	
		<b>DC power requirement</b>	5 VDC $\pm$ 5%—100 mV ripple p-p 12 VDC $\pm$ 5%—200 mV ripple p-p	
	<b>DC current</b>	5 VDC – <800 mA typical, < 1000 mA maximum 12 VDC – < 870 mA typical		
<b>Audio Output Level</b>	0.7 Vrms (typical)			
<b>Configuration Jumper Block</b>	Master, slave, and cable select modes			
<b>Data interface connector</b>	40-pin, shrouded and keyed, flat ribbon			
<b>Environmental (all conditions non-condensing)</b>	<b>Temperature (operating)</b>	41° to 122° F (5° to 50° C)		
	<b>Relative humidity (operating)</b>	10% to 85%		
	<b>Maximum wet bulb temperature (operating)</b>	86° F (30° C)		
<b>Certifications, approvals</b>	MMC II support, multi-read certification, Microsoft WHQL certification, ACA AS/NZS 3548 class B, CNS 13438, C.I.S.P.R. Pub 22, TUV or VDE EN60950, EN 55022, EN55024, SEMKO, NEMKO, DEMKO, FIMKO, EN 60825-1, UL 60950, CSA C22.2 60950-2000,			
<b>Operating systems supported</b>	Microsoft Windows 98, Microsoft Windows NT® 4.0, Microsoft Windows 2000, Windows XP Professional			

### Technical Specifications

<b>4.7-GB DVD+RW Drive</b>	<b>Interface</b>	Atapi IDE		
	<b>Media formats written</b>	CD-R, CD-RW, DVD+RW, DVD+R		
	<b>Media capacity</b>	4.7 GB DVD disc/700 MB CD disc		
	<b>Write methods</b>	Disc-at-once, track-at-once, incremental fixed and variable packet		
	<b>Recording/playing time</b>	3 hours DVD (3.3 Mbps)/80 minutes CD		
	<b>Data transfer rates</b>	<b>Write</b>	DVD+R write — 3247 KB/s (2.4X) DVD+RW write — 3247 KB/s (2.4X) CD-R write — 300 KB/s (2X) CD-R write — 600 KB/s (4X) CD-R write — 1200 KB/s (8X) CD-R write — 1,800 KB/s (12X) CD-RW write — 300 KB/s (2X) CD-RW write — 600 KB/s (4X) CD-RW write — 1500 KB/s (10X)	
		<b>Read</b>	Digital audio extraction (minimum) — 1,200 KB/s (8X) CD-ROM, CD-R, CD-RW read — up to 4,800 KB/s (32X) DVD-ROM, DVD+R, DVD+RW read — up to 10,800 KB/s (8X)	
	<b>Data transfer modes</b>	ATA PIO mode 4—16.7 Mbps ATA multi-word DMA mode 2—16.7 Mbps ATA UltraDMA mode 0—16.7 Mbps ATA UltraDMA mode 1—24 Mbps mode 2—33 Mbps (default)		
	<b>Media formats read</b>	CD-R/CD-ROM, CD-RW, CD-Digital Audio (Red Book) and CD Extra, CD-ROM (Mode 1 - Yellow Book), CD-ROM XA and CD-I (Mode 2/Form 1 - Green Book), CD-ROM XA and CD-I (Mode 2/Form 2 - Green Book), CD-Bridge and Photo-CD (single and multi-session), CD-Video, DVD-ROM, DVD+RW, DVD+R		
	<b>Access times</b>	<b>Random</b>	< 125 ms typical	
		<b>Full stroke</b>	< 250 ms typical	
	<b>Start-up time</b>	< 4 seconds typical		
	<b>Buffer size</b>	<b>2 MB</b>		
	<b>Disc diameter</b>	120 mm or 80 mm		
	<b>Operating conditions</b>	Temperature	41° to 104°F/5° to 40°C	
		Humidity	10% to 90% (non-condensing)	
	<b>Mounting orientation</b>	Horizontal or vertical		
	<b>Weight</b>	0.9 kg/2.0 lb		
	<b>Approvals/environmental</b>	UL 1695 (US and Canada), CE, FDA, FCC, TUV, C-TICK		
	<b>Software supplied</b>	WinDVD 3.2 or later, Roxio Easy CD Creator 5.3 or later, DVD-It 2.5 or later		
<b>Operating systems supported</b>	Microsoft Windows XP Professional, Microsoft Windows 2000 SP2			

### Technical Specifications

<b>48X CD-ROM Drive</b>	<b>Disk</b>	<b>Applicable Disk</b>	CD-ROM (Mode 1 and 2), CD-R/W, CD-R Photo CD (Single and Multi-session), Mixed Mode (Audio and Data combined), CDI Ready, CD-XA Ready, CD TEXT, CD EXTRA	
		<b>Capacity</b>	540 MB (Mode 1, 12 cm) 650 MB (Mode 2, 12 cm)	
		<b>Rotational Speed</b>	8750 maximum	
		<b>Diameter</b>	4.7 in, 3.15 in/12 cm, 8 cm	
		<b>Center Hole</b>	0.6 in/1.52 cm diameter	
		<b>Thickness</b>	0.05 in/0.13 cm	
		<b>Track Pitch</b>	1.6 $\mu$ m	
		<b>Block Size</b>	Mode 1 Mode 2 CD-DA CD-XA	2,048 bytes 2,340, 2,336 bytes 2,352 bytes 2,328 bytes
		<b>Interface</b>	IDE	
		<b>Access Times (typical)</b>	Random Full-Stroke	< 100 ms < 150 ms
		<b>Audio Output Level</b>	Line-Out	0.7 VRMS
		<b>Data Transfer Rate</b>	Sustained Variable	150 KB/s (1X, using audio disc) 3,000 to 7,200 KB/s
		<b>Cache Buffer</b>	128 KB minimum	
	<b>Start-up Time (typical)</b>	< 7 s		
	<b>Stop Time</b>	< 4 s		
	<b>Operating Conditions</b>	Temperature Humidity	41° to 113° F/5° to 45° C 10% to 80%	
	<b>Dimensions</b>	(HxWxD, maximum) Weight	1.7 x 5.9 x 8.19 in/4.29 x 15 x 20.8 cm 2.65 lb/1.2 kg	

### Technical Specifications

40X/12X/40X CD-RW Drive	<b>Interface</b>	ATAPI IDE		
	<b>Media formats written</b>	CD-R and CD-RW		
	<b>Media capacity</b>	700 MB		
	<b>Write methods</b>	Disc-at-once, track-at-once, session-at-once, fixed packet, and variable packet		
	<b>Recording/playing time</b>	80 minutes		
	<b>Data transfer rates</b>	<b>Sustained</b>	CD-R write—6,000 Kbps (40X) (CLV) CD-RW write (1-4X media) —6,000 Kbps (4X) CD-RW write (4-10X media) —1,800 Kbps (12X) CD-RW read—6,000 Kbps (40X) CD-RW read—1,800 Kbps (12X) Digital audio extraction (minimum) —4,800 Kbps (32X)	
		<b>Variable</b>	CD-ROM, CD-R read—1,500 to 6,000 Kbps (10X to 40X) CD-R write – 2,400 to 6,000 kbps (16X to 40X)	
	<b>Data transfer modes</b>	ATA PIO mode 4—16.7 Mbps ATA multi-word DMA mode 2—16.7 Mbps UltraDMA mode 0—16.7 Mbps UltraDMA mode 1—24 Mbps mode 2—33 Mbps (default)		
	<b>Media formats read</b>	audio, CD-ROM (modes 1 and 2), CD-ROM XA (mode 2, forms 1 and 2), single- or multi-session photo CD, CD-I, video CD, CD-text		
	<b>Access times</b>	<b>Random</b>	< 120 ms typical	
		<b>Full stroke</b>	< 200 ms typical	
	<b>Start-up time</b>	<b>Single</b>	< 7 seconds typical	
		<b>Multi-session</b>	< 30 seconds typical	
		<b>Stop time</b>	< 4 seconds	
		<b>Block size</b>	Mode 1—2,048/2,352 bytes Mode 2, Form 1—2,048/2,328/2,336/2,340/2,352 bytes Mode 2, Form 2—2,328/2,336/2,340/2,352 bytes CD-DA—2,352/2,368 bytes	
	<b>Disc diameter</b>	4.72 in/12.0 cm or 3.15 in/8.0 cm		
	<b>Track pitch</b>	1.6 µm		
	<b>Disc loading mechanism</b>	Half-height, tray load		
	<b>Operating conditions</b>	<b>Temperature</b>	Operating 41° to 113° F/5° to 45° C	
		<b>Humidity</b>	10% to 80%	
	<b>Mounting orientation</b>	Horizontal or vertical		
<b>Dimensions</b>	Fits in a standard 5.25-inch drive bay			
<b>Weight</b>	2.6 lb/.2 kg			
<b>Approvals/environmental</b>	UL 94 and 1950, CSA, CE, FDA			
<b>Operating systems supported</b>	Microsoft Windows XP, Microsoft Windows 2000, Microsoft Windows 98, Microsoft Windows NT 4.0			

### Technical Specifications

<b>Intel PRO/100 + Management Adapter</b>	<b>Network Interface</b>	10Base-T or 100Base-TX		
	<b>Expansion Bus Architecture</b>	PCI 2.2		
	<b>Network Transfer Rate</b>	10Base-T (Half-Duplex)	10 Mb/s	
		10Base-T (Full-Duplex)	20 Mb/s	
		100Base-TX (Half-Duplex)	100 Mb/s	
		100Base-TX (Full-Duplex)	200 Mb/s	
	<b>Connectors</b>	RJ-45		
	<b>Standards Compliance</b>	10-MB/s Ethernet	IEEE 802.3	
		100-Mb/s Ethernet	IEEE 802.3u	
	<b>I/O Address</b>	Auto-configured		
	<b>Remote Wakeup</b>	Yes		
	<b>Operating Temperature</b>	0° to 55° F/10° to 35° C		
	<b>Operating Humidity (non-condensing)</b>	85% at 131° F/55° C		
	<b>Operating Altitude</b>	10,000 ft/3,048 m		
	<b>Communication Processor</b>	Intel 82559		
<b>OS Driver Support</b>	Windows NT 4.0	NDIS 3.0, 4.0 Compliant		
	Windows 95, 98, 2000, XP Pro	NDIS 3.0, 4.0, 5.0 Compliant		
	Novell® NetWare® Server v. 3.x, 4.x and 5.0	ODI Compliant		
	SunSoft Solaris™	Not supported		
	SCO® UnixWare®, OpenDesktop, OpenServer®	Supported		

### Technical Specifications

<b>Matrox Millennium G550 AGP Graphics Controller</b>	<b>Form factor</b>	Low profile (LP) board with ATX bracket attached (kit also includes a Small Form Factor (SFF) bracket)	
	<b>Bus type</b>	AGP 4X, AGP 2X, and AGP 1X	
	<b>Standard memory</b>	32-MB, high-speed DDR	
	<b>DAC speed</b>	360-MHz RAMDAC; secondary 230-MHz RAMDAC	
	<b>Data path</b>	64-bit DDR external bus to frame buffer memory/256-bit internal	
	<b>Internal bus width</b>	256-bit DualBus	
	<b>Memory interface</b>	64-bit DDR Memory	
	<b>Frame buffer</b>	32 MB	
	<b>Operating systems supported</b>	Microsoft Windows 2000, Microsoft Windows 98, Microsoft Windows NT 4.0, Microsoft Windows XP Professional	
	<b>Two integrated RAMDACs</b>	Yes	
	<b>3-D engine acceleration</b>	Matrox HeadCasting* engine, two dual-textured 3-D pixels/clock for fast 3-D game play, dual pixel pipelines with dual texturing units per pipeline, floating point 3-D setup engine with dynamically re-allocatable resources; Microsoft DirectX Environment-Mapped Bump Mapping; Vibrant Color Quality rendering; bilinear, 8-sample-per-pixel trilinear, and anisotropic filtering; Microsoft DirectX and OpenGL® alpha blending modes; Z-buffer support	
	<b>3-D features</b>	Single cycle multi-texturing	Yes
		Environment-mapped bump mapping	Yes
		Internal rendering	32-bit
Source textures		Up to 32-bit	
Maximum texture size		2048 x 2048	
32-bit color output		Yes	
32-bit independent Z-buffer		Yes	
Stencil buffering		Yes	
AGP texturing		Yes	
Trilinear filtering		Yes	
Microsoft DirectX support	Yes		
OpenGL support	Yes, through Matrox		
<b>DualHead 3-D display features</b>	HeadCasting, Microsoft DirectX compliant, dual texturing units per pixel pipeline, two pixel pipelines, single-cycle multi-texturing, environment-mapped bump mapping, 32-bit internal rendering precision, up to 32-bit source textures, 32-bit color output, bilinear, trilinear and anisotropic 3-D filtering, 32-bit independent Z-buffer, OpenGL support		
<b>Other 3-D features</b>	Alpha blending, fogging, specular highlighting, environment mapping, stencil buffering, triple buffering, AGP texturing		
<b>Other</b>	Texture mapping support; true color RGB, flat, and Gouraud shading; Direct3-D support; anisotropic filter; perspective-correct texture mapping; specular highlighting (any color); hardware dithering (including dithering of LUT textures); sort-dependent antialiasing; vertex and table fogging; dual texture mapping; Plug-and-Play; 0.18-micron technology (lower heat/power consumption); high-quality DVD playback with DVDMax; color space conversion; QuickDraw supported DCI and Microsoft DirectX and OpenGL blend modes; Microsoft DirectDraw support; support for picture-in-picture and multiple video windows; Unique Motion Video Rendering support		
<b>Optional software bundles (not included)</b>	Matrox Virtual Presenter for Microsoft PowerPoint®; Digimask™ System, HeadFone™ by LipSinc; The Matrox Software DVD Player; eDualHead browser enhancements (PageWrap, PageLog, and PageJump); Matrox PowerDesk		

### Technical Specifications

#### Matrox Millennium G550 AGP Graphics Controller *(continued)*

<b>DualHead configurations</b>	VGA monitor/analog flat panel + VGA monitor/analog flat panel VGA monitor/analog flat panel + television Digital flat panel + VGA monitor/analog flat panel Digital flat panel + television
<b>DualHead 2-D display features</b>	DualHead Multi-Display support; DualHead Browser Enhancement Suite, DualHead DVDMax, DualHead Zoom, DualHead Clone, DVDMax, DualHead MultiDesk, DualHead TV-out, DualHead Snapshot, Dual DVI support; True Multi-Display support with Microsoft Windows 2000
<b>DualHead display technology chip specifications</b>	Multiple independent displays with a single AGP card: analog flat panel (RGB monitor)/analog flat panel (RGB monitor); digital flat panel/digital flat panel

**Note:** System recommendations for HeadCasting and DVD—450-MHz or higher computer; 128 MB RAM; 56-K or higher modem with minimum 40-K connection, microphone, and DVD-ROM; Internet Explorer 5.5 or higher, Microsoft PowerPoint 2000 or Microsoft PowerPoint XP (for Matrox Virtual Presenter)

Resolutions Supported	Maximum Colors Supported	Refresh Rates
640 x 480	16 million	200 Hz vertical, 130 kHz horizontal
800 x 600	16 million	200 Hz vertical, 130 kHz horizontal
1024 x 768	16 million	160 Hz vertical, 130 kHz horizontal
1152 x 864	16 million	150 Hz vertical, 130 kHz horizontal
1280 x 1024	16 million	120 Hz vertical, 130 kHz horizontal
1600 x 1200	16 million	100 Hz vertical, 130 kHz horizontal
1800 x 1440	16 million	90 Hz vertical, 120kHz horizontal
1920 x 1440	16 million	85 Hz vertical, 115 kHz horizontal
2048 x 1536	16 million	85 Hz vertical, 110 kHz horizontal

Secondary Resolutions Supported	Maximum Color Depths (bpp)	Refresh Rates
640 x 480	16 million	200 Hz vertical, 130 kHz horizontal
800 x 600	16 million	200 Hz vertical, 130 kHz horizontal
1024 x 768	16 million	160 Hz vertical, 130 kHz horizontal
1152 x 864	16 million	140 Hz vertical, 130 kHz horizontal
1280 x 1024	16 million	120 Hz vertical, 130 kHz horizontal
1600 x 1200	16 million	100 Hz vertical, 130 kHz horizontal

### Technical Specifications

<b>Matrox Millennium G450 Graphics Controllers</b>	<b>Form Factor</b>	ATX																										
	<b>Bus Type</b>	AGP 1X, 2X, 4X																										
	<b>Standard Memory</b>	32 MB																										
	<b>DAC Speed</b>	360 MHz (secondary DAC: 200 MHz)																										
	<b>Data Path</b>	64-bit DDR External/256-bit Internal																										
	<b>Internal Bus Width</b>	256-bit DualBus																										
	<b>Memory Interface</b>	64-bit DDR Memory																										
	<b>Frame Buffer</b>	32 MB																										
	<b>Two Integrated RAMDACs</b>	Yes																										
	<b>Engine Acceleration</b>	3 ROP bitBLT, line draw, text, color expansion, basic video color conversion and scaling, triangle setup engine																										
	<b>Output</b>	Analog, 2 ports																										
	<b>OS Support</b>	Microsoft Windows 2000, Microsoft Windows XP Professional, Windows 98 and Windows NT 4.0 available from Compaq.																										
	<b>Other</b>	Texture mapping support, flat and Gouraud shading, direct 3D support, Anisotropic Filter, perspective texture, specular highlighting, wireframe, dithering, full scene anti-aliasing, vertex fog, dual texture mapping, Plug-and-Play AGP 2X and AGP 4X, 0.18-micron technology (lower heat/power consumption), high-quality DVD playback with full access to Windows, Color Space Conversion, Quick Draw support, DCI and DirectX video playback, MS DirectDraw support																										
	<b>3D Features</b>	<table border="0"> <tr> <td>Single-cycle multi-texturing</td> <td>Yes</td> </tr> <tr> <td>Environment-Mapped Bump Mapping</td> <td>Yes</td> </tr> <tr> <td>Internal Rendering</td> <td>32-bit</td> </tr> <tr> <td>Source Textures</td> <td>Up to 32-bit</td> </tr> <tr> <td>Maximum Texture Size</td> <td>2048 x 2048</td> </tr> <tr> <td>Hardware non-power-of-2 textures</td> <td>Yes</td> </tr> <tr> <td>32-bit Color Output</td> <td>Yes</td> </tr> <tr> <td>32-bit Independent Z-buffer</td> <td>Yes</td> </tr> <tr> <td>Stencil Buffering</td> <td>Yes</td> </tr> <tr> <td>AGP Texturing</td> <td>Yes</td> </tr> <tr> <td>Trilinear Filtering</td> <td>Yes</td> </tr> <tr> <td>DirectX Support</td> <td>Yes</td> </tr> <tr> <td>OpenGL Support</td> <td>Yes</td> </tr> </table>	Single-cycle multi-texturing	Yes	Environment-Mapped Bump Mapping	Yes	Internal Rendering	32-bit	Source Textures	Up to 32-bit	Maximum Texture Size	2048 x 2048	Hardware non-power-of-2 textures	Yes	32-bit Color Output	Yes	32-bit Independent Z-buffer	Yes	Stencil Buffering	Yes	AGP Texturing	Yes	Trilinear Filtering	Yes	DirectX Support	Yes	OpenGL Support	Yes
	Single-cycle multi-texturing	Yes																										
Environment-Mapped Bump Mapping	Yes																											
Internal Rendering	32-bit																											
Source Textures	Up to 32-bit																											
Maximum Texture Size	2048 x 2048																											
Hardware non-power-of-2 textures	Yes																											
32-bit Color Output	Yes																											
32-bit Independent Z-buffer	Yes																											
Stencil Buffering	Yes																											
AGP Texturing	Yes																											
Trilinear Filtering	Yes																											
DirectX Support	Yes																											
OpenGL Support	Yes																											
<b>DualHead Display Features</b>	Multi-Display Mode, DVD Max Mode, DualHead Zoom Mode, DualHead Clone Mode, DualHead TV Output Mode, Single Chip Multi-Monitor Support																											

### Technical Specifications

#### Matrox Millennium G450 Graphics Controllers *(continued)*

#### Supported Modes

This list assumes setup to be DualHead multi-display running Microsoft Windows 98. If using Windows NT 4.0 or Windows 2000 while in multi-display, primary CRT is limited to modes supported by 2<sup>nd</sup> CRT.

<i>Primary CRT Color Depths</i>	<i>Color Depths (bpp)</i>	<i>Refresh Rates</i>
640 x 480	8, 16, 24, 32	60 Hz, 72 Hz, 75 Hz, 85 Hz
800 x 600	8, 16, 24, 32	60 Hz, 72 Hz, 75 Hz, 85 Hz
1024 x 768	8, 16, 24, 32	60 Hz, 70 Hz, 75 Hz, 85 Hz
1152 x 864	8, 16, 24, 32	75 Hz
1280 x 960	8, 16, 24, 32	60 Hz, 75 Hz, 85 Hz
1280 x 1024	8, 16, 24, 32	60 Hz, 75 Hz, 85 Hz
1600 x 1200	8, 16, 24, 32	60 Hz, 65 Hz, 70 Hz, 75 Hz, 85 Hz <i>(available in single monitor configuration only)</i>
1800 x 1440	8, 16, 24	60 Hz, 72 Hz, 75 Hz, 85 Hz
1856 x 1392	8, 16, 24	60 Hz, 75 Hz, 85 Hz
1920 x 1440	8, 16, 24	60 Hz, 75 Hz, 85 Hz
2048 X 768	8, 16	60 Hz, 75 Hz
<i>Secondary CRT Color Depths</i>	<i>Color Depths (bpp)</i>	<i>Refresh Rates</i>
640 x 480	16, 32	60 Hz, 72 Hz, 75 Hz, 85 Hz
800 x 600	16, 32	60 Hz, 72 Hz, 75 Hz, 85 Hz
1024 x 768	16, 32	60 Hz, 70 Hz, 75 Hz, 85 Hz
1152 x 864	16, 32	75 Hz
1280 x 960	16, 32	60 Hz, 75 Hz, 85 Hz
1280 x 1024	16, 32	60 Hz, 75 Hz, 85 Hz
1600 x 1200	16, 32	60 Hz, 65 Hz, 70 Hz, 75 Hz, 85 Hz

### Technical Specifications

Matrox G200 Quad  
Multi-Monitor Series (MMS)  
Graphics Controller

<b>Dimensions (HxW)</b>	4.5x8 in/11.43x20.32 cm		
<b>Refresh Rate (per display)</b>			
<b>Aspect Ratio</b>	<b>Resolution</b>	<b>Vertical</b>	<b>Horizontal</b>
4:3/5:4	640 x 480	60 to 200 Hz	31 to 102 kHz
	800 x 600	60 to 200 Hz	38 to 114 kHz
	1024 x 768	60 to 140 Hz	48 to 113 kHz
	1152 x 864	60 to 120 Hz	54 to 110 kHz
	1280 x 1024	60 to 100 Hz	64 to 107 kHz
	1600 x 1200	60 to 90 Hz	75 to 113 kHz
16:9/16:10	1800 x 1440	60 to 70 Hz	89 to 104 kHz
	856 x 480	60 to 200 Hz	30 to 108 kHz
	1280 x 720	60 to 100 Hz	44 to 76 kHz
	1600 x 1024	60 to 100 Hz	64 to 108 kHz
	1920 x 1080	60 to 80 Hz	70 to 94 kHz
1920 x 1200	60 to 76 Hz	75 to 95 kHz	

With DVI digital flat panel displays, the maximum display resolution is 1280 x 1024.

Maximum refresh rates may not be attainable at the highest display resolutions with 24 or 32-bit color palettes.

<b>Interface</b>	PCI	
<b>Standard Memory</b>	32-MB SGRAM (8 MB per port)	
<b>DAC Speed</b>	250 MHz	
<b>Data Path</b>	128-bit Internal/64-bit External	
<b>Color Space Conversion</b>	Yes	
<b>Scaling</b>	Yes	
<b>Quick Draw Support</b>	Yes	
<b>DCI &amp; DirectX Video Playback</b>	Yes	
<b>Direct3D Support</b>	Yes	
<b>Engine Acceleration</b>	3 ROP bitBLT, Line Draw, Text, Color Expansion, Basic Video Color Conversion and Scaling, Triangle Setup Engine	
<b>Output</b>	Two output ports, which require 2 adapter cables to connect analog or digital output displays	
	Analog Display Support	2 RGB cables support two DB-15 analog displays per cable
	DVI (Digital Visual Interface) Display Support	DVI cable option kit provides two DVI cables for connecting two DVI compliant displays per cable
	Display options supported	Four analog displays via two RGB cables Four DVI displays via two DVI cables Two analog displays via one RGB cable and two DVI displays via one DVI cable
<b>Other</b>	PCI bus-mastering, texture mapping support, flat and Gouraud shading, Anisotropic Filter, perspective texture, specular highlighting, dithering, full scene anti-aliasing, Vertex fog	
<b>OS Support</b>	Windows 2000 (not available for Chinese, Taiwanese, or Korean languages), Microsoft Windows XP Professional, and Windows NT 4.0	

### Technical Specifications

NVIDIA Quadro4 900 XGL Graphics Controller	<b>3D/2D Controller</b>	Integrated Quadro4 2D/3D 128-bit graphics processor unit (GPU)	
	<b>VGA Controller</b>	Integrated into the Quadro4 GPU	
	<b>Bus Type</b>	AGP4x	
	<b>RAMDAC</b>	350 MHz	
	<b>Speed &amp; Type</b>	325MHz 4Mx32DDR 5ns	
	<b>Memory Amount</b>	128 MB	
	<b>Controller Clock Speed</b>	300 MHz	
	<b>Color Planes</b>	32-bit color buffer	
	<b>Overlay Planes</b>	1 16-bit Video overlay plane, software emulation for OpenGL overlay planes	
	<b>Stencil Planes</b>	8-bit stencil buffer	
	<b>Alpha Planes</b>	8-bit alpha buffer	
	<b>Z-Buffer</b>	24-bit	
	<b>Total Bits/Pixel</b>	64	
	<b>Maximum Vertical Refresh Rate</b>	120 Hz	
	<b>Multi-Display Support</b>	Yes	
	<b>Operating Systems</b>	Microsoft Windows 2000, and Microsoft Windows XP	
		<b>Resolution</b>	<b>Maximum Colors Supported</b>
	640 x 480	16.7 M	120 Hz
	800 x 600	16.7 M	120 Hz
	1024 x 768	16.7 M	120 Hz
	1152 x 864	16.7 M	120 Hz
	1280 x 1024	16.7 M	120 Hz
	1600 x 1200	64 K	100 Hz
	1600 x 1200	16.7 M	85 Hz
	1920 x 1080	64 K	100 Hz
	1920 x 1080	16.7 M	75 Hz
	1920 x 1200	64 K	85 Hz
	1920 x 1200	16.7 M	70 Hz
	1920 x 1440	64 K	75 Hz
	1920 x 1440	16.7 M	60 Hz
	2048 x 1536	64 K	60 Hz

### Technical Specifications

NVIDIA Quadro4 750 XGL Graphics Controller	<b>3D/2D Controller</b>	Integrated Quadro4 Pro 2D/3D 128-bit graphics processor unit (GPU)	
	<b>VGA Controller</b>	Integrated into the Quadro4 Pro GPU	
	<b>Bus Type</b>	AGP4x	
	<b>RAMDAC</b>	350 MHz	
	<b>Speed &amp; Type</b>	275 MHz 4Mx32DDR 5ns	
	<b>Memory Amount</b>	64 to 128 MB	
	<b>Controller Clock Speed</b>	275 MHz	
	<b>Color Planes</b>	32-bit color buffer	
	<b>Overlay Planes</b>	1 16-bit Video overlay plane, software emulation for OpenGL overlay planes	
	<b>Stencil Planes</b>	8-bit stencil buffer	
	<b>Alpha Planes</b>	8-bit alpha buffer	
	<b>Z-Buffer</b>	24-bit	
	<b>Total Bits/Pixel</b>	64	
	<b>Maximum Vertical Refresh Rate</b>	120 Hz	
	<b>Multi-Display Support</b>	Yes	
	<b>Operating Systems</b>	Microsoft Windows 2000 and Microsoft Windows XP	
		<b>Resolution</b>	<b>Maximum Colors Supported</b>
	640 x 480	16.7 M	120 Hz
	800 x 600	16.7 M	120 Hz
	1024 x 768	16.7 M	120 Hz
	1152 x 864	16.7 M	120 Hz
	1280 x 1024	16.7 M	120 Hz
	1600 x 1200	64 K	100 Hz
	1600 x 1200	16.7 M	85 Hz
	1920 x 1080	64 K	100 Hz
	1920 x 1080	16.7 M	75 Hz
	1920 x 1200	64 K	85 Hz
	1920 x 1200	16.7 M	70 Hz
	1920 x 1440	64 K	75 Hz
	1920 x 1440	16.7 M	60 Hz
	2048 x 1536	64 K	60 Hz

### Technical Specifications

NVIDIA Quadro4 550 XGL Graphics Controller	<b>3D/2D Controller</b>	Integrated Quadro4 Pro 2D/3D 128-bit graphics processor unit (GPU)		
	<b>VGA Controller</b>	Integrated into the Quadro4 GPU		
	<b>Bus Type</b>	AGP4x		
	<b>RAMDAC</b>	350 MHz		
	<b>Speed &amp; Type</b>	200 MHz 4Mx 32 DDR SDRAM		
	<b>Memory Amount</b>	64 MB		
	<b>Controller Clock Speed</b>	270 MHz		
	<b>Color Planes</b>	32-bit color buffer		
	<b>Overlay Planes</b>	1 16-bit Video overlay plane, software emulation for OpenGL overlay planes		
	<b>Stencil Planes</b>	8-bit stencil buffer		
	<b>Alpha Planes</b>	8-bit alpha buffer		
	<b>Z-Buffer</b>	24-bit		
	<b>Total Bits/Pixel</b>	64		
	<b>Maximum Vertical Refresh Rate</b>	120 Hz		
	<b>Multi-Display Support</b>	Yes		
	<b>Operating Systems</b>	Microsoft Windows 2000, and Microsoft Windows XP		
		<b>Resolution</b>	<b>Maximum Colors Supported</b>	<b>Maximum Refresh Rate</b>
		640 x 480	16.7 M	120 Hz
		800 x 600	16.7 M	120 Hz
		1024 x 768	16.7 M	120 Hz
	1152 x 864	16.7 M	120 Hz	
	1280 x 1024	16.7 M	120 Hz	
	1600 x 1200	64 K	100 Hz	
	1600 x 1200	16.7 M	85 Hz	
	1920 x 1080	64 K	100 Hz	
	1920 x 1080	16.7 M	75 Hz	
	1920 x 1200	64 K	85 Hz	
	1920 x 1200	16.7 M	70 Hz	
	1920 x 1440	64 K	75 Hz	
	1920 x 1440	16.7 M	60 Hz	
	2048 x 1536	64 K	60 Hz	

### Technical Specifications

<b>NVIDIA Quadro4 400 NVS Graphics Controller</b>	<b>3D/2D Controller</b>	Integrated Quadro4 2D/3D 128-bit graphics processor unit (GPU)
	<b>VGA Controller</b>	Integrated into the Quadro4 GPU
	<b>Bus Type</b>	PCI
	<b>RAMDAC</b>	Dual 350 MHz
	<b>Memory Speed, Type, Capacity</b>	220 MHz, 4mx 32 DDR per GPU, 32 MB per GPU, 64 MB total
	<b>Texture Memory</b>	Unified with frame buffer
	<b>Form Factor</b>	ATX
	<b>Controller Clock Speed</b>	220 MHz
	<b>Color Planes</b>	32-bit color buffer
	<b>Overlay Planes</b>	1 16-bit Video overlay plane, software emulation for OpenGL overlay planes
	<b>Stencil Planes</b>	8-bit stencil buffer
	<b>Alpha Planes</b>	8-bit alpha buffer
	<b>Z-buffer</b>	24-bit
	<b>Total bits/pixel</b>	64
	<b>Maximum Vertical Refresh Rate</b>	120 MHz
	<b>Maximum Pixel Clock</b>	343 MHz based on resolutions shown below
	<b>Multi Screen VGA Support</b>	Yes, 1 to 4 displays with nView
	<b>Single DVI Support</b>	Yes
	<b>Multi screen DVI Support</b>	Yes, 1 to 4 displays
	<b>Operating Systems</b>	Microsoft Windows XP, Microsoft Windows 2000
	<b>nView Hardware Architecture</b>	32-bit color 2048 x 1536 @ 60 Hz maximum resolution 2D rendering engine optimized for 32-, 24-, 16-, 15-, and 8-bpp modes

### Technical Specifications

**NVIDIA Quadro4 400 NVS  
Graphics Controller** *(continued)*

**High-definition Video  
Processor (HDVP)**

Full-screen, full-frame video playback of HDTV and DVD content  
DVD-ready motion compensation for MPEG-2  
Independent hardware color controls for video overlay  
Hardware color-space conversion (YUV 4:2:2 and 4:2:0)  
IDCT motion compensation  
5-tap horizontal by 3-tap vertical filtering  
8:1 up/down scaling

Resolution	Maximum Colors Supported	Maximum Refresh Rate
640 x 480	16.7 M	120 Hz
800 x 600	16.7 M	120 Hz
1024 x 768	16.7 M	120 Hz
1152 x 864	16.7 M	120 Hz
1280 x 1024	16.7 M	120 Hz
1600 x 1200	64 K	100 Hz
1600 x 1200	16.7 M	85 Hz
1920 x 1080	64 K	100 Hz
1920 x 1080	16.7 M	75 Hz
1920 x 1200	64 K	85 Hz
1920 x 1200	16.7 M	70 Hz
1920 x 1440	64 K	75 Hz
1920 x 1440	16.7 M	60 Hz
2048 x 1536	64 K	60 Hz

### Technical Specifications

NVIDIA Quadro4 200 NVS Graphics Controller	<b>3D/2D Controller</b>	Integrated Quadro4 2D/3D 128-bit graphics processor unit (GPU)		
	<b>VGA Controller</b>	Integrated into the Quadro4 GPU		
	<b>Bus type</b>	AGP4x		
	<b>RAMDAC</b>	Dual 350 MHz		
	<b>Memory speed and type</b>	166MHz 4Mx16 SDR 6ns		
	<b>Memory amount</b>	64 MB		
	<b>Texture memory</b>	Unified with frame buffer		
	<b>Form factor</b>	ATX and SFF		
	<b>Controller clock speed</b>	250 MHz		
	<b>Color planes</b>	32-bit color buffer		
	<b>Overlay planes</b>	1 16-bit Video overlay plane, software emulation for OpenGL overlay planes		
	<b>Stencil planes</b>	8-bit stencil buffer		
	<b>Alpha planes</b>	8-bit alpha buffer		
	<b>Z-buffer</b>	24-bit		
	<b>Total bits/pixel</b>	64		
	<b>Maximum vertical refresh rate</b>	120 MHz		
	<b>Maximum pixel clock</b>	350 MHz		
	<b>Dual screen support</b>	Yes, with nView		
	<b>Single DVI support</b>	Yes		
	<b>Dual DVI support</b>	Yes		
	<b>Operating systems</b>	Microsoft Windows XP, Windows 2000,		
	<b>nView hardware architecture</b>	32-bit color 2048 x 1536 @ 60 Hz maximum resolution 2D rendering engine optimized for 32-, 24-, 16-, 15-, and 8-bpp modes		
	<b>High-definition video processor (HDVP)</b>	Full-screen, full-frame video playback of HDTV and DVD content DVD-ready motion compensation for MPEG-2 Independent hardware color controls for video overlay Hardware color-space conversion (YUV 4:2:2 and 4:2:0) IDCT motion compensation 5-tap horizontal by 3-tap vertical filtering 8:1 up/down scaling		
		<b>Resolution</b>	<b>Maximum Colors Supported</b>	<b>Maximum Refresh Rate</b>
		640 x 480	16.7 M	120 Hz
	800 x 600	16.7 M	120 Hz	
	1024 x 768	16.7 M	120 Hz	
	1152 x 864	16.7 M	120 Hz	
	1280 x 1024	16.7 M	120 Hz	
	1600 x 1200	64 K	100 Hz	
	1600 x 1200	16.7 M	85 Hz	
	1920 x 1080	64 K	100 Hz	
	1920 x 1080	16.7 M	75 Hz	
	1920 x 1200	64 K	85 Hz	
	1920 x 1200	16.7 M	70 Hz	
	1920 x 1440	64 K	75 Hz	
	1920 x 1440	16.7 M	60 Hz	
	2048 x 1536	64 K	60 Hz	

### Technical Specifications

NVIDIA Quadro2 EX Graphics Controller	Resolution	Maximum Colors Supported	Maximum Refresh Rate	Memory Dedicated to Texture Support
	640 x 480	16.7 M	120 Hz	28.4 MB
	800 x 600	16.7 M	120 Hz	26.4 MB
	1024 x 768	16.7 M	120 Hz	22.8 MB
	1152 x 864	16.7 M	120 Hz	20.3 MB
	1280 x 1024	16.7 M	100 Hz	16.6 MB
	1600 x 1000	16.7 M	85 Hz	13.3 MB
	1600 x 1200	64 K	100 Hz	20.8 MB
	1600 x 1200	16.7 M	85 Hz	9.5 MB
	1920 x 1080	64 K	85 Hz	19.9 MB
	1920 x 1080	16.7 M	75 Hz	7.7 MB
	1920 x 1200	64 K	85 Hz	18.5 MB
	1920 x 1200	16.7 M	70 Hz	5 MB
<b>Dimensions (LxHxW)</b>	Approximately 6.5 x 2.5 x 0.6 in/16.5 x 6.4 x 1.5 cm			
<b>3D/2D Controller</b>	Integrated Quadro2 EX 2D/3D 128-bit graphics processor unit (GPU)			
<b>VGA Controller</b>	Integrated into the Quadro2 EX GPU			
<b>Bus Type</b>	AGP 2X, 4X			
<b>RAMDAC</b>	350 MHz			
<b>Memory Type</b>	183 MHz SDR 2Mx32			
<b>Memory Amount</b>	32 MB			
<b>Memory Speed</b>	183 MHz			
<b>Controller Clock Speed</b>	175 MHz			
<b>Color Planes</b>	32-bit color buffer			
<b>Overlay Planes</b>	One 16-bit Video overlay plane, software emulation for OpenGL overlay planes			
<b>Stencil Planes</b>	8-bit stencil buffer			
<b>Alpha Planes</b>	8-bit alpha buffer			
<b>Z-buffer</b>	24-bit Z buffer			
<b>Total bits/pixel</b>	64-bits			
<b>Maximum Vertical Refresh Rate</b>	240 Hz			
<b>Maximum Pixel Clock</b>	350 MHz			
<b>Multi-display support</b>	No			
<b>Operating Systems</b>	Microsoft Windows 2000, Microsoft Windows XP Professional, Windows NT 4.0 available from Compaq			

**Note:** All drivers and enhanced software can be found on the Compaq web site at:  
<http://www.compaq.com/support/files/workstations/us/index.html>.

### Technical Specifications

3DLabs Wildcat III 6110 Graphics Controller	<b>Dimensions (L x H x W)</b>	Approximately 13.5 x 4.25 x 1.5 in/34.29 x 10.8 x 3.81 cm			
	<b>3D/2D controller</b>	3DLabs Wildcat III 2D/3D graphics controller technology			
	<b>VGA controller</b>	Standard VGA on board			
	<b>Bus type</b>	AGP Pro-50			
	<b>RAMDAC</b>	320 MHz			
	<b>Memory type</b>	DDR SDRAM			
	<b>Memory amount</b>	Frame buffer: 64 MB DDR Texture: 128 MB DDR DirectBurst: 16 MB			
	<b>Memory speed</b>	Frame buffer: 182 MHz Texture: 166 MHz Direct Burst: 133 MHz			
	<b>Controller clock speed</b>	Geometry Engine: 222 MHz Rasterization Engine: 213 MHz			
	<b>Color planes</b>	32-bit color buffer			
	<b>Overlay planes</b>	8-bit double buffer			
	<b>Stencil planes</b>	8-bit stencil buffer			
	<b>Alpha planes</b>	8-bit alpha double buffer			
	<b>Z-buffer</b>	32-bit Z buffer			
	<b>Total bits per pixel</b>	96, 128, 160, 192			
	<b>Maximum vertical refresh rate</b>	90 Hz			
	<b>Maximum pixel clock</b>	320 MHz (single head analog); 162 MHz (single head digital)			
	<b>Multi-display support</b>	Yes – (dual VGA or Dual DVI-I)			
	<b>Operating systems</b>	Microsoft Windows 2000, Windows XP			
	<b>Resolutions Supported</b>	<b>Maximum Refresh Rate (Hz)</b>	<b>SuperScene Antialiasing Supported</b>	<b>Stereo Available at (Hz)</b>	
	2048 x 1152	75	-	-	
	1920 x 1440	75	-	-	
	1920 x 1200	76	-	-	
1920 x 1080	85	-	-		
1856 x 1392	80	-	-		
1824 x 1368	75	-	-		
1824 x 1128	75	-	-		
1792 x 1344	75	-	-		
1792 x 1120	75	-	-		
1600 x 1200	90	-	-		
1600 x 1024	76	-	-		
1600 x 900	85	-	106		
1520 x 856	90	-	100		
1440 x 900	90	yes	118		
1360 x 766	90	-	120		
1280 x 1024	85	-	120		
1280 x 960	85	yes	112		
1280 x 800	90	yes	120		
1280 x 720	75	yes	120		
1152 x 864	85	yes	120		
1024 x 768	85	yes	120		
856 x 480	75	yes	120		
800 x 600	85	yes	120		
640 x 480	85	yes	120		

### Technical Specifications

ATI Fire GL 8800 Graphics Accelerator	Form Factor	ATX
	Graphics Controller	RADEON™ 8800
	Bus Type	AGP 4x
	RAMDAC	400 MHz/30-bit
	Memory Speed & Type	300MHz 4Mx32 DDR SGRAM 3.3ns
	Memory Amount	128 MB
	Controller Clock Speed	275 MHz
	Color Planes	32 bit, True Color
	Overlay Planes	8-bit
	Stencil Planes	8-bit
	Alpha Planes	8-bit
	Z-Buffer	24-bit
	Video Engine Support	YUV (4:2:2, 4:2:0) conversion, point and bilinear scaling
	Monitor	15-pin D-type analog
	Flat Panel Interface	DVI-I digital (supported resolutions up to 1600 x 1200)
	Video Timings Compliance	VESA DMT 1.0 and VESA GTF 1.0 specifications
	Maximum Vertical Refresh Rate	100 Hz/120 Hz when quad buffer stereo is enabled
	Operating Systems	Microsoft Windows XP and Microsoft Windows 2000

#### Analog or digital monitor with 15-pin VGA connector - single monitor

Resolution	Line Frequency (kHz)	Refresh Rate (Hz)	Color Depth (bits)
640 x 480	31.5, 37.5, 43.3, 50.9	60, 75, 85, 100	16/32
800 x 600	37.7, 46.9, 54.1, 63.9	60, 75, 85, 100	16/32
1024 x 768	48.4, 60.0, 68.7, 80.8	60, 75, 85, 100	16/32
1152 x 864	53.7, 67.5, 77.1, 91.5	60, 75, 85, 100	16/32
1280 x 960	60.0, 75.1, 85.7, 101.7	60, 75, 85, 100	16/32
1280 x 1024	64.0, 80.0, 91.1, 107.0	60, 75, 85, 100	16/32
1600 x 1000	62.1, 78.3, 89.2, 105.9	60, 75, 85, 100	16/32
1600 x 1024*	63.6, 80.2, 81.3, 91.4, 107.5	60, 75, 76, 85, 100	16/32
1600 x 1200	75.0, 93.8, 106.3	60, 75, 85, 100	16/32
1792 x 1344	83.6, 106.3, 119.9	60, 75, 85	16/32
1920x1080**	67.1, 84.6, 96.4, 114.4	60, 75, 85, 100	16/32
1920 x 1200*	74.5, 94.0, 95.0, 107.1, 127.1	60, 75, 76, 85, 100	16/32
2048 x 1536	95.3, 120.2	60, 75	16/32

\* = Wide Screen Aspect Ratio Mode (16:10).

\*\* = Wide Screen Aspect Ratio Mode (16:9).

Note: All drivers can be found on the Compaq Web site at:

<http://www.compaq.com/support/files/workstations/us/index.html>

Note: This web site is available in English only.

HP recommends Microsoft® Windows® XP Professional for Business.

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