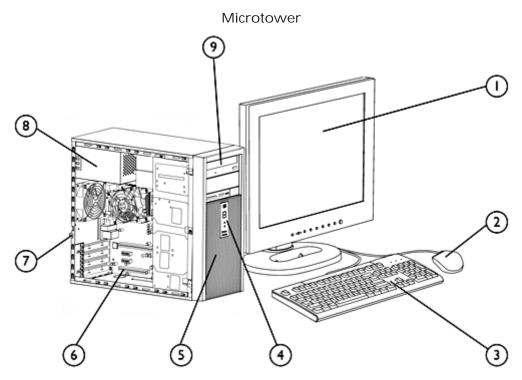
Overview

HP Compaq dx7400 Microtower Business PC

HP recommends Windows Vista[®] Business



- 1. Monitor (sold separately)
- 2. PS/2 Scroll Mouse
- 3. HP Standard Keyboard
- 4. (2) USB 2.0 ports, audio ports
- 5. (2) internal 3.5" drive bays

- 6. (1) full-height PCI 2.3 slot, (2) PCIe x1 slots,(1) PCIe x16 slot
- 7. (6) USB 2.0 ports, (1) serial port, (1) optional second serial port, (1) parallel port, (2) PS/2, (1) RJ-45, (1) VGA, (1) audio in (1) audio out (1) MIC
- 8.300-watt max power supply
- 9. (2) external 5.25" drive bays for optional optical drives;(1) external 3.5" drive bay for optional media reader or diskette drive



Overview

At A Glance

- Support for Intel[®] Core[™] 2 Duo and Core[™] 2 Quad processors, Intel Pentium[®] dual-core processors, Intel Celeron[®] processors
- Choice of operating systems:
 - o Genuine Windows Vista Business 32
 - o Genuine Windows Vista Home Basic 32
 - o Genuine Windows XP Professional
 - o Red Flag Linux (China Only)
 - o FreeDOS (not available in China)
- Intel Q33 Express Chipset
- Intel I/O Controller Hub 9 (ICH9)
- Intel Graphics Media Accelerator
- PCI Express I/O bus
- Serial ATA controller
- Broadcom NetLink BCM5786 GbE Network Connection
- Choice of hard drives and optical drives
- DDR2 SDRAM system memory
- Protected by HP Services. Terms and conditions vary by country. Certain restrictions and exclusions apply.

Standard Features and Configurable Components

Processor and Speed Intel Celeron Processors:

Frocessor and speed inter celeron Processors.				
One of the following	Intel Celeron 420 Processor (1.60-GHz, 512-KB L2 cache, 800-MHz FSB)			
	Intel Celeron 430 Processor (1.80-GHz, 512-KB L2 cache, 800-MHz FSB)			
	Intel Celeron 440 Processor (2.00-GHz, 512-KB L2 cache, 800-MHz FSB)			
	Intel Pentium dual-core Processors:			
	Intel Pentium E2140 Processor (1.6-GHz, 1-MB L2 cache, 800-MHz FSB)			
	Intel Pentium E2160 Processor (1.8-GHz, 1-MB L2 cache, 800-MHz FSB)			
	Intel Core 2 Duo Processors:			
	Intel Core 2 Duo E4400 Processor (2.0-GHz, 2 MB L2 cache, 800-MHz FSB)			
	Intel Core 2 Duo E4500 Processor (2.13-GHz, 2 MB L2 cache, 800-MHz FSB)			
	Intel Core 2 Duo E6320 Processor (1.86-GHz, 4 MB L2 cache, 800-MHz FSB)			
	Intel Core 2 Duo E6420 Processor (2.13-GHz, 4 MB L2 cache, 800-MHz FSB)			
	Intel Core 2 Duo E6550 Processor (2.0-GHz, 4 MB L2 cache, 1333-MHz FSB)			
	Intel Core 2 Duo E6750 Processor (2.66-GHz, 4 MB L2 cache, 1333-MHz FSB)			
	Intel Core 2 Duo E6850 Processor (3.0-GHz, 4 MB L2 cache, 1333-MHz FSB)			
	Intel Core 2 Quad Processors:			
	Intel Core 2 Quad Q6600 Processor (2.403-GHz, 8 MB L2 cache, 1066-MHz FSB)			
	NOTE: Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families.			
Operating Systems	Genuine Windows Vista Business 32*			
and Application	Genuine Windows Vista Home Basic 32*			
Software	Genuine Windows XP Professional SP3			
(availability varies by region)	Red Flag Linux (China Only) Free DOS (not available in China)			
regiony				
	* Certain Windows Vista product features require advanced or additional hardware. See http://www.microsoft.com/windowsvista/getready/hardwarereqs.mspx and http://www.microsoft.com/windowsvista/getready/hardwarereqs.mspx and http://www.microsoft.com/windowsvista/getready/hardwarereqs.mspx and http://www.microsoft.com/windowsvista/getready/capable.mspx for details. Windows Vista Upgrade Advisor can help you determine which features of Windows Vista will run on your computer. To download the tool, visit http://www.windowsvista.com/upgradeadvisor .			
	Microsoft Office 2007 Basic Microsoft Office 2007 Small Business Microsoft Office 2007 Professional Microsoft Works 8.5			
	Roxio Easy Media Creator 9.1**			

Roxio Easy Media Creator 9.1** Intervideo WinDVD Player** Symantec AntiVirus 10 Sun Java Runtime Environment Google Toolbar

** Supporting software available with certain optical drive configurations

Standard Features and Configurable Components

Hard Drives80-GB Serial ATA 3.0-Gb/s Hard Drive (7200 rpm)160-GB Serial ATA 3.0-Gb/s Hard Drive (7200 rpm)250-GB Serial ATA 3.0-Gb/s Hard Drive (7200 rpm)

System Memory

512-MB DDR2 Synch DRAM PC2-5300 (667-MHz) Non-ECC (1 x 512-MB)
1-GB DDR2 Synch DRAM PC2-5300 (667-MHz) Non-ECC (1 x 1-GB)
2-GB DDR2 Synch DRAM PC2-5300 (667-MHz) Non-ECC (2 x 1-GB)
3-GB DDR2 Synch DRAM PC2-5300 (667-MHz) Non-ECC (3 x 1-GB)
4-GB DDR2 Synch DRAM PC2-5300 (667-MHz) Non-ECC (2 x 2-GB)
512-MB DDR2 Synch DRAM PC2-6400 (800-MHz) Non-ECC (1 x 512-MB)
1-GB DDR2 Synch DRAM PC2-6400 (800-MHz) Non-ECC (1 x 1-GB)
1-GB DDR2 Synch DRAM PC2-6400 (800-MHz) Non-ECC (2 x 512MB)
2-GB DDR2 Synch DRAM PC2-6400 (800-MHz) Non-ECC (1 x 2-GB)
2-GB DDR2 Synch DRAM PC2-6400 (800-MHz) Non-ECC (2 x 1-GB)
4-GB DDR2 Synch DRAM PC2-6400 (800-MHz) Non-ECC (2 x 2-GB)
4-GB DDR2 Synch DRAM PC2-6400 (800-MHz) Non-ECC (4 x 1-GB)

Storage – One or more of the following (see Storage section below)	Diskette Drive 1.44-MB Diskette Drive Media Reader HP 16-in-1 Media Reader and additional USB 2.0 port Optical Drives (Serial ATA)		
	SATA CD-ROM drive (available in APJ only; not supported by Windows Vista) SATA DVD-ROM Drive		
	SATA CD-RW/DVD-ROM Combo Drive (not supported by Windows Vista) SATA SuperMulti LightScribe DVD Writer Drive		
Input Devices	Keyboard – One of the following HP PS/2 Standard Keyboard HP USB Standard Keyboard Mouse – One of the following PS/2 2-Button Scroll Mouse PS/2 2-Button Optical Scroll Mouse USB 2-Button Optical Scroll Mouse		
AudioRealtek ALC888 High Definition audio codec3D audio compliant with AC'97 Rev. 2.3 and HD Audio compatible			



Standard Features and Configurable Components

Internal PC speaker

Communication	Intel PRO/1000 PT Gigabit PCIe Adapter (full height) Broadcom NetLink BCM5786 GbE Network Connection Agere 56K PCI Modem	
Graphics	Intel Graphics Media Accelerator 3100	
	NVIDIA GeForce 8400 GS Dual Head GPU	
	NVIDIA GeForce 8400 GS Single Head GPU	
	HP ADD2 SDVO PCIe DVI-I/TV-Out Adapter	
Miscellaneous	s HP FireWire / IEEE 1394 PCI Card (full height)	

System	Details

 Product documentation on CD HP system restore CD Power cord
Slots PCI One (1) full-height PCI 2.3 slot on PCA Two (2) full-height PCI Express x1 slots on PCA One (1) full-height PCI Express x16 slot on PCA (for graphic cards)
Memory Expansion Four (4) DDR2 SDRAM DIMM slots (8 GB maximum memory support)
Bays Internal Two (2) 3.5" External Two (2) 5.25" One (1) 3.5"
USB Support EHCI high-speed USB 2.0 controller Two (2) front ports; Six (6) rear ports, Two (2) internal ports on motherboard
Interfaces (Legacy) One (1) parallel port One (1) serial port One (1) optional second serial port One (1) PS/2 keyboard port One (1) PS/2 mouse port One (1) analog VGA video port One (1) line in; one (1) line out; one (1) mic in One (1) RJ-45 network port
Weight &Chassis Dimensions13.90 x 6.89 x 16.38 in (353 x 175 x 416 mm)Dimensions(H x W x D)
Packaged22.25 x 19.63 x 16.31 in (565.15 x 498.5 x 414.3 mm) (NA)Dimensions21.10 x 19.53 x 15.008 in (536.0 x 496.0 x 383.0 mm) (EMEA)(L x W x H)21.10 x 19.53 x 15.008 in (536.0 x 496.0 x 383.0 mm) (EMEA)
System Weight 21.16 lb (9.6 kg) Shipping Weight 30.86 lb (14.0 kg)



HP Compaq dx7400 Microtower Business PC

System Details

Technology and Features	Memory Type	SDRAM (800MHz) nor Up to 4 GB system mer	PC2-5300 DDR2 SDRAM (667-MHz) non-ECC or PC2-6400 DDR2 SDRAM (800MHz) non-ECC Up to 4 GB system memory standard Up to 8-GB system memory supported	
	Hard Drive Interfaces Supportec	Serial ATA		
Chassis	Front Panel	Power button		
		Power On LED		
		HDD Activity LED		
	Cooling Solutions	Power Supply Fan (vari	able speed)	
	Supported	Active heatsink (variable speed)		
		Chassis fan (variable s	peed)	
	Slots Supported	Four (4) full-height expansion slots		
	Front I/O	Two (2) USB 2.0 ports		
	Rear I/O	Standard Micro ATX I/	O connectors, including six (6) USB 2.0 ports	
	Drive Bays	Two (2) 5-1/4" external		
		One (1) 3-1/2" external		
		Two (2) 3-1/2" interna	l	
	Internal Speaker	Standard		
	Security			
		Kensington Lock Suppo	rt	
	Power Supply	300-watt ATX Power Su	upply – PFC	
Unit Environment and Operating Conditions	 General Unit Operating Guidelines Keep the computer away from excessive moist heat and cold, to ensure that unit is operated violated and cold, to ensure that unit is operated violated and cold, to ensure that unit is operated violated and cold, to ensure that unit is operated vielated and cold, to ensure that unit is operated vielated and cold, to ensure that unit is operated vielated and cold, to ensure that unit is operated vielated and cold, to ensure that unit is operated vielated and cold, to ensure that unit is operated vielated and cold, to ensure that unit is operated vielated are subject to each other computer by blo Do not stack computers on top of each other of they are subject to each other's re-circulated of Occasionally clean the air vents on the front, the computer. Lint, dust and other foreign matter computer. Lint, dust and other foreign matter computer is to be operated within a separated vielation must be provided on the enclosure, above will still apply. 		ated within the specified operating range. vented sides of the computer to permit the y blocking any vents or air intakes. her or place computers so near each other tha ted or preheated air. ont, back, and any other vented side of the tter can block the vents and limit the airflow.	
	Temperature Range	Operating Non-operating	50° to 95° F (10° to 35° C) -22° to 140° F(-30° to 60° C)	



HP Compaq dx7400 Microtower Business PC

System Details

	Maximum Altitude (unpressurized)	Non-operating Operating Non-operating	5% to 95% (non-condensing at ambient) 10,000 ft (3048 m) 30,000 ft (9000 m)				
	NOTE: Operating temperature is de-rated 1.0 deg C per 1000 ft (300 m) to 10,000 ft (3000 m) above sea level, no direct sustained sunlight. Maximum rate of change is 10 deg C/Hr. The upper limit may be limited by the type and number of options installed.						
System Board	Processor	Socket T; LGA775 industry standard Micro ATX form factor					
		Support single Intel Core 2 Duo and Core 2 Quad, Pentium dual-core, or Celeron processors					
	PWM	Intersil 6312 3 phase					
	Chipset	Intel Q33 Express Intel I/O Controller Hub 9 (ICH9)					
	Super I/O	W83627DHG					
	Front Side Bus Frequency	Front Side Bus 533/800/1066/1333 MHz					
	Memory	DDR2 SDRAM					
	Clock Generator	CY505YC56DT					
	Integrated Graphics	Intel Graphics Media	Accelerator (GMA)				
	Audio	Realtek ALC888 HD A 3D audio compliant v	Audio compatible codec with two channel audic vith AC'97 rev. 2.3				
	LOM	Broadcom NetLink BC	CM5786 GbE Connection				
	Expansion Slots	1 x PCI 2.3 slot					
		2 x PCI Express x1 slo	ots				
		1 x PCI Express x16 s	slot				
		Four Serial ATA interf	aces				
	BIOS	SPI FLASH ROM					
	Industrial Standard	PCI 2.3 compliant					
		USB 2.0					
	Rear Side I/O Ports	1 x PS/2 keyboard p	ort				
		1 x PS/2 mouse port					
		6 x USB 2.0 ports					
		1 x RJ-45 10/100 po	rt				
		1 x serial port					
		1 x optional second s	erial port				
		1 x parallel port					
		1 x DB 15-pin analog	VGA port				
		3 x audio ports					
	On Board I/O	1 x ATX power conne	ctor				

System Details				
	Interfaces	1 x +12V power connector		
		1 x Floppy connector		
		1 x Front panel connector, Switch, LED (ON/Flash/OFF)		
		2 x Fan headers for CPU, chassis, with voltage/fan speed control		
		1 x header to support 2 USB 2.0 ports at front side		
		1 x header to support USB media reader		
		1 x serial header to support optional second serial port		
	Board Size	Micro-ATX, PCB Size: 9.6 x 9.0 in (24.38 x 22.86 cm)		
	Doard Size	4-layer PCB with green color		
	Additional Features	Bootable without keyboard, mouse or monitor		
	Auditional realules	-		
		Keyboard/mouse/USB wake up		
		Support S3, S4 and S5		
		ACPI status		
		Hardware monitor capability		
		CPU fan speed control		
Network Interface		Broadcom NetLink BCM 5786 GbE Network Connection		
	Hardware Highlight			
	Features	10-Mbps, 100-Mbps and 1000-Mbps operation Intel PRO/1000 PT Gigabit PCIe Adapter		
	Hardware Highlight			
	0 0			
	Features	10-Mbps, 100-Mbps and 1000-Mbps operation		
Wireless	Wireless A+G PCI Card (full height bracket)			
Power Supply	ATX Power Supr	oly – Passive PFC		
		actor Correction (PFC) – with line switch set to 230V – No PFC in 115V		
 90 to 140VAC, or 180 to 264VAC operating voltage ratio 				
		C, or 200 to 240VAC rated voltage range		
	• 50-60 Hz rated			
		 47-63 Hz operating line frequency range 300 watt maximum rated power 80-mm power supply fan – variable speed for optimum acoustics 		
	• Bo-min power si	upply fait – variable speed for optimum acoustics		
Dowor Concervation	• ADM 1.2 suppo	rt		
Power Conservation 'Energy Saver'	APM 1.2 suppoScreen blanking			
LICI Gy Javer	 Hard drive 'Idle' mode 			
	System Idle mod			
	 ~2 watt power of 	consumption in ES mode – suspend to RAM (S3) (instantly available PC)		



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options, and ancillary equipment will vary depending on the

System Details

Processor/Cache memory power-down (S3)

System	٠	Values are subject to change without notification and are for reference only.
Environmental Specs	٠	Performance of system, options, and ancillary equipment will vary depending
		system configuration.

•

• Levels presented do not decount for normal y compaq instance hardware.				
Ambient Air Temperature	Operating	50° to 95°F (10° to 35°C) at sea level with an altitude de-rating of 1.0°C per every 1000 ft (300 m) above sea level to a maximum of 8000 ft (2500 m), no direct sustained sunlight. Maximum rate of change is 77°F/Hr (25°C/Hr). The upper limit may be limited by the type and number of options installed.		
	Storage	-22° to 140°F (-30° to 60°C) – Maximum rate of change: 410°F/Hr (210°C/Hr).		
Humidity	Operating	10% to 90% relative humidity (Rh), 86°F (30°C) maximum wet bulb temperature, non- condensing		
	Storage	10% to 95% relative humidity (Rh), 101.66°F (38.7°C) maximum wet bulb temperature, non-condensing		
Altitude	Operating	0 to 10,000 feet (0 to 3048 meters) – This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 1,000 ft/min (304.8 m/min).		
	Non-Operating	0 to 30,000 feet (0 to 9,144 meters) – Maximum allowable altitude change rate is 1200 ft/min (365.76 m/min).		
Shock Listed are the levels of shock the product can		The values represent peak input acceleration		
	Non-Operating	35G's (Half-sine Shock) 40G's (Trapezoidal Shock)		
Vibration	Listed are the levels of vibration the product can withstand with NO damage being incurred. The values represent a flat random vibration input acceleration profile across the given frequency range. Operating Random vibration at 5Hz@0.00025G ² /Hz, 10Hz@0.01G ² /Hz, 100Hz@0.01G ² /Hz, 300Hz@0.00001G ² /Hz			

Levels presented do not account for non-HP/Compaq installed hardware.

HP Compaq dx7400 Microtower Business PC

System Details

	Non-Operating	5Hz to 300Hz, (0.25G's nominal). Random vibration at 0.008G•/Hz, 10Hz to 500Hz, (2 Grms nominal).
Acoustic Noise	and declared average d SOUND PRESSURE LEVI 73.4°F (23°C) ambient	A-WEIGHTED SOUND POWER LEVELS (LWAd) lesktop seated operator position A-WEIGHTED ELS (LpAm) when the product is operating in a environment. Noise emissions were measured 7779 (ECMA 74) and declared in accordance 109).
	IDLE (Fixed disk drive spinning)	LWAd = 4.3 Bels, Desktop Average LpAm = 32 dBA
	FIXED DISK (Random write)	LWAd = 4.8 Bels, Desktop Average LpAm = 37dBA
	CD-ROM (Sequential Reads)	LWAd = 5.2 Bels, Deskside Average LpAm = 41dBA

Service and Support On-site Warranty^{Note 1}: One-year (1-1-1) limited warranty delivers one year of on-site, next business-day^{Note 2} service for parts and labor and includes free telephone support^{Note 3} 24 x 7. Global coverage^{Note 2} ensures that any product purchased in one country and transferred to another non-restricted country will remain fully covered under the original warranty and service offering. One-year onsite and labor are not available in all countries.

NOTE 1: Terms and conditions may vary by country. Certain restrictions and exclusions apply. Other warranty variations may be offered in your region.

NOTE 2: On-site service may be provided pursuant to a service contract between HP and an authorized HP third-party provider, and is not available in certain countries. Global service response times are based on commercially reasonable best effort and may vary by country.

NOTE 3: Technical telephone support applies only to HP-configured Compaq and third-party HPqualified hardware and software. Toll-free calling and 24 x 7 support may not be available in some countries.



Communications	NICs	
	Intel PRO/1000 PT Gigabit PCIe Adapter (full height) Wireless LAN	EH352AA
	HP Wireless A+G PCI Card (North America only)	EA118AA
	HP Wireless A+G PCI Card (WW except North America)	PZ928AA
	Modems	
	Agere 2006 PCI High-Speed 56K International SoftModem	EK694AA
Hard Disk Drives	HP 250-GB SATA 3.0-Gb/s Hard Drive	PY278AA
	HP 160-GB SATA 3.0-Gb/s Hard Drive	PY277AA
	HP 80-GB SATA 3.0-Gb/s Hard Drive	PY276AA
Removable Storage	Diskette Drive	
Devices	HP 1.44-MB Internal Diskette Drive	AG295AA
	HP 1.44-MB USB Diskette Drive – External	DC141B
	16-in-1 Media Reader	EM718AA
	USB Drive Key	
	HP 1-GB Drive Key II Flash Drive	AG382AA
	HP (APJ) 512-MB Drive Key II Flash Drive	ED516AA
Input Devices	Keyboards	
	HP PS/2 Standard Keyboard	DT527A
	HP USB Standard Keyboard	DT528A
	Mice	
	HP PS/2 2-Button Scroll Mouse	DD440B
	HP PS/2 2-Button Optical Scroll Mouse	EY703AA
	HP USB 2-Button Optical Scroll Mouse	DC172B
Memory	HP 2-GB PC2-5300 (DDR2 667-MHz) DIMM	ΡΧ977ΑΑ
	HP 1-GB PC2-5300 (DDR2 667-MHz) DIMM	РХ976АА
	HP 512-MB PC2-5300 (DDR2 667-MHz) DIMM	РХ975АА
	HP 256-MB PC2-5300 (DDR2 667-MHz) DIMM	РХ974АА
	HP 1-GB PC2-6400 (DDR2 800-MHz) DIMM	AH058AA
	HP 512-MB PC2-6400 (DDR2 800-MHz) DIMM	AH056AA
	HP 256-MB PC2-6400 (DDR2 800-MHz) DIMM	AH054AA
Audio	HP Satellite Speakers	ZD929AA



After-Market Op	tions	
Graphics	NVIDIA GeForce 8400 GS 256MB DH PCle x1 Card NVIDIA GeForce 8400 GS 256MB SH PCle x16 Card	GJ120AA GJ119AA
Optical Drives	HP SATA CD-ROM Drive (available in Asia Pacific and Japan only)	AH045AA
	HP SATA CD-RW/DVD-ROM Combo Drive	AH046AA
	HP SATA DVD-ROM Drive	AH047AA
	HP SATA SuperMulti LightScribe DVD Writer Drive	GF343AA
Security	HP Business PC Security Lock Kit	PV606AA
Miscellaneous Accessories	HP FireWire / IEEE 1394 PCI Card	PA997A
Monitors	CRTs	
	HP s7540 17" (16.0" vis) CRT Monitor	PF997AA#XXX
	HP v7650 17" (16.0" vis) Flat-face CRT Monitor TFTs	PF996AA#XXX
	HP L1506 15" TFT Flat Panel Monitor – Analog only	PX848AA#XXX
	HP L1706 17" TFT Flat Panel Monitor – Analog only	PX849AA#XXX
	HP L1740 17" TFT Flat Panel Display – Analog/Digital	PL766AA#XXX
	HP L1755 17" TFT Flat Panel Display – Analog/Digital	PL777AA#XXX
	HP L1906 19" TFT Flat Panel Display – Analog only	PX850AA#XXX
	HP L1940T 19" TFT Flat Panel Display – Analog /Digital	EM869AA#XXX
	HP L1955 19" TFT Flat Panel Display – Analog/Digital	PD974AA#XXX
	HP L2065 20" TFT Flat Panel Display – Analog/Digital	EF227A4#XXX
	HP LP2465 24" TFT Widescreen Flat Panel Display – Analog/Digital	EF224A4#XXX
	GSA Monitors	
	HP L717g 17" GSA Flat Panel Monitor	EE191AA#ABA
	HP L919g 19" GSA Flat Panel Monitor	EE192AA#ABA
	Options	
	HP Flat Panel Speaker Bar	EE418AA
	HP CRT Monitor Multimedia Base	PM552AA

HP Compaq dx7400 Microtower Business PC

Memory

DDR SYNCH DRAM NON-ECC MEMORY

The Intel Q33 Express chipset supports non-ECC DDR2 memory up to PC2-6400 (800-MHz). Memory upgrades are accomplished by adding single or multiple DIMMs of the same or varied sizes. This chart does not represent all possible memory configurations.

CAUTION: You must shut down the computer and disconnect the power cord before adding or removing memory modules. Regardless of the power-on state, voltage is always supplied to the memory modules as long as the computer is plugged in to an active AC outlet. Adding or removing memory modules while voltage is present may cause irreparable damage to the memory modules or system board.

HP recommends dual-channel symmetric configurations for maximum performance.

For best performance, add the same amount of total memory to each channel and do not mix speeds. For dual-channel symmetric performance, the total amount of memory in each channel must be equal. If speeds are mixed, speed will default to the slowest DIMM.

STANDARD MEMORY

256-MB, 512-MB, 1-GB, or 2-GB DDR2 SYNCH DRAM

OPTIONAL MEMORY UPGRADES

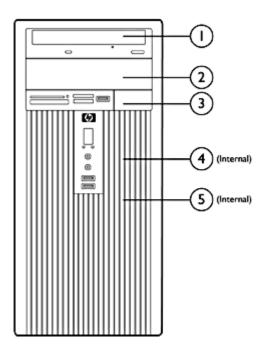
Supports up to 8-GB of DDR2 SYNCH DRAM. Not all memory configurations possible are represented below.

DIMM Size	Slot			
	Chai	nnel A	Char	nnel B
	1 (black)	2 (black)	3 (blue)	4 (blue)
512-MB	512-MB			
1-GB	1-GB			
1-GB (dual-channel symmetric)	512-MB		512-MB	
1-GB (dual-channel symmetric)	512-MB		512-MB	
2-GB (dual-channel symmetric)	1-GB		512-MB	512-MB
2-GB (dual-channel symmetric)	512-MB	512-MB	512-MB	512-MB
3-GB (dual-channel symmetric)	1-GB	512-MB	1-GB	512-MB
8-GB maximum (dual-channel symmetric)	2-GB	2-GB	2-GB	2-GB



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Storage



	Maximum Quantity Supported	Position Supported	Controller
Drive Support			
Diskette Drives	1	3	SIO
Media Reader	1	3	Internal USB 2.0 port
CD-ROM Drives	2	1, 2	SATA
DVD-ROM Drives	2	1, 2	SATA
CD-RW/Combo Drives	2	1, 2	SATA
DVD+/-RW Drives	2	1, 2	SATA
3.5" Serial ATA Hard Drives	2	4, 5	SATA



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Technical Specifications - Audio

Integrated Realtek ALC888 Audio	Type HD Audio compatible codec	Integrated Yes
	Sampling	Supports 48/96 KHz
	Audio Jacks	Mic-In
		Line-In
		Line-Out / Headphone Out
	Power Support	Digital: 3.3V
		Analog: 5V
	Other	Meets performance requirements for audio on PC99/2001 systems High-performance DACs with 97dB SNR(A-Weighting) ADCs with 90dB NR(A-Weighting)



HP Compaq dx7400 Microtower Business PC

Technical Specifications - Communications

Broadcom NetLink	Connector	RJ-45	
BCM5786 Gigabit	Controller	Broadcom NetLink BCM 5786 Gigabit Ethernet Controller	
Network Controller	Memory	Large 48kb receive and 8kb transmit on chip buffer	
	Data rates supported	10/100/1000 Mbps	
	Compliance	IEEE 802.3 compliant, 802.3x flow control	
	Bus architecture	PCI Express 1.1	
	Data transfer mode	Bus-master DMA	
	Hardware certifications	FCC, B, CE, TUV- cTUVus Mark Canada and United States, TUV- GS Mark for European Union	
	Power requirement	Aux 3.3V, 1.234 Watts in 1000base-T and 0.641 Watts in 100Base-T	
	Boot ROM support	Yes	
	Network transfer	10BASE-T (half-duplex) 10 Mbps	
	rate	10BASE-T (full-duplex) 20 Mbps	
		100BASE-TX (half-duplex) 100 Mbps	
		100BASE-TX (full-duplex) 200 Mbps	
		1000BASE-T (full-duplex) 2000 Mbps (actual rate limited by PCI Bus)	
	Environmental	Operating 32° to 120°F (0° to 48.89° C) temperature	
		Operating humidity 85% at 120°F (48.89° C)	
	Dimensions	68Pin QFN (10mm x 10mm x 0.85mm)	
	Management capabilities	WOL, PXE	
Intel PRO/1000 PT	Connector	RJ-45	
PCIe Gigabit NIC	Controller	Intel 82572EI Gigabit Ethernet Controller	
	Memory	Integrated Dual 48K configurable transmit receive FIFO Buffers	
	Data rates supported	10/100/1000 Mbps	
	Compliance	IEEE 802.1P, 802,1Q, 802.2, 802.3, 802.3AB and 802.3u compliant, 802.3x flow control	
	Bus architecture	PCI Express 1.0a	
	Data transfer mode	Bus-master DMA	
	Hardware	FCC, B, CE, TUV- cTUVus Mark Canada and United States, TUV- GS	
	certifications	Mark for European Union	
	certifications	Mark for European Union	
	certifications Power requirement	Mark for European Union Aux 3.3V, 3.0 Watts in 1000base-T and 2.0 Watts in 100Base-T	
	certifications Power requirement Boot ROM support	Mark for European Union Aux 3.3V, 3.0 Watts in 1000base-T and 2.0 Watts in 100Base-T Yes	
	certifications Power requirement Boot ROM support Network transfer	Mark for European Union Aux 3.3V, 3.0 Watts in 1000base-T and 2.0 Watts in 100Base-T Yes 10BASE-T (half-duplex) 10 Mbps	



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HP Compaq dx7400 Microtower Business PC

Technical Specifications - Communications

	Environmental Dimensions Management capabilities	100BASE-TX (full-duplex) 1000BASE-T (full-duplex) Operating temperature Operating humidity 6.4 x 2.6 x 0.8 in (16.3 ASF, WOL, PXE, DMI, W	2000 Mbps (actual rate limited by PCI Bus) 32° to 131°F (0° to 55° C) 85% at 131° F (55° C) x 6.6 x 1.9 cm)
HP Wireless A+G PCI	Dimensions	4.99 x 2.54 x 0.71 in (1	26.8 x 64.4 x 18.0 mm)
	Weight	0.268 lb (65 g)	
	Controller	Atheros AR5414X chipse	et
	system interface	PCI Spec 2.2	
	Network standard	IEEE 802.11a/b/g	
	Frequency band	5.1500 to 5.8500 GHz	
		2.4000 to 2.4835 GHz	
		2.4465 to 2.4835 GHz excluding Japan)	(Europe, Middle East, Asia and Asia Pacific –
	2.4000 to 2.4697 GHz (Japan)		(Japan)
	Operating temperature	32° to 140° F (0° to 60°	C), operating
	Storage temperature	-4° to 176° F (-20° to 80	°C), non-operating
	Humidity	10% to 85% non-conden	sing
	Operating voltage	5V ± 5%	
	Power consumption	Tx/Rx peak 560/250mA @ 3.3V (max.)	
	Output power (approximately)	15 dBM ±2dB	
	Receive sensitivity	-90dBm at 11 Mbps (typical)	
	Data transfer rate		5, 11, 6, 9, 12, 18, 24, 48, 54 and Super
	Spreading	DSSS (Direct Sequence Spread Spectrum)	
	Security	64(40h) bit, 128(104h) bit, WPA, IEEE802.1X, AES-OCB, AES-CCM, Microsoft PEAP, TKIP, WEP	
	Antenna	External 5dBi antenna	
	Throughput	108 Mbps (only with Belkin 54G or above router that supports 108 Mbps speed)	200 ft (60.96 m) – Indoor
		54 Mbps	200 ft (60.96 m) – Indoor
		11 Mbps	200 ft (60.96 m) – Indoor
	Certifications	Wi-Fi certified	

QuickSpecs

hp)

ModemNOTE: 56 Kbps technology refers to download speeds only and requires compatible modems at server sites. Other conditions may limit modem speed. FCC limitations allow a maximum of 53 Kbps during download transmissions.Data Speeds(Upload only)	Technical Specif	fications - Communicat	lions
Modem NOTE: 56 Kbps technology refers to download speeds only and requires compatible modems at server sites. Other conditions may limit modem speed. FCC limitations allow a maximum of 53 Kbps during download transmissions. Data Speeds (Upload only) 33,600/31,200/28,800/26,400/21,600/19,200/16,800/14,400/12,000/9,600/7,200/4,800/2,400/1,200/300 Data Standards IUUT V.90, IUUT, IUUT V.34, V.44, V.42, V.42bis21, V.32bis, Bell 212A, and Bell 103 Fax Speeds 14,400/12,000/9,600/7,200/4,800/2,400/300 b/s Fax Mode IUUT T.31 class 1 FAX, V. 17, V.29, V.27ter, and V.21 Channel 2 Capabilities Error Correction and V.44, 42bis, V.42 and MNP2-5 Data Compression Power Management ACPI: PPMI 1.1 and wake support with PME and Vaux; meets PCI 2.3 requirements and PC 2001 requirements Upgradeability Driver upgradeable for future enhancements Video ITU-T V.80 video ready interface Other TIA/EIA 602 standard AT command set Integrated DTE interface with speeds of up to 115.2 Kbps, parallel 16550a UART-compatible interface Operating 32* to 158* F (0* to 70* C) Temperature Operating 42* to 158* F (0* to 70* C) Operating Humidity 20% to 90%, non-condensing Power Requires a 3.3V auxiliary power rail on PCI bus uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical load Chipset Agere Systems SV92PL - Inte			Europe: Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom Australia
requires compatible modems at server sites. Other conditions may limit modem speed. FCC limitations allow a maximum of 53 Kbps during download transmissions. Data Speeds (Upload only) 33,600/31,200/28,800/26,400/21,600/19,200/16,800/14,400/ 12,000/9,600/7,200/4,800/2,400/1,200/300 Data Standards ITU-T V.90, ITU-T IV-34, V.44, V.42, V.42bis21, V.32bis, Bell 212A, and Bell 103 Fax Speeds 14,400/12,000/9,600/7,200/4,800/2,400/300 b/s Fax Mode ITU-T T.31 class 1 FAX, V. 17, V.29, V.27ter, and V.21 Channel 2 Capabilities Error Correction and V.44, 42bis, V.42 and MNP2-5 Data Compression Power Management ACPI: PPMI 1.1 and wake support with PME and Vaux: meets PCI 2.3 requirements and PC 2001 requirements Upgradeability Driver upgradeable for future enhancements Video ITU-T V.80 video ready interface Other TIA/EIA 602 standard AT command set Integrated DTE interface with speeds of up to 115.2 Kbps, parallel 16550a UART-compatible interface Optional ring wakeup signal Operating 32* to 158* F (0* to 70° C) Temperature Operating Humidity 20% to 90%, non-condensing Power Requires a 3.3V auxiliary power rail on PCI bus Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical load Chipset Agere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus support	Agere 56K PCI	Data Transmission	56,000 Kbps maximum downstream data
33,600/31,200/28,800/26,400/21,600/19,200/16,800/14,400/ 12,000/9,600/7,200/4,800/2,400/1,200/300Data StandardsITU-T V.90, ITU-T, ITU-T V.34, V.44, V.42, V.42bis21, V.32bis, Bell 212A, and Bell 103Fax Speeds14,400/12,000/9,600/7,200/4,800/2,400/300 b/sFax ModeITU-T T.31 class 1 FAX, V. 17, V.29, V.27ter, and V.21 Channel 2 CapabilitiesError Correction andV.44, 42bis, V.42 and MNP2-5Data CompressionPower ManagementPower ManagementACPI; PPMI 1.1 and wake support with PME and Vaux; meets PCI 2.3 requirements and PC 2001 requirementsUpgradeabilityDriver upgradeable for future enhancementsVideoITU-T V.80 video ready interfaceOtherTIA/EIA 602 standard AT command set Integrated DTE interface with speeds of up to 115.2 Kbps, parallel 165500 UART-compatible interface Optional ring wakeup signalOperating32° to 158° F (0° to 70° C)TemperatureQperating Humidity Uses only one-condensingPowerRequires a 3.3-V auxiliary power rail on PCI bus Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadChipsetAgere Systems SV92PL - Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (LX H)Complies with PCI low profile specifications 6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile brackets	-		requires compatible modems at server sites. Other conditions may limit modem speed. FCC limitations allow a maximum of 53 Kbps during
212A, and Bell 103Fax Speeds14,400/12,000/9,600/7,200/4,800/2,400/300 b/sFax ModeITUT T.31 class 1 FAX, V. 17, V.29, V.27ter, and V.21 Channel 2 CapabilitiesError Correction and V.44, 42bis, V.42 and MNP2-5 Data CompressionVertex and MNP2-5Power ManagemethACPI; PPMI 1.1 and wake support with PME and Vaux; meets PCI 2.3 requirements and PC 2001 requirementsUpgradeabilityDriver upgradeable for future enhancementsVideoITU-T V.80 video ready interfaceOtherTA/EIA 602 standard AT command set Integrated DTE interface with speeds of up to 115.2 Kbps, parallel 16550a UART-compatible interfaceOperating Temperature32° to 158° F (0° to 70° C)PowerRequires a 3.3V auxiliary power rail on PCI bus Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadChipsetAger Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (LX H)Comples with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile brackets		Data Speeds	33,600/31,200/28,800/26,400/21,600/19,200/16,800/14,400/
Fax Mode CapabilitiesITUT T.31 class 1 FAX, V. 17, V.29, V.27ter, and V.21 Channel 2 CapabilitiesError Correction and Error Correction and V.44, 42bis, V.42 and MNP2-5 Data CompressionV.44, 42bis, V.42 and MNP2-5 Data CompressionPower Management ACPI: PPMI 1.1 and wake support with PME and Vaux; meets PCI 2.3 requirements and PC 2001 requirementsUpgradeabilityDriver upgradeable for future enhancementsVideoITU-T V.80 video ready interfaceOtherTIA/EIA 602 standard AT command set Integrated DTE interface with speeds of up to 115.2 Kbps, parallel 16550a UART-compatible interface Optional ring wakeup signalOperating32° to 158° F (0° to 70° C) TemperatureOperating Humidity20% to 90%, non-condensing Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadChipsetAgere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (L X H)Complies with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile brackets		Data Standards	
CapabilitiesError Correction andV.44, 42bis, V.42 and MNP2-5Data CompressionPower ManagementPower ManagementACPI; PPMI 1.1 and wake support with PME and Vaux; meets PCI 2.3 requirements and PC 2001 requirementsUpgradeabilityDriver upgradeable for future enhancementsVideoITU-T V.80 video ready interfaceOtherTIA/EIA 602 standard AT command set Integrated DTE interface with speeds of up to 115.2 Kbps, parallel 16550a UART-compatible interface Optional ring wakeup signalOperating32° to 158° F (0° to 70° C)TemperatureOperating HumidityOperating Humidity20% to 90%, non-condensingPowerRequires a 3.3-V auxiliary power rail on PCI bus Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadChipsetAgere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (L X H)Complies with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile brackets		Fax Speeds	14,400/12,000/9,600/7,200/4,800/2,400/300 b/s
Data CompressionPower ManagementACPI; PPMI 1.1 and wake support with PME and Vaux; meets PCI 2.3 requirements and PC 2001 requirementsUpgradeabilityDriver upgradeable for future enhancementsVideoITU-T V.80 video ready interfaceOtherTIA/EIA 602 standard AT command set Integrated DTE interface with speeds of up to 115.2 Kbps, parallel 16550a UART-compatible interfaceOperating Temperature32° to 158° F (0° to 70° C) TemperatureOperating Humidity20% to 90%, non-condensing Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadChipsetAgere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (L X H)Complies with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile brackets		Fax Mode	ITU-T T.31 class 1 FAX, V. 17, V.29, V.27ter, and V.21 Channel 2
requirements and PC 2001 requirements Upgradeability Driver upgradeable for future enhancements Video ITU-T V.80 video ready interface Other TIA/EIA 602 standard AT command set Integrated DTE interface with speeds of up to 115.2 Kbps, parallel 16550a UART-compatible interface Optional ring wakeup signal Operating 32° to 158° F (0° to 70° C) Temperature Operating Humidity 20% to 90%, non-condensing Power Requires a 3.3-V auxiliary power rail on PCI bus Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical load Chipset Agere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus support Dimensions (LX H) Complies with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile brackets			V.44, 42bis, V.42 and MNP2-5
VideoITU-T V.80 video ready interfaceOtherTIA/EIA 602 standard AT command set Integrated DTE interface with speeds of up to 115.2 Kbps, parallel 16550a UART-compatible interface Optional ring wakeup signalOperating32° to 158° F (0° to 70° C) TemperatureOperating Humidity20% to 90%, non-condensing Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadPowerRequires a 3.3-V auxiliary power rail on PCI bus Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadChipsetAgere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (L X H)Complies with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile bracketsConnectionSingle RJ-11 connector		Power Management	
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Integrated DTE interface with speeds of up to 115.2 Kbps, parallel 16550a UART-compatible interface Optional ring wakeup signalOperating Temperature32° to 158° F (0° to 70° C)Operating Humidity Power20% to 90%, non-condensingPowerRequires a 3.3-V auxiliary power rail on PCI bus Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadChipsetAgere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (L X H)Complies with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile bracketsConnectionSingle RJ-11 connector		Video	ITU-T V.80 video ready interface
16550a UART-compatible interfaceOptional ring wakeup signalOperating32° to 158° F (0° to 70° C)TemperatureOperating HumidityPowerRequires a 3.3-V auxiliary power rail on PCI busUses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadChipsetAgere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (L X H)ConnectionSingle RJ-11 connector		Other	TIA/EIA 602 standard AT command set
Operating Temperature32° to 158° F (0° to 70° C)Operating Humidity20% to 90%, non-condensingPowerRequires a 3.3-V auxiliary power rail on PCI bus Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadChipsetAgere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (L X H)Complies with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile bracketsConnectionSingle RJ-11 connector			° i i i i
TemperatureOperating Humidity20% to 90%, non-condensingPowerRequires a 3.3-V auxiliary power rail on PCI bus Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadChipsetAgere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (L X H)Complies with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile bracketsConnectionSingle RJ-11 connector			Optional ring wakeup signal
PowerRequires a 3.3-V auxiliary power rail on PCI bus Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadChipsetAgere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (L X H)Complies with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile bracketsConnectionSingle RJ-11 connector			32° to 158° F (0° to 70° C)
Uses only one PCI load (i.e., one grant/request pair), one shared IRQ, one electrical loadChipsetAgere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (L X H)Complies with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile bracketsConnectionSingle RJ-11 connector		Operating Humidity	20% to 90%, non-condensing
one electrical loadChipsetAgere Systems SV92PL – Integrated PCI interface with 5-V tolerant buffers and CardBus supportDimensions (L X H)Complies with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile bracketsConnectionSingle RJ-11 connector		Power	Requires a 3.3-V auxiliary power rail on PCI bus
buffers and CardBus supportDimensions (L X H)Complies with PCI low profile specifications-6.7 x 2.3 in (17.0 x 5.8 cm) and supports high- and low-profile bracketsConnectionSingle RJ-11 connector			
cm) and supports high- and low-profile bracketsConnectionSingle RJ-11 connector		Chipset	
-		Dimensions (L X H)	
Other Features Digital line protection, call progress monitoring via on-board piezo		Connection	Single RJ-11 connector
		Other Features	Digital line protection, call progress monitoring via on-board piezo

HP Compaq dx7400 Microtower Business PC

Technical Specifications - Communications

	device, support for high profile and low profile brackets, PnP ID support
Safety	UL recognized to UL 1950, 3rd edition (U.S. and Canada); IEC 950 (TUV, NEMKO, DEMKO, SEMKO); CE Mark, EC 950 (TUV, NEMKO, DEMKO, SEMKO, CE mark
EMC	FCC Part 15, IC ES003, EN 55022, 3rd edition, EN 55024, annex A, EN 61000-4-6, EN 61000-4-8
Telecom	FCC Part 68, IC-CS-03 (Canada); Worldwide PTT approvals Not available in Korea or the Republic of South Africa.
Health	Bare PCB material compliant to 94V-0 or better (marked as such)
Other	PC 2001 compliant, PCI version 2.3, WHQL approved; ACPI compliant



HP Compaq dx7400 Microtower Business PC

Integrated Graphics 3D/2D Controller Media Accelerator 3100		anisotropic fil	Microsoft DirectX [®] 9 based with support for Pixel Shader 2.0, 4:1 anisotropic filtering, Gaussian texture filtering, shadow maps, volumetric textures, double-sided stencil buffers, and 4 pixel pipes.			
	VGA Controller	Integrated				
	Bus Type	PCI Express™ PCIe x1 slot, t the system's B SDVO/ADD2	x16 (If an external graphics the internal graphics can be IOS setup utility. If a graphic card is installed in the PCI f nics cannot be enabled).	cs card other than an		
	RAMDAC	Integrated, 35	50 MHz (2048x1536@75 F	lz)		
	Memory	Graphics memory is shared with system usage varies depending on the amoun system load. 8 MB is pre-allocated for time. Additional memory is allocated Intel's Dynamic Video Memory Technol optimal balance between graphics an		em memory. Graphics memory nt of system memory installed and r graphics use at system boot for graphics as needed using blogy (DVMT), to provide an		
		-	mory equal or greater t cated + 248 MB DVMT = m			
	Overlay Planes	Single overlay	Single overlay support with 5x3 filtering			
	Maximum Color Depth	32 bits/pixel	32 bits/pixel			
	Maximum Vertical Refresh Rate	•	85 Hz at up to 1920x1440, 85 Hz at 2048x1536. Varies with mode and configuration. See table below.			
	Multi-display Support	for an additio	Support for one CRT via the motherboard's VGA connector. Support for an additional display can be accomplished with the addition of SDVO/ADD2 option installed in PCIe x16 slot.			
	Graphics/Video AF Support	PI Microsoft Dire	Microsoft DirectX®9, DirectXVA®, VMR9, GDI/GDI+; OpenGL® 1.4.			
Resolutions Supporte	ed ¹ Resoluti	on	Maximum Refr	esh Rate (Hz)		
			Analog Monitor	Digital Monitor		
	640 x 48	30	85	60		
800 x 600 1024 x 768 1280 x 102 1600 x 120		00	85	60		
		68	85	60		
)24	85	60		
		200	85	60		
	1920 x 10		85	60		
	1920 x 12		85	60		
	1920 x 14		85	N/A		
1	2048 x 1	536	75	N/A		

¹ Modes listed are supported with a single active display. The supported mode list for multiple active displays is a subset of this list. Not all modes will support video playback and some supported modes may use software MC (motion compensation) rather than hardware MC. Not all modes will support 3D acceleration depending on the system configuration (e.g., resolution selected, size of frame buffer, number of installed memory modules, etc.).



HP Compaq dx7400 Microtower Business PC

Technical Specifications - Graphics

NOTE: Other resolutions and refresh rates may be selectable but are not recommended.

NVIDIA GeForce 8400 GS (256 MB SH) PCIe x16	Bus type Maximum vertical refresh rate	PCI Express (x16 lanes) 85 Hz		
Graphics Controller	Display support	Integrated 400 MHz RAM	VIDAC	
	Display max resolution	2048 x 1536 (analog), 2560 x 1600 (digital)		
	Input/Output connectors	DVI-I (DVI port supports dual-link and HDCP) TV-out (4 pin S-video)		
	Board display options	DVI-I + TV DVI-I supports analog CRT or flat panel or digital flat panel (using DVI- A, DVI-D or DVI-I connector) DVI-I supports analog CRT or flat panel (with VGA connector and DVI-I to VGA dongle)		
		TV connector is a 4-pin mini-DIN S-video connector		
	Board configuration	Specification	Description	
		Graphics Chip	NVIDIA GeForce 8400 GS	
		Core clock	460 MHz	
		Memory clock	200 MHz	
		Frame buffer	256 MB DDR2	
	Languages supported	24 languages: English, Arabic, Chinese Simplified, Chinese Traditional, Czechoslovakian, Danish, Dutch, Finnish, French, Ge Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegi Polish, Portuguese, Russian, Spanish, Swedish, Thai, Turkish		
	Core power	25 W (Max board power)		

NVIDIA GeForce 8400 GS (256 MB SH) PCIe x16 Graphics Controller display resolutions and refresh rates

NOTE: Other resolutions may be available but are not recommended as they may not have been tested and qualified by HP.

Analog Resolution	Maximum Refresh Rate
640 x 480	85 Hz
800 x 600	85 Hz
1024 x 768	85 Hz
1280 x 1024	85 Hz
1600 x 1200	85 Hz
1920 x 1080	85 Hz
1920 x 1200	85 Hz
1920 x 1440	85 Hz
2048 x 1536	85 Hz



HP Compaq dx7400 Microtower Business PC

Technical Specifications - Graphics

640 x 480	60 Hz
800 x 600	60 Hz
1024 x 768	60 Hz
1280 x 1024	60 Hz
1600 x 1200	60 Hz
1920 x 1200*	60 Hz
1920 x 1440**	60 Hz

* Reduced blanking timings used when connected to a single-link DVI monitor

** Requires a dual-link DVI capable monitor

NVIDIA GeForce	Bus type	PCI Express (x16 lanes)		
8400 GS (256 MB DH) PCIe x1	Maximum vertical refresh rate	85 Hz		
Graphics Controller	Display support	Integrated 400 MHz RAMDAC		
	Display max resolution	2048 x 1536 (analog), 2560 x 1600 (digital)		
	Input/Output connectors	DMS59 (DMS-59 port supports Dual VGA or Dual DVII connections) TV-out (4 pin S-video)		
	Board display options	DMS59 + TV DMS59 supports either 2 VGA displays with the included DVII displays with optional HP DMS59 DVI Dual-head Connector Cable kit #DL139A		
		TV connector is a 4-pin mini-DIN S-video connector		
	Board configuration	Specification	Description	
		Graphics Chip	NVIDIA GeForce 8400 GS	
		Core clock	460 MHz	
		Memory clock	200 MHz	
		Frame buffer	256 MB DDR2	
	Languages supported	24 languages: English, Arabic, Chinese Simplified, Chines Traditional, Czechoslovakian, Danish, Dutch, Finnish, Frenc Greek, Hebrew, Hungarian, Italian, Japanese, Korean, No Polish, Portuguese, Russian, Spanish, Swedish, Thai, Turkisl		
	Core power	25 W (Max board power)		
NVIDIA GeForce 840	00 GS (256 MB SH) PC	le x16 Graphics Conti	roller display resolutions and refresh	

NVIDIA GeForce 8400 GS (256 MB SH) PCIe x16 Graphics Controller display resolutions and refresh rates

NOTE: Other resolutions may be available but are not recommended as they may not have been tested and qualified by HP.

Analog Resolution	Maximum Refresh Rate
640 x 480	85 Hz
800 x 600	85 Hz



HP Compaq dx7400 Microtower Business PC

Technical Specifications - Graphics

-
85 Hz
Maximum Refresh Rate
85 Hz

* Reduced blanking timings used when connected to a single-link DVI monitor



Technical Specifications - Input Devices				
HP PS/2 or USB Standard Keyboard	Physical characteristics	Keys	104, 105, 106, 107, 109 layout (depending upon country)	
		Dimensions (L x W x H)	18.0 x 6.4 x 0.98 in (45.8 x 16.3 x 2.5 cm)	
		Weight	2 lb (0.9 kg) minimum	
	Electrical	Operating voltage	+ 5VDC ± 5%	
		Power consumption	50-mA maximum (with three LEDs ON)	
		ESD	CE level 4, 15-kV air discharge	
		emi – Rfi	Conforms to FCC rules for a Class B computing device	
		MicrosoftPC 99 – 2001	Functionally compliant	
	Mechanical	Languages	38 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 switch membrane	
		Key-leveling mechanisms	For all double-wide and greater-length keys	
		Cable length	6 ft (1.8 m)	
		Microsoft PC 99 – 2001	Mechanically compliant	
		Acoustics	43-dBA maximum sound pressure level	
	Environmental	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, six surfaces	
		Non-operating shock	80 g, six surfaces	
		Operating vibration	2-g peak acceleration	
		Non-operating vibration	4-g peak acceleration	
		Drop (out of box)	26 in (66 cm) on carpet, six-drop sequence	
		Drop (in box)	42 in (107 cm) on concrete, 16-drop sequence	
••••••••••••••••••••••••••••••••••••••	Approvals	UL, CSA, FCC, CE Mark,	, TUV, TUV GS, VCCI, BSMI, C-Tick, MIC	



HP Compaq dx7400 Microtower Business PC

Technical Specifications - Input Devices

	Ergonomic compliance	ANSI HFS 100, ISO 924	1-4, and TUVGS	
HP 2-Button Scroll	Scroll Wheel	8 mm		
Mouse (PS/2)	Maximum Rotation Speed	30 mm/s		
	Switch Type	Light force micro-switch		
	Switch Life	1 million operations		
	Mechanical Life	Minimum 200,000 revolutions		
	Environmental	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	
	Electrical	Operating Voltage	+ 5VDC ± 10%	
		Power Consumption	15mA	
		System Consumption	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	
	Mechanical	Resolution	400 ± 20% DPI	
		Tracking Speed	10 in/s maximum	
		Acceleration	100 in/s	
		Switch Actuation	85 g nominal peak force	
		Switch Life	1,000,000 operations (using Hasco modified tester)	
		Cable Length	2 m	
		PC98-99	Mechanically compliant	
	Regulatory Approvals	UL, CSA, FCC, CE Mark,	TUV, TUV GS, VCCI, BCIQ, C-Tick	



HP Compaq dx7400 Microtower Business PC

Technical Specifications - Hard Drives

Serial ATA Hard Drives (7200 rpm)	80 GB	Capacity Height Width Interface Synchronous Transfer Rate (Maximum)	80,026,361,856 bytes 1 in (2.6 cm) Media diameter: 3.5 in (Physical size: 4 in (10.2 Serial ATA 1.5 Gb/s	
		Buffer	8 MB	
		Seek Time (typical	Single Track	1.0 ms
		reads, includes controller	-	8.5 ms
		overhead, including settling)	Full-Stroke	18 ms
		Rotational Speed	7,200 rpm	
		Logical Blocks	156,301,488	
		Operating Temperature	32° to 140° F (0° to 60° C)	
	160 GB	Capacity	160,041,885,696 bytes	5
		Height	1 in (2.6 cm)	
		Width	Media diameter: 3.5 in (8.9 cm) Physical size: 4 in (10.2 cm)	
		Interface	Serial ATA	
		Synchronous Transfer Rate (Maximum)	1.5 Gb/s	
		Buffer	8 MB	
		Seek Time (typical	Single Track	1.0 ms
		reads, includes controller	Average	8.5 ms
		overhead, including settling)	Full-Stroke	18 ms
		Rotational Speed	7,200 rpm	
		Logical Blocks	312,581,808	
		Operating Temperature	32° to 140° F (0° to 60°	C)
		Capacity	250,059,350,016 bytes	
	250 GB	Height	1 in (2.6 cm)	
		Width	Media diameter: 3.5 in (8.9 cm) Physical size: 4 in (10.2 cm)	
		Interface	Serial ATA	
		Synchronous	1.5 Gb/s	
		-		



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Technical Specifications - Hard Drives

Transfer Rate (Maximum)		
Buffer	8 MB	
Seek Time (typical	Single Track	0.8 ms
reads, includes controller	Average	<9.0 ms
overhead, including settling)	Full-Stroke	• 17 ms
Rotational Speed	7,200 rpm	
Logical Blocks	488,397,168	
Operating	41° to 131° F (5° to 55°	C)
Temperature		



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Technical Specifications - Optical Storage

SATA DVD-ROM	Height	5.25-inch, half-height, tra	av-load	
Drive	Orientation	Either horizontal or vertic	5	
	Interface type	SATA/ATAPI		
	Disc capacity	Single layer: Up to 4.7 GB (6 times capacity of CD-ROM) Double layer: Up to 8.5 GB (12 times capacity of CD-ROM)		
	Dimensions (W x H x D)	5.9 x 1.7 x 8.0 in (15.0 x 4.4 x 20.3 cm)		
	Weight (max)	2.6 lb (1.2 kg)		
	Read speeds	DVD+R/-R/+RW/ -RW/+R DL /-R DL	Up to 8X	
		DVD-ROM	Up to 16X	
		DVD-RAM	Up to 4X	
		CD-ROM, CD-R	Up to 48X	
		CD-RW	Up to 32X	
	Removable Storage	Media	Read	Write
	- Media	CD-ROM	Yes	No
	Compatibility - DVD-	CD-R	Yes	No
	ROM	CD-RW	Yes	No
		DVD-ROM	Yes	No
		DVD-ROM DL	Yes	No
		DVD-RAM	Yes	No
		DVD+R	Yes	No
		DVD+R DL	Yes	No
		DVD+RW	Yes	No
		DVD-R	Yes	No
		DVD-RW	Yes	No
		DVD-R DL	Yes	No
	Access times (typical reads, including	Random	DVD: < 140 ms (typical), (typical)	CD: < 125 ms
	setting)	Full Stroke	DVD: < 250 ms (seek), C	CD: < 210 ms (seek)
		Cache Buffer	2 MB (minimum)	
		Data Transfer Modes	ATA PIO mode 4 (16.7 I word DMA mode 2 (16. UltraDMA Mode 3 (44.4	7 MB/s); ATA
	Power	Source	SATA DC power recepta	cle
		DC Power Requirement	5 VDC ± 5%-100 mV rip 12 VDC ± 5%-200 mV r	
		DC Current	5 VDC - <1000 mA typic maximum 12 VDC -< 600 mA typic maximum	



Technical Specifications - Optical Storage				
	Environmental (all conditions non-condensing)	Temperature Relative Humidity Maximum Wet Bulb Temperature	41° to 122° F (5° to 50° C) 10% to 90% 86° F (30° C)	
SATA CD-RW/DVD- ROM Combo Drive	Height	5.25-inch, half-height, tray-load		
	Orientation	Either horizontal or vertical		
	Interface type	SATA/ATAPI		
	Disc capacity	Single layer: Up to 4.7 GB (6 times capacity of CD-ROM) Double layer: Up to 8.5 GB (12 times capacity of CD-ROM)		
	Dimensions (W x H x D)	5.9 x 1.7 x 8.0 in (15.0 x 4.4 x 20.3 cm)		
	Weight (max)	2.6 lb (1.2 kg)		
	Write speeds	CD-R	Up to 48X	
		CD-RW	Up to 32X	
	Read speeds	DVD+R/-R/+RW/ -RW/+R DL /-R DL	Up to 8X	
		DVD-ROM	Up to 16X	
		CD-ROM, CD-R	Up to 48X	
		CD-RW	Up to 32X	
	Access times (typical reads, including	Random	DVD: < 140 ms (typical), CD: < 125 ms (typical)	
	setting)	Full Stroke	DVD: < 250 ms (typical), CD: < 210 ms (typical)	
	Power	Source	SATA DC power receptacle	
		DC Power Requirement	5 VDC ± 5%-100 mV ripple p-p 12 VDC ± 5%-200 mV ripple p-p	
		DC Current	5 VDC - <1000 mA typical, < 1600 mA maximum 12 VDC -< 600 mA typical, < 1400 mA maximum	
	Environmental (all conditions non-condensing)	Temperature	41° to 122° F (5° to 50° C)	
		Relative Humidity	10% to 90%	
		Maximum Wet Bulb Temperature	86° F (30° C)	
SATA DVD+/-RW LightScribe Drive	Height	5.25-inch, half-height, tray-load		
	Orientation	Either horizontal or vertical		
	Interface type	SATA/ATAPI Single layer: Up to 4.7 GB (6 times capacity of CD-ROM) Double layer: Up to 8.5 GB (12 times capacity of CD-ROM)		



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Technical Specifications - Optical Storage

Dimensions (W x H x D)	5.9 x 1.7 x 8.0 in (15.0) x 4.4 x 20.3 cm)	
Weight (max)	2.6 lb (1.2 kg)		
Write speeds	DVD+R	Up to 16X	
	DVD+RW	Up to 8X	
	DVD+R DL	Up to 8X	
	DVD-R DL	Up to 4X	
	DVD-R	Up to 16X	
	DVD-RW	Up to 6X	
	CD-R	Up to 48X	
	CD-RW	Up to 32X	
Read speeds	DVD-RAM	Up to 4X	
	DVD+R/-R/+RW/ -RW/+R DL /-R DL	Up to 8X	
	DVD-ROM	Up to 16X	
	CD-ROM, CD-R	Up to 48X	
	CD-RW	Up to 32X	
Access times (typical reads, including	Random	DVD: < 130 ms (typical), CD: < 120 ms (typical)	
setting)	Full Stroke	DVD: < 240 ms (seek), CD: < 200 ms (seek)	
Power	Source	SATA DC power receptacle	
	DC Power Requirement	5 VDC \pm 5%-100 mV ripple p-p 12 VDC \pm 5%-200 mV ripple p-p	
	DC Current	5 VDC - <1000 mA typical, < 1600 mA maximum 12 VDC -< 600 mA typical, < 1400 mA maximum	
Environmental	Temperature	41° to 122° F (5° to 50° C)	
(all conditions	Relative Humidity	10% to 90%	
non-condensing)	Maximum Wet Bulb 86° F (30° C) Temperature		

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Technical Specifications - Removable Storage

HP 1.44-MB Diskette Size		3.5 in (8.89 cm)		
Drive	LED Indicators (front panel)	Green		
	Read/Write Capacity 1.44 MB/720 KB per Diskette (high/low)			
	Drive Height	One-third 300 rpm		
	Drive Rotation			
	Transfer Rate (high/low)	500/250 KB/s		
	Bytes/Sector	512		
	Sectors/Track (high/low)	18/9 80/80		
	Tracks/Side (high/low)			
	Access Times	Track-to-Track (high/low)	3/6 ms	
		Average (high/low)	94/173 ms	
		Settling Time	15 ms	
		Latency Average	100 ms	
	Cylinders (high/low)	80/80		
	Read/Write Heads	Two		
HP 16-in-1 Media Card Reader	USB interface	USB 2.0 High-speed device via PCI card or pass -through via internal USB port of system board		
	Advance protocol support	 Supports hardware ECC (Error Correction Code) function Supports hardware CRC (Cyclic Redundancy Check) function Supports MS 4-bit parallel transfer mode Supports MS-PRO 4-bit parallel transfer mode Supports SD 4-bit parallel transfer mode Supports high-speed 50 MHz SD 4-bit card (version 1.1) Support high-speed 52 MHz MMC 8-bit card (version 4.x) 		
	Supported media types	 Supports CompactFlash Card Type I (CF I), CompactFlash Card Type II (CF II),MicroDrive (MD) Supports 3.3V SmartMedia Card (SM), SmartMedia ROM (SM ROM), xD-Picture Card (xD) Supports Secure Digital Card (SD), Secure Digital ROM Card (SD ROM), miniSD, MultiMediaCard (MMC), Secure MultiMediaCard (Secure MMC), ROM Type MultiMediaCard (MMC ROM), Reduced Size MultiMediaCard (RS MMC), MultiMediaCard 4.0 (MMC Plus), Reduced Size MultiMediaCard 4.0 (MMC Mobile) 		



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Technical Specifications - Removable Storage

 Support Memory Stick (MS), Memory Stick ROM (MS ROM), MagicGate Memory Stick (MG), Memory Stick Select, Memory Stick Duo (MS Duo), Memory Stick PRO (MS-PRO), Memory Stick PRO Duo (MS PRO Duo)

Mechanical	Length (3.5")	124.7 cm	
	Width (3.5")	101.6 cm	
	Height (3.5")	25.4 cm	
	Length (5.25")	171.6 cm	
	Width (5.25")	148.9 cm	
	Height (5.25")	42.7 cm	
Environmental	Operational environmental extremes	Test Parameters/Conditions - Power applied, unit operating on system $\pm 5\%$ nominal supply voltage. 10°C 10% R.H. <i>f</i> 24 hours 10°C 90% R.H. <i>f</i> 24 hours 20°C 90% R.H. <i>f</i> 24 hours 30°C 90% R.H. <i>f</i> 24 hours 40°C 90% R.H. <i>f</i> 24 hours 50°C 90% R.H. <i>f</i> 24 hours 50°C 10% R.H. <i>f</i> 24 hours	
	Storage environmental extremes	Test Parameters/Conditions 60°C @ 80% R.H. for 96 hours -30°C @ 20% R.H. for 48 hours No power applied Delta °C < 1.0°C/min Delta % R.H. < 1.5% R.H./min	
Approvals	USB-IF, WHQL, Compliant with USB Mass Storage Class Bulk only Transport Specification Rev. 1.0, Compliant Intel Front Panel I/O Connectivity Design Guide V. 1.2 FCC, CE, BSMI, C-Tick, VCCI, MIC, cUL, TUV-T		

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