Our highest-performing Intel® Xeon® processor-based workstation, the HP xw8400 meets your most demanding computational and visualization needs. Based on revolutionary new, dual-processor/dual- and quad-core technology, the HP xw8400 Workstation offers a full range of the latest professional graphics, the OS that best fits your requirements and the reliability assured by HP’s close partnering with a wide variety of hardware and software vendors. Delivered in our innovative tool-less chassis, the HP xw8400 is the ultimate in Intel® dual-core performance and easy expandability.

A choice of Operating Environment

The HP xw8400 is available with preinstalled genuine Windows® XP Professional (32 or 64-bit). The HP xw8400 is also ready to handle the next-generation Microsoft Vista.

It also supports Red Hat Enterprise Linux WS 4 (64-bit). The HP Installer Kit for Linux is available to ease installation and help create a custom operating system image. We also offer 32-bit or 64-bit Red Hat Linux, either pre-installed or through our HP Installer Kit for Linux, which ensures you have all the tested drivers you need for the install.

HP user-relevant innovations help you fine-tune your system for the utmost in personal productivity. HP Performance Tuning Framework (PTF)™, preinstalled on the HP xw8400, is an easy-to-use tool that guides workstation setup and custom configuration to help increase performance of selected applications and overall productivity. HP Cool Tools provide easy access to HP web pages that help streamline implementation. HP Remote Graphics Software (sold separately) enables remote access of 3D graphics performance via conventional TCP I/P.

Experience a new force in workstation power

The HP xw8400 delivers the latest 64-bit Quad-Core and Dual-Core Intel® Xeon® architecture for outstanding personal workstation performance and expandability. Intel’s next-generation chipset provides substantial improvements in bandwidth over previous Intel chipset technology.

Supporting up to 5 internal hard drives, 3 optical disks, 3 PCI Express (PCIe) I/O slots, 3 PCI-X, and 1 legacy PCI slot, the HP xw8400 provides the hard disk space, I/O expandability, and performance needed in the most demanding work environments. With 8 slots for memory expandability, the HP xw8400 is enabled to achieve the maximum memory configuration supported by the Intel 5000X chipset—64 GB.†
HP recommends Windows Vista™ Business

Form factor
Rackmount minitower

Operating systems
Genuine Windows® XP Professional 32bit

Genuine Windows® XP Professional x64

Windows Vista Capable

Not all Windows Vista features are available for use on all Windows Vista Capable PCs. All Windows Vista Capable PCs will run the core experiences of Windows Vista, such as innovations in organizing and finding information, security, and reliability. Some features available in premium editions of Windows Vista—like the new Windows Aero™ user interface—require advanced or additional hardware. Check http://www.windowsvista.com/getready for details. Enterprise Linux™ WS 4 (64-bit)

HP Installer Kit for Linux (includes drivers for both 32-bit & 64-bit OS versions of Red Hat Enterprise Linux 3 and 4)

Available processors
One or two Quad-Core Intel Xeon Processor 5300 Sequence (8 MB total L2 cache) per processor (2 x 4 MB shared): 1.60 GHz/1066 MHz FSB; 1.86 GHz/1066 MHz FSB; 2.06 GHz/1333 MHz FSB; 2.33 GHz/1333 MHz FSB; 2.66 GHz/1333 MHz FSB

One or two Dual-Core Intel Xeon Processor 5100 Sequence (4 MB shared L2 cache per processor): 1.60 GHz/1066 MHz FSB; 1.86 GHz/1066 MHz FSB; 2.00 GHz/1333 MHz FSB; 2.33 GHz/1333 MHz FSB; 2.66 GHz/1333 MHz FSB; 3.00 GHz/1333 MHz FSB

Chipset
Intel 5000X

Memory
Up to 16 GB of ECC registered 4 channel DDR 667 MHz fully buffered DIMMs via 2 GB DIMMs in 8 DIMMs slots; up to 32 GB of memory via 4 GB DIMMs. The HP xw8400 is enabled to achieve the maximum memory supported by the chipset of 64 GB8.

Drive controllers
Integrated 6 channel SATA 3 Gb/s controller with RAID levels 0, 1, 10, 5 capability8, integrated 4-channel SAS controller with RAID 0, 1, 10 capability8

Hard drives(s)
Up to 5 SATA drives *, 2.75 TB max.; 80 GB** (7200 rpm) SATA 3 Gb/s, or 160, 250, 500, 750 GB**(7200 rpm) SATA 3 Gb/s NCQ, or 80, 160 GB (10K rpm) SATA 1.5 Gb/s NCQ

Up to 5 Serial Attached SCSI (SAS) drives, 1500 GB** max.; 146 GB** (10K rpm) or 73, 146, 300 GB** (15K rpm)

*Populating all 5 drives with SAS will require additional optional SAS controller

Optical drives
CD-ROM, DVD-ROM, CD-RW/DVD combo, DVD+/-RW DL with LightScribe Direct Disc Labeling (Microsoft Windows XP Professional only, requires LightScribe media for labeling)9

Drive bays
3 external 5.25-inch bays, 5 internal 3.5-inch bays

Slots
7 slots: 1 PCIe x16 graphics slot, 1 PCIe x16 mechanically (x4 electrically), 1 PCIe x8 mechanically (x4 electrically), 3 PCI-X slots (one 133 MHz, two 100 MHz slots) and 1 legacy PCI slot

Graphics
Professional 2D: NVIDIA Quadro NVS 285 (128 MB, dual display)

Entry 3D: NVIDIA Quadro FX 560 (128 MB), ATI FireGL V3300 (128 MB)

Mid-range 3D: NVIDIA Quadro FX 1500 (256 MB), ATI FireGL V7200 (256 MB)

High-end 3D: NVIDIA Quadro FX 3500 (256 MB), NVIDIA Quadro FX 4500 (512 MB) with optional Quadro G-Sync card, NVIDIA Quadro FX 5500 (1 GB & up to 2 cards supported)

Audio
Integrated High Definition audio with Jack Retasking technology, opt. Sound Blaster X-Fi XtremeMusic (PCI)

Network
Integrated Broadcom 5752 Netxtreme Gigabit PCIe LAN on Motherboard, opt. Broadcom 5751 Gigabit PCIe NIC

Ports
Front: 2 USB 2.0, 1 IEEE 1394, 1 audio line out, 1 microphone line in

Rear: 5 USB 2.0, 1 IEEE 1394, 1 standard serial port, 1 parallel port, PS/2 keyboard and mouse, 1 RJ-45, audio line in, audio line out

Internal: 1 USB 2.0 (requires optional “Internal USB Kit” for connecting USB device)

Input devices
PS/2 Scroll Mouse; USB Optical Scroll Mouse; USB 3-Button Optical Mouse; USB SpaceMouse; USB SpaceBall; USB SpacePlot

Dimensions (H x W x D)
17.9 in (45.4 cm) x 8.3 in (21.0 cm) x 20.7 in (52.5 cm)

Power
800 watts, Active Power Factor Correction

Monitors
19-inch HP LP1965 Flat Panel Monitor, 20-inch HP LP2065 Flat Panel Monitor, 24-inch HP LP2465 Flat Panel Monitor, 30-inch HP LP3065 Flat Panel Monitor

Warranty
Basic three years next business day, parts, labor, and 8x5 phone support; terms and conditions may vary, certain restrictions apply


i Quad-Core and Dual-Core are new technologies designed to improve performance of multithreaded software products and hardware-aware multitasking operating systems and may require appropriate operating system software for full benefits; check with software provider to determine suitability; Not all customers or software applications will necessarily benefit from use of these technologies.

ii PTF preinstalled on HP xw8400 with Microsoft Windows XP Professional.

iii 8 GB DIMMs required for 64 GB—expected availability in 2007.

iv GHz refers to internal clock speed of the processor. Other factors besides clock speed may impact system and application performance.

vii Hardware RAID is not supported on Linux systems. The Linux kernel, with built-in software RAID, provides excellent functionality and performance. It is a good alternative to hardware-based RAID. Please visit http://h20000.www2.hp.com/bc/docs/support/SupportManual/c00060684/c00060684.pdf for RAID capabilities with Linux.

viii 1 GB = 1 billion bytes. Actual formatted capacity is less.

x The term 10/100/1000 or Gigabit Ethernet indicates compliance with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

Screen image courtesy of Aaron Reid.

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For more information, visit www.hp.com/go/workstations

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