



HP xw8400 WORKSTATION

Featuring top-of-the-line Intel® Xeon® dual processor/dual- or quad-core performance for unmatched design and engineering power.



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-coreⁱ 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-coreⁱ 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)ⁱⁱⁱ, 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-Coreⁱ 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 GBⁱⁱ.

HP xw8400 WORKSTATION

HP recommends Windows Vista™ Business

Form factor	Rackable minitower
Operating systems	Genuine Windows® XP Professional 32-bit 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 ⁱ Intel Xeon Processor 5300 Sequence (8 MB total L2 cache) per processor (2 x 4 MB shared): 1.60 ^{iv} GHz/1066 MHz FSB ^v , 1.86 ^{iv} GHz/1066 MHz FSB ^v , 2.06 ^{iv} GHz/1333 MHz FSB ^v , 2.33 ^{iv} GHz/1333 MHz FSB ^v , 2.66 ^{iv} GHz/1333 MHz FSB ^v One or two Dual-Core ⁱ Intel Xeon Processor 5100 Sequence (4 MB shared L2 cache per processor): 1.60 ^{iv} GHz/1066 MHz FSB ^v , 1.86 ^{iv} GHz/1066 MHz FSB ^v , 2.00 ^{iv} GHz/1333 MHz FSB ^v , 2.33 ^{iv} GHz/1333 MHz FSB ^v , 2.66 ^{iv} GHz/1333 MHz FSB ^v , 3.00 ^{iv} GHz/1333 MHz FSB ^v
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 GB ⁱⁱ .
Drive controllers	Integrated 6 channel SATA 3 Gb/s controller with RAID levels 0, 1, 10, 5 capability ⁱⁱⁱ , integrated 4-channel SAS controller with RAID 0, 1 capability ⁱⁱⁱ
Hard drive(s)	Up to 5 SATA drives*, 3.75 TB max.; 80 GB ⁱⁱⁱ (7200 rpm) SATA 3 Gb/s, or 160, 250, 500, 750 GB ⁱⁱⁱ (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 ⁱⁱⁱ max.; 146 GB ⁱⁱⁱ (10K rpm) or 73, 146, 300 GB ⁱⁱⁱ (15K rpm) *Populating all 5 drives with SAS will require additional opt. 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) ^{ix}
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 opt. 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 SpacePilot
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, 20.1-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

Certain Windows Vista product features require advanced or additional hardware. See <http://www.microsoft.com/windowsvista/getready/hardwarereqs.msp> and <http://www.microsoft.com/windowsvista/getready/capable.msp> 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>.

- 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 8 GB DIMMs required for 64 GB—expected availability in 2007.
- iii PTF preinstalled on HP xw8400 with Microsoft Windows XP Professional.
- iv GHz refers to internal clock speed of the processor. Other factors besides clock speed may impact system and application performance.
- v Actual bus speed is less. Listed bus speed represents the equivalent effective throughput for data.
- vi Expected availability 1/8/07.
- 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.
- ix Actual speeds may vary. Does not permit copying of commercially available DVD movies or other copy-right protected materials. Intended for creation and storage of your original material and other lawful uses. Double layer discs can store more data than single layer discs. However, double-layer discs burned with this drive may not be compatible with many existing single-layer DVD drives and players. LightScribe creates a grayscale image similar to black and white photography. LightScribe media required and sold separately.
- 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.

© Copyright 2007 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice and is provided "as is" without warranty of any kind. The warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. Intel and Xeon are registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Linux is a U.S. registered trademark of Linus Torvalds. Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation. Windows Vista is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

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

4AA0-9122ENW, January 2007

