



## HP Z800 WORKSTATION

### The ultimate in power and expandability

Combining ultimate performance with a revolutionary new industrial design, the HP Z800 Workstation delivers the extreme speed and massive expandability that you demand to tackle your biggest challenges.

#### **Innovation that transforms the way you work**

Designed for speed, inside and out, the new HP Z800 revolutionizes workstation industrial design. Featuring brushed aluminum side panels, integrated handles, visually cable-less engineering that maximizes airflow, modular component removal and reconnect, and optional liquid cooling (expected availability July 2009), among many other signature HP Workstation innovations, this is a system you'll want everyone to see.

- Minimize power and cooling costs with ENERGY STAR® qualified configurations featuring 85% or 88% efficient power supplies and an HP-developed energy-saving feature that helps lower energy consumption in off mode.
- See, share, and show your work across the world with built-in HP SkyRoom<sup>®</sup> collaboration solution which combines real-time 3D graphics sharing and video conferencing

### **Performance to help you accomplish more every minute**

Get massive, whole-system computational power from a workstation that optimizes the way the processor, memory, graphics, OS, and software technology work together.

- Process more tasks—in less time—with the massive computational horsepower of the new quad-core Intel® Xeon® processors<sup>1</sup> and Intel® QuickPath Technology
- Customize your HP Z800 with faster and larger memory capacity and large-scale storage
- Choose from a breadth of operating system choices and new professional graphics options from ATI and NVIDIA

### **Reliable and legendary confidence-inspiring quality**

- Close relationships with ISVs help ensure that HP Workstations are fully certified and optimized for your applications
- In-depth testing and quality assurance keep you productively up-and-running
- HP Performance Tuning Framework helps ease configuration and updates while optimizing a range of applications
- Comprehensive, lifetime HP Total Care options, easy HP financing solutions, and an array of monitors and other accessories make HP Workstations easy to own and use

# HP Z800 WORKSTATION

HP recommends Windows Vista® Business

<b>Form factor</b>	Rackable minitower
<b>Operating systems</b>	Genuine Windows Vista® Business 32-bit with downgrade to Windows® XP Professional 32-bit custom installed* Genuine Windows Vista® Business 64-bit with downgrade to Windows® XP Professional x64 custom installed* Genuine Windows Vista® Business 32-bit** Genuine Windows Vista® Business 64-bit** HP Installer Kit for Linux (includes drivers for both 32-bit and 64-bit OS versions of Red Hat Enterprise Linux WS4 and WS5)
<b>Available processors</b>	Intel® Xeon® processor <sup>1,2</sup> E5504 <sup>3</sup> , 2.00 GHz, 4 MB cache, 800 MHz memory, Quad-Core Intel Xeon processor <sup>1,2</sup> E5506 <sup>3</sup> , 2.13 GHz, 4 MB cache, 800 MHz memory, Quad-Core Intel Xeon processor <sup>1,2</sup> E5520 <sup>3</sup> , 2.26 GHz, 8 MB cache, 1066 MHz memory, Quad-Core Intel Xeon processor <sup>1,2</sup> E5530 <sup>3</sup> , 2.40 GHz, 8 MB cache, 1066 MHz memory, Quad-Core Intel Xeon processor <sup>1,2</sup> E5540 <sup>3</sup> , 2.53 GHz, 8 MB cache, 1066 MHz memory, Quad-Core Intel Xeon processor <sup>1,2</sup> E5550 <sup>3</sup> , 2.66 GHz, 8 MB cache, 1333 MHz memory, Quad-Core Intel Xeon processor <sup>1,2</sup> E5560 <sup>3</sup> , 2.80 GHz, 8 MB cache, 1333 MHz memory, Quad-Core Intel Xeon processor <sup>1,2</sup> E5570 <sup>3</sup> , 2.93 GHz, 8 MB cache, 1333 MHz memory, Quad-Core Intel Xeon processor <sup>1,2</sup> W5580 <sup>3</sup> , 3.20 GHz, 8 MB cache, 1333 MHz memory, Quad-Core
<b>Chipset</b>	Intel® 5520 (Dual)
<b>Memory<sup>4</sup></b>	12 DIMM slots, up to 192 GB (expected availability Q409), 6-channel DDR3 1333 MHz**, 3 channels per CPU (**actual memory speed dependent on processor capability)
<b>Drive controllers<sup>5</sup></b>	Integrated SATA 3Gb/s controller, RAID 0, 1, 5, 10 capable; Integrated 8-channel SAS controller, RAID 0, 1, 10 capable; Optional LSI 8888 ELP 8-port SAS HW RAID 0, 1, 5, 10 capable; 6 channels SATA 3Gb/s
<b>Hard drive(s)<sup>6</sup></b>	Up to (5) 3.5-inch 7200 rpm SATA drives: 160, 250, 320, 500 GB, 1, 1.5* TB, 7.5 TB max*; Up to (6) 2.5-inch 10K rpm SATA drives: 160, 300 GB SFF, 1.8 TB max; Up to (5) 3.5-inch 15K rpm SAS drives: 146, 300, 450 GB, 2.25 TB max (*1.5 TB SATA drive expected availability 9/09).
<b>Optical drives<sup>7</sup></b>	DVD-ROM, DVD+/-RW, Slot-load DVD+/-RW, Blu-Ray Writer (expected availability May, 2009)
<b>Drive bays</b>	3 external 5.25-inch bays, 4 internal 3.5-inch bays, Up to 4 eSATA, Up to 8 external SAS
<b>Slots</b>	2 PCI Express Gen2 x16, 2 PCI Express Gen2 x16 mechanical/x8 electrical, 1 PCI Express Gen2 x8 mechanical/x4 electrical, 1 PCI Express Gen1 x8 mechanical/x4 electrical, 1 PCI
<b>Graphics (dual graphics on selected cards)</b>	<b>Professional 2D:</b> NVIDIA Quadro NVS 295 (256 MB) <b>Entry 3D:</b> NVIDIA Quadro FX 380 (256 MB), ATI FirePro V3700 (256 MB), NVIDIA Quadro FX 580 (512 MB) <b>Midrange 3D:</b> NVIDIA Quadro FX 1800 (768 MB), ATI FirePro V5700 (512 MB) <b>High-end 3D:</b> NVIDIA Quadro FX 3800 (1 GB), ATI FirePro V7750 (1 GB), NVIDIA Quadro FX 4800 (1.5 GB), NVIDIA Quadro CX, NVIDIA Quadro FX 5800 (4 GB)
<b>Audio</b>	High-definition integrated Realtek ALC262 Audio, optional Creative X-Fi Titanium PCIe Audio Card, optional HP Thin USB Powered Speakers
<b>Network</b>	Integrated Dual Broadcom 5764 LAN, TPM 1.2 Controller, Optional Broadcom NIC, Optional Intel NIC
<b>Ports</b>	<b>Front:</b> 3 USB 2.0, 1 IEEE 1394a, 1 microphone in, 1 headphone out <b>Rear:</b> 6 USB 2.0, 1 IEEE 1394a, 1 audio in, 1 audio out, 1 microphone in, 2 PS/2, 2 RJ-45 to integrated Gigabit LAN, 1 serial <b>Internal:</b> 3 USB 2.0
<b>Input devices</b>	PS/2 standard keyboard, USB standard keyboard, USB Smart Card Keyboard, USB 2-button optical scroll mouse, USB 3-button optical mouse, USB SpaceExplorer, USB SpacePilot, USB Laser Scroll Mouse
<b>Dimensions (H x W x D)</b>	17.5 x 8.0 x 20.7 in (44.51 x 20.35 x 52.65 cm)
<b>Power supply</b>	850-Watt 85% efficient power supply or 1110-Watt 88% efficient (ENERGY STAR® SILVER) power supply; direct connection Power Supplies
<b>Monitors (screen size diagonally measured)</b>	HP LP1965 19-inch LCD Monitor, HP LP2275w 22-inch Widescreen LCD Monitor, HP LP2475w 24-inch Widescreen LCD Monitor, HP DreamColor LP2480zx Professional Display (24-inch diagonal widescreen), HP LP3065 30-inch Widescreen LCD Monitor
<b>Warranty</b>	Limited three-year next business day <sup>8</sup> , parts, labor and 8x5 phone support; Terms and conditions may vary.

\*Windows Vista Business disk may also be included for future upgrade if desired. To qualify for this downgrade an end user must be a business (including governmental or educational institutions) and is expected to order at least 25 customer systems with the same custom image.

\*\*Certain Windows Vista product features require advanced or additional hardware. See [www.microsoft.com/windowsvista/getready/hardwarereqs.mspx](http://www.microsoft.com/windowsvista/getready/hardwarereqs.mspx) and [www.microsoft.com/windowsvista/getready/capable.mspx](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 [www.windowsvista.com/upgradeadvisor](http://www.windowsvista.com/upgradeadvisor).

<sup>1</sup> Quad-Core technologies are 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.

<sup>2</sup> 64-bit computing on Intel architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. See [www.intel.com/info/em64t](http://www.intel.com/info/em64t) for more information.

<sup>3</sup> Intel's numbering is not a measurement of higher performance.

<sup>4</sup> Each processor supports up to 3 channels of DDR3 memory. To realize full performance at least 1 DIMM must be inserted into each channel. To get full 6 channel support, 2 processors MUST be installed.

<sup>5</sup> SATA 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.

<sup>6</sup> For hard drives, 1 GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 12 GB of hard drive (or system disk) is reserved for the system recovery software (XP and XP Pro). Up to 3 GB of system disk is reserved for system recovery software. (Vista).

<sup>7</sup> Actual speeds may vary. Does not permit copying of commercially available DVD movies or other copyright 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.

<sup>8</sup> HP Care Pack Services extend service contracts beyond the standard warranties. Service starts from date of hardware purchase. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at [www.hp.com/go/lookuptool](http://www.hp.com/go/lookuptool). Additional HP Care Pack Services information by product is available at [www.hp.com/hps/carepack](http://www.hp.com/hps/carepack). Service levels and response times for HP Care Packs may vary depending on your geographic location.

<sup>9</sup> SkyRoom will be available August 2009



© 2009 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only 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, Xeon, and QuickPath are trademarks of Intel Corporation in the U.S. and other countries. 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.

4AA2-4398ENW, February 2009