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, this is a system you'll want everyone to see.

Minimize power and cooling costs with ENERGY STAR® qualified configurations featuring 85% or 89% efficient power supplies and HP WattSaver which, when activated, lowers energy consumption to less than 1 Watt in off mode.

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 faster with the massive horsepower of quad- and six- core Intel® Xeon® processors[1] and Intel® QuickPath Technology
- Bring the performance of a small cluster to a workstation with the NVIDIA® Tesla™ C1060 computing processor
- Customize your HP Z800 with faster and larger memory capacity and large-scale storage
- Choose from a breadth of operating systems and new professional graphics options from NVIDIA and ATI

Reliability from legendary, confidence-inspiring quality
- Close ISV relationships 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 Advisor 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® 7.

Form factor	Rackable minitower
Operating systems	Genuine Windows® 7 Ultimate 64-bit* Genuine Windows® 7 Professional 32-bit* Genuine Windows® 7 Professional 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) Red Hat Enterprise Linux WS5 (as drop-in-the-box only)
Available processors[1,2,3]	Intel® Xeon® processor E5506, 2.13 GHz, 4 MB cache, 800 MHz memory, Quad-Core Intel Xeon processor E5507, 2.26 GHz, 4 MB cache, 800 MHz memory, Quad-Core Intel Xeon processor E5606, 2.13 GHz, 8 MB cache 1066 MHz memory, Quad-Core Intel Xeon processor E5607, 2.26 GHz, 8 MB cache 1066 MHz memory, Quad-Core Intel Xeon processor E5620, 2.40 GHz, 12 MB cache, 1066 MHz memory, Quad-Core Intel Xeon processor E5630, 2.53 GHz, 12 MB cache, 1066 MHz memory, Quad-Core Intel Xeon processor E5640, 2.66 GHz, 12 MB cache, 1066 MHz memory, Quad-Core Intel Xeon processor E5645, 2.40 GHz, 12 MB cache 1333 MHz memory, Six-Core Intel Xeon processor E5649, 2.53 GHz, 12 MB cache 1333 MHz memory, Six-Core Intel Xeon processor X5647, 2.93 GHz, 12 MB cache 1333 MHz memory, Quad-Core Intel Xeon processor X5650, 2.66 GHz, 12 MB cache, 1333 MHz memory, Six-Core Intel Xeon processor X5660, 2.80 GHz, 12 MB cache, 1333 MHz memory, Six-Core Intel Xeon processor X5667, 3.06 GHz, 12 MB cache, 1333 MHz memory, Quad-Core Intel Xeon processor X5670, 2.93 GHz, 12 MB cache, 1333 MHz memory, Six-Core Intel Xeon processor X5672, 3.20 GHz, 12 MB cache 1333 MHz memory, Quad-Core Intel Xeon processor X5675, 3.06 GHz, 12 MB cache 1333 MHz memory, Six-Core Intel Xeon processor X5677, 3.46 GHz, 12 MB cache 1333 MHz memory, Quad-Core Intel Xeon processor X5680, 3.33 GHz, 12 MB cache, 1333 MHz memory, Six-Core Intel Xeon processor X5687, 3.60 GHz, 12 MB cache 1333 MHz memory, Quad-Core Intel Xeon processor X5690, 3.46 GHz, 12 MB cache 1333 MHz memory, Six-Core
Chipset	Intel 5520 (Dual)
Memory[4]	12 DIMM slots, up to 192 GB, 6-channel DDR3 1333 MHz, 3 channels per CPU (actual memory speed dependent on processor capability)
Drive controllers[5]	Integrated 6-channel SATA 3 Gb/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; Optional LSI 9260-8i 8-port SAS HW RAID 0, 1, 5, 10 capable
Hard drive(s)[6]	Up to (5) 3.5-inch 7200 rpm SATA drives: 160, 250, 320, 500 GB, 1, 1.5, 2 TB, 10 TB max; Up to (6) 2.5-inch 10K rpm SATA drives: 160, 300, 600 GB SFF, 3.6 TB max; Up to (5) 3.5-inch 15K rpm SAS drives: 300, 450, 600 GB, 3 TB max; Up to (5) 2.5-inch SATA solid state drives: Intel X25-M 160 GB, 800 GB max
Optical drives[7,8]	DVD-ROM, DVD+/-RW, Slot-load DVD+/-RW, HP Blu-ray Writer
Drive bays	3 external 5.25-inch bays, 4 internal 3.5-inch bays, Up to 4 eSATA, Up to 8 external SAS
Slots	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

Graphics (dual graphics on selected cards)

Professional 2D:	NVIDIA Quadro NVS 295 (256 MB), NVIDIA NVS 300 (512 MB), AMD FirePro 2270 (512 MB)
Entry 3D:	NVIDIA Quadro FX 380 (256 MB), NVIDIA Quadro FX 580 (512 MB), ATI FirePro V3800 (512 MB), ATI FirePro V4800 (1 GB), NVIDIA Quadro 600 (1 GB)
Midrange 3D:	NVIDIA Quadro FX 1800 (768 MB), ATI FirePro V5800 (1 GB), NVIDIA Quadro 2000 (1 GB)
High-end 3D:	NVIDIA Quadro FX 3800 (1 GB), NVIDIA Quadro FX 4800 (1.5 GB), NVIDIA Quadro FX 5800 (4 GB), ATI FirePro V8800 (2 GB), NVIDIA Quadro 4000 (2 GB), NVIDIA Quadro 5000 (2.5 GB), NVIDIA Quadro 6000 (6 GB), NVIDIA Tesla C1060, NVIDIA Tesla C2050

Audio	High-definition integrated Realtek ALC262 Audio, optional Creative X-Fi Titanium PCIe Audio Card, optional HP Thin USB Powered Speakers
Network	Integrated Dual Broadcom 5764 LAN, Infineon TPM 1.2 Controller, Optional Broadcom NIC, Optional Intel NIC

Ports

Front:	3 USB 2.0, 1 IEEE 1394a, 1 microphone in, 1 headphone out, HP 22-in-1 Media Card Reader (optional)
Rear:	6 USB 2.0, 1 IEEE 1394a, 1 audio in, 1 audio out, 1 microphone in, 2 PS/2, 2 RJ-45 to integrated Gb LAN, 1 serial
Internal:	3 USB 2.0

Input devices	PS/2 standard keyboard, USB standard keyboard, USB Smart Card Keyboard, PS/2 optical scroll mouse, USB 2-button optical scroll mouse, USB 3-button optical mouse, USB SpaceExplorer, USB SpacePilot, USB Laser Scroll Mouse
Dimensions (H x W x D)	17.5 x 8.0 x 20.7 in (44.51 x 20.35 x 52.65 cm)
Power supply	850 watts 85% efficient power supply or 1110 watts 89% efficient power supply; direct connect power supplies
Monitors (screen size diagonally measured)	HP ZR30w 30-inch S-IPS LCD Monitor, HP LP3065 30-inch Widescreen LCD Monitor, HP DreamColor LP2480zx Professional Display (24-inch diagonal widescreen), HP ZR24w 24-inch S-IPS LCD Monitor, HP ZR22w 21.5-inch S-IPS LCD Monitor, HP LP2065 20-inch LCD Monitor
Warranty	Limited three-year Mon-Fri 8-5 next business day,[9] parts, labor and 24x7 phone support; terms and conditions may vary.

*   Windows 7 systems may require upgraded and/or separately purchased hardware and/or a DVD drive to install the Windows 7 software and take full advantage of Windows 7 functionality. See http://www.microsoft.com/windows/windows-7/ for details.

[1]   Quad- and six-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.
[2]   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 for more information.
[3]   Intel's numbering is not a measurement of higher performance.
[4]   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.
[5]   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.
[6]   For hard drives, 1 GB = 1 billion bytes. 1 TB = 1 trillion bytes. Actual formatted capacity is less. Up to 20 GB of hard drive (or system disk) is reserved for the system recovery software for Windows 7.
[7]   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.
[8]   As Blu-ray is a new format containing new technologies, certain disc, digital connection, compatibility and/or performance issues may arise, and do not constitute defects in the product. Flawless playback on all systems is not guaranteed. In order for some Blu-ray titles to play, they may require a DVI or HDMI digital connection and your display may require HDCP support. HD-DVD movies cannot be played on this workstation.
[9]   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. Additional HP Care Pack Services information by product is available at www.hp.com/go/carepack. Service levels and response times for HP Care Packs may vary depending on your geographic location.