

# hp Z1 Workstation



## The world's first 27" all-in-one workstation.

### Open Possibility.

Experience the simplicity of all-in-one design with the HP Z1 Workstation. Enjoy the control of easily swapping out parts on your own. Add a hard drive, upgrade memory, or access the graphics card by snapping it open. Enhance your work with the HD Webcam, SRS Premium Sound processing and whisper-quiet acoustics. Unleash your creativity on a workstation that's worthy of it.

### Workstation Performance Without Compromise.

Bring your ideas to life faster with the accelerated performance of the HP Z1 Workstation. The only all-in-one workstation with quad-core Intel® Xeon® processors includes ISV certifications, HP Performance Advisor and HP Remote Graphic Software, giving you the professional features you expect from a HP Workstation. Professional graphics and ECC memory make renders faster and crashes a thing of the past. Experience the HP Z1 Workstation and stay one step ahead of your imagination.

### High Performance Graphics. Incredible from Every Angle.

See your work more clearly on a 27" diagonal White LED display<sup>1</sup> that supports over a billion colors.<sup>3</sup> With a wide, 178 degree viewing angle and an IPS panel, the HP Z1 Workstation display is professional any way you look at it. With professional NVIDIA Quadro graphics for blazing fast renders and performance, the HP Z1 gives you the time to be your creative best.

### Build the Machine You Want to Drive.

Customize the HP Z1 Workstation the way you want to with a variety of I/O options, including USB 3.0 for blazing fast speeds and your choice of optical drives, like the slot-load Blu-ray Writer.<sup>4</sup> Choose from a variety of storage types, including 7.2K and 10K SATA, SSD options, optional RAID configurations and a media card reader.



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HP recommends Windows® 7.

[www.hp.com/zworkstations](http://www.hp.com/zworkstations)

<b>Form Factor</b>	All-in-one					
<b>Available Operating Systems*</b>	Genuine Microsoft® Windows® 7 Professional 32-Bit Genuine Microsoft® Windows® 7 Professional 64-bit Genuine Microsoft Windows 7 Professional 32-Bit Low Cost Genuine Microsoft Windows 7 Professional 64-Bit Low Cost HP Linux Installer Kit** SUSE Linux Enterprise Desktop 11 China SUSE Linux Enterprise Desktop 11 WW SUSE Linux Enterprise Desktop 11 BRI					
<b>Available Processors<sup>5,6,7</sup></b>	Processor	GHz	Cache	Number of Cores	Watts	Integrated Graphics
	Intel® Core™ i3-2120	3.3	3 MB	2	65W	Intel® HD Graphics 2000
	Intel® Xeon® E3-1245	3.3	8 MB	4	95W	Intel® HD Graphics P3000
	Intel® Xeon® E3-1280	3.5	8 MB	4	95W	N/A
<b>Chipset</b>	Intel® C206 Chipset					
<b>Memory<sup>8,9</sup></b>	Four Memory slots. Up to 32 GB, DDR3 ECC/ 8 GB DDR3 nECC, 1600MHz					
<b>Drive Controllers</b>	N/A					
<b>Storage<sup>10,11</sup></b>	SATA 7200 3.5-in. drives: 250, 500 GB, 1, 2 TB; SATA 10K 2.5-in. Drives: 300, 600GB; SATA Solid State Drives: 160, 300 GB					
<b>Optical Storage</b>	DVD +/- RW Super-Multi <sup>12</sup> Slot-Load or Blu-ray <sup>4</sup> Writer Slot-Load					
<b>Expansion (Slots and Bays)</b>	Up to 2 internal 2.5-in. HDDs, Up to 1 internal 3.5-in. HDD 4 slots: 1 PCIe x16 full, 3 miniPCIe					
<b>Slots</b>	4 slots: 1 PCIe x16 full, 3 miniPCIe					
<b>Available Graphics (dual graphics on selected cards)</b>	Integrated: Intel HD Graphics 2000, Intel HD Graphics P3000 Entry 3D: NVIDIA Q500M Graphics Midrange 3D: NVIDIA Q1000M Graphics, NVIDIA Q3000M Graphics High-end 3D: NVIDIA Q4000M Graphics					
<b>Webcam</b>	HD 1080p 2.0 megapixel webcam					
<b>Audio</b>	SRS Premium Sound, Dual-cone front-facing stereo speakers					
<b>Network<sup>13,14</sup></b>	Intel Gb LAN, 802.11a/b/g/n Wireless LAN, Bluetooth 2.1, 2.1+EDR, 3.0 and 3.0+HS					
<b>Ports</b>	Side: 2 USB 3.0, 1 IEEE 1394a, Mic, Headphone, 6-in-1 Media Card Reader Rear: 4 USB 2.0, RJ-45 Gb-LAN, Line-in, Line-out, Display Port In/Out, SPDIF, Subwoofer Internal: 5 USB 2.0					
<b>Input Devices</b>	HP Wireless Keyboard and Mouse; HP USB Optical Mouse; HP USB 1000dpi Laser Mouse; HP USB Keyboard; HP USB Optical 3-Button Mouse (AMO)					
<b>Dimensions with Stand</b>	Height: 23.0 inches (58.42 cm) Width: 26.0 inches (66.04 cm) Depth: 16.5 inches (41.91 cm)					
<b>Power Supply</b>	400W, 90% Efficient					
<b>Monitor (screen size diagonally measured)</b>	27-inch, 2560x1440 pixel, diagonal White LED IPS display (support for up to 1.07 billion colors) <sup>3</sup>					
<b>Display Support</b>	Supports up to one external display via display port					
<b>Compatible Secondary Displays (screen size diagonally measured)</b>	HP DreamColor LP2480zx Professional Display, HP ZR30w 30-inch S-IPS LCD Monitor, HP ZR2740w 27-inch LED Backlit IPS Monitor, HP ZR2440w 24-inch LED Backlit IPS Monitor, HP ZR24w 24-inch S-IPS LCD Monitor, HP ZR2240w 21.5-inch LED Backlit IPS Monitor, HP ZR2040w 20-inch LED Backlit IPS Monitor					
<b>Keyboards and Mice</b>	HP Wireless Keyboard and Mouse; HP USB Optical Mouse; HP USB 1000dpi Laser Mouse; HP USB Keyboard; HP USB Optical 3-Button Mouse (AMO)					
<b>Warranty<sup>15</sup></b>	Limited three-year Mon-Fri 8-5 next business day, 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/windows7/> for details.

\*\* Linux available 2nd calendar quarter 2012 (CQ2'12)

1 Refers to diagonal measurement of display.

2 All specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

3 1.07 billion viewable colors through A-FRC technology.

4 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.

5 Dual-Core and 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; Not all customers or software applications will necessarily benefit from use of these technologies.

6 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 <http://www.intel.com/info/em64t> for more information.

7 Intel's numbering is not a measurement of higher performance.

8 Each processor supports up to 2 channels of DDR3 memory. To realize full performance at least 1 DIMM must be inserted into each channel.

9 Intel® Xeon E3, Intel Core i3 and Intel Pentium processors can support either ECC or non-ECC memory. Intel Core i5/i7 processors only support non-ECC memory.

10 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.

11 For hard drives, 1 GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 8 GB of hard drive (or system disk) is reserved for the system recovery software for Windows XP and XP Pro, up to 12 GB for Windows Vista, and up to 20 GB for Windows 7.

12 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.

Note that DVD-RAM cannot read or write to 2.6 GB Single Sided/5.2 GB Double Sided - Version 1.0 media.

13 Wireless use requires separately purchased service contract. Check with your local vendor for coverage area and availability in your area. Connection and speeds will vary due to location, environment, network conditions, and other factors.

14 Wireless access point and Internet service required. Availability of public wireless access points limited.

15 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 <http://www.hp.com/go/lookuppool>. Additional HP Care Pack Services information by product is available at <http://www.hp.com/go/carepack>. Service levels and response times for HP Care Packs may vary depending on your geographic location.

Select screen images courtesy of Autodesk and Local Motors, Inc.

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