# **HP Z1 G2 Workstation**

Our most innovative all-in-one workstation with a brilliant display and the latest technologies in an elegant, easily customizable design.





## Spark Creativity.

Bring ideas to life faster than ever with the Intel<sup>®</sup> Xeon<sup>®</sup> processor, NVIDIA Quadro graphics, ECC memory and a wide range of ISV certifications. Be wowed and do more with features enabled by HP's cutting-edge engineering, including a high-end professional MXM Graphics cooling module, optional multiple hard drives<sup>1</sup> and an adjustable custom display stand. Connect in a flash and strike productivity with optional high-performance Thunderbolt<sup>™</sup> 2.0 ports<sup>1,2</sup> located on the side of the Z1 G2 for easy accessibility.

Take computing performance to another level with more efficient processing thanks to 4th generational Intel® Core™/Xeon® E3 processors.<sup>3</sup> A wide range of professional 3D graphics options from NVIDIA give you the confidence that you're working with the very best tools available. Or, choose Intel's new integrated graphics for the ultimate visual experience.<sup>1,4</sup>

## Powerful and refined.

Change most components<sup>5</sup> or make upgrades on your own without tools or a service technician. Simply snap open the chassis and customize to fit your needs. Your most frequently used data is quickly accessible on the HP Z1 G2 Workstation with optional mSATA storage technology that provides fast storage and cache for OS and applications.<sup>1</sup>

#### Versatile view.

Reach for success on the HP Z1 G2 Workstation with the optional 10-point touchscreen.<sup>1</sup> Get creativity flowing and let your fingers fly over the stunning edge-to-edge glass display. Step into the light. Reduce reflection and work with clarity on the HP Z1 G2 Workstation with optional no-glass, anti-glare display.<sup>1</sup>

#### HP Z1 G2 Workstation

Form Factor	All-in-one Windows 8.1 Pro 64 <sup>6</sup> Windows 7 Professional 64 (available through downgrade rights from Windows 8.1 Pro 64 (National Academic only))* Windows 7 Professional 64 (available through downgrade rights from Windows 8.1 Pro 64)* Windows 7 Professional 64* (National Academic) Windows 8.1 Emerging Markets Single-Language 64-bit OS HP Linux Installer Kit SUSE Linux Enterprise Desktop 11 (90 day support)					
Available Operating Systems						
Available Processors <sup>3</sup>	Processor	GHz	Cache	Cores	Hyper-Threading	Integrated HD Graphics
				4		
	Intel® Xeon® E3-1280v3 Intel® Xeon® E3-1245v3	3.6 3.4	8 MB 8 MB	4	Y Y	N/A P4600
	Intel® Xeon® E3-1225v3	3.2	8 MB	4	N/A	P4600
	Intel® Xeon® E3-1281v3	3.7	8 MB	4	Ŷ	N/A
	Intel® Xeon® E3-1246v3	3.5	8 MB	4	Y	P4600
	Intel <sup>®</sup> Xeon <sup>®</sup> E3-1226v3	3.3	8 MB	4	Y	P4600
	Intel® Core™ i7-4790	3.6	8 MB	4	Y	4600
	Intel® Core™ i5-4590	3.3	6 MB	4	N/A	4600
	Intel® Core™ i5-4570	3.2	6 MB	4	N/A	4600
	Intel® Core™ i3-4150	3.5	3 MB	2	Y	4400
	Intel® Core™ i3-4130	3.4	3 MB	2	Y	4400
hipset/BIOS	Intel® C226 Chipset					
Memory <sup>7,8,9</sup>	Up to 32 GB ECC or 16 GB non-ECC unbuffered DDR3 1866 MHz DIMMS; 4 DIMM slots					
Drive Controllers	Integrated Serial ATA interfaces (3x 6Gb/s SATA)					
Storage <sup>10,11</sup>	Up to (1) 1500 SSD drives, 180 GB; Up to (1) 3.5-inch 7200 rpm SATA drives: 500 GB, 1, 2 or 3 TB; Up to (2) 2.5-inch 10K rpm SATA drives: 250, 500 GB, 1 TB; (2 TB max); Up to (2) 2.5-inch SATA SDD drives: 128, 256, 512 GB, 1 TB (2 TB max); Up to (1) mSATA SDD drives: 256 GB; Up to (1) 1500 SED drive 180 GB; Up to (1) 2.5-inch SED SATA drives, 256 GB; Up to (1) SATA SSD drives, 240 GB, 480 GB					
Optical Storage <sup>12,13</sup>	1 Optical drive: Slim tray-load Blu-ray writer; Slim tray-load DVD-ROM; Slim tray-load DVD RW SuperMulti writer					
Display	27" diagonal IPS 2 LED backlit widescreen LCD (2560 x 1440) with 2 MP 1080p webcam and optional touch					
Available Graphics	Integrated:Intel HD Graphics 4400 (Core i3); Intel HD Graphics 4600 (Core i5); Intel HD Graphics P4600 (Xeon E3-12x5v3)Entry 3D:NVIDIA Quadro K610M (1 GB)Midrange 3D:NVIDIA Quadro K2100M (2 GB)High-end 3D:NVIDIA Quadro K3100M (4 GB); NVIDIA Quadro K4100M (4 GB)Note: If a discrete graphics card is installed, Intel integrated graphics is disabled. All discrete graphics cards are PCIe.					
Drive Bays	(1) 3.5" or (2) 2.5" bays					
Slots	1 MXM; 2 mini-PCIe/mSATA (full-length)					
Network <sup>14,15</sup>	Integrated Intel I217LM PCIe Gigabit controller (Intel vPro with Intel AMT 9.0); Integrated Intel dual-band AC 7260 802.11 ac wireless LAN & Bluetooth 4 combo card					
Ports	Side:2x USB 3.0 port (1 charging data port), 2x Thunderbolt 2™2 (optional), 1 Microphone in, 1 Headset out, 1 SD 4.0 media card readerRear:4x USB 2.0 ports, 1x DisplayPort 1.1, 1 audio line in, 1 audio line out, 1 RJ-45, 1 Subwoofer Output, 1 optical S/PDIF OutputInternal:USB 2.0 Type A and 2 USB 2.0 on 9-pin header (not available on touch capable option)					
Remote Technology	HP Remote Graphics Software (RGS)					
Dimensions with Stand (HxWxD)	20.8 in x 26 in x 16.5 in (HxWxD) (52.83 X 66.04 X 41.91cm) 47 lb (21.32 kg) Note: Maximum system weight with stand. Exact weight depends upon configuration					
Power Supply	400 Watt 90%					
Software <sup>16</sup>	HP Performance Advisor; HP Remote Graphics Software 6.0; PDF Complete - Corporate Edition; MS Office Home & Business 2013 <sup>17</sup>					
Security	HP Chassis Intrusion Sensor; HP Keyed Cable Lock Kit (optional)					
Certifications	ENERGY STAR <sup>®</sup> qualified configurations available, Low Halogen, <sup>18</sup> EPEAT Gold					
Warranty <sup>19</sup>	On-site Warranty and Service; Limited one-, three-, four- and five-year options available. Mon-Fri 8-5 next business day, parts, labor and 24x7 phone support, terms and conditions may vary.					



#### **Recommended Accessories**

- HP DreamColor LP2480zx Professional Display (GV546A8)
- HP Z Display Z30i 30-inch IPS 2 LED Backlit Monitor (D7P94A8)
- HP Z Display Z27i 27-inch IPS 2 LED Backlit Monitor (D7P92A8)
- HP Z Display Z24i 24-inch IPS 2 LED Backlit Monitor
- HP Z Display Z23i 23-inch IPS 2 LED Backlit Monitor
- HP Z Display Z22i 21.5-inch IPS 2 LED Backlit Monitor
- NVIDIA Quadro K4100M 4 GB Graphics (E5Z77AA)
- HP Thunderbolt<sup>™</sup> 2-Port AiO Module<sup>2</sup> (E5Z73AA)
- Micron M550 512 GB SATA SSD (F3C95AA)

#### Learn more hp.com/go/Z1

- \* This system is preinstalled with Windows 7 Professional software and also comes with a license and media for Windows 8.1 Pro software. You may only use one version of the Windows software at a time. Switching between versions will require you to uninstall one version and install the other version. You must back up all data (files, photos, etc.) before uninstalling and installing operating systems to avoid loss of your data.
- 1. Sold separately or as an optional feature.
- 2. Thunderbolt<sup>™</sup> 2 is planned to be available via an optional add-in card in early 2014 on the Z1 G2. Thunderbolt is new technology. Thunderbolt cable and Thunderbolt device (sold separately) must be compatible with Windows. To determine whether your device is Thunderbolt Certified for Windows, see thunderbolttechnology.net/products.
- 3. Multi-Core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. 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. Intel's numbering is not a measurement of higher performance.
- 4. Graphics options and support vary by region.
- 5. The power supply, graphics card, hard drives, optical drive, system-cooling blower, and memory can be accessed, and removed without tools. Tools may be required for all other components.
- 6. Not all features are available in all editions of Windows 8.1. Systems may require upgraded and/or separately purchased hardware, drivers and/or software to take full advantage of Windows 8.1 functionality. See microsoft.com for details.
- 7. Each processor supports up to 2 channels of DDR3 memory. To realize full performance at least 1 DIMM must be inserted into each channel. Actual memory speeds dependent on processor capability.
- 8. Intel<sup>®</sup> Xeon<sup>®</sup> E3 and Intel<sup>®</sup> Core<sup>™</sup> i3 processors can support either ECC or non-ECC memory. Intel<sup>®</sup> Core<sup>™</sup> i5 and i7 processors only support non-ECC memory.
- 9. The CPU determines the speed at which the memory is clocked. If a 1600 MHz capable CPU is used in the system, the maximum speed the memory will run at is 1600 MHz regardless of the specified speed of the memory.
- 10. For hard drives, 1 GB = 1 billion bytes. 1 TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB of system disk is reserved for system recovery software.
- 11. 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 <u>h2000.www2.hp.com/bc/docs/support/SupportManual/c00060684/c00060684.pdf</u> for RAID capabilities with Linux.
- 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 use. 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. 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.
- 13. With Blu-Ray, certain 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.
- 14. 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.
- 15. Wireless access point and Internet service required. Availability of public wireless access points limited.
- 16. HP Performance Advisor and HP Remote Graphics Software require internet access.
- 17. Buy Office.
- 18. This product is low halogen except for power cords, cables and peripherals. Service parts obtained after purchase may not be low halogen.
- 19. 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 product, see hp.com/go/cpc.

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