HP recommends Windows® 7.

HP Z420 Workstation

Expand your power.

Performance you want. Value you need.

The HP Z420 gives you professional expandability in an accessible tool-free mini-tower form factor—all at a great price. With up to 8 discrete processing cores, the latest processing and I/O power from Intel®, and the latest graphics technology from leading graphics providers, the HP Z420 has the power you need to get the job done.

Designed With Ease.

Enjoy the control that comes with being able to swap out parts or make upgrades on your own. The HP Z420 Workstation features a smart chassis that offers tool-less access to the inside, easy configurability and an optional optical bay handle for seamless deployment. And with optional liquid cooling designed to deliver whisper-quiet performance, the HP Z420 is built to make your work flow more smoothly.

Enjoy Superb Performance.

Achieve the highest performance available in a single-processer personal workstation. The HP Z420 Workstations offers your choice of Intel® Xeon® E5-1600 and E5-2600 series processors[1,2,3]—with base clock frequencies of up to 3.6 GHz and the new Intel® C602 chipset. Delivering support for up to 8 cores of processing power, the HP Z420 never slows you down.

Build It Your Way.

Build the HP Z420 Workstation the way you want with multiple SATA and SAS RAID configuration options that support a wide range of high-performance, high capacity storage solutions. Always know you're a step ahead with 8 DIMM slots in 4-channel memory architecture, delivering up to 64GB of 1600 MHz memory.

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Form Factor	Convertible minitower
Available Operating Systems	Genuine Windows® 7 Professional 32-bit Genuine Windows® 7 Professional 64-bit Genuine Windows® 7 Ultimate 64-bit HP Linux Installer Kit SUSE Linux Enterprise Desktop 11 Red Hat Enterprise Linux Desktop/Workstation (1 year paper license; no preinstalled OS)

Available Processors[1,2,3,4]

Processor	GHz	Cache	Memory	Cores	Hyper-Threading	Intel® vPro™ Technology	Intel® Turbo Boost Technology[5]
Intel® Xeon® Processor E5-2687W	3.1	20 MB	1600 MHz	8	Y	Y	3, 7
Intel® Xeon® Processor E5-2665	2.4	20 MB	1600 MHz	8	Y	Y	4, 7
Intel® Xeon® Processor E5-1660	3.3	15 MB	1600 MHz	6	Y	Y	3, 6
Intel® Xeon® Processor E5-1650	3.2	12 MB	1600 MHz	6	Y	Y	3, 6
Intel® Xeon® Processor E5-1620	3.6	10 MB	1600 MHz	4	Y	Y	2, 3
Intel® Xeon® Processor E5-1607	3.0	10 MB	1066 MHz	4	N	Y	N/A
Intel® Xeon® Processor E5-1603	2.8	10 MB	1066 MHz	4	N	Y	N/A

Chipset	Intel® C602 Chipset
Memory[6]	8 DIMM slots, Up to 64 GB ECC unbuffered DDR3 1600 MHz; 4 channels per CPU
Drive Controllers	Integrated 6-channel SATA controller: 2 ports 6 Gb/s + 4 ports 3 Gb/s, RAID 0, 1, 5, 10 capable; Optional SAS controller: LSI 9212-4i 4-port SAS/SATA 6 Gb/s, RAID 0, 1, 10 capable
Storage[7,8]	Up to (4) 3.5-inch 7200 rpm SATA drives: 250, 500 GB, 1, 2, 3 TB, 11 TB max; Up to (4) 2.5-inch 10K rpm SATA drives: 300 GB, 1.2 TB max; Up to (4) 2.5-inch 10K rpm SAS drives: 300, 600 GB, 2.4 TB max; Up to (4) 3.5-inch 15K rpm SAS drives: 300, 450, 600 GB, 2.4 TB max; Up to (4) 2.5-inch SATA solid state drives: 128, 160, 256, 300 GB, 1.2 TB max; Note: Fourth drive occupies one external 5.25-inch bay
Optical Storage[9,10]	DVD-ROM, DVD+/-RW DL Super-Multi, Blu-ray Writer, 22-in-1 Media Card Reader
Drive Bays	3 external 5.25-inch bays, 3 internal 3.5-inch HDD bays (4 total when using 5.25-inch bay converters); up to 4 eSATA
Expansion Slots	2 PCI Express Gen3 x16 mechanical/electrical; 1 PCI Express Gen3 x8 mechanical/electrical; 1 PCI Express Gen2 x8 mechanical/x4 electrical; 1 PCI Express Gen2 x4 mechanical/x1 electrical; 1 Legacy PCI
Available Graphics[11]	Professional 2D: NVIDIA NVS 300, NVIDIA NVS 310,* NVIDIA Quadro NVS 450 Entry 3D: NVIDIA Quadro 410,* NVIDIA Quadro 600, AMD FirePro™ V3900, AMD FirePro™ V4900 Mid-range 3D: NVIDIA Quadro 2000, AMD FirePro™ V5900 High-end 3D: NVIDIA Quadro 4000, AMD FirePro™ V7900, NVIDIA Quadro 5000, NVIDIA Quadro 6000, NVIDIA Tesla C2075
Audio	Integrated Intel/Realtek HD ALC262 Audio; Creative Recon3D PCIe Audio Card; optional HP Thin USB Powered Speakers
Network	Integrated Intel GbE LAN; Infineon TPM 1.2 Controller; Optional Broadcom NIC; Optional Intel NIC
Ports	Front: 2 USB 3.0, 1 USB 2.0, 1 IEEE 1394a standard, 1 microphone in, 1 headphone out, HP 22-in-1 Media Card Reader (optional) Rear: 2 USB 3.0, 4 USB 2.0, 2 IEEE 1394b ports via optional add-in PCIe card, 1 audio in, 1 audio out, 1 microphone in, 2 PS/2, 1 RJ-45 to integrated Gigabit LAN, 1 serial via optional adapter Internal: 6 USB 2.0, supports up to three HP Internal USB Port Kits (one two-port kit on each 2x5 header)
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)	17.63 x 7.0 x 17.5 in (44.76 x 17.78 x 44.52 cm)
Power Supply	600 Watt 90% efficient power supply
Compatible Displays (screen size diagonally measured)	HP DreamColor LP2480zx Professional Display (24-inch diagonal widescreen), 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 ZR2240w 21.5-inch LED Backlit IPS Monitor, HP ZR2040w 20-inch LED Backlit IPS Monitor
Warranty[12]	Limited three-year Mon-Fri 8-5 next business day, parts, labor and 24x7 phone support, terms and conditions may vary. Extendable up to five years.

Screen images courtesy of Autodesk

* Available July 2012

1 Dual-, Quad-, Six- and Eight-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.
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 intel.com/info/em64t for more information.
3 Intel's numbering is not a measurement of higher performance.
4 Although the Intel Xeon E5-2600 processor family supports dual processors, the HP Z420 Workstation does not support dual processor configurations.
5 The specifications shown in this column represent the following: (all core maximum turbo steps, one core maximum turbo steps). Turbo boost stepping occurs in 100MHz increments. Processors that do not have turbo functionality are denoted as N/A. Intel® Turbo Boost technology requires a PC with a processor with Intel® Turbo Boost capability. Intel® Turbo Boost performance varies depending on hardware, software, and overall system configuration. Please visit intel.com/technology/turboboost for more information.
6 Each processor supports up to 4 channels of DDR3 memory. To realize full performance at least 1 DIMM must be inserted into each channel.
7 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 h20000.www2.hp.com/bc/docs/support/SupportManual/c00060684/c00060684.pdf for RAID capabilities with Linux
8 For hard drives, 1 GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less.
9 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.
10 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.
11 AMD graphics are not supported when there is greater than 32 GB of system memory present.
12 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 hp.com/go/lookuptool. Additional HP Care Pack Services information by product is available at hp.com/go/carepack. Service levels and response times for HP Care Packs may vary depending on your geographic location.

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