ProductSheet HP Workstation Z4 G4 Tower (643X2UT)

HP's best-selling performance workstation

Perfect for engineering, visualization and Machine Learning, HP's most popular workstation delivers disruptive performance for a wide spectrum of applications. With a choice of Intel[®] Xeon[®] or Core[™] X processors, and support for dual extreme graphics, you get all you need, nothing more.





HP recommends Windows 11 Pro for business Feature-rich functionality

The Z4 is ahead of its time with more standard features than any other single processor HP workstation. With multiple configuration options, you can choose the perfect blend of components that meet your performance requirements.

Visualization powerhouse

Visualize your project anytime with the power to move seamlessly between 3D CAD, rendering and simulation applications. The Z4 can easily handle tasks that require high frequency processing, multiple cores and high-powered GPUs for an optimized design process.

HP's most secure workstations

Advanced security features come standard on every Z4. Rest assured your device, identity and data are safe with security software like HP Client Security Suite Gen3[2] and HP Sure Start Gen3[10] featuring a self-healing BIOS.

Featuring

Intel® Xeon® W processor

Get optimized performance whether your professional application utilizes high core count or high frequency with the Intel® Xeon® W processor. ^[3]

Security is your top priority

The HP Wolf Pro Security Edition provides preconfigured enterprise-level PC protection for small and medium sized businesses.

Intel[®] Core[™] X-Series processors

Experience disruptive price-performance on multi-threaded applications, or combined workflows such as simulation based design, with Intel[®] Core[™] X-Series processors: the high-performance single-socket processors from Intel[®]. ^[8]

Graphics

Get serious about graphics and reach peak productivity with access to a breadth of NVIDIA® and AMD professional graphics from entry to high-end 3D.^[4]

Storage

Install pro-grade storage hardware and elevate your storage-bound apps without sacrificing standard PCIe slots.

Specifications

Operating system	Windows 11 Pro	
Processor family	Intel® Xeon® W processor	
Processor	Intel® Xeon® W-2223 (3.6 GHz base frequency, up to 3.9 GHz with Intel® Turbo Boost Technology, 8.25 MB L3 cache 4 cores) ^[6,7]	
Chipset	Intel® C422; Intel® X299 ^[26,27]	
Memory	16 GB DDR4-2933 MHz RAM (2 x 8 GB)	
Memory Slots	8 DIMM	
Internal Storage	512 GB HP Z Turbo Drive PCle® M.2 SSD	
Internal drive bays	Two 2.5" or 3.5"	
External drive bays	Two 5.25"	
Optical drive	Not included	
Compatible displays	All HP Z Displays and HP DreamColor Displays are supported.	
Minimum dimensions (W x D x H)	38.6 x 16.9 x 44.5 cm	
Minimum dimensions (W x D x H)	15.2 x 6.65 x 17.5 in	
Weight	Starting at 10.2 kg (Exact weight depends on configuration.)	
Weight	Starting at 22.4 lb (Exact weight depends on configuration.)	
Keyboard	HP USB Slim Business Keyboard	
Pointing device	HP USB optical mouse	
Ports	1 headset connector; 4 USB 3.1 (1 charging) (The Intel® Core™ X-Series processor configurations only have one RJ45 port and 5 Rear USB 3.1 Gen 1 ports available. The serial port is optional.)	
Expansion slots	1 PCle 3 x16; 2 M.2 PCle 3 x4	
Ports	1 headset connector; 2 USB 3.1 Gen 2 Type-C™; 2 USB 3.1 Gen1 (1 charging)	
Ports	1 audio-in; 1 audio-out; 1 PS/2 keyboard port; 1 PS/2 mouse port; 1 serial; 2 RJ-45 (1 GbE); 6 USB 3.1 Gen 1	
Power	750 W internal power supply, up to 90% efficiency, active PFC ^[22]	
Sustainable impact specifications	Low halogen	
Security management	Full volume encryption; HP Keyed Cable Lock Kit; HP Secure Erase; HP Sure Start Gen3; Kensington lock slot; Secure authentication; TPM 2.0 certified; HP Device Access Manager; HP Sure Click; HP BIOSphere Gen3; HP Client Security Manager Gen3; HP MIK/SCCM Gen2; Self Encrypting Drive (SED) ^[7,14,15,17,18,28]	
Software included	HP ProtectTools Security; ZCentral Remote Boost	
UPC number	(ABA) 196548063376; (ABC) 196548063383	
Manufacturer Warranty	On-site limited warranty and service with 3 year limited warranty and service offering delivers on-site, next business-day service for parts and labor and includes free telephone support 8 am - 5 pm. Global coverage ensures that any product purchased in one country and transferred to another, non-restricted country will remain fully covered under the original warranty and service offering. 24/7 operation will not void the HP warranty.	

Top Recommended Displays, Accessories and Services

Z Displays		
HP Z32 31.5-inch 4K UHD Display	1AA81A4	
Keyboards		
HP Wireless Premium Keyboard	Z9N41AA	
HP USB Premium Keyboard	Z9N40AA	
Graphics Cards		
NVIDIA Quadro RTX 4000 8GB (3)DP+USBc	5JV89AA	
NVIDIA Quadro RTX 8000 48GB (4)DP+USBc	6NB51AA	
NVIDIA Quadro GV100 32GB Graphics Card	3ME26AA	
DDR4 Memory		
HP 8GB (1x8GB) DDR4-2666 ECC Reg RAM	1XD84AA	
16GB (1x16GB) DDR4-2666 ECC Reg RAM	1XD85AA	
HP 16GB (1x16GB) DDR4 2933 UDIMM NECC Memory	7ZZ65AA	
PC SATA Hard Drives		
HP 4TB SATA 7200 Hard Drive	К4Т76АА	
PC Solid State Drives		
HP Z Turbo Drive Dual Pro 1TB SSD	4YF62AA	

Messaging Footnotes

[2] HP Client Security Suite Gen3 requires Windows and Intel® or AMD 7th Gen processors.

[3] Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.

[8] Windows 10 Pro is preinstalled. Windows 7 is not supported on the Intel[®] Core[™] X - Series processor configurations. Configurations with the Intel[®] Core[™] X processors support only a subset of the full features of the Z4 G4 system, including, but not limited to: memory type and maximum memory, PCIe slot configurations, M.2 storage capacity, GbE interface and manageability features. Please refer to the product QuickSpecs for complete details.

Technical Specifications Footnotes

[6] 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. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.

[7] Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See http://www.intel.com/technology/turboboost/ for more information.

[14] HP BIOSphere G3 requires Intel® 7th generation processors.

[15] HP Secure Erase: For the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method.

[17] HP MIK/SCCM - HP Manageability Integration Kit can be downloaded from http://www.hp.com/go/clientmanagement .

[18] HP Keyed Cable Lock Kit is available only as an aftermarket option.

[22] 465W and 750W power supply options are only available for Intel® Xeon® configurations.

[26] Choice of Intel Core X processor family will affect other configuration choices and system feature set availability; refer to the product Quickspecs for details.

[27] Intel® C422 for Intel® Xeon® configurations, Intel® X299 for Intel® Core™ X configurations.

[28] HP Sure Click is available on most HP PCs and supports Microsoft[®] Internet Explorer, Google Chrome, and Chromium[™]. Supported attachments include Microsoft Office (Word, Excel, PowerPoint) and PDF files in read only mode, when Microsoft Office or Adobe Acrobat are installed.

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