

# HP Z210 Convertible Minitower Workstation

Low-cost, high-performance mainstream value workstations

Do you crave workstation power on a PC budget? We have a workstation for that. The new HP Z210 Convertible Minitower (CMT) Workstations give you workstation-class performance and reliability with faster Xeon processors, ECC memory, professional graphics, enterprise-class storage and application certification at a very appealing price point.



HP recommends Windows® 7.

#### Meaningful innovation

The HP Z210 Workstations offer advanced workstation power and productivity at starting prices that rival traditional desktop computing systems.

- Easy access—Inside, with a tool-free chassis for component updates, and outside, with USB ports for quick peripheral connectivity
- Graphics choices—New Intel® HD Graphics
   P3000 choices and 2D and 3D professional graphics options from NVIDIA and AMD

#### Breakthrough performance

The HP Z210 Workstations offer up to a 20% performance improvement over the predecessor series products.

- Newest Intel technology—A wide selection of enterprise class, next generation Intel® Xeon® Processor E3-1200 Family including the high performance 3.5GHz Intel® Xeon® E3-1280, or 2nd generation Intel® Core™ i3/i5/i7 processors. Selected processors also support Intel® vProTM technology for the first time on workstations.
- Fine-tuned performance—Maintain your drivers, operating systems, and applications with HP Performance Advisor
- Compatible with practically any device—Expanded PCle, FireWire, and USB 2.0 or optional USB 3.0 interfaces; a range of SATA, eSATA, and storage bays; an HP Blu-ray Writer<sup>1</sup> and 22-in-1 media card reader
- Energy smart—HP's highest energy efficiency workstations so far, with 90% efficient power supplies and ENERGY STAR® v5 configurations available

#### Reliability where it counts

Deliver results and stay productively up and running with a confidence backed by in-depth engineering, testing, and quality assurance.

- Enterprise-class memory technology—Includes a choice of ECC memory configurations to help ensure data integrity and higher system uptime; lower-cost non-ECC memory options also available.
- Close ISV relationships—HP has invested in and developed an extensive partner ecosystem to ensure that our workstations are tested, proven and certified for the applications your work depends on-including MCAD, Architectural applications, Professional video editing and 3D animation among others.
- Image stability—HP Stable and Consistent options that last for the life of the platforms





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#### HP recommends Windows® 7.

Form Factor	Committee Michael
	Convertible Minitower
Operating system	Genuine Windows® 7 Professional 32 Genuine Windows® 7 Professional 64 Genuine Windows® 7 Professional 64 Novell SUSE Linux Enterprise Desktop 11 Red Hat Enterprise Linux WS 5 (drop-in-the-box only) HP Installer Kit for Linux HP Installer Kit for Linux includes drivers for 32-bit & 64-bit version of Red Hat Enterprise Linux WS 5 and 6, and 64-bit Novell SLED 11
Processor	Intel® Xeon® E3-1280 (3.50 GHz, 8 MB cache, 4 cores); Intel® Xeon® E3-1270 (3.40 GHz, 8 MB cache, 4 cores); Intel® Xeon® E3-1245 (3.30 GHz, 8 MB cache, 4 cores); Intel® Xeon® E3-1240 (3.30 GHz, 8 MB cache, 4 cores); Intel® Xeon® E3-1230 (3.20 GHz, 8 MB cache, 4 cores); Intel® Xeon® E3-1225 (3.10 GHz, 6 MB cache, 4 cores); Intel® Core™ i7-2600 (3.40 GHz, 8 MB cache, 4 cores); Intel® Core™ i7-2600 (3.40 GHz, 8 MB cache, 4 cores); Intel® Core™ i3-2100 (3.10 GHz, 3 MB cache, 2 cores); Intel® Core™ i3-2100 (3.10 GHz, 3 MB cache, 2 cores)
Chipset	Intel® PCH C206
Memory	Up to 32 GB ECC/16 GB non-ECC. ECC/non-ECC choice and actual memory speed dependent on processor capability. 32 GB ECC available when 8 GB DIMMs available in Q4 2011.
Internal Storage	SATA (7200 rpm) 250 GB up to 1.5 TB SATA (10000 rpm) 160 GB up to 600 GB SATA Solid State Drive up to 160 GB Integrated SATA (4 ports 3 Gb/s and 2 ports 6 Gb/s) with RAID 0, 1 supported. Requires identical hard drives (speeds, capacity, interface).
Removable media	SATA Blu-ray writer; SATA SuperMulti DVD writer; SATA DVD-ROM
Graphics	Integrated, Intel® HD Graphics 2000; Intel® HD Graphics P3000 Professional 2D, NVIDIA Quadro NVS 295 (256 MB); NVIDIA Quadro NVS 300 (512 MB); AMD FirePro 2270 (512 MB) Entry 3D, ATI FirePro V3800 (512 MB); ATI FirePro V4800 (1 GB); NVIDIA Quadro 400 (512 MB); NVIDIA Quadro 600 (1 GB) Mid-range 3D, ATI FirePro V5800 (1 GB); NVIDIA Quadro 2000 (1 GB) NVIDIA Quadro 4000 graphics available as after-market option only. Intel HD Graphics 2000 available on Intel dual-core i3 and quad core i5/i7 processors. Intel HD graphics P3000 available on select Xeon processors. All cards are PCIe.
Audio	Integrated High Definition Realtek ALC261 Audio with Line in, Line Out, Microphone, Headphone
Communications	Integrated Intel 82578LM; Broadcom 5761 NetXtreme Gigabit (optional); Intel Gigabit CT Desktop (optional)
Ports and Connectors	14 USB 2.0; 1 audio in; 2 audio out; 2 microphone in; 1 serial (optional); 1 parallel (optional); 2 PS/2; 1 RJ-45; 1 22-in-1 Media Card Reader (optional); 1 DisplayPort (optional); 1 DVH single link (optional); 1 IEEE 1394 (optional) 5 internal USB 2.0 ports available via two 2x5 and one 1x5 header. 1 IEEE 1394 via optional PCle card. 1 DVH single link and 1 DisplayPort output from Intel HD graphics (available on select processors only). Audio ports can be retasked to function as line in, line out, microphone or headphone.
Input Device	HP USB Standard Keyboard; HP PS/2 Standard Keyboard; HP USB CCID SmartCard Keyboard HP USB Laser Mouse; HP USB 2-Button Optical Scroll Mouse; HP PS/2 Optical Scroll Mouse; HP USB Optical 3-Button Mouse
Monitors	HP ZR30w 76,2 cm (30") S-IPS LCD Monitor, HP DreamColor LP2480zx Professional Display, HP ZR24w 61 cm (24") S-IPS LCD Monitor, HP ZR22w 54,6 cm (21.5") S-IPS LCD Monitor, HP LP2475w 61 cm (24") Widescreen LCD Monitor, HP LP2065 50,8 cm (20") LCD Monitor
Security	Solenoid Hood Lock & Hood Sensor (optional); Security Cable with Kensington Lock (optional); Business PC Security Lock Kit (optional); Trusted Platform Module (TPM) 1.2 (TPM module disabled where use is restricted by law)
Dimensions	17.8 x 45.5 x 44.7 cm Standard minitower orientation
Weight	Starting at 10.7 kg
Energy efficiency compliance	ENERGY STAR® 5.0 qualified configurations available
Power	400W 90% efficient, wide-ranging, Active Power Factor Correction
Expansion solutions	1 PCle Gen2 x16 mechanical (x16 electrical); 1 PCle Gen2 x16 mechanical (x4 electrical); 1 PCle Gen2 x8 mechanical (x4 electrical); 2 PCle Gen2 x1 mechanical (x1 electrical); 2 PCl; All slots are full-height. PCle Gen2 (x16 mechanical/x16 electrical) slot dedicated for graphics. 3 – 13.3 cm (5.25"); 3 – 8.9 cm (3.5")
Warranty	3-year worldwide parts, labour and next business day onsite service Terms and conditions may vary, restrictions apply

<sup>1</sup> 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. 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.

### For more information, please visit www.hp.com/eur/workstations

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## HP Z210 Convertible Minitower Workstation

#### HP recommends Windows® 7.

#### Accessories and Services

ATI FirePro V3800 512MB Graphics Card



This entry workstation solution with 512MB of GDDR3 frame buffer memory is ideally suited for work with large models and complex data sets plus a 30-bit display pipeline for accurate color reproduction and superior visual quality. Based on a new generation GPU with 400 Stream processor units, the ATI FirePro V3800 ultra parallel processing architecture maximizes throughput my automatically directing graphics horsepower where it's needed. Intelligent management of computational resources enables enhanced utilization of the GPU to enable real-time rendering of complex models and scenes while increasing frame rates when animating.

Product number: WL048AA

NVIDIA NVS 300 512MB Graphics Card



The NVIDIA® NVS<sup>™</sup> 300 high resolution, multi-display business graphics solution, designed for small and standard form factor systems, delivers reliable hardware and software for a stable business environment. Tested on leading business applications, NVIDIA NVS 300 is capable of driving two VGA, single link DVI, DisplayPort or HMDI displays. With NVIDIA Mosaic and nView® technologies built in, you can span and efficiently manage your entire Windows desktop across multiple displays.

Product number: XP612AA

NVIDIA Quadro 600 1.0GB Graphics Card



The low-profile NVIDIA Quadro 600 is the newest entry-level professional graphics solution, delivering maximum productivity and flexibility for engineers and designers.

Product number: WS093AA

HP 2 GB (1x2GB) DDR3-1333 MHz ECC DIMM



Upgrading your memory is a cost-effective way to improve system performance when insufficient memory and hard drive paging is slowing your applications down

Product number: FX699AA

HP 500 GB SATA 3.0 Gb/s NCQ 7200 rpm Hard Drive



Serial ATA Hard Drives maximise the performance of HP Workstations by providing the technologies to meet your increasing storage demands. These 500 GB drives offer all the capacity, reliability and performance you need.

Product number: PV943A

5-year Next Business Day Onsite



Receive 5 years of next business day onsite repair from an HP-qualified technician for your computing device, if the issue cannot be solved remotely.

Product number: U7943E

For more information, please visit www.hp.com/eur/hpoptions

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