




HP recommends Windows® 7.

			
HP EliteBook 8460w Mobile Workstation (Not available in all regions)	HP EliteBook 8560w Mobile Workstation	HP EliteBook 8760w Mobile Workstation	
Overview	<ul style="list-style-type: none">• Lightweight. Heavy Hitter.	<ul style="list-style-type: none">• Portable Powerhouse.	<ul style="list-style-type: none">• Power to Perform.
Operating systems	<ul style="list-style-type: none">• Genuine Windows® 7 Professional**• Genuine Windows® 7 Home Premium**• Genuine Windows® 7 Home Basic***• Genuine Windows® Vista® Home Basic***• FreeDOS	<ul style="list-style-type: none">• Genuine Windows® 7 Professional**• Genuine Windows® 7 Home Premium**• Genuine Windows® Vista® Home Basic***• FreeDOS	<ul style="list-style-type: none">• Genuine Windows® 7 Professional**• Genuine Windows® 7 Home Premium**• Genuine Windows® Vista® Business***• Genuine Windows® Vista® Home Basic***• FreeDOS
Processor/chipset/system bus	<ul style="list-style-type: none">• Intel® Core™ i5 or i7 Mobile Processor Family with Intel® Turbo Boost Technology^{1,2,3,12,13}• Mobile Intel QM67 Chipset• Intel vPro Technology (optional)	<ul style="list-style-type: none">• Intel® Core™ i5 or i7 Mobile Processor Family with Intel® Turbo Boost Technology^{1,2,3,12,13}• Mobile Intel QM67 Chipset• Intel vPro Technology (optional)	<ul style="list-style-type: none">• Intel® Core™ i5 or i7 Mobile Processor Family with Intel® Turbo Boost Technology^{1,2,3,12,13}• Mobile Intel QM67 Chipset• Intel vPro Technology (optional)
Slots available/maximum memory/number of memory channels⁴	<ul style="list-style-type: none">• 16 GB, 1333 MHz DDR3 SDRAM (Two SODIMMS for a total of 16 GB of memory)	<ul style="list-style-type: none">• 32 GB, 1333 MHz DDR3 SDRAM (Four SODIMMS for a total of 32 GB of memory is available on quad-core systems only.)	<ul style="list-style-type: none">• 32 GB, 1333 MHz DDR3 SDRAM (Four SODIMMS for a total of 32 GB of memory is available on quad-core systems only.)
Expansion slots	<ul style="list-style-type: none">• 1 Express Card/54• 1 Secure Digital/MMC Media Reader	<ul style="list-style-type: none">• 1 Express Card/54• 1 Secure Digital/MMC Media Reader	<ul style="list-style-type: none">• 1 Express Card/54• 1 Secure Digital/MMC Media Reader
Graphics	<ul style="list-style-type: none">• AMD FirePro™ M3900 with 1 GB dedicated GDDR3 video with AMD Eyefinity Technology for advanced multi-monitor support	<ul style="list-style-type: none">• AMD FirePro™ M5950 with 1 GB dedicated GDDR5 video memory with AMD Eyefinity Technology for advanced multi-monitor support• NVIDIA Quadro 1000M with 2 GB dedicated GDDR3 video (supports multiple external monitors via optional docking station)• NVIDIA Quadro 2000M with 2 GB dedicated GDDR3 video (supports multiple external monitors via optional docking station)	<ul style="list-style-type: none">• AMD FirePro™ M5950 with 1 GB dedicated GDDR5 video memory with AMD Eyefinity Technology for advanced multi-monitor support• NVIDIA Quadro 3000M with 2 GB dedicated GDDR5 video memory (supports multiple external monitors via optional docking station)• NVIDIA Quadro 4000M with 2 GB dedicated GDDR5 video memory (supports multiple external monitors via optional docking station)• NVIDIA Quadro 5010M with 4 GB dedicated GDDR5 video memory (supports multiple external monitors via optional docking station)
Displays	<ul style="list-style-type: none">• Choice of 14.0-in diagonal LED-backlit HD anti-glare (1366 x 768) or 14.0-in diagonal LED-backlit HD+ anti-glare (1600 x 900)	<ul style="list-style-type: none">• Choice of 15.6-in diagonal LED-backlit WVA anti-glare HD+ (1600 x 900), 15.6-in diagonal LED-backlit WVA anti-glare FHD (1920 x 1080) or 15.6-in diagonal LED-backlit UWVA anti-glare FHD DreamColor (1920 x 1080)	<ul style="list-style-type: none">• Choice of 17.3-inch diagonal LED-backlit WVA anti-glare HD+ (1600 x 900), 17.3-inch diagonal LED-backlit WVA anti-glare FHD (1920 x 1080), or 17.3-in diagonal LED-backlit UWVA anti-glare FHD DreamColor (1920 x 1080)
Controllers and HDs^{6,7}	<ul style="list-style-type: none">• 250/320/500/720 GB 7200 rpm SMART SATA II HDD, 320 GB 7200 rpm SED with HP 3D DriveGuard (Microsoft Windows® required)• 128/160/256 GB Solid State Drive, 256 GB SED Solid State Drive	<ul style="list-style-type: none">• 320/500/750 GB 7200 rpm SMART SATA II HDD, 320 GB 7200 rpm SED with HP 3D DriveGuard (Microsoft Windows® required)• 128/256 GB Solid State Drive, 256 GB SED Solid State Drive	<ul style="list-style-type: none">• 320/500/750 GB 7200 rpm SMART SATA II HDD, 320 GB 7200 rpm SED with HP 3D DriveGuard (Microsoft Windows® required)• 128/256 GB Solid State Drive, 256 GB SED Solid State Drive• Secondary storage also available on HP 8760w
Optical drives^{8,9,10}	<ul style="list-style-type: none">• 12.7 mm SATA optical drive or secondary hard drive: Blu-ray R/RE DVD+/-RW SuperMulti DL Drive, DVD+/-RW SuperMulti DL Drive, 500 GB 7200 rpm HDD (supports "Weight Saver" option)	<ul style="list-style-type: none">• 12.7 mm SATA optical drive or secondary hard drive: Blu-ray R/RE DVD+/-RW SuperMulti DL Drive, DVD+/-RW SuperMulti DL Drive, 500 GB 7200 rpm HDD , 320 GB 7200rpm SED HDD	<ul style="list-style-type: none">• 12.7 mm SATA optical drive or secondary hard drive: Blu-ray R/RE DVD+/-RW SuperMulti DL Drive, DVD+/-RW SuperMulti DL Drive, 500 GB 7200 rpm HDD
Communications¹¹	<ul style="list-style-type: none">• Integrated Intel 82579LM Gigabit Network Connection (vPro) and 56K v.92 modem• Optional HP hs2340 HSPA+ Mobile Broadband Module• Optional HP un2420 EV-DO/HSPA Mobile Broadband Module• Intel® Centrino® 802.11a/b/g/n• Bluetooth®¹⁴ 2.1+ EDR Wireless Technology• HP Connection Manager 4.0	<ul style="list-style-type: none">• Integrated Intel 82579LM Gigabit Network Connection (vPro) and 56K v.92 modem• Optional HP hs2340 HSPA+ Mobile Broadband Module• Optional HP un2420 EV-DO/HSPA Mobile Broadband Module• Intel® Centrino® 802.11a/b/g/n• Bluetooth®¹⁴ 2.1+ EDR Wireless Technology• HP Connection Manager 4.0	<ul style="list-style-type: none">• Integrated Intel 82579LM Gigabit Network Connection (vPro) and 56K v.92 modem• Optional HP hs2340 HSPA+ Mobile Broadband Module• Optional HP un2420 EV-DO/HSPA Mobile Broadband Module• Intel® Centrino® 802.11a/b/g/n• Bluetooth®¹⁴ 2.1+ EDR Wireless Technology• HP Connection Manager 4.0

* Linux available 2nd calendar quarter 2012 (CQ2'12)
** 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 www.microsoft.com/windows/windows-7 for details.
*** Certain Windows Vista product features require advanced or additional hardware. See www.microsoft.com/windowsvista/getready/hardwarereqs.mspx and www.microsoft.com/windowsvista/getready/capable.mspx for details. Windows Vista Upgrade Advisor can help you determine which features of Windows Vista will run on your computer. To download the tool, visit www.windowsvista.com/upgradeadvisor.

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 Intel's numbering is not a measurement of higher performance.
³ 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 32bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. See www.intel.com/info/em64t for more information.
⁴ Each processor supports up to 2 channels (HP Z210 CMT/HP Z210 SFF) or 4 channels (HP Z420/HP Z620/HP Z820) of DDR3 memory. To realize full performance at least 1 DIMM must be inserted into each channel. To get full 8 channel support, 2 processors MUST be installed.
⁵ NVIDIA Tesla C2075 on the HP Z820 requires the 1125W power supply.
⁶ 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. HP Z200 does not support RAID 10 Because of drive bay limitation.
⁷ 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.
⁸ 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.
⁹ 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.
¹⁰ 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.
¹¹ The term "10/100/1000" or "Gigabit" Ethernet indicates compliance with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.
¹² This workstation does not support the Intel Core 2 Extreme processor over-clocking feature.
¹³ 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. See www.intel.com/technology/turboboost for more information.
¹⁴ Bluetooth is a trademark owned by its proprietor and used by Hewlett-Packard Company under license.
Select screen images courtesy of Autodesk and Cannon Design

HP recommends Windows® 7.



Workstations

Quick Reference Guide



A FAMILY OF OVERACHIEVERS.



Learn more at www.hp.com/zworkstations

Meet Our HP Workstation Family—Compare Features

HP recommends Windows® 7.

					
HP Z1			HP Z210 SFF		
Overview		• Power without the tower.		• Small package. Big punch.	
Operating systems		• Genuine Windows® 7 Professional 32-Bit • Genuine Windows® 7 Professional 64-bit • HP Linux Installer Kit* • SUSE Linux Enterprise Desktop 11* • Red Hat Enterprise Linux Desktop/Workstation* (1 year paper license; no preinstalled OS)		• Genuine Windows® 7 Professional or other editions available • HP Installer Kit for Linux* (includes drivers for both 32-bit and 64-bit OS versions of Red Hat Enterprise Linux and SUSE Linux Enterprise Desktop 11) • SUSE Linux Enterprise Desktop 11* • Red Hat Enterprise Linux Desktop/Workstation* (1 year paper license; no preinstalled OS)	
Processor/chipset/system bus		• Intel® Core™ i3-2000 Processor Series • Intel® Xeon® Processor E3-1200 Series ^{1,2,3} • Intel® C206 Chipset		• 2 nd Generation Intel® Core™ i3, i5, and i7 Processors and Intel® Xeon® Processor E3 Series ^{1,2,3} • Intel® C206 Chipset	
Slots available/maximum memory/number of memory channels ⁴		• 4 DIMM slots, up to 32 GB, DDR3 ECC/ 8 GB DDR3 nECC, 1600MHz • 2 channels per CPU		• 4 DIMM slots, up to 16 GB, DDR3 1333 MHz • 2 channels per CPU	
Expansion slots		• 1 PCIe x 16 full • 3 miniPCIe		• 1 PCI Express Gen2 x16 mechanical/x16 electrical • 1 PCI Express Gen2 x16 mechanical/x4 electrical • 1 PCI Express Gen2 x1 mechanical/x1 electrical • 1 PCI (All slots are low profile)	
Graphics		• Intel® HD Graphics 2000 (Intel® Core™ processors) • Intel® HD Graphics P3000 (Intel® Xeon® E3-1xx5processors) • NVIDIA Quadro 500M • NVIDIA Quadro 1000M • NVIDIA Quadro 3000M • NVIDIA Quadro 4000M		• Intel® HD Graphics 2000 (Intel® Core™ processors) • Intel® HD Graphics P3000 (Intel® Xeon® E3-1xx5 processors) • AMD FirePro™ 2270 • NVIDIA Quadro NVS 295 • NVIDIA NVS 300 • AMD FirePro™ V3800 • NVIDIA Quadro 400 • NVIDIA Quadro 600	
Maximum supported displays		• Supports up to one external display via display port		• 4 displays	
Controllers and HDs ^{6,7}		• Integrated Serial ATA interfaces (2x 6Gb/s SATA, 1x 3Gb/s SATA) • SATA 7200 3.5-in. drives: 250, 500 GB, 1, 2 TB • SATA 10K 2.5-in. drives: 300, 600 GB • SATA Solid State drives: 160, 300 GB		• Integrated SATA 3 Gb/s or 6 Gb/s controller, RAID 0, 1 capable • Up to (2) 3.5-inch 7200 rpm SATA drives: 250, 500 GB, 1, 2 TB max • Up to (2) 2.5-inch 10K rpm SATA drives: 160, 300 GB, 0.6 TB max • Up to (2) 2.5-inch SATA SSD drives: 128, 160, 256, 300 GB, 0.6 TB max	
Optical drives ^{8,9,10}		• DVD +/- RW Super-Multi Slot-Load • Blu-ray Writer Slot-Load		• DVD-ROM • DVD+/-RW DL Super Multi • Blu-Ray writer • 22-in-1 Media Card Reader	
Communications ¹¹		• Intel Gb LAN • Wireless • Bluetooth		• Intel 82579 GbE (Intel® vPro™ with AMT 7.0)	

					
HP Z210 CMT			HP Z420		
• Low cost. High performance.		• Expand your power.		• Versatility redefined, still compact.	
• Genuine Windows® 7 Professional or other editions available • HP Installer Kit for Linux* (includes drivers for both 32-bit and 64-bit OS versions of Red Hat Enterprise Linux and SUSE Linux Enterprise Desktop 11) • SUSE Linux Enterprise Desktop 11* • Red Hat Enterprise Linux Desktop/Workstation* (1 year paper license; no preinstalled OS)		• 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)		• Genuine Windows® 7 Professional 32-Bit • Genuine Windows® 7 Professional 64-bit • Genuine Windows® 7 Ultimate 64-bit • HP Linux Installer Kit* • Red Hat Enterprise Linux Desktop/Workstation* (1 year paper license; no preinstalled OS)	
• 2 nd Generation Intel® Core™ i3, i5, and i7 Processors and Intel® Xeon® Processor E3 Series ^{1,2,3} • Intel® C206 Chipset		• Intel® Xeon® Processor E5-1600 Series ^{1,2,3} • Intel® C602 Chipset		• Intel® Xeon® Processor E5-2600 Series ^{1,2,3} • Intel® C602 Chipset	
• 4 DIMM slots, up to 32 GB, DDR3 1333 MHz • 2 channels per CPU		• 8 DIMM slots, up to 64 GB ECC unbuffered DDR3 1600 MHz • 4 channels per CPU		• Up to 12 DIMM slots, 8 slots standard + 4 more slots with 2nd CPU • Up to 96 GB ECC DDR3 1600 MHz • 4 channels per CPU, up to 8 channels	
• 2 PCI Express Gen2 slots x1 mechanical/x1 electrical • 1 PCI Express Gen2 slot x16 mechanical/x16 electrical • 1 PCI Express Gen2 slot x16 mechanical/x4 electrical • 1 PCI Express Gen2 slot x8 mechanical/x4 electrical • 1 PCI Express Gen2 slot x8 mechanical/x4 electrical • 2 PCI slots (full-height, full-length)		• 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		• 2 PCI Express Gen3 x16 • 1 PCI Express Gen3 x8 • 1 PCI Express Gen2 x8 mechanical/x4 electrical • 1 PCI Express Gen2 x4 mechanical/x1 electrical • 1 Legacy PCI	
• Intel® HD Graphics 2000 (Intel® Core™ processors) • Intel® HD Graphics P3000 (Intel® Xeon® E3-1xx5 processors) • NVIDIA Quadro NVS 295 • NVIDIA NVS 300 • AMD FirePro™ 2270 • NVIDIA Quadro 400 • NVIDIA Quadro 600 • AMD FirePro™ V3800 • AMD FirePro™ V4800 • AMD FirePro™ V4900 • NVIDIA Quadro 2000 • AMD FirePro™ V5900 • NVIDIA Quadro 4000 (AMO only)		• NVIDIA NVS 300 • NVIDIA NVS 310 • AMD FirePro™ 2270 • NVIDIA Quadro NVS 450 • NVIDIA Quadro 410 • AMD FirePro™ V3900 • NVIDIA Quadro 600 • AMD FirePro™ V4900 • NVIDIA Quadro 2000 • AMD FirePro™ V5900 • NVIDIA Quadro 4000 • AMD FirePro™ V7900 • NVIDIA Quadro 5000 • NVIDIA Tesla C2075		• NVIDIA NVS 300 • NVIDIA NVS 310 • AMD FirePro™ 2270 • NVIDIA Quadro NVS 450 • NVIDIA Quadro 410 • AMD FirePro™ V3900 • AMD FirePro™ V4900 • NVIDIA Quadro 2000 • AMD FirePro™ V5900 • NVIDIA Quadro 4000 • AMD FirePro™ V7900 • NVIDIA Quadro 5000 • NVIDIA Quadro 6000 • NVIDIA Tesla C2075	
• 4 displays		• 8 displays		• 8 displays	
• Integrated SATA 3 Gb/s or 6 Gb/s controller, RAID 0, 1, 5, capable • Up to (3) 3.5-inch 7200 rpm SATA drives: 250, 500 GB, 1, 1.5, 2, 6 TB max • Up to (3) 2.5-inch 10K rpm SATA drives: 160, 300, 600 GB, 1.8 TB max • Up to (3) 2.5-inch SATA solid state drives: 128, 160, 256, 300 GB, 0.9 TB max		• 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 • 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 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		• 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 6 Gb/s RAID 0, 1, 10 capable • Up to (4) 3.5-inch 7200 rpm SATA drives: 250, 500 GB, 1, 1.5, 2, 11 TB max • Up to (4) 2.5-inch 10K rpm SAS drives: 300, 600 GB SFF, 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	
• DVD-ROM • DVD+/-RW DL Super Multi • Blu-Ray Writer • 22-in-1 Media Card Reader		• DVD-ROM • DVD+/-RW DL Super-Multi • Blu-ray Writer • 22-in-1 Media Card Reader		• DVD-ROM • DVD+/-RW • Slot-load DVD+/-RW • Blu-ray Writer • 22-in-1 Media Card Reader	
• Intel 82579 GbE (Intel® vPro™ with AMT 7.0)		• Integrated Intel GbE LAN • Infineon TPM 1.2 Controller • Optional Broadcom NIC • Optional Intel NIC		• Dual integrated Intel GbE LAN • Infineon TPM 1.2 Controller • Optional Broadcom NIC • Optional Intel NIC	