### Windows<sup>®</sup>. Life without Walls<sup>™</sup>. HP recommends Windows 7.







	HP EliteBook 8440w Mobile Workstation	HP EliteBook 8540w Mobile Workstation	HP EliteBook 8740w Mobile Workstation
	(Not available in all regions)		
Overview	Lightweight. Heavy Hitter.	High mobility and exceptional graphics	The most powerful HP mobile workstation
Operating systems	<ul> <li>Genuine Windows® 7 Professional*</li> <li>Genuine Windows 7 Home Premium*</li> <li>Genuine Windows® XP Professional available through downgrade rights from Windows® 7 Professional*.**</li> <li>Genuine Windows Vista® Business***</li> <li>FreeDOS</li> </ul>	<ul> <li>Genuine Windows<sup>®</sup> 7 Professional*</li> <li>Genuine Windows 7 Home Premium*</li> <li>Genuine Windows<sup>®</sup> XP Professional available through downgrade rights from Windows<sup>®</sup> 7 Professional*,**</li> <li>Genuine Windows Vista<sup>®</sup> Business***</li> <li>FreeDOS</li> </ul>	<ul> <li>Genuine Windows® 7 Professional*</li> <li>Genuine Windows 7 Home Premium*</li> <li>Genuine Windows® XP Professional available through downgrade rights from Windows® 7 Professional*.**</li> <li>Genuine Windows Vista® Business***</li> <li>Genuine Windows Vista® Home Basic***</li> <li>FreeDOS</li> </ul>
Processor/chipset/ system bus	<ul> <li>Intel<sup>®</sup> Core™ i5 or i7 Mobile Processor Family with Intel<sup>®</sup> Turbo Boost Technology<sup>1,2,3,4,12</sup></li> <li>Mobile Intel QM57 Chipset</li> <li>Intel vPro Technology (optional)</li> </ul>	<ul> <li>Intel<sup>®</sup> Core™ i5 or i7 Mobile Processor Family with Intel<sup>®</sup> Turbo Boost Technology<sup>1,2,3,4]2</sup></li> <li>Mobile Intel QM57 Chipset</li> <li>Intel vPro Technology (optional)</li> </ul>	<ul> <li>Intel<sup>®</sup> Core<sup>™</sup> i5 or i7 Mobile Processor Family with Intel<sup>®</sup> Turbo Boost Technology<sup>1,2,3,4]2</sup></li> <li>Mobile Intel QM57 Chipset</li> <li>Intel vPro Technology (optional)</li> </ul>
Expansion slots	<ul> <li>1 Express Card/54</li> <li>1 Smart Card Reader</li> <li>1 Secure Digital</li> </ul>	<ul> <li>1 Express Card/54</li> <li>1 Smart Card Reader</li> <li>1 Secure Digital</li> </ul>	<ul> <li>1 Express Card/54</li> <li>1 Smart Card Reader</li> <li>1 Secure Digital</li> </ul>
Graphics	<ul> <li>Discrete: NVIDIA Quadro FX 380M, with 512 MB dedicated video memory</li> </ul>	<ul> <li>ATI FirePro M5800 graphics with 1 GB dedicated DDR3 video memory</li> <li>NVIDIA Quadro FX 880M graphics with 1 GB dedicated GDDR3 video memory</li> <li>NVIDIA Quadro FX 1800M graphics with 1 GB dedicated GDDR5 video memory</li> </ul>	<ul> <li>ATI FirePro M7820 graphics with 1 GB dedicated GDDR5 video memory</li> <li>NVIDIA Quadro FX 3800M graphics with 1 GB dedicated GDDR3 video memory</li> <li>NVIDIA Quadro FX 2800M graphics with 1 GB dedicated GDDR3 video memory</li> </ul>
Displays	Choice of 14.0-inch diagonal LED-backlit HD anti-glare (1366 x 768) or 14.0-inch diagonal LED-backlit HD anti-glare (1600 x 900)	Choice of 15.6-inch diagonal LED-backlit, anti-glare HD1 (1366 x 768), 15.6-inch diagonal LED-backlit, anti-glare HD+1 (1600 x 900), or 15.6-inch diagonal LED-backlit, anti-glare FHD1 (1920 x 1080) (optional HP DreamColor)	Choice of 17.0-inch diagonal LED-backlit WXGA+ anti-glare (1440 x 900), 17.0-inch diagonal LED-backlit WSXGA+ WVA anti-glare (1680 x 1050), or 17.0-inch diagonal LED-backlit WUXGA+ WVA anti-glare (1920x1200) (optional HP DreamColor)
Controllers and HDs <sup>6</sup>	<ul> <li>250/320/500 GB 7200 rpm SMART SATA II HDD with HP 3D DriveGuard</li> <li>160/256 GB Solid State Drive</li> </ul>	<ul> <li>250/320/500 GB 7200 rpm SMART SATA II HDD with HP 3D DriveGuard</li> <li>160/256 GB Solid State Drive</li> </ul>	<ul> <li>250/320/500 GB 7200 rpm SMART SATA II HDD with HP 3D DriveGuard</li> <li>256 GB Solid State Drive</li> </ul>
Optical drives <sup>7,8,9,10</sup>	<ul> <li>Fixed 12.7-mm SATA optical drive (Blu-ray R/RE DVD+/-RW SuperMulti DL Drive, Blu-ray ROM DVD+/- RW SuperMulti DL LightScribe Drive, DVD+/-RW SuperMulti DL LightScribe Drive, DVD-ROM Drive), secondary hard drive (500 GB 7200 rpm HDD), or weight saver</li> </ul>	<ul> <li>Fixed 12.7-mm SATA optical drive (Blu-ray R/RE DVD+/-RW SuperMulti DL Drive, Blu-ray ROM DVD+/- RW SuperMulti DL LightScribe Drive, DVD+/-RW SuperMulti DL LightScribe Drive, DVD-ROM Drive), or secondary hard drive (500 GB 7200 rpm HDD)</li> </ul>	<ul> <li>Fixed 12.7-mm SATA optical drive (Blu-ray R/RE DVD+/-RW SuperMulti DL Drive, Blu-ray ROM DVD+/- RW SuperMulti DL LightScribe Drive, DVD+/-RW SuperMulti DL LightScribe Drive, DVD-ROM Drive), or secondary hard drive (500 GB 7200 rpm HDD)</li> </ul>
Communications <sup>11</sup>	<ul> <li>Intel Gigabit Ethernet (10/100/1000) NIC and 56K v.92 modem</li> <li>Optional HP un2420 EV-DO/HSPA Mobile Broadband Module, GPS-enabled</li> <li>Intel® Centrino® 802.11 a/b/g/n</li> <li>Bluetooth® 2.1</li> <li>HP Wireless Assistant and HP Connection Manager 3.1</li> </ul>	<ul> <li>Intel Gigabit Ethernet (10/100/1000) NIC and 56K v.92 modem</li> <li>Optional HP un2420 EV-DO/HSPA Mobile Broadband Module, GPS-enabled</li> <li>Intel® Centrino® 802.11 a/b/g/n</li> <li>Bluetooth® 2.1</li> <li>HP Wireless Assistant and HP Connection Manager 3.1</li> </ul>	<ul> <li>Intel Gigabit Ethernet (10/100/1000) NIC and 56K v.92 modem</li> <li>Optional HP un2420 EV-DO/HSPA Mobile Broadband Module, GPS-enabled</li> <li>Intel<sup>®</sup> Centrino<sup>®</sup> 802.11 a/b/g/n</li> <li>Bluetooth<sup>®</sup> 2.1</li> <li>HP Wireless Assistant and HP Connection Manager 3.1</li> </ul>

<sup>1</sup> Dual, Quad, and Six-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.

<sup>2</sup> Intel's numbering is not a measurement of higher performance.

<sup>3</sup> 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 www.intel.com/info/em64t for more information.
 <sup>4</sup> This workstation does not support the Intel Core 2 Extreme processor over-clocking feature.

<sup>5</sup> 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://h2000.www2.hp.com/bc/docs/support/Support/Manual/c00060684/c00060684.pdf for RAID capabilities with Linux.

<sup>6</sup> 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.

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. <sup>8</sup> 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. <sup>9</sup> LightScribe creates a monochrome image. LightScribe media required and sold separately.

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. 1 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 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.

<sup>13</sup> Each processor supports up to 2 channels (HP Z200/HP Z200 SFF) or 3 channels (HP Z400/HP Z600/HP Z800) of DDR3 memory. To realize full performance at least 1 DIMM must be inserted into each channel. To get full 6 channel support, 2 processors MUST be installed.

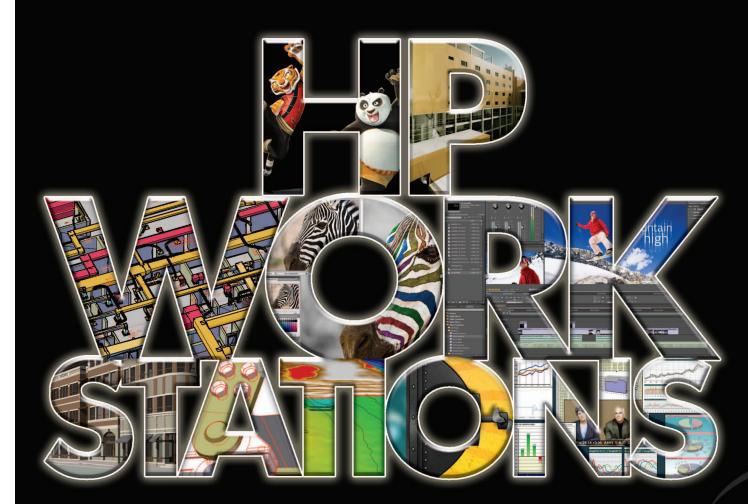


© 2010 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Intel, Celeron, Centrino, Core, Pentium, Turbo Boost, and Xeon are trademarks of Intel Corporation in the U.S. and other countries. Microsoft, Windows, and Vista are U.S. registered trademarks of Microsoft Corporation. ATI is a trademark of Advanced Micro Devices, Inc. Bluetooth is a trademark owned by its proprietor and used by Hewlett-Packard Company under license. ENERGY STAR is a US registered mark of the United States Environmental Protection Agency.

#### 4AA2-5139ENW, September 2010

# HP WORKSTATIONS QUICK REFERENCE GUIDE



# INNOVATION • PERFORMANCE • RELIABILITY





## MEET OUR HP WORKSTATION FAMILY - COMPARE FEATURES

	HP Z200 SFF	HP Z200	HP Z400	HP Z600
Overview	Small size, great value, and rock-solid application performance.	Low-cost, high-performance mainstream entry workstation.	Raising the bar for entry workstations.	Maximum computing power in r
Operating systems	<ul> <li>Genuine Windows<sup>®</sup> 7 Ultimate 64-bit*</li> <li>Genuine Windows<sup>®</sup> 7 Professional 32-bit available through downgrade rights from Windows<sup>®</sup> 7 Professional 32-bit*,**</li> <li>Genuine Windows<sup>®</sup> XP Professional 64-bit available through downgrade rights from Windows<sup>®</sup> 7 Professional 64-bit available through downgrade rights from Windows<sup>®</sup> 7 Professional 64-bit available through downgrade rights from Windows<sup>®</sup> 7 Professional 64-bit available through downgrade rights from Windows<sup>®</sup> 7 Professional 64-bit available through downgrade rights from Windows<sup>®</sup> 7 Professional 64-bit available through downgrade rights from Windows<sup>®</sup> 7 Professional 64-bit available through downgrade rights from Windows<sup>®</sup> 7 Professional 64-bit available through downgrade rights from Windows<sup>®</sup> 7 Professional 64-bit available through 10 Professional 64-bit available through 11 Professional 64-bit available through 11 Professional 11 Linux preloaded</li> <li>Red Hat Enterprise Linux WS5 (as drop-in-the-box only)</li> </ul>	<ul> <li>Genuine Windows® 7 Ultimate 64-bit*</li> <li>Genuine Windows® 7 Professional*</li> <li>Genuine Windows® XP Professional 32-bit available through downgrade rights from Windows® 7 Professional 32-bit*.**</li> <li>Genuine Windows® XP Professional 64-bit available through downgrade rights from Windows® 7 Professional 64-bit available through downgrade rights from Windows® 7 Professional 64-bit available through downgrade rights from Windows® 7 Professional 64-bit available through downgrade rights for Uinux (includes drivers for both 32-bit and 64-bit OS versions of Red Hat Enterprise Linux WS5).</li> <li>Novell Suse SLED 11 Linux</li> <li>Red Hat Enterprise Linux WS5 (as drop-in-the-box only)</li> </ul>	<ul> <li>Genuine Windows® 7 Ultimate 64-bit*</li> <li>Genuine Windows® 7 Professional *</li> <li>Genuine Windows® 7 Professional 32-bit available through downgrade rights from Windows® 7 Professional 32-bit*.**</li> <li>Genuine Windows® XP Professional 64-bit available through downgrade rights from Windows® 7 Professional 64-bit*.**</li> </ul>	<ul> <li>Genuine Windows® 7 Ultimate ( Genuine Windows® 7 Profession)</li> <li>Genuine Windows® XP Profession downgrade rights from Windows®</li> <li>Genuine Windows® XP Profession downgrade rights from Windows®</li> </ul>
Processor/chipset/system bus	<ul> <li>Dual-core Intel<sup>®</sup> Pentium, or Intel<sup>®</sup> Core i3 or i5 processor or quad-core Intel<sup>®</sup> Xeon processor 3400 series.<sup>1,2,3,4</sup></li> <li>Intel<sup>®</sup> 3450 Chipset</li> </ul>	<ul> <li>Dual-core Intel<sup>®</sup> Celeron<sup>®</sup> or Intel<sup>®</sup> Pentium, or Intel Core<sup>™</sup> i3 or i5 processor or quad-core Intel<sup>®</sup> Xeon<sup>®</sup> processor 3400 series.<sup>1,2,3,4</sup></li> <li>Intel<sup>®</sup> 3450 Chipset</li> </ul>	<ul> <li>Dual-, quad-, and six-core Intel® Xeon® processor 3500 and 3600 series<sup>1,2,3</sup></li> <li>Intel® QuickPath Technology</li> <li>Intel® X58 Express chipset</li> <li>HP Liquid Cooling Solution (optional)</li> </ul>	<ul> <li>Quad- and six-core Intel® Xeon® r</li> <li>Intel® QuickPath Technology</li> <li>Intel® 5520 chipset</li> </ul>
Expansion slots	<ul> <li>1 PCI Express Gen2 x16 mechanical/x16 electrical</li> <li>1 PCI Express Gen1 x16 mechanical/x4 electrical</li> <li>1 PCI Express Gen1 x1 mechanical/x1 electrical</li> <li>1 PCI slot</li> <li>All slots are low profile</li> </ul>	<ul> <li>1 PCI Express Gen1 x1 mechanical/x1 electrical</li> <li>1 PCI Express Gen2 x16 mechanical/x16 electrical</li> <li>1 PCI Express Gen1 x4 mechanical/x1 electrical</li> <li>1 PCI Express Gen1 x16 mechanical/x4 electrical, 3 PCI slots (full-height, full-length)</li> </ul>	<ul> <li>2 PCI Express Gen2 x16</li> <li>1 PCI Express Gen2 x8 mechanical/x4 electrical</li> <li>1 PCI Express Gen1 x8 mechanical/x4 electrical</li> <li>2 PCI</li> </ul>	<ul> <li>2 PCI Express Gen2 x16</li> <li>1 PCI Express Gen2 x8 mechanica</li> <li>1 PCI Express Gen1 x8 mechanica</li> <li>2 PCI</li> </ul>
Graphics	<ul> <li>Intel<sup>®</sup> HD Graphics (integrated with dual-core processors only)</li> <li>NVIDIA Quadro NVS 295</li> <li>NVIDIA Quadro FX 380 LP</li> <li>ATI FirePro V3800</li> </ul>	<ul> <li>Intel® HD Graphics (integrated with dual- core processors only)</li> <li>NVIDIA Quadro NVS 295</li> <li>NVIDIA Quadro FX 380</li> <li>ATI FirePro V3700</li> <li>ATI FirePro V3800</li> <li>NVIDIA Quadro FX 580</li> <li>NVIDIA Quadro FX 1800</li> <li>ATI FirePro V4800</li> <li>ATI FirePro V4800</li> <li>ATI FirePro V5800</li> </ul>	<ul> <li>NVIDIA Quadro NVS 295</li> <li>NVIDIA Quadro NVS 450</li> <li>NVIDIA Quadro FX 380</li> <li>ATI FirePro V3700</li> <li>ATI FirePro V3800</li> <li>NVIDIA Quadro FX 580</li> <li>NVIDIA Quadro FX 1800</li> <li>ATI FirePro V4800</li> <li>ATI FirePro V5700</li> <li>ATI FirePro V5700</li> <li>ATI FirePro V7750</li> <li>NVIDIA Quadro FX 3800</li> <li>NVIDIA Quadro FX 4800</li> <li>NVIDIA Quadro FX 4800</li> <li>NVIDIA Quadro 5000</li> <li>Elemental Accelerator</li> </ul>	<ul> <li>NVIDIA Quadro NVS 295</li> <li>NVIDIA Quadro NVS 450</li> <li>NVIDIA Quadro FX 380</li> <li>ATI FirePro V3700</li> <li>ATI FirePro V3800</li> <li>NVIDIA Quadro FX 580</li> <li>NVIDIA Quadro FX 1800</li> <li>ATI FirePro V4800</li> <li>ATI FirePro V5700</li> <li>ATI FirePro V5700</li> <li>ATI FirePro V5700</li> <li>ATI FirePro V7750</li> <li>NVIDIA Quadro FX 3800</li> <li>NVIDIA Quadro FX 3800</li> <li>NVIDIA Quadro FX 4800</li> <li>NVIDIA Quadro 5000</li> <li>Elemental Accelerator</li> </ul>
Maximum supported displays	4 displays	4 displays	8 displays	8 displays
Controllers and HDs <sup>5,6</sup>	<ul> <li>Integrated SATA 3 GB/s controller, RAID 0, 1 capable</li> <li>Up to (2) 3.5-inch 7200 rpm SATA drives: 160, 250, 320, 500 GB, 1 TB 2.0 TB max</li> <li>Up to (2) 2.5-inch 10K rpm SATA drives: 160, 300 GB, 0.6 TB max</li> <li>Up to (2) SATA solid state drives: Intel X25-M 160 GB; 320 GB max</li> </ul>	<ul> <li>Integrated SATA 3 GB/s controller, RAID 0, 1, 5, 10 capable</li> <li>Up to (3) 3.5-inch 7200 rpm SATA drives: 160, 250, 320, 500 GB, 1 TB, 1.5 TB, 4.5 TB max</li> <li>Up to (3) 2.5-inch 10K rpm SATA drives: 160, 300 GB, 0.9 TB max</li> <li>Up to (3) SATA solid state drives: Intel X25-M 160 GB, 480 GB max</li> </ul>	<ul> <li>Integrated SATA 3 GB/s controller, RAID 0, 1, 5, 10 capable</li> <li>Optional SAS controller, LSI 3041E 4-port SAS/SATA, RAID 0, 1, 10 capable</li> <li>Up to (4) 3.5-inch 7200 rpm SATA drives: 160, 250, 320, 500 GB, 1, 1.5 TB, 2 TB, 8 TB max</li> <li>Up to (4) 2.5-inch 10K rpm SATA drives: 160, 300 GB SFF, 1.2 TB max</li> <li>Up to (4) 3.5-inch 15K rpm SAS drives: 146, 300, 450, 600 GB, 2.4 TB max</li> <li>Up to (4) SATA solid state drives: Intel X25-M 160 GB, 640 GB max</li> </ul>	<ul> <li>Integrated SATA 3 GB/s controlle</li> <li>Optional SAS controller, LSI 3041</li> <li>1, 10 capable</li> <li>Up to (3) 3.5-inch 7200 rpm SAT</li> <li>1.5, 2 TB, 6 TB max</li> <li>Up to (4) 2.5-inch 10K rpm SATA</li> <li>1.2 TB max</li> <li>Up to (3) 3.5-inch 15K rpm SAS of 1.8 TB max</li> <li>Up to (4) 160 GB SATA X25-M S</li> <li>Note: Third and fourth drives occ</li> </ul>
Optical drives <sup>7</sup>	<ul> <li>DVD-ROM</li> <li>DVD+/- RW DL Super Multi<sup>8,9</sup></li> <li>Optional Blu-Ray writer<sup>10</sup></li> <li>Optional 22-in-1 Media Card Reader</li> </ul>	<ul> <li>DVD-ROM</li> <li>DVD+/- RW DL Super Multi<sup>8,9</sup></li> <li>Optional Blu-Ray Writer<sup>10</sup></li> <li>Optional 22-in-1 Media Card Reader</li> </ul>	<ul> <li>DVD-ROM</li> <li>DVD+/-RW</li> <li>Blu-Ray Writer<sup>10</sup></li> <li>Optional HP 22-in-1 Media Card Reader</li> </ul>	<ul> <li>DVD-ROM</li> <li>DVD+/-RW</li> <li>Slot-load DVD+/-RW</li> <li>Blu-Ray Writer<sup>10</sup></li> <li>Optional HP 22-in-1 Media Carc</li> </ul>
<b>Communications</b> <sup>11</sup>	<ul> <li>Integrated Intel 82578 DM (Intel<sup>®</sup> AMT 6.0)</li> </ul>	• Integrated Intel 82578 DM (Intel® AMT 6.0)	<ul> <li>Integrated Broadcom 5764 LAN</li> <li>Infineon TPM 1.2</li> <li>Optional Broadcom NIC</li> <li>Optional Intel NIC</li> </ul>	<ul> <li>Integrated Broadcom 5764 LAN</li> <li>Infineon TPM 1.2</li> <li>Optional Broadcom NIC</li> <li>Optional Intel NIC</li> </ul>
Maximum memory/slots available <sup>13</sup>	• 4 DIMM slots, up to 16 GB, DDR3 1333 MHz	• 4 DIMM slots, up to 16 GB, DDR3 1333 MHz	• 6 DIMM slots, up to 24 GB, DDR3 1333 MHz	<ul> <li>6 DIMM slots, up to 48 GB,</li> <li>6 channel DDR3 1333 MHz</li> </ul>

\*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/ for details. \*\*Windows® XP Professional is preinstalled on this system and includes end user rights and media for Windows 7 Professional. You may only use one version at a time. You must back up all data

(files, photos, etc.) before unitabiliting operating systems to avoid loss of your data. \*\*\*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.

## Windows<sup>®</sup>. Life without Walls<sup>™</sup>. HP recommends Windows 7.





- Ultimate 64-bit\* Professional\*
- Professional 32-bit available through Windows® 7 Professional 32-bit\*,\*\*
- Professional 64-bit available through Windows® 7 Professional 64-bit\*,\*\*

#### HP Z800

The ultimate in power and expandability.

- Genuine Windows® 7 Ultimate 64-bit\*
- Genuine Windows® 7 Professional \*
   Genuine Windows® XP Professional 32-bit available through downgrade rights from Windows® 7 Professional 32-bit\*.\*\*
- Genuine Windows<sup>®</sup> XP Professional 64-bit available through downgrade rights from Windows<sup>®</sup> 7 Professional 64-bit\*.\*\*

$pn^{\circledast}$ processor 5500 and 5600 series $^{1,2,3}$	<ul> <li>Quad- and six-core Intel® Xeon® processor 5500 and 5600 series<sup>1,2,3</sup></li> <li>Intel® QuickPath Technology</li> <li>Intel® 5520 chipset (dual)</li> <li>HP Liquid Cooling Solution (optional)</li> </ul>
anical/x4 electrical anical/x4 electrical	<ul> <li>2 PCI Express Gen2 x16</li> <li>2 PCI Express Gen2 x16 mechanical/x8 electrical</li> <li>1 PCI Express Gen2 x8 mechanical/x4 electrical</li> <li>1 PCI Express Gen1 x8 mechanical/x4 electrical</li> <li>1 PCI</li> </ul>
	<ul> <li>NVIDIA Quadro NVS 295</li> <li>NVIDIA Quadro FX 380</li> <li>ATI FirePro V3700</li> <li>ATI FirePro V3800</li> <li>NVIDIA Quadro FX 580</li> <li>NVIDIA Quadro FX 1800</li> <li>ATI FirePro V4800</li> <li>ATI FirePro V5800</li> <li>ATI FirePro V5800</li> <li>ATI FirePro V7750</li> <li>NVIDIA Quadro FX 3800</li> <li>NVIDIA Quadro FX 3800</li> <li>NVIDIA Quadro FX 4800</li> <li>NVIDIA Quadro FX 3800</li> <li>NVIDIA Quadro FX 5800</li> <li>ATI FirePro V4800</li> <li>NVIDIA Quadro FX 5800</li> <li>NVIDIA Quadro FX 5800</li> <li>NVIDIA Quadro FX 5800</li> <li>NVIDIA Quadro FX 5800</li> <li>NVIDIA Tesla C1060</li> <li>NVIDIA Tesla C2050</li> </ul>
	4 displays
roller, RAID 0, 1, 5, 10 capable 3041E 4-port SAS/SATA, RAID 0, SATA drives: 160, 250, 320, 500 GB, 1, ATA drives: 160, 300 GB SFF, AS drives: 146, 300, 450, 600 GB, M SSD drives, 640 GB max occupy one external optical bay.	<ul> <li>Integrated 6-channel 3 Gb/s controller, RAID 0, 1, 5, 10 capable</li> <li>Integrated 8-channel SAS controller, RAID 0, 1, 10 capable</li> <li>Optional LSI 8888 ELP 8-port SAS HW RAID 0, 1, 5, 10 capable</li> <li>Optional LSI 9260-8i 8-port SAS HW RAID 0, 1, 5, 10 capable</li> <li>Up to (5) 3.5-inch 7200 rpm SATA drives: 160, 250, 320, 500 GB, 1, 1.5, 2 TB, 10 TB max</li> <li>Up to (6) 2.5-inch 10K rpm SATA drives: 160, 300 GB SFF, 1.8 TB max</li> <li>Up to (5) 3.5-inch 15K rpm SAS drives: 146, 300, 450, 600 GB, 3 TB max</li> <li>Up to (5) 160 GB SATA X25-M SSD drives, 800 GB max</li> </ul>
Card Reader AN	<ul> <li>DVD-ROM</li> <li>DVD+/-RW</li> <li>Slot-load DVD+/-RW</li> <li>Blu-Ray Writer<sup>10</sup></li> <li>Optional HP 22-in-1 Media Card Reader</li> <li>Dual Integrated Broadcom 5764 LAN</li> <li>Infineon TPM 1.2</li> </ul>
	Optional Broadcom NIC     Optional Intel NIC
	<ul> <li>12 DIMM slots, up to 192 GB,</li> <li>6 channel DDR3 1333 MHz</li> </ul>