

# HP xw4300 Workstation

HP recommends Microsoft® Windows® XP Professional.



Flexible entry workstation delivering the performance you need at the price you want.

Put power and efficiency behind your most demanding applications.

It's all about choice. Single or dual core<sup>i</sup> processor. Microsoft® Windows® or Red Hat Linux®. 32- or 64-bits. Professional 2D to high-end 3D graphics, and a full range of memory and storage options. The HP xw4300 provides cutting edge technology at a PC-like price. There's no need to compromise on performance for the sake of economy.

HP xw4300 meets the computing demands of engineers, designers, scientists, and power users. ISV collaboration and application certification coupled with the future-proofing of 64-bit computing helps ensure a reliable, compatible, high performing workstation to evolve with your business demands.

#### **Leading Intel® technology**

The Intel® 955X Express chipset enables fast, dual channel DDR2 667 MHz memory, PCI Express (PCIe) x16 graphics and includes an integrated 4-channel SATA 3 Gb/s controller with Native Command Queuing (NCQ) and RAID 0/1/5/10 capability<sup>ii</sup>.

#### **Future-proof your business**

The HP xw4300 supports Extended Memory 64 Technology (EM64T)<sup>iii</sup>, extending the address space to a maximum of 16 TB virtual memory, allowing the design and manipulation of huge data sets.

#### **Expand to meet your demands**

Integrate numerous expansion options with the HP xw4300's 2 internal hard drives (up to 4 drives using the optical bays), up to 3 optical disks, optional floppy, 1 PCIe x16 graphics slot, 1 PCIe x1 slot, 1 PCIe x4 (x8 connector) slot, and 3 PCI slots.

#### **Easily convert, access, and service your workstation**

The HP xw4300's versatile chassis allows a minitower or desktop configuration, and the industry-leading tool-less design makes it easy to upgrade and maintain.

#### **Custom configure your workstation to your requirements**

HP Performance Tuning Framework, available on HP Workstations with Microsoft Windows, allows a "custom" configuration that tightly matches the workstation-to-user requirements. PTF facilitates configuring and optimizing the latest graphics cards and drivers and removes some memory restraints. For more information, go to: [www.hp.com/go/framework](http://www.hp.com/go/framework)



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## Specifications

<b>Form factor</b>	Convertible (deskside or desktop), rackable minitower
<b>Operating systems</b>	Preinstalled Microsoft® Windows® XP Professional x64 Edition (64-bit) – workstation is WHQL certified, or preinstalled Microsoft Windows XP Professional SP2 (32-bit) – workstation is WHQL certified, or preinstalled Red Hat Enterprise Linux® WS 3 (64-bit) or HP Installer Kit for Linux (includes drivers for both 32-bit & 64-bit OS versions of Red Hat Enterprise Linux WS 3 & 4)
<b>Available processors</b>	Intel® Pentium® 4 processor 521 <sup>iv</sup> / 2.80 GHz, 1 MB, 800 MHz Front Side Bus (FSB), EM64T <sup>iii</sup> Intel Pentium 4 processor 630 <sup>iv</sup> / 3.00 GHz, 2 MB, 800 MHz FSB, EM64T <sup>iii</sup> Intel Pentium 4 processor 640 <sup>iv</sup> / 3.20 GHz, 2 MB, 800 MHz FSB, EM64T <sup>iii</sup> Intel Pentium 4 processor 650 <sup>iv</sup> / 3.40 GHz, 2 MB, 800 MHz FSB, EM64T <sup>iii</sup> Intel Pentium 4 processor 660 <sup>iv</sup> / 3.60 GHz, 2 MB, 800 MHz FSB, EM64T <sup>iii</sup> Intel Pentium 4 processor 672 <sup>iv</sup> / 3.80 GHz, 2 MB, 800 MHz FSB, EM64T <sup>iii</sup> featuring Intel Virtualization Technology <sup>v</sup> Dual core <sup>i</sup> Intel Pentium D processor 940 <sup>iv</sup> / 3.20 GHz, 4 MB cache (2 MB per core), 800 MHz FSB, EM64T <sup>iii</sup> Dual core <sup>i</sup> Intel Pentium D processor 950 <sup>iv</sup> / 3.40 GHz, 4 MB cache (2 MB per core), 800 MHz FSB, EM64T <sup>iii</sup> Dual core <sup>i</sup> Intel Pentium D processor 960 <sup>iv</sup> / 3.60 GHz, 4 MB cache (2 MB per core), 800 MHz FSB, EM64T <sup>iii</sup> Only the single core Intel Pentium 4 processors in the above list support Hyper-Threading Technology <sup>vi</sup>
<b>Chipset</b>	Intel 955X Express (supports up to 1066 MHz FSB)
<b>Memory</b>	Up to 8 GB of ECC DDR2 533 MHz SDRAM with 2 GB DIMMs or ECC DDR2 667 MHz SDRAM (4 GB max.) or DDR2 533 MHz (2 GB max.); in 4 DIMM slots
<b>Drive controllers</b>	Integrated 4 channel SATA 3 Gb/s controller with RAID <sup>ii</sup> 0, 1, 5, 10 capability, optional Ultra320 SCSI controller/drives, opt. Ultra320 RAID <sup>ii</sup> controller
<b>Hard drive(s)</b>	Up to 4 SATA* drives, 2 TB max.**; 40 GB (7200 rpm) SATA 1.5 Gb/s or 80, 250 GB (7200 rpm) SATA 3 Gb/s or 74 GB (10K rpm) SATA 1.5 Gb/s or 160, 500 GB (7200 rpm) SATA 3 Gb/s NCQ Up to 3 Ultra320* SCSI drives, 900 GB max.; 73, 146, 300 GB (10K rpm) or 36, 73 GB (15K rpm) * Using 2 external 5.25 inch drive bays for 4 SATA, one 5.25 inch drive bay for 3 SCSI **Conversion kit to enable 4th drive
<b>Optical drives</b>	48X CD-ROM, 48X CD-RW, 16X DVD-ROM, 48X CD-RW/DVD combo, 16X DVD+/-RW DL with LightScribe Direct Disc Labeling (Microsoft Windows 2000 & XP only, requires LightScribe media for labeling)
<b>Drive bays</b>	3 external 5.25 inch bays*, 1 external 3.5 inch bay, 2 internal 3.5 inch bays * Third external 5.25 inch bay is not full-depth
<b>Slots</b>	6 slots; 1 PCIe x16 graphics slot, 1 PCIe x4 (x8 connector) slot, 1 PCIe x1 slot and 3 PCI slots
<b>Graphics</b>	Professional 2D: NVIDIA Quadro NVS 440 (PCIe), Quadro NVS 285 with NVIDIA TurboCache Technology (PCIe) Entry 3D: ATI FireGL V3100 (PCIe), NVIDIA Quadro FX 540 (PCIe) Mid-range 3D: ATI FireGL V5100 (PCIe), NVIDIA Quadro FX 1400 (PCIe) High-end 3D: NVIDIA Quadro FX 3450 (PCIe), Quadro FX 4500 (PCIe) with opt. Quadro G-Sync card
<b>Audio</b>	Integrated Intel/Realtek HD audio, opt. Sound Blaster X-Fi XtremeMusic (PCI), opt. Sound Blaster Audigy 2 ZS (PCI)
<b>Network</b>	Integrated Broadcom Gigabit LAN-On-Motherboard (PCIe), opt. Intel Pro/1000 MT or Intel Pro/1000 GT or Broadcom Gigabit NIC (PCI)
<b>Ports</b>	Front: Headphone, microphone, and 2 USB 2.0, 1 optional IEEE 1394A Rear: 6 USB, 1 standard serial port, 1 opt. serial port, 1 parallel port, PS/2 keyboard and mouse, 1 RJ-45, 3 audio ports - any port can act as an audio in or audio out/headphone or stereo microphone, 2 opt. IEEE 1394A
<b>Input devices</b>	Easy access PS/2 or USB keyboard; choice of 2-button scroll mouse (optical or mechanical); or 3-button optical mouse; USB SpaceBall, USB SpacePilot
<b>Dimensions (H x W x D)</b>	17.7 inch (44.9 cm) x 6.7 inch (17.0 cm) x 18 inch (45.7 cm)
<b>Power</b>	460 watts
<b>Monitors</b>	HP L1755 17 inch flat panel, HP L1955 19 inch flat panel, HP LP2065 20.1 inch flat panel, HP L2335 23 inch flat panel
<b>Warranty</b>	Basic 3 years next business day, parts, labor, and 8x5 phone support; terms and conditions may vary, certain restrictions apply

- i Not all customers or software applications will benefit from the use of a dual core processor. Compatible software including compatible operating system software, may be required to obtain the full benefit of this technology
- ii 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.
- iii An EM64T enabled workstation should provide leading performance for many 32-bit applications. It is advised to pre-test your applications by visiting Microsoft's 64-bit 120 day free trial before you order EM64T ([www.microsoft.com/windowsxp/64bit/evaluation/trial.msp](http://www.microsoft.com/windowsxp/64bit/evaluation/trial.msp)). Not all customers or software applications will benefit from the use of a dual core processor. Compatible software including compatible operating system software, may be required to obtain the full benefit of this technology. Intel EM64T requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel EM64T. Processor will not operate (including 32-bit operation) without an Intel EM64T-enabled BIOS. Performance will vary depending on your hardware and software configurations. See [www.intel.com/info/em64t](http://www.intel.com/info/em64t) for more information including details on which processors support Intel EM64T or consult with your system vendor for more information.
- iv Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See [www.intel.com/products/processor\\_number/](http://www.intel.com/products/processor_number/) for details.
- v Intel Virtualization Technology requires a computer system with an enabled Intel® processor, BIOS, virtual machine monitor (VMM) and for some uses, certain platform software enabled for it. Functionality, performance or other benefits will vary depending on hardware and software configurations. Intel Virtualization Technology-enabled BIOS and VMM applications are currently in development.
- vi Hyper-Threading (HT) Technology requires a computer system with an Intel Pentium processor supporting HT Technology and an HT Technology enabled chipset, BIOS, and operating system. Performance will vary depending on the specific hardware and software you use. See <http://www.intel.com/info/hyperthreading/> for more information including details on which processors support HT Technology.

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