### Dell recommends Windows Vista® Business.

# DELL PRECISION<sup>™</sup> T5500

The Dell Precision<sup>™</sup> T5500 Workstation is a productivity machine with lightning-fast 64-bit multi-core Intel<sup>®</sup> Xeon<sup>®</sup> processors, impressive graphics, and exceptional memory capacity that work together in a flexible and innovative compact chassis designed to deliver performance, scalability, and flexibility.

#### **BIG PERFORMANCE. SMALL FOOTPRINT.**

Looking for a high-end workstation that can deliver groundbreaking performance and exceptional processing power in space-constrained environments? Then look no further. Developed in close collaboration with hardware and software partners, the Dell Precision T5500 Workstation combines a flexible, compact chassis and



intelligent power management to help deliver an ideal solution for financial trading floors, performance clusters, render farms, and other crowded, power-sensitive environments. Designed for performance, reliability, and scalability in environments where space is at a premium, the Dell Precision T5500 allows you to power through complex tasks and complete your projects faster than the previous generation.<sup>1</sup>

- Next-generation 45nm quad-core Intel Xeon Processor X5500 Series ignites stunning levels of performance unleashed by Intel Quick Path Interconnect Technology that provides high-speed interconnects per independent processing core
- Outstanding performance for memory-intensive applications delivered with the help of an integrated memory controller on the processor with dedicated three-channel high-speed memory architecture, multi-level shared cache, and high-speed point-to-point interconnects
- Memory scalability up to 72GB<sup>2</sup> with DDR3 ECC registered DIMMs<sup>3</sup>
- Dual-native PCIe x16 Gen 2 graphics slots for outstanding graphics performance, cost-effective quad-monitor support, and GPU-based personal supercomputing
- Designed to deliver increased performance for single- and multi-threaded applications with advanced engineering and thermal design enabling extended use of Intel® Turbo Boost Technology

#### VISUAL REALISM WITH HIGH-PERFORMANCE OPENGL® GRAPHICS

Dell Precision offers an intelligent selection of high-performance graphics cards that can satisfy a range of customer needs from outstanding OpenGL 3D performance to dependable 2D performance.<sup>3</sup>

#### **OUTSTANDING SCALABILITY IN A COMPACT CHASSIS**

With additional DIMM slots to expand memory capacity up to 72GB<sup>2</sup> and an innovative chassis designed for flexibility, the Dell Precision T5500 can provide a highly scalable, cost-effective architecture with performance capabilities that can fundamentally change the way you work.

If you're looking to optimize efficiency and power usage (85% energy-efficient power supply) with a platform designed to support high-performing, multi-core Intel Xeon processors today and into the future, the Dell Precision T5500 is an ideal choice. And Independent Software Vendor (ISV) application certifications help ensure that your applications will run efficiently on Dell Precision workstations today and tomorrow.

#### PEACE OF MIND THROUGH ISV APPLICATION CERTIFICATION

Dell partners with leading ISVs to certify system and application compatibility to help ensure optimized performance in demanding workstation environments. And to ensure access to the latest productivity-enhancing technology solutions, Dell invests in the workstation ISV community by providing the hardware platforms needed to further multi-threaded and 64-bit application development. By maintaining strong relationships with ISV application developers, Dell engineers can provide ongoing optimization and support should you need it.



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FEATURES	DELL PRECISION™ T5500 WORKSTATION
Processors	Quad-core Intel® Xeon® 5500 series processors with up to 6.4GT/s (Intel QuickPath ) up to 8MB shared cache. Turbo Mode and HyperThreading technology on select processors. All processors are 64-bit, support Intel DBS (demand-based switching) and Intel VT (Intel Virtualization Technology).
Operating Systems	Genuine Windows Vista® Ultimate, Genuine Windows Vista Business 32-bit, Genuine Windows Vista Business 64-bit, Downgrade rights to Genuine Windows® XP Pro SP2 and Genuine Windows XP Professional x64 Edition, Red Hat® Enterprise Linux® WS v.5.3 Intel EM64T (Also certified to run Red Hat Enterprise Linux Version 4.7 64-bit )
Chipset	Intel 5520 chipset
Memory <sup>3</sup>	Up to 72GB <sup>2</sup> with optional dual processors installed. Three-channel memory architecture per processor with up to 1333MHz and up to 1066MHz DDR3 ECC Registered DIMM memory. Up to 9 DIMM slots; 6 slots (2 per channel) on motherboard and additional 3 slots on optional 2nd processor riser card.
Flash BIOS	BIOS 8MB flash memory for system BIOS; SMBIOS 2.5 support
Graphics <sup>3</sup>	Support for 2 PCI Express x16 Gen 2 graphics cards up to 150W and with up to 4GB graphics memory including: ATI FirePro V8700; ATI FirePro V5700; ATI FirePro V3750; ATI FirePro V3600; NVIDIA® Quadro® FX 5800; NVIDIA Quadro FX 4800; Quadro FX 3800; Quadro FX 1800; NVIDIA Quadro FX580, and the NVIDIA Quadro NVS 295. All graphics cards support dual-monitor configurations.
GPU	(Graphics Processing Unit used for High-Performance Computing, no graphics output) The T5500 supports the NVIDIA Tesla C1060 GPU card with 240 cores and 4GB of memory
Hard Drives	SATA 3.0Gb/s 7200 RPM with 16MB DataBurst Cache™ up to 1.5TB; <sup>4</sup> SATA 3.0Gb/s 7200RPM with 8MB DataBurst Cache up to 320GB; <sup>4</sup> SATA 3.0Gb/s 10K RPM with 16MB DataBurst Cache up to 300GB; <sup>4</sup> SAS 15K RPM up to 450GB; <sup>4</sup> Dual-orientation chassis supports up to two internal drives plus a 3rd drive in flex bay (mini-tower) or optical bay (desktop) (4.5TB <sup>4</sup> maximum storage capacity). Max 2 SAS HDD in desktop chassis. 4 HDD tower configuration for rack environments available by special order. Single RAID 0 data volumes greater than 2TB are available as factory-installed option with the integrated controller and optional PERC6 RAID adapter under Genuine Windows® XP64, Genuine Windows Vista® 32Bit/64Bit operating systems.
Hard Drive Controller	The T5500 uses a SATA 3.0Gb/s host controller (part of the integrated Intel ICH10R I/O controller hub); Optional SAS 6/ir controller supports SAS drives with host-based RAID 0 or 1; Optional PERC 6/i PCIe SAS/SATA hardware RAID card supports RAID 0, 1, 5, (RAID5 in mini-tower orientation only)
Network Controller	Integrated Broadcom® 5754 Gigabit Ethernet controller. 2nd Gigabit port is available with the optional PCIe Broadcom Gigabit controller card.
Audio Controller	Integrated High-Definition Audio (Rev 1.0 Specification) implemented with a two-chip audio solution comprising the ADI 1984a High-Definition Audio CODEC and the ICH10's integrated AC97/High-Definition digital controller.
Standard I/O Ports	Eleven USB 2.0: two on front panel, six on back panel, three internal: one serial; one parallel; two PS/2; one RJ-45; stereo line-in and headphone line-out on back panel; microphone and headphone connector on front panel; one ESATA port on back panel, front and rear IEEE 1394a ports are provided with optional 1394 PCIe card.
RACK-MOUNTABLE CHA	SSIS
Dual-orientation Desktop Dimensions	Desktop orientation with feet: (WxHxD) 17.64" x 6.73" x 18.54" (maximum including badge);         44.8 cm x 17.1 cm x 47.1 cm (maximum including badge)         Mini-tower orientation with feet: (WxHxD) 6.73" x 17.64" x 18.54"; 17.1 cm x 44.8 cm x 47.1 cm (maximum including badge)
Slots and Bays	<ul> <li>Bays: Two internal 3.5" HDD bays; two external 5.25" optical bays, one of which can accommodate a third HDD in desktop orientation. One external 3.5" flex bay for floppy or media card reader or third (SATA) HDD, in mini-tower orientation.</li> <li>Slots: All full length except as noted. Two PCIe x16 slots wired as x8 (half length); two PCIe x16 Gen 2 graphics slots up to 150W each; one PCI-X 64bit/100MHz slot with support for 3.3V or universal cards; one PCI 32-bit/33MHz 5V slot (half length in desktop chassis orientation). 875W 85% Power Factor Correcting (PFC) power supply.</li> </ul>
Monitor Compatability	Compatible with performance flat-panel displays, Dell™ UltraSharp™ widescreen and standard flat-panel displays from 17" viewable image size to 30" viewable image size; Analog flat-panel displays also available.
Keyboard	Dell-Enhanced QuietKey™ USB; optional Enhanced Multimedia USB or Smart Card keyboard USB
Mouse	Dell USB two-button mouse or optional Dell USB optical two-button scroll mouse
Optional Speakers	Internal chassis speaker; Dell two- and three-piece stereo system; Dell sound bar for all flat-panel displays
Storage Devices	Optional Removable Storage: CD-RW/DVD Combo, DVD-ROM, DVD+/-RW, Blu-ray Disc™, USB Floppy Drive, USB media card reader Optional Modem: Dell 56K v.92 Data/Fax PCI modem
Security Options	Software: Trusted Platform Module 1.2 (TPM 1.2); Chassis intrusion switch; Setup/BIOS Password; I/O Interface Security Hardware: Kensington® Lock slot, Padlock ring, Internal front-panel chassis lock
Environmental and Regulatory	Please refer to Safety Best Practices information on the Regulatory Compliance Homepage on www.dell.com at the following location: www.dell.com/regulatory_compliance
Service and Support	<ul> <li>Base: 3-Year Limited Hardware Warranty<sup>5</sup> with 3 years standard Next Business Day (NBD) On-Site After Remote Diagnosis<sup>6</sup> parts replacement and 3 years NBD On-Site Service After Remote Diagnosis<sup>6</sup></li> <li>Recommended: Optional Dell ProSupport<sup>7</sup> is designed to rapidly respond to your business's needs, protect your investment and sensitive data, and provide enhanced proactive support services to help reduce risk and complexity within your IT environment</li> </ul>

## SIMPLIFY YOUR WORKSTATION AT DELL.COM/Precision

1. Based on testing by Dell Labs in January 2009.

Maximum memory with dual processors installed. A 64-bit operating system is required to support 4GB or more of system memory.
 Significant system memory may be used to support graphics, depending on system memory size and other factors.
 GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less. With Dell Factory Image Restore installed, Windows Vista users will have 10GB of their hard drive capacity set aside for a recovery image.

5. For a copy of Ltd. hardware warranty, please write Dell U.S.A. L.P., Attn: Warranties, One Dell Way, Round Rock, TX 78682 or see www.dell.com/warranty.



6. Remote Diagnosis is determination by online/phone technician of cause of issue; may involve customer access to inside of unit and multiple or extended sessions. If issue is covered by Limited Hardware Warranty www.dell.com/warranty and not resolved remotely, technician and/or part will be dispatched, usually in 1 or 2 business days following completion of Remote Diagnosis. Availability varies. Other conditions apply.

7. Availability and terms of Dell Services vary by region. For more information, visit www.dell.com/servicedescriptions

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