

Windows®. Life without Walls™. Dell recommends Windows 7.



# Dell Precision T5500

## 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 32nm six-core Intel® Xeon® 5600 series processors ignite 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 dependable 2D performance to outstanding OpenGL 3D 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 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. 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.

## Dell Precision T5500

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

Feature	Dell Precision T5500 Workstation Technical Specifications																												
Processors	Intel® Xeon® 5600 series processors up to six-cores, 6.4GT/s (Intel QuickPath Interconnect) and 12MB 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). Note: Intel TXT is not supported.																												
Operating Systems	<ul style="list-style-type: none"> <li>• Genuine Windows® 7 Ultimate 32-Bit; Genuine Windows® 7 Ultimate 64-Bit</li> <li>• Genuine Windows® 7 Professional 32-Bit; Genuine Windows® 7 Professional 64-Bit</li> <li>• Genuine Windows 7 Ultimate 32-Bit with XP mode; Genuine Windows 7 Ultimate 64-Bit with XP mode</li> <li>• Genuine Windows Vista® Ultimate SP1, 32-Bit; Genuine Windows Vista® Ultimate SP1, 64-Bit</li> <li>• Genuine Windows Vista® Business SP1, 32-Bit; Genuine Windows Vista® Business SP1, 64-Bit</li> <li>• Red Hat® Enterprise Linux® WS v.5</li> </ul>																												
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 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. 2 to 8 monitor configurations depending on card(s) chosen <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"><b>High End 3D</b></td> <td style="width: 25%;"><b>Mid-range 3D</b></td> <td style="width: 25%;"><b>Entry 3D</b></td> <td style="width: 25%;"><b>Professional 2D</b></td> </tr> <tr> <td>NVIDIA® Quadro® 6000</td> <td>ATI FirePro V7800</td> <td>ATI FirePro V4800</td> <td>ATI FireMV™ V2260</td> </tr> <tr> <td>NVIDIA Quadro 5000</td> <td>ATI FirePro V5800</td> <td>NVIDIA Quadro 600</td> <td>NVIDIA Quadro NVS 420</td> </tr> <tr> <td>NVIDIA Quadro FX 5800</td> <td>NVIDIA Quadro 4000</td> <td>NVIDIA Quadro FX 580</td> <td>NVIDIA Quadro NVS 295</td> </tr> <tr> <td>NVIDIA Quadro FX 4800</td> <td>NVIDIA Quadro FX 3800</td> <td></td> <td></td> </tr> <tr> <td></td> <td>NVIDIA Quadro 2000</td> <td></td> <td></td> </tr> <tr> <td></td> <td>NVIDIA Quadro FX 1800</td> <td></td> <td></td> </tr> </table>	<b>High End 3D</b>	<b>Mid-range 3D</b>	<b>Entry 3D</b>	<b>Professional 2D</b>	NVIDIA® Quadro® 6000	ATI FirePro V7800	ATI FirePro V4800	ATI FireMV™ V2260	NVIDIA Quadro 5000	ATI FirePro V5800	NVIDIA Quadro 600	NVIDIA Quadro NVS 420	NVIDIA Quadro FX 5800	NVIDIA Quadro 4000	NVIDIA Quadro FX 580	NVIDIA Quadro NVS 295	NVIDIA Quadro FX 4800	NVIDIA Quadro FX 3800				NVIDIA Quadro 2000				NVIDIA Quadro FX 1800		
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GPU	NVIDIA Tesla C1060 GPU (Graphics Processing Unit used for High-Performance Computing, no graphics output)																												
Hard Drives	Chassis supports up to two internal drives plus 3rd/4th drives in flex/optical bays (mini-tower) (6.0TB <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 (not supported on Linux operating system) <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"><b>SATA 3.0GB/s 7200RPM</b></td> <td style="width: 25%;"><b>SATA 3.0GB/s 10K RPM</b></td> <td style="width: 25%;"><b>SAS 15K RPM</b></td> <td style="width: 25%;"><b>SSD</b></td> </tr> <tr> <td>Up to 2TB<sup>4</sup> with 16MB DataBurst™ Cache</td> <td>Up to 600GB<sup>4</sup> with 16MB DataBurst™ Cache</td> <td>Up to 600GB<sup>4</sup></td> <td>256GB<sup>4</sup></td> </tr> <tr> <td>Up to 250GB<sup>4</sup> with 8MB DataBurst Cache</td> <td></td> <td></td> <td></td> </tr> </table>	<b>SATA 3.0GB/s 7200RPM</b>	<b>SATA 3.0GB/s 10K RPM</b>	<b>SAS 15K RPM</b>	<b>SSD</b>	Up to 2TB <sup>4</sup> with 16MB DataBurst™ Cache	Up to 600GB <sup>4</sup> with 16MB DataBurst™ Cache	Up to 600GB <sup>4</sup>	256GB <sup>4</sup>	Up to 250GB <sup>4</sup> with 8MB DataBurst Cache																			
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Hard Drive Controller	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/SSD hardware RAID card supports RAID 0, 1, 5, (RAID5 in mini-tower orientation only)																												
Communications	<b>Network:</b> Integrated Broadcom® 5754 Gigabit Ethernet controller; 2nd Gigabit port available via optional PCIe Broadcom Gigabit controller card <b>Modem:</b> Optional Dell 56K v.92 Data/Fax PCI modem																												
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																												
Dual-orientation Chassis	Dual-orientation Chassis is rackable with optional 3rd party kit <b>Dimensions: Desktop orientation with feet:</b> (WxHxD) 17.64" x 6.73" x 18.54"; 44.8cm x 17.1cm x 47.1cm (maximum including badge) <b>Mini-tower orientation with feet:</b> (WxHxD) 6.73" x 17.64" x 18.54"; 17.1cm x 44.8cm x 47.1cm (maximum including badge) <b>Bays:</b> 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. <b>Slots:</b> 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). <b>Power Supply:</b> 875W 85% efficient Power Factor Correcting (PFC) power supply <sup>5</sup> .																												
Monitor Compatibility	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	CD-RW/DVD Combo; DVD-ROM; DVD+/-RW; Blu-ray; USB Floppy Drive; USB media card reader																												
Security Options	<b>Software:</b> Trusted Platform Module 1.2 (TPM 1.2); Chassis intrusion switch; Setup/BIOS Password; I/O Interface Security <b>Hardware:</b> 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 <a href="http://www.dell.com/regulatory_compliance">www.dell.com/regulatory_compliance</a>																												
Service and Support	<b>Base:</b> 3-Year Limited Hardware Warranty <sup>6</sup> with 3-year standard Next Business Day (NBD) On-Site After Remote Diagnosis <sup>7</sup> parts replacement and 3-year NBD On-Site Service After Remote Diagnosis <sup>7</sup> Recommended; Optional Dell ProSupport <sup>8</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																												

## Simplify your workstation at [dell.com/Precision](http://dell.com/Precision)

<sup>1</sup> Based on testing by Dell Labs in January 2009.

<sup>2</sup> Maximum memory with dual processors installed. A 64-bit operating system is required to support 4GB or more of system memory.

<sup>3</sup> Significant system memory may be used to support graphics, depending on system memory size and other factors.

<sup>4</sup> 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.

<sup>5</sup> The Dell Precision T5500 uses a very efficient Active Power Factor Correction (APFC) power supply. Dell recommends only Universal Power Supplies (UPS) based on Sine Wave output for APFC PSUs, not an approximation of a Sine Wave, Square Wave or quasi-Square Wave (see UPS Technical Specifications). If you have questions, please contact the manufacturer to confirm the output type.

<sup>6</sup> 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](http://www.dell.com/warranty).

<sup>7</sup> 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](http://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.

<sup>8</sup> Availability and terms of Dell Services vary by region. For more information, visit [www.dell.com/servicedescriptions](http://www.dell.com/servicedescriptions)

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