

Dell recommends Windows Vista® Business.

DELL PRECISION™ T7500



The Dell Precision™ T7500 Workstation, a powerhouse of productivity, unites lightning-fast 64-bit multi-core Intel® Xeon® processors, outstanding graphics technology, and exceptional memory capacity in an innovative chassis to deliver superb performance, flexibility, scalability, and reliability. It's not just designed to meet your needs — it's designed to exceed your expectations.

THE WORKSTATION SUPERHERO

It's here for you. Our most powerful workstation delivers the multi-core processing punch you've been waiting for — with levels of performance you've only dreamed about. Developed in close collaboration with hardware and software partners, the next-generation Dell Precision T7500 Workstation helps you create, design, render, and analyze without compromise. Designed to deliver groundbreaking performance, blistering speed, and scalability for compute and graphics-intensive environments, the Dell Precision T7500 helps you power through the most complex tasks and complete projects even faster with up to 50% more system memory than its groundbreaking predecessor.



- Next-generation 45nm quad-core Intel Xeon Processor X5500 Series ignites stunning levels of performance unleashed by Intel Quick Path 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 192GB¹ with DDR3 ECC Registered DIMMs
- Dual-native PCIe x16 Gen2 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
- Proven chassis design for physical security, ease of access, and exceptional flexibility with over 1 billion different configurations²

OUTSTANDING GRAPHICS PERFORMANCE

Dell understands that exceptional graphics performance and high-end visualization capabilities are a requirement for some complex applications. The Dell Precision T7500 offers a great selection of graphics options from entry 2D to top end 3D OpenGL® solutions with up to a staggering 4GB³ of graphics memory.

NEW HEIGHTS OF SCALABILITY

With up to 12DIMM slots to expand memory capacity up to 192GB¹ and a chassis designed for flexible configuration option, the Dell Precision T7500 provides a highly scalable architecture that enables you to manage massive data sets with outstanding performance and reliability. Imagine having the freedom to work the way you've always wanted. Now you can. If you're ready to optimize efficiency and power usage with a platform that can scale to high-performing, multi-core processors available today, the Dell Precision T7500 is an ideal choice. And Independent Software Vendor (ISV) application certification helps ensure that your applications will run efficiently on Dell Precision workstations today and tomorrow.

PEACE OF MIND THROUGH ISV APPLICATION CERTIFICATION

Dell partners with over 35 leading ISVs to test and certify system and application compatibility for 90 applications. This helps ensure optimized performance in demanding workstation environments. In addition, 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™ T7500 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); processors support either 1333 or 1066MHz memory.
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
Memory³	Up to 192GB ¹ with dual processors installed and Red Hat Enterprise Linux. Three-channel memory architecture per processor with up to 1333MHz and up to 1066MHz DDR3 ECC Registered DIMM memory. ³ Up to 12 DIMM slots; 6 slots (2 per channel) on motherboard and additional 6 slots on optional 2nd processor riser card. The 2nd processor has an integrated memory controller, which provides an additional 3 channels of memory bandwidth.
Flash BIOS	BIOS8MB flash memory for system BIOS; SMBIOS 2.5 support
Graphics⁵	Support for 2 PCI Express x16 Gen 2 graphics cards up to 225W and with up to 4GB graphics memory including: ATI FirePro V8700; ATI FirePro V5700; ATI FirePro V3750; NVIDIA® Quadro® FX5800; NVIDIA Quadro FX4800; NVIDIA Quadro FX3800; NVIDIA Quadro FX1800; NVIDIA Quadro FX580; NVIDIA Quadro NVS 295 and NVS 420; 2 to 8 monitor configurations depending on card(s) chosen; Future availability of NVIDIA SLI (Scalable Link Interface) option.
GPU	(Graphics Processing Unit used for High-Performance Computing, no graphics output) The T7500 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 1.5TB4; SATA 3.0Gb/s 7200RPM with 8MB DataBurst Cache up to 320GB4; SATA 3.0Gb/s 10K RPM with 16MB DataBurst Cache up to 300GB4SAS 15K RPM up to 450GB4; Chassis supports up to five internal drives in a SATA boot plus four SATA drive configuration (7.5 TB4 maximum storage capacity); Single RAID 0 data volumes greater than 2TB are available as factory-installed option with the optional PERC6 RAID adapter under Genuine Windows XP64, Genuine Windows Vista 32Bit/64Bit operating systems.
Hard Drive Controller	Integrated LSI 1068e SAS/SATA 3.0Gb/s controller supports host-based RAID 0 or 1. Optional PERC 6/i PCIe SAS/SATA hardware RAID card supports RAID 0, 1, 5, 10
Network Controller	Integrated Broadcom® 5761 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; two IEEE 1394a: one front, one rear; 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, 1 ESATA port on back panel.
Chassis Dimensions	(WxHxD) 8.5" x 22.26" x 22.3", 21.59cm x 56.54cm x 56.6cm without stand, includes feet; 12.8" x 22.26" x 22.3", 32.5cm x 56.54cm x 56.6cm with stand and feet.
Tower	Four internal 3.5" hard disk drive bays; three external 5.25" optical bays, one of which can accommodate a fifth HDD; one external 3.5" flex bay for floppy drive or media card reader Slots: All full length except for slot 1; one PCI-e x16 Gen 2 wired as x4, two PCIe x16 Gen2 slots wired as x8; two PCIe x16 Gen 2 graphics slots; one PCI-X 64bit/100MHz slots with support for 3.3V or universal cards, one PCI 32bit/33MHz 5V slot. 1100 watt 85PLUS Power Factor Correcting (PFC) power supply ⁵
Monitor Compatability	Performance flat-panel displays, Dell UltraSharp™ widescreen and standard flat-panel displays from 17" viewable to 30" viewable; analog flat-panel displays and CRT monitors 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 56Kv.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	Base: 3-Year Limited Hardware Warranty ⁶ with 3 years standard Next Business Day (NBD) On-Site After Remote Diagnosis ⁷ , parts replacement and 3 years NBD On-Site Service After Remote Diagnosis ⁷ Recommended: Dell ProSupport ⁸ 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

1. More than 96GB of memory requires a second processor and Genuine Windows Vista 64-bit or Genuine Windows XP 64-bit and more than 128GB memory requires a second processor and Red Hat Enterprise Linux. A 64-bit operating system is required to support 4GB or more of system memory.

2. Based on available configurations including choice of operating system, memory, processors, graphics cards, hard drive sizes and configurations and optical drive combinations and factory-installed network and sound card options

3. Significant system memory may be used to support graphics, depending on system memory size and other factors. Up to 1GB may not be available with 32-bit operating systems due to system resource requirements.

4. GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

5. The T7500 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.

6. For copy of Ltd Hardware Warranty, write Dell USA LP, Attn: Warranties, One Dell Way, Round Rock, TX 78682 or see www.dell.com/warranty.

7. May be provided by third-party. Technician dispatched, if necessary, following phone-based troubleshooting. Availability varies. See www.dell.com/servicecontracts for details.

8. Availability and terms of Dell Services vary by region. For more information, visit www.dell.com/service-descriptions

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