

# DELL PRECISION™ T7400 WORKSTATION



**IT'S NOT  
JUST DESIGNED  
TO MEET YOUR NEEDS  
- IT'S DESIGNED  
TO EXCEED  
YOUR EXPECTATIONS.**



## **BETTER. FASTER. SMARTER. THE WORKSTATION SUPERHERO**

It's here. 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 T7400 workstation lets 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 T7400 helps you power through the most complex tasks and complete projects even faster and up to 50% quieter than its ground-breaking predecessor<sup>1</sup>

- Next generation, 64-bit quad and dual-core Intel Xeon processors (with up to 1600MHz FSB operating with 800MHz memory) can deliver performance gains over previous generation processors when running multi-threaded applications or multiple applications concurrently.
- Quad-channel memory architecture with up to 800MHz fully buffered DIMMs delivers outstanding performance with memory intensive applications (up to 38GB/s total memory bandwidth)
- Memory scalability up to 128GB<sup>1</sup> (available in Q2 2008 with expected availability of 8GB FB DIMMs. Up to 64GB<sup>1</sup> today with fully buffered ECC DIMMs)
- Dual native PCI-e Gen 2 graphics slots for outstanding graphics performance and cost effective quad monitor support
- Cutting edge 15K SAS (Serial-attached SCSI) hard disk storage delivers up to 30% higher performance than SATA 10K drives<sup>2</sup>
- Innovative chassis designed for physical security, ease of access and exceptional expandability with support for up to five hard disk drives

## **OUTSTANDING GRAPHICS PERFORMANCE**

Dell understands that exceptional graphics performance and high-end visualization capabilities are a requirement for some complex applications. The Dell Precision T7400 offers a great selection of graphics options from entry 2D to top end 3D OpenGL® solutions with up to 1.5GB of graphics memory.<sup>3</sup>

## **NEW HEIGHTS OF SCALABILITY**

With up to 16 DIMM slots to expand memory capacity up to 128GB<sup>1</sup>(future availability) and 64GB<sup>1</sup> today, and a chassis designed for expandability, the Dell Precision T7400 provides a highly scalable architecture that enables you to manage massive datasets 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 will scale to higher performing, multi-core processors available today the Dell Precision T7400 is the ultimate choice. And with Independent Software Vendor (ISV) application certification, you can be sure 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 ensure optimized performance in demanding workstation environments. And, to assure 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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## SYSTEM

<b>Processors</b>	Dual-core Intel® Xeon® series processors with up to 1600MHz front side bus and 6MB shared cache; Quad-core Intel® Xeon® 5400 series processors with up to 1600MHz front side bus and 2 x 6MB shared cache; All processors are 64-bit, support Intel® DBS (Demand Based Switching) and Intel® VT (Intel® Virtualization Technology). 1600MHz front side bus Xeon processors require 800MHz memory
<b>Operating systems</b>	Genuine Windows Vista® Ultimate; Genuine Windows Vista® Business – 32Bit and 64Bit; Genuine Windows® XP Pro SP2; Genuine Windows® XP Professional x64 Edition; Red Hat® Enterprise Linux® WS v.5 (Intel EM64T (Also certified to run Red Hat Enterprise Linux Version 4 64-bit); Intel® 5400 chipset
<b>Chipset</b>	Intel® 5400 chipset
<b>Memory<sup>2</sup></b>	Up to 128GB <sup>1</sup> (expected to be available in Q2 2008 with arrival of 8GB FB DIMMs) Up to 64GB <sup>1</sup> quad-channel 667MHz ECC and 800MHz ECC memory; Up to 16 DIMM slots; Memory riser card chassis is required for memory expansion greater than 32GB (greater than 8 DIMM slots). Memory riser cards are integrated with the system chassis and must be ordered at time of system purchase only. This option will not be available as an after point of sale customer kit or service kit. Dual FX5600 graphics cards are not supported with memory riser card. 800MHz memory requires 1600MHz front side bus Xeon processors
<b>Flash BIOS</b>	BIOS 8Mb flash memory for system BIOS; SMBIOS 2.5 support
<b>Graphics<sup>3</sup></b>	Support for 2 PCI Express x16 Gen 2 graphics cards up to 225 watts and with up to 1.5 GBgraphics memory including: NVIDIA Quadro® FX 5600; NVIDIA Quadro® FX 4600; Quadro® FX 1700; NVIDIA Quadro® FX570; NVIDIA Quadro® NVS 290; All graphics cards support dual monitor configurations; . Dual FX5600 graphics cards are not supported with memory riser card . Will support NVIDIA SLI (Scalable Link Interface) options when they become available via optional dual graphics riser card orderable at the time of system purchase only. Note that optional dual graphics riser card will not be available as an after point of sale customer kit or service kit.
<b>Hard drives</b>	SATA 3.0Gb/s 7200 RPM with 16MB DataBurst Cache up to 1.0TB <sup>4</sup> ; SATA 3.0Gb/s 7200RPM with 8MB DataBurst Cache <sup>4</sup> up to 250GB <sup>4</sup> SATA 3.0Gb/s 10K RPM with 16MB DataBurst Cache up to 160GB <sup>4</sup> SAS 15K RPM up to 300GB <sup>4</sup> ; Chassis supports up to five internal drives in a SATA boot plus four SATA drive configuration (5.0 TB <sup>4</sup> maximum storage capacity)
<b>Hard drive controller</b>	Integrated LSI 1068e SAS/SATA 3.0Gb/s controller supports host based RAID 0, 1 Optional PERC 6/i PCI-e SAS/SATA hardware RAID card supports RAID 0, 1, 5, 10
<b>Network controller</b>	Integrated Broadcom® 5754 Gigabit Ethernet controller. 2nd Gigabit port is available with the optional PCI-e Broadcom Gigabit controller card
<b>Audio controller</b>	Integrated High Definition Audio (Rev 1.0 Specification) with Sigmatel STAC9200 High Definition Audio CODEC and Intel ESB2's integrated AC97/ High Definition digital controller
<b>Standard I/O Ports</b>	Eight USB 2.0: two on front panel, five on back panel, one internal (UDOC) on motherboard; Two IEEE 1394a: one front, one rear; Two 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

## CHASSIS

<b>Dimensions</b>	(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
<b>Tower</b>	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.. One PCI-e x8 slot wired as x4; Two motherboard PCI-e x16 Gen 2 graphics slots; Three PCI-X 64bit/100MHz slots with support for 3.3v or universal cards, One PCI 32bit/33Mhz 5V slot; 980 watt 80%+ Efficiency Power Factor Correcting (PFC) power supply

## EXTERNAL PERIPHERALS

<b>Monitors</b>	Compatible with 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
<b>Keyboard</b>	Dell Enhanced QuietKey USB; Enhanced Multimedia USB; Smart Card keyboard USB
<b>Mouse</b>	Dell USB two-button mouse and Dell USB optical two-button scroll mouse
<b>Optional Speakers</b>	Internal chassis speaker; Dell two and three piece stereo system; Dell sound bar for all flat panel displays

## STORAGE DEVICES

<b>Optional Removable Storage</b>	CD-RW/DVD Combo, DVD-ROM, DVD+/-RW, Blu-ray Disc™, USB Floppy Drive, USB media card reader
<b>Optional Modem</b>	Dell 56K v.92 Data/Fax PCI modem

## SECURITY

<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, Padlock, Internal front panel chassis lock

## ENVIRONMENTAL & REGULATORY

<b>Standards</b>	Green PC, Energy Star, BSMI, C-TICK, CE, FCC, IRAM, NEMKO, NFPA 99, SABBS, SASO, TUV, UL, VCCI, USB 2.0, WEEE
<b>Lead Free</b>	Environmentally conscious design is RoHS Compliant/Lead Free

## SERVICE & SUPPORT

<b>Base</b>	3-Year Limited Warranty <sup>5</sup> with 3 years standard Next Business Day (NBD) onsite <sup>6</sup> parts replacement and 3 years NBD onsite <sup>6</sup> labor (US Only)
<b>Recommended</b>	Recommended 3-Year Same Business Day 4 hour On-site Service <sup>6</sup> - 5 days a week, M-F 10 hours a day (8-6PM) 3-Year Same Business Day 4 hour On-site Service <sup>6</sup> - 7 days a week, 24 hours a day 3 & 4-year Gold Technical Support, expert support via phone, e-mail and online chat - 7 days a week, 24 hours a day



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Dell PCs use genuine Microsoft Windows. [www.microsoft.com/piracy/howtotell](http://www.microsoft.com/piracy/howtotell). 1 The total amount of available memory will be less depending on actual system configuration with 32Bit Windows Operating System. 2 Based on the PCMark 05 hard drive benchmark tests performed by Dell Labs in October 2007 on the Dell Precision 390, comparing the performance of a 73GB 15K SAS drive vs. the 160GB SATA 10K drive. Actual performance will vary based on configuration, usage and manufacturing variability. 3 Significant system memory may be used to support graphics, depending on system memory size and other factors. 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 For a copy of our limited warranties, please write Dell U.S.A. L.P., Attn: Warranties, One Dell Way, Round Rock, TX 78682 or visit [www.dell.com/warranty](http://www.dell.com/warranty). 6 Service may be provided by third-party. Technician dispatched, if necessary, following phone-based troubleshooting. Availability varies. Intel and Xeon are registered trademarks of Intel Corporation. Microsoft, Windows and Windows Vista are trademarks or registered trademarks of Microsoft Corporation in the U.S. and other countries. Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own. © Copyright 2007 Dell Inc.