





# **Dell Precision T7600**

### Our most powerful tower workstation for demanding environments

#### Dell Precision™ Workstations

Precision is the key element that separates greatness from everything else. Dell Precision is your key tool for designing aircraft or automobiles, crunching massive research data sets, creating the next blockbuster movie or wringing the most from any performance intensive application. Our revolutionary workstation-class products offer voracious productivity, Independent Software Vender (ISV) certification<sup>1</sup>, superb reliability, and harmonious manageability to maximize your productivity and dependability.

#### Built to work for you

The Dell Precision T7600 offers the utmost in computational power for advanced engineering / simulation and financial / scientific analysis of massive data sets. Dell workstations are tailored to your needs and offer a wide range of configurations that are ISV certified for a broad range of professional applications, so you can rest easy knowing your professional-grade system can handle your specific workload.

#### Experience outstanding productivity

Power through resource-exhausting and graphics-intensive engineering and analysis workloads with the advanced architecture of the Dell Precision T7600 featuring:

- One or two processors from the Intel® Xeon® processor E5-2600 family
- Up to 512GB2 of quad-channel ECC memory
- Choose from a broad selection of AMD or NVIDIA® graphics
- Experience the power of NVIDIA Maximus® technology, featuring Quadro and Tesla GPUs that simultaneously enable simulation and design on a single system
- Protect your investment with Generation 3 PCIe slots to help prepare for the next generation of graphics
- Intel® Advanced Vector Extensions and Intel® Turbo Boost Technology, offering improved performance for complex applications
- An integrated SATA/SAS controller with RAID options to facilitate data mirroring and data striping

#### Reduce environmental impact

Dell Precision T7600 is EPEAT®-registered³ and offers ENERGY STAR® 5.2 configurations, including 80 PLUS®-registered Gold power supplies. This helps lower your impact on the environment and can also help reduce your operating energy costs.

## Memory you can count on for a lifetime of dependable operation

You keep working, no matter what challenges you face. Dell's exclusive, patented Reliable Memory Technology helps ensure that your workstations will too. The new technology maximizes uptime by eliminating virtually all memory errors so the workstations can get more reliable over time, providing a stable and reliable platform you can trust.

#### Best-in-class chassis design

Completely redesigned from the inside out to incorporate an array of features that make it a versatile and harmonious addition to your infrastructure, including:

- Straightforward, clutter-free interior providing easy access to components
- The only mainstream tower workstation family to offer an externally accessible tool-less power supply for superior serviceability
- Integrated front and rear aluminum handles for easy deployment and moves
- A split chassis design to separate the power supply and hard drives from the motherboard and graphics, allowing for superb air flow and serviceability
- Room for up to four 3.5" or eight 2.5" externally accessible tool-less cold-swap hard drives
- Lockable front bezel and power supply for when security is key



	Dell Precision T7600 Workstation Technical Specifications
Processors	One or two; Intel® Xeon® processor E5-2600 family with up to eight cores and Intel Advanced Vector Extensions, Intel Trusted Execution Technology, Intel AES New instructions, Optimized Intel Turbo Boost and optional Intel vPro™ technology
Operating Systems	Genuine Windows® 7 Ultimate 32-Bit; Genuine Windows® 7 Ultimate 64-Bit Genuine Windows® 7 Professional 32-Bit; Genuine Windows® 7 Professional 64-Bit Red Hat® Enterprise Linux® WS v.6.2 EM64T (Also certified to run Red Hat Enterprise Linux Version 5.8 64-Bit) Ubuntu 11.10 Linux (China only)
Chipset	Intel® C600 series
Memory <sup>2, 4</sup>	Quad channel; up to 512GB1600MHz or 1333MHz ECC RDIMM memory; 16 DIMM slots (8 per processor) (512GB config uses 1333MHz 32GB LRDIMMs)
Graphics <sup>4</sup>	Support for up to three <sup>7</sup> PCI Express® x16 Gen 2 or Gen 3 cards up to 675W (total for graphics (some restrictions apply)):  High End 3D Mid-range 3D Entry 3D Professional 2D (not ISV certified)  NVIDIA® Quadro® 6000 AMD FirePro™ W5000 AMD FirePro V4900 AMD FirePro 2270  NVIDIA Quadro K5000 NVIDIA Quadro K4000 NVIDIA Quadro K600 NVIDIA Quadro NVS™ 510  NVIDIA Quadro 5000 NVIDIA Quadro 4000 NVIDIA Quadro 600 NVIDIA Quadro NVS 310  NVIDIA Quadro 2000 NVIDIA Quadro 2000
GPU	One or two NVIDIA Tesla® K20C GPGPU - Supports Nvidia Maximus™ technology
Storage Options <sup>5</sup>	Up to four 3.5" or eight <sup>6</sup> 2.5" (four in 5.25" bay) internal SATA, SAS or SSD hard drives. Additional add-in controller required for SAS hard drives and to support 6Gb/s operation for drives that are 6.0Gb/s capable.  SATA 7200RPM SATA 10KRPM SAS 10K RPM SAS 15K RPM SSD Up to 3.0TB Up to 500GB Up to 900GB Up to 300GB Up to 512GB
Storage Controller	Integrated: Intel Storage Control Unit (SCU) SATA 3.0Gb/s controller with host based RAID 0, 1, 5, 10  Optional: Dell PERC H310 PCIe host-based RAID card with eight 6Gb/s ports supporting SATA/SAS/SSD drives and RAID 0, 1, 5, 10 configurations Dell PERC H710P PCIe hardware RAID card with 1GB non-volatile cache memory and eight 6Gb/s ports supporting SATA/SAS/SSD drives and RAID 0, 1, 5, 10 configurations
Communications	Integrated: Intel 82579 Gigabit Ethernet controller with Remote Wake UP, PXE and Jumbo frames support  Optional: Intel Ethernet Server Adapter X520-T2 10GbE (PCIe card) Broadcom NetXtreme 10/100/1000 Gigabit Ethernet controller (PCIe card)
Remote Access	Optional PCoIP™ PCIe Remote Access host card
Audio Controller	Integrated Realtek ALC269Q High Definition Audio
I/O Ports	Front Internal Rear  3 - USB 2.0 1 - USB 3.0 1 - Microphone 2 - SATA 6.0Gb/s (reserved for optical drive(s)) 1 - Headphone Rear  5 - USB 2.0 1 - USB 3.0 1 - USB 3.0 2 - PS2 1 - Serial 2 - RJ45 1 - 1394a 400 (optional) 1 - Parallel (optional)
Mid-Tower Chassis	Dimensions (HxWxD): 16.95 x 8.50 x 20.67"; 438 x 216 x 545mm Slots (all full length): Two PCIe x16 Gen 3; two additional PCIe x16 Gen 3 (requires second processor option); one PCIe x16 Gen 3 (requires second processor option); one PCIe x16 Gen 3 wired x4; one PCIe x16 Gen 2 wired x4; One PCI 32bit/33MHz  Bays: One external slimline optical bay; One external 5.25" bay; Four 3.5" or eight 2.5" front accessible hard drive bays (four in external 5.25" bay); Power Supply (externally accessible, toolless, 80 Plus® Gold Certified, 90% efficient): 1300W
Monitor Compatibility	Recommended with high-performance Dell UltraSharp <sup>TM</sup> widescreen displays from 22" to 30" viewable. Also compatible with Dell Professional and E Series widescreen & standard displays from 17" to 24" viewable; analog flat-panel displays also available
Keyboard	Dell Entry keyboard; or optional Dell KB522 Wired Business Multimedia Keyboard (good); Dell NY606 SmartCard USB Keyboard (better); Logitech MK710 Wireless Keyboard and Mouse Combo (best)
Mouse	Dell USB Optical Mouse or optional Dell WM311 3-Button Wireless Mouse (good); Microsoft Corporation U5K-00001 Explorer Touch Mouse – Black (better); Logitech 910-001105 MX Performance Wireless Mouse (best).
Speakers	Optional Speakers: Internal speaker; Dell soundbar; two- and three-piece stereo system
Storage Devices	Slimline options: DVD-ROM; DVD+/-RW; BD-RE  Optional 5.25" device: DVD+/-RW, 19-in-1 media reader
Security	Trusted Platform Module 1.2 (TPM 1.2)8; Optional intrusion switch; Setup/BIOS Password; I/O Interface Security; Kensington® lock slot, Padlock ring, Internal bezel lock; lockable power supply; Optional Dell Data Protection   Encryption solution8
Environmental and Regulatory	Energy Star® 5.2 configurations available including 80 PLUS® registered Gold power supplies; EPEAT® registered³; China CECP; GS Mark. Complete listing of declarations and certifications at Dell's regulatory and compliance homepage at dell.com/regulatory_compliance
Warranty and Service	3-Year Limited Hardware Warranty <sup>9</sup> and 3-year NBD On-Site Service after Remote Diagnosis <sup>10</sup> Optional: Dell ProSupport <sup>11</sup> is designed to rapidly respond to your business's needs, help protect your investment and sensitive data, and provide enhanced proactive support services to help reduce risk and complexity within your IT environment

### Learn more at dell.com/precision

- 1. ISV certification applies to select configurations
  2. A 64-bit operating system is required to support 4GB or more of system memory.
  3. See epeat.net for specific registration rating/status by country
  4. GB means 1 billion bytes and TB equals 1 trillion bytes; significant system memory may be used to support graphics, depending on system memory size and other factors.
  5. GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.
  6. Maximum number of factory installed hard drives is five. User upgrade is required to reach eight hard drives.
  7. Requires second processor option
  8. Available in select regions
  9. 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
  10. Remote Diagnosis is determination by online/phone technician of cause of issue; may involve customer access to inside of system and multiple or extended sessions. If issue is covered by Limited Hardware Warranty and not resolved remotely, technician and/or part will be dispatched, usually within 1 business day following completion of Remote Diagnosis. Availability varies. Other conditions apply.
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