



## Dell Precision Tower 7810

Ultimate performance & scalability



### Experience outstanding productivity

Power through resource-exhausting and graphics-intensive workloads with the advanced design of the dual processor Dell Precision Tower 7810 featuring:

- Single or dual Intel® Xeon® processor E5-2600 v3 have the frequency and cores to process multiple complex tasks quickly.
- With 2<sup>nd</sup> CPU installed, the Tower 7810 delivers 2X the memory bandwidth and CPU cores to quickly process compute intensive multi-threaded applications
- Dell Precision Optimizer 2.0 autotunes application settings for optimized performance
- Intel CAS-W storage option enables performance that is near solid state drive speeds at a significantly reduced cost versus a full SSD storage solution
- Choose from a broad selection of new professional grade AMD FirePro™ or NVIDIA® Quadro® graphics
- Easily handle large data sets with up to 256GB<sup>4,6,10</sup> of quad- channel 2133MHz DDR4 ECC RDIMM memory<sup>6</sup>
- Optional Micron® P420m<sup>10</sup> PCIe SSD drives deliver superb read throughput, exceptional reliability & power efficiency
- Optional 12Gb/s PCIe SATA/SAS controllers facilitate data striping and mirroring for increased performance & data availability

### Reliability you can count on

You keep working, no matter what the challenges . Your workstation should too.

- Exclusive Reliable Memory Technology maximizes uptime by eliminating virtually all memory errors for more stability
- The result of hundreds of rigorous testing, Independent Software Vendor (ISV) certifications ensure your high performance applications run smoothly

### Best-in-class chassis design

- Straightforward, clutter-free interior provides easy access to components for service & modifications with ease
- The only mainstream tower workstation family with externally accessible tool-less power supplies for superior serviceability
- The Tower 7810 is up to 34% quieter than its' predecessor
- Handles for easy deployment and moves
- Easy access to front-mounted USB port & rack mounting via 0U rail shelf kit

### Exceptional Service & Support

- Rest assured that your Dell Precision workstation will be well protected should an issue arise, with a standard 3 year limited hardware warranty<sup>7</sup>

# Dell Precision Tower 7810

Feature	Technical Specification																								
Processor Options	One or two; Intel® Xeon® processor E5-2600 v3 family with up to fourteen <sup>12</sup> cores per processor and Intel Advanced Vector Extensions, Intel Trusted Execution Technology, Intel AES New instructions, Optimized Intel Turbo Boost and optional Intel vPro™ technology																								
Operating System Options	<ul style="list-style-type: none"> <li>Windows® 8.1 Pro (64-Bit)</li> <li>Genuine Windows® 7 Professional (64-Bit)</li> <li>Red Hat® Enterprise Linux® 7.0</li> <li>Ubuntu 12.04 SP1 Linux</li> </ul>																								
Memory Options	Quad channel; Up to 256GB <sup>6,10</sup> 2133 MHz DDR4 ECC RDIMM memory); 8 DIMM slots (4/processor) <sup>6</sup>																								
Chipset	Intel® C612Chipset																								
Graphics <sup>6</sup> Options	Support for two PCI Express® x16 Gen 2 or Gen 3 cards up to 300W total for graphics 825W PSU (restrictions <sup>7</sup> ) <table border="1" data-bbox="381 457 1461 619"> <thead> <tr> <th>High end 3D cards:</th> <th>Mid-range 3D cards:</th> <th>Entry 3D cards:</th> <th>Professional 2D cards:</th> </tr> </thead> <tbody> <tr> <td>NVIDIA® Quadro® K6000</td> <td>AMD FirePro™ W7100<sup>12</sup></td> <td>AMD FirePro 4100</td> <td>NVIDIA Quadro NVS 510</td> </tr> <tr> <td>NVIDIA® Quadro® K5200</td> <td>AMD FirePro™ W5100</td> <td>AMD FirePro 2100</td> <td>(not ISV certified)</td> </tr> <tr> <td></td> <td>NVIDIA Quadro K4200</td> <td>NVIDIA Quadro K620</td> <td>NVIDIA Quadro NVS™ 510</td> </tr> <tr> <td></td> <td>NVIDIA Quadro K2200</td> <td>NVIDIA Quadro K420<sup>12</sup></td> <td>NVIDIA Quadro NVS 315</td> </tr> <tr> <td></td> <td></td> <td></td> <td>NVIDIA Quadro NVS 310</td> </tr> </tbody> </table>	High end 3D cards:	Mid-range 3D cards:	Entry 3D cards:	Professional 2D cards:	NVIDIA® Quadro® K6000	AMD FirePro™ W7100 <sup>12</sup>	AMD FirePro 4100	NVIDIA Quadro NVS 510	NVIDIA® Quadro® K5200	AMD FirePro™ W5100	AMD FirePro 2100	(not ISV certified)		NVIDIA Quadro K4200	NVIDIA Quadro K620	NVIDIA Quadro NVS™ 510		NVIDIA Quadro K2200	NVIDIA Quadro K420 <sup>12</sup>	NVIDIA Quadro NVS 315				NVIDIA Quadro NVS 310
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GPU GPGPU	<ul style="list-style-type: none"> <li>NVIDIA Tesla® K20C Computing Processor (GPGPU)</li> </ul>																								
MCC Compute	<ul style="list-style-type: none"> <li>Intel 3120A Coprocessor (available via S &amp; P in select regions)</li> </ul>																								
Storage Options	Up to three 3.5" or four 2.5" internal SATA, SAS or SSD drives. Additional add-in controller required for SAS HDD <table border="1" data-bbox="381 703 1445 766"> <thead> <tr> <th>SATA 7200RPM</th> <th>SAS 10K RPM</th> <th>SAS 15k RPM</th> <th>SATA SSD</th> <th>SAS SSD</th> <th>PCIe SSD Micron P420m<sup>10</sup></th> </tr> </thead> <tbody> <tr> <td>Up to 4.0TB</td> <td>up to 1.2TB</td> <td>Up to 600GB</td> <td>Up to 512GB</td> <td>400GB</td> <td>700GB/1.4TB</td> </tr> </tbody> </table>	SATA 7200RPM	SAS 10K RPM	SAS 15k RPM	SATA SSD	SAS SSD	PCIe SSD Micron P420m <sup>10</sup>	Up to 4.0TB	up to 1.2TB	Up to 600GB	Up to 512GB	400GB	700GB/1.4TB												
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Storage Controller	Integrated: <ul style="list-style-type: none"> <li>Intel AHCI 6Gb/s SATA controller with six ports at 6Gb/s, two reserved for optical drives, Intel® RSTe supports software RAID 0,1,5,10</li> </ul> Optional <ul style="list-style-type: none"> <li>MegaRAID® SAS 9341-8i 12Gb/s SATA/SAS PCIe controller supports software RAID 0,1,5,10</li> <li>MegaRAID® SAS 9361-8i 12Gb/s SATA/SAS PCIe controller (1 GB cache) supports hardware RAID 0,1,5,10</li> </ul>																								
Add-in cards	<ul style="list-style-type: none"> <li>Thunderbolt 2 PCIe card w DisplayPort loop back cable</li> <li>Serial port PCIe card, 1 port; 1394a/b PCIe card, 3 ports - 1x 1394a, 2x 1394b</li> </ul>																								
Communications	Internal: Intel I217 Gigabit Ethernet controllers with Remote Wake UP, PXE and Jumbo frames support Intel Optional Intel I210 10/100/1000 Gigabit Ethernet controller (PCIe card), 1 X RJ45; Intel X540-T2 10GbE Ethernet Server Adapter (PCIe x8 card), 2 X RJ45																								
1:1 Remote Access Options	<ul style="list-style-type: none"> <li>Tera2 dual &amp; quad display PCoIP™ PCIe Remote access host cards for Wyse P25/P45 zero client &amp; soft clients</li> <li>Teradici PCoIP® Workstation Access Software</li> </ul>																								
Ports	Front : 3 USB 2.0, 1 USB 3.0, 1 Microphone, 1 Headphone, 2 RJ45 Internal: 3 USB 2.0, 4 SATA/SAS 6Gb/s, 2 SATA 6Gb/s (for optical drive(s)), 1 Serial Rear: 3 USB 2.0, 3 USB 3.0, 2 PS2, 1 serial, 1 RJ45 (Intel Gigabit Ethernet)																								
Dimensions	Mid tower chassis dimensions (HxWxD): 16.95 x 8.50 x 20.67"; 438 x 216 x 545mm																								
Bays, chassis, ports	Bays: One external slimline optical bay, two internal 3.5" hard drive bays, one external 5.25" bay; externally accessible, tool-less power supply, 80 Plus gold certified, 90% efficient; 825W or 685W 5 full-length slots, 1 half length, two PCIe x16 Gen 3; 1 PCIe x16 Gen 3 wired x8 (half-length); 1 PCIe x4 Gen 2; 1 PCIe x1 gen2; one PCI 32 bit/33MHz																								
Monitors	Dell UltraSharp Monitors – Award-winning high-performance monitors with PremierColor (on select models) and ultra-wide viewing, from 21.5" - 31.5". Dell Monitors (P models) available from 19" – 28".																								
Optical Drive	Slim-line tray load options: DVD-ROM; DVD+/-RW Optional 5.25" device: DVD+/-RW; 19-in-1 media reader																								
Security Options	Trusted Platform Module (TPM 1.2); Intrusion switch; Setup/BIOS Password; I/O Interface Security; Kensington® lock slot, Padlock ring, Internal bezel lock; lockable power supply; Dell Data Protection (DDP): DDP   Security Tools for authentication; DDP   Protected Workspace for malware; DDP   Encryption for data protection																								
Regulatory & Environmental	Energy Star® configurations available including 80 PLUS® registered Gold power supplies; EPEAT® registered (see epeat.net for specific registration rating/status by country); China CECP; GS Mark. For a complete listing of declarations & certifications, see Dell's regulatory & compliance homepage at <a href="http://dell.com/regulatory_compliance">dell.com/regulatory_compliance</a>																								
Warranty & Support Services	Limited Hardware Warranty <sup>10</sup> ; Standard 3-year On Site Service after Remote Diagnosis <sup>7</sup> . Optional 3 year Dell ProSupport premium support from expert technicians & 24x7 global availability <sup>7</sup> . 4 & 5 year support options <sup>3</sup>																								
Configuration Svcs. <sup>3</sup>	Factory Image load. BIOS Customization. Hardware Customization, Asset Tagging and Reporting																								

OEM ready models available: Learn more about custom-branded solutions at [Dell.com/OEM](http://Dell.com/OEM). 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](http://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. Requires second processor option 7. 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](http://www.dell.com/warranty). 8. 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. 9. Availability and terms of Dell Services vary by region. For more information, visit [www.dell.com/service-descriptions](http://www.dell.com/service-descriptions). 10. Future availability Dell PCs use Genuine Microsoft Windows. Intel, the Intel logo, Xeon and Xeon Inside are trademarks or registered trademarks of Intel Corporation in the U.S. and other countries. Microsoft, Windows and Windows Vista are trademarks or registered trademarks of Microsoft Corporation in the U.S. and other countries. Dell is a trademark of Dell Inc. ©2013 Dell Inc. All rights reserved.



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