

# DELL POWEREDGE PERFORMANCE TOWER SERVERS



## PRODUCTS

|                          | POWEREDGE™ 840   | POWEREDGE™ 1900   | POWEREDGE™ 2900  | POWEREDGE™ 6800   |
|--------------------------|--|---|--|---|
|                          | Basic Server   | Entry-Level Server  | Mainstream Server  | High-End Server   |
|                          | Addressing the needs of small and medium-sized businesses, remote offices, and retail POS environments requiring full server functionality at a low cost <ul style="list-style-type: none"> <li>• File/print server</li> <li>• Internet/intranet</li> <li>• Shared e-mail</li> <li>• Remote/branch office</li> <li>• Retail/POS</li> </ul> | Delivers a great balance of 2P performance with entry-level features, expandability, and affordability <ul style="list-style-type: none"> <li>• File/print server</li> <li>• Internet/intranet</li> <li>• Groupware/messaging</li> <li>• LAN infrastructure</li> <li>• Remote/branch office</li> <li>• Database applications</li> </ul> | Delivering high performance with expandability, availability, and manageability that businesses can depend on <ul style="list-style-type: none"> <li>• File/print server</li> <li>• Internet/intranet</li> <li>• Groupware/messaging</li> <li>• LAN infrastructure</li> <li>• Remote/branch office</li> <li>• Database applications</li> </ul>   | Rackable 6U tower server that sets the new standard for delivering value in high performance database solutions <ul style="list-style-type: none"> <li>• Back-end database and traditional OLTP</li> <li>• UNIX Migration</li> <li>• Server consolidation</li> </ul>        |
| <b>FEATURES</b>          |  |   |  |   |
| Form factor              | Tower only   | Tower only  | Tower or 5U rack-mount   | Tower or 6U rack-mount  |
| Processor(s)             | Single Dual-Core Intel® Xeon® 3000 sequence processor at up to 2.66GHz;<br>Single Intel Pentium® D at 2.8GHz;<br>Single Intel Celeron® D processor at 2.8GHz   | Up to two Quad-Core Intel Xeon 5300 sequence processors at up to 2.66GHz;<br>Up to two Dual-Core Intel Xeon 5100 sequence processors at up to 3.0GHz;<br>Up to two Dual-Core Intel Xeon 5000 sequence processors at up to 3.0GHz  | Up to two Quad-Core Intel Xeon 5300 sequence processors at up to 2.66GHz;<br>Up to two Dual-Core Intel Xeon 5100 sequence processors at up to 3.0GHz;<br>Up to two Dual-Core Intel Xeon 5000 sequence processors at up to 3.0GHz   | Up to four Dual-Core 64-bit Intel Xeon 7100 sequence processors at up to 3.4MHz   |
| Front side bus           | Intel Xeon 3000: Dual Independent 1066MHz;<br>Intel Pentium D: 800MHz;<br>Intel Celeron D: 533MHz  | Intel Xeon 5300 Sequence: Dual Independent 1066MHz or 1333MHz;<br>Intel Xeon 5100 Sequence: Dual Independent 1066MHz or 1333MHz;<br>Intel Xeon 5000 Sequence: Dual Independent 667MHz;  | Intel Xeon 5300 sequence: Dual Independent 1066MHz or 1333MHz;<br>Intel Xeon 5100 sequence: Dual Independent 1066MHz or 1333MHz;<br>Intel Xeon 5000 sequence: Dual Independent 667MHz  | Intel Xeon 7100: Dual Independent 800 MHz   |
| Cache                    | Intel Xeon 3000: Up to 4MB;<br>Intel Pentium D: 2x2MB;<br>Intel Celeron D: 256KB   | Intel Xeon 5300 Sequence: 2x4MB;<br>Intel Xeon 5100 Sequence: 4MB;<br>Intel Xeon 5000 Sequence: 2x2MB   | Intel Xeon 5300 Sequence: 2x4MB;<br>Intel Xeon 5100 Sequence: 4MB;<br>Intel Xeon 5000 Sequence: 2x2MB  | Intel Xeon 7100: Up to 16MB   |
| Chipset                  | Intel 3000   | Intel 5000P   | Intel 5000X  | Intel 8501 (800 MHz)  |
| Memory                   | Up to 8GB (4 DIMM slots): 512MB/1GB/2GB ECC DDR-2 533/667MHz SDRAM   | Up to 16GB (8 FBD DIMM slots): 256MB/512MB/1GB/2GB Fully Buffered DIMMs (FBD) in matched pairs, 533MHz or 667MHz  | Up to 48GB (12 FBD DIMM slots): 256MB/512MB/1GB/2GB/4GB Fully Buffered DIMMs (FBD) in matched pairs, 533MHz or 667MHz  | Up to 64GB (16 DIMM slots): 256MB/512MB/1GB/2GB/4GB ECC DDR-2 SDRAM, 533MHz or 667MHz   |
| I/O slots                | Five total: two PCI Express™ slots (1 x 8 lane and 1 x 1 lane); two PCI-X™ slots (64-bit/133MHz, 3.3v); one PCI slot (32-bit/33MHz, 5v)  | Six total: four PCI Express slots (1 x 8 and 3 x 4 slots); two PCI-X slots (64-bit/133MHz)  | Six total: four PCI Express slots (3 x 4 lane and 1 x 8 lane); two PCI-X slots (64-bit/133MHz)   | Seven total: four PCI Express slots and three PCI-X slots   |
| Drive controller         | Four channel embedded SATA controller; optional SAS  | Integrated two-channel SAS/SATA controller; optional 4-port SAS/SATA controller; optional 39320A SCSI controller (for tape)   | 4 port SAS 5/i integrated SAS controller (no RAID)   | Embedded dual channel Ultra320 SCSI   |
| RAID controller          | PERC 5/i (w/ battery); PERC 5/e; SAS 5/iR  | PERC 5/i; PERC 5/e; SAS 5/iR  | Optional PERC 5/i integrated SAS/SATA daughtercard controller with 256MB cache; PERC 4e/DC; PERC 5/e adapter   | PERC 5/e; PERC 4/DC; PERC 4e/DC; PERC 4e/Di   |
| Hard drives <sup>1</sup> | 3.5" SAS (10K RPM): 73GB, 146GB, 300GB;<br>3.5" SAS (15K RPM): 36GB, 73GB, 146GB;<br>3.5" SATA (7.2K RPM): 80GB, 160GB, 250GB, 500GB   | 3.5" SAS (10K RPM): 73GB, 146GB, 300GB;<br>3.5" SATA (7.2K RPM): 80GB, 160GB, 250GB, 500GB, 750GB   | 3.5" SAS (10K RPM): 73GB, 146GB, 300GB;<br>3.5" SAS (15K RPM): 36GB, 73GB, 146GB;<br>3.5" SATA (7.2K RPM): 80GB, 160GB, 250GB, 500MB SATAu   | 3.5" Ultra320 SCSI (10K RPM): 73GB, 146GB, 300GB;<br>3.5" Ultra320 SCSI (15K RPM): 36GB, 73GB, 146GB  |
| Maximum Internal Storage | Up to 1.2TB: four 300GB cabled or hot-plug SAS (10K RPM);<br>Up to 584GB: four 146GB cabled or hot-plug SAS (15K RPM);<br>Up to 2TB: four 500GB cabled or hot-plug SATA (7.2K RPM)   | Up to 4.5TB: six 750GB cabled 3.5" SATA (7.2K RPM)  | Up to 7.5TB: ten 750GB SATA (7.2K RPM)   | Up to 3.6TB: twelve hot-plug 300GB SCSI   |
| External storage         | SAS storage systems (MD1000)   | 39320A SCSI Controller (for tape), PERC 5e, or Dell/EMC fibre channel HBA's   | SAS, SCSI and fibre channel storage systems  | SAS, SCSI and fibre channel storage systems   |
| Network interface card   | Single-port embedded Broadcom® Gigabit <sup>®</sup> NIC  | Single-port embedded Broadcom Gigabit <sup>®</sup> NIC  | Dual embedded Broadcom NetXtreme II™ 5708 Gigabit <sup>®</sup> Ethernet NIC with fail-over and load balancing; TOE (TCP/IP Offload Engine) supported on Microsoft Windows Server 2003, SP1 or higher with Scalable Networking Pack   | Dual embedded Broadcom Gigabit <sup>®</sup> NICs  |
| Availability             | Highly serviceable tool-less chassis; ECC memory; hot-plug SAS and SATA hard drives; optional hardware SAS or SATA RAID OpenManage Systems Management Support; Optional Dell Remote Access Controller (DRAC 4/p) for remote deployments  | ECC memory; Single Device Data Correction (SDCC); optional PERC 5i w/ battery backed 256MB DDR cache; tool-less chassis; cluster support; Full OpenManage Systems Management Suite Support; validated for Dell/EMC SANs; and optional Dell Remote Access Controller (DRAC 5) for remote deployments                                     | ECC FBD memory; Dual embedded Broadcom NetXtreme II™ 5708 Gigabit Ethernet NIC with fail-over and load balancing; SDCC, Spare Bank, hot-plug SAS/SATA hard drives; hot-plug, optional redundant power; redundant cooling; tool-less chassis; optional PERC5/i integrated daughtercard with battery-backed cache; Active ID; LCD panel; fibre channel; SCSI cluster support; validated for Dell/EMC SAN | ECC memory with SDCC; Memory Mirroring and Memory RAID; hot-plug SCSI hard drives; hot-plug redundant power <sup>2</sup> ; hot-plug redundant cooling; tool-less chassis; high availability fibre channel and SCSI cluster support; optional ROMB with battery-backed cache |



Dell™ PowerEdge 2900

**Dell PowerEdge Servers come with a limited warranty.<sup>3</sup> Dell's Basic Business Hour Service includes business-hour<sup>4</sup> phone support for hardware failures and Next Business Day (NBD) on-site<sup>5</sup> service (after phone-based troubleshooting)**

Dell cannot be responsible for errors in typography or photography. <sup>1</sup>For hard drives, GB means 1 billion bytes; actual capacity varies with preloaded material and operating environment and will be less. <sup>2</sup>This term does not connote an actual operating speed of 1GB/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required. <sup>3</sup>For a complete copy of our guarantees or limited warranties, please visit <http://www.dell.com/warranty> or write to Dell USA L.P., One Dell Way, Round Rock, Texas 78682, Attn: Warranties. <sup>4</sup>8 a.m. to 6 p.m. Monday through Friday local customer time, excluding regularly observed holidays. <sup>5</sup>Service may be provided by third-party technician will be dispatched if necessary following phone-based troubleshooting. Subject to parts availability, geographical restrictions and terms of service contract. Service timing dependent upon time of day call placed to Dell, U.S. only. Dell, the Dell logo and PowerEdge are trademarks of Dell Inc. Intel, Pentium and Celeron are registered trademarks and Xeon is a trademark of Intel Corporation. PCI-X is a registered trademark and PCI Express is a trademark of PCI-SIG. Broadcom is a registered trademark of Broadcom Corporation. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. © Copyright 2006 Dell Inc. All rights reserved. Dell disclaims proprietary interest in the marks and names of others. November 2006 Kolar.

