

# DELL POWEREDGE ULTRA RACK-DENSE SERVERS<sup>1</sup>



PRODUCTS		POWEREDGE™ 860	POWEREDGE™ SC1435
		Basic Server	High Performance Compute Node
		<p>Cost-effective rack server performance, manageability, and serviceability in a 1U form factor</p> <ul style="list-style-type: none"> <li>• Edge-of-network</li> <li>• Infrastructure server</li> <li>• File/print server</li> <li>• Remote server</li> </ul>	<p>Rack-dense 1U server tailored for the unique availability and manageability requirements of distributed cluster applications</p> <ul style="list-style-type: none"> <li>• Web farms</li> <li>• High Performance Computing Clusters (HPCC)</li> </ul>
FEATURES			
Form factor		1U rack-mount	1U rack-mount
Processor(s)		Single Dual-Core Intel® Xeon® 3000 sequence processor at up to 2.66GHz; Single Intel Pentium® D at 2.8GHz; Single Intel Celeron® D processor at 2.8GHz	Up to two dual-core AMD Opteron™ 2200 Series Processor(s) at up to 2.8GHz
Front side bus or HyperTransport		Intel Xeon 3000: 1066MHz; Intel Pentium D: 800MHz; Intel Celeron D: 533MHz	1GHz HyperTransport™ Technology
Cache		Intel Xeon 3000: Up to 4MB; Intel Pentium D: 2x2MB; Intel Celeron D: 256KB	2x1MB
Chipset		Intel 3000	Broadcom HT-2100 and HT-1000 Server I/O Controllers
Memory		Up to 8GB (4 DIMM slots): 512MB/1GB/2GB ECC DDR-2 533/667MHz SDRAM	Up to 32GB (8 DIMM slots): 512MB/1GB/2GB/4GB ECC DDR-2 667MHz SDRAM
I/O slots		Choice of two risers: One PCI-E x 8 and one PCI-E x 4 (with x 8 connector); One PCI-E x 8 and one PCI-X® 64/133 slot	One PCI Express x8 or One PCI-X (64bit/133MHz)
Drive controller		Embedded SATA II, optional SAS	Embedded SATA II controller, optional SAS 5/iR
RAID controller		SAS 5/iR; PERC 5/e	SAS 5/iR
Hard drives <sup>2</sup>		3.5" SAS (10K RPM): 73GB, 146GB, 300GB; 3.5" SAS (15K RPM): 36GB, 73GB, 146GB; 3.5" SATA (7.2K RPM): 80GB, 160GB, 250GB, 500GB	3.5" SAS (10K RPM): 73GB, 146GB, 300GB; 3.5" SAS (15K RPM): 36GB, 73GB; 3.5" SATA II (7.2K RPM): 80GB, 160GB, 250GB, 500GB
Maximum Internal storage		Up to 600GB: two 300GB cabled SAS (10K RPM); Up to 300GB: two 146GB cabled SAS (15K RPM); Up to 1TB: two 500GB cabled SATA (7.2K RPM)	Up to 600GB: two 300GB cabled SAS (10K RPM); Up to 1TB: two 500GB cabled SATA (7.2K RPM)
External storage		SAS storage systems (MD1000)	None
Network interface card		Dual embedded Broadcom® Gigabit® NICs with load balancing and failover support	Dual embedded Broadcom Gigabit® NICs with load balancing and fail-over support
Availability		ECC memory and hardware RAID option; dual embedded NICs with failover and load balancing support	ECC, SDDC DDR-2 memory; RAID controller option; Quad Pack LED



Dell™ PowerEdge 860

<sup>1</sup> 1U-blade



# DELL POWEREDGE ULTRA RACK-DENSE SERVERS



## PRODUCTS

## FEATURES

Form factor

Processor(s)

Front side bus

Cache

Chipset

Memory

I/O slots

Drive controller

RAID controller

Hard drives<sup>2</sup>

Maximum Internal Storage

External storage

Network interface card

Availability

	POWEREDGE™ 1955	POWEREDGE™ 1950
	High Performance/High Density	High Performance/Availability
	A blade server with complete server class features combined with a density and total cost of ownership advantage over traditional 1U rack servers. <ul style="list-style-type: none"> <li>• Web, Citrix® and/or terminal services farms</li> <li>• High Performance Computing Clusters (HPCC)</li> <li>• Messaging</li> <li>• Server consolidation: VMware® ESX Server™</li> </ul>	General-purpose, rack-dense 1U server providing excellent performance and availability <ul style="list-style-type: none"> <li>• High Performance Computing Cluster (HPCC)</li> <li>• Edge-of-network</li> <li>• Infrastructure server</li> <li>• File/print server</li> <li>• SAN compute node</li> </ul>
Form factor	7U rack-mount enclosure holds up to ten blade servers	1U rack-mount
Processor(s)	Up to two Quad-Core Intel Xeon 5300 sequence processors at up to 2.66GHz; Up to two Dual-Core Intel Xeon 5100 sequence processors at up to 3.0GHz; Up to two Dual-Core Intel Low Volt Xeon 5148 processor at 2.33GHz; 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; Up to two Dual-Core Intel Xeon 5100 sequence processors at up to 3.0GHz; Up to two Dual-Core Intel Low Volt Xeon 5148 processor at 2.33GHz; Up to two Dual-Core Intel Xeon 5000 sequence processors at up to 3.0GHz
Front side bus	Intel Xeon 5300 Sequence: Dual Independent 1066MHz or 1333MHz; Intel Xeon 5100 Sequence: Dual Independent 1066MHz or 1333MHz; Intel Xeon 5000 Sequence: Dual Independent 667MHz	Intel Xeon 5300 Sequence: Dual Independent 1066MHz or 1333MHz; Intel Xeon 5100 Sequence: Dual Independent 1066MHz or 1333MHz; Intel Xeon 5000 Sequence: Dual Independent 667MHz
Cache	Intel Xeon 5300 Sequence: 2x4MB; Intel Xeon 5100 Sequence: 4MB; Intel Xeon 5000 Sequence: 2x2MB	Intel Xeon 5300 Sequence: 2x4MB; Intel Xeon 5100 Sequence: 4MB; Intel Xeon 5000 Sequence: 2x2MB
Chipset	Intel 5000P	Intel 5000X
Memory	Up to 32GB (8 FBD DIMM slots) 256MB/512MB/1GB/2GB/4GB Fully Buffered DIMMs (FBD) in matched pairs, 533MHz or 667MHz	Up to 32GB (8 FBD DIMM slots) 256MB/512MB/1GB/2GB/4GB Fully Buffered DIMMs (FBD) in matched pairs, 533MHz or 667MHz
I/O slots	Optional daughtercard and I/O modules for Fibre Channel SAN, Ethernet and InfiniBand	Two PCI Express™ x 8 lane slots or two PCI-X 64-bit/133MHz slots
Drive controller	SAS 5/iR (H/W based) with RAID 1 support	4 port SAS 5/i integrated SAS controller (no RAID)
RAID controller	SAS 5/iR (H/W based) with RAID 1 support	Optional PERC 5/i integrated SAS/SATA daughtercard controller with 256MB cache, PERC4e/DC, PERC 5/e adapter
Hard drives <sup>2</sup>	2.5" SAS (10K RPM): 36GB, 73GB; 2.5" SATA (5.4K RPM): 40GB	2.5" SAS (10K RPM): 36GB, 73GB; 3.5" SAS (10K RPM): 73GB, 146GB, 300GB; 3.5" SAS (15K RPM): 36GB, 73GB, 146GB; 3.5" SATA (7.2K RPM): 80GB, 160GB, 250GB, 500GB, 750GB SATAu
Maximum Internal Storage	Up to 146GB: two 73GB hot-plug 2.5" SAS (10K RPM); Up to 80GB: two 40GB hot-plug 3.5" SATA (5.4K RPM)	Up to 600GB: two 300GB hot-plug 3.5" SAS (10K RPM); Up to 1.5TB: two 750GB hot-plug 3.5" SAS (7.2K RPM)
External storage	Fibre channel storage systems	SAS, SCSI and fibre channel storage systems
Network interface card	Dual port embedded Broadcom® NetXtreme II® 5708 Gigabit® Ethernet NIC with load balancing and failover; TOE (TCP/IP Offload Engine) supported on Microsoft Windows Server 2003, SP1 or higher with Scalable Networking Pack	Dual embedded Broadcom NetXtreme II® 5708 Gigabit® 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
Availability	ECC FBD memory and SDDC (Single Device Data Correction) support; optional hot-plug redundant power, cooling and I/O modules; dual embedded NICs with failover and load balancing support; optional redundant Ethernet switches and other I/O technologies; validated for Dell/EMC SAN, Optional management redundancy with DRAC/MC	ECC FBD memory, Single Device Data Correction (SDDC), Spare Bank; hot-plug hard drives; optional hot-plug redundant power supplies; dual embedded NICs with failover and load balancing support; optional PERC5/i integrated daughtercard controller with battery-backed cache; redundant cooling; tool-less chassis; optional RAID controllers; fibre and SCSI cluster support; validated for Dell/EMC SAN



Dell™ PowerEdge 1950

**Dell PowerEdge Servers come with a limited warranty.\* Dell's Basic Business Hour Service includes business-hour<sup>2</sup> phone support for hardware failures and Next Business Day (NBD) on-site<sup>3</sup> service (after phone-based troubleshooting).**

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