

Dell PowerEdge 4600 Server



Incorporating the latest in high performance technologies, an enhanced set of availability features* and a high level of scalability, the Dell™ PowerEdge™ 4600 introduces a new level of functionality to the dual-processor mid-range server market.

Performance

The Dell PowerEdge 4600 offers new, cutting-edge technologies providing exceptional levels of performance for memory-intensive, high bandwidth applications including network infrastructure, collaborative data backup and recovery, research, security and streaming media. With up to two Intel® Xeon™ processors, it delivers core speeds as fast as 3.0GHz with a 400MHz front side bus.

Furthermore, the PowerEdge 4600 is the first Dell platform to utilize the ServerWorks® Grand Champion High End (GC-HE) chipset that raises the bar for high speed memory access and performance. The PowerEdge 4600 implementation of the chipset provides an incredible 3.2GB/s of memory bandwidth and up to 3.4GB/s of throughput on a five-bus-segment architecture. The chipset also accommodates up to twelve registered DDR (double data rate) DIMMs with capacities up to 2GB and four-way interleaved memory architecture for a performance advantage particularly important in high-end graphic applications environments.

The PowerEdge 4600 also incorporates PCI eXtended (PCI-X) technology, the next generation local I/O standard that provides high bandwidth and dedicated hardware interfaces between internal chips and peripheral cards that can result in an overall reduction of system latency time.

High Availability and Data Protection

Designed to meet the needs of customers who require high levels of availability and data protection, the PowerEdge 4600 offers the latest in high availability features. A key differentiator of the PowerEdge 4600 is the embedded PERC3/Di RAID controller, a high-performance Ultra3 (160MB/s) SCSI RAID solution that provides dual RAID channels and supports write-back caching with a battery backup to protect the cache memory's content in the event of a power outage. It also features redundant cooling and redundant power supply options in addition to hot-plug hard drives and hot-plug PCI-X slots for optimum uptime.

The GC-HE chipset contributes several key high availability features to the PowerEdge 4600. Spare Bank, Memory Mirroring and Error Correcting Code (ECC) SDRAM memory with support for Chipkill™ technology enable the servers to withstand errors that could crash a system that does not support this technology.

Scalability, Manageability and Serviceability

The PowerEdge 4600 provides both enhanced scalability for internal storage, memory and network bandwidth as well as enhanced flexibility to configure and manage data.* As a result, customers have an easy-to-use system that can grow readily with their needs. With 10 hard drives, the server delivers up to 1.46TB of internal storage capacity, and the PowerEdge 4600's seven PCI slots offer room for additional functionality and expansion.

The PowerEdge 4600 offers Dell OpenManage™ with a streamlined, wizard-driven installation for simple management from the very beginning. Built-in remote management includes full in-service or out-of-service access to the system, and the completely redesigned 6U chassis is built for data centers, remote offices and networked environments.

* Versus its predecessor, the PowerEdge 4400.



PowerEdge 4600

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Technology is a significant investment, and it pays to have a partner who can help you minimize costly downtime. Through our Enterprise Support Services offerings, Dell provides tiered support service packages with the flexibility to customize the offering to meet your specific needs across a wide range of computing environments. With proactive and reactive support options which include hardware and software support with varied response levels, account management, and remote resolution, Dell provides support solutions that meet your needs, cost effectively.

Services vary by region. For more information on the available services in your area, please visit www.dell.com.

FEATURES DESCRIPTION

Processor	Up to two Intel® Xeon™ processors at 2.4GHz, 2.6GHz, 2.8GHz to 3.0GHz
Front side bus	400MHz
Chipset	ServerWorks® Grand Champion HE
PCI	Seven slots: 6 x 64-bit/100MHz hot-plug PCI-X (800MB/s peak bandwidth), 1 x 32-bit/33MHz (5V)
Internal storage	Eight one-inch hot-plug drives: Ultra3 (U160) SCSI 10,000 rpm at 36GB, 73GB or 146GB or 15,000 rpm at 18GB, 36GB or 73GB Optional 2 x 1" hot-plug drives (10,000 or 15,000 rpm, Ultra3 (U160) SCSI) in peripheral bay Optional 2 x 4 split backplane
Memory	Up to 24GB DDR ECC SDRAM: 12 DIMM sockets; four-way interleaving Chipkill™ and Spare Bank support for enhanced data protection in the event of a DRAM chip failure
Embedded SCSI	Dual channel Ultra3 (U160) Single channel Ultra2 for internal tape backup units
RAID	Dell PERC 4/DC or PERC3/Di (embedded RAID with 128MB of battery-backed cache) Optional: PERC3/DC (dual-channel PCI RAID controller) PERC3/QC (quad-channel PCI RAID controller)
LAN on motherboard (LOM)	10/100 Ethernet controller; 10/100/1000 Ethernet controller (two controllers support load balancing, failover, and PXE support)
Availability and serviceability	Spare Bank and Memory Mirroring; configurable ECC memory with ChipKill support; hot-plug drives; hot-plug and redundant fans; hot-plug PCI-X slots; optional hot-plug and redundant power supplies Easy-access chassis
System management	Embedded Server Management 3; Active ID (light on front of chassis to indicate errors); LCD panel status for monitoring system temperature, fans, voltage, and critical components functionality Optional DRAC III controller for out-of-band remote system management; LED indicator light on each hot-pluggable component
Optional Software	Microsoft® Windows® Server 2003 Standard Edition; Microsoft Windows 2000 Advanced Server; Microsoft Windows 2000 Server; Microsoft Windows NT Server 4.0; Microsoft Windows NT Server 4.0 Enterprise Edition; Novell® Netware® 5.1, 6.0; Red Hat® Linux 8.0, 9.0; Red Hat Linux 7.2; Red Hat Linux Advanced Server 2.1
Form factor	Tower or 6U rack

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