

DELL POWEREDGE 6850 SERVER



The Dell™ PowerEdge™ 6850 delivers outstanding price/performance/watt with the next generation of dual-core processors that can help you realize performance improvements of up to 143%¹. This server offers high availability and performance scalability as part of Dell's comprehensive data center solutions for the Scalable Enterprise.

Performance

Designed to give you the latest high performance technologies, management tools and storage features, the scalable, quad-socket Dell PowerEdge 6850 server is a part of Dell's comprehensive solution for databases and business-critical applications such as Microsoft® SQL Server, Oracle®, PeopleSoft® and SAP®. Powered by the latest dual-core 64-bit Intel® Xeon™ processors 7100 sequence, a 800MHz Front Side Bus, up to 64GB DDR-2 Memory, SAS hard drives and PCI Express™, this server provides exceptional performance in a 4U rack dense form factor.

Availability

The PowerEdge 6850 server features advanced memory technology for enterprise-class availability. Memory features such as Memory RAID, mirroring and hot-plug DDR-2 SDRAM with Error Correcting Code (ECC) memory plus SDDC keep systems performing without interruption by withstanding errors that could normally bring a system without these high availability features down. In addition, the PowerEdge 6850 provides hot-plug, redundant power supplies, memory, PCI Express slots, hard drives and cooling fans so that you can replace components without having to make the server unavailable to its users.

Expandability

The Dell PowerEdge 6850 server is designed to meet the growing needs of demanding database and enterprise application environments with features such as an optional integrated HBA for factory installed and tested Fibre Channel SAN connectivity. It features four hot-plug PCI Express slots and three PCI-X slots that deliver further expandability for redundant connections to the network and storage. In addition, this server includes redundant integrated NICs so that you can get the most out of your PCI slots. Five 3.5" SAS or SCSI drives or eight 2.5" SAS drives and the PERC 5/i RAID option for SAS drives, PERC 4e/DC PCI Express capable option for SCSI drives, or PERC 4e/Di onboard option enhance availability and performance. Additionally, PERC 5/E provides connectivity to the PowerVault MD1000, an external SAS storage enclosure that can help satisfy the performance requirements of both mainstream and demanding single-server applications.

Manageability and Serviceability

The PowerEdge 6850 server offers easy-to-manage and easy-to-service technology. The Dell OpenManage™ software suite helps to minimize deployment time, costs and impact on productivity. What's more, the optional PCI-based DRAC 4 remote management card allows your IT administrators to securely manage servers located in different buildings or cities.

The PowerEdge 6850 also features a modular chassis designed to provide day-in, day-out ease of serviceability. This server model features tool-less access to internal components. Furthermore, Dell Enterprise Support Services provide the right level of support and outstanding service quality.

Designed for high performance, high availability, ease-of-management and simplified serviceability, the Dell PowerEdge 6850 is ideal for growing data center environments.



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DELL IT INFRASTRUCTURE SERVICES

Dell brings pure execution to IT Services. The planning, implementation and maintenance of your IT infrastructure deserves nothing less. Variability in execution can compromise user productivity, IT resources and ultimately, your reputation. By leveraging our heritage of process driven excellence, Dell Services can deliver a smarter way.

We don't claim to do everything. We focus on IT infrastructure services. And we take a customer led approach, grounded in the philosophy that you know your business better than anyone. That's why Dell does not try to take key business decisions out of your hands, or lock you into more than you need. Instead, we apply our world-class process management and "no excuses" culture to deliver what customers today most need – flexibility and repeatable quality. That's pure execution. That's Pure Dell.

Assessment, Design and Implementation Services

IT departments are continually challenged to evaluate and implement new technologies. Dell's assessment, design and implementation services can restructure your IT environment to enhance performance, scalability and efficiency while helping to maximize your return on investment and minimize disruption to your business

Deployment Services

System deployment is a necessary evil that plagues nearly every organization. You must deploy new systems to help improve performance and meet user demand. With Dell's deployment services, we help simplify and speed up the deployment and utilization of new systems to maximize uptime throughout your IT environment.

Dell Data Center Environmental Assessment and Database Optimization Services provide end-to-end data center solutions for customers.

Asset Recovery and Recycling Services

Proper disposal, reselling and donation of computer equipment is a time-consuming task that typically falls to the bottom of many IT to-do lists. Dell simplifies the end of life processes for IT equipment in a way that can maximize value for customers.

Training Services

Arm your employees with the knowledge and skills they need to be as productive as possible. Dell offers comprehensive training services which include hardware and software training, as well as PC skills and professional development classes. With Dell training you can help improve system reliability, maximize productivity and reduce end user requests and downtime.

Enterprise Support Services

With Dell, you can get maximum performance and availability of your Dell server and storage systems. Our Enterprise Support services offer proactive maintenance to help prevent problems as well as rapid response and resolution of problems when they do occur. We have built a robust global infrastructure that offers multiple levels of enterprise support for systems throughout your infrastructure.

To help you get the most from your Dell systems, visit www.dell.com/services.

Services vary by region.

FEATURES DELL™ POWEREDGE™ 6850 SERVER

Form factor	4U rack-mount
Processors(s)	Up to four dual-core 64-bit Intel® Xeon™ processors 7100 sequence
Front side bus	Dual Independent 800MHz
Cache	Up to 16MB L3 cache per processor (dual-core)
Chipset	Intel 8501 (800MHz)
Memory	1GB/64GB DDR-2 400 ECC SDRAM
I/O slots	Seven total: four hot-plug PCI Express™ slots and three PCI-X slots
Drive controller	Embedded dual channel Ultra320 SCSI
RAID controller	PERC 5/i, PERC 5/E, 4/DC, PERC 4e/DC and PERC 4e/Di
Drive bays	Five 3.5" SCSI or SAS hot-plug drives or eight 2.5" SAS hot plug drives; floppy drive and CD or CD-RW/DVD ²
Maximum internal storage	Up to 1.5TB ³
Hard drives³	2.5" SAS (10k rpm): 36GB or 73GB 3.5" SAS (10k rpm): 73GB, 146GB, 300GB 3.5" SAS (15k rpm): 36GB, 73GB, 146GB 3.5" SCSI (10k rpm): 73GB, 146GB and 300GB 3.5" SCSI (15k rpm): 36GB, 73GB and 146GB
Internal storage performance	10K/15K RPM SCSI drives or 10K SAS drives
External storage	SAS, SCSI and fibre channel storage systems with optional integrated HBA
Tape backup options	External: PowerVault™ 124T, 132T, ML6000 series
Network interface card	Dual embedded Broadcom® Gigabit ⁴ NICs
Power supply	1470W, hot plug 1+1 redundant power, 200-240V only
Availability	Hot-plug memory, ECC memory with SDDC, Memory RAID and Memory Mirroring; hot-plug PCI Express slots; hot-plug SCSI or SAS hard drives; hot-plug redundant power; hot-plug redundant cooling; tool-less chassis; high availability fibre channel and SCSI cluster support; optional ROMB with battery-backed cache
Video	Embedded ATI-Radeon 7000 controller with 16MB SDRAM
Remote management	Baseboard Management Controller with IPMI 1.5 compliance, accessible via network or serial port; optional DRAC 4/p
Systems management	Dell OpenManage™
Rack support	4-post for Dell rack or supported 3rd party racks
Operating systems	Microsoft® Windows Server™ 2003, Standard x64 Edition; Microsoft Windows Server 2003, Enterprise x64 Edition; Microsoft Windows Server 2003, Standard Edition; Microsoft Windows Server 2003, Enterprise Edition; Red Hat® Enterprise Linux® 3 and 4; SUSE® Linux Enterprise Server 9 EM64T SP2; VMware® ESX Server™ 2.5.1

¹Based on the SPECjbb2005 benchmark test performed by Dell Labs in July 2006 and April 2006 on a PE6850 with four dual core Intel Xeon 7140 (3.4GHz Tulsa) processors, 16GB 400Mhz DDR-2 memory and Windows Server 2003 Enterprise x64 Edition+SP1 OS as compared to a PE6850 with four dual core Intel Xeon 7041 2.8GHz (PaxvilleMP) processors, 16GB 400Mhz DDR2 memory and Windows Server 2003 Enterprise x64 Edition+SP1 OS. Actual performance will vary based on configuration, usage and manufacturing variability.

² DVD-ROM drives may have write-capable hardware that has been disabled via firmware modifications.

³ For hard drives, 1 GB means 1 billion bytes and 1 TB means 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

⁴ This term does not connote an actual operating speed of 1 GB/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

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