

Dell PowerEdge 1855 Blade Server



The Dell™ PowerEdge™ 1855 server is the first blade server to deliver on the promise of high density computing with complete server class features and a price advantage over traditional rack servers.

Performance and Density

The PowerEdge 1855 blade server is designed to provide greater performance per square foot and as much as 43% better density than traditional 1U servers¹. As a result, customers no longer need to compromise server class features and performance to save valuable data center space. The PowerEdge 1855 blade offers performance today and scalability for tomorrow with dual 64-bit Intel® Xeon™ processors (single-core or dual-core) and a chassis that supports future technologies.

Each blade server also includes an 800MHz front side bus designed to move data quickly, scalable DDR-2 memory for demanding applications and PCI Express™ architecture for excellent scalability and performance. Additionally, the PowerEdge 1855 server incorporates high availability features such as hot pluggable and redundant hard drives with integrated hardware RAID functionality, I/O modules, cooling fans and power supplies for reliability.

Bringing the “Dell Effect” to the Blade Server Market

While most of the major manufacturers charge a price premium for blade servers, Dell delivers cost savings from beginning to end with the PowerEdge 1855 blade server. By leveraging the Direct Model and superior operational efficiency, the PowerEdge 1855 delivers as much as a 25% price advantage over similarly configured Dell 1U servers².

Additionally, the PowerEdge 1855 blade server saves expensive data center square footage because it requires less physical space. It is designed for low power consumption per server for further savings. And with support for multiple generations of blade servers and I/O technologies, it can protect your investment well into the future.

Easy to Manage - Just Like Other PowerEdge Servers

The PowerEdge 1855 blade server not only saves money, but can also save IT staff time and hassles with simple deployment and management tools. It features the intuitive Dell OpenManage™ Suite that provides easy deployment, change management and monitoring options.

Managing the PowerEdge 1855 blade server is just like managing other Dell servers. Why should your systems management strategy be dictated by the form factor of a server or your hardware vendor of choice? Its flexibility allows integration into leading third party enterprise management applications and existing management infrastructures.

Based on industry-standard technology, the dense chassis of the PowerEdge 1855 server is designed to seamlessly integrate into existing environments, thus reducing complexity and protecting investments. What's more, the blade features industry-standard rack rails and a minimal number of cables so that it is easy to incorporate into existing data center space.

The Dell PowerEdge 1855 blade server offers the optimal balance of leading server class features, density and price with investment protection for the future.



Dell PowerEdge 1855

GET MORE PERFORMANCE AND VALUE. GET MORE OUT OF NOW.



Dell PowerEdge 1855 Blade Server

DELL ENTERPRISE SERVICES

Dell Services can deliver the services you need to realize the full value of your IT investment. Complementing our award-winning products, these IT infrastructure services incorporate operational excellence, accountability and value.

By utilizing our best practices, proven processes and expertise in implementing standards-based technologies, we can help strengthen your IT infrastructure and enable you to adopt evolving technologies. Whether you need support, deployment, asset management, training, certification, planning or professional services – individually or bundled as a total solution – you can count on Dell.

Strengthening Your IT Infrastructure

Our planning services help integrate your new enterprise hardware into your existing or evolving IT infrastructure. We can provide guidance whether you're adding a single or multiple servers, storage area network or high-performance computing cluster.

We can also help you enhance the overall performance of your IT infrastructure and data center by consolidating software and hardware, developing a business continuity plan and migrating to standards-based technologies.

Simplifying Deployment

Dell simplifies implementation with comprehensive services that accelerate deployment of new hardware and IT solutions. During the initial system-build of your server, we can customize software and hardware to match your specific requirements. By helping you rapidly deploy new capabilities while minimizing disruptions, we can contribute to improved efficiencies and lower costs.

Our training services provide education and certification courses to help you better manage and use your new hardware so you can reap the full benefits of standards-based technologies.

Providing Award-Winning Service & Support

Your server and storage infrastructure is central to your business, which is why you need a partner who can help minimize downtime and keep your business-critical systems running efficiently. Our enterprise support services are designed to protect your entire enterprise or to focus on specific systems. These customizable services include hardware and software support with varied response levels, account management and remote resolution.

We can also help you enhance the performance of your data center and provide managed IT solutions and asset management services for your enterprise, desktop and notebook environments.

The Dell Enterprise Command Centers (ECC) – which utilize industry-leading technologies and tools that speed up problem resolution – efficiently route spare parts and direct expert technicians to your site.

Services vary by region. For more information, please visit www.dell.com.

FEATURES Dell™ PowerEdge™ 1855

CHASSIS

Form factor	7U enclosure holds up to ten blade servers
Dimensions (H x W x D)	30.67cm (12.07") H x 44.60cm (17.56") W x 73.50cm (28.94") D
Power supplies	Hot pluggable, non-redundant or optional 2+2 redundant power
Input devices	Integrated Avocent® Analog or Digital Access keyboard, video and mouse (KVM) switch with seamless tiering into an external Avocent or Dell switch environment
Enclosure I/O modules	PowerConnect™ 5316M Ethernet Switch, Ethernet Pass-Through, Fibre Channel Pass-Through, Brocade® SilkWorm® 3014 Fibre Channel Switch, McDATA® 4314 Fibre Channel Switch or Topspin® InfiniBand Pass-Through

BLADES

Processor(s)	Up to two single-core 64-bit Intel® Xeon™ processors at up to 3.8GHz or up to two dual-core 64-bit Intel Xeon processors at 2.8GHz
Front side bus	800MHz
Cache	Up to 2MB L2 per processor core
Chipset	Intel 7520
Memory	512MB/ 12GB ECC DDR-2 SDRAM; 16GB with availability of dual rank 4GB DIMMs ²
Dual Port I/O cards	Optional Dell 2342M Integrated Fibre Channel daughtercard, powered by Qlogic™, Intel Gigabit Ethernet daughtercard, or Topspin 4X Infiniband HCA daughtercard
Drive controller	Embedded single channel Ultra320 SCSI
RAID controller	PERC 4/im for RAID 1 mirroring
Drive bays	Two 1" Ultra320 hot-plug SCSI drives
Maximum internal storage	Up to 600GB
Hard drives ⁴	36GB, 73GB and 146GB (15,000 rpm) Ultra320 SCSI 73GB, 146GB and 300GB (10,000 rpm) Ultra320 SCSI
Internal storage	10K/15K RPM SCSI drives
External storage options	Dell/EMC network storage or PowerVault™ NAS storage
Input devices	Each server blade has a port which supports an external USB CD or floppy drive. The CD can be used with Dell Server Assistant (DSA) to load an OS on a system and/or for application installation once the operating system is loaded. The CD or floppy can be used for a network operating system install, offline diagnostics or local BIOS/driver/agent updates. USB keyboard and mouse.
Tape backup options	SAN-based or LAN-based backup
Integrated network controllers	Dual embedded Intel Gigabit® NICs with teaming and failover support
Availability	ECC memory with two-way interleaving 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
Video	ATI Radeon 7000 with 16MB DDR memory
Remote management	Baseboard Management Controller with IPMI 1.5 compliance, access via network; DRAC/MC chassis management module with optional redundancy; Virtual Media; Active Directory Integration; Dynamic DNS
Systems management	Dell OpenManage™
Operating systems	Microsoft® Windows Server™ 2003, Standard x64 Edition, Enterprise x64 Edition, Standard Edition, Enterprise Edition and Web Edition; Red Hat® Enterprise Linux® 3 and 4; SUSE® Linux Enterprise Server 9; VMware® ESX Server™ 2.5 and Virtual Node

¹Sixty PowerEdge 1855 blade servers can reside in one 42U rack versus 42 1U PowerEdge 1850 servers. ²Based on comparison of U.S. hardware list pricing of 10 PowerEdge 1855 Blade servers and 1 PowerEdge 1855 chassis with 10 PowerEdge 1850 1U rack servers; each with 2.8GHz Intel Xeon processor, 512MB DDR-2 Memory, 36GB 15K SCSI hard drive, and DRAC as of 6/15/2005. ³With availability of the dual ranked 4GB DIMMs scheduled for Q1 2005. ⁴For hard drives, GB means 1 billion bytes; actual capacity varies with preloaded material and operating environment and will be less. ⁵This 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. ⁶SUSE Linux Enterprise Server 9 does not include support for OpenManage or Dell/EMC. Support coming soon. Dell is not responsible for errors in typography or photography. Dell, the Dell logo, PowerConnect, PowerEdge, PowerVault and OpenManage are trademarks of Dell Inc. Intel is a registered trademarks and Xeon is a trademark of Intel Corporation. Linux is a registered trademark of Linus Torvalds. Microsoft and Windows are registered trademarks of Microsoft 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. Dell disclaims proprietary interest in the marks and names of others. © Copyright 2005 Dell Inc. All rights reserved. Reproduction in any manner whatsoever without the express written permission of Dell Inc. is strictly forbidden. For more information contact Dell. October 2005.

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