

# Density without compromise

The Dell PowerEdge 1855 lets organizations reduce their physical space requirements for servers without compromising performance and price

**Not long ago, blade server systems came with significant price tags.** With corporate spending slow and IT expenditures tough to justify, many IT organizations were compelled to forego the benefits of blades—such as consolidation of critical data center space—and opt instead for more cumbersome but feature-rich stand-alone servers. That paradigm has now changed. Dell has produced a blade server breakthrough—a system that does not force customers to make significant trade-offs between density, features, and price.

The Dell™ PowerEdge™ 1855 is the first blade server system to offer the advantages that organizations have come to expect from a blade server solution—including limited physical space requirements, low power consumption, and ease of management—without the traditional drawbacks. Designed to deploy seamlessly into existing data center racks, the PowerEdge 1855 fits up to 10 server blades in a 7U chassis, producing up to 43 percent greater server density than Dell 1U servers.<sup>1</sup>

Leveraging the Dell direct model and superior operational efficiency, the PowerEdge 1855 delivers up to a 25 percent price advantage<sup>2</sup> over similarly configured 1U servers.

Yet, like its 1U counterparts, the PowerEdge 1855 also supports the latest high-performance features, I/O technologies, and management tools for low total cost of ownership (TCO) and a quick return on investment (ROI).

## Density and performance

The PowerEdge 1855 is designed with leading technologies that are consistent with the rest of eighth-generation Dell PowerEdge servers to help provide investment protection while satisfying current IT needs. Each PowerEdge 1855 server blade comes equipped with up to two Intel® Xeon™ processors with Intel Extended Memory 64 Technology (EM64T) for cutting-edge performance—and an easy migration path to 64-bit applications.

An 800 MHz frontside bus (FSB) helps move data quickly to and from memory—the system supports up to 16 GB double data rate 2 (DDR2) SDRAM with 4 GB dual in-line memory modules (DIMMs)—while a next-generation Peripheral Component Interconnect Express (PCI Express) I/O architecture and support for 10 Gigabit technologies help deliver the performance that resource-intensive applications demand. The PowerEdge 1855 also helps provide high availability through hot-pluggable SCSI drives, redundant power supplies and I/O modules, and a dual-port embedded Gigabit<sup>3</sup> Ethernet network interface card (NIC).

## Simplified management

With its small form factor, the PowerEdge 1855 is designed to make installation, management, and deployment a breeze. The PowerEdge 1855 simplifies setups by integrating keyboard, video, mouse (KVM) switches, Gigabit Ethernet switches, and Fibre Channel storage area network (SAN) connectivity right into the chassis. The system also consolidates and aggregates up to 70 percent of the KVM, network, power, and I/O cables to minimize sprawl—and reduce IT management headaches.

Managing the PowerEdge 1855 is just like managing other Dell PowerEdge servers. The familiar and flexible Dell OpenManage™ product suite helps enable easy deployment, change management, and monitoring options. A management module built into the system consolidates powerful chassis and blade management functions into a single intuitive interface. Taking a cue from the rest of the eighth-generation PowerEdge server line, the PowerEdge 1855 is also equipped with Intelligent Platform



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Management Interface (IPMI) 1.5—compliant base-board management controllers (BMCs).

## Scalable building blocks

The inclusion of technologies in the PowerEdge 1855 from industry leaders such as Intel, Brocade, Avocent, QLogic, Top Spin, and EMC can help organizations easily integrate the blade server system into existing environments. As Dell continues to equip blade server systems with the powerful technology and industry standards that it already delivers in stand-alone systems, blade servers will begin to become the building blocks of the scalable enterprise. By conserving expensive data center real estate, the Dell PowerEdge 1855 offers an immediate benefit for a low up-front cost—and headroom for convenient, cost-effective growth.

## For more information:

In U.S.: [www.dell.com/poweredge](http://www.dell.com/poweredge)

In Europe: [www.euro.dell.com](http://www.euro.dell.com)

In Asia: [www.dell.com/ap](http://www.dell.com/ap)

<sup>1</sup> Up to 60 PowerEdge 1855 blade servers can reside in one 42U rack versus 42 1U PowerEdge 1850 servers.

<sup>2</sup> Based on comparison of hardware list pricing of 10 PowerEdge 1855 blade servers and one PowerEdge 1855 chassis with 10 PowerEdge 1850 1U rack servers—each with an Intel Xeon processor at 2.8 GHz, 512 MB DDR2 memory, 36 GB 15,000 rpm SCSI hard drive, and Dell Remote Access Controller (DRAC)—as of November 15, 2004.

<sup>3</sup> This term does not connote an actual operating speed of 1 Gbps. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.