Dell PowerEdge M910

The Dell™ PowerEdge™ M-Series blade servers are designed to help cut operating expenses through energy efficiency, scalability, product flexibility and efficient use of data center space.

The PowerEdge M910 provides significant performance and reliability in a scalable, full-height, 4-socket blade server, allowing the deployment of large enterprise-class applications as well as the ability to support heavy virtualization or workload consolidation in maximum density.

When combined with Dell's world-class storage, management and support offerings, the result is a total enterprise solution that can help you optimize your IT environment and expenses.

Powerful

The PowerEdge M910 was designed to meet the needs of nearly any IT infrastructure or environment. Built with powerful Intel® Xeon® processors and advanced systems management capabilities, the M910 is ideal for the demanding applications at the core of most data centers, such as large databases, virtualization and messaging infrastructure.

Memory is a critical component for performance, especially for heavy virtualization and high-end database needs. With this in mind, the PowerEdge M910 was designed with 32 DIMM slots allowing up to 1TB of ECC DDR3 RAM to be supported, allowing these memory-intensive applications to have ample resources at their disposal.

Scalable

Many servers may be able to take advantage of the large memory support that modern architectures provide, but only Dell offers FlexMem Bridge technology, which allows the M910 to seamlessly scale from 4GB to 512GB of DDR3 RAM in either two-socket or four-socket configurations. This patent-pending technology allows Dell to deliver a unique platform that can seamlessly scale as customer and application needs dictate, without having to "rip and replace" existing server infrastructure.

In addition to allowing significant memory and processor scaling capabilities, the compact form factor of Dell blades allows the ability to scale down the amount of space that your core application servers require. By using the PowerEdge M910, you can deploy up to eight next generation 4-socket servers in only 10U of rack

space, which is less than a third of the space required using traditional 4U, 4-socket rack servers.

Reliable

With the PowerEdge M910, Dell continues its unrelenting focus on reliability. The PowerEdge M910 utilizes the redundant power, cooling and networking infrastructure provided by the Dell M1000e PowerEdge Blade enclosure. The PowerEdge M910 itself incorporates improvements and features for maximum protection against potential downtime, such as the ability to support three fully redundant fabrics per blade and the inclusion of a dual-media redundant embedded hypervisor.

The PowerEdge M910 also utilizes Intel Xeon processors which are designed to automatically monitor, report, and recover from hardware errors in order to maintain data integrity and keep mission-critical services online.

As with all Dell PowerEdge servers, the M910 is manufactured with our "one-touch" factory build process. This process is designed to ensure just one person is responsible for the entire server build, resulting in greater quality control. In addition, every fully configured Dell server is tested (and re-tested) before it leaves the factory to ensure maximum reliability.

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Feature	PowerEdge M910 technical specification
Processors	Intel® Xeon® processor 7500 and 6500 series Intel Xeon E7-2800, E7-4800 and E7-8800 product family
Chipset	Intel E7510
Memory[1]	Up to 1TB (32 DIMM slots): 1GB/2GB/4GB/8GB/16GB/32GB ECC DDR3 up to 1333MT/s
Drive bays	Two 2.5" SAS/Solid State hot-pluggable drives
Storage	**Hot-plug hard drive options:** 2.5" SAS SSD, SATA SSD, SAS (15K, 10K), nearline SAS (7.2K) **External storage:** For information about Dell external storage options, visit Dell.com/Storage.
RAID controller options	PERC H200 Modular (6Gb/s) PERC H700 Modular (6Gb/s) with 512MB battery-backed cache
I/O mezzanine card options	Fully populated mezzanine card slots and switch modules will yield 3 highly available, redundant I/O fabrics per blade. **1Gb and 10Gb Ethernet:** Broadcom® Dual-Port Gb Ethernet with TOE (BCM-5709S) Intel Quad-Port Gb Ethernet Broadcom Quad-Port Gb Ethernet (BCM-5709S) Intel Dual-Port 10Gb Ethernet Broadcom Dual-Port 10Gb Ethernet (BCM-57711) **10Gb Enhanced Ethernet and Converged Network Adapters (CEE/DCB):** Intel Dual-Port 10Gb Enhanced Ethernet (FCoE Ready for Future Enablement) Emulex® Dual-Port CNA (OCM10102-F-M)—Supports CEE/DCB 10GbE + FCoE QLogic Dual-Port CNA (QME8142)—Supports CEE/DCB 10GbE + FCoE QLogic Dual-Port CNA (QME8242-k)—Supports 10GbE + NPAR Brocade® BR1741M-k Dual-Port Mezzanine CNA **Fibre Channel:** QLogic Dual Port FC16 HBA (QME2662) Emulex Dual Port FC16 HBA (LPm16002B-D) QLogic Dual-Port FC8 Fibre Channel Host Bus Adapter (HBA) (QME2572) Emulex Dual-Port FC8 Fibre Channel HBA (LPe1205-M) Emulex 8 or 4 Gb/s Fibre Channel Pass-Through Module **InfiniBand:** Mellanox® ConnectX®-3 Dual Port FDR10 Mellanox Dual-Port ConnectX-2 QDR
Operating systems	Microsoft® Windows Server® 2012 Microsoft Windows Server 2008 SP2, x86/x64 (x64 includes Hyper-V®) Microsoft Windows Server 2008 R2 SP1, x64 (includes Hyper-V) Microsoft Windows® HPC Server 2008 Novell® SUSE® Linux Enterprise Server Red Hat® Enterprise Linux® Oracle® Solaris™ **Virtualization options:** Citrix® XenServer® Microsoft Hyper-V through Microsoft Windows Server 2008 VMware® vSphere® and ESXi™ Red Hat Enterprise Virtualization® For more information on the specific versions and additions, visit Dell.com/OSsupport.
Featured database applications	Microsoft SQL Server® solutions (see Dell.com/SQL) Oracle® database solutions (see Dell.com/Oracle)
Power supply	Supplied by Dell™ PowerEdge™ M1000e Blade Chassis
Video	Matrox® G200eW with 8MB memory
Systems management	Dell OpenManage™ BMC, IPMI 2.0 compliant Unified Server Configurator Lifecycle Controller iDRAC6 Enterprise with optional vFlash media Remote Management: iDRAC6 Enterprise with optional vFlash media Microsoft System Center Essential (SCE) 2010 v2
Embedded hypervisor	Optional Dual-Media Redundant Hypervisor

For more information about the Dell blade solution, see the PowerEdge M1000e Technical Guide or the M1000e Blade Chassis Specification Sheet.

[1] GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

Dell Services

Dell Services can help reduce IT complexity, lower costs, and eliminate inefficiencies by making IT and business solutions work harder for you. The Dell Services team takes a holistic view of your needs and designs solutions for your environment and business objectives while leveraging proven delivery methods, local talent, and in-depth domain knowledge for the lowest TCO.

Discover more at Dell.com/Blades