PowerEdge M630

An ultra-efficient blade server combining up to 36 cores of Intel processing power and 24 DIMMs of DDR4 memory in a dense, easy-to-manage platform ideal for data center workloads.

Easily scale your workload capacity

Deliver the compute power your demanding applications require with the PowerEdge M630 blade server, a member of the 13th generation of PowerEdge servers. Designed for use with the PowerEdge M1000e blade enclosure and PowerEdge VRTX converged infrastructure, the M630 offers exceptional scalability in environments ranging from IT as a service (XaaS) providers and private clouds to remote and branch offices.

The Intel® Xeon® processor E5-2600 v3 product family offers the processing cycles and threads to help increase virtualization performance, allowing the M630 to deliver more, larger and higher-performing virtual machines with help from more cores and up to 15 percent greater memory bandwidth.

Drive peak performance

Unleash the workload capabilities of your converged infrastructure with the ample memory capacity of the M630's 24 DDR4 DIMM slots and up to four 1.8" SSDs — twice the number of flash drives per server than previous generations. This extreme memory density and high-bandwidth memory makes the M630 ideal for workloads like high-performance computing (HPC).

Tailor your blades to your business

The M630 provides flexibility to optimize in-server storage and I/O performance, allowing you to tailor your servers to your workloads today and tomorrow. With a range of drive options from two 2.5" hard drives or Express Flash PCIe SSDs to up to four 1.8" SSDs, it's easy to configure in-server storage to meet your needs. For network flexibility, the M630 features Dell Select Network Adapters. These modular integrated NICs offer you a choice of fabric, speed and vendor, allowing you to precisely address workload bandwidth requirements and enable rapid access to the storage resources your server or cloud requires— NAS or SAN.

Innovative management with intelligent automation

The Dell OpenManage systems management portfolio simplifies and automates server lifecycle management — making IT operations more efficient and Dell servers the most productive, reliable and cost effective. The capabilities of Dell's agent-free integrated Dell Remote Access Controller (iDRAC) with Lifecycle Controller make server deployment, configuration and updates more automated and efficient than ever. Dell M630 servers also benefit from the Chassis Management Controller (CMC), an embedded component that provides management of the converged infrastructure in every chassis and monitors multiple chassis at once via a web browser.

Both iDRAC and CMC technologies are leveraged by the rest of the OpenManage portfolio. OpenManage Essentials provides enterprise-level monitoring and control of Dell and third-party data center hardware, and works with OpenManage Mobile to provide similar information on smart phones. OpenManage Essentials also delivers server configuration management capabilities that automate bare-metal server and OS deployments, replication of configurations and ensures ongoing compliance with set system configurations.

PowerEdge M630

- Up to 58 cores per U with latest Intel Xeon processor E5-2600 v3 product family

- 24 DIMMs of DDR4 memory

- Up to four 1.8" SSDs with double the storage bandwidth

Feature	PowerEdge M630 technical specification	
Form factor	Half-height blade with up to 16 nodes in a 10U M1000e chassis; up to four nodes in a VRTX chassis	
Processor	Intel® Xeon® processor E5-2600 v3 product family	
Processor sockets	2	
Dimensions	H: 197.9 cm, W: 50.35 cm, D: 544.32 cm	
Cache	2.5MB per core; core options: 4, 6, 8, 10, 12, 16, 18	
Chipset	Intel C610 series chipset	
Memory[1]	Up to 768TB (24 DIMM slots): 4GB/8GB/16GB/32GB DDR4 up to 1866MT/s	
I/O mezzanine cards	2 x PCIe 3.0 (x8) mezzanine cards	
RAID controllers	**Internal controllers**: PERC S130 (SW RAID), PERC H330, PERC H730, PERC H730P	
Primary storage	**Hot-plug hard drive options:** PowerEdge Express Flash NVMe PCIe SSD, SATA HDD/SSD or SAS HDD/SSD 4 x 1.8" SSD. 2 x 2.5" PCIe SSDs	
I/O options	**Dell Select Network Adapter (NDC) options:** Broadcom® 57810S-k dual-port 10Gb KR Blade NDC Broadcom 57840 quad-port KR Blade Converged NDC Intel X520-k dual-port 10Gb KR Blade NDC QLogic® QMD8262-k dual-port 10Gb NDC **Fibre Channel:** Emulex® LPe1205-M (FC8) Emulex LPm16002B-D (FC16) QLogic QME2572 (FC8) QLogic QME2662 (FC16)	**1Gb/10Gb adapters:** Broadcom 57810S-k dual-port 10Gb KR Brocade® BR1741M-k dual-port 10Gb CNA Broadcom 5719 quad-port 1Gb Intel Ethernet X520-K dual-port 10Gb Intel I350 quad-port 1Gb QLogic QME8262-k dual-port 10Gb KR CNA **InfiniBand**: Mellanox® ConnectX®-3 dual-port FDR10 Mellanox ConnectX-3 dual-port FDR Mellanox ConnectX-3 dual-port QDR Mellanox ConnectX-3 dual-port 10GbE KR blade
Power supplies	Chassis level – PowerEdge M1000e 2700W Platinum and 3000W Titanium PSU options	
Video card	Video type Matrox® G200 (integrated with iDRAC8) Video memory: 16MB shared with iDRAC8 application memory	
Systems management	**Systems management:** IPMI 2.0 compliant; Dell OpenManage Essentials; Dell OpenManage Mobile; Dell OpenManage Power Center **Remote management** iDRAC8 with Lifecycle Controller, iDRAC8 Express (default), iDRAC8 Enterprise (upgrade) 8GB vFlash media (upgrade), 16GB vFlash media (upgrade)	**Dell OpenManage Integrations:** • Dell OpenManage Integration Suite for Microsoft® System Center • Dell OpenManage Integration for VMware® vCenter™ **Dell OpenManage Connections:** • HP Operations Manager, IBM Tivoli® Netcool® and CA Network and Systems Management • Dell OpenManage Plug-in for Oracle® Database Manager
Operating systems	Microsoft Windows Server® 2008/2012 R2 (with Hyper-V® enabled) Microsoft Windows Server 2012 (with Hyper-V enabled) Microsoft Windows Server 2008/2012 Datacenter (with Hyper-V enabled) Microsoft Windows Server 2008 R2 SP1 (with Hyper-V enabled) Microsoft Windows Server 2008 R2 SP2 x64/x86 (with Hyper-V enabled) Novell® SUSE® Linux Enterprise Server Red Hat® Enterprise Linux	**Optional hypervisors:** Citrix® XenServer® VMware vSphere® ESXi™ For more information on the specific versions and additions, visit Dell.com/OSsupport.
Recommended support	Dell ProSupport Plus for critical systems or Dell ProSupport for premium hardware and software support for your PowerEdge solution. Consulting and deployment offerings are also available. Contact your Dell representative today for more information. Availability and terms of Dell Services vary by region. For more information, visit Dell.com/ServiceDescriptions.	

For more information about the Dell blade solution, see the PowerEdge M1000e Technical Guide or the M1000e Blade Chassis Spec Sheet. For more information about the VRTX converged infrastructure platform, see the PowerEdge VRTX Technical Guide of PowerEdge VRTX Spec Sheet.

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

End-to-end technology solutions

Reduce IT complexity, lower costs and eliminate inefficiencies by making IT and business solutions work harder for you. You can count on Dell for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage and Networking, Dell Enterprise Solutions and Services deliver innovation at any scale. And if you're looking to preserve cash or increase operational efficiency, Dell Financial Services™ has a wide range of options to make technology acquisition easy and affordable. Contact your Dell Sales Representative for more information.**

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