



## POWEREDGE M830

The PowerEdge M830 is a 4-socket converged platform designed to boost application performance, consolidation and time-to-value in data center or remote office applications by delivering vast amounts of compute, memory and storage resources that are easy to deploy and manage.

### Enhance IT workload performance

Up to 88 Intel® processor cores and 48 DIMMs of DDR4 memory offer tremendous computational horsepower for heavy-use workloads in exceptionally demanding database, technical computing and virtualized environments. Get results faster from memory-intensive workloads with DDR4 DIMMs offering 28 percent higher MT/s than DDR3. Feed your I/O-intensive workloads with up to 240Mbits of throughput using 24 x 10GBE ports connected to three redundant, low-latency fabrics. Accelerate data-intensive workloads using 12 in-chassis SSDs, with expansion options for up to 25 HDDs (50TB).

### Converge IT resources

Save expenses with physical and software-defined consolidation that optimizes application delivery using flexibly tailored IT. Meet business objectives by powering critical workloads with converged solutions designed specifically for data center and small-office environments. Reduce infrastructure sprawl by converging management modules, switches, power and network cabling, disk enclosures and feature-dense 4S servers into a single chassis. Save floor space, power and cooling costs, and licensing fees by using core-dense M830s to create a software-defined environment from legacy infrastructure. Utilize vast local SSD and memory resources to develop software-defined standalone edge networking and DAS storage with VMware VSAN and Virtual Distributed Switch technologies.

### Expedite time to value

Reduce configuration, maintenance, imaging and deployment time and costs by standardizing on a single 4-socket E5-4600 v4 platform in existing VRTX or M1000e chassis for remote offices and data centers. Protect software-defined compute, storage and networking with Dell Fault Resilient Memory and redundant embedded hypervisor. Automate operations with agent-free, 1-to-many systems management tools that preprovision LAN and SAN resources and assist with BIOS, firmware and driver updates. Enable zero-touch discovery and configuration with template-based provisioning.

### Simplify and automate your IT management tasks

Manage your blades as you like with the Dell Chassis Management Controller (CMC) — the single, embedded interface for multi-chassis management included with Dell shared infrastructure platforms. The powerful features of the CMC let you manage your M830 blades individually or collectively in groups, in one or multiple chassis, and in one or more locations in your network. Leveraging the incomparable agent-free capabilities of the PowerEdge embedded integrated Dell Remote Access Controller (iDRAC) with Lifecycle Controller technology, server deployment, configuration and updates are streamlined across the OpenManage portfolio and through integration with third-party management solutions.

Monitoring and control of Dell and third-party data center hardware is provided by OpenManage Essentials and with anytime, anywhere mobile access, through OpenManage Mobile. OpenManage Essentials now also delivers Server Configuration Management capabilities that automate one:many PowerEdge bare-metal server and OS deployments, quick and consistent replication of configurations and ensure compliance to a predefined baseline with automated drift detection.

### PowerEdge M830

- Up to 88 cores with the latest Intel Xeon E5-4600 v4 processors
- Up to 48 DIMMs provide up to 3TB of DDR4 memory per blade
- Up to 12 x 1.8" SSDs with I/O throughput of up to 240Mbits using 24 x 10GBE ports

Feature	Technical specification	
<b>Form factor</b>	Full-height blade with up to 8 nodes in a 10U M1000e chassis; up to two nodes in a VRTX chassis	
<b>Processor</b>	Intel® Xeon® processor E5-4600 v4 product family	
<b>Processor sockets</b>	4	
<b>Dimensions</b>	H: 39.52 cm (15.56 in), W: 5.03 cm (1.98 in), D: 54.5 cm (21.45 in)	
<b>Cache</b>	2.5MB per core; core options: 6, 10, 12, 14, 16, 18, 22	
<b>Chipset</b>	Intel C610 series chipset	
<b>Memory</b>	Up to 3TB (48 DIMM slots): 4GB/8GB/16GB/32GB/64GB DDR4 up to 2400MT/s	
<b>RAID controllers</b>	<b>Internal controllers:</b> PERC S130 (SW RAID), PERC H330, PERC H730, PERC H730P	
<b>Primary storage</b>	<b>Hot-plug hard drive options:</b> PowerEdge Express Flash NVMe PCIe SSD, SATA HDD/SSD or SAS HDD/SSD 12 x 1.8" SSD, 4 x 2.5" SATA HDD/SSD or SAS HDD/SSD, 2 x 2.5" PCIe SSD and 2 x 2.5" SATA HDD/SSD or SAS HDD/SSD	
<b>On-board network adapters</b>	2 x PCIe 3.0 (x8) Dell Select Network Adapters <b>Select Network Adapter options:</b> Broadcom 5720 1GB Quad Port KR Blade Network Daughter Card Emulex OneConnect OCm14102B-N6-D 2-port 10GBE bNDC NIC Emulex OneConnect OCm14102B-U4-D 2-port 10GBE bNDC CNA Emulex OneConnect OCm14102-N6-D 2-port 10GBE KR NIC, Blade Network Daughter Card	Emulex OneConnect OCm14102-U4-D, Dual Port 10GBE, KR CNA Network Daughter Card Intel i350 Quad Port 1 Gigabit, KR Blade Network Daughter Card Intel Quad Port 10-Gigabit, KR Blade Network Daughter Card Intel x520-k Dual Port 10GB KR Blade Network Daughter Card Intel X710 Dual Port, 10GB KR Blade Network Daughter Card QLogic 57810-k Dual port 10GB KR CNA Blade Network Daughter Card QLogic 57840S 10GB Quad Port KR CNA Blade Network Daughter Card
<b>I/O expansion options</b>	Broadcom 5719 Quad port 1GBE Mezzanine Card Emulex LPE1205-M 8GBps Dual Port Fibre Channel I/O Mezzanine Card Emulex LPM16002 16GBps Dual Port Fibre Channel I/O Mezzanine Card Emulex OCm14104-U3-D, Dual Port 10GBE, KR Mezzanine Converged Network Adapter Emulex OneConnect OCm14102B-N5-D 2-port 10GBE Mezzanine NIC	Emulex OneConnect OCm14102B-U5-D 2-port 10GBE Mezzanine CNA Emulex OneConnect OCm14102-N5-D 2-port 10GBE Mezzanine NIC Intel i350 Quad Port 1GB Serdes Mezzanine Card Intel X520-x/k 10GB Dual Port I/O Mezzanine Card Mellanox Connect X3 FDR10 IB Mezzanine Card Mellanox ConnectX-3 Dual Port 10GB KR Mezzanine Card Mellanox ConnectX-3 Pro Dual Port 10 GBE KR Mezzanine Card QLogic QME2572 8GBps Fibre Channel I/O Mezzanine Card QLogic QME2662 16GBps Fibre Channel I/O Mezzanine Card
<b>Power supplies</b>	<b>Chassis level –</b> M1000e 2700W Platinum and 3000W Titanium PSU options	
<b>Video card</b>	<b>Video Type:</b> Integrated Integrated Matrox G200 with iDRAC8 <b>Video Memory:</b> 16 MB shared with iDRAC8 application memory	
<b>Systems management</b>	<b>Systems management:</b> IPMI 2.0 compliant; Dell OpenManage Essentials; Dell OpenManage Mobile; Dell OpenManage Power Center <b>Remote management:</b> iDRAC8 with Lifecycle Controller; iDRAC8 Express (default); iDRAC8 Enterprise (upgrade); 8GB vFlash media (upgrade); 16GB vFlash media (upgrade)	<b>Dell OpenManage integrations:</b> Dell OpenManage Integration Suite for Microsoft® System Center; Dell OpenManage Integration for VMware® vCenter™ <b>Dell OpenManage Connections:</b> HP Operations Manager; IBM Tivoli® Netcool® and CA Network and Systems Management; Dell OpenManage Plug-in for Oracle® Database Manager
<b>Operating system</b>	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  <b>Optional hypervisors:</b> Citrix® XenServer®; VMware vSphere® ESXi™; For more information on the specific versions and additions, visit <a href="http://Dell.com/OSSupport">Dell.com/OSSupport</a>

### Recommended services

ProSupport Plus with SupportAssist provides proactive and predictive support for critical systems. ProSupport provides comprehensive hardware and software support. Get more from your technology starting on day one with ProDeploy Enterprise Suite deployment offers. For more information, visit [Dell.com/itlifecycleservices](http://Dell.com/itlifecycleservices).

### 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 EMC for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage and Networking, Dell EMC 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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