PowerEdge M640

High Performance modular server blade

The PowerEdge M640 is a density optimized, half-height blade server designed for performance and efficiency. It is ideal for XaaS, private cloud, and HPC applications.

Powerful 2-socket modular architecture server

The M640 server supports today's dynamic business needs by enabling increased scale-out performance in a Dell EMC blade server chassis. Get up to 16 Intel® Xeon® Scalable dual-socket compute nodes in a single chassis. The M640 is an ideal solution for customers with High Performance Computing (HPC), Anything-as-a-Service (XaaS), and private cloud applications. In data center settings that need highly-scalable, multi-server, or clustering, the density optimized M640 is an efficient solution for those designs and their various workloads.

Innovative management with intelligent automation

The OpenManage portfolio delivers peak efficiency for PowerEdge servers through intelligent, automated management of routine tasks. Combined with the unique iDRAC agent-free management capabilities, the M640 is managed easily and effectively, freeing up time for business priorities.

- Enable collective or individual management of your servers with the Dell Chassis Management Controller (CMC), embedded in PowerEdge VRTX and M1000e systems.
- Monitor Dell and 3rd party hardware with OpenManage Essentials.
- Use the OpenManage Mobile app to receive and take action on hardware alerts at the server or from anywhere, at any time.

End-to-end server ecosystem and life cycle security

Every PowerEdge server is made with a cyber-resilient architecture, infusing security into all parts of a server's life cycle. The M640 uses these new security features so you can reliably and securely deliver the right data to where your customers are, no matter where they are. Dell considers each part of server security, from design to end of life, to ensure trust and deliver worry-free, secure systems.

- Rely on a secure supply chain that ensures server protection from factory to the data center..
- Maintain data security with cryptographically signed firmware packages and Secure Boot.
- Prevent unauthorized or malicious change with Server Lockdown.
- Wipe all data from storage media including hard drives, SSDs and system memory quickly and securely with System Erase.

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- High performance, density optimized modular server
- Supports dynamic business needs and scalable applications
- Ideal for HPC, XaaS and private cloud

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Features	Technical Specification	
Processor	Up to two Intel® Xeon® SP, up to 28 cores per processor	
Memory	16 DDR4 DIMMs in total; Supports RDIMM /LRDIMM speeds up to 2667, 1024 GB Max ECC Registered DDR4	
Storage controllers	Internal controllers: Software RAID S140, PERC9 H330, H730P Boot Optmized Storage system, Internal Dual SD Module	
Drive bays	Front: Up to 2 x 2.5" HDD/SSD/NVMe, max 6.4 TB	
Power supplies	The M640 leverages the power supplies in the M1000e or VRTX enclosure. Hot plug fans with full redundancy provided in the M1000e or VRTX enclosure.	
Dimensions	D: 544.87 mm x W: 50.35 mm x H: 197.9 mm (Handle push in) D: 564.87 mm x W :50.35 mm x H: 197.9 mm (Handle pull out)	
Embedded / At-Server	iDRAC9 with Lifecycle Controller iDRAC Direct	iDRAC REST API with Redfish Chassis Management Controller (CMC)
Consoles & Mobile	OpenManage Enterprise (available soon) OpenManage Essentials	OpenManage Mobile OpenManage Power Center
Integrations	OpenManage integrations: Microsoft® System Center, VMware® vCenter™, BMC Software	
Connections	OpenManage connections: Nagios & Nagios XI,Oracle Enterprise Manager, HP Operations Manager, IBM Tivoli Netcool/OMNIbus, IBM Tivoli® Network Manager, CA Network and Systems Management	
Tools	Dell Repository Manager Dell System Update Dell Server Update Utility Dell Update Catalogs	iDRAC Service Module OpenManage Server Administrator OpenManage Storage Services
Security	TPM 1.2/2.0 optional Cryptographically signed firmware Secure Boot	System Lockdown System Erase
I/O & Ports	Network daughter card options 2 x 10GE + 4 X 1GE, 4 x 10GE Front ports: Power button System ID / Status LED 1 USB 2.0 MicroAB port with iDRAC management function 1 USB 3.0 port Rear ports: see enclosure specifications Video card: VGA controller integrated with iDRAC PCIe: See enclosure specifications	
Supported operating systems	Canonical® Ubuntu® LTS Citrix® XenServer® Microsoft Windows Server® with Hyper-V Red Hat® Enterprise Linux SUSE® Linux Enterprise Server VMware® ESXi	For specifications and interoperability details, see Dell.com/OSsupport
Recommended support and services	Choose 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/itlifecycleservices.	
Dell Financial Services	Deliver results with easy financing. Explore financial options that move at the speed of business. For more information, contact your Dell Sales Representative.*	

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