POWEREDGE T640

Maximum performance and scalability

The PowerEdge T640 delivers ultimate two-socket performance and massive internal storage capacity in a rack or tower platform. The scalable T640 drives a wide range of workloads for mid-sized offices, remote sites and data centers.

Adapt and scale to your dynamic business needs

The PowerEdge T640 balances cost-effective, in-server expansion with powerful performance to provide a scalable business architecture. The versatile T640 allows you to address data-heavy, diverse workloads including virtualization, databases, analytics, imaging applications and SDS. Meet dynamic performance and capacity demands with flexible storage and I/O options.

- Deliver fast insights with up to 8 NVMe drives, up to 2x more than the previous generation.[1]

- Meet changing business requirements with a dual port 10GbE network.

- Future-proof data growth with up to 18 x 3.5" or 32 x 2.5" drives and 8 PCIe slots.

- Provide advanced imaging and VDI with up to 4 x 300W GPU accelerators.

Intuitive systems management with intelligent automation

Dell EMC PowerEdge servers increase efficiency by leveraging the power and simplicity of the embedded iDRAC with Lifecycle Controller for smart automation of routine tasks. With agent-free management, the T640 is managed with ease and frees up time for your business priorities.

- Simplify and automate management of your Dell EMC infrastructure with OpenManage Essentials.

- Take advantage of the OpenManage Mobile app and Quick Sync 2 capabilities to easily and effectively manage PowerEdge servers at the server, or wherever you are.

- Streamline management in virtualized environments with OpenManage Integrations for VMware vCenter or Microsoft System Center.

Safeguard data with integrated security

Every PowerEdge server is made with a cyber-resilient architecture, delivering security into all parts of a server's life cycle. The T640 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 EMC considers each part of system security, from design to end of life, to ensure trust and deliver worry-free systems.

- Rely on a secure supply chain that protects servers from the factory to the data center.

- Maintain data safety 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.

PowerEdge T640

- Accelerate and consolidate data-intensive workloads in a 5U rack-capable tower platform.

- Scale effortlessly with maximum internal capacity and optimized performance.

- Mix and match NVMe, HDD and SSD drives to create your ideal configuration.

1   Dell internal analysis in July 2017 comparing the previous generation T630 specifications vs T640 specifications.

PowerEdge T640

Features	Technical Specification	
Processor	Up to two Intel® Xeon® Scalable processors, up to 28 cores per processor	
Memory	24 DDR4 DIMM slots, Supports RDIMMS/ LRDIMMS, speeds up to 2666MT/s, 3TB max[1] Up to 12 NVDIMM, 192GB max Supports registered ECC DDR4 DIMMs only	
Storage controllers	Internal controllers: PERC H330, H730P, H740P, HBA330, Software RAID (SWRAID) S140 Boot Optimized Storage Subsystem: HWRAID 2 x M.2 SSDs 120GB, 240 GB External PERC (RAID): H840 External HBAs (non-RAID): 12 Gbps SAS HBA	
Drive bays	Up to 8 or 18 x 3.5" SAS/SATA (HDD/SSD) max 216TB or up to 16 or 32 x 2.5" SAS/SATA (HDD/SSD) max 122TB or up to 16 x 2.5 SAS/SATA (HDD/SSD) + 8x NVMe SSD max 112TB	
Power supplies	Titanium 750W, Platinum 495W, 750W, 1100W, 1600W, 2000W and 2400W	48VDC 1100W, 240HVDC 750W Hot plug power supplies with full redundancy Up to 8 fans with N-1 redundancy (6 hot-pluggable internal fans and 2 external fans)
Sizing	Form factor: Tower or rack, 5U	Chassis max depth: 708.7 mm
Bezel	Optional security bezel	
Embedded / At-Server	iDRAC9 with Lifecycle Controller iDRAC Direct	iDRAC REST API with Redfish Quick Sync 2 BLE/wireless module
Consoles & Mobile	OpenManage Enterprise OpenManage Essentials	OpenManage Mobile OpenManage Power Center
Integrations	Microsoft® System Center, VMware® vCenter™, BMC Software	
Connections	Nagios & Nagios XI, HP Operations Manager (OMi)	
Tools	Dell EMC Repository Manager Dell EMC Update Package Dell EMC System Update Dell EMC Server Update Utility	iDRAC Service Module OpenManage Server Administrator OpenManage Storage Services
Security	TPM 1.2/2.0 optional Cryptographically signed firmware Silicon Root of Trust	Secure Boot System Lockdown System Erase
I/O & Ports	2 x 10GbE LOM 8 x USB (1 x USB 2.0, 1 x USB 3.0, 6 x USB 2.0/3.0) dedicated IDRAC Direct Micro-USB Video card: VGA Up to 8 PCIe Gen3 slots	
GPU options[2]	GPU options: 4 x DW or 8 x SW Nvidia Tesla P100, K80M, M60, M10, P40, AMD S7150, S7150X22	See Dell.com/GPU for latest information.
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.
OEM-ready version available	From bezel to BIOS to packaging, your servers can look and feel as if they were designed and built by you. For more information, visit Dell.com/OEM.	
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, visit https://www.emc.com/products/how-to-buy/global-financial-services/index.htm.*	

1 The 128GB DIMM slots will be available post-release.
2 GPU capability available in a rack form factor. Must be ordered at the time of initial purchase. Two 300W GPU are supported within NVMe drive configurations.

Learn more at Dell.com/PowerEdge

DELLEMC