

Density optimized multi-node server for extreme compute at scale

The Dell EMC PowerEdge C6520, the ideal compute-dense server designed to boost data center performance and address extreme compute at scale



Innovate at scale with challenging and emerging workloads

The Dell EMC PowerEdge C6520, powered by the 3rd Generation Intel® Xeon® Scalable processors, is the ideal compute-dense server designed to support dynamic compute-at-scale business requirements in a dense form factor. The PowerEdge C6520 maximizes performance per U by supporting 4 dual-socket compute nodes in a 2U chassis with Air and Direct Liquid Cooling options to power the highest performing processors. It supports 8 memory channels/CPU, up to 16 DDR4 DIMMs @ 3200 MT/s DIMM speed. In addition, to address substantial throughput improvements the PowerEdge C6520 supports PCIe Gen 4 and up to 6 NVMe drives per node. This makes the PowerEdge C6520 an ideal server for hyperscale compute workloads requiring high scalability and high performance such as High-Performance Computing (HPC), high performance data analytics (HPDA), financial modeling and high frequency trading(HFT), Web Tech and XaaS Service Providers.

Accelerate operational efficiency with autonomous collaboration

The Dell EMC OpenManage systems management portfolio tames the complexity of managing and securing IT infrastructure. Using Dell Technologies' intuitive end-to-end tools, IT can deliver a secure, integrated experience by reducing process and information silos in order to focus on growing the business. The Dell EMC OpenManage portfolio is the key to your innovation engine, unlocking the tools and automation that help you scale, manage, and protect your technology environment.

- Optional built-in telemetry streaming, thermal management, and RESTful API with Redfish offer streamlined visibility and control for better server management
- Intelligent automation lets you enable cooperation between human actions and system capabilities for added productivity
- Integrated change management capabilities for update planning and seamless, zero-touch configuration and implementation
- Full-stack management integration with VMware, Microsoft, ServiceNow, Ansible and many other tools

Protect your data assets and infrastructure with proactive resilience

The Dell EMC PowerEdge C6520 server is designed with a cyber-resilient architecture, integrating security deeply into every phase in the lifecycle, from design to retirement.

- Operate your workloads on a secure platform anchored by cryptographically trusted booting and silicon root of trust
- Maintain server firmware safety with digitally signed firmware packages
- Prevent unauthorized configuration or firmware change with system lockdown
- Securely and quickly wipe all data from storage media, including hard drives, SSDs and system memory with System Erase

PowerEdge C6520

The Dell EMC PowerEdge C6520 offers compelling compute-density, improved performance and value for:

- High-Performance Computing (HPC)
- Web Tech
- XaaS Service Providers

Feature	Technical Specifications	
Chassis	Dell EMC PowerEdge C6400 chassis	
Nodes	4 hot-swappable dual-socket compute nodes in a 2U chassis	
Processor	Up to two 3rd Generation Intel Xeon Scalable processors per node, with up to 40 cores per processor	
Memory	<ul style="list-style-type: none"> 16 DDR4 DIMM slots, supports RDIMM of 1 TB max or LRDIMM of 2 TB max, speeds up to 3200 MT/s Supports registered ECC DDR4 DIMMs only 	
Availability	Hot-plug redundant drives and PSUs	
Controllers	<ul style="list-style-type: none"> Internal controllers: PERC H745, H750, HBA345, HBA355i, S150, H345, H350 Internal Boot: Boot Optimized Storage Subsystem (BOSS-S1): HWRAID 2 x M.2 SSDs, uSD card 	
Drive bays	Front bays: <ul style="list-style-type: none"> Up to 12 x 3.5-inch SAS/SATA (HDD/SSD) drives max 92.16 TB Up to 24 x 2.5-inch SAS/SATA (HDD/SSD)/NVMe drives max 368.64 TB 	
Power supplies	Dual hot-plug redundant 100 - 240 V AC Platinum (2600 W, 2400 W, 2000 W, 1600 W) Power supply units	
Cooling options	Air cooling, optional processor liquid cooling	
Fans	Non-Hot plug fans	
Dimensions	Height: 40.1 mm (1.58 inches) Width: 174.4 mm (6.86 inches) Depth: 570.34 mm (22.45 inches)	Weight: 45.6 kg (100.53 lb) for 12 x 3.5-inch direct backplane chassis 41.4 kg (91.27 lb) for 24 x 2.5-inch direct/NVMe backplane chassis 35 kg (77.16 lb) for system with no backplane
Sled height (U)	1U	
Embedded/At-the-Server	<ul style="list-style-type: none"> iDRAC9 iDRAC Direct iDRAC Service Module 	
Consoles	<ul style="list-style-type: none"> OpenManage Enterprise OpenManage Power Manager plugin OpenManage SupportAssist plugin OpenManage Update Manager plugin 	
Mobility	OpenManage Mobile	
Integrations and Connections	OpenManage Integrations <ul style="list-style-type: none"> VMware vCenter and vRealize Operations Manager Microsoft System Center I Red Hat Ansible Modules BMC Truesight 	OpenManage Connections <ul style="list-style-type: none"> IBM Tivoli Netcool/OMNIBus BM Tivoli Network Manager IP Edition Micro Focus Operations Manager i Nagios Core Nagios XI
Integrated Security	<ul style="list-style-type: none"> TPM 1.2/2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ Digitally Signed Firmware Chassis Intrusion Alert Secure Boot Secure Erase Silicon Root of Trust System Lockdown (requires iDRAC Enterprise or Datacenter) 	
Embedded NIC	1 x 1 GbE LOM riser	
Network cards	1 x OCP 3.0 x16 Gen4 (for network controller)	
GPU options	Low-profile (Half-height) 70 W GPU	
Rear Ports	<ul style="list-style-type: none"> 1 x iDRAC Direct (Micro-AB USB) port 1 x Mini-DisplayPort 1 x iDRAC or NIC port or RJ45 1 x USB 3.0 	
PCIe	Up to 4 x PCIe Gen4 slots (3 x16, 1 x8) with support for SNAP I/O modules	
Supported Operating Systems	<ul style="list-style-type: none"> Canonical Ubuntu Server LTS CentOS Citrix Hypervisor Microsoft Windows Server with Hyper-V Red Hat Enterprise Linux SUSE Linux Enterprise Server VMware ESXi/vSAN Windows Preinstallation Environment (WinPE) 64-bit drivers For specifications and interoperability details, see Dell.com/OSsupport .	
OEM-enabled 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	

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