

# C6520-IR (Immersion Ready)

Density optimized multi-node server for extreme compute at scale



The Dell EMC PowerEdge C6520 optimized for Immersion by UNICOM Engineering, C6520-IR, 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 C6520-IR maximizes performance per U by supporting 4 dual-socket compute nodes in a 2U chassis 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 C6520-IR supports PCIe Gen 4 and up to 6 SSD drives per node. This makes the C6520-IR 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.

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## Gain a Competitive Advantage

Many times, the best way to deliver a truly competitive solution is to leverage the products, skills, and resources of proven partners. Building on innovative Intel technology, UNICOM Engineering's design, integration, logistics and support expertise helps customers streamline software application deployment and shorten time to revenue. Our strong foundation of engineering expertise, process-driven manufacturing, technology partner relationships, and an unrelenting commitment to quality has made UNICOM Engineering one of the most trusted deployment partners in the industry.

# C6520-IR (Immersion Ready)

## technical specifications



C6520-IR Rear View

### Chassis

- Dell EMC PowerEdge C6400 chassis, 2U/ 4 Nodes

### Dimensions

- Height: 86.8mm (3.4")
- Width: 448.0mm (17.6")
- Depth: 797.3 mm (31.3")

### 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

### Nodes

- Four 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

- 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

- Internal controllers: PERC H745, HBA345, S150, H345
- Internal Boot: Boot Optimized Storage Subsystem (BOSS-S1): HWRAID 2 x M.2 SSDs, uSD card

### Front Drive Bays (SSD Only)

- Up to 24 x 2.5-inch SSD drives max 368.64 TB

### Power Supplies

- Dual Hot-plug redundant 2400W AC Power Supply
- Dual Hot-plug non-redundant 2400W AC Power Supply

### Cooling

- Optimized for Immersion Cooling Systems

### Fans

- Optimized for Immersion Cooling Systems

### Sled Height (U)

- 1U

### Embedded Management

- iDRAC9
- iDRAC Direct
- iDRAC Service Module

### Embedded NIC

- 1 x 1 GbE LOM riser

### Networking Cards

- 1 x OCP 3.0 x16 Gen4 (for network controller)

### GPU Options

- Low-profile (Half-height) 70 W GPU

### Rear Ports

- 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

- 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

**Note:** These specifications should be viewed as preliminary and final specifications may vary.

## Support and Maintenance Services

UNICOM Engineering offers a variety of support and maintenance service programs to ensure high availability, rapid response, effective troubleshooting, fast parts replacement and 24-hour support.


Please visit [www.unicomengineering.com/supportservices](http://www.unicomengineering.com/supportservices) for more information.

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