



POWEREDGE C6320P SERVER NODE

Balanced, high-performance computing for the most demanding, highly parallel applications, delivered in the modular 1U C6320p server node, powered by the innovative Intel® Xeon® Phi™ processor and managed with iDRAC8 with Lifecycle Controller.

Optimized for HPC

High-performance computing applications for workloads like scientific simulations, seismic processing and financial risk analysis gain performance advantages from highly parallelized code. The PowerEdge C6320p provides a dense and balanced computing platform optimized to deliver better performance for parallel code — using the Intel® Xeon® Phi™ processor with up to 72 out-of-order cores and providing a choice of low-latency I/O options — both Intel Omni-Path and InfiniBand®.

The C6320p is a 1U modular server node — purpose-built for dense, high-performance computing environments — with 6 DIMMs of DDR4 memory and access to six 2.5-inch drives using dynamic drive assignment. Housing up to four nodes per C6300 chassis, it can deliver a maximum of 288 cores per 2U for tremendous parallel performance. Integrated Omni-Path or InfiniBand fabric options allow you to create an ideal platform for accelerating data-intensive computation, like deep learning, life sciences or weather simulation.

Compatible, scalable and flexible

The Intel Xeon Phi processor lets developers use standard, existing programming tools and methods. Familiar programming models remove training barriers and accelerate development cycles, allowing less time to be spent on software engineering and more time spent productively working on the business or research challenges that are important to you. The modular building block design of the C6320p permits future-ready scale-up infrastructures that grow along with demand. The variety of low-latency I/O fabrics and PCI Express® (PCIe) expansion options (x8 PCIe 3.0 mezzanine slot and x16 PCIe 3.0 slot) allow the C6320p to address a both parallel processing applications and extreme scale environments with extensive flexibility and impressive expandability.

Improved operational productivity

The C6320p leverages the scale and cost efficiencies of the integrated Dell Remote Access Controller 8 (iDRAC8) with Lifecycle Controller, proven by operation in millions of servers worldwide. iDRAC8 with Lifecycle Controller delivers intelligent management and configuration automation for hyper-converged solutions and appliances, and enables you to select the management functions you need, to streamline operations by reducing the time and number of steps to deploy, monitor, and update PowerEdge C6320p servers throughout their entire life cycle.

PowerEdge C6320p

- Intel Xeon Phi processor
- Up to 288 out-of-order cores/2U
- 384GB memory/6 HDDs per node
- iDRAC8 with Lifecycle Controller (Express or Enterprise)

| Feature | Technical specification |
|------------------------------|--|
| Form factor | 1U sled in 2U 6300 rack-mount chassis (4 x C6320p/6300 chassis) |
| Dimensions and weight | H: 8.68 cm (3.42 in), W: 44.8 cm (17.6 in), D: 79.0 cm (31.1 in) Weight (maximum configuration): 41 kg (90.4 lbs) Weight (empty): 15.1 kg (33.3 lbs) |
| Processor | Intel® Xeon® Phi™ processor 72XX product family Processor sockets: up to 4 x 1 socket nodes in the C6300 chassis; 64, 68 or 72 processor cores Internal interconnect: Intel QuickPath Interconnect (QPI) |
| Chipset | Intel C612 chipset |
| Memory | 6 x DDR4 RDIMM (2400/MT/s); up to 384GB (64GB DIMMs); 1 DPC |
| I/O slots | 1 x 16 PCIe 3.0 half-height, half-length 1 x 4 PCIe 3.0 DCS mezzanine |
| Drive bays | 24 x 2.5" per chassis |
| Hard drives | 6 x 2.5" HD options per server node (6Gbps SATA) Internal 1.8" SSD option for boot (120GB and 240GB) Secure Digital High Capacity (SDHC) card option for boot (16GB) |
| Embedded NIC | Single-port 1GbE LOM Single-port Mellanox® ConnectX® -4 100GbE embedded (optional) |
| Power supplies | Dual hot-plug redundant high-efficiency 1400W or 1600W power supplies (200–220 VAC, 240VDC) |
| Availability | Redundant hot-plug cooling and power |
| Operating systems | Red Hat® Enterprise Linux® |
| Systems management | iDRAC8 with Lifecycle Controller: iDRAC8 Express (default) iDRAC8 Enterprise (upgrade option) |

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.

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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