PowerEdge C6220 II

Get up to 40% greater performance and improved energy efficiency in the same award-winning PowerEdge™ C6000 shared infrastructure chassis with the latest Intel® Xeon® E5-2600 v2 processors.

Designed with your needs in mind

High-performance workloads such as seismic processing, video rendering and scientific simulations rely heavily on compute performance, memory bandwidth, and overall efficiency to drive time and cost savings that impact a server's total cost of ownership (TCO).

The next-generation Dell™ PowerEdge C6220 II servers provide an ideal solution for such demanding environments and feature the latest Intel Xeon E5-2600 v2 processors for improved performance and efficiency. This scale-out building block is a true workhorse with up to four 2-socket server nodes in a highly-flexible 2U shared infrastructure chassis.

With up to 24 cores per node, memory bandwidth up to 1866MT/s, and dynamic drive assignment, the PowerEdge C6220 II delivers new levels of performance that can be tailored to customer requirements while offering increased flexibility and reliability over traditional rack-mounted servers.

Deliver results faster and more securely

Computationally-intense workloads demand performance, from processors to memory to connected devices. The PowerEdge C6220 II features Intel Xeon E5-2600 v2 processors with increased core counts of up to 50% over prior E5-2600 models, as well as 50% more cache. Those improvements deliver performance enhancements of up to 40%, allowing you to do more with less and get results faster than ever before.

In addition to this leap in processor performance, the PowerEdge C6220 II server supports up to 512GB of memory per server node — with up to four nodes per chassis — for a total of 2TB of memory in a highly-dense, 2U solution. Memory bandwidth has also been improved substantially with support for 1866MT/s DDR3 DIMMs, reducing bottlenecks for memory-intensive applications.

Additional enhancements to PCI Express® (PCIe) 3.0 connectivity drive up to 4x faster task completion for high-performance computing (HPC) workloads while expanded support for x16 non-transparent bridges allows greater flexibility in device memory mapping for complex HPC environments.

Flexibly mix workloads in the same chassis

The PowerEdge C6220 II allows you to tailor your environment to specific workload needs with numerous options for compute, storage and connectivity within one advanced 2U chassis.

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Support for up to two 2U nodes with additional PCIe expandability or four 1U nodes to maximize compute density lets you tailor resources as needed over time.

Each C6000 chassis supports up to 24x 2.5" or 12x 3.5" drives with multiple SATA and SAS options for up to 48TB of storage capacity. With the expander backplane option, dynamic drive assignment for 2.5" drives provides even more flexibility by zoning any number of drives to each node, giving nodes additional or fewer storage resources as workloads demand.

The x8 PCIe mezzanine slot in each node supports a variety of options for 1Gb and 10Gb Ethernet, InfiniBand, or additional drive controllers while the x16 PCIe slot adds even more flexibility, including connection to the 16-slot PowerEdge C410x PCIe expansion chassis — delivering up to 16.48 teraflops of added GPGPU-based computing performance.

The PowerEdge C6220 II server is part of Dell's hyperscale-inspired PowerEdge C server line designed to bring the most compute power in the least amount of space with the least energy draw to lower operational costs. These servers have the right combination of what you need and nothing more. They are purpose-built servers designed for high performance computing, Web 2.0, hosting, data analytics, and cloud building. They are best for rack deployments, large homogenous cluster/cloud application environments where the software stack provides primary platform availability and resiliency. The PowerEdge C server line does not come with features you don't need in a scale-out environment like comprehensive systems management, or broad enterprise storage.

PowerEdge C6220 II

- Intel Xeon E5-2600 v2 processors: performance boosted by up to 40% over prior E5-2600 models

- Improved memory bandwidth with support for 1866MT/s DDR3 DIMMs

- Up to 4x faster task completion and improved device addressing for HPC with enhanced PCIe 3.0 connectivity

Feature	PowerEdge C6220 II technical specifications		
Chassis	2U rack mount		
Processors	Up to four 2-socket servers, 4, 6, 8, 10 or 12 cores per processor Intel Xeon processor E5-2600 v2 product family, with L3 cache: up to 30MB		
Memory	16 DIMM slots for up to 512GB per node: • 4GB/8GB/16GB (1.5V) DDR3 RDIMM (1866MT/s) • 32GB LV DDR3 RDIMM (1333MT/s)	• 4GB/8GB/16GB LV (1.35V) DDR3 RDIMM (1600MT/s) • 4GB LV DDR3 UDIMM (1600MT/s) • 32GB LV DDR3 LRDIMM (1600MT/s)	
Chipset	Intel C602 chipset		
Video	Integrated AST2300 with up to 16MB video RAM		
Primary storage	Maximum internal storage: 48TB SATA or NL 48TB SAS		
Drive bays and hard drives	24 x 2.5" or 12 x 3.5" hard drive options 2.5" SAS (15K): 146GB, 300GB 2.5" SAS (10K): 600GB, 900GB, 1.2TB 2.5" SATA: 500GB, 1TB 2.5" NL SAS (7.2K): 1TB 2.5" SATA SSD (eMLC): 100GB, 200GB, 400GB, 800GB	2.5" SATA SSD (MLC): 120GB, 160GB, 240GB, 300GB, 480GB, 800GB 3.5" SATA (7.2K): 1TB, 2TB, 3TB, 4TB 3.5" SAS (15K): 600GB 3.5" NL SAS (7.2K): 1TB, 2TB, 3TB, 4TB	
Connectivity	Intel Ethernet Controller i350, 2 x 1Gb Ethernet; 1 x 100Mb Ethernet dedicated management port		
USB ports	2 external ports		
I/O slots	1U-node version: 1 x8 mezzanine, 1 x16 half-height (low profile), half-length slot 2U-node version: 1 x8 mezzanine slot; 1 x16 full-height, half-length slot; 1 x16 full-height, full-length slot		
I/O adapter options	**1Gb Ethernet** Intel i350 quad-port 1Gb adapter Intel 82580 ET quad-port 1Gb mezz **10Gb Ethernet** Intel 82599 dual-port 10Gb DA/SFP + mezz Intel X520 dual-port 10Gb DA/SFP + mezz	**InfiniBand** Mellanox® ConnectX®-2 QDR dual-port mezz Mellanox ConnectX-3 FDR single-port mezz Dell X410 host interface card (HIC) for connection to the C410x	
Drive and RAID controllers	Intel C602: SATA or SSD drives only LSI® 2008 6Gbs SAS mezzanine (optional) LSI 9265-8i 6Gbs SAS add-in controller (optional)		
Power supplies	Dual hot-plug redundant high-efficiency 1200W or 1400W power supplies		
Fans	Shared cooling with quick-disconnect 4x 60mm speed fans detectable with PWM control		
Operating systems	Microsoft® Windows Server® 2012 Microsoft Windows Server 2012 R2 (includes Hyper-V®) Microsoft Windows Server 2008 R2 Enterprise x64 SP1 (includes Hyper-V)	Microsoft Windows® HPC Server 2008 R2 x64 SP1 Novell® SUSE® Linux Enterprise Server 11 Red Hat® Enterprise Linux®	
Server management	Embedded BMC with IPMI 2.0 support with 1x 10/100 Mbps RJ45 connector Intel Node Manager 2.0 compliant		
Hypervisors	Citrix® XenServer® VMware® vSphere® ESXi™		
Services (Availability varies by region. Please contact your sales representative for details.)	Data Center Consulting Services Rack Integration (U.S. only, not available in China) Rack Design Verification Configuration Services/CFI Onsite Deployment	Online Self Dispatch Basic Support ProSupport for IT ProSupport for Data Center 4-Hour Support Keep Your Hard Drive	Enterprise Wide Contract IT Advisory Service Remote Advisory Service Certified Data Destruction Specialized Onsite Services
Dimensions and weight	Height: 8.68 cm (3.42 in) Width: 44.8 cm (17.6 in) Depth: 79.0 cm (31.1 in)	Weight (maximum configuration): 37 kg (81.6 lb) Weight (empty): 17.14 kg (37.8 lb)	

Global services and support

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