



HYPERSCALE-INSPIRED DESIGN

# PowerEdge C6220

Get >80% more performance with up to four 2-socket Intel Xeon E5-2600 processor-based servers in a smart 2U shared infrastructure chassis that saves more than 100 watts.

# Designed with your needs in mind

Whether you're seismic processing, video rendering, or running scientific simulations, server performance, bandwidth and efficiency can impact time and cost to results.

The ability to run high-frequency processors can increase performance. Servers that can run at higher ambient temperatures can help reduce cooling costs. Simplified serviceability can save time while helping increase uptime, and the flexibility to run multiple configurations in the same chassis means the ability to do more with less.

We incorporated that customer feedback into the next generation Dell<sup>TM</sup> PowerEdge<sup>TM</sup> C6220 server. This scale-out building block is a workhorse with up to four 2-socket Intel® Xeon<sup>TM</sup> E5-2600 processor-based servers in a streamlined 2U shared infrastructure chassis.

#### Deliver results faster

The high volume of computations requires performance, from the processor to the memory to the interconnect. Intel's new Xeon E5-2600 series processors feature Turbo Boost Technology 2.0 in the Sandy Bridge microarchitecture to deliver more than 80% more performance than Intel Xeon 5600 series processors.<sup>2</sup>

In addition to this generational leap in processor performance, the PowerEdge C6220 server supports up to 135 watt processors, adding ~20% in performance over the 95 watt processor.<sup>3</sup>

When it comes to memory, 16 DIMM slots provide up to 512Gb of memory per server node; up to four nodes; and 1600MHz memory is available to help improve bandwidth per processor.

The Xeon E5-2600 processor has 2.3x the memory bandwidth of the previous generation, with four memory channels, and the integrated I/O helps reduce latency up to 30%.<sup>4</sup>

The PowerEdge C6220 server is also available with PCI Express (PCIe) Generation 3, doubling the I/O bandwidth of the previous generation.<sup>5</sup>

## Accomplish more with less

The space-conscious PowerEdge C6220 server comes in two- and four-node versions, with a streamlined shared infrastructure chassis. The server nodes share Platinum-certified power supplies, high-efficiency fans, and enhanced power routing at the midplane to help improve

power distribution, saving more than 100 watts.6

This server has fewer boards and connecting cables than the previous version, while providing easier access to components to help simplify and speed maintenance.

#### Mix workloads in the same chassis

Choose processors, memory, cards and connectivity per server node to mix workloads in the same chassis. The PowerEdge C6220 comes with 12 x 3.5" or 24 x 3.5" hard drives.

Feel free to use the x8 PCIe mezzanine slot for 10Gb Ethernet, Infiniband, or SAS HBAs, and the standard x16 PCIe slot to connect to the PowerEdge C410x PCIe expansion chassis. The two-node version has twice the PCIe slots for more bandwidth, and room for a full-height, full-length card to increase expandability options.

### Get the services and support you want

Dell is dedicated to simplifying IT, and Dell Services can help you manage the complexities of growing and maintaining your scale-out environments. Dell's broad portfolio of planning, implemmentation and maintenance

# PowerEdge C6220

- Intel Xeon E5-2600 processors boost performance by > 80%
- 135W processors deliver ~20% more performance over 95W
- 2.3x the memory bandwidth than the previous generation
- Smart chassis improvements save more than 100W per chassis

services can help accelerate your IT initiatives and grow your business. Dell services can be tailored to complement how you manage your environment. Options include, but are not limited to consulting services to help you optimize your data center, custom rack integration, and expert-level solution support with Dell Online Self Dispatch.

Feature	PowerEdge C6220 Technical Specifications	
Chassis	2U rack mount	
Processors	Up to four 2-socket servers, 2, 4, 6, or 8 cores per processor Intel® Xeon™ E5-2600 processor series, with L3 cache: up to 20MB	
Memory	4GB/8GB LV DDR3 (1333/1600 MHz), 16GB (1066 MHz), 16 DIMM slots for up to 512GB per node	
Chipset	Intel C600 chipset	
Video	Integrated AST2300 with up to 16MB video RAM	
Primary Storage	Maximum internal storage: 24TB SATA or NL 36TB SAS	
Drive Bays and Hard Drives	24 x 2.5" or 12 x 3.5" hard drive options 2.5" SAS (15K RPM): 146GB 2.5" SAS (10K RPM): 300GB, 600GB, 900GB 2.5" SATA II and NL SAS (7.2K RPM): 1TB 2.5" SATA SSD (SLC): 100GB	3.5" SATA (7.2K): 2TB, 3TB 3.5" SAS (15K): 300GB, 600GB 3.5" NL SAS (7.2K): 500GB, 1TB, 2TB
Connectivity	Intel Ethernet Controller i350 - 2 x 1Gb Ethernet 1 x 100Mb Ethernet dedicated management port	
Ports - USB	2 USB ports external (rear)	
I/O Slots	1 x8 mezzanine, 1 x 16 half-height (low profile), half-length slot 2-node version: 1 x8 mezzanine slot; 1 x16 full-height, half-length slot; 1 x16 full-height, full-length slot Mellanox® ConnectX-2 dual-port Quad Data Rate (QDR) InfiniBand adaptor (optional) Intel 82580 quad-port Gb Ethernet controller quad-port (optional)	
Drive Controller	Intel C600: SATA or SSD drives only LSI® 2008 6Gb SAS mezzanine (optional)	
RAID Controller	LSI 9265-8i add-in RAID controller	
Power Supplies	Dual hot-plug redundant high-efficiency 1200W/1400W power supplies	
Fans	Shared cooling with quick-disconnect 4 x 60mm speed fans detectable with PWM control	
Operating Systems	Novell® SUSE® Linux® Enterprise Server 11 SP1 Red Hat® Enterprise Linux 6.0 Windows® Server® 2008 R2 Enterprise x64 SP1 Windows Server 2008 R2 Hyper-V <sup>TM</sup> SP1 Windows HPC Server® 2008 R2 x64 SP1	
Server Management	Embedded BMC with IPMI 2.0 support with 1 x 10/100 Mbps RJ45 connector Intel Node Manager 2.0 compliant	
Hypervisors (Optional)	Citrix® XenServer® 5.6 SP2 VMware® ESXi v5.0 Windows Server 2008 Hyper-V	
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.)	

The PowerEdge C6220 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.

<sup>1</sup> http://www.intel.com/content/www/us/en/architecture-and-technology/turbo-boost/turbo-boost-technology.html 
<sup>2</sup> http://www.intel.com/performance/index.htm 
<sup>3</sup> http://www.intel.com/content/www/us/en/architecture-and-technology/turbo-boost/turbo-boost-technology. 
<sup>4</sup> http://www.intel.com/content/www/us/en/io/i-o-expansion-modules.html#Infinibad 
<sup>5</sup> http://www.pcisig.com/specifications/pciexpress/resources/PCle\_3\_0\_External\_FAQ\_Nereus.pdf 
<sup>6</sup> As a result of higher-efficiency power supplies, fans and power routing. According to Dell service technicians, improved chassis design reduced the tear-down time by an hour, measured in Dell labs January 2012.

Learn more at Dell.com/Partner/PowerEdge

© 2012 Dell Inc. All rights reserved. Dell, the DELL logo, the DELL badge and PowerEdge are trademarks of Dell Inc. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell disclaims proprietary interest in the marks and names of others. This document is for informational purposes only. Dell reserves the right to make changes without further notice to the products herein. The content provided is as-is and without expressed or implied warranties of any kind.

PowerEdge C

