PowerEdge C410x

An external PCI Express (PCIe) expansion chassis, the Dell® PowerEdge™ C410x connects 1-8 servers to 1-16 PCIe devices to get results faster, while saving on space, weight and cost.

Designed with your needs in mind

The results of your research, mapping, rendering or model simulation have the potential to impact the lives of millions. Yet, the required processing of massive amounts of data and computations takes time. Meanwhile, application and computing infrastructure demands increase while the budget remains the same.

You can see results faster, while increasing efficiency with the Dell PowerEdge C410x PCIe expansion chassis. Loaded with NVIDIA® Tesla™ graphics processing unit (GPU) computing modules, it brings 21 TFLOPs of computing throughput in single precision performance in a 3U.

See your results faster

Increase GPU to server ratios so you can see your results faster without over-investing in CPU cores. Off-load more parallel processing to up to 16 GPUs without having to buy another server. With a wide range of flexible server-to-PCIe device configurations, you can set the right ratio to maximize application performance.

Do more with less

The Dell PowerEdge C410x PCIe expansion chassis provides 25% more density in a 3U than its closest competitor. It's 31% lighter and requires 11% fewer racks and switches.

The PowerEdge C410x has a purpose-built shared infrastructure, designed to maximize power and cooling for GPUs and other PCIe devices. for example, it comes with larger, more efficient 92mm fans that use less power than the 40mm fans found in competing chassis/servers.

Mix and match

The PowerEdge C410x is one of the only PCIe expansion chassis available today that enables 1-8 servers to connect to 1-16 PCIe devices. PCIe devices can include GPUs, Infiniband cards and more with the optional General Purpose PCI Express Carrier. This carrier supports low-profile PCIe cards with an SSI PCIe standard card I/O full-height bracket.

So, when you need more PCIe devices, or want to mix PCIe devices, you can quickly add or change them, without having to buy additional, often more expensive servers or other equipment.

Increase uptime

Keep your project running, even if there are thermal, power or chassis-level issues. The PowerEdge C410x PCIe expansion chassis's dedicated Intelligent Management Platform Interface (IPMI) management port notifies you right away. Better yet, the C410x is one of the only PCIe expansion chassis available today with hot-add, individually serviceable PCIe modules, hot-plug redundant power supplies and fans, increasing uptime while saving time and money.

The right combination

The PowerEdge C410x PCIe expansion chassis is part of Dell's hyperscale-inspired PowerEdge C series, designed to bring the most compute power in the least amount of space and energy draw to lower operational costs.

The global services and support you need

Dell is dedicated to simplifying IT, and Dell Services can help you manage the complexities of growing and maintaining your hyperscale, high performance and cloud

PowerEdge C410x

- Up to 21 TFLOPs in 3U

- Flex from 1-8 servers connected to 1-16 PCIe devices

- 25% greater density, 31% lighter, 11% fewer racks and switches than its closest competitor

- Individually serviceable PCIe modules, power supplies, fans

computing environments. Dell's broad and customizable portfolio of planning, implementation and maintenance services can help accelerate your IT initiatives and grow your business.

Feature	PowerEdge C410x Technical Specifications
Chassis	• 3U rack mount
PCI Express (PCIe) Modules	• Up to 16 available slots, 10 front, 6 rear x16 slots • PCI Express modules that support low profile single-wide PCI Express cards with a standard full height bracket.*
PCIe Inputs	• 8 PCIe Gen 2 x 16 iPASS ports
PCIe Cards Supported	• NVIDIA Tesla M2070, M2070Q, M2090 • Low profile PCI Express single-wide card that fits in the dimensions of the general purpose PCI Express carrier (max height 68.9mm x length 167.65mm)*
Management	• On-board IPMI 2.0 BMC • Dedicated management port
Power Supplies	• 4 x 1400W hot-plug, high-efficiency power supplies • N + 1 power supply redundancy
Fans	• Shared redundant cooling with high-efficiency hot-plug 92mm fans
Host Interface Card (HIC)	• NVIDIA single-port HIC • Dell X410 HIC
HIC Form Factor	• NVIDIA HIC, low profile, PCIe x 16 Gen 2, single port, 6.6" x 2.713" • Dell X410 HIC, low profile, PCIe x 16 Gen 2, single port, 5.091" x 2.657" • Full-height options available
Cable Options	• 2.0m iPASS cable
Validated Host Platforms	• PowerEdge C1100, C6100, C6105, C6145, and R5500 servers
Services (Availability varies by region. Please contact your sales representative for details.)	• IT Consulting Services • Rack Integration (U.S. only) • Server and Storage Deployment • Support Services
	*Only available with the General Purpose PCI Express Carrier

Simply Put: Get results faster with this incredibly flexible external PCIe expansion chassis, while saving space, weight, energy and cost.

Validated with the PowerEdge C6145 server

The PowerEdge C410x PCIe expansion chassis is validated with the PowerEdge C6145 and other servers. The PowerEdge C6145 is one of the highest performing servers ever, with two 4-socket AMD® Opteron® 6200 series processor-based servers in a hyper-efficient 2U; with 10 PCIe slots to ramp up expansion possibilities.

It has up to 128 cores, 1TB memory, and 40Gb/second I/O per card slot. It has six PCIe Gen 2 x16 slots, two x8 mezzanine and two dedicated x16 host interface card slots (HICs), so you have 10 total slots to flex with your needs. Best of all, it's all in a hyper-efficient shared infrastructure 2U, so it saves in space, weight and energy.

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