



Based on the NVIDIA CUDA™ GPU architecture code named "FERMI," the Xtreme Compute Technologies (XCT) XS2-Q5000 & Q6000 1u Professional Graphics Computing Systems are designed from the ground up for mulit-GPU high performance visual and GPU compute to tackle today's biggest challenges.

The XCT-XS2-Q5000 & Q6000 multi-GPU Professional Graphics Compute Systems based on the NVIDIA Quadro(R) 5000 & 6000 by PNY delivers the industry's largest 2.5 & 6 GB GDDR5 graphics memory. Built on the innovative NVIDIA Fermi architecture and providing 352 & 448 NVIDIA CUDA™ parallel processing cores, respectively, delivering up to 5X faster performance across a broad range of design, animation and video applications.

Additional" must have" features for both the technical and enterprise computing space include ECC memory for uncompromised accuracy and scalability, and 7x the double precision performance compared to the previous generation GPU computing products. Compared to typical quad-core CPU's, Quadro Fermi based compute systems deliver equivalent performance at 1/10th the cost and 1/20th the power consumption. Designed with FOUR Fermi based processors in a standard 2u chassis, the XCT-XS2-Q5000 & Q6000 visual computing systems scale to solve the worlds most important computing challenges - more quickly and accurately. OIL & GAS, SCIENCE, FINANCE AND MORE!



Quadro 5000 Quadro 6000



# **Technical Specifications**

**Form Factor** 2U #of Quadro by PNY GPU's 4 DVI-DL + DP + DP + Stereo **Display Connectors (Q6000) Memory Speed** 1.55 GHz GPU 384-bit GPU Memory Interface (Q6000) 148 GB/sec Memory Bandwidth (Q6000) **DP Floating Point (Q6000)** 2 Tflops (Peak) **SP Floating Point (Q6000)** 4 Tflops (Peak) **Total Dedicated Memory** 10 GB GDDRS: A-BriX XS2-Q5000

24 GB GDDRS: A-BriX X52-Q6000

System Interface PCIe x16 /Gen2

**Software Development Tools** 

CUDA C/C++

Fortran, OpenCL, DirectCompute Toolkits

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Flexibility Mix Tesla or Quadro for optimum application and budget requirements		8
Serviceability Field Serviceable Reduce downtime Peace of mind		*
<b>Upgradability</b> Stay current with future Fermi architecture advances	<b>⊘</b>	8
3 year Standard On-Site Warranty INCLUDED!		
Made in USA	<b>②</b>	8
Data Center Certified	<b>Ø</b>	<b>②</b>











# **Quadro - 2U Specifications**

### Enclosure

Dimensions: 19"w x 3.5"h x 21"d Removable front bezel with air filter One or two rear panel PCle x16 cable connectors Rack ears and rack slides included

## **PCIe Expansion Slots**

PCle 2.0 compliant Four or Eight PCle x16 slots (electrical and

### **System Monitoring**

Monitors 8 temp sensors Monitors 4 fan tachometers

### **Operating Environment**

Temperature Range: Operating: 0°Cto 50°C Storage: -40°C to +85° C

Altitude: Operating 0 to 10,000 feet Storage: 0 to 50,000 feet

# **Agency Compliance**

#### Host cable adapter

PCIe half-card

#### PCIe x16 cable

PCIe External Cabling Specification, Rev. 1.0 Cables can be ordered in 1m, 3m, lengths

Brackets for I/O cards provided upon request

# PCIe Over Cable

enclosure cables to the host system with one or two PCle x16 cables. The high-speed cables allow data transfers

## Installation

2 cable adapters can be installed in the PCIe host system or of two is required for the expansion enclosure to be fully operational.

## System Monitoring

monitor surveys system parameters of temperature, fan speed, and power speed, and power voltages. System status can be easily accessed through an Ethernet port on the rear of the enclosure.

Dual 850 watt hot swappable power supplies provide ample power for high-end GPU boards. Additional

# Cooling

provided across all the boards. A power modulator controls the speed of the fans

www.xtremecompute.com

