

3U Compute Accelerator with NVIDIA Quadro M6000

The CA16006 Compute Accelerator with sixteen NVIDIA® Quadro® M6000 GPU accelerators is employed in a variety of HPC applications including oil and gas exploration and financial services. Completely integrated with the GPUs most suited for a specific application, it's easy installation and tested reliability makes it superior to alternative products. The CA16006 occupies only 3U of rack space and connects directly to one or four host server(s) through the latest technology PCIe x16 Gen3 connections. Four removable canisters house up to four full-height, full-length, PCIe x16 double-wide GPUs and one half-length, half-height IO card each. The system is powered by three 3000-watt redundant power supplies and includes an IPMI-based system monitor.

PN: OSS-PCIe3-3UZ-20-4-X

Features

- 3U High
- Four removable canisters with four GPUs each
- Optional 5th slot in each canister to support EDR IB or 10/40GbE
- Fully IPMI v2.0-compliant system monitoring capability
- Three 3000-watt power supplies
- Superior Cooling with eight temperature controlled fans
- Up to four PCIe x16 Gen3 cable connections to host server(s)



Specifications

Enclosure

- Dimensions: 17"W x 5.25" H x 38"D
- Supports 16 full-length, full-height, 2-slot PCIe x16 GPU/PHIs
- All 16 boards face the rear of the chassis (no IO bracket access)
- Supports four half-height, half-length, single-wide PCIe x16 cards with IO bracket access
- Removable front bezel with air filter
- Front panel LEDs
- Four rear panel PCIe x16 Gen3 cable interfaces
- 4 individually-removable rear fans and 4 canister mounted fans
- Weight: 92lbs when fully loaded with 16 accelerators

Main Backplane

- Four PCIe 3.0 x16 cable inputs to rear of enclosure
- Four PCIe 3.0 x16 high-density connectors to each canister
- Three PCIe 3.0 switches manage PCIe cross connects from cables to canisters
- 2x RJ45 connectors for IPMI v2.0 System Monitor
- 1x HD DB-9 serial port for IPMI network configuration
- Optional RJ45 for basic SYSMON2 chassis monitor (not required when using IPMI System Monitor)
- Supports bus-bar power distribution to the canisters through 8 high-power bladed connectors (2 per canister)
- On board IPMI System Monitor & SYSMON2 connectors

Canister Backplane

- 4x PCIe 3.0 x16 double-spaced slots in 2 ranks of 2 GPUs each
- 4x 8-Pin 12V power connectors for GPU/PHI AUX power cables
- 1x PCIe 3.0 x16 single-wide slot for half-height, half-length IO cards
- PCIe 3.0 switch

Power

- 6000W redundant power subsystem
- Three 3U 3,000-watt front removable, hot-swap supplies
- Each supply measures 1U (1.65") x 2.7" x 28.5"
- 2+1 redundant with full current sharing operation
- 3,000W each at 208-277VAC, 15A max input
- 1,500W each at 90-124VAC, 15A max input
- 15A breaker and IEC C19 power input at rear for each supply
- +12V and +12V standby voltage outputs
- All +12V power rails shared on copper bus bar delivery system

Power Cords

- The HDCA ships with C19-C20 15A PDU type power cords
- 240V power cord for PDUs
 - OSS Part number: OSS-CBL-PWR-C20-C19-15A-8
 - IEC C19 to IEC C20, Straight, 14AWG, 15A, 8' (2.44m)
- Other power cords available on request

Specifications	Quadro M6000 12GB	Quadro M6000 24GB
Peak Single Precision Performance	Up to 7 TeraFLOPS	Up to 7 TeraFLOPS
Number of GPUs	1 Maxwell GM200	1 Maxwell GM200
Number of CUDA Cores	3072	3072
Memory Capacity and Bandwidth	12GB GDDR5 at 317GB/s	24GB GDDR5 at 317GB/s
Power Consumption	250 W	250 W
Max Simultaneous Displays	4 direct, 4 DP 1.2 Multi-Stream	4 direct, 4 DP 1.2 Multi-Stream
Max DP 1.2 Resolution	4096 x 2160 at 60 Hz	4096 x 2160 at 60 Hz
Max DVI-I DL Resolution	2560 x 1600 at 60 Hz Max	2560 x 1600 at 60 Hz Max
DVI-I SL Resolution	1920 x 1200 at 60 Hz	1920 x 1200 at 60 Hz
Max VGA Resolution	2048 x 1536 at 85 Hz	2048 x 1536 at 85 Hz

Specifications subject to change without notice