OSS Gen3 4U Value 5-Slot GPU Expansion

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This 5-Slot rackmount expansion chassis provides significant GPU expansion capabilities at insignificant prices.
The 4UV-5-1 links 5 PCIe 3.0 x16 slots to the host server with 1 PCIe 3.0 x16 host-connection. The system supports up to 4 double-width GPUs, or 5 single-wide add-in-cards. With options for static or dynamic cooling, users have the choice to control fan-speeds for optimal high-power cooling. Each 4UV chassis is equipped with two 2000W power supplies which provide up to 4000W of usable redundant power to the GPU accelerator system.

Features

- 4U Rackmount Design
- 5 PCIe 3.0 x16 Expansion Slots
- One PCIe 3.0 x16 Host Connection
- PCIe x16 Cables (up to 3-Meters)
- Tach and PWM Fan Options
- Two 2000W Load-Sharing Power Supplies
- Eight EPS12V PCIe Power Connectors

Specifications

Enclosure	**Supports** (Electrical):
	• 5-1 Configuration
	  ○ Up to 5 full-height/full-length PCIe slots (75W Power to Each)
	  ○ One Host Connection Interface
	• Extended-Height Cards
	• Internal Auxiliary-Power for GPUs with Top-Side Power-Connects for Additional Power
	• System Status Tri-Color LED Panel (Power and Fan-Status)
	Dimensions: 19”W x 18.5”D x 7”H (4U)
	Aesthetics: Black Medium-Texture Liquid-Paint Finish with Optional OEM-Logo Area
	Rackmounts: Toolless Rack-Slides Included

PCIe Backplanes	One 5-Slot PCIe 3.0 x16 Expansion Backplane (OSS-PCIe-BP-457) The 5-Slot Integrated System Includes: • One PCIe 3.0 x16 Cable-Target Interface • Three PCIe 3.0 x16 Double-Width Slots • Two PCIe 3.0 x16 Single-Width Slots

Host/Target Interface	Two PCIe 3.0 x16 Host/Target Adapter Cards for Expansion-to-Host Uplink
	Host/Target Interface Boards:
	• **Form Factor**: Half-Height/Half-Length, Single-Slot PCIe 3.0 x16 Add-in-Card
	• **Card-Edge Connector**: PCIe3 x16 Physical (128 Gbps)
	• **Cable Connector**: PCIe Cable Specification 3.0 x16 (128 Gbps)
	  ○ **Option 1: HIB38 Interface Board**
	  ▪ iPass Connector
	  ▪ Accepts PCIe x16 Copper Cables with iPass Connectors
	  ○ **Option 2: HIB68 Interface Board**
	  ▪ SFF-8644 Connector
	  ▪ Accepts Mini-SAS HD Cables with SFF-8644 Connectors

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	• **Switch:** Broadcom PEX 8733 Switch; Includes:
	  ○ Fast Cut-Through (132ns Latency)
	  ○ SSC Isolation
	  ○ Non-Blocking Switch Fabric
	  ○ Maximum Server-Compatibility Design
	  ○ Integrated 4-channel DMA Engine
	• **Average Power Consumption:** 6.4W Typical

Cables	**HIB38 Interface Board Option (Includes 1 Cable per Host-Uplink)** • 0.5-Meter Passive PCIe x16 Cable • 1-Meter Passive PCIe x16 Cable • 2-Meter Passive PCIe x16 Cable **HIB68 Interface Board Option (Includes 4 Cables per Host-Uplink)** • 1-Meter Mini-SAS HD Cables • 2-Meter Mini-SAS HD Cables • 3-Meter Mini-SAS HD Cables
Cooling	Three High-Power Fans, Mounted to Front Bezel of the Chassis • **Dimensions:** 120mm x 38mm • **Speed:** 250CFM • **Use:** Cools Multi-GPU or FPGA Applications up to 3000W • **Monitoring:** Tachometer Monitoring via Front-Panel LED • **Optional:** Fan Speed Controller (*not included in standard price*)

Power	Dual Load-Sharing Power Supplies, Pluggable from the Rear of the Chassis
	Two 2000W 80Plus Titanium Efficiency Power Supplies with Dual IEC C14 AC Input Connectors
	• **Output Power** (per PSU)
	  ○ 1000W: 100-127Vac / 12.5-9.5A / 50-60 Hz
	  ○ 1800W: 200-220Vac / 10-9.5A / 50-60 Hz
	  ○ 1980W: 220-230Vac / 10-9.8A / 50-60 Hz
	  ○ 2000W: 230-240Vac / 10-9.8A / 50-60 Hz
	• **Total Power to the System:** 4000W Non-Redundant
	• **Redundancy:** Hot-Swappable when Total System Power Requirements are Under 2000W
	• **Aux Power:** 8 EPS12V AUX Power Connectors Available for High-Power Cards

Operating Environment	0-35°C 10-90% relative humidity 0-10,000 feet above sea level
Storage Environment	-40 to 85°C 5-96% relative humidity 0-50,000 feet above sea level
Agency Compliance	**Agency Certifications** (testing pending): • FCC Class A • CE Safety & Emissions • UL, cUL • RoHS2