### DATASHEET

## OSS Gen3 4U Value 10-Slot GPU Expansion

This 10-Slot rackmount expansion chassis provides significant GPU expansion capabilities at insignificant prices. The 4UV-10-2 links 10 PCIe 3.0 x16 slots to the host server with 2 PCIe 3.0 x16 host-connections. The system supports up to 8 double-width GPUs, or 10 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
- 10 PCIe 3.0 x16 Expansion Slots
- Two PCIe 3.0 x16 Host Connections
- PCIe x16 Cables (up to 3-Meters)
- Tach and PWM Fan Options
- Two 2000W Load-Sharing Power Supplies
- Eight EPS12V PCIe Power Connectors



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### **Specifications**

Enclosure	Supports (Electrical):	
	• 10-2 Configuration	
	<ul> <li>Up to 10 full-height/full-length PCIe slots (75W Power to Each)</li> </ul>	
	<ul> <li>Two Host Connection Interfaces</li> </ul>	
	Extended-Height Cards	
	Internal Auxiliary-Power for GPUs with Top-Side Power-Connects for Additional Power	
	<ul> <li>System Status Tri-Color LED Panel (Power and Fan-Status)</li> <li>Dimensions: 19"W x 18.5"D x 7"H (4U)</li> <li>Aesthetics: Black Medium-Texture Liquid-Paint Finish with Optional OEM-Logo Area</li> </ul>	
		Rackmounts: Toolless Rack-Slides Included
		PCIe Backplanes
	The 10-Slot Integrated System Includes:	
	• Two PCIe 3.0 x16 Cable-Target Interfaces (One per Backplane)	
	• Six PCIe 3.0 x16 Double-Width Slots (Three per Backplane)	
	• Four PCIe 3.0 x16 Single-Width Slots (Two per Backplane)	
Host/Target Interface	Four 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	
	<ul> <li>iPass Connector</li> </ul>	
	<ul> <li>Accepts PCIe x16 Copper Cables with iPass Connectors</li> </ul>	
	• Option 2: HIB68 Interface Board	
	<ul> <li>SFF-8644 Connector</li> </ul>	
	<ul> <li>Accepts Mini-SAS HD Cables with SFF-8644 Connectors</li> </ul>	

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	Switch: Broadcom PEX 8733 Switch; Includes:
	<ul> <li>Fast Cut-Through (132ns Latency)</li> </ul>
	<ul> <li>SSC Isolation</li> </ul>
	<ul> <li>Non-Blocking Switch Fabric</li> </ul>
	<ul> <li>Maximum Server-Compatibility Design</li> </ul>
	<ul> <li>Integrated 4-channel DMA Engine</li> </ul>
	Average Power Consumption: 6.4W Typical
Cables	HIB38 Interface Board Option (Includes 1 Cable per Host-Uplink)
	0.5-Meter Passive PCle 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)
	<ul> <li>1000W: 100-127Vac / 12.5-9.5A / 50-60 Hz</li> </ul>
	<ul> <li>1800W: 200-220Vac / 10-9.5A / 50-60 Hz</li> </ul>
	<ul> <li>1980W: 220-230Vac / 10-9.8A / 50-60 Hz</li> </ul>
	<ul> <li>2000W: 230-240Vac / 10-9.8A / 50-60 Hz</li> </ul>
	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