

# OSS Gen3 4U Value 16-Slot PCIe Expansion

This 16-Slot rackmount expansion chassis provides significant expansion capabilities at insignificant prices. The 4UV-16-2 links 16 PCIe 3.0 x8 slots to the host server with 2 PCIe 3.0 x16 host-connections; the system supports up to 16 single-width 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.

PN: OSS-PCIe3-4UV-16-2

### Features

- 4U Rackmount Design
- 16 PCIe 3.0 x8 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



## Specifications

<b>Enclosure</b>	<p><b>Supports (Electrical):</b></p> <ul style="list-style-type: none"> <li>• 16-2 Configuration                             <ul style="list-style-type: none"> <li>○ Up to 10 full-height/full-length PCIe slots (75W Power to Each)</li> <li>○ Two Host Connection Interfaces</li> </ul> </li> <li>• Extended-Height Cards</li> <li>• Internal Auxiliary-Power for GPUs with Top-Side Power-Connects for Additional Power</li> <li>• System Status Tri-Color LED Panel (Power and Fan-Status)</li> </ul> <p><b>Dimensions:</b> 19"W x 18.5"D x 7"H (4U)</p> <p><b>Aesthetics:</b> Black Medium-Texture Liquid-Paint Finish with Optional OEM-Logo Area</p> <p><b>Rackmounts:</b> Toolless Rack-Slides Included</p>
<b>PCIe Backplanes</b>	<p>Two 8-Slot PCIe 3.0 x8 Expansion Backplanes (OSS-PCIe-BP-452)</p> <p>The 16-Slot Integrated System Includes:</p> <ul style="list-style-type: none"> <li>• Two PCIe 3.0 x16 Cable-Target Interfaces (One per Backplane)</li> <li>• Sixteen PCIe 3.0 x8 Single-Width Slots (Eight per Backplane)</li> </ul>
<b>Host/Target Interface</b>	<p>Four PCIe 3.0 x16 Host/Target Adapter Cards for Expansion-to-Host Uplink</p> <p><b>Host/Target Interface Boards:</b></p> <ul style="list-style-type: none"> <li>• <b>Form Factor:</b> Half-Height/Half-Length, Single-Slot PCIe 3.0 x16 Add-in-Card</li> <li>• <b>Card-Edge Connector:</b> PCIe3 x16 Physical (128 Gbps)</li> <li>• <b>Cable Connector:</b> PCIe Cable Specification 3.0 x16 (128 Gbps)                             <ul style="list-style-type: none"> <li>○ <b>Option 1: HIB38 Interface Board</b> <ul style="list-style-type: none"> <li>▪ iPass Connector</li> <li>▪ Accepts PCIe x16 Copper Cables with iPass Connectors</li> </ul> </li> <li>○ <b>Option 2: HIB68 Interface Board</b> <ul style="list-style-type: none"> <li>▪ SFF-8644 Connector</li> <li>▪ Accepts Mini-SAS HD Cables with SFF-8644 Connectors</li> </ul> </li> </ul> </li> </ul>

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	<ul style="list-style-type: none"> <li>• <b>Switch:</b> Broadcom PEX 8733 Switch; Includes: <ul style="list-style-type: none"> <li>○ Fast Cut-Through (132ns Latency)</li> <li>○ SSC Isolation</li> <li>○ Non-Blocking Switch Fabric</li> <li>○ Maximum Server-Compatibility Design</li> <li>○ Integrated 4-channel DMA Engine</li> </ul> </li> <li>• <b>Average Power Consumption:</b> 6.4W Typical</li> </ul>
<b>Cables</b>	<p><b>HIB38 Interface Board Option (Includes 1 Cable per Host-Uplink)</b></p> <ul style="list-style-type: none"> <li>• 0.5-Meter Passive PCIe x16 Cable</li> <li>• 1-Meter Passive PCIe x16 Cable</li> <li>• 2-Meter Passive PCIe x16 Cable</li> </ul> <p><b>HIB68 Interface Board Option (Includes 4 Cables per Host-Uplink)</b></p> <ul style="list-style-type: none"> <li>• 1-Meter Mini-SAS HD Cables</li> <li>• 2-Meter Mini-SAS HD Cables</li> <li>• 3-Meter Mini-SAS HD Cables</li> </ul>
<b>Cooling</b>	<p>Three High-Power Fans, Mounted to Front Bezel of the Chassis</p> <ul style="list-style-type: none"> <li>• <b>Dimensions:</b> 120mm x 38mm</li> <li>• <b>Speed:</b> 250CFM</li> <li>• <b>Use:</b> Cools Multi-GPU or FPGA Applications up to 3000W</li> <li>• <b>Monitoring:</b> Tachometer Monitoring via Front-Panel LED</li> <li>• <b>Optional:</b> Fan Speed Controller (<i>not included in standard price</i>)</li> </ul>
<b>Power</b>	<p>Dual Load-Sharing Power Supplies, Pluggable from the Rear of the Chassis</p> <p><b>Two 2000W 80Plus Titanium Efficiency Power Supplies with Dual IEC C14 AC Input Connectors</b></p> <ul style="list-style-type: none"> <li>• <b>Output Power</b> (per PSU) <ul style="list-style-type: none"> <li>○ 1000W: 100-127Vac / 12.5-9.5A / 50-60 Hz</li> <li>○ 1800W: 200-220Vac / 10-9.5A / 50-60 Hz</li> <li>○ 1980W: 220-230Vac / 10-9.8A / 50-60 Hz</li> <li>○ 2000W: 230-240Vac / 10-9.8A / 50-60 Hz</li> </ul> </li> <li>• <b>Total Power to the System:</b> 4000W Non-Redundant</li> <li>• <b>Redundancy:</b> Hot-Swappable when Total System Power Requirements are Under 2000W</li> <li>• <b>Aux Power:</b> 8 EPS12V AUX Power Connectors Available for High-Power Cards</li> </ul>
<b>Operating Environment</b>	0-35°C 10-90% relative humidity 0-10,000 feet above sea level
<b>Storage Environment</b>	-40 to 85°C 5-96% relative humidity 0-50,000 feet above sea level
<b>Agency Compliance</b>	<p><b>Agency Certifications</b> (testing pending):</p> <ul style="list-style-type: none"> <li>• FCC Class A</li> <li>• CE Safety &amp; Emissions</li> <li>• UL, cUL</li> <li>• RoHS2</li> </ul>