



High Performance Computing ExpressBox 3450

Expansion System with 5 Slot x16 Gen-3 and 1200/1500W Power Supply

Model ExpressBox 3450

Compact Workstation Optimized for (4) Double-Wide GPUs + (1) Single-Wide Peripheral

Features and Benefits:

- Accommodates 4 double wide GPUs and one single wide peripheral
- PCIe Gen 3 x16 (128Gbps) for all connections
- Supports both workstation and server class GPUs
- Designed for HPC peripherals (SSDs and GPUs)
- Rack shelf and desktop compatible
- Passive host interface; no PCIe switch on host link cards provides lowest latency possible
- Two 1200W/1500W hot swappable power supplies standard
- Direct flow through air cooling for maximum cooling efficiency with fan speed control
- Design optimized for GPU applications - concentrate your HPC investment in a chassis that will support full GPU performance utilization
- Low-profile host card allows for easy installation into low-profile computers
- Supports peer-to-peer transfers between cards in the expansion chassis to provide full bandwidth potential among I/O cards
- Supports daisy-chaining of fan-out configuration of multiple expansion chassis

Magma's ExpressBox 3450 provides optimal server grade GPU and other HPC peripheral expansion to existing host computer systems. Designed to support full Gen 3 x16 PCIe connectivity to all devices, the EB3450 supports 128 Gbps communication between the host and all peripherals. Up to four double wide (e.g. GPU) and one single wide PCIe devices are supported through expansion.

The EB3450 supports fan speed control which allows the support of a variety of peripherals including workstation class GPUs for quiet deskside HPC. The EB3450 is ideal for media and entertainment, oil and gas exploration, finance, simulation and virtualization. Server class GPU devices are supported with higher airflow for data center applications. The EB3450 includes Magma's Express I/O for system control, monitoring and alarming.



MODEL

ExpressBox 3450

- One five slot backplane mounted in a 1/2 19" width rack chassis. Supports up to 4 GPUs + 1 single slot device
- Two 1200W/1500W (2400W/3000W total) PSUs

TECHNOLOGY

PCI Express Bus Specification 3.0, 2.3; PCI Bridge Architecture Revision 1.2

POWER SUPPLY OPTIONS

Additional Hot swappable 1200W@120V/1500W@240V AC power PSU. Can be ordered as spares

HOST CONNECTION

Host side: Any PCIe based host-equipped computer (preferably Gen 3 x16)

Expansion side: All host links are Gen 3 x16 capable and will train down to Gen 2 or 1 as needed

Switchless host link adapter design for minimal host/expansion latency

1m or 2m cable lengths are supported for host interface

BACKPLANE

EB3450: Five peripheral slots and one host link slot

INTERCONNECT BANDWIDTH

PCIe Gen 3 x16: 128 Gbits/sec to all peripherals and host link

ENCLOSURE

Steel chassis
215,9mm (8,5") Wide x 177,8mm (7") High
(4U) x 508mm (20") Deep
43 lbs/19,7kg

ENVIRONMENTAL

Ambient Temperature: 0° to 50° C
Storage Temperature: -55° to 125° C
Relative Humidity: 0% to 90% non-condensing

REGULATORY COMPLIANCE

FCC Class A Verified
RoHS Compliant
CE Mark

WARRANTY

1 Year return to factory (extendable)

Order Informations:

Order number	Model	Description
WM1-098-100	EB3450	Gen3 x16 Backplane, 5 Slots (4 GPUs + 1 Single Wide Device), 2400W, 9 PCI AUX Kabel, Express IO Manager, include two x16 Gen-3 Host Bus Adapters (1 in the EB3450 and 1 in the host computer. (please select a cable option)
Power Options:		
WM1-126-610	01-08003-00	1200 Watt at 120 Volt / 1500 Watt at 240 Volt hot swap power supply
Interface and Cable Options:		
WM1-126-615		X8/x16 Gen 3 Host Link Adapter
WM1-126-620	CBL1G3	1 Meter x8 Gen 3 cable (2 needed to make x16 link)
WM1-126-625	CBL2G3	2 Meter x8 Gen 3 cable (2 needed to make x16 link)