SMART PCIe Version 2.0 Expansion System with 16 Slots
Smart PCIe-to-PCIe, 16 Slot PCI Express® Expansion for multiple servers

Modell EB16SX8

Partition one expansion chassis to multiple servers with Express I/O Manager™

- Partition expansion slots among four individual servers
- Use any combination of x1, x4, x8 and x16 cards
- x8 or x16 interconnect options -speeds up to 80Gbps
- 850W, 1700W or 850W redundant power supply
- Board-sets available for OEMs

PCI EXPRESS®

WUNTRONIC

Remotely Manage Sixteen I/O Cards Attached to Multiple Servers

Smart, Manageable, Multi-Host Expansion

Magma's ExpressBox 16 Basic is the simplest solution to seamlessly increase the number of PCI PCI Express connectivity has matured well beyond the early days of PCI into a fully capable "outside the box" high-speed interconnect for the most demanding mission critical applications in HPC and IT infrastructures. As cloud computing and remote services become standard, offering a flexible, manageable, and cost effective expansion solution is demanded for high-speed Ethernet, HBAs, fibre channel SAN controllers, GPUs, video accelerators, and more.

ExpressBox 16 expands one host PCIe® slot to sixteen slots by extending PCI Express signals over a high-bandwidth x8 or x16 connection to an external Magma enclosure. When combined with Magma's software utility, Express I/O Manager, technology managers have the flexibility to partition slots inside the expansion chassis to up to four separate servers. Express I/O Manager also provides access to monitor the most critical components like power temperature, fans and PCI Express links through an Ethernet connection. The software tool can be integrated with any SNMP agent in the IT network.

ExpressBox 16 consists of a pair of interface cards (x8 or x16), an iPass cable and a 4U rack-mount expansion chassis. The Magma expansion chassis is automatically configured by the System BIOS, with the expansion slots appearing transparently on the host computer.
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Partitioning Configuration 3
3 Servers x16, 1 Server x8
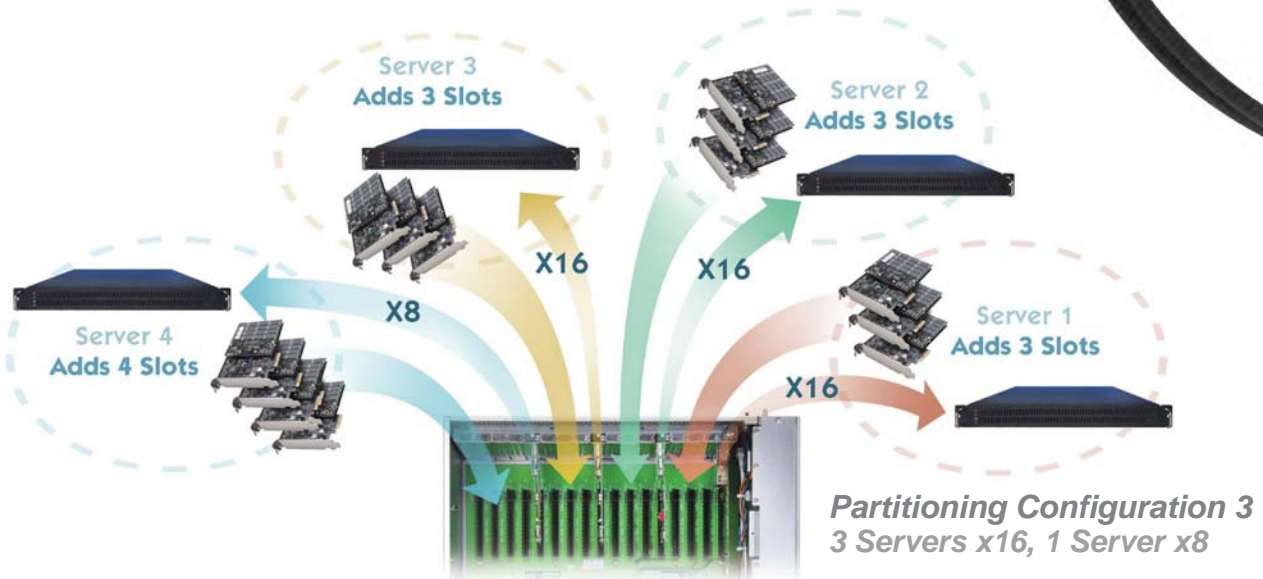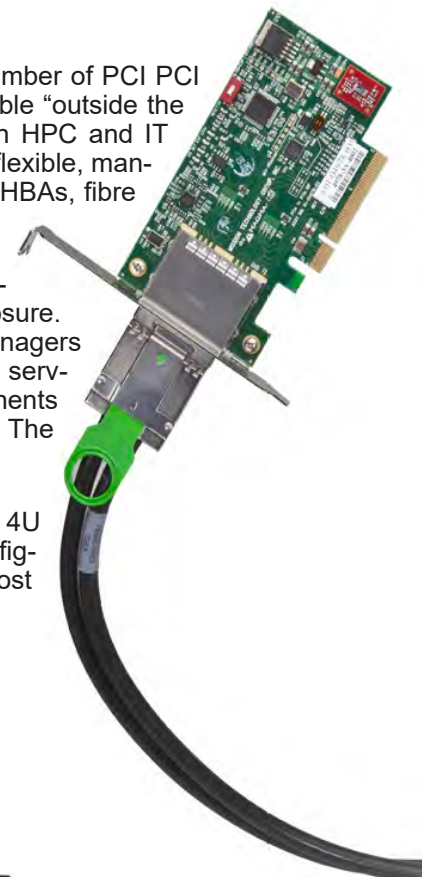
Expansion Partitioning Between Multiple Servers

A unique feature of the Express Box 16 Smart allows the PCIe expansion slots to be partitioned and between 4 different servers. Using the Express IO Manager, 3 different partitioning configurations can be selected. In the default configuration, all 16 expansion slots are accessed by one host computer. Configurations 3and 3 provides up to 3 expansion cards per server at x16 speeds, and up to seven expansion cards for a fourth server at x8 speeds. A separate host adapter is required for each server
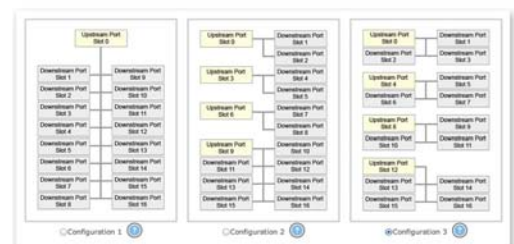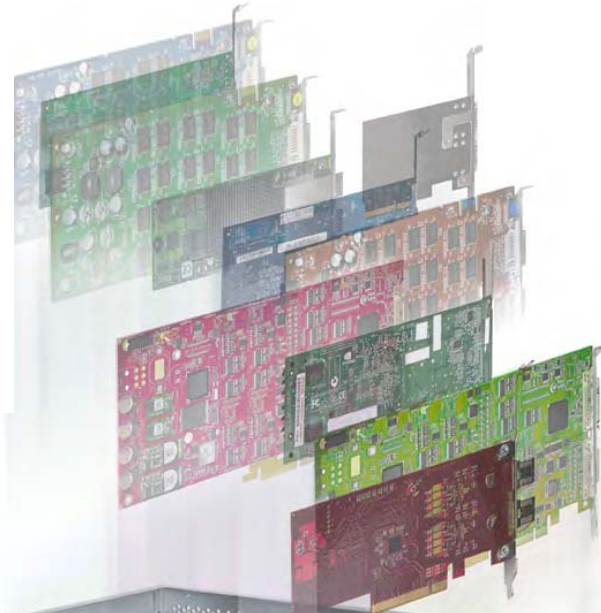
Express I/O Manager
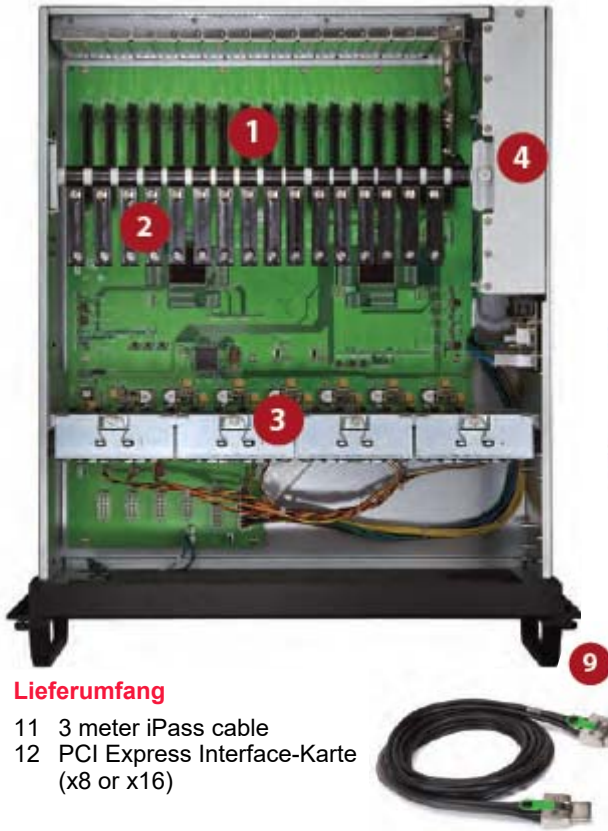### Makes server setup and management a breeze !

Benefits:

- Mission critical solution for adding (16) PCI Express slots to one or more computers
- Provides ability to partition PCIe slots among up to four servers
- Offers flexibility in configuration and allocation of scarce or expensive I/O resources
- Keep the PCIe I/O configuration consistent from server to server

- Protect investment of expensive I/O cards during server migrations and upgrades
- Express I/O Manager provides an enhancement to existing SNMP protocol
- Notifications of failures by SNMP trap, audible alarm, and email
- Minimize downtime by servicing problems immediately
- Reduce power and space requirements

Features:

- Low profile PCIe host card can be installed in any server
- High-speed x8 or x16 interconnection
- Automatic power-up control by computer
- 4U rack-mount enclosure with superior EMI control, vibration, shock and moisture resistance
- All slots support full-length cards and card hold down bar keeps PCIe cards secure

- LEDs on backplane indicate active link, speed (Gen 1 or Gen 2), partial or complete lane training
- Supports peer-to-peer transfers between cards in the expansion chassis to provide full-bandwidth potential among I/O cards
- Four hot-swappable cooling fans
- Multiple power supply options with auxiliary power connectors to support high-wattage cards
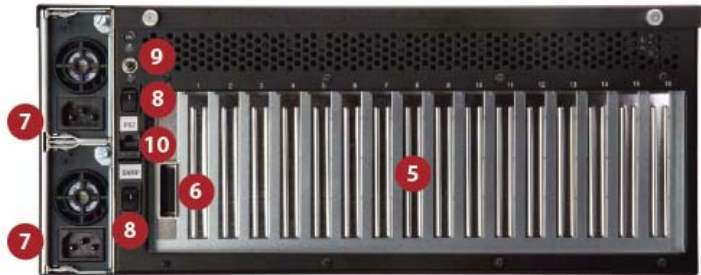
WURTRONIC

EB16 – Top View

1. Sixteen PCI Express slots
2. Card Retainers
3. Backplane cooling fans (Hot-Swappable)
4. Power Supply

EB16– Rear View

5. PCI Express card slot opening
6. Pass connector for cable
7. Power cord socket(s)
8. Power Switch
9. Locate Switch and LED
10. RJ45 Ethernet connection for SNMP monitoring

Lieferumfang

11. 3 meter iPass cable
12. PCI Express Interface-Karte (x8 or x16)

Configuration / Order Informations:

Order number	Model	Description	Order number	Model	Description
WM1-090-830	EB16-SX8-X8	16 Slot PCI Express Expansion System with 14 Slots x8 Gen-2 and 2 Slots x16 Gen-2, 850 Watt power supply	WM1-090-845	EB16R-SX8-X8	16 Slot PCI Express Expansion System with 14 Slots x8 Gen-2 and 2 Slots x16 Gen-2, 850 Watt redundant power supply
WM1-090-835	EB16-SX8-X16	16 Slot PCI Express Expansion System with 14 Slots x8 Gen-2 and 2 Slots x16 Gen-2, 850Watt power supply	WM1-090-850	EB16R-SX8-X16	16 PCI Express Erweiterungssystem mit 14 x8 Gen-2, 2 x16 Gen-2 und redundanten 850 Watt Netzteil

Interconnect Option (Please select one interface kit)

WM1-126-180	SUB-EB16-x8	X8 Expansion Interface, X8 Host Interface and 3 meter interface cable	WM1-126-185	SUB-EB16x16	X16 Expansion Interface, X8 Host Interface and 3 meter interface cable

Options

WM1-126-100	RSLIDES-18	18 „Chassis Trak® rack slides w.extender bracket	WM1-126-120	RSLIDES-26	26" Chassis Trak® rack slides w. extender bracket
WM1-126-110	RSLIDES-24	24 „Chassis Trak® rack slides w.extender bracket	WM1-126-130	RSLIDES-28	28 „Chassis Trak® rack slides w.extender bracket

Specifications:

Backplane	System Cooling	Regulatory Compliance
EB-16-SX8 - (17) PCI Express slots 1 slot dedicated for host link card 2 slots, x16 PCIe Gen-2 14 slots, x8 PCIe Gen-2	Four big 77 CFM Backplane fans (hot-swappable) Power Supply Fan(s)	FCC Class A Verified RoHS Compliant CE Certified
	Host Connections and Power Consumption	
Cable	Low profile X8 PCIe: 1.25A @ +3.3 V maximum X16 PCIe: 1.5A @ +3.3 V maximum	
3 meter iPass		
		Supported Operating Systems
Interconnect Bandwidth	**Chassis Power Supply**	Windows XP/Vista 2000 Server 2003 MacOS X 10.4 Linux Kernel 2.6x + Solaris
40 Gbps (PCIe x8 Gen 2) 80 Gbps (PCIe x16 Gen 2)	850 Watt, 1700 Watt or 850 Watt Redundant 100 to 240 VAC, 47 to 63 Hz Power Input 12V @ 60 Ampere 3.3V @ 33 Ampere	
Enclosure		
4U Black Rack-mount 19"W x 7"H x 20"D (482.6mmxBx177.8 mm Hx508mm T) **Removable/cleanable air filter** 28lbs or 13kg	**Environmental**	
	Ambient Temperature: 0° to 50° C, Storage Temperature: -20° to 125 Relative Humidity: 0% to 90%, non-condensing	**Warranty**
Rack Installation	**MTBF**	1 year
Optional Chassis Track® rackside kit	100.000 hours	