EB7-x8G2 RAS – Top View
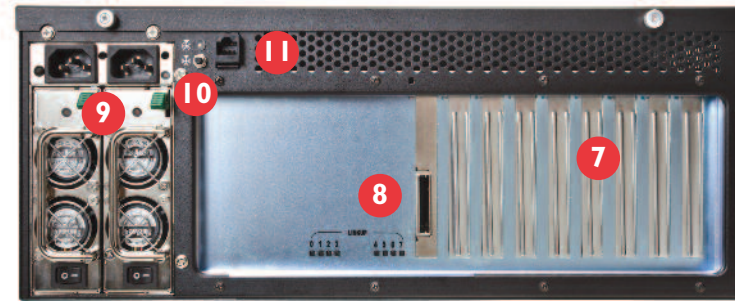
1. Seven PCI Express slots
2. Backplane cooling fan assembly with slot holders for full-length cards
3. 550W, 90-264V/10.0A, 47-63HZ Power Supplies
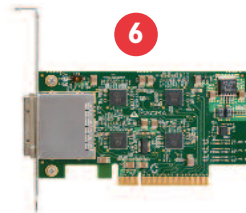
Hardware Included

5. iPass cable
6. PCI Express Host Card

EB7-x8G2 RAS – Rear View

7. PCI Express card slot opening
8. iPass connector to Host Computer
9. Power cord sockets
10. Locate Switch and LED
11. RJ45 Ethernet connection for SNMP monitoring

ExpressBox Universal (EBU)

8 Slot PCI Express® Mainframe

http://www.ndttech.net/cn/product/pci_expansion/EB7.html

Model EB7-x8G2 RAS

MAGMA

How to Buy:

All Magma products can be purchased online at www.ndttech.net or call us at 0731-84668116

Model Names:

EB7-x8G2 RAS: 7 Slot PCI Express Expansion System, 4U form factor
Includes:
01-04978-03 PCI Express x8 Host Card
SUBCBL3IP: 3 meter iPass cable

Options:

RSLIDES: Chassis Trak® rack slides (18", 26"or 28" lengths)

Specifications:

Backplane	Host Connections and Power Consumption	Regulatory Compliance
(8) PCI Express slots (7) User slots, (1) Host Interface Card x16 connectors, x8 slot speeds Gen 2 Hot-pluggable slots	x8 PCI Express connector, x8 slot speeds Gen 2 1.25A @ +3.3V maximum Low profile PCI Express Bus Specification Revision 2.0	FCC Class A Verified RoHS Compliant CE

Cable	Chassis Power Supply	Supported Operating Systems
3-meter iPass	Redundant 550W, hot-swappable AC Input: 90-264 VAC, 10.0A Input Frequency: 47-63HZ DC Output: 550Watts Max per module	Windows XP/Vista 2000 Server 2003 MacOS X 10.4+ Linux Kernel 2.6x+ Solaris

Interconnect Bandwidth

4GBytes/sec simplex at PCI Express Gen 2
8GBytes/sec duplex at PCI Express Gen 2

DC Output voltages	
+12V	41.0 A maximum
- 12V	1.0A maximum
+5V	30.0 A maximum
-5V	0.5 A maximum
+3.3V	24.0A maximu

Warranty

30 day money back guarantee
1 year return to factory

Enclosure

4U Rack-mount
19" wide, 7" High, 18" Depth
Removable/cleanable air filter
28 lbs or 13Kg

Environmental

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

Rack Installation

Optional Chassis Trak® rack slide kit

MTBF

100,000 Hours

System Cooling

Four 77CFM Backplane Fans
Two Power Supply Fans

Seamlessly expand your server or workstations with PCI Express slots

- Add seven PCI Express slots through a single slot
- Includes redundant power supply and built-in LCD monitoring system
- Includes hot-swappable PCI Express slots
- Supports all PCI Express form factors
- Easily transform product function from expansion to stand-alone workstation/server

PCI EXPRESS®

The EB7-x8G2 RAS product is a member of the family of new generation of Magma Expansion products that falls under the umbrella of the EBU product offering. The EBU (ExpressBox Universal) addresses a host of applications and thus its name Universal. It is a platform that goes beyond the traditional Expansion Chassis applications.

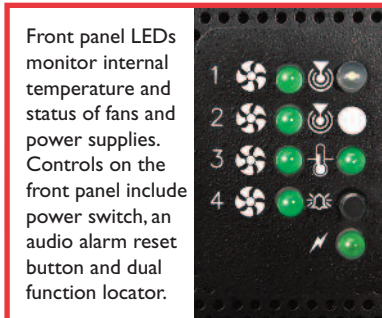## Modular Solution for expanding I/O capacity while designing out obsolescence
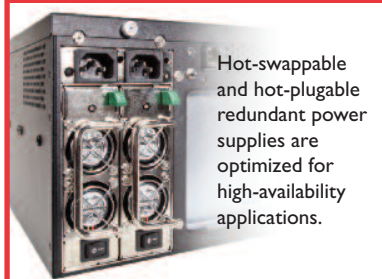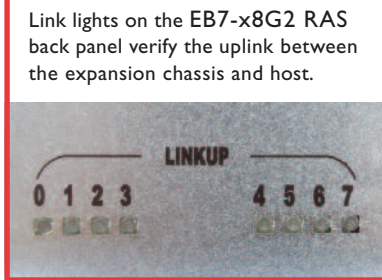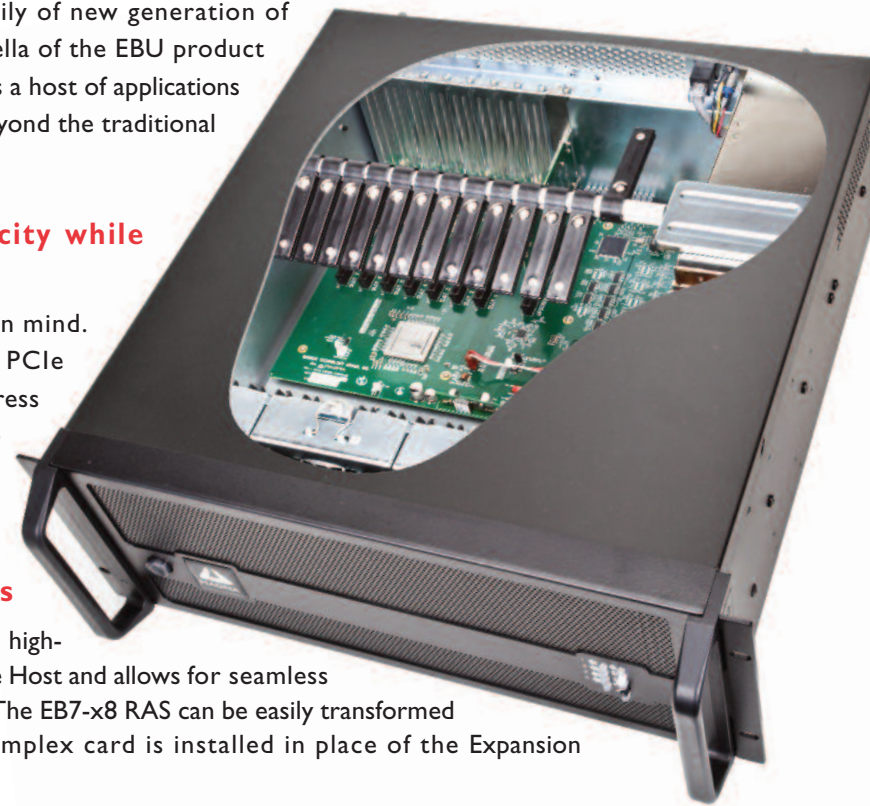
The EB7-x8G2 RAS is built with modularity and scalability in mind. It has an Expansion Interface Card installed in one PCIe slot in the chassis that provides x8 Lanes of PCI Express connection to the Host. The Expansion Interface Card can be replaced with an optical card that allows for connection with Host over Fiber.

Seamless expansion of System capabilities

The EB7-x8G2 RAS, with its companion Host Card and high-performance cable, extends the PCI Express bus out of the Host and allows for seamless integration of up to 7 PCI Express I/O cards per chassis. The EB7-x8 RAS can be easily transformed into a Host Computer with 8 slots when a Root Complex card is installed in place of the Expansion Interface card in the chassis.

Optimal method to enhance your PCI Express I/O capabilities

The EB7-x8G2 RAS is an expansion chassis in 4U height that provides 7 full-length PCI Express slots. These chassis can be daisy-chained while giving up one usable slot per chassis excepting for the last one in the chain. The total number of PCI Express slots derived will be determined by the number of root complex ports supported by the Host.

How it Works

1 Install Magma Host Card in Computer or Server

2 Install up to 7 PCIe cards in EB7-x8G2 RAS Chassis

Link lights on the EB7-x8G2 RAS back panel verify the uplink between the expansion chassis and host.

LINKUP
0 1 2 3   4 5 6 7

Hot-swappable and hot-plugable redundant power supplies are optimized for high-availability applications.

Front panel LEDs monitor internal temperature and status of fans and power supplies. Controls on the front panel include power switch, an audio alarm reset button and dual function locator.

Hot-Plug support:
Removal and replacement of PCI Express peripheral cards is supported via an independent hot-plug mechanism as follows:
- User friendly interface allows initiating a hot-swap request without affecting the operation of the entire system.
- Any one of the four PCIe peripherals can be stopped and replaced with the same or equivalent peripheral.
- All seven expansion slots are designed to protect a PCIe peripheral electrically in the event of its surprise removal.

Optional I²C Support:
- Hosts supporting I²C signaling on their PCI Express slots can control the Expansion chassis and the I/O cards in it with sideband signaling supported via the PCI Express cable. Control functions are identical to that supported by the SNMP agent.

SNMP protocol support:
The EB7-x8G2 RAS utilizes the SNMP protocol to monitor and report normal operation parameters as well as alerts and failure events. It offers the following features:
- Support for SNMP v2.
- Real time, Ethernet-based system health reporting is accessible via a standard web browser or an equivalent SNMP-based agent, while the chassis can support both DHCP and static IP setups.
- Flexible SNMP trap management allows for early detection of chassis failures. Such events include chassis overheating, swappable fan failure and swappable power supply failure.
- Real time reporting of chassis temperature as probed in two locations within the chassis is available via the same interface.
- SNMP agent supports managers across multiple platforms (DOS, Linux, UNIX etc.).
- SNMP agent supports remote Reset of chassis as in Warm Reset/Boot and remote power cycling of chassis.
- All PCI Express Slots have connection to the SMBus Data and Clock signals allowing it to be controlled by web-based SNMP Management controller or alternately by any I/O card that can act as the SMBus Master.
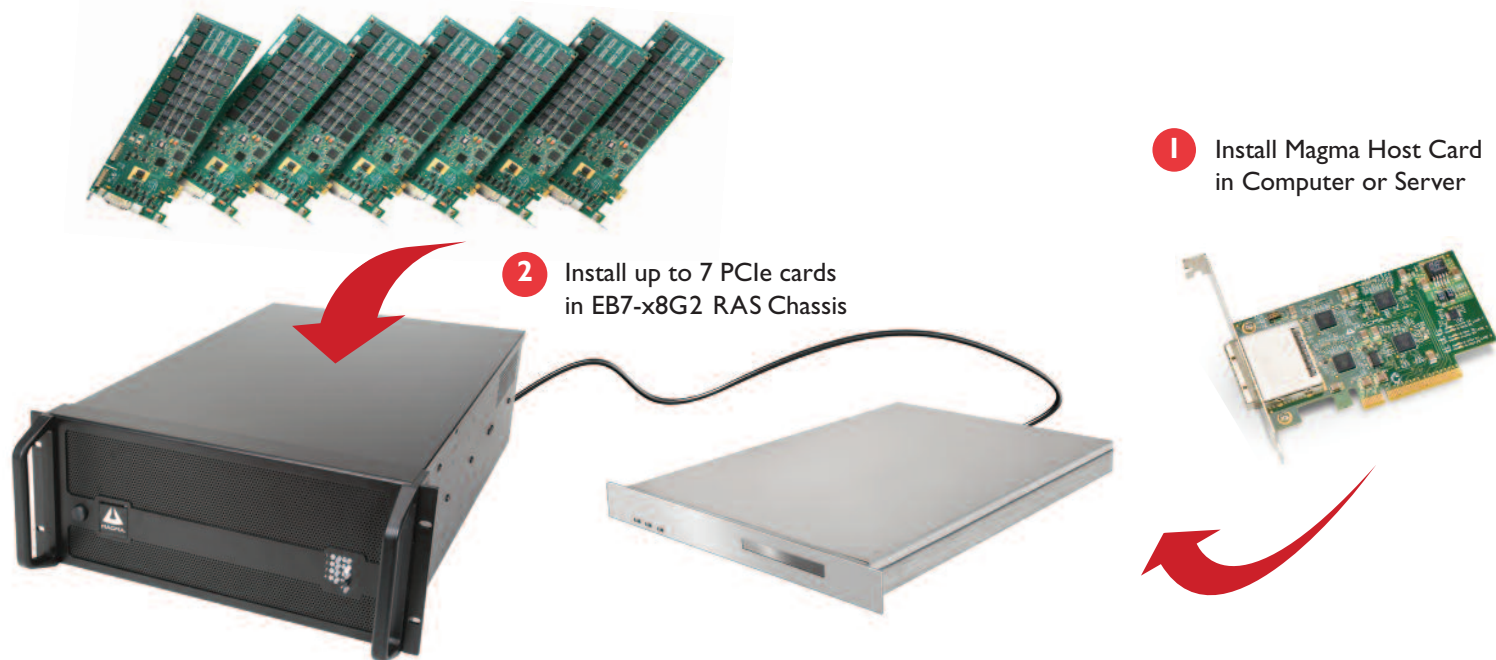
New Feature! **PCIe Switch Partition under user control:**
Support is provided by the SNMP agent to transform the singular PCI Express Switch residing on the backplane to a maximum of 4 separate respective PCI Express Switches by utilizing the partitioning features built-in to the Switch devices. This partitioning can take place dynamically - for instance, controlled by the SNMP agent this process is seamless, lending itself to a variety of applications including failover functions.

Contact Magma for assistance on your custom applications.

SNMP

Benefits:

- Industrial solution for adding up to 7 PCI Express cards to one computer
- Attach full-length PCI Express cards to computer with limited card space
- Individual PCI Express slots can be turned off without powering down entire system
- Low profile Host card allows for easy installation in low profile computers
- Supports peer to peer transfers between cards in slots of the expansion chassis
- Power supply, fans, and chassis temperature constantly monitored for failure status

- Equipped with LED display for visual failure status and audible alarm
- Surveillance Pro 2 provides failure alert via email or web browser
- Supports SNMP, enabling monitoring using industry-standard management information bases (MIBs)
- 7 built-in auxiliary power connection to PCI Express cards
- Supports automatic power up control of the chassis by the Host
- Supports user selectable bypass of Hot swappable feature

Features:

- Easy "Plug and Play" installation
- Easily visible LEDs indicate correct installation
- Includes x8 PCI Express Host card and 3 meter iPass cable
- All slots support any combination of x1, x4, x8 and x16 PCI Express cards
- All slots support full-length cards
- Transparent extension of PCI Express signals outside the computer
- 4U, rugged black rack-mount enclosure
- Redundant 550 Watt dual power supply

- Hot-swappable fans dedicated to cooling PCI cards
- Constant critical component monitoring of temperature, fan speed and power supply status with audible alarm
- RJ-45 connector provides 100Mbits/sec Ethernet for SNMP monitorinr and remote system reset, designed to provide prompt correction when a fault occurs
- Equipped with superior EMI control, vibration, shock and moisture resistance
- Optional Chassis Trak® rack slide kit for rack installation
- Designed to meet MIL-STD-461E