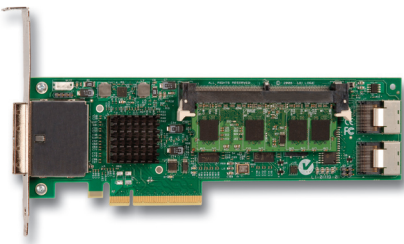


MegaRAID® SAS 8888ELP

Eight-Port 3Gb/s PCI Express SAS/SATA RAID On Chip Adapter



Protect Business Critical Data with the Industry's Most Trusted SAS/SATA RAID Adapters

KEY ADVANTAGES

- LSI SAS1078 storage processor with RAID6
- Fastest cache available – 667MHz DDRII
- Low-profile, fits 2U servers
- Includes both internal and external SAS ports

Robust SAS/SATA RAID Solution

Keeping electronic data online and available is essential to running a successful business. Making sure that data is protected – while remaining instantly accessible – requires faster, smarter solutions. The MegaRAID SAS 8888ELP, a second generation SAS RAID product from LSI, addresses these demands and boasts being the most powerful internal RAID solution we've offered to date. The MegaRAID SAS 8888ELP adapter features the LSI SAS1078 IC, a powerful I/O storage engine that transparently performs all the data protection, data checking, and restoration tasks.

Flexibility best summarizes the features of the SAS 8888ELP. With selectable connectors, one card serves three deployment needs. Users can choose two connectors: two internal, two external or one each. System builders can attach up to 240 disks; choose high performance SAS disks or high capacity SATA drives – or a combination of both – for greater system design flexibility. Finally, this adapter features a replaceable 256MB DDR II mini DIMM cache module, with two battery backup options. An investment in the 8888ELP brings piece of mind, with its unique ability to operate with both internal or external disk equipment.

RAID 6, Advanced Data Protection

The 8888ELP supports all key RAID levels including RAID 6 and 60. RAID 6 tolerates two simultaneous failures, and thus the ability to manage unrecoverable media errors during rebuilds. This is particularly useful when using lots of ports high-capacity, lower-cost SATA disk drives.

Check consistency and Patrol Read, advanced background sentry services that find and fix bad media blocks on disk drives, offer critical-business applications unparalleled data protection capabilities.

Performance

The MegaRAID SAS 8888ELP is designed to excel in both high I/O transaction and high bandwidth processing. With an integrated 500MHz PowerPC and industry leading 667MHz write cache, and x8 PCI express, the 8888ELP delivers impressive performance numbers – over 1.5GB/s throughput – allowing steaming video or data backup applications run faster than ever with 1MB stripe configurations.

Advanced RAID Management Utility

The MegaRAID Management Suite™ provides the essential software tools to efficiently manage

FEATURES

- LSI SAS1078 RAID on Chip
 - 500MHz PowerPC
 - Hardware RAID 5 & 6 engines
- Selectable SAS/SATA connectors
 - Two internal
 - Two external
 - One internal, one external
- x8 PCI Express
- 667MHz DDRII cache (256MB or 512MB)
- Optional battery backup module
- Optional iTBBU battery
 - Rated 72 hours
- Connect 240 drives
 - Intermixed SAS and SATA
- RAID levels 0, 1, 5 and 6
- RAID Spans 10, 50 and 60
- Auto-resume on array rebuild
- Auto-resume array reconstruction
- Online Capacity Expansion (OCE)
- RAID Level Migration (RLM)
- Create 64 logical volumes
- Up to 64TB LUN support
- Comprehensive management tools
- Audible alarm circuit

MegaRAID products, whether deployed in an enterprise or small business. LSI offers a collection of applications and tools including a pre-boot setup utility as well a full spectrum of online RAID management utilities. This new suite of applications allow administrators to adjust SAS topology views from the system host, controller and disk enclosure down to the logical and physical drive level. Extending to enterprise deployments, the powerful tools

easily scale to efficiently configure, monitor and manage RAID volumes locally or over the LAN network.

Optional iBBU and iTBBU Support

The MegaRAID LSIiBBU05 is a battery-backup module that protects the integrity of the cached data on a MegaRAID controller by providing backup power if there is a complete AC power failure or a brief power outage. The

kit includes an expansion cable, that allows users to mount the iBBU in a remote location.

The industry exclusive MegaRAID iTBBU module offers an additional layer of fault tolerance by protecting data in cache during adapter field replacement. These battery backup solutions provide an inexpensive alternative to using an Uninterruptible Power Supply (UPS).

MegaRAID® SAS 8888ELP	
Solution Provided	Selectable eight-port SAS RAID solution for servers and workstations requiring the flexibility to use either SAS or 3Gb/s SATA drives, or a combination of both in internal or external storage environments
Environment	Internal and/or external sub-systems with up to 240 SAS or 3Gb/s SATA drives
Physical Dimensions	Low profile, extended half-length (7.71" X 2.536")
Connectors	Two SAS SFF8088 x4 external connectors, two SAS SFF8087 x4 internal connectors
Device Support	Up to 240 devices supported
Host Bus Type	x8 lane PCI Express 1.0a compliant PCI Power Management Specification 1.1 compliant
Data Transfer Rates	Up to 3Gb/s per port
I/O Processor/SAS Controller	LSI SAS1078 RAID on Chip (ROC)
Cache Memory	256MB or 512MB DDR II SDRAM integrated
Battery Backup Unit	LSIiTBBU03, an optional Intelligent Transportable Battery Backup Unit (iTBBU) LSIiBBU05, an intelligent battery backup module option with cable for remote cache protection
RAID and Fault Tolerant Features	<ul style="list-style-type: none"> ■ RAID levels 0, 1, 5, and 6 ■ Online Capacity Expansion (OCE) ■ Configurable stripe size up to 1MB ■ Check Consistency for background data integrity ■ Hot Spare support <ul style="list-style-type: none"> – Automatic rebuild – Global and dedicated – Enclosure affinity – Emergency SATA hot spare for SAS arrays ■ Enclosure management <ul style="list-style-type: none"> – SES (inband) – SGPIO (sideband) ■ RAID spans 10, 50 and 60 ■ Online RAID Level Migration (RLM) ■ Fast initialization for quick array setup ■ Patrol read for media scanning and repairing ■ 64 logical drive support ■ DDF compliant Configuration on Disk (COD) ■ S.M.A.R.T support ■ Auto resume after loss of system power during arrays array rebuild or reconstruction (RLM) ■ Up to 64TB LUN support
Operating Temperature	Maximum ambient: 50°C (40°C w/iBBU)
Operating Voltage	+3.3V
Warranty	3 years, free advanced technical support, advanced replacement option
Regulatory Certifications	EN55022, EN50082, EN60950; FCC Class A, Class B; UI1950; UL; CSA C22.2; VCCI; AS3548; BSMI; MIC
RAID Management	MegaRAID Management Suite <ul style="list-style-type: none"> ■ MegaRAID Storage Manager ■ MegaCLI (command-line interface) ■ WebBIOS
OS Support	Extensive support includes Microsoft® Windows® Server 2003/2000/XP, Linux® and more. * Visit the LSI download Center for the most complete list of supported operating systems: lsi.com/support



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