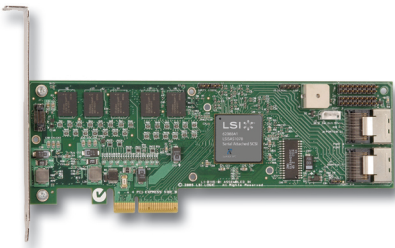


MegaRAID® SAS 8708ELP

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
- Two internal mini 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 8708ELP, a second generation SAS/SATA RAID product from LSI, addresses these demands in a cost-effective, yet powerful internal RAID solution for entry server and small office environments. The MegaRAID SAS 8708ELP adapter features the LSI SAS1078 IC, a powerful I/O storage engine that transparently performs all the data protection, data checking, and restoration tasks. The low profile PCI adapter offers eight internal 3Gb/s Serial Attached SCSI (SAS) ports on two SFF8087 mini multi-Lane connectors, 128MB DDR II write cache, and PCI Express host interface. Also, system builders can choose high performance SAS disks or low cost, high capacity SATA drives – or a combination of both – for greater system design flexibility. The 8708ELP offers support for both SAS expanders as well as SATA native command queuing (NCQ).

RAID6, Advanced Data Protection

Support for all key RAID levels including RAID 6 and 60. RAID 6 tolerates two simultaneous failures, and thus the ability to manage unre-

coverable media errors during rebuilds. This is particularly useful when using lots of 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 8708ELP 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, the 8708ELP delivers impressive performance numbers – up to 900MB/s throughput – allowing streaming 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 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

FEATURES

- 8 internal SAS/SATA compatible ports
- 2 mini-SAS 4i connectors (8087) – 3Gb/s throughput per port
- Fits PCI Express slot, x4 or x8
- 667Mhz DDRII cache (128MB)
- Optional battery backup module – Rated 72 hours
- Connect up to 16 intermixed SAS and SATA devices within the same array
- 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 32TB LUN support
- Comprehensive management tools
- LED fault indicator header
- Audible alarm circuit
- LSI SAS1078 RAID on Chip – 500MHz PowerPC – Hardware RAID 5 & 6 engines

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.

Management Indicators

The MegaRAID SAS 8708ELP supports industry standard SGPIO, SES and also an option to directly drive eight LED fault indicators. When disks do fail, these schemes provide visual assistance to quickly pinpoint faulty hardware.

Optional iBBU Support

The MegaRAID LSIiBBU05 is an intelligent battery backup module that protects the integrity of cached data on a MegaRAID controller by providing backup power in the event of a server failure or extended power outage.

MegaRAID® SAS8708ELP	
Solution Provided	Eight-port SAS RAID solution for servers and workstations using up to 16 drives with the flexibility to use either SAS or 3Gb/s SATA drives, or a combination of both
Environment	Intel™ X86, EM64T and AMD Opteron™
Physical Dimensions	Low profile, extended half-length (7.71" X 2.536")
Connectors	Two internal mini-SAS 4i (SAS SFF8087) connectors
Device Support	Up to 8 direct-connect or up to 16 with SAS expanders, 3Gb/s SAS and SATA drives
Host Bus Type	x4 lane PCI Express 1.0a compliant
Data Transfer Rates	3Gb/s per port
I/O Processor/SAS Controller	LSI SAS1078 RAID on Chip (ROC)
Cache Memory	667MHz DDR II SDRAM, 128MB
Battery Backup Unit	Optional intelligent Battery Backup Unit (iBBU) LSIiBBU05
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) – One 8-pin header to illuminate fault LED ■ 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 32TB 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



For more information and sales office locations, please visit the LSI web sites at: lsi.com lsi.com/contacts

North American Headquarters
 Milpitas, CA
 T: +1.866.574.5741 (within U.S.)
 T: +1.408.954.3108 (outside U.S.)

LSI Europe Ltd.
European Headquarters
 United Kingdom
 T: [+44] 1344.413200

LSI KK Headquarters
 Tokyo, Japan
 Tel: [+81] 3.5463.7165

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