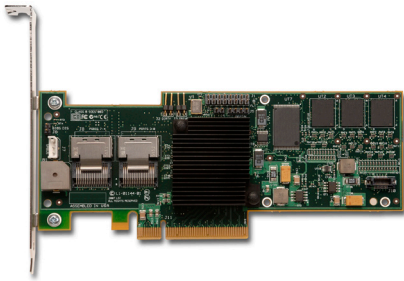


# MegaRAID® SAS 8708EM2

## 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

- Eight-port LSISAS1078 storage processor with RAID 5 and RAID 6
- Low-profile MD2 form factor – best fit for high density servers
- Fast cache – 667MHz DDRII
- Two internal Mini-SAS connectors for connecting SAS and SATA hard drives

### FEATURES

- Eight internal SAS/SATA ports
- Two Mini-SAS 4i connectors (SFF8087)
- 3Gb/s throughput per port
- LSISAS1078 RAID on Chip
  - 500MHz PowerPC
  - Hardware RAID 5 & 6 engine
- x8 PCI Express Host Interface
- 128MB or 256MB 667MHz DDRII cache memory
- Optional battery backup module
  - Direct attach
  - Rated 72 hours
- Connect up to 32 SAS and/or SATA drives
- 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)
- Import foreign arrays
  - MegaRAID Entry, Value, Feature and IR supported
- Create 64 logical volumes
- Up to 64TB LUN support
- Comprehensive management tools
- Extensive online configuration options
  - Advanced monitoring and event notification

### Robust RAID for SATA and SAS Hard Drives

The MegaRAID SAS 8708EM2, a second generation SAS/SATA RAID product from LSI, enables users to create tiered storage with SATA and SAS hard drives. Architected with a x8 PCI Express host interface, 667MHz DDRII memory, and the LSISAS1078 ROC controller, the MegaRAID SAS 8708EM2 is the most powerful value-line solution LSI has offered to date. With a true MD2 low-profile form factor and two internal Mini-SAS connectors, this adapter allows system builders to attach up to 32 SAS and/or SATA drives in high-density servers and systems for maximum design flexibility.

### RAID 6 for Advanced Data Protection

The MegaRAID SAS 8708EM2 supports all key RAID levels including RAID 6 and 60 for increased fault tolerance. RAID 6 tolerates two simultaneous drive failures, and thus the ability to manage unrecoverable media errors during re-builds. This is particularly useful when using a lot of high-capacity SATA disk drives.

### Intuitive 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 and 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, these tools scale to easily configure, monitor and manage RAID volumes locally or over the LAN network.

### Intelligent Battery Backup Support

The MegaRAID LSIIBBU06 is a battery-backup module that protects the integrity of the cached data on a MegaRAID controller in the event of a complete power or server failure. This add-on module, which connects directly to the adapter, has the added functionality to automatically charge the battery pack and communicate with the host system the battery status, such as voltage, temperature, and capacity.

## MegaRAID® SAS 8708EM2

Solution Provided	Eight-port internal SAS/SATA solution for high-density servers and workstations using up to 16 drives with the flexibility to use both SAS and SATA hard drives	
Physical Dimensions	MD2 Low profile (6.6" X 2.536")	
Connectors	Two Mini-SAS SFF8087 4i internal connectors	
Device Support	Up to 32 SAS and/or SATA hard drives	
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	LSISAS1078 RAID on Chip (ROC)	
Cache Memory	128MB or 256MB 667MHz DDR II SDRAM	
Battery Backup Unit	LSIiBBU06, an intelligent battery backup module option that directly connects to the adapter	
Key RAID Data Protection Features	<ul style="list-style-type: none"> <li>■ RAID levels 0, 1, 5, and 6</li> <li>■ RAID spans 10, 50 and 60</li> <li>■ Online Capacity Expansion (OCE)</li> <li>■ Online RAID Level Migration (RLM)</li> <li>■ Auto resume after loss of system power during arrays array rebuild or reconstruction (RLM)</li> <li>■ Configurable stripe size up to 1MB</li> <li>■ Fast initialization for quick array setup</li> <li>■ Check Consistency for background data integrity</li> <li>■ Patrol read for media scanning and repairing</li> <li>■ 64 logical drive support</li> </ul>	<ul style="list-style-type: none"> <li>■ Up to 64TB LUN support</li> <li>■ DDF compliant Configuration on Disk (COD)</li> <li>■ S.M.A.R.T support</li> <li>■ Hot Spare support                             <ul style="list-style-type: none"> <li>– Automatic rebuild</li> <li>– Global and dedicated</li> <li>– Enclosure affinity</li> <li>– Emergency SATA hot spare for SAS arrays</li> </ul> </li> <li>■ Enclosure management                             <ul style="list-style-type: none"> <li>– SES (inband)</li> <li>– SGPIO (sideband)</li> </ul> </li> </ul>
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"> <li>■ MegaRAID Storage Manager</li> <li>■ MegaCLI (command-line interface)</li> <li>■ WebBIOS</li> </ul>	
OS Support	Extensive support includes Microsoft® Windows® Vista/Server 2003/2000/XP, Linux®, Solaris (x86) and more. * Visit the LSI download Center for the most complete list of supported operating systems: <a href="http://lsi.com/support">lsi.com/support</a>	



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