First-to-Market Serial Attached SCSI (SAS) RAID for Maximum Flexibility and Performance

Key Advantages

BO

FEATURES

• Eight internal SAS/SATA ports

• 3 Gb/s throughput per port

- Two x4 SFF 8484 connectors

• RAID Levels 0, 1, 5, 10, and 50

• Greater than 2TB array support

Intel[®] IOP333 I/O Processor

• PCI Express 1.0a compliant

• 256MB DDRII 400MHz SDRAM

• Optional intelligent transportable

battery backed DIMM module

• Advanced data integrity and

Enhanced error handling and

- Online Capacity Expansion (OCE)

Online RAID Level Migration (RLM)
 Comprehensive management and

configuration utilities

 Full SAS expander support (32 disk support)

- 2.5 Gb/s per lane

- x8 lane width

recovery

reporting

• FlexRAID[®]:

- Industry proven MegaRAID data protection
- Flexibility for both SAS and SATA II drives
- PCI Express host interface for increased bandwidth
- RAID 6 ready for greater data protection
- Advanced MegaRAID management suite

Market Leading Performance and Features

As the first-to-market eight-port Serial Attached SCSI RAID solution, the MegaRAID SAS 8408E offers advanced fault tolerant features for SAS drives, SATA II drives, or any combination of the two. Using a high-performance Intel I/O processor for optimum RAID performance and a PCI Express host interface for increased bandwidth, the MegaRAID SAS 8408E delivers an intelligent and robust RAID solution. In addition, this adapter supports 256MB DDRII SDRAM for data caching and an intelligent transportable battery backup (iTBBU) that protects cached data for up to 72 hours in the event of a complete power failure. The transportable cache module can even be moved to a new MegaRAID adapter with complete data retention.

A Higher Level of Data Protection

In addition to supporting all major RAID levels, the MegaRAID SAS 8408E is RAID 6 ready. RAID 6 offers additional fault tolerance to mission critical applications by allowing for two simultaneous drive failures without losing any data. Other RAID features include online capacity expansion for adding storage capacity, RAID level migration for changing RAID levels, and Patrol Read for protection against bad blocks of data.



MegaRAID SAS Advantage

As the recognized leader in driving and developing storage interface standards and technologies, LSI Logic has extended its leadership with a complete family of SAS RAID solutions for the next-generation of direct attach storage (DAS) for servers and high performance workstations. MegaRAID SAS solutions enable system builders to meet both performance and capacity requirements using either SAS or SATA drives. SAS drives provide speed, reliability and scalability for enterprise-class systems, while SATA drives allow for low-cost and efficient storage in data-dense environments and near-line storage environments.

New Advanced RAID Management Suite

The MegaRAID Management Suite[™] of software is a complete spectrum of applications and tools including a next generation pre-boot as well as advanced online RAID management utilities. This new suite of applications features a variety of configuration options and SAS topology views from the system host, controller and disk enclosure down to the logical and physical drive level. This allows administrators to efficiently configure, monitor and manage RAID volumes locally or over the network.









MegaRAID[®] SAS 8408E 3Gb/s PCI EXPRESS SAS RAID ADAPTER

Industry-Exclusive iTBBU

The MegaRAID LSIiTBBU02 (Order #: LSI00046) is a battery-backed 256MB DDRII DIMM module that allows system administrators to replace a failed adapter, while maintaining the data protected on the DIMM module for up to 72 hrs.

This innovative, industry-exclusive module offers intelligent monitoring capabilities, accessible via MegaRAID Storage Manager (MSM). Some of the capabilities of the iTBBU are monitoring the battery status and power levels as well as the ability to recondition and calibrate the battery for improved reliability.



Front View



Rear View

	LSI Logic MegaRAID SAS 8408E	
Solution Provided	Eight-port internal SAS for storage systems requiring the flexibility to use either SAS or 3Gb/s SATA drives, or a combination of both	
Environment	Internal sub-systems with up to 32 SAS or 3Gb/s SATA drives	

Processor	Intel® IOP333 I/O processor	
Device Support	Up to 8 direct connect; Up to 32 using expanders	
Data Transfer Rate	Up to 3Gb/s per ports	
Cache Memory	256MB DDR2 SDRAM DIMM with iTBBU support	
Battery Back-up Unit	Optional Intelligent Transportable Battery Backup Unit (iTBBU)	
Host Bus Type	PCI Express 1.0 2.5GHz, x8 Link for 2Gb/s peak simplified or 4Gb/s peak duplex	
Physical Dimensions	Standard-height, three-quarters length (9.5" x 4.2")	
Operating Temperature	55°C (45°C w/iTBBU)	
Operating Voltage	+3.3V	
Warranty	3 years, free advanced technical support, advanced replacement option	
Regulatory Certification	CE, FCC, C-tic, UL, VCCI, BSMI and RRL	
RAID and Fault Tolerant Features	 RAID Levels 0, 1, 5, 10, 50 Online Capacity Expansion (OCE) RAID Level Migration (RLM) Variable stripe size support Fast initialization for quick array setup Patrol read Automatic rebuild of hot spare drives 	 Enclosure Management (SES and SGPIO) Online RAID Level Migration (RLM) 64 Logical drive support Auto resume on array reconstruction Configuration On Disk (COD) S.M.A.R.T. support Audible alarm
RAID Management	MegaRAID Management Suite Online MegaRAID Storage Manager MegaCLI (Command-line Interface) Pre-Boot MegaRAID BIOS Configuration Utility 	
OS Support	 Microsoft[®] Windows[®] Server 2003/2000/XP Red Hat[®] AS Linux[®] SuSE[®] Linux[®]/SLES 	

Visit the LSI Logic web site at: http://lsilogic.com/storage

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