

# MegaRAIDfi SAS 9271-4i

## Four-Port 6Gb/s PCI Expressfi 3.0 SATA+SAS RAID Controller

LSI MegaRAID SAS 9271-4i

### Key Features:

- Four internal 6Gb/s SATA+SAS ports
- One Mini-SAS internal connector (SFF8087)
- LSiSAS2208 Dual-core 6Gb/s ROC - x2 800MHz PowerPC Processors
- PCI Express 3.0 Host Interface
- 1GB DDRIII cache memory
- RAID Levels 0, 1, 5, 6, 10, 50 and 60
- Support for NAND flash or BBU cache protection solution

### Key Advantages:

- Unmatched RAID performance
- Connect up to 128 3Gb/s and 6Gb/s SATA and SAS hard drives or SSDs
- Helps users realize potential of solid-state storage deployments
- CacheVault technology option for greener, lower total cost cache protection (LSiCVM01)
- Heat-tolerant battery backup option (LSiIBBU09)

### Unmatched RAID Performance for Next-Generation Servers and Storage

Today's data center, cloud and high-performance computing environments not only require increased storage capacity to handle massive volumes of data, but are also challenged to protect and deliver data as quickly as possible to meet the needs of applications and end users. To address these performance demands as capacity scales, the newest 6Gb/s SAS RAID controllers from LSI offer a powerful combination of intelligent performance, enterprise RAID data protection and proven interoperability with the latest server platforms based on the PCI Express 3.0 specification. The MegaRAID SAS 9271-4i, with four internal ports, delivers two 800MHz PowerPCfi processor cores and a 72-bit DDRIII interface that drives 1GB cache memory. Powered by the LSiSAS2208 dual-core processor, the 9271-4i controller includes the latest PCI Express 3.0 and 6Gb/s SAS technology and helps customers to maximize the performance benefits of solid state storage.

### Protect Cached Data with LSI MegaRAID CacheVault Technology or BBU

RAID caching is a cost-effective way to improve I/O performance by writing data to a controller cache before it is written to disk. In write-back mode, data written to cache is vulnerable until it is made permanent on disk. To avoid the possibility of data loss or corruption during a power outage or failure, LSI offers the CacheVault flash cache protection module or the LSiIBBU09 battery backup unit for the MegaRAID SAS 9271-4i controller. CacheVault flash cache protection uses NAND flash cache memory powered by a super-capacitor to help protect data stored in the MegaRAID controller cache. The RAID controller automatically writes the data in cache memory to flash storage when a power failure occurs, while the super-capacitor keeps the current going during the process. When the power comes back, the DRAM is recovered from flash storage and the system goes back to normal without loss of data. Customers have the flexibility to choose a traditional LiON battery solution or a greener, lower total cost of ownership (TCO) cache protection solution with MegaRAID CacheVault technology.

### Support for Advanced Software Options

The LSI family of 6Gb/s MegaRAID controllers are designed to support advanced software options that provide white box channel partners with enhanced performance and data protection capabilities. These new software options help enable end users to address key business challenges while helping to deliver a higher return on their IT investments. MegaRAID CacheCade Pro 2.0 software and MegaRAID Fast Path software boost transactional I/O performance of solid state configurations, while MegaRAID Recovery software and MegaRAID SafeStore software enable enhanced data protection and security.

### Intuitive RAID Management Utility

The MegaRAID Management Suite software provides essential tools to 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 suite of applications allows administrators to adjust SAS or SATA topology views from the system host, controller and disk enclosure down to the logical and physical drive level. Extended enterprise deployments, these tools scale to more easily configure, monitor and manage RAID and JBOD volumes locally or over the LAN network.

