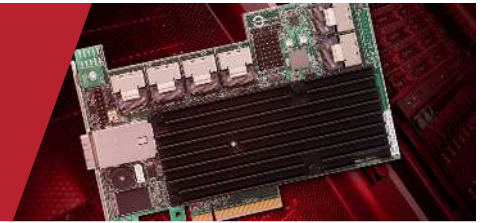# MegaRAID® SAS 9280-24i4e
24-Port Internal / 4-Port External PCI Express SATA and SAS RAID Controller

Key Features

- Twenty-Eight 6Gb/s SATA+SAS ports
- Six Mini-SAS internal connectors(SFF-8087)
- One Mini-SAS external connector (SFF-8088)
- LSI SAS 2108 6Gb/s RAID-on-Chip –800MHz PowerPC®
- 512MB 800MHz DDRII cache memory
- Optional battery backup module
- RAID Levels 0, 1, 5 and 6
- RAID Spans 10, 50 and 60

Key Advantages

- Internal drive storage and external
- JBOD expansion
- PCI Express® 2.0 provides faster signaling for high-bandwidth applications
- Connect up to 240 3Gb/s and 6Gb/s SATA and SAS hard drives
- Support for Advanced Software Options

Protect Business Critical Data with the Industry's Most Trusted SATA+SAS RAID Controllers

Next-Generation High Port SATA+SAS RAID

MegaRAID SATA+SAS controllers provide a new level of reliability, availability, and performance to businesses that are facing storage challenges driven by unprecedented data growth. The MegaRAID SAS 9280-24i4e, with twenty-four internal and four external ports, supports both internal drive storage and external JBOD expansion for up to 240 SATA or SAS drives. With a large number of internal ports, the 9280-24i4e connects up to 24 drives inside the server via direct connection or passive backplane. Using the external SAS ports, multiple JBODs can be connected to a server, providing a scalable and affordable solution for growing storage requirements.

6Gb/s SAS Performance Advantage

With data transfer rates of up to 6Gb/s per port, the MegaRAID SAS 9280-24i4e bring users new features and improved performance, while continuing to support all the features of the previous 3Gb/s SATA+SAS generation. 6Gb/s SAS is designed for backward compatibility with 3Gb/s SAS as well as with 6Gb/s and 3Gb/s SATA hard drives. Regardless of the drive speed, 6Gb/s MegaRAID controllers are designed to deliver significant performance improvements in both read and write applications as compared to their 3Gb/s predecessors.

Support for Advanced Software Options

The Avago family of 6Gb/s MegaRAID high port count 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 can enable end users to address key business challenges while helping to deliver a higher return on their IT investments. MegaRAID CacheCade™ software and MegaRAID FastPath™ software boost transactional I/O performance of solid state disk configurations, while MegaRAID Recovery software and MegaRAID SafeStore™ software enable enhanced data protection and security.

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. Avago 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 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.

MegaRAID SAS 9380-4i4e

Solution Provided	Twenty-four port internal / Four-port external SATA+SAS solution for internal drive storage and external JBOD expansion using up to 240 SAS and/or SATA drives
Physical Dimensions	Half-Length, Full Height (6.6" x 4.376")
Internal Connectors	Six Mini-SAS SFF8087 4i internal connectors
External Connectors	One Mini-SAS SFF8088 4x external connector
Device Support	Up to 240 SAS and/or SATA drives
Host Bus Type	x8 lane PCI Express 2.0 Compliant
Data Transfer Rates	Up to 6Gb/s per port
I/O Processor/SAS Controller	LSI SAS 2108 RAID on Chip (ROC) and LSI SAS 2x36 Expander
Cache Memory	512MB 800MHz DDR II SDRAM
Battery Backup Unit	LSIiBBU08, an intelligent battery backup module option that connects remotely to the RAID controller

Key RAID Data Protection Features	• RAID levels 0, 1, 5, and 6
	• RAID spans 10, 50 and 60
	• Online Capacity Expansion (OCE)
	• Online RAID Level Migration (RLM)
	• Auto resume after loss of system power during arrays array rebuild or reconstruction (RLM)
	• Single controller Multipathing (failover)
	• Load Balancing
	• Configurable stripe size up to 1MB
	• Fast initialization for quick array setup
	• Check Consistency for background data integrity
	
	• SSD Support with SSD Guard™ Patrol read for media scanning and repairing
	• 64 logical drive support
	• DDF compliant Configuration on Disk (COD)
	• S.M.A.R.T support
	• Global and dedicated Hot Spare with Revertible
	  −Automatic rebuild
	  −Enclosure affinity
	  −Emergency SATA hot spare for SAS arrays
	• Enclosure management
	  −SES (inband)
	  −SGPIO (sideband)

Operating Temperature	Maximum ambient: 60°C (45°C w/iBBU)
Operating Voltage	+3.3V
Warranty	3 years, free advanced technical support, advanced replacement option
Regulatory Certifications	EN55022, EN55024, EN60950, EN 61000-3-2, EN 61000-3-3; FCC Class A, Class B; UL1950; UL; CSA C22.2; VCCI; RRL for MIC; BSMI;
RAID Management	MegaRAID Management Suite – MegaRAID Storage Manager – MegaCLI (command-line interface) – WebBIOS
OS Support	Extensive support includes Microsoft® Windows® Vista/2008/Server 2003, Linux®, Solaris™ (x86), FreeBSD®, VMware® and more. * Visit the download center for the most complete list of supported operating systems: www.lsi.com/support
MTBF	900,264 Hours

Ordering Information

MegaRAID SAS 9280-24i4e Single Pack	LSIiBBU08
MPN: L5-25243-05	MPN: L5-25343-06
OPN: LSI00211	OPN: LSI00264

Visit the Avago Server Storage website at: avagotech.com/server-storage

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