

MegaRAID° SAS 9341-8i & MegaRAID SAS 9341-4i

Cost Effective, Entry Line of Eight-Port and Four-Port 12Gb/s PCle 3.0 SATA+SAS RAID Controllers



Key Advantages

- High performance with 12Gb/s data transfer rates
- PCI Express® 3.0 host interface drives superior system performance
- Delivers robust, yet simple RAID functionality
- Flexible SATA+SAS array architecture optimizes cost
- Complete kit package includes necessary cables and brackets
- Includes JBOD Mode support Applications
- Internal storage configurations
- 1U/2U rack servers
- File, Web, database and email servers
- High-performance workstations

Typical Uses

- Direct-attach, internal SAS or SATA hard disk drives (HDDs) and solid state drives (SSDs)
- High volume, "warm data" access

Key Features

- Eight internal 12Gb/s SATA+SAS ports
- x8 PCI Express 3.0 host interface
- Two x4 SFF-8643 mini-SAS HD internal connectors
- LSISAS3008 PowerPC 476 controller
 a 1.2GHz
- RAID 0, 1, 5, 10, 50 and JBOD mode
- Low-profile form factor
- Supports up to 64 devices in JBOD mode
- Up to 32 physical devices in RAID mode
- Powerful device monitoring and maintenance capabilities

MegaRAID SATA+SAS Entry Product Line

MegaRAID SATA+SAS entry controller cards allow small to medium business (SMB) owners and gaming enthusiasts to enjoy the latest RAID technology at affordable prices with low power consumption. This product line delivers trusted MegaRAID reliability with minimal maintenance effort. MegaRAID entry controller cards offer users a straight-forward solution that includes essential RAID levels and uncomplicated configuration options.

In addition, they are able to connect to combinations of SATA and SAS hard disk drives and solid state drives, allowing for storage configurations that optimize cost, performance and robust data protection.

Enterprise Ready

Along with an extensive list of enterprise RAID capabilities, the 9341 series now offers advanced drive diagnostic technologies. In the event of a physical drive failure, the drive is placed in a shielded state and the MegaRAID controller starts drive diagnostics to determine if the drive is indeed failed or can be restored. This saves customers time, money and lost compute time associated with transient drive failures and unnecessary drive returns.

Simple Migration to MegaRAID Enterprise Products

A unique feature of the MegaRAID SATA+SAS entry line is the ability to migrate from these simple, yet powerful RAID 5 controllers to the more full-featured MegaRAID product lines. Users can simply plug in a new controller to recognize and import the existing array without requiring any reconfiguration. Plus, a single management client provides a consistent user interface to manage any MegaRAID SATA, SAS or SSD array.

12Gb/s SAS and PCI 3.0 Performance Advantages

12Gb/s SAS is designed for backward compatibility with 6Gb/s and 3Gb/s SAS and SATA hard drives. Regardless of the drive speed, 12Gb/s MegaRAID controllers will deliver significant performance improvements in both read and write applications compared to their predecessors.

Solution Provided	Low-cost, green SATA+SAS RAID solution for high-density servers and workstations with the flexibility to use both SATA and SAS hard drives and solid state drives	
Physical Dimensions	9341-8i & 9341-4i: 2.6" x 6.0"	
Connectors	9341-8i: Two, x4, SFF-8643 mini-SAS HD horizontal connector placement 9341-4i: One, x4, SFF-8643 mini-SAS HD horizontal connector placement	
Max Number of Physical Devices	Non-RAID (JBOD Mode): 64 RAID 0: 32 per volume RAID 1: 2 per volume plus hot spare	RAID 5: 32 per volume RAID 10: 32 per volume RAID 50: 32 per volume
Host Bus Type	8-lane, 5 GT/s PCI Express 3.0 Compliant	
Data Transfer Rates	Up to 12Gb/s per port	
Key RAID Data Protection Features	 RAID levels 0, 1, 5, 10, 50 and JBOD mode Online Capacity Expansion (OCE) Online RAID Level Migration (RLM) Auto resume after loss of system power during array rebuild or RLM Single controller multipathing (Load balancing) Drive hot plug support Drive roaming Selectable logical drive as boot drive Virtual Disk (VD) Consistency Check Fast initialization for quick array setup Staggered disk spin up Hot Spare support (up to 8) Global, dedicated (copy back), enclosure affinity and emergency SATA support Automatic rebuild support 	 SafeStore Encryption Services for SED HDDs Shielded state drive diagnostic technology Patrol Read media scan and repair Online HDD firmware update Error recovery support SAS TCQ support SATA NCQ support Support for native 4K HDDs Non disk device support >2TB logical drive support Soft bad block management DDF-compliant Configuration on Disk Foreign Configuration Import S.M.A.R.T. support SES (inband) & SGPIO (sideband) management
MegaRAID Management Suite	 MegaRAID Storage Manager — Now with single login for domain admin StorCLI (command-line interface) 	CTRL-R (BIOS configuration utility) HII (UEFI Human Interface Infrastructure)
Environments	Operating 0°C to 70°C 5 to 90% Non-condensing	Storage -45°C to 105°C 5 to 90% Non-condensing
PCI Card Type	3.3V add-in Card	
PCI Voltage	+12V +/-8% 13.0 W (normal), 19.04 W (max) Bus Master DMA	
PCI Power		
PCI Modes		
LED Indicators	Internal Activity/Fault per x4 port – Heartbeat	
MTFB	>2,800,000 hours	
Compliances	EMC: Class B-US (CFR 47, P15B); Canada (ICES-003); Japan (V-3/02.04); Europe (EN55022/EN55024); Australia/New Zealand (AS/NZS 3548); Safety: EN60950	
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; C-tick	
OS Support	Extensive support includes Microsoft* Windows* Server 2012/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	
Brackets	Full Height and Low-Profile	

Ordering Information	
MegaRAID SAS 9341-4i Single Pack	MegaRAID SAS 9341-8i Single Pack
MPN: 05-26105-00	MPN: 05-26106-00
OPN: LSI00419	OPN: LSI00407



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