

Product Brief



Key Features

- High-performance 12 Gb/s data transfer rates
- Eight internal 12 Gb/s SATA+SAS ports
- Two mini-SAS SFF8643 internal connectors (horizontal mount)
- SAS3108: 1.2 GHz PowerPC 476 dual-core 12 Gb/s ROC
- PCI Express 3.0 host interface
- Cache memory options:
 - 1 GB 1866 MHz DDR3 SDRAM
 - 2 GB 1866 MHz DDR3 SDRAM
- RAID levels 0, 1, 5, 6, 10, 50, and 60
- Support for CacheVault flash cache protection

Key Advantages

- 12 Gb/s solutions accelerate performance for next-generation data centers, web, and cloud
- Delivers enterprise-class data protection and security
- Preserves investment in 6 Gb/s and 3 Gb/s drives
- Support for Advanced Software options
- Connect up to 128 3 Gb/s, 6 Gb/s, or 12 Gb/s SATA and SAS devices

9361-8i

High-Performance 12 Gb/s PCI Express SATA+SAS RAID Controller

Unmatched RAID Performance for Next-Generation Servers and Storage

The explosive growth of data in cloud and enterprise data centers is driving the need for a higher performance storage interface to accelerate the ability of critical applications to access data. Broadcom first-to-market 12 Gb/s SAS solutions are designed to deliver the performance and data protection capabilities required for the most demanding next-generation server and storage platforms. Offering up to double the data transfer rate of 6 Gb/s SAS solutions, 12 Gb/s SAS allows the SAS infrastructure to deliver bandwidth that can fully utilize that of PCI Express 3.0 with a single controller card. The MegaRAID® SAS 9361-8i, with eight internal ports, delivers two 1.2 GHz PowerPC processor cores and a 72-bit DDR3 interface that drives 2 GB cache memory. Powered by the SAS3108 RAID-on-Chip (ROC), the 9361-8i controller includes the latest PCI Express 3.0 and 12 Gb/s SAS technology and helps users to support increased scaling of hard disk drives (HDDs) and maximize the performance benefits of solid state drives (SSDs).

Enterprise Data Protection

Standard support for the most popular RAID levels and accessories, including RAID 5, RAID 6, and CacheVault® Flash cache protection module, further strengthen the data protection capabilities of the MegaRAID SAS 9361-8i. A new enterprise feature employed by the 12 Gb/s MegaRAID SAS controllers is advanced drive diagnostic technology. In the event of a physical drive failure, the drive is placed in shield 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.

Support for Advanced Software Options

The 12 Gb/s MegaRAID controller family is designed to support Broadcom advanced software options that provide system integrators and VARs with enhanced performance and data protection capabilities. These 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 (optional) and MegaRAID Fast Path software (included) boost transactional I/O performance of solid state disk configurations, while SafeStore™ software enables enhanced data protection and security when used with encryption-capable devices.

MegaRAID SAS 9361-8i		
Solution Provided	Eight-port internal 12 Gb dual core ROC-based SAS solution for data center, cloud, and performance-hungry applications using up to 128 SAS or SATA devices	
Physical Dimensions	MD2 low profile (6.6 in. × 2.536 in.)	
Connectors	Two mini-SAS SFF8643 internal connectors (horizontal mount)	
Device Support	Up to 128 SAS and/or SATA devices	
Host Bus Type	x8 lane PCI Express 3.0 compliant	
Data Transfer Rates	Up to 12 Gb/s per port	
I/O Processor/SAS Controller	SAS3108 12 Gb/s dual-core ROC	
Cache Memory Options	<ul style="list-style-type: none"> • 1 GB 1866 MHz DDR3 SDRAM • 2 GB 1866 MHz DDH3 SDRAM 	
Cache Protection	Optional CacheVault Flash Module (LSICVM02) - Includes CVFM04, CVPM02, mounting clip, and cable	
Key RAID Data Protection Features	<ul style="list-style-type: none"> • 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 array rebuild or reconstruction (RLM) • Single controller Multipathing • Load Balancing • Configurable stripe size up to 1 MB • Fast initialization for quick array setup • Check Consistency for background data integrity • SSD Support with SSD Guard™ technology • 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 Hot Spare support <ul style="list-style-type: none"> - Automatic rebuild - Enclosure affinity - Emergency SATA hot spare for SAS arrays • Enclosure management <ul style="list-style-type: none"> - SES (inband) - SGPIO (sideband) • Databolt bandwidth optimizer technology support for compatible expander-based enclosures • Shielded state drive diagnostic technology 	
Operating Temperature	Maximum ambient: Controller Card: 55°C, with optional CacheVault accessory (LSICVM02): 55°C	
Operating Voltage	+3.3V, +12V	
MTBF (Calculated)	1,343,187 hours	
Hardware Warranty	3 years, free 5x8 phone 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; C-tick	
MegaRAID Management Suite	<ul style="list-style-type: none"> • MegaRAID Storage Manager • StorCLI (command-line interface) • CTRL-R (BIOS configuration utility) • HII (UEFI Human Interface Infrastructure) 	
SSD Optimization	<ul style="list-style-type: none"> • MegaRAID CacheCade Pro 2.0 Software leverages SSDs in front of HDD volumes to create high-capacity, high-performance controller cache pools (Optional Upgrade) • MegaRAID Fast Path Software provides high-performance I/O acceleration for SSD arrays connected to 6 Gb/s MegaRAID SATA+SAS controllers (Included) 	
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	
OS Support	Extensive support includes Microsoft Windows Server 2012/8 and 7/2008/Vista/2003, Linux, Solaris (x86), FreeBSD, VMware and more. Visit the download center for the most complete list of supported operating systems: www.broadcom.com/support/download-search	
Ordering Information		
MegaRAID SAS 9361-8i (Single Pack, 1 GB Option)	MegaRAID SAS 9361-8i (Single Pack, 2 GB Option)	LSICVM02 CacheVault Kit
MPN: 05-25420-08	MPN: 05-25420-17	MPN: 05-25444-00