

# Intel® RAID Controller RS2PI008

Compact Eight-Port 6G SAS PCIe 2.0 RAID Adapter for External Storage

## Product Overview

The Intel® RAID Controller RS2PI008, part of Intel's portfolio of 6Gb/s SAS adapters, offers unprecedented performance with exceptional data protection and design flexibility. Features including LSI's SAS2108 6Gb/s RAID on Chip (ROC) silicon and a native PCI Express\* 2.0 architecture technology allow for significant performance gains for both 3Gb/s and 6Gb/s drive-based

solutions. Data protection and availability are enhanced by new features including Decision Feedback Equalization for greater signal integrity, enhanced diagnostics, and more robust error reporting.

All Intel RAID solutions are validated across multiple platforms with Intel® boards, chassis, and systems. In addition, the Intel RS2PI008 is tested with several industry leading JBOD enclosures. Customized training, as well as Intel® service and support, make Intel the one source for customers seeking data protection, increased productivity, and simplified IT.

## Key Advantages

### ▪ Exceptional data protection.

Supports data redundancy using SAS or SATA hard disk drives through mirroring, parity, and double parity (RAID levels 1, 5, and 6) plus striping capability for spans (RAID levels 10, 50, and 60).

### ▪ Excellent performance.

LSI SAS2108 ROC technology, x8 PCI Express Generation 2 host interface and 800 MHz cache allow for exceptional performance with significant bandwidth and IOPS gains when compared to prior generations of Intel® RAID Controllers - even for solutions utilizing 3Gb/s drives.

### ▪ Inside-the-box design flexibility.

With a true MD2 form factor, this adapter is ideal for low-profile height and half-length adapter slots. Eight internal 6 Gb/s SAS ports allow connection to 6Gb/s or 3Gb/s high-performance SAS drives, high-capacity SATA drives or a combination of both.

### ▪ Outstanding availability.

Powered by LSI MegaRAID\* technology, Intel RS2PI008 delivers proactive drive monitoring and automatic error correction. An optional battery backup maintains the integrity of data in transit to drives in the event of a power interruption.

### ▪ Optional Self-Encrypting Drive (SED) Support.

The RS2PI008 "DE" (Disk Encryption) model allows for management and protection of SEDs using a simple pass phrase, security key identifier, and security key file. This is a significant step forward in securing a drive's data from any unauthorized access or modification resulting from theft, loss, or repurposing of drives.



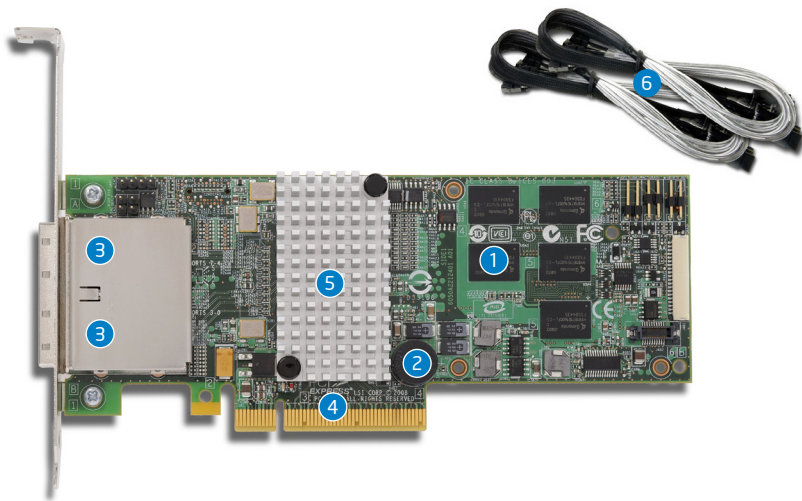
# Intel® RAID Controller RS2PI008

Powered by LSI MegaRAID\* Technology

For more information on  
Intel® RAID Controllers,  
visit [www.intel.com/go/RAID](http://www.intel.com/go/RAID)

## Features

- 1 Embedded 512 MB 800 MHz cache (ECC DDR2 memory) to efficiently store data in transition
- 2 Speaker to deliver audible alerts
- 3 Two SFF8088 SAS/SATA connectors for up to eight external ports
- 4 x8 PCI Express Generation 2 interface for fast communication with the server board
- 5 LSI SAS2108 ROC controller providing SAS 2.0 compliance including 6Gb/s data transfer
- 6 Two internal cables with SFF8087 connectors that expand to four individual connectors



For more information on the Intel® RAID Controller RS2PI008, visit: [www.intel.com/go/RAID](http://www.intel.com/go/RAID)

For more information on how to make the Intel® RAID Controller RS2PI008 part of your server environment, please contact an Intel® Channel Partner Program participant.

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## Technical Specifications

RAID Levels and Spans	RAID Levels 0, 1, 5, and 6 RAID Spans 10, 50, and 60
Data Protection Feature Highlights	Online Capacity Expansion Hot-Spare Support – Global & Dedicated Single Controller Multipathing (Failover) Enclosure Management Background Consistency Checking Patrol Read for Media Functionality S.M.A.R.T. Support
Intel® RAID Software	Intel® RAID Web Console 2 Intel® RAID Command Line Tool Intel® RAID Flash Utilities
Self-Encrypting Drive Support	Optional "DE" (Disk Encryption) model includes SafeStore* Encryption Services with Instant Secure Erase and Local Key Management
I/O Processor	LSI SAS2108 ROC running at 800 MHz
Drive Types	SAS 6Gb/s, SAS 3Gb/s or SATA 3Gb/s
Maximum Drives	Up to 240 physical devices supported
Connectors	Two SAS SFF8088 x4 external connectors
Cache Memory	Embedded 512 MB at 800MHz
PCI Interface	x8 PCI Express* 2.0
BBU Support	Optional Intel® Smart Battery AXXRSBBU7
Form Factor	Low profile, MD2 (6.6" X 2.536")
Data Transfer Rates	Up to 6Gb/s per port
Compatibility	Validated with most Intel® Server Boards and Systems. Also, tested with several industry leading JBOD. See <a href="http://support.intel.com">support.intel.com</a> for details.
Operating Temperature	Maximum ambient: 50°C (45°C with optional BBU)
Operating Voltage	+3.3 V

