

# Intel® RAID Controller RS2SB008

Eight External Port 6Gb/s PCI Express SAS/SATA RAID Controller with Maintenance Free Cache Protection

## Product Overview

The Intel® RAID Controller RS2SB008, powered by LSI\* MegaRAID technology, offers exceptional performance, scalability and configuration flexibility making it the perfect choice for I/O and throughput intensive applications. The Intel RS2SB008 delivers eight external ports, two 800MHz processor cores and a 72-bit DDRIII interface that drives 1GB cache memory. Furthermore, the Intel RS2SB008 comes with a Maintenance Free Backup Unit that utilizes NAND flash memory and a super-capacitor to help protect data stored in

the controller cache. The benefits of this technology are elimination of hardware maintenance associated with LiON batteries, lower total cost of ownership over the life of the adapter, and more environmentally friendly cache protection.

Users can deploy the Intel RS2SB008 in existing HDD-based server environments for significant performance gains. Alternatively, for users implementing server platforms based on solid-state storage, these next-generation controllers exploit the potential of SSDs for new levels of performance accompanied by enterprise-class reliability.

All Intel RAID solutions are validated across multiple platforms with Intel® boards, chassis, and systems. 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 and performance.

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). Dual-core LSI SAS2208 ROC technology, x8 PCI Express Generation 2 host interface and DDR3 cache enhances the performance of scalable performance applications.

### ▪ Improved serviceability with a MFBU.

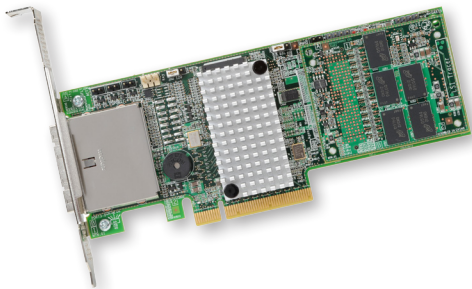
The Maintenance Free Backup Unit (MFBU) is built using NAND flash that can retain data for up to ten years. In addition, it provides near instant optimal RAID performance versus traditional Lithium Ion (LiON) battery backup units (BBUs) which are limited to just days of retention and can take up to 8 hours to charge. Furthermore, longer lasting technology allows for a standard 3 year warranty.

### ▪ Environmentally friendly

The Maintenance Free Backup Unit (MFBU) improves traditional methods of cache protection by eliminating LiON batteries. MFBU does not require additional hazardous shipping compliance documentation, does not require LiON disposal fees, personnel- or maintenance-planning expenses.

### ▪ Support for premium feature upgrades.

The RS2SB008 includes a connector for optional hardware-based keys that easily plug in to unlock advanced software algorithms designed to improve performance and enhanced data protection. For instance the SSD Cache with FastPath\* I/O upgrade allows for using one or more SSD as a large cache pool for the RAID controller which can significantly improve performance of read-intensive applications, such as file, Web and online transaction processing servers.



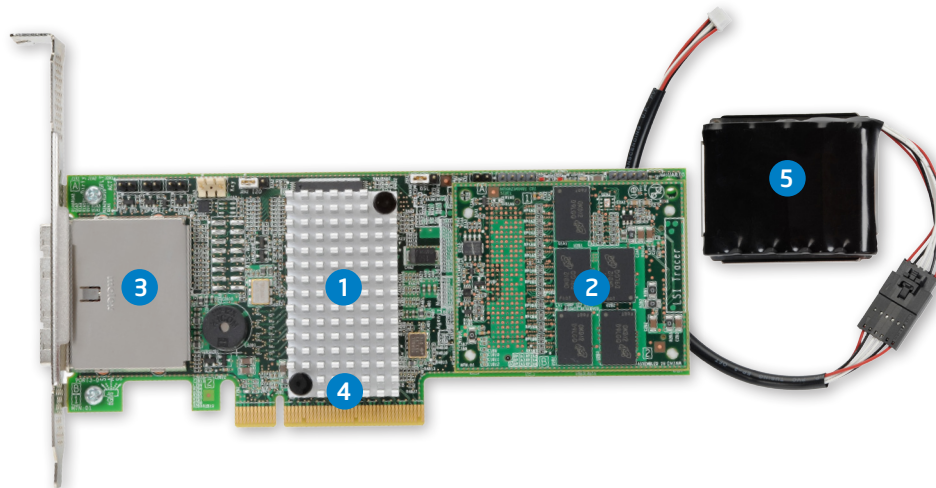
# Intel® RAID Controller RS2SB008

Powered by LSI MegaRAID\* Technology

For more information on the Intel® RAID Controller RS2SB008, visit: [www.intel.com/go/RAID](http://www.intel.com/go/RAID)

## Features

1. **LSI SAS2208 ROC controller** providing SAS 2.0 compliance including 6Gb/s data transfer
2. **Embedded 1GB DDR3 1333MHz cache (ECC DDR3 memory)** to efficiently store data in transition
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. **Maintenance Free Backup Unit** with super-capacitor and flash memory included



## Technical Specifications

Order Codes	RS25SB080 (8 external ports) Note: Maintenance Free Backup Unit (flash and capacitor-based) included
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 (SES2, SGPIO) 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
I/O Processor	LSI SAS2208 ROC running at 800 MHz
Drive Types	SAS 6Gb/s or SATA 6Gb/s, SAS 3Gb/s or SATA 3Gb/s
Maximum Drives	Up to 240 physical devices supported
Connectors	Two SAS SFF8088 x4 SAS external connectors
Cache Memory	Embedded 1GB DDR3 at 1333MHz
PCI Interface	x8 PCI Express* 2.0
Backup Support	Includes NAND and Supercap module for maintenance free backup
Form Factor	Low profile, MD2 (6.6" X 2.536")
Data Transfer Rates	Up to 6Gb/s per port
Operating Temperature	Maximum ambient: 65°C (55°C with optional BBU)
Operating Voltage	+3.3 V
Operating Systems	Extensive support includes Microsoft* Windows* Vista/2008/Server 2003/2000/XP, Linux*, Solaris*(x86), Netware*, FreeBSD*, VMware* and more. * Visit intel.com for the most complete list of supported operating systems

For more information on how to make the Intel® RAID Controller RS25AB008 part of your server environment, please contact an Intel® Channel Partner Program participant.

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