

# Intel® RAID Controller RS2BL040

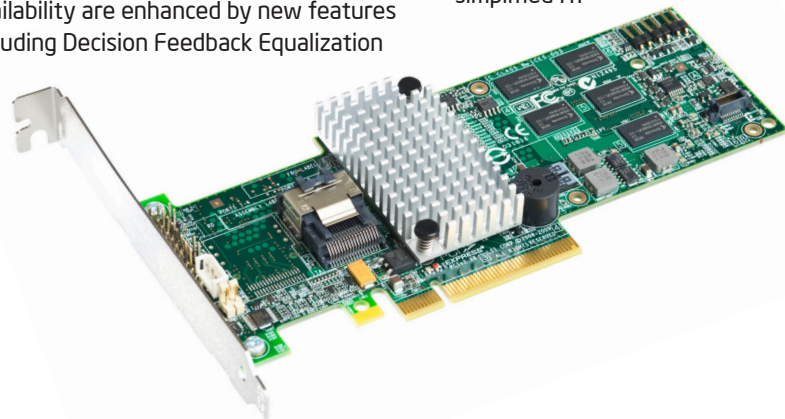
Compact Four-Port 6G SAS PCIe 2.0 RAID Adapter for Expander-based or Low Drive Count Solutions

## Product Overview

The Intel® RAID Controller RS2BL040, a member of Intel's 6Gb/s SAS adapter family, is targeted at solutions with expander backplanes or low drive counts. Features including LSI's SAS2108 6Gb/s RAID on Chip (ROC) silicon and a native PCI Express\* 2.0 architecture allow for significant performance gains for both 3Gb/s and 6Gb/s drive-based solutions versus prior generation RAID adapters. Data protection and availability are enhanced by new features including Decision Feedback Equalization

for greater signal integrity, enhanced diagnostics, and more robust error reporting.

Intel RAID solutions, powered by LSI MegaRAID\* technology, are validated across multiple platforms with Intel® server 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.** 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 enhances the performance of mainstream applications.
- **Inside-the-box design flexibility.** With a true MD2 form factor, this adapter is ideal for low-profile height and half-length adapter slots. Four internal 6Gb/s SAS ports allow connection to 6Gb/s or 3Gb/s high-performance SAS drives, high-capacity SATA drives or a combination of both. Furthermore, support for SAS expanders allows bandwidth consolidation of multiple drives per port.
- **Outstanding availability.** 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.
- **Intel RAID Web Console II.** Allows administrators to easily configure, monitor and manage RAID volumes locally or over the LAN network. SAS/SATA topology can be viewed from the system host, controller and disk enclosure level down to the configurations of logical and physical drives.

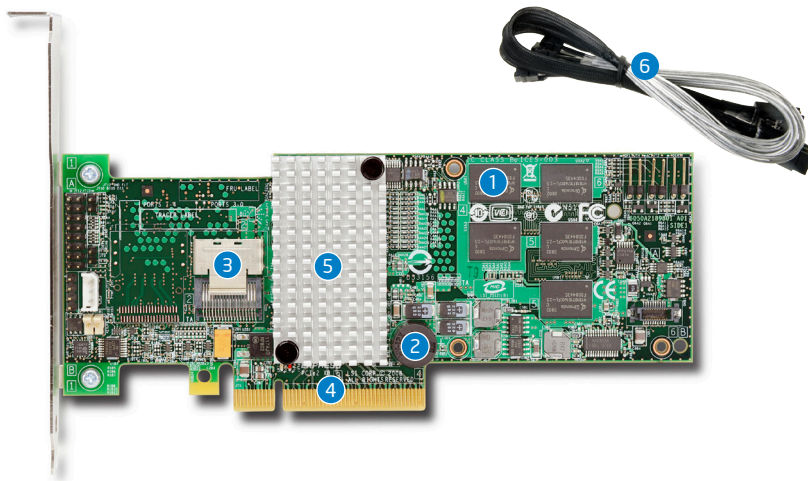
# Intel® RAID Controller RS2BL040

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 One SFF8087 SAS/SATA connector for up to eight internal 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 One cable with SFF8087 connectors that expand to four individual connectors



## 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
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 32 physical devices supported
Connector	One SAS SFF8087 x4 internal connector
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
Operating Temperature	Maximum ambient: 50°C (45°C with optional BBU)
Operating Voltage	+3.3 V

For more information on the Intel® RAID Controller RS2BL040, visit: [www.intel.com/go/RAID](http://www.intel.com/go/RAID)

For more information on how to make the Intel® RAID Controller RS2BL040 part of your server environment, please contact an Intel® Channel Partner Program participant.

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