



## Product Brief

Intel® Integrated  
RAID Module  
SR0MBSASMR

# Intel® Integrated RAID Module SR0MBSASMR

Custom Form Factor SAS/SATA RAID Module Simplifies Adding Full Featured RAID to Select Intel® Server Boards and Systems

### Product Overview

The Intel® Integrated RAID Module SR0MBSASMR, powered by LSI MegaRAID® technology, offers intelligent RAID protection for servers using SAS or SATA hard drives. Designed specifically for select Intel server boards, this SAS/SATA RAID module communicates with the host system through a custom board-to-board interface using a proprietary 50-pin PCI Express connector. With the popularity of rack-dense 1U and 2U servers increasing, this design allows system builders to easily implement a robust RAID solution without sacrificing a valuable riser-card slot or using a chassis with low-profile add-in card cut-outs.

Designed with an integrated LSISAS1078 RAID-On-Chip, a PCI Express x4 host interface and 667MHz DDR2 memory, the SR0MBSASMR is a powerful internal SAS/SATA RAID solution for mainstream use. It can connect up to four SAS or SATA hard drives directly, or up to sixteen using SAS expanders. This module can also support an optional Intel RAID Smart Battery, AXXR5BBU3, which protects cached data by providing power to the module in the event of server or power failure.

### 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).
- **Inside-the-box design flexibility.** Designed to plug into a custom I/O expansion slot, this module works great in systems of all form factors and is particularly ideal for 1U or 2U Intel server environments as it can be used without the need for a riser card or low profile chassis cutout.
- **Excellent performance.** LSI SAS1078 ROC technology, PCI Express\* x4 host interface and 667 MHz cache enhances the performance of mainstream applications.
- **Outstanding availability.** Delivers proactive drive monitoring and automatic error correction. An optional battery backup maintains data without the need for an uninterruptible power supply.
- **Increased IT productivity.** Includes a suite of tools that are common across all Intel SAS/SATA RAID solutions, for easy installation and advanced management.



## Features

### Intel® Integrated RAID Module SROMBSASMR *Enabled by LSI*

- 1 Embedded 128MB 667MHz cache (ECC DDR2 memory)
- 2 LSI SAS1078 ROC controller
- 3 SATA connectors for up to four internal ports
- 4 Optional Intel RAID Smart Battery AXXR5BBU3
- 5 Four internal cables with right angle connectors allowing use in most chassis (cables not shown)
- 6 Custom form factor ideal for 1U or 2U Intel server environments



INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT, OR OTHER INTELLECTUAL PROPERTY RIGHT. Intel products are not intended for use in medical, life-saving, or life-sustaining applications. Intel may make changes to specifications and product descriptions at any time, without notice.

All products, dates, and figures specified are preliminary based on current expectations, and are subject to change without notice. Availability in different channels may vary.

Intel and the Intel logo are trademarks of Intel Corporation in the U.S. and other countries.

\*Other names and brands may be claimed as the property of others.

Copyright © 2009, Intel Corporation. All rights reserved.

0609/SJ/PDF

Please Recycle

321570-002US

## Technical Specifications

Compatible Intel® Server Boards and Systems	Intel® Server Board S5520HC/S5500HCV Intel® Server Board S5520UR Intel® Server Board S5500WB Intel® Workstation Board S5520SC Intel® Server Board S3420GP
RAID Levels and Spans	RAID Levels 0, 1, 5, and 6 RAID Spans 10, 50, and 60
Fault Tolerant Features	Online Capacity Expansion Hot-Spare Support Enclosure Management S.M.A.R.T Support
Intel® RAID Software	Intel® RAID Web Console 2 Intel® RAID Flash Utilities
I/O Processor	LSI SAS1078 ROC with IBM PowerPC* 440 core running at 500 MHz, and dual-independent DMA controllers
Drive Types	SAS or SATA 3Gb/s
Maximum Drives	Up to 4 direct-connect; Up to 16 using SAS expander
Connectors	Four SAS/SATA internal connectors (SATA type)
Cache Memory	Embedded 128MB DDR2 (667MHz)
PCI Interface	PCI Express* x4
BBU Support	Intel® Smart Battery AXXR5BBU3
Form Factor	Custom for use with select Intel Server boards
Operating Temperature	Maximum ambient: 60°C (45°C with optional BBU)
Operating Voltage	+3.3 V

