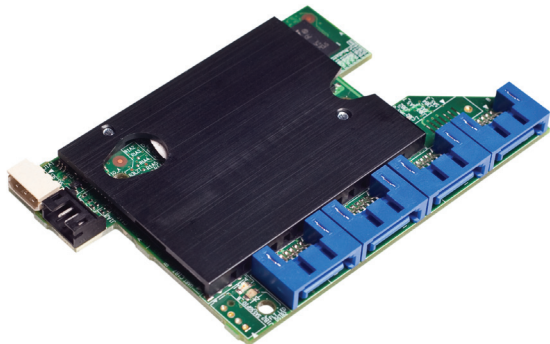


Intel® Integrated RAID Module RMS2LL040

Low Cost SAS-2 with Mirroring, Striping, and JBOD for Intel® Server Boards and Systems



Product Overview:

Ideal for servers and workstations needing high-speed data transfer within a small hardware footprint, the Intel RAID Module RMS2LL040 delivers a 1U capable design with high-throughput for internal storage applications. This RAID controller provides SAS capability that allows compatibility with 6Gb/s and 3Gb/s SAS and SATA hard drives, and SAS expander devices.

While many other SAS controllers drive large RAID software stacks between the host CPU and controller, the RMS2LL040 utilizes the embedded CPU in the LSI 2008 ASIC to perform RAID 0, 1, and 1E/10 operations. With the reduction in RAID overhead, the RMS2LL040 offers superior internal READ/WRITE performance.

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

- **System design flexibility.** 1U capable SAS RAID module connects to the I/O expansion slot available on most Intel server boards. This module can be used in Intel and 3rd party chassis without the need for a riser card or low profile cutout.
- **Cost Effective Data Protection.** Provides a low-cost RAID 0, 1, and 1E solution for entry-level server and workstation environments where high-performance and reliable data protections are required.
- **SAS or SATA Storage.** Connect SAS or SATA devices within the array. Use SAS drives for speed, reliability and scalability; use high-capacity SATA drives for budget-friendly storage.
- **High Scalability.** Employ JBODs (Just a Bunch of Disks) with support of up to 244 physical devices, or RAID 0, 1, 1E/10 with up to 10 devices.
- **Ultra thin driver.** LSI Fusion-MPT™ architecture provides over 290,000 I/Os per second while communicating over the PCI Express* 2.0 Host Bus.

Why Consider More?

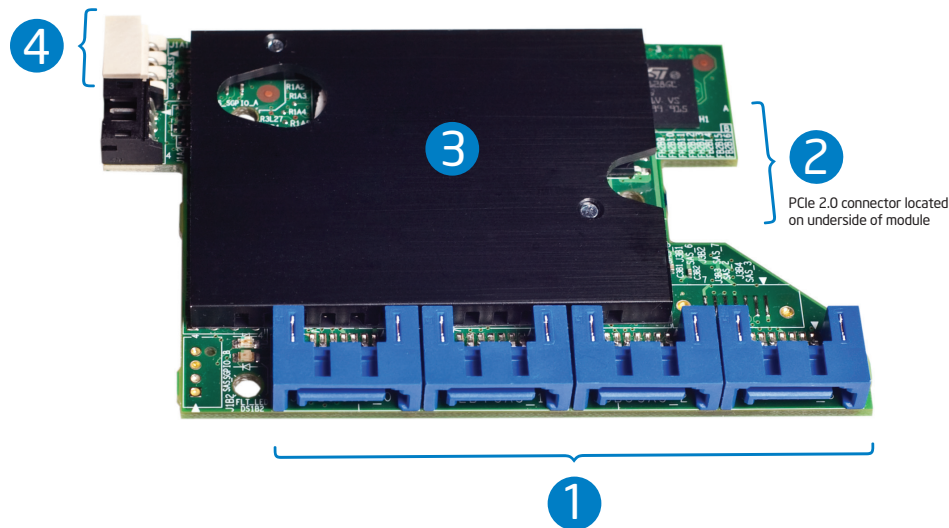
Install a mainstream RAID controller* for:

- Superior performance with LSI2108 RAID On Chip Processor
- 512MB embedded cache with optional battery backup
- Additional RAID levels 5, 6 and spans 50, 60
- Compatibility with Intel RAID Premium Features

*For example, Intel® RAID Controller RS2BL040

Features:

- 1 Four 7-Pin SAS/SATA connectors for up to eight internal ports
 - 2 x4 PCI Express* Generation 2 interface for fast communication with the server board
 - 3 LSI SAS2008 IOC controller providing SAS 2.0 compliance including 6Gb/s data transfer and compatibility with SAS or SATA drives
 - 4 I2C Connector 3-pin keyed connector for out-of-band enclosure management (SES2)
- 5 Four cables with 7-pin SAS/SATA connectors are included in the standard retail SKU (not shown)



Technical Specifications:

Intel Order Code	AXXRMS2LL040	
Compatible Intel® Server Boards and Systems (as of July '10)	Intel® Server Board S5520UR Intel® Server Board S5500WB Intel® Server Board S5520HC Intel® Server Board S5520SC Intel® Server Board S3420GP Intel® Server Systems and 3rd party systems based on the above server boards	
Data Protection Feature Highlights	Distributed Sparring Hot Spare Support Expander Support Background Consistency Checking Enclosure Management S.M.A.R.T. Support RAID support before operating system loaded	
Intel® RAID Software	Intel® RAID Web Console 2 Intel® RAID Command Line Tool Intel® RAID Flash Utilities	
I/O Processor	LSI SAS2008 SAS Controller	
Drive Types	SAS 6Gb/s, SAS 3Gb/s or SATA 3Gb/s	
Maximum Devices/Drives	Non-RAID	256
	Integrated RAID (IR)	14 spread across 2 volumes
	RAID 0	10 per volume
	RAID 1	2 per volume plus hotspare
	RAID 1E	10 per volume
	RAID 10	10 per volume
Connectors	Four 7-pin SAS/SATA	
PCI Interface	x4 PCI Express* 2.0	
Form Factor	1U Capable System Board	
Data Transfer Rates	Up to 6Gb/s per port	
Operating Temperature	Maximum ambient: 50°C	
Operating Voltage	+12V ±10%	
Standard Warranty	3 years, AWR option	

For more information on how to make Intel® Integrated RAID Module RMS2LL040 part of a successful storage solution, visit: www.intel.com/go/RAID



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