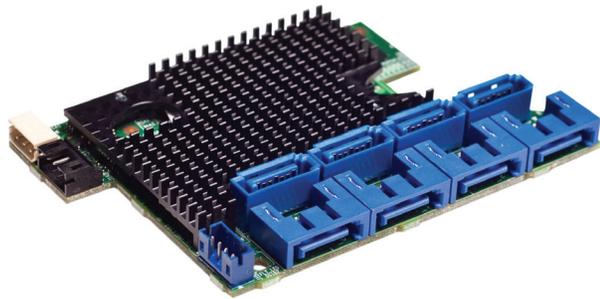


# Intel® Integrated RAID Module RMS2AF080

Seamless Entry-Level SAS-2 RAID for Intel® Server Boards and Systems



## Product Overview:

The Intel® RMS2AF080, one of Intel's new entry-level 6Gb/s SAS I/O modules, incorporates LSI's MegaRAID\* Entry technology to offer exceptional data protection and configuration flexibility. Designed for a wide selection of Intel server boards, this

SAS/SATA RAID module offers features including LSI's 2008 6Gb/s I/O Controller (IOC) and a native PCI Express\* 2.0 architecture help to deliver essential performance for 3Gb/s and 6Gb/s drive-based solutions. The Intel RMS2AF080 allows businesses using entry-level servers and workstations to employ robust RAID functionality at lower prices than enterprise-class RAID adapters.

The Intel® RMS2AF080 communicates with the host system through a custom board-to-board PCIe 2.0 interface to allow for minimizing the RAID hardware footprint. 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.

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 system board connects to the I/O expansion slot on Intel's rack optimized server boards. This module can be used in Intel and 3<sup>rd</sup> party chassis without the need for a riser card or low profile chassis cutout.
- **Exceptional data protection.** Supports data redundancy using SAS or SATA hard disk drives through mirroring, parity, and double parity (RAID levels 1 and 5) plus striping capability for spans (RAID levels 10 and 50).
- **Excellent performance without hindering system resources.** LSI SAS2008 I/O controller, host allows for built-in hardware RAID 0, 1 and 10 ; plus, firmware-based RAID 5 and 50 (RAID 5 and 50 utilize system resources to a limited extent).
- **Enhanced entry-level availability.** The Intel RMS2AF080 design utilizes LSI MegaRAID\* Entry technology which offers simplified configuration options, the same robustness, and many of the same features as trusted LSI MegaRAID technology.
- **Seamless migration to more fully featured RAID.** The Intel RMS2MH080 shares common drivers with Intel's enterprise-class RAID products.

## Why Consider More?

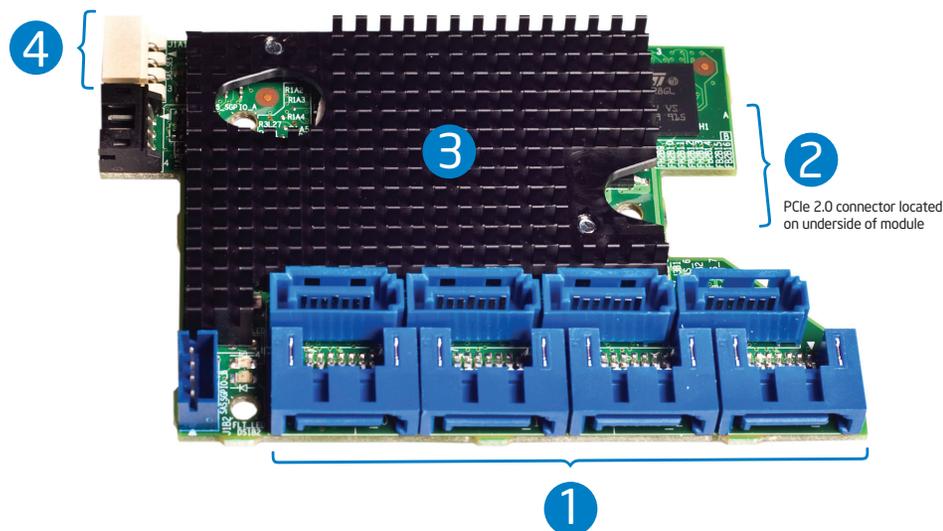
Install a mainstream RAID controller\* for:

- Superior performance with LSI2108 RAID On Chip Processor
- 512MB embedded cache with optional battery backup
- Additional RAID level 6 and span 60
- Compatibility with Intel RAID Premium Features

\*For example, Intel® RAID Controller RS2BL080

## Features:

- 1 Eight 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 Eight cables with 7-pin SAS/SATA connectors on each end (not shown)



For more information on how to make Intel® Integrated RAID Module RMS2AF080 part of a successful storage solution, visit: [www.intel.com/go/RAID](http://www.intel.com/go/RAID)

## Technical Specifications:

<b>Intel Order Code</b>	AXXRMS2AF080
<b>Compatible Intel® Server Boards and Systems (as of July '10)</b>	Intel® Server Board S5520UR Intel® Server Board S5500WB Intel® Server Board S5520HC Intel® Server Board S5520SC Intel® Server Board S3420GP Intel® Server System's and 3 <sup>rd</sup> party systems based on the above server boards
<b>Data Protection Feature Highlights</b>	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
<b>Intel® RAID Software</b>	Intel® RAID Web Console 2 Intel® RAID Command Line Tool Intel® RAID Flash Utilities
<b>I/O Processor</b>	LSI SAS2008 SAS Controller
<b>Drive Types</b>	SAS 6Gb/s, SAS 3Gb/s or SATA 3Gb/s
<b>Maximum Devices/Drives</b>	RAID 0: 16 per volume RAID 1: 2 per volume plus hotspare RAID 5: 16 per volume RAID 10: 16 per volume RAID 50: 16 per volume
<b>Connectors</b>	Eight 7-pin SAS/SATA connectors
<b>PCI Interface</b>	x4 PCI Express* 2.0
<b>Form Factor</b>	1U Capable System Board
<b>Data Transfer Rates</b>	Up to 6Gb/s per port
<b>Operating Temperature</b>	Maximum ambient: 50°C
<b>Operating Voltage</b>	+12V ±10%
<b>Standard Warranty</b>	3 years, AWR option



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