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# Intel® Integrated RAID Module RMS2MH080

Simplifies Adding Full Featured SAS-2 RAID to Select Intel® Server Boards and Systems

## Product Overview:

The Intel® Integrated RAID Module RMS2MH080, 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 module allows for use in popular 1U and 2U servers without sacrificing a valuable riser-card slot or using a chassis with low-profile add-in card cut-outs.

Engineered for mainstream use, the RMS2MH080 is a powerful internal SAS/SATA RAID solution with integrated LSI2108 RAID-On-Chip, a PCI Express x8 Gen 2.0 host interface and 800MHz DDR2 memory.  It can connect up to eight SAS or SATA hard drives directly, or up to thirty two using SAS expanders.  This module also supports an optional Intel RAID Smart Battery, AXXRSBBU7, which protects cached data by providing power to the module in the event of server or power failure.

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.
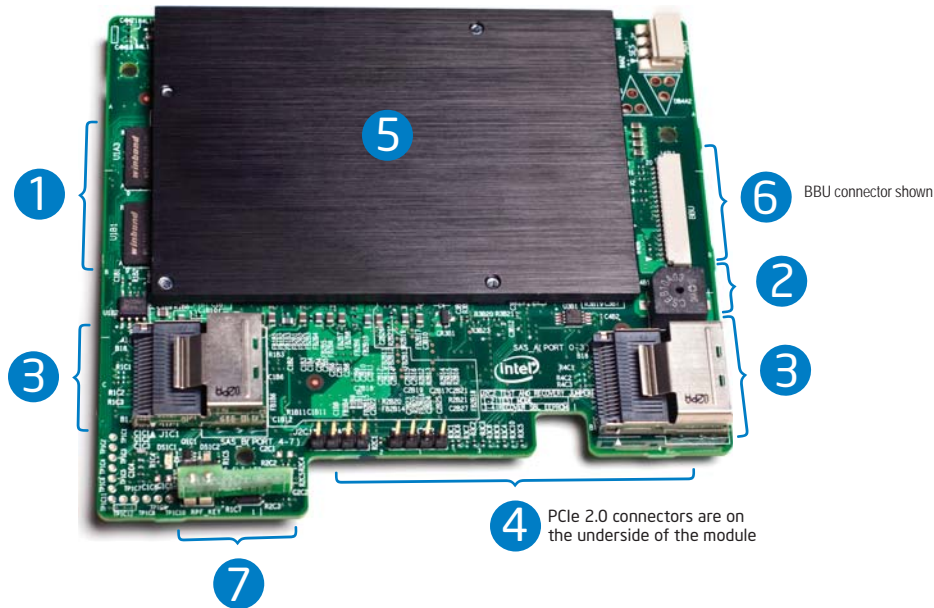
## KEY Advantages:

- **Greater flexibility of system design.**  Eliminate the need to use a riser card or a standard add-in card slot.  1U capable system board connects to the I/O expansion slot on Intel's rack optimized server boards and is compatible with Intel or 3rd party chassis.

- **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.**  Enhances I/O of mainstream applications with LSI SAS2108 ROC technology, PCI Express*2.0 Gen x8 host interface and 800 MHz cache.

- **Outstanding availability.**  Delivers proactive drive monitoring and automatic error correction.  Maintain data in the event of power or server failure with optional battery backup.

- **Increased IT productivity.**  Offers easy installation, simplified administration, and advanced management capabilities; as, it features a suite of tools that are common across all Intel SAS/SATA RAID solutions.

## Features:

1. Embedded 512 MB 800 MHz cache (ECC DDR2 memory) to efficiently store data in transition
2. Speaker to deliver audible alerts
3. Two SFF8087 SAS/SATA connectors 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. Optional Intel® Smart Battery AXXRSBBU7 for up to 72 hours of cache data retention
7. Optional Premium Feature Key for upgrade features such as SSD Cache, FastPath* I/O or Rapid Recovery Snapshot
8. Includes two internal cables with SFF8087 connectors that expand to four individual connectors, cables ship with standard SKU (not shown)



BBU connector shown

PCIe 2.0 connectors are on the underside of the module

## Technical Specifications:

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|---|---|
| **Intel Order Code** | AXXRMS2MH080 |
| **Compatible Intel® Server Boards and Systems** | Intel® Server Board S5520UR<br>Intel® Server Board S5500WB<br>Intel® Server System's based on the above server boards such as SR1625UR, SR2600UR and SR2612UR. |
| **RAID Levels and Spans** | RAID Levels 0, 1, 5, and 6<br>RAID Spans 10, 50, and 60 |
| **Fault Tolerant Features** | Online Capacity Expansion<br>Hot-Spare Support<br>Enclosure Management<br>S.M.A.R.T Support |
| **Intel® RAID Software** | Intel® RAID Web Console 2<br>Intel® RAID Flash Utilities |
| **I/O Processor** | LSI SAS2108 ROC running at 800MHz |
| **Drive Types** | SAS or SATA 6Gb/s or 3Gb/s |
| **Maximum Drives** | Up to 32 physical devices supported |
| **Connectors** | Two SAS SFF8087 x4 SAS internal connectors |
| **Cache Memory** | Embedded 512MB DDR2 (800MHz) |
| **PCI Interface** | PCI Express* 2.0 x8 |
| **BBU Support** | Intel® Smart Battery AXXRSBBU7 |
| **Form Factor** | Custom for use with select Intel Server boards |
| **Data Transfer Rates** | Up to 6Gb/s per port |
| **Operating Temperature** | Maximum ambient: 50°C<br>(45°C with optional BBU) |
| **Operating Voltage** | +3.3 V |

For more information on how to make Intel® Integrated RAID Module RMS2MH080 part of a successful storage solution, visit: www.intel.com/go/RAID

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