

Intel® RAID Controller RS2WG160

16-Port Internal SAS-2 RAID Controller for Scalable Performance Applications

Product Overview

The Intel® RAID Controller RS2WG160, with sixteen internal ports, connects up to 16 drives inside the server via direct connection or passive backplane. In addition, this controller is excellent for growing storage requirements as it can support up to

128 devices by leveraging SAS expander technology. Furthermore, the RS2WG160's SAS-2 architecture delivers data transfer rates of up to 6Gb/s per port, and brings new features and improved performance regardless of whether the storage solution utilizes 3Gb/s or 6Gb/s SAS or SATA drives.

All Intel RAID solutions are validated across multiple platforms with Intel® 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. Highly scalable.

LSI* SAS2108 ROC technology, x8 PCI Express* Generation 2 host interface and 800 MHz cache enhances the performance of scalable performance applications. Capable of connecting up to 16 drives directly or up to 128 using SAS expanders.

▪Easy to use management utility.

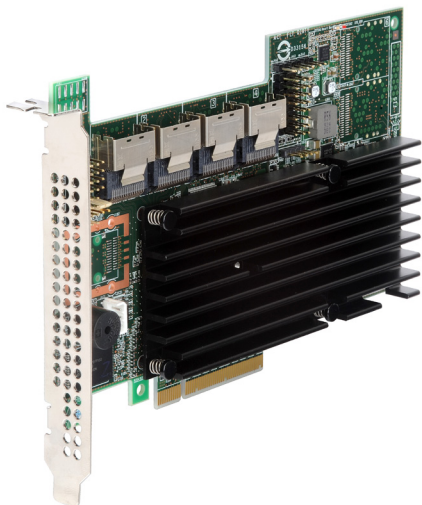
The Intel RAID Web Console provides the essential software interface to efficiently manage Intel RAID products, whether deployed in an enterprise or small business. Intel also offers a collection of applications and tools including a pre-boot setup utility and a full spectrum of online RAID management utilities.

▪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.

▪Support for premium feature upgrades.

The RS2WG160 includes a connector for optional hardware-based keys that easily plug in to unlock advanced software algorithms designed to improve performance and enhanced data protection. For instance the SSD Cache with FastPath* I/O upgrade allows for using one or more SSD as enhanced cache for the RAID controller which can significantly improve performance of read-intensive applications, such as file, Web and online transaction processing servers.



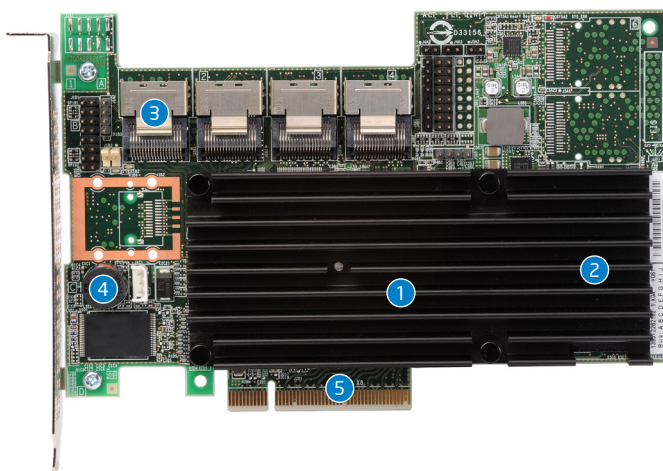
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Powered by LSI MegaRAID* Technology

For more information on
Intel® RAID Controllers,
visit www.intel.com/go/RAID

Features

- 1 LSI SAS2108 ROC controller providing SAS 2.0 compliance including 6Gb/s data transfer
- 2 Embedded 512 MB 800 MHz cache (ECC DDR2 memory) to efficiently store data in transition
- 3 Sixteen Internal Ports with four SFF8087 (Mini-SAS) connectors
- 4 Speaker to deliver audible alerts
- 5 x8 PCI Express Generation 2 interface for fast communication with the server board
- 6 Optional Intel® Smart Battery AXRSBBU7 for up to 72 hours of cache data retention (not shown)
- 7 Four internal cables with SFF8087 connectors on each end (not shown)



Technical Specifications

Order Code	RS2WG160
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 and LSISAS2x36 Expander
Drive Types	SAS 6Gb/s, SAS 3Gb/s or SATA 3Gb/s
Maximum Drives	Up to 128 physical devices supported
Connectors	Four SAS SFF8087 x4 SAS internal connectors
Cache Memory	Embedded 512 MB DDRII at 800MHz
PCI Interface	x8 PCI Express* 2.0
BBU Support	Optional Intel® Smart Battery AXRSBBU7
Form Factor	Full Height, ½ Length (4.376" x 6.6")
Data Transfer Rates	Up to 6Gb/s per port
OS Support	Extensive support includes Microsoft® Windows® Vista/2008/Server 2003/2000/XP, Linux®, Solaris® (x86), Netware®, FreeBSD®, VMware® and more.
Operating Temperature	Maximum ambient: 50°C (45°C with optional BBU)
Operating Voltage	+3.3 V

For more information on the Intel® RAID Controller RS2WG160, visit: www.intel.com/go/RAID

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