Intel® RAID Controller RT3WB080

Cost-Effective and High Performing RAID Solution for Mainstream SATA Storage Based Systems

Product Overview

The Intel® RAID Controller RT3WB080 is an intelligent RAID solution that uses RAID-On-Chip (ROC) technology to deliver cost effective, state-of-the-art performance and data protection for high capacity SATA drive based systems. The RT3WB080 includes LSI's SAS2108 6Gb/s RAID on Chip (ROC) silicon, a native PCI Express* 2.0 architecture and other powerful features such as RAID 6 and advanced RAID management. Because the RT3WB080 is built on SAS technology, it is compatible with SAS expanders including support for up to 16 physical devices.

Intel RAID solutions are validated across multiple platforms with all Intel boards, chassis, and systems. Customized training, as well as Intel service and support, makes Intel the one source for customers seeking data protection, increased productivity, and simplified IT.

Key Advantages

- **Powerful performance and economical.** The RT3WB080 offers excellent performance for budget sensitive mainstream SATA-based storage solutions, as it includes some features available in higher priced cards such as LSI SAS2108 ROC technology, x8 PCI Express Generation 2 host interface and 256MB of 800 MHz cache.

- **Exceptional data protection.** Supports data redundancy using 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.** With a true MD2 form factor, this adapter is ideal for low-profile height and half length adapter slots. Eight internal 6 Gb/s ports allow connection to 6Gb/s or 3Gb/s high-performance SATA.

- **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.

- **Optional Premium Feature support.** The RT3WB080 includes a connector for optional hardware-based keys that easily plug in to unlock advanced software algorithms designed to improve performance and enhance data protection. For instance the SSD Cache with FastPath* I/O upgrade allows the use of one or more Solid State Drives 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.
Intel® RAID Controller RT3WB080
Powered by LSI MegaRAID® Technology

Features
1. Embedded 256 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 for outstanding performance
6. Two internal cables with SFF8087 connectors that expand to four individual SATA style connectors

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

Optional Premium Features
SSD Cache with FastPath* VODisk Encryption Management
Rapid Recovery Snapshot

I/O Processor
LSI SAS2108 ROC running at 800 MHz

Drive Types
3Gb/s and 6Gb/s SATA drives

Maximum Drives
Up to 16 physical devices supported

Connectors
Two SFF8087 x4 SAS/SATA internal connectors

Cache Memory
Embedded 256 MB at 800MHz

PCI Interface
x8 PCI Express® 2.0

BBU Support
Optional Intel® Smart Battery AXXR586U7
Intel® Smart Battery AXXR588UL will also be supported after it is launched in Q1 2011

Form Factor
Low profile, MD2 (6.6” X 2.536”)

Data Transfer Rates
Up to 6Gb/s per port

Operating Temperature
Maximum ambient: 50°C (45°C with optional BBU)

Operating Voltage
+3.3 V

For more information on how to make Intel® RAID Controller RT3WB080 part of a successful storage solution, visit: www.intel.com/go/RAID