Broadcom 9211-8i Datasheet



Broadcom LSI 9211-8i LSI00194 PCIe 2.0 x8 SAS2008 8 Internal Ports 6Gb/s SAS+SATA Host Bus Adapter 9211-8i

The Broadcom SAS 9211-8i host bus adapter provides high performance for internal drive connectivity in 1U and 2U servers and workstations. The SAS 9211-8i provides 8 lanes of 6Gb/s SAS and is matched with 8 lanes of PCI Express (PCIe) 2.0 5Gb/s performance to eliminate bottlenecks. Performance is based on the SAS 2008 IO controller that highly integrates the latest enhancements in PCIe and SAS technology. The HBA supports up to 256 SAS or SATA devices.

The SAS 9211-8i has two (x4) internal mini SAS connectors (SFF8087) enabling a low profile solution which provide SAS and SATA data transfer rates of 1.5, 3 and 6Gb/s per lane through automatic speed negotiation that can achieve over 320,000 IOPs. Enhanced features include T-10 Protection Information Model for early detection of and recovery from data corruption, and Spread Spectrum Clocking (SSC) for minimal EMI.

Storage by LSI

Broadcom products serve four primary target markets: wireless communications, wired infrastructure, enterprise storage, and industrial. Broadcom Storage by LSI offers the industry's broadest portfolio of storage solutions, backed by decades of experience and trusted by the world's leading server and storage suppliers. Broadcom provides the building blocks for storage solutions that help customers understand, prioritize, store and protect critical data.

The Broadcom SAS portfolio includes MegaRAID® controller cards, host bus adapters (HBAs), advanced software options, Syncro® shared DAS solutions and SAS storage ICs, including RAIDon- Chip (ROCs), I/O controllers and expanders.

Fusion-MPT™ Architecture

Fusion-MPT architecture marks the next generation of I/O architecture designed to deliver the highest performance available today while reducing time to market, integration, and certification time. Fusion-MPT devices are high performance, cost-effective protocol controllers that represent the newest system- level integration technology in intelligent I/O processors from Broadcom.

Features

- 8 internal 6Gb/s SAS+SATA ports
- 8 lanes, PCIe 2.0
- Low profile form factor design
- Two x4 internal mini-SAS connectors (SFF8087)
- SAS 2008 6Gb/s SAS+SATA Controller
- Supports up to 256 SAS or SATA end devices
- Supports SSDs, HDDs and tape drives
- Offers Integrated RAID (0, 1, 1E and 10)

Key Advantages

- Provides state of the art connectivity for servers and appliances with internal storage and the ability to add external storage
- 8 lanes of PCIe 2.0 provides fast signaling for high-bandwidth applications

• High performance with 6Gb/s data transfer rates

Specifications

• Product: SAS 9211-8i Host Bus Adapter

• I/O Controller: SAS2008/ Fusion MPT 2.0

• Storage Connectivity; Data Transfer Rates: 8 ports, 6Gb/s SAS 2.0 Compliant

• SAS Bandwidth: Half Duplex, 600 MB/s per lane

• Port Configurations:

8 ea, x1 ports (individual drives)

2 ea, x4 wide port

• Host Bus: x8 lane, PCI Express 2.0 compliant

• PCI Data Burst Transfer Rates: Half Duplex, x8, PCIe, 4000 MB/s

• Physical Dimensions: Low Profile (2.6" x 6.6")

• Connectors: Two mini-SAS internal connectors (SFF8087)

• Brackets: Full height and low profile

• Cable Support: Passive Copper

• PCI Card Type: 3.3 V Add-in Card

• Operating Voltage: +12V +/-8%; 3.3V +/-9%

• PCI Power (Nominal): 8.04W typical (Airflow min 200 LFM)

• Device Support: 256 Non-RAID SAS/SATA devices

Environmental

Operating:

■ 0°C to 55°C

■ 5 to 90% Non-condensing

Storage:

■ -45°C to 105°C

■ 5 to 90% Non-condensing

• MTBF: >2,000,000 Hours

 Regulatory Certifications: EMC: Class B-US (CFR 47, P15B); Canada (ICES-003); Japan (V-3/02.04); Europe (EN55022/EN55024); Australia/New Zealand (AS/NZS 3548); Korea (N-B 2-0001-404); Safety: EN60950; RoHS; WEEE

OS Support: Microsoft Windows, Linux (SuSE, Red Hat), Solaris, VMware. See
http://www.lsi.com/channel/ChannelDownloads for details on versions and support

For more information of this Broadcom SAS 9211-8i Host Bus Adapter, please visit Broadcom website:

https://docs.broadcom.com/doc/12353333

Buy Now