Broadcom 9300-8e Datasheet



Broadcom LSI 9300-8e H5-25460-00 LSI00343 PCIe 3.0 x8 SAS3008 8 External Ports 12Gb/s SAS Host Bus Adapter 9300-8e

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The SAS 9300 8 and 4-port, 12Gb/s SAS host bus adapter family provides increased connectivity and maximum performance for high-end servers and appliances within internal storage, or connecting to large scale storage enclosures.

The SAS 9300 HBA family is based on the SAS 3008 IO controller, integrating the latest enhancements in SAS and PCI Express® technology. Each host bus adapter also supports 8 or 4 SAS ports operating at 12Gb/s data transfer rates, and can reach over 1 million IOPs. The 9300 adapter family supports 8 PCI Express lanes that comply with the latest PCI Express 3.0 specifications. In addition, these adapters are backwards compatible with previous SAS and PCIe generations through automatic negotiation, and provide SAS data transfer rates of 12, 6, and 3 Gb/s per lane, and SATA data transfer rates of 6 and 3Gb/s per lane. Broadcom provides a broad suite of industry standard operating system drivers.

Broadcom Storage by LSI

Broadcom products serve four primary target markets: wireless communications, wired infrastructure, enterprise storage, and industrial. Broadcom Storage by LSI™ off ers 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 12Gb/s SAS portfolio includes MegaRAID® controller cards, host bus adapters (HBAs), advanced

software options, Syncro® shared DAS solutions and SAS storage ICs, including RAID-on-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 certifi cation time. Fusion-MPT devices are high

performance, cost-eff ective protocol controllers that represent the newest system- level integration technology in

intelligent I/O processors from Broadcom.

Features

• Eight/four ports of 12Gb/s SAS + SATA ports

• Eight lanes of PCI Express 3.0

• Low-profile form factor

• Mini-SAS HD connectors

• SAS 3008 12Gb/s SAS+SATA controller

• Supports SSDs, HDDs, and tape drives

Key Advantages

• Provides connectivity in a low-profi le form factor

• 8 lanes of PCI Express 3.0 provides fast signaling for high bandwidth applications

• High performance with 12Gb/s SAS data transfer rates

Specifications

Product: SAS 9300-8e Host Bus Adapter

• MPN: H5-25460-00

• OPN: LSI00343

• I/O Controller: SAS 3008 Fusion MPT 2.5

- Port Count: 8-port, external
- Connectors: Mini SAS HD SFF8644 Two (x4)
- Storage Connectivity Data Transfer Rates: 12Gb/s SAS 3.0 Compliant
- SAS Bandwidth: Half Duplex (x8 wide bus) 9600 MB/s
- Port Configurations
 - 8 ea, x1 ports (individual drives)
 - 2 ea, x4 wide port
- Host Bus: x8 lane, PCIe 3.0
- PCI Data Burst Transfer Rates
- Half Duplex
- x8, PCIe 3.0, 8000 MB/s
- Form Factor: Low Profile
- Physical Dimensions: 2.6" x 6.6"
- Brackets: Full Height and low profile vented
- Cable Support: Passive Copper, Active Copper
- Operating Voltage: +12V +/-8%; 3.3V +/-9%
- PCI Power (Nominal): 14.5W
- Device Support: 1024 Non-RAID devices
- Environmental
 - Operating: 0°C to 55°C
 - Storage: -45°C to 105°C
 - 5 to 90% Non-condensing
 - o Airflow: 200 LFM
- MTBF: >2,800,000 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, FreeBSD See
 http://www.lsi.com/support/pages/download-search.aspx for details on versions * The HBA supports Solaris 10
 and Oracle® provides a built in driver; installation of an LSI driver is not required. For more information on the
 Oracle Solaris 10 driver and installation, sign in at the following Oracle link: https://support.oracle.com/ Contact
 Oracle support for Oracle driver or software support.