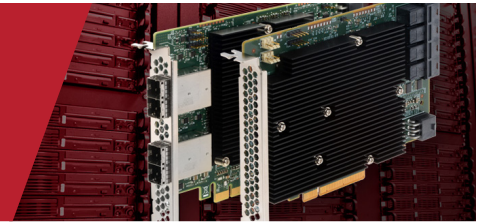


Avago Technologies SAS 9300 16-port 12Gb/s SAS Host Bus Adapter (HBA) Family



Key Features

- 16 external or internal 12Gb/s SAS + SATA ports
- 8 lanes, PCIe 3.0
- 2 SAS 3008 12Gb/s SAS + SATA Controllers
- Supports SSDs, HDDs, and tape drives

Key Advantages

- High performance with 12Gb/s data transfer rates with full size form factor
- 8 lanes of PCIe 3.0 provides fast signaling for high bandwidth applications

For applications demanding high levels of storage connectivity and performance, 16-port 12Gb/s SAS HBAs connect servers and appliances to internal and external storage, achieving close to 2 million IOPS.

Overview

The Avago SAS 9300 16-port, 12Gb/s SAS HBA 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 16-port HBA family is based on the SAS 3008 IO controller, integrating the latest enhancements in SAS and PCI Express® (PCIe) technology. The SAS 9300-16e and SAS 9300-16i support 16 SAS ports operating at 12Gb/s data transfer rates, and can reach close to 2 million IOPS. The 16-port adapter family supports 8 PCIe lanes that comply with the latest PCIe 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. Avago Technologies provides a broad suite of industry standard operating system drivers.

Avago Storage by LSI™

Avago Technologies products serve four primary target markets: wireless communications, wired infrastructure, enterprise storage, and industrial. Avago 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. Avago provides the building blocks for storage solutions that help customers understand, prioritize, store and protect critical data.

The Avago 12Gb/s SAS portfolio includes MegaRAID® controller cards, 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

The Avago SAS HBAs are based on the Fusion-MPT architected SAS controllers, which implements the Fusion-MPT (Message Passing Technology) architecture. Each controller features embedded PowerPC™ processors that help deliver maximum host CPU offload. The built-in intelligence enables Avago to publish a single binary OS driver to operate any Fusion-MPT controller or adapter. This architecture helps enable high performance, reduced software development, and faster time to market.

Avago 9300 16-port HBAs

	SAS 9300-16i	SAS 9300-16e
IO Controller	Two, SAS 3008/ Fusion MPT 2.5	Two, SAS 3008/ Fusion MPT 2.5
Port Count	16-port, internal	16-port, external
Connectors	Mini-SAS HD SFF8643 Four (x4)	Mini-SAS HD SFF8644 Four (x4)
Storage Connectivity Data Transfer Rates	12Gb/s SAS 3.0 Compliant	12Gb/s SAS 3.0 Compliant
SAS Bandwidth	Half Duplex (x16 wide bus) 19200 MB/s	Half Duplex (x16 wide bus) 19200 MB/s
Port Configurations	16 ea, x1 ports (individual drives) 4ea, x4 wide ports 2 ea, x8 wide ports	16 ea, x1 ports (individual drives) 4ea, x4 wide ports 2 ea, x8 wide ports
Host Bus	x8 lane, PCIe 3.0	x8 lane, PCIe 3.0
PCI Data Burst Transfer Rates	Half Duplex x8, PCIe 3.0, 8000 MB/s	Half Duplex x8, PCIe 3.0, 8000 MB/s
Form Factor	Full Height	Full Height
Physical Dimensions	4.4" x 6.1"	4.4" x 6.6"
Brackets	Full Height	Full Height
Cable Support	Passive Copper, Active Optical	Passive Copper, Active Copper
LED Management	Reference SFF-8485 (SGPIO) compliant	
Operating Voltage	+12V +/-8%; 3.3V +/-9%	+12V +/-8%; 3.3V +/-9%
PCI Power (Nominal)	27W	28.6W *no active cable support
Device Support	1024 Non-RAID devices	1024 Non-RAID devices
Environmental	Operating: 0°C to 55°C Storage: -45°C to 105°C 5 to 90% non-condensing Airflow: 200 LFM	Operating: 0°C to 55°C Storage: -45°C to 105°C 5 to 90% non-condensing Airflow: 200 LFM
MTBF	>2,500,000 hours	>2,500,000 hours
Regulatory Certifications	USA (FCC 47 CFR part 15 Subpart B, class B); Canada (ICES -003, Class B); Taiwan (CNS 13438); Japan (VCCI V-3); Australia/New Zealand (AS/NZS CISPR 22); Korea (RRA no 2013-24 & 25); Europe (EN55022/EN55024); Safety: EN/IEC/UL 60950; RoHS; WEEE	
OS Support	Microsoft Windows, Linux (SuSE, Red Hat), Solaris, VMware, FreeBSD See http://www.lsi.com/support for details on versions *The HBA supports Solaris 10 and Oracle* provides a built in driver; installation of an Avago 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.	
Warranty	3 years; with advanced replacement option Free technical support at http://www.lsi.com/support	
Ordering Part Number	9300-16i Single LSI00447	9300-16e Single LSI00342