

Avago° **SAS 9300-16e** 16-Port, 12Gb/s SAS+SATA to PCI Express Host Bus Adapter



Key Features

- 16 external 12Gb/s SAS+SATA ports
- 8 lanes, PCle 3.0
- Four x4 external mini-SAS HD connectors (SFF8644)
- Two SAS 3008 12Gb/s SAS+SATA Controllers
- Supports up to 1024 SAS or SATA end devices per controller
- Supports SSDs, HDDs and tape drives

Key Advantages

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

16-port SAS HBA Provides Maximum Connectivity and Performance for External JBOD and External RAID enclosures

Overview

The Avago SAS 9300-16e 16-port, 12Gb/s SAS host bus adapter provides increased connectivity and high performance for high-end servers and storage applications. The SAS 9300-16e HBA is based on the SAS 3008 IO controller that integrates the latest enhancements in SAS and PCI Express (PCIe) technology and can achieve 2 million IOPs.

The SAS 9300-16e has four (x4) external mini SAS HD connectors (SFF8644) and supports 8 PCle lanes that comply with the latest PCle 3.0 specification with 8Gb/s per lane in a single direction. The adapter also supports 16 individual SAS ports operating at 12Gb/s. The adapter is backward compatible with previous PCle and SAS generations through automatic negotiation and provides SAS data transfer rates of 12, 6, and 3Gb/s per lane, and SATA data transfer rates at 6 and 3Gb/s per lane. Avago provides a complete 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, 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 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 Avago.

IO Controller	Two, SAS 3008/ Fusion MPT 2.5
Storage Connectivity; Data Transfer Rates	16 ports; 12Gb/s SAS 3.0 compliant
SAS Bandwidth	Half Duplex (x4 wide bus)
	4800 MB/s
Port Configurations	16 ea, x1 ports (individual drives)
	4 ea, x4 wide ports
	2ea , x8 wide ports
Host Bus	x8 lane, PCle 3.0 compliant
PCI Data Burst Transfer Rates	Half Duplex
	x8, PCle, 8000 MB/s
Physical Dimensions	4.4" x 6.6"
Connectors	Four (x4) mini-SAS HD external connector (SFF8644)
Brackets	Full height
Cable Support	Passive Copper, Active Copper
Operating Voltage	+12V +/-8%; 3.3V +/-9%
PCI Power (Nominal)	28.6W
Device Support	1024 Non-RAID SATA/SATA devices per controller
Environmental	Operating: 0oC to 55oC
	Storage: -45°C to 105°C
	5 to 90% Non-condensing
	Airflow: 200 LFM
MTBF	>1,500,000 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 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 Information

9300-16 Single Pack

MPN: H5-25520-00 OPN: LSI00342

