For applications demanding high levels of storage connectivity and performance, 8 and 4-port 12Gb/s SAS HBAs connect servers and appliances to internal and external storage, achieving over 1 million IOPS.

Overview

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. 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, 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.
### Product Brief

**SAS9300-8e**

- **IO Controller**: SAS 3008 Fusion MPT 2.5
- **Port Count**: 8 port, external
- **Connectors**: Mini SAS HD SFF8644 Two (x4)
- **Storage Connectivity Data**: 12Gb/s SAS 3.0 Compliant
- **SAS Bandwidth**: Half Duplex (x8 wide bus) 9600 MB/s
- **Port Configurations**: 8 ea, x1 ports (individual drives)
- **Host Bus**: x8 lane, PCIe 3.0
- **PCI Data Burst**: 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
- **LED Management**: Reference SFF-8485 (SGPIO) compliant
- **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
- **MTBF**: >2,800,000 hours
- **Regulatory Certifications**: EMC: Class B-US (CFR 47, P15B); RoHS; WEEE
- **OS Support**: Microsoft Windows, Linux (SuSE , Red Hat), Solaris, VMWare, FreeBSD; See www.lsi.com/support for details on versions
- **Warranty**: 3 years, free advanced technical support, advanced replacement option

**SAS9300-8i**

- **IO Controller**: SAS 3008 Fusion MPT 2.5
- **Port Count**: 8 port, internal
- **Connectors**: Mini SAS HD SFF8643 Two (x4)
- **Storage Connectivity Data**: 12Gb/s SAS 3.0 Compliant
- **SAS Bandwidth**: Half Duplex (x8 wide bus) 9600 MB/s
- **Port Configurations**: 8 ea, x1 ports (individual drives)
- **Host Bus**: x8 lane, PCIe 3.0
- **PCI Data Burst**: 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
- **LED Management**: Reference SFF-8485 (SGPIO) compliant
- **Operating Voltage**: +12V +/-8%; 3.3V +/-9%
- **PCI Power (Nominal)**: 13W
- **Device Support**: 1024 Non-RAID devices
- **Environmental**: Operating: 0°C to 55°C; Storage: -45°C to 105°C
- **MTBF**: >2,800,000 hours
- **Regulatory Certifications**: EMC: Class B-US (CFR 47, P15B); RoHS; WEEE
- **OS Support**: Microsoft Windows, Linux (SuSE , Red Hat), Solaris, VMWare, FreeBSD; See www.lsi.com/support for details on versions
- **Warranty**: 3 years, free advanced technical support, advanced replacement option

**SAS9300-4i4e**

- **IO Controller**: SAS 3008 Fusion MPT 2.5
- **Port Count**: 4 port ext/4 port int
- **Connectors**: Mini SAS HD SFF8644 One (x4), SFF8643 One (x4)
- **Storage Connectivity Data**: 12Gb/s SAS 3.0 Compliant
- **SAS Bandwidth**: Half Duplex (x8 wide bus) 9600 MB/s
- **Port Configurations**: 8 ea, x1 ports (individual drives)
- **Host Bus**: x8 lane, PCIe 3.0
- **PCI Data Burst**: 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
- **LED Management**: Reference SFF-8485 (SGPIO) compliant
- **Operating Voltage**: +12V +/-8%; 3.3V +/-9%
- **PCI Power (Nominal)**: 14.2W
- **Device Support**: 1024 Non-RAID devices
- **Environmental**: Operating: 0°C to 55°C; Storage: -45°C to 105°C
- **MTBF**: >2,800,000 hours
- **Regulatory Certifications**: EMC: Class B-US (CFR 47, P15B); RoHS; WEEE
- **OS Support**: Microsoft Windows, Linux (SuSE , Red Hat), Solaris, VMWare, FreeBSD; See www.lsi.com/support for details on versions
- **Warranty**: 3 years, free advanced technical support, advanced replacement option

**SAS9300-4i**

- **IO Controller**: SAS 3004 Fusion MPT 2.5
- **Port Count**: 4 port internal
- **Connectors**: Mini SAS HD SFF8643 One (x4)
- **Storage Connectivity Data**: 12Gb/s SAS 3.0 Compliant
- **SAS Bandwidth**: Half Duplex (x4 wide bus) 4800 MB/s
- **Port Configurations**: 4 ea, x1 ports (individual drives)
- **Host Bus**: x8 lane, PCIe 3.0
- **PCI Data Burst**: Half Duplex x8, PCIe 3.0, 8000 MB/s
- **Form Factor**: Low Profile
- **Physical Dimensions**: 2.6” x 6.0”
- **Brackets**: Full Height and low profile vented
- **Cable Support**: Passive Copper
- **LED Management**: Reference SFF-8485 (SGPIO) compliant
- **Operating Voltage**: +12V +/-8%; 3.3V +/-9%
- **PCI Power (Nominal)**: 14.2W
- **Device Support**: 1024 Non-RAID devices
- **Environmental**: Operating: 0°C to 55°C; Storage: -45°C to 105°C
- **MTBF**: >2,800,000 hours
- **Regulatory Certifications**: EMC: Class B-US (CFR 47, P15B); RoHS; WEEE
- **OS Support**: Microsoft Windows, Linux (SuSE , Red Hat), Solaris, VMWare, FreeBSD; See www.lsi.com/support for details on versions
- **Warranty**: 3 years, free advanced technical support, advanced replacement option

### Ordering Information

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