

# LSI SAS 9201-16i

16-Port, 6Gb/s SAS+SATA to PCI Express Host Bus Adapter



#### **Key Features**

- 16 internal 6Gb/s SAS+SATA ports
- 8 lanes, PCI Express 2.0
- Standard height form factor
- Four x4 internal mini-SAS connectors (SFF8087)
- LSISAS2116 6Gb/s SAS+SATA Controller
- Supports up to 512 SAS or SATA end devices
- Supports SSDs, HDDs and tape drives

#### **Key Advantages**

- Maximum internal connectivity and performance in a standard height form factor
- 8 lanes of PCI Express 2.0 provides fast signaling for high-bandwidth applications
- High performance with 6Gb/s data transfer rates

16-Port SAS HBA Provides Maximum Connectivity and Performance for External JBOD and External RAID Enclosures

#### **Overview**

The LSI SAS 9201-16i, quad port, host bus adapter provides maximum connectivity and performance for servers and appliances with internal storage. The LSI SAS 9201-16i provides 16 lanes of 6Gb/s SAS connectivity to 8 lanes of PCI Express 2.0. Performance is based on the LSISAS2116 IO controller that highly integrates the latest enhancements in PCI Express and SAS technology. The HBA supports up to 512 SAS or SATA devices.

The LSI SAS 9201-16i has four (x4) internal mini- SAS connectors (SFF8087) enabling a 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 430,000 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.

## **SAS Leadership**

LSI offers the broadest SAS product portfolio in the industry with true end-to-end solutions including controllers, expanders, active-active multiplexers, ROCs, host bus adapters, RAID solutions, and external storage. LSI's proven SAS core has completed extensive stress and interoperability testing resulting in the industry's most robust, interoperable solution.

LSI has supplied leading edge serial technology to systems throughout the world for over seven generations, making LSI the most experienced enabler of serial interconnect for storage in the world. Integrators can be assured that their LSI adapter is providing the most advanced and robust serial technology available.

## **Fusion MPT Architecture**

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

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LSI SAS 9201-16i Host Bus Adapter		
I/O Controller	LSISAS2116, Fusion MPT 2.0	
Storage Connectivity; Data Transfer Rates	16 ports; 6Gb/s SAS 2.0 compliant	
SAS Bandwidth	Half Duplex	
	600 MB/s per lane	
Port Configurations	16 ea, x1 ports (individual drives)	
	4 ea, x4 wide ports	
Host Bus	x16 lane, PCI Express 2.0 compliant	
PCI Data Burst Transfer Rates	Half Duplex	
	x8, PCIe, 4000 MB/s	
Physical Dimensions	Full Height (4.2" x 6.6")	
Connectors	Four mini-SAS internal connectors (SFF8087)	
Brackets	Full height	
Cable Support	Passive Copper	
PCI Card Type	3.3 V Add-in Card	
Operating Voltage	+12V +/-8%; 3.3V +/-8%	
PCI Power (Nominal)	16W typical (Airflow min 200 LFM)	
Device Support	512 Non-RAID SAS/SATA devices	
Environmental	Operating	Storage
	0oC to 55oC	-45°C to 105°C
	5 to 90% Non-condensing	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); 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	
Warranty	3 years; with advanced replacement option	
	Free technical support at http://www.lsi.com/channel/support	

# **Ordering Information**

SAS 9201-16i SGL

MPN: H5-25373-00 OPN: LSI00244

