LSI

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Product Brief

LSI SAS 9202-16e

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





LSI SAS 9202-16e

KEY FEATURES

- 16 external 6 Gb/s SAS+SATA ports
- 16 lanes, PCI Express 2.0
- Low profile form factor design
- Four x4 external HD mini-SAS connectors (SFF8644)
- Two LSISAS2008 6Gb/s SAS+SATA Controllers
- Supports up to 1024 SAS or SATA end devices
- Supports SSDs, HDDs and tape drives

KEY ADVANTAGES

- Maximum connectivity and performance in a low profile form factor
- 16 lanes of PCI Express 2.0 provides faster 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 in a Low Profile Form Factor

Overview

The LSI SAS 9202-16e, quad port, host bus adapter provides high performance for high end servers and high performance storage applications. The LSI SAS 9202-16e provides 16 lanes of 6Gb/s SAS matched with 16 lanes of PCI Express 2.0 5Gb/s performance to eliminate bottlenecks. Internal performance is based on dual LSISAS2008 IO controllers that highly integrate the latest enhancements in PCI Express and SATA technology and supports up to 1024 SAS or SATA devices.

The LSI SAS 9202-16e has four (x4) external HD mini SAS connectors (SFF8644) enabling a low profile 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 700,000 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.

LSI SAS 9202-16e Host Bus Adapter		
IO Controller	Two, LSISAS2008/ 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	
	2ea , x8 wide ports	
Host Bus	x16 lane, PCI Express 2.0 compliant	
Physical Dimensions	Low Profile (2.7" x 6.6")	
Connectors	Four HD mini-SAS external connectors (SFF8644)	
Brackets	Full height and low profile	
Cable Support	Passive, Active Copper	
PCI Card Type	3.3 V Add-in Card	
Operating Voltage	+12V +/-8%; 3.3V +/-8%	
PCI Power (Nominal)	17W typical (Airflow min 200 LFM)	
Device Support	1024 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	> 1,000,000 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	

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