

LSI SAS 9217-4i4e

8-port, 6Gb/s SAS+SATA to PCI Express Host Bus Adapter





LSI SAS9217-4i4e

Key Features:

- 4 Internal and 4 external 6Gb/s SAS+SATA norts
- 8 lanes, PCI Express 3.0
- Low profile form factor design
- One x4 mini-SAS internal connector (SFF8087)
- One x4 mini-SAS external connector (SFF8088)
- LSISAS2308 6Gb/s SAS+SATA Controller
- Supports up to 256 SAS or SATA end devices
- Supports SSDs, HDDs and tape drives
- Offers Integrated RAID (0, 1, 1E and 10)

Key Advantages:

- Provides state of the art connectivity for servers and appliances with internal storage and the ability to add external storage
- 8 lanes of PCI Express 3.0 provides fast signaling for high-bandwidth applications
- High performance with 6Gb/s data transfer rates

8-port SAS HBA Provides High Performance for Internal and External Storage Connections

Overview

LSI SAS 9217-4i4e host bus adapter provides a high performance solution for internal and external storage connections in 1U/2U servers and workstations. The LSI SAS 9217-4i4e provides 8 lanes of 6Gb/s SAS and is matched with 8 lanes of PCI Express 3.0, 8Gb/s performance to eliminate any performance bottlenecks. Performance is based on the LSISAS2308 6Gb/s SAS IO Controller that highly integrates the latest enhancements in PCI Express and SAS technology.

The LSI SAS 9217-4i4e has one (x4) internal mini-SAS connector (SFF8087), one (x4) external mini-SAS connector (SFF8088), and provides SAS and SATA data transfer rates of 1.5, 3, and 6Gb/s per lane. The LSI SAS 9217-4i4e offers Integrated RAID (R0,1,10,1E) support. Due to simplifying the configuration options and offering a IR firmware support for its 6Gb/s SAS host adapters, the LSI Integrated RAID solution provides a low cost solution for the server or workstation market that requires the extra performance, storage capacity, and/or redundancy of a RAID configuration.

The LSI Integrated RAID solution includes the following RAID features:

- The Integrated Mirroring solution, which provides features of RAID 1
- The Integrated Mirroring + Striping solution, which provides features of RAID 10
- The Integrated Mirroring Enhanced solution, which provides features of RAID 1
- Enhanced (RAID 1E)
- The Integrated Striping solution, which provides features of RAID 0

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.

IO Controller	LSI SAS2308/ Fusion MPT 2.0	
Storage Connectivity Data Transfer Rates	8 ports, 6Gb/s SAS 2.1 Compliant	
SAS Bandwidth	Half Duplex	
	600 MB/s per lane	
Port Configurations	4 ea, x1 internal ports (individual drives)	
	4 ea, x1 external ports	
	1ea, x4 external wide port	
Host Bus	x8 lane, PCI Express 3.0 compliant	
PCI Data Burst Transfer Rates	Half Duplex	
	x8, PCIe, 8000 MB/s	
Physical Dimensions	Low Profile (2.6" x 6.6")	
Connectors	One x4 internal mini-SAS (SFF8087), One x4 external mini-SAS (SFF8088)	
Brackets	Full height and low profile	
Cable Support	Passive Copper	
PCI Card Type	3.3 V Add-in Card	
Operating Voltage	+12V +/-8%; 3.3V +/-9%	
PCI Power (Nominal)	9.8W	
Device Support	256 SAS+SATA devices	
Integrated RAID (IR)	14 spread across 2 volumes	
	RAID 0 10 per volume	
	RAID 1 2 per volume plus hot spare	
	RAID 1E 10 per volume	
	RAID 10 10 per volume	
Environmental	Operating	Storage
	0°C to 55°C	-45°C to 105°C
	5 to 90% Non-condensing	5 to 90% Non-condensing
MTBF	>2,000,000	,
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/channel/ChannelDownloads for details on versions and support	
Warranty	3 years; with advanced replacement option	
	Free technical support at http://www.lsi.com/channel/support	
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For more information and sales office locations, please visit the LSI website at: www.lsi.com

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