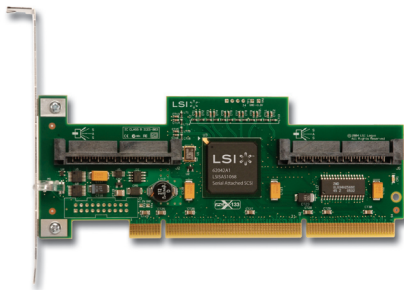


LSI SAS3080X-R

3Gb/s SAS Eight-Port Host Bus Adapter



APPLICATIONS

- High performance workstations
- Mid to high-end servers
- Internal arrays with striping and mirroring

TYPICAL USES

- Four drive internal configuration running RAID 10E
- Small form-factor internal drive expansion
- SAS drives: mission critical operations
- SATA drives – data archive and backup

FEATURES

- 3Gb/s per port PCI-X HBA
- 2 x4 internal SFF8484 connectors
- Low-profile MD2 form factor PCI card
- Connects to both SAS and SATA HDDs and tape drives
- Allows more than 122 total end-point devices
- Fusion-MPT™ architecture providing over 140,000 I/Os per sec
- Integrated RAID 0, 1, 1E and 10E
- Supports all major operating systems

Providing Unsurpassed Internal Storage Capacity and Performance

KEY ADVANTAGES

- Greatest internal throughput from two wide 4-Phy SAS connectors
- Ultimate SAS/SATA flexibility from eight internal ports
- 3Gb/s per port delivers 2400MB/s to enclosures
- Superior performance and data protection with integrated RAID 0, 1, 1E and 10E

Industry's First 8-Port Internal SAS Controller

The LSI SAS3080X-R card enables high-throughput control to internal direct attach storage (DAS) arrays through 8 internal 3Gb/s ports, driving any number of Serial Attached SCSI (SAS) and Serial ATA (SATA) devices. The host bus adapter supports internal server storage HDDs and enclosures by connecting a 64-bit PCI-X 133MHz bus with 2 internal x4 SFF 8484 SAS connectors. The SAS3080X-R provides 2400MB/s throughput; a significant advantage over parallel SCSI and the maximum internal bandwidth available for both SAS and SATA drives.

Outperforming the Competition with LSI SAS Integrated RAID

As the performance leader in SCSI/SAS controllers, the LSI SAS3080X-R leverages the LSI SAS1068 controller ASIC's advanced Fusion-MPT architecture. While other SAS cards drive large RAID software stacks between the host CPU and controller, the LSI SAS3080X-R HBA utilizes the embedded CPU in the LSI SAS1068 ASIC to perform integrated RAID 0, 1, 1E and 10E operations. By avoiding the PCI-X bus traffic and reducing RAID code overhead, the LSI SAS3080X-R offers the greatest internal READ/WRITE performance available today.

Most Flexibility From An Internal Storage Array

Flexibility is a key advantage of SAS when considering compatibility with either SAS or SATA drives. LSI maximizes flexibility by offering eight internal SAS/SATA drive connects, allowing integrators to build in large capacity tiered storage arrays without leaving the server. By offering two SFF8484 connectors, system builders can run wide SAS ports to internal SFF or full size drive enclosures. The flexibility of eight SAS ports controlling an internal SAS/SATA drive configuration saves cost while providing the necessary performance for mission critical operation.

SAS Connectivity from the Serial IO Experts

The LSI SAS3080X-R is a part of the first generation of Serial Attached SCSI controllers. Successful implementation of these serial adapters is best served with supplier experience and knowhow. Having a supplier who fully understands the physical, electrical and protocol requirements of each new serial standard will reduce the time for system bring-up and offer greater flexibility in system topography.

LSI has supplied leading edge serial technology to systems throughout the world for over six 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.

Operating System Support

The LSI SAS3080X-R HBA supports all key 32-bit

and 64-bit versions of Microsoft Windows, Linux, Solaris, Netware as well as the x86, IA64, SPARC, AMD64 and EM64T system architectures. All OS drivers are backed by extensive testing and validation to ensure optimum

system performance. For a list of the most current supported drivers, visit www.lsi.com/support.

LSI SAS3080X-R HOST BUS ADAPTER		
PCI Bus	64-bit, 133MHz PCI-X, Backward Compatible with PCI	
PCI Modes	Bus Master DMA	
PCI Data Burst Transfer Rates	132MB/s (PCI 32-bit bus @ 33MHz) 264MB/s (PCI 64-bit bus @ 33MHz) 528MB/s (PCI 64-bit bus @ 66MHz) 800MB/s (PCI-X 64-bit bus @ 100MHz) 1064MB/s (PCI-X 64-bit bus @ 133MHz)	
SAS Bandwidth	Half Duplex Single lane – 300MB/s Wide port (2-lanes) – 600MB/s Wide port (3-lanes) – 900MB/s Wide port (4-lanes) – 1200MB/s 2 x 4 lanes – 2400MB/s	Full Duplex Single lane – 600MB/s Wide port (2-lanes) – 1200MB/s Wide port (4-lanes) – 2400MB/s
PCI Card Type	3.3V Add-in Card	
PCI Voltage	+3.3V ±0.3V	
PCI Form Factor	6.6" x 2.5" (MD2 Low-Profile)	
PCI Power	7.5W	
Bracket	Full Height and Low-Profile	
Certification Level	PCI 2.2, PCI-X 1.0a, PCI-X 2.0 Model	
SAS Bus	Eight external 3Gb/s SAS or SATA Ports	
SAS Processor	LSI SAS1068	
Connectors	Internal Two SFF8484 SAS connectors	External N/A
Max. No. of Physical Devices	122	
Integrated RAID Levels	RAID 0, 1, 1E and 10E	
MTFB	>200,000 Hours	
Compliances	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	
Software Support	Drive monitoring, HBA management, drive topology	
MyStorage™	Microsoft® Windows® 2000, Server 2003 32-bit and 64-bit (x86 and AMD64, XP)	
OS Support	Red Hat® Linux® RHEL 3	Novell® NetWare® SuSE® Linux®/SLES Sun SPARC Solaris 2.6 thru 2.10
Ordering Information	LSI SAS3080X-R Kit – P/N: LSI00117 LSI SAS3080X-R 5-pack – P/N: LSI00059-F	
Warranty	3 years, advanced replacement option, free advanced technical support at www.lsi.com/support	



For more information and sales office locations, please visit the LSI web sites at: lsi.com lsi.com/contacts

North American Headquarters
Milpitas, CA
T: +1.866.574.5741 (within U.S.)
T: +1.408.954.3108 (outside U.S.)

LSI Europe Ltd.
European Headquarters
United Kingdom
T: [+44] 1344.413200

LSI KK Headquarters
Tokyo, Japan
Tel: [+81] 3.5463.7165

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