

LSI LOGIC®

The Industry's First IOP-based, SATA II RAID Adapter Offers High Data Throughput, Extensive Fault Tolerance Capabilities and Advanced Management Utilities

Key Advantages

- Supports SATA II 3Gb/s and SATA Extensions
- Port Multiplier Technology - Supports 32 Drives with Eight, 1-to-4-Port Multipliers
- High Performance Throughput
- Extensive Fault Tolerant Capabilities
- Online Capacity Expansion



A Cost-Effective Serial ATA Solution

Developed for intensive storage applications, the MegaRAID SATA 300-8X provides speed and bandwidth for cost sensitive environments. Leveraging a stable, OEM-proven RAID firmware core, the MegaRAID SATA 300-8X offers unequalled fault tolerance capabilities, superior RAID performance, and reliable data availability.

Migrating to the Next Generation

Fully compliant with SATA I and SATA II, the MegaRAID SATA 300-8X includes Native Command Queuing, Port Multiplier and Enclosure Management support. MegaRAID SATA II solutions offer a proven software stack, consistent management utilities and an easy migration path to the next generation of SCSI product, Serial Attached SCSI (SAS). With the common interface of MegaRAID software, users can seamlessly upgrade to a SAS system by simply moving the SATA drives to an LSI Logic SAS controller.

High Performance Technology

The point-to-point scalable MegaRAID SATA 300-8X PCI-X RAID adapter offers data transfer speeds of up to 3Gb/s per port. Delivering a powerful coupling of technology with the Intel PCI-X Xscale IOP331 integrated I/O processor and Marvell 88SX6081 PCI-X SATA interface, the MegaRAID SATA 300-8X powers world-class SATA II storage solutions.

OS Driver Availability

The MegaRAID SATA 300-8X supports a wide range of operating system drivers including Microsoft Windows, Linux, Netware, SCO UnixWare, and SCO OpenServer. LSI Logic drivers optimize the RAID interface providing the highest data transfer rates and data consistency checks on all mirrored drives.

Powerful RAID Management Utilities

The MegaRAID SATA 300-8X management software suite consists of a complete set of tools including two BIOS-level utilities (MegaRAID BIOS Configuration Utility and WebBIOS), character-based MegaManager, and graphically powered Power Console Plus (PCP). This selection of powerful RAID management tools provides the capability to efficiently configure, monitor, and manage RAID systems locally or over a network.

Visit: <http://lsiologic.com/reseller> for partner program details.

ENVIRONMENTS

Entry-level to mid-range servers and network storage applications requiring a cost-effective scalable SATA interface

TYPICAL USES

Digital video editing, near line storage, workgroup server, backup and restoration

FEATURES

- Half-size PCI form factor
- Fast initialization for quick array setup
- Intel® XScale™ IOP331 I/O processor on-board
- Marvell 88SX6081 PCI-X SATA controller on-board
- Serial ATA 1.5Gb/s and 3Gb/s drive mode support
- Re-flashable BIOS
- 48-bit LBA support
- BIOS Boot Specs (BBS) support
- Post Memory Management (PMM) support
- FlexRAID® support
 - Online capacity expansion
 - Online RAID level migration
- Ships with 128MB embedded DDR SDRAM



MegaRAID® SATA 300-8X

EIGHT-PORT PCI-X SERIAL ATA RAID STORAGE ADAPTER

Visit the LSI Logic web site at:
<http://lsilogic.com/storage>

LSI Logic NA Headquarters

+1 866-574-5741

<http://lsilogic.com>

U.S. Western Region

+1 818-889-6341

U.S. Central Region and Canada

+1 952-921-8363

U.S. Eastern Region

+1 781-290-0244

Advanced Technical Support

North / South America

+1 800-633-4545

+1 678-728-1250

<http://lsilogic.com/support>

support@lsil.com

LSI Logic European Headquarters

+44 1344-413200

UK / Ireland / Nordic Region /
South Africa

+44 1344-413-115

France / Spain / Portugal

+33 14601-1340

Belgium/Netherlands/Luxembourg

+31 402-96-2111

Italy +39 039-687-3705

Central / Eastern Europe

+49 89-45833-312

Israel +49 7032-991373

Europe Advanced Technical Support

English +44 1344-413-441

Deutsch +49 89-45833-338

<http://lsilogic.com/support>

eurosupport@lsil.com

All Other EMEA

+49 89-45833-156

LSI Logic

Pacific Asia Headquarters

Taiwan +866 2-2718-7828

Tokyo +81 3-5463-7821

Korea +82 2528-3400

Hong Kong +852 2192-1789

Singapore / South Pacific

+65 6334-9080

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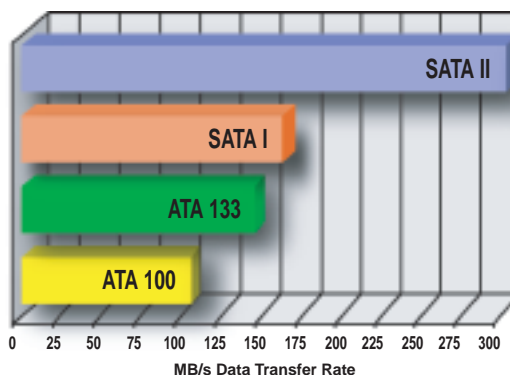
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LSI Logic MegaRAID SATA 300-8X	
Product Advantages	Supports SATA I and SATA II specs; increasing performance, reliability, flexibility, manageability and availability in storage environments
Solution Provided	High performance eight-port PCI-X SATA RAID adapter providing high data throughput, reliability, and availability in cost sensitive and near line servers
Environment	Entry-level to mid-range servers and network storage applications requiring a cost-effective scalable SATA RAID interface

Internal Connectors	Eight internal Serial ATA 7-pin, 1 meter cables	
Device Support	Combined with Port Multiplier technology, the MegaRAID SATA 300-8X supports up to 32 drives with eight 1-to-4 Port Multipliers implemented in the chassis.	
Data Transfer Rates	Up to 3Gb/sec per port	
Cache Memory	128MB embedded DDR333 SDRAM	
Processor	Intel® XScale™ IOP331 integrated I/O processor	
Bus Type	64-bit, 133MHz PCI-X host interface	
Physical Dimensions	Half-Size PCI (short card) 6.6" x 4.2" or 16.78cm x 10.67cm	
Operating Temperature	0-60°C (w/o BBU card), 0-45°C (w/BBU card)	
Operating Voltage	5.00V ±0.25V	
Warranty	3 years, free advanced technical support, advance replacement option	
Regulatory Certification	CE, FCC, C-tick, ETL, VCCI, BSMI and RRL	
RAID and Fault Tolerant Features	<ul style="list-style-type: none"> • RAID levels 0, 1, 5, 10, and 50 • Variable strip size support • Flashable BIOS • 40 logical drive support • Drive hot plug support • Patrol read • Automatic rebuild of hot spare drives • FlexRAID power fail option • Online RAID level migration • Battery backup support (optional) 	<ul style="list-style-type: none"> • Fast initialization for quick array setup • Enhanced error handling and reporting • Port Multiplier support • Native command queuing • 48-bit LBA for drives greater than 137GB • Configuration on Disk (COD)/NVRAM • S.M.A.R.T. support • Online capacity expansion • SAF-TE enclosure management • Staggered drive spin-up
RAID Management	<ul style="list-style-type: none"> • Online Utilities: <ul style="list-style-type: none"> – Power Console Plus (GUI-based) – MegaManager (character-based) 	<ul style="list-style-type: none"> • Pre-Boot BIOS Utilities: <ul style="list-style-type: none"> – MegaRAID BIOS Configuration Utility (character-based) – WebBIOS Configuration Utility (browser-based)
OS Support	<ul style="list-style-type: none"> • Microsoft™ Windows® XP/2000/Server 2003 • Red Hat® AS Linux® • Novell® NetWare® • SCO® OpenServer 	<ul style="list-style-type: none"> • Suse® Professional Linux® • Suse® Linux® Enterprise Server (SLES) • SCO® UNIXWare
System Support	<ul style="list-style-type: none"> • IA-32 (or x-86) • AMD64 	<ul style="list-style-type: none"> • IA-64 • Intel® EM64T

PERFORMANCE ADVANTAGE

Double your speed with SATA II, reaching up to 300MB/s (3Gb/s) data transfer speeds. The MegaRAID SATA 300-8X provides the industry's most cost-effective and robust Serial ATA RAID solution. LSI Logic is leading the market in advanced storage solutions.



MB/s Data Transfer Rate