



LSI SAS6100 Series 6Gb/s SAS Switch

KEY APPLICATIONS

- Rack mount server and storage clusters
- Cloud and Mega Data Center Environments
- SMB and Departmental

FEATURES

- Simple, easy integration
- Industry-standard SAS infrastructure
- Enables direct-attached –storage to be scaled as a low-cost storage network
- 16 SAS ports (4 SAS phys per port)
- 24Gb/s SAS connections, aggregate bandwidth of 384Gb/s
- 1U ½ width and 1U full-width form factors
- SAS and SATA connectivity >1,000 devices
- T10 zoning compliant
- In-band and out-of-band management utility
- OS independent
- External laptop-style power supply

Overview

LSI SAS6160 (1U ½ width) and the LSI SAS 6161 (1U full-width) extend the capabilities of SAS in direct-attached storage (DAS) environments by allowing multiple servers to connect to one or more independent storage systems. LSI 6Gb/s SAS switches are designed to provide customers with a low-cost and easy to use storage networking option for rack mount server and storage installations in cloud computing, mega datacenter and small-to-medium sized business environments.

By enabling storage resources to be shared across multiple hosts, and managed effectively through SAS zoning, LSI SAS Switch products help customers to maximize storage resource utilization, eliminate islands of storage and simplify storage management, backup and upgrades.

Simple, plug-and-play integration further enhanced by having complete SAS management available through an embedded utility. The embedded utility is able to modify port configuration, including zoning, firmware management and viewing the topology of the SAS domain. It also offers flexibility to reconfigure without reconnecting cables or adding hardware.

As the SAS physical layer supports both SAS and Serial ATA (SATA), the SAS Switch enables single switching infrastructure to address multiple classes of storage supporting a mix of SAS and SATA storage enclosures.



LSI SAS6160

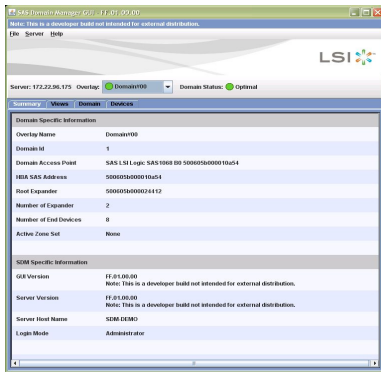


LSI SAS6161

LSI 6160 SAS SWITCH

SAS/SATA Ports	Sixteen x4 Wide Ports
Port Configuration	x4 Wide Port
Performance	Non-blocking 384Gb/s aggregated throughput
Max Number of SAS Addresses	1,000
SAS Connector Configuration	Sixteen Mini-SAS (SFF8088)
Visual Indicators	Activity and Fault/Status LEDs for Each Port
Management Interfaces	SAS in-band and Ethernet out-of-band

A single SAS Switch can be used in a normal configuration, or two switches can be configured for a High Availability (HA) application where both ports of the storage are connected using redundant paths. If one of the switches fails, the second one will continue normal operation.



SSM SOFTWARE GUI

SOFTWARE FEATURES

- Embedded SDM GUI & CLI management utility
- SAS in-band and Ethernet out-of-band management interface
- T10 zoning
- Switch discovery, self configuration
- Configuration/topology validation
- Event logging and error reporting
- SES support

LSI 6160 SAS SWITCH SPECIFICATIONS

SAS Compliances	SAS-2.0	
SAS Protocols	SSP, STP and SMP	
SAS Ports Configuration	Sixteen x4 Phy Wide	
SAS Bandwidths	Half Duplex Wide Port (4 phys) – 24Gb/s	Full Duplex Wide Port (4 phys) – 48Gb/s
Storage Types	1.5, 3.0 or 6.0Gb/s SAS and/or SATA	
Zoning	T10 Zoning	
Zone Groups & Zone Sets	Host Based SDM Up to 4096 zone groups (248 zone groups per zone set) Up to 4096 zone sets	Embedded SDM Up to 192 zone groups Up to 16 zone sets
Management Interface	SAS in-band or 10/100 Ethernet out-of-band	
Firmware	Field upgradeable	
Connectors	SAS 16 SFF8088 (Mini-SAS)	Ethernet RJ-45
LED Indicators	Activity – 1 per Connector	Link/Fault – 1 per Connector
Real time clock	Battery backup RTC	
Power Consumption	25 watts nominal (no active cables); 50 watts max	
Power Supply	External 12 Volt ±5% 100-240 VAC @ 50/60Hz	
Fans	Support for two fans	
Size	1.65" x 8" x 10" (Two will fit in a standard 1U rack space) 1U full-width alternative	
Environments	Operating Temperature: 5°C to 50°C Relative Humidity: 5 to 90% Non-condensing	Storage Temperature: -45°C to 105°C Relative Humidity: 5 to 90% Non-condensing
MTBF	640,000 hours	
Compliances	FCC Class B; Canada ICES-003 Class B, CE Europe (EN55022/EN55024); Japan VCCI Class B)	
Warranty	One year	
Other Model Options	Dual redundant power supplies, QSFP SAS connectors	

Warranty – For more than 25 years, LSI has been providing high-performance storage solutions to leading OEMs worldwide. Using only the highest quality components, the LSI SAS switch is assembled in world-class facilities to assure superior product reliability and performance. Because of stringent quality management programs, the LSI SAS Switch carries a one-year warranty.

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

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