



A51606-SW

16-Ports (64-Lanes) 6Gb/s SAS Switch



The Astek A51606-SW-01 is a 1U wide, 16-port (64-lanes), 6Gbps Gen II SAS switch. The switch extends the capabilities of SAS in direct-attached storage (DAS) environments by allowing multiple servers to connect to one or more independent storage systems. Astek's A51606-SW-01 switch is 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 data-center and small- to medium-sized business (SMB) environments. Two of the x4 ports support active cables including copper up to 20 meters and optical up to 100 meters.

By enabling storage resources to be shared across multiple hosts, and managed effectively through SAS zoning, Astek 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 is 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.

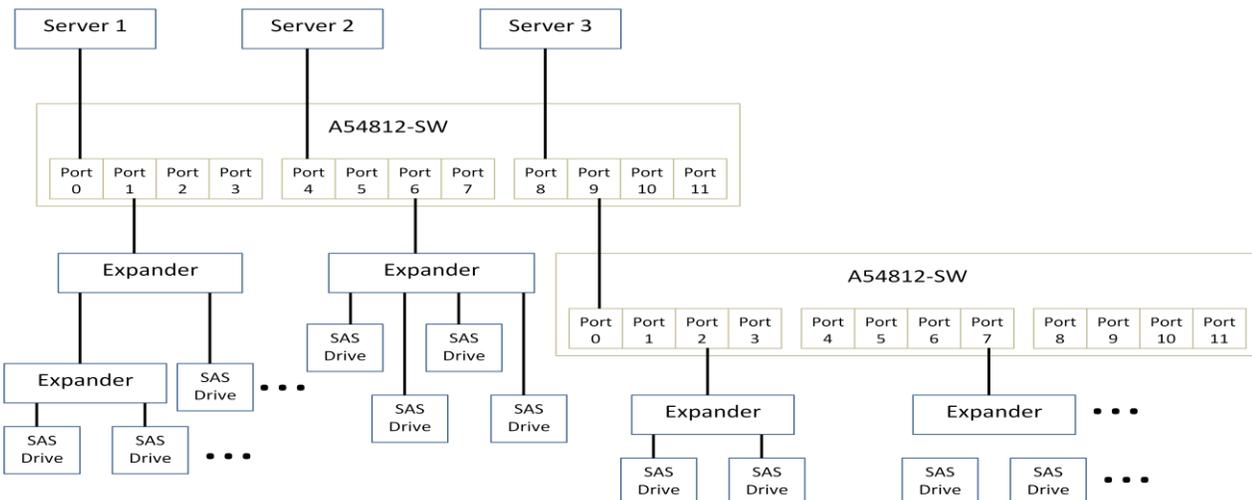
A single SAS Switch can be used in a normal configuration, or two switches can be configured for a High Availability (HA) application where both ports of the storage are connected using redundant paths. If one of the switches fails, the second one will continue normal operation.

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 (64-lanes)
 - 4 SAS phys per port
 - 2 ports support optical cable up to 100 meters
- 24Gb/s SAS connections, aggregate bandwidth of 384Gb/s
- 1U wide form factors
- SAS and SATA connectivity >1,000 devices
- T10 zoning compliant
- Out-of-band management utility
- OS independent





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Technical Specifications

SAS Compliances	SAS-2.0, 6Gbps	
SAS Protocols	SSP,STP and SMP	
SAS Ports Configuration	Sixteen x4 Phy Wide, 6Gps	
SAS Bandwidths	Half Duplex Wide Port(4Phys)-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	Embedded SDM Up to 192 zone groups Up to 16 zone sets	
Management Interface	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	100-240 VAC @ 50/60Hz	
Fans	Support for two fans	
Size	1.65" x 19" x 10" (full width alternative)	
Environments	Operating Temperature: 5°C to 55°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 VCCL Class B)	

WARRANTY

Astek products are assembled and tested in world-class facilities to assure superior product reliability and performance.

About Astek Corporation

Astek manufactures storage products for embedded markets including medical, telecommunications and military applications. In addition to Host Bus Adapters, Astek also supplies Serial Attached SCSI solutions including edge and fan-out expanders.

For more information please visit the Astek web site at:

www.astekcorp.com

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