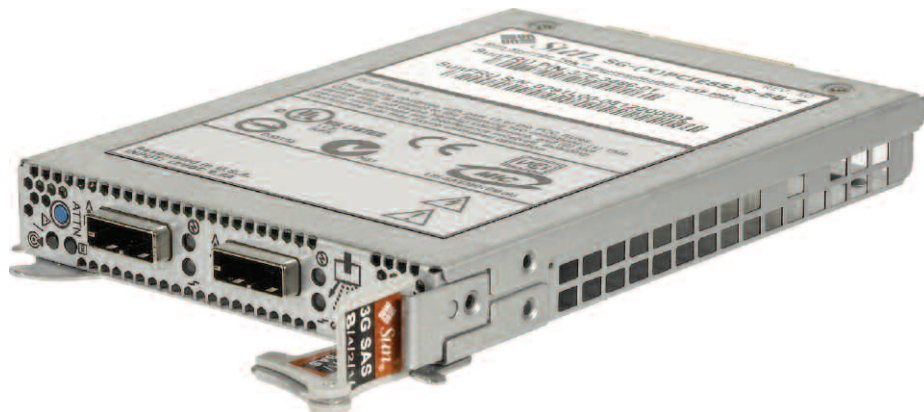


Sun StorageTek™ SAS ExpressModule™ Host Bus Adapter

SAS connectivity for Sun blade servers



Meeting the requirements of large scale external storage, the Sun StorageTek™ SAS ExpressModule™ Host Bus Adapter (HBA) addresses the need for SAS connectivity. The StorageTek SAS ExpressModule HBA, supporting up to 122 devices, is ideal for today's data centers, leveraging existing SCSI infrastructure for investment protection and ease of migration.

Highlights

- 3 Gb/s per port
- Two x4 external miniSAS connectors (SFF-8088)
- Connects to both SAS and SATA HDDs
- Allows up to 122 end-point devices
- Enterprise-class HBAs ideal for large or mixed OS environments
- Features the award-winning Fusion-MPT HBA architecture from LSI
- Simultaneous on-board support for Sun Fire™ x64/x86 BootBIOS (Windows and Linux) and Solaris™ SPARC OpenBoot

The StorageTek SAS ExpressModule HBA provides outstanding performance by matching 8-lanes of PCIe with 8-lanes 3 Gb/s SAS. The serial interface allows for point-to-point connection enabling higher performance, increased aggregate bandwidth, higher availability with dual-ported drives, and enhanced reliability when compared to parallel SCSI.

The SAS interface provides universal interconnect with Serial ATA (SATA), while still offering logical SCSI compatibility along with the reliability, performance, and manageability available in SAS drives. Common electrical and physical connection allows for the application to dictate the technology of choice for disk drives.

The StorageTek™ SAS ExpressModule™ HBA supports multiple OS environments on Sun servers.

High-performance storage connectivity

The StorageTek SAS ExpressModule HBA is ideal for Sun customers who require an enterprise-level SAS solution for interconnecting external storage to a Sun Blade system. The HBA provides the flexible functionality and high performance required for storage implementations.

ExpressModule

Sun ExpressModule HBAs provide the customer with key advantages including high availability, serviceability, reliability, and lower TCO in a industry standard form factor.

- **High levels of availability and serviceability** – The StorageTek SAS ExpressModule HBA's enclosed chassis provides the highest availability and customer serviceable through hot plug and hot insertion requiring no Blade server downtime.

- **Increased reliability and lower TCO** – The StorageTek SAS ExpressModule HBA ports are available for use without any additional hardware providing higher reliability and lower TCO. By eliminating the need for additional pass thru modules or switches the ExpressModule HBA provides the customer with reduced cost and reduced complexity.
- **Industry standard form factor** – The StorageTek SAS ExpressModule HBA is an industry standard form factor and therefore non proprietary. Customers can use the ExpressModule wherever an ExpressModule slot is available on the blade server.

Superior design

The StorageTek SAS ExpressModule HBA, utilizing the LSI Fusion-MPT architecture, provides unparalleled performance and binary compatibility of host software with LSI's

controller products. Fusion-MPT is based on industry-standard ARM technology to control the system interface and the hardware assisted SAS ports. The architecture frees the host CPU for other processing tasks while maximizing overall I/O performance. The processing power of the Fusion-MPT architecture also allows for advanced embedded features, and can be quickly adapted to respond to emerging I/O interfaces.

Flexibility

A robust feature set, combined with comprehensive testing and support from Sun Microsystems, helps ensure that the StorageTek SAS ExpressModule HBA provides the flexibility and interoperability needed for storage attach. Flexible multiplatform support includes numerous OS, server and storage platforms.

Learn More

For additional information on the Sun StorageTek SAS ExpressModule HBA visit sun.com/storagetek/networking

High-quality, multi-platform support

- Scale-up SPARC®
- Scale-out/grid computing x64/x86
- Multi-Boot support, same HBA can be redeployed to different OS and architecture without firmware change or re-flash

Sun StorageTek SAS ExpressModule HBA Specifications

Supported operating systems

- Solaris 10, SPARC and x64
- Linux RHEL 4
- Linux RHEL 5
- Linux SLES 9
- Linux SLES 10
- VMWare 3.0x
- Windows Standard/Enterprise Server 2003 x64/x86

Supported server platforms

- Sun Blade™ 8000
- Sun Blade 6000

Supported storage platforms

- Sun StorageTek 2530 array

SAS HBA part numbers

- Xoption – SG-XPCIESAS-EB-Z
- Factory configured – SG-PCIE8SAS-EB-Z

Technical specifications

- PCI Express Module x 8-lanes (1.0a specification)
- 3 Gb/s SAS 8-lanes
- 10W power dissipation
- Two external miniSAS x4 connectors (SFF8088)

Physical dimensions

- 170 mm x 112 mm x 22 mm (6.69 in. x 4.4 in. x 0.866 in.)

Environment

Operating temperature	• 0°C to +60°C
Storage temperature	• -45° to +105°C
Relative humidity	• 5% to 90% non-condensing