



Sun StorageTek™ 4 Gb Fibre Channel ExpressModule™ Host Bus Adapter

The Sun StorageTek™ Dual-channel 4 Gb Fibre Channel ExpressModule™ Host Bus Adapter (HBA) is ideal for Sun Blade 8000 and 6000 customers who require an enterprise-level 4 Gb Fibre Channel connectivity solution. This ExpressModule (EM) HBA provides the flexible functionality and high performance required for today's SAN implementations.

Featuring the award-winning LightPulse Fibre Channel architecture from Emulex, the StorageTek 4 Gb ExpressModule HBA is a highly integrated connectivity solution for enterprise-class storage area networks (SANs). With PCI Express host bus platform support and 4 Gb Fibre Channel link speeds, this ExpressModule HBA solution delivers unsurpassed performance and flexibility for your most demanding storage networking applications.

Highlights

- Industry's first closed chassis 4 Gb Fibre Channel PCIe ExpressModule HBA form factor
- Features the award-winning LightPulse Fibre Channel architecture from Emulex
- Enterprise-class I/O connectivity ideal for large or mixed OS SAN environments
- Dual port 4 Gb/s Fibre Channel link speeds
- HBAnyware® for centralized management, providing efficient, scalable administration of enterprise-class SAN connectivity
- Hot-pluggable to eliminate disruption to on-going blade activities during insertion / removal
- Reduced thermal and power requirements for blade server cavity of chassis
- Full fabric support with automatic topology and speed adaptation

Innovative Form Factor

The ExpressModule HBA form factor provides a method of deploying remote I/O that allows tool-less installation/removal of the Fibre Channel EM and packs more performance and functionality in a smaller space while delivering higher I/O throughput. This solution provides efficient use of datacenter real estate.

Modular Architecture Provides Scalability and Investment Protection

Most traditional rackmount servers require a box-swap in order to take advantage of each new release of CPU and I/O technology. This problem is solved with the Sun Blade family's modular architecture design. Everything, including the I/O, is modular and hot-pluggable.

Stay Ahead in Reliability, Availability & Serviceability (RAS)

The flexible architecture of the Sun Blade Modular System is based entirely on the hot-pluggable components--I/O, processing, system management, and chassis infrastructure. All critical components are hot-swap and redundant. The Fibre Channel ExpressModule HBA is a snap to install or replace. This is the state-of-the-art in hot-swap enterprise-class RAS features, and it all works

together to boost your IT efficiency and uptime, speed your responsiveness, and lower your TCO.

Proven design, architecture and interface

The award-winning LightPulse Fibre Channel architecture from Emulex raises the bar in performance I/O computing. The design minimizes onboard components, while advanced error-checking methods assure robust data integrity.

Powerful Centralized Management Suite

For Enterprise SAN administrators, HBAnyware® is a powerful, centralized HBA management suite, providing discovery, reporting and management of local and remote HBAs, from a single console anywhere in the SAN and across platforms. It enables sophisticated management automation capabilities such as batch firmware upgrades or driver profiles, as well as advanced diagnostics.

Flexibility

A robust feature set, combined with comprehensive testing and support helps ensure that the Sun StorageTek 4 Gb Fibre Channel ExpressModule HBA provides the flexibility and interoperability needed for complex, highly scalable heterogeneous SANs.

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Supported Operating Systems

- Solaris 10 (x64/x86)
- Red Hat RHEL 4.0 (64-bit)
- SUSE SLES 9 (64-bit)
- Windows Server 2003 (32-bit & 64-bit)
- VMware ESX Server 3.0.1

Supported Server Platforms

- Sun Blade 8000 Modular System
- Sun Blade 6000 Modular System

Host Bus Interface Specifications

- Native PCI Express X4
- PCI Express base spec 1.0a
- PCIe Express Module Electromechanical Specification 1.0
- PCI Express Card Electromechanical Specification rev. 1.0
- PCI Local Bus Specification 2.3

Fibre Channel Specifications

- 4/2/1 Gb/s auto-negotiation (4.2480/2.1240/1.0625 Gb/s)
- Point-to-point (N_Port), arbitrated loop (NL_Port) and switched fabric (N_Port)
- Class 2 and 3
- ANSI Fibre Channel: SCSI-FCP, FC-PH, FC-PH-2, FC-PH-3, FC-AL-2, FC-FLA, FC-PLDA, FC-TAPE, FCP-2, FC-GS-3, FC-FS



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Physical

- Dual Channel
- Connector: SFF, LC-style small form factor fixed multimode optic
- Singlewide ExpressModule form factor: 170 mm x 112 mm x 22 mm (6.69 in. x 4.4 in. x 0.866 in.)
- Weight:
 - 13.6 oz (0.85 lbs)
 - 21.1 oz (1 lb, 5.1 oz) w/ packaging

Environment

- Volts
 - +12 VDC
- Power consumption (typ/max)
 - 6.60W / 9.43W
- Operating temperature
 - 0° to 55°C (32° to 131°F)
- Airflow required
 - 2.0 CFM
- Storage temperature
 - -40° to 70°C (-40° to 158°F)
- Relative humidity
 - 5% to 93% non-condensing

Agency Approvals

- Class 1 Laser Product per DHHS 21CFR (J) and EN60825-1
- UL recognized to UL 60950-1 :2003
- CUR recognized to CSA22.2, No. 60950-1-03
- TUV certified to EN60950-1
- FCC rules, Part 15, Class A
- ICES-003, Class A
- EMC Directive 2004/108/EEC (CE)
 - EN55022, Class A and EN55024
- Australian EMC Framework (C-Tick)
 - AS/NZS CISPR22:2002; Class A
- VCCI, Class A (Japan)
- BSMI Class A (Taiwan)
- MIC Class A approval (Korea)
- RoHS Compliant (Directive 2002/95/EC)
- China RoHS Compliant

Description and Model Name

- Sun StorageTek Dual-channel 4Gb Fibre Channel ExpressModule HBA **SG-XPICIE2FC-EB4-Z**

