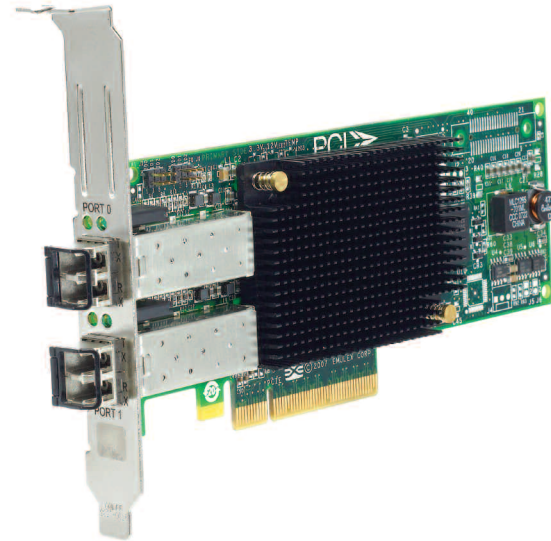


Sun StorageTek™ 8 Gb FC PCIe Host Bus Adapter

Enabling 8 Gb FC storage area networks



➤ The Sun StorageTek™ 8 Gb FC PCIe Host Bus Adapter family offers highly integrated connectivity solutions for enterprise-class storage area networks (SANs). Featuring the LightPulse HBA architecture from Emulex, the StorageTek 8 Gb FC PCIe single and dual channel host bus adapters offer streamlined installation and management, unrivaled scalability, and industry-leading virtualization, making this the ideal solution for enterprise, mixed-OS and virtual server environments.

Highlights

- Enterprise-class HBAs ideal for large or mixed OS SAN environments
- Features the award-winning LightPulse® HBA architecture from Emulex
- Support for 8 Gb/sec, 4 Gb/sec and 2 Gb/sec Fibre Channel devices
- Integrates seamlessly into existing SANs
- Comprehensive virtualization capabilities with support for N-Port ID Virtualization (NPIV) and Virtual Fabric
- Supports IT server consolidation and energy conservation initiatives
- Improves IT staff productivity through simplified deployment and management

Proven design, architecture and interface

Based on the LightPulse HBA architecture from Emulex, the Sun StorageTek 8 Gb FC PCIe Host Bus Adapters provide a highly integrated processor design with minimized onboard components to improve host performance and efficiency. With advanced error-checking features, these I/O connectivity solutions ensure the integrity of block data as it traverses the SAN.

Comprehensive testing and support

A robust feature set, combined with comprehensive testing and support from Sun Microsystems, helps ensure that the Sun StorageTek Enterprise 8 Gb Fibre Channel family of host bus adapters provides the flexibility and interoperability needed for complex, highly scalable heterogeneous SANs. Flexible multiplatform support includes numerous OS, server and storage platforms.

Ease of management

- Universal Boot capability allows the appropriate boot environment to be automatically selected for any given hardware
- Boot from SAN capability reduces system management costs and increases uptime
- Detailed real-time event logging and tracing enables quick diagnosis of SAN problems
- Beaconing feature flashes the HBA LEDs, simplifying their identification within server racks
- Environmental monitoring feature helps to optimize SAN availability

Sun StorageTek™ 8 Gb FC PCIe Host Bus Adapters Specifications

Standards

- ANSI Fibre Channel: FC-PI-4, FC-FS-2, FC-FS-2/AM1, FC-LS, FC-AL-2, FC-GS-6, FC-FLA, FC-PLDA, FC-TAPE, FC-DA, FCP through FCP-4, SBC-3, FC-SP, FC-HBA and SMI-S v1.1
- PCI Express base spec 2.0
- PCI Express card electromechanical spec 2.0
- Fibre Channel class 2 and 3
- PHP hot plug-hot swap

Architecture

- Single-channel or dual-channel
- 8 Gb/sec, 4 Gb/sec or 2 Gb/sec FC link speeds automatically detected
- Integrated data buffer and code space memory

Supported operating systems

- Solaris 10 SPARC
- Solaris 10 x86
- Red Hat Enterprise Linux 4
- RHEL AS/ES 4.6 or later
- Red Hat Enterprise Linux 5.1
- RHEL AS 5.0
- SUSE Linux Enterprise Server 9
- SUSE Linux Enterprise Server 10
- VMware ESX 3.01 & ESX 3.05
- Windows 2003 Standard and Enterprise Server
- Windows 2008 Standard and Enterprise Server

Supported server platforms

- Sun Fire™ X4140 server
- Sun Fire X4150 server
- Sun Fire X4240 server
- Sun Fire X4250 server
- Sun Fire X4440 server
- Sun Netra x4450 server
- Sun Fire X4100 M2 server
- Sun Fire X4200 M2 server
- Sun Fire X4600 server
- Sun Fire X2100 server
- Sun Fire x2200 server
- Sun Fire X2250 server
- Sun Fire V445 server
- Sun Fire V245 server
- Netra T2000 server
- Sun SPARC® Enterprise T5120 server
- Sun SPARC Enterprise T5220 server
- Sun SPARC Enterprise T5140 server
- Sun SPARC Enterprise T5240 server
- Sun SPARC Enterprise T5440 server
- Sun SPARC Enterprise M4000 server
- Sun SPARC Enterprise M5000 server
- Sun SPARC Enterprise M8000 server
- Sun SPARC Enterprise M9000 server

Optical

| | |
|------------|--|
| Data rates | • 2.125, 4.25 and 8.5 Gb/sec (auto-detected) |
| Optics | • Short wave lasers with LC type connector |
| Cable | • Operating at 8 Gb/sec <ul style="list-style-type: none"> – 50/125 μm (500 MHz*km BW) – up to 50m – 50/125 μm (2000 MHz*km BW) – up to 150m |

Physical dimensions

- Short, low profile MD2 form factor card
- 167.64 mm x 68.91 mm (6.60" x 2.71")
- Standard bracket (low profile available)

Power and environmental requirements

| | |
|-----------------------|----------------------------------|
| Volts | • +3.3, +12 |
| Operating temperature | • 0°C to 55°C (32°F to 131°F) |
| Storage temperature | • -40°C to 70°C (-40°F to 158°F) |
| Relative humidity | • 5% to 95% non-condensing |
| | • 23°C wet bulb |

Agency approvals

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

Learn More

To learn more about the Sun StorageTek 8 Gb FC PCIe host bus adapter, visit sun.com/storagetek/networking

Additional features

Performance features

- Doubling the maximum Fibre Channel link rate from 4 Gb/sec to 8 Gb/sec and enhanced virtualization capabilities help support IT "Green" initiatives
- Frame-level Multiplexing and out-of-order frame reassembly increases link efficiency and maximizes HBA performance.

Data protection features

- End-to-end data protection with hardware parity, CRC, ECC and other advanced error checking and correcting algorithms ensure data is safe from corruption.

Management

- Automated installation facilities and extensive management capabilities speed HBA deployment and device management, while reducing administration costs and protecting IT investment.
- HBA management capabilities enable secure, centralized discovery, monitoring, reporting, and administration of HBAs on local and remote hosts.
- Powerful automation capabilities facilitate remote driver parameter, firmware and boot code upgrades. Advanced diagnostic features such as HBA beaconing and HBA statistics help to optimize management and network performance while the environmental monitoring feature helps to maintain optimum host to fabric connections.
- The GUI interface, management functions can also be performed via a scriptable Command Line Interface (CLI) as well as a web browser.
- In-band and out-of-band management capabilities, Sun provides data center administrators with the greatest level of management flexibility.

Order information – part number

- SG-XPCIE1FC-EM8-Z (single channel)
- SG-XPCIE2FC-EM8-Z (dual channel)