

# Sun StorageTek™ Enterprise 4Gb Fibre Channel PCI-X 2.0 Host Bus Adapters

The Sun StorageTek™ Enterprise 4Gb Fibre Channel PCI-X 2.0 host bus adapter family offers highly integrated connectivity solutions for enterprise-class storage area networks (SANs). With PCI-X 2.0 host bus platform support and 4Gb Fibre Channel link speeds, this host bus adapter solution delivers unsurpassed performance and flexibility for your most demanding storage networking applications.

Featuring the award-winning LightPulse® HBA architecture from Emulex, the StorageTek SG-XPCI1FC-EM4-Z (single channel) and SG-XPCI2FC-EM4-Z (dual channel) host bus adapters are ideal for SAN environments that need to perform to today's most rigorous standards.

## Highlights

- Enterprise-class HBAs ideal for large or mixed OS SAN environments
- Features the award-winning LightPulse® HBA architecture from Emulex
- Single and dual channel 4Gb/s Fibre Channel PCI-X 2.0 models
- Full fabric support with automatic topology and speed adaptation
- End-to-end parity protection for high data integrity
- Simultaneous on-board support for x64/x86 BootBIOS (Windows and Linux) and Solaris™ SPARC OpenBoot
- On-board hardware context cache for superior fabric support and high-transaction performance
- Large on-board data buffer supports over 150 meters cabling at full 4Gb/s FC bandwidth

## High-Performance SAN Connectivity

The Sun StorageTek SG-XPCI1FC-EM4-Z (single channel) and SG-XPCI2FC-EM4-Z (dual channel) HBAs are ideal for Sun customers who require an enterprise-level 4Gb Fibre Channel connectivity solution and are implementing the latest in host bus architectures with PCI-X 2.0. These HBAs provide the flexible functionality and high performance required for SAN implementations.

## PCI-X 2.0

Designed for servers with the high-performance next generation host bus called PCI-X 2.0, these HBAs keep pace with advances in high-bandwidth business-critical applications such as 4Gb Fibre Channel. Adoption is further simplified by retaining hardware and software compatibility with previous generations of PCI and PCI-X. As a result, these HBAs can immediately connect with hundreds of PCI and PCI-X Sun servers that are already field deployed.

## Superior Design

The award-winning LightPulse® HBA architecture from Emulex raises the bar in performance I/O computing by combining high performance RISC microprocessors with integrated 4Gb SERDES and an

advanced Fibre Channel protocol engine for superior performance and best-in-class server CPU offload.

## Flexibility

A robust feature set, combined with comprehensive testing and support from Sun Microsystems, helps ensure that the Sun StorageTek Enterprise 4Gb Fibre Channel family of host bus adapters provides the flexibility and interoperability needed for complex, highly scalable heterogeneous SANs. Flexible multi-platform support includes numerous OS, server and storage platforms.

## 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

## Multiple Models Available

- Sun StorageTek SG-XPCI1FC-EM4-Z (single channel HBA)
- Sun StorageTek SG-XPCI2FC-EM4-Z (dual channel HBA)

## Product Name

Sun StorageTek SG-XPCI1FC-EM4-Z  
(single channel HBA)

Sun StorageTek SG-XPCI2FC-EM4-Z  
(dual channel HBA)

### Supported Operating Systems

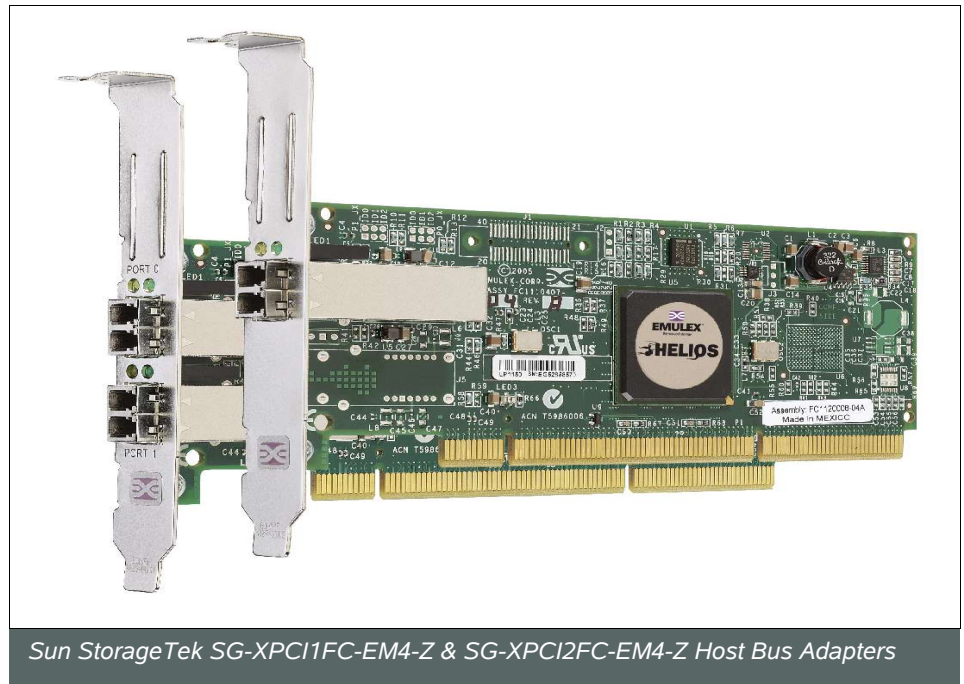
- Sun Solaris 10, 9, 8 SPARC
- Sun Solaris 10 IA32/AMD64
- RedHat RHEL 3 IA32/AMD64
- RedHat RHEL 4 IA32/AMD64
- SUSE SLES 9 SP1 IA32/AMD64
- Windows Server 2000 IA32/AMD64
- Windows Server 2003 IA32/AMD64

### Supported Server Platforms

- SunBlade 1000, 1500, 2000, 2500
- Sun Fire V210, V240, V250, V440, V480, V490, V880, V890, E4800, E4810, E6800, V1280, E2900, E4900, E6900, E12K, E15K, E20K, E25K, 280R, V20z, V40z, x4100, x4200, T2000
- Netra 20, 240, 440, 1280, 1400/1405

### Supported Storage Platforms

- Sun StorEdge:
  - 3510, 3511
  - 6320, 6020, 6120, 6130, 6920
  - 9990, 9985, 9980, 9970
  - L25, L100, L500 Tape Libraries
  - L180, L700 Tape Libraries
  - L5500, L8500 Tape Libraries
  - C4 Tape Library with FC bridge
- STK FlexLine:
  - FLX210, FLX240, FLX280, FLX380



Sun StorageTek SG-XPCI1FC-EM4-Z & SG-XPCI2FC-EM4-Z Host Bus Adapters

### Fibre Channel Switches

- Brocade SilkWorm 200E, 3200, 3250, 3800, 3850, 3900, 4100, 12000
- QLogic 5200, 5600 & SANbox 2 – 8, 16, 64 port
- McData 4300, 4500, 6064, 6140

### Physical Dimensions

- 167.64mm x 64.42mm  
6.60 inches x 2.54 inches

### Environment

- Volts: +3.3 and +5 VDC
- Operating Temperature: 0° - 55°C (32° - 131°F)
- Storage Temperature: -40° - 70°C (-40° - 158°F)
- Relative Humidity: 5% to 95% non-condensing
- Airflow Required: 100 lf/m

### Standards

- PCI-X 2.0
- PCI 3.0
- ANSI Fibre Channel:
  - FC-FS, FC-PH, FC-PI, FC-PI2, FCP, FCP-2, FC-AL, FC-PLDA, FC-MI, FC-FLA, FC-TAPE
- Fibre Channel Class 3
- PHP hot plug-hot swap
- RoHS 6 Compliant

### Optical

- Data Rates: 1.0625, 2.125 & 4.25GB/s (auto-detected)
- Optics: short wave lasers with LC type connector
- cable: 50/125um, up to 150m at 4Gb/s, 62.5/125um, up to 75m at 4Gb/s