

MAJOR FEATURES

Full duplex 2Gb/s Fibre Channel delivering up to 400MB/s

Automatic speed negotiation

Automatic topology detection

Full fabric support using F_Port and FL_port connections

Onboard hardware context cache for superior fabric performance

Support for multiple concurrent protocols (SCSI and IP)

Full support for both FC service class 2 and 3

Full fabric boot support in x86 and SPARC environments to multiple LUNs

Support for FC-Tape (FCP-2) devices

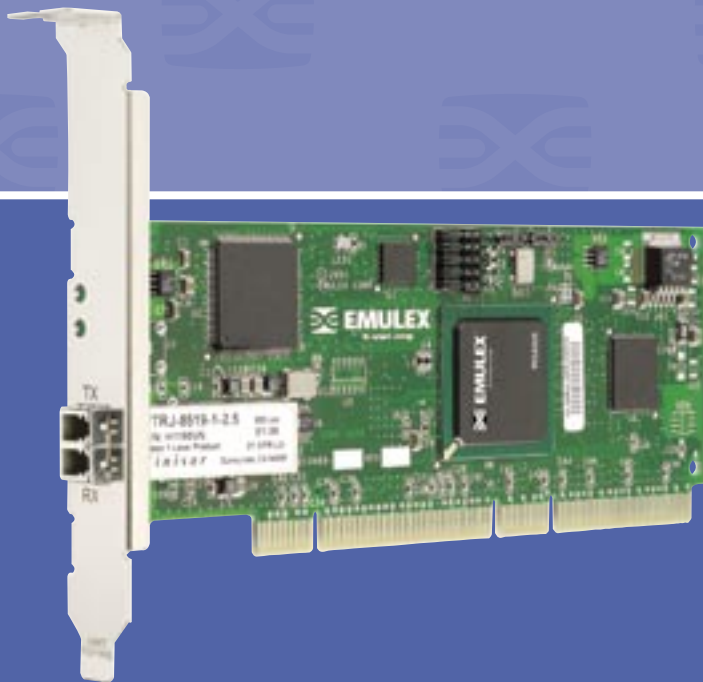
66/100/133 MHz PCI-X 1.0a and PCI 2.2 compatibility

End-to-end parity protection for high data integrity

Buffered data architecture to support over 50km cabling at full 2Gb/s bandwidth

Robust suite of software supporting Windows Server 2003, Windows 2000, Windows NT, HP-UX, Linux, NetWare and Solaris

Optical small form factor (LC) interface



LightPulse™

LP9802

2Gb/s Fibre Channel PCI-X Host Bus Adapter

The LP9802 PCI-X host bus adapter offers a highly integrated 2Gbps Fibre Channel HBA for use in servers based on either PCI or the latest PCI-X expansion bus. The LP9802 delivers exceptional performance through the use of an Emulex Pegasus ASIC, a 266MIPs onboard processor, an embedded 1Gig/2Gig SERDES, and a high performance unified QDR SRAM. The LP9802 features automatic topology detection and automatic speed negotiation capability. These capabilities allow complete compatibility with existing 1Gb/s Fibre Channel SANs, while allowing seamless upgrades to higher speed 2Gb/s SANs.

The features of this PCI-X based HBA provide the flexibility and broad interoperability needed for complex, highly scalable SANs. The LP9802 provides a combination of features, including fabric support using F_Port and FL_Port connections, full-duplex data transfers, high data integrity features, support for all Fibre Channel topologies, and support for service classes 2 and 3.

The LP9802 also features sophisticated hardware that provides superior performance in SANs and provides best in class server CPU offload. This exclusive hardware delivers low latency and high throughput in fabric, arbitrated loop and clustered environments. Support for fiber optic cabling is provided through an embedded small form factor (LC) optical interface.

SPECIFICATIONS

STANDARDS

ANSI Fibre Channel FC-FS
ANSI Fibre Channel FC-PH
ANSI Fibre Channel FC-PI
ANSI Fibre Channel FC-AL
ANSI Fibre Channel FC-PLDA
ANSI Fibre Channel FC-MI
ANSI Fibre Channel FC-FLA
PCI-X 1.0a
PCI local bus revision 2.2 (see power requirements)
Fibre Channel Class 2, 3
PHP hot plug - hot swap

ARCHITECTURE

Emulex Pegasus ASIC technology
up to 133MHz PCI-X DMA
2Gb/s or 1Gb/s FC Link
2MB FLASH memory
2MB QDR SRAM

SOFTWARE ENVIRONMENTS

Windows Server 2003
Windows 2000
Windows NT
HP-UX
Linux
NetWare
Solaris

HARDWARE ENVIRONMENTS

x86, SPARC and PowerPC PCI hardware platforms
3.3V signaling, 5V tolerant
32/64b 33/66MHz PCI
66/100/133MHz PCI-X

PHYSICAL DIMENSIONS

Short low profile MD2 form factor
Low profile or standard bracket
167.64mm x 64.42mm (6.60" x 2.54")

OPTICAL

Data rates: 1.0625/2.125Gb/s
Optics: short/long wave lasers
Cable: 9/125µm single-mode fiber
50/125µm multi-mode fiber
62.5/125µm multi-mode fiber
Connector: LC
Distance: (1Gb/s)
10K meters (32,800') 9/125 µm fiber
500 meters (1,640') 50/125 µm fiber
300 meters (984') 62.5/125 µm fiber
(2Gb/s)
10K meters (32,800') 9/125 µm fiber
300 meters (984') 50/125 µm fiber
150 meters (492') 62.5/125 µm fiber

POWER REQUIREMENTS

Volts: +3.3 VDC (± 5%)
Power: 7.7 watts @ 66MHz,
8.5 watts @ 133MHz (typ)

ENVIRONMENTAL CONDITIONS

Operating temperature: 0° to 45°C (32° to 113°F)
Airflow required: 100 lf/m
Storage temperature: -40° to 70°C (-40° to 158°F)
Relative humidity: 5% to 95% non-condensing

AGENCY APPROVALS

Class 1 Laser Product per
DHHS 21CFR (J) & EN60825
UL recognized to UL 1950
CUR recognized to CSA22.2, No. 950
TUV certified to EN60950
FCC rules, Part 15, Class A
ICES-003, Class A
EMC Directive 89/336/EEC (CE Mark)
- EN55022, Class A
- EN55024
Australian EMC Framework (C-Tick Mark)
- AS/NZS 3548, Class A
VCCI, Class A

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DRIVER SUPPORT

A rich suite of software complements the LP9802. Some examples of the features included are, LUN Masking, LUN Mapping, Persistent Binding, I/O Coalescing, full fabric boot in both x86 and Sparc environments as well as support for multi or simultaneous protocol (SCSI & IP) operation. In addition, most drivers include a full-featured implementation of the FC-MI HBA Management Interface. These features enable advanced storage area network (SAN) implementations in Windows Server 2003, Windows 2000, Windows NT, Linux, HP-UX, Solaris and NetWare environments. All drivers are also fully compatible with the Emulex LP10000, LP9002L, LP8000, LP7000E, LP9402DC, and LP9002C host bus adapters. Windows, Linux and NetWare drivers are also compatible with the LP1050, LP850, LP952L and LP982.

ORDERING INFORMATION

LP9802-F2
embedded multi-mode optic interface (LC)
LP9802-X2
embedded single-mode optic interface (LC)

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