LightPulse™ LP8000

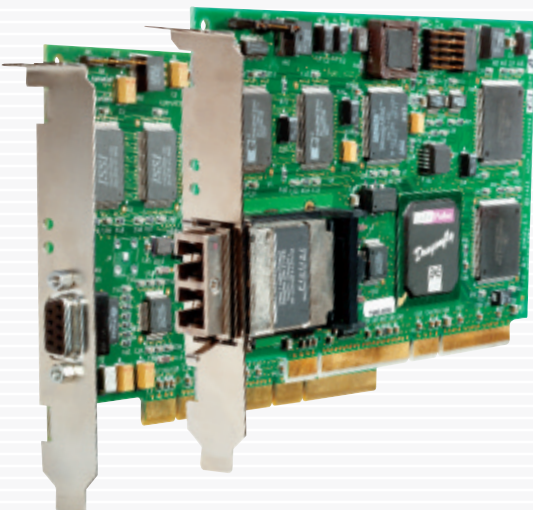1Gb/s Fibre Channel PCI Host Bus Adapter

The LightPulse™ LP8000 Fibre Channel PCI host bus adapters deliver exceptional performance through the use of Emulex's Dragonfly ASIC, a 266MIPS onboard processor and state of the art dual-ported buffer memory. The LP8000 features a 64 bit PCI interface and provides the richest set of features available.

The LP8000 is designed to support mission-critical enterprise applications. The LP8000 provides a unique combination of features, including switched 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 class 2 and 3.

The LP8000 also features sophisticated hardware that provides superior performance in storage area networks, delivering low latency and high throughput in switched, arbitrated loop and clustered environments. Support for both copper and fiber optic cabling is provided through standard GBIC or embedded interfaces.

Major Features

- simultaneous full duplex 1Gb/s Fibre Channel delivers up to 200MB/s
- full fabric support using F_Port and FL_Port connections
- onboard hardware context cache for superior fabric performance
- support for concurrent use of multiple protocols (SCSI and IP)
- full support for FC service Class 2 and 3
- support for FC-Tape (FC-2) devices
- 64 bit, 33MHz PCI
- end-to-end parity protection for high data integrity
- buffered data architecture to support up to 100km cabling
- robust suite of software including IP and storage protocols under Windows 2000, Windows NT, HP-UX, Linux, NetWare, Solaris and AIX
- GBIC or embedded physical interfaces

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LP8000

1Gb/s Fibre Channel PCI Host Bus Adapter

Specifications

standards
ANSI Fibre Channel FC-PH
ANSI Fibre Channel FC-AL
ANSI Fibre Channel FC-PLDA
ANSI Fibre Channel FC-FLA
PCI local bus revision 2.1
Fibre Channel Class 2, 3
PHP hot plug - hot swap
gigabit interface converter (GBIC)

architecture
Emulex Dragonfly ASIC technology
up to 33MHz PCI bus master DMA
512KB FLASH memory
1MB code RAM
256KB buffer RAM

software environments
Windows 2000
Windows NT
NetWare
HP-UX
Linux
Solaris
AIX

hardware environments
x86, SPARC & PowerPC PCI hardware platforms
5v signaling

copper
data rate 1.0625Gb/s
cable type ...... dual twinax or quad axial
connector DB9
distance .... 30 meters (98')

optical
data rate 1.0625Gb/s
optics .... short/long wave lasers
cable .... 9/125µm single-mode fiber
             50/125µm multi-mode fiber
             62.5/125µm multi-mode fiber
connector .... dual SC
distance .... 10k meters (32,800') 9/125µm fiber
             500 meters (1640') 50/125 µm fiber
             300 meters (984') 62.5/125 µm fiber

physical dimensions
short PCI form factor
174.75mm x 106.68mm
(6.88" x 4.20")

power requirements
volts............. 5 VDC
power .... 10 watts typical

environmental conditions
operating temperature
    0° to 45℃ (32° to 113°F)
airflow required
    100 LF/m

storage temperature
-10° to 55℃ (14° to 131°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 B*
ICES–003, Class B*
EMC Directive 89/336/EEC (CE Mark)
    EN55022, Class B*
    EN55024
Australian EMC Framework (C–Tick Mark)
    AS/NZS 3548, Class B*
VCCI, Class B*
note: LP8000-D1 is Class A

Driver Support

The LightPulse™ LP8000 is complemented by a rich suite of software support including storage protocol (SCSI), network protocol (IP) as well as concurrent multi-protocol (SCSI & IP) operation, enabling advanced storage area network (SAN) implementations in Windows 2000, Windows NT, HP-UX, Linux, NetWare, Solaris and AIX environments. All drivers are also fully compatible with the Emulex LP9002L, LP9000, LP7000E, LP952L and LP850 host bus adapters.

Ordering Information

LP8000–D1
embedded copper BD9 interface

LP8000–F1
embedded multi-mode optic interface

LP8000–T1
copper BD9 GBIC interface

LP8000–N1
multi-mode optic GBIC interface

LP8000–L1
single-mode optic GBIC interface

Registered ISO Supplier FS28361

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EMULEX
We network storage