



DXH510

Dolphin Express Host Adapter



Connect Better

The Dolphin Express DXH510 PCI Express host adapter brings new functionality to PCI Express with the ability to support both clustering solution and high speed I/O expansion solutions. High performance embedded and enterprise applications can now take advantage of the DXH510's distance scaling as well as its low latency performance. Applications such as High Performance Computing, Medical, Manufacturing, Test and Measurement, and Military which often require high speed I/O or clustering solution, now have an alternative to remotely locate I/O or hosts up to 100 meters and still maintain high performance.

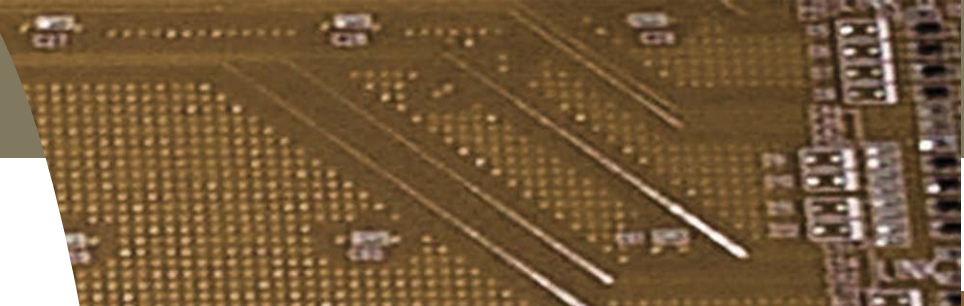
FEATURES AND BENEFITS

- High performance PCI Express 1.1 compatible host adapter for cabling low cost PCs and servers to high speed I/O
- 20 Gbps interconnect performance between host and PCI Express devices.
- DMA support
- Supports host to host and host to I/O configurations
- Provides both copper and fiber optic cabling options for connection to I/O
- Low Profile PCI form factor ensures compatibility to low cost servers and workstations requiring low profile cards
- Two 10 Gbps ports provides flexibility to connect as a single 20 Gbps connection or two 10Gbps connections
- Provides connectivity up to 10 meters via copper cabling and 100 Meters with fiber optic cabling
- Supports spread spectrum clocked servers and workstations

The DXH510 overcomes PCI Express' distance limitations with support of fiber optic cabling for up to 100 meters. With two industry standard x4 high speed connectors, the DXH510 creates ports for connection to one or two Dolphin expansion products. These ports support either copper or fiber optic cabling with the use of pluggable transceivers. Each port is capable of up to 10 Gbps transfer rates and can be combined to support 20 Gbps. At 20 Gbps, the DXH510 provides user's significant performance for most applications.

The DXH510 is also used as part of Dolphin's Dolphin Express clustering solution. It provides a high speed interconnect for CPU to CPU communication with DMA capability. Configured with other Dolphin Express hardware and software solutions, DXH510 enables high speed, low latency communication between processors.

Dolphin implemented the DXH510 in a low profile PCIe form factor enabling its use in low cost servers and work stations with support for Linux, Windows XP, and Vista operating systems. As part of the overall Dolphin solution, the DXH510 gives customers the ability build highly flexible systems that scale both distance and performance.



DXH510

Application Examples

TECHNICAL & PHYSICAL SPECIFICATIONS

Specifications

- Product Code**
 - DXH510-A0
- Link Speeds**
 - 20 Gb/sec full duplex
- PCI Express Specification**
 - PCI Express Specification 1.1
- Topologies**
 - Switched topologies

Physical Specifications

- Cable Connections**
 - Copper Cabling
 - Fiber Optic via pluggable transceivers
- Cable Distances**
 - Copper - Up to 10 meters
 - Fiber optic
 - » 20 Gbps - up to 100 meters

- Mechanical Dimensions**
 - 4.5" W x 2.5" h (115mm w x 65 mm h)
- Operating Environment**
 - Operating Temperature: 0°C - 55°C
 - Relative Humidity: 5% - 95% non-condensing
 - Altitude: 0 - 3000 meters

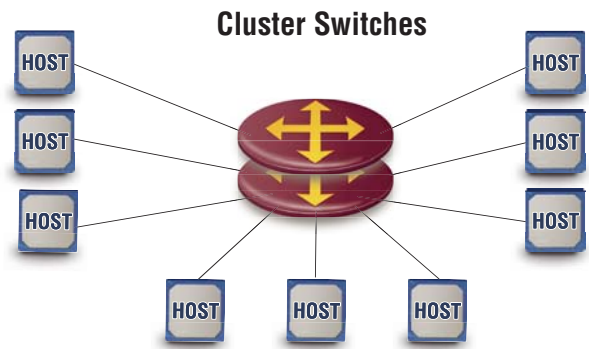
Software

- Operating System Support**
 - Windows NT, Windows 2000, Windows XP and Windows Vista
 - Linux

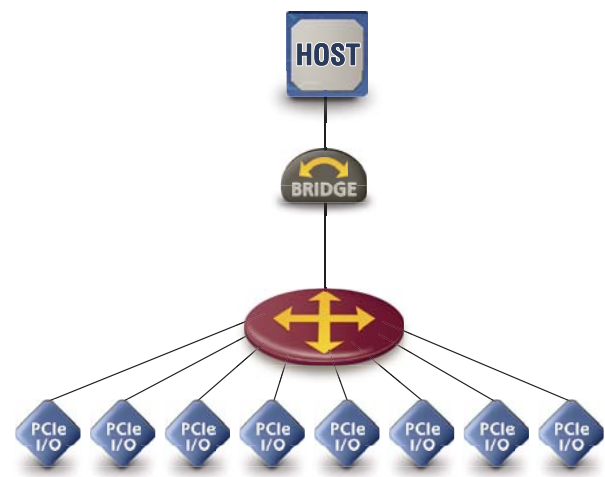
Regulatory

- CE Mark, commercial
- FCC Class A

Cluster Computing



Fiber Expansion Solution



Dolphin Interconnect Offices

Dolphin USA
 225 Cedar Hill St.
 Marlborough, MA 01752, USA
 Phone: 508-786-9950
 Fax: 508-786-9785

Dolphin Europe
 Olaf Helsetts vei 6
 NO-0694 Oslo, Norway
 Phone: +47 23 16 70 00
 Fax: +47 23 16 71 80

Internet Information
 E-mail: info@dolphinics.com
 Website: <http://www.dolphinics.com>