

FWBX2-PCIE1XE220

Dual Channel 4-port OHCI 1.2 Compliant FireWire 800 (IEEE 1394b) to PCI Express Card Host Adapter



Introduction

The FWBX2-PCIE1xE220 is a Dual OHCI 1.2 Compliant FireWire 800 (IEEE 1394b) to PCI Express Host Adapter.

FWBX2-PCIE1xE220 is designed with Two key components.

- 3-Lane, 3-Port PCI Express Switch.
- OHCI 1.2 Compliant IEEE 1394b Single Chip Host Controller.

Utilizing the standard PCI Express Switch, the 3-Lane/3-Port PCI Express Switch provides the most efficient fan-out solution for integrating two OHCI 1.2 Compliant IEEE 1394b Single Chip Host controllers into a small board design. Each OHCI 1.2 Compliant IEEE 1394b Single Chip Host controller takes advantages of 2.5 Gbps burst rate of 1-lane PCI Express bus in both directions and is fully compliant with PCI Express Base specification 1.1. This solution provides full PCI Express and 1394b functionality and performance.

Technical Specifications

PCI Express:	• Fully compliant with revision 1.1 base specification. • One virtual channel. • Eight traffic classes. • 64-bit and 32-bit platform support. • PCI compatible Interrupts via legacy INTx emulation
OHCI (Open Host Controller Interface):	• Enhanced with the OHCI 1.2 draft specification for 1394b-2002 PHY full operational compliance. • OHCI 1.0 backwards compatible. Configurable via

	EEPROM to operate in either OHCI 1.0 or OHCI 1.1 mode. • 8 Kbyte isochronous transmit FIFO. • 4 Kbyte asynchronous transmit FIFO. • 8 Kbyte isochronous receive FIFO. • 8 Kbyte asynchronous receive FIFO. • Dedicated asynchronous and isochronous descriptorbased DMA engines. • Eight isochronous transmit contexts. • Eight isochronous receive contexts. • Supports parallel processing of incoming physical read and write requests.
1394b-2002 PHY:	• Provides three IEEE 1394b-2002 compliant ports supporting 1394b-2002 speeds of 800 Mbits/s and 400 Mbits/s while maintaining backward compatibility to IEEE 1394a-2000 speeds of 100 Mbits/s, 200 Mbits/s, and 400 Mbits/s over 4.5 m copper. • Fully supports provisions of IEEE 1394a-2000 and 1394-1995 standards for high-performance serial bus. • Link is not required for hub operation. • Supports extended BIAS_HANDSHAKE time for enhanced interoperability with cameras. • Does not require external filter capacitor for PLL. • Supports arbitrated short bus reset to improve utilization of the bus. • Supports ack-accelerated arbitration and fly-by concatenation. • Supports PHY pinging and remote PHY access packets. • Fully supports suspend/resume.
FireWire P1394b Cable Ports:	FWBX2-PCIE1xE220: Four FireWire P1394b Cable Ports • OHCI 1: Two 1394b Bilingual Ports • OHCI 2: Two 1394b Bilingual Ports
Power Management:	• Supports PCI Power Management Interface specification (PCI-PM 1.2) • Supports Advanced Configuration and Power Interface Specification, Revision 2.0 (ACPI) supporting active link state.
Bus Power Connector:	with IDE big 4-pin DC + 12V power connector

Operating System Requirements



- Windows 2000, XP, 2003 , 7
- Linux 2.6.X
- Mac OS X

Certifications

- CE Test: Pass
- FCC Test : Pass



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&ProdID = 1060102](http://www.ioi.com.tw/products/proddetail.aspx?CatID = 106&DeviceID = 3021&HostID = 2009&ProdID = 1060102)