

Triple-Port 1394b PCIe OHCI Adapter Card

Single-Node IEEE-1394b PCIe OHCI Solution

Applications

Vehicle Software, Hardware, and System emulation labs

Non-transformer coupled IEEE-1394b desktop computer host adapter

Flight Control and Mission Systems emulation environments

Benefits

Uses industry standard Texas Instruments TSB41BA3 Physical Layer and XIO2213B 1394 OHCI Link Layer Controller

Implemented without transformer isolation to reduce costs

No power over 1394b I/O cable eliminates power and ground shift concerns

Features

Single OHCI IEEE-1394 Beta (1394b) node

IEEE-1394-2008 compliant

Three Beta only ports per node supporting:

- S100β (122.88Mb/s)
- S200β (245.76Mb/s)
- S400β (491.52Mb/s)

Configurable maximum connection speeds of: S100 β or S200 β or S400 β

Three IEEE-1394 Bilingual Connectors

Texas Instruments XIO2213B OHCI Link Layer Controller and TSB41BA3 PHY

Powered via PCIe connector; No external PSU needed

One Lane PCIe generation 1.1 support

Overview

The FW-1x-PCIe-400 is a single node 1394 OHCI host adapter with a single lane PCI Express (PCIe) host bus interface. Each of the three Beta ports connect to the 1394 bus through 9-pin bilingual connectors. The use of the bilingual connector on the beta port was specifically designed to support legacy system with 6-pin connectors operating as beta only connection.

The bilingual connector also supports 9-pin to 9-pin Beta cables.

For applications not requiring transformer isolation such as Flight Control, Vehicle Management Systems, Mission Systems or Avionics Simulation Laboratories that connect to a cross point switch, the FW-1x-PCle-400 provides the ideal cost performance solution.

The IEEE-1394 connectivity is provided by one Texas Instruments XIO2213B Open Host Controller Interface (OHCI) Link Layer Controllers with one TSB41BA3 PHY devices. The XIO2213B implements PCIe 1.1 x1 host interface and the 1394 Beta PHY is capable of S100 β , S200 β and S400 β operation.

The industry standard 1394 OHCI interface allows for Windows, Linux, VxWorks, etc. software support.



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Complete Product Support Program

As our customers can attest, the New Wave DV team prides itself on excellent customer support. New Wave DV provides industry standard warranties on its products, but it is the human factor that makes our support so valuable to our customers. Our team takes the time and effort to ensure that the customer experience with our products is a positive one.

Our Commitment

New Wave DV is committed to providing the latest innovations in technology, architectures, and techniques to keep our customers one step ahead of the rest. Our products are intended to offer our customers an entirely unique out-of-the-box experience.

Ordering Information

FW-1x-PCIe-400: 1394b PCIe card, 1 node 3 port, TI PHY and Link, 3x electrical ports, no transformers, XIO2213B and TSB41BA3 Host Adapter

Technical Specifications

INTERFACES

Single Channel PCIe 1.1 Three IEEE-1394 Beta Ports

DATA RATES

 $\text{S}100\beta$, $\text{S}200\beta$ and $\text{S}400\beta$

POWER REQUIREMENTS

Powered via PCIe connector; No external PSU needed

COMPLIANCE

IEEE-1394 beta (1394b) PHY and OHCI Link Layer PCIe x1 Generation 1.1 support

DIMENSIONS

94 mm (width) x 82 mm (length)

TEMPERATURE

Operating: 0°C to 70°C Storage: -45°C to 85°C

FOR MORE INFORMATION:

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