

PCIe-FIW64

4-CH PCI Express IEEE-1394b Frame Grabber



Overview

The PCIe-FIW64 is IEEE 1394b (FireWire 800) interface card designed for high speed computer-based machine vision application. The PCIe-FIW64 supports four 1394b (FireWire 800) ports for multiple 1394b device connections with data transfer rates up to 800 Mb/s, like most of the IEEE 1394b cameras.

The PCIe-FIW64 provides four isolated digital inputs and outputs to connect to external devices such as a position sensor. The PCIe-FIW64 also includes four isolated programmable trigger output pulses to manage trigger events such as activating a strobe light.

Features

- PCI Express x4 compliant
- High-speed image transfer rates up to 800 Mb/s
- Provides industrial screw lock connector
- Status LED for channel activation
- Four isolation digital inputs/outputs
- Four isolation TTL level programmable trigger output pulses

Software Support

- Supports Windows Vista/XP/XP embedded

Ordering Information

PCIe-FIW64	4-CH PCI Express x4 IEEE 1394.b interface card
1394.b Cable	5-meter IEEE 1394.b 9-pin cable with screw-lock connector

Specifications

IEEE1394b Port

Four IEEE1394b fully compliant cable ports at 100 Mb/s, 200 Mb/s, 400 Mb/s, and 800 Mb/s.

Fully supports provisions of IEEE P1394b-2002.

Fully compliant with provisions of IEEE std 1394-1995 for a high performance serial bus and IEEE std 1394a-2000.

Digital and Trigger I/Os

Four isolated digital inputs

Four isolated digital outputs

Four isolated trigger Inputs

Four isolated trigger Outputs

Isolated Voltage

Rated isolation voltage: 1000 V @ 60 seconds

Form Factor

x4 PCI-express interface (PCI Express Base Specification, Revision 1.1 compliant)

Dimensions

W x L: 129.5 x 111.15 mm

Operating Environment

Temperature: 0 to 55°C

Humidity: 5 to 90% RHNC

Storage Environment

Temperature: 0 to 85°C

Humidity: 0 to 95% RHNC

Power Requirements

+12 V max, 200 mA

+3.3 V max, 2.5 A

I/O, and trigger

Function	Electronic specification
Isolated Digital Input	Photo Coupled Input x 4 ch
Input voltage range	0 to 25V
Low level	0 to 0.5V
High Level	2 to 25V
Isolated Digital Output	Photo Coupled Output x 4 ch
Load voltage range	3 to 24V
Output sink current	80mA (Max)
Output voltage drop	1.0V (Max)
Leak current	0.1mA (Max)
Reverse voltage	-6V
Isolated Trigger Input	Photo Coupled Trigger input x 4 ch
Input voltage range	0 to 25V
Low level	0 to 0.5V
High level	2.4 to 25V
Polarity	Positive / Negative Selectable
Minimum pulse width	0.1msec
Isolated Trigger out	Photo Coupled Trigger output x 4 ch
Load voltage range	0 to 5V
Output sink current	40mA (Max)
Output voltage drop	0.4V Max(@16mA)
Trigger Out Control	
Trigger delay	0msec to 1000msec selectable (1msec step.)
Trigger out pulse width	0.1msec to 50msec selectable (0.1msec step)
Polarity	Positive / Negative Selectable
Enable Control	Enable/Disable