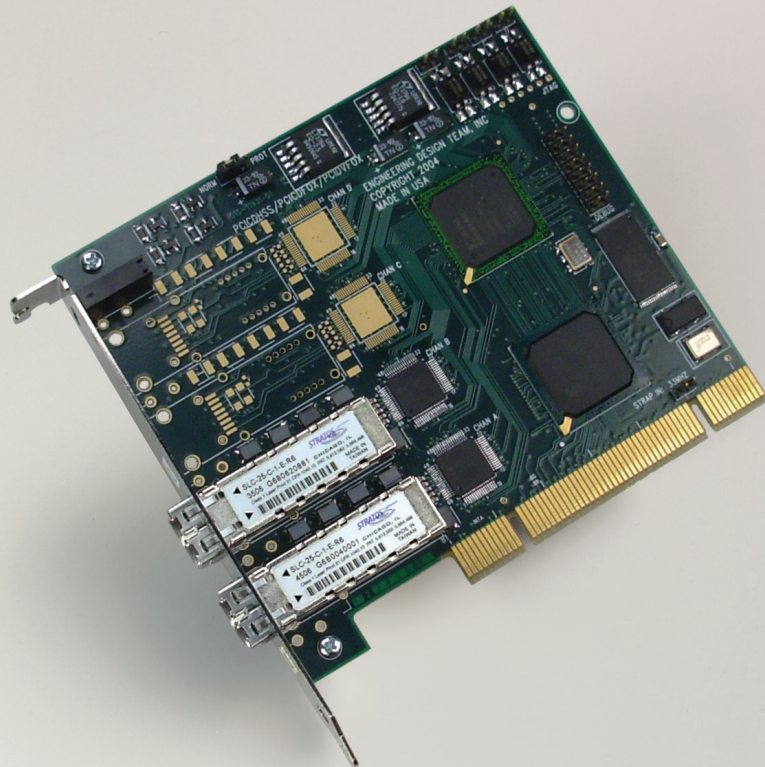


PCI DV FOX

PCI digital video fiberoptic interface for Camera Link



Description

The PCI DV FOX is a PCI fiberoptic interface that provides long-range uncompressed image capture for Camera Link cameras. It allows one or optional two SFF transceivers, supporting one medium- or up to two base-mode cameras up to 100 kilometers from the host computer (depending on transceivers).

The board pairs with one or more EDT extenders (RCX C-Link) to convert data from most camera types to fiberoptic cable, via one or optional two SFF fiberoptic transceivers.

The board fits in any PCI bus slot. Images of any resolution are captured and displayed, in real time, via DMA to the host computer; speed, resolution, and buffers are limited only by host bandwidth and memory.

Line and frame triggering are supported over camera control lines.

Provided with the board are drivers for supported operating systems and a software development kit that includes C language libraries, examples, utilities, image capture and display GUI, camera configuration files, and Camera Link standard DLL for camera control.

Features

Fiberoptic interface fits in a PCI or PCI-X bus

Supports one medium- or up to two base-mode cameras via one or more EDT extenders (RCX C-Link)

Captures and displays images in real time, via DMA to host computer

Allows remote operation – up to 100 km from host, depending on transceivers

Provides electrical isolation of camera from host

Provides onboard region-of-interest control

Supports line and frame triggering over camera control lines

Supports data rates up to 220 MB/s, as supported by host

Applications

Astronomy / biology / microscopy

Aerial mapping / traffic systems

Commercial film / multimedia

Medical and nuclear imaging

Remote scientific monitoring

Manufacturing / inspection

Machine vision / robotics

Security / surveillance

Scanning / archiving

Specifications

Product Type	PCI DV FOX is a PCI digital video fiberoptic interface; it is used with one or more EDT extenders (RCX C-Link).			
Memory	FIFOs for up to several lines of data; no frame memory			
Data Rates	Per transceiver	Up to 120 MB/s		
	Aggregate (peak / typical)	Up to 220 / 190 MB/s (or maximum supported by host)		
Data Format (I/O)	Camera Link input			
Camera Link Compliance (with RCX C-Link module)	Modes (depending on configuration)	Base, dual base, medium		
	Pixel clock rate (in increments of 0.25 MHz)	20–60 MHz		
	Serial CC1 - CC4	Via API or serial DLL (9600 to 115,200 baud) Discretely programmable for steady-state, trigger, and timed pulse		
EU Compliance	CE	Contact EDT		
	RoHS	Contact EDT		
	WEEE	WEEE directive 2002/96/EC		
PCI Compliance	PCI version	PCI 2.3 (will work in a PCI-X bus)		
	Direct memory access (DMA)	Yes		
	Clock rate / data width	66 MHz / 32 bits		
Laser Safety	Class 1 (for EDT-supplied transceivers)			
Noise	0 dB			
Transceivers	One or optional two (SFF), with duplex LCs. The fiber connections use standard physical contact (PC) polish. EDT provides SFFs for these wavelengths and cables:			
	Wavelength	Cable	Range at 1.25 Gb/s	Range at 2.5 Gb/s
	850 nm	62- μ MMF	300 meters	Not supported
	850 nm	50- μ MMF	500 meters	Not supported
	1310 nm	9- μ SMF	10 kilometers	Not supported
	For longer ranges (10 to 100+ kilometers): CWDM and bidirectional transceivers are available in various wavelengths; contact EDT.			
Triggering	CC lines supported via fiber, or externally via connector (opto-coupled Berg)			
Connectors	In addition to transceivers (above), connectors include:			
	One opto-coupled Berg		For external triggering	
Cabling	Cabling is purchased separately; consult EDT for options.			
	Fiber connection polish		Standard physical contact (PC)	
Physical	Weight	3.3 oz. typical		
	Dimensions	5.1 x 3.8 in.		
Environmental	Temperature (operating / non-operating)	10° to 40° C (extended -40° to 60° C, 33 MHz bus only) / -40° to 60° C		
	Humidity (operating / non-operating)	20% to 80%, non-condensing at 40° C / 95%, non-condensing at 40° C		
System and Software	System must have a PCI or PCI-X bus, 66 MHz or faster (33 MHz will work, but at reduced data rates). Software is included for Windows and Linux, with limited support for Mac OS X and VxWorks; for versions, see www.edt.com .			

Ordering Options

- Transceivers: **1 / 2** [see options above]
- Environmental: Extended temperature

Bold is default. Ask about custom options.