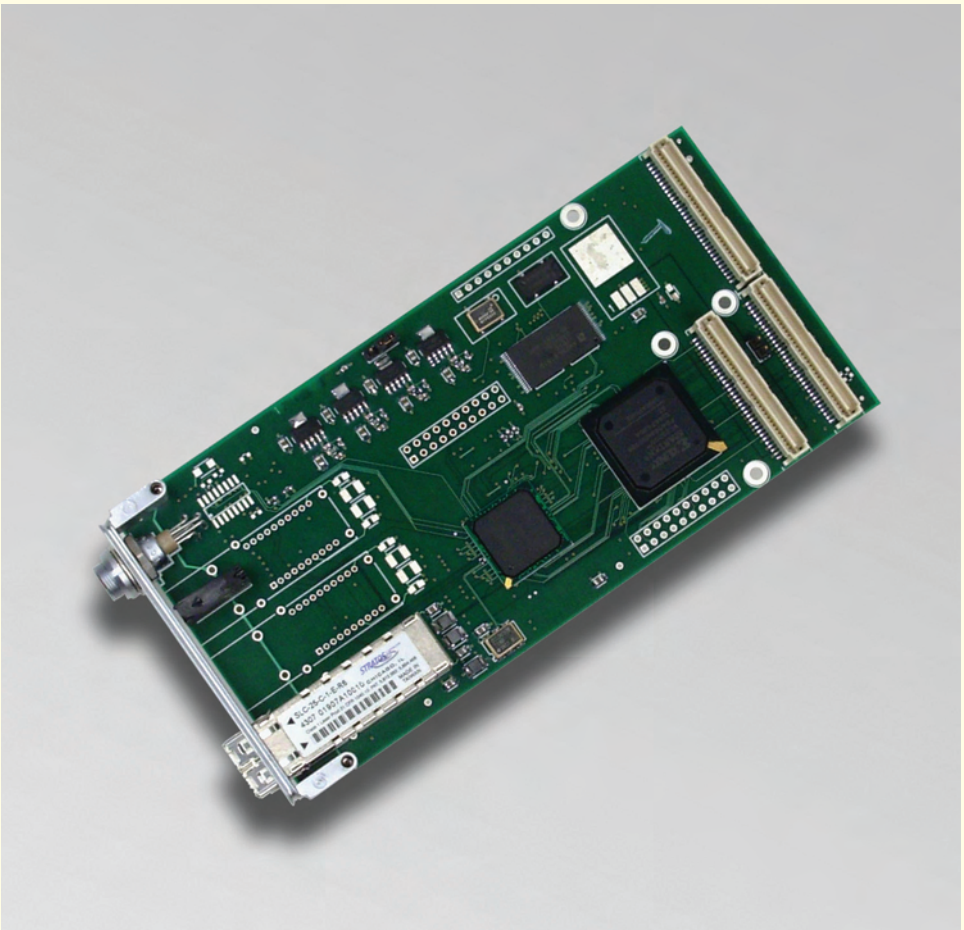
edt
a HEICO company

PMC DV FOX

PMC digital video fiberoptic interface for Camera Link or AIA



Description

The PMC DV FOX is a long-range fiberoptic interface that provides high-resolution image capture for Camera Link or AIA (LVDS/RS422) cameras. It supports one medium- or up to two base-mode cameras, at distances up to 10 kilometers from the host computer.

The board pairs with one or more EDT RCX C-Link or RCX adapter modules to convert data from most camera types to fiberoptic cable. Alternately, this fiberoptic interface can be incorporated in the camera.

The compact board fits in any PMC bus. Images are captured and displayed in real time, and camera speed, resolution, and number of buffers are limited only by host bandwidth and memory.

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 PMC bus
- Supports up to two cameras (Camera Link, LVDS, or RS422) via EDT's RCX C-Link or RCX LVDS/RS422 adapter module
- Accepts images of any resolution; sends data directly to host via DMA
- Allows remote operation – camera can be located up to 10 km from host
- Provides electrical isolation of camera from host
- Provides onboard region-of-interest control
- Supports data rates up to 220 MB/s, as supported by host

Applications

- Astronomy
- Aerial mapping
- Computer microscopy
- Intelligent traffic systems
- Manufacturing / inspection
- Remote scientific monitoring
- Medical and nuclear imaging
- Image archiving
- Machine vision
- Multimedia
- Security

Specifications

Product Type	PMC DV FOX is a PMC digital video fiberoptic interface; typically it is used with an RCX LVDS/RS422 or RCX C-Link adapter.			
Memory	FIFOs for up to several lines of data; no frame memory			
Data Rates	Peak	Up to 220 MB/s		
	Typical	190 MB/s or maximum supported by host		
Camera Link Compliance (with RCX C-Link module)	Modes supported	Base – common configurations		
	Pixel clock rate	20 to 80 MHz		
	Serial	Via API or serial DLL (9600 to 115,200 baud)		
	CC1 – CC4	Discretely programmable for steady-state, trigger, and timed pulse		
	For a list of tested cameras, see www.edt.com/pdvcl_cameras.html.			
AIA Compliance (with RCX module)	Supports most AIA format (LVDS/RS422) cameras that provide line- and frame-valid signals and a continuous pixel clock.			
	For a list of tested cameras, see www.edt.com/pcidv_cameras.html.			
EU Compliance	CE	Contact EDT		
	RoHS	RoHS directive 2002/95/EEC		
	WEEE	WEEE directive 2002/96/EC		
PCI Compliance	PCI version	PCI 2.3		
	Direct memory access (DMA)	Yes		
	Clock rate / data width	66 MHz / 32 bits		
PMC Compliance	P1386.1			
Laser Safety	Class 1			
Noise	0 dB			
MTBF	Estimated at 200,000 hours			
Transceivers	One or optional two (wavelength 850 nm or optional 1310 nm), with duplex LCs			
	Wavelength	**Cable**	**Range at 1.25 Gb/s**	**Range at 2.5 Gb/s**
	850 nm	62-µ MMF	300 meters	150 meters
	850 nm	50-µ MMF	500 meters	250 meters
	1310 nm	9-µ SMF	10 kilometers	5 kilometers
Triggering	CC lines supported via fiber, or externally via connector (opto-coupled Berg or optional 7-pin Lemo – mate to FGG.0B.307.CLAD.56)			
Cabling	Cabling is purchased separately; consult EDT for options.			
Physical	Weight	2.9 oz. typical		
	Dimensions	6.0 x 2.9 in.		
Environmental	Temperature	Operating 10° to 40° C; extended -40° to 60° C (33 MHz bus only)		
		Non-operating -40° to 60° C		
	Humidity	Operating 20% to 80%, non-condensing at 40° C		
		Non-operating 95%, non-condensing at 40° C		
System and Software	System must have a PMC bus, 66 MHz or faster (33 MHz will work, but at reduced data rates).			
	Software is included for Windows, Solaris, Linux, and Mac OS X and can be requested for VxWorks; for versions, see our website.			

Support

EDT offers engineer-to-engineer customer support, from phone consultation to custom design of hardware, firmware, and software. Contact us for options and details.

Contact

Engineering Design Team (EDT), Inc.
1400 NW Compton Drive, Suite 315
Beaverton, Oregon 97006
800-435-4320 / 503-690-1234 (phone)
503-690-1243 (fax)
www.edt.com

Ordering Options

- Fiberoptic adapter: RCX C-Link or LVDS/RS422
- Transceivers: **1** / 2 (**850** / 1310 nm)
- Triggering (external): 7-pin Lemo
- Environmental: Extended temperature

Bold is default. **Ask about custom options.**