

PCIe4 DV C-Link

PCI Express 4-lane digital video ("no A" series) Camera Link interface



Description

The PCIe4 DV C-Link is a Camera Link framegrabber that provides high resolution image capture for digital video. It has two MDR26 connectors to support one medium- or up to two base-mode cameras.

The board fits in any 4-, 8-, or 16-lane PCI Express slot. 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

- Camera Link interface fits in a 4-, 8- or 16-lane PCI Express bus
- Supports one medium- or up to two base-mode cameras
- Accepts images of any resolution; sends data directly to host via DMA
- Provides onboard region-of-interest control
- 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

Memory	FIFOs for up to several lines of data; no frame memory	
Data Rates	Peak Typical	Up to 220 MB/s 190 MB/s or maximum supported by host
Data Format (I/O)	Camera Link input; timecode input (IRIG-B)	
Camera Link Compliance	Modes 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	Base or medium – common configurations
EU Compliance	CE RoHS WEEE	Contact EDT RoHS directive 2002/95/EEC WEEE directive 2002/96/EC
PCI Express Compliance	PCIe version Direct memory access (DMA) Number of lanes	PCIe 1.1 Yes 4
Noise	0 dB	
MTBF	Estimated at 200,000 hours	
Triggering	Via CC lines, or externally via connector (opto-coupled Berg or optional 7-pin Lemo – mate to FGG.0B.307.CLAD.56)	
Connectors	Two MDR26	For data and control
Cabling	Cabling is purchased separately; consult EDT for options.	
Physical	Weight Dimensions	3.3 oz. typical 4.8 x 4.8 x 0.7 in.
Environmental	Temperature (operating / non-operating) Humidity (operating / non-operating)	10° to 40° C / -20° to 60° C 1% to 90% non-condensing at 40° C / 95% non-condensing at 45° C
System and Software	System must have a PCI Express bus (4, 8, or 16 lanes). Software is included for Windows and Linux; for versions, see edt.com.	

Ordering Options

- Triggering (external): 7-pin Lemo

Bold is default. Ask about custom options.