

PCIe8 DV C-Link

PCI Express 8-lane digital video Camera Link interface



Description

The PCIe8 DV C-Link is a Camera Link interface that provides high-resolution image capture for digital video. It has two MDR26 connectors to support one full-, one medium-, or up to two base-mode cameras.

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

An optional time code input (IRIG-B) for precise timestamping is available.

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 an 8- or 16-lane PCI Express bus
- Supports one full-, 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 1.4 GB/s, as supported by host
- Offers optional time code input (IRIG-B) for precise timestamping

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	PCIe8 DV C-Link is a PCI Express 8-lane digital video Camera Link interface.	
Memory	FIFOs for up to several lines of data; no frame memory	
Data Rates	Peak Typical	Up to 1.4 GB/s Maximum supported by host
Camera Link Compliance	Modes supported Pixel clock rate Serial CC1 - CC4 Connectors For a list of cameras that have been tested, see www.edt.com/pdvcl_cameras.html .	Base, medium, or full – common configurations 20 to 85 MHz Via API or serial DLL (9600 to 115,200 baud) Discretely programmable for steady-state, trigger, and timed pulse Two MDR26 for data and control
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 8
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.OB.307.CLAD.56)	
Time code input	IRIG-B input for precise timestamping via optional 7-pin Lemo	
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 Humidity	Operating 10° to 40° C Non-operating -20° to 60° C Operating 1% to 90%, non-condensing at 40° C Non-operating 95%, non-condensing at 45° C
System and Software	System must have a PCI Express bus (8 or 16 lanes) that is not dedicated to display use only. 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

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Ordering Options

Select one of these options for 7-pin Lemo:
- Lemo for triggering (external)
- Lemo for time code input (IRIG-B)
- **No Lemo**

Bold is default. Ask about custom options.