

PCIe4 DV C-Link

PCI Express 4-lane digital video 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 MDR 26-pin connectors to support one medium- or up to two base-mode cameras.

The compact, half-length 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 or display GUI, camera configuration files, and Camera Link standard DLL for camera control.

Applications

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

Features

- Camera Link framegrabber fills one 4-, 8- or 16-lane PCI Express slot
- 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

Specifications

Product Type	PCIe4 DV C-Link is a PCI Express 4-lane digital video Camera Link framegrabber.	
Memory	FIFOs for up to several lines of data; frame memory not included	
Data Rates	Theoretical Typical	Up to 220 MB/s 190 MB/s or 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 or medium – common configurations 20 to 80 MHz Via API or serial DLL (9600 to 115,200 baud) Discretely programmable for steady-state, trigger, and timed pulse Two (MDR 26-pin) 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 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)	
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 and a 4-, 8-, or 16-lane slot. Software is included for Windows, Solaris, Linux, and Mac OS X and can be requested for VxWorks; for supported versions, see 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.

Ordering Options

- Triggering (external): 7-pin Lemo

Bold is default. Consult EDT for more options.

Contact

Engineering Design Team (EDT), Inc.
1100 NW Compton Drive, Suite 306
Beaverton, Oregon 97006
800-435-4320 / 503-690-1234 (phone)
503-690-1243 (fax)
www.edt.com / info@edt.com