

PCI DV C-Link

PCI digital video ("no A" series) Camera Link interface



Description

The PCI DV C-Link is a PCI Camera Link interface that provides uncompressed 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 PCI or PCI-X bus. 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.

External triggering is enabled by the provided Berg or the optional DB 9-pin subpanel connector.

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 PCI or PCI-X bus
- Supports one medium- or up to two base-mode cameras
- Captures and displays images in real time, via DMA to host computer
- Provides onboard region-of-interest control
- Supports line and frame triggering over camera control lines
- Supports data rates up to 220 MB/s

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	
Camera Link Compliance	Modes Pixel clock rate Serial CC1 - CC4 Connectors	Base, dual base, medium – common configurations 20–85 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	Contact EDT RoHS directive 2002/95/EEC
PCI Compliance	PCI version Direct memory access (DMA) Clock rate / data width	PCI 2.3 (will work in a PCI-X bus) Yes 66 MHz / 32 bits
Noise	0 dB	
MTBF	Estimated at 200,000 hours	
Triggering	Via CC lines, or externally via connector (opto-coupled Berg or optional DB 9-pin subpanel – CTG DB9M 09480)	
Connectors	Two MDR26 Camera Link One opto-coupled Berg One optional DB 9-pin subpanel	For data and control For external triggering For external triggering
Cabling	Cabling is purchased separately; consult EDT for options.	
Physical	Weight Dimensions	2.8 oz. typical 5.0 x 3.6 x 0.5 in.
Environmental	Temperature (operating / non-operating) Humidity (operating / non-operating)	10° to 40° C (extended -40° to 60° C, 33 MHz bus only) / -40° 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 or PCI-X bus, 66 MHz or faster (33 MHz will work, but at reduced data rates). Software is included for Windows and Linux; for versions, see edt.com.	

Ordering Options

- Connector: **Berg (included)** / DB 9-pin sub-panel (optional), for external triggering
- Environmental: Extended temperature

Ask about custom options.