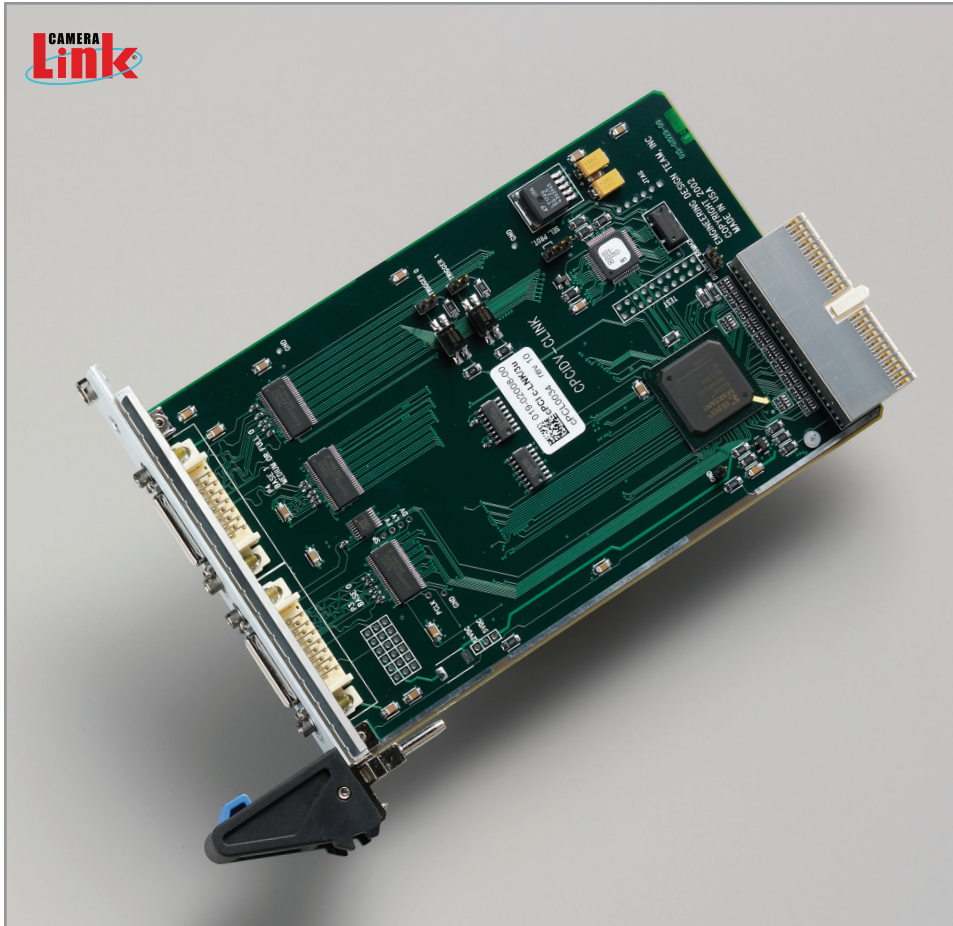# cPCI DV C-Link
CompactPCI digital video Camera Link interface

Description

The cPCI DV C-Link is a cPCI 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 comes in a 3U or 6U CompactPCI form factor. 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 connector (for 3U or 6U) or the optional DB15 (6U only).

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 CompactPCI 3U or 6U 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, 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

Product Type	cPCI DV C-Link is a CompactPCI digital video Camera Link interface.	
Form Factor	3U or 6U	
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	Base, dual base, medium – common configurations
	Pixel clock rate	20–85 MHz
	Serial	Via API or serial DLL (9600 to 115,200 baud)
	CC1 - CC4	Discretely programmable for steady-state, trigger, and timed pulse
	Connectors	Two MDR26 for data and control
EU Compliance	CE	Contact EDT
	RoHS	Contact EDT
	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
cPCI Compliance	PICMG 2.0 R3.0	
Noise	0 dB	
MTBF	Estimated at 200,000 hours	
Triggering	Via CC lines, or externally via connector (opto-coupled Berg for 3U or 6U, or DB15 for 6U only)	
Connectors	Two MDR26 Camera Link	For data and control
	One opto-coupled Berg	For external triggering
	One optional DB15	For external triggering
Cabling	Cabling is purchased separately; consult EDT for options.	

Physical	**For 3U and 6U:**	**3U**	**6U**
	Weight	5.2 oz. typical	8.9 oz. typical
	Dimensions (not including back panel / connectors)	4.0 x 6.3 x 0.4 in.	9.2 x 6.3 x 0.4 in.

Environmental	Temperature (operating / non-operating)	10° to 40° C (extended -40° to 60° C, 33 MHz bus only) / -40° to 60° C
	Humidity (operating / non-operating)	1% to 90%, non-condensing at 40° C / 95%, non-condensing at 45° C
System and Software	System must have a 3U or 6U CompactPCI bus, 66 MHz or faster (33 MHz will work, but at reduced data rates). Software is included for Windows and Linux, with limited support for Mac OS X and VxWorks; for versions, see www.edt.com.	

Ordering Options

- Form factor: 3U / 6U
- Connector: **Berg (included)** / DB15 (optional), for external triggering, IRIG-B input, or both
- Environmental: Extended temperature

Ask about custom options.