

PCI DV CLS

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



Description

The PCI DV CLS is a PCI Camera Link simulator that generates image data by simulating one medium- or base-mode camera. It provides a pixel clock rate of 20 to 85 MHz (in increments of 0.25 MHz) and a text-based configuration script that can be modified to match the timing parameters of the camera to be simulated.

Known image data allows easy debug of interface application code, and system debug when target camera is unavailable.

The PCI DV CLS has no frame buffer memory; image data is sent via DMA from host memory as required by the application. Internal counters can be used as an alternative source of image data.

C language libraries allow the user to define appropriate responses to UART commands from the interface.

Line and frame triggering are supported over camera control lines.

Features

- Camera Link simulator connects to a PCI or PCI-X bus
- Simulates one Camera Link digital camera, base-mode or 32-bit medium-mode
- Supports DMA from host memory for image data
- Internal counters may be chosen as alternate source of image data
- Supports data rates up to 220 MB/s, as supported by host
- Allows emulation of camera UART commands
- Supports line and frame triggering over camera control lines
- Supports Camera Link clock from 20 to 85 MHz in increments of 0.25 MHz

Applications

- Any PCI application requiring simulated Camera Link output

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 (in increments of 0.25 MHz) Serial CC1 - CC4 Connectors	Base or 32-bit medium – common configurations 20–85 MHz 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	EMC directive 2004/108/EC and low voltage directive 73/23/EEC Contact EDT WEEE directive 2002/96/EC
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 150,000 hours	
Connectors	Two MDR26 Camera Link	For data and control
Cabling	Cabling is purchased separately; consult EDT for options.	
Physical	Weight Dimensions	3.3 oz. typical 5.0 x 4.2 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 20% to 80% non-condensing at 40° C / 95% non-condensing at 40° 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

- Environmental: Extended temperature

Ask about custom options.