VisionLink CLS
Camera Link simulator for PCI Express

PARHELIA

edt
a HEICO company

Description

The VisionLink CLS is a Camera Link 2.0 simulator that simulates base mode cameras at pixel clock rates of 20 to 85 MHz on a PCI Express Gen3 board.

Actual or generated images are output as Camera Link data, facilitating development and testing of imaging systems, cameras, and software.

Images are sent via DMA from host memory, as supported by the host computer. Internal counters can be used as an alternative source of image data.

Simulator setup is facilitated by text-based configuration scripts, easily modifiable to match the timing parameters of multiple camera models.

Line and frame triggering are supported over camera control lines.

C language libraries provide access to all simulator functions and allow the user to define appropriate responses to UART commands from the interface.

Features

Simulates Camera Link base mode cameras

Supports pixel clock rates of 20 to 85 MHz

Outputs actual or generated images as Camera Link data

Allows internal counters to be used as alternative source of image data

Supports DMA from host memory as supported by host

Includes text-based configuration scripts modifiable for various camera models

Supports line and frame triggering over camera control lines

Allows emulation of camera UART commands

Applications

Development and testing of...
- Cameras
- Image-processing software
- Image-processing hardware
- Imaging systems and applications

Record-playback systems

Specifications

Data Format	Camera Link	
Memory	FIFO	Up to several lines of data
Camera Link Compliance	Version	2.0
	Modes	Base, dual base
		(Dual base outputs can use the same or different pixel clock sources.)
	Pixel clock rate	20–85 MHz
	Serial	9600 to 115,200 baud (via API, serial DLL, or loopback)
	CC1 - CC4	Supported
	Connectors	SDR26
EU Compliance	Contact EDT	
PCI Express Compliance	Form factor	Half-length, full-height
	PCIe version	Gen3
	Direct memory access (DMA)	Yes
	Number of lanes	8
Noise	0 dB	
MTBF	Estimated at 200,000 hours	
Triggering	Freerun or via CC lines	
Connectors	Two SDR26 Camera Link	For data and control
Cabling	Camera Link (purchased separately)	SDR-to-SDR or SDR-to-MDR
Physical	Weight	3.5 oz.
	Dimensions	With connectors and backpanel, 4.75 x 5.0 x 0.75''; without, 4.0 x 4.625 x 0.5''
Environmental	Temperature (operating / non-operating)	10° to 40° C / -20° to 60° C
	Humidity (operating / non-operating)	1% to 90%, non-condensing at 40° C / 95%, non-condensing at 45° C
Software	Software is included for Windows and Linux; for versions, see edt.com.	

Ordering Options

- VisionLink CLS: **Standard** options
- Camera Link cabling: Purchased separately

Bold is default. **Ask** about custom options.

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