IMPERX

FRAMEGRABBERS

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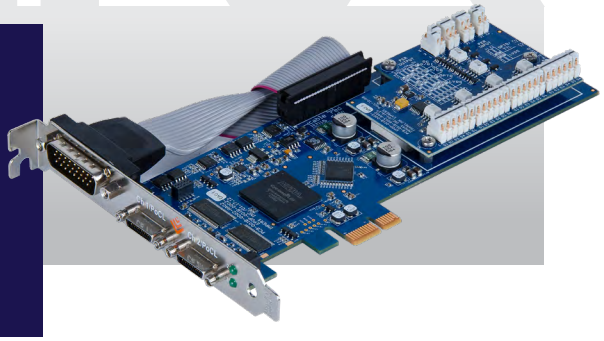
VCE-CLPCIe02

Camera Link® PCIe x1 Card for Desktop PCs



Imperx: *VCE-CLPCIe02*

IMPERX Framelink PCIe x1 is a professional level PCI Express video capture card that enables users to view and store in real time mega pixel images from Camera Link source onto desktop computers. The Framelink PCIe x1 is capable of capturing single or multiple frames and standard AVI clips on up to two Base or one Medium Camera Link compliant video source. Each captured frame can be stamped with a user message along with the date and time of capture. The Framelink VCE-CLPCIe02 comes with easy to use camera configuration software for fast integration of the card into demanding machine vision environments.

Key Features

- PCIe x1 lane providing 2.5 Gbps of bandwidth
- Fully compliant with the Power over Camera Link (PoCL) and Safe Power specifications
- Built in comprehensive programmable logic controller (PLC)
- Intelligent scatter/gather DMA for fast, efficient use of PCIe bandwidth and system memory
- Flow-through pipeline architecture for low latency
- Includes 4 external inputs each configurable as TTL, LVDS or Opto-coupled
- Includes 4 general outputs each configurable as TTL, LVDS, Opto-coupled or Open Collector
- Dynamic buffer allocation
- Selectable window sizes
- Adjustable RGB brightness and auto white balance
- Unique ‘auto-learn’ feature automatically recognizes camera parameters and simplifies CAM file creation
- Bayer pattern interpolation
- Captures single, multiple frames or AVI clips
- Normal or delay capture
- Date, time and text overlay
- BMP, TIFF or adjustable JPEG file format
- Image viewer with DVR controls
- Look up tables, histograms, hex pixel dump

Specifications

Feature	Description
Software	Application program: Full featured, intuitive, easy to use GUI Drivers: Windows 10/11, DirectX, Halcon, LabVIEW, Matlab SDK: C/C++, COM, .NET, ActiveX - all with sample source code
Video Source	Uses two mini-CL (SDR/HDR) connectors Base: 24 video data bits plus strobes and clock per channel Medium: 48 video data bits plus strobes and clock per channel 4 camera control bits (CC1 to CC4) per channel Bi-directional serial interface per channel

Feature	Description
Video Format	Base: 1x8, 2x8, 3x8, 1x10, 2x10, 1x12, 2x12, 1x14, 1x16 and 3x8 (RGB24) Medium: 4x8, 3x10, 4x10, 3x12, 4x12, RGB30 and RGB36 Monochrome and color: RGB, Bayer and TRUESENSE Sparse CFA
Power	3.3 V DC +/-5%, 500 mA steady 1.65 W constant power
Mechanical	Low profile PCI Express form factor
Weight	1.59 oz. (45 g)
Environmental	-40 °C to +85 °C Operating
Humidity	90% non-condensing
MTBF	>390,000 hours @ 50°C (MIL-STD-785B, MIL-HDBK-217F)
Regulatory	FCC Part 15 Class B, CE, RoHS

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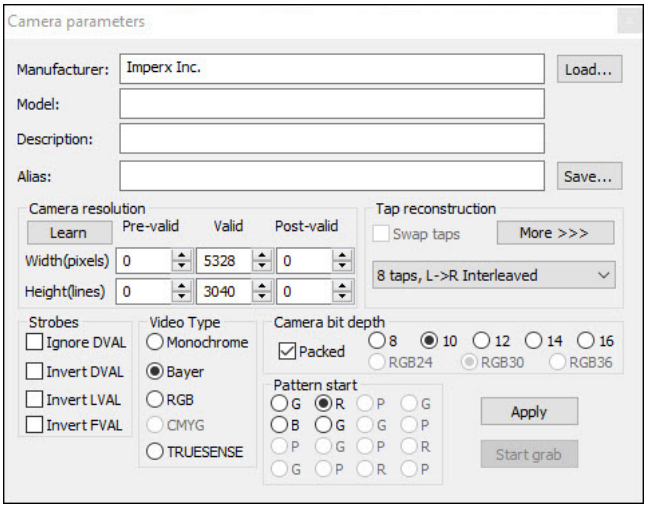
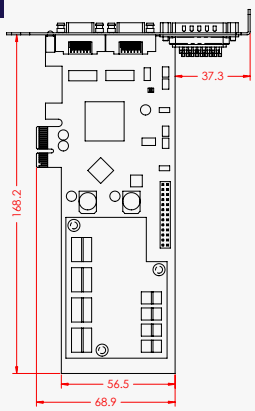
Industrial Cameras & Imaging Systems

Software

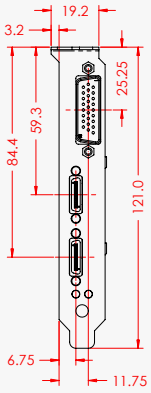


Dimensions

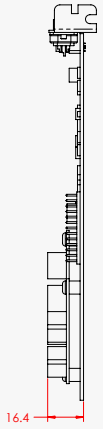
FRONT



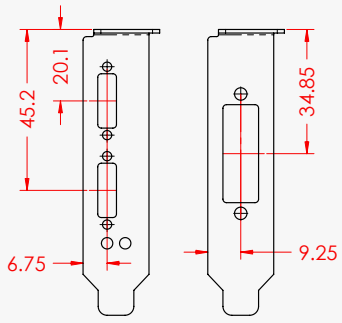
TOP



SIDE



Supplied with low profile bracket



Ordering Information

VCE-CLPCIe02

For specific details and ordering information, consult the FrameLink Express user's manual or contact IMPERX at sales@imperx.com.

Rev: VCE-CLPCIe02_r4_2023

Quality Management System ISO 9001:2015 Registered
Environmental Management System ISO 14001:2015 Registered
DDTC Registered (Directorate of Defense Trade Controls, US Department of State)

IMPERX
Industrial Cameras & Imaging Systems

IMPERX 6421 Congress Ave., Boca Raton, FL 33487, USA
Tel: +1-561-989-0006. Email: sales@imperx.com

WWW.IMPERX.COM

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