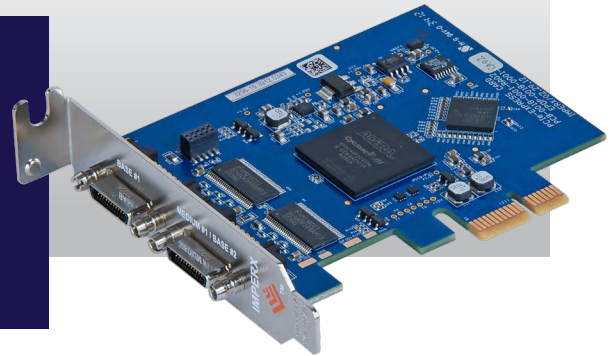


FRAME GRABBERS

VCE-CLPCle01

Camera Link® PCIe x1 Card for Desktop PCs



Imperx: VCE-CLPCle01

IMPERX FrameLink PCIe x1 is a professional level video capture card that enables users to view and store in real time mega pixel video images from Camera Link sources onto desktop computers. IMPERX 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. A full software suite that includes drivers, C/C++, SDK, and an application program is provided with each FrameLink VCE-CLPCle01 card.

Key Features

- PCIe x1 lane providing 2.5 Gbps of bandwidth
- Intelligent scatter/gather DMA for fast, efficient use of PCIe bandwidth and system memory
- Built in CC pulse generators
- Unique 'auto-learn' feature automatically recognizes camera parameters and simplifies CAM file creation
- Dynamic buffer allocation
- Selectable window sizes
- Adjustable RGB brightness and auto white balance
- Bayer pattern interpolation
- Captures single, multiple frames or AVI clips
- Normal or delay capture
- Date, time and text overlay
- BMP, TIFF, RAW or adjustable JPEG file format
- Image viewer with DVR controls
- Look up tables, histograms, hex pixel dump

Specifications

| Feature | Description | 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 | Power | 3.3 V DC +/-5%, 500 mA steady 1.65 W constant power |
| 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 | Mechanical | Low profile PCI Express form factor |
| 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 | 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 |

Software

Camera parameters

Manufacturer: Imperx Inc. Load...

Model:

Description:

Alias: Save...

Camera resolution

| Learn | Pre-valid | Valid | Post-valid |
|---------------|-----------|-------|------------|
| Width(pixels) | 0 | 5328 | 0 |
| Height(lines) | 0 | 3040 | 0 |

Tap reconstruction

☐ Swap taps More >>>

8 taps, L->R Interleaved

Strobes

☐ Ignore DVAL

☐ Invert DVAL

☐ Invert LVAL

☐ Invert FVAL

Video Type

☐ Monochrome

☒ Bayer

☐ RGB

☐ CMYK

☐ TRUESENSE

Camera bit depth

☒ Packed

☐ 8 ☒ 10 ☐ 12 ☐ 14 ☐ 16

☐ RGB24 ☒ RGB30 ☐ RGB36

Pattern start

☐ G ☒ R ☐ P ☐ G

☐ B ☐ G ☐ G ☐ P

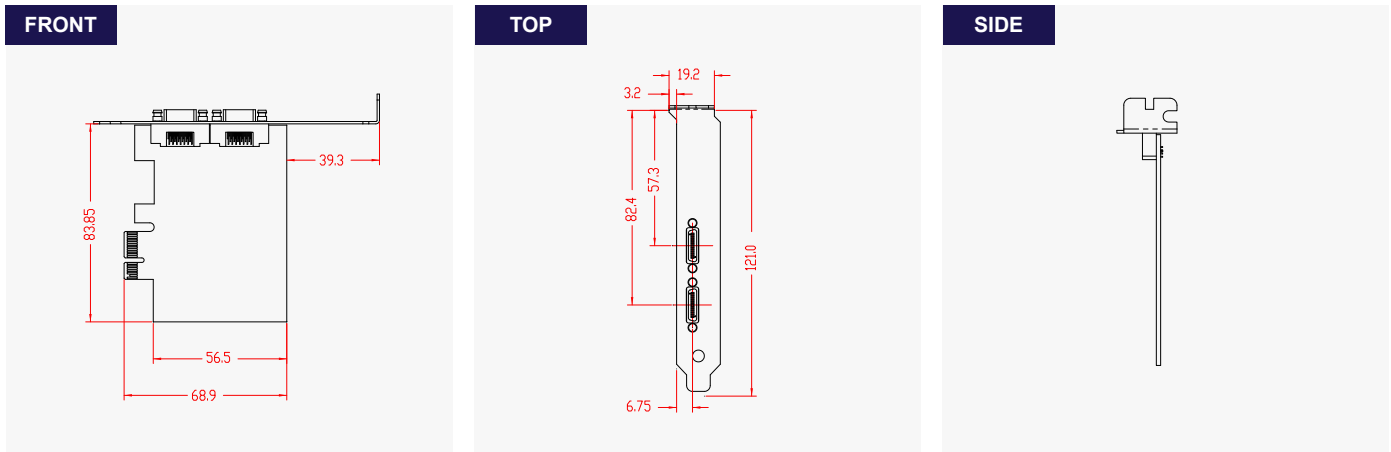
☐ P ☐ G ☐ P ☐ R

☐ G ☐ P ☐ R ☐ P

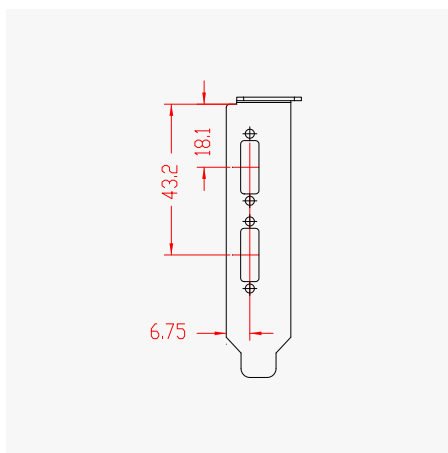
Apply

Start grab

Dimensions



Supplied with low profile bracket



Ordering Information

VCE-CLPCle01

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

Rev: VCE-CLPCle01_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)



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