FRAME GRABBERS



ExpressCard/54 Camera Link

Video Capture Card







Framelink ExpressCard/54 (VCE- CLEX01)

Simultaneous acquisition from two base cameras or one medium camera.
Advanced features: Lookup tables, histograms, RGB gain/offset with auto-white balance...

The IMPERX FrameLink ExpressCard/54 is a professional level PCI Express video capture card that enables users to view and store in real time mega pixel video images from Camera Link sources onto laptop computers. IMPERX FrameLink ExpressCard/54 is capable of capturing single or multiple frames and standard AVI clips on up to two base or one medium CameraLink 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 IMPERX FrameLink VCE-CLEX01 card.

- Supports two independent base or one medium Camera Link interface
- ExpressCard/54 compliant providing 2.5 Gbps of bandwidth
- Intelligent scatter/gather DMA for fast, efficient use of PCIe bandwidth and system memory
- Flow-through pipeline architecture for low latency
- Built in CC pulse generators
- Many advanced features including look up tables, histograms, RGB gain/offset with auto-white balance, hex pixel dump, etc.
- Bayer pattern interpolation
- Unique ‘auto-learn’ feature automatically recognizes camera parameters and simplifies
- CAM file creation
- Backwards compatible with FrameLink (PCMCIA) software

IMPERX™

APPLICATIONS

Aerial Mapping
Aerial Robots: Military, Police
Aerospace
Agriculture
Automation
Automotive
Biometrics
Broadcasting
Printed Circuit Board (PCB)
Electronics
Energy/Solar/Wind Power
Flat Panel Inspection
Food/Beverage
Homeland Security
Law Enforcement
Intelligent Traffic Systems (ITS)
Medical Devices/Imaging
Metrology
Microscopy
Military/Defense
Pharmaceuticals
Particle Image Velocimetry (PIV)
Radiology
Robotics
Scientific Apps
Surveillance
Semiconductors
Transportation
Textile/Apparel

IMPERX Framelink ExpressCard/54 VCE-CLEX01 Specifications

Features

- Simultaneous acquisition from two base cameras or one medium Camera Link camera
- PCI Express lane providing 2.5 Gbps of bandwidth
- Intelligent scatter/gather DMA
- Flow-through pipelined architecture
- Dynamic buffer allocation
- Selectable window sizes
- Adjustable RGB brightness and auto white balance
- Bayer pattern interpolation
- Built in programmable logic controller
- 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

Software

- Application program: Full featured, intuitive, easy to use GUI
- Drivers: Win XP/2000/Vista/7 in 32 and 64 bit versions, DirectX, Labview, Matlab, Halcon, MIL, Linux
- SDK: C/C++, COM, .NET, ActiveX – all with sample source code

Video Source

Two CameraLink inputs configured as dual base or single medium:

- Uses two mini-CL SDR 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

Video Format

Base: 1x8, 2x8, 3x8, 1x10, 2x10, 1x12, 2x12, 1x14, 1x16 and 3x8 (RGB24)

Medium: All base modes + 4x8, 3x10, 4x10, 3x12, 4x12, RGB30 and RGB36

Monochrome and color (RGB, Bayer and TRUESENSE)

Power

3.3V DC +/-5%, 500 mA steady

1.65W constant power

Environmental

Operating temperature: 0°C to 65°C

Relative humidity: 90% non-condensing

Regulatory

FCC 15 part B, CE, RoHS

Mechanical

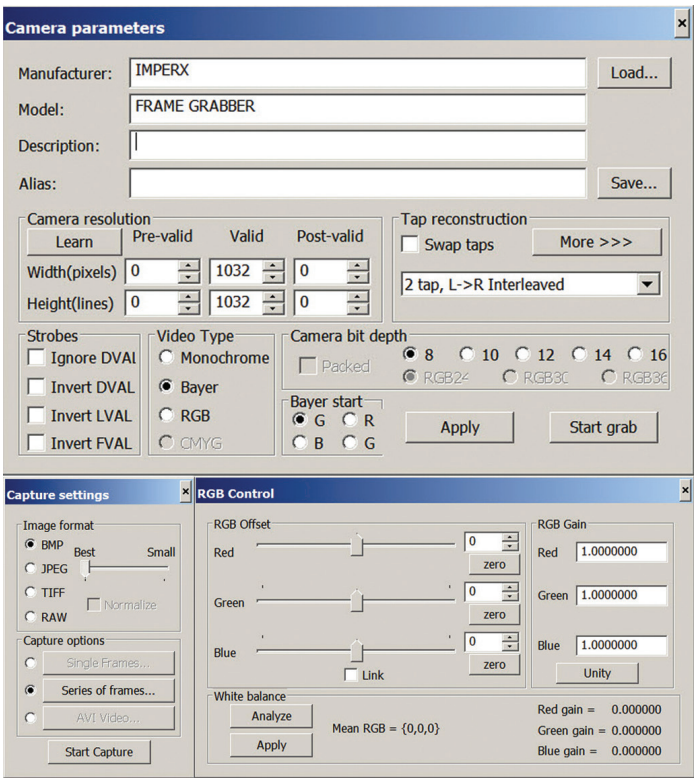
ExpressCard/54 form factor

Weight 1.91 oz., 50g

Order: VCE-CLEX01

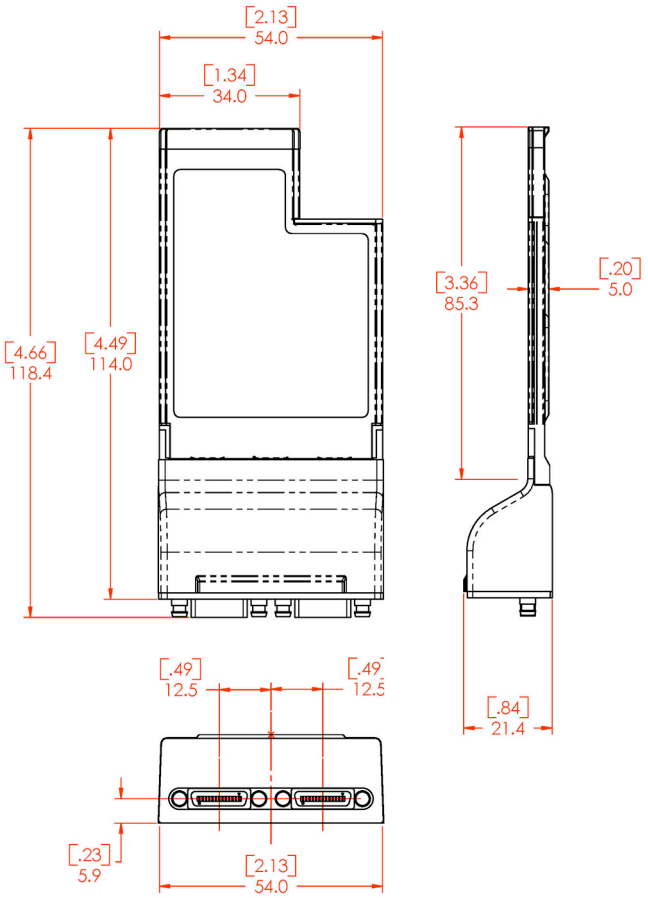
For specific details and ordering information, consult the FrameLink user's manual or contact IMPERX at sales@imperx.com.

Software



Mechanical Dimensions

VCE-CLEX01



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