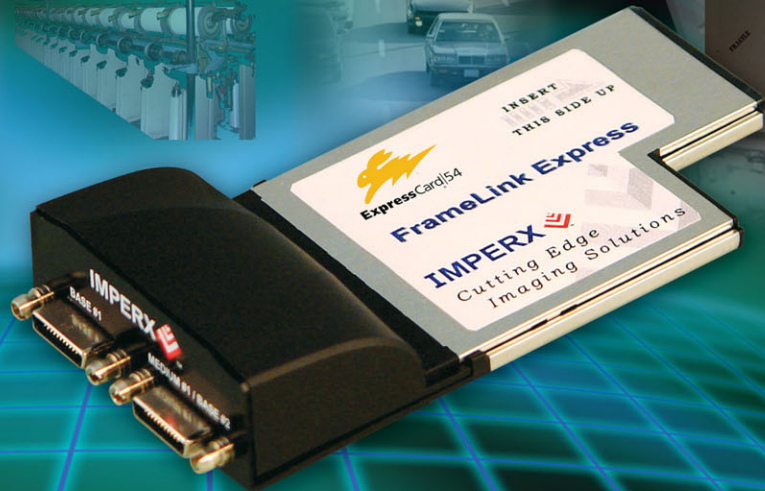


## DUAL CAMERA LINK EXPRESSCARD/54 VIDEO CAPTURE CARD

FrameLink Express



### Features

- Supports two independent Base Camera Link interfaces
- ExpressCard/54 compliant providing 2.5 Gbps of bandwidth
- Intelligent scatter/gather DMA for fast, efficient use of ExpressCard bandwidth and system memory
- Flow-thru pipelined architecture for low latency
- Built-in CC Pulse Generators
- Many advanced features including lookup tables, histograms, RGB gain/offset with auto-white balance, hex pixel dump, etc.
- Bayer pattern interpolation
- Unique 'auto-learn' feature that automatically recognizes camera parameters and simplifies CAM file creation
- Plug-n-Play operation with hot insertion/removal
- Backwards compatible with FrameLink (PCMCIA) software

### Applications

- Industrial
  - Silicon wafer and PCB inspection
  - Machine vision
  - Document scanning
- Medical
  - Ultrasound
  - X-Ray, CT and MRI
- Security
  - Police in-car surveillance
  - Biometric identification
- Military
  - Aerial mapping/survey
  - Battlefield imaging
  - UAV, Robotic vision

The success of the FrameLink and VCE series of PCMCIA frame grabbers has positioned Imperx as the world's leading supplier of frame grabbers for laptops. Using this experience as leverage, we have developed the FrameLink Express, a Camera Link frame grabber designed especially for ExpressCard laptops. It provides the functionality, performance and versatility required by today's most demanding vision systems. The FrameLink Express is a highly versatile frame grabber capable of acquiring images from two independent Camera Link Base cameras. It features a flow-through pipelined architecture with an intelligent scatter/gather DMA engine providing over 200 MBytes/s of throughput. A full software suite, including drivers, C/C++ SDK, and an application program, is provided with the card.

MOBILITY... CONVENIENCE... PERFORMANCE...  
**ExpressCard FRAME GRABBERS**

# Specifications for FrameLink Express

<b>Features</b>	Simultaneous acquisition from two Camera Link Base Cameras ExpressCard/54 compliant PCIe x1 lane providing 2.5 Gps of bandwidth Intelligent scatter/gather DMA Flow-through pipeline architecture Dynamic buffer allocation Plug-and-play with hot insertion and removal Selectable window sizes Adjustable RGB brightness level and auto white balance Bayer pattern interpolation Built-in programmable CC pulse generator 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
<b>Video Source</b>	Two Camera Link inputs configured as dual Base <ul style="list-style-type: none"> <li>• Uses two mini-CL connectors</li> <li>• 24 video data bits plus strobes and clock per channel</li> <li>• 4 camera control bits (CC1 to CC4) per channel</li> <li>• Bi-directional serial interface per channel</li> </ul> Video Format <ul style="list-style-type: none"> <li>• 1x8, 2x8, 3x8, 1x10, 2x10, 1x12, 2x12, 1x14, 1x16 and 3x8(RGB24)</li> <li>• Mono, Bayer Color and RGB Color</li> </ul>
<b>Software</b>	Application program: Full-featured, intuitive, easy to use GUI Drivers: Win XP/2000/Vista, DirectX, Labview, Matlab, Halcon SDK: C/C++, COM, .NET, ActiveX - all with sample source code
<b>Environmental</b>	Operating temperature: 0°C to 65°C Relative humidity: 90% non-condensing
<b>Mechanical</b>	ExpressCard/54 form factor 4.28" x 2.1" x 0.7" (108 x 54 x 18 mm) Weight 1.91 oz., (53.6 g)
<b>Regulatory</b>	FCC 15 part B, CE, RoHS

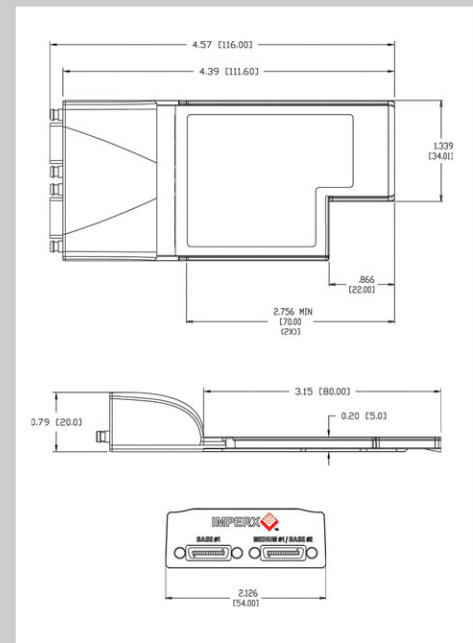
## Description

The FrameLink Express is a professional, state of the art ExpressCard video capture card, allowing users to view and store in real time mega-pixel video images from Camera Link sources on their notebook computers. The FrameLink Express is capable of capturing single or multiple frames, and standard AVI clips from any Base 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 Express offers easy to use camera configuration software, which allows for fast integration of the card into demanding machine vision environments.

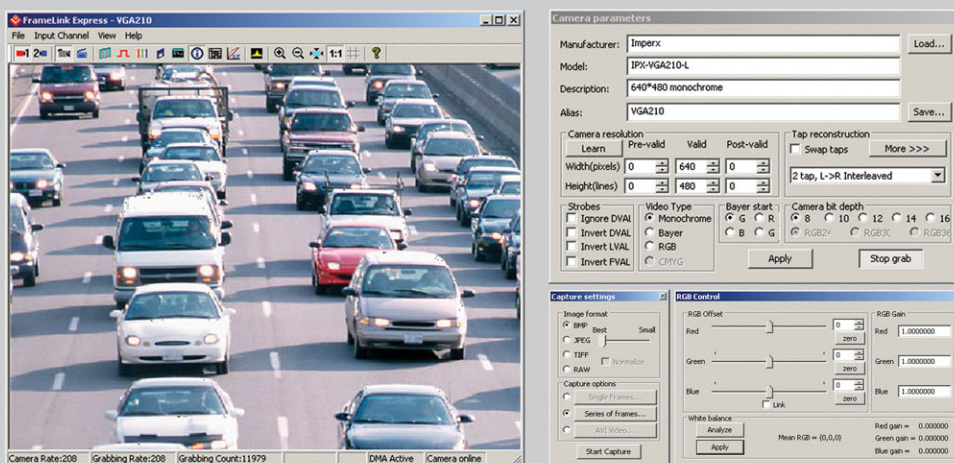
## Power Requirements

- 3.3V DC +/- 5%
- 500 mA steady
- 1.65W constant power

## Mechanical Dimensions



## Software



## Ordering Information

Ordering: **VCE-CLEX01**

For specific details and ordering information, contact us at [sales@imperx.com](mailto:sales@imperx.com).

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Rev. 1.0



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