



### VCE-ANEX03



#### VCE Express - Analog Express Card/34 - Video Capture Card

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 VCE Express, an analog frame grabber designed especially for ExpressCard/34 laptops. It provides the functionality, performance and versatility required by today's most demanding vision systems. The VCE Express is a highly versatile frame grabber capable of acquiring images from any NTSC, PAL, RS170, or SECAM video source. It features a flow-through pipelined architecture with an intelligent scatter/gather DMA engine providing over 235 Mbytes(s) of throughput. A full software suite, including drivers, an application program and SDK, is provided with the card.

#### Features

- Supports NTSC, PAL, RS170, or SECAM video
- Saves 16 bit YCrCb 4:2:2, 4:4:4 or RGB24 data
- External trigger input (TTL)
- ExpressCard/34 compliant providing 2.5 Gbps of bandwidth
- Intelligent scatter/gather DMA for fast, efficient use of ExpressCard bandwidth and system memory
- Flow-through pipeline architecture for low latency
- Many advanced features including histograms, RGB gain/offset with auto-white balance, hex pixel dump, look up tables, Gamma correction, etc.
- Plug-and-play operation with hot insertion/removal

#### Applications

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

# VCE ExpressCard/34 - VCE-ANEX03 Specifications

Features	NTSC, PAL, RS170, or SECAM real time video acquisition ExpressCard/34 compliant PCIe x1 lane providing 2.5 Gbps 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 and auto white balance Programmable RGB look up tables and Gamma correction Captures single, multiple frames or AVI clips Normal or delay capture RAW, BMP, TIFF or adjustable JPEG file format 16 bit YCrCb 4:2:2, 4:4:4 or 24 bit RGB formatting Advanced features including histograms & hex pixel dump Image viewer with DVR controls
Video Source	2 Composite or SVideo inputs NTSC, PAL (B, D, G, H, I, M, N), RS170 and SECAM Auto NTSC/PAL format detection Automatic gain control
Software	Application program: Full featured, intuitive, easy to use GUI Drivers: Win 7/XP/Vista 32 bit and 64 bit, DirectX, Labview, Matlab, Halcon SDK: C/C++, COM, .NET, ActiveX – all with sample source code
Environmental	Operating temperature: 0°C to 65°C Relative humidity: 90% non-condensing
Mechanical	ExpressCard/34 form factor 4.28" x 1.3" x 0.7" (108 x 34 x 18mm) Weight 1.27 oz., (35.9g)
Regulatory	FCC 15 part B, CE, RoHS

## Description

The VCE Express is a professional, state of the art ExpressCard video capture card, allowing users to view and store in real time images from any standard analog video source on their notebook computers. The VCE Express is capable of capturing single or multiple frames, and standard AVI clips from NTSC, PAL, RS170 or SECAM compliant video source. An external triggering option allows users to qualify image capture based on external events. Each captured frame can be stamped with a user message along with the date and time of capture. A specially designed image viewer gives users the flexibility to view, scroll or step through the recorded images. The VCE Express offers easy to use camera configuration software, which allows for fast integration of the card into demanding machine vision environments.

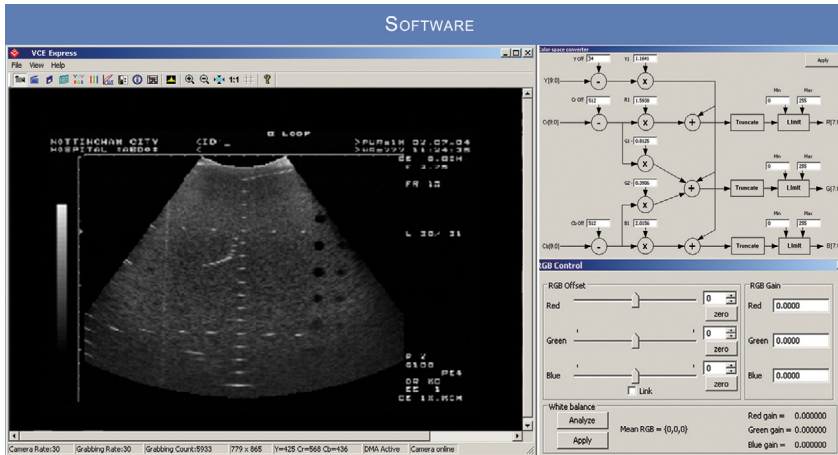
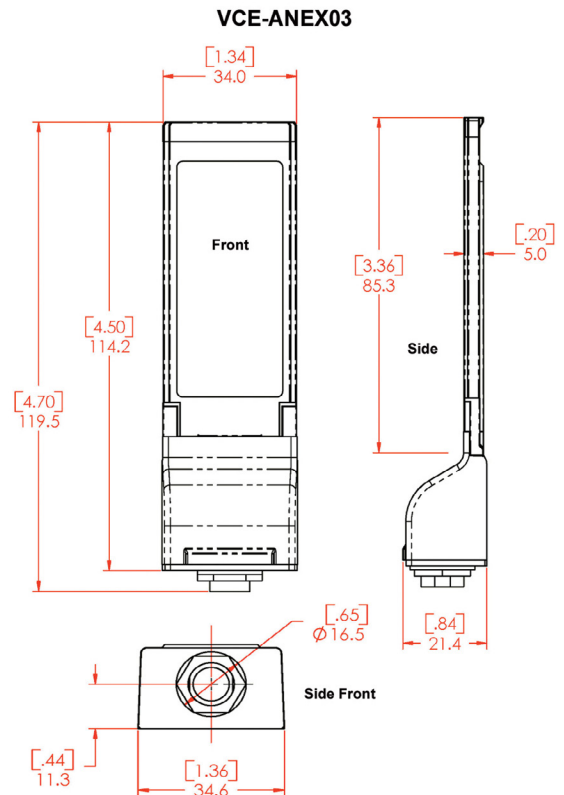
## Power Requirements

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

## Order Information

Order: VCE-ANEX03

## Mechanical Dimensions



For specific details and ordering information, consult the VCE-Express user's manual or contact IMPERX at [sales@imperx.com](mailto:sales@imperx.com).

