



HD-SDI EXPRESSCARD/54 VIDEO CAPTURE CARD

HD-SDI Express



Features

- Supports SD and HD SDI formats for 720p, 1080i and 1080p video
- Supports SMPTE 274M and SMPTE 296M framing
- Saves 20 bit YCrCb 4:2:2 or 24 bit RGB data
- 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
- Many advanced features including histograms, RGB gain/offset with auto-white balance, hex pixel dump, lookup tables, Gamma correction, etc.
- Plug-n-Play operation with hot insertion/removal

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 HD-SDI Express, an HD-SDI frame grabber designed especially for ExpressCard/54 laptops. It provides the functionality, performance and versatility required by today's most demanding vision systems. The HD-SDI Express is a highly versatile frame grabber capable of acquiring images from any SD or HD SDI 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, application program and SDK is provided with the card.

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

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

Specifications for HD-SDI Express

Features	SD or HD SDI real time video acquisition 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 Programmable RGB lookup tables and Gamma correction Captures single, multiple frames or AVI clips Normal or delay capture Date, time and text overlay RAW, BMP, TIFF or adjustable JPEG file format 16/20 bit YCrCb 4:2:2 or 24 bit RGB formatting Advanced features including histograms and hex pixel dump Image viewer with DVR Controls
Video Source	75 ohm BNC coaxial connector Analog SMPTE 292M serial interface operating at 1.485 Gbps SMPTE 274M and SMPTE 296M framing
Software	Application program: Full-featured, intuitive, easy to use GUI Drivers: Win XP/2000/Vista, DirectX, TWAIN, Labview, Matlab, 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/54 form factor 4.28" x 2.1" x 0.7" (108 x 54 x 18 mm) Weight 1.91 oz., (53.6 g)
Regulatory	FCC 15 part B, CE, RoHS

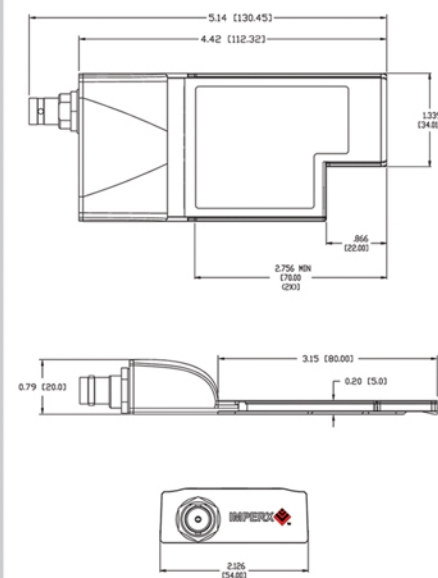
Description

The HD-SDI 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 HD-SDI video source on their notebook computers. The HD-SDI Express is capable of capturing single or multiple frames, and standard AVI clips from any SD or HD SDI compliant video source. Each captured frame can be stamped with a user message along with the date and time of capture. The HD-SDI Express offers easy to use camera configuration software, which allows for fast integration of the card into demanding machine vision environments.

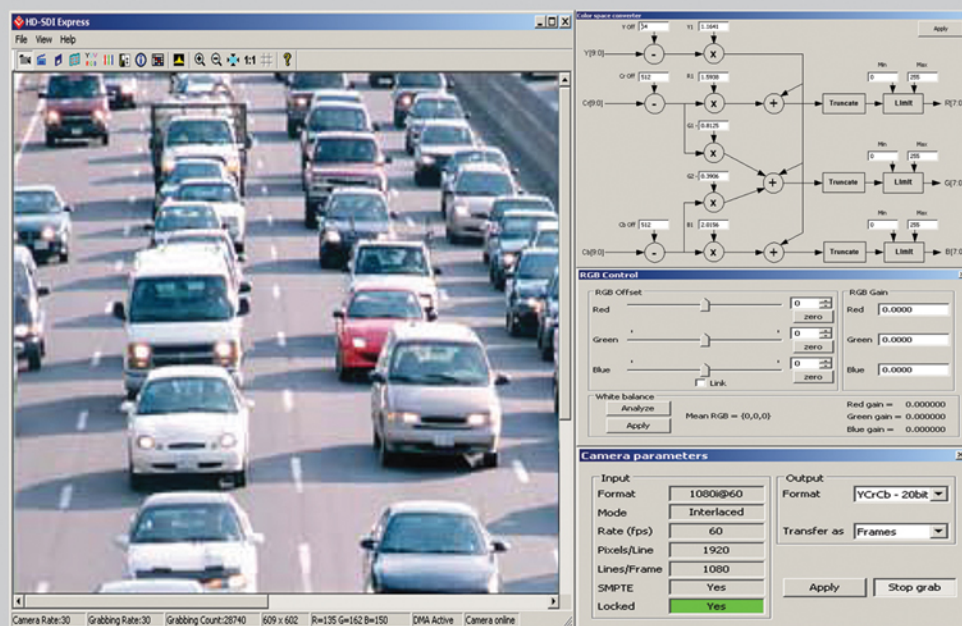
Power Requirements

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

Mechanical Dimensions



Software



Ordering Information

Ordering: **VCE-HDEX01**

For specific details and ordering information, contact us at sales@imperx.com.

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