FRAME GRABBERS

SPECIFICATIONS

IMPERX™

CAMERAS
FRAME GRABBERS
IMAGING SOLUTIONS

HD-SDI Mini-PCIe for Desktop PCs

VCE-HDmPCIe01

Acquisition from an SD or HD-SDI video source.
Advanced features: Look up tables, histograms, RGB gain/offset with auto-white balance...

IMPERX HD-SDI Mini-PCIe is a professional level PCI Express video capture card that enables users to view and store in real time mega pixel video images from any standard HD-SDI video source onto desktop PC computers. IMPERX HD-SDI Mini-PCIe 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. A full software suite that includes drivers, C/C++, SDK, and an application program is provided with each IMPERX HD-SDI Mini-PCIe (VCE-HDmPCIe01) card.

Note: The physical dimensions of this card are larger than a standard mini-PCIe card. As such, it is not compliant with the PCI Express® Mini Card Electromechanical Specification.

Features

- Mini-PCIe compliant providing 2.5 Gbps of bandwidth
- Intelligent scatter/gather DMA for fast, effcient use of PCIe x1 bandwidth and system memory
- SD and HD-SDI formats for 720p,1080 and 1080p video
- SMPTE 292M serial interface and SMPTE 274M/296M framing
- SD or HD-SDI real time video and audio acquisition with SDI loop-through
- Audio acquisition of two 24 bit channels @ 48KHz
- A second MCX coaxial connector provides an SDI loop-through capability
- Bi-directional RS232/RS485 serial interface for camera control (Optional)
- 16/20 bit YCrCb 4:2:2 or 24-bit RGB formatting
- Flow-through pipelined architecture for low latency
- On board color space conversion
- Dynamic buffer allocation
- Selectable window sizes
- Adjustable RGB brightness 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
- Image viewer with DVR controls
- Plug-and-Play operation with hot insertion / removal
- Many advanced features including look up tables, histograms, RGB gain/offset with auto-white balance, hex pixel dump, gamma correction

Software
- Application program: Full featured, intuitive, easy to use GUI
- Drivers: Win XP/2000/Vista/7/8, DirectX, Halcon, Adobe Premiere, Matlab
- SDK: C/C++,COM, .NET, ActiveX - all with sample source code

Video Source
- Two 75 ohm MCX coaxial connectors (in and out)
- Analog SMPTE 292M serial interface operating at 1.485Gbps
- SMPTE 274M and SMPTE 296M framing

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

Communications
- RS232/RS485 ASYNC UART for camera control
- 6-pin Hirose style connector (Optional)

Environmental
- Operating temperature: -40°C to +85°C
- Relative humidity: 90% non-condensing

MTBF
- >372,000 hours @ 50°C (MIL-STD-785B, MIL-HDBK-217F)

Regulatory
- FCC part 15, Class B, CE, RoHS

Mechanical
- Low profile PCI Express form factor
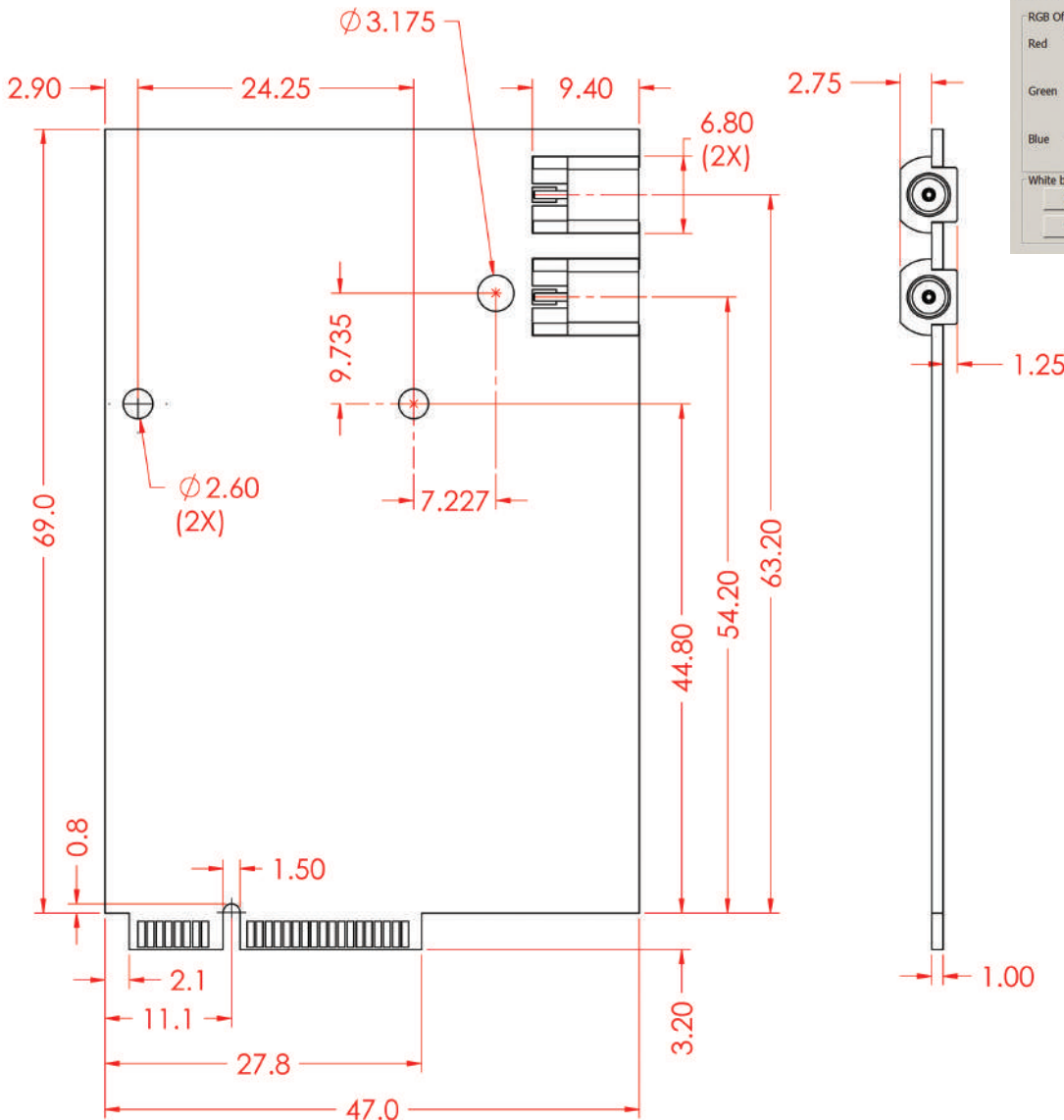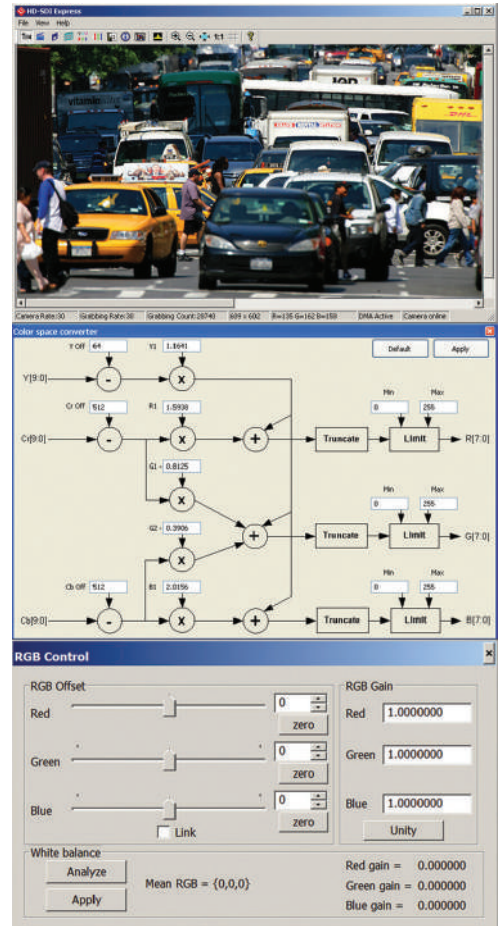- Weight 1.91 oz., 47g
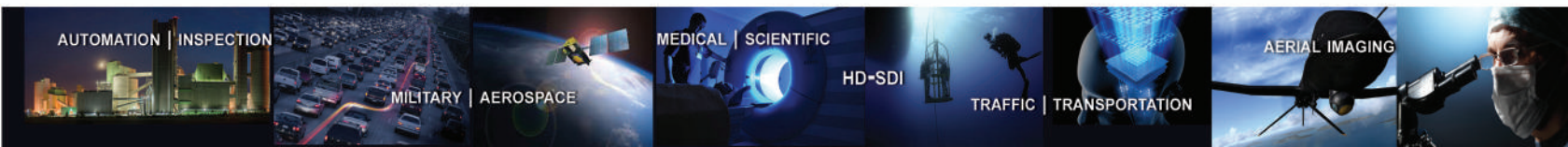
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Order: VCE-HDmPCIe01

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