IMPERX **FRAMEGRABBERS**

FRAME GRABBERS

VCE-HDmPCle01 HD-SDI Mini-PCIe for Desktop PCs



Imperx: VCE-HDmPCIe01

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-HDmPCle01) card.

Key Features

- · Mini-PCIe compliant providing 2.5 Gbps of bandwidth
- Intelligent scatter/gather DMA for fast, efficient 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)

control

6-pin Hirose style connector (Optional)

· 16/20 bit YCrCb 4:2:2 or 24-bit RGB formatting

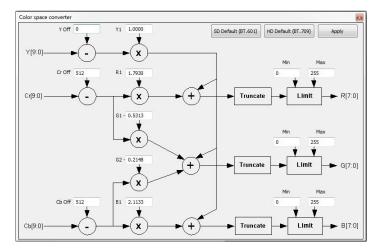
- Flow-through pipeline architecture for low latency
- · On board color space conversion
- · Dynamic buffer allocation
- · Selectable window sizes
- · Adjustable RGB brightness and auto white balance
- · Programmable RGB lookup tables and gamma correction
- Captures single, multiple frames or AVI clips
- · 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 •
- · Histograms, hex pixel dump

Specifications

Feature	Description	Feature	Description
Software	Application program: Full featured, intuitive, easy to use GUI Drivers: Windows 10/11, DirectX, Halcon,	Mechanical Weight Environmental	Low profile PCI Express form factor 1.91 oz. (47 g) -40 °C to +85 °C Operating
	Adobe Premiere, Matlab SDK: C/C++, COM, .NET, ActiveX – all with sample source code	Humidity MTBF	90% non-condensing >372,000 hours @ 50°C (MIL-STD-785B,
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	Regulatory	MIL-HDBK-217F) FCC Part 15 Class B, CE, RoHS
Power	3.3 V DC +/-5%, 500 mA steady 1.65 W constant power		
Communications	RS232/RS485 ASYNC UART for camera		

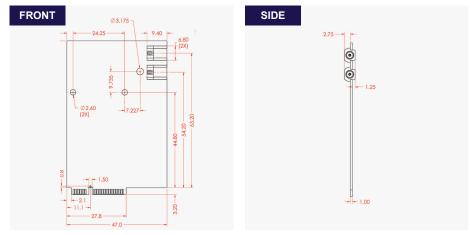


Software



RGB Offset		RGB Gain
Red	0 	Red 1.0000
Green		Green 1.0000
Blue	0	Blue 1.0000 zero Unity
White balance		Red gain = 0.000000
Analyze	Mean RGB = {0,0,0}	Green gain = 0.000000

Dimensions



Ordering Information

VCE-HDmPCle01

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



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Rev: VCE-HDmPCle01_r4_2023 Quality Management System ISO 9001:2015 Registered Environmental Management System ISO 14001:2015 Registered DDTC Registered (Directorate of Defense Trade Controls, US Department of State)

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