XtremeRGB-SDI2

Dual channel SDI2 3G-SDI video capture card

DESCRIPTION

The XtremeRGB-SDI2 is a dual channel PCI express HD-SDI video capture card. The card supports SD-SDI, HD-SDI and 3G-SDI (including 2K Digital Film Resolution modes). The XtremeRGB-SDI2, a stand alone PCIe x4 plug in card, delivers extreme performance with 650MB/s transfer bus bandwidth.

This industry beating performance makes the XtremeRGB-SDI2 ideal for a wide range of applications including:

- Display wall controllers
- Broadcasting
- Machine Vision: Acquire SDI camera outputs
- Advanced medical applications

SOFTWARE CONFIGURATION

The XtremeRGB-SDI2 is supplied with a powerful sofware application for configuring the format of the input sources and displaying the data. Simply connect your video source into the card, run the XtremeRGB-SDI2 application to automatically detect the video source format and display the captured video in a window on your desktop.

Engineering the world's best visual solutions



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FEATURES

- Dual Channel PCI express 3G/HD/SD capture card
- Four lane PCIe bus with maximum data rate of 650MB/sec
- Support for all 3G/HD/SD video modes up to 1080p 60Hz
- Loop Through SDI BNC connections
- 64MB per channel, total 128MB on board frame buffer
- On board processor for real time mode and sync detection
- Audio output for each channel to an onboard SPDIF header (use with the EMS Audio Output Module)
- High performance DMA to system memory or direct to graphics memory with scatter gather
- High quality scaling (7 x 5 Polyphase Filter)
- Input status indicator lights
- Long range, single co-ax cable support (150 metres capturing 1080p, 300 metres capturing SD)
- 16 cropping windows per capture channel

VIDEO STREAMING

DirectShow drivers for WDM Streaming driver supports the following applications, to encode, record and stream video over networks or the Internet:

- Microsoft Media Encoder[®]
- VLC
- VirtualDub
- Any other DirectShow encoding software

For streaming applications, the XtremeRGB-SDI2 can be used with Windows Media Encoder to compress and stream captured video. To replay the video, use Windows® Media Player.

Any application compatible with Windows DirectShow technology can use the XtremeRGB-SDI2 due to it built-in WDM support.

SOFTWARE

EMS's wall control software presents a representational window of the entire display wall showing position and size of video windows.

It enables you to configure your multi-screen display, launch video overlays and create a wall layout configuration. With the full version it is possible to save layouts and recall them for future use and also operate the system on a remote PC via a network connection.

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COMPATIBILITY

The XtremeRGB-SDI2 is supported by the following operating systems: Linux, Windows[®] XP, Windows Vista, Windows Server 2003, Windows Server 2008, Windows 7, Windows 8/8.1 and Windows 10.

EMS SDK is included for software developers.

SPECIFICATION

BOARD FORMAT

PCI-e x4 plug-in card, 110mm x 170mm PCI-e bus master with scatter gather DMA providing maximum data rate of 650MB/s

CONNECTORS Four BNC connectors for SDI inputs and outputs

MAXIMUM CAPTURE RESOLUTION

2x 2048 x 1556 at 24fps, 2x 1920 x 1080 at 60fps **MAXIMUM SDI BIT RATE** 3Gb/s

FRAME BUFFER MEMORY 64 MB per channel (total 128MB)

INPUT MODE DETECTION Supports SMPTE - 352 Payload Identifiers

MODELS AVAILABLE

Order Code: XtremeRGB-SDI2 Dual HD-SD capture card

PIXEL TRANSFER FORMATS

RGB: 5-5-5, 5-6-5 or 8-8-8 (24bit / 32bit) pixels YUV: 4:2:2 MONO: 8bit

UPDATE RATE

User defined Captured frame rate will match the source providing max data rate (650MB/s) is not exceeded Multi-buffered to eliminate tearing artifacts

VIDEO MODES

SD-SDI (480i/576i) HD-SDI (up to 1080i) 3G-SDI (up to 1080p) 2K Digital Cinema modes

POWER REQUIREMENTS

Max current at +3.3V – 0.45A Max current at +12V – 0.85A Max power – 12W

OPERATING TEMPERATURE 0 °C to 35 °C / 32 °F to 96 °F

STORAGE TEMPERATURE

-20 °C to 70 °C / -4 °F to 158 °F

RELATIVE HUMIDITY

5% to 90% non-condensing

WARRANTY

3 years

All products are shipped with the latest software available, unless stated otherwise. Special requirements may be organised by contacting our Sales team.

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