## **EMS XtremeSDI-2**

### 3G/ HD/ SD capture card

- Dual Channel PCI Express 3G/ HD/ SD capture card
- Four lane PCI Express 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 (7x5 Polyphase Filter)
- Input status indicator lights
- Long range, single co-ax cable support. (150metres capturing 1080p, 300 metres capturing SD)
- 16 cropping windows per capture channel
- VigiControl Wall Control support and SDK

The XtremeSDI-2 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 XtremeSDI-2, a stand alone PCI Express x4 plug in card, delivers extreme performance with 650MB/s transfer bus bandwidth. This industry beating performance makes the XtremeSDI-2 ideal for a wide range of applications including:

- Display wall controllers
- Broadcasting
- Machine Vision: Acquire SDI camera output
- Advanced Medical applications

### **Display Walls**

The XtremeSDI-2 is fully integrated with the EMS family of video wall display products providing high resolution digital video support.



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#### Video Streaming

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

- Dataton WatchOut
- Microsoft Expression Encoder
- Microsoft Windows® Media Encoder
- VidBlaster
- AMCap and other DirectShow compatible software

For further details see the EMS DirectShow SDK documentation supplied as part of a typical installation.

#### Software Configuration

The XtremeSDI-2 is supplied with a powerful software application for configuring the format of the input sources and displaying the data. Simply connect your video source into the card, run the XtremeSDI-2 application to automatically detect the video source format and display the captured video in a window on your desktop.

### Wall Control

Wall Control presents a representational window of the entire display wall showing position and size of video windows.

EMS VigiControl - Wall Control software 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 Wall Controller on a remote PC via a network connection.

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Board format	PCI Express x4, plug-in card, 110mm x 170mm PCI Express bus master with scatter gather DMA providing maximum data rate of 650 MB/s
Connectors	4 BNC connectors for SDI inputs and outputs
Maximum capture resolution	3Gb/s
Maximum SDI bit rate	64MB per channel (total 128M)
Frame buffer memory	Supports SMPTE - 32 Payload Identifiers
Input mode detection	Supports SMPTE - 352 Payload Identifiers
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
Operating system	Windows® XP, Windows® Vista, Windows® Server 2003, Windows® Server 2008

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support	and Windows® 7
Power requirements	Max current at +3.3V - 0.45A Max current at +12V - 0.85A Max power - 12W
<b>Operating temperature</b>	0 to 35 deg C/ 32 to 96 deg F
Storage temperature	-20 to 70 deg C/ -4 to 158 deg F
<b>Relative Humidity</b>	5% to 90% non-condensing
Warranty	3 years

We are continuously developing the technology used within our product ranges delivering outstanding innovative solutions, therefore the specification may change from time to time.



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