

# EMS XtremeSDI-2

3G/ HD/ SD capture card



*XtremeSDI-2*



- 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.

### 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.

### Specifications

<b>Board format</b>	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
<b>Connectors</b>	4 BNC connectors for SDI inputs and outputs
<b>Maximum capture resolution</b>	3Gb/s
<b>Maximum SDI bit rate</b>	64MB per channel (total 128M)
<b>Frame buffer memory</b>	Supports SMPTE - 32 Payload Identifiers
<b>Input mode detection</b>	Supports SMPTE - 352 Payload Identifiers
<b>Pixel transfer formats</b>	RGB: 5-5-5, 5-6-5 or 8-8-8 (24bit/ 32bit) pixels YUV: 4:2:2 MONO:8bit
<b>Update rate</b>	User defined. Captured frame rate will match the source providing max data rate (650MB/s) is not exceeded Multi-buffered to eliminate tearing artifacts
<b>Video modes</b>	SD-SDI (480i/576i) HD-SDI (up to 1080i) 3G-SDI (up to 1080p) 2k Digital Cinema modes
<b>Operating system</b>	Windows® XP, Windows® Vista, Windows® Server 2003, Windows® Server 2008

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<b>support</b>	and Windows® 7
<b>Power requirements</b>	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
<b>Storage temperature</b>	-20 to 70 deg C/ -4 to 158 deg F
<b>Relative Humidity</b>	5% to 90% non-condensing
<b>Warranty</b>	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.

For details on how to purchase the XtremeRGB products contact our sales department [sales@ems-imaging.com](mailto:sales@ems-imaging.com)



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