# XtremeLC-SDI

Version V<sub>1.2</sub>



# SINGLE CHANNEL "LiveStream: Capture" CARD

Professional Digital Audio and Video Capture Card

### + HIGH PERFORMANCE CARD

Discreet video capture is now the mainstay of many small form factor appliances being used in markets such as lecture capture, distance learning and medical environments. EMS's XtremeLC-SDI provides tri-band SDI capture for use within such applications. EMS's LiveStream:Capture architecture allows captured video to be processed

and delivered in real time to a processor or graphics card. The XtremeLC-SDI supports on board colour space conversion and scaling, providing the ability to efficiently transfer the video signal in a suitable format for rendering or encoding applications. The XtremeLC-SDI natively supports 32, 24, 16 and 12 bit YUV and RGB formats.

#### + FEATURES

- Single SDI capture channel
- SD/ HD/ 3G at 6o fps
- 800 MB/s DMA bandwidth
- High performance up and down scaling
- Colour space conversion to support output formats

- PCI Express Gen 1 x4 low profile
- EMS unified Windows® and Linux® driver support

### + MULTI-APPLICATION CAPTURE

The XtremeLC-SDI card has been designed for use within application models such as:

- Medical environments
- Simulation systems
- Live events
- PC and gaming console capture
- Lecture and presentation capture
- Real time streaming

It is also possible to put more than a single card into a system for multiple capture channels.

Due to the nature of the LiveStream:Capture architecture, the XtremeLC-SDI is not supported for wall controller applications that depend on EMS's MultiStream technology.

#### + VIDEO STREAMING

Built upon the Microsoft AV Stream framework, XtremeLC-SDI inputs can be accessed and enumerated by any DirectShow or Media Foundation supported application. A Video for Linux (V4L) driver package is also available for download.

Tested applications include:

- Microsoft Media Encoder
- VLC
- Telestream WireCast
- vMix
- Opencast Matterhorn
- VidBlaster
- OBS Project
- Adobe Flash Media Encoder
- Dataton Watchout

#### + MODELS AVAILABLE

Order Code: XtremeLC-SDI

Single Channel "LiveStream: Capture" Card

## + SPECIFICATION

Board Format	PCle Gen 1 x4 plug-in card
Dimensions	103mm x 64mm (l x h)
Connector	SDI-BNC
Max Capture Resol	ution SD-HD-3G Level A and Level B at 6o fps
Transfer Rate	800 MB/s maximum DMA transfer rate
Hardware Colour S	pace Conversion 32 / 24 / 16bit RGB (4:4:4) 16bit YUV (4:2:2) 12bit YUV, NV12, YV12 (4:2:0)
Audio Support	Stereo Pair PCM audio via SDI input at 16 bits in depth, sampling options include 44.1/48/96 kHz
Video modes	SD-SDI (480i/ 576i) ST-259, EBU 3276 HD-SDI (up to 1080i) ST 260, 274, 296 3G-SDI (up to 1080p) ST 274, 296 2k Digital Cinema modes ST-2048-2
Low Latency	LiveStream: Capture Single frame time plus DMA transfer of final line
Operating System  Power requirement	Linux, Windows ® XP, Windows Vista, Windows Server 2003, Windows Server 2008, Windows 7, Windows 8/8.1 and Windows 10
Power requirement	.s Max current at 1A at 3.3V
	Max power ≈ 3.3W
Operating Temp	o to 35 deg C/ 32 to 96 deg F
Storage Temp	-20 to 70 deg C (-4 to 158 deg F)
Relative Humidity	5% to 90% non-condensing
Warranty We are continuously dev	3 years reloping the technology used within our product

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

