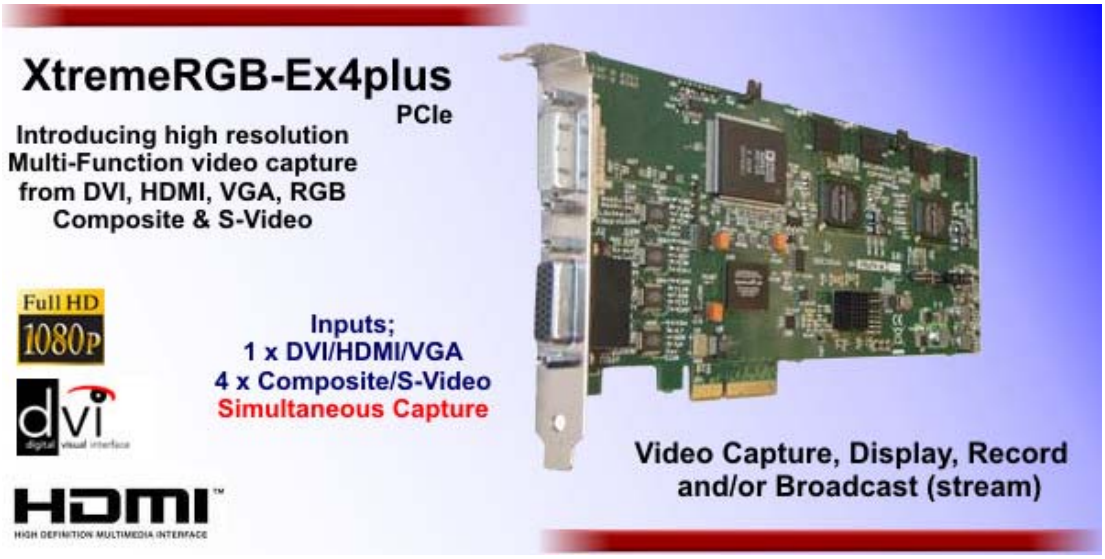
EMS XtremeRGB-Ex4+

1 x HDMI/DVI/VGA & 4 Ch. Composite/Svideo Capture Card

Multi-Function Capture card supporting: 4 Independent channels PAL/NTSC/S-video and 1 x Single Channel HDMI/DVI/VGA/HD capture card with Streaming Drivers (WDM) Support, PCI-E (x4)



- **4 channel PAL/NTSC/S-video and single channel RGB/DVI/HD capture card**
- **4 Lane PCIe bus with a maximum data rate of 480MB/sec**
- **Max analog RGB capture resolution 1x 2048x1536x24bits**
- **Max DVI capture resolution 1x 1920x1200x24bit.**
- **HD video capture for DVI and YPrPb. Supports 1x (1080P,1080i,720P,576i,480i)**
- **4x Standard Definition video capture channels for PAL,NTSC and S-video**
- **On card processor for real time mode and sync detection**
- **Direct DMA Driver Software and WDM Streaming driver**
- **High Quality Down Scaling**
- **Support for YUV 4:2:2, RGB5:5:5, 5:6:5, 8:8:8 video output formats**
- **High performance 4Gb/s DMA to system memory or direct to graphics memory with scatter gather.**
- **Support for separate H/V sync, Composite sync or Sync on Green**
- **16 cropping windows for RGB capture channel.**
- **SDK available for OEM customers**
- **OS Support: Windows® XP Professional (x86 and x64), Windows® Server 2003 (x86 and x64), Windows Vista® (x86 and x64), Windows® Server 2008 (x86 and x64) and Windows 7**

The XtremeRGB-Ex4plus is an ideal solution for applications that require the capture of up to four Standard Definition video sources and a single Component HD/HDMI/RGB/DVI source simultaneously.

The XtremeRGB-Ex4plus is a four channel PCI express video capture card. The card supports PAL, NTSC and SECAM in both composite and S-video input formats, supports de-interlaced video capture and displays at 25/30 frames/sec for real-time video vindows. In addition, the XtremeRGB-Ex4plus is also a single channel PCIe capture card, able to capture:

- Component HD up to 1080P at 60 frames per second (Requires optional Component HD-DVI adapter)
- HDMI up to 1080P (Requires optional Component HD-DVI adapter, Audio not supported, HDCP not supported (see XtremeAV2HDMI)
- DVI up to 1920 x 1200
- RGB/VGA up to 2048 x 1536

Application Areas

Viewing Analog or DVI sources from PCs, MACs
Industrial/Medical Equipment

Broadcast, Adverising Monitering Applications
Digital Signage
CCTV Security & Surveillance
Machine Vision
Capture Radar Images
Video Streaming & Conferencing Applications .... *and much more ...*

Installing Multiple Cards

Up to 8 cards can be installed in a system providing a maximum of 32 standard definition channels and 8 DVI-I capture channels.

Software Included

XtremeRGB application, to auto-detect, capture/display and record (into our own format)
VigiControl - (demo version) presents a representational window of the entire display wall showing position and size of video windows
Software Development Kit with example application code and Directshow source code examples
DirectX SDK for Directshow application development (downloadable for Microsoft).

Streaming Support

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

- Microsoft Media Encoder®
- VLC
- StreamPix
- Arkaos
- Adobe Flash Encoder
- VidBlaster
- Any other DirectShow encoding software - please see the software page

Included with the XtremeRGB-Ex4+

- XtremeRGB-Ex4+ card
- BNC16 Input Cable
- VGA-DVI Adapter
- Installation CD

XtremeRGB-Ex4+ Specifications

Board Format:	PCI-e x4 plug-in card, 110mm x 204mm. PCI-e bus master with scatter gather DMA providing maximum data rate of 480MB/s.
Connectors:	One DVI-I type connector and one D connector for SD inputs.
Maximum Sample Rate (RGB/DVI):	170Mpixels per second analog RGB or 165 MHz DVI. Analog modes up to 340MHz pixel clock can be captured using dual-pass sampling.
Video Sampling:	RGB: 24 bits per pixel / 8-8-8 format. Video: 16bits per pixel/YUV format.
SD Maximum Capture Resolution:	720x576x16bit.
Video Capture Memory:	64 MB, triple buffered.
Analog RGB Mode Support:	640x480, 800x600, 1024x768, 1280x1024, 1600x1200, 1920x1080, 2048x1536, custom modes.

DVI Single Link Mode Support:	640 x 480, 800 x 600, 1024 x 768, 1280 x 1024, 1600 x 1200, 1920x1080, 1900 x 1200, and custom modes.
HD Modes:	1080p,1080i, 720p, 576p, 576i, 480p and 480i using a Component HD-DVI Adapter (HDCP not supported).
Input Mode Detection:	Automatic detection of input modes in hardware, enabling the tracking of mode changes in the source signal.
Pixel Transfer Formats:	RGB: 5-5-5, 5-6-5 or 8-8-8 (24bit/32bit) pixels. YUV 4:2:2, UYVY, YUY2, YVYU
Update Rate:	User defined, captured frame rate will match the source providing max data rate (480MB/s) is not exceeded. Multi-buffered to eliminate tearing artifacts.
Video Format Options:	Analog RGB plus HSync and VSync (5 wire). Analog RGB with Composite Sync (4 wire). Analog RGB with Sync on Green (3 wire). DVI Single Link. PAL, NTSC, SECAM or S-Video for SD inputs.
Operating System Support:	Windows® XP Professional, Windows® Server 2003, Windows Vista®, Windows® Server 2008 and Windows® 7. (x86 and x64 Operating Systems)
Power Requirements:	Max current at +3.3V – 0.25A. Max current at +12V – 1.2A. Max power – 15 Watts.
Operating Temperature:	0 to 35 deg C.
Storage Temperature:	-20 to 70 deg C.

For details on how to purchase the XtremeRGB products contact our sales department
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