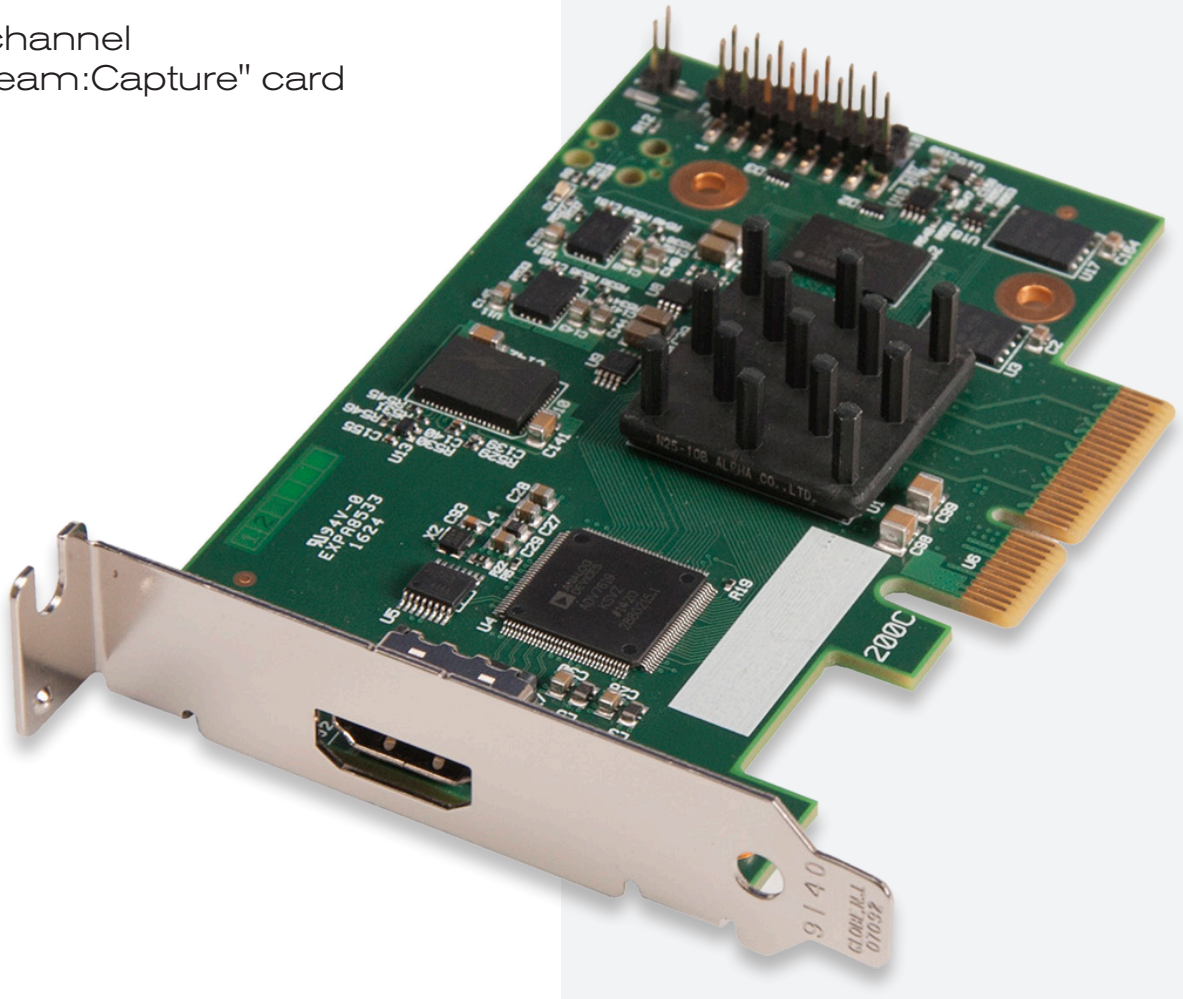# VisionLC-HD

Single channel "LiveStream: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. Datapath's VisionLC-HD provides HDMI capture for use within such applications. Datapath's LiveStream: Capture architecture allows captured video to be processed and delivered in real time to a processor or graphics card.

The VisionLC-HD 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 VisionLC-HD natively supports 32, 24, 16 and 12 bit YUV and RGB formats.

FEATURES

- ■ Single HDMI capture channel
- ■ Up to 297 Mpixel/s capturing up to 4096 x 2160p at 30fps
- ■ 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
- ■ Datapath unified Windows® and Linux® driver support

Engineering the **world's best** visual solutions

DATAPATH
EXCELLENCE BY DESIGN

Professional digital audio and video capture card

MULTI-APPLICATION CAPTURE

The VisionLC-HD capture 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 VisionLC-HD is not supported for wall controller applications that depend on Datapath's MulitStream technology.

VIDEO STREAMING

Built upon the Microsoft AV Stream framework, VisionLC-HD 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:

- 4 x 3G SDI inputs
- Microsoft Media Encoder
- VLC
- Telestream WireCast
- vMix
- Opencast Matterhorn
- VidBlaster
- OBS Project
- Adobe Flash Media Encoder
- Dataton Watchout

COMPATIBILITY

The VisionLC-HD 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.

SPECIFICATION

BOARD FORMAT
PCIe Gen 1 x4 plug-in card

DIMENSIONS
103mm x 64mm

CONNECTORS
HDMI

PIXEL RATE
297Mpixel/s

MAX CAPTURE RESOLUTION
4096 x 2160p at 30Hz

TRANSFER RATE
800 MB/s maximum DMA transfer rate

HARDWARE COLOUR SPACE CONVERSION
32 / 24 / 16bit RGB (4:4:4)
16bit YUV (4:2:2)
12bit YUV, NV12, YV12 (4:2:0)

AUDIO SUPPORT
Stereo Line-In/ Stereo balanced inputs with programmable gain (+/-12dB) 16bit sampling at 44.1/ 48/ 96kHz Analogue stereo line-out for direct passthrough of selected input at up to 64kHz sampling, sourced from Analogue input or HDMI channel

LOW LATENCY
LiveStream Capture Single frame time plus DMA transfer of final line

POWER REQUIREMENTS
Max current at 1A at 3.3V Max power ≈ 3.3W

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

STORAGE TEMP
-20 °C to 70 °C / -4 °F to 158 °F

RELATIVE HUMIDITY
5% to 90% non-condensing

WARRANTY
3 years

MODELS AVAILABLE

Order Code: VisionLC-HD
Single channel "LiveStream:Capture" card

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

DATAPATH
EXCELLENCE BY DESIGN