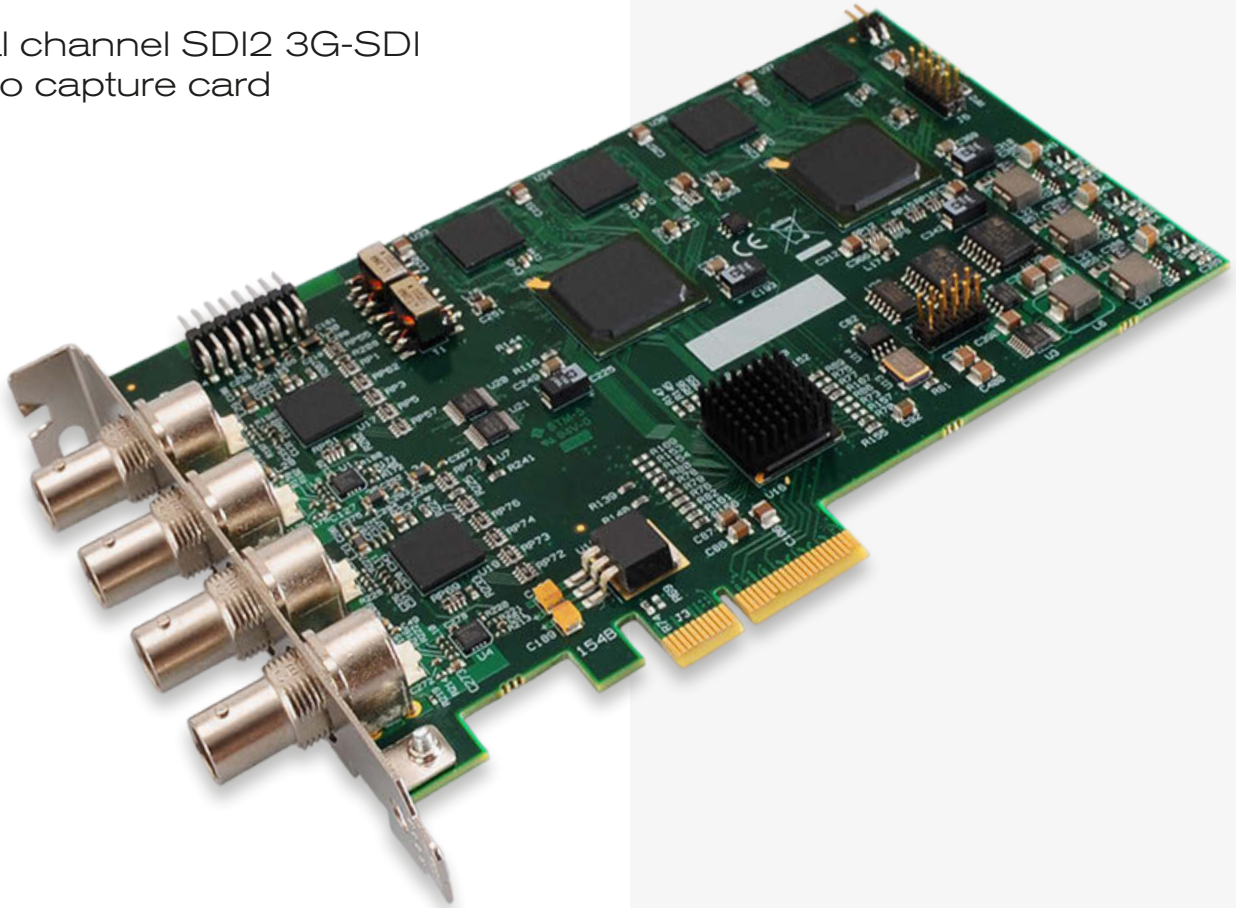


# VisionSDI2

Dual channel SDI2 3G-SDI  
video capture card



## DESCRIPTION

The VisionSDI2 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 VisionSDI2, a stand alone PCIe x4 plug in card, delivers extreme performance with 650MB/s transfer bus bandwidth.

This industry beating performance makes the VisionSDI2 ideal for a wide range of applications including:

- Display wall controllers
- Broadcasting
- Machine Vision: Acquire SDI camera outputs
- Advanced medical applications

## SOFTWARE CONFIGURATION

The VisionSDI2 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 VisionSDI2 application to automatically detect the video source format and display the captured video in a window on your desktop.

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## FEATURES

- Dual Channel PCI express 3G/HD/SD capture card
- Four lane PCIe 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 Datapath Audio Output Module)
- High performance DMA to system memory or direct to graphics memory with scatter gather
- High quality scaling (7 x 5 Polyphase Filter)
- Input status indicator lights
- Long range, single co-ax cable support (150 metres capturing 1080p, 300 metres capturing SD)
- 16 cropping windows per capture channel

## VIDEO STREAMING

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

- Microsoft Media Encoder®
- VLC
- VirtualDub
- Any other DirectShow encoding software

For streaming applications, the VisionSDI2 can be used with Windows Media Encoder to compress and stream captured video. To replay the video, use Windows® Media Player.

Any application compatible with Windows DirectShow technology can use the VisionSDI2 due to it built-in WDM support.

## SOFTWARE

Datapath's wall control software presents a representational window of the entire display wall showing position and size of video windows.

It 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 the system on a remote PC via a network connection.

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## COMPATIBILITY

The VisionSDI2 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.

Datapath SDK is included for software developers.

## SPECIFICATION

### BOARD FORMAT

PCI-e x4 plug-in card, 110mm x 170mm  
PCI-e bus master with scatter gather DMA  
providing maximum data rate of 650MB/s

### CONNECTORS

Four BNC connectors for SDI inputs and outputs

### MAXIMUM CAPTURE RESOLUTION

2x 2048 x 1556 at 24fps, 2x 1920 x 1080 at 60fps

### MAXIMUM SDI BIT RATE

3Gb/s

### FRAME BUFFER MEMORY

64 MB per channel (total 128MB)

### 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

### POWER REQUIREMENTS

Max current at +3.3V – 0.45A  
Max current at +12V – 0.85A  
Max power – 12W

### OPERATING TEMPERATURE

0 °C to 35 °C / 32 °F to 96 °F

### STORAGE TEMPERATURE

-20 °C to 70 °C / -4 °F to 158 °F

### RELATIVE HUMIDITY

5% to 90% non-condensing

### WARRANTY

3 years

## MODELS AVAILABLE

Order Code: VisionSDI2

Dual HD-SD capture card

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

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