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Link do produktu: https://www.wamm.pl/magewell-pro-capture-sdi-p-2179.html



# Magewell Pro Capture SDI

Cena brutto	1 522 zł
Cena netto	1 237 zł
Dostępność	Zapytaj o dostępność
Kod producenta	11050
Producent	Magewell

# Opis produktu

## **Pro Capture SDI**

One channel HD capture card

- Captures SD/HD/3G/2K SDI + embedded audio
- Loop-through SD/HD/3G/2K SDI loopback + embedded audio

# **Tech Specs**

Supported OS

Windows 7/8/8.1/10/Server 2008/Server 2008
 R2/Server 2012/Server 2016 (x86 & x64)

<sup>•</sup> Windows



- Linux (support x86, x64 & ARM architecture)
  - Ubuntu 12.04/14.04/16.04/17.04/17.10 (x86 & x64)
  - CentOS 6.5/7 (x86 & x64)
  - Fedora 25/26/27 (x86 & x64)
  - Red hat 6.5 and above (x86 & x64)
  - Other Linux OS with kernel version 2.6.35 and above
- Mac
- o OS X 10.9/10.10/10.11
- macOS 10.12/10.13

#### Recommended OS (tested)

- Windows
  - Windows 7 Ultimate/8.1 Enterprise/10
     Enterprise/Server 2008 R2 DataCenter/Server 2012 R2 DataCenter/Server 2016 R2
     DataCenter (x86 & x64)
- Linux
  - Ubuntu 12.04/14.04/16.04 (x86 & x64)
  - Ubuntu 17.04/17.10 (x64)
  - CentOS 6.5/7.2 (x86 & x64)
  - Fedora 25/26 (x64)
  - Red hat 6.5 (x86 & x64)
- Mac
- o OS X 10.9.5/10.10/10.11.2/10.11.3/10.11.4
- macOS 10.12/10.13.2/10.13.3

#### Supported APIs

- Windows
  - DirectShow
  - DirectKS
  - Wave API/DirectSound/WASAPI
- Linux
  - V4L2
  - ALSA

### Supported Software

- VLC
- VirtualDub
- OBS
- xSplit
- vMix
- VidBlaster
- Wirecast
- Microsoft Media Encoder
- Adobe Flash Media Encoder
- Any other DirectShow/V4L2 encoding/streaming software

#### Input Interfaces

- BNC
- SD/HD/3G SDI

#### Host Interfaces

• PCle Gen2 x1

### Loop-through Interfaces



• BNC (SDI loop-through)

#### Input Features

Support for input video resolutions up to 2048×1080 pixels

#### **SDI Specific Features**

- Integrated cable equalizer supporting cable lengths up to 230M for HD signals
- Support for SD/HD/3Ga/3Gb/3Ga-DL/3Gb-DS standards
- Support for 2K (2048×1080) mode
- Support for RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2 color sampling
- Support for 10/12-bit color depth
- Support for extraction of SMPTE 352 payload identifier
- Support for up to 8 (mono) audio channels at 48KHz (channels 1-8 from the 16 available in the SDI spec)
- Support for extraction of audio formation information & channel status data
- Limited support of 3Gb-DS: only the first stream can be captured
- Limited support for capture of the first link of dual link interfaces:
  - YCbCr 4:2:2 10-bit 1080p 50/59.94/60: captured as 1080i 50/59.94/60
  - YCbCr 4:4:4 10-bit: captured as 4:2:2
  - RGB 4:4:4: R/B sub-sampled

#### Video Capture Formats

- Support for capture image resolutions up to 2048×2160 pixels
- Support for capture frame rates up to 120fps. (Actual capture frame rate can be limited by PCle bandwidth, and at higher image resolutions above 1280×1024 by the pixel clock of the on-board video processing hardware. eg. Max frame rate at 1920×1080 = ~80fps.
- Support for 4:2:0 8-bit capture formats: NV12, I420, YV12
- Support for 4:2:2 8-bit capture formats: YUY2, YUYV, UYVY
- Support for 4:4:4 8-bit capture formats: V308, IYU2, V408, BGR24, BGR32
- Support for 4:4:4 10-bit capture formats: V410, Y410
- More capture formats are supported via Pro Capture SDK for DirectKS

#### Video Processing Features

- $\bullet$  Two video processing pipelines with  ${\sim}180 \text{Mpixels/s}$  processing bandwidth for each one
- Full 10-bit video processing
- · Video cropping
- · Video scaling
- Video de-interlacing
  - Weave
  - Blend top & bottom field
    - Top field only
    - Bottom field only
- Video aspect ratio conversion
  - Auto or manual selection of input aspect ratio
  - $\circ\,$  Auto or manual selection of capture aspect



ratio

- Three aspect ratio conversion modes: Ignore (Anamorphic), Cropping or Padding (Letterbox or Pillarbox)
- Video color format conversion
  - Auto or manual selection of input color format & quantization range
  - Auto or manual selection of capture color format, quantization range & saturation range
  - Support for RGB, YCbCr 601, YCbCr 709, YCbCr 2020 color formats
  - Support for Limited or Full quantization range
  - Support for Limited, Full & 'Extended gamut' saturation range
- · Video frame rate conversion
- · Video OSD composition
  - Support for PNG OSD image (up to 2048×2160)
  - Support for dynamic loading of RGBA OSD image via SDK

#### Multiple Cards per System

- Support for multiple cards plugged to one system
- On-board rotary switch to set card number, with 16 positions from 0 to F
- System hardware device tree will display "01: Pro Capture AIO" when rotary switch is set to 1, and so on
- The video and audio device names displayed in your software will include the card number (set by the rotary switch)

#### Multiple Capture Streams

- Unlimited capture streams for any one input channel
- Independent cropping, aspect ratio, color format, resolution, frame rate, de-interlacing and color adjustment settings for each individual stream

#### Ultra Low Latency Support

- Latency of 64 video lines
- Partial notification mode in SDK

### Timestamp & A/V Synchronization

- Hardware based 100ns high resolution clock
- Audio frames (192 audio samples) & video frames are stamped with hardware clock
- Hardware clock can be synchronized across cards (via SDK)

#### Video Capture SG-DMA

- ~400MB/s per channel DMA bandwidth in PCIe 2.0 system
- ~200MB/s per channel DMA bandwidth in PCIe 1.0 system
- Support for auto detection of Intel tiled GPU surface
- Support for DirectGMA for AMD video adapter chipsets
- Support for GPUDirect for Nvidia video adapter chipsets

#### SDK



	performance (Windows)
Windows Driver Tweaks	
	<ul> <li>All options can be controled by three levels of registry key: global level, product level and device level</li> <li>Video, Audio, Crossbar filter names can be customized via registry keys</li> </ul>
Firmware Upgrade	
	<ul> <li>Multiple cards in one system can be upgraded simultaneously</li> <li>Cards can be upgraded without a system power shutdown when it is not in use</li> <li>Safe upgrade. If power off or system break down occur when the firmware is being upgraded, it will automatically restore to the initial version. This function is only available for firmware version 1.21 and above.</li> </ul>
LED Indicator	
	<ul> <li>Status LEDs indicate the working state of each channel: idle, input signal locked, memory failed or FPGA configuration failed.</li> </ul>
Form Factor	
	<ul> <li>Low profile PCle x1 Add-on Card</li> <li>87.68mm x 68.88mm (without PCl bracket)</li> </ul>
Accessories	Low Profile bracket.
Power Consumption	
	<ul> <li>Max current at 12V: ~ 0.32 A</li> <li>Max current at 3.3V: ~ 0.17 A</li> <li>Max power consumption: ~ 4.45 W</li> </ul>
Working Environment	
	<ul> <li>Operating temperature: 0 to 40 deg C</li> <li>Storage temperature: -20 to 70 deg C</li> </ul>

• Pro Capture SDK for DirectShow for easy integration

• Relative Humidity: 5% to 90% non-condensing

 $\bullet\,$  Pro Capture SDK for DirectKS for maximum flexibility &

(Windows)

# Magewell

Magewell was founded in 2011 as an R&D center and manufacturer of video capture devices. We have been breaking boundaries ever since, expanding our technologies to live streaming, encoding and playout as well as embedded systems for video processing. Our solutions are widely deployed around the world for applications including live streaming, broadcast



production, video conferencing, lecture capture, medical imaging, security, machine vision, gaming, virtual reality production and many more.

In addition to empowering end-users, our products are also incorporated into a wide range of third-party solutions on an OEM basis by other industry-leading manufacturers. Our products are available globally through our valued channel partners including distributors, resellers and systems integrators.