MAGEWELL

USB Capture SDI Gen 2 Technical Specifications

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Input Features

- Max input: 2048x1080 60fps 4:2:2 10bit
- Up to 8-channel embedded audio
- SD/HD/3G-SDI BNC input
- SD (ST 259)/HD (ST 292)/3Ga (ST 425)/3Gb-DL (ST 425)/3Gb-DS (ST 425) standard
- Input RGB/YUV 4:4:4 10/12-bit, YUV 4:2:2 8/10/12-bit, RGBA/YUVA 4:4:4:4 10-bit
- Input SDI signals transmitted up to 150m for 3G-SDI signals

Process and Capture Features

- Video processing pipeline up to 160M pixels/s. Capture videos up to 2048x1080, frame rates up to 120fps. Outputs include (actual capture frame rate can be limited by the USB bandwidth and internal working frequency.):
 - 1920x1080p/1280x720p 23.98/24/25/29.97/30/50/59.94/60
 - o 720x576p25
 - o 720x480p30
- Support for YUY2/UYVY/RGB24/RGB32
- Support video cropping, up/down scaling, de-interlacing, aspect ratio conversion, color format conversion, frame rate conversion, flip and mirror
- Up to 2 audio channels at 48KHz

Included Software

• USB Capture Utility enables users to easily check and set the capture-related parameters, upgrade firmware of the capture device and export info needed for troubleshooting

SDK & APIs

- The MWCapture SDK provides functions including signal status extraction, capture configuration and real-time audio & video capture, etc.
- Windows DirectShow/Wave API/DirectSound/WASAPI
- Linux V4L2/ALSA
- macOS AVCaptureSession/AudioUnit

Output Interface

- USB 3.0
 - o compatible with USB 2.0
 - o compatible with USB 3.1 Gen 1

Compatible Software

- Zoom Rooms
- Microsoft Teams
- Skype for Business
- Google Hangouts
- GoToMeeting
- Gstreamer
- VLC
- · OBS Studio
- XSplit

- QuickTime Player
- Any other DirectShow/V4L2/AVCaptureSession based encoding or streaming software

Recommended OS

- Windows 7/8/8.1/10/11/Server 2008/Server 2008 R2/Server 2012/Server 2016 (x86 & x64) and above
- Linux x86, x64 & ARM architecture, with 2.6.35 and above
- Mac OS X 10.9/macOS 10.12 and above
- Chrome OS

LED Indicator

- Status LEDs indicate the working state of each channel:
 - Pulsing slowly: input signal unlocked
 - o On: input signal locked
 - o Double blinks: memory failed or FPGA configuration failed
 - Off: firmware or power supply abnormal

Form Factor

• 92.2mm (L) x 40.2mm (W) x 12.3mm (H)

Accessories

- 1 × USB 3.0 cable (63cm)
- 1 × MCX to BNC cable (33cm)

Power Consumption

- 5V max current: ~0.5A
- Max power consumption: ~2.5W

Working Environment

- Operating temperature: 0 to 50 deg C
- Storage temperature: -20 to 70 deg C
- Relative Humidity: 5% to 90% non-condensing