

# MAGEWELL

## USB Capture SDI Gen 2 Technical Specifications

Copyright (c) 2011–2022 [Nanjing Magewell Electronics Co., Ltd.](#) All rights reserved.

Specifications are based on current hardware, firmware and software revisions, and are subject to change without notice.

Windows, DirectShow and DirectSound are trademarks or registered trademarks of Microsoft Corporation. OS X and macOS are trademarks or registered trademarks of Apple Inc.

Revised 10/06/2022

### 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 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
  - 720x576p25
  - 720x480p30
- Support for YUY2/UYYVY/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
  - compatible with USB 2.0
  - 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
  - On: input signal locked
  - 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
- 1 × MCX to BNC cable

## 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