MAGEWELL

USB Capture DVI Plus 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.

HDMI, the HDMI logo and High-Definition Multimedia interface are trademarks or registered trademarks of HDMI Licensing LLC. 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 22/11/2021

Input Features

- 225MHz HDMI receiver, max input & loop through signal: 2048x2160p60/1920x1080p90 4:4:4
- Custom EDID
- Input RGB/YUV 4:4:4 8-bit, YUV 4:2:2 12-bit, RGB/YUV 4:4:4 8/10/12-bit signals
- DVI-I: DVI 1.0
 - HDMI 1.4a (via breakout cable)
 - VGA (via DVI-to-VGA convertor)
 - Component (via breakout cable)
- 3.5mm audio jack for microphone

VGA & Component Specific Features

- 12-bit ADC
- Support RGB & YCbCr (YUV) color formats
- Support separated sync, composite sync, sync-on-green (SOG), sync-on-luminance (SOY)
- Support DMT, CEA, CVT, GTF and customized CVT/GTF video timings
- Input signals up to 165MHz pixel rate are digitized with 1:1 sampling

HDMI Specific Features

- Capture resolutions up to 2048x2160, frame rate up to 120fps, Outputs include
 - 2048x2160p 23.98/24/25/29.97/30
 - 1920x1080p/1280x720p60
 - 1920x1080i 50/59.94/60/75
 - 720x576p25
 - o 720x576i50
 - 720x480p30
 - o 720x480i60
- Output YUYV/UYVY/RGB24/RGB32 videos
- Video cropping, de-interlacing, up/down scaling, aspect ratio conversion, frame rate conversion, color format conversion, flipping and mirror
- Output audio via 3.5mm line out

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

Host Interface

• USB 3.0

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

Compatible Softwares

- Zoom Rooms
- Microsoft Teams Rooms
- · 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 the device:
 - · Pulsing slowly: input signal unlocked
 - o On: input signal locked
 - o Double blinks: memory abnormal or Signal cannot be unlocked
 - Off: firmware or power supply abnormal

Form Factor

• 101.5mm (L) x 56.8mm (W) x 17mm (H)

Accessories

- 1 × USB 3.0 A male to A male cable, about 24 inch (2 feet)
- 1 × DVI to VGA connector
- 1 × DVI-I to HDMI + Component breakout
- 1 × DB9 to YC + Composite + Analog Audio + Componentbreakout

Power Consumption

- 5V max current: ~600mA
- max power consumption: ~3W

Working Environment

- Operating temperature: 0 to 45 deg C
- Storage temperature: -20 to 70 deg C
- Relative Humidity: 5% to 90% non-condensing