MAGEWELL

USB Capture DVI Plus Technical Specifications

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

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Input Features

- 225MHz HDMI receiver, max input & loop through signal: 1920x1080p90 4:4:4
- Custom EDID
- Input RGB/YUV 4:4:4 8/10/12-bit, YUY 4:2:2 12-bit HDMI signals
- DVI-I: DVI 1.0
  - HDMI 1.4a (via breakout cable)
  - VGA (via DVI-to-VGA connector)
  - 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

- Video processing pipelines with ~160M pixels/s processing bandwidth
- Capture resolutions up to 2048x2160, frame rate up to 120fps. Outputs include (actual capture frame rate can be limited by the USB bandwidth and internal working frequency.)
  - 1920x1080p/1280x720p60
  - 720x576p25
  - 720x480p30
- 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
- Up to 2-channel IEC60958 audio streams

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 the device:
  - Pulsing slowly: input signal unlocked
  - On: input signal locked
  - Double blinks: memory abnormal or FPGA configuration failed
  - Off: firmware or power supply abnormal

Form Factor

- 101.5mm (L) x 56.8mm (W) x 17mm (H)

Accessories

- 1 × USB 3.0 cable (63cm)
- 1 × **DVI** to **VGA** connector
- 1 × **DVI-I** to **HDMI + Component** breakout

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