LCC260 HD HDMI audio and video capture/encoding card specification

version： V1.1

LCC260 is a high-definition HDMI audio and video capture and H.264 encoding integrated card. The HDMI video input of LCC260 complies with V1.4a standard and supports up to 1920x1080p@60fps.

LCC260 encodes the collected HDMI video signals into MJPEG and H.264 via an internal high-efficiency hardware encoder, and transmit them to the host through USB. Because the LCC260 integrates an internal hardware encoder, the host CPU occupancy rate is significantly reduced. The audio and video data are encoded to excellent video signal with litter amount of data, which is very suitable for network transmission and storage.

The LCC260 output is USB2.0 interface, multi platform, free driver, plug and play. LCC260 is small, light and easy to use, which make the LCC260 can run on lower performance equipment which ensures LCC260 have more widely uses and better applicability.

In addition, the video stream transmission protocol, both of MJPEG and H.264, conform to the UVC standard, while the audio stream transmission protocol conforms to the UAC standard, allowing LCC260 to run on operating system devices such as Windows/Linux/Mac/Android free driver.

LCC260 specially optimizes compatibility for Android systems, enabling it be compatible with more Android-based mobile phones, tablets, and professional terminals.

1. Product Appearance

Figure 1: Frontal view

Figure 2: Micro USB output interface

Figure 3: HDMI   TYPE A input interface

2. Basic Functions

- Input interface: support HDMI 1.4A protocol function, Type A connector;
- Maximum video resolution: 1920x1080@60fps; (YUV/RGB format for image input, PCM format for audio input only)
- support 2 channels encoded stream output simultaneously: 1 MJPEG + 1 H.264;
- MJPEG maximum output resolution: 720x576@30fps;
- H.264 maximum output resolution: 1920x1080@30fps;
- Output interface: Micro USB 2.0;
- Video output protocol: UVC (free driver);
- Audio output protocol: UAC (free driver);
- Support system: Windows, Linux, Mac, Android;
- LED indicates the working status of the equipment;
- Ultra small volume: 73 x 42 x 14 mm

3. Function Characteristics

- Audio/Video capture and encoding integrated;
- Automatically Identify HDMI parameters such as resolution,frame frequency and so on .
- Support parameters adjustment such as brightness, contrast, saturation and so on;
- Support H.264 code rate adjustment;
- Support parameters saving when power off;
- Support one machine multi cards;
- Support 2 channel streams, MJPEG is suitable for preview, H.264 is suitable for transmission and storage.

4. Electrical Characteristics and Working Environment

Table 1: Electrical Characteristics

voltage	5.0 V
current	~450 ma
consumption	~2.5W

Table 2:   Working Environment

Working Temperature	0-45° C
Storage Temperature	-20 – 60° C
Relative Humidity	5% - 90%

Table 3: HDMI input requires

HDMI Standard：	V1.4a
HDMI Interface：	Type A
Supported Resolutions：	1920x1080@60fps;1920x1080@50fps;1920x1080@30fps;1920x1080@25fps; 1280x720@60fps;1280x720@50fps;1280x720@30fps;1280x720@25fps;

Table 4: USB output

USB Output Standard	UVC 1.0 + UAC 1.0
USB interface	Micro USB
MJPEG Output Resolution	720x576;720x480;640x480;
H.264 Output Resolution	1920x1080;1440x900;1280x960;1024x768;1280x720; 720x576； 720x480； 640x480；
Audio Output	PCM ,16K,16bit,BE

5. Dimension

6. Running Software Environment

6.1 Operation System

- Windows 7/8/8.1/10/2008/2008 R2/2012 (x86 & x64)
- Linux (Ubuntu 12.04 – 16.10, CentOS 7)
- OS X 10.9 – 10.11

- macOS 10.12

6.2 Referenced APP Software

◎ View and store in real-time: VLC/virturalDub/potplayer

◎ Live broadcast and transmission: OBS/XSplit/vMix/VidBlaster/Wirecast

◎ Live platforms: Fighting fish TV/Tiger teeth Live/LongZhu Live

◎ Generic Application: ffmpeg

◎ Other software: EirectShow/V4L2/Quick Time/AV Foundation progress interface or streaming software

7. Application Scene

- Video capture card / host video live broadcast / industrial image analysis / engineering installation
- Mobile /pad screen / conference projection / game live broadcast / real-time streaming media
- UAV application / course recording

8. Other

- This specification may be changed without notice. Please check the relevant information of the Link-Card Technical Official Website in time.(http://www.link-card.com/en/)
- Link-card technology has the final interpretation power of the specification.
- For bulk purchase customers, Link-card technology can provide customized services such as setting OSD, coding and decoding parameters.

9. Contact

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