

4K PCIe Frame Grabber



Features

- Maximum input resolution up to 4096x2160/60fps
- Maximum capturing and recording Up to 4096x2160/60fps
- Low-profile PCI Express form factor
- Realize the industry only “Power-off Pass-through” function
- Support hardware up/down scaling, de-interlacing, and color space convert
- Support 10-bit color depth
- Built-in Signal-lock LED Indicator and RGB LED Temperature Indicator

Introduction

AVerMedia AVerGrabber CL511HN, the 4Kp60 HDR HDMI low profile video capture card, is equipped by one HDMI channel with the embedded audio input and supports astounding uncompressed real-time video capturing up to 4096 x 2160 60fps 4K resolution.

At the frame rate of 60 fps, CL511HN can improve the quality of a wide range of media recorded for businesses, universities, broadcasting, and manufacturing facilities, which can eventually provide a more lifelike and smooth video playback experience.

Low Profile Form Factor

Suitable for small-footprint embedded platform, the compact low profile form factor design provides a better use of internal space and reduces cable routing. It increases the use of interior space for a more flexible heat spreading solution.

Power-off Pass-through

Realize the Industry only “Power-off Pass-through”. Capture images even when your computer is not turned on.

Hardware Video Processing

CL511HN has built-in AVerMedia Video Engine technology which implements most useful video enhancing features to significantly reduce the efforts of CPU and the software development. In other words, this can help our clients to achieve the better cost saving of the hardware platform and the development resource.

Support up to 4:4:4 10-bit RGB and YUV

The 10-bit color depth support is especially useful in the medical imaging applications where images with the slightest color variation may indicate different conditions or stages of diseases. This in turn may assist doctors in accurately diagnosing patient conditions.

Versatile SDK

AVerMedia software development kit (SDK) is a set of development tools that allows software engineers to seamlessly integrate video capture modules into application specific systems.

AVerMedia SDK constantly updates the latest industrial standards, protocols, and media formats for optimal compatibility and to support cutting-edge technologies. AVerMedia SDK also supports various programming languages for quick and easy application, providing sample source codes. Along with AVerMedia SDK, CL511HN can be easily integrated into the different vertical applications that require superb video quality, such as education, broadcasting, and surveillance, etc.

Built-in Signal-lock LED Indicator and RGB LED Temperature Indicator

LED for Signal-lock Indicator

The LED light goes off when HDMI is not plugged in or there is no HDMI signal input.



The LED light turns green when HDMI signal is locked (hot-plugging 5V pull high).



RGB color LED for Temperature Indicator

Different temperature ranges of the main chip junction temperature (Tj) will produce a different color LED :



Green is indicated for temperatures 0~73°C (32~163.4°F)



Orange is indicated for temperatures 73~80°C (163.4~176°F)



Red is indicated for temperatures 80~85°C (176~185°F)

Blinking red is indicated for temperatures over 85°C (185°F)

Specifications

Host Interface	PCIe Gen2 x 4
Audio Interface	HDMI embedded PCM
Audio Format	HDMI embedded audio / 8CH LPCM Audio
Audio Sampling Rate	32/44.1/48KHz
Connector Type	HDMI Type A
Input Interface	HDMI 2.0, (Pass-Through)
Video Format	YUV444: IYU2, AYUV, V410, Y410 YUV422: YUY2, YUYV, UYVY, V210, Y210 YUV420: I420, NV12, YV12, P010 RGB: RGB565, RGB555, RGB24, RGB32, ARGB
Color Depth	8 bit/10bit
Channel No.	1 channel
Max. Input Resolution	4096x2160 60fps
Max. Recording Resolution	4096x2160 60fps

Encoding Mode	Software Encoding
Multi-Card Support	Yes
Supported OS	Windows 7, 8.1, 10 (32/64-Bit) Linux (based on V4L2, support x64)
Form Factor	PCIe Low Profile
Dimension (L x W)	151x 68.7mm
Power Consumption	15W<
Operating Temperature	0°C ~ 55°C
Operating Humidity	5% - 95% Relative Humidity
Safety Certification	FCC / CE

All specifications are subject to change without prior notice.

Ordering Information

- **CL511HN**: 4Kp60 HDR HDMI Low Profile Video Capture Card
- **Accessories**:
 - Low-profile bracket
- **SDK kits**:
 - SDK Pro
 - SDK Premium add-on kits