

# AVerMedia

## CL312H1

### 4Kp30 HDMI 2-Channel Low Profile Video Capture Card



#### Features

- Maximum input resolution up to 4096x2160/30fps
- Maximum capturing and recording Up to 4096x2160/30fps
- Low-profile PCI Express form factor
- Reduce the capture latency to shorten the time required for a full frame of image to be captured
- Support hardware up/down scaling, de-interlacing, and color space convert
- Support 10-bit color depth

#### Introduction

AVerMedia CL312H1, the 4Kp30 HDMI 2-Channel low profile video capture card, is equipped by four HDMI channels with the embedded audio input and supports astounding uncompressed real-time video capturing up to 4096x2160 30fps 4K resolution.

At the frame rate of 30 fps, CL312H1 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.

#### Hardware Video Processing

CL312H1 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.

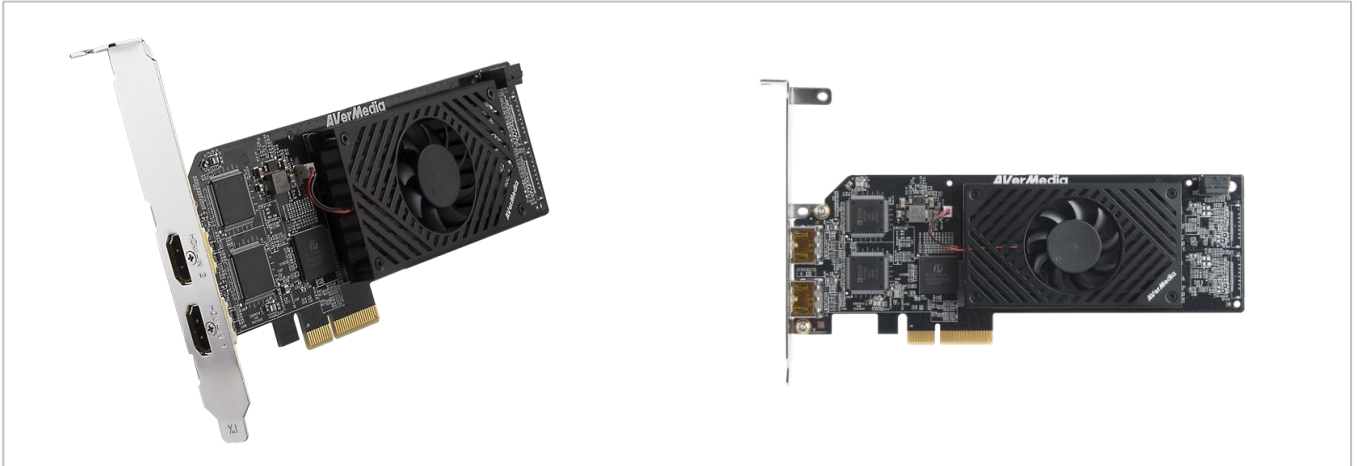
AVerMedia SDK constantly updates the latest industrial standards, protocols, and media formats for optimal compatibility and to support cutting-edge technologies. AVerMedia SDK also supports various programming languages for quick and easy application, providing sample source codes.

Along with AVerMedia SDK, CL312H1 can be easily integrated into the different vertical applications that require superb video quality, such as education, broadcasting, and surveillance, etc.

# CL312H1

## 4Kp30 HDMI 2-Channel Low Profile Video Capture Card

### Board Design



### Specifications

Host Interface	PCIe Gen2 x 4
Audio Interface	HDMI embedded PCM
Audio Format	Embedded HDMI, PCM
Audio Sampling Rate	32/44.1/48KHz
Connector Type	HDMI Type A
Input Interface	HDMI*2 (HDMI 1.4a)
Video Format	<b>YUV444:</b> IYU2, AYUV, V410, Y410 <b>YUV422:</b> YUY2, YUYV, UYVY, V210, Y210 <b>YUV420:</b> I420, NV12, YV12 <b>RGB:</b> RGB565, RGB555, RGB24, RGB32, ARGB
Color Depth	8 bit/10bit
Channel No.	2 channels
Max. Input Resolution	4096 x 2160 @ 30fps (by pass)
Max. Recording Resolution	2-CH 4096x2160 30fps (by pass)

Encoding Mode	Software Encoding
Multi-Card Support	Yes
Supported OS	Windows 7, 8.1, 10 (32/64-Bit) Linux Kernel 2.6.14 and above (32/64-bit)
Form Factor	PCIe Low Profile
Dimension (L x W)	180 x 68.78 mm
Power Consumption	16W
Operating Temperature	0°C ~ 60°C
Operating Humidity	5% - 80% Relative Humidity
Safety Certification	FCC / CE

All specifications are subject to change without prior notice.

### Ordering Information

- [CL312H1](#): 4Kp30 HDMI 2-Channel Low Profile Video Capture Card
- [Accessories](#):
  - Low-profile bracket
- [SDK kits](#) :
  - SDK Pro
  - SDK Premium add-on kits

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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