AVerMedia

CN331-H
H.264 H/W Encoding M.2 Capture Card

Features

- FHD video capture with HDMI input and output
- H.264 HW encoding
- The latest M.2 compact interface
- HDMI with flexible connector angle
- Low power consumption
- Hardware video processing:
  1. hardware scaling
  2. de-interlacing
  3. color space conversion
- Ideal for industrial, education and enterprise applications

Introduction

The CN331-H is a PCI Express M.2 video capture card based on H.264 hardware compression that features Full HD video capture with minimum CPU consumption. The CN331-H can ingest and capture HDMI sources for monitoring, archiving or analyzing Full HD video content with more flexibilities and possibilities.

The CN331-H features hardware encoding performance that preserves the captured video quality under minimum CPU load. It is endowed with complete functions to capture videos in Full HD resolutions for industrial and commercial markets. The CN331-H is committed to shorten the development schedule and provide integrators with a complete and rugged solution towards building their own applications. Along with M.2 cards' compact size and AVerMedia proprietary SDK, it can be seamlessly integrated into vertical applications that require ultra high-definition video quality.

The Latest M.2 Compact Form Factor

With the compact form factor design from a PCI Express, the M.2 is perfect for the small-footprint embedded systems. It is an efficient low-power consuming solution. Ideal for applications that need to be vibration-proof such as industrial applications. As enterprise users aim for compact and slim designs, the M.2 has become the new trend and interface of choice for embedded systems.
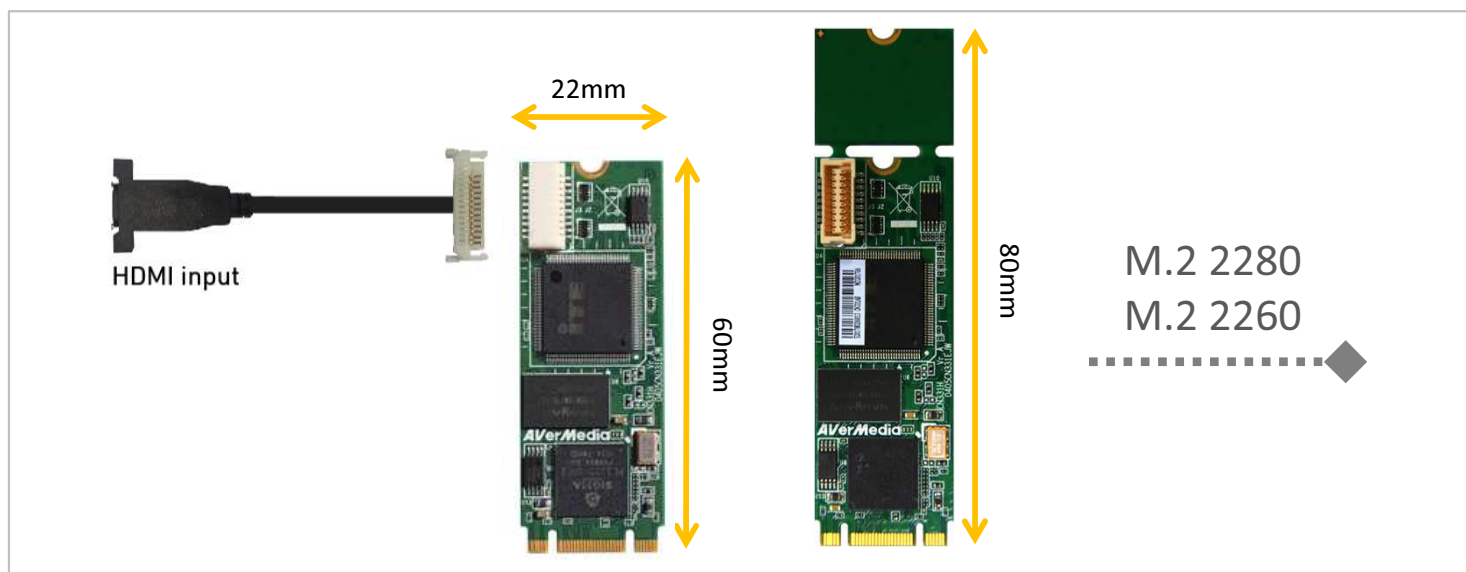
Hardware H.264 Compression

The CN331-H is equipped with an advanced built-in H.264 hardware encoder. It enables the system to encode without impacting the CPU's computing power while retaining high quality video. This feature balances the loading and increases the system's reliability. As a result, the CN331-H significantly reduces the computing efforts on both hardware and software so that the CPU can focus on other important parts of application on hand.

Hardware Scaling, De-Interlacing and Color Space Conversion

AVerMedia's hardware-based video engine technology implements practical video processing functions such as de-interlacing for a sharper image, color space conversion for more true-to-life video color and resolution scaling. The functions help reduce the computing burden on hardware and software in order to focus on other important applications.

Connection Diagram

22mm

HDMI input

60mm

80mm

M.2 2280

M.2 2260

Specifications

Host Interface	Gen1 x 1		Encoding Mode	H.264 hardware encoding
Audio Interface	1×HDMI embedded audio L/R		Multi-channel Support	Up to 2 cards
Audio Sampling Rate	32/44.1/48KHz		Supported OS	Windows 7/8.1/10 (32/ 64 bit)*
Connector Type	Wafer			Linux (based on V4L2, support x64)
Input Interface	HDMI 1.4		Form Factor	M.2 Type B/M
Video Format	YV12, YUY2, RGB24		Dimension (W x L)	22 x 80 or 22 x 60 mm
Color Depth	8-bit		Power Consumption	1 W
Channel No.	1Ch		Operating Temperature	0°C ~ 55°C
Max. Input Resolution	1920 x 1080 60fps		Operating Humidity	0% ~ 95% relative humidity
Max. Capturing Resolution	1920 x 1080 30fps		Storage Temperature	-20°C ~ 80°C

All specifications are subject to change without prior notice.
* Linux support is coming soon.

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. SDK Pro and SDK Premium are available upon request, they offer professional grade functionalities to better match each application's specific requirements.

Ordering Information

CN331-H Capture Card
- SDK kits
  - SDK Basic
  - SDK Pro
  - SDK Premium Add-on Kits

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