

AVerMedia

AVerGrabber CN312M

2Kp60 HDMI/SDI Dual-Channel M.2 Video Capture Card

CN312MN	Normal Version
CN312MW	Wide Temperature Version
CN312MC	Wide Temperature with Conformal Coating Version



Introduction

AVerMedia AVerGrabber CN312M, the Dual-Channel M.2 Video Capture Card, is equipped by one HDMI and one SDI channels with the embedded audio.

CN312M is a PCIe Gen2 x4 M.2 capture card equipped with one HDMI and one SDI channels with embedded audio input. With its HDMI and SDI video source input, it is able to support an astounding uncompressed real-time video capture resolution of up to 2048 x 1080 60fps (SDI)/ 1920 x 1200 60fps (HDMI). At the frame rate of 60 fps, CN312M 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.

Features

- Max. input resolution:
SDI input: 2048 x 1080 60fps
HDMI input: 1920 x 1200 60fps
- Max. capturing/ recording 1920 x 1080 60fps
- The latest M.2 compact interface
- Hardware video processing:
 1. hardware scaling
 2. color space conversion
- Wide temperature and conformal coating design

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 such as industrial, medical, education, video conference, etc. Utilizing software encoding, it offers users the customization ability to tweak or modify codecs' decompression and compression settings for optimum bit-rate or video quality. With AVerMedia Windows and Linux driver support, clients are able to choose from a wide range of platforms according to your needs; making CN312M the best choice for all Full HD professional capturing applications.

Wide Temperature and Conformal Coating Design

AVerMedia delivers this advanced solution, which is capable of withstanding the extreme temperature environment without compromising the video functionality. CN312MW (Wide Temperature Version) can offer the stable operation in the temperature range from -20°C to 70°C (-4°F to 158°F). Furthermore, CN312MC (Wide Temperature with Conformal Coating Version) thermally robust product is specifically designed to provide great reliability for the rugged and industrial applications to against moisture, dust, or chemicals.

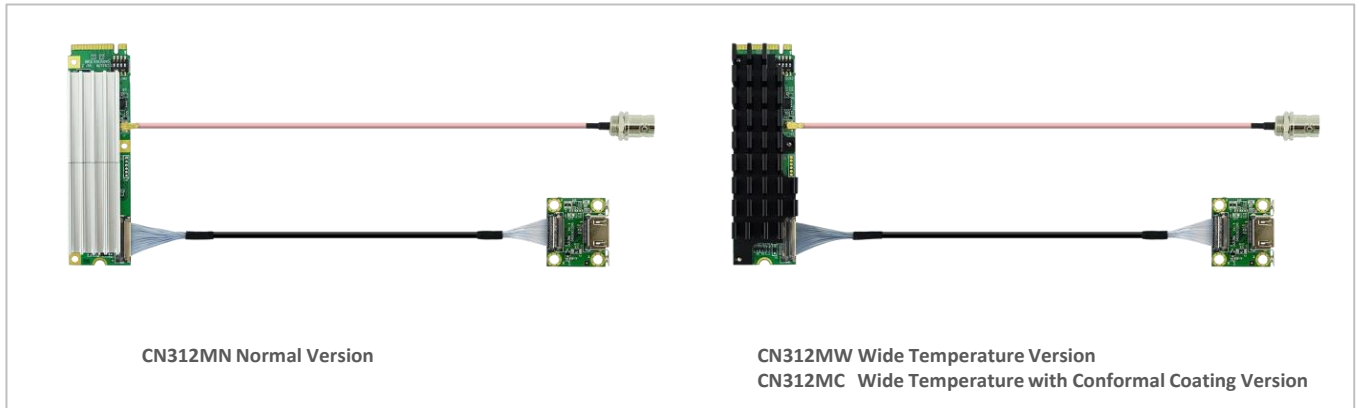
Hardware Scaling and Color Space Conversion

AVerMedia hardware-based video engine technology implements practical video processing functions such as 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 at hand.

AVerGrabber CN312MN/CN312MW/CN312MC

2Kp60 HDMI/SDI Dual-Channel M.2 Video Capture Card

Thermal Design / BNC Cable and HDMI Micro Coaxial Cable



CN312MN Normal Version

CN312MW Wide Temperature Version
CN312MC Wide Temperature with Conformal Coating Version

Specifications

Host Interface	Gen2 x 4
Audio Format	HDMI/SDI embedded audio
Audio Sampling Rate	32/44.1/48KHz
Connector Type	1CH HDMI Type A , 1CH BNC for SDI
Input Interface	HDMI 1.4a, DVI-D 1.0 + 2K SDI
Video Format	Driver support output: 4:2:0 8-bit : NV12, I420, YV12 4:2:2 8-bit : YUY2, YUYV, UYVY 4:4:4 8-bit: IYU2, BGR24, BGR32 SDK support output: 4:2:0 8-bit : YV12 4:2:2 8-bit : YUY2 4:4:4 8-bit: BGR24
Color Depth	8-bit (support 10-bit video input)
Channel No.	2 channels
Max. Input Resolution	2048 x 1080@60fps (SDI) 1920 x 1200@60fps (HDMI)
Max. Capturing Resolution	1920 x 1080@60fps

Encoding Mode	Software encoding
Multi-Card Support	Yes
Supported OS	Windows 7/ 8.1/ 10 (32/ 64 bit) Linux (based on V4L2, support x86, x64)
Form Factor	M.2 (2280 Key M)
Dimension (W x L x H)	CN312MN: 22 x 80 x 6.8 mm CN312MW/CM312MC: 22 x 80 x 26.3 mm
Power Consumption	3.3 W
Operating Temperature	CN312MN: 0°C ~ 40°C CN312MW/CM312MC: -20°C ~ 70°C (with 0.5m/s airflow)
Operating Humidity	0% ~ 95% relative humidity
Storage Temperature	-40°C ~ 85°C
Safety Certification	FCC / CE

*All specifications are subject to change without prior notice.

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

- **CN312MN:** Normal Version
- **CN312MW:** Wide Temperature Version
- **CN312MC:** Wide Temperature with Conformal Coating Version
- **Package includes:**
 - CN312M
 - BNC Cable x 1
 - HDMI Micro Coaxial Cable x 1
- **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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