

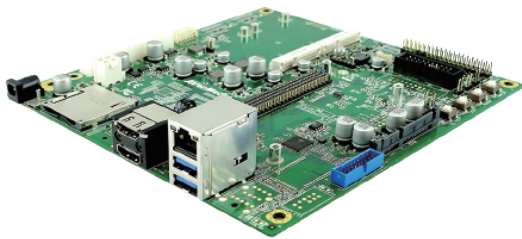
**AVerMedia**



**PREFERRED  
SOLUTION  
PROVIDER**

# AVerAI EX713-AA00 Carrier Board

EX713-AA00-0000 carrier board provides 1x mPCIe slots  
It fully supports NVIDIA® Jetson™ TX2 module



## Features

- Support NVIDIA® Jetson™ TX2 module
- PCB dimension: Mini-ITX, 170 mm x 170 mm (6.7" x 6.7")
- 1x full-height mPCIe slot
- 1x HDMI-out
- Battery power for uninterrupted power system
- Support AVerMedia's mPCIe capture cards for HDMI/VGA/SDI/Composite signal

## Description

AVerMedia's EX713-AA00-0000 Carrier for NVIDIA® Jetson™ TX2 module is designed for using in Intelligent Video Analysis. This product provides dual ports of mPCIe Gen2 x1 to support AVerMedia's Mini-PCIe capture cards, such as C353 for 1080p60 HDMI/VGA input, CM313B for 1080p60 3G-SDI input, and C351 for 4-channels SD composite inputs. The mPCIe slot also supports Ethernet and EtherCAT cards for industrial motion control applications.

The AVerMedia's EX713-AA00-0000 design includes 1x HDMI-out, 2x external USB 3.0, 2x internal USB 3.0, 1x Giga-bit Ethernet RJ-45, 1x USB OTG, 1x SD card slot, 1x SATA, 1x mPCIe, and 40 pins of GPIO expansion with 1x 3.3V UART, 1x I2C, and 7x GPIOs.

This carrier follows Mini-ITX dimension (170mm x 170mm, 6.7" x 6.7") to support Mini-ITX chassis and 1U server chassis. It is one of the best Application Ready Platform by supporting NVIDIA® Jetson™ TX2 module for you to run the edge computing algorithm and start developing your potential market.

## Embedded Vision Solutions for NVIDIA Jetson

AVerMedia offers 3 categories of Embedded Vision Solutions for AI application on the edge devices, with the support of NVIDIA Jetson family, battery power, HDMI/VGA/3G-SDI/Composite video sources, and the direct technical support for developers.

- Standard and customized Nano/Tegra/AGX Xavier/Xavier NX carrier boards.
- Standard and customized Nano/Tegra/AGX Xavier/Xavier NX application-ready systems.
- Software design service of Linux BSP, driver, OpenCV, VisionWorks, and cuDNN.

## Why AVerMedia

- As NVIDIA® PREFERRED solution provider, AVerMedia gets the direct support from NVIDIA. We are able to offer technical support in 24 hours to help your project success.
- Support full range of NVIDIA Jetson modules, including Nano, Tegra, and AGX Xavier.
- Support various video input sources from IP camera, USB camera, MIPI camera, and capture cards supporting HDMI/VGA/3G-SDI/Composite video sources.
- Provide customization services of HW, PCB, chassis, BSP, driver, and UX/UI/ID/ME design.
- Supports 65°C/149°F operating temperature in the No-Air-Flow environment for fanless system designed by using AVerCooler technologies.
- Provide flexible user-configured security to protect the SW.

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## Specifications

Type	Carrier Board
NVIDIA GPU SoC Module Compatibility	NVIDIA® Jetson™ TX2 module
Networking	1x GbE (RJ-45)
Display Output	1x HDMI type A, maximum resolution: 4096 x 2160 at 60Hz
Temperature	Operating temperature 0°C ~ 70°C Storage temperature -40°C ~ 85°C Relative humidity 40 °C @ 95%, Non-Condensing
USB	2x external USB3.0 Type A (USB3.2 Gen1x 1) 2x internal USB3.0 (USB3.2 Gen1x 1)
Storage	1x SATA 3Gb/s and SATA Power, 1x SD card
GPIO Expansion	40 pins: 1x 3.3V UART, 1x I2C, and 7x GPIOs
User Expansion	1x full-height mPCIe
Input Power	12V/5A
Buttons	Power, Reset, Recovery, and Sleep buttons
PCB/Electronics Mechanical Info	Mini-ITX , 170mm x 170mm (6.7" x 6.7") Weight: 200.8g
Certifications	CE, FCC

## Compatible Cards



Model Name	CM313B	CM313BW	C351	C351W	C353	C353W
Host Interface	PCIe Gen1 x1		PCIe Gen1 x1		PCIe Gen1 x1	
Max Input Resolution	1920x1080 60fps		NTSC/PAL		1920x1080 60fps	
Max Record Resolution	1920x1080 30fps		NTSC/PAL		1920x1080 30fps	
Channel No.	1		4		1	
H/W Encode	●				●	
Audio Interface	SDI embedded		RL (RCA)		HDMI embedded	
Video Interface	SDI				●	
	HDMI				●	
	DVI				●	
	VGA				●	
Composite			●			
Color Depth/Precision					8 bit	
Color Format	YUY2		YUY2		YUY2	
Operating Temperature	0°C~55°C	-40°C~85°C	0°C~55°C	-40°C~85°C	0°C~55°C	-40°C~85°C
Dimensions ( LxW ) mm	50.95x30		50.95x30		50.95x30	

\* All specifications are subject to change without prior notice.



## 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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