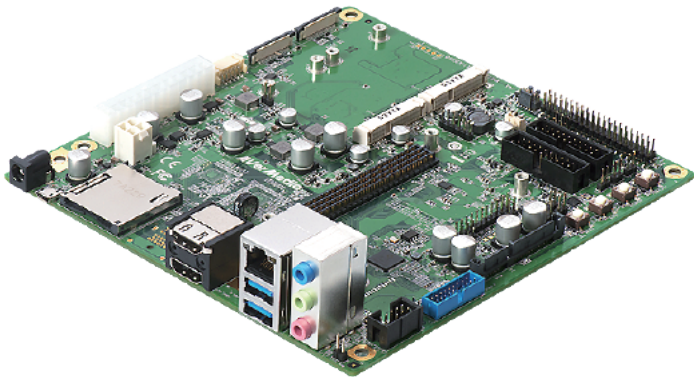


AVerAI EX713-AA00 Carrier Board

EX713-AA00-0000 carrier board provides 2x mPCIe slots

It fully supports NVIDIA®Jetson™ TX2/ TX1



Description

AVerMedia's EX713-AA00-0000 Carrier for NVIDIA®Jetson™ TX1/TX2 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. These two mPCIe slots also support mPCIe Ethernet and EtherCAT cards for industrial motion control applications.

The AVerMedia's EX713-AA00-0000 design includes 2x HDMI-out, 2x external USB 3.0, 2x internal USB 3.0, 1x Gigabit Ethernet RJ-45, 1x USB OTG, 1x SD card slot, 1x SATA, 2x 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™ TX1/TX2 for you to run the edge computing algorithm and start developing your potential market.

Features

- Support NVIDIA®Jetson™ TX2/ TX1
- PCB dimension: Mini-ITX, 170 mm x 170 mm (6.7" x 6.7")
- 2x full-height mPCIe slots (TX2 only supports 1x mPCIe)
- 2x HDMI-out (TX2 only supports 1x HDMI-out)
- Battery power for uninterrupted power system
- Support AVerMedia's mPCIe capture cards for HDMI/ VGA/ SDI/ Composite signal

Embedded Vision Solutions for NVIDIA Jetson

AVerMedia offers 5 categories of Embedded Vision Solutions for deep learning application on the edge devices, with the support of battery power and HDMI/ VGA/ 3G-SDI/ Composite video sources and the direct technical support for developers.

- Standard and customized TK1 modules and carrier boards
- Standard and customized TX1/ TX2/ TX2i/ AGX Xavier/ Nano carrier boards
- Standard and customized TK1 single boards
- Standard and customized TK1 and TX1/ TX2/ TX2i/ AGX Xavier/ Nano application-ready systems
- Software design service of Linux BSP, driver, OpenCV, VisionWorks, and cuDNN.

Why AVerMedia

- Innovative, patented passive cooling thermal designs for No-Air-Flow environment: AVerCooler, WaveFin, and Surfax.
- Full customization ability with our in-house HW and SW development teams.
- Timely support from NVIDIA® as we are a NVIDIA®Jetson Preferred Partner.
- Stable supply as we are a financially sound company.

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Specifications

Type	Carrier Board
NVIDIA GPU SoC Module Compatibility	NVIDIA®Jetson™ TX2/ TX1
Networking	1x GbE (RJ-45)
Display Output	2x HDMI type A, maximum resolution: 4096 x 2160 at 60Hz (TX2 only supports 1x HDMI-out)
Temperature	Operating temperature 0°C ~ 55°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	2x full-height mPCIe (TX2 only supports 1x 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



-40°C 85°C



-40°C 85°C

Model Name	CM311-H	C353	C353W	C351	C351W
Host Interface	PCIe Gen2 x1	PCIe Gen1 x1		PCIe Gen1 x1	
Max Input Resolution	1920x1080 60fps	1920x1080 60fps		NTSC/PAL	
Max Record Resolution	1920x1080 60fps	1920x1080 30fps		NTSC/PAL	
Channel No.	1	1		4	
H/W Encode		●			
Audio Interface	HDMI embedded	HDMI embedded		RL (RCA)	
Video Interface	SDI				
	HDMI	●	●		
	DVI		●		
	VGA		●		
	Composite			●	
Color Depth/Precision	8 bit	8 bit			
Color Format	IYU2, YUY2, YUYV, UYVY RGB565, RGB555, RGB24	YUY2, YV12 RGB24		YUY2	
Operating Temperature	0°C~50°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.

