AVerAI EN715 Carrier Board

EN715 carrier board supports 3 x MIPI CSI-2, 2xUSB 3.0, 1xGbE and 1x4Kp60 HDMI-out
It fully supports NVIDIA® Jetson Nano™ (Version B01) / Xavier™ NX module

Introduction

AVerMedia AVerAI carrier board EN715 is designed for NVIDIA® Jetson Nano™ (Version B01)/Xavier™ NX module and for the industry applications in the environment with the high physical space concern and operation in the temperature range from 0°C to 70°C. It features the very compact dimensions of 70.6mm (L) x 87mm (W) x 27.3mm (H), with four Ø 3.2 mounting holes for the highly reliable field installation.

AVerAI EN715 can provide the access to a list of rich I/O functions, which includes 2x 2 Lane MIPI CSI-2, 1x 4 Lane MIPI CSI-2 MIPI Camera Input, 1x 4Kp60 HDMI output, 2x USB 3.0, 1x GbE RJ-45, 20-pins GPIO expansion, 1x Micro SD card slot, and 1x Micro-B USB 2.0 for recovery. It also comes with a single-mold PCB terminal block module for the easy power connection.

With the compact dimensions, design for reliable field installation, and the rich I/O functions, EN715 is the best cost-effective choice for AIoT edge computing in the intelligent video analytics applications of Smart Retail, Smart Camera, Smart Medical and Smart City.

Features

- Fully support NVIDIA® Jetson Nano™ (Version B01)/Xavier™ NX module
- 1x GbE, 2x USB 3.0, 1x 4Kp60 HDMI outputs
- 2x 2 Lane MIPI CSI-2
- 1x 4 Lane MIPI CSI-2 (for EN715-BBC3 only)
- 20-pin GPIO expansion
- 1x micro-SD card slot
- Operating temperature: 0°C ~ 70°C
- Dimension: W:87mm x L:70.6mm x H: 27.3mm

Embedded Vision Solutions for NVIDIA Jetson

AVerMedia offers 3 categories of Embedded Vision Solutions for deep learning 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 of 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.

www.avermedia.com/professional

AVerAI EN715 Carrier Board

EN715 carrier board provides 2x 2 Lane MIPI CSI-2 and 15 pin FPC 1mm pitch connector
It fully supports NVIDIA® Jetson Nano™ (Version B01) / Xavier™ NX module

Specifications

Model	EN715-BBC2	EN715-BBC3
Type	Carrier Board	
NVIDIA GPU SoC Module Compatibility	NVIDIA® Jetson Nano™ (Version B01)/Xavier™ NX module	
Networking	1x GbE RJ-45	
Display Output	3840 x 2160 at 60Hz	
Temperature	Operating temperature 0°C~70°C Storage temperature -40°C ~ 85°C Relative humidity 40 °C @ 95%, Non-Condensing	
MIPI Camera Inputs	• 2x 2 lane MIPI CSI-2, 15 pin FPC 1mm Pitch Connector (Compatible on NVIDIA® Jetson Nano™ Developer Kit)	• 2x 2 lane MIPI CSI-2, 15 pin FPC 1mm Pitch Connector (Compatible on NVIDIA® Jetson Nano™ Developer Kit) • 1x 4 lane MIPI CSI-2, 36 pin FPC 1mm Pitch Connector
USB	1x USB 2.0 Micro-B for recovery 2x USB 3.0 Type-A	
Storage	1x micro-SD card slot	
GPIO Expansion	20 pins: 2x I2C, 1x UART, 9x GPIOs	
Input Power	3.5mm Screw Terminal; 9V~19V is recommended.	
Buttons	Power and Recovery	
RTC Battery	Support RTC battery and Battery Life Monitoring by MCU	
PCB/Electronics Mechanical Info	W: 87mm x L: 70.6mm x H: 27.3mm (3.43" x 2.78" x 1.07"), Weight: 70g	
Certifications	CE, FCC, KC	

Optional Accessories

NVIDIA® Jetson Series	NVIDIA® Jetson Nano™ (Version B01)/Xavier™ NX module
Power Adaptor	12V, 5A
Power Cord	US/JP/EU/UK/TW
Fan Module	Heat sink with fan

MIPI Camera	**Camera Module Manufacturer: Raspberry Pi**
	For 15 pin MIPI connector
	  Raspberry Pi Camera Module v2 (8M), 1080P (30fps)
	Camera Module Manufacturer: APPRO.PHO
	For 15 pin MIPI connector:
	  B-04: IMX179 (8M) MIPI, 1080P (30fps)
	  C-04: IMX290 (2M) MIPI, 1080P (30fps)
	  C-05: IMX290 (2M) +ISP (YUV), 1080P (30fps)
	For 36 pin MIPI connector:
	  A-03: IMX290 (FHD) V-by-One® HS, 1080P (60fps)
	  A-06: IMX334 (4K) V-by-One® HS x1, 4K (30fps)
	  B-03: IMX334 (4K) MIPI, 4K (30/60fps)
	  B-13: IMX334 (4K) +ISP(YUV) , 4K (30fps)

*All specifications are subject to change without prior notice.

RoHS 2 COMPLIANT

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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