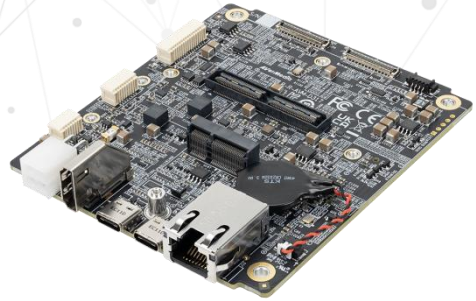


D317 Carrier Board [Preliminary]

NVIDIA® Jetson AGX Orin module

For AMR Applications



Overview

AVerMedia's carrier board D317 equips powerful NVIDIA® Jetson AGX Orin module. This efficient system-on-module (SoM) opens new worlds of embedded IoT applications with full analytic capabilities.

D317 is designed for the industry applications with spatial concern and feature a rich assortment of I/O ports for rapid AI-based solution development and seamless deployment as required by demanding business applications.

AVerMedia supports businesses of all sizes and offers customizable BSP services, flexible MoQ, in addition to NVIDIA's JetPack™ SDK.

Enterprise-Leading Features

- Embedded NVIDIA® Jetson AGX Orin module
- 1x GbE RJ-45
- 1x M.2 Key E 2230 for WIFI 6
- 1x HDMI 2.0 (3840x2160 at 60Hz)
- 1x 120pin for GMSL camera board
- 1x USB 3.2 Type-C for BSP install
- Optional 2x 10G RJ-45 (via daughter board)
- Optional 8x PoE (via daughter board)
- Optional 1x M.2 Key B for 5G connection (via daughter board)
- Operating temperature: -40 to 85°C (carrier board) (TBD)
- Dimension: W: 92mm x L: 107mm

The AVerMedia Advantage



Video Processing Technology



Flexibility & Reliability



Dedicated After-Sales Support

AVerMedia understands that each business has a unique set of requirements that requires professional expertise and support. With AVerMedia, you are guaranteed to work with a proven global leader in video processing technology (200+ video capturing & streaming patents) with decades of experience processing multiple video signals for countless award-winning products.

A global leader that supports businesses of all sizes with comprehensive customization services (i.e., HW/PCB/BSP/etc.), flexible MoQ while ensuring a high-quality design and stable product. And for projects requiring additional security, we can provide customizable encryption hardware to support your privacy needs.

By partnering with us, a dedicated NVIDIA® ELITE Partner, our support-driven team offers prompt after-sales support so that your company stays focused on what matters most, customer acquisition.

Specifications

Model	D317
Type	Carrier Board
NVIDIA Module Compatibility	NVIDIA® Jetson AGX Orin module
Networking	• 1x GbE RJ-45 • 1 x M.2. key E 2230 for wifi 6 • Optional 2x 10G RJ-45 (via daughter board) (TBD) • Optional 8x PoE (via daughter board) (TBD) • Optional 1x M.2 Key B for 5G connection (via 5G 、PoE/5G 、USB/5G daughter board) (TBD)
Display Output	1 x HDMI output 3840 x 2160 at 60Hz
Temperature	Operating temperature: -40 to 85°C (carrier board) (TBD) Storage temperature -40°C ~ 85°C (TBD) Relative humidity 40 °C @ 95%, Non-Condensing
Camera Inputs	1x 120pin for GMSL camera board
USB	• 1x USB 3.2 Type-C for BSP install (supports OTG mode, when using with PoE/5G daughter board or USB/5G daughter board ,the USB 3.2 OTG port becomes USB 2.0) • 1x USB 3.2 Type-C (host mode only) • Optional 8x USB3.2 Type-A (via daughter board) (TBD)
Storage	2x NVMe M.2 Key M 2280 (1x only support S1 Type Top side component SSD)
Expansion Header	• 30pin header: 1xUART, 1xI2C, 3xGPIO,1xSPI, 2xCAN BUS, 1xI2S, 5V(Maximum 0.7A), 3.3V(Maximum 0.7A) • 12pin header: 1x12V(Maximum 0.7A), 1x5V(Maximum 1A), 1x3.3V(Maximum 1A) power Output, 1xUSB 2.0, 1xDMIC • 16pin wafer for OOB or External Button: ■ OOB*: 1xUART, 1xDebug UART, 1xPower button, 1xReset button, 1x Power detect (via out-of-band management module) ■ External Buttons: 1xPower Button, 1xReset button, 1xRecovery button, ■ 1xPWR_LED (via external button cable) • 40pin coaxial connector for 10G expansion • 40pin coaxial connector for PCIe expansion
GPS	Optional Dual-RTK GNSS support (via daughter board)
Sensor	Temperature sensor for PCB top/bot Temperature measure
Power requirement	ATX 4pin ,12V +/- 5% DC Input

* For details, please refer to the ["Accessory-OOB module"](#) webpage.

Thermal Solution	Fan solution (12V fan wafer)
Buttons	Power and Recovery
LED	1x system power 1x input power
RTC Battery	Support RTC battery and Battery Life Monitoring by MCU
PCB/Electronics Mechanical Info	- W: 92mm x L: 107mm (TBD) - Weight: 150g (TBD)
Certifications	CE, FCC,VCCI, KC (TBD)
Package	1x Carrier board Screws Nuts

Ordering Information

Model	Part Number	SKU Number	Description
D317	61D3170001AC	D317-001	-

Optional Accessory

Model	Part Number	Product Name	Type	Description
D317	61D317USB1AJ	USB Board	Board	Support 8xUSB port and 1xM.2 Key B for 4G/5G Module
D317	61D317OB01AK	ERMI Board	Board	Support remote device management services
D317	61D317GM01AF	GMSL Board	Board	Support 8x GMSL camera via mini fakra cable
D317	60D3170001AB	Mini FAKRA Cable	Cable	Support standard FAKRA x4 for connecting to GMSL board
D317	60D3170001AC	12pin Flying Leads Cable	Cable	Support connection to the 12-pin port (J71) on the D317 board
D317	60D3170001AD	16pin Flying Leads Cable	Cable	Support connection to the 16-pin port (J32) on the D317 board
D317	60D3170001AE	30pin Flying Leads Cable	Cable	Support connection to the 30-pin port (J70) on the D317 board



*All specifications are subject to change without prior notice.