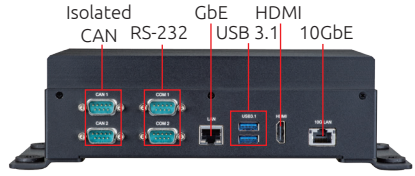
AVA-XV-V1

NVIDIA® Jetson AGX Xavier™ AI GMSL2 Platform for Autonomous Drive Applications

Features

- NVIDIA® Jetson AGX Xavier™ module
- 8x Gigabit Multimedia Serial Link 2 (GMSL2), through 2x 1*4 mini Fakra typeZ
- Customizable ignition setting
- 2x Isolated CAN
- 1x 10GbE, 1 x GbE ports
- 2x USB 3.1
- 1x Mini PCIe for LTE or Wi-Fi module
- 9-36 VDC input with ignition control

Preliminary



Specifications

- **System**

  NVIDIA® Jetson AGX Xavier™ ARM-based processor
  512-core Volta™ architecture @ 1.37GHz
  64 tensor cores
  5.5-11 TFLOPS (FP16)
  20-32 TOPS (INT8)

  Memory on module
  32 GB 256-bit LPDDR4x 136.5GB/s
  Storage on module
  32GB eMMC 5.1

- **Graphics**
  1x HDMI 2.0a

- **GMSL2**
  8x GMSL2 (2x 1*4 mini Fakra, type Z)

- **Ethernet**
  1x 10GbE Ethernet port
  1x 1GbE-T Ethernet ports

- **CAN**
  2x Isolated CAN
  CANbus 2.0B

- **Serial Ports**
  2x RS-232

- **Extension**
  1x mini PCIe full function

- **USB**
  2x type A USB 3.1

- **Power Consumption**
  50 W (max)

- **Mechanical**
  225mm x 150mm x 75mm (WxDxH, without mounting kit)
  Cold plate design with backup thermal solution for external cooling

- **Environmental**

  Operating Temperature
  -10°C to 55°C

  Storage Temperature
  -40°C to 85°C

  Humidity
  10% to 90% non-condensing

  Shock/ Vibration (operating)
  MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II
  MIL-STD-810G, Method 514.6, Category 4
  3 Grms, 5-500 Hz, 3 axes

- **EMC**
  CE: EN 61000-6-4 & EN 61000-6-2, Class A
  FCC: FCC 47 CFR Part 15 Subpart B, Class A

- **Operating System**
  Ubuntu 18.04

Ordering Information

- **AVA-XV-V1**
  Advanced driver assistance system with NVIDIA Jetson AGX Xavier Edge AI GPU, 8x GMSL2, 1x 10GbE, 2x RS-232, 2x USB 3.1, 1x HDMI