

NVIDIA GPU and Intel® Xeon® AI Computing Platform for Autonomous Vehicles

Datasheet

AVA-3510



Features

- Intel® Xeon® E processor
- NVIDIA Turing™ (NVIDIA Quadro RTX 5000) GPU module
- Customizable ignition setting
- 2x 10GbE, 5x GbE
- 2x USB 3.0 lockable, 2x USB 2.0
- 1x Mini PCIe for LTE or Wi-Fi module
- 1x 2.5" SSD 256G; up to 2x 2.5" SATA
- 9-36 VDC input

Ordering Information

AVA-3510 Gen1 - Xeon	AVA-3510 Gen1 with top Fan, Xeon 2278 GE, DDR4 64G ECC, 1x 2.5" SSD 256G, RTX-5000, CAN x1, Ignition, DC 9-36V
-----------------------------	--

Optional Accessories

AC/DC Power adapter	330W, AC/DC adapter, 24V/13.75A (P/N: 31-62179-0000-A0)
SSD	2.5" SATA 256G (P/N: 29-42N00-6090-A0DE)

Specifications

Model Name	AVA-3510 Gen1 - Xeon
System Core	
Processor	Intel® Xeon® Processor 2278GE Coffee Lake Refresh
Base Freq.	3.3 GHz
MAX Turbo Freq.	4.7 GHz
Chipset	Intel® PCH C246
Graphic	NVIDIA® Quadro® Embedded RTX5000, MXM 3.1 type B+, 82 x 110mm, PCIe x16 Gen3
Memory	Dual channel 32G DDR4-2666 SODIMM socket, up to 64G
Display	2 x DP and 1 x DP++
Storage Devices	
2.5" SATA	Default: 1x 2.5" SSD 256G; up to 2x 2.5" SATA
External I/O Interface (CONN)	
Ethernet	2x 10 GbE (X550, no support WOL), 4x 1G GbE (i210T), 1x 1G GbE (I219 PHY), 5x RJ45, support wake on LAN
Serial Port	2x DB9: COM1/2: RS-232/422/485
USB 2.0	2 port / support 1A, type-A connector x2
USB 3.1	2 port / 2x GEN1, type -A connector x2
DIO	2x DB9 con: 4 DI + 4 DO
Internal I/O Interface	
Mini PCIe	2 x full size: Default: 1xCAN BUS Module, Option: 1x LTE Module or Wifi Module
µSIM	1 x µSIM Slot (4G/LTE)
MXM Slot	Default: PCIe x16 (For EGX-MXM-RTX5000)
CAN	Optional with CAN module
Mechanical	
Dimensions	335(W)mm x 225.1(D)mm x 95(H)mm
Mounting	Wall Mount
Color	Black
Power requirements	
DC Input	9~36V DC IN on MB with Ignition
AC/DC Power Adapter	Optional: 330W, AC/DC adapter, 24V/13.75A
Fail reset	Hardware reset button
Power Button	1x power On/Off button
Extendable PWR switch	Power box-header
Battery	CMOS Battery Holder BR2032
Environmental	
Operating Temperature	Standard: -10°C to 55°C
Operating Humidity	EN 50125-1, compliance EN 60068-2-78
Storage Temperature	-40°C to +70°C
Vibration	MIL-STD-810H METHOD 514.8, Procedure I, Category 4, Table 514.8C-I, Figure 514.8C-2 Common carrier (US highway truck vibration exposure).
Shock	Operating MIL-STD-810H, Method 516.8, Procedure I
ESD	Contact +/- 4KV, Air +/- 8KV
EMC	CE/ FCC Class A, according to EN 55024 & EN 55032 ISO 7637-2 & SAE J1113-11 (Nice to have)
Safety	CE-LVD
Operating System	
Linux	Ubuntu 20.04.03

Mechanical Overview

