AVA-5600

19" Rackmount Rugged, Fanless AIoT Platform for Real-time Video/Graphics Analytics

Features

- Intel® Core™ i7-7820EQ Processor and Mobile Intel® CM236 Chipset
- NVIDIA Quadro® GPU MXM 3.1 Type A/B module on PCIe x16
- 4x M12 GbE with PoE, 4x USB 3.0
- Rich Storage Options: 2.5" SATA 6.0 Gb/s drive bay, 1x M.2 2280 slot, 1x CFast socket
- GNSS/3G/4G/WLAN support via 2x Mini PCIe slots and 2x USIM slots
- MVB/CAN bus support by Mini PCIe add-on module (BOM option)
- Nominal Voltage: 110VDC (EN50155 compliant)

New



Specifications

System

Processor
Quad-core Intel® Core™ i7-7820EQ Processor, 3.0GHz (formerly Kaby Lake)

Chipset
Mobile Intel® CM236 Chipset

Memory
16/32GB DDR4 2133 via SODIMM (max. 32GB supported)

BIOS
AMI UEFI

GPU
MXM module with NVIDIA® Quadro® Embedded RTX-5000, or P1000 by BOM option

Storage

2x 2.5" SATA 6.0 Gb/s drive bay
1x CFast slot, externally accessible
1x M.2 2280 (SATA)

Display

1x DisplayPort with lockable design from MXM GPU, 4k support
1x DVI-I from Intel® processor

Connectivity

Ethernet
2x GbE RJ-45 (1x NIC, 1x PHY)
4x M12 X-coded GbE with PoE Class 2 (7W per port), 1.5kV isolation

USB
4x USB 3.0 Type A ports

Serial Ports
4x DB-9 COM with 2kVrms isolation

Digital I/O (optional)
4x isolated DI and 4x isolated DO via two DB-9 connectors, supported by add-on module (occupies one 2.5" drive space)
DI: 0-24V input voltage with 1500VDC isolation
DO: 3.3V-35VDC output voltage, 250mA/ch sink current, 1500VDC isolation

CAN/MVB (optional)
Supported by Mini PCIe module with two DB-9 outputs, by BOM option

Wireless
2x Mini PCIe card slots available for cellular modem or WLAN modules
Compliant to Mini PCIe Card Spec. Rev. 1.2 (PCIe and USB 2.0)
Each Mini PCIe slot supports one micro-SIM card
4x RP-SMA antenna connector cutouts

Internal Expansion I/O
2x full size Mini PCI Express slots
1x Type A/Type B MXM slot with BOM option for RTX-5000 and P1000
1x USB 2.0 wafer connector

External I/O
4x M12-X-coded GbE ports with PoE
4x DB-9 COM ports
2x RJ-45 GbE ports
1x DisplayPort
1x DVI-I port
4x USB 3.0 Type A ports
2x DB-9 +/-12V DC output sharing 40/60/100W (40W by default)
2x USIM slots
1x CFast slot on rear side
2x 2.5" SATA drive bay on rear side
4x antenna cutouts reserved
Reset button
Power button

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Specifications

Miscellaneous

LEDs
1x diagnostic, 1x storage, 1x WDT, 3x user-defined

Battery
Coin cell CR2032, reverse charge protection

Board Management
ADLINK SEMA 3.0:
- Watch Dog
- Hardware monitor
- Runtime statistics

Power Supply
One 3-pin V+/NC/V- connector +110V DC by default
Power Consumption<300W

Mechanical

Dimensions
19”, 2U, 448.2mm x 225.4mm x 98.4mm (WxDxH)

Weight
7kg

Mounting
Rack mount

Environmental

Operating Temperature
EN 50155: 2017 Class OT3: -25°C to 70°C with NVIDIA P1000, RTX-3000
EN 50155: 2017 Class OT1: -25°C to 55°C with NVIDIA RTX-5000

Storage Temperature
-40°C to 85°C

IP Rating
IP4X

Humidity
10-90% RH operating, non-condensing
5-95% RH storage, EN 60068-2-30, EN 50155

Vibration
EN50155 standard, method EN61373:2010, Category 1 Class B

Shock
EN50155 standard, method EN61373:2010, Category 1 Class B

Safety
EN 50153
EN 50155

Fire Protection
EN 45545-2, HL3

EMC
EN 50121-3-2, EN50155

Operating System
Windows 10
Ubuntu 18.04

AVA-5600

Ordering Information

- **AVA-5600/7820/16G/P1000**
  2U 19" rackmount Fanless railway computer with Intel® Core™ i7-7820EQ, 16GB DDR4 and P1000 MXM, 2x DC 40W output
- **AVA-5600/7820/16G/RTX3000**
  2U 19" rackmount Fanless railway computer with Intel® Core™ i7-7820EQ, 16GB DDR4 and RTX-3000 MXM, 2x DC 40W output
- **AVA-5600/7820/16G/RTX5000**
  2U 19" rackmount Fanless railway computer with Intel® Core™ i7-7820EQ, 16GB DDR4 and RTX-5000 MXM, 2x DC 40W output

(conformal coating by request; external cables are excluded)

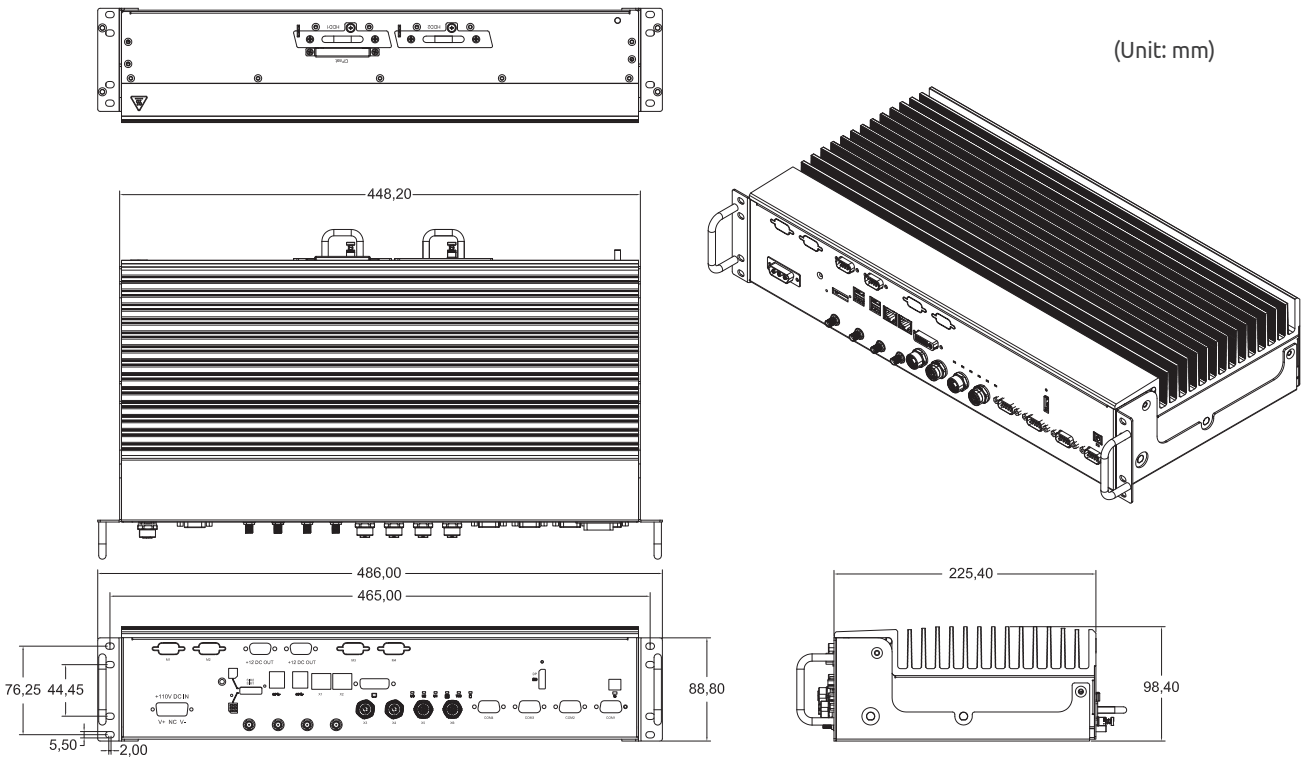
*Please contact your sales representative for RTX-5000 support condition

Optional Accessories

- **Mini PCIe 3G/Wi-Fi/BT/GPS wireless kit**
- **Mini PCIe CAN bus kit**

Mechanical Drawing

(Unit: mm)



LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

All products and company names listed are trademarks or trade names of their respective companies.
Updated Jun. 09, 2021. ©2021 ADLINK Technology, Inc. All Rights Reserved.
All specifications are subject to change without further notice.