

BOXER-8640AI

AI@Edge fanless embedded box PC with NVIDIA® Jetson™ AGX Orin

Features

- 1792-core Amper GPU with Tensor cores
- Supports 4x RJ-45 for PoE (802.11af, total 60W)
- Supports DB-9 for RS-232/422/485, CANBUS
- Supports 40-pin header, Mic in and Line out
- Supports M.2 E key, M key and SATA storage

System

CPU 8-core ARM v8.2 64bit CPU, 2MB L2 + 4MB L3

AI accelerator NVIDIA® Jetson™ AGX Orin 32GB

RAM 32GB 256-Bit LPDDR5x 205GB/s

Storage Capacity 64GB eMMC 5.1
 Micro SD card slot
 2.5" SATA drive bay
 M.2 Key M 2280

OS support Linux (NVIDIA Jetpack 5.0)

I/O

USB 1x USB 3.2 Gen 1 (USB Type A)
 2x USB 3.2 Gen 1 (USB Type C)
 1x USB 2.0 (USB Type A)

Ethernet 4x RJ-45 for PoE LAN (10/100/1000 Base-TX with IEEE 802.11 af, total 60W)

Serial Ports 1x RS-232/422/485
 1x CANBUS

Video 1x HDMI 2.0

Audio 1x Mic-in and line-out

Others 1x MicroSD slot
 1x Micro USB for OS Flash
 1x Recovery button
 1x Power button (& Power LED)
 40-pin header compliance with NVIDIA Dev Kit 40 pins (4 pins CANBUS occupied)

Expansion Slots 1x USB 2.0 header (optional, circuit reserved)
 1x M.2 Key E 2230 for WiFi/Bluetooth (PCIe[x1] + USB)
 1x M.2 Key M 2280 (PCIe[x4])
 1x SATA
 1x RS-232/422/485 pin header

Mechanical

DC Input DC 12V~24V 2-pin terminal

Dimensions 210 mm (W) x 164.2 mm (D) x 59 mm (H)

Weight 2.72kg (gross weight) // 1.92kg (net weight)

Mounting Wall-mount

Front



Rear



BOXER-8640AI

Environmental

Operating temperature -10C to 50°C, IEC60068-2 with 0.5 m/s AirFlow

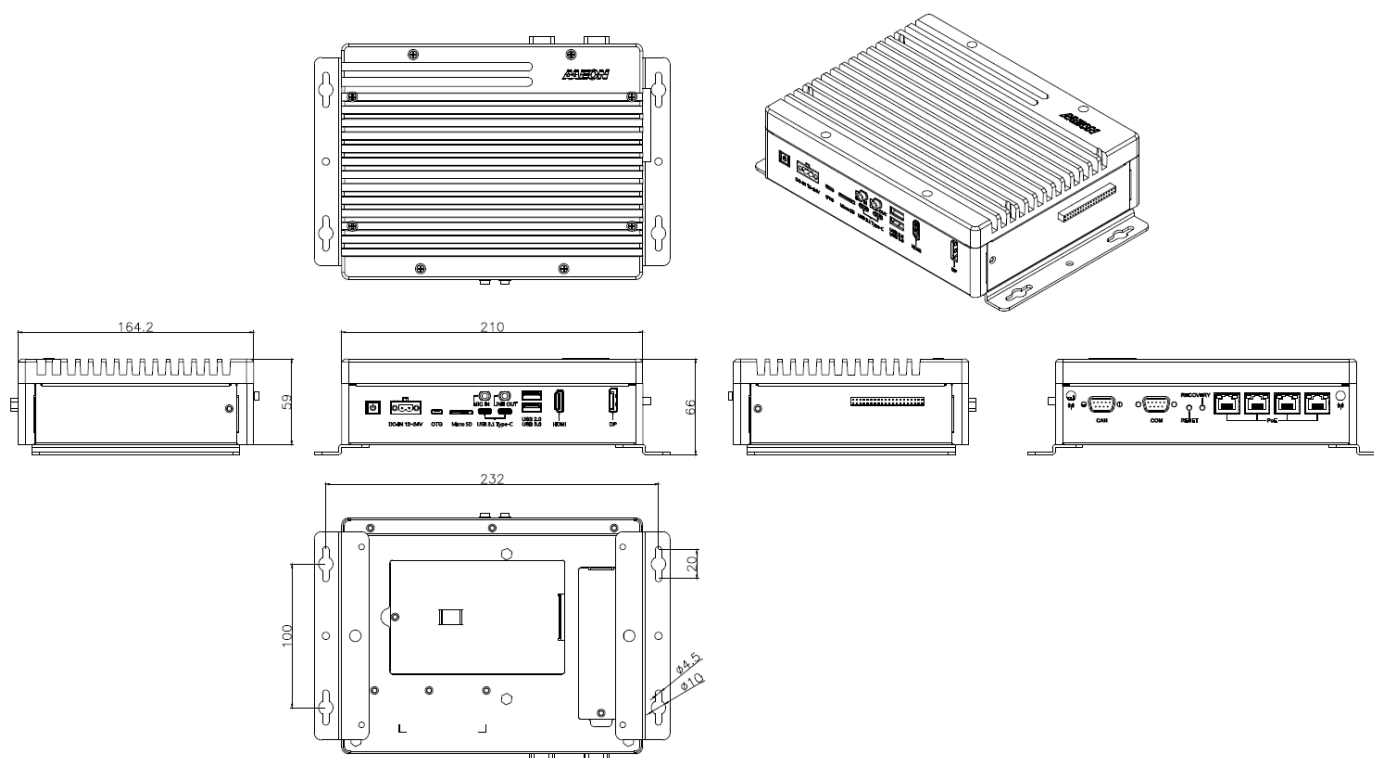
Storage temperature -40°C ~ 70°C

Storage Humidity 95% @ 40°C, non-condensing

Vibration Random, 3 Grms/ 5 ~ 500Hz

Certification CE/FCC Class A

Dimensions (mm)



Packing list

- **BOXER-8640AI**
- **1x Power connector**

Optional accessories

- **1255X00035**
120W power adapter
- **1702031803**
Power cord (European type)
- **1702031802**
Power cord (US type)
- **170203180E**
Power cord (Japanese Type)