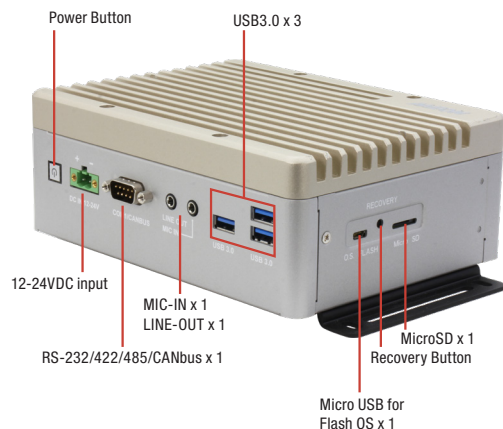


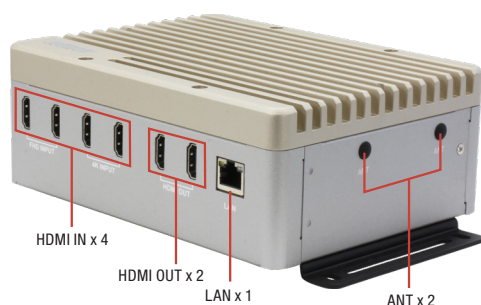
# BOXER-8256AI

AI@Edge Fanless Embedded AI System with NVIDIA Jetson Xavier NX, HDMI Input x4

Front View



Rear View



## Features

- HDMI x 4 for Video Input 1.4
- HDMI x 2 for Video Display 2.0
- USB Type A x 3 for USB 3.2 Gen 1
- DB9 for RS-232/422/485 (By switch) and CANbus x1
- RJ-45 x 1 for GbE LAN
- M.2 M-Key (PCIEx4)
- M.2 B-Key (PCIEx2 and USB 3.0)
- M.2 E-key (PCIEx1 and USB 2.0)

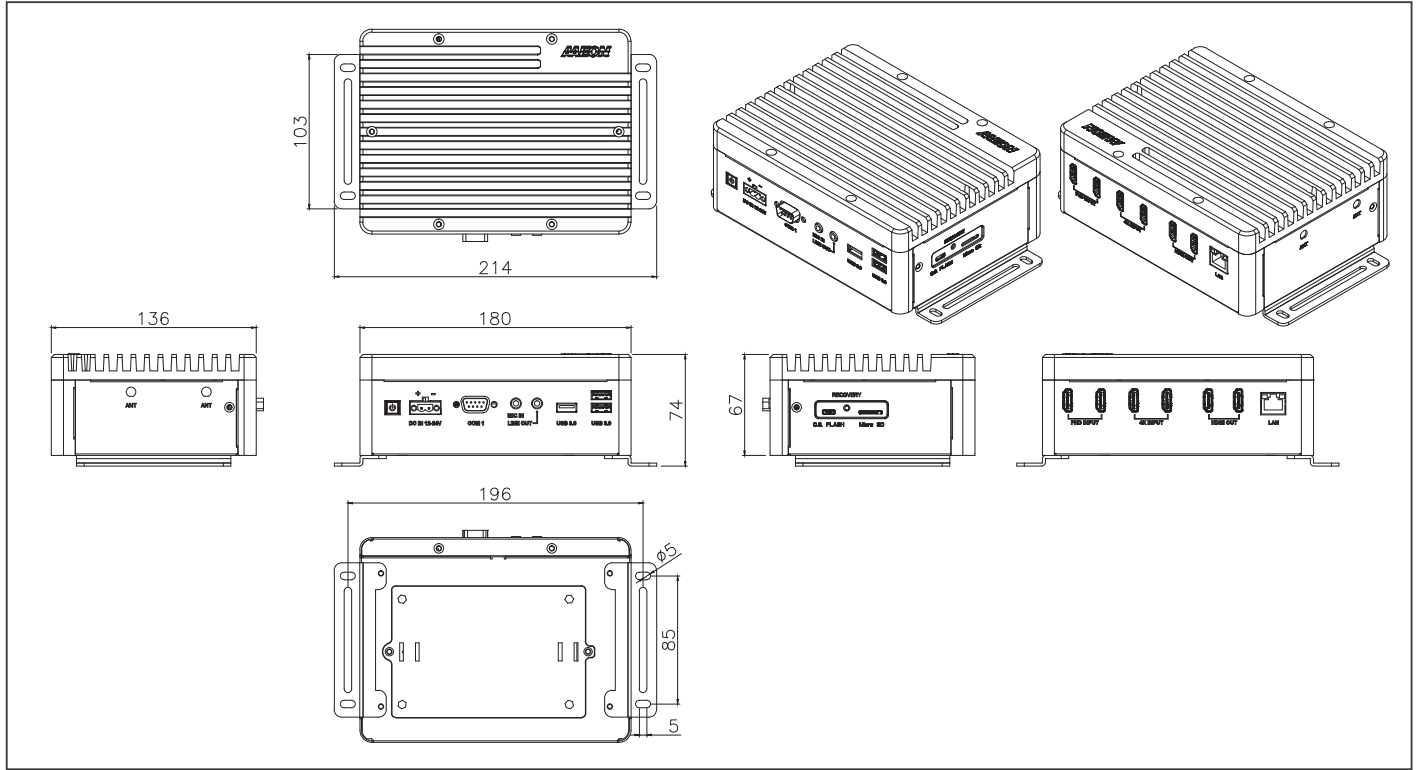


## Specifications

| System                 |                                                                                                                                                                                                                                                                                                                                    |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AI Accelerator         | NVIDIA Jetson Xavier NX                                                                                                                                                                                                                                                                                                            |
| CPU                    | 6-core NVIDIA Carmel Arm@v8.2 64-bit CPU                                                                                                                                                                                                                                                                                           |
| System Memory          | 8GB LPDDR4x                                                                                                                                                                                                                                                                                                                        |
| Storage Device         | 16GB eMMC x 1<br>MicroSD Slot x 1<br>M.2 M-Key 2280 x 1 (PCIEx4))                                                                                                                                                                                                                                                                  |
| Display Interface      | HDMI 2.0 x 2                                                                                                                                                                                                                                                                                                                       |
| Ethernet               | RJ-45 x 1 for GbE LAN                                                                                                                                                                                                                                                                                                              |
| I/O                    | USB Type A x 3 for USB 3.2 Gen 1<br>DB9 for RS-232/422/485 (By switch) and CANbus x1<br>HDMI x 2 for Video Display 2.0<br>HDMI x 4 for Video Input 1.4 (Limitation have stated in User manual)<br>Mic-in x 1, Line-Out x 1<br>Micro USB for OS Flash x 1<br>Power ON/OFF switch x 1<br>Recovery button x 1<br>SMA Antenna hole x 2 |
| Expansion              | M.2 B-Key 3042/3052 x 1 (PCIEx2] + USB 3.0)<br>M.2 E-key x 1(PCIEx1] + USB 2.0)<br>SATA connector and 5V x 1<br>COM pin header x 1 for RS-232/422/485 (BOM Change)                                                                                                                                                                 |
| Indicator              | Power LED x 1                                                                                                                                                                                                                                                                                                                      |
| OS Support             | Linux (NVIDIA Jetpack 4.6.2 or above)                                                                                                                                                                                                                                                                                              |
| Power Supply           |                                                                                                                                                                                                                                                                                                                                    |
| Power Requirement      | DC-in 12-24V with 2-pin terminal block                                                                                                                                                                                                                                                                                             |
| Mechanical             |                                                                                                                                                                                                                                                                                                                                    |
| Mounting               | Wall mount kit                                                                                                                                                                                                                                                                                                                     |
| Dimensions (W x D x H) | 7.09" x 5.35" x 2.64" (180 mm x 136 mm x 67 mm )                                                                                                                                                                                                                                                                                   |
| Gross Weight           | 4.23 lb (1.92 kg)                                                                                                                                                                                                                                                                                                                  |
| Net Weight             | 2.87 lb (1.3 kg)                                                                                                                                                                                                                                                                                                                   |
| Environmental          |                                                                                                                                                                                                                                                                                                                                    |
| Operating Temperature  | -5°F ~ 140°F (-15°C ~ 60°C with 0.5 m/s airflow)                                                                                                                                                                                                                                                                                   |
| Storage Temperature    | -40°F ~ 176°F (-40°C ~ 80°C)                                                                                                                                                                                                                                                                                                       |
| Storage Humidity       | 5 ~ 95% @ 40°C, non-condensing                                                                                                                                                                                                                                                                                                     |
| Anti-Vibration         | 3.5 Grms/ 5 ~ 500Hz/ operation – eMMC                                                                                                                                                                                                                                                                                              |
| Anti-Shock             | 50G, IEC 60068-2-27, half sine, 11 ms duration – eMMC                                                                                                                                                                                                                                                                              |
| Certification          | CE / FCC class A                                                                                                                                                                                                                                                                                                                   |

## Dimension

Unit: mm



## Ordering Information

| PART NUMBER                 | AI SOLUTION      | LAN | USB               | CANBus        | RS-232/422/485 | Digital I/O | Audio                      | Storage                                        | Display  | Expansion                                                                         | Mounting  | Power      | Operation temp. | OPERATION SYSTEM     |
|-----------------------------|------------------|-----|-------------------|---------------|----------------|-------------|----------------------------|------------------------------------------------|----------|-----------------------------------------------------------------------------------|-----------|------------|-----------------|----------------------|
| BOXER-8256AI-JP462E-A1-1010 | Jetson Xavier NX | 1   | USB 3.2 Gen 1 x 3 | 1 (by Switch) | 1 (by Switch)  | —           | Mic-in x 1<br>Line-Out x 1 | 16GB eMMC<br>MicroSD slot x 1<br>M.2 M Key x 1 | HDMI x 2 | M.2 B key x 1<br>M.2 E key x 1<br>SATA connector and 5V x 1<br>COM pin header x 1 | Wallmount | DC 12V~24V | -15°C ~ 60°C    | NVIDIA Jetpack 4.6.2 |

## Packing List

- Wallmount Bracket x 2
- Screw Package x 1
- Power Connector x 1
- BOXER-8256AI

## Optional Accessories

- 1255X00052  
200W Power Adapter
- 1702031802  
Power Cord (US type)
- 1702031803  
Power Cord (European Type)
- 170203180E  
Power Cord (Japanese Type)