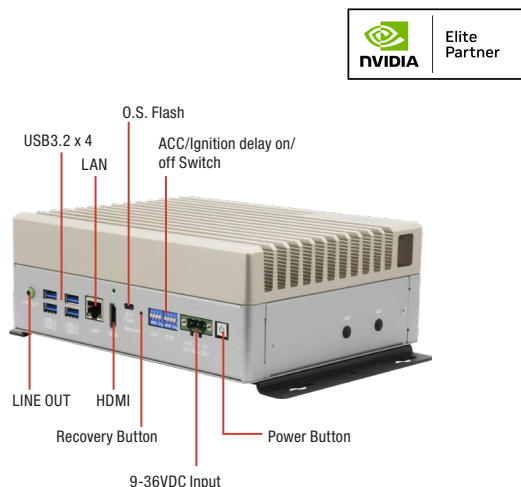


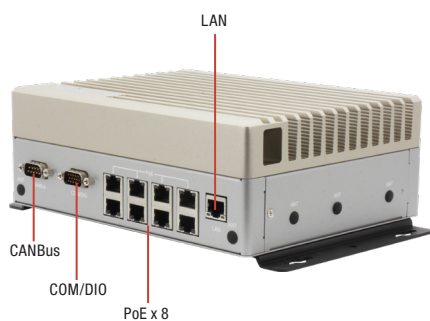
# BOXER-8658AI

AI@Edge Fanless PoE Embedded AI System with NVIDIA® Jetson Orin™ NX

Front View



Rear View



## Features

- NVIDIA® Jetson Orin™ NX
- PoE/PSE GbE LAN x 8
- Giga LAN x 2
- 9V ~ 36V DC in with ACC Ignition Delay On/Off
- Military Standard Vibration and Shock
- IMU, TPM, GNSS

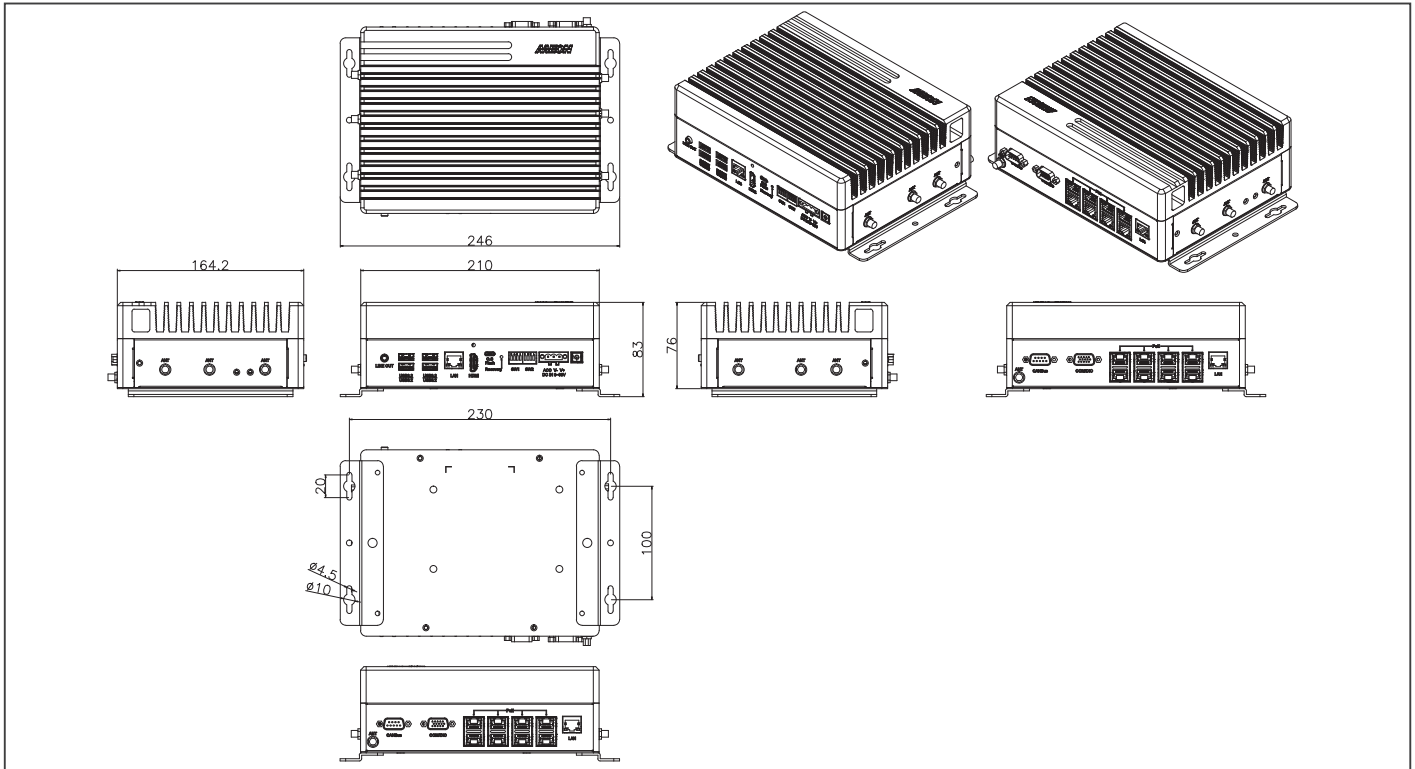


## Specifications

System	
AI Accelerator	NVIDIA® Jetson Orin™ NX
CPU	Orin NX 8GB: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU Orin NX 16GB: 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU
System Memory	8GB LPDDR5 16GB LPDDR5
Storage Device	2.5" SATA Driver Bay x 1 M.2 2280 NVMe M Key x 1
Display Interface	HDMI 2.0 type A x 1
Ethernet	RJ-45 x 2 for Giga LAN RJ-45 x 8 for GbE PoE/PSE (802.3af/at, MAX.:120W) *4 PoE ports sharing one MAC address and one Giga bandwidth. Supports total 120W PoE when input voltage is at or over 24V. Supports total 80W PoE when input voltage is between 12~24V. Supports total 30W PoE when input voltage is below 12V.
I/O	USB 3.2 Gen 2 type A x 4 DB-9 x 1 for CANBus FD x 1 DB-15 x 1 for RS232/422/485 x 1 and DIO x 8 Line out x 1 Micro USB x 1 for OS Flash Power button x 1 Recovery button x 1 Switch x 2 for ACC Ignition Delay On/Off Antenna x 7 TPM Support GNSS Support 9-Axis Sensor Support
Expansion	M.2 2230 E Key x 1 (Wifi/BT) M.2 3052 B Key x 1 (LTE) M.2 2280 NVMe M Key x 1 2.5" SATA x 1 SIM Slot x 2
Indicator	Power LED x 1
OS Support	Linux (NVIDIA JetPack™ 5.0 and above)
Power Supply	
Power Requirement	3-pin Terminal Block x 1 for 9V ~ 36V ACC Ignition Delay On/Off
Mechanical	
Mounting	Wall Mount Kit
Dimensions (W x D x H)	8.27" x 6.46" x 2.99" (210 x 164.2 x 76 mm) (Without Bracket) 9.69" x 6.46" x 3.27" (246 x 164.2 x 83 mm) (With Bracket)
Gross Weight	8.6 lbs (3.9Kg)
Net Weight	6.7 lbs (3Kg)
Environmental	
Operating Temperature	5°F ~ 140°F (-15°C ~ 60°C with 0.7 m/s airflow, with Industrial wide Temp. SSD)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Storage Humidity	5 ~ 95% @ 40°C, non-condensing
Anti-Vibration	MIL-STD-810G, 514.6C Procedure 1, Category 4 Trucker/Semitrailer on US highway (Figure 514.6C-1-Category 4-Common carrier)
Anti-Shock	MIL-STD-810G, Method 516.6, Procedure I, flight vehicle equipment
Certification	CE / FCC class A, E-Mark Compliance

## Dimension

Unit: mm



## Ordering Information

Part Number	AI Solution	LAN	POE	USB 3.2 Gen 2	COM	CANBUS	DIO	Storage	Display	Expansion	Mounting	Power	Operation System
BOXER-8658AI-JP512N-A1-1010	NVIDIA® Jetson Orin NX™ 8GB	2	8	4	1	1	8 bits	M.2 2280 M-Key x 1 (Default: 128GB) 2.5" SATA Drive Bay x 1	HDMI x 1	M.2 2230 E Key x 1 (Wifi/BT) M.2 3052 B Key x 1 (LTE) M.2 2280 NVMe M Key x 1 Build in GNSS & 9 axis sensors & TPM	Wallmount	9 ~ 36VDC w/ 3 pin terminal block and Ignition delay on/off	NVIDIA Jetpack™ 5.1.2
BOXER-8658AI-JP512N-A2-1010	NVIDIA® Jetson Orin NX™ 16GB	2	8	4	1	1	8 bits	M.2 2280 M-Key x 1 (Default: 128GB) 2.5" SATA Drive Bay x 1	HDMI x 1	M.2 2230 E Key x 1 (Wifi/BT) M.2 3052 B Key x 1 (LTE) M.2 2280 NVMe M Key x 1 Build in GNSS & 9 axis sensors & TPM	Wallmount	9 ~ 36VDC w/ 3 pin terminal block and Ignition delay on/off	NVIDIA Jetpack™ 5.1.2

## Packing List

- BOXER-8658AI x 1
- Wallmount Bracket x 2
- Power connector x 1
- Screw Package x 1

## Optional Accessories

- 1255302300  
230W Power Adapter
- 170X000799  
Power Cord (US type)
- 170X000800  
Power Cord (European Type)
- 170X000803  
Power Cord (Japanese Type)