

# BOXER-8640AI PRELIMINARY

AI@Edge Fanless Embedded AI System with NVIDIA® Jetson AGX Orin™ 32GB

Front View



Rear View



## Features

- NVIDIA® Jetson AGX Orin™
- PoE/PSE 802.3af x 4 ( Max. 60W )
- RS-232/422/485, CANBUS x 1
- 40-pin header, Mic in and Line out
- M.2 E key, M.2 M key and SATA storage

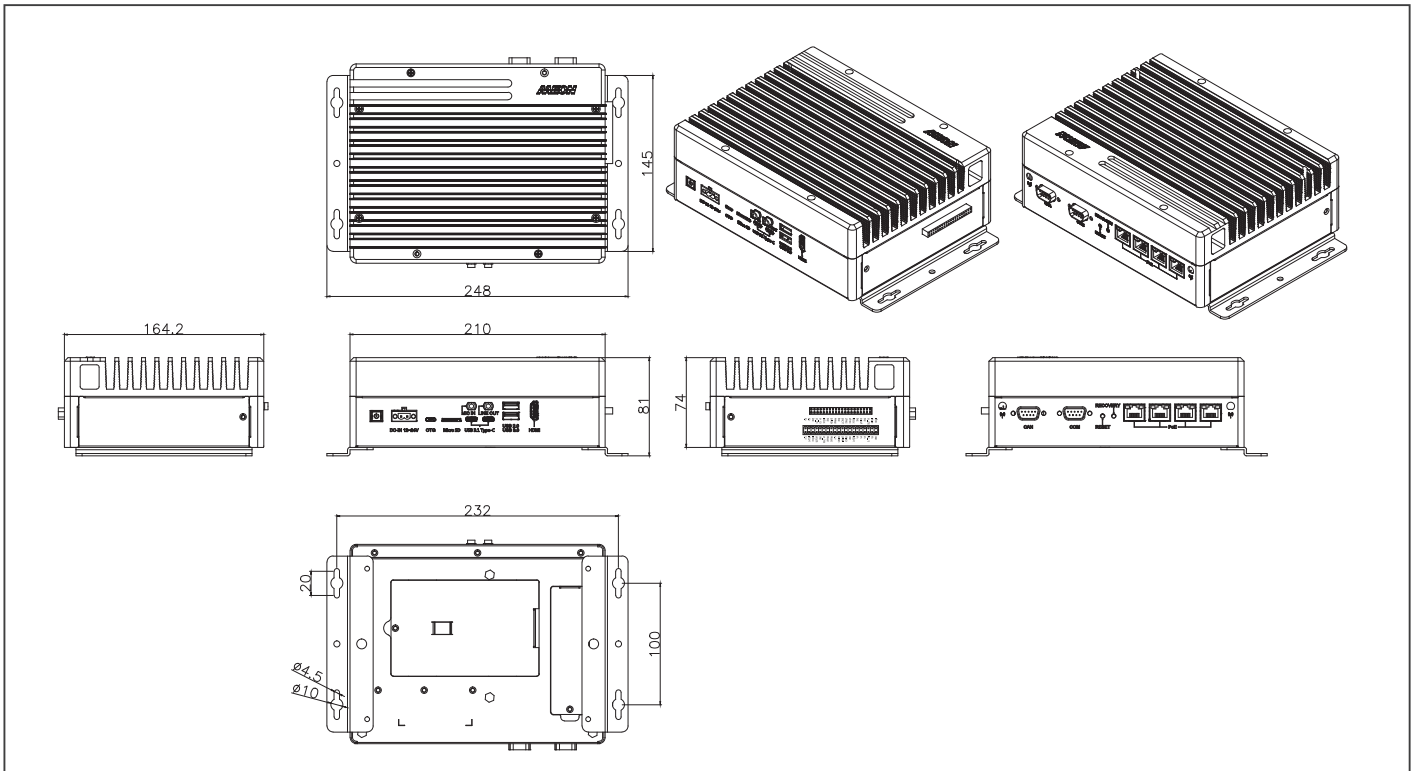


## Specifications

System	
AI Accelerator	NVIDIA Jetson AGX Orin™ 32GB
CPU	8-core ARM v8.2 64bit CPU, 2MB L2 + 4MB L3
System Memory	32GB 256-Bit LPDDR5 205GB/s
Storage Device	64GB eMMC 5.1 Micro SD card slot x 1 2.5" SATA drive bay x 1 M.2 Key M 2280 x 1
Display Interface	HDMI 2.0 x 1
Ethernet	RJ-45 for GbE PoE/PSE 802.3af x 4 ( Max. 60W )
I/O	USB Type A x 2 for USB 3.2 Gen 2 USB Type C x 2 for USB 3.2 Gen 2 RS-232/422/485 x1 CANBUS x 1 Mic-in x 1 Line-out x 1 MicroSD slot x 1 Micro USB x 1 for OS Flash Recovery button x 1 Power button x 1 40-pin header compliance with NVIDIA Dev Kit 40 pins ( without CANBus )
Expansion	USB 2.0 header x 1 (Optional, circuit reserved) M.2 E Key 2230 ( for Wifi/BT ) x 1 M.2 M Key 2280 ( NVMe ) x 1 2.5" SATA drive bay x 1 RS-232/422/485 pin header x 1
Indicator	Power LED x 1
OS Support	Linux ( NVIDIA Jetpack 5.0 or above )
Power Supply	
Power Requirement	DC 12V~24V 2-pin terminal
Mechanical	
Mounting	Wallmount
Dimensions (W x D x H)	8.26" x 6.46" x 2.32" (210mm x 164.2mm x 59mm)
Gross Weight	8.3lb ( 3.76kg )
Net Weight	6.4lb ( 2.9kg )
Environmental	
Operating Temperature	-4°F ~ 131°F (-20°C ~ 55°C, according to IEC60068-2 with 0.5 m/s AirFlow)
Storage Temperature	-40 °F ~ 158°F(-40°C ~ 70°C)
Storage Humidity	95% @ 40°C, non-condensing
Anti-Vibration	Random, 3.5 Grms, 5 ~ 500Hz
Anti-Shock	50G Peak Acceleration
Certification	CE/FCC class A

## Dimension

Unit: mm



## Ordering Information

PART NUMBER	AI SOLUTION	Poe LAN	USB	RS-232/422/485	CANBus	40pins header	STORAGE	DISPLAY	MOUNTING	POWER	OPERATION SYSTEM
BOXER-8640AI-JP502E-A1-1010	Jeson AGX Orin	4	3.2 Gen 2 x 4	2	1	1	64GB eMMC + MicroSD + 2.5" SATA + M.2 2280 M Key	HDMI x 1	Wall mount	12 - 24VDC w/ 2 pin terminal block	Linux ( NVIDIA Jetpack 5.x up )

## Packing List

- BOXER-8640AI
- Wallmount Bracket x 2
- Power Connector x 1
- Screw Package x 1

## Optional Accessories

- 1255X00066  
120W Power Adapter
- 1702031802  
Power Cord (US type)
- 1702031803  
Power Cord (European Type)
- 170203180E  
Power Cord (Japanese Type)