

# BOXER-8655AI PRELIMINARY



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

Front View

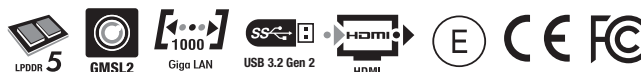


Rear View



## Features

- NVIDIA® Jetson Orin NX
- GMSL2 with FAKRA Connectors x 8
- Giga LAN x 5
- TPM, 9-Axis sensor and GPS
- 9V ~ 48V DC in with ACC Ignition Delay On/Off
- Military Standard Vibration and Shock
- E-Mark Certified



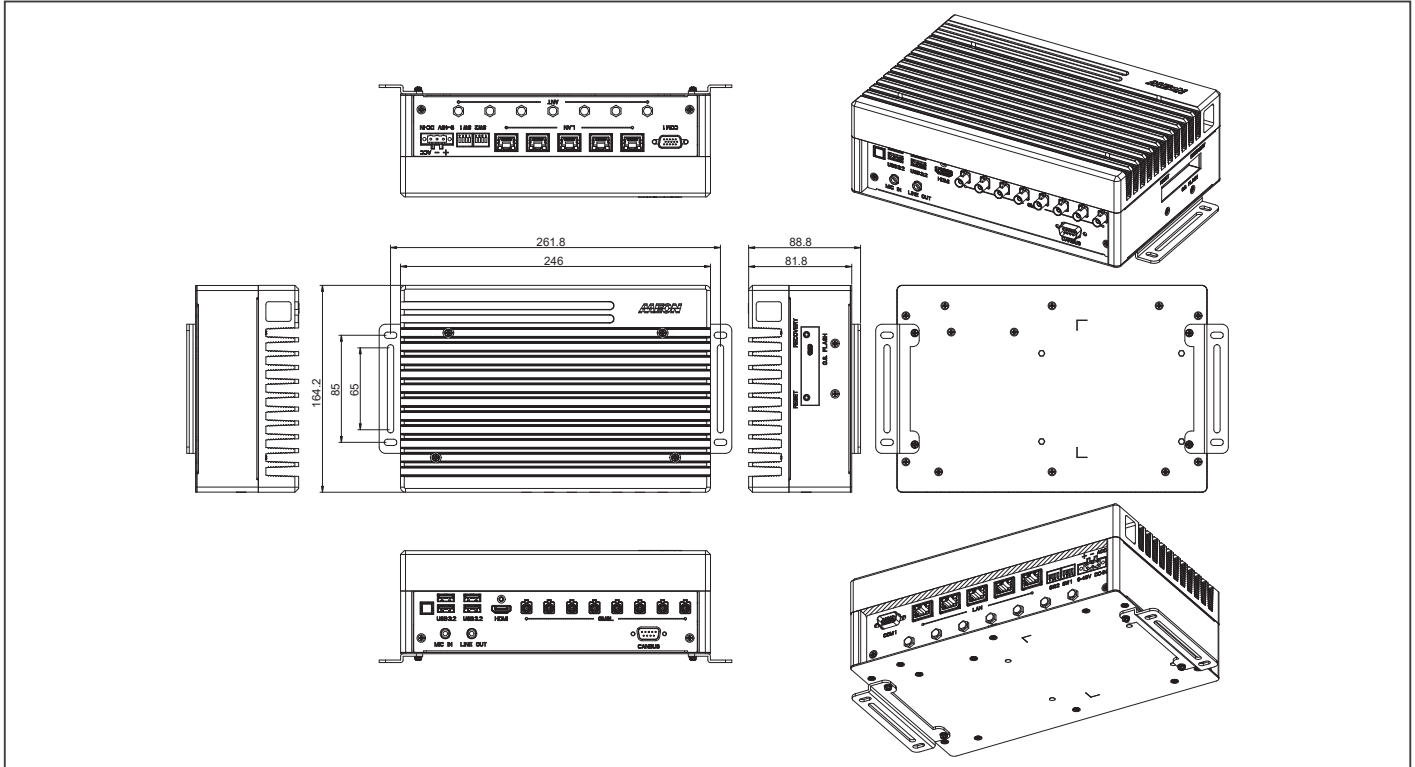
## Specifications

System	
AI Accelerator	NVIDIA® Jetson Orin™ NX
CPU	Orin NX 8GB : 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3 Orin NX 16GB : 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3
System Memory	Orin NX 8GB : 8GB LPDDR5 Orin NX 16GB : 16GB LPDDR5
Storage Device	M.2 2280 M-Key x 1 (NVMe) 2.5" SATA Driver Bay x 1
Display Interface	HDMI 2.1 x 1
Ethernet	RJ-45 for GbE LAN x 5
I/O	GMSL2 x 8 with Fakra connectors DB-9 x 1 for CANBus FD DB-15 for RS232 ( Rx/Tx )/RS422/RS485 x 1, programmable DIO x 8 External SMA antenna x 7 Power button x 1 Recovery button x 1 Micro USB x 1 for OS Flash Mic in and Line out x1 Reset button x1 USB Type A for USB 3.2 Gen 2 x 4
Expansion	M.2 2230 E-Key x 1 (Wifi/BT) M.2 3042/3052 B-Key x 1 (LTE/5G) (USB 2.0,USB3.0) M.2 2280 M-Key x 1 (NVMe) 2.5" SATA x 1
Indicator	Power LED
OS Support	Linux (NVIDIA JetPack™ 5.1 and above)
Power Supply	
Power Requirement	3-pin Terminal Block x 1 for 9V ~ 48V ACC Ignition Delay On/Off
Mechanical	
Mounting	Wallmount
Dimensions (W x D x H)	9.68 " x 6.46 " x 3.49" (246.0 mm x 164 .2 mm x 88.8 mm)
Gross Weight	TBD
Net Weight	TBD
Environmental	
Operating Temperature	5°F ~ 158°F (-15°C ~ 70°C with 0.7 m/s airflow)
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	E-Mark, CE/FCC Class A



## Dimension

Unit: mm



## Ordering Information

Part Number	AI SOLUTION	LAN	USB 3.2 Gen 2	COM	CANBUS	DIO	Storage	Display	Expansion	Mounting	Power	Operation System
BOXER-8655AI-JP511N-A1-1010	NVIDIA® Jetson Orin NX 8GB	5	4	1	1	8	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 3042/3052 B Key x 1 (LTE/5G) M.2 2280 NVMe M Key x 1	Wallmount	9 – 48VDC w/ 3 pin terminal block and Ignition delay on/off	NVIDIA Jetpack™ 5.1.2 and above
BOXER-8655AI-JP511N-A2-1010	NVIDIA® Jetson Orin NX 16GB	5	4	1	1	8	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 3042/3052 B Key x 1 (LTE/5G) M.2 2280 NVMe M Key x 1	Wallmount	9 – 48VDC w/ 3 pin terminal block and Ignition delay on/off	NVIDIA Jetpack™ 5.1.2 and above

## Packing List

- BOXER-8655AI X 1
- Wallmount Bracket x 2
- Power connector x 1
- Screw Package x 1

## Optional Accessories

- TBD