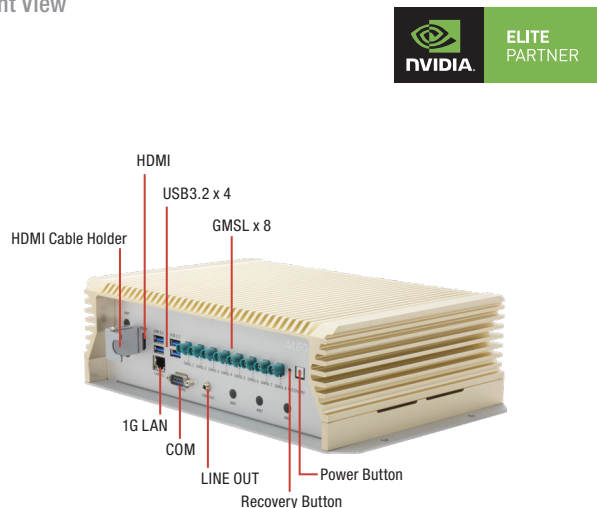


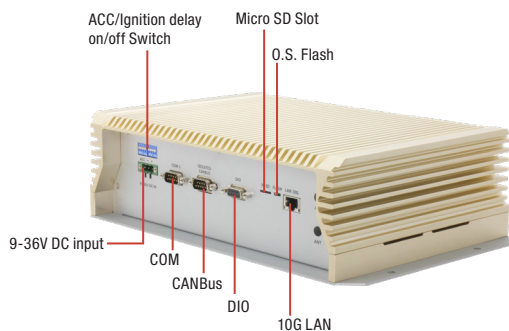
# BOXER-8645AI

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

Front View



Rear View



## Features

- NVIDIA® Jetson AGX Orin™
- GMSL2 with FAKRA Connectors x 8
- 10G LAN x 1, Giga LAN x 1
- ACC Ignition Delay On/Off
- Military Standard Vibration and Shock
- E-Mark Certified
- Additional LAN x 8 (By request)

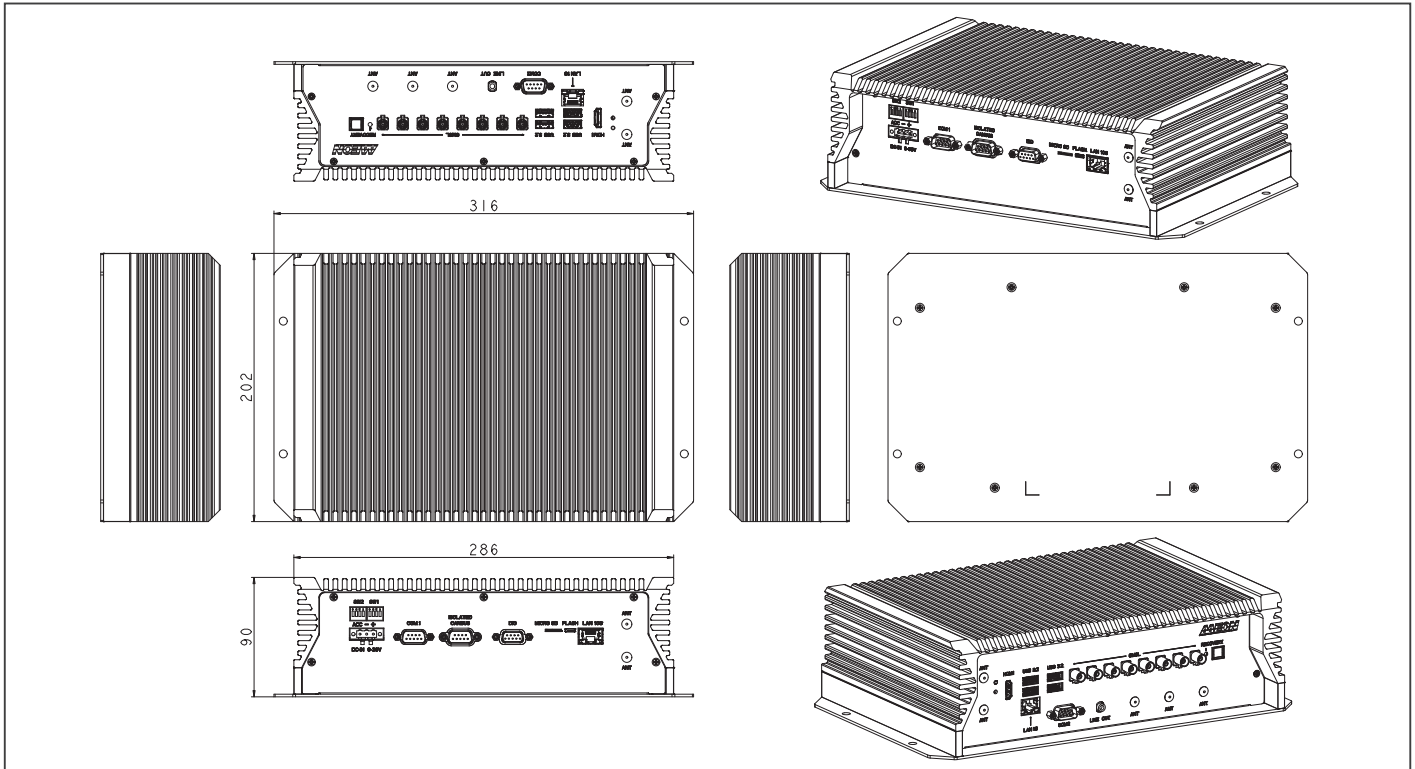


## Specifications

System	
AI Accelerator	NVIDIA® Jetson AGX Orin™
CPU	AGX Orin 32GB: 8-core Arm® Cortex®-A78AE CPU AGX Orin 64GB: 12-core Arm® Cortex®-A78AE CPU
System Memory	32GB LPDDR5 64GB LPDDR5
Storage Device	64GB eMMC 5.1 x 1 M.2 2280 M-Key x 1 (NVMe) 2.5" SATA x 2
Display Interface	HDMI 2.0 x 1 (Type-A)
Ethernet	RJ-45 for 10G LAN x 1 RJ-45 for Giga LAN x 1 Additional LAN x 8 (By request)
I/O	GMSL2 with FAKRA x 8 USB 3.2 Gen 2 x 4 (Type-A) Micro USB x 1 for OS Flash Line-Out x 1 DB-9 x 1 for Isolated CANBus x 2 DB-9 x 2 for RS-232 (Rx/Tx/CTS/RTS)/RS-485 x 2 DB-9 x 1 for DIO x 8 Switch x 1 for Ignition Delay On/Off 3-pin Terminal Block x 1 for Power Input Power Button x 1 Recovery Button x 1 Antenna Hole 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 M-Key x 1 (NVMe) 2.5" SATA x 2 SIM Slot x 2 MicroSD Slot x 1
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 (default)
Dimensions (W x D x H)	11.26" x 7.95" x 3.54" (286mm x 202mm x 90mm)
Gross Weight	11 lb. (5Kg)
Net Weight	13 lb. (5.9Kg)
Environmental	
Operating Temperature	-13°F ~ 149°F (-25°C ~ 65°C with 0.5 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



## Optional Accessories

- **1255X00059**  
120W Power Adapter
- **1702031802**  
Power Cord (US Type)
- **1702031803**  
Power Cord (European Type)
- **170203180E**  
Power Cord (Japanese Type)
- **9641864500**  
M.2 2280 NVMe Gen 3 M key Thermal Kit. For the SSD support list, please check the user manual.
- **9641864510**  
M.2 2280 NVMe Gen 4 M key Thermal Kit. For the SSD support list, please check the user manual.

## Packing List

- **BOXER-8645AI**
- **Power Connector x 1**
- **Screw Package x 1**
- **HDMI Cable Holder x 1**

## Ordering Information

PART NUMBER	AI SOLUTION	GMSL	LAN	USB	RS-232/422/485	Isolated CANBUS	DIO	STORAGE	GNSS & 9 axis sensors & TPM	DISPLAY	MOUNTING	POWER	OPERATION SYSTEM
BOXER-8645AI-JP511E-A1-1010	NVIDIA® Jetson AGX Orin™ 32GB	8	10G x 1 & Giga x 1	3.2 Gen 2 x 4	2	2	8	64GB eMMC, M.2 2280 NVMe M Key x 2, 2.5" SATA x 2	Built in	HDMI x 1	Wall mount	9 ~ 36VDC w/ 3 pin terminal block and Ignition delay on/off	Linux (NVIDIA Jetpack™ 5.0 or above)
BOXER-8645AI-JP511E-A2-1010	NVIDIA® Jetson AGX Orin™ 64GB	8	10G x 1 & Giga x 1	3.2 Gen 2 x 4	2	2	8	64GB eMMC, M.2 2280 NVMe M Key x 2, 2.5" SATA x 2	Built in	HDMI x 1	Wall mount	9 ~ 36VDC w/ 3 pin terminal block and Ignition delay on/off	Linux (NVIDIA Jetpack™ 5.0 or above)