

# BOXER-8251AI

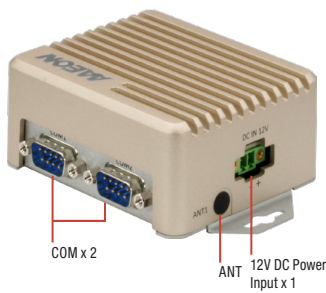
AI@Edge Compact Fanless Embedded AI System with NVIDIA Jetson Xavier NX

AI@Edge Solutions

Front View



Rear View



With High Heatsink  
Front View



Rear View



## Features

- NVIDIA® Jetson Xavier™ NX
- 8GB LPDDR4x + 16GB eMMC
- USB3.2 Gen 1 x 4
- LAN x 1 + RS-232 x 2
- 12Vdc Power input



## Specifications

System	
AI Accelerator	Nvidia Jetson Xavier NX
CPU	6 Core ARM® Carmel@V8.2 64bit CPU 6MB L2 + 4MB L3
System Memory	8GB LPDDR4x
Storage Device	16GB eMMC + MicroSD
Display Interface	HDMI 2.0
Ethernet	10/100/1000Base-TX x 1
I/O	USB 3.2 Gen 1 x 4 LAN x 1 RS-232 x 2 HDMI x 1 MicroSD x 1 DC Power Input x 1 Recovery Button x 1 Micro-USB for Flash OS x 1
Expansion	M.2 E-Key 2230 x 1 (for WiFi)
Indicator	Power LED x 1
OS Support	Linux (AAEON ACLinux 4.9) Linux (NVIDIA Jetpack 4.5) Ubuntu18.04
Power Supply	
Power Requirement	12Vdc w/ 2-pin terminal block
Mechanical	
Mounting	Wallmount
Dimensions (W x D x H)	Standard: 3.46" x 2.95" x 1.53" (88mm x 75mm x 39mm) High heatsink Dimension: 3.54" x 3.30" x 2.04" (90mm x 84mm x 52mm)
Gross Weight	Standard: 1.10 lb (0.5 kg) High heatsink: 1.76lb(0.8kg)
Net Weight	Standard: 0.66 lb (0.3 kg) High heatsink: 1.31lb(0.6kg)
Environmental	
Storage Temperature	-40°F ~ 158°F (-40°C ~ 70°C)
Storage Humidity	95% @ 40°C, non-condensing
Anti-Vibration	3 Grms/ 5 ~ 500Hz/ operation – MicroSD or eMMC
Anti-Shock	—
Certification	CE/FCC class A

## Operating Temperature

Power Mode	CPU Core	CPU Maximum Frequency	Operation Temp.
20W	6 Core	1.4GHz	-20°C ~ 55°C (for high heat sink)
	4 Core	1.4GHz	-20°C ~ 40°C/-20°C ~ 50°C(for high heat sink)
15W	4 Core	1.4GHz	-20°C ~ 40°C
	2 Core	1.9GHz	-20°C ~ 50°C/-20°C ~ 60°C(for high heat sink)
10W	4 Core	1.2GHz	-20°C ~ 50°C/-20°C ~ 60°C(for high heat sink)
	2 Core	1.5GHz	-20°C ~ 50°C

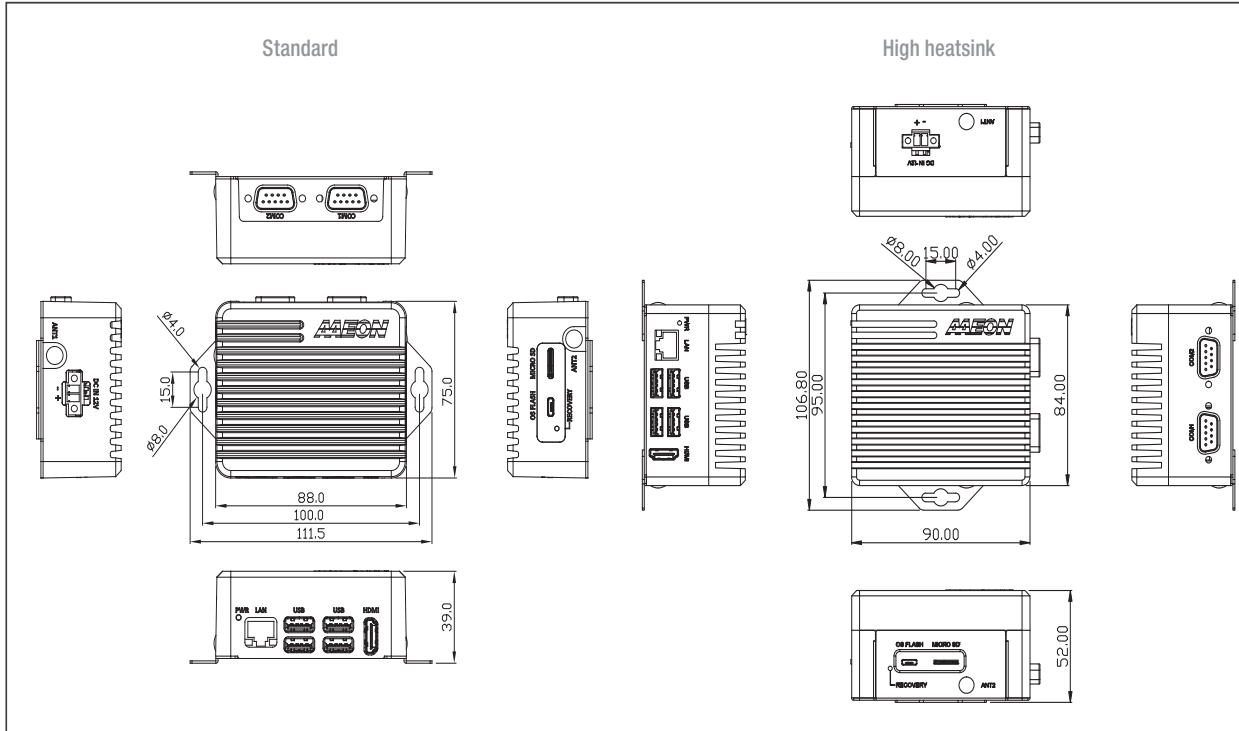
# BOXER-8251AI

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## Dimension

Unit: mm



## Ordering Information

PART NUMBER	AI SOLUTION	LAN	USB	RS-232	STORAGE	DISPLAY	MOUNTING	POWER	OPERATION SYSTEM
BOXER-8251AI-A1-1112	Jetson Xavier NX	1	3.2 Gen 1 x 4	2	16GB eMMC + MicroSD	HDMI x 1	Wallmount	12Vdc w/ 2 pin terminal block	ACLinux
BOXER-8251AI-A3-1010	Jetson Xavier NX	1	3.2 Gen 1 x 4	2	16GB eMMC + MicroSD	HDMI x 1	Wallmount	12Vdc w/ 2 pin terminal block	NVIDIA Jetpack 4.5
BOXER-8251AI-JP46E-A1-1010	Jetson Xavier NX	1	3.2 Gen 1 x 4	2	16GB eMMC + MicroSD	HDMI x 1	Wallmount	12Vdc w/ 2 pin terminal block	NVIDIA Jetpack 4.6
BOXER-8251AI-JP46E-E1-1010(high heatsink)	Jetson Xavier NX	1	3.2 Gen 1 x 4	2	16GB eMMC + MicroSD	HDMI x 1	Wallmount	12Vdc w/ 2 pin terminal block	NVIDIA Jetpack 4.6

## Packing List

- Power Connector x 1
- BOXER-8251AI

## Optional Accessories

- **1255300611**  
60W Power Adapter
- **1702031802**  
Power Cord (US type)
- **1702031803**  
Power Cord (European Type)
- **170203180E**  
Power Cord (Japanese Type)

## Assured Systems

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