



Boxer-8646AI – AI@Edge Fanless PoE Embedded AI System with NVIDIA® Jetson AGX Orin™

The record-breaking, world-leading BOXER-8646AI distinguishes itself from previous models by offering ten times the data transmission rate via 10G LAN and six times the AI performance, with up to 200 TOPS via the NVIDIA® Jetson AGX Orin™. The only system powered by the NVIDIA Jetson AGX Orin to host 12 PoE and 10G LAN ports, the BOXER-8646AI raises both the quality and quantity of connectors available for cross-market AI edge solutions. Complimented by a multitude of expansion options and a comprehensive I/O, the BOXER-8646AI scales, enhances, and diversifies what’s possible across any application.

SPECIFICATIONS

CPU	8-core ARM v8.2 64bit CPU, 2MB L2 + 4MB L3
Memory Type	32GB LPDDR5
AI Accelerator	NVIDIA® Jetson AGX Orin™
Video	HDMI Type A x 1 for HDMI 2.0
LAN Ports	RJ-45 x 12 for GbE PoE/PSE (802.3af/at, MAX 120W), RJ-45 x 1 for 10G LAN, RJ-45 x 1 for Giga LAN
Extended Interface	1 x M.2 E-Key (2230, Wifi/BT), 1 x M.2 B-Key (3052, LTE), 1 x M.2 M-Key (2280, NVMe), 1 x SIM Slot
I/O	2 x USB Type-A USB 3.2 Gen1, 2 x USB Type-A USB 2.0, 1 x Micro USB, 1 x Mic-in, 1 x Line-out, 1 x DB-9 (CANbus FD x 2), 2 x DB-9 (RS-232/422/485), 1 x DB-9 (DIO x 8), 1 x 3-pin terminal block
Power Requirement	3-pin terminal block x 1 for 19V~24V
Dimensions	264.76 mm x 184.00 mm x 93.30 mm
Operating Temperature	-20°C ~ 50°C with 0.5 m/s airflow
Storage Temperature	-40°C ~ 70°C
Relative Humidity	5 ~ 95% @ 40°C, non-condensing
Vibration	3.5Grms / 5~500Hz
Shock	50G peak acceleration
OS Software Supported	Linux (NVIDIA Jetpack 5.0 or above)
Certification	CE / FCC class A
Global P/N / SKU	1708576

Ordering Options

1708576: Boxer-8646AI with ARM v.8 and 64GB eMMc Notes: System comes with 2 x Wallmount Bracket and 1 x Screw Package

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