# BOXER-6406U-ADN

Fanless Compact Embedded Computer with Intel Atom® Processor X-series/N-series (formerly Amston Lake/Alder Lake-N)

Front View

Rear View

## Features

- **Intel Atom® Processor X-series/N-series (formerly Amston Lake/Alder Lake-N)**
- **DDR5 4800MHz via SODIMM**
- **2.5GbE x 2**
- **M.2 2280 M-Key x 1, M.2 2230 E-Key x 1**
- **USB 3.2 Gen 2 (Type-A) x 2**
- **Onboard TPM 2.0**
- **Wide -20°C ~ 60°C Operating Temperature**
- **Compact Size**

DDR 5 | 1000 Giga LAN | 2.5 GbE | USB 3.2 Gen 2 | HDMI | CE | FC | UK CA
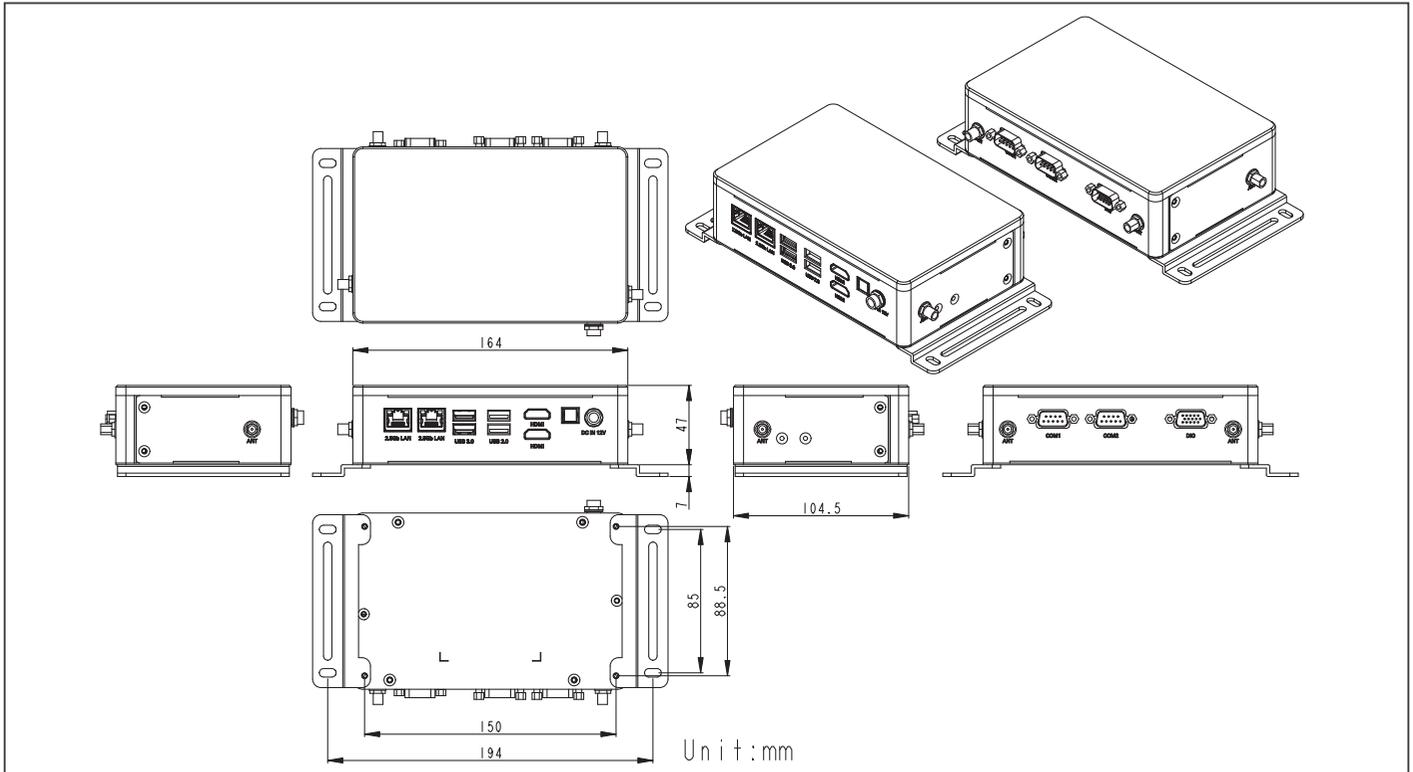
## Specifications

| System | |
|---|---|
| CPU | Intel® Processor N200<br>Intel® Processor N50<br>Intel Atom® x7211E<br>Intel Atom® x7433RE<br>Intel Atom® x7213RE<br>Intel Atom® x7211RE |
| Chipset | Intel® SoC |
| System Memory | DDR5 4800MHz SODIMM x 1, up to 32GB |
| Display Interface | HDMI x 2 |
| Storage Device | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2])<br>2.5" SATA HDD/SSD x 1 |
| Ethernet | RJ-45 x 2 for 2.5GbE LAN (Intel® Ethernet Controller I226-LM) |
| I/O | HDMI x 2<br>RJ-45 x 2 for 2.5GbE LAN (Intel® Ethernet Controller I226-LM)<br>USB 3.2 Gen 2 (Type-A) x 2<br>USB 2.0 (Type-A) x 2<br>DB-9 x 2 for RS-232/422/485<br>DB-15 x 1 Male for 8-Channel Digital I/O<br>12V DC Jack Input<br>Power Button with LED x 1<br>Antenna Opening x 4 |
| Expansion | M.2 2280 M-Key x 1 (PCIe [x2])<br>M.2 2230 E-Key x 1<br>Full-Size Mini Card x 1 (PCIe + USB)<br>SIM Slot x 1 |
| Indicator | Power Button with LED |
| OS support | Windows® 10 IoT Ent LTSC<br>Windows® 11 Pro<br>Ubuntu 22.04 |
| **Power Supply** | |
| Power Requirement | Lockable DC Jack x 1 for 12V DC-in |
| **Mechanical** | |
| Mounting | Wallmount |
| Dimensions (W x H x D) | 6.46" x 4.11" x 1.85" (164mm x 104.5mm x 47mm) without bracket<br>8.74" x 4.11" x 2.13" (222mm x 104.5mm x 54mm) with bracket |
| Gross Weight | 3.8 lb. (1.73Kg) |
| Net Weight | 2 lb. (0.93Kg) |
| **Environmental** | |
| Operating Temperature | -4°F ~ 140°F (-20°C ~ 60°C), according to IEC68-2 with 0.7 m/s AirFlow (w/ Industrial wide Temp. SSD/RAM) |
| Storage Temperature | -40˚F ~ 176˚F (-40˚C ~ 80˚C) |
| Storage Humidity | 5 ~ 95% @ 40˚C, non-condensing |
| Anti-Vibration | With SSD: Random, 3 Grms, 5~500Hz |
| Anti-Shock | With SSD: 50 G, IEC 60068-2-27, half sine, 11 ms duration |
| Certification | CE/FCC class A |

Note: All specifications are subject to change without notice.

## Dimension
Unit: mm



## Ordering Information

| Part Number | CPU | LAN | PCH | USB 3.2 Gen 2 | USB 2.0 | RS-232/422/485 | Storage | Display | Expansion | Mounting | Power | Operation Temp. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BOXER-6406U-ADN-A1-1010 | Intel® Processor N200 | 2 | Intel SoC | 2 | 2 | 2 | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) 2.5" SATA Drive Bay x 1 | HDMI x 2 | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) M.2 2230 E-Key x 1 Full-Size Mini Card x 1 (PCIe + USB) SIM Slot x 1 | Wallmount | 12V | -4°F ~ 140°F (-20°C ~ 60°C), according to IEC68-2 with 0.7 m/s AirFlow (w/ Industrial wide Temp. SSD/RAM) |
| BOXER-6406U-ADN-A2-1010 | Intel® Processor N50 | 2 | Intel SoC | 2 | 2 | 2 | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) 2.5" SATA Drive Bay x 1 | HDMI x 2 | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) M.2 2230 E-Key x 1 Full-Size Mini Card x 1 (PCIe + USB) SIM Slot x 1 | Wallmount | 12V | -4°F ~ 140°F (-20°C ~ 60°C), according to IEC68-2 with 0.7 m/s AirFlow (w/ Industrial wide Temp. SSD/RAM) |
| BOXER-6406U-ADN-A3-1010 | Intel Atom® x7211E | 2 | Intel SoC | 2 | 2 | 2 | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) 2.5" SATA Drive Bay x 1 | HDMI x 2 | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) M.2 2230 E-Key x 1 Full-Size Mini Card x 1 (PCIe + USB) SIM Slot x 1 | Wallmount | 12V | -4°F ~ 140°F (-20°C ~ 60°C), according to IEC68-2 with 0.7 m/s AirFlow (w/ Industrial wide Temp. SSD/RAM) |
| BOXER-6406U-ASL-A1-1010 | Intel Atom® x7433RE | 2 | Intel SoC | 2 | 2 | 2 | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) 2.5" SATA Drive Bay x 1 | HDMI x 2 | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) M.2 2230 E-Key x 1 Full-Size Mini Card x 1 (PCIe + USB) SIM Slot x 1 | Wallmount | 12V | -4°F ~ 140°F (-20°C ~ 60°C), according to IEC68-2 with 0.7 m/s AirFlow (w/ Industrial wide Temp. SSD/RAM) |
| BOXER-6406U-ASL-A2-1010 | Intel Atom® x7213RE | 2 | Intel SoC | 2 | 2 | 2 | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) 2.5" SATA Drive Bay x 1 | HDMI x 2 | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) M.2 2230 E-Key x 1 Full-Size Mini Card x 1 (PCIe + USB) SIM Slot x 1 | Wallmount | 12V | -4°F ~ 140°F (-20°C ~ 60°C), according to IEC68-2 with 0.7 m/s AirFlow (w/ Industrial wide Temp. SSD/RAM) |
| BOXER-6406U-ASL-A3-1010 | Intel Atom® x7211RE | 2 | Intel SoC | 2 | 2 | 2 | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) 2.5" SATA Drive Bay x 1 | HDMI x 2 | M.2 2280 M-Key x 1 (PCIe Gen 3 [x2]) M.2 2230 E-Key x 1 Full-Size Mini Card x 1 (PCIe + USB) SIM Slot x 1 | Wallmount | 12V | -4°F ~ 140°F (-20°C ~ 60°C), according to IEC68-2 with 0.7 m/s AirFlow (w/ Industrial wide Temp. SSD/RAM) |

## Packing List

- BOXER-6406U-ADN x 1
- Wallmount Bracket x 2
- Screw Package x 1
- 60W 12V Power Adapter x 1

## Optional Accessories

- **170X000799**
  Power Cord (US type)
- **170X000800**
  Power Cord (European Type)
- **170X000803**
  Power Cord (Japanese Type)
- **9741EG25G0**
  4G Module & Antenna (for global)