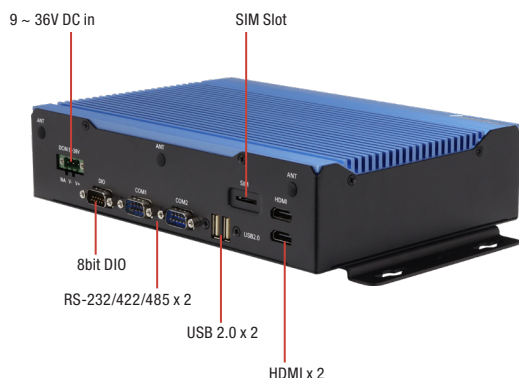


# BOXER-6649-RAP PRELIMINARY

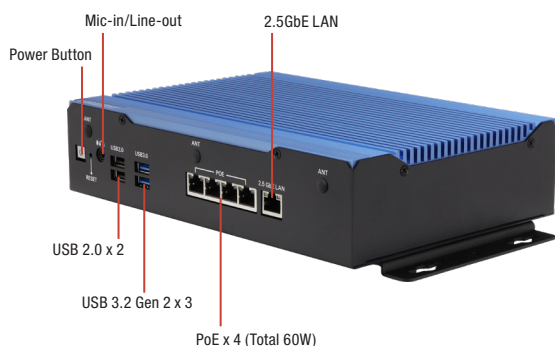


Fanless Compact Embedded Computer with Intel® Core™ 13th i3/i5/i7 Processor

Front View



Rear View



## Features

- Intel® Core™ 13th i3/i5/i7 Processor (28W TDP)
- Intel® Iris® Xe Graphics
- Dual-Channel DDR5 SODIMM up to 96GB
- Dual HDMI video output
- Support 2.5G LAN x5 (IEEE 802.3 at PSE x4)
- Wide Range 9~36V DC input with protection circuit
- Wide Operating Temperature -25~60°C
- TPM 2.0 onboard



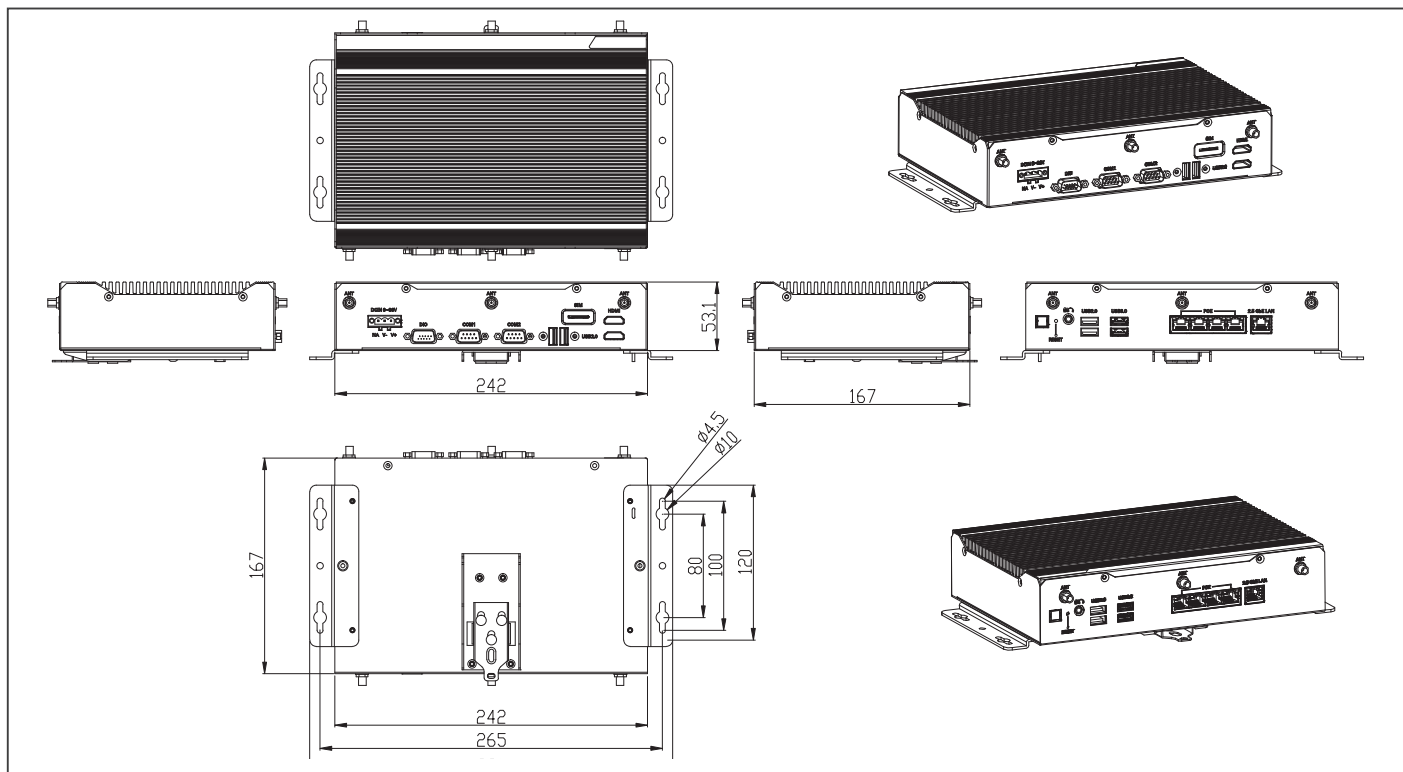
## Specifications

| System                 |                                                                                                                                                                                  |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU                    | Intel® 13th i3/i5/i7 processor (28W TDP):<br>Intel® Core™ i3-1320PE<br>Intel® Core™ i5-1340PE<br>Intel® Core™ i7-1370PE                                                          |
| Chipset                | Intel® SoC                                                                                                                                                                       |
| System Memory          | DDR5 SODIMM slot x 2, up to 96GB                                                                                                                                                 |
| Display Interface      | HDMI x 2                                                                                                                                                                         |
| Storage Device         | Internal 2.5" SATA Drive Bay x 1<br>M.2 2280 NVMe Slot x 1 (PCIe Gen4x4)                                                                                                         |
| Ethernet               | RJ-45 for 2.5GbE LAN i226-LM x 5<br>(IEEE802.3 at PoE PSE x 4)<br>*Note:<br>PoE total support 20W while DC input < 12V<br>PoE total support 60W while DC input ≥ 12V             |
| I/O                    | USB Type-A for USB3.2 Gen2 10G x 2<br>USB Type-A for USB2.0 x 4<br>DB-9 for RS-232/422/485 x 2<br>Mic in / Line out<br>DB15 for DIO 8 bit<br>Power Button with LED indicator x 1 |
| Expansion              | M.2 E key 2230 x 1 (PCIe)<br>M.2 B Key 3052 x 1 (USB 3.2 / USB 2.0)<br>SIM slot x 1                                                                                              |
| Indicator              | System Power                                                                                                                                                                     |
| OS support             | Windows® 10 IoT Enterprise LTSC 2021<br>Windows® 11 PRO<br>Windows® 11 IoT Enterprise LTSC 2024<br>Ubuntu 24.04 above                                                            |
| Power Supply           |                                                                                                                                                                                  |
| Power Requirement      | DC-in 9~36V in 3pin Terminal block connector<br>With protection circuit                                                                                                          |
| Mechanical             |                                                                                                                                                                                  |
| Mounting               | Wallmount, DIN Rail (optional)                                                                                                                                                   |
| Dimensions (W x H x D) | 9.5" x 6.6" x 2.1" (242mm x 167mm x 53mm) w/o brackets                                                                                                                           |
| Gross Weight           | 7.1 lb (3.2 Kg)                                                                                                                                                                  |
| Net Weight             | 5.3 lb (2.4 Kg)                                                                                                                                                                  |
| Environmental          |                                                                                                                                                                                  |
| Operating Temperature  | -13°F ~149°F (-25°C ~ 60°C), IEC60068-2 with 0.7 m/s AirFlow, with wide temp. memory/storage                                                                                     |
| Storage Temperature    | -40°F ~ 176°F (-40°C ~ 80°C)                                                                                                                                                     |
| Storage Humidity       | 5 ~ 95% @ 40°C, non-condensing                                                                                                                                                   |
| Anti-Vibration         | SSD: Random, 3Grms, 5~500Hz                                                                                                                                                      |
| Anti-Shock             | SSD: 50G @ wallmount, Half-sine, 11ms                                                                                                                                            |
| Certification          | CE/FCC class A                                                                                                                                                                   |



## Dimension

Unit: mm



## Ordering Information

| Part Number            | CPU                    | PCH | LAN                                       | USB 3.2 | USB 2.0 | RS-232/422/485 | Storage                                                       | Display  | Expansion                                                                       | Mounting                       | Power       | Operation Temp.                                                                              |
|------------------------|------------------------|-----|-------------------------------------------|---------|---------|----------------|---------------------------------------------------------------|----------|---------------------------------------------------------------------------------|--------------------------------|-------------|----------------------------------------------------------------------------------------------|
| BOXER-6649-RAP-A1-1010 | Intel® Core™ i3-1320PE | SoC | 2.5GbE LAN x 5 (IEEE802.3 at PoE PSE x 4) | 2       | 4       | 2              | M.2 2280 M Key Slot x 1 (NVMe SSD)<br>2.5" SATA Drive Bay x 1 | HDMI x 2 | M.2 E key 2230 x 1 (PCIe)<br>M.2 B Key 3052 x 1 (USB3.2/USB2.0)<br>SIM slot x 1 | Wallmount, DIN Rail (optional) | 9~36V DC in | -13°F ~149°F (-25°C ~ 60°C), IEC60068-2 with 0.7 m/s AirFlow, with wide temp. memory/storage |
| BOXER-6649-RAP-A2-1010 | Intel® Core™ i5-1340PE | SoC | 2.5GbE LAN x 5 (IEEE802.3 at PoE PSE x 4) | 2       | 4       | 2              | M.2 2280 M Key Slot x 1 (NVMe SSD)<br>2.5" SATA Drive Bay x 1 | HDMI x 2 | M.2 E key 2230 x 1 (PCIe)<br>M.2 B Key 3052 x 1 (USB3.2/USB2.0)<br>SIM slot x 1 | Wallmount, DIN Rail (optional) | 9~36V DC in | -13°F ~149°F (-25°C ~ 60°C), IEC60068-2 with 0.7 m/s AirFlow, with wide temp. memory/storage |
| BOXER-6649-RAP-A3-1010 | Intel® Core™ i7-1370PE | SoC | 2.5GbE LAN x 5 (IEEE802.3 at PoE PSE x 4) | 2       | 4       | 2              | M.2 2280 M Key Slot x 1 (NVMe SSD)<br>2.5" SATA Drive Bay x 1 | HDMI x 2 | M.2 E key 2230 x 1 (PCIe)<br>M.2 B Key 3052 x 1 (USB3.2/USB2.0)<br>SIM slot x 1 | Wallmount, DIN Rail (optional) | 9~36V DC in | -13°F ~149°F (-25°C ~ 60°C), IEC60068-2 with 0.7 m/s AirFlow, with wide temp. memory/storage |

## Packing List

- BOXER-6649-RAP x 1
- 3pin Terminal Block connntecor x 1 (for DC input)
- Screw Pack x 1
- Wallmount Kit x 1

## Optional Accessories

- 1255X00102  
180W AC to DC Power Adapter
- 170X000799  
Power Cord (US Type)
- 170X000800  
Power Cord (Europe)
- 170X000803  
Power Cord (Japan)