

# ABOX-5222(P) Series

Powered by Intel® Core™ Series 2 Processor —  
High-Performance, Low-Profile Edge AI Computer



- Intel® Core™ Series 2 Processor
- High Performance, Low Profile: Engineered for Peak Performance Density at the Edge
- 6 x 2.5GbE with PoE+ Option: Simplified Connection to Edge Devices
- 4 x USB 3.2 Gen 2: High-Speed Plug and Play Interface

## Specifications

### System

#### Processor

- Intel® Core™ 7 251TE
- Intel® Core™ 5 211TE
- Intel® Core™ 3 201TE

#### GPU

- Processor-integrated GPU — Intel® UHD Graphics 770

#### Chipset

- H610E

#### Memory

- 2 x DDR5-5600 SO-DIMM up to 96 GB

#### Security

- TPM 2.0

#### Watchdog

- Auto reset for unresponsive system (custom 1-255 sec/min settings in BIOS)

### Interface

#### Video

- 1 x HDMI® up to 3840 x 2160 @ 60Hz as specified in HDMI 2.0b
- 1 x DP++ up to 7680 x 4320 @ 60Hz

#### Audio

- 1 x Line-out, 1 x Mic-in

#### Ethernet

- 6 x 2.5GbE (Intel I226-LM) via RJ-45 (optional PoE+)
- \* PoE supports 25.5W per port with total power budget: 120W

#### USB

- 4 x USB 3.2 Gen 2

#### DIO

- 8 x DI (DC 9-60V), 4 x DO (DC 5V/100mA)

#### COM

- 2 x RS-232/422/485 (optional 6 x RS-232/422/485)

### Internal Expansion

#### M.2

- 1 x M.2 3042/3052 Key B for WWAN w/ dual SIM support
- 1 x M.2 2242 Key B for GNSS or CAN FD
- 1 x M.2 2230 Key E for Wi-Fi/BT

\* Thermal solution is required for M.2 5G module.

#### Mini PCIe

- 1 x Mini PCIe (full-size w/ USB 2.0 only)

### Storage

#### Type

- 1 x M.2 2280 Key M for NVMe/SATA SSD
- 1 x Removable tray for 2 x 2.5" SATA SSD

### Power

#### Power Input

- DC 9-60V (nominal power input DC 12V/24V/48V) via 5-pin terminal block

#### Power Protection

- OCP, OVP, surge protection, reversed polarity protection

#### Power Management

- Ignition detection, Smart Power Management

#### RTC Battery

- Front removeable tray for coin cell battery

### Software

#### Operating System

- Windows 11 IoT Enterprise LTSC
- Ubuntu 22.04 LTS

### Environmental

#### Operating Temp.

- -40°C ~ 70°C (-40°F ~ 158°F) with 0.6 m/s airflow
- \* Operating temperature varies by accessories installed.

#### Storage Temp.

- -40°C ~ 80°C (-40°F ~ 176°F)

#### Relative Humidity

- 10% RH ~ 90% RH (non-condensing)

#### Vibration

- IEC 60068-2-64, random, 2.5G@5~500Hz, 1hr/axis
- MIL-STD-810H, Method 514.8, Procedure I, Category 4

#### Shock

- MIL-STD-810H, Method 516.8, Procedure I, trucks and semi-trailers=15G (11ms)

### Certification / Compliance

- CE, FCC Class A, UKCA, E-Mark, IEC 62368-1

### Mechanical

#### Construction

- Aluminum alloy

#### Antenna

- 7 x SMA connector mounting hole

#### Mounting

- Wall mounting

#### Net Weight

- 3.50 kg (7.72 lb)

#### Dimensions (L x W x H)

- 242 x 240 x 70 mm (9.53 x 9.45 x 2.76 in.) w/ mounting brackets
- 210 x 240 x 65 mm (8.27 x 9.45 x 2.56 in.) w/o mounting brackets

