



Features:

- Rugged & compact, fanless designed box structure;
- Powerful Intel Alder Lake 12th Gen. Core i7-1255U processor;
- Dual DDR5 memory, max. up to 64GB, 2* M.2 & 1 SATA 3.0 storage;
- DC Terminal, wide 9~36V power input, 1 SW remote switch;
- 2 RJ45, optional with 3G/4G/LTE, 5G, Wi-Fi/BT and Wi-Fi 6;
- 2 USB3.1, 2 USB3.0, 1 USB-C, 6 COM, 1 HDMI, 1 DP, Audio;
- 2 M.2 and 1 Mini-PCIe expansion slots;
- Industrial operating -20 ~ +60°C temp. range.

Specification



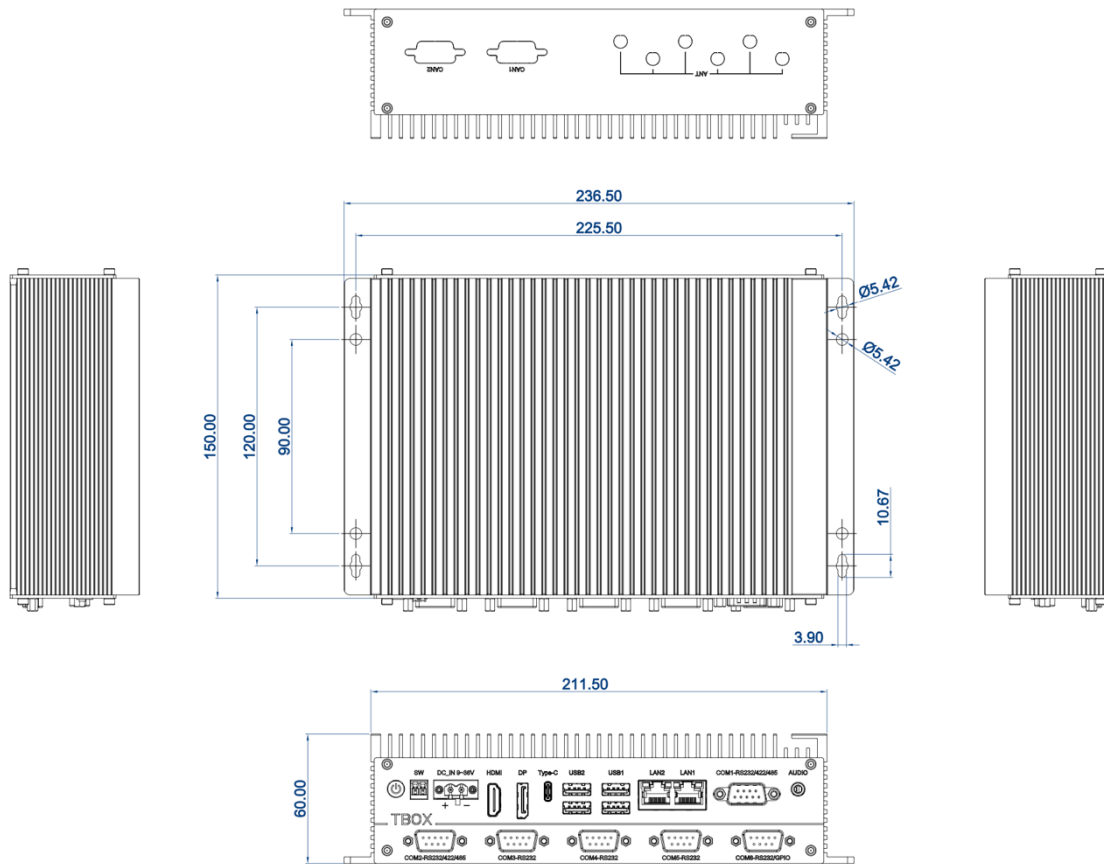
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|----------------------------------|---------------------------|--|
| System | BIOS | SPI AMI EEI BIOS |
| | CPU | Intel 12 th Gen. Core i7-1255U processor |
| | CPU Ghz | 10 cores (2P+8E), 12 threads, 1.70Ghz, TDP 15W |
| | TPM | Intel PTTMP2.0 |
| | Memory | SO-DIMM, DDR5-4800 Mhz, Dual channels, Max. up to 64GB |
| | Storage | 1* M.2 2280 M-Key slot (PCIe x4 Gen IV, NVMe) SSD, 1* M.2 2280 M-Key slot (SATA) SSD ^[1] , 1* SATA3.0 SSD |
| | Graphic | Intel Iris Xe Graphics eligible (Up to 80 EUs, 1.25Ghz) |
| | Network | 1* Intel I226 (2.5GbE), 1* Intel I219 (1.0GbE) Network chips, optional support 3G/4G/5G/Wi-Fi/BT, Wi-Fi 6 wireless |
| | Audio | On-board Realtek ACL897 Audio controller |
| | Expansion | 1* M.2 (NGFF) B-Key 3042/3052 slot, 1* M.2 E-Key 2240 slot, 1* Mini-PCIe slot, 1* Sim card slot |
| | Watchdog | 0 ~ 256 seconds programmable |
| | Operating system | Win10 IoT 2021 LTSC; Win10 (21H2), Win11(21H2 or later); Linux Kernel 5.17 or later |
| IO interface | Serial port | COM1/2: RS232/RS485/RS422 (BIOS control); COM3/4/5/6: RS232 |
| | Ethernet | 2* RJ45 |
| | Audio | 1* Mic-in/Line-out (2 in 1, 3.5mm Jack) |
| | USB | 2* USB3.1 type-A (USB3.2 Gen2x1 10Gbps), 2* USB3.0 type-A (USB3.2 Gen1x1 5Gbps), 1* USB-C (USB3.1 & DP1.4) |
| | Display | 1* HDMI1.4 (Max. resolution to 4K@30Hz), 1* DP++ (Max. support 8K @30Hz) |
| | Power input | 1* 2 pin, phenix terminal |
| | GPIO | 8* GPIO (Optional via 1* DB9) |
| Structure | Box structure and surface | Aluminum alloy, anodizing and anti-scratch treatment |
| | Color | Silver |
| | Mount method | Desktop, wall mount |
| | Cooling system | Finned aluminum heatsinks |
| | Indicator & Button | Power switch, Power LED, HDD LED |
| | Dimension | 236.5 * 150.0 * 60.0 (mm) |
| | Net weight | About 1.6 KG |
| Power & Environmental | Operating temp. | -20 ~ + 60 (°C) |
| | Storage temp. | -40 ~ + 80 (°C) |
| | Humidity | 10 ~ 95% @ 10C (No condensation) |
| | Vibration | 50 ~ 500 Hz, 1.5G, 0.15mm peak to peak |
| | Shock | 10G/Peak (11 ms) |
| | Power input | DC terminal 9~36V range |
| | Power consumption | About 25W |
| | Certificate | CE/FCC/ROHS |

[1] This M.2 slot Default as SATA SSD, optional as NVMe 4x SSD to support RAID 0/1 (selected by resistors).

TBOX-2D38

Dimension

DIMENSIONAL DRAWING:TBOX-2DX8



DIMENSIONS IN MILLIMETERS

DATE:2024.10.22

 REV:E Unit:mm

Ordering information

| Part no. | Description |
|----------------------|---|
| TBOX-2D38 | Intel 12 th Gen. Core i7-1255U 10C/12T processor, 2 RJ45, 2 USB3.1, 2 USB3.0, 1 USB-C, 6 COM, 1 HDMI,1DP, Audio Jack, DC 9~36V, 1 SW, PSU |
| Optional Accessories | Description |
| Memory | SO-DIMM, DDR5, 8GB/16GB/32GB/64GB M.2 NVMe SSD: 256GB/512GB/1TB |
| Storage | M.2 SATA SSD: 256GB/512GB/1TB 2.5" SATA SSD: 128GB/256GB/512GB/1TB 2.5" HDD: 1TB/2TB/4TB |
| Wireless | Wi-Fi module with BT Integrated, with Antenna All network 4G module, with Antenna 5G network module, with Antenna Wi-Fi 6 module, with Antenna |

Packing List

| Description | Quantity |
|-----------------------------------|----------|
| Standard TBOX-2D38 Box PC Product | 1 piece |
| 60W PSU (Power supply) | 1 set |
| Power Cable & Plug | 1 set |

The information in this specification is subject to change without notice.