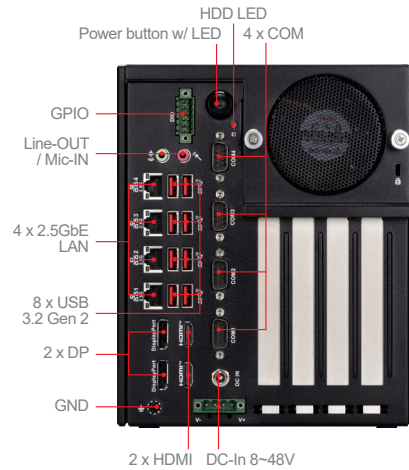
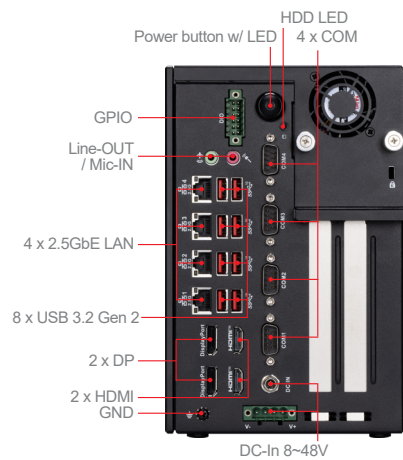


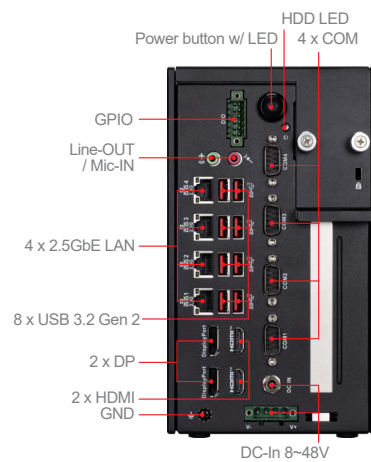
### SKU1 – 4 Slots



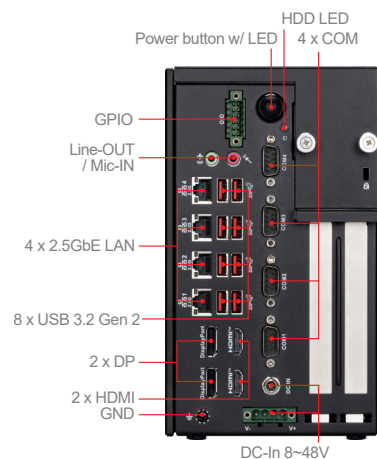
### SKU2 – 2 Slots



### SKU3 – 1 Slot



### SKU4 – 2 Slots



Specifications

| Processor         | CPU                   | SKU1                                                                                                  |                                                                                    | SKU2               | SKU3               | SKU4 |
|-------------------|-----------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------|--------------------|------|
|                   |                       | Intel® 12th Gen IOTG Alder Lake-S Processor Core i9/ i7/i5/i3, Pentium®, Celeron® Processor, Max. 35W |                                                                                    |                    |                    |      |
|                   |                       | Intel® 13th Gen IOTG Raptor Lake-S Processor Core i9/i7/i5/i3, Max. 35W                               |                                                                                    |                    |                    |      |
|                   |                       | Intel® 14th Gen IOTG Raptor Lake-S Refresh Processor Core i9/i7/i5/i3, Max. 35W                       |                                                                                    |                    |                    |      |
|                   |                       | Frequency                                                                                             | P-Core 1.1 GHz~5.5 GHz (Depends on CPU)<br>E-Core 0.8 GHz~4.0 GHz (Depends on CPU) |                    |                    |      |
|                   | L2 Cache              | 4M~36M (Depends on CPU)                                                                               |                                                                                    |                    |                    |      |
|                   | CPU Type              | Socket (LGA1700)                                                                                      |                                                                                    |                    |                    |      |
| Memory            | Chipset               | Intel® R680E chipset                                                                                  |                                                                                    |                    |                    |      |
|                   | BIOS                  | AMI                                                                                                   |                                                                                    |                    |                    |      |
|                   | Technology            | Dual-channel DDR5(ECC/non-ECC) 5600MHz (ECC support will depend on CPU)                               |                                                                                    |                    |                    |      |
|                   | Max. Capacity         | Up to 64GB                                                                                            |                                                                                    |                    |                    |      |
|                   | Socket                | 2 x 262-pin SO-DIMMs                                                                                  |                                                                                    |                    |                    |      |
| Display           | Controller            | Intel® UHD Graphics                                                                                   |                                                                                    |                    |                    |      |
|                   | Graphic Memory        | Depends on CPU                                                                                        |                                                                                    |                    |                    |      |
|                   | Multiple Display      | 4 independent displays                                                                                |                                                                                    |                    |                    |      |
|                   | Display Interface     | HDMI up to 4096 x 2304 @60Hz<br>DP up to 4096 x 2304 @60Hz                                            |                                                                                    |                    |                    |      |
| Ethernet          | Controller            | 1 x Intel® I226LM 2.5GbE LAN (Support Intel® AMT)<br>3 x Intel® I226V 2.5GbE LAN                      |                                                                                    |                    |                    |      |
| Audio             | Controller            | Realtek® ALC897 HD Audio Codec                                                                        |                                                                                    |                    |                    |      |
| H/W Monitor       | Watchdog Timer        | 256-level Watchdog Timer                                                                              |                                                                                    |                    |                    |      |
| TPM               | Smart Fan             | Yes                                                                                                   |                                                                                    |                    |                    |      |
| Expansion Slot    | Controller            | Infineon SLB9672VU2.0                                                                                 |                                                                                    |                    |                    |      |
|                   | PCIe x16              | 1                                                                                                     |                                                                                    |                    |                    | N/A  |
|                   | PCIe x8               | N/A                                                                                                   | N/A                                                                                | N/A                | 2                  |      |
|                   | PCIe x4               | N/A                                                                                                   |                                                                                    |                    |                    |      |
|                   | PCIe x1               | N/A                                                                                                   |                                                                                    |                    |                    |      |
|                   | PCI                   | 3                                                                                                     |                                                                                    |                    |                    |      |
|                   | M.2                   | 1 x M.2 M key (PCIe Gen4 x4 NVMe & SATA 3.0), 2280<br>1 x M.2 E key (PCIe Gen4 x1), 2230              | 1 x M.2 M key (PCIe Gen4 x4 NVMe & SATA 3.0), 2280                                 |                    |                    |      |
| Storage           | Mini-PCIe             | N/A                                                                                                   | 1 x Full-size                                                                      | N/A                | N/A                |      |
|                   | SATA                  | 2 x 2.5" HDD/SSD                                                                                      |                                                                                    |                    |                    | N/A  |
|                   | mSATA                 | N/A                                                                                                   |                                                                                    |                    |                    |      |
|                   | CFast                 | N/A                                                                                                   |                                                                                    |                    |                    |      |
|                   | CompactFlash          | N/A                                                                                                   |                                                                                    |                    |                    |      |
| I/O Interface     | RJ-45                 | 4                                                                                                     |                                                                                    |                    |                    |      |
|                   | PoE                   | N/A                                                                                                   |                                                                                    |                    |                    |      |
|                   | Audio                 | 1 x Mic-in<br>1 x Line-out                                                                            |                                                                                    |                    |                    |      |
|                   | USB                   | 8 x USB 3.2 Gen 2<br>2 x USB 3.2 Gen 1<br>3 x USB 2.0 (internal, Type-A)                              |                                                                                    |                    |                    |      |
|                   | Serial                | 4 x COM ports<br>COM1~2: RS232/422/485, 0V/5V/12V<br>COM3~4: RS-232, 0V                               |                                                                                    |                    |                    |      |
|                   | PS/2                  | N/A                                                                                                   |                                                                                    |                    |                    |      |
|                   | GPIO                  | 8-bits (4 x GPI; 4 x GPO), 5~35V, isolation 1.3KV                                                     |                                                                                    |                    |                    |      |
|                   | CANbus                | N/A                                                                                                   |                                                                                    |                    |                    |      |
|                   | HDMI                  | 2                                                                                                     |                                                                                    |                    |                    |      |
|                   | LVDS                  | N/A                                                                                                   |                                                                                    |                    |                    |      |
|                   | DVI                   | N/A                                                                                                   |                                                                                    |                    |                    |      |
|                   | DisplayPort           | 2                                                                                                     |                                                                                    |                    |                    |      |
|                   | Antenna               | 2 openings reserved for antennas                                                                      |                                                                                    | N/A                |                    |      |
|                   | Power Supply          | DC Input                                                                                              | DC-in 8-48V Wide-Range Pluggable connectors with latch (V+, V-)                    |                    |                    |      |
| Environment       | IP Rating             | N/A                                                                                                   |                                                                                    |                    |                    |      |
|                   | Operating Temperature | -10 ~ 50°C w/ industrial DC power Up to 35W CPU<br>Note: Thermal w/ Airflow:0.7m/s                    |                                                                                    |                    |                    |      |
|                   | Operating Humidity    | 10 ~ 90% , non-condensing                                                                             |                                                                                    |                    |                    |      |
|                   | Storage Temperature   | -20 ~ 80°C                                                                                            |                                                                                    |                    |                    |      |
|                   | Storage Humidity      | 10 ~ 90%, non-condensing                                                                              |                                                                                    |                    |                    |      |
|                   | Vibration             | Operating, IEC 60068-2-64: 2 Grms, random, 5 ~ 500 Hz, 1hr/axis (w/ HDD/SSD)                          |                                                                                    |                    |                    |      |
| Form Factor       | Shock                 | Operating, IEC 60068-2-27: 50G, half sine, 11ms (w/ HDD/SSD)                                          |                                                                                    |                    |                    |      |
|                   | Dimensions (Wx DxH)   | 178 x 242 x 217 mm                                                                                    | 142 x 240 x 217 mm                                                                 | 123 x 240 x 217 mm | 127 x 240 x 217 mm |      |
|                   | Weight                | 4.8 kg                                                                                                | 4.3 kg                                                                             | 4.1 kg             | 4.2 kg             |      |
| Certification     | Mounting              | Wall mount                                                                                            |                                                                                    |                    |                    |      |
|                   | EMC                   | FCC Class A, CE, RCM, BSMI, VCCI, UKCA, IC                                                            |                                                                                    |                    |                    |      |
| Software Platform | Safety                | IEC 62368: CE(LVD) / BSMI                                                                             |                                                                                    |                    |                    |      |
|                   | OS Support            | Windows 10 IoT Enterprise 2021 LTSC (64-bit, 21H2)                                                    |                                                                                    |                    |                    |      |
|                   |                       | Windows 11 IoT Enterprise (64-bit, 22H2, Pre-scan)<br>Linux (Support by request)                      |                                                                                    |                    |                    |      |

Features

- Intel® 12th/13th/14th Gen Alder Lake-S/Raptor Lake-S/Raptor Lake-S Refresh Series with R680E
- 2 DDR5 5600 MHz ECC/non-ECC SODIMM slots up to 64GB
- Quadruple independent displays: 2 HDMI, 2 DP
- 4 2.5 GbE LAN with RJ-45
- SKU1: 1 PCIe x16 (Gen 4), 3 PCI, PCIe E Key (Gen 4) x1
- SKU2: 1 PCIe x16 (Gen 4), 1 PCI, 1 x Mini-PCIe (Full-size)
- SKU3: 1 PCIe x16 (Gen 4)
- SKU4: 2 PCIe x8 (Gen 4)
- 2 SATA 3.0 (2.5" SSD/HDD, 7mm) for storage
- SATA RAID 0/1
- 8 USB 3.2 Gen 2, 2 USB 3.2 Gen 1, 3 USB 2.0, 4 COM, Audio, GPIO, System FAN
- Onboard TPM 2.0
- GPIO 8-bit supports, 5~35V, Isolation 1.3KV
- Easy access CPU, HDD, memory, expansion slots
- Anti-Vibration & Shockproof Design to Compliance IEC 60068-2
- Wide Voltage DC-IN 8~48V
- Fanless design

Ordering Information

| Part Number | Description |
|-------------|-------------|
| Coming soon |             |

Packing List

| Part Number | Description | Quantity |
|-------------|-------------|----------|
| Coming soon |             |          |

Optional Item

| Part Number | Description |
|-------------|-------------|
| Coming soon |             |

Lambortech reserves the right to change the specifications without prior notices.