

# SBC-264J

## 3.5"SBC Motherboard

Coming Soon

### KEY FEATURES

- Intel® Alder Lake-N Processors
- 1 x 262-pin SO-DIMM DDR5 4800 MHz, up to 32GB
- 3 x USB 3.2 Gen2, 5 x USB 2.0, 1 x M.2 Key E, 1 x M.2 Key M, 1 x M.2 Key B, 4 x COM, 1 x SATA3
- 2 x Realtek 2.5 Gigabit LAN
- Supports Triple display, 2 x HDMI 2.0b, 1 x LVDS or eDP
- 9~36V DC-In

### SPECIFICATIONS

#### Form Factor

|            |                                                                |
|------------|----------------------------------------------------------------|
| Dimensions | 3.5"SBC (5.8-in x 4-in x 1.02-in, 14.7 cm x 10.2 cm x 2.60 cm) |
|------------|----------------------------------------------------------------|

#### Processor System

|      |                                                                                                                                                                                     |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU  | Intel® Alder Lake-N SoC Processors<br>SBC-264J (N97, QC, Max Speed Up to 3.6GHz, 12W)<br><small>*For other CPU SKUs request, please contact regional Sales for availability</small> |
| BIOS | AMI SPI 256 Mbit                                                                                                                                                                    |

#### Memory

|            |                              |
|------------|------------------------------|
| Technology | Single Channel DDR5 4800 MHz |
| Capacity   | 32GB                         |
| Socket     | 1 x 262-pin SO-DIMM          |

#### Graphics

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| Controller   | Intel® UHD Graphics                                                       |
| HDMI         | HDMI 2.0b<br>Max resolution up to 4096 x 2160@60Hz                        |
| LVDS         | Dual channel 24 bit up to 1920 x 1200@60Hz<br>(Connector shared with eDP) |
| eDP          | Max resolution up to 1920 x 1080@60Hz<br>(Connector shared with LVDS)     |
| MultiDisplay | Triple display                                                            |

#### Expansion Slot

|            |                                                                                                                                                   |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| M.2        | 1 x M.2 (Key E, 2230) with PCIe Gen3 x1, USB 2.0 and CNVi for Wireless<br>1 x M.2 (Key B, 3042/3052) with PCIe Gen3 x1, USB 2.0 and SIM for 4G/5G |
| SIM Socket | 1 x SIM socket connected to M.2 key B                                                                                                             |

#### Audio

|           |                                           |
|-----------|-------------------------------------------|
| Interface | Realtek ALC256 HD, High Definition Audio. |
|-----------|-------------------------------------------|

#### Ethernet

|                   |                                                                                                          |
|-------------------|----------------------------------------------------------------------------------------------------------|
| Controller/ Speed | LAN1: Realtek RTL8125BG with 10/100/1000/2500 Mbps<br>LAN2: Realtek RTL8125BG with 10/100/1000/2500 Mbps |
| Connector         | 2 x RJ-45                                                                                                |

#### Rear I/O

|          |                                 |
|----------|---------------------------------|
| HDMI     | 2 x HDMI 2.0b                   |
| Ethernet | 2 x 2.5 Gigabit LAN             |
| USB      | 3 x USB 3.2 Gen2<br>1 x USB 2.0 |

#### Internal Connector

|                 |                                                    |
|-----------------|----------------------------------------------------|
| USB             | 4 x USB 2.0 (2 x 2.54 pitch header)                |
| COM             | COM2, COM3, COM4 (RS-232)<br>COM1 (RS-232/422/485) |
| GPIO            | 4 x GPI, 4 x GPO                                   |
| LVDS            | 1 (Connector with LVDS/eDP signal, switch by BIOS) |
| SATA PWR Output | 1                                                  |
| Speaker Header  | 1                                                  |
| I2C Header      | 1                                                  |

#### Storage

|      |                                                                            |
|------|----------------------------------------------------------------------------|
| M.2  | 1 x M.2 (Key M, 2242/2280) with PCIe Gen3 x1 and SATA3 and USB 2.0 for SSD |
| SATA | 1 x SATA3 (6Gb/s)                                                          |

#### Security

|     |                          |
|-----|--------------------------|
| TPM | TPM Header<br>Intel® PTT |
|-----|--------------------------|

#### Watchdog Timer

|          |                                  |
|----------|----------------------------------|
| Output   | From Super I/O to drag RESETCON# |
| Interval | 256 Segments, 0, 1, 2, ...255sec |

#### Power Requirements

|           |                                                                                                                           |
|-----------|---------------------------------------------------------------------------------------------------------------------------|
| Input PWR | 9~36V DC-In<br>12V DC-In only (BOM option)                                                                                |
| Power On  | AT/ATX Supported<br>- AT : Directly PWR on as power input ready<br>- ATX : Press button to PWR on after power input ready |

#### Environment

|                    |                           |
|--------------------|---------------------------|
| Operating Temp     | -20°C ~ 70°C              |
| Storage Temp       | -40°C ~ 85°C              |
| Operating Humidity | 5% ~ 90% (non-condensing) |
| Storage Humidity   | 5% ~ 90% (non-condensing) |