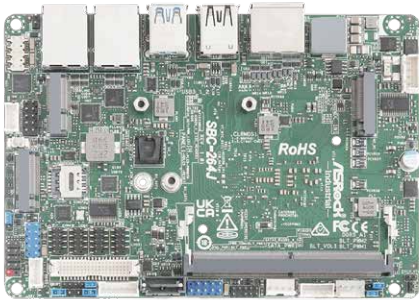


# SBC-264J

## 3.5" SBC Motherboard



### 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 |

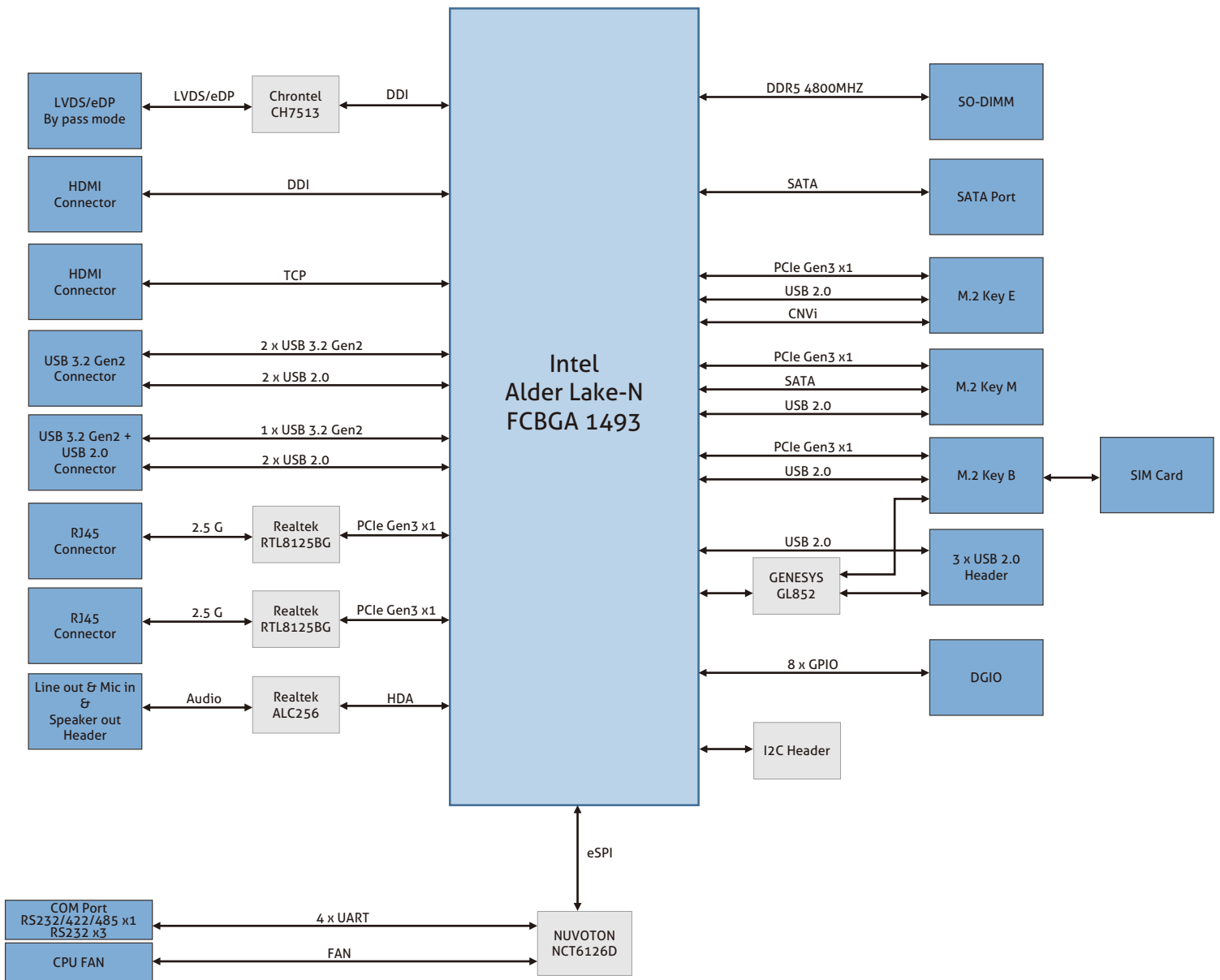
#### Power Requirements

|           |   |
|-----------|---|
| 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) |

BLOCK DIAGRAM



## ORDERING INFORMATION

### Ordering Information

|             |          |
|-------------|----------|
| Model       | SBC-264J |
| CPU         | N97      |
| HDMI        | 2        |
| LVDS/eDP    | 1/ (1)   |
| 2.5 Gbe LAN | 2        |
| COM         | 4        |
| USB 3.2     | 3        |
| USB 2.0     | 5        |
| SATA III    | 1        |
| M.2 E-Key   | 1        |
| M.2 B-Key   | 1        |
| M.2 M-Key   | 1        |
| TPM         | FW TPM   |

### I/O View



### Packing List (Gift)

| Description        | Quantity |
|--------------------|----------|
| Heatsink           | 1        |
| SATA Power Cable   | 1        |
| COM Cable          | 2        |
| SATA Data Cable    | 2        |
| DC-in Cable        | 1        |
| SCREW M3*2.5       | 3        |
| 2.00mm MINI JUMPER | 1        |

### Packing List (Bulk)

| Description        | Quantity |
|--------------------|----------|
| SCREW M3*2.5       | 3        |
| 2.00mm MINI JUMPER | 1        |