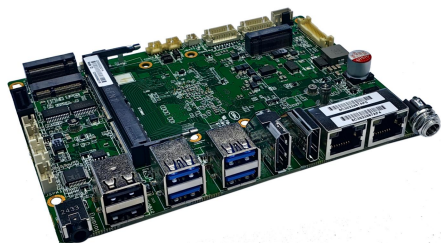


# SIM3-3510

## 3.5" embedded industrial motherboard

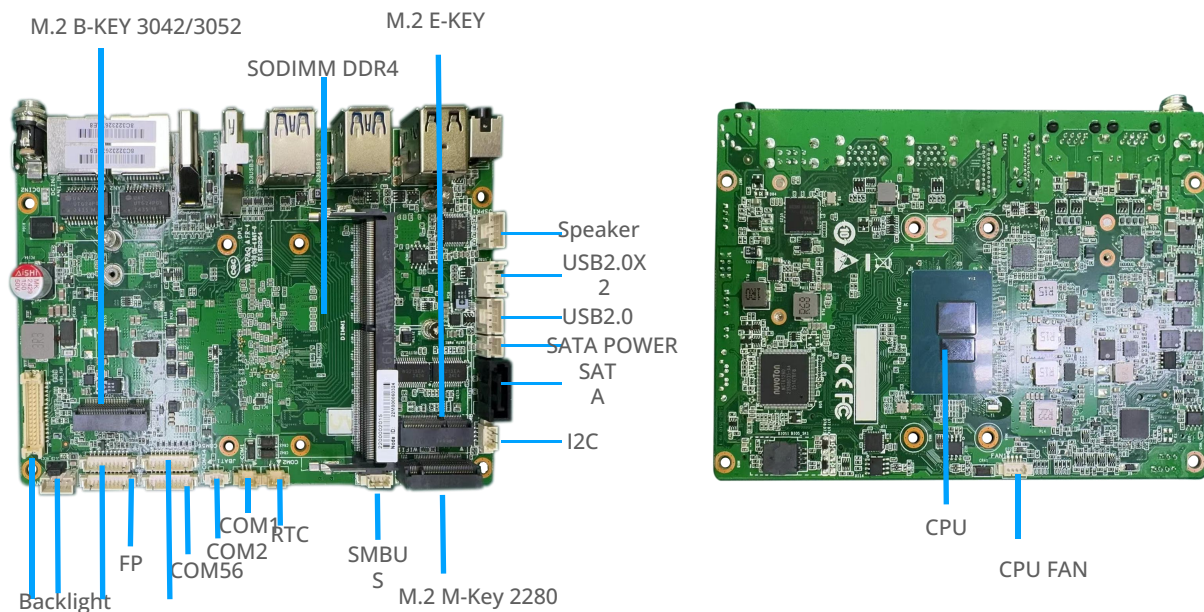


- Intel Alder lake N series low-power CPU, TDP 15W
- 1 DDR4 SO-DIMM slots, supporting up to 16GB
- M.2 2280 Key-M supports SATA/nVME auto-adaptation
- M.2 3042/3052 Key-B for 4G/5G,
- M.2 2230 Key-E for Wifi/BT
- Back mounted processor, DC 12/24V power supply
- 3 Independent display interfaces HDMI+DP+LVDS/eDP

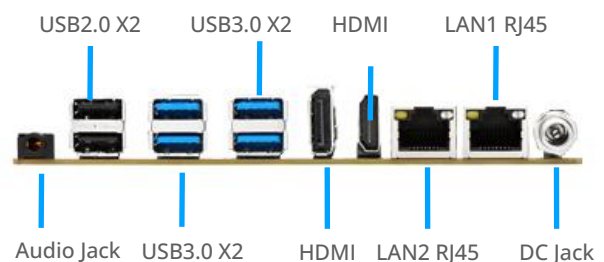
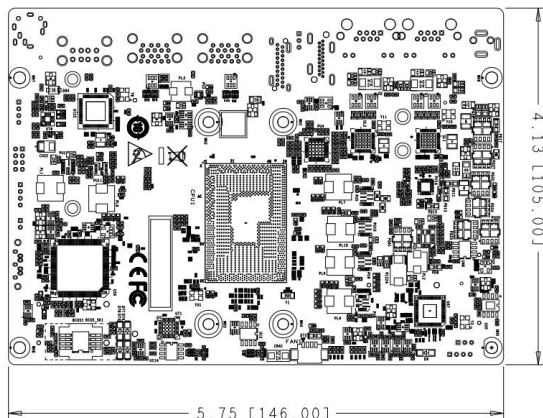
## Specifications

|                                         |                                                                                                                                                                                                                                            |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU                                     | Intel® Alder Lake-N N95/up to 3.4GHz+4C/4T/6MB/15W<br>Intel® Alder Lake-N N97/up to 3.6GHz+4C/6MB/12W<br>Intel® Alder Lake-N N100/up to 3.4GHz+4C/4T/6MB/6W<br>Intel® Alder Lake-N i3-N305/up to 3.8GHz+8C/8T/6MB/15W                      |
| Chipset                                 | Intel Alder lake N SOC                                                                                                                                                                                                                     |
| Memory                                  | 1 × DDR4 SODIMM memory slot, up to DDR4-3200 single socket up to 16GB                                                                                                                                                                      |
| Display controller                      | Integrated Core Graphics: Intel UHD Graphics for 11th or Iris Xe Graphics (depending on CPU)                                                                                                                                               |
| Display interface                       | Quad display interface : HDMI+DP+eDP/LVDS;<br>1个HDMI 2.0 max resolution up to 4096*2160<br>1个DP, max resolution up to 4096*2160<br>1*eDP/LVDS: eDP, max resolution up to 4096*2160@60Hz<br>LVDS, max resolution up to 1920*1200@60Hz       |
| Storage                                 | 1xSATA3.0+PWR 2pin 2.0mm<br>1xM.2 2280 Key-M supports SATA/nVME self-adaptation                                                                                                                                                            |
| Audio                                   | Support Mic-in+Line-out<br>Support digital audio output with power amplifier (3W, 4Pin wafer)                                                                                                                                              |
| Network                                 | 2 × RJ45 network ports (4KV surge protection)<br>LAN1 LAN2: REALTEK8111K                                                                                                                                                                   |
| USB                                     | 4 × USB3.2 Gen2x1 5 × USB2.0(3 on the rear board)                                                                                                                                                                                          |
| I <sup>2</sup> C/I <sup>2</sup> S/SMBus | 1 × SMBus, 4Pin wafer, 1 × 4Pin I <sup>2</sup> C wafer                                                                                                                                                                                     |
| COM                                     | 6 × COM: COM1, COM2 support RS485 COM3, COM4 support RS232 COM5, COM6 supportRS232/TTL                                                                                                                                                     |
| CAN                                     | /                                                                                                                                                                                                                                          |
| Digital I/O                             | 8-bit digital I/O interface (1x10Pin wafer)                                                                                                                                                                                                |
| TPM/TCM                                 | The on-board encryption chip SLB9670 supports TPM2.0 (option)                                                                                                                                                                              |
| Expansion bus                           | 1 × M.2 Key-B 3042/3052 supports 4G/5G (USB3.0)<br>1 × M.2 Key-E 2230 (CNVI,PCIe,USB)                                                                                                                                                      |
| Operating temperature and humidity      | When using room temperature memory and storage: 0°C~60°C, relative humidity 10%~85%, atmospheric pressure 85~105kPa<br>When using wide temperature memory and storage: -40~70°C, relative humidity 10%~85%, atmospheric pressure 85~105kPa |
| Non-operating temperature and humidity  | Temperature: -40°C~85°C; The relative humidity is 5%~95% (40°C), and the atmospheric pressure is 85~105kPa                                                                                                                                 |
| Watch Dog                               | 255 levels of programmable seconds per minute with support for timeout interrupt or system reset                                                                                                                                           |
| BIOS                                    | AMI UEFI BIOS                                                                                                                                                                                                                              |
| Operating System                        | Windows10, Windows11, Linux Ubuntu 21.04                                                                                                                                                                                                   |
| Power                                   | DC+12V~24V anti-screw DC-Jack (optional 2Pin Phoenix terminal)<br>power indicator, storage indicator                                                                                                                                       |
| PCB dimensions (L*W)                    | 3.5 inch: 146mm(W)×105mm(D)                                                                                                                                                                                                                |

## Product view



## Dimensions



## Product Selection

| Product model | CPU     | Display | LAN | M.2 | USB3 | USB2 | COM |
|---------------|---------|---------|-----|-----|------|------|-----|
| SIM3-3510-0   | N100    | 3       | 2   | 3   | 4    | 5    | 6   |
| SIM3-3510-5   | N95     | 3       | 2   | 3   | 4    | 5    | 6   |
| SIM3-3510-7   | N97     | 3       | 2   | 3   | 4    | 5    | 6   |
| SIM3-3510-I3  | i3-N305 | 3       | 2   | 3   | 4    | 5    | 6   |