

279.00 EUR

incl. 19% VAT, plus [shipping](#)

- Intel Alder Lake !
- Dual INTEL LAN !
- Multi expansion Slot !
- 8-24VDC !



- Intel® Alder Lake N ATOM/Core i3 BGA Processor (TDP up to 12W)
- Support 1 x DDR5 SO-DIMM (Up to 16GB)
- Compatible with M.2 3042/3052 + SIM slot for 5G cellular network connectivity
- Support Triple Display for HDMI, DisplayPort, and LVDS/eDP
- Support 1 x PCIe X1 (Gen 3) slot, 1 x M.2 2280 M-Key(SATA), 1x M.2 2280/2242 B-Key (SATA, PCIe X1), 1 x M.2 2230 E-Key, 1 x SATA III.
- 1x USB3.2 Gen2, 3x USB3.2 Gen1, 4 x USB2.0, 1 x USB2.0 Vertical Type A, 4 x COM and 1 MiAPI (configurable digital I/O)
- 8V~24V wide voltage power input

MECHANICAL

FORM FACTOR

Mini-ITX: 6.7" x 6.7" (170 mm x 170 mm)

|          |               |                                                                                                       |
|----------|---------------|-------------------------------------------------------------------------------------------------------|
| SYSTEM   | PROCESSOR     | Intel® Alder Lake N N50, Core i3-N305, and Atom x7425E Processor                                      |
|          | CHIPSET       | Intel® SoC Integrated                                                                                 |
|          | SYSTEM MEMORY | 1 x 260-pin SO-DIMM / DDR5 4800 MHz / Max. 16GB (Non-ECC)                                             |
|          | GRAPHICS      | Intel® HD Graphics                                                                                    |
|          | ETHERNET      | 2 x Intel® I226-V 2.5 Giga LAN                                                                        |
|          | AUDIO         | Realtek® ALC888S                                                                                      |
|          | I/O CHIPSET   | Nuvoton NCT6126D(eSPI)                                                                                |
|          | TPM           | Nuvoton NPCT750AABYX TPM2.0 (Optional)                                                                |
|          |               | - i3-N305 & x7425E:                                                                                   |
|          |               | PCIe 3.0 x1 slot                                                                                      |
| GRAPHICS |               | /M.2 3042 / 3052 / 2242 / 2260 / 2280 B key (USB3.1 Gen 1, USB2.0, SATAIII, PCIe1) with nano SIM slot |
|          |               | /M.2 2280 M key(SATAIII)*Not support M.2 M Key NVMe SSD                                               |
|          |               | /M.2 2230 E key (PCIe1, USB2.0)*Support CNVi.                                                         |
|          |               | / - N50:                                                                                              |
|          |               | PCIe 3.0 x1 slot                                                                                      |
|          |               | /M.2 3042 / 3052 / 2242 / 2260 / 2280 B key ( USB2.0, SATAIII, PCIe1) with nano SIM slot              |
|          |               | *Not support M.2 M Key NVMe SSD                                                                       |
|          |               | /M.2 2230 E key (PCIe1, USB2.0)*Support CNVi.                                                         |
|          |               | AMI BIOS                                                                                              |
|          |               | Temperature Monitor / Voltage Monitor / Fan Monitor                                                   |
| REAR I/O |               | 1~255 steps by software program                                                                       |
|          |               | CPU Fan                                                                                               |
|          |               | -                                                                                                     |
|          |               | -                                                                                                     |
|          |               | Up to 4K (4096 x 2160) @60 Hz                                                                         |
|          |               | Up to 4K (4096 x 2160) @60 Hz                                                                         |
|          |               | Up to 1920 x 1200 @60 Hz                                                                              |
|          |               | Up to 4K (4096 x 2160) @60 Hz                                                                         |
|          |               | - i3-N305 & x7425E:                                                                                   |
|          |               | 1x USB 3.2 Gen2, 3x USB 3.2 Gen1                                                                      |
|          |               | - N50:                                                                                                |
|          |               | 1x USB 3.2 Gen2, 1x USB 3.2 Gen1, 2x USB 2.0                                                          |
|          |               | 1 x HDMI 1.4 / 1 x DisplayPort 1.4b                                                                   |
|          |               | 1 x Mic-in / 1 x Line-out                                                                             |
|          |               | 2 x RJ-45                                                                                             |
|          |               | -                                                                                                     |
|          |               | -                                                                                                     |
|          |               | DC-in Jack 8-24V (2.5 mm / ID, 5.5 mm / OD)                                                           |
|          |               |                                                                                                       |
|          |               |                                                                                                       |

|                     |                       |                                                                                                                                                                                                                                                                               |
|---------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTERNAL CONNECTORS | STORAGE               | 1 x SATA power header / 1 x SATAIII<br>(Multiplexed with M.2 Key)<br>I3-N305 & 7425E:                                                                                                                                                                                         |
|                     | USB                   | 4 x USB 2.0<br>/ 1 x USB2.0 Vertical Type A<br>N50:<br>2 x USB 2.0                                                                                                                                                                                                            |
|                     | DISPLAY I/O           | 1 x Backlight Connector<br>/ 1 x LVDS<br>/ 1 x eDP(optional)                                                                                                                                                                                                                  |
|                     | AUDIO I/O             | 1 x Stereo Speaker Header<br>/ 1 x Audio Header (Front Panel Mic-in &<br>Line-out)<br>- i3-N305 & x7425E:                                                                                                                                                                     |
|                     | SERIAL PORT           | 1 x RS232/RS422/485<br>/ 3 x RS232<br>- N50:<br>3 x RS232                                                                                                                                                                                                                     |
|                     | PARALLEL PORT         | 1 x MiAPI Header                                                                                                                                                                                                                                                              |
|                     | GPIO                  | -                                                                                                                                                                                                                                                                             |
|                     | FAN                   | 1 x 4-pin System Fan Header                                                                                                                                                                                                                                                   |
|                     | POWER                 | 1 x AT / ATX Mode Select Jumper<br>/ 1 x 4-pin ATX Power Connector<br>1 x CMOS Jumper<br>/ 1 x Chassis Front Panel Header (2 x 5-pin)<br>/ 1 x Front Audio Header (Mic-in & Line-out)<br>/ 1 x Buzzer<br>/ 1 x Panel power select header (default<br>3.3V, option to 5V, 12V) |
|                     | OTHERS                | DC-in 8~24V (2.5 mm / ID, 5.5 mm / OD) /<br>ATX 4-pin                                                                                                                                                                                                                         |
| POWER REQUIREMENT   | POWER INPUT           |                                                                                                                                                                                                                                                                               |
| ENVIRONMENTAL       | OPERATING TEMPERATURE | 0 ~ 60°C (32 ~140°F)                                                                                                                                                                                                                                                          |
|                     | STORAGE TEMPERATURE   | -40 ~ 85°C (-40 ~185°F)                                                                                                                                                                                                                                                       |
|                     | OPERATING HUMIDITY    | 10% ~ 95% R/H (Non-condensing)                                                                                                                                                                                                                                                |
| OS                  | CERTIFICATION         | CE / FCC Class B                                                                                                                                                                                                                                                              |
|                     | OS SUPPORT            | Linux (support by request) / Ubuntu 20.04 /<br>Windows® 10 64-bit / Windows® 11 64bit,<br>1 x 50 cm SATA Cable / 2 x I/O Bracket<br>(Half and Full Height) / 1 x Quick Installation<br>Guide / 1 x 54 cm SATA Power Cable / 1 x<br>Motherboard                                |
| PACKING LIST        | PACKAGE               |                                                                                                                                                                                                                                                                               |