



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

- Intel Alder Lake !
- H610 Chipset !
- 19V DC-in !

Long-term availability until at least 2030.

- Intel® Alder Lake 12th i9/i7/i5/i3 LGA 65W processor
- Intel® H610 Chipset
- Intel® vPro technology support (nur Q670)
- 2x DDR5 SO-DIMM up to 64GB
- Support triple display for HDMI, DisplayPort and LVDS/eDP
- 1x M.2 2280M-key (NVME), 1x M.2 2230 E-key (CNVi), 1x M.2 3042 B-Key, 1x PCIe X4
- 1x Intel® 2.5Gigabit Ethernet, 1x Intel® Gigabit Ethernet
- DC-in 19V

FORM FACTOR

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

PROCESSOR

12th Gen Intel® Alder Lake LGA1700 Socket Processor / Core i9/i7/i5/i3 Processor / TDP 65W

CHIPSET

Intel® H610

SYSTEM MEMORY

DDR5 4800 MHz / 2 x 262-pin SO-DIMM / Max. 64 GB (Non-ECC)

GRAPHICS

Intel® UHD Graphics

ETHERNET

Intel® I219-LM Giga LAN + Intel® I225V 2.5 Giga LAN

AUDIO

Realtek® ALC888 Co-Lay ALC897

I/O CHIPSET

Nuvoton NCT6126D(eSPI)

TPM

TPM Header / (support optional TPM module board NPCT750)

| | |
|-----------------------|---|
| EXPANSION SLOT | 1x M.2 2230 E key (PCIe X1 , USB2.0, SMBus, CNVi) / 1x M.2 3042 B key (USB2.0, PCIe3.0 X1, SATAIII) / 1x M.2 2242 / 2280 M key (PCIe3.0 X4, SATAIII) / 1x PCIe 3.0 X4 slot |
| BIOS | AMI BIOS / 256 Mbit SPI |
| H/W MONITOR | Temperature Monitor / Voltage Monitor / Fan Monitor |
| WATCHDOG TIMER | 1~255 steps by software program |
| SMART FAN CONTROL | CPU Fan / System Fan |
| 2nd DISPLAYPORT | - |
| VGA | - |
| DVI | - |
| HDMI | Up to 4K (4096 x 2160) @30 Hz |
| DISPLAYPORT | Up to 4K (4096 x 2304) @60 Hz |
| LVDS | Up to 1920 x 1200 @60 Hz |
| eDP (Option) | Up to 4K (4096 x 2304) @60 Hz |
| USB | 4 x USB 3.2 Gen1 (H610) / 4 x USB 3.2 Gen2 (Q670) |
| DISPLAY I/O | 1 x HDMI 1.4 / 1 x DisplayPort 1.2 |
| AUDIO I/O | 1 x Mic-in / 1 x Line-out |
| LAN I/O | 2 x RJ-45 |
| SERIAL PORT | - |
| PS/2 PORT | - |
| OTHERS | DC-in 12V (2.5 mm / ID, 5.5 mm / OD) / DC-in 19V (5.1 mm / ID, 7.4 mm / OD) |
| STORAGE | 2 x SATAIII |
| USB | H610 & Q670: 5 x USB 2.0 (1 x USB share M.2 B) / Q670: 2 x USB 3.2 |
| DISPLAY I/O | 1 x LVDS (*Optional eDP SKU available) / 1 x Backlight Connector |
| AUDIO I/O | 1 x Stereo Speaker Header |
| SERIAL PORT | 1 x RS232 / 1 x RS232 / 422 / 485 |
| PARALLEL PORT | - |
| GPIO | 1 x MiAPI Header (Programmable. Support 10-bit GPIO) |
| FAN | 1 x 4-pin CPU Fan Header / 1 x 4-pin System Fan Header |
| POWER | 1 x AT / ATX Mode Select Jumper / 1 x 4-pin ATX Power Connector |
| OTHERS | 1 x CMOS Jumper / 1 x Front Audio Header (Mic-in & Line-out) / 1 x panel power select header / 1x buzzer header / 1x Digital MIC / 1 x FIO header / 1 x intrusion switch header |
| POWER INPUT | DC-in 19V (5.1 mm / ID, 7.4 mm / OD) / ATX 4-pin 19V |
| OPERATING TEMPERATURE | 0 ~ 60°C (32 ~140°F) |
| STORAGE TEMPERATURE | -40 ~ 85°C (-40 ~185°F) |
| OPERATING HUMIDITY | 10% ~ 95% R/H (Non-condensing) |
| CERTIFICATION | CE / FCC Class B |
| OS SUPPORT | Ubuntu 20.04 / Windows® 11 64bit, / Linux (support by request) |
| PACKAGE | 1 x Motherboard / 2 x I/O Bracket (Half and Full Height) / 1 x SATA & SATA PWR Cable |