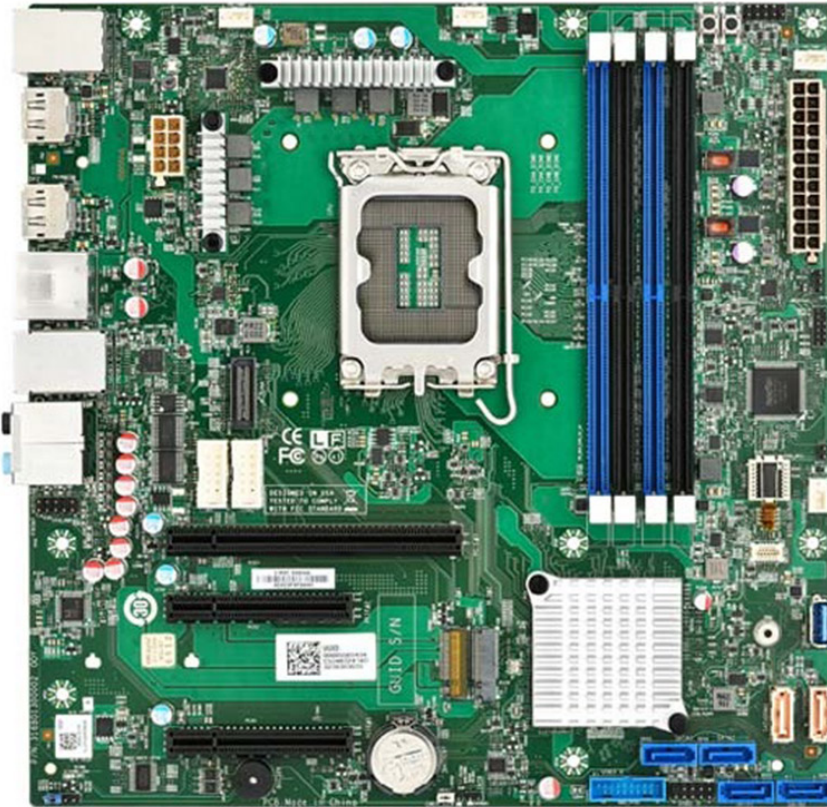


298.00 EUR

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

- Intel Q670 !
- 2x LAN !



- Intel® Raptor Lake-S Refresh 14th/Raptor Lake-S 13th /Alder Lake-S 12th i9/i7/i5/i3 125W processor
- Intel® Q670 Chipset
- Intel® vPro technology support (Q670)
- 4x DDR4 U-DIMM up to 128GB
- 1 x PCIe X16 slot, 2 x PCIe X8 slot (x4 Lanes), 2 x M.2 2280/2210 M-key (NVME)
- Support triple display for 3 x DisplayPort
- Up to 6 x SATAIII (support RAID 0, 1, 5, 10)
- Up to 2 x Intel® Gigabit Ethernet
- Up to 7 x USB 3.2 Gen1, 4 x USB 2.0, 2 x COM ports
- ATX power input

FORM FACTOR

Micro-ATX: 9.6" x 9.6" (244 mm x 244 mm)

|                   |                                                                                                                                                                                                                           |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | 14th/13th/12th Gen Intel® Raptor Lake-S Refresh/ Raptor Lake-S/ Alder Lake-S LGA1700 Socket Processor / Core i9/i7/i5/i3 Processor / TDP 125W                                                                             |
| PROCESSOR         |                                                                                                                                                                                                                           |
| CHIPSET           | Intel® Q670                                                                                                                                                                                                               |
| SYSTEM MEMORY     | 4 x 288-pin U-DIMM / DDR4 3200 MHz / Max. 128 GB (Non-ECC)                                                                                                                                                                |
| GRAPHICS          | Intel® UHD Graphics 770                                                                                                                                                                                                   |
| ETHERNET          | Intel® I219-LM Giga LAN + Intel® I225V 2.5 Giga LAN                                                                                                                                                                       |
| AUDIO             | Realtek® ALC888-VR                                                                                                                                                                                                        |
| I/O CHIPSET       | Nuvoton NCT6796D-E                                                                                                                                                                                                        |
| TPM               | TPM Header / (support optional TPM module board NPCT750)                                                                                                                                                                  |
| EXPANSION SLOT    | Q670: PCIe 3.0 X16 slot/ 2 x PCIe 3.0 X8 slot (X4 Lanes)/ M.2 2280 / 22110 M key (PCIe X4)/ M.2 2280 / 22110 M key (PCIe X2) / H610: PCIe 3.0 X16 slot/ 1 x PCIe 3.0 X8 slot (X4 Lanes)/ M.2 2280 / 22110 M key (PCIe X2) |
| 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                                                                                                                                                                                                      |
| VGA               | -                                                                                                                                                                                                                         |
| DVI               | -                                                                                                                                                                                                                         |
| HDMI              | -                                                                                                                                                                                                                         |
| DISPLAYPORT       | Up to 4K (4096 x 2304) @60 Hz                                                                                                                                                                                             |
| LVDS              | -                                                                                                                                                                                                                         |
| eDP (Option)      | -                                                                                                                                                                                                                         |
| USB               | 4 x USB 3.2 Gen 1(2 x with USB2.0 Signal only when H610) / 2 x USB 2.0                                                                                                                                                    |
| DISPLAY I/O       | 3 x DisplayPort 1.2                                                                                                                                                                                                       |
| AUDIO I/O         | 1 x 6-stack Audio Jack                                                                                                                                                                                                    |
| LAN I/O           | 2 x RJ-45                                                                                                                                                                                                                 |
| SERIAL PORT       | -                                                                                                                                                                                                                         |
| PS/2 PORT         | -                                                                                                                                                                                                                         |
| OTHERS            | -                                                                                                                                                                                                                         |

|                       |                                                                                                                                    |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------|
| STORAGE               | 6 x SATAIII (4 x SATAIII when H610)                                                                                                |
| USB                   | 2 x USB 2.0<br>/ 1 x USB 3.2 Gen1 Type A connector (This Type A connector is with USB2.0 Signal only when H610) / 2 x USB 3.2 Gen1 |
| DISPLAY I/O           | -                                                                                                                                  |
| AUDIO I/O             | 1 x Front Audio                                                                                                                    |
| SERIAL PORT           | 2 x RS232                                                                                                                          |
| PS/2 PORT             | -                                                                                                                                  |
| PARALLEL PORT         | -                                                                                                                                  |
| GPIO                  | -                                                                                                                                  |
| FAN                   | 1 x 4-pin CPU Fan Header / 3 x 4-pin system Fan Header                                                                             |
| POWER                 | 1 x 8-pin ATX Power Connector<br>/ 1 x 24-pin ATX Power Connector                                                                  |
| OTHERS                | 1 x CMOS Jumper<br>/ 1 x FIO header<br>/ 1 x SPI TPM header                                                                        |
| POWER INPUT           | ATX 8-pin + ATX 24-pin                                                                                                             |
| OPERATING TEMPERATURE | 0 ~ 60°C (32 ~140°F)                                                                                                               |
| STORAGE TEMPERATURE   | -20 ~ 70°C (-4 ~158°F)                                                                                                             |
| OPERATING HUMIDITY    | 10% ~ 95% R/H<br>(Non-condensing)                                                                                                  |
| CERTIFICATION         | CE / FCC Class B                                                                                                                   |
| OS SUPPORT            | Linux (support by request) /<br>Ubuntu 20.04 / Windows® 10<br>64-bit / Windows® 11 64bit,                                          |
| PACKAGE               | 1 x 50 cm SATA Cable / 1 x I/O<br>Bracket / 1 x Motherboard                                                                        |