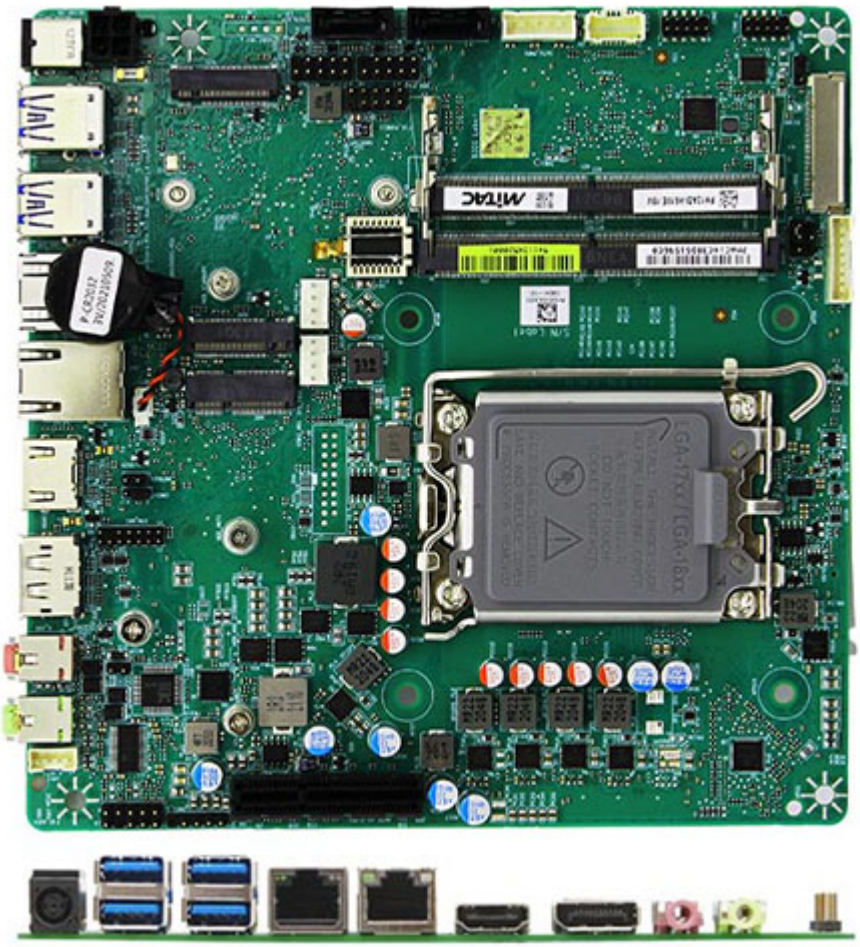

209.95 EUR
incl. 19% VAT, plus shipping

- 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), 1 x M.2 2230 E-key (CNVi), 1 x M.2 3042 B-Key, 1 x PCIe X4
- 1 x Intel® 2.5Gigabit Ethernet, 1 x 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