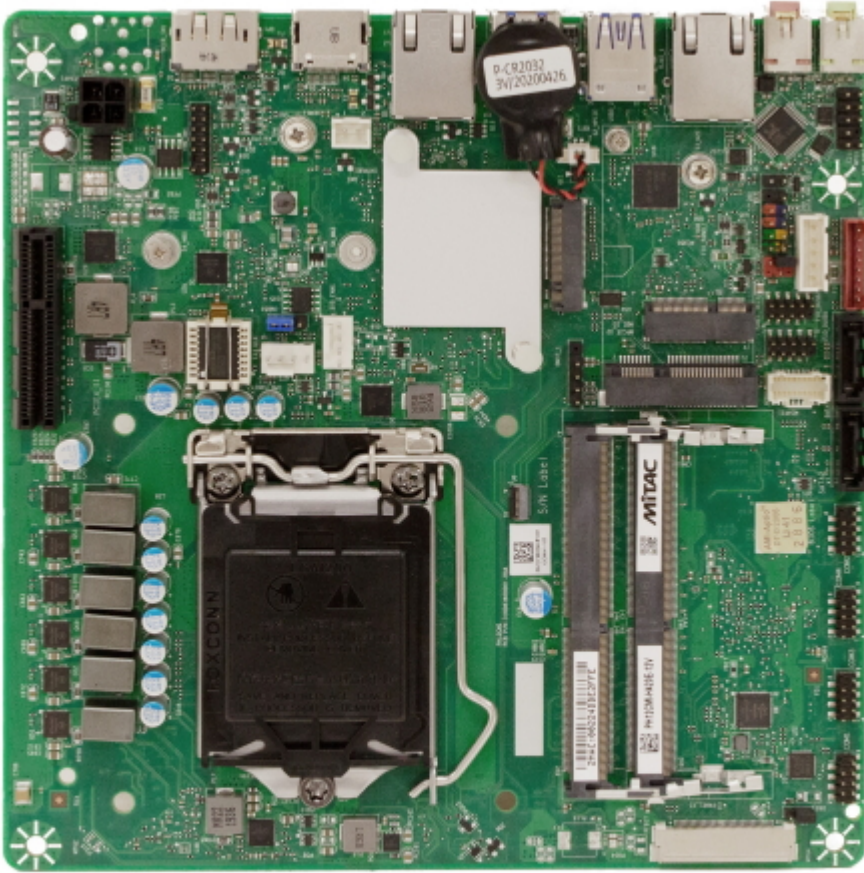




249.95 EUR

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

- Intel Q470E Chipset !
- Intel vPro tech support !
- up to 32GB DDR4 SO-DIMM !
- Support triple display !



- Intel® Comet Lake 10th 65W(10cores) LGA processor
- Intel® Q470E Chipset
- Intel® vPro technology support (Q470E)
- 2 x DDR4 SO-DIMM up to 32GB
- Support triple display for HDMI, DisplayPort and LVDS/eDP
- 1 x M.2 M 2280, 1 x M.2 E 2230, 1 x mPCIe Full size, 1 x PCIe X4
- 2 x Intel® Gigabit Ethernet
- DC-in 12V

MECHANICAL

FORM FACTOR

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

|                     |                   |                                                                                                                                                                                |
|---------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SYSTEM              | PROCESSOR         | 10th Gen Intel® Comet Lake LGA1200<br>Socket Processor / 10core TDP Max 35W /<br>8ccore TDP 65W                                                                                |
|                     | CHIPSET           | Intel® Q470 (Support RAID 0 / 1 / 5, VPro)                                                                                                                                     |
|                     | SYSTEM MEMORY     | DDR4 2933/2666/2400MHz / 2 x 260-pin<br>SO-DIMM / Max. 64 GB (Non-ECC)                                                                                                         |
|                     | GRAPHICS          | Intel® HD Graphics                                                                                                                                                             |
|                     | ETHERNET          | Intel® I219-LM Giga LAN + Intel® I211-AT<br>Giga LAN                                                                                                                           |
|                     | AUDIO             | Realtek® ALC662 / ALC888                                                                                                                                                       |
|                     | I/O CHIPSET       | Nuvoton NCT6126D(eSPI)                                                                                                                                                         |
|                     | TPM               | TPM Header / (support TPM module board<br>NPCT750)                                                                                                                             |
|                     | EXPANSION SLOT    | 1 x M.2 2230 E key(PCIe / USB) / PCIe 3.0<br>X4 slot / M.2 2242 / 2280 M key (PCIe,<br>SATA) / Mini PCIe Full size (PCIe / USB /<br>SATA)                                      |
|                     | BIOS              | AMI BIOS / 128 Mbit SPI                                                                                                                                                        |
| GRAPHICS            | H/W MONITOR       | Temperature Monitor / Voltage Monitor / Fan<br>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                                                                                                                                                  |
| REAR I/O            | USB               | 4 x USB 3.2 Gen 2 (Q470)                                                                                                                                                       |
|                     | 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(DIN 4-pin power cable) / DC-in<br>19V (5.1 mm / ID, 7.4 mm / OD)                                                                                                     |
|                     | STORAGE           | 2 x SATAIII / 1 x SATA power header                                                                                                                                            |
|                     | USB               | 6 x USB 2.0                                                                                                                                                                    |
|                     | DISPLAY I/O       | 1 x LVDS (*Optional eDP SKU available) / 1<br>x Backlight Connector                                                                                                            |
| INTERNAL CONNECTORS | AUDIO I/O         | -                                                                                                                                                                              |
|                     | SERIAL PORT       | 4 x RS232 (One supports RS232 / 422 /<br>485)                                                                                                                                  |
|                     | PARALLEL PORT     | -                                                                                                                                                                              |
|                     | GPIO              | 1 x MiAPI Header (Programmable. Support<br>10-bit GPIO)                                                                                                                        |
|                     | FAN               | 1 x 4-pin CPU Fan Header / 1 x 4-pin<br>System Fan Header                                                                                                                      |
|                     | POWER             | 1 x AT / ATX Mode Select Jumper / 1 x 4-pin<br>ATX Power Connector                                                                                                             |
|                     | OTHERS            | 1 x CMOS Jumper / 1 x Front Audio Header<br>(Mic-in & Line-out) / 1 x panel power select<br>header / 1 x backlight power select header, /<br>1x buzzer header / 1x Digital MIC |
|                     |                   |                                                                                                                                                                                |
|                     |                   |                                                                                                                                                                                |
|                     |                   |                                                                                                                                                                                |

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|                   |                       |                                                                                                                           |
|-------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------|
| POWER REQUIREMENT | POWER INPUT           | DC-in 19V (5.1 mm / ID, 7.4 mm / OD) / ATX<br>2-pin 19V / DC-in 12V(DIN 4-pin power<br>cable)/ ATX 4-pin 12V              |
| 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)                                                                                            |
|                   | CERTIFICATION         | CE / FCC Class B                                                                                                          |
| OS                | OS SUPPORT            | Windows® 10 64-bit / Linux (support by<br>request)                                                                        |
| PACKING LIST      | PACKAGE               | 1 x Motherboard / 2 x I/O Bracket (Half and<br>Full Height) / 1 x Quick Installation Guide / 1<br>x SATA & SATA PWR Cable |