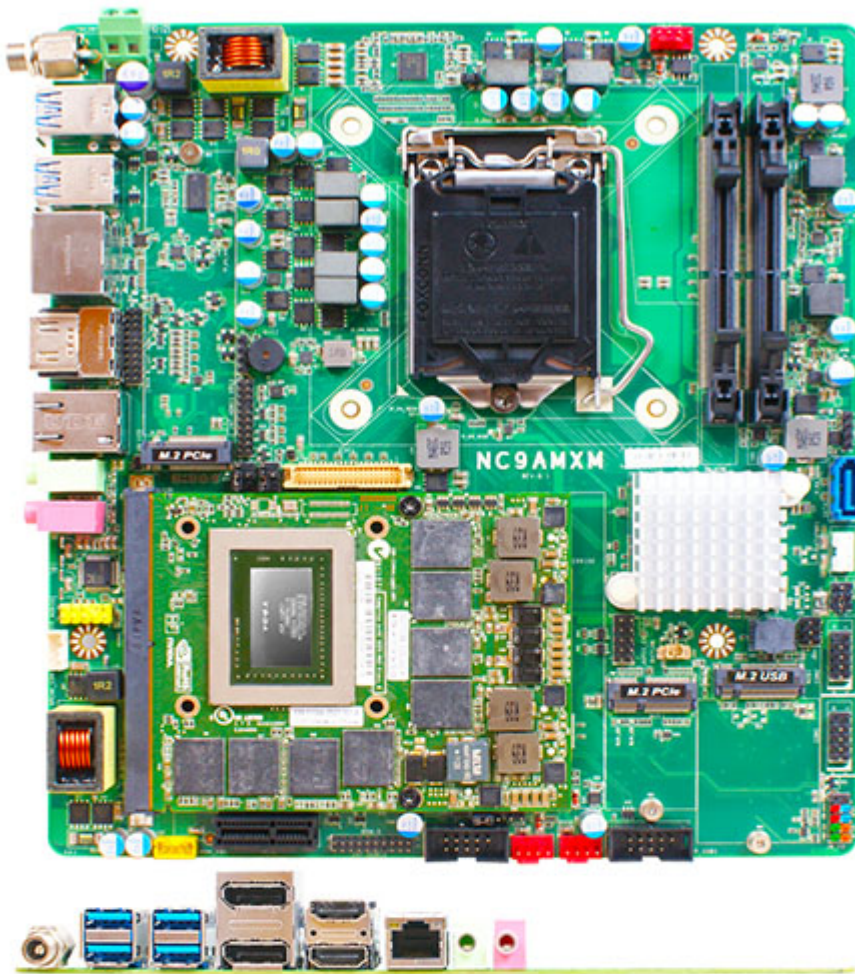
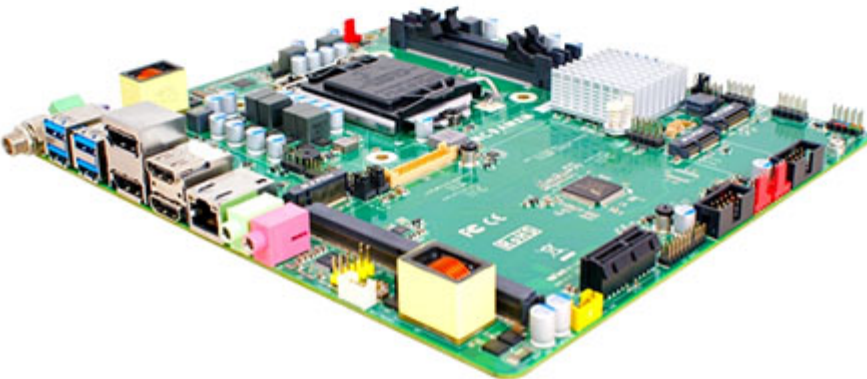




279.00 EUR

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

- Intel 8th/9th Gen. !
- H310 Chipset !
- SBC !



- Intel® LGA1151 Socket Core I3,I5,I7 Pentium Processor
- Intel® Coffee Lake-S H310 Chip
- Support Dual Channel DDR4 2133MHz SO-DIMM up to 32GB
- Support 1\* MXM VGA Card Socket (MXM:90W)
- 1\* SATA III (6Gb/s) & M.2 (M key 2280, NVMe), 1\* PCI-E x1, 1\* M.2 E key Support CNVi, 1\* M.2 B key Support 3G/4G Module
- 1\* Intel® I219LM GbE, 2\* RS232 (COM2 Support 5V/12V TTL), 4\* External USB3.1, 4\* Internal USB2.0
- 12 ~ 36V DC-in
- Form Factor: 220\*200mm

MXM module not included in scope of supply !

| Form Factor            |                                                                                                                                                                                                                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions             | – SBC (220 * 220mm)                                                                                                                                                                                                                                                                                      |
| Processor System       |                                                                                                                                                                                                                                                                                                          |
| CPU                    | – Intel® LGA1151 Coffee Lake Series Processor (Max 90W)                                                                                                                                                                                                                                                  |
| Core Number            | – (by CPU)                                                                                                                                                                                                                                                                                               |
| Max Speed              | – (by CPU)                                                                                                                                                                                                                                                                                               |
| L2 Cache               | – (by CPU)                                                                                                                                                                                                                                                                                               |
| Chipset                | – H310 /Q370                                                                                                                                                                                                                                                                                             |
| BIOS                   | – AMI 128M Flash ROM                                                                                                                                                                                                                                                                                     |
| Expansion Slot         |                                                                                                                                                                                                                                                                                                          |
| Expansion              | <ul style="list-style-type: none"> <li>– 1* M.2 M Key (2280, for NVMe)</li> <li>– 1* M.2 E Key (2230, support CNVi)</li> <li>– 1* M.2 B Key (3042, support 3G/4G Module)</li> <li>– 1* SATA</li> <li>– 1* PCIe x1 slot</li> <li>– 1* MXM Card Socket (Max: 90W)</li> <li>– 1* SIM Card holder</li> </ul> |
| Memory                 |                                                                                                                                                                                                                                                                                                          |
| Technology             | – Dual CH DDR4 2400MHz DRAM                                                                                                                                                                                                                                                                              |
| Max.                   | – 32GB                                                                                                                                                                                                                                                                                                   |
| Socket                 | – 2 * SO-DIMM                                                                                                                                                                                                                                                                                            |
| Graphics 1             |                                                                                                                                                                                                                                                                                                          |
| Controller             | – Intel® HD Graphics                                                                                                                                                                                                                                                                                     |
| VRAM                   | – Shared Memory                                                                                                                                                                                                                                                                                          |
| eDP 1.2                | – 1 (Max Resolution : 4096×2304@60Hz, by CPU)                                                                                                                                                                                                                                                            |
| DisplayPort            | – 1 (Max Resolution : 4096×2304@60Hz, by CPU)                                                                                                                                                                                                                                                            |
| HDMI                   | – 1 (Max Resolution : 4096×2160@30Hz, by CPU)                                                                                                                                                                                                                                                            |
| Graphics 2             |                                                                                                                                                                                                                                                                                                          |
| Controller             | – by MXM VGA Cards                                                                                                                                                                                                                                                                                       |
| DisplayPort            | – 1* DP, by MXM VGA Card                                                                                                                                                                                                                                                                                 |
| HDMI                   | – 3* HDMI, by MXM VGA Card                                                                                                                                                                                                                                                                               |
| Multi Display          | – 6                                                                                                                                                                                                                                                                                                      |
| Ethernet               |                                                                                                                                                                                                                                                                                                          |
| Ethernet               | – 10/100/1000 Mbps                                                                                                                                                                                                                                                                                       |
| Controller             | – Intel® I219LM GbE                                                                                                                                                                                                                                                                                      |
| Connector              | – 1 * RJ 45                                                                                                                                                                                                                                                                                              |
| Audio                  |                                                                                                                                                                                                                                                                                                          |
| CODEC                  | – HD Audio : Realtek ALC662VD                                                                                                                                                                                                                                                                            |
| Channel                | – Line-Out, MIC                                                                                                                                                                                                                                                                                          |
| SATA                   |                                                                                                                                                                                                                                                                                                          |
| Max Data Transfer Rate | – 1* SATAIII (6.0Gb/s)                                                                                                                                                                                                                                                                                   |
| Rear I/O               |                                                                                                                                                                                                                                                                                                          |

|                           |                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rear I/O                  | <ul style="list-style-type: none"> <li>– 2* HDMI</li> <li>– 2* DP</li> <li>– 1* RJ45</li> <li>– 4* USB3.1</li> <li>– Line-Out, MIC</li> <li>– 9~36 V DC-in</li> </ul>                                                                                                                                                                                                                  |
| <b>Internal Connector</b> |                                                                                                                                                                                                                                                                                                                                                                                        |
| Internal Connector        | <ul style="list-style-type: none"> <li>– 4* USB 2.0</li> <li>– 1* eDP</li> <li>– 3* HDMI</li> <li>– 2* COM (COM2 support 5V/12V TTL)</li> <li>– 1* SATAIII (6.0Gb/s)</li> <li>– 3* M.2 (M key, E key, B key)</li> <li>– 1* 8bit GPIO</li> <li>– 1* Chassis intrusion</li> <li>– 1* Audio Header</li> <li>– 1* 3W AMP Speaker</li> <li>– 1* SMBUS/ I2C</li> <li>– 1* AT mode</li> </ul> |
| <b>Watchdog Timer</b>     |                                                                                                                                                                                                                                                                                                                                                                                        |
| Output                    | – From Super I/O to drag RESETCON#                                                                                                                                                                                                                                                                                                                                                     |
| Interval                  | – 256 segments (10sec ~ 255min)                                                                                                                                                                                                                                                                                                                                                        |
| <b>Power Requirements</b> |                                                                                                                                                                                                                                                                                                                                                                                        |
| Input PWR                 | – 12~36V DC-in                                                                                                                                                                                                                                                                                                                                                                         |
| Power On                  | AT/ATX Supported<br>– AT : Directly PWR on as Power input ready<br>– ATX: Press Button to PWR on after Power input ready                                                                                                                                                                                                                                                               |
| <b>Certifications</b>     |                                                                                                                                                                                                                                                                                                                                                                                        |
| Certifications            | – CE, FCC, RoHS, REACH                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Environment</b>        |                                                                                                                                                                                                                                                                                                                                                                                        |
| Temperature               | – Operating: 0°C ~ 60°C                                                                                                                                                                                                                                                                                                                                                                |
|                           | – Storage: -20°C ~ 85°C                                                                                                                                                                                                                                                                                                                                                                |