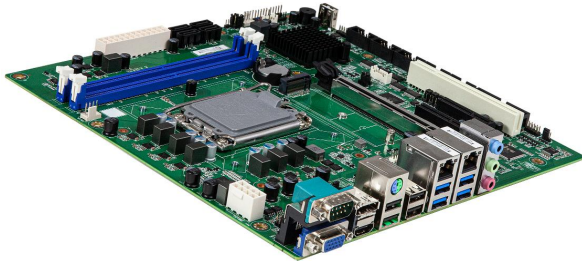# AIoT9-H610
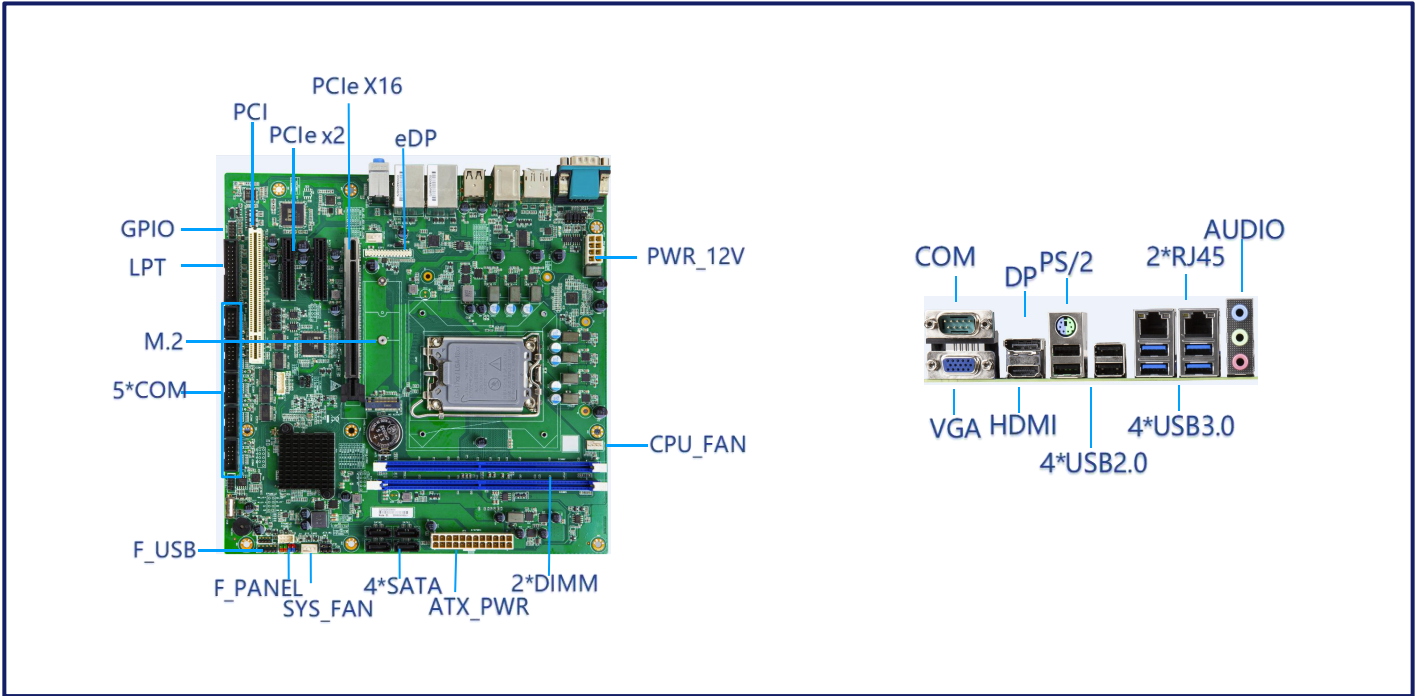## Standard Micro ATX industrial motherboard



- Support LGA1700 packaged Gen12&13&14 i9/i7/i5/i3 CPUs
- 2 DDR4 UDIMM slots support up to 64GB
- PCIe5.0 x16, 2 PCIe3.0 x2 and 1 PCI slots
- 4 USB3.0 ports can connect to Industrial cameras
- Four display port, support  Triple-display
- Using high Tg grade PCB boards to ensure wide temperature stability
- Industrial grade IO protection device, blocking ESD and surges, ensuring system stability and reliability
- Optimized interface and expansion layout effectively avoid interference and facilitate expansion for industry users
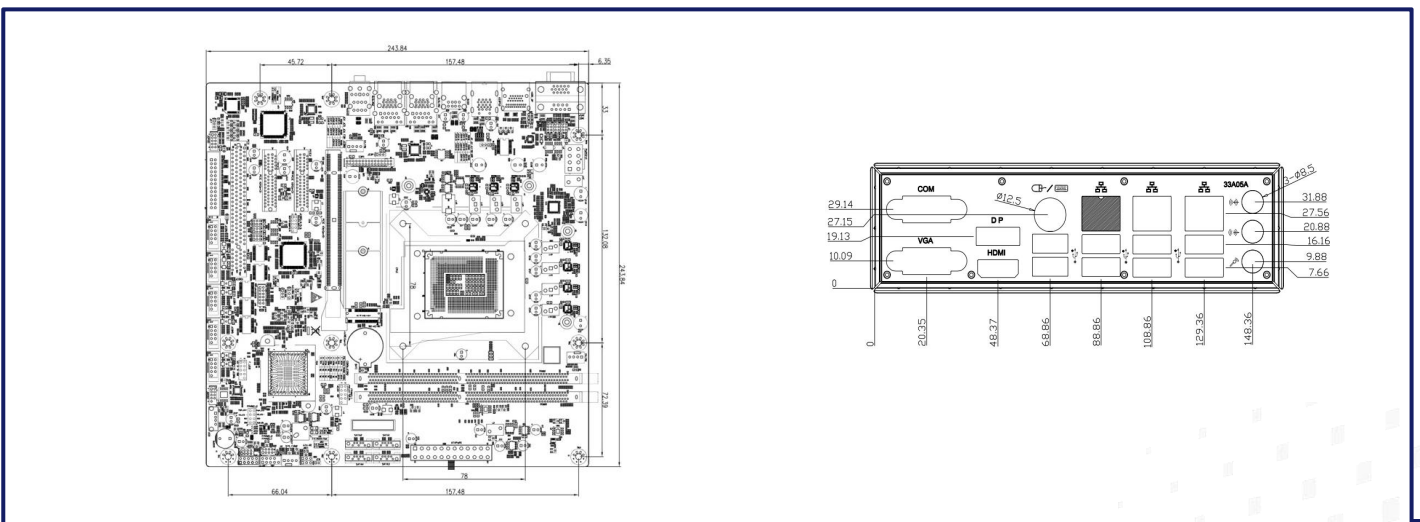
# 01
# Specifications

| | |
|---|---|
| CPU | Support LGA1700 packaged Gen12&13&14 i9/i7/i5/i3 CPUs, TDP 65W |
| Chipset | Intel ® H610 chipset |
| Memory | 2 * 288Pin DDR4 UDIMM memory slot, single slot 32GB maximum support 64GB<br>Depending on the assigned CPU support DDR4-2133/2400/2666/2933/3200 |
| Display controller | Intel CPU Integrated display controller (depending on the assigned CPU) |
| Display interface | VGA + HDMI + DP + eDP four display port, support Triple-display |
| Storage | 4 SATA 3.0 (6 Gb/s) Ports<br>1 M.2 2242/2280 Key-M supports Nvme x2 SSD |
| Audio | Rear IO supports MIC-In, Speaker-Out, Line-In  audio jack, |
| Network | 2 Intel high-speed Ethernet ports: LAN1 i226-V; LAN2 i219V |
| USB | 8 rear IO USB( 4*USB3.0,  2*USB2.0 Type A ) ; 2 intenal USB(1*USB 2.0 Type-A)<br>Chassis front panel USB interface F_USB1 and F_USB2 , choose one from two |
| Parallel/I²C/SMBus | 1 * parallel port |
| Serial port | 6 serial port (COM1&2 supports RS232/422/485, COM3-6 supports RS232) |
| Keyboard & mouse | 1 PS/2 Keyboard & mouse via 2-in-1 connector on the rear IO |
| Digital I/O | 8-bit digital I / O, providing power supply and ground, + 5V level |
| LPC/eSPI | 1 eSPI bus |
| TPM interface | On board encryption chip SLB9670, supporting TPM2.0 |
| Power  supply | ATX power Socket, supports ATX/AT On/Off mode<br>Chassis front panel FPANEL1 and FPANEL2 Pin-header , choose one from two |
| Expansion bus | 1 * PCIe 5.0 x16 slot, maximum data bandwidth 64GB/s;<br>2 * PCIe 3.0 x4 slots(x2 signal), maximum data bandwidth 2GB/s<br>1 * Standard PCI slot (32bit) |
| Operating temperature and humidity | -10℃~60℃, relative humidity 0%~90%, no condensation, air pressure 85-105kPa |
| Non-operating temperature and humidity | -40℃~85℃, relative humidity 0%~90%, no condensation, air pressure 85~105kPa |
| Watch Dog | 255-level programmable in the mode of seconds/minutes, supports timeout interrupt or system reset |
| BIOS | AMI UEFI BIOS |
| Operating System | Win10 x64,  Win11 x64,  Linux Ubuntu 22.04 |
| PCB dimensions (L*W) | 244mm X 244mm |

# 02 Product view



- PCI
- PCIe X16
- PCIe x2
- eDP
- GPIO
- LPT
- M.2
- 5*COM
- F_USB
- F_PANEL
- SYS_FAN
- 4*SATA
- ATX_PWR
- 2*DIMM
- CPU_FAN
- PWR_12V

- COM
- DP
- PS/2
- 2*RJ45
- AUDIO
- VGA
- HDMI
- 4*USB2.0
- 4*USB3.0

# 03 Dimensions



# 04 Product Selection

| Product model | Chipset | Memory | Display | Storage | USB3 | USB2 | COM | LAN | PCI | PCIe |
|---|---|---|---|---|---|---|---|---|---|---|
| AIoT9-H610 | H610 | 2 DDR4 | 4(3) | 4SATA | 4 | 6 | 6 | 2 | 1PCI | 3PCIe |