

# AIoT0-W580

## High performance ATX industrial motherboard

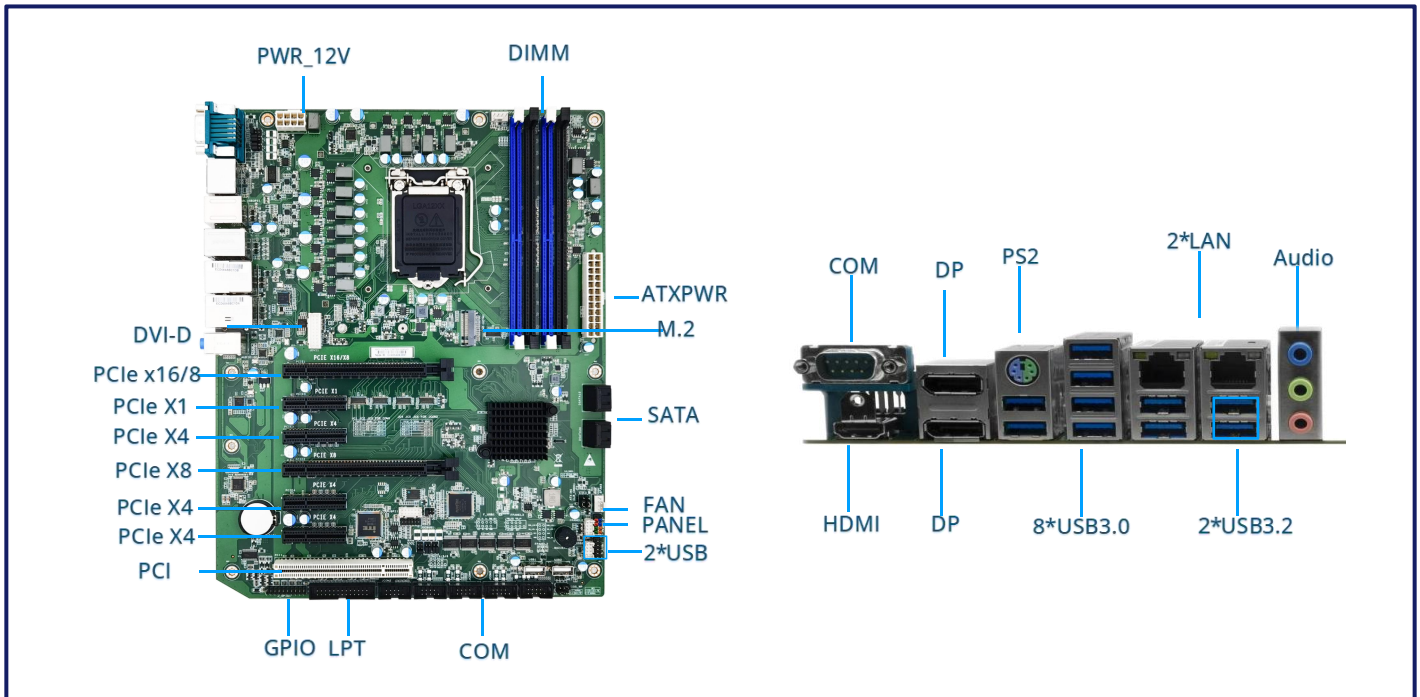


- Support LGA1200 Gen10&11 W/i9/i7/i5/i3/G , TDP up to 125W. CPUs above i5 can support vPro
- 4 \* DDR4 U-DIMM slot, supports up to 128GB
- 6 \* PCIe expansion slot, which can be expanded to a maximum of 22 Gigabit Intel ports
- 10 \* USB3.2 high-speed interface, which can be connected to high-definition video equipment
- Triple-display /4SATA/2GbE/14USB/6COM/1PCI/6PCIe
- 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
- Supports dual GPU card expansion, empowering AI and MV applications

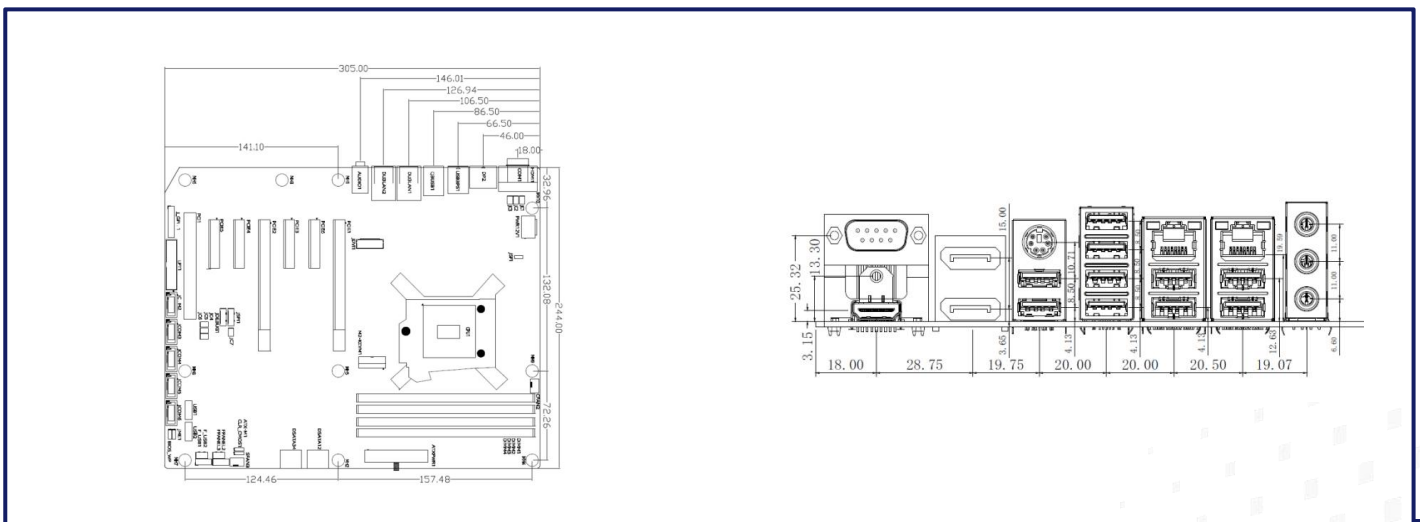
## 01 Specifications

CPU	Support LGA1200 Gen10&11 W/i9/i7/i5/i3/G , TDP up to 125W. CPUs above i5 can support vPro
Chipset	Intel®W580 chipset
Memory	4*288PIN DDR 4 UDIMM , single 32GB maximum support of 128GB with ECC Depending on the different CPU , support DDR4-2133/2400/2666/2933/3200
Display controller	Intel CPU Integrated display controller (depending on the assigned CPU)
Display interface	Four display output DP+DP+HDMI+DVI-D, supports independent triple display
Storage	4 * SATA3.0, supports SATA Raid0/1/5/10 (when SATA SSD is inserted into M.2, there is no signal from SATA1) 1 * M.2 2242/2280Key-M SSD connector, supports SATA bus or Nvme4 (only Gen 11 CPU support nVME)
Audio	Rear IO supports MIC-In, Speaker-Out, Line-In, and three-hole audio
Network	2 * Intel Fast Ethernet ports: LAN1: i226-LM 2.5Gb, LAN2: i219V, i5 or above CPU support vPro
USB	10 rear IO USB3.2 Type A ( 2 * Gen2 , and 8 Gen1 ) ; 4 internal USB ( 2 x USB 2.0 via header, 2 x USB 2.0 Type-A) Chassis front panel USB interface F_USB1 and F_USB2 , choose one from two
Parallel port	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	16-bit digital I / O, providing power supply and ground, + 5V level
LPC/eSPI	1 eSPI bus (2x6Pin can expand four serial ports)
TPM interface	On board encryption chip SLB9670, supporting TPM2.0
Power supply	ATX power Socket, supports ATX/AT On/Off mode Chassis front panel FPANEL1 and FPANEL2 Pin-header , choose one from two
Expansion bus	2 * PCIe3.0 x16 slot ( x16 or x8 self-adaption) 4 * PCIe3.0 x4 expansion slot ( 3 * x4, 1 * x1) 1 * PCI (32bit)
Operating temperature and humidity	-10 °C~60 °C, relative humidity 0%~90%, no condensation, air pressure 85-105kPa
Non-operating temperature and humidity	-40 °C~85 °C, 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)	305mm X 244mm

## Product view



## Dimensions



## Product Selection

Product model	Chipset	Memory	Display	Storage	USB3	USB2	COM	LAN	PCI	PCIe
AloT0-W580	W580	4 DDR4	4(3)	4SATA	10	4	6	2	1PCI	6PCIe