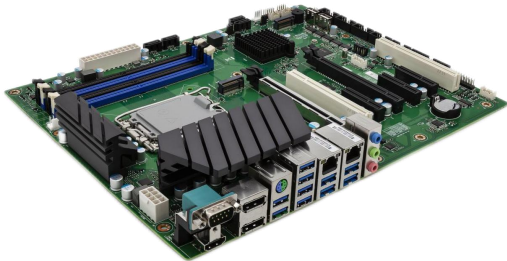


AIoT0-W680

High performance ATX industrial motherboard

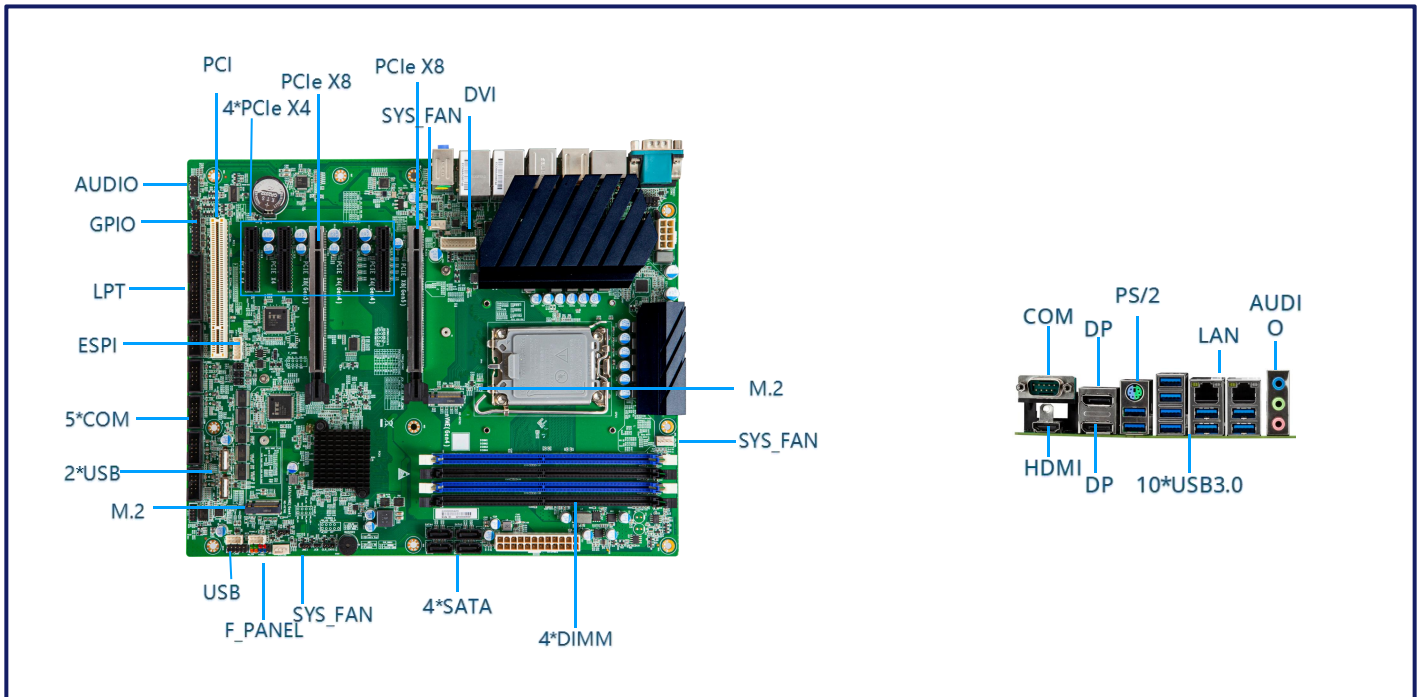


- Support LGA1700 packaged Gen12&13&14 i9/i7/i5/i3 CPUs
- Four DDR5 U-DIMM slots support maximum of 192GB
- Five PCIe expansion grooves can expand up to 22 stem network ports
- 10 USB3.2 high-speed ports can connect to Industrial cameras
- Four display / 4 SATA / 2 GbE / 14USB / 6COM / 1PC / 6 PCIe
- 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

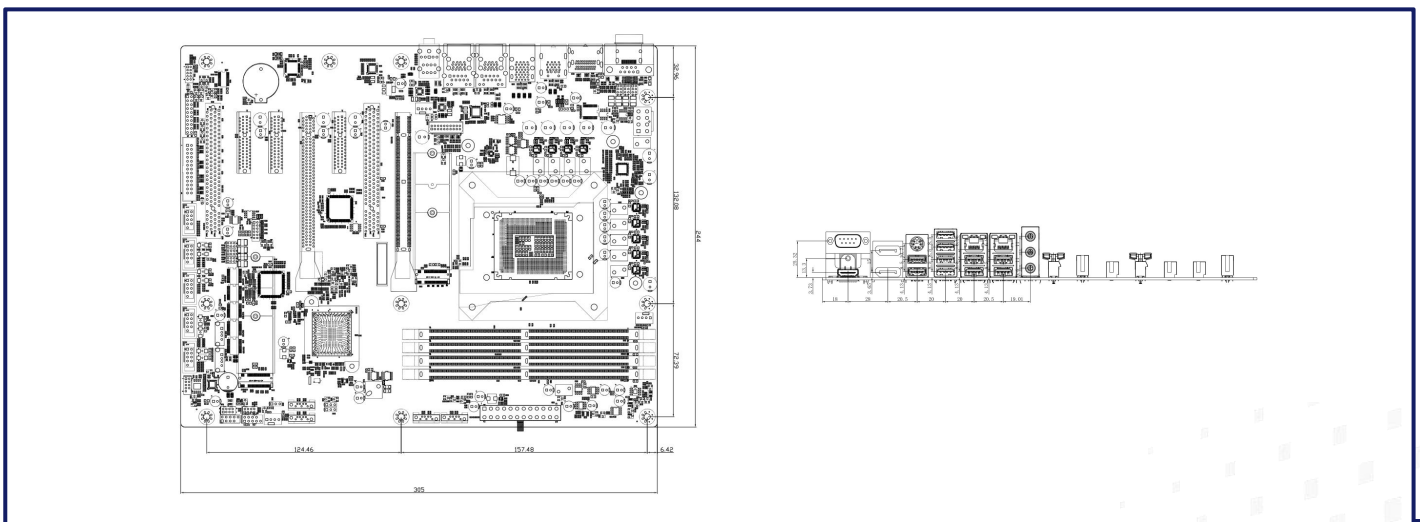
01 Specifications

CPU	Support LGA1700 packaged Gen12&13&14 i9/i7/i5/i3 CPUs (not supporting G-series), TDP up to 125W, i5 and above support vPro
Chipset	Intel ® W680 chipset
Memory	4 DDR5 U-DIMM memory slots, support dual channels, support ECC memory; With Gen.12 CPU support 2 * DDR5-4800 (black), 4 * DDR5-4000,single 32GB, maximum 128GB; With Gen.13&14 CPU support 2 * DDR5-5600 (black), 4 * DDR5-4000,single 48GB, maximum 192GB;
Display controller	Intel CPU Integrated display controller (depending on the assigned CPU)
Display interface	Four display output DP + DP + HDMI + DVI-D, support independent four display HDMI: 3840*2160@60Hz ; DP: 5120*2160@60Hz ; DVI-D: 1920*1080@60Hz
Storage	4 SATA 3.0 (6 Gb/s) Ports, Support SATA Raid 0 / 1 / 5 / 10 2 M.2 2242 / 2280 Key-M supports Nvme (M2-KEYM 2 supports SATA / Nvme adaptation)
Audio	The rear IO supports MIC-In, Speaker-Out, Line-In three-hole audio, with a reserved front panel audio pin F_Audio
Network	2 Intel high-speed Ethernet ports: LAN1: i226-LM/V2.5Gb; LAN2: i219V
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	1 * PCIe 5.0 x16 slot, maximum data bandwidth 64GB/s; 1 * PCIe 4.0 x16 slot (x4 signal), maximum data bandwidth 8GB/s 1 * PCIe 4.0 x4 slot, maximum data bandwidth 8GB/s 2 * PCIe 3.0 x4 slots, maximum data bandwidth 4GB/s 2 * Standard PCI slot (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-W680	W680	4 DDR5	4(4)	4SATA	10	4	6	2	2PCI	5PCIe