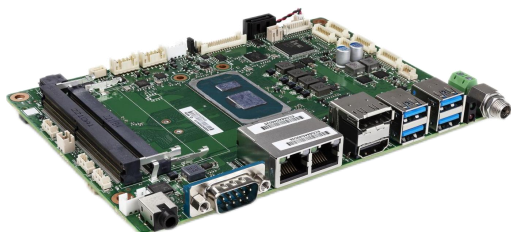


AIoT4-TGU

4" embedded industrial motherboard

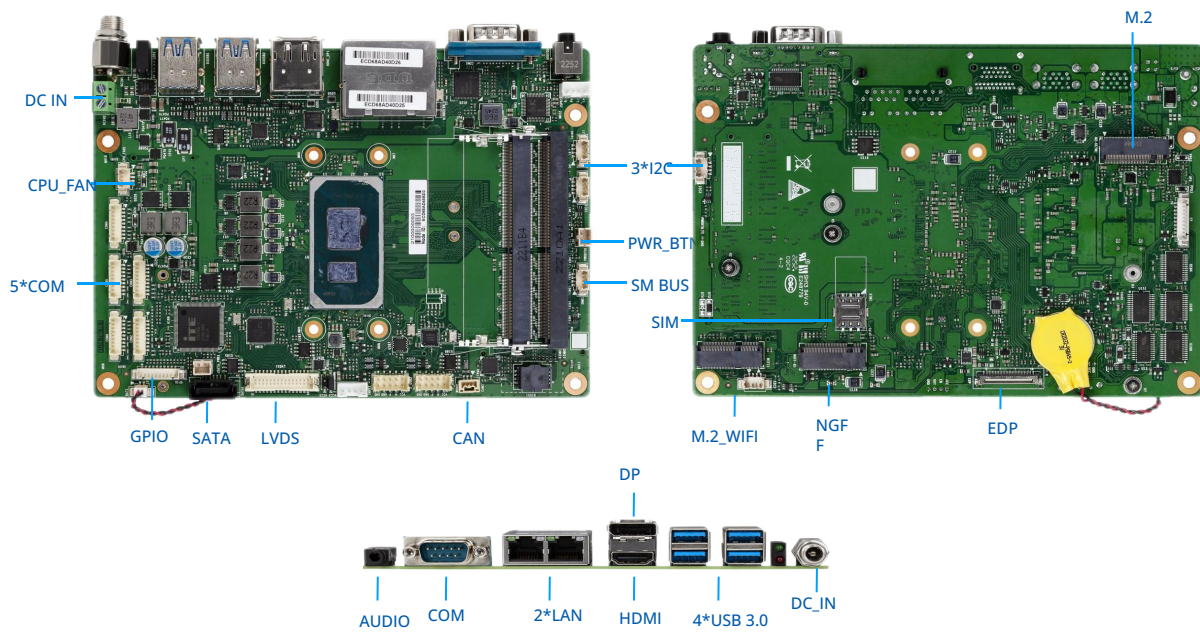


- Intel TigerLake U series low-power CPU, TDP 15W ,Turbo 28W
- 2 DDR4 SO-DIMM slots, supporting up to 64GB
- M.2 2280 Key-M supports SATA/nVME auto-adaptation
- M.2 3042/3052 Key-B for 4G/5G, M.2 2230 Key-E for Wifi/BT
- 4 Independent display interfaces HDMI+DP+LVDS+eDP
- 2 Intel high-speed network interfaces, 4KV surge protection
- 4 USB 3.2 Gen2 ports for connecting HD video devices
- Industrial-grade port protection blocks static electricity and surges, and can choose a wide temperature range of -40~70°C

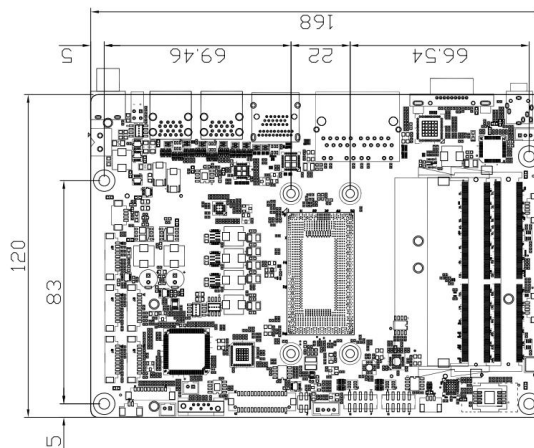
Specifications

CPU	Intel Celeron 6305/6305E or Intel Core i3-1115G4/i3-1115G4E or Intel Core i5-1135G7/i5-1145G7E or Intel Core i7-1195G7/i7-1185G7E
Chipset	Intel Tiger Lake UP3 SOC
Memory	2 × DDR4 SODIMM memory slot, up to DDR4-3200 single socket up to 64GB
Display controller	Integrated Core Graphics: Intel UHD Graphics for 11th or Iris Xe Graphics (depending on CPU)
Display interface	Quad display interface : HDMI+DP+eDP+LVDS; 1 x LVDS: Dual Channel 18/24-bit, up to 1920 x 1200 1 x eDP1.4 HBR3, up to 4096x2304x36bpp@60Hz; (Optional: MIPI-DSI v1.3 2.5GHz, up to 3200x2000x24bpp@60Hz) 1 x HDMI 2.0b, up to 4Kx2Kx24bpp@60Hz 1 x DP1.4a, up to 4096x2304x36bpp@60Hz or 5120x3200x24bpp@60Hz
Storage	1xSATA3.0+PWR 2pin 2.0mm 1xM.2 2280 Key-M supports SATA/nVME self-adaptation
Audio	Support Mic-in+Line-out (single-hole 2-in-1); Support digital audio output with power amplifier (3W, 4Pin wafer)
Network	2 x RJ45 network ports (4KV surge protection) LAN1: Intel i219V, LAN2: Intel i210AT/IT (optional industrial grade)
USB	4 x USB3.2 Gen2x1 10GbType-A on the rear board
I ² C/I ² S/SMBus	3 x I2C 1Mbps, 1 x SMBus, 4Pin wafer
COM	6 x COM: COM1, COM2 support RS232/422/485 (BIOS setting) COM3~6 support RS232
CAN	1↑CAN Bus 2.0 (3Pin wafer)
Digital I/O	8-bit digital I/O interface (1x10Pin wafer)
TPM/TCM	The on-board encryption chip SLB9670 supports TPM2.0
Expansion bus	1 x M.2 Key-B 3042/3052 supports 4G/5G (PCIe x1, USB2.0) 1 x M.2 Key-E 2230 (PCIe x1, USB2.0)
Operating temperature and humidity	When using room temperature memory and storage: -10°C~60°C, relative humidity 10%~85%, atmospheric pressure 85~105kPa When using wide temperature memory and storage: -40~70°C, relative humidity 10%~85%, atmospheric pressure 85~105kPa
Non-operating temperature and humidity	Temperature: -40°C~85°C; The relative humidity is 5%~95% (40°C), and the atmospheric pressure is 85~105kPa
Watch Dog	255 levels of programmable seconds per minute with support for timeout interrupt or system reset
BIOS	AMI UEFI BIOS
Operating System	Windows10, Windows11, Linux Ubuntu 21.04
Power	DC+12V~24V anti-screw DC-Jack (optional 2Pin Phoenix terminal) power indicator, storage indicator
PCB dimensions (L*W)	4 inch: 168mm(W)×120mm(D)

Product view



Dimensions



Product Selection

Product model	CPU	Memory	Display	Storage	USB3	USB2	COM	LAN	M.2
AIoT4-TGU05	6305/6305E	2	4	1	4	4	6	2	1
AIoT4-TGUi3	i3-1115G4/i3-1115G4E	2	4	1	4	4	6	2	1
AIoT4-TGUi5	i5-1135G7/i5-1145G7E	2	4	1	4	4	6	2	1
AIoT4-TGUi7	i7-1195G7/i7-1185G7E	2	4	1	4	4	6	2	1