

AIoT4-EHL

4" embedded industrial motherboard

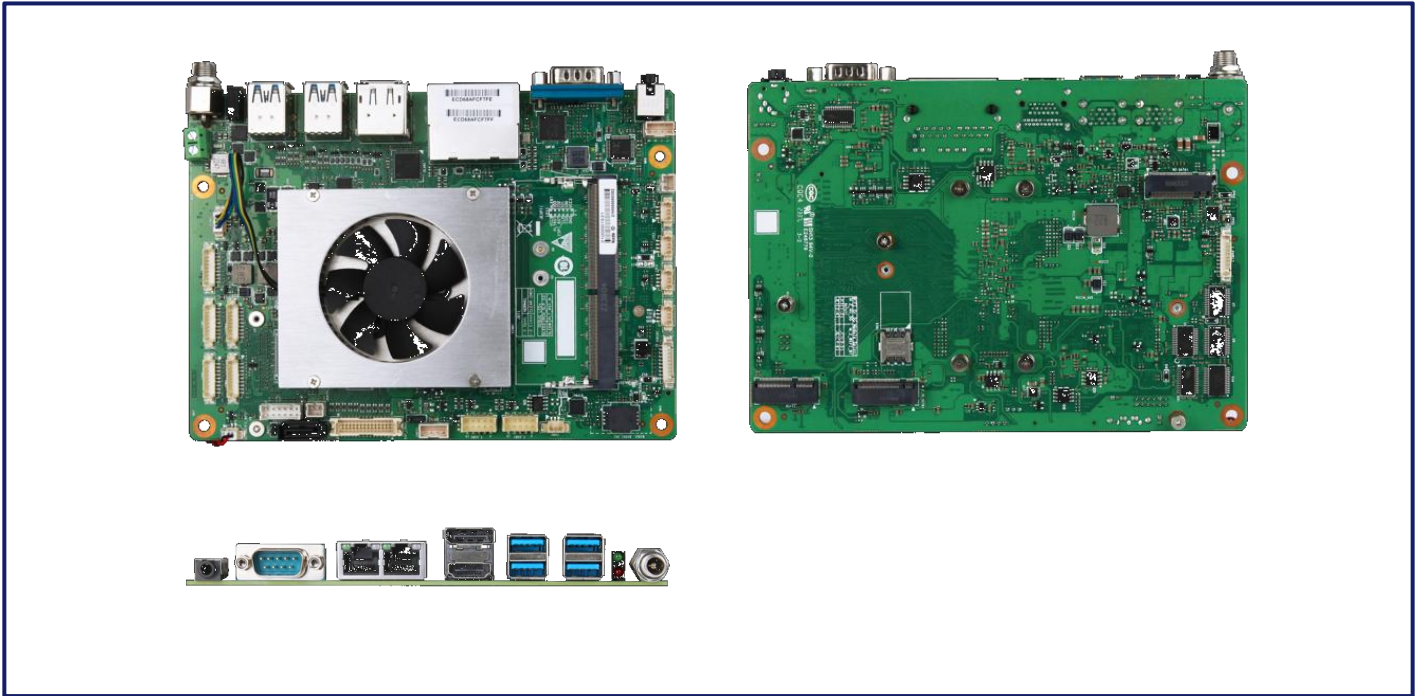


- Intel Elkhart Lake series low-power CPU, TDP10W
- 1 x DDR4 SO-DIMM slot, supporting up to 32GB
- M.2 2242/2280 Key-M supports SATA SSD
- M.2 3042/3052 Key-B for 4G/5G, M.2 2230 Key-E for Wifi/BT
- 3 display interface: HDMI+DP+eDP/LVDS
- 2 x high-speed network interfaces, 4KV surge protection
- 4 x USB 3.0 Gen1/5Gbps ports
- Optional working grade wide temperature -40~70°C
- Industrial-grade port protection blocks static electricity and surges, effectively protecting the stability and reliability of the core of the system

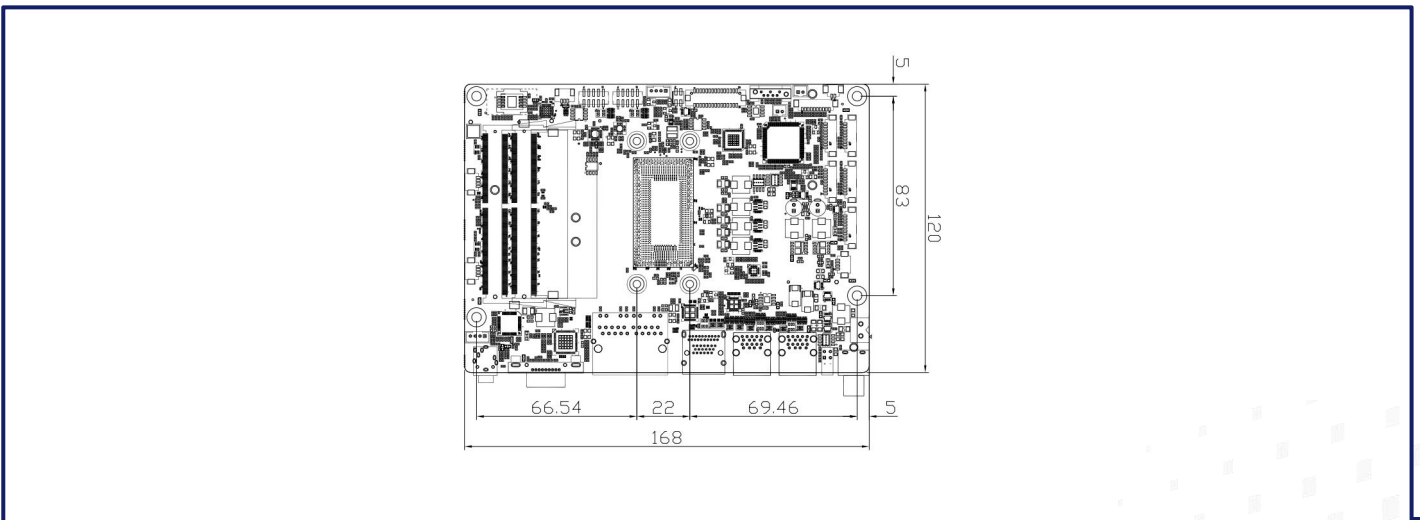
01 Specifications

CPU	Intel Elkhart Lake series J6412 onboard CPU
Chipset	Intel Elkhart Lake SOC
Memory	1 x DDR4 SODIMM memory slot, up to DDR4-3200, up to 32GB
Display controller	Intel® UHD Graphics for 10th Gen Intel® Processors
Display interface	3 x display interface: HDMI+DP+eDP/Lvds 1 x eDP1.4 HBR3, up to 4K@60Hz; /1 x LVDS, up to 1920x1200 1 x HDMI 2.0b, up to 4K@60Hz ; 1 x DP1.4a, up to 4K@60Hz
Storage	1↑SATA3.0+PWR 2pin 2.0 mm 1↑M.2 2242/2280 Key-M for SATA SSD
Audio	Support Mic-in+Line-out (single-hole 2-in-1); Support digital audio output with power amplifier (3W, 4Pin wafer)
Network	2 RJ45 network ports (4KV surge protection), Intel i210AT/IT (industrial optional)
USB	4 x USB 3.0 Gen1 10Gb Type-A on the rear board, 4 x USB 2.0 boards
I ² C/I ² S/SMBus	3 x I2C 1Mbps, 1 x SM Bus, 4Pin wafer interface
COM	6 x COM: COM1, COM2 support RS232/422/485 (BIOS setting) after IO; COM3~6 supports RS232 wafer
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	-10°C~60°C, relative humidity 10%~85%, atmospheric pressure 85~105kPa Optional -40~70°C, relative humidity 10%~85%, atmospheric pressure 85~105kPa (using wide temperature memory and storage)
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 (BOM optional 2Pin Phoenix terminal) power indicator, storage indicator
PCB dimensions (L*W)	4 inch: 168mm(W)×120mm(D)

02 Product view



03 Dimensions



04 Product Selection

Product model	CPU	Memory	Display	SATA	USB3	USB2	COM	LAN	M.2
AIoT4-EHL	J6412	1	3	1	4	4	6	2	3