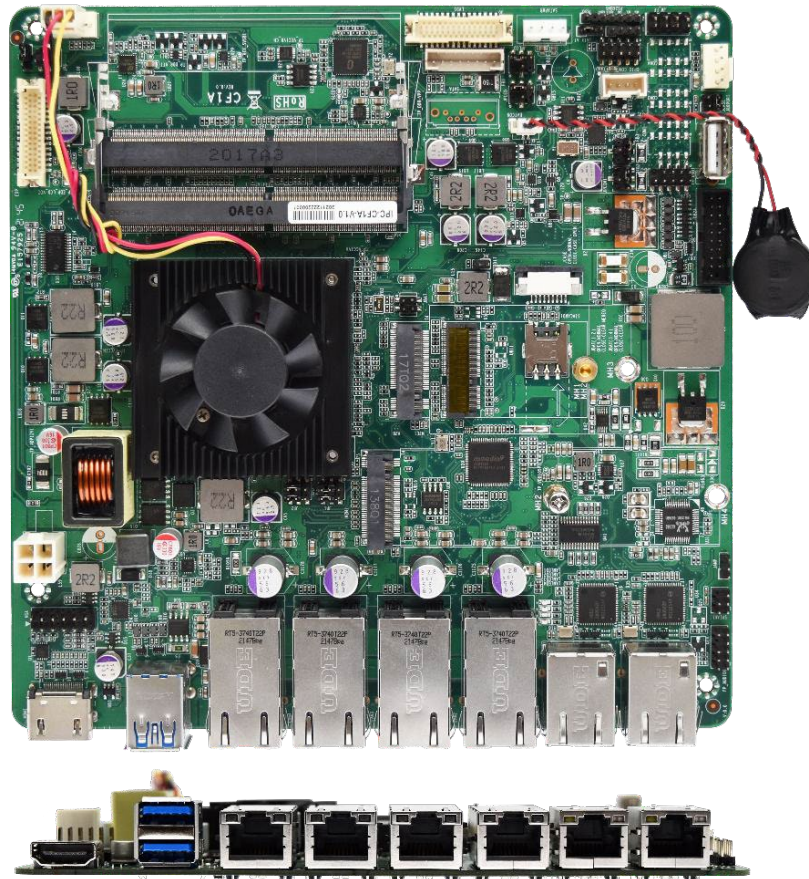# EMB-I1135G7F-MI64 Embedded Motherboard

Features

Low power consumption TDP 15W(i5-1135G7)

Intel Core 11th Gen U-series, Pentium/Celeron/Atom platform

Wide power voltage input

Support PoE power supply

Support CAN OPEN

Support 2 RS485

Support 16bit GPIO

Support I2C direct screen connection

Dual-channel memory slot

Application

4 PoE can be directly linked to industrial cameras applications in the field of machine vision, serial port and USB port can simultaneously support peripheral applications, CAN port can support motion control.

6 NICs can be applied to gateway, net gap applications.

Support LVDS +EDP+I2C, can directly drive the screen, special USB TP interface is applicable to industrial panel PC.

Advantage

1. Long Time Product Support. Use selected industrial use material, provides as long as 15 years product support, maintain our product stability and customer loyalty.

2. Rich I/O port. All industrial motherboards support multiple I/O ports. Customers can easily find out our standard product that meet their requirements.

3. Easy upgrade. Industrial motherboards designed to provide standard layout from H81 to H610 chipset, and will continue to provide convenience when our customers need upgrade.

Specifications

CPU/CHIP	Onboard Intel Tiger Lake i5-1135G7 CPU, support Intel Core 11th Gen U-series, Pentium/Celeron/Atom platform
	AMI 128Mbit SPI FLASH
Power	12-36V DC in
DRAM	2*SO-DIMM For DDR4 2400MHz
	Max 64GB
SSD	1*M.2 Socket (2242/2280, SATA/NVMe, Jumper, Default NVMe) 1*SATAIII
DISPLAY	1*HDMI2.0b: 4096*2304@60Hz（EXT） 1*CRT: 2560*1600@60Hz（Hi-EXT, Option） 1*EDP：4096*2304@60Hz (INT) 1*LVDS：2560*1600@60Hz
LAN	10/100/1000 Mbps
	4*Intel I211AT（PoE PS）+ 2*Intel I211AT GIGALAN
Audio	Front_FP（Support ALC888S/ALC897/ALC662）+ 3W Speaker
Front I/O	1*HDMI 2*USB3.1 6*RJ45(4*PoE , ASM1806 FOR 4*LAN, 2*Intel PCI-E)
Internal Connectors	1* DC Connector（4PIN Power connector） 1* M.2 (M key 2242/2280 for SSD, SATA/NVMe, Jumper, Default NVMe) 1* M.2 (B key 3042/3052 for 4G/5G) 1* M.2 (E key 2230 PCI-E,USB2.0） 1*CRT（15pin Header, Option）
	1* USB3.0 2* USB2.0 +1*USB2.0(For TP) +1*USB2.0 4* COM（COM1/COM2：RS232/422/485，COM3~4：RS232）

	1* CAN（F81251） 1* SATAIII+1*SATA Power 1* 16bit GPIO (5V) 1* SIM Card hold(Co-lay FPC Connector) 1* CPU FAN (Support smart FAN) 1* SYSTEM FAN（W/O Smart FAN） 1* AT_Mode
Others	Support SMbus/I2C
Temperature Range	Operation: -10~60℃
	Non-Operation: -20~70℃
Dimensions	PCB SIZE: 170*170mm(ITX)