

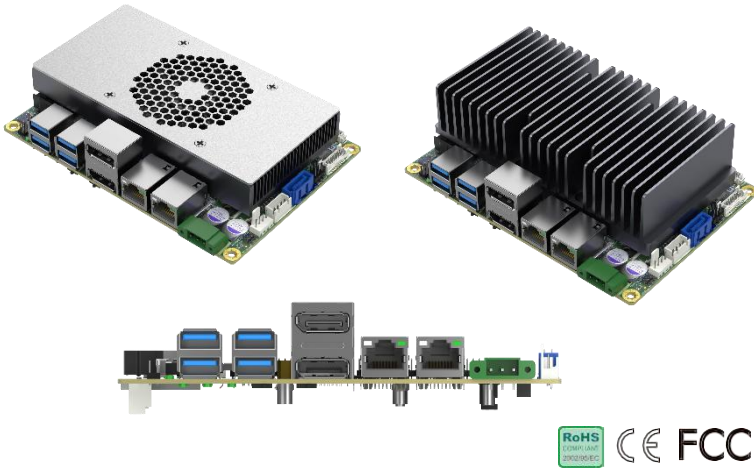
ECM-I910

Intel® Whiskey lake U CPU, Dual Channel DDR4, 1*HDMI, 1*eDP,
1*DP, 2*LAN, 4*USB3.0, 4*COM, 1*8-bit DIO, 1*M.2 E-key,
1*Full size mini PCIe

JHCTECH

IoT Computer
Connecting the Dots

Single Board Computer-SBC



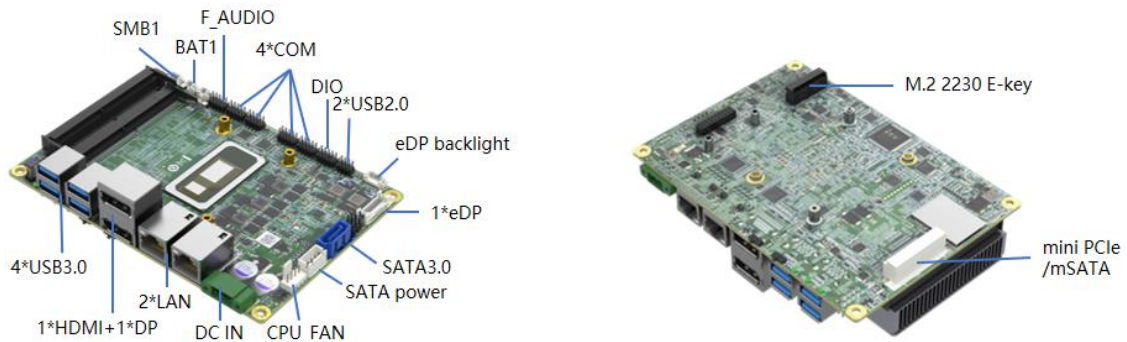
Key Features

- Intel 8th Whiskey lake U Core™ i3/i5/i7/Celeron
- Dual channel DDR4 SODIMM, support 2400MHz, up to 32GB
- 1*HDMI, 1*eDP, 1*DP, 3 independent 4K display interfaces
- 2*LAN, Gig. Ethernet, 10/100/1000Mbps self-adaptive
- 4*USB3.0, 2*USB2.0, 4*COM, 1*8-bit DIO
- 1*M.2 2230 E-key, 1*full size Mini PCIe, mSATA signal selection can be realized through BIOS, with SIM card slot, support 4G LTE/ WIFI /BT
- 1*SATA3.0 HDD/SSD, 1*mSATA(Optional) for storage
- Optional support for TPM2.0, DC IN 12V, 9-36V wide power input for optional (OFX-075)

Description

ECM-I910 is powered by the Intel® Whiskey lake U CPU 2.2-4.6GHz, 4 cores 8threads. ECM-I910 can support 9-36V wide power input through by one 75W power board OFX-075. This 3.5 inch main board has compact size, complete function, easy to customize for embedded system applications, very suitable for ITS, AI edge computing, intelligent manufacturing, intelligent security and other fields.

I/O View

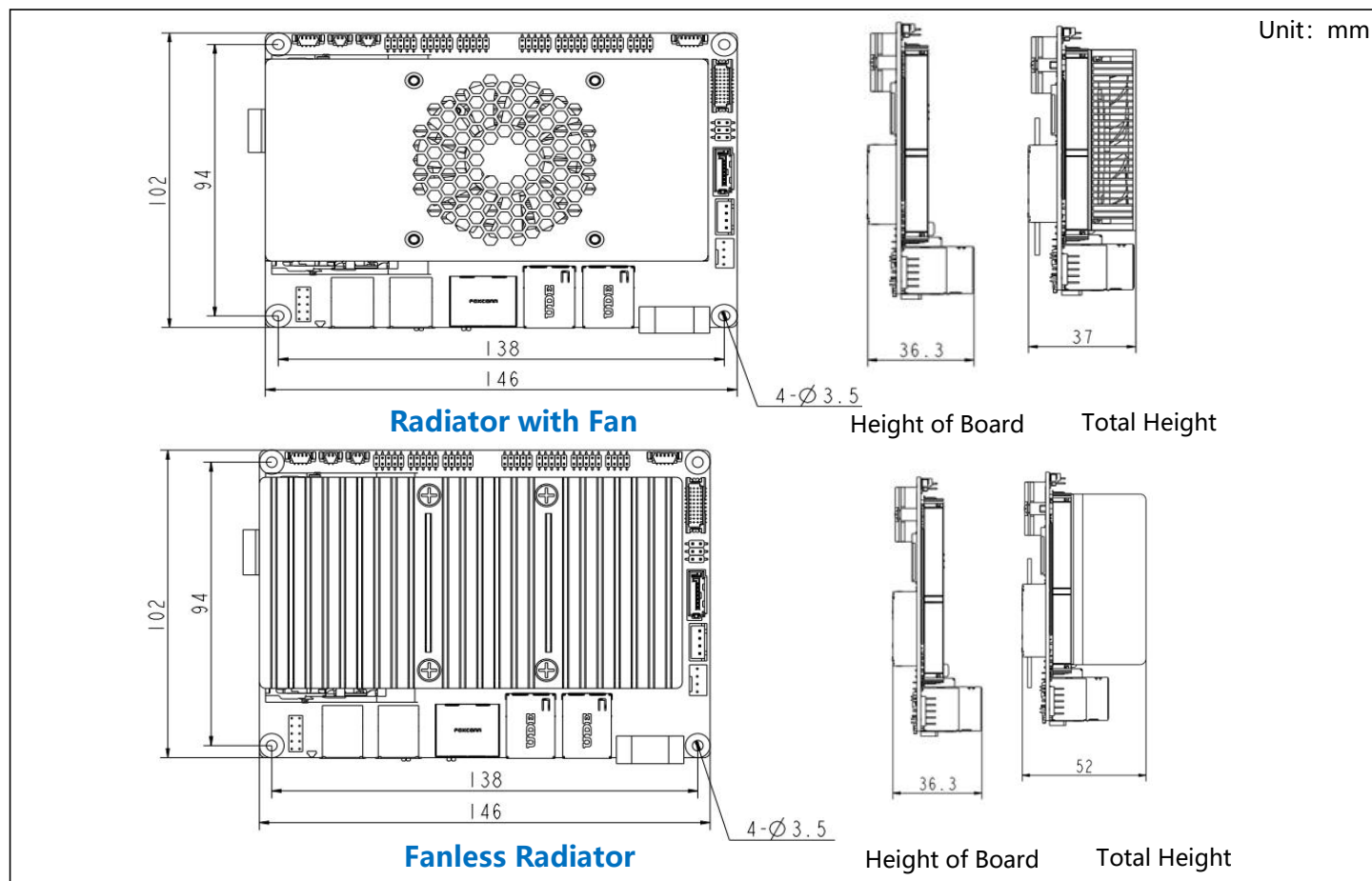


SPEC.

CPU	Intel® Whiskey lake U Celeron /Core I3/I5/I7 CPU
System Memory	2*260-pin DDR4 SODIMM, support 2133/2400MHz, up to 32GB
Expansion	1*Full size mini PCIe(PcieX1/mSATA+USB2.0 signal) with SIM slot, support 4G LTE 1* M.2 2230 E-key, support WiFi6/BT5.0
Graphics	Intel Gen. 9 UHD Graphics, support 3 independent 4K display, DirectX 12, HEVC/H265 HW HD codec, the highest dynamic frequency up to 1.2GHz; HDMI: up to 4096*2304@24Hz DP: up to 4096*2304@60Hz eDP: up to 1600*900 @60Hz
Audio	Realtek ALC897 controller, 1*Mic in & Line in & Line out, Support 5.1 channel
LAN	1*Intel® I226V, 10M/100M/1000M self-adaptive, support WOL 1*Intel® I219LM, 10/100/1000Mbps self-adaptive, support WOL
Storage	1*SATA3.0 HDD/SSD, 1*mSATA(Optional)
Front I/O	2*GbE LAN(RJ45) 4*USB3.0 gen1.0 TYPE A, 1*HDMI 1.4, 1*DP 1.2
Internal I/O	2*USB2.0(2*4pin dupont pin), 2*RS232/422/485(two 2*5pin dupont pins), 2*RS232(two 2*5pin dupont pins), 1*8-bit DIO(2*5pin dupont pin), 1*F-audio(2*5pin dupont pin), 1*eDP (2*10pin DF13 port), 1*SM BUS(1*4pin wafer), 1*SATA 3.0, 1*FAN
Switch & LED	1*Power SW, 1*AT/ATX SW, 1*Clear CMOS SW, 1*RST SW 1*Power LED; 1*HDD LED; 3*CPU Temp.LED (Red is warning, Yellow is high, Green is normal)
Power Supply	DC 12V (It can be connected to OFX-075 75W power board and supports 9-36V wide voltage input) TDP: 19.92W (CPU I5-8265U, 8GB DDR, 1*500G SSD)
Watchdog Timer	Watchdog timeout programmable via software 1 to 255 second
OS Support	Windows 10*IoT enterprise, Android, SUSE, Ubuntu, Wind River, Red Hat*Enterprise, Wind RiverVxWorks*7, Yocto

Dimension	(W*H) : 146*102mm
Operating Temperature	0 ~ 60°C
Storage Temperature	-40°C~85°C
Storage Humidity	10~90%@40°C, Non-condensing
EMC/Certification	CE/FCC Class A

Dimension



Ordering Info

Model No.	CPU	Introduction
ECM-I910/S001	Intel® Core I3-8145U	3.5" Embedded Single Board Computer, 2*SODIMM DDR4, 2*LAN, 4*USB3.0, 2*USB2.0, 1*M.2 2230 E-Key, 1* Full size mini PCIe/mSATA, 4*COM, 1*8-bit DIO, 1*DP, 1*HDMI, 1*eDP, 1*Mic & Line out&Line in, 1*SATA3.0, DC 12V
ECM-I910/S002	Intel® Core I5-8265U	
ECM-I910/S003	Intel® Core I7-8565U	
ECM-I910/S004	Intel® Celeron 4305U	
OFX-075	75W power board, DC IN 9-36V, DC OUT 12V, 38*53mm, TDP mini 54W, max 78W	
Radiator with Fan(Opt.)	Pure copper+Aluminium alloy heat radiator, four-wire intelligent temperature control ball-bearing fan, silent ultra-thin design, fan cable 100mm, size: 137*70*24.2mm (After installation, the total thickness of the motherboard is 37mm)	
Fanless Radiator(Opt.)	Pure copper+Aluminium alloy heat radiator, size: 137*70*39.3mm (After installation, the total thickness of the motherboard is 52mm)	

Accessory Pack

Standard configuration			Selectinve configuration		
Accessory	description	Amount	Accessory	description	Amount
Serial ports cable	DB9 male, 300mm	4	DIO cable	DB9 male, 300mm	1
SATA cable	(7+15)pin SATA power supply +SATA data cable, 300mm	1	Audio cable	Three in a row(Line-out/Line-in/Mic) 3.5mm phone jack, 300mm	1
Screw jumper package	Two M2 screws +Two jumper caps (spare)	1	USB2.0 cable	Two in a row Type A, 300mm	1
DC – IN pin	3.81 pitch 3pin phoenix plug with earhole	1			