POLYHEX
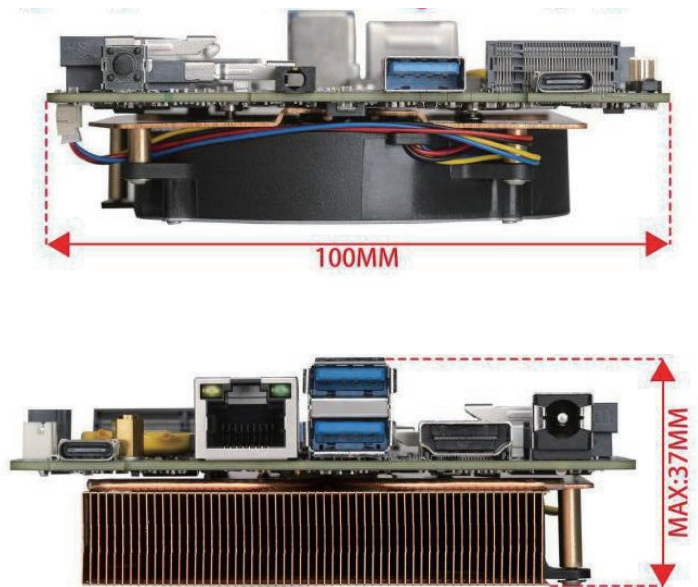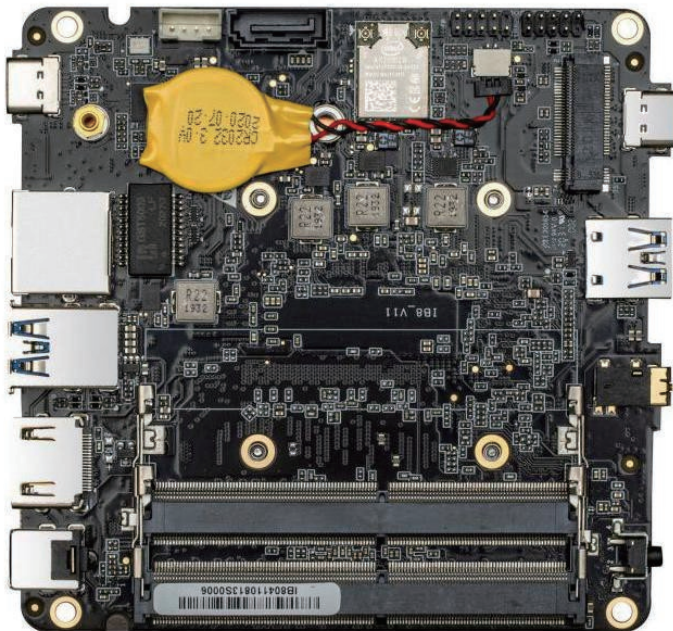
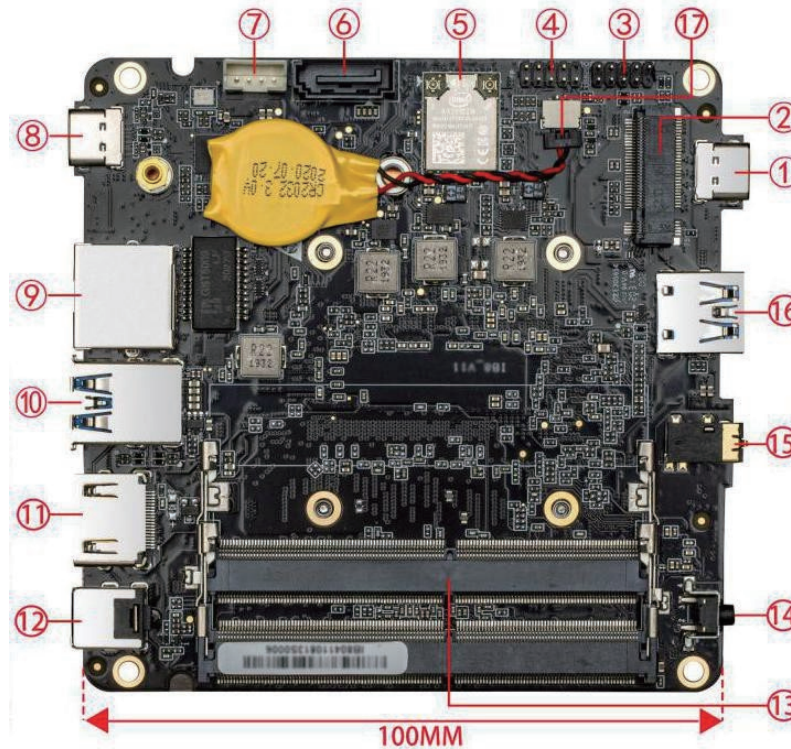# Embedded Motherboard Based on Intel Core Ice Lake-U Processors

Main Features:

· Motherboard adopts SoC single chip design, onboard Ice Lake-U processor, professional platform solutions.

· CPU: Ice Lake-U i3-1005G1 / i5-1035G1 / G7 / i7-1065G7

· RAM: 2*SODIMM RAM Slots, support DDR4, Max. 64GB

· Graphics: Intel UHD/Iris Plus Graphics

· Network Card: Realtek 8111H

· Audio Card: Realtek HD ALC256, Line_OUT and MIC_IN two-in-one

· Support Thunderbolt3, DP display, PD agreement, USB3.1 GEN2, PCIe equipment and docking station

· Power: 19V/65W, DC 5.5*2.5MM

Specification:

M/B Model	CPU	Base frequency	Turbo Boost	Core thread	TDP	Configuration TDP	Graphics
MR-i3I1005T4U	i3-1005G1	1.2GHZ	3.4GHZ	2C4T	15W	900MHZ/13W	Intel (R) UHD
MR-i5I1035T4U	i5-1035G1	1GHZ	3.6GHZ	4C8T	15W	900MHZ/13W	Intel (R) UHD
MR-i5I1035T4U	i5-1035G7	1.2GHZ	3.7GHZ	4C8T	15W	800MHZ/12W 1.5GHZ/25W	Iris Plus Graphics
MR-i7I1065T4U	i7-1065G7	1.3GHZ	3.9GHZ	4C8T	15W	1GHZ/12W 1.5GHZ/25W	Iris Plus Graphics
RAM	2*SO-DIMM DDR4, Max.64GB						
Graphic Card	Intel (R) UHD/Iris Plus Graphics						
Network Card	Realtek 8111H Gigabit Ethernet, support PXE diskless boot						
Audio card	Realtek HD ALC 256						
Storage	1*M.2 M Key Slot 1*SATA3.0						
WIFI	Onboard Intel WIFI6 and BT5.1 AX201						
USB	2*USB2.0 (Via internal headers) 3*USB3.1 Type-A 1*USB3.1 Type-C						
Internal	2*M.2 Slot 1*F_PANEL 1*CPU_FAN 1*SATA 1*SATA_PWR 1*CLR_CMOS 1*F_USB2.0						
Front I/O	1*USB3.1 Type-C 1*USB3.1 Type-A 1*AUDIO						
Rear I/O	1*DC 1*LAN 1*Thunderbolt 3 1*HDMI 2*USB3.1 Type-A						
BIOS	AMI EFI BIOS						
Power	19V/65W						
OS	Support Windows 10/64 Bit and Linux						
Dimension	100mm*100mm						
Temperature	-15℃-60℃						
Humidity	0%-96% Relative Humidity, non-condensing						

I/O Interfaces:

PIN	Definition specification	PIN	Definition specification
1	1*USB 3.1 TYPE-C	10	2*USB 3.1 TYPE-A
2	1*M.2 KEY M	11	1*HDMI
3	1*F_USB 2.0	12	1*DC IN 19V/65W
4	1*F_Panel	13	2*DDR4
5	1*SMT WIFI 6.0 and BT5.1	14	1*PWR KEY
6	1*SATA	15	1*AUDIO
7	1*SATA PWR	16	1*USB 3.1 TYPE-A
8	1*Thunderbolt3	17	1*CMOS PWR 240MA 3.0V
9	1*LAN		

ABOUT POLYHEX

As a board level and system level designer and manufacturer, Polyhex, with 9-year experience, always delivers best-in-class embedded computing solutions based on both ARM and X86 architecture, including hardware customization and software debugging etc. Partnered with silicon vendors like Intel, NXP, ST, Rockchip, Allwinner and so on, we have earned trust from clients worldwide in over 30 countries. Polyhex is also certified with ISO9001 and ISO13485 for the self-owned manufacture facility.

POLYHEX
Beyond the Embedded Deployment