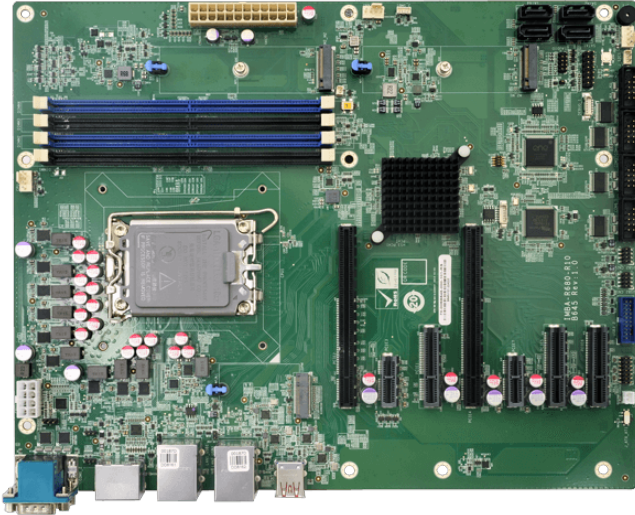


# IMBA-R680

ATX motherboard supports LGA1700 Intel® 12th/13th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR5, Triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, and RoHS



## Features

1. LGA1700 Intel® 12th/13th Generation Core i9/i7/i5/i3, Pentium and Celeron processor(125W)
2. Dual-channel DDR5 4800MHz
3. Support DisplayPort 1.4a, HDMI&IDPM module
4. Support 2 x M.2 M key for NVMe storage
5. High Performance ATX motherboard with PCIe Gen4&Gen5 expansion Slot

## Specifications

Form Factor	
Form Factor	ATX Motherboard
System	
CPU	LGA1700 socket supports 12th generation Alder Lake-S Intel® Core™ i9/i7/i5/i3/Pentium®/Celeron® Processor (up to 125W TDP CPU)
Chipset	Intel®R680E
Memory	Four 288-pin Dual-Channel DDR5 (up to 4400 MHz) SDRAM Unbuffered DIMMs supported up to 128GB (ECC&non-ECC support)
Memory Max.	128GB
Cooling method / System Fan	1 x CPU fan connector (1x4 pin) 2 x System fan connector (1x4 pin)
Physical Characteristics	
Dimensions (LxWxH) (mm)	244mm x 305mm
Net Weight	700g
Storage	
Storage	4 x SATA : RAID 0/1/5/10 supported 2 x M.2(NGFF)
I/O Interface	
Display Output	1 x HDMI : up to 3840*2160 @30Hz 1 x Display Port : up to 4096 x 2304 @60Hz 1 x iDPM : support iEi eDP/ LVDS/ VGA module
Ethernet	2 x LAN - LAN1: Intel® I225V 2.5GbE controller (CO-LAY I225-LM support vPro) LAN2: Intel® I225V 2.5GbE controller
Audio	1 x HD Audio : 1 x iAUDIO supports IEI AC-KIT-888S Audio Kit (2x5 pin)
I/O Interface	2 x External RS-232/422/485 : RS-485 support AFC 4 x Internal RS-232 : 2x5 pin, P=2.54 2 x External USB 3.2 Gen1x1 : 5Gb/s (Type A) 4 x Internal USB 2.0 : 2x4 pin, P=2.00 2 x Internal USB 3.2 Gen1x1 : 5Gb/s (2 X 10pin, P=2.00)

	4 x External USB 3.2 Gen2x1 : 10Gb/s (Type A)
Expansion	2 x PCIe x16 : Gen5 slot with x8 Signal
	3 x PCIe x4 : Gen4 open-end
	2 x PCIe x1 : Gen3 x1
	2 x M.2(NGFF) : M Key (2242/2280, PCIe x4) NVMe supported
<b>Power</b>	
Power Consumption	3.3V@0.89A, 5V@10.05A, 12V@6.05A, 5VSB@0.64A
	(Intel® Core™ i7-12700E CPU with four 16 GB 4800 MHz DDR5 memory, EuP mode enabled)
Power Supply	ATX/AT power supply
	Support AT/ATX mode
	ErP/EuP Compliant
<b>Environment</b>	
Operating Temperature	0°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Humidity	5% ~95%, non-condensing

## Ordering Information

IMBA-R680-R10	ATX motherboard supports LGA1700 12th/13th Generation Intel® Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR5, triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, and RoHS
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## Packing List

1 x IMBA-R680 single board computer	2 x SATA cable
1 x I/O shielding	1 x QIG