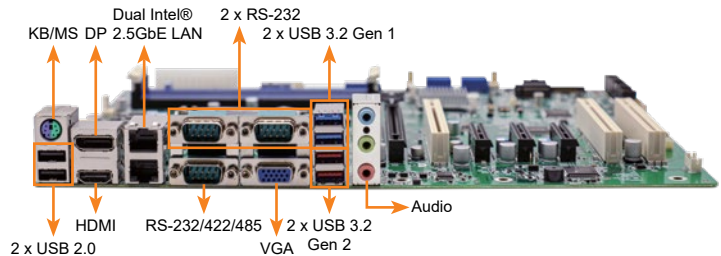
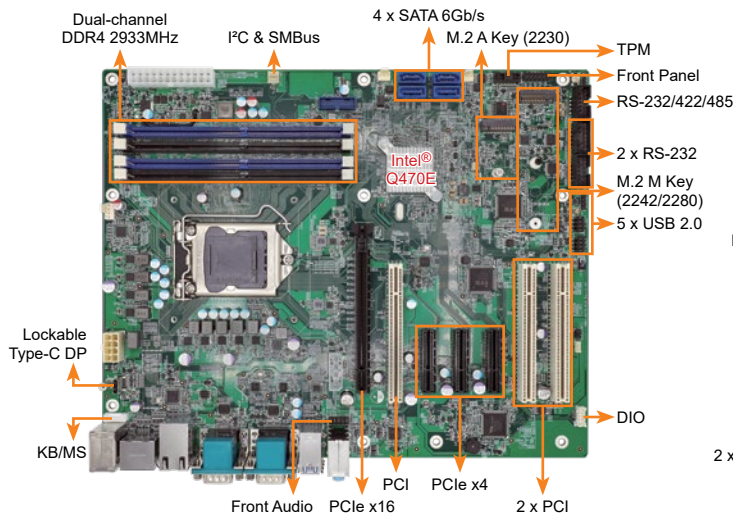


IMBA-Q470

ATX motherboard supports LGA1200 Intel® 10th Generation Core™ i9/i7/i5/i3, Celeron® and Pentium® processor, DDR4, triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS

Preliminary



Specifications

- ◆ CPU
LGA1200 Intel® 10th generation Core™ i9/i7/i5/i3, Celeron® and Pentium® processor
- ◆ Chipset: Intel® Q470E
- ◆ BIOS: AMI UEFI BIOS
- ◆ Memory
Four 288-pin 2933 MHz Dual-Channel DDR4 SDRAM Unbuffered DIMMs supported up to 128GB
- ◆ Graphics Engine
Up to Intel® UHD Graphics 630, Intel® HD Graphics Gen 9 Engines with Low power 16 execution unit, supports DX2015, OpenGL 5.X and OpenCL2.x, ES 2.0
- ◆ Display Output
Triple independent displays
1 x VGA (up to 1920 x 1080 @60Hz)
1 x DP (up to 4096 x 2304 @60Hz)
1 x HDMI (up to 4096 x 2304 @30Hz)
1 x Internal 180° Type-C DP (up to 4096 x 2304 @60Hz)
- ◆ Ethernet
LAN1: Intel® I225V 2.5GbE controller
LAN2: Intel® I225V 2.5GbE controller
- ◆ External I/O Interface
1 x PS/2 KB/MS
1 x RS-232/422/485 (RS-485 support AFC)
2 x RS-232
2 x USB 2.0
2 x USB 3.2 Gen1
2 x USB 3.2 Gen2
- ◆ Internal I/O Interface
1 x KB/MS (1x6 pin)
1 x RS-232/422/485 (2x5 pin, P=2.54) (RS-485 support AFC)
2 x RS-232 (2x5 pin, P=2.54)
2 x USB 3.2 Gen1 (2x10 pin, P=2.0)
4 x SATA 6Gb/s (RAID 0/1/5/10 supported)
6 x USB 2.0 (2x4 pin, P=2.54)
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ I²C: 1 x I²C (1x4 pin)
- ◆ Audio
Realtek ALC888S HD Audio codec
3 x Audio Jack (Line-in, Line-out, Mic-in)
1 x Analog audio (2x5 pin)
- ◆ Front Panel
1 x Front Panel (2x7 pin, Power LED, HDD LED, Speaker, Power Button, Reset Button)
- ◆ LAN LED: 2 x LAN LED (1x2 pin)
- ◆ Expansion
1 x PCIe x16
3 x PCIe x4 open-end
3 x PCI
1 x M.2 A key (2230) with PCIe x1/USB 2.0
1 x M.2 M Key (2240/2280) with PCIe x4
- ◆ Digital I/O: 1 x 8-bit digital I/O (2x5 pin)
- ◆ TPM: 1 x TPM (2x10 pin) compatible with TPM-IN03
- ◆ Fan Connector
1 x CPU fan connector (1x4 pin)
2 x System fan connector (1x3 pin)
- ◆ Chassis Open: 1 x Chassis intrusion (1x2 pin)
- ◆ Power Supply
ATX/AT power supply
Support AT/ATX mode
ErP/EuP Compliant
- ◆ Watchdog Timer: Software Programmable support 1~255 sec. System reset
- ◆ Power Consumption: TBD
- ◆ Operating Temperature: -20°C ~ 60°C
- ◆ Storage Temperature: -30°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimension: 244mm x 305mm
- ◆ Weight: GW:1200g / NW:700g
- ◆ CE/FCC compliant

Features

- LGA1200 Intel® 10th Generation Core™ i9/i7/i5/i3, Celeron® and Pentium® processor
- Dual-channel DDR4 2933MHz
- Support HDMI, DP, VGA
- Support M.2 A key for WLAN expansion, M key for PCIe NVMe storage

Dimensions (Unit: mm)



Packing List

1 x IMBA-Q470 single board computer	1 x I/O Shielding
2 x SATA cable	1 x QIG

Ordering Information

Part No.	Description
IMBA-Q470-R10	ATX motherboard supports LGA1200 Intel® 10th Generation Core™ i9/i7/i5/i3, Celeron® and Pentium® processor, DDR4, triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS
19800-000049-RS	LPT flat cable, 240mm, P=2.54
19800-000075-RS	PS/2 KB/MS cable with bracket, 220mm, P=2.0
19800-003100-100-RS	Dual port USB cable with bracket, 30mm, P=2.54
19800-010500-200-RS	USB 3.0 cable 457mm with bracket
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
32205-000702-100-RS	RS-232 cable, 230mm, P=2.54
CF-1156A-RS-R11	High-performance LGA1155/1156 cooler kit, 1U chassis compatible 73W
CF-1156C-RS	LGA1155/LGA1156 cooler kit, 1U chassis compatible, 45W
CF-1156D-RS	LGA1155/LGA1156 cooler kit, 1U chassis compatible, 65W
CF-1156E-R11	High-performance LGA1155/1156 cooler kit, 95W
TPM-IN03-R10	20-pin Infineon SPI TPM2.0 module, software mangement tool, firmware V7.63