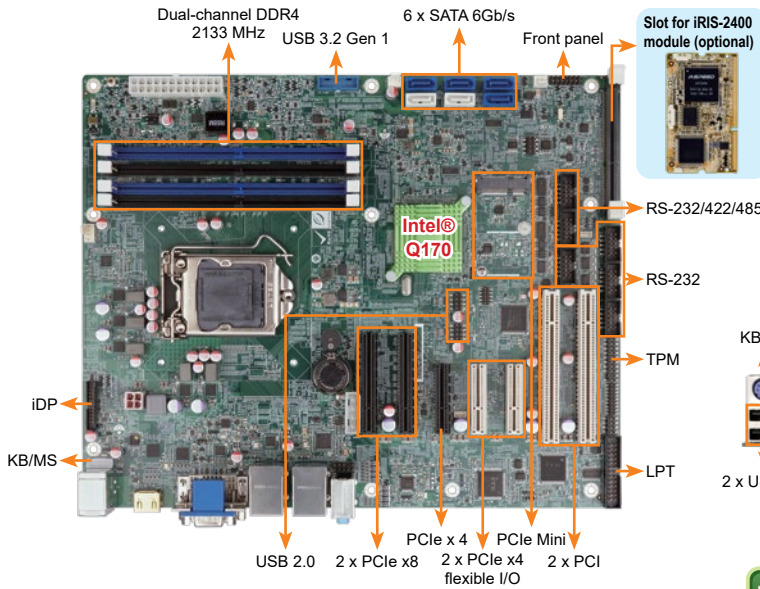


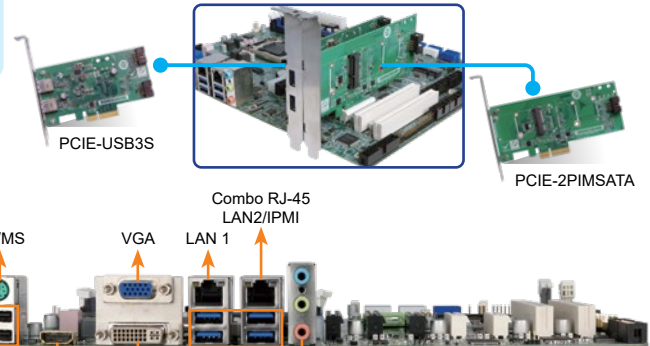
# IMBA-Q170-i2

ATX motherboard supports 14nm LGA1151 Intel® CPU, Intel® Q170, DDR4, triple independent display VGA/ DVI-D/ HDMI 2.0, dual Intel® PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, HD Audio, IPMI 2.0 and RoHS



## Flexible I/O support

IEI USB 3.2 Gen 1 (5Gb/s) & mSATA/PCIe Mini expansion card  
The expansion card can provide more choices to meet users demand



## Specifications

- ◆ CPU: LGA 1151 socket supports Intel® 6th/7th generation Core™ i7/i5/i3, Pentium® or Celeron® processor
- ◆ Chipset: Intel® Q170
- ◆ Memory: Four 288-pin 2133 MHz dual-channel DDR4 SDRAM unbuffered DIMMs support up to 64 GB
- ◆ BIOS: UEFI BIOS
- ◆ Graphics Engine: Intel® HD Graphics Gen 9 engine with 16 low-power execution units, supports DX11/12, OpenGL 4.3/4.4 and OpenCL2.x, ES 2.0
- ◆ Display Output: Triple independent display  
1 x VGA (up to 1920x1200@60 Hz)  
1 x DVI-D (up to 1920x1200@60Hz)  
1 x HDMI 2.0 (up to 4096x2160@60Hz)  
1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 3840x2160@60Hz)
- ◆ Ethernet: LAN1: Intel® I219LM with Intel® AMT 11.0 support  
LAN2: Intel® I210AT PCIe controller with NCSI support
- ◆ External I/O Interface: 2 x USB 2.0  
4 x USB 3.2 Gen 1 (5Gb/s)
- ◆ Internal I/O Interface: 1 x KB/MS (1x6 pin) 4 x RS-232 (2x5 pin, P=2.54)  
1 x LPT (2x13 pin, P=2.54) 4 x USB 2.0 (2x4 pin, P=2.0)  
2 x USB 3.2 Gen 1 (5Gb/s) (2x10 pin, P=2.0) 6 x SATA 6Gb/s (RAID 0/1/5/10 supported)  
2 x RS-232/422/485 (2x5 pin, P=2.54)
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ I<sup>2</sup>C: 1 x I<sup>2</sup>C (1x4 pin)
- ◆ TPM: 1 x TPM (2x10 pin)
- ◆ Audio: Realtek ALC888S HD audio codec supports 7.1-channel  
3 x Audio jacks (line-out, line-in, mic-in) on rear IO  
1 x Front 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 Full-size PCIe Mini card slot (support mSATA)  
2 x PCI slot  
2 x PCIe x 8 slot (Gen3)  
3 x PCIe x 4 slot (Gen3)
- ◆ iRIS Remote Management Module: 1 x iRIS-2400 slot
- ◆ Watchdog Timer: Software programmable supports 1~255 sec. system reset
- ◆ Digital I/O: 8-bit digital I/O (2x5 pin)
- ◆ Fan Connector: 1 x CPU smart fan (1x4 pin)  
2 x System smart fan (1x3 pin)
- ◆ Chassis Open: 1 x Chassis intrusion (1x2 pin)
- ◆ Power Supply: ATX/AT power supply
- ◆ Power Consumption: 3.3V@1.65A, 5V@3.4A, 12V@8.58A, 5VSB@0.22A  
(Intel® Core™ i7-6700K 4.0GHz CPU with 32 GB (four 4 GB) 2133 MHz DDR4 memory)
- ◆ Operating Temperature: -20°C ~ 60°C
- ◆ Storage Temperature: -30°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 244mm x 305mm
- ◆ Weight: GW: 1200g / NW: 700g
- ◆ CE/FCC compliant

## Features

- LGA 1151 Intel® 6th/7th generation Core™ i7/i5/i3, Pentium® or Celeron® processor supported
- Dual-channel DDR4 2133 MHz
- Support triple display with HDMI, DVI and VGA
- Support USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s and PCI Express Gen3
- Support IPMI 2.0 via iRIS-2400 module

## Packing List

1 x IMBA-Q170-i2 single board computer	2 x SATA cable
1 x I/O shielding	1 x QIG

## Ordering Information

Part No.	Description
IMBA-Q170-i2-R10	ATX motherboard supports 14nm LGA1151 Intel® CPU, Intel® Q170, DDR4, triple independent display VGA/ DVI-D/ HDMI 2.0, dual Intel® PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, HD Audio, IPMI 2.0 and RoHS
IMBA-Q170-ECO-R10	ATX motherboard supports 14nm LGA1151 Intel® CPU, Intel® Q170, DDR4, triple independent display VGA/ DVI-D/ HDMI 2.0, dual Intel® PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, HD Audio, ECO packing and RoHS (10 pcs/pack)
iRIS-2400-R10	IPMI 2.0 adapter card with AST2400 BMC chip for DDR3 SO-DIMM socket interface
PCIES-2PIMSATA-R10	Peripheral card for flexible I/O, 1 x PCIe Mini, 2 x mSATA expansion
PCIES-USB3-R10	Peripheral card for flexible I/O, USB 3.2 Gen 1 (5Gb/s) expansion
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 3.2 Gen 1 (5Gb/s) 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-115XC-R10	LGA1155/LGA1156 cooler kit, 1U chassis compatible, 45W
CF-115XD-R10	LGA1155/LGA1156 cooler kit, 1U chassis compatible, 65W
CF-115XE-R10	High-performance LGA1155/1156 cooler kit, 95W
DP-DP-R10	DisplayPort to DisplayPort converter board (for IEI iDP connector)
DP-DVI-R10	DisplayPort to DVI-D converter board (for IEI iDP connector)
DP-HDMI-R10	DisplayPort to HDMI converter board (for IEI iDP connector)
DP-LVDS-R10	DisplayPort to 24-bit dual-channel LVDS converter board (for IEI iDP connector)
DP-VGA-R10	DisplayPort to VGA converter board (for IEI iDP connector)
TPM-IN02-R20	20-pin Infineon TPM 2.0 module, software management tool, firmware v5.5