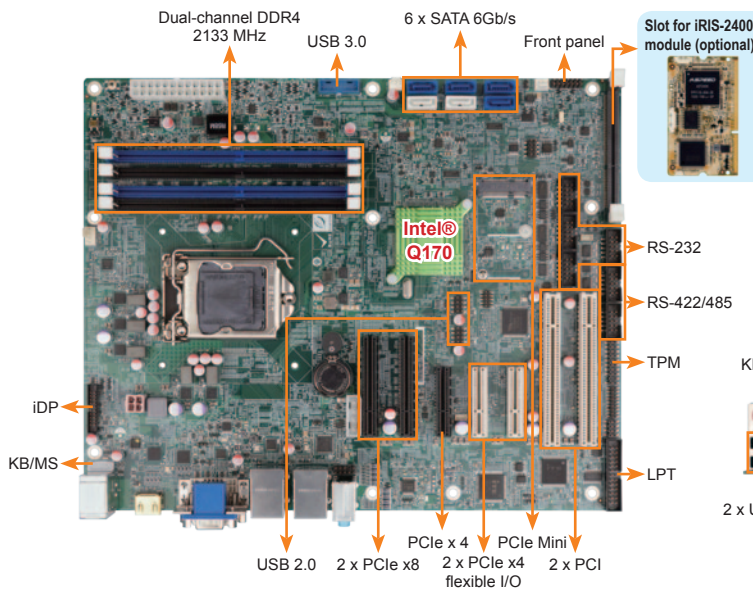


# IMBA-Q170-i2

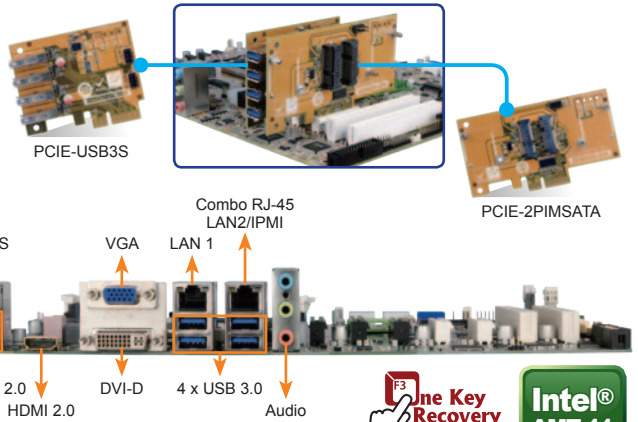
ATX motherboard supports 14nm LGA1151 Intel® CPU Intel® Q170, DDR4, triple independent display VGA/ DVI-D/ HDMI 2.0, dual Intel® PCIe GbE, USB 3.0, SATA 6Gb/s, HD Audio, IPMI 2.0 and RoHS



## Flexible I/O support

**IEI USB 3.0 & mSATA/PCIe Mini expansion card**  
The expansion card can provide more choices to meet users demand

**Preliminary**



## Specifications

- ◆ CPU  
LGA 1151 6th generation Intel® Core™ i7/i5/i3, Pentium® or Celeron® processor
- ◆ System 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 OpenCL 2.x, ES 2.0
- ◆ Display Output  
Triple independent display  
1 x VGA (up to 1920x1200@60 Hz)  
1 x DVI-D (up to 2560x1600@60Hz)  
1 x HDMI 2.0 (up to 4096x2160@60Hz)  
1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 4096x2304@60Hz)
- ◆ Ethernet  
LAN1: Intel® I210 PCIe controller  
LAN2: Intel® I219LM PCIe with Intel® AMT 11.0 support
- ◆ External I/O Interface  
2 x USB 2.0  
4 x USB 3.0
- ◆ Internal I/O Interface  
1 x KB/MS (1x6 pin)                                   1 x USB 3.0 (2x10 pin, P=2.0)  
1 x LPT (2x13 pin, P=2.54)                        1 x USB 2.0 (Type A)  
1 x mSATA (colay SATA2)                         4 x USB 2.0 (2x4 pin, P=2.0)  
2 x RS-232/422/485 (2x5 pin, P=2.54)        4 x RS-232 (2x5 pin, P=2.54)  
6 x SATA 6Gb/s (RAID 0/1/5/10 support)
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ I<sup>2</sup>C: 1 x I<sup>2</sup>C (1x4 pin)
- ◆ TPM: 1 x TPM connector (2x10 pin)
- ◆ Audio  
Realtek ALC662 HD codec supports 5.1-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)  
1 x System smart fan (1x4 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@3.4A  
(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



## Features

- LGA1151 6th generation Intel® Core™ i7/i5/i3, Celeron® and Pentium® processor
- Dual-channel DDR4 2133 MHz
- Support triple display with HDMI, DVI and VGA
- Support USB 3.0, SATA 6Gb/s and PCI Express Gen3
- Support IPMI 2.0 via iRIS-2400 module
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Packing List

1 x IMBA-Q170-i2-R10	1 x One Key Recovery CD
1 x I/O shielding	1 x QIG
2 x SATA cable	1 x Utility CD

## Ordering Information

Part No.	Description
IMBA-Q170-i2-R10	ATX motherboard supports 14nm LGA1151 Intel® CPU Intel® C170, DDR4, triple independent display VGA/ DVI-D/ HDMI 2.0, dual Intel® PCIe GbE, USB 3.0, SATA 6Gb/s, HD Audio, IPMI 2.0 and RoHS
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, 2 x PCIe Mini, 2 x mSATA expansion
PCIES-USB3-R10	Peripheral card for flexible I/O, USB 3.0 expansion
19800-00049-RS	LPT flat cable, 280mm
19800-00075-RS	PS/2 KB/MS Y-cable with bracket, 220mm
19800-003100-300-RS	Dual-port USB cable with bracket
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	Serial port cable, P=2.54, 230mm
CF1156A-RS-R11	High-performance LGA1155/1156 cooler kit, 1U chassis compatible 73W
CF-1156C-RS	LGA1155/1156 kit, 1U chassis compatible, 45W
CF-1156D-RS	LGA1155/1156 kit, 1U chassis compatible, 65W
CF-1156E-R11	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-IN01-R11	20-pin Infineon TPM module, software management tool, firmware v3.17