

IMBA-Q471

ATX industrial motherboard supporting 10 th /11 th Intel® Core™ i9/i7/i5/i3, Celeron®, Pentium® processors

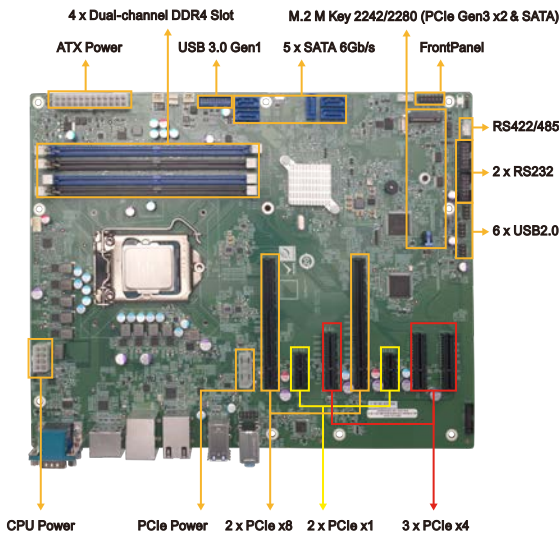
- support HDMI, DP, VGA triple independent display output
- support triple Intel® i225V 2.5GbE controller
- support 2x PCIe x16, 3x PCIe x4 , 2 x PCIe x1 and 1 x M.2 M key expansion slots
- support 2 x USB 3.2 Gen2, 4 x USB 3.2 Gen1, 8x USB 2.0, transfer rate up to 10Gb/s
- support 3x RS-232, 1 x RS-422/485, 5 x SATA 6Gb/s connector

**PURE PCIe Expansion Slots
High Performance**



IMBA-Q471

ATX Motherboard Supports 10th/11th Gen. LGA1200 Intel® Core™ i9/i7/i5/i3, Celeron® and Pentium® Processors, DDR4, Triple Independent Displays, Triple 2.5GbE, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS



Support Intel® 10th/11th generation processor

Support Intel® 10th/11th generation Core™ i9/i7/i5/i3, Celeron® and Pentium® Serise pcessor (LGA 1200 slot),release super performance,and can handle multiple tasks at the same time



Support Intel® I225V 2.5GbE Ethernet Controller

The I/O layout 3 Gigabit RJ45 network interfaces, based on Intel® I225v 2.5GbE network controller core Chip to achieve network transmission rate up to 2.5GbE

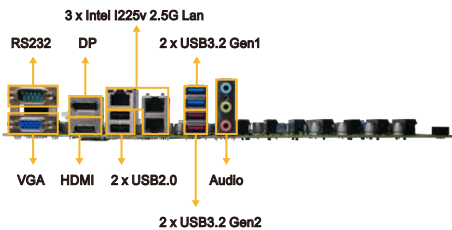
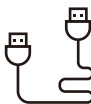


Support USB 3.2 Gen1/Gen 2, up to 10Gb/s

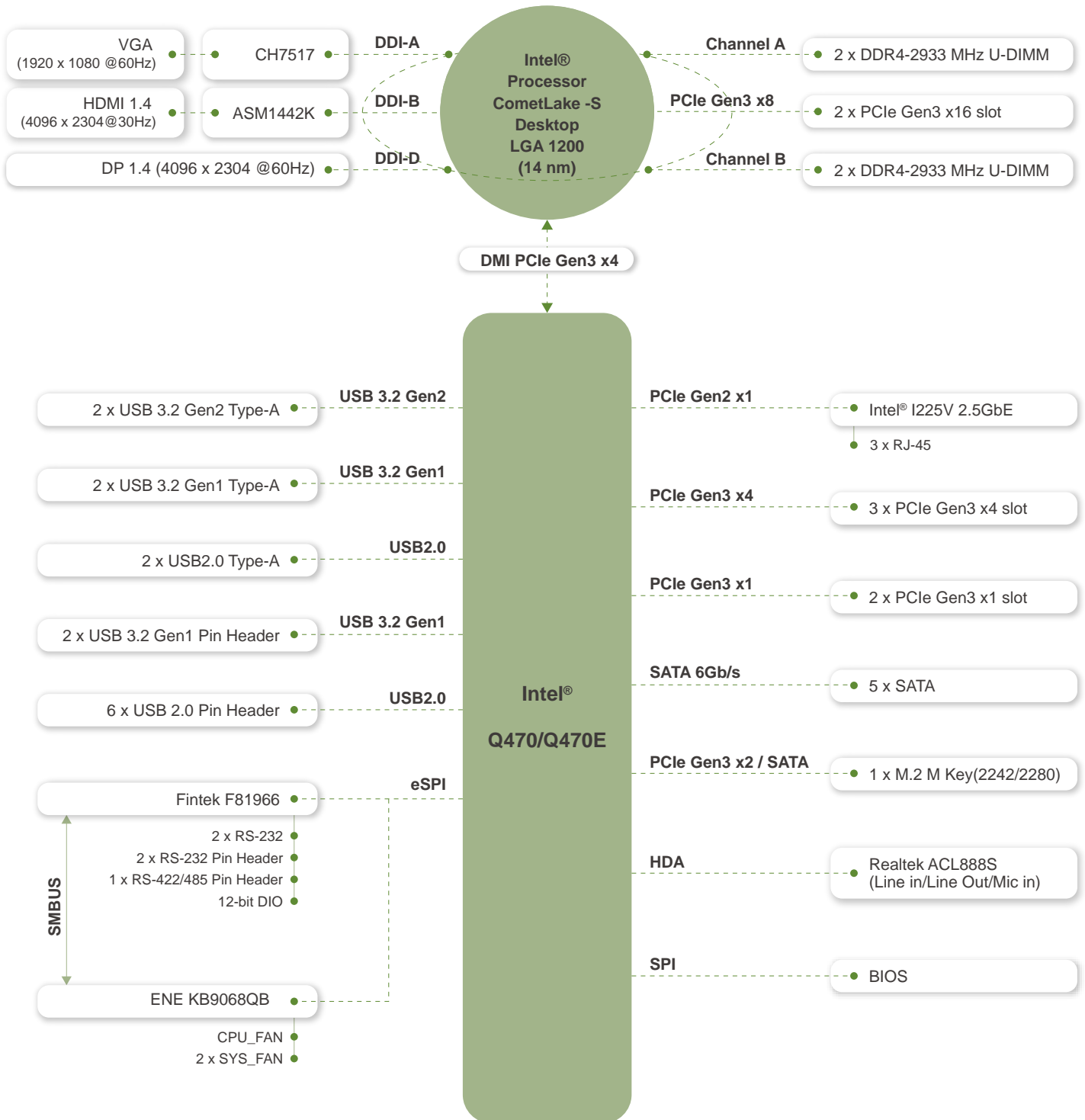
The design of motherboard is based on USB 3.2 protocol, and the I/O layout provides two USB 3.2 GEN1 (5GB/s) and two USB 3.2 Gen 2 (10Gb/s) for faster data transfer rate. The motherboard also has USB 3.2 Gen 1 and USB 2.0 ports for wiring expansion.

Full PCIe expansion slot

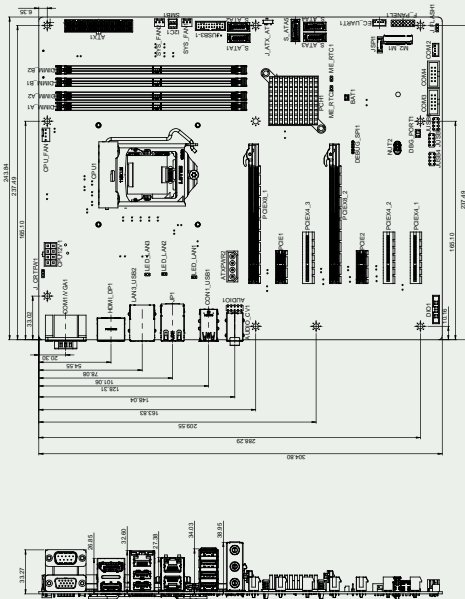
The motherboard provides full PCIe expansion slots. There are 2 x PCIe GEN3 x16 slots that support PCIe GEN3 x8 signals and support two independent graphics cards at the same time. There are also 3 x PCIe GEN3 x4 slots and 2 x PCIe GEN3 x1 slots that support PCIe function expansion cards such as network card, sound card and motion control card



IMBA-Q471 Block Diagram



Dimensions



Specifications

Specifications	IMBA-Q471
CPU	10th/11th Generation LGA1200 Intel® Core™ i9/i7/i5/i3, Celeron® and Pentium® processors, TDP up to 125W
Chipset	Intel® Q470/Q470E
BIOS	AMI UEFI BIOS
Memory	Four 288-pin 2933 MHz dual-channel unbuffered DDR4 SDRAM DIMM slots supporting up to 128 GB memory
Graphics Engine	Up to Intel® UHD Graphics 630; Intel® HD Graphics Gen 9 Engines with 16 low-power execution units, supporting DX2015, OpenGL 5.x, OpenCL 2.x and ES 2.0
Display Output	Triple independent displays 1 x VGA (up to 1920 x 1080 @ 60 Hz) 1 x DP (up to 4096 x 2304 @ 60 Hz) 1 x HDMI (up to 4096 x 2304 @ 30 Hz)
Ethernet	LAN1: Intel® I225V 2.5GbE controller(Colay with I225-LM) LAN2: Intel® I225V 2.5GbE controller(Colay with I225-LM) LAN3: Intel® I225V 2.5GbE controller(Colay with I225-LM)
External I/O Interface	2 x USB 3.2 Gen 2 (10Gb/s) (Type-A) 2 x USB 3.2 Gen 1 (5Gb/s) (Type-A) 2 x USB 2.0 (Type-A) 1 x RS-232
Internal I/O Interface	5 x SATA 6Gb/s (RAID 0/1/5/10 supported) 6 x USB 2.0 (2x4 pin, P=2.54) 2 x USB 3.2 Gen1 (2x10 pin, P=2.0) 2 x RS-232 (2x5 pin, P=2.54) 1 x RS-422/485 (1x4 pin, P=2.0)
I2C	1 x I2C(1x4 pin)
SMBus	1 x SMBus(1x4 pin)
Audio	Realtek ALC888S HD 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 (2 x 7 pin, Power LED, HDD LED, Speaker, Power Button, Reset Button)
LAN LED	2 x LAN LED (1x2 pin)
Expansion	2 x PCIe Gen3 x16(x8 signal) 3 x PCIe Gen3 x4 open-end 2 x PCIe Gen3 x1 M.2 M key (2240/2280) with PCIe x2 &SATA signal
Digital I/O	1 x 12-bit digital I/O (2x7 pin)
TPM	Intel® PTT(TPM 2.0)
FAN connector	1 x CPU fan connector (1x4 pin) 2 x System fan connector (1x3 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	3.3V@1.1A, 5V@3.359A, 12V@2.18A, 5VSB@0.12A (Intel® Core™ i5-10500TE CPU with four 8 GB 2933 MHz DDR4 DIMMs)
Operating Temperature	0°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~95%, non-condensing
Dimension	244mm x 305mm
Weight	GW:1200 g / NW:700 g
Safety	CE/FCC compliant

Optional accessories



Packing List

1 x IMBA-Q471 single board computer	2 x SATA cable
1 x I/O Shielding	1 x QIG

Ordering Information

IMBA-Q471-R10	ATX Motherboard Supports 10th/11th Gen. LGA1200 Intel® Core™ i9/i7/i5/i3, Celeron® and Pentium® Processors, DDR4, Triple Independent Displays, Triple 2.5GbE, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS
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Optional Accessories

19800-003100-100-RS	Dual port USB cable with bracket, 300mm, P=2.54
19800-010500-200-RS	USB 3.0/USB3.2 cable 450mm with bracket
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
19800-020100-100-RS	RS-232 cable 230mm P=2.54
CF-115XA-R10	High-performance LGA1155/1156/1200 cooler kit, 1U chassis compatible 73W
CF-1156C-R20	LGA1155/1156/1200 cooler kit, 1U chassis compatible, 45W
CF-1156D-R30	LGA1155/1156/1200 cooler kit, 1U chassis compatible, 65W
CF-115XE-R10	High-performance LGA1155/1156/1200 cooler kit, 95W

**125W fan information please contact sales