

# IMB-Q470

LGA1200 socket supports 10th/11th generation Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor. up to 125W TDP

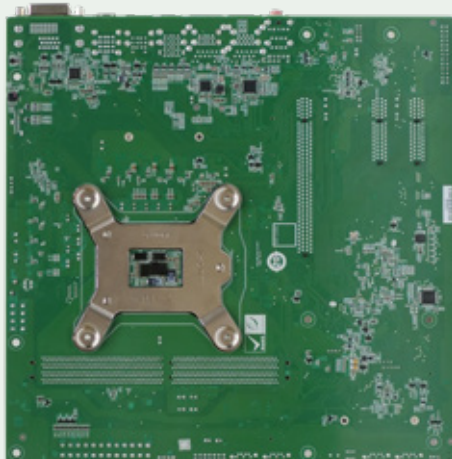
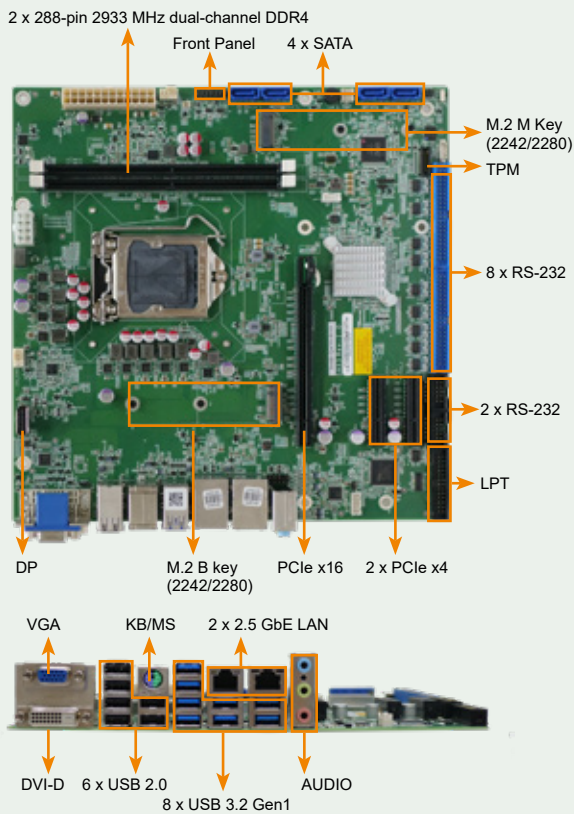
- Two 288-pin 2933 MHz dual-channel unbuffered DDR4 SDRAM DIMM slots (system max. 64GB)
- Triple independent display via VGA, DVI and internal DP connector
- Two LAN ports via Intel® I226-V and Intel® I219-LM
- Support one PCIe x16, two PCIe x4, M.2 B key and M.2 M key expansions



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# IMB-Q470

Micro-ATX motherboard supports LGA1200 Intel® 10th/11th Gen. Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR4, triple displays, dual LAN, M.2, 8 USB 3.2, 6 USB 2.0, 10 COM, SATA 6Gb/s, HD Audio and RoHS



### Support 10th/11th Gen Intel® Core™ CPU

Built-in with 10th/11th Generation Intel® Core™ i9/i7/i5/i3, Celeron® and Pentium® processor (LGA1200), high performance capability with multi-tasking function



### Support Intel® I226-V 2.5GbE and Intel® I219-LM Controller

The IMB-Q470 is designed with one 2.5 GbE LAN port via Intel® I226-V 2.5GbE and one 1 GbE LAN port via Intel® I219-LM



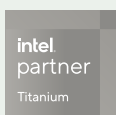
### Rich Expansion I/O

It includes one PCIe x16, two PCIe x4 slots for functional expansions like graphics cards, LAN cards or motion control cards. It also provides one M.2 B-keyed one M.2 M-key for NVME storage.

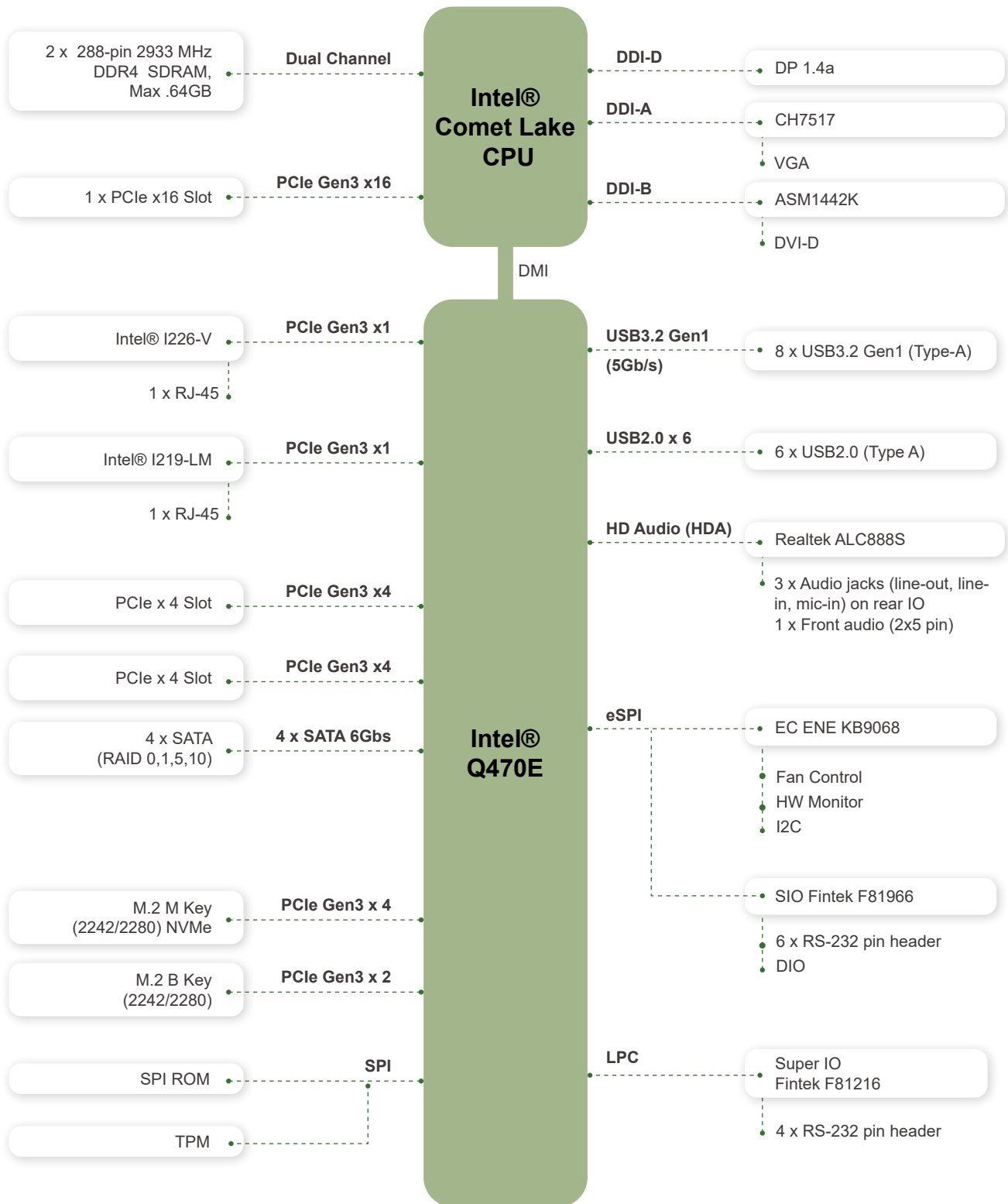


### Abundant USB and COM interfaces

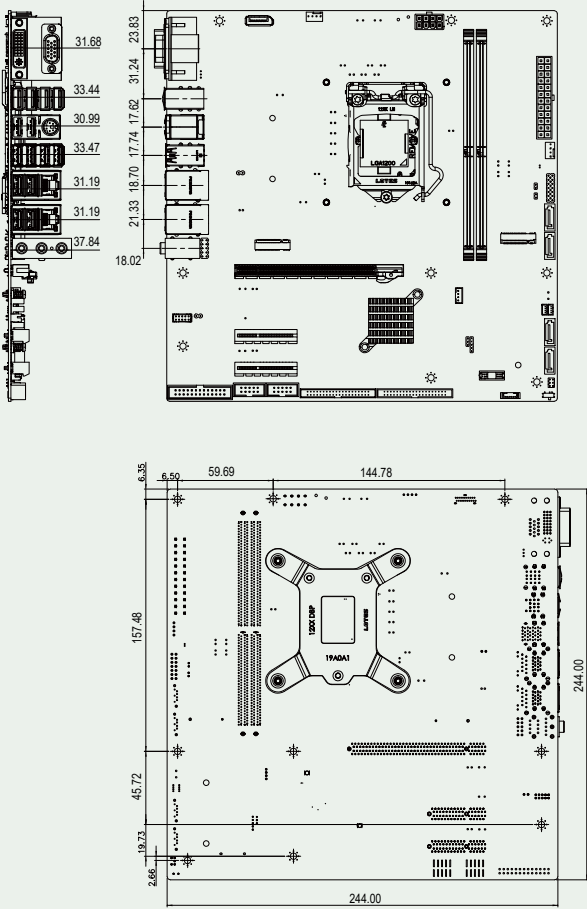
It is equipped with 8 USB 3.2 Gen 1 (5Gb/s) ports, six USB 2.0 ports on the rear panel. Additionally, 10 x RS-232 ports are supported via internal connectors.



# Block Diagram



Dimensions



Optional Accessories



Specifications

Model	IMB-Q470
CPU	LGA1200 socket supports 10th/11th generation Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor. up to 125W TDP
System Chipset	Intel® Q470/Q470E
Memory	Two 288-pin 2933 MHz unbuffered DDR4 SDRAM DIMM slots (supporting up to 64 GB memory)
BIOS	AMI UEFI BIOS
Graphic Engine	Intel® UHD Graphics
Display Output	Triple display support 1 x VGA (up to 1920 x 1080@60Hz) 1 x DVI-D (up to 2560x1600 60Hz) 1 x interna DP (up to 3840 x 2160 60Hz)
Ethernet	LAN1: Intel® I219-LM GbE controller LAN2: Intel® I226-V controller
External I/O Interface	8 x USB 3.2 Gen1 6 x USB 2.0 1 x KB/MS
Internal I/O Interface	10 x RS-232 (2 x 2 *20-pin, 2 x 2*5 pin, P=2.54) 1 x LPT (2*13 pin) 4 x SATA 6Gb/s
SMBus	1 x SMBus (1x4 pin)
TPM	1 x TPM (2x10 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)
I²C	1 x I²C (1x4 pin)
Expansion	1 x PCIe Gen3 x16 slot 2 x PCIe Gen3 x4 slot 1 x M.2 B key 2242/2280 (PCIe Gen3 x2) 1 x M.2 M key 2242/2280 (PCIe Gen3 x4)
Watchdog Timer	Software Programmable support 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)
Power Supply	ATX/AT Power Supply
Power Consumption	3.3V@1.13A, 5V@10.14A, 12V@11.86A, 5VSB@0.23A (11th Gen.Intel® Core® i9-11900K 3.50 GHz 125W CPU with 32GB 2933MHz DDR4 memory, EUP enabled) 3.3V@1.16A, 5V@10.45A, 12V@5.93A, 5VSB@0.26A (10th Gen.Intel® Core® i9-10900E 2.80 GHz 65W CPU with 32GB 2933MHz DDR4 memory, EUP enabled)
Operating Temperature	0°C ~ 60°C
Operating Humidity	5% ~95%, non-condensing

Packing List

1 x IMB-Q470 single board computer	2 x SATA cable (PN: 32801-012500-100-RS)
1 x I/O shielding (PN: 45014-0105C0-00-HF)	1 x QIG

Ordering Informaiton

IMB-Q470-R11	micro-ATX motherboard supports LGA1200 Intel® 10th/11th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR4, triple independent displays, dual 2.5GbE LAN, M.2, 8 USB 3.1,6 USB 2.0,10 COM, SATA 6Gb/s, HD Audio and RoHS
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Optional Accessories

19800-014700-100-RS	RS-232 cable, 400mm, 2*20 pin, P=2.54
19800-020100-100-RS	RS-232 cable, 230mm, P=2.54
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
19100-000318-00-RS	High-performance LGA1155/1156/1200 cooler kit, 4U chassis compatible 125W, 0°C~50°C
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