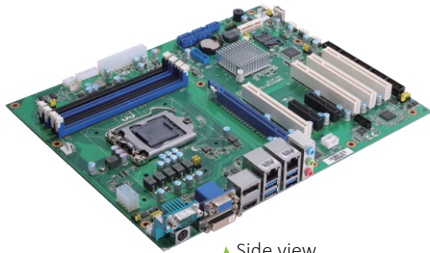
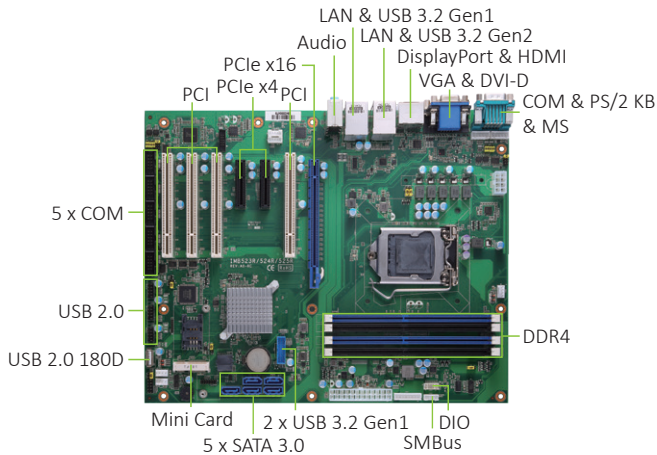


IMB523R

ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® Q370, USB 3.2 Gen2, SATA 3.0, PCI Express Mini Card Slot, VGA, DisplayPort++, DVI-D, and HDMI



Features

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor (Coffee Lake Refresh)
- Four 288-pin DDR4-2666/2400 DIMM for up to 128GB of memory
- DisplayPort, DVI-D, HDMI and VGA with triple-view supported
- 5 SATA-600 with RAID 0/1/5/10
- 1 PCI Express Mini Card slot
- Two USB 3.2 Gen2 and four USB 3.2 Gen1
- TPM 2.0 supported (optional)



Specifications

Core System

CPU	LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor (up to 95W)
System Memory	4 x 288-pin DDR4-2666/2400 DIMM, up to 128GB
Chipset	Intel® Q370
BIOS	AMI BIOS
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x PCIe x16 slot 2 x PCIe x4 slot 4 x PCI slot 1 x PCIe Mini Card slot with PCIe x1 & USB 2.0 & SATA
Battery	Lithium 3 V/ 220 mAH

Display

Chipset	Intel® HD Graphic
Memory Size	Share system memory
Display Interface	1 x VGA 1 x DVI-D 1 x HDMI 1 x DisplayPort++

I/O

SATA	5 x SATA-600 with RAID 0/1/5/10
Hardware Monitoring	Detect CPU/system temperature, voltage and supports smart fan control
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® I219-LM; supports Wake-on-LAN, PXE Boot ROM, iAMT 1 x 10/100/1000 Mbps Ethernet with Intel® I210-AT; supports Wake-on-LAN, PXE Boot ROM
Audio	HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC888

I/O

USB	2 x USB 3.2 Gen 2x1 (10Gbps) (rear IO) 4 x USB 3.2 Gen 1x1 (5Gbps) (rear IO, internal box header) 7 x USB 2.0 (pin header, 180D type A)
Serial	4 x RS-232 (Internal box header) 2 x RS-232/422/485 (COM 1: rear I/O; COM 2: internal box header)
PS/2 Combo Port	1 x PS/2 keyboard and mouse
TPM	TPM 2.0 (optional)
SMBus	Yes
Digital I/O	8-channel programmable

Mechanical and Environmental

Dimensions	305 x 244 mm
Board Thickness	1.6 mm
Operating Temperature	0°C to +60°C (+32°F to +140°F)
Humidity	10% to 95% relative humidity, non-condensing

Ordering Information

Standard

IMB523RVDHGGGA-Q370 (P/N: E38F523103)	ATX motherboard with LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor, Intel® Q370, USB 3.2 Gen1/Gen2, SATA 3.0, 2 GbE LANs, VGA, DisplayPort++, DVI-D and HDMI
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Optional

5938A808010E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=190 mm
5938A808020E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=400 mm
5948C122800E	2 x USB 3.2 Gen 1x1 cable with bracket, L=400 mm
59380000290E	PS/2 keyboard & mouse cable with bracket
593826A0000E	SATA signal cable/red, L=500 mm
59384500100E	Audio cable with bracket, P=2.0 mm, L=450 mm
59380402010E	1 x COM port cable with bracket, P=2.54 mm, L=300 mm
59380703000E	2 x COM port cable with bracket, P=2.54 mm, L=300 mm
83935151000E	TPM 2.0 module (AX93515)
5076E510000E	CPU heatsink for 1U chassis (AX61135TM)
50761222000E	CPU cooler for 2U, 4U, and wall mount chassis

Processor List

CPU	Speed	Cache	Cores	TDP
Intel® Core™ i7-9700TE Processor	1.8 GHz	12 MB	8	35 W
Intel® Core™ i7-8700K Processor	3.7 GHz	12 MB	6	95 W
Intel® Core™ i7-8700 Processor	3.2 GHz	12 MB	6	65 W
Intel® Core™ i7-8700T Processor	2.4 GHz	12 MB	6	65 W
Intel® Core™ i5-9500E Processor	3.0 GHz	9 MB	6	65 W
Intel® Core™ i5-9500TE Processor	2.2 GHz	9 MB	6	35 W
Intel® Core™ i5-9400 Processor	2.9 GHz	9 MB	6	65 W
Intel® Core™ i5-8400 Processor	2.8 GHz	9 MB	6	65 W
Intel® Core™ i5-8500T Processor	2.1 GHz	9 MB	6	35 W
Intel® Core™ i3-9100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-9100E Processor	3.1 GHz	6 MB	4	65 W
Intel® Core™ i3-9100TE Processor	2.2 GHz	6 MB	4	35 W
Intel® Core™ i3-8100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-8100T Processor	3.1 GHz	6 MB	4	35 W
Intel® Pentium® Gold G5400T Processor	3.1 GHz	4 MB	2	35 W
Intel® Celeron® G4900T Processor	2.9 GHz	2 MB	2	35 W