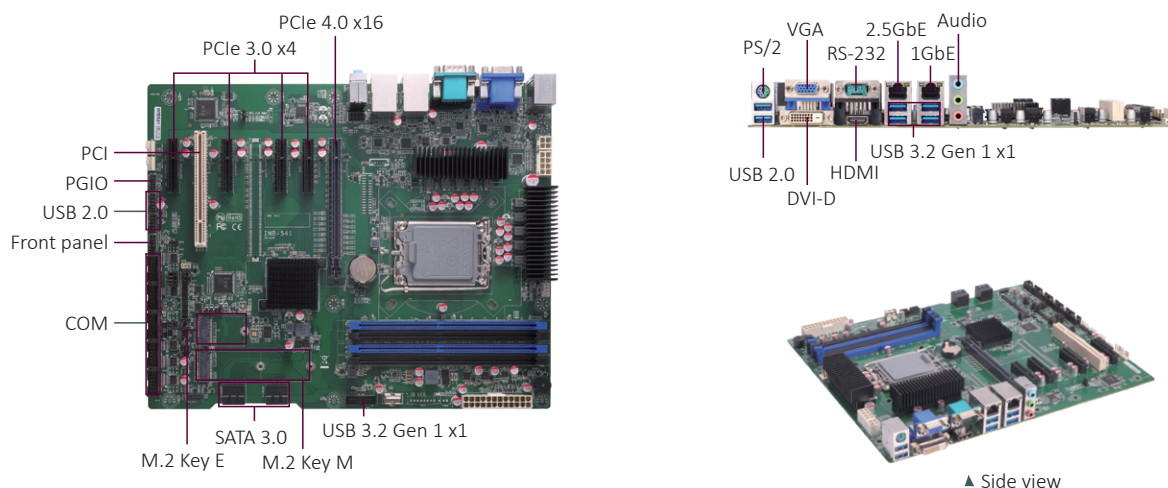


IMB541

ATX Motherboard with LGA1700 Socket 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® Processor, Intel® Q670E, USB 3.2 Gen 1 x1, SATA 3.0, 1GbE and 2.5GbE, VGA, DVI-D, and HDMI



Features

- LGA1700 socket 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor
- 4 288-pin DDR4-3200 non-ECC Long-DIMM, up to 128GB
- Supports triple-view with VGA, DVI-D, and HDMI interfaces
- Supports M.2 Key M 2280 and Key E 2230
- 6 USB 3.2 Gen 1 x1 and 2 USB 3.2 Gen 1 x1 (internal)
- TPM 2.0 supported (optional)

Specifications

Core System

CPU	LGA1700 socket 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor (up to 125W)
System Memory	4 x 288-pin DDR4-3200 non-ECC Long-DIMM, up to 128GB
Chipset	Intel® Q670E
BIOS	AMI BIOS
Storage	M.2 Key M 2280 with support for PCIe x4 via CPU
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x PCIe Gen4 x16 slot 4 x open-ended PCIe x4 slots (Gen4 signal by PCH, slot 2 supports Gen3 only) 1 x M.2 Key E 2230 (supports PCIe x1 and USB 2.0) 1 x 32-bit PCI slot; default clock is 33 MHz
Battery Lithium	Lithium 3 V/ 220 mAH
Power Input	24-pin + 8-pin + 4-pin ATX connector
Power Consumption	Intel® Core™ i9-14900K with 64GB (2 x DDR4-3200 32GB) Power requirements: +12V_CPU @ 4.6A +5V @ 2.5A +3.3V @ 0.9A

Specifications

Display

Chipset	Intel® UHD Graphics
Display Interface	1 x VGA, up to 1920 x 1200 @ 60Hz 1 x HDMI 1.4b, up to 4096 x 2160 @ 24Hz 1 x DVI-D, up to 1920 x 1200 @ 60Hz

I/O

External	1 x 2.5GbE with Intel® I226-V, supporting Wake-on-LAN, PXE Boot ROM, and TSN 1 x 1GbE with Intel® I219-V HD Codec audio as MIC-in/Line-in/Line-out 6 x USB 3.2 Gen 1 x1 (5Gbps) (rear I/O) 1 x RS-232 (rear I/O) 1 x PS/2 keyboard (rear I/O)
Internal	4 x SATA 3.0 with RAID 0/1/5/10 4 x USB 2.0 (pin header) 1 x USB 2.0 (180D Type-A) 2 x USB 3.2 Gen 1 x1 (5Gbps, box header) 3 x RS-232 (box header) 1 x RS-232/422/485 (box header) 1 x RS-232/485 (box header)

Key Benefits

TPM	Not included by default; supports Intel® PTT as default
SMBus	Yes
Digital I/O	8-channel programmable
Hardware Monitoring	Detect CPU/system temperature, voltage and supports smart fan control

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

IMB541-Q670E-BP (P/N: E38F541100)	ATX motherboard with LGA1700 socket 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor, Intel® Q670E, USB 3.2 Gen1x1, SATA 3.0, 1GbE and 2.5GbE, VGA, DVI-D, and HDMI (bulk packaging)
IMB541-Q670E-SP (P/N: E38F541101)	ATX motherboard with LGA1700 socket 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor, Intel® Q670E, USB 3.2 Gen1x1, SATA 3.0, 1GbE and 2.5GbE, VGA, DVI-D, and HDMI (single packaging)

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 Gen1 cable with bracket, L=400 mm
594G5208000E	SATA 3.0 signal cable, L=500 mm with locking latch
594G5208010E	SATA 3.0 signal cable, L=500 mm without locking latch
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
711000002500	CPU cooler for 2U, 4U, and wall mount chassis with smart fan

*Please refer to the user's manual for the system CPU support list.