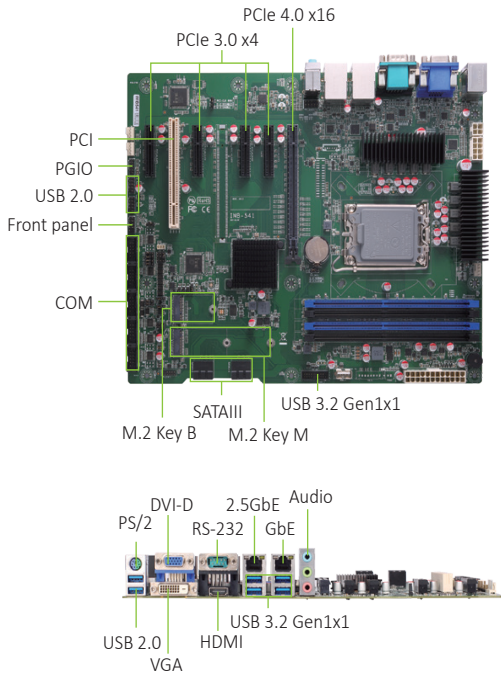


# IMB541 NEW

ATX Motherboard with LGA1700 Socket 12th Gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® Processor, Intel® Q670E, USB 3.2 Gen1x1, SATA 3.0, GbE and 2.5GbE LAN, VGA, DVI-D, and HDMI



## Features

- LGA1700 socket 12th gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor (Alder Lake S)
- Four 288-pin DDR4-3200 non-ECC Long-DIMM, up to 128GB
- Supports triple-view with VGA, DVI-D, and HDMI connectivity
- Supports M.2 Key M 2280 and Key B 2230
- 6 USB 3.2 Gen1x1 and 2 USB 3.2 Gen1x1 (internal)
- TPM 2.0 supported (optional)



## Specifications

### Core System

CPU	LGA1700 socket 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
SSD	M.2 Key M 2280 in support of 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 slot (Gen4 signal by PCH, slot 2 supports Gen3 only) 1 x M.2 Key B 2230 (supports PCIe x1 and USB) 1 x 32-bit PCI slot; default clock is 33 MHz
Battery	Lithium 3 V/ 220 mAH

### Display

Chipset	Intel® UHD Graphics
Memory Size	Share system memory
Display Interface	1 x VGA, up to 1920x1200 @60Hz 1 x HDMI 1.4b, up to 4096x2160 @24Hz 1 x DVI-D, up to 1920x1200 @60Hz

<b>I/O</b>	
SATA	4 x SATA-600 with RAID 0/1/5/10
Hardware Monitoring	Detect CPU/system temperature, voltage and supports smart fan control
Ethernet	1 x 10/100/1000/2500 Mbps with Intel® I225-V in support of Wake-on-LAN, PXE Boot ROM, and TSN 1 x 10/100/1000 Mbps with Intel® I219-V
Audio	HD Codec audio as MIC-in/Line-in/Line-out
USB	6 x USB 3.2 Gen1x1 (5Gbps, rear I/O) 2 x USB 2.0 (rear I/O) 2 x USB 3.2 Gen1x1 (5Gbps, internal box header) 4 x USB 2.0 (internal pin header) 1 x USB 2.0 (internal 180D type A)
Serial	1 x RS-232 (rear I/O) 3 x RS-232 (internal box header) 1 x RS-232/422/485 (internal box header) 1 x RS-232/485 (internal box header)
PS/2 Combo Port	1 x PS/2 keyboard (rear I/O)
TPM	TPM 2.0 (optional)
SMBus	Yes
Digital I/O	8-channel programmable
<b>Mechanical and Environmental</b>	
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 12th gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor, Intel® Q670E, USB 3.2 Gen1x1, SATA 3.0, GbE and 2.5GbE LAN, VGA, DVI-D, and HDMI (bulk packaging)
IMB541-Q670E-SP (P/N: E38F541101)	ATX motherboard with LGA1700 socket 12th gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor, Intel® Q670E, USB 3.2 Gen1x1, SATA 3.0, GbE and 2.5GbE LAN, 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 III signal cable, L=500 mm with locking latch
594G5208010E	SATA III 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.

## Assured Systems

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