

# IMB540 NEW

ATX Motherboard with LGA1700 Socket 12th Gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® Processor, Intel® R680E, USB 3.2 Gen2, SATA 3.0, GbE and 2.5GbE LAN, VGA, DisplayPort++, 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 ECC/non-ECC un-buffered Long-DIMM, up to 128GB
- DisplayPort++, VGA, DVI-D and HDMI with quad view supported
- Supports M.2 Key M 2280
- 4 USB 3.2 Gen2 and 4 USB 3.2 Gen 2x1 and Dual USB 3.2 Gen 1x1
- TPM 2.0 supported (optional)

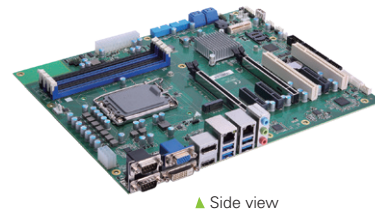
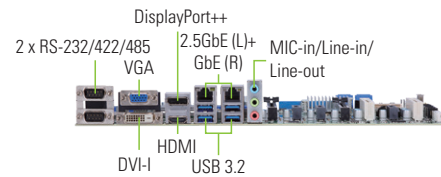
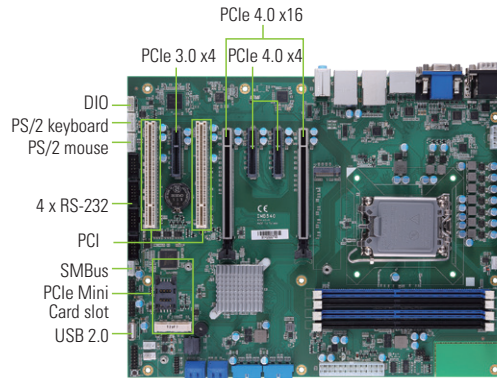


## Core System

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 ECC/Non-ECC un-buffered Long-DIMM, up to 128GB (ECC memory is available for Intel® R680E only)
Chipset	Intel® R680E
BIOS	AMI BIOS
SSD	M.2 M Key with 2280 in support of PCIe x4 via CPU
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	2 x PCIe Gen4 x16 slot (signal: x16 + x0 or x8 + x8) 3 x PCIe x4 slot open ended (1 x Gen3 + 2 x Gen4) (signal by PCH) 1 x PCIe Mini Card slot (signal: PCIe x1) 2 x 32-bit PCI slot, default clock is 33 Mhz, PCI clock could be selected between 33 or 66 MHz by jumper (signal by PCH)
Battery	Lithium 3 V/ 220 mAh
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

## I/O

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-LM; supports Wake-on-LAN, PXE Boot ROM, TSN, and Intel® AMT with Intel vPro® 1 x 10/100/1000 Mbps with Intel® I211-AT; supports Wake-on-LAN, PXE Boot ROM
Audio	HD Codec audio as MIC-in/Line-in/Line-out
USB	4 x USB 3.2 Gen 2x1 (10Gbps) (Rear I/O) 2 x Dual USB 3.2 Gen 1x1 (5Gbps) (Internal, Box Header) 4 x USB 2.0 (Internal, Pin Header) 1 x USB 2.0 (Internal, 180D type A)
Serial	4 x RS-232 (internal box header) 2 x RS-232/422/485 (rear I/O)
PS/2 Combo Port	1 x PS/2 keyboard (internal box header) 1 x PS/2 mouse (internal box header)
TPM	TPM 2.0 (optional)
SMBus	Yes
Digital I/O	8-channel programmable



## Display

Graphic	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 Displayport++ (DP 1.2) Up to 4096x2304 @60Hz 1 x DVI-D Up to 1920x1200 @60Hz

## Ordering Information

Standard	
IMB540-S: ATX board, 12th Gen, R680E	ATX motherboard with LGA1700 socket 12th gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor, Intel® R680E, USB 3.2 Gen2 x 1, SATA 3.0, GbE and 2.5GbE LAN, VGA, DisplayPort++, DVI-D, and HDMI

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
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)
TBC	CPU heatsink for 1U chassis (AX61135TM)
713000001000	CPU cooler for 2U, 4U, and wall mount chassis

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