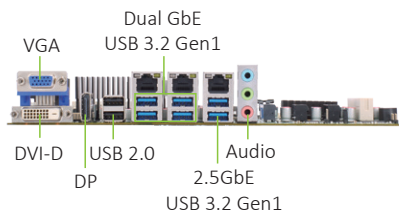
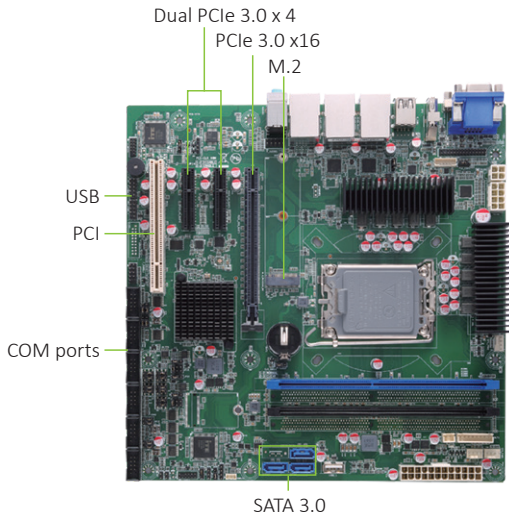


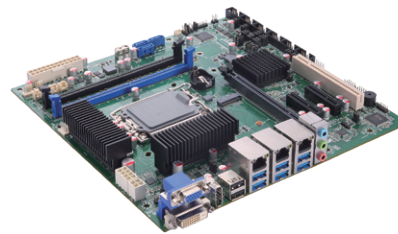
MMB541 NEW

Micro ATX Motherboard with LGA1700 Socket 13th/12th Gen Intel® Core™ Processor, Intel® H610E, USB 3.2 Gen1x1, SATA 3.0, Triple LAN with Dual GbE and 2.5GbE, VGA, DP, DVI-D



Features

- LGA1700 socket 13th/12th gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor (Alder Lake-S)
- Dual 288-pin DDR4-3200 Long-DIMM, up to 64GB
- DP, VGA, DVI-D with triple-view supported
- Supports M.2 Key M (2280/2242)
- Supports USB 3.2 Gen1x1 and USB 2.0
- TPM 2.0 supported (optional)



▲ Side view

Specifications

Core System

CPU	LGA1700 socket 13th/12th Gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor (up to 125W)
System Memory	Dual 288-pin DDR4-3200 non-ECC Long-DIMM, up to 64GB
Chipset	Intel® H610E
BIOS	AMI BIOS
SSD	M.2 Key M 2280/2242 (Supports SATA SSD)
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x PCIe Gen3 x16 slot 2 x PCIe x4 slot open ended (Gen3 signal by PCH) 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 DP; max. resolution up to 4096 x 2160@30Hz 1 x DVI-D; max. resolution up to 1920 x 1200@60Hz 1 x VGA; max. resolution up to 1920 x 1200@60Hz

I/O

SATA	3 x SATA-600 without RAID
Hardware Monitoring	Detect CPU/system temperature, voltage and supports smart fan control
Ethernet	1 x 10/100/1000/2500 Mbps with Intel® I225-V; supports Wake-on-LAN, PXE Boot ROM, TSN 2 x 10/100/1000 Mbps with Intel® I210-AT
Audio	HD Codec audio as MIC-in/Line-in/Line-out
USB	4 x USB 3.0 (Type-A, rear I/O) 4 x USB 2.0 (Type-A, rear I/O) 1 x USB 2.0 (vertical Type-A, Internal) 4 x USB 2.0 (header, internal)
Serial	4 x RS-232 (COM1/2/5/6, box header) 1 x RS-232/RS-485/RS-422 (COM3, box header) 1 x RS-232/RS-485 (COM4, box header)
TPM	TPM 2.0 (optional)
SMBus	Yes
Digital I/O	8-channel programmable
Mechanical and Environmental	
Dimensions	244mm x 244mm
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

MMB541 (P/N: TBD)	Micro ATX motherboard with LGA1700 socket 13th/12th Gen Intel® Core™ processor, Intel® H610E, USB 3.2 Gen1x1 , SATA 3.0, triple LAN with dual GbE and 2.5GbE, VGA, DP, DVI-D
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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
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
713000000500	CPU heatsink for 1U chassis (AX61135TM)
711000000500	CPU cooler for 2U, 4U, and wall mount chassis

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