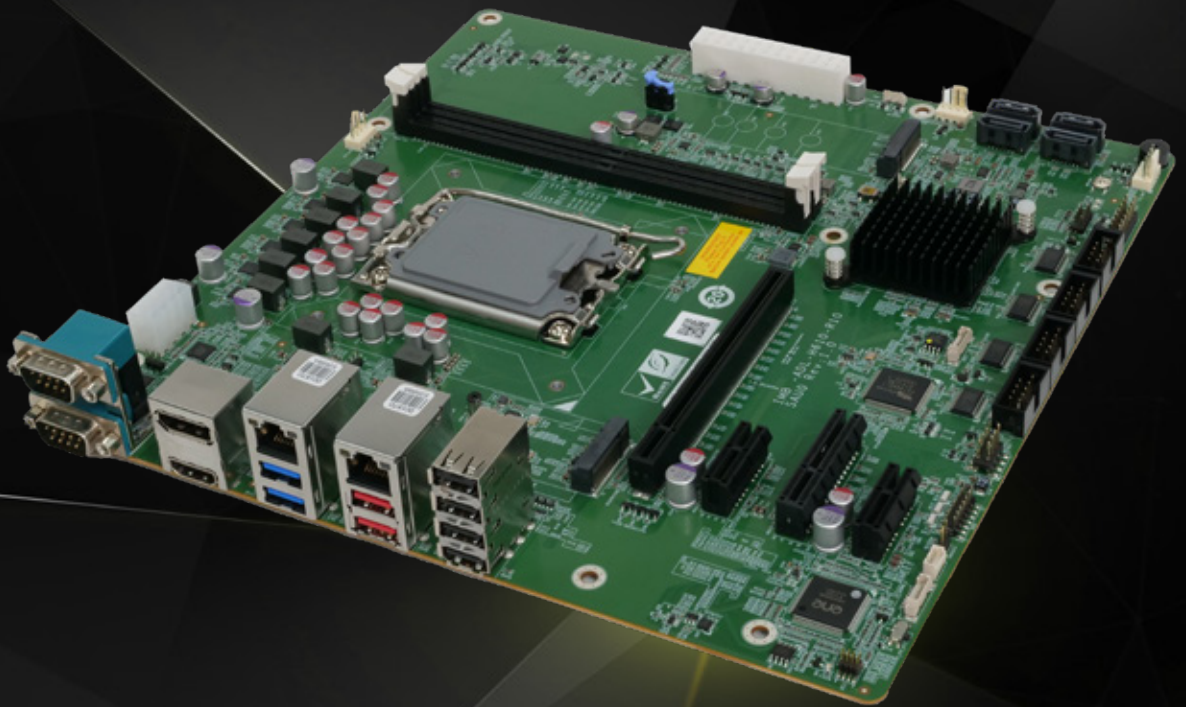


# IMB-ADL-H610

microATX motherboard supports LGA1700 12th/13th/14th Generation Intel® Core™ i9/i7/i5/i3, Pentium® and Celeron® processors

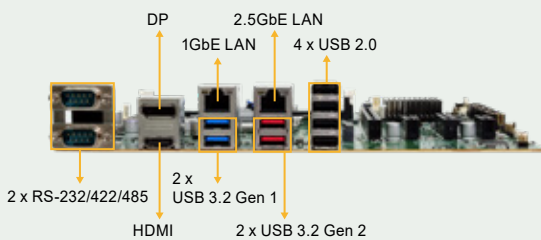
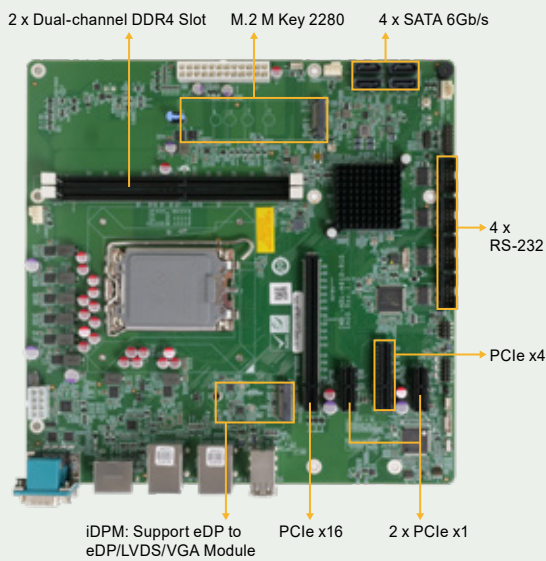
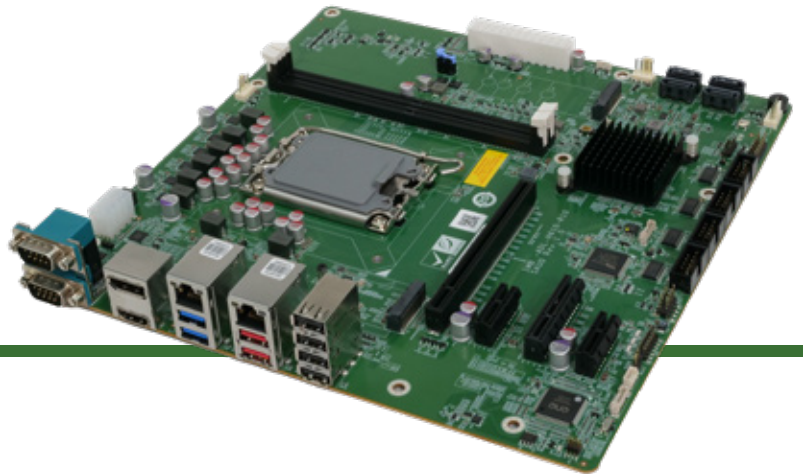
- Support Intel® H610/H610E chipset
- Dual-channel DDR4 3200MHz
- Support DisplayPort 1.4a, HDMI 2.0b & iDPM for eDP/ LVDS/VGA module
- Support M.2 M key 2280 slot and pure PCIe Gen3 & Gen4 expansion slot



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# IMB-ADL-H610

microATX motherboard supports LGA1700  
12th/13th/14th Generation Intel® Core™ i9/i7/i5/i3,  
Pentium® and Celeron® processors



## Support LGA1700 socket 12th/13th/14th Generation Intel® Processor

Supports 12th/13th/14th generation Alder Lake-S/Raptor Lake-S Intel® Core™ i9/i7/i5/i3, Pentium® and Celeron® Processor (up to 65W TDP CPU)



## Rich Expansion I/O

It includes one PCIe x16, one PCIe x4 and two PCIe x1 slot for function expansions like graphics cards, LAN cards or motion control cards; one M.2 M key for NVMe storage.



## Support Intel® I226V 2.5GbE Ethernet Controller

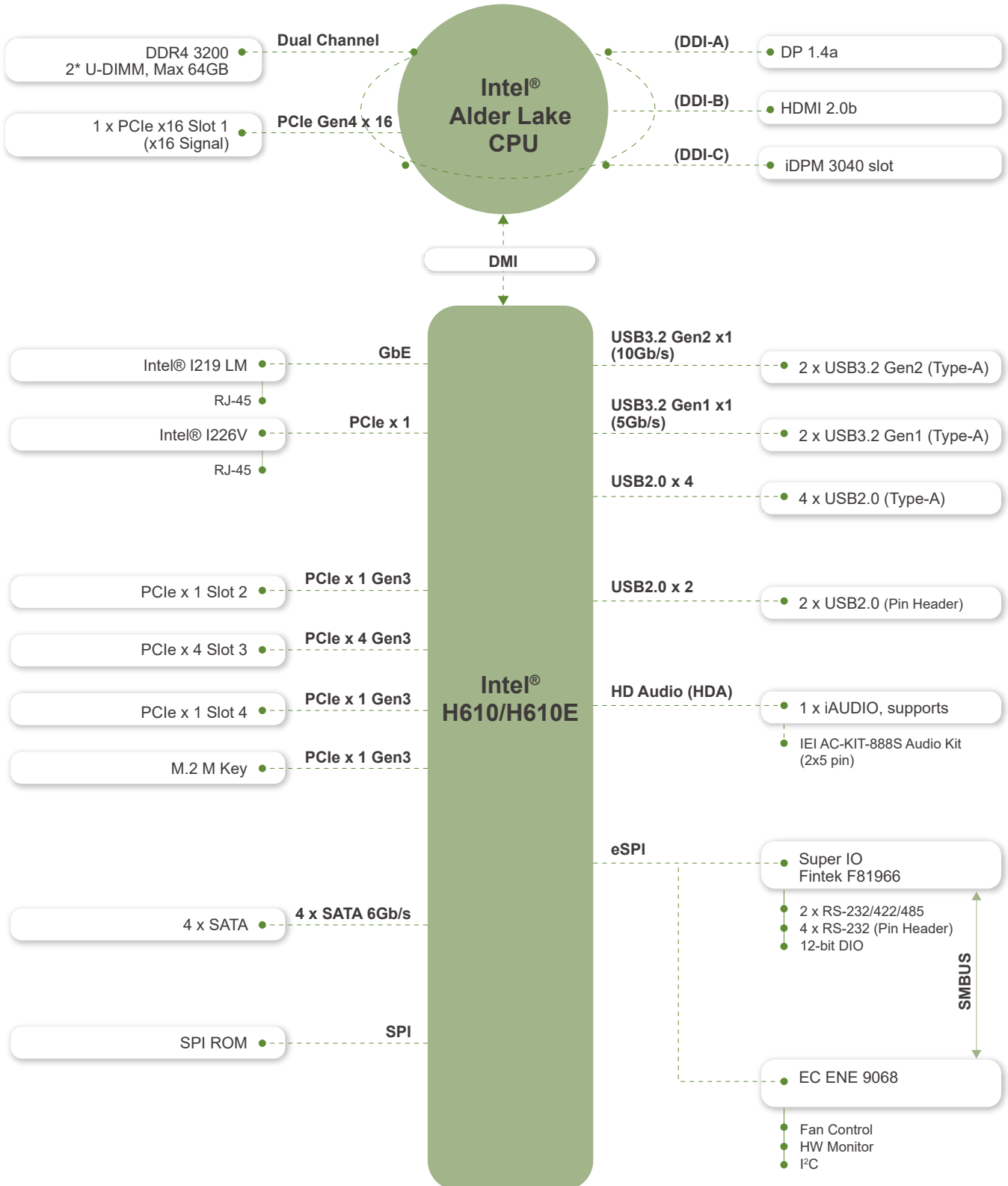
Support RJ45 network interface via Intel® I226V 2.5GbE network controller to achieve up to 2.5GbE network transmission rate.



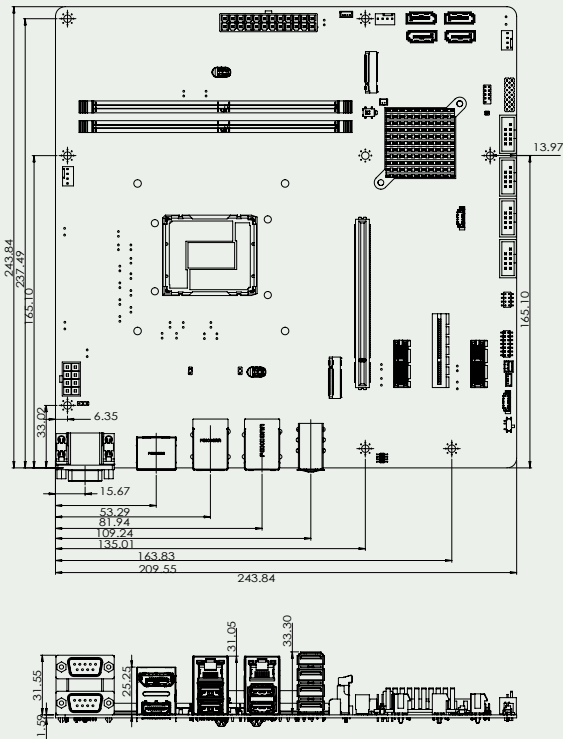
## Support Triple Independent Display

Support triple independent display outputs: one DP (resolution up to 4096 x 2304 @60Hz), one HDMI (resolution up to 4096 x 2304@30Hz), and IEI IDPM slot for IEI eDP/LVDS/VGA display module

# IMB-ADL-H610 Block Diagram



Dimensions



Specifications

Model	IMB-ADL-H610
CPU	LGA1700 socket supports 12th/13th/14th generation Alder Lake-S/Raptor Lake-S Intel® Core™ i9/i7/i5/i3/Pentium®/Celeron® Processor (up to 65W TDP CPU)
Chipset	Intel® H610/H610E
BIOS	AMI UEFI BIOS
Memory	Two 288-pin 3200 MHz Dual-Channel DDR4 SDRAM Unbuffered DIMMs supported up to 64GB
Graphics Engine	Intel® UHD Graphics 770
Display Output	Triple independent display 1 x DP 1.4a (up to 4096 x 2304 @60Hz) 1 x HDMI 2.0b (up to 4096 x 2304 @30Hz) 1 x iDPM 3040 slot (only for IEI eDP/LVDS/VGA module)
Ethernet	LAN1: Intel® i219 LM controller LAN2: Intel® I226V 2.5GbE controller
External I/O Interface	2 x USB 3.2 Gen2 x1 (Type-A) (10Gb/s) 2 x USB 3.2 Gen1 x1 (Type-A) (5Gb/s) 4 x USB 2.0 (Type-A) 2 x RS-232/422/485 (RS-485 support AFC)
Internal I/O Interface	4 x SATA 6Gb/s 2 x USB 2.0 (2x4 pin, P=2.54) 4 x RS-232 (2x5 pin, P=2.54)
SMBus	1 x SMBus (1x4 pin)
I2C	1 x I2C (1x4 pin)
Audio	1 x iAUDIO, supports IEI AC-KIT-888S Audio Kit (2x5 pin)
Front Panel	1 x Front Panel (2x7 pin, Power LED, HDD LED, Speaker, Power Button, Reset Button)
LAN LED	2 x LAN LED (1x2 pin)
Expansion	**1 x PCIe Gen4 x16 Slot with x16 Signal 1 x PCIe Gen3 x4 open-end 2 x PCIe Gen3 x1 1 x M.2 M Key 2280 (PCIe x1)
Digital I/O	1 x 12-bit digital I/O (2x7 pin)
TPM	Intel® PTT (TPM 2.0)
FAN connector	1 x CPU fan connector (1x4 pin) 1 x System fan connector (1x4 pin)
Power supply	ATX/AT power supply Support AT/ATX mode ErP/EuP Compliant
Watchdog Timer	Software Programmable support 1~255 sec. System reset 3.3V@0.35A, 5V@7.54A, 12V@5.75A, 5VSB@0.96A
Power Consumption	(Intel® Core™ i9-12900E CPU with 8 GB 3200 MHz DDR4 memory, EuP mode enabled)
Operating Temperature	0°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~95%, non-condensing
Dimension	244mm x 305mm
Weight	GW:1200g / NW:700g
Certification	CE/FCC Compliant

\*\*Intel® recommends that Alder Lake-S CPU PCIe ports are only used for discrete graphics and storage devices

Optional accessories



Packing List

1 x IMB-ADL-H610 single board computer	2 x SATA cable(PN: 32801-012500-100-RS)
1 x I/O shielding (PN: 45014-0098C0-00-HF)	1 x QIG

Ordering Information

IMB-ADL-H610-R11	micro ATX motherboard supports LGA1700 Intel® 12th/13th/14th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR4, Triple independent displays,dual LAN, USB 3.2, SATA 6Gb/s and RoHS
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Optional Accessories

19800-003100-100-RS	Dual port USB cable with bracket, 300mm, P=2.54
32205-000702-200-RS	RS-232/422/485 cable, 230mm, P=2.54
AC-KIT-888S-R10	Realtek ALC888S 7.1 Channel HD Audio peripheral board, RoHS
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
19100-000323-00-RS	LGA1700 cooler kit, 65W
iDPM-eDP-R10	eDP to eDP DisplayPort converter board (for IEI iDPM connector)
iDPM-LVDS-R10	eDP to LVDS DisplayPort converter board (for IEI iDPM connector)
iDPM-DP-R10	eDP to DP DisplayPort converter board (for IEI iDPM connector)
iDPM-VBO-R10	eDP to VBO DisplayPort converter board (for IEI iDPM connector)