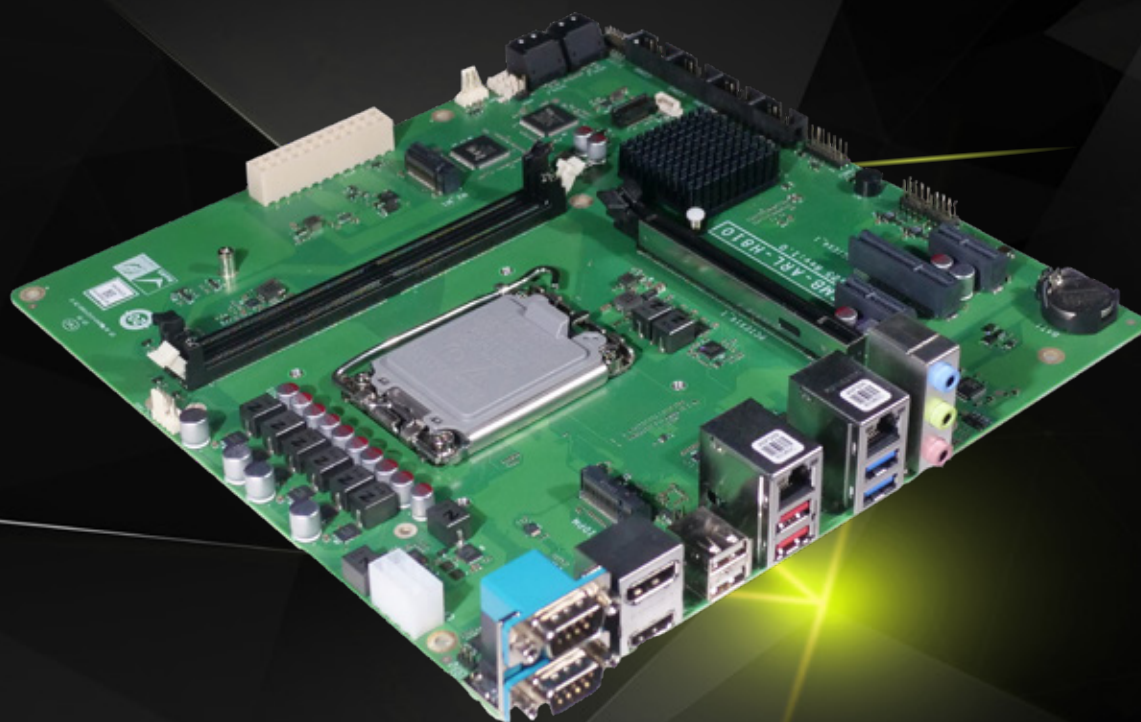


IMB-ARL-H810

micro-ATX motherboard supports LGA1851 Intel® 15th Generation Ultra™ processor, DDR5, Triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS

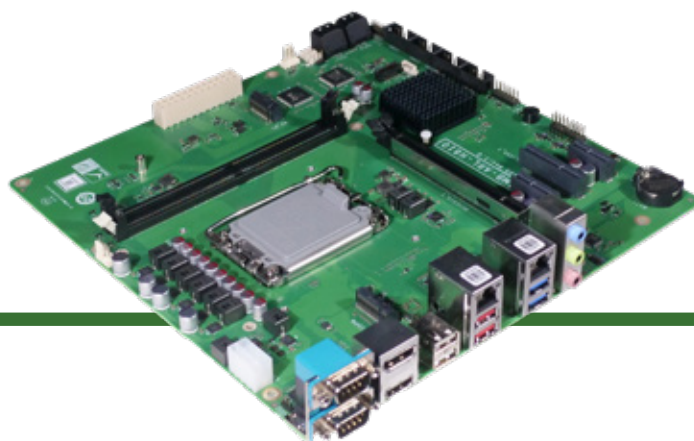
- LGA1851 Intel® 15th Generation Ultra processor
- Support DisplayPort, HDMI and iDPM
- Support one PCIe x16, one PCIe x4 and two PCIe x1 expansion



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intel

Two 288-pin Dual-Channel DDR5 SDRAM supported up to 96GB

M.2 M Key

4 x SATA

4 x RS-232

1 x PCIe x16

4 x USB 2.0

1 x PCIe x4

iDPM

2 x PCIe x1

DP

2 x 2.5GbE LAN

2x RS232/422/485

HDMI

2 x USB 2.0

2 x USB 3.2 Gen2

2 x USB 3.2 Gen1

Audio



Support 15th Gen Intel® Core™ Ultra CPU

Support high-Performance Intel® Core™ Ultra Processors (Series 2), up to 65W TDP CPU



Support Dual-Channel DDR5 SDRAM Unbuffered DIMMs

IEI design the IMB-ARL-H810 support 2 x 288-pin 5600 MHz dual-Channel DDR5 SDRAM Unbuffered, Clocked Unbuffered DIMM (UDIMM & CUDIMM) supported up to 96GB



Support Intel® 2.5GbE Network Controller

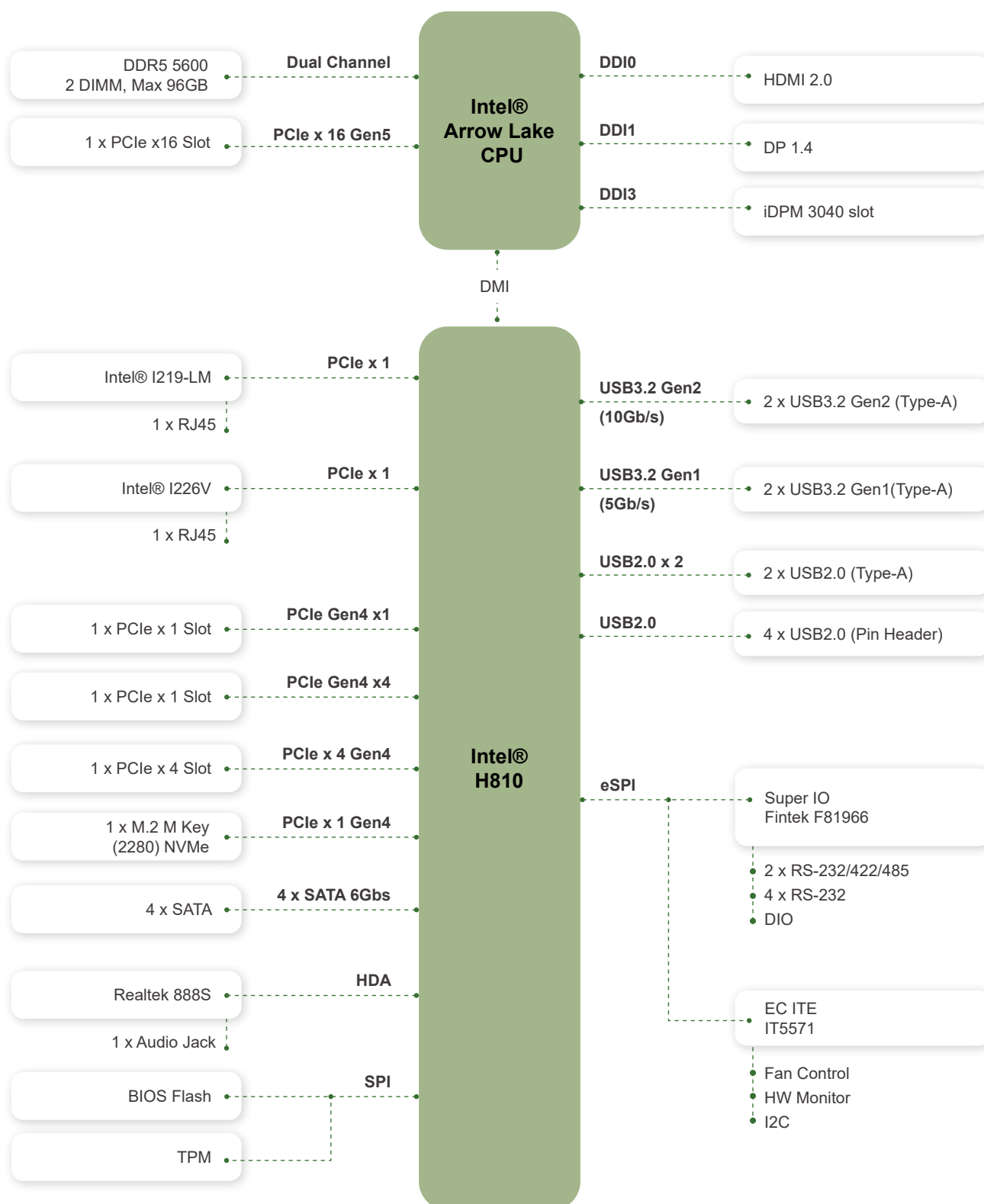
Two RJ45 network ports are provided via Intel® I219-LM and I226-V network controller to achieve up to 2.5GbE network transmission rate



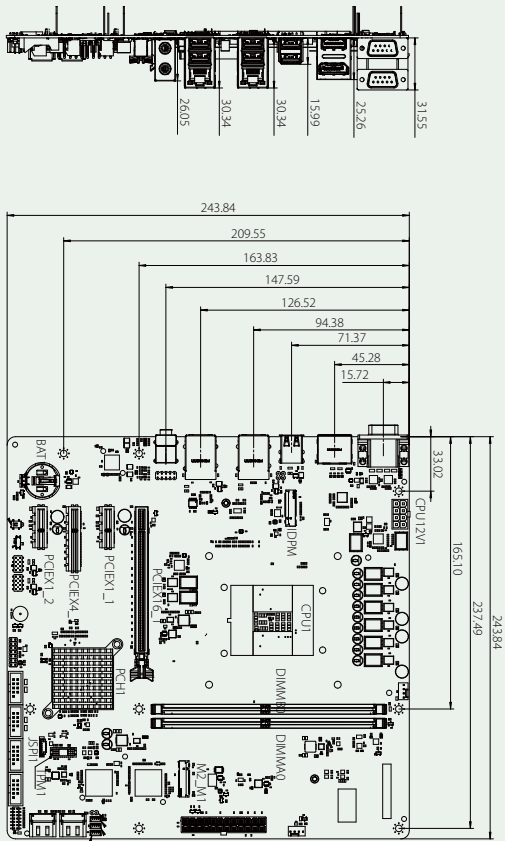
Abundant Expansion Slots

The IMB-ARL-H810 supports 1 x PCIe x16, 1 x PCIe x4, 2 x PCIe x1 and M.2 M key for NVME storage

Block Diagram



Dimensions



Optional Accessories



Specifications

Model	IMB-ARL-H810
CPU	LGA1851 socket supports 15th generation Arrow Lake-S Intel® Ultra Processor (up to 65W TDP CPU)
Chipset	Intel®H810
BIOS	AMI UEFI BIOS
Memory	Two 288-pin 5600 MHz Dual-Channel DDR5 SDRAM Unbuffered, Clocked Unbuffered DIMM (UDIMM & CUDIMM) (CUDIMM support 6400MHz), supported up to 96GB
Graphics Engine	New Intel® Xe Graphics architecture with SRIOV, Genlock
Display Output	Triple independent display 1 x DP1.4 (up to 4K@60Hz) 1 x HDMI2.0 (up to 4K@60Hz) 1 x iDPM 3040 slot (only for IEI eDP/LVDS/VGA module)
Ethernet	LAN1: Intel® I219-LM controller LAN2: Intel® I226V 2.5GbE controller
Super I/O	Fintek F81966
Embedded Controller	ENE KB9068
External I/O Interface	2 x RS-232/422/485 (RS-485 support AFC) 2 x USB 3.2 Gen1 (Type-A) (5Gb/s) 2 x USB 3.2 Gen2 (Type-A) (10Gb/s) 2 x USB 2.0 (Type-A)
Internal I/O Interface	4 x SATA 6Gb/s 4 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	Realtek ALC888S HD codec 2 x Audio Jack (Line-out, Mic-in) on rear IO 1 x Analog audio (2x5 pin)
Front Panel	1 x Front Panel (2 x 7 pin, Power LED, HDD LED, Speaker, Power Button, Reset Button)
LAN LED	2 x LAN LED (1x2 pin)
Expansion	1 x PCIe x16 with Signal Gen5 1 x PCIe x4 open-end Gen4 2 x PCIe x1 Gen4 1 x M.2 M Key 2280 (PCIe Gen4 x1)
Digital I/O	1 x 12-bit digital I/O (2x7 pin)
TPM	1 x TPM 2 x10 pin ,support Intel PTT
FAN connector	1 x CPU fan connector (1x4 pin) 1 x System fan connector (1x4 pin)
Chassis Open	1 x Chassis intrusion (1x2 pin)
Power supply	ATX/AT power supply Support AT/ATX mode ErP/EuP Compliant
Watchdog Timer	Software Programmable support 1~255 sec. System reset
Power Consumption	3.3V@0.35A, 5V@6.49A, 12V@6.18A, 5VSB@0.27A (Intel Core Ultra 9 285 with DDR5 4800MT/s U-DIMM 32GB memory)
Operating Temperature	-10°C ~ 65°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~95%, non-condensing
Diemension	244mm x 244mm
Weight	GW: 1200g / NW: 700g

Packing List

1 x IMB-ARL-H810 single board computer	2 x SATA cable
1 x I/O Shielding	1 x QIG

Ordering Informaiton

IMB-ARL-H810-R10	micro-ATX motherboard supports LGA1851 Intel® 15th Generation Ultra™ processor, DDR5, Triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS
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Optional Accessories

CB-USB02-RS	Dual-port USB cable with bracket, 300mm, p=2.54
32205-000702-100-RS	RS-232 cable, 230mm, P=2.54
19100-000323-00-RS	High-performance cooler, 65W (72 x 70 x 45.8 mm)
19100-000333-00-RS	High-performance cooler, 80W (72 x 48.5 x 73.5 mm)
19100-000326-00-RS	High-performance cooler, 125W (87.8 x 66.5 x 75 mm)