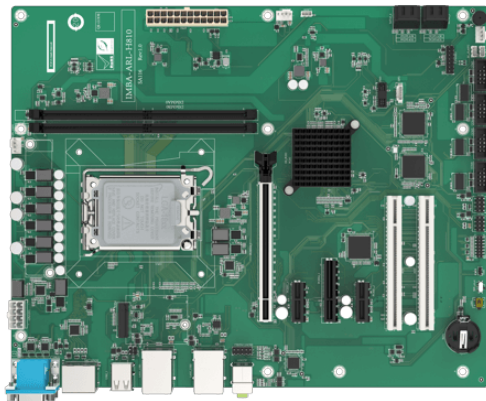


# IMBA-ARL-H810

ATX motherboard supports LGA1851 High-Performance Intel® Core™ Ultra Processors (Series 2), DDR5, Triple independent displays, dual LAN, USB 3.2, SATA 6Gb/s, HD Audio and RoHS



## Features

- » High-Performance Intel® Core™ Ultra Processors (Series 2) (up to 65W TDP CPU)
- » Two 288-pin 5600 MHz Dual-Channel DDR5 SDRAM Unbuffered, Clocked Unbuffered DIMM(CUDIMM support 6400MHz) supported up to 96GB
- » Triple independent display via HDMI™, DP and iDPM
- » Support Dual Intel® I226V/I219 LM 2.5GbE controller
- » Support PCIe Gen4 x1, PCIe Gen4 x4, PCIe Gen5 x16 and PCI expansion

## Specifications

|                             |                                                                                                                                                                                                                                                               |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form Factor                 |                                                                                                                                                                                                                                                               |
| Form Factor                 | ATX                                                                                                                                                                                                                                                           |
| System                      |                                                                                                                                                                                                                                                               |
| CPU                         | High-Performance Intel® Core™ Ultra Processors (Series 2)<br>(up to 65W TDP CPU)                                                                                                                                                                              |
| Chipset                     | Intel® H810                                                                                                                                                                                                                                                   |
| Memory                      | Two 288-pin 5600 MHz Dual-Channel DDR5 SDRAM Unbuffered, Clocked Unbuffered DIMM(CUDIMM support 6400MHz) supported up to 96GB                                                                                                                                 |
| Cooling method / System Fan | 1 x CPU fan connector (1x4 pin)<br>1 x System fan connector (1x4 pin)                                                                                                                                                                                         |
| Physical Characteristics    |                                                                                                                                                                                                                                                               |
| Dimensions (LxWxH) (mm)     | 244mm x 305mm                                                                                                                                                                                                                                                 |
| Net Weight                  | GW: 1200g / NW: 700g                                                                                                                                                                                                                                          |
| Storage                     |                                                                                                                                                                                                                                                               |
| Storage                     | 4 x SATA : 4 x SATA 6Gb/s                                                                                                                                                                                                                                     |
| I/O Interface               |                                                                                                                                                                                                                                                               |
| Display Output              | 1 x HDMI™ 2.0 (up to 4K@60Hz)<br>2 x Display Port 1.4 (up to 4K@60Hz)<br>1 x iDPM 3040 slot (only for IEI eDP/LVDS/VGA module)                                                                                                                                |
| Ethernet                    | 2 x LAN -<br>LAN1: Intel® I219 LM controller<br>LAN2: Intel® I226V 2.5GbE controller                                                                                                                                                                          |
| Audio                       | HD Audio : Realtek ALC888S HD codec<br>2 x Audio Jack (Line-out, Mic-in) on rear IO<br>1 x Analog audio (2x5 pin)                                                                                                                                             |
| I/O Interface               | 2 x External RS-232/422/485 : RS-485 support AFC<br>4 x Internal RS-232 : 2x5 pin, P=2.54<br>2 x External USB 2.0 : Type-A<br>2 x External USB 3.2 Gen1x1 : Type-A, 5Gb/s<br>4 x Internal USB 2.0 : 2x4 pin, P=2.00<br>1 x DIO : 12-bit digital I/O (2x7 pin) |

|                       |                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------|
|                       | 2 x External USB 3.2 Gen2x1 : Type-A, 10Gb/s                                                      |
|                       | 1 x I <sup>2</sup> C : 1x4 pin                                                                    |
| Expansion             | 1 x PCIe x16 : with Signal Gen5                                                                   |
|                       | 1 x PCIe x4 : open-end Gen4                                                                       |
|                       | 2 x PCIe x1 : Gen4 x1                                                                             |
|                       | 2 x PCI Slot                                                                                      |
| Power                 |                                                                                                   |
| Power Consumption     | 3.3V@0.64A, 5V@3.63A, 12V@6.49A, 5Vsb@0.53A<br>(Intel Ultra 9 285T with DDR5 4800MHz 32GB memory) |
| Power Supply          | ATX/AT power supply                                                                               |
|                       | Support AT/ATX mode                                                                               |
|                       | ErP/EuP Compliant                                                                                 |
| Environment           |                                                                                                   |
| Operating Temperature | -10°C ~ 60°C                                                                                      |
| Storage Temperature   | -30°C ~ 70°C                                                                                      |
| Humidity              | 5% ~95%, non-condensing                                                                           |
| Certifications        |                                                                                                   |
| Safety & EMC          | CE/FCC compliant                                                                                  |
| Watchdog Timer        |                                                                                                   |
| Watchdog Timer        | Software Programmable support 1~255 sec.                                                          |
|                       | System reset                                                                                      |

## Ordering Information

|                   |                                                                                                                                                               |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IMBA-ARL-H810-R10 | ATX motherboard supports LGA1851 Intel® 15th Generation Ultra™ processor, DDR5, Triple independent displays, dual LAN, USB 3.2, SATA 6Gb/s, HD Audio and RoHS |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Packing List

|                                         |                   |
|-----------------------------------------|-------------------|
| 1 x IMBA-ARL-H810 single board computer | 1 x I/O Shielding |
| 1 x SATA cable                          | 1 x QIG           |