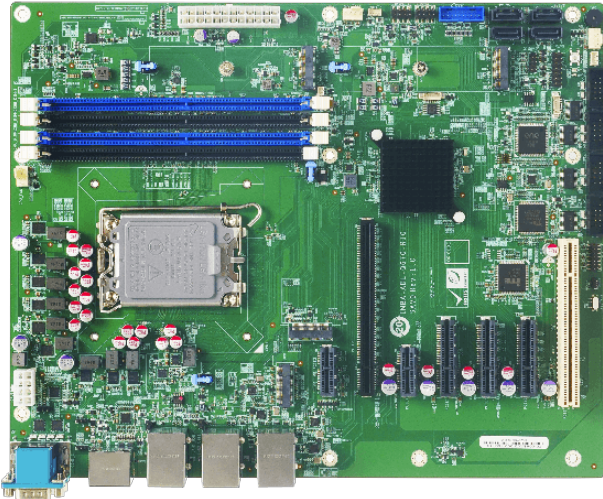


# IMBA-ADL-Q670

ATX motherboard supports LGA1700 Intel® 12th/13th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR4, Triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, iAUDIO and RoHS



## Features

- » LGA1700 Intel® 12th/13th Generation Core i9/i7/i5/i3, Pentium and Celeron processor (up to 125W)
- » Dual-channel DDR4 3200MHz supported up to 128GB
- » Support triple independent display via HDMI™, DP and iDPM
- » Support one PCIe x16, three PCIe x4, two PCIe x1, one PCI expansions
- » Support two M.2 M keys and four SATA for storage

## Specifications

|                             |                                                                                                                                                       |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form Factor                 |                                                                                                                                                       |
| Form Factor                 | ATX Motherboard                                                                                                                                       |
| System                      |                                                                                                                                                       |
| CPU                         | LGA1700 socket supports 12th/13th generation Alder Lake-S/Raptor Lake-S Intel® Core™ i9/i7/i5/i3/Pentium®/Celeron® Processor (up to 125W TDP CPU)     |
| Chipset                     | Intel® Q670/Q670E                                                                                                                                     |
| Memory                      | Four 288-pin 3200 MHz Dual-Channel DDR4 SDRAM Unbuffered DIMMs supported up to 128GB                                                                  |
| Memory Max.                 | 128GB                                                                                                                                                 |
| Cooling method / System Fan | 1 x CPU fan connector (1x4 pin)<br>2 x System fan connector (1x4 pin)                                                                                 |
| Physical Characteristics    |                                                                                                                                                       |
| Dimensions (LxWxH) (mm)     | 244mm x 305mm                                                                                                                                         |
| Net Weight                  | 700g                                                                                                                                                  |
| Storage                     |                                                                                                                                                       |
| Storage                     | 2 x M.2(NGFF) -<br>1 x M Key (2242/2280, PCIe x4 )<br>1 x M Key (2242/2280, PCIe x2 )<br>4 x SATA : RAID 0/1/5/10 supported                           |
| I/O Interface               |                                                                                                                                                       |
| Display Output              | 1 x Display Port : up to 4096 x 2304 @60Hz<br>1 x HDMI™ : up to 4096 x 2304 @30Hz<br>1 x iDPM : support iEi eDP/ LVDS/ VGA module                     |
| Ethernet                    | 2 x LAN -<br>LAN1: Intel® I225V 2.5GbE controller (CO-LAY I225-LM support vPro)<br>LAN2: Intel® I225V 2.5GbE controller (CO-LAY I225-LM support vPro) |
| Audio                       | 1 x HD Audio : iAUDIO supports IEI AC-KIT-888S Audio Kit (2 x 5 pin)                                                                                  |
| I/O Interface               | 2 x External RS-232/422/485 : RS-485 support AFC<br>2 x External USB 3.2 Gen1x1 : 5Gb/s (Type A)<br>4 x External USB 3.2 Gen2x1 : 10Gb/s (Type A)     |

|                       |                                                                                                                               |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------|
|                       | 4 x Internal RS-232 : 2 x 5 pin, P=2.54                                                                                       |
|                       | 4 x Internal USB 2.0 : 2 x 4 pin, P=2.54                                                                                      |
|                       | 2 x Internal USB 3.2 Gen1x1 : 2 x 10 pin, P=2.00 pin wafer (5Gb/s)                                                            |
| Expansion             | 2 x M.2(NGFF) -                                                                                                               |
|                       | 1 x M Key (2242/2280, PCIe x4 ) NVMe support                                                                                  |
|                       | 1 x M Key (2242/2280, PCIe x2 for SSD) NVMe support                                                                           |
|                       | 1 x PCI Slot                                                                                                                  |
|                       | 2 x PCIe x1 (Gen3)                                                                                                            |
|                       | 1 x PCIe x16 (Gen4 slot with x16 Signal)                                                                                      |
|                       | 3 x PCIe x4 (Gen4 open-end)                                                                                                   |
| <b>Power</b>          |                                                                                                                               |
| Power Consumption     | 3.3V@1.04A, 5V@10.38A, 12V@5.76A, 5VSB@0.39A (Intel® Core™ i9-12900E<br>CPU with 8 GB 3200 MHz DDR4 memory, EuP mode enabled) |
| Power Supply          | ATX/AT power supply<br>Support AT/ATX mode<br>ErP/EuP Compliant                                                               |
| <b>Environment</b>    |                                                                                                                               |
| Operating Temperature | 0°C~60°C                                                                                                                      |
| Storage Temperature   | -30°C~70°C                                                                                                                    |
| Humidity              | 5% ~95%, non-condensing                                                                                                       |

## Ordering Information

|                   |                                                                                                                                                                                                                |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IMBA-ADL-Q670-R10 | ATX motherboard supports LGA1700 Intel® 12th/13th Generation Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, DDR4, Triple independent displays, dual 2.5GbE LAN, M.2, USB 3.2, SATA 6Gb/s, iAUDIO and RoHS |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Packing List

|                                         |                |
|-----------------------------------------|----------------|
| 1 x IMBA-ADL-Q670 single board computer | 2 x SATA cable |
| 1 x I/O shielding                       | 1 x QIG        |