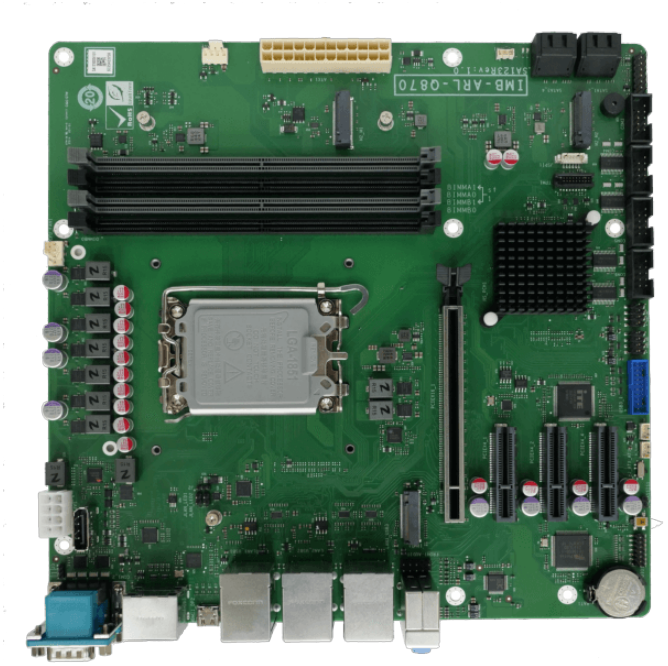
IMB-ARL-Q870

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



Features

1. high-Performance Intel® Core™ Ultra Processors (Series 2)

2. Support four 288-pin 5600 MHz Dual-Channel DDR5 Clocked Unbuffered DIMM (CUDIMM) up to 192GB

3. Support dual Intel® 2.5GbE controller

4. Support PCIe Gen5 x16, PCIe Gen4 x4, 2 x M.2 M key and M.2 B key expansion

Specifications

Form Factor	
Form Factor	Micro-ATX
System	
CPU	high-Performance Intel® Core™ Ultra Processors (Series 2)
Memory	Four 288-pin 5600 MHz Dual-Channel DDR5 SDRAM Clocked Unbuffered DIMM (CUDIMM) DIMMs
Memory Max.	192GB
Cooling method / System Fan	1 x CPU fan connector (1x4 pin)
	1 x System fan connector (1x4 pin)
Physical Characteristics	
Dimensions (LxWxH) (mm)	244mm x 244mm
Net Weight	GW: 1200g / NW: 700g
Storage	
Storage	4 x SATA : 6Gb/s (RAID 0/1 supported)
I/O Interface	
Display Output	1 x DP++ -
	DP1.4 (up to 4K @60Hz)
	DP1.4 (up to 4K @60Hz) internal
	1 x HDMI™ : HDMI 1.4 (up to 4K @60Hz)
	1 x USB4 : 40Gb/s speed, support DP 4096 x 2304 @60Hz, up to 15W per port
Ethernet	2 x LAN -
	LAN1: Intel® I226-LM 2.5GbE controller
	LAN2: Intel® I226V 2.5GbE controller
I/O Interface	1 x DIO : 12-bit digital I/O (2x7 pin)
	2 x External RS-232/422/485 : RS-485 support AFC
	6 x External USB 3.2 Gen2x1 : Type-A, 10Gb/s
	4 x Internal RS-232 : 2x5 pin, P=2.54
	4 x Internal USB 2.0 : 2x4 pin, P=2.54

	2 x Internal USB 3.2 Gen1x2 : 2x10 pin, P=2.00, 5Gb/s
Expansion	2 x M.2(NGFF) -
	2 x M.2 M Key (2280, PCIe x4) NVMe support
	1 x M.2 B key for IRIS2-2600
	1 x PCIe x16 : PCIe Gen5 x16
	3 x PCIe x4 : PCIe Gen4 x4
Power	
Power Consumption	3.3V@5.05A, 5V@11.94A, 12V@5.79A, 5VSB@0.6A
	(Intel® Core™ Ultra 9 285 with DDR5 5600MT/s U-DIMM 48GB memory)
Power Supply	ATX/AT power supply
	Support AT/ATX mode
	ErP/EuP Compliant
Environment	
Operating Temperature	0°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Humidity	5% ~ 95%, non-condensing

Ordering Information

IMB-ARL-Q870-R10	micro-ATX motherboard supports LGA1851 Intel® 15th Generation Ultra™ processor, DDR5, Quadruple independent displays, triple LAN, M.2, USB 3.2, SATA 6Gb/s, HD Audio and RoHS

Packing List

1 x IMB-ARL-Q870 single board computer	1 x I/O Shielding
2 x SATA cable	1 x QIG