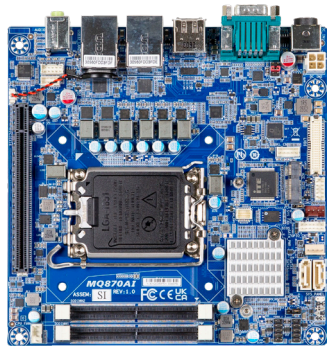
Mini-ITX Series

mITX-Q870A (MQ870AI)

Mini-ITX with Intel® Q870 Chipset, support Intel® Core™ Ultra Processors (Series 2), Dual channel DDR5 memory, PCIe, 2 x COM, 2 x SATA 6Gb/s, 8 x USB, 1 x USB Type C





Features

- Mini-ITX form factor
- Support Intel® Core™ Ultra processors (Series 2)
- Intel® Q870 Chipset
- Dual Channel DDR5, 2 x SO-DIMMs
- 2 x 2.5GbE LAN Port
- 2 x SATA 6Gb/s Ports
- HDMI, Display Port, USB Type C (with Alt mode), LVDS ports for multiple display
- 1 x COM Port (RS-232)
- 1 x COM Port (RS-232/422/485 & RI/5V/12V)

Specifications

Form Factor	Mini-ITX 170W x 170D (mm)
CPU	Support Intel® Core™ Ultra processors (Series 2) TDP under 65W
Socket	1 x LGA 1851
Chipset	Intel® Q870 Chipset
Memory	2 x DDR5 SO-DIMM sockets, Max. Capacity 96 GB Support Dual Channel DDR5 5600 MHz memory modules or 2 x DDR5 CSO-DIMM sockets, Max. Capacity 128 GB Support Dual Channel DDR5 6400 MHz memory modules
Ethernet	1 x 2.5GbE LAN port (Intel® I226LM) 1 x 2.5GbE LAN port (Intel® I226V)
Video	Integrated Graphics Processor - depends on CPU: 1 x HDMI 2.0 port, supporting a maximum resolution of 4096x2160 @60Hz 1 x DP 1.4 port, supporting a maximum resolution of 4096x2160 @60Hz 1 x LVDS port, supporting a maximum resolution of 1920x1200 @60Hz 1 x DP 1.4 through USB Type C (DP Alt mode), supporting a maximum resolution of 4096x2160 @60Hz (4 independent display outputs)
Audio	Realtek® ALC897
Storage	2 x SATA 6Gb/s Ports
Raid	RAID 0/1/5

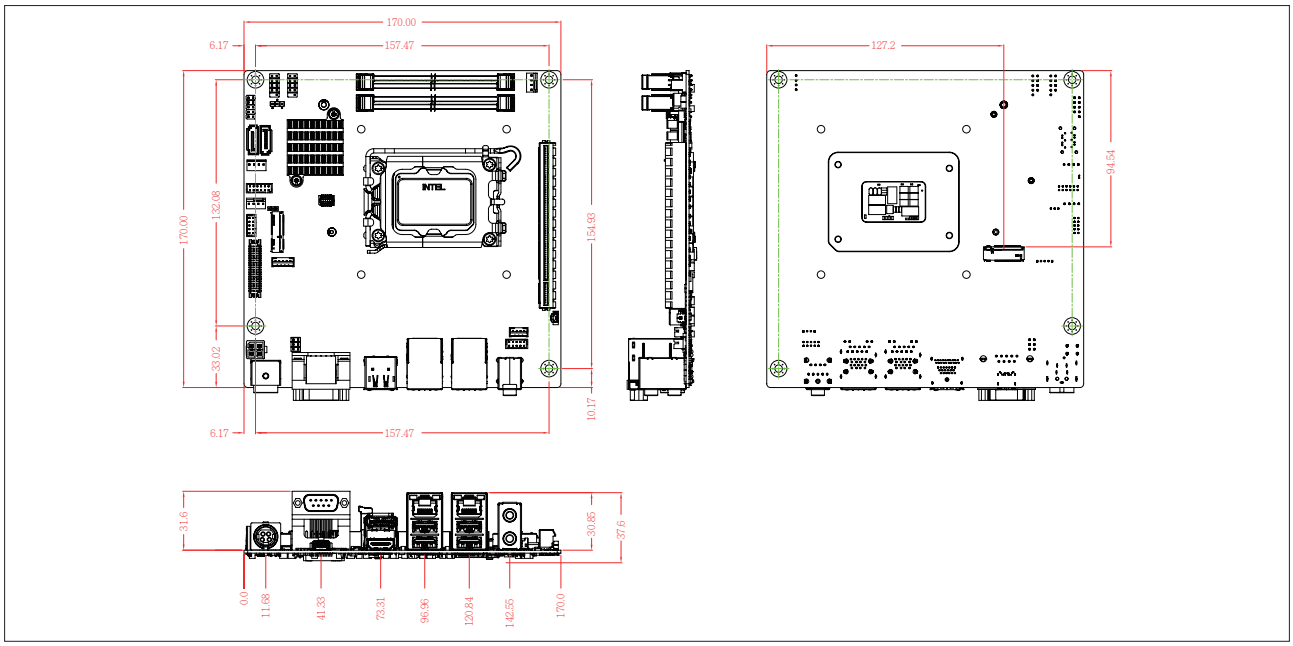
Expansion Slots	1 x PCIe x16 (Gen4 x16) 1 x 2280 M.2 M-Key (PCIe Gen4x4, SATA 6Gb/s) 1 x 2230 M.2 E-Key (WiFi/BT)
Internal I/O	1 x 2x2-pin DC power connector (+12V/+19V~+24VDC) 2 x SATA power connectors 1 x CPU fan header 1 x System fan header 1 x Front panel header 1 x Front panel audio header 1 x 2W Speaker out header 4 x USB 2.0 headers 1 x COM header (RS-232) 1 x GPIO (8 bits) & SMBus header 1 x Backlight Control header 1 x Clear CMOS jumper 1 x AT/ATX mode select jumper
Rear I/O	2 x Audio Jacks (Line out, Mic in) 1 x COM Port (RS-232/422/485 & RI/5V/12V) 1 x HDMI 1 x Display Port 1 x USB 3.2 Type C with DP 1.4 (DP Alt mode)(10Gbps) 2 x RJ45 LAN Ports 4 x USB 3.2 Gen 1 (5Gbps) 1 x DC Jack (+12V/+19V~+24VDC)
TPM	Onboard TPM 2.0 security chip Infineon SLB9670VQ2.0
OS Compatibility	Windows 10 IoT Enterprise LTSC 2021, x64 Windows 11 IoT Enterprise LTSC 2024, x64
Operating Properties	Operating temperature: 0°C to 60°C Operating humidity: 60°C @ 20-95% (non-condensing) Non-operating temperature: -40°C to 85°C Non-operating humidity: 85°C @ 95% (non-condensing)
Packing Content	Carton size: 465 x 351 x 217 (mm) Packing Capacity: 10pcs Single Box size: 221 x 178 x 65 (mm) Including: IO Shield x 1 (P/N: 12AIO-MQ870A-00R) SATA power Cable x 1 (P/N: 25CRI-300B01-K1R)
Order Information	9MQ870AIMR-SI (Box packing)

GIGAIPC reserves the right to modify or change technical data without prior notice.

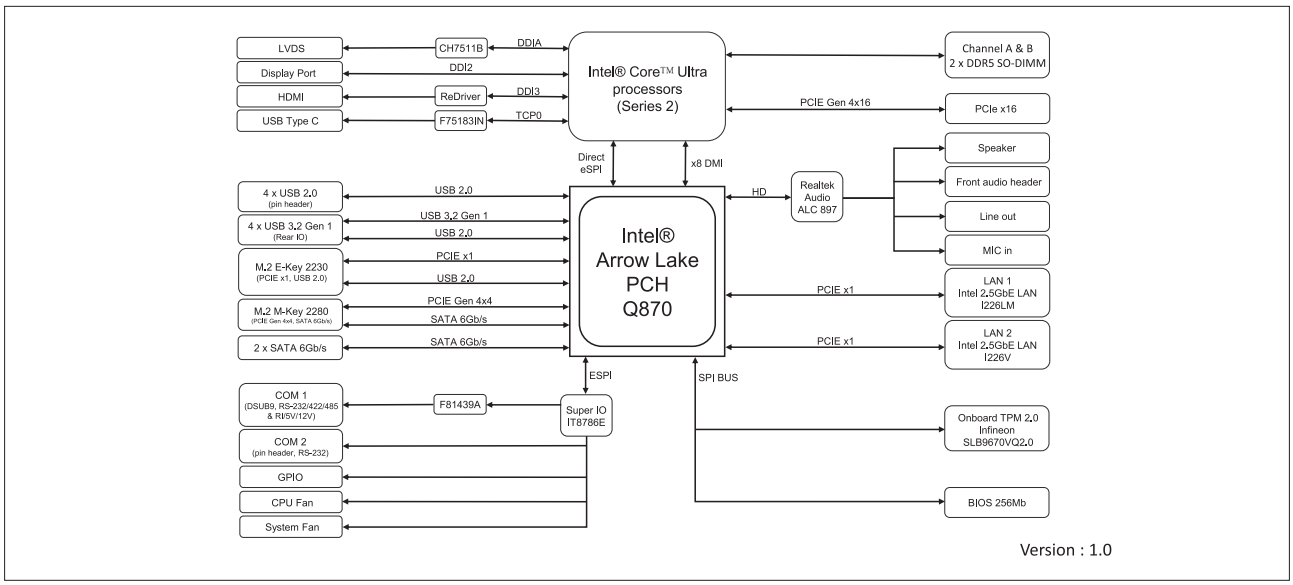
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Dimension (Unit: mm)

2026/10/29



Block Diagram



Optional Kit

Part No.	Description	Quantity
25ST0-037820-Y0R	CPU Cooler	1
12KRH-0A1700-00R	CPU Cooler Backplate	1

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