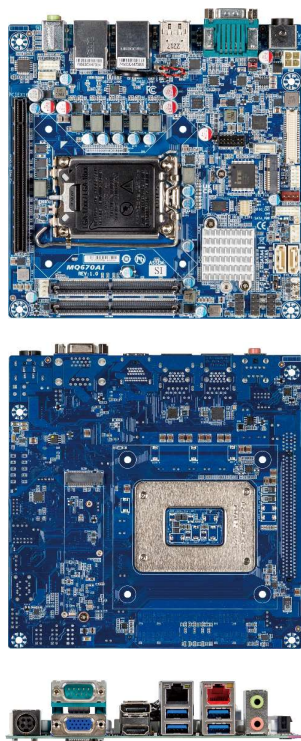# mITX-Q670A (MQ670AI)

Mini-ITX with Intel® Q670 Chipset, support 13th/12th Generation Intel® Core™ Processors, Dual channel DDR4 memory, PCIe, 2 x COM, 10 x USB, 2 x SATA 6Gb/s
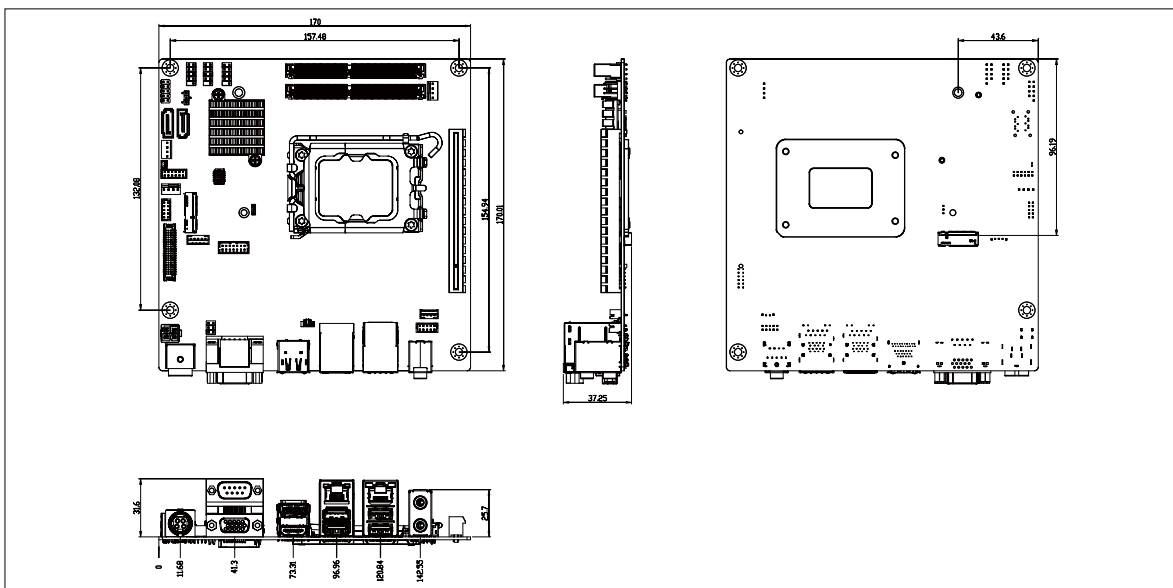

Features

- Mini-ITX form factor
- Support 13th/12th Generation Intel® Core™ Processors
- Intel® Q670 Chipset
- Dual Channel DDR4, 2 x SO-DIMMs
- 1 x GbE LAN Port
- 1 x 2.5GbE LAN Port
- 2 x SATA 6Gb/s Ports
- HDMI, Display Port, VGA, LVDS ports for multiple display
- 1 x COM Port (RS-232)
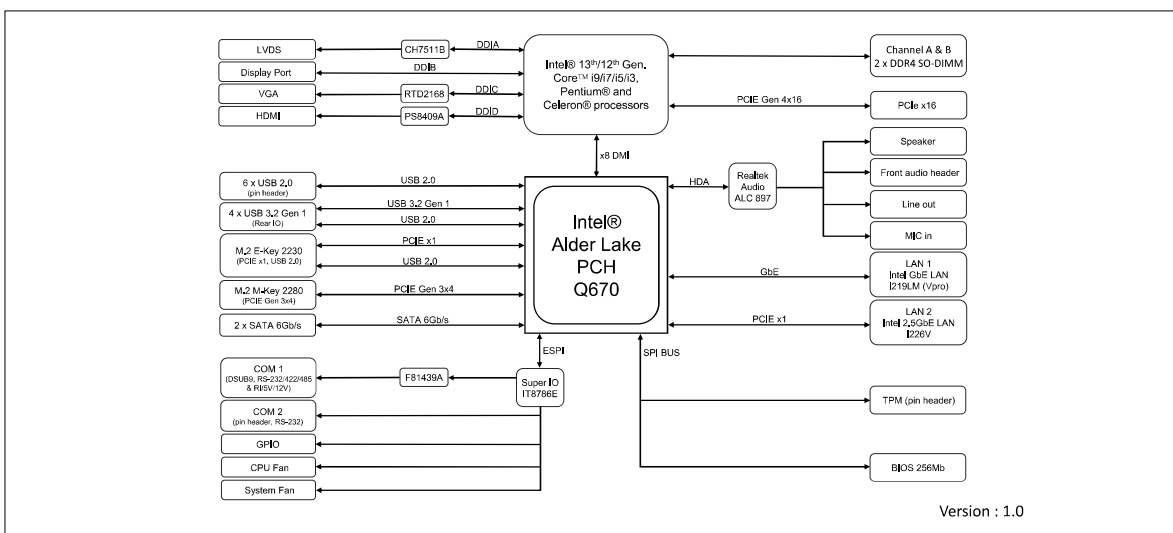- 1 x COM Port (RS-232/422/485 & RI/5V/12V)

Expansion Slots	1 x PCIe x16 (Gen4 x16) 1 x 2280 M.2 M-Key (PCIe x4) 1 x 2230 M.2 E-Key (WiFi/BT)
Internal I/O	1 x 4-pin ATX main power connector 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 6 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 Buzzer header 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 VGA 2 x RJ45 LAN Ports 4 x USB 3.2 Gen 1 1 x DC Jack (+12V/+19V~+24VDC)
TPM	1 x TPM header
OS Compatibility	Windows 10/11 (x64)
Operating Properties	Operating temperature: 0°C to 60°C Operating humidity: 0-90% (non-condensing) Non-operating temperature: -40°C to 85°C Non-operating humidity: 0%-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-MQ47EA-10R) SATA power Cable x 1 (P/N: 25CRI-300B01-K1R)
Order Information	9MQ670AIMR-SI (Box packing)

Specifications

Form Factor	Mini-ITX 170W x 170D (mm)
CPU	Support for 13th/12th Generation Intel® Core™ i9/i7/i5/i3, Pentium® and Celeron® processors in the LGA1700 package TDP under 65W
Socket	1 x LGA 1700
Chipset	Intel® Q670 Chipset
Memory	2 x DDR4 SO-DIMM sockets, Max. Capacity 64 GB Support Dual channel DDR4 3200 MHz memory modules
Ethernet	1 x GbE LAN Port (Intel® I219LM) 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 port, supporting a maximum resolution of 4096x2160 @60Hz 1 x VGA port, supporting a maximum resolution of 1920x1200 @60Hz 1 x LVDS port, supporting a maximum resolution of 1920x1200 @60Hz (4 independent display outputs)
Audio	Realtek® Audio Codec
Storage	2 x SATA 6Gb/s Ports
Raid	RAID 0/1

Dimension (Unit: mm)

Block Diagram

Version : 1.0

Optional Kit

Part No.	Description	Quantity
25ST0-037820-Y0R	CPU Cooler	1
12KRH-0A1700-00R	CPU Cooler Backplate	1
9CTM010NR-00	TPM 2.0 module	1