

uATX-Q670B (MQ670BM)

Micro-ATX with Intel® Q670 Chipset, support 14th/13th/12th
Generation Intel® Core™ Processors, Dual channel DDR5 memory,
PCIe, 4 x COM, 12 x USB, 6 x SATA 6Gb/s



Specifications

Form Factor	Micro ATX 244W x 244D (mm)
CPU	Support for 14th/13th/12th Generation Intel® Core™ i9/i7/i5/i3, Pentium® & Celeron® processors in the LGA1700 package TDP under 125W
Socket	1 x LGA 1700
Chipset	Intel® Q670 Chipset
Memory	4 x DDR5 DIMM sockets, Max. Capacity 128 GB, Support Dual channel DDR5 4800 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: 2 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 D-sub port, supporting a maximum resolution of 1920x1080 @60Hz 1 x LVDS port, supporting a maximum resolution of 1920x1200 @60Hz (4 independent display outputs)
Audio	Realtek® ALC897
Storage	6 x SATA 6Gb/s Ports
RAID	RAID 0/1/5/10
Expansion Slots	1 x PCIe x16 (Gen 4x16)(PCIEX16_A) * The PCIEX16_A slot shares bandwidth with the PCIEX16_B slot. * The PCIEX16_A slot operates at up to x8 mode when a device is installed in the PCIEX16_B slot. 1 x PCIe x16 (Gen 4x8)(PCIEX16_B) 1 x PCIe x1 (Gen 3x1) 1 x PCIe x4 (Gen 3x4) 1 x 2280/2242 M.2 M-Key (PCIe Gen 4x4, SATA 6Gb/s) 1 x 2230 M.2 E-Key

Features

- Micro ATX form factor
- Support 14th/13th/12th Generation Intel® Core™ Processors
- Intel® Q670 Chipset
- Dual Channel DDR5, 4 x DIMMs
- 1 x GbE LAN Port
- 1 x 2.5GbE LAN Port
- 6 x SATA 6Gb/s Ports
- Up to 4 x PCIe expansion slots
- 12 x USB Ports
- 1 x COM Port (RS-232/422/485 & RI/5V/12V)
- 3 x COM Ports (RS-232)

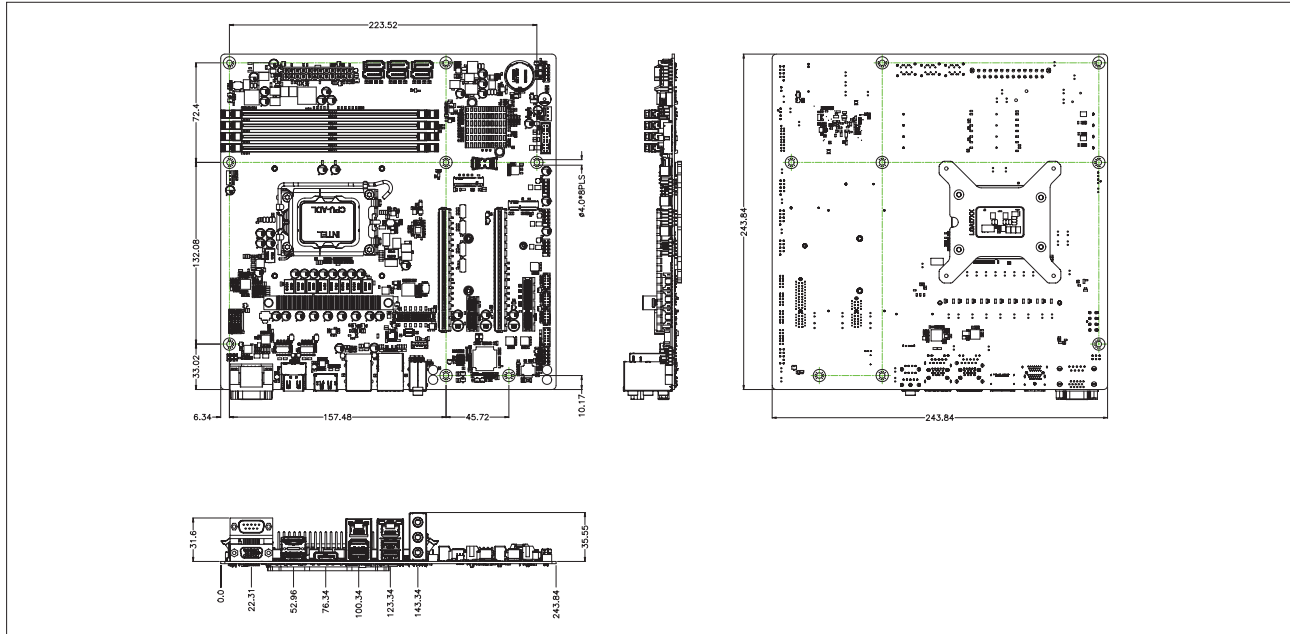
Internal I/O	1 x 24-pin ATX main power connector 1 x 8-pin ATX 12V power connector 1 x CPU fan header 1 x System fan header 1 x Front panel header 1 x Front panel audio header 1 x Case open header 6 x USB 2.0 headers 2 x USB 3.2 Gen 1 headers 3 x COM headers (RS-232) 1 x GPIO (8 bits) & SMBus header 1 x Backlight Control header 1 x Clear CMOS jumper 1 x Buzzer 1 x AT/ATX mode select jumper
Rear I/O	3 x Audio Jacks (Line in, Line out, Mic in) 2 x HDMI 1 x DisplayPort 1 x VGA 1 x COM Port (RS-232/422/485 & RI/5V/12V) 2 x RJ45 LAN Ports 2 x USB 3.2 Gen 2x1 2 x USB 3.2 Gen 1
TPM	Onboard TPM 2.0 security chip INFINEON SLB9670VQ2.0
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: 360 x 354 x 390 (mm) Packing Capacity: 5pcs Single Box size: 350 x 330 x 65 (mm) Including: IO Shield x 1 (P/N: 12AIO-MQ67EA-00R) SATA Cable x 2 (P/N: 12CF1-2SAT1B-01R)
Order Information	9MQ670BMMR-SI (Box packing)

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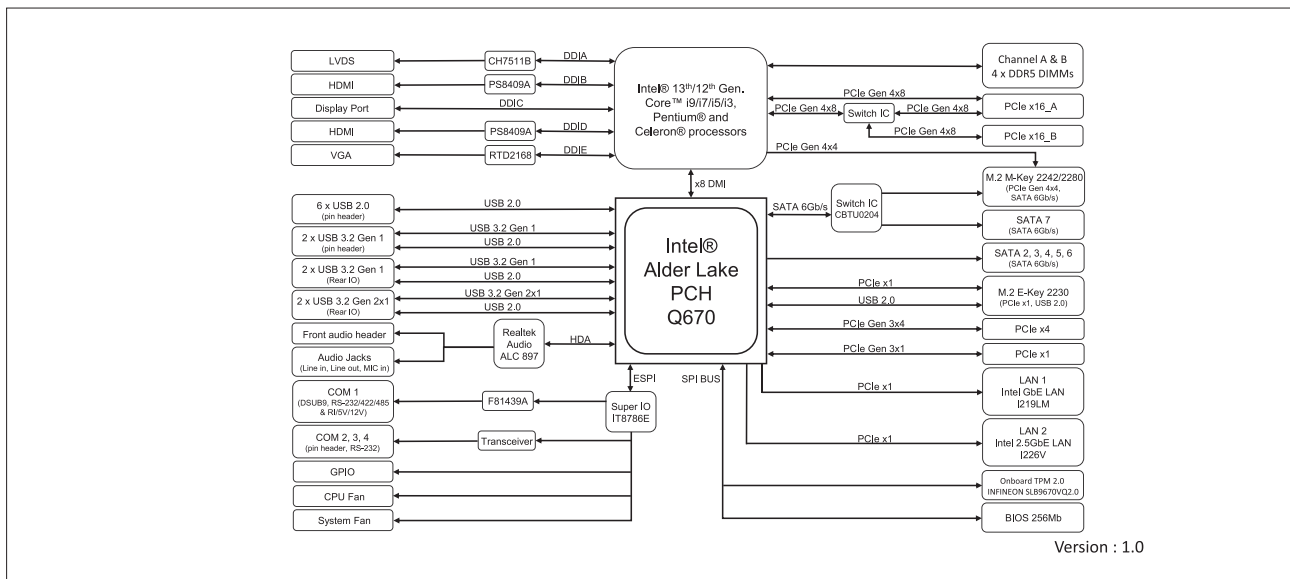
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Dimension (Unit: mm)

2024/12/03



Block Diagram



Optional Kit

Part No.	Description	Quantity
12SF1-SK1700-01R	CPU Cooler for CPU TDP 125W (Push-pin type)	1
25ST0-037820-Y0R	CPU Cooler for CPU TDP 65W	1
12KRH-0A1700-00R	CPU Cooler Backplate, (Used with P/N: 25ST0-037820-Y0R)	1
12SP2-090027-00R	VR Heatsink (Suggest to be used if CPU real power is over 100W)	1