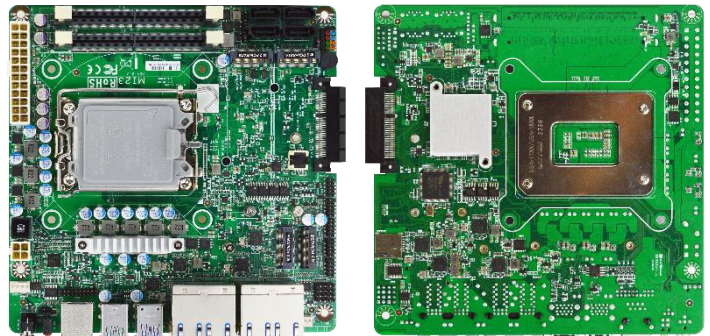


## MI23-Q670X Series

Intel® H670E Chipset support LGA 1700 socket for the 14th/13th/12th Gen (Raptor Lake-S/Alder Lake-S) i9/i7/i5/i3 processor (Max. 65W TDPs under 180A) support DDR5 up to 64GB, 4\* SATAIII support RAID, 8\* 2.5GbE

### Features

1. Intel® LGA1700 Socket supports 14th/13th/12th Gen. Core Processor (Max. 65W TDPs under 180A)
2. Intel® Q670E Chipset
3. 2\* DDR5 5600MHz/4800MHz SO-DIMM up to 64GB
4. 4\* SATAIII support RAID 0, 1, 5, 10
5. 2\* M.2 (M-key), 1\* M.2 (E-key), 1\* M.2 (B-key)
6. 8\* 2.5GbE, 3\* RS232, 1\* PCIe Gen.4 x4
7. 2\* USB3.2 (Gen.2), 2\* USB3.2 (Gen.1), 4\* USB2.0
8. 24pin ATX + 4pin 12V
9. Support JetBIOS SW back up tool for BIOS recovering
10. Support onboard TPM 2.0 (MI23-Q6702 only)



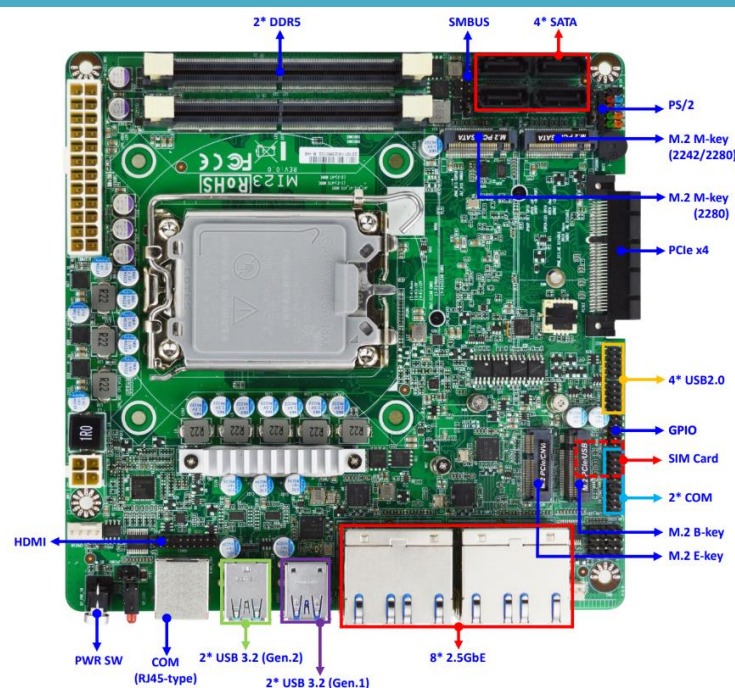
intel. FC CE RoHS COMPLIANT

### Overview

The JETWAY MI23-Q670X Series adopt the Intel®LGA1700 socket processor and are equipped with two DDR5 SO-DIMM slot up to 64GB. Featuring the integrated Intel® 2.5 Gigabit Ethernet controller for eight 10/100/1000/2500 Base-TX Ethernet devices for network transmission. One M.2 (M-key 2242/2280, PCIe Gen4x4 w/SATA interface), one M.2 (M-key 2280, PCIe Gen.4x4 w/SATA interface) support NVMe, and four SATAIII support RAID 0/1/5/10 for multiple storage choices. One M.2 (E-key 2230, USB2.0/PCIex1 interface) support CNVi and one M.2 (B-key 3042, USB3.2 Gen.1/USB2.0/PCIex1 interface) support 4G module. There are two USB3.2 Gen.2 ports, two USB3.2 Gen.1 ports, four USB2.0 ports, and three RS232 ports for versatile expansions. MI23-Q670X Series are suitable for IoT, high performance networking application, and firewall solution.

**Application:** IoT / High Performance Networking Application / Firewall

### I/O Diagram



## Specifications

<b>Model</b>	<ul style="list-style-type: none"> <li>MI23-Q6700 (Q670E)</li> <li>MI23-Q6702 (Q670E, onboard TPM 2.0)</li> </ul>
<b>Form Factor</b>	<ul style="list-style-type: none"> <li>Mini-ITX (170 * 170 mm)</li> </ul>
<b>Processor System</b>	<ul style="list-style-type: none"> <li>Intel® 14th/13th/12th (Raptor Lake-S/Alder Lake-S) LGA1700 Socket Core i7/i5/i3/Pentium/Celeron Processor (Max. 65W TDPs under 180A)</li> <li>Intel® Q670E Chipset</li> <li>AMI Flash ROM BIOS</li> </ul> <p>*Support recover crashed BIOS data tool by a USB flash pen driver:</p> <ol style="list-style-type: none"> <li>Using JetBIOS SW back up tool with any external USB ports</li> </ol>
<b>Memory</b>	<ul style="list-style-type: none"> <li>Intel® 14th/13th CPU support 2* DDR 5600MHz SO-DIMM up to 64GB</li> <li>Intel® 12th CPU support 2* DDR5 4800MHz SO-DIMM up to 64GB</li> </ul>
<b>Storage</b>	<ul style="list-style-type: none"> <li>4* SATAIII (6 Gb/s) support RAID 0, 1, 5, 10 (SATA4 share with M.2 M-key 2280)</li> <li>1* M.2 M-key (2242/2280, PCIe Gen.4x4 w/SATA interface) support NVMe</li> <li>1* M.2 M-key (2280, PCIe Gen.4x4 w/SATA interface) support NVMe</li> </ul>
<b>Expansion</b>	<ul style="list-style-type: none"> <li>1* M.2 E-key (2230, USB2.0/PCIe x1 interface) support CNVi</li> <li>1* M.2 B-key (3042, USB3.2 Gen.1/USB2.0/PCIe x1 interface) support 4G Module</li> <li>1* PCIe Gen.4 x4 slot</li> </ul>
<b>Ethernet</b>	<ul style="list-style-type: none"> <li>1* Intel® i225-LM 2.5 GbE</li> <li>7* Intel® i225-V 2.5 GbE</li> </ul>
<b>Graphics</b>	<ul style="list-style-type: none"> <li>Intel® UHD Graphics, shared memory</li> <li>1* HDMI (Max Resolution: 1920 x 1080@60Hz)</li> </ul>
<b>Audio</b>	<ul style="list-style-type: none"> <li>NA</li> </ul>
<b>Watchdog Timer</b>	<ul style="list-style-type: none"> <li>From Super I/O to drag RESETCON#</li> <li>256 segments (10sec ~ 255min)</li> </ul>
<b>Internal I/O</b>	<ul style="list-style-type: none"> <li>4* USB2.0</li> <li>4* SATAIII</li> <li>2* RS232</li> <li>1* Chassis intrusion</li> <li>1* HDMI</li> <li>1* PS/2</li> <li>1* SIM card slot</li> <li>1* GPIO</li> <li>1* SMBUS</li> </ul>
<b>External I/O</b>	<ul style="list-style-type: none"> <li>2* USB3.2 (Gen.2)</li> <li>2* USB3.2 (Gen.1)</li> <li>8* RJ45 2.5GbE</li> <li>1* RS232</li> <li>Power Button</li> <li>Power LED</li> </ul>
<b>Power</b>	<p>ATX PWR (4 + 24 pin)</p> <ul style="list-style-type: none"> <li>- AT: Directly PWR on as Power input ready</li> <li>- ATX: Press Button to PWR on after Power input ready</li> </ul>
<b>Compliance</b>	CE, FCC, RoHS, REACH
<b>Temperature</b>	<ul style="list-style-type: none"> <li>Operating Temperature: 0 ~ 60° C (with 0.7 m/s air flow)</li> <li>Storage Temperature: -20 ~ 85° C</li> <li>Humidity: 10% ~ 90% RH @40°C (non-condensing)</li> </ul>
<b>OS Support</b>	UEFI Win10 64-bit (Build 10.0.19044.1288), Win 10 IoT Enterprise 64-bit LTSC 2019 (Build 17763.107), Win 10 IoT Enterprise 64-bit LTSC 2021 (Build 19044.1288), UEFI Win 11 64-bit (Build 22000.318), UEFI Win 11 IoT Enterprise (Build 22621.1), CentOS 7 (Version 7), CentOS 8 (Version 8-latest), CentOS 9 (Version 9), Debian 11 (Version 11.4), Fedora-LXDE (Version 36-1.5), Fedora Workstation (Version 36-1.5), Fedora Server (Version 36-1.5), OpenSUSE (Version 15.4), OpenBSD (Version 7.1), Ubuntu Standard / LTS (Version 22.04), Ubuntu Server (Version 22.04), Vmware ESXi (Version 8).
<b>Warranty</b>	<ul style="list-style-type: none"> <li>2 Years limited warranty</li> </ul>

\* Specifications subject to change without notice, not responsible for typographical errors. Does not include HDD or OS.

## Standard Accessories

Part Number	Description
-----	MI23-Q670X Series M/B
F04-MB-096-F	MI23 I/O shield
G01-SATA3-BL-1F	1* SATA cable
G01-COM-H2M20-1F	1* COM cable
G01-2X10A-HDMI-F	1* HDMI cable

# Mechanical Drawings (Unit=mm)

