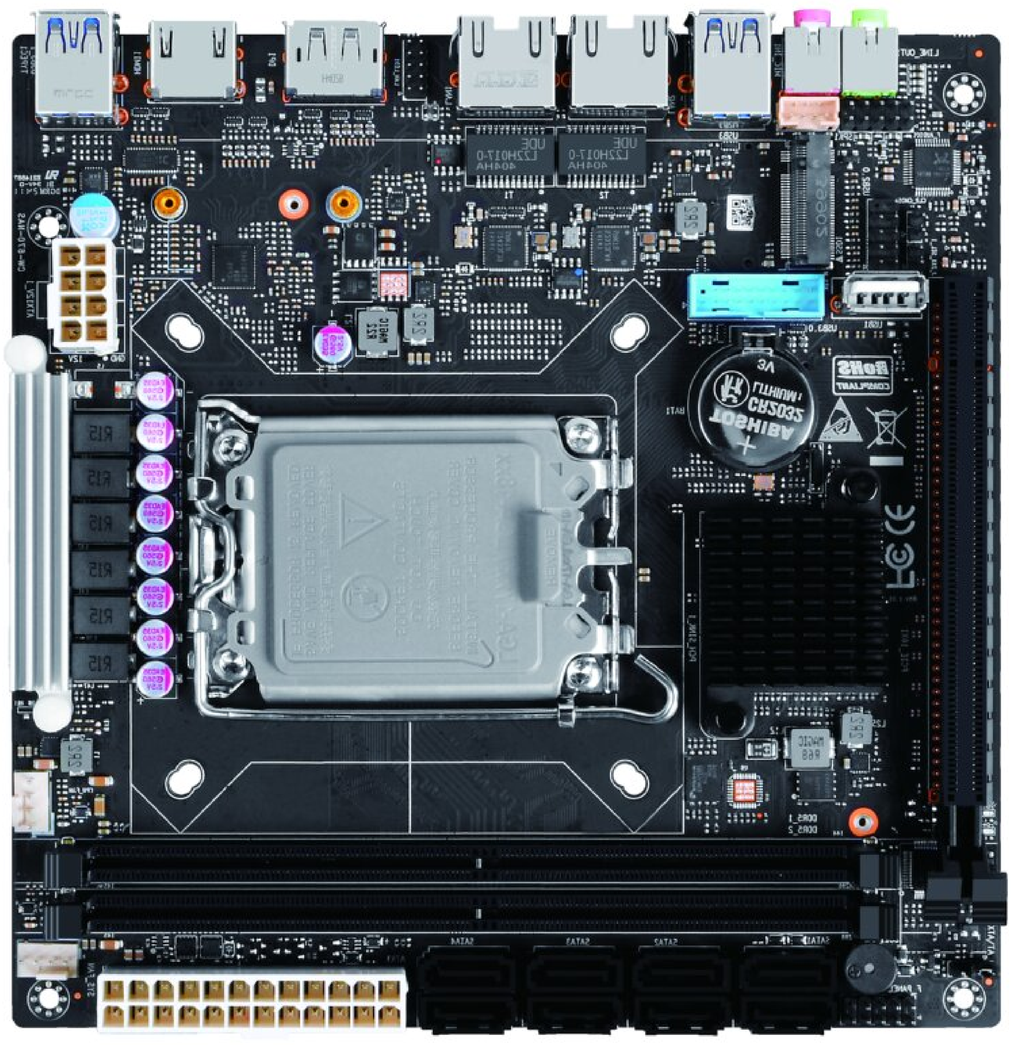
Q670 Dual Lan 8 Bay NAS Mainboard User Manual

Motherboard Core Features:

- Supports Intel 12th, 13th, and 14th Gen desktop processors, TDP 65W, with a maximum power consumption of 125W.
- 17x17 standard Mini-ITX form factor, compatible with 115x/1700 series CPU coolers.
- 1 x PCI-E x16 slot, PCIe 5.0 x16 signal, supports graphics cards, network cards, and other expansion cards.
- 1 x M.2 NVMe (PCIe 4.0 x4) slot, 2280 size (on the back of the motherboard).
- 1 x M.2 NVMe (PCIe 3.0 x4) slot, 2280 size (on the back of the motherboard).
- 1 x M.2 NVMe (PCIe 4.0 x4) slot, 2280-22110 size (on the front of the motherboard).
- Onboard 8 x Native SATA 3.0 6Gb/s ports.
- Dual-channel desktop U-DIMM DDR5 slots, supporting up to 5600MHz by default and backward compatible.
- 1 x Intel i226-V 2.5G RJ45 LAN port.
- 1 x Intel i226-LM 2.5G RJ45 LAN port, supporting Intel vPro remote management functionality.
- HDMI + DP dual display output, supporting 4K@60Hz.
- 2 x USB 3.0 ports, 1 x USB 3.2 port, 1 x Type-C port with 20Gbps speed.
- Internal set of USB 3.0 and USB 2.0 headers, allowing connection to front/rear panels via cables.
- Internal USB 2.0 header supports applications like USB drive encryption and some system booting.

Motherboard Model: CW-670-NAS



intel Q670 | PCI-E x16 | 2500 Giga LAN | DDR5 Dual-channel | M.2 3 units | HDMI 2.0 | DP 1.4 | SATA 8 units | vPro Remote Management | Type-C 20G

Specifications:

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Motherboard Features	* Matte black PCB * 8-layer high-density moisture-resistant fiber PCB * Full protection design (supports all USB, audio, and network interfaces)
Processor	* Supports Intel 12th / 13th / 14th Gen LGA1700 desktop processors * Note: vPro function requires an i5-1X500 or above processor; F-series processors are not supported (integrated graphics required) * Note: Default support for 65W TDP processors; K-series processors are not recommended * Note: T-series processors such as 13500T are recommended for lower power consumption and long-term operation
Memory	* Supports desktop U-DIMM DDR5 memory technology * 2 × U-DIMM DDR5 dual-channel memory slots – DDR5 default supports 5600MHz (Note: 12th Gen processors support up to 4800MHz only; 13th Gen i7 and above support 5600MHz by default) * Maximum capacity of 48GB per module; up to 96GB total with two modules
TDP	Base power consumption (65W)
Storage	* 1 × M.2 NVMe PCIe 4.0 x4 (2280–22110) * 1 × M.2 NVMe PCIe 4.0 x4 (2280), located on the back of the motherboard * 1 × M.2 NVMe PCIe 3.0 x4 (2280), located on the back of the motherboard * 8 × SATA 3.0 (6Gbps)
Network	* 1 × Intel i226-V 2.5G RJ45 Ethernet port * 1 × Intel i226-LM 2.5G RJ45 Ethernet port (supports vPro remote management)
Graphics	* Integrated graphics depends on the CPU * x16 slot supports various PCI-E graphics cards / network cards * HDMI 2.0 supports 4K 4096×2160 @ 60Hz * DP 1.4 supports 4K 4096×2160 @ 60Hz
Structure	* Mini-ITX form factor: 6.7 in × 6.7 in (17.0 cm × 17.0 cm) * Solid capacitor design
Operating System	* Supports Microsoft® Windows 10/11 64-bit * Compatible with Linux * Supports EFI mode only
Motherboard Size	170mm(W)X170mm(L)

Specifications:	
Front I/O Ports	* 2 × USB 3.0 * 1 × USB 3.2 * 1 × Type-C (USB 3.2, data only, no display support) * 1 × HDMI 2.0 * 1 × DP 1.4 * 2 × 2.5G RJ45 Ethernet ports * 2 × Audio ports
Internal I/O headers	* 1 × CPU_FAN * 1 × SYS_FAN * 1 × 8-pin ATX power connector * 1 × 24-pin ATX power connector * 1 × USB 3.0 header * 1 × M.2 NVMe PCIe 4.0 x4 (2280 and 22110) * 1 × M.2 NVMe PCIe 4.0 x4 (2280) * 1 × M.2 NVMe PCIe 3.0 x4 (2280) * 1 × Audio header * 1 × U-DIMM DDR5 dual-channel memory slot * 8 × SATA 3.0 ports * 1 × Power switch header (FPANEL) * 1 × Buzzer * 1 × PCIe x16 slot (PCIe 5.0 x16 signal) * 1 × USB 2.0 header (vertical, supports dongles and USB drives) * 1 × USB 2.0 pin header
Power Supply	* ATX 24-pin + 8-pin (recommended to use a power supply of 500W or above)

Network Security Industrial Computer Original Factory Source

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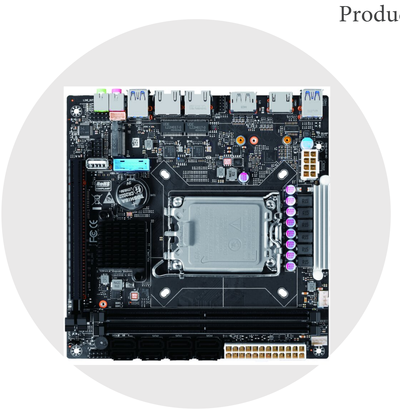

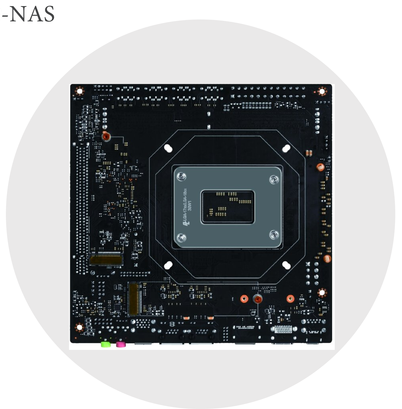
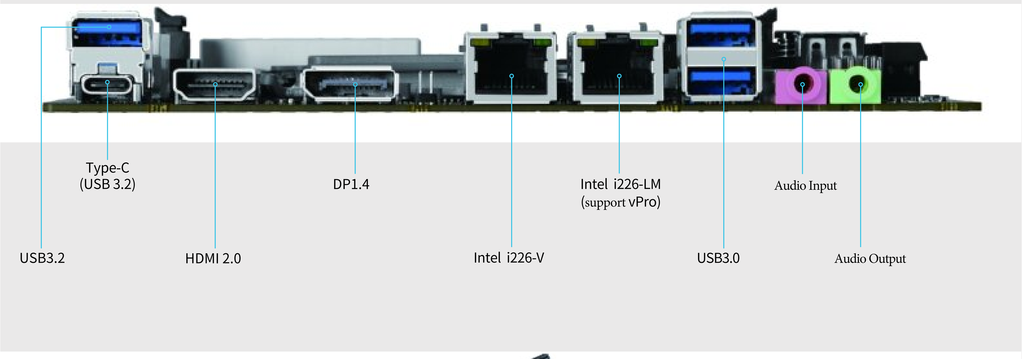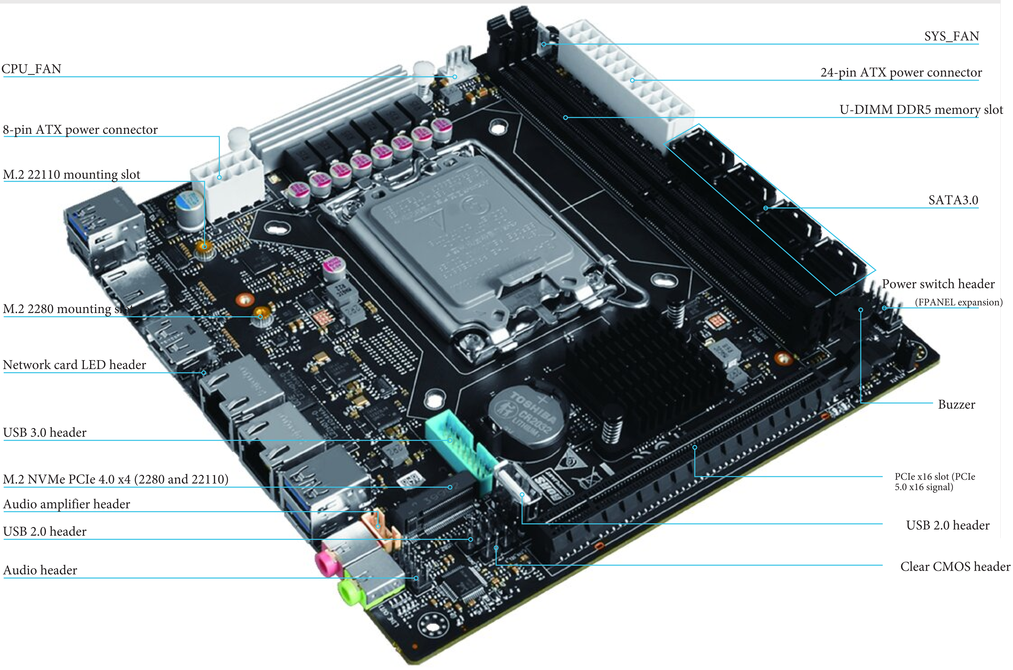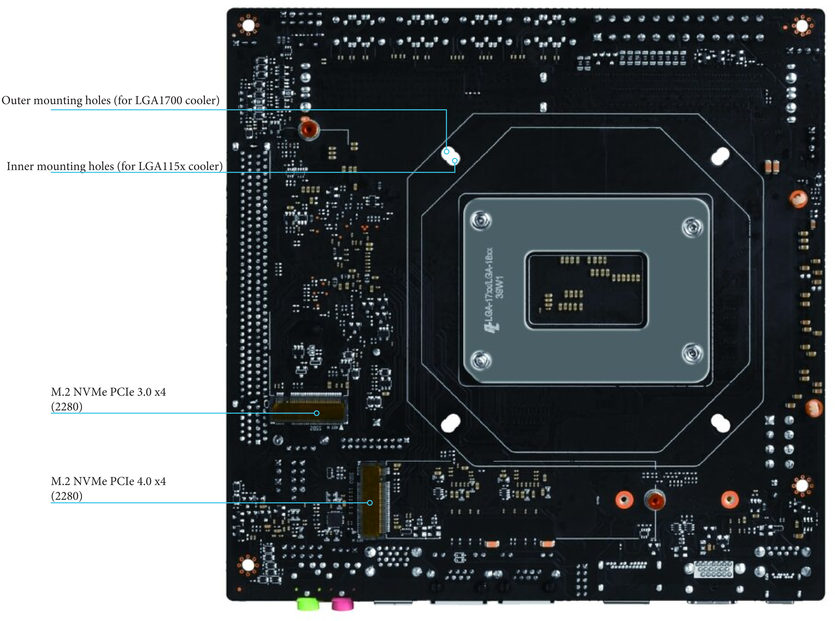
Interface Description