

GMB-AQ67010

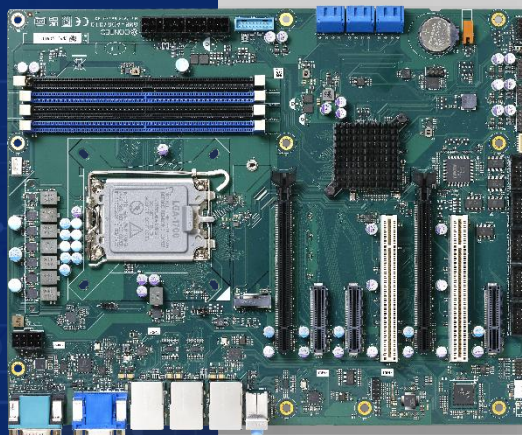
Industrial Motherboard

ATX Form Factor

Intel® 12th / 13th / 14th / BTL-S

Alder Lake-S / Raptor Lake-S / Raptor Lake-S Refresh / Bartlett lake-S

CONTEC Technology for a better life



FEATURES

- Intel® 12th / 13th / 14th Gen. processor Alder Lake-S / Raptor Lake-S / Raptor Lake-S Refresh / Bartlett lake-S Platform
- 4 x DDR5-5600 U-DIMM, up to 128GB (Non-ECC support)
- Multi display supported: Display port, HDMI and VGA
- 3x LAN ports : 2x 2.5 GbE + 1x GbE and 6 x USB 3.2 Gen2 on rear I/O
- Extend interface by 1 x PCIe x16 + 1 x PCIe x8 + 3 x PCIe x4 + 2 x PCI + 1 x M.2 M key
- 6x COM Ports Auto-flow Control Supported

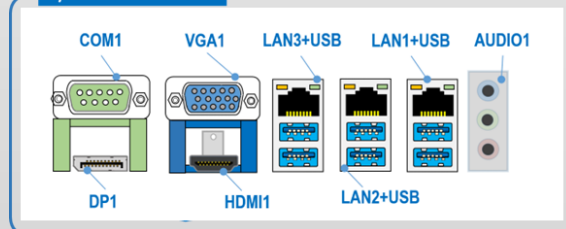
CPU Selection Guide

Intel 14th Gen Embedded Options

No.	CPU Part No.	Cores / Threads	Max speed	TDP
1	Core™ i9 processor 14901E	8 / 16	5.6 GHz	65W
2	Core™ i9 processor 14901TE	8 / 16	5.5 GHz	45W
3	Core™ i7 processor 14701E	8 / 16	5.4 GHz	65W
4	Core™ i7 processor 14701TE	8 / 16	5.2 GHz	45W
5	Core™ i5 processor 14501E	6 / 12	5.2 GHz	65W
6	Core™ i5 processor 14501TE	6 / 12	5.1 GHz	45W
7	Core™ i5 processor 14401E	6 / 12	4.7 GHz	65W
8	Core™ i5 processor 14401TE	6 / 12	4.5 GHz	45W



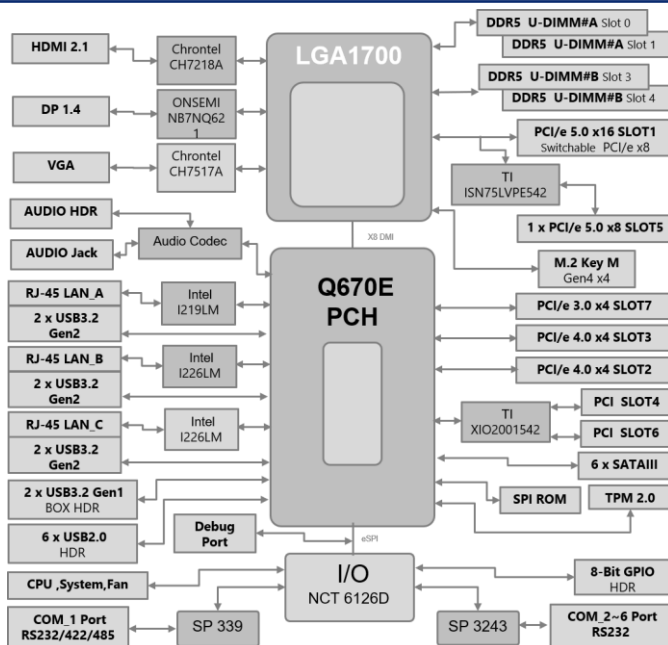
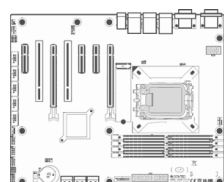
I/O Panel View



Rich Expansion Interface

Perfectly suited for use in healthcare and production monitoring. From whisper-quiet kiosks to high-performance AI inference boxes, its versatility drives innovation across industries.

BLOCK DIAGRAM



Specifications

PROCESSOR	Intel® 12 th / 13 th / 14 th / BTL-S Gen Core™ Processors CPU in LGA1700 socket
CHIPSET	Intel® Q670 Chipset
BIOS	AMI UEFI BIOS
MEMORY	4x DDR5-5600 U-DIMM up to 128GB Non-ECC
Storage	6 x SATA III (6.0Gb/s) Port ,Support RAID 0/1/5/10 1x M.2 Connector M Key 2280 for NVMe storage (Only PCIe Gen4 x4)
Graphic	1 x DP 1.4, up to 7680 x 4320 @ 60Hz · 1 x HDMI 2.0b, up to 3840 x 2160 @ 60Hz · 1 x VGA, up to 1920x1200 @60Hz ·
EXPANSION INTERFACE	Slot1 PCIe x16 (Gen5) or PCIe x8 (Gen5), by x16 slot Slot2 PCIe x4 (Gen4), x4slot openend Slot3 PCIe x4 (Gen4), x4slot openend Slot4 PCI Slot5 PCIe x8 (Gen5) or N/A ,by x16slot Slot6 PCI Slot7 PCIe x4 (Gen3), x4slot openend
AUDIO	Realtek® ALC897 High-Definition Audio Codec Audio Jack Line-in/ Line-out/ Mic-in on rear I/O
ETHERNET	2x 2.5GbE LAN Port (use Intel I226LM) 1x 1GbE LAN Port (use Intel I219LM)
SERIAL PORT	1x RS-232/422/485 on rear I/O (D-sub 9P) 5x RS-232 on board pin box header (pitch 2.54 BHD)
USB PORT	6x USB3.2 Gen2 (10Gbps) on rear I/O (Type A connector) 2x USB3.2 Gen1 (5Gbps) by Internal box header 6x USB2.0 by Internal pin header
GPIO	GPIO port 8-bit by software programmable
DIMENSIONS (L X W)	304.8 mm (12.0") x 243.84 mm (9.6") ATX formfactor
POWER SUPPLY	ATX Power Connector 24-Pin, 12V-8P
ENVIRONMENT	Operation Temperature: 0 to 60°C Storage Temperature: -40 to 80°C Relative Humidity: 5 to 95% non-condensing
OS SUPPORT	Windows 11 IoT Enterprise LTSC 2024
CERTIFICATE	CE / FCC / VCCI (class A) / UKCA / RoHS2.0

Ordering Guide

● GMB-AQ67010	ATX MB 12 th / 13 th / 14 th / BTL-S Gen Intel Core Processor, Intel® Q670 Chipset
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