ALD-75

Intel® Alder Lake-S(LGA1700 Socket) Processor based ATX Motherboard with Z690/Q670/H670



Features

- CPU: Intel® Alder Lake-S LGA1700 Socket
- Memory: 4x UDIMM DDR4 Up to 128GB
- Display: Integrated Graphics display via HDMI+DVI-I(VGA)
- Ethernet Controllers: 1xIntel® i219+1xIntel® i226
- Storage: 1xM.2 for NVMe SSD, 4xSATA
- Expansion: 1*PCle2X, 1*PCle16X, 5*PCle4X(Z690) or 4*PCle4X(Q670/H670)
- Power: ATX_24PIN + 2*8PIN





Introduction

The ALD-75 ATX motherboard is based on the Intel® Alder Lake-S series processor with Z690/Q670/H670 Chipset, providing a complete PC platform with powerful performance. It supports dual displays in addition to four UDIMM DDR4 memory; features Intel i219 and i226 Ethernet controllers, up to 2.5GbE for high-speed communication. It has four SATA plus M.2 for storage; and a rich I/O interface that includes 6xCOM, 6 x USB2.0, 6 x USB3.2, and up to 7xPCle for greater expansion.

The ALD-75 is an ideal solution for various industrial applications, it retains a robust design that can cope with extreme conditions. Our goal is to provide an excellent customer experience with a reliable product for more flexibility.







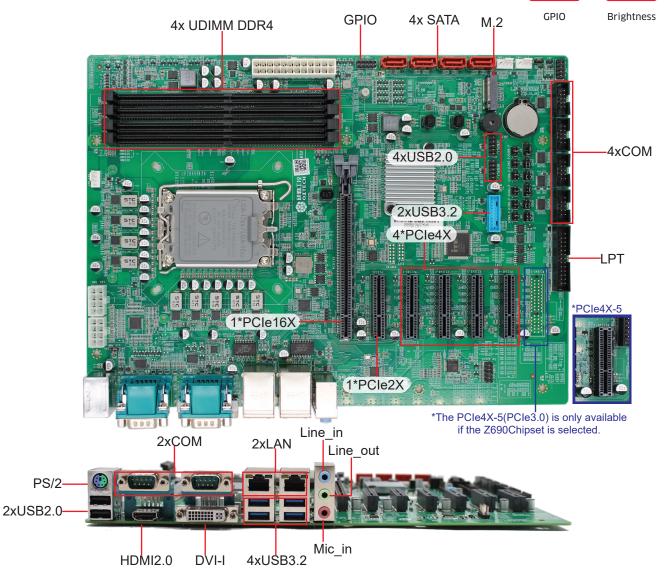




H/W Monitor Watchdog



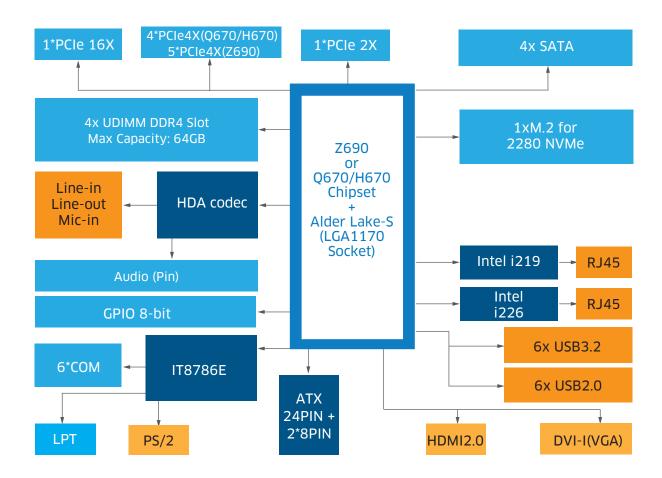
I/O Interfaces



Technical Specifications

| Processor | CPU | Intel® Alder Lake-S/Raptor Lake Processor (LGA1700) |
|------------------|------------------|---|
| | Chipset | Q670/H670/Z690 |
| Memory | Type | 4x UDIMM DDR4-3200 |
| | Max Capacity | Up to 128GB |
| Display | GPU | Intel® Integrated Graphics based on CPU |
| | Port | 1x HDMI® +1x DVI-I(VGA) |
| Ethernet | Controller | Intel® i219,Date Rate Per Port:1.0GbE |
| | | Intel® i226, Date Rate Per Port:2.5GbE |
| | Interface | 2x RJ45 |
| | Wake on LAN | Yes |
| | AMT | Yes. Intel®Active Management Technology. Only for selected models, varies on |
| CPU. | | |
| | TXT | Yes. Intel®Trusted Execution Technology. Only for selected models, varies on CPU. |
| Audio | Audio Codec | Realtek HD |
| | Interface | 1xLine-in+1xLine-out+1xMic-in, |
| Hardware | | CPU and system temperature, on-board voltage, watchdog |
| Storage | SATA | 4x SATA |
| | M.2 | 1x M.2 for 2280 NVMe(PCIe4.0)/SATA SSD |
| Expansion | PCIe5.0 | 1(PCIe16X) |
| | PCIe4.0 | 3(PCIe4X-1,PCIe4X-3,PCIe4X-4) |
| | PCIe3.0 | 2(PCIe2X, PCIe4X-2) if Q670/H670 Chipset is selected. |
| | | or 3(PCle2X, PCle4X-2,PCle4X-5,) if Z690 Chipset is selected. |
| I/O Interface | LAN | 2 |
| | COM | 6xCOM: 6*RS232 default |
| | | The COM5, COM6 can be set as RS485/RS422 by jumper |
| | USB2.0 | 2x USB2.0 Ports+ 4x USB2.0 Header |
| | USB3.2 | 4x USB3.2 Ports + 2x USB3.2 Header |
| | HDMI2.0 | 1 |
| | DVI-I | 1 |
| | Audio | 1xLine-in + 1x Line-out + 1x Mic-in |
| | PS/2 | 1 (for PS/2 keyboard and mouse) |
| | GPIO | 8-bit |
| | LPT | 1 |
| | TPM2.0 | Optional |
| Dimension | Size | 304.8mm x 218.44mm |
| | Board Type | ATX |
| Power | Standard Port | ATX_24PIN + 2*8PIN |
| | Peripheral Input | For Fan and SATA (Compatible with 1150X) |
| Temperature | Operating Temp. | 0 $^{\sim}$ 60 $^{\circ}$ C, depends on CPU speed and cooler solution |
| | Storage Temp. | -40 ~ 85° C |
| Operating System | | Windows 10/11, Linux |

Functional Block Diagram



Order Information

| Model Name | Description | |
|------------|--|--|
| DTZ690-ATX | DT Intel Z690 ALD75 ATX 2LAN(I219+I226) 6*COM HDMI+DVI-I 1xPCIE16X+1xPCIE2X+5xPCIE4X | |

^{*}For customized options, please consult regional sales. And please confirm the model name and description before purchasing. *The model name and description might vary due to inventory changes.



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