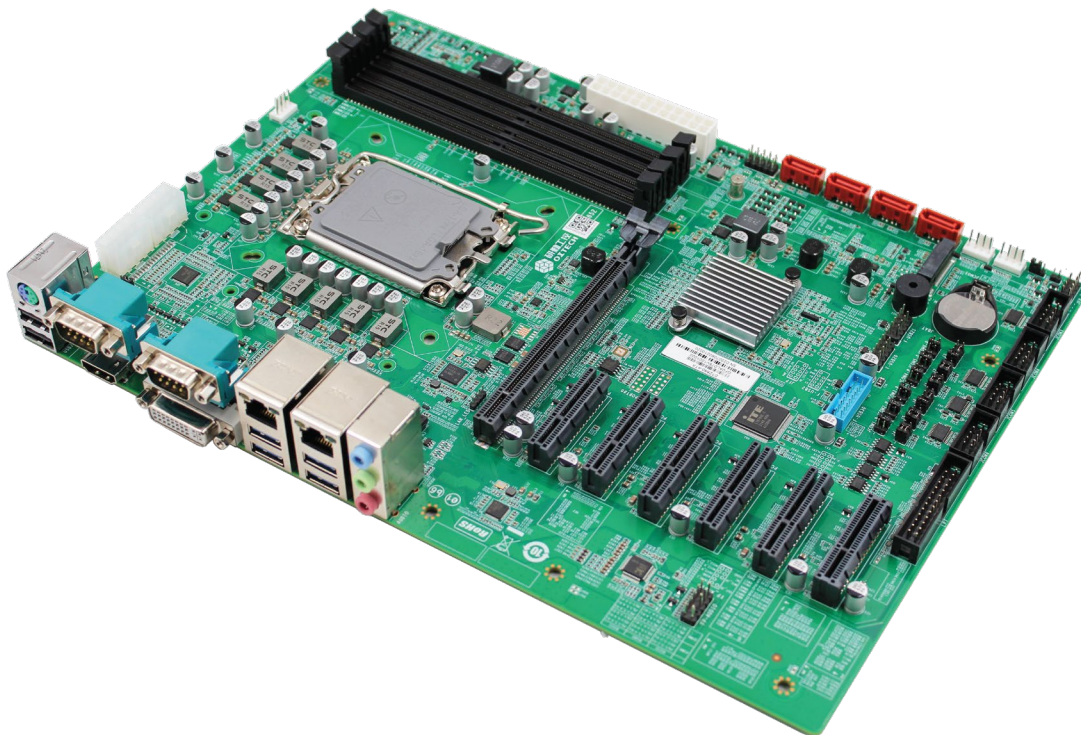


# ALD-75

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



## Features

- CPU: Intel Alder Lake/Raptor Lake(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\*PCIe2X, 1\*PCIe16X, 5\*PCIe4X(Z690) or 4\*PCIe4X(Q670/H670)
- Power: ATX\_24PIN + 2\*8PIN



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## Introduction

The ALD-75 ATX motherboard is based on the Intel Alder Lake-S series and Raptor Lake 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 7xPCIe 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

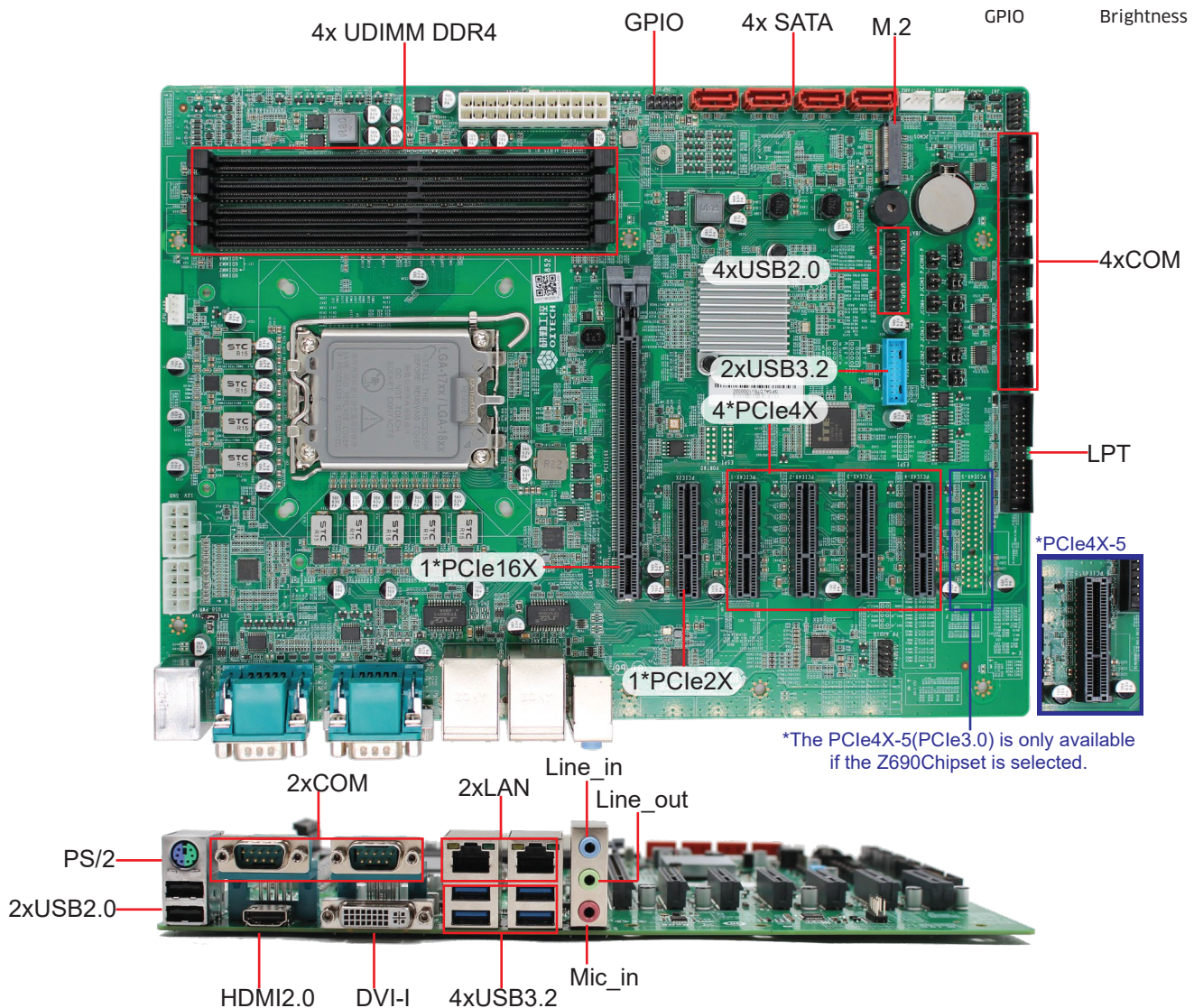


GPIO



Brightness

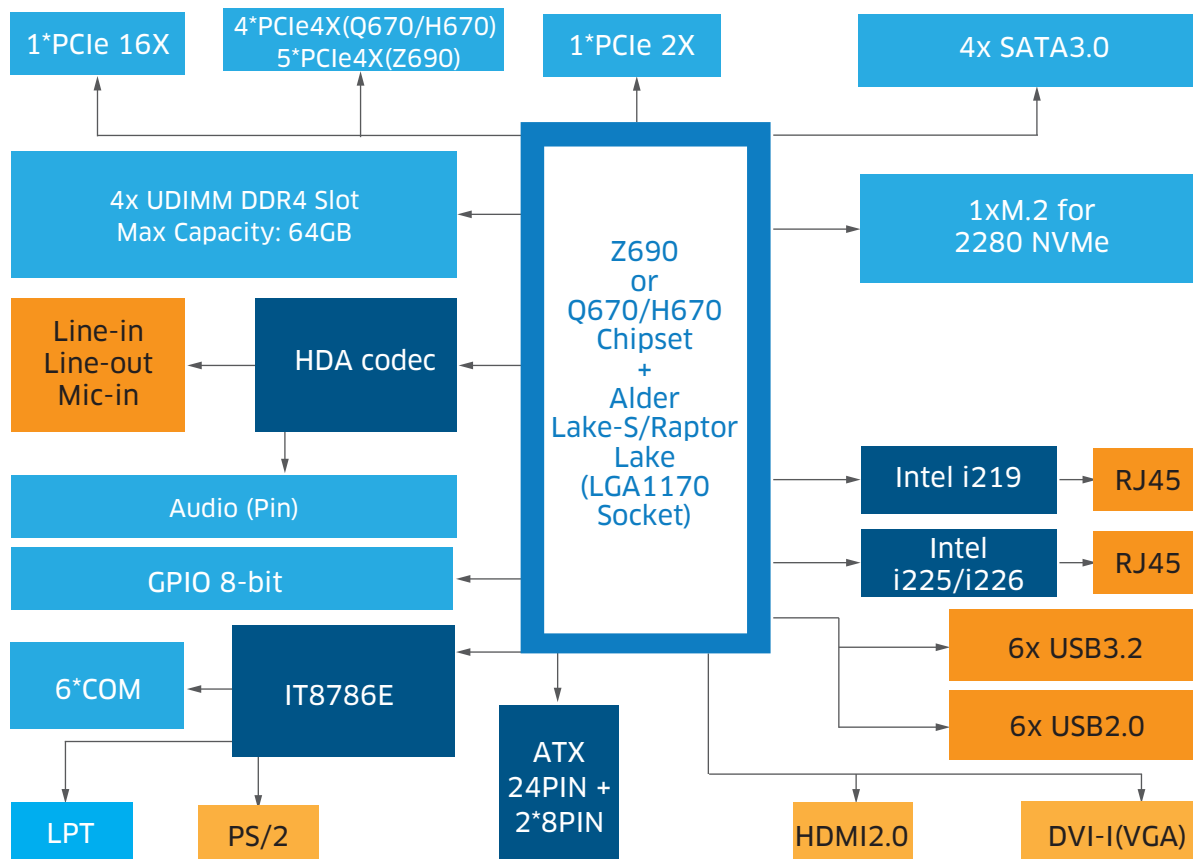
## I/O Interfaces



## 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	1x Intel i219, Data Rate Per Port: 1.0GbE 1x Intel i226, Data Rate Per Port: 2.5GbE
	Interface	2x RJ45
Audio	Audio Codec	Realtek HD
	Interface	1x Line-in + 1x Line-out + 1x Mic-in,
Hardware Storage		CPU and system temperature, on-board voltage, watchdog
Expansion	SATA	4x SATA3.0
	M.2	1x M.2_2280 for NVMe(PCIe4.0)/SATA SSD
I/O Interface	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(PCIe2X, PCIe4X-2, PCIe4X-5,) if Z690 Chipset is selected.
I/O Interface	COM	6x COM: 6*RS232 default The COM5, COM6 can be set as RS485/RS422 by jumper
	USB2.0	6x USB2.0: 2*Ports + 4*Header
	USB3.2	6x USB3.2: 4*Ports + 2*Header
	HDMI2.0	1
	DVI-I	1
	PS/2	1 (for PS/2 keyboard and mouse)
	GPIO	8-bit
	LPT	1
	TPM2.0	Optional
	Dimension	Size
Board Type		ATX
Power	Standard Port	ATX_24PIN + 2*8PIN
	Peripheral Input	For Fan and SATA (Compatible with 1150X)
Temperature	Operating Temp.	0 ~ 60° C, depends on CPU clock speed and cooling systems
	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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