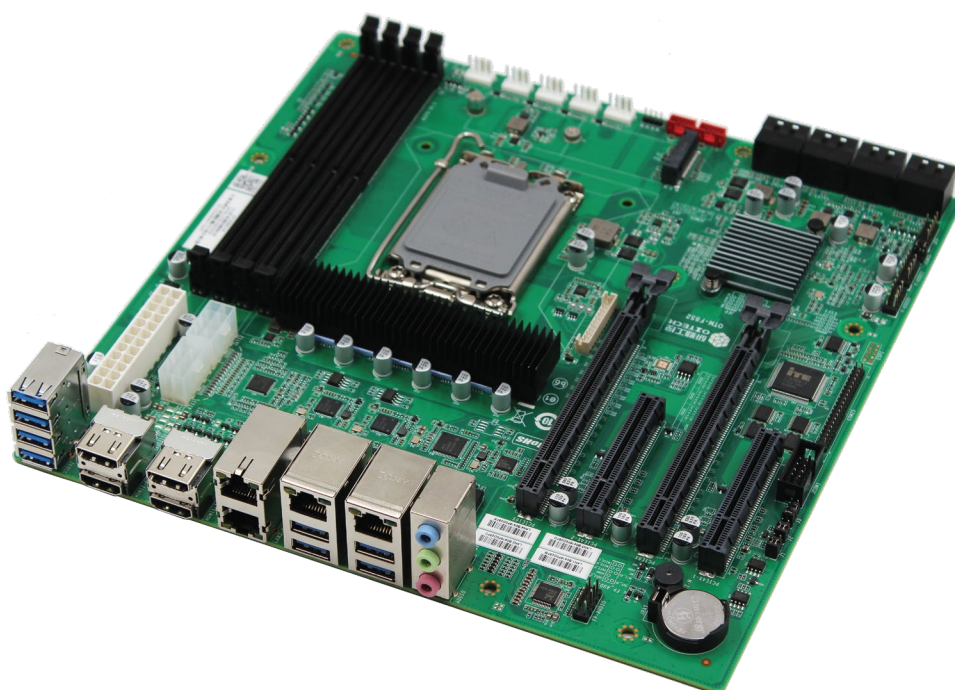


# ALD-76

Intel® Alder Lake/Raptor Lake LGA1700 Socket with Z690 Chipset based Micro ATX Motherboard



## Features

- CPU: Intel Alder Lake/Raptor Lake Desktop Series LGA1700 Socket+Z690 Chipset
- Memory: 4x UDIMM DDR5 Up to 128GB
- Display: Integrated Graphics via 4xHDMI+VGA Onboard Header
- Ethernet: 1xIntel i219+3xIntel i210
- Storage: 1xM.2 for NVMe SSD, 8xSATA
- Expansion: 2\*PCIe8X or 1\*PCIe16X+2\*PCIe4X
- Power: ATX\_24PIN + 2\*8PIN



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## Introduction

The ALD76 Micro ATX motherboard is a high-performance solution designed for seamless integration with Intel's Alder Lake-S/Raptor Lake desktop processors on the LGA1700 socket and Z690 chipset. Boasting versatile features, this motherboard supports up to 128GB of DDR5 RAM, offers extensive storage options with 8 SATA ports and an M.2 NVMe SSD slot, and ensures fast network connectivity through multiple Intel Ethernet controllers.

With support for multiple displays via HDMI 1.4 and VGA ports, the ALD76 delivers enhanced graphics performance. Tailored for IoT deployments, it withstands extreme temperatures (-20°C to 60°C operating, -40°C to 80°C storage), making it a robust choice for demanding computing scenarios. The ALD76 Micro ATX motherboard empowers users to tap into the full potential of Intel's processors, providing a versatile and reliable solution for advanced computing needs.



H/W Monitor

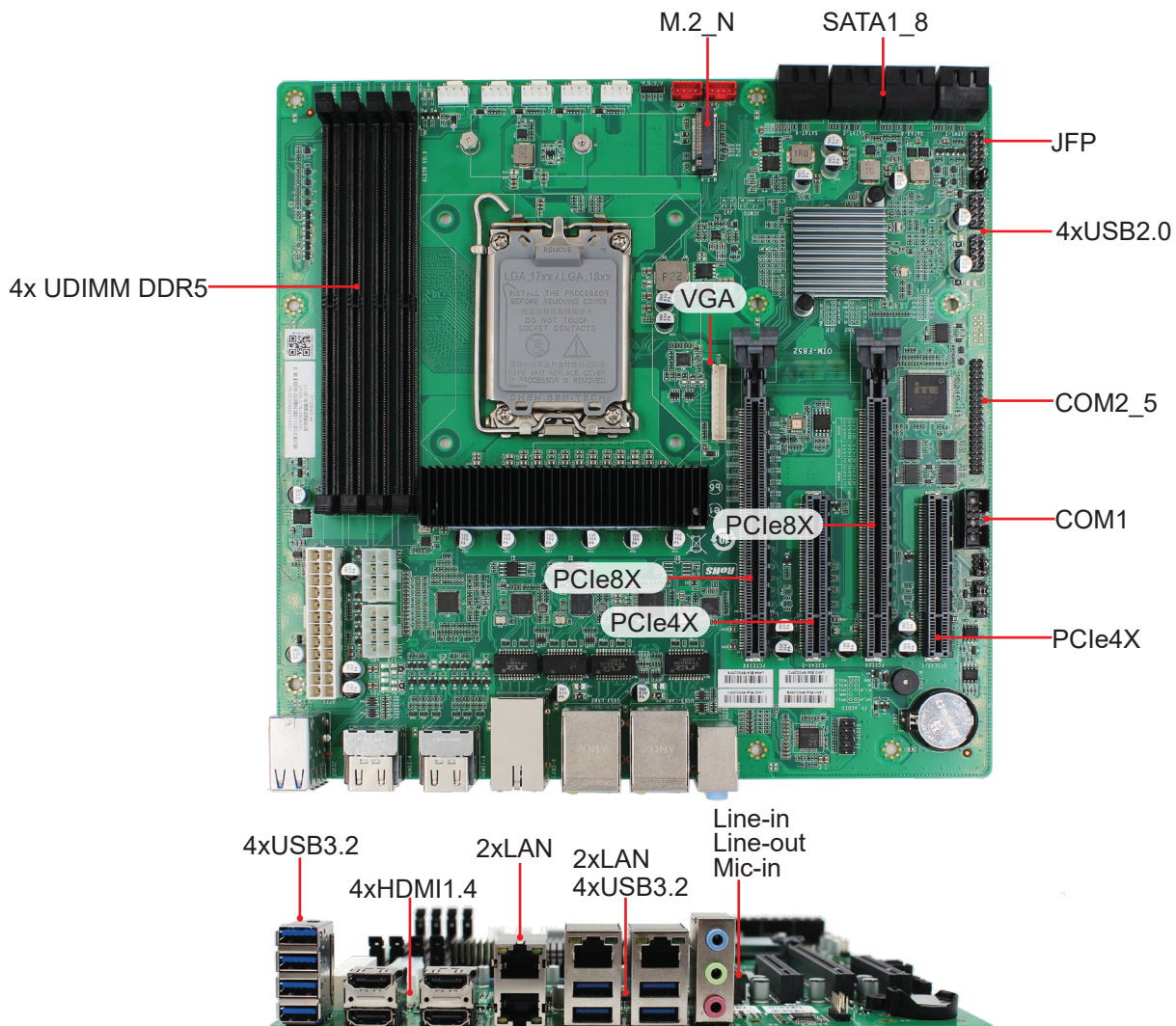


Watchdog



Brightness

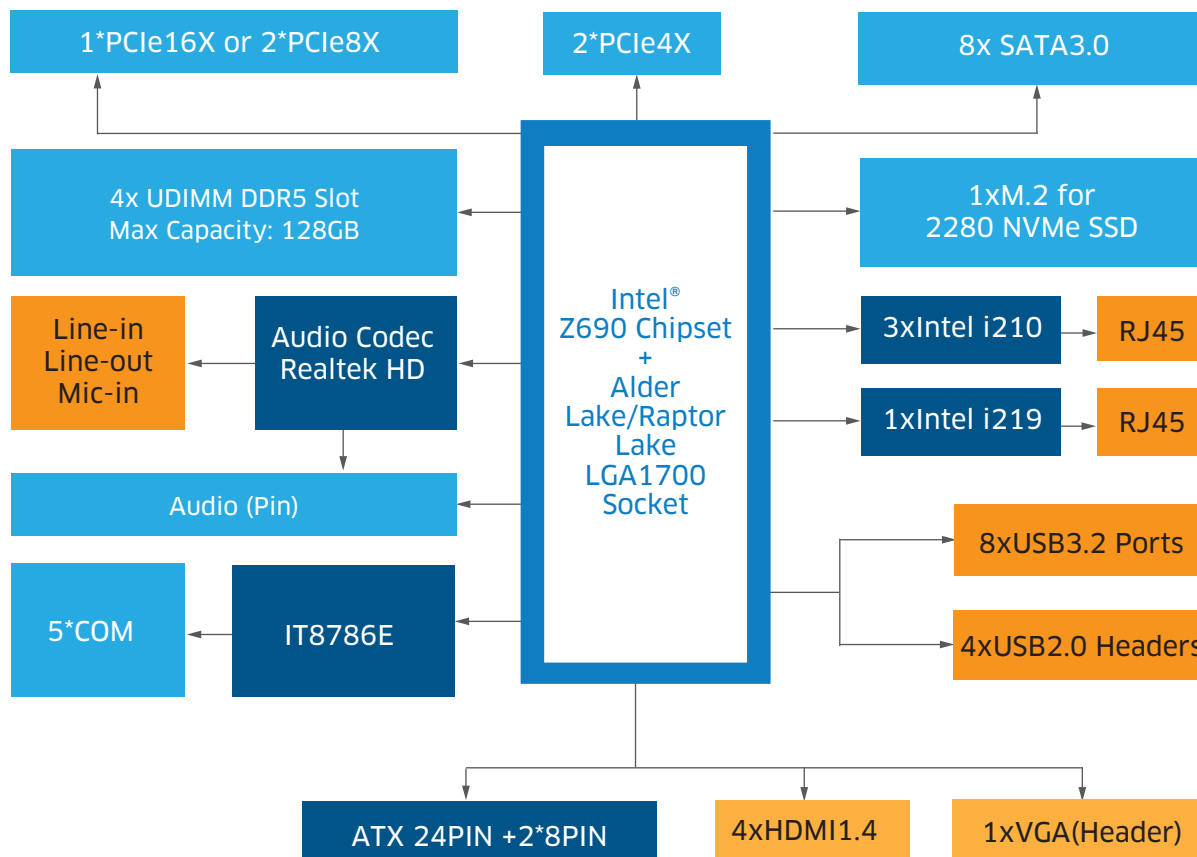
## I/O Interfaces



## Technical Specifications

Processor	CPU	Intel® Alder Lake-S/Raptor Lake-S Series Processor
	Socket	LGA1700
	Chipset	Z690
Memory	Type	4x UDIMM DDR5
	Max. Transfer Rate	4400MT/s
	Max. Capacity	128GB
Display	GPU	Integrated Intel® UHD Graphics based on CPU
	Interface	4x HDMI1.4 +1x VGA(Onboard Header)
Ethernet	Controller	1xIntel® i219, Data Rate Per Port:1.0GbE
		3xIntel® i210, Data Rate Per Port:1.0GbE
	Interface	4xRJ45
Audio	Audio Codec	Realtek HD
	Interface	1xLine-in+1xLine-out+1xMic-in,
Hardware		CPU and system temperature, on-board voltage, watchdog
Storage	SATA3.0	8xSATA3.0, Support RAID 0.1.5.10
	M.2	1xM.2 for 2280 NVMe(PCIe4.0) SSD
Expansion	PCIe4.0	2*PCIe8X or 1*PCIe16X
	PCIe4.0	2*PCIe4X
I/O Interface	COM	5xCOM: 5*RS232 default
		The COM1 can be set as RS485/RS422 by jumper
	USB2.0	4x USB2.0 Header
	USB3.2	8x USB3.2 Ports
	TPM2.0	Optional
Dimension	Size	243.84mm x 243.84mm
	Board Type	Micro ATX
Power	Standard Port	ATX_24PIN + 2*8PIN
	Peripheral Input	For Fan and SATA
Temperature	Operating Temp.	-20° C ~ 60° C
	Storage Temp.	-40 ° C~ 80° C
Operating System		Windows 10/11, Linux

## Functional Block Diagram



## Order Information

Model Name	Description
DTZ690-M	DT Intel Z690 ALD76 4LAN(1*i219+3*i210) 5COM(4*RS232+1*RS422/485/232) VGA+4*HDMI

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

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