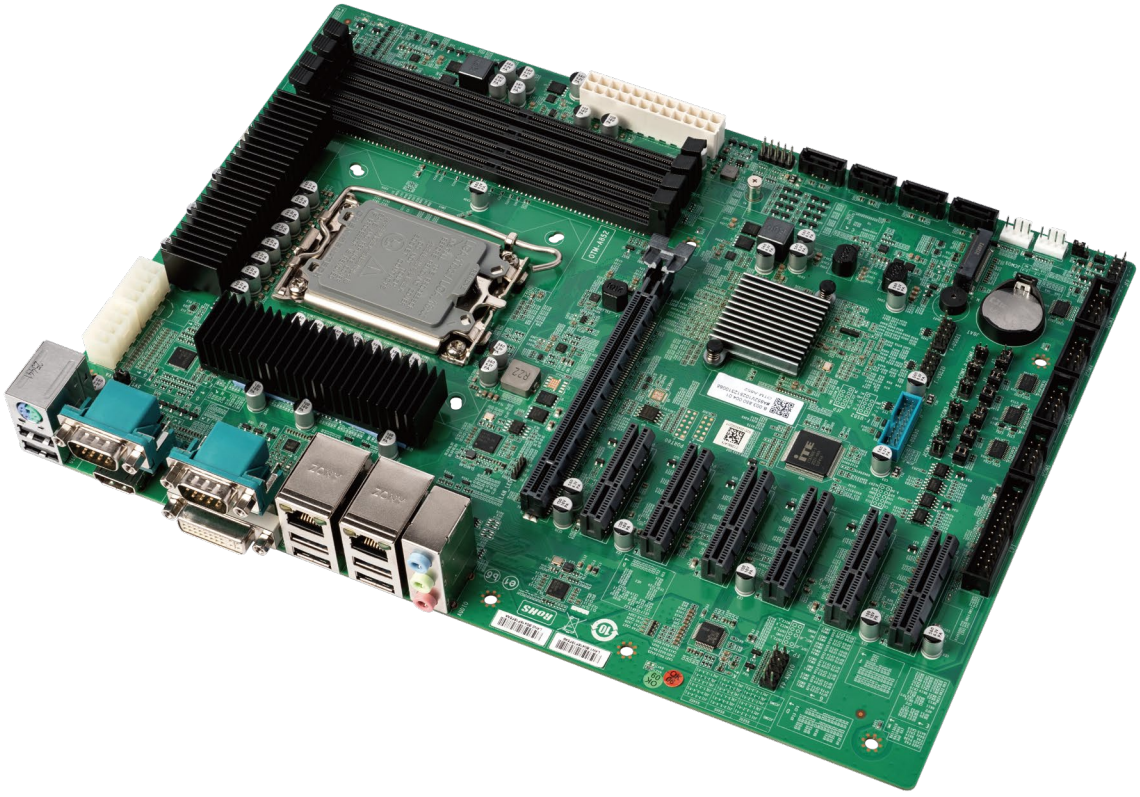
PRODUCT DATASHEET
HW Rev.: V1.0

ALD-75

Intel 12th/13th/14th Gen Desktop Series Processor based ATX Motherboard with Z690/Q670/H670 Chipset



Features

- CPU: Intel 12th/13th/14th Gen Desktop Series Processor
- Memory: 4x UDIMM DDR4 Up to 128GB
- Display: Integrated Graphics display via HDMI+DVI-I(VGA)
- Ethernet: 1xIntel i219+1xIntel i226
- Storage: 1xM.2 Key M for NVMe/SATA SSD, 4xSATA
- Expansion: 1*PCIeX2, 1*PCIeX16, 5*PCIeX4(Z690) or 4*PCIeX4(Q670/H670)
- Power: ATX_24PIN + 2*8PIN

intel prestige partner Builder

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Introduction

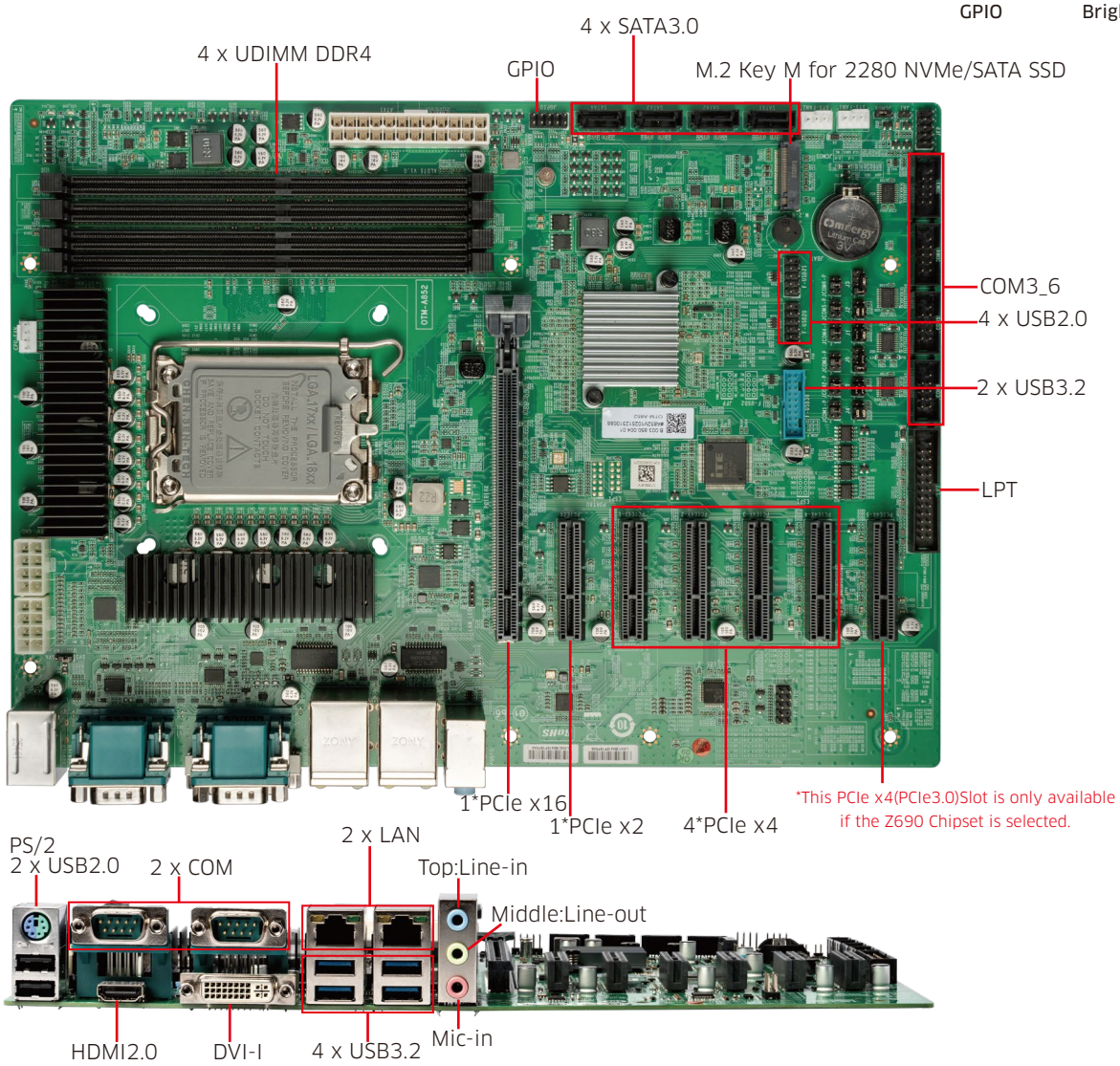
The ALD-75 ATX motherboard is based on the Intel 12th/13th/14th Gen Intel Desktop (Code Name: Alder Lake/Raptor Lake) series processor with Z690/Q670/H670 Chipset, providing a complete PC platform with powerful performance. It supports dual displays in addition to four UDIMM DDR4 memory and features 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 by retaining a robust design that copes with extreme conditions. We aim to provide an excellent customer experience with a reliable product for more flexibility.

Linux
ubuntu
Windows

H/W Monitor
Watchdog
GPIO
Brightness

I/O Interfaces

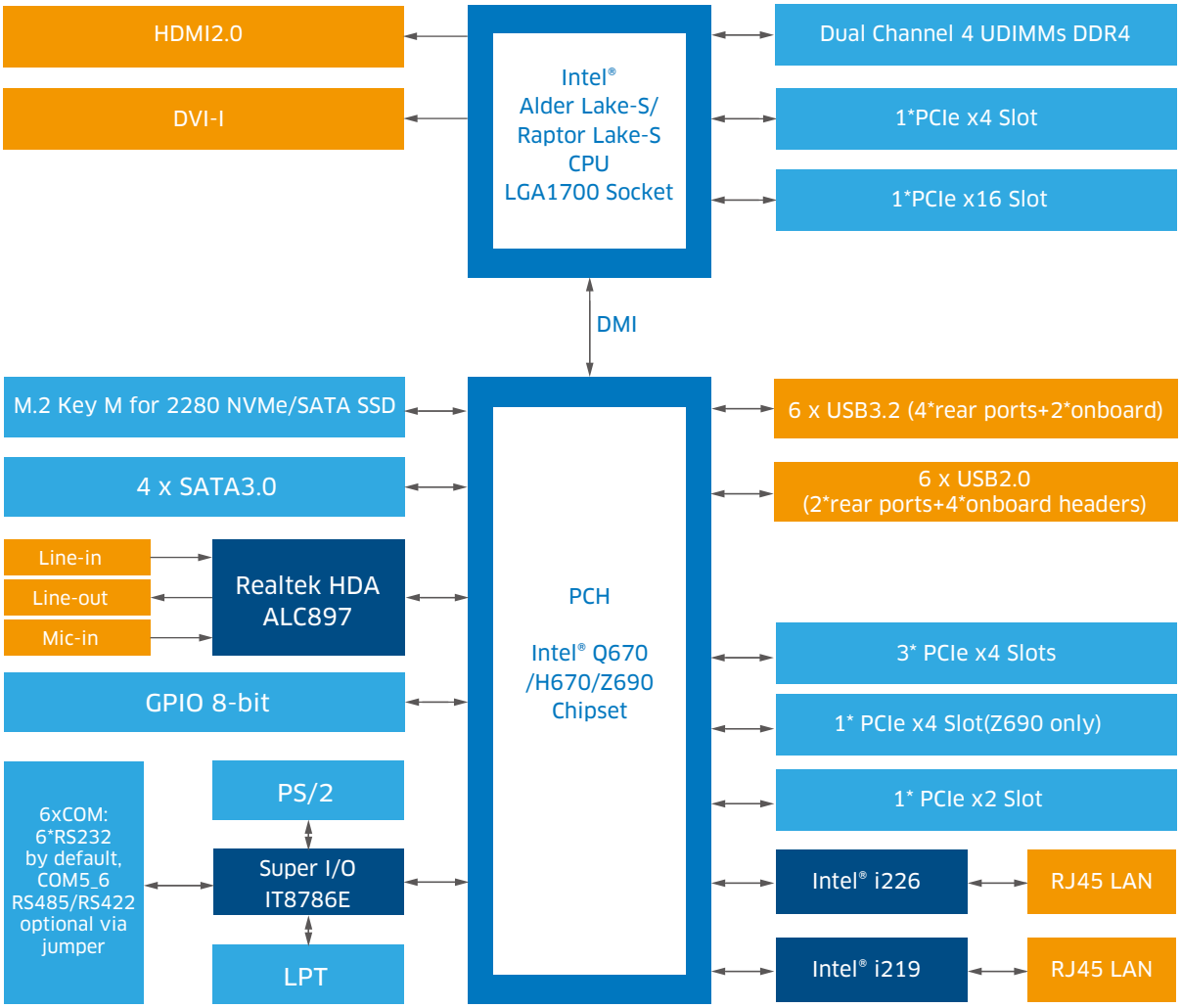


Technical Specifications

Processor	CPU	12th/13th/14th Gen Intel Desktop Series Processor
	Code Name	Intel Alder Lake/Raptor Lake Desktop Series
	Socket	LGA1700
	Chipset	Q670/H670/Z690
Memory	Type	4 x UDIMM DDR4-3200
	Max Capacity	128GB
Display	GPU	Intel Integrated Graphics based on CPU
	Port	1 x HDMI2.0, 1 x DVI-I(VGA)
Ethernet	Controller	1 x Intel i219,Date Rate Per Port:1.0GbE
		1 x Intel i226, Date Rate Per Port:2.5GbE
	Interface	2 x RJ45
Audio	Audio Codec	Realtek HD ALC897
	Interface	1 x Line-in, 1 x Line-out, 1 x Mic-in,
Hardware Monitoring		CPU and system temperature, on-board voltage, watchdog
Storage&Expansion	SATA	4 x SATA3.0
	M.2	1 x M.2 Key M for 2280 NVMe(PCIe4.0)/SATA SSD
	PCIe x16	1*PCIe x16 (PCIe5.0)
	PCIe x4	3*PCIe x4 (PCIe4.0)
		1*PCIe x2 (PCIe3.0)+1*PCIe x4 (PCIe3.0)
		Additional 1*PCIe x4 (PCIe3.0) available if Z690 Chipset is selected.
I/O Interface	COM	6 x COM: 6*RS232 by default.
		COM5, COM6 can be set as RS485/RS422 via jumper
	USB2.0	6 x USB2.0(2*Ports+ 4*Header)
	USB3.2	6 x USB3.2(4*Ports+ 2*Header)
	PS/2	1 x PS/2 for keyboard and mouse
	GPIO	8-bit
	LPT	1
	TPM2.0	Optional
Dimension	Size	304.8mm x 218.44mm
	Form Factor	ATX
Power	Standard Port	ATX_24PIN + 2*8PIN
	Peripheral Input	For Fan and SATA
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

* All specifications and photos are subject to change without notice.

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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