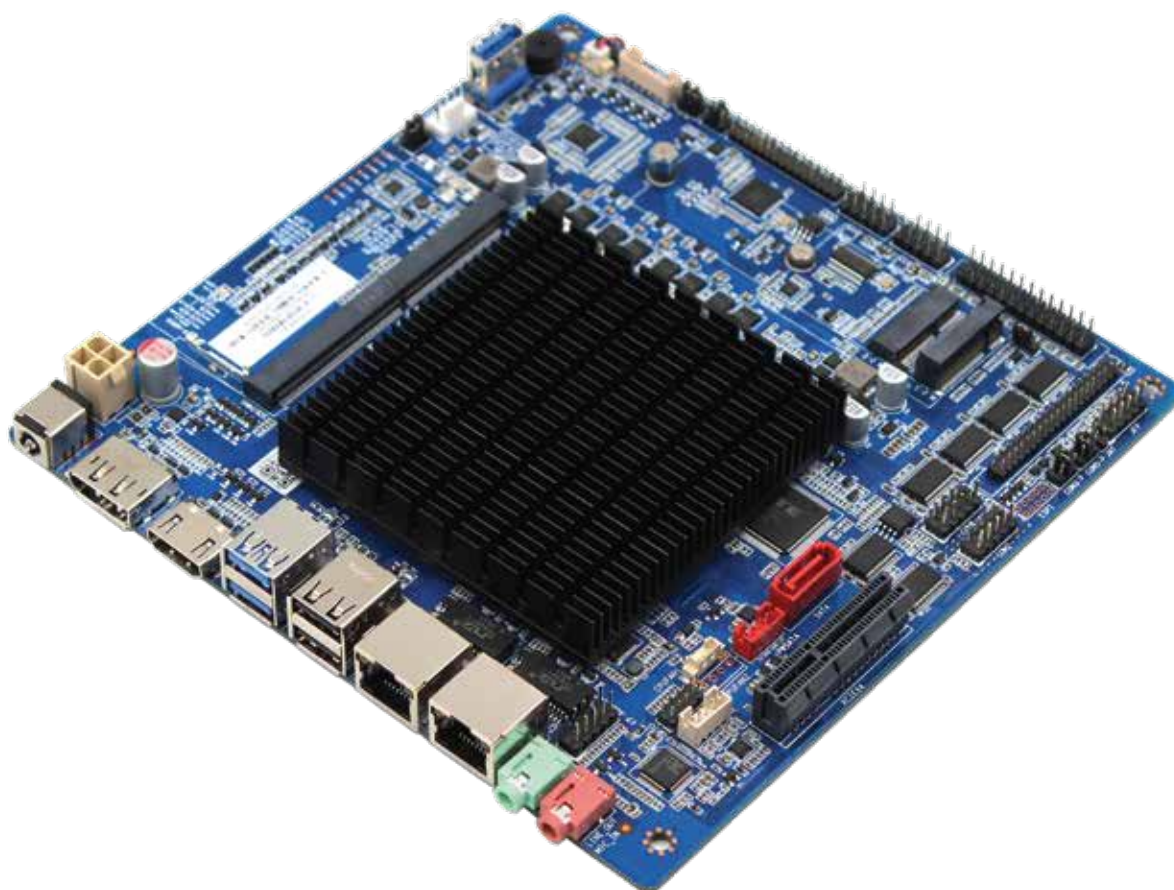


# ALN-10

## Intel® Alder Lake-N Series Processor based Mini ITX Motherboard



### Features

- CPU: Intel® Alder Lake-N Series processor
- Memory: Single channel SO-DIMM DDR4 up to 32GB
- GPU: Integrated Intel® UHD Graphics
- Ethernet Controller: Dual RJ45 Intel i226 2.5GbE
- Storage: 1xM.2 for SATA SSD/4G, 1xSATA
- Expansion: M.2 for WiFi, PCIe 4X(2X Signal)
- Power: 19V/12V DC-in



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## Introduction

The Maxtang ALN-10 is based on the 12th Gen Intel Alder Lake-N series processor ideal for various industrial applications. The board supports up to 8 cores and 8 threads, faster graphics performance with low power consumption. Its small form factor design is great for IoT deployments that require powerful performance, high-speed connectivity, and enhanced graphics density. It Supports 1xSO-DIMM DDR4 up to 32GB, features HDMI2.0+DP+LVDS/EDP for multitasking, a rich I/O interfaces includes 6xCOM, 2xUSB3.2+6xUSB2.0+1xUSB Dongle, 2xLAN, 1xSATA, 2xM.2 connector, PCIe4X(Pcie 2X Signal), GPIO and optional TPM2.0 for added security.

The ALN-10 drives more value for IoT use cases with differentiated capabilities and offers an immersive experience through the Intel UHD graphics for multiple 4K independent displays. The motherboard is great for energy saving, suitable for surveillance, digital signage, electronic gaming machine, and thin client.



H/W Monitor



Watchdog

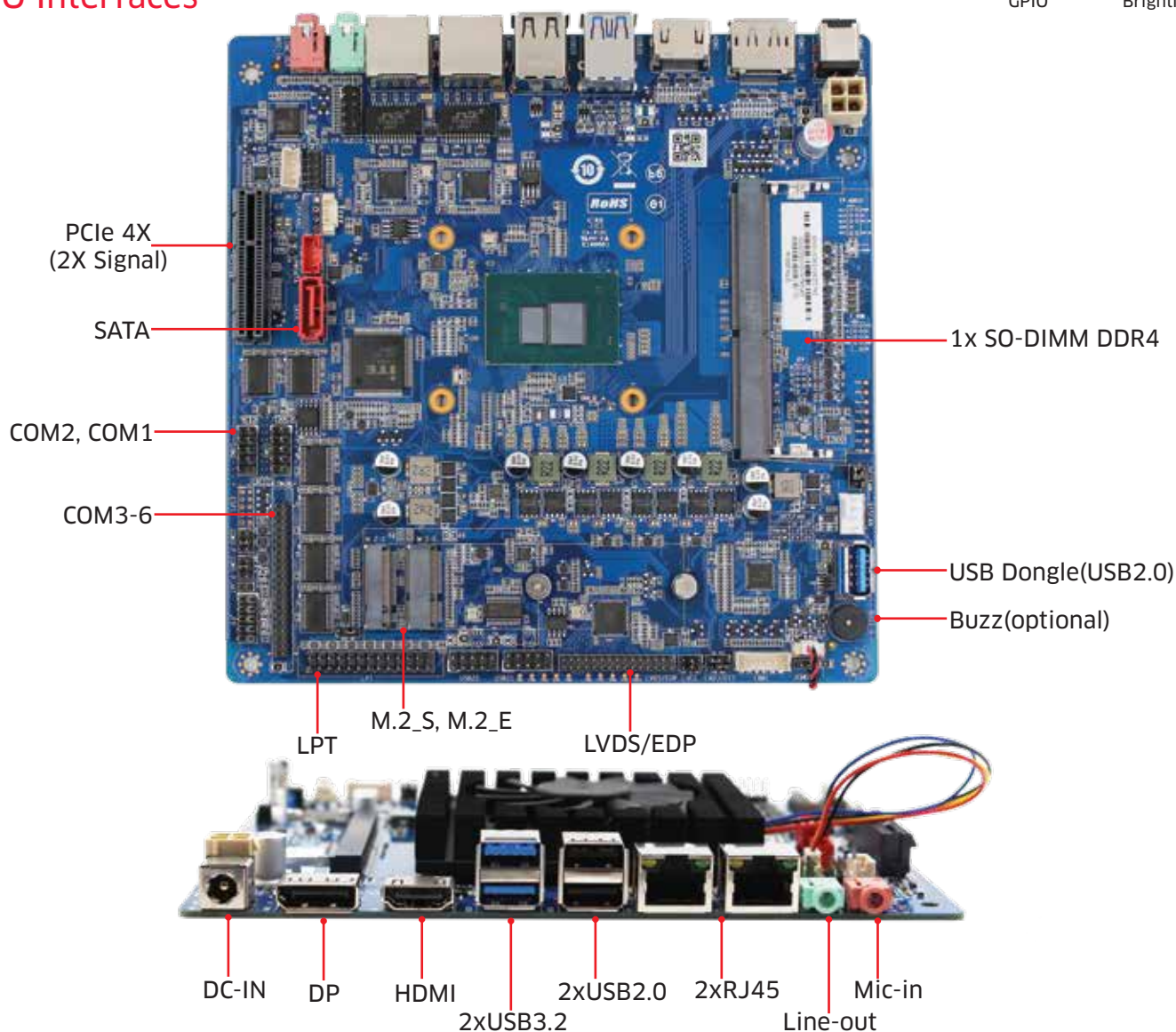


GPIO



Brightness

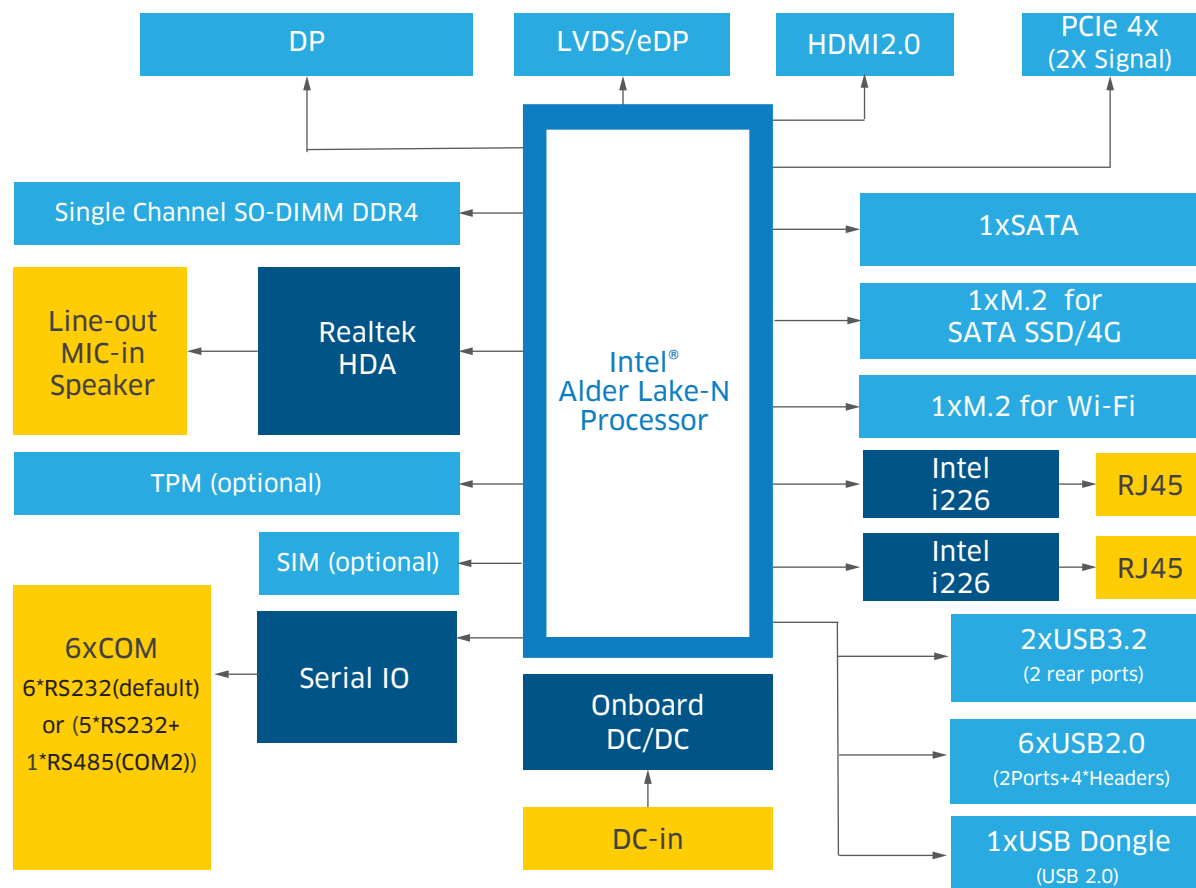
## I/O Interfaces



## Technical Specifications

Processor	Alder Lake N Series	i3-N305	N100	N97
	Total Cores/Threads	8C/8T	4C/4T	4C
	Max Turbo Frequency	3.80GHz	3.40GHz	3.60GHz
	Cache	6MB	6MB	6MB
	TDP	15W	6W	12W
	Cooling Method	Active	Passive	Active
	BIOS	AMI UEFI BIOS		
Memory	Type	Single Channel SO-DIMM DDR4		
	Max.Capacity	32GB		
Display	GPU	Integrated Intel UHD Graphics		
	Interface	1x HDMI2.0+1x DP+1x LVDS/eDP		
Ethernet	Controller	2x Intel i226 Data Rate Per Port: 2.5GbE		
	Interface	2x RJ45		
	Wake on LAN	Yes		
Audio	Audio Codec	Realtek HD		
	Interface	1xLine-out, 1xMic-in, supports audio header and amplifier header		
Hardware	CPU system temperature, onboard voltage, watchdog, and auto power on Buzz optional. None by default.			
Storage	M.2	1xM.2 for SATA SSD/4G		
	SATA	1		
Expansion	M.2	1x M.2 for WiFi, support Intel® Integrated Connectivity (CNVi)		
	PCIe4X	1(PCIe 2X Signal)		
	SIM	Optional		
I/O Interface	COM	6xCOM: 6*RS232(default) or 5*RS232+1*RS485(COM2)		
	USB3.2	2*rear ports		
	USB2.0	2*rear ports+4*headers		
	USB Dongle	1(USB2.0)		
	GPIO	8		
	TPM2.0	Onboard, optional		
	Dimension	Size	170mm×170mm	
Power	Board Type	Mini-ITX		
	Standard Port	12/19V DC-in		
	Peripheral Input	For Fan and SATA		
	Operating Temp.	-20°C ~60°C		
	Storage Temp.	-40°C ~80°C		
Operating System	Win10/11 64 bit, Linux 64 bit			

## Functional Block Diagram



## Order Information

Model Name	Description
DTN305-A	DT MINI-ITX Intel Core i3-N305 ALN10 2LAN 6*RS232 HDMI+DP+LVDS NO SIM
DTN100-A	DT MINI-ITX Intel N100 ALN10 2LAN 6*RS232 HDMI+DP+LVDS NO SIM
DTN97-A	DT MINI-ITX Intel N95 ALN10 2LAN 6*RS232 HDMI+DP+LVDS NO SIM

\*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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