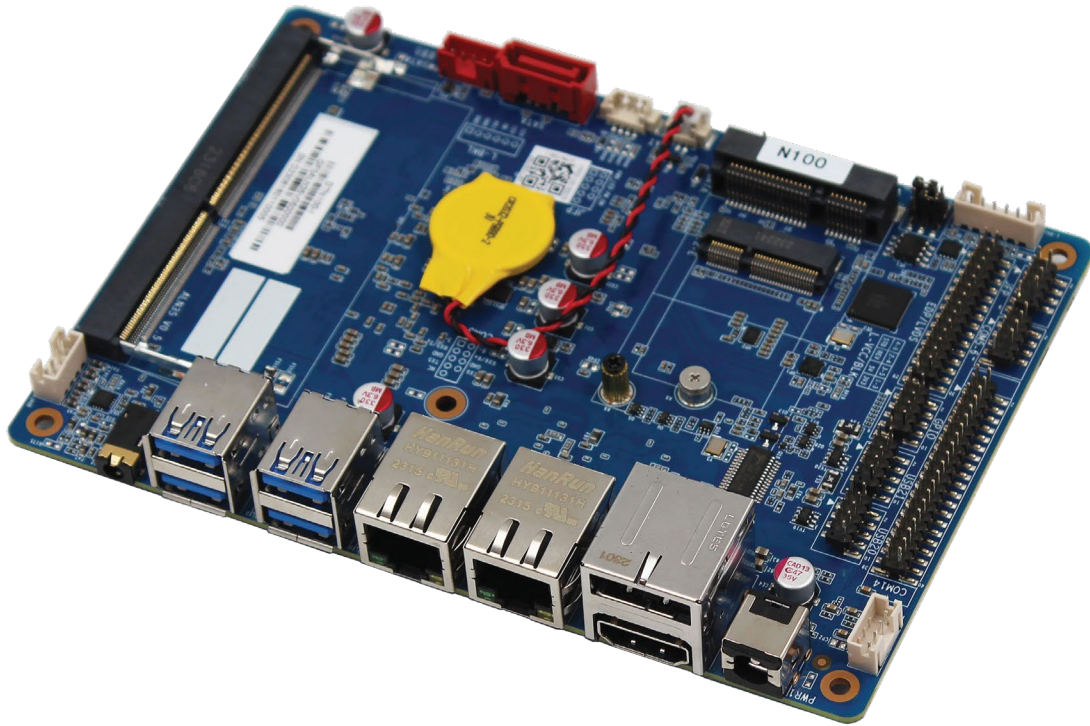


ALN-35V1.0

Intel® Alder Lake-N Series Processor
based Single Board Computer



Features

- CPU: Intel® Alder Lake-N Processor
- Memory: Single Channel SO-DIMM DDR4 up to 16GB/32GB
- Display: Integrated Graphics display via HDMI+DP+eDP/LVDS
- Ethernet: 10/100/1000Mbps
- Storage: mSATA, SATA3.0
- Expansion: M.2 Key E for 2230 WiFi & BT
- Power: 12V-35V DC-IN



IoT Solutions
Alliance
Industrial Solution
Builders Specialist

Maxtang

MAXIMIZING YOUR COMPUTING PRODUCTIVITY

Introduction

The Maxtang SBC ALN-35V1.0 is a powerful and energy-efficient embedded motherboard designed for industrial applications. It is equipped with an Intel Alder Lake N series processor and supports up to 16GB/32GB of single-channel SO-DIMM DDR4 memory, providing enhanced performance and productivity. The board also offers a range of display options, including HDMI, DP plus eDP/LVDS, and features two Intel Ethernet controllers, mSATA and SATA for storage, making it a versatile solution for a variety of applications.

Moreover, the SBC ALN-35V1.0 provides a comprehensive input/output interface, including 6x COM, 4x USB3.2, 4x USB2.0, GPIO, and CTIA audio port, making it easy to connect to a wider range of peripherals. The board is designed for stability and reliability and is built with a robust design to withstand harsh industrial environments. As a member of the Intel IoT Solutions Alliance, Maxtang is committed to delivering high-quality products at a competitive price to meet the needs of its customers.



H/W Monitor



Watchdog



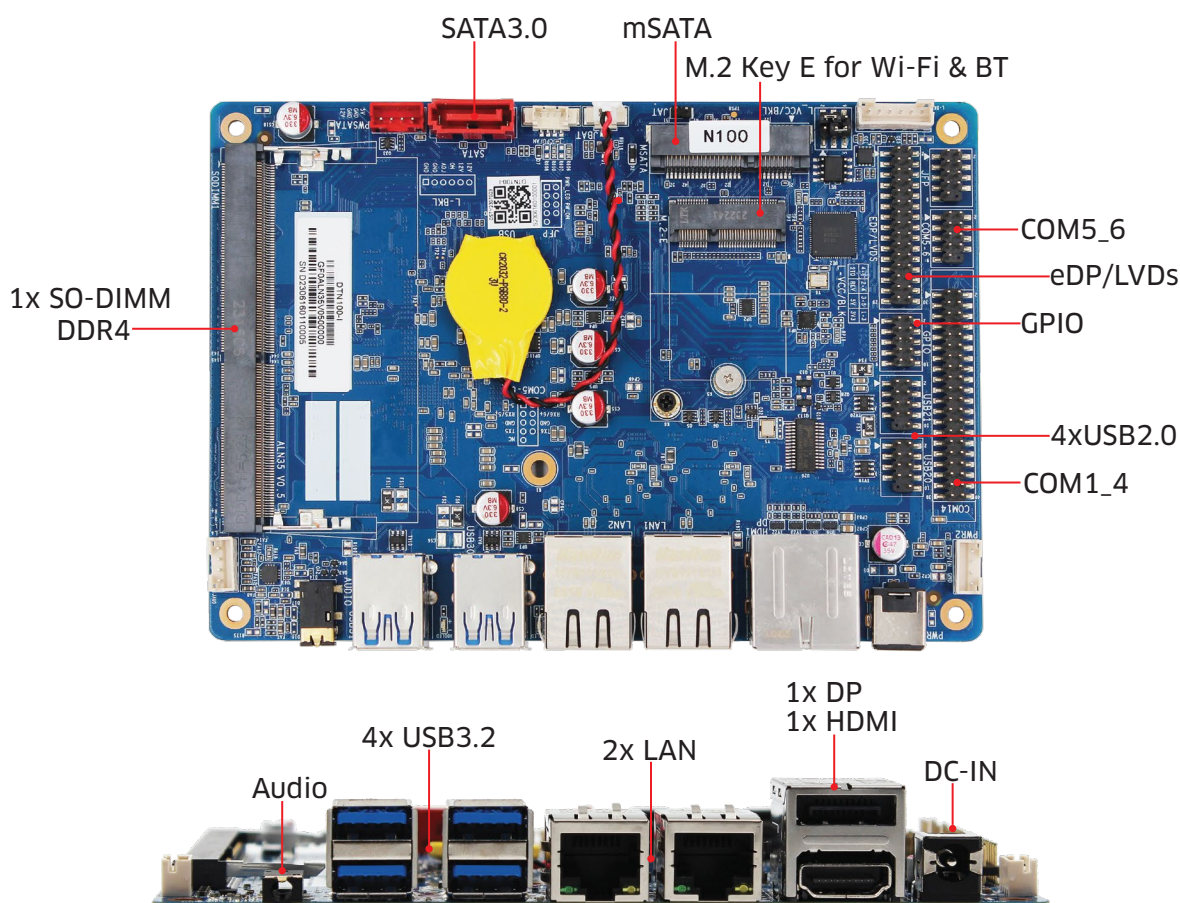
GPIO



Brightness



I/O Interfaces

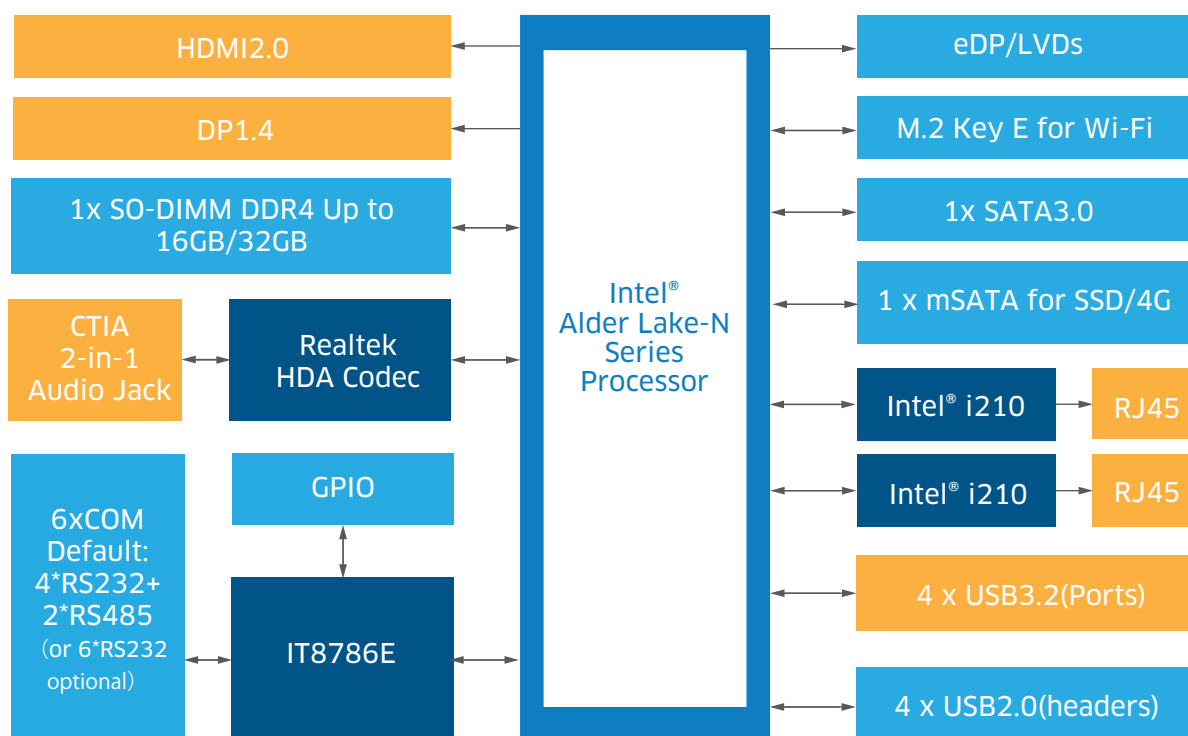


Technical Specifications

Processor	CPU	i3-N305	N100	N97
	Total Cores/Threads	8C/8T	4C/4T	4C
	Max Turbo Frequency	3.80GHz	3.40GHz	3.60GHz
	Intel® Smart Cache	6MB	6MB	6MB
	TDP	15W	6W	12W
	BIOS	AMI UEFI BIOS		
Memory	Type	Single Channel SO-DIMM DDR4		
	Max. Capacity	16GB(N305,N100)/32GB(N97)		
Display	GPU	Integrated Intel® UHD Graphics		
	Display via	1 x HDMI2.0 + 1 x DP1.4+1 x eDP/LVDs		
Ethernet	Controller	2 x Intel® i210		
	Speed	10/100/1000Mbps		
	Interface	2 x RJ45		
	Wake on LAN	Yes		
Audio	Audio Codec	Realtek HD		
	Interface	1 x CTIA Audio Jack, Line-out + Mic-in in one, supports power amplifier		
Hardware		CPU system temperature, on-board DC-in voltage, watchdog, auto power on		
Storage	mSATA	1 x mSATA for SSD/4G Module		
	SATA3.0	1 x SATA3.0		
Expansion	M.2	1 x M.2 Key E for 2230 Wi-Fi & BT Module, support CNVi		
I/O Interface	COM	Default: 4*RS232+2*RS485(COM5_6) Optional: 6*RS232		
	USB3.2	4*ports		
	USB2.0	4*headers		
	GPIO	8-bit		
	Size	146 mm x 102mm		
	Form Factor	3.5" SBC		
Power	Standard Port	12V-35V DC-IN		
	Peripheral Input	For Fan and SATA		
	LED Indicator	Power Indicator		
Temperature	Operating Temp.	-20°C to 60°C		
	Storage Temp.	-40°C to 80°C		
Operating System		Win10/11 64bit, Linux 64bit		

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

Functional Block Diagram



Order Information

Model Name	Description
DTN305-I	DT Intel N305 ALN35V1.0 1DDR4 2LAN(i210) 4*RS232 2*RS485 DP+HDMI+LVDS
DTN100-I	DT Intel N100 ALN35V1.0 1DDR4 2LAN(i210) 4*RS232 2*RS485 DP+HDMI+LVDS
DTN97-I	DT Intel N97 ALN35V1.0 1DDR4 2LAN(i210) 4*RS232 2*RS485 DP+HDMI+LVDS

***For customized options, please contact regional sales. Model names and descriptions are subject to change; please confirm before purchase.

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