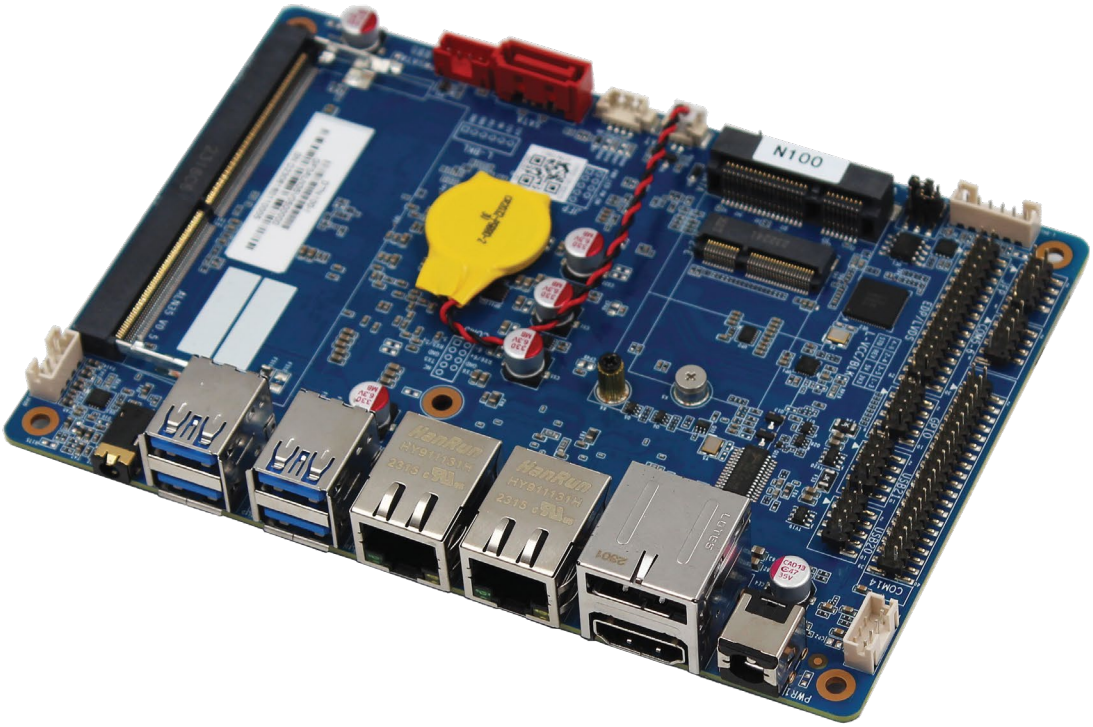
PRODUCT DATASHEET
HW Rev.: V1.0

ALN-35

Intel® Twin Lake/Alder Lake-N Series Single Board Computer



Features

- CPU: Intel® Twin Lake/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: 9-36V DC-IN

intel prestige partner Builder

Maxtang®
MAXIMIZING YOUR COMPUTING PRODUCTIVITY

Introduction

The Maxtang SBC ALN-35 is a powerful and energy-efficient embedded motherboard designed for industrial applications. It is equipped with an Intel Twin Lake/Alder Lake N series processor and supports up to 16GB/32GB of single-channel SO-DIMM DDR4 memory, providing enhancedperformance 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.

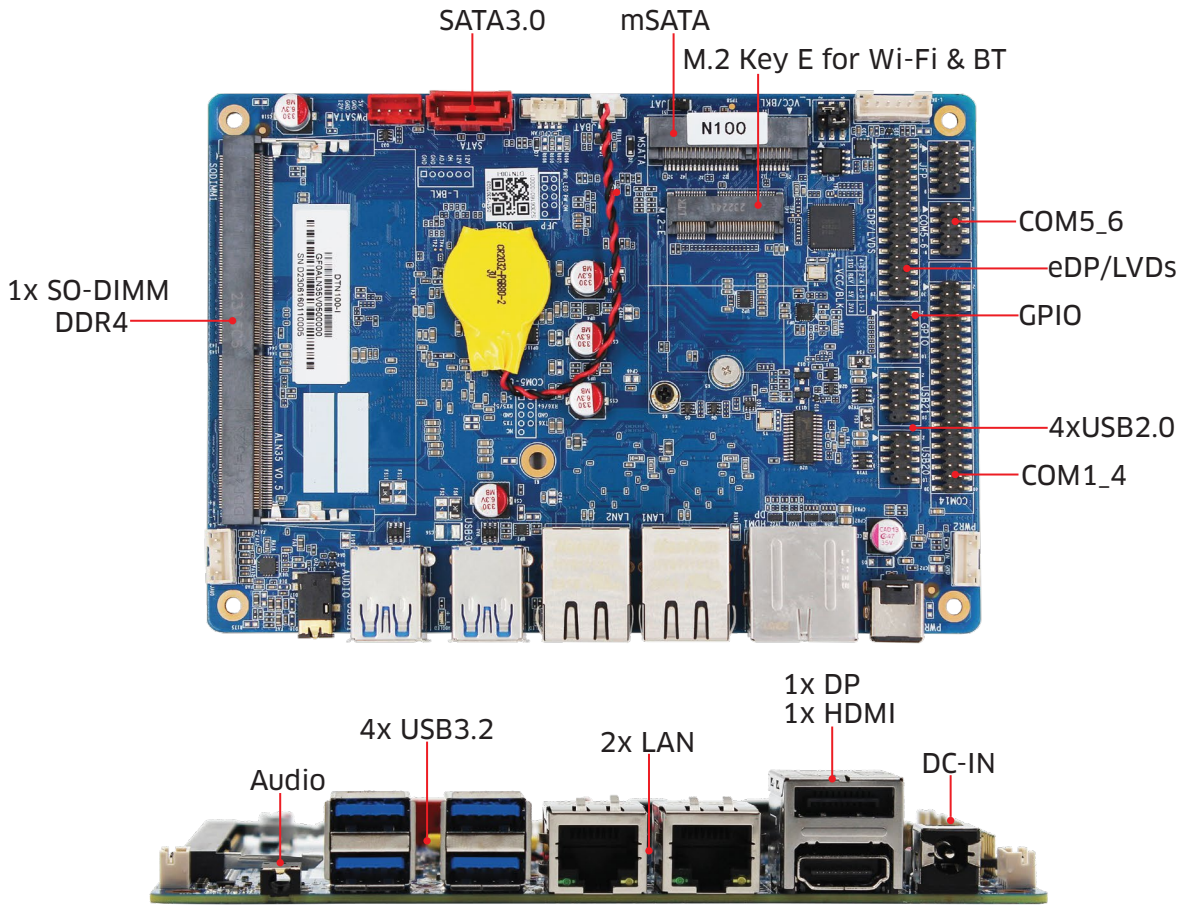
Moreover, the SBC ALN-35 provides a comprehensive input/output interface, including 6xCOM, 4xUSB3.2, 4xUSB2.0, GPIO, and CTIA audio port, making it easy to connect to a widerange of peripherals. The board is designed for stability and reliability and is built with a robustdesign to withstand harsh industrial environments. As a member of the Intel IoT SolutionsAlliance, Maxtang is committed to delivering high-quality products at a competitive price to meet the needs of its customers.

Linux
ubuntu
Windows

H/W Monitor
Watchdog
GPIO
Brightness

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

I/O Interfaces

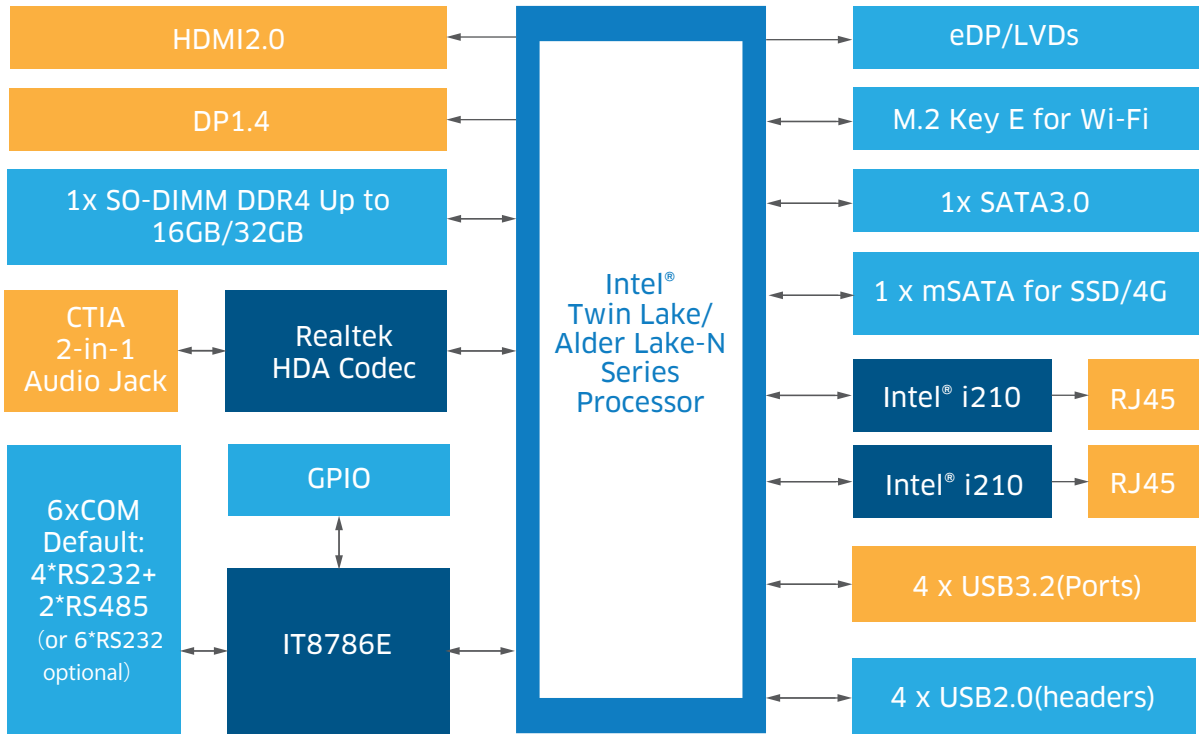


Technical Specifications

Processor	CPU	i3-N305	N150	N100	N97
	Total Cores/Threads	8C/8T	4C/4T	4C/4T	4C
	Max Turbo Frequency	3.80GHz	3.60GHz	3.40GHz	3.60GHz
	Intel® Smart Cache	6MB	6MB	6MB	6MB
	TDP	15W	6W	6W	12W
	BIOS	AMI UEFI BIOS			
Memory	Type	Single Channel SO-DIMM DDR4			
	Max. Capacity	16GB(N305/N150/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	10/100/1000Mpbs			
	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 Monitoring		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 Slot for 2230 Wi-Fi & BT Module, support CNVi			
I/O Interface	COM	6 x COM: default 4*RS232+2*RS485, or 6*RS232 optional			
	USB3.2	4 x USB3.2(Ports)			
	USB2.0	4 x USB2.0(headers)			
	GPIO	8-bit			
Dimension	Size	146 mm x 102mm			
	Form Factor	3.5” SBC			
Power	Standard Port	9-36V 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
DTN150-I	DT Intel N150 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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