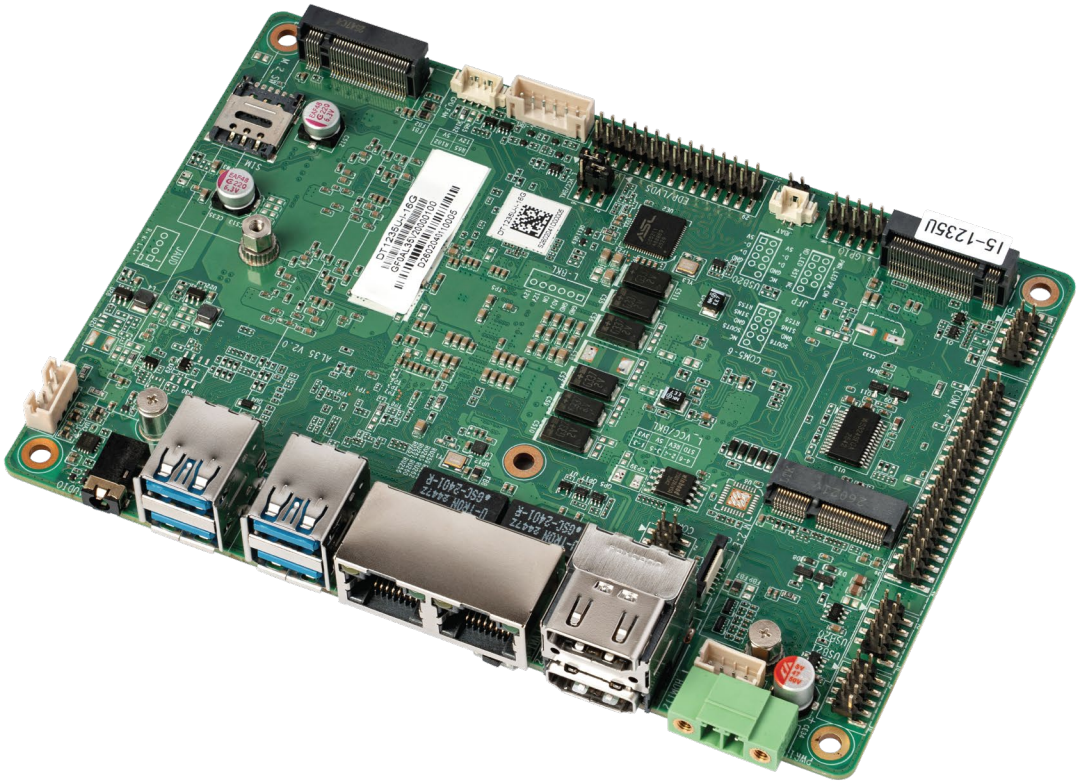
PRODUCT DATASHEET
HW Rev.: V2.0

AL-35

Intel® Alder Lake U/Raptor Lake U Series Processor based Single Board Computer



Features

- CPU: Intel® Alder Lake U/Raptor Lake U Series Processor
- Memory: Onboard LPDDR5, 8GB/16GB
- Display: Integrated Intel Graphics display via 2xHDMI2.0, eDP/LVDs
- Ethernet: 2 x Intel® i210, 10/100/1000Mbps
- Storage: SATA3.0 FPC, M.2 Key B Slot for SATA/4G, M.2 Key M Slot for NVMe,UFS Flash optional
- Expansion: M.2 Key E Slot for Wi-Fi&BT
- Power: 9V-36V(2-Pin DC-IN Phoenix Connector)

intel prestige partner Builder

Maxtang®
MAXIMIZING YOUR COMPUTING PRODUCTIVITY

Introduction

The Maxtang AL-35 is a compact, high-performance 3.5” industrial single board computer powered by 12th and 13th Gen Intel® Core™ U-Series processors (Alder Lake-U / Raptor Lake-U). Supporting Intel® Core™ i7, i5, and i3 processor options with up to 10 cores and 12 threads, it delivers efficient multitasking and optimized power performance for industrial and embedded applications. Integrated Intel® Iris® Xe / UHD Graphics and onboard LPDDR5-5200 memory (8GB/16GB) enable responsive computing and flexible multi-display output via dual HDMI 2.0 and one eDP/LVDS interface.

Designed for reliability and expansion flexibility, AL35V2.0 features dual Intel® i210 Gigabit LAN, six RS232 ports (COM1/2 configurable to RS422/RS485 via BIOS), four USB 3.2 Gen2 ports, 8-bit GPIO, and versatile storage options including M.2 NVMe, M.2 SATA/4G, SATA 3.0, and UFS Flash support. With a wide 9V–36V DC input and -20°C to 60°C operating temperature, it provides stable performance in demanding environments such as industrial automation, machine vision, medical systems, and smart retail applications.

Linux™

ubuntu Linux

Windows

H/W Monitor

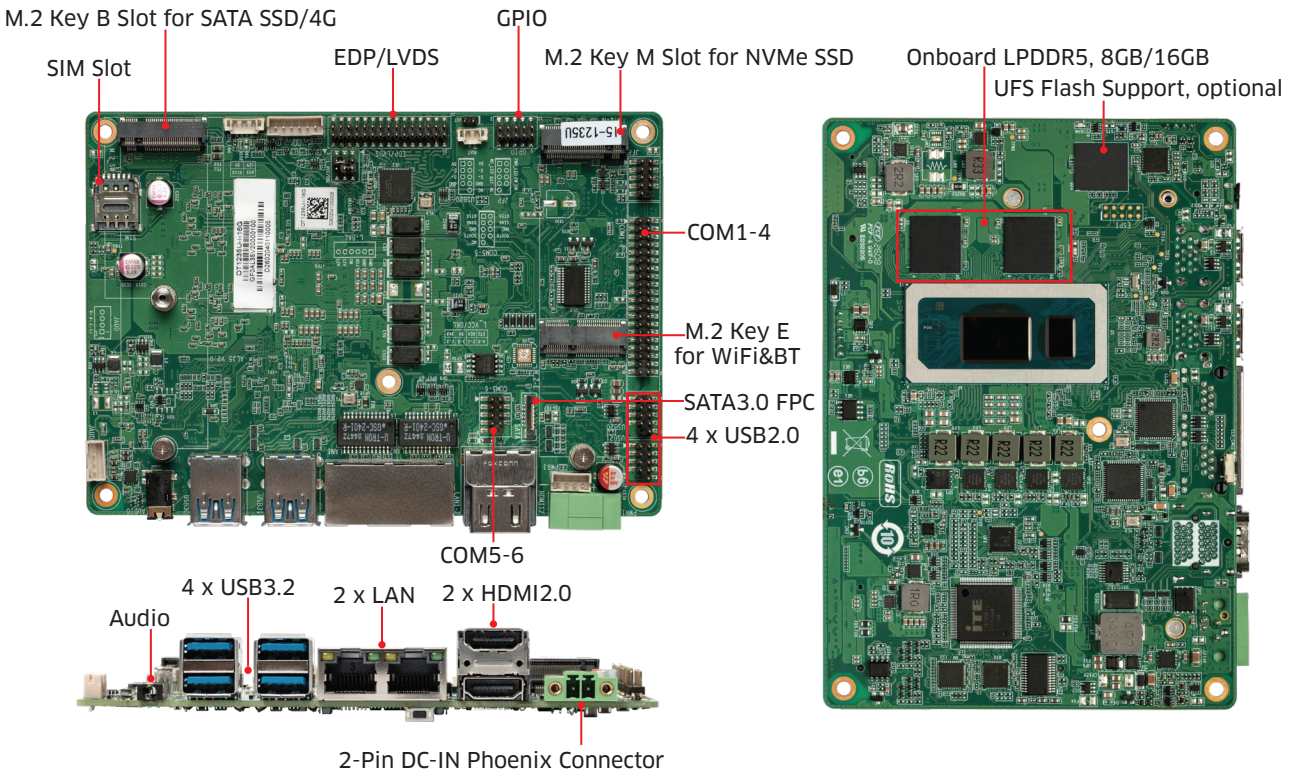
Watchdog

GPIO

Brightness

HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE

I/O Interfaces

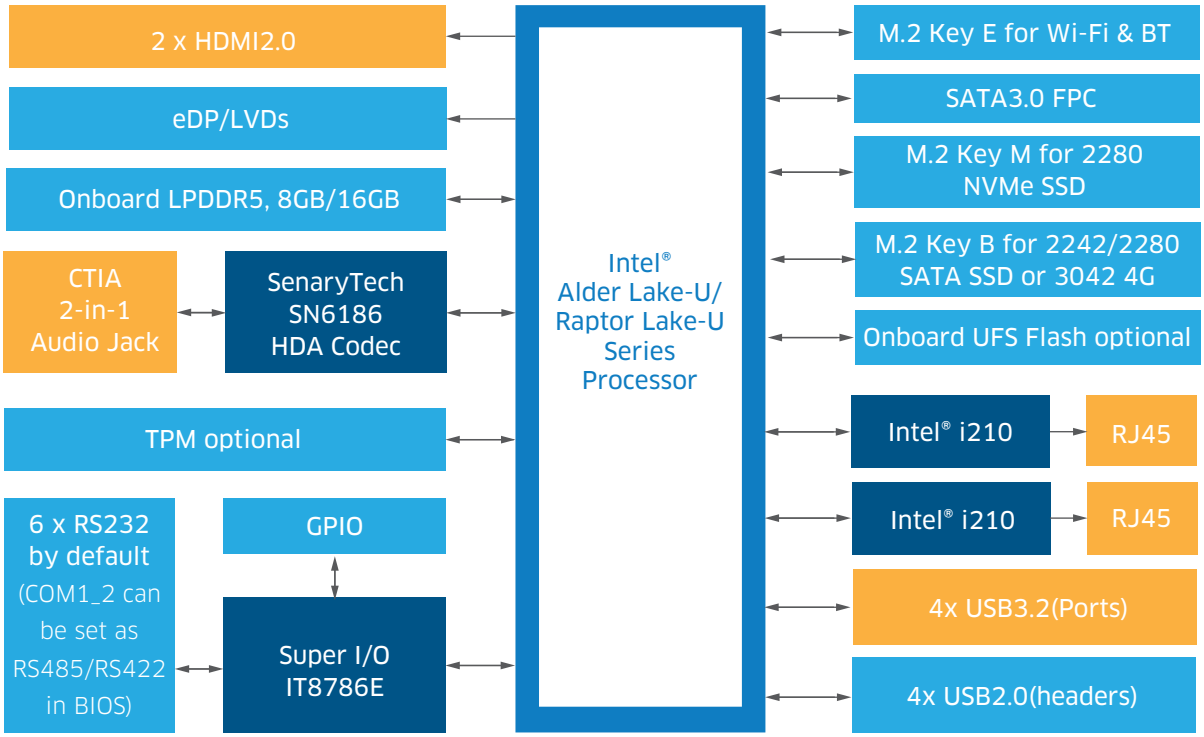


Technical Specifications

Processor	Intel® Core™ CPU	i7-1255U	i5-1235U	i3-1215U
	Total Cores/Threads	10C/12T	10C/12T	6C/8T
	P-core Max Turbo Frequency	4.70GHz	4.40GHz	4.40GHz
	E-core Max Turbo Frequency	3.50GHz	3.30GHz	3.30GHz
	Intel® Smart Cache	12MB	12MB	10MB
	BIOS	AMI UEFI BIOS		
Memory	Type	Onboard LPDDR5-5200Mb/s		
	Capacity	8GB/16GB		
Display	GPU	Integrated Intel® Iris® Xe/UHD Graphics.		
	Interface	2 x HDMI2.0, 1 x eDP/LVDs		
Ethernet	Controller	2 x Intel® i210		
	Max Speed	10/100/1000Mbps		
	Interface	2 x RJ45		
	Wake on LAN	Yes		
Audio	Audio Codec	SenaryTech SN6186 High-definition Audio Codec		
	Interface	1 x CTIA 2-in-1 Audio Jack, supports Line-out + Mic-in and power amplifier		
Hardware Monitoring		CPU system temperature, on-board DC-in voltage, watchdog, auto power on		
Storage	M.2_SW	1 x M.2 Key B Slot for 2242/2280 SATA SSD/3042 4G Module		
	M.2_N	1 x M.2 Key M Slot for 2280 NVMe SSD		
	SATA	1 x SATA3.0 FPC Interface		
	UFS	UFS Flash support, optional		
Expansion	M.2_E	1 x M.2 Key E Slot for 2230 Wi-Fi&BT Module, supports PCIE& CNVi		
	SIM Slot	1 x SIM Slot Optional		
Other I/O	COM	6 x RS232 by default. COM1-2 configurable as RS422/RS485 via BIOS		
		COM5-6: RS232 (TX/RX/GND only, no flow control)		
	USB3.2	4 x USB3.2 Gen2 10Gbps, rear ports		
	USB2.0	4 x USB2.0, onboard header		
	GPIO	8-bit		
Dimension	Size	146 mm x 102mm		
	Form Factor	3.5" SBC		
Power	Standard Port	9V-36V; 2-Pin DC-IN Phoenix Connector		
	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.

Block Diagram



Order Information

Model Name	Description
DT1235U-I-16G	DT Intel Core i5-1235U AL35V20 LPDDR5_16GB 2LAN 2HDMI+LVDS 4*RS232+2*RS232/RS485/RS422
DT1215U-I-8G	DT Intel Core i3-1215U AL35V20 LPDDR5_8GB 2LAN 2HDMI+LVDS 4*RS232+2*RS232/RS485/RS422

*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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MAXIMIZING YOUR COMPUTING PRODUCTIVITY

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