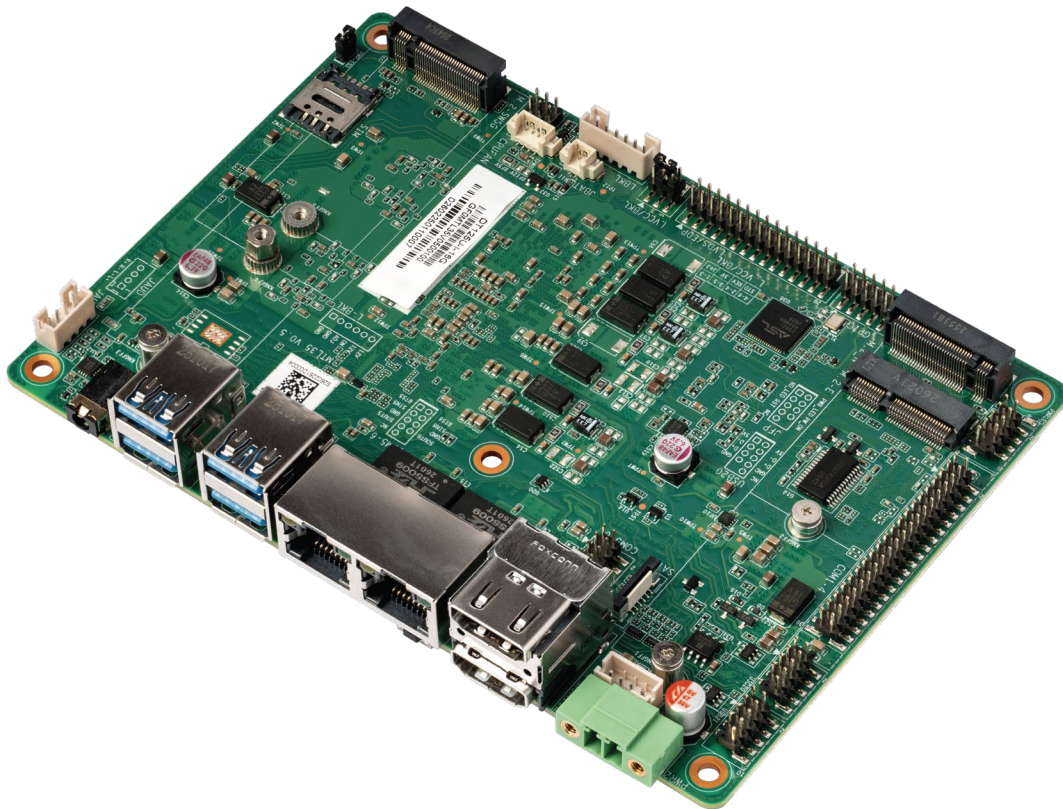


MTL-35

Intel® Core™ Ultra Meteor Lake-U/Arrow Lake-U Series
based Single Board Computer



Features

- CPU: Intel® Meteor Lake-U/Arrow Lake-U Series Processor
- Memory: Onboard LPDDR5, 8GB/16GB/32GB
- Display: Integrated Intel Graphics display via 2xHDMI2.0, eDP/LVDS
- Ethernet: 2 x Intel® i210, 10/100/1000Mbps
- Storage&Expansion: SATA3.0 FPC, M.2 Key B Slot for SATA/4G/5G, M.2 Key M Slot for NVMe, M.2 Key E Slot for Wi-Fi&BT
- Power: 9V-36V(2-Pin DC-IN Phoenix Connector)

intel prestige
partner
Builder

Introduction

The Maxtang MTL-35 is a compact 3.5" single board computer based on the latest Intel® Core™ Ultra 125U, 225U (Meteor Lake-U/Arrow Lake-U) processor, featuring a 12-core/14-thread architecture with integrated graphics and Intel® AI Boost NPU (up to 12 TOPS) for edge AI acceleration. With onboard LPDDR5 memory up to 32GB, dual Intel® i210 Gigabit Ethernet, and rich I/O including 4× USB 3.2 Gen2, 4× USB 2.0, and 6× COM ports (RS232, with COM1/2 configurable to RS422/RS485), the MTL-35 delivers strong computing performance and flexible connectivity for industrial and embedded applications.

The board supports triple display output via 2× HDMI 2.0 and 1× eDP/LVDS, enabling multi-display configurations for HMI, panel PC, and smart display systems. Expansion options include M.2 Key M (NVMe SSD), M.2 Key B (SATA SSD/4G/5G), and M.2 Key E (Wi-Fi/BT), along with an optional SIM slot for wireless communication. Designed for reliability, the MTL-35 features wide voltage input (9-36V DC), system monitoring functions, and an operating temperature range of -20°C to 60°C, making it suitable for continuous operation in demanding industrial environments.



H/W Monitor



Watchdog



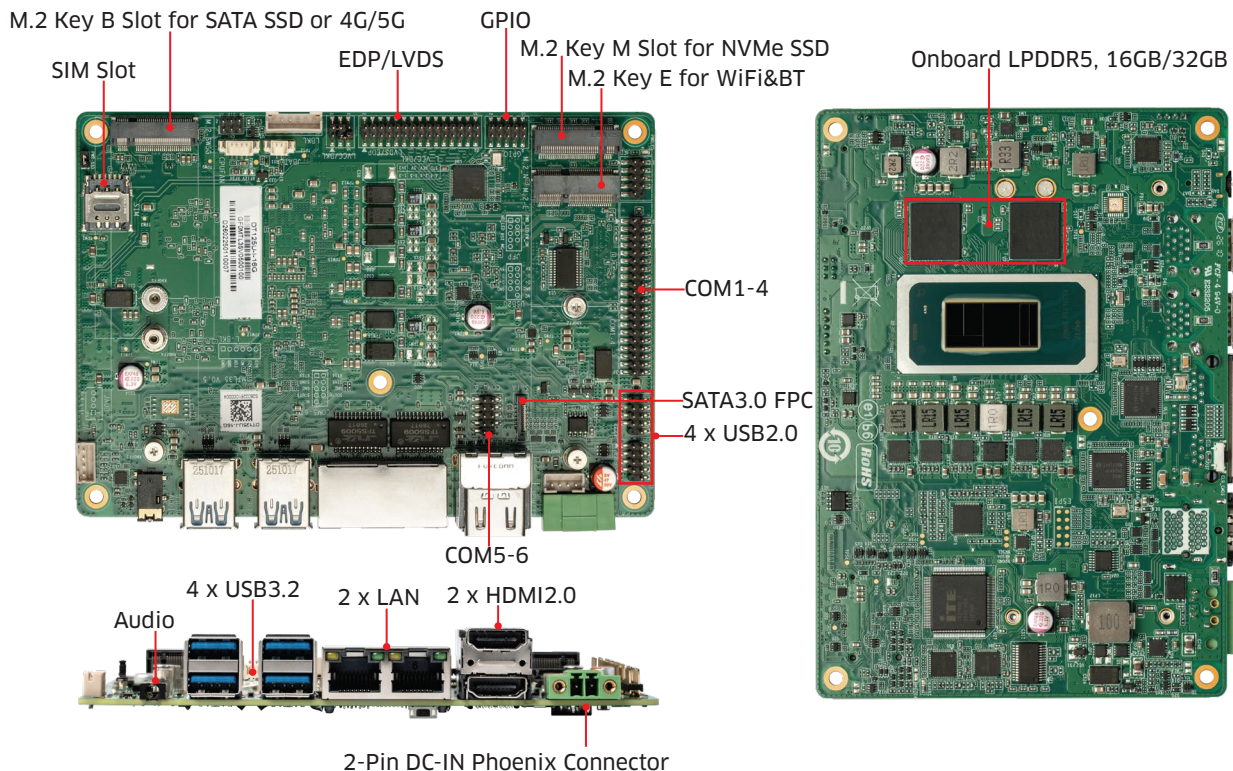
GPIO



Brightness



I/O Interfaces

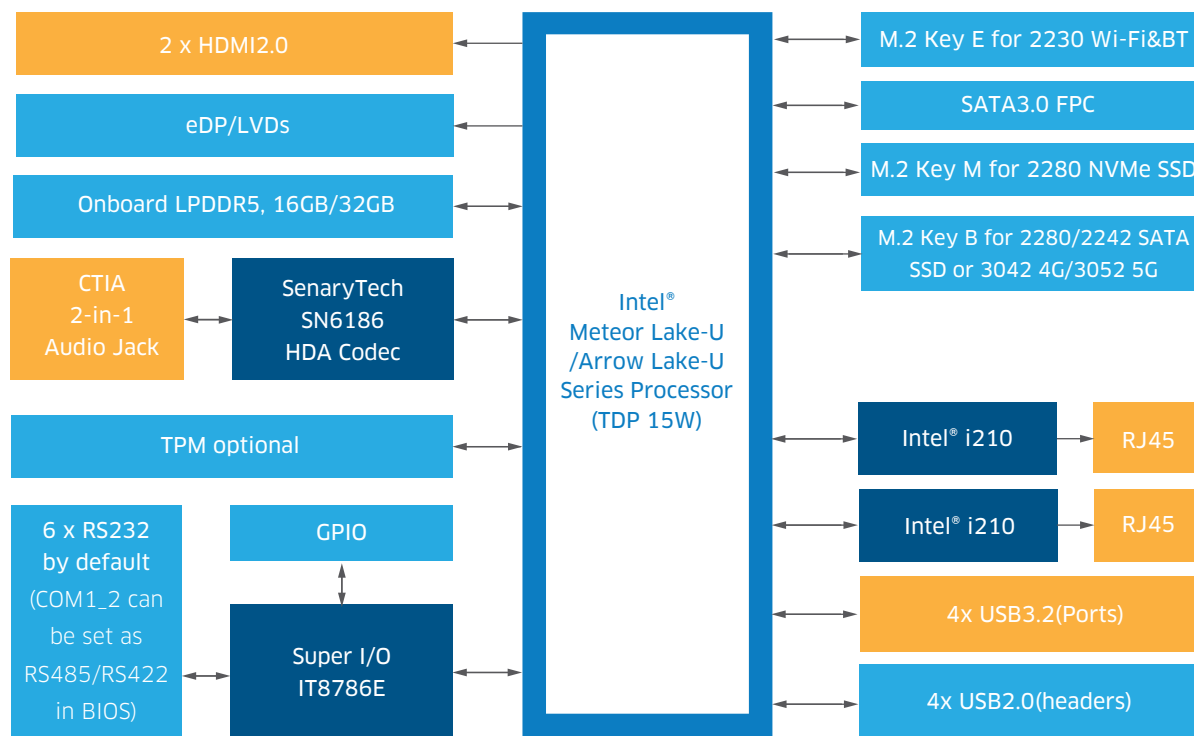


Technical Specifications

Processor	Intel® Core™ Ultra	125U	225U	
	Total Cores/Threads	12C/14T	12C/14T	
	P-core Max Turbo Frequency	4.3GHz	4.8GHz	
	E-core Max Turbo Frequency	3.6GHz	3.8GHz	
	Intel® Smart Cache	12MB	12MB	
NPU	Intel® AI Boost	YES	YES	
	NPU Peak TOPS	11TOPS	12TOPS	
Memory	BIOS	AMI UEFI BIOS		
	Type	Onboard LPDDR5		
	Capacity	8GB/16GB/32GB		
Display	GPU	Integrated Intel® 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 or 3042 4G/3052 5G Module		
	M.2_N	1 x M.2 Key M Slot for 2280 NVMe SSD		
	SATA	1 x SATA3.0 FPC Interface		
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		
	TPM	Optional		
	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
DT125U-I-8G	DT 3.5INCH Intel Core Ultra 5 125U MTL35 LPDDR5_16G 2LAN 4*RS232+2*RS232/RS485 2*HDMI+LVDS
DT125U-I-16G	DT 3.5INCH Intel Core Ultra 5 125U MTL35 LPDDR5_16G 2LAN 4*RS232+2*RS232/RS485 2*HDMI+LVDS
DT225U-I-32G	DT 3.5INCH Intel Core Ultra 5 225U MTL35 LPDDR5_32G 2LAN 4*RS232+2*RS232/RS485 2*HDMI+LVDS

*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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