

WL-10

Intel® Whiskey Lake-U Processor based Mini ITX Motherboard



Features

- CPU: Intel Whiskey Lake-U Celeron and Core processor
- Memory: Dual channel SO-DIMM DDR4 up to 64GB
- Display: Intel UHD Graphics display via HDMI, DP, eDP/LVDS
- Ethernet: 10/100/1000 Mbps
- Storage: M.2 for 4G/SSD, SATA3.0
- Expansion: M.2 for WiFi, PCIe 4X
- Power: 12V DC-in



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Introduction

The Maxtang mini-ITX WL10 embedded motherboard is based on Intel Whiskey Lake-U processors, provides a complete PC platform with high performance. Dual Channel SO-DIMM DDR4 up to 64GB for its memory and two SATA3.0, M.2 for its storage. Intel UHD graphics (based on CPU) for display via HDMI, DP, and eDP/LVDS. It supports 4G module, M.2_E for WiFi, PCIe4X for expansion. Rich interfaces include 6xCOM, 2xLAN, 3xUSB3.2, and 5xUSB2.0 cater most market's requirements.

This industrial mini-ITX motherboard offers a lot of functionality right off the rear panel and its internal headers. It is composed of high-quality components intended for a long-life operation that is perfect for industrial environments. It retains a robust design just like all other Maxtang products with stability, reliability, and cost advantages.



H/W Monitor



Watchdog

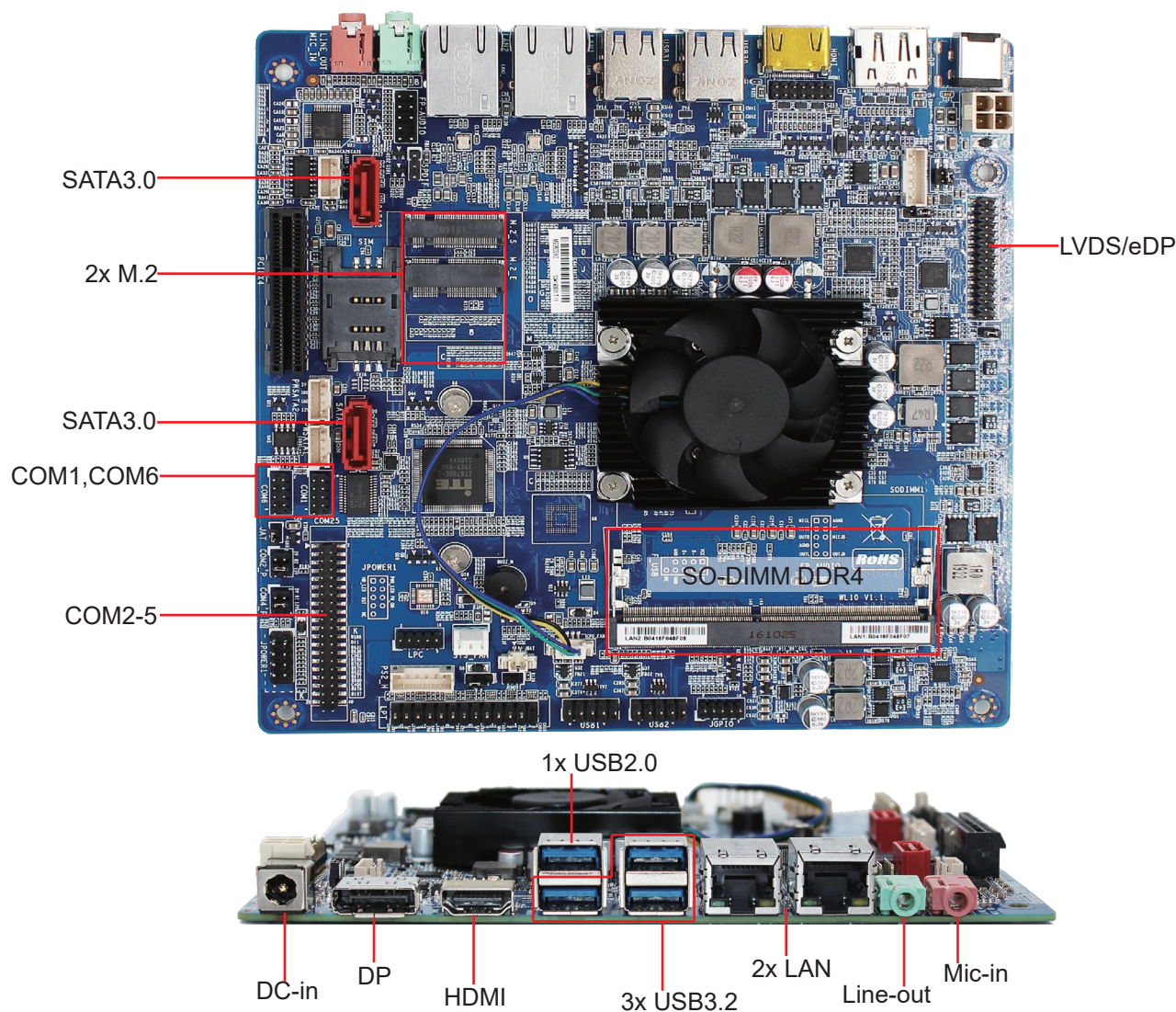


GPIO



Brightness

I/O Interfaces

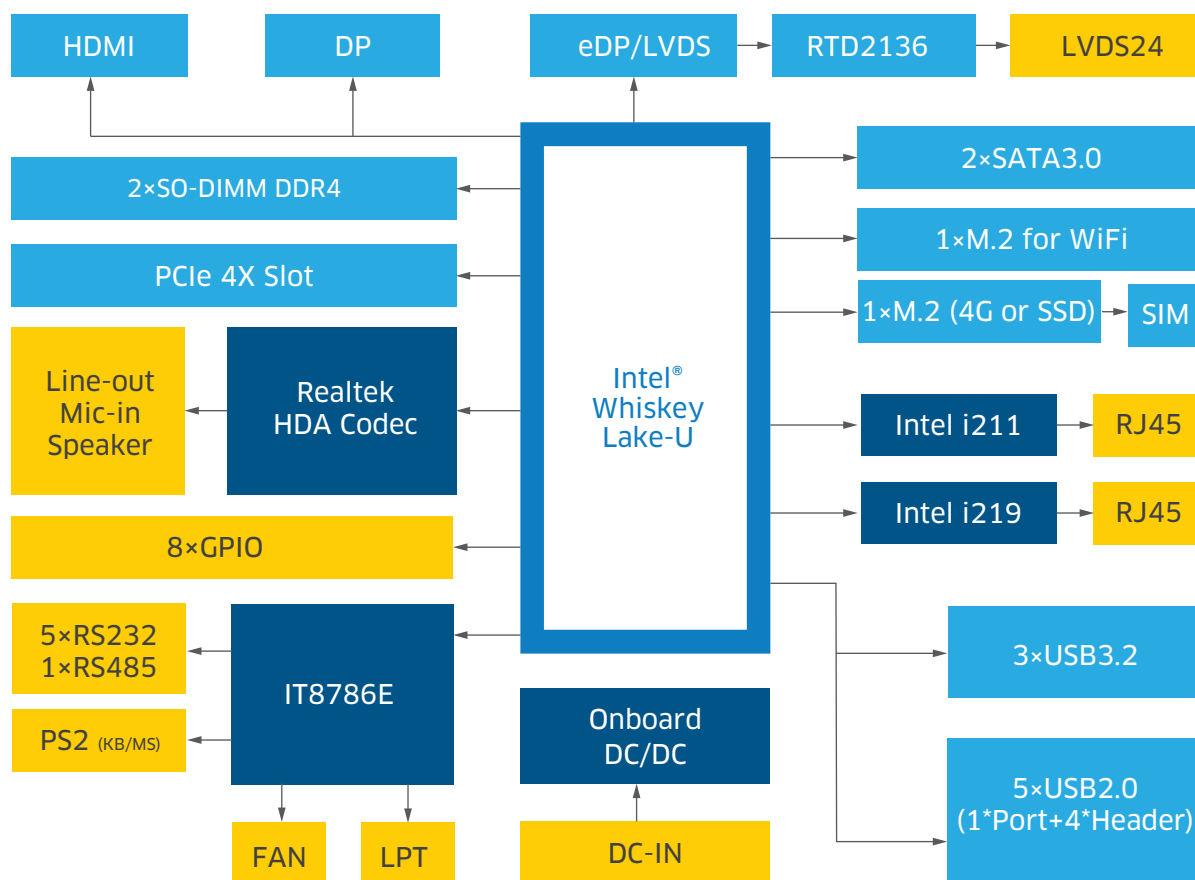


Technical Specifications

Processor	CPU	4205U	i3-8145U	i5-8265U	i7-8565U/8665U
	Base Frequency	1.8GHz	2.1GHz	1.6GHz	1.8GHz/1.9GHz
	Turbo Frequency	/	3.9GHz	3.9GHz	4.6GHz/4.8GHz
	Cache	2MB	4MB	6MB	8MB
	BIOS	AMI UEFI BIOS			
Memory	Type	Dual Channel SO-DIMM DDR4			
	Max.Capacity	64GB			
Display	GPU	Intel UHD Graphics 610/620 based on CPU			
	Display via	1xHDMI+1xDP+1x LVDS/eDP			
Ethernet	Speed	10/100/1000Mbps			
	Controller	1xIntel i211+1xIntel i219			
	Interface	2xRJ45			
	Wake on LAN	Yes			
Audio	Audio Codec	Realtek HD			
	Interface	Line-out, Mic-in, audio header, amplifier header			
Hardware		CPU System Temperature, onboard voltage, watchdog, Auto power on			
Storage	M.2	1×M.2 for 4G/2280 SSD			
	SATA3.0	2 (Only 1 if Celeron onboard)			
Expansion	M.2	1xM.2 for WiFi			
	PCIe4X	1			
I/O Interface	LAN	2			
	COM	6*header (5×RS232+1×RS485)			
	USB3.2	3			
	USB2.0	5 (1*Port+4*header)			
	GPIO	8			
	LPT	1			
	PS/2	1			
	Audio	1×Line-out, 1×Mic-in			
	TPM2.0	Onboard, optional			
	Size	170mm×170mm			
	Board Type	Mini-ITX			
Power	Standard Port	12V DC-in /4 PIN Power			
	Peripheral Input	For Fan and SATA			
	Operating Temp.	-20°C ~60°C			
	Storage Temp.	-40°C ~80°C			
Operating System		Win10 64 bit, Linux 64 bit			

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

Functional Block Diagram



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