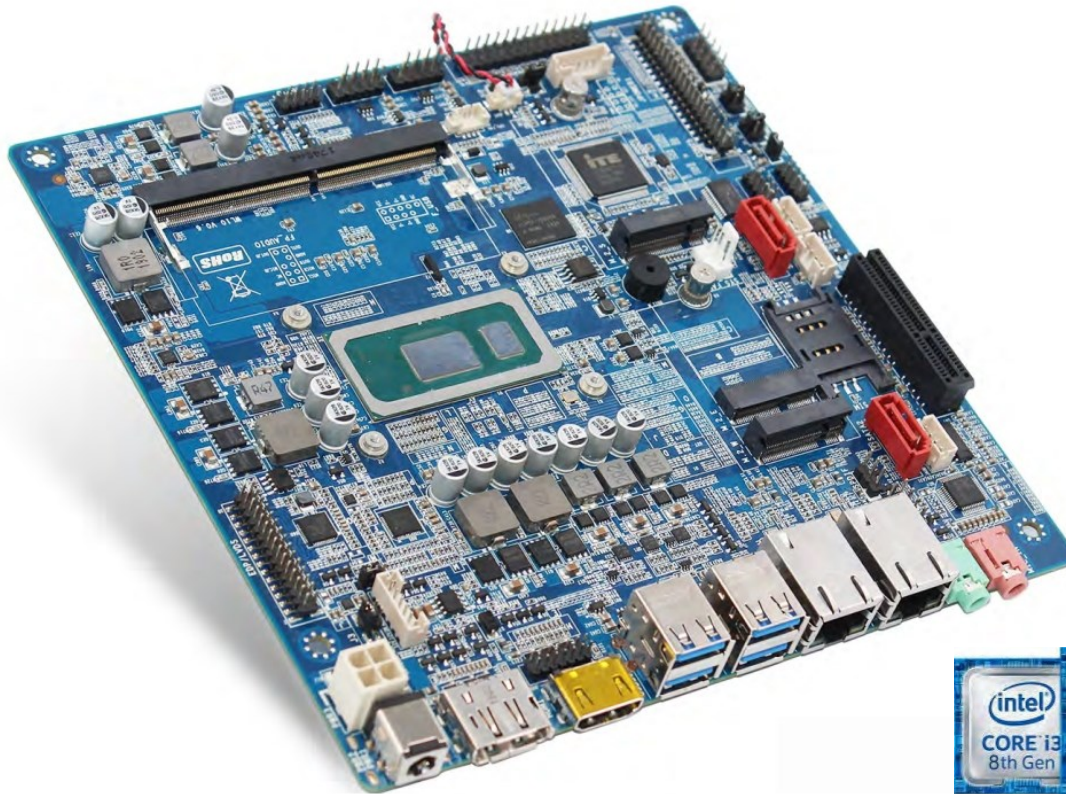


1ST-MITX-WL10

Thin Mini-ITX Embedded Motherboard
with Intel® Core™ or Celeron® CPU (Whiskey Lake-U)

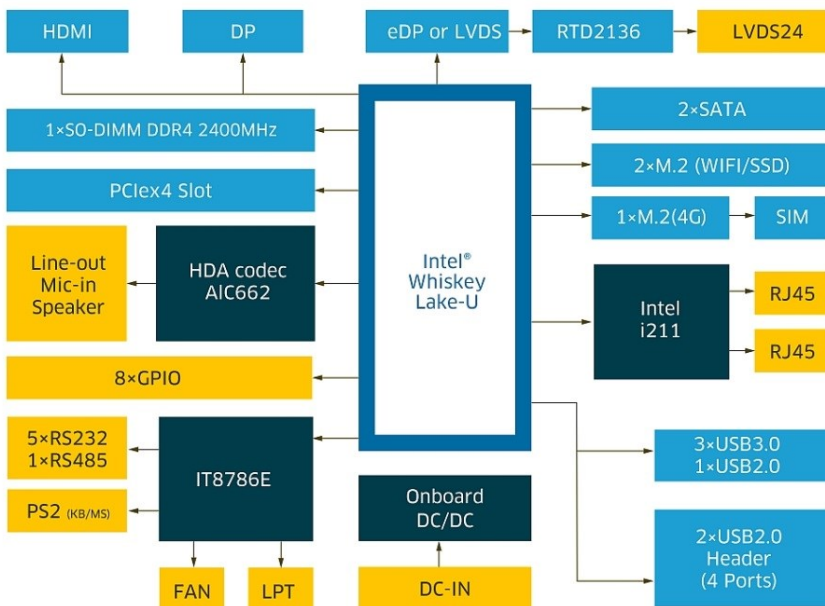


The 1ST-MITX-WL10 is an embedded motherboard supporting Intel® latest 8th Gen. Core™ i3/ i5/ i7 processor or Celeron® 4205U processor. This board features multiple display via 1x DP1.2 and 1x HDMI 1.4 and 1x eDP or 1x LVDS.

It carries 1x DDR4 SO-DIMM 2400MHz slot up to 16GB to add higher bandwidth and lower latencies for processes.

- 2x 10/100/1000Mbps BASE-T GB LAN (Intel® i211)
- 3x USB3.0, 5x USB 2.0, 5x RS232, 1x RS485
- 1x LPT, 1x HDMI header, 1x PS2_H, 8x GPIO
- Support 3G/4G network
- SATA3.0, M.2, PCIe x4

1ST-MITX-WL10 Functional Block Diagram



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	Items	Descriptions
Motherboard	CPU	Intel® Core™ i3-8145U (2.1GHz up to 3.9GHz, dual-core processor, TDP 15W), Intel® Core™ i5-8265U (1.6GHz up to 3.9GHz, quad-core processor, TDP 15W), Intel® Core™ i7-8565U (1.8GHz up to 4.6GHz, quad-core processor, TDP 15W) Intel® Celeron® 4205U (1.8GHz, dual-core processor, TDP 15W)
	System Memory	1 × SO-DIMM DDR4-2400MHz up to 16GB
	GPU	Intel® HD Graphics 610/620 (Based on CPU)
	BIOS	AMI 8MB UEFI
Display		1x HDMI 1.4
		1x DP 1.2
		1x LVDS (optional with eDP)
		1x eDP (optional with LVDS)
		Multiple display HDMI + DP + eDP or LVDS
Ethernet	Speed	10/100/1000Mbps
	Controller	Intel® i211
	Interface	2x RJ45
	Wake on LAN	Yes
Hardware Monitoring		CPU/System temperature, onboard DC-IN voltage, watchdog, auto power on
Storage		1x M.2 for 2242 SSD 2x SATA 3.0 (only 1x SATA if Intel® Celeron® onboard)
Expansions		1x M.2 for WiFi 1x M.2 for 3G/4G module, supports LTE Category 6 and above 1x PCIe x4
Rear Panel I/O		2x LAN RJ45 10/100/1000Mbps 3x USB3.0 1x USB2.0 1x HDMI 1x DP 1x DC-IN Audio 1x Line-out , 1x Mic-in
I/O Headers		5x RS232 / 1x RS485 4x USB2.0 header 1x USB2.0 straight terminal 8x GPIO 1x HDMI header 1x JLPT 1x PS2_H
Power	Standard Input	12V DC-IN 4PIN
	Peripheral Output	For fan and SATA
Mechanical & Environmental	Type	Mini-ITX
	Dimensions (LxW)	170mm x 170mm (LxW)
	Operating temperature	-40°C ~ 60°C non condensing
	Storage temperature	-40°C ~ 80°C
Supported OS		Windows10 64bit, Linux 32/64bit

Ordering Information

Part No.	Descriptions
1ST-MITX-WL10-i3-8145U	Thin Mini-ITX Embedded Motherboard with Intel® Core™ i3-8145U
1ST-MITX-WL10-i5-8265U	Thin Mini-ITX Embedded Motherboard with Intel® Core™ i5-8265U
1ST-MITX-WL10-i7-8565U	Thin Mini-ITX Embedded Motherboard with Intel® Core™ i7-8565U
1ST-MITX-WL10-4205U	Thin Mini-ITX Embedded Motherboard with Intel® Celeron® 4205U

