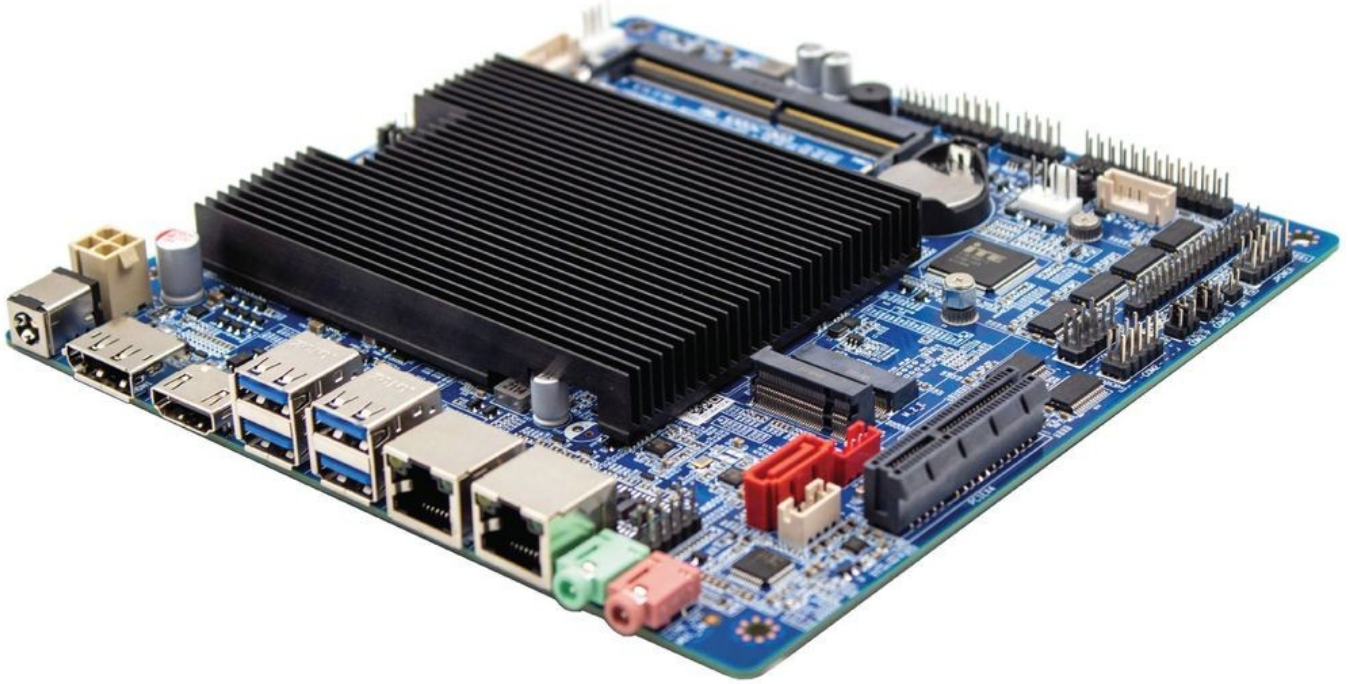


1ST-MITX-EHL10

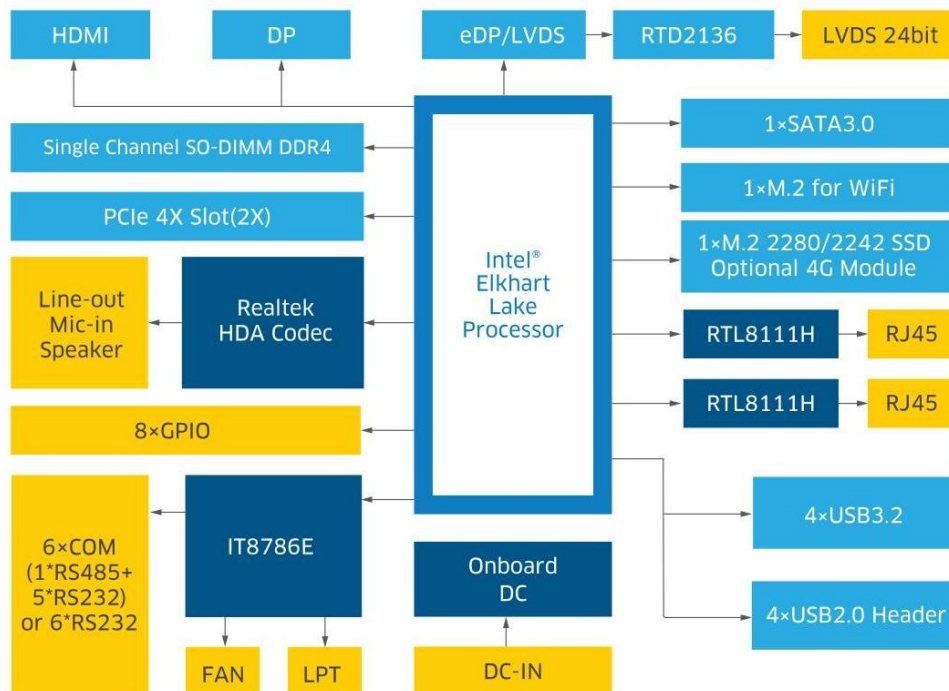
Thin Mini-ITX Embedded Motherboard
6x COM, 2x LAN, 8x USB, 2x M.2



The 1ST-MITX-EHL10 is an embedded motherboard supporting Intel® Atom® x6425RE, x6427FE, Pentium® J6426, or Celeron® J6412 processor. This board features multiple display via DP and HDMI® and eDP or LVDS. It carries 1x DDR4 SO-DIMM slot up to 32GB to add higher bandwidth and lower latencies for processes.

- 2x 10/100/1000Mbps GbE (Realtek RTL8111H)
- 4x USB3.2, 4x USB 2.0 header
- 1x LPT, 8x GPIO, 5x RS232, 1x RS485 or 6x RS232
- M.2 for WiFi/BT, PCIe x4(2x Signal), SIM optional
- M.2 for 4G/SSD, SATA3.0

1ST-MITX-EHL10 Functional Block Diagram



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	Items	Descriptions
Motherboard	CPU	Intel® Celeron® J6412 (2GHz up to 2.6GHz, quad-core processor, TDP 10W), Intel® Pentium® J6426 (2GHz up to 3GHz, quad-core processor, TDP 10W), Intel® Atom® x6427FE (1.9GHz, quad-core processor, TDP 12W) Intel® Atom® x6425RE (1.9GHz, quad-core processor, TDP 12W)
	System Memory	1x SO-DIMM DDR4 up to 32GB
	GPU	Intel® HD Graphics (based on CPU)
	BIOS	AMI UEFI
Display		1x HDMI®
		1x DP
		1x eDP or 1x LVDS optional
Ethernet	Speed	10/100/1000Mbps
	Controller	Realtek RTL8111H
	Interface	2x RJ45
	Wake on LAN	Yes
Audio Codec		Realtek HD
Hardware Monitoring		CPU/System temperature, onboard DC-IN voltage, watchdog, auto power on
Storage		1x M.2 for 2280/2242 SSD, optional 4G module 1x SATA 3.0
Expansions		1x M.2 for WiFi/BT 1x PCIe x4 (2x Signal) Optional SIM card slot (on the back side of the board) TPM2.0 optional
Front Panel I/O		2x LAN RJ45 10/100/1000Mbps 4x USB3.0 1x HDMI® 1x DP 1x DC-IN Audio 1x Line-out , 1x Mic-in
I/O Headers		5x RS232, 1x RS485 or 6x RS232 4x USB2.0 header 8x GPIO 1x eDP or LVDS header 1x LPT
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	-20°C ~ 60°C non condensing
	Storage temperature	-40°C ~ 80°C
Supported OS		Windows10/11 64bit, Linux 64bit

Ordering Information

Part No.	Descriptions
1ST-MITX-EHL10-J6412	Thin Mini-ITX Embedded Motherboard with Intel® Celeron® J6412
1ST-MITX-EHL10-J6426	Thin Mini-ITX Embedded Motherboard with Intel® Pentium® J6426
1ST-MITX-EHL10-x6427FE	Thin Mini-ITX Embedded Motherboard with Intel® Atom® x6427FE
1ST-MITX-EHL10-x6425RE	Thin Mini-ITX Embedded Motherboard with Intel® Atom® x6425RE

