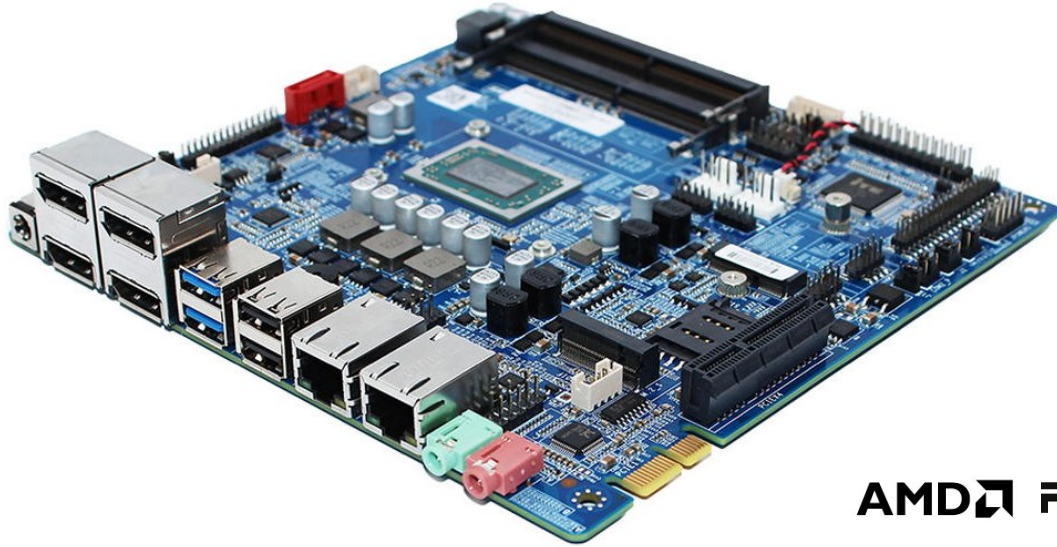


1ST-MITX-FP10

Mini-ITX Embedded Motherboard
with AMD Ryzen™ CPU, 4x DP, 4x USB, 2x LAN

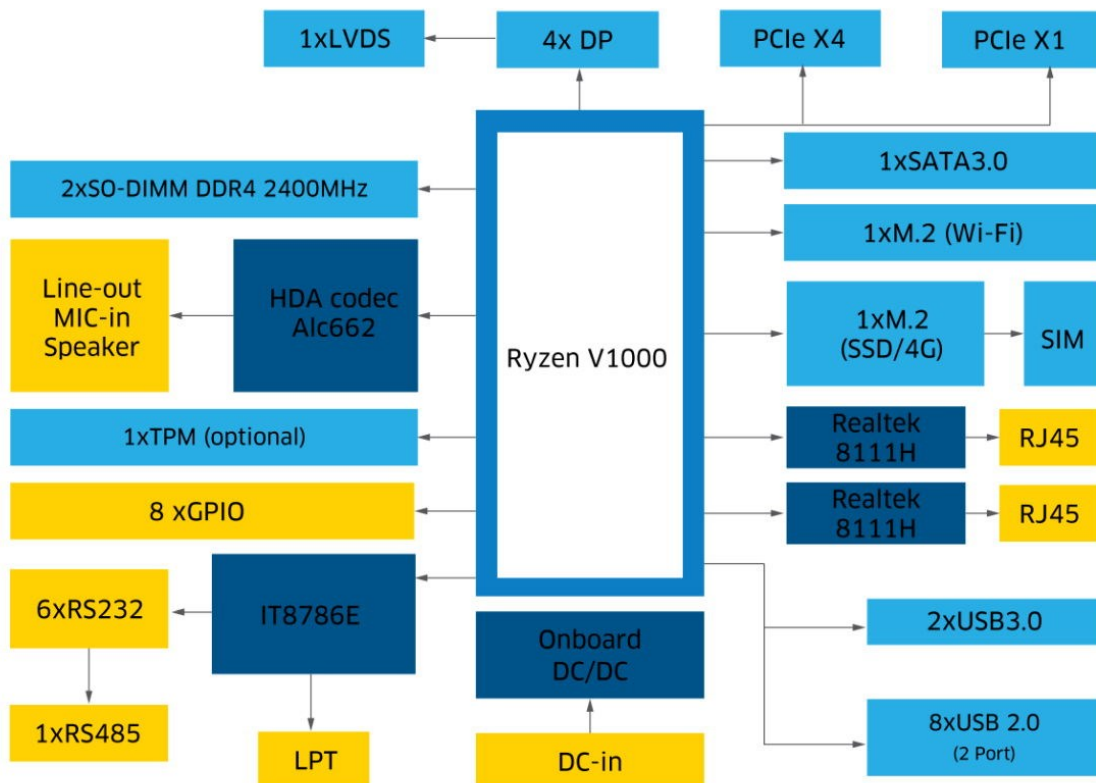


The 1ST-MITX-FP10 is an embedded motherboard supporting AMD Ryzen™ V1605B (quad-core) or V1202B (dual-core) processor with energy saving processing performance. This board features multiple 4K+ display via 4x DP1.2 (LVDS/eDP optional). It carries 2x DDR4 SO-DIMM slots up to 32GB.

- 2x GbE Ethernet ports
- 2x USB3.0, 2x USB 2.0
- SATA3.0, M.2, PCIe x4, PCIe x1
- Security: TPM 2.0 supported (optional)

Application areas: IoT, Industry 4.0, Edge-Computing, KI, Digital Signage, POS, Social Collaboration.

1ST-MITX-FP10 Functional Block Diagram



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	Items	Descriptions
Motherboard	CPU	AMD Ryzen™ Embedded V1605B (2GHz up to 3.6GHz, quad-core processor, TDP 12-25W) AMD Ryzen™ Embedded V1202B (2.3GHz up to 3.2GHz, dual-core processor, TDP 12-25W)
	System Memory	2× SO-DIMM DDR4-2400MHz up to 32GB
	GPU	AMD Radeon™ Vega 8 Graphics
	BIOS	AMI 64MB SPI
Display		4x DP 1.2, 4096x2160@60 Hz
		optional instead of 1x DP: 1x eDP or 1x LVDS
		Multiple display 3x DP + 1x DP/eDP/LVDS
Ethernet	Speed	1GbE
	Controller	RTL8111H
	Interface	2x RJ45
Hardware Monitoring		CPU/System temperature, onboard voltage, watchdog
Storage		1×M.2 for 4G/2280 SSD 1x SATA
Expansions		1x M.2 for WiFi 1x PCIe x4 and 1x PCIe x1
Rear Panel I/O		4x DP 2x LAN RJ45 1000Mbps 2x USB3.0 2x USB2.0 1x DC-IN Audio 1x Line-out , 1x Mic-in
Internal I/O		6× RS232 / 1x RS485 optional 6x USB2.0 header 8x GPIO 1x LVDS/eDP header 1x JLPT 1x PS2_H TPM 2.0 optional
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 64bit, Linux 64bit

Ordering Information

Part No.	Descriptions
1ST-MITX-FP10-Q	Mini-ITX Embedded Motherboard with AMD Ryzen™ V1605B (quad-core) CPU
1ST-MITX-FP10-D	Mini-ITX Embedded Motherboard with AMD Ryzen™ V1202B (dual-core) CPU

