

VT-MITX-TGL Single Board Computer

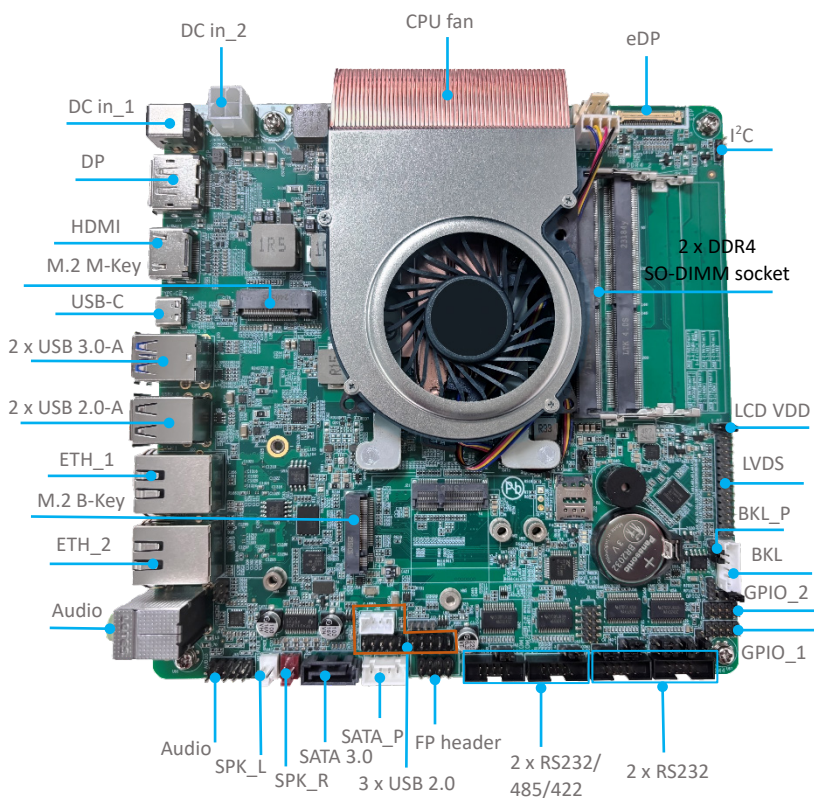


Product Brief









VT-MITX-TGL single board computer adheres to the international industry size standards with a 170mm x 170mm form factor. It is powered by the latest 11th Gen Intel® Core™ U series processor that combines best-in-class technologies to offer the best user experience. It supports high-definition audio encoding and decoding to provide outstanding clarity and fidelity. Better yet, it provides rich interfaces and customer expansion options to meet varying application scenarios, including smart retail, self-service terminals, industrial automation, intelligent medical health, and digital media.

Featuring high flexibility and high performance, the board could work under extreme environments with extended temperatures ranging from -40°C to +85°C, making it a reliable solution for industrial applications.

Exterior and Features



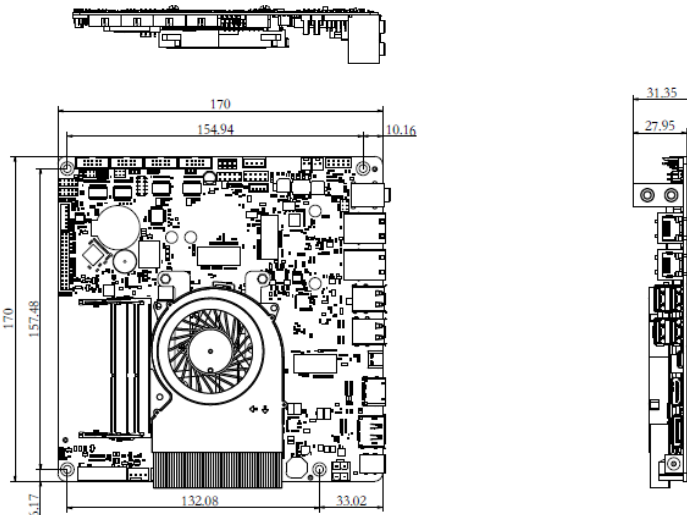
VT-MITX-TGL

-  11th Gen Intel® Core™ U Series processor
-  Windows 10/Linux operating system
-  2 x DDR4 SO-DIMM, up to 64 GB
-  Rich interfaces, flexible expansion
-  High-definition audio CODEC
-  RTC support
-  USB 3.0 & USB 2.0
-  Wide temperature range supported

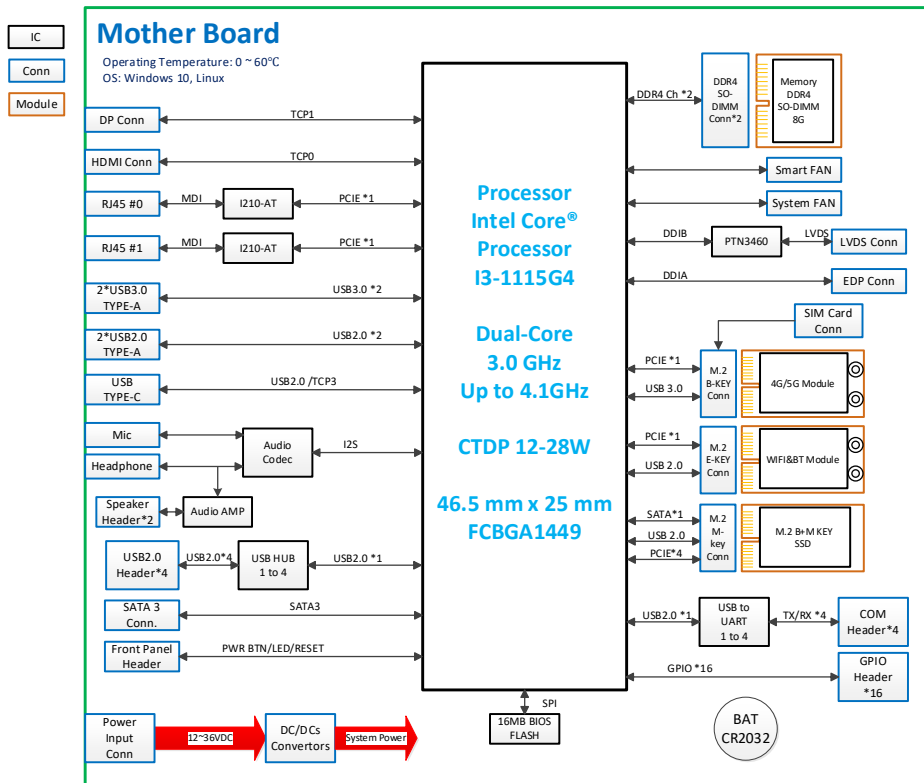
VT-MITX-TGL Single Board Computer Datasheet

VT-MITX-TGL			
System	CPU	11 th Gen Intel® Core™ U-Series i3-1115G4/ i5-1135G7/ i7-1195G7 processor	
	Memory	2 x DDR4 SO-DIMM socket, 3200MHz, up to 64GB	
	Storage	1 x SATA 3.0	SSD expansion by M.2 M-Key supported
Communication	Ethernet	2 x RJ45, 10M/100M/1000M Base-T (2 x Intel® 1Gbps PCIe controller)	
	4G/5G	Optional (expansion by M.2 B-Key)	
	Wi-Fi & Bluetooth	Optional (expansion by M.2 E-Key)	
Media	Graphics	Intel® UHD Graphics	
	Display	1 x HDMI: Resolution up to 4096 x 2160 @24Hz 1 x DP: Resolution up to 4096 x 2160 @24Hz 1 x eDP: Resolution up to 4096 x 2160 @60Hz	1 x LVDS with backlight control: Resolution up to 1920 x 1200 @60Hz
	Audio CODEC	Stereo audio codec	
	Audio interface	1 x Mic/Line-out 2 x Speaker connector	1 x Headphone jack 1 x Microphone jack
I/Os	Serial	2 x RS232	2 x RS232/RS422/RS485
	USB	2 x USB 2.0 Type-A 2 x USB 3.0 Type-A	1 x USB 3.1 Type-C 3 x Built-in USB 2.0
	GPIO	16 x GPIO	1 x GPIO power
	I ² C	1 x I ² C	
	SIM card holder	1 x Nano SIM card holder (connected to M.2 B-Key)	
Expansion	M.2	1 x M.2 B-Key (3042/3052, PCIe x1 / USB 3.0 for 4G/5G expansion) 1 x M.2 M-Key (2242/2280, PCIe x4 / SATA / USB 2.0 for SSD expansion) 1 x M.2 E-Key (2230, PCIe x1 / USB 2.0 for Wi-Fi & BT expansion)	
	BIOS	UEFI	
	RTC	Processor integrated RTC	
Firmware	Security	FTPM supported	
	System Control	FP header	1 x Front panel header (power button, reset button, LED power)
Mechanical	Dimensions	170mm x 170mm	
	Heat dissipation	1 x System fan	1 x CPU fan connector
Power	Input	12V~36V DC (1 x 4-pin power header, 1 x Power jack)	
Software	Operating system	Windows 10 IoT, Linux (support by request)	
Environmental	Temperature	Operating: 0°C~+60°C (Optional: -40°C~+85°C) Storage: -20°C~+75°C (Optional: -55°C~+85°C)	

Product Outlines



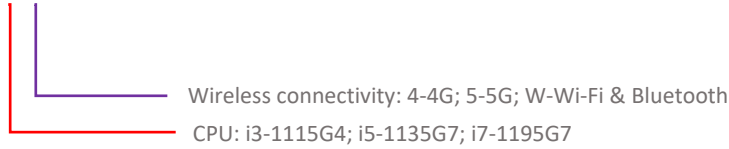
Block Diagram



Ordering Information

Nomenclature

VT-MITX-TGL-C-W



Example Ordering No.	CPU	Wireless Connectivity	Description
VT-MITX-TGL-i3-4	Intel® Core™ i3-1115G4	4G	HDMI, DP, eDP, LVDS, RS232, RS485, RS422, GPIO, I ² C
VT-MITX-TGL-i5-5	Intel® Core™ i5-1135G7	5G	
VT-MITX-TGL-i7-W	Intel® Core™ i7-1195G7	Wi-Fi & Bluetooth	

Packing list	
VT-MITX-TGL single board computer	1

Optional accessories	
19V DC power adapter and power cord	1 kit
Wi-Fi and BT antenna	2
Cellular antenna	2

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