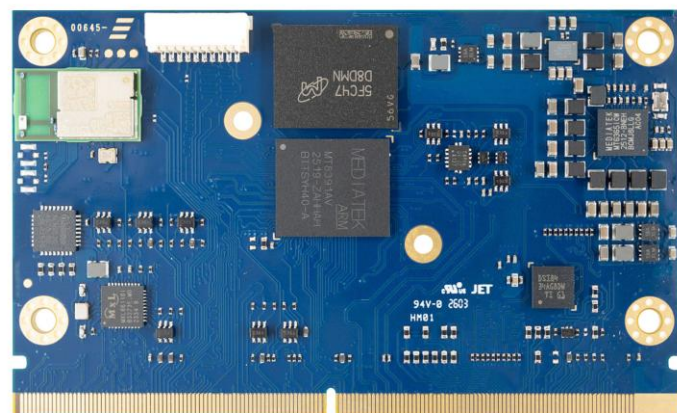


This Engicam module is a powerful IoT platform equipped with generative AI capabilities and advanced multimedia features, based on SMARC® standard. SmarCore Genio 520/720 is based on MediaTek® Genio 520/720 processor with 10 TOPS 8th Generation NPU, 3D GPU for real-time and high-performance applications.



FEATURES



	CPU	MediaTek® Genio 520/720
	CORES	<ul style="list-style-type: none"> 2x Arm Cortex-A78, up to 2.6 GHz 6x Arm Cortex-A55, up to 2.0 GHz
	MEMORY	Up to 16GB (@ 6400 MT/s) LPDDR5
	AI & GRAPHICS	MediaTek 8 th Generation 10 TOPS NPU Arm Mali-G57 MC2 up to 1.1 GHz <ul style="list-style-type: none"> OpenGL® ES 1.1, 2.0, 3.2 Vulkan® 1.0, 1.1 OpenCL up to 2.2
	VIDEO INTERFACES	<ul style="list-style-type: none"> MIPI-DSI, LVDS option 2x 4-lane MIPI-CSI eDP DP
	VIDEO PROCESSING	<ul style="list-style-type: none"> 3840 x 2160@60 fps HEVC/H.264/VP9 decoder 3840 x 2160@30 fps HEVC/H.264 encoder
	AUDIO	<ul style="list-style-type: none"> I²S interface Optional earphone audio buffer
	NETWORKING	1x Gb Ethernet interface WiFi+BT (Optional)

HIGHLIGHTS

- Standard SMARC 2.2
- Powerful MediaTek® Genio 520/720 processor with GPU and NPU
- Suitable for machine learning, vision and advanced multimedia applications

APPLICATIONS



	USB	<ul style="list-style-type: none"> 1x USB 3.0 (Optional Type C) 5x USB 2.0 (1x USB 2.0 OTG)
	MASS STORAGE	Starting from 4GB eMMC drive soldered on-board
	PERIPHERAL INTERFACES	UART, SPI, I²C, GPIOs, JTAG
	PCIe	1x PCIe Gen2 1-lane
	OPERATING SYSTEM	<ul style="list-style-type: none"> Linux Yocto Android
	POWER SUPPLY	+5V DC
	DIMENSIONS	Standard SMARC short size module
	OPERATING TEMPERATURE*	Industrial qualified

* Valid for all components except CPU. Customer shall consider junction temperature for CPU. Temperature will widely depend on application. Specific cooling solutions could be necessary for the final system.

BLOCK DIAGRAM

