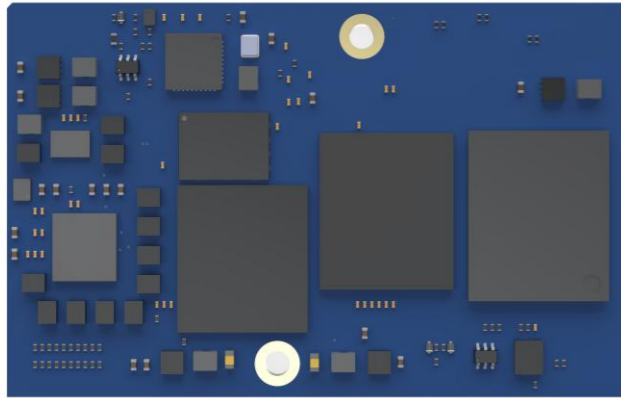


This Engicam module is a powerful IoT platform equipped with generative AI capabilities and advanced multimedia features. TIA Genio 520/720 is based on MediaTek® Genio 520/720 processor with 10 TOPS 8<sup>th</sup> Generation NPU, 3D GPU for real-time and high-performance applications.



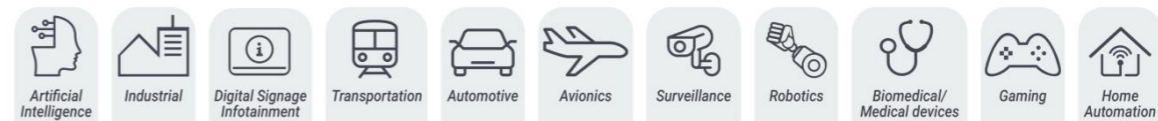
## FEATURES

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

## HIGHLIGHTS

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

## APPLICATIONS



	<b>USB</b>	<ul style="list-style-type: none"> <li>• 2x USB 3.2 (HOST+OTG) or 1x USB Type-C (USB +DP)</li> <li>• 2x USB 2.0</li> </ul>
	<b>MASS STORAGE</b>	eMMC or UFS drive soldered on-board
	<b>PERIPHERAL INTERFACES</b>	UART, SPI, I <sup>2</sup> C, GPIOs, JTAG, SDIO
	<b>PCIe</b>	1x PCIe Gen2 1-lane
	<b>OPERATING SYSTEM</b>	<ul style="list-style-type: none"> <li>• Linux Yocto</li> <li>• Android</li> </ul>
	<b>POWER SUPPLY</b>	+5V DC
	<b>DIMENSIONS</b>	35 x 55 mm
	<b>OPERATING TEMPERATURE*</b>	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

