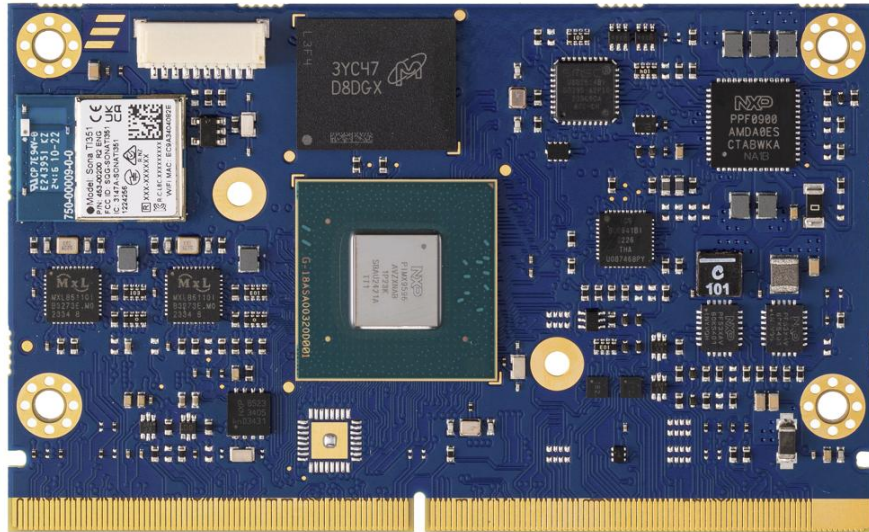


The new Engicam module for a wide range of edge applications from Automotive connectivity to Industry 4.0 and IoT platforms, is based on SMARC® standard. SmarCore MX95 is based on NXP® i.MX95 processor with 2.0 TOPS NPU, 3D GPU for real-time, safety/low-power and high-performance applications.



FEATURES



	CPU	NXP® i.MX95
	CORES	<ul style="list-style-type: none"> • 6x Arm Cortex-A55, up to 2.0 GHz • 1x Arm Cortex-M7, up to 800 MHz • 1x Arm Cortex-M33, up to 333 MHz
	MEMORY	Up to 16GB (@ 6400 MT/s) LPDDR5
	AI & GRAPHICS	NXP eIQ® Neutron 2.0 TOPS NPU Arm Mali-G310 3D GPU supporting 50 GFLOPs FP32. <ul style="list-style-type: none"> • OpenGL® ES 3.2 • Vulkan® 1.3 • OpenCL 3.0
	VIDEO INTERFACES	<ul style="list-style-type: none"> • LVDS • MIPI-DSI • MIPI-CSI
	VIDEO PROCESSING	<ul style="list-style-type: none"> • 4Kp30 H.265/H.264 simultaneous encode & decode • 1x JPEG Encoder • 1x JPEG Decoder
	AUDIO	<ul style="list-style-type: none"> • I²S interface • SAI Interface
	NETWORKING	2x 1Gb Ethernet interfaces 1x 10 Gb Ethernet interface (SGMII)

HIGHLIGHTS

- Standard SMARC 2.1.1
- Powerful NXP® i.MX95 processor with GPU, NPU and VPU
- Suitable for machine learning, vision and advanced multimedia applications

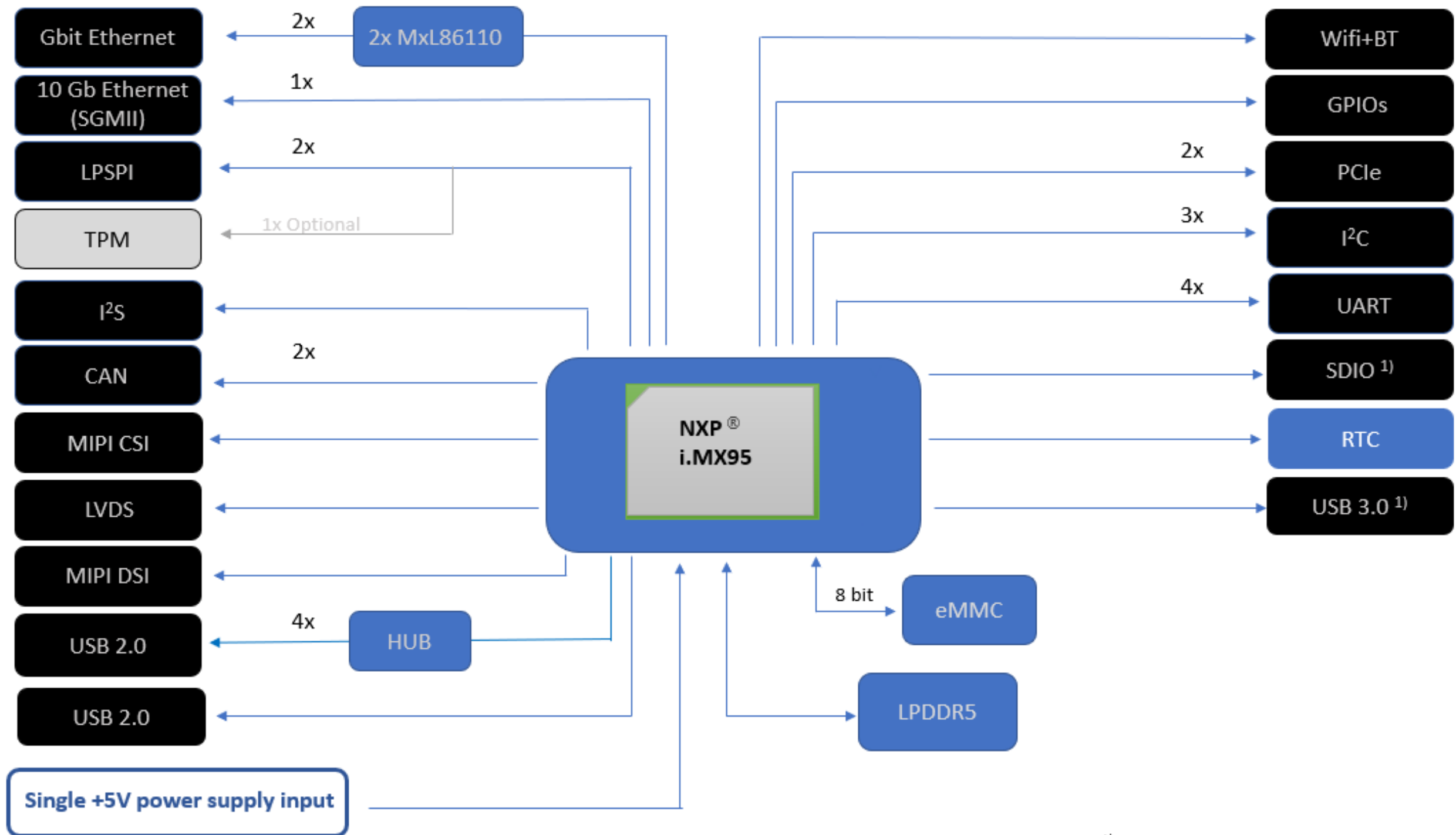
APPLICATIONS



	USB	<ul style="list-style-type: none"> • 1x USB 3.0 (Optional Type C) • 5x USB 2.0 (HUB option)
	MASS STORAGE	Starting from 4GB eMMC drive soldered on-board
	PERIPHERAL INTERFACES	UART, LPSPI, I²C, CAN Bus, GPIOs
	PCIe	2x PCIe 3.0 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*	Extended 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



¹⁾ For further information see related chapter