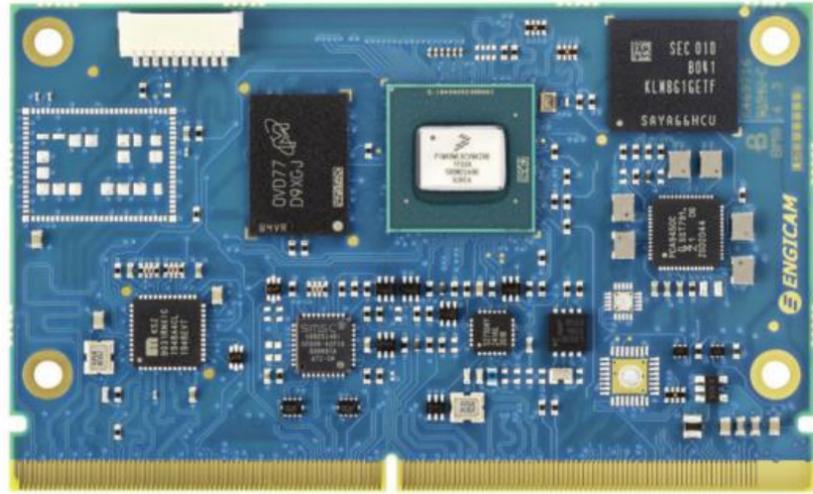


The new Engicam module for machine learning, IoT connectivity, multimedia and HMI applications is based on SMARC standard. SmarCore MX8M Plus is based on NXP® i.MX 8M Plus equipped with Cortex® -A53 cores plus Cortex®-M7 with NPU (Neural Processing Unit) up to 2.3 TOPS.



HIGHLIGHTS

- Standard SMARC 2.1
- Powerful quad Arm® Cortex -A53 processor with NPU
- Suitable for machine learning, vision and advanced multimedia applications

APPLICATIONS



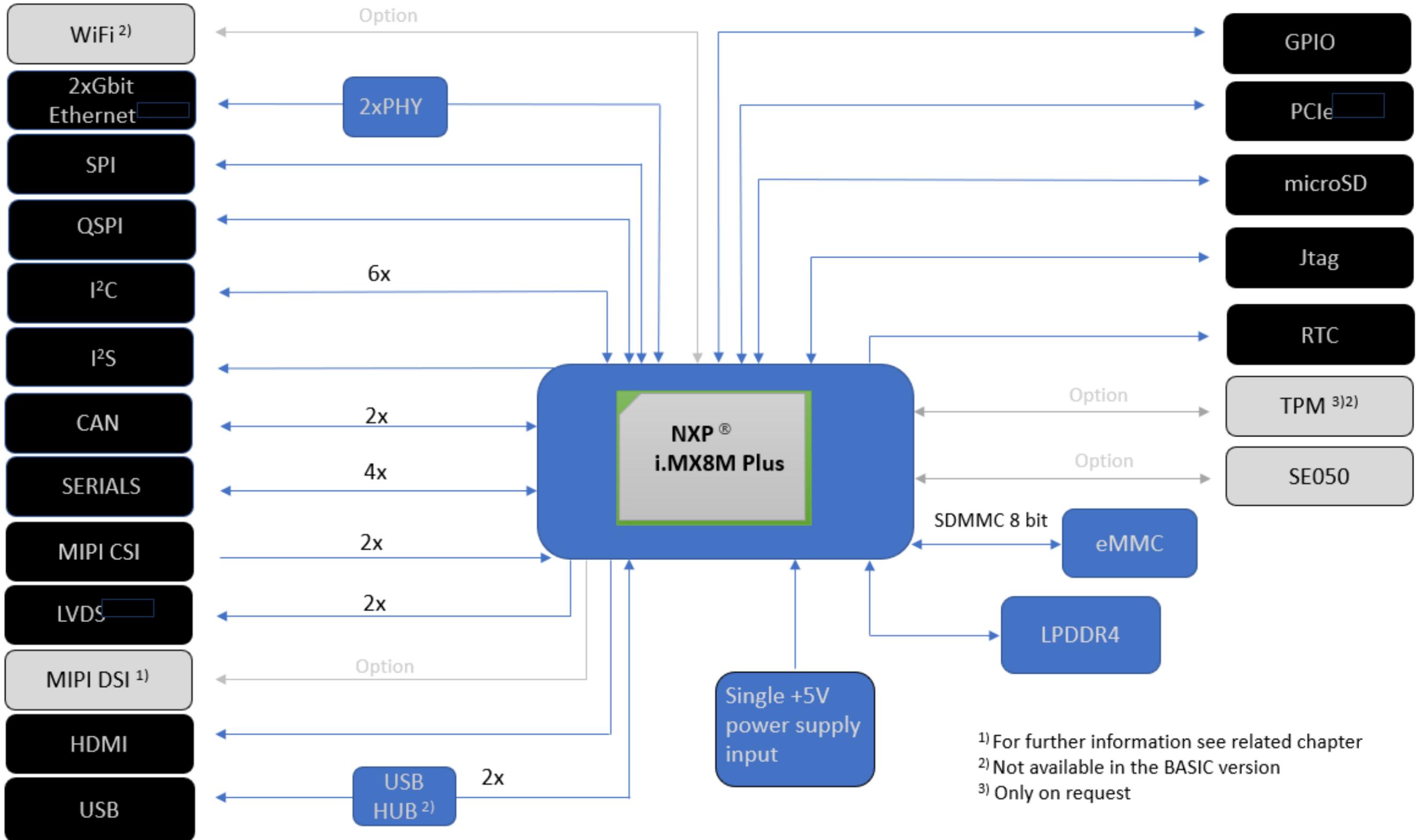
FEATURES



	CPU	NXP® i.MX 8M Plus		USB	<ul style="list-style-type: none"> • 1x USB HOST 3.0 • 1x USB OTG 3.0
	CORES	Quad Arm Cortex-A53 @1.8GHz and Cortex-M7 @800MHz		MASS STORAGE	Starting from 8GB eMMC drive soldered on-board
	MEMORY	Up to 4GB LPDDR4		PERIPHERAL INTERFACES	UART, I ² C, JTAG, CAN, SDIO, SPI, GPIOs
	GRAPHICS	GC7000UL (2 shaders), OpenGL ES 2.0/3.0/3.1, Vulkan, OpenCL 1.2; GC520 (2D)		PCIe	1x PCIe 3.0
	VIDEO INTERFACES	<ul style="list-style-type: none"> • LVDS 18/24bit up to Full HD • MIPI-DSI – 4 lanes option • HDMI up to Full HD • 2x MIPI-CSI – 4 lanes 		OPERATING SYSTEM	<ul style="list-style-type: none"> • Linux • Yocto • Android
	VIDEO PROCESSING	<ul style="list-style-type: none"> • 1080p60 HEVC (h.265, VP9, VP8) dec • 1080p60 HEVC (h.265) enc 		POWER SUPPLY	+5V DC
	AUDIO	I ² S interface		DIMENSIONS	Standard SMARC short size module
	NETWORKING	2x GB Ethernet interface		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



¹⁾ For further information see related chapter

²⁾ Not available in the BASIC version

³⁾ Only on request