









SmarCore MX8MPlus

The new Engicam module for machine learning, IoT connectivity, multimedia and HMI applications is based on SMARC standard. SmarCoreMX8M Plus is based on NXP® i.MX 8M Plus is equipped with Cortex® -A53 cores plus Cortex-M7



FEATURES








	CPU	NXP® i.MX 8M Plus
	CORES	Quad Arm Cortex-A35 @1.8GHz processor with a (NPU) up to 2.3 TOPS and Cortex-M7 CPU @800MHz
	MEMORY	Up to 4GB LPDDR4
	GRAPHICS	GC7000UL (2 shaders), OpenGL ES 2.0/3.0/3.1, Vulkan, OpenCL 1.2; GC520 (2D)
	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
	VIDEO PROCESSING	<ul style="list-style-type: none"> • 1080p60 HEVC (h.265, VP9, VP8) dec • 1080p60 HEVC (h.265) enc
	AUDIO	I ² S interface
	NETWORKING	2x GB Ethernet interface

HIGHLIGHTS

- Standard SMARC 2.1
- Powerful quad Arm® Cortex -A53 processor with a Neural Processing Unit (NPU)
- Suitable for machine learning, vision and advanced multimedia applications

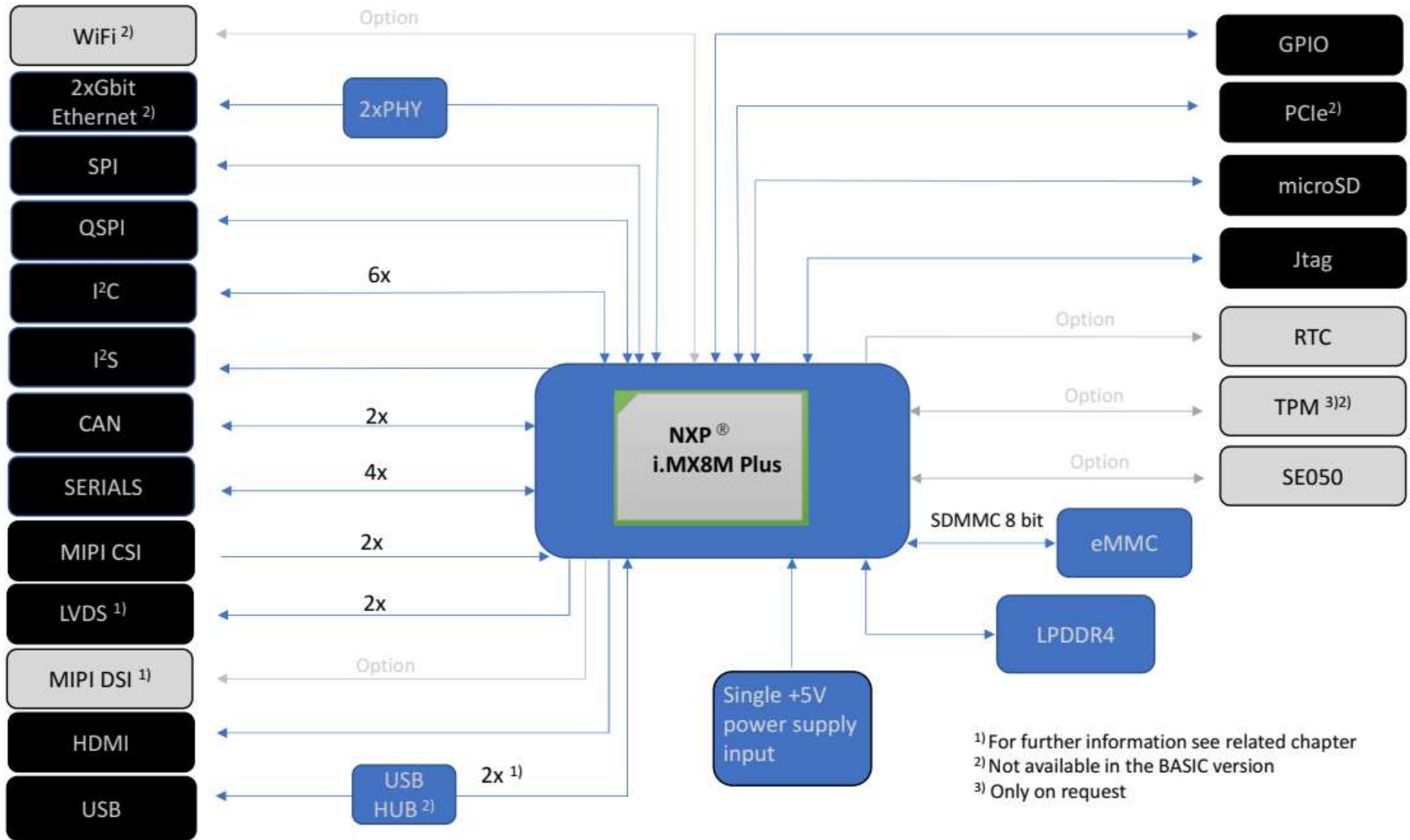
APPLICATIONS



	USB	<ul style="list-style-type: none"> • 1x USB HOST 3.0 • 1x USB OTG 3.0
	MASS STORAGE	Starting from 8GB eMMC drive soldered on-board
	PERIPHERAL INTERFACES	UART, I ² C, JTAG, CAN, SDIO, SPI, GPIOs
	PCIe	1x PCIe 3.0
	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



¹⁾ For further information see related chapter
²⁾ Not available in the BASIC version
³⁾ Only on request