

I.COREMX8M PLUS

Engicam introduces the new module i.CoreMX8M Plus equipped with the Cortex-A53 cores plus Cortex-M7, for machine learning, IOT connectivity, multimedia and HMI applications. The new module will be based on EDIMM 2.0 versatile.

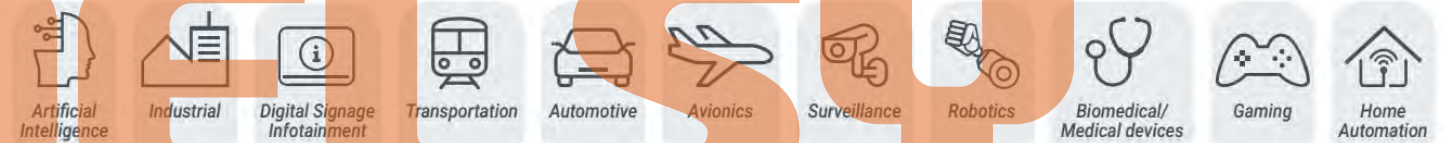


HIGHLIGHTS









- Standard Edimm 2.0
- Powerful quad Arm® Cortex®-A53 processor with a Neural Processing Unit (NPU)
- Suitable for high performance HMI and video applications











APPLICATIONS



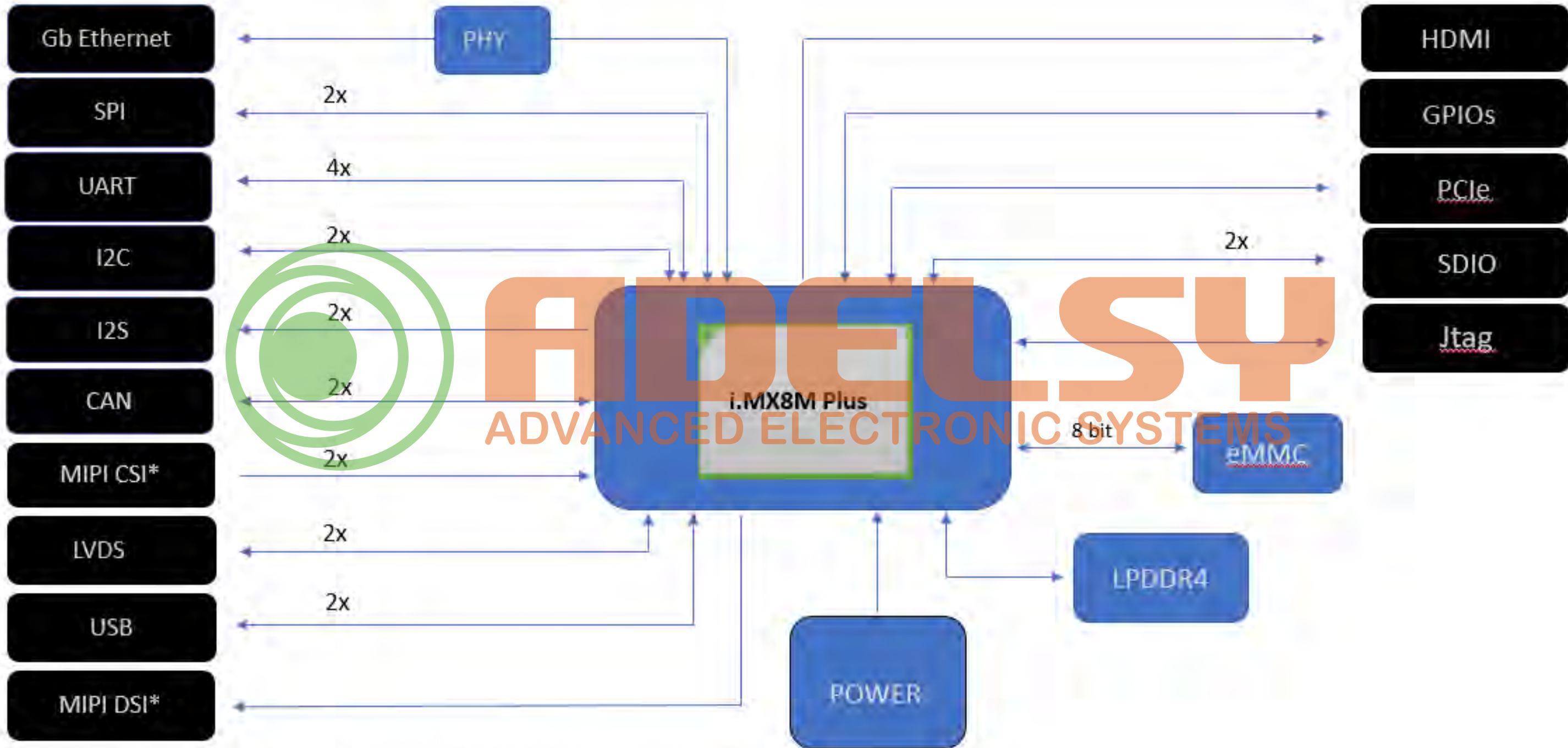
FEATURES

	CPU	NXP® i.MX8M Plus
	CORES	Quad Arm® Cortex®-A53 @ up to 1.8GHz processor with a (NPU) up to 2.3 TOPS and Cortex®-M7 CPU @ 800 MHz.
	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	<ul style="list-style-type: none"> • I²S interface
	NETWORKING	Gb Ethernet interfaces

	PCIe	1 x PCIe 3.0
	USB	<ul style="list-style-type: none"> • USB OTG 3.0 • USB HOST 3.0
	MASS STORAGE	<ul style="list-style-type: none"> • Starting from 4GB eMMC drive soldered on-board
	PERIPHERAL INTERFACES	UART, I ² C, SPI, JTAG, CAN,SDIO, GPIOs
	POWER SUPPLY	+5V DC
	OPERATING SYSTEM	<ul style="list-style-type: none"> • Linux • Yocto • Android
	OPERATING TEMPERATURE*	Industrial qualified
	DIMENSIONS	32.1 x 67,6 mm

* 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



* The MIPI CSI2 have signals shared with DSI, please see the related chapters on HW Manual for details