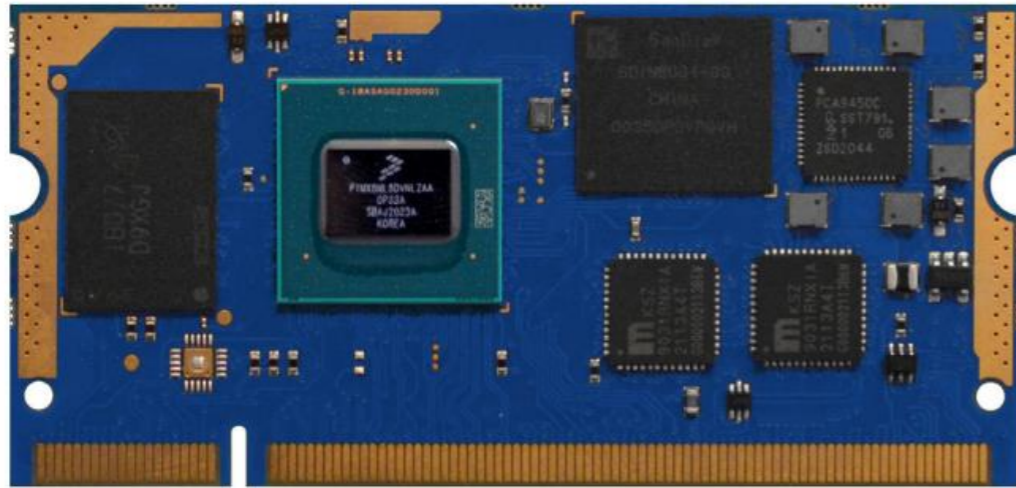


i.Core MX8M Plus-2 GbE

The new version of i.Core MX8M Plus processor with double Gb Ethernet interface. As the first i.MX processor with a machine learning accelerator, the NXP® i.MX 8M Plus processor provides substantially high performance for ML inference at the edge.









Equipped with the quad-core Arm® Cortex®-A53 plus Cortex-M7, i.Core MX8M Plus GbE runs at up to 1.8 GHz with an integrated neural processing unit (NPU) that delivers up to 2.3 TOPS.

The module is available also with a single Gb Ethernet interface + reduced gigabit media-independent interface (RGMII).



FEATURES

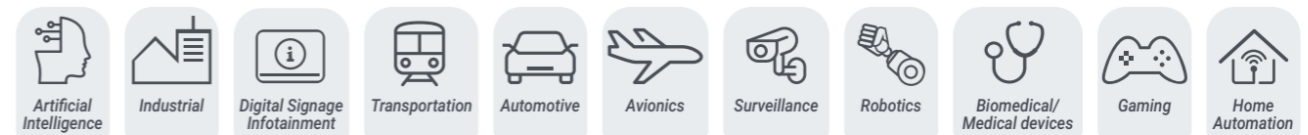










 CPU	NXP i.MX8M Plus
 CORES	Quad Arm Cortex-A53 @ up to 1.8GHz processor with a (NPU) up to 2.3 TOPS and Cortex-M7 CPU @ 800 MHz.
 MEMORY	Up to 4GB LPDDR4
 GRAPHICS	GC7000UL (2 shaders), OpenGL ES 2.0/3.0/3.1, Vulkan, OpenCL 1.2; GC520 (2D)
 VIDEO INTERFACES	<ul style="list-style-type: none"> • LVDS 18/24bit up to Full HD • HDMI up to Full HD
 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	<ul style="list-style-type: none"> • Double Gb Ethernet interfaces • Single Gb Ethernet interface + Single RGMII (option)

HIGHLIGHTS

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

APPLICATIONS



 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

