









# i.Core MX8M Plus-Fast Ethernet

The new i.Core MX8M Plus Fast Ethernet is based on i.MX 8M Plus processor equipped with the quad-core Arm® Cortex®-A53 plus Cortex-M7. The i.MX 8MP series features offer powerful video processing with an H.265 video encoder for highly efficient compression in live video streaming applications. It runs at up to 1.8 GHz with an integrated neural processing unit (NPU) that delivers up to 2.3 TOPS. As the first i.MX processor with a machine learning accelerator, the i.MX 8M Plus processor provides substantially high performance for ML inference at the edge.



## FEATURES



	<b>CPU</b>	NXP® i.MX8M Plus
	<b>CORES</b>	Quad Arm Cortex-A53 @ up to 1.8GHz processor with a (NPU) up to 2.3 TOPS and Cortex-M7 CPU @ 800 MHz.
	<b>MEMORY</b>	Up to 4GB LPDDR4
	<b>GRAPHICS</b>	GC7000UL (2 shaders), OpenGL ES 2.0/3.0/3.1, Vulkan, OpenCL 1.2; GC520 (2D)
	<b>VIDEO INTERFACES</b>	<ul style="list-style-type: none"> <li>• LVDS 18/24bit up to Full HD</li> <li>• HDMI up to Full HD</li> </ul>
	<b>VIDEO PROCESSING</b>	<ul style="list-style-type: none"> <li>• 1080p60 HEVC (h.265, VP9, VP8) dec</li> <li>• 1080p60 HEVC (h.265) enc</li> </ul>
	<b>AUDIO</b>	<ul style="list-style-type: none"> <li>• I<sup>2</sup>S interface</li> </ul>
	<b>NETWORKING</b>	LAN 107100 Ethernet interfaces









\* 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.

## HIGHLIGHTS

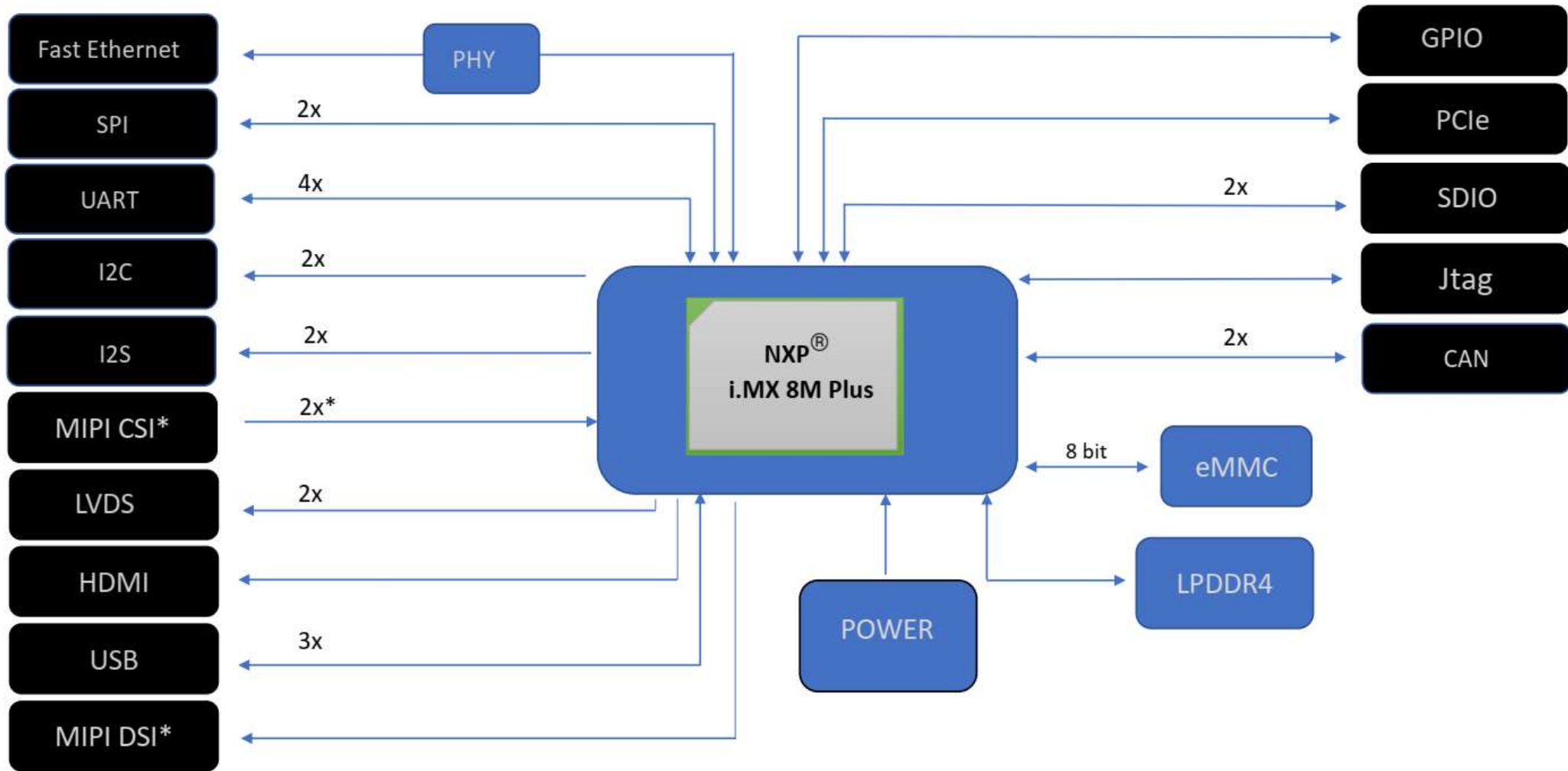
- Standard Edimm 2.0
- Powerful quad Arm Cortex-A53 processor with a Neural Processing Unit (NPU)
- Suitable for high performance HMI, video and networking applications

## APPLICATIONS



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

**BLOCK DIAGRAM**



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