

# i.Core MX8M Plus – 2GBE



The new version of i.Core MX8M Plus processor with **double Gb Ethernet** interface. NXP<sup>®</sup> i.MX 8M Plus processor provides substantially high performance for **ML inference** at the edge. Equipped with the quad-core Arm<sup>®</sup> Cortex<sup>®</sup>-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).



## 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**



### **FEATURES** yocto · CPU >PCIE 1 x PCIe 3.0 CPU NXP i.MX8M Plus • USB OTG 3.0 • Quad Arm Cortex-A53 @ up to 1.8GHz processor with a (NPU) USB CORES USB HOST 3.0 up to 2.3 TOPS and Cortex-M7 CPU @ 800 MHz. MASS Starting from 4GB eMMC drive soldered MEMORY Up to 4GB LPDDR4 STORAGE on-board GC7000UL (2 shaders), OpenGL ES 2.0/3.0/3.1, PERIPHERAL GRAPHICS UART, I<sup>2</sup>C, SPI, JTAG, CAN, SDIO, Vulkan, OpenCL 1.2; GC520 (2D) **INTERFACES** GPIOs POWER VIDEO \_\_\_\_ k LVDS 18/24bit up to Full HD +5V DC SUPPLY INTERFACES HDMI up to Full HD • Linux **OPERATING** ¢° VIDEO • 1080p60 HEVC (h.265, VP9, VP8) dec Yocto **SYSTEM** 2 PROCESSING • 1080p60 HEVC (h.265) enc Android **OPERATING** :: **AUDIO** I<sup>2</sup>S interface Industrial qualified **TEMPERATURE\*** Double Gb Ethernet interfaces $\Box$ NETWORKING DIMENSIONS • Single Gb Ethernet interface + Single RGMII (option) Δ 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.





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## **BLOCK DIAGRAM**



