









i.Core MX8M Plus

Engicam introduces the new module i.Core MX8M 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 .



FEATURES











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|--|-------------------------|---|
|  | CPU | NXP® i.MX 8M 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 |

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

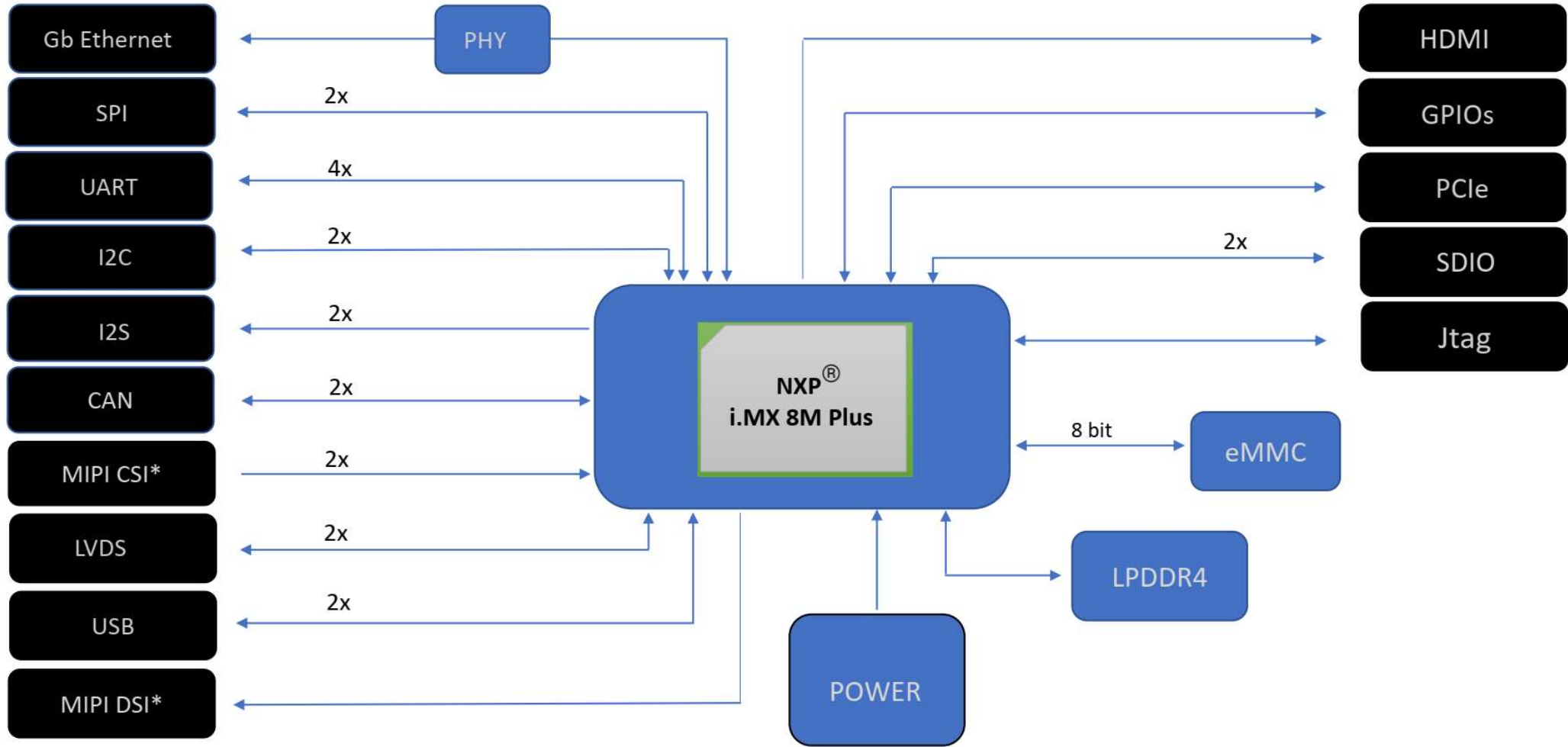
APPLICATIONS



| | | |
|---|-------------------------------|--|
|  | 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