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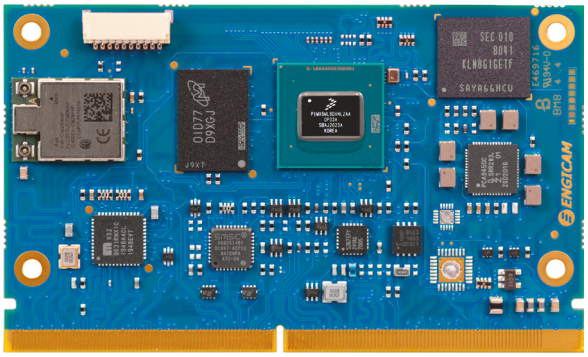
SMARC

# SmarCore MX8M Plus

The new Engicam module for machine learning, IOT connectivity, multimedia and HMI applications is based on SMARC standard.
SmarCoreMX8M Plus is based on NXP™ i.MX 8M Plus is equipped with Cortex-A53 cores plus Cortex-M7.



## HIGHLIGHTS

- Standard SMARC
- Powerful quad Arm® Cortex®-A53 processor with a Neural Processing Unit (NPU)
- Suitable for machine learning and vision and advanced multimedia applications

yocto PROJECT

Specifications are subject to change without notice.

## APPLICATIONS

Artificial Intelligence · Industrial · Digital Signage Infotainment · Transportation · Automotive · Avionics · Surveillance · Robotics · Biomedical/ Medical devices · Gaming · Home Automation

## FEATURES

| | | | |
|---|---|---|---|
| CPU | NXP® i.MX 8M Plus | Mass Storage | Up to 32GB eMMC |
| CORES | Powerful quad Arm® Cortex®-A53 @ up to 1.6GHz processor with a Neural Processing Unit (NPU) operating at up to 2.3 TOPS + Cortex®-M7 CPU @ 800 MHz | Networking | 2 x Gb Ethernet interface |
| | | PCIe | 1 x PCIe 3.0 |
| MEMORY | RAM up to 4GB LPDDR4 | USB | 1 x USB OTG 3.0<br>1 x USB HOST 3.0 |
| Graphics | GC7000UL (2 shaders), OpenGL ES 2.0/3.0/3.1, Vulkan, OpenCL 1.2; GC520 (2D) Asynchronous Sample Rate Converter | Audio | I2S Interface |
| | | Pheripheral Interfaces | UART, I2C, PCIe 3.0, SPI, JTAG, CAN, SDIO, SPI, GPIO |
| Video Interfaces | LVDS, 18/24bit up to Full HD MIPI-DSI – 4 lanes option HDMI up to Full HD 2x MIPI-CSI – 4 lanes | PowerSupply | + 5V DC |
| | | Operating System | Linux - Android |
| Video Processing Unit capabilities | 1080p60 HEVC (h.265, h264, VP9, VP8) dec; 1080p60 HEVC (h.265, h.264) enc | Operating Temperature* | Industrial (-40°C to 105°C Tj) |
| | | Dimensions | Standard SMARCTM 2.0 short size module |

* 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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