

Engicam introduces i.Core MX93 based on the newest NXP®'s i.MX 93 processor, equipped with Arm® Cortex®-A55 @ up to 1.7 GHz processor with dedicated NPU. i.Core MX93 is an energy-efficient SOM suitable for machine learning, IoT, industrial and automotive device. The new module is based on EDIMM 2.0 versatile pinout and includes industrial features and industrial temperature grade as well as a wide set of peripherals and connectivity options such as 2x USB 2.0, and several display outputs.



FEATURES



CPU	NXP i.MX 93
CORES	2x Arm Cortex-A55 @ up to 1.7 GHz processor and 1x Arm Cortex-M33 @250Mhz.
MEMORY	Up to 2GB LPDDR4 @3700MTs
GRAPHICS	2D GPU: blending/composition, resize, color space graphics conversion
VIDEO INTERFACES	<ul style="list-style-type: none"> • Single channel LVDS up to 1366x768 or 1280x800 • MIPI-DSI – 4 lanes up to 1920x1200 • MIPI-CSI
NETWORKING	2x Gb Ethernet interfaces (1x RGMII option available)

HIGHLIGHTS

- Standard Edimm 2.0
- Powerful dual Arm Cortex - A55 processor with Neural Processing Unit (NPU)
- Suitable for high performance ML applications

APPLICATIONS



USB	<ul style="list-style-type: none"> • USB OTG 2.0 • USB HOST 2.0
MASS STORAGE	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	Linux, Android
OPERATING TEMPERATURE*	Industrial qualified
DIMENSIONS	32 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

