# Embedded Module with NXP i.MX93

Open Standard Module™ - iesy i.MX93 OSM-MF

Technical Concept

▶ Processor: i.MX9352 Dual-Core A55 with NPU
+ Cortex-M33 MCU

▶ CPU Clock-Rate: 1.7 GHz (A55) / 250 MHz (M33)

▶ RAM: 1 GByte LPDDR4 (Inline ECC)

▶ Flash-Memory: 8 GByte e-MMC 5.1

▶ Dimension: 30 mm x 45 mm

▶ Footprint: OSM Size-M
Land Grid Array (LGA) with 476 contacts

▶ Supply: Single Supply 5 VDC

▶ Temperature range:
> Operating: -25 °C to +85 °C
> Storage: -40 °C to +85 °C

▶ Features & Interfaces

> 2x Ethernet 1 Gbit (with TSN)
> 2x USB 2.0 Client/Host/OTG
> 1x MIPI CSI (2 Lanes, incl. I2C)
> 1x MIPI-DSI (4 lanes) – Up to 1080p/60 FPS
> 1x SD-Card + 1x SDIO (4 bit)
> 15x GPIO
> 2x CAN
> 1x I2S
> 2x I2C
> 2x UART + 1x Debug-UART
> 2x ADC-Input
> 4x PWM, 1x JTAG, 1x SPI (2x chip select)
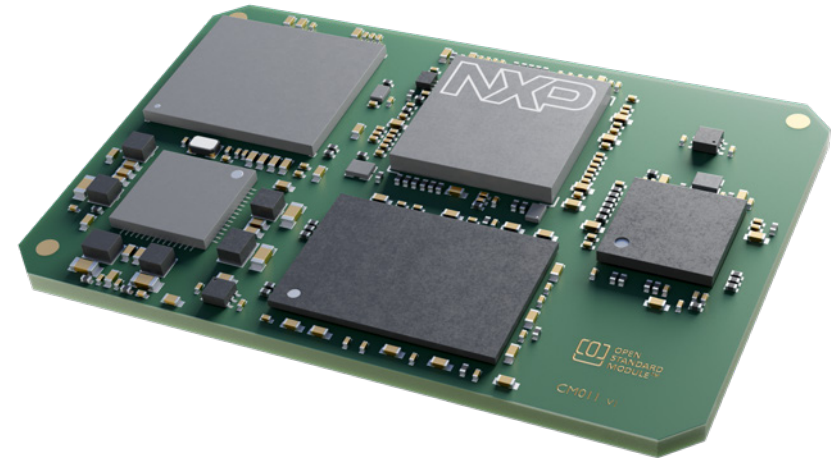
About OSM™

The Open Standard Modules™ specification was adopted by the SGeT e.V. in 2019. The new standard was developed to meet future requirements in terms of **flexibility**, **scalability**, but also **costs**. OSM™ solder-down modules can be **individually adapted** to the respective customer requirements. For this purpose, the individual modules can be made **available to the SMT process** by means of tray & reel packaging and processed automatically. The OSM™ series includes in total four different form factors.

iesy.com/osm