

The MAS OSM i.MX93 is based on the new OSM 1.1 standard (Size-S) "Small" for completely machine processible low-cost embedded computer modules during soldering, assembly and testing.

APPLICATION AREAS



INDUSTRIAL



AUTOMOTIVE



MEDICAL



ARTIFICIAL INTELLIGENCE

NEITH i.MX93 OSM Small Module

The MAS OSM i.MX93 is based on the new OSM 1.1 standard (Size-S) "Small" for completely machine processible low-cost embedded computer modules during soldering, assembly and testing.

MAS OSM i.MX93 provides fast and low power LPDDR4 memory technology with inline ECC support, combined with up to 256GB eMMC Flash memory. Hardware Watch dog, Chip ID and TPM Module are integrated in the board. Various interfaces for embedded applications such as Dual Gigabit Ethernet(RGMII), USB 2.0, 2x CAN-FD, MIPI-DSI and MIPI CSI-2 (2-lane) for connecting a camera are available. The typical design power ranges from 2 W to 4 W. Logevity is 15 years.

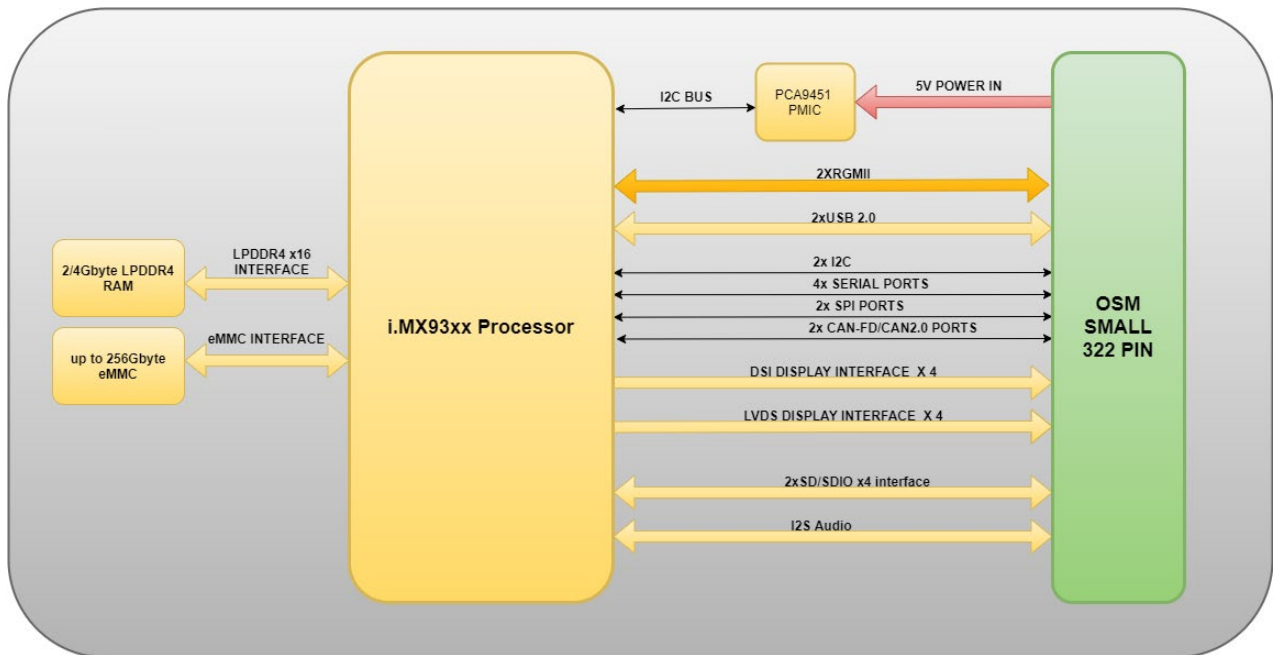
The module is compliant with the new OSM 1.1 standard. For evaluation and design-in of the new MAS OSM i.MX93 module, MAS provides a development platform and a starter kit. A Yocto based Linux Board Support Package is available.

MAIN FEATURES

Arm® Core	MAS OSM SMALL i.MX93
Arm® Core	1-2 X Cortex-A55, 1 X Cortex-M33@250Mhz
NPU	ARM Ethos-U65 micro NPU with 256 MACs/Cycle
DRAM	Up to 2GB 3700MT/s LPDDR4 SDRAM, soldered, inline ECC support
eMMC	8GB, ver 5.0 (HS400) expandable up to 256GB
TPM	Trusted Platform Module compliant 2.0
CSI	1x MIPI CSIx2
VIDEO	1x LVDS up to 720p 60fps 1x DSI up to 1080p 60fps
Ethernet	2 x Gigabit RGMII

Arm® Core	AURORA i.MX8M PLUS SOM
GPIO	20x GPIO, configurable as input or output, interrupt capable 2x PWM 2x ADC inputs (12-bit)
Ethernet	2 x Gigabit RGMII
Serial interfaces	4x UART
Other interfaces	2x I2C up to 400 Kbit/s 2x SPI (with two chip selects) 2x CAN-FD/CAN 2.0B
USB	2 x USB 2.0
Operating System	Linux 5.15.xx, Kirksotone
Dimentions	30x30mm OSM SMALL Format
Temperature	Commercial: 0° ... 70°C (operating) -20° - 85°C (storage) Extended: -25° ... 85°C (operating) -40° -85°C (storage) Industrial: -40° ... 85°C (operating) -40° -85°C (storage)

i.MX93 SOM BLOCK DIAGRAM



ORDERING

ORDERING CODE	DESCRIPTION	Comments
NEID_000_0_1	Full feature board	Standard product