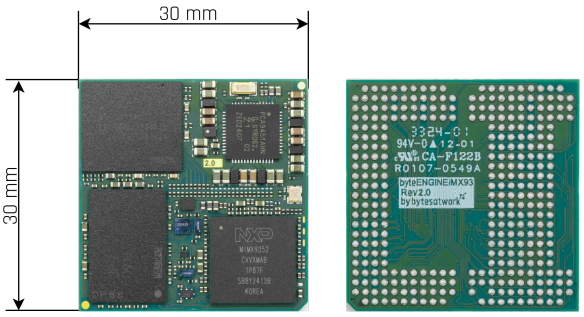
Factsheet

byteENGINE IMX9x

industrial computing module

bytesatwork

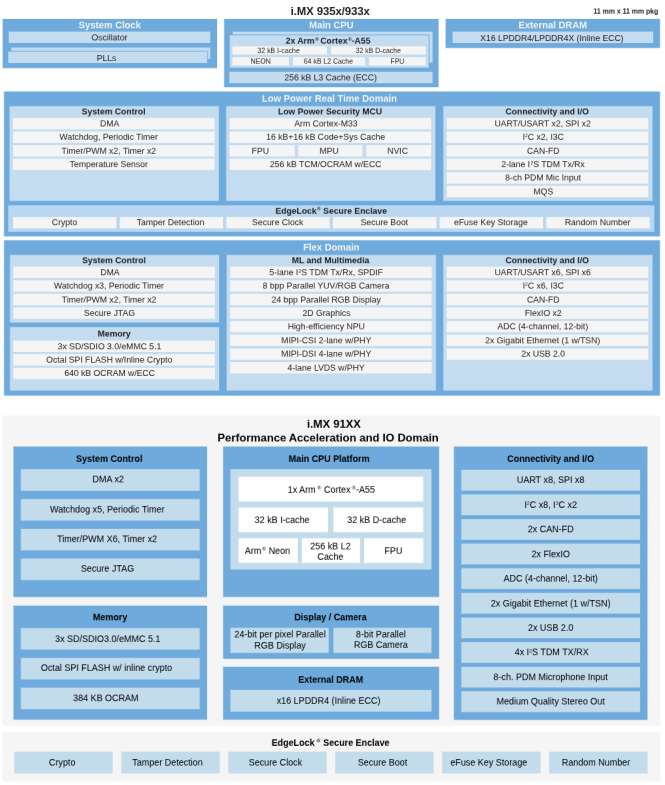
DIMENSIONS



USE CASES

- Audio and Speech Recognition
- Low-cost Gateway
- Surround Sound and Sound Bars
- Smart Thermostats

BLOCK DIAGRAM



YOUR CUSTOMIZED MODULE

Manufacturing customized module variants starting from small quantities is our strength. Contact us for a non-binding inquiry.

FEATURES

The future of embedded systems based on the OSM-S standard. The SoM focuses on vision systems, multimedia and industrial automation. Together with the integrated NPU and the multicore-architecture, the module combines powerful processing, energy efficiency and advanced security for future-ready solutions.

- Single or Dual ARM Cortex®-A55 and Cortex®-M33 MCU.
- Arm® Ethos™ micro NPU.
- High-speed LPDDR4 memory interface.
- Small format, high performance.
- Arm® TrustZone® and EdgeLock® secure enclave.

MODULE SPECIFICATION

CPU	Single or Dual core ARM Cortex®-A55 of NXP i.MX 9x CPU Family
Co-CPU	Cortex® M33 MCU 250 MHz
Frequency	Up to 1.7 GHz
Memory	512 MB to 2048 MB LPDDR4
Flash eMMC	up to 128 GB
Temperature	Industrial: -40 to +85° C consumer: 0 to +70° C
Power	5.0 V, 2 W
Dimensions	30 x 30 x 3 mm
Connector	OSM-S Interface
Software Support	Yocto Linux, Debian, Zephyr RTOS and more
Interfaces	USB, SD/SDIO, ADC, SPI, I2C, UART, FlexIO, CAN-FD, I3C, JTAG, GPIO, PWM, Ethernet
NPU	Arm® Ethos™ micro
Display	1080p60 MIPI-DSI (4-lane); 720p60 LVDS (4-lane), 24bit parallel RGB
Safety Features	Arm® TrustZone®, EdgeLock® secure enclave
Longevity	Yes

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Further Product Information
i.MX9x Modules

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