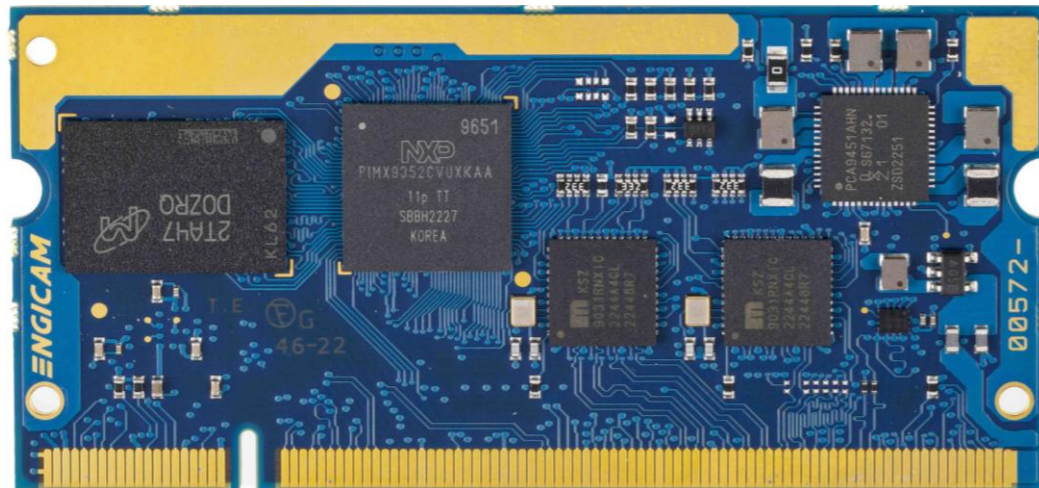i.Core MX91 is an energy-efficient SOM suitable for secure gateway, IoT, industrial devices based on the newest NXP®'s i.MX 91 processor.

The new module is equipped with Arm® Cortex®-A55 @ up to 1.4 GHz processor includes industrial features and temperature grade, a wide set of peripherals, connectivity and security options such as 2x USB 2.0.
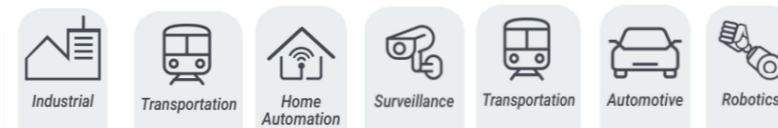

HIGHLIGHTS

- Standard Edimm 2.0
- Powerful Arm Cortex - A55 processor
- Secure gateaway, connectivity, IoT and industrial applications

APPLICATIONS

Industrial | Transportation | Home Automation | Surveillance | Transportation | Automotive | Robotics

FEATURES

CPU	NXP i.MX 91	
CORES	Arm Cortex -A55 @ up to 1.4 GHz processor	
MEMORY	Up to 2GB LPDDR4 @2400MTs	
OPERATING SYSTEM	Linux, Android	
POWER SUPPLY	+5V DC	
NETWORKING	2x Gb Ethernet interfaces (1x RGMII option available)	

USB	• USB OTG 2.0 • USB HOST 2.0	
MASS STORAGE	Starting from 4GB eMMC drive soldered on-board	
PERIPHERAL INTERFACES	UART, I^2C, SPI, JTAG, CAN,SDIO, GPIOs	
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