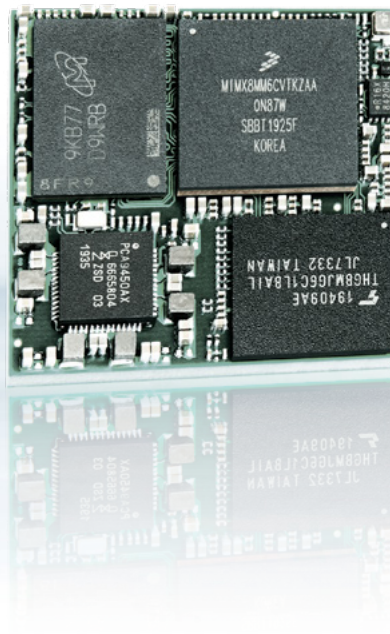


SoM SL i.MX8M MINI



Quad Core with 1.6 GHz, eMMC and DDR4 Memory
on just 30 x 30 mm

- ▶ 4x Arm® Cortex®-A53 @1.6 GHz and 1x Arm® Cortex-M4 @400 MHz
- ▶ 2D GPU, 3D GPU
- ▶ Memory expansion
- ▶ Pre-installed embedded Linux operating system incl. all drivers for communication and LCD/touch

POSSIBILITIES START HERE

SoM SL i.MX8M MINI

Our new system-on-module SoM SL i.MX8M Mini offers maximum performance on a minimum footprint for use in demanding 3D graphics, wide-ranging communication tasks and computing-intensive applications. The cutting-edge processor (4x Cortex®-A53) and memory technology (DDR4) can be deployed easily and rapidly for custom board and application development.

Equipped with state-of-the-art encryption technologies, secure boot and further security features, the SoM satisfies the most exacting security requirements. In combination with the latest

wireless technologies and modern software architectures, it is the ideal building block for developing secure devices in large-scale IoT networks.

High performance, compact design and low cost make the SoM SL i.MX8M Mini an excellent basis for proprietary baseboard development. Ready2Use: Thanks to the included Linux Board Support Package and full development environment, the system is ready for immediate deployment.

CLIENT BENEFITS

- ▶ Quick and easy realization of complex processor solutions
- ▶ Complex pin multiplexing and sophisticated DDR4 RAM layout already implemented
- ▶ Short Time to Market
- ▶ Requires only one voltage supply (5 V)

APPLICATIONS

- ▶ IoT/Industry 4.0
- ▶ Automation and control technology
- ▶ HMI, Touch Panel
- ▶ Consistent processor module for wide range of baseboard families
- ▶ Minimum-footprint applications

▶ TECHNICAL DATA

FUNCTION		STANDARD	OPTIONS
MICROPROCESSOR	CPU	4x Arm® Cortex®-A53 @1.6 GHz, 1x Arm® Cortex®-M4 @400 MHz, 2D GPU and 3D GPU	
MEMORY	LPDDR4-RAM NOR-FLASH eMMC	1 GByte 2 MByte 8 GByte	up to 4 GByte up to 128 GByte
COMMUNICATION	ETHERNET USB I/O	1x 1 Gbit/s 2x USB 2.0 OTG 4x UART 4x I ² C, 2x SPI, 27x GPIO, 3x PWM, 1x PCIe, 1x SAI, 1x QSPI 2x SDIO 3.0, 1x 4 bit, 1x 8 bit	
DISPLAY / TOUCH	LCD INTERFACE CAMERA INTERFACE	1x MIPI DSI (4-lane) up to 1920 x 1080 @60fps 1x MIPI CSI2 (4-lane)	
OTHER	POWER SUPPLY POWER CONSUMPTION TEMPERATURE RANGE OPERATING SYSTEM FORM FACTOR FOOTPRINT	5 V DC ±5 % Linux running < 1 W max. < 3.5 W -25 °C ... +85 °C Embedded Linux (Yocto Distribution) Microsoft Windows 10 IoT Core 30 x 30 mm 267 Pin / RM 1,5 mm	
SECURITY		HAB Secure Boot, TrustZone, TRNG, RSA up to 4096, AES-128/192/256, 3DES, ARC4, MD-5, SHA up to 256, ECC, Secure JTAG	

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