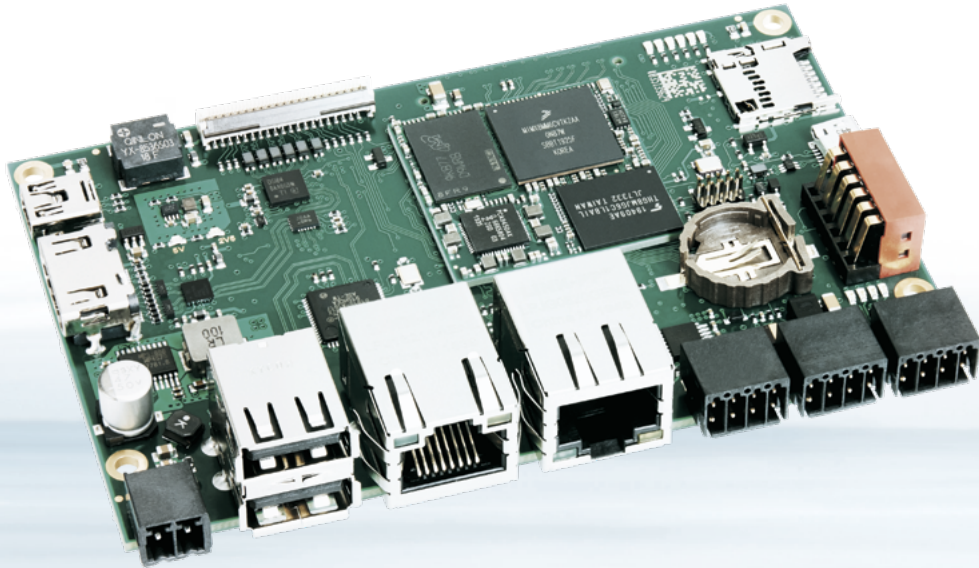


# BL i.MX8M Mini OSM-S

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## OSM-Baseboard with High-Performance-Processor Quad Core 1.6 GHz

- ▶ Embedded application and control processor
- ▶ 4x Arm® Cortex®-A53 @1.6 GHz and 1x Arm® Cortex®-M4 @400 MHz with various interface
- ▶ System on Module (SoM) – OSM – Open Standard Module™ Size-S
- ▶ Pre-inst. operating system including all drivers (Embedded Linux Board Support Pack.)

POSSIBILITIES START HERE



## BL i.MX8M Mini OSM-S

The Open Standard Module™ (OSM) standardizes the current variety of manufacturer-specific modules with regard to sizes, pin assignment, interfaces, cooling and power dissipation. The SoM Modul OSM-S i.MX8M Mini can be directly soldered onto the Baseboard BL i.MX8M Mini OSM-S. It offers the advantages of simplified machine manufacturing as well a cost-effective basis for board and application development.

The baseboard is equipped with a powerful NXP i.MX8M Mini Quad Core application processor, which ensures high performance, low

power consumption and long availability. Demanding 3D graphics applications as well as complex and extensive system architectures are implemented effortlessly. The system offers a 4x Arm® Cortex®-A53 microprocessor with a clock frequency of 1.6 GHz and DDR4 memory technology as well as extensive configuration options for various interfaces.

With the combination of SoM and Baseboard, nothing stands in the way of your successful project launch.

### CLIENT BENEFITS

- ▶ Quick and easy applicability of complex processor solutions
- ▶ Custom add-on functions via expansion plug in
- ▶ Full Linux toolchain available free of charge
- ▶ Short time to market

### APPLICATIONS

- ▶ IoT/Industrie 4.0
- ▶ Communication
- ▶ Medical technology
- ▶ High-end touch display
- ▶ Edge Computing

### ▶ 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 SOM MODULE	LPDDR4-RAM NOR-FLASH	4 GByte 2 MByte	1 GByte, 2 GByte
MEMORY SOM BASEBOARD	eMMC EEPROM SD CARD	32 GByte 1 kb 1x microSD Card Slot	4 GByte up to 64 GByte up to 128 kb
COMMUNICATION	ETHERNET USB DIO SERIAL CAN	1x 1 Gbit/s, 1x 10/100 Mbit/s 2x 2.0 Host, 1x 2.0 OTG 4x DIO (24 V/up to 800 mA) 1x RS232, 1x RS485 1x CAN 2.0	
DISPLAY / TOUCH	LCD INTERFACE TOUCH	1x HDMI, 1x LVDS, up to 1920 x 1080 @60 fps 1x I²C, 1x USB	
OTHER	POWER SUPPLY POWER CONSUMPTION TEMPERATURE RANGE OPERATING SYSTEM FORM FACTOR RTC EXTERNAL (I²C) RTC BUFFERING DEBUG EXPANSION PLUGS	24 V DC ±20 % Linux running < 2 W 0 °C...+70 °C Embedded Linux (Yocto Distribution) 105.5 x 67 mm (4.3") 1x on Baseboard Battery on Baseboard CR1220 1x Console 1x I²C, 1x I²S, 1x SPI, 1x SDIO (8-bit), Camera interface 1x MIPI CSI (4-lane)	
SAFETY	AUDIO	HAB Secure Boot, TrustZone, True RNG, RSA up to 4096, AES-128/192/256, 3DES, ARC4, MD-5, SHA up to 256, ECC, Secure JTAG	

### ▶ YOUR CONTACT

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