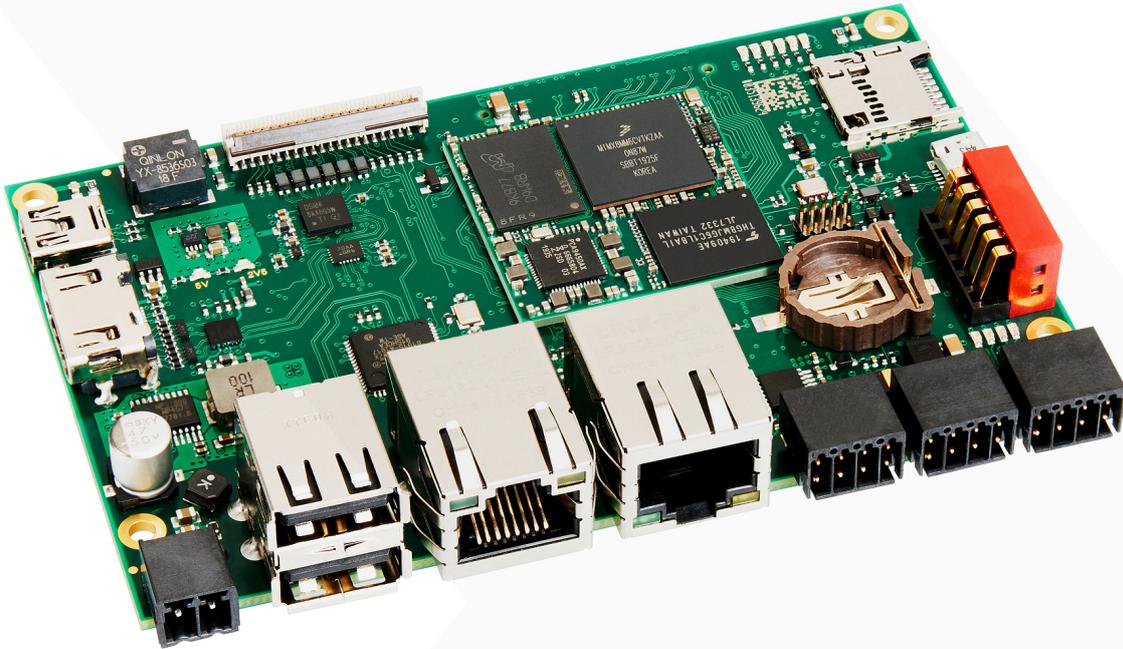


BL i.MX8M Mini OSM-S Board-Line



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

- Embedded application and control processor
- NXP i.MX8M Mini, 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.)

FUNCTION		STANDARD	OPTIONS
MICROPROCESSOR	CPU	NXP i.MX8M Mini, 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 nv MEMORY	32 GByte 64 kbit 1x microSD Card Slot 64 kbit EERAM	4 GByte up to 64 GByte tbd
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 B	
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 RTC BUFFERING DEBUG EXPANSION PLUGS AUDIO	24 V DC ±20 % Linux running < 3 W 0 °C...+70 °C Embedded Linux (Yocto Distribution) 105.5 x 67 mm (4.3") 5 ppm accuracy CR1220 1x Console 1x I²C, 1x SPI, 1x SDIO (8-bit), 1x SAI, 1x PCIe, 1 USB Camera interface 1x MIPI CSI (4-lane) 1x Buzzer	
SAFETY		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	

Product Highlights

The Open Standard Module™ (OSM) standardizes the current variety of manufacturer-specific modules with regard to sizes, pin assignment and interfaces. 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 as 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

PRODUCT NAME	ARTICLE NO.	OPTIONS
BL i.MX8M Mini OSM-S Quad 1 GB/8 GB	tbd	-
BL i.MX8M Mini OSM-S Quad 4 GB/32 GB	40099 233	-
AC CONNECTOR SET BL/AL/DL	30099 003	Order in addition
USB-UART ADAPTER	40099 101	-



Development Kit

PRODUCT NAME	ARTICLE NO.	OPTIONS
DK 7" i.MX8M Mini OSM-S Quad 4 GB/32 GB	tbd	BL i.MX8M Mini Quad OSM-S, 1 GB/8 GB, Touch Display, Power Supply, Cables, Debug Adapter





About Kontron

Kontron is a global leader in IoT/Embedded Computing Technology (ECT) and offers individual solutions in the areas of Internet of Things (IoT) and Industry 4.0 through a combined portfolio of hardware, software and services. With its standard and customized products based on highly reliable state-of-the-art technologies, Kontron provides secure and innovative applications for a wide variety of industries. As a result, customers benefit from accelerated time-to-market, lower total cost of ownership, extended product lifecycles and the best fully integrated applications.

For more information, please visit: www.kontron.com

About Kontron Electronics

Kontron Electronics GmbH is a full-service provider in the field of electronics, development and manufacturing services. Our business portfolio includes proprietary and client-specific products, development and design services for complex electronics components, modules and systems, as well as production and assembly services for entire devices. The company is part of the technology corporation Kontron AG.

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