# BL i.MX8M MINI





# BL i.MX8M MINI 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
- ▶ Pre-installed operating system incl. all drivers (Embedded Linux Board Support Package)



Reinventing ourselves - that's what we at Kontron Electronics succeeded in doing with the new SoM SL i.MX8M Mini. The compact modular size of the SoM offers maximum performance and complexity on a footprint of just 30 mm x 30 mm.

The new platform is the perfect solution for sophisticated 3D graphics applications and computing-intensive system architectures. In addition to an attractive price, the i.MX8M Mini processor boasts an extremely high-performing application processor. The

system features a 4x Arm® Cortex®-A53 microprocessor, a clock frequency of 1.6 GHz and DDR4 memory technology, as well as extensive configuration of powerful interfaces.

With the combination of SoM and baseboard, there's nothing to hold your projects back. This high-powered and autonomous platform is versatile in use and represents a secure investment for your future products.

#### **CLIENT BENEFITS**

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

#### **APPLICATIONS**

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

#### TECHNICAL DATA

FUNCTION		STANDARD	OPTIONS
MICROPROCESSOR	СРИ	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	1 GByte 2 MByte	up to 4 GByte
MEMORY SoM BASEBOARD	eMMC SD-Card	8 GByte 1x micro-SD Slot	up to 128 GByte
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 @60fps 1x I <sup>2</sup> C, 1x USB	
OTHER	POWER SUPPLY POWER CONSUMPTION TEMPERATURE RANGE OPERATING SYSTEM FORM FACTOR EXTERNAL RTC RTC BUFFERING EXPANSION PLUGS AUDIO	24 V DC ±20 % Linux running < 2 W 0 °C+70 °C Embedded Linux (Yocto Distribution) Microsoft Windows 10 IoT Core 105,5 x 67 mm (4,3") 1x on Baseboard Battery on Baseboard CR1220 1x I²S, 1x PCIe, 1x SPI, 1x SDIO 8 bit Camera Interface 1x MIPI CSI (4-lane) 1x Buzzer	
SECURITY		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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