

Baseboard with High-Performance Processor Quad Core 1.6 GHz

- ▶ NXP i.MX8M Mini, 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)



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 SD-CARD nv MEMORY	32 GByte 1x micro-SD Slot 64kbit EERAM	4 GByte / 64 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 B	
DISPLAY / TOUCH	LCD INTERFACE TOUCH	1x HDMI, 1x LVDS, up to 1920 x 1080 @60fps 1x I 2 C, 1x USB	
OTHER	POWER SUPPLY POWER CONSUMPTION TEMPERATURE RANGE OPERATING SYSTEM FORM FACTOR RTC RTC BUFFERING EXPANSION PLUGS	24 V DC ±20 % Linux running < 3 W 0 °C+70 °C Embedded Linux (Yocto Distribution) 105,5 x 67 mm (4,3") 5ppm accuracy CR1220 1x ²C, 1x PCle, 1x SPI, 1x SDIO 8 bit, 1x QSPI, 1x SAI, 1x USB 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	

Product Highlights

BL i.MX8M Mini is a system-ready IR-certified product developed by the open, standard-based initiative Arm® Project Cassini. It fulfills your performance and installation space requirements and is compatible with Embedded Linux.

This combination of SoM and Board is your ideal solution for sophisticated 3D graphics applications and CPU-intensive system architectures. The attractively priced i.MX8M Mini Processor also features an extremely high-yield application

processor. In addition to a 4x Arm® Cortex®-A53 microprocessor with 1.6 GHz clock frequency and DDR4 memory technology, the system features an array of high-performance interfaces.

BL i.MX8M Mini combines proven technology and maximum quality. This potent, independent platform can be deployed for a wide range of uses and represents a secure investment in 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

PRODUCT NAME	ARTICLE NO.	OPTIONS
BL i.MX8M MINI QUAD 1 GB/8 GB	40099 187	-
BL i.MX8M MINI QUAD 2 GB/8 GB	On request	-
BL i.MX8M MINI QUAD 4 GB/32 GB	40099 220	-
AC CONNECTOR SET BL/AL/DL	30099 003	Order in addition to BL i.MX8M Mini Quad
USB-UART ADAPTER	40099 101	-



Products Automation-Line

PRODUCT NAME	ARTICLE NO.	OPTIONS
AL i.MX8M MINI QUAD 1 GB/8 GB	50099 067	-
AL i.MX8M MINI QUAD 2 GB/8 GB	On request	-
AL i.MX8M MINI QUAD 4 GB/32 GB	50099 068	-
AC CONNECTOR SET BL/AL/DL	30099 003	Order in addition to AL i.MX8M Mini Quad
USB-UART ADAPTER	40099 101	-



Development Kit

PRODUCT NAME	ARTICLE NO.	OPTIONS
DK i.MX8M Mini Quad 1 GB/8 GB	50099 059	BL i.MX8M Mini Quad 1 GB/8 GB, Power Supply, Cables, Debug Adapter
DK 7" i.MX8M MINI QUAD 1 GB/8 GB	50099 063	BL i.MX8M Mini Quad 1 GB/8 GB, Touch Display, Power Supply, Cables, Debug Adapter
DK i.MX8M MINI QUAD 4 GB/32 GB	50099 065	BL i.MX8M Mini Quad 4 GB/32 GB, Power Supply, Cables, Debug Adapter
DK 7" i.MX8M MINI QUAD 4 GB/32 GB	50099 064	BL i.MX8M Mini Quad 4 GB/32 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, Kontronprovides secure and innovative applications for a wide variety of industries. As a result, customers benefit from accerated 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.

For more Information please visit: www.kontron-electronics.com

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