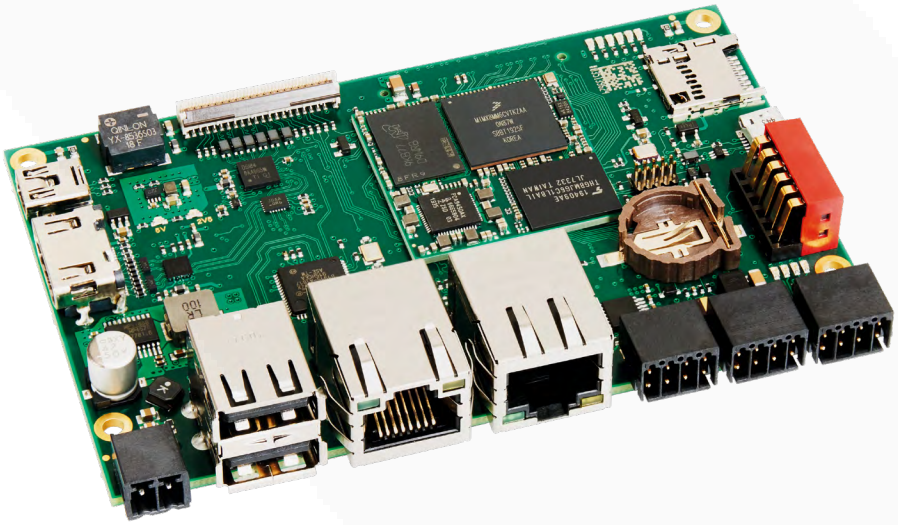
# BL i.MX8M Mini

## Board-Line



## 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)

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# Technical Information



| FUNCTION | | STANDARD | OPTIONS |
|---|---|---|---|
| MICROPROCESSOR | CPU | NXP i.MX8M Mini<br>4x Arm® Cortex®-A53 @1.6 GHz,<br>1x Arm® Cortex®-M4 @400 MHz,<br>2D GPU and 3D GPU | |
| MEMORY SoM MODULE | LPDDR4-RAM<br>NOR-FLASH | 4 GByte<br>2 MByte | 1 GByte / 2 GByte |
| MEMORY SoM BASEBOARD | eMMC<br>SD-CARD<br>nv MEMORY | 32 GByte<br>1x micro-SD Slot<br>64kbit EERAM | 4 GByte / 64 GByte |
| COMMUNICATION | ETHERNET<br>USB<br>DIO<br>SERIAL<br>CAN | 1x 1 Gbit/s, 1x 10/100 Mbit/s<br>2x 2.0 Host, 1x 2.0 OTG<br>4x DIO (24 V/up to 800 mA)<br>1x RS232, 1x RS485<br>1x CAN 2.0 B | |
| DISPLAY / TOUCH | LCD INTERFACE<br>TOUCH | 1x HDMI, 1x LVDS, up to 1920 x 1080 @60fps<br>1x I²C, 1x USB | |
| OTHER | POWER SUPPLY<br>POWER CONSUMPTION<br>TEMPERATURE RANGE<br>OPERATING SYSTEM<br>FORM FACTOR<br>RTC<br>RTC BUFFERING<br>EXPANSION PLUGS<br><br><br>AUDIO | 24 V DC ±20 %<br>Linux running < 3 W<br>0 °C...+55 °C<br>Embedded Linux (Yocto Distribution)<br>105.5 x 67 mm (4,3")<br>5ppm accuracy<br>CR1220<br>1x I²C, 1x PCIe, 1x SPI, 1x SDIO 8 bit, 1x QSPI,<br>1x SAI, 1x USB<br>Camera Interface 1x MIPI CSI (4-lane)<br>1x Buzzer | |
| SECURITY | | HAB Secure Boot, TrustZone, True RNG,<br>RSA up to 4096, AES-128/192/256, 3DES,<br>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

# Products Board-Line



| 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 aceerated 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 electronics industry, offering comprehensive services in development, rapid prototyping, and manufacturing. The company's portfolio includes proprietary and customer-specific products, development and engineering services for complex electronic components, modules, and systems, as well as production and assembly services for complete assemblies. The company is part of the Kontron AG technology group.

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

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