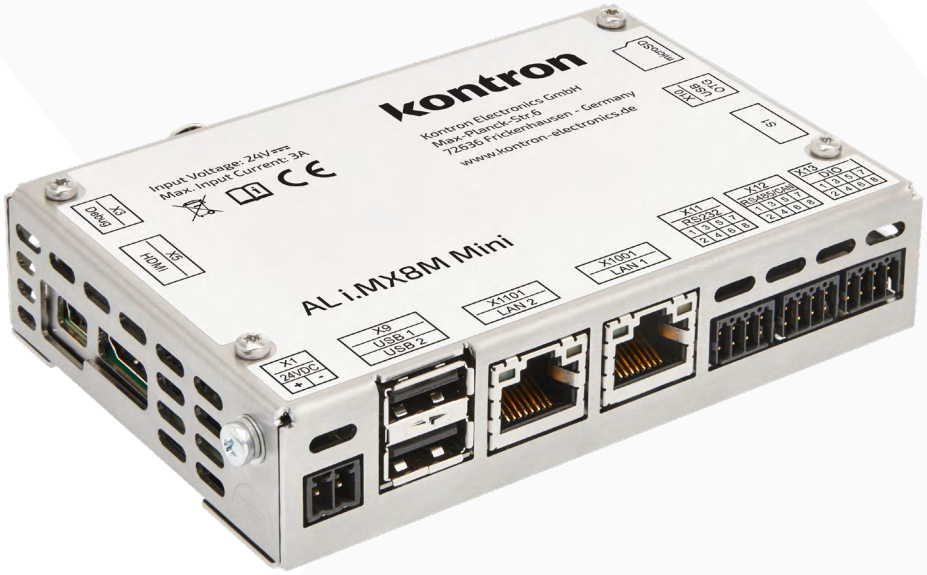
AL i.MX8M Mini

Automation-Line



Designed with Automation and IoT Solutions in mind

- Compact, fanless Box-PC
- Embedded Linux operating system
- Wide range of interfaces
- Robust chassis

kontron
The Power of IoT

Technical Information

FUNCTION		
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	LPDDR4-RAM NOR-FLASH eMMC SD-CARD NV MEMORY	4 GByte (optional 1 GByte, 2 GByte) 2 MByte 32 GByte (optional 4 GByte up to 64 GByte) 1x microSD Card Slot 8 kB (64 kb) EERAM
COMMUNICATION	ETHERNET USB SERIAL CAN DIO	1x 1 Gbit/s, 1x 10/100 Mbit/s 2x 2.0 Host, 1x 2.0 OTG 1x RS232, 1x RS485 1x CAN 2.0 B 4x DIO (24 V/up to 800 mA)
DISPLAY	LCD INTERFACE	1x HDMI, up to 1920 x 1080 @60fps
OTHER	POWER SUPPLY POWER CONSUMPTION FORM FACTOR COOLING TEMPERATURE RANGE PROTECTION CLASS APPROVAL	24 V DC ±20 % Linux running <3 W Stainless steel 111 x 25 x 76 mm for mounting on 35mm DIN rail acc. EN 60715 fanless, passiv 0 °C … +55 °C ambient, non condensing IP20 CE
SOFTWARE	BOOTLOADER OPERATING SYSTEM RTC RTC BUFFERING DEBUG AUDIO SECURITY	U-Boot Embedded Linux (Yocto Distribution) 5 ppm accuracy CR1220 1x Console 1x Buzzer 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 Automation Line AL i.MX8M Mini, based on Arm® Cortex®-A53 and Arm® Cortex®-M4, is another addition to our Linux computer portfolio for DIN rail mounting. The compact design features a wide range of communication interfaces as well as a modern HDMI interface for display use. The robust chassis is specially designed with automation and IoT solutions in mind.

AL i.MX8M Mini is predestined for sophisticated control tasks and as an intelligent gateway for IOT applications. The Automation Line (AL) can easily be expanded via multifunctional I/O modules. The I/O assemblies can be controlled via CAN Bus, and up to 16 modules can be connected. Where required, individual I/O modules can be customized to meet your specific requirements.

Client Benefits

- Small, compact, fanless design
- Flexible top-hat rail assembly
- Optional expansion via multifunctional I/O module
- Excellent price/performance ratio

Applications

- Automation
- IoT Gateways
- Edge Computing
- Mechanical Engineering
- Control
- Communication
- Visualization

Products Automation-Line

PRODUCT NAME	ARTICLE NO.	OPTIONS
AL i.MX8M Mini 4 GB/32 GB	50099 068	-
AC CONNECTOR SET BL/AL/DL	30099 003	Order in addition to AL i.MX8M Mini
USB-UART DEBUG ADAPTER	40099 101	-



Products Automation-Line

PRODUCT NAME	ARTICLE NO.	OPTIONS
AL Multifunctional module CAN I/O MODULE	50099 036	2x CAN, 12x DI, 12x DO, 4x AI, 4x AO, 2x PT100, in chassis



Development Kit

PRODUCT NAME	ARTICLE NO.	OPTIONS
DK i.MX8M Mini 4 GB / 32 GB	50099 065	BL i.MX8M Mini, Power Supply, Cables, Debug Adapter
DK 7" I.MX8M MINI 4 GB /32 GB	50099 064	BL i.MX8M Mini 7" Touch Display, Power Supply, Cables, Debug Adapter



About Kontron

Kontron AG is a leading IoT technology company. For more than 20 years, Kontron has been supporting companies from a wide range of industries to achieve their business goals with intelligent solutions. From automated industrial operations, smarter and safer transport to advanced communications, connectivity, medical, and energy solutions, the company delivers technologies that add value for its customers. With the acquisition of Katek SE in early 2024, Kontron significantly strengthens its portfolio with the new GreenTec division, focusing on solar energy and eMobility, and grows to around 8,000 employees in over 20 countries worldwide. Kontron is listed on the SDAX® and TecDAX® of the German Stock Exchange.

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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