AL i.MX8M Mini LTE

Automation-Line



Ideal for mobile and wireless IoT solutions

- Compact, fanless IoT-Gateway
- Embedded Linux operating system, KontronOS
- Wide range of communication interfaces
- LTE Cat1 Module

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: 2 GByte) 2 MByte 32 GByte (optional: 16 / 64 GByte) 1x microSD Card Slot 8 kByte
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)
WIRELESS TECHNOLOGY	LTE	LTE Cat 1 untill Uplink up to 5 Mbps, Downlink up to 10 Mbps 1x Nano-SIM Slot
SOFTWARE	BOOTLOADER OPERATING SYSTEM	Secure-Boot KontronOS Optional Embedded Linux (Yocto Distribution)
OTHER	POWER SUPPLY POWER CONSUMPTION TEMPERATURE RANGE COOLING FORM FACTOR RTC RTC BUFFERING DEBUG PROTECTION CLASS APPROVAL	24 V DC ±20 % TBD 0 °C ... +55 °C, ambient, non condensing Fanless, passiv Stainless steel 111 x 43 x 76 mm for mounting on 35 mm DIN-Rail acc. EN 60715 5 ppm accuracy CR 1220 1x Console IP20 CE
SECURITY		HAB Secure-Boot Two redundant partitions for maximum uptime End-to-end encryption of all connections Separation of operating system and applications

Product Highlights

Automation-Line AL i.MX8M Mini LTE, based on Arm® Cortex®-A53 and Arm® Cortex®-M4, completes the product range of existing Linux computers for DIN rail mounting. The intelligent gateway with LTE connectivity has extensive communication interfaces. With its robust housing, the gateway is ideal for demanding control tasks as well as mobile and wireless IoT solutions.

An outstanding feature is the LTE Cat1 module, which ensures a particularly reliable and fast connection for IoT applications. It is an excellent alternative when it is not possible to integrate the device into the company's own network. The AL i.MX8M Mini LTE comes standard with the secure, hardened Linux® based **KontronOS** operating system and **KontronGrid**, a comprehensive IoT-Device-Management Solution for Edge-Devices. This ensures the highest security standards and protection of sensitive data.

For detailed information about KontronOS and KontronGrid, please visit **www.susietec.com/en** under Products & Services.

Client Benefits

- Compact, fanless design
- Flexible top-hat rail assembly
- Expandable via multifunction I/O module
- Attractive price-performance ratio

Applications

- Mobile solutions
- IoT-Gateways
- Edge Computing
- Mechanical Engineering
- Control
- Wireless Communication

Products Automation-Line

PRODUCT NAME	ARTICLE NO.	DETAILS
AL i.MX8M Mini QC 4 GB / 32 GB LTE	50099 099	-
AC CONNECTOR SET BL/AL/DL	30099 006	Order in addition to AL i.MX8M Mini LTE
AC POWER SUPPLY 230 V / 24 V	30099 001	-
USB-CABLE A-CONNECTOR TO MINI B-CONNECTOR	1 860 1154	-
USB-UART-DEBUG ADAPTER	40099 101	-



Products Automation-Line

PRODUCT NAME	ARTICLE NO.	OPTIONS
Multifunctional module AL 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.	DETAILS
DK i.MX8M Mini 4 GB / 32 GB	50099 065	BL i.MX8M Mini, Power Supply, USB-Cable, USB-UART Debug-Adapter, Connector Set
DK 7" i.MX8M Mini 4 GB / 32 GB	50099 094	BL i.MX8M Mini, 7" Touch-Display, Power Supply, USB-Cable, Connector Set, USB-UART 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 7,000 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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