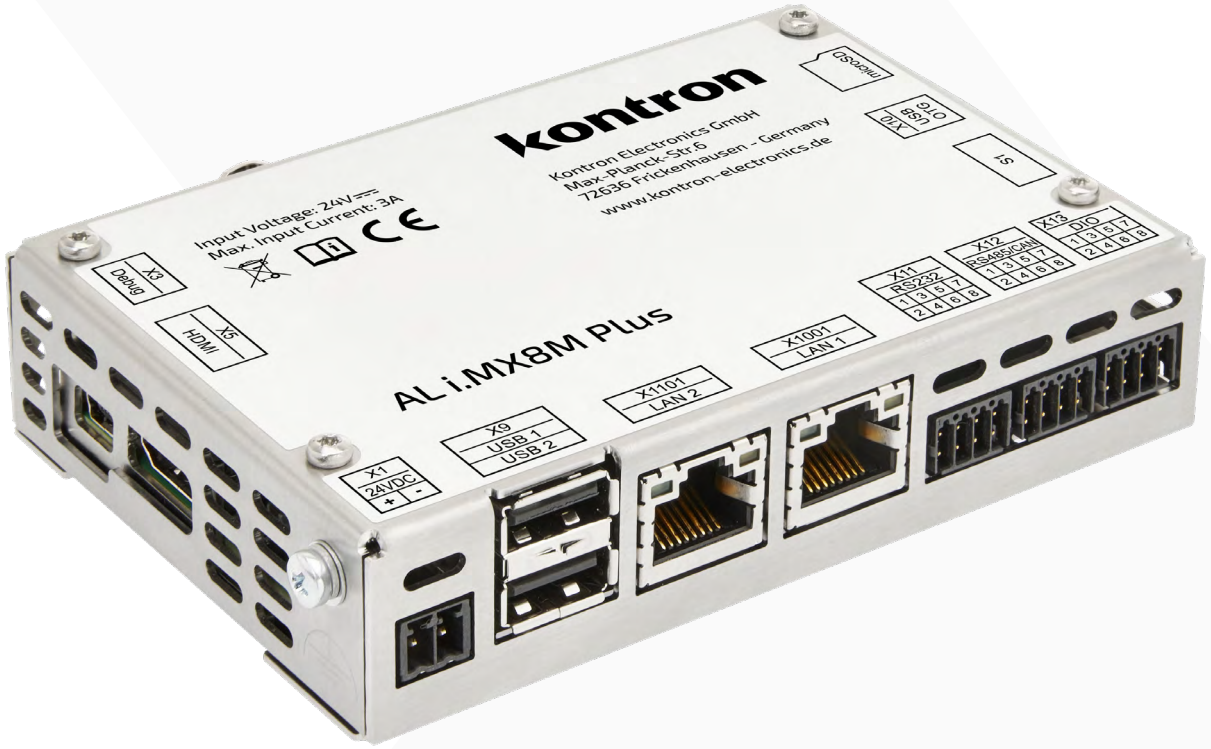
AL i.MX8M Plus
Automation-Line



For AI, automation and IoT solutions in the control cabinet

- NXP i.MX8M Plus, 4x Arm® Cortex®-A53 @1.6 GHz with Neural Processing Unit (NPU)
- Dual Gigabit Ethernet and CAN FD Interface
- Yocto Mainline Kernel BSP
- Robust, fanless chassis

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The Power of IoT

Technical Information

MICROPROCESSOR	CPU	NXP i.MX8M Plus, 4x Arm® Cortex®-A53 @1.6 GHz 1x Arm® Cortex®-M7 @800 MHz, 2D GPU and 3D GPU, NPU (2.3 TOPS)
MEMORY	LPDDR4 RAM eMMC EEPROM SD CARD nv MEMORY	4 GByte (Optional: 1...8 GByte) 32 GByte (Optional: 4...128 GByte) 8 kB (64 kb) 1x microSD Card Slot 8 kB (64 kb) EERAM
COMMUNICATION	ETHERNET USB SERIAL INTERFACE CAN DIO	2x 1 Gbit/s 2x USB 2.0 Host, 1x USB 3.0 Type-C 1x RS232, 1x RS485 1x CAN FD 4x DIO (24 V / up to 800 mA)
DISPLAY	LCD INTERFACE	1x HDMI (up to 4Kp30)
SOFTWARE	OPERATING SYSTEM BOOTLOADER	Embedded Linux (Yocto Distribution) U-Boot
OTHER	POWER SUPPLY TEMPERATURE RANGE COOLING FORM FACTOR RTC RTC BUFFERING DEBUG AUDIO PROTECTION CLASS APPROVAL	24 V DC ±20 % 0 °C ... +55 °C, ambient, non-condensing fanless, passiv Stainless steel 111 x 25 x 76 mm for mounting on 35 mm DIN rail acc. EN 60715 5 ppm accuracy CR 1220 1x Console 1x Buzzer IP20 CE
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

Automation-Line AL i.MX8M Plus, based on CPUs Arm® Cortex®-A53 and Arm® Cortex®-M7, brings AI functionality and Dual Gigabit Ethernet to the control cabinet. The compact design features a wide range of communication interfaces as well as a modern 4k HDMI interface. The robust chassis is specially designed with automation and IoT solutions in mind.

AL i.MX8M Plus is predestined for sophisticated real-time 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

- AI in the Edge device
- Automation
- IoT-Gateways
- Mechanical Engineering
- Control
- Communication
- Visualization

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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