# 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



MICROPROCESSOR	CPU	NXP i.MX8M Plus, 4x Arm® Cortex®-A53 @1.6 GHz (1.8 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: 12 GByte) 32 GByte (Optional: 464 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	$24\text{V}$ DC $\pm 20\%$ 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**

- ➤ Al 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 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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