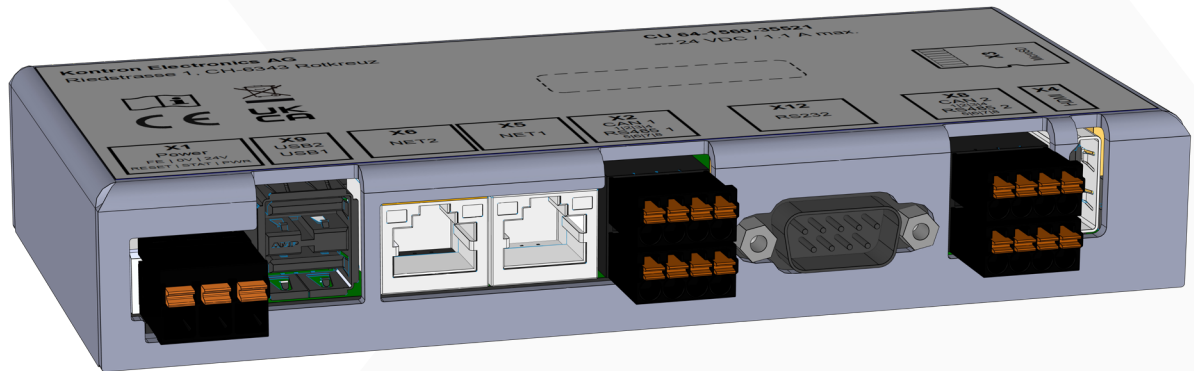
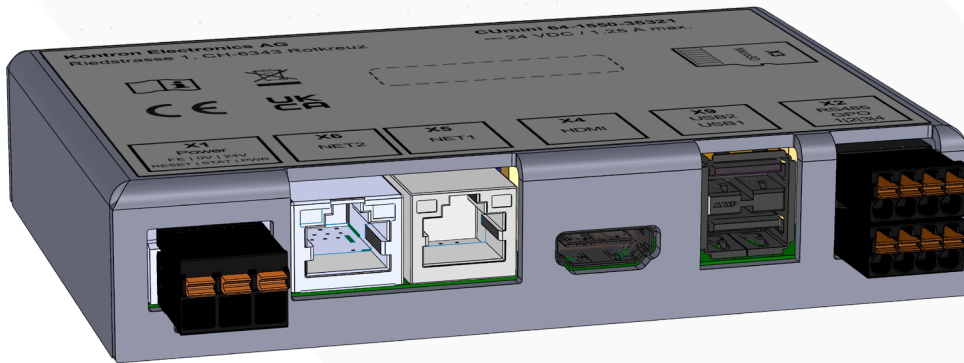


# Control Units CU & CU Mini 6x



## Compact, powerful controller with multiple connectivity

- High performance thanks to powerful Quad Core CPU i.MX8M Plus
- Various interfaces for maximum flexibility
- Compact fanless design for DIN rail mounting
- Industrial quality, 10 years of availability
- Optional with CODESYS® SoftPLC

## CU Control Unit 6X - powerful, fanless, compact

This powerful controller series combines industrial compact design with a wide range of interfaces. The series is based on the long-term available NXP i.MX8M Plus Quad Core Arm® processor, offers high performance in a compact package and is well-suited for cost-sensitive control and IoT gateway applications. Thanks to its compact, fanless design, these controllers are also ideal for installation in limited space conditions. The numerous interfaces enable communication with various fieldbuses and cloud connections.

Furthermore, the control unit offers a wide range of adaptation options to meet a wide range of requirements thanks to its internal M.2 slot, expansion ports and a "Time-Sensitive Networking" (TSN) capable Ethernet interface. CODESYS® SoftPLC is optionally available for the fast and efficient implementation of sophisticated automation and visualization solutions. The control units are designed for long-term availability (> 10 years) and can also be customized and optimized to your individual requirements.

## Technical Information

PRODUCT		Control Unit CU Mini 6x	Control Unit CU 6x
PROCESSOR	CPU	NXP Arm® i.MX8M Plus Quad Core, 1.6 GHz	NXP Arm® i.MX8M Plus Quad Core, 1.6 GHz
MEMORY	DRAM DDR4 eMMC NOR FLASH FRAM SD-CARD	1 GByte, soldered (up to 4 GByte) 4 up to 32 GByte 2 MByte (up to 16 MByte) 32 kByte (up to 512 kByte) microSD slot (up to SDXC-format)	1 GByte, soldered (up to 4 GByte) 4 up to 32 GByte 2 MByte (up to 16 MByte) 32 kByte (up to 512 kByte) microSD slot (up to SDXC-format)
INTERFACES	USB ETHERNET  CAN SERIAL PORTS  DISPLAY INTERNAL, PLUGGABLE EXTENSIONS (OPTIONAL)	2x USB 2.0 (Host) 2x Ethernet (10/100/1000) independent, 1x TSN capable  1x RS485 (isolated) 2x GPO 1x HDMI 1.4	2x USB 2.0 (Host) 2x Ethernet (10/100/1000) independent, 1x TSN capable 1x CAN-FD (isol.), optional: 2x CAN FD 1x RS485 (isol.), optional: 2x RS485 1x RS232 1x HDMI 1.4 GPIO, HDMI, SPI, i²C, Audio 2x 2W, MIPI CSI 4-lane, M.2 Slot (Key E, B)
MORE FEATURES	SECURITY REAL TIME CLOCK SYSTEM	TPM RTC with SuperCAP (>5 days) 2x status LED, Reset-button	TPM RTC with SuperCAP (>5 days) 2x status LED, Reset-button
MECHANICAL	CONSTRUCTION COOLING MOUNTING	IP20, aluminium Fanless For mounting on 35mm mounting rail acc. to EN 60715	IP20, aluminium Fanless For mounting on 35mm mounting rail acc. to EN 60715
ENVIRONMENT	CERTIFICATION POWER SUPPLY EMC  OPERATING TEMPERATURE STORAGE TEMPERATURE SHOCK (EN 60068-2-27) VIBRATION (EN 60068-2-6) HUMIDITY ALTITUDE	CE (UL/cUL planed) 24 VDC +/- 20 % (optional PoE) EN 61000-6-2 (immunity), EN 61000-6-4 (emission) 0 °C ... +55 °C (optional -20 °C ... +55 °C) -20 °C ... +70 °C 15G 11ms (half sine) 10-500Hz 1G/3 axis 10%-90%, non-condensing Up to 9.800 ft (3000 m)	CE (UL/cUL planed) 24 VDC +/- 20 % EN 61000-6-2 (immunity), EN 61000-6-4 (emission) 0 °C ... +55 °C (optional -20 °C ... +55 °C) -20 °C ... +70 °C 15G 11ms (half sine) 10-500Hz 1G/3 axis 10%-90%, non-condensing Up to 9.800 ft (3000 m)
SOFTWARE	OPERATING SYSTEM SOFTPLC (OPTIONAL) PROTOCOLS (OPTIONAL)	Embedded Linux (Yocto Distribution) CODESYS® V3 EtherCAT, Modbus TCP/RTU, Profinet, Ethernet IP, OPC UA, IIoT Libraries (MQTT, HTTPS; Azure, AWS, Google..)	Embedded Linux (Yocto Distribution) CODESYS® V3 EtherCAT, Modbus TCP/RTU, Profinet, Ethernet IP, CANopen, OPC UA, IIoT Libraries (MQTT, HTTPS; Azure, AWS, Google..)



## 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, Kontron provides secure and innovative applications for a wide variety of industries. As a result, customers benefit from accelerated 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](http://www.kontron.com)

## About Kontron Electronics

Kontron Electronics AG acts as a provider of automation solutions. The enterprise is at home in a variety of sectors, such as industrial machinery and device manufacturing, medical technology and building automation. Our 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](http://www.kontron-electronics.com)

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