

Complex Application Processor, as easy to use as a Microcontroller!

- ▶ NXP i.MX6ULL/UL, Embedded application and control processor
- > 1x Arm® Cortex® -A7 @800 MHz, various memory sizes, variable interfaces
- Pre-installed embedded Linux operating system incl. all drives for communication and LCD/touch interfaces



FUNCTION		STANDARD LAYOUT	OPTIONS
MICROPROCESSOR	CPU	UL: NXP i.MX6UltraLite 1x Arm® Cortex®-A7 @528 MHz ULL: NXP i.MX6ULL 1x Arm® Cortex®-A7 @800 MHz	
MEMORY SOM MODULE	DDR3-RAM NAND-FLASH NOR-FLASH	512 MByte 512 MByte 1 MByte	256 MByte 256 MByte
MEMORY SOM BASEBOARD	eMMC SD-CARD NVMEMORY	4 GByte 1x micro-SD Slot 8kByte nvSRAM	8 GByte - 64 GByte
COMMUNICATION	ETHERNET USB SERIAL CAN DIO AIO	2x 10/100 Mbit/s 2x 2.0 Host, 1x 2.0 OTG 1x RS232, 1x RS485 1x CAN 2.0 B 2x DIO (24 V/up to 800 mA) 2x AIN (0 24 V)	
DISPLAY / TOUCH	LCD INTERFACE TOUCH	1x RGB 24 bit up to 1366 x 768 @60fps 1x I ² C, 1x USB	
OTHER	POWER SUPPLY POWER CONSUMPTION TEMPERATURE RANGE OPERATING SYSTEM FORM FACTOR RTC RTC-BUFFERING DEBUG EXPANSION PLUGS AUDIO SECURITY	24 V DC ±20 % Linux running <1.5 W 0 °C +70 °C Embedded Linux (Yocto Distribution) 105.5 x 67 mm (4.3") 5 ppm accuracy CR1220 1x Console 2x USB, 1x I²C 1x Buzzer ULL: Secure Boot, RNG, AES-128 UL: Secure Boot, TRNG, Tamper Detection, Secure Storage (including 32 kb Secure RAM), Cryptographic Accelerators (AES-128, DES 3DES, ARC4,MD5, SHA-1, SHA-224, SHA-256, RSA/ECDSA), Secure Debug, OTP Space	1x SPI instead of nvSRAM

Product Highlights

The Internet of Things (IoT) requires ever smaller, higher-performing but yet more cost-efficient controller solutions, with maximum demands in terms of computing power, interface variety and driver support. Ever more complex systems have to be developed in ever shorter cycles.

For the price of a microcontroller, the i.MX6 Ultralite processor offers you a high-yield application processor featuring 1x Arm®

Cortex®-A7 core, a clock frequency of 800 MHz and a variably configurable interface landscape.

Get your project started right now with the compact Kontron Electronics SoM pre-installed on the Baseboard. Ready for testing, development or direct use with your application. Keep pace with ever-shorter development cycles while relying on industry-capable solutions and processor modules with guaranteed long-term availability.

Kundenvorteile

- **)** Quick and easy realization of complex processor solutions
- **)** Low-cost solutions possible using simple Baseboards
- **>** Custom add-on functions via expansion plug-ins
- No special know-how needed for DDR3 RAM integration
- **>** Full Linux toolchain available free of charge
- ➤ Short Time to Market

Anwendungen

- **▶** IoT/Industry 4.0
- Medical technology
- **>** Communications
- > Same processor module for variant-rich Baseboard families
- > Minimum footprint

PRODUCTNAME	ARTICLE NO.	OPTIONS
BL i.MX6 UL 512 MB/512 MB	40099 191	CODESYS® LOW License
BL i.MX6 ULL 512 MB/512 MB	40099 148	CODESYS® MED License
AC CONNECTOR SET BL/AL/DL	30099 003	Order in addition to BL i.MX6UL/ULL
USB-UART ADAPTER	40099 101	-



Products Automation-Line

PRODUCTNAME	ARTICLE NO.	OPTIONS
AL i.MX6 ULL 512 MB/512 MB	50099 037	CODESYS® MED License
AL i.MX6 ULL 512 MB/512 MB CODESYS® + Webvisu	50099 053	CODESYS® MED License
AC CONNECTOR SET BL/AL/DL	30099 003	Order in addition to BL i.MX6UL/ULL
USB-UART ADAPTER	40099 101	-



Development Kit

PRODUCTNAME	ARTICLE NO.	OPTIONS
DK i.MX6 UL 512 MB/512 MB	50099 061	BL i.MX6 UL, Power Supply, Cables, Debug Adapter
DK 5" i.MX6 UL 512 MB/512 MB	50099 058	BL i.MX6 UL, Touch Display, Power Supply, Cables, Debug Adapter
DK i.MX6 ULL 512 MB/512 MB	50099 046	BL i.MX6 ULL, Power Supply, Cables, Debug Adapter
DK 5" I.MX6 ULL 512 MB/512 MB	50099 042	BL i.MX6 ULL Touch Display, Power Supply, Cables, Debug Adapter



www.kontron-electronics.de



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, Kontronprovides secure and innovative applications for a wide variety of industries. As a result, customers benefit from accerated 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

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

Your Contact

Kontron Electronics GmbH

Max-Planck-Straße 6 72636 Frickenhausen, Germany Tel.: +49 7022 4057-0 info@kontron-electronics.de

www.kontron-electronics.com

Global Headquarters

Kontron Europe GmbH

Gutenbergstraße 2 85737 Ismaning, Germany Tel.: +49 821 4086-0 info@kontron.com

