



COMPLEX APPLICATION PROCESSOR, AS EASY TO USE AS A MICROCONTROLLER!

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 a 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.

FEATURES

- Embedded application and control processor
- Module featuring Arm® Cortex®-A7 architecture, RAM and Flash, Ethernet and serial interfaces, GPIOs, as well as I²C, SPI and LCD interface
- Pre-installed embedded Linux operating system incl. all drivers for communication and LCD/touch interfaces

CLIENT BENEFITS

- 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

APPLICATIONS

- ► IoT/Industry 4.0
- Medical technology
- ▶ Communications
- ➤ Same processor module for variant-rich baseboard families
- ▶ Minimum footprint

TECHNICAL DATA

FUNCTION	STANDARD LAYOUT	OPTIONS
MICROPROCESSOR		
CPU	i.MX6ULL (Arm® Cortex®-A7 @800 MHz)	
MEMORY SoM MODULE		
DDR3-RAM	512 MB	256 MB
NAND-Flash	512 MB	256 MB
NOR-Flash	1 MB	
MEMORY SoM BASEBOARD		
eMMC	4 GB	8 GB
SD-Card	1x micro-SD	
NVRAM	8 kB	
COMMUNICATION		
Ethernet	2x 10/100 Mbit/s	
USB	2x USB 2.0 Host, 1x USB OTG	
Serial	1x RS232, 1x RS485	
CAN	1x CAN 2.0 B	
DIO	2x digital IO (24V/0,8A)	
AIO	2x analog IN (024V)	
DISPLAY / TOUCH		
LCD Interface	1x RGB	
Touch	1x I ² C	
OTHER		
Power supply	24V DC ±20%	
Temperature range	0 +70°C	
Operating system	Embedded Linux (Yocto Distribution)	
Form factor	105,5 x 67 mm (4,3")	
RTC buffering	Battery CR1220	
Expansion plugs	USB, I ² C	







YOUR CONTACT

Kontron Electronics GmbH

Kantstraße 10, 72663 Großbettlingen, Germany

Phone: +49 7022 4057-0 Fax: +49 7022 4057-22 E-Mail: info@kontron-electronics.de Web: www.kontron-electronics.de

GLOBAL HEADQUARTERS

Kontron S&T AG

Lise-Meitner-Str. 3-5, 86156 Augsburg, Germany

Phone: +49 821 4086 0 Fax: +49 821 4086 111 E-Mail: info@kontron.com Web: www.kontron.com

We point out that all used brand names refer to the general brand, trademark or patent protection of the respective company or facility. Subject to change.

Art.-Nr.: 48099_146_00-61_EN