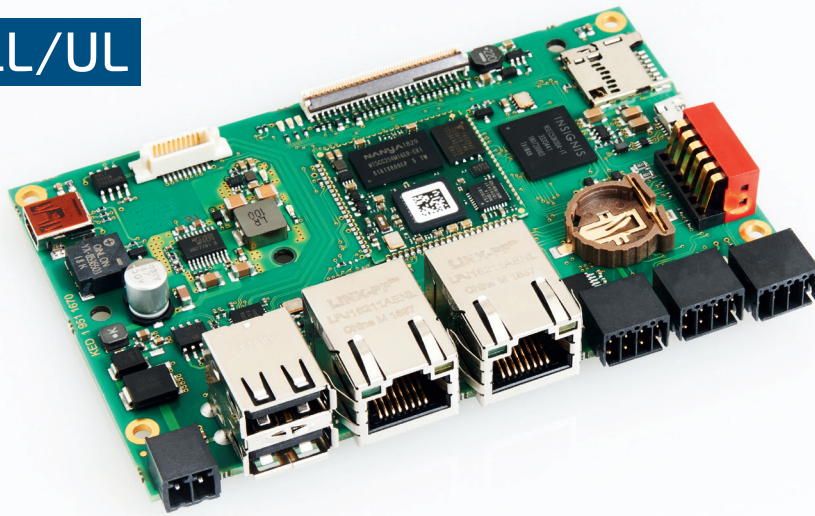


BL I.MX6ULL/UL



Board - Line

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 as well as I²C 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 application

TECHNICAL DATA

FUNCTION	STANDARD LAYOUT ULL	STANDARD LAYOUT UL	OPTIONS
MICROPROCESSOR			
CPU	i.MX6ULL 1x Arm® Cortex®-A7 @800 MHz	i.MX6UltraLite 1x Arm® Cortex®-A7 @528 MHz	
MEMORY SoM MODULE			
DDR3-RAM	512 MB	512 MB	256 MB
NAND-Flash	512 MB	512 MB	256 MB
NOR-Flash	1 MB	1 MB	
MEMORY SoM BASEBOARD			
eMMC	4 GB	4 GB	up to 128 GB
SD-Card	1x micro-SD Slot	1x micro-SD Slot	
NVSRAM	64 kB	64 kB	
COMMUNICATION			
Ethernet	2x 10/100 Mbit/s	2x 10/100 Mbit/s	
USB	2x 2.0 Host, 1x 2.0 OTG	2x 2.0 Host, 1x 2.0 OTG	
Serial	1x RS232, 1x RS485	1x RS232, 1x RS485	
CAN	1x CAN 2.0	1x CAN 2.0	
DIO	2x DIO (24V/up to 800mA)	2x DIO (24V/up to 800mA)	
AIO	2x AIN (0...24V)	2x AIN (0...24V)	
DISPLAY / TOUCH			
LCD Interface	1x RGB 24 bit up to 1366 x 768 @60fps	1x RGB 24 bit up to 1366 x 768 @60fps	
Touch	1x I²C, 1x USB	1x I²C, 1x USB	
OTHER			
Power supply	24V DC ±20%	24V DC ±20%	
Power consumption	Linux running <1,5W	Linux running <1,5W	
Temperature range	0°C...+70°C	0°C...+70°C	
Operating system	Embedded Linux (Yocto Distribution)	Embedded Linux (Yocto Distribution)	
Form factor	105,5 x 67 mm (4,3")	105,5 x 67 mm (4,3")	
External RTC	1x on Baseboard	1x on Baseboard	
RTC-Buffering	Battery on Baseboard CR1220	Battery on Baseboard CR1220	
Debug	1x Console	1x Console	
Expansion plugs	2x USB, 1x I²C	2x USB, 1x I²C	1x SPI instead of nvSRAM
Audio	1x Buzzer	1x Buzzer	
Security	Secure Boot, RNG, AES-128	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	

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