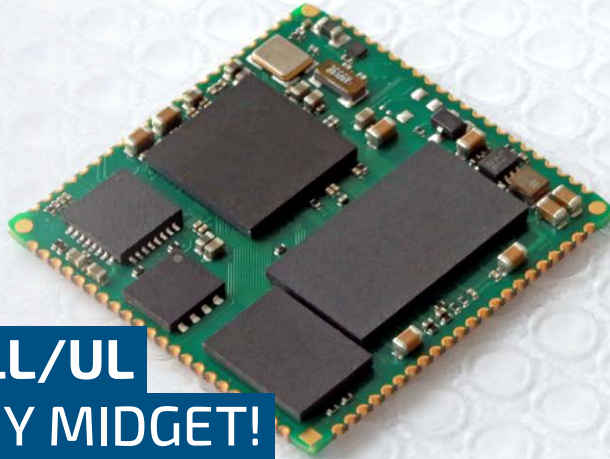


SL i.MX6ULL/UL THE MIGHTY MIDGET!



SOM - Line

COMPUTING POWER, COMMUNICATION AND GRAPHICS ON 25MM X 25MM COMPLEX APPLICATION PROCESSOR AS EASY TO USE AS A MICROCONTROLLER!

The Internet of Things (IoT) demands ever smaller, higher-powered but nevertheless cost-efficient controller solutions with high requisites in terms of computing power, interface variety and driver support.

Accordingly, we have added the Ultralite Derivatives series to the lower-price segment of our i.MX6 microprocessor family. For the price of microcontroller, you now get a high-performance application processor with a Arm® Cortex®-A7 core, 800 MHz pulse frequency and a variable-configuration interface landscape.

Kontron Electronics postage stamp-format SoM lets you combine complex computing performance with low-cost, easy-to-implement baseboards. In this way you can quickly develop mature, industry-capable solutions while relying on long-term availability of our processor modules.

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 interfaces
- ▶ Pre-installed embedded Linux operating system incl. all drivers for communication and LCD/touch interfaces

CLIENT BENEFIT

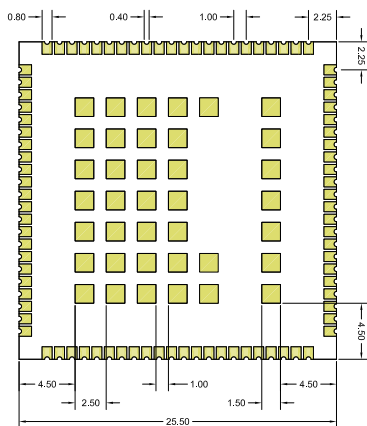
- ▶ Quick and easy realization of complex processor solutions
- ▶ Low-cost solutions available as 2-layer baseboards and higher
- ▶ No special layout know-how needed for DDR3 RAM connectivity
- ▶ Short Time to Market
- ▶ Requires only one voltage supply (3.3V)

APPLICATIONS

- ▶ IoT/Industry 4.0
- ▶ Medical technology
- ▶ Communications
- ▶ Single processor module for wide range of baseboard families
- ▶ Minimum-footprint applications

TECHNICAL DATA

FUNCTION	STANDARD LAYOUT ULL	STANDARD LAYOUT UL	OPTIONS
MICROPROCESSOR			
CPU	i.MX 6ULL(Arm® Cortex®-A7 @800 MHz)	i.MX 6UL(Arm® Cortex®-A7 @528 MHz)	
MEMORY			
DDR3-RAM	512 MB		256 MB
NAND-Flash	512 MB		256 MB
NOR-Flash	1 MB		
COMMUNICATION			
Ethernet	2x 10/100 Mbit/s (1x external PHY required)		
USB	2x USB 2.0 OTG		
Serial	up to 5x UART		
CAN	up to 2x CAN 2.0 B		
I/O	up to 2x I ² C, up to 3x SPI, up to 48x GPIO, up to 8x analog IN, up to 4x PWM		
SDIO	1x SDIO 3.0-ready, 4 bit, 1x SDIO, 4 bit		
DISPLAY			
LCD Interface	1x RGB 1366 x 768 @60fps		
OTHER			
Power supply	3,3V +/-5%		
Power consumption	< 1 W (as per I/O configuration)		
Temperature range	-40 ... +85°C		
Operating system	Embedded Linux (Yocto Distribution)		
Footprint	88 Pin CASTELLATIONS, 38 LGA Pads		
RTC	onboard with quartz		
SECURITY			
	Without Smart Card Interface AES-128, RNG, eFuse, Secure RTC	With Smart Card Interface Ciphers, OTF DRAM Encryption, RNG, 10 Tamper Pins, eFuse, RSA4096 DPA Protection, Secure RTC, 32 KB Secure Storage	



EVALUATION BOARD AVAILABLE



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