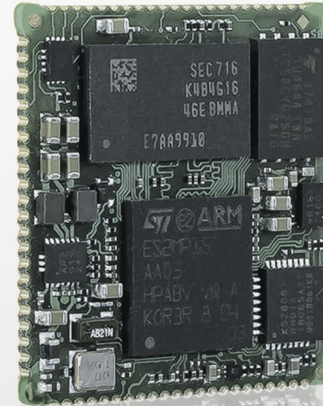
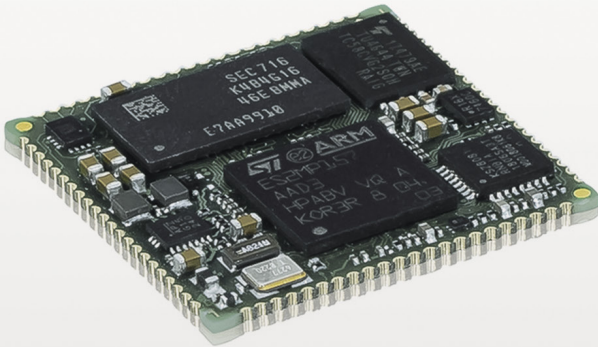


► SL STM32MP157



SoM - Line

WE CAN'T DO MAGIC, BUT WE'LL BRING EVERYTHING UNDER ONE ROOF! GRAPHICS, COMMUNICATION AND REALTIME CONTROL IN ONE SINGLE CHIP

The System on Module (SoM) from Kontron Electronics offers concentrated computing power for visualization, Internet communication and demanding control tasks in mechanical engineering and device technology. Three processor cores in one housing provide the right solution for every task. Based on the Linux operating system, the Arm® Cortex®-A7 Dual Core part handles all complex visualization tasks, including the display of web content. With the Arm® Cortex®-M4 processor, the STM32MP157A features proven microcontroller technology with a wide range of peripherals.

Thus, this SoM provides an excellent solution module to realize very compact, powerful device or machine controls in combination with existing or individual Baseboards. The support of common touch displays and wireless technologies required for the IoT is a matter of course.

Whether you want to develop your own Baseboard or we do the development for you: In any case, the SoM SL STM32MP157 is the excellent basis for a fast and reliable design and your project success.

► FEATURES

- Dual Arm® Cortex®-A7 Core and Arm® Cortex®-M4 in one housing
- 3D GPU
- Scalable memory expansion
- Pre-installed embedded Linux operating system including all drivers for communication and LCD/touch interfaces

► CLIENT BENEFITS

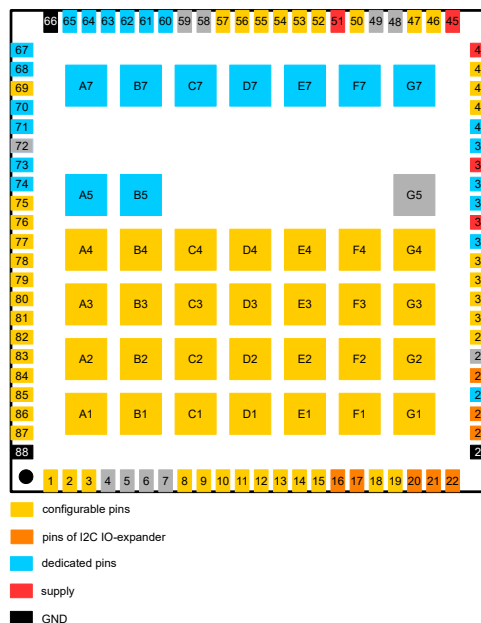
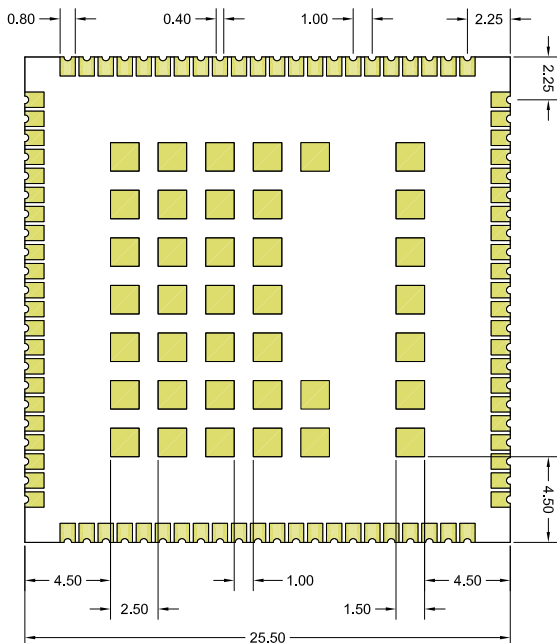
- Communication and realtime in one intelligent package
- Quick and easy realization of complex processor solutions
- No special layout know-how needed for DDR3-RAM connectivity
- Short time to market
- Requires only one voltage supply (3.3 V)

► APPLICATIONS

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

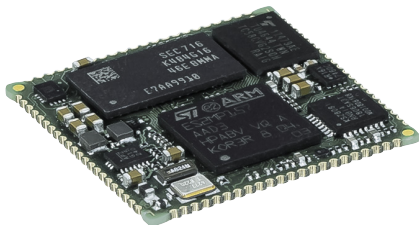
► TECHNICAL DATA

FUNCTION	STANDARD LAYOUT	OPTIONS
MICROPROCESSOR		
CPU	STM32MP157A, 2x Arm® Cortex®-A7 @650 MHz, 1x Arm® Cortex®-M4 @200 MHz, 3D GPU	
MEMORY		
DDR3-RAM	512 MB	256 MB
NAND-Flash	512 MB	256 MB
NOR-Flash	2 MB	
COMMUNICATION		
Ethernet	1x 10/100 Mbit/s, PHY included	
USB	1x 2.0 Host, 1x 2.0 OTG	
CAN	1x CAN 2.0	
I/O	3x UART, 2x I ² C, 19x GPIO, 2x PWM, 2x ADC	
SDIO	2x SDIO (4-bit)	
DISPLAY / TOUCH		
LCD interface	1x MIPI DSI, 1x RGB 24-bit up to 1366 x 768 @60 fps	
OTHER		
Power supply	3.3 V ± 5%	
Power consumption	max. < 1.25 W	
Temperature range	-40 °C ... +85 °C	
Operating system	Embedded Linux (Yocto Distribution)	
Form factor	25.5 x 25.5 mm	
Footprint	88 Pin CASTELLATIONS, 38 LGA Pads	
Internal RTC	on SoM with Quartz	
SAFETY		
	TrustZone, AES 256, SHA-256, MD5, HMAC, 3x Tamper Pins with 1 active, Secure RAMs, Secure Peripherals, Secure RTC, Analog true RNG, 98-bit unique ID	



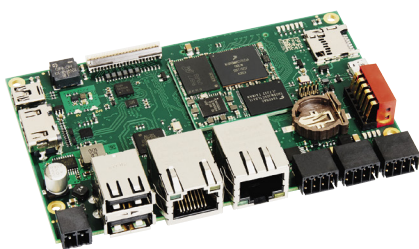
► PRODUCTS SOM-LINE

PRODUCT NAME	ARTICLE NO.	OPTIONS
SL STM32MP157 256 MB/256 MB	40099 168	–
SL STM32MP157 512 MB/512 MB	40099 167	–



► PRODUCTS BOARD-LINE

PRODUCT NAME	ARTICLE NO.	OPTIONS
BL STM32MP157 512 MB/512 MB	40099 176	–
AC Connector Set BL/AL/DL	30099 003	Order in addition to BL STM32MP157
USB-UART Adapter	40099 101	–



► DEVELOPMENT KIT

PRODUCT NAME	ARTICLE NO.	CONTENTS
DK STM32MP157 512 MB/512 MB	50099 045	BL STM32MP157, Power Supply, Cables, Debug Adapter
DK 5" STM32MP157 512 MB/512 MB	50099 044	BL STM32MP157, Touch Display, Power Supply, Cables, Debug Adapter



POSSIBILITIES START HERE



► 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 Kontron and the technology corporation S&T.

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