SL STM32 MP157 SoM-Line



We can't do Magic, but we'll bring everything under one Roof: graphics, communication and realtime control

- > STM32 MP157A, 2x Arm® Cortex®-A7 Core, 1x Arm® Cortex®-M4 in one housing
- **>** 3D GPU
- > Scalable memory expansion
- ▶ Pre-installed embedded Linux operating system incl. all drivers for communication and LCD/touch interfaces



FUNCTION		STANDARD	OPTIONS
MICROPROCESSOR	CPU	STM32 MP157A 2x Arm® Cortex®-A7 @650 MHz, 1x Arm® Cortex®-M4 @200 MHz, 3D GPU	
MEMORY	DDR3-RAM NAND-FLASH NOR-FLASH	512 MByte 512 MByte 2 MByte	256 MByte 256 MByte
COMMUNICATION	ETHERNET USB CAN I/O SDIO	1x 10/100 Mbit/s, 1x PHY included 1x 2.0 Host, 1x 2.0 OTG 1x CAN FD 3x UART, 2x I ² C, 19x GPIO, 2x PWM, 2x ADC 2x SDIO (4-bit)	
DISPLAY / TOUCH	LCD INTERFACE	1x MIPI DSI, 1x RGB 24 bit up to 1366 x 768 @60fps	
OTHER	POWER SUPPLY POWER CONSUMPTION TEMPERATURE RANGE OPERATING SYSTEM FORM FACTOR FOOTPRINT	3.3 V ± 5 % max. < 1.25 W, Linux running < 0.7 W -40 °C +85 °C Embedded Linux (Yocto Distribution) 25.5 x 25.5 mm 88 Pin CASTELLATIONS, 38 LGA Pads	
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	

Product Highlights

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 STM32 MP157A 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 STM32 MP157 is the excellent basis for a fast and reliable design and your project success.

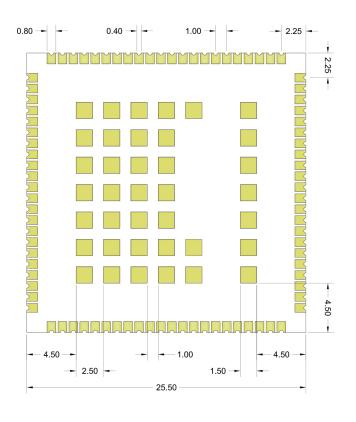
Client Benefits

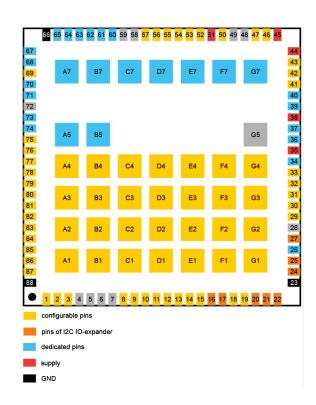
- **>** Communication and realtime in one intelligent package
- **)** Quick and easy realization of complex processor solutions
- No special layout know-how needed for DDR3-RAM connectivity
- ➤ Short time to market
- ightharpoonup Requires only one voltage supply (3.3 V)

Applications

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

Dimensions SL STM32 MP157





Products SoM-Line

PRODUCTNAME	ARTICLE NO.	OPTIONS
SL STM32 MP157 256 MB/256 MB	40099 168	-
SL STM32 MP157 512 MB/512 MB	40099 167	-



PRODUCTNAME	ARTICLE NO.	OPTIONS
BL STM32 MP157 512 MB/512 MB	40099 176	_
BE 311-132 1-11 137 312 1-18/ 312 1-18	10033 170	
AC Connector Set BL/AL/DL	30099 003	Order in addition to BL STM32 MP157
AC CONNECTOR SET BL/AL/DL	2009 600	Order in addition to BE 31M32 MF137
HED HARTAL .	4.0.000.101	
USB-UART Adapter	40099 101	-



Development Kit

PRODUCTNAME	ARTICLE NO.	OPTIONS
DK STM32 MP157 512 MB/512 MB	50099 045	BL STM32 MP157, Power Supply, Cables, Debug Adapter
DK 5" STM32 MP157 512 MB/512 MB	50099 044	BL STM32 MP157, Touch Display, Power Supply, Cables, Debug Adapter





About Kontron

Kontron AG is a leading IoT technology company. For more than 20 years, Kontron has been supporting companies from a wide range of industries to achieve their business goals with intelligent solutions. From automated industrial operations, smarter and safer transport to advanced communications, connectivity, medical, and energy solutions, the company delivers technologies that add value for its customers. With the acquisition of Katek SE in early 2024, Kontron significantly strengthens its portfolio with the new GreenTec division, focusing on solar energy and eMobility, and grows to around 8,000 employees in over 20 countries worldwide. Kontron is listed on the SDAX® and TecDAX® of the German Stock Exchange.

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

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