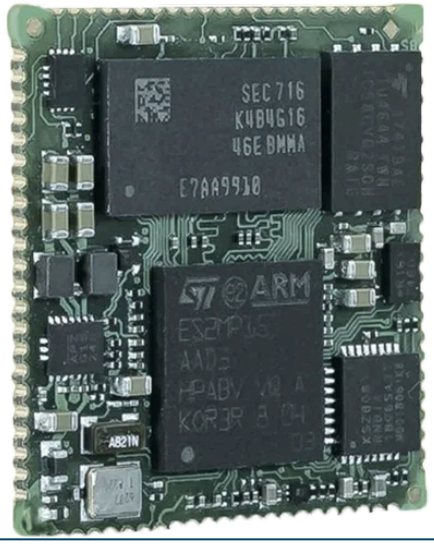
SOM-SL STM32MP157



- STM32MP157A, 2x Arm® Cortex®-A7, 1x Arm® Cortex®-M4
- DDR3-RAM 256/512 MByte, NAND-Flash 256/512 MByte
- Ethernet, USB, CAN, I/O, SDIO,i²C, LCD
- Powered by Embedded Linux Yocto Distribution

By the three cores of the 2x Arm® Cortex®-A7 and the 1x Arm® Cortex®-M4 processors' in one chip, the module – with dimensions of only 1 inch x 1 inch (25.4 x 25.4 mm) – achieves maximum performance in terms of visualization and computing power. In addition, it offers extensive interfaces that are predestined for applications in industry, automation, medical technology, POS/POI applications as well as IoT and Industry 4.0. Its compact design is ideally suited for a wide range of baseboard designs. Kontron has already provided a corresponding evaluation board in the 4.3-inch form factor as a reference design.

The STM32MP157A processor from STMicroelectronics offers sufficient computing and graphics power for demanding visualization and Internet communication applications as well as for control tasks within mechanical engineering and equipment technology. Based on a pre-installed embedded Linux operating system, the Arm® Cortex®-A7 Dual Core handles complex visualization tasks, including the display of web content. In this context, touch displays and wireless technologies are also supported, as they are mainly used in IoT solutions. The integrated Cortex-M4 offers proven microcontroller technology with a multitude of interfaces for industrial measuring and control technology.

The System-on-Module based on the STM32MP157A processor provides a powerful, compact and cost-effective basis for individual board designs. As it is a solderable module, the costs for connectors on the

SoM module and the baseboard below are omitted. The module's long-term availability is provided for a period of ten years.

The Kontron SoM with the STM32MP157A processor is equipped with 512 MB DDR3 RAM (optional 256 MB), 2 MB NOR-Flash and 512 MB NAND-Flash (optional 256 MB) as standard. It has one 10/100 Mbit/s Ethernet port, 2x USB 2.0 Host port, 1x USB OTG, one USB 2.0 OTG port, up to 3 UART ports and one CAN FD port. Numerous digital and analog I/Os as well as PWM and two Secure Digital Input Output (SDIO) interfaces make the SoM ideal for industrial use. A Display Serial Interface (DSI) port and an RGB interface are available for connecting displays.

Power is supplied via a 3.3 volt connection ±5%. The application range is from -40°C to +85°C.

For full product
info and datasheet
Click here

Kontron

Kontron 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.

kontron
The Power of IoT