

**MULTIPROCESSOR
SOM – New!**



SOM-STM32MP157



WE CAN'T DO MAGIC, BUT WE'LL BRING EVERYTHING UNDER ONE ROOF!

Graphics, communication and realtime control in one single chip.

The new 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 Cortex A7 Dual Core part handles all complex visualization tasks, including the display of web content. With the Cortex M4 processor, the STM32MP157 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 can do it for you: In any case, the SoM-STM32MP157 is the excellent basis for a fast and reliable design and your project success.

FEATURES

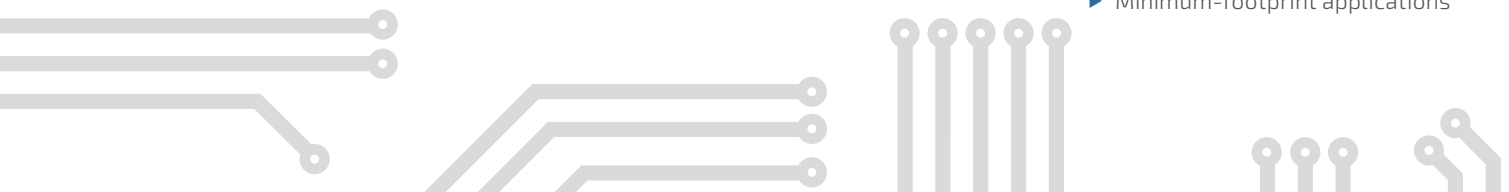
- ▶ Dual Cortex-A7 core and Cortex-M4 in one housing
- ▶ 3D GPU
- ▶ scalable memory expansion
- ▶ Pre-installed embedded Linux operating system incl. all drivers for communication and LCD/touch interfaces

CLIENT BENEFITS

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

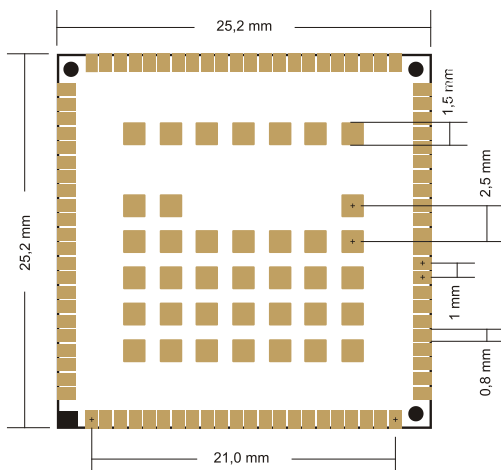
APPLICATIONS

- ▶ Industry
- ▶ Automation
- ▶ Medical technology
- ▶ Communications
- ▶ IoT/Industry 4.0
- ▶ M2M
- ▶ Single processor module for wide range of baseboard families
- ▶ Minimum-footprint applications

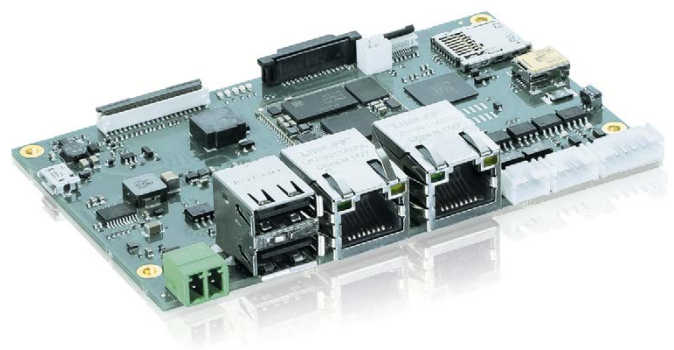


TECHNICAL DATA

FUNCTION	STANDARD	OPTIONS
MICROPROCESSOR		
CPU	STM32MP157 (2x Cortex-A7@ 650MHz, 1x Cortex-M4@200MHz, 3D GPU)	
MEMORY		
DDR3-RAM	256 MB	512 MB
NOR-Flash	2 MB	
NAND-Flash	256 MB	512 MB
COMMUNICATION		
Ethernet	1 x 10/100 Mbit	
USB	2x USB 2.0, 1x as OTG	
Serial	up to 8 x UART	
CAN	up to 2x CAN	
I/O	up to 6 x I2C, up to 6 x SPI, up to 98 x GPIO, up to 17 x analog IN, up to 4x PWM, 2 x DAC	
SDIO	3 x SDIO 4.0 8 bit	
DISPLAY / TOUCH		
LCD Interface	1x DSI, 1 x RGB	
OTHER		
Power supply	only 3,3V +/-5%	
Temperature range	0 .. +70°C	-40 .. +85°C
Operating system	Embedded Linux	
Footprint	88 Pin CASTELLATIONS, 38 LGA Pads	
RTC	onboard with quartz	



EVALUATION BOARD ALREADY AVAILABLE



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