

# Triple Processor power for your Project or Proof of Concept!

- > STM32 MP157A, 2x Arm® Cortex®-A7 Core and Arm® Cortex®-M4 combined together
- **>** 3D GPU
- **→** 4,3" form factor
- > Scalable memory expansion
- ▶ Pre-installed embedded Linux operating system incl. all drivers for communication and LCD/touch interfaces



FUNCTION		STANDARD	OPTIONS
MICROPROCESSOR	СРИ	STM32MP157A 2x Arm® Cortex®-A7 @650 MHz, 1x Arm® Cortex®-M4 @200 MHz, 3D GPU	
MEMORY SOM MODULE	DDR3-RAM NAND-FLASH NOR-FLASH	512 MByte 512 MByte 2 MByte	256 MByte 256 MByte
MEMORY SOM BASEBOARD	eMMC SD-CARD	4 GByte 1x micro-SD Slot	8 GByte / 64 GByte
COMMUNICATION	ETHERNET USB SERIAL CAN DIO AIO	2x 10/100 Mbit/s 2x 2.0 Host, 1x 2.0 OTG 1x RS232, 1x RS485 1x CAN FD 2x DIO (24 V/up to 800 mA) 2x AIN (024 V)	
DISPLAY / TOUCH	LCD INTERFACE TOUCH	1x RGB 24 bit, 1x LVDS, 1 HDMI up to 1024 x 600 @60fps 1x I <sup>2</sup> C, 1x USB	
OTHER	POWER SUPPLY POWER CONSUMPTION TEMPERATURE RANGE OPERATING SYSTEM FORM FACTOR RTC RTC BUFFERING DEBUG AUDIO SAFETY	24 V DC ±20 % Linux running < 2.5 W 0 °C +70 °C Embedded Linux (Yocto Distribution) 105.5 x 67 mm (4,3") 5 ppm accuracy CR1220 1x Console 1x Buzzer TrustZone, SHA-256, MD5, HMAC, 3x Tamper Pins with 1 active, Secure RAMs, Secure Peripherals, Secure RTC, Analog true RNG, 96-bit unique ID	

## **Product Highlights**

The System on Module (SoM) from Kontron Electronics is already placed on a handy Baseboard. It offers concentrated computing power for visualization, Internet communication and demanding control tasks in machine and device construction.

Three processor cores in one housing provide the right solution for every task. Based on the Linux operating system, the Arm® Cortex®-A7DualCoreparthandlesallcomplexvisualizationtasks, including the display of web content. Display interfaces such as RGB and DSI are already available. With the Arm® Cortex®-M4

processor, the STM32 MP157A features proven microcontroller technology with a variety of peripheral interfaces. This board thus offers an excellent solution for implementing very compact, cost effective high-performance touch HMIs or machine controls. Support of the common radio 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 baseboard BL STM32 MP157 is the excellent basis for a fast project start and for your project success.

#### **Client Benefits**

- **>** Communication and Realtime in one intelligent package
- **)** Quick and easy realization of complex processor solutions
- Low-cost solutions using simple baseboards
- ➤ Wide range of communication interfaces

#### **Applications**

- **▶** Control
- Communication
- Visualization
- ➤ HMI/MMI
- **▶** IoT/Industry 4.0

PRODUCTNAME	ARTICLE NO.	OPTIONS
BL STM32 MP157 512 MB/512 MB	40099 176	
AC CONNECTOR SET BL/AL/DL	30099 003	Order in addition to BL STM32 MP157
USB-UART ADAPTER	40099 101	-



# **Products Automation-Line**

PRODUCTNAME	ARTICLE NO.	OPTIONS
AL STM32 MP157 512 MB/512 MB	tbd	
AC CONNECTOR SET BL/AL/DL	30099 003	Order in addition to AL STM32 MP157
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 is a global leader in IoT/Embedded Computing Technology (ECT) and offers individual solutions in the areas of Internet of Things (IoT) and Industry 4.0 through a combined portfolio of hardware, software and services. With its standard and customized products based on highly reliable state-of-the-art technologies, Kontronprovides secure and innovative applications for a wide variety of industries. As a result, customers benefit from accerated time-to-market, lower total cost of ownership, extended product lifecycles and the best fully integrated applications.

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

### **Your Contact**

Kontron Electronics GmbH

Max-Planck-Straße 6 72636 Frickenhausen, Germany Tel.: +49 7022 4057-0 info@kontron-electronics.de

www.kontron-electronics.com

## Global Headquarters

Kontron Europe GmbH

Gutenbergstraße 2 85737 Ismaning, Germany Tel.: +49 821 4086-0 info@kontron.com

