A powerful triple core module with development board providing graphics and communications for real-time automation and control

A powerful and versatile System on Module (SoM) by Kontron Electronics, the SOM-BL STM32MP157 development board, is now available from Review Display Systems (RDS). It features three Arm processors for advanced computing power, with a wide selection of communication and display options

Westerham, Kent, UK. 27th January 2021. The SOM-BL STM32MP157 is ideal for developers and makers, who can use it immediately for a wide variety of projects, for proof of concept or prototyping. It has ample processing power for complex visualisation tasks, a variety of peripheral interfaces and all the drivers required for communication and LCD or touch interfaces. It also supports popular radio technologies for IoT applications.

The SoM features two Arm Cortex-A7 Dual Core processors, operating at 650MHz and a Cortex M4 at 200Mhz capable of handling complex visualisation operations, including the display of web content. This 3D GPU can be used with a variety of peripheral interfaces, including RGB and DSI (display serial interface), making the SoM ideal for implementing compact, cost-effective, yet high performance, touch HMIs (human machine interfaces) or machine controls.

The SOM-BL STM32MP157 is equipped with 256 or 512 Mbyte DDR3 RAM, 256 or 512-Mbyte NAND Flash and 2-Mbyte NOR Flash memory. In addition to a 4 Gbyte eMMC (128 Gbyte is optional), there is a micro-SD slot, 1 x RGB, 1 x LVDS and 1 x HDMI interfaces, and a USB and I²C port for touch displays.

The dual-core Arm Cortex-A7 runs the Linux operating system (OS).

The SoM supports 2 x 10/100-Mbit/s Ethernet, 2 x USB 2.0 and 1 x USB 2.0 OTG port as well as serial, CAN, 2 x DIO (digital I/O) and 2 x AIO (all in one) ports to meet all IoT communication requirements.

The SOM-BL STM32MP157 operates from a 24V DC (±20%) power supply and has an operating temperature range of 0°C-+70°C.

The impressive combination of processing capability, memory, communications, I/O and display options ensures ample processing power for complex visualisation tasks, as well as communication and control tasks. As a result, the SOM-BL STM32MP15 is a versatile SoM for multiple machine automation and industrial connectivity applications in the IoT and industrial IoT, or Industry 4.0.

The STM32MP157 SoM can be supplied as a standalone unit or with this development baseboard.