

DISPLAY CONTROLLER

Computer-on-module for home and industrial applications

F&S Elektronik Systeme (Germany) expanded its portfolio by the PicoCore RT1 compact-size controller (35 mm x 40 mm) with two CAN interfaces.



PicoCore RT1 computer-on-module weighs 10 g (Source: F&S)

display, a cable kit, as well as the access data to documentation and software. The board is planned to be available until at least 2030.

The computer-on-module integrates the 600MHz i.MX RT1050 ARM Cortex-M7 from NXP. For the internal working memory an SDRAM is available. For the program memory an SPI-connectable flash memory is offered. Additionally, an external SD-card slot is provided. The two 80-pin connectors enable using a variety of interfaces on the base-board. Beside two CAN ports, the possible interfaces include Ethernet, two USB, four I²C, two SPI, two UART, audio in/out, etc.

A 16-bit RGB (red-green-blue) interface is provided for control of TFTs (thin-film transistor) displays up to WXGA resolution. For the connection of a PCAP touch panel, one of the I²C interfaces can be used. RTC (real time clock) is integrated as well. Requiring a power supply of 5 V, the device typically consumes less than 1 W. The possible temperature range is 0 °C to +70 °C or -40 °C to +85 °C.

The Freertos operating system is already prepared for development by the customer's software team. The supplier also offers customer-specific boards based on the mentioned CPU and supports the customers while project development. The offered starter kit is shipped with the base-board, a 7-inch TFT

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