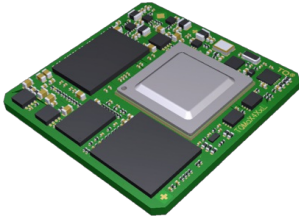


CAN Newsletter Online

EMBEDDED MODULES

CAN FD for industrial devices

TQ-Systems' TQMax4xxl module is designed for industrial sensors and actuators. Another TQMaRZG2x computer-on-module enables the realization of human machine interfaces (HMIs).



TQMax4xxl module implements the Sitara AM243x micro-controller and the AM64xx processor from TI (Source: TQ-Systems)

TQMax4xxl is an LGA (land grid array) module based on the Sitara AM243x micro-controller and the AM64xx processor (up to six cores) from Texas Instruments (TI). It can be used for servo motor controllers (for robots), industrial gateways, data collectors, and small edge servers in production, providing data for the cloud. The module sizing 38 mm x 38 mm provides two CAN FD interfaces, up to four real-time capable 1-Gbit/s Ethernet ports, one USB 2.0 or USB 3.0 channel as well as a PCIe interface for connecting mass storage devices. An SD card slot, memory expansion possibility, and optional security functions are available. Supported operating systems include Linux and Realtime OS (AM64xx) as well as Free RTOS (AM243x). The modules and a matching starter kit samples will be available from Q1/2022.

TQMaRZG2x COM (computer on module) is based on the 64-bit RZ/G2 multi-core processor (ARM Cortex A53/A57) from Renesas. It is dedicated for developments in robotics, optoelectronics, transportation, and medical technology, especially when it comes to realization of human-machine interfaces, stated the company. Memory expansion up to 8 GiB, data security options, two CAN FD interfaces, two USB 3.0, a 1-Gbit/s Ethernet, two Mipi-CSI for camera sensors, LVDS display output, HDMI, SD card, and more are available. A PCIe slot enables further extensions such as WLAN (wireless LAN) modules. The COMs with three CPU variants are already available.



TQMaRZG2x computer on module is based on the 64-bit RZ/G2 multi-core processor from Renesas (Source: TQ-Systems)

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