

Hardware supports CAN FD

SYS TEC Electronic (Germany) presented on the SPS 2019 tradeshow its CoC-100 CANopen module based on an ARM Cortex M4 processor.

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The tiny CANopen module is equipped with the S32K142 micro-controller by NXP and the TCAN337 transceiver by TI (Source: SYS TTEC)

Like its predecessor, the CANopen Chip F40, the CoC-100 is an operational plug-in module with pre-programmed CANopen firmware. The integrated standard DIP-40 connector forms the interface to the target hardware. With up to 7 I/O configurations, it provides a selection of usable digital inputs and outputs, analog inputs and PWM outputs. The CANopen NMT slave module complies with the CiA 401 CANopen device profile version 3.1.0 and the CiA 301 CANopen communication profile version 4.2.0. The provider has tested the module on conformance using the CiA Conformance Test Tool. LEDs show the device status according to CiA 303-3 version 1.4.

The Cortex M4 micro-controller features a CAN module, which supports Classical CAN as well as CAN FD according to ISO 11898-1:2015. The processor is equipped with additional CAN buffers and can be operated with 5 v or 3,3 V. A CANopen boot-loader is available on request. The CAN software supports the Layer Setting Services as specified in CiA 305.

The CANopen module is pin-compatible with the F40 module. It can be configured with any CANopen tool supporting the CiA 401 profile. The 12-bit A/D converter allows higher resolutions than the 10-bit converter of the F40 module. Additional application-specific functionality can be provided in request. The CANopen module was also exhibited on the CiA booth in hall 5.

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