

COOPERATION

CANopen stacks, drivers, and tools support micro-controllers

The CANopen-based stacks, drivers, and tools from Port (Germany) support the Cortex-M4 micro-controllers XMC4800 and XMC4700 from Infineon (Cypress).



CANopen is available for the entire XMC4000 family (Source: Port)

Both micro-controllers are intended for industrial applications and member of the XMC4000 family of micro-controllers based on the 32-bit ARM Cortex-M4 processor core. The XMC4800 provides an Ethercat node on an ARM Cortex-M4 micro-controller with on-chip flash and analog/mixed signal capabilities.

Port's Ansi-C CANopen Library CANopen stack (commander/responder, LSS, multiline) supports these MCUs (micro-control unit). This CANopen stack complies to CiA 301 version 4.2 and CiA 302. This hardware-independent software library is suitable for the CANopen higher-layer CAN protocol and supports development of devices.

The available drivers of the company simplify the integration of these stacks, Port explained. The drivers called CANopen Driver Package are the driver modules of the CANopen Library by port.

The drivers are the keys for the usage of the target system independent protocol library. They are designed for both target systems with and without operation systems.

The ICC tool (Industrial Communication Creator - former Design Tool) supports the developer with the design in, the company added. This tool is used for the development of CANopen applications. The object dictionary source code can be generated along with the device EDS file using prepared device profiles. Standard CiA 301 and CiA 302 network communication profiles are included. The tool also administers device databases. From those databases an object dictionary, an initialization function in C-code, the ESI / EDS file, an electronic data sheet, and the documentation are produced automatically. Furthermore, it enables the configuration of the CANopen Library and the CANopen Driver Packages. The following CiA profiles are available in Port products: CiA 301, CiA 302, CiA 304, CiA 401, CiA 404, CiA 405, CiA 406, CiA 410, CiA 417, CiA 418, CiA 419, CiA 443, CiA 447, CiA 452.

CANopen is available for the entire XMC4000 family. In connection with an ET1100 / 1200 (from Beckhoff) or a LAN9252 (from Microchip) the XMC4000 family (except XMC4800 / XMC4700 - these have the Ethercat controller on board) can be used with the Ethercat solution from Port, too.

[CW](#)