# SoM (System on Module)



















## Get more functionality at lower costs SoM

The SoM (System on Module) offers a lot of functionalities in combination with real time communication possibilities.

Various fieldbus protocols are available:

(Pre certified)

- PROFINET CC-B RT1 on board
- OPC-UA
- EtherNet/IP/DLR
- SPI driver available
- EtherCAT
- Extensive tool chain available
- CANopen (optional)
- Design Tool for PROFINET/EtherNetIP

The SoM modules from PORT, significantly reduce your development time and your investments in license fees.



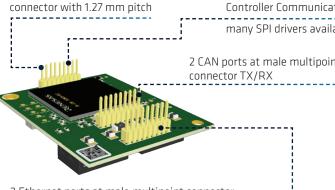
# **Test SoM from port with Evaluation Boards**

Power supply and reset control via male multipoint

4 wire Serial Peripheral Interface for Application Controller Communication (SPI)

many SPI drivers available

2 CAN ports at male multipoint



2 Ethernet ports at male multipoint connector for direct routing to individual industrial ethernet jacks

- RJ45
- **9** M8
- Mini ETH
- M12 V14 other no change of the housing necessary

ARDUINO/PMOD Board offers you the extensions of your development environment via standardized interfaces like ARDUINO and PMOD. Based on the GOAL technology (middleware) you get the possibility to test different communication ways.

The ARDUINO/PMOD Board shows the CtC (Core to Core) communication via SPI between the host CPU (for example STM32Fx or RENESAS Synergy S7) and the communication module.

Discover the Evaluation Board for ARDUINO/ PMOD, LINUX, STM32F, RENESAS Synergy and Raspberry.



## **ANSI-C Protocol Stack Libraries**

Universal ANSI-C conform and hardware independent software Protocol Stack Libraries for higher layer protocols. Support development of devices, conform to the standards.

The Protocol Stack Libraries provide all required services for compliant communication according to the Protocol communication profiles. They facilitate easy and fast development of master and slave devices.

Access to the hardware is carried out via a defined driver interface, which is available for many CPU- and communication controllers with and without operating system.

#### Application

The Protocol Stack Libraries are completely written in ANSI-C and can be compiled with every ANSI-C compliant compiler.

Depending on the required scope of functionality, they are available in different expansion stages.

All versions of the Protocol Stack Libraries are compatible to each other and are constantly tested with the current Conformance Tests for compliance with the respective standard.

The user application communicates with the Protocol Stack Libraries through function calls and call-back functions.





