

ANNIVERSARY

Protocol stacks available for 200 MCUs

25 years ago, Microcontrol (Germany) has been founded. In 1997, the company also joined CAN in Automation (CiA) as a member. In this article, Frank Wielpütz, CEO at Microcontrol, talked about history and future of the company's CAN-related developments.



Frank Wielpütz, CEO at Microcontrol (Source: Microcontrol)

The current situation comes with unpredictable lead times of electronic components. To overcome this problem, Microcontrol's CANopen and J1939 protocol stacks are compatible with more than 200 different micro-controller units (MCUs) and offer, according to the company, availability and redesign options to adjust systems to available MCUs.

"When we started Microcontrol 25 years ago, we developed the trendsetting idea of a software construction kit which has continuously been improved and updated ever since", explained CEO Frank Wielpütz the benefits for the customer. "The option to enhance existing systems to CANopen FD sets applications for the future and evokes growing customer response. The industrial sector benefits from the experience of the automotive industry which has been counting on the CAN bus as a reliable and efficient solution for years."

And with its CAN knowledge, the company supports newcomers to this technology by offering webinars, in-house workshops, and custom trainings. Frank Wielpütz: "Once the decision for CAN has been made, we continue to support our customers by monitoring and coaching their project. Based on our well-established set of protocol stacks, we also develop solutions tailored to our customers' needs and their specific micro-controllers."

CANopen commander, CANopen responder, bootloader, J1939 etc. can be built on the CANpie driver layer which the customer has to buy only once. "In a new project, you only need to buy a possible new component and you can start at once. In any case, the customer just buys the company license once - without any further run time fees. During the first 12 months, technical support is free of charge. Our commitment to support our customers in every aspect is what distinguishes us from others", continued Frank Wielpütz.

Designers in industries such as automotive, measurement, energy, and sensor technology use the company's protocol stacks. Features of the protocol stacks include, according to the company, for example low resource consumption (RAM/Flash), as well as different development environments (IDEs).

In the same way as interlocking bricks, functions can be combined as desired, the company gave a brief overview:

- The CANpie FD driver is an open interface which is currently available for more than 200 different micro-controllers.
- The CANopen/CANopen FD commander offers versatile configuration options for controlling CANopen networks.
- CANopen commander and CANopen FD commander are optionally available as "Safety" versions and EN 50325-S compliant.
- The CANopen/CANopen FD responder is optimized to low resource requirements in intelligent sensors and actuators.
- With the J1939/J1939 FD these standards can be integrated, e.g. in mobile systems.
- The CANopen/CANopen FD bootloader contains the complete functional range for the integration in existing devices.
- The CANpie FD server visualizes development environments - and is compatible with all PC operating systems.
- The Code Generator uses a graphic interface to facilitate selection and configuration of the desired protocol components.



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