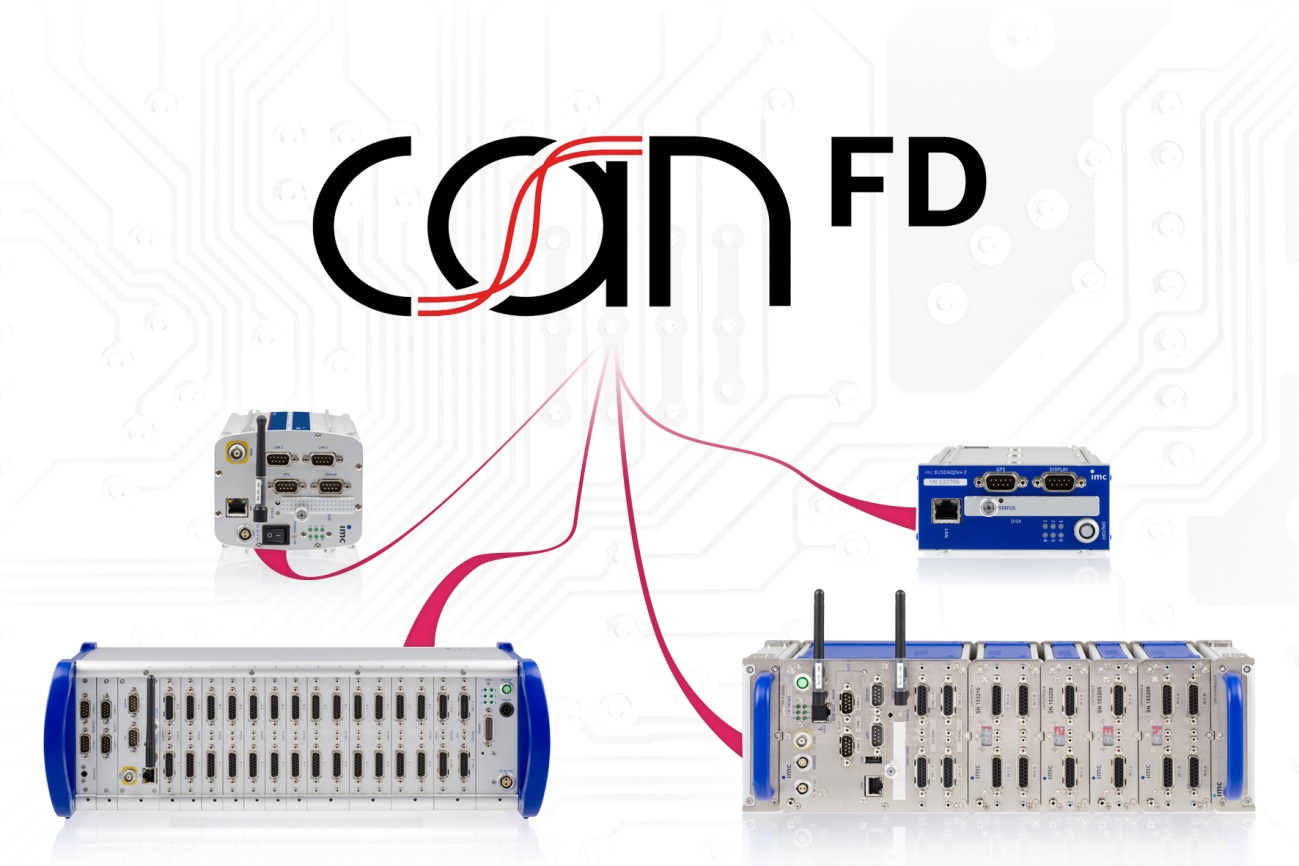
**Jump onto the bus of the future:**

**imc integrates CAN FD into measurement systems**

****In order to be ready for the future, imc Meßsysteme GmbH is expanding its portfolio of interfaces for field and vehicle buses with the new CAN FD bus. The imc CAN FD interface is now available for all imc measurement devices. It is equipped with two independent and isolated CAN nodes, which can be operated in CAN FD mode, as well as in the classic, standard CAN mode.

Typical application areas of the new imc CAN FD interface are found mainly in the automotive industry, which requires faster bus systems due to the increasing data volume. As an extension of the classic, standard CAN protocol, CAN FD offers faster data rates and higher bus capacities with largely the same functionality. Thus, CAN FD is a robust and cost-effective alternative to FlexRay.

Martin Riedel, Product Marketing Manager at imc Meßsysteme GmbH reports: “I think the use of CAN FD in future vehicles is very likely. On the one hand, bottlenecks in the bus load can be solved and, on the other hand, the total number of physical CAN bus networks required can be reduced. Classic CAN networks, however, will certainly continue in parallel for a long time, since a change always requires that all CAN bus participants support the extended protocol: otherwise, bus errors occur. For modern test equipment, this means that they must support both modes.”

With the possibility to switch the imc CAN FD interface via software between classic and fast CAN FD operation, imc customers are ideally equipped for the future without neglecting the present. Thus, the interface can continue to be used on all conventional standard CAN topologies and simultaneously benefit from the latest technology.

This is particularly noticeable in increased processor performance, which offers more reserves in the live decoding of CAN channels and also in standard CAN operation. If CAN traffic is not only to be written into a simple protocol channel (dump), but instead individual channels are to be decoded live, computing power is required. The channels, thus deliberately decoded, can reduce the amount of data to be stored to the actual required amount. In addition, they are scaled directly to real physical quantities and units. The channels can therefore be evaluated, processed and analyzed in real time, e.g., directly on an imc device with imc Online FAMOS or PC-based with imc Inline FAMOS.

In addition, the imc interface can also function as a gateway from CAN to CAN FD, since one CAN node can be connected to a classic CAN network, and a CAN FD network can be connected to the other. Both nodes can send and receive messages as well. In conjunction with the real-time platform imc Online FAMOS, this even allows for a rest bus simulation: the imc system can automatically react to incoming messages and simulate responses from non-existing bus participants by sending corresponding messages. An optional packet also supports higher protocols for communication such as CCP, XCP, KWP2000 or OBD-2.

**imc Meßsysteme GmbH, Berlin, Germany**

For over 25 years, imc Meßsysteme GmbH has been developing, manufacturing and selling hardware and software solutions worldwide in the field of physical measurement technology. Whether in a vehicle, on a test bench or monitoring plants and machinery – data acquisition with imc systems is considered productive, user-friendly and profitable. So whether needed in research, development, testing or commissioning, imc offers complete turnkey solutions, as well as standardized measurement devices and software products.

imc measurement systems work in mechanical and mechatronic applications offering up to 100 kHz sampling rate per channel with most popular sensors for measuring physical quantities, such as pressure, force, speed, vibration, noise, temperature, voltage or current. The spectrum of imc measurement products and services ranges from simple data recording via integrated real-time calculations, to the integration of models and complete automation of test benches.

Founded in 1988 and headquartered in Berlin, imc Meßsysteme GmbH employs around 160 employees who are continuously working hard to further develop the product portfolio. Internationally, imc products are distributed and sold through our 25 partner companies.