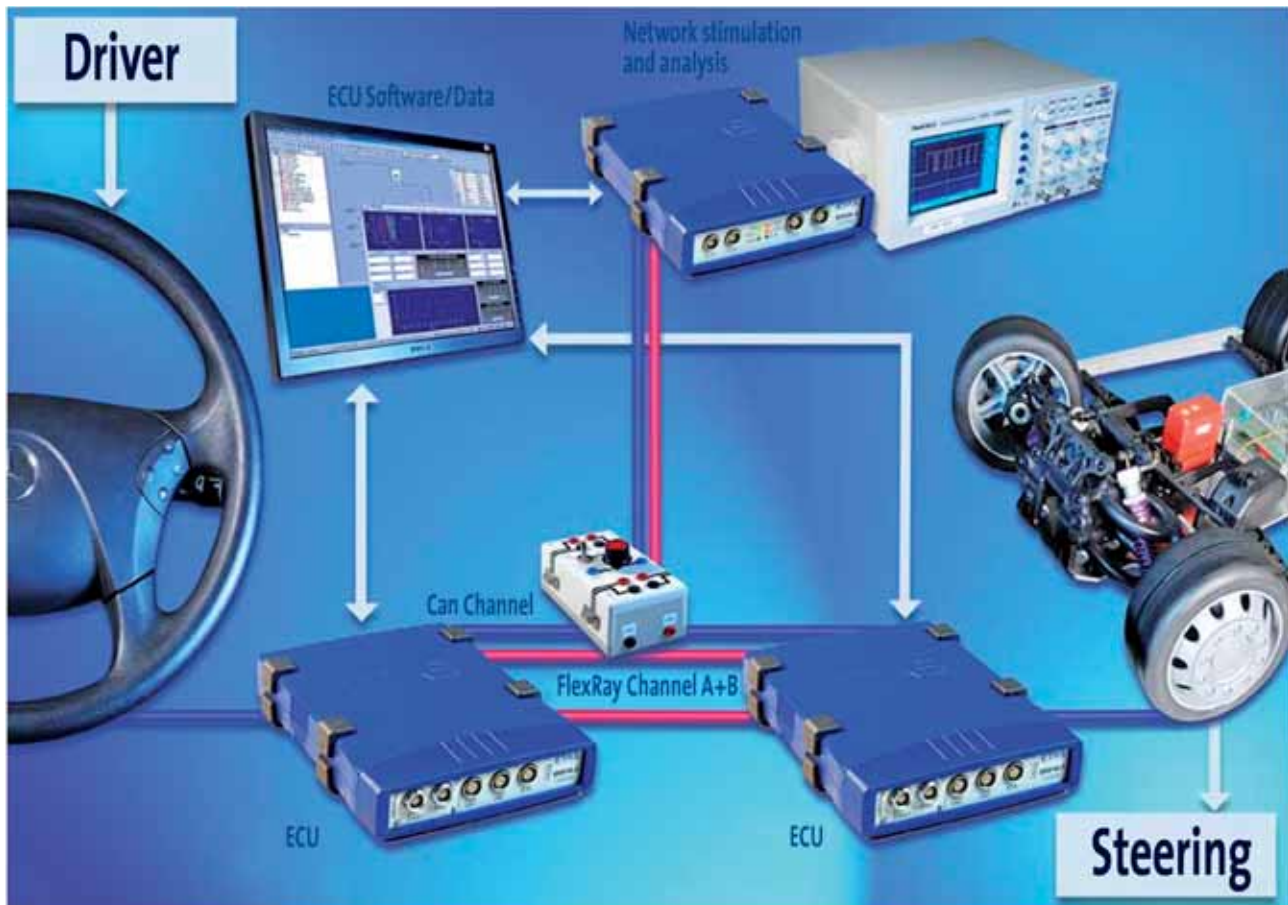


Serial data transfer and network analysis



FKFS test bench for developing By-Wire functions with network analysis and comparison

The secure data transfer is the foundation for all interconnected control circuits in the vehicle and directly impact their functional efficiency and control quality. After operating principle, data transfer rate, fault tolerance and price, the suitable protocol is selected for every subnet and, if necessary, modified or expanded. Due to its many activities, such as in the field of function development or testing, the FKFS features an extensive know-how in the area of serial data transfer.

Network technologies:

Particularly the following bus systems in the area of comfort and powertrain are managed across all layers of the ISO/OSI layer models, including many derivatives and protocols:

- CAN
- LIN
- FlexRay
- SENT
- TCP/IP
- UDP/IP
- RS232
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Examples of current activities:

- Rest bus simulations for open and closed-loop test systems
- Driving measuring systems for passenger and commercial vehicles
- Research on X-by-Wire systems
- Architecture examinations
- Student training in research at the IVK, our daughter institute of the Universität Stuttgart