

Serial bus system in motor vehicles

Duration:	1 Day
Target group:	Project executives, developers, users
Prerequisites:	none

1 Introduction to serial bus systems in motor vehicles (1,0 h)

Goal: Build up an understanding of serial bus systems respectively serial communications in motor vehicles; build up an understanding of the most important serial bus systems in motor vehicles

Contents: Electronics in motor vehicles, motivation for application serial bus systems, serial bus system basics, ISO/OSI model of data communication, serial bus systems and their application in motor vehicles

2 Introduction to CAN (Controller Area Network) (2,0 h)

Goal: Build up an understanding of CAN technology and CAN protocol basics

Contents: Fields of application, CAN characteristics, CAN specification, principle of communication, network structure, framing, media access control, data saving

3 Introduction to LIN (Local Interconnected Network) (1,0 h)

Goal: Build up an understanding of LIN technology and LIN protocol basics

Contents: Fields of application, LIN characteristics, LIN specification, principle of communication, network structure, framing, media access control, scheduling, data saving

4 Introduction to FlexRay (1,0 h)

Goal: Build up an understanding of FlexRay technology and FlexRay protocol basics.

Contents: Fields of application, FlexRay characteristics, principle of communication, network structure, framing, media access control, synchronization, data saving

5 Introduction to MOST (Media Oriented System Transport) (1,0 h)

Goal: Build up an understanding of MOST technology and MOST protocol basics

Contents: MOST characteristics, MOST specification, principle of communication, network structure, application framework

6 Abstract and comparisons (1,0 h)

Goal: Evaluation of the serial bus systems

Contents: Characteristics of the serial bus systems, Abstracts and comparisons

7 Questions, Feedback, Suggestions

Goal: Clarification of open issues and open discussion as feedback for Vector