

FlexRay Protocol Fundamentals

Agenda VectorAcademy

Delivery Format:	This course is offered in Classroom or in Remote Format
Duration:	Classroom: 1 days Remote: 6 hours
Target Group:	Flexray users and ECU developers
Prerequisites:	Basic understanding of serial data transmission
Goal:	Knowledge about physical characteristics of a FlexRay network and characteristics of the FlexRay protocol

1. Introduction to Flexray

- > Electronification of motor vehicles
- > Motivation for the development of FlexRay
- > FlexRay consortium and specification
- > Differences between CAN and FlexRay

2. Physical Topologies and Signal Transmission

- > Physical topologies
- > Signal transmission and voltage levels
- > Node architecture and termination

3. Synchronization

- > Synchronization mechanism
- > Wake-Up and startup
- > Time hierarchy
- > Re-Synchronization on bit level

4. Communication Structure and Bus Access

- > Communication cycle
- > Static and dynamic segment
- > Frame format
- > Bus access