MICROSAR Safe

Agenda VectorAcademy

Duration:	1 Day
Target Group:	Developers of ECUs with safety-related functions according to ISO 26262, Safety Managers
Prerequisites:	Participation in the AUTOSAR Fundamentals and AUTOSAR in Practice Trainings or good AUTOSAR knowledge, good knowledge of ISO 26262
Goal:	Fundamental knowledge of the technical concept of MICROSAR Safe, learning how to work with the MICROSAR Safe Solution

1 | Overview of the Concepts used in MICROSAR Safe

> Explanation of important topics and terms of ISO 26262, e.g. freedom from interference
> Mixed-ASIL-Systems

2 | Measures and Mechanisms for Functional Safety at Software Level

> Basic principles and technical concepts of MICROSAR Safe
> Description of the Freedom from Interference

3 | Memory Protection and Safe Context Switch (SafeOS)

> Software partitioning, application and configuration of the MPU
> Approach to application, configuration and integration

4 | Flow Control of Safety-related Software Components (SafeWDG)

> Control methods of Safe Watchdog
> Configuring and applying the Safe Watchdog Manager Module

5 | Safe Communication Between ECUs (SafeE2E)

> Error detection methods of the E2E Library
> Application of the Protection Wrapper

6 | MICROSAR Safe at Application Level (SafeRTE)

> Applying the RTE in ECUs with safety-related functions
> Applying the RTE and Protection Wrapper