

AUTOSAR in practice

Duration:	3 days
Target Group:	ECU developers of automobile suppliers and OEMs
Prerequisites:	Participation of the AUTOSAR workshop or good AUTOSAR knowledge

1 Overview and introduction (0,75 h)

Objective: Combinations of AUTOSAR, MICROSAR, DaVinci

Topics: Mapping between AUTOSAR methodology and the Vector tool chain

2 Operating system (1 h)

Objective: Basic understanding of the mediums and mechanisms of the AUTOSAR operating system

Topics: Tasks, alarms, events, AUTOSAR CC

3 Software components (2,25h)

Objective: Handling of DaVinci developer and RTE

Topics: Design of software components, ports, connections, task mapping and creation of the RTE, exercises

4 Input and output (3,5 h)

Objective: Data exchange with I/O modules

Topics: Configuration of the basic software for the I/O with the MICROSAR configuration suite, exercises

5 Communication (3 h)

Objective: Data exchange with CAN

Topics: Configuration of the basic software for the communication with the MICROSAR configuration suite, exercises

6 State management and system services (2 h)

Objective: Sleep and wake up of ECUs and bus

Topics: Configuration of the basic software-manager-components, exercises

7 Bus systems (1,5 h)

Objective: Understanding of the conceptual differences of the bus systems and the importance for the configuration of the basic software

Topics: CAN, LIN, FlexRay

8 Memory accesses (2,5 h)

Objective: Memory accesses with AUTOSAR

Topics: Configuration of the basic software for memory accesses, exercises

9 Diagnostics (2,5h)

Objective: Diagnostics with AUTOSAR

Topics: Configuration of the diagnostics basic software by the MICROSAR configuration suite, exercises

10 Highlights of the OEMs (2,5 h)

Objective: Information of AUTOSAR at the OEMs

Topics: Which function of the AUTOSAR standard is used at the corresponding OEM.