

# MICROSAR

## The Solution for AUTOSAR ECU Software

### What is MICROSAR?

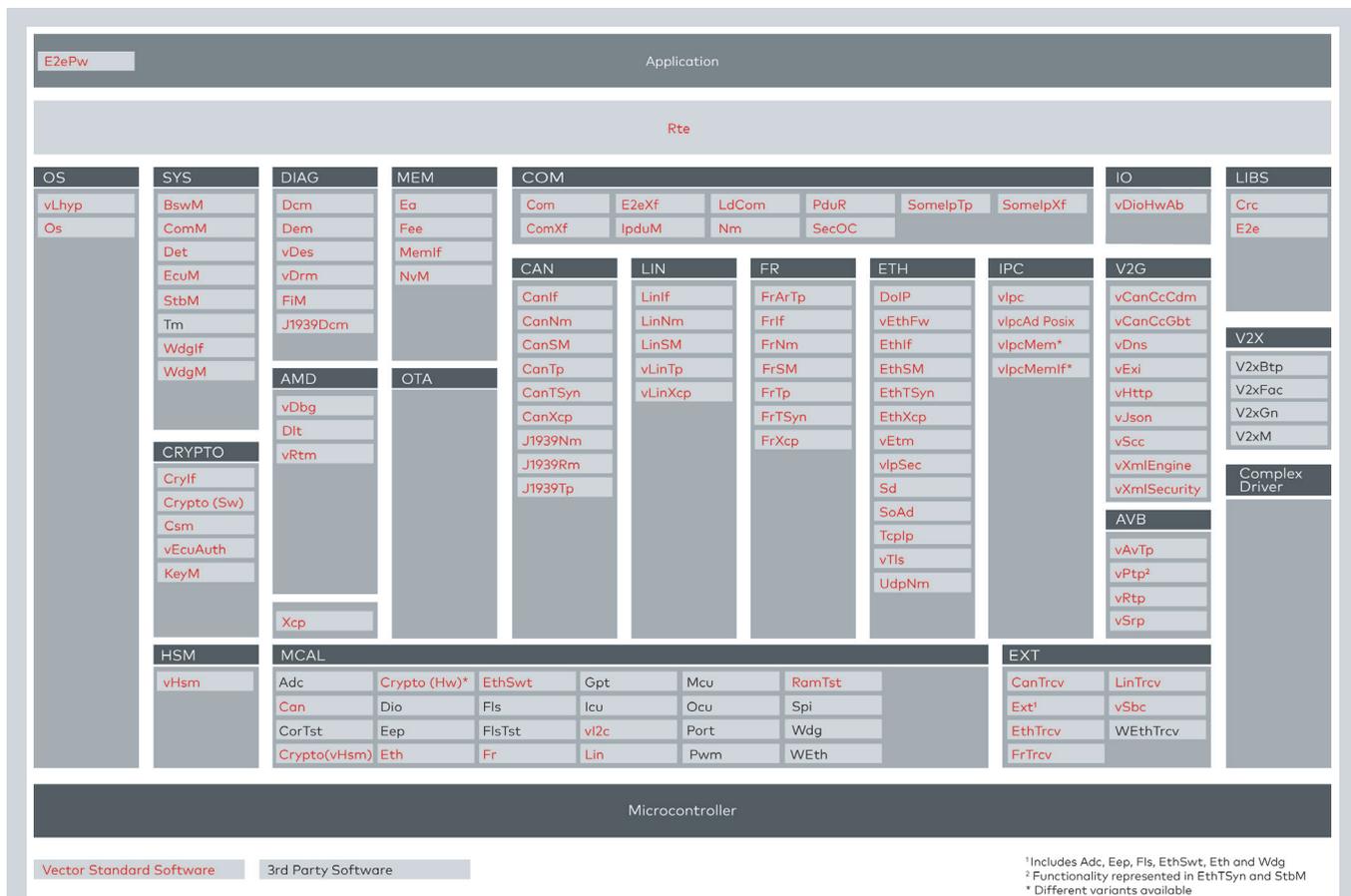
MICROSAR is the AUTOSAR solution for your ECU software. MICROSAR consists of the MICROSAR RTE (runtime environment) and MICROSAR basic software modules (BSW), which cover all aspects of the AUTOSAR standard and include many useful extensions.

Each AUTOSAR BSW module is assigned to a MICROSAR package. For detailed descriptions of individual packages and the MICROSAR RTE, please refer to the separate product information.

### Overview of Advantages

- > Implementation based on AUTOSAR 4.3
- > Simple and fast integration with the application by use of the Software Integration Package (SIP)

- > Quick and reliable support during start-up and in addressing open issues
- > Variety of services ranging up to complete development of the application
- > Together with MICROSAR Safe, also suitable for safety-related functions per ISO 26262
- > One solution for all automotive OEMs
- > Efficient memory utilization and short execution times
- > SPICE Level 3 certified development process
- > High implementation quality and quick availability based on substantial collaboration on many AUTOSAR concepts
- > Flexible license models
- > Seamless interaction with tools from Vector, e.g. CANoe, CANape, vVIRTUALtarget and third-party tools



The MICROSAR packages contain modules of the AUTOSAR standard (here: AUTOSAR 4.3).

### **Delivery of Turnkey Software**

For a quick start-up, you get a Software Integration Package (SIP) with a MICROSAR Stack specially released for your application. To accomplish this, we test your use case in relation to the selected BSW modules and OEM requirements on the hardware platform that you have specified.

Vector also offers a flexible lineup of services for your MICROSAR Stack. For instance, upon request we can integrate your MICROSAR Stack on your ECU in the context of an Extended Integration Package (EIP). Requirements of the specific vehicle OEM (databases, etc.) are considered here.

### **Easy Configuration**

- > Automatic parameterization and updating of the communication and diagnostic BSW based on commonly used data formats
- > Consistency checks right after user input assists you in configuring your basic software
- > Convenient editors bundle the information of multiple BSW modules and simplify configuration across modules
- > Support of distributed development projects by Diff and Merge functions

You will find more details on the DaVinci AUTOSAR tools from Vector in their respective Fact Sheets.

### **Special Functions**

- > Support of multicore processors
- > MICROSAR Identity Manager permits different ECU behavior depending on where the device is installed
- > Security to protect against manipulation or data theft
- > Support of J1939 and ISOBUS for commercial vehicles and agricultural machinery
- > Post-build loadable lets you update parameters in a device that has already been delivered
- > AUTOSAR monitoring for testing and analyzing of ECUs

**More information:** [www.vector.com/microsar](http://www.vector.com/microsar)