

MICROSAR COM

AUTOSAR Basic Software Modules for Communication

The MICROSAR COM package offers all of the signal-based services needed to connect bus-specific and PDU-based communication modules with the application. This is necessary to fully integrate the MICROSAR CAN, MICROSAR FlexRay and MICROSAR LIN communication stacks into your application.

Properties and Advantages

MICROSAR COM contains the AUTOSAR Basic Software Modules (BSW) COM, PDUR and NM. The IPDUM module is also available as an option.

All MICROSAR Basic Software Modules conform to AUTOSAR Release 3.0. When implementing them, special emphasis was placed on efficient memory utilization and a short run time. As a result, they are an ideal foundation for your AUTOSAR software. The configuration time of all MICROSAR Basic Software Modules is user selectable, because the Vector Basic Software Modules are pre-compile, link-time or post-build capable (in accordance with the AUTOSAR Configuration Conformance Classes CCC1 through CCC3).

You can combine the MICROSAR COM Basic Software Modules with other MICROSAR Basic Software Modules of the seamless Vector AUTOSAR solution. This will provide a reliable foundation for your ECU-specific software, which lets you focus on developing your application.

Application Areas

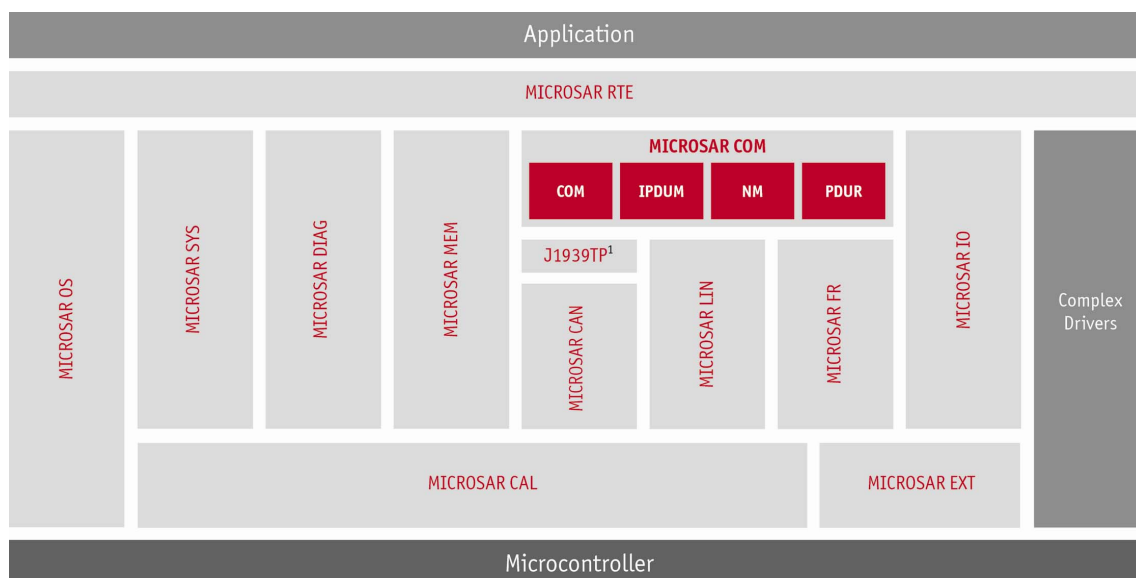
The MICROSAR COM bundle contains all of the Basic Software Modules your application needs to transmit signals. It takes the application-related signals and creates bus-independent IPDUs. Conforming to your system design, these IPDUs are transmitted by a communication stack on any desired data bus.

The use of MICROSAR COM lets you develop your application entirely independent of the bus system.

Functions

MICROSAR COM

- > COM - The "Communication" module is the signal-based interface for all communication stacks. It creates the necessary IPDUs, makes it possible to send signals by various send types and handles timeout monitoring for Rx signals.
- > PDUR - The "Protocol Data Unit Router" distributes the communication packets (PDUs) to the different communication channels.
- > IPDUM - The "I-PDU Multiplexer" handles multiple utilizations of fixed I-PDUs with different data contents.
- > NM - The "Generic Network Management Interface" bundles all bus-independent Network Management activities of the various communication channels.



**MICROSAR COM
modules**

¹ Available extensions for AUTOSAR 3.0

Training Courses
 We offer various training courses and workshops for AUTOSAR in our classrooms or at your business site.
 For further information on individual training events and dates on the Internet go to: www.vector-academy.com.

Contact and Availability
 Our Basic Software Modules for automotive ECUs are available for a wide variety of currently used microcontrollers. You can obtain additional information at www.micosar.com or by inquiry
 E-mail: embedded@vector-informatik.com
 Telephone: +49 711 80670 400

Configuration

It is easy and convenient to consistently configure the MICROSAR COM modules with the familiar GENy configuration tool (included in the DaVinci Configurator Pro delivery) and the AUTOSAR ECU Configuration Description (based on the AUTOSAR system description) or a network description file (DBC, LDF or FIBEX). DaVinci Network Designer from Vector supports you in creating the network description file.

Built-in consistency checks detect errors in the configuration of modules right in the configuration phase. Invalid configurations are already identified in early phases and may be automatically corrected. This gives you a quick way to create a runnable system.

Scope of Delivery

- > DaVinci Configurator Base as Generic ECU Configuration Editor (GCE) as well as a command line based generator
- > Libraries, C header files and optionally with source code
- > BSW Module Description, makefiles and sample programs
- > Documentation/operating instructions/Readme file

Maintenance

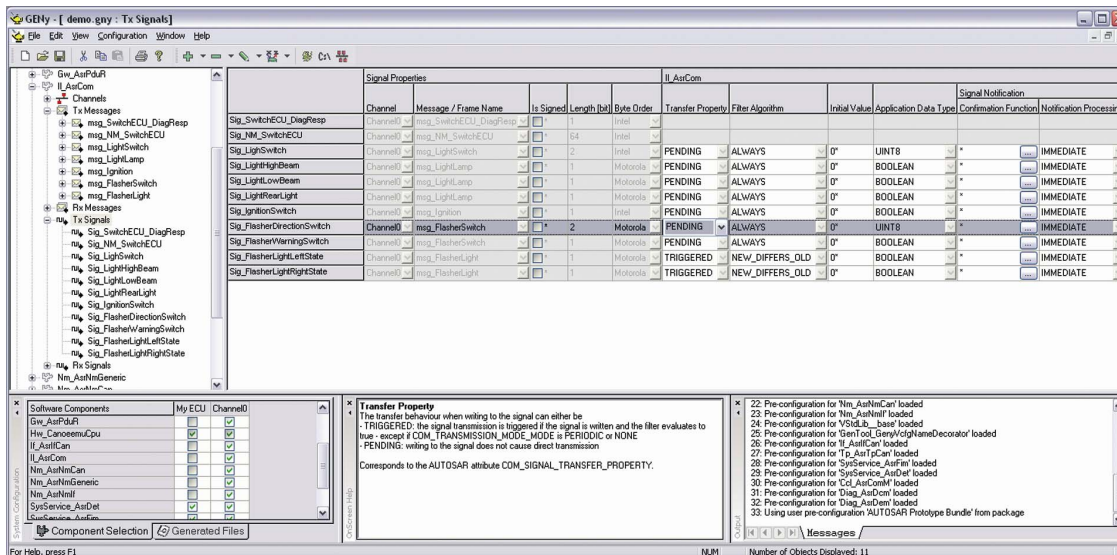
We offer supplemental maintenance contracts for all MICROSAR products. They include adapting the software to updated specifications, which guarantees long-term protection of your investments.

License

Vector offers flexible licensing customized to your individual requirements.

Optional Services

- > Consultation in system design and integration
- > Integrating the Basic Software into existing ECUs
- > Extending standard modules according to your needs
- > Developing customer-specific AUTOSAR Software Components (SWC)
- > Hotline, special workshops and training courses on the topic of embedded software and AUTOSAR



Configuring the COM module with GENy