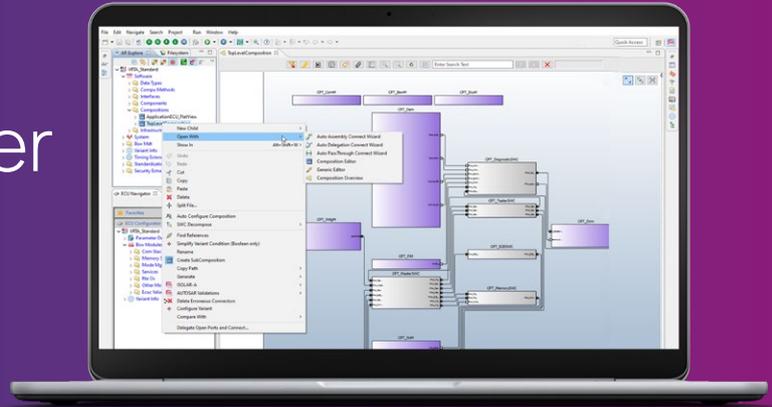


# AUTOSAR Classic based microcontroller platform solution RTA-CAR



## Integrated environment to configure the AUTOSAR Classic stack for ECUs

In today's rapidly evolving automotive landscape, manufacturers face immense challenges, including the need for real-time performance, stringent safety compliance, and the ability to adapt quickly to technological advancements. As vehicles become increasingly complex, addressing these challenges is crucial for maintaining a competitive edge and ensuring a seamless user experience.

### Areas of application

- Working on projects that require adherence to AUTOSAR standards for interoperability among different suppliers
- Developing easily adaptable software to operate across a range of hardware platforms from small sensors to huge multi-core computers
- Projects requiring adherence to automotive safety (ASIL) and security standards
- Projects requiring a modular approach to meet specific customer requirements or proprietary functionalities
- Working on resource-constrained environments and legacy systems where memory and processing power are limited

### Features

- Compatible with AUTOSAR standards for flexible software architecture
- Supports a wide range of hardware platforms, accommodating various project sizes
- Meets automotive safety standards (ISO 26262) for robust applications
- Facilitates easy integration and customization for specific project needs
- Broadest support of microcontrollers in the industry covering Infineon, NXP, Texas Instruments, CALTERAH, Renesas, ST, Horizon, Xilinx and many more

### Benefits

- **Cost reduction** through utilized standardization to accelerate development and ensure seamless integration
- **Superior performance and efficiency** thanks to the fastest and smallest OS available, cutting resource consumption by up to 50% for smoother operations and reduced hardware needs
- **High safety and security** by compliance with industry standards like ISO26262 and ISO/SAE21434, along with MISRA-C & CERT-C guidelines
- **Superior Support** due to prompt assistance from our global network of regional hubs
- **High flexibility** due to the open and adaptable approach giving freedom to integrate functions and expand the vehicle platform

# RTA-CAR: Your AUTOSAR Classic platform solution at a glance

## RTA-CAR includes numerous modules and tools for the development of ECU software

- **ISOLAR-A – AUTOSAR architecture configuration:** ISOLAR-A is a tool for designing AUTOSAR Classic architectures, systems, and application software
- **ISOLAR-B – Basic software configuration:** ISOLAR-B is a tool for configuring AUTOSAR basic software and orchestrating the RTA code generator suite
- **RTA-BSW – AUTOSAR basic software:** RTA-BSW is a suite of modular code generators that produce AUTOSAR classic runtime software from your ARXML configuration
- **RTA-OS – Real-time operating system:** RTA-OS is the world's smallest and fastest AUTOSAR OS
- **RTA-RTE – AUTOSAR runtime environment generator:** RTA-RTE generates ECU communication infrastructure and real-time scheduling for all application software components and their interfaces between application software and basic software modules.
- **RTA-CAR FSQP – Functional safety qualification pack:** RTA-CAR FSQP provides documentary support to help you argue functional safety when integrating RTA-CAR into your ECU

## ETAS RTA-CAR provides a complete AUTOSAR Classic Platform Solution and a proven service environment

### AUTOSAR Classic Platform RTA-CAR

#### Complete solution ready-to-go

- Comprehensive AUTOSAR solution
- One development framework for multiple OEM platforms
- Wide range of hardware support across many components like OS, HSM, MCAL, transceivers and switches
- World's smallest and fastest AUTOSAR OS
- OEM extensions and flash bootloaders
- Enhanced solutions by non-AUTOSAR extensions
- Functional safety and ISO26262 certified up to ASIL-D

#### Market leading state of the art security

- Cutting edge AUTOSAR security stack combined with ESCRYPT CycurHSM, CycurHsmSoC

#### Proven and reliable

- More than 4 billion ECUs on the road with zero defects
- Qualified by several OEMs
- Proven at over 350 of customers

### AUTOSAR Consulting and Support

#### Global support from local teams

- AUTOSAR technical expert teams in major automotive development locations around the world
- Industry leading support ticket resolution times

#### From zero to hero

- Training, starter kits, coaching and collaboration programs to empower the users to deliver
- Safety consulting for safety management, safety analysis, confirmation reviews, tool qualification and AUTOSAR configuration support

#### Innovation beyond today's AUTOSAR

- Turnkey solutions beyond AUTOSAR including flash bootloaders, embedded hypervisors, Tier1 and OEM AUTOSAR extensions
- Actively driving the AUTOSAR standard

We support you in the various steps of integration and show you how easy it is to use RTA-CAR in your respective projects to create your functional ECU software.