EB tresos & ECU solutions

Concepts, products, services, and tooling for real-time computing (RTC) systems
EB tresos

Everything you need to bring Classic AUTOSAR on the road

Develop your electronic control unit (ECU) with our scalable basic software, operating systems, and tailor-made tool environment based on Classic AUTOSAR

Benefits:

- Reliability based on 35+ years of expertise in automotive basic software and tools development
- Fast and secure support for broad areas of application and a reuse option
- Reduces complexity by having a one-tool environment for configuration, validation, and code generation
- Safe and reliable mass-production-ready software, e.g. 100% code coverage
- Dependable partner for developing, configuring, testing, and maintaining ECU software throughout the product life cycle.

Features:

- Industry-leading implementation of AUTOSAR-compliant basic software for automotive ECUs
- Functional safety up to ASIL D
- Fulfills OEM-specific requirements by customizing AUTOSAR software applicable to your ECU.

Download the evaluation edition
Manage the complexity of real-time computing (RTC) systems

**Cross-OEM products**
- **Efficient and scalable tool and target software products for ECU projects**
  - **EB tresos Studio**
    - One configurator for every target software while supporting the latest AUTOSAR data model.
  - **EB tresos AutoCore Generic**
    - Hardware-independent basic software based on AUTOSAR R20-11 including Ethernet security, TLS, V2G, J1939, UDS, OBD, distributed BSW, and SomelP.
  - **EB tresos Safety components**
    - E2E, TimeE, run-time environment, OS, freedom from interference, and ASIL D & SIL 3 certification.
  - **EB tresos AutoCore OS & EB tresos Embedded Hypervisor**
    - Single-/multi-core OS and a safe virtualization solution to separately deploy OBD and non-OBD applications on the same ECU.
  - **EB tresos Security components**
    - Embedded crypto routines and hardware crypto support.
  - **EB tresos OsekCore**
    - OSEK-/VDX compliant stack
  - **EB zentur**
    - HSM firmware and Crypto Driver for hardware and secure hardware extension.
  - **EB zoneo**
    - Intelligent automotive-grade switch firmware.

**OEM-specific products**
- **Target software for implementing car manufacturers’ software requirements beyond the AUTOSAR standard**
  - **EB tresos AutoCore OEM Extensions**
    - OEM-specific bootloader and FOTA Handler allow ECU reprogramming and firmware for over-the-air update functionality. Blueprint for bootloader, FOTA, and application as an example for project setup.

**Microcontroller-specific services**
- **Modular integration and test strategy to reach quality goals**
  - **EB tresos Board Support Package**
    - Porting of hardware-dependent Elektrobit products and integration of third-party modules (e.g. MCAL modules) into the EB tresos framework.
  - **EB tresos SOP Qualification**
    - Execution of both Elektrobit module and integration tests on a dedicated microcontroller (incl. MCAL modules).

**Project-specific services**
- **Solutions and services for Tier 1 suppliers to set up and run ECU projects for all leading car manufacturers**
  - **EB tresos Startup Package Application for OEM**
    - Project integration package, which assures integration and pre-configuration considering project-specific input.
  - **Engineering services**
    - Development of Classic AUTOSAR SW-C application software, integration, validation & verification through a global team of Engineers ready to manage agile projects related to EB tresos, Classic AUTOSAR, and/or integration of third-party/OEM software components using a CI/CT framework.
  - **Customer services**
    - Requirement engineering, development of AUTOSAR architectural concept, development and integration of additional components, transfer legacy code, configuration of AUTOSAR modules to ECU-specific requirements, integrate & update ECU-specific functions (application), and design & develop tests.

**Training, consulting & support**
- **Experts you can trust when developing next-generation software**
  - Variety of product and technology training sessions, lean and agile development consulting, on-demand hands-on workshops, and generic support for all products.

**Contact us:**
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