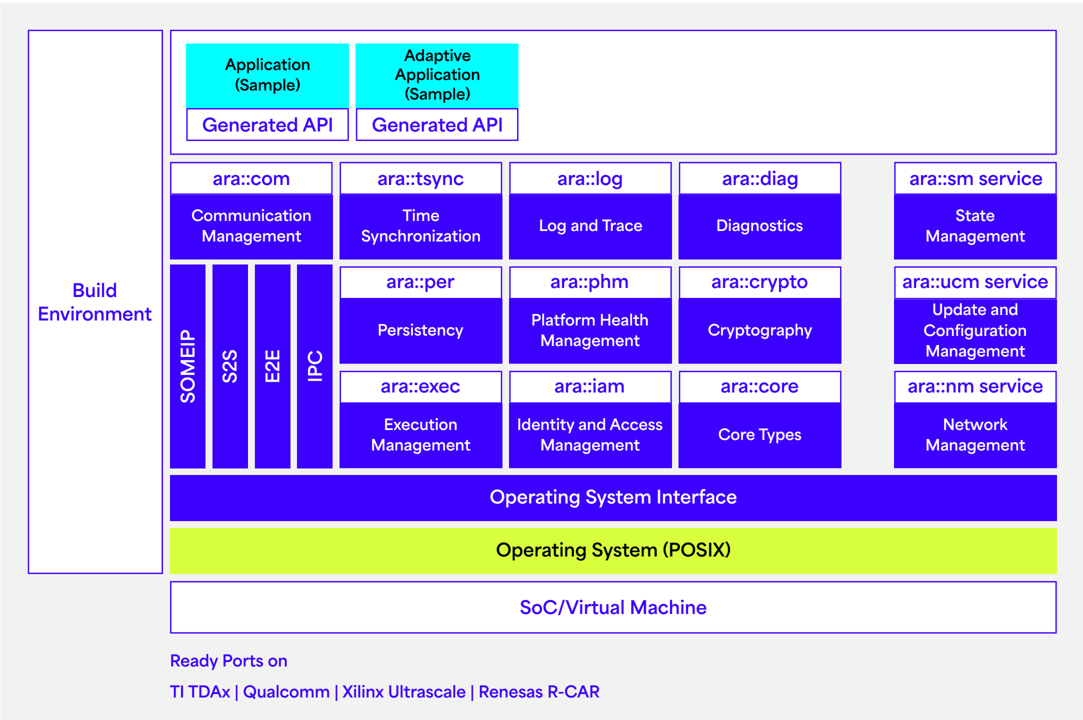
Building World-Class Automotive Middleware Stacks

Qorix Adaptive

Qorix Adaptive builds upon the foundation of Qorix Classic, specifically designed for modern, complex automotive applications that require flexible and dynamic software architectures. Qorix Adaptive is tailored for applications with less stringent real-time requirements, but demanding high computational power, flexibility, and connectivity. It is ideal for autonomous driving systems, V2X (Vehicle-to-Everything) communication, and advanced infotainment systems.

Qorix Adaptive Architecture



Key Highlights

- Communication Over IPC and SOMEIP
- Optimized Boot Timings
- Diagnostics Events Reporting and Communication
- AUTOSAR Compliant UCM Master and Subordinate
- Tooling Support for Vehicle Software Package Generation
- Tooling Support for Adaptive AUTOSAR Methodology and Integration With 3rd Party Tools
- Support for Built In Safety Mechanisms
- SDKs Available for Virtual Platforms to Support Parallel Developments
- Safety-Certified

Qorix Adaptive Features

Safety

Customization and Scalability

AUTOSAR Adaptive Support

Interoperability

Tool Integration and Extensibility

Modeling and Code Generation

3rd Party Inputs
OS SDK - HW BSP's - Compiler - Debugger

TÜV-certified for **ISO 26262 (ASIL B)**, Qorix Adaptive is one of the industry's few safety-validated Adaptive stacks - engineered for complexity, built for trust.

Adaptive AUTOSAR Programs With Qorix Adaptive

Client	Problem Statement	Solutions with Qorix Adaptive
Asian OEM + Asian Tier 1	▪ Adaptive AUTOSAR for Inter ECU and Intra ECU Communication ▪ FOTA Using Adaptive Diagnostics Communication ▪ Support for Safety and Security ▪ Time Deterministic Communication	▪ SOMEIP and IPC Communication With Support for Dynamic Service Discovery ▪ Adaptive Diagnostics for Software Download and Secured Diagnostics ▪ E2E and PHM Support ▪ Support for Deterministic Client
Asian OEM	▪ Adaptive AUTOSAR for Inter ECU and Intra ECU Communication ▪ SOTA Using Adaptive UCM ▪ Support for Safety and Security	▪ SOMEIP and IPC Communication With Support for Dynamic Service Discovery ▪ UCM for Update of Application Software and Configurations ▪ E2E and PHM Support ▪ Crypto and Secured Diagnostics

Qorix is a technology company that provides innovative, robust middleware solutions for all areas of the vehicle, especially in the context of the shift towards software-defined vehicles (SDVs). We help automotive manufacturers and suppliers manage increasing software complexity while maintaining control over architecture. Our middleware enables a secure, scalable, and powerful software ecosystem for next-generation vehicles. Our product portfolio includes AUTOSAR Classic and Adaptive platforms, as well as our proprietary performance stack, which was developed specifically for high-performance computers and real-time integration. With a global team of around 300 experts, Qorix delivers software products for leading original equipment manufacturer (OEM) and tier one (Tier 1) programs. As a joint venture between KPIT Technologies, Qualcomm Ventures, and ZF, Qorix combines in-depth software expertise with automotive system knowledge. Qorix is a member of the VDA, AUTOSAR, and the Eclipse Foundation and actively participates in shaping modern software standards for tomorrow's mobility.

Learn more at **www.qorix.ai**

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