

Press information

November 17, 2025

Qorix is driving forward Eclipse S-CORE, an open software base for software-defined vehicles

- Eclipse S-CORE 0.5-alpha establishes a common, open software foundation for functionally safe middleware in the automotive industry.
- The goal is to create a standardized, production-ready platform that reduces development costs and accelerates the transition to softwaredefined vehicles.
- As the main development partner, Qorix plays a pivotal role in S-CORE, providing a commercial, ready-to-use middleware solution called Qorix Performance, based on S-CORE.

Munich (Germany) – The release of version 0.5-alpha of the open-source S-CORE (Safe Open Vehicle Core) project within the Eclipse Software Defined Vehicle Working Group is a decisive step for the automotive industry towards establishing common software standards for safety-critical vehicle architectures. As a key technology partner, Qorix helped shape the release and establish an initial production-ready implementation.

What S-CORE aims to achieve

S-CORE aims to create an open, standardized software base for software-defined vehicles (SDVs). This common platform lies between the operating system and applications on modern high-performance computers (HPCs). It ensures that safety-critical functions, such as those related to driver assistance, the powertrain, and the chassis, can be executed in a deterministic, interoperable, and platform-independent manner.

S-CORE represents a new collaborative approach. Rather than developing their own software base alone, companies now collaborate. Instead, a common, open core platform is created, which reduces development costs, increases quality, and accelerates innovation.

Qorix as a technical pioneer and industry partner

As one of the founding members of the Eclipse S-CORE project, Qorix plays a pivotal role in shaping the project's architecture and implementation. This includes the orchestration and storage modules, which are essential for achieving deterministic runtime control and functional safety. Qorix focuses on the middleware level of the software base — the layer that enables communication, data management, and real-time processing.

As the primary developer of the orchestration module, Qorix has contributed a core component to the S-CORE stack. The orchestrator enables the deterministic, scalable, and maintainable execution of mixed-criticality applications. This forms the basis for safe and efficient software architectures. It offers a declarative model that can be used to systematically map cause-and-effect chains, time conditions, and error management logic without developers having to manually control sequence planning or resource utilization. This architectural principle is a decisive factor in the fast, flexible usability of S-CORE on real vehicle platforms.

With Qorix Performance Distribution based on S-CORE, Qorix provides original equipment manufacturers (OEMs) and tier-1 suppliers with a ready-to-use middleware product that can be integrated directly into existing development environments. This distribution combines the openness of the S-CORE stack with stabilized components, professional support, tooling, and long-term release maintenance, supplemented by services such as cybersecurity, functional safety documentation, and system integration. This makes open-source technology usable in the automotive sector. Together with the Qorix Performance Stack, S-CORE becomes executable, production-ready middleware that offers clear advantages to automotive manufacturers and suppliers.

###

Press contact:

Valérie Hasler, Corporate Communications, Qorix GmbH <u>valerie.hasler.ext@qorix.ai</u>

About QORIX

Qorix is a technology company that develops innovative, robust middleware solutions for software-defined vehicles (SDVs). We help automotive manufacturers and suppliers manage increasing software complexity while maintaining control over their architecture. Our middleware creates a secure, scalable, and powerful software ecosystem for next-generation vehicles, providing support from platform integration to the long term.

Our portfolio includes AUTOSAR Classic and Adaptive platforms, both of which are TÜV-certified, as well as our proprietary performance stack 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.

Qorix GmbH ► Frankfurter Ring 105b ► 80807 München

As a joint venture between KPIT Technologies, Qualcomm Ventures, and ZF, Qorix combines deep software expertise with comprehensive automotive knowledge. We are members of the VDA, AUTOSAR, and the Eclipse Foundation and actively shape tomorrow's mobility standards.

Learn more at www.qorix.ai

About the Eclipse S-CORE project

S-CORE (Safe Open Vehicle Core) is an open-source project within the Software Defined Vehicle (SDV) Working Group of the Eclipse Foundation. Its goal is to develop common middleware for SDVs. This will form the non-differentiating core of a modern vehicle software stack, enabling the modular, interoperable and scalable development of safety-related components. Leading companies in the automotive and software industries founded the project, including Accenture GmbH, BMW Group, ETAS GmbH, Mercedes-Benz Tech Innovation GmbH, and Qorix GmbH. The open-source approach promotes reuse, standardisation, and faster development. It creates the basis for sustainable, shared software that is open, secure and future-proof.

Learn more at https://eclipse.dev/score/index.html