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Press Release

AUMOVIO enables end-to-end service-oriented communication across vehicle architectures

- **Automotive remote control network (automotive RCNet) extends service-oriented communication from central computers to sensors and actuators**
- **Open networking concept supports software-defined vehicle architectures and different OEM migration paths**
- **Standardized interfaces increase software reusability and reduce integration complexity**
- **Flexible deployment of functions across high-performance computers, zone control units and I/O boxes**
- **Global industry collaboration advances open standards for software-defined vehicle architectures**

Frankfurt am Main, November 19, 2026. The technology and electronics company AUMOVIO has introduced automotive remote control network (automotive RCNet), an open networking concept designed for software-defined vehicles (SDVs). The technology enables end-to-end service-oriented communication across different vehicle architectures, connecting central computing platforms, zone control units, I/O boxes, sensors and actuators within a common networking concept. By providing a common service-oriented communication framework across different network technologies and architecture levels, automotive RCNet has been developed to help vehicle manufacturers reduce integration effort, increase software reusability and manage complexity across vehicle platforms and generations.

"OEMs are pursuing different paths towards SDVs. Automotive RCNet has been designed to support this diversity while reducing integration complexity and increasing software reusability across vehicle platforms," says Jean-François Tarabbia, Member of the Executive Board and Head of the Architecture and Network Solutions business area at AUMOVIO. "It establishes a common language for communication throughout the vehicle, enabling software functions to be deployed more flexibly across different network technologies and architecture levels while providing a scalable foundation for future vehicle platforms."

Extending service-oriented communication throughout the vehicle

Automotive RCNet is based on a service-oriented, bus-agnostic networking concept supporting Ethernet, CAN and LIN. While service-oriented communication has become increasingly important in modern vehicle computers and zonal architectures, communication closer to sensors and actuators often remains signal-based.

Automotive RCNet extends this approach across all architecture levels, creating a consistent communication framework from central computing platforms to sensors and actuators. This enables software functions to be developed independently of their deployment location, providing greater flexibility across different vehicle platforms.

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Flexible function deployment for software-defined vehicles

The concept allows software functions to be deployed flexibly on high-performance computers, zone control units or I/O boxes according to performance, cost and system requirements. Automotive RCNet combines networking technology, hardware platforms and software concepts within a single ecosystem and supports different centralization strategies.

Standardized interfaces help decouple software from hardware, increasing software reusability across platforms and vehicle generations. This can help reduce development and integration effort while improving scalability across different vehicle programs.

Supporting OEM migration paths

As manufacturers transition towards software-defined vehicles, many must support multiple generations of electrical and electronic architectures simultaneously. Automotive RCNet has been designed to support this transition by enabling different centralization strategies and deployment models within a common networking concept.

The concept is applicable to a broad range of body and comfort functions, including doors, windows, seating systems, climate control and roof systems. Demonstrators have already validated end-to-end communication across high-performance computers, zone control units, I/O boxes, sensors and actuators in zonal vehicle architectures.

Automotive RCNet complements existing industry initiatives such as the Remote Control Protocol (RCP) being developed within the Open Alliance. Together, both approaches can support different OEM strategies and deployment models across future vehicle platforms.

Advancing open standards through ecosystem collaboration

AUMOVIO is advancing automotive RCNet together with industry partners as part of a standardization initiative for edge devices in future software-defined vehicle architectures.

Together with Elektrobit and Vector Informatik, AUMOVIO is working to establish an open, manufacturer-independent standard for intelligent mechatronic edge devices across the automotive industry. Each partner contributes its specific expertise and perspective to the development of a sustainable industry standard. The collaboration aims to improve interoperability, simplify the integration of smart sensors and actuators, and promote software and hardware reuse to support scalable, cost-efficient server-zone architectures.

Automotive RCNet builds on this common standardization approach and supports the implementation of standardized interfaces in future vehicles. The initiative aims to simplify integration efforts for OEMs, increase flexibility in vehicle development and enable greater software and hardware reuse across platforms and vehicle generations.

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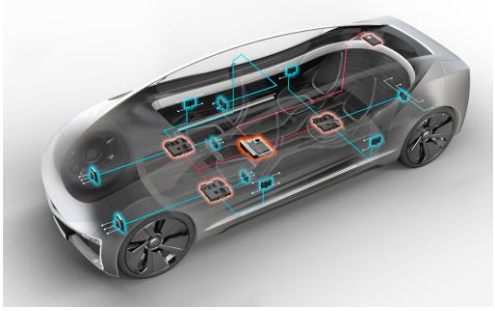
In China, AUMOVIO is one of the initiators of automotive RCNet standard, launched together with CAAM (China Association of Automobile Manufacturers) and leading companies across the industry value chain, including vehicle manufacturers, component suppliers and semiconductor companies. The initiative aims to enable service-oriented access to sensors and actuators while standardizing communication interfaces, promoting software and hardware reuse, and optimizing system costs through industry-wide collaboration.

Expanding automotive RCNet for future vehicle platforms

As vehicle architectures continue to evolve towards greater centralization and software-driven functionality, scalable communication concepts and standardized interfaces will become increasingly important. AUMOVIO plans to further expand automotive RCNet, grow its partner network and advance the development of open standards for future software-defined vehicles. The company welcomes collaboration across the automotive ecosystem to further advance interoperability, scalability and software reuse.

More information about Automotive RCNet is available here.

Images and captions



AUMOVIO_PP_Automotive remote control network

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In September 2025, AUMOVIO emerged as a spin-off from Continental's former Automotive group sector and has since established itself as an independent technology company. The company offers a broad portfolio for safe, exciting, connected and autonomous mobility, including sensor solutions, displays, brake and comfort systems as well as extensive expertise in software, architecture platforms and advanced driver assistance systems for software-defined vehicles. In fiscal year 2025, AUMOVIO generated sales of € 18.5 billion. Headquartered in Frankfurt am Main, AUMOVIO has around 82,000 employees at more than 80 locations worldwide.