

Media Release

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AUTOSAR implements new communication, diagnostics and execution management features with the Release R17-10 of the AUTOSAR Adaptive Platform.

The AUTOSAR (AUTomotive Open System ARchitecture) development partnership constantly improves its standards. The latest revision of its Adaptive Platform, Release 17-10, integrates several new features into the open system architecture standard. These include communication features such as time synchronization across all ECUs, full support for ISO 13400/ ISO 14229 diagnostic standards and execution management features such as machine state handling. On the conceptual level, safety and security features were also enhanced in this release. AUTOSAR made Release 17-10 available on its website on October 27th, 2017 according to its six-month publishing schedule.

“AUTOSAR Adaptive Platform establishes a new standard for making intelligent and adaptive automobiles. It paves the way in contributing to safe and secure autonomous driving,” says Thomas Scharnhorst, AUTOSAR spokesperson. “In providing specifications and a reference implementation for its partners, the release 17-10 is a key incremental step toward the complete set of specifications foreseen by fall 2018.”

One of the major achievements featured in AUTOSAR Adaptive Platform Release 17-10 is support for RESTful Web Services: Representational State Transfer (short: REST) is a programming paradigm for distributed systems (e.g., web services). REST-compliant web services allow requesting systems to access and manipulate textual representations of web resources using a uniform and predefined set of stateless operations, thus facilitating a unified interface.

Release 17-10 also contains multiple additions to the execution management, such as resource management, a recovery action framework and machine state handling. These modifications enable the platform to react to errors in a very flexible way and avoid interference.

Furthermore, the completion of ISO 13400/ ISO 14229 standard implementation allows compatibility with both diagnostics over IP and CAN-based diagnostics approaches.

With the full set of extensions and innovations in this release, AUTOSAR greatly improves the applicability of the standard.

About the Adaptive Platform

AUTOSAR first released its Adaptive Platform on March 31st, 2017 as a standardized integration platform for electronic control units (ECU). The AUTOSAR Adaptive Platform is based on POSIX operating systems and is the ECU standard for new automotive megatrends. It combines the safety and security of microcontroller-based ECUs with the high performance provided by microprocessor-based multimedia ECUs. By doing so, the new standard avoids the costly alternative for OEMs and their suppliers of repeatedly developing the critical and complicated functionality of such a software platform with proprietary and individual approaches.

About AUTOSAR (AUTomotive Open System ARchitecture)

AUTOSAR (AUTomotive Open System ARchitecture) is a worldwide development partnership of car manufacturers, suppliers and other companies from the electronics, semiconductor and software industries. Since 2003, they have been working on the development and introduction of an open, standardized software architecture for the automotive industry. By simplifying replacement and the update options for software and hardware, the AUTOSAR approach forms the basis for reliably controlling the growing complexity of electrical and electronic systems in motor vehicles. In addition, AUTOSAR improves cost efficiency without compromising quality. The "core partners" of AUTOSAR are the BMW Group, Bosch, Continental, Daimler AG, Ford, General Motors, PSA Group, Toyota and the Volkswagen Group. In addition to these companies, more than 200 partners play an important role in the success of the partnership. Companies, which join the AUTOSAR Development Partnership, can use the specifications free of charge.

Further information

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