

Media Release

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Release 18-03 of the AUTOSAR Adaptive Platform features new software configuration management, persistency, signal-based communication and updated security features.

The AUTOSAR (AUTomotive Open System ARchitecture) development partnership constantly improves its standards. The latest release of its Adaptive Platform, Release 18-03, integrates several new features into the open system architecture standard. This new version includes software configuration management, security, and persistency features as well as signal-based communication configuration options. AUTOSAR made Release 18-03 available on its website on April 10th, 2018 according to its six-month publishing schedule.

“The specifications of the new release of the AUTOSAR Adaptive Platform 18-03 add important features. The new standard continues on track with what AUTOSAR Classic started with its strong support for safety and security”, says Thomas Scharnhorst, AUTOSAR spokesperson. “In providing specifications and an example of implementation for its partners, the release is a key step towards the first joint release of the Classic and Adaptive Platforms targeted for fall 2018.

One of the major achievements featured in the AUTOSAR Adaptive Platform Release 18-03 is the Update and Configuration Management (UCM), which enables vehicles to be updated over-the-air. This feature includes package management and corresponding installation routines.

Release 18-03 also contains security extensions. The new security feature follows the “support of trusted platform” concept, thus providing protection from security-relevant “attacks” and protection of single applications against each other (so-called “freedom from interference”, which is also relevant in the context of the security of add-on software packages installed throughout the lifecycle of the vehicle). The feature set protects vehicles against software issues arising from incomplete or faulty installation processes and can avoid recalls.

Furthermore, the new AUTOSAR Adaptive Platform release 18-03 includes a data persistency concept: While the PSE51 interface does not include support for a file system, the Adaptive Platform provides a solution for this. It includes safe data storage and persistent data encryption.

Additionally, release 18-03 allows the platform to perform not only service-oriented communication but also signal-based communication. Thus, an additional communication pathway with AUTOSAR Classic Platform is open.

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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