

14th AUTOSAR Open Conference



The 14th AUTOSAR Open Conference celebrated past successes of the last twenty years and highlighted the future direction of the organization.

Dedicated to the motto "20 Years of Collective Success and Ready for the Future," the 14th AUTOSAR Open Conference was held on May 11th and 12th in San Diego, California, USA with over 140 participants visiting from around the world.

On May 11th and 12th, AUTOSAR hosted its 14th annual AUTOSAR Open Conference (AOC). The AOC participants got a global insight into the usage of AUTomotive Open System Architecture, coupled with the opportunity to meet AUTOSAR partners, interested non-partners, and collaborating organizations.

AUTOSAR Spokesperson, Günter Reichart, and North American Spokesperson, Steve Crumb, opened the 14th AUTOSAR Open Conference with warm words and led the audience through the two-day event. Accordingly, the first day was filled with presentations from international 3rd party organizations giving a taste



on how to shape the Software Defined Vehicle of the future together.

Alfred Chen from UC Irvine delivered the keynote presentation focusing on the Cyber-Physical security of Connected and Autonomous Driving Systems. Afterwards, CATARC led by Wu Hanbing and Jing Zhe present the global standard.

Kazuo Tsubouchi of JASPAR (Japan Automotive Software Platform and Architecture) introduced the alliance with AUTOSAR, focusing on collaboration towards the next generation. North American Spokesperson Steve Crumb presented the AUTOSAR and COVESA Alignment: Realizing the Vehicle API Concept. This was followed by

presentations from Robert Day from SOAFEE presenting the Automotive Development Ecosystem and Michael Plagge presenting the collaboration of Eclipse SDV and AUTOSAR.

Afternoon sessions focused on CAN in Automation (CiA), presented by Holger Zeltwanger and a presentation on Supporting Trustworthiness in Automotive Cybersecurity from Gil Bernabeu of GlobalPlatform.

The first day offered three technical sessions. The first session by Abdallah Mostafa presented the PiCar, how the update works, and explained the update “Over the Air” of an application. This was followed by Felix Martin on behalf of WG-RES discussing the challenges of timing in AUTOSAR. The final session was SDK for Adaptive AUTOSAR Development, led by Tobias Kühnel. The first day closed with a demo session of the PiCar and a panel discussion led by AUTOSAR Spokesperson Günter Reichart.

The second day of the 14th AUTOSAR Open Conference started with an overview about the AUTOSAR organization with a Welcome Speech by AUTOSAR Chairperson Thomas Rüping and a Keynote address from Qualcomm’s Jeremiah Golston. The status of Classic Platform was presented by Project Leader Speaker Pinglei Wang and the Adaptive Platform by the Project Leader Team.



This was followed by a technical overview by selected AUTOSAR contributors, including numerous presentations on new concepts and application scenarios. The presentations were organized into four subgroups: SWaP, Diagnostics, Safety and SDV.

At the end of the technical presentations, members of the AUTOSAR Steering Committee and Project Leader Team were on stage giving the conference participants the chance to ask questions. The Q&A session covered extensive responses and explanations related to the organization, the standard itself and the future of AUTOSAR.

The 14th AUTOSAR Open Conference concluded with closing words from AUTOSAR Deputy Chairperson Peter Redlich.

The 14th conference has once again shown that the AUTOSAR community continues to be very lively, practical, and forward-looking. Based on values such as openness, responsibility and trust, the community with more than 360 global partners can therefore continue to build on growth and good cooperation.



It is safe to say that AUTOSAR is already an established global standard in automotive embedded systems. However, the exciting question will be what role AUTOSAR will play in the market that is currently undergoing a major change towards the Software Defined Vehicle. In this context, the opening of the automotive E/E system architecture for cross-system supporting functions outside the vehicles and for networking the vehicles with each other will be a decisive

factor. Therefore, AUTOSAR will remain an important standard in the automotive industry due to its long experience in the specification of reliable, safe, and secure systems.

To follow this development further, we are already looking forward to the 15th AUTOSAR Open Conference, which is planned to take place on 11th and 12th of June in Japan.

About the AUTOSAR Adaptive Platform

AUTOSAR first released its Adaptive Platform on March 31st, 2017 as a standardized integration platform for microprocessor-based electronic control units (ECU). The AUTOSAR Adaptive Platform is based on POSIX operating systems and is the ECU standard for new automotive megatrends. It provides a unique holistic AUTOSAR safety and security approach for microcontroller-based ECUs and high performance microprocessor-based ECUs throughout the whole EE-Architecture with a consistent software and methodology design. Additionally, AUTOSAR Adaptive Platform also introduces a holistic approach for updatability (over the air) throughout the whole EE-Architecture. 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 software platforms with proprietary and individual solutions.

About the AUTOSAR Classic Platform

The AUTOSAR Classic Platform is the well-established standardized software and methodology framework for deeply embedded electronic control units (microcontroller ECUs), which offers OEMs and suppliers a safe, secure, and stable foundation to build up their distributed software systems. By using a layered software architecture based on a methodology that configures the software stack as well as the complete communication for a given EE-Architecture, the AUTOSAR Classic Platform supports all kinds of interconnected microcontroller-based ECUs.

About AUTOSAR (AUTomotive Open System ARchitecture)

AUTOSAR (AUTomotive Open System ARchitecture) is a global partnership of leading companies in the automotive and software industry to develop and establish the standardized technical framework enabling scalable E/E system architectures for intelligent mobility. Since 2003, they have been working on the development and introduction of several open, standardized software platforms including the joining methodology for the automotive industry. By simplifying replacement and update for software and hardware, the AUTOSAR approach forms the foundation for reliably controlling the growing complexity of electronic and software systems in today's and future vehicles. As AUTOSAR is open to new features in the Automotive area it will continuously adapt the standards. In addition, AUTOSAR improves cost efficiency and quality by enabling its partners to cooperate in a competitive way but on the same solution. The "Core Partners" of AUTOSAR are the BMW Group, Bosch, Continental, Ford, General Motors, Mercedes-Benz, Stellantis, Toyota and the Volkswagen Group. The AUTOSAR partnership of over 360 partners play an important role in the success of the partnership and can use the standards free of charge.

Further information

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