

AHK meets AUTOSAR

Automotive Software Development for Future E/E System Architectures

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Virtual Event Series

Part 3/3













AUTOSAR Partnership

The Collaboration Model With Proven Track Record

AUTOSAR has succeeded in **bringing together main players** in automotive E/E system development **to form a powerful standard** that is successfully used all **around the world**



AUTOSAR Basic Principle

AUTOSAR ensures an advanced complexity management of integrated E/E architectures through increased **reuse** and **exchangeability of software modules** between OEMs and suppliers.





AUTOSAR

The Advantage of a Strong Community

31 international automotive OEM are AUTOSAR partners.
21 are under the 22 top-selling OEM and covering around 80% of the total market revenue in 2019*.

Together with other Tier1 and Suppliers, our partners are collaborating to shape Future Intelligent Mobility.





ISUZU

Tesla

Around 297 AUTOSAR Partners

9 Core Partners BMW Group
BOSCH Ontinental DAIMLER
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56 Development Partners

+ 145 Associate Partners + 27 Attendees



AUTOSAR Adaptive and Classic Platform

What Are the Differences?





AUTOSAR standardizes two software platforms – Classic and Adaptive



Common Bus Interface Specification



Automotive Systems Engineering -Safe Automatetd Driving challenge



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Present state of Automotive Systems Engineering INCOSE – automotive vision 2025 <u>https://www.incose.org/products-and-publications/se-vision-2025</u>

- Automotive **Systems Engineering continues to evolve** in response to an accelerating growth in distributed automotive system and consumer electronics complexity.
- Automotive Systems Engineering is recognized as **an essential set of competencies** required to deliver high quality customer and environment friendly products.
- Automotive Systems Engineering is also recognized by other industries, academia and government as beings a leading growth area for the application of both real-time hard controls and consumer electronics soft controls in the delivery of advanced, coordinated in-vehicle and cloud based solutions.
- Many auto-systems engineering practices are based on heuristics, but a theoretical foundation is being established. There is a need for **greater cross fertilization** across domains and across OEMs/Tier 1s.
- The need for ever increasing global integration of re-useable vehicle assets requires a more formalized, consistent and flexible automotive systems engineering workflow.
- The future success of the automotive industry will be fundamentally based on its ability to:
 - Hire and retain engineers with a cross section of systems engineering skills
 - Establish an **industry-wide**, systems engineering competency standard that can help drive global Schools and University to develop and deliver aligned class content.
 - Develop University systems engineering courses that are dynamic, integrate the science of systems engineering and are based on projects that solve immediate, real-time automotive design and development challenges.



Zone Architecture Supported by AUTOSAR



AUTOSAR^M

Enabling Continuous Innovation

Enter the < Automotive field >

Looking forward to hearing from you!

BMW Group

BOSCH Ontinental





