



ADAS System Design for Selection of best System Architecture

Many OEMs implement ADAS functions forced by legislation (EU) and/or to increase safety. In order to identify the best system, a proper system design needs to be performed, preferably by an experienced independent partner.

SUMMARY

AVL offers the whole range of services for a successful system design from use case definition and requirements breakdown, sensor simulation to supplier screening identifying the best system.

Service Range:

- Benchmarking of ADAS functions
- Target setting and definition of KPIs
- System requirements definition
- Use and test case definition
- Hazard and risk analysis
- System Architecture (Sensors, xCU, E/E)
- Development of RFI and RFQ documents
- DVP and test case development

FAST FACTS

Customer/ Department	<ul style="list-style-type: none"> • OEM engineering centers, all ADAS and AD programs (PoC and SOP)
Challenge	<ul style="list-style-type: none"> • Identifying the best system architecture for the target application • Differentiation from the competitors • Staying independent from suppliers • Definition of Verification & Validation approaches for best safety with least effort
AVL Strengths	<ul style="list-style-type: none"> • Long experience and system know-how of ADAS systems • Independent from any system supplier • AVL-DRIVE™ Autonomous for objective assessment of ADAS functions for target setting and benchmarking • Innovative methodologies for defining the DVP and test cases

REASONS TO WORK WITH AVL WITHIN SYSTEM DESIGN

ADAS FEATURE TARGET SETTING

AVL-DRIVE™ Autonomous enables to set targets of ADAS features in an objective way

- Target vehicles are analyzed in the course of a benchmark study and targets are derived
- Studies of driving styles are performed, analyzed and targets derived

Benefit: Objective targets set with clearly defined KPIs

Additional features of AVL-DRIVE Autonomous:

- Controller calibration, target fulfillment testing, validation, fleet monitoring

Benefit: Time saving due to automated evaluation and improved quality of global or localized driving features

AVL SYSTEM DEFINITION

- The high number of available ADAS systems and components on the market requires a systematic approach to identify the best ADAS system for the target application
- AVL's long experience from many customer and R&D projects and the continuous intensive screening and evaluation of the available systems on the market allows to select the best suitable system for the customer's target application
- New innovative tools assist in setting up the DVP and test case catalogue

Benefit: Best system architecture selected out from the global knowledge base of AVL



AVL FOOTPRINT FOR ADAS NEARSHORE SOLUTION

- 11,000 employees worldwide, total 45 Technical Centers worldwide
- 20 locations with experienced technical ADAS engineers performing on-site projects close to out customers

Benefit: Know-how transfer between the different locations ensures the availability of the best technologies and methodologies close to the customer.

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FIND OUT MORE

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