TATA ELXSI

ADVANCED DRIVER ASSISTANCE SYSTEMS & AUTONOMOUS DRIVING ENGINEERING SERVICES

Perceive | Integrate | Validate

Trending

Regulators and automotive safety bodies now include ADAS features like driver monitoring in their roadmaps.

Many industry players are trying to improve the perception accuracies for detection and prediction of objects on the road. They are using ML and AI with sensor fusion to optimize the system performance.

A connected environment with AI powered collision warning systems and perception technologies is driving the Automotive Industry towards the more futuristic AD.

Opportunities & Challenges

Automotive OEMs and Tier-1 suppliers are focusing heavily on creating a comprehensive ADAS platform built on a combination of features and capabilities across diverse platforms.

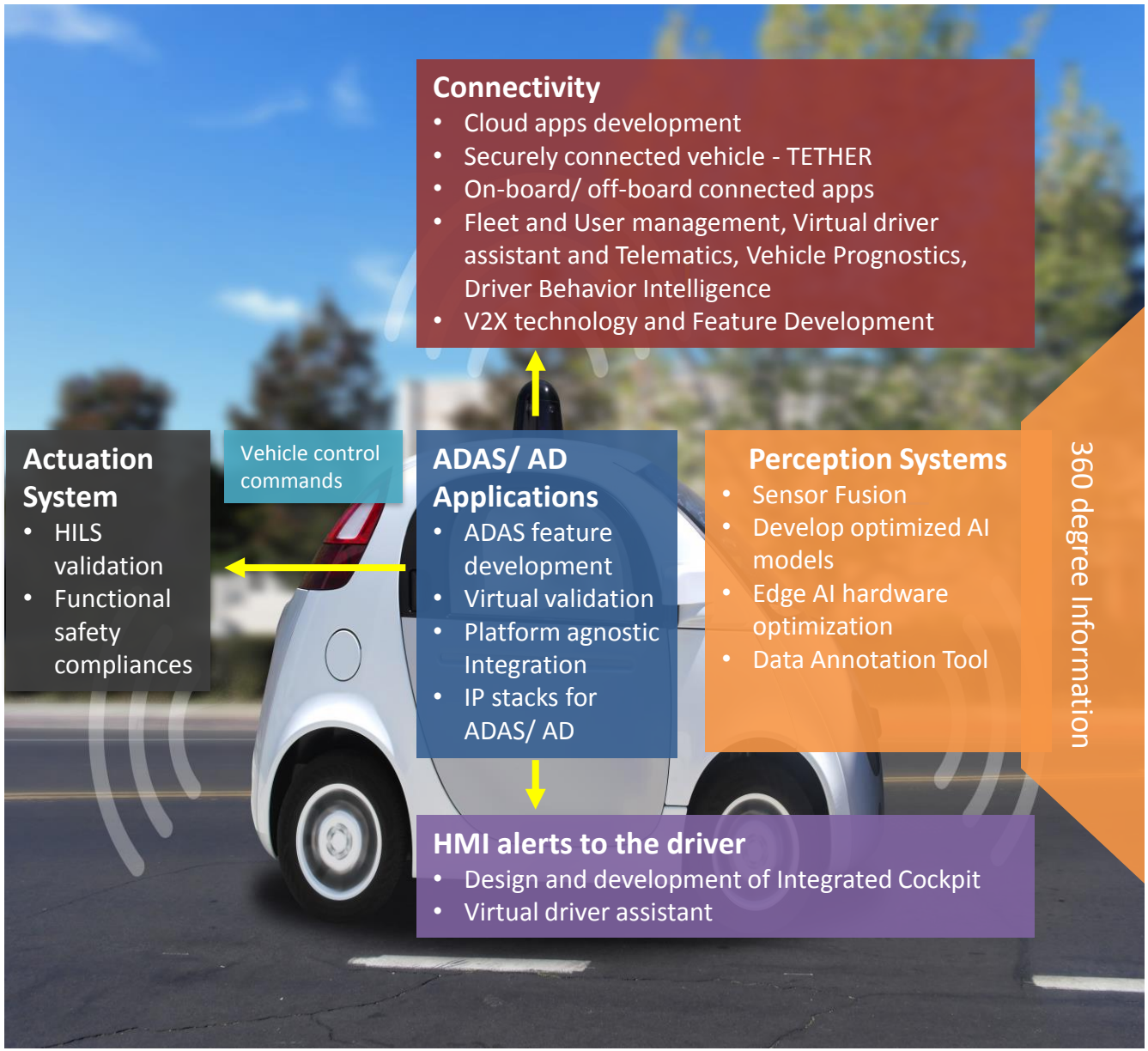
The increase in architectural complexity and computational requirements will require solutions that balance performance and cost-effectiveness appropriately.

Need for high-performance accurate sensors and a reliable, accurate model of the vehicle surroundings, Camera, radar sensor and infrared sensor will help in realization of AD

Benefits for your Consumer

- Improved vehicle and road safety
- Optimum infrastructure utilization
- Reduce time-to-market with the use of existing proven platform
- Advanced HIL testing reducing time & cost and the use of in-house test beds and tools

ADAS/ AD SERVICES FRAMEWORK



Differentiators

- Multi-year experience in ADAS, Active Safety & Autonomous Driving
- Worked on 35+ production programs; functions such as Camera Monitoring System, Driver Monitoring System, Adaptive Cruise Control, Emergency Brake assist and functionalities like Lane Keep Assist, Traffic Sign Recognition, Pedestrian Detection etc.

Cases

- Development of eMirror system replacing the side mirrors | Tier 1 Europe: Product launched | Development & Validation
- Adaptive Cruise Control & Blind spot detection using RADAR and Camera | Tier 1: Multiple OEMs and variants: In production
- Proximity warning system with LIDAR | OEM-US: Concept development
- Semi autonomous parking using USS and Camera with supporting PD and SVS | Developing & Validation | OEM: India: Concept development

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