



# Autonomous Driving

## Data-Driven Development and Validation

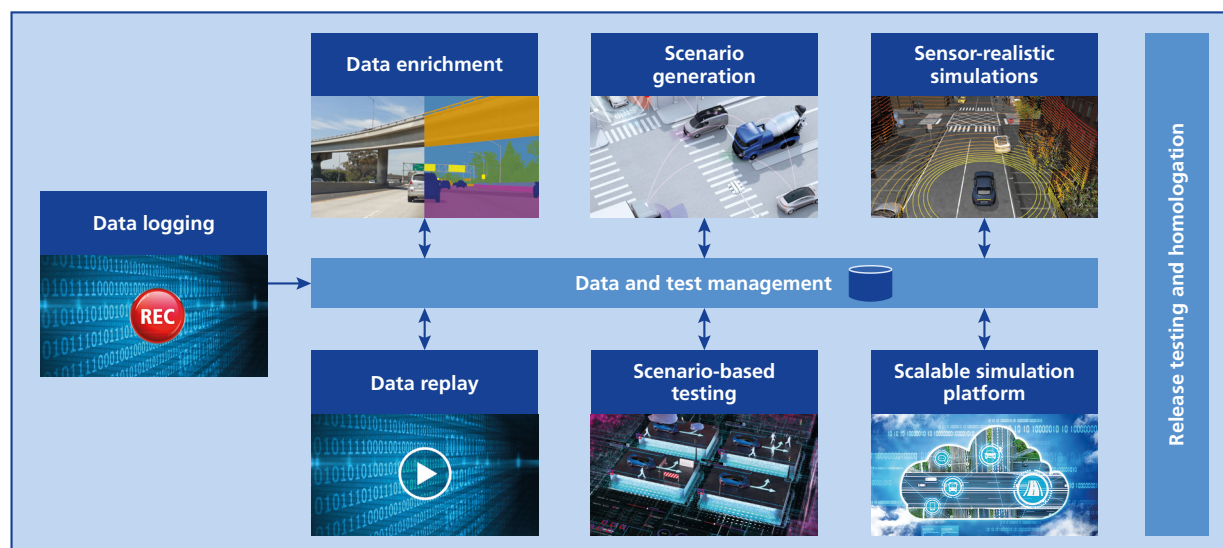
# Autonomous Driving

## Data-Driven Development and Validation

Empowering safe autonomous driving: with dSPACE as your partner in simulation and validation, safe autonomous vehicles become reality. dSPACE solutions provide an integra-

ted development and test environment – from data logging to homologation.

### Solutions Portfolio



### Highlights

- Data logging: robust in-vehicle data logging system with outstanding performance to record sensor raw data and vehicle bus data
- Data enrichment: automated data anonymization and data annotation (ground truth) with best-in-class quality
- Scenario generation: automated generation of simulation scenarios from sensor raw data or object lists
- Sensor-realistic simulations: highly realistic, physics-based simulation of camera, lidar, and radar sensors
- Data replay: time-synchronous replay of sensor raw data and vehicle bus data with exceptionally high streaming bandwidth
- Scenario-based testing: validating perception, fusion and planning algorithms for autonomous driving by automatically performing and evaluating millions of tests
- Data and test management: central management of simulation and test data (including variant handling and workflow management)
- Simulation platform: end-to-end solution for SIL, HIL, and large scale simulation in the cloud
- Release testing: planning the validation and verification strategy according to ISO 26262 and ISO/PAS 21448 (SOTIF) to achieve homologation using optimized processes

### Why dSPACE?

- Global partner and solution supplier for developing and validating software for autonomous driving
- Integrated end-to-end development and test environment
- Highly scalable and reliable solutions from on-premise to cloud applications
- Long-standing expertise and industry-proven solutions
- Unparalleled solution portfolio for data-driven development and validation
- More efficiency, productivity, and reliability for innovations in autonomous driving