



Autonomous Driving

Data-Driven Development and Validation

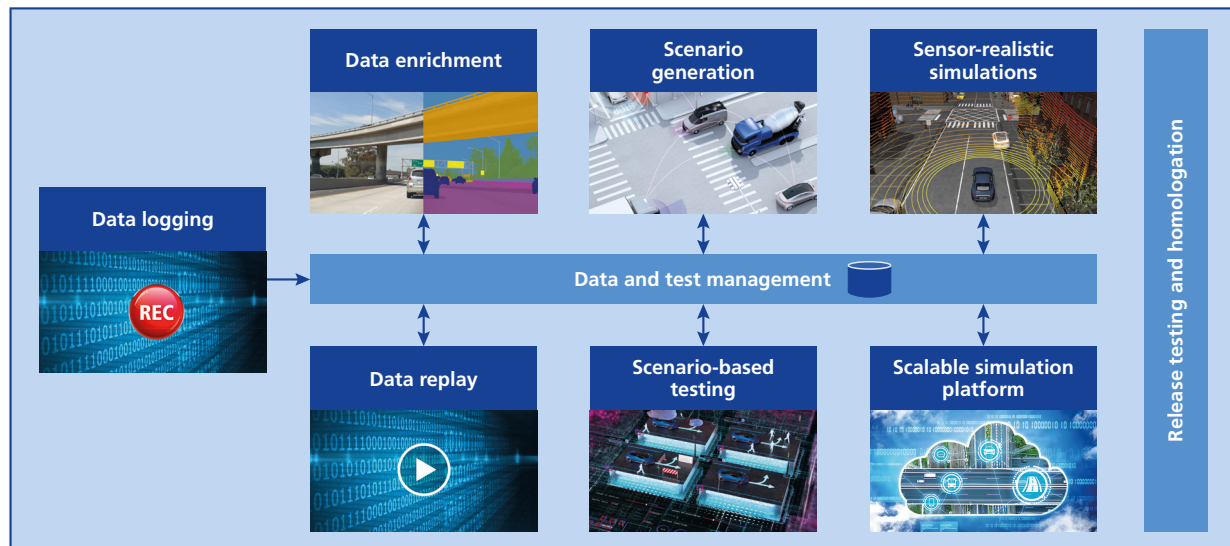
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Empowering safe autonomous driving: with dSPACE as your partner in simulation and validation, safe autonomous vehicles become reality. dSPACE solutions provide an integra-

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