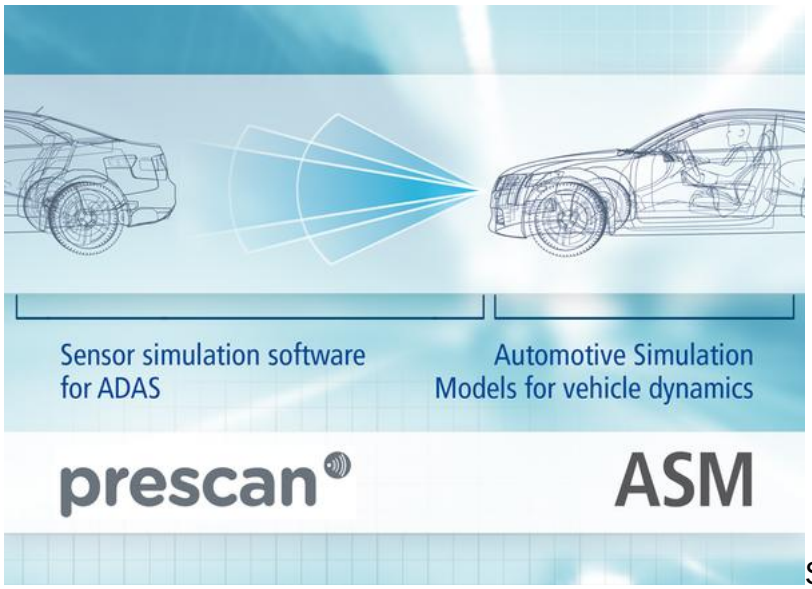
Software helps developers with driver assistance systems



SPACE Automotive Simulation Models (ASM) now work with PreScan, a software program from TASS for high-quality sensor and environment simulation. This tool combination enables developers to optimize the efficiency of intelligent assistance systems at an early stage with highly precise sensor simulation and flexible, reproducible traffic simulation.

ASM and PreScan are both designed for the development of driver assistance systems. Developers use the ASM to simulate the dynamic behavior of vehicles when developing and testing vehicle dynamics ECUs. PreScan provides the simulation of vehicle sensors in complex traffic scenarios involving several vehicles and is used for designing driver assistance controls and sensor concepts. The strengths of these two tools can now be combined to simulate driver assistance applications such as emergency brake assistance, lane keeping assistance, and pre-crash systems.

PreScan provides extensive options for defining sensor systems such as cameras, radar and lidar (light detection and ranging) at expert level. For example, sensors from different manufacturers and with different characteristics can be used and their behavior can be tested in virtual traffic scenarios. The reflection properties of objects such as the radar image of a tanker truck are also supported.

All this means that new concepts and ideas can be simulated realistically on a developer PC in early phases of development, thereby speeding up the development of intelligent vehicles.

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