

## **Accelerating the Validation of Advanced Driver Assistance Systems with a New Modular Test Platform**

IPG Automotive develops the Autonomous Drive Emulation (ADE) System jointly with Keysight Technologies and Nordsys

**Together with Keysight Technologies, a leading technology company, and Nordsys, a specialist for automotive software and V2X solutions, IPG Automotive is designing and developing a modular test platform that accelerates the validation of advanced driver assistance systems (ADAS) and functions for highly automated driving.**

The automotive industry is currently facing significant transitions and is characterized by many disruptive technologies. The number of sensors and the amount of data that need to be processed in the decision units of ADAS-capable vehicles confronts the areas of development, simulation and testing with growing challenges. In addition to the technology restrictions of many sensor emulation applications, the absence of standardized interfaces leads to an increased complexity for the integration into a complete and comprehensive environment.

IPG Automotive, Keysight Technologies and Nordsys are working on a solution in a joint project. The modular test platform – Autonomous Drive Emulation (ADE) System – emulates the synchronized connections to all relevant sensors of the vehicle, such as the global navigation satellite system (GNSS), radar and camera sensors or vehicle-to-everything communication (V2X) for example, in a system. This enables customers to simulate their components, software and systems including the sensor fusion and the decision-making algorithms and to fully focus on them. It is an open platform that simplifies merging commercial 3D models, HIL systems and already existing test and simulation environments.

“With our innovative software solution, you can transfer realistic test scenarios, including the entire environment, into the virtual world with a high level of detail. We are pleased that we can integrate our powerful and real-time capable modeling technology into ADE and to work with Keysight Technologies in the framework of this joint project,” comments Steffen Schmidt, CEO of IPG Automotive.