

Press release

Four National Instruments Alliance Partners Pursue A Collaborative Strategy To Develop Advanced Driver Assistance Systems (ADAS) Test Solutions – Further Accelerating Development Programs For Fully Autonomous Vehicles

Radolfzell, Wangen, Troisdorf, and Mönchengladbach, Germany, March 21, 2017, companies Konrad Technologies GmbH, SET GmbH, S.E.A. Datentechnik GmbH, measX GmbH & Co. KG form a collaboration - **ADAS IIT-Innovation In Test** – leveraging their expertise in the field of Advanced Driver Assistance Systems (ADAS), sensor fusion, Hardware in the Loop (HiL), V2X communication, GNSS simulation and data management to provide a one stop solution for fully autonomous vehicles.

With the **ADAS IIT** (www.adas-iit.com) collaboration, the four technological innovative companies offer a unique approach for ADAS testing, joining their knowledge and skills to develop highly scalable future-proof ADAS test solutions based on the standardized National Instruments (NI) platforms.

The ADAS IIT group is the first to present cost-optimized consolidated ADAS test solutions for virtual test drive combining; sensor fusion, Hardware in the Loop (HiL) testing system, V2X communication, GNSS simulation and integrated data management systems. This unique NI platform based concept will help bring autonomous vehicles to the market safer and faster than expected.

„We are pleased to see NI’s open platform and ecosystem empower the four ADAS IIT engineering companies to address the increasing testing complexity of highly integrated, fully automated ADAS HIL test solutions, covering sensor fusion and target simulation as well as V2X communication and GNSS simulation.”, says **Rahman Jamal, Global Technology & Marketing Director, National Instruments**. “The combination of our flexible software like NI LabVIEW, modular hardware platform like PXI and the ADAS IIT’s deep technical expertise ensures that our common customers will get the cutting-edge technology they need to speed up the research and development of autonomous vehicles.”

A Unique Commitment to Fully Autonomous Vehicles

Together, the exceptional expertise in ADAS Sensor Fusion of [Konrad Technologies GmbH](#), on HiL of [SET GmbH](#), on V2X Communication and GNSS Application of [S.E.A. Datentechnik GmbH](#), and on Data Management of [measX GmbH & Co. KG](#) form a complete, flexible set of tools from design to development, implementation, and validation to production.

The companies agreed to collaborate on the research and development of a seamless one-stop solution designed to make autonomous driving even more predictable and safe; a solution providing a significantly more robust and capable architecture across the automotive industry that simplifies and shortens development times for automobile manufacturers.

“The demand for fully autonomous vehicles requires efficient test systems not just for RADAR or LIDAR sensors but a Sensor Fusion technique that synchronously combines inputs from all car sensors. We thrive to provide ideal solutions for testing Sensor Fusion which offers timing, triggering, validation and synchronization capabilities all in one. A combination of these technologies with HiL, V2X, and highly efficient data management systems will go a long way to set very high standards in the automotive industry, and I am very excited that ADAS IIT is at the forefront of these technological innovations.”
Michael Konrad, Managing Director of Konrad Technologies GmbH

“As real test drives are highly time-consuming, require a lot of test driver resources, and cannot be repeated to 100%, virtual test drives are inevitable to test today’s sensors and sensor fusion electronic control units (ECU) for the future autonomous driving. Therefore, we bring in our domain expertise regarding highly complex, innovative ADAS HIL test solutions and are thrilled to be part of this leading cooperation.” **Frank Heidemann, Managing Director of SET GmbH**

“V2X is becoming an integrated part of future vehicles and ADAS systems. Testing along the development chain requires the in-depth expertise of RF and V2X protocols, as well as system interaction with other sensors like GNSS, RADAR or LIDAR. Respecting these requirements S.E.A. has decided to cooperate closely with leading NI partners adding new core competences to provide on-the-edge test systems and development support world-wide.” **Dr. Gerd Schmitz, Managing Director of S.E.A. Datentechnik GmbH**

Testing of multiple ADAS sensors as well as complete vehicles in real situations produces a lot of data which need to be transformed into information. MeasX as a long-term specialist in technical data management and analysis is proud to bring in its expertise into this cooperation.” **Dr. Joachim Hilsmann, Managing Director of measX GmbH & Co. KG**

Cooperation Details and Timing:

The ADAS IIT – Innovation In Test collaboration is expected to close in the first quarter of 2017. It will be the premier partnership with research and development infrastructure put in place to achieve complete ADAS test solutions in a lab environment replacing today’s validation and assessment in real life.

Upon final completion, more than 300 engineers in Europe, Asia and USA will work on the next steps towards a complete test of fully autonomous vehicles in a virtual environment, from design to development, implementation, validation to production and testing services around the globe.

[Konrad Technologies GmbH](#)

Konrad Technologies GmbH is a global company that offers testing, production solutions, and turnkey solutions in the areas of electronics manufacturing, high-frequency technology, and optics. Since 1993, Konrad Technologies has successfully developed, designed and integrated customer-specific test solutions providing customers with R&D, qualification, and manufacturing of electronic products with tools to fulfill their quality goals, accelerate engineering and development throughput. As a National Instruments Platinum Alliance Partner, Konrad Technologies offers individual testing solutions, such as function tests, in-circuit tests, ADAS testing systems, optical camera testing systems, and complete production lines for the automotive, medical technology, consumer electronics, semiconductors, as well as aerospace industries.

[SET GmbH – Smart Embedded Technologies](#)

SET GmbH is an innovative technology company that specializes in developing semiconductor reliability testing systems, HiL, and function test systems, as well as electronics development and manufacturing for the automotive, aerospace, and semiconductors industries. As Gold Alliance Partner of National Instruments with the Hardware in the Loop and Embedded Specialties, SET GmbH offers qualified project management, from the definition of system requirements to hardware, mechanical, and software development and production, to operational start-up of finished systems. Since its founding in 2001, SET GmbH has grown continuously and has now over 45 employees at three locations in its main business as well as another roughly 40 employees within its subsidiary, SET Power Systems GmbH (SPS).

[S.E.A. Datentechnik GmbH](#)

S.E.A. Datentechnik GmbH is a company providing demanding test and control solutions to worldwide customers in various industry areas - including automotive, space and aerospace since more than 20 years. Based on its RF & communication expertise S.E.A. has become National Instruments Gold RF Speciality, as well as Embedded Specialty Partner. Within its RF-activities, S.E.A. has been successful in providing Software Defined Radio and protocol implementations based on the National Instruments platform. Recently various 802.11p products, as well as test systems and HIL applications for validation and verification in the V2X field have been successfully implemented. S.E.A. has more than 40 employees operating from Troisdorf, Germany.

[measX GmbH & Co. KG](#)

For more than 20 years the engineers of measX offer their experience and technical know-how in software development and the engineering of complete test systems. We offer consultation services and turnkey systems for the acquisition, organisation, management, and evaluation of measured data. Turnkey systems will be adapted optimally to your data and IT environment. This includes the analysis of the data to be processed and of the work sequences to be supported, as well as data modeling, database design, and the creation of complete applications for the acquisition and evaluation of data. We use National Instruments™ standard software like DIAdem® and LabVIEW™ to create turnkey systems that may range from single station solutions to sophisticated applications for several hundred users.

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