Press Release

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Online DoE with ETAS ASCMO and A&D's ORION Minimizes Test Cell Time and Costs

ETAS and A&D Technology are pleased to announce the integration of their products ETAS ASCMO and ORION. Both products on their own accelerate the often tedious automotive calibration procedures by automating the process and reducing the number of necessary data points to be acquired. In combination, the two products shorten the process even more.

Test cell time is expensive, and running a large number of Design of Experiment (DoE) points takes a long time. Integrating A&D's ORION with ETAS' ASCMO DoE tool provides a way to minimize both time and cost by indicating when the model quality is high enough to yield accurate results. Monitoring the model quality throughout the data collection enables users to stop the entire process early, eliminating superfluous measurements.

ETAS ASCMO is a model-based calibration software that automatically generates DoE test plans and enables the development of very accurate data-based models. Once created, these models can be used to optimize parameters of real systems such as the control parameters of engine ECUs and also as plant models in different simulation environments (e.g., Simulink® or HiL systems). Both steady state and dynamic/ transient behaviors can be captured.

The ORION automated calibration tool facilitates the calibration process by taking control of both the ECU calibration system and the test cell control system to run experiments as part of an automated process. Using a user-friendly GUI and a Design of Experiment (DoE) as input, the user defines a sequence of actions for completing the calibration task. ORION then commands the test cell control system and the calibration system to run the sequence as defined. Data is collected as directed to

characterize the engine, and then output after the test to the next step in the model-based calibration process.

"Integrating ETAS ASCMO with ORION is a logical next step in engine base calibration," says Tobias Gutjahr, Program Manager at ETAS Inc. "Knowing exactly that the desired model quality has been achieved takes the guesswork out of the DoE test planning and measurement campaign."

About ETAS

ETAS provides innovative solutions for the development of embedded systems for the automotive industry and other sectors of the embedded industry. As a systems provider, ETAS supplies a multifaceted portfolio that covers the range from integrated tools and tool solutions to engineering services, consulting, training, and support. Security solutions in the area of embedded systems are offered by the ETAS subsidiary ESCRYPT. Established in 1994, ETAS GmbH is a 100-percent subsidiary of the Bosch Group, with international subsidiaries and sales offices in 13 countries in Europe, North and South America, and Asia.

For more information, visit www.etas.com

About A&D Technology

A&D Technology provides advanced test and simulation solutions for alternative energy, hybrid and conventional powertrain testing, and vehicle development. Our open, flexible and cost-effective tools are designed to fit a wide variety of applications, from durability and performance to hybrid/electric vehicle and battery test systems, and Hardware-in-the-Loop (HiL) simulation.

For more information, visit www.aanddtech.com

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