

reddot award 2015 honourable mention

Compact, Scalable, Open

ETAS brings professional real-time testing to your desk

ETAS DESK-LABCAR is a compact, scalable Hardware-in-the-Loop (HiL) test system that enables cost-efficient testing of electronic control units (ECUs) in the early stages of development – with award-winning design and usability.

DESK-LABCAR is the compact version of ETAS' proven LABCAR HiL system. Its unique housing includes an integrated breakout box (BOB), real-time PC simulation target, as well as expansion slots for interface boards. The system opens up a broad range of applications from economical open-loop tests of simple control functions to sophisticated closed-loop tests of complex algorithms. Thanks to its compact design, the system enables HiL testing even in confined environments.

Recently, DESK-LABCAR earned kudos from the Red Dot Award for Product Design in the Measuring and Testing Technology category, picking up an "Honourable Mention" in the areas of design and usability.

DESK-LABCAR is the latest product in the industry-established LABCAR product family. The DESK-LABCAR entry bundle provides a broad set of functionalities at an affordable price. It, therefore, fits either for customers hesitating to invest in full-scale HiL systems, or those that would like to reserve the utilization of their full-scale HiL systems for comprehensive system tests



by moving less complex tests to the DESK-LABCAR.

Scalability in hardware and software doesn't mean a compromise in quality. DESK-LABCAR enables the testing of small and medium size ECUs without the necessity to use a complete HiL system. On the other hand, a switch-over to a full-scale LABCAR system is straightforward if required by the complexity of the tests or the unit under test. Compatibility with the other HiL platforms in the LABCAR family ensures the reuse of test artifacts from desktop testing later on fullscale systems.

DESK-LABCAR is available in four different bundles. Each combines the ES5100 housing with an ES5340 Multi-I/O Interface Board and either an open-loop simulation target or the real-time simulation target LABCAR-RTPC and the experiment environment LABCAR-OPERATOR. The closed-loop version is configurable. All bundles can be flexibly expanded with other ETAS software and hardware products.

As an off-the-shelf solution, DESK-LABCAR only requires that the customer connects an additional wiring harness to the DESK-LABCAR interfaces, breakout box, and ECU to be ready for use. In addition, it can be combined with other products and services. ETAS Engineering Services supports further customer-specific modifications.

AUTHORS

Thomas Lenzen is Test Solutions Product Manager at **ETAS Gm<u>bH</u>**.

Julia Noe is

Technical Editor for product information at **ETAS GmbH**.