

Hardware-in-the-loop simulator for the desk

With the Scalexio Lab Box, Dspace (Germany) offers a system for hardware-in-the-loop (HIL) tests. It fits on every desk and can therefore be used for early function tests at the developers' workplace.

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The product supports CAN and CAN FD (Photo: Dspace)

Scalexio is a modular real-time system used for hardware-in-the-loop (HIL) testing. During HIL simulation, it allows for real-time simulations of computation-intensive models and supports a number of I/O functions as well as current bus and network systems such as CAN, CAN FD, LIN, Flexray, and Ethernet. The product can also be coupled with existing HIL simulators.

The system, which consists of the Lab Box and the Scalexio Processing Unit, can be adjusted to meet different project requirements. It provides slots for up to 18 I/O boards, which can be put at the front side of the box. If users need more I/Os or computing power, they can extend the system themselves by adding more Lab-Boxes or Processing Units. The product is connected to the Processing Unit via the company's loctnet network technology, which was developed to meet the requirements of real-time applications.

The I/O boards of the system cover a range of functions, from digital or analog I/Os, to I/O functions for engine simulation and automotive bus systems. Users can configure the boards via the company's Configuration Desk, which makes it possible to modify the system according to changing project requirements and to decrease iteration times. The configurations created in Configuration Desk can be reused later with larger Scalexio HIL simulators.

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