

## PROCESSING UNIT

### *Eight processor cores, CAN, and CAN FD*

Dspace (Germany) has added a processing unit to its Scalexio product line. It comes with eight processors, as well as CAN and CAN FD support.

Scalexio is a modular real-time system used for hardware-in-the-loop (HIL) testing. During HIL simulation, it allows for a real-time simulation of computation-intensive models and supports a high number of I/O functions as well as current bus and network systems such as CAN, CAN FD, LIN, Flexray, and Ethernet. The I/O channels are specified with the central configuration software Configuration Desk. Using the company's locnet technology makes possible to extend the system and set up decentralized systems. Scalexio can also be coupled with existing Dspace HIL simulators.



*The units support CAN and CAN FD (Photo: Dspace)*

Now, the company has introduced an additional processing unit for Scalexio test systems. Equipped with an octal-core Intel Xeon Processor E5, the added unit is ideal for the parallel execution of complex and computationally intensive simulation models. According to the company, this enables engineers to use high-fidelity, physically realistic models, increases model accuracy, and makes HIL simulations more realistic.

With the octal-core variant, Dspace extends the processing unit product line with a second variant to address the variety of customers' application scenarios. The unit with eight cores is especially recommended for customers who often have to compute very large simulation models in parallel, such as those for vehicle dynamics simulation with detailed chassis and tire models. For use cases that require a strong computation performance of each individual core, the company continues to provide the quad-core processing unit with an Intel Xeon Processor E3 and equally high performance.

Both variants, quadruple- and octal-core, of the processing unit support multiprocessor applications where multiple processing units are interconnected. The two versions can also be used together in a multi-processor network.

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