ETAS ISOLAR-B Completes the AUTOSAR Tool Chain

For more information, see: www.etas.com/isolarb

ISOLAR-B makes life easier for ECU integrators. The new tool for configuring AUTOSAR-compliant basic software takes many routine tasks off their hands. With a clearly structured display, support for iterative development flows, a high degree of automation, and the possibility of early validation, integrators reach their goals faster with increased quality. Thanks to the intelligent evaluation of system information, the integrator may recognize connections and relationships more quickly. System extensions allow them to close gaps between system description and basic software configuration and reduce configuration work. Together with ISOLAR-A and RTA-BSW (Basic Software), this creates a seamlessly coordinated and balanced AUTOSAR solution which has already proven itself in projects. ISOLAR-A and ISOLAR-B, both of which support the AUTOSAR R4.3 release, use a shared database. This shortens roundtrip times and simplifies and further automates configuration, bringing even greater efficiency to series projects. ISOLAR-B uses the Eclipse platform and can be easily integrated into existing Eclipse development environments.

New ES300 Series Measurement Module

Connecting the measurement modules of the ETAS ES300 family with each other is easy.

The ETAS measuring tool suite was expanded 2017 with the arrival of the cost-effective miniaturized measurement modules of the new ES300 hardware series. These watertight and dustproof measuring devices can be installed in the engine compartment and on the chassis of test vehicles. The modules' measurement data is transmitted via a shared CAN bus and can be synchronously acquired with CAN signals from ECUs using INCA – for example, in combination with the ES581.4 or ES584 USB CAN Interface Modules. Currently, the 8-channel ES321 Thermo Module, the 4-channel ES313 A/D Module, and the 4-channel ES341 Counter and Frequency Module are available. The ES313 and ES341 devices also provide a separate power supply to the connected sensors for each channel.

Better Scalability for Test Systems

In order to achieve better scalability for LABCAR HiL test systems, ETAS has developed new electromechanical and electronic system components which have already been successfully used in customer projects. In this way, it is possible to both realize individual ECU test systems and to flexibly configure HiL test benches for system and overall vehicle validation.

As central modules, plug-in boards from the PCI-Express ES5300 platform are fitted in 19-inch racks that are either 60 or 80 cm wide with 24, 33, or 38 rack height units. For racks with an overall dimension of 80 cm, 24 slots are provided, which can accommodate connectors with up to 300 individual contacts for connecting ECUs and loads. The internal wiring is routed along internal panels attached to the sides and is optimized according to length. If required, switches for signal paths and specific modules can be fitted such as modules for the high-precision measurement of standby, other supply, and load currents.

The LABCAR systems based on these components are compliant with the IEC 61326-1 specifications on electromagnetic compatibility (EMC). As well as minimizing signal delays for closed-loop testing, EMC was also carefully considered when designing the circuit board layout of the ES53xx I/O modules. Delivered systems are released in accordance with the safety standard IEC 61010-1, which covers issues such as the use of flame-retardant components and the testing of mechanical and electrostatic discharge (ESD) protection.

The new ES820 Drive Recorder.

New ES820 Drive Recorder

Available since September, the new ES820 Drive Recorder module of the ETAS ES800 system replaces the INCA PC or laptop. It can be used for a variety of measurement tasks for development and calibration and for the validation of electronic systems in the vehicle. In combination with ES89x- and ES5xx interface modules, ECUs can be connected to the Drive Recorder using ETK, XETK, or high-performance FETK interfaces plus several LIN, CAN/CAN FD, and FlexRay buses. Using measurement modules from the ES400 and ES600 series, signals can be captured from the vehicle environment at high rates. In addition to the internal solid-state drive (SSD) with a memory capacity of 128 GB, easily exchangeable SSD memory modules with capacities of either 500 GB or 1 TB are available for recording measurement data.