

Höhenkirchen-Siegersbrunn
March, 21st 2018

From model to reality: testing with TRACE32 and Mx-Suite

Mx-Suite, Danlaw's Embedded Systems Test Platform, offers a back-to-back testing solution between Simulink models and Lauterbach's TRACE32 Debuggers. Back to back testing is used to demonstrate equivalence between a simulation model and its generated C code. Mx-Suite is an ISO 26262 (TUV SUED qualified) comprehensive platform used for embedded software and systems verification and validation. Test suites can be developed and reused across the development lifecycle, for testing models (MiL), C/C++ code (SiL), and ECU software (HiL). Mx-Suite's integration with TRACE32, further extends this to processor-in-the-loop (PiL) targets.

A requirement for ISO 26262 compliance states that test platform should "correspond as closely as possible to the target environment." Another is for MC/DC level code coverage measurement. The optimum solution for Simulink model-based development is Lauterbach's TRACE32 and Danlaw's RapiCover, coupled with Mx-Suite's powerful test platform offering high levels of automation, easy to use GUI, comprehensive reports, and more.

"When qualifying a software development toolchain for ISO 26262 every component of the tool chain has to be addressed. By using Mx-Suite for MiL, SiL, HiL and now PiL, the qualification effort is drastically reduced. In Addition, by reusing test cases between MiL and PiL the need to qualify the code generator can be eliminated." said Michael McCormack, Director of Development.

"TRACE32 offers comprehensive support for automotive processors coupled with powerful debug and trace features that allow a seamless transition to on-target testing. Testing can start on development platforms or make use of virtual targets before the first hardware prototypes are available. By combining Mx-Suite with TRACE32 our customers can reap the benefits of early on-target testing: Detecting errors early and reducing the time to market", said Stephan Lauterbach, General Manager of Lauterbach.

Used across automotive domains, such as infotainment, powertrain, steering, brakes, and body ECUs, Mx-Suite easily integrates into most industry standard development and life-cycle management tool chains used for ECU software development. Its extensive feature set, includes an intuitive user interface, record/playback capabilities, and comprehensive logging to drastically accelerate the creation and execution of tests and the isolation of the root symptoms.

ABOUT DANLAW

Danlaw is a global leader in connected car and automotive electronics. For thirty years, our family of 800 people have lived, breathed, and created innovative tech for some of the world's largest car makers. We focus our efforts on R&D to stay ahead of rapidly changing industry needs in an increasingly connected world. Danlaw is known for ground-breaking technology, efficient development, and adaptive solutions for dynamic environments. Our Engineering Solutions Group provides solutions and tools for embedded systems development including testing Embedded Control Units (ECUs) and V2X applications.

For more information, contact: Cyrilla Jane Menon, Product Marketing Manager, cyrillam@danlawinc.com.

About LAUTERBACH

Lauterbach is the leading manufacturer of complete, modular and upgradeable microprocessor development tools worldwide with experience in the field of embedded designs since 1979. It is an international, well-established company with blue chip customers in every corner of the globe and has a close working relationship with all semiconductor manufacturers. At the headquarters in Höhenkirchen, near Munich, the engineering team develops and produces highly proficient and specialized Development Tools, which are utilized all over the world under the brand TRACE32[®]. Our branch offices exist in the United Kingdom, Italy, France, Tunisia, on the east and west coasts of the United States, Japan and China. Highly qualified sales and support engineers are also available in many other countries. For more information visit <http://www.lauterbach.com/>

LAUTERBACH, TRACE32, µTrace and other LAUTERBACH products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of LAUTERBACH. All other product and service names mentioned are the trademarks of their respective companies.