

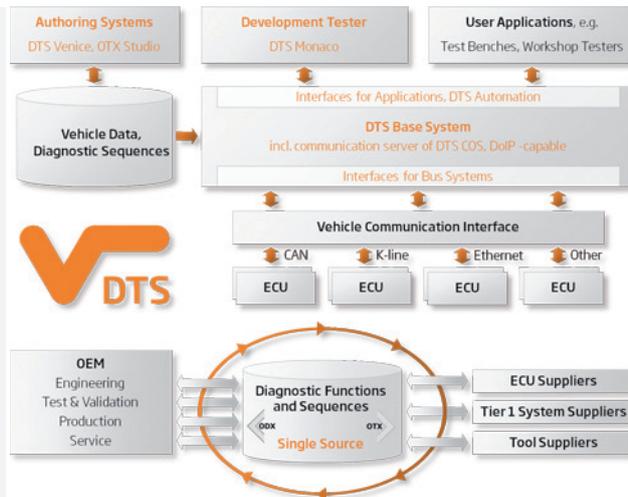


Diagnostic Tool Set 8

With Softing's Diagnostic Tool Set, developers, engineers and technicians can create consistent diagnostic functions and sequences based on international standards. This means reliable diagnostic communication can be ensured over the entire value chain. The interfaces of the central D-Server are based on the latest international standards. Alongside DoIP support, the highlight is the ultra-compact runtime format that can be encrypted to suit the particular OEM. DTS Venice for ODX and the new OTX Studio are powerful authoring systems. A considerable number of functions were added to the universal development tester DTS Monaco which is now also more intuitive in terms of handling. For the very first time, the ODX and OTX standards cover vehicle diagnostics

Highlights

- ISO 22900-3/
ASAM MCD-3D 3.0
- ISO 13400 (DoIP)
- ISO 22901-1/
ASAM MCD-2D
ODX 2.2
- ISO 13209
OTX 1.0
- Ultra-compact,
encryptable
runtime data



completely. This facilitates the exchange of diagnostic functions and sequences between the Engineering, Testing, Manufacturing and After-Sales Service Departments as well as with suppliers. At the start of the value chain, the standards considerably shorten the development time and thus reduce costs. The central database improves data quality and international standardization ensures long-term reusability. At the end of the value chain, the After-Sales Department will be able to localize problems much more quickly and precisely than before thanks to considerable improvements in the area of guided fault diagnostics. In comparison to legacy developments at the OEM, the Diagnostic Tool Set enables a significant reduction of both development and long-term maintenance costs.

The first release of DTS 8 is scheduled for the start of 2013.

More information: <http://automotive.softing.com/en/dts8>

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Events

- March 12 - 13, 2013
MessTec & Sensor Masters, Stuttgart
- April 15 - 16, 2013
CTI Stuttgart
- May 14 - 15, 2013
Sensor + Test, Nürnberg
- June 4 - 6, 2013
Testing Expo Stuttgart
- June 25 - 26, 2013
Progress in Automotive Electronics
Ludwigsburg
- October 16 - 17, 2013
Automotive Electronics, Baden-Baden

OBD for Heavy-Duty Diesel

The monitoring and diagnostics of emissions-relevant thresholds were introduced to the automotive industry many years ago. In order to implement uniform technology for on-board diagnostics in vehicles with heavy diesel engines – such as trucks, buses, and agricultural and construction vehicles – the ISO is currently drafting the standard ISO 27145 “World Wide Harmonized On-Board Diagnostics”. OBD systems are legally mandatory in all types of vehicle except for mobile working machinery. Nevertheless, the implementation of a monitoring system and the installation of service diagnostics make sense in this area, too.

The OBD4HDD® Experts Group

About one year ago, the OBD4HDD® Experts Group was founded to illustrate all the associated issues and develop possible solutions for on-board diagnostics. The aim of the cooperation is the cross-company exchange of information and experience, the clarification of open questions and the drafting and publication of technical information. Members include renowned manufacturers of trucks, buses, mobile working machinery, diesel engines, SCR systems and tools as well as service providers. If you are interested in finding out more about this working group, contact us at OBD4HDD@softing.com.

Engineering and Consulting on Customer Premises

With diagnostics, measuring and testing as its core areas of expertise, Softing is at the cutting edge of key technologies in automotive electronics. Alongside products and project solutions, Softing also provides expert engineering and consulting services in these central fields of technology on the customer premises. Our excellently trained employees support the work of specialist departments directly – with great motivation and commitment.

The close networking with all those involved – both on site on the customer premises and with colleagues at Softing – is a fundamental part of our philosophy and crucial for the success of customer projects.

Electrical Testing and Verification

Our Experience - Your Security

For over 20 years now, Softing Messen & Testen GmbH has specialized in challenging tasks in the automotive industry and mechanical engineering. In hundreds of applications and solutions, we have been able to help users simplify tasks and processes in the test area, reduce costs in the entire development and manufacturing process, and increase the quality and reliability of electronic developments. Our service portfolio is constantly being adapted to suit customer requirements and we are now proud to present not only the new μ Series (see page 4) in the measurement technology sector but also our new Softing Measurement Technology System (SMT).

Premium Solutions in Hardware and Software

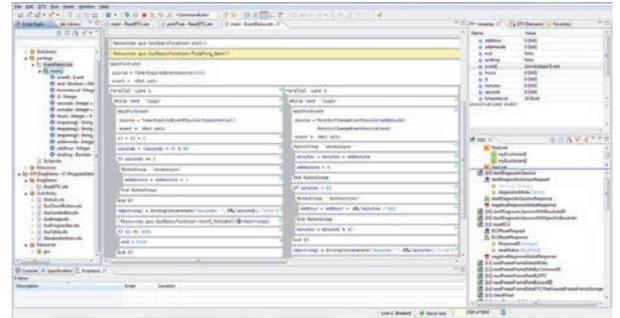
We offer a wide range of products and solutions from simple help with wiring in the lab to a complex HiL solution or convenient data acquisition. Alongside breakout boxes, checkracks, test adaptations, diagnostic boards, and simulation circuits the extensive range also includes complete test systems as well as HiL assemblies. We also offer consulting services on all areas of testing and verification as well as excellent measurement technology with special all-in-one performance characteristics which can also satisfy the toughest of demands and environmental conditions with integrable control, regulation and extensive simulation possibilities.

OTX - Standardized Diagnostic Sequences!

Test and Verification Sequences in acc. with ISO 13209

OTX closes a major gap as its principles make it possible to store and exchange diagnostic sequences - or test sequences in general - in a standardized way. OTX is replacing JAVA as storage format for sequence descriptions and is considerably easier to process automatically as it is based on XML.

With OTX Studio, Softing is presenting a tool that supports the entire development process of sequences in the diagnostic sector. The typical phases in software development are supported perfectly by OTX Studio: A graphic editor is used in the specification phase to define sequence logic. There is a whole range of keyboard shortcuts for the subsequent implementation. Initiation of OTX sequences is then simplified by diverse debugging and trace functions.



Fast Results thanks to Simple Operation

Operation is geared toward both novices and experienced users thanks to its support of keyboard operation and Drag & Drop. In addition to keyboard operation, fast input is facilitated with IntelliSense-like mechanisms.

OTX Studio supports virtually all OTX language elements (OTX extensions) and in addition offers language extensions developed by Softing for file handling, XML processing and generic DLL calls. This means the solution is flexible and can be used universally, even for more challenging demands. A powerful GUI library, including a GUI design tool and a user-friendly link to OTX sequences, is available for guided functions in the manufacturing and repair shop tester sector.

More information: <http://automotive.softing.com/en/otx>

Softing Measurement Technology SMT

The continued development of modern vehicles has brought with it tougher requirements in terms of the measurement technology used. In addition to physical variables, bus signals have to be acquired, measured data evaluated and stimuli generated. If a range of systems is used for this purpose, problems may well occur at the interfaces. To counteract these and other problems, Softing has developed SMT - the new Softing Measurement Technology.

SMT combines sophisticated measurement technology with signal generation, communication, computer power and storage depth. A number of standard transducers are supported. Examples of these

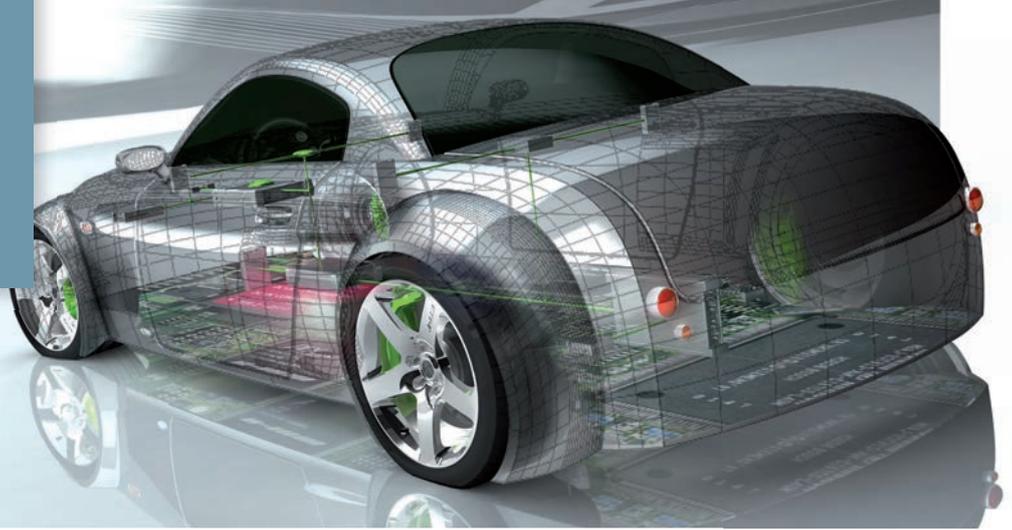
are ohmic-resistive and piezoresistive full and half bridges, active transducers with voltage and frequency outputs as well as various temperature sensors. With galvanically isolated inputs, sampling rates of up to 100 kSPS and extensive filter possibilities, the SMT systems are perfect when it comes to dealing with demanding measuring tasks.

The unique module concept enables optimal adaptation to the particular application. Channels can be scaled to virtually any degree, not even decentral systems pose a problem. Apart from being perfect for use with test bench applications, SMT is particularly suitable for mobile applications thanks to its compact and ruggedized design.

The system software supplements the performance data of the IO modules. It offers a whole range of possibilities in the automation, data processing and visualization sectors to name but a few. In addition to classical measuring applications, SMT is also suitable for automation tasks, designing control systems, real-time monitoring, data logging and residual bus simulations.



More information: <http://automotive.softing.com/en/smt>



μ-Serie – Field Bus Measurement Technology by Softing

The amount of space required for measurement technology usually plays a relatively insignificant role in lab and test bench applications. And their weight and requirements in terms of energy are not usually a deciding factor when it comes to choosing the most appropriate tool either. What's more, good mechanical and thermal decoupling of measurement electronics and the measurement object can usually be implemented at an acceptable price with moderate effort. But it is a completely different story when it comes to mobile applications. The new μ Series from Softing has a lot to offer wherever reliable, top-quality measuring has to take place under difficult environmental conditions.

The μ Series is a collection of compact measurement modules connected via CAN. They are often installed in close proximity to the measuring point with the aim of cutting down on the amount of cable needed in the vehicle and considerably reducing measurement errors caused by long-distance analog transmission. As the μ Series requires little space and features an extremely ruggedized design, its modules are particularly suitable for use in challenging environmental conditions, for example for measurements concerning chassis components or the engine compartment. Their extremely low power consumption as well as a whole range of mounting possibilities underline the modules' suitability for practical, regular use. And the μ Series can be implemented flexibly in terms of software too. The modules are supported by the SMT system software PEA, making integration into complex SMT systems both fast and easy. DBC files can be generated at the push of a button for pure CAN applications based on the module configuration. If, in addition, the in-built free-wheeling mode is enabled, the modules change to measuring mode immediately once power is supplied. This makes it possible to record and evaluate measured data with standard CAN tools.

More information: <http://automotive.softing.com/en/u-serie>

HSC – Trend-Setting High-Tech VCI

VCI development is experiencing a major breakthrough in terms of performance and integration density with the HSC. The compact hardware architecture consisting of 32-bit high-performance CPU with integrated WLAN connection is accommodated in a special plastic housing with integrated diagnostic connector. For CAN and K-line, the standards UDS (ISO 14229) and KWP 2000 (ISO 14230, ISO 15765) as well as many OEM-specific protocols are supported via D-PDU API. Combined communication solutions consisting of legacy systems and Ethernet-based vehicles are becoming possible with the implementation of the increasingly common Ethernet connection to the vehicle using Diagnostics over IP (DoIP). The data stream to the vehicle must be able to be mapped completely both via USB and via WLAN. Alternatively, the VCI can also communicate with the workstation via 100 MBit Ethernet. The cable is connected via a special magnet-based contact system (MagCode).

The product launch of the new VCI is scheduled for the beginning of 2013.

More information: <http://automotive.softing.com/en/hsc>



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