Universal Debug Engine® UDE is one of the leading frameworks for Debug, Trace and Test supporting a wide range of microcontrollers including: AURIX/TriCore, ARM Cortex M/R/A, SPC5/MPC5xxx, RH850, XE166/XC2000

**Multi-core debugging and trace**
- Debug and trace for 32 and 64 bit MCUs
- Comfortable multi-core debugging and visualization
- Core perspectives and core-specific coloring

**Trace data analysis at system level**
- Visualization of task and code execution
- Code coverage analysis helps ensuring software quality and fulfilling requirements of ISO26262

**Compiler, RTOS, Hypervisor support**
- Support for C/C++ cross compilers from different vendors: HighTec/GNU, Tasking, Keil, ARM, Wind River, Green Hills, etc.
- Awareness of various RTOS: PXROS, CMX, μC/OSII, rcX, Autosar/OSEK, FreeRTOS and SafeRTOS
- Hypervisor awareness for LynxSecure hypervisor

**Target interfaces and hosts**
- Fast, robust and flexible target access provided by the Universal Access Device family: UAD2pro, UAD2next, UAD3+
- Support for virtual prototypes / simulators
- Target communication using functional interfaces and protocols (CAN, XCP)

**Software API for automation**
- Open interface to all functional features of UDE
- Based on Microsoft Component Object Model (COM)
- Debug and test automation by scripting
- Support for Perl, Python, Java, VB Script, Power Shell
- C/C++, .NET, etc.
- Tool interface for third party tools

**Synchronous start, stop and single step**
- Flexible core groups and multi-core breakpoints
- Support for eTPU, GTM and HSM
- Parallel capturing and visualization of multiple trace sources
- Offline analysis of traces
- Easy configuration of on-chip trace filters and trigger logic
- Fast find in large trace data

**No influence on runtime behavior of application, no instrumentation required**
- Branch coverage can be calculated from trace even for highly optimized code (special compiler extension required)
- Profiling provides important runtime information for finding bottlenecks in applications quickly

**Windows 7/8/10 (32 and 64 bit) supported**
- Eclipse plug-in for UDE offers complete cross debugger unclonability and provides support for latest Eclipse releases
Universal Access Device
Leading Edge in Debugging, Trace & Test

The Universal Access Device family opens a completely new dimension for fast and flexible access to multi-core systems via a wide range of interfaces and support for on-chip and external trace solutions.

Smart debugging with UDE/UAD2pro
- High speed USB 2.0 host interface
- Proven adapter solution for fastest and reliable target access: JTAG, DAP, SWD, OnCE, LPD, H-UDI
- Up to 50 MHz shift clock and 1,65 V - 5,5 V I/O voltage
- Electrically isolated target adapters (option)
- Combined connector for CAN and serial interface
- Support for on-chip trace buffers

Universal debug system UDE/UAD2next
- High speed host interfaces: USB3, Gigabit Ethernet
- Proven adapter solution for fastest and reliable target access: JTAG, DAP, SWD, OnCE, LPD, H-UDI
- Up to 160 MHz shift clock and 1,65 V - 5,5 V I/O voltage
- ASC and CAN target interface, CAN FD available upon request
- Electrically isolated target adapters (option)
- Easy extension by pluggable target specific trace modules
- AURORA serial high-speed trace with up to 1.25 Gbit/s
- Parallel trace with up to 12 bit @ 125 MHz DDR
- 512 Mbyte trace memory

High-end trace with UDE/UAD3+
- High speed host interfaces: USB 2.0, Gigabit Ethernet, IEEE1394b (FireWire-800)
- Fast multi-target access – up to 8 debug interfaces
- Proven adapter solution for fastest and reliable target access: JTAG, DAP, SWD, OnCE, LPD, H-UDI
- Separate debug pods for up to 5 meters distance to the target
- Up to 160 MHz shift clock and 1,65 V - 5,5 V I/O voltage
- Electrically isolated target adapters (option)
- AURORA serial high-speed trace with up to 3.125 Gbit/s
- Parallel trace with up to 20 bit @ 500 MHz
- Up to 4 Gbyte trace memory

Contact us if you have any questions about debugging, trace and test tools for AURIX/TriCore, ARM Cortex M/R/A, SPC5/MPC5xxx, RH850, XE166/XC2000...

www.pls-mc.com
info@pls-mc.com