LAUTERBACH
DEVELOPMENT TOOLS

MODULAR, POWERFUL AND FUTURE PROVEN

Debugger & Trace Solutions for AMD FPGA-SoCs

AMD offers a comprehensive portfolio of FPGAs and FPGA-SoCs to address requirements across a wide set of applications. The devices combine the software programmability of several kinds of Arm® processors, hardware programmability of FPGAs, and specialized hardened blocks for whole application acceleration.

Lauterbach's market leading TRACE32® debug and trace development tools for the embedded industry provide not only full insights into all today's AMD's chips: Thanks to the long-standing close partnership with AMD, future chip developments are also accompanied by Lauterbach from the very beginning – ensuring a future-proof investment.

DOWNLOAD OUR SOLUTIONS OVERVIEW

All information about Lauterbach's products for debugging and tracing.

KEY FEATURES

Unlimited Multicore Debugging

AMD FPGA-SoCs implement different kinds of Arm® cores – besides hard-cores like Cortex-A9/A53/A72 and Cortex-R5 it's also possible to implement additional Arm® Cortex-M or other soft-cores like MicroBlaze™ within the FPGA logic. No matter what kind of multicore system is used, TRACE32® supports them all.

OS-Aware Debugging of Any Core

Lauterbach's TRACE32® OS-aware debugging provides key insights into applications and the operating systems they are running on, no matter if rich operating systems like Linux, real-time operating systems (RTOS), or a mixture of all is used. With this, engineers can better understand how they are behaving and utilizing chip resources.

HSDP Debugging and Trace for AMD Versal™ SoCs

The high-speed debug port (HSDP) enables faster debugging, and high-speed serial trace. Lauterbach's HSDP adapter improves the configuration and trace link speed to up to 10 Gbit/s – orders of magnitude faster than JTAG. Faster iterations and repetitive downloads increase development productivity and reduce the design cycle.

Debugging Hardware and Software Simultaneously

The XVCD bridge is an integration by Lauterbach that allows developers to use the Vivado Suite of AMD for hardware analysis and the TRACE32® infrastructure for software debugging via the same probe. Internal FPGA signals can be analyzed via AMD's Integrated Logic Analyzer (ILA) while the software is debugged with TRACE32®. With Lauterbach's Mixed Signal Probe extension, developers can also monitor external I/O signals, which are not connected to Vivado, and correlate them to the program flow.

LEARN MORE @
lauterbach.com

AMD-FPGA-SoCs

DEBUGGER and TRACE-Solutions
for All AMD FPGA-SoCs

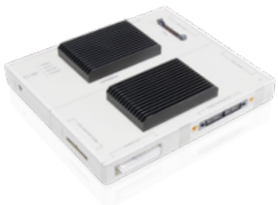
Chip-Family	Architectures	Debug	On-Chip Trace	Off-Chip Trace	XCP Debugging	Instruction Set Simulator
CHIPS		AVAILABLE TRACE32® SOLUTIONS				
VERSAL	Arm®/Cortex®, MicroBlaze™	✓ 1	✓ 1	✓ 2 / 3	✓ 4	✓ 5
ZYNQ-ULTRASCALE+	Arm®/Cortex®, MicroBlaze™	✓ 1	✓ 1	✓ 2 / 3	✓ 4	✓ 5
ZYNQ-7000	Arm®/Cortex®	✓ 1	✓ 1	✓ 2	✓ 4	✓ 5
MicroBlaze™ Soft-core for FPGAs	MicroBlaze™	✓ 1	–	✓ 2	–	✓ 5

Find the Right TRACE32® Solution for Your Chip:
lauterbach.com/supported-platforms/amd

PowerDebug System

1 Powerful, moduler, flexible debug system for 150+ microprocessor families

PowerTrace System



2 Highest performance parallel and serial trace system

CombiProbe 2

3 Compact debug & trace probe for low-bandwidth trace capture

XCP Debug & Trace

xcp

4 Software debugger via XCP measurement and calibration protocol

Instruction Set Simulator

ISS
Instruction Set Simulator

5 ISS for developing or testing application code without target hardware