

MODULAR, POWERFUL AND FUTURE PROVEN

# Debugger & Trace Solutions for Qualcomm Snapdragon SoC

Qualcomm offers a comprehensive portfolio of Snapdragon SoCs to address requirements across a wide set of industries and applications with a strong focus on Mobile Devices and Automotive. They implement high performance custom Arm® v8/9-A cores as main CPUs as well as Hexagon DSPs/NPUs for AI, Audio and other specialized workloads. Lauterbach's market leading TRACE32® debug and trace development tools provide not only full insights into Snapdragon SoCs for the whole lifecycle: Thanks to the long-standing close partnership with Qualcomm, 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

Qualcomm Snapdragon SoCs implement multiple Arm® v8/9-A compatible in-house developed CPUs as well as custom Hexagon DSPs/NPUs and further cores of different architectures. No matter what kind of multicore configuration is used, Lauterbach's TRACE32® tools support 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) like QNX, or even proprietary RTOSes, or a mixture of all is used. With this, engineers can better understand how they are behaving and utilizing chip resources.

### Ready for Software Defined Vehicles (SDV)

On virtualized SDV systems, where multiple OSES are controlled by a hypervisor like QNX, TRACE32® allows you to perform concurrent OS-aware debugging for each guest OS/virtual machine (VM) and display an overview of the overall system. This includes also any kind of AUTOSAR aware debugging and containerized workloads.

### Covering the Whole Snapdragon SoC Lifecycle

Besides to real silicon, TRACE32® tools can connect to various simulators, emulators, and virtual targets. Developers can reuse the scripts generated in this phase throughout the entire product life cycle because the user interface and scripting commands stay the same from simulations through use in the field by the customers.

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[lauterbach.com](https://lauterbach.com)

# QUALCOMM





# DEBUGGER and TRACE-Solutions for Qualcomm Snapdragon SoCs

| Chip-Family                  |                                                                                                      | Architectures                |                | Debug | On-Chip Trace | Off-Chip Trace | XCP Debugging | Instruction Set Simulators |
|------------------------------|------------------------------------------------------------------------------------------------------|------------------------------|----------------|-------|---------------|----------------|---------------|----------------------------|
| CHIPS                        |                                                                                                      | AVAILABLE TRACE32® SOLUTIONS |                |       |               |                |               |                            |
| Snapdragon™                  | Qualcomm custom Arm® v8/9-A,<br>Qualcomm Hexagon DSP/NPU<br>Further cores of different architectures | ✓ <sup>1</sup>               | ✓ <sup>1</sup> |       |               |                |               | ✓ <sup>2</sup>             |
| ...further<br>Qualcomm Chips | Please search Lauterbach's chip database – see QR code below                                         |                              |                |       |               |                |               |                            |



Find the Right TRACE32® Solution for Your Chip:  
[lauterbach.com/supported-platforms/qualcomm](https://lauterbach.com/supported-platforms/qualcomm)

## PowerDebug System



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

## Instruction Set Simulators from Lauterbach & Qualcomm



2 ISS for developing or testing  
application code  
without target hardware