

Factsheet



TimingProfiler for ARM

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TimingProfiler helps you identify application parts that cause unsatisfactory execution times. It delivers results as soon as there is compiled code, and thus can be used very early in the development process, when measurements on physical hardware are costly or impossible. This makes TimingProfiler ideally suited for constantly monitoring timing behavior during software development and in model-based development environments.

Key benefits

- TimingProfiler gives detailed information about the execution time and time-critical paths.
- The analysis is purely static. No access to physical hardware and no code instrumentation are required.
- The analyzer does not need to be stimulated with concrete inputs. By default, it takes all potential inputs into account.
- Nevertheless, the analysis can be restricted to specific execution scenarios if desired.
- The tool shows call and control flow graphs, and displays all relevant information about the executable.
- Hotspots and bottlenecks can be identified at early development stages so that late-stage integration problems can be avoided.
- This provides for easy integration into the development process, and enables application in continuous test and integration frameworks.
- TimingProfiler can be seamlessly coupled with StackAnalyzer to additionally take the stack behavior into account, providing a unified approach to addressing resource usage.

Supported compilers

- ARM Developer Suite C/C++ compiler
- CompCert C Compiler

- GNU C/C++ Compiler (GCC)
- Green Hills C/C++ Optimizing Compiler
- IAR C/C++ compiler
- Keil MDK-ARM C/C++ compiler suite
- LLVM/Clang based ARM compilers such as the HighTec compiler
- Tasking C/C++ compiler
- Texas Instruments C/C++ compiler
- Wind River Diab C/C++ compiler

Supported processor derivatives

- ARM Cortex-A
- ARM Cortex-M
- ARM Cortex-R

System requirements

- Windows: x86-64 Windows 10 (1809) or newer
- Linux: x86-64 RHEL 9 or compatible
- 4 GB of RAM (16 GB recommended)
- 4 GB of disk space

Also available

The following AbsInt products are also available for this target:

- aiT
- StackAnalyzer
- ValueAnalyzer
- TimeWeaver

More information

- Visit our website: www.absint.com
- Speak with a product specialist:
call +49 681 383 600



About AbsInt

AbsInt provides advanced development tools for embedded systems, and tools for analysis, optimization and verification of safety-critical software. Our customers are located in more than 40 countries worldwide. We have distribution agreements with major software distributors in Asia, North America, Middle East, and throughout Europe.

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