Factsheet

aiT for ARM

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AbsInt

aiT WCET Analyzers statically compute tight bounds for the worst-case execution time (WCET) of tasks in real-time systems. They directly analyze binary executables and take the intrinsic cache and pipeline behavior into account.

Key benefits

- aiT-computed bounds are extremely tight and thus reflect the actual performance of your system. Ensuring deadline adherence is not done at the expense of hardware resources.
- aiT-computed bounds are valid for all inputs and each execution of a task. Extensive timing testing is a thing of the past.
- aiT directly analyzes binary executables. It is widely independent of the compiler and source code language used. This means no modification of your toolchain or the system's operational behavior and performance is required.
- Seamless integration with other analysis tools from AbsInt in an intuitive user interface.

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 derivates

- ARM Cortex-M0 (STM32F0DISCOVERY)

- ARM Cortex-M1 (Milandr 1986VE1T)
- ARM Cortex-M3 (LM3S811, STM32F103xx)
- ARM Cortex-M4 (Infineon XMC4500)
- ARM Cortex-R4F (TI TMS570LS3137)
- ARM Cortex-R4F LCR
- ARM Cortex-R5F (TI TMS570LC4357)
- ARM7TDMI
- ARM720T (Sharp LH79520)

System requirements

- Windows: x86-64 Windows 10 or newer
- Linux: x86-64 CentOS/RHEL 7 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:

- StackAnalyzer
- TimingProfiler
- ValueAnalyzer
- TimeWeaver
- Qualification Support Kit

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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