

Factsheet



ValueAnalyzer for ARM

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ValueAnalyzer is a static program analyzer for value analysis of register and memory contents. It is particularly useful for verifying the absence of illegal accesses to an embedded software system from within third-party modules provided as object code.

Key benefits

- The analysis is fully automatic and valid for all inputs. No input patterns need to be provided.
- The analysis performed by ValueAnalyzer is conservative, i.e. the results are safe. All illegal accesses that are present will also be reported.
- Supplied third-party software can be analyzed right away. It does not have to be integrated on the ECU.
- No debug information is required. The results are not affected by possible bugs in the debug output.
- 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 architecture variants and extensions

- ARMv4 / ARMv4T
- ARMv5T / ARMv5TE
- ARMv6 / ARMv6T2
- ARMv7
- ARMv8
- ARMv9 up to and including ARMv9.3
- Advanced SIMD / “NEON”
- Thumb/Thumb-2
- VFP

Supported ARM families

- ARM7TDMI / ARM9TDMI
- StrongARM
- ARM9E / ARM10E
- XScale
- Cortex-A / Cortex-M / Cortex-R

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:

- aiT
- StackAnalyzer
- TimingProfiler
- 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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