

Factsheet



ValueAnalyzer for X86

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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

- CAD-UL Tool Suite C/C++ compiler for x86 Protected Mode
- CompCert C Compiler
- Cygnus LynxOS x86 C/C++ Compiler of LynuxWorks for 32-bit flat mode
- GNU C/C++ Compiler (GCC) for 32-bit flat mode or 64-bit long mode
- Intel iC-86 C/C++ Compiler (ICC) for 16-bit real mode
- LLVM/Clang based C/C++ compilers
- PL/I compiler for x86 processors (protected mode)

Supported architecture variants and extensions

The supported instruction sets are x86-32 (= ia32 = Intel 32), x86-64 (= Amd64 = Intel 64), x87, MMX, 3DNow!, SSE, SSE2, SSE3, SSE4.1, SSE4.2, AES, AVX, and AVX2.

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

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.



Our headquarters

Science Park 1
66123 Saarbrücken, Germany
Phone: +49 681 383 600
Fax: +49 681 383 60 20
Email: info@absint.com
Web: www.absint.com