

# Factsheet



## ValueAnalyzer for X86

Release 24.04i, b15309220

April 25, 2024



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](http://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](mailto:info@absint.com)  
Web: [www.absint.com](http://www.absint.com)