

# Factsheet



## ValueAnalyzer for V850

Release 25.04i, b17402278

April 24, 2025





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

- Wind River Diab C/C++ compiler (C code)
- Green Hills C/C++ Optimizing Compiler (C code)
- Renesas CS+ compiler

## Supported architecture variants and extensions

- V850E/PHO3 (revisions  $\mu$ PD70F3441 and  $\mu$ PD70F3483)
- V850E/FK3-H (revision  $\mu$ PD70F3469)
- V850E2/Fx4-H (revision  $\mu$ PD70F3501F1, umbrella emulation device)
- VFOREST (revisions  $\mu$ PD76F0134,  $\mu$ PD76F0197,  $\mu$ PD76F0198,  $\mu$ PD76F0199)

- FOREST (revisions  $\mu$ PD70F3407,  $\mu$ PD70F3409,  $\mu$ PD70F3410,  $\mu$ PD70F3429,  $\mu$ PD70F3431)
- Generic support for the various V850 E1/ES, E2, E3, and RH850 ISA targets

## 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
- TimingProfiler
- TimeWeaver

## 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)