



Prover PSL™

Version 5.10

Prover PSL™ is an efficient model checker capable of formally verifying big industrial systems. Prover PSL™ empowers developers to ensure the correctness and reliability of their high-integrity software, meeting stringent safety standards across industries.

Benefits

Enhanced Safety. Mitigate risks and enhance safety by rigorously verifying critical software components.

High Performance Model Checking. Based on the Prover® history, all the analysis strategies implemented have been finely tuned.

Bug Chasing. Prover PSL™ helps you find and analyze issues in your systems.

Key Features

Various proof strategies. A powerful default strategy is available, but you can also configure your own model checking strategies using build-in strategies such as BMC, induction, interpolation or IC3.

Strategy Fusion. Strategies can be fused to create new, more powerful, strategies.

Turbo Threading. Use all the power of multicore processors to accelerate your proofs.

Embedded debug tools. Several built-in checks are available, that help you debug your system, but also powerful features to understand issues discovered in your system.

Industry Standards Compliance

For compliance with CENELEC EN50128, use Prover PSL™ together with Prover Certifier™. Prover Certifier™ is approved by TÜV NORD as a CENELEC EN50128-compliant T2 tool for SIL 4 applications.

Interfaces

Prover PSL™ is a command line tool that reads HLL models, sHLL models, and LLL models from file. Various translators to HLL, sHLL and LLL are available as add-ons.

Results are reported directly by Prover PSL™ and optionally stored in a text file.

Counterexamples produced by Prover PSL™ can be exported in XML format.

Supported Platforms

Linux Ubuntu 18.04 until April 30, 2025.

Linux Ubuntu 20.04 until April 30, 2027.

Linux Ubuntu 22.04 until April 30, 2029.

Linux Ubuntu 24.04 until April 30, 2031.

Red Hat Enterprise Linux 8 until May 31, 2029.

Red Hat Enterprise Linux 9 until May 31, 2032.

Support for additional platforms can be purchased.

Expert Services

Additional expert services can be provided, including training, analysis as a service, and best practices advice.

Get Started with Prover PSL™

Visit www.prover.com/products/prover-psl/ to learn more,

watch a demo, or get in touch with our experts.