

Precision RTL Plus

Precision RTL Plus is Mentor Graphics' flagship FPGA synthesis solution offering breakthrough advantages for commercial applications and for mil-aero and safety-critical systems.

Precision RTL Plus offers an improved way of designing FPGAs and increasing designer productivity. Through its advanced synthesis technologies and integration within Mentor's FPGA flow, it provides several unique features that enable every designer to reach timing closure faster, to minimize the impact of design changes, and to address application-specific requirements.

Key Features and Benefits

Physical Synthesis

- Average performance improvement of 10%
- Support for Actel, Altera, Lattice and Xilinx

Mil-Aero, Safety-Critical, & DO-254

- Repeatability of results
- Synthesis for design assurance
- Integration with Mentor tools for DO-254

Low Power Synthesis

- Optimizations to reduce dynamic power
- Multi-vendor support

Incremental Synthesis

- Fully automatic incremental synthesis
- Partition-based incremental synthesis
- Reduces runtime and preserves QoR
- Integrated with incremental place-and-route

Precise™-Explore

- Automated exploration of synthesis implementation options
- Control options for frequency, area and runtime

Precise™-Validate

- Vendor independent FPGA debug and validation
- Seamless push-button instrumentation without any HDL modification
- System speed FPGA validation with virtually unlimited visibility

Precise-Encrypt

- Vendor independent HDL encryption
- Based on IEEE P1735 draft
- Interoperable with ModelSim & Questa

Integration with Mentor Tools

- Design reuse with HDL Designer™
- Equivalence checking with FormalPro™
- Requirements tracking with ReqTracer™
- FPGA-PCB co-design with I/O Designer

Resource Manager

- Graphical analysis of embedded resources
- Aids in improving performance and area

All Precision RTL Features

- Award-winning analysis
- Mixed language support with SystemVerilog
- ASIC prototyping support
- Precise™-IP