

# Product Line

## Verification Ecosystem for FPGA/SoC Designs

A trusted name in EDA since 1984, Aldec understands that today's engineers require innovative solutions to enable rapid deployment at every stage of development.

Aldec works closely with customers to understand their real-world challenges and requirements, and deliver a personal blueprint of solutions customized to fit their needs.

High-Performance Simulator for Mixed Language Designs  
IEEE VHDL, SystemVerilog, Verilog-AMS, SystemC/C/C++  
Verification Libraries: UVM, OS-VVM  
Assertion-Based Verification: SVA, PSL

### Riviera-PRO™

#### ADVANCED VERIFICATION

IEEE VHDL, Verilog, SystemVerilog (Design)  
Multi-FPGA & EDA Tool Design Flow Manager  
HTML and PDF Design Documentation  
Text, Schematic, FSM Design Entry Tools

### Active-HDL™

#### FPGA DESIGN & SIMULATION

### HES-DVM™

Acceleration, SCE-MI Emulation, Prototyping  
Virtual Platform Integration – HW/SW Co-Verification  
Transactor Library - Bus Models and Peripherals  
Extensive Debugging Capabilities

#### HW/SW EMULATION

#### DESIGN RULE CHECKING

### ALINT™

Industry-leading Rule Libraries: STARC, RMM, DO-254  
Early Bug Detection during RTL Design Phase  
IEEE VHDL, Verilog, Mixed-Language Designs  
IDE for In-Depth Design Troubleshooting

### HES-7™

Scalable up to 633 million ASIC gates  
ARM® Cortex®-A9 Support with Xilinx® Zynq® SoC  
HDMI, USB, Bluetooth, Wi-Fi, Ethernet, and more  
Expandable, Non-proprietary Connectors

#### PROTOTYPING BOARDS

#### CDC VERIFICATION

### ALINT-PRO™

Clock and Reset Networks Analysis  
Avoiding post RTL and post Synthesis Simulation Mismatches  
Extensive CDC checks with ALDEC\_CDC rule plug-in  
Code Portability and Reuse

Traceability to HDL Design and Testbench  
Requirements Coverage Analysis  
Change Impact Analysis  
Test-Results Management

### Spec-TRACER™

Supported Microsemi Devices/Capacities  
RTAX-S/SL Up To 4000S, RTAX-DSP & RTSX-SU Device  
Automated Device Netlist Converter  
Memory & Physical Design Constraint (PDC) File Conversion

### RTAX/RTSX

#### REQUIREMENTS LIFECYCLE MANAGEMENT

#### FPGA LEVEL IN-TARGET TESTING

### DO-254/CTS™

Increase verification coverage by test  
Testbench reuse as hardware test vectors  
100% device I/O controllability and visibility  
Testing at-speed on target device:  
Altera®, Microsemi®, Xilinx®

#### MICROSEMI™ RAD-TOLERANT PROTOTYPING



## Customer Stories

### Active-HDL™



"With a good editor/compiler and a versatile, easy to use simulator, Active-HDL was considered the best featured design tool compared to leading competitors. The quality of the design environment and good integration with source control tools definitely saves time on both new development and maintaining existing code."

### Riviera-PRO™



"Designers seeking superb verification tools will benefit from Riviera-PRO's complete verification environment for high-performance RTL and gate-level simulation."

### DO-254/CTS™



EASA approved our verification process based on Aldec DO-254/CTS, accepted our test results, and the audit passed without any findings. This is the first time in Elbit's history that we have been able to bring more than 5 FPGA devices to the audit. Aldec helped us solve several of our verification challenges and delivered quick and professional responses for all our requests.

### Technical Support



"Thanks to Aldec's support team, learning how to simulate a new and rather complex design took nearly no time at all. It is quite clear that Aldec's engineers have left no stone unturned in their quest for excellence."

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