Overview of the Design System

Aeroflex Colorado Springs offers two Hardware Description Language (HDL) design systems. Both the VHDL and Verilog design systems provide sign-off quality libraries and robust tools. The VHDL libraries are VITAL 3.0 compliant, and the Verilog libraries are OVI 1.0 compliant. With the library capabilities Aeroflex provides, you can use High Level Design methods to synthesize your design for simulation. Aeroflex also provides tools to verify that your HDL design will result in working ASIC devices.

Either of Aeroflex’s HDL design systems let you easily access Aeroflex’s RadHard capabilities.

Advantages

- The Aeroflex’s HDL Design System gives you the freedom to use tools from Synopsys, Mentor, Cadence, and other vendors to help you synthesize and verify a design.
- Aeroflex’s Logic Rules Checker and Tester Rules Checker allow you to verify partial or complete designs for compliance with Aeroflex UTMC design rules.
- Aeroflex HDL Design Systems accept back-annotation of timing information through SDF.
- Your design stays completely within the language in which you started (VHDL or Verilog), preventing conversion headaches.

<table>
<thead>
<tr>
<th>This Tool in the Aeroflex HDL Design System...</th>
<th>Performs This Task...</th>
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</thead>
<tbody>
<tr>
<td>HDL Source Analyzer</td>
<td>Checks structural HDL syntax</td>
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<tr>
<td>Delay Calculator</td>
<td>Estimates design timing before layout</td>
</tr>
<tr>
<td>Logic Rules Checker</td>
<td>Makes sure the design meets connectivity rules</td>
</tr>
<tr>
<td>Tester Rules Checker</td>
<td>Makes sure the design can be tested on Aeroflex UTMC testers</td>
</tr>
<tr>
<td>Pin Timing Budget Calculator</td>
<td>Supports timing driven layout</td>
</tr>
</tbody>
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Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.

Design Flow in the Aeroflex HDL Design System

1. Design
   - High Level Design Simulation
   - Generate Structural HDL
   - Perform Logic Rules Checking
   - Simulate/Verify Design
   - Perform Tester Rules Checking
   - Transfer Design to Aeroflex
   - Provide customer with SDF back-annotation file

2. Design Idea
   - Synthesis Tools
   - Schematic Analysis Tools
   - VITAL/OVI compliant Simulator
   - Aeroflex HDL Design System
   - Production

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