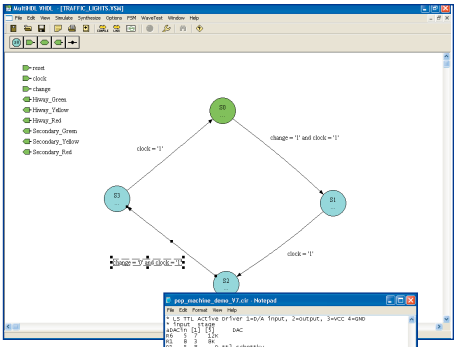
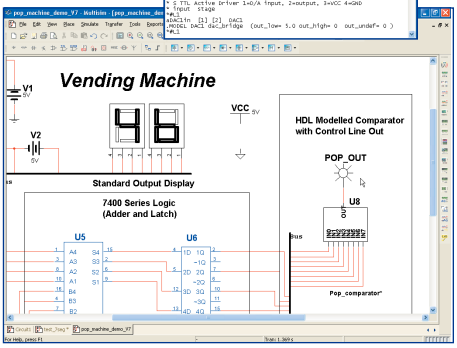
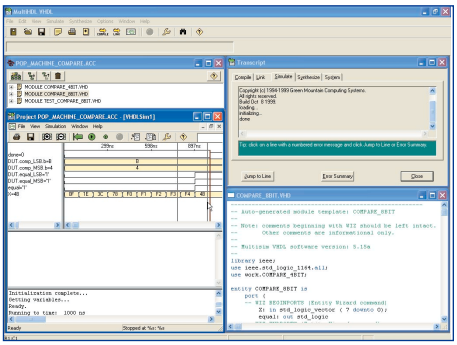
multiHDL
Programmable Logic

TEACHING HDLS AND DIGITAL LOGIC WITH MULTIHDL

In addition to the SPICE simulation inside Multisim, Electronics Workbench also offers HDL simulation technology. MultiHDL can be used to teach VHDL programming to your students and is fully compliant with all IEEE standards. If you already have a course in VHDL, or if you've been thinking about new ways to introduce digital logic, then we have the solution for you!

By simulating VHDL models along with SPICE models, Multisim lets you ease your students into HDL design. Get students started by replacing simple gates with VHDL models. In a short time, they will be simulating complex digital chips using VHDL models alongside the analog and glue logic portions of their circuits. Your students will benefit greatly from this simple transition into HDLs using the same software and interface that they have mastered in their earlier courses.

MultiHDL can be used as a stand-alone application, or together with Multisim's SPICE simulator using patented co-simulation. It is perfect for teaching HDLs, digital logic, programmable logic design or for creating simulation models for complex digital IC's not practically modeled in SPICE. Co-simulation allows you to introduce VHDL modeled components into mixed-mode circuits and to demonstrate the performance of a FPGA/CPLD in the real (SPICE modeled) circuit in which it will be used.

MultiHDL comes complete with flexible design entry, highly automated project management, powerful simulation, advanced waveform viewing and comprehensive debug features.

- Source Code Editor
- Fast, accurate simulation
- State machine editor
- Pin & Tunnel Diodes
- RF BJTs & MOSFETs
- Waveguides
- Graphical Testbench Designer
- On-the-fly error detection — catch many mistakes prior to compilation
- Graphical Waveform Viewer
- Complete VHDL IEEE 1076-93 and 1164 support
- Advanced, interactive source level debugging
- Patented co-simulation with SPICE