

SawTooth EDA

simControl™

FEATURES:

Open Architecture

- Interfaces with industry spice and fast-spice simulators
- Interfaces with industry standard 3rd party load balancers
- Built-in load balancer
- API to batch measurement tools (i.e. Ocean)
- Built-in rawfile measurement tool
- Send waves to waveform viewers

Simulation Setup

- Advanced corner sweeping and permutation control
- Input file macro expansion
- Netlist and/or model sweeps
- Interface to simulator monte carlo
- Built-in global / local(mismatch) monte carlo

Data Analysis

- Rigorous equation engine including cross-corner functions
- Cross-corner graph generation utilities
- Script API for custom data analysis needs and post processing

Web Based Dashboards

- Circuit dashboard
- Simulation / measurement results dashboard
- Specification dashboard
- Hyperlinked input, output, model and error files
- Launch waveform viewers
- Cross-corner graphs
- Export data to CSV, Excel
- Export graphs to Excel

Web Control Console

- Edit input files
- Re-launch simulations

Custom Design Verification Environment

- Automate circuit test benches and regression suites
- Reduce design closure time to specification
- Standardize the circuit design process
- Maximize design yield with repeatability

SimControl is the industry's only open architecture custom design verification environment. By maximizing freedom of choice, SimControl enables automation of circuit design the way you want via open, user-friendly technology.

Design Yield vs. Closure Time

Circuit designers must simulate their designs across a broad range of circuit environments to ensure high silicon yield. Often tradeoffs must be made between rigorous verification and schedule – leading to ad-hoc test benches or incomplete corner sets. SimControl eliminates these limitations by fully automating and parallelizing the corner setup and simulation process. Thousands of corners can be setup and managed in parallel using SimControl with results only limited by compute power. This turnkey scalability enables designers to reduce design cycle time while improving design yield.

Standardize Design Process

SimControl allows simple and efficient simulation setup and management. Since corners, sweeps, measures and data post-processing are all centrally managed, circuit analyses can be setup quickly and results can be monitored with fast feedback. More importantly, SimControl provides a platform with which to standardize simulation setup, verification, measurement and general design methodology. Standardization provides three key benefits:

- Framework: provides turnkey scalability and eases transfer of simulations from designer to designer (especially to a junior designer)
- Repeatability: reduces human error and thereby increases designer productivity
- Communication: improves communication with peers and management via a web interface

Dashboard Views

The SimControl dashboard views provide real-time information on the completion status of circuit blocks. Dashboards at various levels of hierarchy make it easy to quickly acquire the information needed – allowing progress toward design closure to be tightly tracked. The specsheet view for a circuit gives management valuable insight into the quality and timeliness of the design effort. Specsheets are easily created via the web interface and are automatically populated with the latest simulation data.