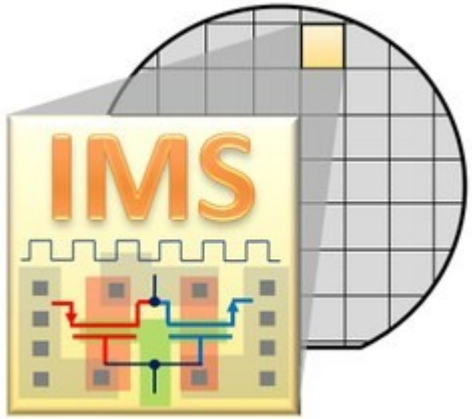
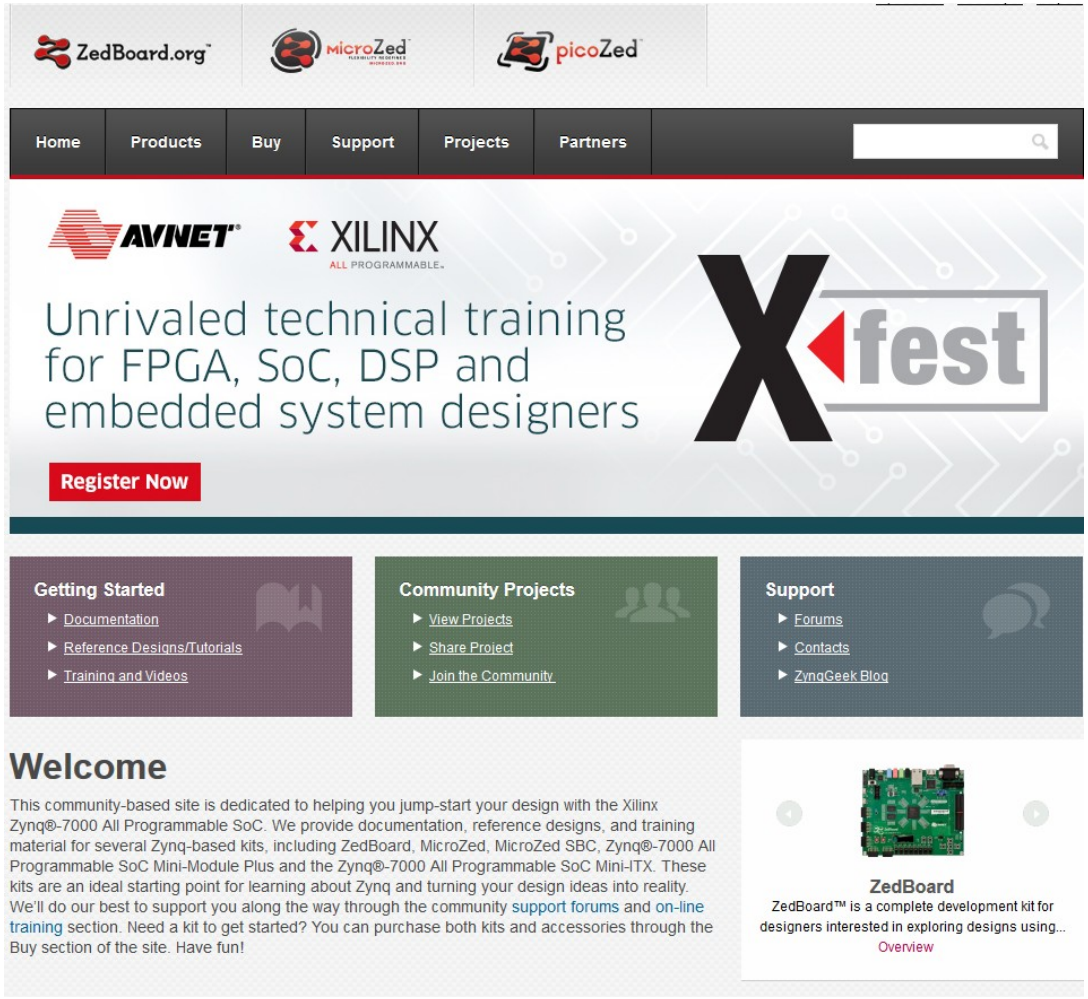
Bachelorarbeit Themen EIT4



1. Inbetriebnahme Zedboard (FPGA-Board)



http://zedboard.org/

2. Simulationen
in Cadence Spectre

http://http://www.cadence.com/products/rf/spectre_rf_simulation/

cadence

Tools IP Solutions Services Support and Training Alliances Community Company

Home > Tools > RF Design > Cadence Spectre RF Simulation

Email Share Subscribe Contact Print

RF Design

Spectre RF Simulation

Fast and accurate RF analyses

The Spectre RF Simulation solution provides a comprehensive set of analyses and high-performance verification of highly complex RF integrated circuits.

Spectre RF Simulation Solution Datasheet »
Faster, More Accurate Approach for System-Level Performance Verification White Paper »

Overview | Resource Library | Support & Training

The Cadence® Spectre® RF Simulation solution provides numerous analyses built on silicon-proven simulation engines in both the time and frequency domain. The choice of engines with automated set-up gives you the flexibility to tackle verification of linear and non-linear RF circuits. The wide range of analyses enables verification of broad RF-IC types, including mixers, transceivers, power amplifiers, dividers, switched capacitors, filters, and phase-locked loops (PLLs).

The Spectre RF solution supports extensive noise and distortion analysis capabilities. It also provides application-centric analysis, such as wireless analysis for system-level performance evaluation using standard-compliant signal sources. The tight integration into the Virtuoso® Analog Design Environment enables exhaustive simulation with set-up of multiple tests for multiple conditions.

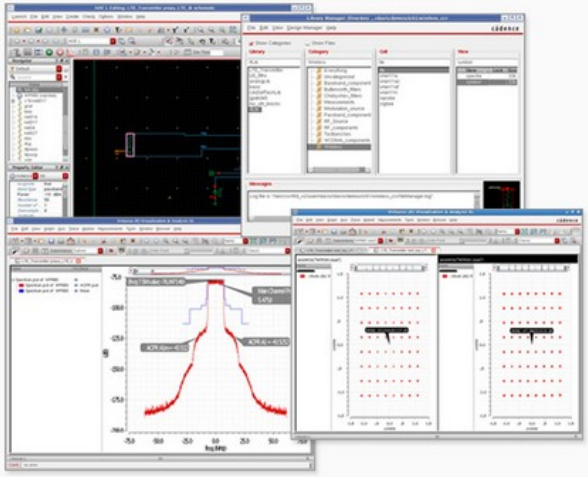


Figure 1: Wireless System-Level Performance Verification

Features/Benefits

- Harmonic balance and Shooting Newton engines for high-performance simulation of linear and non-linear RF circuits
- Enables robust RF circuit verification with a comprehensive set of analyses
- Wireless analysis with a powerful fast envelope modeling technology, standard-compliant sources, and automated set-up and post-processing
- RF transmission line library allows verification of the RF design in context of on- and off-chip passive circuitry
- Advanced S-parameter simulation with Broadband SPICE® technology

Highlights

- A Faster, More Accurate Approach for System-Level Performance Verification of a Wireless RFIC Design White Paper
- New Cadence Custom/Analog Flow Delivers Holistic Approach to 20nm Silicon Realization
- Taming the Challenges of 20nm Custom/Analog Design White Paper

Recent Blog Posts

- Virtuosity: 12 Things I Learned In February by Browsing Cadence Online Support
- Virtuosity: 13 Things I Learned in January 2015 by Browsing Cadence Online Support
- Virtuosity: 28 Things I Learned in November and December 2014 by Browsing Cadence Online Support

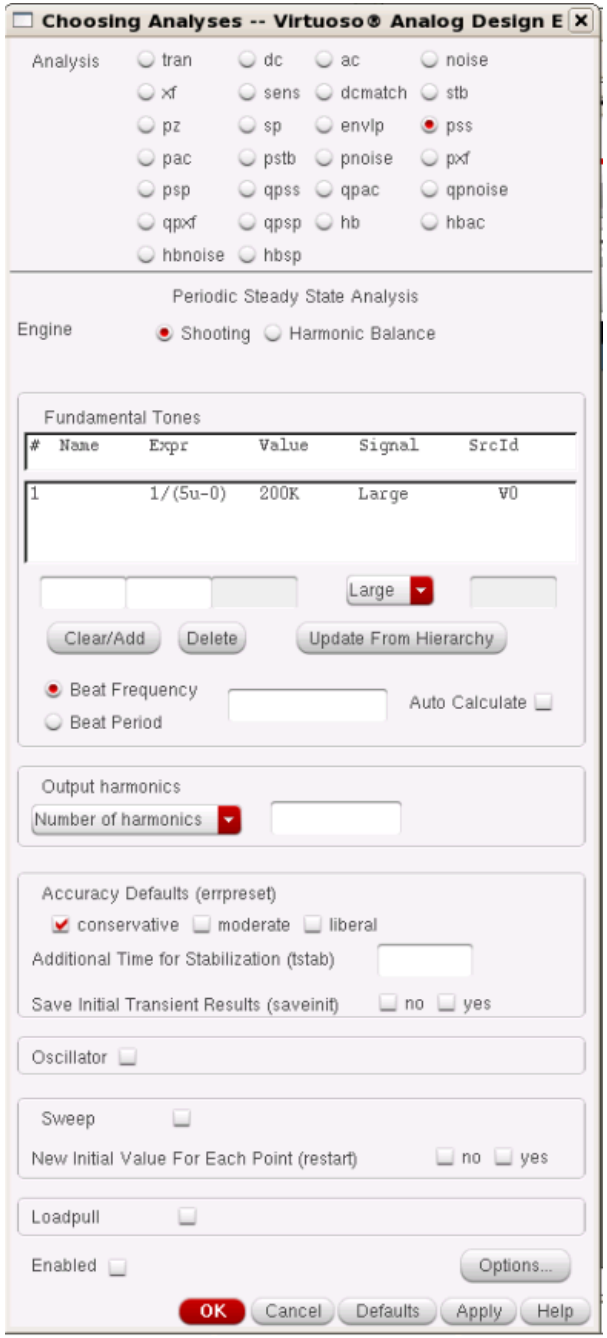
Visit the Community »

Related Info

- Cadence Services
- Support & Training
- Software Downloads
- Cadence Designer network Community

2. Simulationen in Cadence Spectre

http://http://www.cadence.com/products/rf/spectre_rf_simulation/



Design Themen

- Einfache Blöcke
  - Operationsverstärker
  - Low Noise Verstärker
  - Spannungsgesteuerte Oszillatoren
  - Mischer
  - Komparatoren

Design Themen Design Flow

- Einarbeitung Cadence Tools (1 Woche)
- Schematic Design (4 Wochen)
- Optimierung (1 Wochen)
- Layout (1-2 Wochen)
- LVS, DRC, Extracted View (1 Woche)
- Dokumentation (2-3 Wochen)