



Berkeley Design Automation and Altos Design Automation Accelerate Complex I/O Characterization

*Unprecedented Performance Enables I/O Characterization
with Nanometer SPICE Accuracy*

SANTA CLARA, CA, April 5, 2011— Berkeley Design Automation, Inc., the nanometer circuit verification leader and Altos Design Automation, Inc., the leading provider of IP characterization technology, today announced the support of Berkeley Design Automation Analog FastSPICE™ Platform in Altos' Liberate product to accelerate complex I/O cell characterization with nanometer SPICE accuracy, including the effects of device noise and layout parasitics.

Complex I/O cells implemented in nanometer-scale processes run at GHz speeds, have increasingly tight performance specifications, and must meet extremely low jitter requirements. Ensuring that these circuits will meet specification requires nanometer circuit verification including the impact of device noise and post-layout parasitics. The integration of Berkeley Design Automation Analog FastSPICE with Altos Liberate addresses this need and delivers 5x-10x faster I/O cell characterization, including the effects of device noise and parasitics, with nanometer SPICE accuracy.

"Complex I/O characterization is very challenging for our customers," said Jim McCanny, Altos CEO and founder. "Adding support for the Analog FastSPICE Platform in Liberate accelerates the characterization of complex I/O cells, including the effects of device noise and parasitics, with nanometer SPICE accuracy for our mutual customers."

"As high-speed interfaces become pervasive in nanometer designs, accurate complex I/O cell characterization becomes critical for IC designers," said Ravi Subramanian, president and CEO of Berkeley Design Automation. "The combination of the AFS Platform with Altos' IP characterization tools brings our mutual customers substantial benefits - nanometer SPICE accurate results, a significant boost in performance, and breakthrough analysis of physical effects unmatched by any other solution."

The Analog FastSPICE Platform is the industry's only unified verification platform for nanometer analog, RF, mixed-signal, and custom digital circuits. The AFS Platform combines foundry-certified nm SPICE accuracy, 5x-10x faster single-core performance than any other SPICE circuit simulator, >10M-element capacity, and the industry's only comprehensive silicon-accurate device noise analysis. The AFS Platform is a single executable that uses advanced algorithms and numerical analysis to rapidly solve the original device equations and full-circuit matrix without any approximations. It includes licenses for AFS Nano SPICE simulation, AFS circuit simulation, AFS Transient Noise Analysis, AFS RF Analysis, and AFS Co-Simulation.

Altos Liberate is an ultra-fast library creator that generates electrical models in Liberty®, Verilog, Vital and IBIS formats. Liberate supports all the latest models for timing, noise and power such as CCS (Composite Current Source) and ECSM (Effective Current Source Models) Liberate also supports ultra low power and high speed design styles that include power gating cells, state retention registers, level shifters, pulse clocking and CML. The support for AFS is available in Altos' 3.1 product release also announced today.

**For more information on Berkeley Design Automation, visit <http://www.berkeley-da.com>
For more information on Altos Design Automation, visit <http://www.altos-da.com>**