Synopsys Collaborates with Sigrity to Accelerate Signal Integrity Analysis

Combination of HSPICE and Sigrity Solution Delivers Up to 3X Speed-up for SI Analysis

MOUNTAIN VIEW, Calif., Jan. 25, 2012 /PRNewswire/ -- Synopsys, Inc. (Nasdaq: SNPS), a world leader in software and IP used in the design, verification and manufacture of electronic components and systems, and Sigrity, Inc., a market leader in signal and power integrity solutions, today unveiled an enhanced solution that accelerates signal integrity simulation of high-speed systems. In the latest release of the HSPICE® circuit simulator, Synopsys has employed in-memory communication to deliver deeper integration with Sigrity's signal integrity analysis offerings. In addition, the HSPICE 2011.09 release provides enhanced multi-core simulation performance, improved accuracy in statistical eye-diagram analysis, and new multi-core enabled S-parameter and W-element analysis. The combined Synopsys and Sigrity solution offers up to 3X faster simulation of signal and power integrity analysis of multi-gigahertz designs.

Sigrity's solutions are widely used with HSPICE for signal, power integrity and electromagnetic interference analysis of high-speed boards, packages and integrated circuits. Sigrity tools generate interconnect models in either a traditional format or in Sigrity's Broadband Network Parameter (BNP) format, which contains richer frequency domain data in a compact format. HSPICE 2011.09 has been enhanced to support the BNP format using a unique API that facilitates direct in-memory communication between HSPICE and Sigrity's electromagnetic solver, improving simulation throughput, accuracy and convergence.

"Many Sigrity customers have made major investments in HSPICE over the years and rely on it as a trusted gold-standard of circuit simulation," said Raymond Y. Chen, senior vice president of Sigrity. "Sigrity has pioneered several application-specific electromagnetic analysis solutions integrated with HSPICE that provide the accuracy essential for high-speed designs in an environment that supports rapid design improvement."

"Signal integrity analysis of high-speed systems requires fast and accurate HSPICE simulation, as well as specialized analyses provided by the HSPICE Integrator Program (HIP) partners such as Sigrity," said Farhad Hayat, senior director of marketing at Synopsys. "The latest improvements in the HSPICE 2011.09 release for signal integrity analysis, combined with the large ecosystem of HIP partners, give designers access to best-in-class simulation and analyses for designing high-speed integrated circuits, printed circuit boards and packages."

HSPICE Special Interest Group Event

Synopsys will host an HSPICE Special Interest Group (SIG) dinner on January 31, 2012 at the Santa Clara Marriott Hotel. At this event, attendees will have the opportunity to speak with Synopsys HSPICE R&D personnel, as well as select HIP partners, including Sigrity. During the dinner, attendees will hear what technical representatives from Altera, Broadcom, Cavium and Micron have to say about using HSPICE in some of today's most challenging designs. Circuit designers and managers interested in attending this event can register online at www.hspice.com.

About Synopsys

Synopsys, Inc. (Nasdaq: SNPS) is a world leader in electronic design automation (EDA), supplying the global electronics market with the software, intellectual property (IP) and services used in semiconductor design, verification and manufacturing. Synopsys' comprehensive, integrated portfolio of implementation, verification, IP, manufacturing and field-programmable gate array (FPGA) solutions helps address the key challenges designers and manufacturers face today, such as power and yield management, system-to-silicon verification and time-to-results. These technology-leading solutions help give Synopsys customers a competitive edge in bringing the best products to market quickly while reducing costs and schedule risk. Synopsys is headquartered in Mountain View, California, and has approximately 70 offices located throughout North America, Europe, Japan, Asia and India. Visit Synopsys online at https://www.synopsys.com/.

About Sigrity

Sigrity, Inc., a privately held U.S. company incorporated in 1998, delivers advanced software solutions for package physical design and for analyzing power and signal integrity in chips, packages and printed circuit boards. Sigrity's patented electrical analysis methodologies run orders of magnitude faster than general-purpose electromagnetic tools, helping leading companies in the semiconductor, computer, graphics, communications and networking industries ensure high performance and reduce time to market. The company is headquartered in Campbell, California with direct sales and global distribution through worldwide representatives. For more information about how to ensure operational designs by using Sigrity's package physical design and power and signal integrity analysis solutions, please visit: http://www.sigrity.com.

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Editorial Contacts:
Sheryl Gulizia
Synopsys, Inc.
650-584-8635
sgulizia@synopsys.com

Lisa Gillette-Martin
MCA, Inc.
650-968-8900 ext. 115
lgmartin@mcapr.com

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