Synopsys and Applied Dynamics International Deliver
Physical Simulation Environment for Automotive Design

Physical Simulation Environment Enables Real-Time Verification
and Validation of Next-Generation Auto Systems

MOUNTAIN VIEW, Calif. and ANN ARBOR, Mich., March 3, 2003 – Synopsys, Inc. (Nasdaq:SNPS), the world leader for integrated circuit (IC) design software, and Applied Dynamics International (ADI), a provider of hardware-in-the-loop (HiL) simulation equipment, today announced a real-time physical simulation environment for automotive design. This environment links Synopsys’ Saber® simulator with ADI’s SIMsystem HiL equipment, for real-time verification and validation of next-generation automotive system designs. The solution provides auto designers a significant reduction in prototyping time and cost with improved efficiency.

“Automotive designers can streamline their design process using our real-time SIMsystem HiL equipment with the Saber simulator,” said John McIntosh, president and CEO, Applied Dynamics International. “The combination enables models created with Synopsys’ Saber to be reused for real-time verification, improving the overall simulation and validation efficiency.”

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Traditionally, automotive designers had to build hardware prototypes for all of the mechanical, hydraulic, and electrical components used in a car’s subsystems, and then combined these prototypes to simulate and verify the functionality of the entire car. Linking Synopsys’ Saber simulation environment with ADI’s SIMSystem HiL equipment replaces the need for hardware prototypes. In this way, the time required to simulate car subsystems — from the PowerTrain/ABS to each of the X-by-wire systems (brake-by-wire, steer-by-wire, throttle-by-wire) — can be significantly reduced, speeding time to production.

“Synopsys’ continues to invest in innovations for multi-technology simulation to address the growing needs of designers in the automotive, aerospace and defense industries.” said Antun Domic, executive vice president and general manager for Synopsys’ NAT business unit. “The physical simulation environment is a result of close collaboration between Synopsys and ADI offering our mutual customers real-time verification and validation capability for next generation auto systems.”

About Saber

Saber is the de-facto standard for multi-technology simulation, with more than a decade experience, patented algorithms for best performance with thousands of generic and characterized models in the library using MAST modeling language. Saber technology allows development and verification of various components within the different transportation subsystems.

Pricing and Availability

The Saber solution is available today from Synopsys at $15,000 US list price for a one-year technology subscription license (TSL). SIMsystem software solutions for real-time hardware-in-the-loop simulation are available from ADI on a custom application basis. A demonstration of Saber and SIMsystem will be offered at this year’s SAE World Congress in Detroit, March 3-6, COBO Convention Center, in booths 1607 and 2207.
About Synopsys

Synopsys, Inc. (Nasdaq:SNPS) is the world leader in electronic design automation (EDA) software for integrated circuit (IC) design. The company delivers technology-leading IC design and verification platforms to the global electronics market, enabling the development of complex systems-on-chips (SoCs). Synopsys also provides intellectual property and design services to simplify the design process and accelerate time-to-market for its customers. Synopsys is headquartered in Mountain View, California and is located in more than 60 offices throughout North America, Europe, Japan and Asia. Visit Synopsys online at [http://www.synopsys.com/](http://www.synopsys.com/).

About Applied Dynamics International

A pioneer in the development, manufacture, and use of simulation and control system technology for more than 40 years, Applied Dynamics International design engineering products are used in leading real-time simulation laboratories around the world. Applied Dynamics International is a supplier of advanced embedded hardware and software development tools for the aviation, aerospace, automotive, defense, electronics and other related industries. Headquartered in Ann Arbor, MI, Applied Dynamics International also has offices in the United Kingdom, installations in 23 countries and representatives throughout the world. Visit ADI at [www.adi.com](http://www.adi.com).

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