

# Aeroflex Realizes 60x Performance Improvement Using Synopsys CustomSim Solution

Increases Transistor-level Verification Coverage on High-reliability Mixed-signal ICs

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MOUNTAIN VIEW, Calif., Feb. 1 /[PRNewswire-FirstCall](#)/ -- Synopsys, Inc. (NASDAQ: SNPS), a world leader in software and IP for semiconductor design, verification and manufacturing, today announced that Aeroflex Colorado Springs, Inc., a global provider of high-technology solutions to the aerospace, defense and broadband communications markets, has successfully deployed Synopsys' CustomSim™ unified circuit simulation solution for the development and verification of its high-reliability integrated circuits (ICs). The CustomSim solution delivers performance improvements of up to 60x over SPICE, increasing designer productivity and confidence by enabling more corners to be run for transistor-level verification of large blocks. In addition, taking advantage of the Discovery™ Verification Platform by using the CustomSim solution with Synopsys' VCS® functional verification solution enables full-chip, mixed-signal simulations that were not possible with previous-generation simulators, allowing Aeroflex to reduce design cycle times.

"Our customers require high-reliability products and solutions that need to operate for many years in harsh and often remote environments. Verifying that our designs will meet specifications over a broad range of conditions and remain within budgeted power is essential for mission-critical products," said John Pfeil, senior mixed-signal design engineer for the Aeroflex Standard Products Group. "CustomSim is the only solution we've found that delivers the capability and performance to enable us to run hundreds of corners on large blocks before tapeout, and reduce product development cycle times by running mixed-signal simulations at the full-chip level."

Synopsys offers a comprehensive suite of circuit simulation solutions. The HSPICE® simulator is widely recognized as the "gold standard" for accurate circuit simulation and offers foundry-certified MOS device models with state-of-the-art simulation and analysis algorithms. The CustomSim solution unifies the best-in-class simulation technologies of NanoSim®, HSIM® and XA with added multi-threading capabilities for high-capacity, high-performance circuit simulation. For full-chip mixed-signal verification, the CustomSim solution is tightly coupled to VCS through a Direct Kernel Integration and is integrated into a unified analog/mixed-signal (AMS) verification environment, which simplifies usability through a common set of inputs, outputs and device models.

"Using CustomSim to verify its high-reliability ICs is testimony to the confidence Aeroflex has in Synopsys' circuit simulation solution," said Farhad Hayat, senior director of product marketing, Analog/Mixed-Signal Group at Synopsys. "CustomSim delivers high-performance circuit simulation technologies that enable companies like Aeroflex to ensure that their products meet the most stringent design requirements."

## 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, software-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 more than 65 offices located throughout North America, Europe, Japan, Asia and India. Visit Synopsys online at <http://www.synopsys.com>.

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