

# Synopsys Mixed-signal Verification Solution Delivers 5X Speed-up at Amlogic

CustomSim and VCS Solution Enables Fast Turnaround Time for SoC Verification

MOUNTAIN VIEW, Calif., March 15, 2011 /PRNewswire/ -- Synopsys, Inc. (Nasdaq: SNPS), a world leader in software and IP for semiconductor design, verification and manufacturing, today announced that Amlogic, a leading fabless supplier of video, audio and image processing chips, has selected Synopsys' CustomSim™ solution for mixed-signal verification of its high-performance multimedia system-on-chips (SoCs). Using CustomSim and VCS®, Amlogic observed a 5X improvement in verification throughput compared with competitive solutions, helping to reduce the typical SoC verification cycle from five days to 21 hours.

"Amlogic's new AML8726-M multimedia SoC combines our proprietary HD multimedia processing engine with ARM® Cortex™-A9 MPCore CPU and Mali™-400MP GPU cores, setting a new standard for high-performance SoCs," said Mike Yip, vice president of Engineering at Amlogic. "Synopsys enabled us to meet aggressive tapeout schedules by reducing our chip-level mixed-signal verification time by more than 5X with CustomSim and VCS while ensuring high-quality verification."

CustomSim, an integral part of Synopsys' Discovery™ Verification Platform, unifies the best-in-class NanoSim®, HSIM® and XA FastSPICE technologies with added multi-threading capabilities for high-capacity, high-performance circuit simulation. For full-chip mixed-signal verification, CustomSim is tightly coupled to the VCS functional verification solution through Direct Kernel Integration and is integrated into a unified analog/mixed-signal (AMS) verification environment, simplifying usability through a common set of inputs, outputs and device models.

"Designers have consistently ranked mixed-signal SoC verification throughput as one of their top areas to improve," said Bijan Kiani, vice president of product marketing at Synopsys. "The combination of CustomSim and VCS delivers the performance and capacity needed to run full-chip mixed-signal verification of multi-million-gate designs, allowing our customers to shorten tapeout schedules and increase confidence in verification quality."

## About Amlogic

Amlogic is a leading fabless system-on-chip (SoC) company that provides open platform solutions for HD multimedia, 3D gaming and internet connected consumer applications including tablets, digital TV, set-top box, IP-STB, digital photo frame and MID. Amlogic has combined its proprietary HD multimedia processing engine and systems IP with industry-leading CPU and graphics processor technology to produce semiconductor (IC) solutions for leading OEM and ODM brand customers in the world. Amlogic provides a total integrated solution to its customers so that they can bring compelling products to consumers in fast time to market. By providing SoC solutions with high-level of system integration, Amlogic enables its customers to quickly produce connected CE products that can reach a good balance between advance feature performance, power consumption and cost. The company is headquartered in Santa Clara, California, with offices in Shanghai, Shenzhen, Beijing and Hong Kong. Visit Amlogic online at <http://www.amlogic.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 <http://www.synopsys.com/>.

Synopsys, CustomSim, Discovery, HSIM, NanoSim and VCS are registered trademarks or trademarks of Synopsys, Inc. Any other trademarks or registered trademarks mentioned in this release are the intellectual property of their respective owners.

## Editorial Contacts:

Sheryl Gulizia  
Synopsys, Inc.  
650-584-8635

[sgulizia@synopsys.com](mailto:sgulizia@synopsys.com)

Lisa Gillette-Martin  
MCA, Inc.  
650-968-8900 ext. 115  
[lgmartin@mcapr.com](mailto:lgmartin@mcapr.com)

SOURCE Synopsys, Inc.

---