# Faraday Verifies Complex CPU Cores With Synopsys' VCS and Vera Verification Solutions

Advanced Coverage and Testbench Technologies in the Synopsys Discovery™ Verification Platform Enable Robust Validation of Faraday's Processor IP

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Synopsys, Inc. (NASDAQ: SNPS), a world leader in semiconductor design software, and Faraday Technology Corporation (TAIEX: 3035), a leading fabless ASIC and IP provider, today announced that Faraday has successfully used Synopsys' VCS® comprehensive RTL verification solution and Vera® testbench automation tool to optimize the verification process for Faraday's FA series of complex 32-bit RISC processor cores. Synopsys' industry-leading verification solutions enabled Faraday's verification team to complete verification with a high quality of results and a high degree of confidence.

"We are committed to providing our SoC customers with high-quality processor cores and the means to achieve design success," said Thomas Hsieh, associated vice president of R & D at Faraday. "In our endeavor to deploy the best verification solution for our CPU cores, we used the native coverage features in Synopsys' VCS RTL verification solution to quickly and easily check the completeness of our RTL verification. We also used the Vera tool to create a comprehensive verification environment to allow us to ensure that the functional coverage goals were met as specified."

The combination of Synopsys technology and Faraday methodology enables a solution that yields high-quality Faraday CPU cores. With the use of Synopsys' VCS and Vera verification solutions and Faraday's constrained-random test methodology, working silicon-proven processor IP was quickly produced. By using the Vera tool to generate testbenches with constrained-random patterns and functional coverage, the Faraday verification team reached its functional coverage goals very quickly. At the same time, the VCS solution's built-in coverage metrics enabled the team to measure the completeness of its RTL code coverage during simulation.

"Ensuring design robustness is critical for all development teams," said Farhad Hayat, vice president of Marketing, Verification Group, Synopsys, Inc. "Design and verification engineers need effective ways to measure verification progress and rapidly meet their coverage goals. Synopsys' advanced testbench technologies, now available natively in the VCS solution for even higher performance, help our customers achieve high quality on very tight schedules."

Synopsys Discovery Verification Platform

The Discovery Verification Platform is a unified environment that provides high performance and efficiency of interaction among all platform components, including mixed-HDL simulation, mixed-signal, system-level verification, assertions, DesignWare® verification intellectual property, code coverage, functional coverage, testbenches and formal analysis. Combined with support for industry standard hardware design and verification languages, including Verilog, VHDL, SystemVerilog, SystemC™ and OpenVera®, and Synopsys' proven Reference Verification Methodology, the Discovery Verification Platform helps designers achieve higher levels of verification productivity by contributing to first-time silicon success within required project cycles.

About Synopsys

Synopsys, Inc. is a world leader in electronic design automation (EDA) software for semiconductor design. The company delivers technology-leading semiconductor design and verification platforms and IC manufacturing software products to the global electronics market, enabling the development and production 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 has offices in more than 60 locations throughout North America, Europe, Japan and Asia. Visit Synopsys online at http://www.synopsys.com/ .

About Faraday Technology Corporation

Faraday Technology Corporation is a leading silicon IP and fabless ASIC vendor. The company's broad IP portfolio includes 32-bit RISC CPUs, DSPs, and PHY/Controllers for USB 2.0, Ethernet, and Serial ATA. With more than 500 employees and 2003 revenue of US$159 million, Faraday is one of the largest fabless ASIC companies in the Asia-Pacific region, and it also has a significant presence in other world-wide markets. Headquartered in Taiwan, Faraday has service and support offices around the world, including the U.S., Japan, Europe, and China. For more information, please visit: http://www.faraday-tech.com/ .

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