Synopsys Design Solutions Enable Implementation and Deployment of ARM Cortex-A8 Processor to Licensees

ARM and Synopsys Collaborate to Demonstrate Galaxy Design and Discovery Verification Flow for ARM Cortex-A8 Processor Implementation

Building on ten years of collaboration with ARM, Synopsys, Inc. (NASDAQ: SNPS), a world leader in semiconductor design software, today announced at the ARM Developers' Conference, Santa Clara, Calif., that the companies have collaborated to demonstrate the successful integration of Synopsys' Galaxy™ RTL synthesis, hierarchical design planning, physical implementation solution, sign-off and Discovery™ verification solution within a high-performance design flow for the new ARM® Cortex™-A8 processor. The Cortex-A8 processor achieves outstanding performance and power efficiency through a combination of microarchitectural innovation, the ARM Artisan® Advantage-CE library, and advanced EDA design flows. Some early ARM Cortex-A8 processor licensees are deploying Synopsys Galaxy Design and Discovery Verification platform tools to implement Cortex-A8 processor designs.

"Synopsys has considerable experience in enabling high performance, low power design and is a key technology partner for the Cortex-A8 processor," said Mike Inglis, executive vice president of Marketing at ARM. "Synopsys Galaxy Design and Discovery Verification solutions together with the ARM Artisan Advantage-CE library will enable licensees of the ARM Cortex-A8 processor to achieve excellent levels of design performance, low power and designer productivity."

ARM and Synopsys employed a high-performance design flow for the Cortex-A8 processor consisting of the following tools: RTL synthesis (Design Compiler®, DesignWare® Library, DFT Compiler and Power Compiler™), hierarchical design planning (JupiterXT™), physical implementation (Astro™ and Physical Compiler®), sign off (PrimeTime® SI and Star- RCXT™), and verification (Formality®, ESP, HSPICE®, NanoSim® and VCS®).

The Cortex-A8 processor is the first ARM applications processor to be based on the next-generation ARMv7 architecture, and features Thumb®-2 technology and Intelligent Energy Manager (IEM) capability for low-power while maintaining the ability to provide the full performance of the processor core. In addition to the unique microarchitecture, which delivers over 2.0 DMIPS per MHz, the Cortex-A8 processor is implemented using ARM's new Artisan Advantage- CE library to achieve high-speed operation and low-power consumption. This new Advantage-CE library uses Liberty™ Composite Current Source (CCS) models to take full advantage of the Galaxy Design and Discovery Verification solutions.

"Designers demand new levels of processor performance and power efficiency to support the convergence of applications in wireless and mobile devices," said Antun Domic, senior vice president and general manager, Implementation Group, Synopsys. "Our decade of collaboration with ARM has produced many significant achievements, including solutions that will enable new high-performance, low-power innovations based on the ARM Cortex-A8 processor. Synopsys' production-proven Galaxy and Discovery platforms will play a key role in helping ARM Cortex-A8 processor licensees achieve new levels of design excellence and designer productivity."

In addition, Synopsys Professional Services will offer consulting services to ARM partners to accelerate Cortex-A8 processor implementations. With extensive experience hardening ARM processors, including ARM IEM technology- enabled cores and now extended to the Cortex-A8 processor, Synopsys consultants combine unique ARM technology-specific expertise with deep knowledge of Synopsys flows and advanced chip design to help developers optimize their SoCs for power and performance. Synopsys Professional Services has been an ARM Approved Design Center since 2001 with design centers throughout North America, Europe and Asia.

Synopsys and ARM have collaborated extensively to deliver many new industry solutions, including: the first synthesizable ARM7™ and ARM9™ family processors available from ARM, the ARM-Synopsys Galaxy Reference Methodology (RM) for fast implementation and high performance, the extension of the RM to support ARM IEM technology-enabled processors, verification IP and methodology and the ARM Metro low-power libraries. ARM and Synopsys will be highlighting their joint solutions at the ARM Developers' Conference 2005 in Synopsys Booth (#202), on October 4-6, Santa Clara Convention Center, Santa Clara, California. For more information regarding ARM-Synopsys solutions, visit https://www.synopsys.com/arm .

About Synopsys

Synopsys, Inc. is a world leader in 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.

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Forward Looking Statements

This press release contains forward-looking statements within the meaning of the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, including statements regarding the expected benefits of the integration of Synopsys' Galaxy and Discovery software platforms in the design flow for the ARM Cortex processor, expected benefits of Synopsys' collaboration with ARM and expectations regarding Synopsys Professional Services. These statements are based on Synopsys' current expectations and beliefs. Actual results could differ materially from these statements as a result of unforeseen difficulties in completing development of the integrated design flow, uncertainties attendant to any technical collaboration and certain statements contained in the section of Synopsys' Quarterly Report on Form 10-Q for the fiscal quarter ended July 31, 2005 entitled "Factors That May Affect Future Results."

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