Toshiba Expands Synopsys IC Compiler II Usage Across Groups to Shorten Design Cycle

Best-In-Class Power, Performance and Area Lead to Selection of IC Compiler II

MOUNTAIN VIEW, Calif., May 17, 2016 /PRNewswire/ --

Highlights:

- IC Compiler II has enabled Toshiba to achieve successful tapeout for over a dozen designs across established and emerging processes
- Best-in-class quality of results establishes IC Compiler II as plan of record for performance-critical designs at Toshiba, making IC Compiler II the predominant place and route flow at Toshiba applied to internal designs as well as external designs.
- Toshiba has rolled out the latest version of their IC Compiler II-based design kit for internal and external design needs

Synopsys, Inc. (Nasdaq: SNPS) today announced that Toshiba Corporation, a leading semiconductor manufacturer and SoC device developer, selected Synopsys' IC Compiler™ II place and route solution as the plan-of-record across its groups for performance-critical designs including internal and external customer designs. Since its launch in 2014, IC Compiler II has rapidly established itself as the widely recognized solution of choice for high-performance designs. Driven by the very attractive runtime speed-ups, Toshiba began using IC Compiler II soon after market introduction and has since expanded its usage across groups. Toshiba is a leader in IC design, fielding a variety of solutions in NAND/SSD, microcomputers, wireless communications equipment ICs, automotive devices, ASSPs, logic ICs and ASICs. The vast majority of the company's designs are performance-critical in nature, requiring Toshiba to employ the very best in design technology. The decision to expand usage of IC Compiler II to implement performance-critical designs stands to help Toshiba meet their aggressive market windows and quality-of-results (QoR) objectives.

"Our external and internal customers always have very aggressive requirements for power, performance, area and very short design cycle, making it imperative that we have the best design technology available," said Kazunari Horikawa, senior manager of the Design Technology Development Department, Mixed Signal IC Division, Storage & Electronic Devices Solutions Company at Toshiba Corporation. "Having already taped-out over a dozen designs with IC Compiler II, we have come to rely on it as our primary solution. We have been impressed with its very fast TAT (turnaround time) while providing superior QoR. With expanded usage of IC Compiler II, which will be continually improved by Synopsys, we are confident that our design teams are well equipped to offer the highest QoR possible across our technology portfolio."

IC Compiler II is a state-of-the-art place and route system designed from the ground up to deliver the highest productivity and best QoR for designs across process nodes. Architected around a modern, low memory footprint and natively multi-threaded infrastructure, IC Compiler II is able to handle designs with more than 500 million placeable instances hierarchically and has proven capacity for more than 10-million-instance block implementations. With its optimized place and route focused data model, coupled with an extensible library system that offers unique, geographically separated development capabilities, IC Compiler II eases user adoption by supporting industry-standard input and output formats, as well as familiar interfaces and process technology files.

IC Compiler II delivers industry-leading, ultra-high-capacity automated design planning, unique clock-building technology and patented global-analytical optimization that results in a convergent design implementation flow. Together, these technologies enable enhanced QoR across power, performance and area implementation metrics as well as accelerated time to market. The culmination of numerous years of engineering innovation, these industry-first technologies enable IC Compiler II to deliver 5X faster runtime within half the memory footprint while concurrently requiring half the iterations required to achieve the same target QoR. This ultimately results in a step-change boost in throughput and designer productivity.

"We share a long history of success with Toshiba, and they have been a key lead partner through the development and deployment of IC Compiler II," said Antun Domic, executive vice president and general manager of the Design Group at Synopsys. "Gaining plan-of-record status for IC Compiler II for Toshiba's performance-critical designs underscores the many game-changing, QoR-focused technologies that are at the very core of this exciting product."

About Synopsys

Synopsys, Inc. (Nasdaq:SNPS) is the Silicon to Software™ partner for innovative companies developing the electronic products and software applications we rely on every day. As the world's 16th largest software company, Synopsys has a long history of being a global leader in electronic design automation (EDA) and semiconductor IP and is also growing its leadership

in software quality and security solutions. Whether you're a system-on-chip (SoC) designer creating advanced semiconductors, or a software developer writing applications that require the highest quality and security, Synopsys has the solutions needed to deliver innovative, high-quality, secure products. Learn more at www.synopsys.com.

Editorial Contact:
Sheryl Gulizia
Synopsys, Inc.
650-584-8635
sgulizia@synopsys.com

SOURCE Synopsys, Inc.