Synopsys Announces Collaboration with Samsung Foundry to Offer Secure and Scalable Environment on the Cloud for IC Design and Verification

Using Synopsys Cloud Solution, Samsung Foundry's 7nm Library Characterization Has Been Significantly Accelerated

MOUNTAIN VIEW, Calif., March 27, 2019 /PRNewswire/ -- Synopsys, Inc. (Nasdaq: SNPS) today announced it has collaborated with Samsung Foundry to provide a secure, scalable cloud-based IC design and verification environment on the Synopsys Cloud Solution for designers using Samsung Foundry's cutting-edge process technology. The Synopsys Cloud Solution provides optimized and proven infrastructure and services to enable IC design and verification teams to take full advantage of the benefits of the cloud from major public cloud providers such as Amazon Web Services (AWS), Microsoft Azure, and Google Cloud, as well as Synopsys-hosted infrastructure. This collaboration enables system-on-chip (SoC) teams to design in the cloud using Synopsys EDA tools and IP, and Samsung Foundry's process technology. As part of this collaboration, Samsung Foundry was able to accelerate the development of its 7-nanometer (nm) Ultra-High Density Standard Cell libraries, leveraging Synopsys' SiliconSmart[®] characterization solution on the cloud.

"As a leading provider of advanced-node foundry services, we strive to enable our customers to securely design in the cloud. We have collaborated extensively with Synopsys to certify both the security and performance of the Synopsys Cloud Solution," said Jung Yun Choi, vice president of Design Technology Team at Samsung Electronics. "Based on this cloud solution, we successfully deployed Synopsys' SiliconSmart solution on the Synopsys-managed cloud infrastructure to accelerate characterization of our 7LPP standard cell library about 30 percent, shortening from 3 months down to 2 months."

The Synopsys DesignWare[®] IP group has used this cloud solution with Synopsys' IC Validator physical verification solution to accelerate the tapeout of the DesignWare USB 3.1 PHY IP, incorporating the DesignWare High-Density Logic Library on Samsung's 7-nm low-power process to meet critical project schedules.

The Synopsys Cloud Solution provides optimized infrastructure with security protections and services to enable IC design and verification teams to take full advantage of the benefits of the cloud. Built for unique EDA workloads, the Synopsys-managed cloud solution supports compute infrastructures from major public cloud providers such as AWS, Microsoft Azure, and Google Cloud, as well as Synopsys-hosted infrastructure.

The Synopsys Cloud Solution includes:

- Support for complete EDA design flows, including cloud-optimized products that exploit the scalability of cloud infrastructures
- A range of services for EDA environments in the cloud, such as setup, configuration, on-boarding, tools, and license installation to provide fully-integrated tools to handle diverse/complex EDA workflows
- Synopsys ZeBu[®] Cloud services, providing access to the industry's fastest emulation system in a fullymanaged cloud-based model

For more information on the Synopsys Cloud Solution, visit www.synopsys.com/cloud.

"Through our continued collaboration with Samsung Foundry, we have enabled the ecosystem and designers to take full advantage of the Samsung Foundry process as well as Synopsys products, while gaining the advantages offered by cloud computing," said Hasmukh Ranjan, corporate vice president and chief information officer at Synopsys. "Our cloud collaboration has delivered a robust and secure environment to leverage cloud capabilities to accelerate SoC IC design and verification schedules."

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 15th 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 security and quality solutions. Whether you're a system-on-chip (SoC) designer creating advanced semiconductors, or a software developer writing applications that require the highest security and quality, Synopsys has the solutions needed to deliver innovative, high-quality, secure products. Learn more at www.synopsys.com.

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