Samsung Foundry Certifies Synopsys IC Validator for 5nm and 4nm Advanced Process Technologies

Collaboration Enables Faster Physical Signoff for Graphics, Augmented Virtual Reality, Automotive and High-Performance Computing Applications

MOUNTAIN VIEW, Calif., Feb. 22, 2021 /PRNewswire/ -- Synopsys, Inc. (Nasdaq: SNPS) today announced that its IC Validator physical verification solution has been certified by Samsung Foundry for its most advanced 5-nanometer (nm) and 4nm process technologies. IC Validator, an integral part of the Synopsys Fusion Design Platform™ and Custom Design Platform™, has enabled multiple customers to achieve successful chip tapeouts for graphics, augmented virtual reality, automotive and high-performance computing applications.

As customers target designs at 5nm and below technology nodes, the physical verification complexity drastically increases, including tens of thousands of design rules and hundreds of thousands of operations. IC Validator accelerates the physical verification closure, drastically increasing productivity with the highest accuracy on Samsung advanced process nodes.

"As the design complexity increases at the lower process nodes, we are resolved to support our customers' needs with innovative technologies for advanced chip designs. Synopsys IC Validator provides a best-in-class, differentiated solution that is certified on our production-ready, 5nm and 4nm technologies," said Jongwook Kye, vice president of Design Enablement Team at Samsung Foundry. "IC Validator's innovative capabilities and predictive results, combined with Samsung Foundry's advanced process technology, enable our mutual customers to achieve silicon success for their most demanding next-generation applications."

As a key part of both the Synopsys Fusion Design Platform and Custom Design Platform, IC Validator offers designs teams a comprehensive physical verification solution that includes fast DRC checking, programmable electrical rule checks, dummy metal fill, and design-for-manufacturability enhancement capabilities and signoff accurate StarRC™ integration to accelerate convergence. IC Validator's live DRC technology provides on-demand verification for immediate DRC feedback in Synopsys' Custom Design Platform.

"Leading-edge customers have already deployed Synopsys IC Validator to gain a competitive edge, achieve a faster physical signoff and deliver repeated successes for their products," said Raja Tabet, senior vice president of Engineering, Custom Physical Group at Synopsys. "All designers can now rapidly and confidently adopt Samsung Foundry's 5nm and 4nm processes and use the innovative technologies in Synopsys IC Validator to gain time-to-results advantages and design the most differentiated products."

Learn more about Synopsys IC Validator's new technologies at https://www.synopsys.com/implementation-and-signoff/physical-verification.html.

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 an S&P 500 company, Synopsys has a long history of being a global leader in electronic design automation (EDA) and semiconductor IP and offers the industry's broadest portfolio of application security testing tools and services. Whether you're a system-on-chip (SoC) designer creating advanced semiconductors, or a software developer writing more secure, high-quality code, Synopsys has the solutions needed to deliver innovative products. Learn more at