

Synopsys and GLOBALFOUNDRIES Collaborate to Expand Fusion Compiler Benefits for Latest Platforms

Synopsys' Unique Product Delivers Best-in-Class PPA to Accelerate Innovation on GF Platform Offerings for Aerospace and Defense, Automotive and Cloud/AI Applications

MOUNTAIN VIEW, Calif., Sept. 24, 2020 /PRNewswire/ --

Highlights:

- Close collaboration on technology enablement unlocks optimal PPA potential of GLOBALFOUNDRIES® 12LP and 12LP+ (12nm FinFET) platforms and 22FDX® (22nm FD-SOI) platforms
- Targeted innovations in Fusion Compiler deliver up to 18 percent better performance, power and area (PPA) and 2X faster time-to-results on GLOBALFOUNDRIES platforms
- Fusion Compiler, with integrated PrimeTime® voltage-scaling technology and StarRC™ signoff extraction, enables an optimized solution for adaptive-body biasing (ABB), available on FD-SOI based platforms

Synopsys, Inc. (Nasdaq: SNPS) today announced its latest collaboration with GLOBALFOUNDRIES (GF®) to drive productivity and power, performance, and area (PPA) enhancements for mutual customers deploying the Synopsys Fusion Compiler™ RTL-to-GDSII product – the industry's only single data model and golden-signoff enabled implementation solution. This collaboration will enable the fast-tracking of next-generation, market-shaping products in verticals such as aerospace and defense, automotive, data center, IoT and mobile on GF's feature-rich platforms.

This expanded partnership – leveraging Fusion Compiler's latest, advanced technologies – enhances platform-specific gains and speeds up the delivery of highly optimized and targeted design-implementation methodologies for mutual customers on GF's 12LP and 12LP+ (12nm FinFET) platforms and 22FDX (22nm FD-SOI) platforms. This partnership also expands to support unique platform requirements, including the FD-SOI specific, adaptive-body biasing (ABB) and forward-biasing design flows. By leveraging the fusion of StarRC signoff extraction and PrimeTime's smart voltage-scaling technology for both delay and variation analysis, Fusion Compiler's full-flow optimization is enabled to maximize the power-efficiency gains available through this advanced platform technology.

"The growing demand for our differentiated platforms and specialty solutions, optimized for applications across several high-potential growth markets, requires flows that can efficiently deliver optimal PPA and address today's design complexity and tight schedules," said Richard Trihy, vice president of Design Enablement at GF. "We are pleased to deepen our partnership with Synopsys and offer this Fusion Compiler based flow, with its integrated RTL-to-GDSII implementation, to customers who are designing on our best-in-class 12LP, 12LP+, and 22FDX solutions."

The Fusion Compiler solution is uniquely architected to enable design teams to achieve the optimal levels of PPA in the most convergent manner and ensure the fastest and most predictable time to results (TTR). Fusion Compiler has been built from the ground up around a unified, highly-scalable data model; is unique in deploying a common, full-flow, RTL-to-GDSII optimization framework; and further differentiates itself by comprising a single analysis backbone, leveraging technology from Synopsys' industry-leading, golden-signoff products. These key technology lynchpins provide the optimum convergence and signoff correlation of critical PPA metrics that are optimized accurately and effectively throughout the entire design flow. Fusion Compiler provides the leading SoC design-implementation platform to manage growing design challenges across the industry, where process technology, design implementation, and signoff go hand in hand.

"Across the broad semiconductor industry, Fusion Compiler is experiencing unprecedented adoption by the many leaders and market shapers who have aggressively deployed the solution to realize the industry's most complex and sought-after SoCs," said Charles Matar, senior vice president of System Solutions and Ecosystem Enablement in the Design Group at Synopsys. "Our work with GLOBALFOUNDRIES promises to bring the key benefits of Fusion Compiler's unique architecture – best-in-class full-flow PPA and fastest time-to-results – to help our mutual customers deliver the next generation of market-defining products."

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.

Editorial Contact:

Simone Souza

Synopsys, Inc.

650-584-6454

simone@synopsys.com

SOURCE Synopsys, Inc.
