Rockley Selects Synopsys for Silicon Photonics Design Solutions

Synopsys Provides Complete Front-to-Back Photonic IC Design Solutions, Supported by Photonics Experts

MOUNTAIN VIEW, Calif., March 15, 2021 /PRNewswire/ -- Synopsys, Inc. (Nasdaq: SNPS) today announced that Rockley Photonics, a leading global supplier of integrated optical chips and modules, has adopted Synopsys solutions to accelerate the design and verification of silicon photonics for sensing and datacom applications. Rockley is using tools from Synopsys' Photonic Solutions platform, including OptoCompiler™, OptoDesigner, OptSim™ Circuit, RSoft™ Photonic Device Tools and IC Validator. Rockley plans to use Synopsys solutions to design and optimize photonic devices, create process design kits (PDKs) and tape out photonic ICs.

Rockley was an early adopter of Synopsys' OptoCompiler tool following its commercial launch in September 2020. OptoCompiler is the industry's first unified electronic and photonic design platform, combining mature and dedicated photonic technology with Synopsys' industry-proven custom and analog-mixed signal tools to enable engineers to produce and verify complex photonic IC designs quickly and accurately.

"Rockley's unique photonic chipset technology with silicon photonics at its core is driving the growth of integrated optical components in healthcare, machine vision and data communications," said Andrew Rickman, chief executive at Rockley. "The PDA platform Rockley has created by utilizing OptoCompiler allows our engineers to define, simulate, lay out and verify Photonic ICs quickly and efficiently to meet our quality and schedule goals. Synopsys' technical support has been instrumental in ensuring Rockley met its tape-out goals. We look forward to additional efficiency gains by expanding our use of Synopsys' Photonic Solutions tools."

The Synopsys OptoCompiler design platform is a schematic-driven layout flow that speeds design time with automated features such as assisted waveguide routing and auto-alignment of photonic circuits. OptoCompiler helps ensure accuracy through the use of comprehensive photonic layout versus schematic (LVS) checking and native photonic simulators that work in conjunction with industry-standard SPICE electrical simulators.

"Rockley is a valued partner and this purchase is the latest step in a longstanding relationship," said Tom Walker, group director of Synopsys' Photonic Solutions. "Rockley's choice of Synopsys validates our model of providing a unified design platform and expert support. Our intuitive photonics design flow integrated in a familiar EDA environment allows traditional IC designers to be productive in the emerging field of integrated photonics."

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 www.synopsys.com.

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