Synopsys Accelerates First-Pass Silicon Success for Banias Labs' Networking SoC

High-Quality Synopsys 112G Ethernet PHY IP and AI-Driven EDA Design Suite Cuts Bring-up Time for Advanced 5nm Chip

MOUNTAIN VIEW, Calif., April 6, 2023 /PRNewswire/ -- Synopsys, Inc. (Nasdaq: SNPS) today announced that Banias Labs achieved first-pass silicon success for its optical DSP SoC using Synopsys 112G Ethernet PHY IP and EDA Design Suite. In 2021, Banias selected Synopsys' IP due to its low latency, flexible reach lengths, and maturity on 5nm process technology. Synopsys provided Banias Labs with a comprehensive IP solution that included a routing feasibility study, packaging substrate guidelines, signal and power integrity models, and thorough crosstalk analysis. In addition, Banias leveraged Synopsys' EDA Design Suite to deliver high quality of results with optimized power, performance, area and yield.

"Today's high-performance computing infrastructure requires trusted and complete solutions for high-end design," said Amnon Rom, CEO at Banias Labs. "Using Synopsys EDA Design Suite to integrate Synopsys Ethernet PHY IP with custom features and capabilities into our chip offered the solutions we needed to boost system performance and accelerate our time-to-market."

"Implementing ultra-high-speed Ethernet designs comes with significant power, area, packaging, and signal integrity challenges," said John Koeter, senior vice president of marketing and strategy for IP at Synopsys. "Synopsys provides companies like Banias Labs with high-performance, low-latency solutions that enable hyperscale data center, networking, AI, optical module and Ethernet switch SoCs for emerging high-performance computing designs."

Availability & Additional Resources

- The Synopsys 112G Ethernet PHY IP is available in multiple advanced process technologies to 3nm.
- Learn more about Synopsys 112G Ethernet PHY IP and Synopsys AI-driven EDA Design Suite.

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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