Synopsys Demonstrates Industry's First Interoperability of PCI Express 6.0 IP with Intel's PCIe 6.0 Test Chip

Joint 64 GT/s Demo Showcases Successful Interoperability, Reducing Integration Risk for Advanced High-Performance Computing SoCs

SUNNYVALE, Calif., September 18, 2023 /PRNewswire/ – Synopsys, Inc. (Nasdaq: SNPS) today announced that its collaboration with Intel has achieved end-to-end 64 GT/s interoperability between Synopsys' IP for PCI Express (PCIe) 6.0 and Intel's PCIe 6.0-enabled test chip. This milestone validates that future products integrating PCIe 6.0 solutions from Synopsys or Intel will communicate effectively with the ecosystem, reducing design risk and accelerating time-to-market.

The demo, showcasing successful interoperability between the Synopsys endpoint PHY and Controller IP for PCIe 6.0 and Intel PCIe 6.0 test chip, will be featured in the CXL, PCIe & DRAM Emerging Technologies Community at Intel Innovation 2023, taking place September 19 and 20. Synopsys' complete IP solution for PCIe 6.0 includes controllers, PHYs, verification IP and integrity and data encryption (IDE) security IP to accelerate development of chips for high-performance computing and AI applications.

"Our decades-long collaboration with Intel has empowered designers to implement the latest industry standards using trusted Synopsys IP," said John Koeter, senior vice president of marketing and strategy for IP at Synopsys. "The successful interoperability with Intel, combined with more than two dozen PCIe 6.0 design wins, validates the robustness of the silicon-proven Synopsys IP for PCIe 6.0 and enables designers to reduce integration risk, meet stringent requirements, and accelerate their time to market."

"To meet the demands of data-intensive operations in the cloud and on the edge, designers require advanced connectivity and processing technologies that operate with low latency at fast speeds," said Debendra Das Sharma, Senior Fellow and co-GM of Memory and I/O Technologies at Intel Corporation. "Intel's close collaboration with Synopsys, a leading PCIe IP provider, has once again resulted in successful interoperability using the latest PCIe standard. Our intent with this demonstration is to give the ecosystem confidence that Intel's future generation products with PCIe 6.0 will be interoperable with the ecosystem, enabling broad adoption of the PCIe 6.0 standard."

Additional Resources:

- Event: Intel Innovation 2023, Sept 19-20 in San Jose, CA
- Blog: Maximize PCIe 6.0's Advantages with End-to-End PCIe Design & IP Solutions
- White paper: How the Doubling of Interconnect Bandwidth with PCI Express® 6.0 Impacts IP Electrical Validation

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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