Synopsys Achieves PCIe 6.x Interoperability Milestone with Broadcom's PEX90000 Series Switch at PCI-SIG DevCon 2025

Demonstration at 64 GT/s Reduces Design Risk and Accelerates Deployment of High-Performance AI and Computing Solutions with Proven PCIe 6.x Technologies

SUNNYVALE, Calif., June 11, 2025 /PRNewswire/ -- Synopsys, Inc. (Nasdaq: SNPS) today announced that its collaboration with Broadcom has achieved interoperability between Synopsys' PCle 6.x IP solution and Broadcom's PEX90000 series switch. As a cornerstone of next-generation Al infrastructures, PCle switches play a critical role in enabling the scalability required to meet the demands of modern Al workloads. This milestone demonstrates that future products integrating PCle 6.x solutions from Synopsys and Broadcom will operate seamlessly within the ecosystem, reducing design risk and accelerating time-to-market for high-performance computing and Al data center systems.

The interoperability demonstration with Broadcom features a Synopsys PCIe 6.x IP solution, including PHY and controller, operating as a root complex and an endpoint running at 64 GT/s with Broadcom's PEX90000 switch. Synopsys will showcase this interoperability demonstration at PCI-SIG DevCon 2025 at booth #13, taking place June 11 and 12, where attendees can see a variety of successful Synopsys PCIe 7.0 and PCIe 6.x IP interoperability demonstrations in both the Synopsys booth and partners' booths.

"Building on more than 20 years of PCIe IP leadership, Synopsys remains committed to delivering silicon-proven IP solutions that help designers reduce risk and accelerate time-to-market," said Neeraj Paliwal, senior vice president of IP product management at Synopsys. "Our successful interoperability with Broadcom's PCIe 6.x switch demonstrates the readiness of Synopsys' PCIe 6.x IP solution to address the rigorous performance and scalability requirements of high-performance computing and AI-driven data center applications."

"To address the growing demands of AI and high-performance computing, designers require connectivity solutions that deliver scalability, reliability, and robust performance," said Dan Roehrich, vice president of IC Development, Data Center Solutions Group, Broadcom. "Broadcom's collaboration with Synopsys has resulted in successful interoperability of the PCIe 6.x standard. As AI servers with PCIe 6.x begin scaling in production, this milestone represents a significant step forward in enabling the industry to meet the challenges of modern AI and HPC workloads while driving broad adoption of the PCIe 6.x standard across the ecosystem."

Proven Ecosystem Leadership

With more than 100 PCIe 6.x IP implementations spanning a wide range of applications, Synopsys continues to lead the industry by delivering more than 3,800 customer tapeouts across seven generations of PCI Express. Synopsys' complete PCIe solution, designed to minimize design risk and accelerate time-to-market, includes PHYs, controllers, verification IP, and security IP. This latest milestone reinforces Synopsys' proven leadership in the ecosystem supporting extensive interoperability and expertise that enables customers to adopt next-generation protocols.

Availability & Additional Resources

The complete Synopsys PCI Express IP solutions are available now across all generations of PCIe on the most advanced process nodes.

- Solution page: Synopsys PCI Express IP Solutions
- Event page: Synopsys at PCI-SIG Developers conference

About Synopsys

Catalyzing the era of pervasive intelligence, Synopsys, Inc. (Nasdaq: SNPS) delivers trusted and comprehensive silicon to systems design solutions, from electronic design automation to silicon IP and system verification and validation. We partner closely with semiconductor and systems customers across a wide range of industries to maximize their R&D capability and productivity, powering innovation today that ignites the ingenuity of tomorrow. Learn more at www.synopsys.com.

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