Analog Power Conversion LLC adopts Silvaco's Design Technology Co-Optimization Flow for Next Generation Silicon and Silicon Carbide Power Devices

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SANTA CLARA, Calif., Sept. 16, 2025 (GLOBE NEWSWIRE) -- Silvaco Group, Inc. ("Silvaco") (NASDAQ: SVCO), a provider of TCAD, EDA software, and SIP solutions that enable semiconductor design and digital twin modeling through AI software and innovation, today announced that Analog Power Conversion LLC, a leader in advanced power semiconductor technology, has adopted Silvaco's comprehensive suite of TCAD and EDA tools for their Design Technology Co-Optimization (DTCO) flow.

This strategic initiative enables Analog Power Conversion to accelerate product innovation, improve power device performance, and reduce time-to-market across its portfolio of high-frequency and high-power silicon and silicon carbide (SiC) solutions.

To implement its DTCO methodology, Analog Power Conversion has deployed Silvaco's integrated platform, including the Victory TCAD™ suite for process and device simulation, UTMOST IV™ for SPICE model parameter extraction, and SmartSpice™ for circuit simulation and verification.

"The integration of Silvaco's end-to-end DTCO platform provides a unified environment to simulate, characterize, and optimize power devices, from process through circuit," said Dumitru Sdrulla, CTO at Analog Power Conversion. "This capability allows us to better correlate fabrication process variations with device and circuit performance, enabling the engineering of more robust and efficient solutions."

"We value our collaboration with Analog Power Conversion and support their mission to advance high-performance power semiconductor technology," said Eric Guichard, Senior Vice President and General Manager of the TCAD business unit at Silvaco. "Our DTCO platform empowers customers to tightly couple technology development with circuit design, enabling innovation and improved design robustness."

With Silvaco's platform, Analog Power Conversion is now able to:

- **Virtually optimize process flows** for silicon and SiC devices using Victory Process™, reducing development time and minimizing fabrication risk
- **Simulate electrical performance and reliability** with high precision through Victory Device™
- **Extract accurate compact models** from simulated data using UTMOST IV, enabling highly correlated SPICE simulations
- **Optimize analog and mixed-signal circuit designs** with SmartSpice, supporting seamless integration from process development to circuit optimization

By tightly integrating process, device, and circuit-level tools, this DTCO approach ensures rapid design iteration, tighter feedback between manufacturing and design, and higher first-pass success. This is a critical advantage in markets such as automotive systems, industrial automation, and energy infrastructure.

For more information about Silvaco's tools, visit www.silvaco.com.

About Silvaco
Silvaco is a provider of TCAD, EDA software, and SIP solutions that enable semiconductor design and digital twin modeling through AI software and innovation. Silvaco's solutions are used for semiconductor and photonics processes, devices, and systems development across display, power devices, automotive, memory, high performance compute, foundries, photonics, internet of things, and 5G/6G mobile markets for complex SoC design. Silvaco is headquartered in Santa Clara, California, and has a global presence with offices located in North America, Europe, Egypt, Brazil, China, Japan, Korea, Singapore, Vietnam, and Taiwan. Learn more at silvaco.com.

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