Synopsys Powers Autonomous Engineering with a Broad Portfolio of Long-Horizon Agents and Autopilot Platform

Open and Secure Synopsys Autopilot Platform Accelerates Engineering Productivity, Improves Design Quality, and Achieves Faster Closure Across Silicon to Systems

Key Highlights

- Synopsys Autopilot™ Platform includes a broad portfolio of domain-specific AgentEngineer™ solutions, long-horizon agents that reason, plan, and execute with the support of task agents across silicon to systems workflows
- The Platform's context intelligence combines trusted engineering expertise with reusable skills and persistent memory to guide workflows with greater accuracy
- Open, secure architecture provides customer choice across Synopsys, partner, and third-party models, infrastructure, tools, and agents
- Demonstrated results by market leaders include up to 50x faster verification closure, 20% higher coverage, 30% productivity boost, 2x better token efficiency, and lower latency

SUNNYVALE, Calif., Sept. 28, 2026 /PRNewswire/ -- Synopsys, Inc. (Nasdaq: SNPS) today announced Synopsys AgentEngineer™ solutions, the industry's broadest portfolio of domain-specific long-horizon agents that can reason, plan, and execute complete engineering workflows from silicon to systems across verification, system validation, implementation, analog, manufacturing, and simulation and analysis domains. Built on the Synopsys Autopilot™ Platform, a comprehensive, open, and secure foundation for autonomous engineering, these agents help teams accelerate engineering productivity, improve design quality, and achieve faster closure across critical workflows while optimizing token efficiency and reducing latency.

"Our customers are re-engineering their engineering workflows across semiconductor and systems products to keep pace with increasing system complexity and tight market windows," said Ravi Subramanian, Chief Product Management Officer at Synopsys. "Synopsys' portfolio of AgentEngineer solutions and the Autopilot Platform enable customers to accelerate their shift from AI-assisted design to autonomous engineering, built on trusted EDA and simulation and analysis engines."

Portfolio of Long-Horizon Agents Across Silicon-to-System Design
Synopsys AgentEngineer solutions bring long-horizon, domain-specific intelligence to critical engineering workflows supporting verification, implementation, analog, manufacturing, and simulation and analysis engineering domains in one unified platform environment.

In addition, task-level agents apply Synopsys engineering expertise to targeted execution, including autonomous coverage closure; software bring-up and validation; multi-die 3DIC assembly; PPA closure; analog layout synthesis and design migration; mask synthesis; combustion, resonance, and signal integrity; and other complex design tasks.

Together, these long-horizon and task-level agents deliver unmatched breadth and depth, enabling autonomous execution of cross-domain tasks. Their effectiveness is powered by deep engineering context, domain expertise, and workflow intelligence uniquely derived from Synopsys' industry-leading EDA and simulation and analysis ground-truth engines.

Built On Synopsys Autopilot Platform: A Trusted Foundation for Agentic Orchestration
The Synopsys Autopilot Platform provides orchestration, skills, memory, telemetry, and governance for autonomous engineering workflows. It creates a trusted environment for AI systems to coordinate activities, access design knowledge, execute actions, and maintain enterprise-grade security and control.

- **Built for Optionality:** Enables customer choice across Synopsys, partner, and third-party infrastructure, models, data, agents, workflows, and ecosystem integrations, while preserving security and data integrity.
- **Context Intelligence**: Powered by Synopsys' cognitive model, combines deep domain engineering knowledge and tools, reusable skills, and persistent memory to help AI agents interpret design intent and guide workflows.
- **Advanced Security & Data Management:** Protects customer, partner, and Synopsys intellectual property through architecture flexibility, access controls, encryption, and runtime guardrails.
- **Optimized for Efficiency:** Uses privileged APIs and reasoning over proprietary context intelligence to deliver better results at significantly lower token cost/count and latency.

Advancing Autonomous Engineering at Scale Industry Collaborations
Beyond automating individual tasks, the Synopsys Autopilot Platform helps engineering teams accelerate entire workflows from design through verification and systems development. Engagements with leading companies are validating the promise of autonomous engineering and demonstrating meaningful improvements in productivity, design quality, and workflow closure.

"As a fast-growing innovator developing next-generation processor architectures, we are continually looking for new ways to accelerate engineering execution and improve productivity across our design workflows," said **Alon Mahl, VP of Verification, AheadComputing**. "The Synopsys AgentEngineer technology extends AI beyond task assistance to help automate complex workflows and accelerate engineering execution. From RTL handoff through implementation, ECO, and signoff, the Synopsys Implementation AgentEngineer helped us reduce manual engineering effort and accelerate design convergence, enabling our engineering teams to focus more time on the differentiated aspects of our processor architecture."

"We achieved a 10–30% productivity boost in RTL code generation with Synopsys Verification AgentEngineer capabilities," said **Toshio Yoshida, Senior Vice President and Head of the Advanced Computing Development Unit at Fujitsu.**"This was driven by highly efficient generation of SystemVerilog assertions, wrapper modules, and parameterized modules, as well as code refactoring."

"Advancing the productivity and efficiency of our verification teams is critical as design complexity continues to increase across next-generation computing platforms," said **Manoj Selva, Vice President, Product Enablement, Intel**. "Our work with Synopsys Verification AgentEngineer technology highlights the promise of agentic AI for debug, enabling engineers to accelerate issue resolution across verification environments. We believe these advancements can help reduce verification bottlenecks, improve engineering efficiency, and accelerate the delivery of our silicon innovations."

"Our engineers have consistently pushed the boundaries of analog and mixed-signal design and are continuously looking for ways to dramatically enhance design and layout productivity," said **Ching San Wu, Vice President of MediaTek** "Building on the successful deployment of Synopsys SmartFloorplanning Technology, we are continuing our collaboration with Synopsys on the Agentic AI AMS Platform, driving the next frontier of autonomous analog engineering flows. We believe this transformative technology will fundamentally reshape how our teams create, optimize, and implement complex AMS designs."

"Autonomous engineering requires AI agents that understand design intent, plan and execute complex workflows, and validate their results," said **Tim Costa, Vice President and General Manager of Industrial and Computational Engineering at NVIDIA.** "Synopsys is combining its silicon-to-systems expertise with NVIDIA accelerated computing and NVIDIA Agent Toolkit, including NVIDIA Nemotron models and the NVIDIA OpenShell secure runtime, to build long-running agents that help engineers improve design quality and accelerate development."

"Breakthroughs in AI increasingly depend on breakthroughs in memory: the industry calls for higher bandwidth, greater efficiency, and faster innovation cycles," said **JY Choi, Executive Vice President and Head of Memory Design Technology at Samsung Electronics.** "Synopsys agentic AI solutions are helping Samsung's engineering teams accelerate complex development workflows, allowing us to focus more effort on innovating the advanced memory technologies that power the next generation of AI infrastructure."

"As AI drives the shift to multi-die architectures with unprecedented power densities, increasingly complex power delivery networks demand new approaches for power integrity signoff," said **Aveek Sarkar, Director of the Ecosystem and Alliance Management Division at TSMC**. "Through our enduring partnership with Open Innovation Platform® (OIP) ecosystem partners like Synopsys, we are successfully enabling agentic AI-based solutions to accelerate critical power integrity analysis workflows. As advanced packaging designs rapidly grow in scale and complexity, these AI-based solutions significantly boost engineering productivity and enable groundbreaking designs for next-generation AI systems."

Availability and Resources
More than 50 engagements are underway with Synopsys AgentEngineer solutions and the Autopilot Platform, with availability planned for the end of 2026.

For more information about Synopsys AgentEngineer solutions and the Autopilot Platform, visit: https://www.synopsys.com/ai/agentic-ai.

About Synopsys
Synopsys, Inc. (Nasdaq: SNPS) is the leader in engineering solutions from silicon to systems, enabling customers to rapidly innovate AI-powered products. We deliver industry-leading silicon design, IP, simulation and analysis solutions, and design services. We partner closely with our 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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Forward-Looking Statements
This press release contains forward-looking statements, including, but not limited to, statements concerning our expectations regarding certain of our solutions, including their anticipated performance and benefits, and the development of additional solutions and enhancements. These statements involve risks, uncertainties and other factors that could cause our actual results, time frames, or achievements to differ materially from those expressed or implied in such forward-looking statements.

Information on potential risks, uncertainties and other factors that could affect Synopsys' results is included in filings we make with the SEC from time to time, including in the sections entitled "Risk Factors" in our latest Annual Report on Form 10-K and in our latest Quarterly Report on Form 10-Q.

Contacts
Media
Kelli Wheeler, kelli.wheeler@synopsys.com
Pete Smith, smithp@synopsys.com
corp-pr@synopsys.com

SOURCE Synopsys, Inc.

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