Silicon Labs Unveils the Next Evolution of IoT Development with the Simplicity Ecosystem

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Developers gain faster, smarter workflows today – and AI-powered collaboration in 2026

AUSTIN, Texas, Oct. 22, 2025 /PRNewswire/ -- Silicon Labs (NASDAQ: SLAB), the leading innovator in low-power wireless, today announced the launch of the Simplicity Ecosystem, a next-generation suite of modular software tools with planned AI augmentation designed to transform embedded IoT development. Anchored by Simplicity Studio 6 and complemented by the emerging Simplicity AI SDK framework, the ecosystem unifies installation, configuration, debugging, and analysis into a single intelligent, developer-first environment that delivers automation and insight at every stage of product creation.



"The Simplicity Ecosystem represents a major step in making intelligent, context-aware development a reality," said Manish Kothari, Senior Vice President of Software Development at Silicon Labs. "By integrating AI into every layer of our tools, we will give developers a platform that learns, adapts, and accelerates innovation across the entire IoT lifecycle."

From Integrated Development Environment (IDE) to Ecosystem

For more than a decade, Simplicity Studio has helped engineers build connected devices with speed and reliability. The new Simplicity Ecosystem extends that legacy by breaking the toolchain into modular, interoperable components, each designed to fit seamlessly into modern workflows, whether GUI-based or automated. The Simplicity Ecosystem supports Silicon Labs Series 2 and Series 3 devices and major IoT standards, including Bluetooth LE, Zigbee, Thread, Matter, Wi-Fi, Wi-SUN, and Z-Wave.

Core tools include:

- Simplicity Installer – A lightweight package manager enabling on-demand installation of SDKs, examples, and tools. Developers can install only what they need, reducing overhead and startup time.

- VS Code and CLI Integration – Simplicity Studio 6 embraces VS Code as its primary IDE, offering a flexible environment with a Simplicity Studio extension. Studio 6 also features generation of a modern CMake & Ninja build environment, enabling robust CLI automations supporting a range of toolchains.

- Device Manager – A unified interface for identifying, managing, and programming Silicon Labs hardware. It simplifies firmware flashing, serial communication, and board detection, supporting everything from bring-up to production.

- Simplicity Commander – A command-line tool for programming, debugging, and security configuration. Engineers can erase, flash, or query devices, making it ideal for CI/CD and production automation.

- Network Analyzer – A protocol-aware tracing tool for wireless traffic, offering real-time visibility

into packet exchanges across Bluetooth LE, Zigbee, Thread, and Matter networks. Engineers can visualize events and diagnose performance issues efficiently.

- Energy Profiler – A real-time power measurement tool that correlates energy consumption directly to code execution, helping developers minimize current draw in battery-powered designs.

- Wireless Tools – A full suite of configuration, control/debug, and analysis tools for all wireless technologies, helping teams fine-tune wireless performance.

Each tool can function independently or as part of the complete Simplicity Ecosystem. Together, they deliver a modular workflow that simplifies setup, boosts productivity, and provides deep visibility into device behavior.

Evolving the Developer Experience with Simplicity AI SDK

Silicon Labs also revealed the Simplicity AI SDK, a framework that will extend the ecosystem's developer-first design into an AI-augmented workflow enabling significant gains in innovation and productivity. The Simplicity AI SDK combines context awareness and intelligent automation to accelerate development. It augments the engineer by acting as a collaborator that interprets code, surfaces insights, and assists with tasks across the lifecycle—from project setup to field debugging.

The first release will integrate with VS Code to let developers "chat with their code." It can explain functions, trace errors, and suggest improvements in real time, drawing on an understanding of project context and Silicon Labs SDKs. This collaboration between developers and intelligent tools marks a shift toward AI-assisted design where creativity and precision coexist.

At the heart of Simplicity AI SDK is dynamic context engineering, which gives AI agents the right data at the right time. This allows them to understand project structure, interpret documentation, and provide contextual support without manual lookup. Future updates will extend these capabilities across Silicon Labs' tools, enabling adaptive debugging, optimization, and application generation.

A full exploration of the Simplicity AI SDK's roadmap and philosophy is available in Silicon Labs Senior Vice President of Software Manish Kothari's blog post, "Shaping the Future of IoT Development with Simplicity AI SDK".

The Simplicity AI SDK will enter public access in 2026, beginning with developer feedback and beta testing.

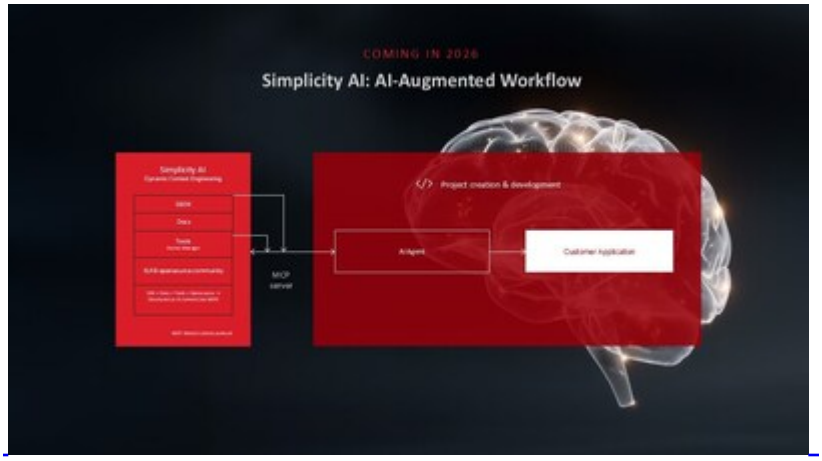
Get Started with the Simplicity Ecosystem

Simplicity Studio 6 is available today for download at https://www.silabs.com/software-and-tools/simplicity-studio.

Public launch of the Simplicity AI SDK is planned for 2026. Join the Simplicity AI SDK early access waitlist to be among the first to receive updates.

About Silicon Labs

Silicon Labs (NASDAQ: SLAB) is the leading innovator in low-power wireless connectivity, building embedded technology that connects devices and improves lives. Merging cutting-edge technology into the world's most highly integrated SoCs, Silicon Labs provides device makers with the solutions, support, and ecosystems needed to create advanced edge connectivity applications. Headquartered in Austin, Texas, Silicon Labs has operations in over 16 countries and is the trusted partner for innovative solutions in the smart home, industrial IoT, and smart cities markets. Learn more at www.silabs.com.



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