

Silicon Labs Extends IoT Security Leadership with World's First PSA Level 4 Certification

Series 3 Secure Vault, debuting on the SiXG301 SoC in the next-gen Series 3 lineup, achieves highest security certification for advanced IoT protection

AUSTIN, Texas, Aug. 4, 2025 /PRNewswire/ -- Silicon Labs (NASDAQ: SLAB), the leading innovator in low-power wireless, today announced that its Series 3 Secure Vault security subsystem on the [SiXG301 SoC](#), the first SoC in its [Series 3 portfolio](#), has achieved the world's first PSA Level 4 certification. This achievement – the highest level recognized by [PSA Certified](#) – affirms Silicon Labs' [security](#) leadership and its legacy of embedding trust at the core of connected technology.

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"Security isn't just a feature – it's foundational to everything we develop," said Matt Johnson, President and CEO of Silicon Labs. "Being the first to achieve PSA Level 4 certification is a powerful validation of our leadership in IoT security and our focus on accelerating IoT growth."

Raising the Bar: PSA Level 4 Certification

PSA Certified introduced the Level 4 certification and its two designations, iSE/SE for secure elements and ROT for Root of Trust, to address the rising complexity and sophistication of physical attacks on embedded devices. Unlike previous levels, Level 4 validates resilience against laser fault injection, side-channel attacks, microprobing, and voltage manipulation – threats once considered theoretical but now part of the evolving reality.

Silicon Labs has consistently led the industry in achieving PSA milestones. Its [MG21 SoC](#) was the world's first device to earn [PSA Level 3](#) certification, establishing new benchmarks in protection against physical tampering and setting the stage for this next leap to Level 4. Silicon Labs SoCs were also the industry's first to reach PSA Levels 1 and 2.

Silicon Labs collaborated with [Keysight Technologies](#), a market-leading design, emulation, and test solutions company with renowned test and evaluation labs to validate Secure Vault on Series 3 for PSA Level 4. Their experts noted the seamless partnership with Silicon Labs' engineering team, who demonstrated deep technical expertise and adaptability throughout the audit process.

"Keysight is proud to have supported Silicon Labs in achieving the world's first PSA Level 4 certification," said Marc Witteman, Technical Director, Keysight Device Security Testing at Keysight Technologies. "Our advanced testing methodologies, including side-channel analysis and fault injection, were instrumental to validating the Series 3 Secure Vault on the SiXG301's resilience against today's most sophisticated threats. This milestone reflects our commitment to helping innovators like Silicon Labs meet the highest levels of security assurance and regulatory readiness in a rapidly evolving IoT landscape."

Future-Proofing Through Security-First Engineering

The Series 3 Secure Vault and the SiXG301 SoC's resilience aren't just about meeting today's standards – it's about anticipating future threats. The security subsystem and SoC were engineered to endure over a decade in the field, with industry-leading defenses against threats not yet commonplace. When combined with over-the-air firmware and software updates and real-time monitoring, Series 3 Secure Vault and the SiXG301 exemplify security as an ongoing lifecycle, not a one-time event.

Silicon Labs' [Series 3 platform](#), built on a 22 nm process node, is an industry leader in security and builds upon Silicon Labs' award-winning Series 2 security legacy and scales it with PSA Level 4 capabilities. All Series 3 devices are planned to feature this industry-leading enhanced security foundation, with the SiXG301 expected to be the first to market with PSA Level 4 certification when it becomes generally available in Q3 2025.

Enabling Compliance Around the World

As governments around the globe enact new regulations – such as the EU's Radio Equipment Directive (RED) and CRA, the US Cyber Trust Mark, and Singapore's Cybersecurity Labeling Scheme (CLS) – Silicon Labs stands ready to help device makers align with emerging mandates. Silicon Labs' holistic approach to security and expert guidance gives product teams a head start on regulatory readiness and consumer trust, backed by independent lab validation.

With the EU's RED regulations now in effect as of August 1, 2025. Silicon Labs' Secure Vault – when properly implemented – delivers the features needed for compliance. Developers can [register](#) for an upcoming webinar, [Stay Ahead of Global IoT Security Regulations with Silicon Labs](#), to learn how to integrate RED-ready security into their products.

To learn more about how Silicon Labs is pioneering security-first design and helping device makers and future-proof their solutions, visit:

- [Silicon Labs Security Overview](#)
- [CTO blog: Silicon Labs' Proven History of Firsts in IoT Security](#)
- [Silicon Labs Custom Part Manufacturing Service \(CPMS\)](#)
- [Silicon Labs Matter Developer Journey](#)

About Silicon Labs

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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