Silicon Labs and Arduino Partner to Democratize Matter

Collaboration enables developers to go from new board to commissioned device in under two minutes

AUSTIN, Texas, Feb. 6, 2024 /PRNewswire/ -- Silicon Labs (NASDAQ: SLAB), a leader in secure, intelligent wireless technology for a more connected world, today announced a new partnership in collaboration with Arduino, the global leader in open-source hardware and software, to better enable seamless development of Matter over Thread applications for Arduino's 33 million-strong developer community. Developed in collaboration with Silicon Labs, Arduino's first-ever Matter software libraries are available today on both the xG24 Explorer Kit from Silicon Labs and the xG24-based SparkFun Thing Plus Matter – MGM240P development board.

"Arduino's simplicity, ease of use, and powerful development environment is what makes them so appealing to their community of over 33 million users, whether they be Makers just getting started, or Pros with a wealth of development experience," said Rob Shane, Vice President of Mass Market Sales and Applications at Silicon Labs. "By combining Arduino's software libraries with Silicon Labs-based hardware, developers get the best of both worlds with our leading security, energy efficiency, and processing power for Matter."

Code samples, reference designs, documentation and more are now live in the Arduino Core for Silicon Labs Devices GitHub page.

Arduino Speeds Matter Development for Silicon Labs Developers
Arduino is an ecosystem that offers hardware products, software solutions, and cloud services accessible to all. In line with the open-source nature of the entire project, the Arduino programming language – used in the Arduino Integrated Development Environment (IDE) – has grown and evolved over the years thanks to the input of its highly engaged community and user base, who routinely contribute to the platform's ability to meet the changing needs of the embedded computing market. Its intuitive interface and extreme ease of use have made it a favorite for anyone from students taking their first steps in coding to enterprise developers. This new partnership marks a crucial step further in this direction, lowering barriers to entry to make developing a Matter device easier than ever.

"Empowering innovators has always been at the core of Arduino's mission, and our collaboration with Silicon Labs takes that commitment to new heights. This partnership represents a significant stride in democratizing the development of Matter applications, for our community and beyond. By integrating Arduino's simplicity and powerful development environment with Silicon Labs' cutting-edge hardware capabilities, we are providing users with a unique blend of accessibility and advanced features. Together with Silicon Labs, we are excited to pave the way for the next wave of innovation in the IoT landscape," commented Fabio Violante, CEO of Arduino.

Indeed, Arduino's shared software resources are incredibly powerful, with a wide range of pre-compiled libraries to help developers get their new devices up and running, quickly. In internal testing, Silicon Labs engineers were able to set up a new board flashed as a Matter device and ready to be commissioned into a new network in under two minutes. This represents a major step forward in making Matter development more accessible, simpler, and faster than ever before.

Phase Two of Partnership Focuses on Bringing New Hardware to Market
A complete platform for Matter development needs both hardware and software, and as Phase Two of the collaboration between Arduino and Silicon Labs, the two companies are co-developing a new member of the highly successful Arduino Nano family of development boards for small form factor devices. The new member of the family will incorporate the MGM240 Module from Silicon Labs.

Based on the MG24 SoC, the module provides wireless connectivity using Matter, Thread, and Bluetooth® protocols. With key features like an ARM® Cortex®-M33, ten dBm output power, low current consumption, and the highest PSA Certification Level 3 security, Arduino developers can create robust, fast, and energy-efficient applications while securing end-user privacy. The large memory of up to 1536 kB of Flash, 256 kB of RAM, and 32 GPIO provides the capacity and expandability needed for Matter.

Silicon Labs and Arduino Partnership Advances Goal of Simple IoT Development
This new partnership between Silicon Labs and Arduino is a part of Silicon Labs' ongoing goal to make IoT development as user-friendly and expedient as possible. To accomplish this, Silicon Labs is not only partnering with some of the world's leading development tool providers, like Arduino, but is also evolving its own development tools. These will take a major step forward with the release of Simplicity Studio 6 later this year. This next version of Simplicity Studio will allow developers to integrate their own preferred IDE, meaning that they can program their devices within their preferred environment, using their preferred language. Learn more about how Silicon Labs is looking inward and outward to make the lives of developers easier:

- See how easy it is to program and commission a new Matter over Thread device in the Quick Look – Matter Over Thread for Arduino video on YouTube
- Read more about the partnership in Arduino's blog

About Silicon Labs

We're a leader in secure, intelligent wireless connectivity for a more connected world. For more information visit www.silabs.com.

About Arduino

Arduino is the leading open-source hardware and software company in the world. Born to provide an easy-to-use platform for anyone making interactive projects, Arduino has reached a growing community and adapted to new needs and challenges, branching out into products for IoT, wearables, 3D printing, and embedded environments. As of today, the Arduino community includes over 33 million active users.

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Additional assets available online: Images (2) Video (1)

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