PSA Certified Spotlight
Sigma Delta Technologies Inc. (SDT)

PSA Certified Level 1:
IoT System-on-Module Based on STM32L4
IoT System-on-Module Based on STM32F4

PSA Certified Leads to Company Growth in IoT Market

From developing system-on-modules (SoM) to providing an ‘IoT Platform for All,’ Korea-based Sigma Delta Technologies Inc. (SDT) depends on the PSA Certified framework to reassure its customers and grow its business.

“Since the company was founded in 2017, customers have been using our SoMs, drivers, and software development kit as the foundation for their own applications and products,” explains Jiwon Yune, founder and CEO of SDT. “Prior to PSA Certified, the biggest challenge was how to build for security. Now, PSA Certified gives us the guidelines and offers our customers an independent rating they can trust.”

SDT solutions are the foundation for many IoT products across several industries in different countries, including medical, smart utility, and smart appliance manufacturers. As Yune expanded the company to focus on the large-scale deployment of IoT devices as well, he recognized the need for additional cloud-based device and data connectivity management services, as well as security for all devices and systems governing devices.

Expanded Services with Arm Pelion IoT Platform

“PSA Certified also gives us a foundation to work with for connected services,” Yune adds. “As an authorized reseller of the Arm Pelion IoT platform, we’re able to offer our customers trusted services and solutions to connect our SoM to their preferred cloud.”

SDT plans to take eight of its SoMs through the PSA Certified program by the end of the year and already has two products certified at PSA Certified Level One. Having gone through the process and adapted its development and manufacturing processes to PSA Certified guidelines, Yune is confident the company will achieve its goal.

“I noticed during the process of getting the first product certified that the PSA Certified framework is not just about making a secure physical product,” Yune says. “We had to build a company culture around PSA Certified requirements and that transformed our thinking. Now we’re ready to build quickly based on the stringent security processes.”
Arm Ecosystem Offer New Opportunities

Going through the PSA Certified process has also helped SDT partner with global digital certificate authority (CA) companies that provide public and private key pairs based for cloud services. It’s also working with a Taiwan-based device programmer to build applications for its PSA Certified products.

“Now we know exactly how to design for security and our customers trust us more,” Yune says. “Not every company has PSA Certified products, so we have a strong competitive advantage and we’re offering customers educational materials, seminars, and workshops on the benefits of security.”

This transformation in company culture around security, together with support from Arm’s ecosystem of silicon vendors means that SDT has been able to grow from an SoM startup to Yune’s vision of an IoT platform solutions company.

Customers Reassured by Security

“Security isn’t a technology our customers want to tackle—they’d prefer to have it as a type of insurance,” Yune explains. “By selling them cloud services paired with PSA Certified devices, we’re providing them the type of insurance they need.”

Since that kind of ‘insurance’ benefit is not common in IoT services, Yune is delighted that SDT is now on the forefront of a growing trend and moving toward becoming a hardware-as-a-service (HaaS) company.

“Our SoMs come with everything the customer needs for their applications, including the right level of security,” Yune concludes. “Security is a tricky thing. Even if we establish perfect security for one device or system, scaling up presents additional challenges. PSA Certified reassures our customers that their products are protected.”