



We are the link
between the real and
the digital world.

Secure Device Management with PSoC[®] 64 and AWS IoT

Infineon's virtual show 2020



PSoC® 64 Standard Secure AWS MCUs



Qualified by AWS to work optimally with FreeRTOS and AWS IoT Core for secure device management



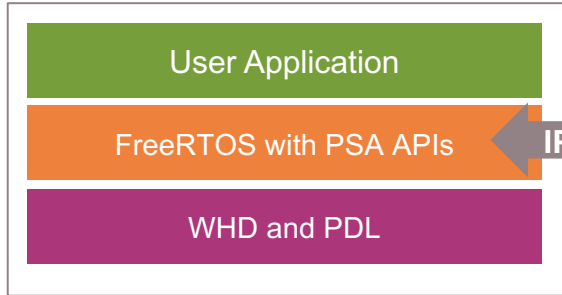
Incorporates open source Trusted Firmware-M security firmware achieving Platform Security Architecture (PSA) certification



Integrated Wi-Fi Host Driver (WHD) support to easily pair with Cypress wireless connectivity solutions

PSoC® 64 Standard Secure AWS MCUs

Non-Secure Processing Environment (NSPE)

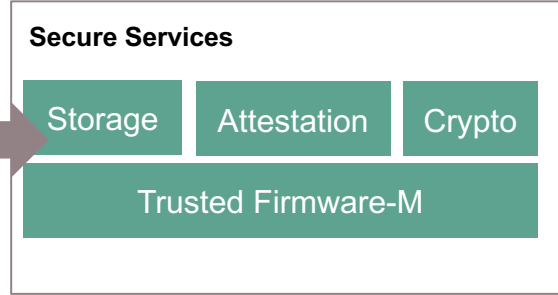


Cortex-M4

- › Develop your application on the Arm® Cortex®-M4 processor
- › FreeRTOS supports PSA APIs for access secure services in SPE
- › Wi-Fi driver support for Cypress wireless chipsets



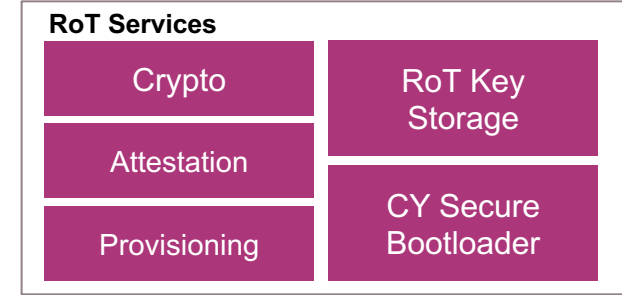
Secure Processing Environment (SPE)



Cortex-M0+

- › Pre-established SPE runs on Arm Cortex-M0+ processor
- › Utilizes open source Trusted Firmware-M

Root-of-Trust and Services



- › The root-of-trust provides an immutable, unclonable identity
- › Securely store keys
- › Performs security operations such as secure provisioning, secure boot, attestation, and firmware over-the-air (FOTA) updates

PSoC® 64 and AWS

Secure Device Management for the IoT



Provisioning

**SECURE
CONFIGURATION**
of device with
TRUSTED unique
identity



Onboarding

**SECURE
CONNECTION** of
device to cloud with
proper credentials



Regular Use

SECURE ACCESS
to device in the Field



Updates

**SECURE
UPDATES** of
device software
remotely

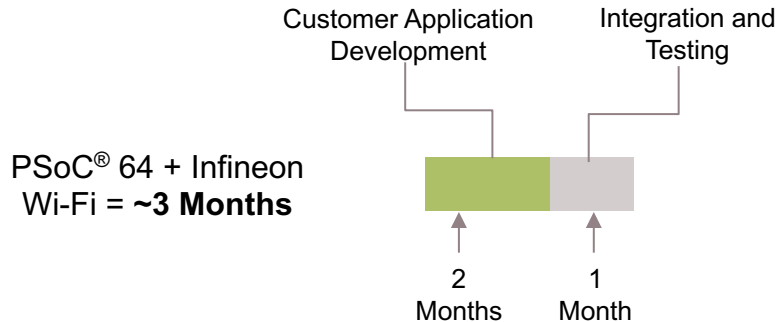
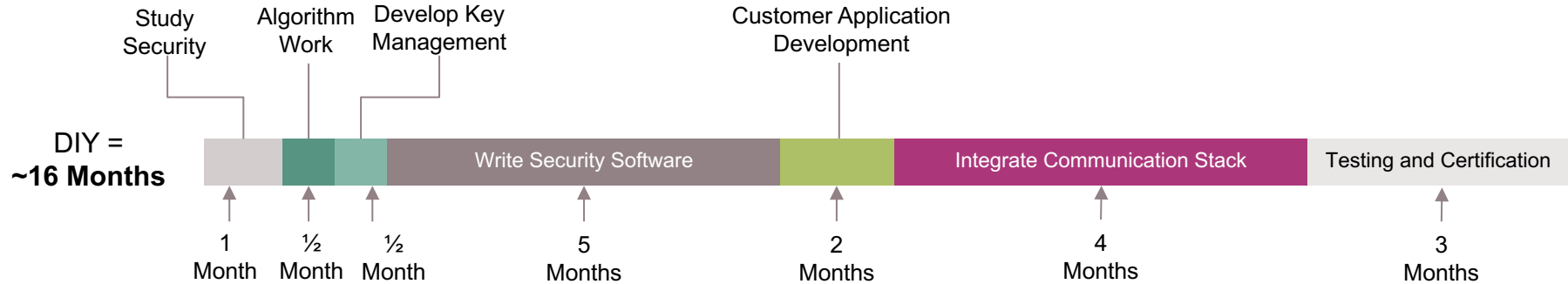


Decommissioning

**SECURE
REMOVAL** of
devices from the
service (End of life)

Secure Lifecycle Management

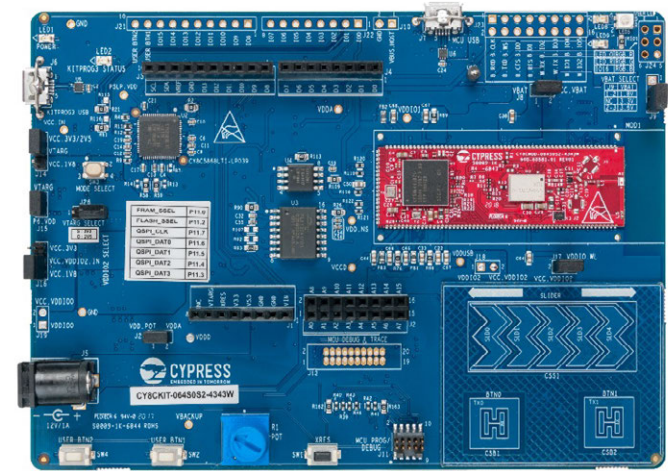
PSoC[®] 64 reduces R&D spend and Time-to-Market



Design Your Secure IoT Application in
~1/5 the Time Using Certified Firmware!

Getting started

1. Purchase a PSoC® 64 Standard Secure AWS Pioneer Kit (CY8CKIT-064S0S2-4343W)
www.cypress.com/cy8ckit-064s0s2-4343w
2. Refer to the AWS getting started guide for this kit on AWS website
https://docs.aws.amazon.com/freertos/latest/ugerguide/getting_started_cypress_psoc64.html



PSoC® 64 Standard Secure AWS
Wi-Fi® Bluetooth® Pioneer Kit
(CY8CKIT-064S0S2-4343W)



Part of your life. Part of tomorrow.