

## Zero Touch Provisioning kit for AWS IoT Release B

Part Number: AT88CKECC-AWS-XSTK-B



## Product Overview:

The Microchip Zero Touch Secure Provisioning Kit for AWS IoT helps designers to quickly and securely develop IoT devices that are in compliance with the AWS security regulations. These regulations state that a device must use mutual authentication with a remote server to be authorized on the AWS cloud.

Meanwhile, a robust authentication must also ensure a complete isolation of the system credentials such as private keys from the application core to avoid leaving backdoors opened to software loop holes. In addition, the software is as secure as the user's skillset is in security. Human users and software can often be one of the easiest targets for a hacker as they are the least reliable elements. Incorporating Microchip pre-configured ATECC508-MAHAW or ATECC508ASSHAW CryptoAuthentication devices into a system is a very secure method to connect to the AWS IoT service. It leaves the whole handling of certificate and private key manipulation to Microchip secure provisioning factories in addition to keeping crendentials away from software and users.

The devices are pre-configure but not provisioned out of the box. Start with the upgraded Zero Touch Provisioning Kit for AWS IoT Version B and benefit from the new provisioning scripts (Python based) and AWS IoT account configuration scripts (using Cloudformation).

This version B of the kit comes with an easier onboarding process to generate certificates and provision them into the CryptoAuthentication device using Python scripts. In addition, the user will have access to a CloudFormation script to generate a web UI reflecting the I/O of the kit and utilize it as a foundation to develop

virtually any sensor based use cases. In addition to the ATECC508AMAHAW, the kit includes a Cortex-M4 ATSAMG55 and Wi-Fi ATWINC1500 using FreeRTOS and the ATWINC1500 integrated TLS stack.

## Features:

- Complete development and prototyping platform on AWS IoT serviceIncludes three customized CryptoAuthed Xplained Pro (ATCRYPTOAUTH-XAWS) add-on boards, each containing an AWS configured ATECC508AMAHAW for in-situ provisioning by the kit python scripts.
- An OLED1-XPRO board that demonstrates operability through the cloud environment through the use of LEDs and switches.
- Secure Root and Signer Provisioning Scripts
- Generic ATSAMG55 Xplained Pro development board running FreeRTOS
- ATWINC1500 Wi-Fi module on Xplained Pro development board with integrated TLS stack.
- CryptoAuthLib library commands are already setup.

## Package Content:

- ATECC508MAHAW : CryptoAuth XPRO board
- ATSAMG55 XPRO board
- ATWINC1500 XPRO board
- USB to mini USB cable
- Flyer with link to instructions.