# Introducing Alexa Voice Service Integration for AWS IoT Core, A Cost-Effective Solution for Devices with Alexa Built-in

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Alexa Voice Service SDK Alexa Built-in Dev Kits News

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Device makers have used the Alexa Voice Service (AVS) to create products that bring voice-first, ambient computing experiences to customers everywhere. There are now hundreds of different Alexa Built-in products that customers can talk to, ranging from multi-room speakers and soundbars, to headphones, PCs, TVs, and more. Today, we are pleased to introduce the **AVS Integration for AWS IoT Core**, a new cost-effective way to bring Alexa voice capabilities to all types of connected devices.

## Built for the Internet of Things

The AVS Integration for AWS IoT Core makes it easier and more cost-effective to add Alexa Built-in capabilities to products where embedding voice wasn't previously viable, such as light switches, thermostats, and small appliances. This solution simplifies the device-side architecture of Alexa Built-in products by offloading complex processes to the cloud. This is made possible by leveraging Amazon AWS IoT Core, a managed cloud service that lets connected devices easily and securely interact with cloud applications and other devices. AVS interfaces are now accessible via a single, secure AWS IoT reserved topic for MQTT (Message Queuing Telemetry Transport) a lightweight communication protocol. The resulting on-device code for the Alexa client can run on microcontroller-class processors with <1MB embedded memory, instead of the application-class processors with >50MB memory required for typical AVS Device SDK based integrations. In addition, device makers have access to simpler device management, strengthened device security, and rich analytics via easy to use AWS IoT services. Learn more about the new AVS Integration for AWS IoT Core on the AWS Developer Blog.

## New Development Kits for Device Makers

Qualcomm has introduced the **Qualcomm Home Hub 100 Dev Kit** -- This kit is based on the QCA4020 SoC, an ARM Cortex-M4 MCU with integrated Bluetooth / WiFi hosting the Alexa client, paired with a Synaptics voice processor for far-field voice capture. NXP has introduced the **NXP i.MX RT MCU AVS Solution**, featuring the i.MX-RT1060A ARM Cortex-M7 based crossover processor that hosts both the Alexa client and the far-field audio front end on a single chip running Amazon FreeRTOS. Learn more about qualified development kits for AVS on the AVS Developer Portal.

## Get Started Today

Commercial device makers interested in developing Alexa Built-in products using the new AVS Integration for AWS IoT Core can get started today:

1. View the AVS Integration for AWS IoT Core Developer Guide

2. Prototype using a qualified development kit from NXP or Qualcomm

3. Register for an online webinar on AVS Integration for AWS IoT Core to learn more