

# Mesh Wi-Fi Systems with Alexa Built-in: Redefining How Users Interact with their Wireless Network

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News



Qualcomm Technologies, Inc. today announced the launch of the Qualcomm Mesh Networking Development Kit for Amazon Alexa Voice Service (AVS). This development kit accelerates the integration of AVS into mesh Wi-Fi systems.

The Wi-Fi router in the home has held an important and evolving role in enabling connected devices and experiences. As Wi-Fi technology faces the explosive increase of video consumption and connected devices, ensuring corner-to-corner Radio Frequency (RF) coverage in homes with brick or cinder block walls is a challenge. Data and RF requirements have resulted in the Wi-Fi router moving to more central locations within the home by the consumer, many of whom are leveraging Alexa’s ability to play the role of central communicator in the smart home ecosystem. These factors have also resulted in the standalone Wi-Fi router evolving into mesh Wi-Fi systems. Collectively, these changes make the residential Wi-Fi network a natural new home for Alexa.

The Qualcomm Mesh Networking Development Kit for Amazon AVS is the first ever Amazon-qualified reference design for a mesh Wi-Fi system with Alexa built-in. This reference platform is based on the Qualcomm IPQ4019 SoC and includes a rectangular 4-microphone array, far-field audio processing algorithms for noise suppression, acoustic echo cancellation, wake word engine, and the AVS Device SDK, to provide far-field voice recognition capability. It simplifies product engineering and reduces development time for OEMs looking to build Alexa into mesh routers.

“Qualcomm’s development kit enables device makers to build voice-first mesh Wi-Fi systems with minimal time and financial investment,” said Priya Abani, Director of the Alexa Voice Service. “We’re thrilled that Qualcomm continues to provide solutions that make it even easier for companies to bring Alexa built-in products to their customers.”

Here are a few ways users can interact with Alexa on their mesh Wi-Fi systems:

The Qualcomm Mesh Networking Dev Kit for Amazon AVS brings a host of benefits to consumers. First, with Alexa integrated in a mesh system, whole home deployment of Alexa is a simpler decision. Second, with Alexa leveraging the mesh system’s local processing and connectivity, the need for separate standalone Alexa built-in devices in the home is reduced. Third, Alexa’s integration into the home Wi-Fi infrastructure ensures more seamless control of all devices throughout the home via voice.

With the Qualcomm Mesh Networking Dev Kit for Amazon AVS, it is now simpler and quicker than ever to create next-generation voice-enabled connected experiences in the home.

## Start Developing

To start developing with the Qualcomm Mesh Networking Dev Kit for Amazon AVS, [visit Qualcomm’s product page](#) where you’ll find specifications, guidelines, and links to distributors carrying the solution. To see all development kits for AVS qualified by Amazon, please visit our [development kits for AVS page](#) on Amazon’s developer portal.

## New to AVS?

AVS makes it easy to develop products with Alexa built-in and bring voice-forward experiences to your customers. Through AVS, you can add a new natural user interface to your products and offer your customers access to a growing number of Alexa features, smart home integrations, and skills. [Get started](#).

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