



NXP Launches First MCU-based Solution Qualified for Amazon's Alexa Voice Service (AVS)

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News Highlights

- Production-ready solution qualified by the Alexa Voice Service (AVS) for a broad range of embedded Internet-of-Things (IoT) edge applications
- Low latency, far-field "wake word" detection, enhanced with noise suppression, echo cancellation and barge-in capabilities, for acoustically difficult environments
- Based on NXP's i.MX RT crossover microcontroller (MCU) platform - drastically reducing cost of integrating Alexa without the need for a costly microprocessor, DSP, DRAM, PMIC, or high-layer count board
- Targets a wide range of cost-sensitive applications including smart homes, smart buildings, smart appliances and industrial use cases.

NUREMBERG, Germany, Feb. 25, 2019 (GLOBE NEWSWIRE) -- **(Embedded World 2019)** – NXP Semiconductors N.V. (NASDAQ:NXPI) today unveiled the world's first microcontroller (MCU) based voice control solution qualified with Amazon's Alexa Voice Service (AVS). This enables original equipment manufacturers (OEMs) to quickly, easily and inexpensively add voice control to their products, giving their customers access to rich voice experiences with Alexa.

Built on an NXP i.MX RT crossover platform, this MCU-based AVS solution enables low latency, far-field, "wake word" detection; embeds all necessary digital signal processing capabilities; runs on Amazon FreeRTOS; and includes an Alexa client application. It is a cost-effective, easy-to-use solution and can be embedded in a diverse range of products across home, commercial and industrial spaces, eliminating the need to deploy standalone voice control devices such as smart speakers or smart displays.

"NXP's production-ready solution is a time-and-cost-effective way for OEMs to build Alexa into their products," said Priya Abani, Director, Alexa Voice Service. "It's fantastic to see NXP create another solution that simplifies the integration process and enables device makers to bring Alexa built-in products to market even faster."

NXP's i.MX RT MCU-based AVS solution provides OEMs with a self-contained, turnkey offering that enables them to quickly add Alexa to their products. It includes the MCU, a smart audio amplifier with speaker protection, and comes with fully integrated software. It also features noise suppression, echo cancellation, beam forming and barge-in capabilities that enable use in acoustically difficult environments.

With a total system cost at less than half of microprocessor-based alternatives, this solution is based on the newest member of NXP's i.MX RT crossover platform, the i.MX RT106A. Additionally, the solution includes the TFA9894D smart audio amplifier, and optional A71CH secure element, and is already embraced by OEMs developing a diverse range of industrial and consumer products.

"Leviton is excited about NXP's introduction of its i.MX RT MCU-based AVS solution, which will significantly enhance consumers' smart home experiences," Aaron Ard, Senior Director of Engineering with Leviton. "We look forward to leveraging this capability in our ongoing product development."

NXP is now engaging with OEM customers to provide early access to an evaluation and development kit implementation of this solution. Broad market availability for the solution is expected to begin later in the year. NXP is demonstrating this solution during Embedded World in Nuremberg, Germany, in stand 4A-220 (Hall 4A). For more information, please visit www.nxp.com/mcu-avs.

To help accelerate customer's time to market and to achieve the best possible Alexa Built-in integration, NXP now offers at its Mougins, Sophia-Antipolis facilities a product testing service for Alexa Built-in products, available to its customers desiring to test their devices before submitting to Amazon for final evaluation. If a customer's product supports music and/or is far-field enabled and uses a "wake word" to initiate interactions with Alexa, additional testing is required prior to submitting products to Amazon for evaluation. This is where Pro-Support Audio Voice Services helps to complete the self-test checklists. More information is available at www.nxp.com/prosupport/audiolabservices.

About NXP Semiconductors

NXP Semiconductors N.V. (NASDAQ:NXPI) enables secure connections and infrastructure for a smarter world, advancing solutions that make lives easier, better and safer. As the world leader in secure connectivity solutions for embedded applications, NXP is driving innovation in the secure connected vehicle, end-to-end security & privacy and smart connected solutions markets. Built on more than 60 years of combined experience and expertise, the company has over 30,000 employees in more than 30 countries and posted revenue of \$9.41 billion in 2018. Find out more at www.nxp.com.

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