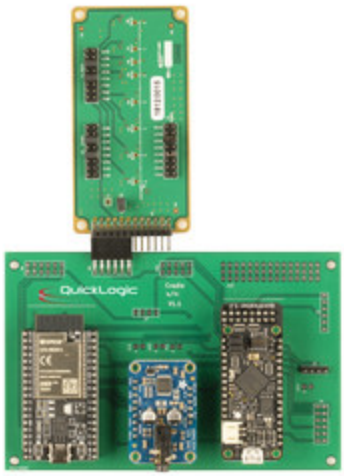
February 18, 2021

QuickLogic's Amazon-Qualified Reference Design Brings Alexa to Hearables

- Smart hearable reference design for voice-initiated, hands-free Alexa Built-in Devices with Close-Talk support

- Provides hearable OEMs and ODMs with a head start on designing their own products with the Alexa user experience

SAN JOSE, Calif., Feb. 18, 2021 /PRNewswire/ -- QuickLogic Corporation (NASDAQ: QUIK), a developer of ultra-low power multi-core voice-enabled SoCs, embedded FPGA IP, and Endpoint AI solutions, today announced it has released an Amazon-qualified reference design that empowers OEMs and ODMs to evaluate and develop their own smart hearable products quickly and easily. This kit integrates the Alexa voice-initiated Close-Talk experience, enabling a broad set of battery-powered applications to communicate directly with Alexa for a multitude of use cases.



This is the first available, Close-Talk qualified smart hearable reference design based on QuickLogic's EOS™ S3 ultra-low power Arm® Cortex®-M4-based Voice Processor + eFPGA System-on-Chip. The reference design is built on QuickLogic's Open Reconfigurable Computing (QORC) initiative, and QuickLogic's QuickFeather 100% open source development kit. The EOS S3 integrates Sensory's™ Low Power Sound Detection (LPSD) technology, with DSP Concepts' TalkTo™ noise suppression and beamforming technology, and Alexa Wake Word engine technology to enable a superior user experience and long battery life.

In addition to the very low power, voice-initiated Alexa voice recognition capability enabled by the EOS S3 platform, OEMs and ODMs can optionally integrate multiple AI-based

motion, sound and other AI use cases based on SensiML's AI Software Platform, which already has native support for the QuickFeather development kit.

Following evaluation with this reference design, manufacturers can take the next step in product development using the same QuickFeather development kit, or design their own hardware.

The QuickFeather AVS Reference Design Features:

- Alexa Wake Word Engine (WWE) running in the EOS S3 voice processor
- Hardware-optimized Low Power Sound Detection (LPSD) technology from Sensory
- Support for one or two microphone use cases with DSP Concepts' TalkTo noise suppression and beam forming technology
- Connectivity to Alexa Voice Service
- Built on top of 100% open source hardware QuickFeather dev kit and QORC open source software tools

"The age of the smart hearable has arrived, and our always-listening, Alexa Close-Talk reference design is the ideal platform for developing next generation AI-enabled hearable products," said Brian Faith, CEO of QuickLogic. "OEMs and ODMs can use this readily available design along with the QuickFeather development kit as a sandbox for their own product development with the comfort that we have already gone through the AVS certification process on our reference design with Amazon. The fact that we have built all of this on our QuickLogic Open Reconfigurable Computing platform, which integrates with the SensiML AI Software Platform, makes it that much easier for users to innovate in familiar development environments, speeding time-to-market and reducing risk."

Availability

The QuickLogic QuickFeather AVS reference design for Amazon is available now and can be ordered from QuickLogic's online store. To learn more, please visit: www.quicklogic.com/avs

About QuickLogic
QuickLogic Corporation (NASDAQ: QUIK) is a fabless semiconductor company that develops low power, multi-core semiconductor platforms and Intellectual Property (IP) for Artificial Intelligence (AI), voice and sensor processing. The solutions include embedded FPGA IP (eFPGA) for hardware acceleration and pre-processing, and heterogeneous multi-core SoCs that integrate eFPGA with other processors and peripherals. The Analytics Toolkit from our recently acquired wholly-owned subsidiary, SensiML Corporation, completes the end-to-end solution with accurate sensor algorithms using AI technology. The full range of platforms, software tools and eFPGA IP enables the practical and efficient adoption of AI, voice, and sensor processing across mobile, wearable, hearable, consumer, industrial, edge and endpoint IoT. For more information, visit www.quicklogic.com and https://www.quicklogic.com/blog/.

View original content to download multimedia:http://www.prnewswire.com/news-releases/quicklogics-amazon-qualified-reference-design-brings-alexa-to-hearables-301230788.html

SOURCE QuickLogic Corporation