USB-to-I2S Bridge Chip Brings Turnkey Simplicity to Digital Audio Design

-- Silicon Labs' Latest USB Connectivity Solution Frees Developers from the Complexities of Firmware Development --

AUSTIN, Texas, April 19, 2017 /PRNewswire/ -- Silicon Labs (NASDAQ: SLAB) has introduced a fixed-function audio bridge device that provides a simple, turnkey solution for transferring digital audio data between the universal serial bus (USB) and integrated inter-IC sound (I2S) serial bus interfaces. The new CP2615 digital audio bridge simplifies USB-to-I2S connectivity and accelerates time to market for a wide range of power-sensitive, space-constrained USB audio applications based on the Android, Windows, Linux and Mac operating systems, including headphones, headsets, speakers, MP3 accessories, navigation systems and point-of-sale terminals.

While USB connectivity seems simple for consumers, USB audio design can be very challenging, and developers need a fast, painless way to add USB connectivity to their audio accessories. Silicon Labs' CP2615 digital audio bridge provides a drop-in USB-to-I2S connectivity solution that requires no USB audio knowledge or protocol expertise, enabling developers to focus on their end applications instead of firmware development.

The single-chip CP2615 audio bridge is available in a compact 5 mm x 5 mm QFN-32 package, making it ideal for portable audio applications with limited printed circuit board (PCB) space. The feature-packed CP2615 device includes a USB 2.0 full-speed function controller, USB transceiver, on-chip oscillator, I2S audio interface, I2C control interface and embedded flash memory for storing device configurations. This high level of integration eliminates the need for external components, significantly reducing PCB size and BOM cost.

The CP2615 audio bridge provides a cost-effective solution for low-end and mid-market headphones requiring a 48 kHz sampling rate. The small-form-factor device is also ideal for USB dongles designed for consumers who own high-end headphones that use an analog jack for audio. Many new smartphone designs are eliminating the analog headphone jack, offering only one USB connector to support both charging and audio connectivity. As a result, consumers often buy simple, low-cost dongles that interface the 3.5 mm analog jack to a USB-C to Micro USB adapter, enabling them to continue to use their existing headphones.

Silicon Labs' popular Simplicity Studio development environment includes an easy-to-use, GUI-based Xpress Configurator tool that simplifies USB audio design. Using the Xpress Configurator, developers can configure and customize their digital audio applications in three easy steps: connect the CP2615 bridge device, configure the USB and audio parameters, and then program the device. The configurator tool also enables developers to take advantage of Silicon Labs' flexible factory programming options to speed time to market.

"Silicon Labs really knows the ins and outs of USB development, and we're passing along our many man-years of USB expertise to developers with plug-and-play USB connectivity solutions like our new CP2615 audio bridge chip," said Tom Pannell, Senior Marketing Director for IoT products at Silicon Labs. "If you are developing USB-based digital audio applications, you can save considerable time, effort and cost by using Silicon Labs' CP2615 device, Xpress Configurator tool and evaluation kit."

Silicon Labs is a leading provider of USB connectivity solutions, offering a broad and flexible USB portfolio including fixed-function devices and general-purpose 8-bit and 32-bit MCUs with on-chip USB controllers.

Pricing and Availability
Samples and production quantities of the CP2615 digital audio bridge device are available now. CP2615 product pricing begins at $2.51 (USD) in 10,000-unit quantities. The CP2615-EK evaluation kit is available now and priced at $59.00 (USD MSRP). For additional CP2615 product information and to order samples and evaluation kits, please visit www.silabs.com/digitalaudio.

Silicon Labs
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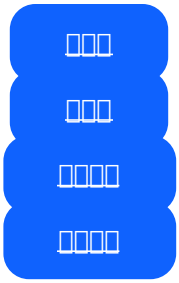

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