Silicon Labs Simplifies Bluetooth Audio Development with New iWRAP Software Release

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Sixth-Generation iWRAP Software and BGScript™ Scripting Language Ease the Complexity of Adding Bluetooth 3.0 Connectivity to Audio Accessories

AUSTIN, Texas--(BUSINESS WIRE)-- Silicon Labs (NASDAQ: SLAB), a leading provider of wireless connectivity solutions for the Internet of Things (IoT), today introduced a sixth-generation version of the iWRAP ™ Bluetooth software stack for the Bluetooth® 3.0 wireless audio accessory market. iWRAP 6.1 software is a full-featured embedded Bluetooth stack from Bluegiga, a Silicon Labs company, designed to support the popular WT32i Bluetooth audio module. Target applications include smart phone accessories, stereo and hands-free audio, cable replacement and Bluetooth HID.

The iWRAP software stack exposes a powerful yet easy-to-use command interface enabling developers to manage Bluetooth operations. iWRAP software hides the complexity of the Bluetooth protocol stack and profiles for a wide range of applications, from simple audio and data applications to more complex use cases requiring interaction with several Bluetooth-enabled devices, or even for multi-profile environments with simultaneous audio and data connections.

iWRAP is supported by Silicon Labs' easy-to-use BGScript™ scripting language Embedded into each Bluetooth module from Bluegiga, BGScript eliminates the added cost and complexity of using an external host MCU and separate software development kit (SDK) required by conventional Bluetooth development alternatives.

iWRAP 6.1 software supports the following new features:

- Audio tone support - audio tones (files) can be stored on the Bluetooth module's flash memory, with playback support for stored files
- Audio tone mixing - audio tones can be mixed with A2DP or HFP audio output
- Simultaneous AVRCP controller and target profiles - improved user experience with the latest smart phones
- Enhanced user-configurable Bluetooth reconnection logic
- Software application programming interfaces (APIs) added for the I2C interface

No Bluetooth wireless development skills or tools are needed to use the iWRAP stack. The software's simple ASCII-based command and response API over UART is easy to use and learn, simplifying and accelerating Bluetooth application development. iWRAP supports up to seven simultaneous connections with data throughput up to 500 kbps. The software is customizable and field-upgradable over UART.

iWRAP software supports 13 integrated profiles for data and audio applications including the Apple iAP1 and iAP2 profiles, supporting all Apple iOS devices on the market. iWRAP also adds the latest versions of Bluetooth audio profiles such as AVRCP v.1.5 with media browsing capabilities, a MAP profile for SMS notifications and message downloads, and new aptX and AAC audio codecs for an enhanced Bluetooth audio experience.

"The growing popularity of wireless audio streaming from mobile handsets continues to drive strong demand for Bluetooth classic audio solutions," said Riku Mettälä, general manager of wireless module products at Silicon Labs. "As a leading supplier of Bluetooth 3.0 solutions for the wireless audio accessory market, we have continued to enhance our iWRAP stack, now in its sixth generation, to support the latest Bluetooth audio features while simplifying wireless development with easy-to-use tools like our BGScript language."

Pricing and Availability

The iWRAP software stack is available now to Bluegiga WT32i Bluetooth module customers at no charge at www.bluegiga.com/iwrap.

Silicon Labs

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