

QSG144: CP2615-EK Quick-Start Guide

The Silicon Labs CP2615 Digital Audio Bridge Evaluation Kit is designed to enable rapid development of mobile audio accessories and USB digital audio products using the CP2615 Digital Audio Bridge.

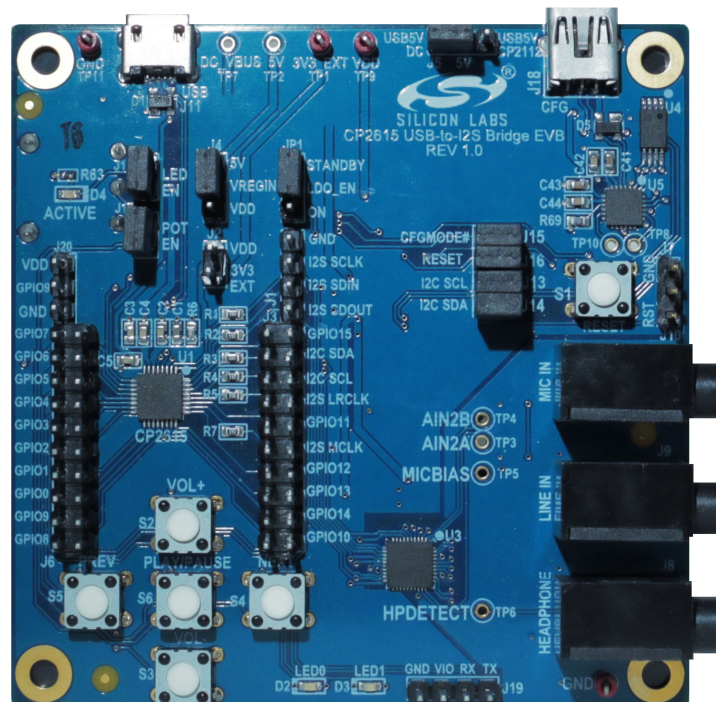
The CP2615 provides built-in support for USB digital audio streaming and HID user-interface functions for transport control buttons. It also provides an I/O protocol to allow host applications access to GPIO, ADC, and serial interfaces. The CP2615 is designed to operate with any USB host that supports USB Audio class 1.0. No firmware development is required to use the CP2615, and it has many custom options that can be configured using a GUI configuration tool.

The CP2615-EK kit includes the following:

- CP2615 Audio Bridge evaluation board
- 1 x Mini USB cable
- 1 x Micro USB OTG adapter
- 1 x micro USB cable
- 1 x USB Type-C to USB-A adapter
- Quick-Start Card

KEY FEATURES

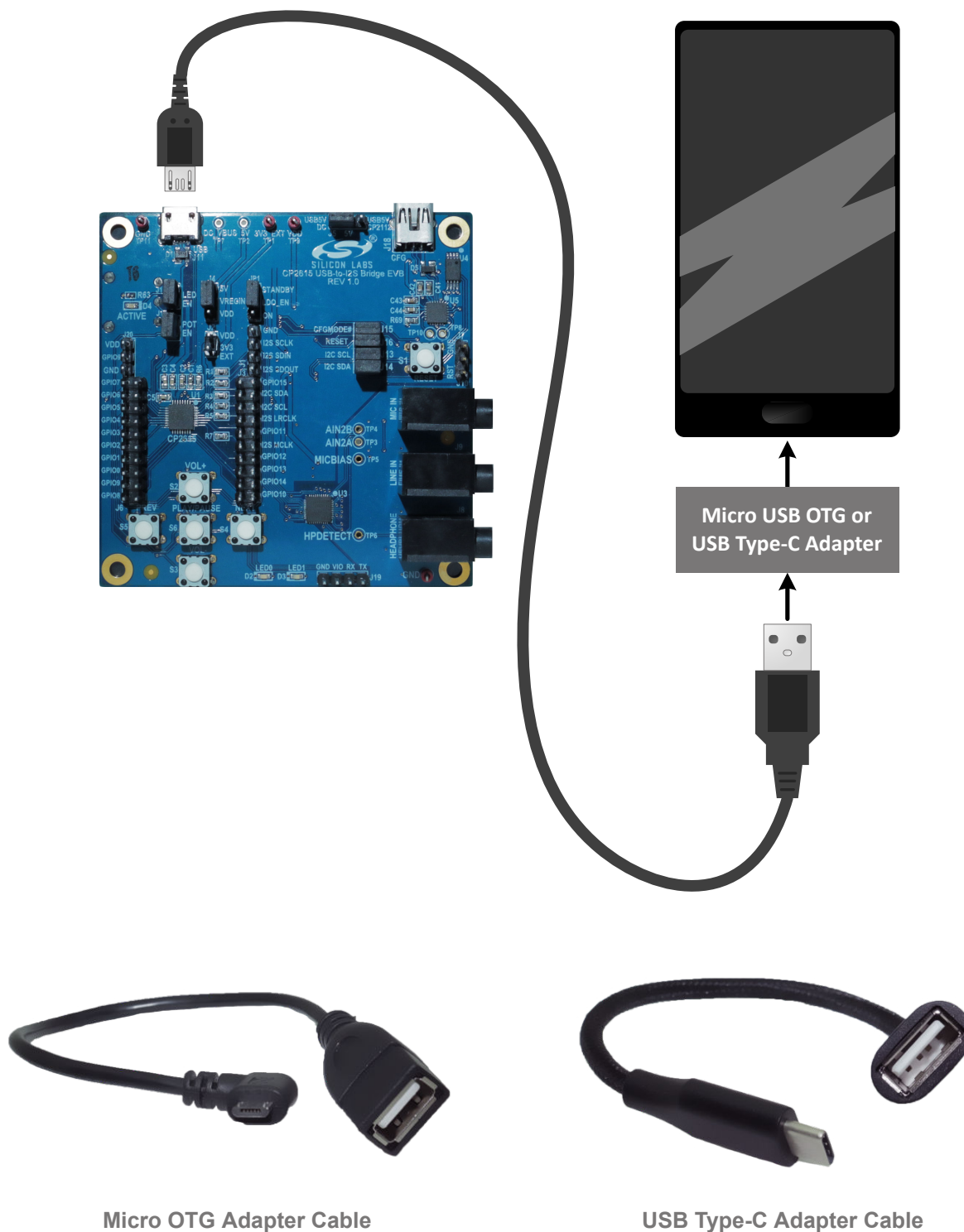
- USB Audio class 1.0
- Supports USB HID Consumer Controls for Volume and Mute Synchronization
- Includes USB-UART bridge function
- Supports 48 kHz, 16-bit/ 24-bit stereo digital audio
- Integrated USB transceiver; no external resistors required
- Integrated clock; no external crystal required
- On-chip voltage regulator: 3.45 V output
- Self-powered or Bus-powered
- No firmware development



1. Getting Started

1. Set Up Your Kit

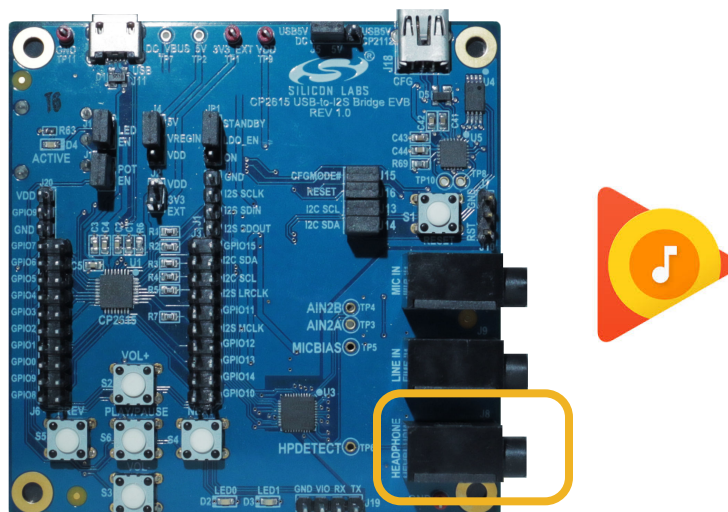
Connect the USB micro cable to [J11] of the CP2615-EK board. Depending on the type of receptacle on your phone, attach either the micro OTG adapter or the USB Type-C adapter to the other end of the USB cable. Then, connect the other end of the adapter to your Android phone.



The Micro USB OTG adapter is for phones that use a micro connector. The USB Type-C adapter is for phones that use a USB Type-C connector.

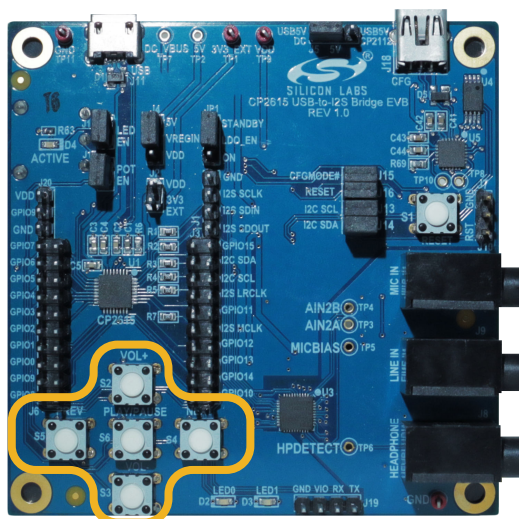
2. Listen to Audio

Connect headphones (**J8**) to the CP2615 board and use your favorite Android audio application to play music.



3. Control the Audio

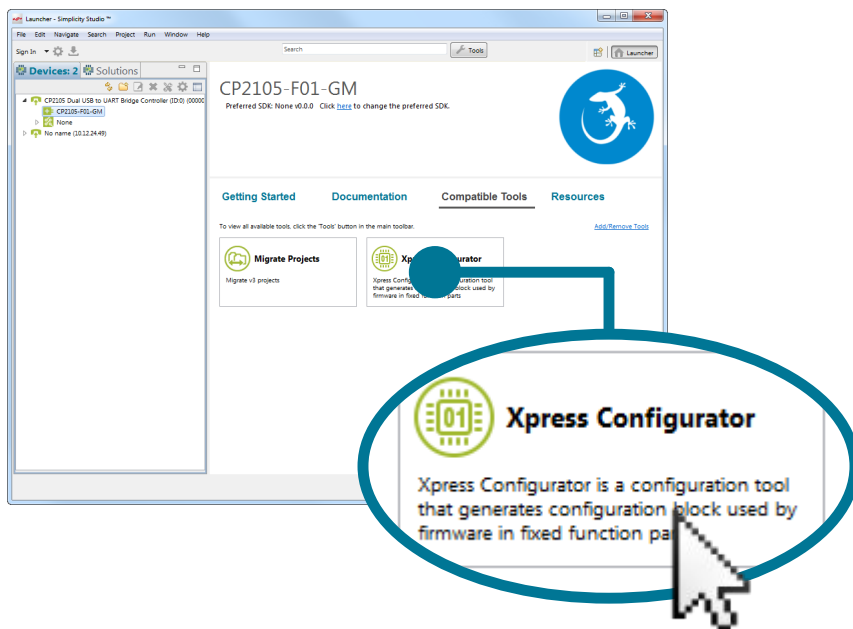
Use the buttons to control volume, play and pause the music, and skip ahead or skip back.



2. Resources

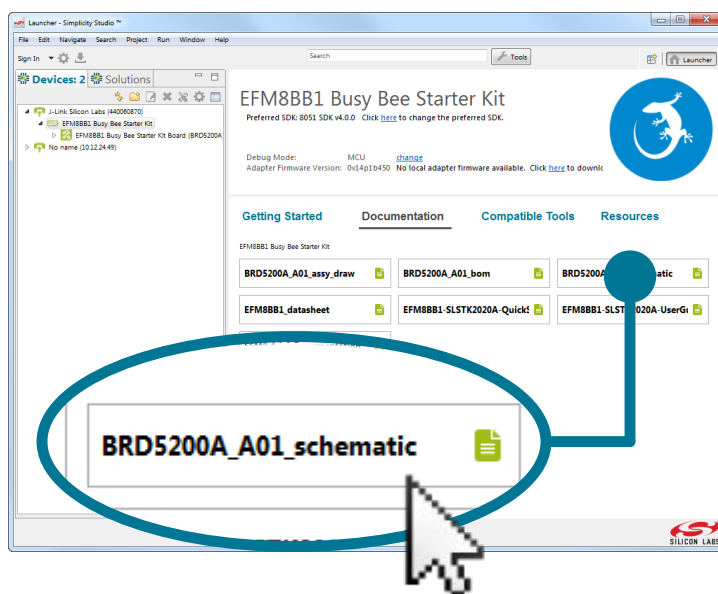
Xpress Configurator

The CP2615 device can be configured by using the [Xpress Configurator] tool within Simplicity Studio.



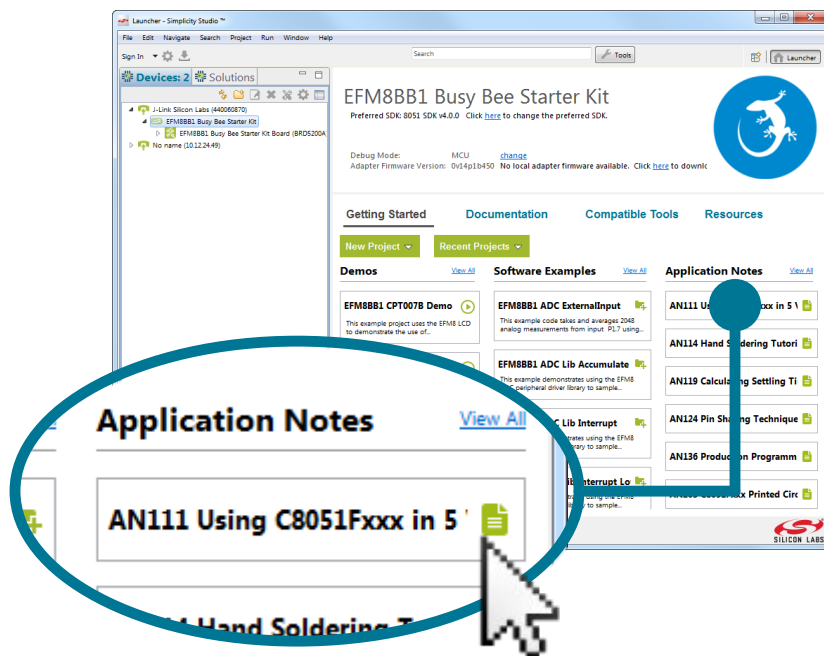
Kit Documentation and User's Guide

Kit documentation like the schematic and detailed board user guide can be found using the [Documentation] area of the Simplicity Studio launcher.



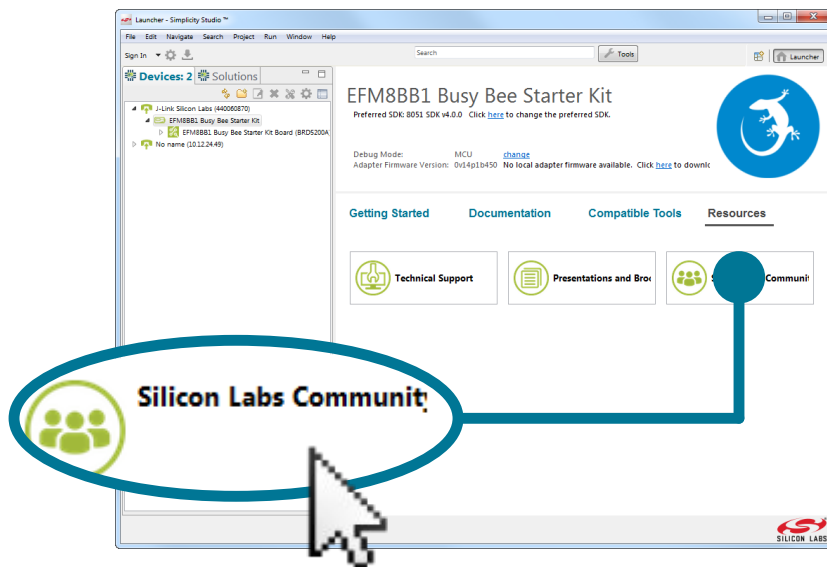
Application Notes

Application Notes on peripherals and other various topics can be accessed using the [Getting Started]>[Software Examples] area of the launcher.



Community and Support

Have a question? Visit the community by clicking the [Resources]>[Silicon Labs Community] area of the launcher.



Silicon Labs

Simplicity Studio™4



Simplicity Studio

One-click access to MCU and wireless tools, documentation, software, source code libraries & more. Available for Windows, Mac and Linux!



IoT Portfolio
www.silabs.com/IoT



SW/HW
www.silabs.com/simplicity



Quality
www.silabs.com/quality



Support and Community
community.silabs.com

Disclaimer

Silicon Labs intends to provide customers with the latest, accurate, and in-depth documentation of all peripherals and modules available for system and software implementers using or intending to use the Silicon Labs products. Characterization data, available modules and peripherals, memory sizes and memory addresses refer to each specific device, and "Typical" parameters provided can and do vary in different applications. Application examples described herein are for illustrative purposes only. Silicon Labs reserves the right to make changes without further notice and limitation to product information, specifications, and descriptions herein, and does not give warranties as to the accuracy or completeness of the included information. Silicon Labs shall have no liability for the consequences of use of the information supplied herein. This document does not imply or express copyright licenses granted hereunder to design or fabricate any integrated circuits. The products are not designed or authorized to be used within any Life Support System without the specific written consent of Silicon Labs. A "Life Support System" is any product or system intended to support or sustain life and/or health, which, if it fails, can be reasonably expected to result in significant personal injury or death. Silicon Labs products are not designed or authorized for military applications. Silicon Labs products shall under no circumstances be used in weapons of mass destruction including (but not limited to) nuclear, biological or chemical weapons, or missiles capable of delivering such weapons.

Trademark Information

Silicon Laboratories Inc.®, Silicon Laboratories®, Silicon Labs®, SiLabs® and the Silicon Labs logo®, Bluegiga®, Bluegiga Logo®, Clockbuilder®, CMEMS®, DSPLL®, EFM®, EFM32®, EFR®, Ember®, Energy Micro, Energy Micro logo and combinations thereof, "the world's most energy friendly microcontrollers", Ember®, EZLink®, EZRadio®, EZRadioPRO®, Gecko®, ISOModem®, Precision32®, ProSLIC®, Simplicity Studio®, SiPHY®, Telegesis, the Telegesis Logo®, USBXpress® and others are trademarks or registered trademarks of Silicon Labs. ARM, CORTEX, Cortex-M3 and THUMB are trademarks or registered trademarks of ARM Holdings. Keil is a registered trademark of ARM Limited. All other products or brand names mentioned herein are trademarks of their respective holders.



SILICON LABS

Silicon Laboratories Inc.
400 West Cesar Chavez
Austin, TX 78701
USA

<http://www.silabs.com>