



# BACCHHP4Kalimba Product Brief

v1.01.000

## 1 BACCHHP4Kalimba Overview

The patented BACCH 3D Sound technology provides highly realistic, spectrally uncolored 3D audio from any pair of headphones.

BACCHHP4Kalimba is a complete Software Development Kit for the CSR 8675 Bluetooth SoC that incorporates BACCH 3D Sound technology.

BACCH 3D Sound technology is provided as a library. A complete Demo App with source code is provided. A complete Sink App with source code is also provided to demonstrate how to incorporate BACCHHP4Kalimba into your product.

The BACCHHP4Kalimba SDK and License are provided separately. The Library will play silence for 5 seconds, perform complete BACCH-HP audio processing for the balance of ten minutes, and then output silence until it is reset. Unrestricted runtime libraries are available for both evaluation and licensing and are licensed by Bluetooth address space.

The BACCHHP4Kalimba library incorporates a filter that is designer for a generic pair of headphones. Libraries with different filters, including custom and bespoke filters equalized and customized for specific headphone products, are available upon request.

This product is intended for use with support of your embedded design, please contact your BACCH Labs representative if you do not have a support contact.



### 2 Library

1. Quick Setup script: Copies necessary files to the specified Qualcomm ADK folder
2. Detailed integration information: the BACCHHP4Kalimba.h header file includes detailed information on integrating the BACCHHP4Kalimba library with an existing ADK Sink application

### 3 Demo App

The BACCHHP4Kalimba demo app provides a simple but effective demonstration of the BACCHHP4Kalimba library.

- Real time enable/bypass using the SW1 button, current state indicated by the green LED
- Workspace folder and source files included
- Requirements:
  - Installed Qualcomm ADK
  - BACCHHP4Kalimba library installed in the Qualcomm ADK's folder structure using the supplied Quick Setup script
  - CSR8675 H13179v2 development board
  - Input device connected to LINE-IN
  - Output headphones connected to the output of the H13223v1 daughter-board
  - BACCHHP4Kalimba\_Demo\_App from provided media

### 4 Sink App

The Qualcomm ADK includes a sink app example/baseline implementation. The included sink app demonstrates a completed integration of the BACCHHP4Kalimba library with the sink soundbar workspace.