

CSR8670 WLCSP Development Kit

Product Overview

The BlueCore® CSR8670 WLCSP development kit contains everything required for rapid evaluation and development of Bluetooth stereo and mono audio applications. It is based on CSR's latest generation single chip Bluetooth audio solution: BlueCore® CSR8670.

The BlueCore® CSR8670™ WLCSP consumer audio platform for wired and wireless applications integrates an ultra-low-power DSP and application processor with embedded flash memory, a high-performance stereo codec, a power management subsystem, LED and LCD drivers and capacitive touch sensor inputs in a SOC IC. The dual-core architecture with flash memory enables manufacturers to easily differentiate their products with new features without extending development cycles.

Along with CSR's Audio Development Kit (ADK) software suite and the CSR headset configuration tools, the development kit provides a very flexible and powerful development platform for designing advanced, high-quality, Bluetooth stereo and mono products based on the BlueCore® CSR8670 single chip Bluetooth audio solution.

Product Key Features

- Bluetooth® v3.0 specification fully qualified software
- Bluetooth® v4.0 specification compliant hardware
- Radio includes integrated balun and RF performance of 10dBm transmit power and -90dBm receive sensitivity
- 80MHz RISC MCU and 80MIPS Kalimba DSP
- 16Mb internal flash memory (64-bit wide); optional support for 64Mb of external serial flash memory or serial RAM
- High performance stereo CODEC
- Support for up to 6 digital microphone inputs
- Support for CSR's latest CVC technology for narrow-band and wideband voice connections including wind noise reduction
- Audio interfaces: I²S, PCM and SPDIF
- Integrated dual switch-mode regulators, linear regulators and battery charger
- 3 hardware LED controllers (for RGB) and ability to drive LCD segment display directly
- Support for up to 6 capacitive touch sensors



Applications

Home Entertainment Ecosystem

- TVs
- Smart remote controllers
- Soundbars
- Stereo speakers and headphones

Tablets / PCs / Mobile Connectivity

- Wearable audio (on-the-go)
- Wired or wireless stereo headphones for music/gaming/multimedia content
- Wired or wireless speakers
- Speakerphones and in-car kits
- Mono headsets for voice

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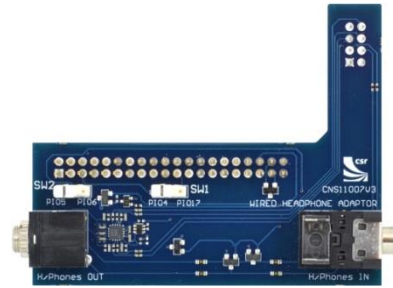
CSR8670 Software Development Board



This board features the latest CSR BlueCore® CSR8670 WLCSP Bluetooth audio solution. It interfaces with stereo headphones and microphones and has flexible LED and push-button assignments. Battery current measurements can be performed, and a PIO header allows for connection of further application hardware, such as displays.

Board Ref: CNS11012

Wired Audio Plug-in Board



This board allows the developer to design a product which includes the ability to operate in a wired mode (non-Bluetooth) with the BlueCore® CSR8670 WLCSP powered off.

Board Ref: CNS11007

SPI-USB Converter and Interface Board



The kit includes an SPI-USB converter to allow software development via USB, a level shifting interface board is also included for communications with the development board.

Board Ref: DEV-PC-1309

Cables, Headphones and Quick Start Guide



Included in the kit are a pair of high-quality stereo headphones with microphone as well as a quick-start guide and all necessary cables.

Ordering Information

Part number: **CSR8670C-ICXT-R**

Development Kit Part Number: **DK-8670-10071-2A**

Development Board Only: **DB-8670-10070-2A**

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