

# QF-Blue-Mojo

## Bluetooth based wireless stereo headset reference design

### Description

The Blue Mojo board is a reference design for a high quality stereo headset using Quickfilter's QF1D512 digital filter IC's and CSR's BlueCore5-Multimedia IC (BC5-MM). The QF1D512's provide the user with the ability to implement high quality audio equalization on the left and right channels independently.

Blue Mojo allows users to get to market quickly with a solution providing high quality audio. It enables the user to stream music using SBC or MP3 audio formats while offering full call handling features and CVC echo cancellation and noise reduction.

### Features

- Quickfilter QF1D512 for independent digital filtering of left and right channels
  - Virtually infinite filtering type options
  - Fully reprogrammable filters
  - "change on the fly" capability
- Audio front end
  - Mono electret microphone input
  - 3.5mm stereo output
- Man Machine Interface (MMI)
  - Power-on, pairing, Volume up and Down, A/B comparison, and reset buttons
  - Three LEDs
- RF front end. Output can be mechanically switched between a printed antenna and an SMA connector
- internal voltage regulators and charger circuit provided within BlueCore5-Multimedia External
- current measurement point
- Li-Polymer battery
- Complete application software
  - A2DP, AVRCP & HF/HS profiles supported
  - Other profiles supported by request

### Kit Contents (\$249)

- 1) Blue Mojo board.
- 2) Blue Mojo interface board for connection to CSR's DEV-PC-1309C computer interface board.
- 3) Lithium-polymer battery.
- 4) USB cable for charging the included lithium-polymer battery.
- 5) Headphones.

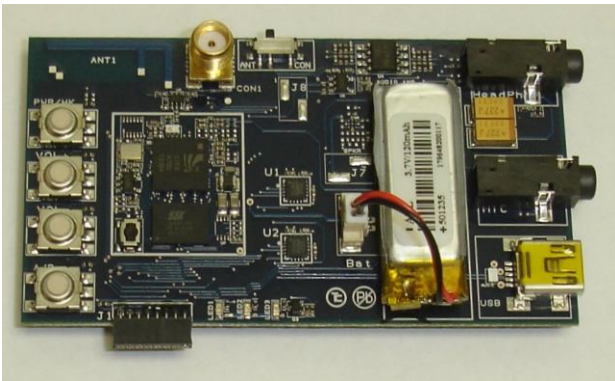
### Design Environment

- Use QF1D512-DK (\$199) development kit to design filters
- Import filters to Bluetooth environment using BlueTunes2 development kit from CSR

### Documentation

- Schematics
- BOM
- Layout files
- Bluetooth Application Software
- Startup Guide
- User Guide

(Available at [www.quickfiltertech.com](http://www.quickfiltertech.com))



### Blue-Mojo Reference Design

**Contact and Ordering Information:** Quickfilter Technologies, Inc.  
1024 South Greenville Avenue, Suite 100  
Allen, TX 75002-3324

**Web:** [www.quickfiltertech.com](http://www.quickfiltertech.com)  
**Email:** [sales@quickfilter.net](mailto:sales@quickfilter.net)  
**Phone:** 214-547-0460