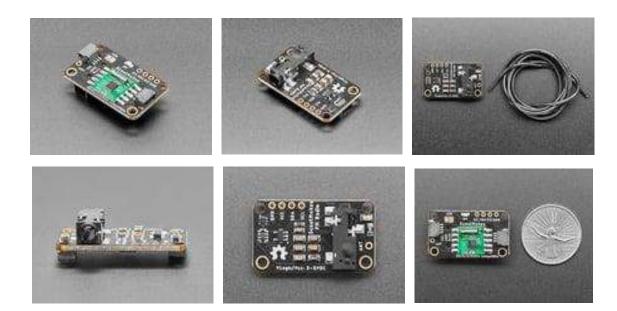


# ScoutMakes FM Radio Board - STEMMA QT / Qwiic

Product ID: 5651



## Description

The ScoutMakes FM Radio Board is a great way to learn about the world of electronics. It is an I2C breakout board for the RDA5807 FM radio chip by RDA Microelectronics. The board supports Arduino and CircuitPython. Libraries and example code are provided to help you get started. The board also has connectors which support SparkFun's Qwiic and Adafruit's STEMMA QT I2C connector standards, JST-SH 4-pin.

The RDA5807 also has RDS (Radio Data System) capability where station information (station name, song name) can be received. The example code shows RDS information as well.

The board is open source with design files provided. Designed and manufactured in the USA!! The design has been open source certified by the Open Source Hardware Association (OSHWA) – US002137. Arduino & CircuitPython code can be <u>found here</u>.

This is a perfect introduction for newbies to get into electronics! What is more satisfying than getting an FM radio to work? No internet connection needed! The board also is a great entry into the magical world of wireless communications.

This is the first FM radio breakout that supports CircuitPython and is STEMMA QT/Qwiic compatible. It is also open source!

#### FM Radio Kit Features & Specifications

- Open hardware & open source software
- RDA5807M single-chip FM receiver
- High-quality stereo audio output
- Built-in volume and bass control
- Received signal strength indicator (RSSI) information
- Station scanning and presets are supported in code
- Radio Data Service (RDS) information available for display
- Received signal strength (RSSI) indication
- Adafruit CircuitPython library
- Adafruit STEMMA QT and SparkFun Qwiic connectors for easy, solderless attachment of other I<sup>2</sup>C devices
- 3.5 mm audio jack
- Power LED indicator

#### Example Code user menu options:

- increase volume
- decrease volume
- next preset
- previous preset
- scan up
- scan down
- direct frequency input
- station status
- mono/stereo mode
- bass boost
- mute/unmute
- get rssi data
- soft reset

Please note: Headphones, antenna wire, and STEMMA QT/Qwiic cables are NOT included with the board. A short 770 mm/30.31-inch wire will make for a good antenna (typically 1/4 of the wavelength of the tuned frequency will make for a good antenna).

YouTube link: <a href="https://www.youtube.com/watch?t=346&v=jYTGwns-6bQ&embeds">https://www.youtube.com/watch?t=346&v=jYTGwns-6bQ&embeds</a> euri=https%3A%2F%2Fwww.adafruit.com%2F&feature=emb imp woyt

### **Technical Details**

Documentation:

- Design Files
- Source Code

RDA5807 Datasheet