RFID Qwiic Reader

SEN-15191
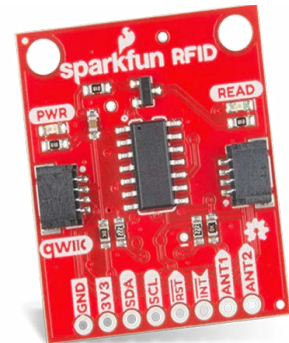
Product Overview

11-22-2021

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

The SEN-15191Radio-Frequency Identification (RFID) Qwiic Reader is I^{2}C based RFID breakout board for the ID-3LA, ID-12LA, and ID-20LA readers. By utilizing the ATtiny84A Microcontroller, the Qwiic RFID takes the 6byte ID tag of 125kHz RFID card, attaches a time stamp, and puts it onto a stack that hold up to 20 unique RFID scans at a time. It also comes with a "READ" LED, buzzer, and a jumper to disable the buzzer if required.
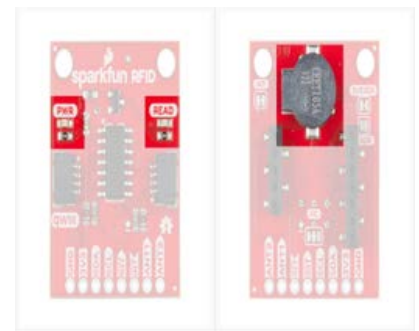
Features

- "READ" LED
- Buzzer
- Qwiic Connectors
- 0.1"-spaced pins
- ATiny84A Microcontroller
- Jumpers
  - INT
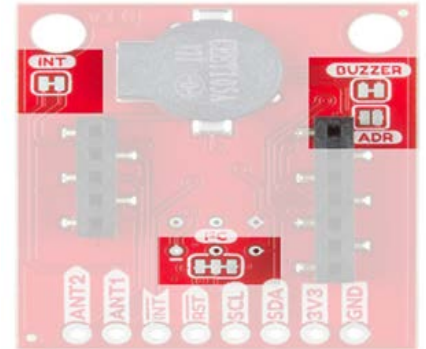 - I2C
  - RFID
  - ADDR

Hardware Overview

Power, "READ" LED & Buzzer

The Qwiic RFID ID-xxLA is a 3.3V system. You can power the product with a Qwiic cable plugged into a capable microcontroller. You can also provide power through the 3V3 pin on the header. When you provide power to the board you will see the onboard red power LED light up. There's another LED opposite the power LED labeled "READ". This blue stat LED and the onboard buzzer will light or beep respectively when an RFID tag is brought into range.
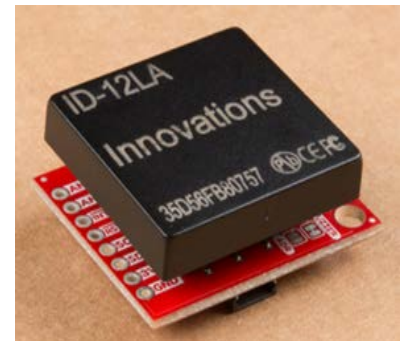
Jumpers

There are 4 jumpers on the header side of the product. At the top left side, there is a jumper labeled INT (Interrupt pin) that can be disconnected here by cutting the trace. In the bottom near the header is a jumper labeled I^{2}C that connects the I^{2}C pull-up resistors to the I^{2}C data lines. On the right side is a jumper labeled Buzzer that disconnects the buzzer when cut. This will disable the beeping sound when a RFID card is in range. This will allow the ADDR jumper to change the default I^{2}C jumper from 0x7D to 0x7C.

RFID Modules

There are three ID-xxLA options in the catalog that are ID-3LA, ID-12LA, and ID-20LA. The RFID kit contains the ID-12LA and RFID cards. It has a variance in power consumption which translates into different "READ" range capabilities. The ID-3LA is designed to be used with an external antenna which will get you 30cm of range. The ID-12LA and ID-20LA have a range of 12cm and 18cm respectively.

Associated Product

• [SparkFun Qwiic Connect System](#)

Mouser Part Number

[View Part](#)

To learn more, visit https://www.mouser.com/new/sparkfun/sparkfun-sen-15191-rfid-reader/