Qwiic Twist - RGB Rotary Encoder Breakout
DEV-10583
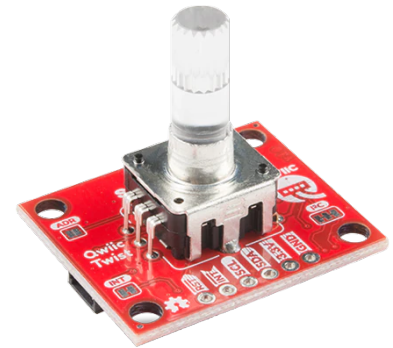
Product Overview
11-26-2021
For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

Qwiic Twist board combines the various interrupts, switches and pulse-signaling of LEDs, and presents those features over an I²C interface. The digital RGB rotary encoder breakout can also connect to the Qwiic Connect System. The Qwiic Twist is designed to get rid of the mass of wires that are needed to implement an RGB encoder in a breadboard. No soldering is required for connection. The rotary encoder knob is rotated in either direction to increase the overall count by 24, which can be transmitted over I²C. The red, green, and blue LEDs are all set via software commands and can be digitally mixed to render over 16 million colors.
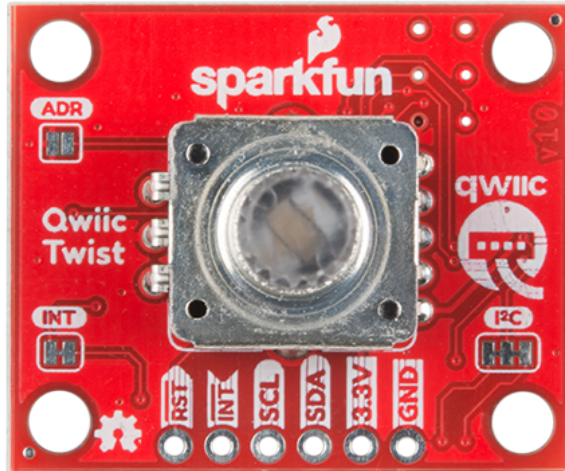
Qwiic Twist with an indent encoder which gives the user a great 'clicky' feel. Additionally, the encoder has a built in button so the user can select an GUI menu or element by pressing down on the it. This Qwiic Twist board uses a 6mm shaft and works great with Clear Plastic knob or any other 6mm knob.
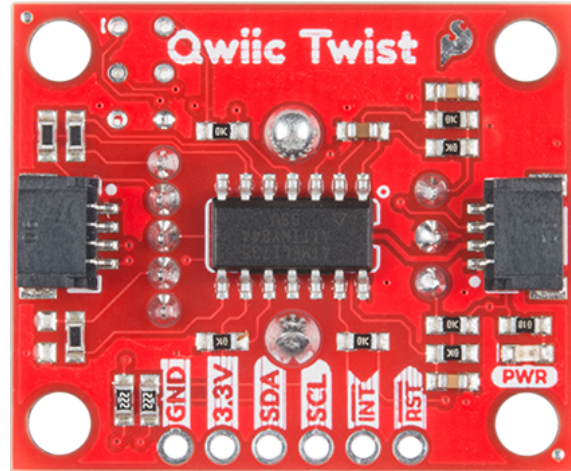
Features

- 25.4mm x 30.5mm board dimensions
- 0.984" (25mm) height
- 3.3V voltage rate
- Current:
  - Approximately 2.8mA LEDs off
  - Approximately 40.6mA with LEDs on 100%
- 24 ticks per 360° rotation
- Clockwise and counterclockwise direction is detected
- Software configurable I²C address - up to 111 devices on a single bus
- Built-in momentary button
- RGB LED controlled via PWM allowing for up to 16M colors
- Up to 400kHz I²C communication
- Jumpers for address selection, interrupt pull up disable, and I²C pull up disable
- I²C address:
  - 0x3F (Jumper Open, Default)
  - 0x3E (Jumper Closed)
- 2x Qwiic connectors

The information contained in this document should be used as a guideline only.
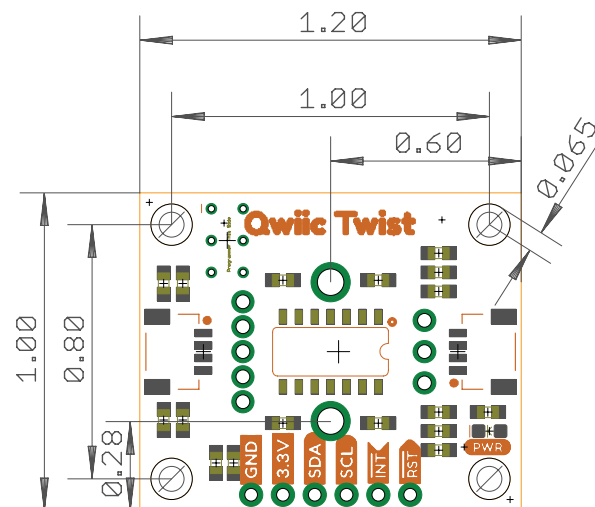
Board Overview

Top View

Bottom View

Board Dimensions

All dimensions in inches

Mouser Part Number

View Part

To learn more, visit https://www.mouser.com/new/sparkfun/sparkfun-qwiic-twist/