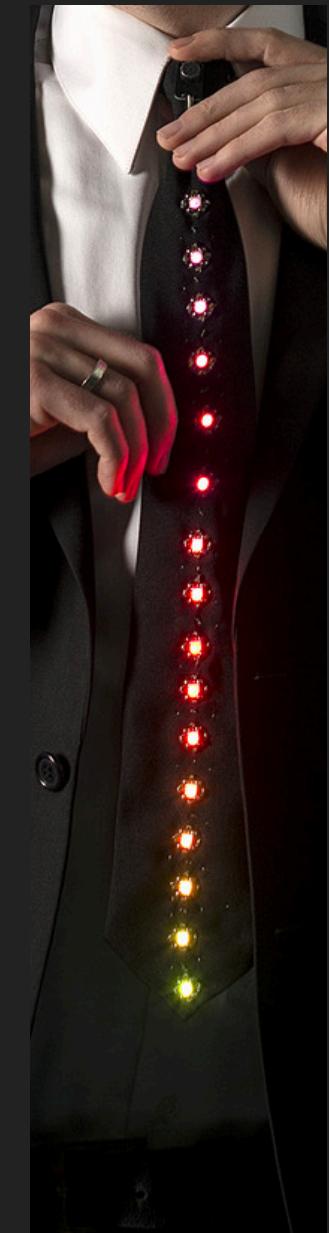


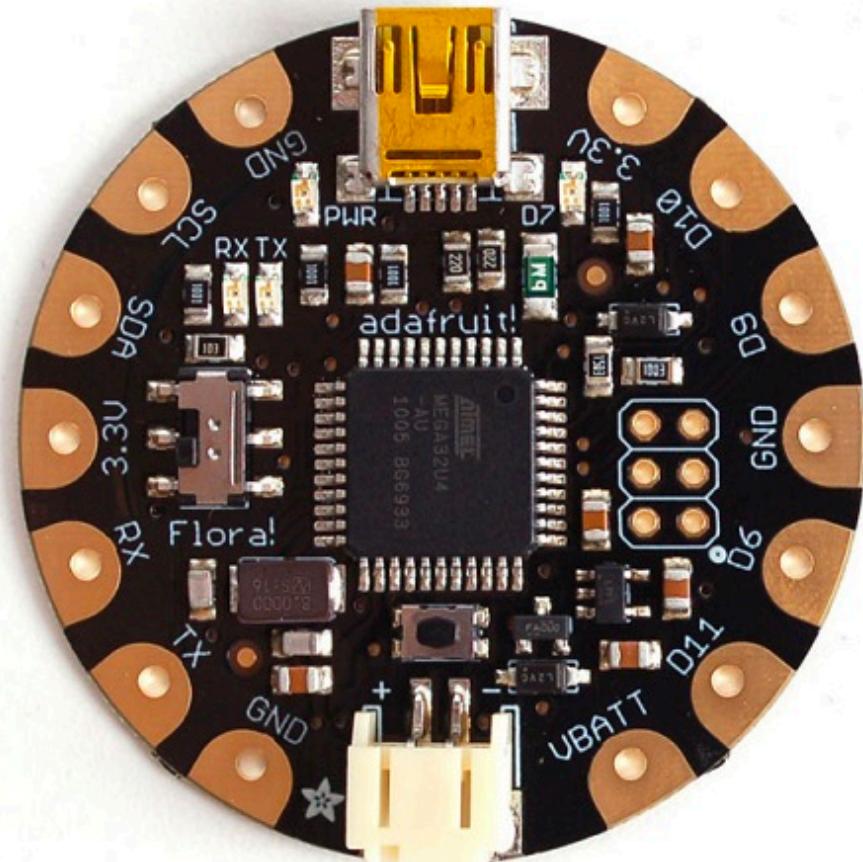
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# UGLY SWEATER BUILD NIGHT

## UGLY SWEATERS

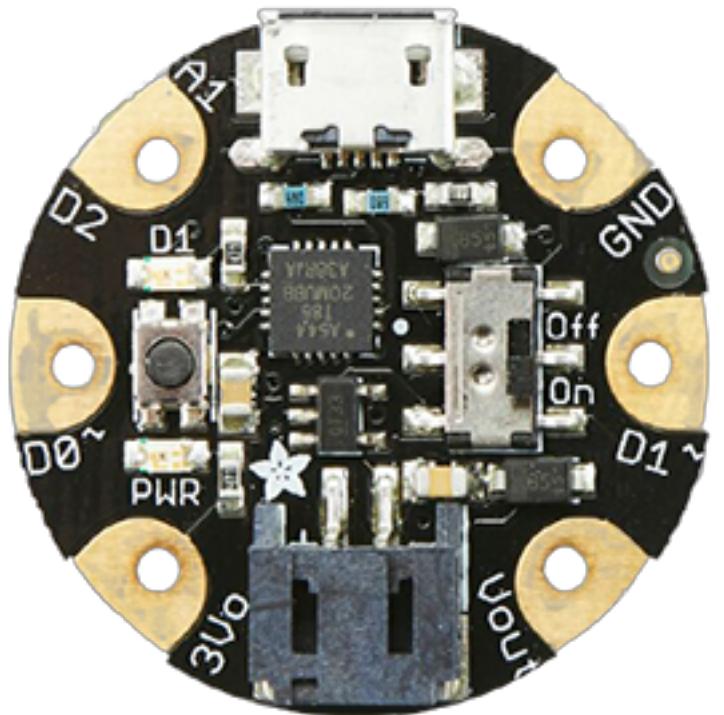


EACH KIT HAS

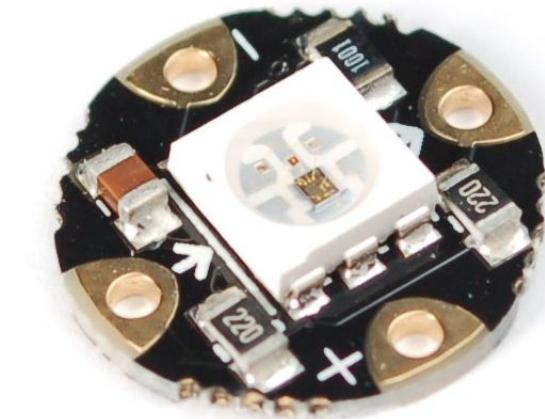


FLORA

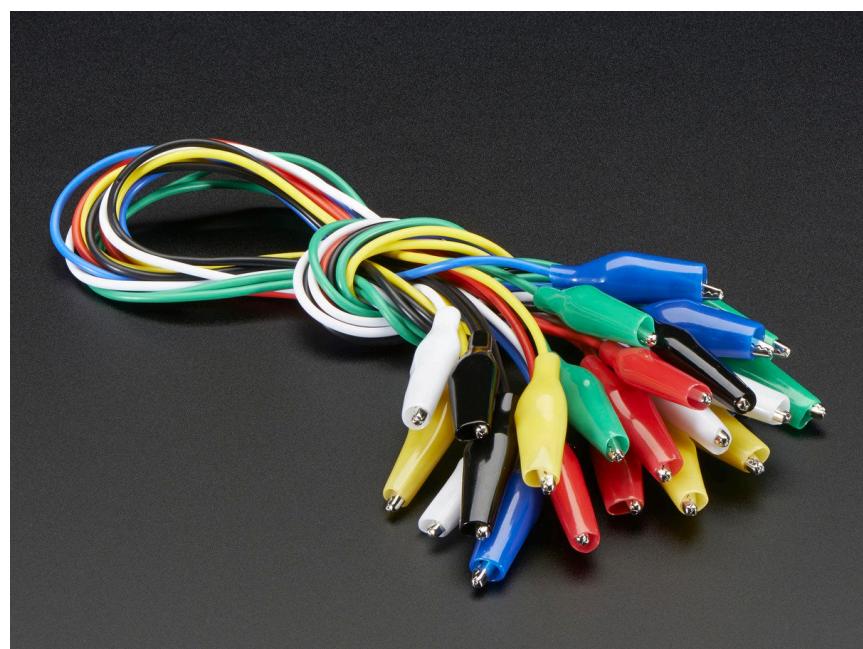
OR



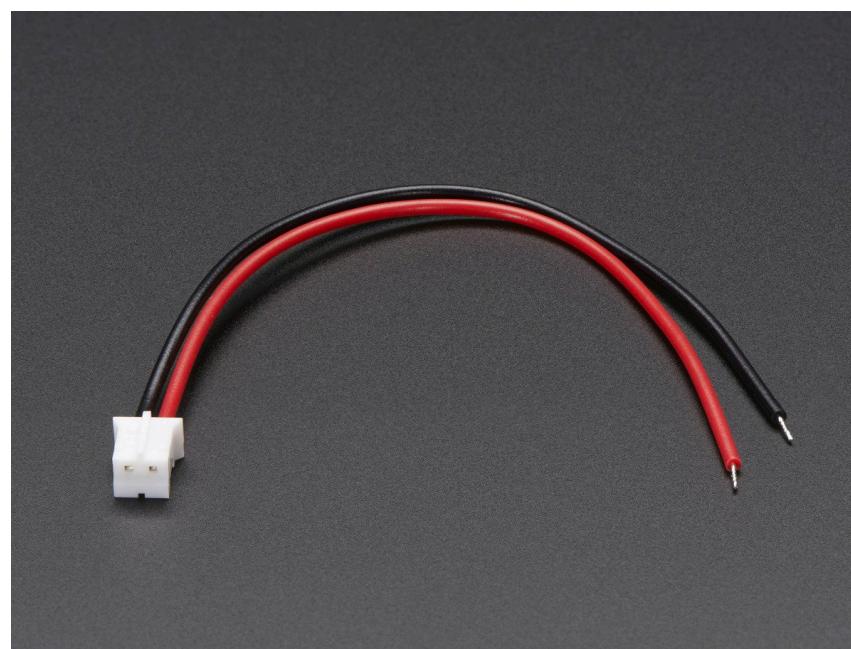
GEMMA



NEOPIXEL



ALLIGATOR CABLES X3

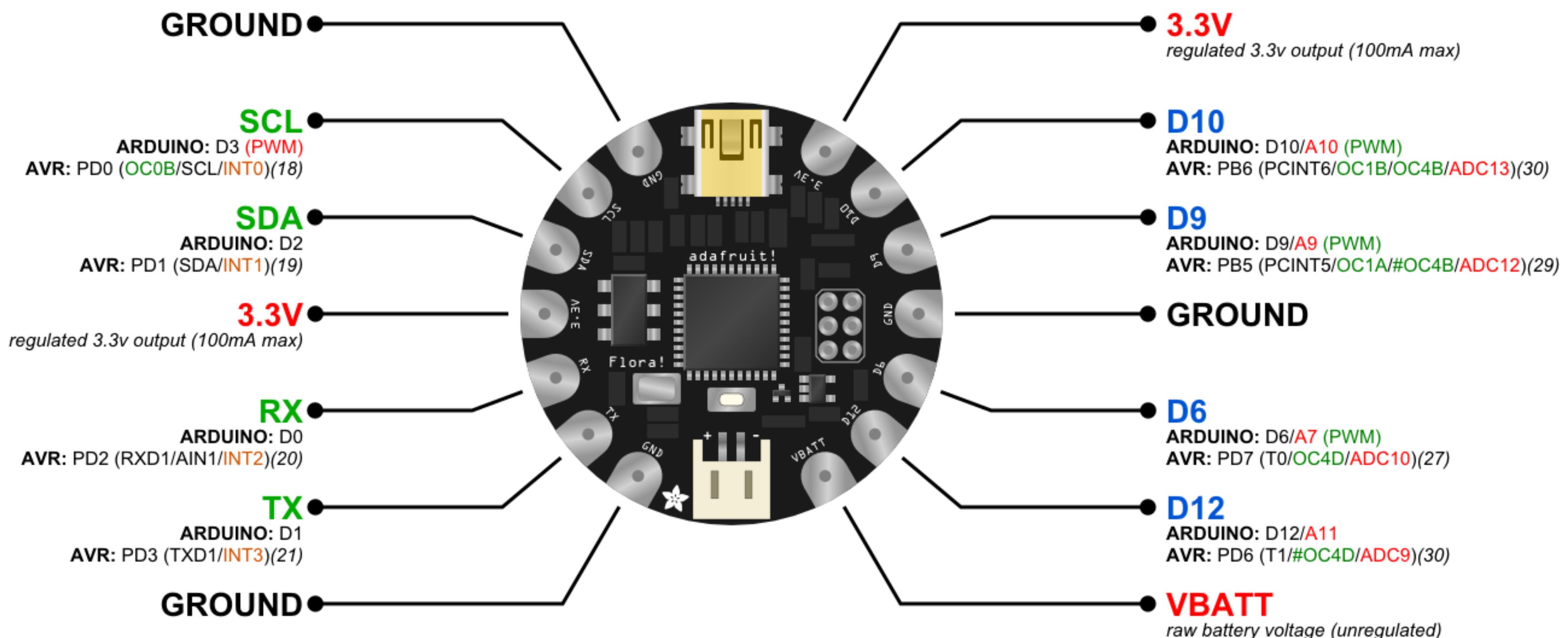


JST CONNECTOR



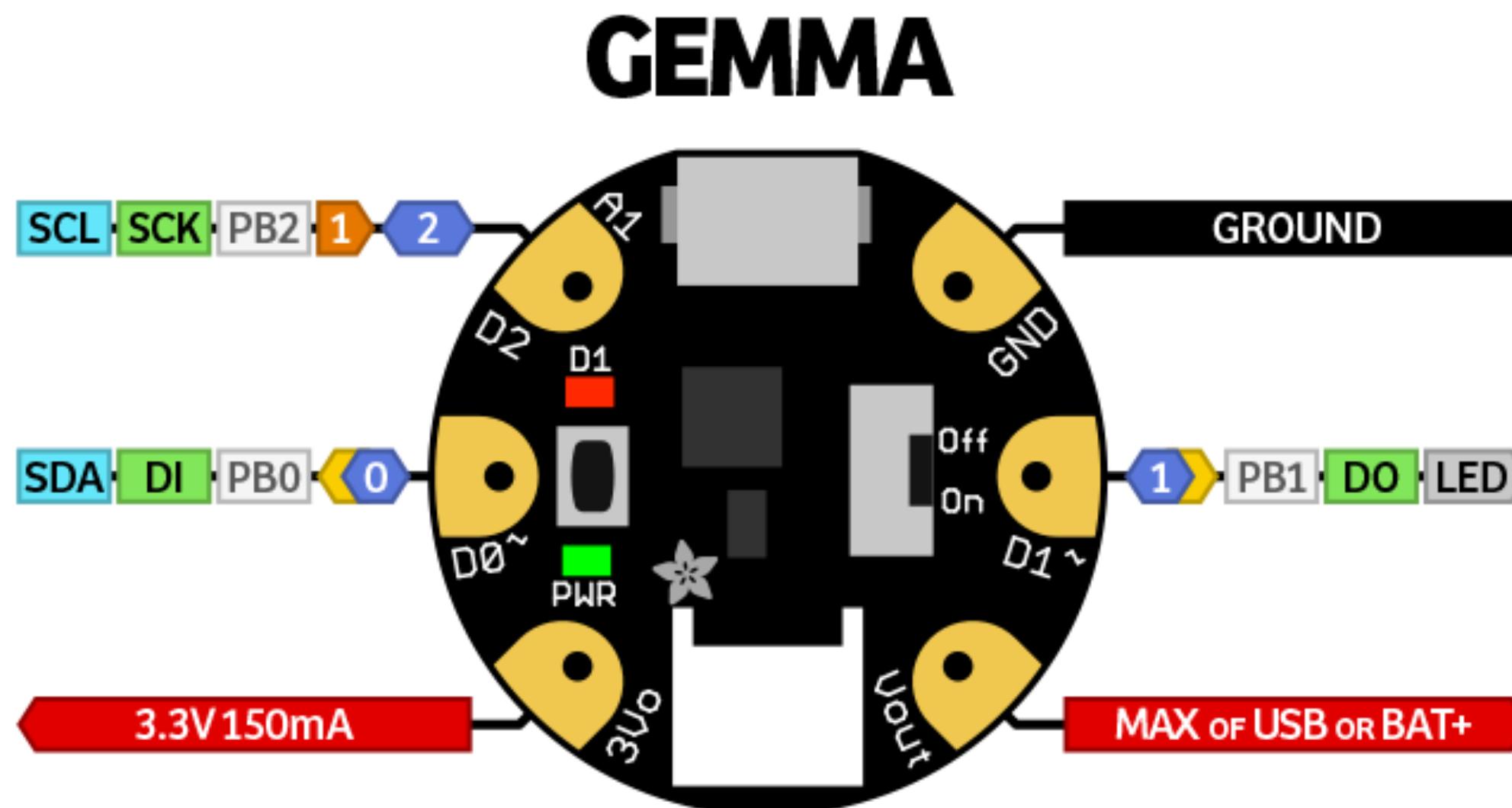
BATTERY X2

# FLORA



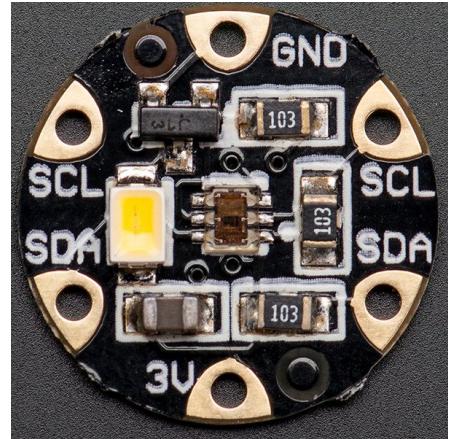
FLORA Wearable Electronics Platform

# GEMMA

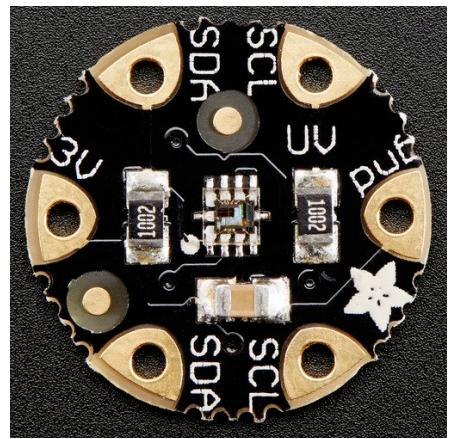


POWER		
GROUND		
DIGITAL READ/WRITE		
ANALOG: READ	WRITE	
SERIAL	I2C	SPI
PORT PIN		
MISC		

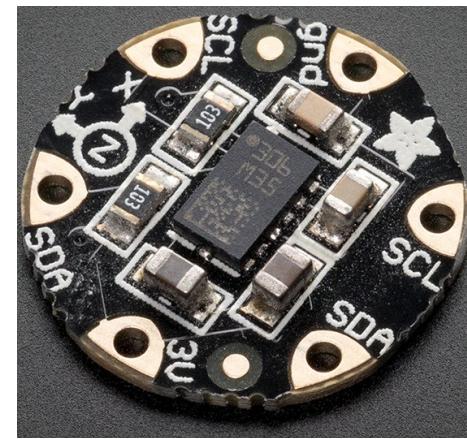
# LIGHT, SENSORS & ACTUATORS THAT ARE ON THE COMMON TABLE



COLOR  
SENSOR



UV LIGHT  
SENSOR



ACCELEROMETER  
& COMPASS



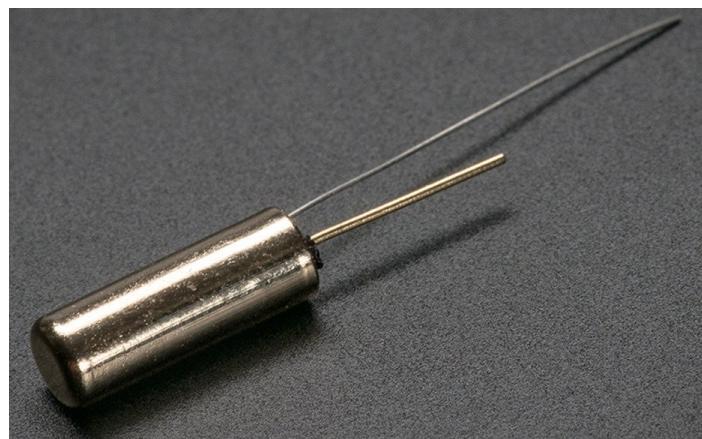
SPEAKER



SOFT POTENTIOMETER



BUTTON SWITCH



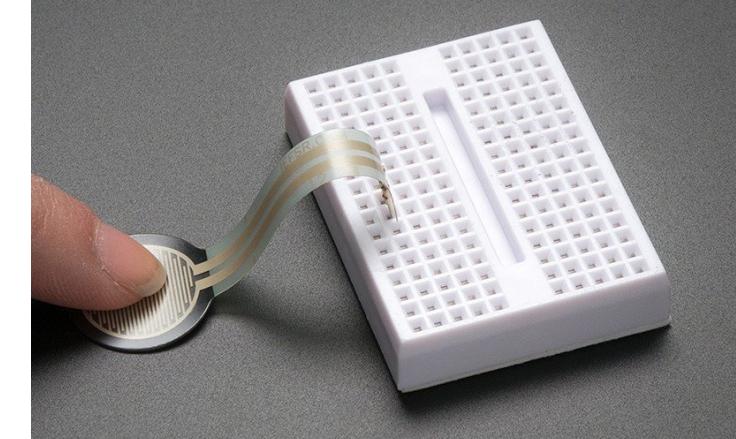
TILT BALL SWITCH



ON/OFF SWITCH



CONDUCTIVE FABRIC



FORCE SENSOR



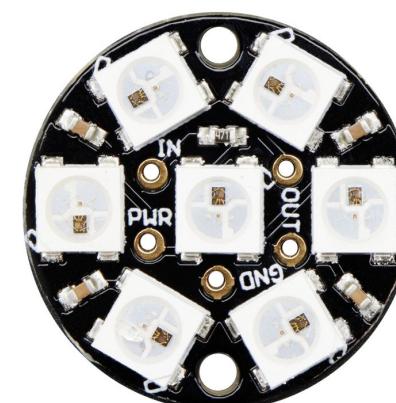
RED SEQUIN



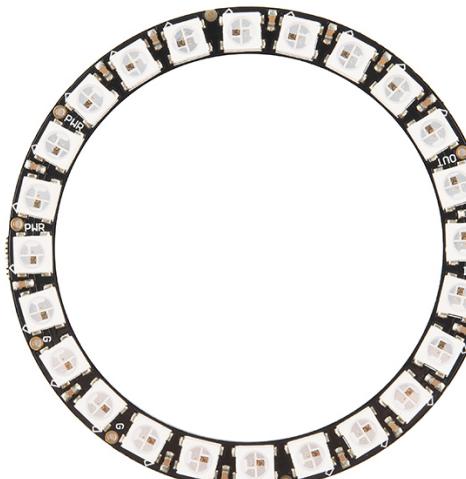
BLUE SEQUIN



NEOPIXEL



NEOPIXEL JEWEL



NEOPIXEL RING



NEOPIXEL STRIP

# MAKE IT WORK

## YOUR MISSION:

- ▶ Create your own technology wearable

## GETTING STARTED:

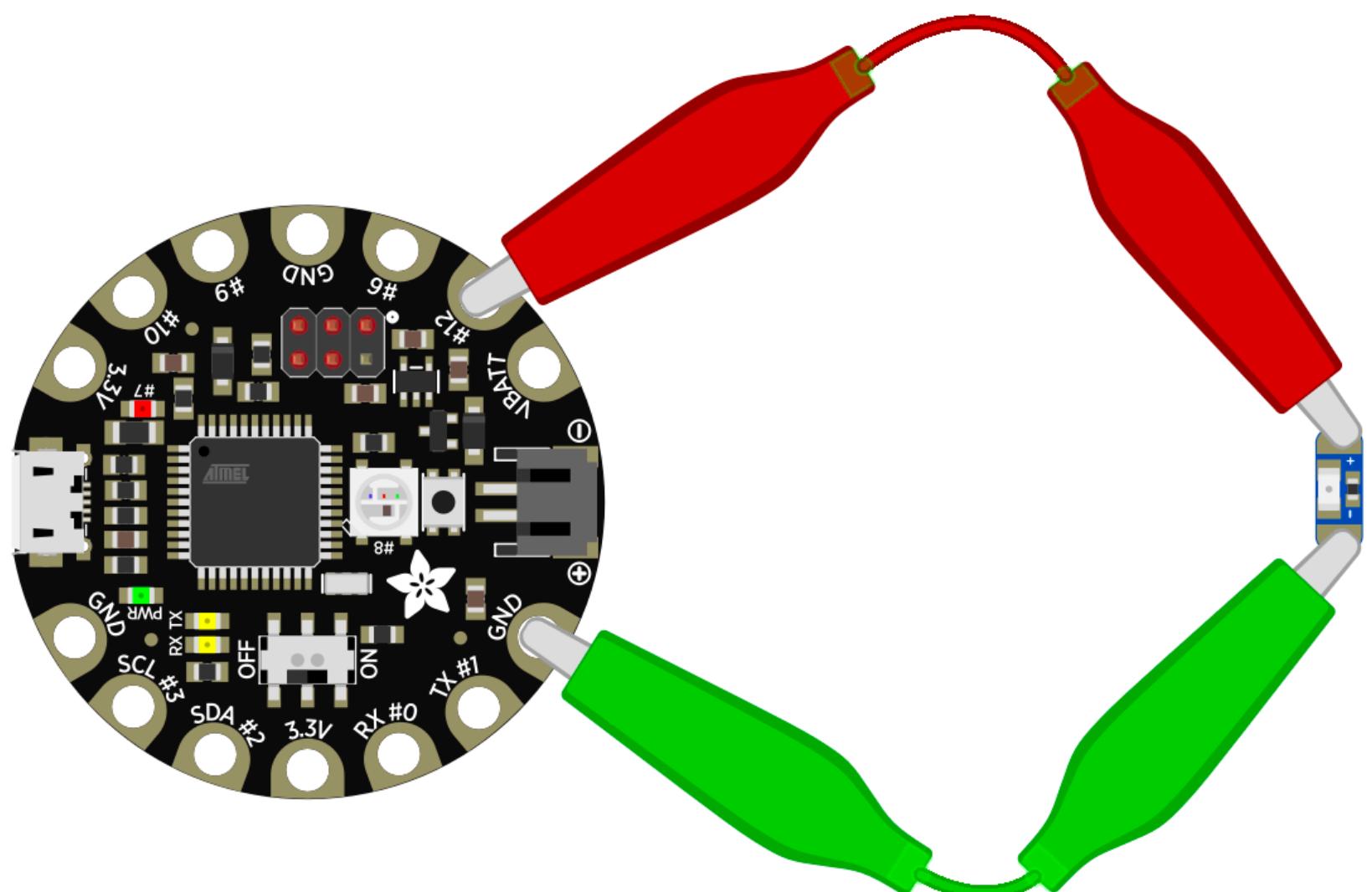
- ▶ Come up with an idea of what you want to build
- ▶ Connect the necessary lights, sensors, and actuators to your FLORA or Gemma using alligator cables
- ▶ There are code examples of how to use every light, sensor, and actuator on GitHub
- ▶ Copy from a code example into wearables.ino
- ▶ Upload the code to your FLORA or Gemma 
- ▶ Run your code 
- ▶ If you brought your own parts, once your project fully works with alligator cables, you can sew!



## NOTES:

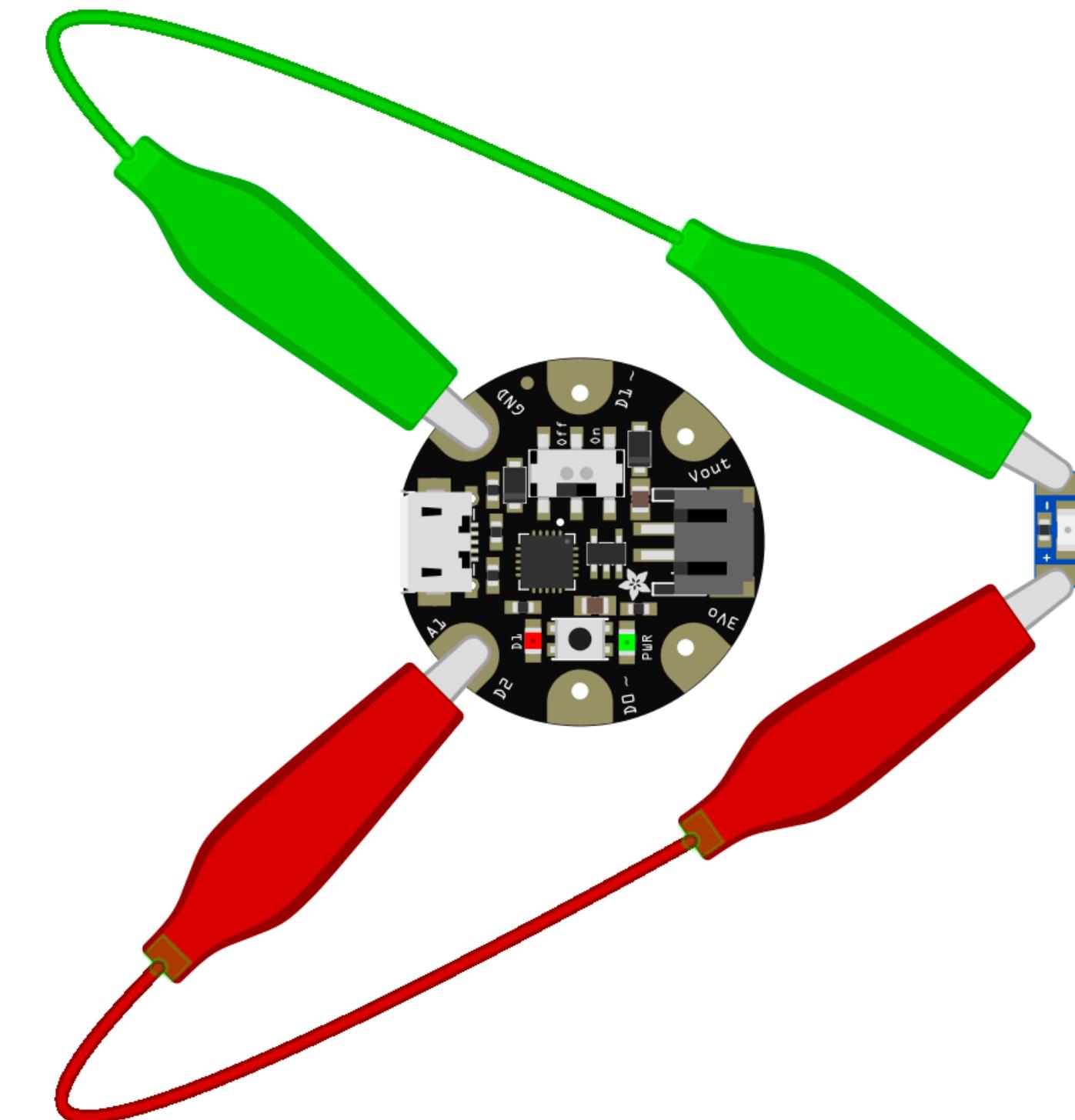
- ▶ Try, try again - failure is expected and helps you come up with new ideas
- ▶ You have a helper if you get really stuck
- ▶ Please take photos of your team and build process - we will have a wiki where everyone can share their projects

# SEQUIN BLINK



fritzing

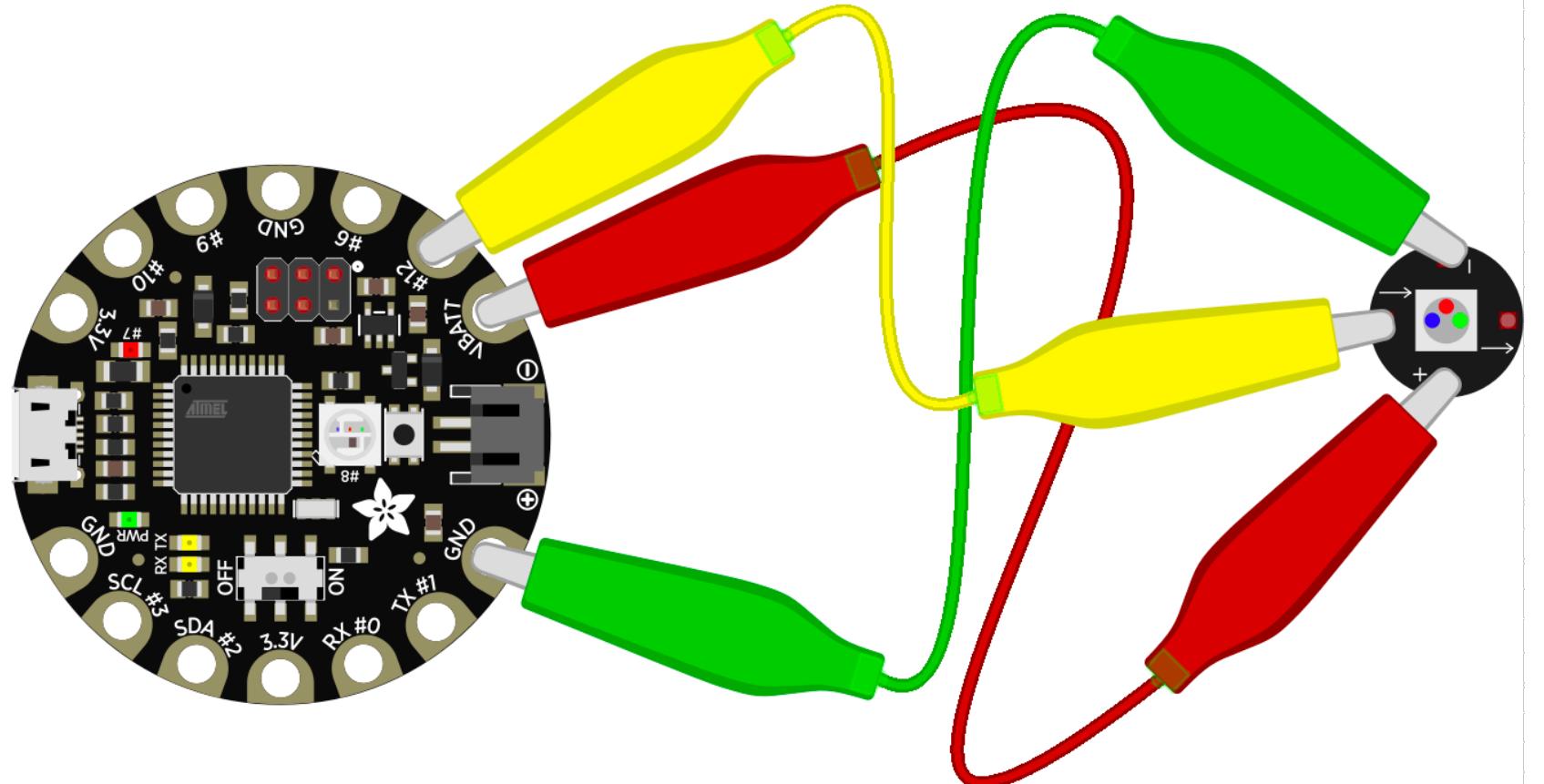
FLORA



GEMMA

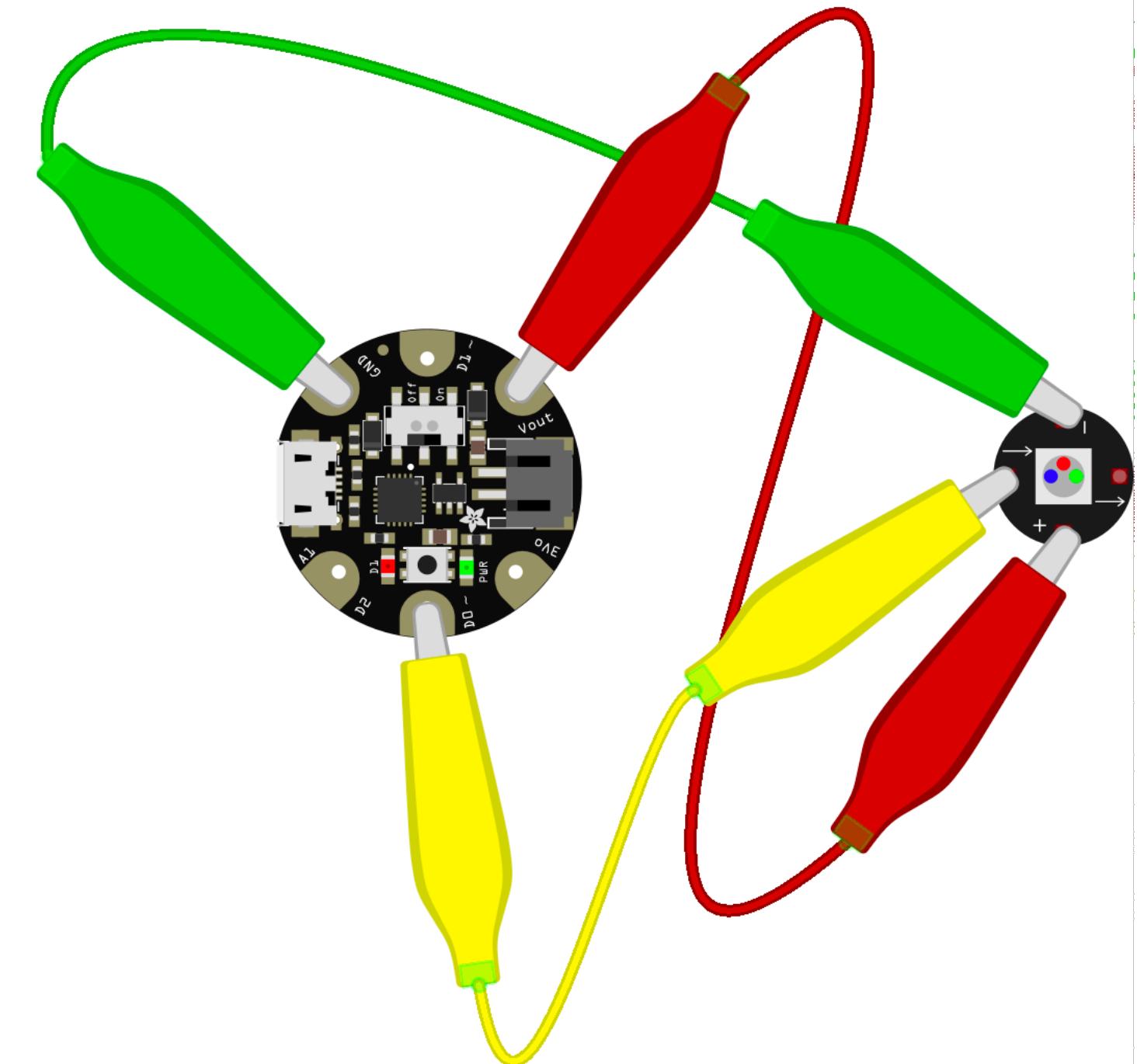
fritzing

# NEOPIXEL RAINBOW



# fritzing

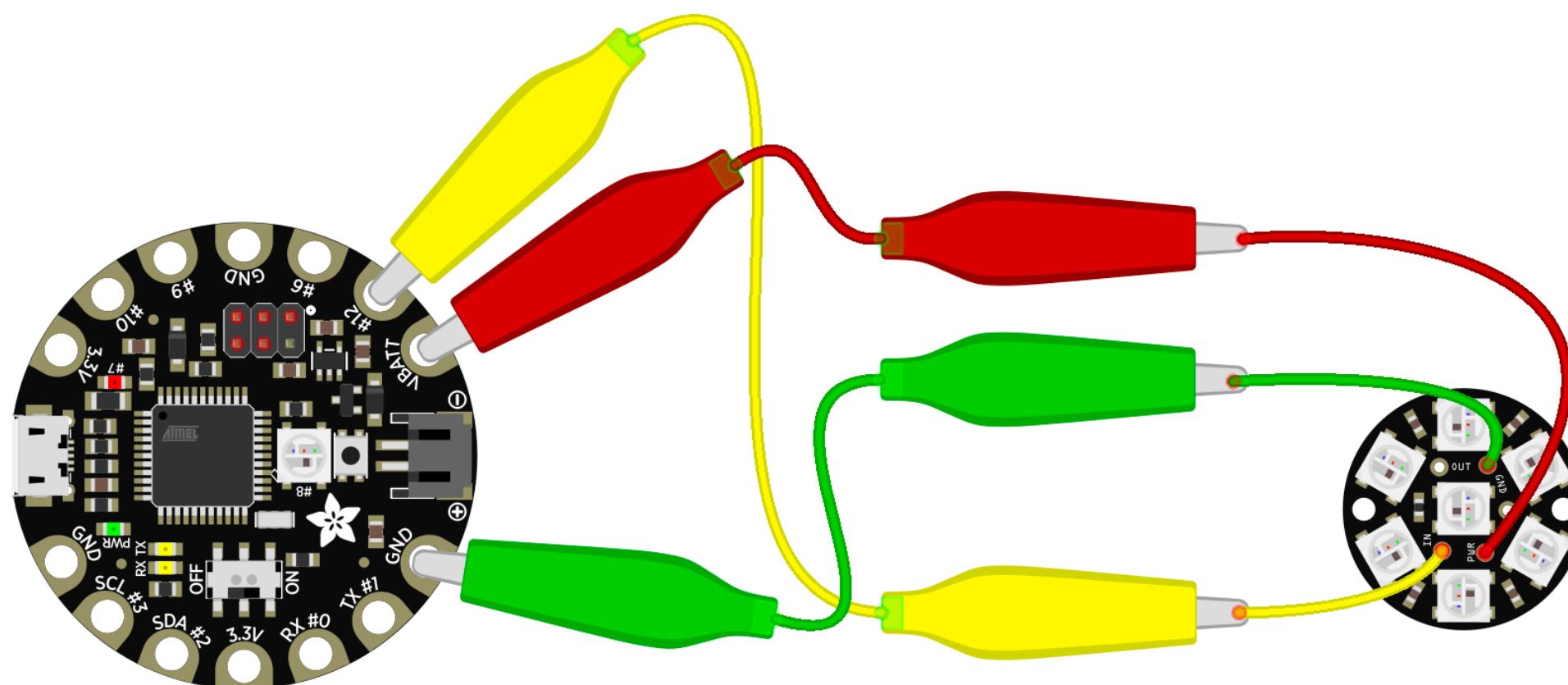
FLORA



fritzing

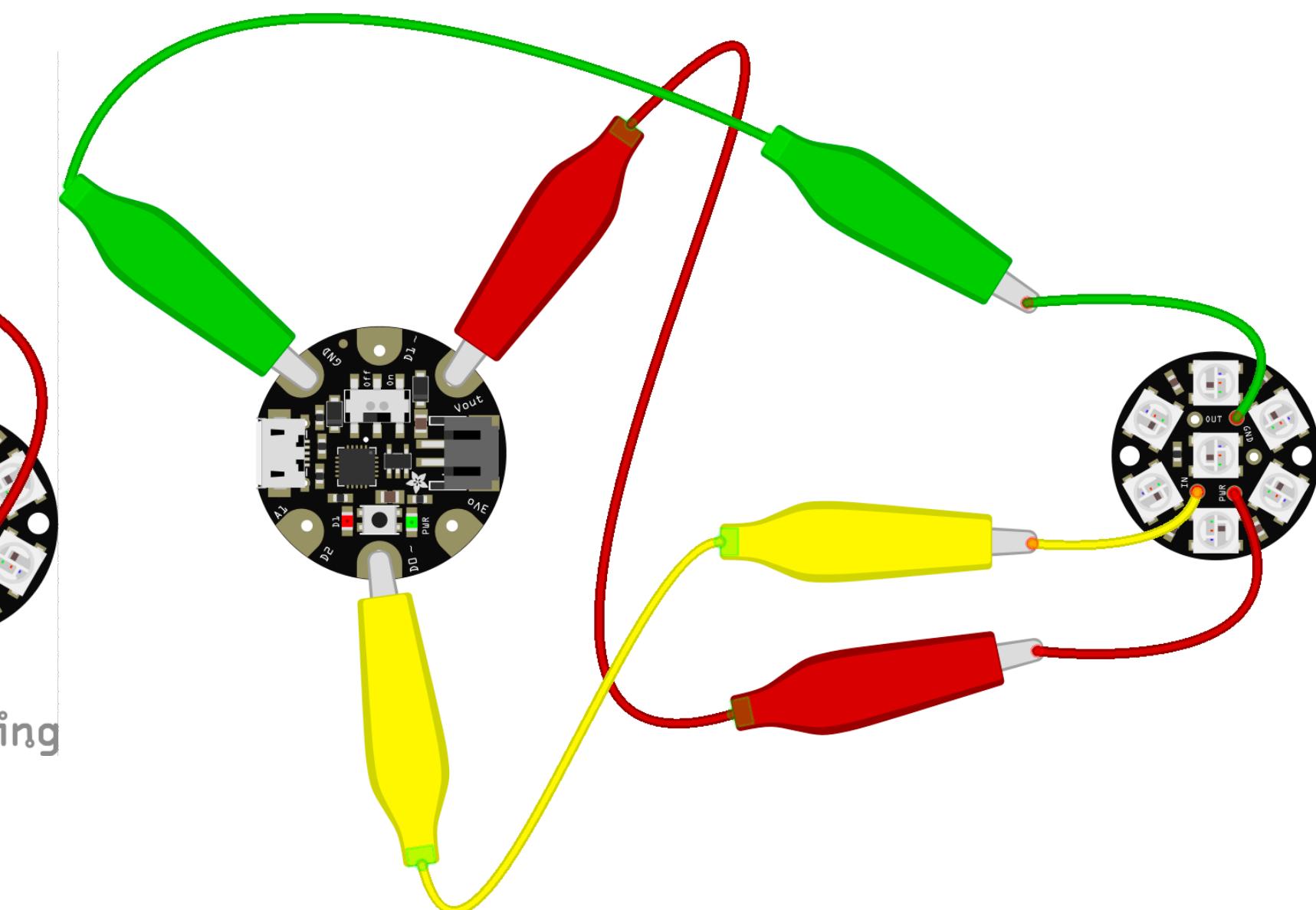
**GEMMA**

# NEOPIXEL JEWEL



fritzing

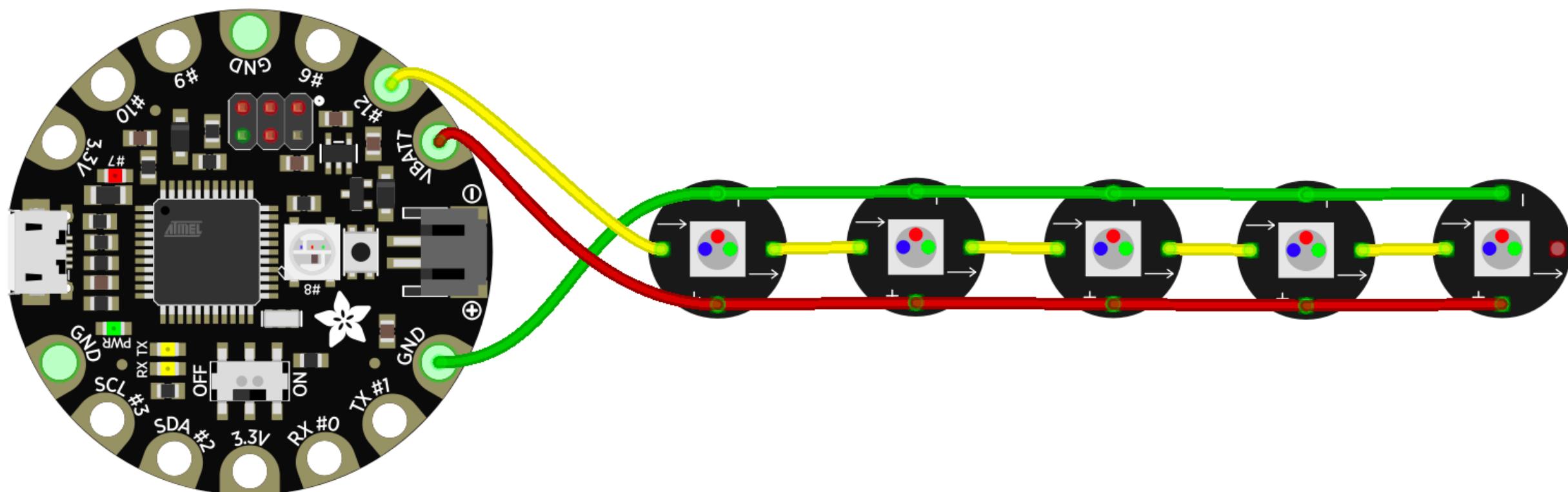
FLORA



fritzing

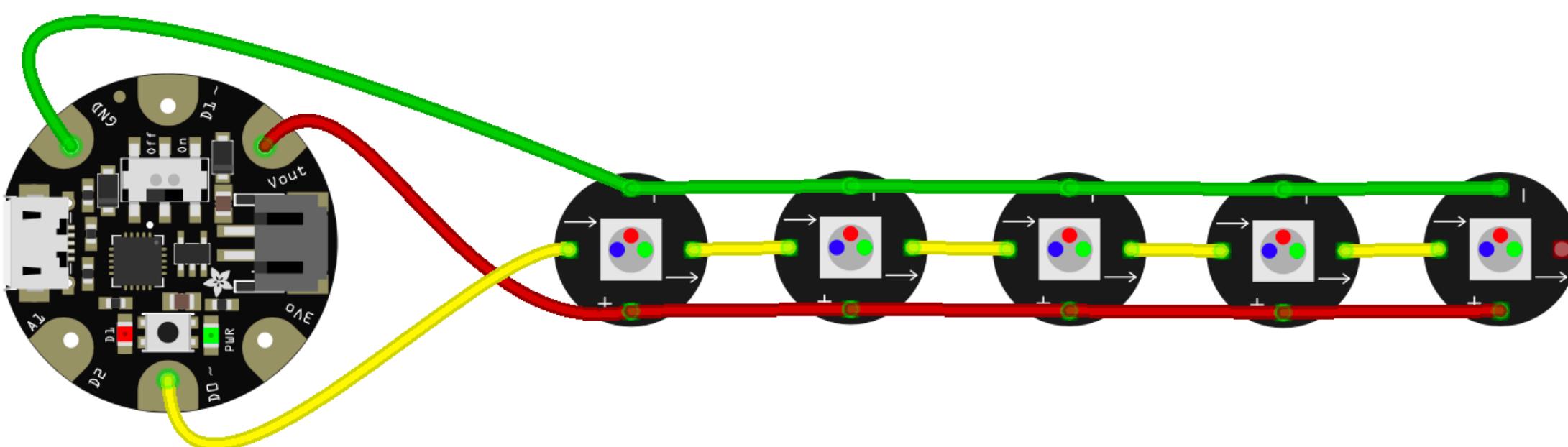
GEMMA

# NEOPIXEL CHAIN



FLORA

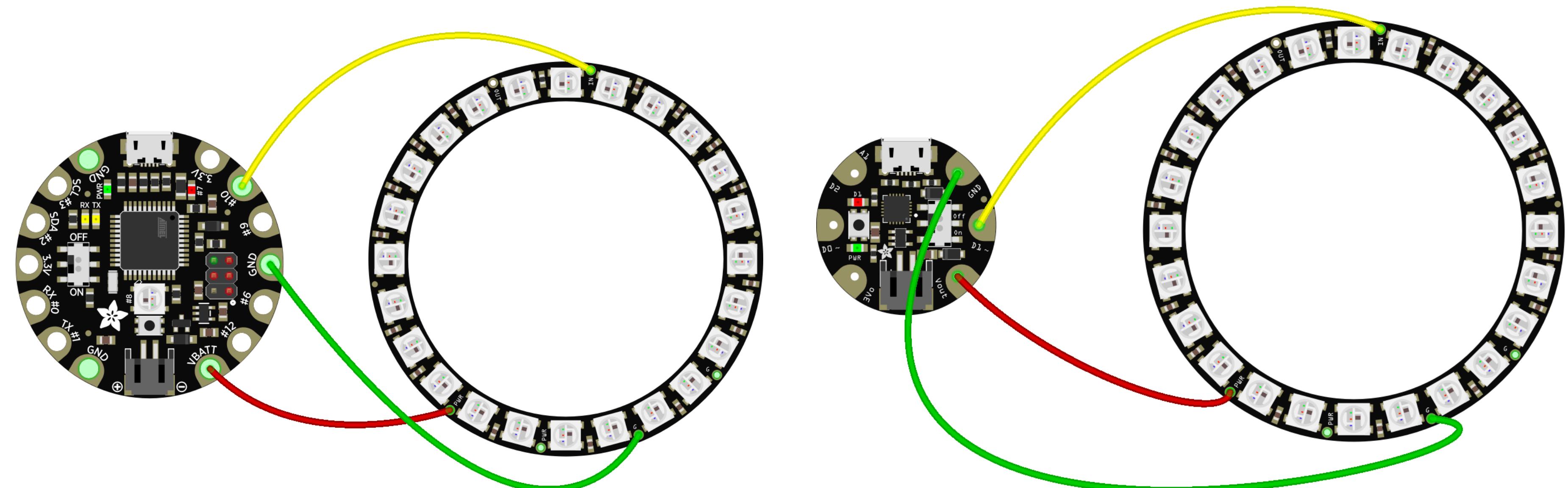
fritzing



GEMMA

fritzing

# NEOPIXEL RING

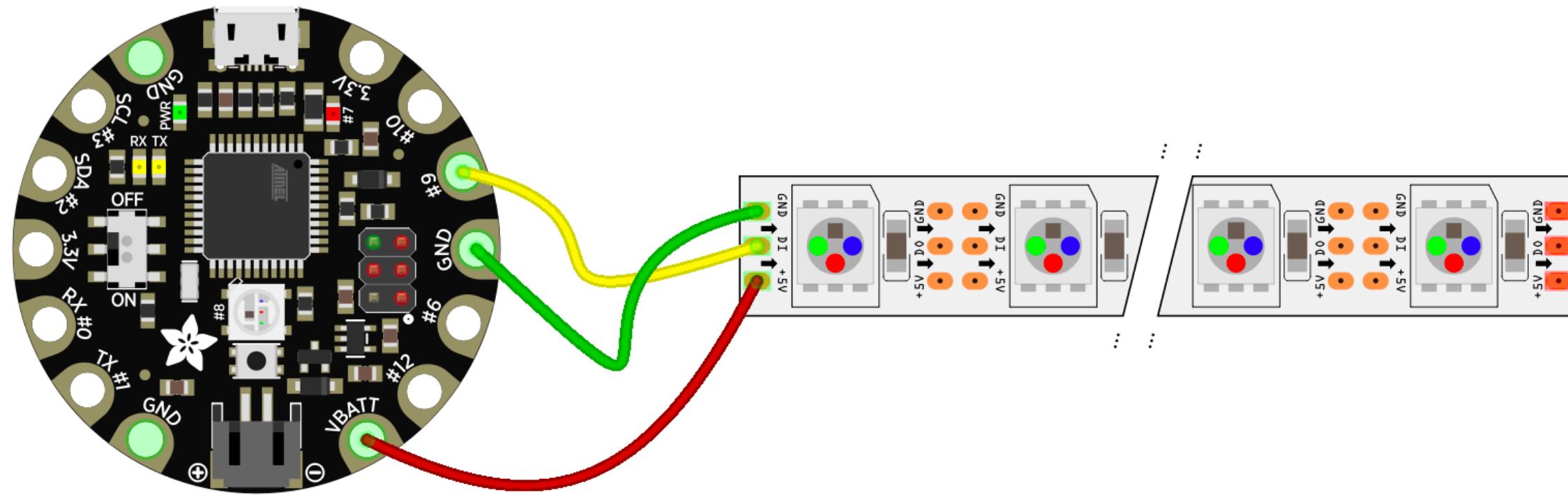


fritzing

FLORA

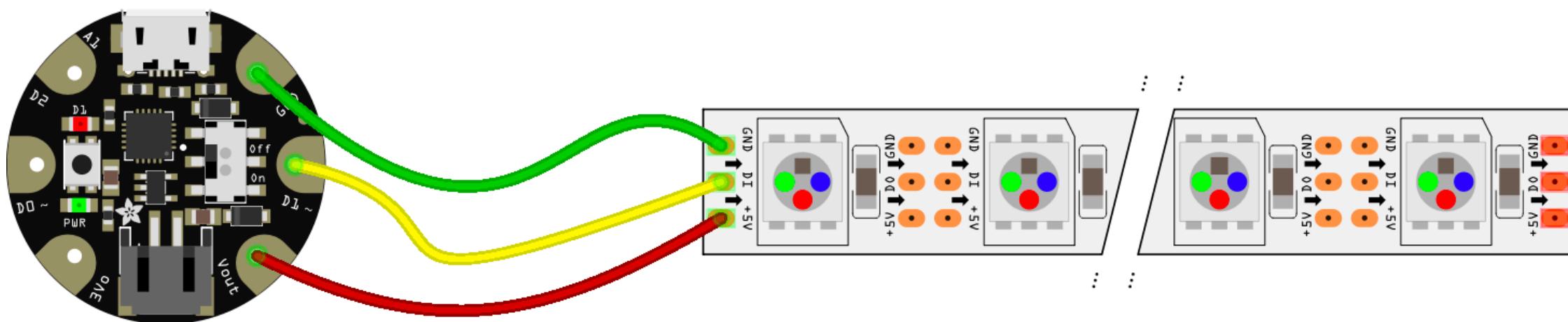
GEMMA

# NEOPIXEL STRIP



FLORA

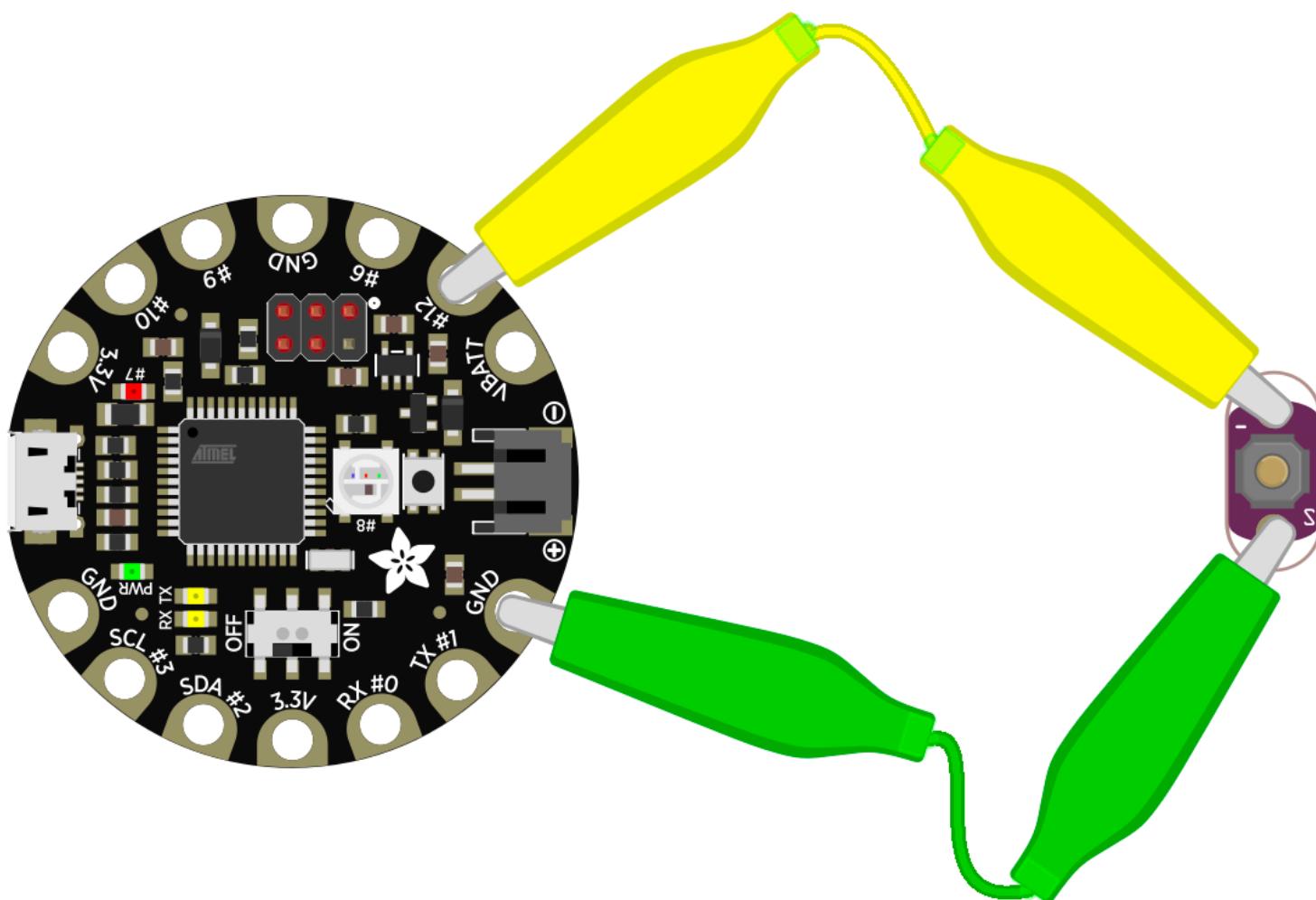
fritzing



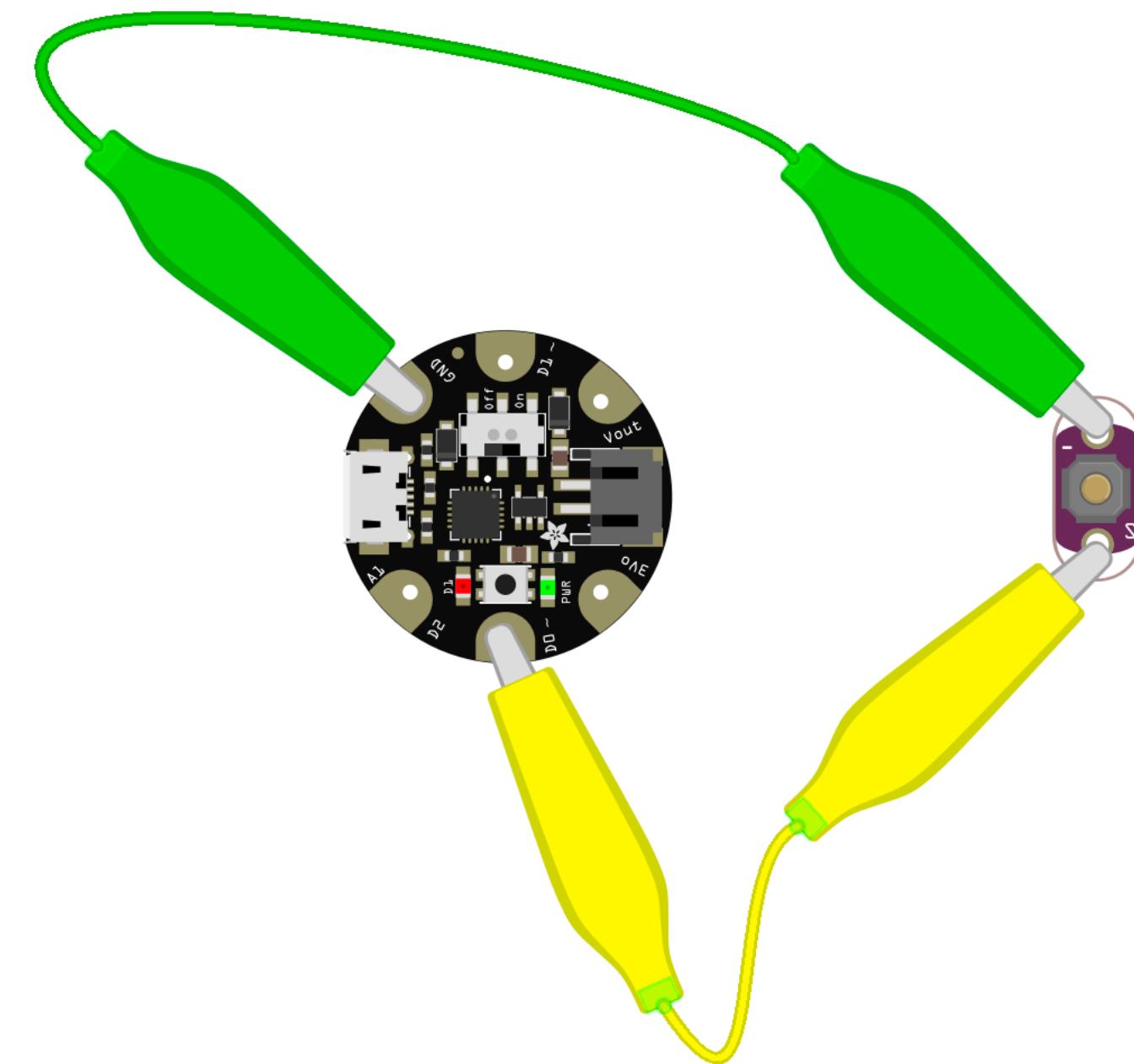
GEMMA

fritzing

# PUSH BUTTON



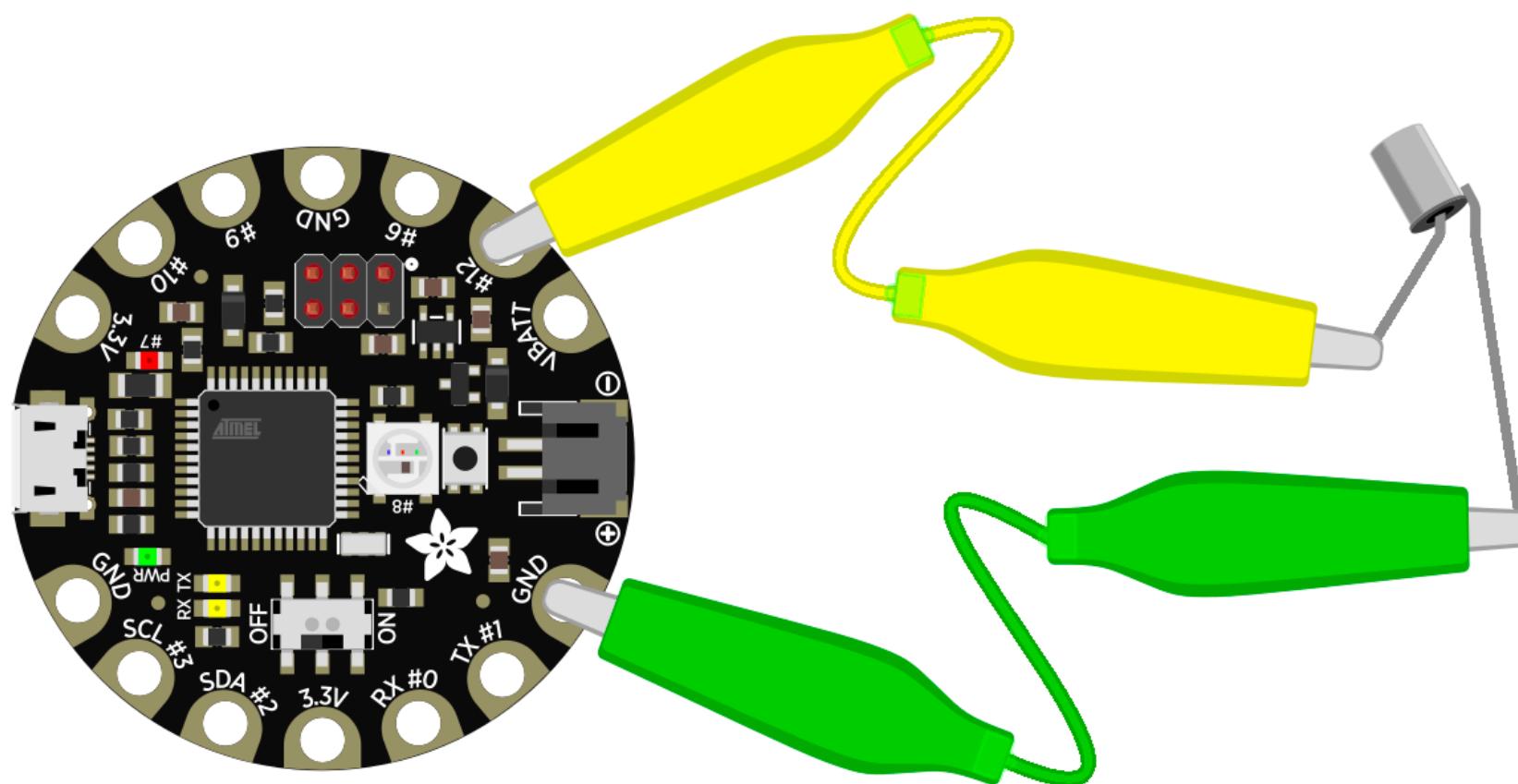
fritzing



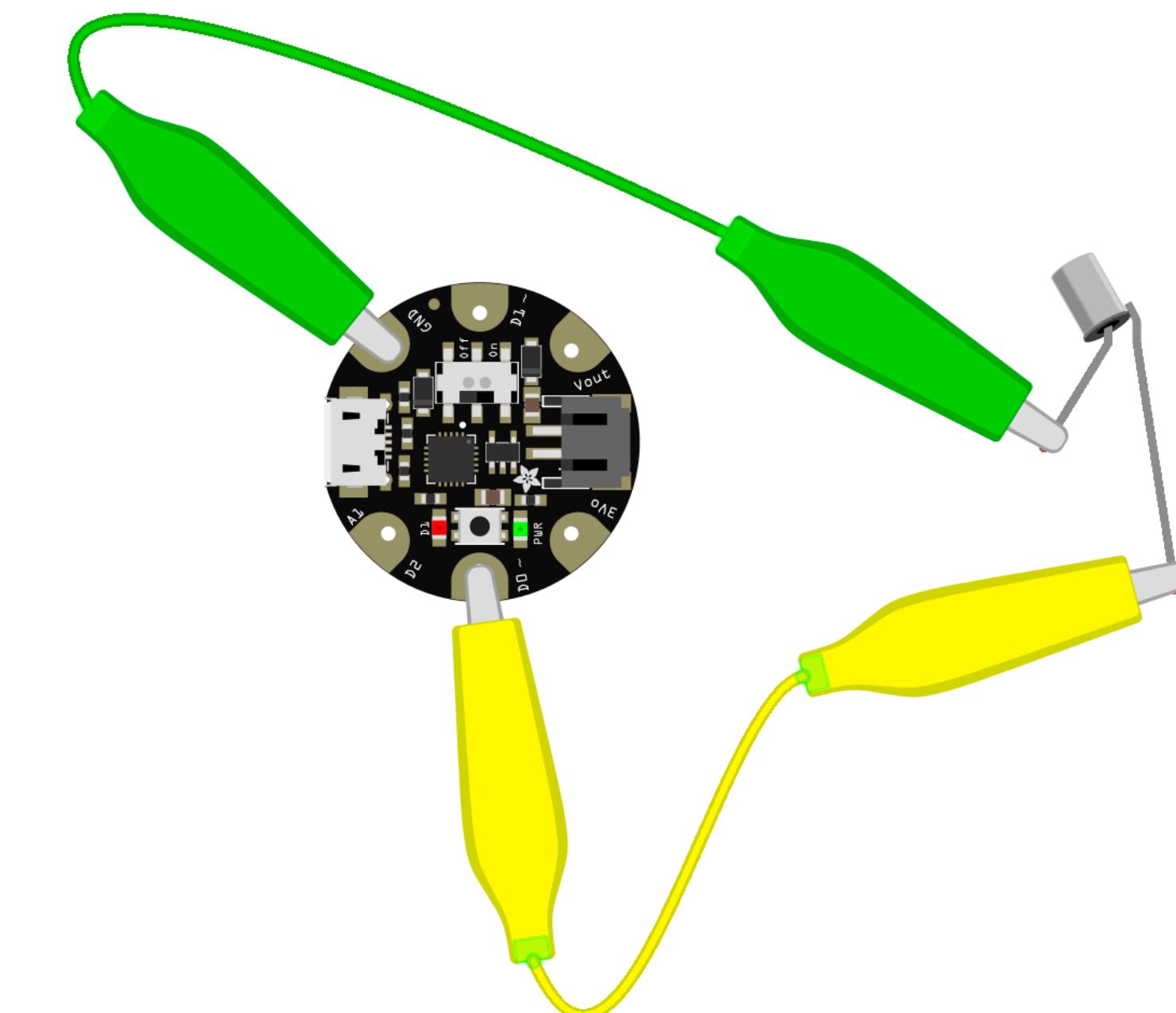
fritzing

# FLORA

# TI LT SWITC H

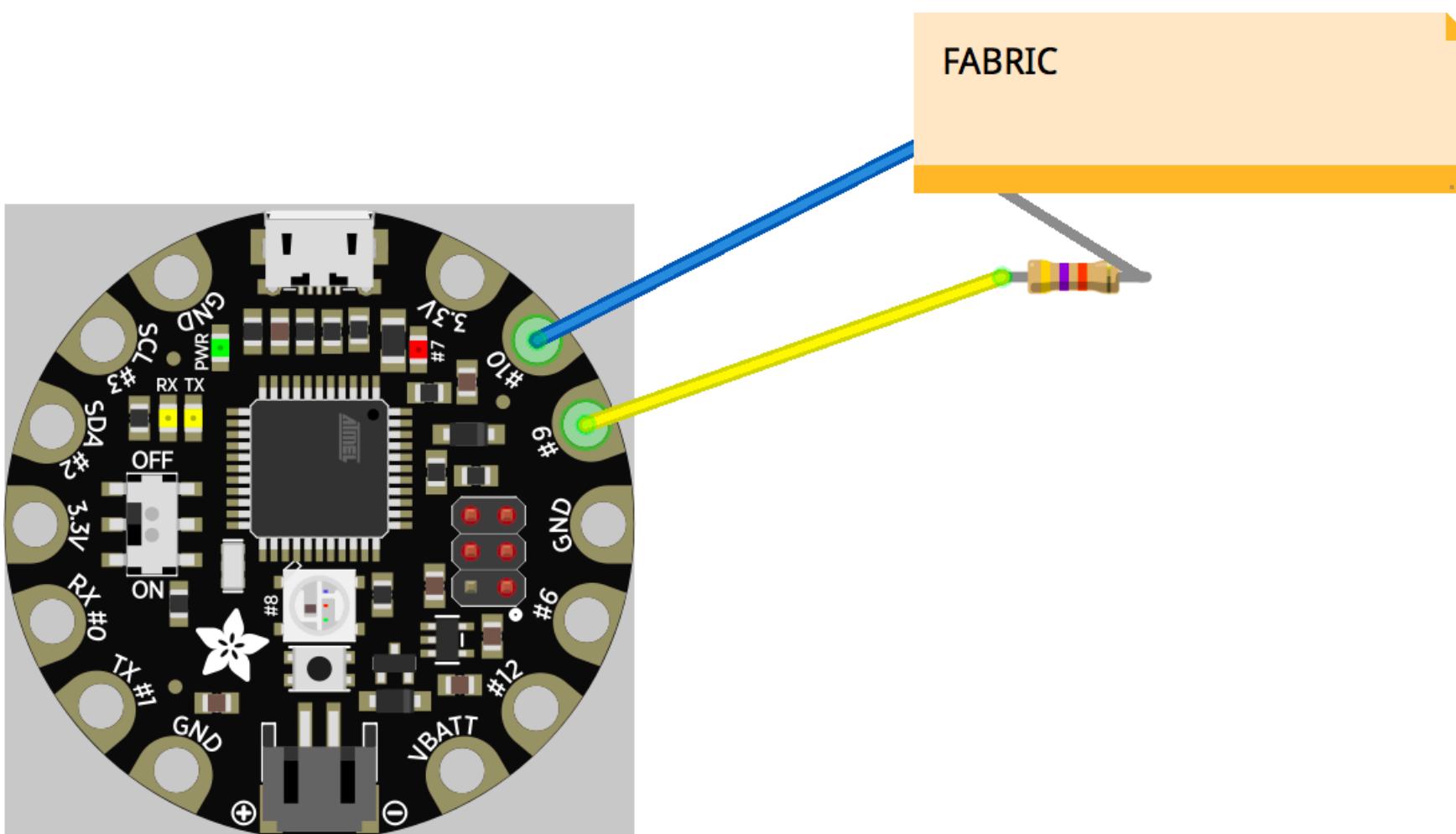


FLORA



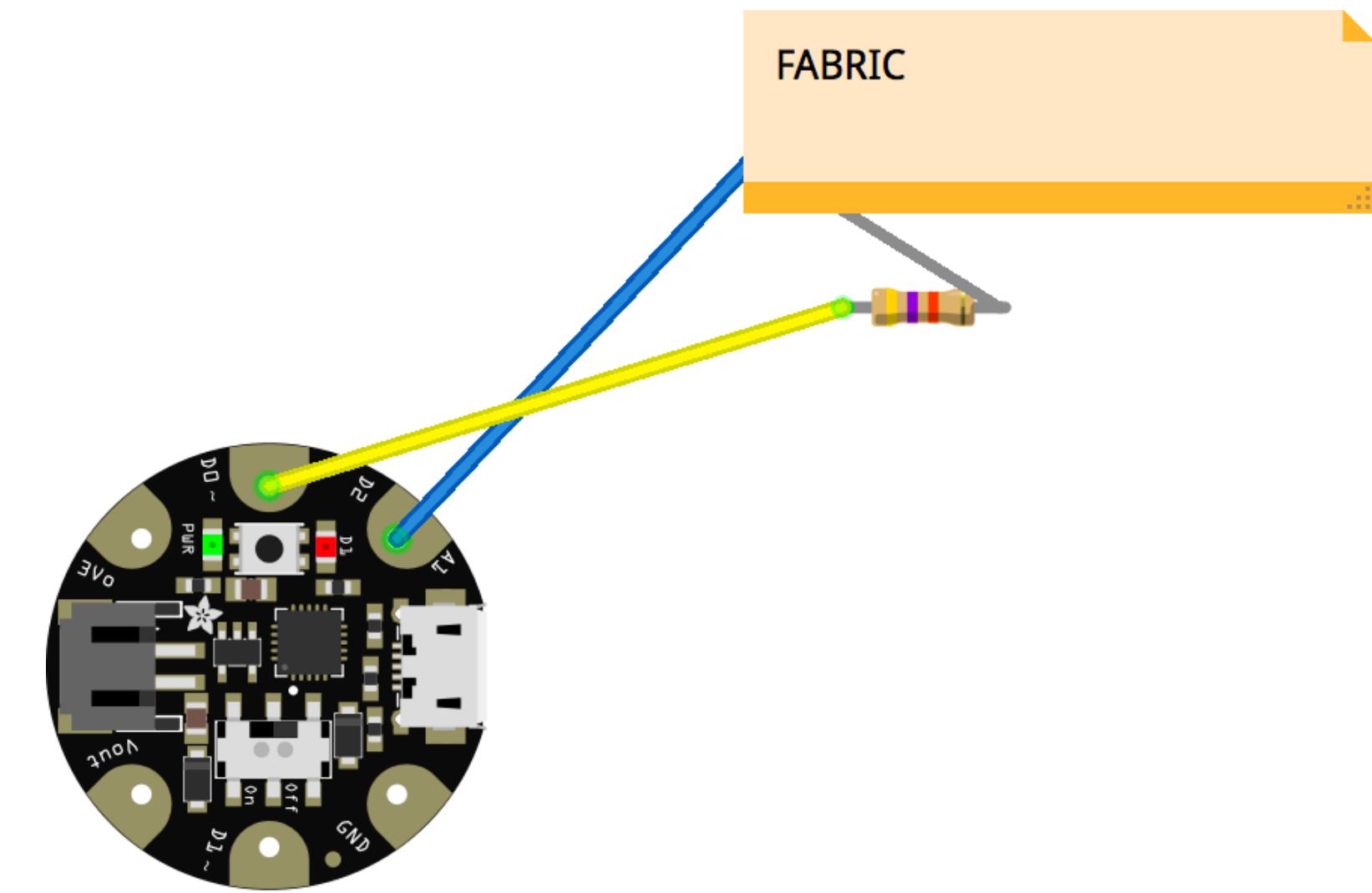
GEMMA

# CONDUCTIVE FABRIC



fritzing

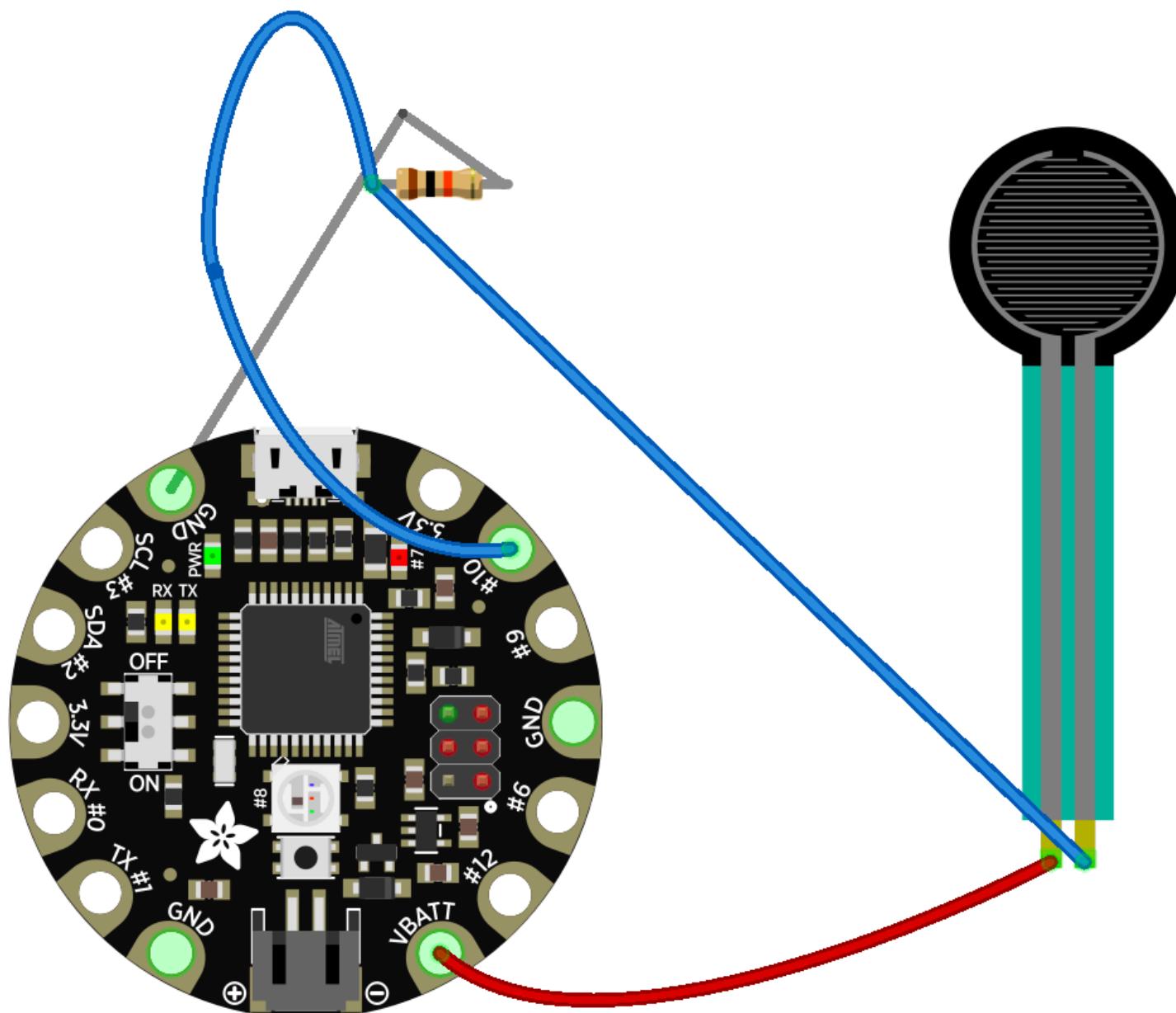
FLORA



fritzing

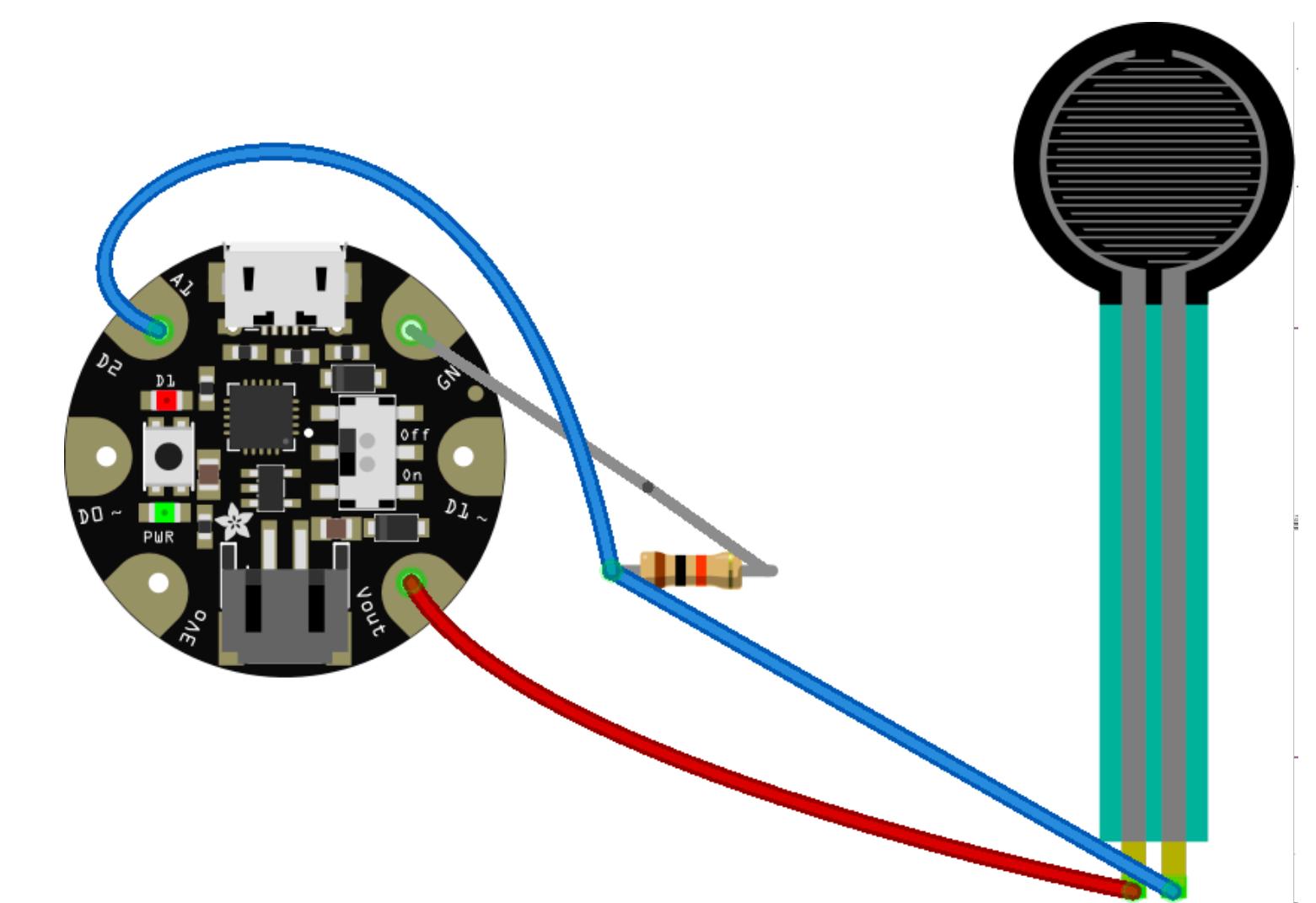
GEMMA

# FORCE SENSOR



fritzing

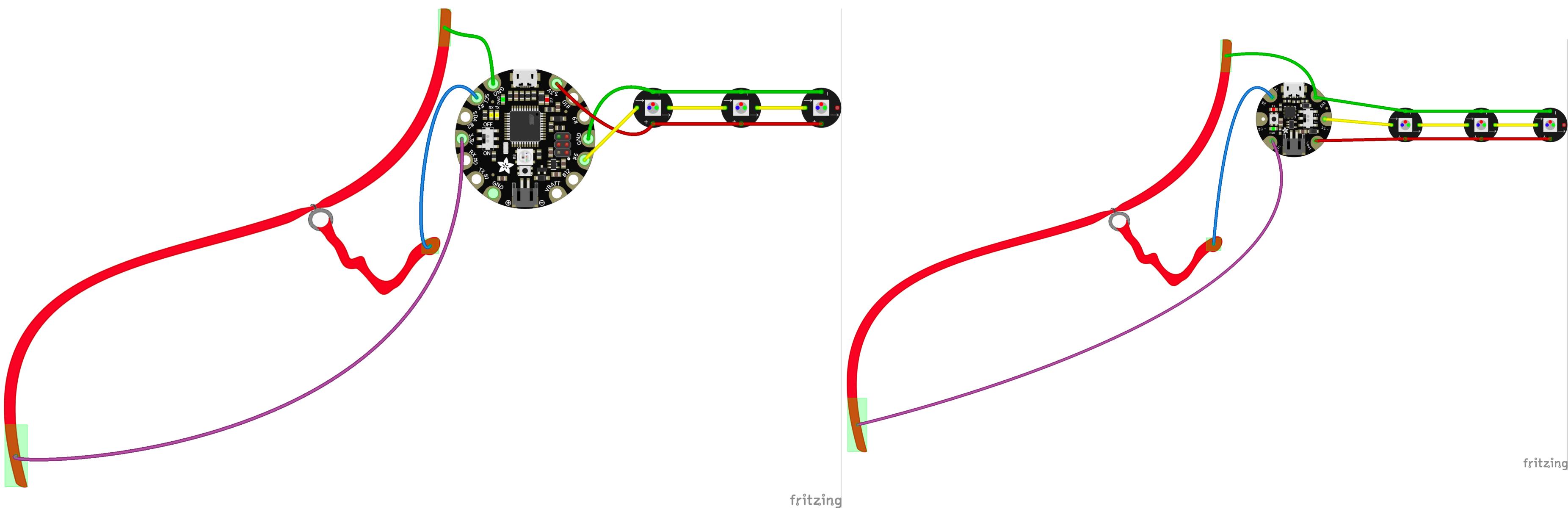
FLORA



fritzing

GEMMA

# SOFT POTENTIOMETER

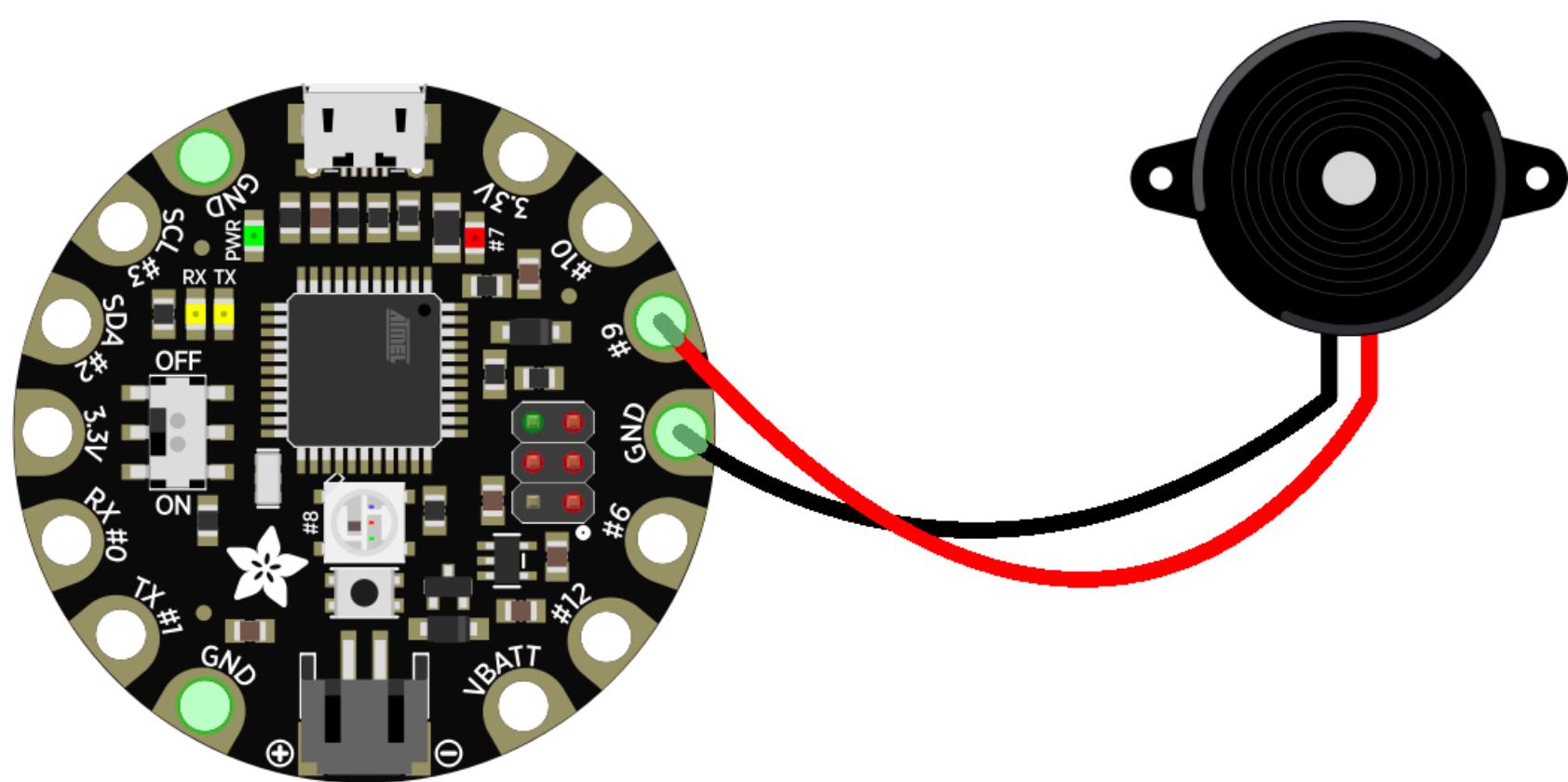


FLORA

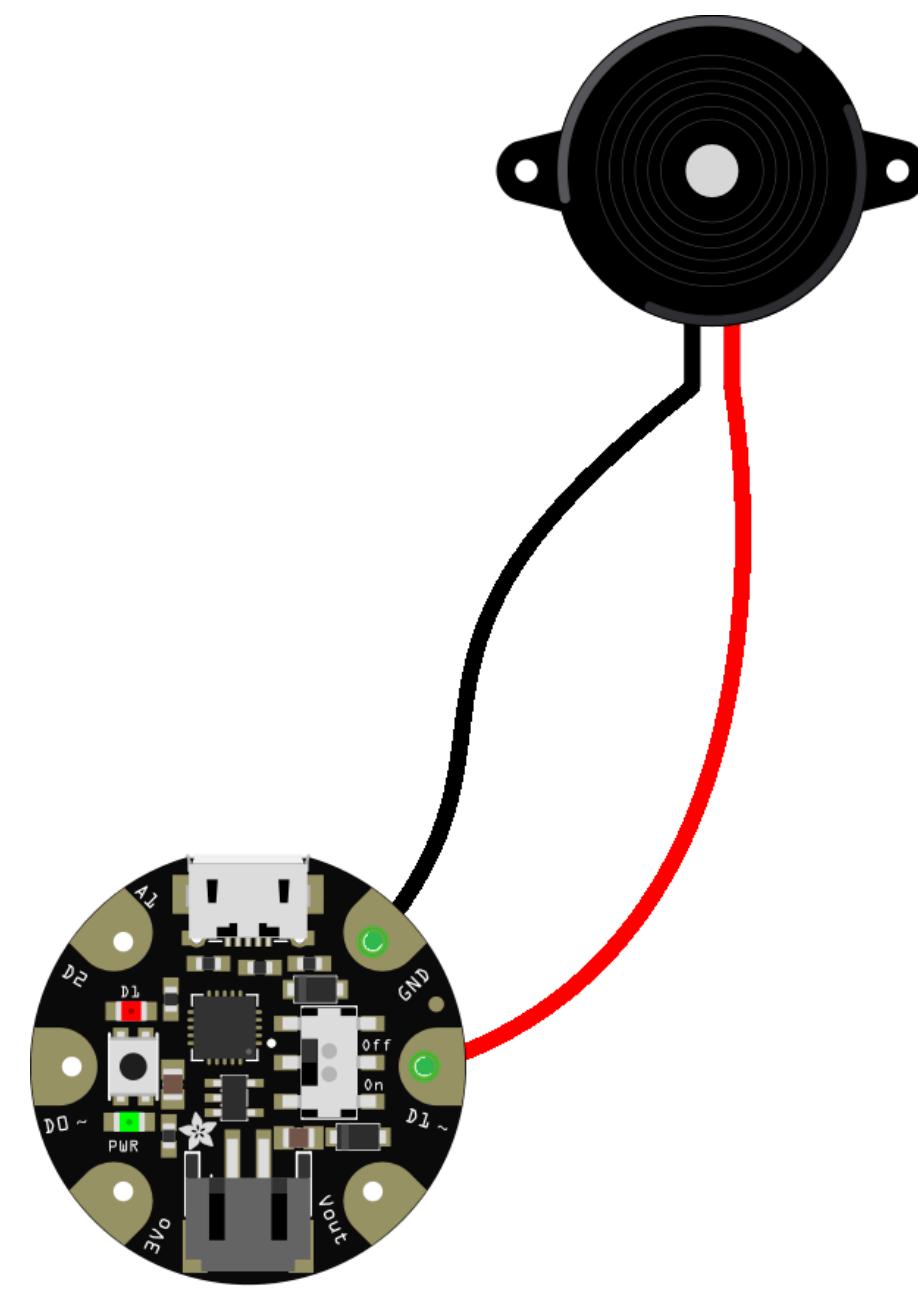
GEMMA

fritzing

# SPEAKER

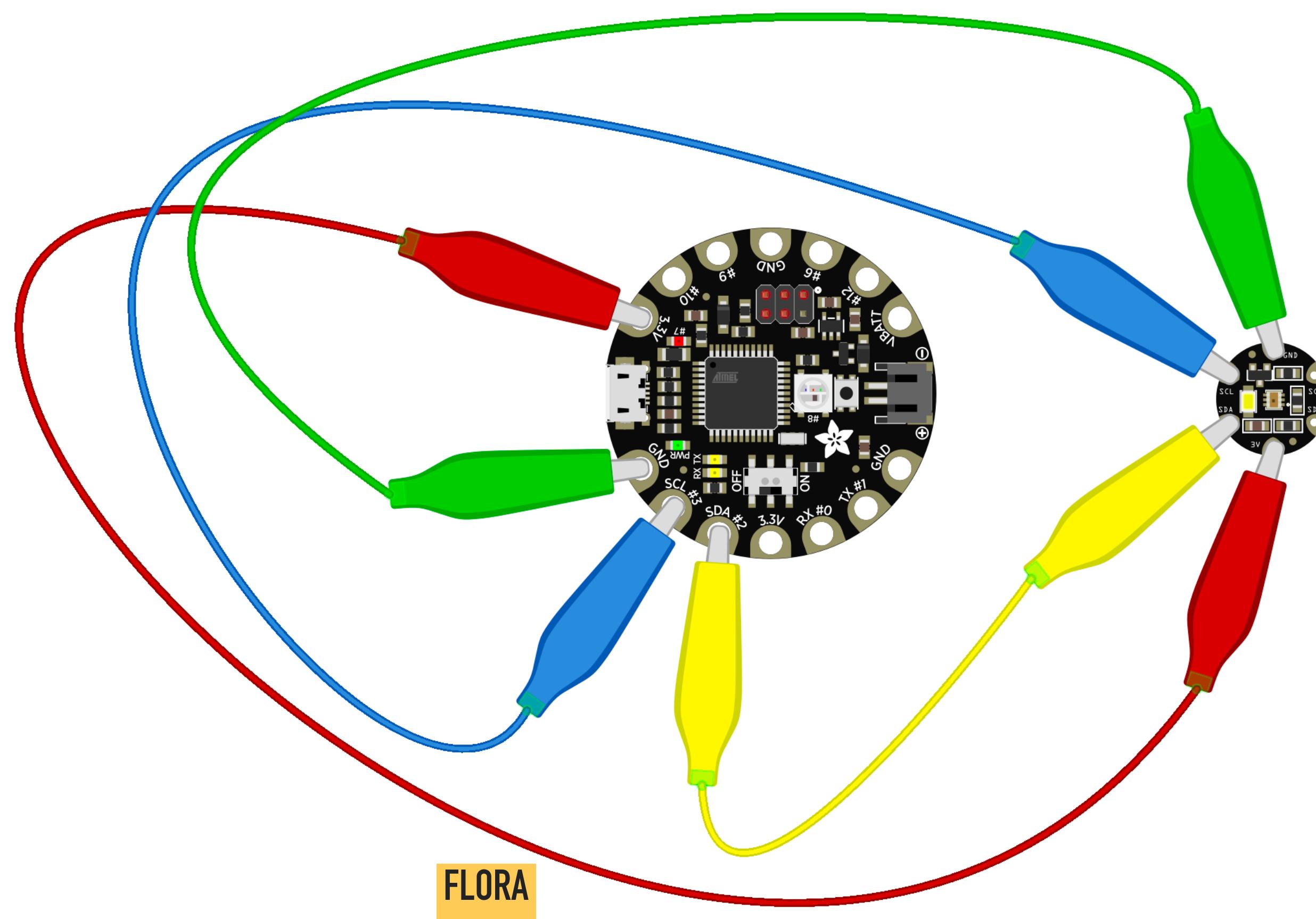


FLORA

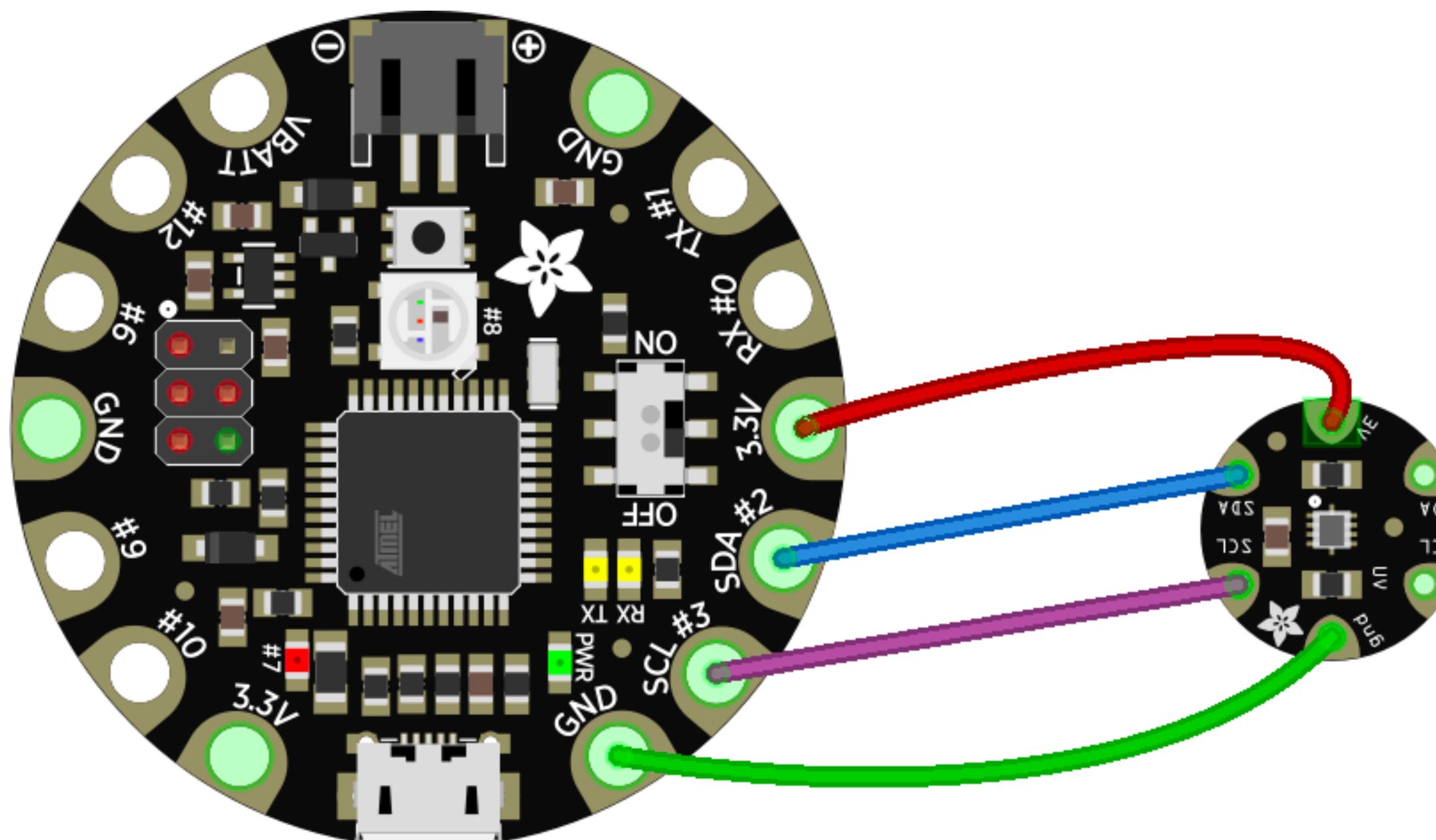


GEMMA

# COLOR SENSOR



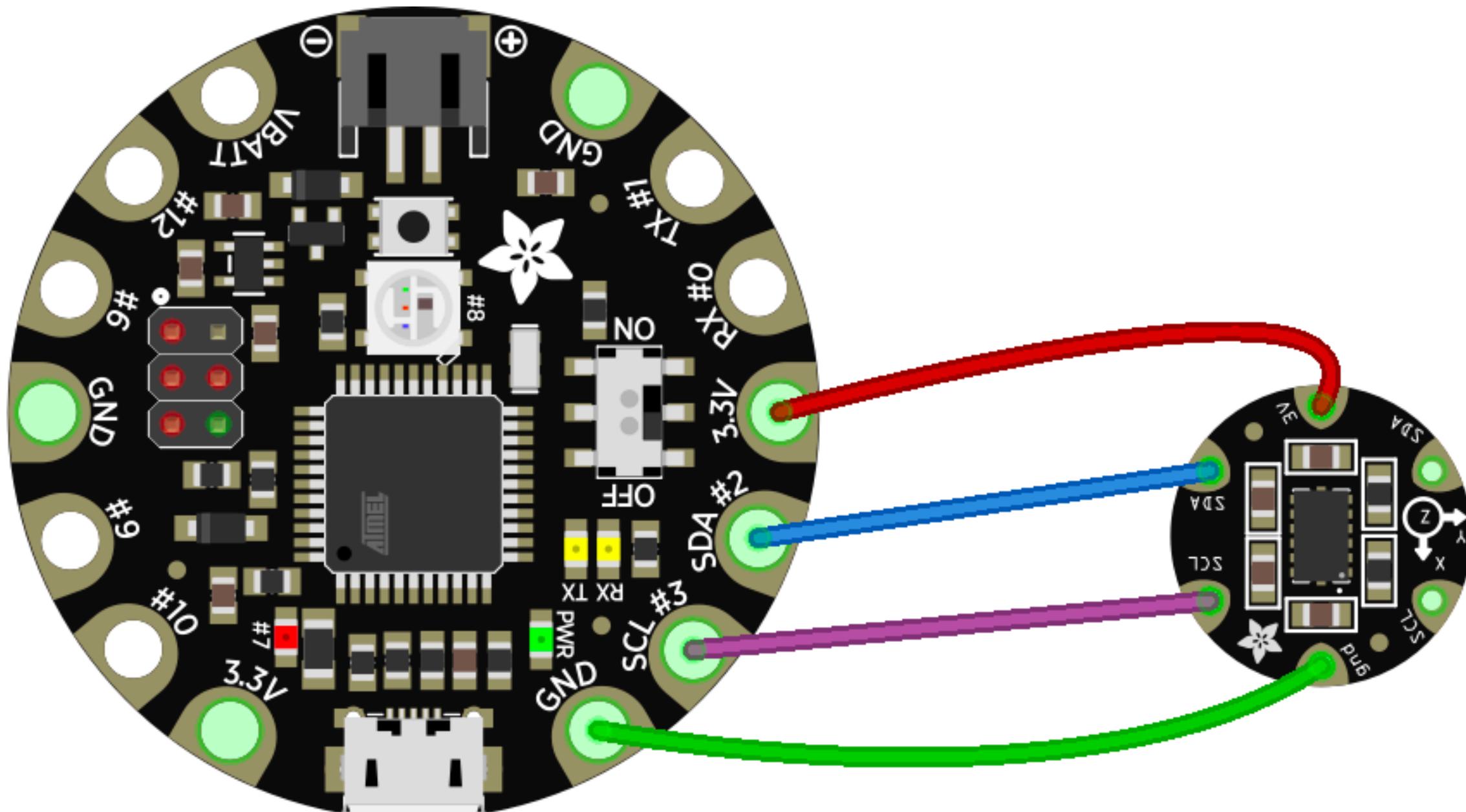
# UV LIGHT SENSOR



fritzing

FLORA

# ACCELEROMETER/COMPASS



fritzing

FLORA

DREAM UP YOUR  
OWN UGLY  
SWEATER PROJECT.

YOU CAN MAKE  
ANYTHING YOU CAN  
IMAGINE.

**HAVE**  
**FUN!!**