

Capacitive Touch scrollwheel:
If using circuit express,
possibly i wont use this

Potentiometer for user to
adjust brightness

my real part doesnt exist
it is normally:
93 LEDs WS2812B
RGB 6 Ring Lamp
Operating Voltage:
5V
Operating Current:
≤1A
LED Type: WS2812B
LED Quantity: 93
Color: Full Color RGB
Source: [https://
www.dfrobot.com/
product-2091.html](https://www.dfrobot.com/product-2091.html)

Those replace capacitive
touchwheel

Potentiometer for user to
adjust brightness

This is supposed to be a Proto
Gizmo
[https://www.adafruit.com/
product/4320](https://www.adafruit.com/product/4320)

Notes about Circuit Express pins:
Vout - there is one Voltage Output
pad. This is a special power pad, it
will be connected to either the USB
power or the battery input,
whichever has the higher voltage.
This output does not connect to the
regulator so you can draw as much
current as your USB port / Battery
can provide. There is a resettable
fuse on this pin, so you can draw
about 500mA continuous, and 1
Amp peak before it will trip. If the
fuse trips, just wait a minute and it
will automatically reset

If you want to connect servos,
NeoPixels, DotStars or other high
power electronics that are OK up to
5V, use the Vout pad.

All of the GPIO pads are 3.3V output
level, and should not be used with
5V inputs. In general, most 5V
devices are OK with 3.3V output
though.

Each Pin!
Let's start with A0 which is in the bottom right corner,
and work our way counter-clockwise

A0 (a.k.a D12) - This is a special pin that can do true
analog output so it's great for playing audio clips. In can
be digital I/O, or analog I/O, but if you do that it will
interfere with the built-in speaker. This is the one pin
that cannot be used for capacitive touch.
A1 / D6 - This pin can be digital I/O, or analog Input.
This pin has PWM output and can be capacitive touch
sensor
A2 / D9 - This pin can be digital I/O, or analog Input.
This pin has PWM output and can be capacitive touch
sensor
A3 / D10 - This pin can be digital I/O, or analog Input.
This pin has PWM output and can be capacitive touch
sensor
A4 / D3 - This pin can be digital I/O, or analog Input.
This pin is also the I2C SCL pin, and can be capacitive
touch sensor
A5 / D2 - This pin can be digital I/O, or analog Input.
This pin is also the I2C SDA pin, and can be capacitive
touch sensor
A6 / D0 - This pin can be digital I/O, or analog Input.
This pin has PWM output, Serial Receive, and can be
capacitive touch sensor
A7 / D1 - This pin can be digital I/O, or analog Input.
This pin has PWM output, Serial Transmit, and can be
capacitive touch sensor

D4 - Left Button A
D5 - Right Button B
D7 - Slide Switch
D8 - Built-in 10 NeoPixels
D13 - Red LED
D27 - Accelerometer interrupt
D25 - IR Transmitter
D26 - IR Receiver
A0 - Speaker analog output
A8 - Light Sensor
A9 - Temperature Sensor
A10 - IR Proximity Sensor
D29 - Internal I2C SDA (access with Wire1)
D30 (PIN_SPI_MISO) - SPI FLASH MISO
D31 (PIN_SPI_SCK) - SPI FLASH SCK
D32 (PIN_SPI_MOSI) - SPI FLASH MOSI
D33 - SPI FLASH Chip Select

my real part doesnt exist
it is normally:
93 LEDs WS2812B
RGB 6 Ring Lamp
Operating Voltage:
5V
Operating Current:
≤1A
LED Type: WS2812B
LED Quantity: 93
Color: Full Color RGB
Source: [https://
www.dfrobot.com/
product-2091.html](https://www.dfrobot.com/product-2091.html)