Smart Lamp Circuit
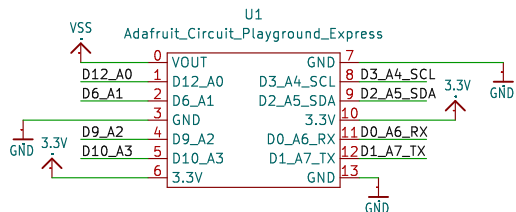
Adafruit Circuit Playground Express I/O Pads
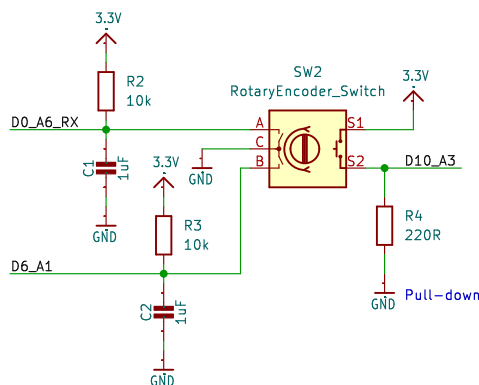
U1
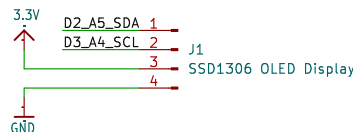Adafruit_Circuit_Playground_Express

VSS

0	VOUT	GND	7	
1	D12_A0	D3_A4_SCL	8	D3_A4_SCL
2	D6_A1	D2_A5_SDA	9	D2_A5_SDA
3	GND	3.3V	10	3.3V
4	D9_A2	D0_A6_RX	11	D0_A6_RX
5	D10_A3	D1_A7_TX	12	D1_A7_TX
6	3.3V	GND	13	

D12_A0
D6_A1
GND 3.3V
D9_A2
D10_A3

GND

Mode Button

SW1
SW_Push
3.3V

D1_A7_TX

R1
220R

GND   Pull-down
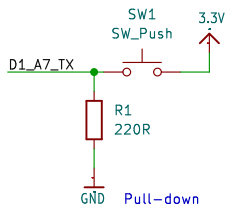
Light Control Knob

RC low pass filter for encoder debouncing

3.3V

R2
10k

D0_A6_RX

SW2
RotaryEncoder_Switch
3.3V

A   S1
C
B   S2

D10_A3

C1
1uF

3.3V

GND

GND

R3
10k

R4
220R

D6_A1

C2
1uF

GND

GND   Pull-down

SSD1306 OLED Display Connection

3.3V

D2_A5_SDA   1
D3_A4_SCL   2
             3
             4

J1
SSD1306 OLED Display

GND

DS1307 AT24C32 RTC Connection

VCC

D3_A4_SCL   1
D2_A5_SDA   2
             3
             4

J2
DS1307 AT24C32 RTC

GND
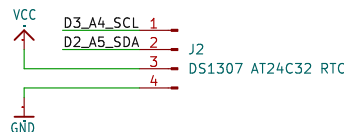
VCC is USB input voltage, can be between 3.3V-5.5V