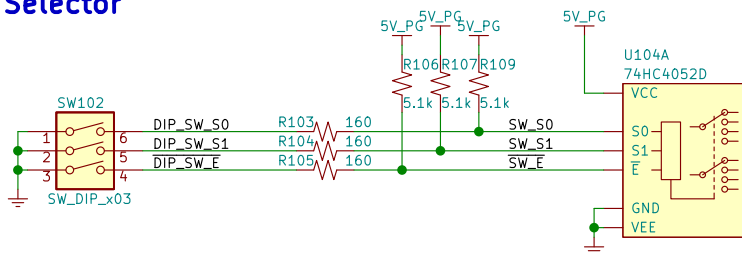
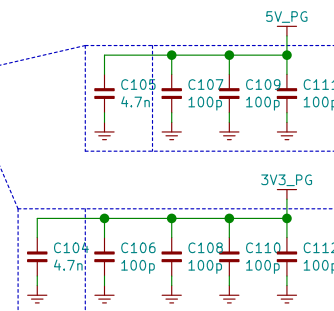


\bar{E}	S1	S0	Output
0	0	0	nY0
0	0	1	nY1
0	1	0	nY2
0	1	1	nY3
1	x	x	none



Place the bulk decoupling capacitor near the related components



- Place a decoupling capacitor at the power pin of each chip

- Place a decoupling capacitor at the power pin of each chip

3V3_PG

J102 SMA

SW101

R102 5.1k

C101 100n

PG_TRIG

U101 74LVC1G17GW

3V3_PG

U102A 74AUP2G3404

PG_PULSE_REF

R108 160

U102B 74AUP2G3404

5V_PG

U103 DS1100Z-25+

VCC

IN

7 5ns

2 10ns

20ns

15ns

6 15ns

5ns

3 20ns

10ns

U104B 74HC4052D

1Y0

1Y1

1Y2

1Y3

U104C 74HC4052D

2Y0

2Y1

2Y2

2Y3

U106 74LVC1G08GW

3V3_PG

PG_PULSE

R115 24.9

R116 0

R117 0

PG_PULSE_OUT

J101 SMA

DN

R213/R313 is a placeholder and should be used to tune the pulse width

Trigger: 1.4 ~ 2.0 V

Tap positions shuffled to improve layout

[illegible][illegible]

```
5V_PG   : 115 mA
3V3_PG   : 250 mA
```

Given the power consumption of this module is quite small, one could replace the connector with simpler means of supplying power and use a regulator from the 5V rail to produce the 3.3V.

For example, a USB connector could be used to power this circuit.

EDC

Sheet: /

File: PulseGenerator_Board.sch

Title: Pulse Generator

Size: A4	Date: 2022
----------	------------

KiCad E.D.A. kicad (5.1.7)-1

A horizontal number line with tick marks at every integer from 0 to 10. The number 4 is written below the tick mark for 4.

Rev: 1.0

Id: 1/1