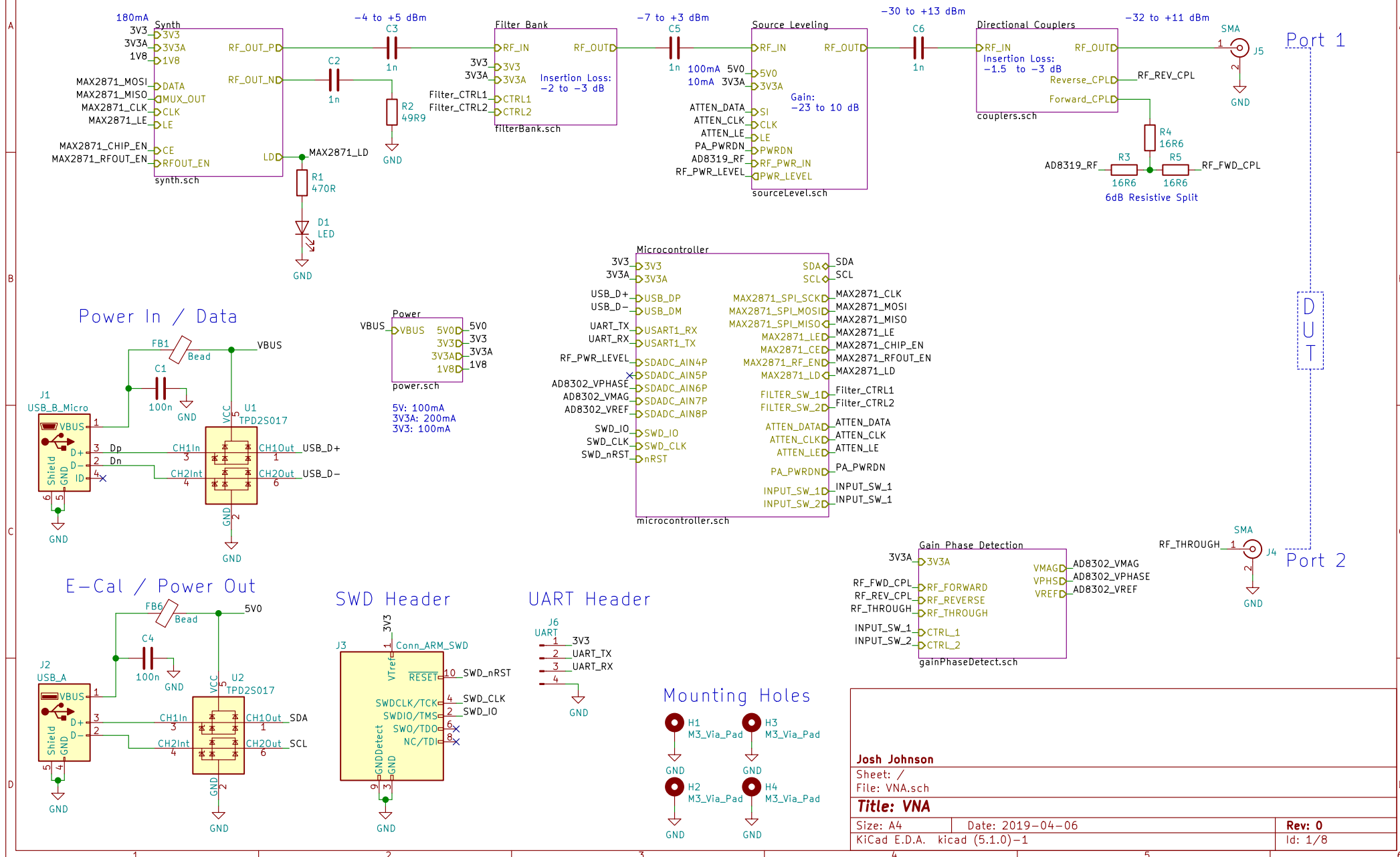


## Josh's VNA



Id: 2/8

**Input Protection**

VBUS → F1 (500mA Polyfuse) → VIN → PWR\_FLAG

TP1 VBUS

**5V (Filtered)**

VIN → C29 (10u) → FB4 (Bead) → C30 (10u) → 5V0 → TP2 5V0

**3V3 LDO**

VIN → C32 (1u) → U5 (TVL755P) → C34 (1u) → 3V3 → TP5 3V3

**3V3A LDO**

VIN → C28 (1u) → U4 (LP5912) → C31 (1u) → 3V3A → TP3 3V3A

**1V8 LDO**

VIN → C33 (1u) → U6 (MIC5366-1.8) → C35 (1u) → 1V8 → TP4 1V8

**Voltage Rail LEDs**

1V8 → R13 (10K) → Q1 (RE1C002UN) → R14 (470R) → D2 LED → GND

3V3A → R15 (470R) → D3 LED → GND

3V3 → R16 (470R) → D4 LED → GND

5V0 → R17 (1K) → D5 LED → GND

VBUS → R18 (1K) → D6 LED → GND

**Ground Test Points**

TP6 GND, TP7 GND, TP8 GND, TP9 GND, TP10 GND, TP11 GND, TP12 GND, TP13 GND, TP14 GND, TP15 GND

Sheet: /Power/  
File: power.sch

Class: A/B

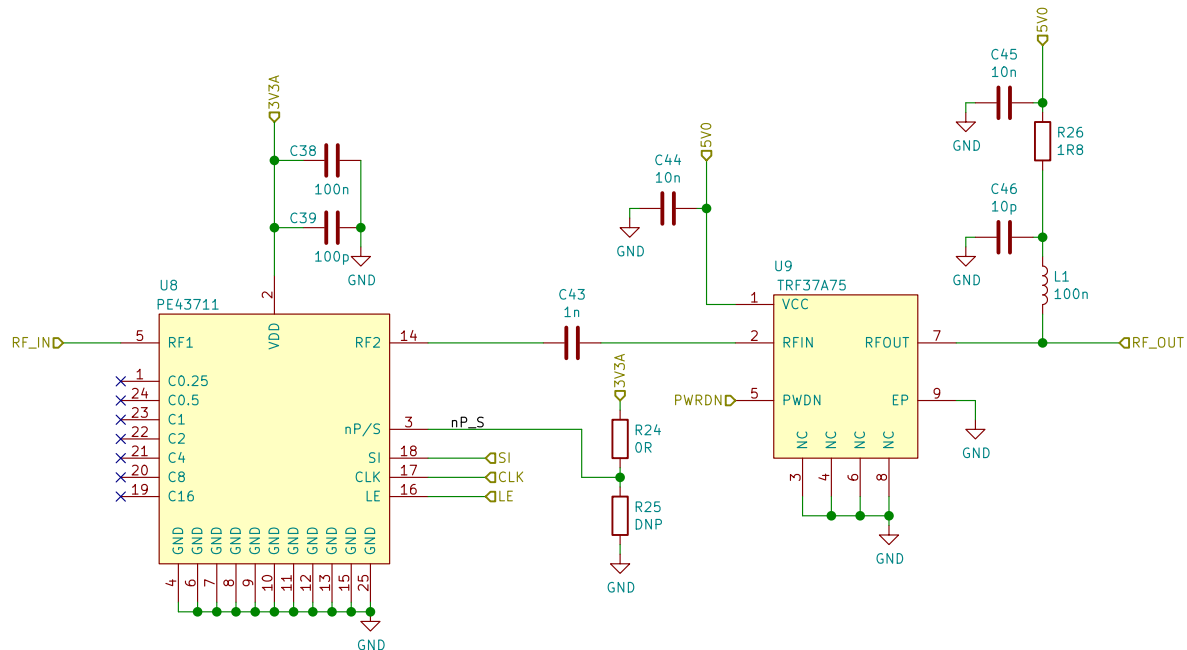
KiCad E.D.A.	kiCad (5.1.0)-1
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Id: 3/8

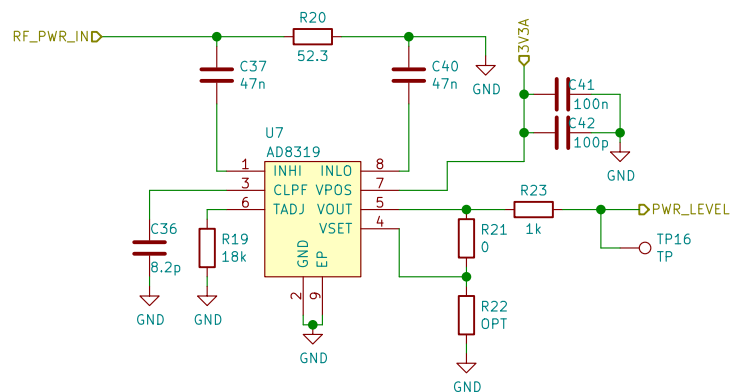
## Programmable Attenuator

## Amplifier

(Gain = 12dB P1dB = +18dBm IP3 = +32.5dBm)



## Power Detector



Josh Johnson

Sheet: /Source Leveling/

File: sourceLevel.sch

**Title: Source Leveling**

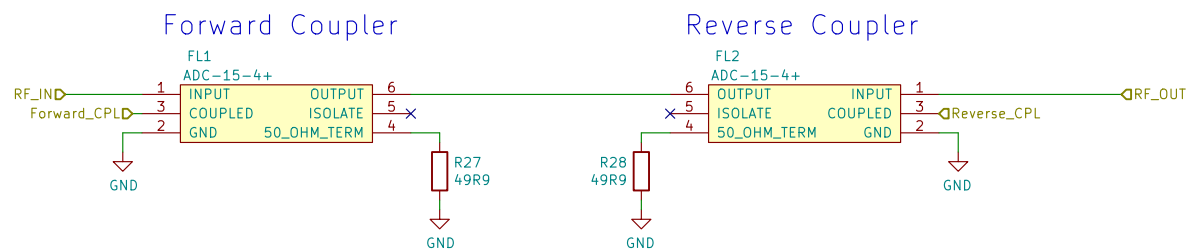
Size: A4

Date: 2019-04-06

Rev: 0

KiCad E.D.A. kicad (5.1.0)-1

Id: 4/8



Josh Johnson

Sheet: /Directional Couplers/  
File: couplers.sch

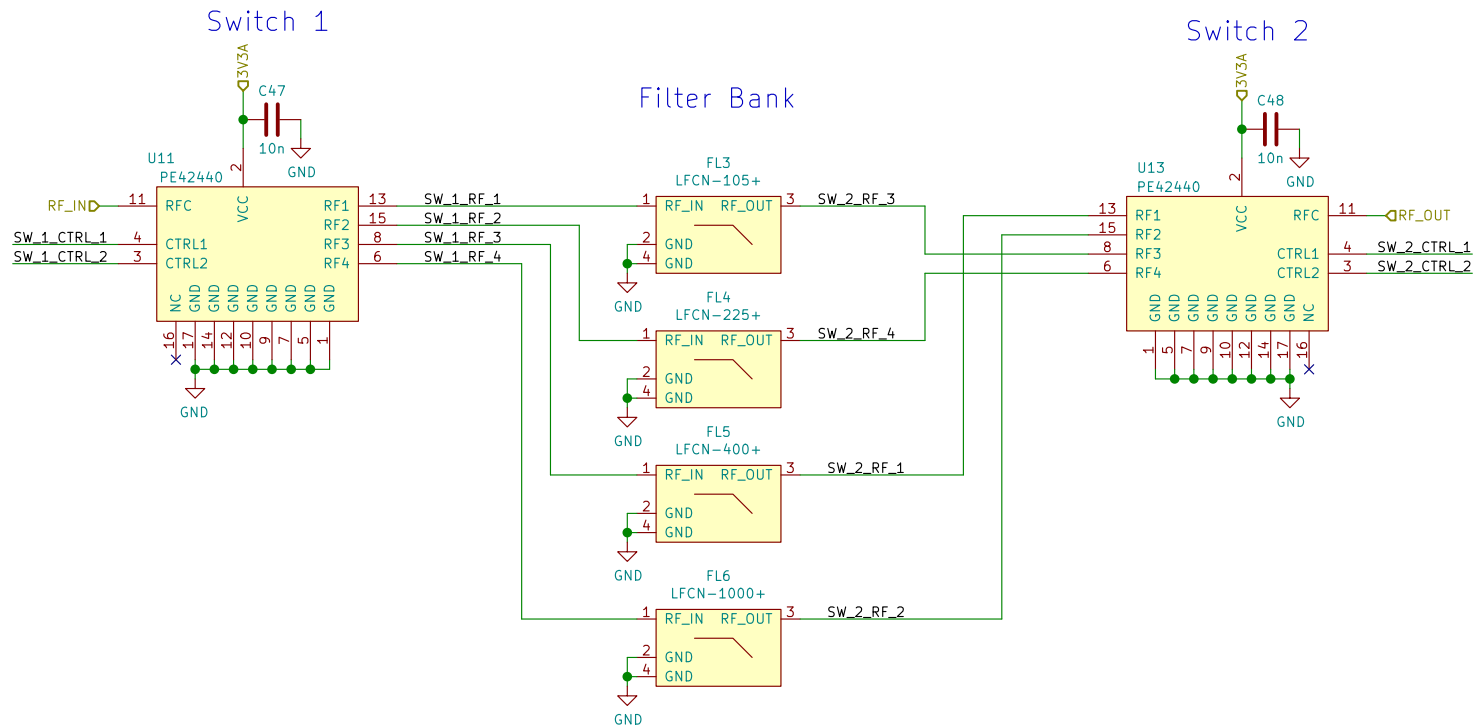
**Title: Directional Couplers**

Size: A4 Date: 2019-04-06

KiCad E.D.A. kicad (5.1.0)-1

Rev: 0

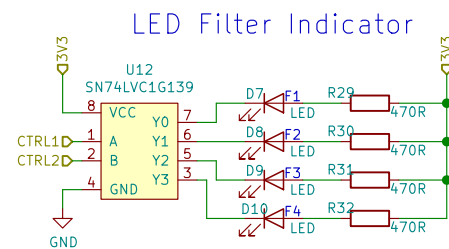
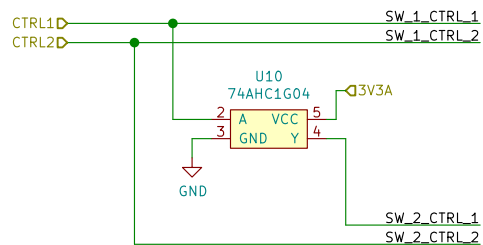
Id: 5/8



## Switch Configuration

74AHC1G04 is a not gate, used to allow the below truth tables to be correct with only two control lines following the values in the first table

SW_1	CTRL_1	CTRL_2	SW_2	CTRL_1	CTRL_2
1	0	0	3	1	0
2	0	1	4	1	1
3	1	0	1	0	0
4	1	1	2	0	1



Josh Johnson

Sheet: /Filter Bank/  
File: filterBank.sch

**Title: Filter Bank**

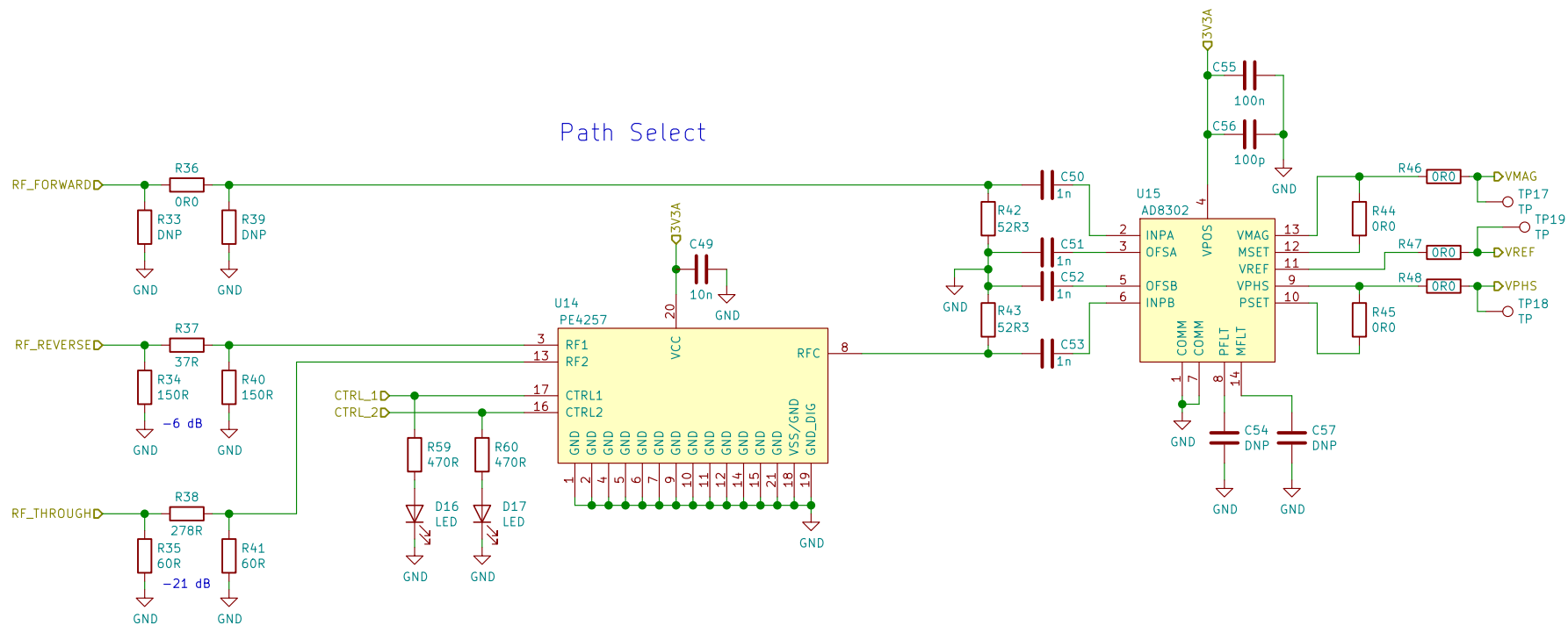
Size: A4 Date: 2019-04-06

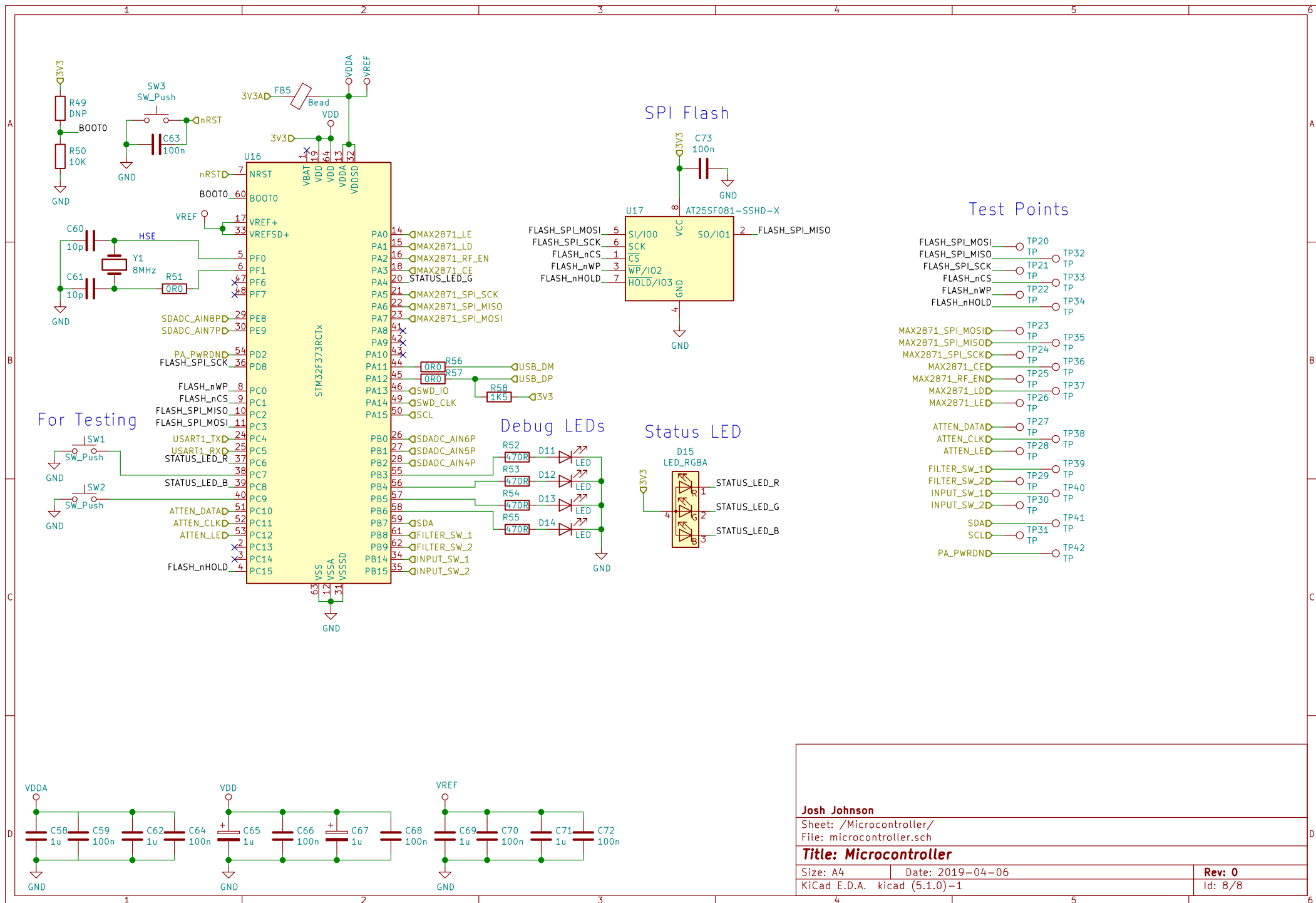
KiCad E.D.A. kicad (5.1.0)-1

Rev: 0

Id: 6/8

# Path Select





Josh Johnson

Sheet: /Microcontroller/  
File: microcontroller.sch

**Title: Microcontroller**

Size: A4 Date: 2019-04-06

KiCad E.D.A. kicad (5.1.0)-1

Rev: 0

Id: 8/8