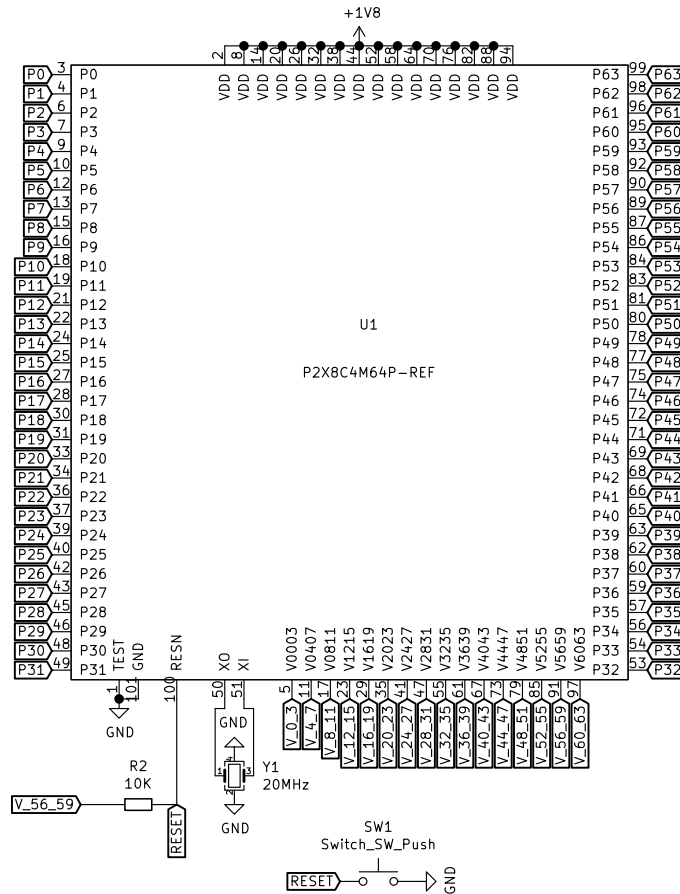
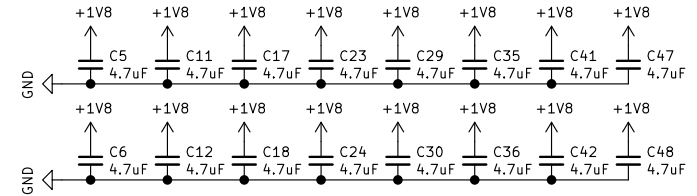


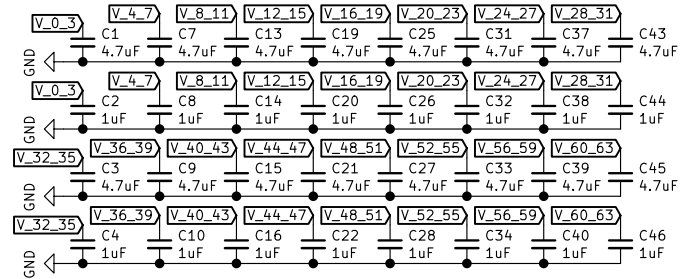
## Propeller 2



## Core Supply Capacitors



## IO Supply Capacitors



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Sheet: /  
File: MAD\_P2.sch

**Title: MaD\_P2**

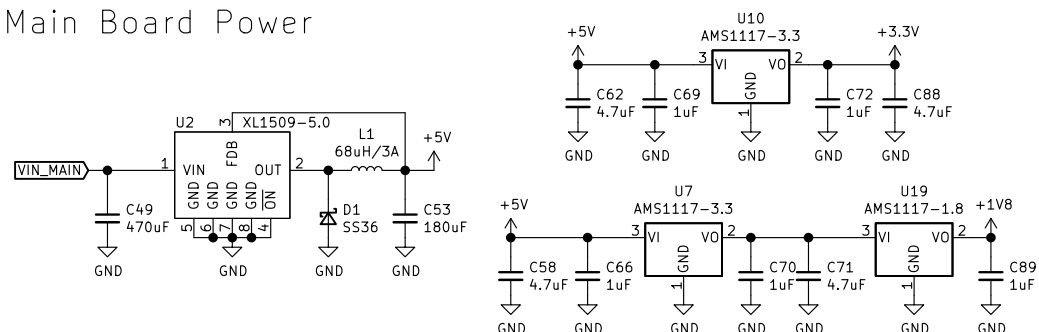
Size: A4 Date: 2021-05-06

KiCad E.D.A. kicad (5.1.9)-1

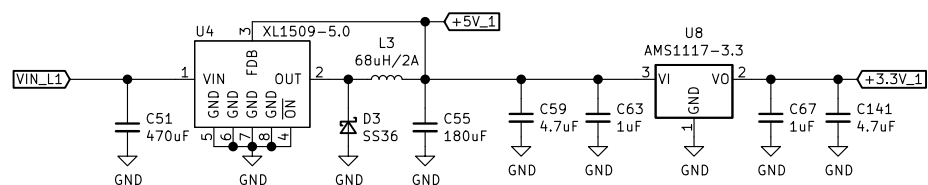
Rev: 1

Id: 1/6

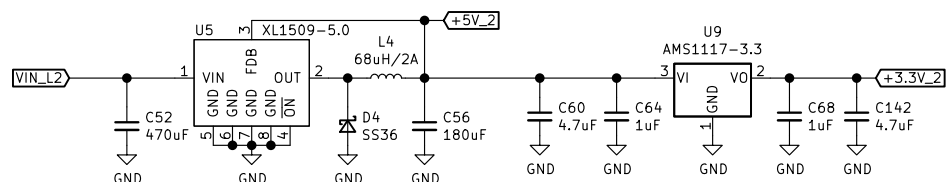
## Main Board Power



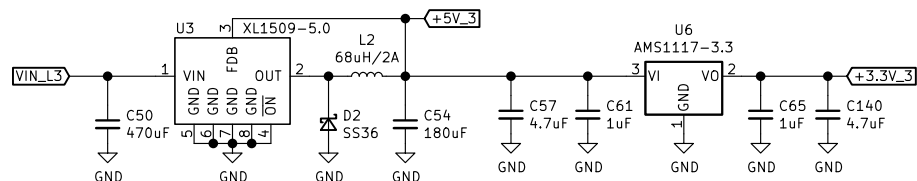
Line Out #1



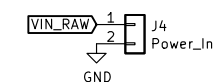
Line Out #2



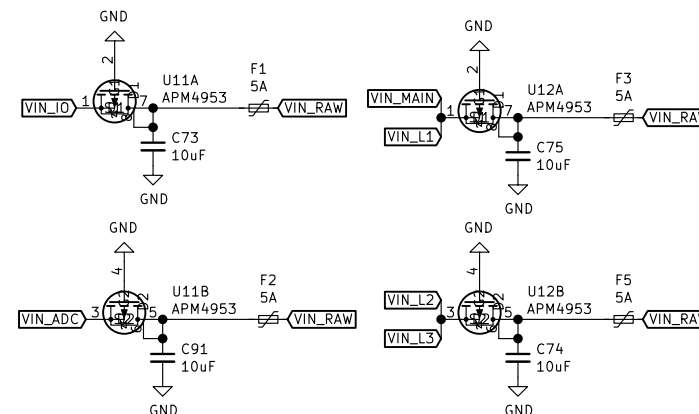
## Line Out #3



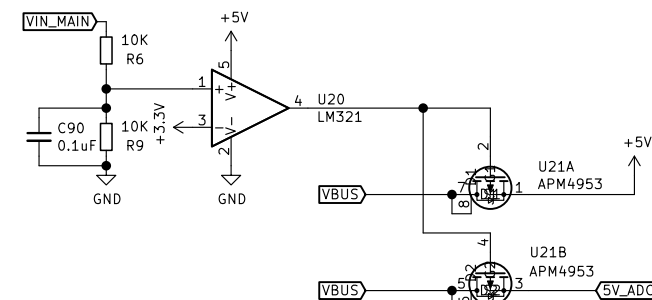
## Power



## Reverse Polarity and Over Current Protection



## Voltage Selection



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Sheet: /Power/

File: Power.sch

**Title:** MaD\_P2

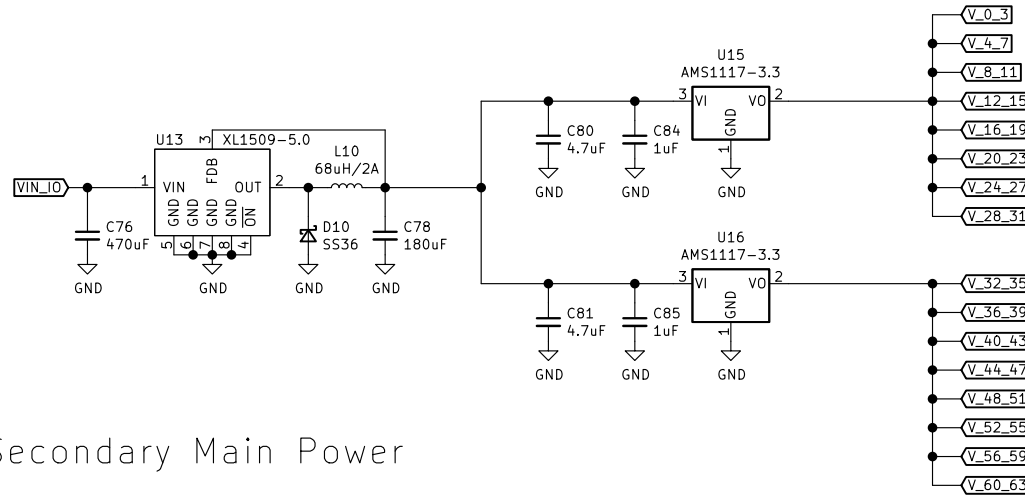
Size: A4	Date: 2021-05-06
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SIZE: A1	DATE: 2021
KiCad E.D.A.	kiCad (5.1.9)-1

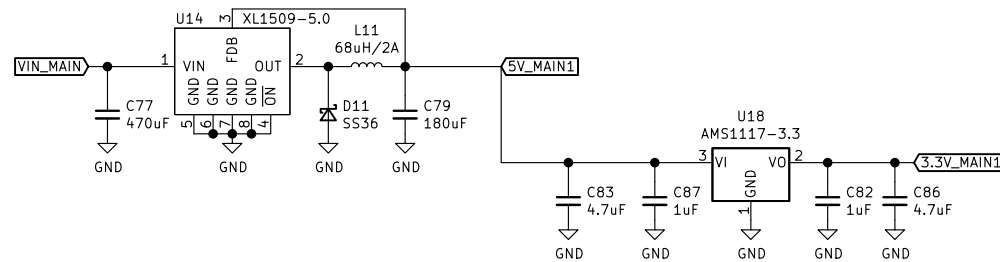
Rev: 1

Id: 2/6

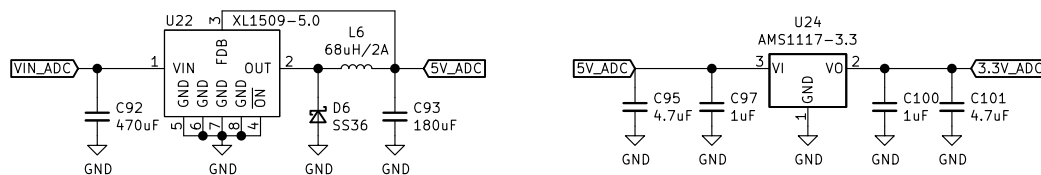
## IO Power



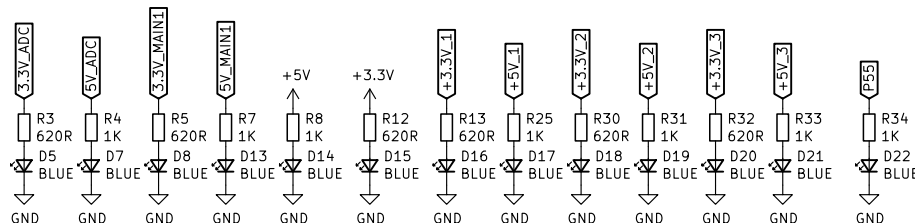
## Secondary Main Power



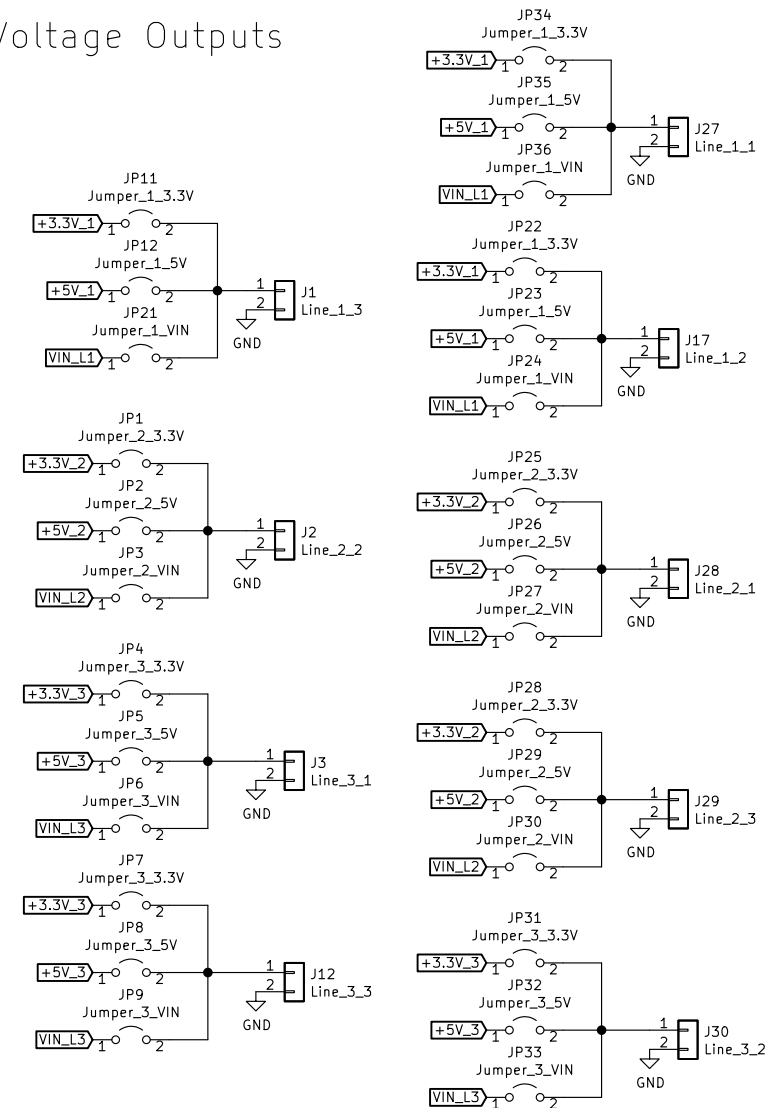
## ADC/DAC Power



## Power Indication LEDs



## Voltage Outputs



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Sheet: /Power2/

File: Power2.sch

Title: **MaD\_P2**

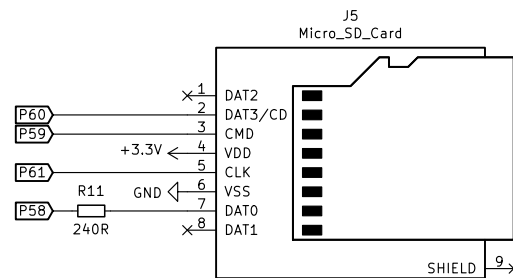
Size: A4 Date: 2021-05-06

KiCad E.D.A. kicad (5.1.9)-1

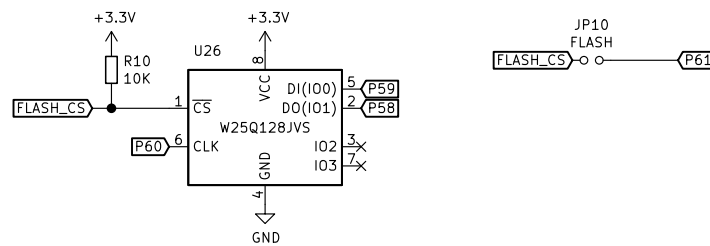
Rev: 1

Id: 3/6

## Boot SD Card



## Optional Boot SPI Flash



Sheet: /Memory/  
File: Memory.sch

### Title:

Size: A4  
KiCad E.D.A. kicad (5.1.9)-1

Date:

Rev:  
Id: 4/6

# Edge Connector

Edge Connector

J6

Edge\_Conn

1 X

2 X

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

P38

P39

V\_32\_35

V\_40\_43

P40

P41

P42

P43

P44

P45

P46

P47

V\_24\_27

V\_48\_51

P48

P49

P50

P51

P52

P53

P54

P55

V\_16\_19

V\_56\_59

P56

P57

P58

P59

P60

P61

P62

P63

V\_8\_11

V\_0\_3

RESET

GND

GND

GND

VIN\_MAIN

VIN\_MAIN

P37

P36

P35

P34

P33

P32

P31

P30

P29

P28

P27

P26

P25

P24

P23

P22

P21

P20

P19

P18

P17

P16

P15

P14

P13

P12

P11

P10

P9

P8

P7

P6

P5

P4

P3

P2

P1

P0

IO Breakout

10 Breakout

P34

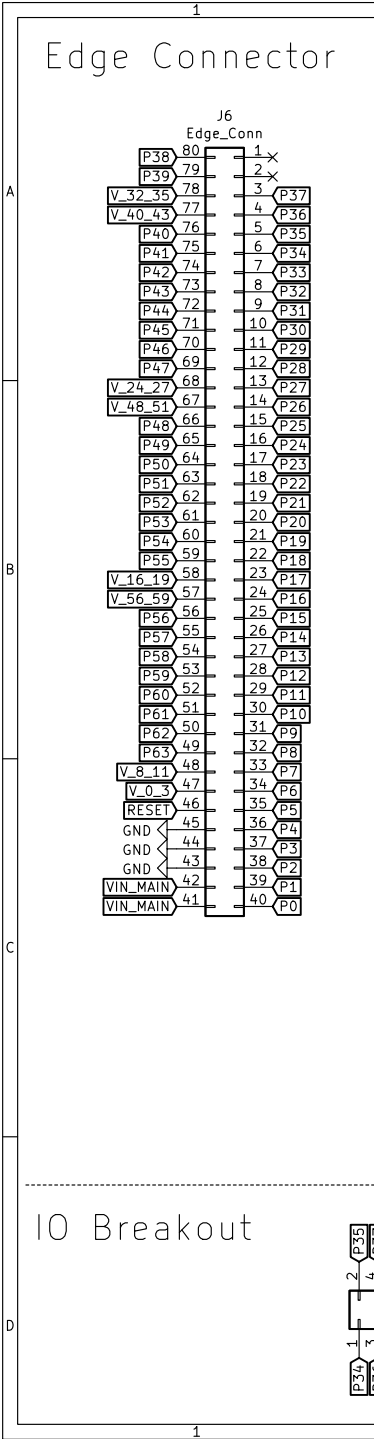
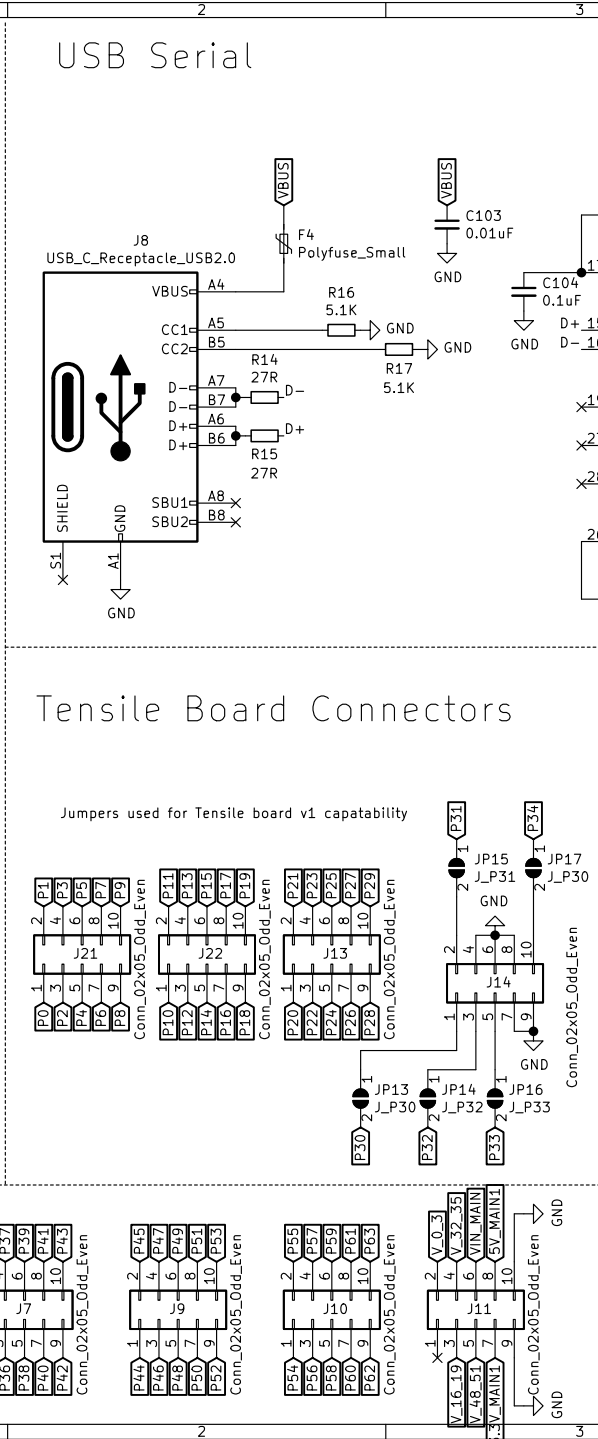
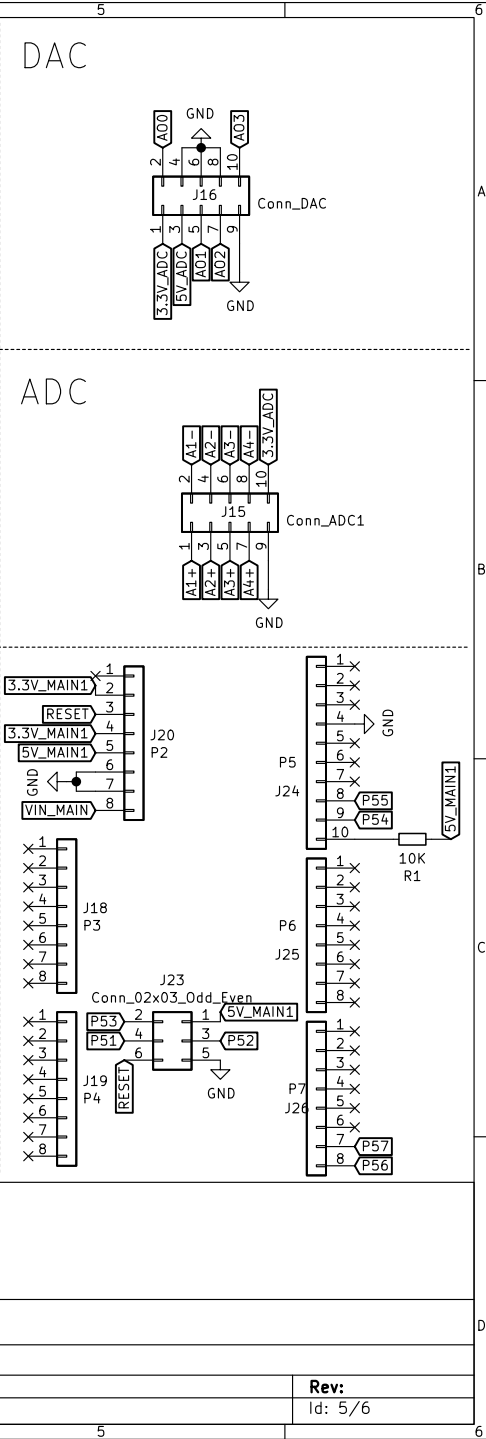
P35

1

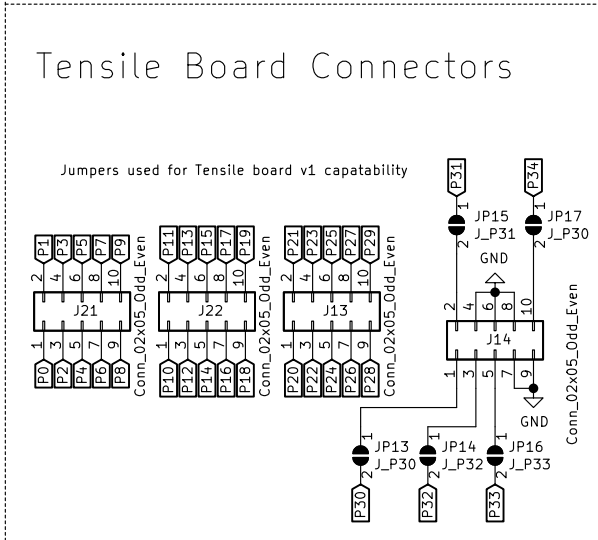
2

3

4

[illegible][illegible]

# Tensile Board Connectors



The image displays two PCB layout diagrams for a Data SD Card, labeled 'Data SD Card' and 'C'.

**Left Diagram (Micro\_SD\_Card\_Connector J31):**

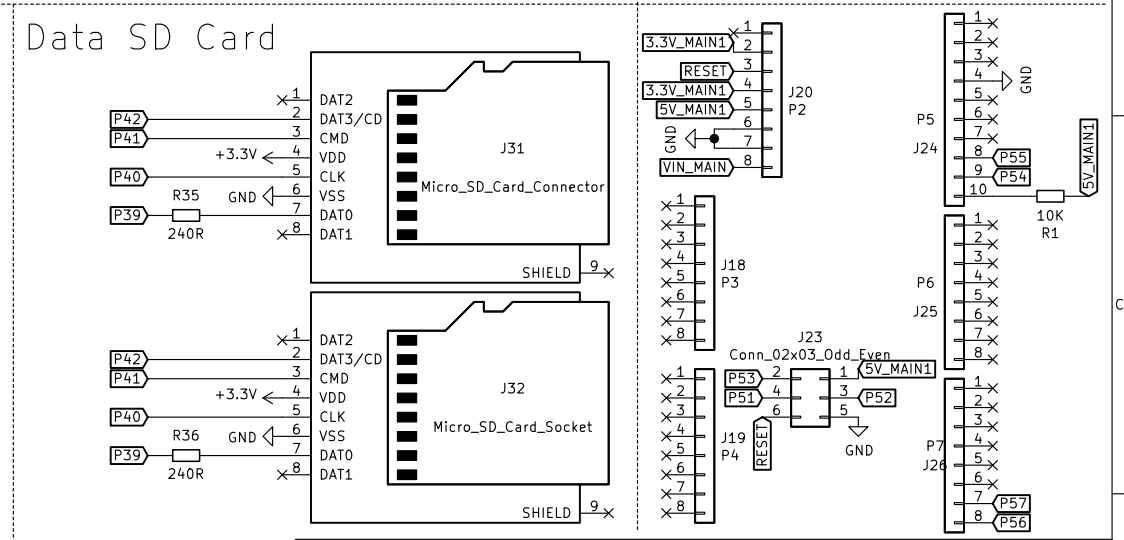
- Pin Headers:**
  - P42: DAT2
  - P41: DAT3/CD
  - P40: CMD
  - P39: VDD
  - R35: 240R
  - GND
  - P39: VSS
  - P39: DAT0
  - P39: DAT1
- Connector J31:** Micro\_SD\_Card\_Connector
- Shield:** SHIELD

**Right Diagram (Micro\_SD\_Card\_Socket J32):**

- Pin Headers:**
  - P42: DAT2
  - P41: DAT3/CD
  - P40: CMD
  - P39: VDD
  - R36: 240R
  - GND
  - P39: VSS
  - P39: DAT0
  - P39: DAT1
- Connector J32:** Micro\_SD\_Card\_Socket
- Shield:** SHIELD

**Other Components and Connections:**

- J18 (P3):** 8-pin header.
- J19 (P4):** 8-pin header.
- J20 (P2):** 8-pin header.
- J23 (Conn\_02x03\_Odd\_Even):** 6-pin header.
- J24 (P5):** 10-pin header.
- J25 (P6):** 8-pin header.
- J26 (P7):** 8-pin header.
- Resistors:** R1 (10K), R35 (240R), R36 (240R).
- Buttons:** RESET (J20), RESET (J19).
- Power:** 3.3V\_MAIN1, 5V\_MAIN1, VIN\_MAIN1.
- Ground:** GND.



IO Breakout

Diagram showing 10 Breakout boards (J7, J9, J10, J11) with their respective pin connections and labels.

**J7:** Conn\_02x05\_Odd\_Even

1	P34
2	P35
3	P36
4	P37
5	P38
6	P39
7	P40
8	P41
9	P42
10	P43

**J9:** Conn\_02x05\_Odd\_Even

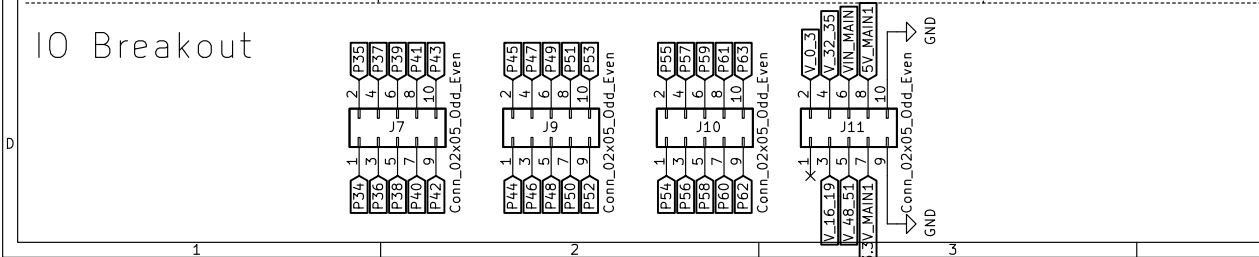
1	P44
2	P45
3	P46
4	P47
5	P48
6	P49
7	P50
8	P51
9	P52
10	P53

**J10:** Conn\_02x05\_Odd\_Even

1	P54
2	P55
3	P56
4	P57
5	P58
6	P59
7	P60
8	P61
9	P62
10	P63

**J11:** Conn\_02x05\_Odd\_Even

1	V16 19
2	V0 3
3	V32 35
4	VIN MAIN1
5	V48 51
6	VIN MAIN1
7	5V MAIN1
8	5V MAIN1
9	
10	



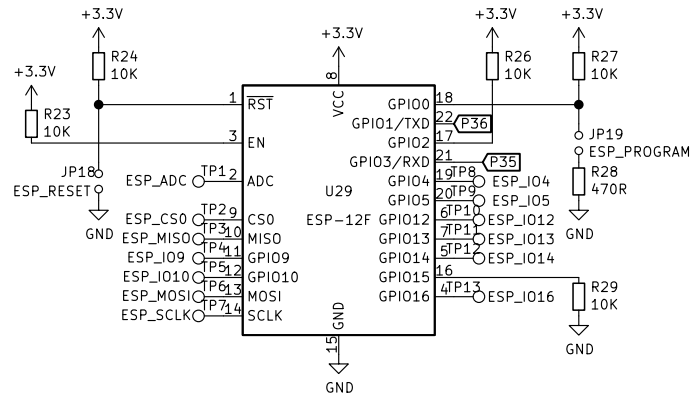
Sheet: /Connections/ File: Connections.sch		
<b>Title:</b>		
Size: A4	Date:	Rev:
KiCad E.D.A.    kicad (5.1.9)–1		Id: 5/6

Sheet: /Connections/ File: Connections.sch		
<b>Title:</b>		
Size: A4	Date:	Rev:
KiCad E.D.A.    kicad (5.1.9)–1		Id: 5/6

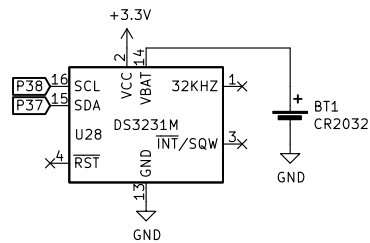
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Size: A4	Date:	Rev:
KiCad E.D.A.    kicad (5.1.9)–1		Id: 5/6

Sheet: /Connections/ File: Connections.sch		
<b>Title:</b>		
Size: A4	Date:	Rev:
KiCad E.D.A.    kicad (5.1.9)–1		Id: 5/6

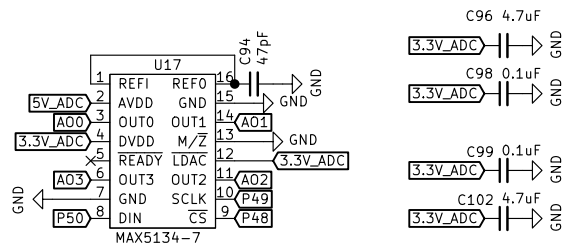
## WIFI



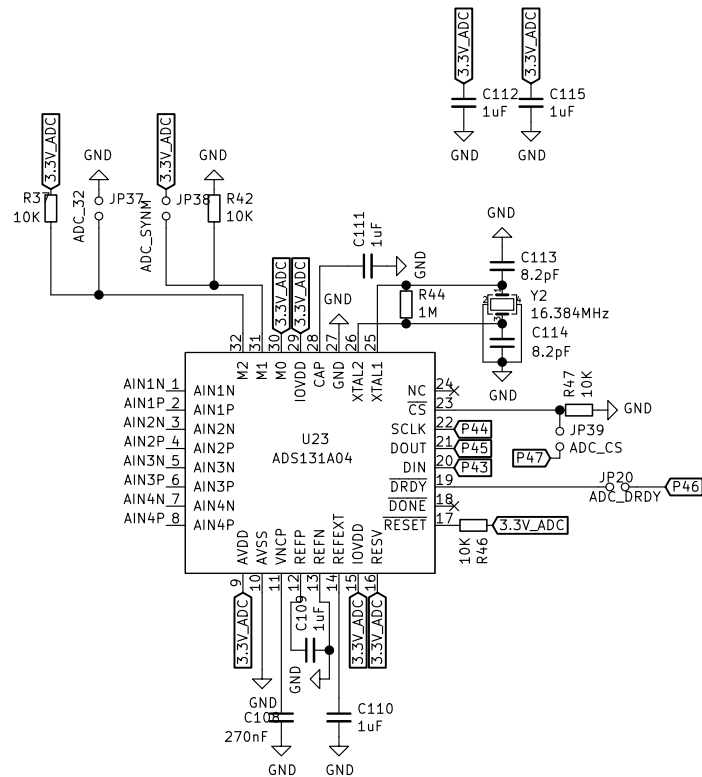
## Real Time Clock



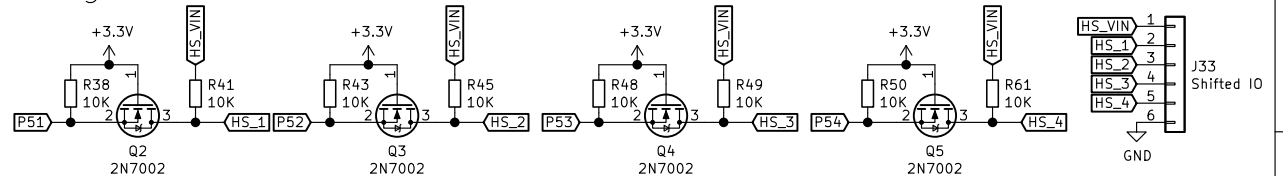
## 16 Bit DAC



24 Bit ADC



Voltage Shifted 10

Sheet: /Peripherals/  
File: Peripherals.sch**Title:**

Size: A4

Date:

Size: A4	Date:
KiCad E.D.A.	kicad (5.1.9)-1

Rev:

Id: 6/6