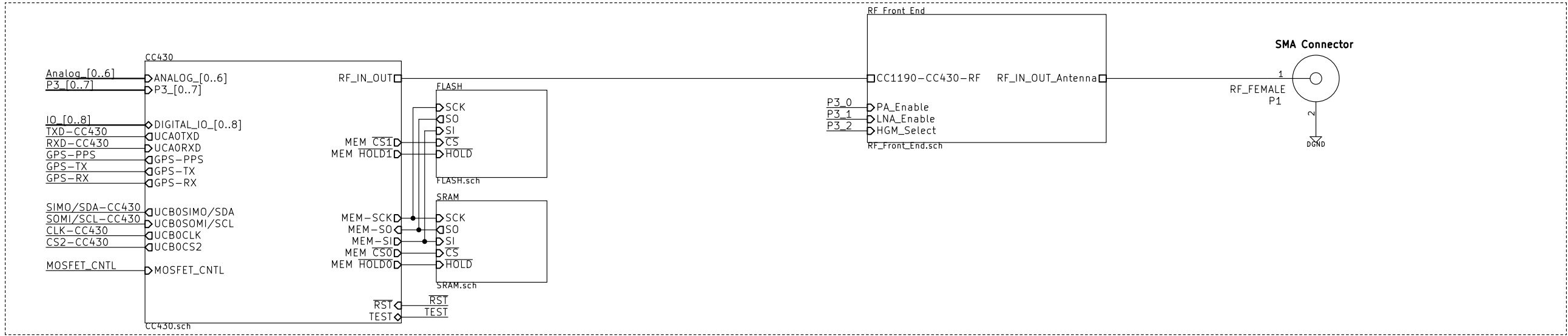
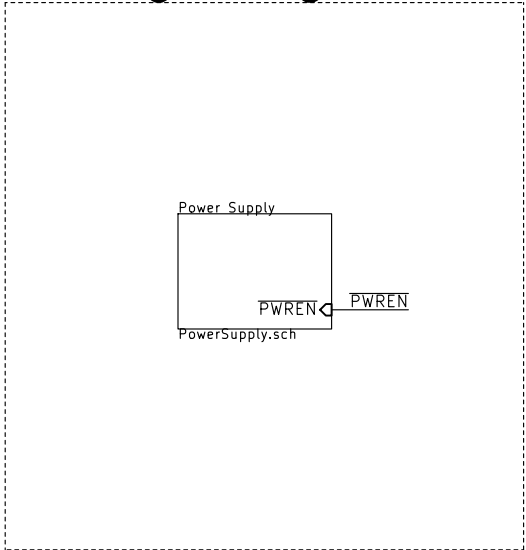


FaradayRF Wireless Module

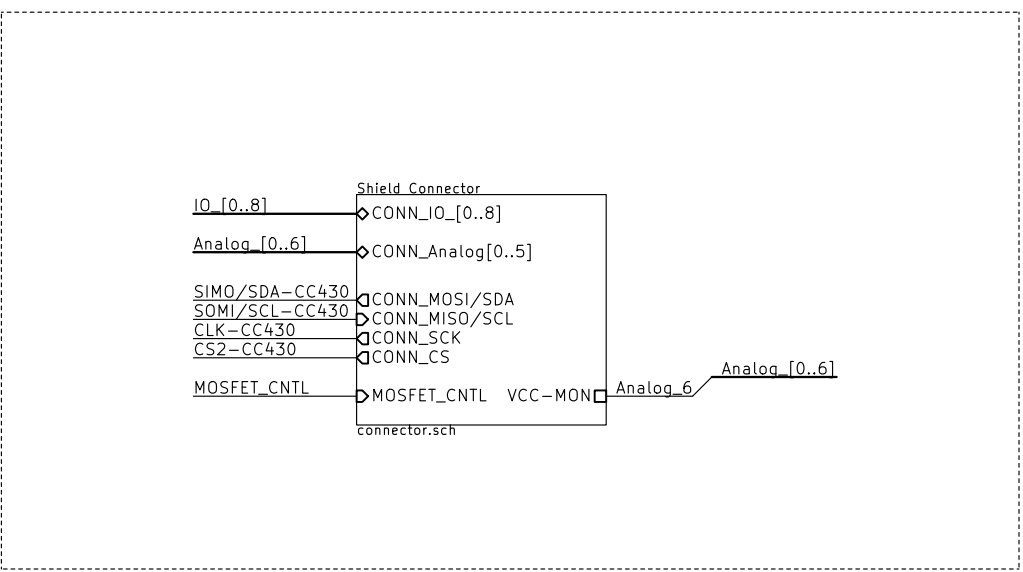
RF & Control Section



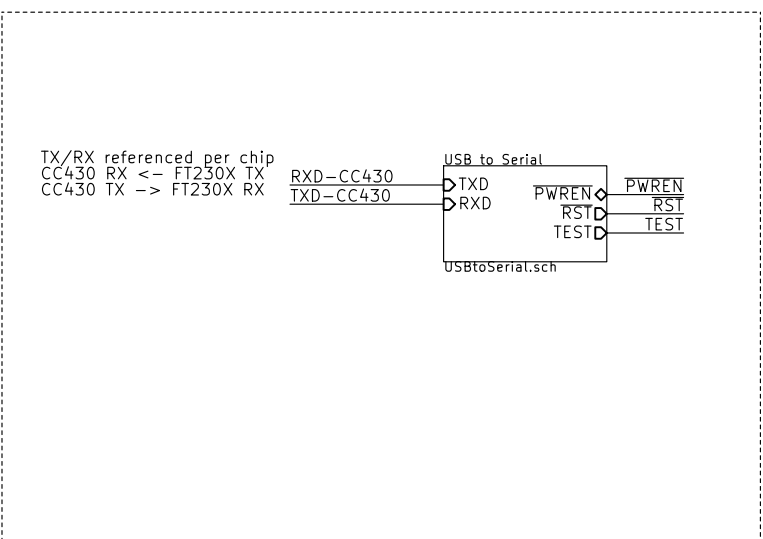
Voltage Regulator



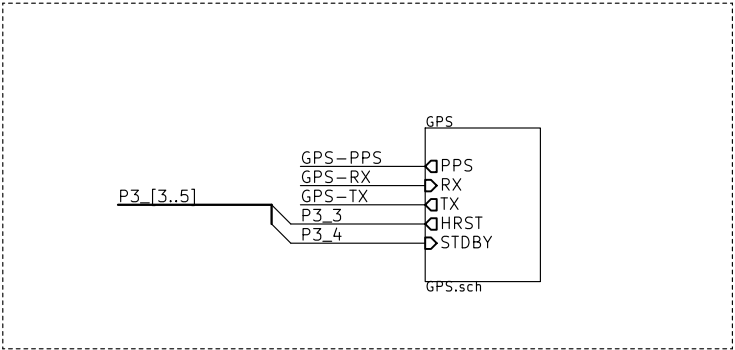
Connectors



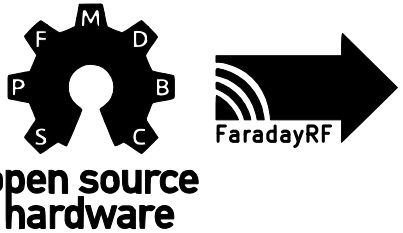
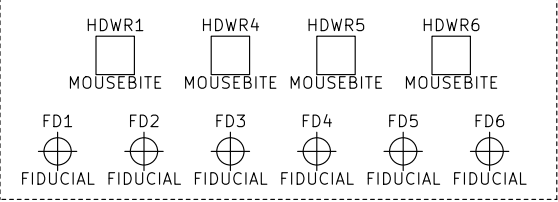
USB <=> UART



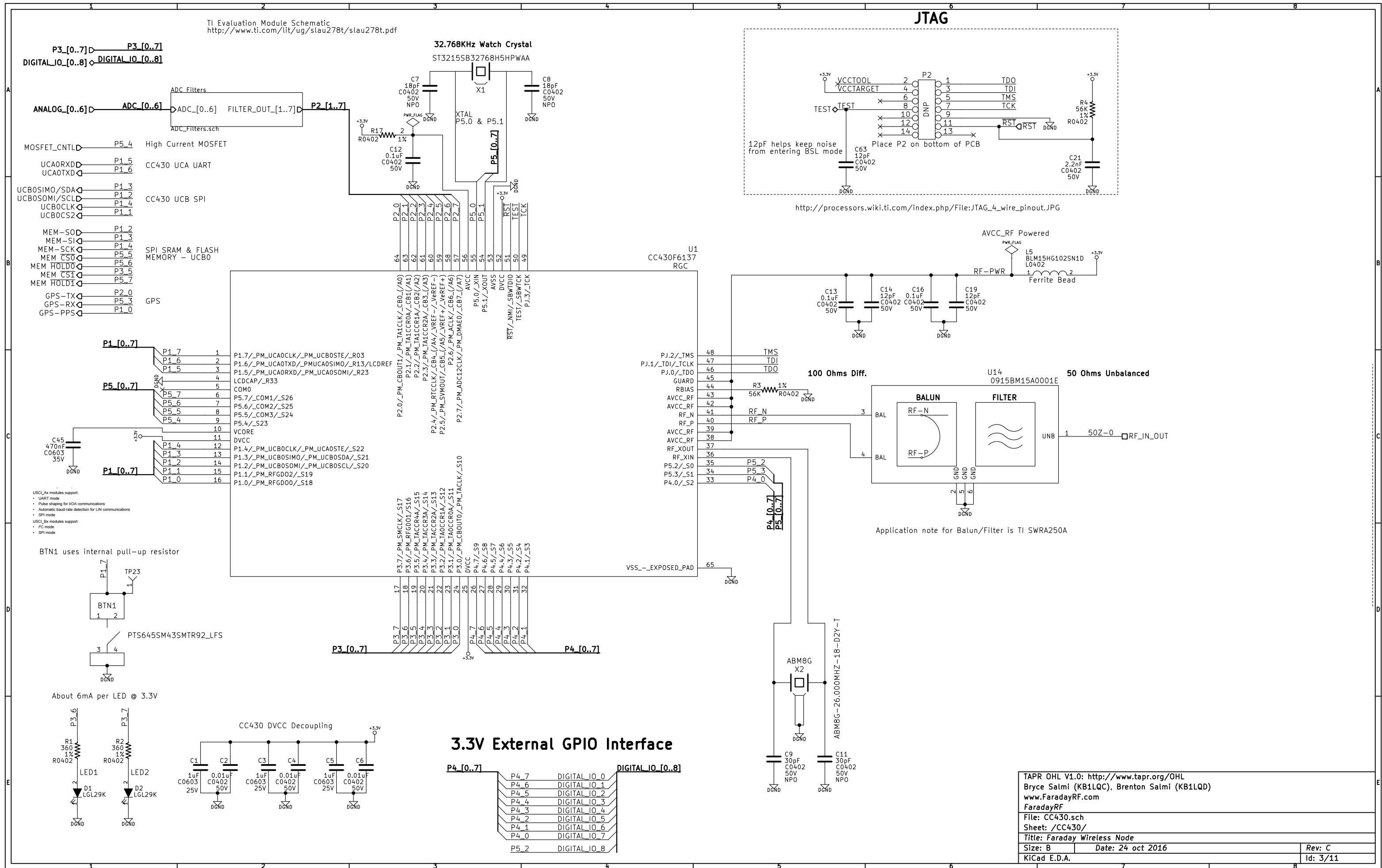
GPS Receiver



Manufacturing

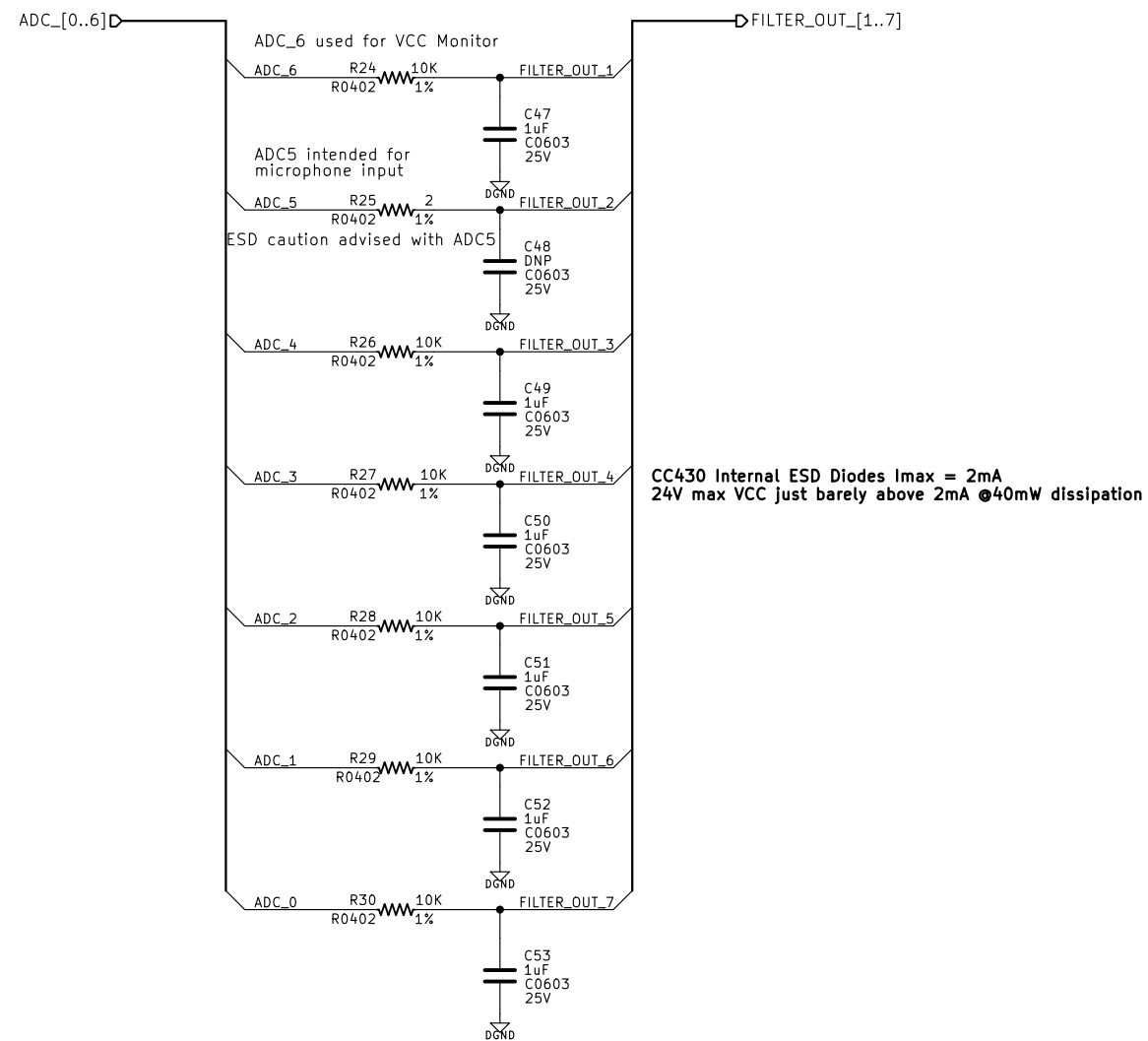


TAPR OHL V1.0: http://www.tapr.org/OHL		
Bryce Salmi (KB1LQC), Brenton Salmi (KB1LQD)		
www.FaradayRF.com		
FaradayRF		
File: Faraday.sch		
Sheet: /		
Title: Faraday Wireless Node		
Size: B	Date: 24 oct 2016	Rev: C
KiCad E.D.A.		Id: 1/11

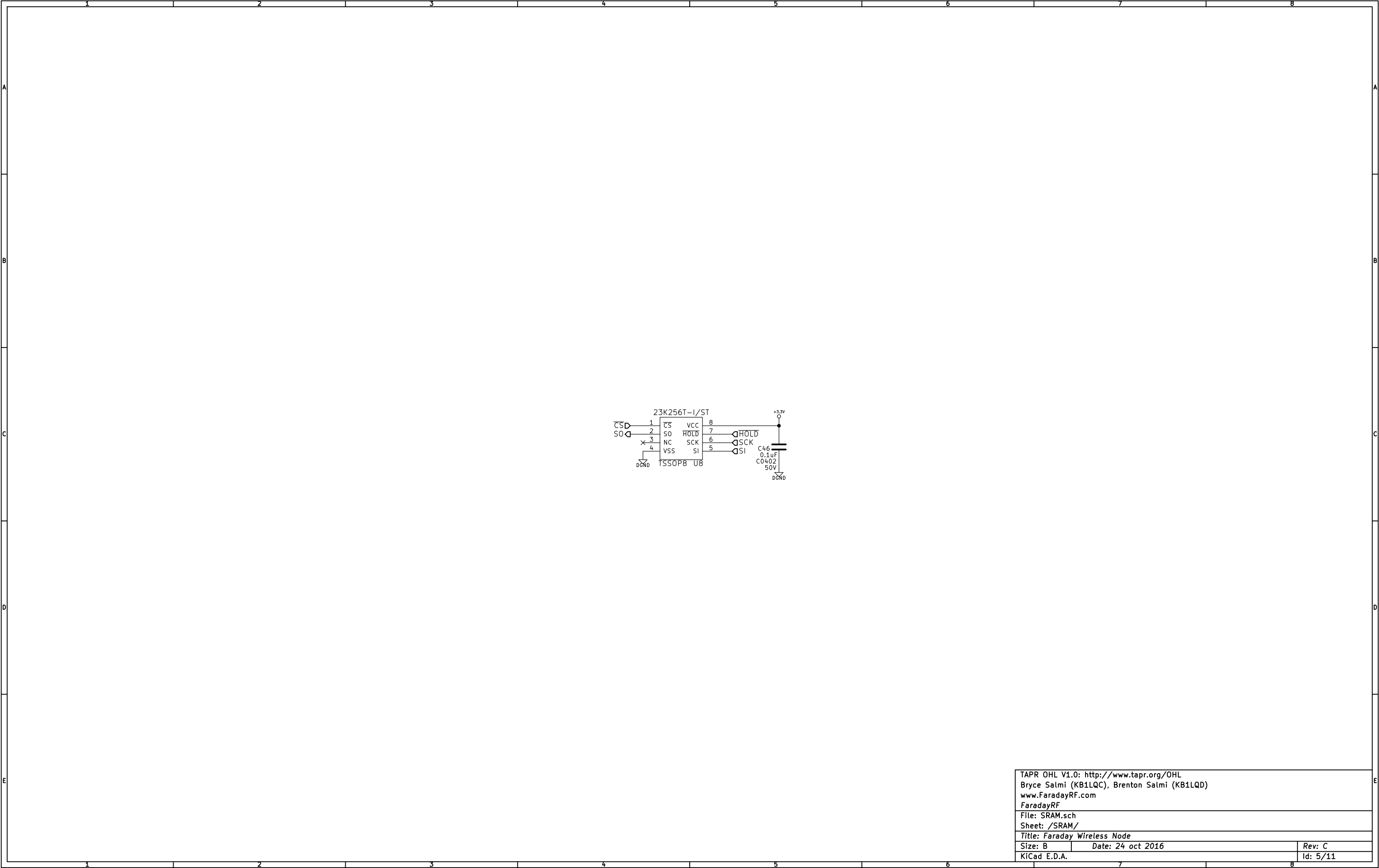


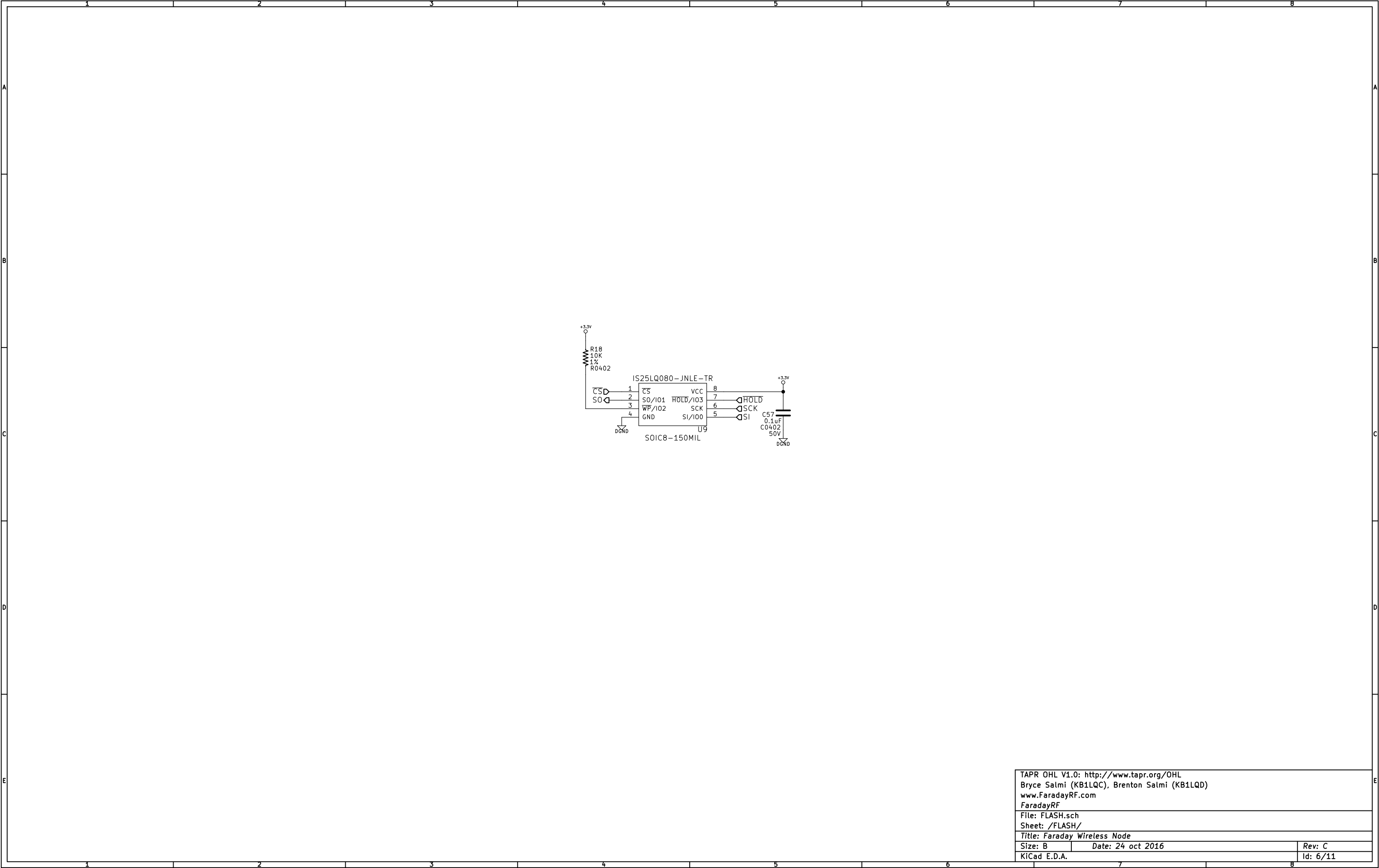
Filter channels flipped for routing!

```
ADC_6 = P2.1
ADC_5 = P2.2
ADC_4 = P2.3
ADC_3 = P2.4
ADC_2 = P2.5
ADC_1 = P2.6
ADC_0 = P2.7
```

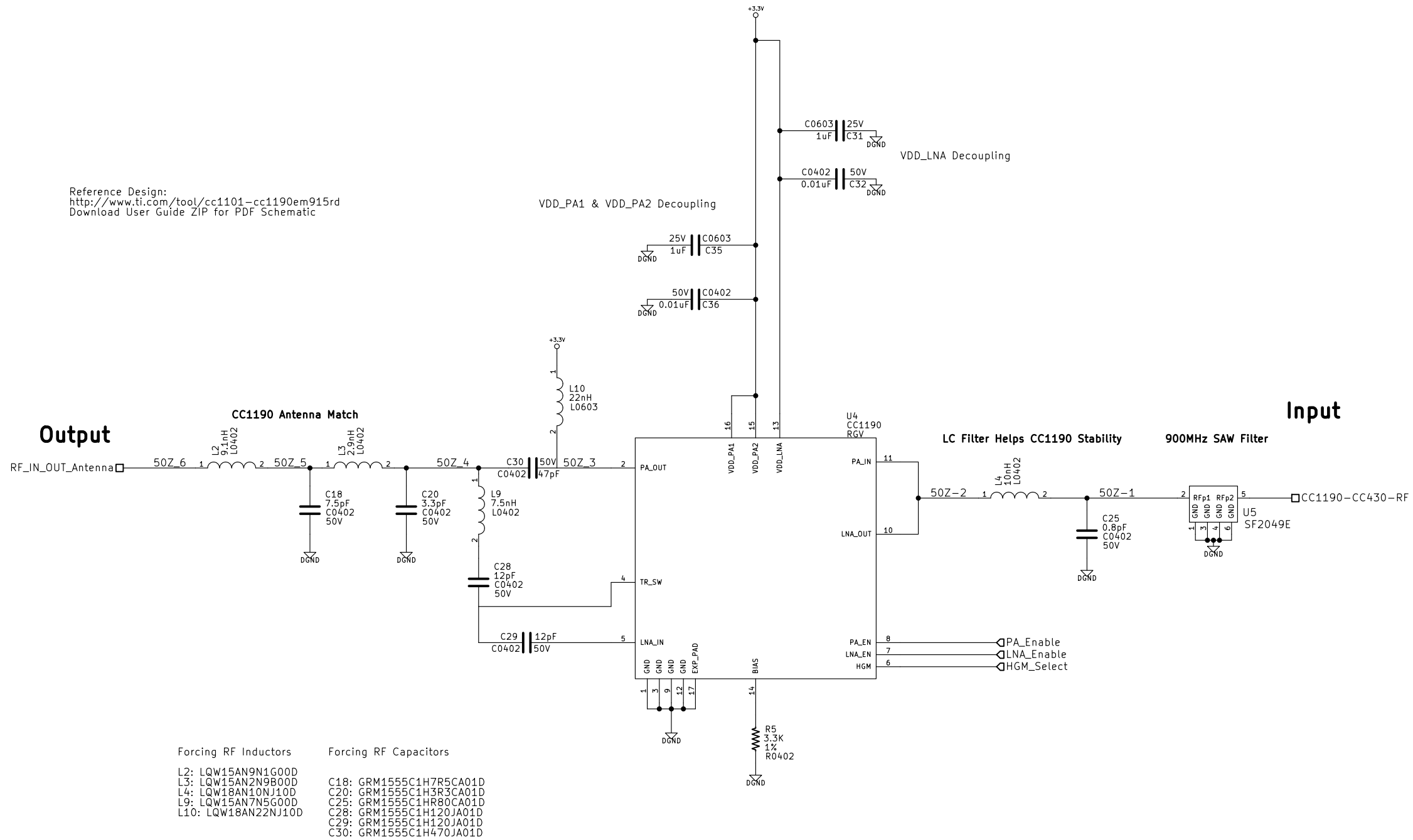


TAPR OHL V1.0: http://www.tapr.org/OHL	
Bryce Salmi (KB1LQC), Brenton Salmi (KB1LQD)	
www.FaradayRF.com	
FaradayRF	
File: ADC_Filters.sch	
Sheet: /CC430/ADC Filters/	
Title: Faraday Wireless Node	
Size: B	Date: 24 oct 2016
KiCad E.D.A.	Id: 4/11





Reference Design:
<http://www.ti.com/tool/cc1101-cc1190em915rd>
Download User Guide ZIP for PDF Schematic



TAPR OHL V1.0: <http://www.tapr.org/OHL>
Bryce Salmi (KB1LQC), Brenton Salmi (KB1LQD)
www.FaradayRF.com
FaradayRF

File: RF_Front_End.sch
Sheet: /RF Front End/

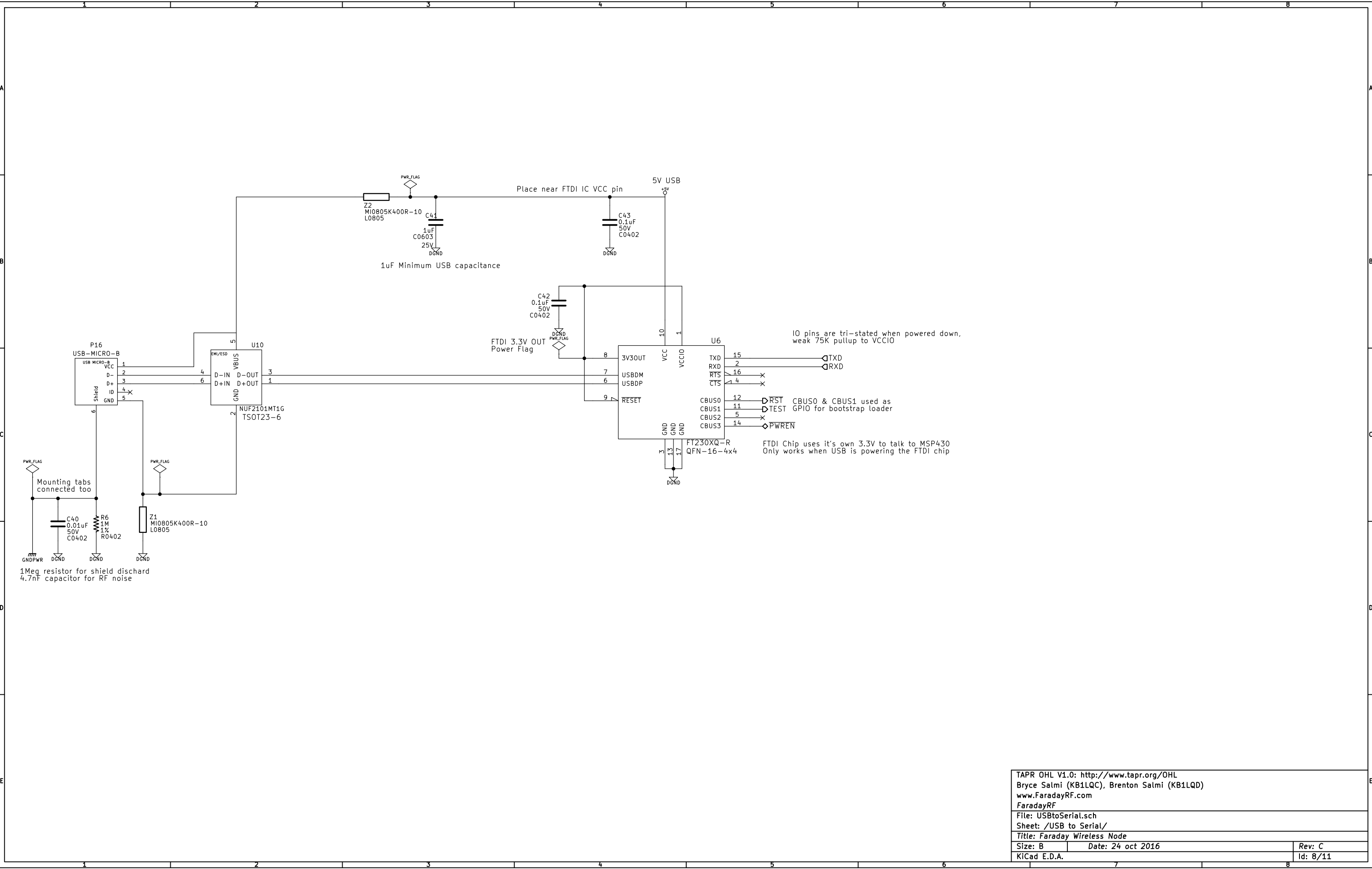
Title: Faraday Wireless Node

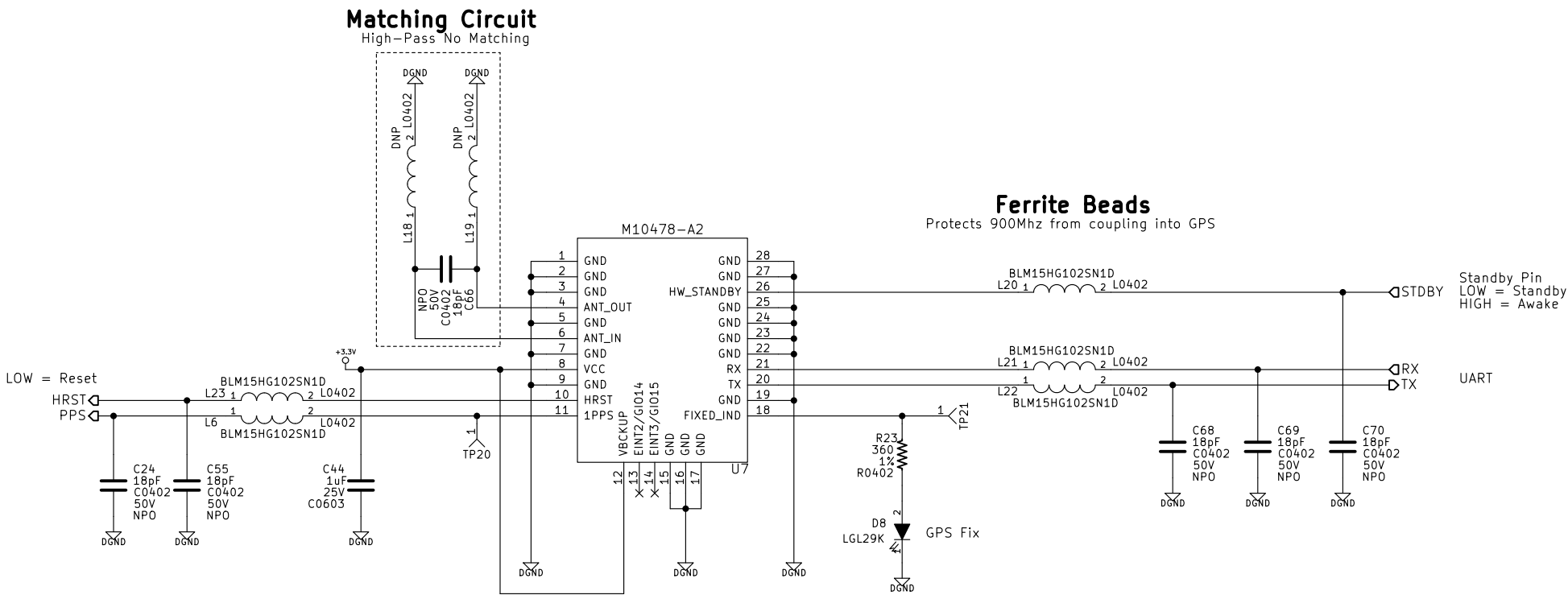
Size: B Date: 24 oct 2016

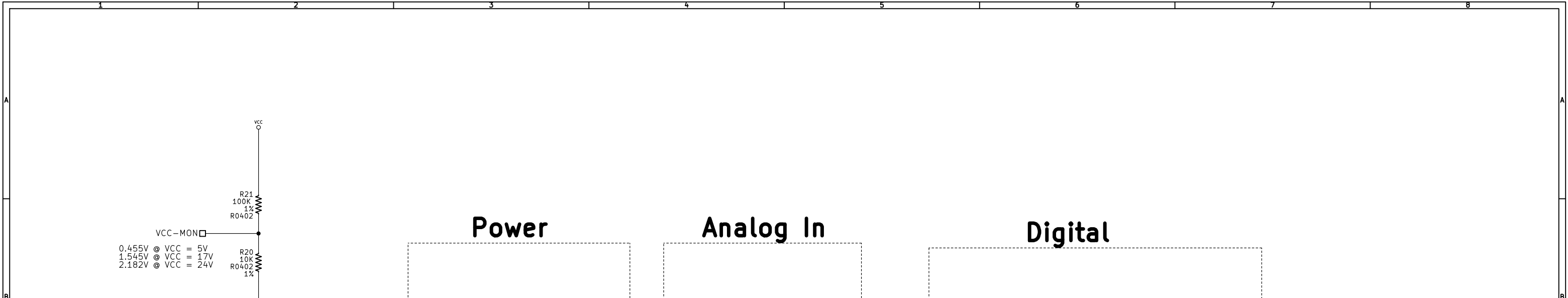
KiCad E.D.A.

Rev: C

Id: 7/11







The image contains three wiring diagrams for the CC430 UCB module, each showing connections to an Arduino Shield Connector.

Diagram 1 (Left): Shows the connection of the module's pins to the Arduino Shield Connector. The module's pins are labeled 1 through 8. The Arduino Shield Connector pins are labeled 1 through 8. The connections are as follows:

- Module Pin 1 to Shield Pin 1
- Module Pin 2 to Shield Pin 2
- Module Pin 3 to Shield Pin 3
- Module Pin 4 to Shield Pin 4
- Module Pin 5 to Shield Pin 5
- Module Pin 6 to Shield Pin 6
- Module Pin 7 to Shield Pin 7
- Module Pin 8 to Shield Pin 8

Diagram 2 (Middle): Shows the connection of the module's pins to the Arduino Shield Connector. The module's pins are labeled 1 through 8. The Arduino Shield Connector pins are labeled 1 through 8. The connections are as follows:

- Module Pin 1 to Shield Pin 1
- Module Pin 2 to Shield Pin 2
- Module Pin 3 to Shield Pin 3
- Module Pin 4 to Shield Pin 4
- Module Pin 5 to Shield Pin 5
- Module Pin 6 to Shield Pin 6
- Module Pin 7 to Shield Pin 7
- Module Pin 8 to Shield Pin 8

Diagram 3 (Right): Shows the connection of the module's pins to the Arduino Shield Connector. The module's pins are labeled 1 through 8. The Arduino Shield Connector pins are labeled 1 through 8. The connections are as follows:

- Module Pin 1 to Shield Pin 1
- Module Pin 2 to Shield Pin 2
- Module Pin 3 to Shield Pin 3
- Module Pin 4 to Shield Pin 4
- Module Pin 5 to Shield Pin 5
- Module Pin 6 to Shield Pin 6
- Module Pin 7 to Shield Pin 7
- Module Pin 8 to Shield Pin 8



CONN_IO_[0..8]

IO_[0..8]

CONN_Analog[0..5]

AD_[0..5]

CONN_MOSI/SDA

MOSI/SDA

CONN_MISO/SCL

MISO/SCL

CONN_SCK

SCK

CONN_CS

CS2

MOSFET_CNTL

MOSFET_CNTL

Ext. Power/MOSFET

P3

2

MOSFET_IN

VCC

1

0022232021

P4

2

PWR_FLAG

VCC

1

D0ND

0022232021

Ground is driven

MOSFET Channel

IN

MOSFET_IN

MOSFET_CNTL

MOSFET_CNTL

MOSFET.sch

TAPR OHL V1.0: <http://www.tapr.org/OHL>
Bryce Salmi (KB1LQC), Brenton Salmi (KB1LQD)
www.FaradayRF.com
FaradayRF

File: connector.sch
Sheet: /Shield Connector/
Title: Faraday Wireless Node

Size: BDate: 24 oct 2016Rev: C

KiCad E.D.A.Id: 10/11

