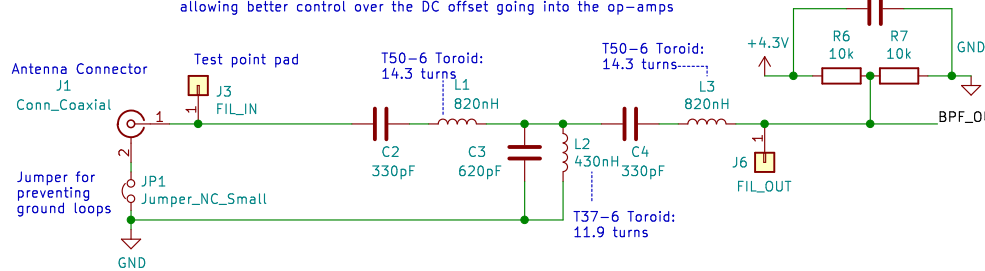


Toroid Info:  
T37-6: 3nH per turns\*2  
T50-6: 4nH per turns\*2  
See datasheet for more info

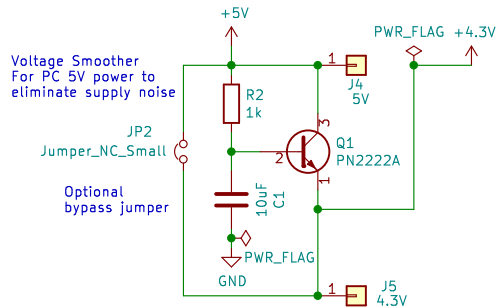
### Bandpass Filter

6-16MHz (3rd Order, Series-First Butterworth)  
By doing Series-First, DC signals cannot pass through the capacitor (C2), allowing better control over the DC offset going into the op-amps

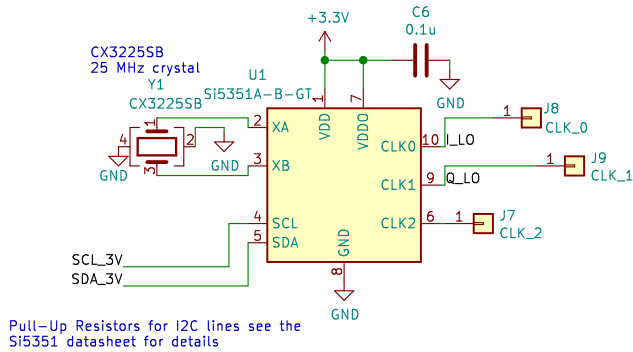


### Voltage Smoother

To smooth 5V power supply from USB which may contain noise

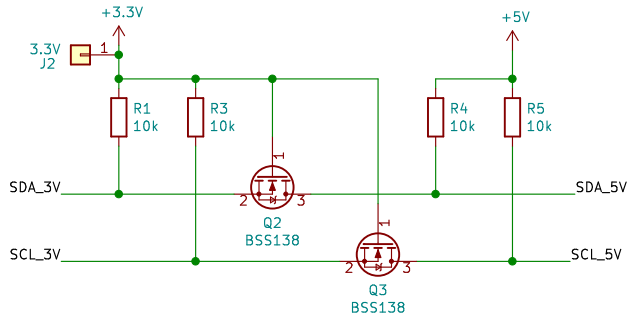


### Local Oscillator (Si5351a)

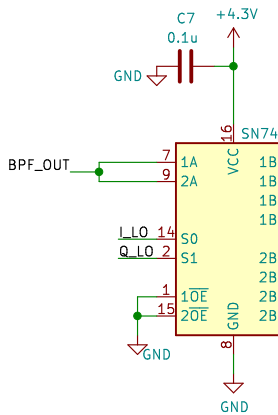


### 5V to 3.3V Converter

This is used to convert the 5V logic of the arduino nano to the 3.3V logic of the Si5351a both directions.

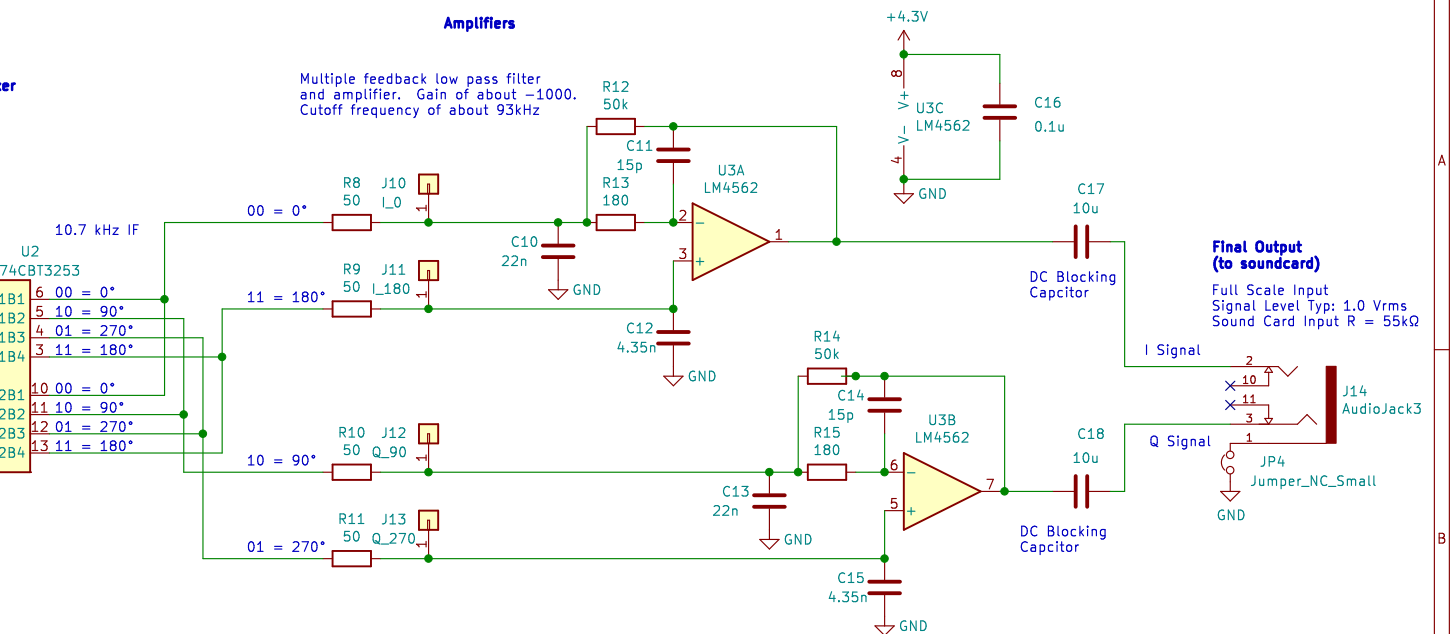


### Taylor Mixer

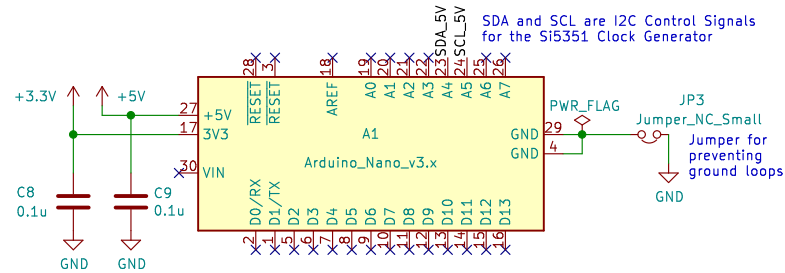


### Amplifiers

Multiple feedback low pass filter and amplifier. Gain of about -1000. Cutoff frequency of about 93kHz



### Arduino Nano



ENGR 357

Author: Caleb Nelson  
**Walla Walla University**  
Sheet: /  
File: SDRReciever.sch

**Title: SDR Reciever**

Size: A3 Date: 2021-04-28  
KiCad E.D.A. eeschema (5.0.2)-1

Rev: 0.3  
Id: 1/1