

Sheet: Filters

File: filters.sch

Sheet: IF Amplifier

File: if-amplifier.sch

Sheet: AF Amplifier

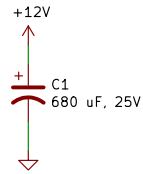
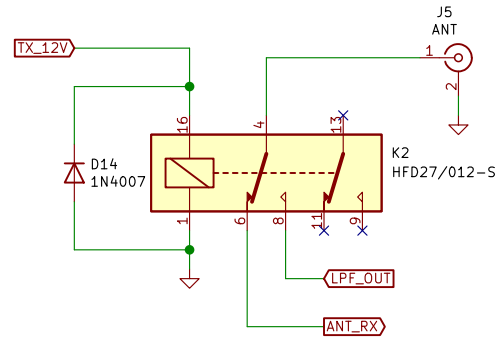
File: af-amplifier.sch

Sheet: Microphone Input

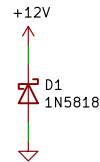
File: microphone-input.sch

Sheet: Power Amplifier

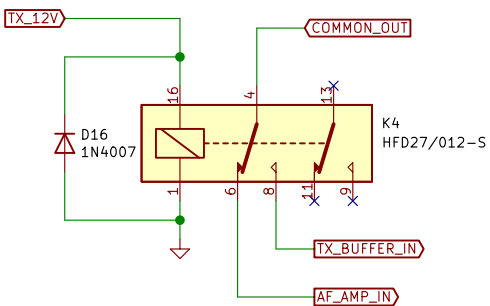
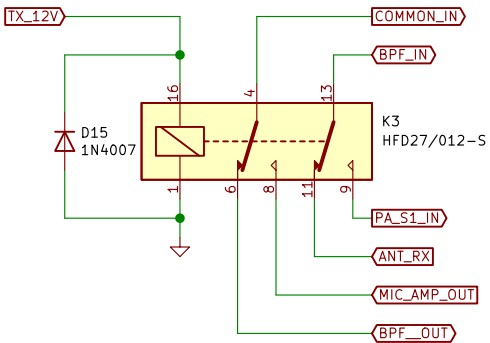
File: power-amplifier.sch



Some power supplies go into short circuit protection when the rig switches from RX to TX, which reboots the MCU. This capacitor prevents this from happening.



Simple reverse-polarity protection. Use with an external 2A fuse.



Sheet: /  
File: ssb-transceiver.sch

**Title: R2AUK TRX MK2 :::** <https://eax.me/ssb-transceiver/>

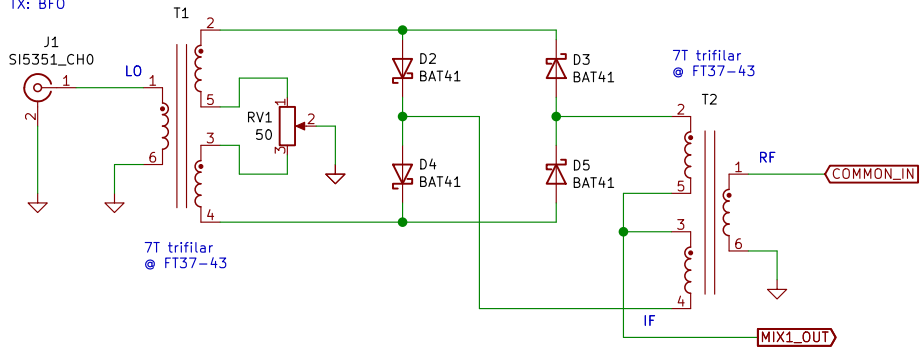
Size: A4 Date: 2021-01-22

KiCad E.D.A. kicad (5.1.6-0-10\_14)

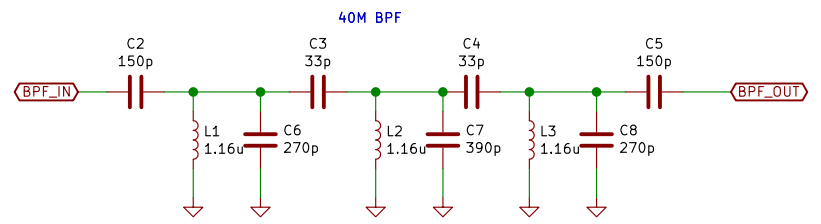
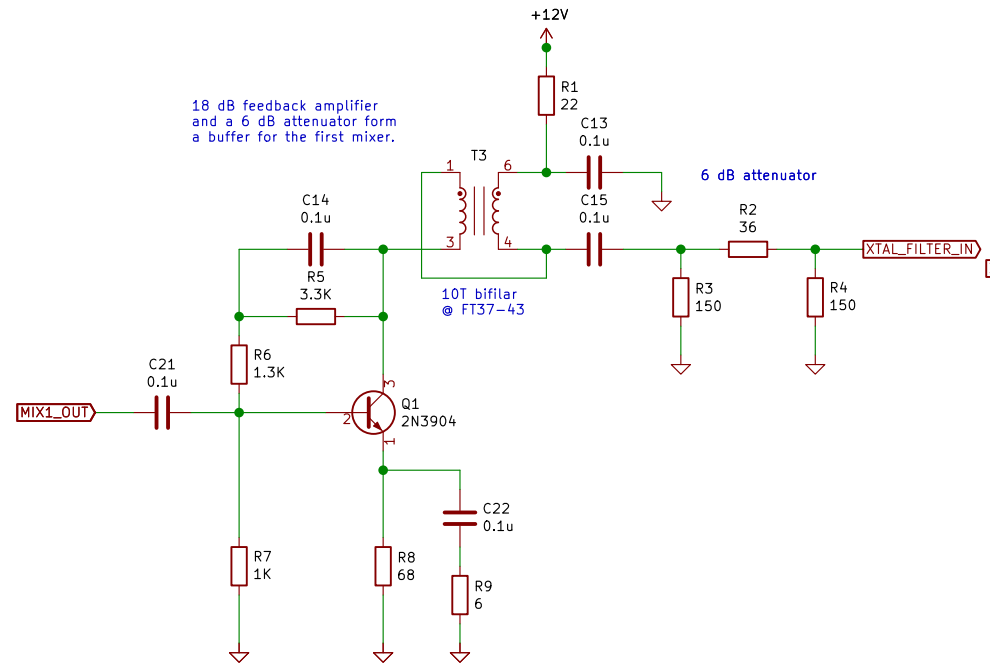
Rev:

Id: 1/6

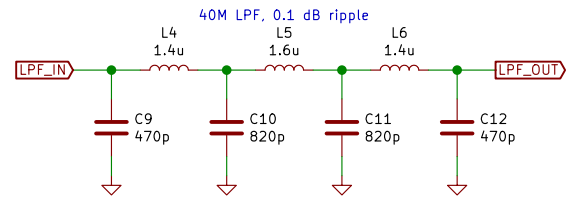
RX: VFO  
TX: BFO



18 dB feedback amplifier  
and a 6 dB attenuator form  
a buffer for the first mixer.

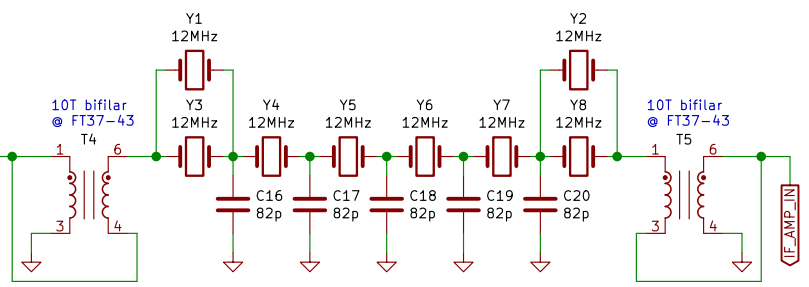


1.16u = 16T @ T50-6

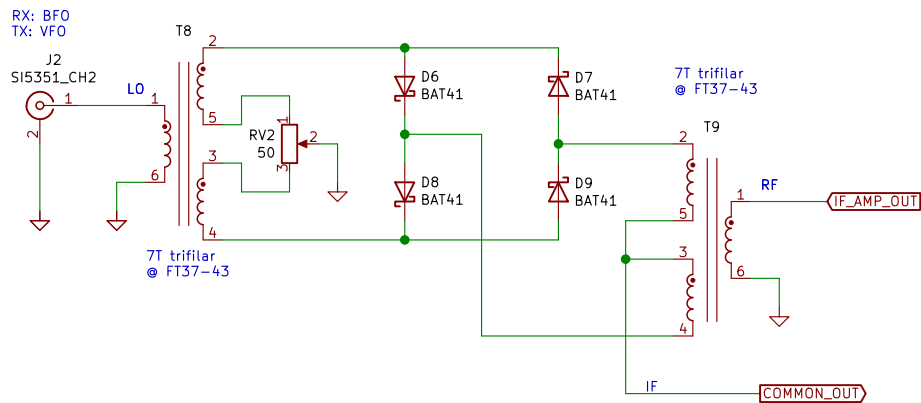
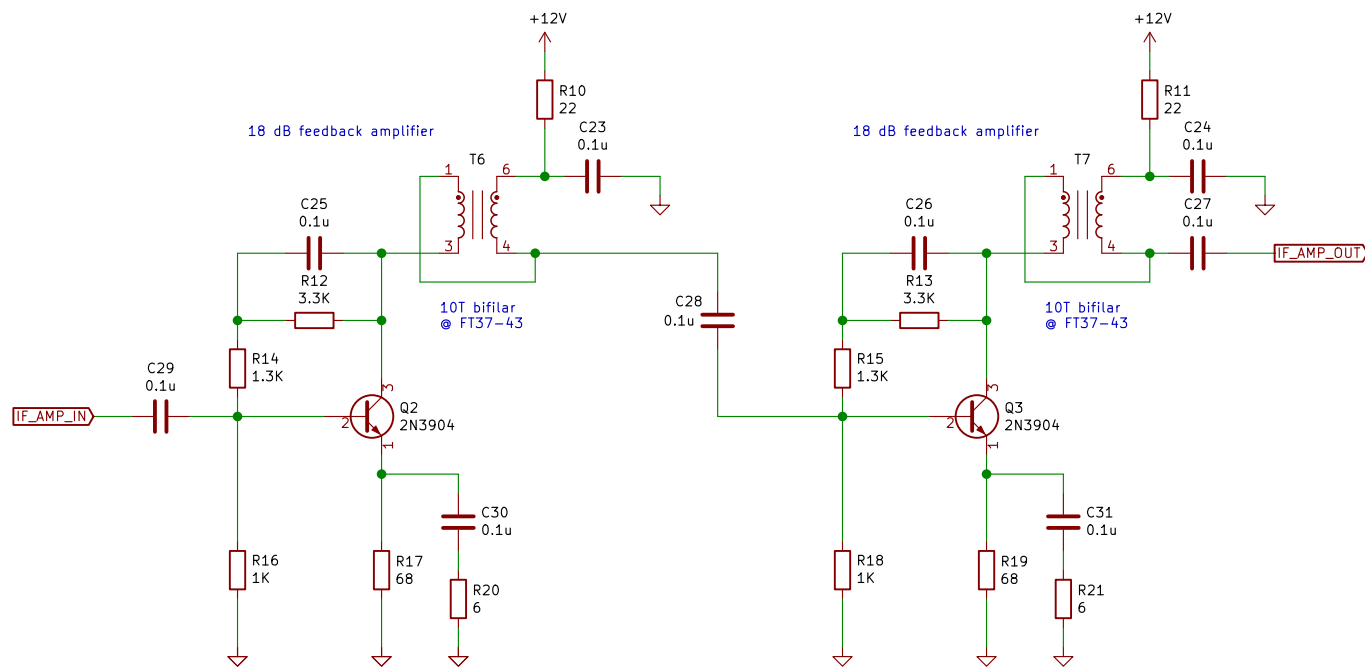


1.4u = 18T @ T50-6  
1.6u = 20T @ T50-6

2150 Hz QER Filter, 200 Ohm impedance.  
Xtals can be replaced to 11.059 Mhz ones.  
This will narrow the passband of the filter  
to 2000 Hz and change the IF frequency.  
Otherwise the filter will work about the same way.



Sheet: /Filters/ File: filters.sch	
<b>Title: R2AUK TRX MK2 :::</b> <a href="https://eax.me/ssb-transceiver/">https://eax.me/ssb-transceiver/</a>	
Size: A4	Date: 2021-01-22
KiCad E.D.A. kicad (5.1.6-0-10_14)	Rev: Id: 2/6



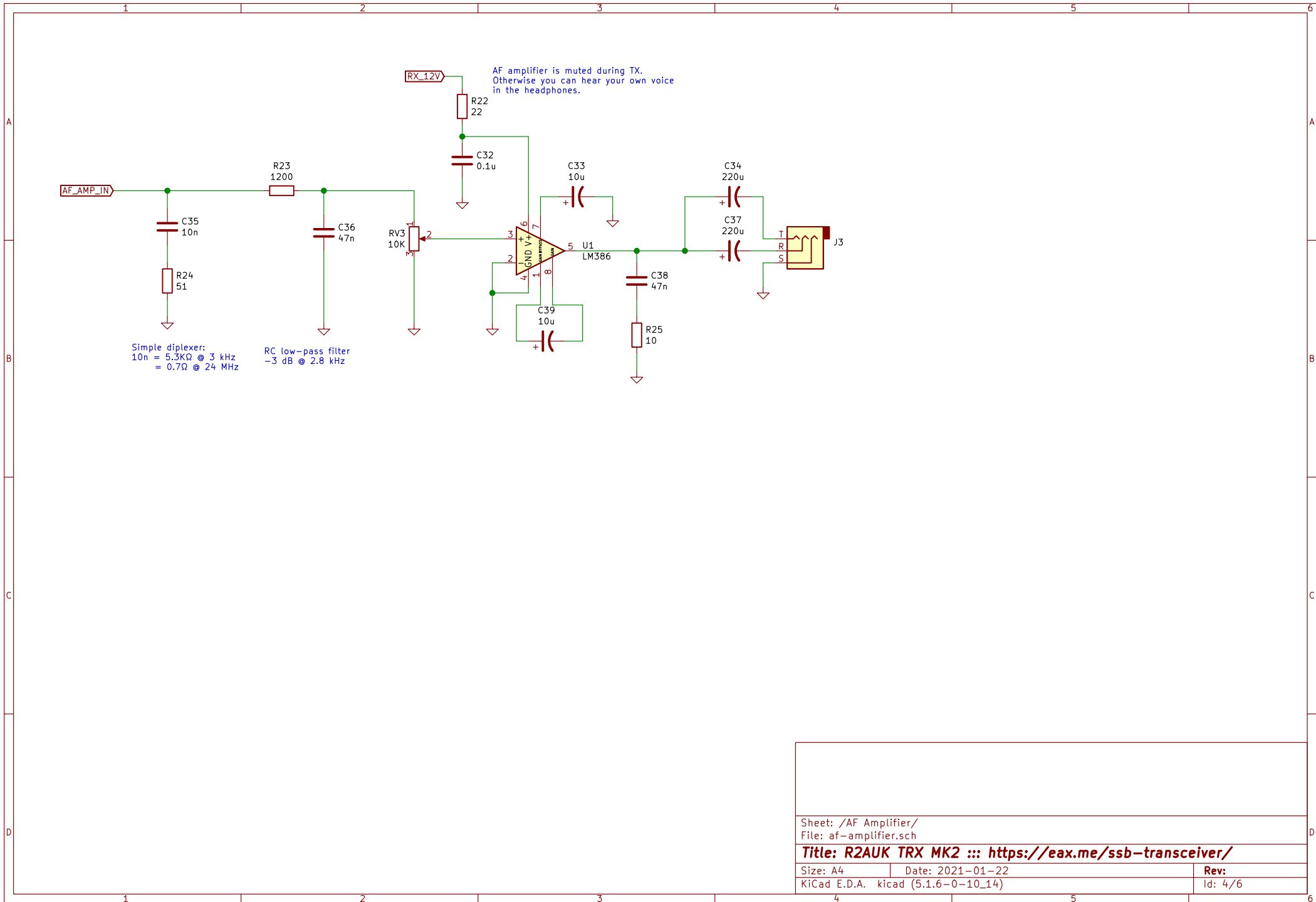
Sheet: /IF Amplifier/  
 File: if-amplifier.sch

**Title: R2AUK TRX MK2 :::** <https://eax.me/ssb-transceiver/>

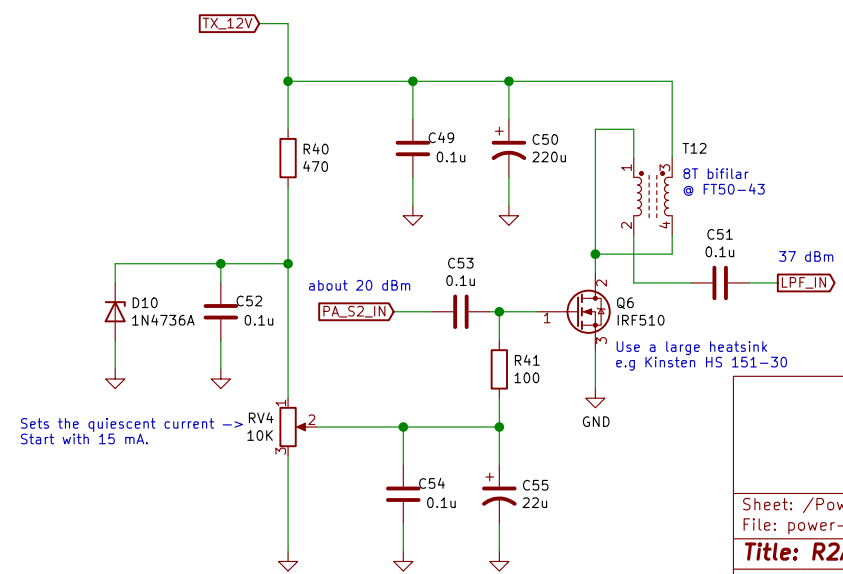
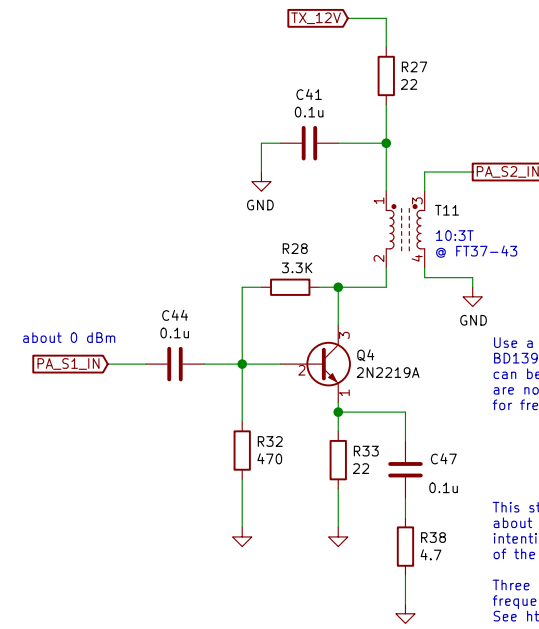
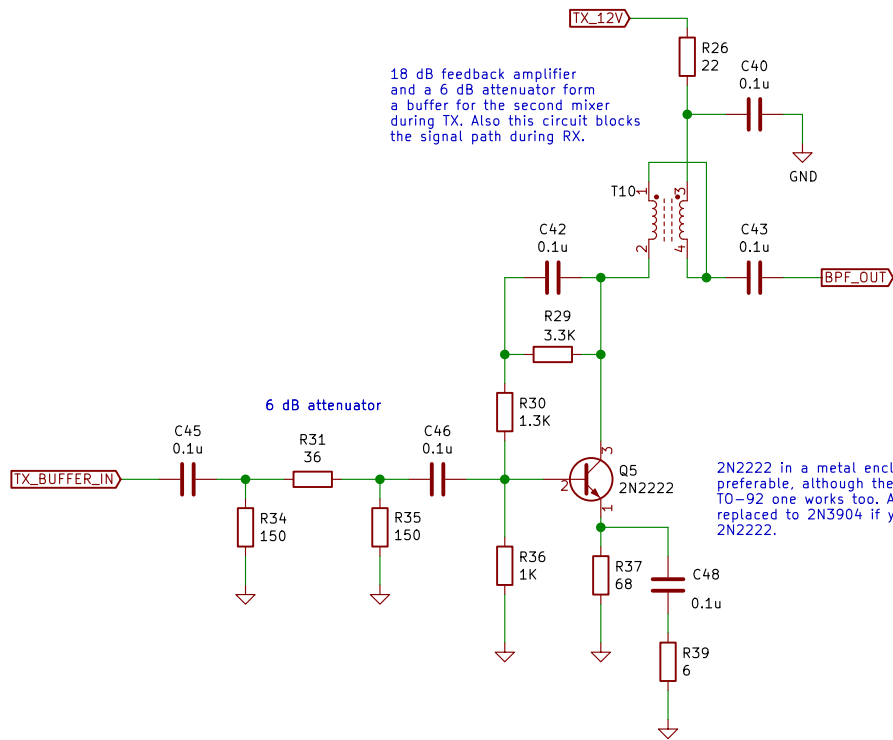
Size: A4 Date: 2021-01-22

KiCad E.D.A. kicad (5.1.6-0-10\_14)

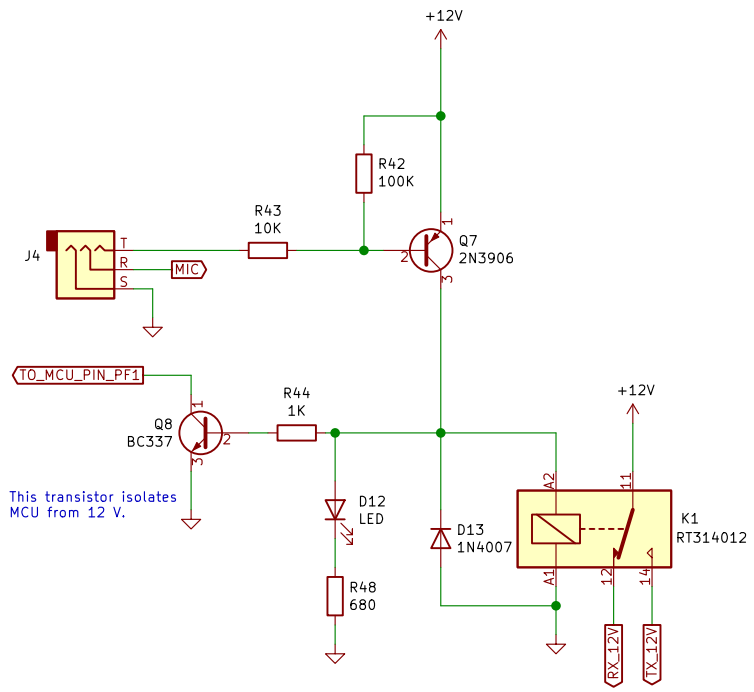
Rev:  
 Id: 3/6



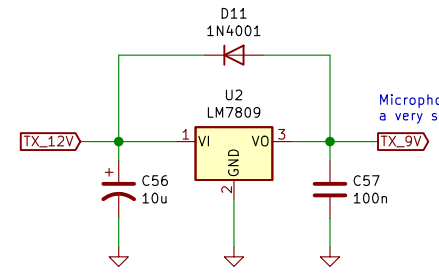
Sheet: /AF Amplifier/		
File: af-amplifier.sch		
<b>Title: R2AUK TRX MK2 :::</b> <a href="https://eax.me/ssb-transceiver/">https://eax.me/ssb-transceiver/</a>		
Size: A4	Date: 2021-01-22	Rev:
KiCad E.D.A. kicad (5.1.6-0-10_14)		Id: 4/6



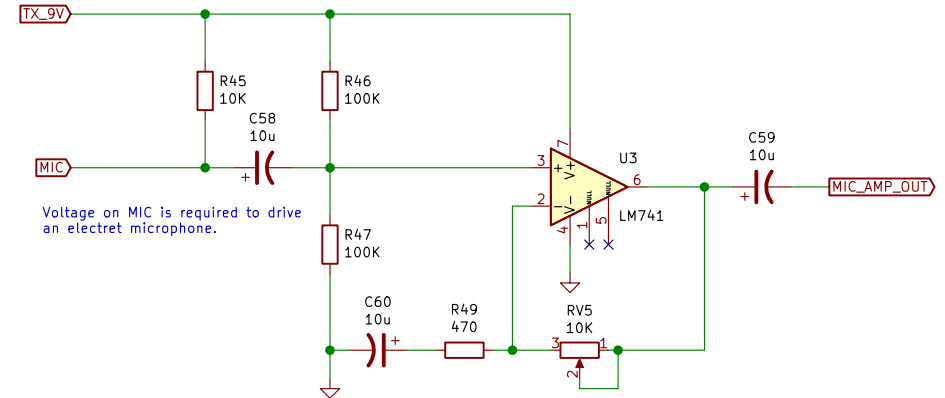
Sheet: /Power Amplifier/		File: power-amplifier.sch	
<b>Title: R2AUK TRX MK2 :: <a href="https://eax.me/ssb-transceiver/">https://eax.me/ssb-transceiver/</a></b>			
Size: A4	Date: 2021-01-22	Rev:	
KiCad E.D.A. kicad (5.1.6-0-10_14)	Id: 5/6		



This transistor isolates MCU from 12 V.



Microphone amplifier needs a very stable voltage during TX.



Voltage on MIC is required to drive an electret microphone.

LM741 is configured as a non-inverting 0.26 dB amplifier

Sheet: /Microphone Input/ File: microphone-input.sch		
<b>Title: R2AUK TRX MK2 :: <a href="https://eax.me/ssb-transceiver/">https://eax.me/ssb-transceiver/</a></b>		
Size: A4	Date: 2021-01-22	Rev:
KiCad E.D.A. kicad (5.1.6-0-10_14)		Id: 6/6