

Sheet: /Misc/
File: misc.sch

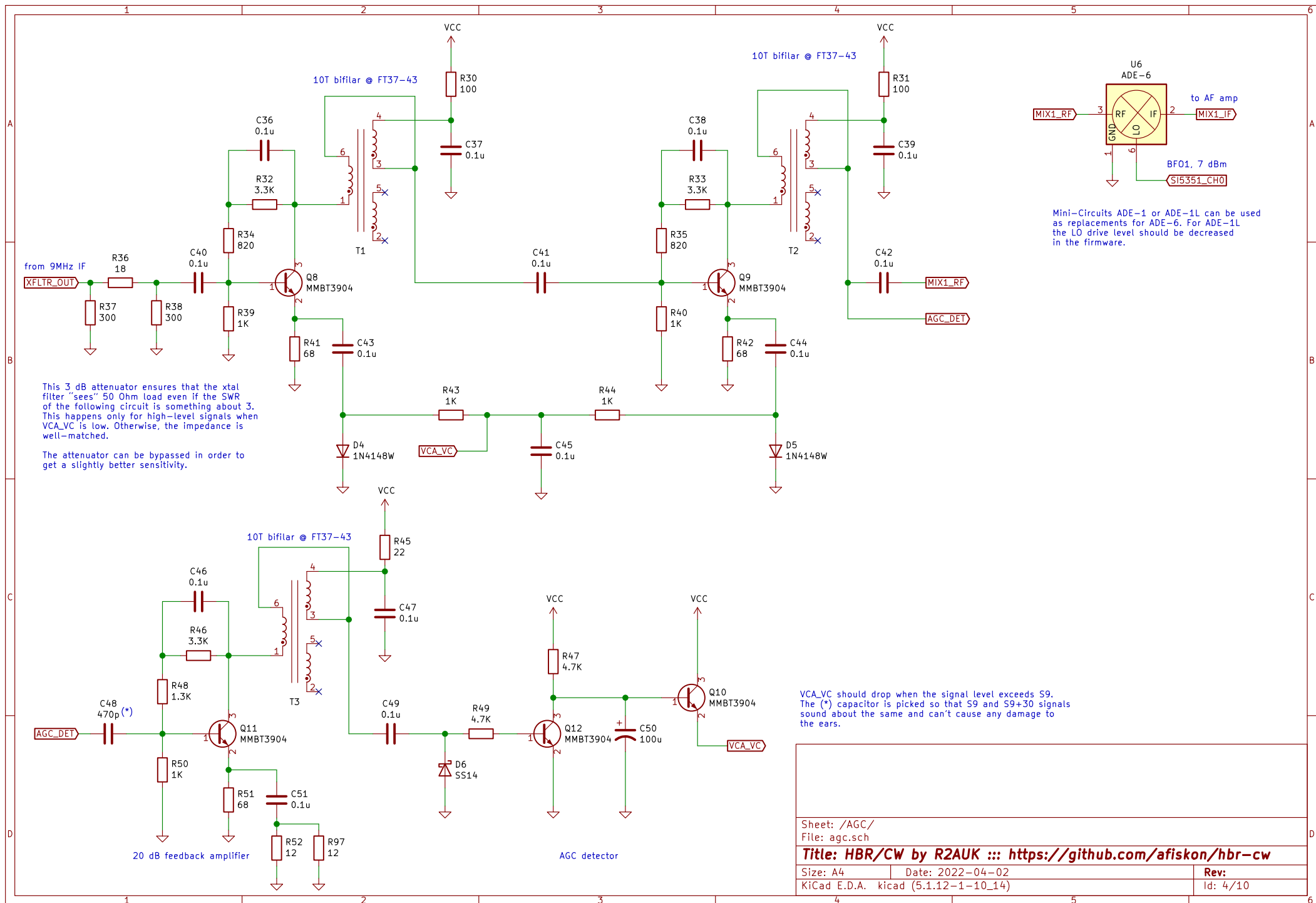
Title: HBR/CW by R2AUK ::: <https://github.com/afiskon/hbr-cw>

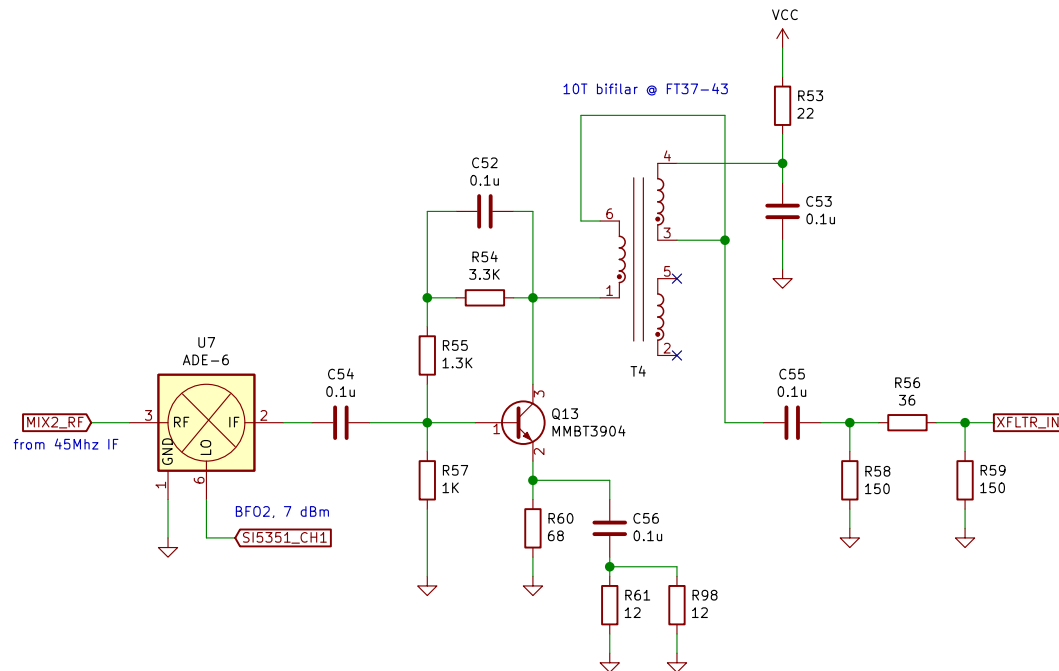
Size: A4 Date: 2022-04-02

KiCad E.D.A. kicad (5.1.12-1-10_14)

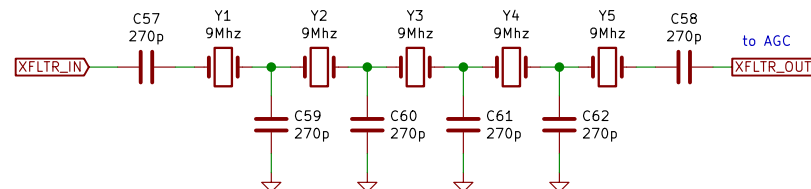
Rev:

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Buffer for the mixer: 20 dB feedback amplifier + 6 dB attenuator



Xtals should be measured using G3UUR method,
and suitable capacitors should be picked in LTspice.
Xtals should be matched by the resonant frequency.

It's possible to use xtals for another frequency. Only
a slight change of the firmware is required in this case,
and maybe a little adjustment of the AGC circuit.
Another number of xtals can be used as well.

<https://eax.me/crystal-measurements/>
<https://eax.me/crystal-filters-part-4/>

Sheet: /IF-9Mhz/
File: if-9mhz.sch

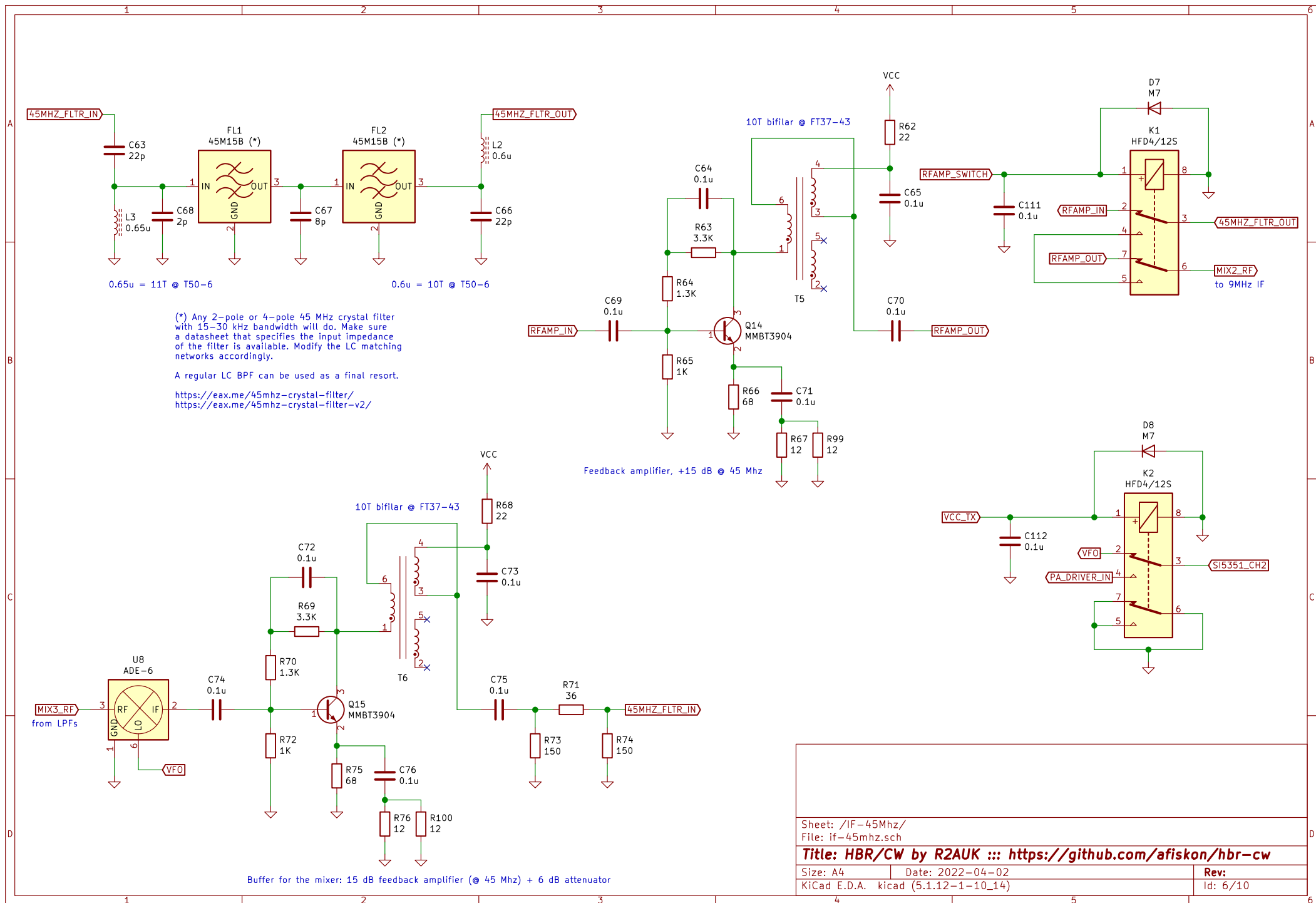
Title: HBR/CW by R2AUK ::: <https://github.com/afiskon/hbr-cw>

Size: A4 Date: 2022-04-02

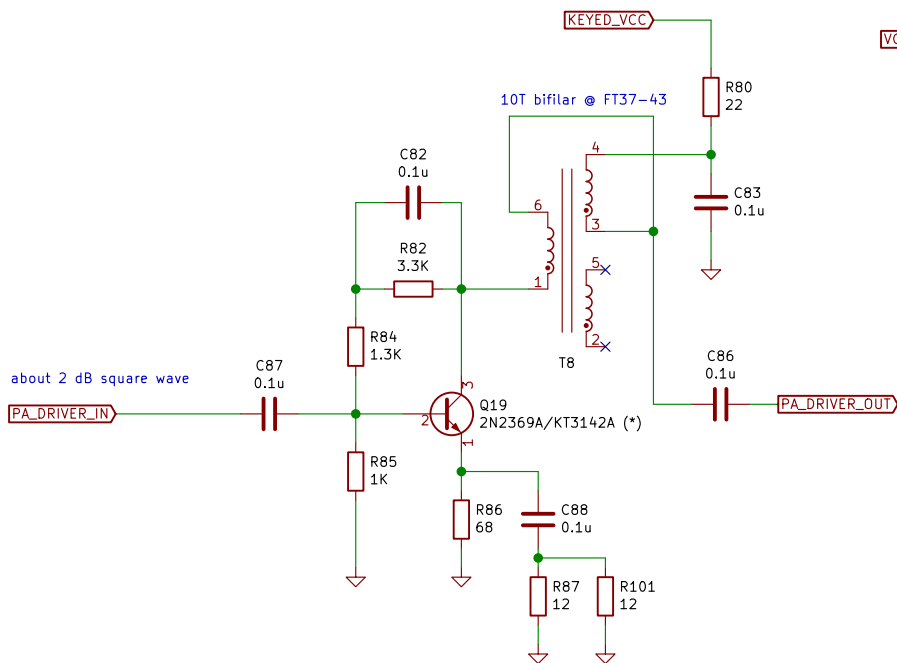
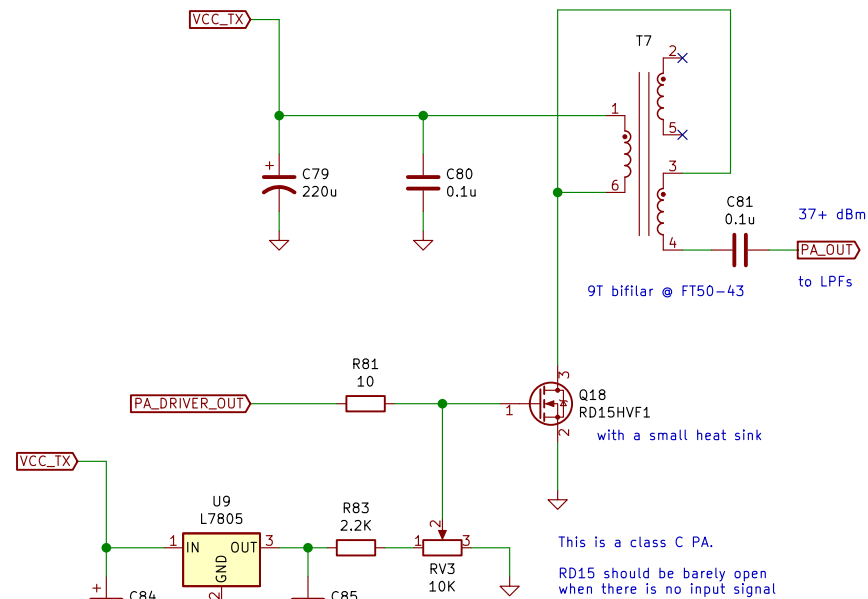
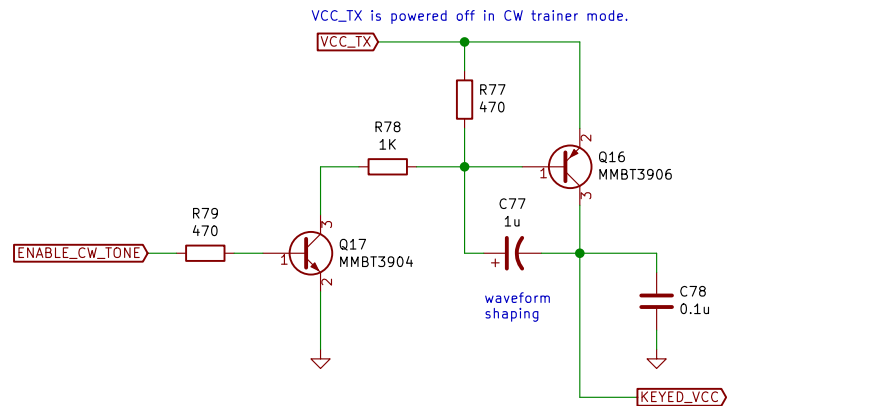
KiCad E.D.A. kicad (5.1.12-1-10_14)

Rev:

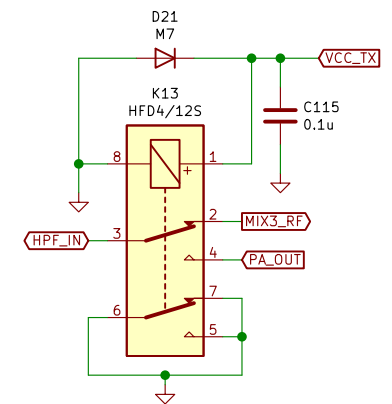
Id: 5/10



Sheet: /IF-45Mhz/	
File: if-45mhz.sch	
Title: HBR/CW by R2AUK ::: https://github.com/afiskon/hbr-cw	
Size: A4	Date: 2022-04-02
KiCad E.D.A. kicad (5.1.12-1-10_14)	Rev: Id: 6/10



(*) You need something similar to 2N3904 but with higher f_T to get equal power across all HF bands. 2N2369A / KT3142A have $f_T = 500$ Mhz.



Sheet: /PA/
File: pa.sch

Title: HBR/CW by R2AUK ::: <https://github.com/afiskon/hbr-cw>

Size: A4 Date: 2022-04-02

KiCad E.D.A. kicad (5.1.12-1-10_14)

Rev:

Id: 7/10

