

ACME GRAF1 Holes
ACME GRAF2 CC0 logo
ACME GRAF3 AO logo

H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole

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Rich Holmes / Analog Output



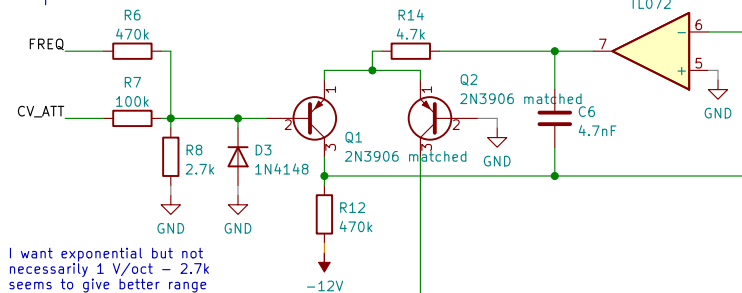
Sheet: /
File: vcapf.kicad_sch

Title: VC All Pass Filter

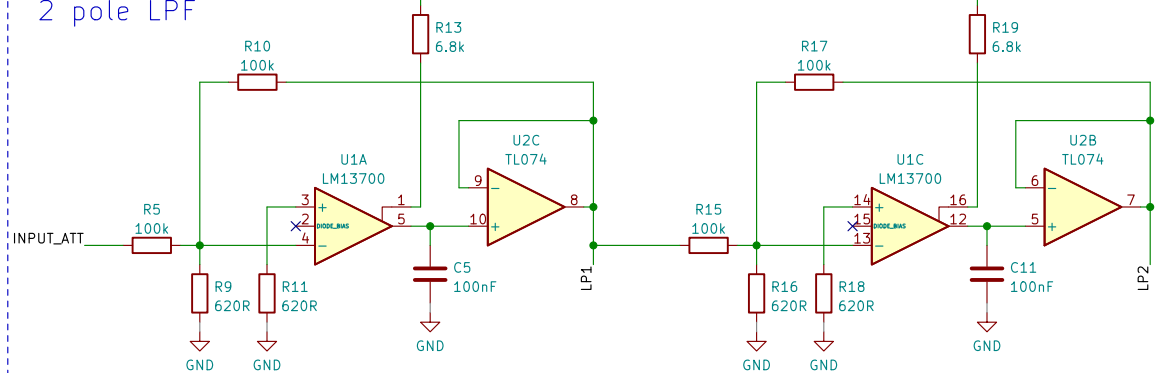
Size: USLetter Date: 2022-03-30
KiCad E.D.A. kicad 6.0.5-a6ca702e91-116-ubuntu20.04.1

Rev:
Id: 1/2

Exponential converter

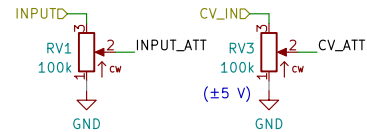
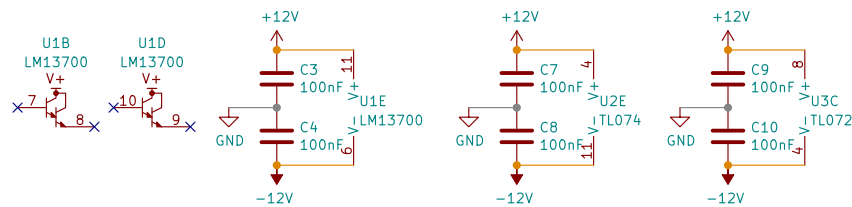


2 pole LPF

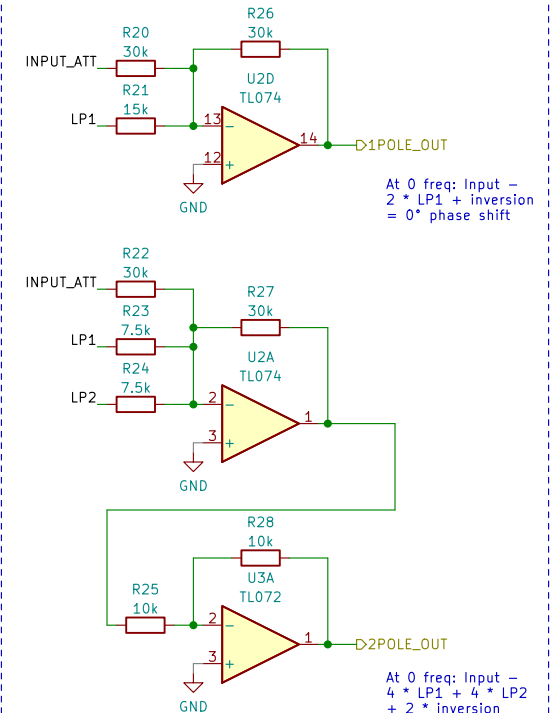


Per LM13700 datasheet,
 $f_0 = R_A g_m / ((R + R_A) 2\pi C)$
 $R_A = 620$ $R = 100k$
 $g_m = 9600 \mu S$ at $I_{ABC} = 500 \mu A$ ($\sim 19.2 I_{ABC}$).
 $f_0 \sim 10/C$ Hz with C in μF .

B2
Board



Pole mixing



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Sheet: /Main PCB/
 File: vcapf_main.kicad_sch

Title: VC All Pass Filter

Size: USLetter Date: 2022-03-30
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Rev:
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