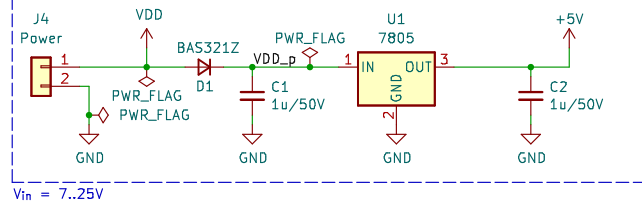
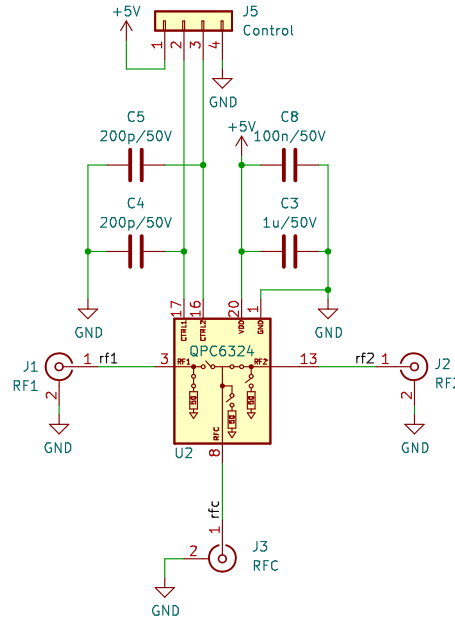


Power Supply

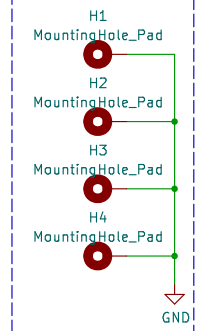


$V_{in} = 7..25V$

RF Switch



Mount



PCB:
 - 1.51mm (60mil) FR4 (Dk = 4.5)
 - 35um (1oz) copper (both sides)

Coplanar Wave Guide with ground plane (KICAD Calculator Tools)

- $\epsilon_r = 5$
 - $\tan \delta = 0.02$
 - $\rho = 1.72e-08$
 - $H = 1.51mm$
 - $T = 35um$
 - $f = 25MHz$
 - $W = 1.45mm$ (0805 pad height)
 => $S = 0.355mm$

Design Goals:

- Easy to solder/fix/adjust
 - Standard parts
 - Standard PCB (FR4)
 - Standard manufacturing (standard design constraints)

Based on the Qorvo Evaluation Board for the QPC6324

Maximilian Stabel

ETH ZÜRICH

Sheet: /

File: tr_switch.kicad_sch

Title: T/R Switch

Size: A4 Date: 2023-06-19

KiCad E.D.A. kicad 7.0.7-2.fc38

Rev: 1

Id: 1/1