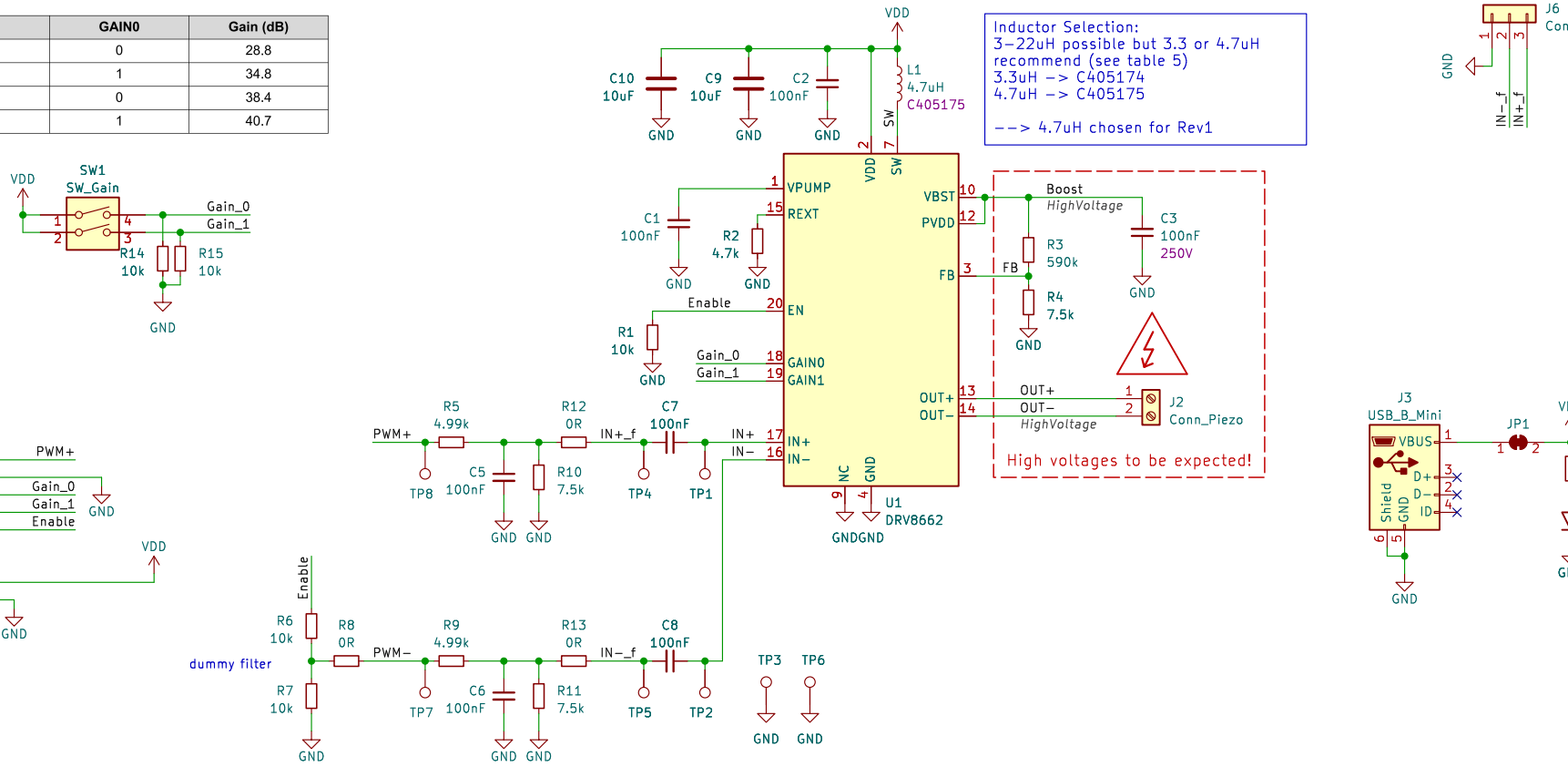
| GAIN1 | GAIN0 | Gain (dB) |
|---|---|---|
| 0 | 0 | 28.8 |
| 0 | 1 | 34.8 |
| 1 | 0 | 38.4 |
| 1 | 1 | 40.7 |




Inductor Selection:
3–22uH possible but 3.3 or 4.7uH recommend (see table 5)
3.3uH –> C405174
4.7uH –> C405175

–––> 4.7uH chosen for Rev1

Filter used:
"3.5.1.2 First–Order Filter" but with dummy filter so that it can be used as a single ended filter (similar to Figure 14)

Feedback resistors:
Resistors from dev board: 768k top, 9.777k bottom
–––> 105V
My resistors: 7.5k bottom, 590k top
–––> 105V

$$V_{BOOST} = V_{FB}\left(1 + \frac{R_1}{R_2}\right)$$

where $V_{FB}$ = 1.32 V.

https://github.com/bennymeg/JLC–Plugin–for–KiCad

Current limiting resistor:
4.7uH –> C405175 –> 4.5A
Use 3A as limit to facilitate smaller inductors
$R_{ext}$ = 4.7k –> 2.97A

$$R_{EXT} = \left(K\frac{V_{REF}}{I_{LIM}}\right) - R_{INT} \quad (2)$$

where K = 10500, $V_{REF}$ = 1.35 V, $R_{INT}$ = 60 Ω, and $I_{LIM}$ is the desired peak current limit through the inductor.

FID1 Fiducial
FID2 Fiducial
FID3 Fiducial
H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole

**Design: Jonathan Fulcher | Software: Luis Kleinwort**

Sheet: /
File: DRV8662_Breakout.kicad_sch

**Title: DRV8662 Breakout**

| Size: A4 | Date: 2024–01–03 | **Rev: 1** |
|---|---|---|
| KiCad E.D.A. kicad (7.0.0) | | Id: 1/1 |