





Choose R1, R6 as large as possible subject to:

- max voltage drop between input DC and regulator inputs. Allow 3V drop for the regulators.
- power for given current draw = $I^2 R$

$1/(2 \cdot \pi \cdot R1 \cdot C1)$ should be much less than 60Hz if possible

(otherwise R1, R6 aren't worth including, just link them

5.08 mm header connector

Input options:

AC doubler (connect to J1-1 and JP2-2)
DNP (Do not populate) U2, R3, R5, C5
V at R1, R6 $\approx \pm 1.4V_{in}$

AC full-wave (connect to J1-1 and J1-3)
V at R1, R6 $\approx \pm 0.7V_{in}$
vs. half-wave option:
Better utilization of transformer
Better filtering

DC split supply (connect to JP2-1(+),JP2-2(0V),JP2-3(-))
DNP CR1, U2, R3, R5, C5

DC single supply
connect to J1-1 and J1-3 (polarity doesn't matter but you get 2 diode voltage drops)
or connect to JP2-1(+) and JP2-3(-) and DNP CR1

R2 = R7 \approx 100 to 270 ohms.
Then R4 = R8 = R2*(Vout/1.25 - 1)

Formula was from:
 $V_o = 1.25(1 + R_4/R_2)$

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