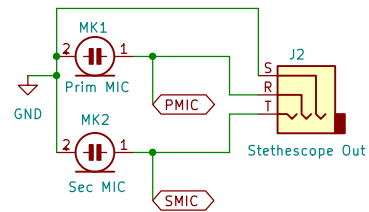
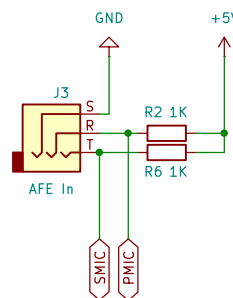


Stethoscope End

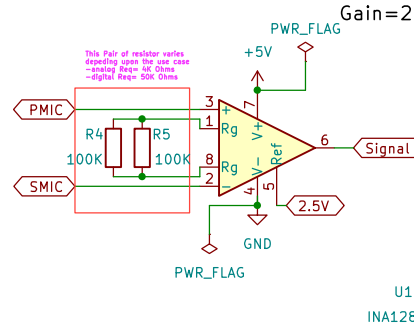


Dual Microphone is used to cancel out the ambient noise
Primary = (Signal+ Noise)
Secondary = (Noise)

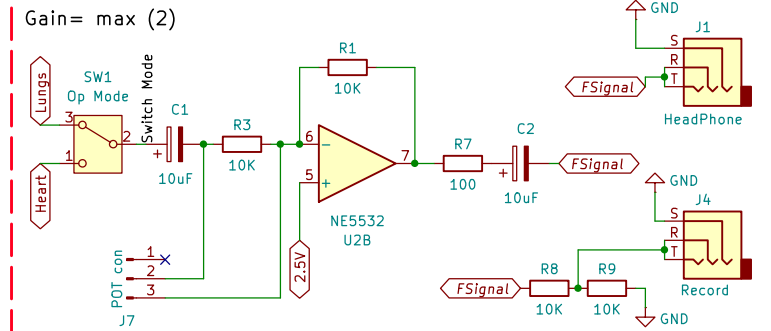
Mic Biasing



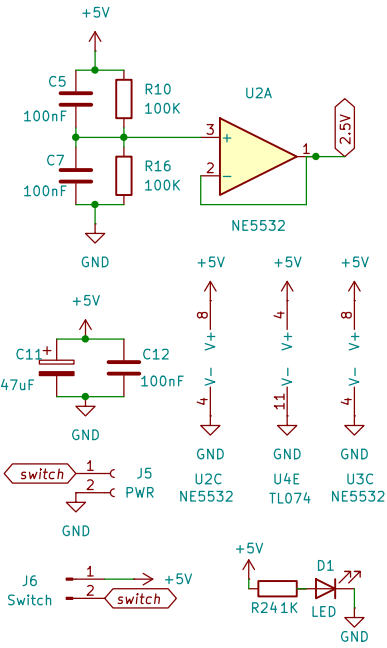
Differential Stage



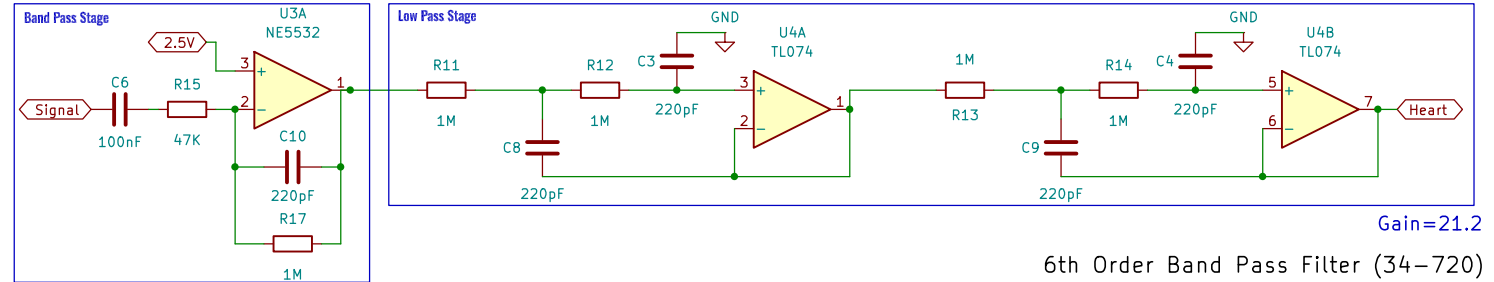
Output Stage



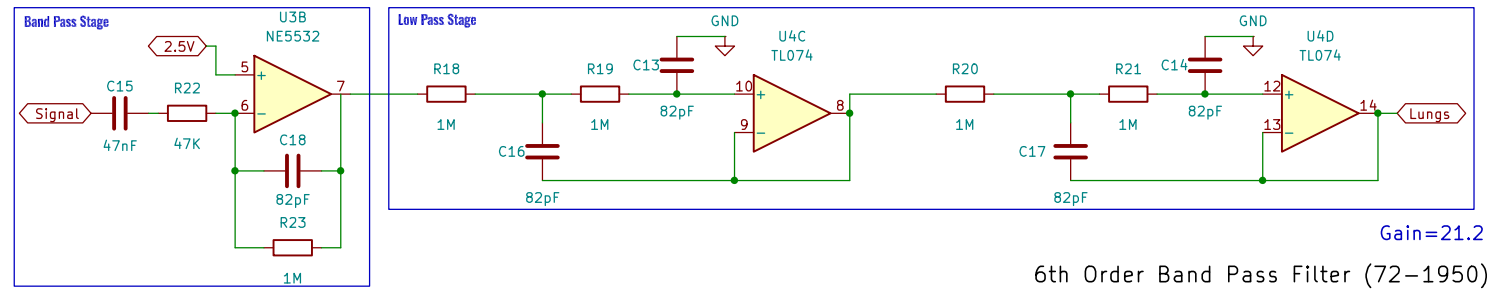
Power Supply & Vref



Heart Sound Filtering



Lungs Sound Filtering



Mounting Holes



- Adjustable Gain from 20–40 X
- Heart (34–720)Hz
- Lungs (72–1950)Hz

This has to operated using 3.7V Lithium Ion battery with a C type charging module and a boost coverter for 5V supply

TL074 | NE5532 | INA128

Shreenandan Sahu

Sheet: /

File: final schematics.kicad_sch

Title: Electronics Stethoscope

Size: A4

Date: 2025–06–12

KiCad E.D.A. 8.0.2

Rev: 1.0

Id: 1/1