

# Simulated Exhaust

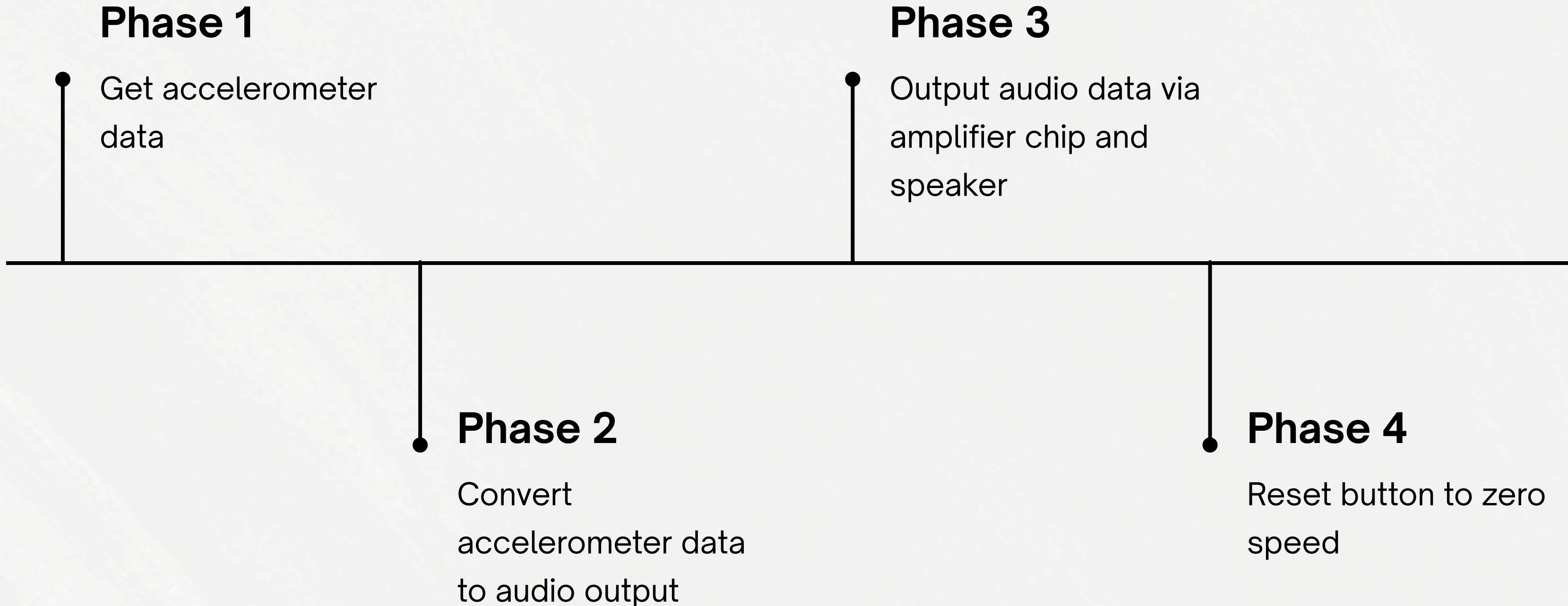
A photograph of a hot air balloon basket. Two yellow flexible exhaust pipes are attached to the side of the basket, each emitting a plume of white smoke. The background is a vibrant, multi-colored sky with shades of blue, orange, and yellow.

CMPE 3815 FINAL PROJECT

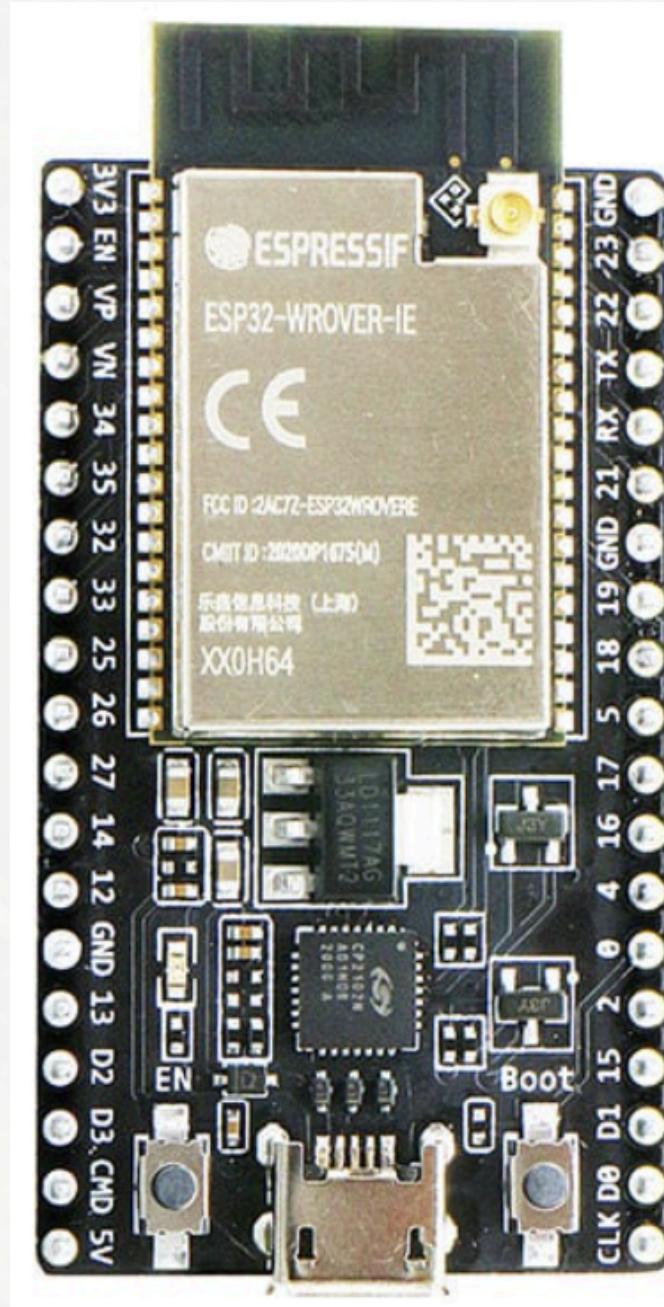
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Tyler Meadows  
Sarah Wiederman

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# How it works



# Hardware



1

Microcontroller: ESP32

2

Sensor: Accelerometer

3

Amplifier Chip: Audio OpAmp

4

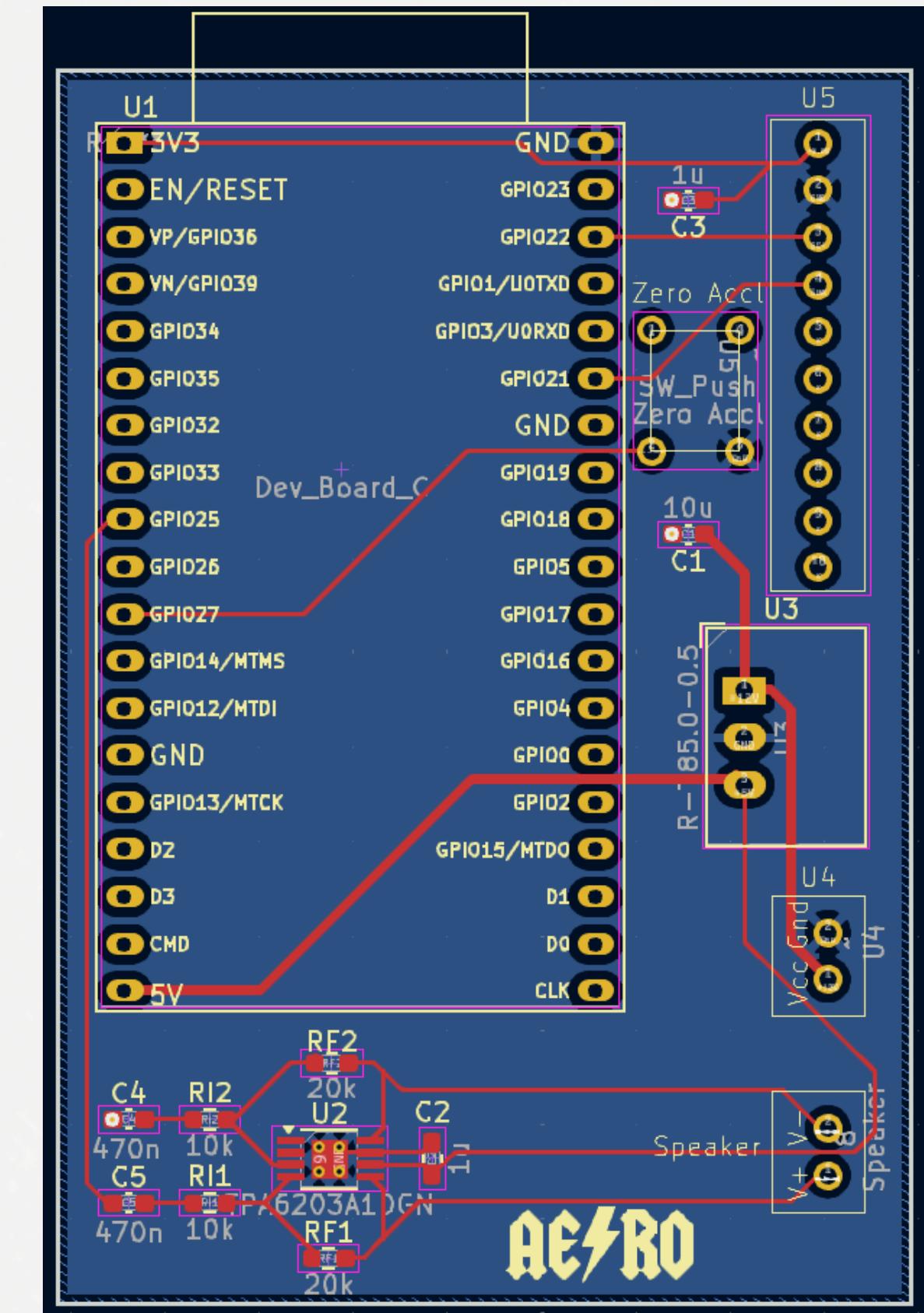
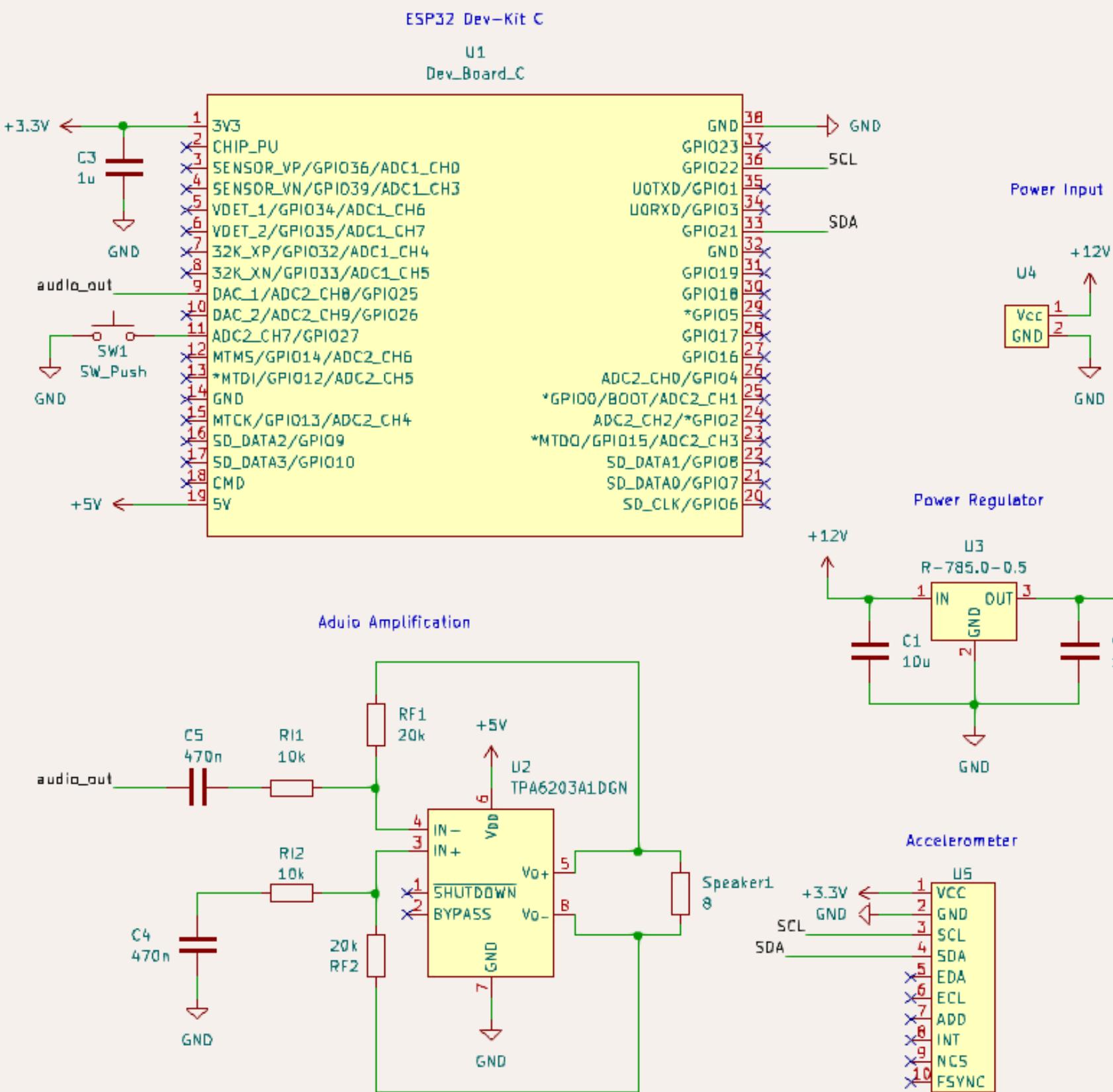
Speaker

5

PCB: JLPCB

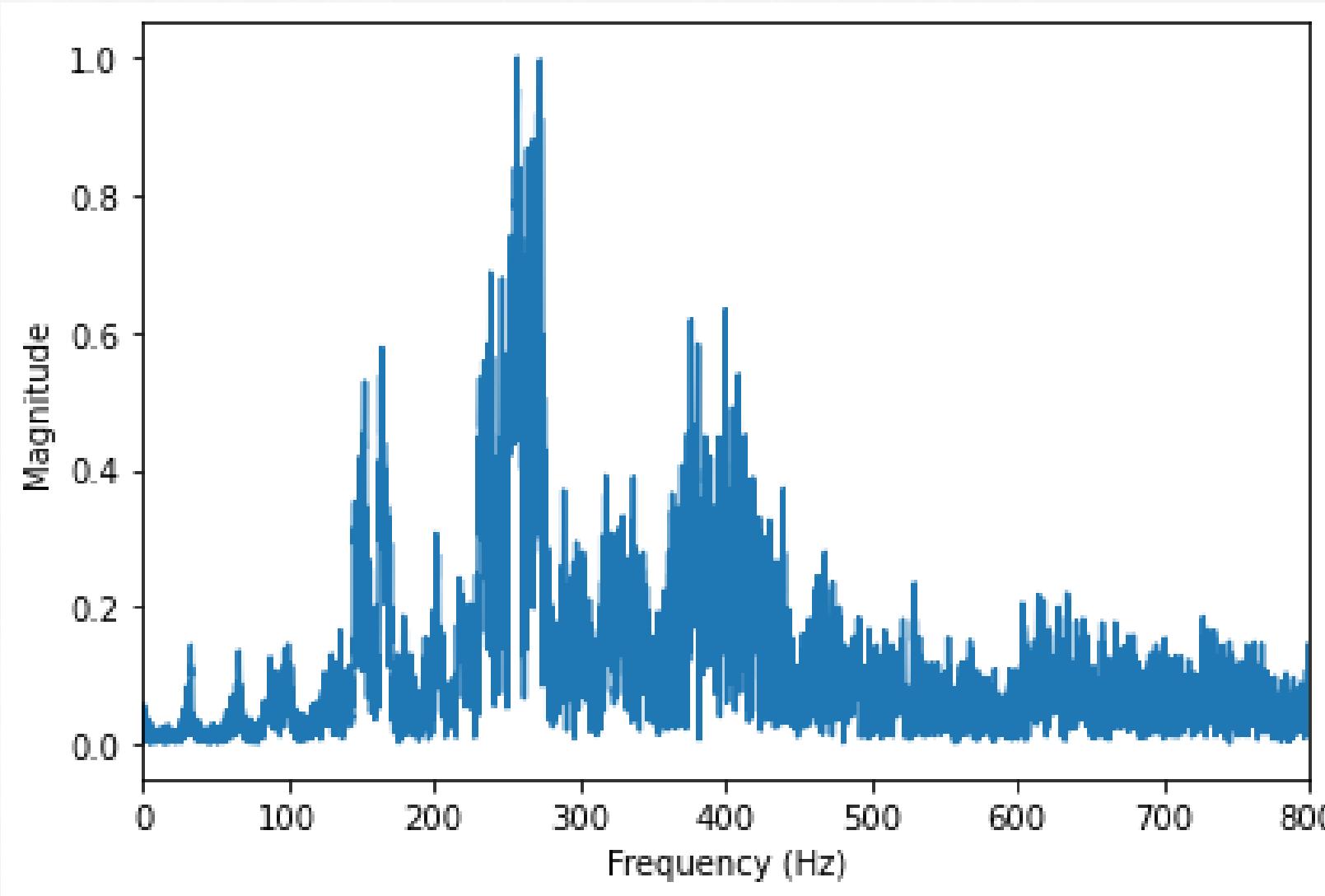
# Schematic

# PCB

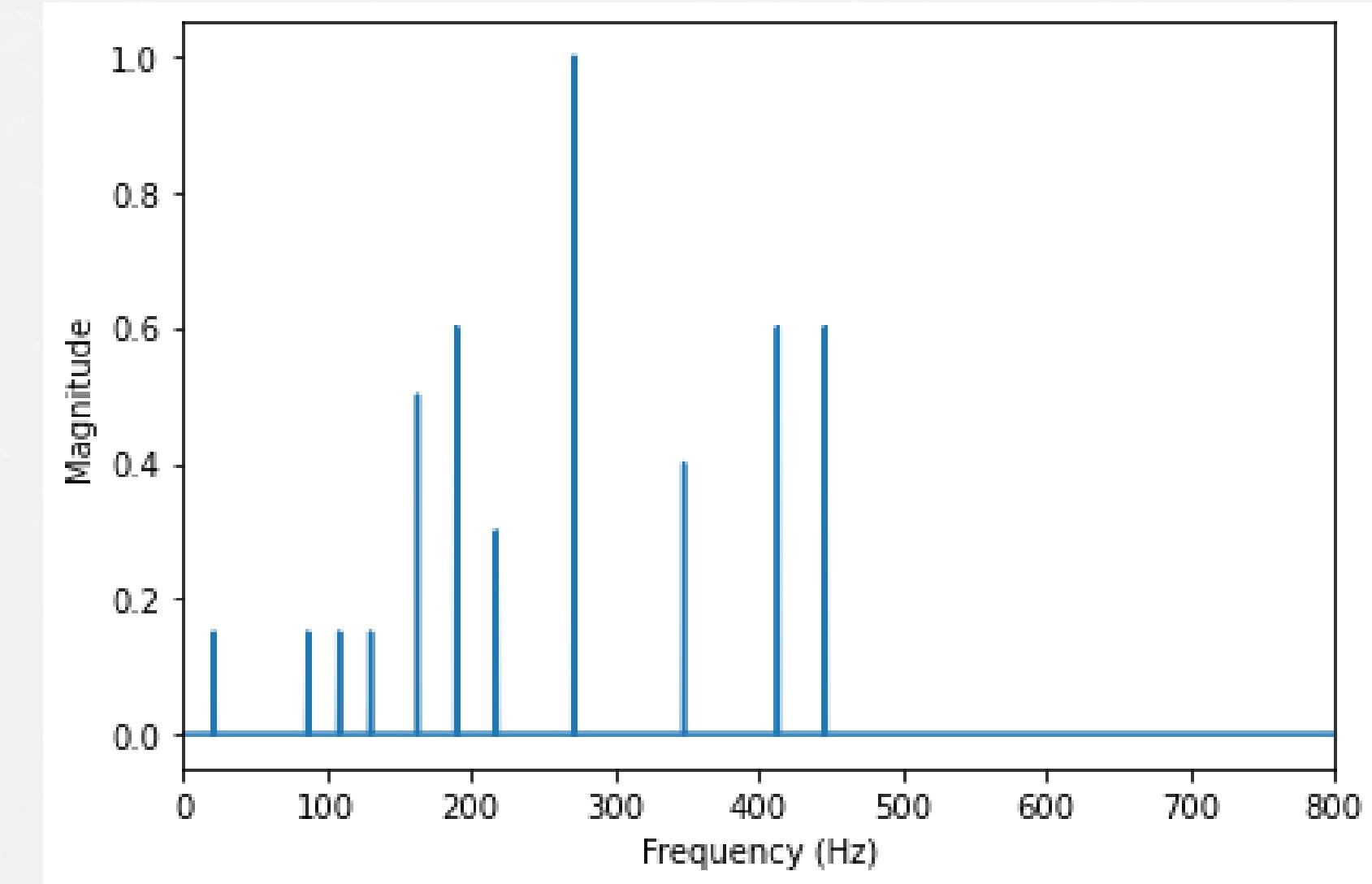


# Challenge: Audio Quality

Before FFT



After FFT



# The End

THANK YOU FOR LISTENING