

Sound

Pulse-Width Modulation (PWM)

50% duty cycle



75% duty cycle



25% duty cycle



`pwm_clock`, `pwm_range`, `pwm_width`

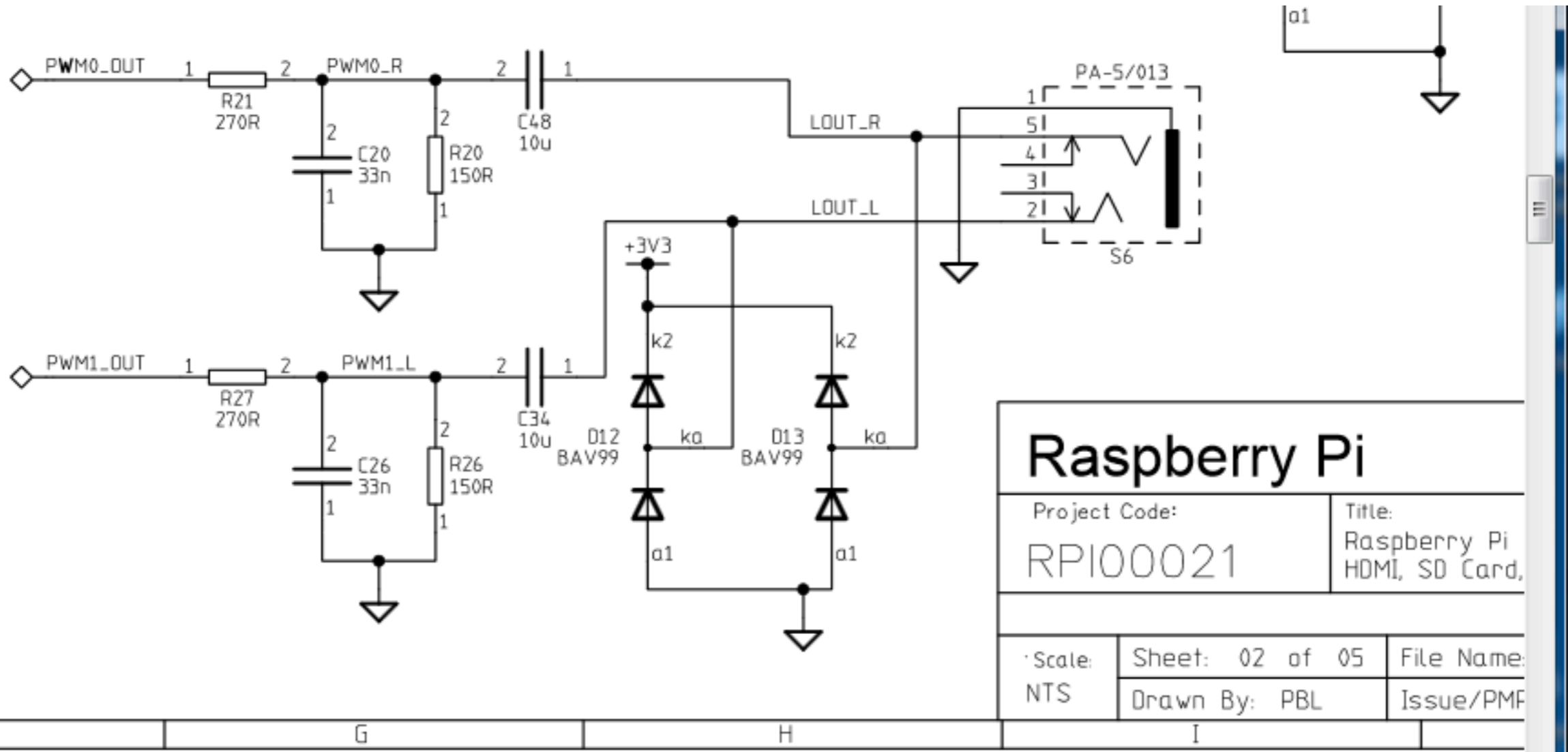
`pwm.c`

	PWM0	PWM1
GPIO 12	Alt Fun 0	-
GPIO 13	-	Alt Fun 0
GPIO 18	Alt Fun 5	-
GPIO 19	-	Alt Fun 5
GPIO 40	Alt Fun 0	-
GPIO 41	-	Alt Fun 0
GPIO 45	-	Alt Fun 0
GPIO 52	Alt Fun 1	-
GPIO 53	-	Alt Fun 1

PWM0 is output on GPIO_PIN18 ALT_FUN5

pwm.c
tone.c
melody.c

Raspberry Pi Stereo Jack

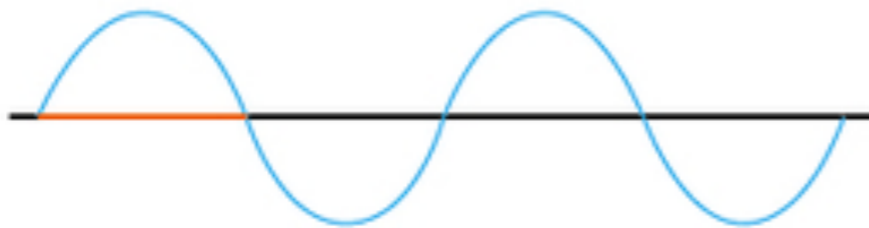


	PWM0	PWM1
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GPIO 45	-	Alt Fun 0
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GPIO 53	-	Alt Fun 1

**Stereo Jack connected to
GPIO_PIN40 and GPIO_PIN45**

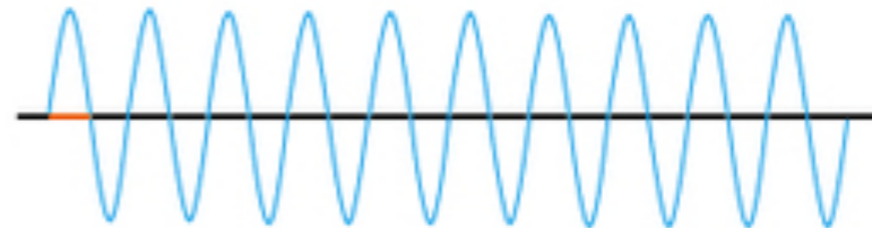
Sound Waves

Lower Pitch



Low Frequency

Higher Pitch



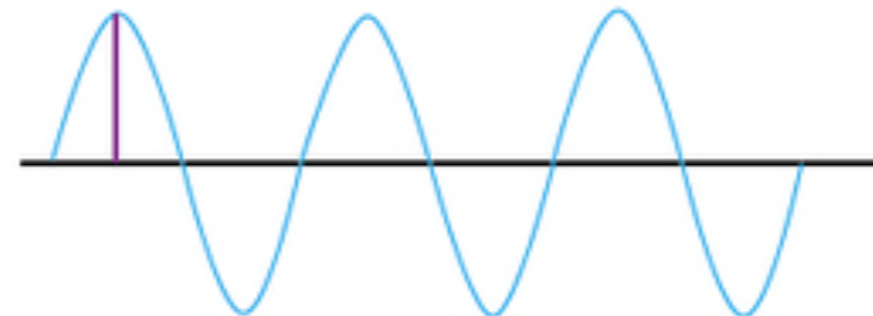
High Frequency

Quieter



Low Amplitude

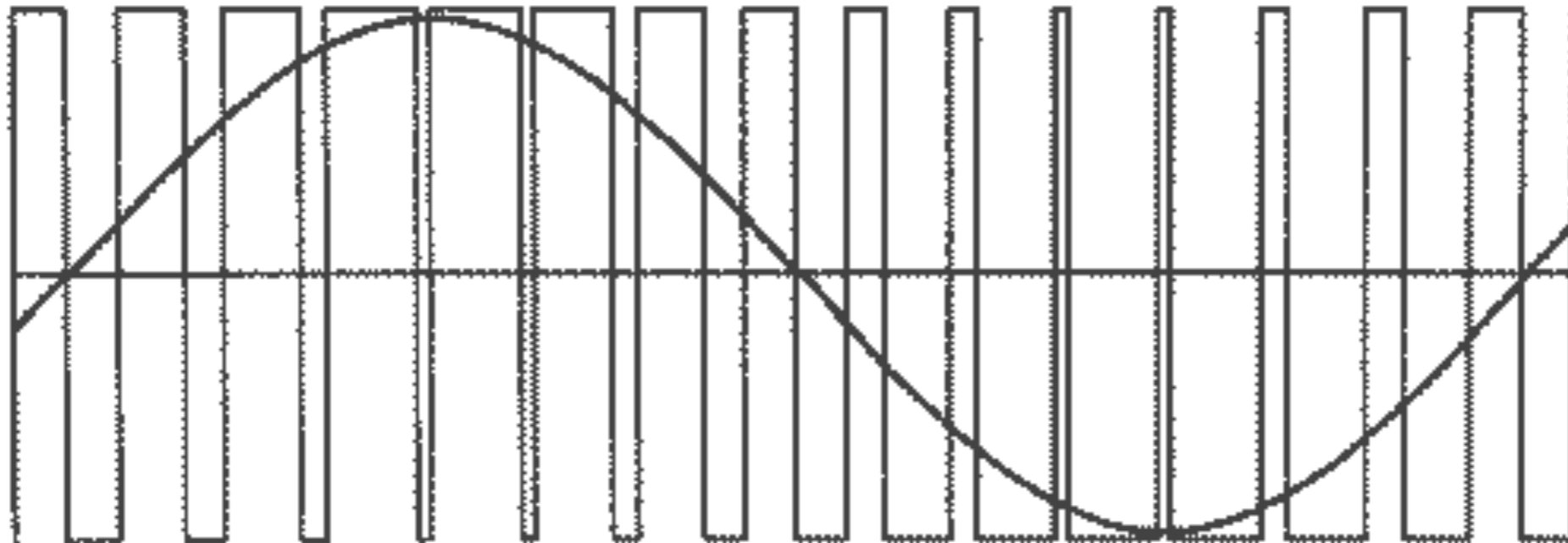
Louder



High Amplitude

Continuous Values

Can simulate continuous values with fast enough PWM clocking



Like you did to control the LED brightness

audio.c