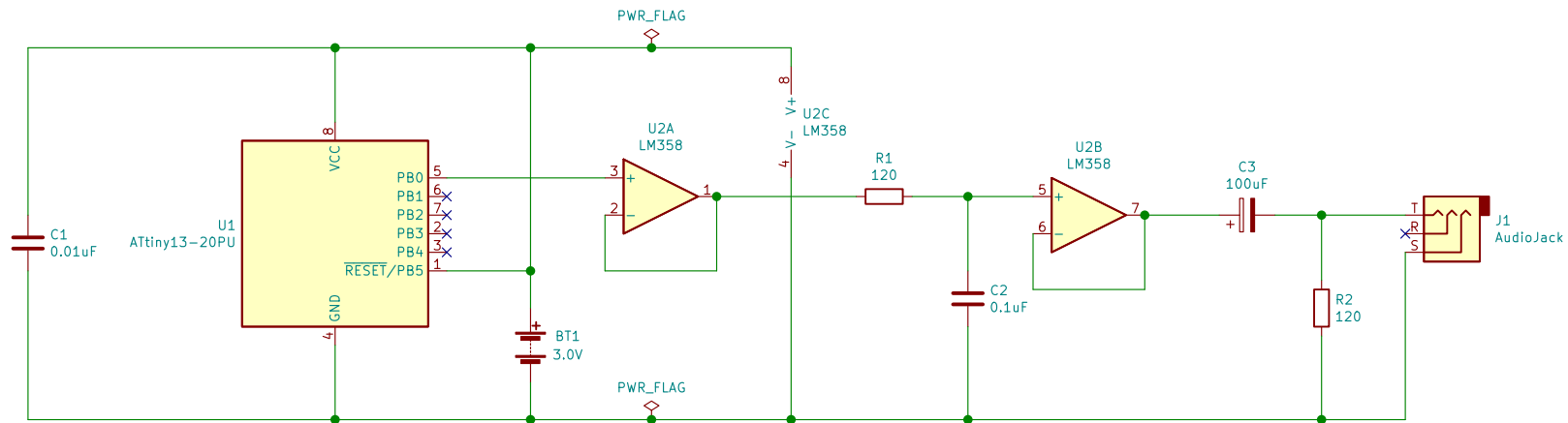


- \* PB0–5 of U1 are used in several ways for applications. In this case, PB0 (OC0A) is assumed to be the PWM output.
- \* U2A or U2B is a buffer made of a voltage follower, which has an input with high impedance (in terms of resistance).
- \* R1 and C2 make a low-pass filter. The cut-off frequency is approx. 13270 Hz.  
Option: B10K potentiometer next to R1 in series (cut-off 157 Hz – 13270 Hz). Caution that high resistance makes voltage drop. If you set 18750 samples per second for DPCM, apply 0.2uF capacitor for C2 to reduce high frequency noise (cut-off 6630 Hz).
- \* R2 and C3 make a high-pass filter. The cut-off frequency is approx. 13.26 Hz.



This schematic is exempt from warranty, responsibility, and liability from any kind and any damage.

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**JimmyKenMerchant**

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File: sound\_output\_pwm.sch

**Title: Sound Output with PWM of ATtiny13**

Size: A4 Date: 2020-01-21

KiCad E.D.A. kicad (5.1.5)-3

**Rev: 1.0.0**

Id: 1/1