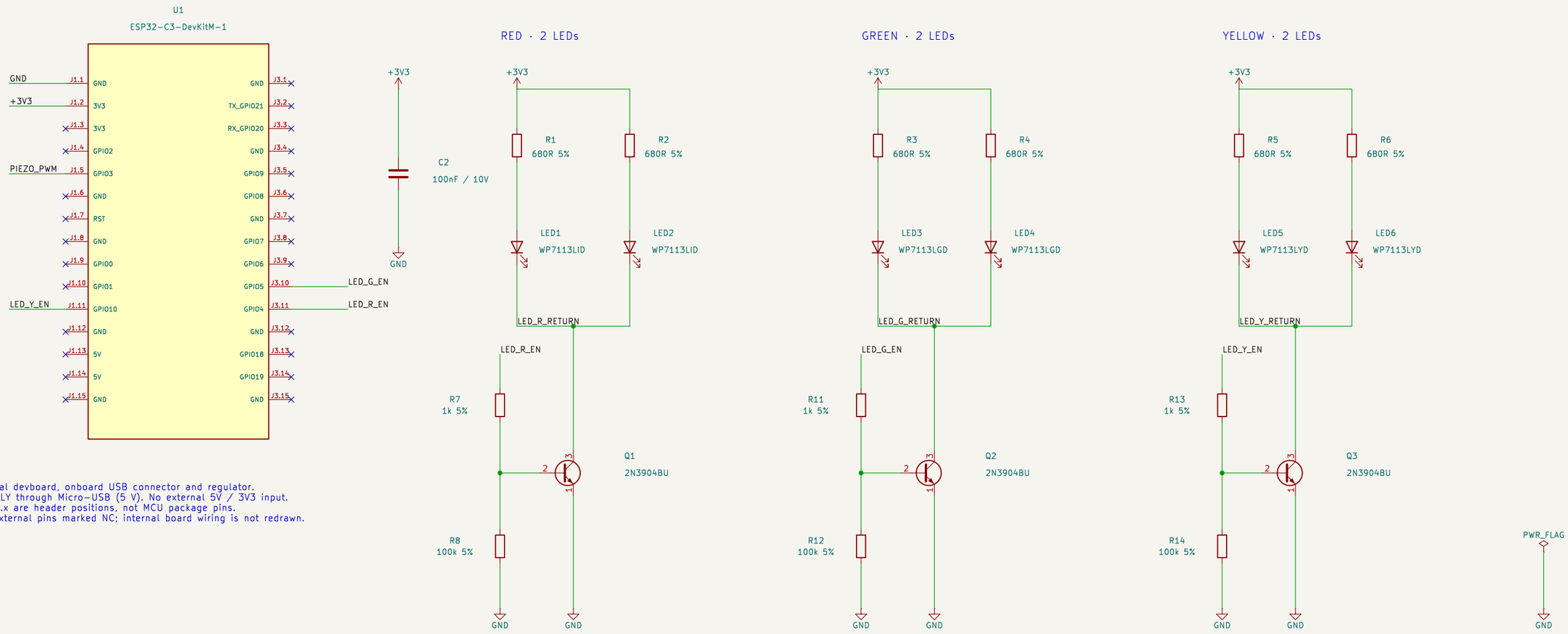
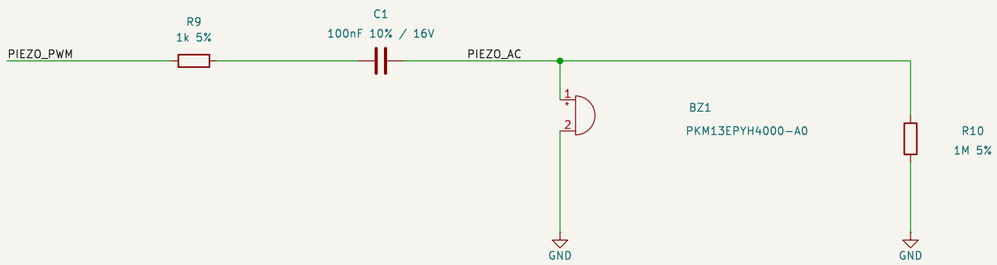


U1: official devboard, onboard USB connector and regulator.
Power ONLY through Micro-USB (5 V). No external 5V / 3V3 input.
J1.x / J3.x are header positions, not MCU package pins.
Unused external pins marked NC; internal board wiring is not redrawn.

Q1/Q2/Q3: onsemi TO-92, 1=E, 2=B, 3=C. One switch per colour pair.

PASSIVE PIEZO · EXTERNAL DRIVE · NOT A MAGNETIC SPEAKER



C1 non-polar. BZ1 passive piezo (5.5 nF +/-30%).
No active buzzer / low-impedance loudspeaker substitution.
Secure against impact; this circuit is not surge/ESD qualified.

DESIGN STATUS / SCOPE
External circuit only; devboard internals omitted.
R1-R14: >=0.125 W. R1-R6: one per LED.
LED branches: ~1.9 to 2.2 mA at 3.3 V.
No PCB layout / fabrication release.
No target firmware compile or physical validation.
GPIO: red=4, green=5, yellow=10, piezo=3.
Internal battery supply is NOT designed.
See README.md for assembly and test procedure.

USB power only. Battery supply and actual fit unverified.
ENGINEERING PROTOTYPE — NOT PHYSICALLY TESTED
LUMA prototype

Sheet: /
File: LUMA_Music_RevC.kicad_sch

Title: LUMA MUSIC Rev C — three colour groups

Size: A3	Date: 2026-11-03	**Rev: C**
KiCad E.D.A. 9.0.2		Id: 1/1