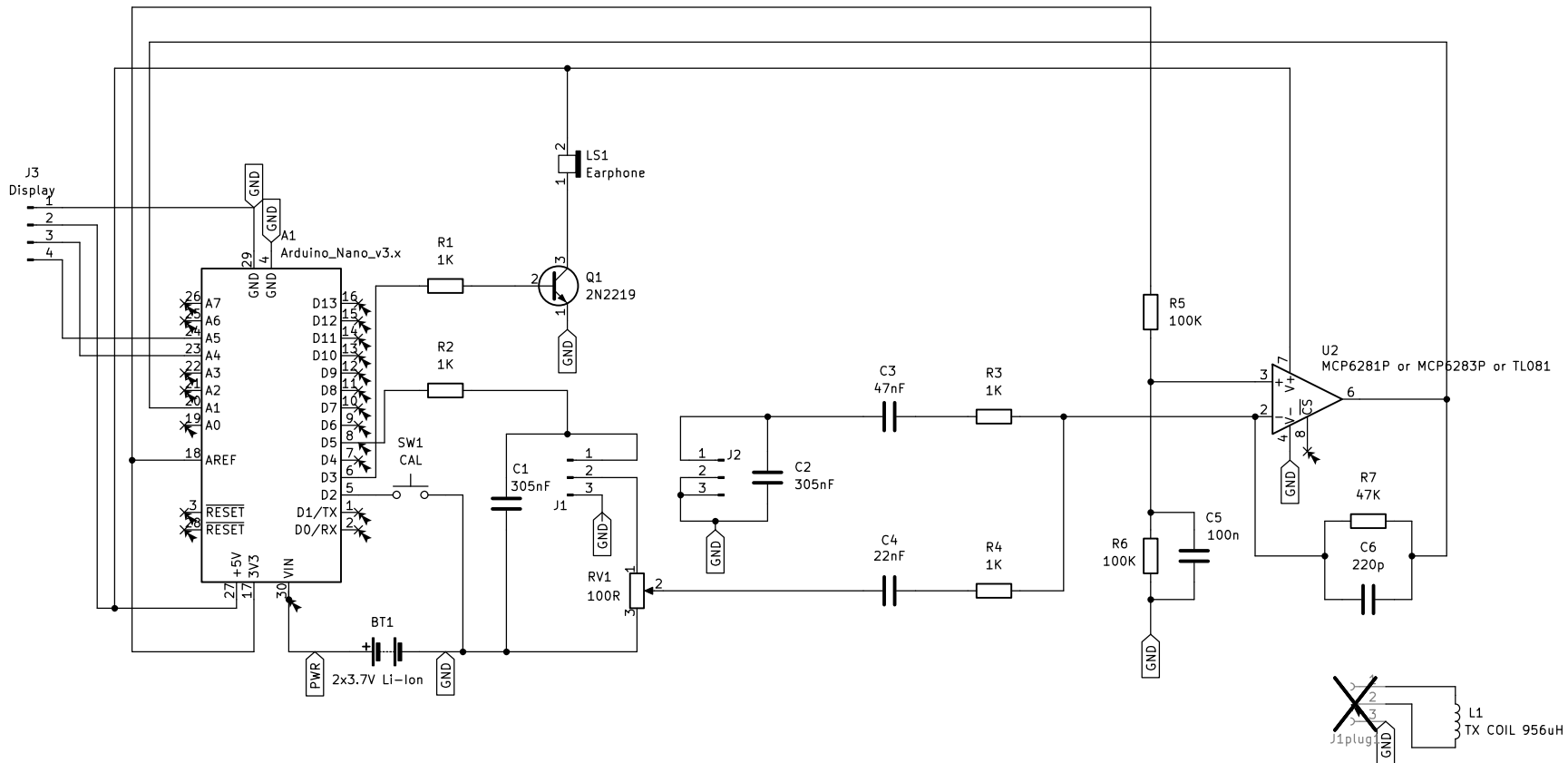


CANADUINO® LCD 1602 2x16, HD44780 controller, PFC8574 I2C Interface



NOTES

- Select R1 and R2 current limit resistors for 20mA max
- L1 and L2, two slightly overlapping D-shaped coils, each 55 turns of wire wound on 15.5cm form, approx. 210 x 120mm
- C1 and C2 should be metallised foil. Other capacitors may be ceramic
- Select C1 and C2 values for parallel resonance at 8_kHz
- Use shielded and grounded wire pairs to the coils
- Connect the shield at the coil end to a Faraday shield covering the outer part of each coil (don't cover the coils where they overlap).
- Shielding provides protection from electrostatic fields, magnetic fields are not blocked.
- A_2-line_1602_LCD_display_with_HD44780_controller,_adjustable_backlight,_and_an_I2C_add-on_PCB_with_PFC8574_is_used
- C3, R3 network: $Z = 1.089K$, phase shift -22.94218 deg
- C4, R4 network: $Z = 1.348K$, phase shift -42.12271 deg
- R7, C6 network: 15.3 kHz low-pass filter

Induction Balance Metal Detector

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