

## 2. Component list

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### Component list and designator

- 1 x LCD PCB
- resistors:
  - 1 x 330Ω (orange, orange, black) (R1)
- 1 x 6 pin female header
- 1 x 128x64 LCD (LCD1)
- 10 x ceramic capacitor 1μF (105) (C1 ... C10)
  
- 1 x main PCB
- resistors:
  - 1 x 10K (brown, black, black, red) (R1)
  - 1 x 33K (orange, orange, orange) (R2)
  - 3 x 3K3 (orange, orange, red) (R3 ... R5)
  - 1 x 2K2 (red, red, red) (R6)
  - 3 x 470K (yellow, purple, yellow) (R7 ... R9)
  - 1 x 10K (brown, black, black, red) (R10)
  - 3 x 680 (blue, grey, brown) (R11 ... R13)
  - 1 x 2K2 (red, red, red) (R14)
  - 1 x 27K (red, purple, orange) (R15)
  - 1 x 100K (brown, black, yellow) (R16)
- 1 x diode 1N4007 (D1)
- capacitors:
  - 3 x capacitor 100nF (104) (C1, C2, C5)
  - 1 x capacitor 1nF (102) (C3)
  - 1 x capacitor 10nF (103) (C4)
  - 1 x capacitor 330nF (334) (C6)
  - 2 x capacitor 1μF/50V (C7, C8)
- 1 x tactile switch 12x12mm (SW1)
- transistors:
  - 1 x transistor BC557 (T1)
  - 2 x transistor BC547 (T2, T3)
- 1 x 28 pin IC socket (U1)
- 1 x 16 pin IC socket (IC1)
- 1 x 3 pin board to wire male 90° connector (SK1)
- 1 x 3 pin board to wire female (SK1)
- Voltage reference:
  - 1 x reference diode LM385Z2.5 (VR1)
- Voltage regulator:
  - 1 x voltage regulator LM78L05 (VR2)
  - 1 x voltage regulator KY5033 (VR3)
- 1 x 12 pin male header to cut in half (SK2)
- 1 x battery holder
- 3x screw 2.9x6.5mm
- IC's:
  - 1 x IC CD4050 (IC1)
  - 1 x ATmega318p (U1)
- 8 x 1cm spacer
- 4 x M3 25mm bolt
- 4 x M3 nut
- 4 x rubber feet
- 1x red mini clamp
- 1x yellow mini clamp
- 1x black mini clamp

