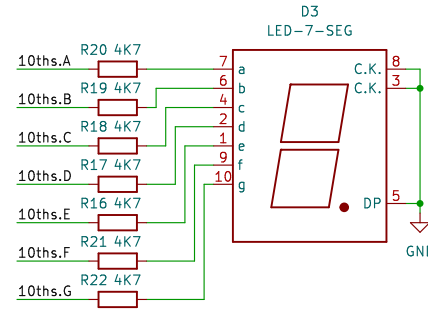
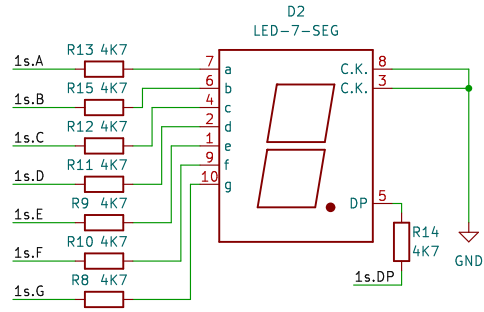
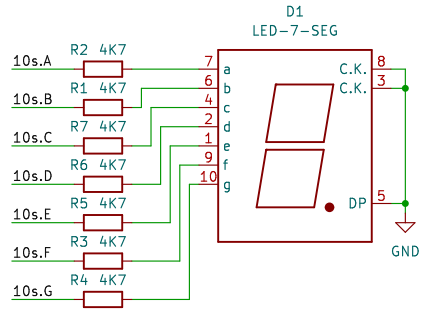
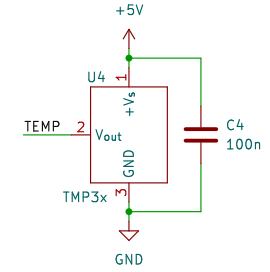


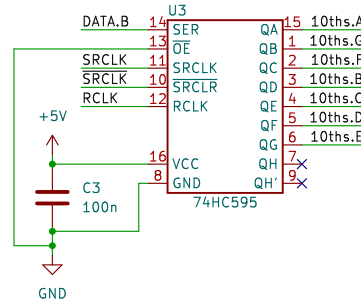
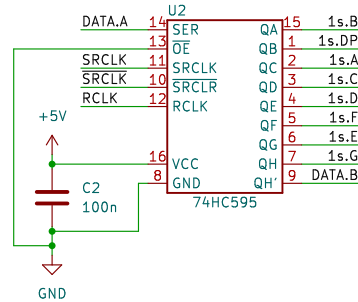
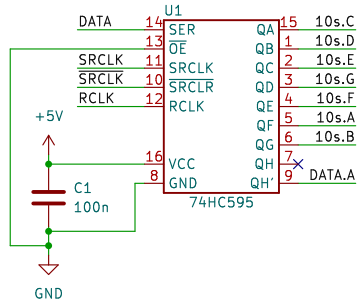
## 7-Segment LED Display



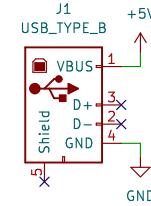
## Temperature Sensor



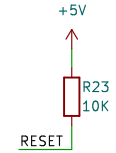
## Display Shift Registers



## USB Power



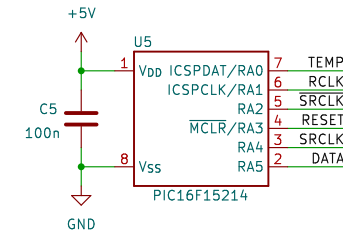
## MCU Reset Control



## NOTES:

- \* Component assignment order dictated by board layout
- \* Assignment of shift register output pins to display elements facilitate board routing
- \* All 100nF capacitors to be placed as close as possible to the supply pins for all ICs
- \* Either a TMP36 or TMP37 can be used for the TMP3x component
- \* All current limiting resistors sized to allow for a maximum current of 40 mA per display

## Microcontroller



© 2024 – The Broken Engineer

This source describes Open Hardware and is licensed under the CERN-OHL-S v2. You may redistribute and modify this source and make products using it under the terms of the CERN-OHL-S v2 ([https://ohwr.org/cern\\_oh\\_s\\_v2.txt](https://ohwr.org/cern_oh_s_v2.txt)).

Sheet:

File: Desktop Thermometer USB-2.kicad\_sch

**Title: Desktop Thermometer – USB 2 Version**

Size: A4

Date:

Rev: 1.0-A

KiCad E.D.A. kicad 7.0.10

Id: 1/1