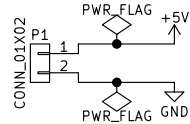
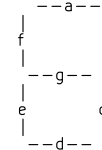


Power supply
modified USB cable

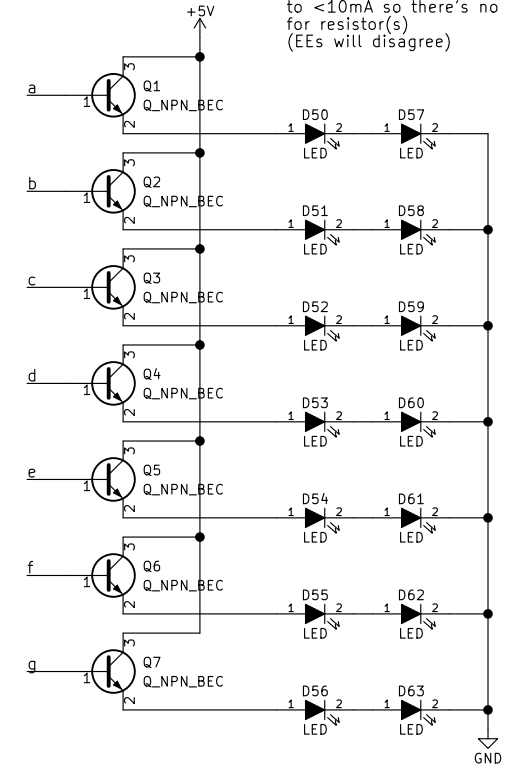
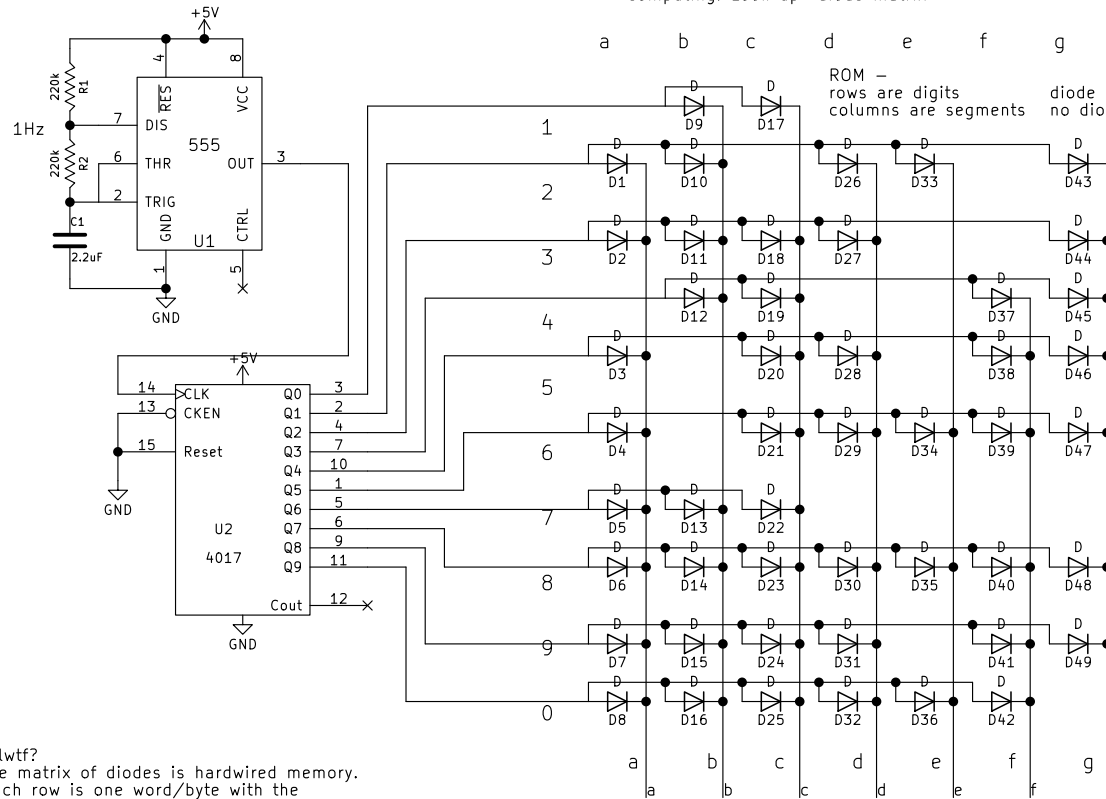


This is a diode ROM
similar that was used in pioneers of
computing. Look up "diode matrix"



	abcdefg
1	0110000
2	1101101
3	1111001
4	0110011
5	1011011
6	1011111
7	1110000
8	1111111
9	1111011
0	1111110

Single digit
7 segment display
from discrete LEDs
The power is voltage-limited
to <10mA so there's no need
for resistor(s)
(EEs will disagree)



Q: lolwtf?

A: The matrix of diodes is hardwired memory.

Each row is one word/byte with the length of 7 bits. The circuit 'stores' data for displaying a number on a 7 segment LED display (hence 7 bit word)

I'll be making the memory and the display from discrete diodes and the only chips are for changing the address. Counting up at 1Hz frequency. It would also work by putting logic HIGH on anode of one of the leftmost diodes and get your output on the bottom. That's where the display is wired.

Sheet: /

File: discrete7segment.sch

Title: Discrete ROM 7-segment driver

Size: A4 Date: 2018-04-21

KiCad E.D.A. kicad 4.0.5+dfsg1-4

Rev:

Id: 1/1