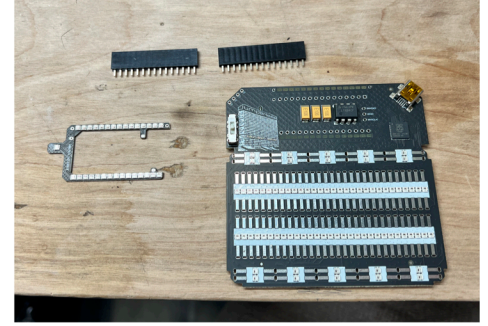
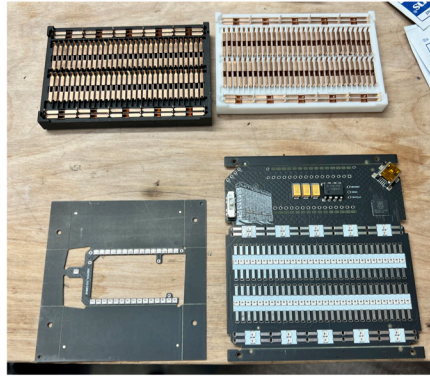


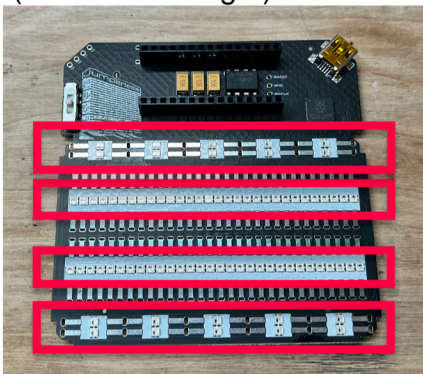
Jumperless assembly outline

Break off edge rails

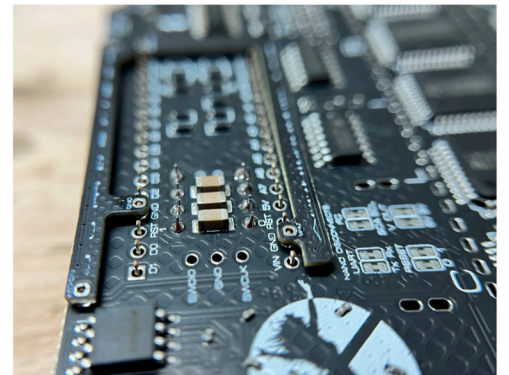
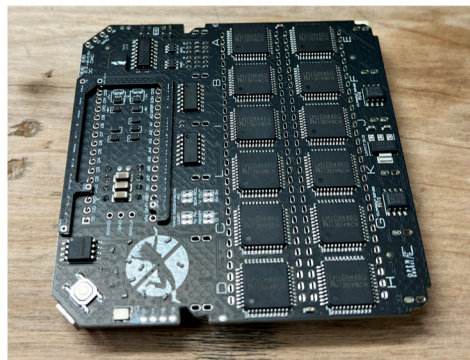
Place clips into breadboard shell



Slightly roughen tops of LEDs with sandpaper (to diffuse the light)

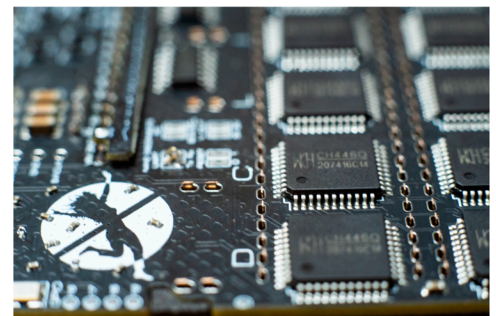
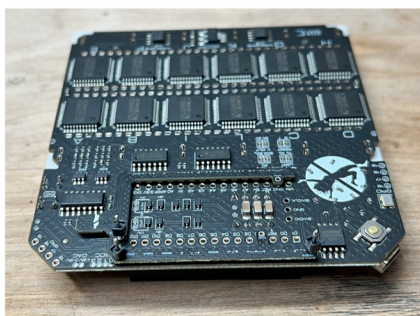
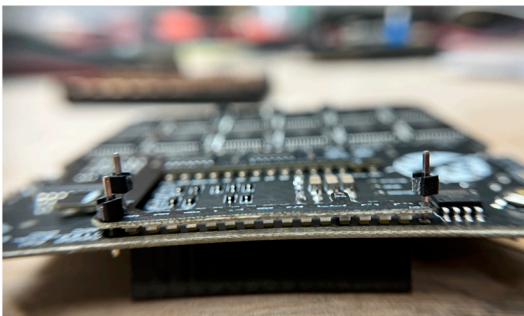


Place 15 pin female headers and LED board

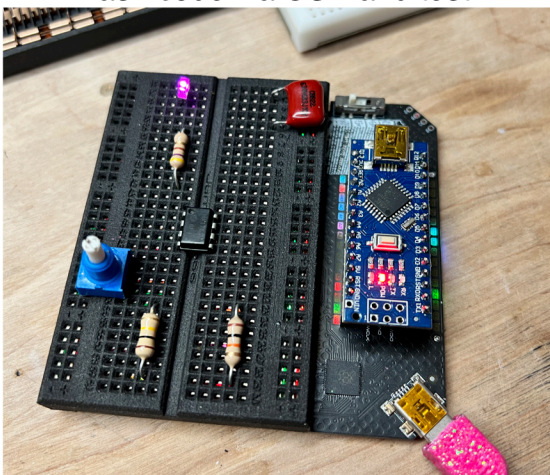


Place 3 male headers into the connection points

Place breadboard and solder everything



Flash code via USB and test



The breadboard has 144 through hole soldering joints and the top has 33

So in total there are 177 soldered connections