

Stage III-V

STAGE III

Protoboards for taking the general purpose PC & cooking it down

Half size **protoboard** \$9

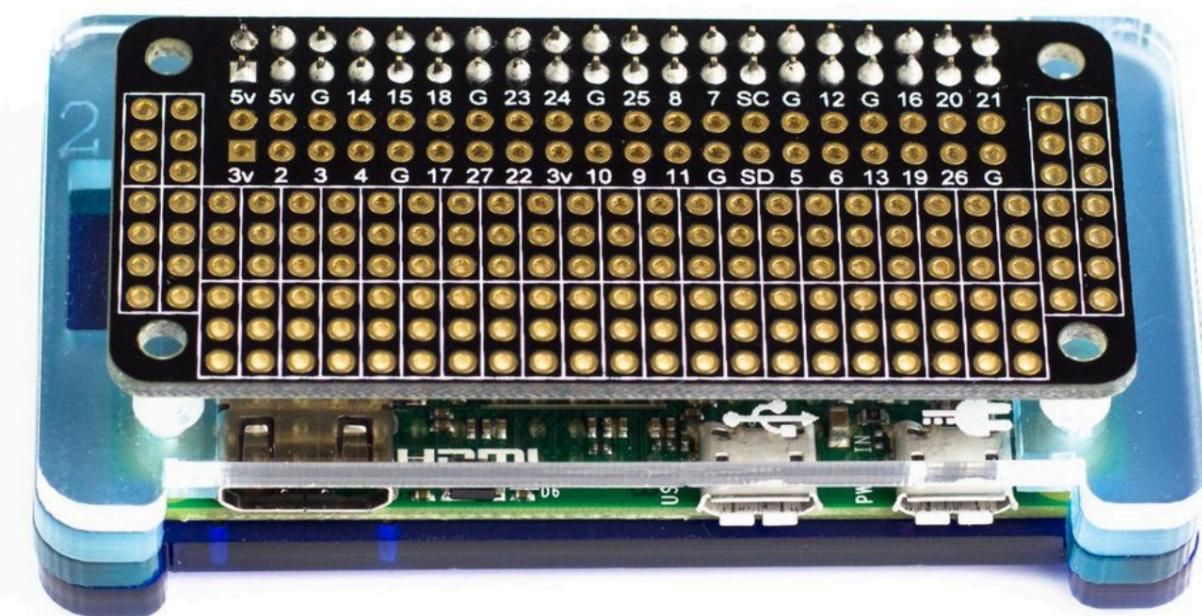
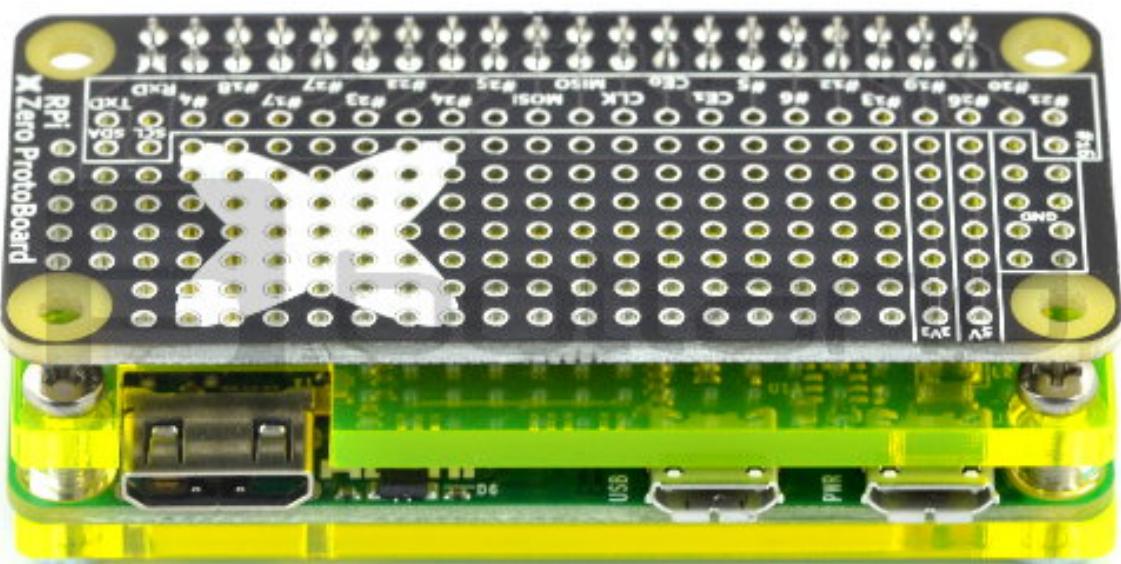
First was Protozero Richard Saville
kickstarter

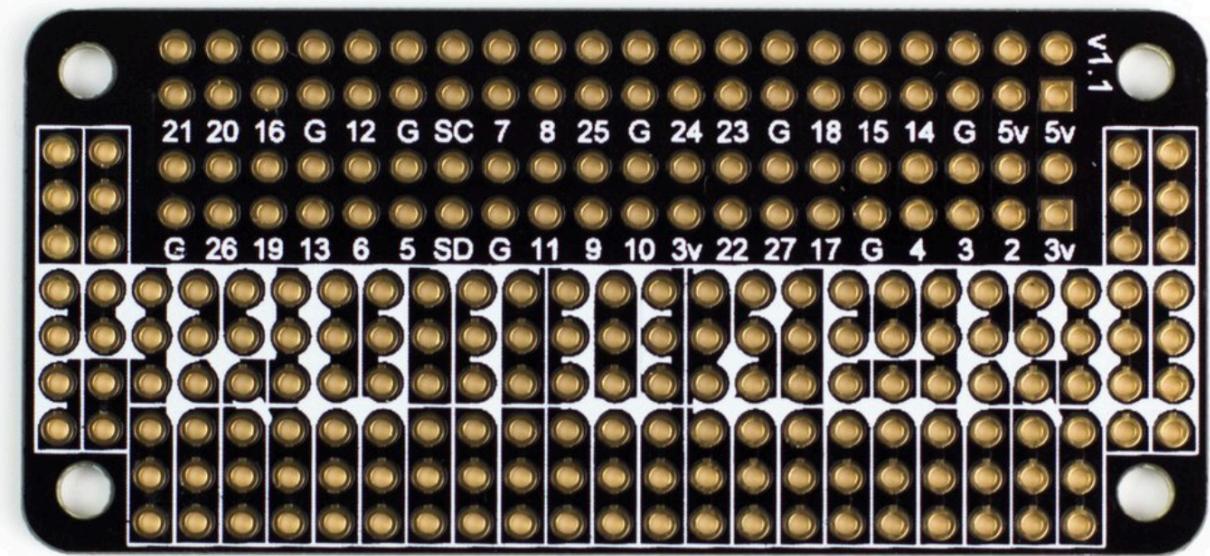
Now Pimoroni Digikey \$6.66

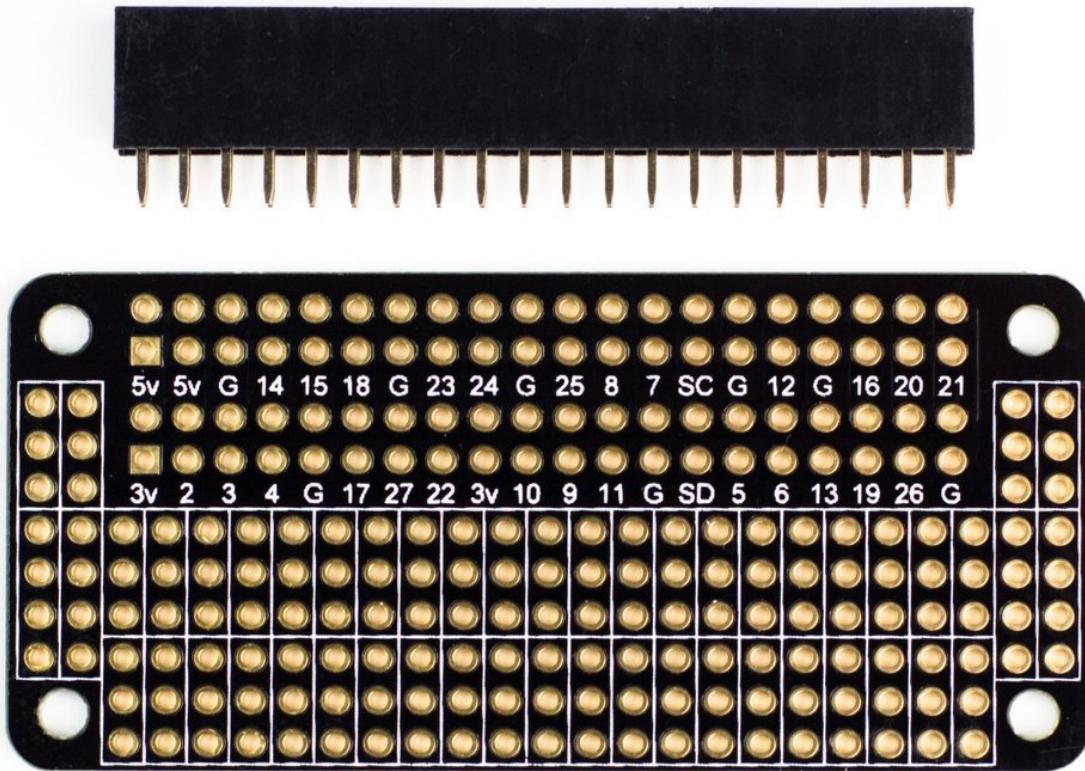
China knock off \$3.45

Maker spot \$4

Adafruit quarter \$4.5 half size \$6 **full size** \$8







Triple stack \$8.75

Need this with connected headers with hats like above. Stage after breadboard & protoboard.

Holes between the layers allow the GPIO of the boards to be connected with wire



<https://www.etsy.com/listing/501858512/triple-stack-zero-case-for-the-raspberry>

SCHMARTBOARD

Hi density schmartboard \$10

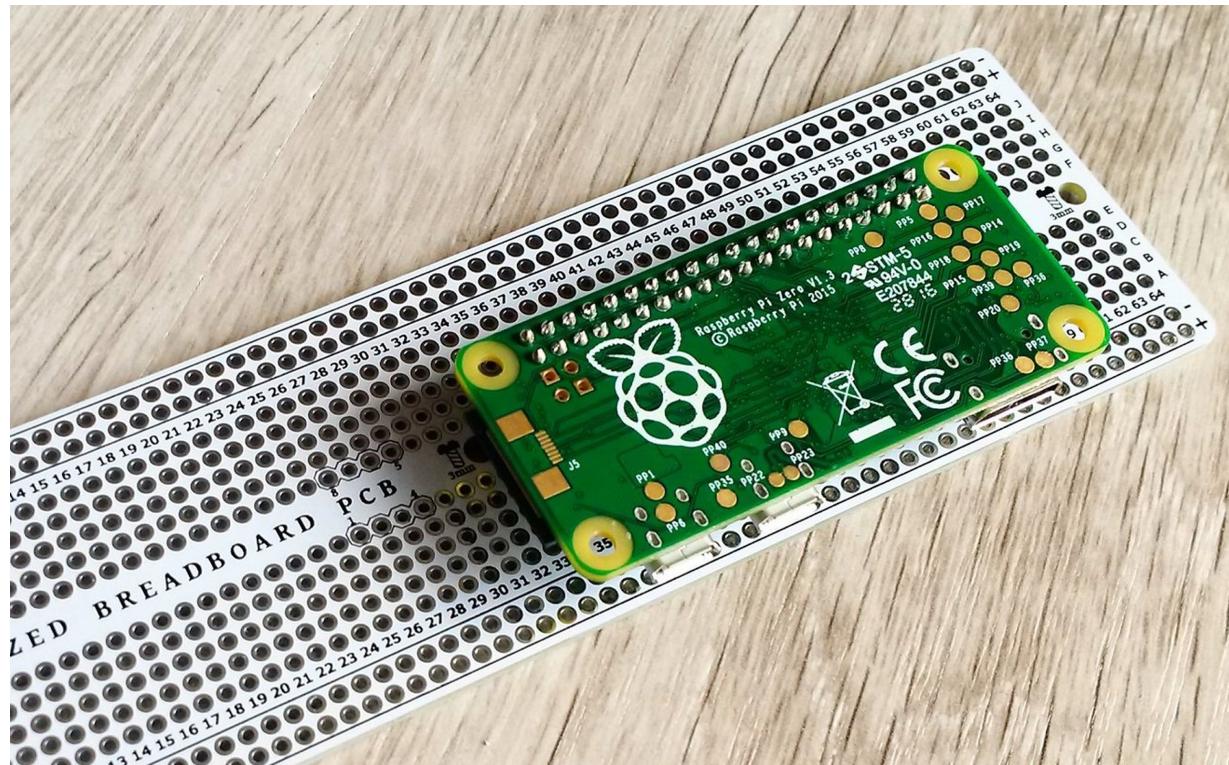
AWESOME PCB \$4.8

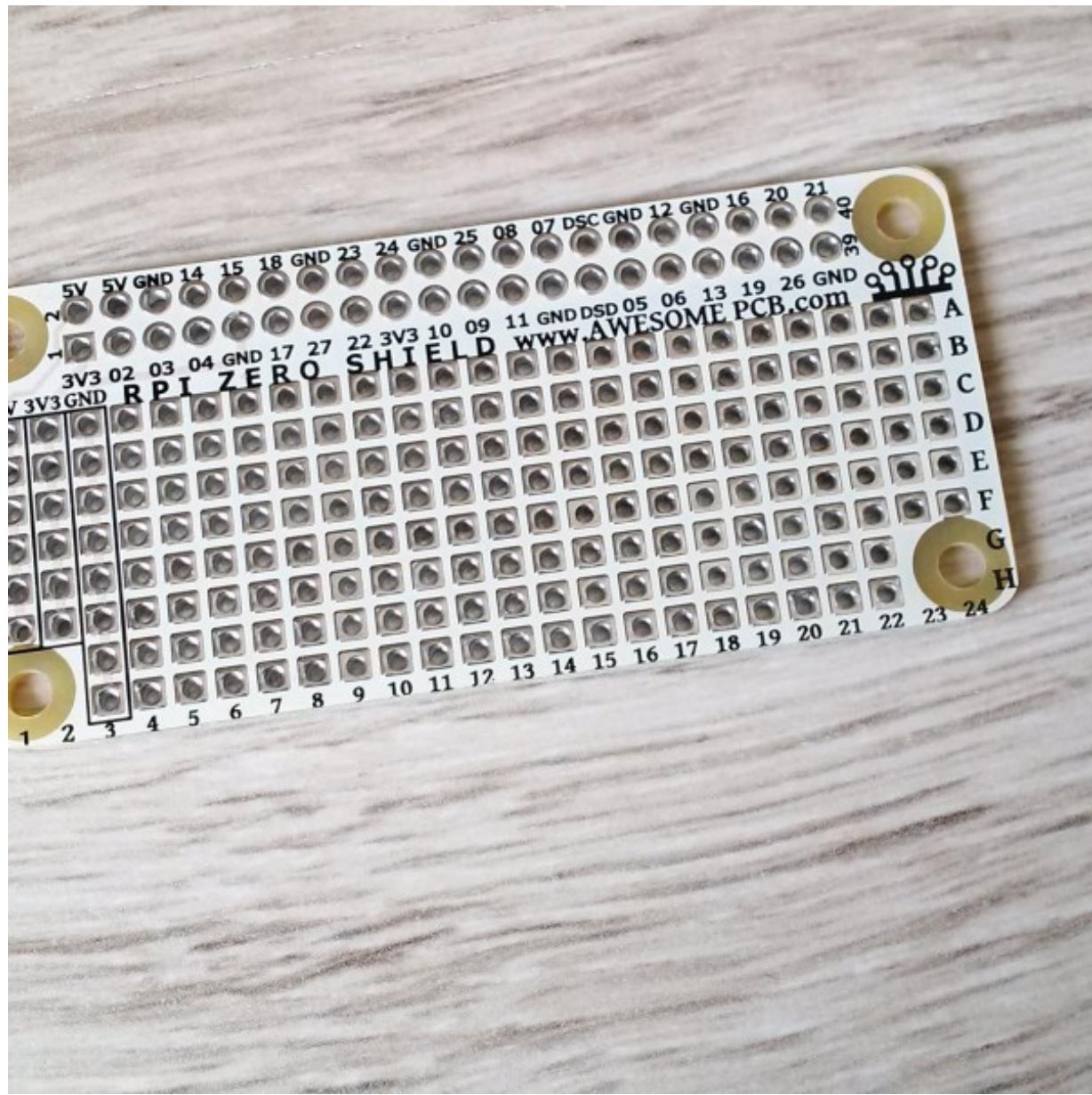
Tindie [review](#)

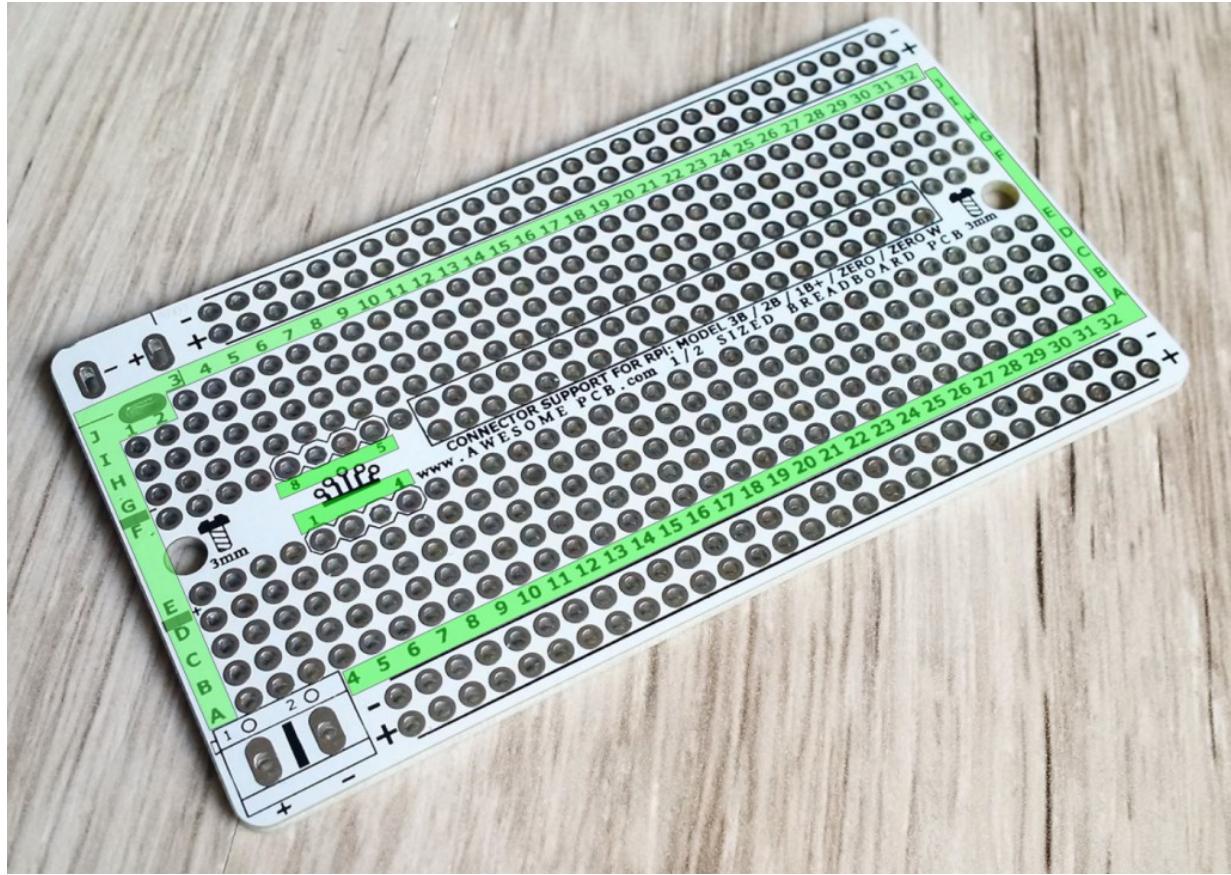
ESP8266 Wi-Fi support connector on full, half and quarter proto board
power supply connector – footprint terminal block connector

3 x footprint for SO08 package on full proto board

big holes 1.1 mm take even big power components



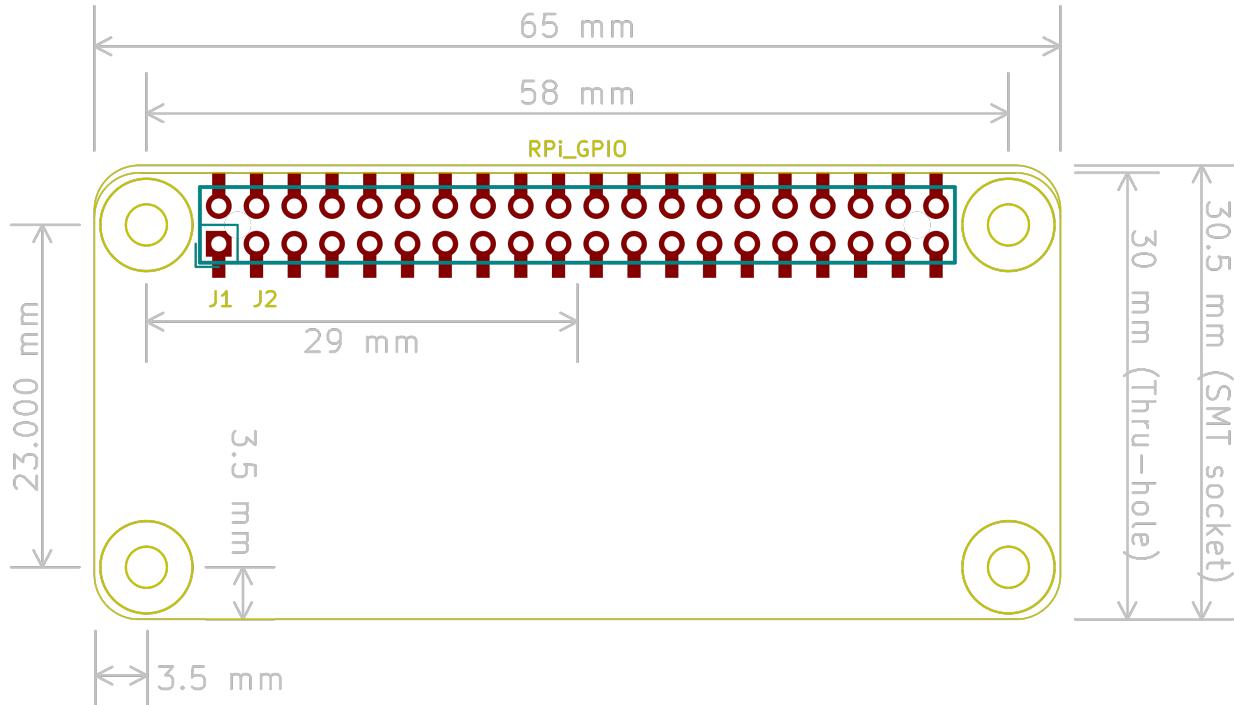




STAGE V

Custom proto

Mike Lawrence [https://github.com/mikelawrence/
RPi_Zero_pHAT_Template](https://github.com/mikelawrence/RPi_Zero_pHAT_Template)



Richard <https://upverter.com/Richard42Graham/899c821c1437c2a1/pizero-template/>

fosdem pdf

<http://www.themakersworkbench.com/articles/get-started-designing-your-own-raspberry-pi-zero-hats-today-these-eagle-footprint-files>
<https://www.raspberrypi.org/forums/viewtopic.php?f=63&t=127228>
<http://www.instructables.com/id/Design-a-Raspberry-Pi-Hat-KiCad/>
<https://www.hackster.io/jonbuford/raspberry-pi-hat-kicad-template-c9d6e7>

<https://www.youtube.com/watch?v=1P7GOLFCCgs>

<https://blog.help-14.com/hat-template-for-raspberry-pi-zero-2b8b847da7af>

https://github.com/xesscorp/RPi_Hat_Template

kicad

google for Chris Gammel's (sp?) video introduction to get you started.

zero Eagle **templates**