2x 5.1K Resistors on the CC pins will = 5V@1.5A
this is the recomended default config for type-c

TYPE-C-31-M-12

USB/POWER

D1 NEEDS to be 0ohm resistor or 1N4002 diode

I think this is important for usb 3.0 but not 2.0 and 1.1 however it may help with analogue performance but Ive yet to test this

500mA hold current
1A trip
6V trip

Only fit cBP1 if you have selected an alternate voltage regulator

TLV75533PDBVR does not require cBP1.

MAKE SURE THIS LINE is ran off of pin43
or close to pin43

These decoupling capacitors are meant
to be put close by each 3.3V pin of the RP2040

Make sure C10 is close to pin 44 of RP2040

Make sure C3 is close to pin 45 of RP2040

Make sure R3 and R4 are close to RP2040

suposedly the rp2040
supports SPI-2 flash
but I havent tried it.

Would assume you could just
not connect SD2 and SD3 for non QSPI

Pin 9 technically doesnt exist
its the main central contact under
the chip for heat dicipation

Make sure the flash chip you
have selected supports 3.3V
power or adjust the design.

Flash

Im pretty sure a lot of these W25QXXX Chips are pin compatible
Dont quote me on that

Im unsure if the RP2040 can function with flash larger than 128Mb

GD25Q40CEIGR is NOT Compatible
you need GD25W16* needs to be a multiple of 8 atleast for circuitpython.

(Ive not confirmed if GD25W16 works I just
Have some boards with GD25Q40CEIGR and they dont work)

https://datasheets.raspberrypi.com/rp2040/hardware-design-with-rp2040.pdf

On page 13 you can learn more details of what flash is supported

GPIOs

LEDs

Crystal

not 22pf but pick to match crystal.

1K resistor to prevent overdriving of
the crystal as per the minimal design example

RP2040 supports 1MHz to 15MHz

this is for factory testing
always pull this to ground

Power LED is on by default but when
GPIO24 is enabled it will be shut off

Envious.Design	
Sheet: /RP2040/	
File: RP2040MCU.kicad_sch	
Title: Raspberry Pi Pico Clone	
Size: A3	Date: 2020-12-18
KiCad E.D.A. kicad (6.0.6)	**Rev: REV1**
	Id: 2/2