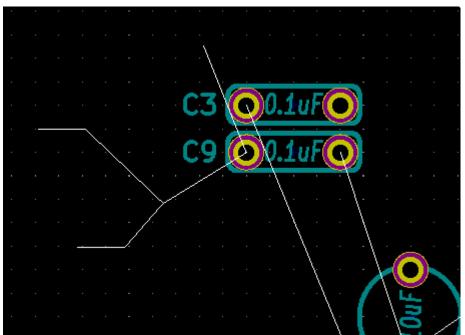
Twitter Thread by foone







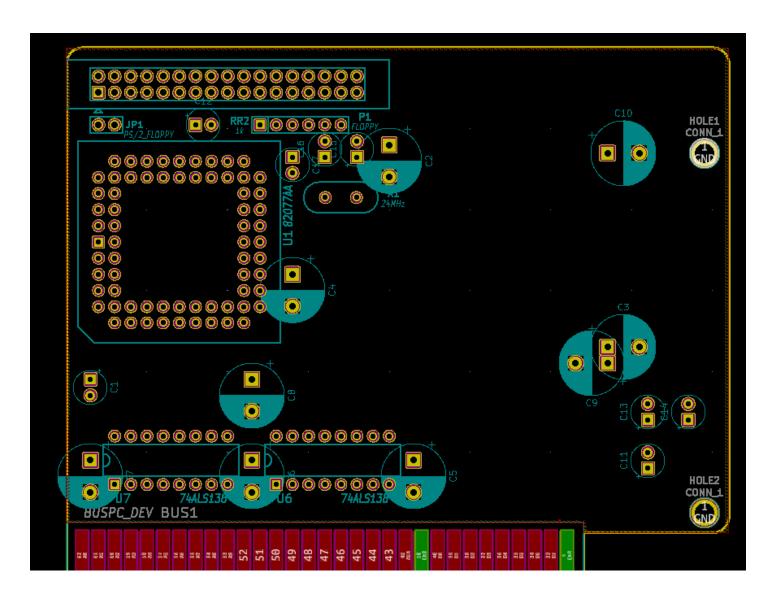
I think I've permanently confused KiCAD it's reminding me that I need to connect this capacitor to Nothing



attach this end to ground, this end to +5v, and this end to THE VOID

I accidentally made all the capacitors gigantic and they won't fit anymore

halp



gonna design an ISA card using some of these

it's gonna be tricky to fit in the case



that's from this video: https://t.co/FyMofzOFEX

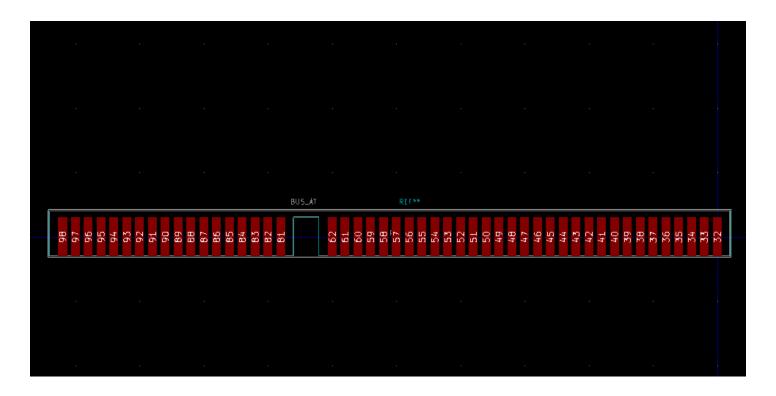
those kicad motherfuckers

they have an ISA footprint but it doesn't show up when you search for "ISA" because they called it BUS_AT despite it being clearly called "ISA" since THE LATE 80s

- 1 Connector_PCBEdge:4UCON_10156_2x40_P1.27mm_Socket_Horizontal
- 2 Connector_PCBEdge:BUS_AT
- 3 Connector_PCBEdge:BUS_PCI
- 4 Connector_PCBEdge:BUS_PCIexpress_x1
- 5 Connector_PCBEdge:BUS_PCIexpress_x4
- 6 Connector_PCBEdge:BUS_PCIexpress_x8
- 7 Connector_PCBEdge:BUS_PCIexpress_x16
- 8 Connector_PCBEdge:BUS_PCI_Express_Mini
- 9 Connector_PCBEdge:BUS_PCI_Express_Mini_Dual
- 10 Connector_PCBEdge:BUS_PCI_Express_Mini_Full
- 11 Connector_PCBEdge:BUS_PCI_Express_Mini_Half
- 12 Connector_PCBEdge:molex_EDGELOCK_2-CKT
- 13 Connector_PCBEdge:molex_EDGELOCK_4-CKT

and even worse, it's actually the AT bus

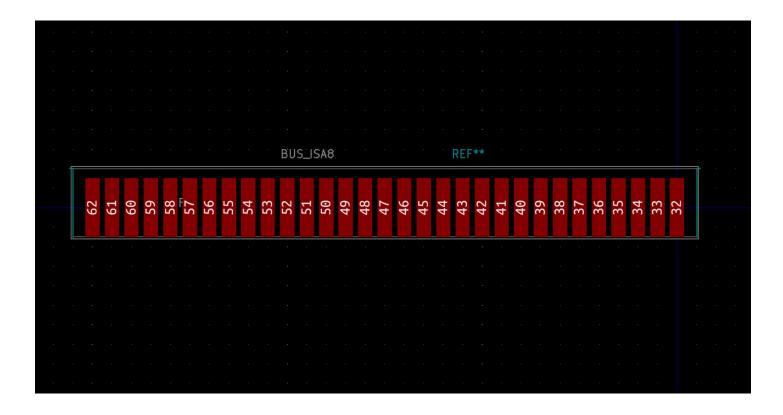
The full AT bus, the 16bit extension to the 8bit PC/XT bus!

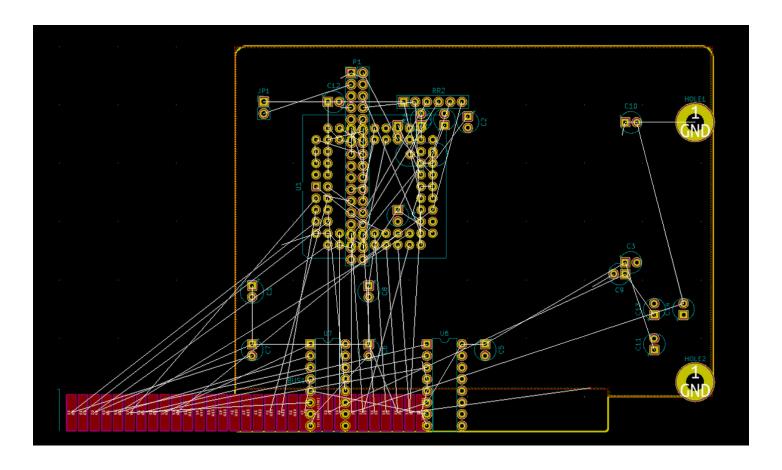


but surely they included the PC/XT bus as well, since it's just a minor variation of the AT bus, right? You'd just need to make the same design but slightly smaller?

- 1. no, because
- 2. fuck you

gotta do it myself like some kind of caveman

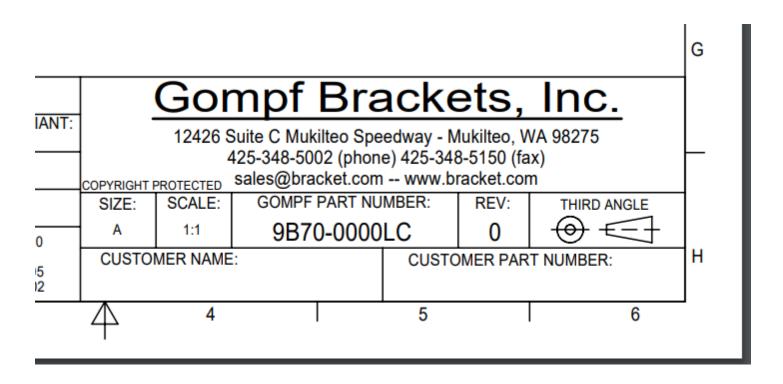


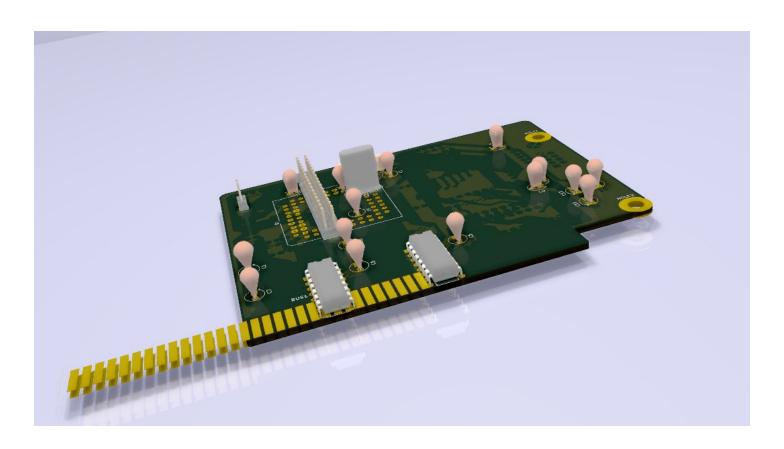


apparently I have now fixed the issue of connecting to the void at the expense of every single item on the board deciding to roll scatter dice



I thought I'd quickly google "what size are ISA mounting bracket holes?" and it quickly led me to JOGGLE TABS by GOMPF BRACKETS and I think I wandered into the part of the internet that's generated by markov chains

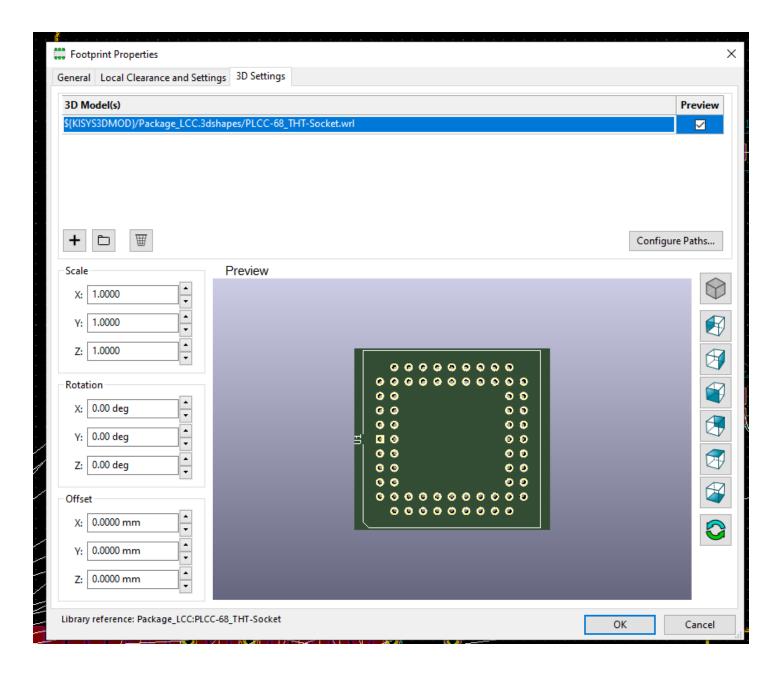




hang on I'm doing an update of all my symbols & footprints & 3d models. this will fix and/or cause all my problems

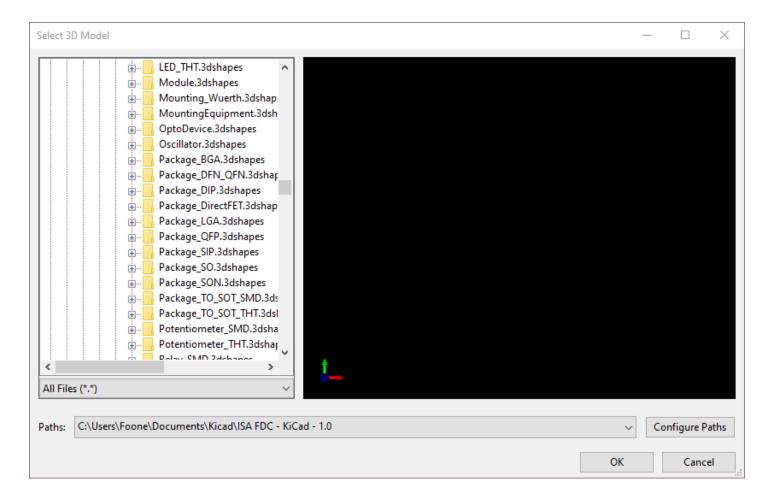
does all software have to constantly gaslight me? look at this.

it's the wrong 3D library, as that's just the footprint not the socket. I don't even know if here's a socket, so I'd like to look. See the 3D model path? it's in Package_LCC.3dshapes



so I hit BROWSE and scroll to package_...

there's no LCC



there's no LCC and yet it apparently is working? even though it doesn't exist?

HOW? WHY?

(my guess is that either it's being cached and doesn't exist anymore (or has been moved), or it's aliased from somewhere else, or autogenerated from the footprint, or any number of things)

but the end user experience is that it makes you think you're going fucking insane

amusingly if I google for "PLCC-68_THT-Socket.wrl" there's two results:

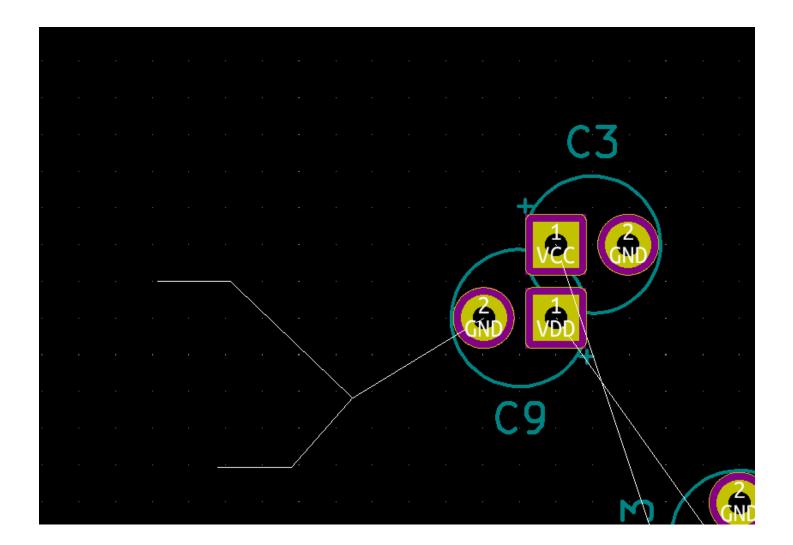
- 1. the source for kicad which points at this non-existent file
- 2. <u>@TubeTimeUS's</u> PlaidBib project which points at "Housings_LCC.3dshapes/PLCC-68_THT-Socket.wrl", which is a slightly different path!

which also doesn't exist.

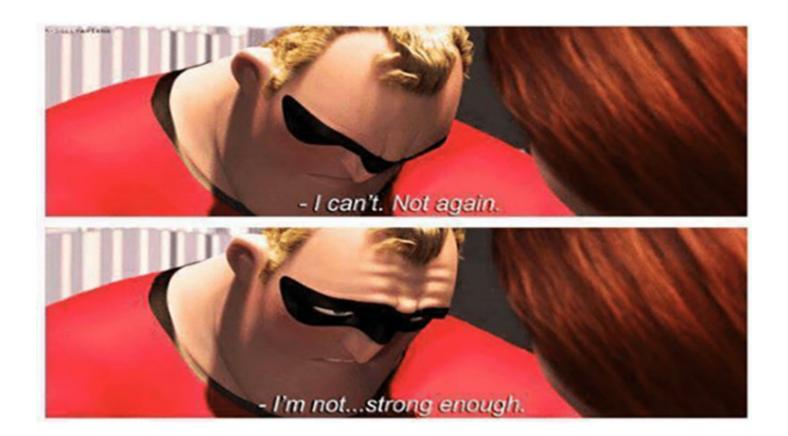
so I'm guessing the answer is that there is no WRL file for this part and this is just a placeholder for in case anyone ever makes one, and it's instead just getting autogenerated from the footprint

computers are one of those fun subjects where the more you learn about them, the more you hate them

updating the libraries brought back the void



https://t.co/Sunhq9SZuH



FINE YOU WANT ME TO CONNECT TO THE VOID? I'LL DO IT. BUT I'LL DO IT RIGHT.

THERE.

We've got out power connectors.

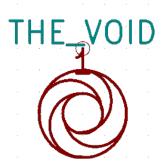
5 volts

ground

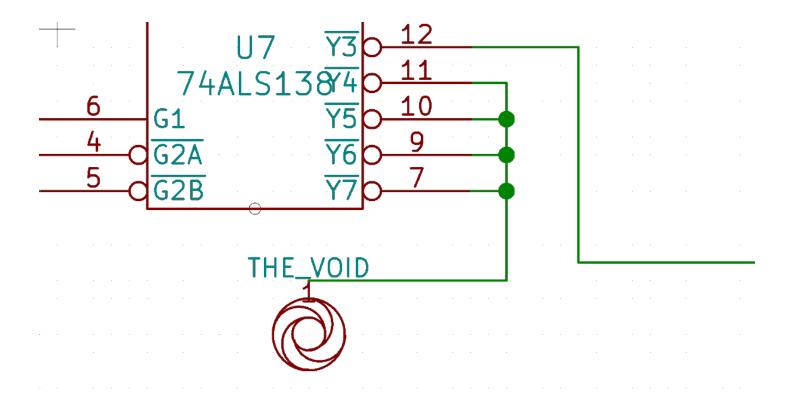
and the fucking VOID







connect them to the void.



mmm, tasty.

https://t.co/6pHY6xZkCZ

Drinks available:

Sprite

Diet Coke

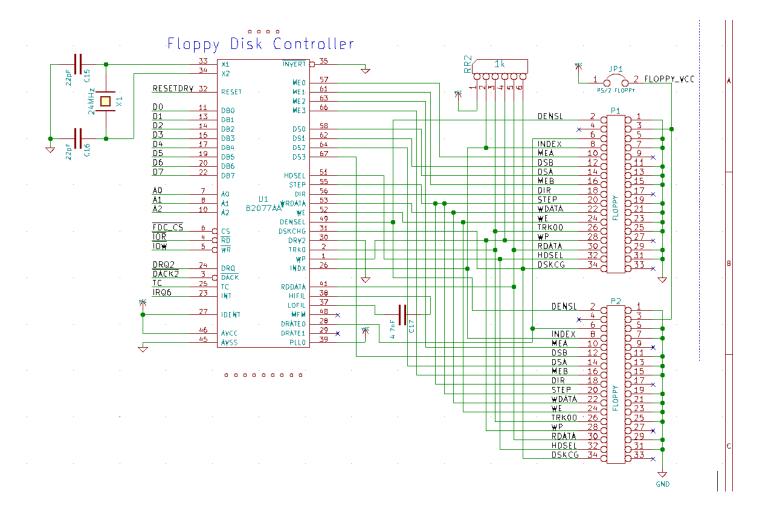
\uff34 \uff28 \uff25 \uff36 \uff2f \uff29 \uff24 pic.twitter.com/t2FXeaJAyy

- foone (@Foone) March 24, 2019

fun fact: I couldn't remember how I'd phrased that one and searching "the void" didn't find it, so I had to google "the void drinks machine" and it found a couple reddit posts that screenshotted the tweet and cropped off my name, so I then could search for "diet coke" and find it

less fun fact: that shitpost is probably the most popular thing I ever ever done, and it's all because of people reposting the screenshot without credit!

I seriously only opened up this PCB editor so I could do a shitpost followup to something I said last night and now it's 2 hours later and I'm mostly done setting up a 4-drive floppy controller why

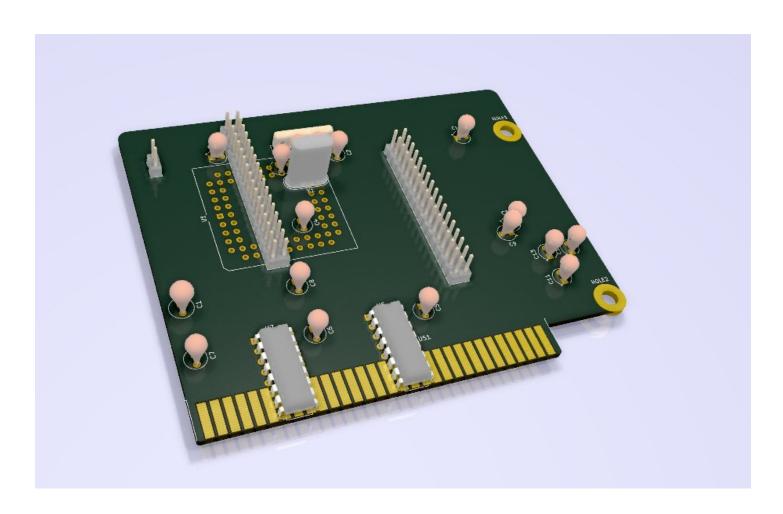


people like to complain about ADHD keeping you from getting anything done, or only letting you concentrate on "pointless" things like games and TV shows, and that's definitely a big part of it

but the other side is that sometimes you CAN CONCENTRATE and you can do it VERY WELL and FOR A LONG TIME but you have zero ability to control what you're concentrating on

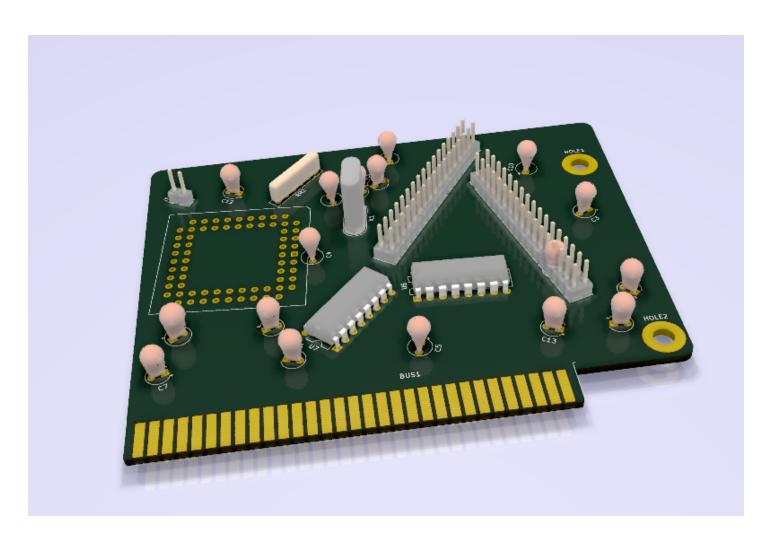
I wanted to wake up and make a quick joke on twitter and then go get some coffee and start the day and NOPE TWO HOURS LATER I'M DESIGNING A FLOPPY DISK CONTROLLER

JLCPCB here I come



OK I know that one won't work. There's too many overlapping parts.

I fixed it now. This'll work.

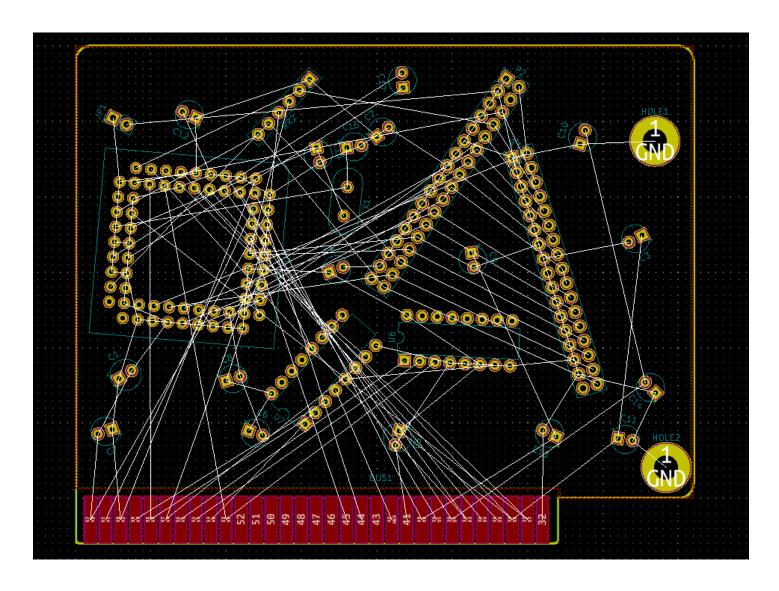


I did this one manually but I have seriously considered writing a plugin for kicad that goes through every part and picks a random orientation out of 360 degrees and applies it

and by "manually" I mean I clicked each part and adjusted the properties. Obviously I let a computer generate the randomness, I'm not a barbarian.

```
Microsoft Windows [Uersian 10.0.19042.746]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\Faone>python
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> random.randint(0,360)
134
>>> Irandom.randint(0,360) for x in range(10)]
[255, 227, 263, 87, 138, 341, 199, 32, 17, 254]
>>> [random.randint(0,360) for x in range(10)]
[350, 340, 154, 134, 207, 71, 95, 38, 35, 9]
>>> Irandom.randint(0,360) for x in range(10)]
[283, 63, 39, 156, 226, 159, 63, 343, 90, 346]
>>> |
```



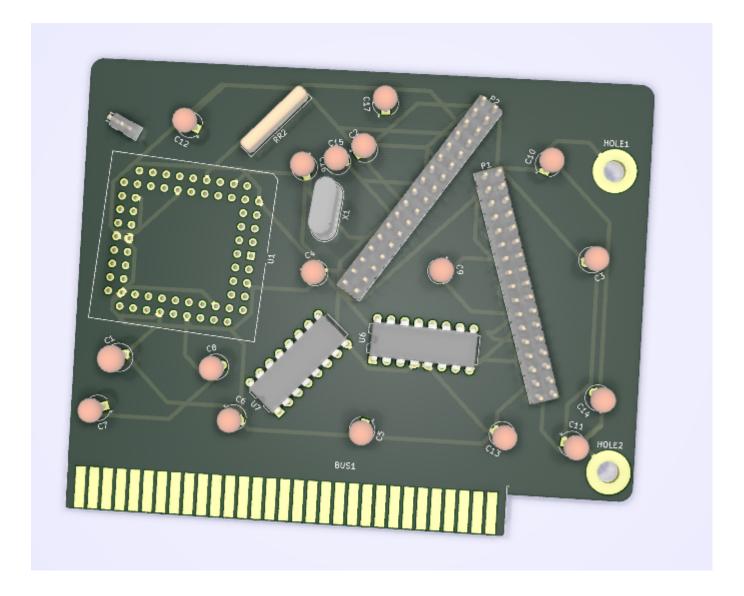
I'm pretty sure if I pointed an autorouter at this my computer would collapse into a black hole

especially since I have all these pads I need to connect to THE VOID

done routing the ground.

I decided not to use a ground plane fill. it's too easy.

I'm just gonna do point-to-point traces for all the ground points



I may need more than 2 layers

hey what if I just give every major component their own layer?

kicad only supports up to 32 layers, but that should be enough