

## PART A: VORON 2.4 CABLE CHAIN WIRING for the Octopus Pro V1.0 Board:

NOTES: Using 48VDC to drive motors. Using Bigtreetech TMC5160 Pro in SPI mode. All fans are 24 VDC. Using Hartk1213's Afterburner-ERCF-PCB for toolhead PCB (also known as HartK's v3.rabbit Toolhead PCB). Use 20 AWG PTFE for 24V to tool head and HE0! All other wires to toolhead can be 24 AWG.

## Note about the Hartk1213 v3.rabbit board:

If the jumper pads on the back of the v3.rabbit are configured incorrectly you could end up damaging your Octopus Pro mother board!!

Because there are two different versions of this Toolhead board around (let's call them version #1, and version #2), before powering on your printer, please ensure that the jumper pads on the back of the v3.rabbit Toolhead board are properly configured for your FANS and ABL!

How to tell which version of the v3.rabbit Toolhead board you own:

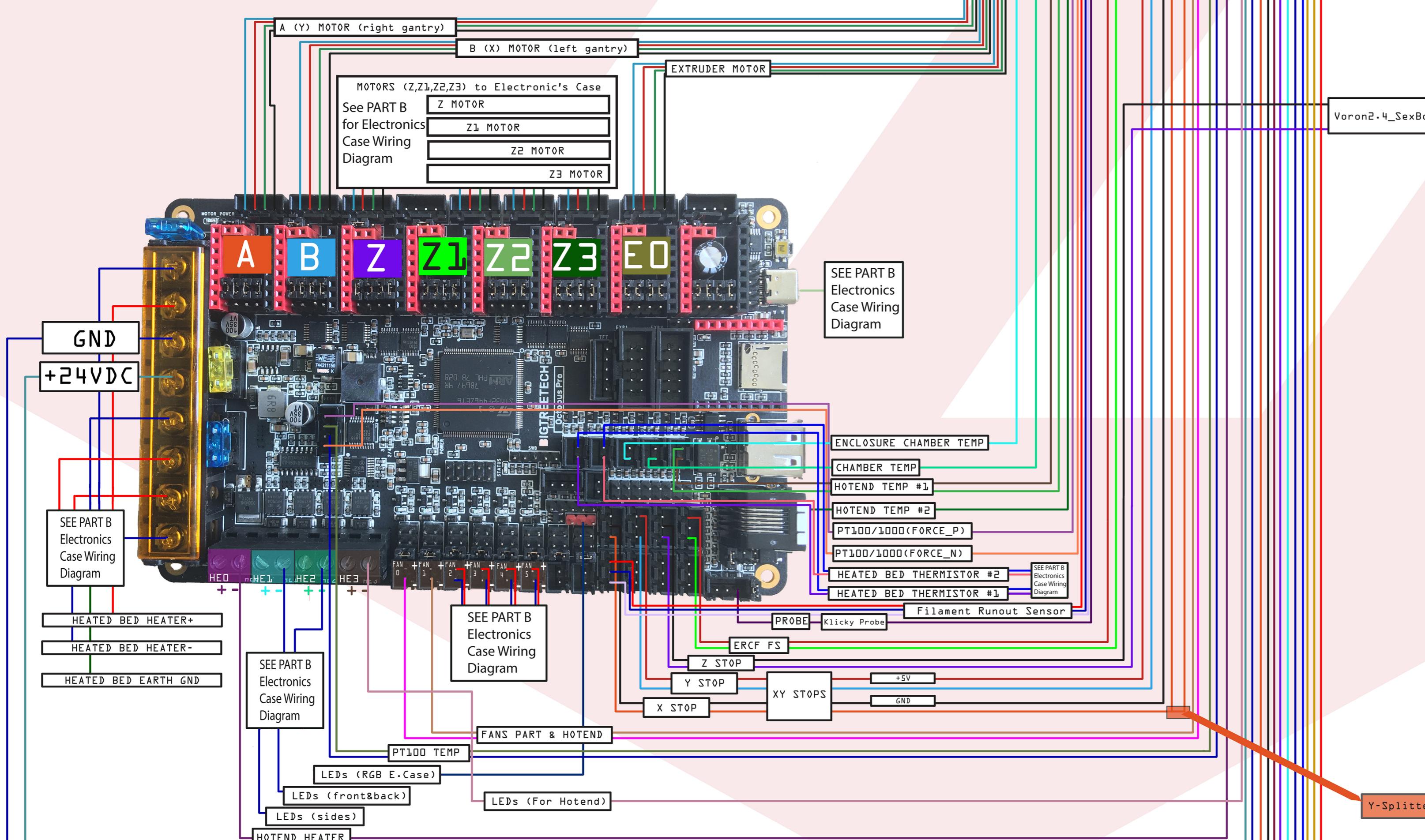
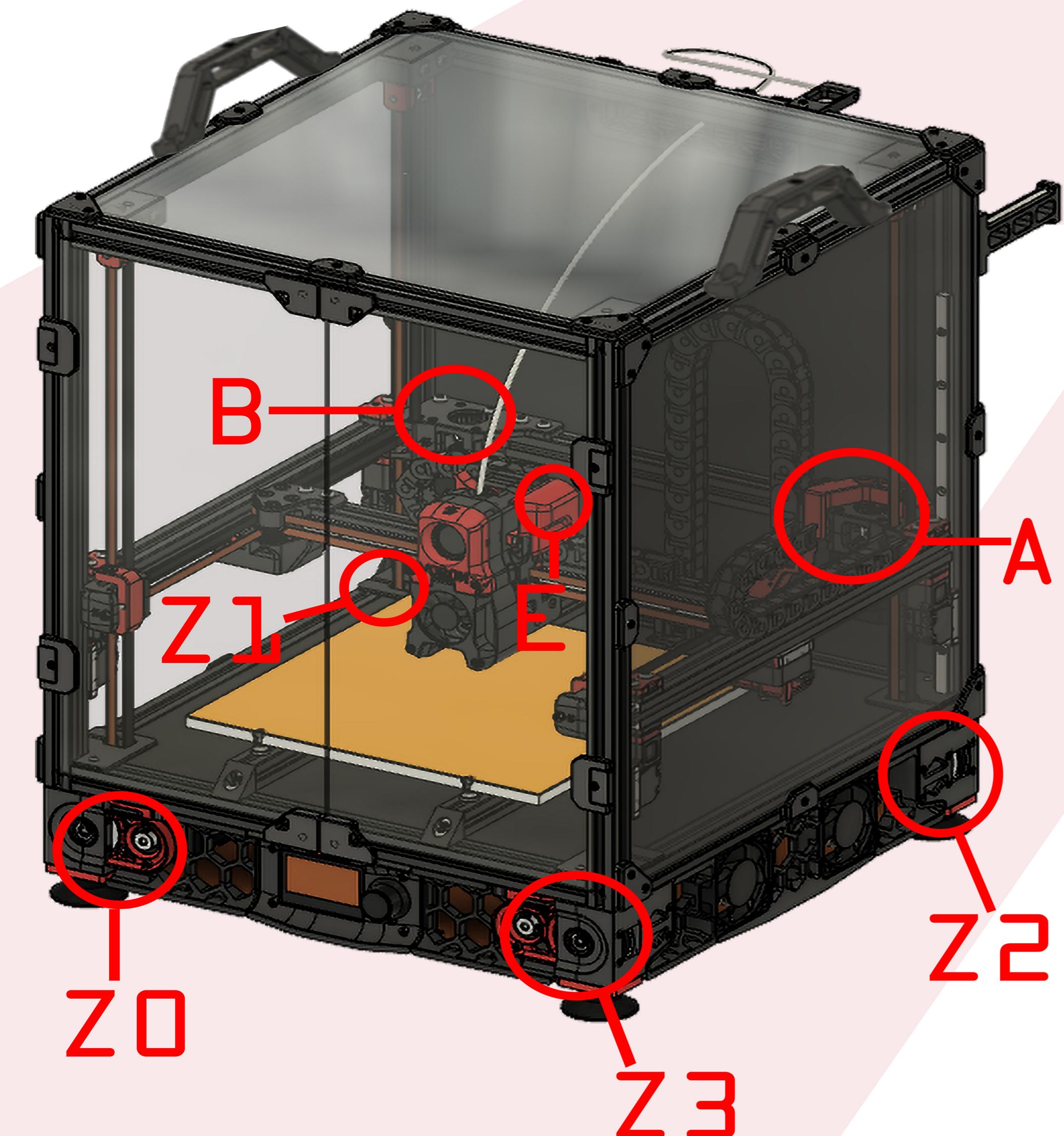
If you turn the board over on its back, you will see a bank of jumper pads. For version #1 of the v3.rabbit Toolhead board has 4 columns by 3 rows of jumper pads. For version #2 of v3.rabbit Toolhead board has 3 columns by 3 rows of jumper pads. If you have version #1 of the v3.rabbit Toolhead board (4 columns by 3 rows of jumper pads) than **you are responsible for bridging the jumper pads** to your desired voltage (in my case I would solder a bridge to 24VDC for ABL, PCF, HEF, and FS). If you have version #2 of the v3.rabbit Toolhead board (3 columns by 3 rows of jumper pads) than all the selectable voltages default to 24VDC!

Here is what the labels mean:  
ABL means auto bed leveling or an inductive probe or the proximity sensor connector; PCF means Part Cooling Fan;  
HEF means Hotend Fan; and FS means Filament Switch Sensor.

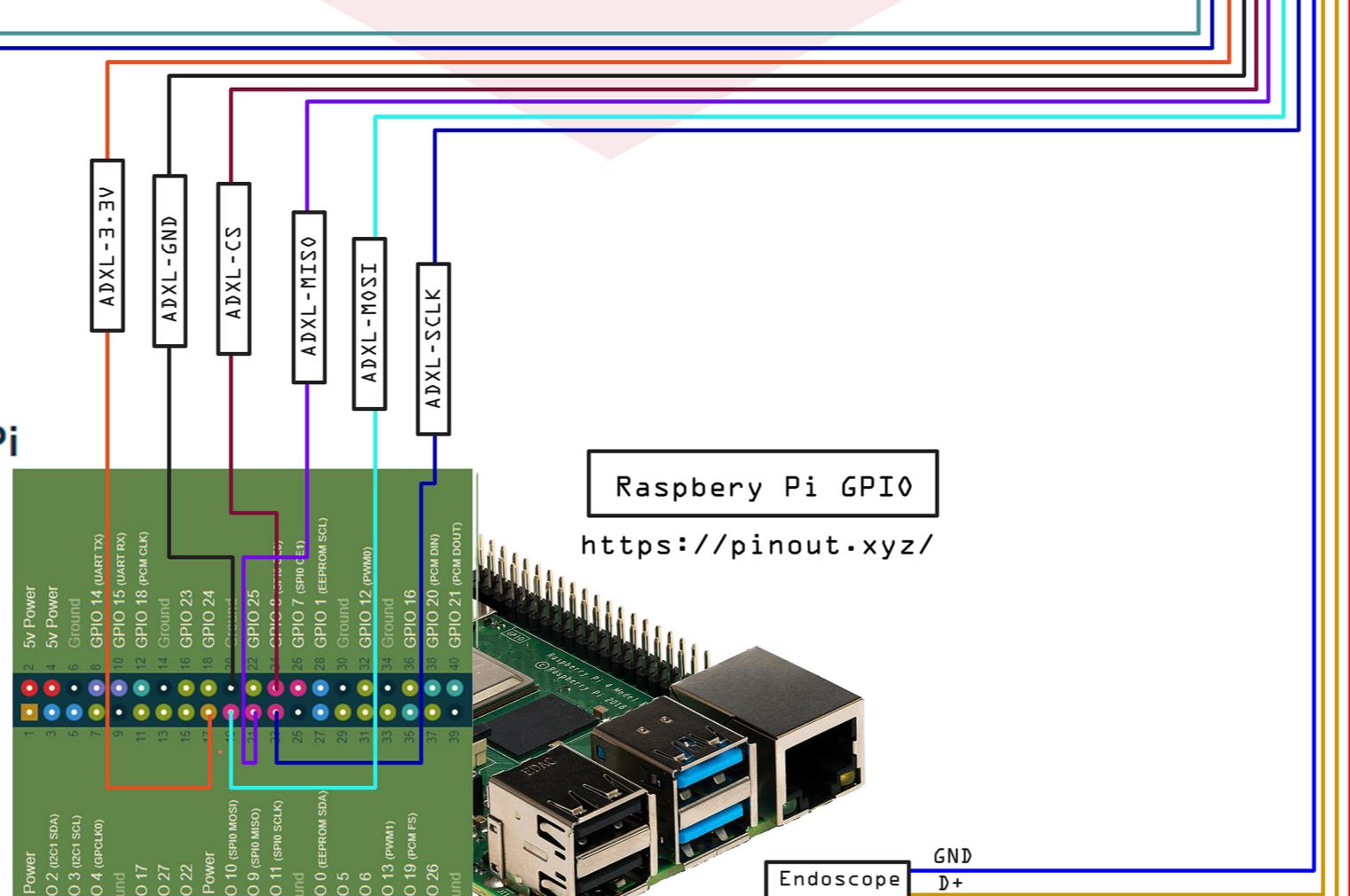
For version #1 of the v3.rabbit board, the columns are labeled from left to right: ABL, PCF, HEF, FS.  
For version #2 of the v3.rabbit board, the columns are labeled from left to right: ABL, PCF, HEF.

For version #1 and version #2 the rows are: 1<sup>st</sup> row is 24VDC; 2<sup>nd</sup> row is (ABL, PCF, or HEF, only on Version #1 FS); and 3<sup>rd</sup> row is 5VDC.

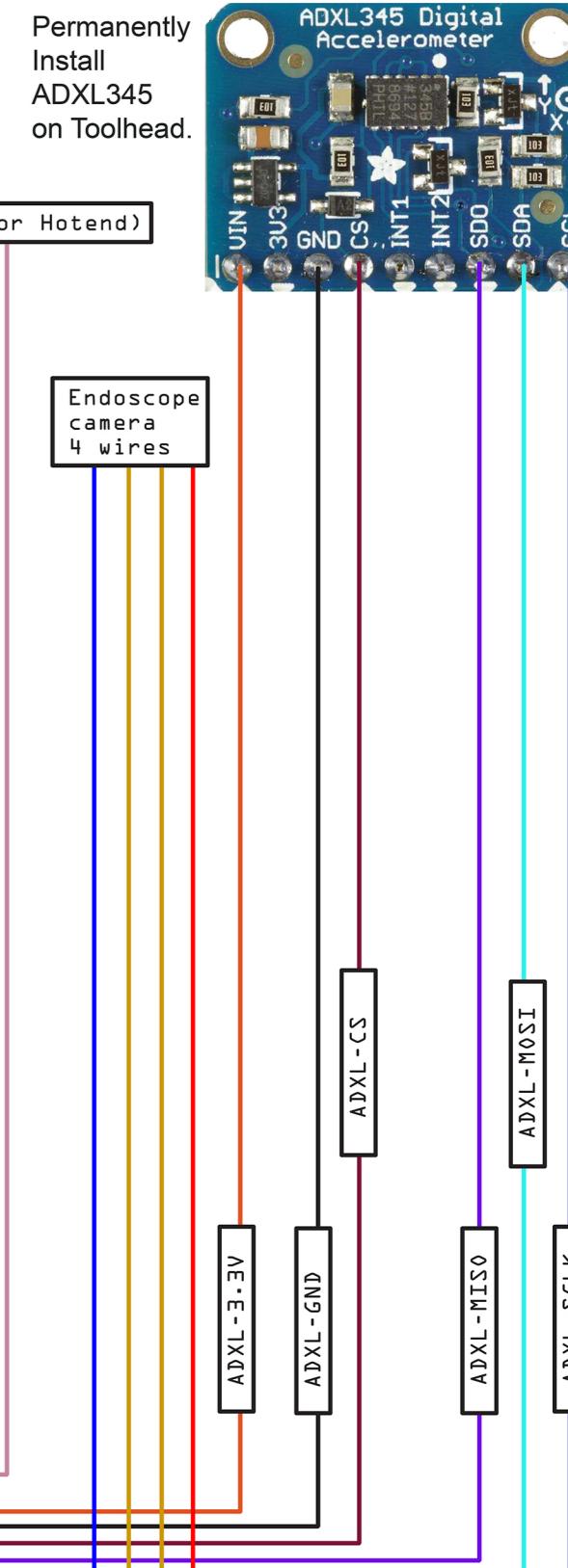
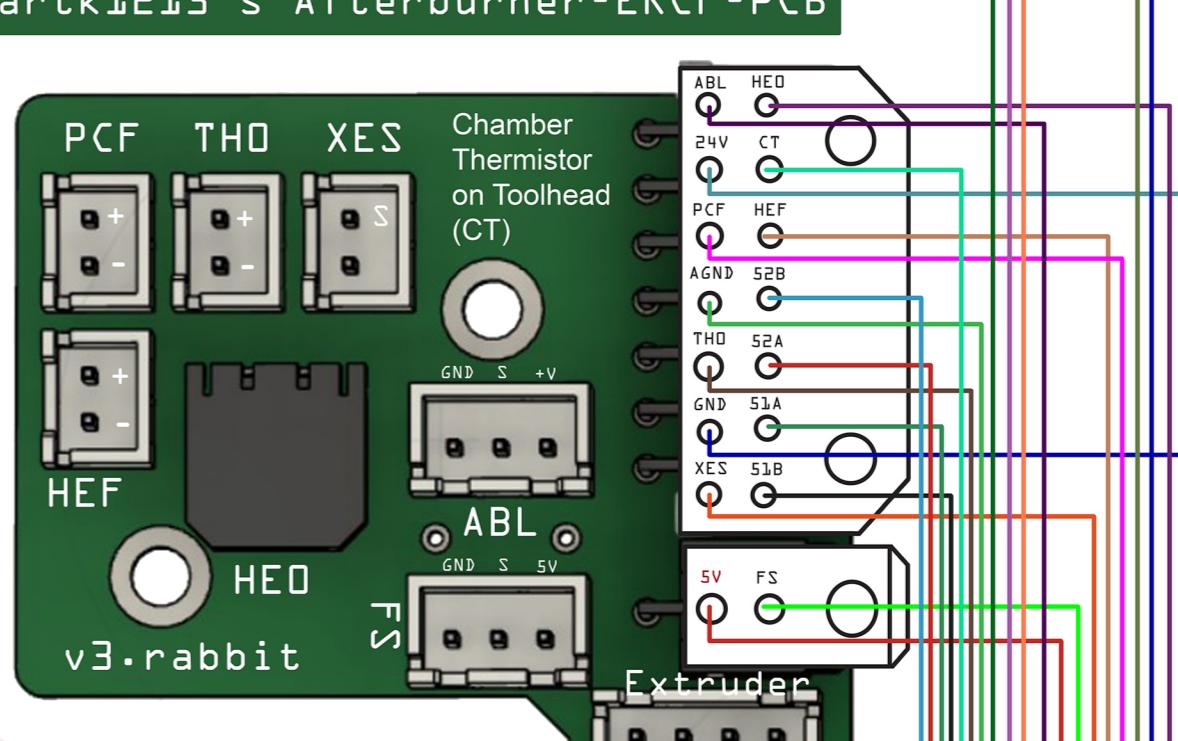
If you have version #2 and you want 5VDC, you are going to cut the trace to the 24VDC on the desired PIN (ABL,PCF or HEF)!



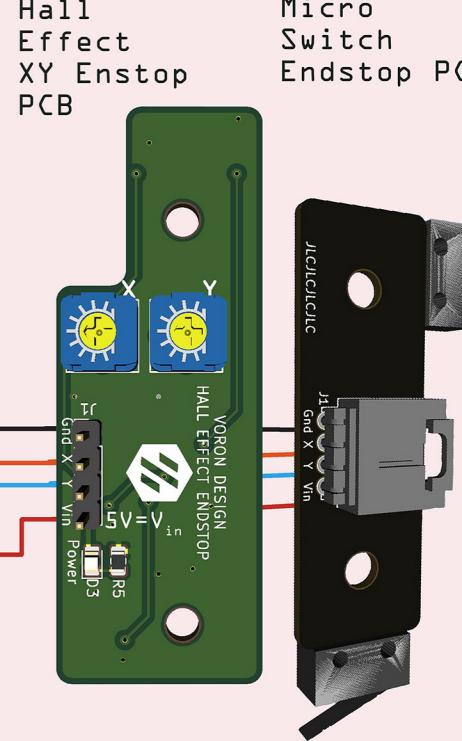
Raspberry Pi Pinout



Optional wires:  
Might want to install 4-wire PT100 later; Add one extra in case  
PT100/1000(FORCE\_N)  
PT100/1000(FORCE\_P)  
HOTEND TEMP #2 (extra wire)  
PT100 TEMP



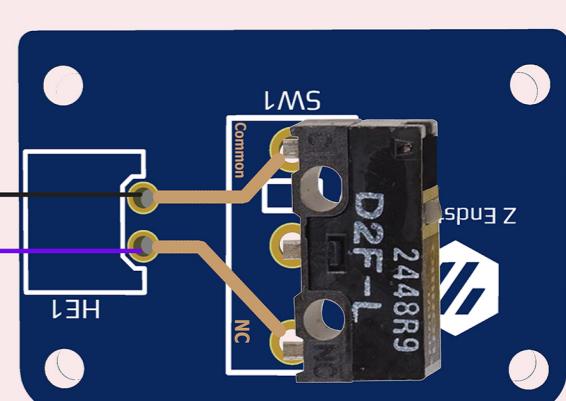
OR



X CABLE CHAIN

Y CABLE CHAIN

Z CABLE CHAIN



Designed by  
GadgetAngel



Based on work done by  
Thomas White