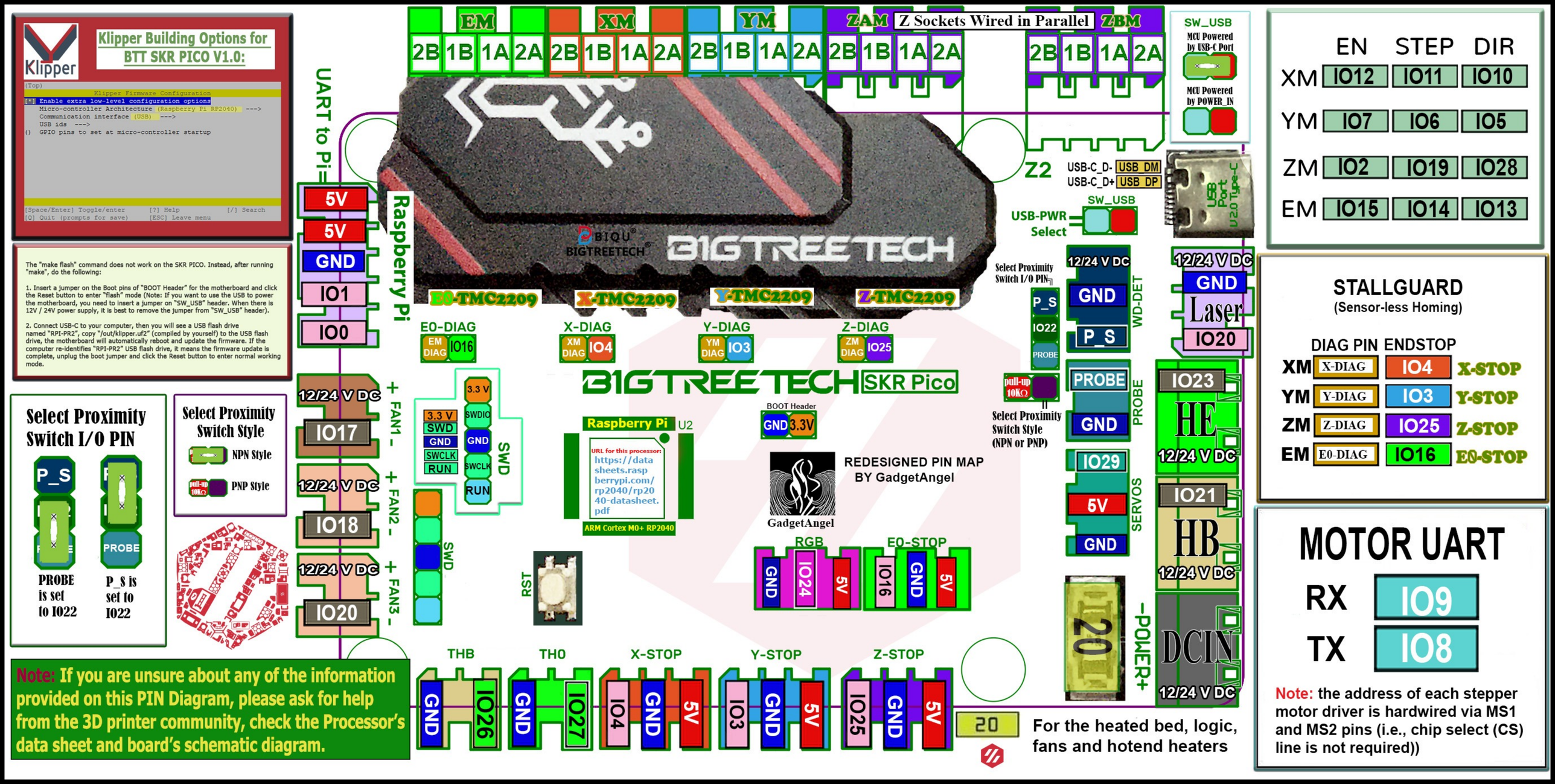
Klipper Building Options for BTT SKR PICO V1.0:
Klipper Firmware Configuration
[*] Enable extra low-level configuration options
Micro-controller Architecture (Raspberry Pi RP2040) --->
Communication interface (USB) --->
USB ids --->
() GPIO pins to set at micro-controller startup
[Space/Enter] Toggle/enter [?] Help [/] Search
[Q] Quit (prompts for save) [ESC] Leave menu
The "make flash" command does not work on the SKR PICO. Instead, after running "make", do the following:
1. Insert a jumper on the Boot pins of "BOOT Header" for the motherboard and click the Reset button to enter "flash" mode (Note: If you want to use the USB to power the motherboard, you need to insert a jumper on "SW_USB" header. When there is 12V / 24V power supply, it is best to remove the jumper from "SW_USB" header).
2. Connect USB-C to your computer, then you will see a USB flash drive named "RPI-PR2", copy "/out/klipper.uf2" (compiled by yourself) to the USB flash drive, the motherboard will automatically reboot and update the firmware. If the computer re-identifies "RPI-PR2" USB flash drive, it means the firmware update is complete, unplug the boot jumper and click the Reset button to enter normal working mode.
Select Proximity Switch I/O PIN
P_S
PROBE
PROBE is set to IO22
P_S is set to IO22
Select Proximity Switch Style
NPN Style
PNP Style
pull-up 10KΩ
Note: If you are unsure about any of the information provided on this PIN Diagram, please ask for help from the 3D printer community, check the Processor's data sheet and board's schematic diagram.
EM
XM
YM
ZAM
Z Sockets Wired in Parallel
ZBM
2B 1B 1A 2A
UART to Pi
Raspberry Pi
5V
5V
GND
IO1
IO0
BIQU
BIGTREETECH
E0-TMC2209
X-TMC2209
Y-TMC2209
Z-TMC2209
E0-DIAG
EM DIAG IO16
X-DIAG
XM DIAG IO4
Y-DIAG
YM DIAG IO3
Z-DIAG
ZM DIAG IO25
BIGTREETECH SKR Pico
12/24 V DC
IO17
+ FAN1 -
12/24 V DC
IO18
+ FAN2 -
12/24 V DC
IO20
+ FAN3 -
3.3 V
SWDIO
GND
SWCLK
RUN
SWD
Raspberry Pi U2
URL for this processor:
https://datasheets.raspberrypi.com/rp2040/rp2040-datasheet.pdf
ARM Cortex M0+ RP2040
BOOT Header
GND 3.3V
RST
REDESIGNED PIN MAP BY GadgetAngel
GadgetAngel
RGB
GND IO24 5V
E0-STOP
IO16 GND 5V
THB
THO
X-STOP
Y-STOP
Z-STOP
GND IO26
GND IO27
IO4 GND 5V
IO3 GND 5V
IO25 GND 5V
20
For the heated bed, logic, fans and hotend heaters
Z2
USB-C_D- USB_DM
USB-C_D+ USB_DP
USB Port U2.0 Type-C
SW_USB
USB-PWR Select
Select Proximity Switch I/O PIN
P_S
IO22
PROBE
pull-up 10KΩ
Select Proximity Switch Style (NPN or PNP)
12/24 V DC
GND
P_S
WD-DET
PROBE
GND
PROBE
IO29
5V
GND
SERVOS
20
-POWER+
12/24 V DC
GND
Laser
IO20
IO23
HE
12/24 V DC
IO21
HB
12/24 V DC
DCIN
12/24 V DC
SW_USB
MCU Powered by USB-C Port
MCU Powered by POWER_IN
EN STEP DIR
XM IO12 IO11 IO10
YM IO7 IO6 IO5
ZM IO2 IO19 IO28
EM IO15 IO14 IO13
STALLGUARD
(Sensor-less Homing)
DIAG PIN ENDSTOP
XM X-DIAG IO4 X-STOP
YM Y-DIAG IO3 Y-STOP
ZM Z-DIAG IO25 Z-STOP
EM E0-DIAG IO16 E0-STOP
MOTOR UART
RX IO9
TX IO8
Note: the address of each stepper motor driver is hardwired via MS1 and MS2 pins (i.e., chip select (CS) line is not required))