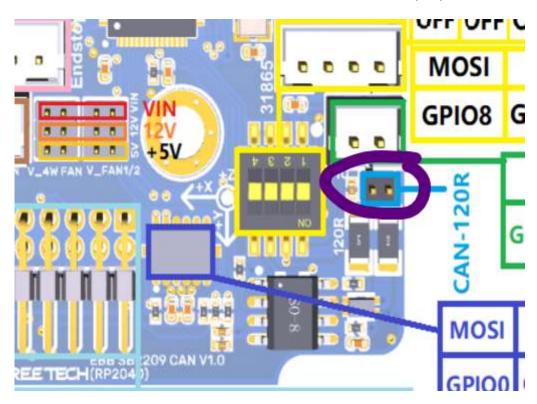
<u>Toolhead Flashing</u> / <u>Common Toolhead Hardware</u> / BigTreeTech SB2209 (RP2040)

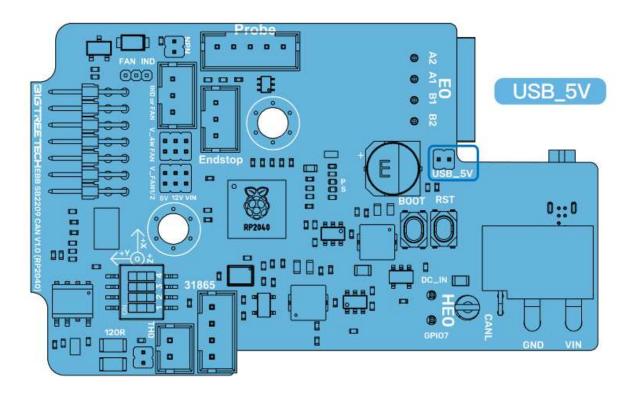
### 120 ohm Termination Resistor

The header for the 120R termination resistor is circled in purple

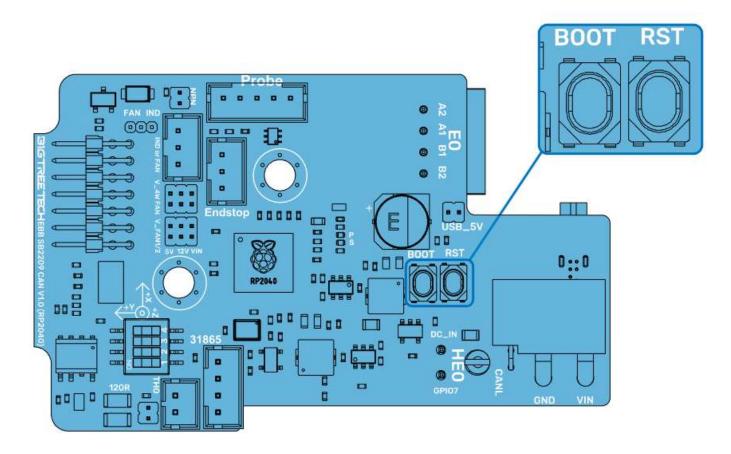


### **BOOT Mode**

To put the SB2209 into boot mode (for initial flashing), unplug any USB and CAN cables from the SB2040, then put the 5v jumper in place so the board can receive power over the USB connection:



Plug a USB cable from the pi to the SB2209 then hold down the BOOT button, breifly press the RST button (while still holding BOOT), wait a few seconds, then release the BOOT button. The SB2209 should now show up to an [Isusb] command as Pi RP2 Boot device:



## Katapult Config

```
Micro-controller Architecture (Raspberry Pi RP2040) --->
Flash chip (W25Q080 with CLKDIV 2) --->
Build Katapult deployment application (16KiB bootloader) --->
Communication interface (CAN bus) --->

(4) CAN RX gpio number (NEW)
(5) CAN TX gpio number (NEW)
(1000000) CAN bus speed
() GPIO pins to set on bootloader entry

[*] Support bootloader entry on rapid double click of reset button
[] Enable bootloader entry on button (or gpio) state

[*] Enable Status LED
(gpio26) Status LED GPIO Pin
```

## Klipper Config

```
(Top)

KLapper Firnware Configuration

[*] Enable extra low-level configuration options
   Micro-controller Architecture (Raspberry Pi RP2040) --->
   Bootloader offset (16KiB bootloader) --->
   Communication interface (CAN bus) --->

(4) CAN RX gpio number (NEW)

(5) CAN TX gpio number (NEW)

(1000000) CAN bus speed

(gpio26) GPIO pins to set at micro-controller startup
```

# Sample Config

A sample config file can be found at

https://github.com/bigtreetech/EBB/tree/master/EBB%20SB2209%20CAN%20(RP2040)