## Doing below actions might "brick" or realy brick your skr 1.4;

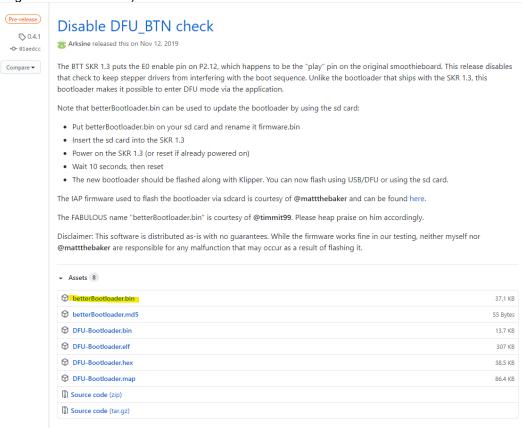
All credits to the devs of the betterbootloader, I'm just using it.

Before(same if you already have Klipper installed, below actions assume you have fresh skr 1.4 board)

Starting situation(fresh skr board), attach only one skr board to make it easy:

## https://github.com/Arksine/LPC17xx-DFU-Bootloader/releases

download betterBootloader.bin this is for skr 1.3 but it still works for 1.4(read instruction below or follow 'guide' further below)



Rename to firmware.bin and place it on sd card.(you can remove old FIRMWARE.CUR or copy somewhere on pc as a backup)

Reset skr board, wait 10sec and we now see

```
pi@voron01:~/klipper $ ls /dev/serial/by-id/
ls: cannot access '/dev/serial/by-id/': No such file or directory
pi@voron01:~/klipper $ [
```

Reset (might need to do 2x resets in interval of 10secs)

```
pi@voron01:~ $ ls /dev/serial/by-id/
usb-Klipper_Klipper_firmware_12345-if00
```

Let's compile Klipper

(source: https://github.com/KevinOConnor/klipper/blob/master/docs/Installation.md)

```
pi@voron01: ~/klipper — — X

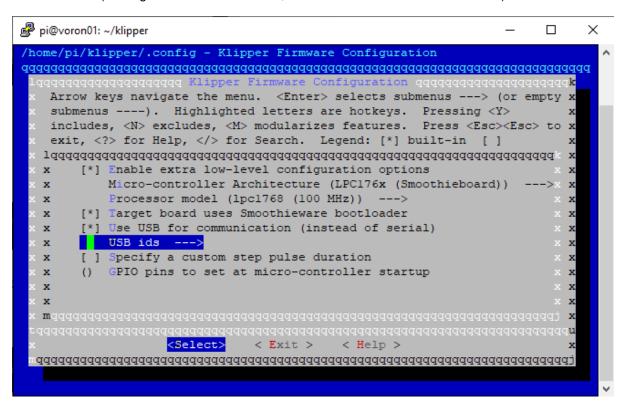
pi@voron01:/ $ cd ~/klipper/
pi@voron01:~/klipper $ sudo service klipper stop
pi@voron01:~/klipper $ make menuconfig

Make menuconfig

pi@voron01:~/klipper $ make menuconfig

scripts/kconfig/mconf /home/pi/klipper/src/Kconfig
```

Pick LBC1768 (if using turbo choose 120MHz, note: I have not tested turbo version)



## Select Exit And type: make

```
pi@voron01:~/klipper $ make menuconfig
scripts/kconfig/mconf /home/pi/klipper/src/Kconfig

*** End of the configuration.

*** Execute 'make' to start the build or try 'make help'.

pi@voron01:~/klipper $ make
Build Kconfig config file
Creating symbolic link out/board
Compiling out/src/sched.o
Compiling out/src/command.o
Compiling out/src/basecmd.o
```

Wait until it is compiled.

```
Version: v0.8.0-779-g91979756-20200917_210241-voron01
Preprocessing out/src/generic/armcm_link.ld
Linking out/klipper.elf
Creating bin file out/klipper.bin
pi@voron01:~/klipper $
```

Now type(should be 'always the same, if not verify with Is /dev/serial/by-id/\* command):

make flash FLASH\_DEVICE=/dev/serial/by-id/usb-Klipper\_Klipper\_firmware\_12345-if00

```
pi@voron01:~/klipper $ make flash FLASH DEVICE=/dev/serial/by-id/usb-Klipper Klipper fir
mware_12345-if00
 Flashing out/klipper.bin to /dev/serial/by-id/usb-Klipper Klipper firmware 12345-if00
Entering bootloader on /dev/serial/by-id/usb-Klipper Klipper firmware 12345-if00
Device reconnect on /sys/devices/platform/scb/fd500000.pcie/pci0000:00/0000:00:00.0/0000
:01:00.0/usb1/1-1/1-1.3/1-1.3:1.0
sudo dfu-util -p 1-1.3 -D out/klipper.bin
dfu-util 0.9
Copyright 2005-2009 Weston Schmidt, Harald Welte and OpenMoko Inc.
Copyright 2010-2016 Tormod Volden and Stefan Schmidt
This program is Free Software and has ABSOLUTELY NO WARRANTY
Please report bugs to http://sourceforge.net/p/dfu-util/tickets/
dfu-util: Invalid DFU suffix signature
dfu-util: A valid DFU suffix will be required in a future dfu-util release!!!
Opening DFU capable USB device...
ID 1d50:6015
Run-time device DFU version 0101
Claiming USB DFU Interface...
Setting Alternate Setting #0 ...
Determining device status: state = dfuIDLE, status = 0
dfuIDLE, continuing
DFU mode device DFU version 0101
Device returned transfer size 512
Copying data from PC to DFU device
                                     =====] 100%
                                                        20512 bytes
Download
Download done.
state(8) = dfuMANIFEST-WAIT-RESET, status(0) = No error condition is present
Done!
pi@voron01:~/klipper $ ls /dev/serial/by-id/
usb-Klipper_lpc1768_04C0FF0E02094AAF459A5E5DC32000F5-if00
pi@voron01:~/klipper $
```

Take a note of that new ID for your MCU config in printer.cfg