V0 Display Screen

V0 Display Flickering Instructions

Connection

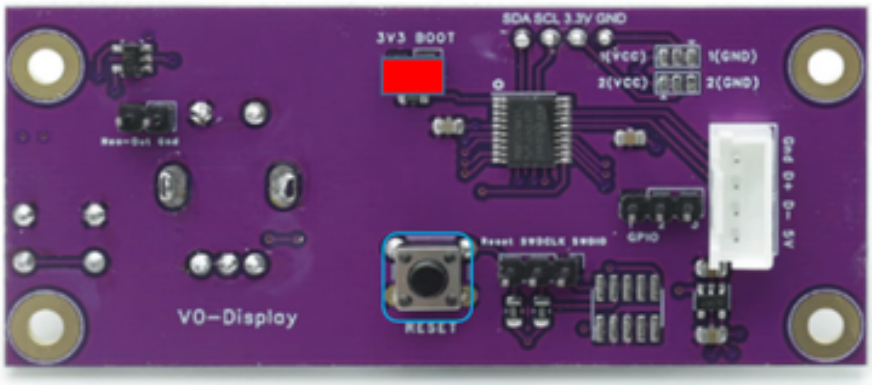
The display is connected to the host computer via USB.

Firmware Pre-Installation Check

Determine if your display has firmware pre-installed:

If the display has pre-flashed firmware:

Install a jumper cap in the red area shown in the image below and press the RSSCT button to put the development board into DFU mode.



If the display does not have firmware pre-flashed:

The MCU defaults to DFU mode if no other firmware is installed.

Confirm that the development board enters DFU mode in step 4.

Connect via SSH

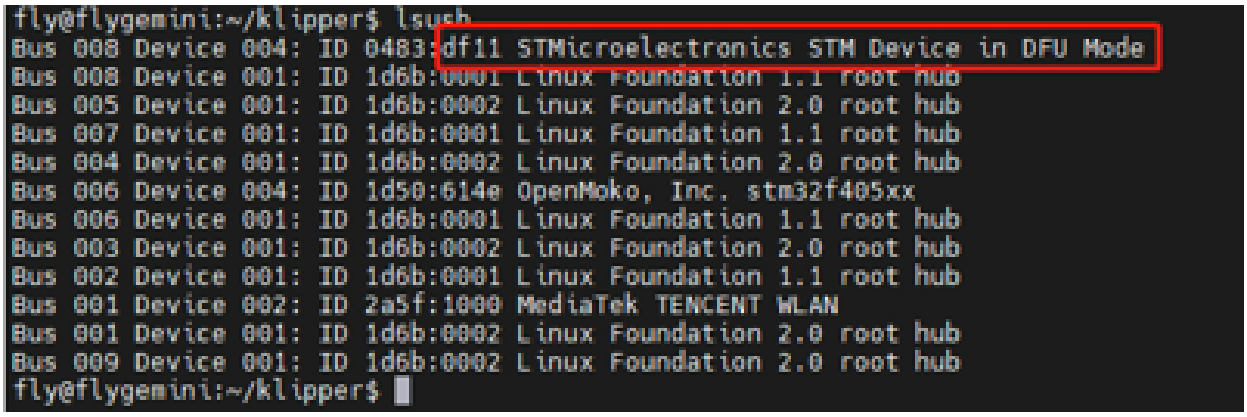
Connect to your host computer using SSH.

Verify DFU Mode

Run the command:

```
lsusb
```

Ensure the STM32 is listed in DFU mode.

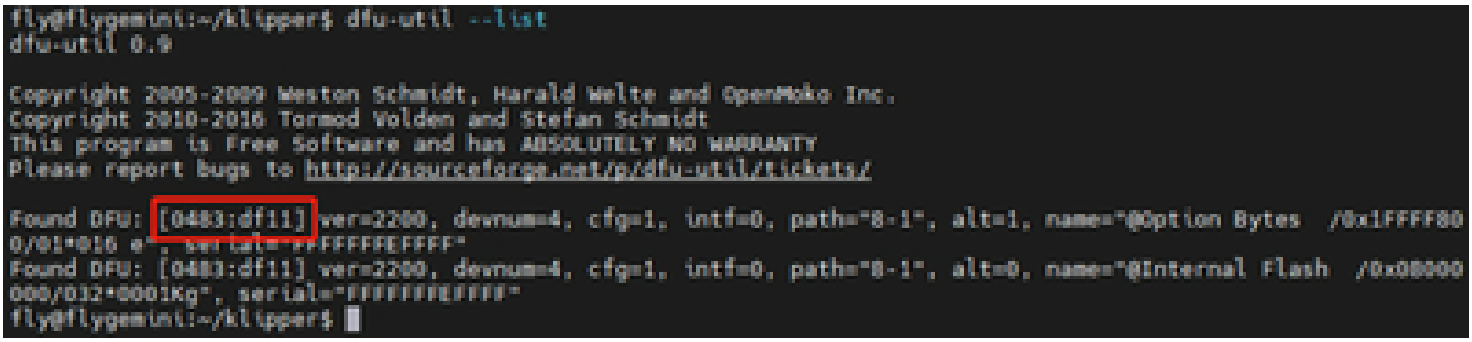


List DFU Devices

Run:

```
dfu-util --list
```

Note the information in the red box.



Access Klipper Directory

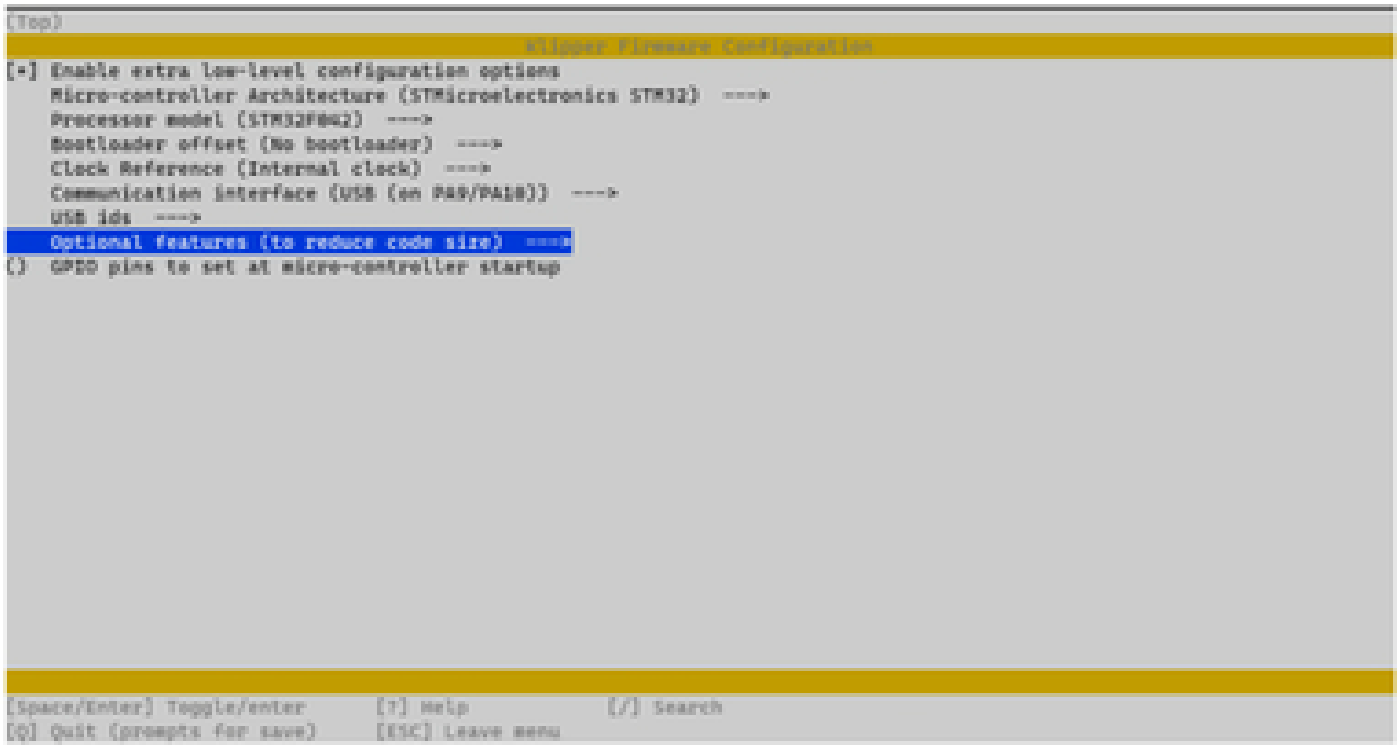
Run:

```
cd ~/klipper
```

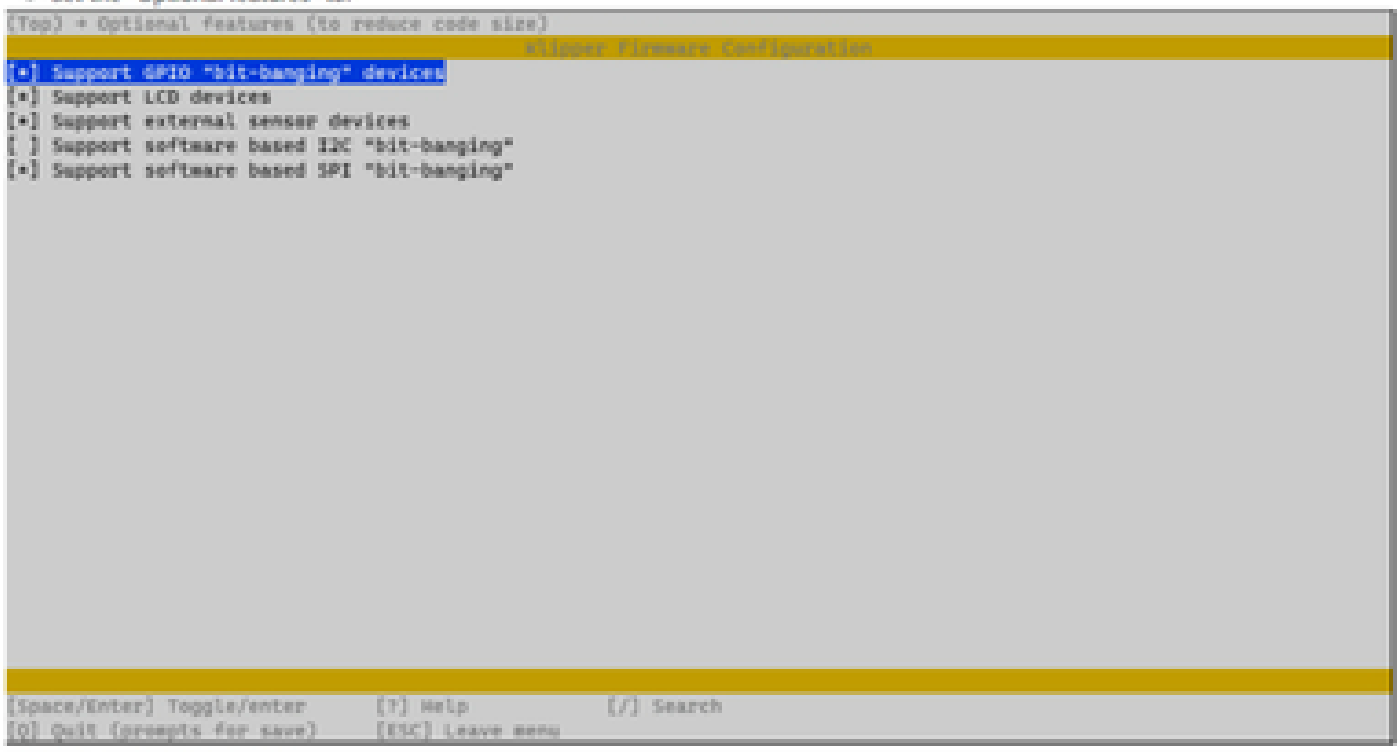
Configure Klipper

Run:

```
make menuconfig
```



- Set the "Optional features" to:



- Hit `Q` to Exit and Save

Set the configuration as required, then exit and save.

Clean Make Environment

Run:

```
make clean
```

Flash Firmware
Run:

```
make flash FLASH_DEVICE=0483:df11
```

(Use the appropriate xxxx:yyyy from the previous step.)

Final Steps

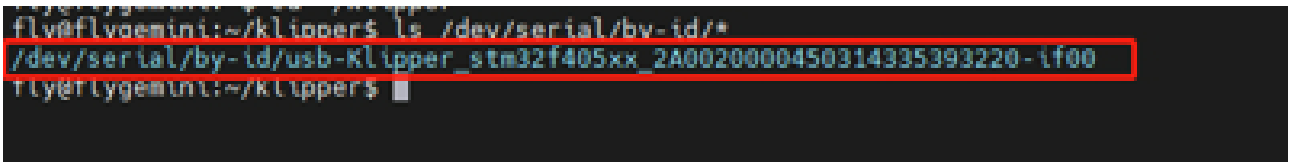
Remove the power jumper.

Press the reset button.

Verify Serial Device
After completion, run:

```
ls /dev/serial/by-id/*
```

This should return a device starting with `/dev/serial/by-id/usb-Klipper_stm32f042x6...`.



Update Display Configuration
Copy the serial port name (e.g., `/dev/serial/by-id/usb-Klipper_stm32f042x6...`) and place it in the `[mcu display]` section of the display configuration file.

Example Configuration for V0Display.cfg

```
[mcu display]
serial: /dev/serial/by-id/usb-Klipper_stm32f042x6_JKYZ-if00
restart_method: command

[display]
lcd_type: sh1106
i2c_mcu: display
i2c_bus: i2c1a
encoder_pins: ^display:PA4, ^display:PA3
click_pin: ^!display:PA1
kill_pin: ^!display:PA5
x_offset: 2

[neopixel displayStatus]
pin: display:PA0
chain_count: 1
color_order: GRB
initial_RED: 0.24
initial_GREEN: 0.02
initial_BLUE: 0.25
```

Copy

Your display should now work with Klipper. To get started, it's recommended to copy the configuration file to the same directory as `printer.cfg`, and then add `[include V0Display.cfg]` at the end of `printer.cfg` to include the file.