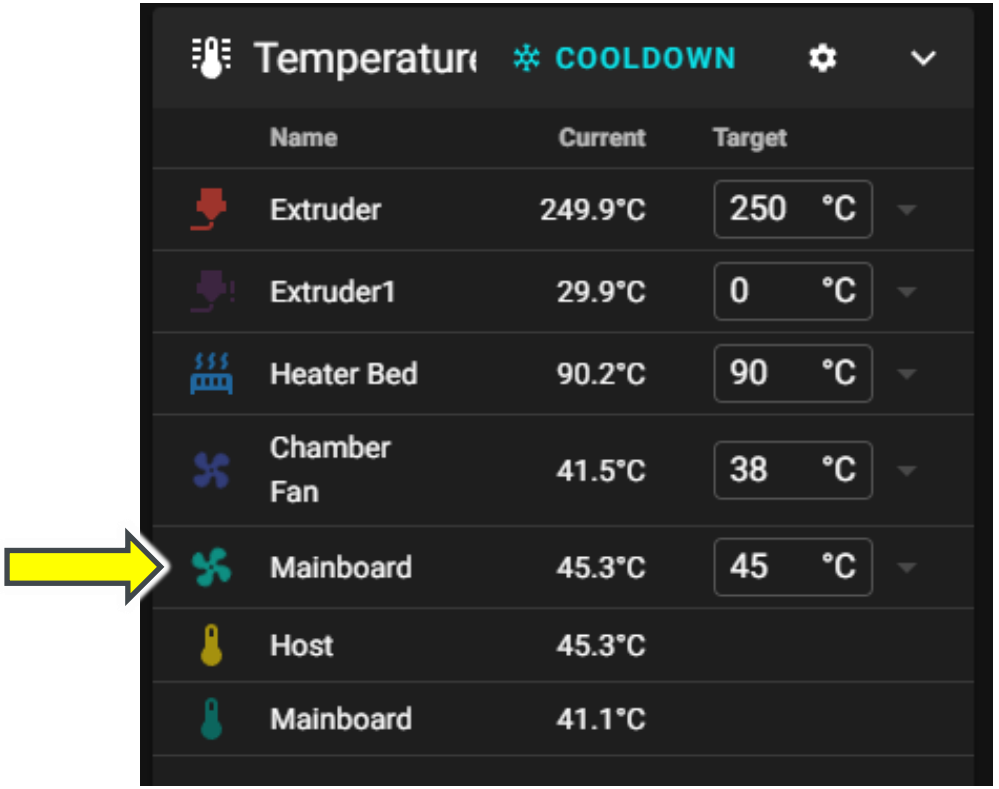
FORMBOT

Marathon

Mainboard Controlled Fan



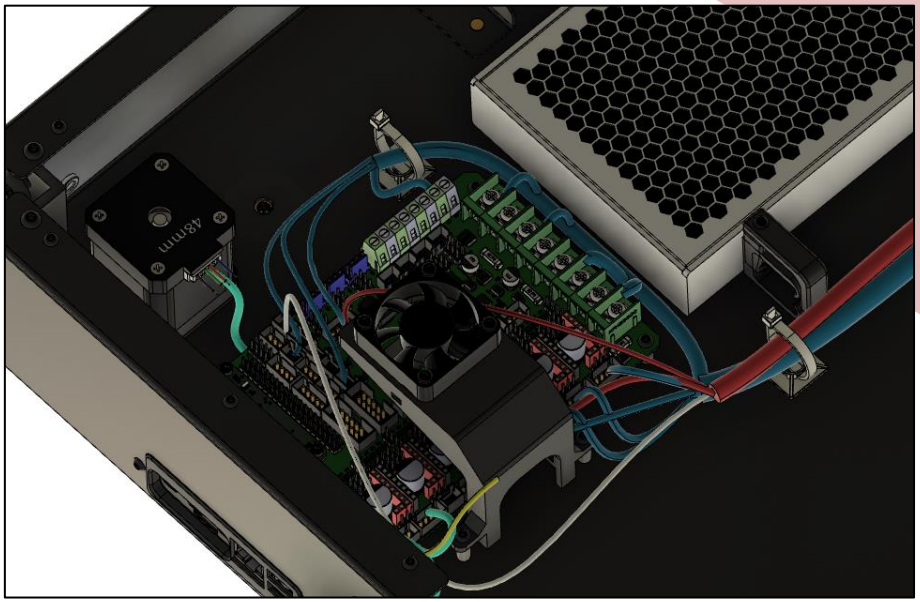
VIVEDINO

Designed by Dr. Ing. Dan Andrei Marinescu

Introduction

Motivation

The mainboard fan is by default always on, even when there is no printing job ongoing. As a result, the machine is unnecessarily noisy when idle.



Pros: It reduces the overall noise of the printer, making it completely silent when idle.

Cons: couldn't find any...

BOM

- Some 24 gauge wires.
- Cable End Sleeves

3d printed parts

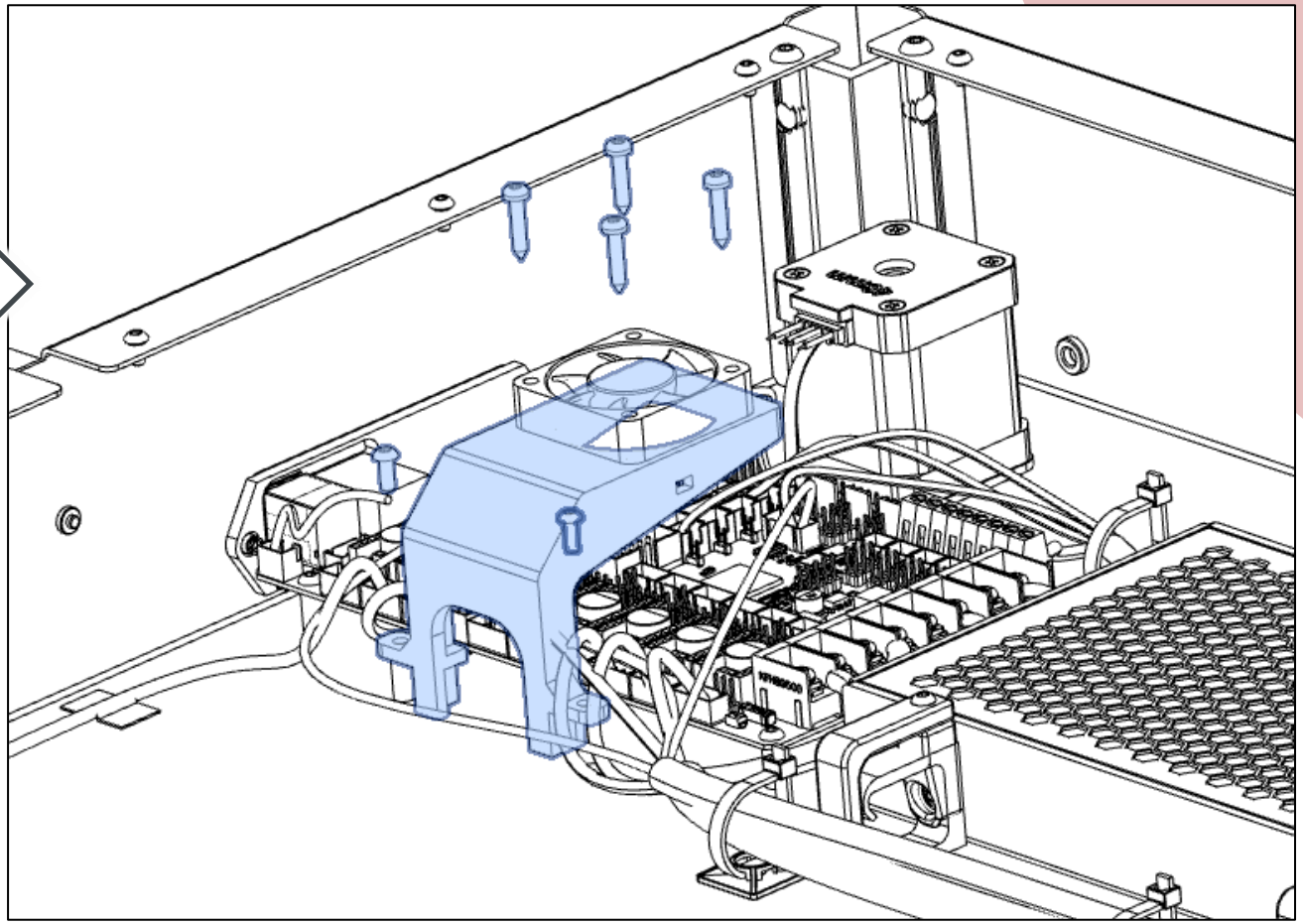
- 1x Bracket for the fan → with 30% infill, no supports. Chose the material and color you like.

* **Print this part only if your printer doesn’t have it, in the early units was another type of bracket installed.**

Prepare and Installation

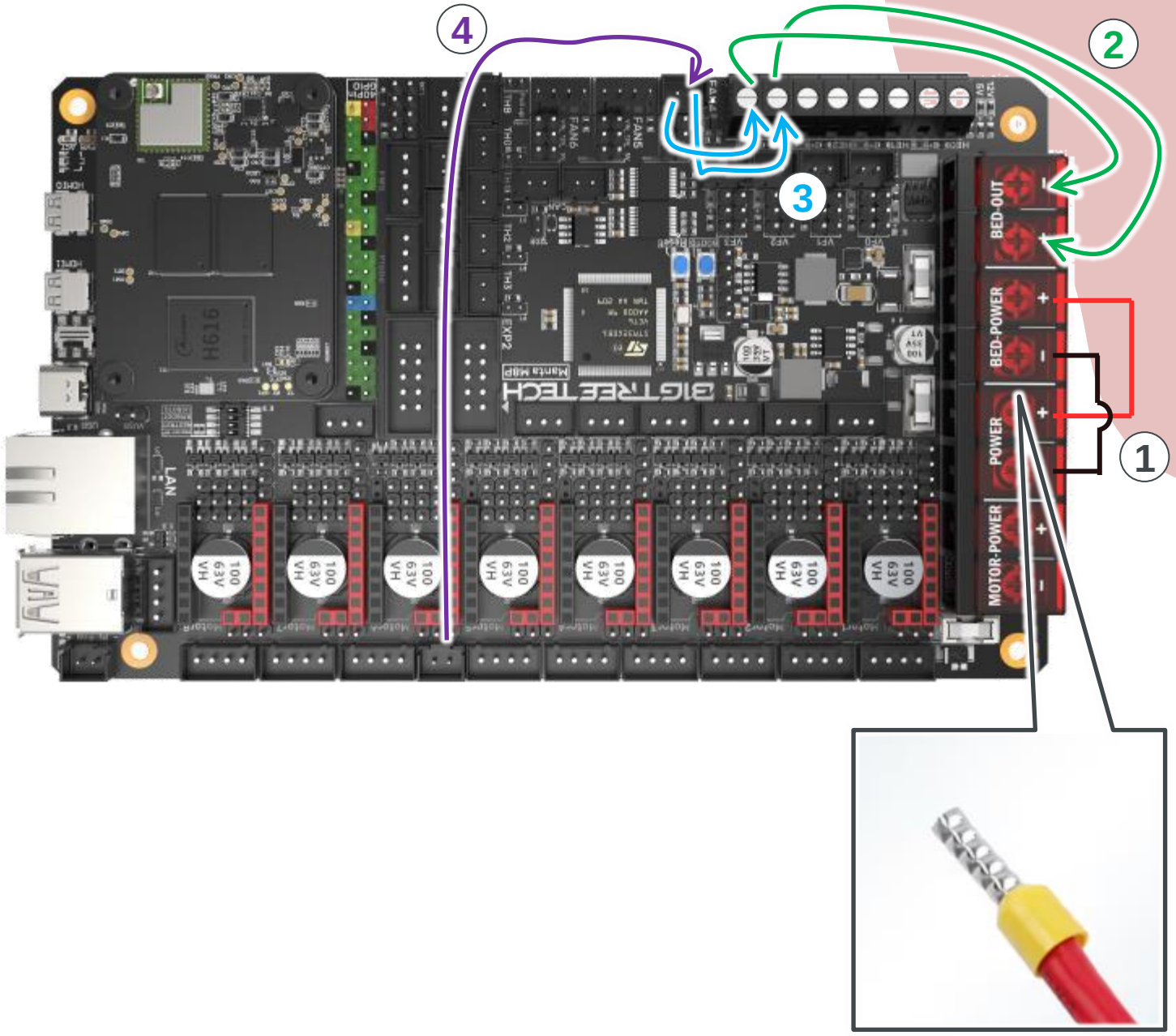
Remove the original fan bracket and install the new one as described.

As mentioned in the previous slide, you may already have this bracket in your printer.



Wiring

- ① make a bridge as described for '*BED-POWER*'. **Crimp your wires at the end !**
- ② move the wires from '*bed*' to '*BED-OUT*' as shown
- ③ move the wires from *'Air Filter*' to where '*bed*' previously was. **Crimp your wires at the end !**
- ④ move the wires from Mainboard fan to where '*Air Filter*' was.



Software settings

Go in ‘Marathon_BTT_M8P-V1.1.cfg’ and make the following changes:

- Change the heater pin for the bed:
[heater_bed]
heater_pin:PB7

- Change the pin for the chamber fan:
[temperature_fan chamber_fan]
pin:PE1

Add the following config section for the mainboard fan:

[temperature_fan Mainboard]
pin:PE4
max_power:1.0
control:watermark
max_delta:2
sensor_type:temperature_host
min_temp:0
max_temp:65
target_temp:45

If your running the new image where everything is updated via ‘Update Manager’:

- Make sure that you have all the Klipper components updated.
- Add this line in your printer.cfg in MODs CFG section

[include ./0__Marathon/2__Formbot_MODs/23__MB_Fan/M1__Temp_Control__MB_Fan.cfg]

printer.cfg

```
#
##### UNCOMMENT the lines below if you implmenent XY offsets measurments with kTAMV and CXC ####
#####                    https://github.com/TypQxQ/kTAMV                                    ####
#####          All rights for kTAMV tool reserved to Andrei Ignat                            ####
####             https://www.linkedin.com/in/andrei-ignat-718401b                           ####
####          All rights for CXC-Camera reserved to Ember Prototypes                        ####
####               https://www.emberprototypes.com/products/cxc                             ####
#
#
[include ./0__Marathon/2__Formbot_MODs/21__kTAMV_CXC/M1__kTAMV_CXC_Macros__Formbot.cfg]      #
[include ./0__Marathon/2__Formbot_MODs/21__kTAMV_CXC/M1__Auto_XY_Calibration__Formbot.cfg]   #
#
#
[ktamv]                                                                                      #
nozzle_cam_url: http://localhost/webcam2/snapshot?max_delay=0                                #
server_url: http://localhost:8085                                                           #
move_speed: 1800                                                                            #
send_frame_to_cloud: true                                                                   #
detection_tolerance: 1                                                                      #
#
[include ktamv-macros.cfg]                                                                  #
#
##############################################################################################
#
[include ./0__Marathon/2__Formbot_MODs/23__MB_Fan/M1__Temp_Control__MB_Fan.cfg]
#[include ./0__Marathon/2__Formbot_MOD__CFG/2*_*****/****.cfg]                               #
#[include ./0__Marathon/2__Formbot_MOD__CFG/2*_*****/****.cfg]                               #
#
##############################################################################################
```

Marathon

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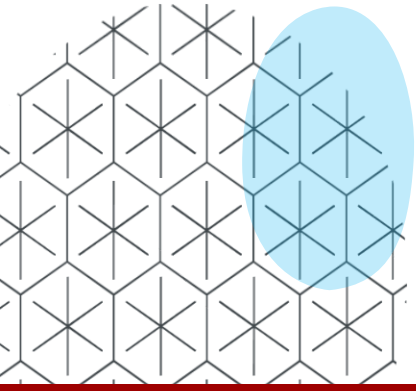
Happy printing!



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