printer.cfg

```
[include mainsail.cfg]
[include macros/*.cfg]
[include display.cfg]
[include ebbcan.cfg]
[include led_progress.cfg]


[virtual_sdcard]
path: /home/pi/printer_data/gcodes
on_error_gcode: CANCEL_PRINT


[mcu]
#serial: /dev/serial/by-id/usb-Klipper_rp2040_45503571288F4C98-if00
serial: /dev/ttyAMA0
restart_method: command


[printer]
kinematics: corexy
max_velocity: 200
max_accel: 2500
max_z_velocity: 15
max_z_accel: 300
square_corner_velocity: 6.0


[input_shaper]
shaper_freq_x: 75.2
shaper_type_x: mzv
shaper_freq_y: 54.4
shaper_type_y: zv



#########################################
# Neopixel and LED configuration
#########################################

[neopixel beed_rgb]
```

```
pin: gpio24

chain_count: 1

color_order: GRB

initial_RED: 0.1

initial_GREEN: 0

initial_BLUE: 0


[led bauraumlicht]

white_pin: gpio18


########################################
# Temperature configuration
##########################################


[temperature_sensor pi_zero]

sensor_type: temperature_host

min_temp: 10

max_temp: 100


[temperature_sensor pico_board]

sensor_type: temperature_mcu

min_temp: 0

max_temp: 100


##########################################
# Fan configuration
##########################################


#[heater_fan Hotend_Fan]

#pin: gpio18

#kick_start_time: 0.8

#shutdown_speed: 0

#off_below: 0.1

#max_power: 1.0

#fan_speed: 0.6

#sensor_type: temperature_host

#control: pid

#min_temp: -40

#max_temp: 85

#max_delta: 5.0
```

```
#pid_kp: 1.0
#pid_ki: 0.5
#pid_kd: 2.0
#min_speed: 0.1
#max_speed: 0.6
#target_temp: 38


#[heater_fan controller_fan]
#pin: gpio17
#heater: extruder
#max_power: 1.0
#heater_temp: 30.0


[fan_generic filter_fan]
pin: gpio20


[temperature_fan board_fan]
pin: gpio17
max_power: 1.0
sensor_type: temperature_host
control:watermark
target_temp: 38
min_temp: 0
max_temp: 90
off_below: 0.10
kick_start_time: 0.50
max_speed: 0.6
min_speed: 0.3


#########################################
# X-Axis configuration
#########################################


[stepper_x]
step_pin: gpio11
## Refer to https://docs.vorondesign.com/build/startup/#v0
dir_pin: gpio10                           # Check motor direction in link above. If inverted, add a ! before
gpio10
enable_pin: !gpio12
rotation_distance: 40
```

```
microsteps: 32
full_steps_per_rotation: 200                          # Set to 400 for 0.9° degree stepper motor, 200 is for 1.8°
stepper motors
#endstop_pin: ^gpio4
endstop_pin: tmc2209_stepper_x:virtual_endstop
position_endstop: 120
position_max: 120
position_min: 0
homing_speed: 20                                      # Can be increased after initial setup, Max 100
homing_retract_dist: 0
homing_positive_dir: true

[tmc2209 stepper_x]
uart_pin: gpio9
tx_pin: gpio8
uart_address: 0
interpolate: False
run_current: 0.5
stealthchop_threshold: 999999
diag_pin: ^gpio4
driver_SGTHRS: 70


#########################################
# Y-Axis configuration
#########################################

[stepper_y]
step_pin: gpio6
## Refer to https://docs.vorondesign.com/build/startup/#v0
dir_pin: gpio5                                        # Check motor direction in link above. If inverted, add a ! before
gpio5
enable_pin: !gpio7
rotation_distance: 40
microsteps: 32
full_steps_per_rotation: 200
#endstop_pin: ^gpio3
endstop_pin: tmc2209_stepper_y:virtual_endstop
position_endstop: 120
position_max: 120
position_min: 0
```

```
homing_speed: 20                                    # Can be increased after initial setup, Max 100
homing_retract_dist: 0
homing_positive_dir: true


[tmc2209 stepper_y]
uart_pin: gpio9
tx_pin: gpio8
uart_address: 2
interpolate: False
run_current: 0.5
sense_resistor: 0.110
stealthchop_threshold: 999999
diag_pin: ^gpio3
driver_SGTHRS: 75


##########################################
# Z-Axis configuration
##########################################


[stepper_z]
step_pin: gpio19
dir_pin: !gpio28                              # Remove the ! before gpio28 if motor direction is inverted.
enable_pin: !gpio2
rotation_distance: 8                          # For T8x8 integrated lead screw
microsteps: 32
endstop_pin: ^gpio25
position_endstop: 120
position_max: 120
position_min: -1.5
homing_speed: 20
second_homing_speed: 3.0
homing_retract_dist: 3.0



[tmc2209 stepper_z]
uart_pin: gpio9
tx_pin: gpio8
uart_address: 1
interpolate: False
## For OMC (StepperOnline) 17LS13-0404E-200G 0.4A
```

```
#run_current: 0.2
## For LDO-42STH25-1004CL200E 1.0A
run_current: 0.37
sense_resistor: 0.110
stealthchop_threshold: 0

#[safe_z_home]
#home_xy_position: 117,85 # Change coordinates to the center of your print bed
#speed: 50
#z_hop: 10              # Move up 10mm
#z_hop_speed: 5


#####################################
# Bed configuration
#####################################

[heater_bed]
heater_pin: gpio21
sensor_type: EPCOS 100K B57560G104F
sensor_pin: gpio26
#control = pid
#pid_kp = 59.345
#pid_ki = 2.327
#pid_kd = 378.326
min_temp: 0
max_temp: 83


#################################################################
###
# Bed Mesh Settings
#################################################################
###

#[bed_mesh]
#speed: 100
#horizontal_move_z: 10
#mesh_min: 10, 5
#mesh_max: 113, 135
#probe_count: 4, 4
#mesh_pps: 2,2
```

```
#fade_start: 1
#fade_end: 10
#fade_target: 0


#*# <---------------------- SAVE_CONFIG ---------------------->
#*# DO NOT EDIT THIS BLOCK OR BELOW. The contents are auto-generated.
#*#
#*# [heater_bed]
#*# control = pid
#*# pid_kp = 60.659
#*# pid_ki = 2.527
#*# pid_kd = 363.956
```