

## Repetier-Firmware configuration tool for version 0.92.9 version

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- Enable Z-probing
- Enable axis compensation (requires z-probing enabled, even without z-probe available)
- Enable servo support
- Enable ditto printing (send same signals to extruder 0 and 1)
- Enable watchdog. The watchdog resets the printer if temperature loop is not called every second.
- Enable arc support (G2/G3)
- Memory position/move to memory position (M401/M402)
- Force checksums once a checksum is received
- Echo commands when executed rather when received
- Send "wait" when firmware is idle. Helps solving communication problems when host supports it.
- Send line number along with receive confirmation.
- Enable sd support. Gets overwritten by ui-controller or board settings.
- Return extended directory information. Not compatible with all host software.
- Enable babystepping (change z position while printing when first layer bonding is bad).
- Enable fan control (M106/M107) for filament cooling. (FEATURE\_FAN\_CONTROL)
- Enable second fan control (M106/M107 P1) for cooling. (FEATURE\_FAN2\_CONTROL)
- Enable G10/G11 retraction and filament change and allow jam detection

- Enable JSON formatted info output for ESP8266 Duet web interface, PanelDue (JSON\_OUTPUT)
- Enable power on startup for switchable power units (ENABLE\_POWER\_ON\_STARTUP)
- Invert signal for switchable power units (POWER\_INVERTING)

**Print cooling fan pin**

FAN\_PIN

Heater 2 normally used for extruder 1 ▼

**Fan kickstart time**

200

[ms]

**Fan pin for board cooling**

Digital pin 6 ▼

**Board fan speed**

200

[0-255]

You can define one thermistor controlled fan. It will change fan pwm according to the set temperature range. Below min temperature it will disable the fan.

**Thermo Coupled Fan Pin**

FAN\_THERMO\_PIN

Disabled / No pin assigned ▼

**Thermo Fan Min PWM**

FAN\_THERMO\_MIN\_PWM

128

[ms]

**Thermo Fan Max PWM**

FAN\_THERMO\_MAX\_PWM

255

[ms]

**Temp. for min PWM**

FAN\_THERMO\_MIN\_TEMP

45

[ms]

**Temp. for max PWM**

FAN\_THERMO\_MAX\_TEMP

60

[ms]

**Thermo Fan Temperature Sensor**

100k Epcos B57560G0107F000 ▼

FAN\_THERMO\_THERMISTOR\_TYPE

**Thermo Fan  
Temperature Sensor  
Pin**

Disabled / No pin assigned ▼

FAN\_THERMO\_THERMISTOR\_PIN

**ATX Power on pin**

Disabled / No pin assigned ▼

**Z Babystepping  
multiplier**

1

[-]

**Run on sd print stop**

Separate commands by \n.

 Disable heaters and motors on stopped sd print.

## Bed Coating

If you switch between different bed coatings it can be handy to change the required start position with a simple variable. This is what bed coating does. It makes sure that a move to z=0 does include the bed coating thickness. The coating mode takes into account what a z-probe will measure so current coating setting is taken into account.

**Bed Coating Mode**  
Z\_PROBE\_Z\_OFFSET\_MODE

Trigger is not influenced by bed coating ▼

**Bed Coating  
Thickness**  
Z\_PROBE\_Z\_OFFSET

0

[mm]

Bending correction adds a value to a measured z-probe value. This may be required when the z probe needs some force to trigger and this bends the bed down. Currently the correction values A/B/C correspond to z probe positions 1/2/3. In later versions a bending correction algorithm might be introduced to give it other meanings.

**Bending Correction A**  
BENDING\_CORRECTION\_A

0

[mm]

**Bending Correction B**

0

BENDING\_CORRECTION\_B  [mm]

**Bending Correction C**  
BENDING\_CORRECTION\_C  [mm]

## G10/G11 Retraction and Filament Change

This feature allows slicers to use the commands G10 and G11 for retracting and undo retracts instead of adding the moves on their own. These parameters can be changed in EEPROM later. Autoretraction converts pure E moves into G10/G11. For that reason it is when enabled not possible to extrude with only E axis. So if you want to use it, I would suggest to enable/disable it with **M209 S1** and **M209 S0** in the slicers start and end g-code so it is normally disabled.

Enable autoretract conversion. Simple extrusion will not work when enabled!

**Normal retraction**  [mm]

**Extruderswitch retraction**  [mm]

**Retraction speed**  [mm/s]

**Z-Lift on retraction**  [mm]

**Extra length on undo retraction**  [mm]

**Extra length on undo switch retr.**  [mm]

**Speed undo retraction**  [mm/s]

Filament change allows to initiate a filament change procedure with M600 or the filament change command in the LCD interface. A LCD interface is required for this to work. Once initiated, the extruder will retract the short distance, move up, move to target x,y position and then do the long retract. Then you must replace the filament and insert new one until plastic comes out of the nozzle. Then click the ok button of the printer. While changing, the rotary encoder will move the extruder. If not moving, motor gets disabled to make insertion/removal easier. Then it goes back to starting position and continues printing. You can add a homing before going to target position. This may help if you moved the extruder by accident.

**Filament change x**  [mm]

**Filament change y**  [mm]

**Filament change z lift**  [mm]

**Filament change first retract**  [mm]

**Filament change last retract**  [mm]

**Homing after Filamentchange**

## Extra Motor Driver

For some special functions you may need to drive extra motors. Here you can define how to drive the motors. You can control them with G201 - G204, see Repetier.ino for more infos.

**Number Extra Motors**

Previous step

Next step