

Function Fake-Temp

Why do we need this?

Basically when we develop Marlin or, using Marlin with non-existence hardware(i.e Just Ramps and Mega2560 boards), we need to "virtually-test-print" with GCode file to test some mid-of-Printing function. We literally cannot print real object, which would be massive waste of time. This function, at least "tries" to reduce those time, by fak-ing a temperature on firmware. So we can "virtually-test-print" with non-existence hardware.

How to use?

For enabling fake HOTENDS temperature: Use M981 S[TEMP]

For enabling fake HEATEDBED temperature: Use M982 S[TEMP]

For disabling fake HOTENDS/HEATEDBED temperature, set TEMP to 0, it will automatically read thermistor's value.

How it works(By Order, explanation)?

1. It will check whether
FAKE_HOTEND_TEMPERATURE_SUPPORTED/FAKE_BED_TEMPERATURE_SUPPORTED is enabled or not.
2. If enabled, by default temperature monitor will read thermistor's value.
3. If user execute GCode, the variable hotend_fake_temperature_enabled/bed_fake_temperature_enabled will triggered to 1(true), and automatically read variable's value instead of thermistor's value.
4. If user execute GCode with temperature 0(S0), the variable
hotend_fake_temperature_enabled/bed_fake_temperature_enabled will triggered to 0, and automatically read thermistor's value again.
5. That's all

So, basically it will check Configuration variable before compiling anything, but even if it is enabled in configuration, for safety purpose, I disabled this fake-temp function "SOFTWARETICALLY". This boolean-like variable could be modified during runtime operation: like GCode.

Furthermore, MINTEMP Warning is disabled ONLY when fake temperature is enabled. This one is exclusively for those who are developing Marlin without specific thermistor. MINTEMP warning and assert will restored when fake temperature function is softwaretically disabled.

For more reference and code, Have a look at [github commit](#) or for per-patchset commit, you might want to visit [gerrit review](#)

Is it done?(TODO)

For now, Yes. The achievements of this function has been done.

But this function is not global-ized for every printer and situation, i.e: Multiple Extrusion Nozzle. The thing I need to solve is make it more global. That is all and finding a possible bug would be the one.