

Temp watch protection for the bed

Feature Name: Temperature watch protection for heated bed

Feature Name in Annotation: THERMAL_PROTECTION_BED

Source of Information

Releaselog, pull requests, commits, ifdefs with feature annotation name

Strategy Used:

Feature is identified from the latest release log first. The release log also provides the pull request and commits linked to the feature (see the links and tables below), Ifdefs are also used for speeding up feature location.

Feature Release Version: 1.1.0 - RC7

Time took to Identify and Locate the feature: 0.25 hour

Time took to Understand the Implementation: 0.5 hour

Feature Description:

A function that protect bed from overheating or thermistor failure. When setting the bed temp via M140/M190, if the thermistor does not read an increase of WATCH_BED_TEMP_INCREASE degrees within WATCH_BED_TEMP_PERIOD seconds then it will throw "Error:Heating failed, system stopped! Heater_ID: bed" and call the kill() function.

Feature Information and Statistics:

PR No.	Merged Time	PR	Commits	Files	Line Added	Line deleted
#3653	1 May 2016	Introduce temp watch protection for the bed	2	19	275	57
#4106	21 Jun 2016	Fix compile error with watch_bed_next_ms	1	2	2	2

Ratios of sources (%)

RL	PR	CM	Ifdef	DK	CC	SC	GD
50	15	5	30	0	0	0	0

RL: Release Log; **PR:** Pull Request; **CM:** Commit; **Ifdef:** Ifdef Expression; **DK:** Domain Knowledge; **CC:** Code Comment; **SC:** Source Code; **GD:** G-Code Documentation.

Pull Request Links:

<https://github.com/MarlinFirmware/Marlin/pull/3653/files>

<https://github.com/MarlinFirmware/Marlin/pull/4106/files>

Feature Characteristics:

Feature Name	LoFC	SD	TD	Completely Wrapped by ifdef
Temperature watch protection for heated bed	73	8	1	Yes

Feature's Relevant Historical Data

Request(issue) proposed

Time: 18 Apr 2016, by: scalez

<https://github.com/MarlinFirmware/Marlin/pull/3554>

Other related feature request:

Heating_Sanity_Check for the bed: [#924](https://github.com/MarlinFirmware/Marlin/issues/924) (18 Jun 2015)