

Auto Bed Leveling Bilinear

Feature Name: Auto Bed Leveling Bilinear

Feature Name in Annotation: Auto_Bed_Leveling_Bilinear

Source of Information

Domain knowledge, Code comment, Source Code, ifdefs

Strategy Used:

When we were testing the printer, we learned that there are optional features that allows the user to automatically home the extruder. When we browsed through the largest and most central logic file MarlinMain.cpp, we found that there are ifdef macros surround the comments and source codes for bilinear auto bed leveling. All the found logics are annotated, and the other files are also checked to find the rest of the feature.

Feature Description: This feature is optional for Marlin. An user can choose between manual homing or other types of auto homing features.

Time spent: This feature is one of 18 features that were located by manually going through all code files of Marlin using our source code method. It took one person 25 hours to identify all 18 features.

Feature Characteristics:

Feature Name	LoFC	SD	TD	Completely Wrapped by ifdef
Auto Bed Leveling Bilinear	226	1	6	Yes

Ratios of sources (%)

RL	PR	Commit	Ifdef	Domain	CC	SC	GD
0	0	0	5	15	25	55	0

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