

Homing

Feature Name: Move to Home Position

Feature Name in Annotation: Homing

Source of Information

Domain knowledge, Code comment, Source Code

Strategy Used:

Through 3D printer construction, we learned that the extruder would first of all find its origin place as reference to rest of the movement. Then we started from the largest and most central logic file MarlinMain.cpp, and browsing through the code comment and source code in searching for related source code for the feature. We found some related keywords such as “Home”. Then we moved on to other files to find the rest of the feature.

Feature Description: This feature is mandatory for Marlin. Every 3D printer has a mechanism to firstly locate a reference point for starters.

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
Move to Home Position	686	9	64	No

Ratios of sources (%)

RL	PR	CM	Ifdef	DK	CC	SC	GD
0	0	0	0	15	15	70	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.