

# Marlin 3D Printer Firmware

license **GPL-3.0** contributors **381** release date **october** CI **passing**

Additional documentation can be found at the [Marlin Home Page](#). Please test this firmware and let us know if it misbehaves in any way. Volunteers are standing by!

## Marlin 2.0

Marlin 2.0 takes this popular RepRap firmware to the next level by adding support for much faster 32-bit and ARM-based boards while improving support for 8-bit AVR boards. Read about Marlin's decision to use a "Hardware Abstraction Layer" below.



Download earlier versions of Marlin on the [Releases page](#).

## Building Marlin 2.0

To build Marlin 2.0 you'll need [Arduino IDE 1.8.8 or newer](#) or [PlatformIO](#). Detailed build and install instructions are posted at:

- [Installing Marlin \(Arduino\)](#)
- [Installing Marlin \(VSCode\)](#).

## Supported Platforms

Platform	MCU	Example Boards
<a href="#">Arduino AVR</a>	ATmega	RAMPS, Melzi, RAMBo
<a href="#">Teensy++ 2.0</a>	AT90USB1286	Printboard
<a href="#">Arduino Due</a>	SAM3X8E	RAMPS-FD, RADDS, RAMPS4DUE
<a href="#">LPC1768</a>	ARM® Cortex-M3	MKS SBASE, Re-ARM, Selena Compact
<a href="#">LPC1769</a>	ARM® Cortex-M3	Smoothieboard, Azteeg X5 mini, TH3D EZBoard
<a href="#">STM32F103</a>	ARM® Cortex-M3	Malyan M200, GTM32 Pro, MKS Robin, BTT SKR Mini
<a href="#">STM32F401</a>	ARM® Cortex-M4	ARMED, Rumba32, SKR Pro, Lerdge, FYSETC S6
<a href="#">STM32F7x6</a>	ARM® Cortex-M7	The Borg, RemRam V1
<a href="#">SAMD51P20A</a>	ARM® Cortex-M4	Adafruit Grand Central M4
<a href="#">Teensy 3.5</a>	ARM® Cortex-M4	
<a href="#">Teensy 3.6</a>	ARM® Cortex-M4	
<a href="#">Teensy 4.0</a>	ARM® Cortex-M7	
<a href="#">Teensy 4.1</a>	ARM® Cortex-M7	

## Submitting Changes

- Submit **Bug Fixes** as Pull Requests to the ([bugfix-2.0.x](#)) branch.
- Follow the [Coding Standards](#) to gain points with the maintainers.
- Please submit your questions and concerns to the [Issue Queue](#).

## Marlin Support

For best results getting help with configuration and troubleshooting, please use the following resources:

- [Marlin Documentation](#) - Official Marlin documentation
- [Marlin Discord](#) - Discuss issues with Marlin users and developers
- Facebook Group "[Marlin Firmware](#)"
- RepRap.org [Marlin Forum](#)
- [Tom's 3D Forums](#)
- Facebook Group "[Marlin Firmware for 3D Printers](#)"
- [Marlin Configuration](#) on YouTube

## Credits

The current Marlin dev team consists of:

- Scott Lahteine [[@thinkyhead](#)] - USA [Donate](#)
- Roxanne Neufeld [[@Roxy-3D](#)] - USA
- Chris Pepper [[@p3p](#)] - UK
- Bob Kuhn [[@Bob-the-Kuhn](#)] - USA
- Erik van der Zalm [[@ErikZalm](#)] - Netherlands



## License

Marlin is published under the [GPL license](#) because we believe in open development. The GPL comes with both rights and obligations. Whether you use Marlin firmware as the driver for your open or closed-source product, you must keep Marlin open, and you must provide your compatible Marlin source code to end users upon request. The most straightforward way to comply with the Marlin license is to make a fork of Marlin on Github, perform your modifications, and direct users to your modified fork.

While we can't prevent the use of this code in products (3D printers, CNC, etc.) that are closed source or crippled by a patent, we would prefer that you choose another firmware or, better yet, make your own.