M Prime One

English • العربية • български • català • čeština • Deutsch • Ελληνικά • español • فارسی • français • hrvatski • magyar • italiano • română • ▯▯▯ • ▯▯▯ • lietuvių • Nederlands • norsk • polski • português • русский • Türkçe • українська • ▯▯▯▯▯▯▯▯ • ▯▯▯▯▯▯ • עברית • azərbaycanca •

Main Page
Build a RepRap
Glossary
Reference

Participation
Recent Changes
Get a Wiki account
Create a new page
Donation Page
Policy

Community
RepRap Forum
RepRap IRC
Development Index
RepRap User Groups
Community Portal
Licence

Tools
What links here
Related changes
Special pages
Printable version
Permanent link
Page information
Cite this page

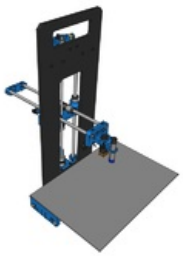
M Prime One is a free 3D printer intended to be simple, low-cost and easy to build and use.

With the M Prime One, we have designed a 3D printer focusing on three main points:

- **Free design**. The printer have been designed from scratch in a free 3D software: FreeCAD. All the files have been published under the less restrictive license we have found (CC BY 4.0). This way anybody can download the files, modify them and use them for their own purposes.
- **Simplicity**. The design has few different parts (for example, cold bed, 4 motors, just two types of screws and one type of radial bearings) in an effort to reduce building complexity, cost and maintenance.
- **Documentation**. Apart from the files, you can find the printer firmware, list of materials, slicing profiles... in the repository, receive support in our Q&A site and soon read the complete assembly manual in the manuals repository.

M Prime One

Release status: working



Description	free, simple 3D printer
License	CC-BY
Author	Diego Trapero
Contributors	
Based-on	Smartrap, Prusa i3
Categories	
CAD Models	Github repository
External Link	http://mprime.io

Features

The features of the M Prime One are:

- Printing surface: 200x150x150mm.
- Resolution up to 0.05mm layer height
- 1.75mm bowden extruder.
- Compatible with any hotend with 12mm diameter mount.
- Magnetic bed, easy to place and remove.
- Auto-level system with inductive/capacitive sensor.
- Cable management integrated in the design
- Integrated electronics holder (compatible with RAMPS or SAV Mk1, can be adapted to other boards)
- Optional LCD holder (compatible with Smart Controller)

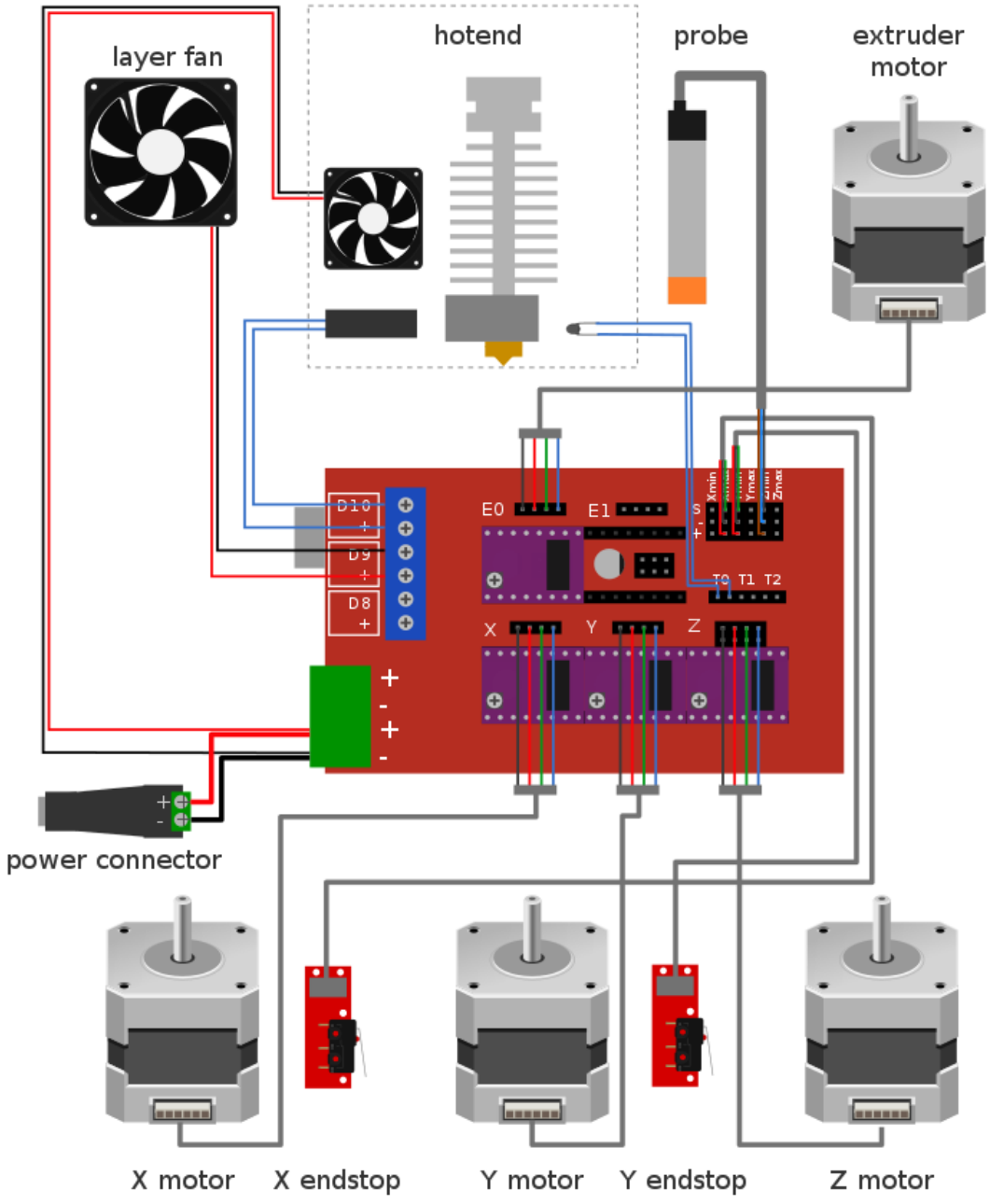
How to build an M Prime One

We are currently documenting the project, but the files have already been released and you can build the printer. You can find all the necessary files in the following links:

- Github repository: https://github.com/diegotrap/M_Prime_One
  - Assembled 3D model: https://github.com/M-Prime/M_Prime_One/blob/master/m_prime_one.fcstd
  - Bill of Materials: https://github.com/diegotrap/M_Prime_One/blob/master/documentation/BOM.md
  - Firmware: https://github.com/diegotrap/M_Prime_One/tree/master/firmware/Marlin
- Support and discussion: https://plus.google.com/u/0/communities/108084856251985677965
- Where to get parts? M Prime

Wiring diagram

M Prime One wiring diagram



Categories: Working developments | Smartrap, Prusa i3 Development