

Filament Printers

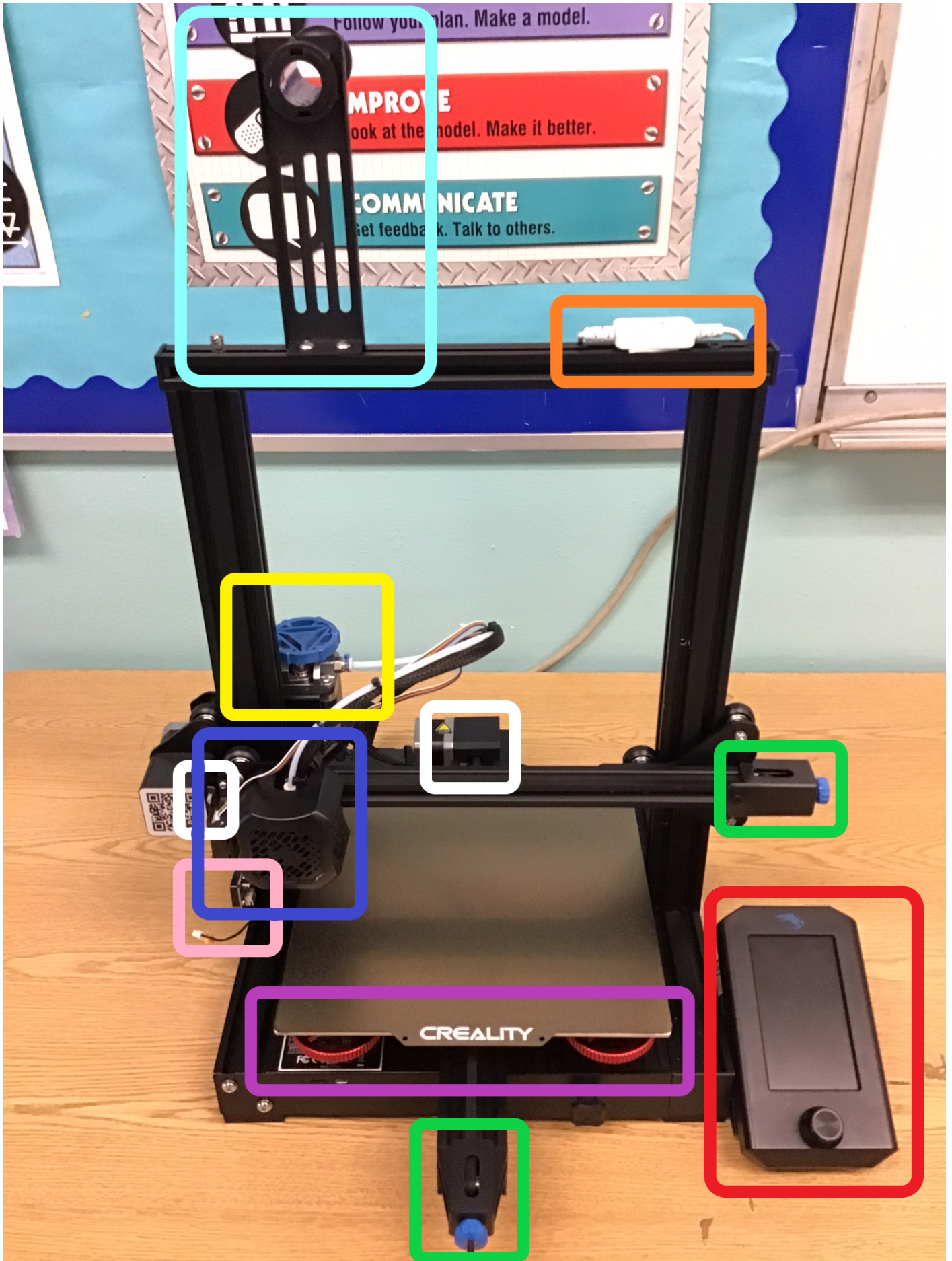
- [Ender 3 V2](#)
 - [Ender 3 V2 - Pictures](#)
 - [Ender 3 V2 Firmware](#)

Ender 3 V2

Instructions on how to do certain tasks with the Ender 3 V2

Ender 3 V2

Ender 3 V2 - Pictures



Green - Belt Tensioners

Red - Screen and Knob



Purple - Bed, Springs, and Knobs

Pink - Z-axis limit switch

Blue - Hot-End Assembly

White - Stepper Motors

Yellow - Extruder

Orange - LED Light Switch

Light Blue - Filament Holder

Ender 3 V2 Firmware

Hello! This document is used as a repository for the custom firmware used on the PWB STEM printers.

Failure to use these **EXACT FIRMWARE** files attached to this article will result in **PERMANENT FAILURE**

Explanation

Some explanation for the warning above. The attached firmware files on the left pane are custom built for the printers in this room. In the off-chance they become corrupted, or have software issues, use the files to re-flash the printers.

Therefore, we've decided to use [mriscoc's Ender 3 V2 firmware](#). It's packed with features, and quality of life improvements.

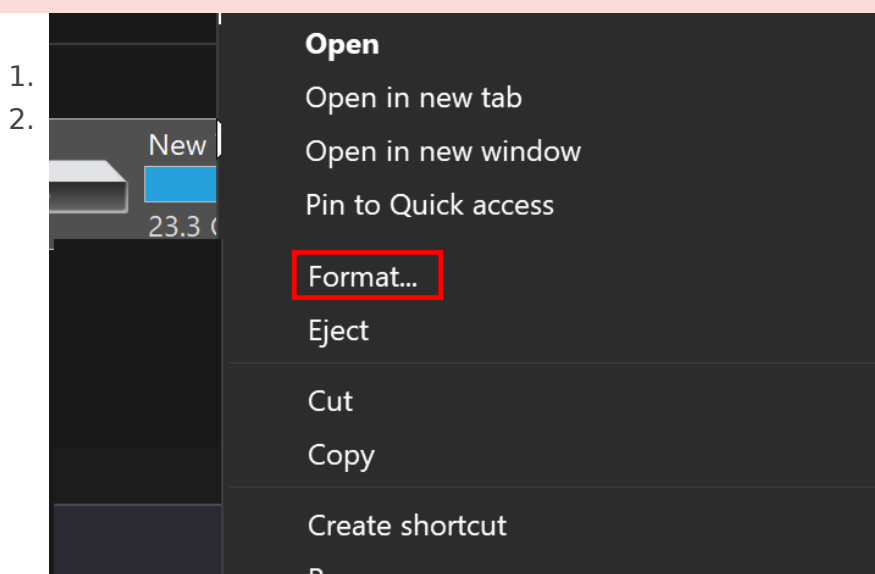
The Anatomy of firmware names

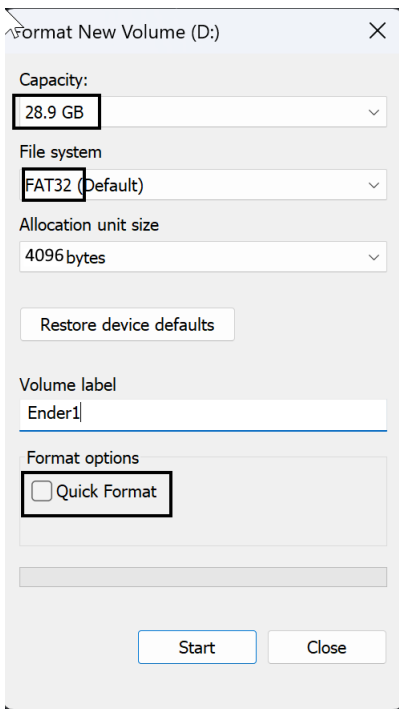
The firmware files are named according to the printers features. There's an example below.

MB 4.2.2 Unified Bed Leveling
422-BLT-UBL-TJC.bin
BL-Touch Auto Leveling Display Model

Firmware flashing instructions

The Micro SD Card used in this tutorial **WILL BE WIPED!!!**



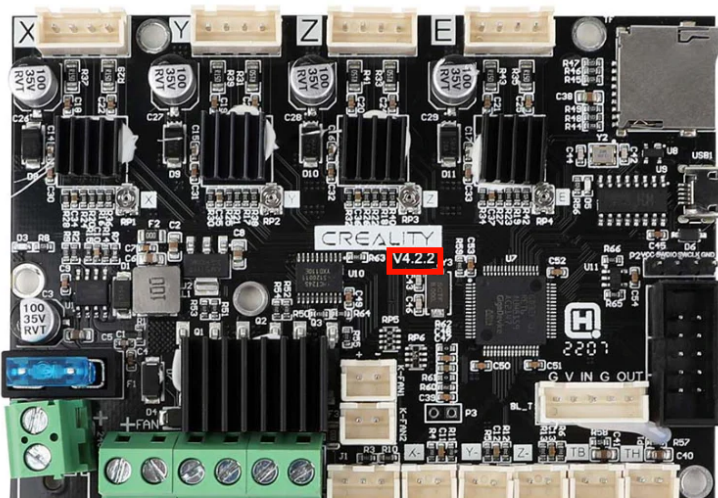


3. Press start
4. Copy the .bin file to the root of the card (base folder)
5. Ensure that the name of the file was not previously used to update the printer. If necessary, rename the file. (use gibberish, remember to keep the .bin extension)
6. Turn off the printer, **disconnect any USB cable** and insert the Micro SD card.
7. Turn on the printer, the upgrade firmware process will start automatically.
8. The display will be blank until the upgrade is finished (about 15 seconds).

Anatomy Information

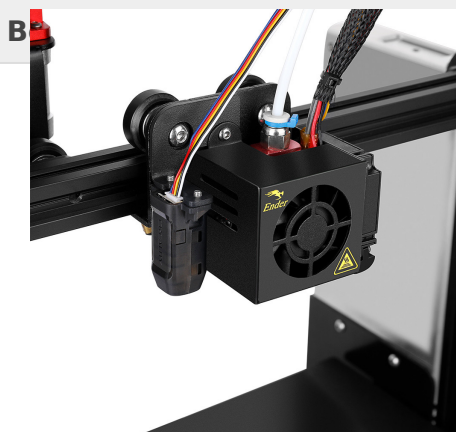
These explain the devices and firmware name in more depth

MB Number



422 - Motherboard Version: 4.2.2

427 - Motherboard Version: 4.2.7



BLT: Creality BL-Touch Bed Probe

MM: Manual Mesh (Manual Leveling of bed)

Unified Bed Leveling

TLDR:

Use UBL for printers with a bed probe

Use MM for printers without a bed probe

Display Type

TJC: (Newer style of display), **needs a firmware update for the display.**

DWIN: Older Display, **no firmware update required**

For info on which display is which, click [this link](#)