

Greetings,

Revised on Jan 14, 2023:

Experimental Printer Configuration and Compiling a new bin file revision 1

1. From the Special_Configurations Repository, https://github.com/mriscoc/Special_Configurations, click Latest (Right Side) and download the Source Code (Zip). In addition review the readme file for examples.
2. Un-Zip all the files to a new Folder on your system. My Folder Example, "Special_Configurations-InputShaping"
3. Open the Folder and scroll to the bottom and look for the Configurator.pyw file'
4. Note: [Python3.XX](#) along with [Visual Studio Code](#) and [PIO](#) must be installed on your computer. Double Click on Configurator.pyw to start it.
Select your Printer, M. Board, Leveling, Thermistor (Enders use the T1) and Features like MPC for sure and maybe LA.
5. Click " Set config ", then click the upper right " Auto " this will place a configuration file name in the window.
6. Edit the file name as you need it to be now click " Generate " this will save the configuration file, you named, back in the main folder.
7. Look in the main folder where the Configurator.pyw file is and find the file you saved from the Configurator.
8. Copy the Configuration.h, Configuration.adv.h & Platformio.inf files from it, and maybe paste them on the desktop. For step 11 below.
9. Now from the Ender3V2S1 Repository, <https://github.com/mriscoc/Ender3V2S1>, click Latest (Right Side) scroll to the bottom and download the Source Code (Zip). Note this is a different Source Code than from the file above in step 1.
10. Un-Zip all the files to a different new Folder on your system. A different one the one from step 2. My Folder Example, "Ender3V2S1-20221222"
11. From step 8 above, Copy the Configuration.h & Configuration.adv.h files to the Marlin folder in the new un-zip folder you created and over write the originals. Copy the Platformio.inf file to the Main folder where the Marlin folder is and overwrite the current one.
12. Open Visual Studio Code. Select open folder and Open the complete folder from step 10 with the updated Configuration.h & Configuration.adv.h and Platformio.inf files.
13. After editing, Test the compile by clicking the M icon, which is the " Auto Build Marlin " on the far left tool bar. Then click

the Show ABM Panel and scroll down to Environments and select the Build for your Environment. The chip on my 4.2.7 board is a STM32f103RET6 (512k). The first listing was for a STM32F103RE_Creality (512K) so I selected it and clicked Build.

14. When the compile is complete your build selection will turn GREEN and it will transfer the compiled bin and elf file to the hard drive. Look in the source code folder, the one you loaded into Visual Studio Code, open the pio folder > build folder > (in my case the STM32F103RC_creality) folder and the the bin is listed there. You could also use step 15.
15. Your bin file is located at the top of the left hand pane, click:> .pio\build > STM32F103RC_creality. Drag and drop the top listed firmware-xxxxxxx-xxxxxx.bin to your desk top.
16. Prior to flashing your mother board make a copy of all the current configuration and calibration data on your printer, you will need it.
17. Copy the bin file to a formatted 8gig SD card, install in your printer and power up. Re-enter your printers old configuration data. After entering all of your previous configuration data, save it all, then Power Off your printer and remove the SD card. Then power back on and do all the auto temperature calibrations, tramming, z-offsets and bed mesh. Save it all again. Power off one more time prior to running a print. This will make sure all the data you saved is in memory correctly.

Thank you for reviewing.

Doug