Sprinter

From RepRapWiki

The leading developers of Sprinter are currently Kliment and caru, though many others contribute with their patches. This is a firmware for RAMPS and other reprap single-processor electronics setups. It supports printing from SD card, active heatbed control, and ATmega internal pullups. This work is licensed under the GNU GPL v3 or (at the user's discretion) any later version. It is based on Tonokips's firmware, which was licensed under GPL v2 or later.

See Sprinter (https://github.com/kliment/Sprinter) on Github.

Works on RAMPS and Sanguinololu, seen working on Generation_6_Electronics, Gen3 Monolithic Electronics (http://reprap.org/wiki/Sprinter_on_gen3) and maybe other

Sprinter

Release status: working

Description	a firmware for RAMPS reprap single-processor setups
License	GNU GPL v3
Author	Kliment
Contributors	
Based-on	Tonokips's firmware
Categories	firmware firmware dev
CAD Models	none
External Link	https://github.com/klim

Sprinter Firmware Guide

moved from Calibration to here

Adjustments to the calibration are made in the firmware because this is where the motors are told how much to move each time they are told to move a unit. You will need to know how to compile and uploaded firmware to your arduino to find the following information useful. The sprinter firmware can be found at https://github.com/kliment/Sprinter.

Note: the Sprinter instructions in the readme are outdated and incorrect, with an incorrect link to sanguino hardware support. Correct link to sanguino hardware support is at http://code.google.com/p/sanguino/

First, you will need to choose your electronics in the configuration.h file:

```
//// The following define selects which electronics board you have. Please choose the one that
matches your setup
// MEGA/RAMPS up to 1.2  = 3,
// RAMPS 1.3 = 33
// Gen6 = 5,
// Sanguinololu up to 1.1 = 6
// Sanguinololu 1.2 and above = 62
// Teensylu (at90usb) = 8
// Gen 3 Plus = 21
// gen 3  Monolithic Electronics = 22
#define MOTHERBOARD 3
```

```
//// Thermistor settings:
// 1 is 100k thermistor
// 2 is 200k thermistor
// 3 is mendel-parts thermistor
// 4 is 10k thermistor
// 5 is ParCan supplied 104GT-2 100K
// 6 is EPCOS 100k
// 7 is 100k Honeywell thermistor 135-104LAG-J01
#define THERMISTORHEATER 1
#define THERMISTORBED 1
```

Calibration settings are inside the configuration.h file (take note of the comments around this code if you are using Metric Prusa Mendel with Makergear geared stepper extruder or MakerGear Hybrid Prusa Mendel):

```
//// Calibration variables
// X, Y, Z, E steps per unit - Metric Prusa Mendel with Wade extruder:
float axis_steps_per_unit[] = {40, 80, 3200/1.25,700};
```

If you are using RAMPS, it is important to find the following lines in the pins.h file and do as the comments say:

```
// uncomment one of the following lines for RAMPS v1.3 or v1.0, comment both for v1.2 or 1.1
#define RAMPS_V_1_3
#define RAMPS_V_1_0
```

A Youtube video that explaines all the available variables can be found here [1] (http://www.youtube.com/watch?v=oe3HJzL1vQI)

Note: If you experience issues compiling, make sure "AT MEGA 2560" is selected in Tools -> Board.

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Categories: Working developments | Firmware | Firmware development

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