MKS Gen-L v1.0 & TMC2130 Drivers Wiring for SPI and Sensor-less Homing

1. For this setup to work, the TMC2130 modules must be configured in SPI mode by bridging the appropriate solder pads on the underside of the driver module.

2. By default, Marlin uses pins D53 and D49 for X_CS and Y_CS. However, this conflicts with the control lines of the RepRap Discount LCD/SD Card Reader; therefore, pins D59 and D63 are remapped in the pins_RAMPS.h file to be X_CS and Y_CS respectively.

3. For dual extruders, duplicate setup for E0 as E1, but connect E1_CS to D44 in AUX-2.

4. Only X and Y get sensor-less homing, The Z axis still needs an endstop switch.

5. These connections were tested with the latest version of Marlin at the time (1.1.8) configured for a Tevo Tornado.

6. When upgrading from stock controller board/LCD, the LCD modules connectors (EXP1 & EXP2) must be connected rotated 180° for it to work. The connector's key must be removed.

Gerson Ramos - 02/03/18