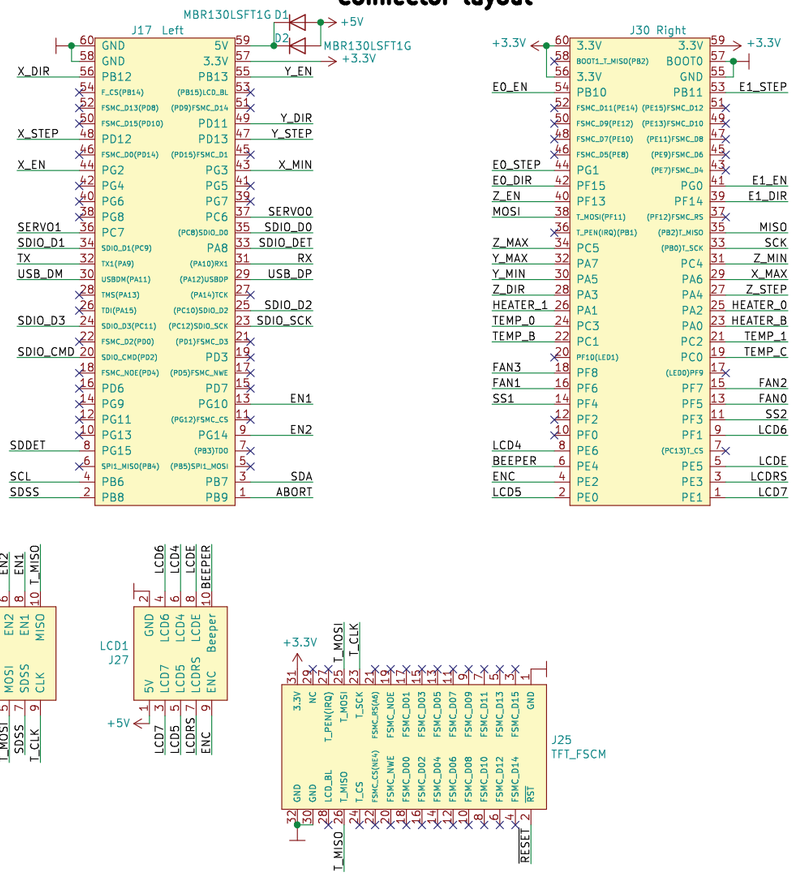
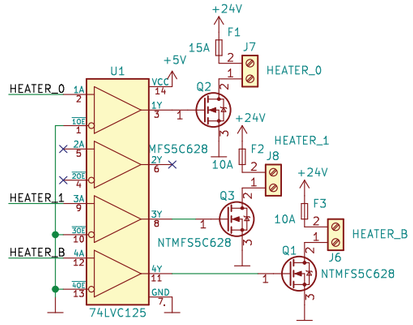
3D Printer RAMPS board
for STM32F407ZGT6
Chinese black edition
with Touch TFT ILI9341
320x240

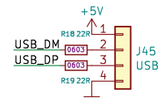
STM32F407ZGT6 Black board connector layout



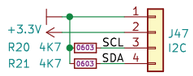
Heating block



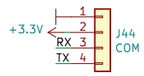
USB



I2C

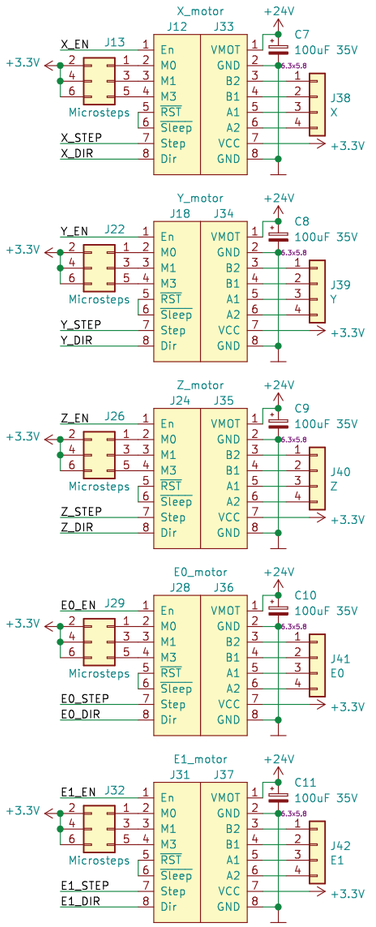


UART

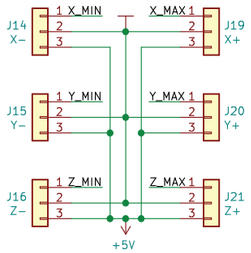


SPI

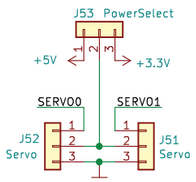
Stepper Motors



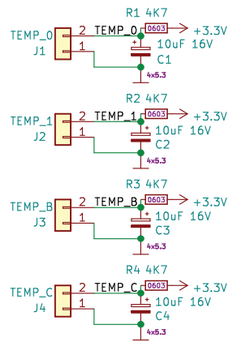
Limit switches



Servos

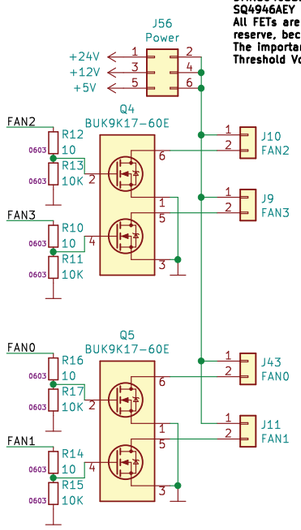


Thermistors

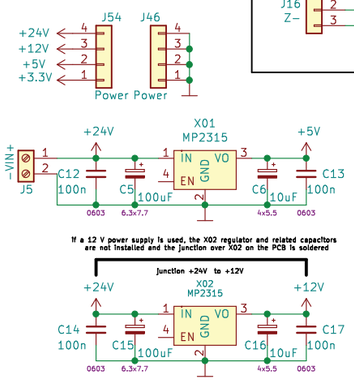


Fans

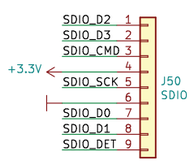
On the PCB can be mounted a direct replacement:
Instead of this BUK9K17-60E = max. current 25A
DMN6040SSD = much low cost low max. current 5A
SQ4946AEY = similar price, low max. current 7A
All FETs are to the 60V operating voltage with reserve, because power supply can be up to 24V
The important thing is that VGS(th) Gate-Source Threshold Voltage is very low max. to 2.5V



Power



SD Card



Jarin's

Sheet: /
File: RAMPS_STM32F407_TFT_Touch.sch

Title: RAMPS STM32F407Black

Size: A3	Date: 01.05.2020	Rev:
KiCad E.D.A. kicad (5.1.5)-3		Id: 1/1