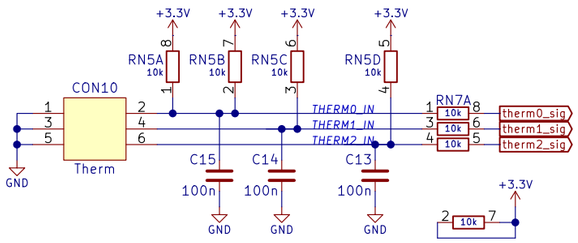
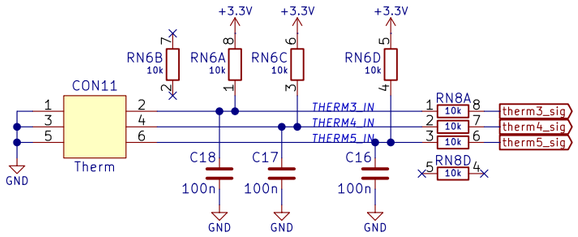
External thermistor inputs

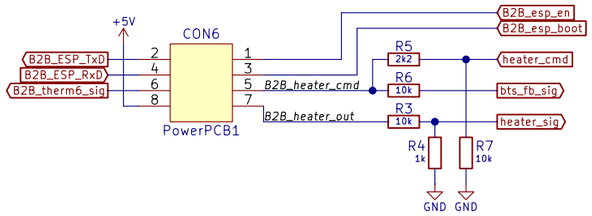
Thermistor 0 is for higher temperature – for heater and have lower pullup resistance. Other are for servos and BEC

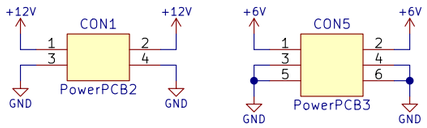




Power PCB connectors

6V power is for servos
5V for OLED and LDO
12V for external outputs

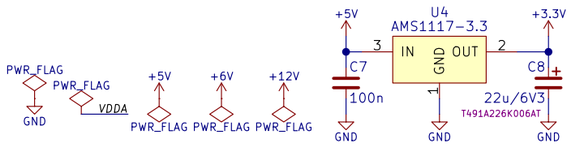




3V3 LDO regulator

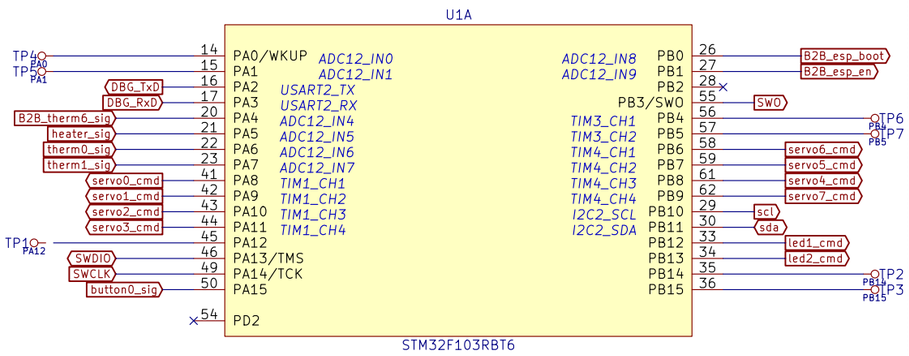
For uC only

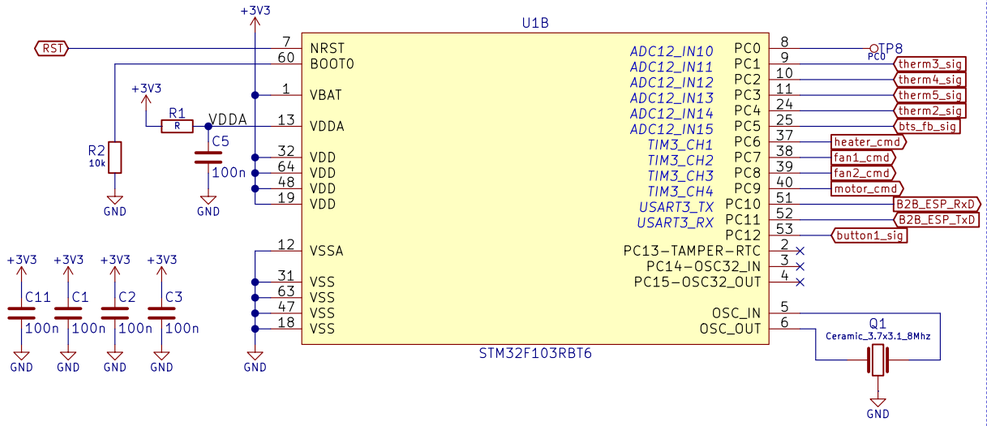
3.3V±3%
250mA max.
0.51W max.



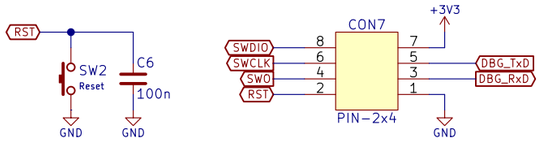
Naming convention:
– small_letters (_cmd,_sig) – board level signals (out/in from uC)
– BIG_LETTERS (_OUT,_IN) – connections to outside world
– B2B_signals – connections to second board

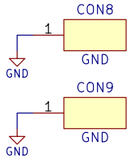
STM32 microcontroller



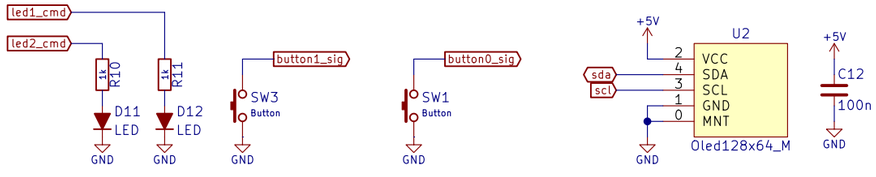


Programming/debug connector and reset switch



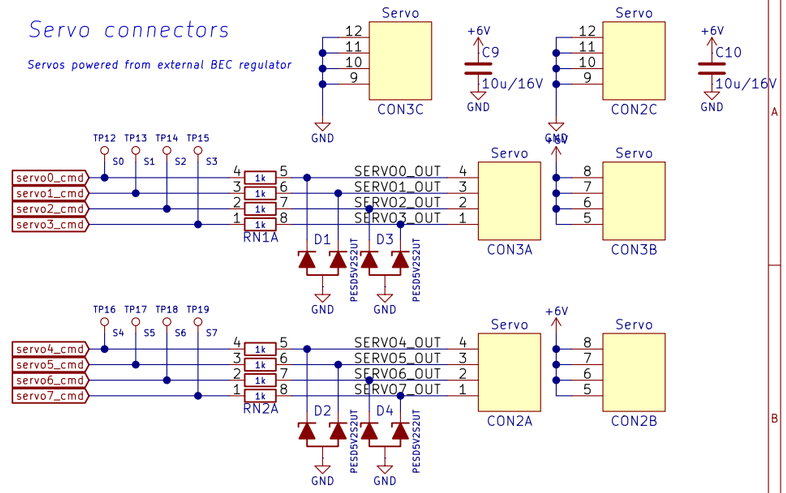


User interaction



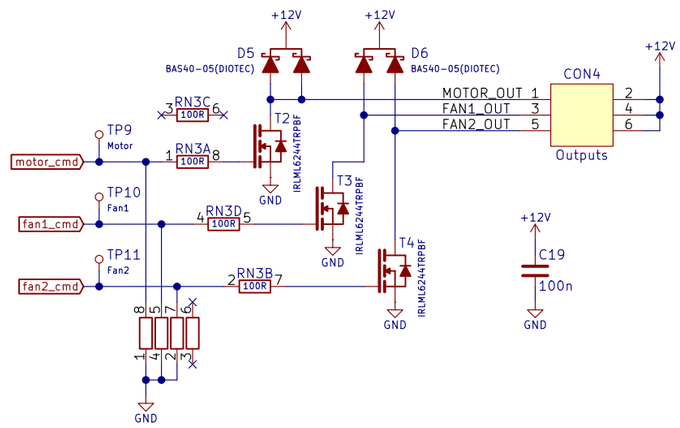
Servo connectors

Servos powered from external BEC regulator



Medium power outputs

motor_cmd and two fans



Mechanical parts and Power PCB

Power PCB for 3D model

MECH9
PowerPCB

MH1 Mounting hole
MH2 Mounting hole
MH3 Mounting hole
MH4 Mounting hole
GND

MECH5 spacer_M3x5+6
MECH6 spacer_M3x5+6
MECH7 spacer_M3x5+6
MECH8 spacer_M3x5+6
MECH1 nut
MECH2 nut
MECH3 nut
MECH4 nut

NiceCircuits

Sheet: /
File: drOctopusControl.sch

Title: Wi–Fi Servo Controller

Size: A3	Date: 2016–01–24	**Rev: 2.0**
KiCad E.D.A. kicad 4.0.0–rc1–stable		Id: 1/1