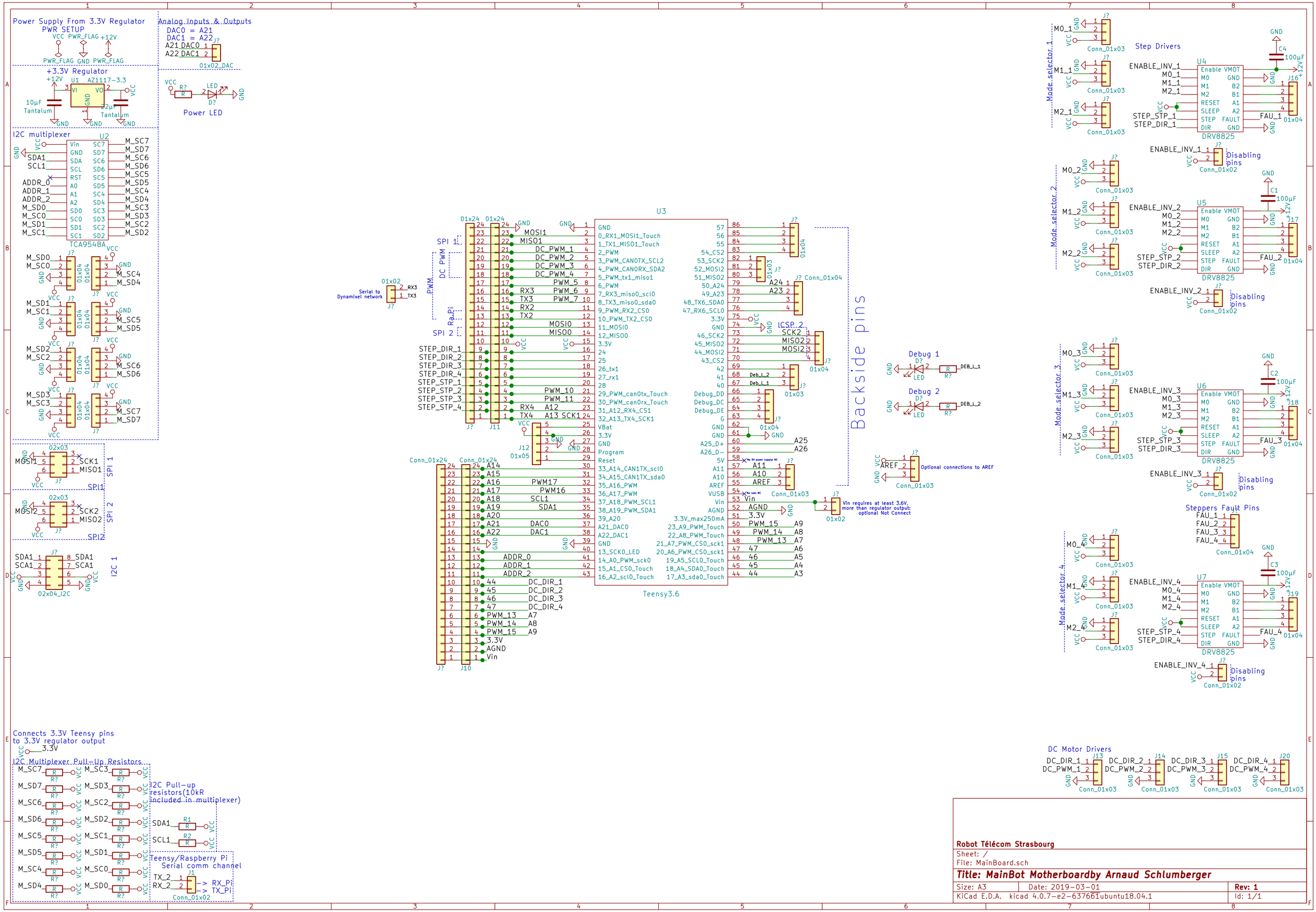
Power Supply From 3.3V Regulator
PWR SETUP
+3.3V Regulator
U1 AZ1117-3.3
10µF Tantalum
22µF Tantalum
Analog Inputs & Outputs
DAC0 = A21
DAC1 = A22
01x02_DAC
Power LED
I2C multiplexer
U2
TCA9548A
Serial to Dynamixel network
U3
Teensy3.6
Backside pins
Debug 1
Debug 2
Optional connections to AREF
Vin requires at least 3.6V, more than regulator output: optional Not Connect
Step Drivers
U4
U5
U6
U7
DRV8825
Disabling pins
Steppers Fault Pins
Mode selector 1
Mode selector 2
Mode selector 3
Mode selector 4
SPI 1
SPI 2
I2C 1
Connects 3.3V Teensy pins to 3.3V regulator output
I2C Multiplexer Pull-Up Resistors
I2C Pull-up resistors(10kR included in multiplexer)
Teensy/Raspberry Pi Serial comm channel
DC Motor Drivers
Robot Télécom Strasbourg
Sheet: /
File: MainBoard.sch
Title: MainBot Motherboardby Arnaud Schlumberger
Size: A3
Date: 2019-03-01
Rev: 1
KiCad E.D.A. kicad 4.0.7-e2-637661ubuntu18.04.1
Id: 1/1