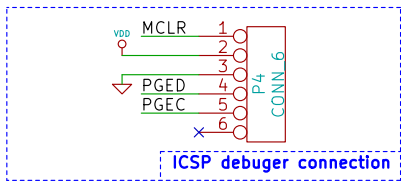
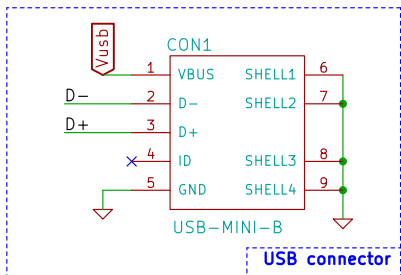


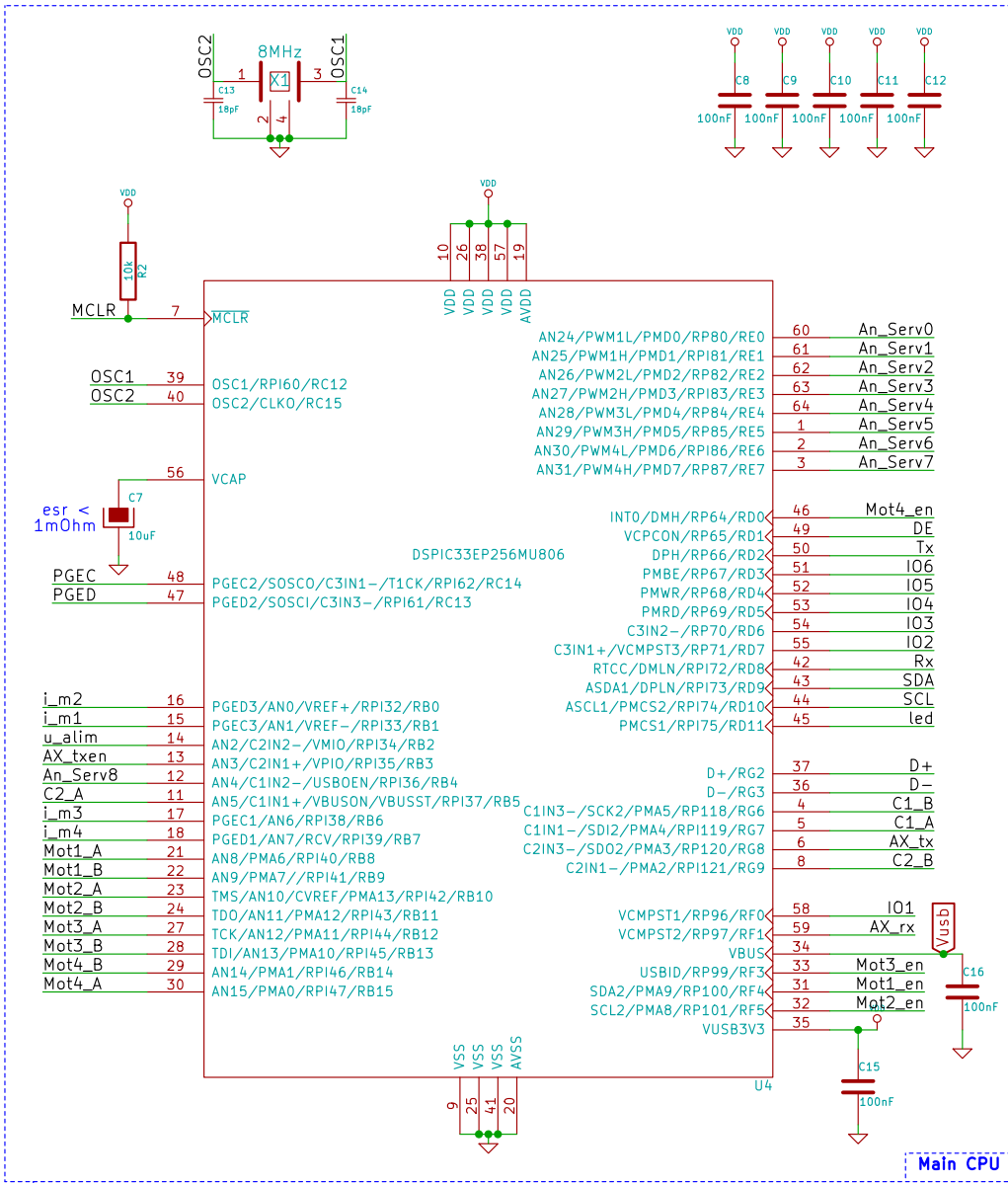
Power and motors parts



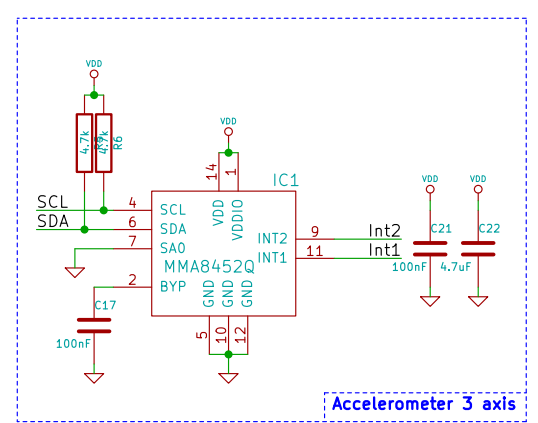
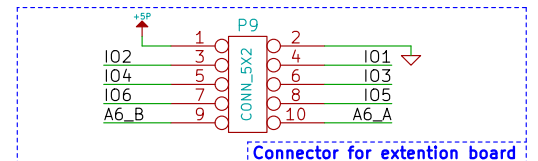
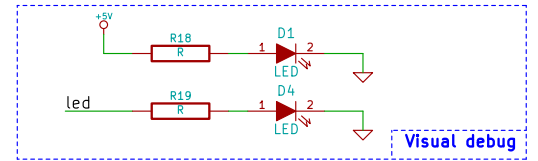
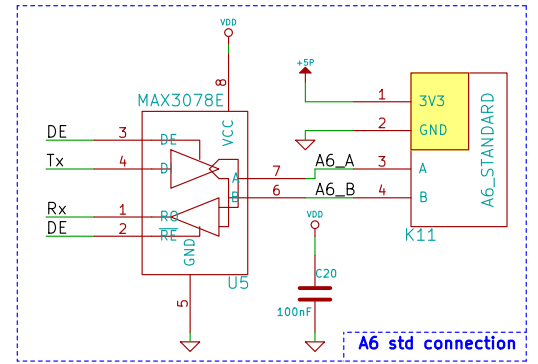
ICSP debugger connection



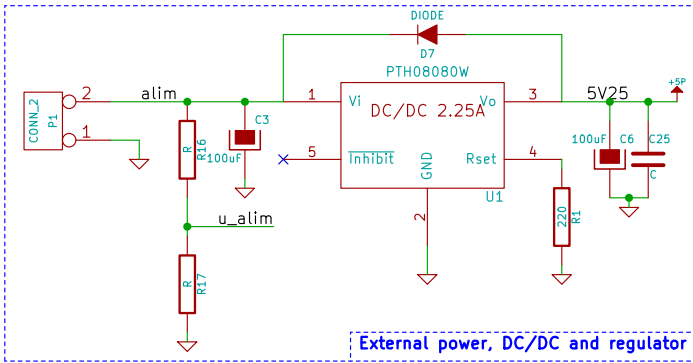
USB connector



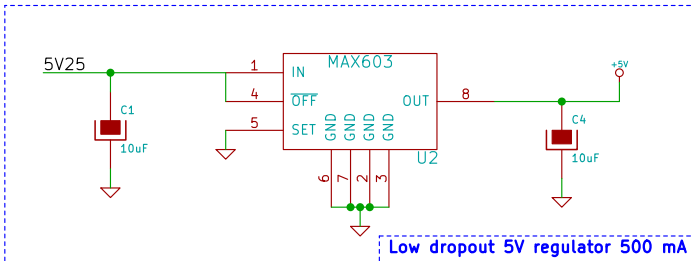
Main CPU



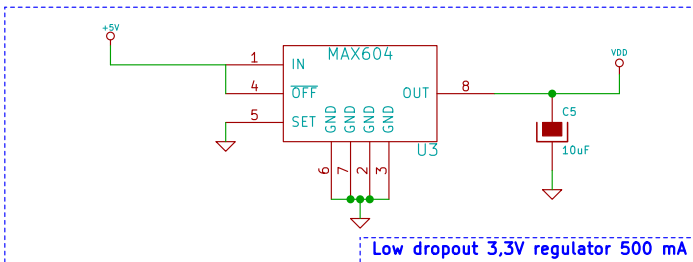
Robotips, Sébastien CAUX		
File: mother_board.sch		
Sheet: /		
Title: MiniBot control board		
Size: A4	Date: 25 feb 2015	Rev: 1.a
KiCad E.D.A.		Id: 1/2



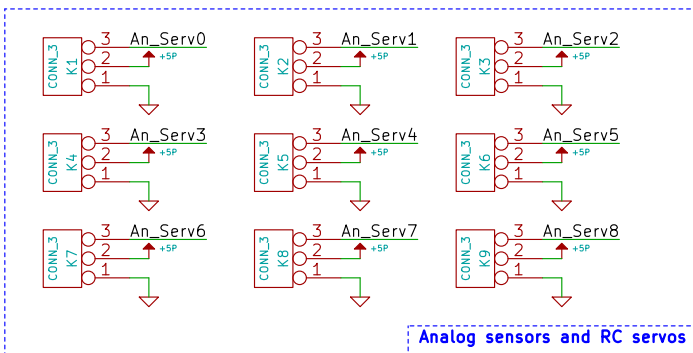
External power, DC/DC and regulator



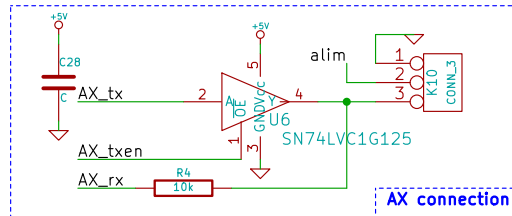
Low dropout 5V regulator 500 mA



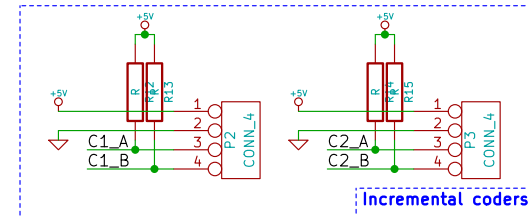
Low dropout 3.3V regulator 500 mA



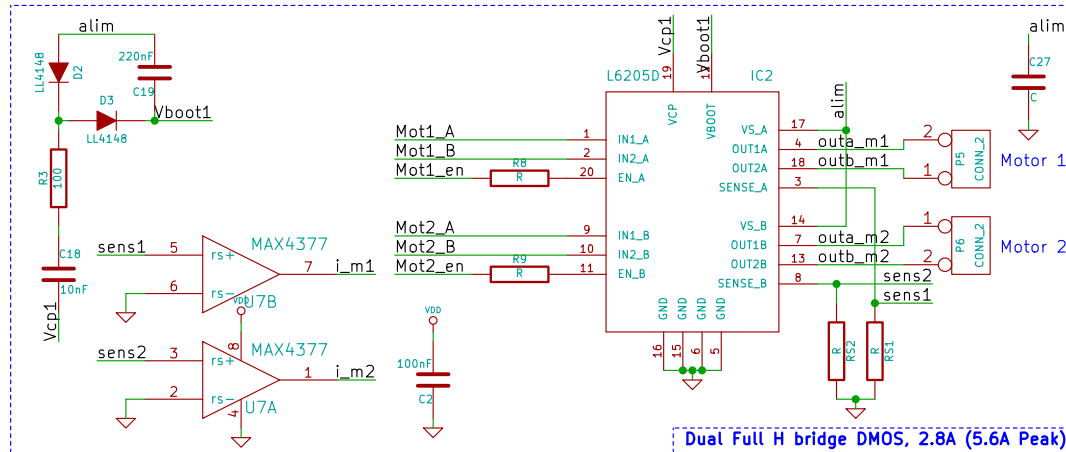
Analog sensors and RC servos



AX connection



Incremental coders



Dual Full H bridge DMOS, 2.8A (5.6A Peak)

- An\_Serv0 → An\_Serv0
- An\_Serv1 → An\_Serv1
- An\_Serv2 → An\_Serv2
- An\_Serv3 → An\_Serv3
- An\_Serv4 → An\_Serv4
- An\_Serv5 → An\_Serv5
- An\_Serv6 → An\_Serv6
- An\_Serv7 → An\_Serv7
- An\_Serv8 → An\_Serv8

- C1\_A → C1\_A
- C1\_B → C1\_B
- C2\_A → C2\_A
- C2\_B → C2\_B

- Mot1\_A → Mot1\_A
- Mot1\_B → Mot1\_B
- Mot1\_en → Mot1\_en

- Mot2\_A → Mot2\_A
- Mot2\_B → Mot2\_B
- Mot2\_en → Mot2\_en

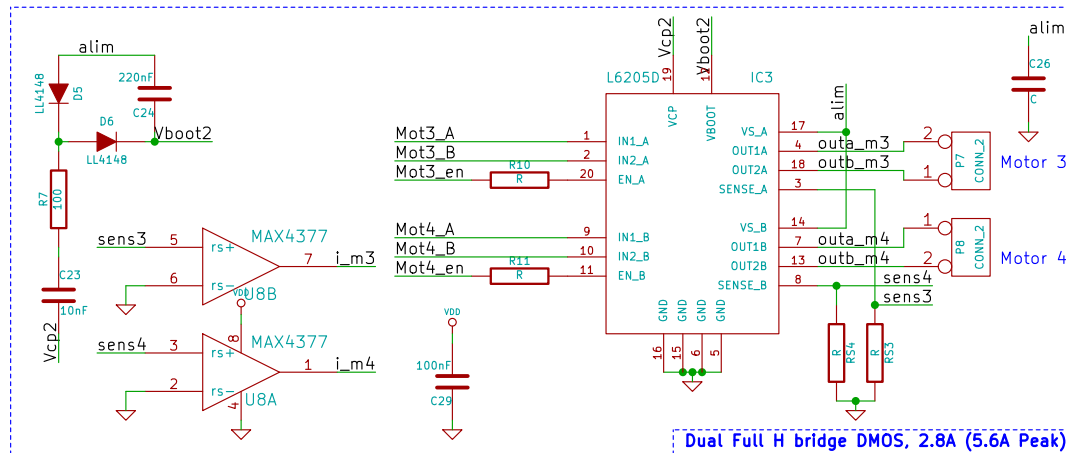
- Mot3\_A → Mot3\_A
- Mot3\_B → Mot3\_B
- Mot3\_en → Mot3\_en

- Mot4\_A → Mot4\_A
- Mot4\_B → Mot4\_B
- Mot4\_en → Mot4\_en

- AX\_tx → AX\_tx
- AX\_txen → AX\_txen
- AX\_rx → AX\_rx

- u\_alim → u\_alim

- i\_m1 → i\_m1
- i\_m2 → i\_m2
- i\_m3 → i\_m3
- i\_m4 → i\_m4



Dual Full H bridge DMOS, 2.8A (5.6A Peak)

Sébastien CAUX		
Robotips, Sébastien CAUX		
File: power_motors.sch		
Sheet: /power_motors/		
Title: MiniBot control board		
Size: A4	Date: 25 feb 2015	Rev: 1.a
KiCad E.D.A.		Id: 2/2