

NOTE: This is a "Work In Progress"; implement at your own risk.

Sheet: OSv4_logic

Logic

File: OSv4_logic.sch

Sheet: OSv4_H-bridge

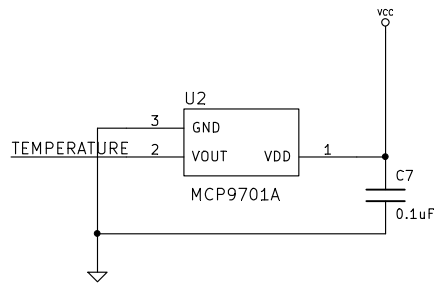
H-bridge

File: OSv4_H-bridge.sch

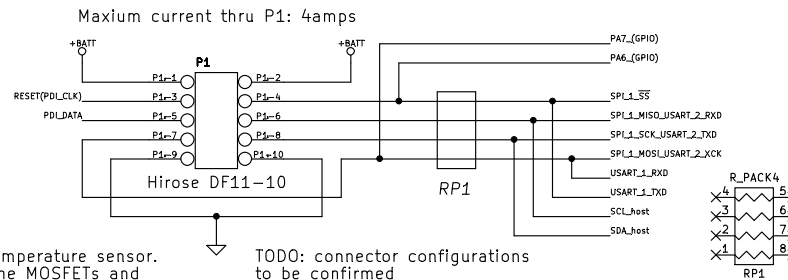
NOTE: This is most definitely a "Work In Progress" that is in a state of flux... It is presented for review purposes only and does not represent an end product!

File: OSv4.sch		
Sheet: /		
Title: OpenServo v4 preliminary work-up, © OpenServo project 2010		
Size: A4	Date: 12 may 2010	Rev:
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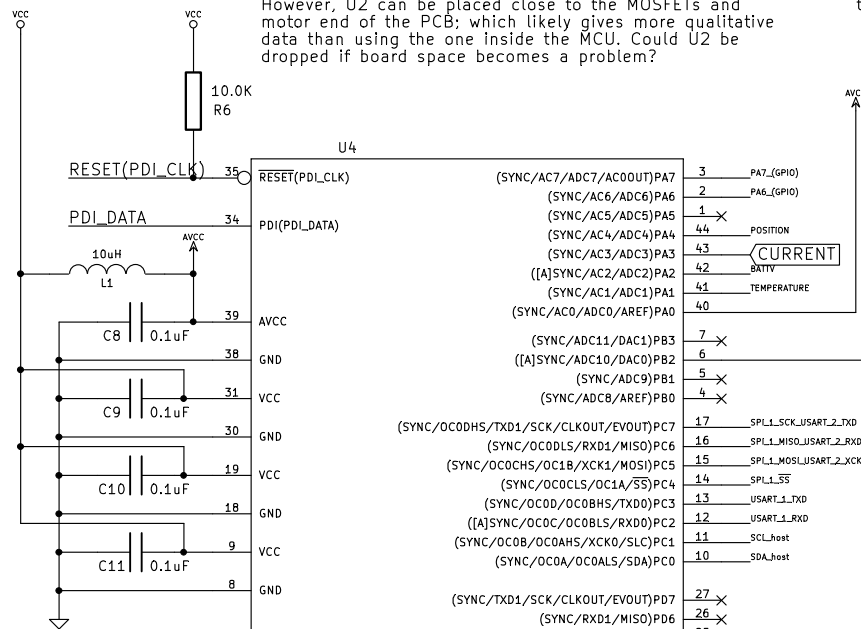
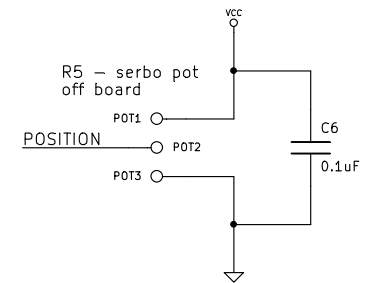


NOTE: The XMEGA has an integrated temperature sensor. However, U2 can be placed close to the MOSFETs and motor end of the PCB; which likely gives more qualitative data than using the one inside the MCU. Could U2 be dropped if board space becomes a problem?



TODO: connector configurations to be confirmed

RP1 would have provided some limited protection against connection and programming errors; however design considerations on the PCB mean that this is one of the items that probably has to be dropped.

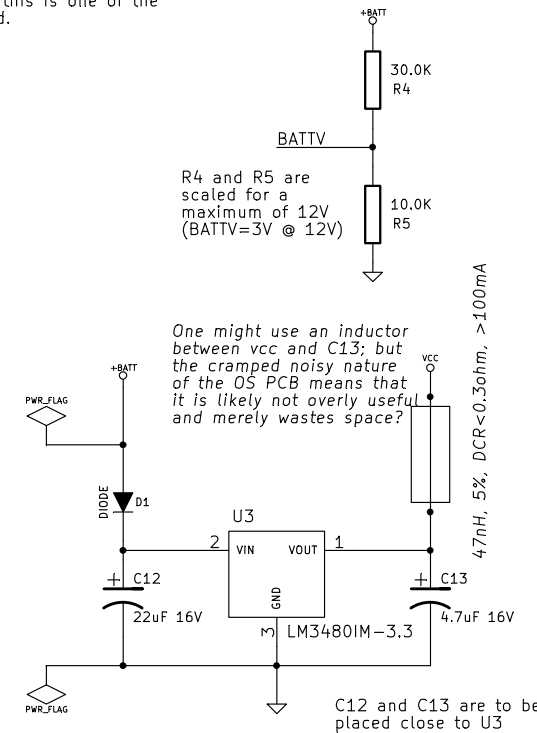


NOTE: It is proposed that the system will use the internal clocks (the 32 MHz Run-time Calibrated Internal Oscillator during normal operation).

Software IRQ?

ATXMEGA32A4

NOTE: Decoupling capacitors to be placed close to the device for each supply pin pair in a signal group.



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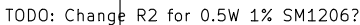
Size: A4 Date: 12 may 2010

Rev: 0.0

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5



NOTE: According to the docs, pin 5 on U5 has "no internal connection"; it has been used for routing purposes on the PCB.

TODO: TEST!

× 1 NC OUT_A

2 IN_A

3 GND VDD

4 IN_B OUT_B

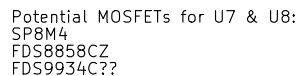
TC4428A

PWM_A

EN_B

RP2

R_PACK4



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