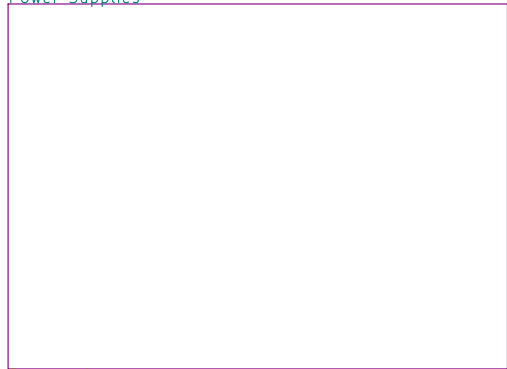
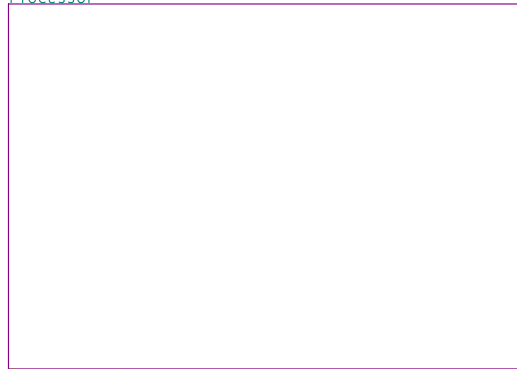


Power Supplies



Power.sch

Processor



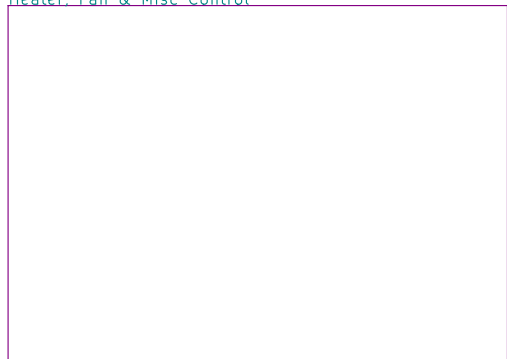
Processor.sch

Stepper Driver



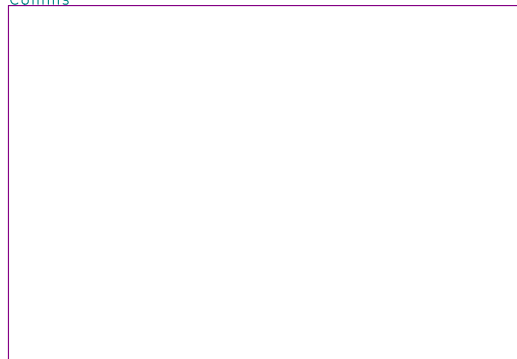
Stepper_Drv.sch

Heater, Fan & Misc Control



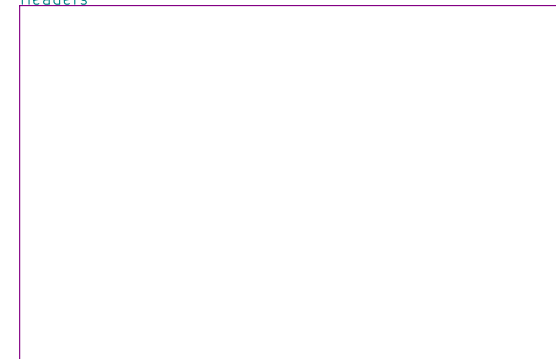
Htr_Fan.sch

Comms



Comms.sch

Headers



Headers.sch

http://www.ohwr.org/attachments/2388/cern_ohLv_1_2.txt
CERN OSH License 1.2

Duet3d

Sheet: /
File: Duet2Maestro.sch

Title: Duet 2 Maestro

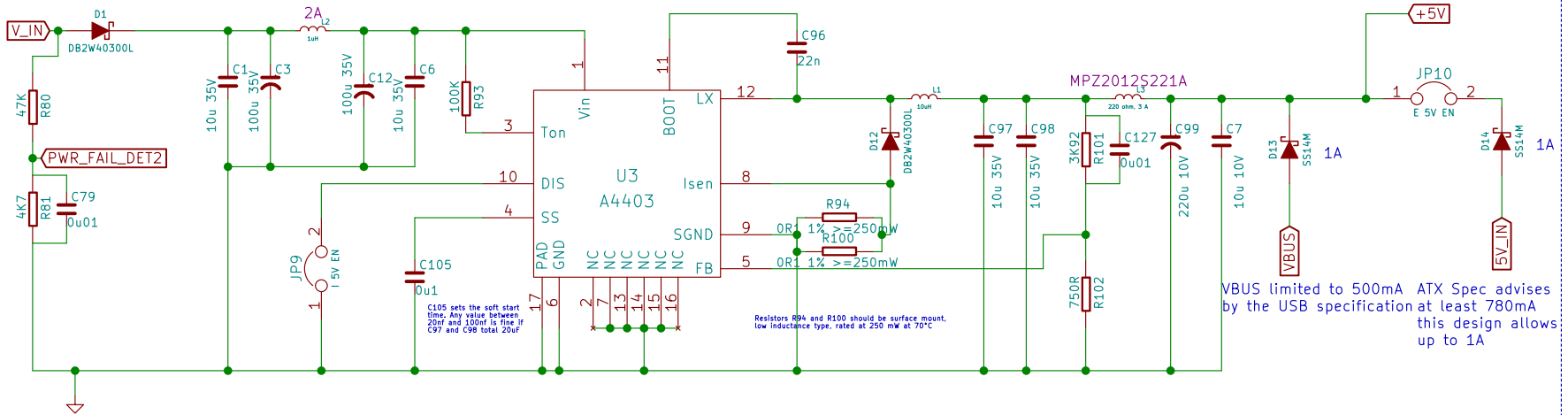
Size: A4 Date: 2017-12-05

KiCad E.D.A. kicad 4.0.7

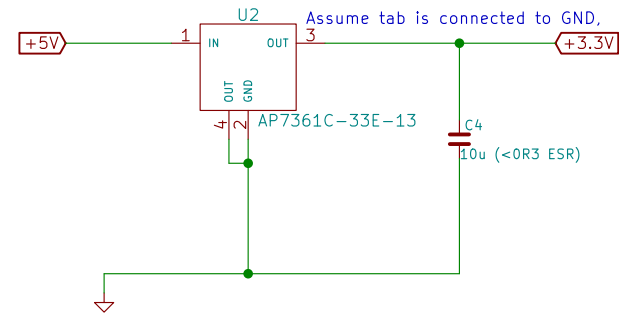
Rev: 1.0

Id: 1/77

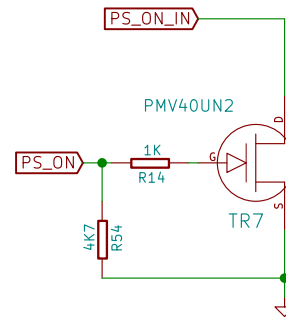
12-24V Input, 5V 2A Output
PWM Buck Converter



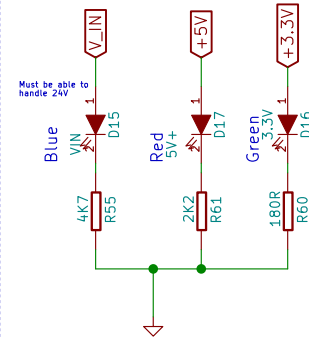
5V Input, 3.3V Output
Low Drop-Out Linear Regulator



PS_ON Control



Power LEDs



http://www.ohwr.org/attachments/2388/cern_ohLv_1_2.txt

CERN OSH License 1.2

Duet3d

Sheet: /Power Supplies/

File: Power.sch

Title: Duet 2 Maestro

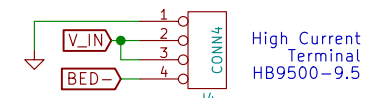
Size: A4 Date: 2017-12-05

KiCad E.D.A. kicad 4.0.7

Rev: 1.0

Id: 3/7

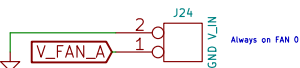
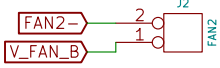
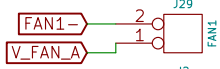
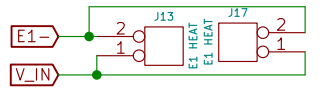
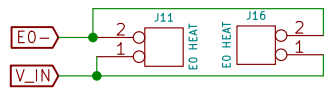
Power, Heaters and Fans



High Current Terminal HB9500-9.5



5VPS

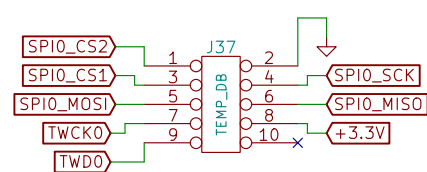


Always on FAN 0

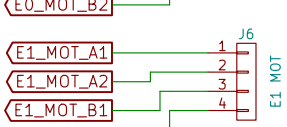
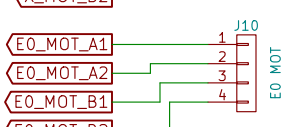
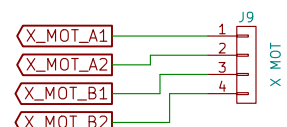
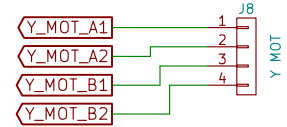
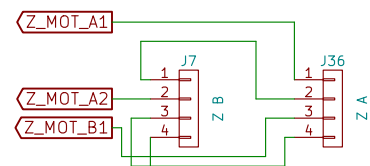
Temperature (Thermistor & PT1000)



Temperature Daughterboard Header



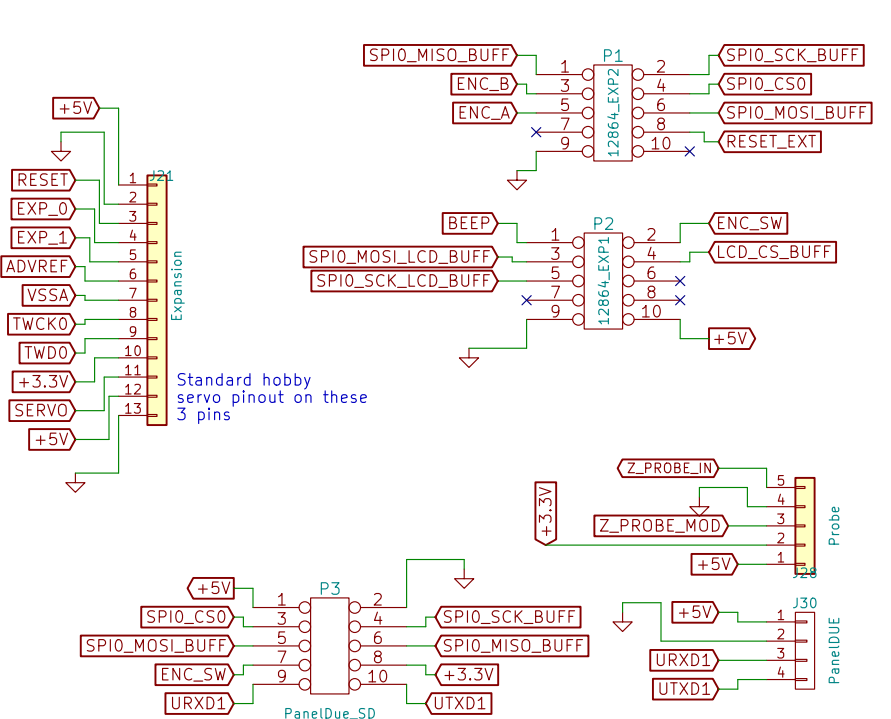
Motors



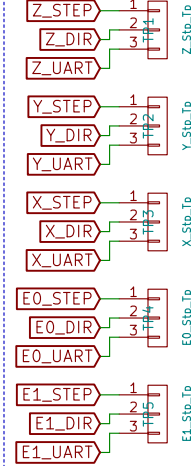
Endstops



Differences from the RRD "Standard":
No SD Detect
http://reprap.org/wiki/images/5/51/RRD_FULL_GRAPHIC_SMART_CONTROLLER_SCHEMATIC.pdf

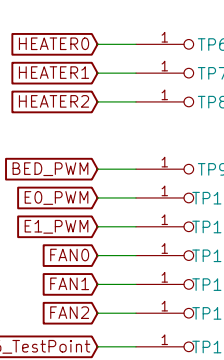


Test Points

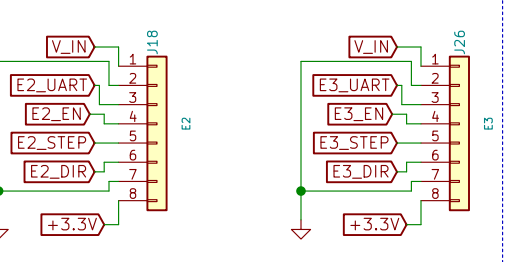


The Step/Dir/UART Test points are only provided to allow test connections for ATE etc. These are not header connections

All test points are DNP



External Stepper Drivers



http://www.ohwr.org/attachments/2388/cern_ohLv1_2.txt
CERN OSH License 1.2

Duet3d

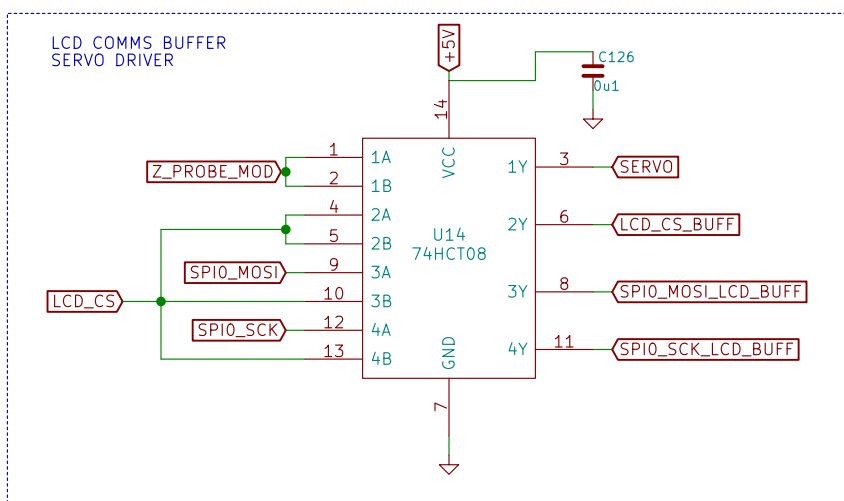
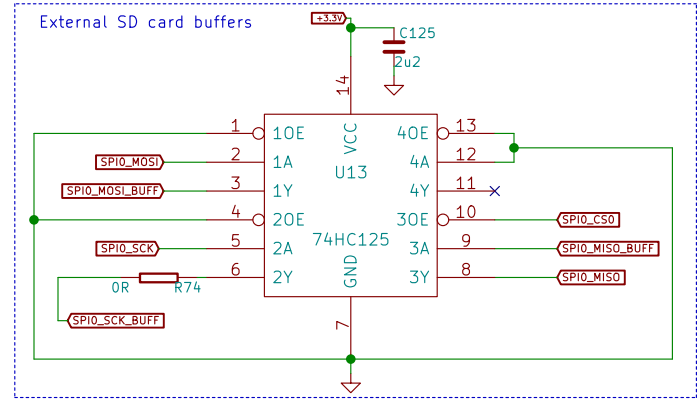
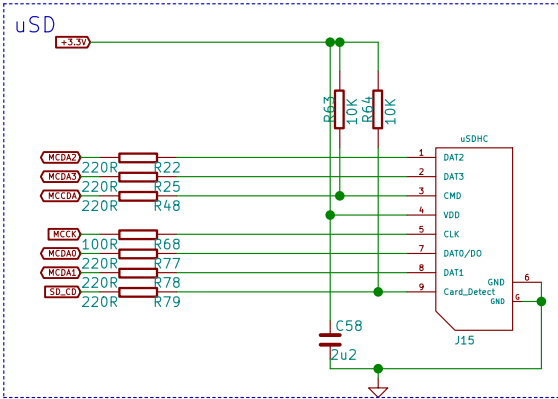
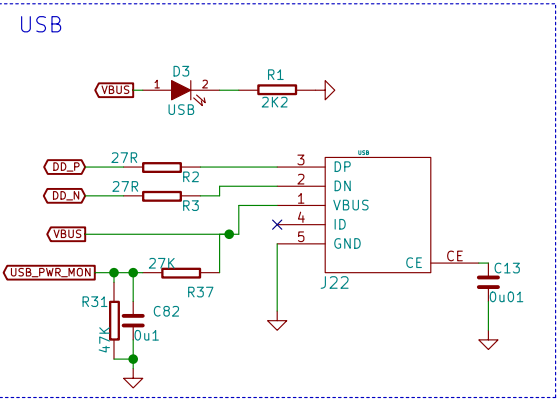
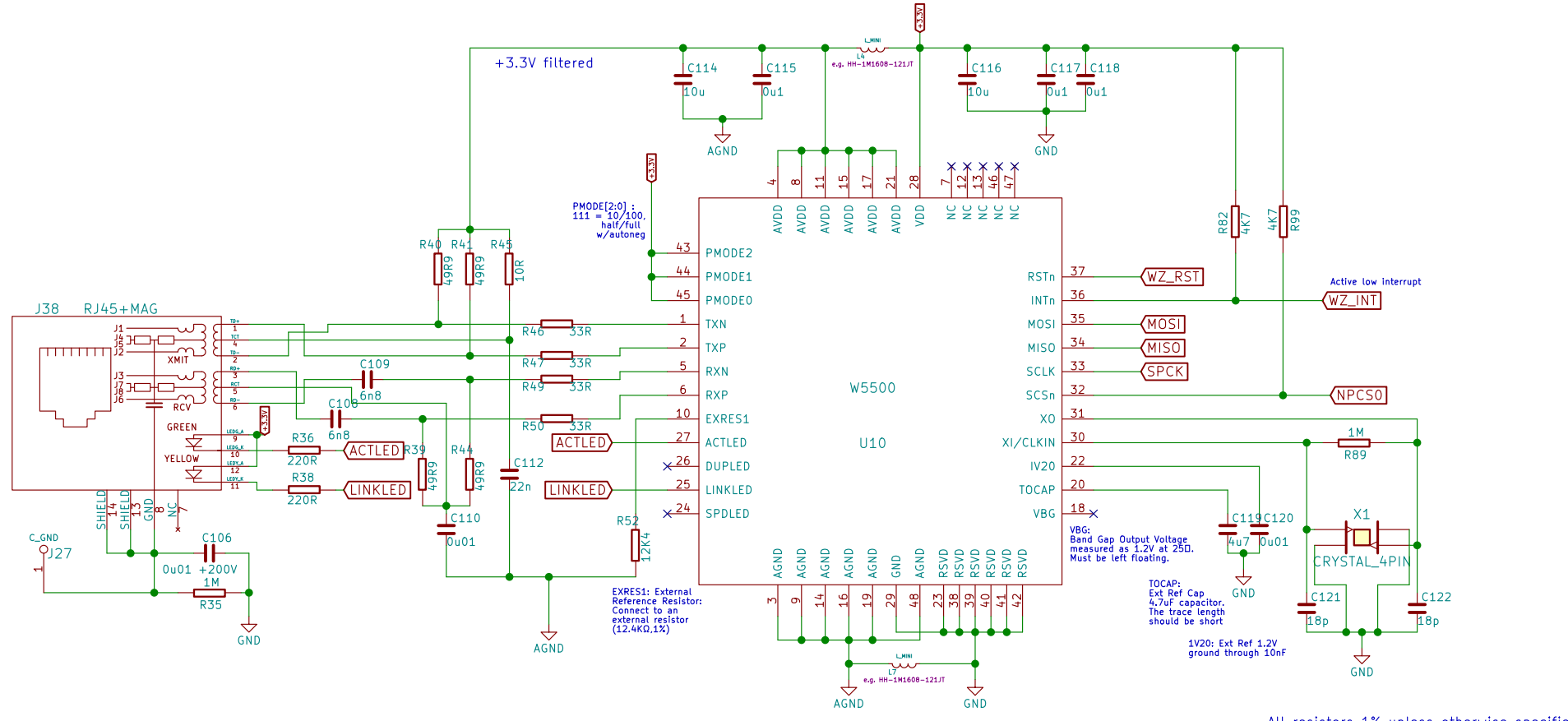
Sheet: /Headers/
File: Headers.sch

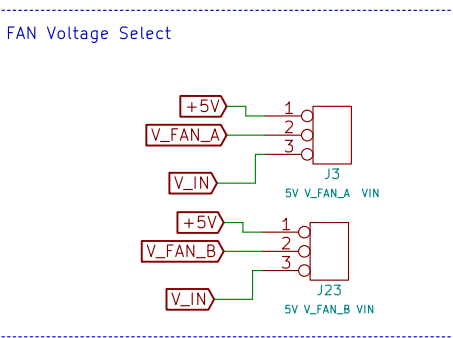
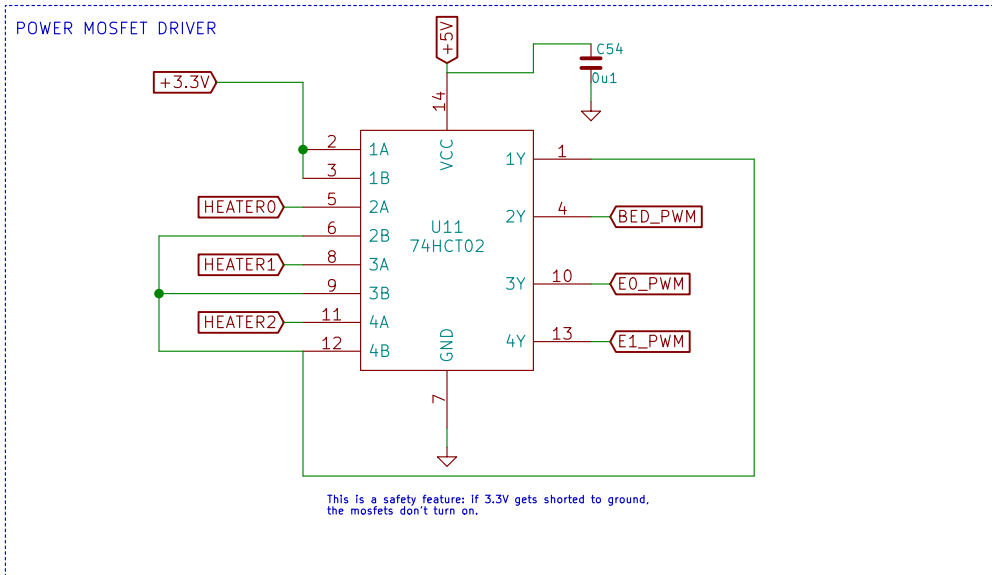
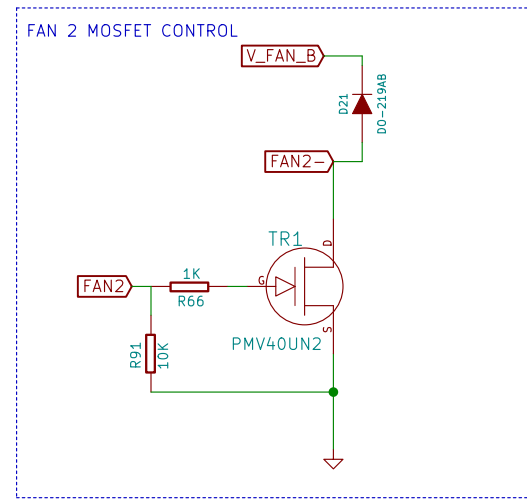
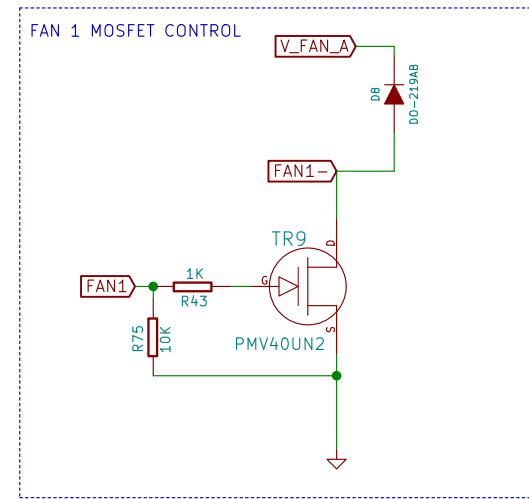
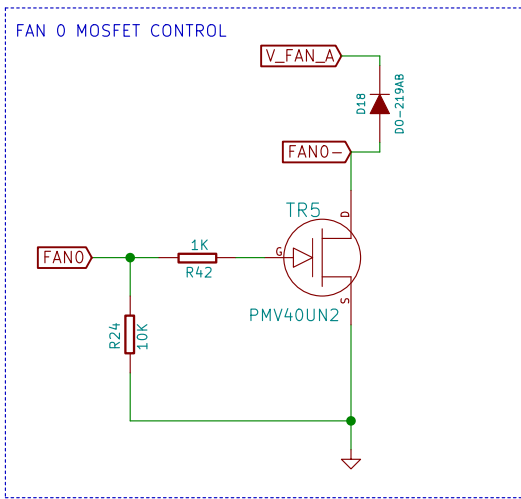
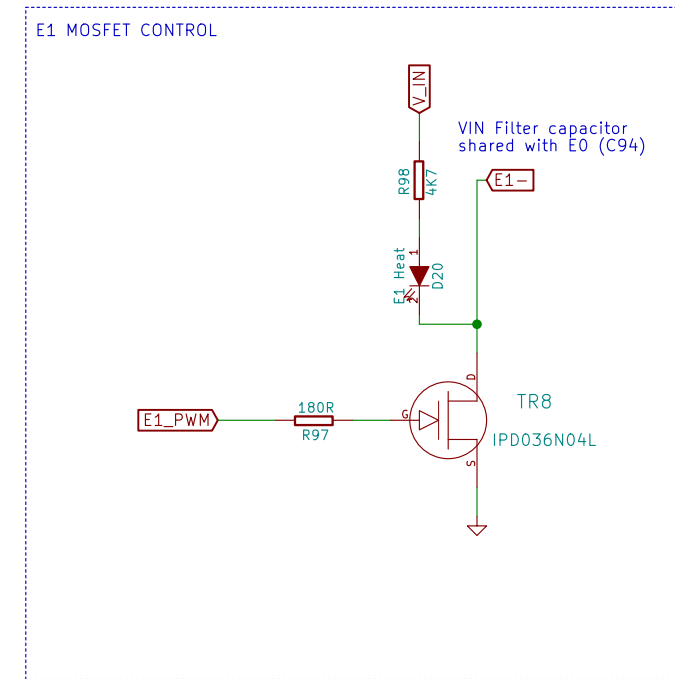
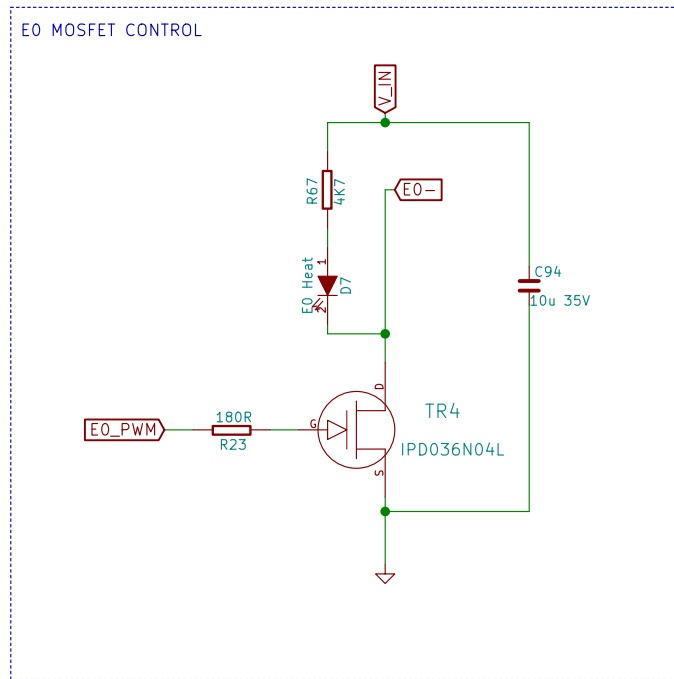
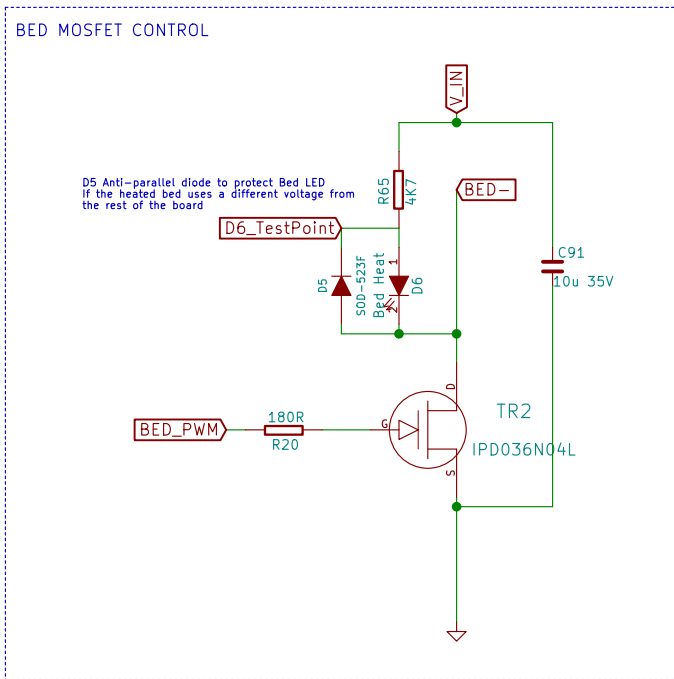
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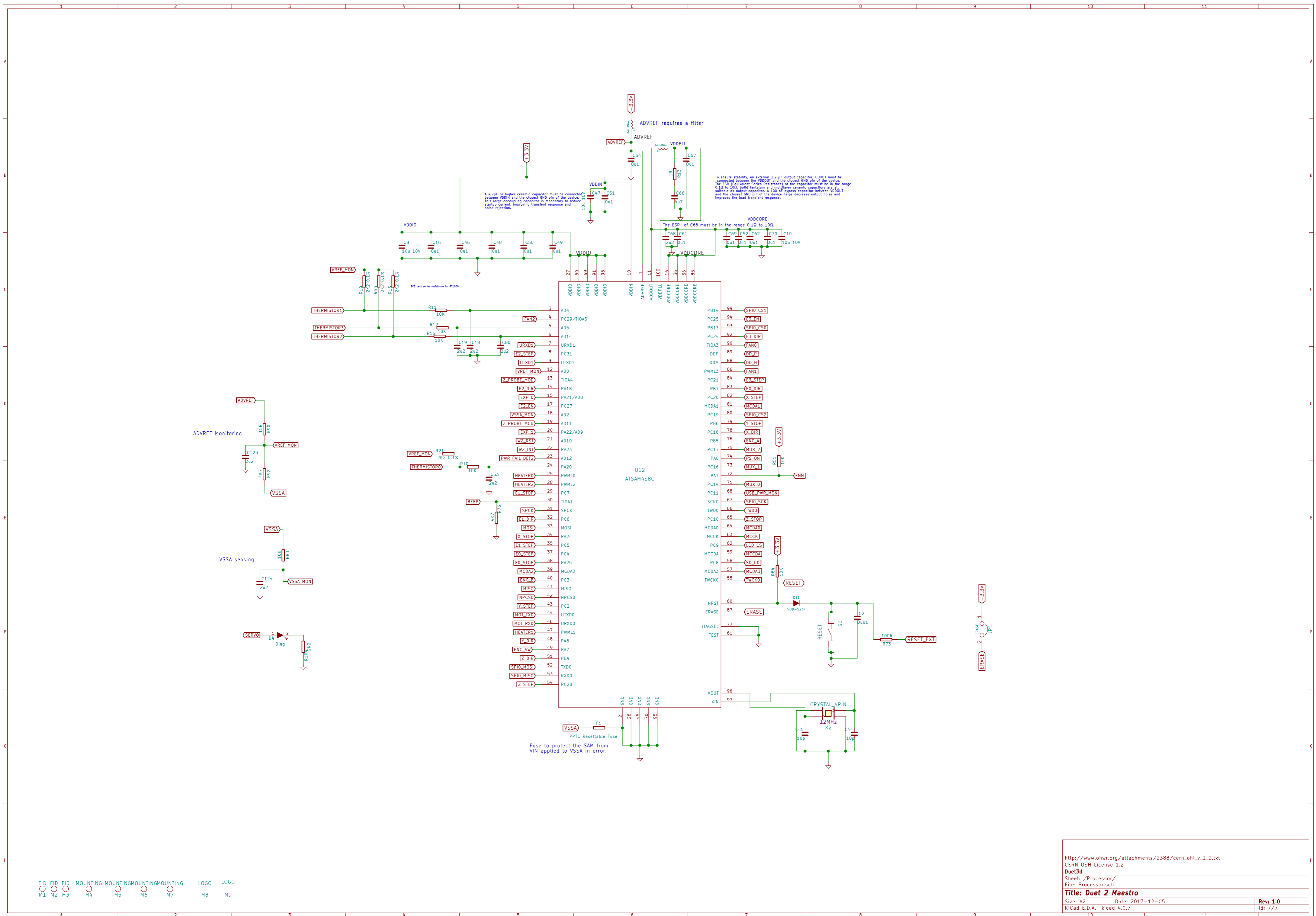
Size: A3 Date: 2017-12-05
KiCad E.D.A. kicad 4.0.7

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W5500 + Ethernet RJ45







A 4.7uF or higher ceramic capacitor must be connected between VDDIN and the closest GND pin of the device. This large decoupling capacitor is mandatory to reduce startup current, improving transient response and noise rejection.

ADVREF requires a filter

To ensure stability an external 2.2 uF output capacitor, COUT must be connected between the VDDOUT and the closest GND pin of the device. The ESR (Equivalent Series Resistance) of the capacitor must be in the range 0.1Ω to 10Ω. Solid tantalum and multilayer ceramic capacitors are all suitable as output capacitor. A 100 nF bypass capacitor between VDDOUT and the closest GND pin of the device helps decrease output noise and improves the load transient response.

The ESR of C68 must be in the range 0.1Ω to 100Ω.

Fuse to protect the SAM from VIN applied to VSSA in error.