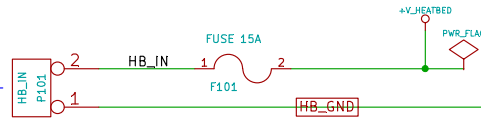


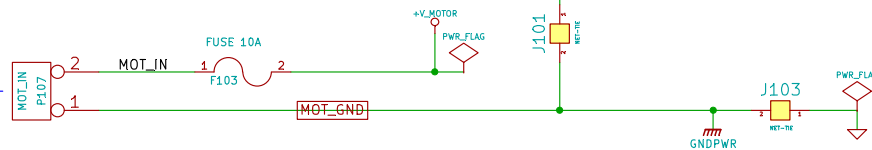
# Power

PS-ON P103

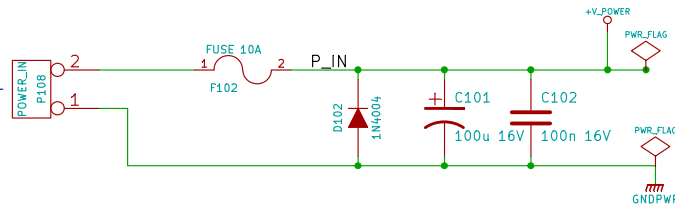
Heatbed Only: 12–24V, 15A



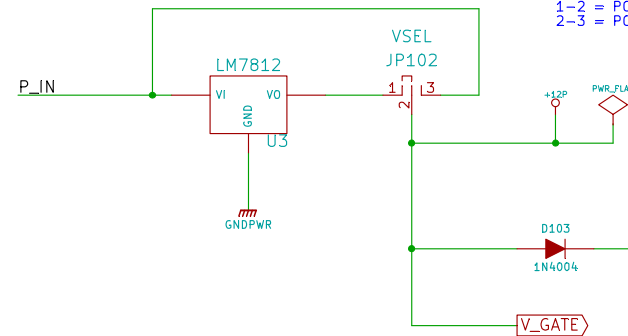
Motors only, 12–24V



High power MOSFETS  
(extruder heaters, fans)



JP102 – VSEL – Select voltage  
1–2 = POWER\_IN = 24 V (or > 15V)  
2–3 = POWER\_IN = 12 V (or < 15V)

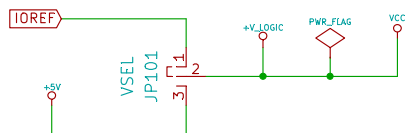


Low power MOSFETS (fans etc)  
also input to Due/Mega  
and gate voltage

Note: On R3 compatible Arduinos, IOREF will supply 3.3V (Due), or 5V (Mega).

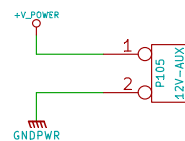
If IOREF is not provided (non-R3) then it must be a 5V Arduino so set VSEL to 5V.

If not 5V then need to get 3.3V from somewhere ...



VSEL – Select logic voltage  
1–2 = Autoselect by IOREF  
2–3 = 5V

Power output



File: Power.sch

Sheet: /Power/

Title:

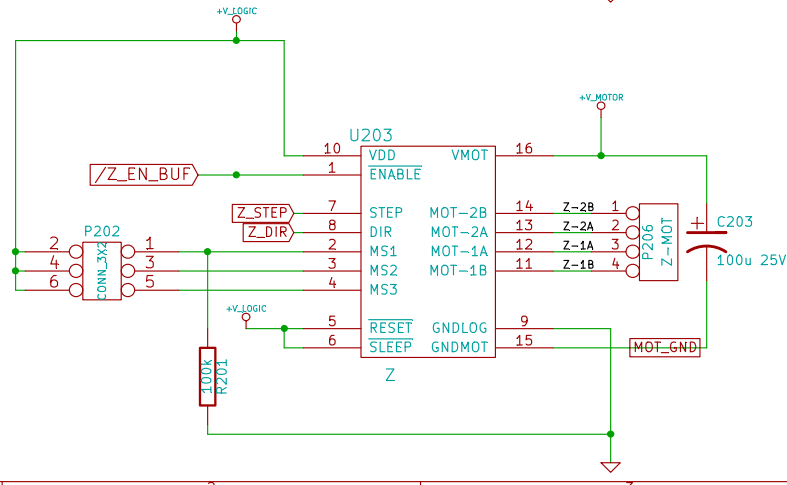
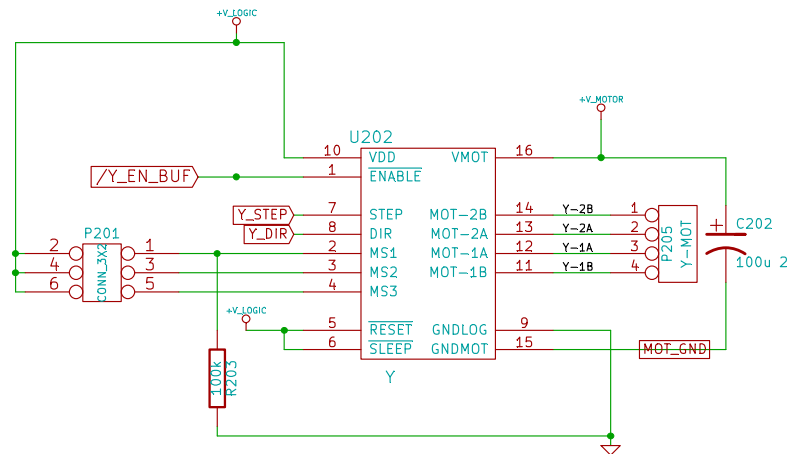
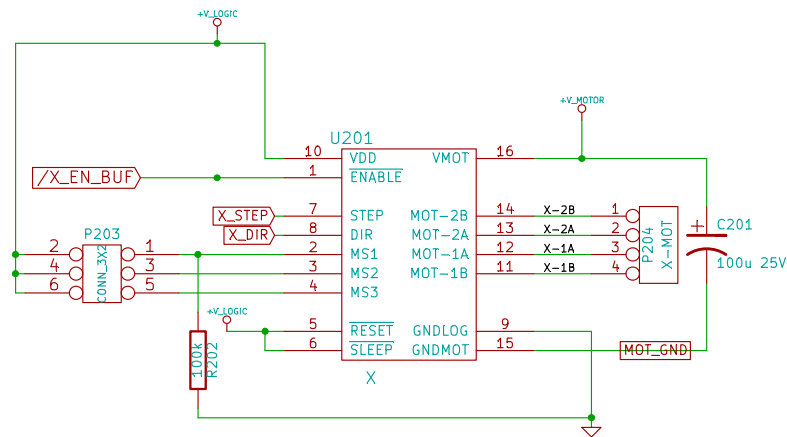
Size: A4

Date: 19 sep 2013

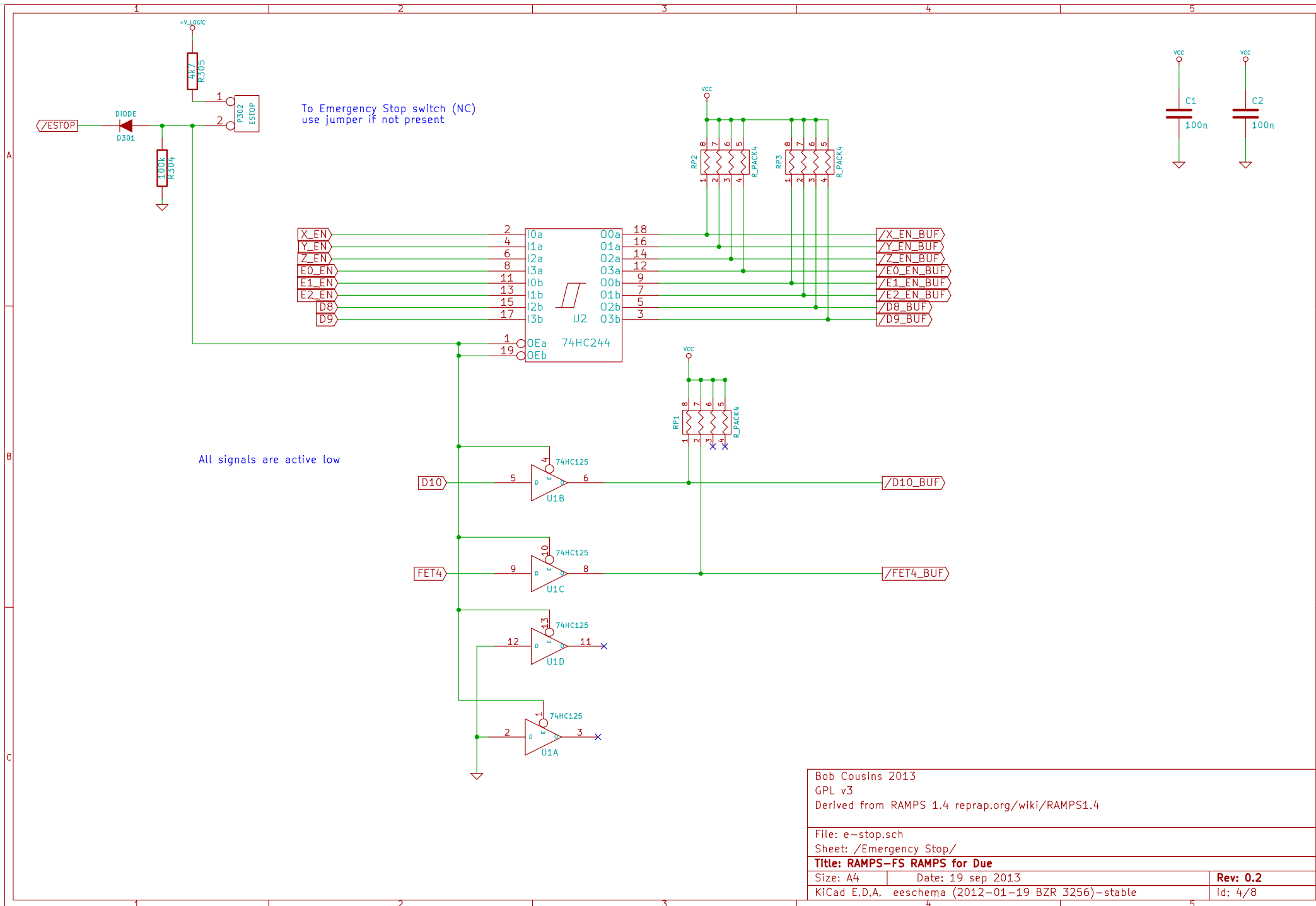
KiCad E.D.A. eeschema (2012-01-19 BZR 3256)–stable

Rev:

Id: 2/8



Bob Cousins 2013 GPL v3 Derived from RAMPS 1.4 <a href="http://reprap.org/wiki/RAMPS1.4">reprap.org/wiki/RAMPS1.4</a>		
File: steppers.sch Sheet: /Stepper Drivers/		
<b>Title: RAMPS-FS RAMPS for Due</b>		
Size: A4	Date: 19 sep 2013	Rev: 0.2
KiCad E.D.A. eeschema (2012-01-19 BZR 3256)-stable		Id: 3/8



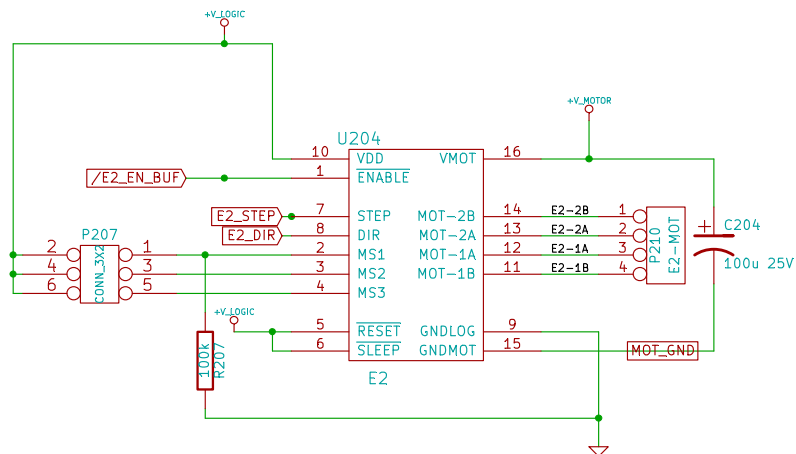
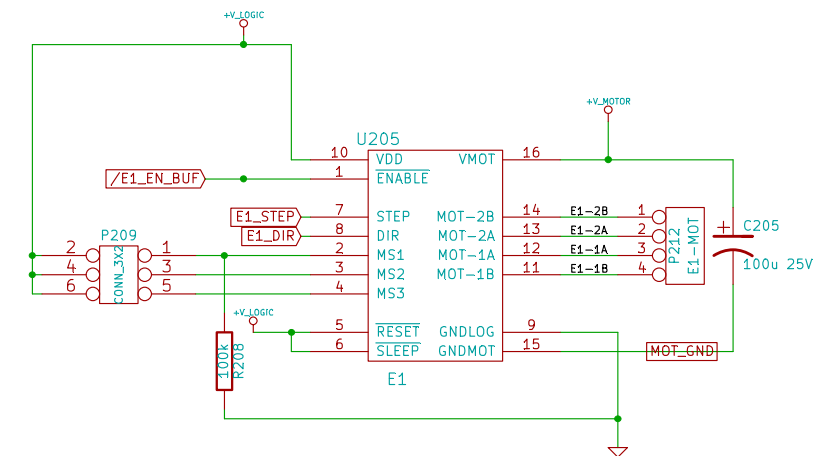
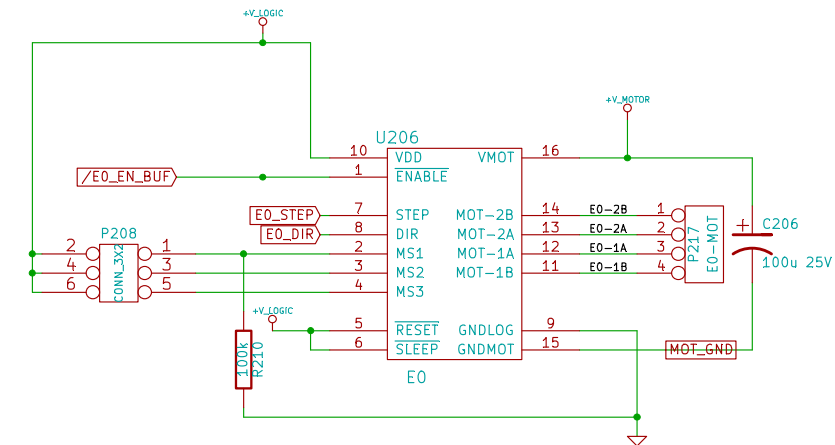
Bob Cousins 2013  
 GPL v3  
 Derived from RAMPS 1.4 [reprap.org/wiki/RAMPS1.4](http://reprap.org/wiki/RAMPS1.4)

File: e-stop.sch  
 Sheet: /Emergency Stop/

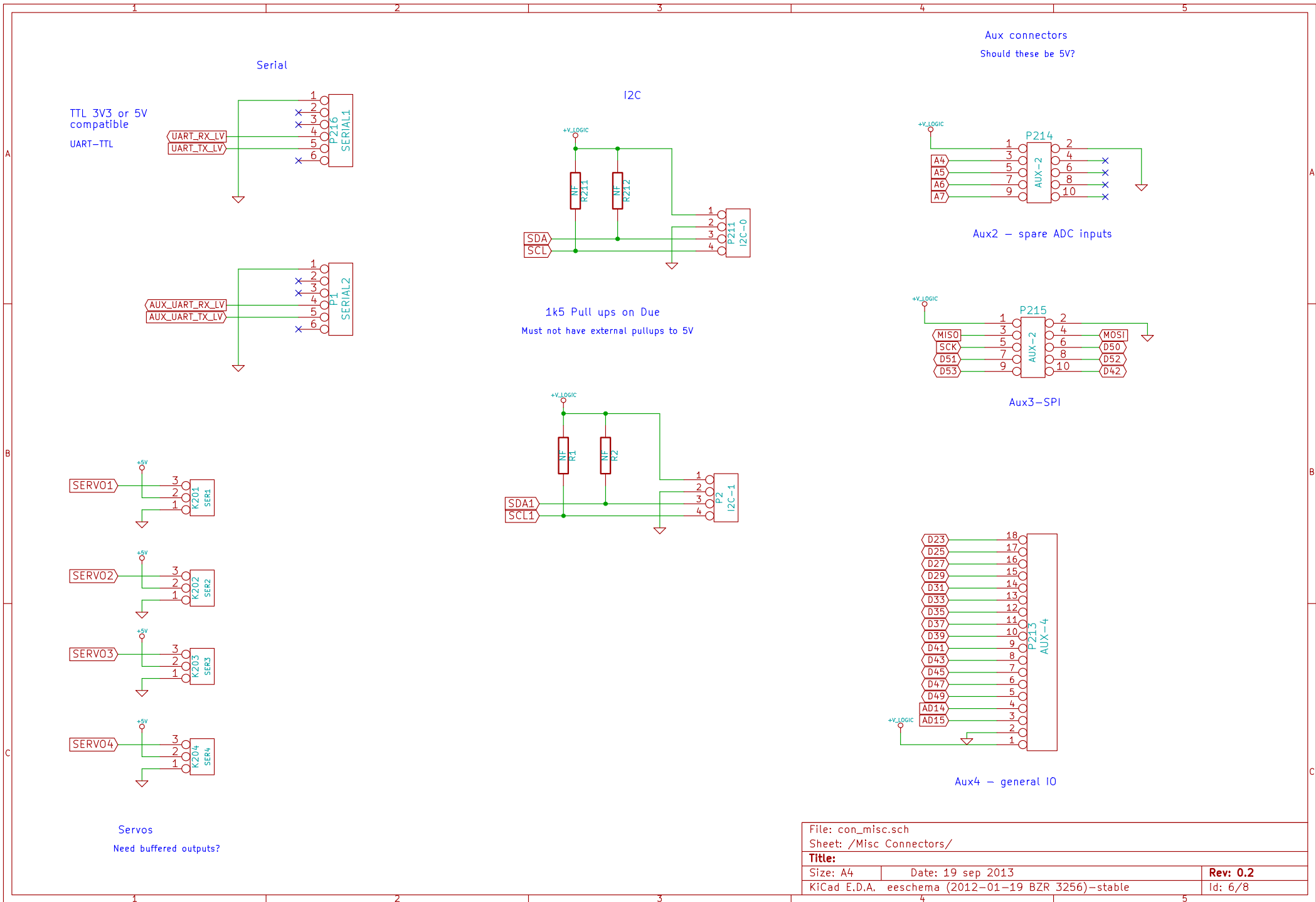
**Title: RAMPS-FS RAMPS for Due**

Size: A4 Date: 19 sep 2013  
 KiCad E.D.A. eeschema (2012-01-19 BZR 3256)-stable

Rev: 0.2  
 Id: 4/8

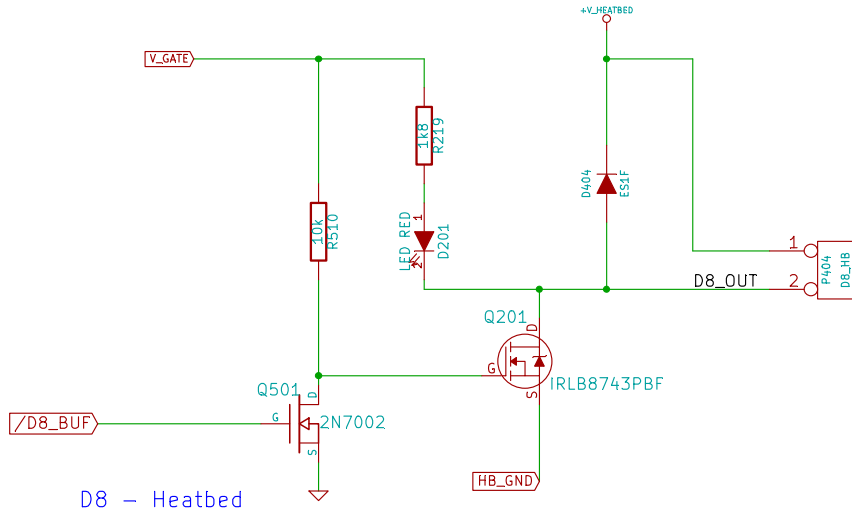


File: steppers2.sch		
Sheet: /Stepper Drivers 2/		
<b>Title:</b>		
Size: A4	Date: 19 sep 2013	Rev: 0.2
KiCad E.D.A. eeschema (2012-01-19 BZR 3256)-stable		Id: 5/8

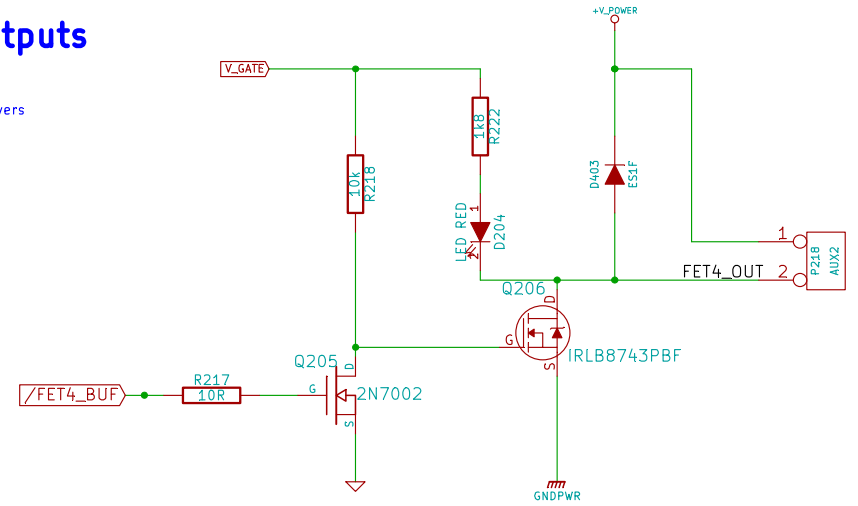


## MOSFET Outputs

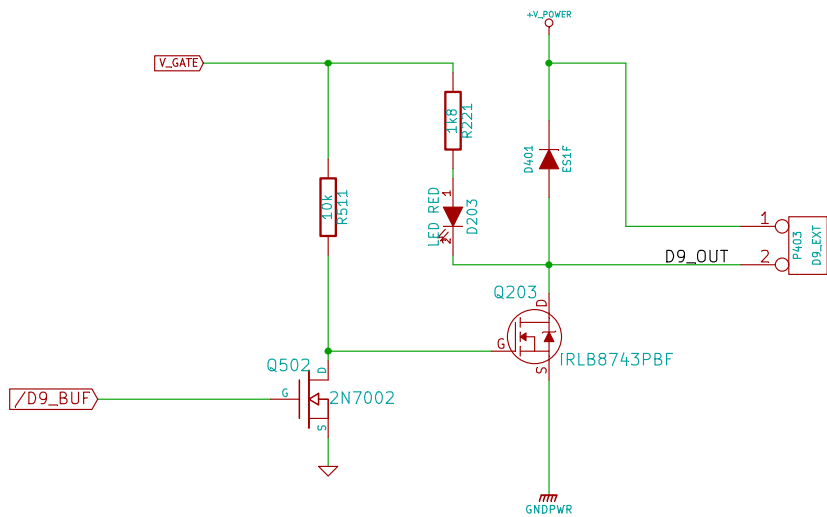
NB: Inverting drivers



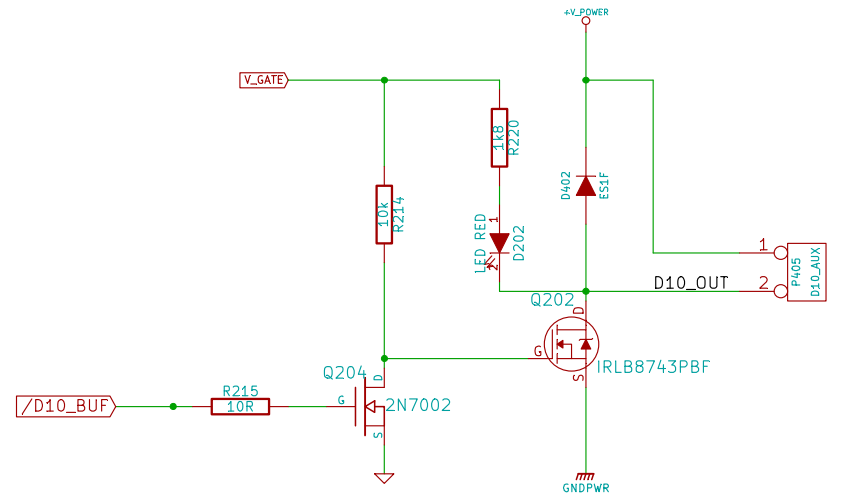
D8 - Heatbed



FET4 - Extruder 3 / Fan

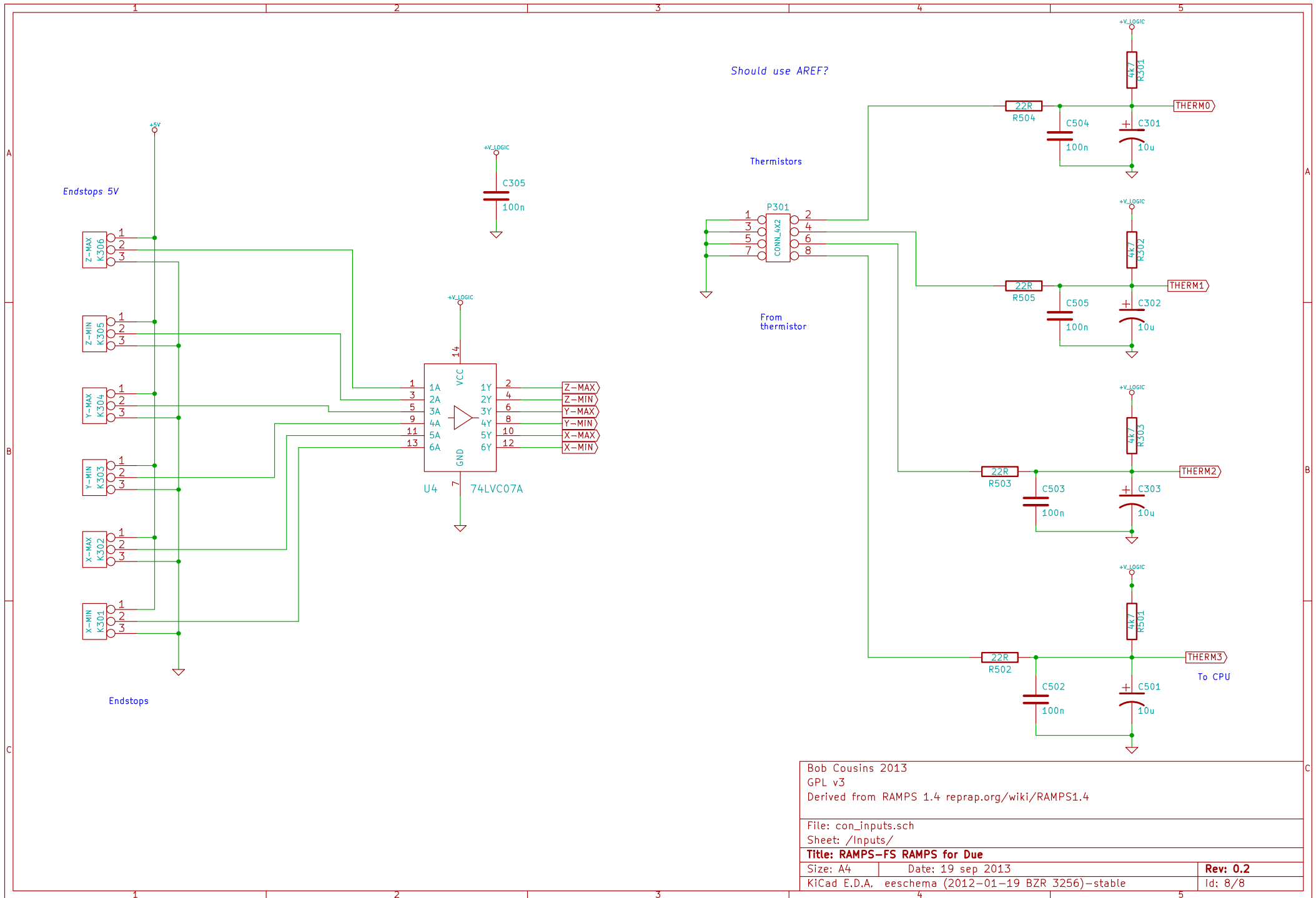


D9 - Extruder 1



D10 - Extruder 2 / Fan

File: con_outputs.sch		
Sheet: /Outputs/		
<b>Title:</b>		
Size: A4	Date: 19 sep 2013	Rev: 0.2
KiCad E.D.A. eeschema (2012-01-19 BZR 3256)-stable		Id: 7/8



Bob Cousins 2013  
 GPL v3  
 Derived from RAMPS 1.4 [reprap.org/wiki/RAMPS1.4](http://reprap.org/wiki/RAMPS1.4)

File: con\_inputs.sch  
 Sheet: /Inputs/

**Title: RAMPS-FS RAMPS for Due**

Size: A4 Date: 19 sep 2013

KiCad E.D.A. eeschema (2012-01-19 BZR 3256)-stable

**Rev: 0.2**

Id: 8/8