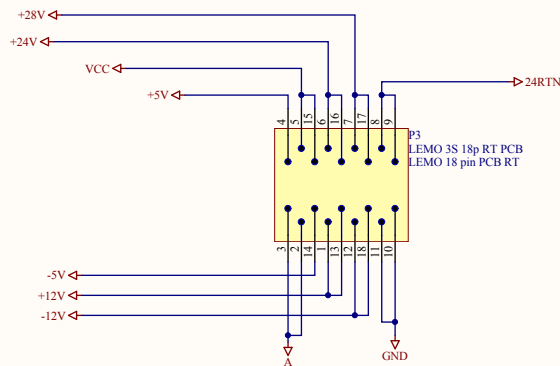
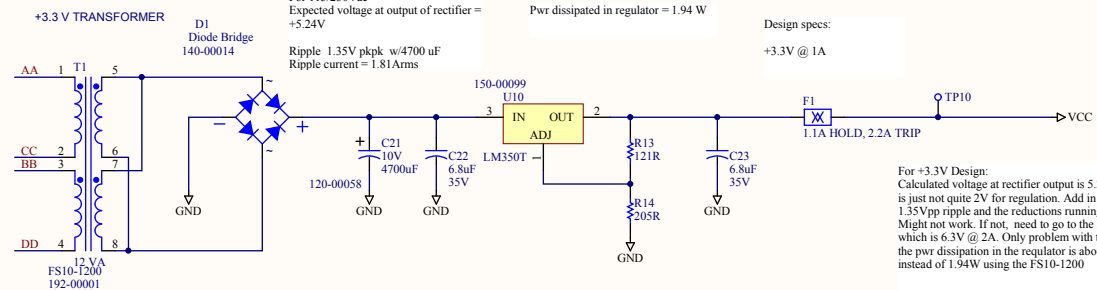


For grounding consider changing RS lines to +24V RTN and using +24V to run heater drivers on TT board. Also keep both A and GND paths for analog and digital ground.

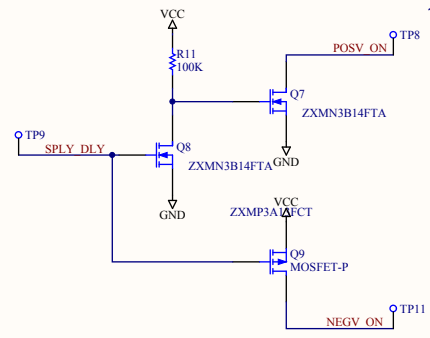
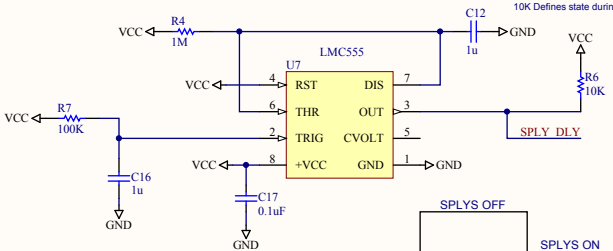
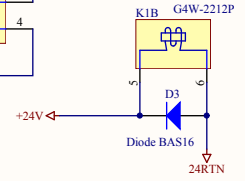
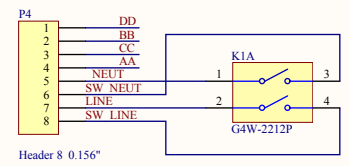
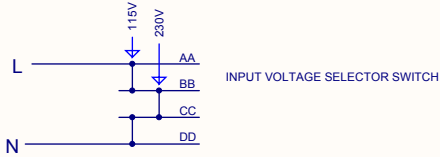


Power Dissipated in primary:
 $5.24V \times 1A = 5.24W$
(1.2 is approx regulation spec)



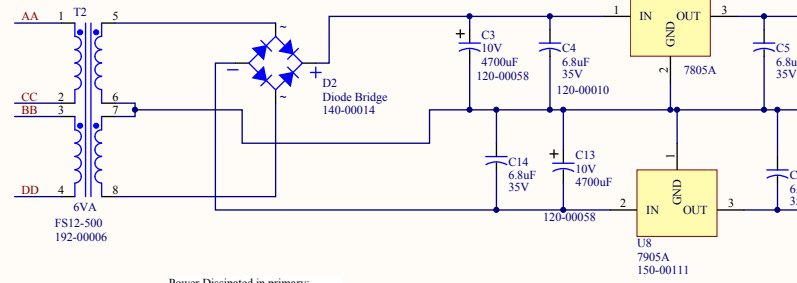
For +3.3V Design:
Calculated voltage at rectifier output is 5.24V which is just not quite 2V for regulation. Add in the 1.35Vpp ripple and the reductions running at 209Vac. Might not work. If not, need to go to the FS12-1000 which is 6.3V @ 2A. Only problem with this is that the pwr dissipation in the regulator is about 3.4W instead of 1.94W using the FS10-1200

Title		
SCH, SINISTRO POWER SUPPLY		
Size	Number	Revision
B	175-00023	2
Date:	12/24/2012	Sheet of
File:	U:\Alum Projects\1780-00028 rev2 Pg1	Power Supply.SchDoc



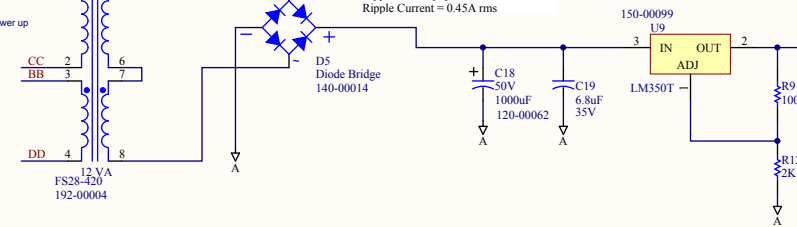
Power Dissipated in primary:
 $14.74V \times 0.250A \times 1.2 = 4.42W$
 (1.2 is approx regulation spec)

+/- 5V TRANSFORMER

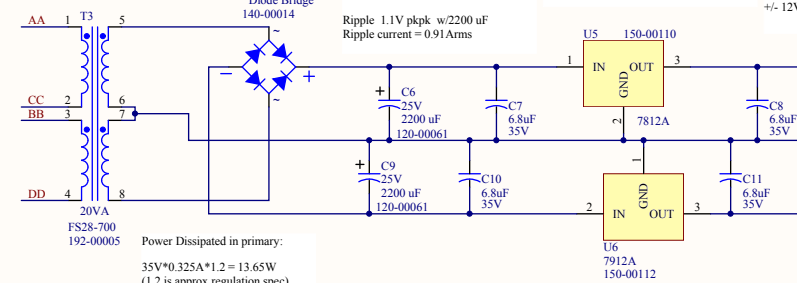


Power Dissipated in primary:
 $37.66V \times 0.125A \times 1.2 = 5.65W$
 (1.2 is approx regulation spec)

+28V transformer



+/-12V TRANSFORMER



Power Dissipated in primary:
 $35V \times 0.325A \times 1.2 = 13.65W$
 (1.2 is approx regulation spec)

Power Dissipation all Xfirms = $6.28 + 4.42 + 5.65 + 13.65 = 30.0 W$
 Power Dis in all regulators = $1.94 + 2 \times (0.59) + 1.21 + 2 \times (1.79) = 7.53 W$
 Total Power Dissipated in power supply module = 37.53 W

Title		
SCH, SINISTRO POWER SUPPLY		
Size	Number	Revision
B	175-00023	2
Date:	12/24/2012	Sheet of
File:	U:\Alum Projects\1780-00028 rev2 Pg2	Power Supply.SchDoc