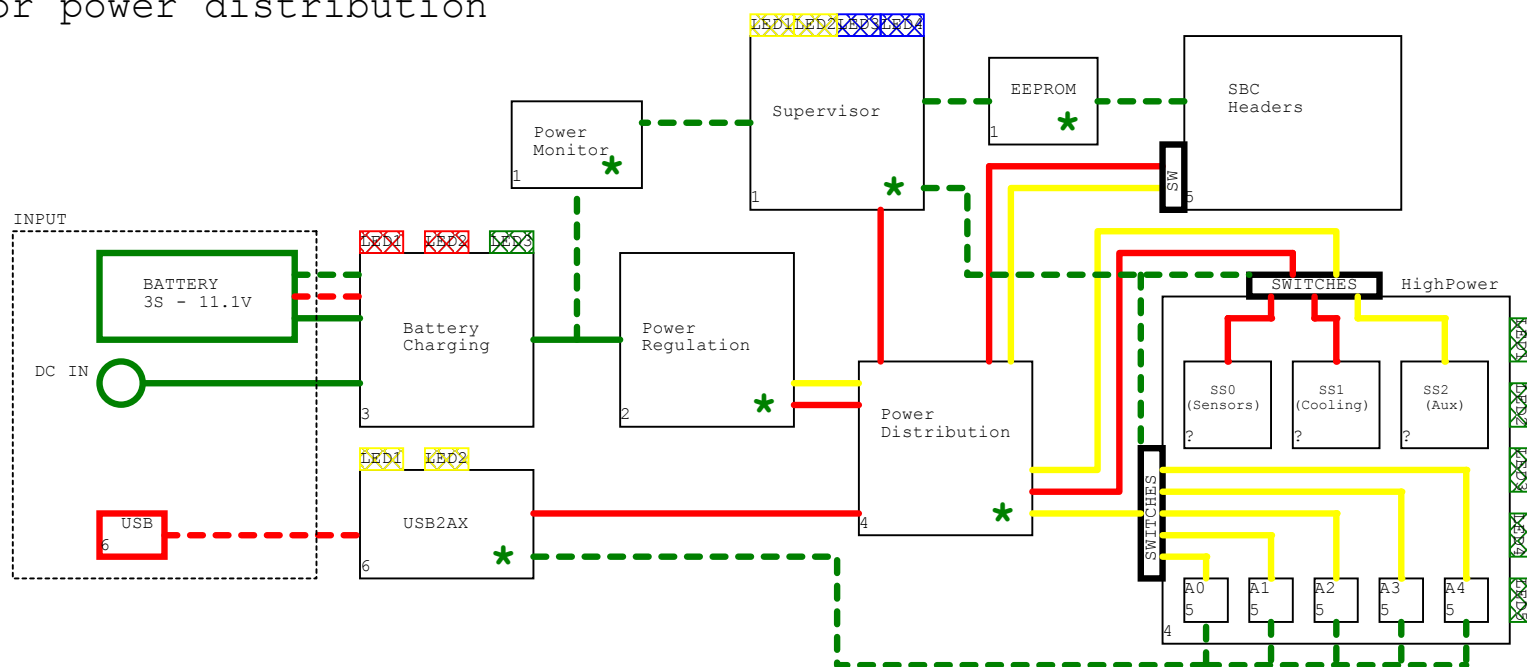


# OnyxPSU

OnyxPSU fulfills the following purposes:

- Subsystem power control
- Efficient power distribution and conversion
- Battery health indication
- Reliable and protected against common wiring mistakes
- Onboard reprogrammable supervisor
- Serial bus and communications management
- EEPROM Diagnostics and Memory
- USB slave transceiver
- Actuator power distribution



**KEY**

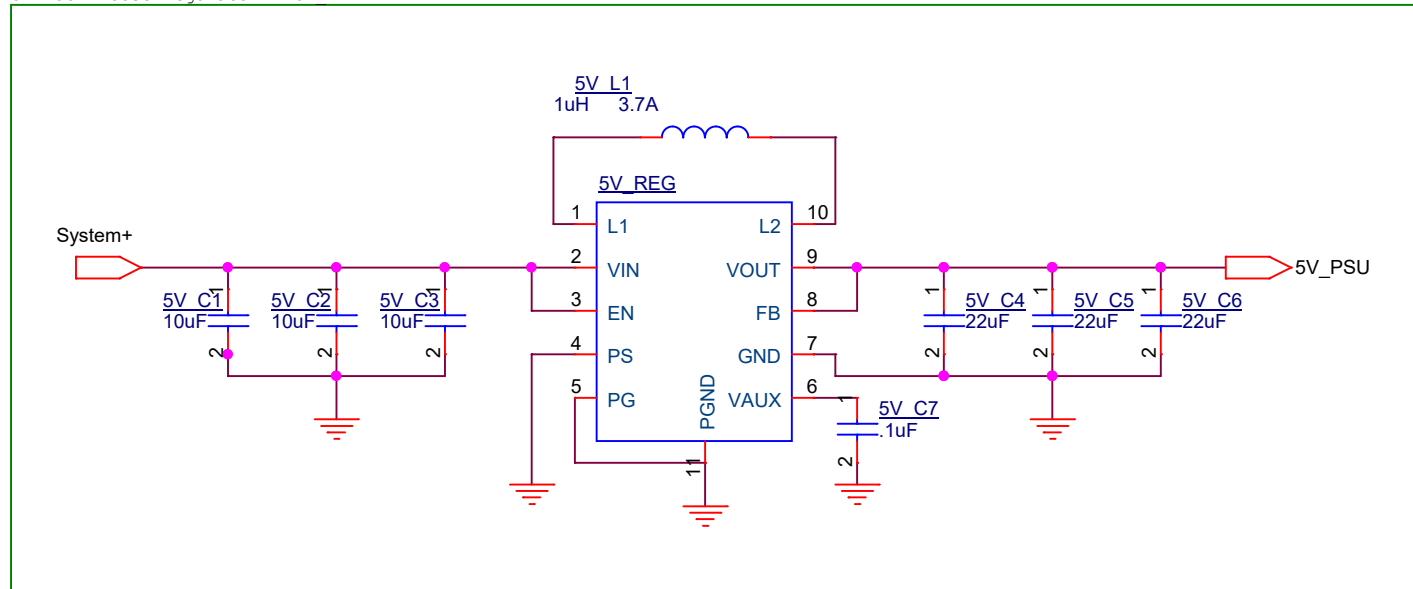
12V	POWER	RC1
5V	SIGNAL	
3.3V	INDICATOR	
RAW		

# Sheet Number   ? Not Implemented

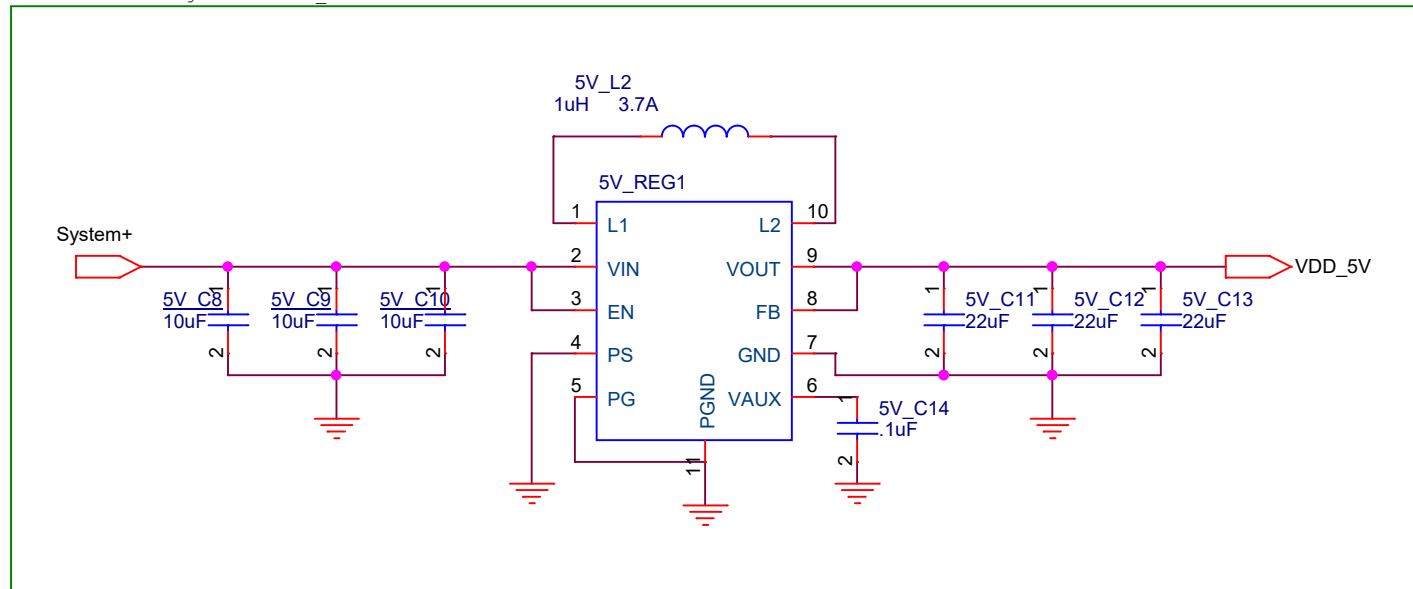
Title OnyxPSU - Overview		
Size A	Document Number O-PSU-1	Rev 1.0
Date: Sunday, February 12, 2017	Sheet 1	of 7



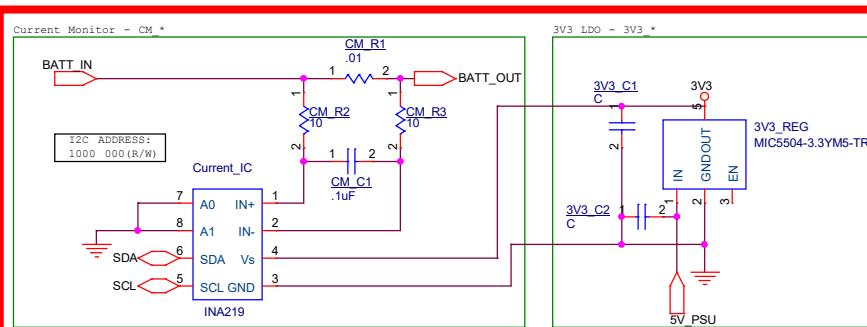
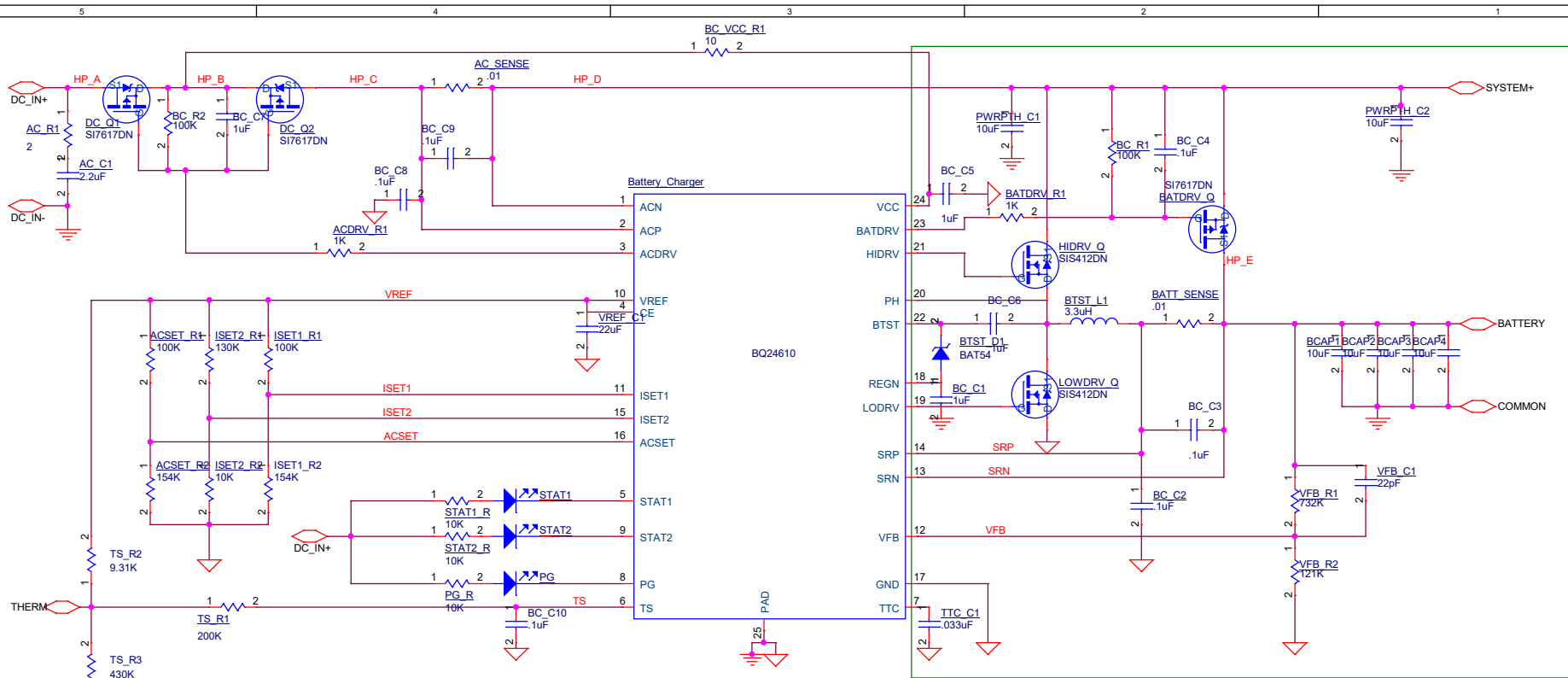
5V Buck Boost Regulator - 5V \*



5V Buck Boost Regulator - 5V\_\*



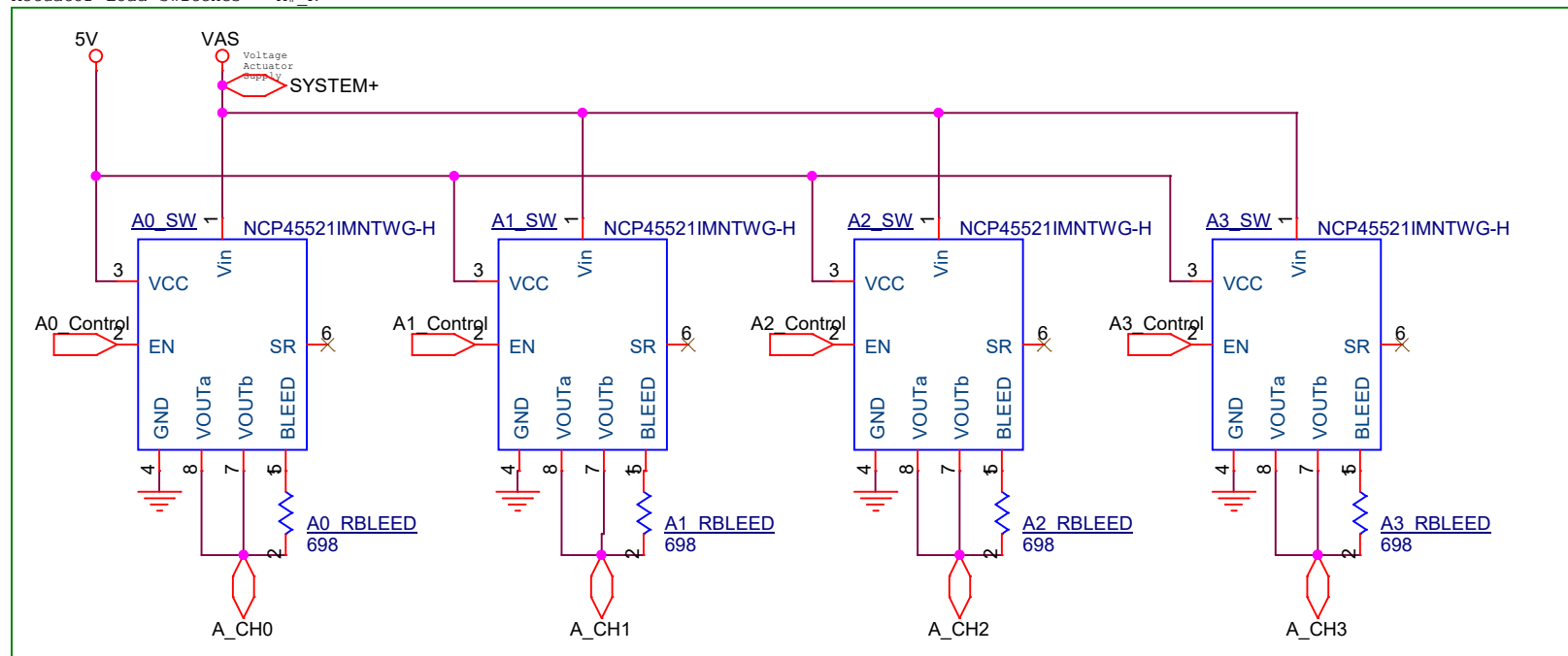
Title		
OnyxPSU - Power Regulation		
Size	Document Number	Rev
A	O-PSU-3	1.0
Date: Monday, February 13, 2017		
Sheet 3 of 7		



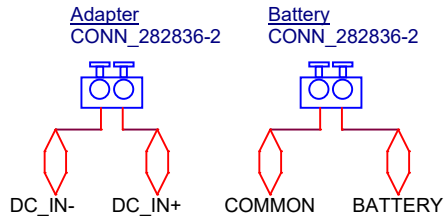
Suppressed for Rev 1

Title			
OnyxPSU - Battery Charging			
Size	Document	Number	Rev
B	O-PSU-4		1.0
Date:	Monday, February 13, 2017		
Sheet	4	of	7

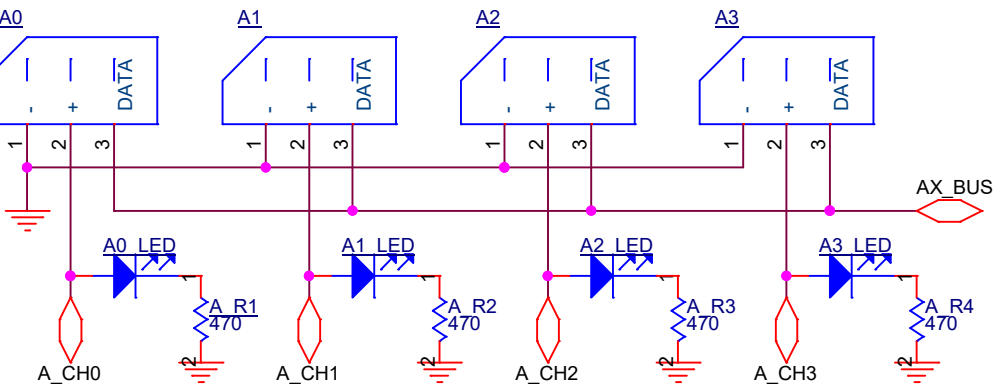
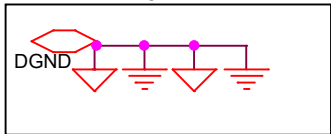
# Actuator Load Switches - A#\_R\*



Title		
OnyxPSU - Power Distribution		
Size	Document Number	Rev
A	O-PSU-5	1.0
Date:	Monday, February 13, 2017	Sheet 5 of 7

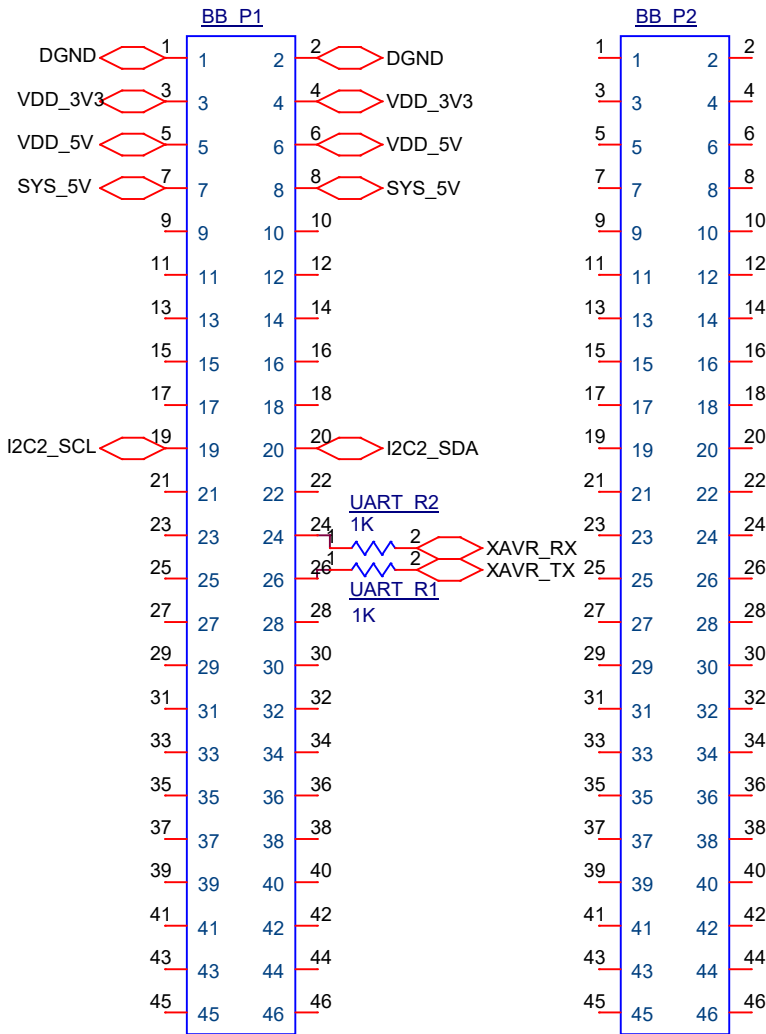


Ground Pinning

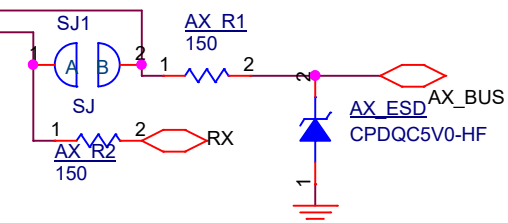
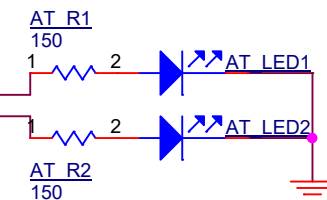
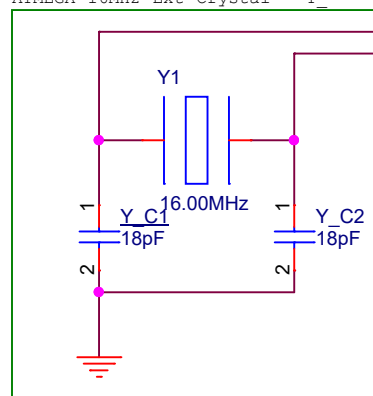
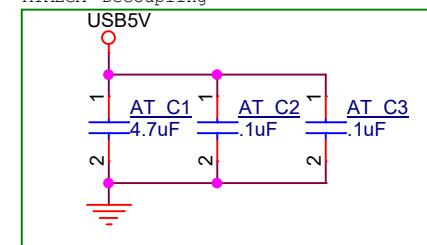
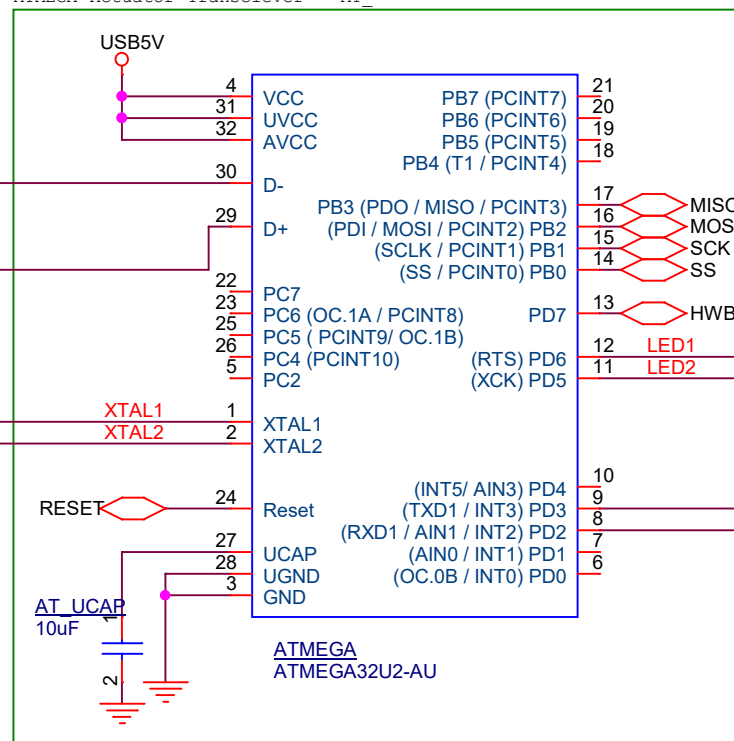
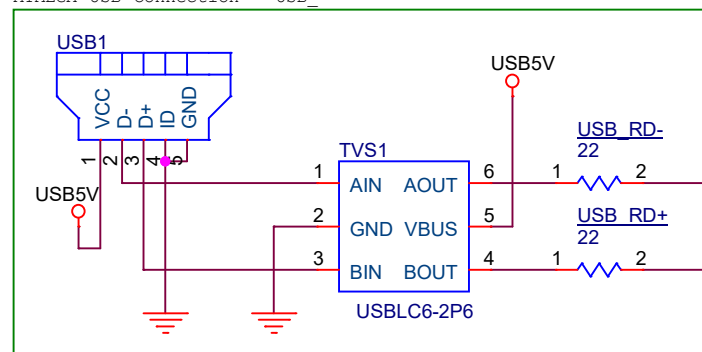


BE CAREFUL WITH HEADER ORIENTATION

TOP DOWN VIEW



Title		
OnyxPSU - Connectors		
Size	Document Number	Rev
A	O-PSU-6	1.0
Date:	Monday, February 13, 2017	Sheet 6 of 7



Title OnyxPSU - USB2AX			
Size A	Document Number O-PSU-7		Rev 1.0
Date:	Monday, February 13, 2017	Sheet	7 of 7