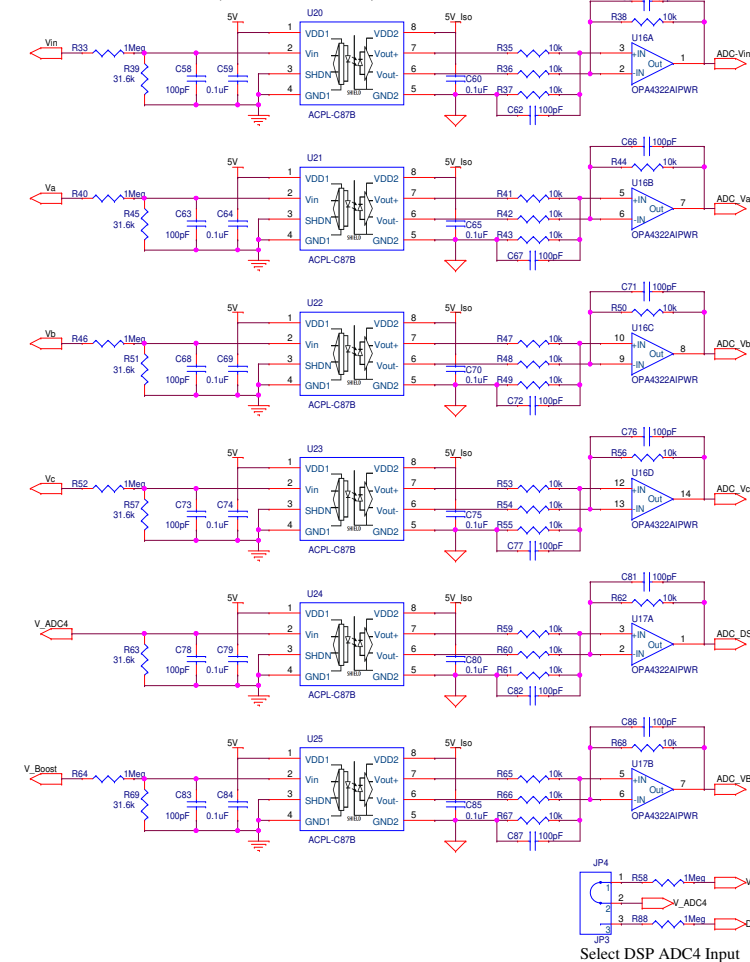
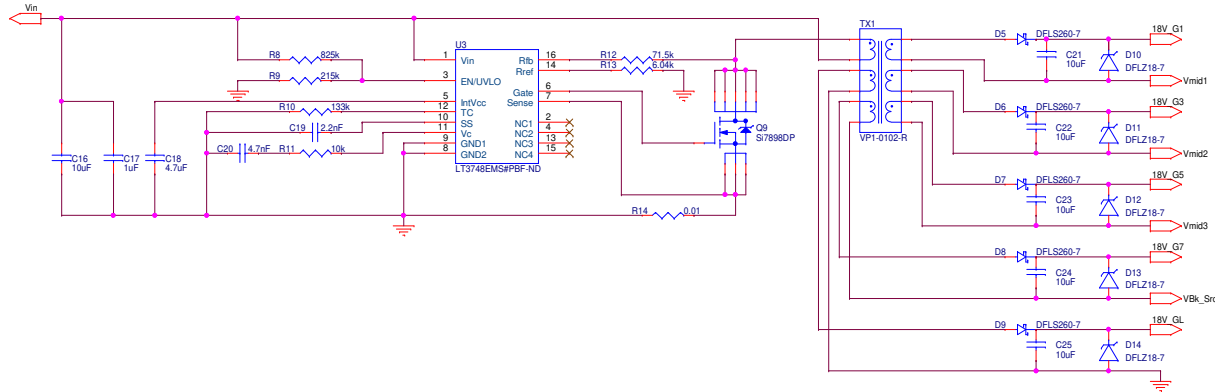


Isolated Voltage Sensing

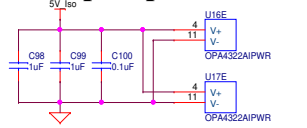
Scale : (R39, R45, R51, R57, R63, and R69)
66V = 2V for 31.6k Resistor (RK73H1JTTD3162F)
400V = 2V for 4.99k Resistor (RK73H1JTTD4991D)



Vin to Isolated Gate Voltage Converter



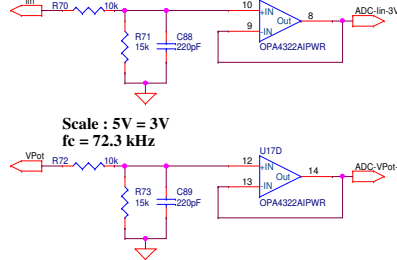
OpAmp Power



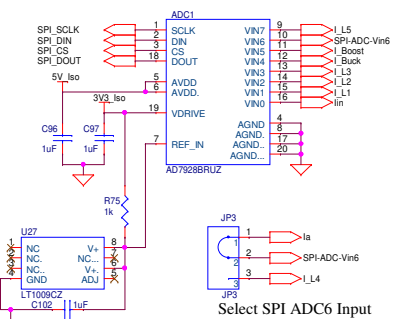
Voltage Scaling for DSP ADC

Scale : 5V = 3V

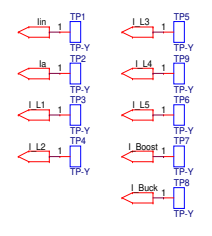
fc = 72.3 kHz



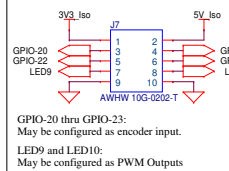
SPI ADC - 5V Input, 3.3V I/O



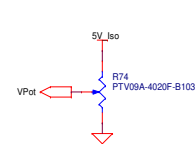
Current TestPoints



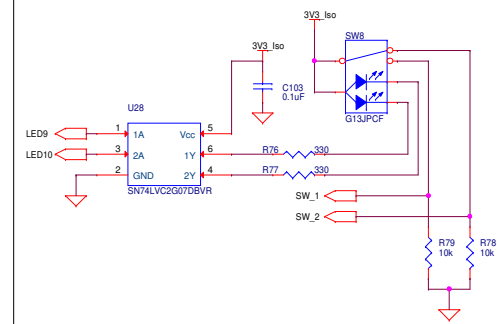
External Interface



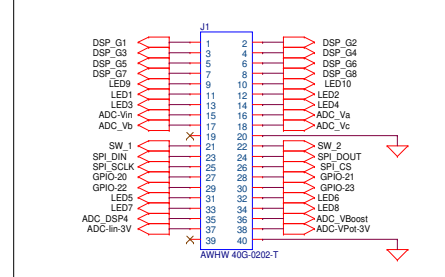
Pot Interface



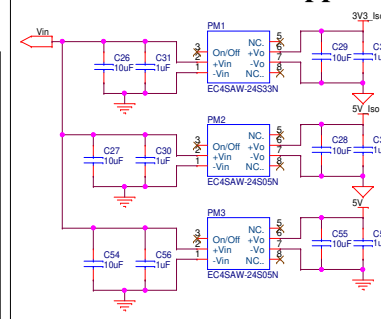
SW and LED Interface



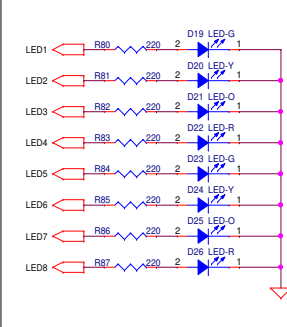
DSP Connection



Isolated 3.3V/5V Supplies



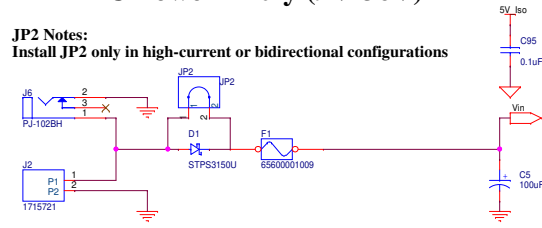
Status LEDs



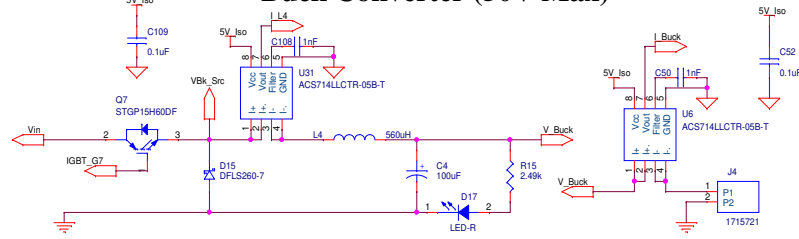
UNIVERSITY OF ARKANSAS COLLEGE OF ENGINEERING		NCREPT NATIONAL CENTER FOR RELIABLE ELECTRIC POWER TRANSMISSION	
Organization University of Arkansas (NCREPT)		Address 700 W. Research Center Blvd Fayetteville, AR 72701	
Title NCREPT PE-Eval PCB		Engineer(s) Chris Farnell	
Size C	Document Number <Doc>	Rev 1.5	Date Monday, June 25, 2018
Sheet 1		of 2	

DC Power Entry (9V-36V)

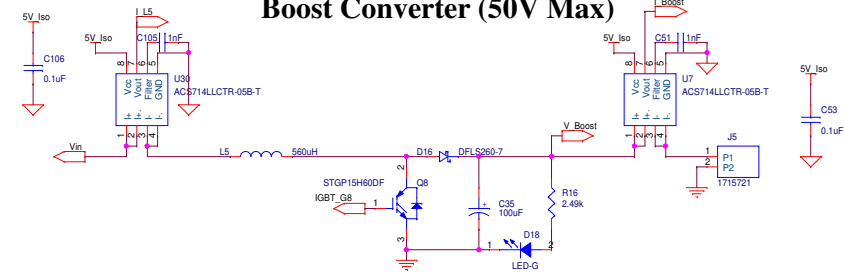
JP2 Notes:
Install JP2 only in high-current or bidirectional configurations



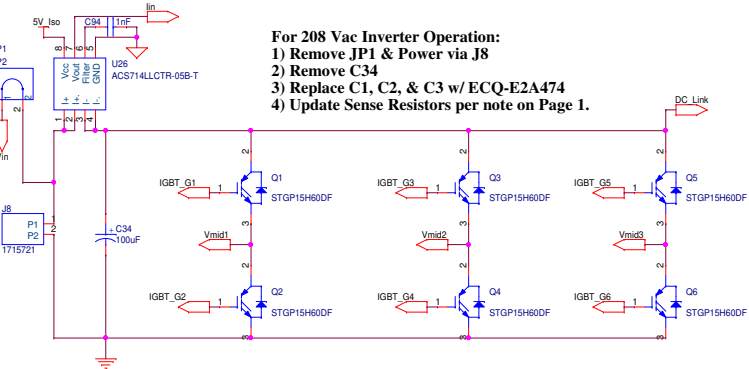
Buck Converter (50V Max)



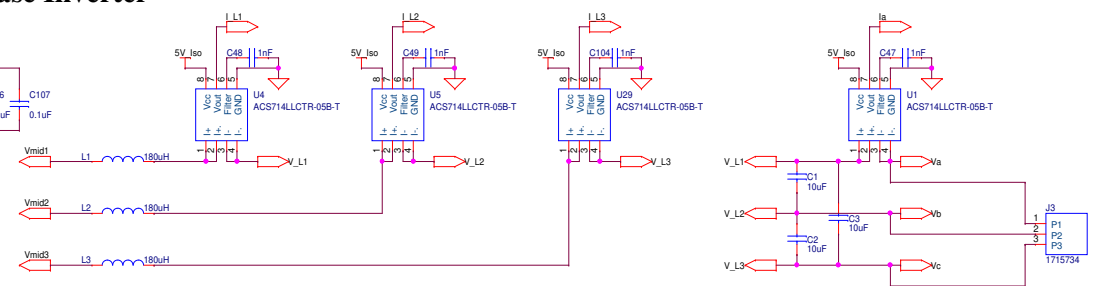
Boost Converter (50V Max)



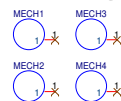
For 208 Vac Inverter Operation:
1) Remove JP1 & Power via J8
2) Remove C34
3) Replace C1, C2, & C3 w/ ECQ-E2A474
4) Update Sense Resistors per note on Page 1.



3-Phase Inverter

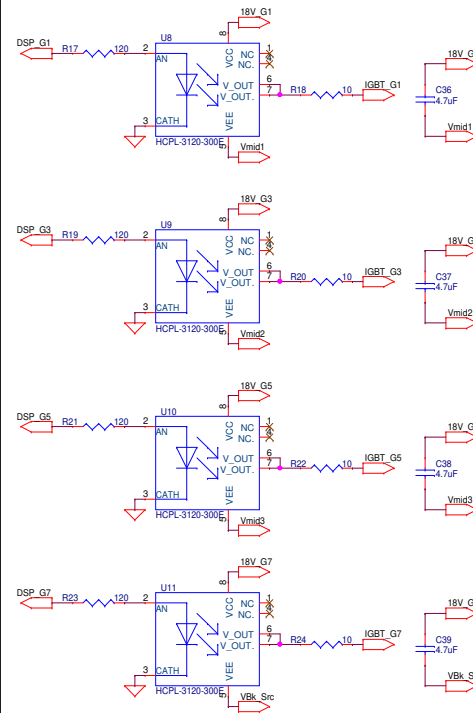


Mounting



IGBT Drivers

High-Side



Low-Side

