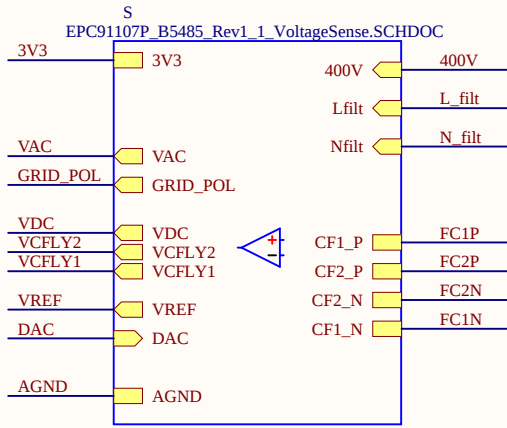
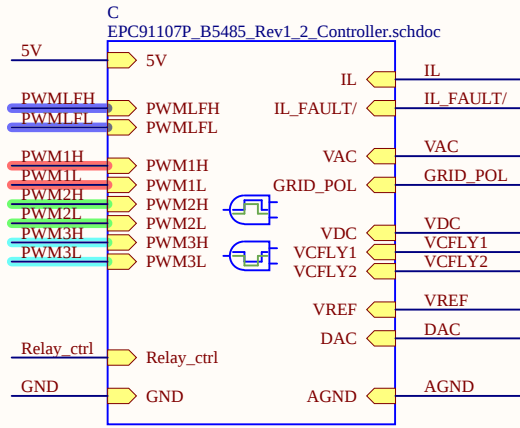
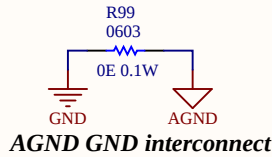
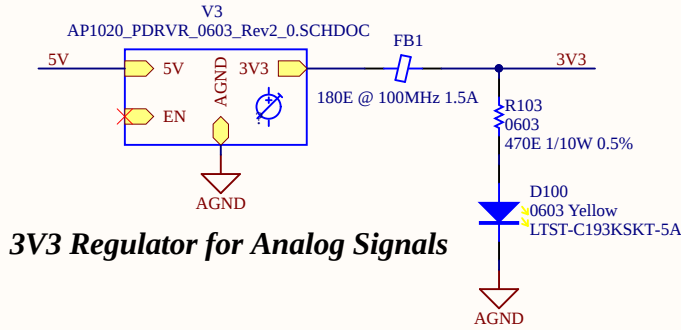
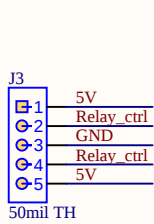
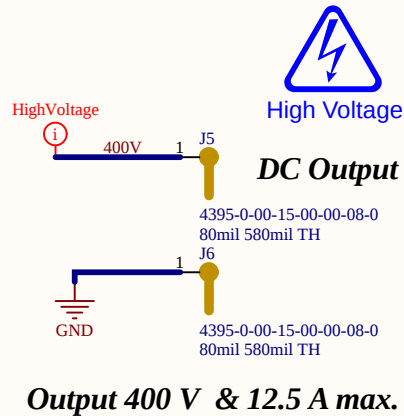
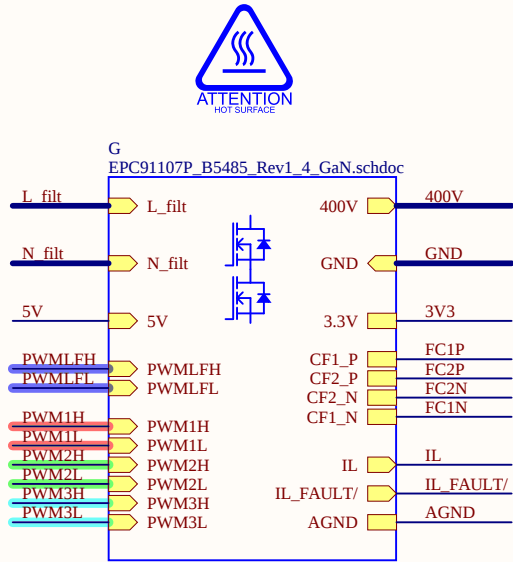
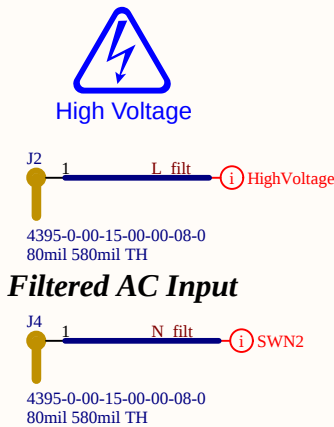




For evaluation only;
not FCC approved for resale

Serial# yyww-nnn

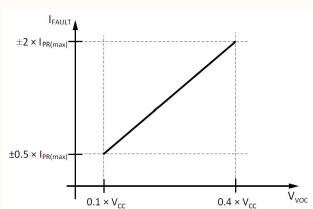


PCB1

B5485_1.0

Title: 5kW 4-level PFC GaN Board		© EPC 2025	
Design #: [No Variations]	PCB #: B5485	Efficient Power Conversion 909 Pacific Coast Hwy. Ste 230 El Segundo, CA 90245 U.S.A. www.epc-co.com 	
Revision 1.5	Revision: 1.0		
Date: 3/13/2025	Sheet 1 of 7		
File: EPC91107P_B5485_Rev1_5_Main.schdoc			

U90 Over Current Setting



Set 0.2 x Vcc to get +/-40 A OVC

Current Sensing

Current Sensing

Low Frequency Leg

Low Frequency Leg

PWM inputs Filters

PWM inputs Filters

Gate Drivers

Gate Drivers

High Frequency Leg

High Frequency Leg

400V DC output Bus

400V DC output Bus

HF decoupling

HF decoupling

HF decoupling

HF decoupling

Flying Capacitor CF2 - 133 V Nom. Over-voltage clamp

Flying Capacitor CF2 - 133 V Nom. Over-voltage clamp

HF decoupling

HF decoupling

Flying Capacitor CF1 - 266 V Nom. Over-voltage clamp

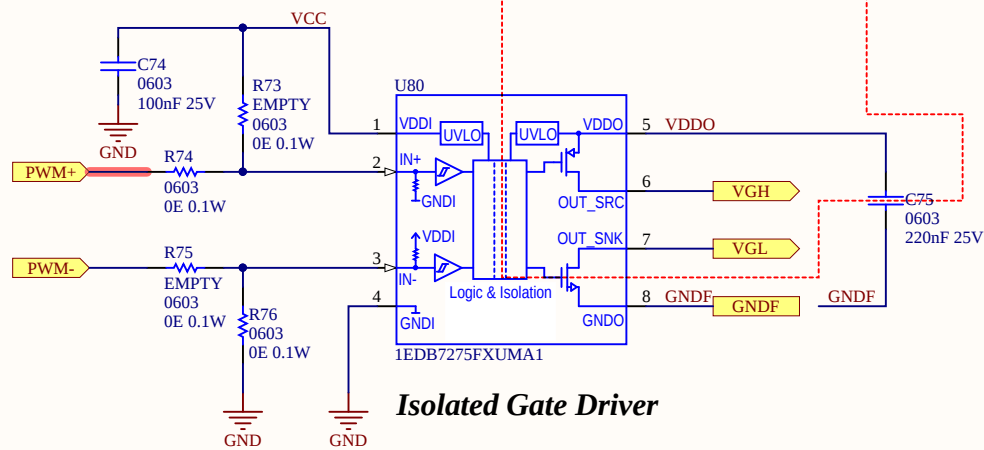
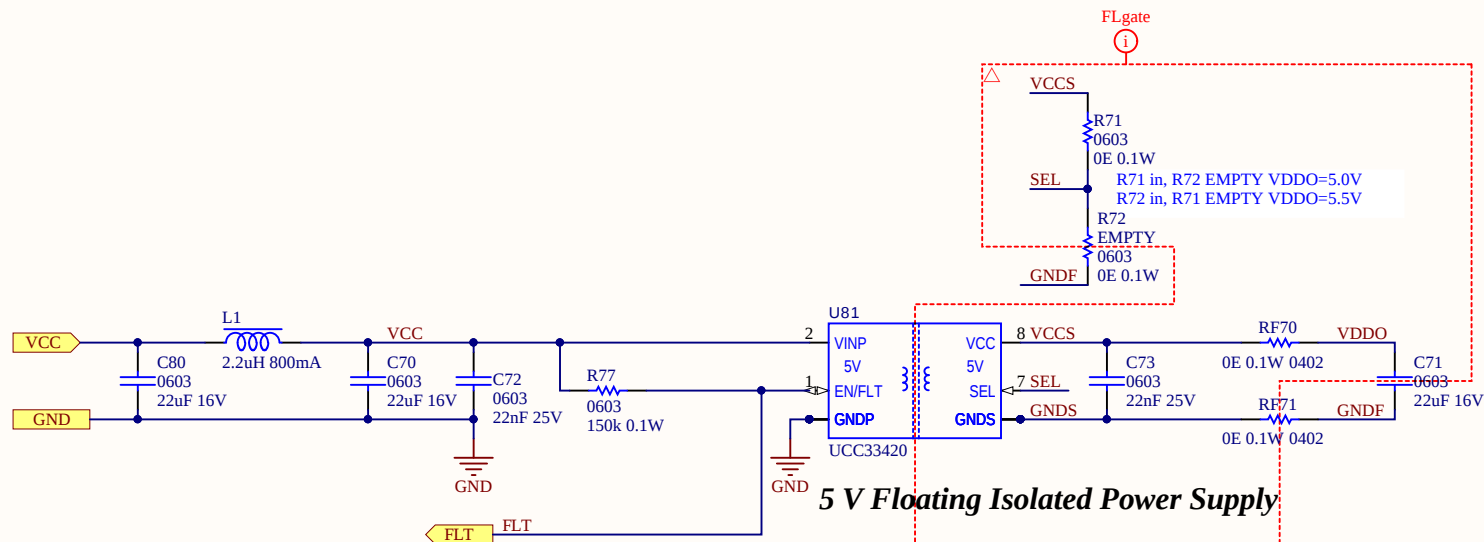
Flying Capacitor CF1 - 266 V Nom. Over-voltage clamp

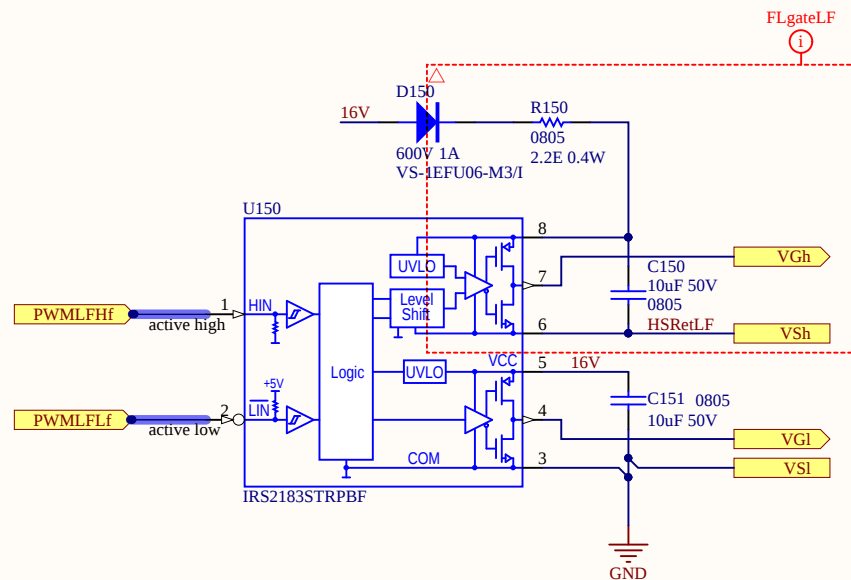
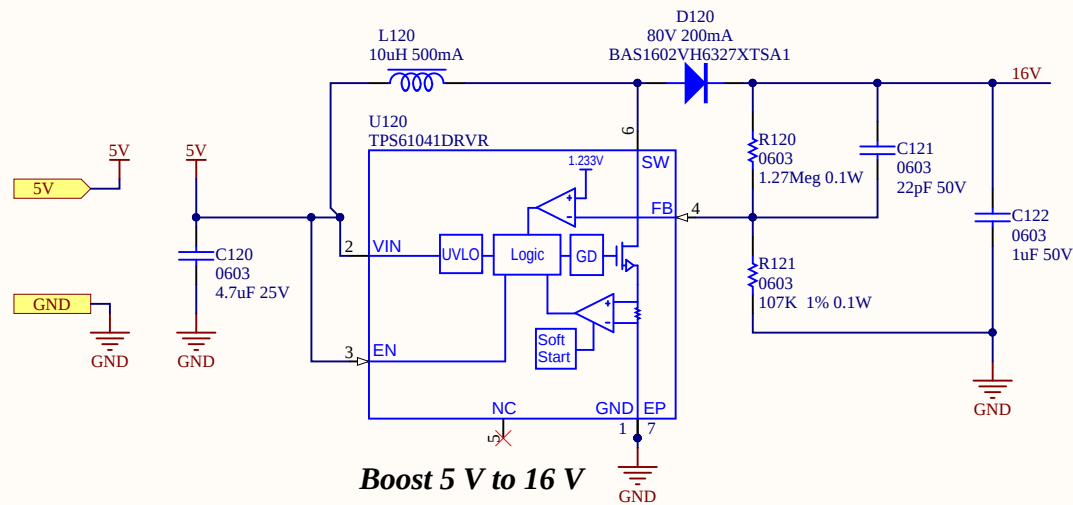
Balancing Resistors

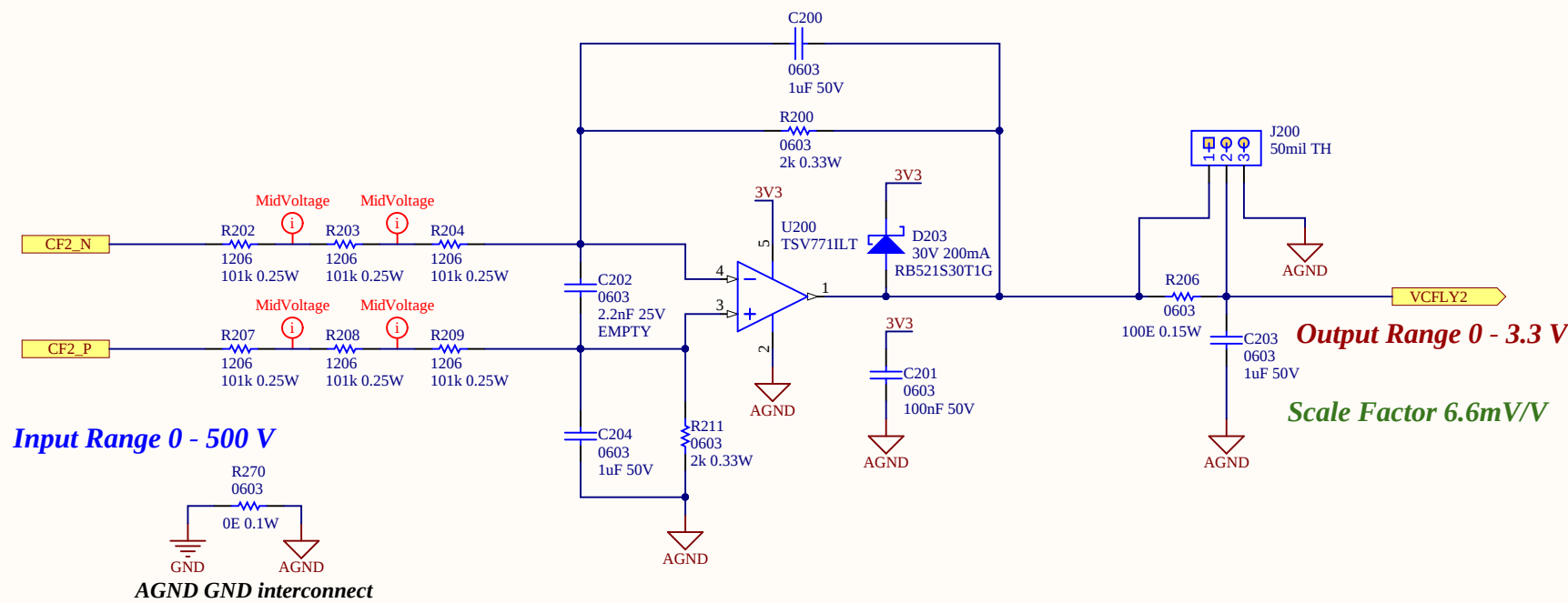
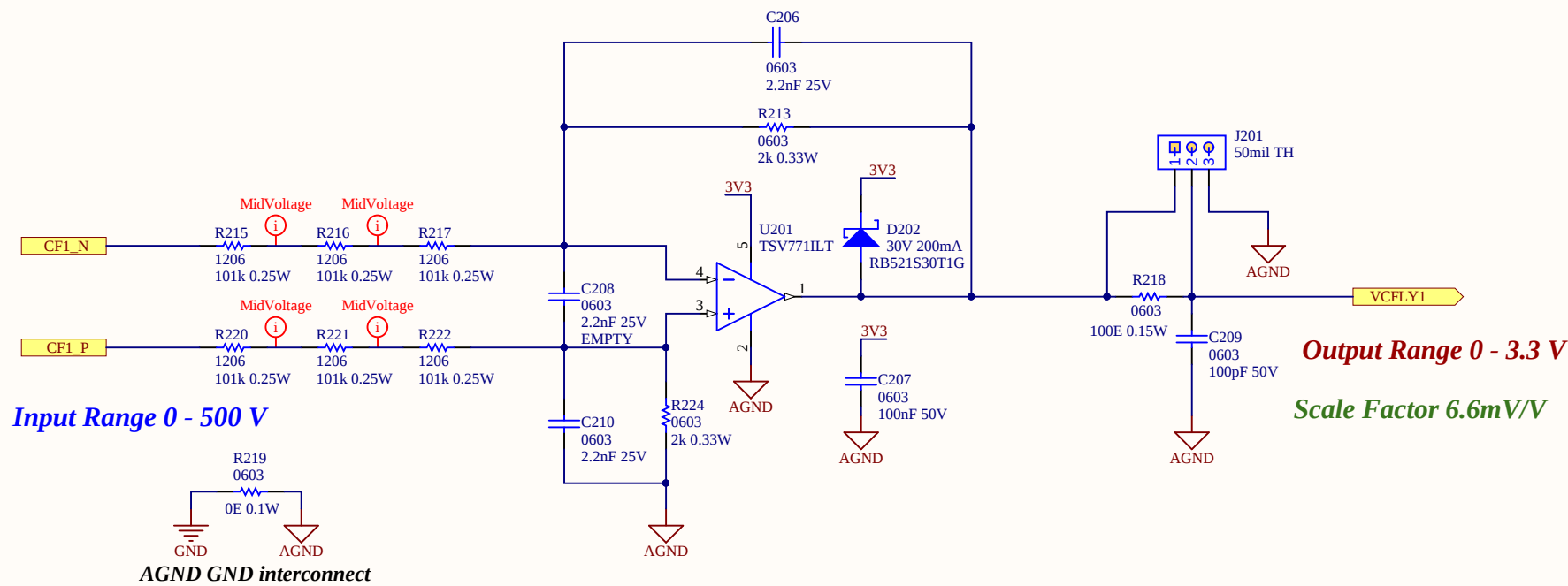
Balancing Resistors

Flying Capacitors Balancing Resistors

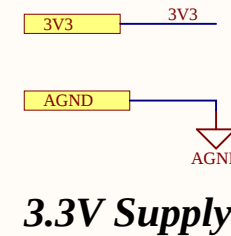
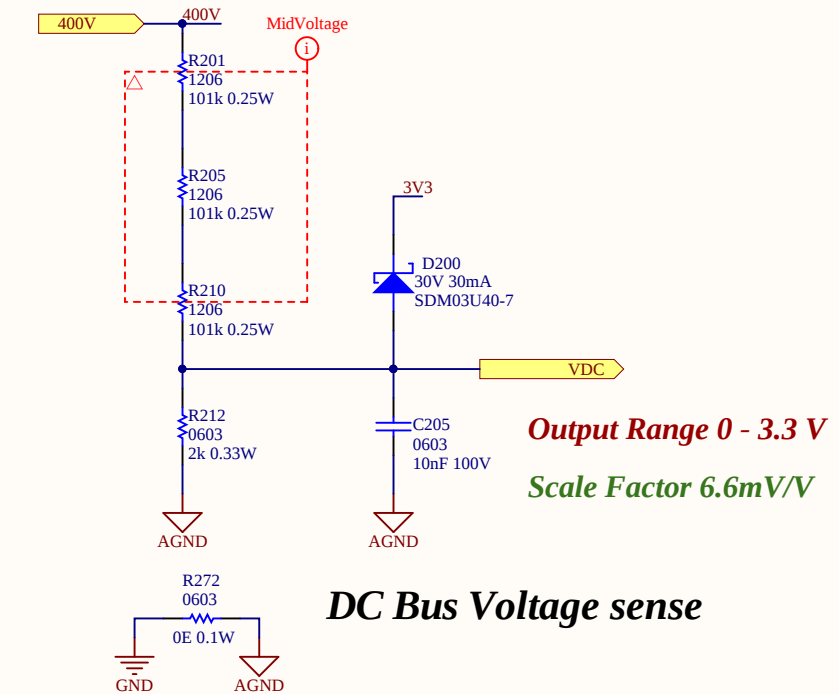
Flying Capacitors Balancing Resistors



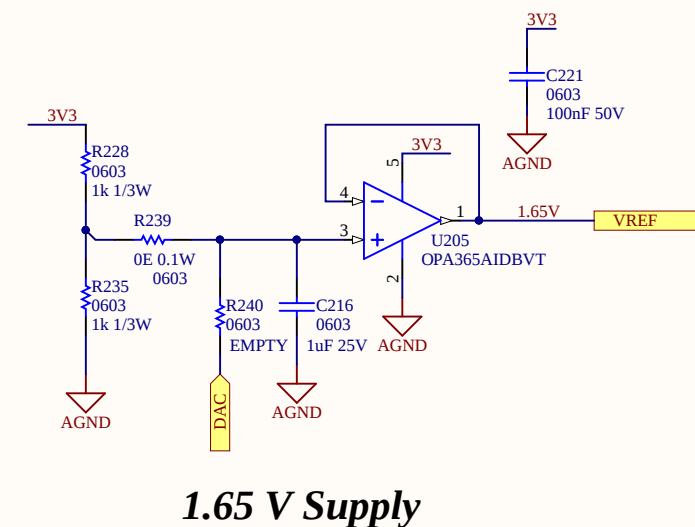
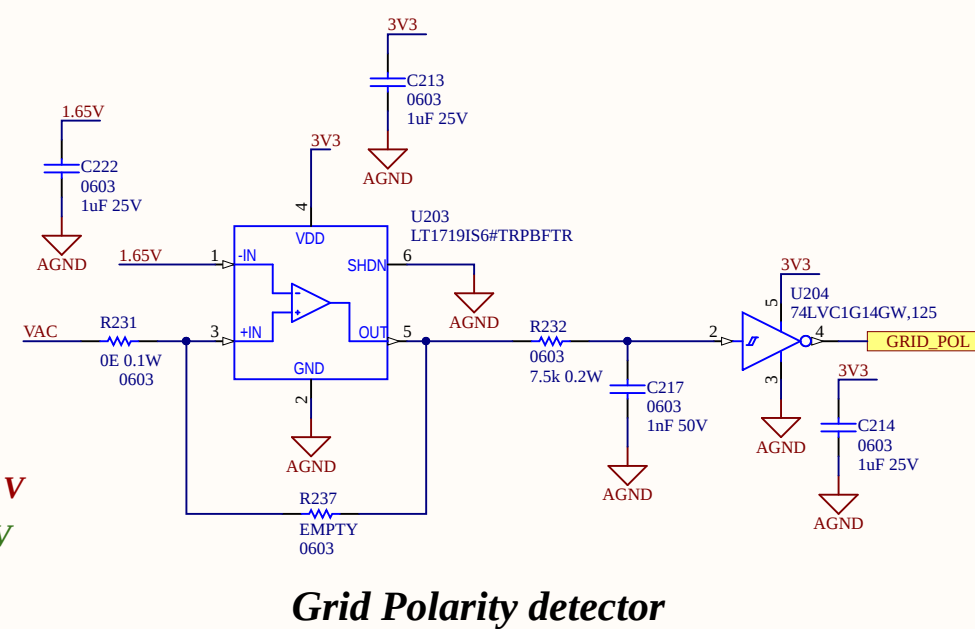
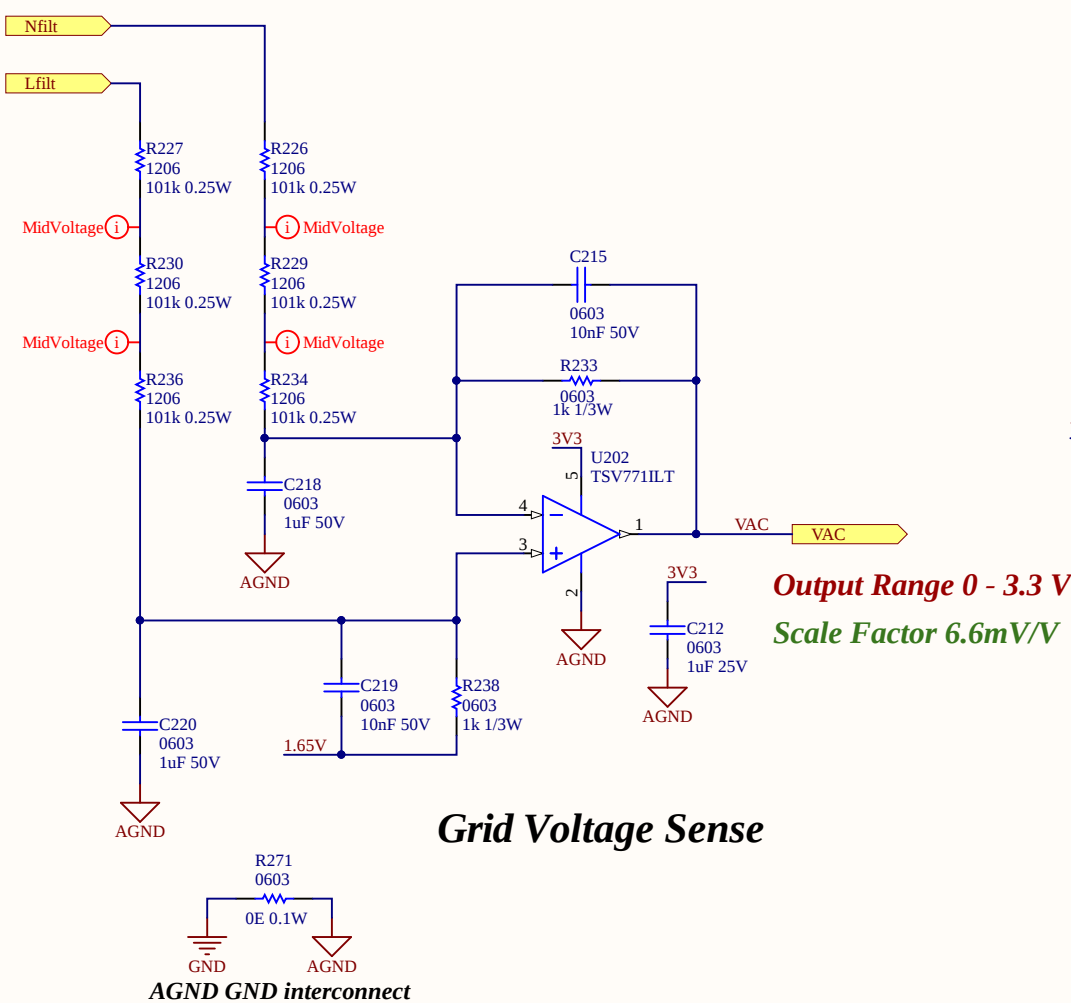


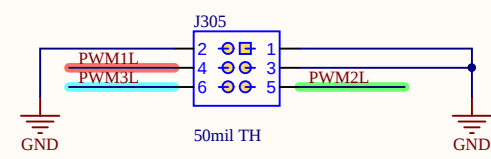
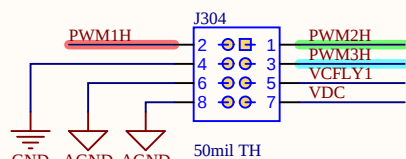
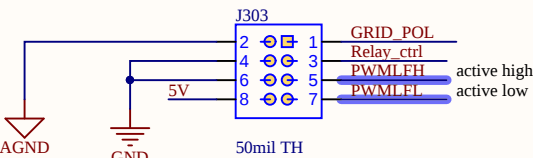
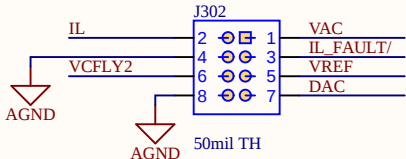
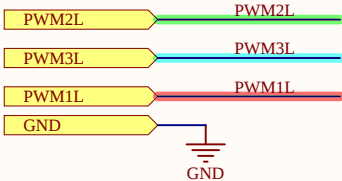
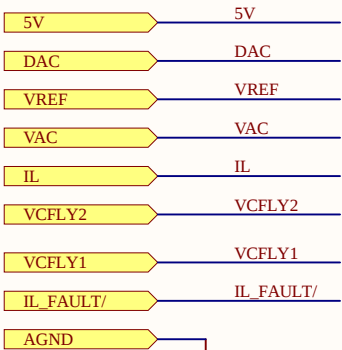


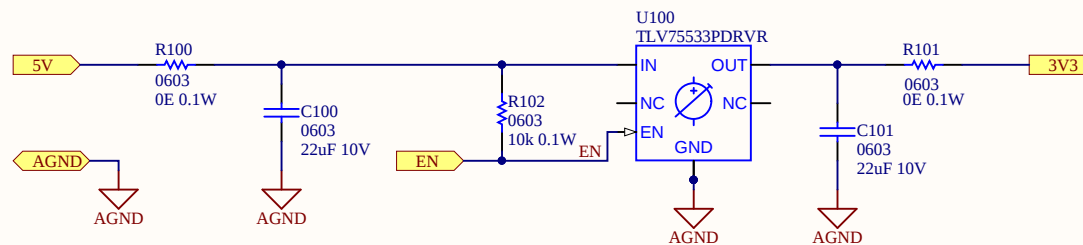
Input Range 0 - 500 V



Input Range 0 - 500 V







Title: 5 V to 3.3 V LDO power supply PDRVR 0603

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Design #: AP1020

Revision 2.0

Date: 9/8/2024

File: AP1020_PDRVR_0603_Rev2_0.SCHDOC

Sheet 7 of 7

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909 Pacific Coast Hwy. Ste 230
El Segundo, CA 90245
U.S.A.
www.epc-co.com

