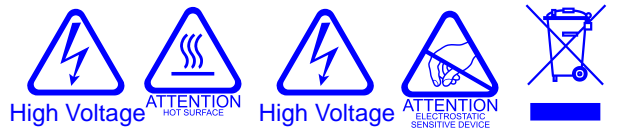
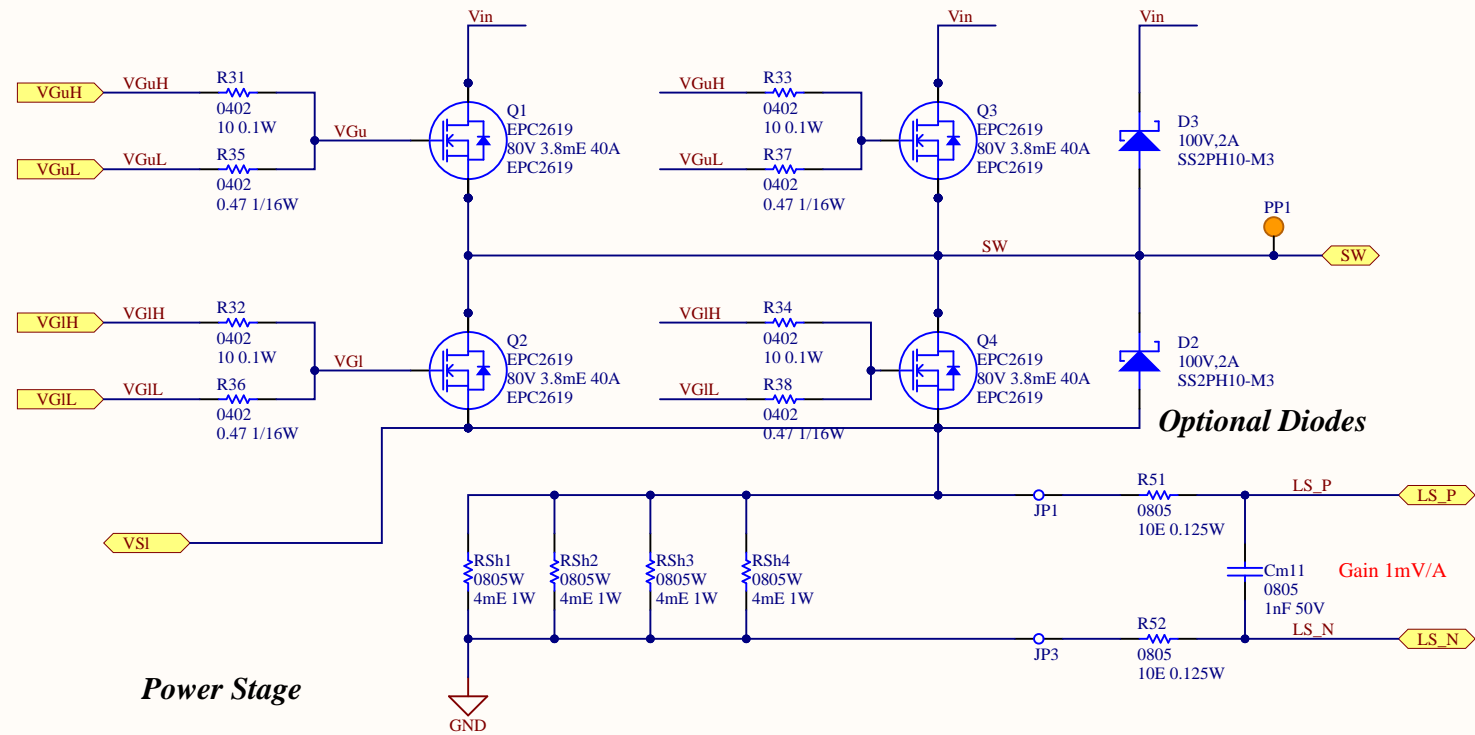
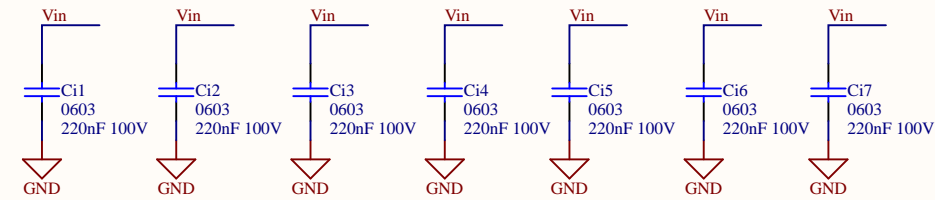
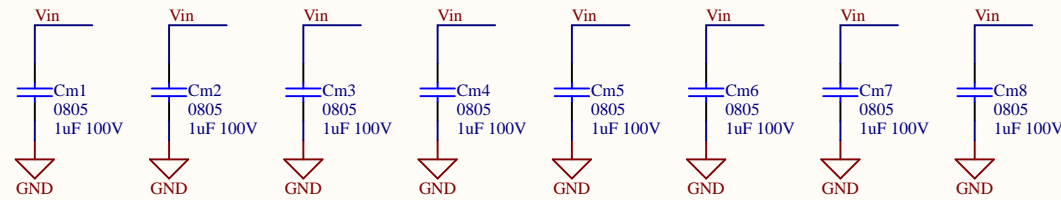
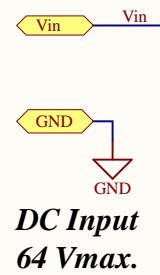


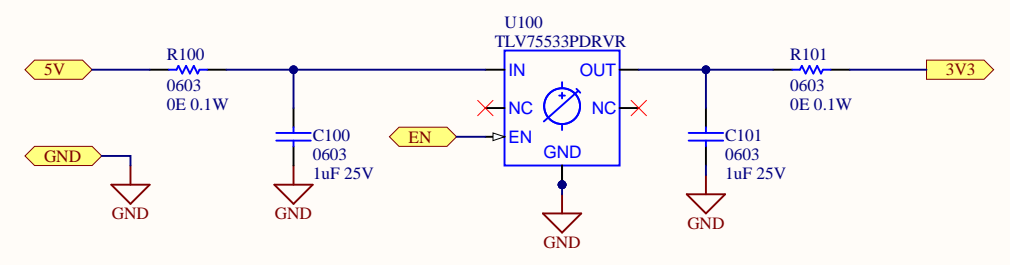
For evaluation only;  
not FCC approved for resale

**3-phase motor drive board using EPC2619 power stage**

Title: EPC9193 B5468 Rev. 1.1		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 23 El Segundo, CA 90245 United States <a href="http://www.epc-co.com">www.epc-co.com</a>	
Size: A	Revision: 1		
Date: 11/3/2023	Sheet 1 of 1		
File: EPC9193_B5468_Rev1_1_Main.SCHDOC			



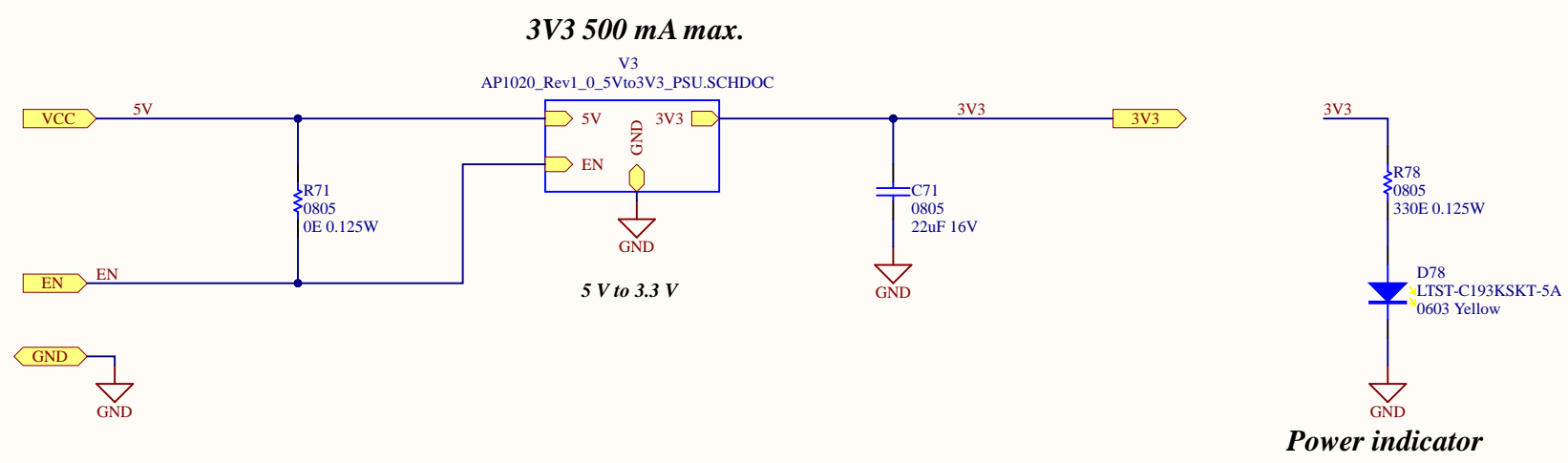




5 V to 3.3 V LDO power supply

Title AP1020 Rev. 1.0		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States <a href="http://www.epc-co.com">www.epc-co.com</a>	
Size: A	*	Revision: 1	
Date: 2/1/2021		Sheet 1 of 1	
File: AP1020_Rev1_0_5Vto3V3_PSU.SCHDOC			





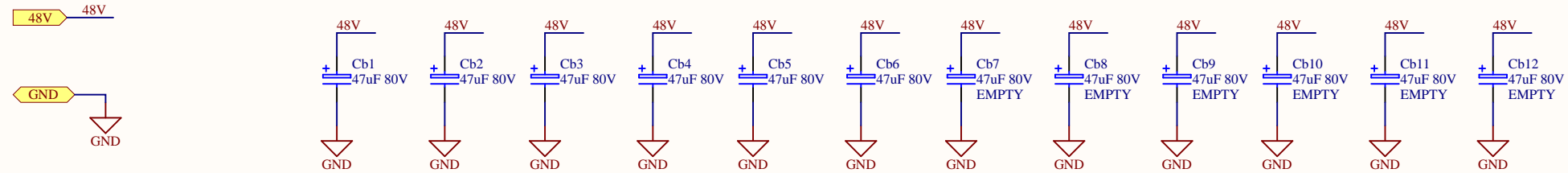
5V to 3V3 LDO Housekeeping Power Supply

Title AP1051 Rev. 1.0		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States <a href="http://www.epc-co.com">www.epc-co.com</a>	
Size: A	*	Revision: 1	
Date: 6/9/2021	Sheet 1 of 1		
File: AP1051_Rev1_0_5Vto3V3LDO_PSU.SCHDOC			



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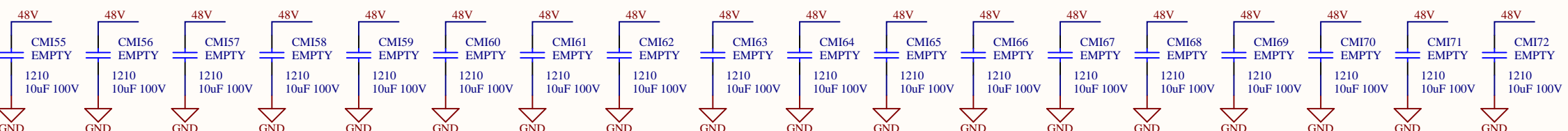
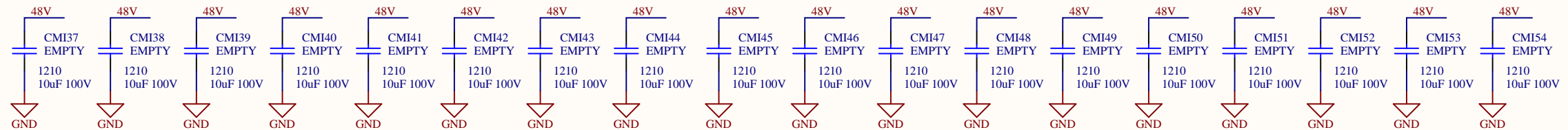
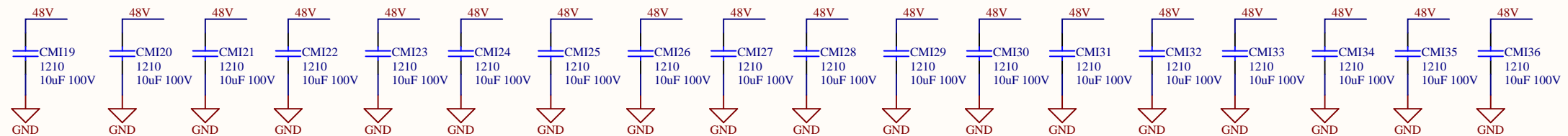
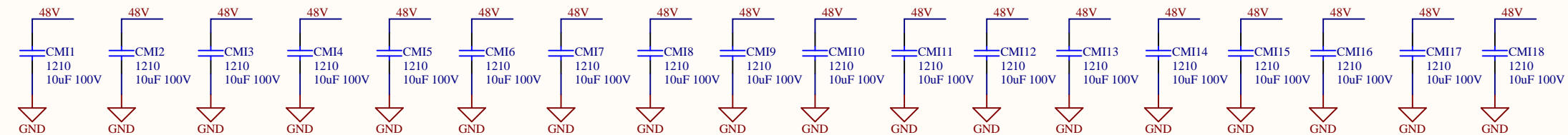
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### 48 V Bulk Capacitors

B

B



### 48 V Medium Frequency Capacitors

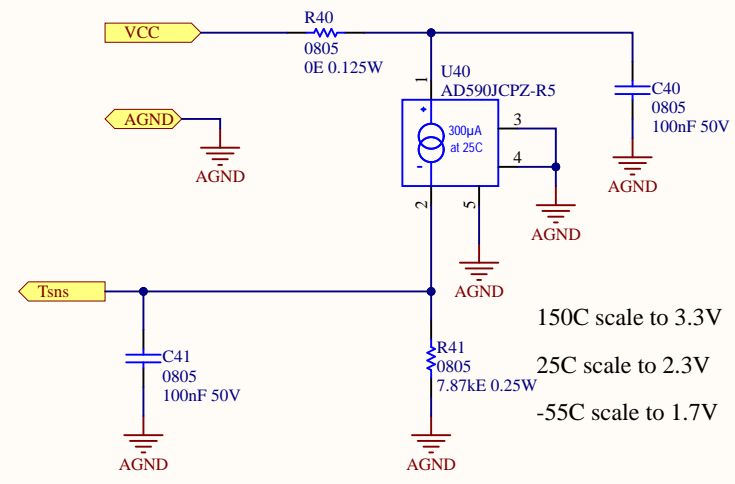
### High Power Motor Drive DcBus Capacitors

Title AP1052 Rev. 1.0		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States <a href="http://www.epc-co.com">www.epc-co.com</a>	
Size: A	Revision: 1		
Date: 3/6/2023	Sheet 1 of 1		
File: AP1052_Rev1_0_DcBusCapacitors.SCHDOC			

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D

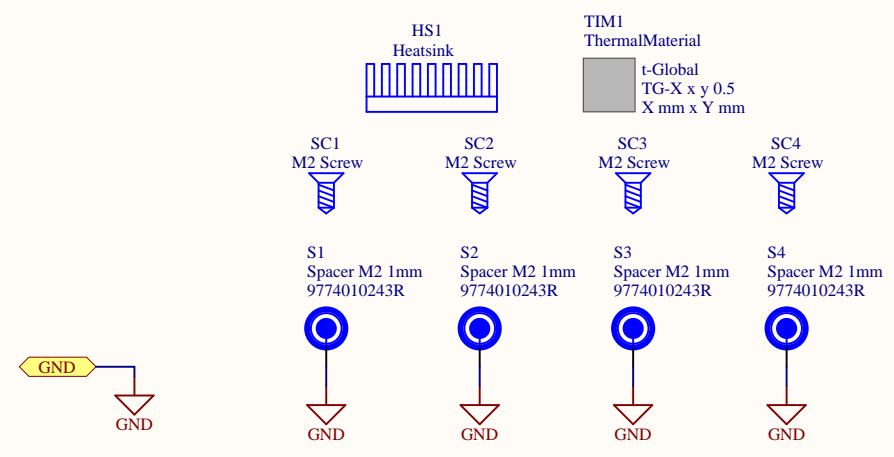
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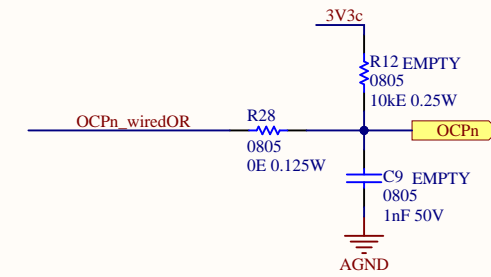
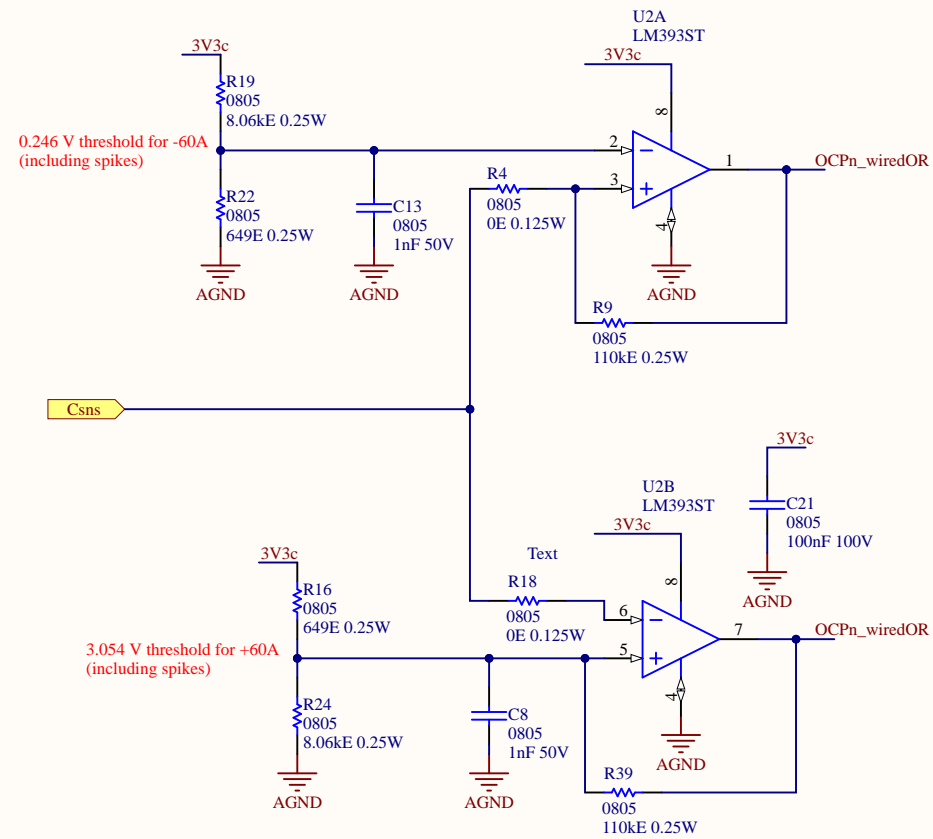
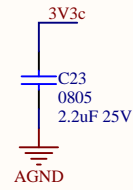
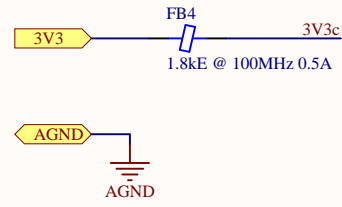


Temperature sense using AD590 with separate AGND

Title AP1009 Rev. 1.3		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States <a href="http://www.epc-co.com">www.epc-co.com</a>	
Size: A	*	Revision: 1	
Date: 3/3/2023	Sheet 1 of 15		
File: AP1009_Rev1_3_TemperatureSense_AD590.SCHDOC			





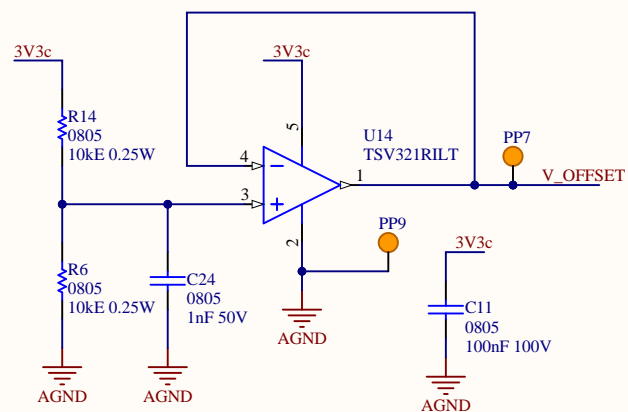
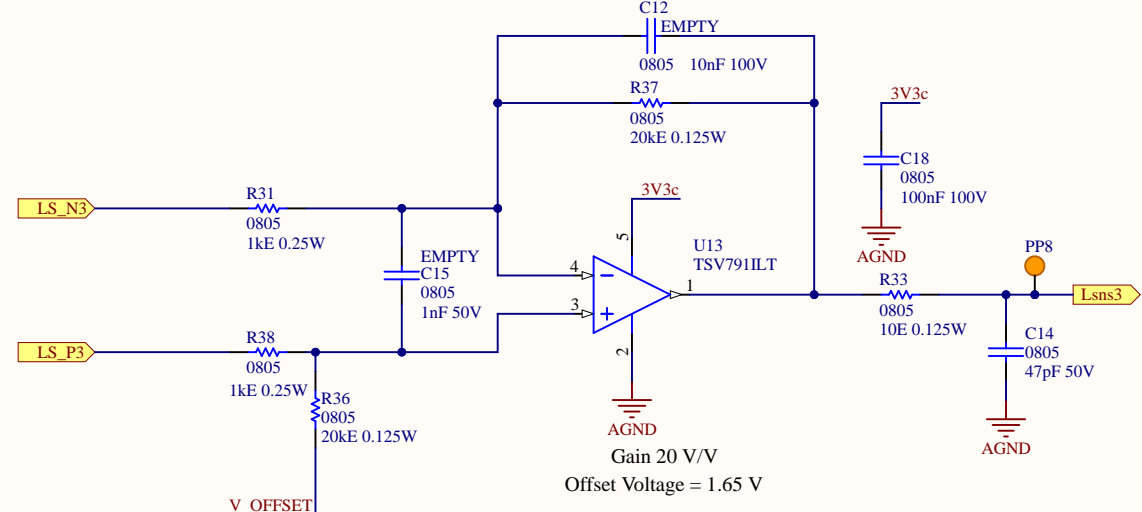
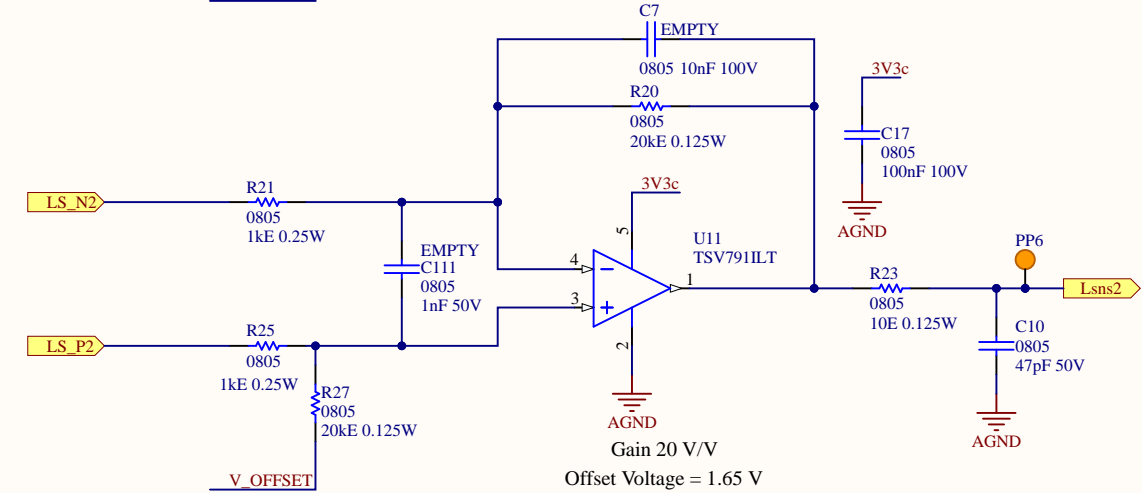
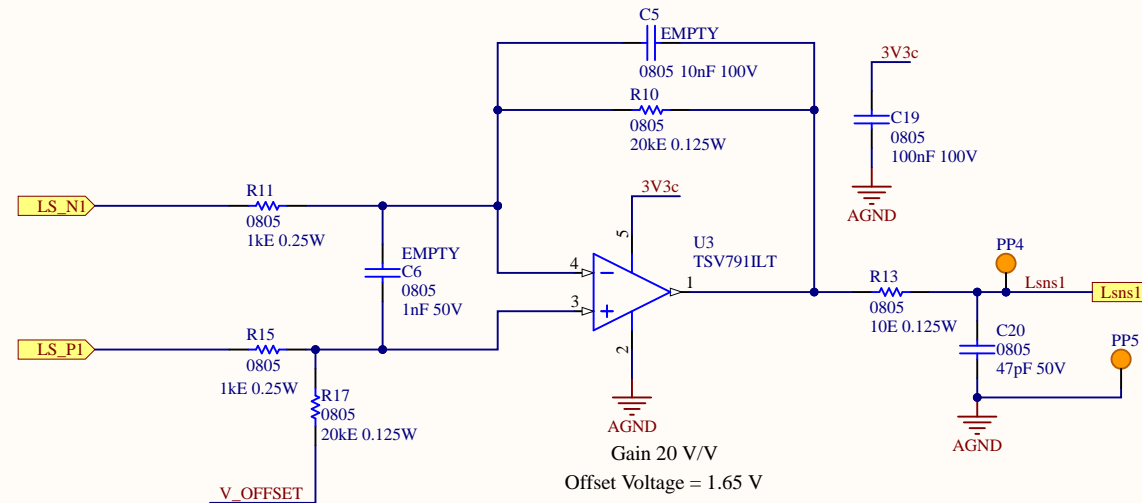
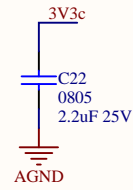
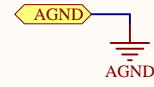
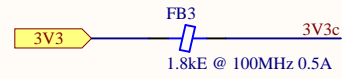


R12 and C9 are not mounted because they are mounted in front of the gate driver.

### Bi-Directional Over Current Detection

Title AP1034 Rev. 1.0		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States <a href="http://www.epc-co.com">www.epc-co.com</a>	
Size: A	*	Revision: 1	
Date: 11/3/2023		Sheet 1 of 1	
File: AP1034_Rev1_0_OverCurrentProtection.SCHDOC			

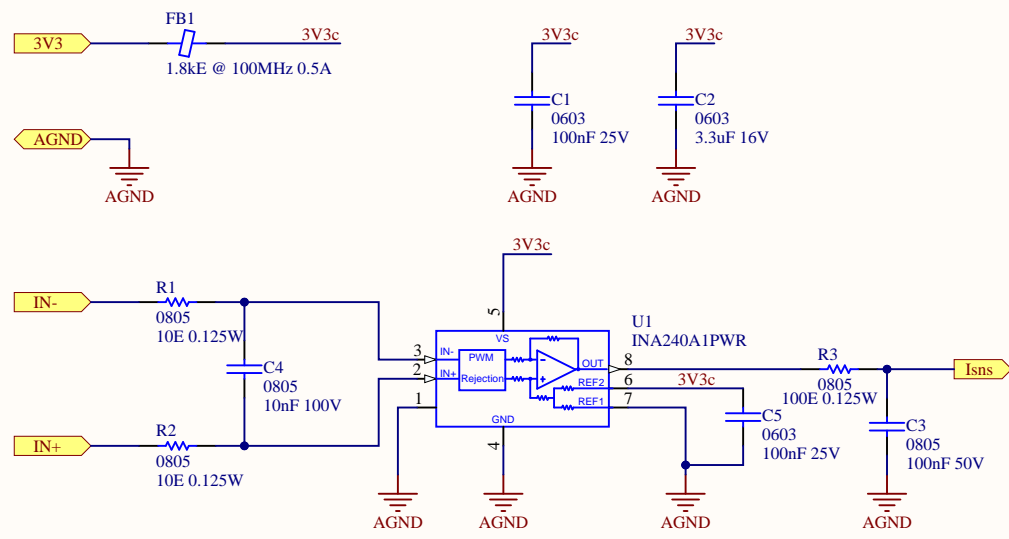




Bi-Directional Leg Current Sense Amplifier

Title AP1035 Rev. 1.0		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States <a href="http://www.epc-co.com">www.epc-co.com</a>	
Size: A	*	Revision: 1	
Date: 11/3/2023		Sheet 1 of 1	
File: AP1035_Rev1_0_LegSenseAmp.SCHDOC			

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INA240A1PWR Gain 20V/V  
Offset Voltage = 1.65 V

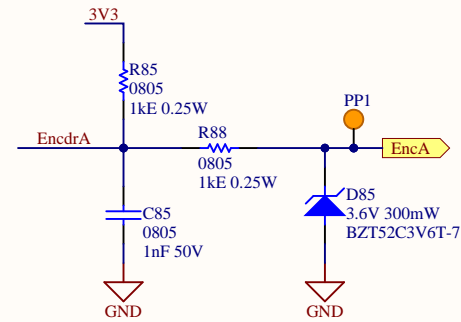
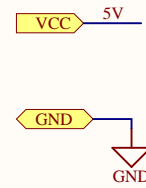
Bi-Directional 80 V Current Sense Amplifier

Title AP1004 Rev. 1.2		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States <a href="http://www.epc-co.com">www.epc-co.com</a>	
Size: A	*	Revision: 1	
Date: 3/6/2023		Sheet 1 of 1	
File: AP1004_Rev1_2_CurrentSenseAmp.SCHDOC			

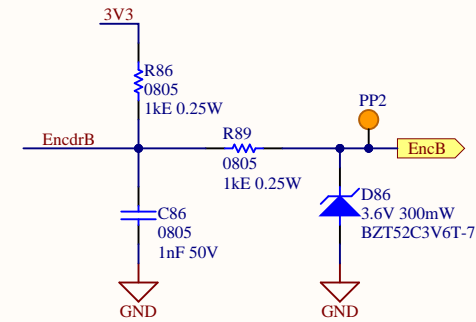
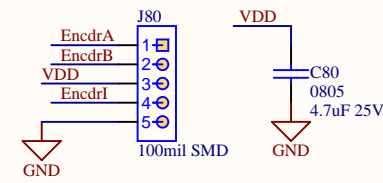




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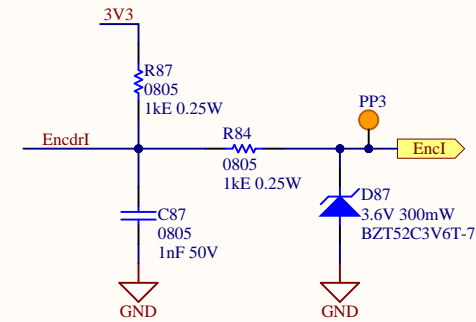
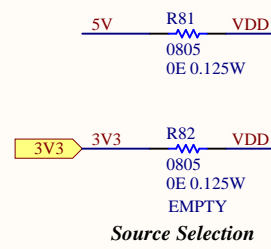


B




**Shaft encoder connection**  
**Quadrature with Index**  
*Supports optical and hall*

C

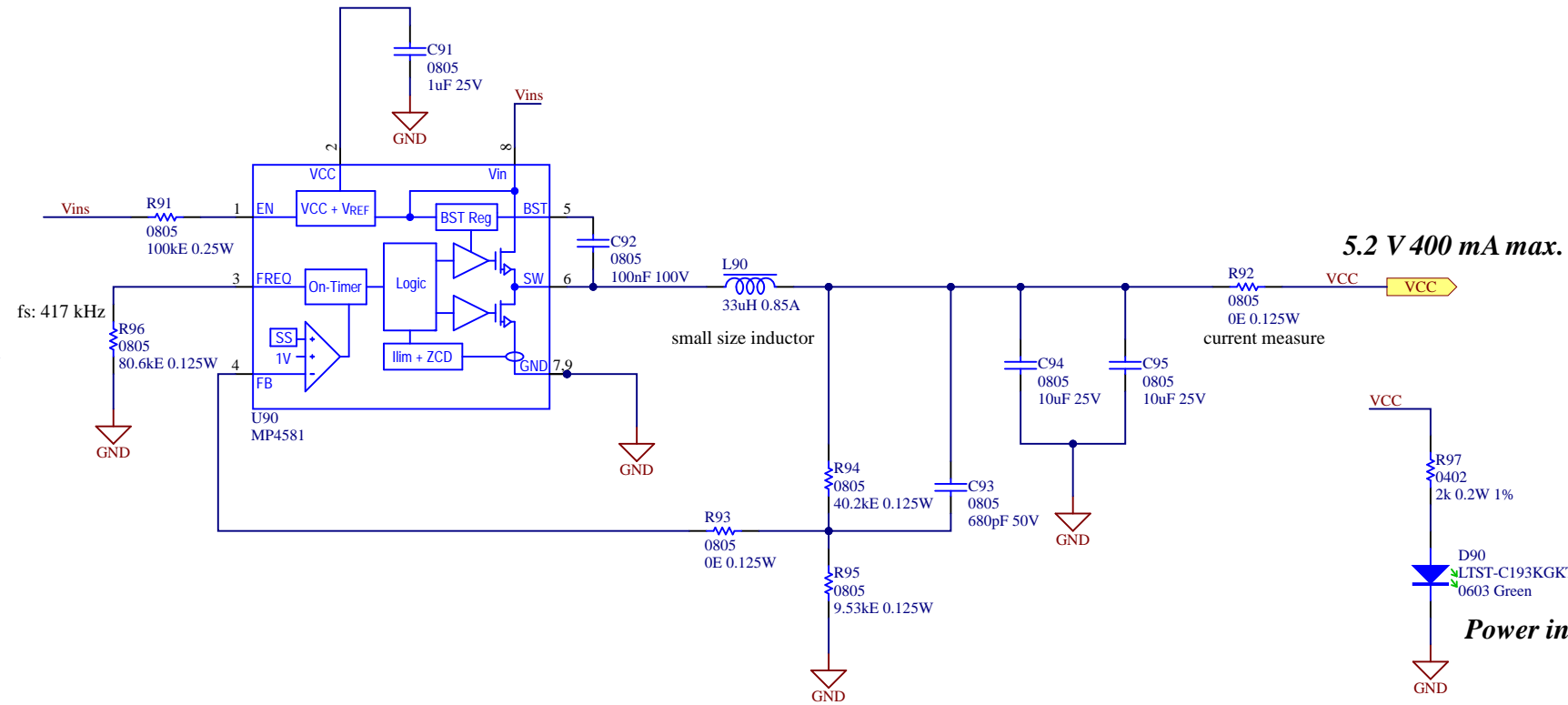
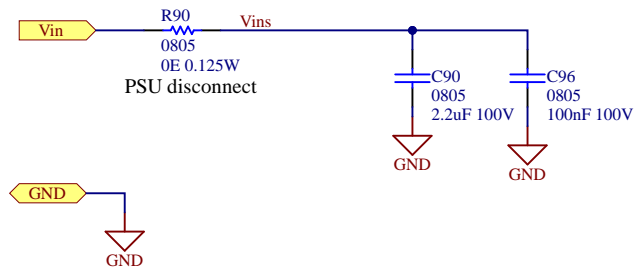


D

**Quadrature Encoder Interface without 5V regulator**

Title AP1005 Rev. 1.1		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States <a href="http://www.epc-co.com">www.epc-co.com</a>	
Size: A	*	Revision: 1	
Date: 11/3/2023		Sheet 1 of 1	
File: AP1005_Rev1_1_QuadEncdr.SCHDOC			

**10 Vmin. to 100 Vmax.**

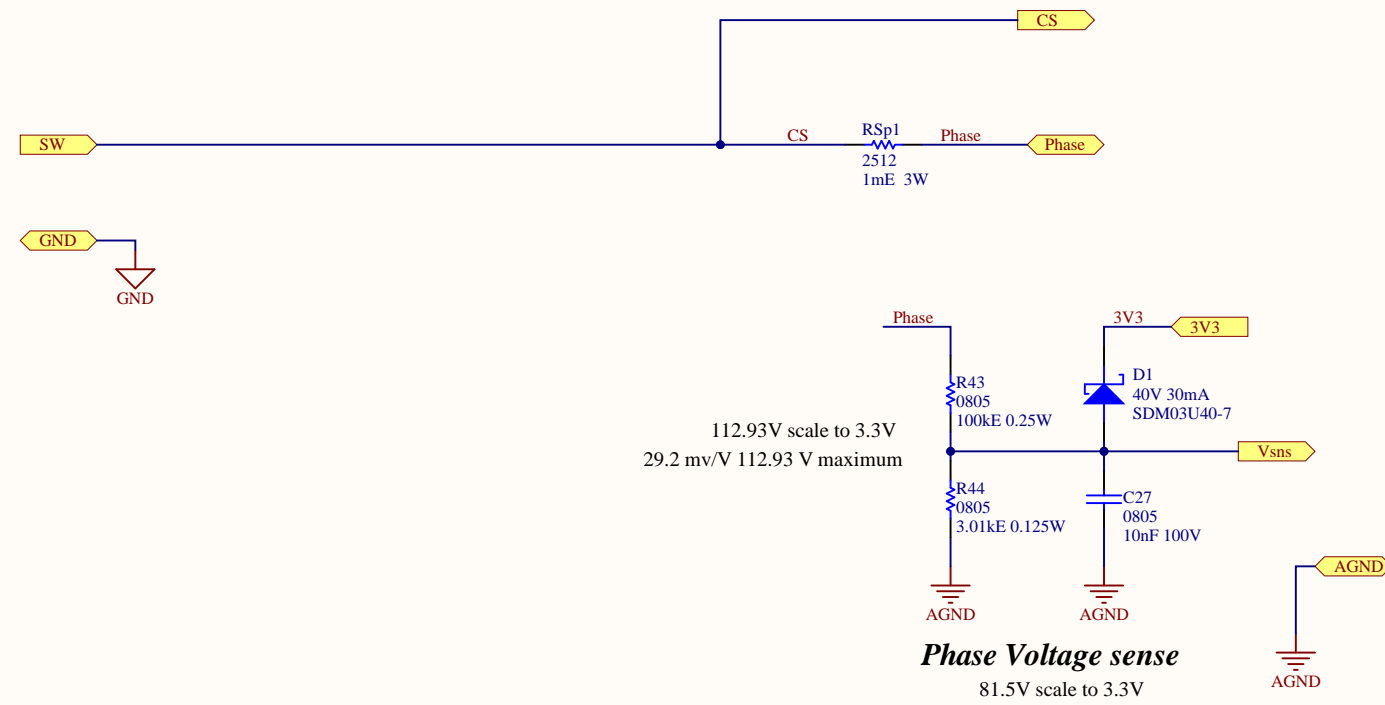


**5.2 V 400 mA max.**

**100 V to 5 V Housekeeping Power Supply**

Title AP1065 Rev. 1.1		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States <a href="http://www.epc-co.com">www.epc-co.com</a>	
Size: A	*	Revision: 1	
Date: 8/2/2023	Sheet 3 of 15		
File: AP1065_Rev1_1_100V_to_5V_PSU.SCHDOC			

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Phase Shunt and phase voltage sense

Title AP1037 Rev. 1.1		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States <a href="http://www.epc-co.com">www.epc-co.com</a>	
Size: A	*	Revision: 1	
Date: 7/12/2023	Sheet 8 of 1		
File: AP1037_Rev1_1_PhaseShunt_withV_Isns.SCHDOC			