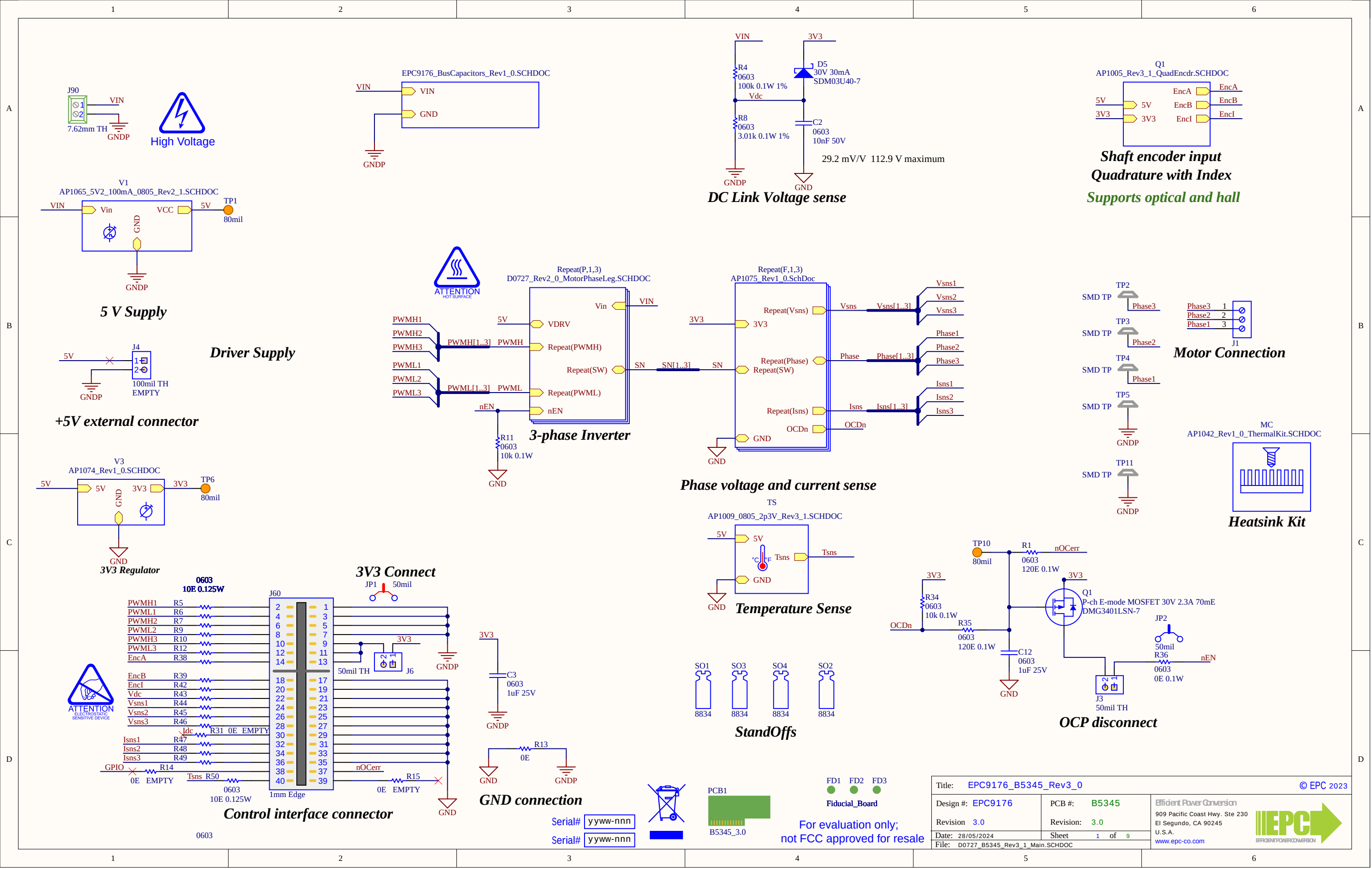
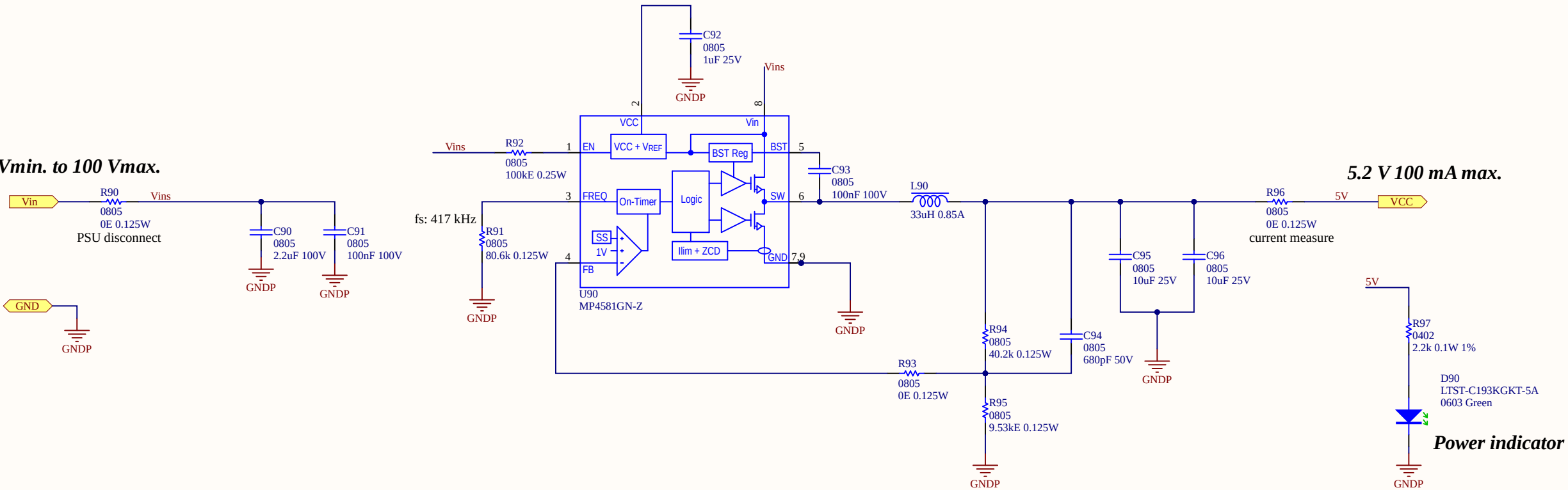
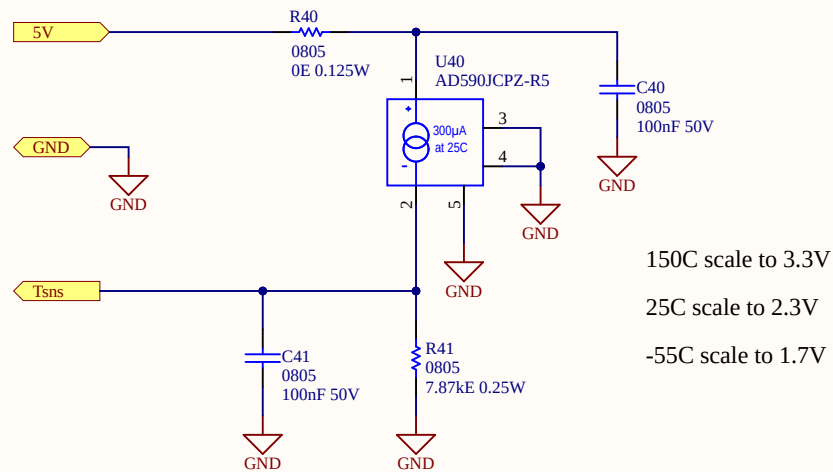




10 Vmin. to 100 Vmax.

5.2 V 100 mA max.





Title: Temperature sense using AD590 - 0805 components

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Design #: AP1009_0805_2p3V

Revision 3.1

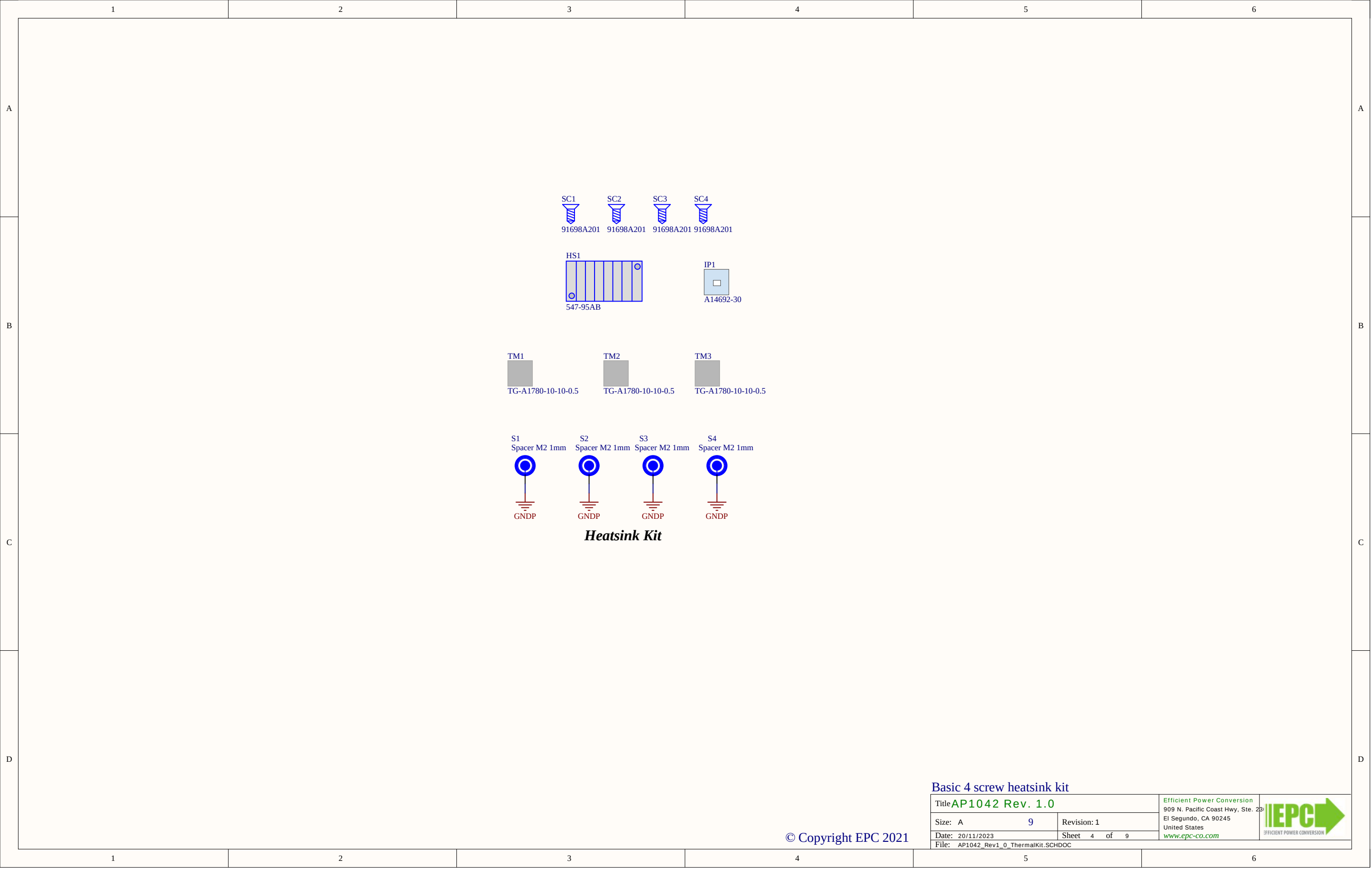
Date: 28/05/2024

Sheet 3 of 9

File: AP1009_0805_2p3V_Rev3_1.SCHDOC

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Basic 4 screw heatsink kit

TitleAP1042 Rev. 1.0		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States www.epc-co.com		
Size: A	9	Revision: 1		
Date: 20/11/2023	Sheet 4 of 9			
File: AP1042_Rev1_0_ThermalKit.SCHDOC				





Title: EPC9176_BusCapacitors		© EPC 2023	
Design #: *		Efficient Power Conversion 909 Pacific Coast Hwy, Ste 230 El Segundo, CA 90245 U.S.A. www.epc-ca.com	
Revision 1.1			
Date: 01/12/2023	Sheet 5 of 9		
File: EPC9176_BusCapacitors_Rev1_0.SCHDOC			

A

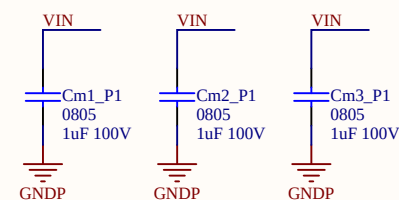
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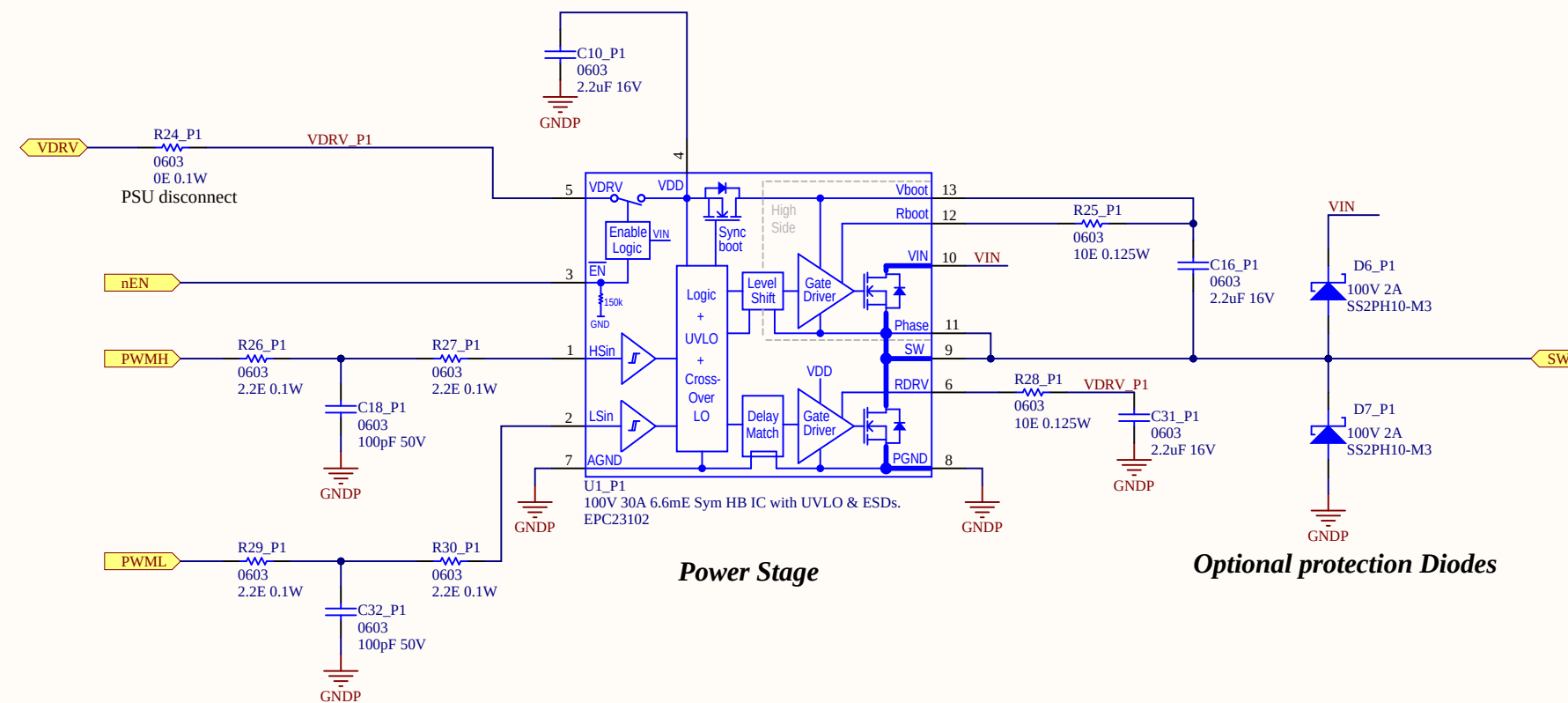
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Intermediate Capacitors



C

C



Power Stage

Optional protection Diodes

A

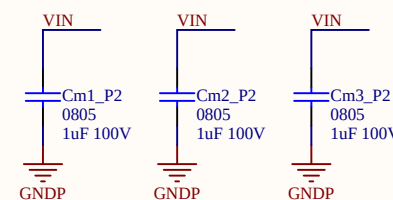
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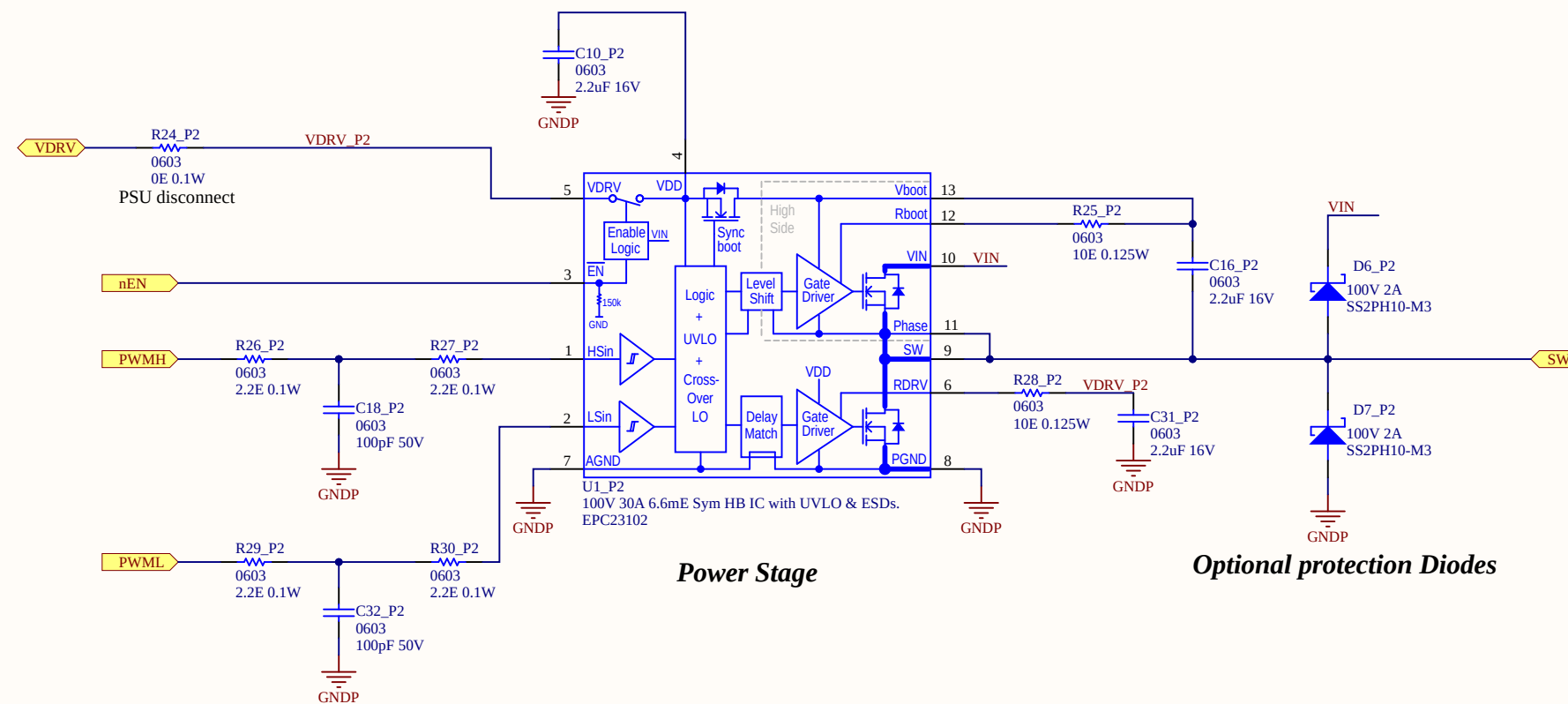
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Intermediate Capacitors



C

C



Power Stage

Optional protection Diodes

D

D

Title: FET Phase Leg		© EPC 2023	
Design #: Half-Bridge Phase Leg		Efficient Power Conversion 909 Pacific Coast Hwy. Ste 230 El Segundo, CA 90245 U.S.A. www.epc-co.com	
Revision 1.1	P/N#: EPC23102	 EFFICIENT POWER CONVERSION	
Date: 20/11/2023	Sheet 6 of 9		
File: D0727_Rev2_0_MotorPhaseLeg.SCHDOC			

A

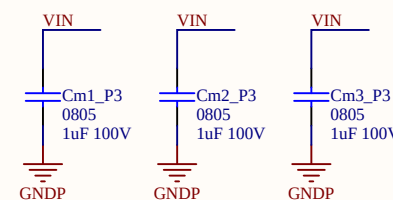
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B

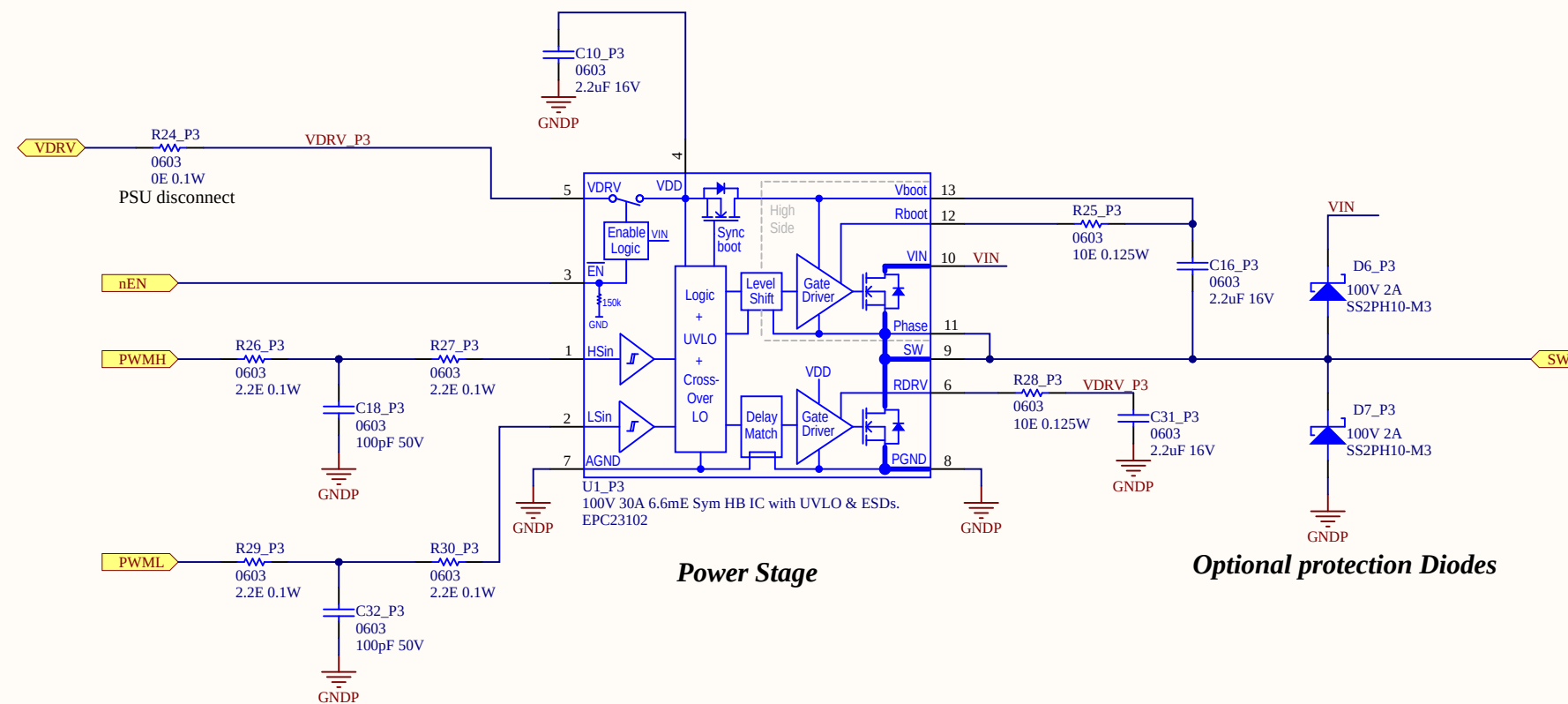
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Intermediate Capacitors



C

C



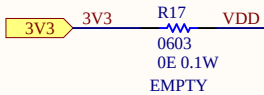
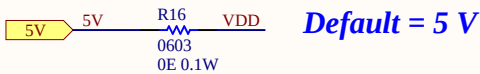
Power Stage

Optional protection Diodes

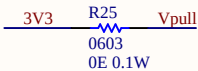
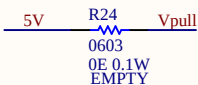
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D

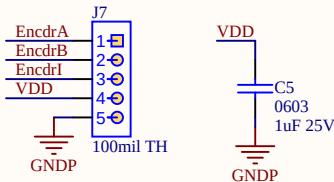
Title: FET Phase Leg		© EPC 2023	
Design #: Half-Bridge Phase Leg		Efficient Power Conversion 909 Pacific Coast Hwy. Ste 230 El Segundo, CA 90245 U.S.A. www.epc-co.com	
Revision 1.1	P/N#: EPC23102		
Date: 20/11/2023	Sheet 6 of 9		
File: D0727_Rev2_0_MotorPhaseLeg.SCHDOC			



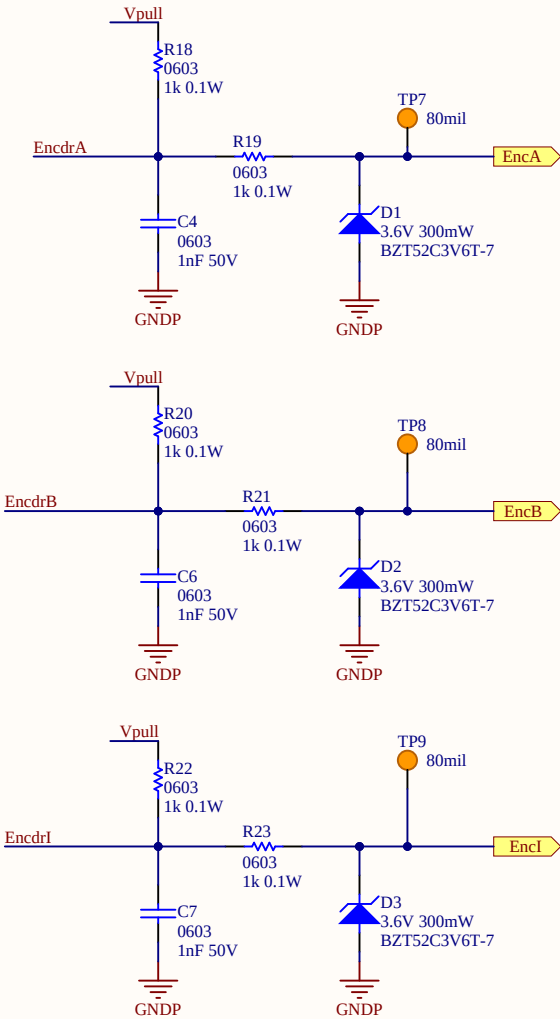
Sensors supply Voltage selection

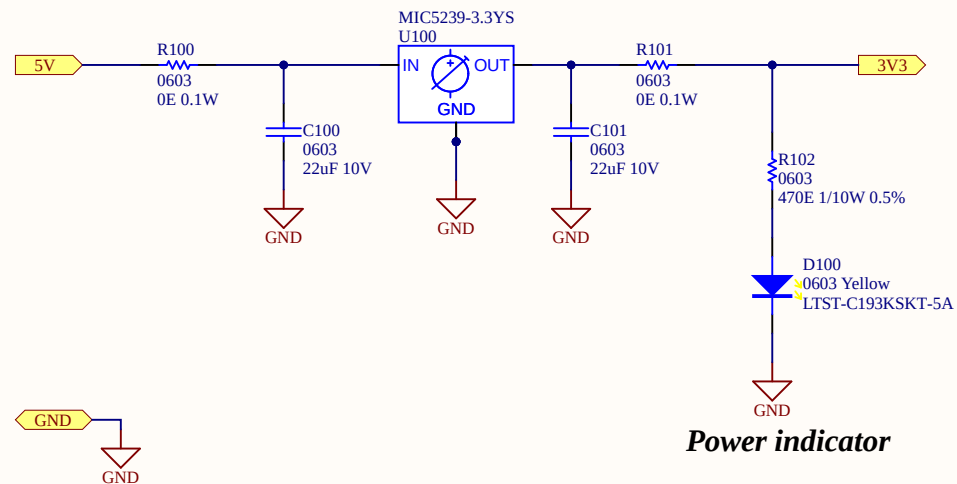


Pull Up Voltage for microcontroller input signals



Shaft encoder connection
Quadrature with Index
Supports optical and hall





Title: 5V to 3V3 500mA LDO using MIC5239-3.3YS

© EPC 2023

Design #: AP1074

Revision 1.0

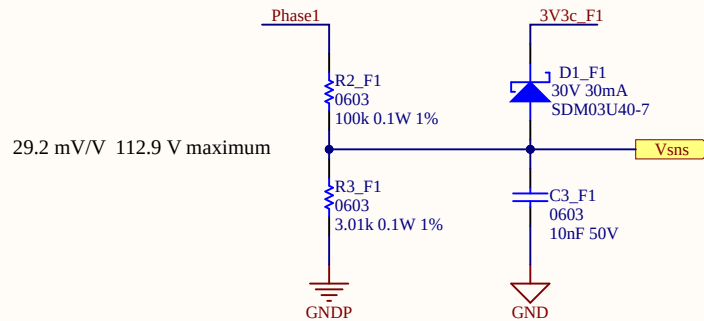
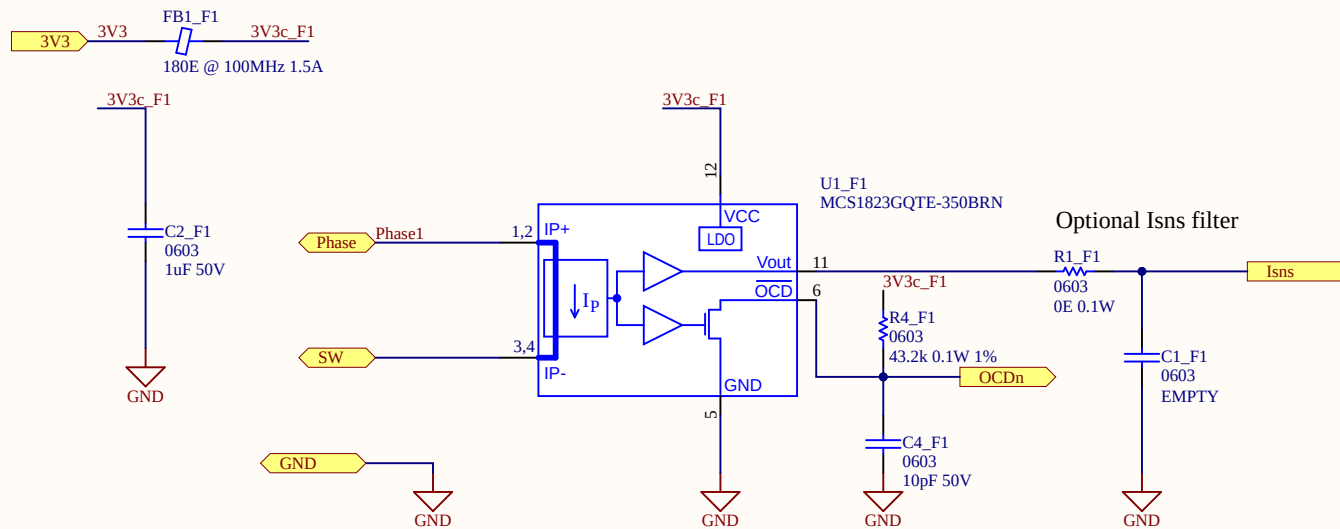
Date: 04/12/2023

File: AP1074_Rev1_0.SCHDOC

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Phase Voltage sense

112.9 V scale to 3.3V

Title: Bidirectional current sense using Hall effect sensor MCS1823

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Design #: AP1075

Revision 1.0

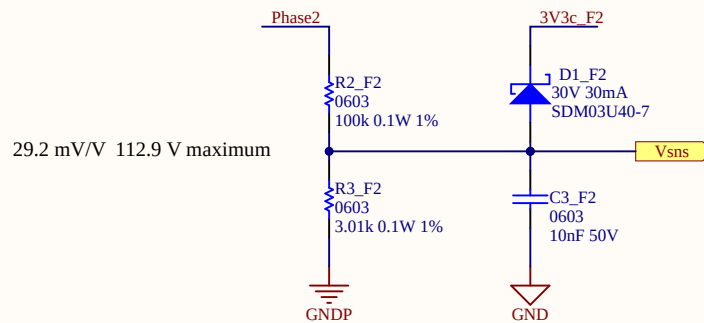
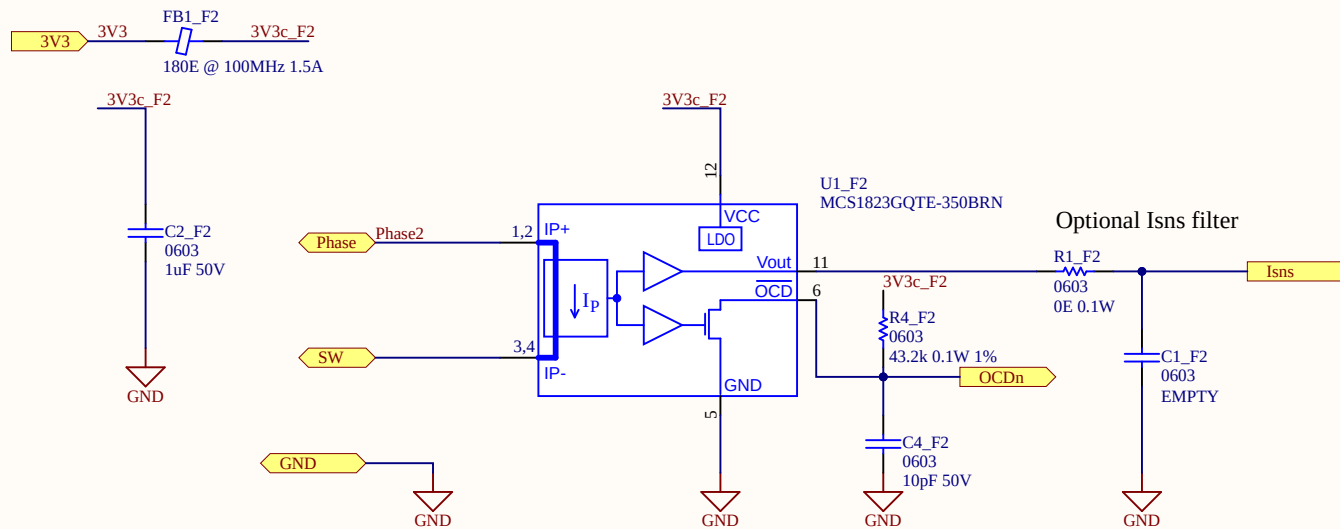
Date: 28/05/2024

File: AP1075_Rev1_0.SchDoc

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Phase Voltage sense
112.9 V scale to 3.3V



