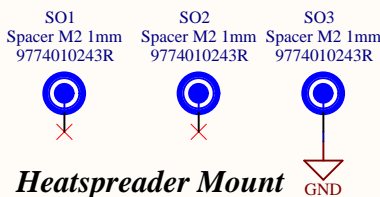


For evaluation only;  
not FCC approved for resale



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**Evaluation Board Main Schematic**

Title: EPC90154_B5219_Rev3_0		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	1	Revision: 1	
Date: 5/26/2023	Sheet 1 of 5		
File: D0320_B5219_Rev3_0_SCHDOC			

A

A

B

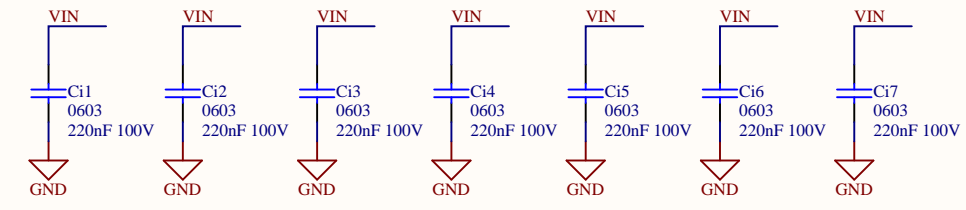
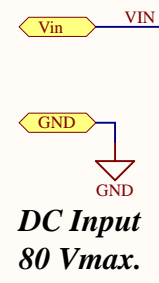
B

C

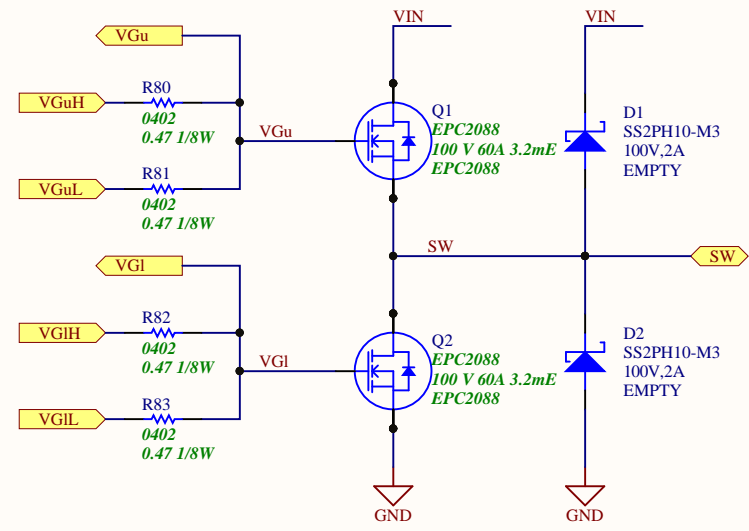
C

D

D



**HF loop Capacitors**



**Power Stage      Optional Diodes**

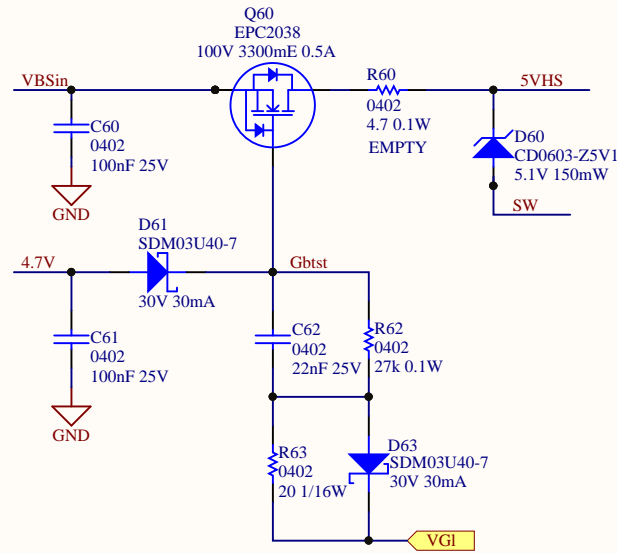
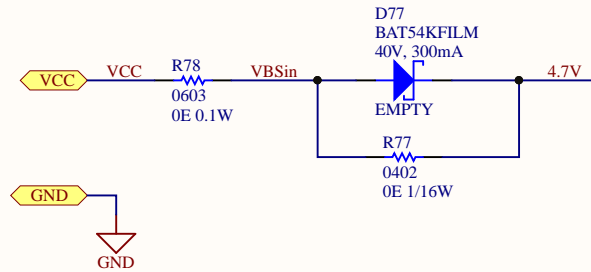
EPC2088

Title D0320 Phase Leg Rev. 1.0		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	2	Revision: 1	
Date: 5/25/2023	Sheet 2 of 5		
File: D0320_Rev1_0_PhaseLeg.SCHDOC			

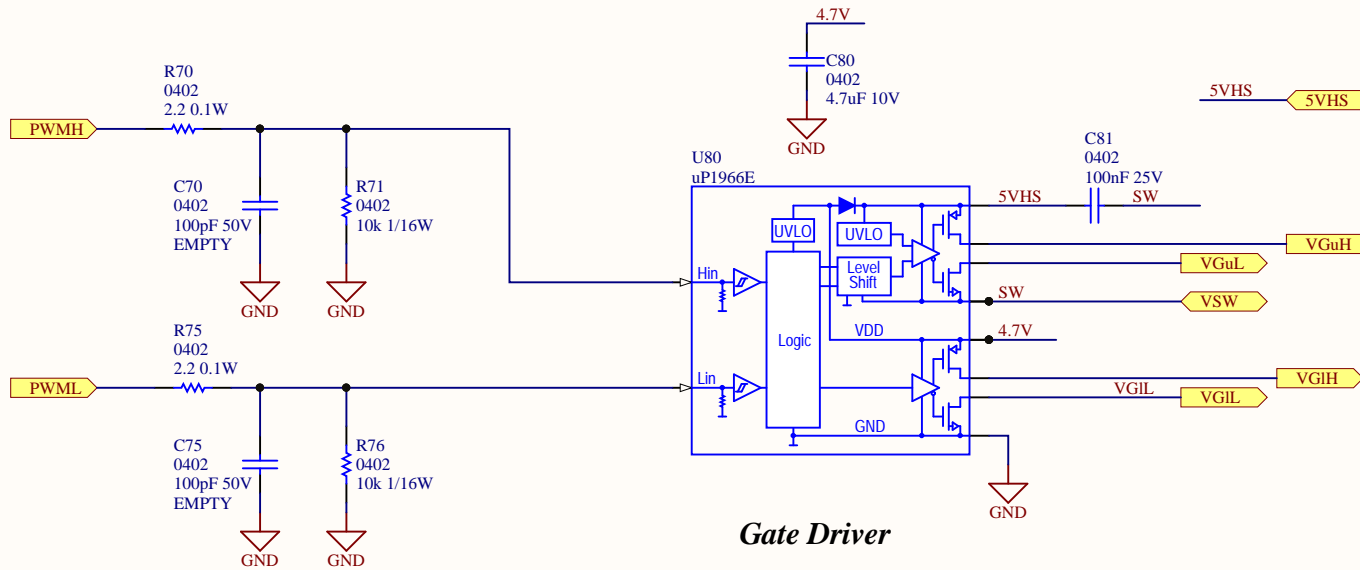
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Sync Boot = Install R60 and D77, remove R77  
 No Sync Boot = Install R77, remove R60 and D77  
 Default = No Sync Boot




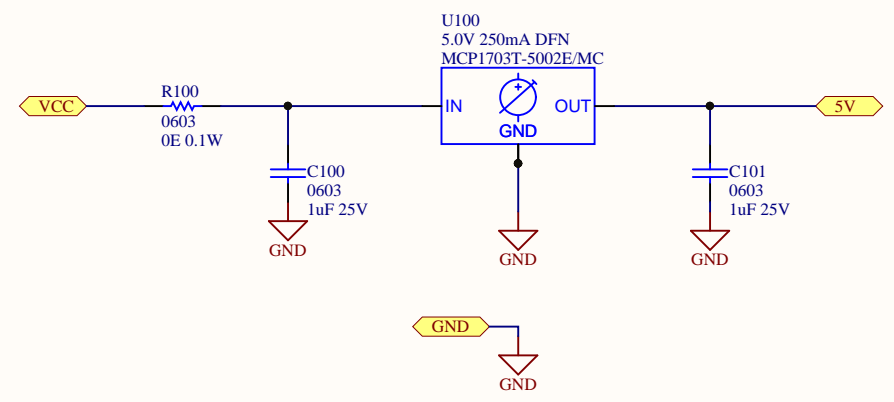
**Synchronous Bootstrap Power Supply**



**Gate Driver**

100 V Gate Driver with Bootstrap

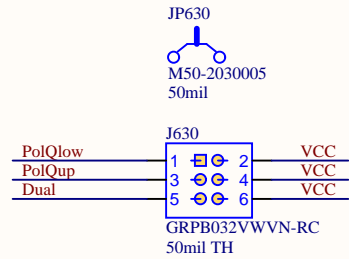
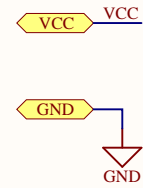
Title AP1017 Rev. 3		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 23 El Segundo, CA 90245 United States <a href="http://www.epc-co.com">www.epc-co.com</a>	
Size: A	3	Revision: 1	
Date: 5/26/2023	Sheet 3 of 5		
File: AP1017_Rev3_0_100VBGA_GateDriverWboot.SCHDOC			



12 V to 5 V LDO power supply

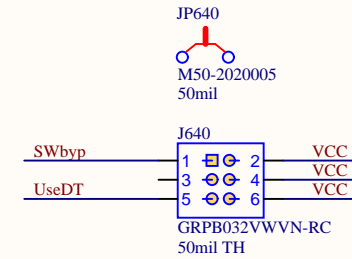
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Size: A	4	Revision: 1	
Date: 5/25/2023	Sheet 4 of 5		
File: AP1006_Rev2_01_12Vto5VInPSU.SCHDOC			





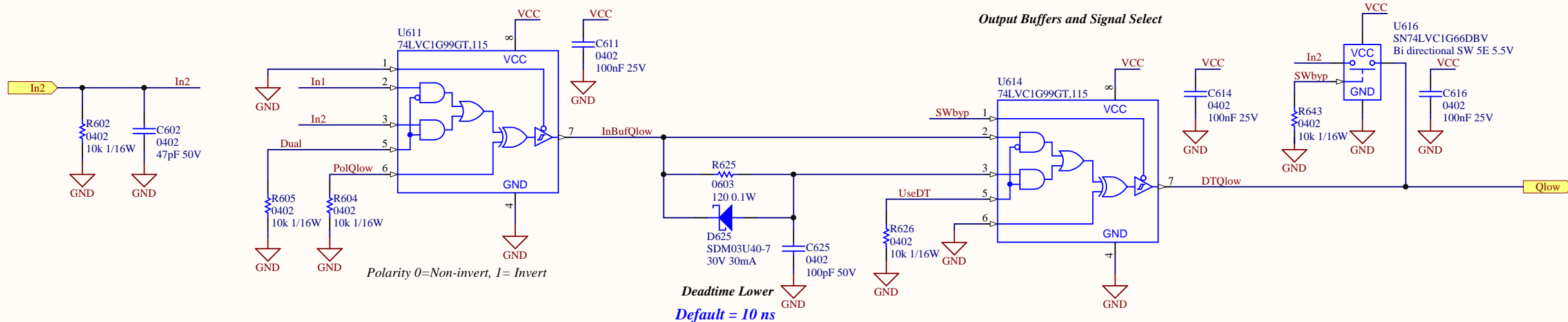
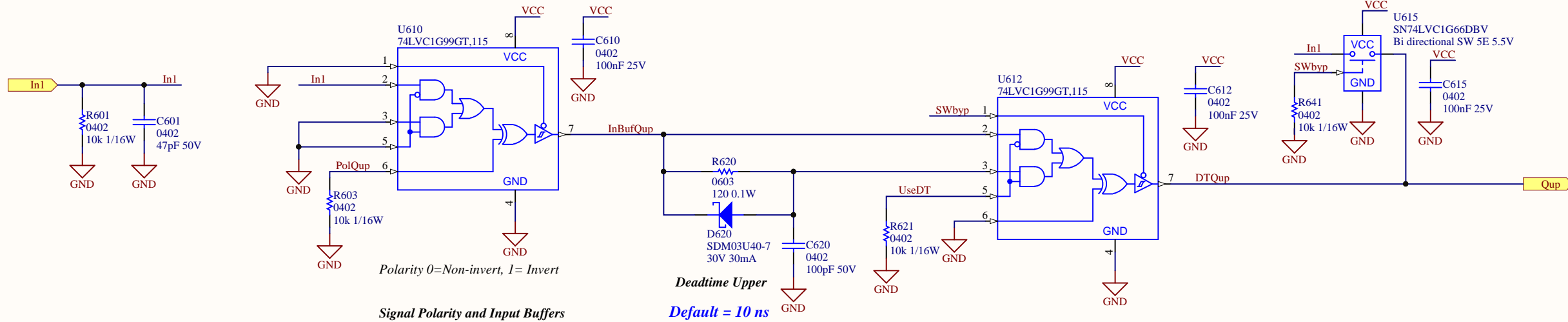
**Buck Single Signal  
Boost Single Signal  
Dual Signal**

**Dual/Single PWM, Buck, and Boost Mode Selector**



**Full Bypass  
DT Bypass  
No Bypass**

**Bypass Mode Select**



**General Dead-time with Polarity Changer and Bypass**

Title AP1010 Rev. 3.0		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	5	Revision: 1	
Date: 5/25/2023	Sheet 5 of 5		
File: AP1010_Rev3_02_GeneralDeadtime.SCHDOC			