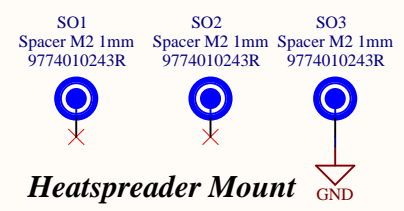
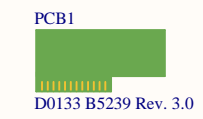
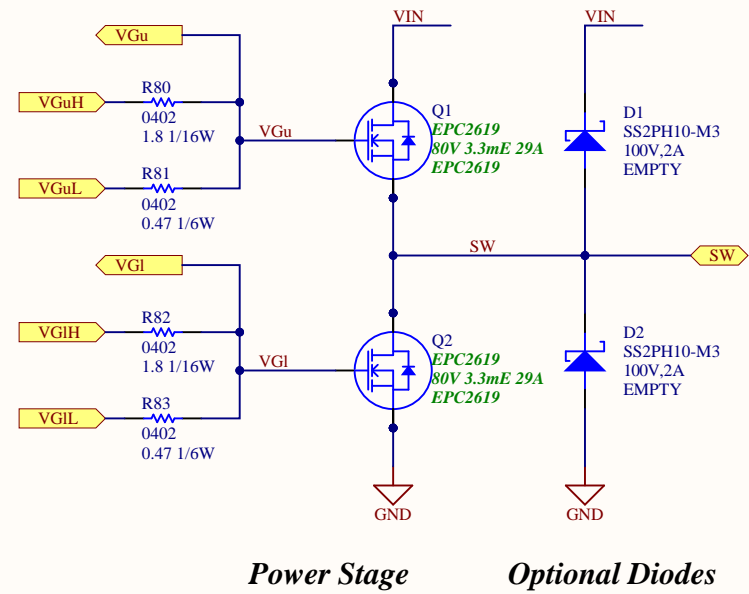
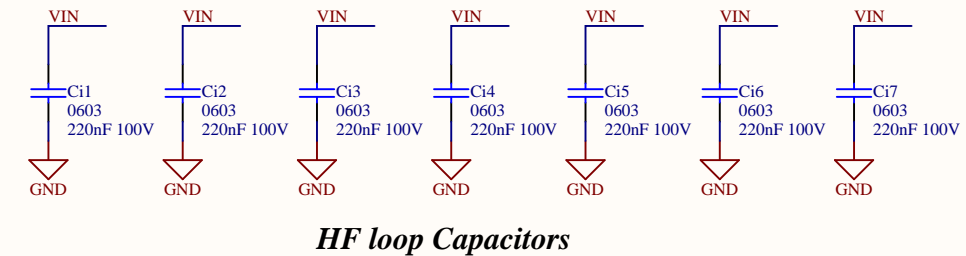
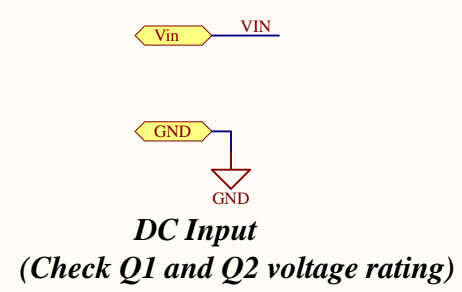


For evaluation only;
not FCC approved for resale



© EPC eGaN® FET
Evaluation Board Main Schematic

Title: EPC90153_B5239_Rev3_0		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 23 El Segundo, CA 90245 United States www.epc-co.com	
Size: A	1	Revision: 1	
Date: 10/18/2022	Sheet 1 of 5		
File: D0133_B5239_Rev3_0.SCHDOC			

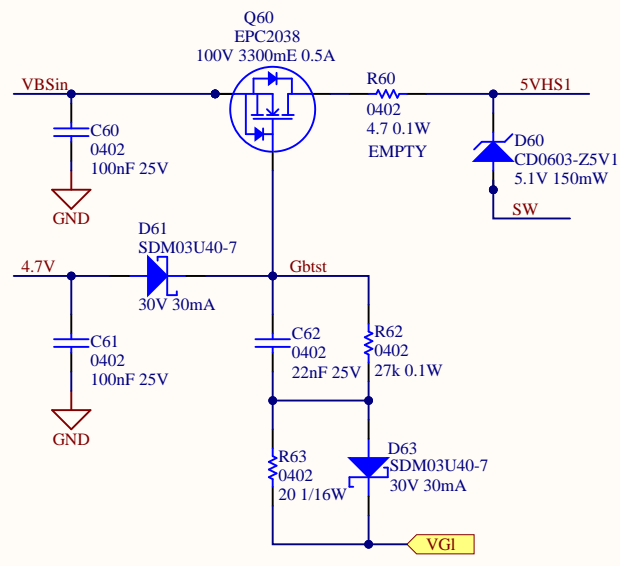
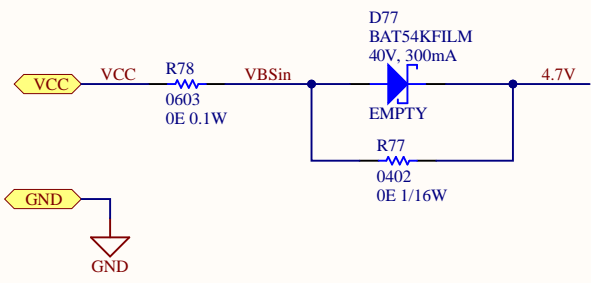


EPC2619

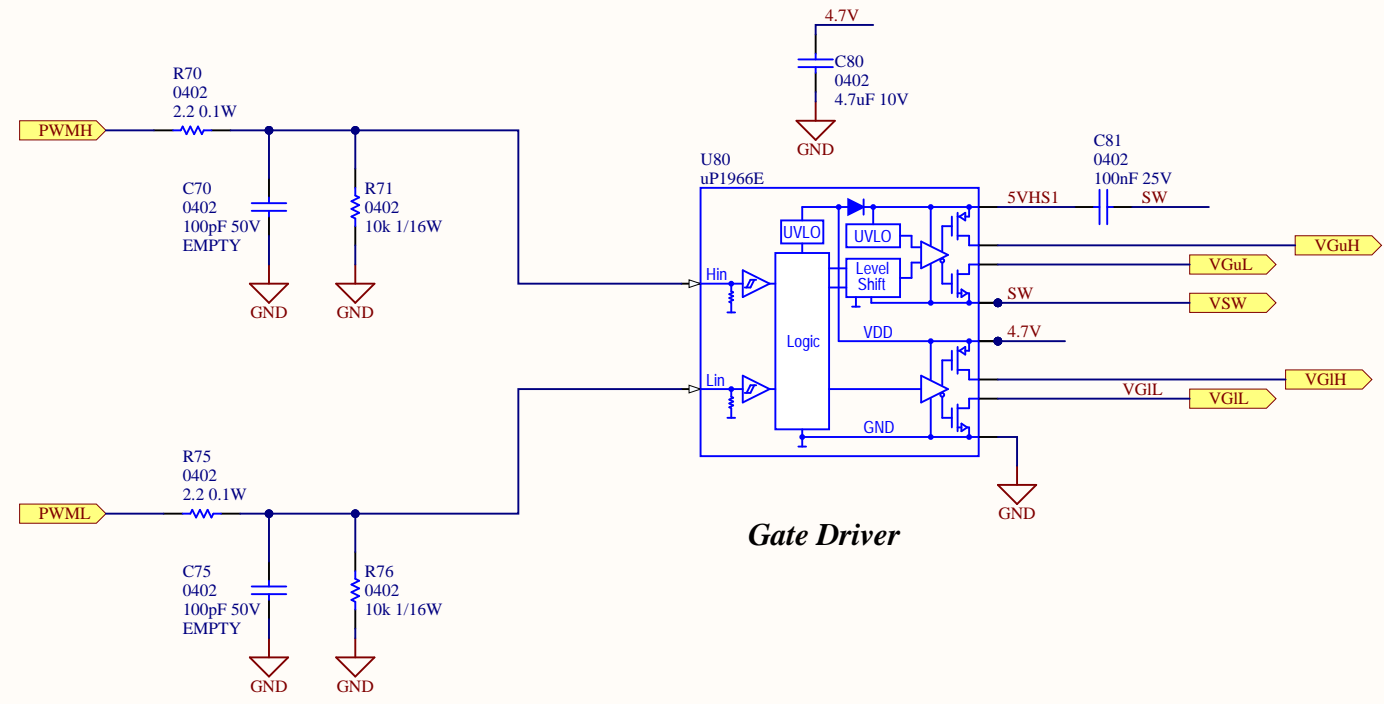
Title D0133 Phase Leg Rev. 1.0		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States www.epc-co.com		
Size: A	2			Revision: 1
Date: 10/31/2022	Sheet 2 of 5			
File: D0133_Rev1_0_PhaseLeg.SCHDOC				

© Copyright EPC 2022

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



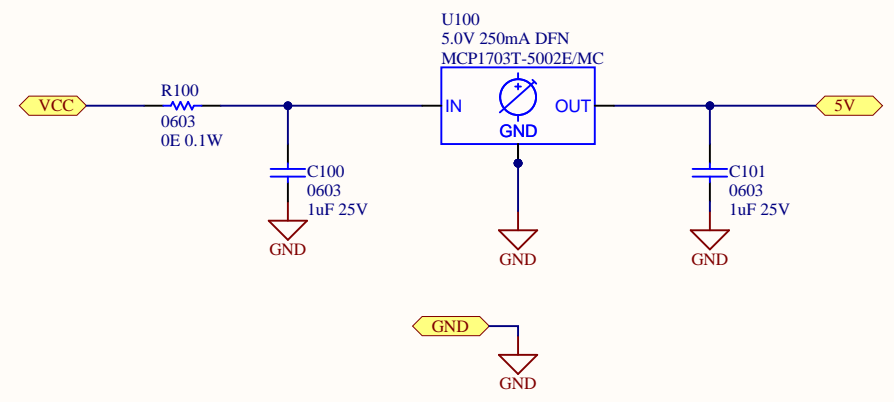
Synchronous Bootstrap Power Supply



Gate Driver

100 V Gate Driver with Bootstrap

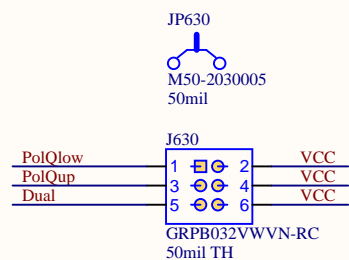
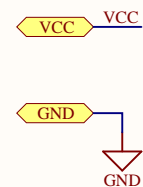
Title AP1017 Rev. 2.0		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States www.epc-co.com	
Size: A	3	Revision: 1	
Date: 10/19/2022	Sheet 3 of 5		
File: AP1017_Rev2_01_100VBGA_GateDriverWboot.SCHDOC			



12 V to 5 V LDO power supply

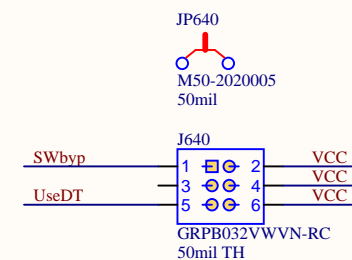
Title AP1006 Rev. 2.0		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States www.epc-co.com	
Size: A	4	Revision: 1	
Date: 10/19/2022	Sheet 4 of 5		
File: AP1006_Rev2_01_12Vto5VinPSU.SCHDOC			





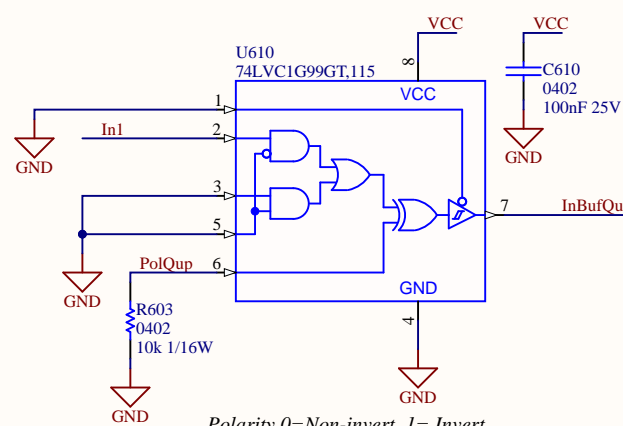
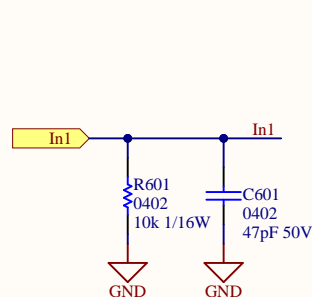
Buck Single Signal
Boost Single Signal
Dual Signal

Dual/Single PWM, Buck, and Boost Mode Selector



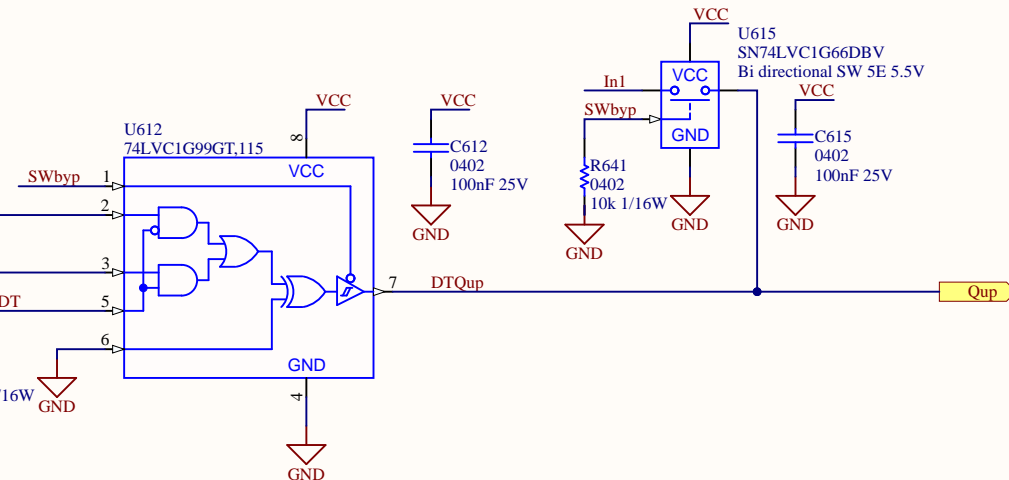
Full Bypass
DT Bypass
No Bypass

Bypass Mode Select

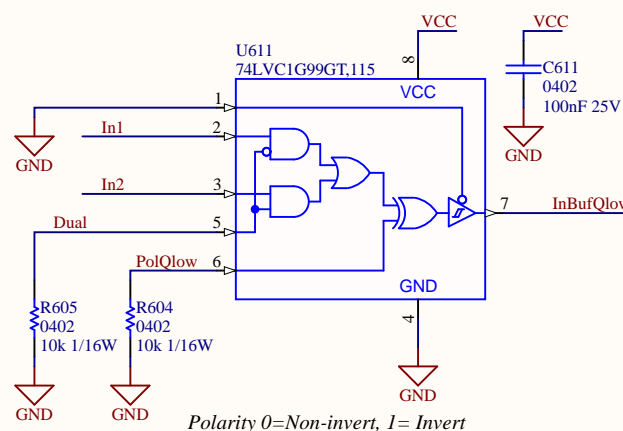
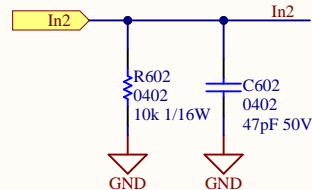


Signal Polarity and Input Buffers

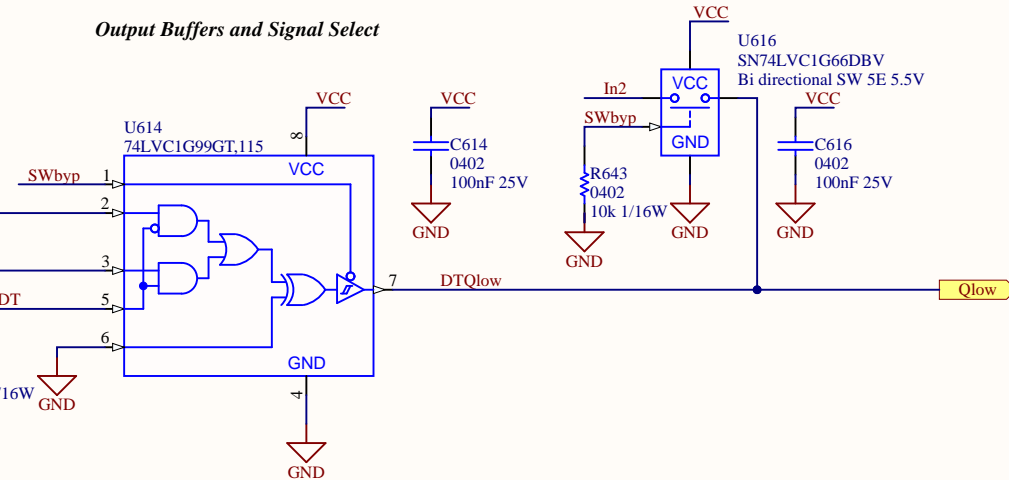
Deadtime Upper
Default = 10 ns



Output Buffers and Signal Select



Deadtime Lower
Default = 10 ns



General Dead-time with Polarity Changer and Bypass

Title AP1010 Rev. 3.0		Efficient Power Conversion 909 N. Pacific Coast Hwy, Ste. 231 El Segundo, CA 90245 United States www.epc-co.com		
Size: A	5	Revision: 1		
Date: 10/19/2022		Sheet 5 of 5		
File: AP1010_Rev3_02_GeneralDeadtime.SCHDOC				