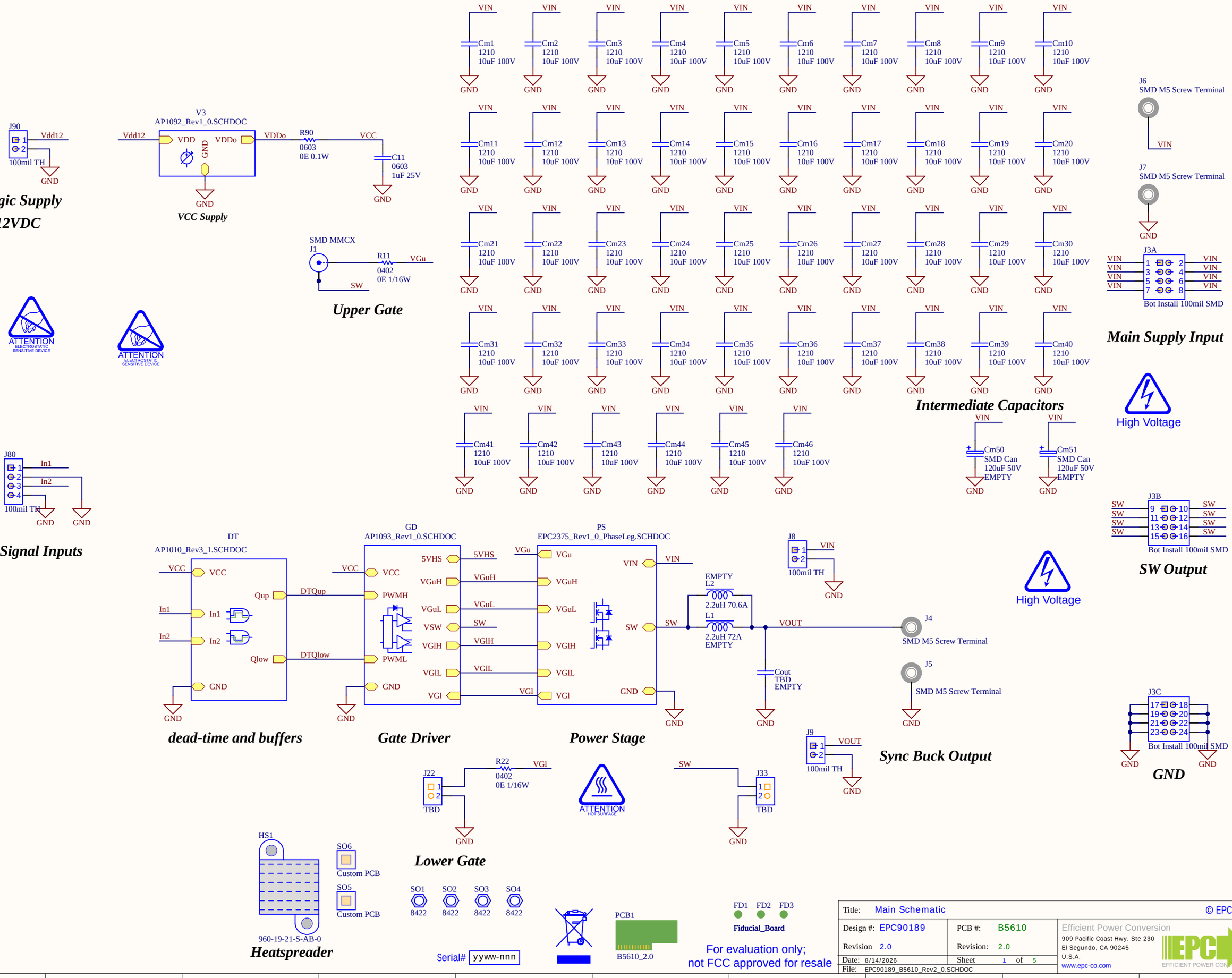
J90
Vdd12
100mil TH
GND
Logic Supply
12VDC
V3
AP1092_Rev1_0.SCHDOC
Vdd12
VDD
GND
VDDo
R90
0603
0E 0.1W
VCC
C11
0603
1uF 25V
VCC Supply
SMD MMCX
J1
R11
0402
0E 1/16W
VGu
SW
Upper Gate
ATTENTION
ELECTROSTATIC SENSITIVE DEVICE
Cm1 1210 10uF 100V
Cm2 1210 10uF 100V
Cm3 1210 10uF 100V
Cm4 1210 10uF 100V
Cm5 1210 10uF 100V
Cm6 1210 10uF 100V
Cm7 1210 10uF 100V
Cm8 1210 10uF 100V
Cm9 1210 10uF 100V
Cm10 1210 10uF 100V
Cm11 1210 10uF 100V
Cm12 1210 10uF 100V
Cm13 1210 10uF 100V
Cm14 1210 10uF 100V
Cm15 1210 10uF 100V
Cm16 1210 10uF 100V
Cm17 1210 10uF 100V
Cm18 1210 10uF 100V
Cm19 1210 10uF 100V
Cm20 1210 10uF 100V
Cm21 1210 10uF 100V
Cm22 1210 10uF 100V
Cm23 1210 10uF 100V
Cm24 1210 10uF 100V
Cm25 1210 10uF 100V
Cm26 1210 10uF 100V
Cm27 1210 10uF 100V
Cm28 1210 10uF 100V
Cm29 1210 10uF 100V
Cm30 1210 10uF 100V
Cm31 1210 10uF 100V
Cm32 1210 10uF 100V
Cm33 1210 10uF 100V
Cm34 1210 10uF 100V
Cm35 1210 10uF 100V
Cm36 1210 10uF 100V
Cm37 1210 10uF 100V
Cm38 1210 10uF 100V
Cm39 1210 10uF 100V
Cm40 1210 10uF 100V
Cm41 1210 10uF 100V
Cm42 1210 10uF 100V
Cm43 1210 10uF 100V
Cm44 1210 10uF 100V
Cm45 1210 10uF 100V
Cm46 1210 10uF 100V
Intermediate Capacitors
Cm50 SMD Can 120uF 50V EMPTY
Cm51 SMD Can 120uF 50V EMPTY
J6
SMD M5 Screw Terminal
J7
SMD M5 Screw Terminal
J3A
Bot Install 100mil SMD
Main Supply Input
High Voltage
J80
In1
In2
100mil TH
Signal Inputs
DT
AP1010_Rev3_1.SCHDOC
VCC
In1
In2
Qup
Qlow
DTQup
DTQlow
dead-time and buffers
GD
AP1093_Rev1_0.SCHDOC
PWMH
PWML
5VHS
VGuH
VGuL
VSW
VGlH
VGlL
VGl
Gate Driver
PS
EPC2375_Rev1_0_PhaseLeg.SCHDOC
VGu
VIN
SW
Power Stage
J8
100mil TH
EMPTY
L2
2.2uH 70.6A
L1
2.2uH 72A
EMPTY
VOUT
Cout
TBD
EMPTY
J4
SMD M5 Screw Terminal
J5
SMD M5 Screw Terminal
Sync Buck Output
High Voltage
J3B
Bot Install 100mil SMD
SW Output
J3C
Bot Install 100mil SMD
GND
J9
VOUT
100mil TH
J22
R22
0402
0E 1/16W
TBD
Lower Gate
ATTENTION
HOT SURFACE
J33
TBD
HS1
960-19-21-S-AB-0
Heatspreader
SO6
Custom PCB
SO5
Custom PCB
SO1 8422
SO2 8422
SO3 8422
SO4 8422
Serial# yyww-nnn
PCB1
B5610_2.0
FD1 FD2 FD3
Fiducial_Board
For evaluation only;
not FCC approved for resale
Title: Main Schematic
© EPC 2026
Design #: EPC90189
PCB #: B5610
Revision 2.0
Revision: 2.0
Date: 8/14/2026
Sheet 1 of 5
File: EPC90189_B5610_Rev2_0.SCHDOC
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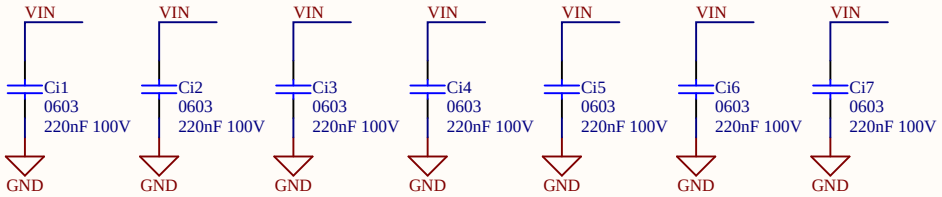
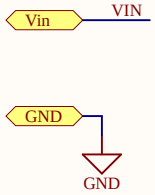
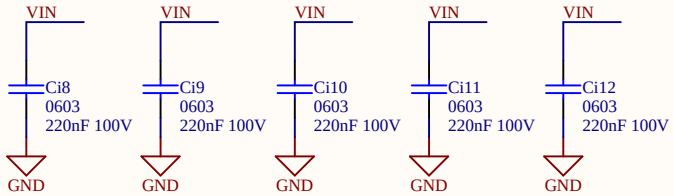
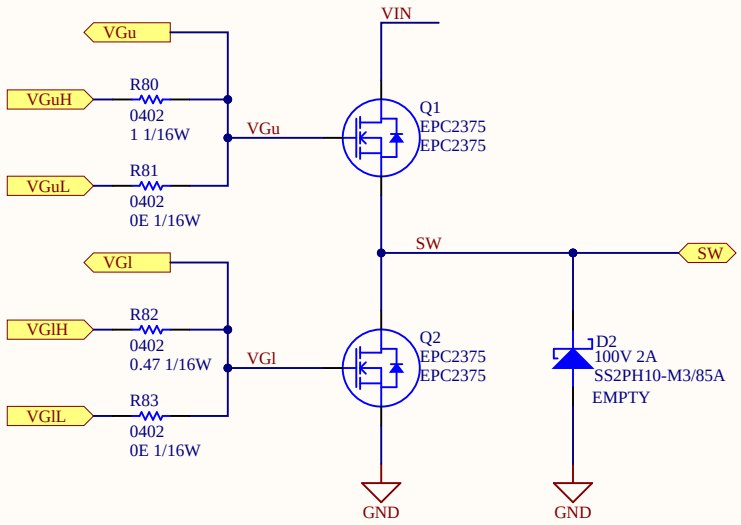


HF loop Capacitors



DC Input
40 Vmax.





Power Stage ***Optional Diodes***

Title:	HB Sub Schematic - Phase Leg		© EPC 2026
Design #:	EPC2375 Phase Leg		
Revision	1.0	P/N#:	EPC2375
Date:	8/14/2026	Sheet	2 of 5
File:	EPC2375_Rev1_0_PhaseLeg.SCHDOC		

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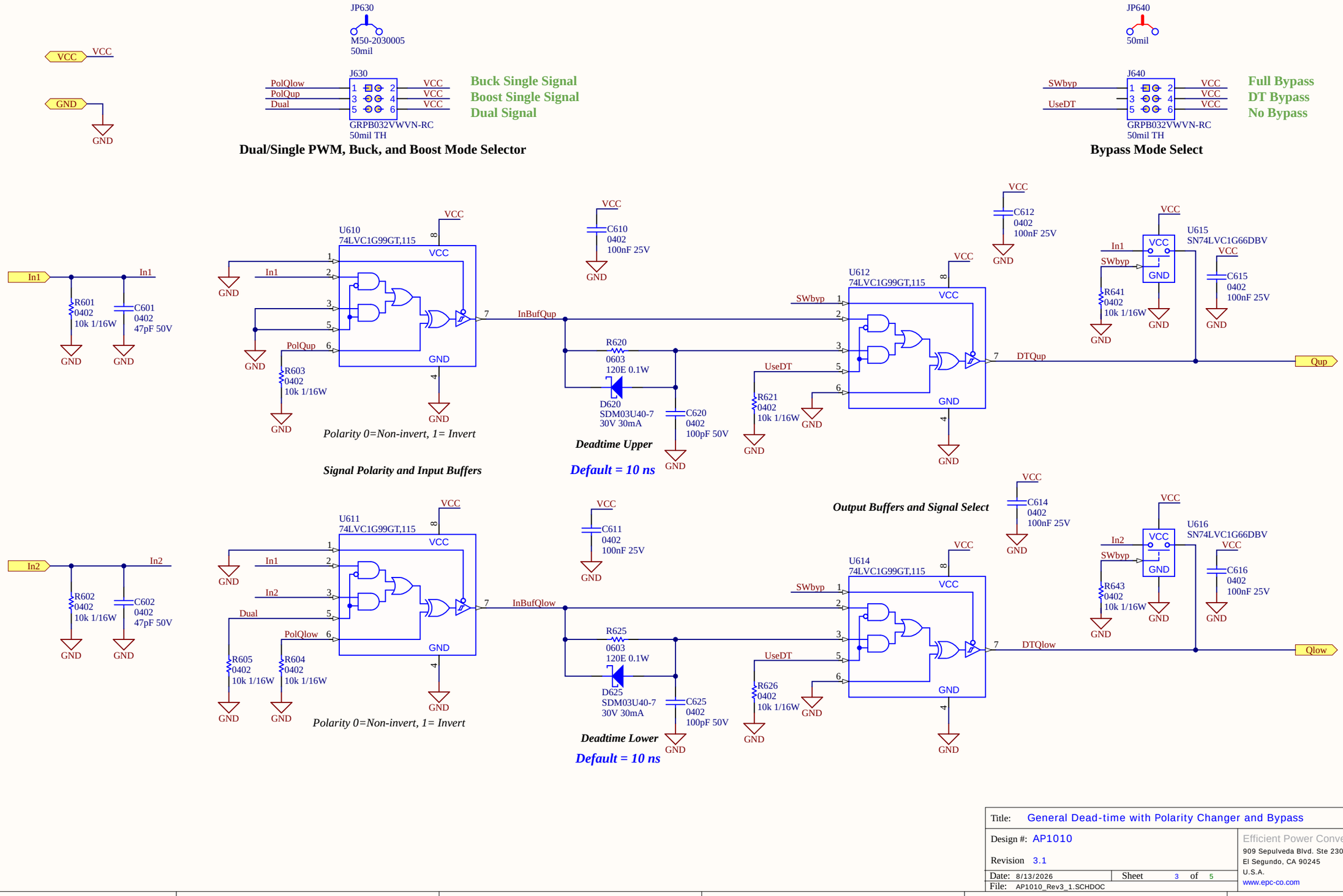

Title:	General Dead-time with Polarity Changer and Bypass
Design #:	AP1010
Revision	3.1
Date:	8/13/2026
Sheet	3 of 5
File:	AP1010_Rev3_1.SCHDOC

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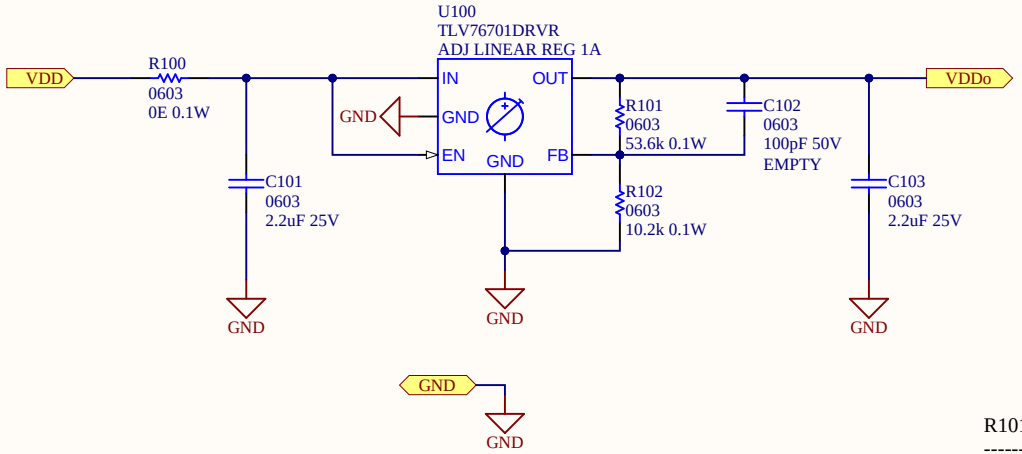

R101	R102	VDDo
53.6k	10.2k	5V
54.9k	10.2k	5.1V
56.2k	10.2k	5.2V
54.9k	9.76k	5.3V
56.2k	10.2k	5.4V
60k	10.2k	5.5V

Title: 16 V to 5 V, 1 A Linear Regulator

Design #: AP1092

Revision 1.0

Date: 8/13/2026 | Sheet 4 of 5

File: AP1092_Rev1_0.SCHDOC

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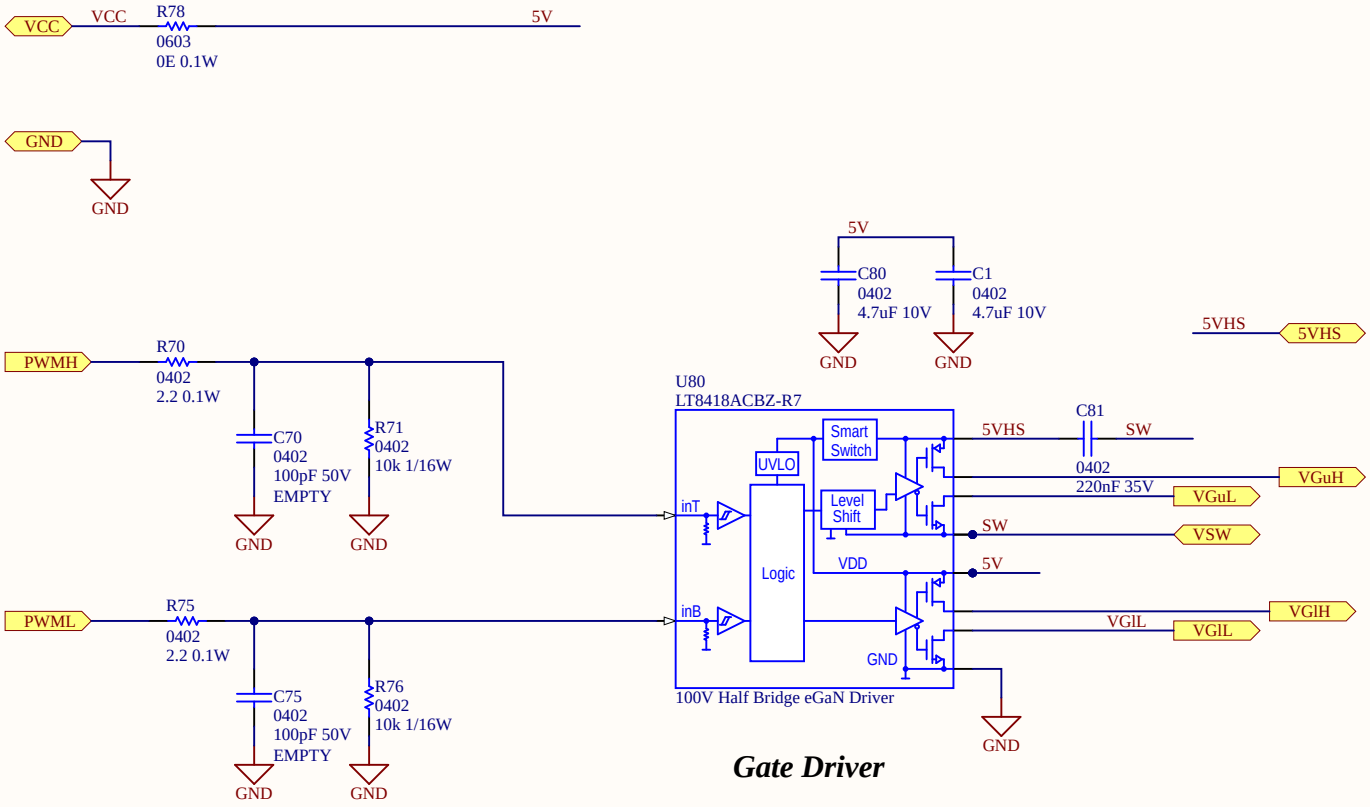

Gate Driver

Title: 100 V HB Gate Driver		© EPC 2026
Design #: AP1093 Revision 1.0		Efficient Power Conversion 909 Pacific Coast Hwy. Ste 230 El Segundo, CA 90245 U.S.A. www.epc-co.com
Date: 8/13/2026	Sheet 5 of 5	
File: AP1093_Rev1_0.SCHDOC		