

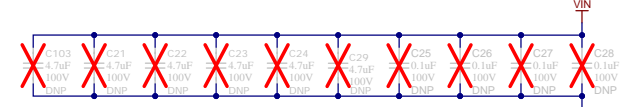
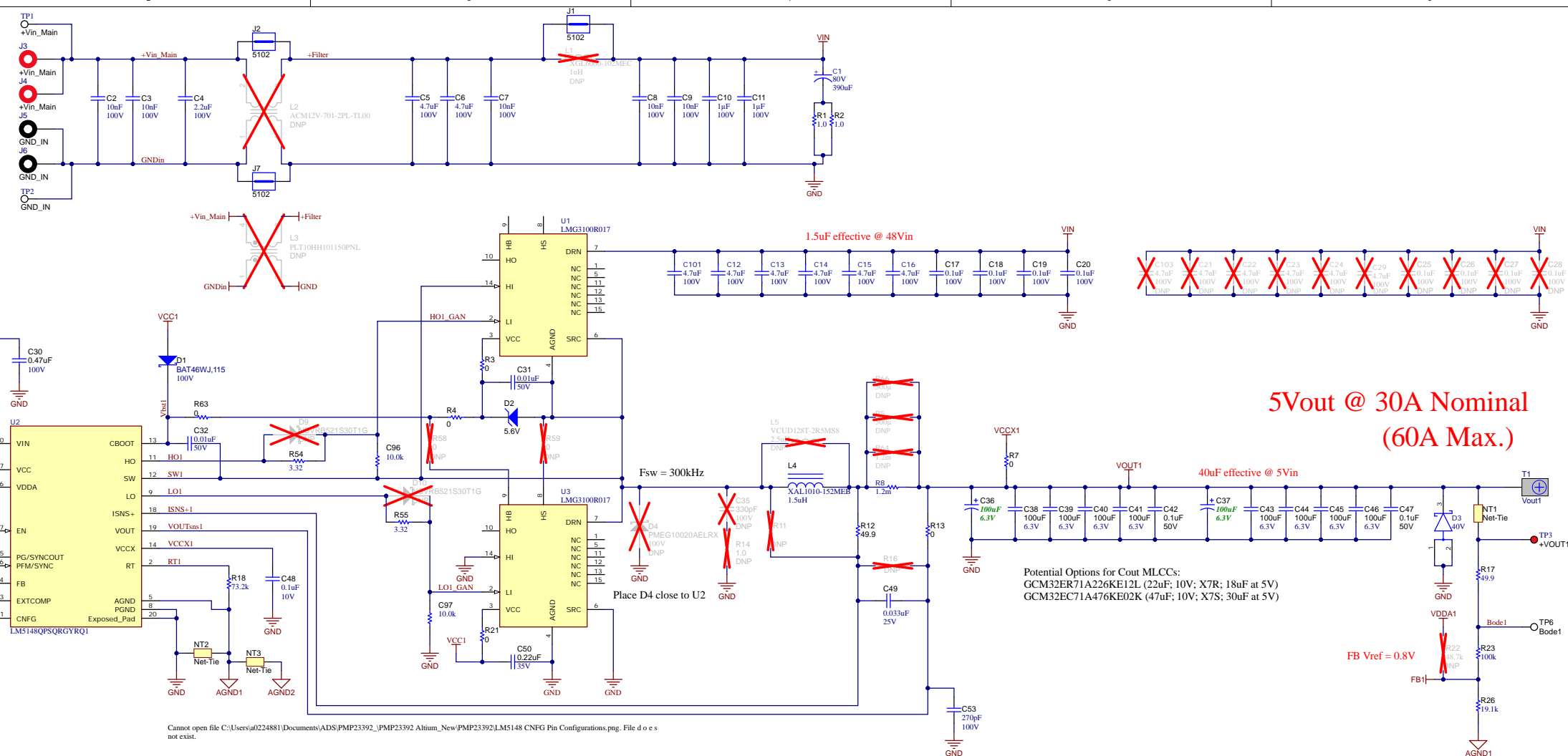
Input Voltage = 48Vin Nominal
(24Vin Min.; 60Vin Max.)

UVLO Rising/Enable = 23.0Vin
UVLO Falling/Disable = 20.0Vin

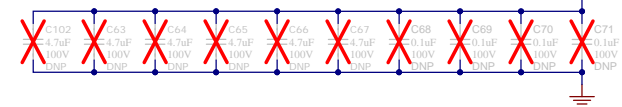
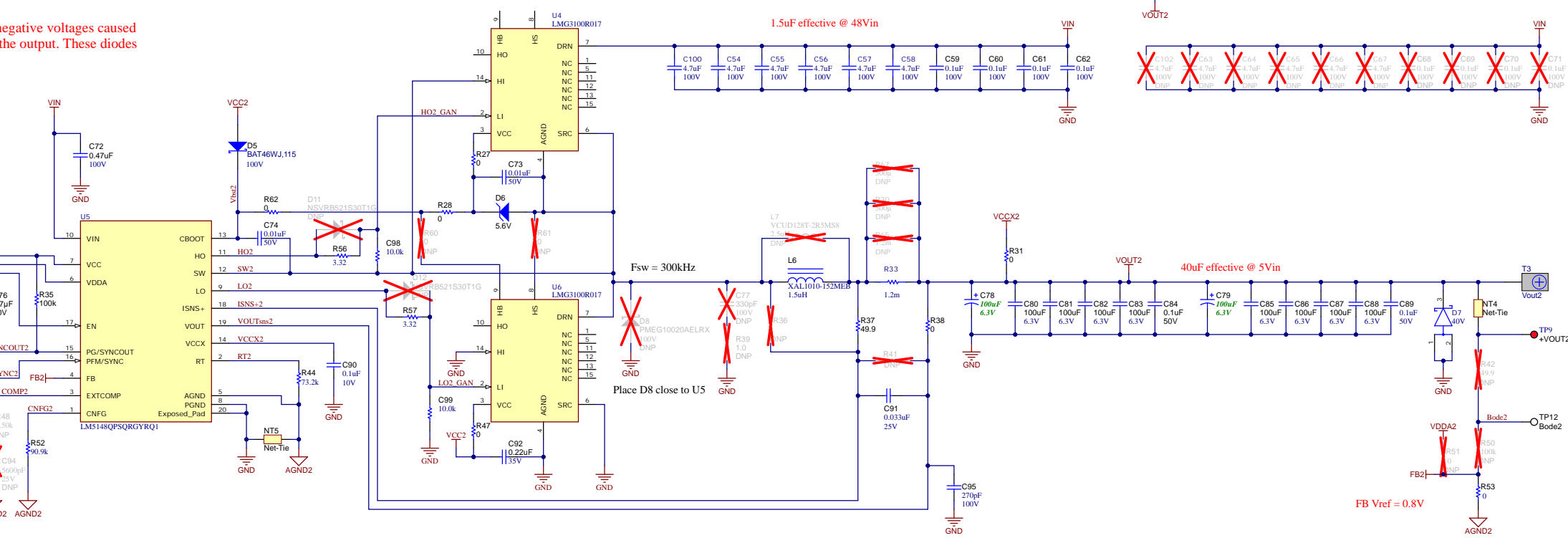
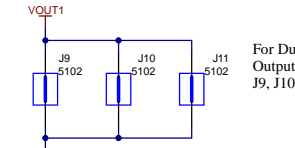
PFM/SYNC pin = HIGH -> PFM
PFM/SYNC pin = LOW -> FPWM

***NOTES:**

1. D1 and D5 can be removed. The LM5148-Q1 contains internal bootstrap diodes.
2. D3 and D7 protect the circuit from potential large negative voltages caused by short circuit applications using long lead wires on the output. These diodes may be omitted on a final system design.



Potential Options for Cout MLCCs:
GCM32ER71A226KE12L (22uF; 10V; X7R; 18uF at 5V)
GCM32EC71A476KE02K (47uF; 10V; X7S; 30uF at 5V)



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Orderable: ChangeMe in variant	Designed for:	Mod. Date: 11/8/2024
TID #: PMP23392	Project Title: Dual-Phase LM5148-Q1 Buck Using GaN FETs	
Number: PMP23392	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 1 of 2
Drawn By:	File: PMP23392_BlkSheet_SchDoc	Size: C
Engineer: Hrag Kasparian	Contact: http://www.ti.com/support	

H1 NY PMS 440 0025 PH
 H2 NY PMS 440 0025 PH
 H3 NY PMS 440 0025 PH
 H4 NY PMS 440 0025 PH

H5 1902C
 H6 1902C
 H7 1902C
 H8 1902C

FID1
 FID2
 FID3
 FID4
 FID5
 FID6

PCB Number: PMP23392
 PCB Rev: A



PCB LOGO
 FCC disclaimer

PCB LOGO
 WEEE logo

Variant/Label Table

Variant	Label Text
001	

LBL1
 PCB Label
 THT-14-423-10
 Size: 0.65" x 0.20 "

Orderable: ChangeMe in variant	Designed for:	Mod. Date: 8/9/2023
TID #: PMP23392	Project Title: Dual-Phase LM5148-Q1 Buck Using GaN FETs	
Number: PMP23392	Rev: -1	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 2 of 2
Drawn By:	File: PMP23392_Hardware_SchDoc	Size: B
Engineer: Hrag Kasparian	Contact: http://www.ti.com/support	

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