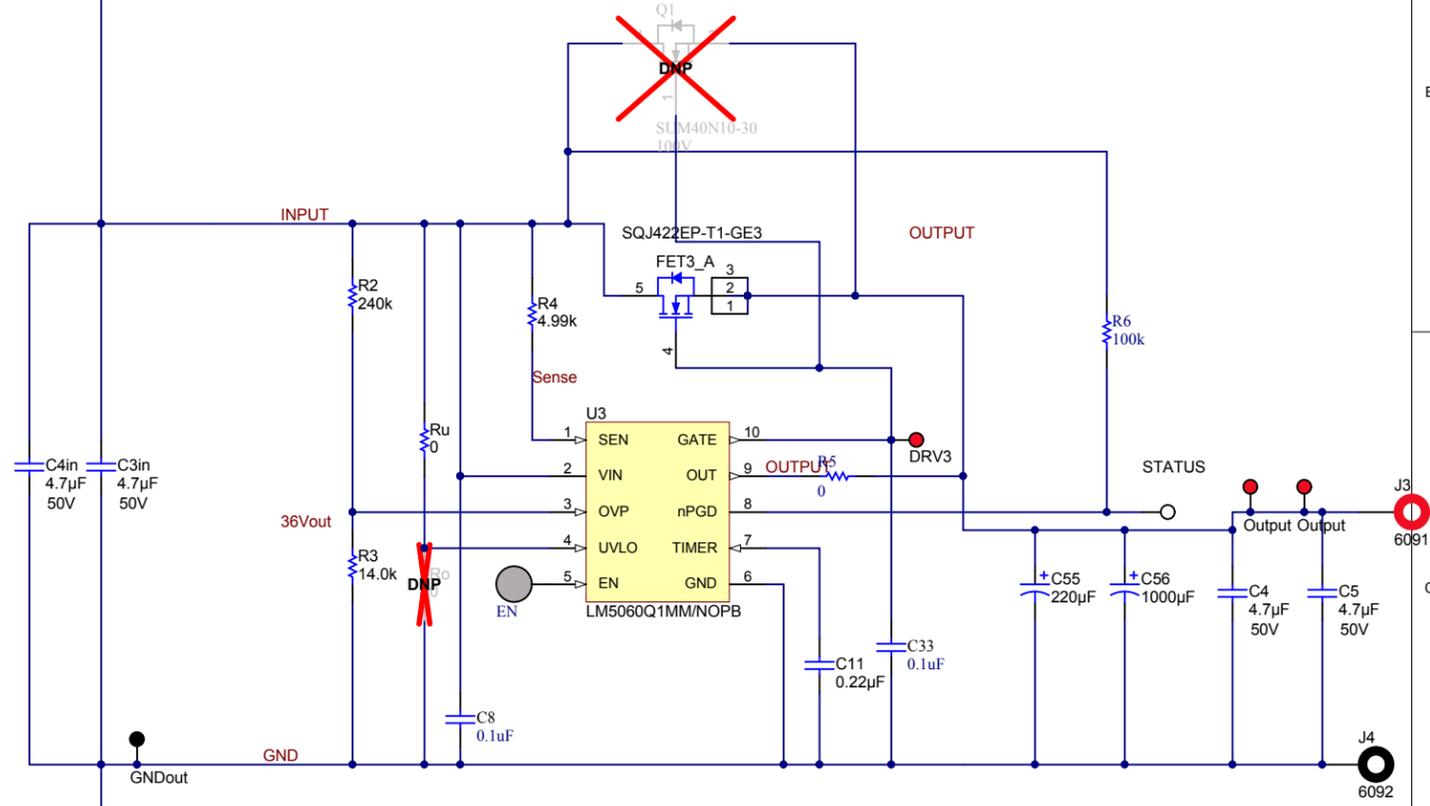


OVP
 $R2 = R3 \cdot (VINMAX - OVPh) / OVPh$
 OVP th = 2.0V typ
 $VinMAX = OVPh + (R2 \cdot OVPh) / R3$

UVLO
 DO NOT POPULATE Ropt IF UVLO NOT USED
 $RUVLO = VIN(min) - UVLOTh / (UVLObias + (UVLOTh / ROPT))$

if OVP not used, DO not populaye R2, R3 short to ground

The drain to source voltage threshold (VDSTH), which is set with the resistor RS
 $VDSTH = (RS \times ISENSE)$ I sense = 18uA typ
 The MOSFET drain to source current threshold is: Idsth = VDSTH/RDSON



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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

H9 SJ-5303 (CLEAR) H10 SJ-5303 (CLEAR) H11 SJ-5303 (CLEAR) H12 SJ-5303 (CLEAR)

~~DNP~~ FID1 ~~DNP~~ FID2 ~~DNP~~ FID3

PCB Number: PMP10748
PCB Rev: E1

PCB
LOGO
Texas Instruments

PCB
LOGO
Pb-Free Symbol

You should delete the nylon screws/standoffs and/or the bumpons as needed for your design (or substitute other parts from Hardware.IntLib). Bumpons are cheaper, but provide less clearance.

Deleting anything else from this page may result in your EVM submission being rejected (until you add them back).

Update the Label Text in the Label Table as needed for each Assembly Variant.

You can delete this note too.

Label Table	
Variant	Label Text
001	UVLO Optional

ZZ2
Assembly Note
These assemblies are ESD sensitive, ESD precautions shall be observed.

ZZ3
Assembly Note
These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

ZZ4
Assembly Note
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

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TID #: TID	Project Title: Reverse Polarity + OV, OC and UV Protection		
Number: PMP10748	Rev: E1	Sheet: 3 of 3	
SVN Rev: Version control disabled	Assembly Variant: 001	File: TID_Hardware.SchDoc	
Drawn By: Engineer: Kaiser Ali	Contact: http://www.ti.com/support	Size: B	

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