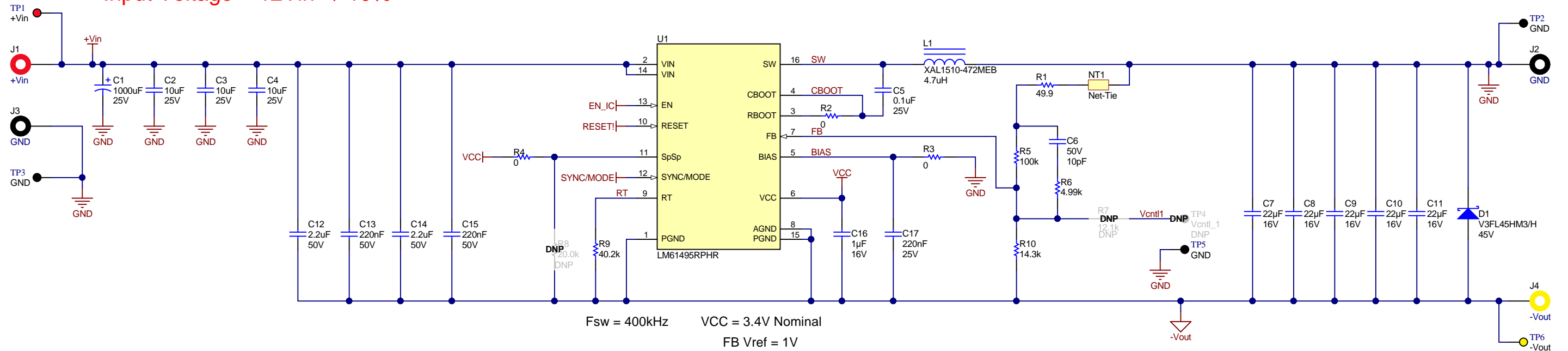


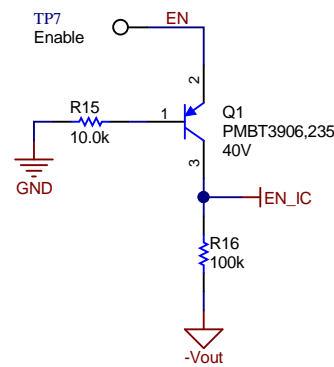
Input Voltage = 12Vin +/-10%



Fsw = 400kHz  
VCC = 3.4V Nominal  
FB Vref = 1V

-8Vout @ 2.7A (4A Max.)

Enable Sub-Circuit

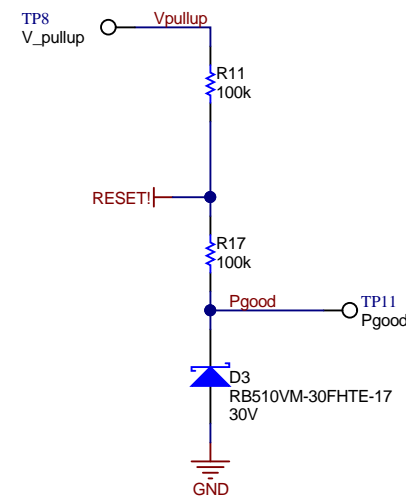


Enable:

To enable the converter, apply a voltage on the TP7 testpoint, between 1V and 24V (Abs. Max.), relative to GND.

To disable the converter, apply a voltage on the TP7 testpoint, below 0.3V, relative to GND, or leave floating.

Pgood Sub-Circuit

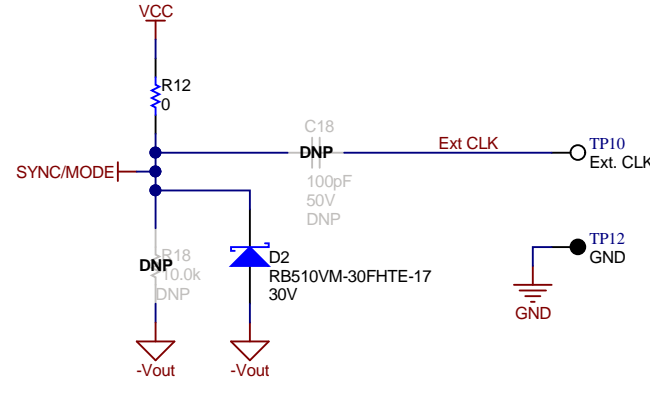


Pgood :

Apply the desired pullup voltage to TP8. This should be no more than 8V Abs. Max., relative to GND!

The Power Good signal will be on the TP11 testpoint and will swing between the provided Pgood pullup voltage provided by user on TP8 and near 0V.

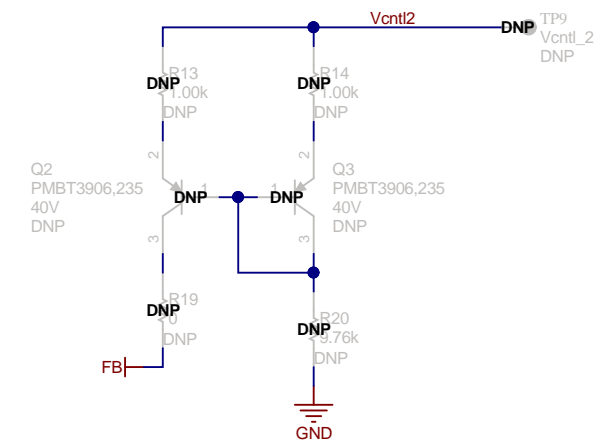
Mode



Mode Options:

1. For FPWM operation: install R12; uninstall R18.
2. For PFM operation: install R18; uninstall R12
3. To synchronize to external clock signal, configure in PFM mode, install C18, and provide external clock signal to testpoint TP10 ("Ext. CLK"), referenced to GND (TP12).

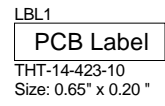
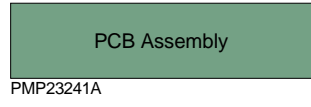
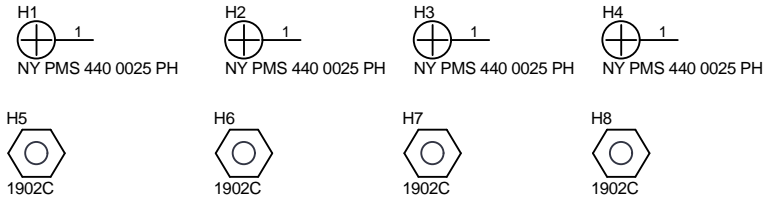
Current Mirror Vout Adjust method



Output Voltage Adjustment Method:

1. If using the current mirror sub-circuit for adjusting the output: install R19 and R20; change R5 to 11Kohm.
2. Apply a 0V to 5V control signal to TP9 to adjust the output voltage between -12V to -7.5V, respectively.

Design is built on PMP23241A PCB



Variant/Label Table	
Variant	Label Text
001	

Orderable: <a href="#">ChangeMe in variant</a>	Designed for:	Mod. Date: 12/22/2022
TID #: PMP23333	Project Title: Synchronous Inverting Buck-Boost Converter	
Number: PMP23333	Rev: -1	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 2 of 2
Drawn By:	File: PMP23333_Hardware.SchDoc	Size: B
Engineer: Hrag Kasparian	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	TEXAS INSTRUMENTS <a href="http://www.ti.com">http://www.ti.com</a> © Texas Instruments 2023

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