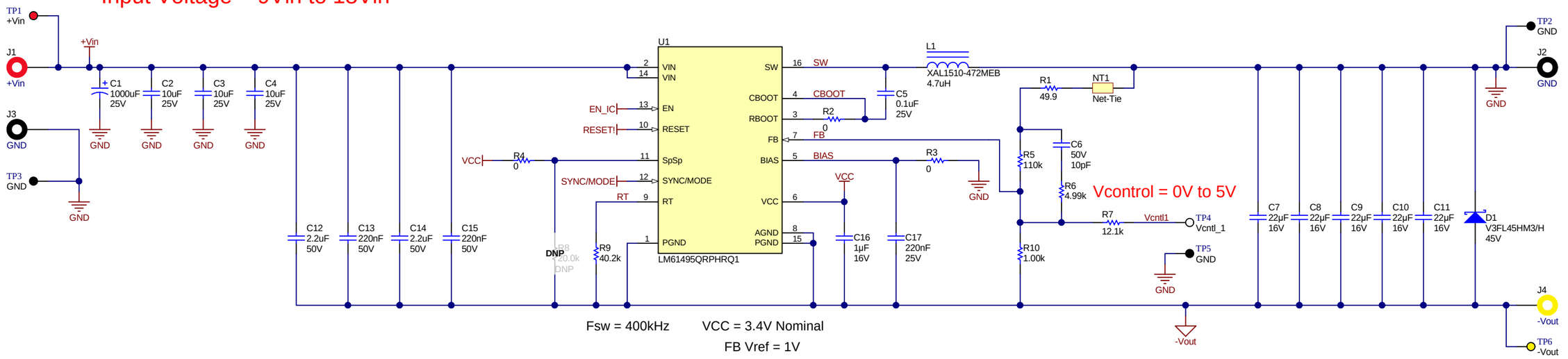
Input Voltage = 9Vin to 18Vin



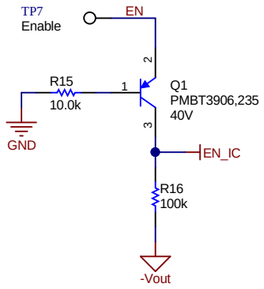
Vcontrol = 0V to 5V

Fsw = 400kHz VCC = 3.4V Nominal

FB Vref = 1V

-7.5Vout to -12Vout @ 5A

Enable Sub-Circuit

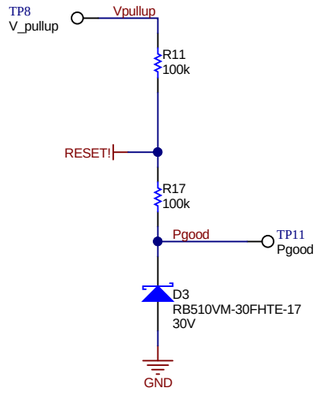


Enable:

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

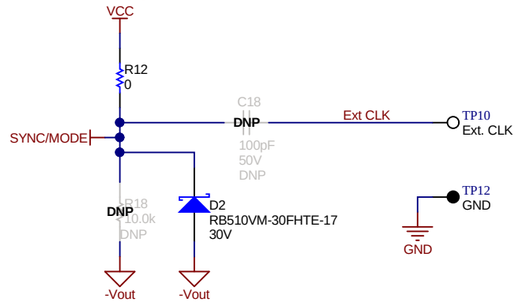


Pgood :

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.

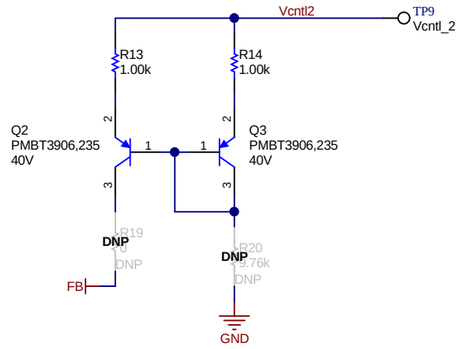
Mode



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 TP10, 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 th output voltage between -12V to -7.5V, respectively.

Orderable: ChangeMe in variant	Designed for:	Mod. Date: 4/8/2022
TID #: PMP23241	Project Title: Inverting Buck-Boost with Adjustable Output	
Number: PMP23241 Rev: -1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 1 of 2
Drawn By:	File: IBB Adjustable Output_BlankSheet.SchDoc	Size: B
Engineer: Hrag Kasparian	Contact: http://www.ti.com/support	

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H1 1
NY PMS 440 0025 PH

H2 1
NY PMS 440 0025 PH

H3 1
NY PMS 440 0025 PH

H4 1
NY PMS 440 0025 PH

H5
1902C

H6
1902C

H7
1902C

H8
1902C

PCB Number: PMP23241
PCB Rev: A

CE Mark

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: 4/6/2022
TID #: PMP23241		Project Title: Inverting Buck-Boost with Adjustable Output	
Number: PMP23241	Rev: -1	Sheet Title:	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 2 of 2
Drawn By:		File: IBB Adjustable Output_Hardware.SchDoc	Size: B
Engineer: Hrag Kasparian		Contact: http://www.ti.com/support	

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