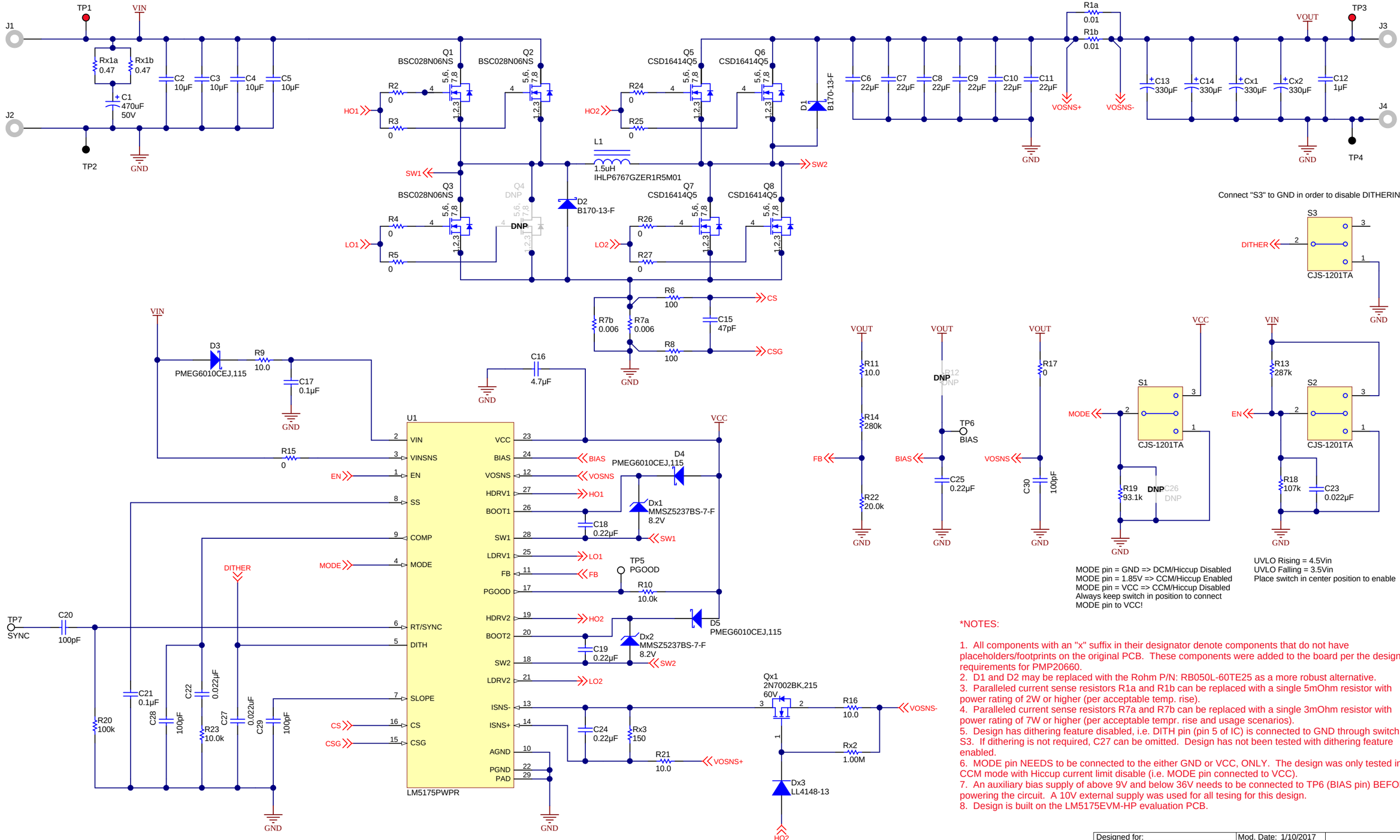
Input Voltage = 5Vin to 13Vin

12Vout @ 11A CC/CV



*NOTES:

1. All components with an "x" suffix in their designator denote components that do not have placeholders/footprints on the original PCB. These components were added to the board per the design requirements for PMP20660.
2. D1 and D2 may be replaced with the Rohm P/N: RB050L-60TE25 as a more robust alternative.
3. Paralleled current sense resistors R1a and R1b can be replaced with a single 5mOhm resistor with power rating of 2W or higher (per acceptable temp. rise).
4. Paralleled current sense resistors R7a and R7b can be replaced with a single 3mOhm resistor with power rating of 7W or higher (per acceptable tempr. rise and usage scenarios).
5. Design has dithering feature disabled, i.e. DITH pin (pin 5 of IC) is connected to GND through switch S3. If dithering is not required, C27 can be omitted. Design has not been tested with dithering feature enabled.
6. MODE pin NEEDS to be connected to the either GND or VCC, ONLY. The design was only tested in CCM mode with Hiccup current limit disable (i.e. MODE pin connected to VCC).
7. An auxiliary bias supply of above 9V and below 36V needs to be connected to TP6 (BIAS pin) BEFORE powering the circuit. A 10V external supply was used for all tesing for this design.
8. Design is built on the LM5175EVM-HP evaluation PCB.

Designed for:		Mod. Date: 1/10/2017	
Project Title: LM5175 4-SW Buck-Boost with CC/CV Output			
Number: PMP20660	Rev: A	Sheet Title: Schematic	
SVN Rev: Version control disabled		Assembly Variant: 001	Sheet: 1 of 2
Drawn By: Kim Nielson		File: PMP20660_Schematic.SchDoc	Size: B
Engineer: Hrag Kasparian		Contact: http://www.ti.com/support	

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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

DNP
FID1

DNP
FID2

DNP
FID3

!PCBA1
PCB Assembly
LM5175EVM-HP PCB

PCB
LOGO
FCC disclaimer

CAUTION HOT SURFACE

LBL1
PCB Label
LM5175EVM-HP

Label Table	
Variant	Label Text
001	

Designed for:		Mod. Date: 1/6/2017	
Project Title: LM5175 4-SW Buck-Boost with CC/CV Output			
Number: PMP20660	Rev: A	Sheet Title: Hardware	
SVN Rev: Version control disabled		Assembly Variant: 001	Sheet: 2 of 2
Drawn By: a0413446		File: PMP20660_Hardware.SchDoc	Size: B
Engineer: Hrag Kasparian		Contact: http://www.ti.com/support	

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