



\*. Discharge phase selects only 1 of the two current sensor (U109 or U110).  
 \*. If isolators are used to drive high side GaN FETs, DNP R108 and R109.  
 \*. If the daughter card is use for discharge phase, populate R120 and R122. Otherwise, populate R110 and R121.

Vbat,min=28.6V; Vbat,max=44V (Assume 11s in series)

Vbus=50V

PCB LOGO  
 WEEE log FCC disclaimer  
 Pb-Free Symbol

PCB Number: PMP23421\_PS  
 PCB Rev: C



Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

Orderable:	Designed for: Public Release	Mod. Date: 7/11/2024
TID #:	Project Title: 4-sw Buck Boost	
Number: PMP23421_PS Rev: C	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 2 of 8
Drawn By:	File: PMP23421_PS.SchDoc	Size: B
Engineer: Sheng-Yang Yu	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	

TEXAS INSTRUMENTS  
<http://www.ti.com>  
 © Texas Instruments 2024

## IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATA SHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to [TI's Terms of Sale](#) or other applicable terms available either on [ti.com](https://www.ti.com) or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.

TI objects to and rejects any additional or different terms you may have proposed.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265  
Copyright © 2024, Texas Instruments Incorporated