



Input voltage range = 20V to 60V (48V nom)

Fsw = 440kHz, RT = 52.3k

Testing will start with DRSS off, Rcnfg = 41.2k
Soft-Start timing 4.6ms, RSS = 20k

Default is that EN will turn on when input voltage is above the UVLO threshold, to disable need to jumper EN to GND

PFM/SYNC by default is connected to GND through a 10k res and in PPFM mode
First power will have tied to GND for forced PPFM

Compensation values are not finalized

Remove 48.7k and populate the 3 resistors with value shown with Bode plot showing only

12Vout @ 50A

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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 6/3/2025
TID #: N/A	Project Title: Automotive Dual-Phase buck converter with GaN de	
Number: PMP23591	Rev: B	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 1 of 3
Drawn By:	File: PMP23591_SchDoc	Size: B
Engineer: Ahanaf Ahmed	Contact: http://www.ti.com/support	



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

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

PCB Number: PMP23591
 PCB Rev: B

PCB LOGO
 Texas Instruments



PCB LOGO
 FCC disclaimer

PCB LOGO
 WEEE logo



Variant/Label Table	
Variant	Label Text
001	ChangeMe!
002	ChangeMe!

LBL1
 PCB Label
 THT-14-423-10
 Size: 0.65" x 0.20 "

ZZ1
 Label Assembly Note
 This Assembly Note is for PCB labels only

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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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/12/2025	<p>TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2024</p>
TID #: N/A	Project Title: Automotive Dual-Phase buck converter with GaN de		
Number: PMP23591	Rev: B	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 3 of 3	
Drawn By:	File: PMP23591_Hardware.SchDoc	Size: B	
Engineer: Ahanaf Ahmed	Contact: http://www.ti.com/support		

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