



Use 3.3V 100kHz PWM signal

VPWM=0% for VOUT=9.2V
 VPWM=50% for VOUT=8.1V
 VPWM=100% for VOUT=7.0V

I2C Interface tested with TI USB2ANY
 Use external pullups to 3.3V on SCL & SDA < 10k ohm
 Jumper pins 1 to 2 on J8, J9, J10 for Address = 50
 Register 00 for WA battery charge current 12.5A max
 Register 01 for WB input current 6A max
 Full scale Byte FF hex
 Half scale Byte 80 hex
 Zero scale Byte 00 hex

Trickle charge for VBAT < 6.0V

$0.5A * 2m\Omega w/ 200V/V \rightarrow 0.2V$
 $5A * 2m\Omega w/ 200V/V \rightarrow 2V$

$1A * 1m\Omega w/ 200V/V \rightarrow 0.2V$
 $10A * 1m\Omega w/ 200V/V \rightarrow 2V$

This design was built on PMP10594 Rev A PC board.
 Reference designator > 100 denote components not on the original layout.
 Designators in () denote the location installed on the Rev A PC board.

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Orderable: N/A	Designed for: Public Release	Mod. Date: 12/4/2017
TID #: PMP10594	Project Title: LM5175 Buck/Boost Battery Charger	
Number: PMP10594	Rev: A	Sheet Title:
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 1 of 2
Drawn By:	File: PMP10594_REVA_Sh1_mod4.SchDoc	Size: B
Engineer: Robert Sheehan	Contact: http://www.ti.com/support	



Revision History	
Revision	Notes

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

PCB Number: PMP10594
PCB Rev: A

PCB LOGO
Texas Instruments

Label Table	
Variant	Label Text
001	

ZZ1
Assembly Note
These assemblies are ESD sensitive, ESD precautions shall be observed.

ZZ2
Assembly Note
These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

ZZ3
Assembly Note
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

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TID #: PMP10594	Project Title: LM5175 Buck/Boost Battery Charger	Sheet: 2 of 2	
Number: PMP10594	Rev: A	Sheet Title:	© Texas Instruments 2014
SVN Rev: Version control disabled	Assembly Variant: 001	File: PMP10594_REVA_Sh2.SchDoc	
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