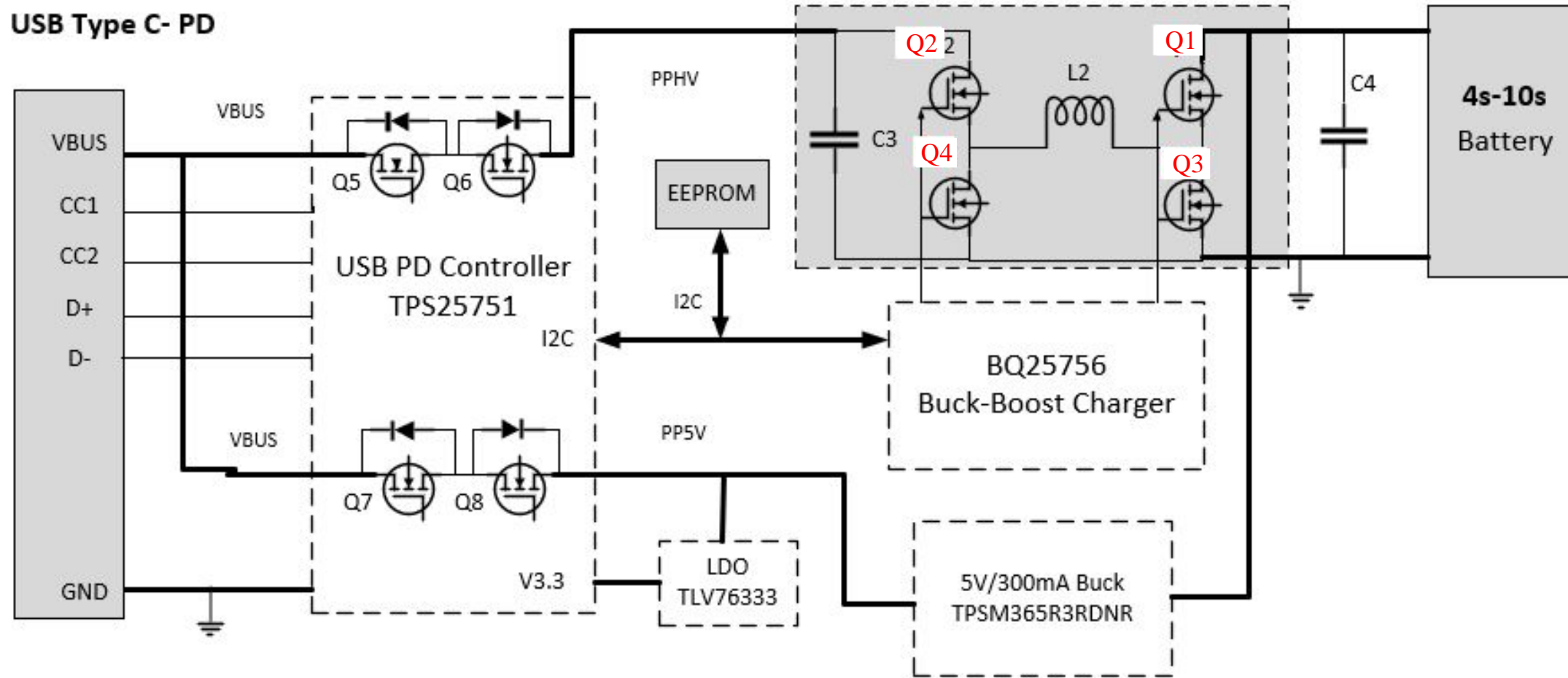


USB 5V/9V/15V/20V
BAT: 4S-10S
Voltage: Max 42V
Pmax=100W

Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A

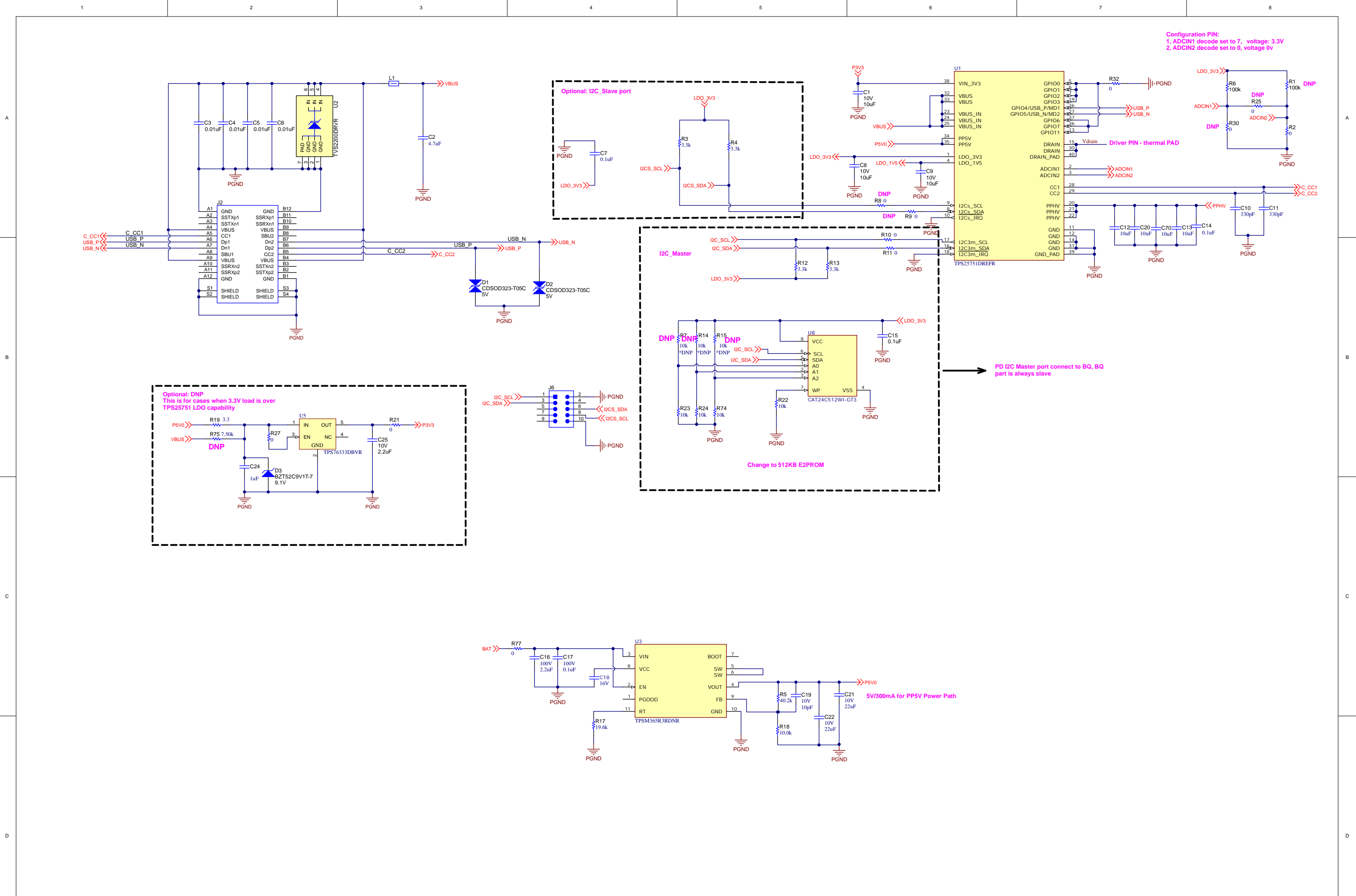
PMP41062

USB Type C- PD



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/4/2024	
TID #: PMP41062	Project Title: 100W USB Type C		
Number: PMP41062	Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 1 of 4	
Drawn By:	File: 100W SBD_SchDoc	Size: A2	http://www.ti.com
Engineer: Max Wang	Contact: http://www.ti.com/support		© Texas Instruments, 2018

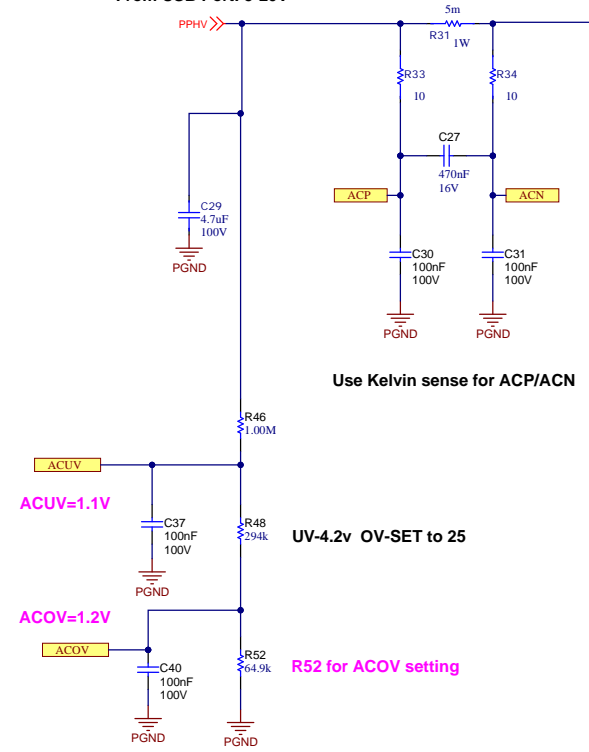


Configuration PIN:
 1, ADCIN1 decode set to 7, voltage: 3.3V
 2, ADCIN2 decode set to 0, voltage 0v

PD I2C Master port connect to BQ, BQ
 part is always slave

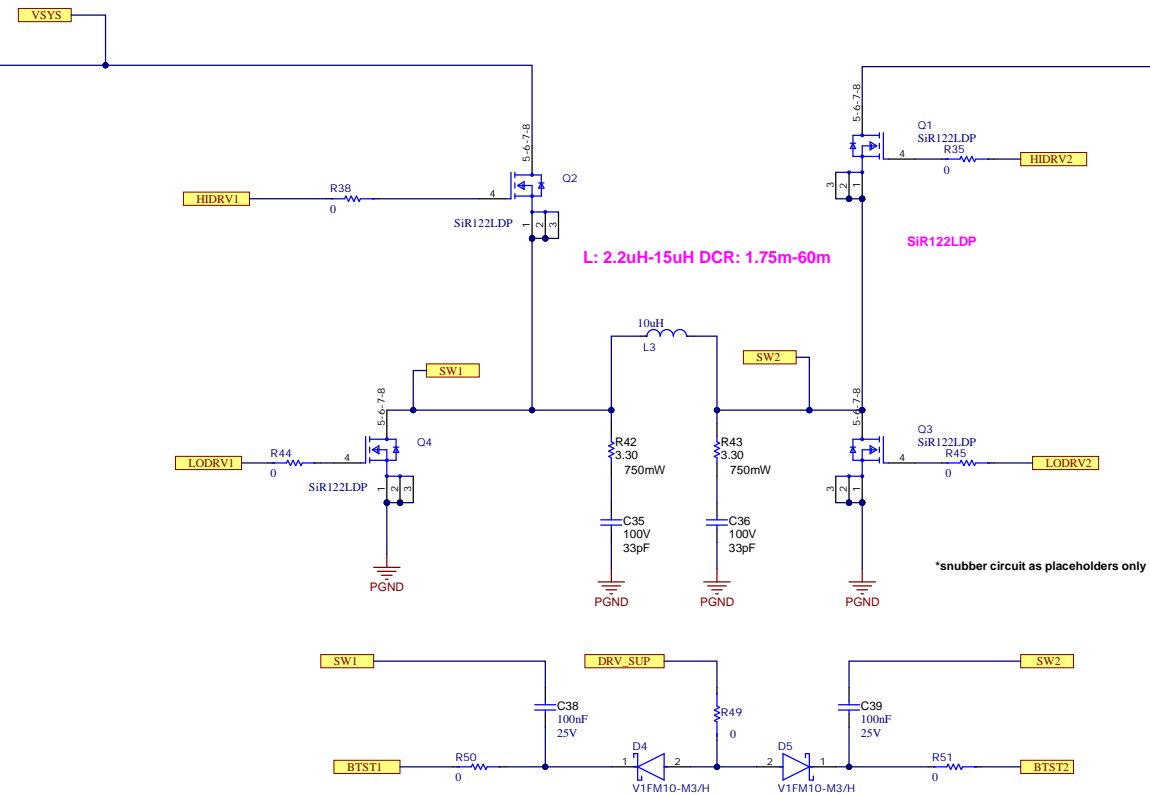
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From USB Port: 5-20V



RENG comes from PPHV at Charging mode
 RENGL comes from BAT at dis-Charging mode(Higher loss due to High cell)
 REGN: LDO 5V/70mA
 EXT-DRV supply is needed if high driver loss and associated generated loss from REGN path

Optional:
 I2C port to access BQ device through BQ studio

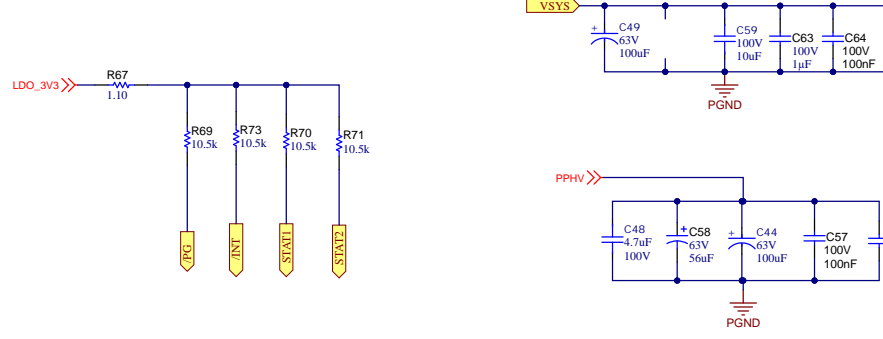


PIN33 is for Bias Pin

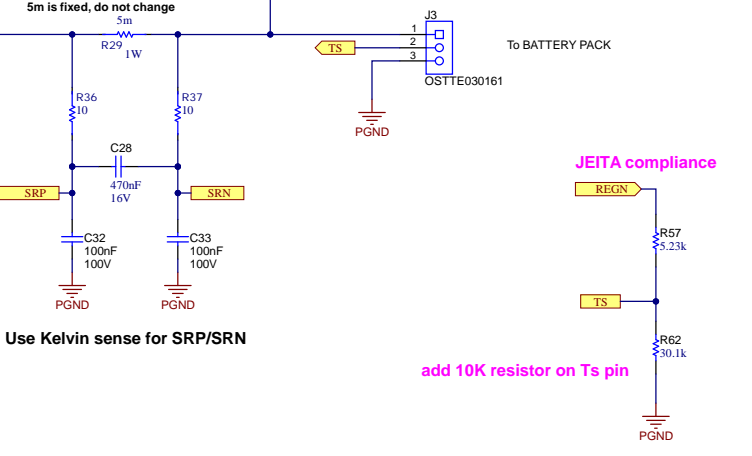
PIN32 is for reverse mode voltage regulation

EVM Set to 300KHz

Default 3K



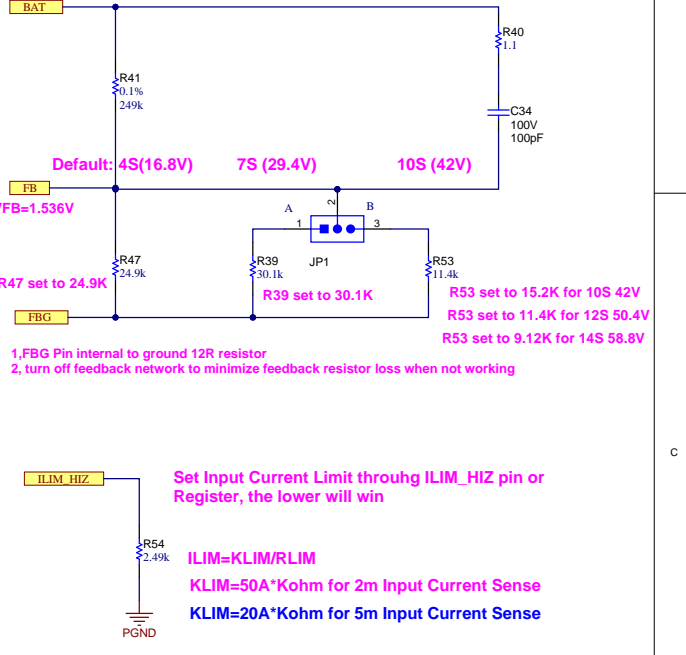
VOUT/VBAT 1S-10S 3V to 42V



add 10K resistor on Ts pin

4S/7S/10S BAT Selection Table

	VBAT
Default	4S(16.8V)
JP_A	7S(29.4V)
JP_B	10S(42V)



Set Input Current Limit through ILIM_HIZ pin or Register, the lower will win
 ILIM=KLIM/RLIM
 KLIM=50A*Kohm for 2m Input Current Sense
 KLIM=20A*Kohm for 5m Input Current Sense

Set Charge current through ICHG pin or Register, the lower will win
 ICHG=KICHG/RCHG
 KICHG=50A*Kohm

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A

A

B

B

C

C

D

D

PCB Number: PMP41062
PCB Rev: E1

PCB
LOGO
Texas Instruments

PCB
LOGO
FCC disclaimer

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: 6/12/2023	 TEXAS INSTRUMENTS
TID #: PMP41062	Project Title: 100W USB Type C		
Number: PMP41062 Rev: E1	Sheet Title:	Sheet: 4 of 4	
SVN Rev.: Not in version control	Assembly Variant: 001	File: 100W USB Type C Charger_Hardware.SchDoc Size: A2	
Drawn By: Max Wang	Engineer: Max Wang	Contact: http://www.ti.com/support	http://www.ti.com
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