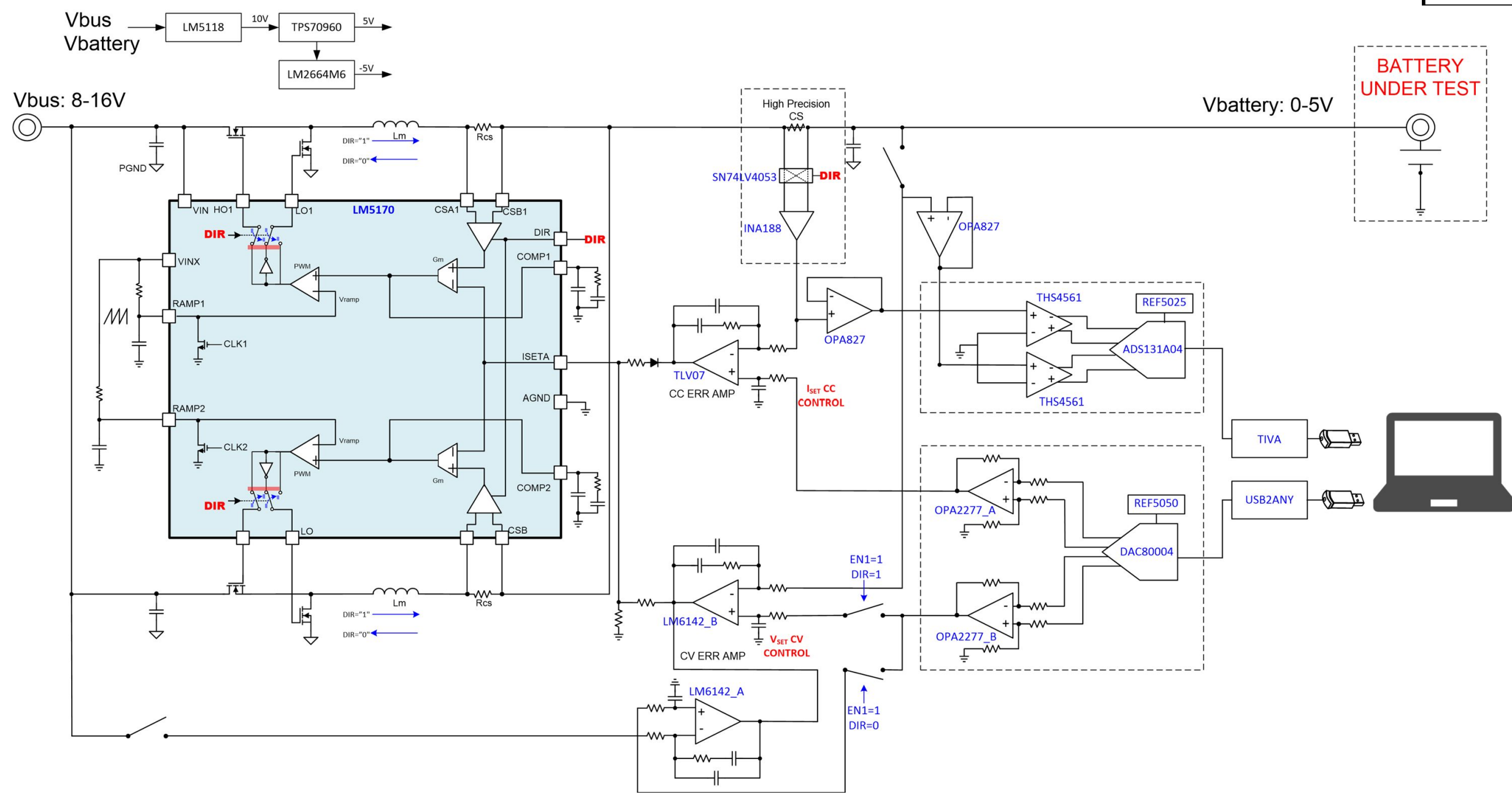


Revision History	
Revision	Notes



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Number: TIDA-01040	Rev: A	Sheet Title: Block Diagram	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 1 of 11	
Drawn By:	File: SV601272A-Cover.SchDoc	Size: B	
Engineer: Sean Zhou	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 2205 H6 2205 H7 2205 H8 2205

FID1 FID2 FID3

PCB Number: TIDA-01040
PCB Rev: A

Logo2
PCB
LOGO
Pb-Free Symbol
PCB
LOGO
FCC disclaimer



Label Table	
Variant	Label Text
001	
002	

LBL1
PCB Label

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

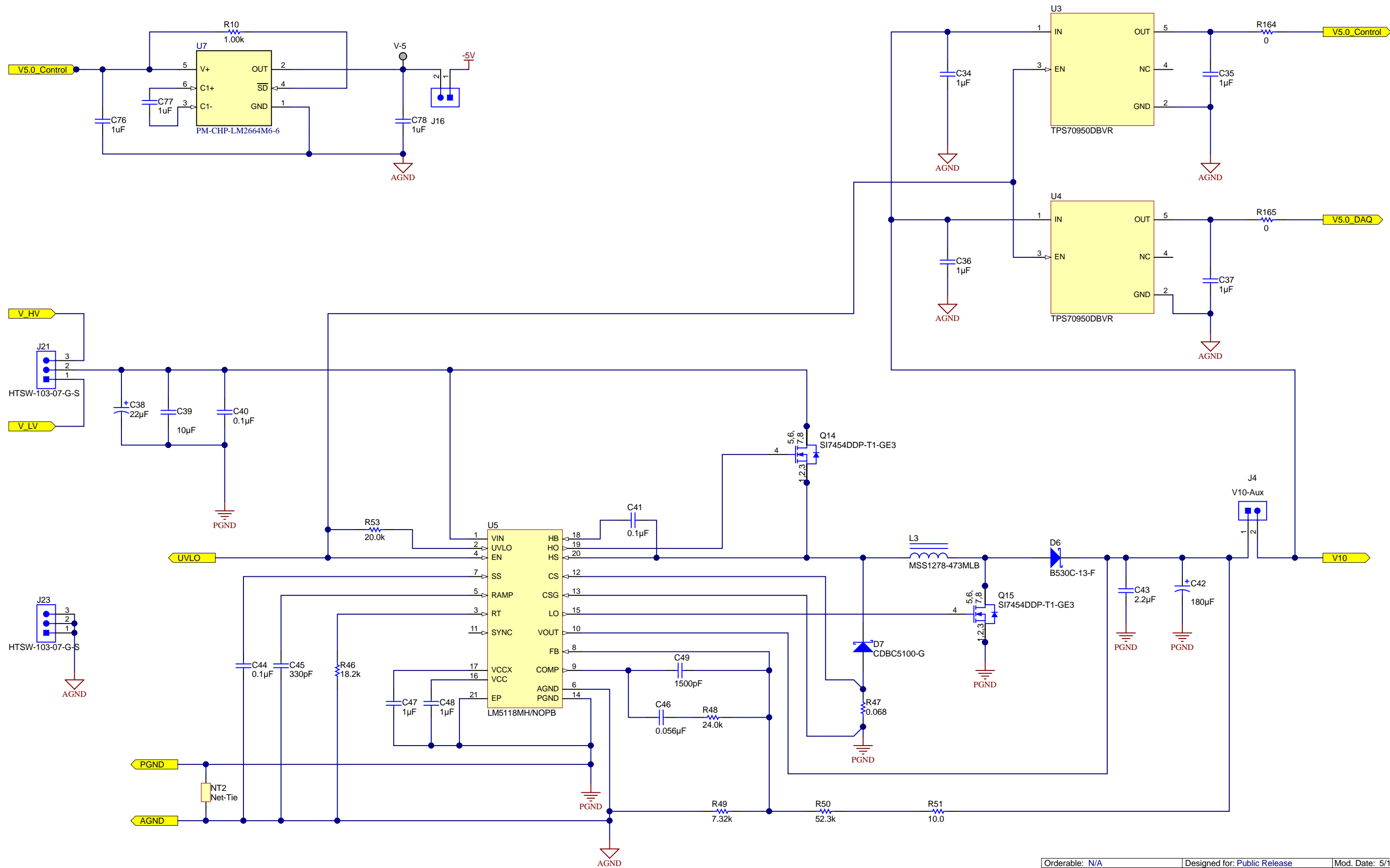
ZZ2
Assembly Note
These assemblies are ESD sensitive, ESD precautions shall be observed.

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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TID #: TIDA-01040	Project Title: Battery Tester Reference Design for High Current Ap	Sheet: 2 of 11	
Number: TIDA-01040	Rev: A	Sheet Title: Hardware	
SVN Rev: Version control disabled	Assembly Variant: 001	File: SV601272A-HW_SchDoc	
Drawn By:	Engineer: Sean Zhou	Contact: http://www.ti.com/support	

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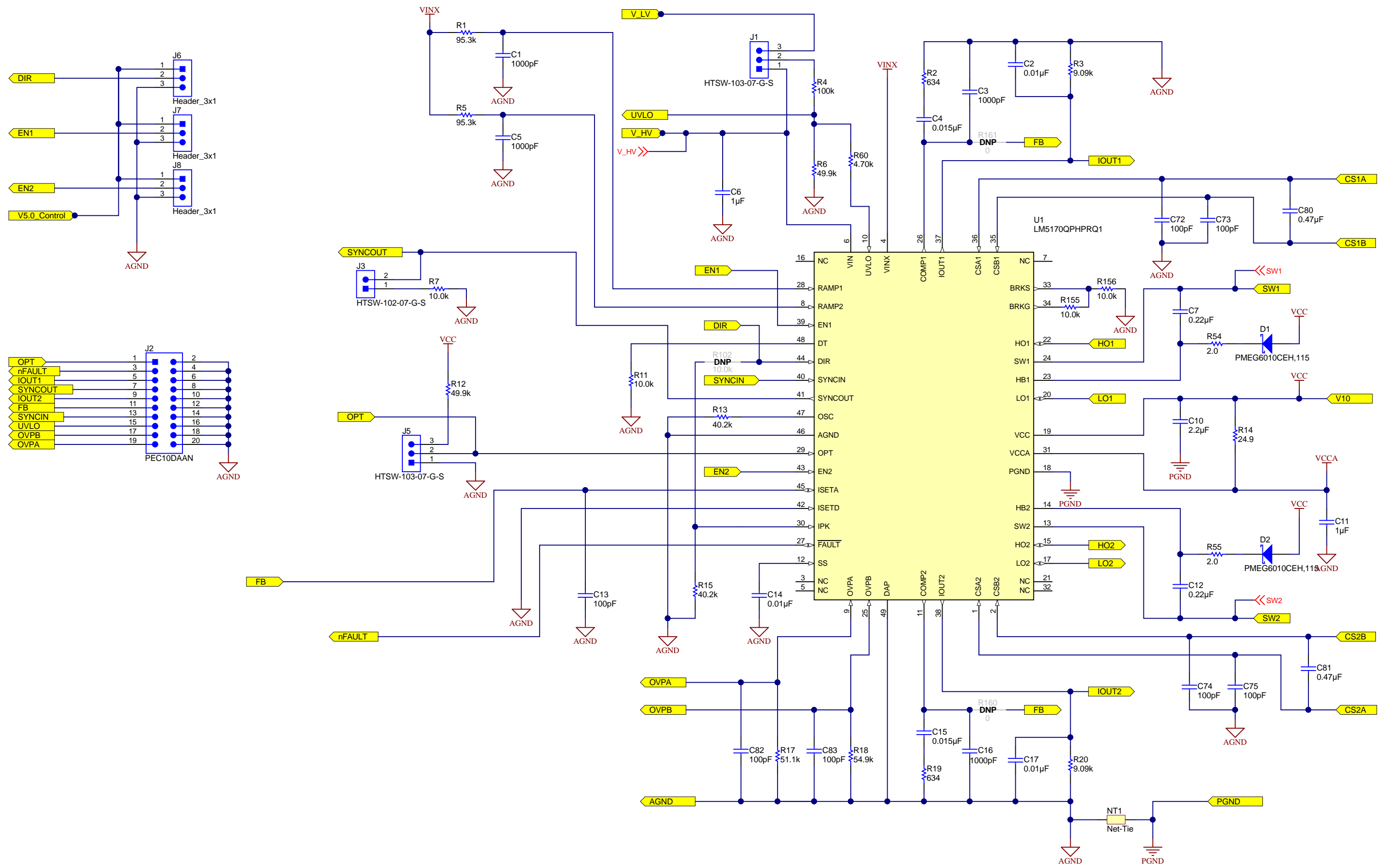


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TID #: TIDA-01040	Project Title: Battery Tester Reference Design for High Current Ap	
Number: TIDA-01040	Rev: A	Sheet Title: Bias Supply
SVN Rev: Version control disabled		Sheet: 3 of 11
Drawn By:	File: SV601272A-Bias.SchDoc	Size: B
Engineer: Sean Zhou	Contact: http://www.ti.com/support	

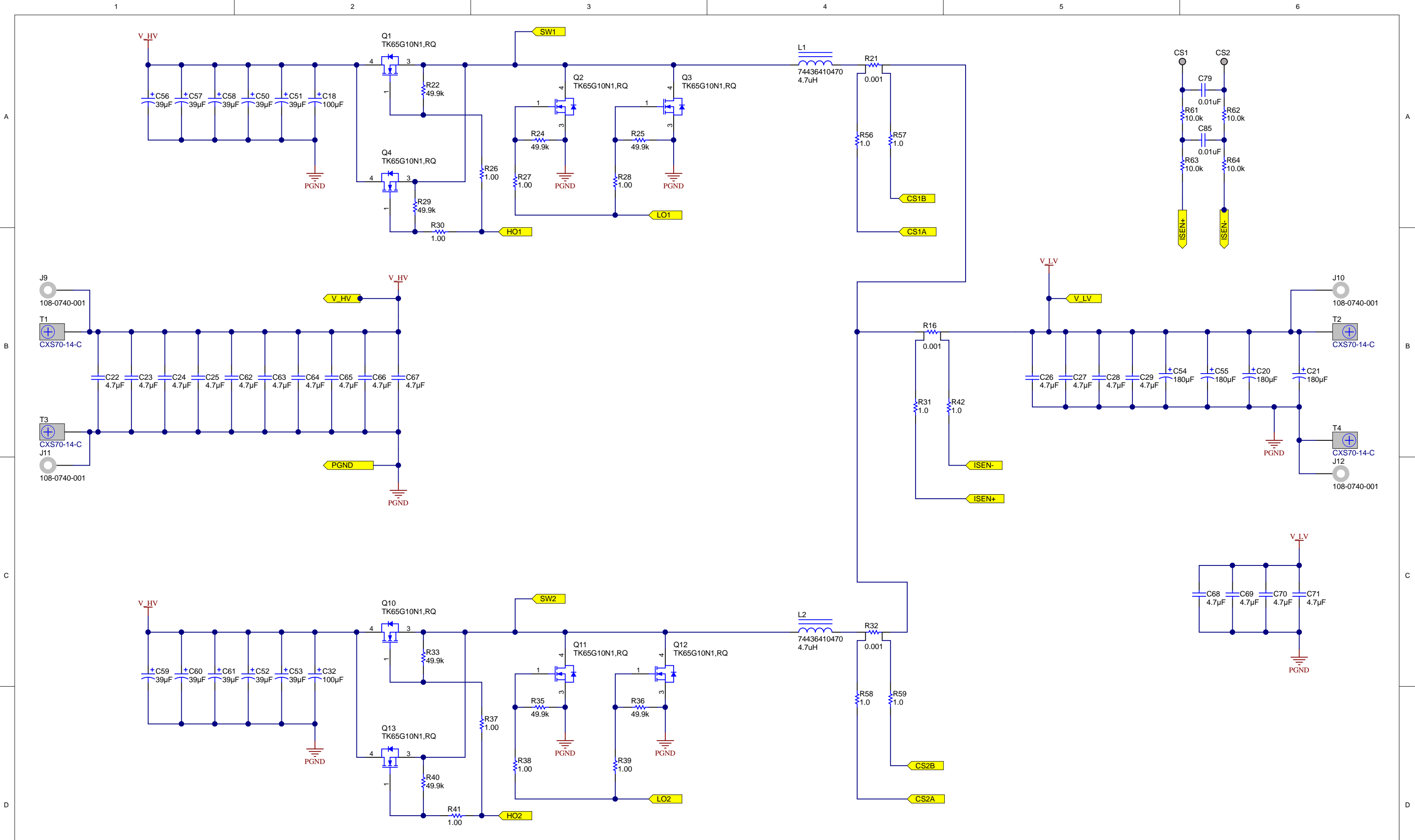


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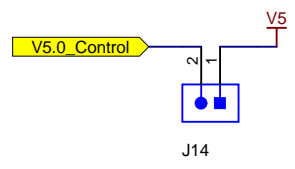
Orderable: N/A	Designed for: Public Release	Mod. Date: 5/16/2018	 http://www.ti.com © Texas Instruments 2018
TID #: TIDA-01040	Project Title: Battery Tester Reference Design for High Current Applications	Sheet Title: Controller	
Number: TIDA-01040	Rev: A	Assembly Variant: 001	
SVN Rev: Version control disabled	File: SV601272A-Controller.SchDoc	Size: B	
Drawn By:	Engineer: Sean Zhou	Contact: http://www.ti.com/support	



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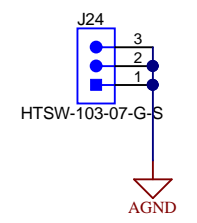
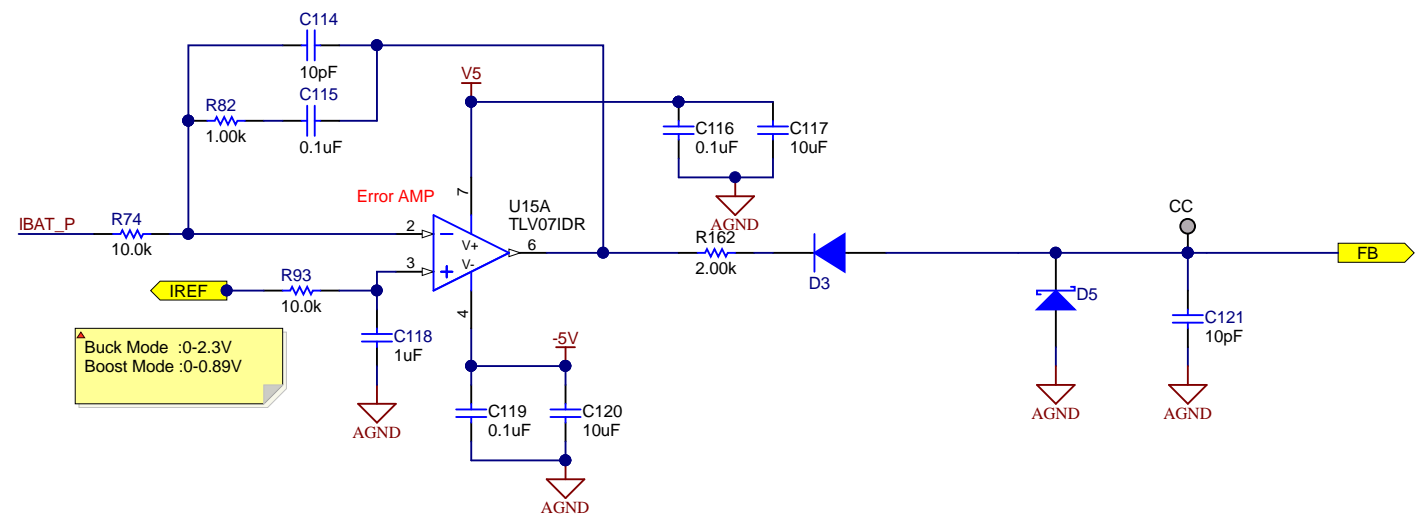
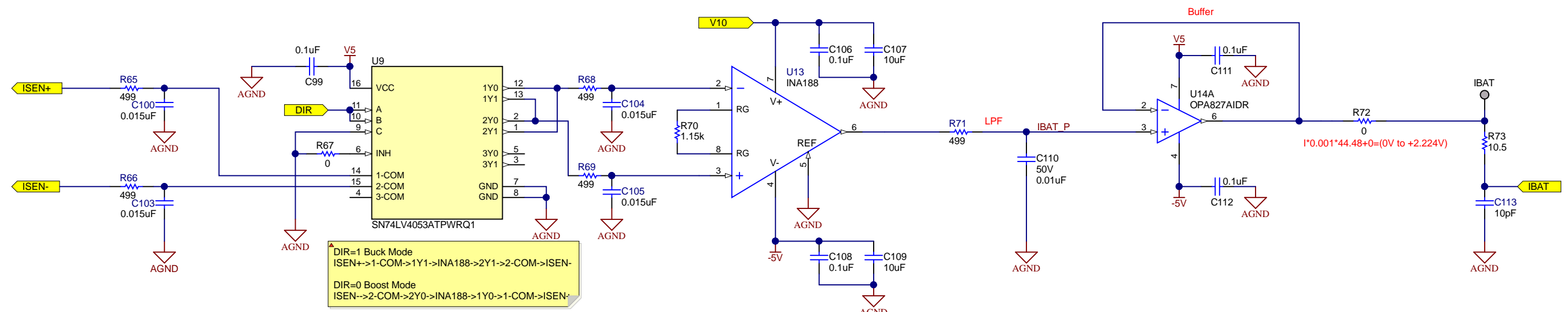
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TID #: TIDA-01040	Project Title: Battery Tester Reference Design for High Current Ap	
Number: TIDA-01040	Rev: A	Sheet Title: Power Stage
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 5 of 11
Drawn By:	File: SV601272A-Power.SchDoc	Size: B
Engineer: Sean Zhou	Contact: http://www.ti.com/support	





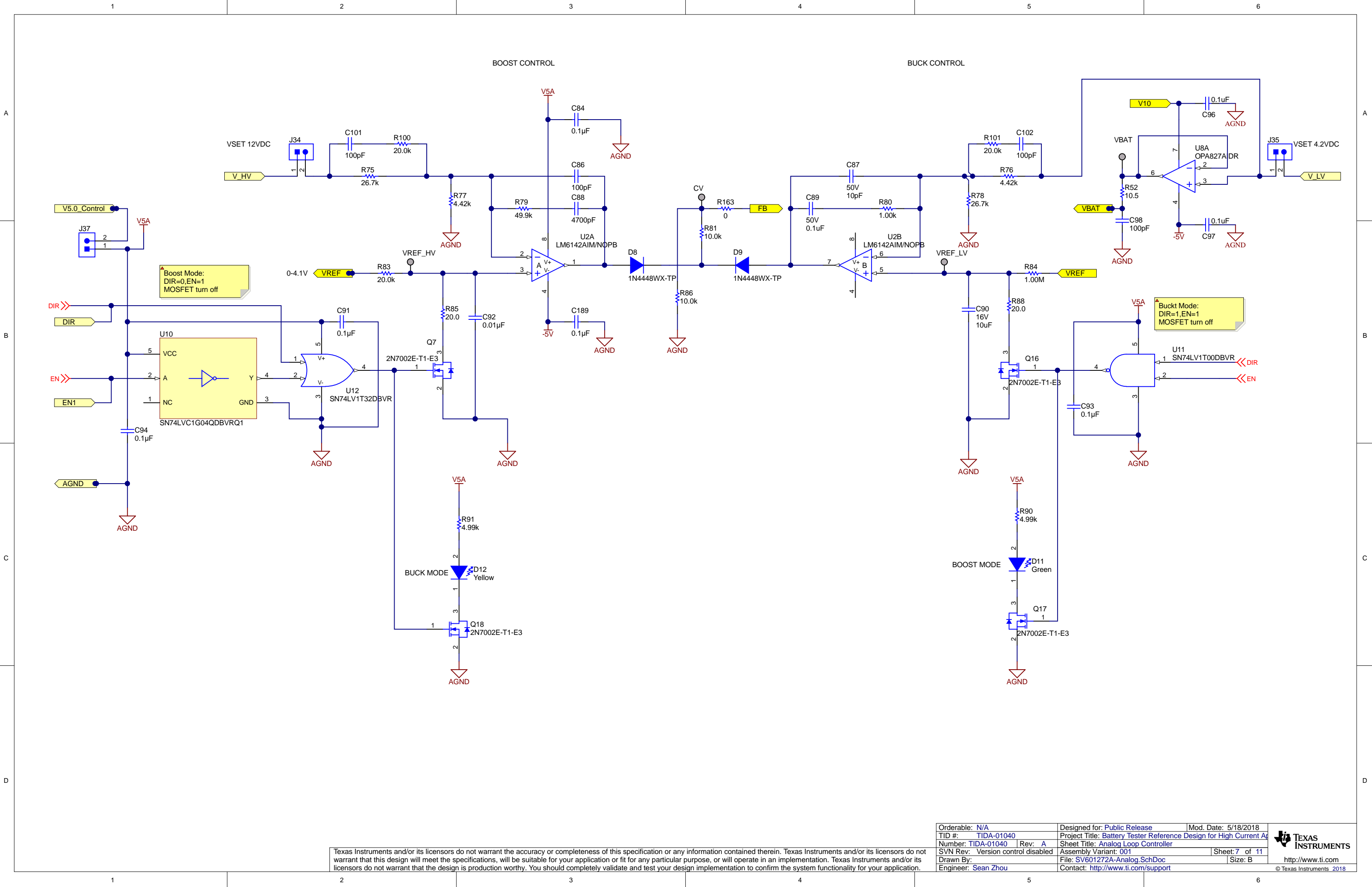
Current Control

INA188 Gain=1+50/1.15=44.48
 Output=-20A to 50A*0.001*44.48+0
 =0V to +2.224V



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Number: TIDA-01040	Rev: A	Sheet Title:	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 6 of 11	
Drawn By:	File: SV601272A-Current-Control.SchDoc	Size: B	
Engineer: Sean Zhou	Contact: http://www.ti.com/support		



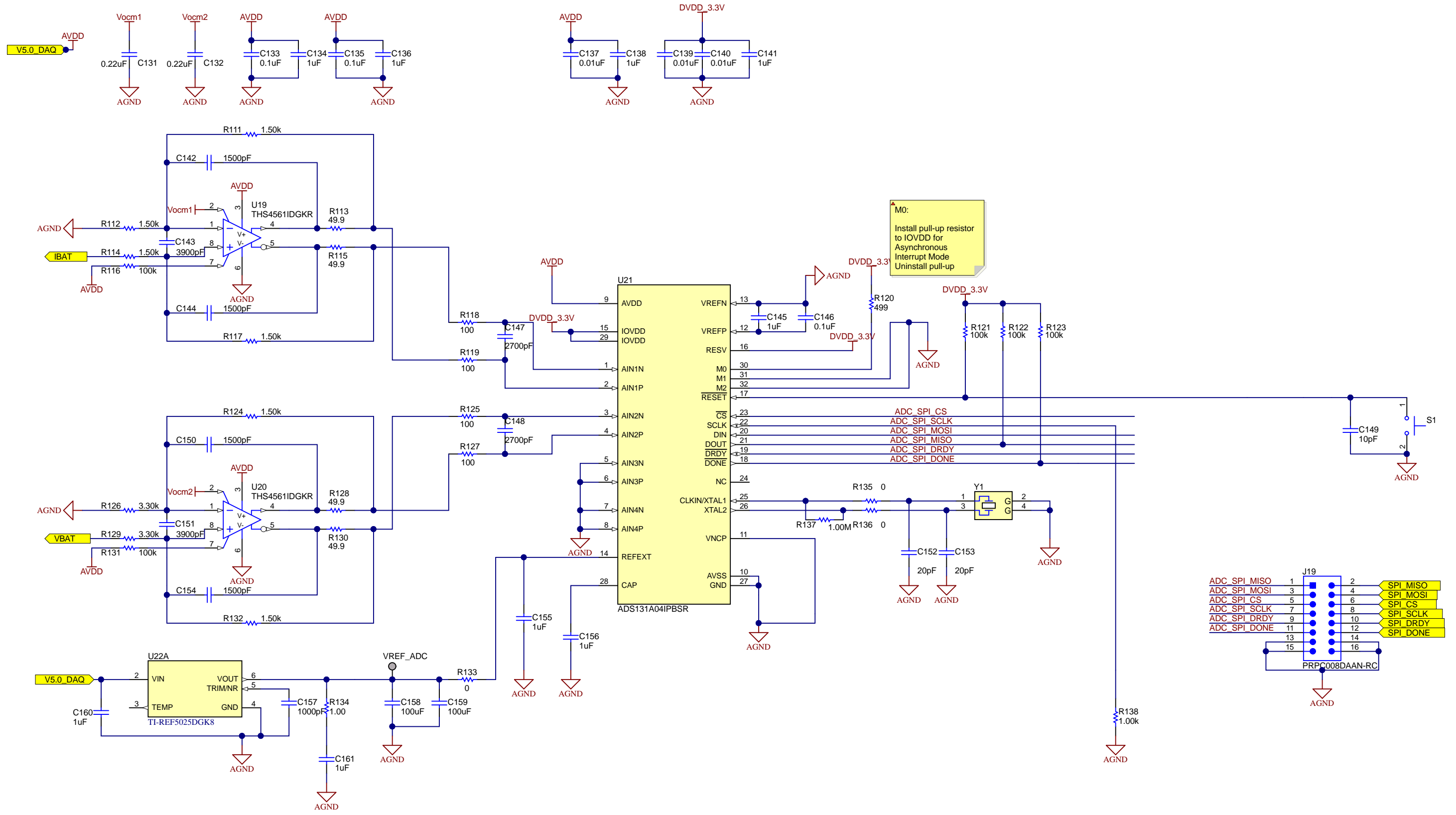
Boost Mode:
DIR=0, EN=1
MOSFET turn off

Buck Mode:
DIR=1, EN=1
MOSFET turn off

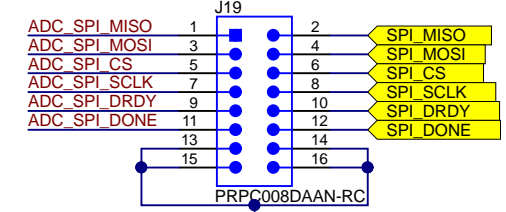
Orderable: N/A	Designed for: Public Release	Mod. Date: 5/18/2018
TID #: TIDA-01040	Project Title: Battery Tester Reference Design for High Current Ap	
Number: TIDA-01040	Rev: A	Sheet Title: Analog Loop Controller
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 7 of 11
Drawn By:	File: SV601272A-Analog.SchDoc	Size: B
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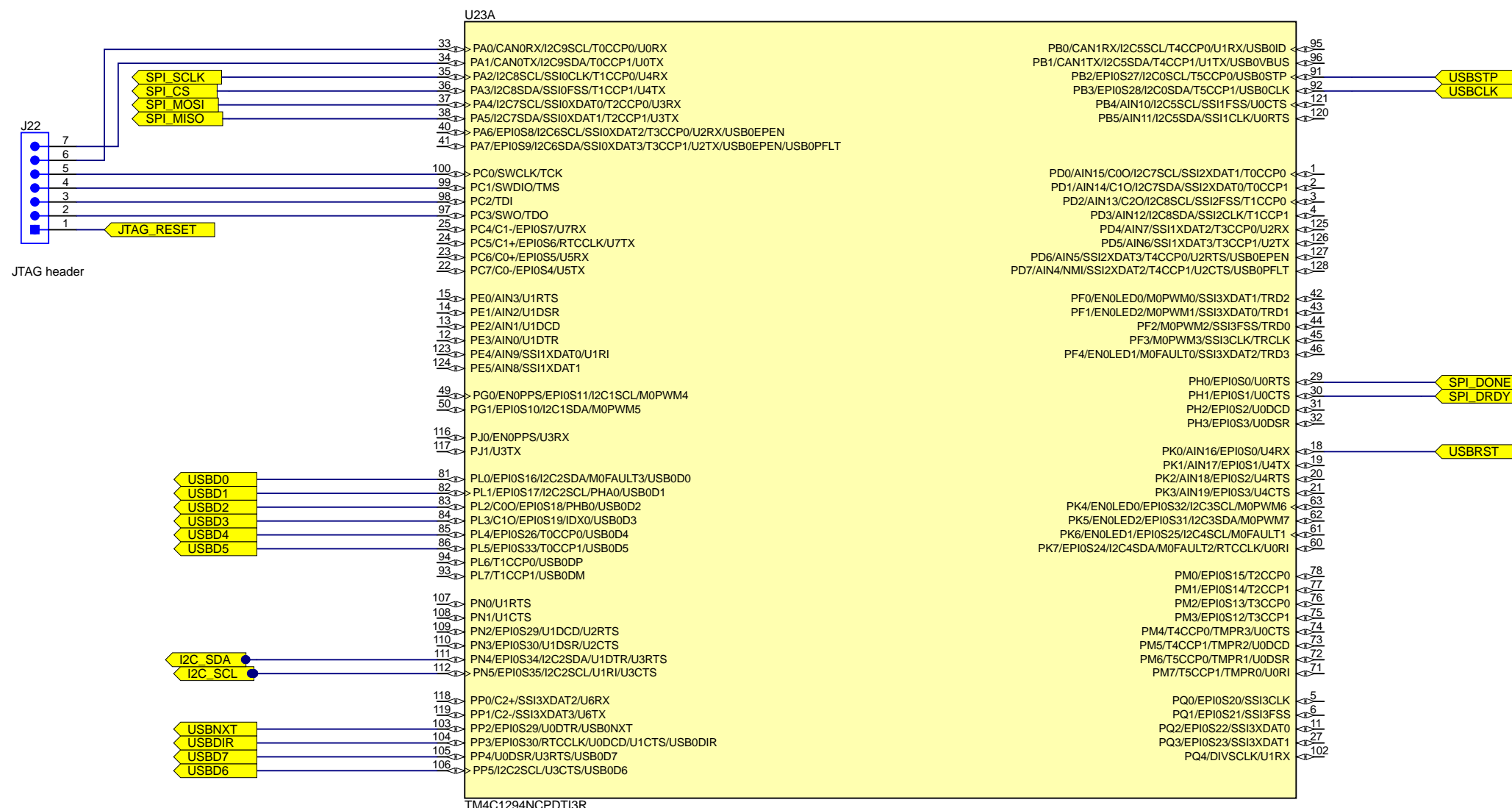
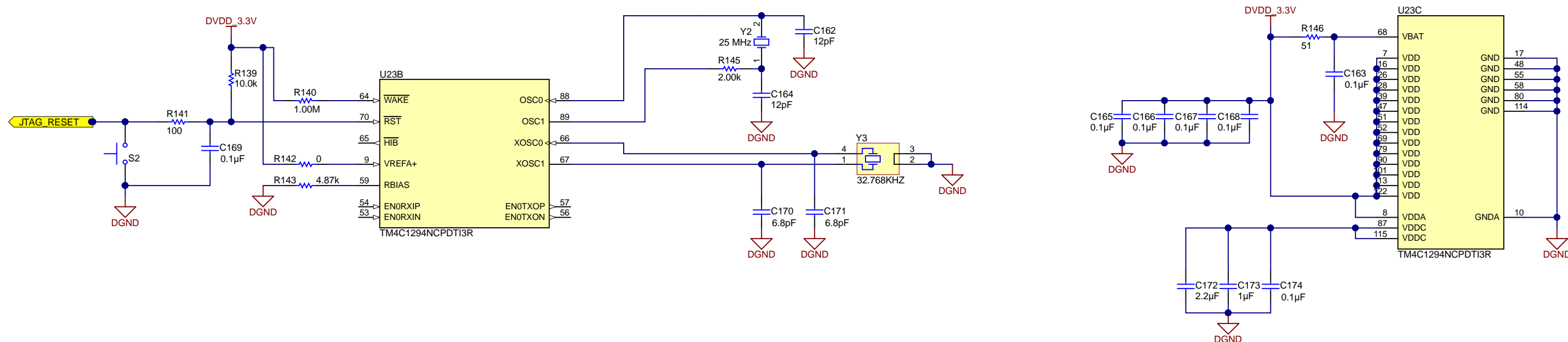


M0:
Install pull-up resistor to IOVDD for Asynchronous Interrupt Mode
Uninstall pull-up



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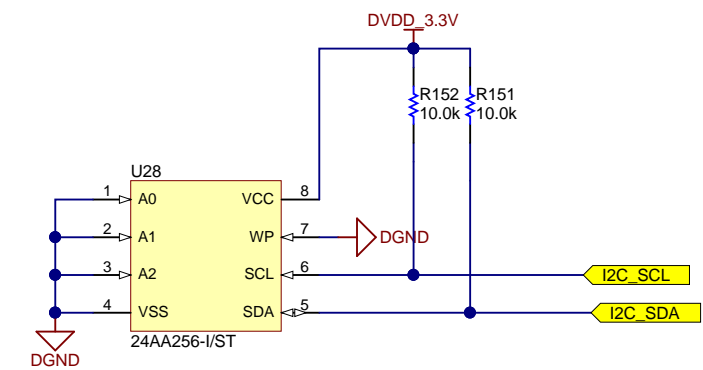
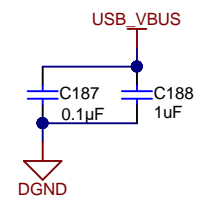
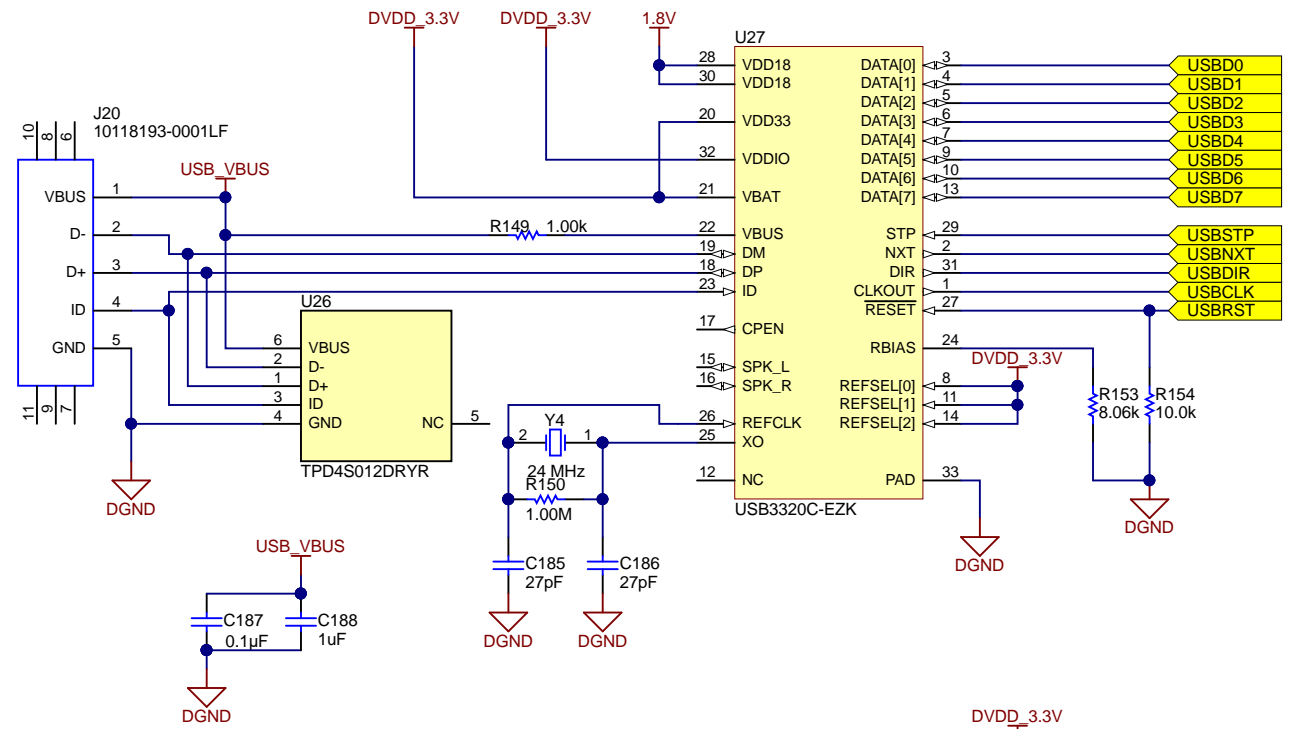
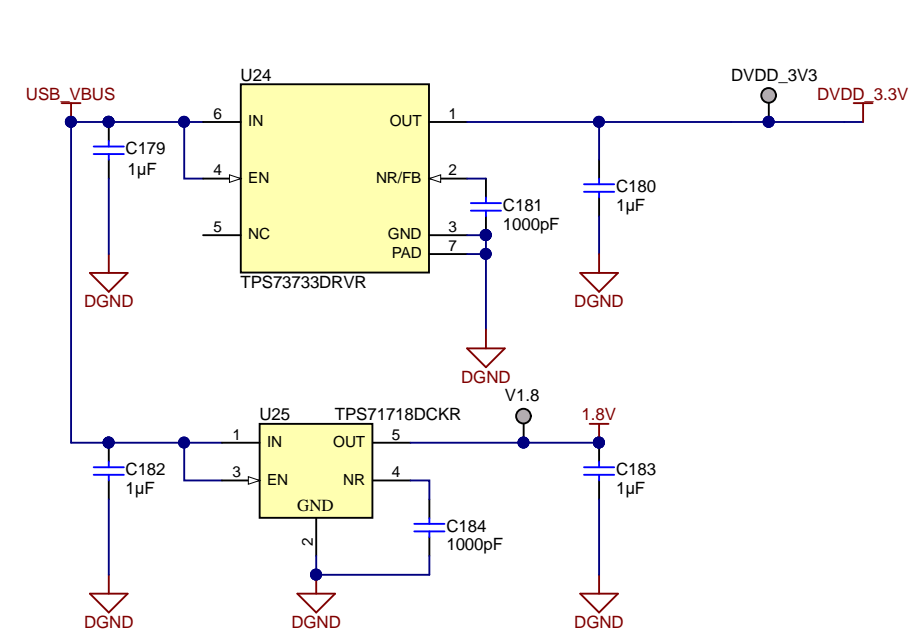
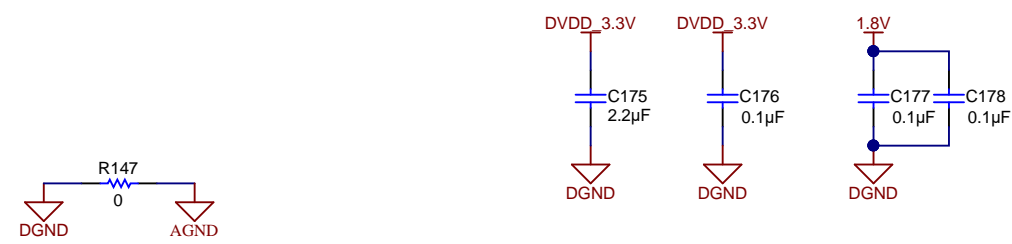
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TID #: TIDA-01040	Project Title: Battery Tester Reference Design for High Current Ag		
Number: TIDA-01040	Rev: A	Sheet Title:	
SVN Rev: Version control disabled	Assembly Variant: 001		
Drawn By:	File: SV601272A-ADC.SchDoc	Sheet: 9 of 11	
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TID #: TIDA-01040	Project Title: Battery Tester Reference Design for High Current Ag	
Number: TIDA-01040	Rev: A	Sheet Title:
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 10 of 11
Drawn By:	File: SV601272A-TM4C_Main_SchDoc	Size: B
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Number: TIDA-01040	Rev: A	Assembly Variant: 001	
SVN Rev: Version control disabled	File: SV601272A-TM4C_Power.SchDoc	Sheet: 11 of 11	
Drawn By:	Engineer: Sean Zhou	Size: B	
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