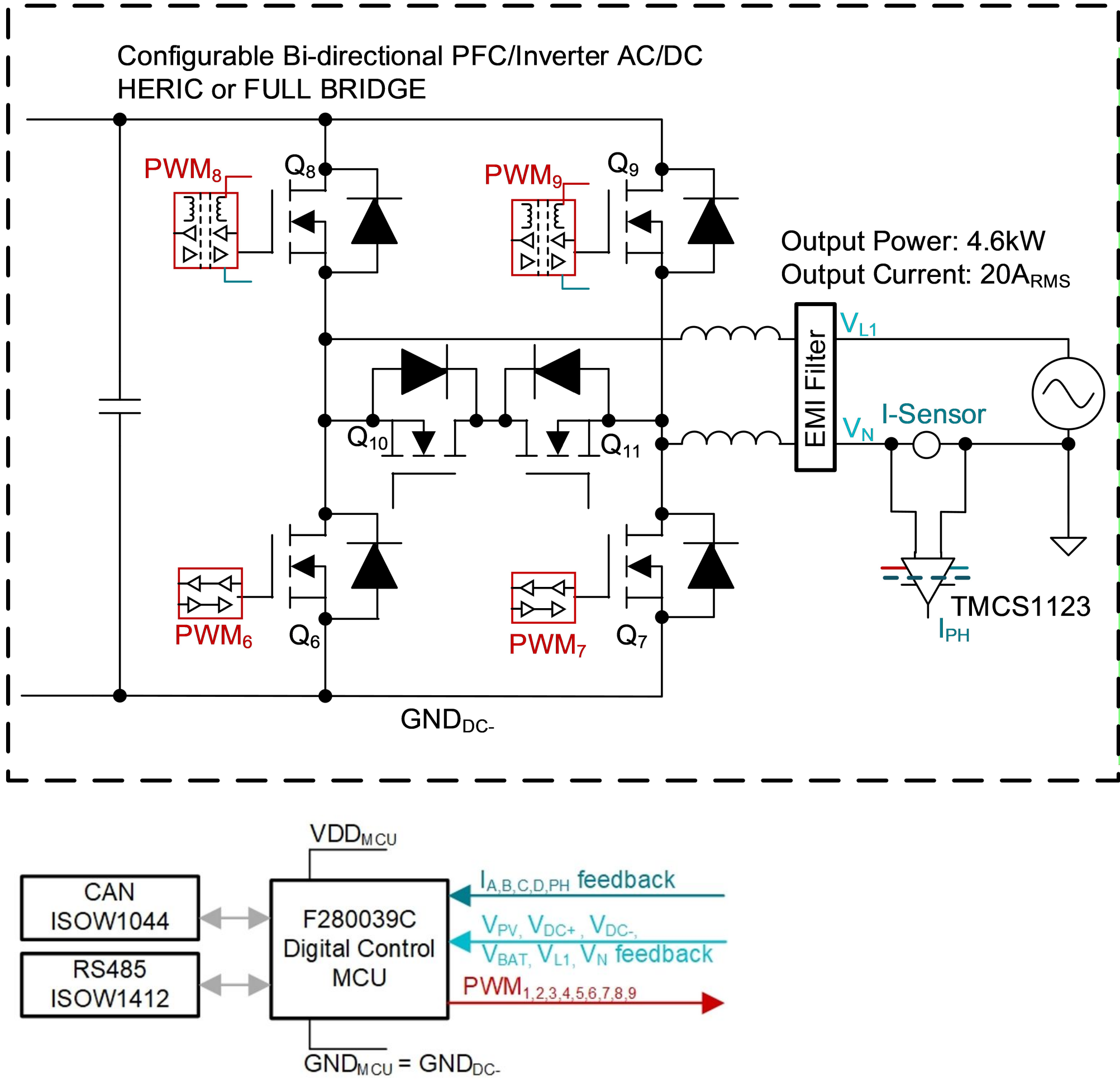
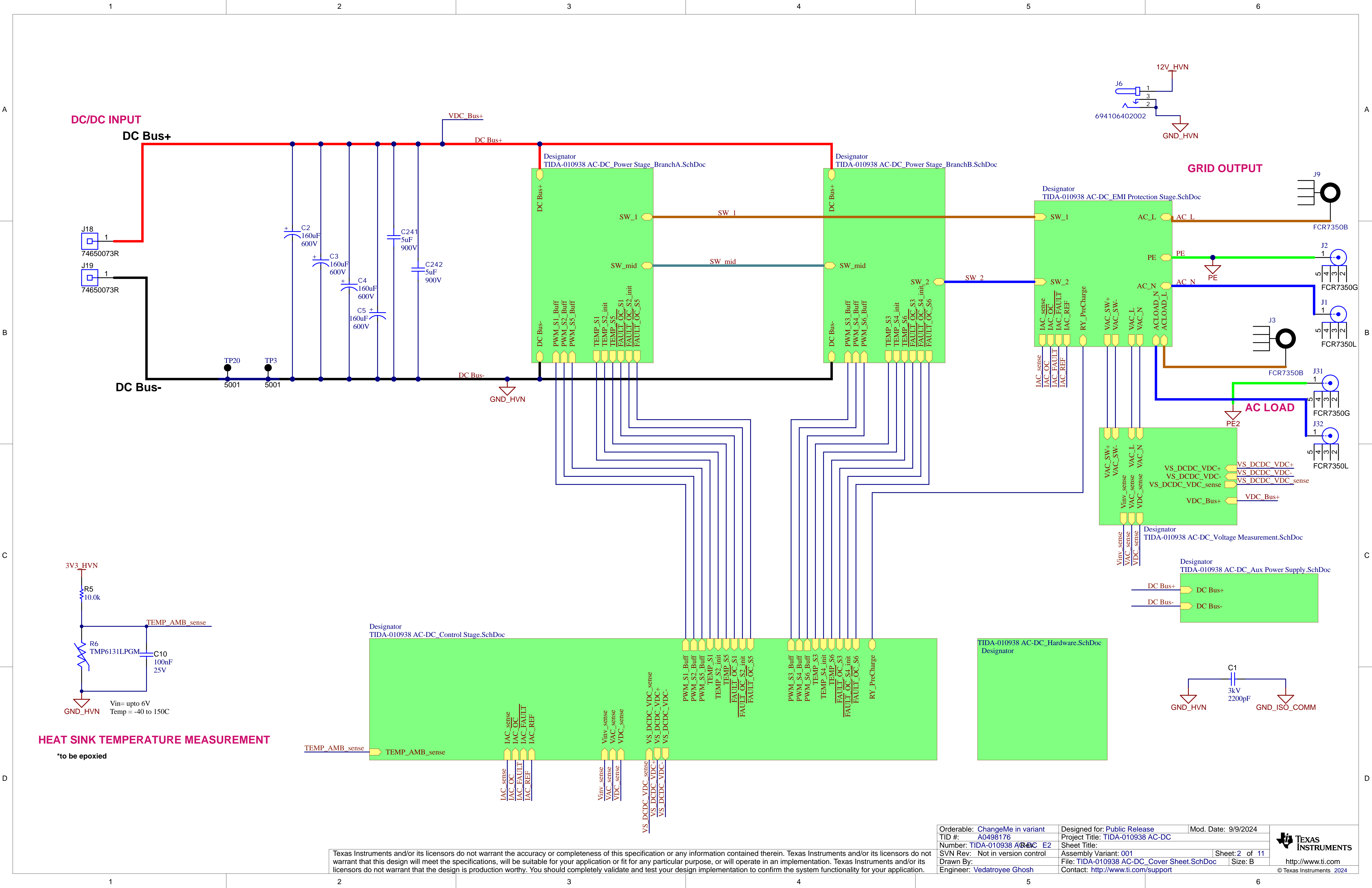
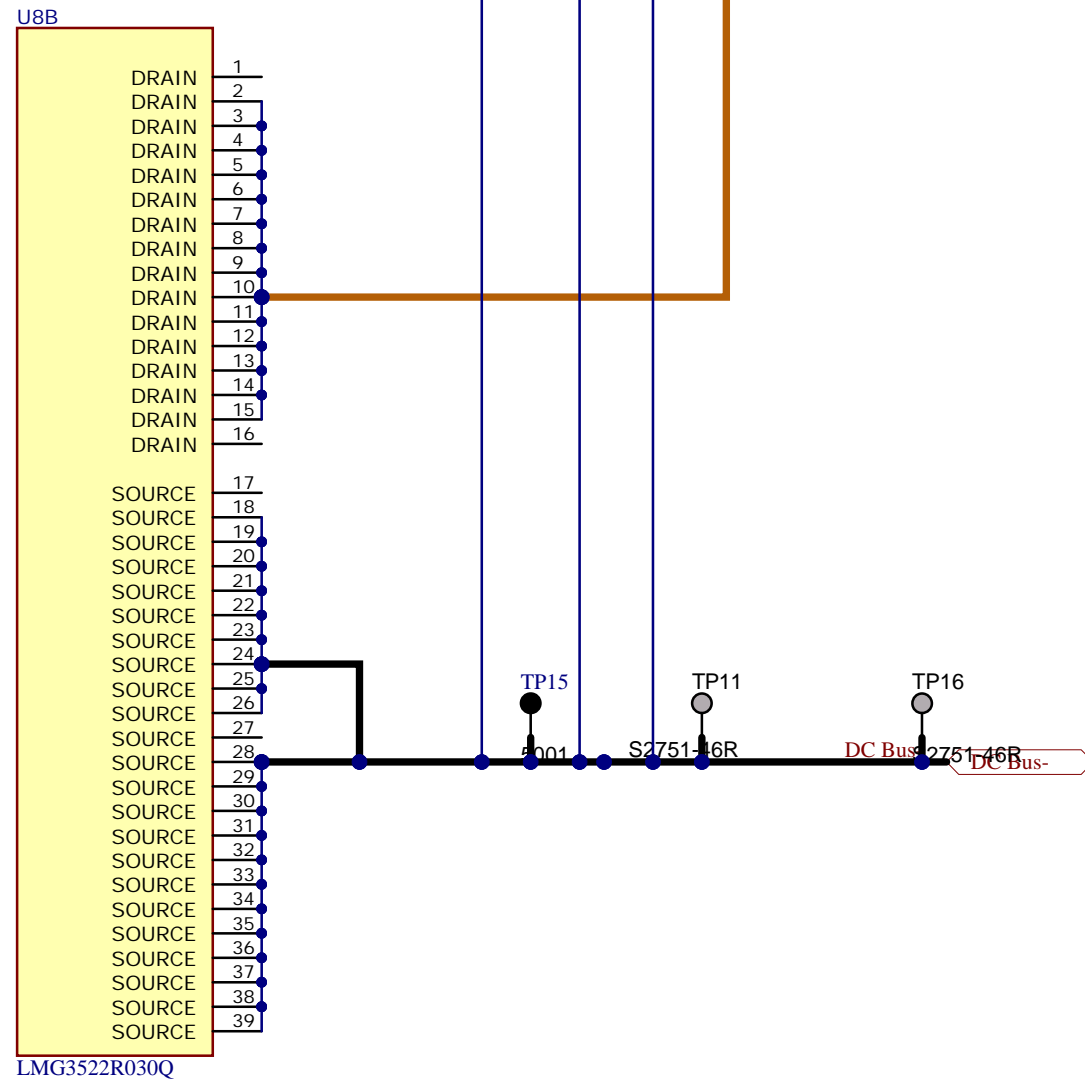
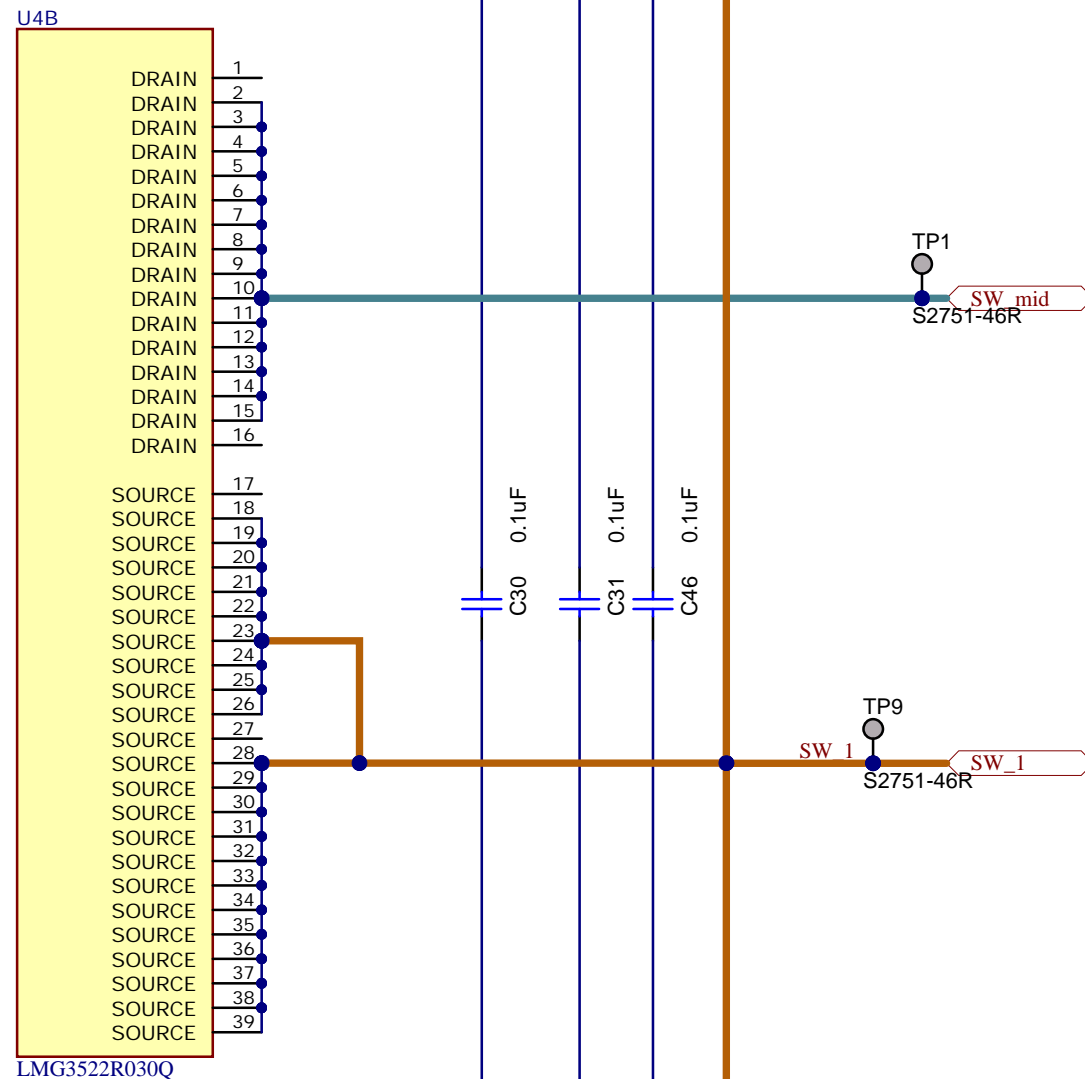
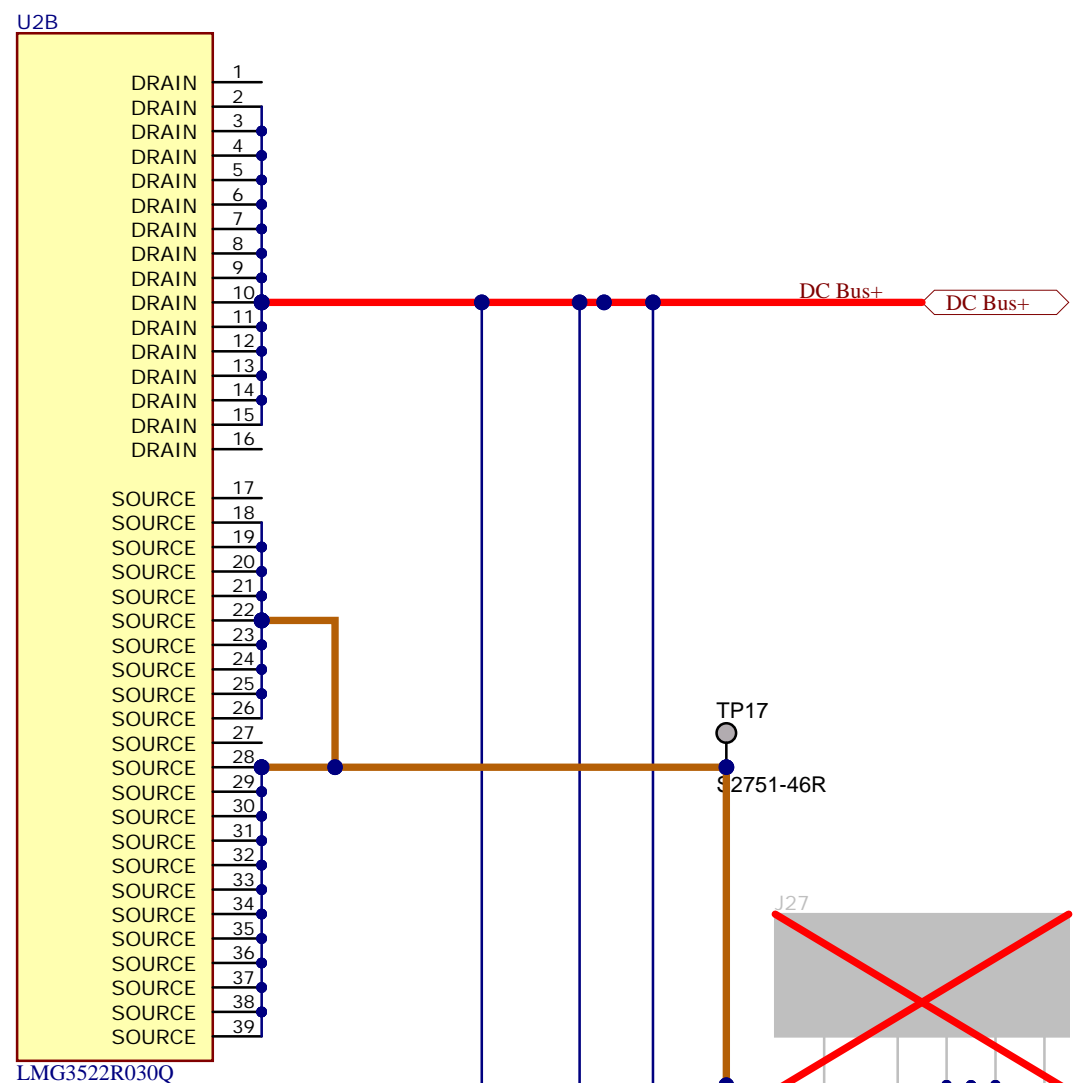
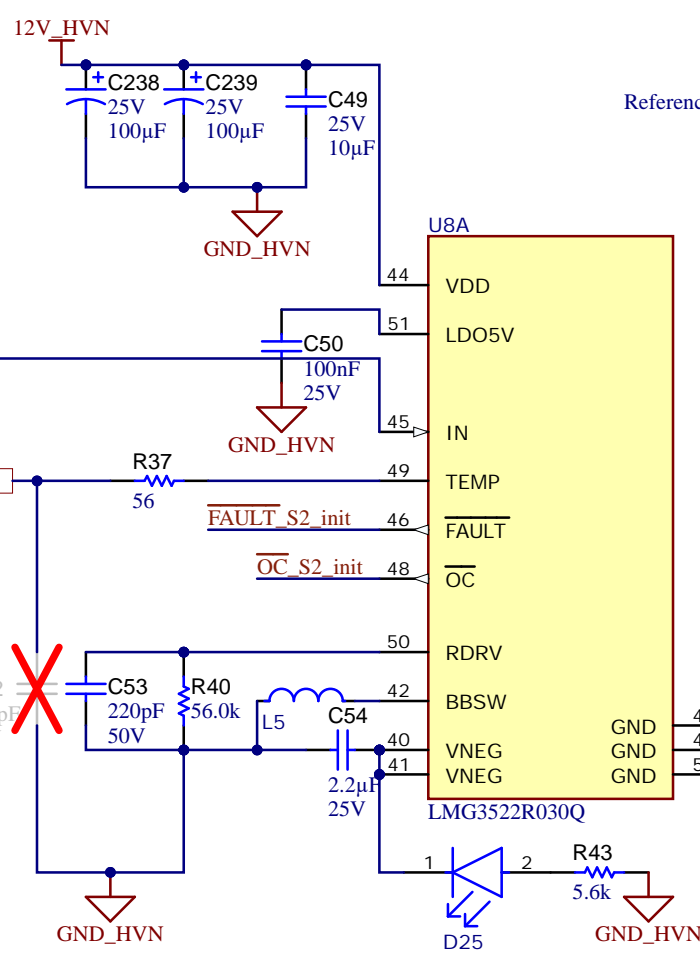
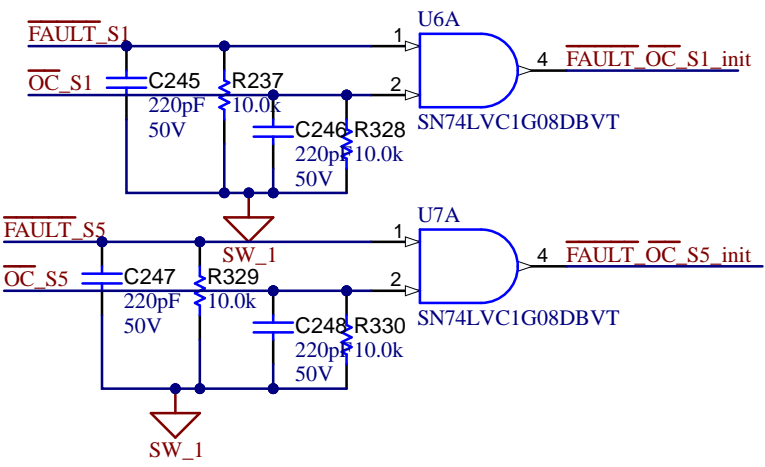
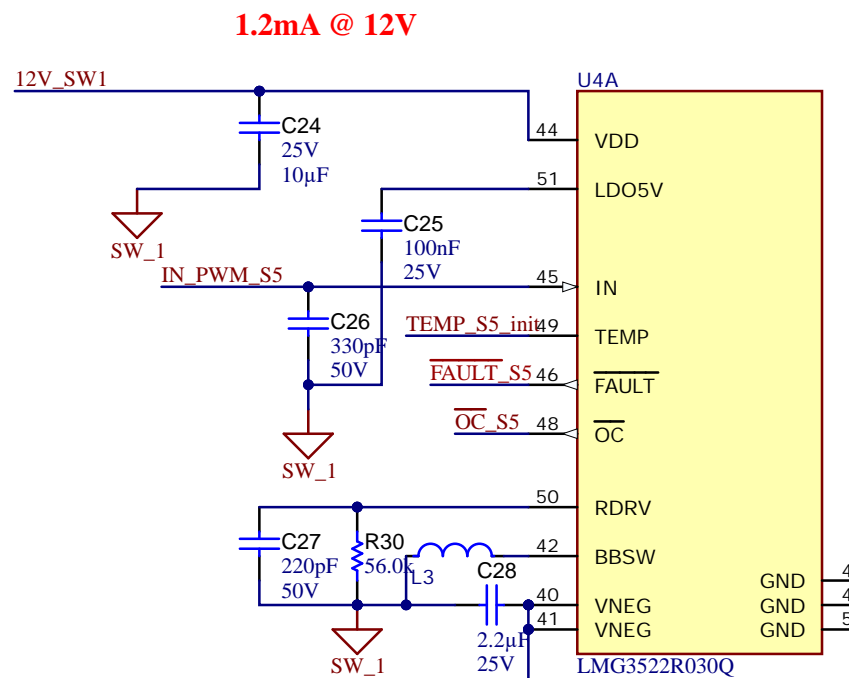
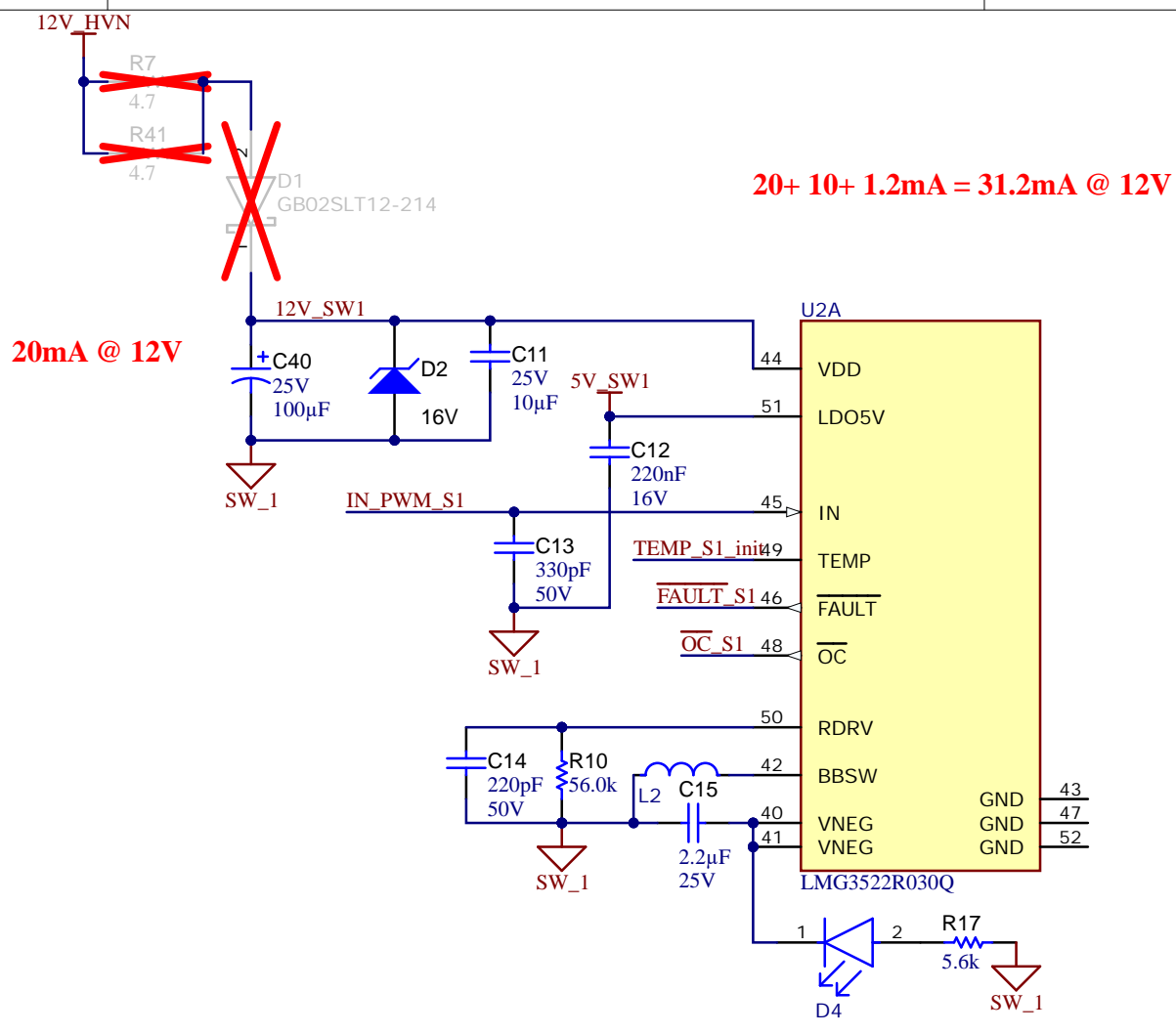
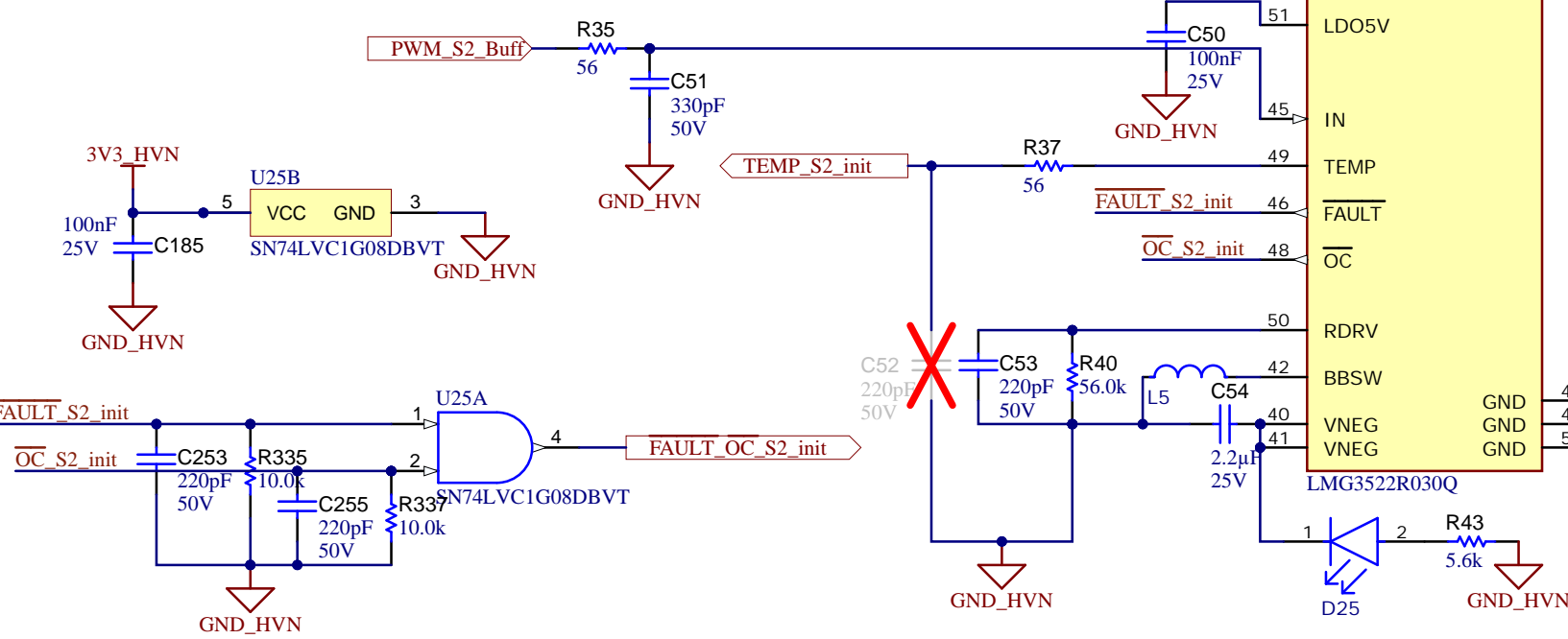
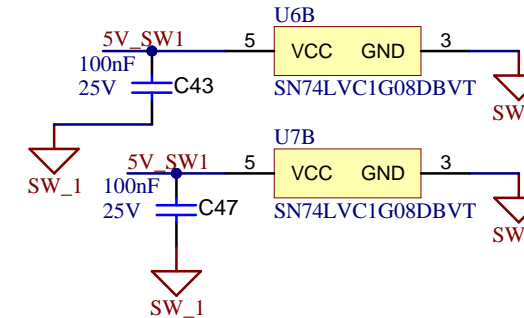
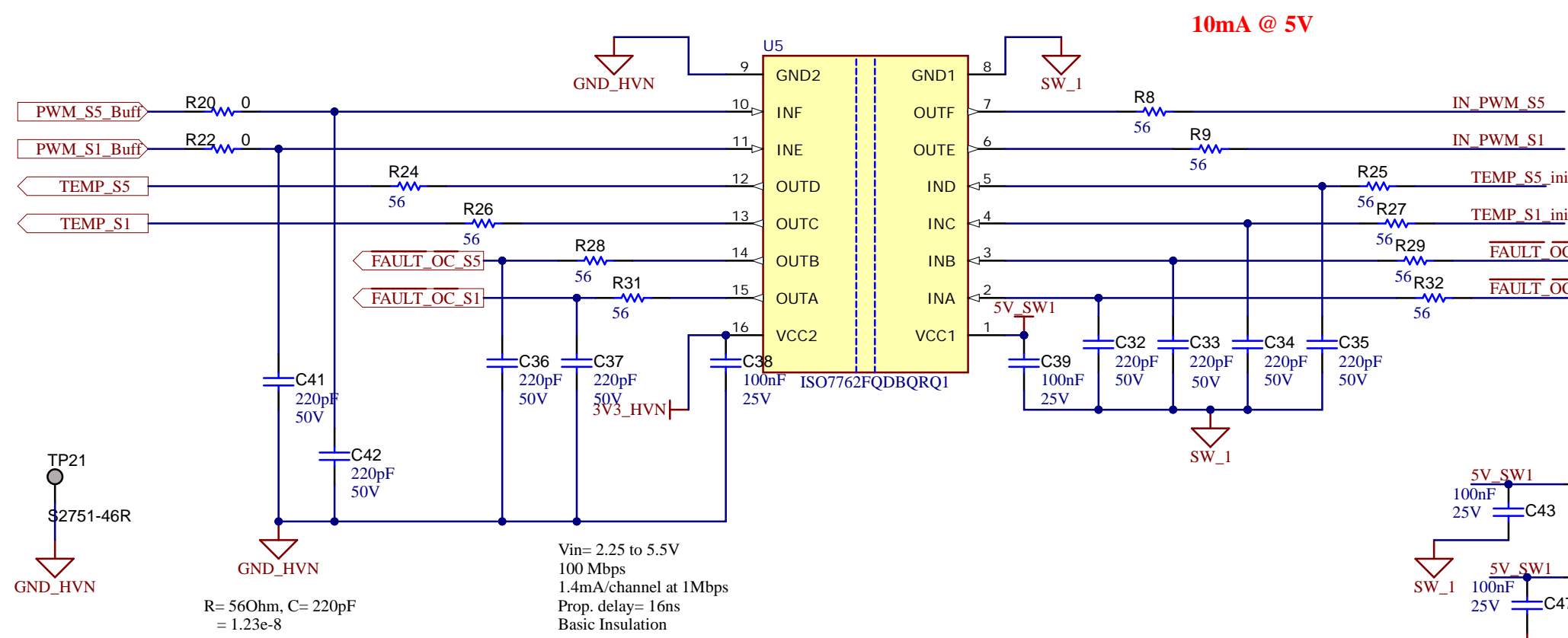
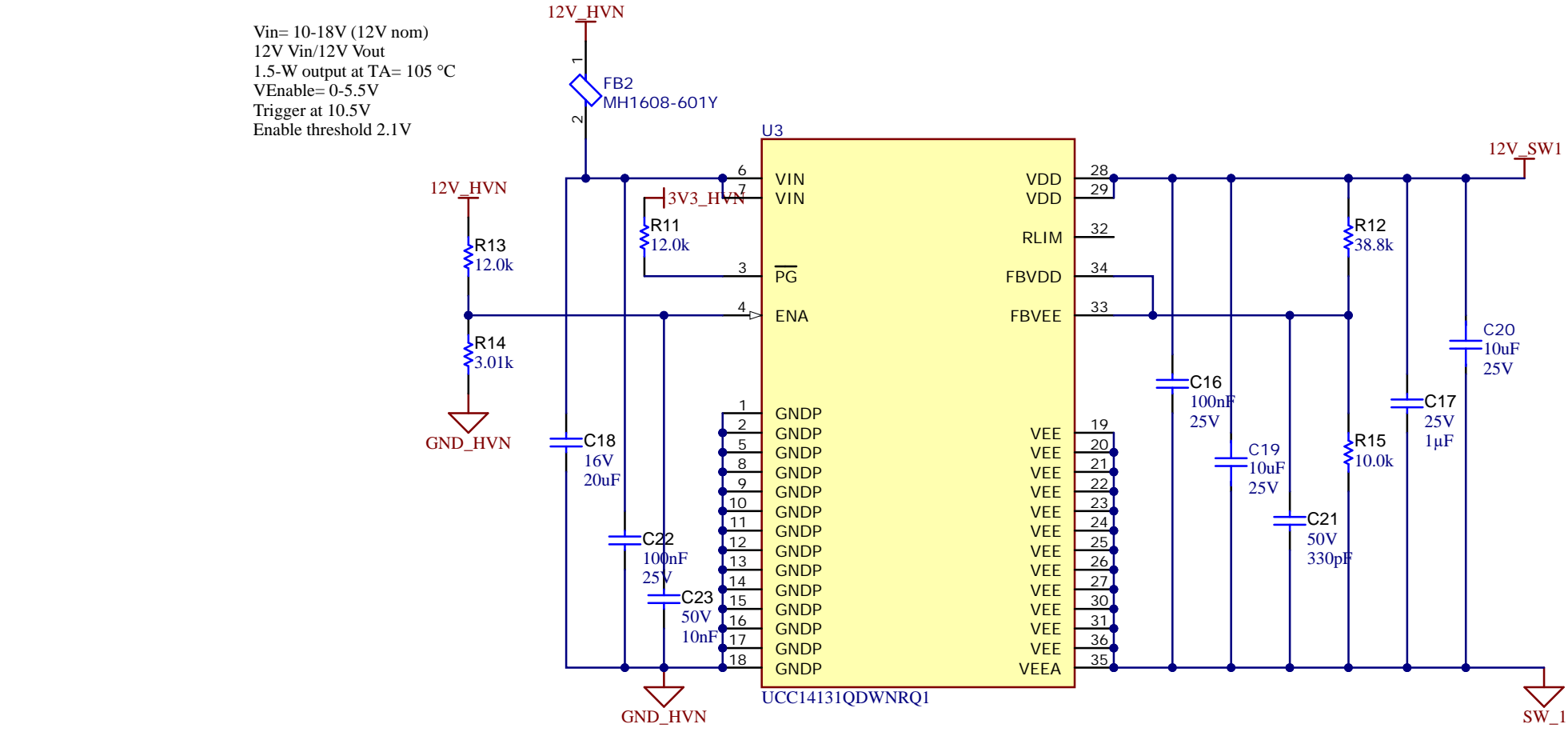


Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A



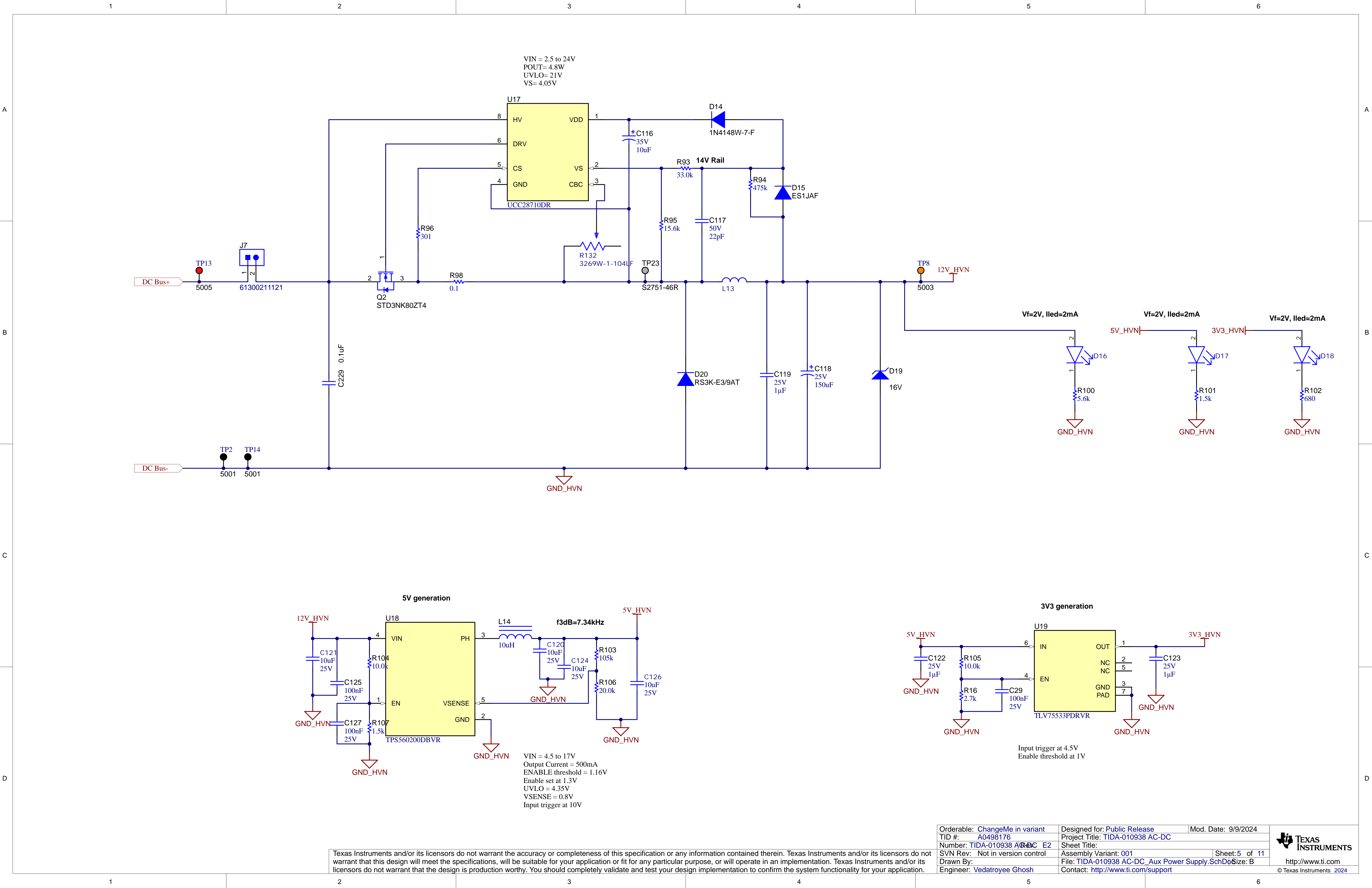






Vin= 10-18V (12V nom)  
12V Vin/12V Vout  
1.5-W output at TA= 105 °C  
VEnable= 0-5.5V  
Trigger at 0.5V  
Enable threshold 2.1V

Vin= 2.25 to 5.5V  
100 Mbps  
1.4mA/channel at 1Mbps  
Prop. delay= 11ns  
Basic Insulation



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: <a href="#">ChangeMe</a> in variant	Designed for: <a href="#">Public Release</a>	Mod. Date: 9/9/2024
TID #: <a href="#">A0498176</a>	Project Title: <a href="#">TIDA-010938 AC-DC</a>	
Number: <a href="#">TIDA-010938 AC-DC E2</a>	Sheet Title:	
SVN Rev: <a href="#">Not in version control</a>	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">5</a> of <a href="#">11</a>
Drawn By:	File: <a href="#">TIDA-010938 AC-DC_Aux Power Supply_SchDoc</a>	Size: <a href="#">B</a>
Engineer: <a href="#">Vedatroyee Ghosh</a>	Contact: <a href="#">http://www.ti.com/support</a>	

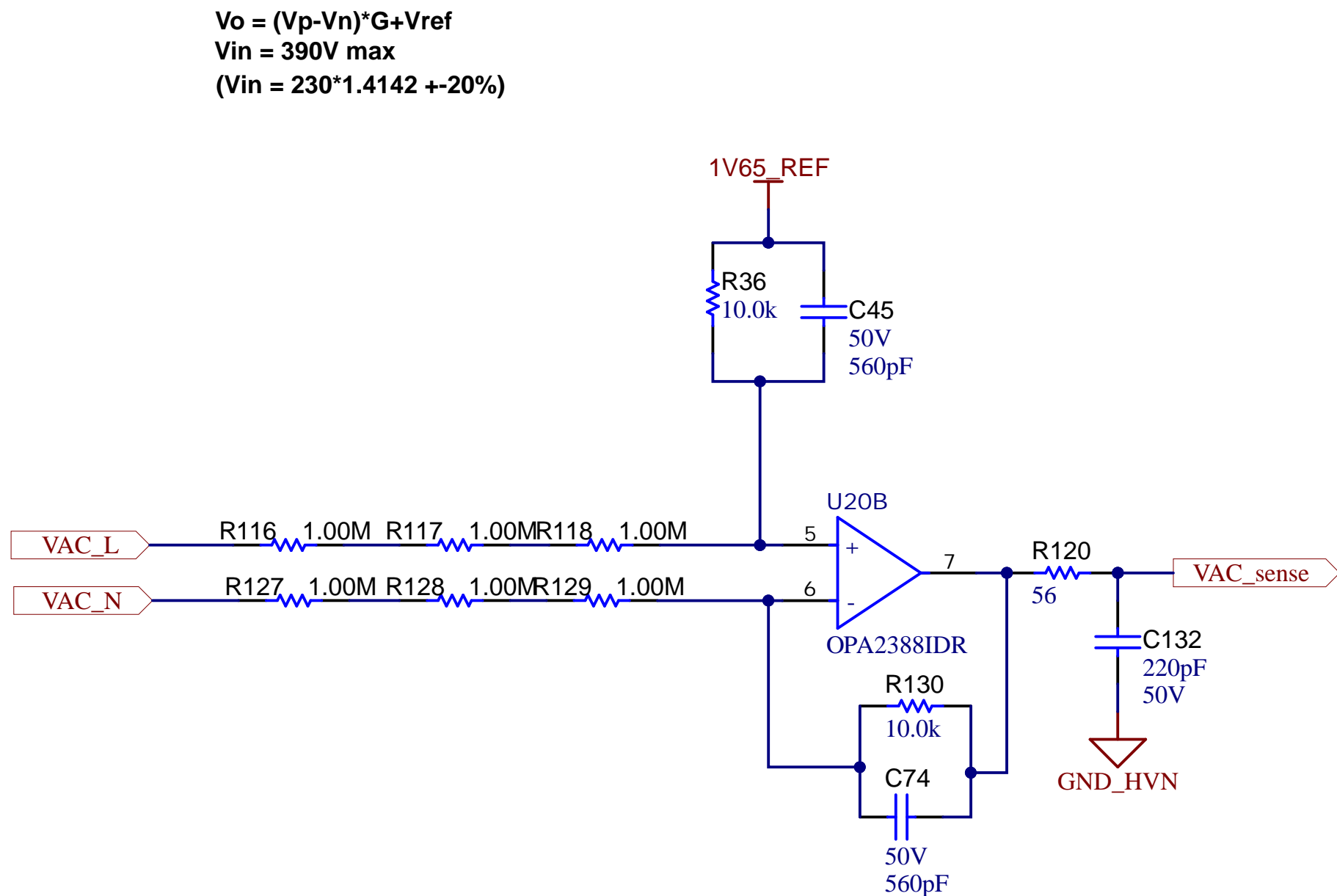
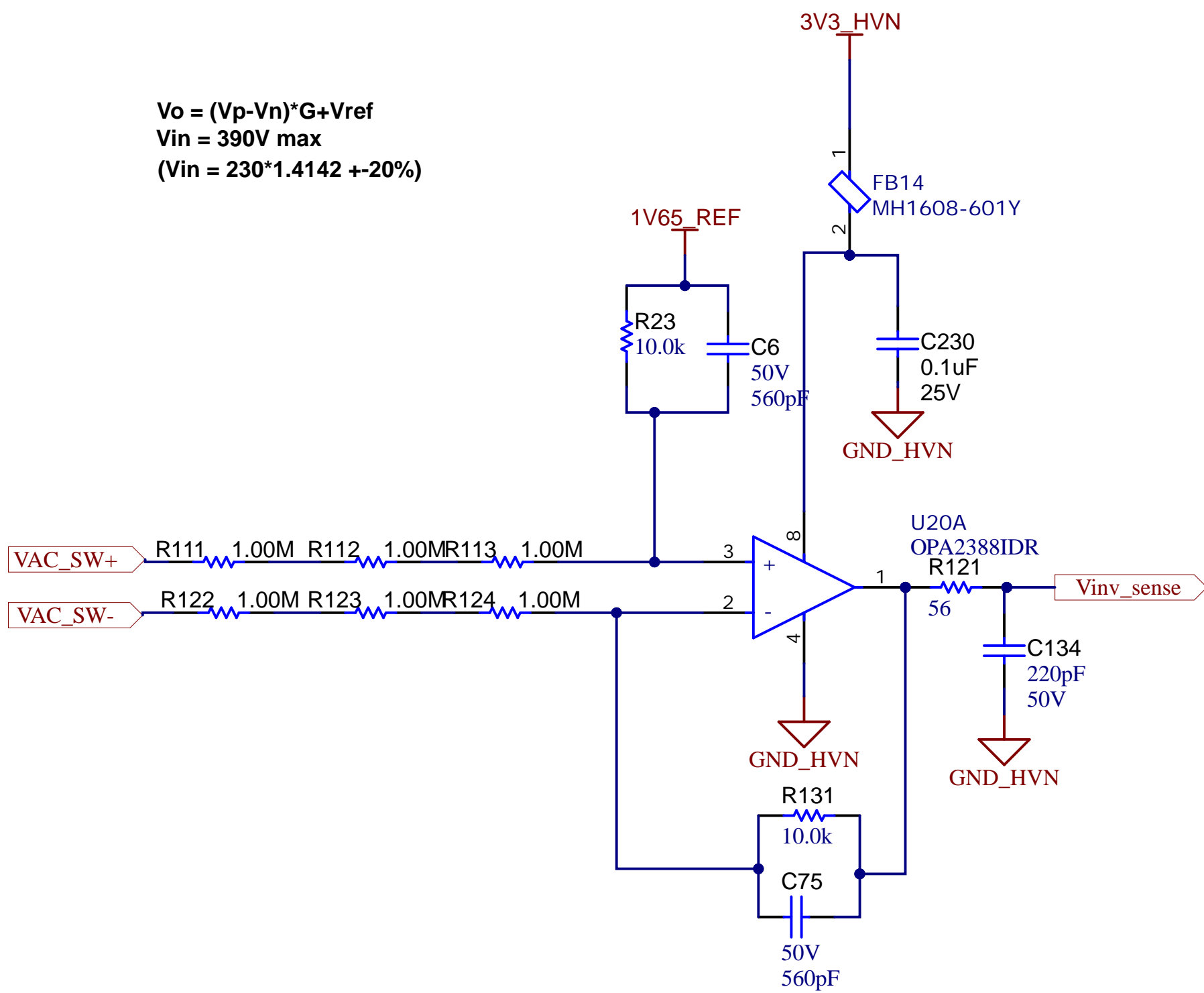
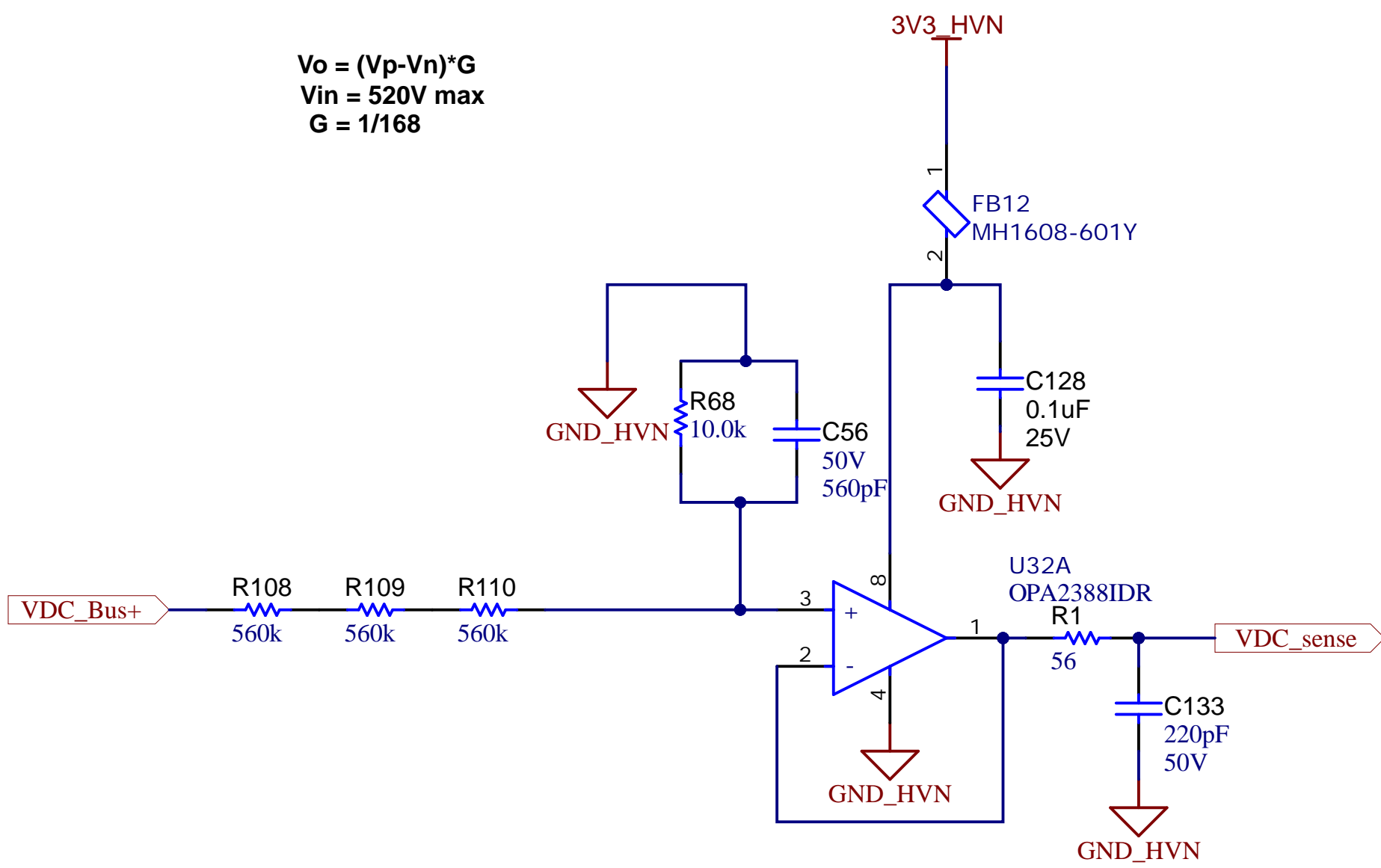




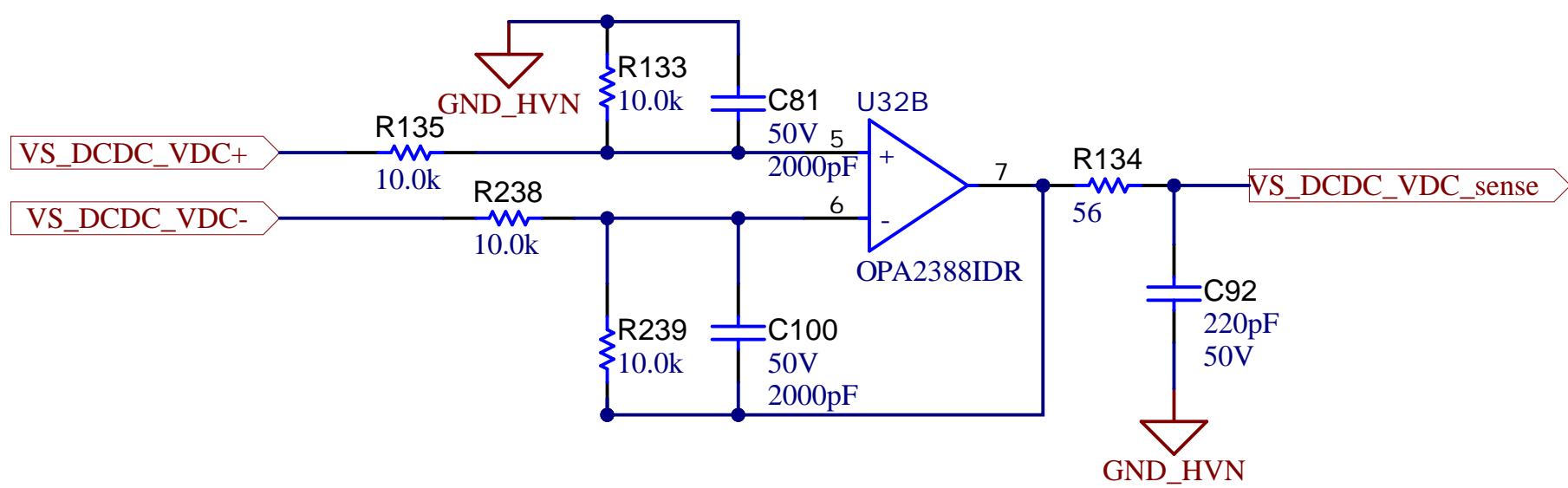
BUS VOLTAGE SENSING

EMI INPUT VOLTAGE SENSING

INVERTER OUTPUT VOLTAGE SENSING

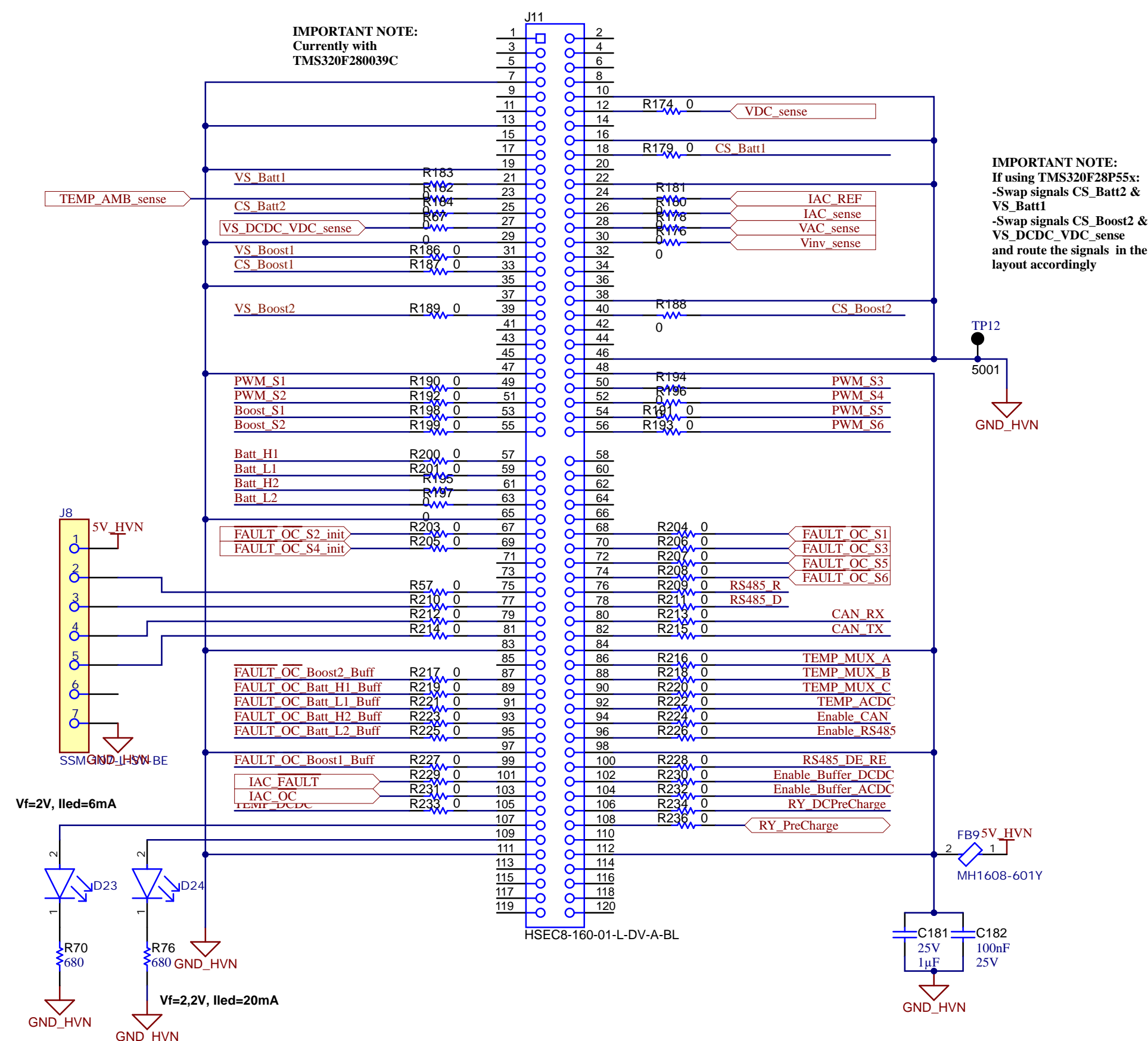


Bus Voltage Sensing DC/DC Board

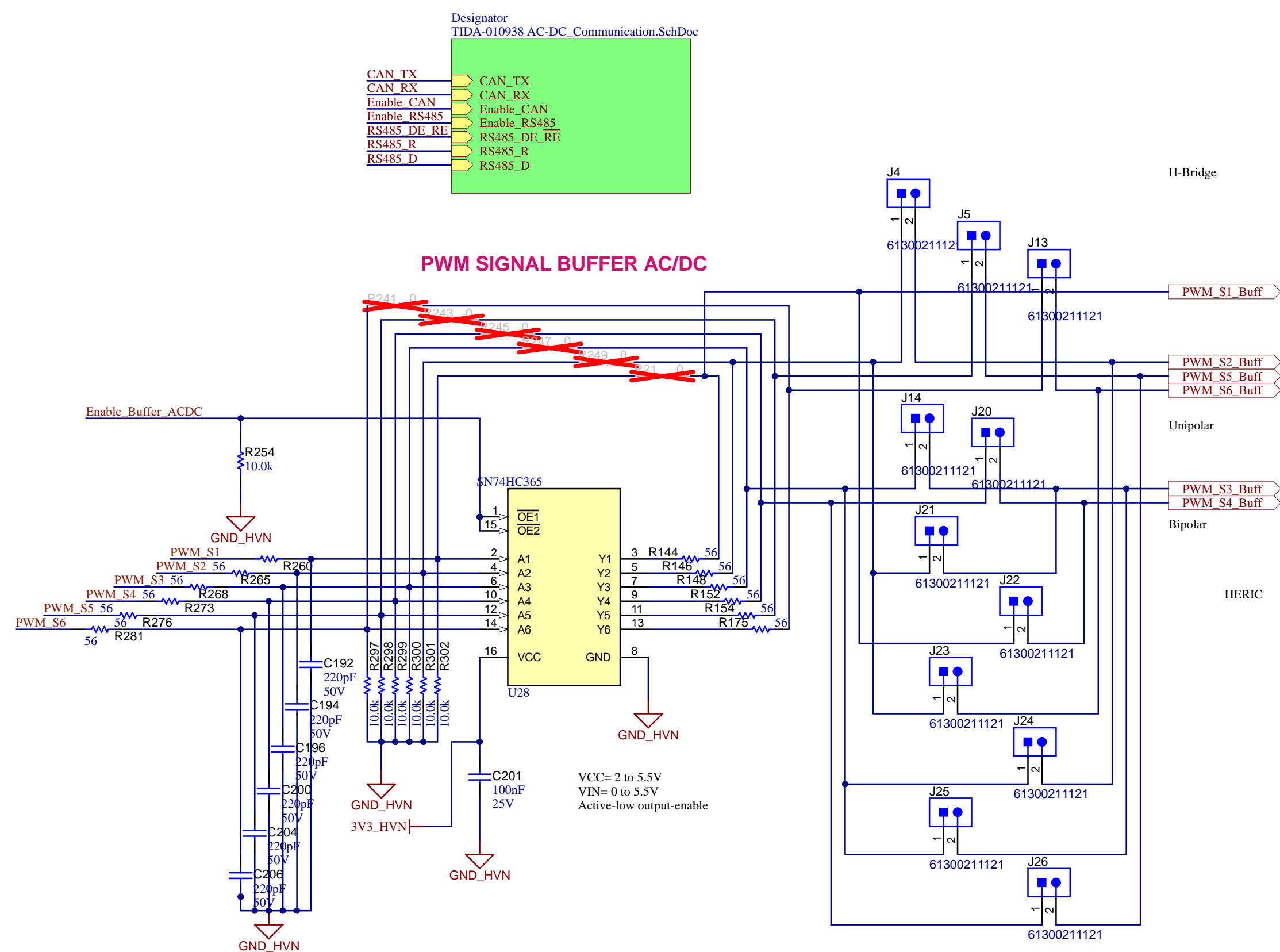


Orderable: <a href="#">ChangeMe in variant</a>	Designed for: <a href="#">Public Release</a>	Mod. Date: 9/9/2024
TID #: <a href="#">A0498176</a>	Project Title: <a href="#">TIDA-010938 AC-DC</a>	
Number: <a href="#">TIDA-010938 AC-DC E2</a>	Sheet Title:	
SVN Rev: <a href="#">Not in version control</a>	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">7</a> of <a href="#">11</a>
Drawn By:	File: <a href="#">TIDA-010938 AC-DC_Voltage Measurement_Sch_Sheet B</a>	
Engineer: <a href="#">Vedatroyee Ghosh</a>	Contact: <a href="#">http://www.ti.com/support</a>	

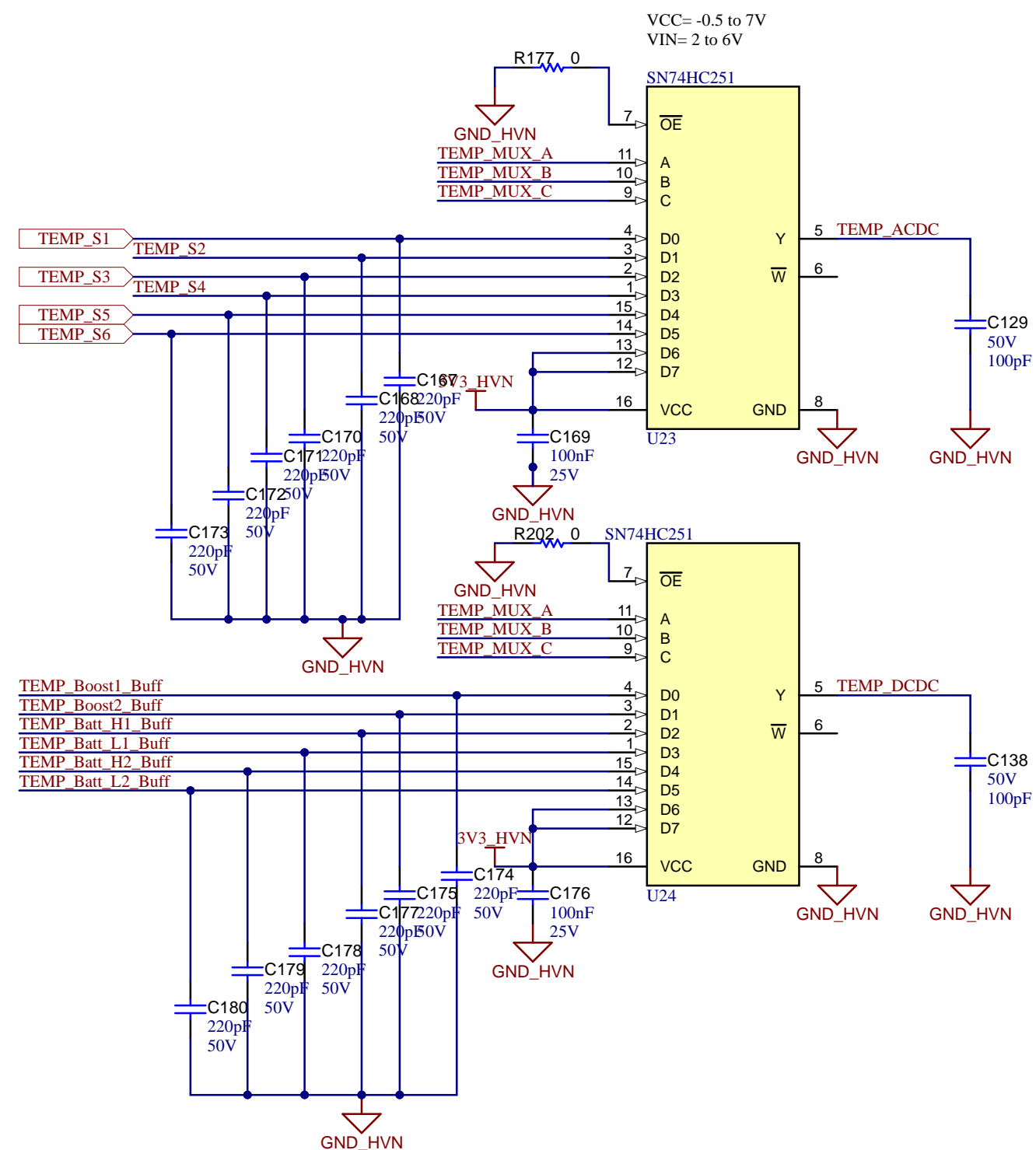
## CONTROL CARD



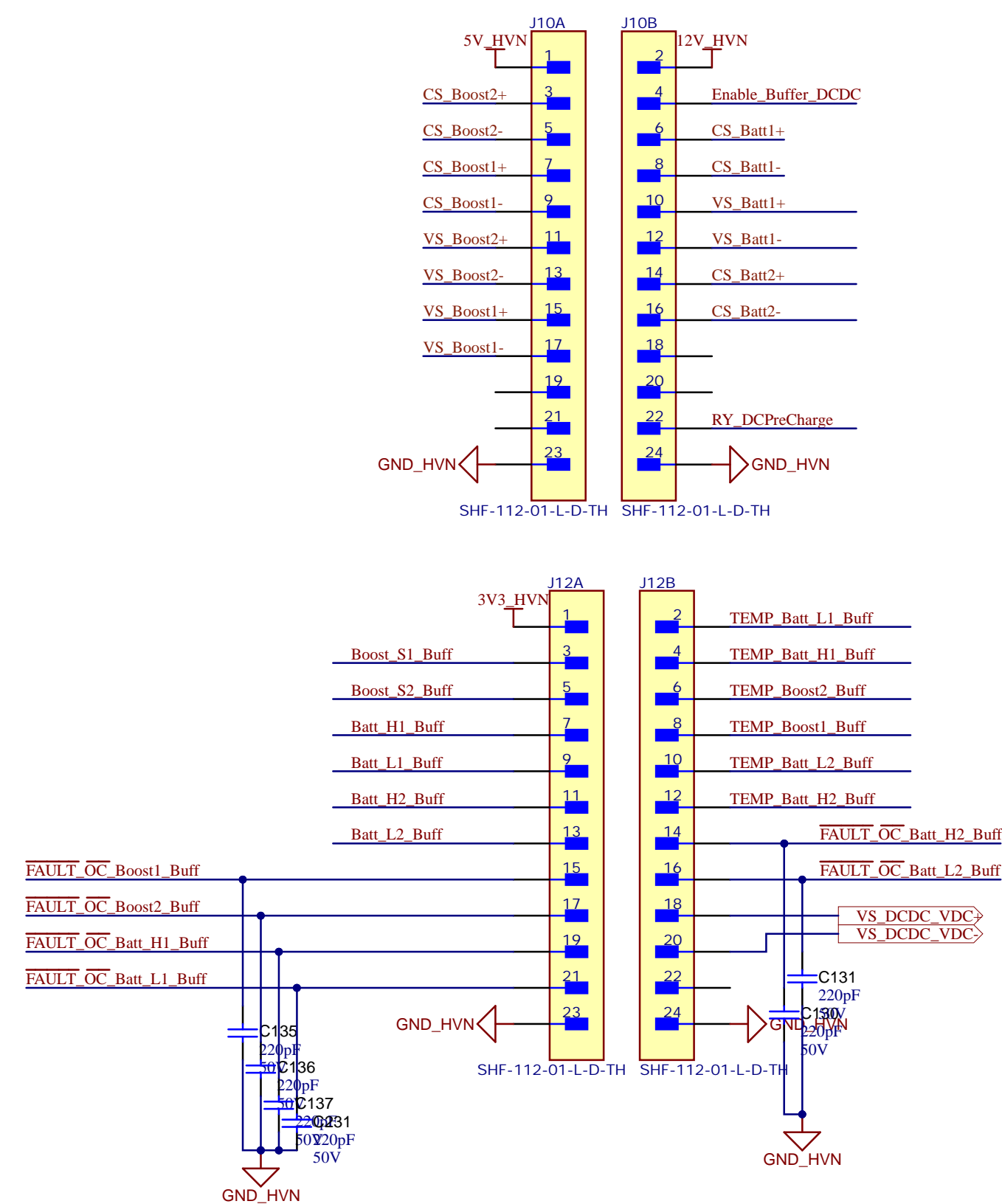
## COMMUNICATION WITH BATTERY



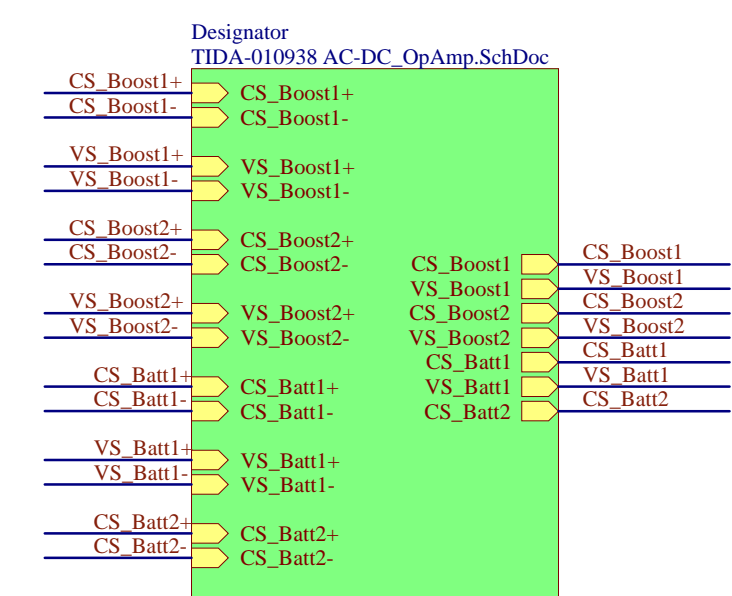
## MUX FOR TEMP. MEASUREMENT



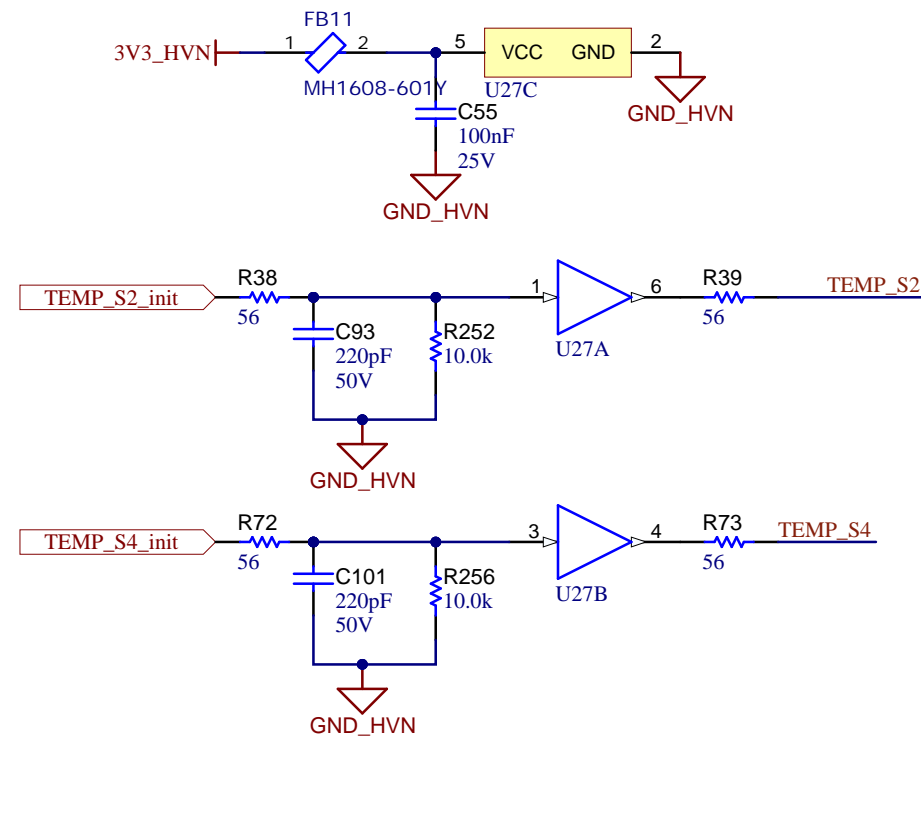
## CONNECTORS TO&FRO DC/DC



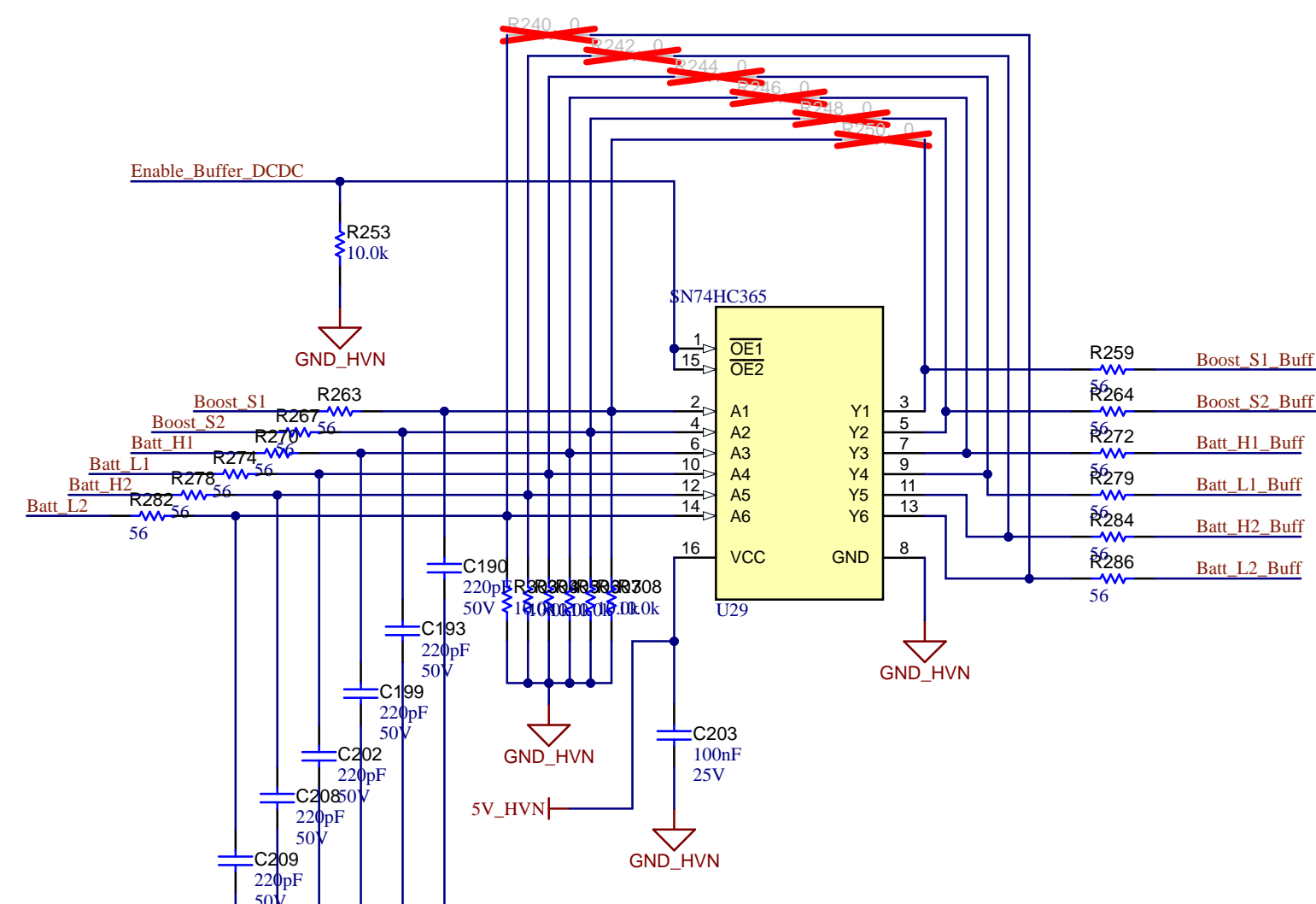
## MEASUREMENT SIGNALS FROM DC/DC



## LEVEL SHIFTING

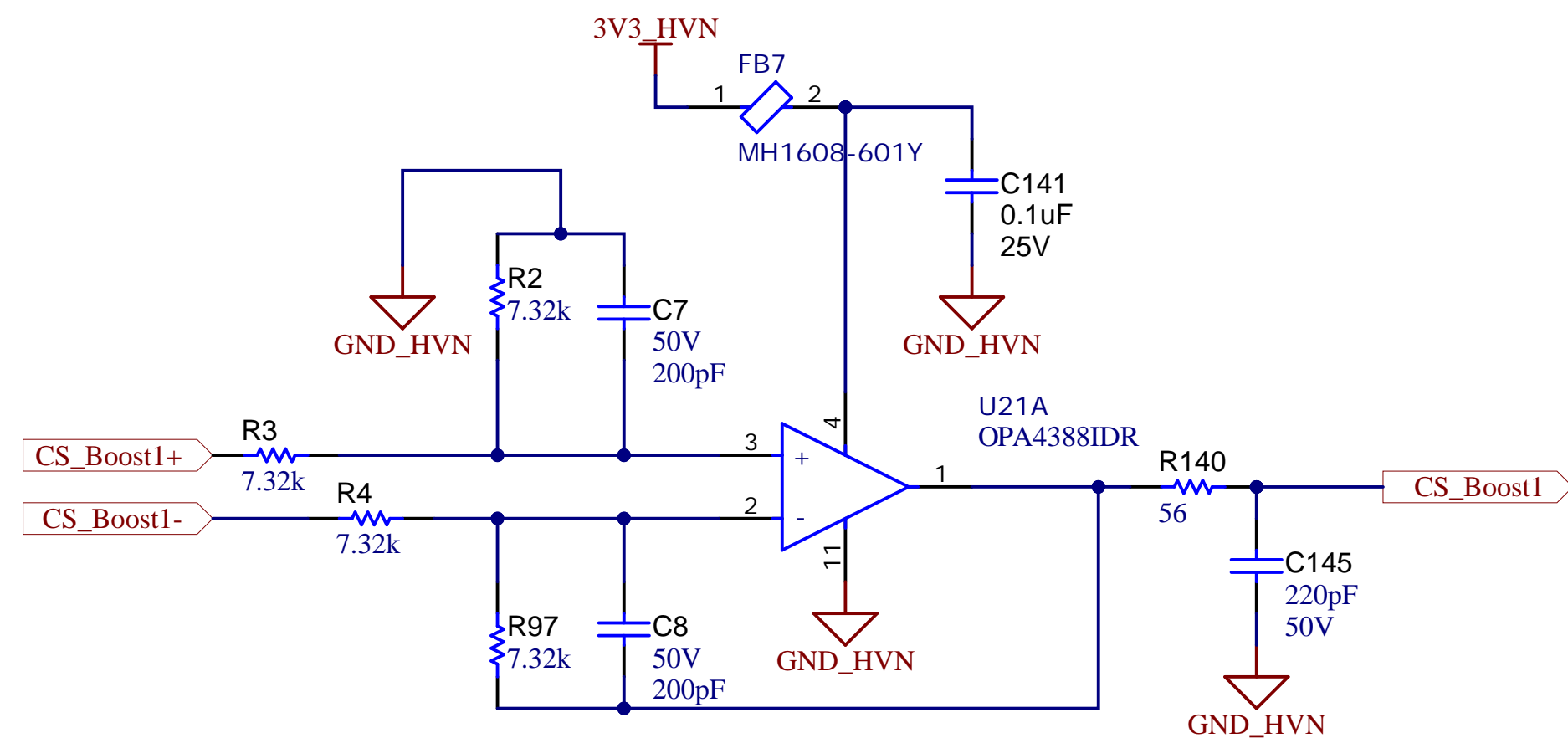


## PWM SIGNAL BUFFER DC/DC

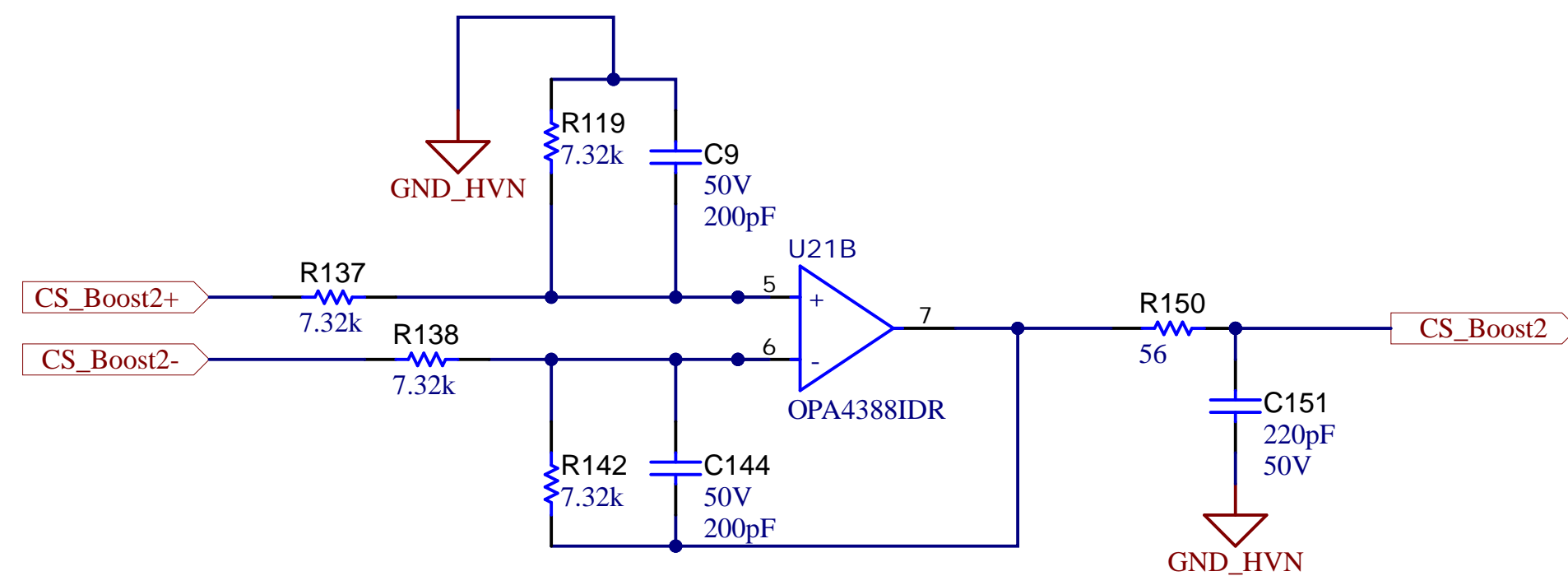




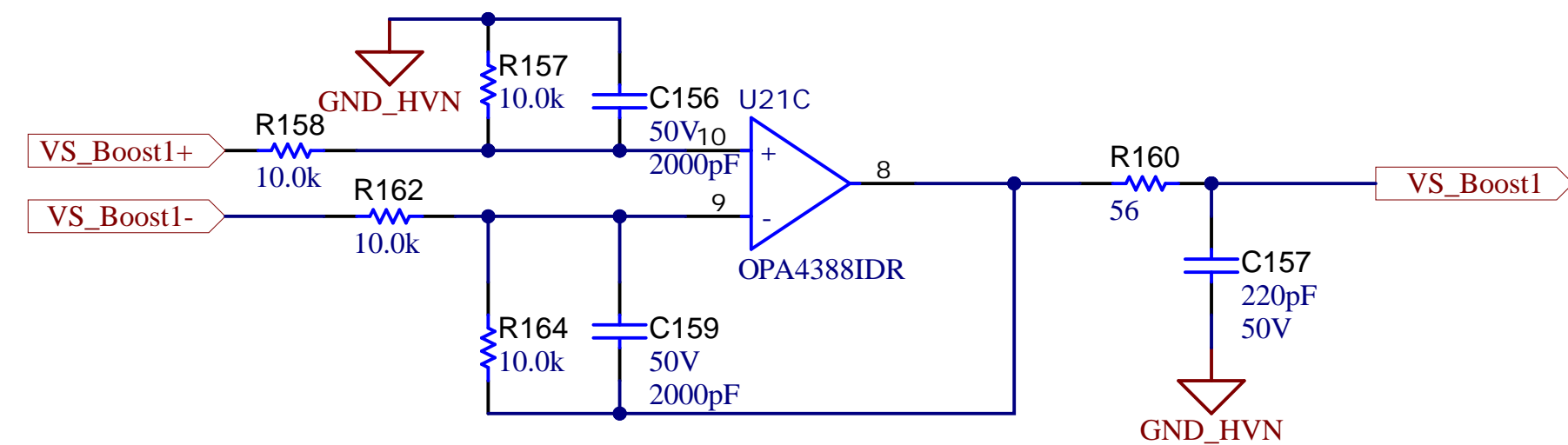
### Boost leg 1 Current



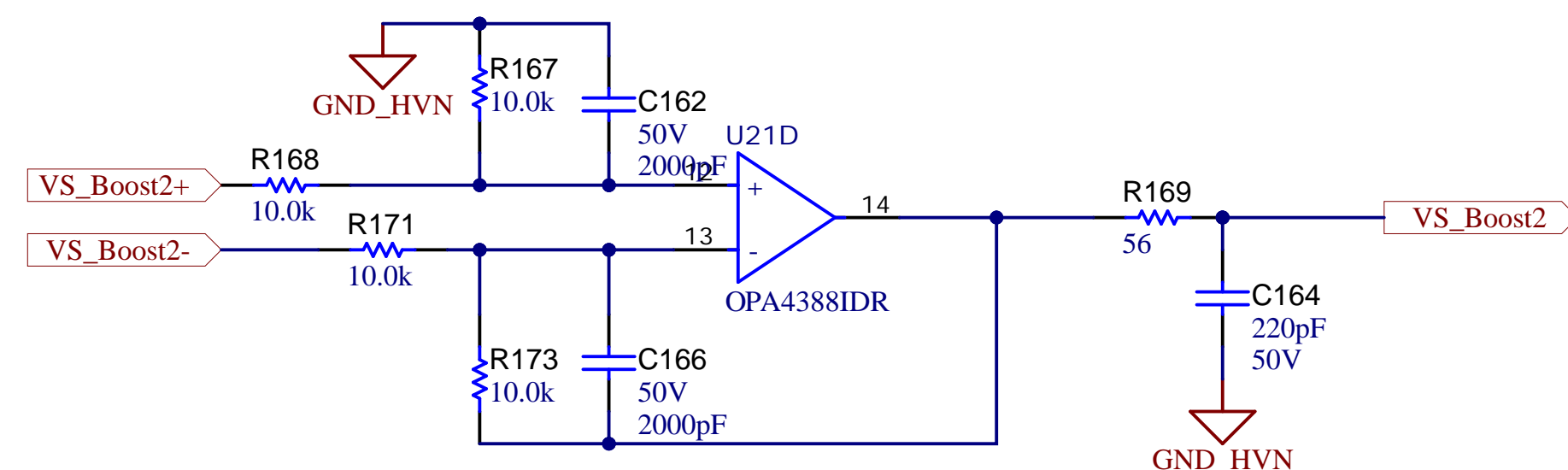
### Boost leg 2 Current



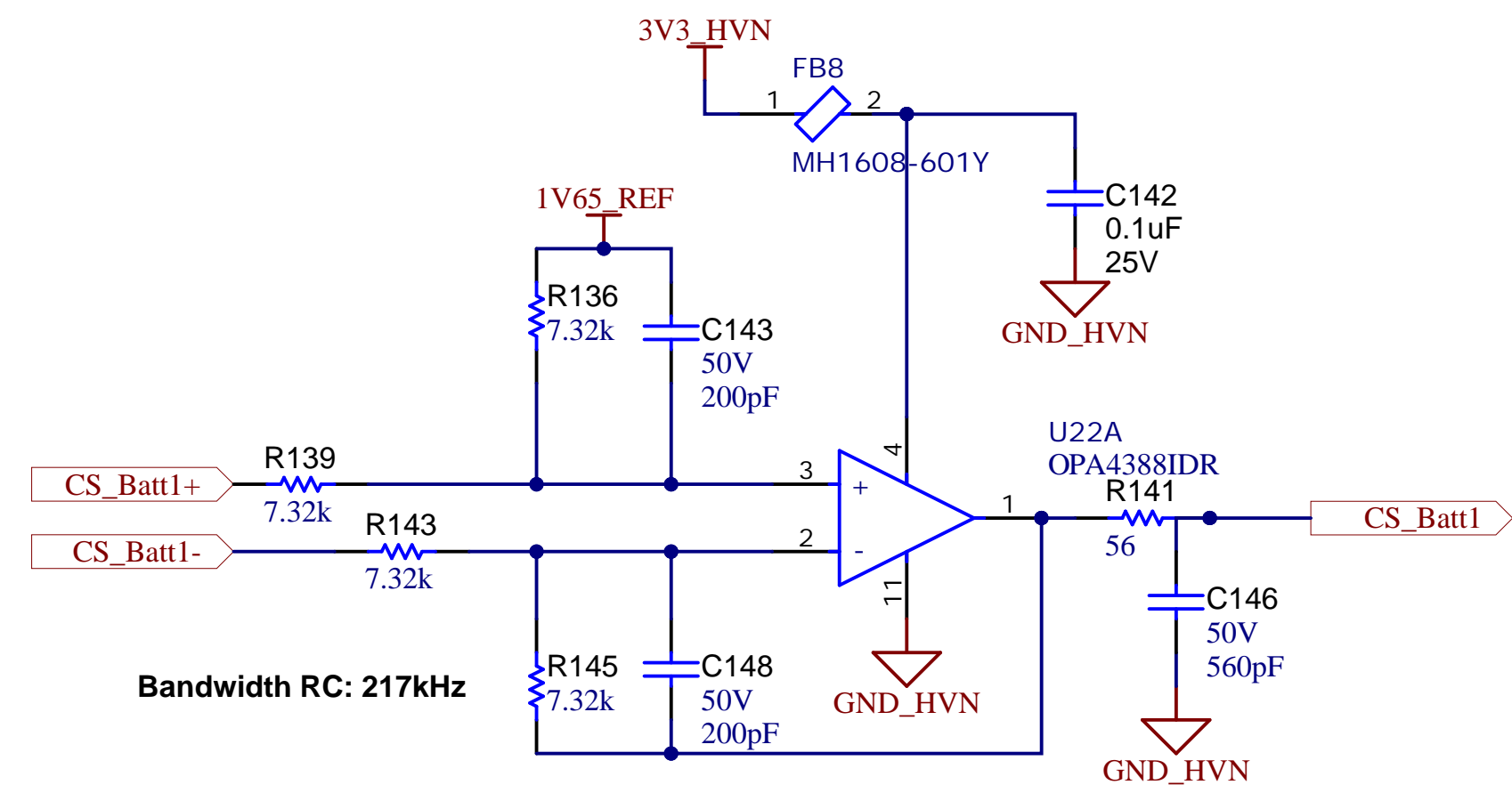
### Boost leg 1 Voltage



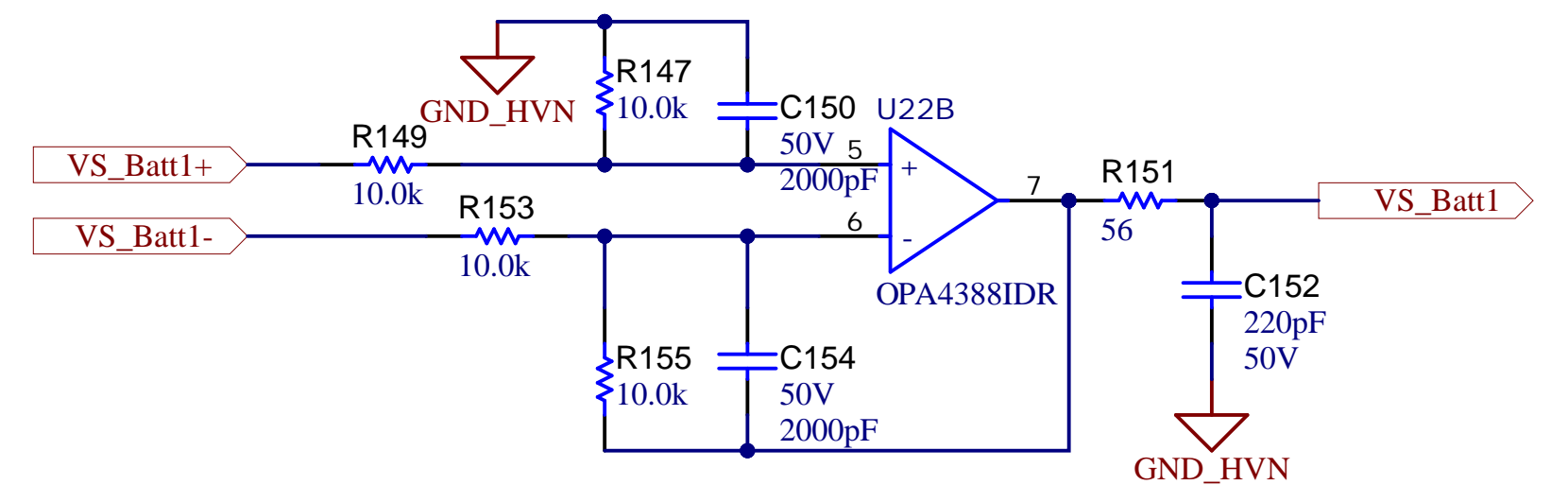
### Boost leg 2 Voltage



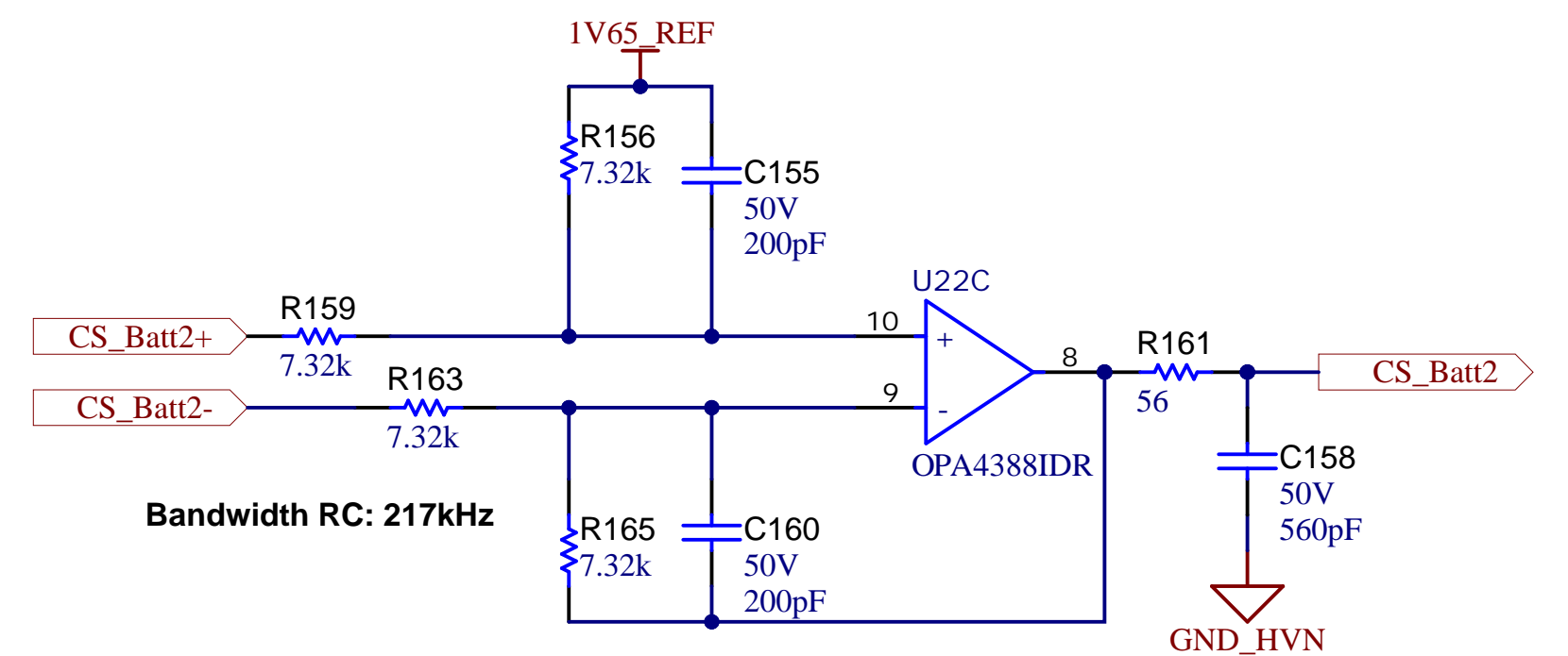
Battery stage 1 Current



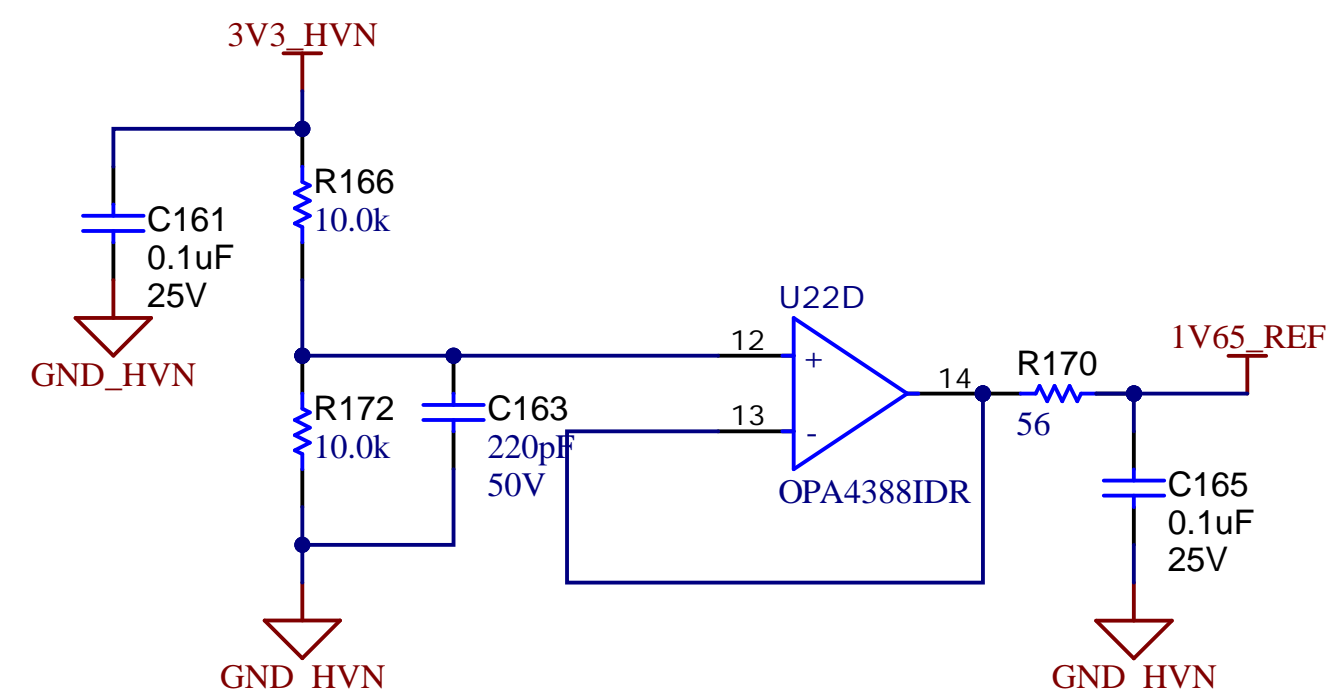
Battery stage 1 Voltage

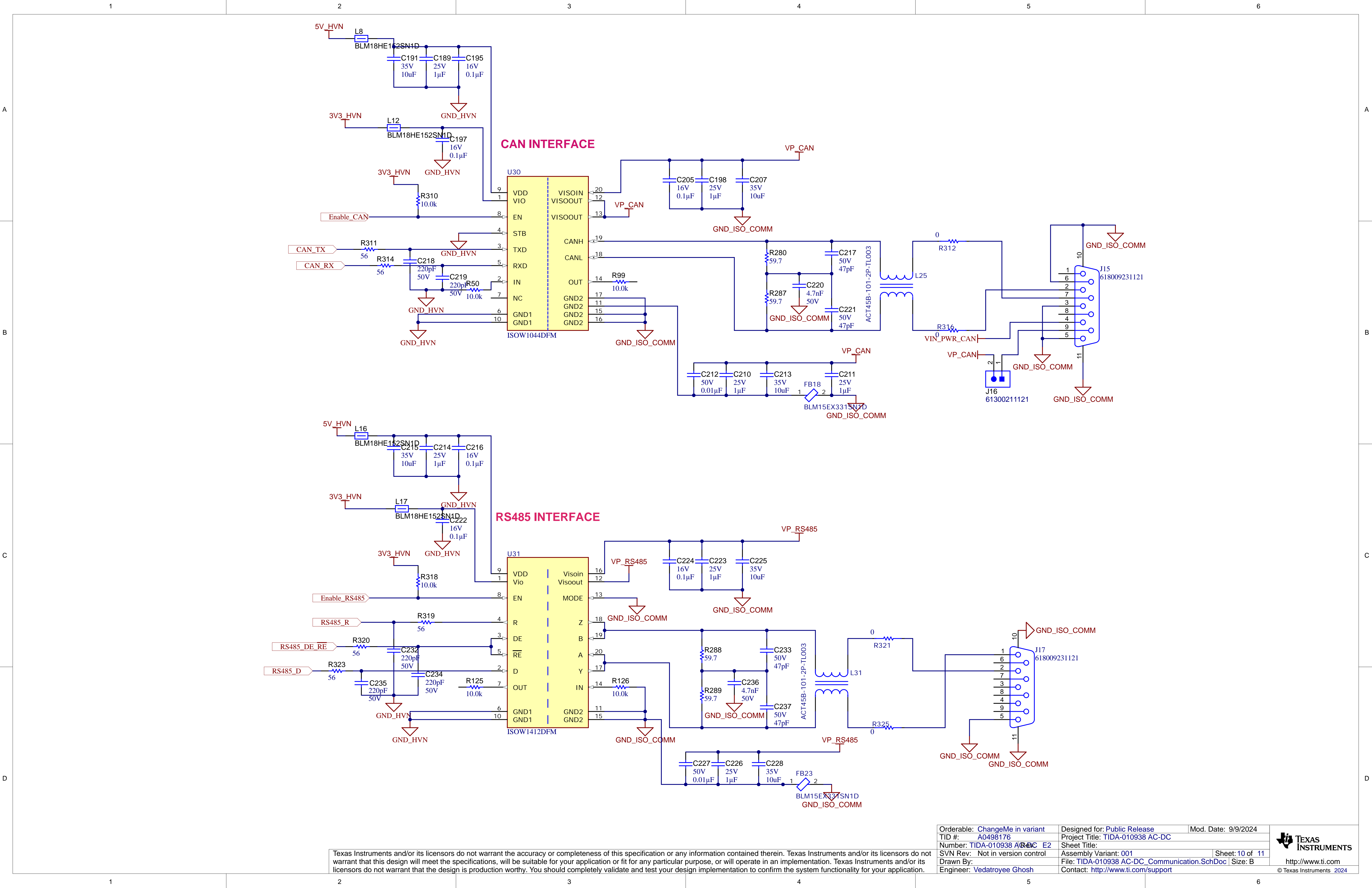


Battery stage 2 Current



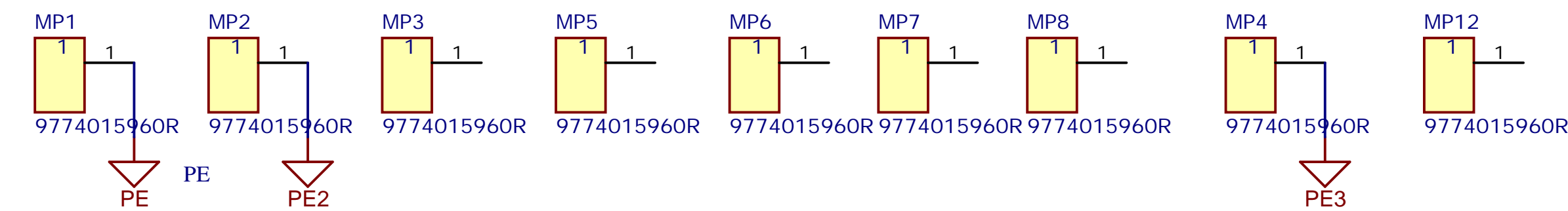
### REF generation



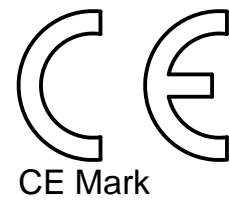


Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular 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: <a href="#">ChangeMe</a> in variant	Designed for: Public Release	Mod. Date: 9/9/2024
TID #: A0498176	Project Title: TIDA-010938 AC-DC	
Number: TIDA-010938 AC-DC E2	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 10 of 11
Drawn By:	File: TIDA-010938 AC-DC_Communication.SchDoc	Size: B
Engineer: Vedatroyee Ghosh	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	



PCB Number: TIDA-010938 AC-DC  
PCB Rev: E2

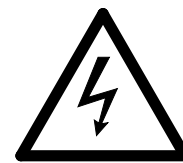


PCB  
LOGO  
FCC disclaimer

PCB  
LOGO  
WEEE logo



CAUTION HOT SURFACE



DANGER HIGH VOLTAGE

[illegible]

LBL1

PCB Label

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.