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Orderable: NA	Designed for: Public Release	Mod. Date: 10/28/2020
TID #: 010086	Project Title: 10A Digital battery test system	
Number: XTIDA-010086 Rev: E2	Sheet Title: Block diagram	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 1 of 8
Drawn By: Jeff Xie	File: XTIDA-010086_CoverSheet_SchDoc	Size: B
Engineer: Jeff Xie / Shaury Anand	Contact: http://www.ti.com/support	



MAIN SHEET
 XTIDA-010086_MAIN SHEET.SchDoc



CoverSheet
 XTIDA-010086_CoverSheet.SchDoc



Hardware
 XTIDA-010086_Hardware.SchDoc

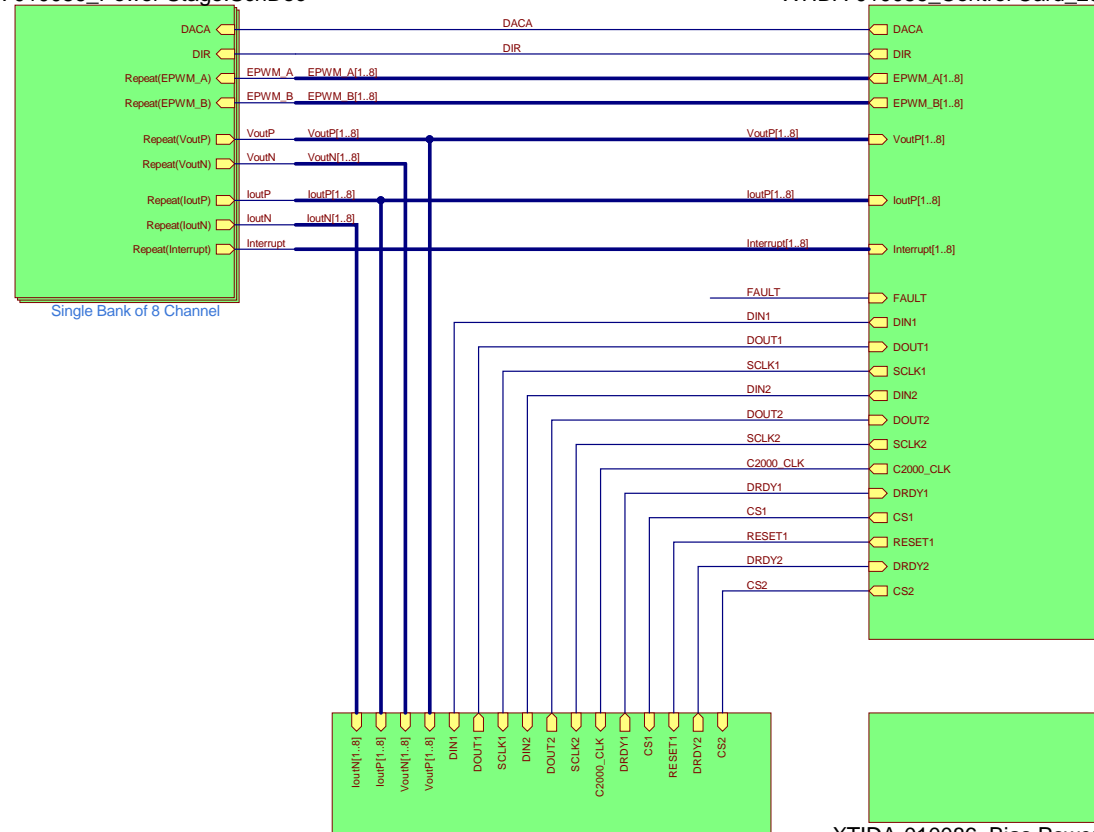


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Orderable: NA	Designed for: Public Release	Mod. Date: 12/27/2019
TID #: 010086	Project Title: 10A Digital battery test system	
Number: XTIDA-010086 Rev: E2	Sheet Title: TOPLEVEL MAIN SHEET	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 2 of 8
Drawn By: Jeff Xie	File: XTIDA-010086_TOP LEVEL MAIN SHEET.SchDoc	Size: B
Engineer: Jeff Xie / Shaury Anand	Contact: http://www.ti.com/support	

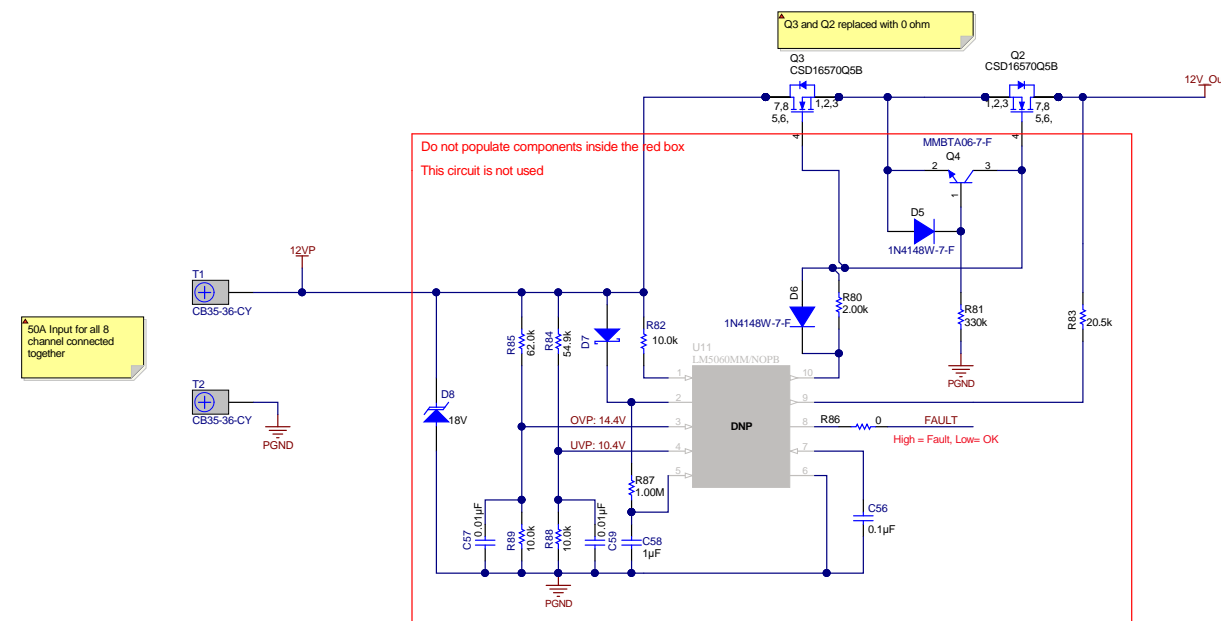
Repeat(Ch,1,8)
XTIDA-010086_Power Stage.SchDoc

Control Card_28379
XTIDA-010086_Control Card_28379.SchDoc

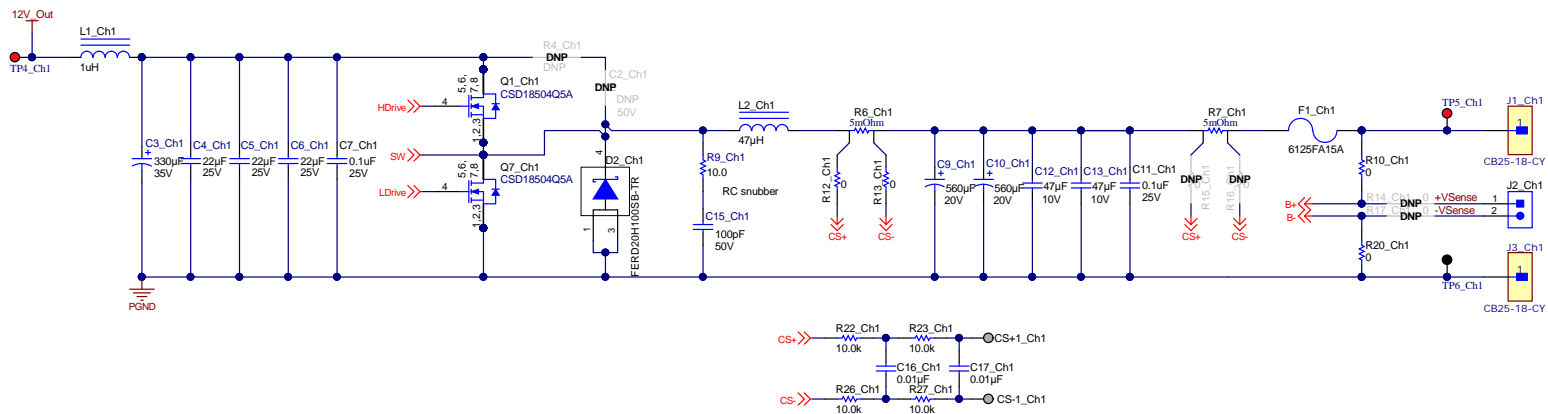


XTIDA-010086_ADC.SchDoc
ADC

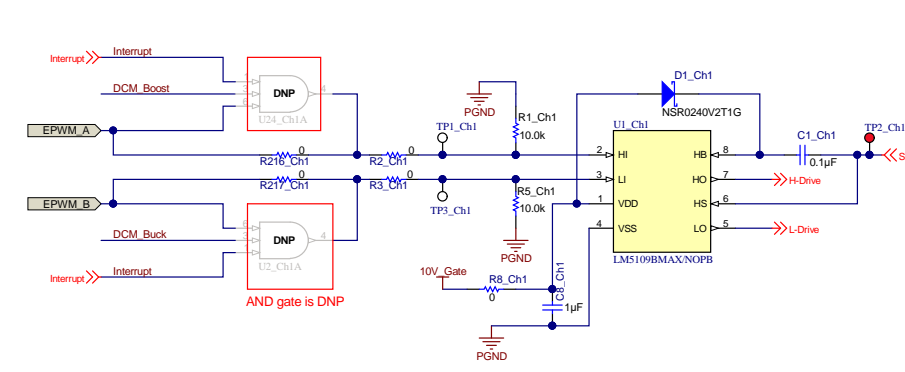
XTIDA-010086_Bias Power Supply.SchDoc
Bias Power Supply



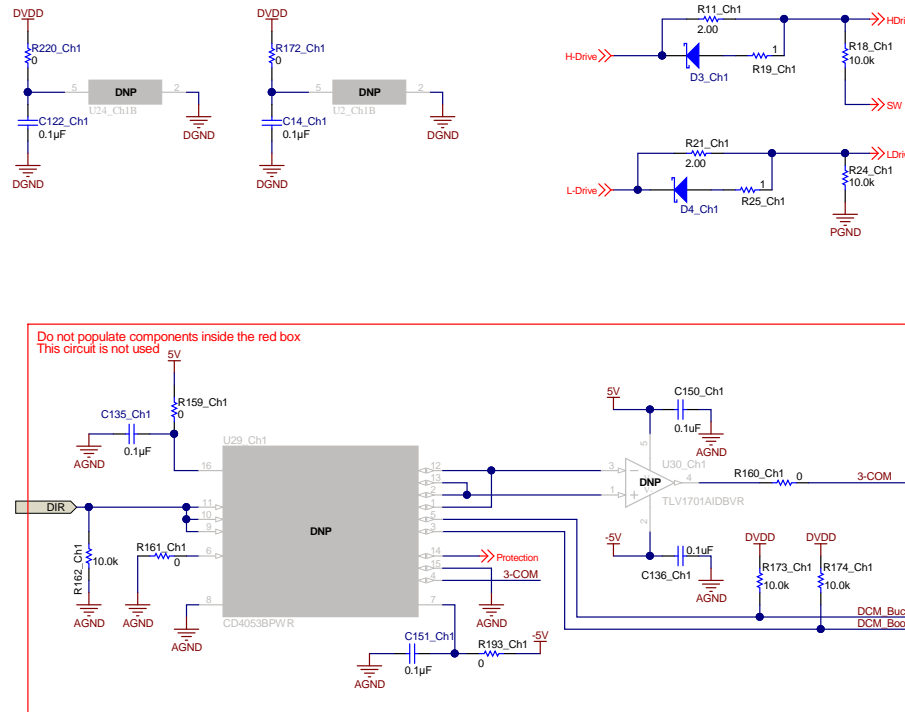
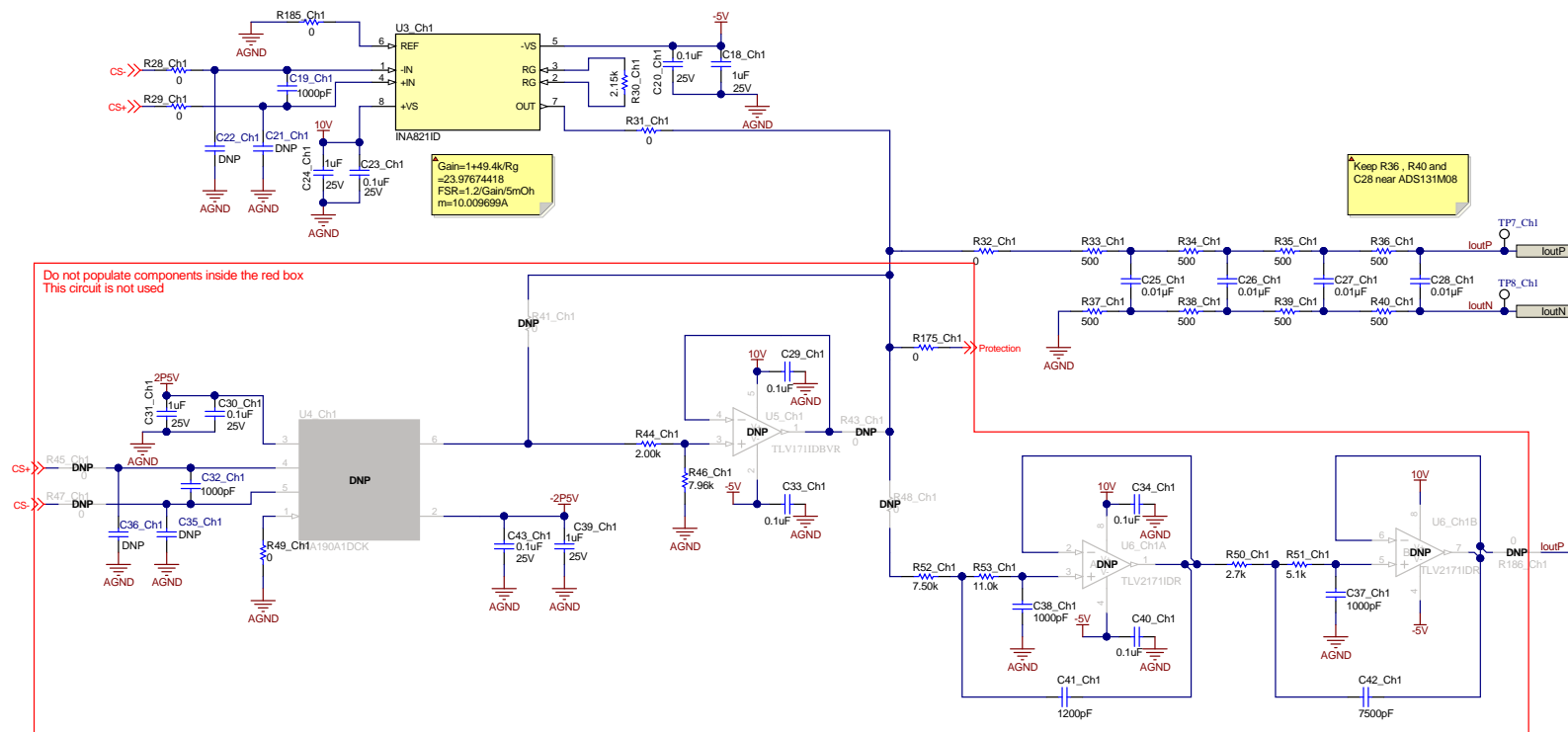
Power stage



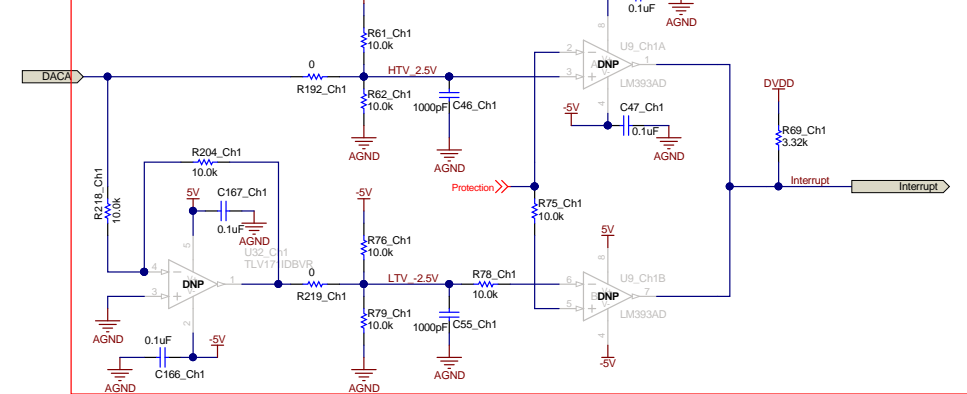
Driver circuit



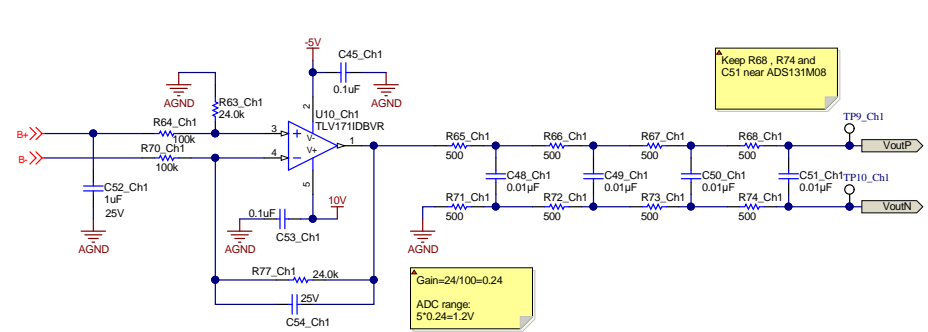
Current sense



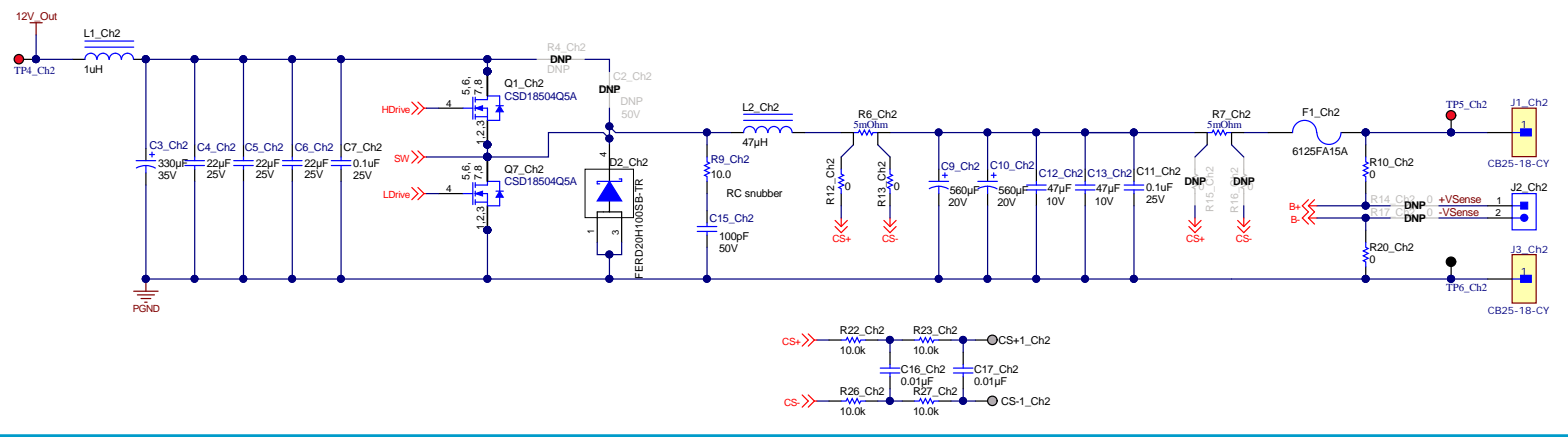
OCP circuit



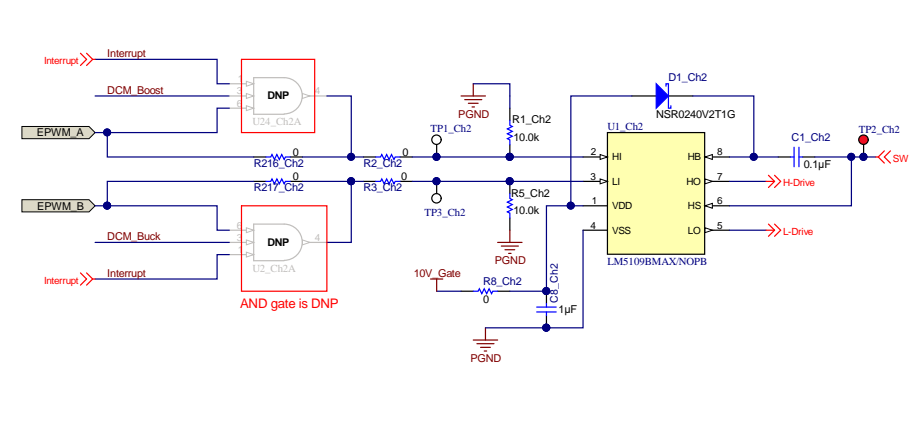
Voltage Sense



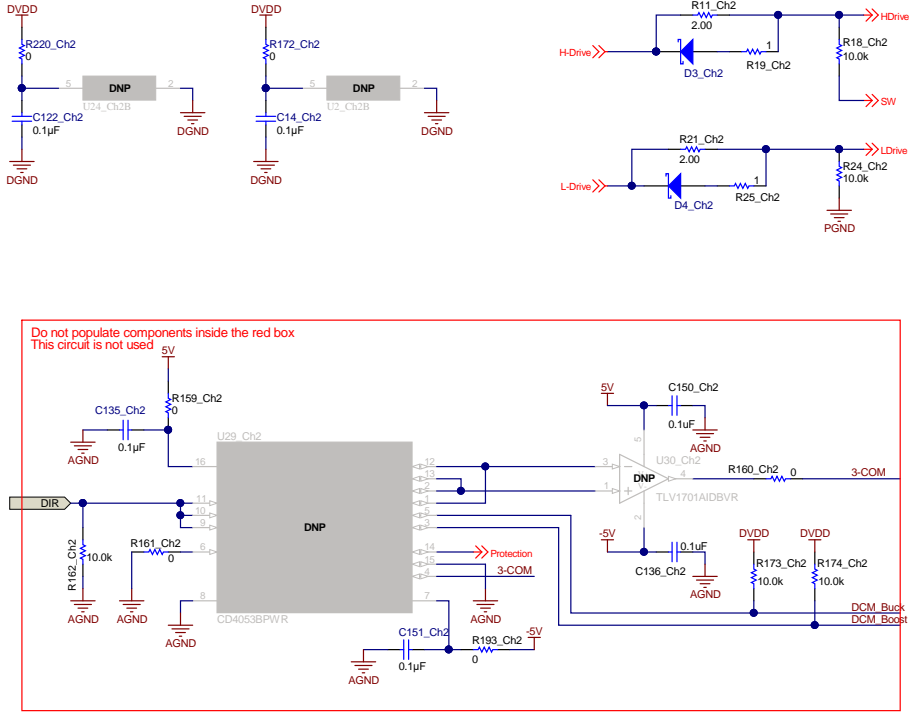
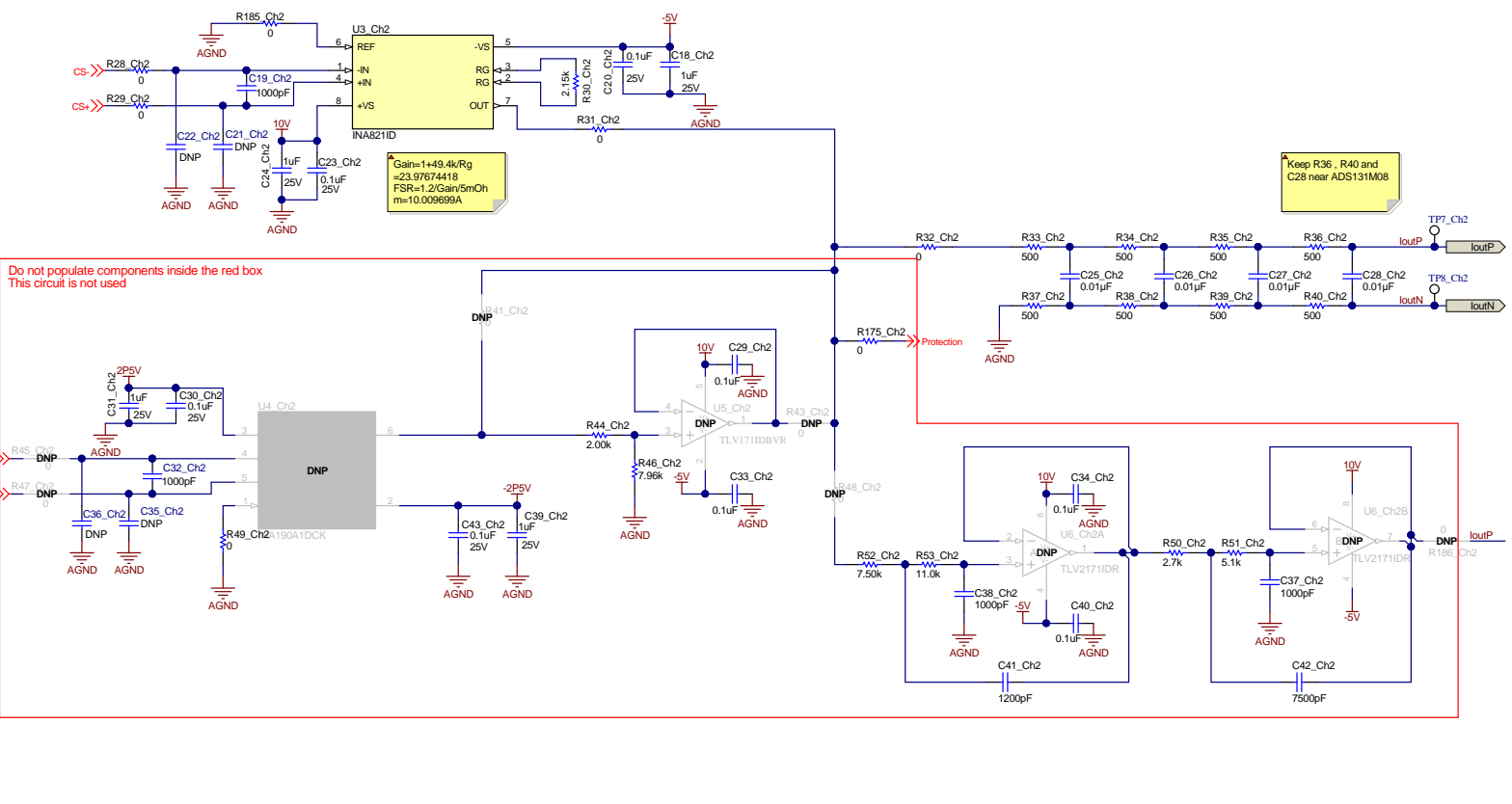
Power stage



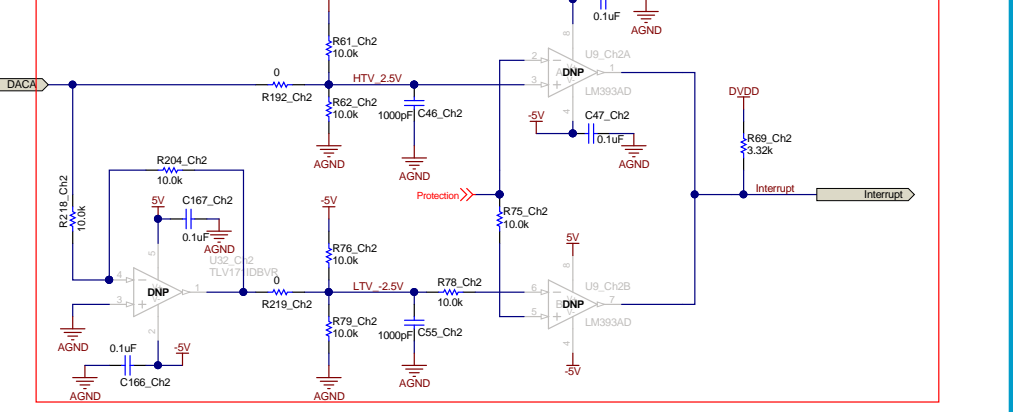
Driver circuit



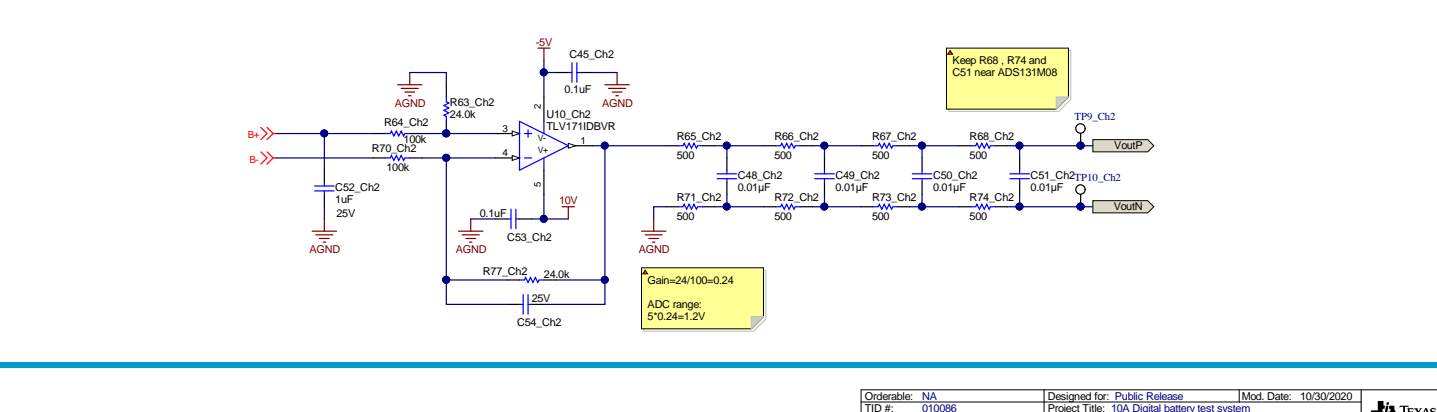
Current sense



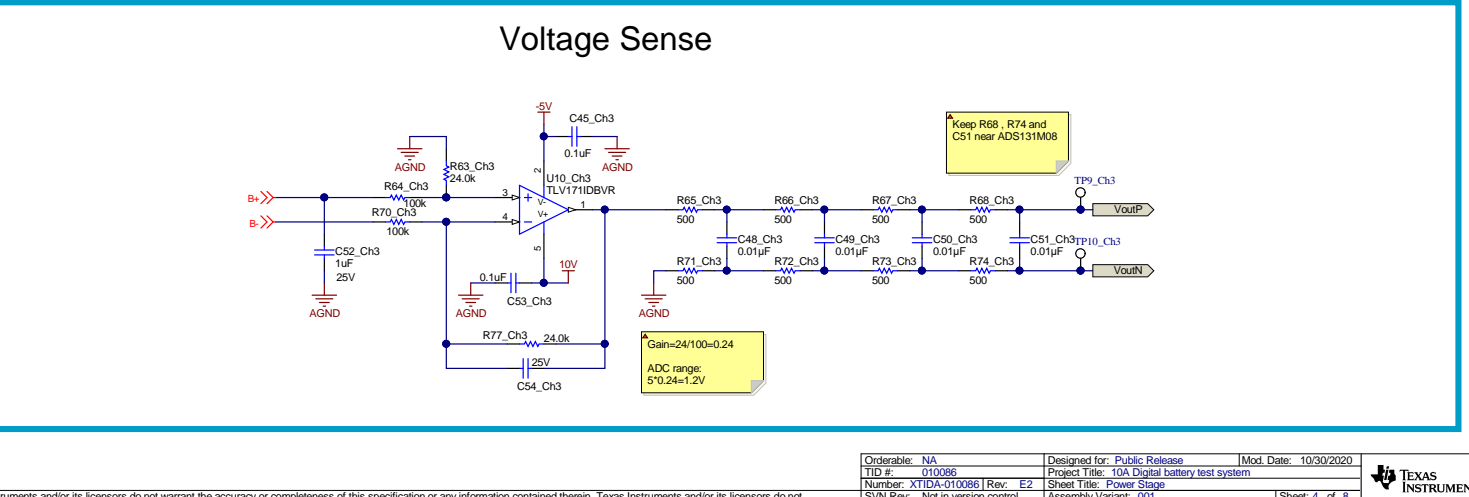
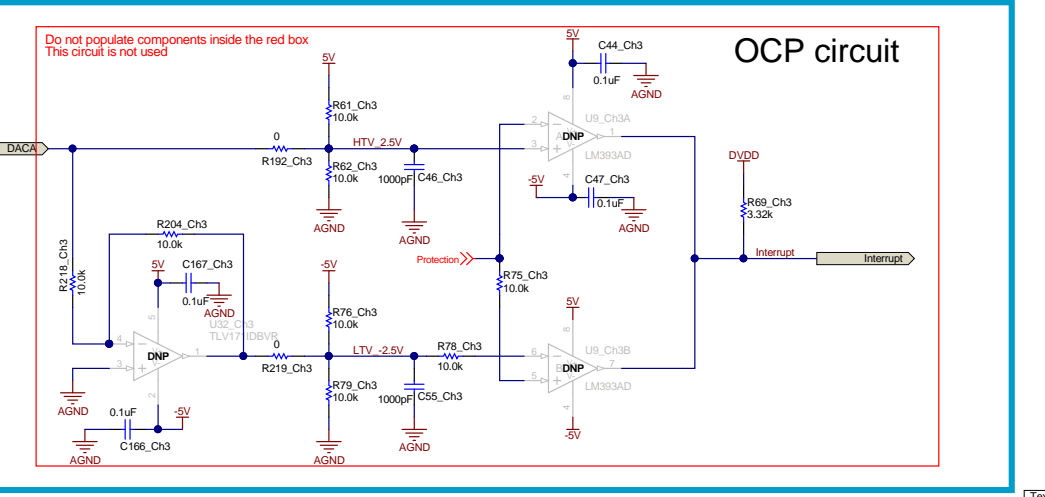
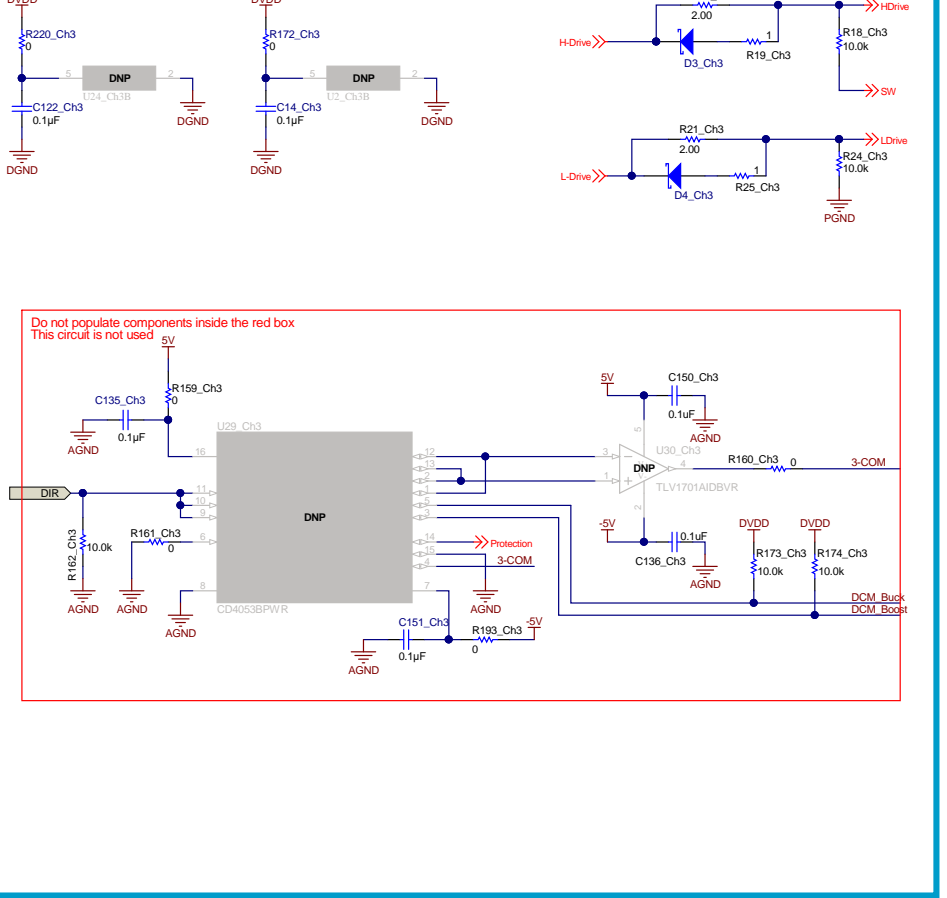
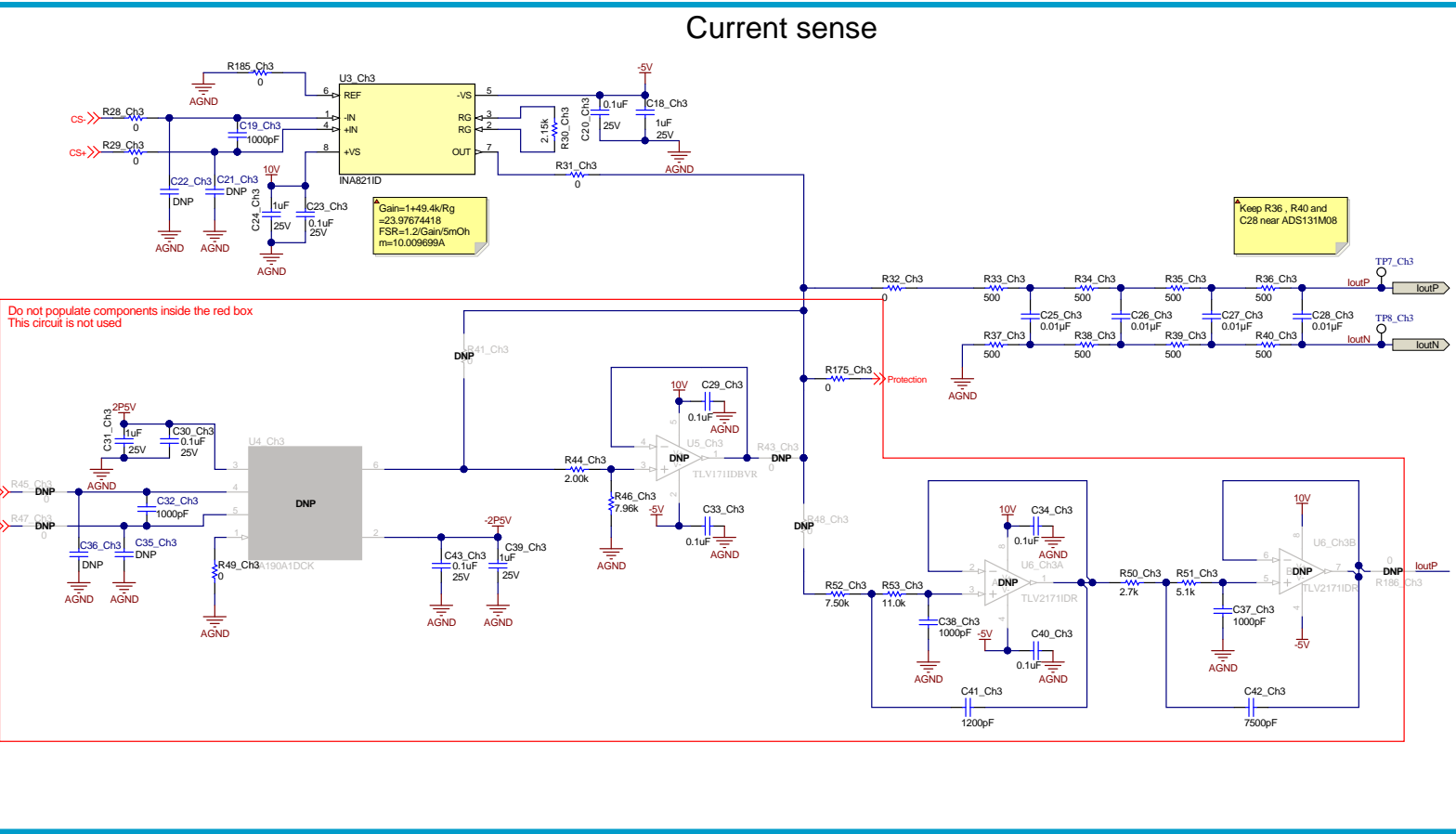
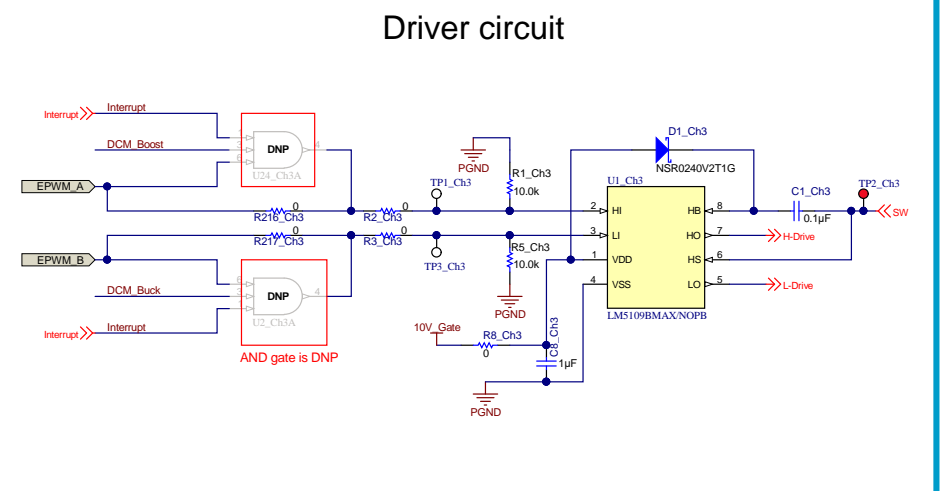
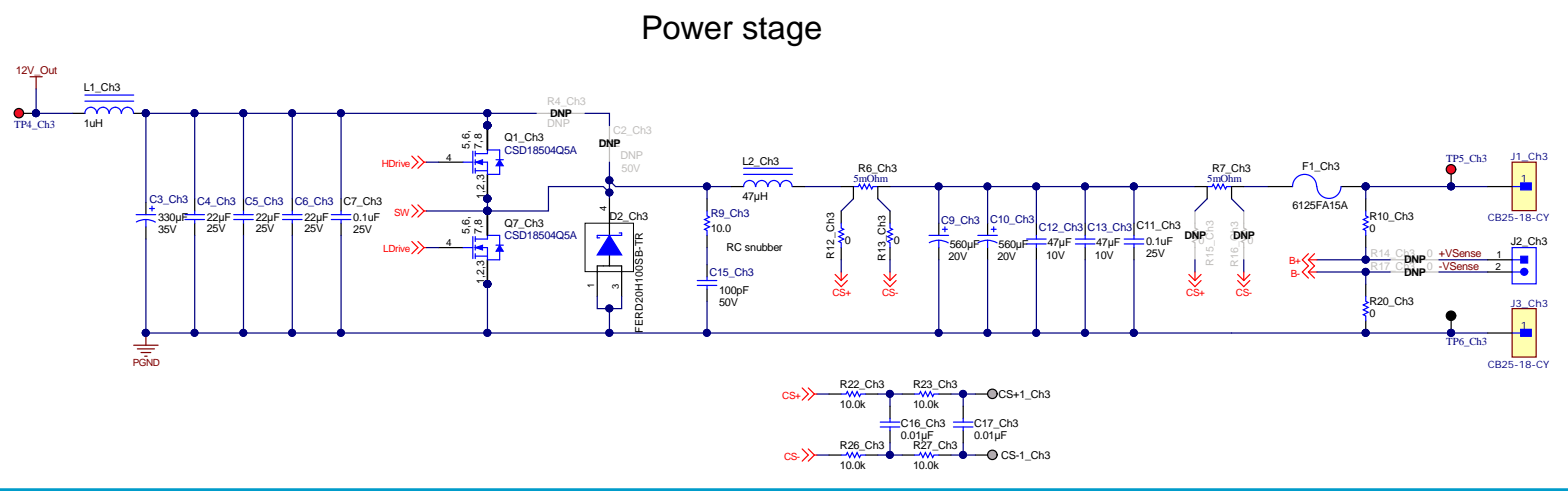
OCP circuit

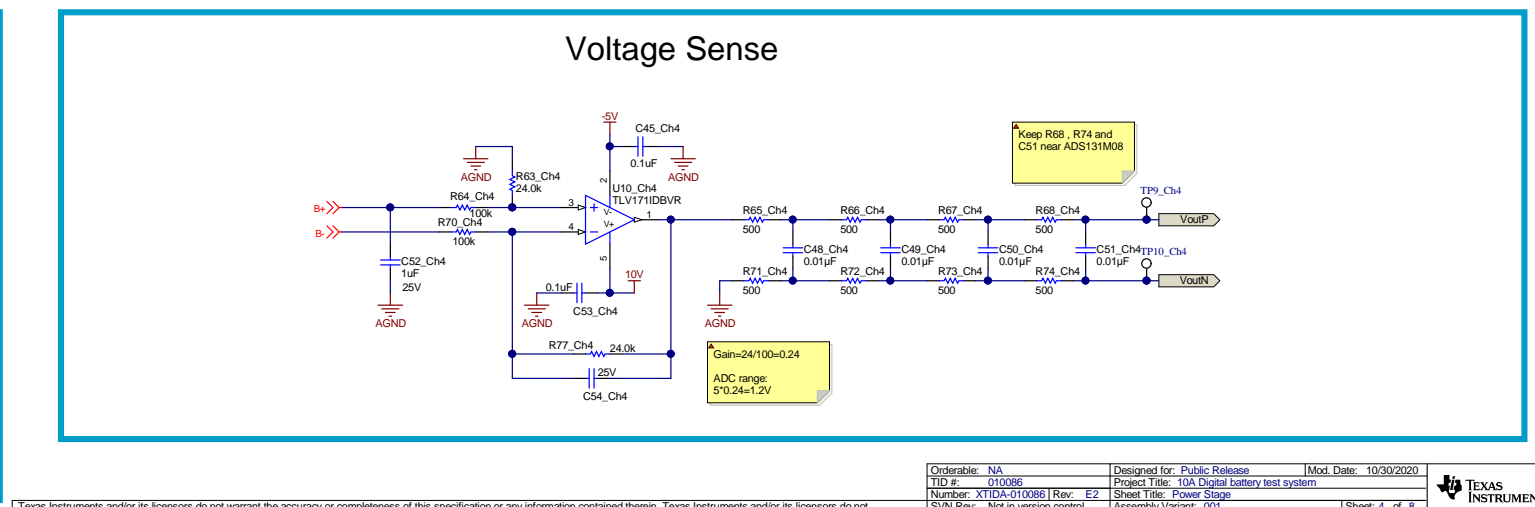
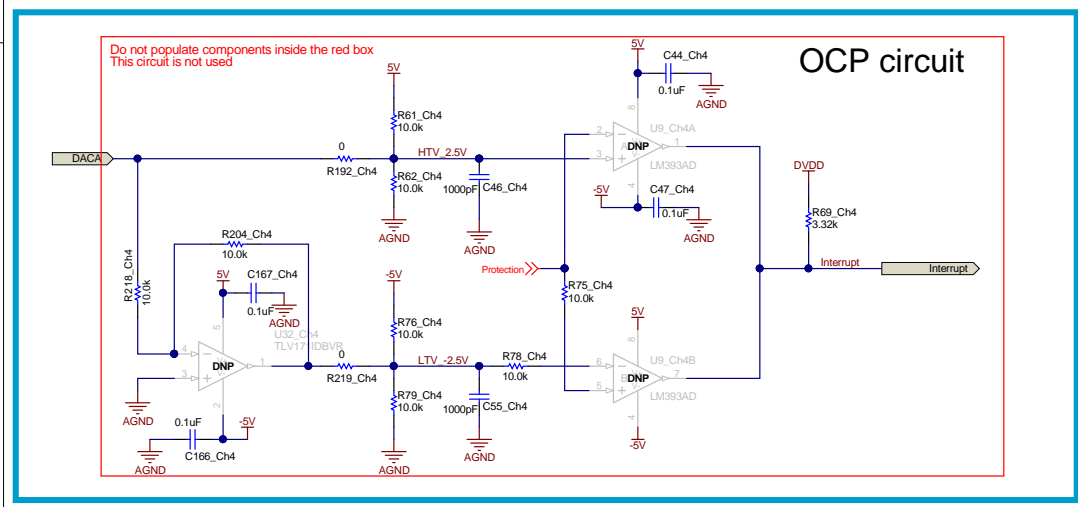
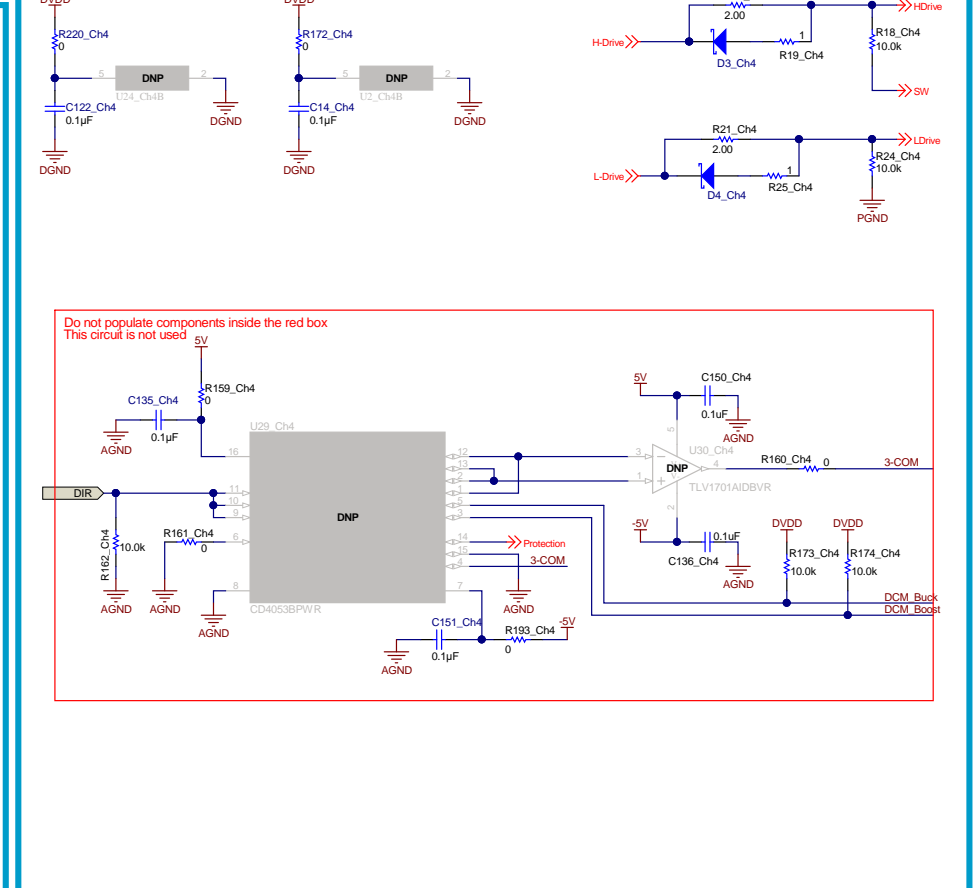
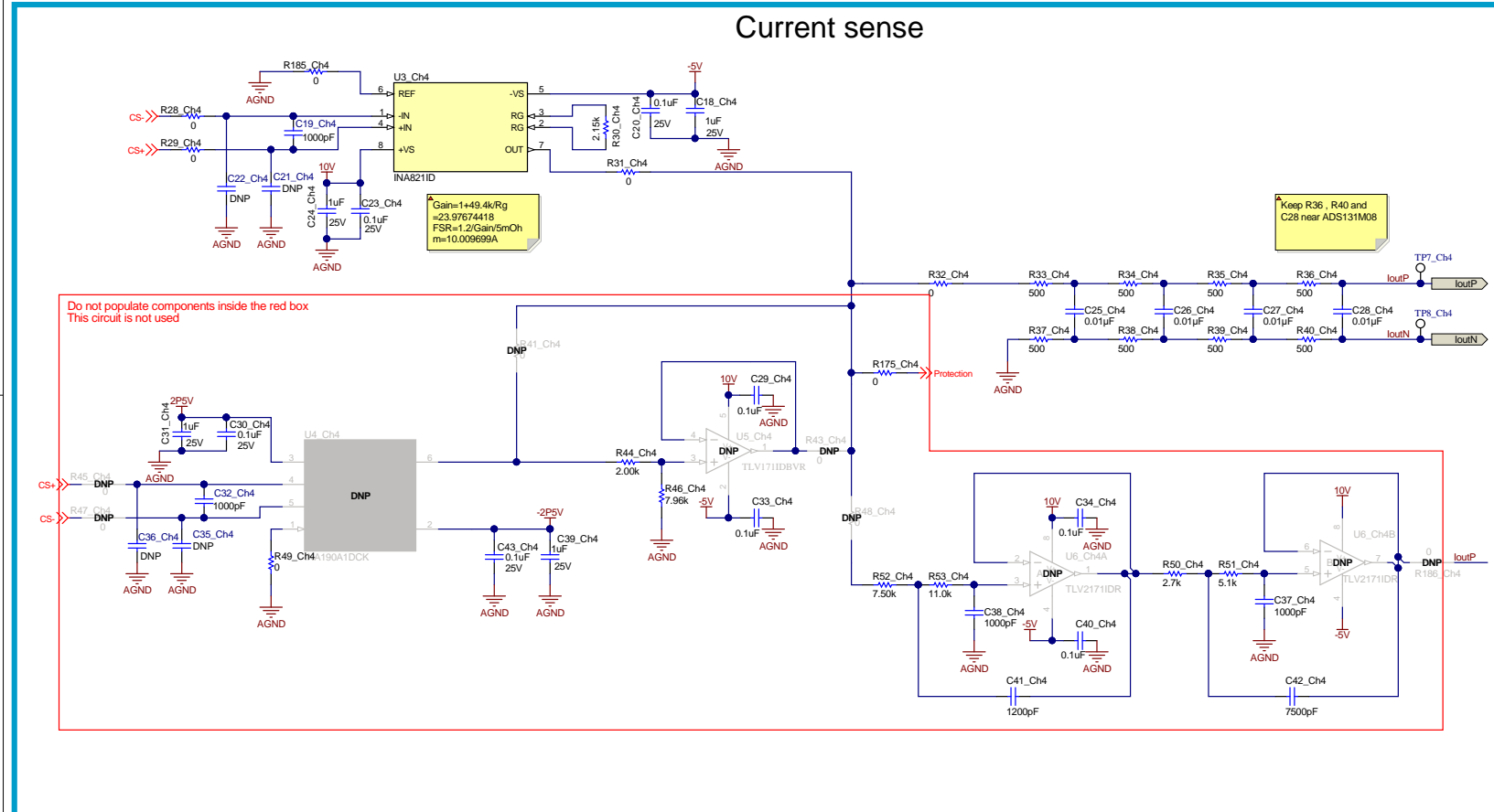
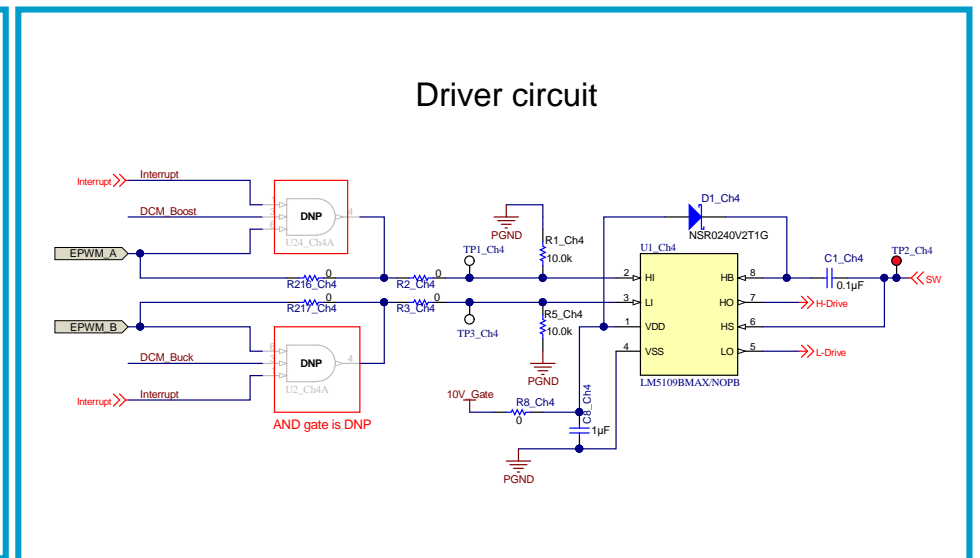
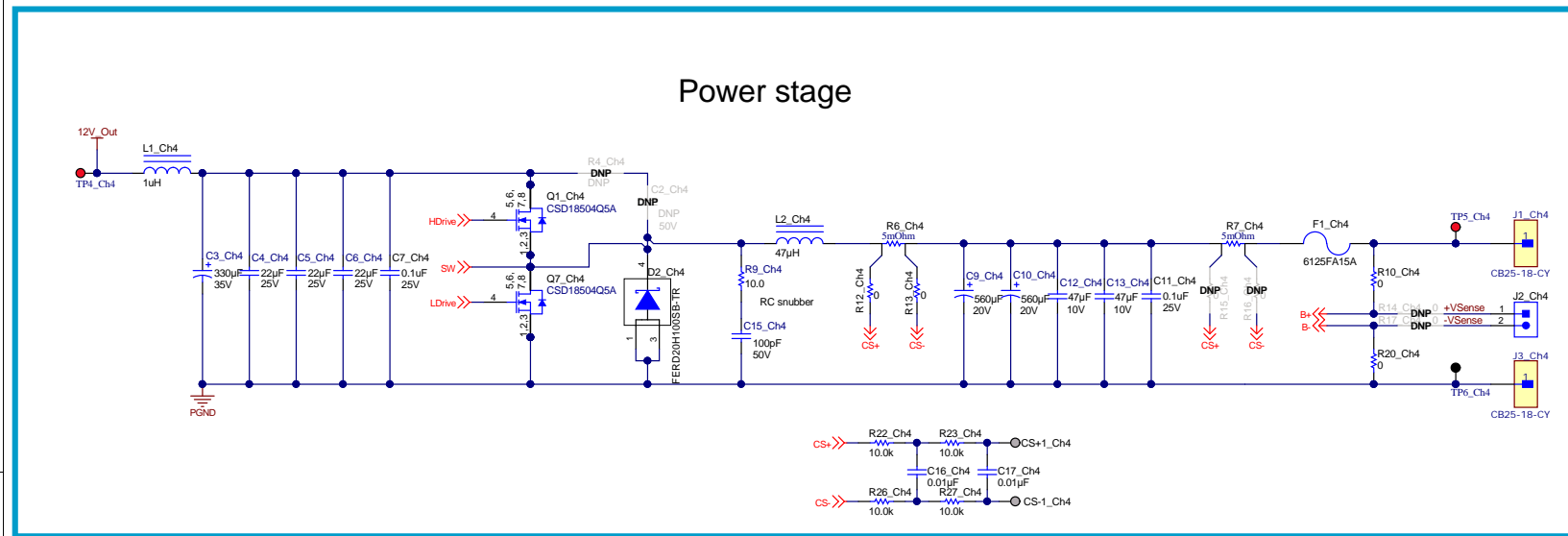


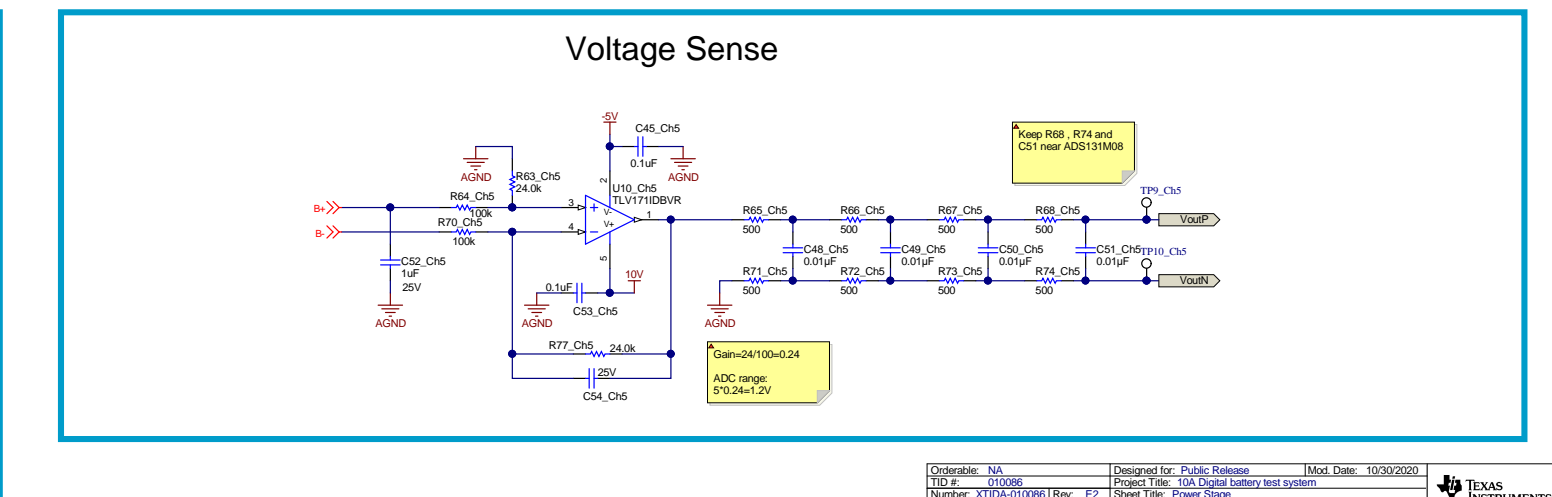
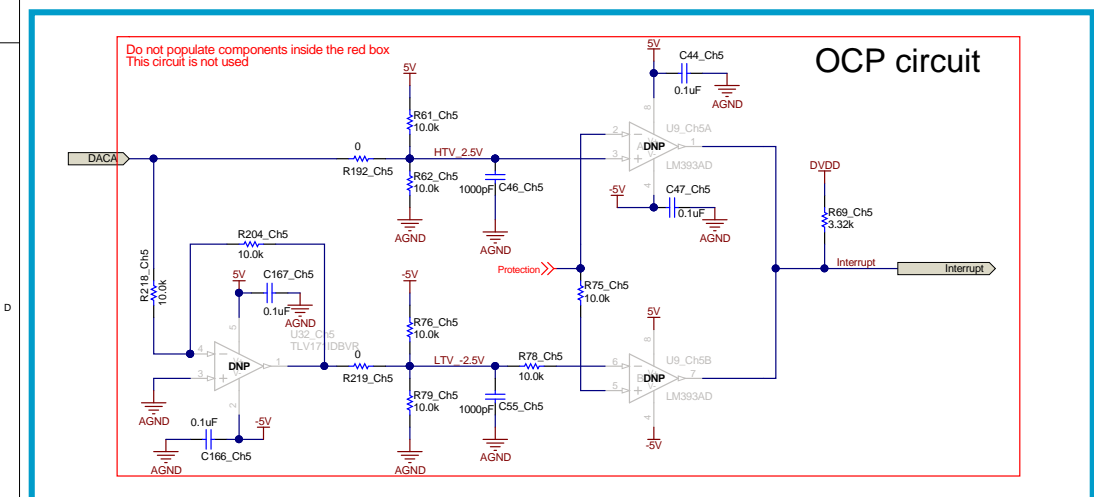
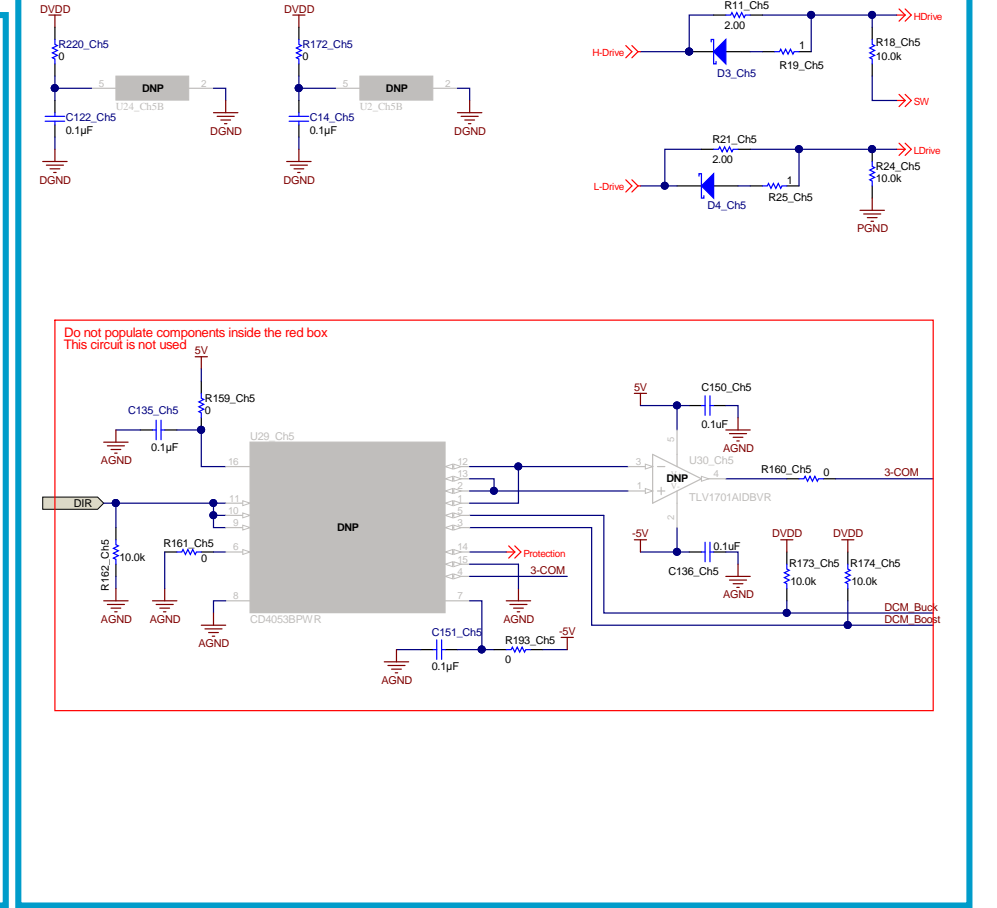
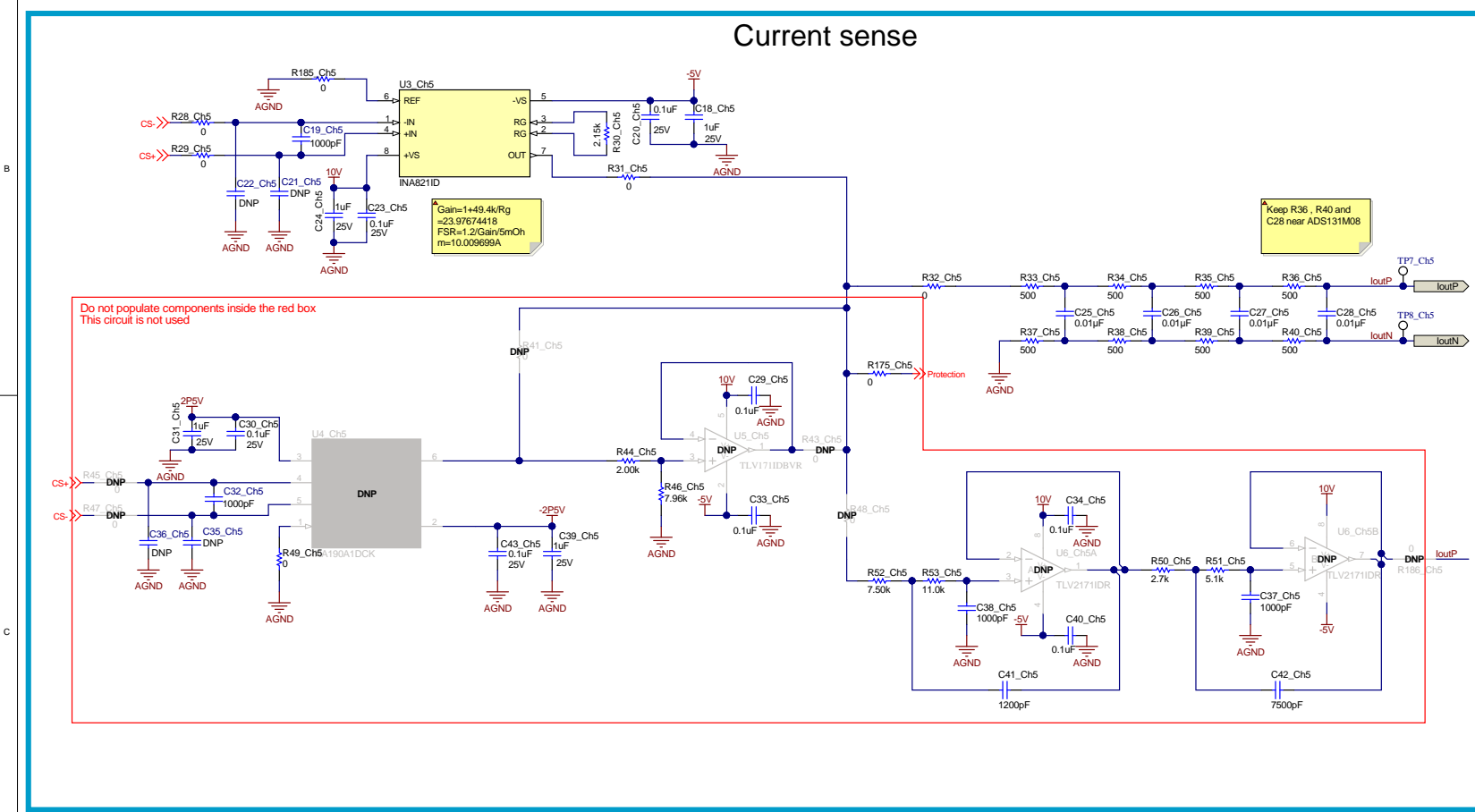
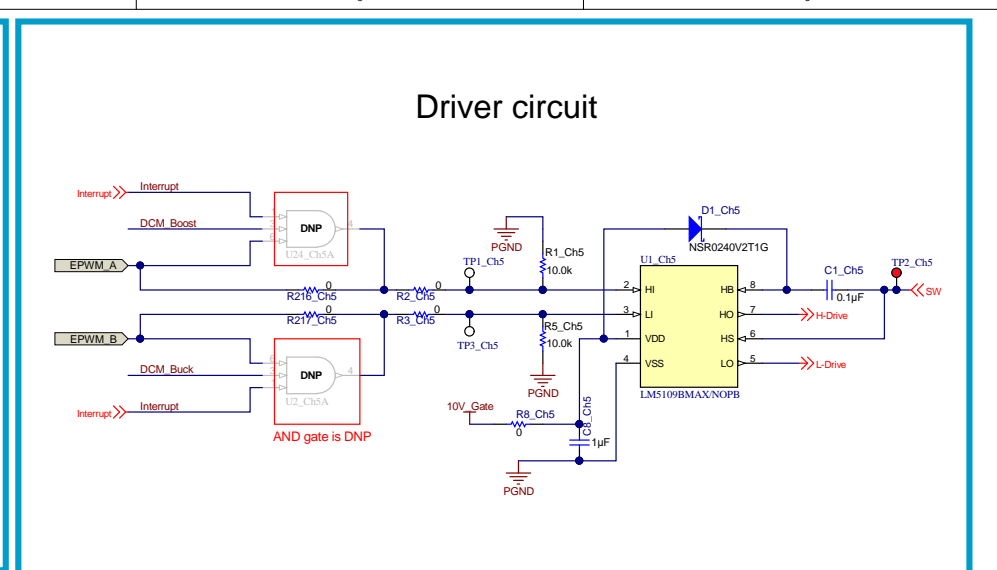
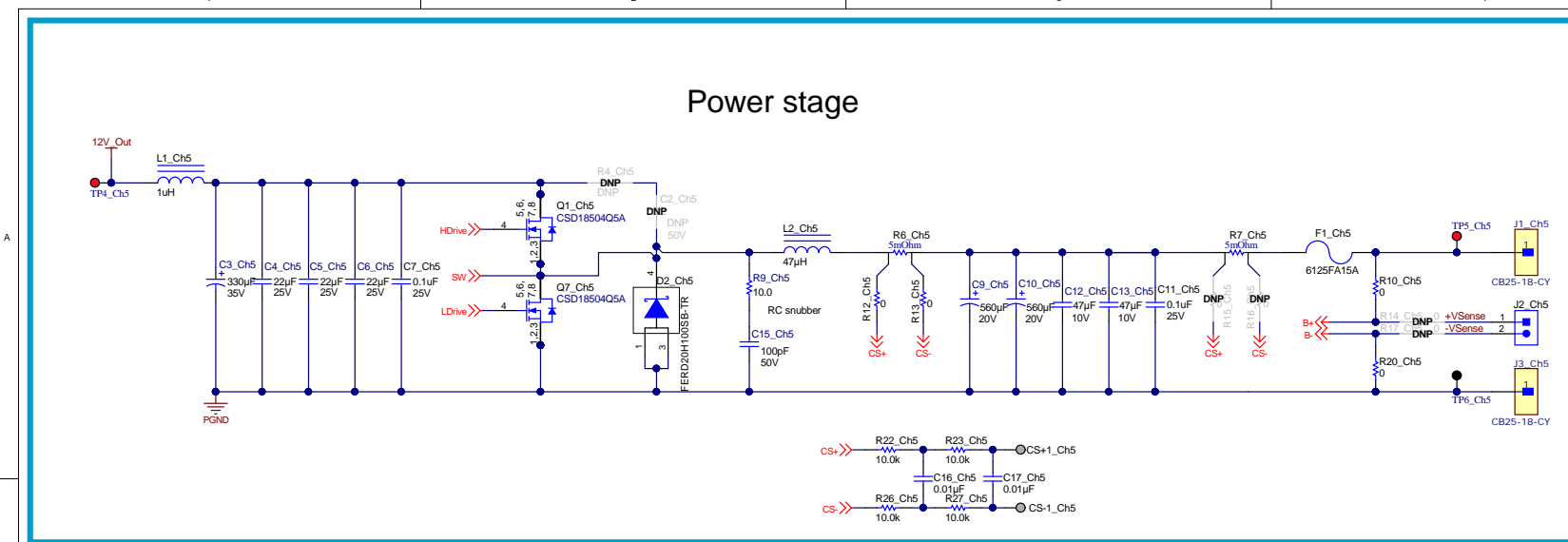
Voltage Sense



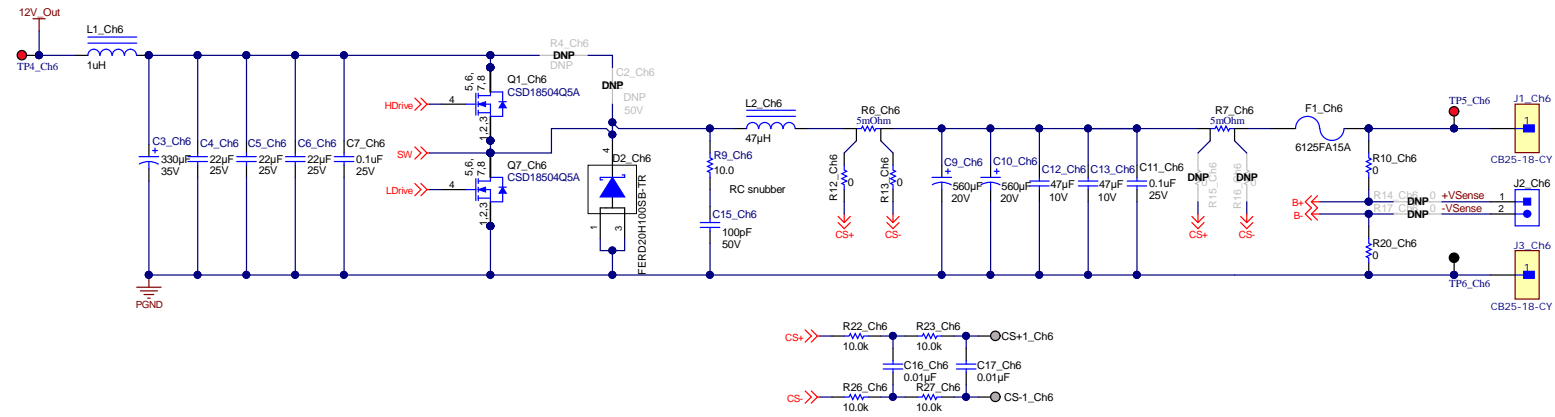
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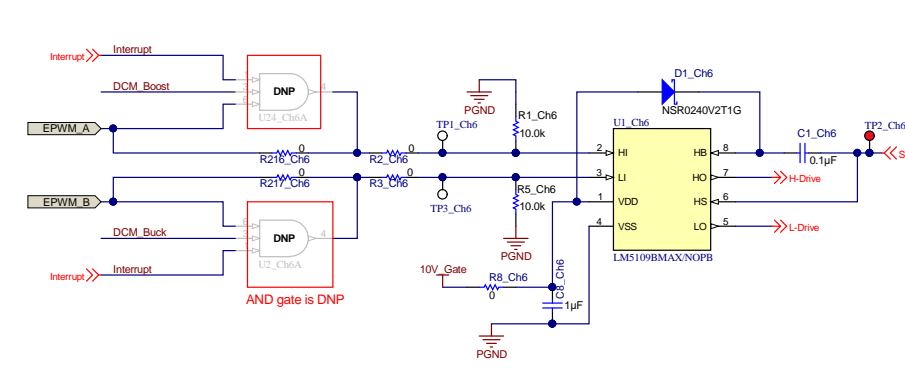




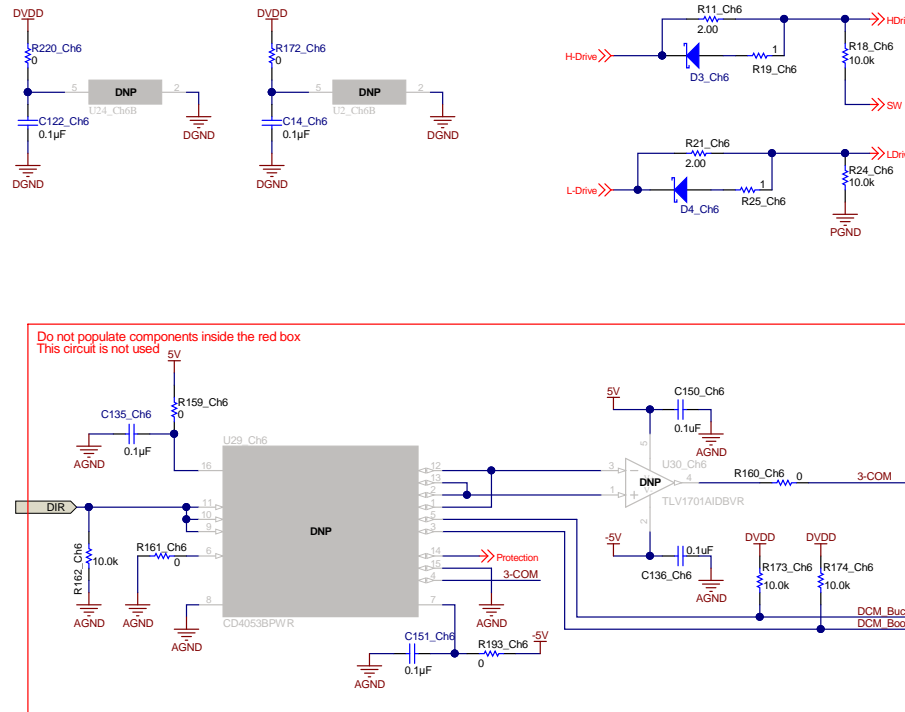
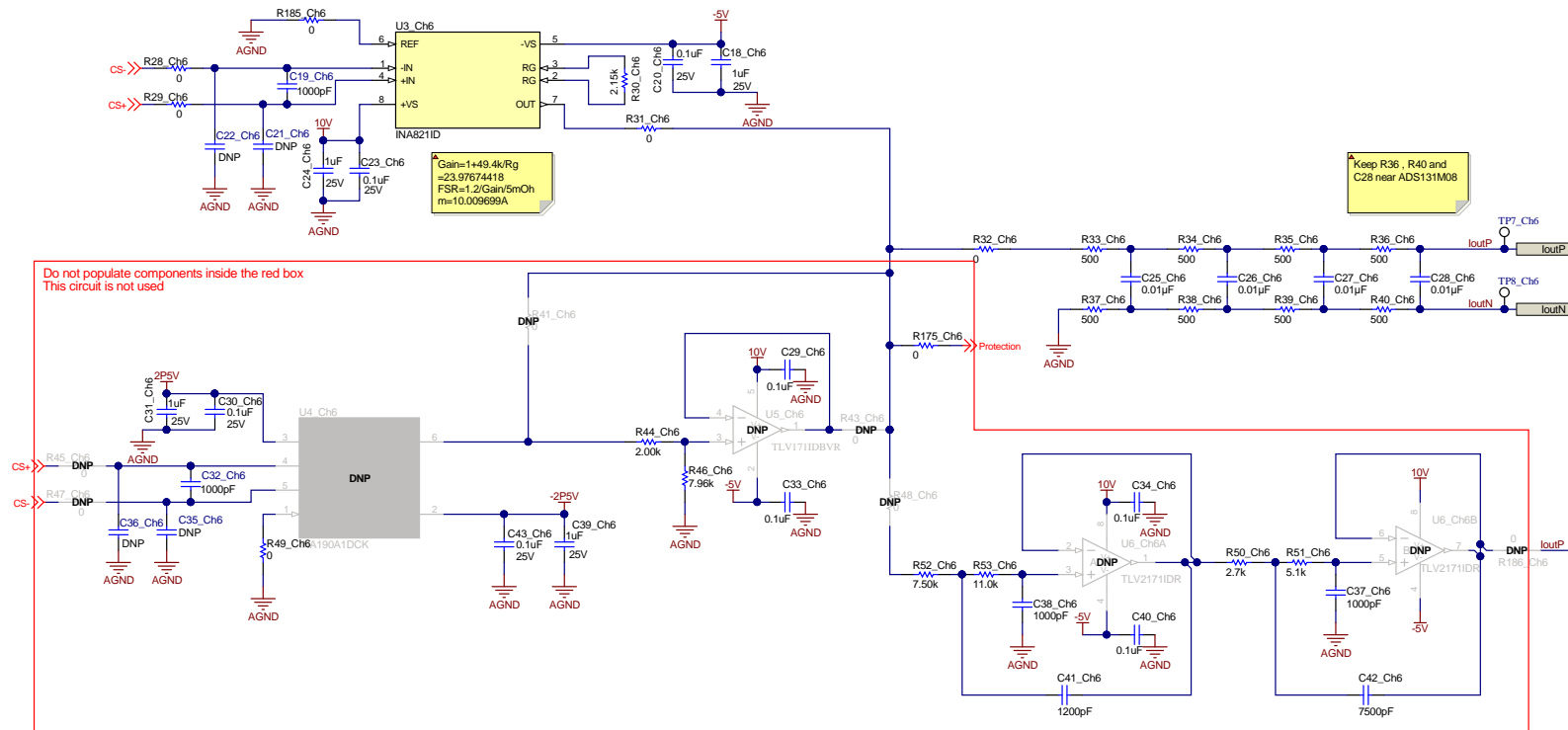
Power stage



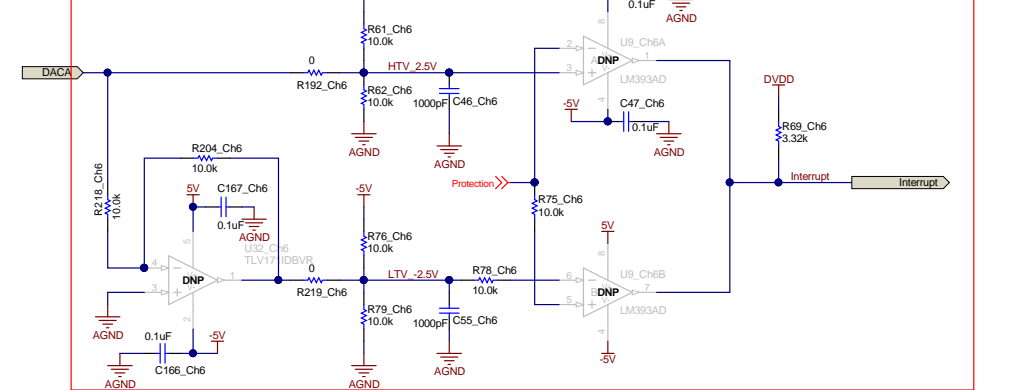
Driver circuit



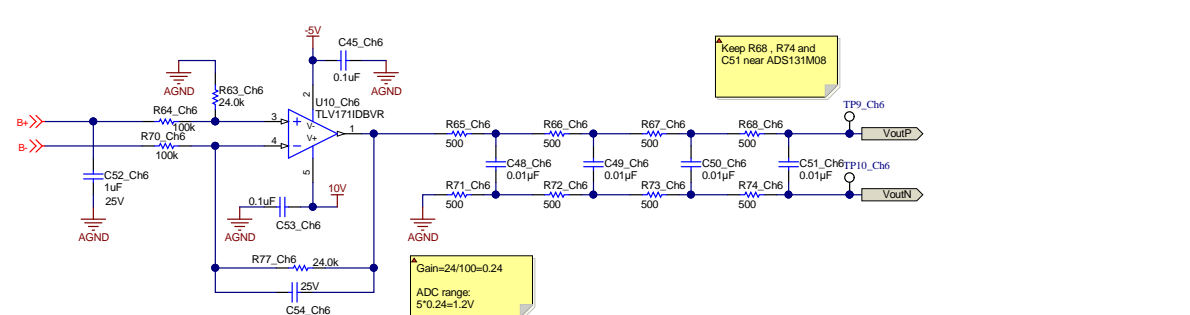
Current sense

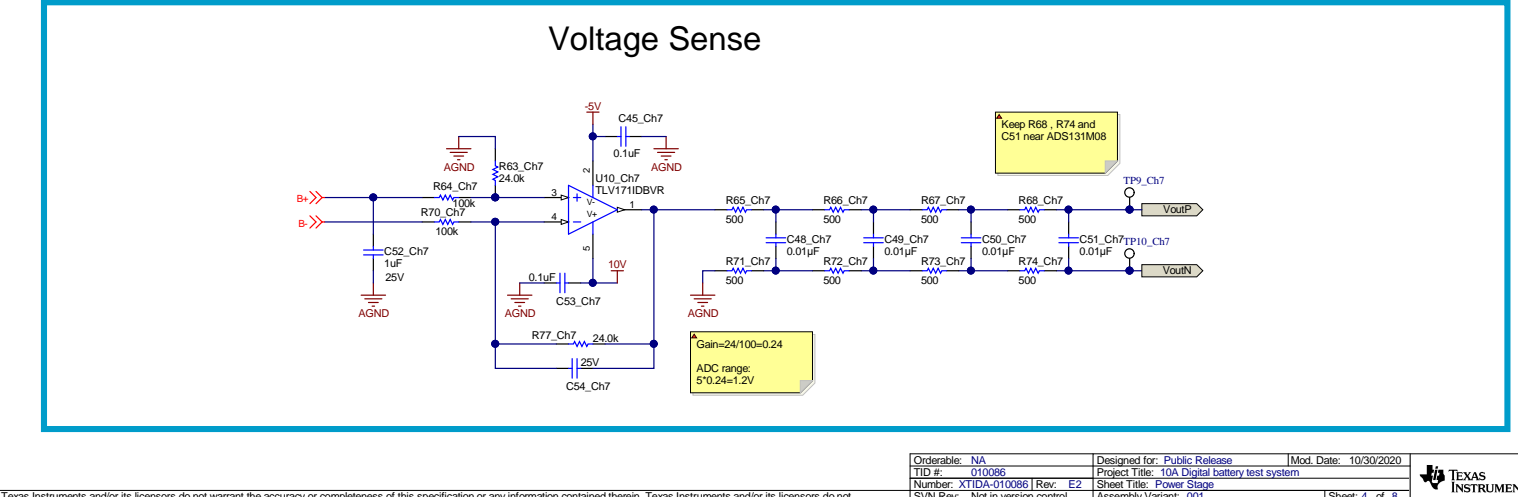
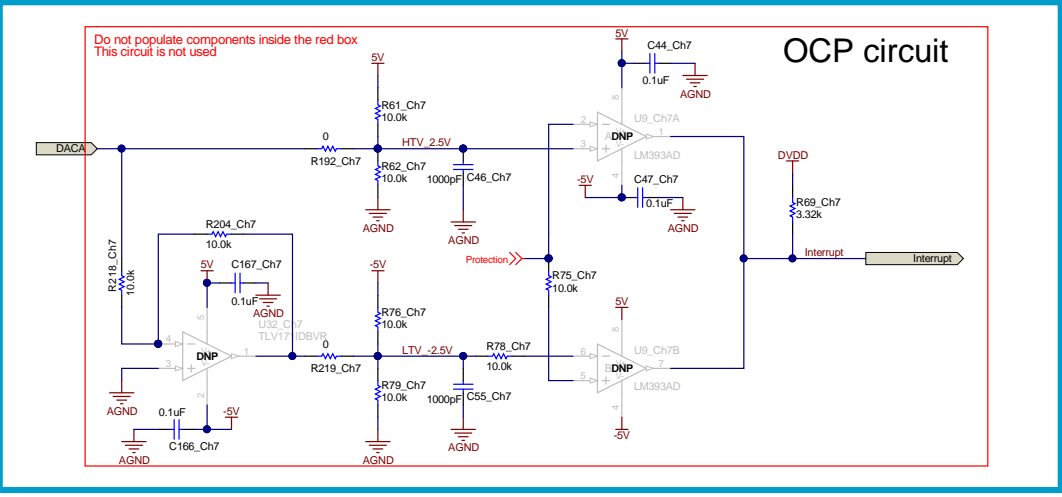
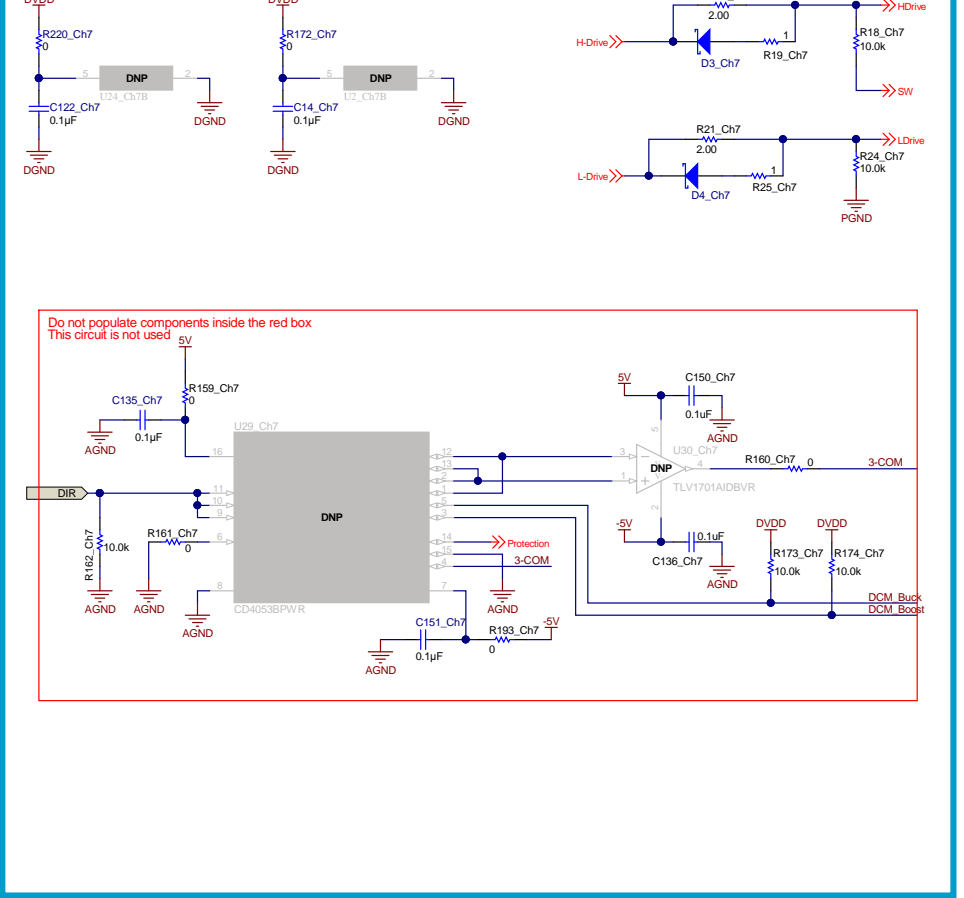
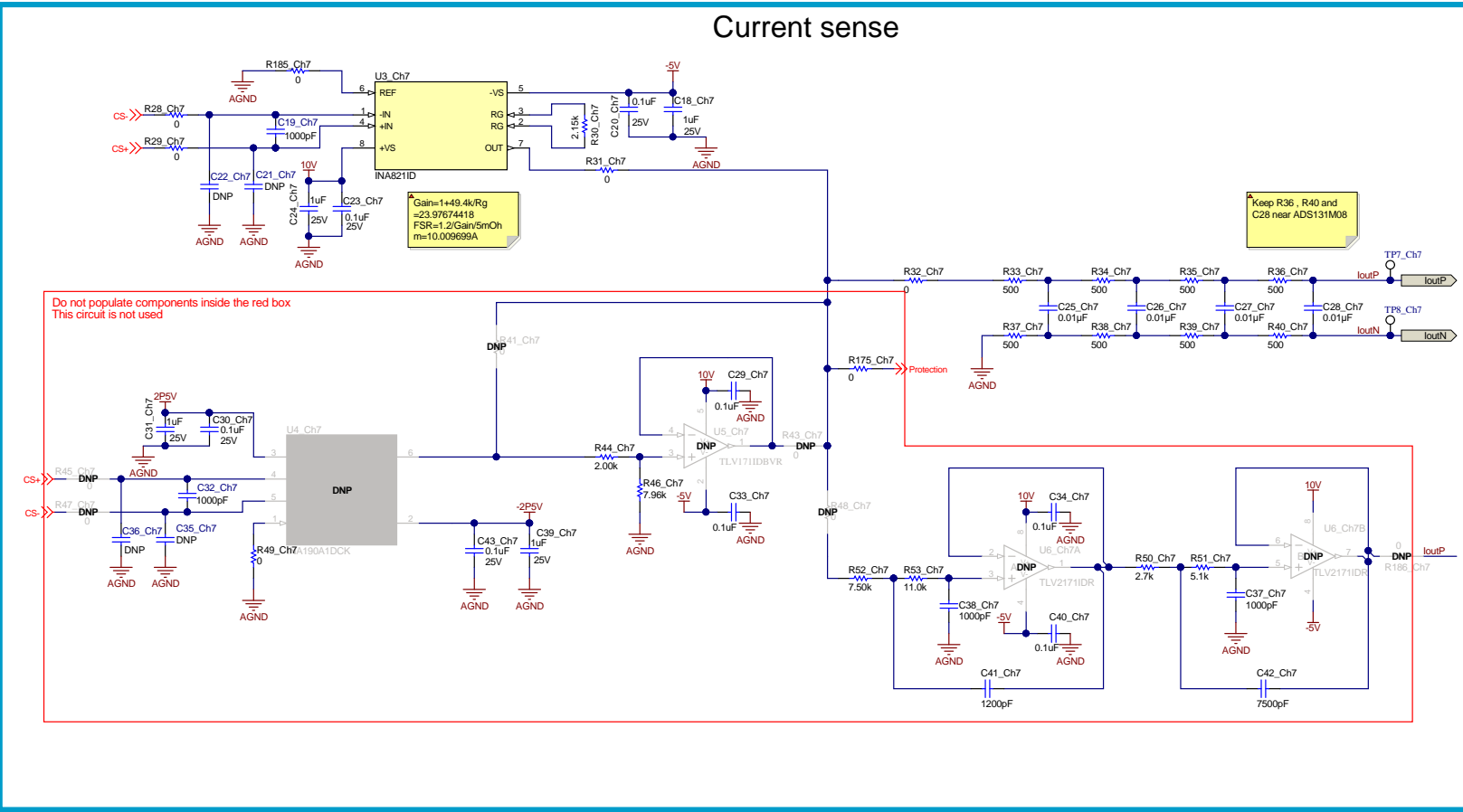
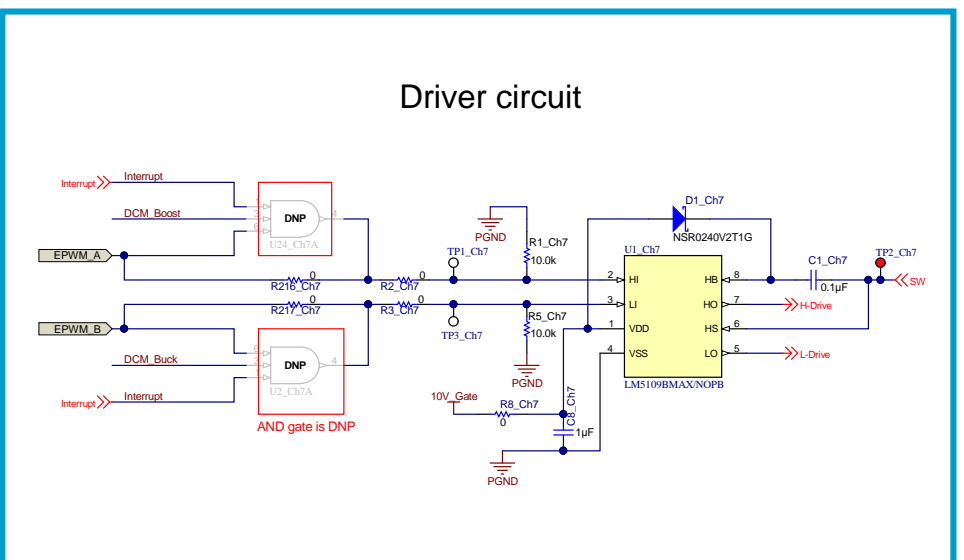
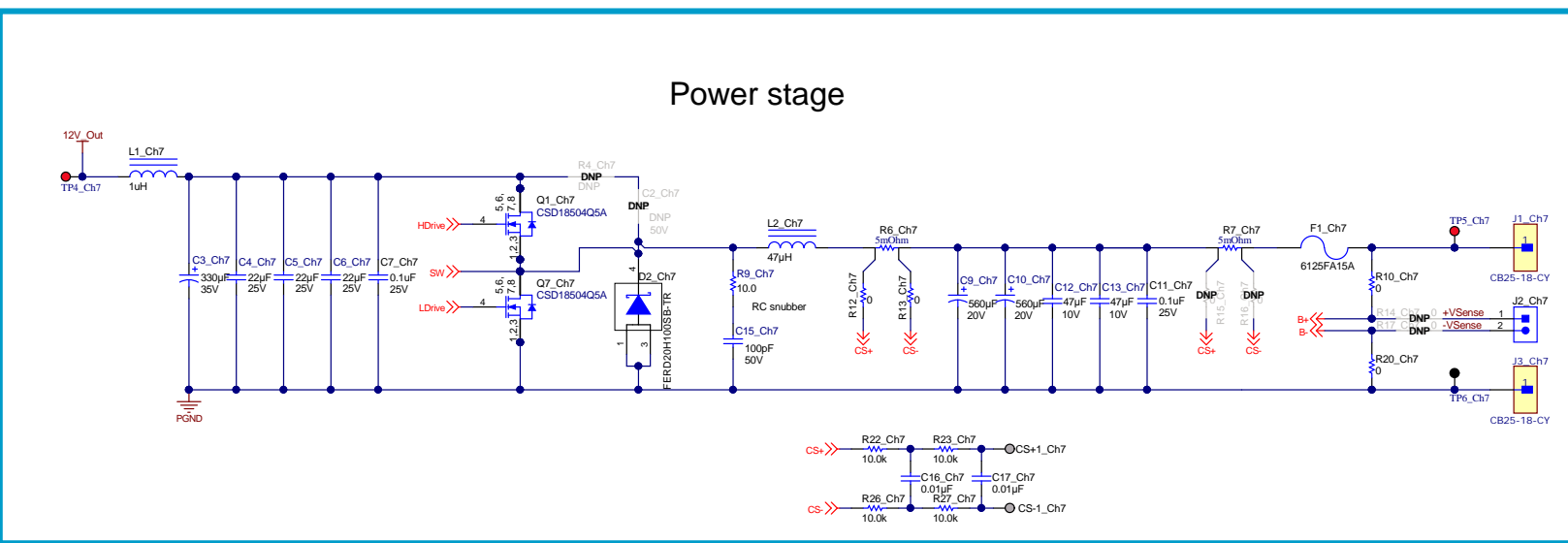


OCP circuit

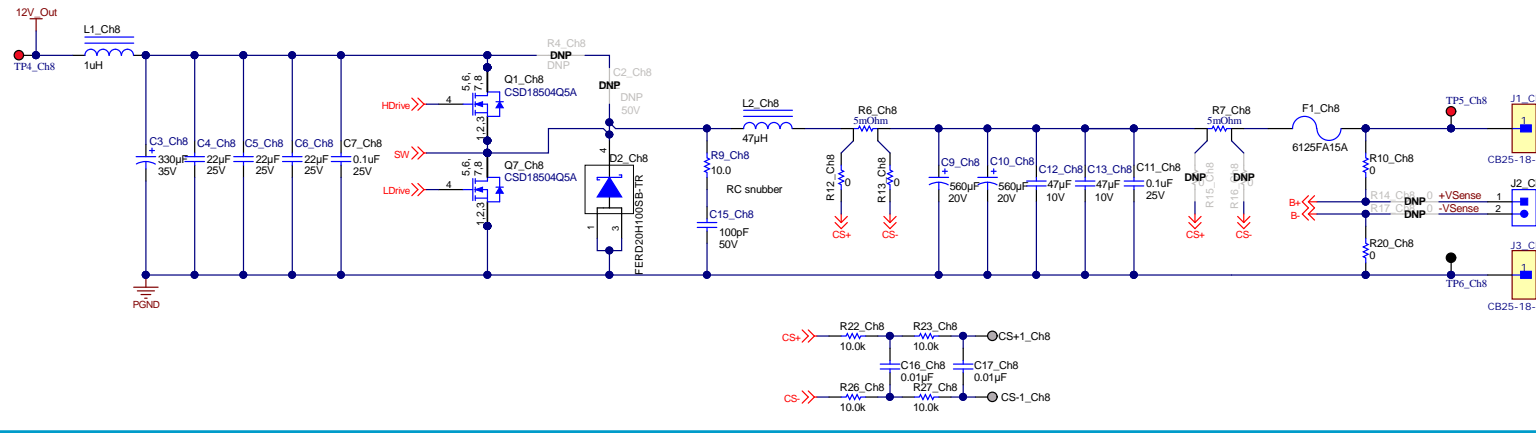


Voltage Sense

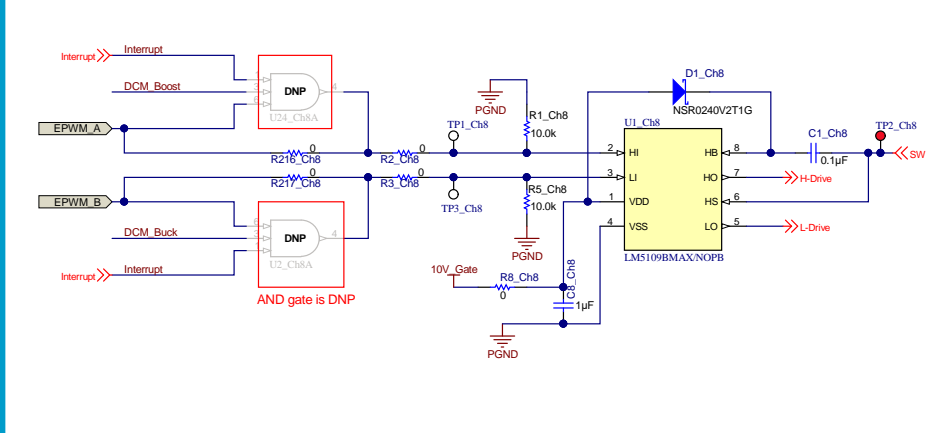




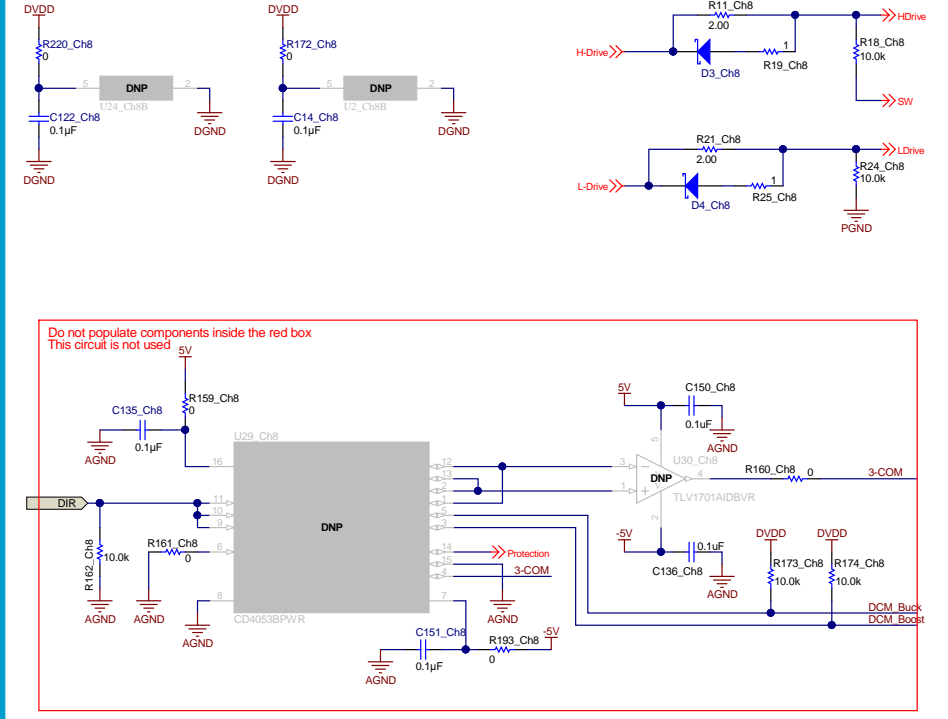
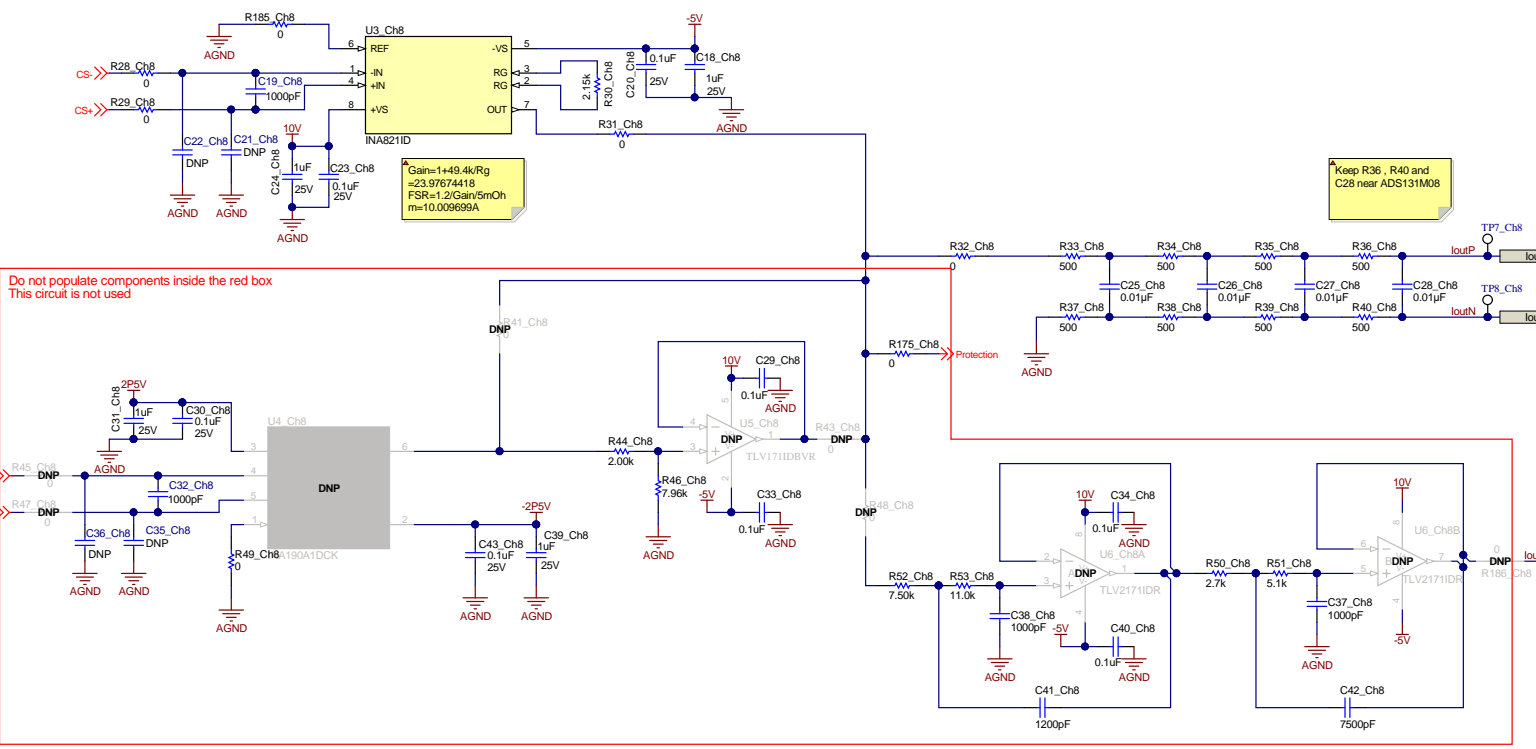
Power stage



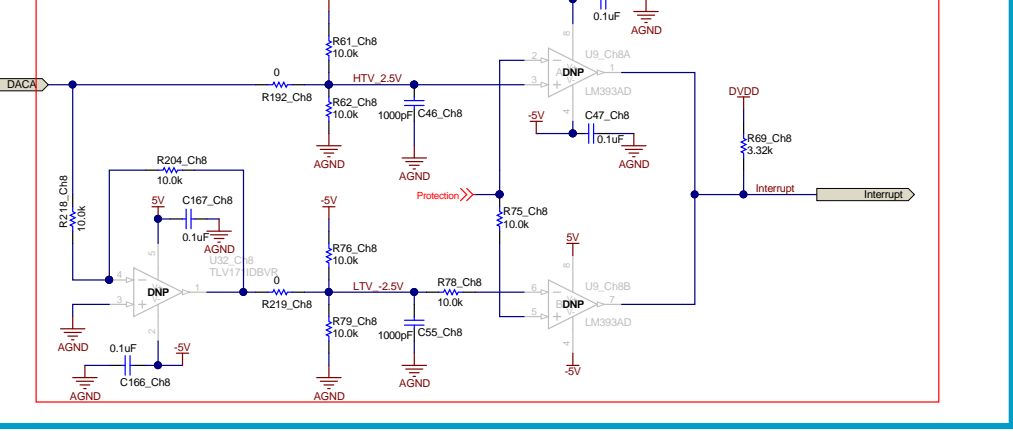
Driver circuit



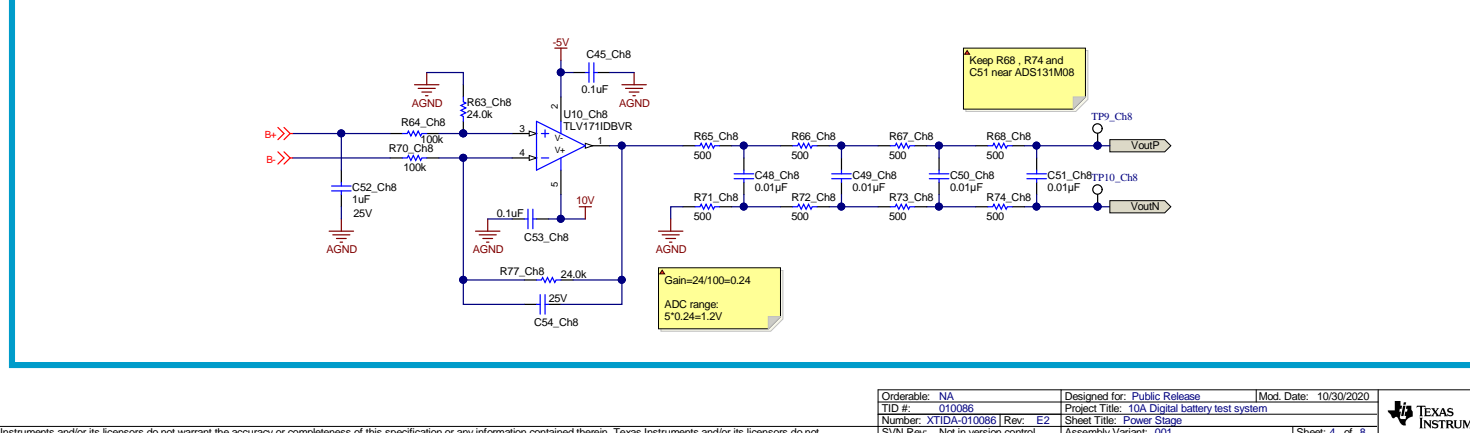
Current sense



OCP circuit

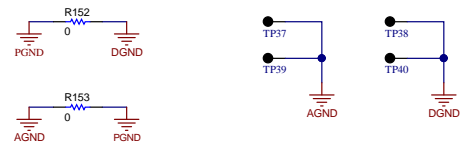
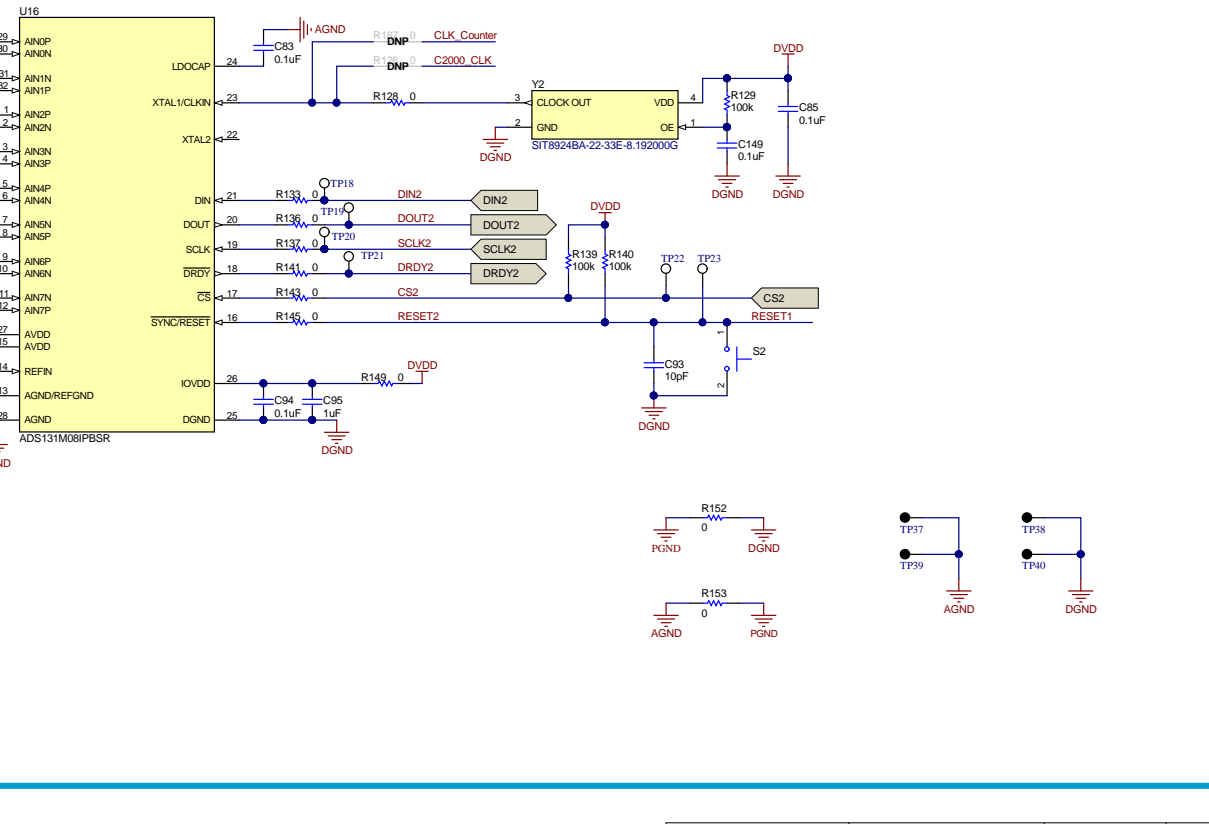
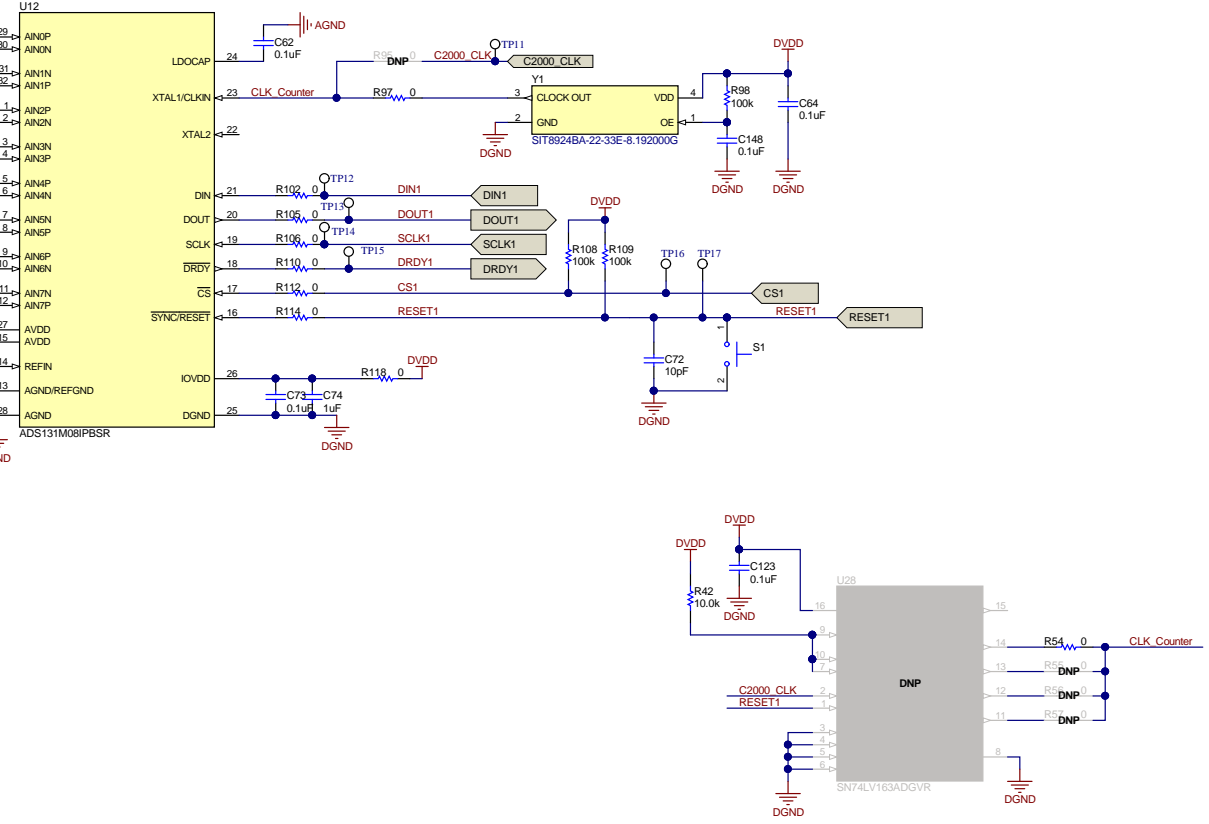
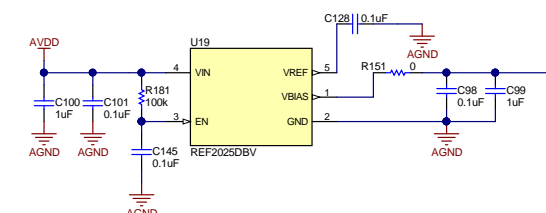
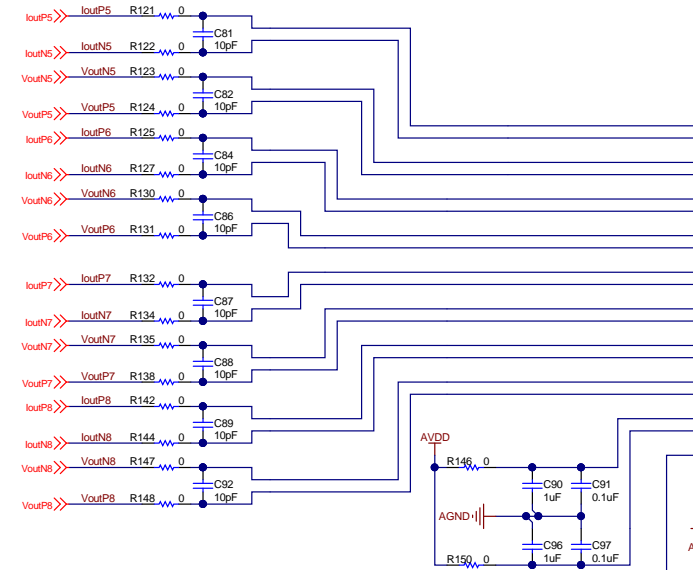
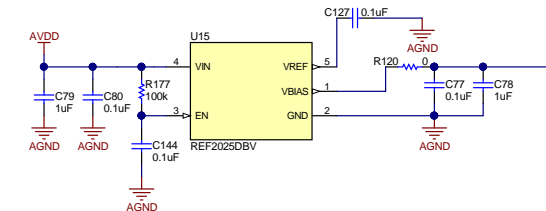
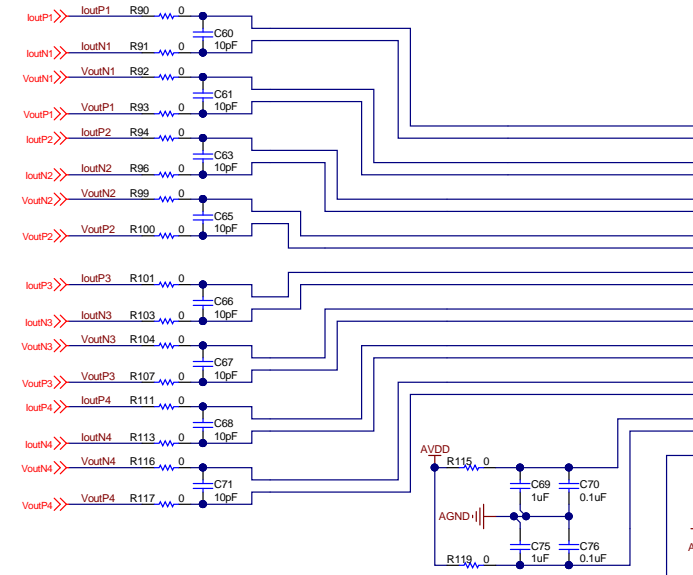
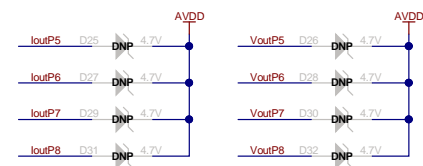
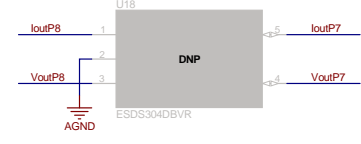
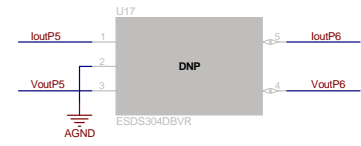
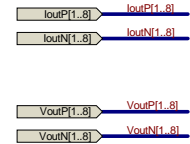
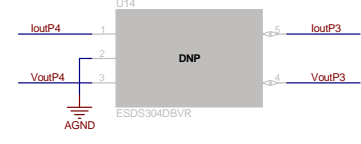
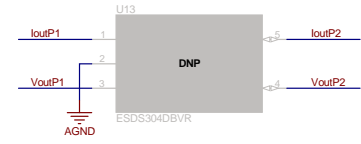
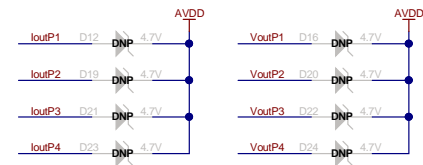


Voltage Sense



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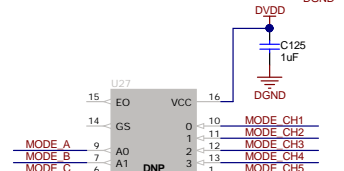
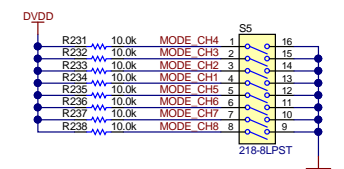
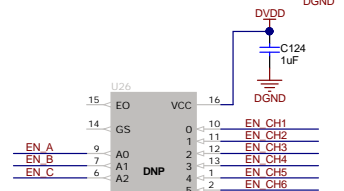
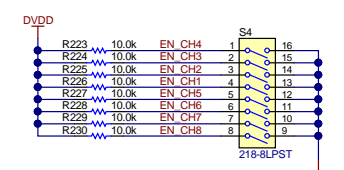
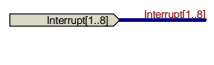
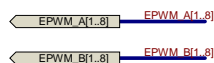
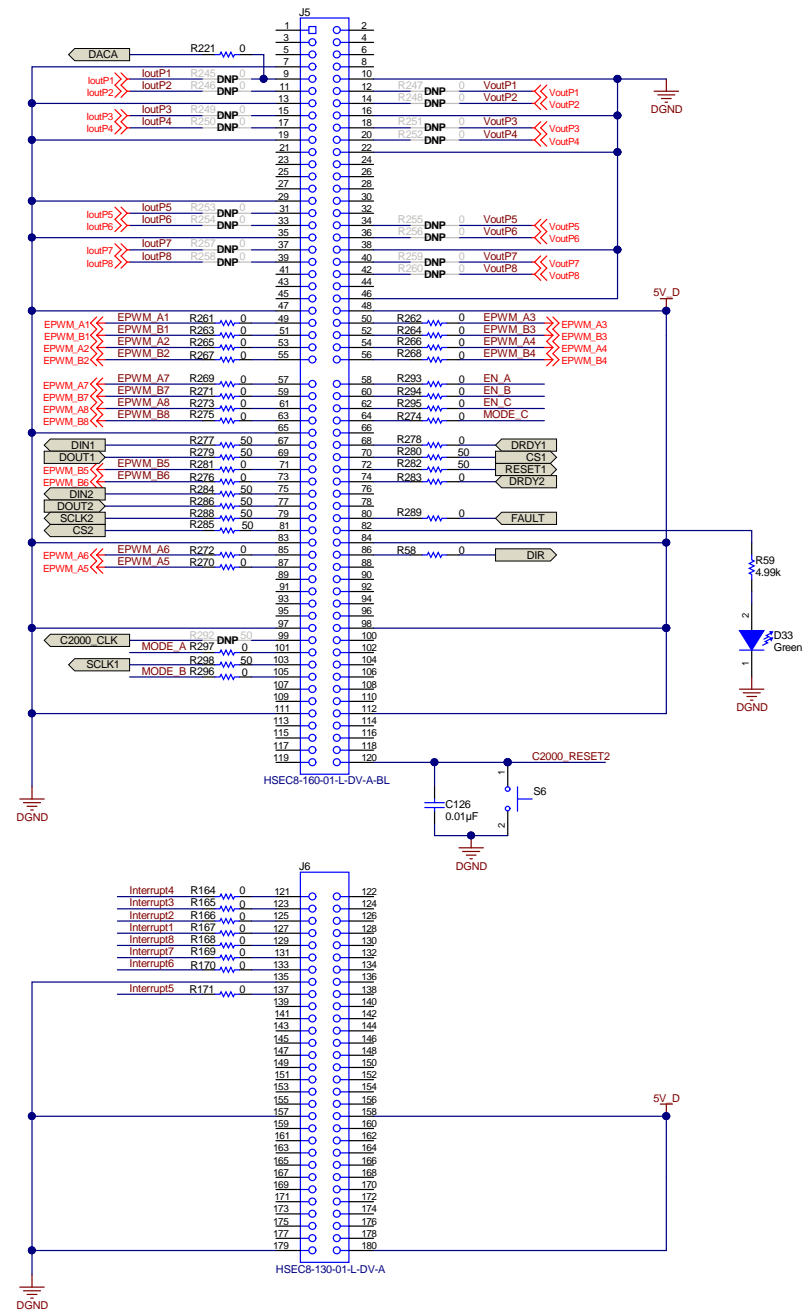
ADS131M08



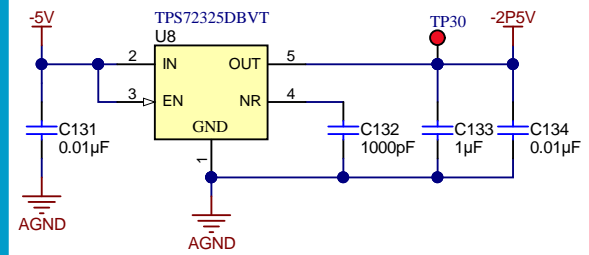
Orderable: NA	Designed for: Public Release	Mod. Date: 2/6/2020
TID #: 010086	Project Title: 10A Digital battery test system	
Number: XTIDA-010086 Rev: E2	Sheet Title:	
S/N Rev: Not in version control	Assembly Variant: 001	Sheet: 5 of 8
Drawn By:	File: XTIDA-010086_ADC.SchDoc	Size: C
Engineer: Jeff Xie / Shaury Anand	Contact: http://www.ti.com/support	

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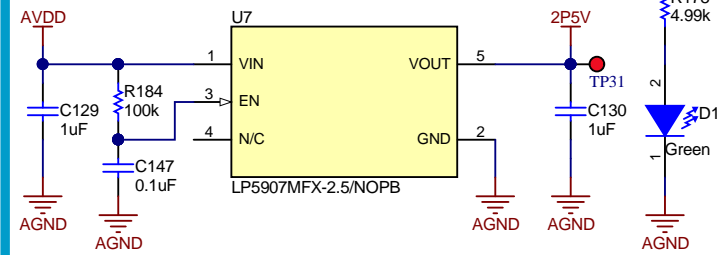
CONTROL CARD PIN MAPPING_28379



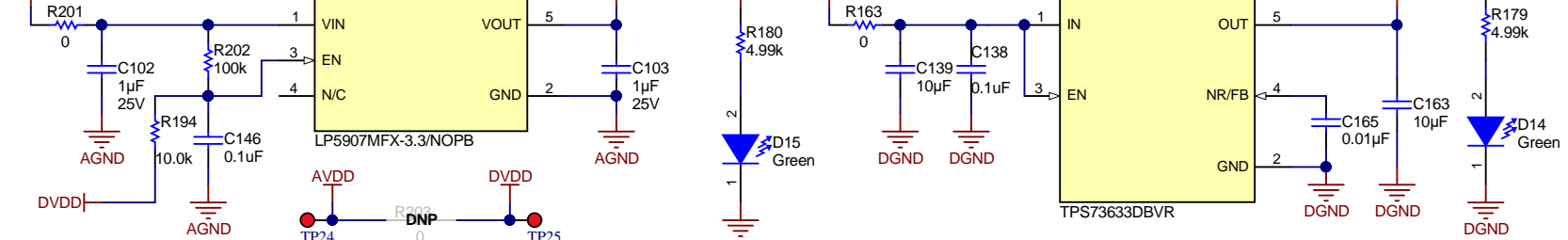
-2V5 Supply



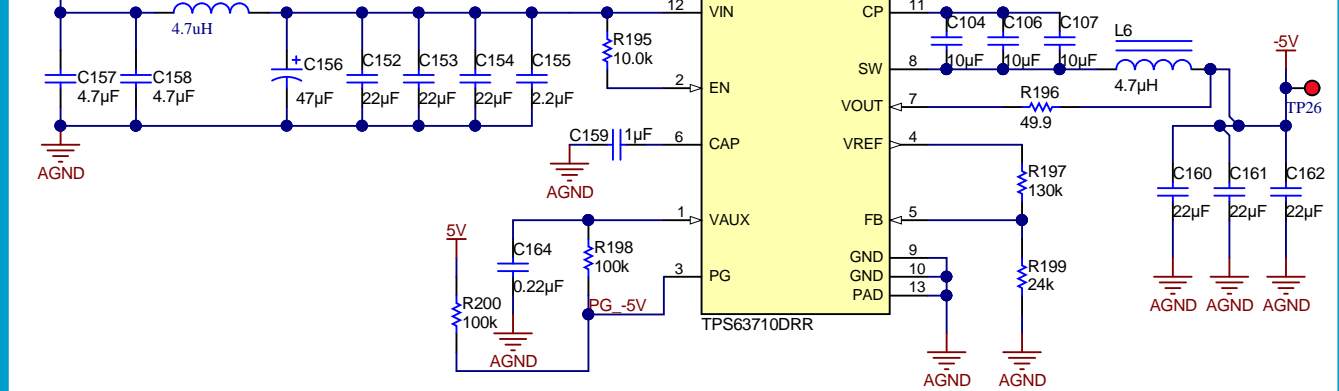
2V5 Supply



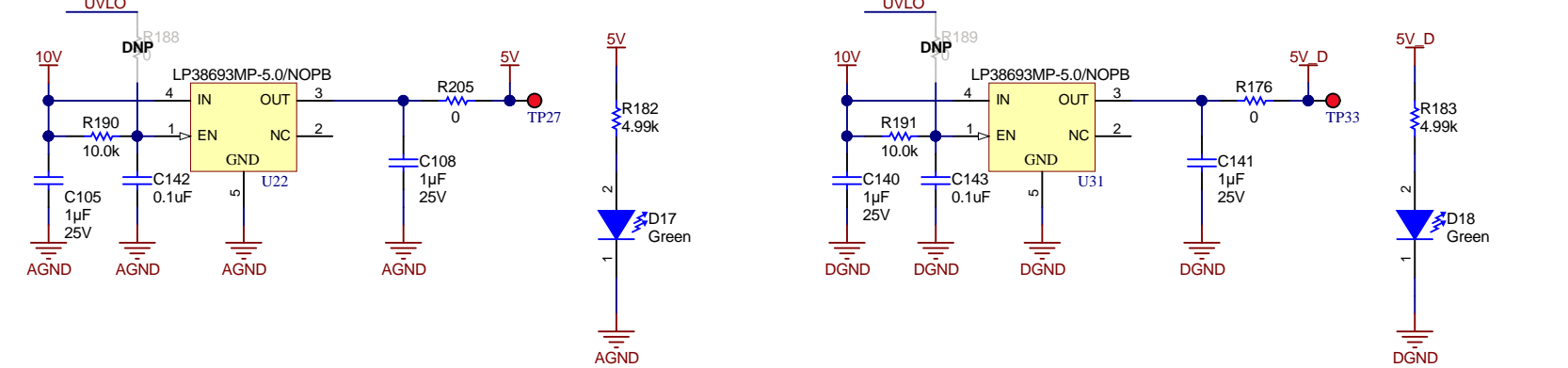
3V3 Supply



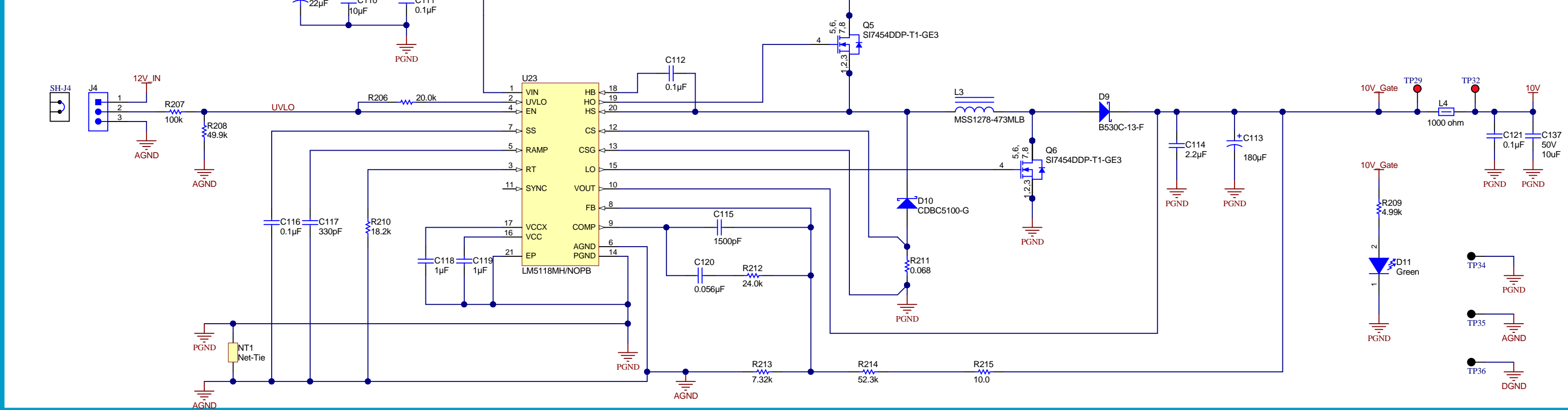
-5V Supply



5V Supply



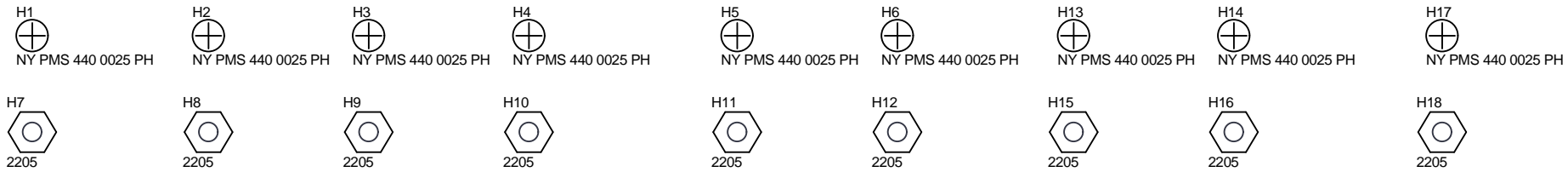
10V Supply



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Orderable: NA	Designed for: Public Release	Mod. Date: 10/30/2020
TID #: 010086	Project Title: 10A Digital battery test system	
Number: XTIDA-010086 Rev: E2	Sheet Title: Control card	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 7 of 8
Drawn By: Jeff Xie	File: XTIDA-010086_Bias Power Supply_SchDoc	Size: B
Engineer: Jeff Xie / Shaury Anand	Contact: http://www.ti.com/support	





PCB Number: XTIDA-010086
PCB Rev: E2



PCB LOGO
FCC disclaimer

PCB LOGO
WEEE logo



PCB LOGO
Pb-Free Symbol

PCB LOGO
Logo7

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.

Orderable: NA	Designed for: Public Release	Mod. Date: 10/30/2020
TID #: 010086	Project Title: 10A Digital battery test system	
Number: XTIDA-010086 Rev: E2	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 8 of 8
Drawn By: Jeff Xie / Shaury Anand	File: XTIDA-010086_Hardware.SchDoc	Size: B
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