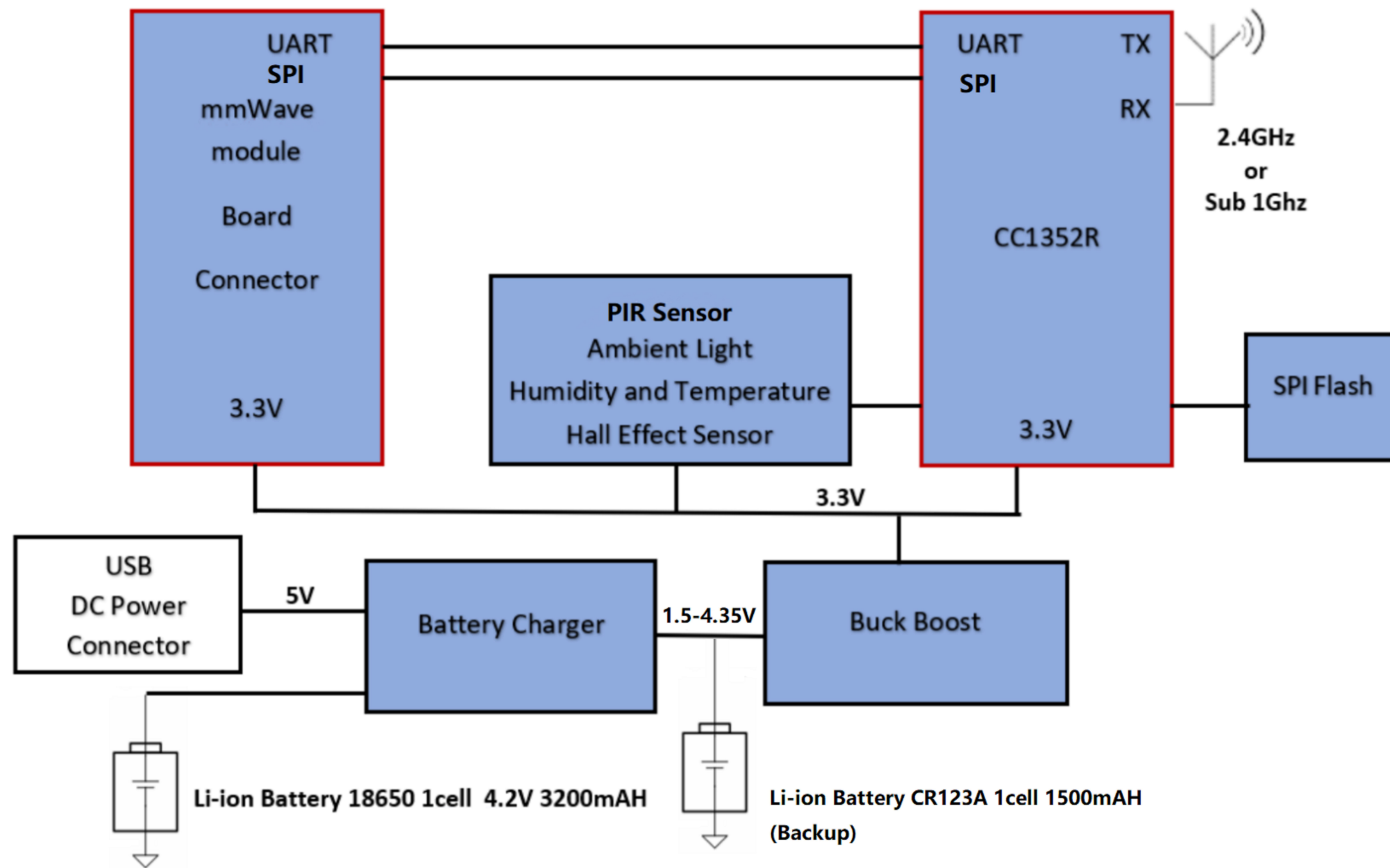


Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A

BLOCK DIAGRAM



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Orderable:	Designed for: Public Release	Mod. Date: 4/18/2023
TID #: TIDA_010254	Project Title: TIDA_010254_Base_Board	
Number: TIDA_010254_Base_Board	Sheet Title: BLOCK DIAGRAM	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 1 of 8
Drawn By: Justin	File: TIDA_010254_Base_Board_Block_Diagram.Sch	Size: B
Engineer: Justin	Contact: http://www.ti.com/support	

TABLE OF CONTENTS

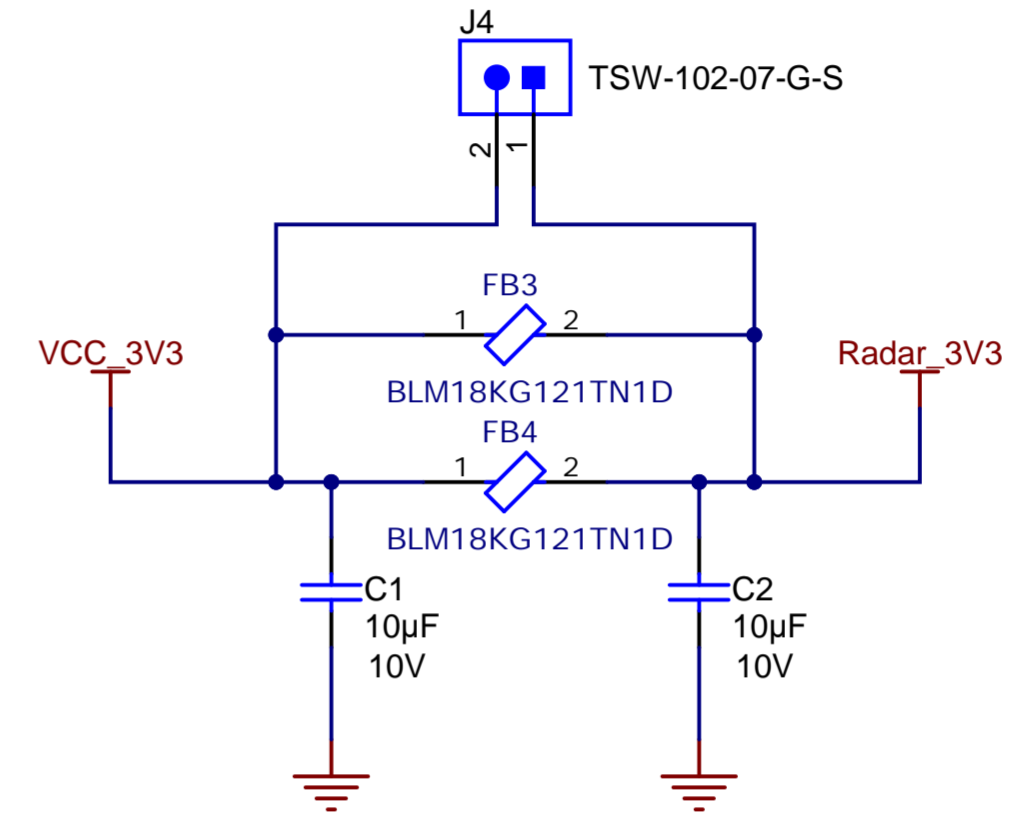
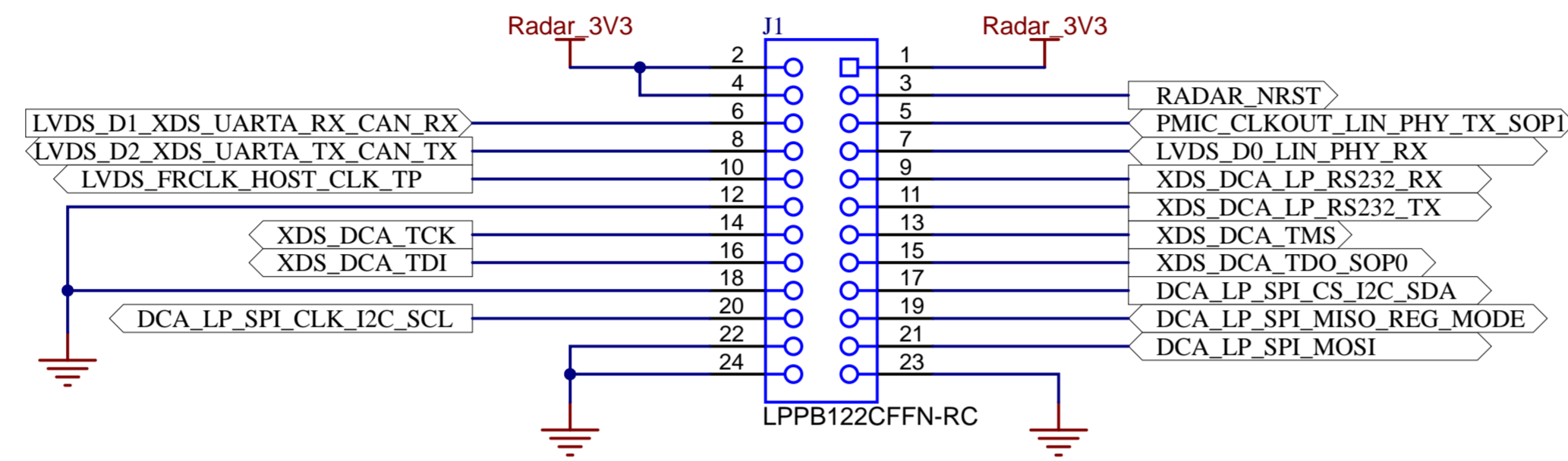
SHEET NO.	SHEET NAME
1	BLOCK DIAGRAM
2	TABLE OF CONTENTS
3	Connector
4	Charger
5	DC_Regulator
6	CC1352R Chip
7	Sensors
8	HARDWARE

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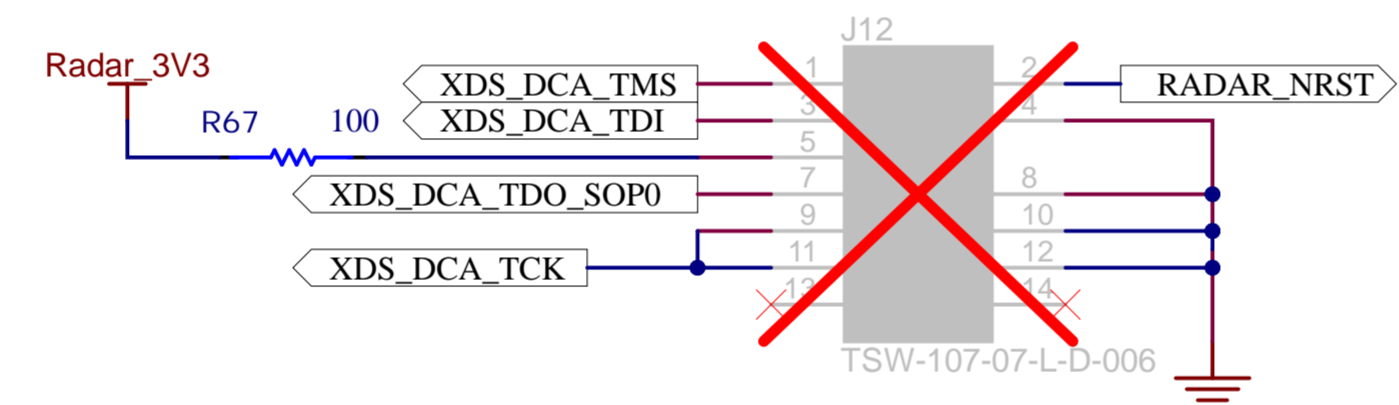
Orderable:	Designed for: Public Release	Mod. Date: 4/13/2023
TID #: TIDA_010254	Project Title: TIDA_010254_Base_Board	
Number: TIDA_010254_Base_Board	Sheet Title: TABLE OF CONTENTS	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 2 of 8
Drawn By: Justin	File: TIDA_010254_Base_Board_Table_Of_Contents_SizB.c	
Engineer: Justin	Contact: http://www.ti.com/support	



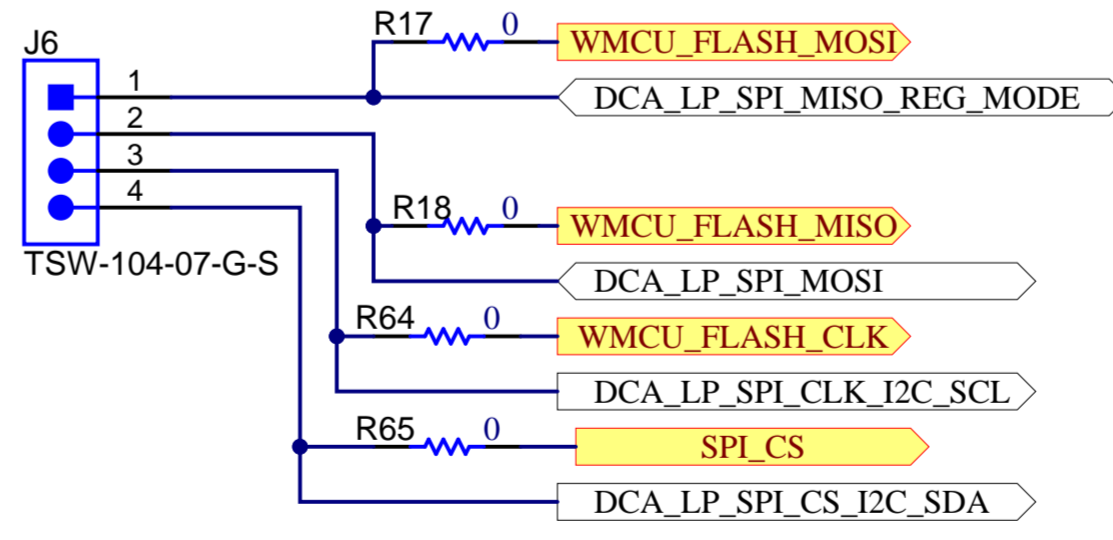
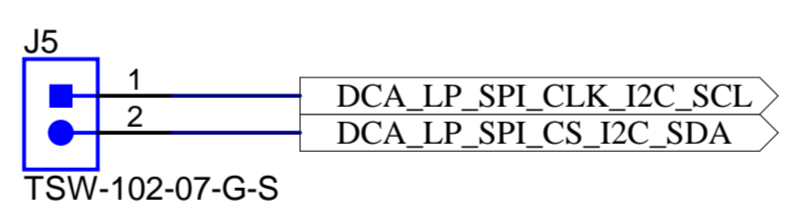
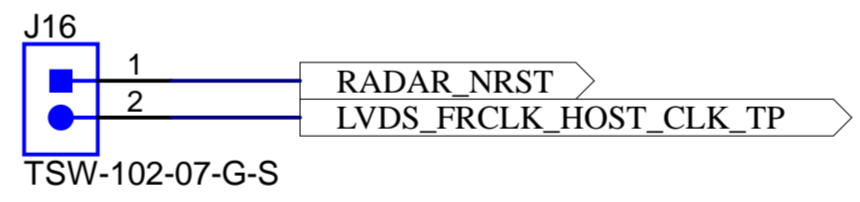
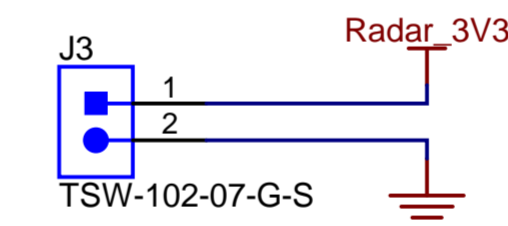
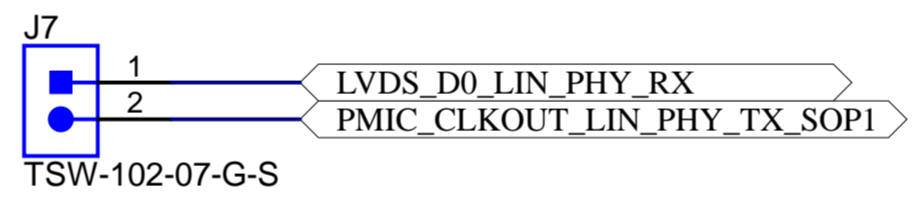
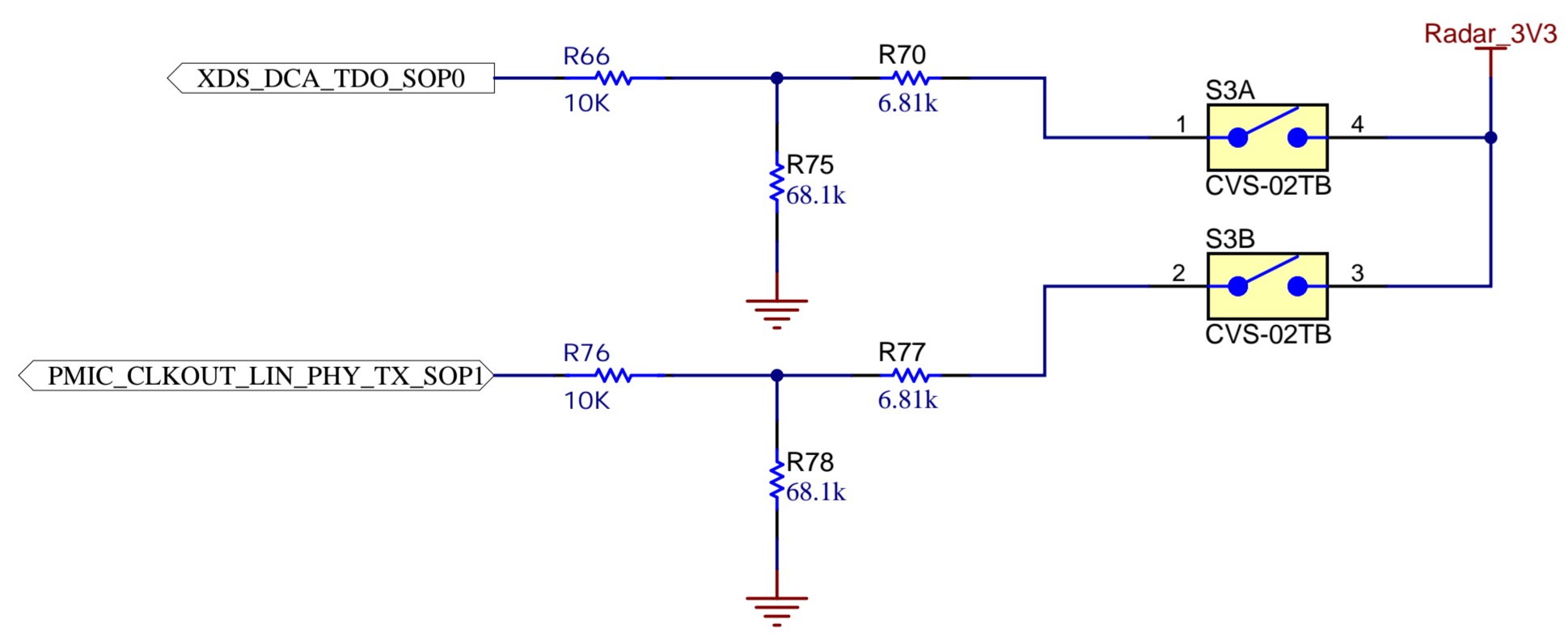
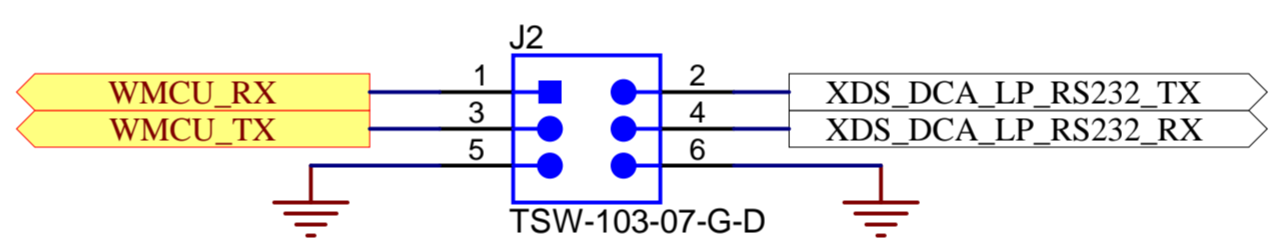
Connectors



xWRL6432 JTAG Connection

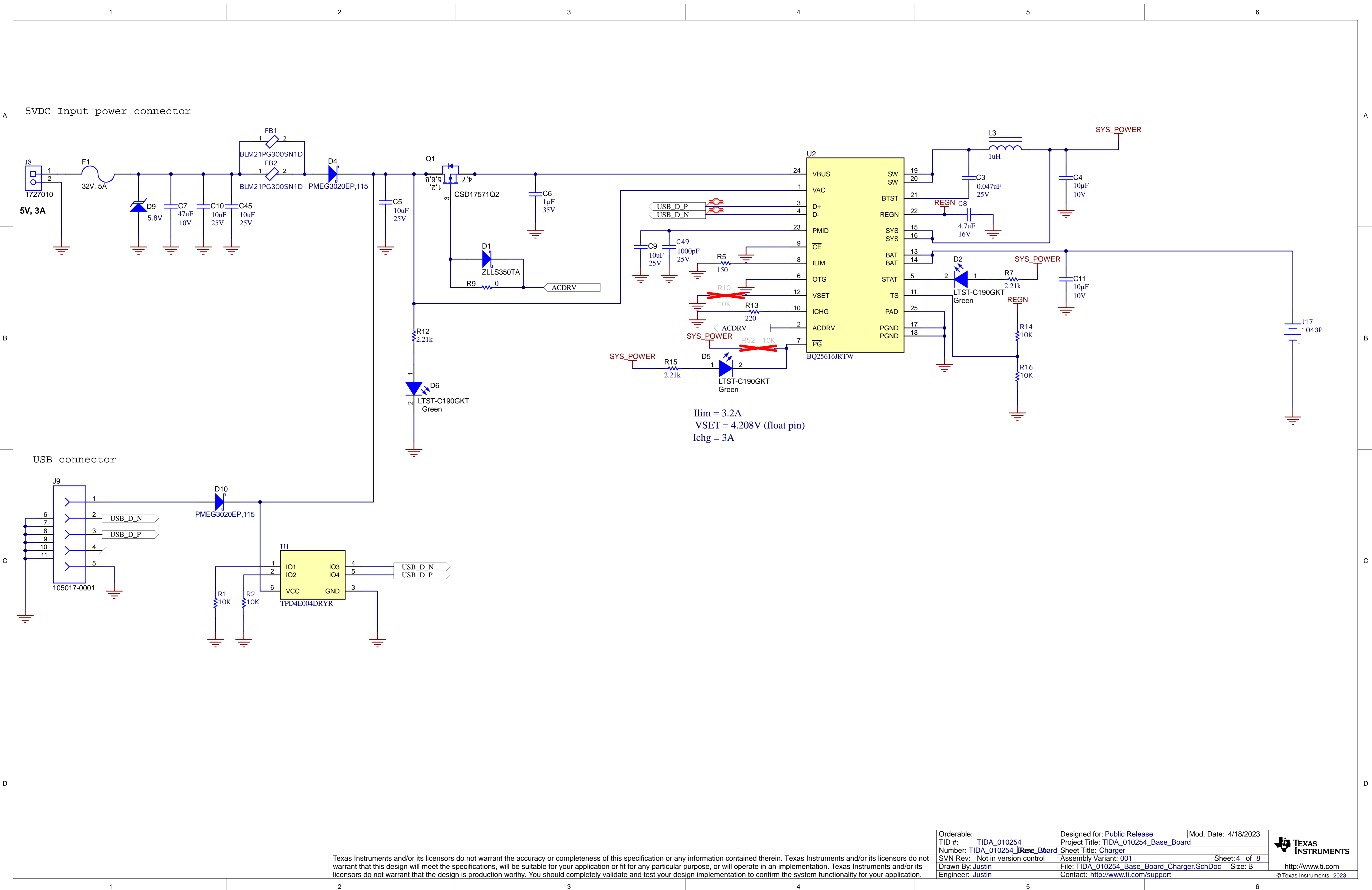


xWRL6432 GPIO Connection



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Orderable:	Designed for: Public Release	Mod. Date: 4/13/2023
TID #: TIDA_010254	Project Title: TIDA_010254_Base_Board	
Number: TIDA_010254_Base_Board	Sheet Title: PWR_Connector	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 3 of 8
Drawn By: Justin	File: TIDA_010254_Base_Board_Connector.SchDoc	Size: B
Engineer: Justin	Contact: http://www.ti.com/support	



$I_{lim} = 3.2A$
 $V_{SET} = 4.208V$ (float pin)
 $I_{chg} = 3A$

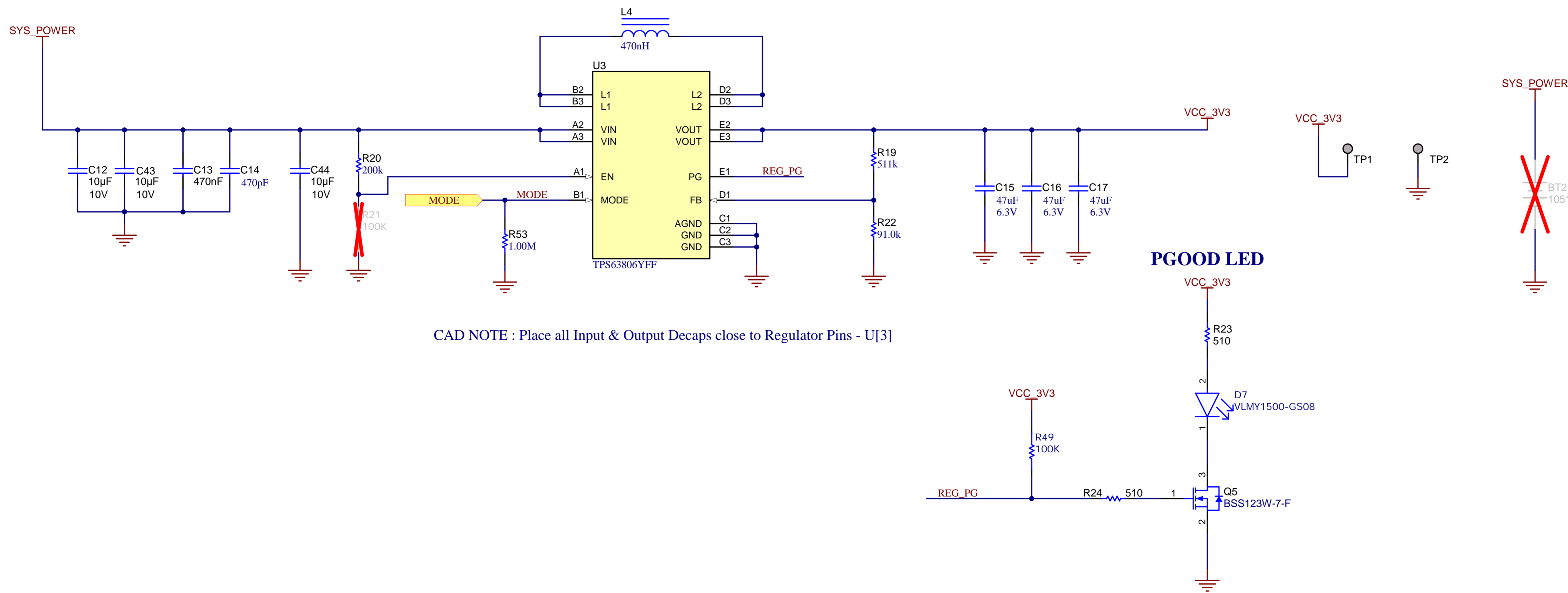
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Orderable:	Designed for: Public Release	Mod. Date: 4/18/2023
TID #: TIDA_010254	Project Title: TIDA_010254_Base Board	
Number: TIDA_010254_Base Board	Sheet Title: Charger	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 4 of 8
Drawn By: Justin	File: TIDA_010254_Base Board_Charger.SchDoc	Size: B
Engineer: Justin	Contact: http://www.ti.com/support	



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DC-DC REGULATORS - 3.3V OUTPUTS

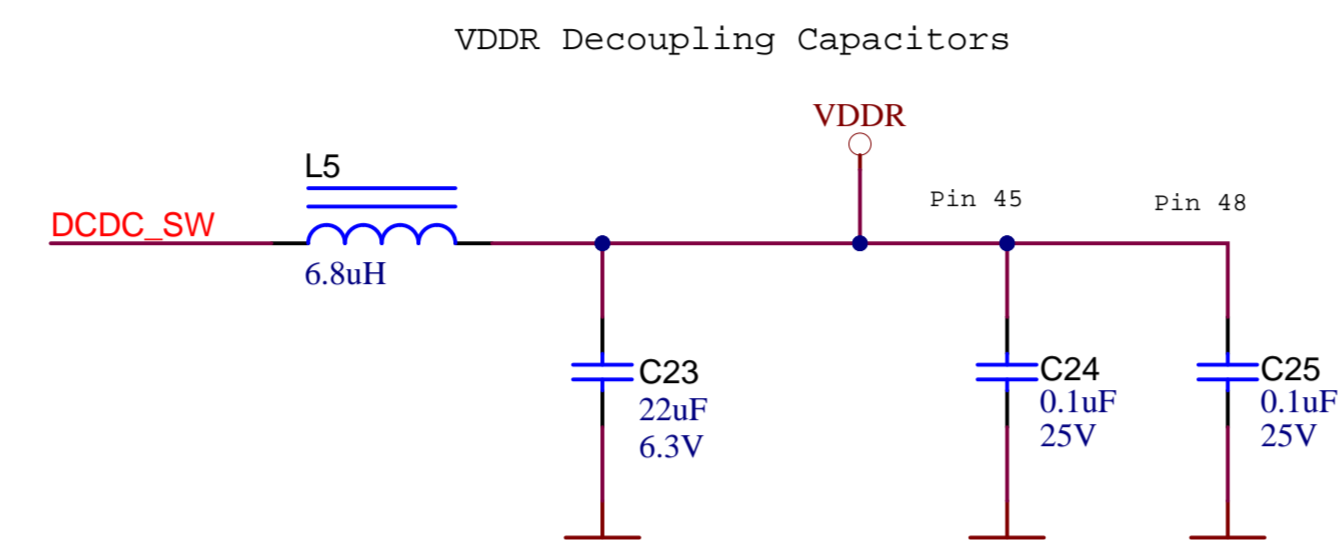
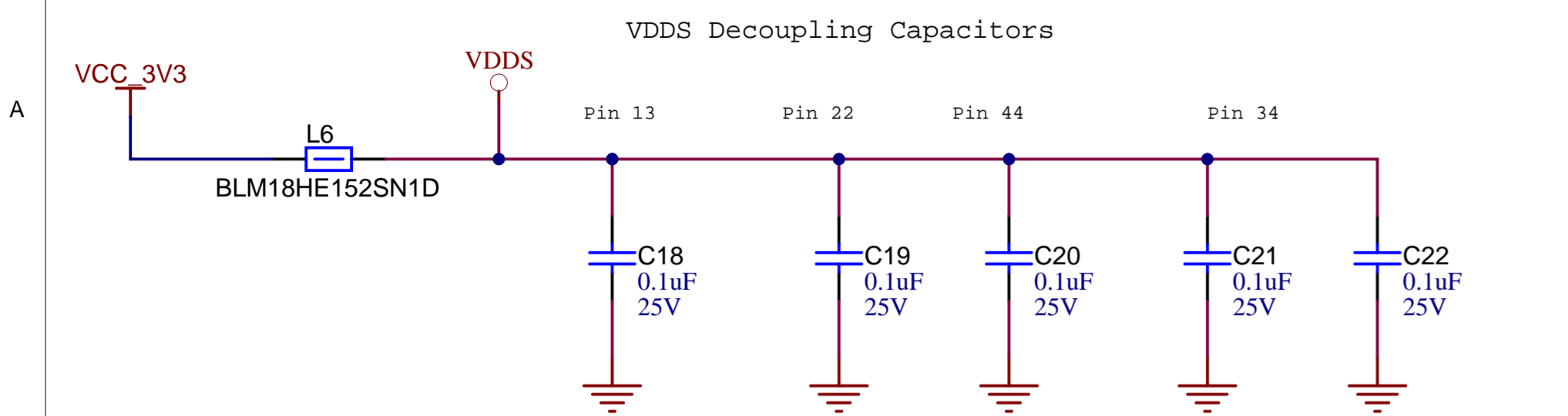


CAD NOTE : Place all Input & Output Decaps close to Regulator Pins - U[3]

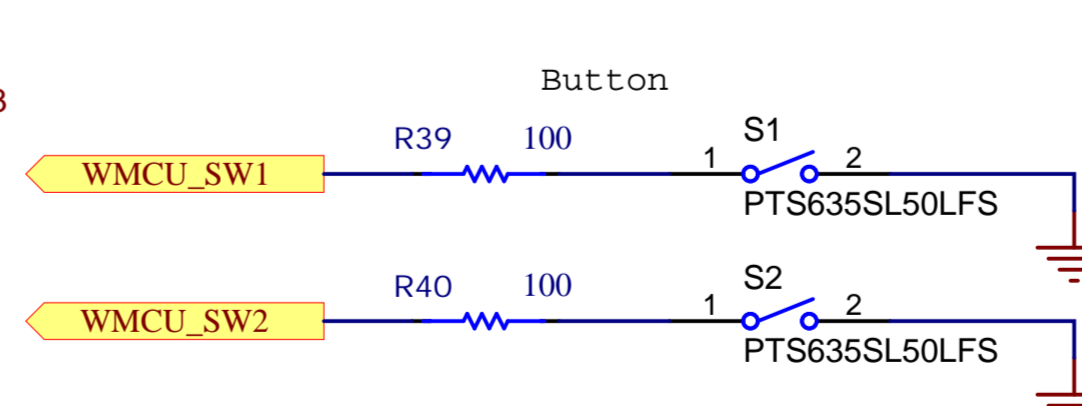
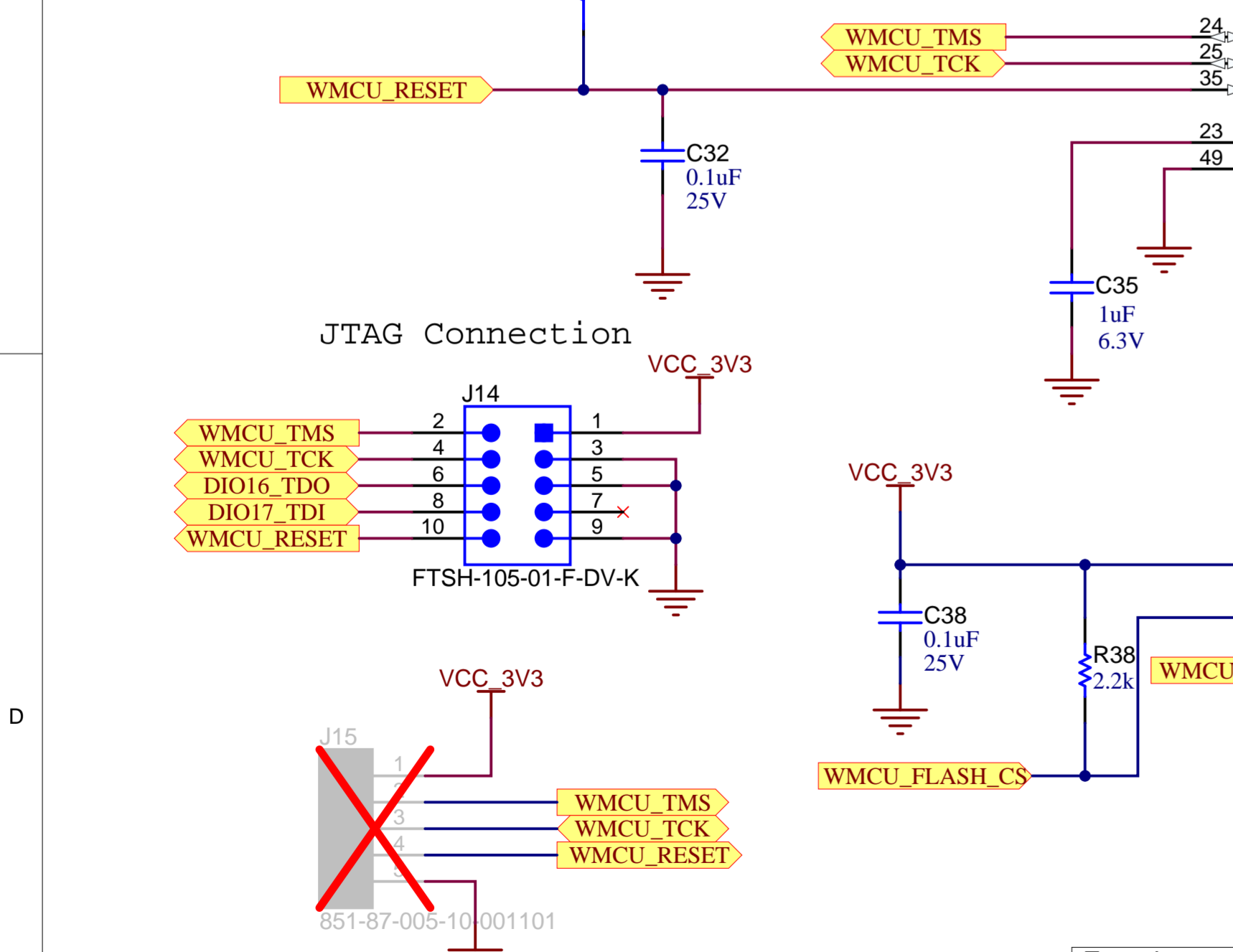
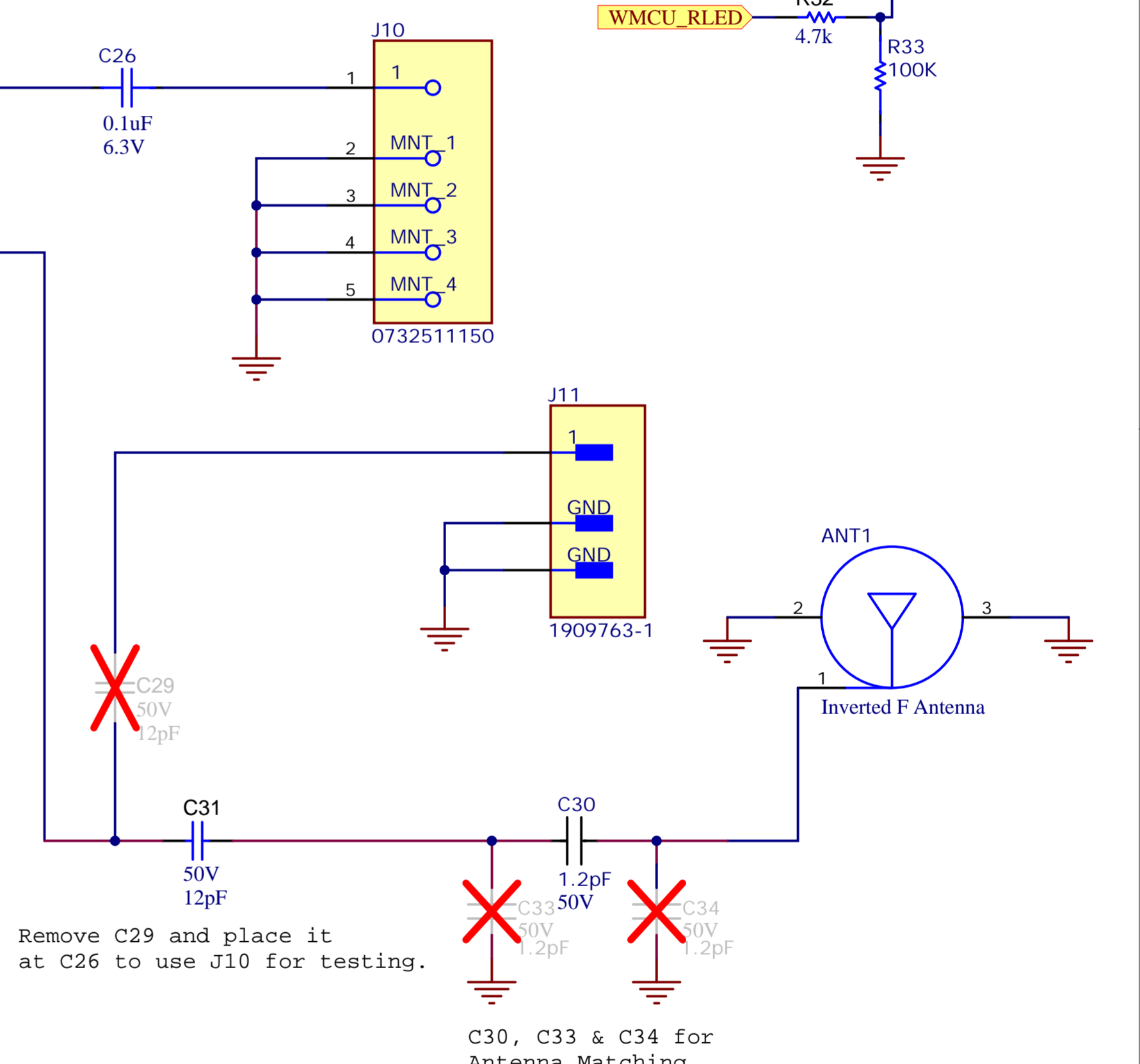
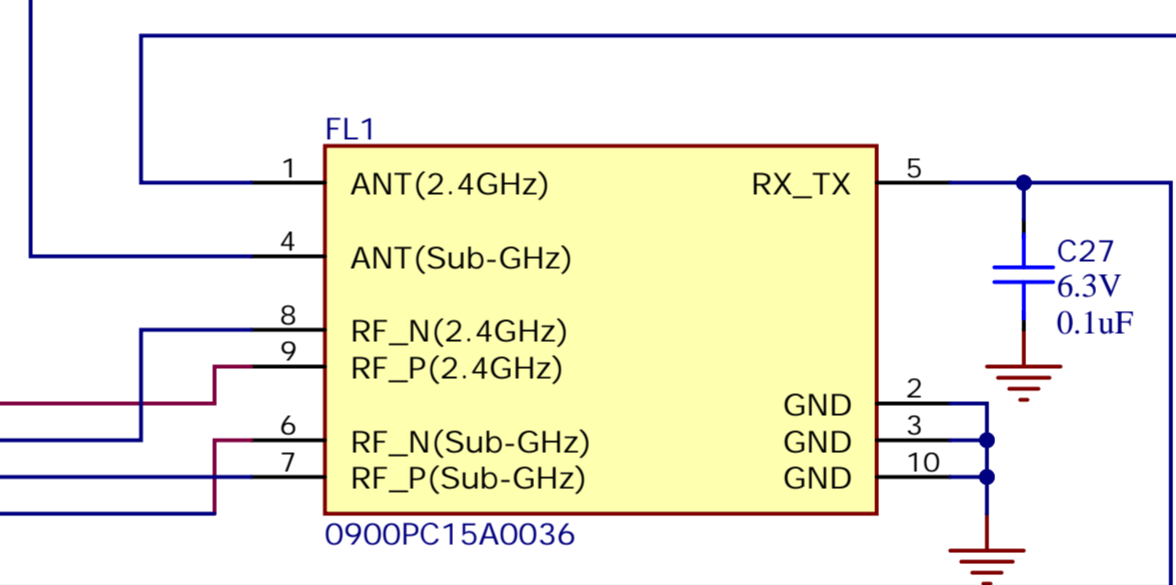
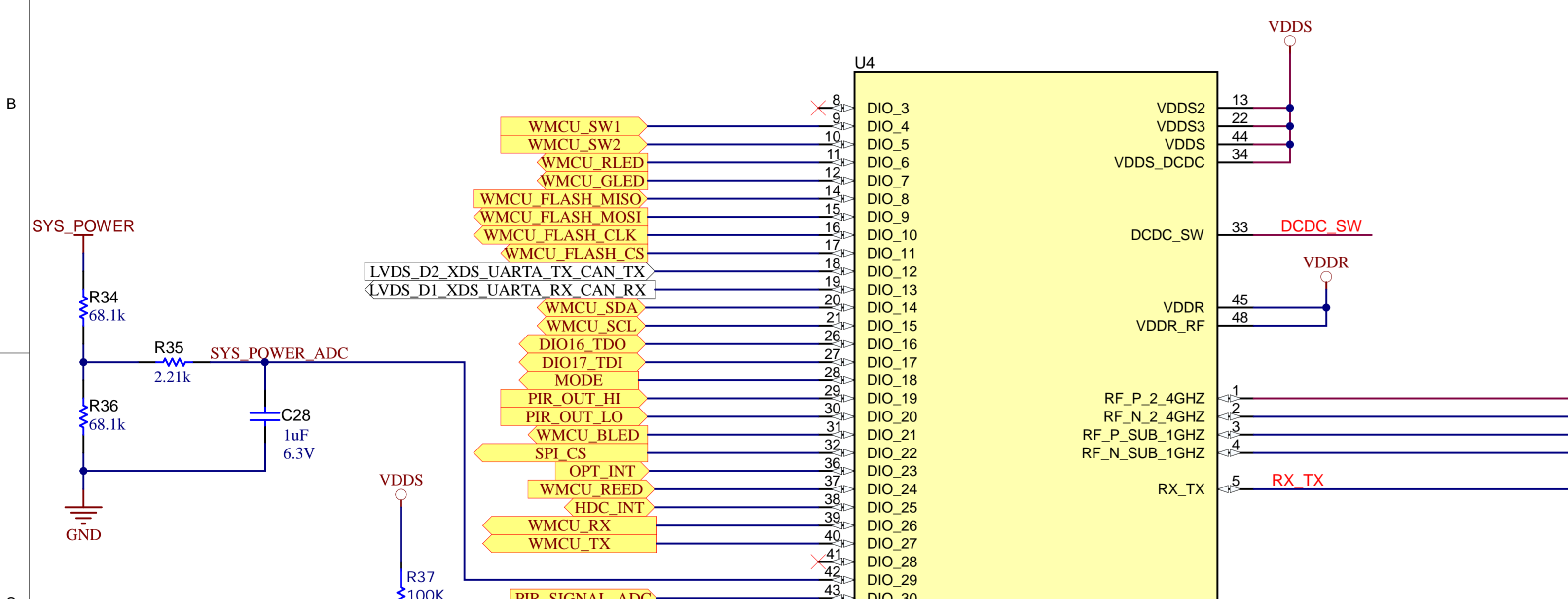
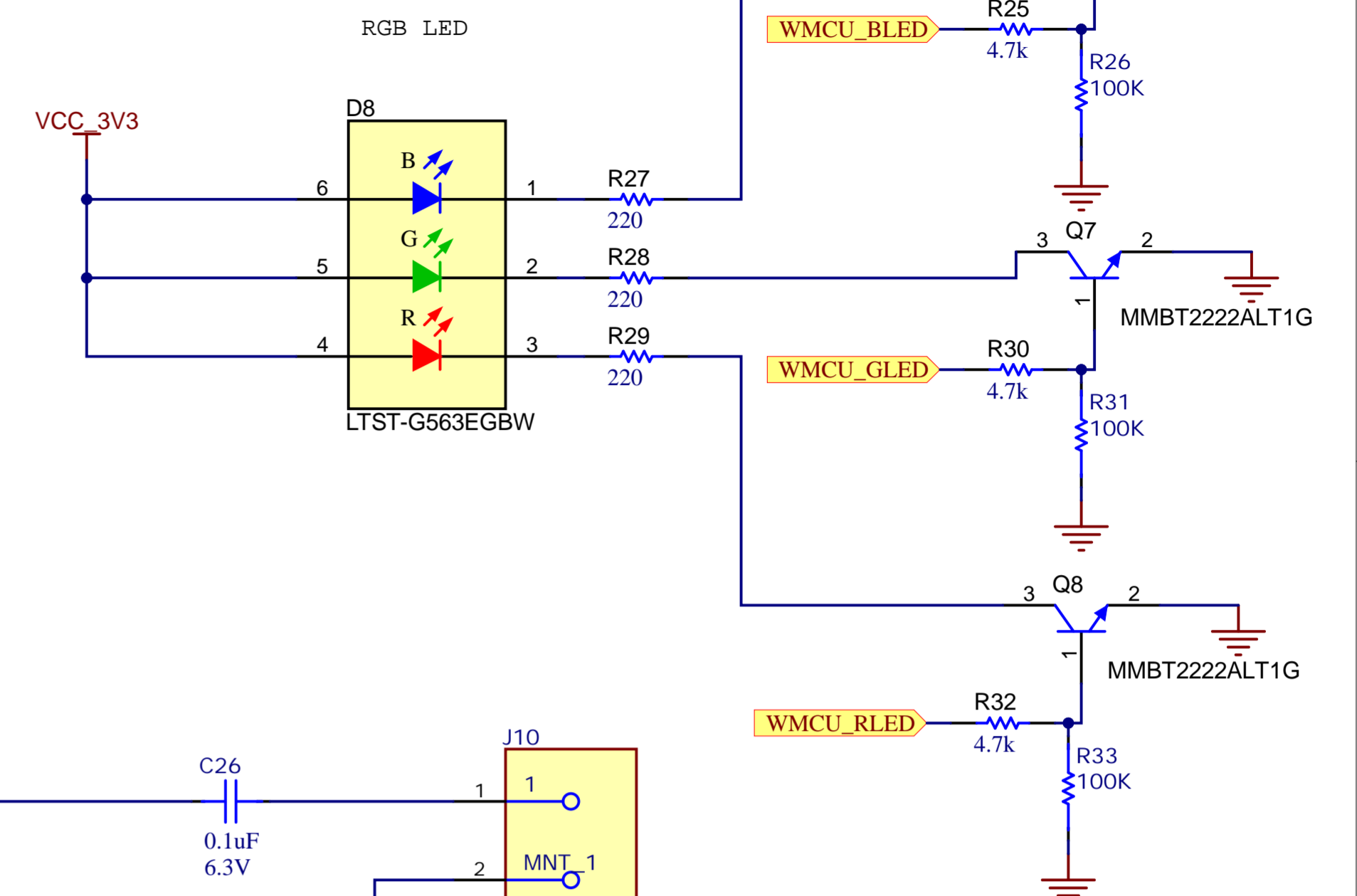
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Orderable:	Designed for: Public Release	Mod. Date: 6/29/2023
TID #: TIDA_010254	Project Title: TIDA_010254_Base_Board	
Number: TIDA_010254_Base_Board	Sheet Title: DC_REGULATOR	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 5 of 8
Drawn By: Justin	File: TIDA_010254_Base_Board_DC_Regulators.Sch	Size: B
Engineer: Justin	Contact: http://www.ti.com/support	

Wireless MCU RF



Place L1 and C1 close to pin 33.
Low inductance ground for C1

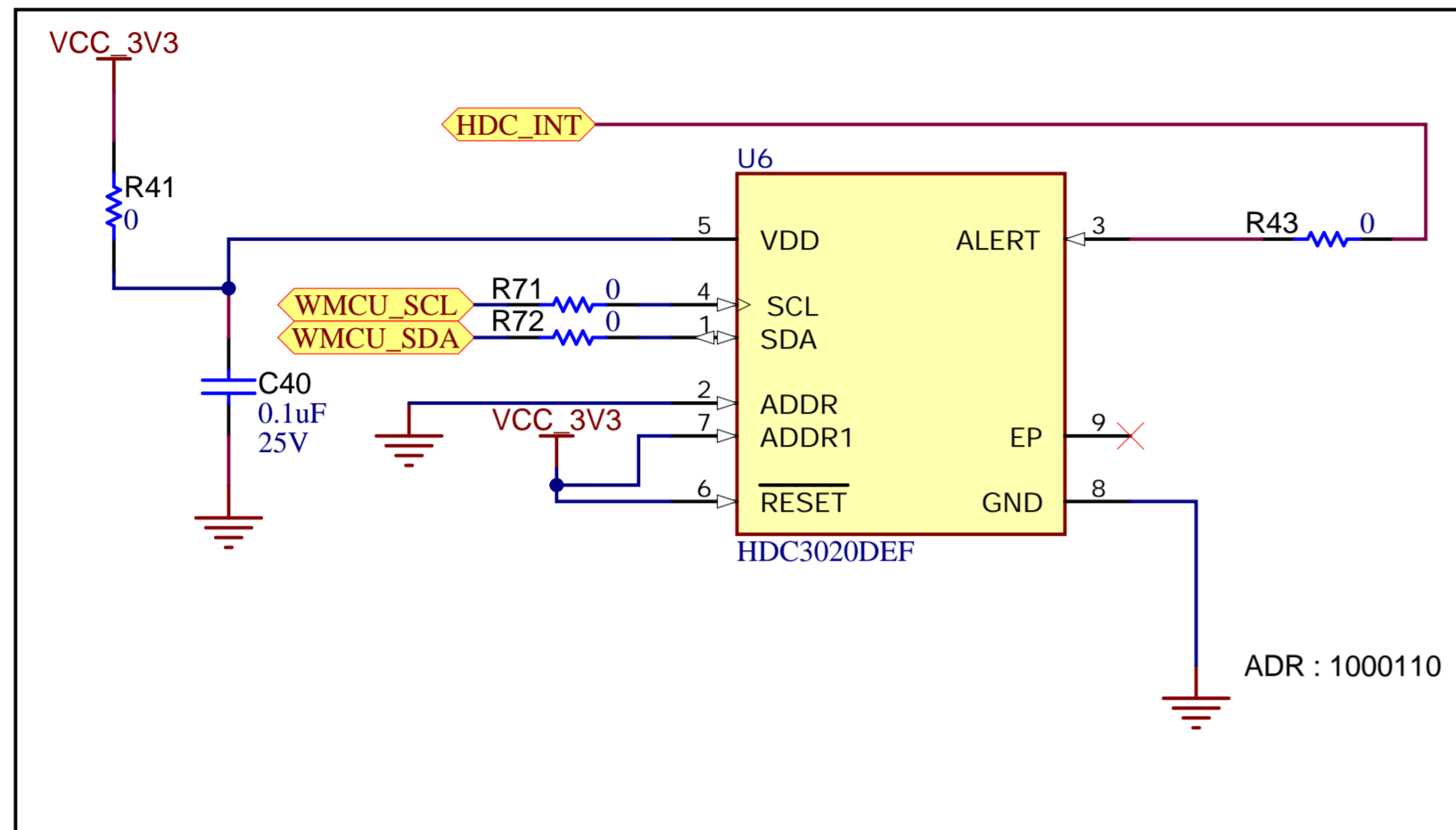


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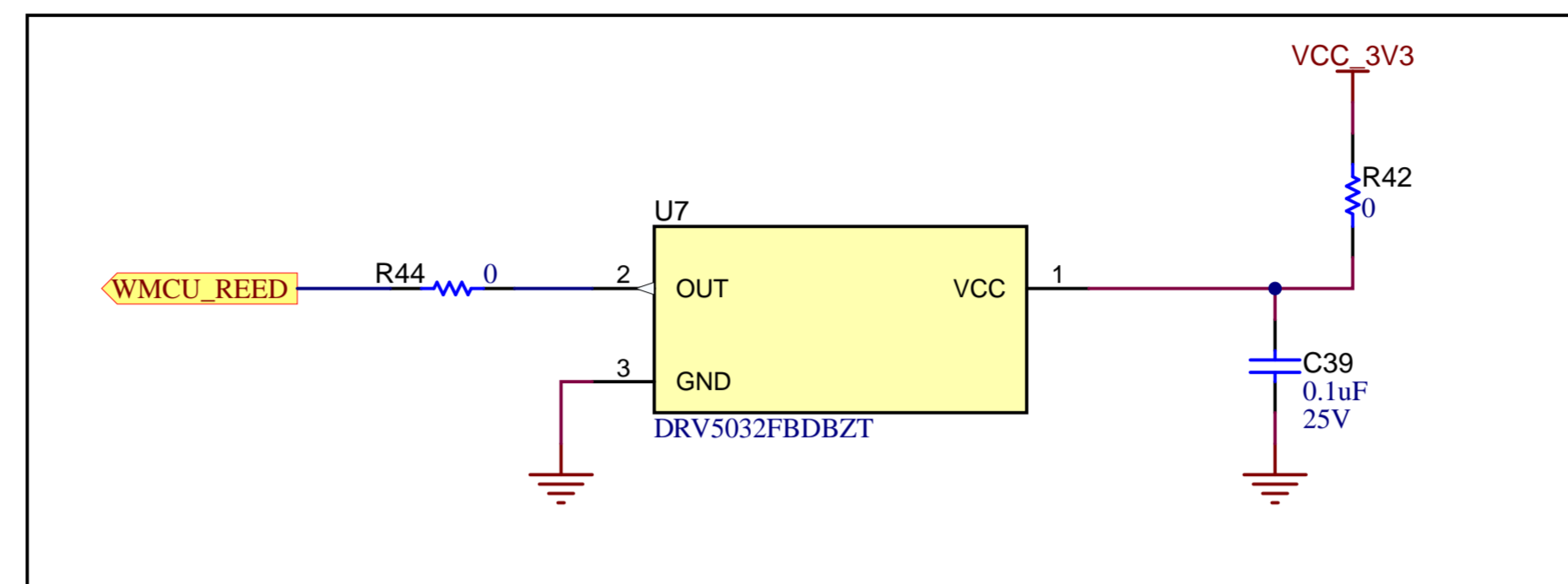
Orderable:	Designed for: Public Release	Mod. Date: 4/18/2023
TID #: TIDA_010254	Project Title: TIDA_010254_Base_Board	
Number: TIDA_010254_Base_Board	Sheet Title: CC1352R_CHIP	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 6 of 8
Drawn By: Justin	File: TIDA_010254_Base_Board_CC1352R.SchDoc	Size: B
Engineer: Justin	Contact: http://www.ti.com/support	



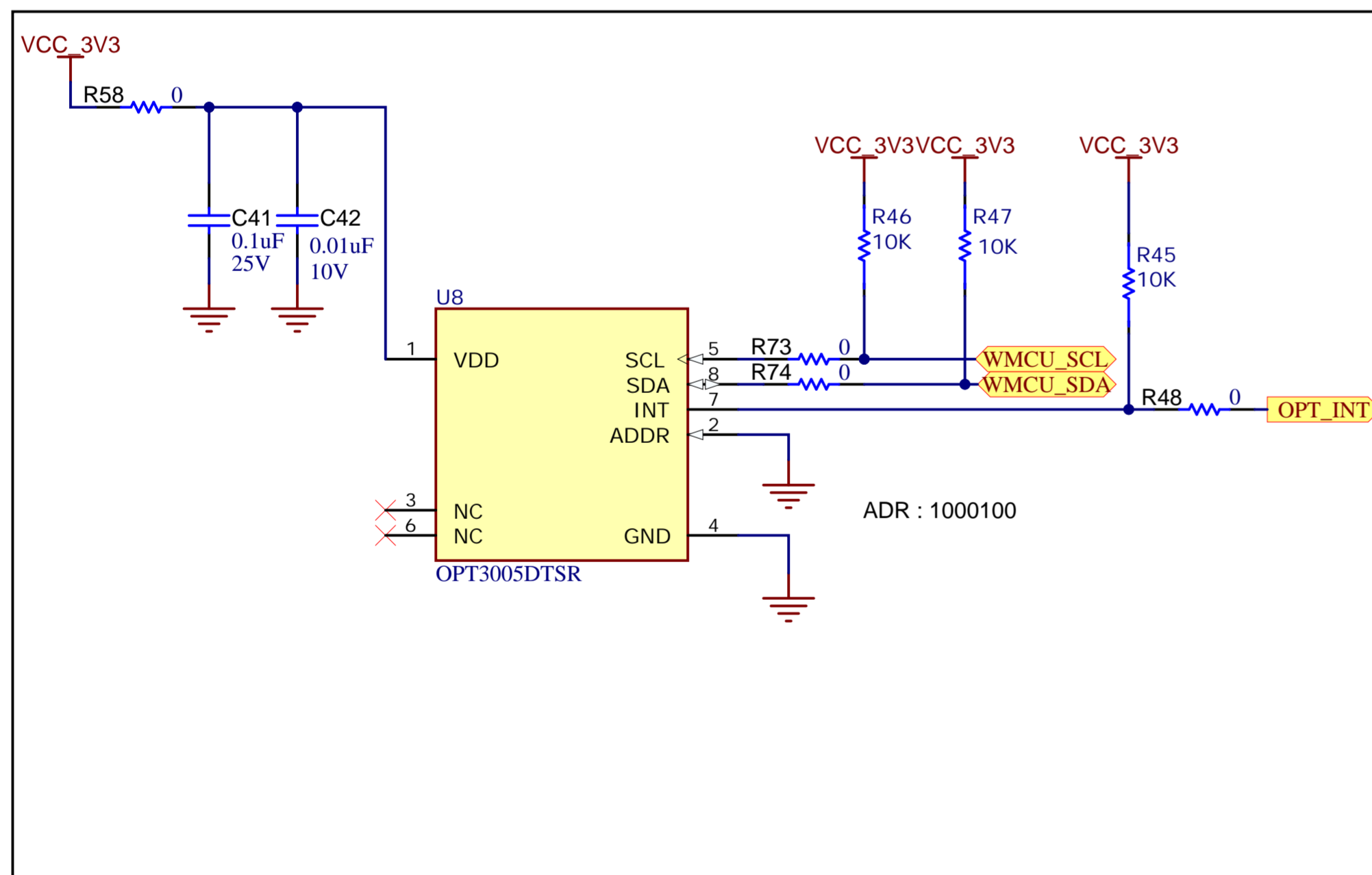
Humidity and Temperature Sensor



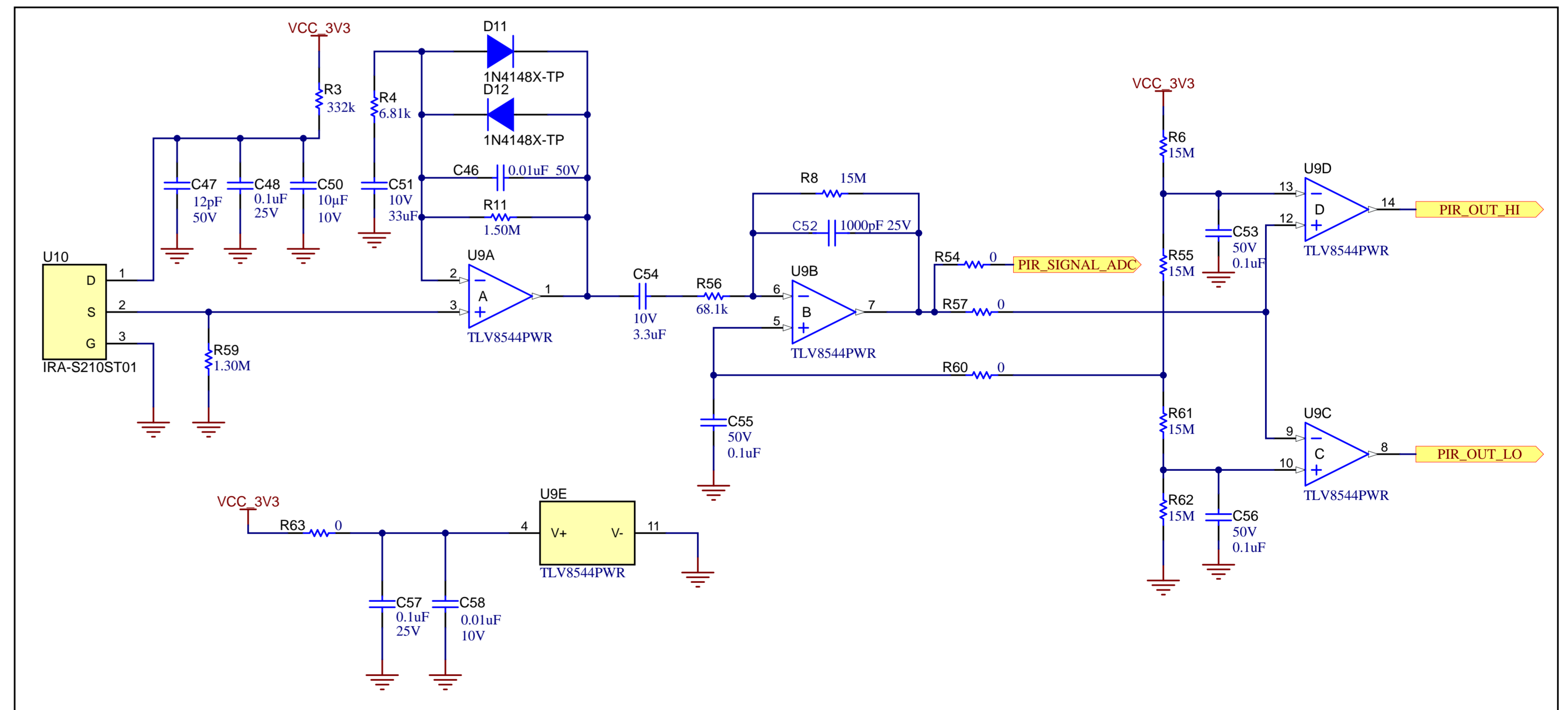
Hall Effect Sensor



Ambient Light Sensor



PIR Sensor



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Orderable:	Designed for: Public Release	Mod. Date: 4/19/2023
TID #: TIDA_010254	Project Title: TIDA_010254_Base_Board	
Number: TIDA_010254_Base_Board	Sheet Title: Sensors	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 7 of 8
Drawn By: Justin	File: TIDA_010254_Base_Board_Sensors.SchDoc	Size: B
Engineer: Justin	Contact: http://www.ti.com/support	

TEXAS INSTRUMENTS
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1

2

3

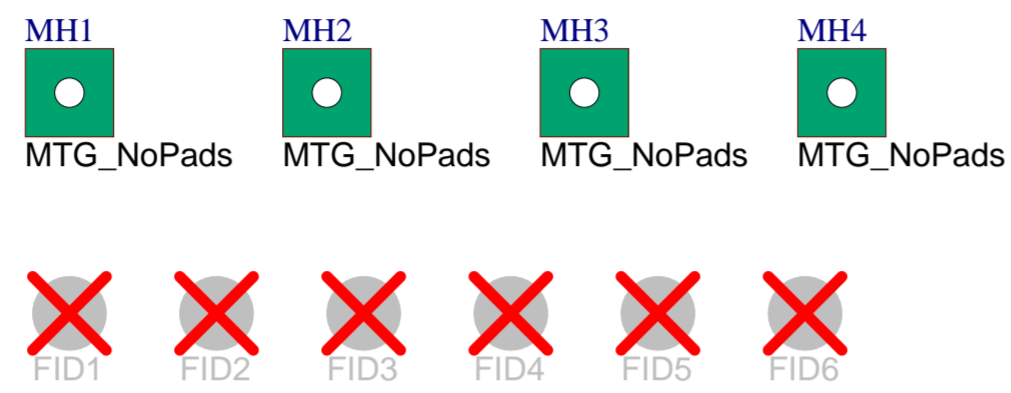
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5

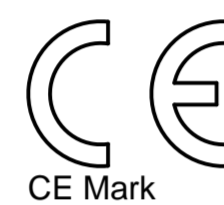
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A

A



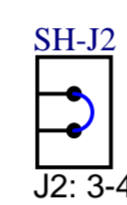
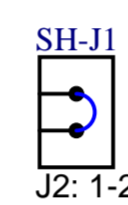
PCB Number: TIDA_010254_Base_Board
 PCB Rev: A



PCB LOGO
Texas Instruments

PCB LOGO
FCC disclaimer

PCB LOGO
WEEE logo



Variant/Label Table	
Variant	Label Text

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.

ZZ5
Assembly Note
 INDICATION FOR COMPONENTS D* ARE GIVEN AT THEIR CATHODE SIDE.

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Orderable:	Designed for: Public Release	Mod. Date: 3/17/2023
TID #: TIDA_010254	Project Title: TIDA_010254_Base_Board	
Number: TIDA_010254_Base_Board	Sheet Title: HARDWARE	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 8 of 8
Drawn By: Justin	File: TIDA_010254_Base_Board_Hardware.SchDoc	Size: B
Engineer: Justin	Contact: http://www.ti.com/support	



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C

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B

B

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