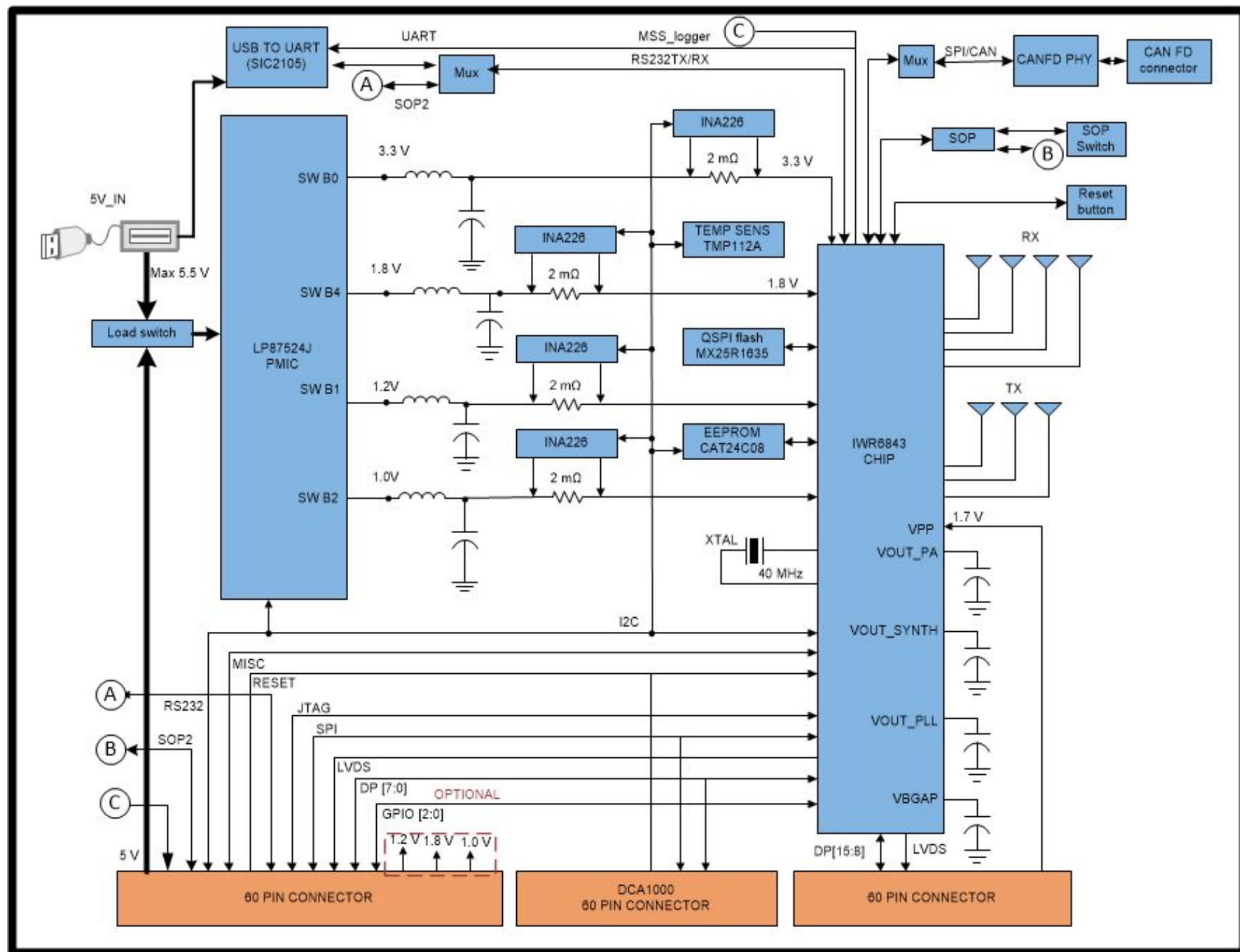


Revision History

Rev	ECN #	Approved Date	Approved by	Notes
C	1	3/2/2020	Charles Oladimeji	REV C

BLOCK DIAGRAM



S.No	DESCRIPTION	I2C ADDRESS
1	CURRENT SENSOR 3.3V	100 0100
2	CURRENT SENSOR 1.8V	100 0000
3	CURRENT SENSOR 1.2V	100 0001
4	CURRENT SENSOR 1.0V	100 0101
5	TEMPERATURE SENSOR1	100 1011
6	LP8770 PMIC	110 0000
7	EEPROM	1010 0XX

1	2	3	4	5	6
A					A
B					B
C					C
D					D

TABLE OF CONTENTS

SHEET NO.	SHEET NAME
1	Block diagram
2	Table of Contents
3	PMIC
4	IWR6843 Chip
5	Decoupling caps_LC_Filters
6	QSPI Flash
7	60Pin HD Connector
8	Temp_Current_Sensor
9	USB to UART
10	DCA Connector
11	SOP Control
12	CAN Interface
13	Hardware

Orderable: IWR6843ISK

TID #: N/A

Number: PROC073

SVN Rev: Not in version control

Drawn By: Charles F. Oladimeji

Engineer: Charles F. Oladimeji

Designed for: Public Release

Project Title: IWR6843ISK

Sheet Title: TABLE OF CONTENTS

Assembly Variant: 001_IWR


File: PROC073C_Table_Of_Contents.SchDoc

Contact: http://www.ti.com/support

Mod. Date: 3/11/2020

Sheet: 2 of 13

Size: B

 TEXAS
INSTRUMENTS

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1

2

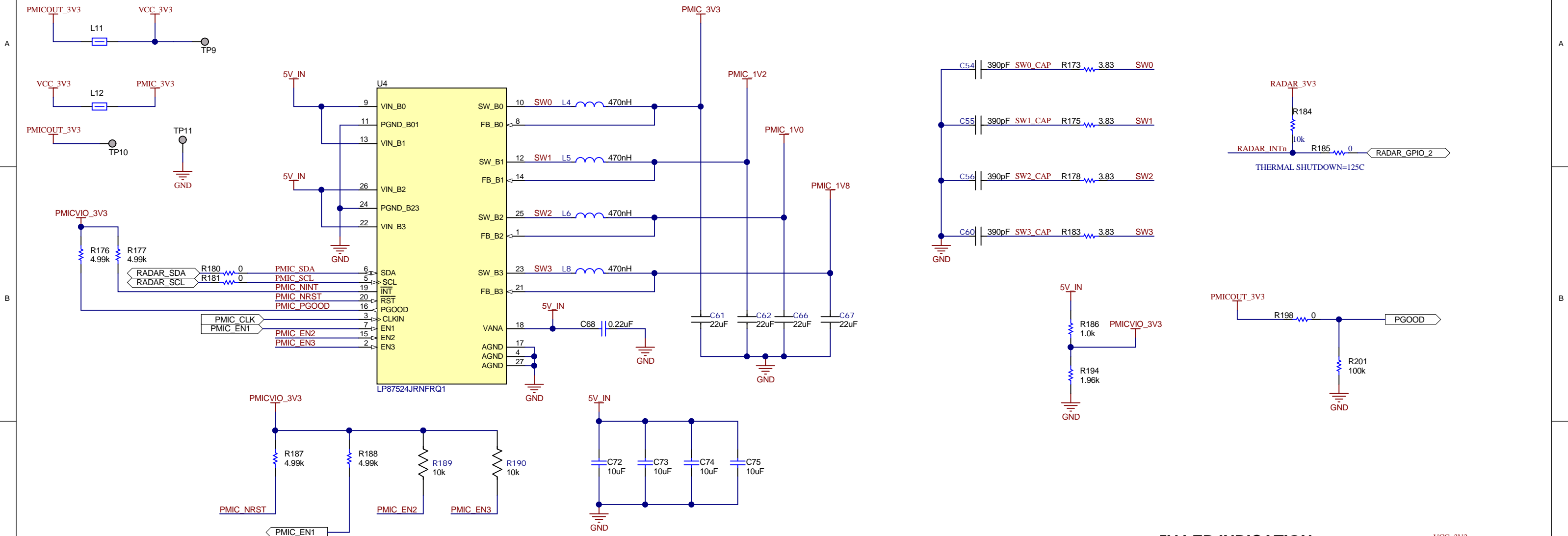
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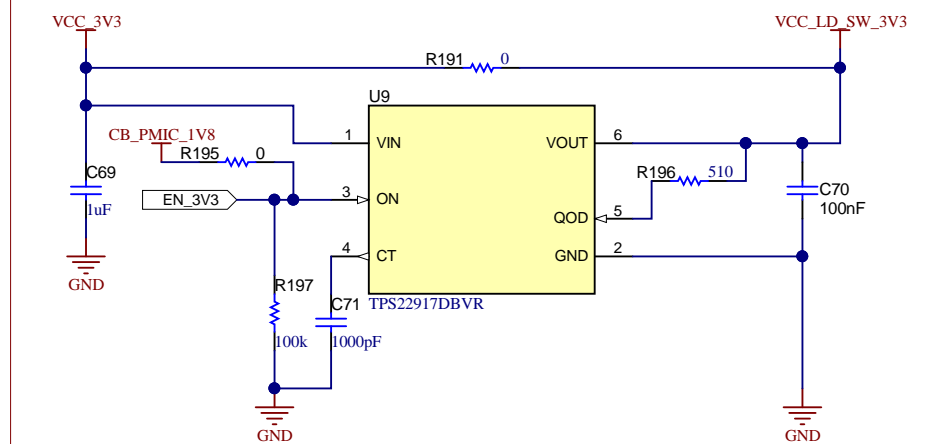
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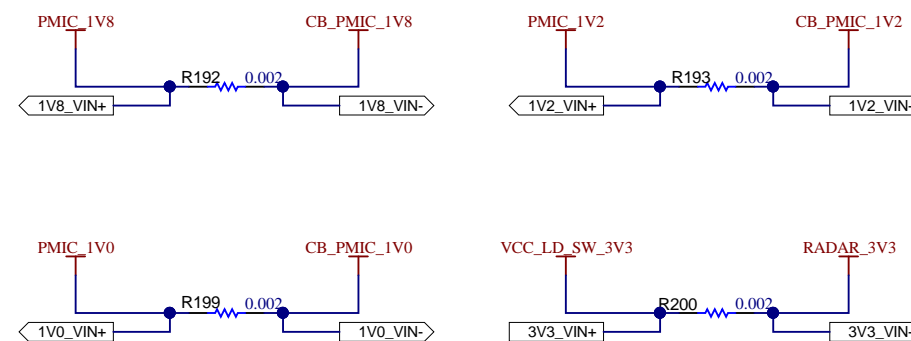
PMIC (3.3V, 1.2V, 1.0V, 1.8V OUTPUTS)



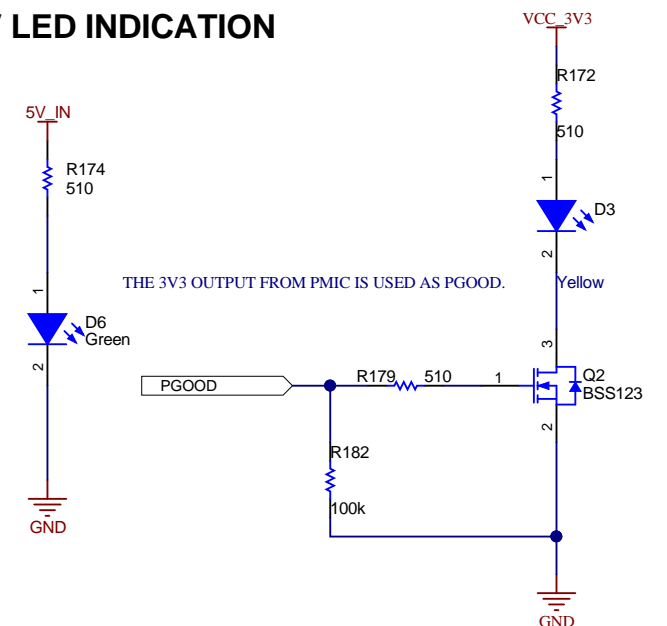
Load switch for delaying 3.3V to IWR6483 module




Current Sense Resistors



5V LED INDICATION



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Orderable: IWR6843ISK	Designed for: Public Release	Mod. Date: 3/11/2020	 TEXAS INSTRUMENTS
TID #: N/A	Project Title: IWR6843ISK		
Number: PROC073	Rev: C	Sheet Title: PMIC	
SVN Rev: Not in version control	Assembly Variant: 001_IWR	Sheet: 3 of 13	
Drawn By: Charles F. Oladimeji	File: PROC073C_PMIC_Sch.Doc	Size: B	
Engineer: Charles F. Oladimeji	Contact: http://www.ti.com		© Texas Instruments 2020

IWR6843 Chip

A

B

C

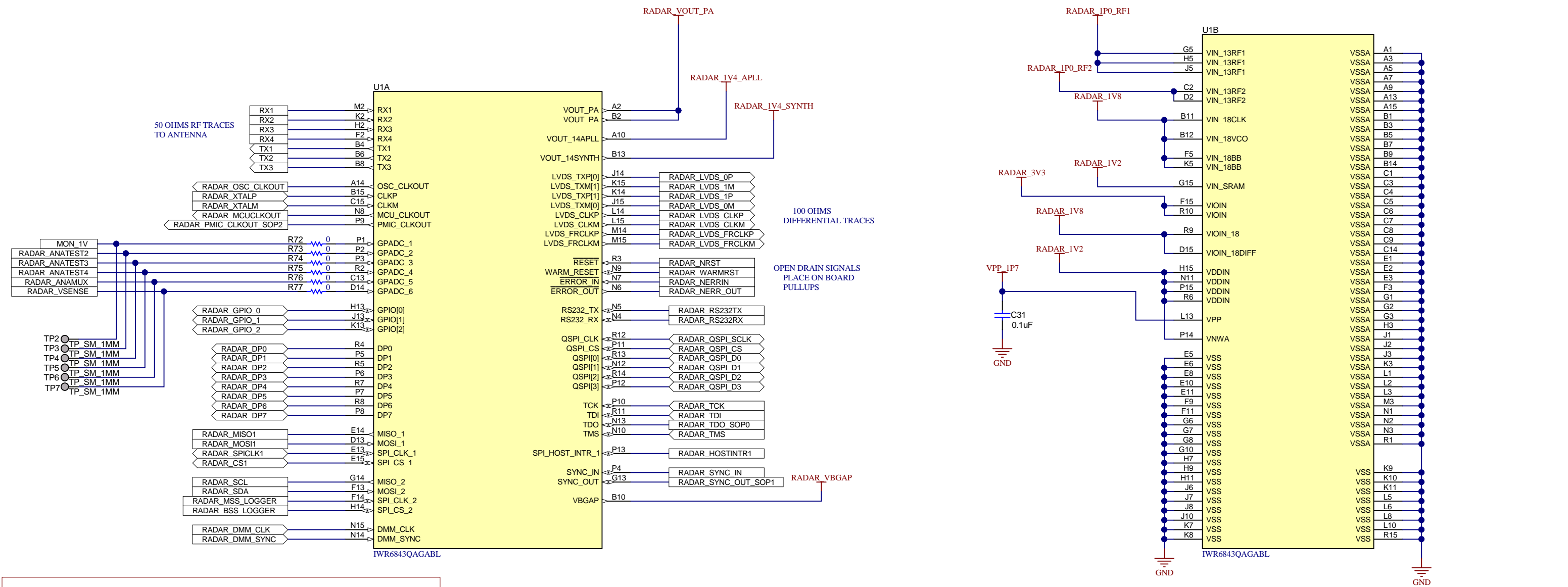
D

A

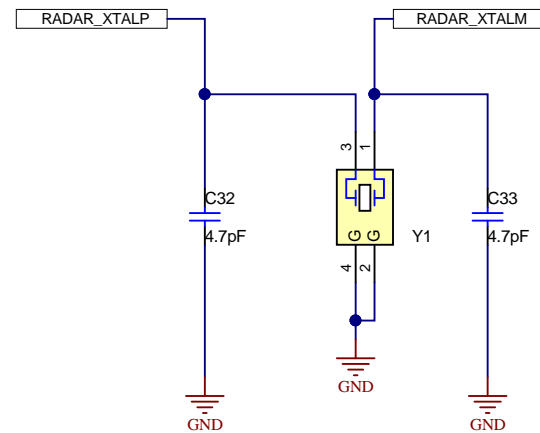
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C

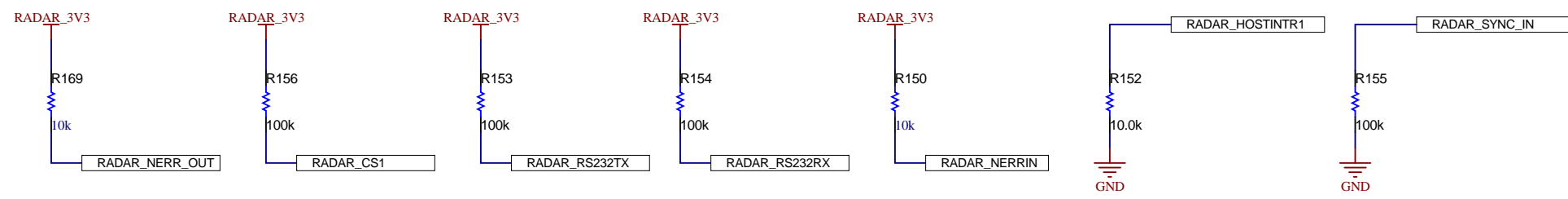
D



Crystal Oscillator
40MHz



PULL UPs/DOWNs FOR SPI CS1, NERRIN, RS232, SYNC_IN & HOST_INTr



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Orderable: IWR6843ISK	Designed for: Public Release	Mod. Date: 3/11/2020
TID #: N/A	Project Title: IWR6843ISK	
Number: PROC073	Rev: C	Sheet Title: IWR6843_CHIP
SVN Rev: Not in version control	Assembly Variant: 001_IWR	Sheet: 4 of 13
Drawn By: Charles F. Oladimeji	File: PROC073C_IWR6843_Chip_SchDoc	Size: B
Engineer: Charles F. Oladimeji	Contact: http://www.ti.com/support	



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A

B

C

D

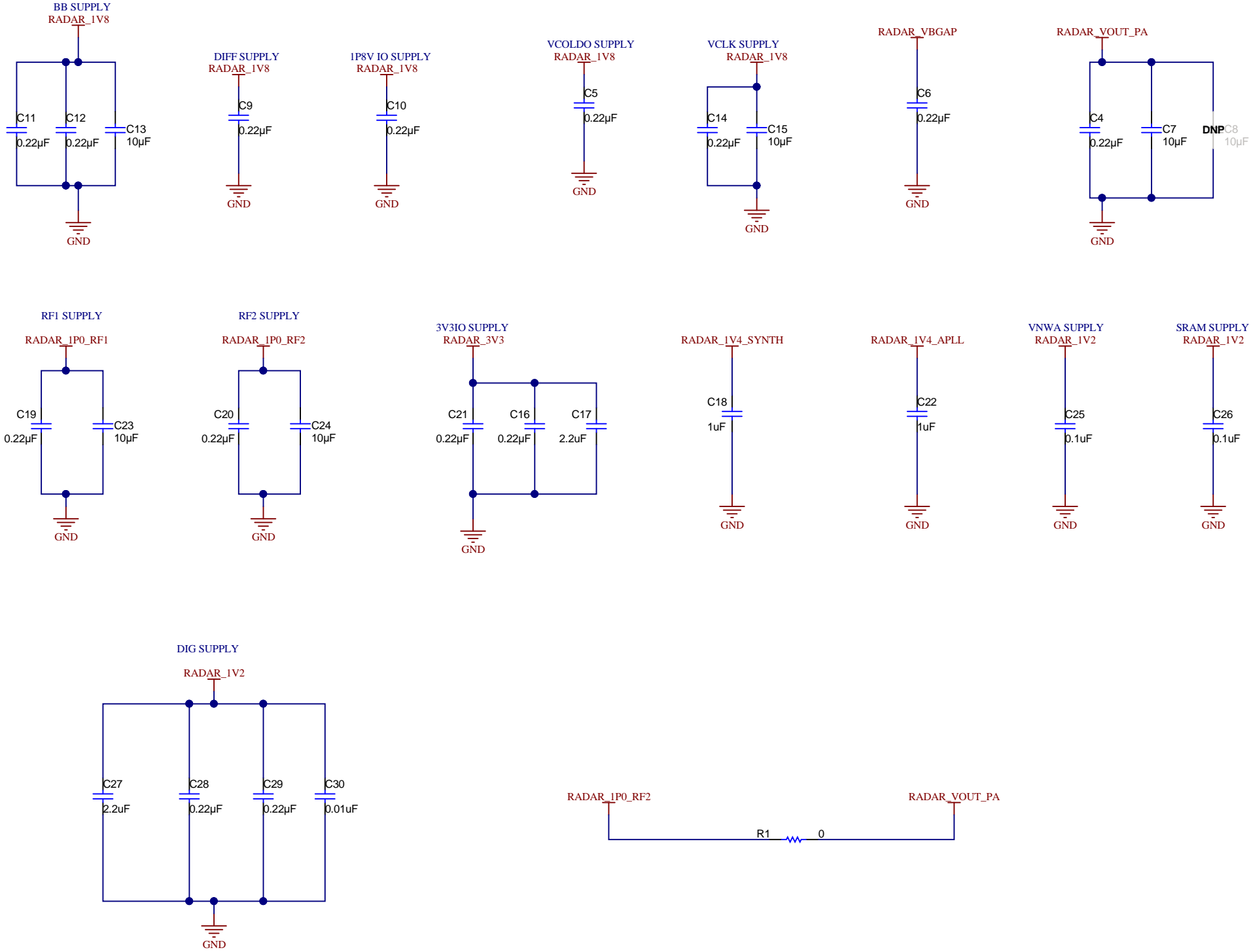
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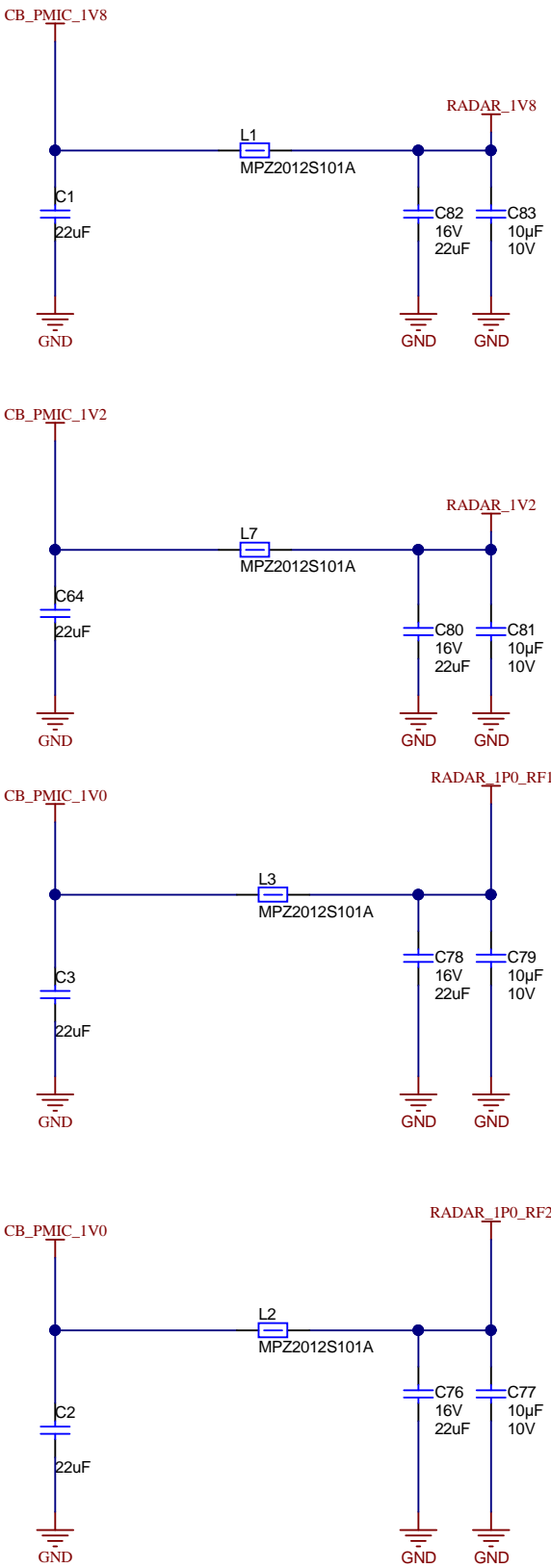
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D

SUPPLY_DECOUPLING_CAPS



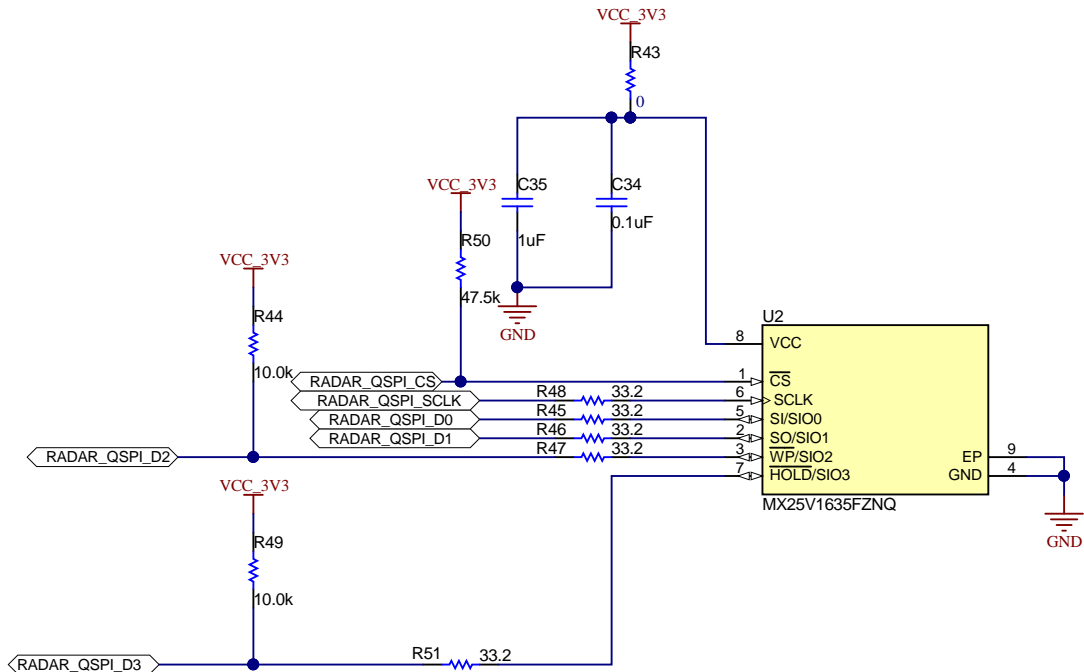
PMIC LC Filters



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Orderable: IWR6843ISK	Designed for: Public Release	Mod. Date: 4/22/2020
TID #: N/A	Project Title: IWR6843ISK	
Number: PROC073	Rev: C	Sheet Title: Decoupling Caps
SVN Rev: Not in version control	Assembly Variant: 001_IWR	Sheet: 5 of 13
Drawn By: Charles F. Oladimeji	File: PROC073C_Dcoupling_caps.SchDoc	Size: B
Engineer: Charles F. Oladimeji	Contact: http://www.ti.com/support	

QSPI FLASH

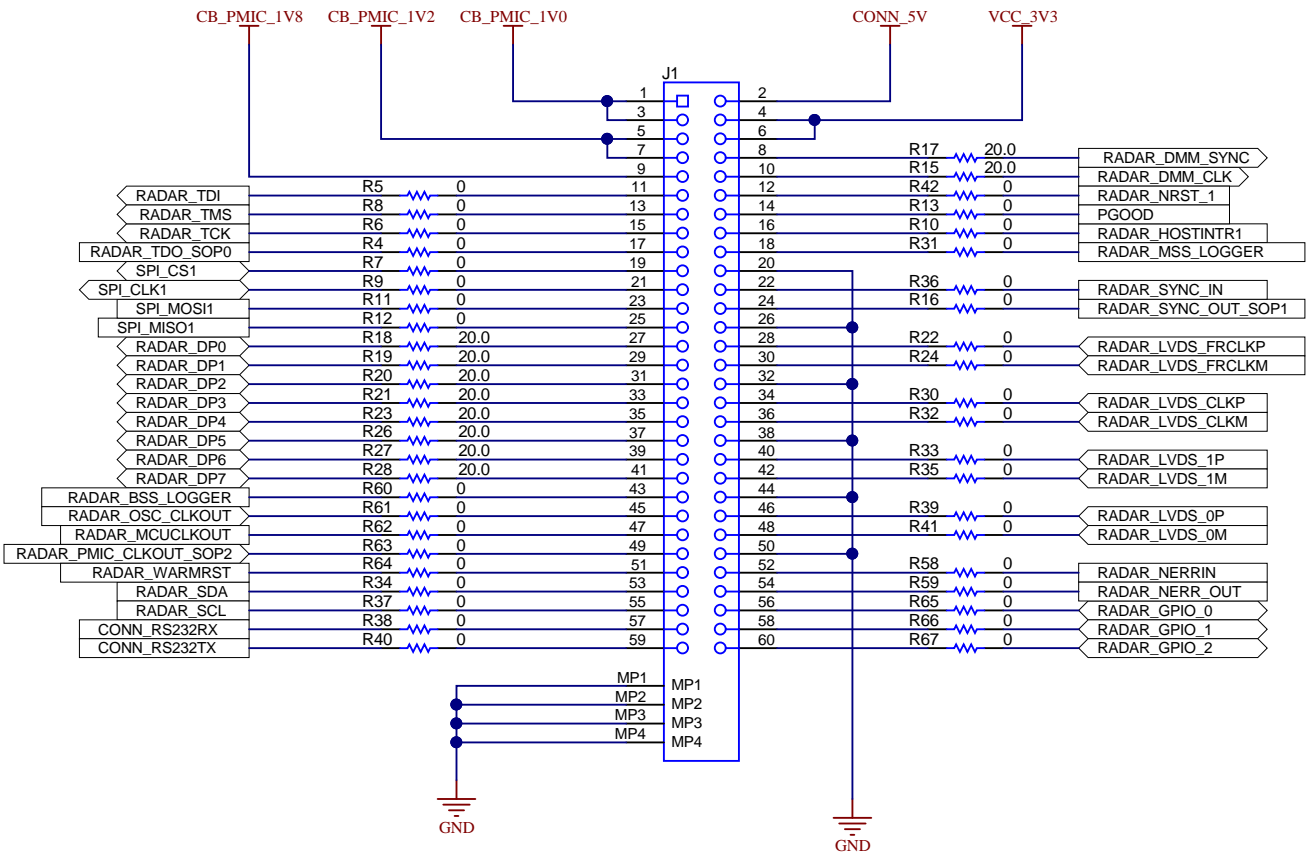


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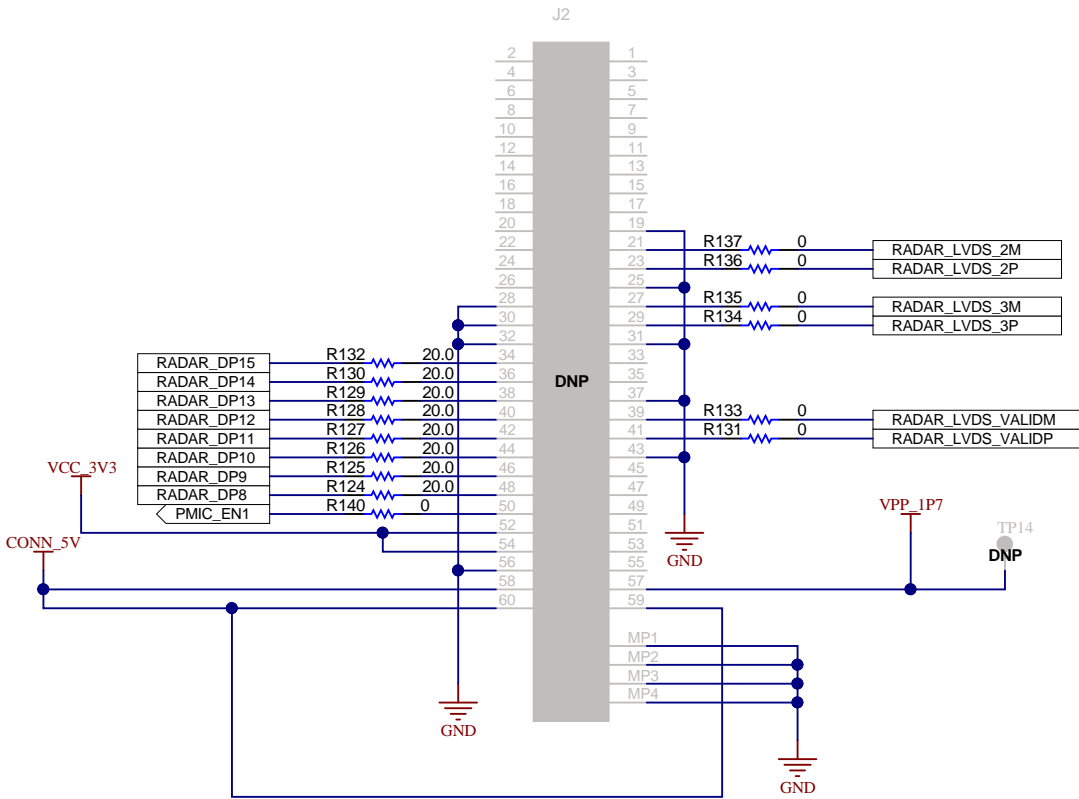
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TID #: N/A	Project Title: IWR6843ISK	
Number: PROC073	Rev: C	Sheet Title: QSPI Flash
SVN Rev: Not in version control	Assembly Variant: 001_IWR	Sheet: 6 of 13
Drawn By: Charles F. Oladimeji	File: PROC073C_QSPI_Flash_section.SchDoc	Size: B
Engineer: Charles F. Oladimeji	Contact: http://www.ti.com/support	

CONNECTORS

60 PIN HD CONNECTOR



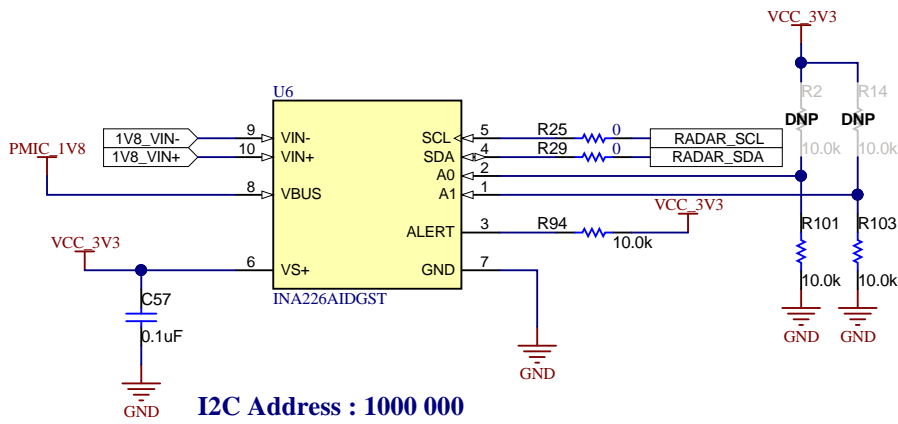
60 PIN HD CONNECTOR FOR xWRxxxx DEVICES COMPATABILITY



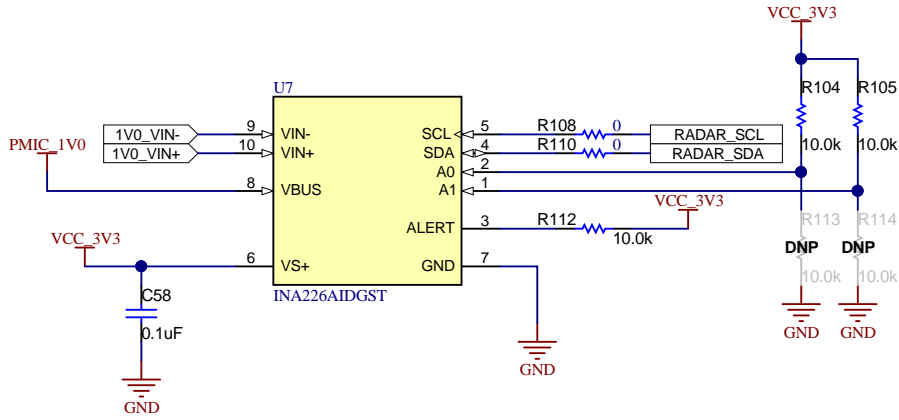
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Orderable: IWR6843ISK	Designed for: Public Release	Mod. Date: 3/11/2020
TID #: N/A	Project Title: IWR6843ISK	
Number: PROC073	Rev: C	Sheet Title: HD Connector
SVN Rev: Not in version control	Assembly Variant: 001_IWR	Sheet: 7 of 13
Drawn By: Charles F. Oladimeji	File: PROC073C_HD_Connector_60Pin.SchDoc	Size: B
Engineer: Charles F. Oladimeji	Contact: http://www.ti.com/support	

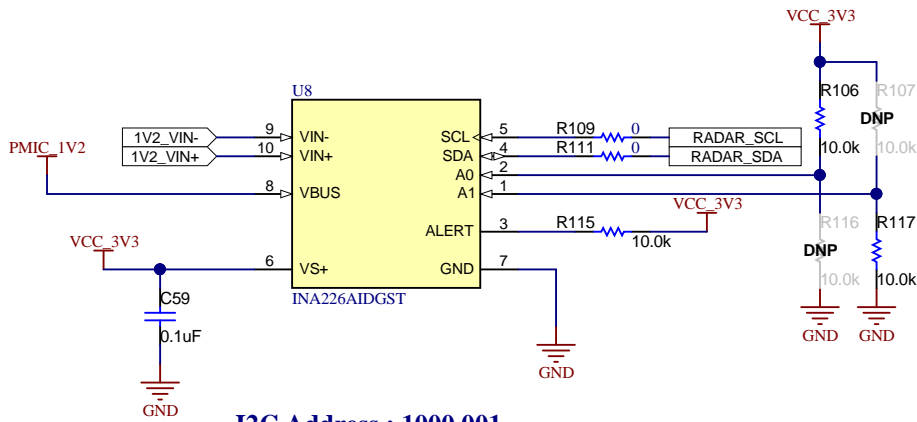
CURRENT SENSOR



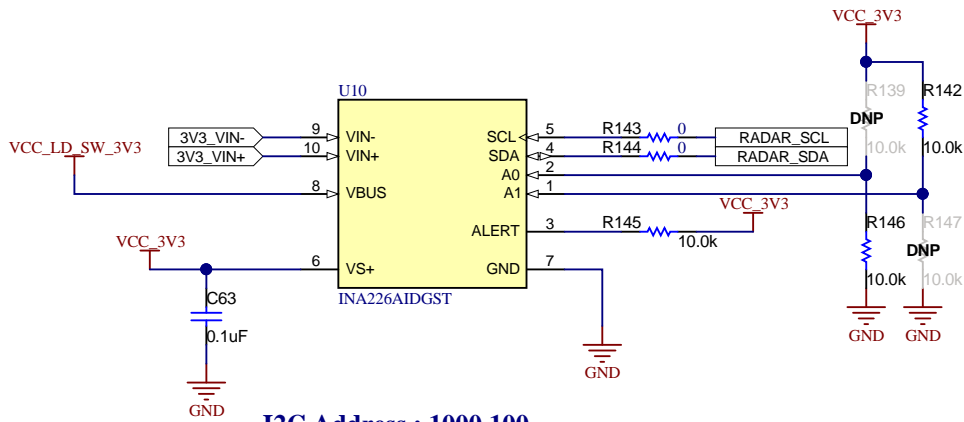
I2C Address : 1000 000



I2C Address : 1000 101

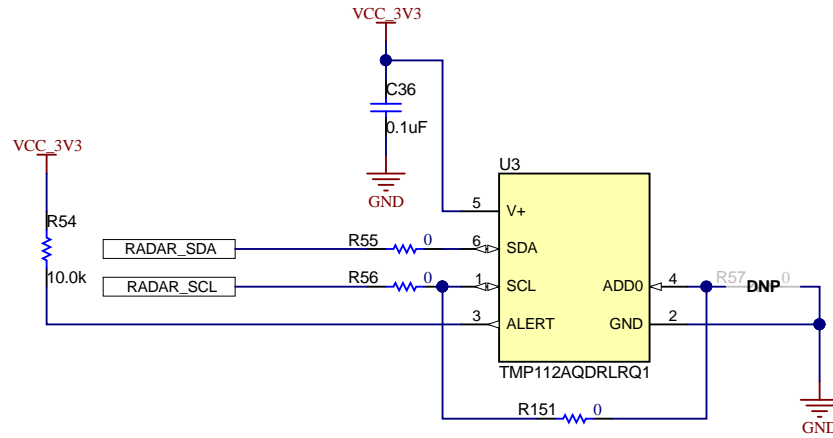


I2C Address : 1000 001



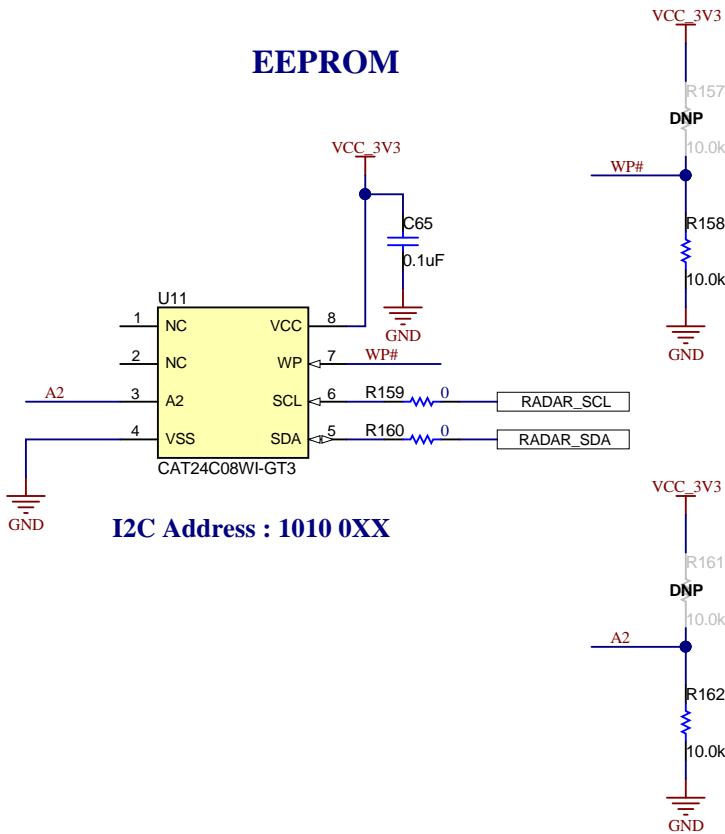
I2C Address : 1000 100

TEMPERATURE SENSOR



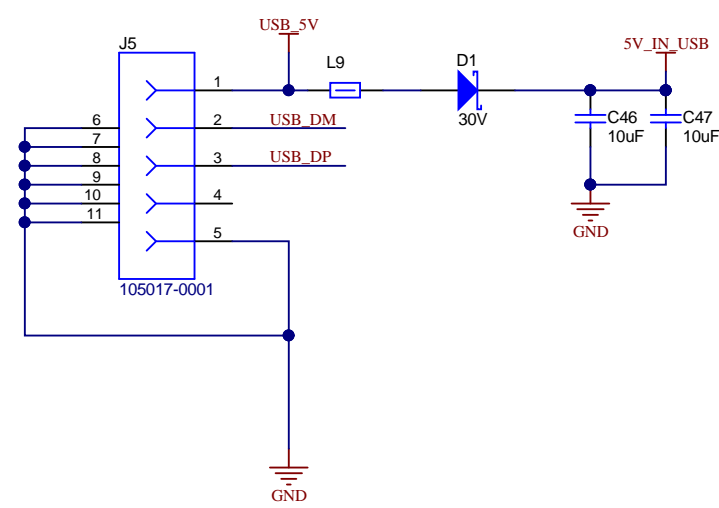
I2C Address : 1001 011

EEPROM

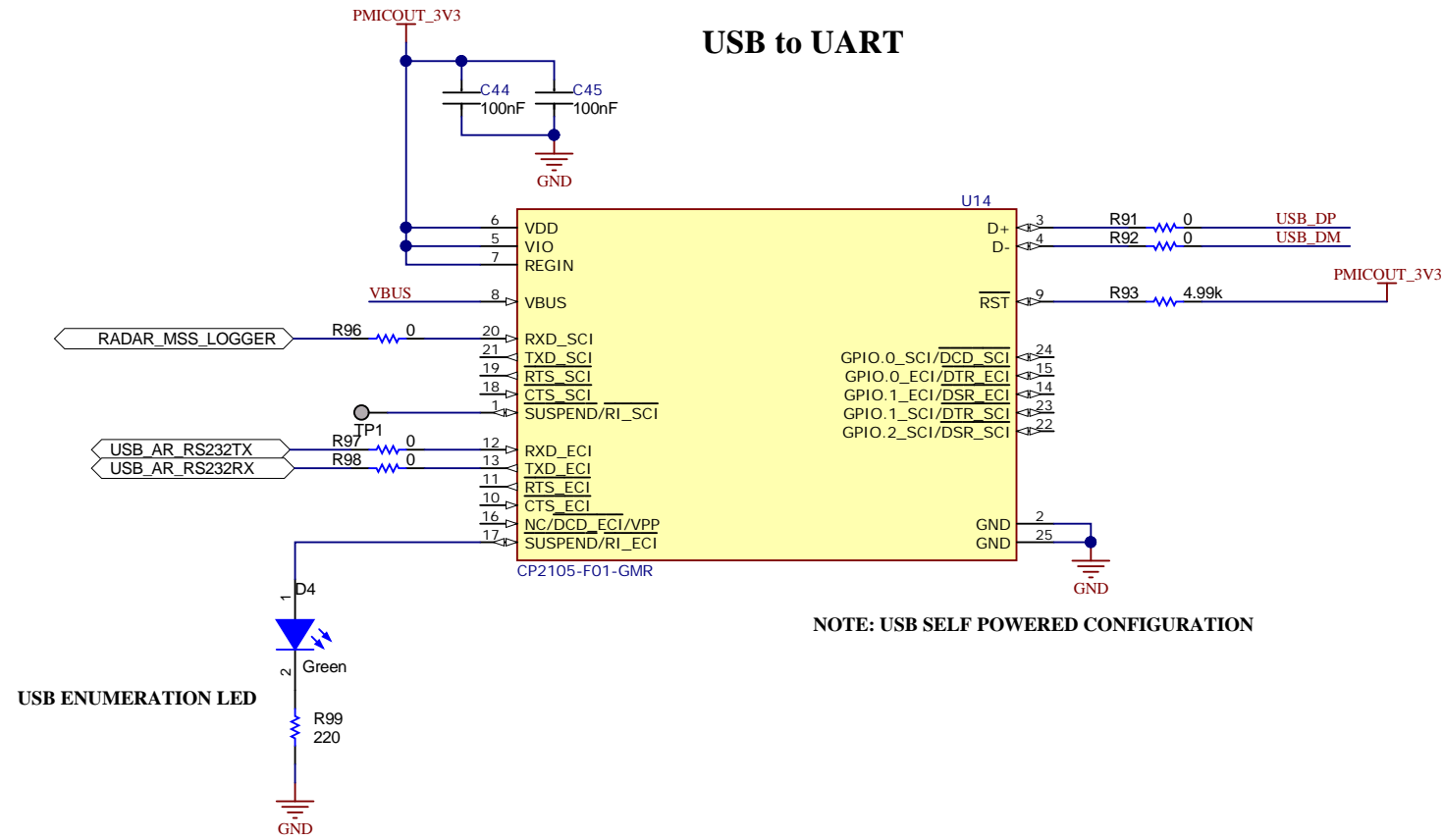


I2C Address : 1010 0XX

USB CONNECTOR

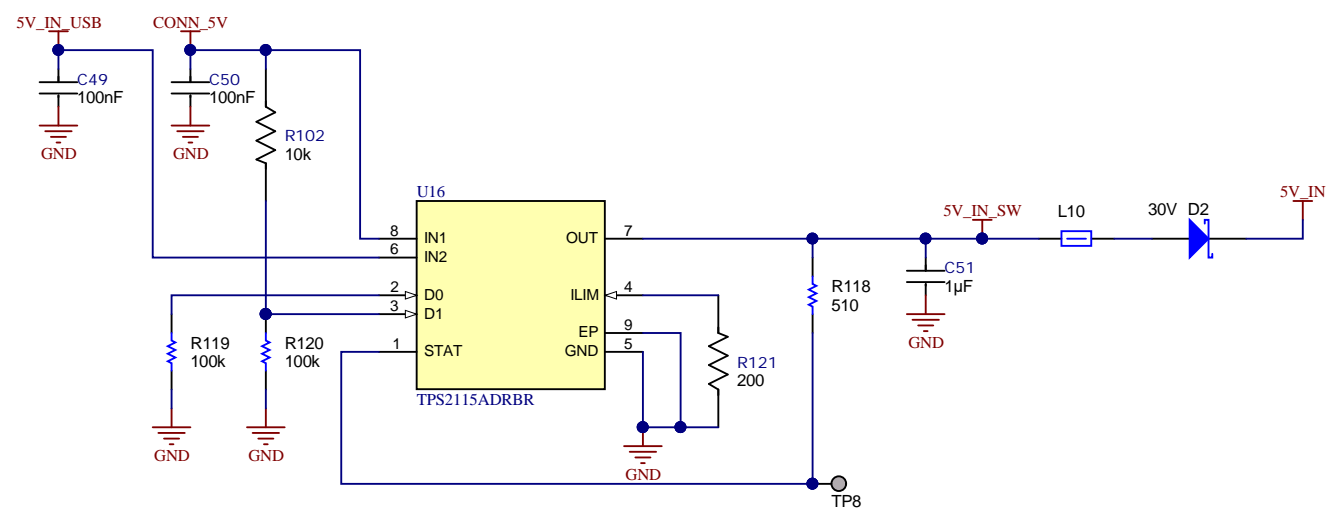


USB to UART

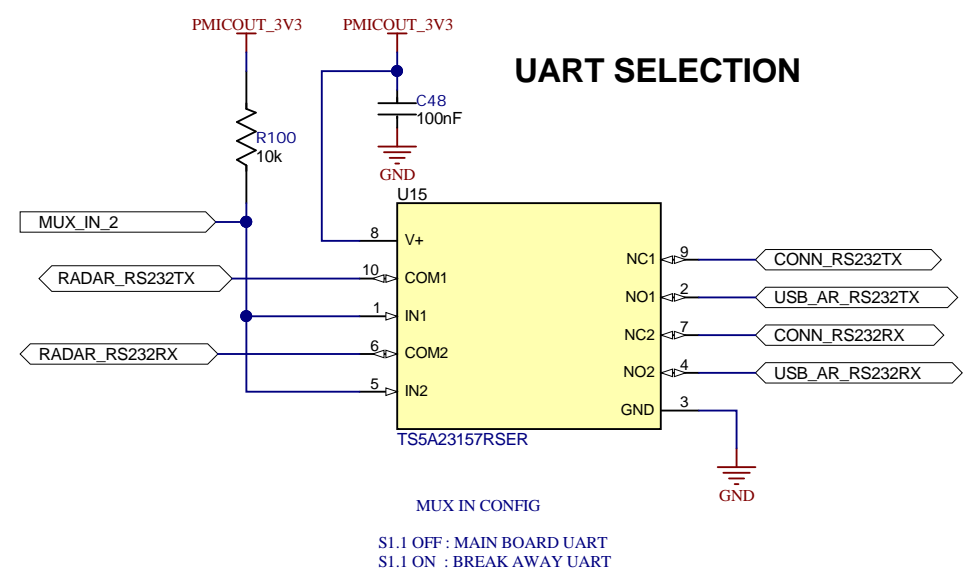


NOTE: USB SELF POWERED CONFIGURATION

CONNECTOR PWR / USB PWR LOAD SWITCH

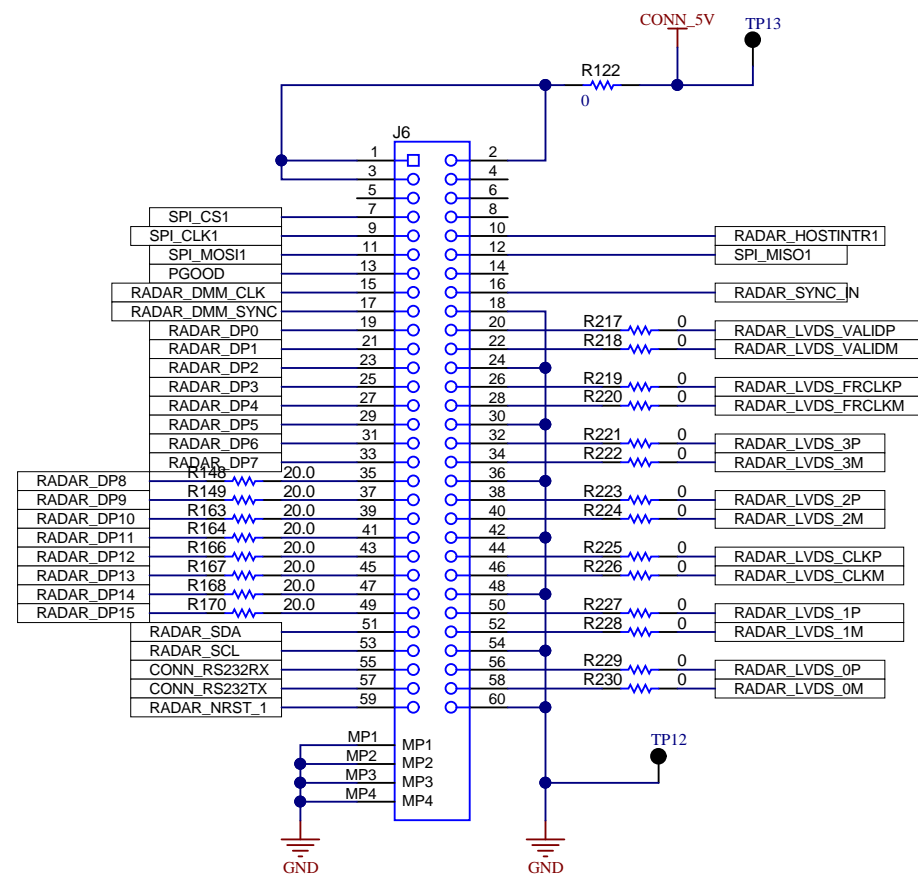


UART SELECTION



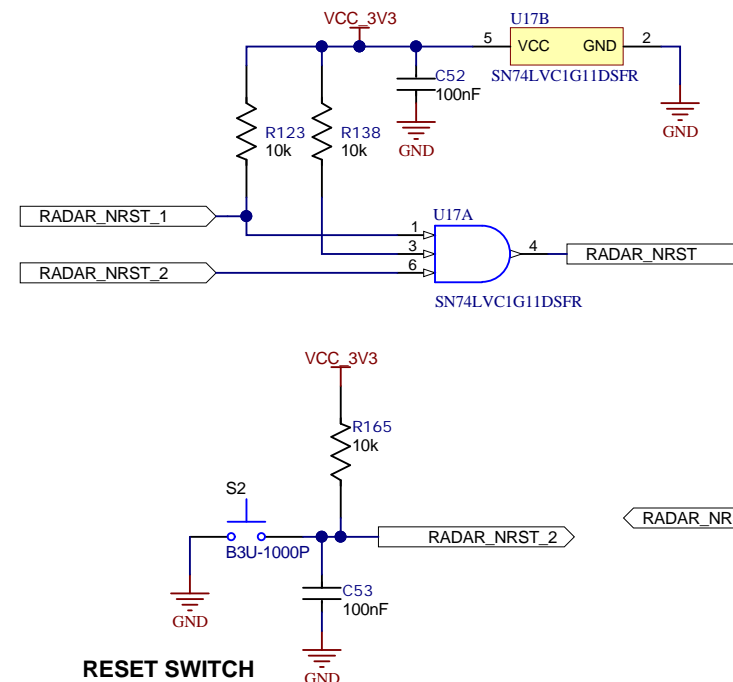
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60PIN HD CONNECTOR FOR DCA1000

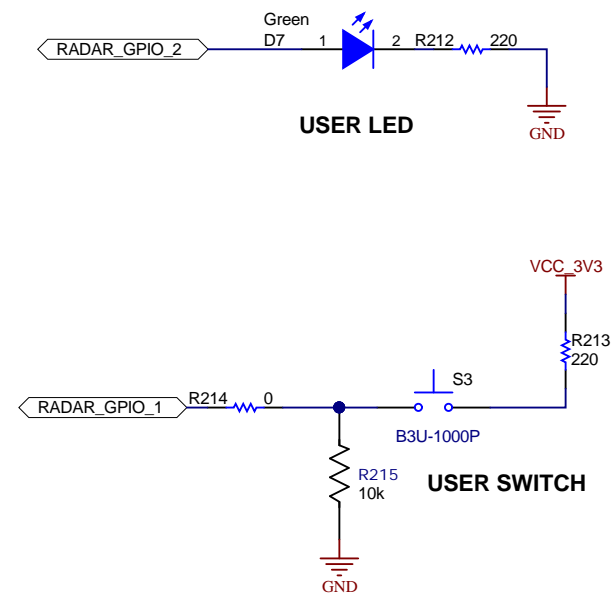


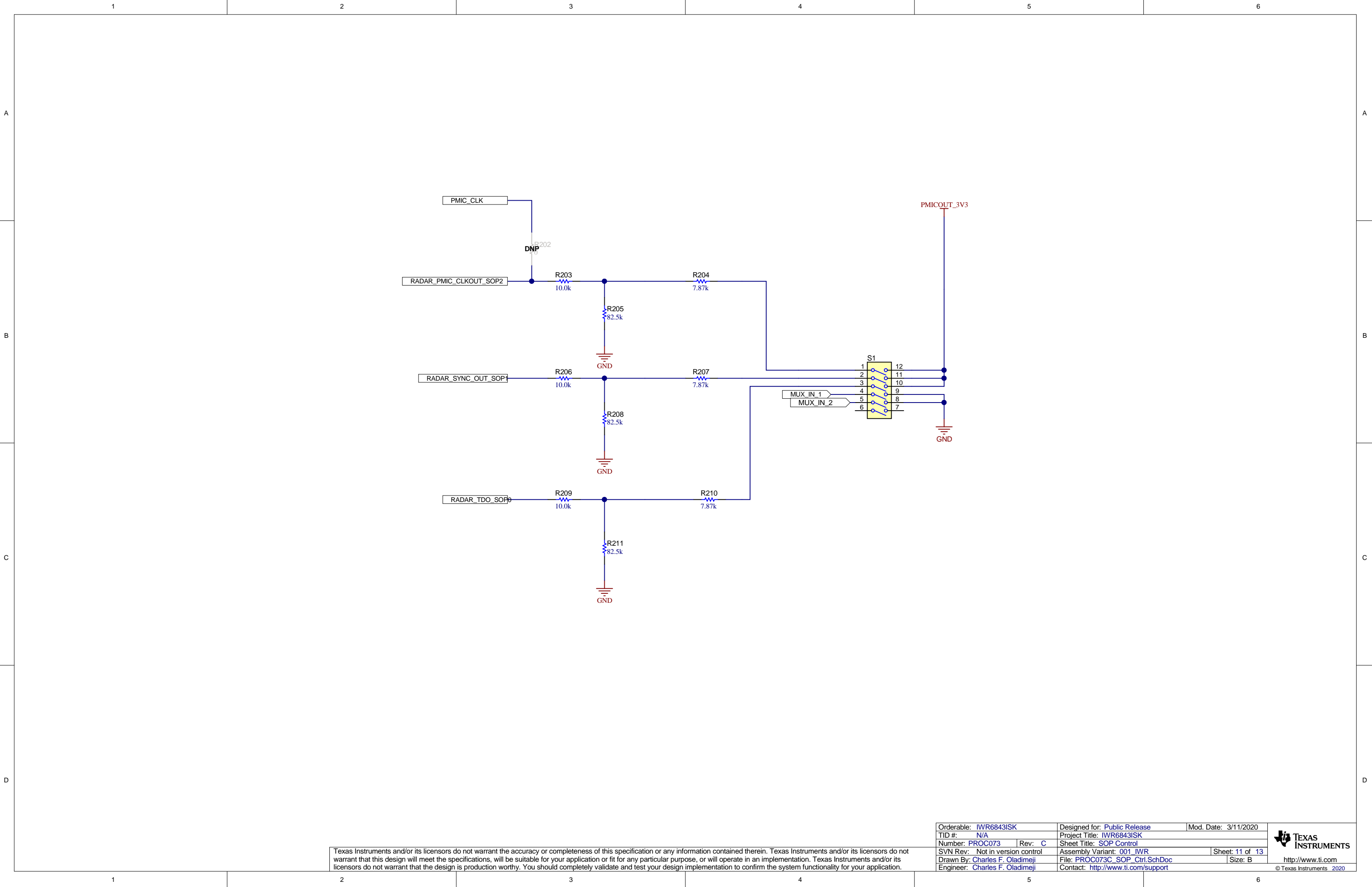
RESET, USER LED and SWITCHES

RESET



USER LED





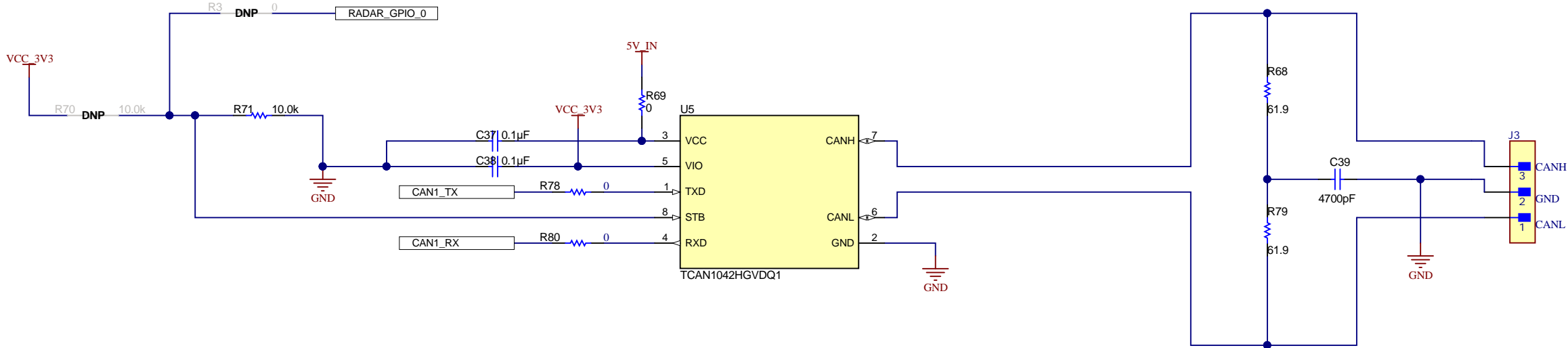
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Orderable: IWR6843ISK		Designed for: Public Release		Mod. Date: 3/11/2020	
TID #: N/A		Project Title: IWR6843ISK			
Number: PROC073		Rev: C		Sheet Title: SOP Control	
SVN Rev: Not in version control		Assembly Variant: 001_IWR		Sheet: 11 of 13	
Drawn By: Charles F. Oladimeji		File: PROC073C_SOP_Ctrl.SchDoc		Size: B	
Engineer: Charles F. Oladimeji		Contact: http://www.ti.com/support			

A

A

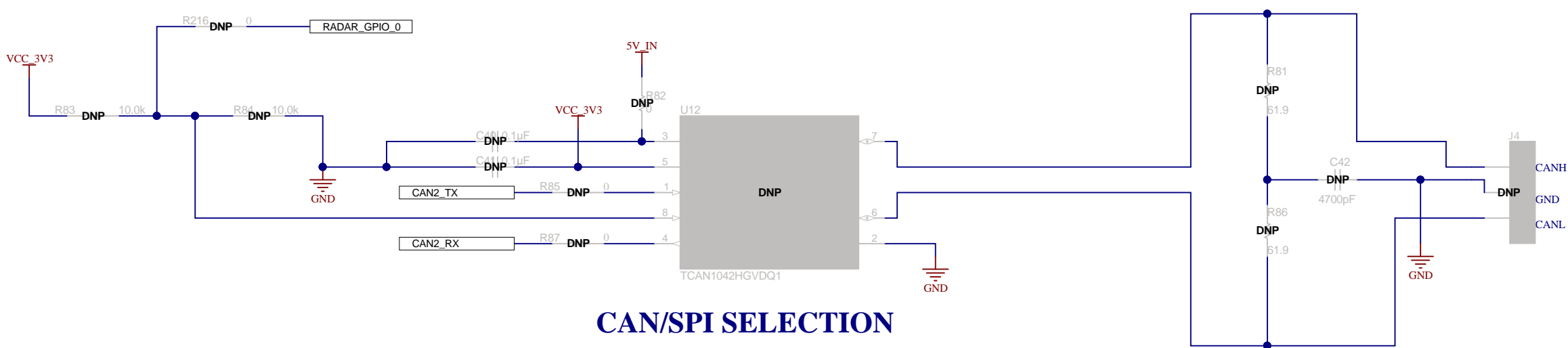
CAN_FD TRANSCEIVER



B

B

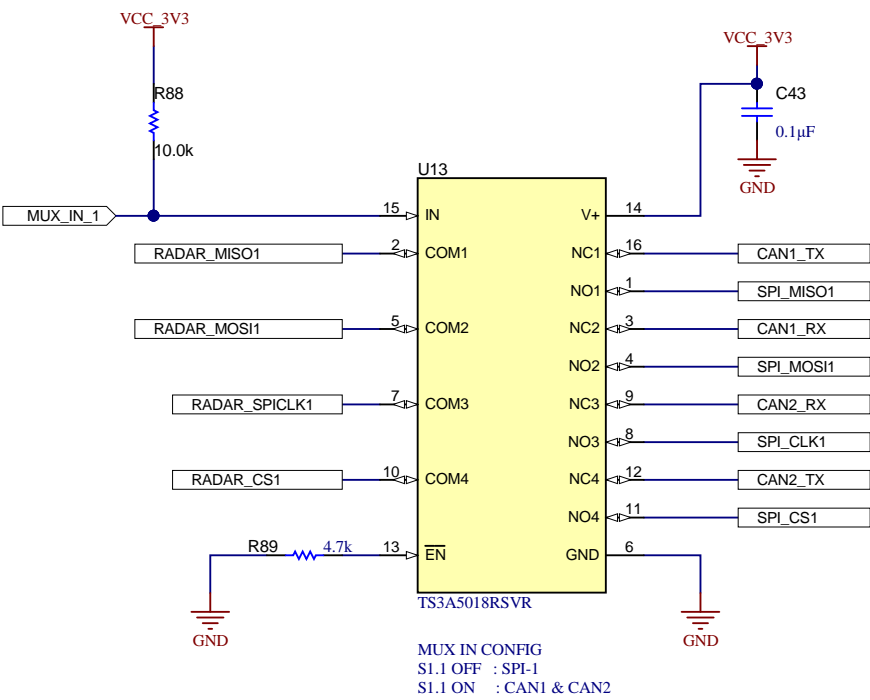
CAN_FD TRANSCEIVER



C

C

CAN/SPI SELECTION



D

D

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Orderable: IWR6843ISK	Designed for: Public Release	Mod. Date: 3/11/2020
TID #: N/A	Project Title: IWR6843ISK	
Number: PROC073	Rev: C	Sheet Title: CAN Interface
SVN Rev: Not in version control	Assembly Variant: 001_IWR	Sheet: 12 of 13
Drawn By: Charles F. Oladimeji	File: PROC073C_Can_Interface.SchDoc	Size: B
Engineer: Charles F. Oladimeji	Contact: http://www.ti.com/support	

