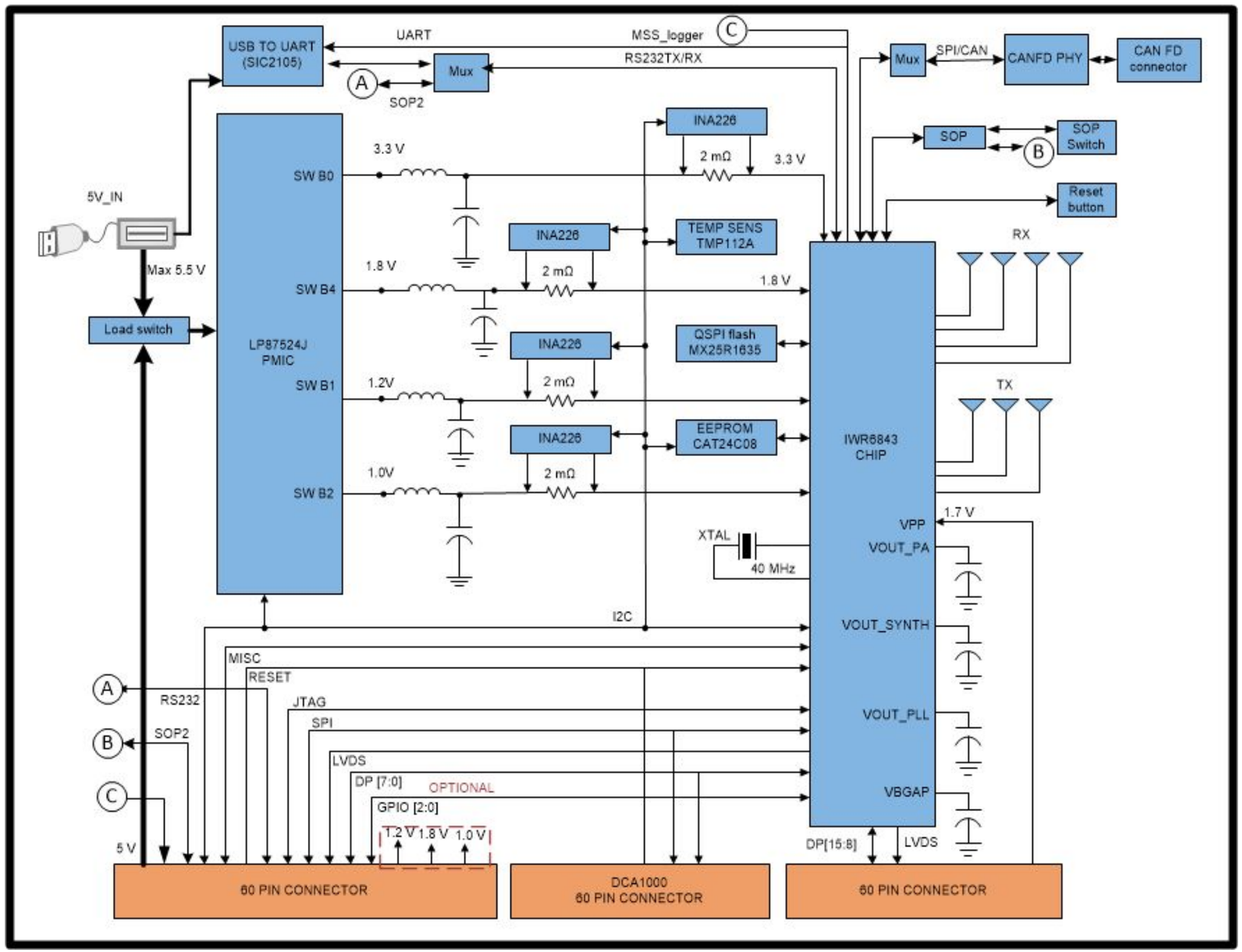
Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
C	1	3/2/2020	Charles Oladimeji	REV C

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

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TID #: N/A		Project Title: IWR6843ISK	
Number: PROC073	Rev: C	Sheet Title: BLOCK DIAGRAM	
SVN Rev: Not in version control		Assembly Variant: 002_AWR	Sheet: 1 of 13
Drawn By: Charles F. Oladimeji		File: PROC073C_Block_Diagram.SchDoc	Size: B
Engineer: Charles F. Oladimeji		Contact: http://www.ti.com/support	

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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

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Orderable: AWR6843ISK	Designed for: Public Release	Mod. Date: 3/11/2020
TID #: N/A	Project Title: IWR6843ISK	
Number: PROC073 Rev: C	Sheet Title: TABLE OF CONTENTS	
SVN Rev: Not in version control	Assembly Variant: 002_AWR	Sheet: 2 of 13
Drawn By: Charles F. Oladimeji	File: PROC073C_Table_Of_Contents.SchDoc	Size: B
Engineer: Charles F. Oladimeji	Contact: http://www.ti.com/support	

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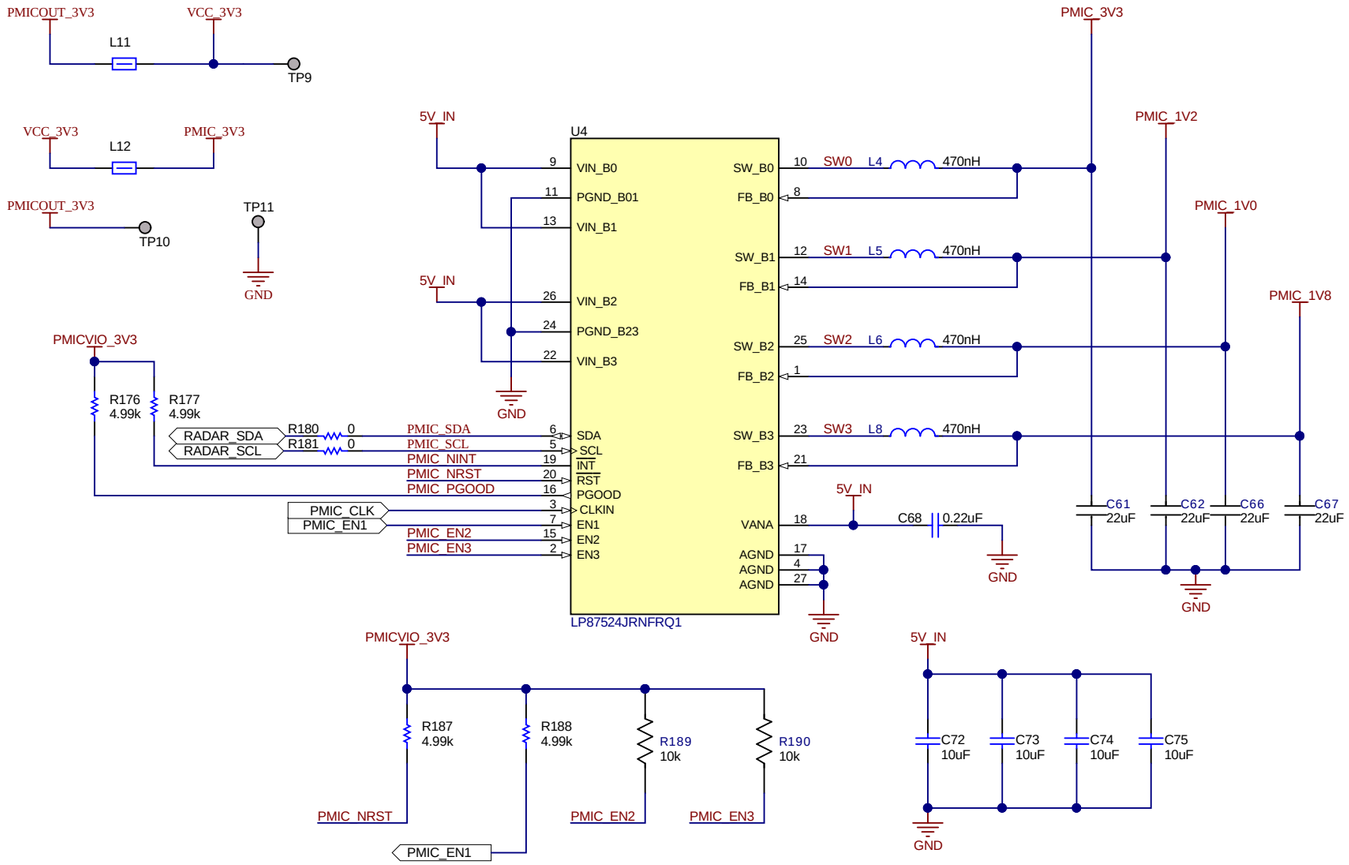
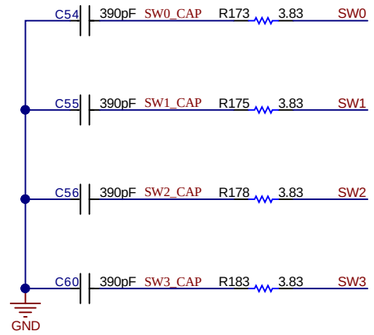
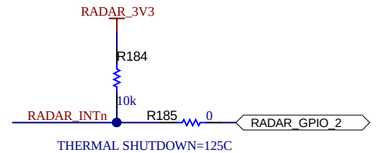
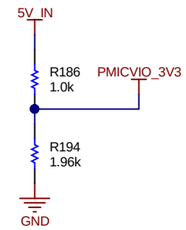
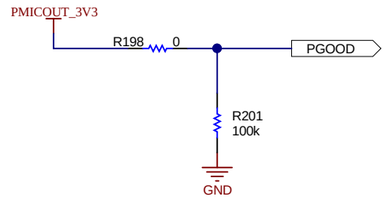
PMIC (3.3V, 1.2V, 1.0V, 1.8V OUTPUTS)



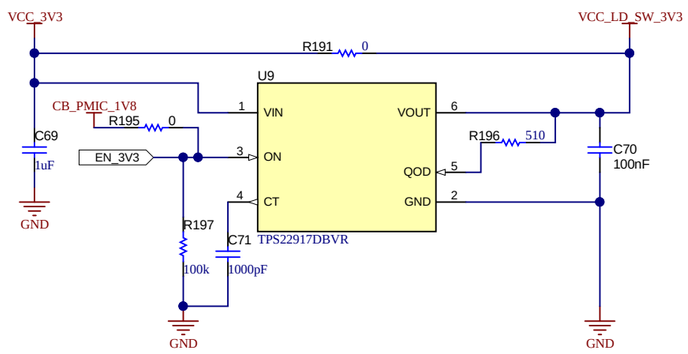








Load switch for delaying 3.3V to IWR6483 module



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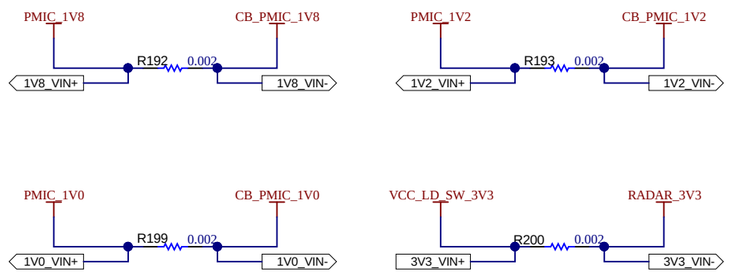
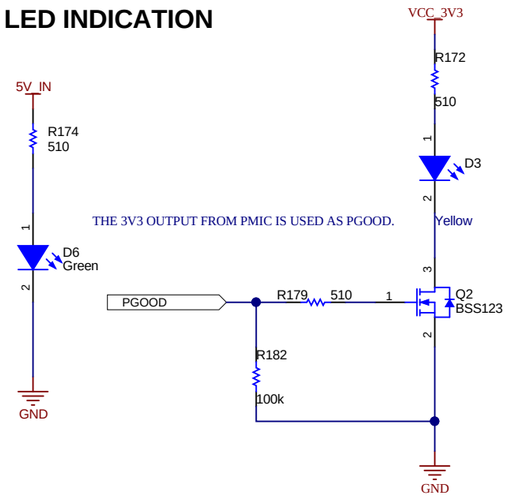


5V LED INDICATION



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TID #: N/A		Project Title: IWR6843ISK	
Number: PROC073	Rev: C	Sheet Title: PMIC	
SVN Rev: Not in version control		Assembly Variant: 002_AWR	Sheet: 3 of 13
Drawn By: Charles F. Oladimeji		File: PROC073C_PMIC.SchDoc	Size: B
Engineer: Charles F. Oladimeji		Contact: http://www.ti.com/support	

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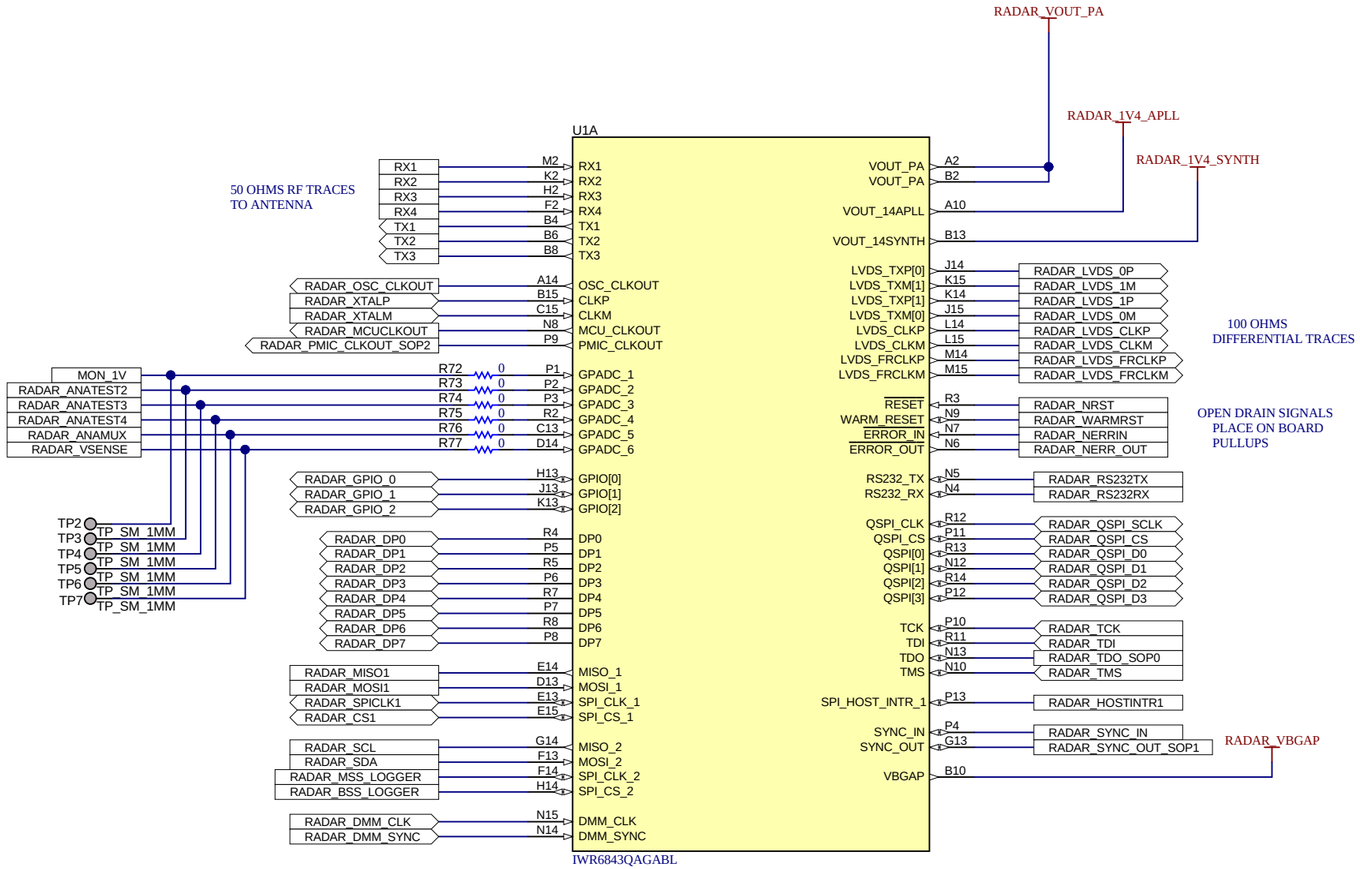
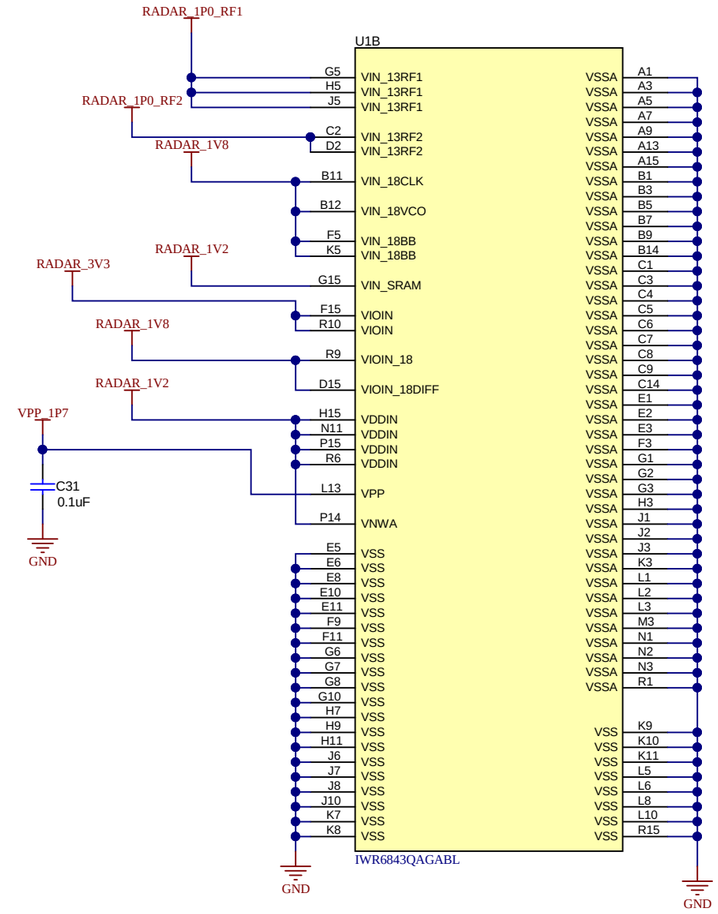
IWR6843 Chip





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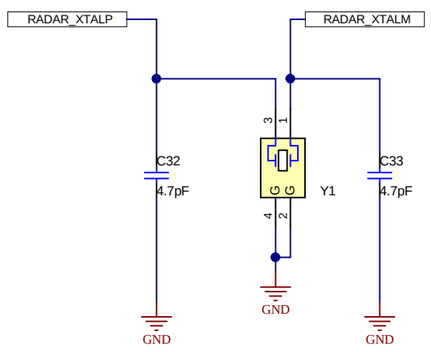
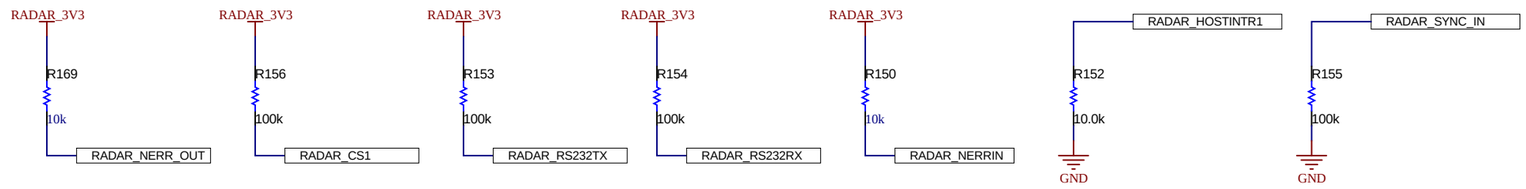


PULL UPs/DOWNs FOR SPI CS1, NERRIN, RS232, SYNC_IN & HOST_INTn



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Number: PROC073	Rev: C	Sheet Title: IWR6843_CHIP	
SVN Rev: Not in version control		Assembly Variant: 002_AWR	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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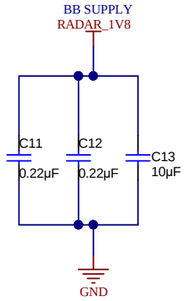
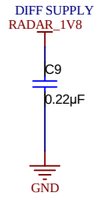
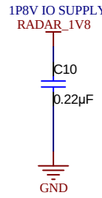
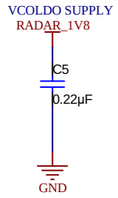
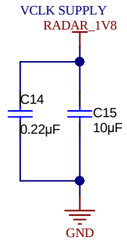
SUPPLY_DECOUPLING_CAPS

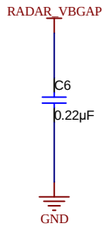


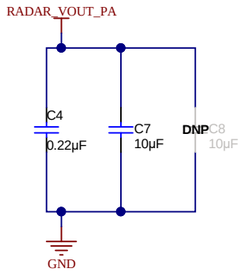


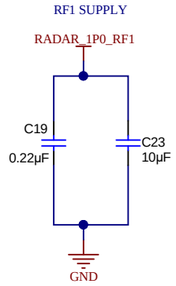


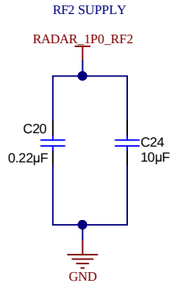


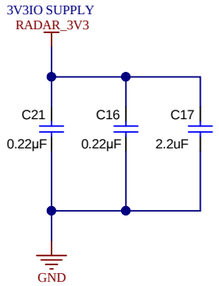


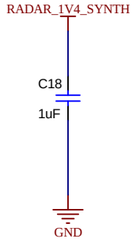


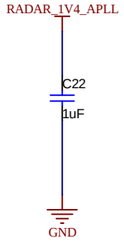


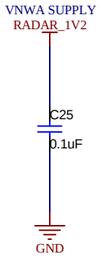


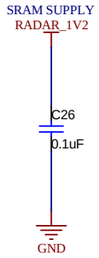


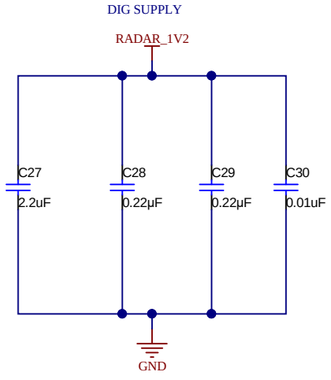


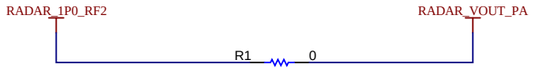




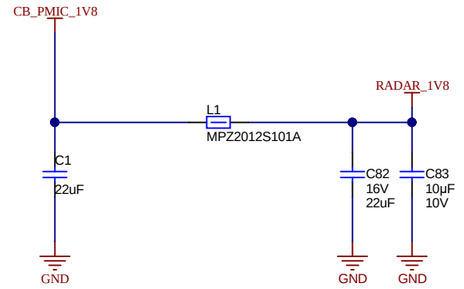


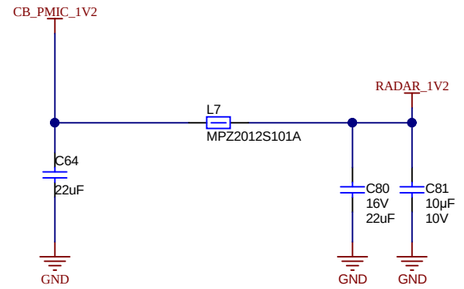


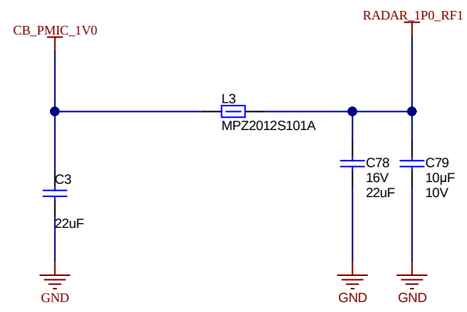


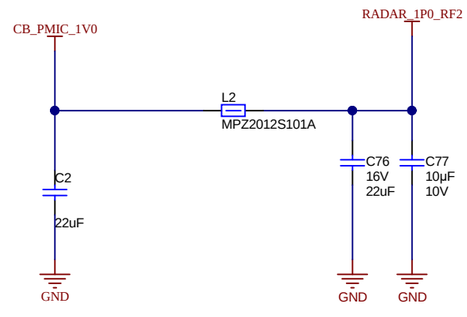


PMIC LC Filters









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TID #: N/A		Project Title: IWR6843ISK	
Number: PROC073	Rev: C	Sheet Title: Decoupling Caps	
SVN Rev: Not in version control		Assembly Variant: 002_AWR	Sheet: 5 of 13
Drawn By: Charles F. Oladimeji		File: PROC073C_Decoupling_caps.SchDoc	Size: B
Engineer: Charles F. Oladimeji		Contact: http://www.ti.com/support	

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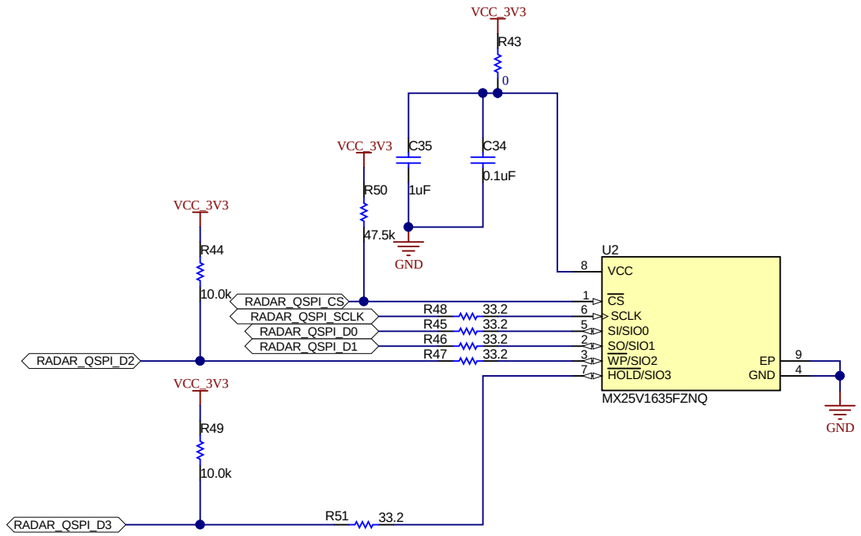
QSPI FLASH



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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: 002_AWR	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	

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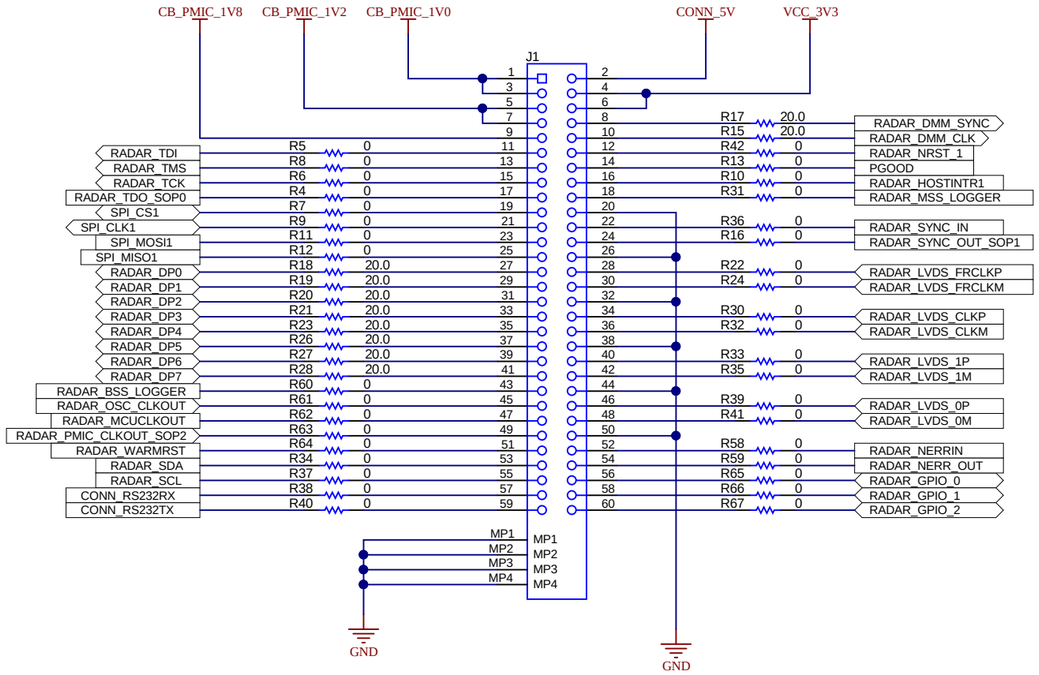
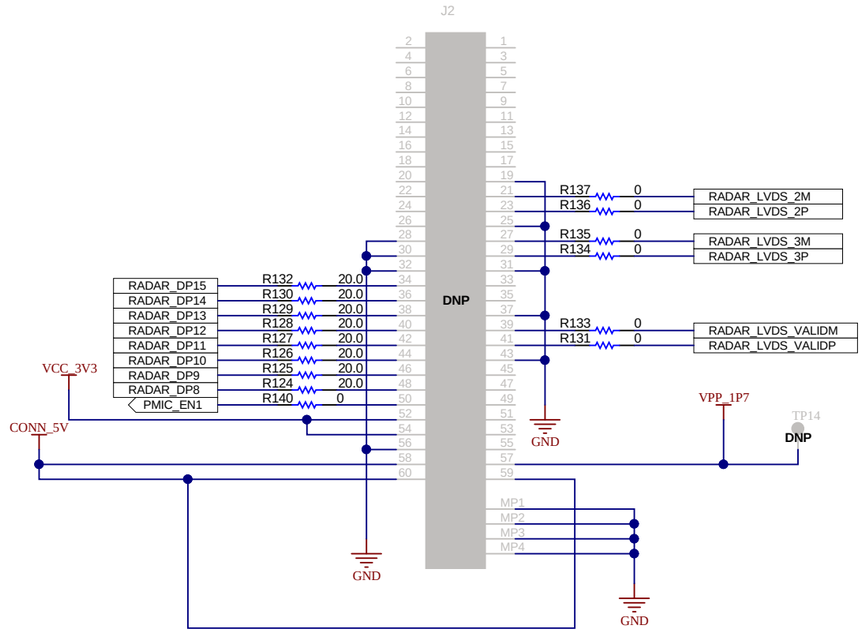
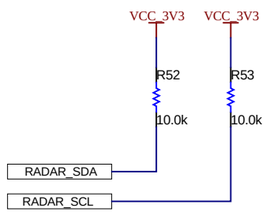
CONNECTORS

60 PIN HD CONNECTOR



60 PIN HD CONNECTOR FOR xWRxxxx DEVICES COMPATABILITY





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TID #: N/A		Project Title: IWR6843ISK	
Number: PROC073	Rev: C	Sheet Title: HD Connector	
SVN Rev: Not in version control		Assembly Variant: 002_AWR	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	

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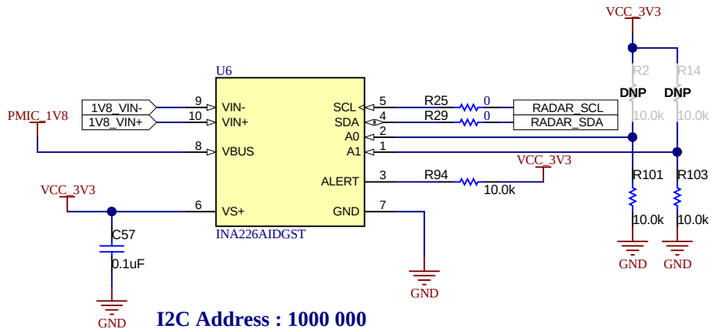
CURRENT SENSOR



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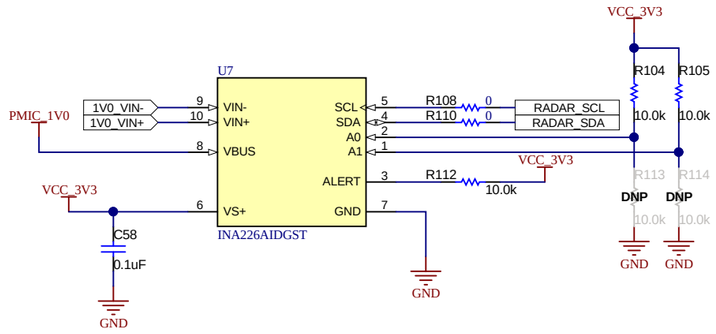

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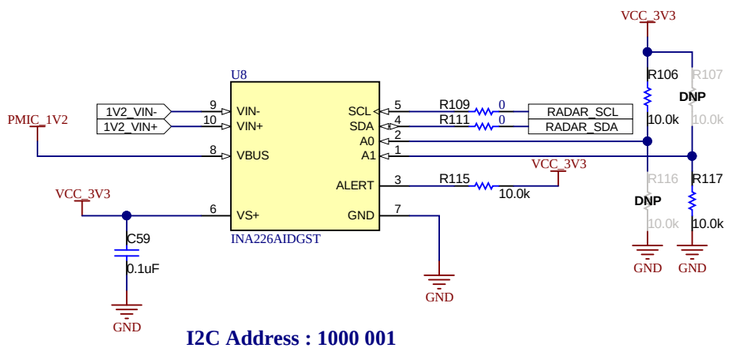

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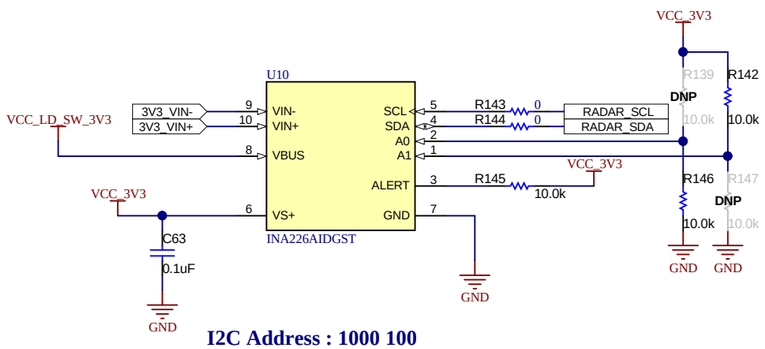
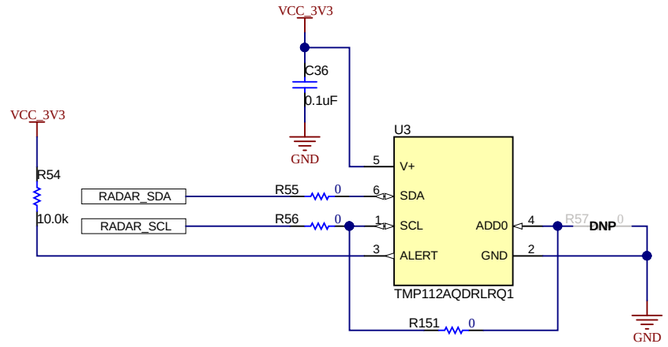


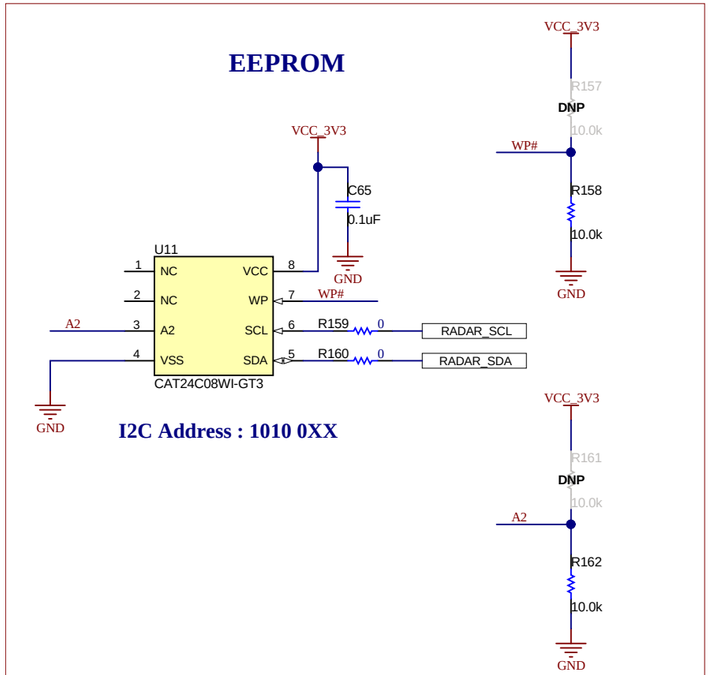
I2C Address : 1000 100

TEMPERATURE SENSOR



I2C Address : 1001 011

EEPROM



I2C Address : 1010 0XX

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Orderable: AWR6843ISK		Designed for: Public Release	Mod. Date: 3/11/2020
TID #: N/A		Project Title: IWR6843ISK	
Number: PROC073	Rev: C	Sheet Title: Temp Current sonsor	
SVN Rev: Not in version control		Assembly Variant: 002_AWR	Sheet: 8 of 13
Drawn By: Charles F. Oladimeji		File: PROC073C_Temp_Current_sensor.SchDoc	Size: B
Engineer: Charles F. Oladimeji		Contact: http://www.ti.com/support	

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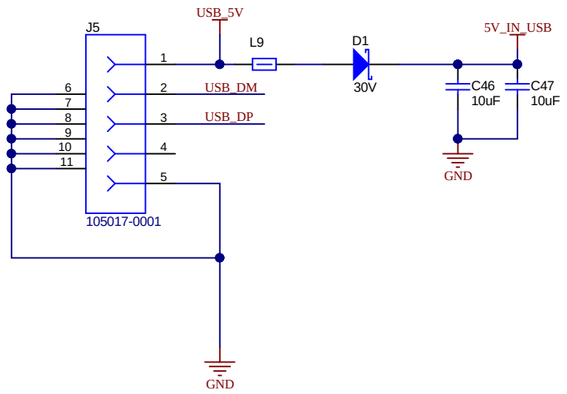
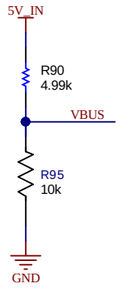
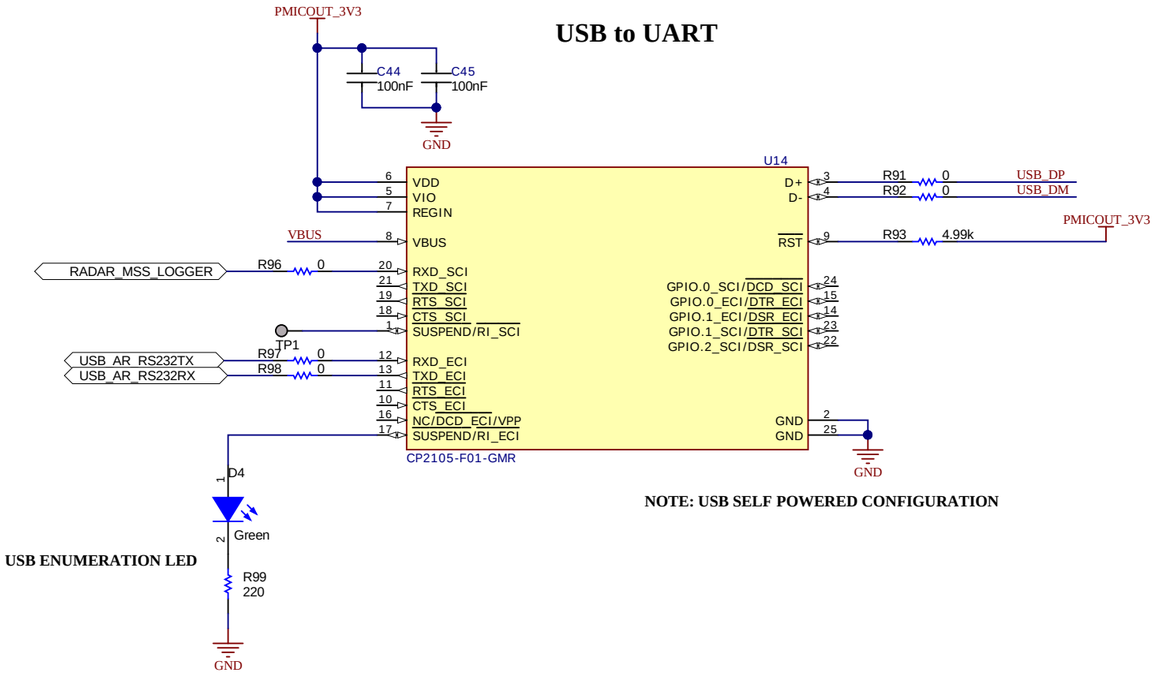
USB CONNECTOR

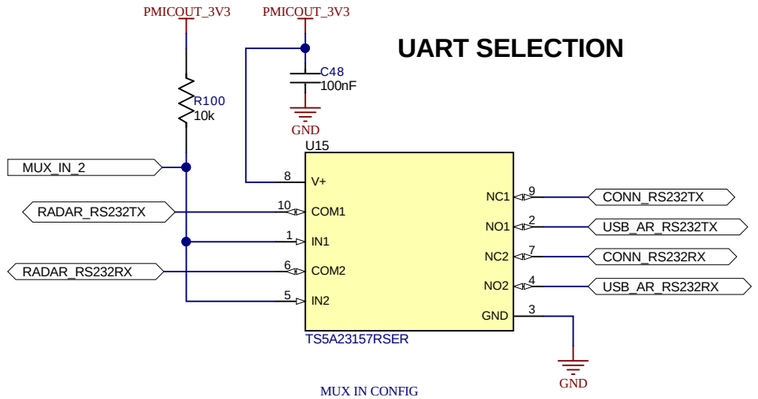




USB to UART



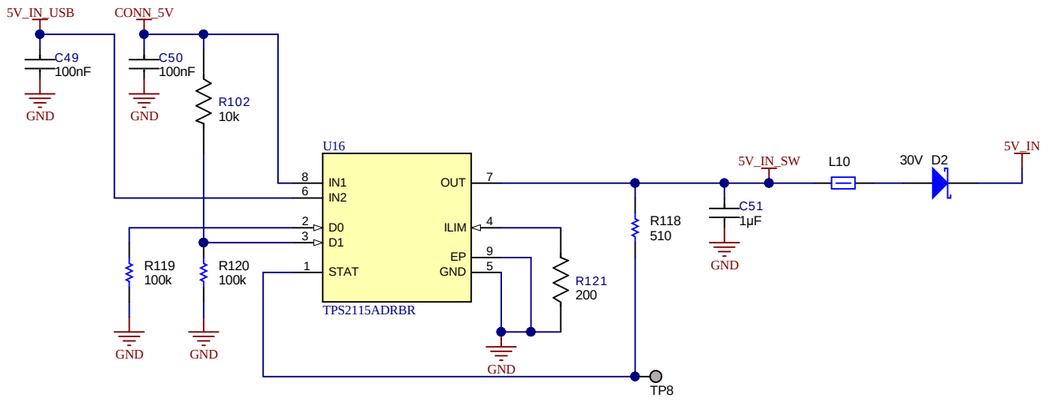
UART SELECTION



MUX IN CONFIG

S1.1 OFF : MAIN BOARD UART
S1.1 ON : BREAK AWAY UART

CONNECTOR PWR / USB PWR LOAD SWITCH



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Orderable: AWR6843ISK	Designed for: Public Release	Mod. Date: 3/11/2020
TID #: N/A	Project Title: IWR6843ISK	
Number: PROC073 Rev: C	Sheet Title: Flash USB to UART	
SVN Rev: Not in version control	Assembly Variant: 002_AWR	Sheet: 9 of 13
Drawn By: Charles F. Oladimeji	File: PROC073C_Flash_USB_To_UART.SchDoc	Size: B
Engineer: Charles F. Oladimeji	Contact: http://www.ti.com/support	

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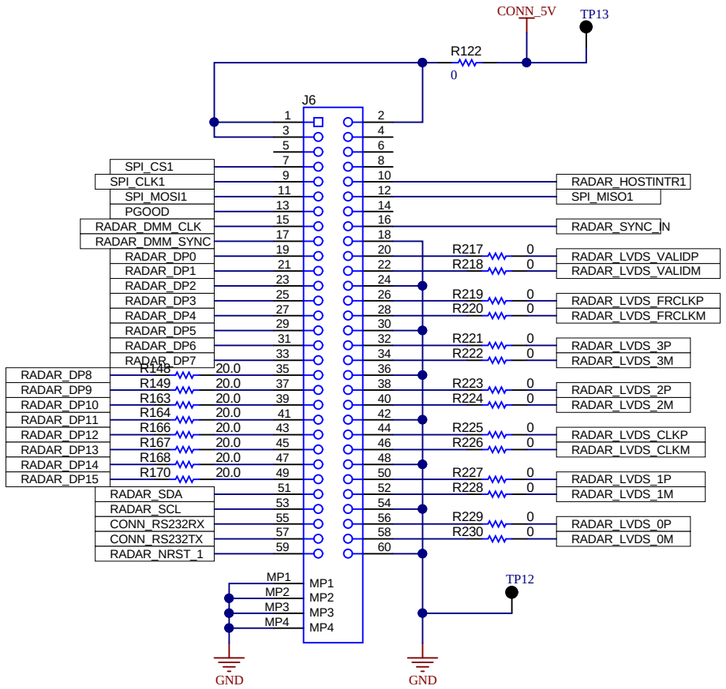
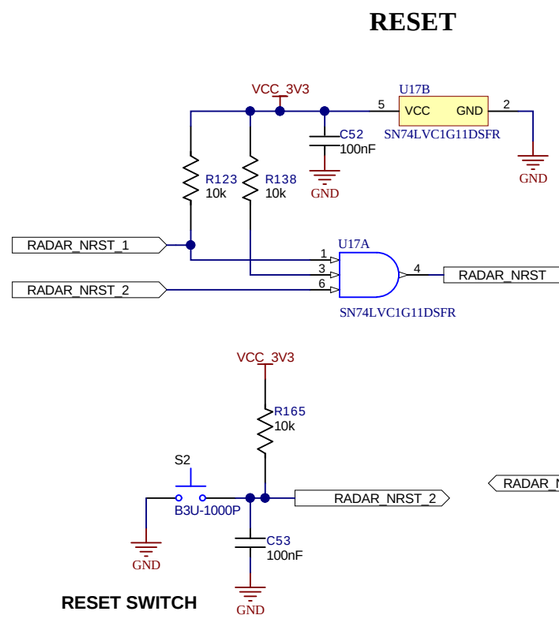
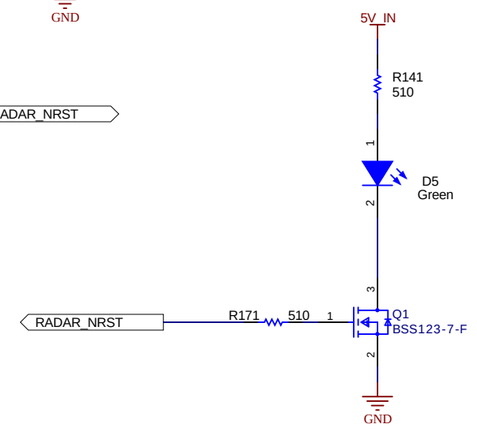
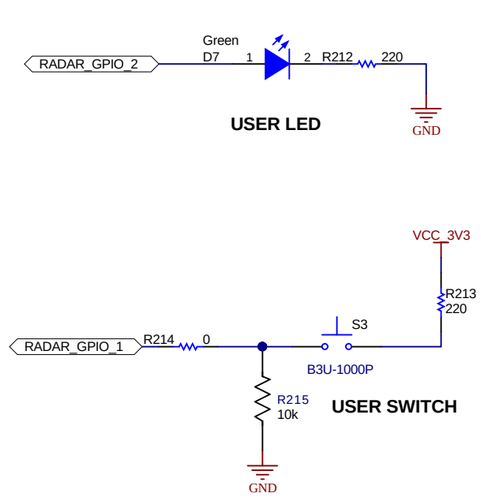
60PIN HD CONNECTOR FOR DCA1000



RESET, USER LED and SWITCHES







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Orderable: AWR6843ISK	Designed for: Public Release	Mod. Date: 3/11/2020
TID #: N/A	Project Title: IWR6843ISK	
Number: PROC073 Rev: C	Sheet Title: HD DCA Connector	
SVN Rev: Not in version control	Assembly Variant: 002_AWR	Sheet: 10 of 13
Drawn By: Charles F. Oladimeji	File: PROC073C_HD_DCA_Conn.SchDoc	Size: B
Engineer: Charles F. Oladimeji	Contact: http://www.ti.com/support	

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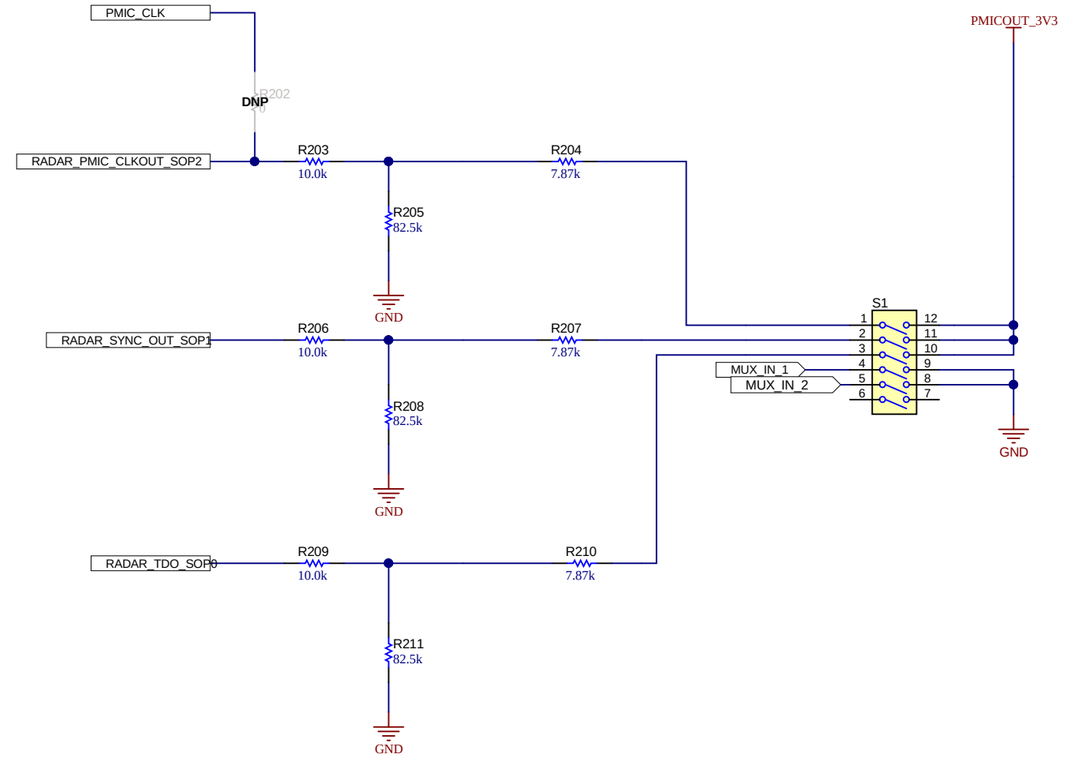

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Orderable: AWR6843ISK	Designed for: Public Release	Mod. Date: 3/11/2020
TID #: N/A	Project Title: IWR6843ISK	
Number: PROC073 Rev: C	Sheet Title: SOP Control	
SVN Rev: Not in version control	Assembly Variant: 002_AWR	Sheet: 11 of 13
Drawn By: Charles F. Oladimeji	File: PROC073C_SOP_Ctrl.SchDoc	Size: B
Engineer: Charles F. Oladimeji	Contact: http://www.ti.com/support	

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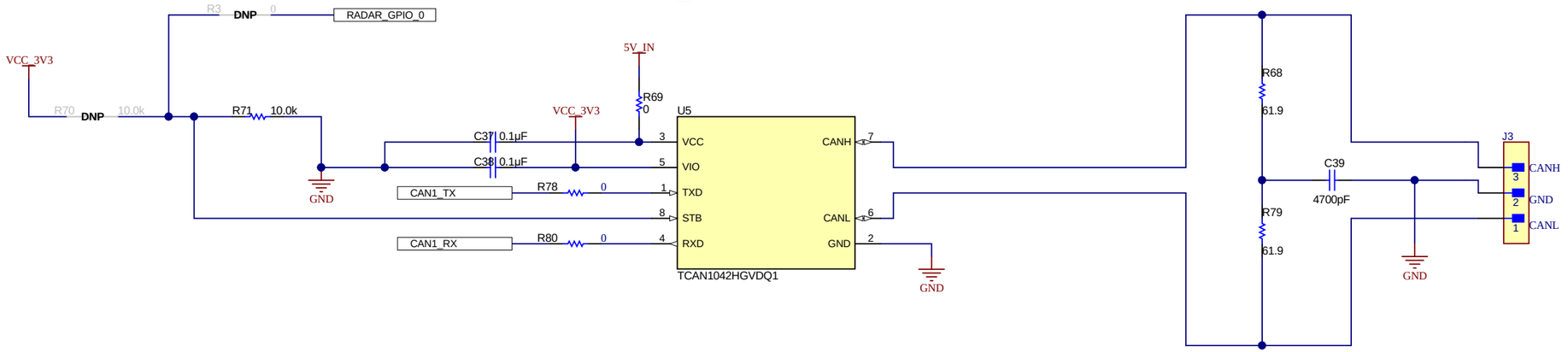
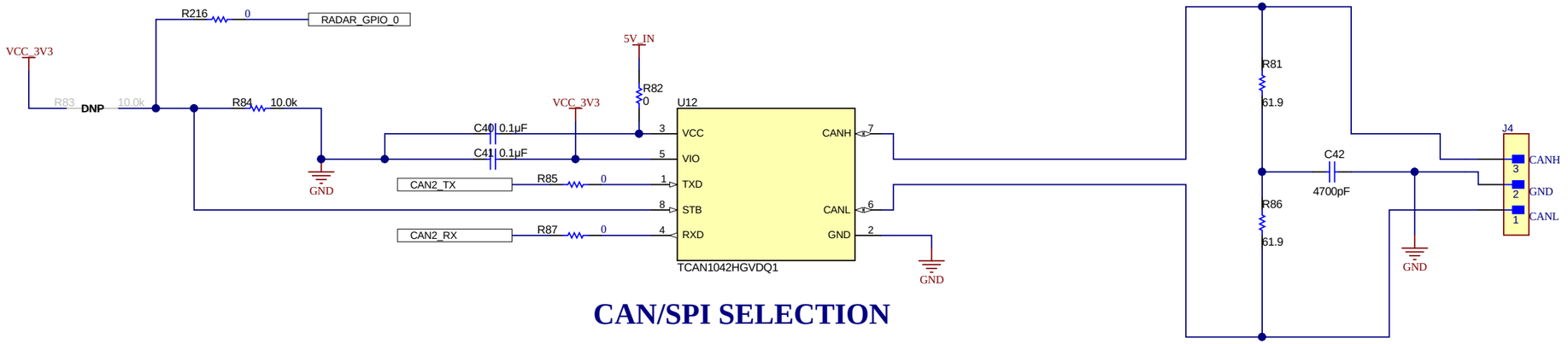
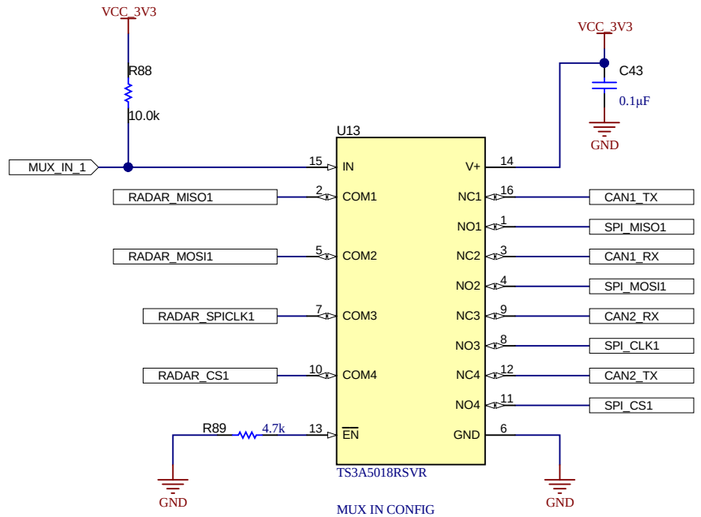
CAN_FD TRANSCEIVER



CAN_FD TRANSCEIVER



CAN/SPI SELECTION



MUX IN CONFIG
S1.1 OFF : SPI-1
S1.1 ON : CAN1 & CAN2

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Orderable: AWR6843ISK	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: 002_AWR	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	

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H1 560-338 H3 560-338 H2 560-338 H4 560-338

H5 4708 H7 4708 H8 4708 H6 4708

H10 24430 H9 24430 H11 24430 H12 24430

H13 91420A126 H14 91420A126 H15 91420A126 H16 91420A126

DNP FID1 DNP FID2 DNP FID3 DNP FID4 DNP FID5 DNP FID6

PCB Number: PROC073
PCB Rev: C

PCB LOGO
Texas Instruments

CE Mark

PCB LOGO
FCC disclaimer

PCB LOGO
WEEE logo

PCB LOGO
Texas Instruments

CAUTION HOT SURFACE1

CAUTION HOT SURFACE

Variant/Label Table	
Variant	Label Text
001_IWR	IWR6843ISK
002_AWR	AWR6843ISK

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.

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

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Orderable: AWR6843ISK		Designed for: Public Release	Mod. Date: 3/11/2020
TID #: N/A		Project Title: IWR6843ISK	
Number: PROC073	Rev: C	Sheet Title: Hardware	
SVN Rev: Not in version control		Assembly Variant: 002_AWR	Sheet: 13 of 13
Drawn By: Charles F. Oladimeji		File: PROC073C_EVM_Hardware.SchDoc	Size: B
Engineer: Charles F. Oladimeji		Contact: http://www.ti.com/support	

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