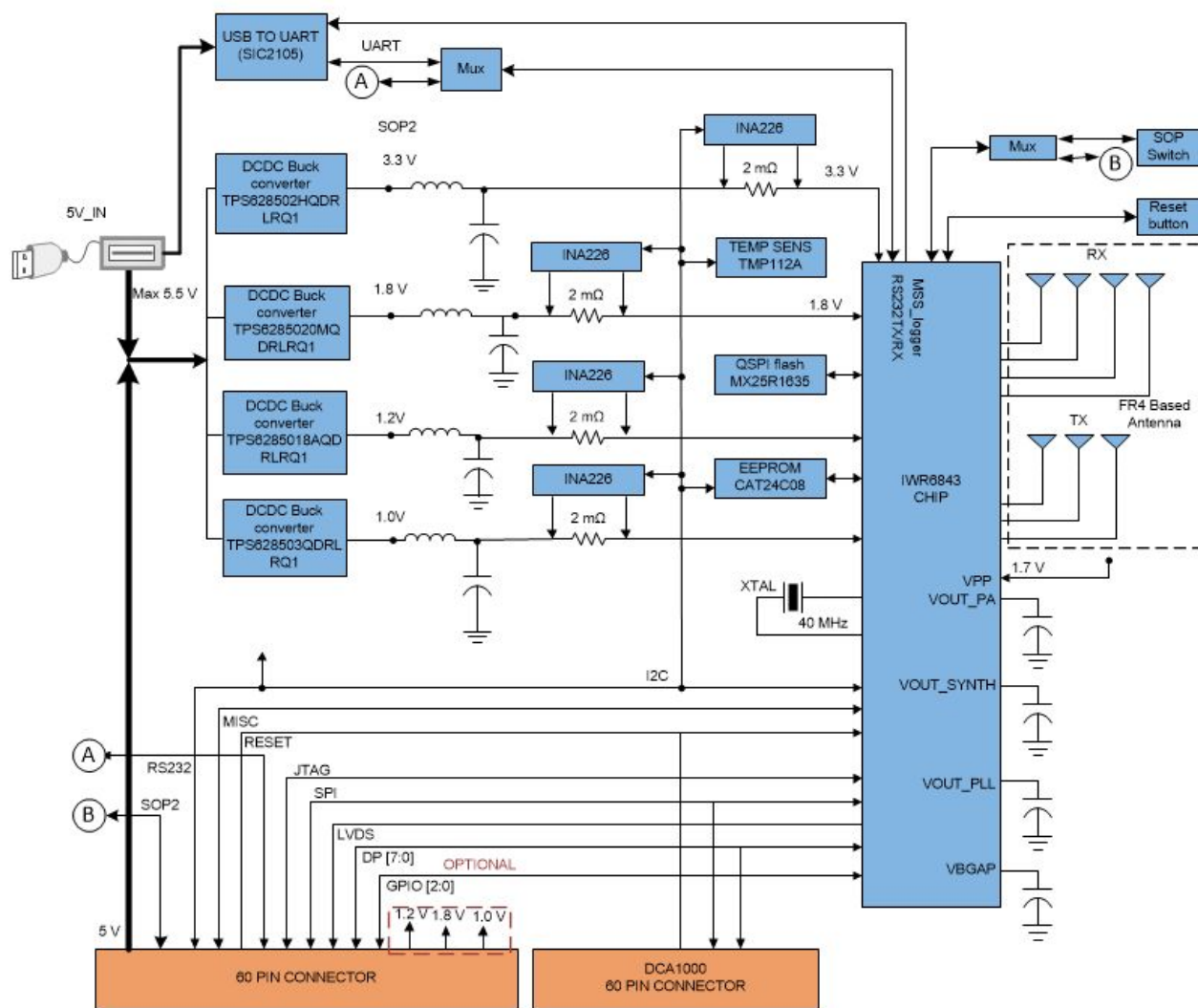


BLOCK DIAGRAM



Revision History

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

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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Orderable: IWR6843LCEVM	Designed for: Public Release	Mod. Date: 4/28/2021
TID #: N/A	Project Title: IWR6843 LOW COST EVM	
Number: PROC116	Rev: A	Sheet Title: BLOCK DIAGRAM
SVN Rev: Unknown revision	Assembly Variant: 001_IWR	Sheet: 1 of 14
Drawn By: Chethan Kumar.Y.B	File: PROC116A_Block_Diagram_SchDoc	Size: B
Engineer: Chethan Kumar.Y.B	Contact: http://www.ti.com/support	



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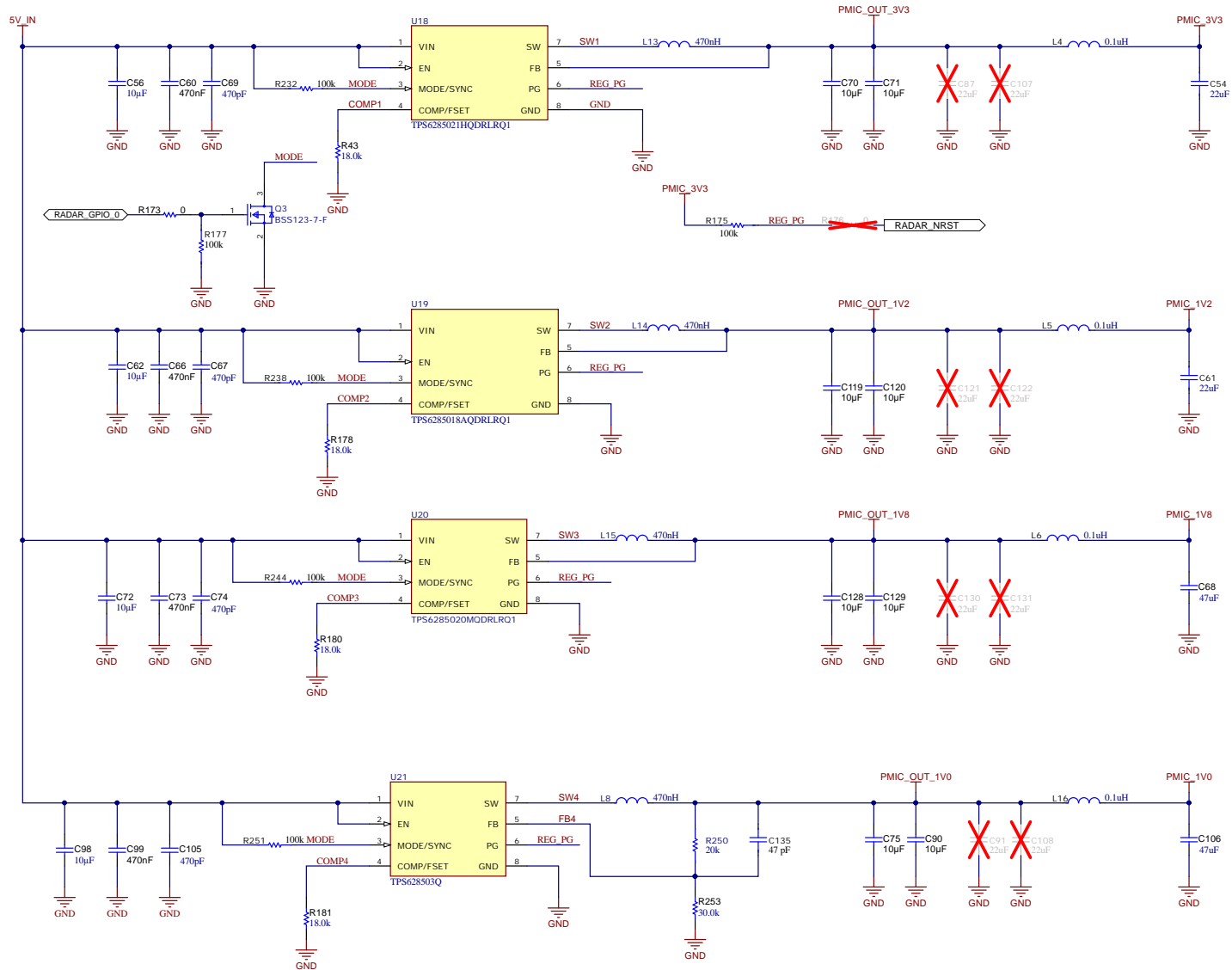
TABLE OF CONTENTS

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

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Orderable: IWR6843LCEVM	Designed for: Public Release	Mod. Date: 4/28/2021
TID #: N/A	Project Title: IWR6843 LOW COST EVM	
Number: PROC116	Rev: A	Sheet Title: TABLE OF CONTENTS
SVN Rev: Unknown revision	Assembly Variant: 001_IWR	Sheet: 2 of 14
Drawn By: Chethan Kumar.Y.B	File: PROC116A_Table_Of_Contents.SchDoc	Size: B
Engineer: Chethan Kumar.Y.B	Contact: http://www.ti.com/support	

DC-DC 3.3V, 1.2V, 1.8V & 1.0V OUTPUTS



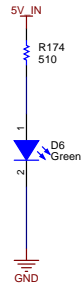
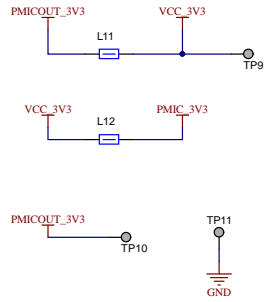
CAD NOTE :Place all input & output decaps close to Regulator Pins- U[18:21]

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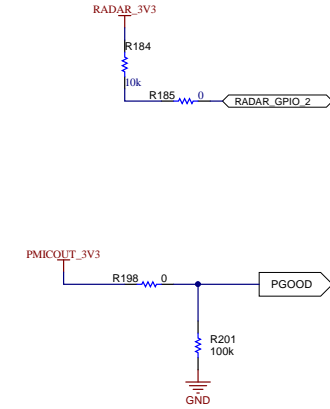
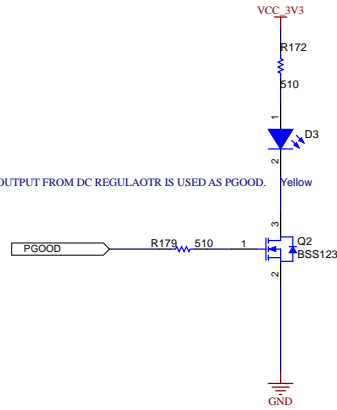
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TID #: N/A	Project Title: IW/R6843 LOW COST EVM	
Number: PROC116	Rev: A	Sheet Title: DC_Regulators
SVN Rev: 63	Assembly Variant: 001_IWR	Sheet: 3 of 14
Drawn By: Chethan Kumar.Y.B	File: PROC116A_DC_Regulators_SchDoc	Size: B
Engineer: Chethan Kumar.Y.B	Contact: http://www.ti.com/support	

5V PWR,PGOOD LED ,Current sensors

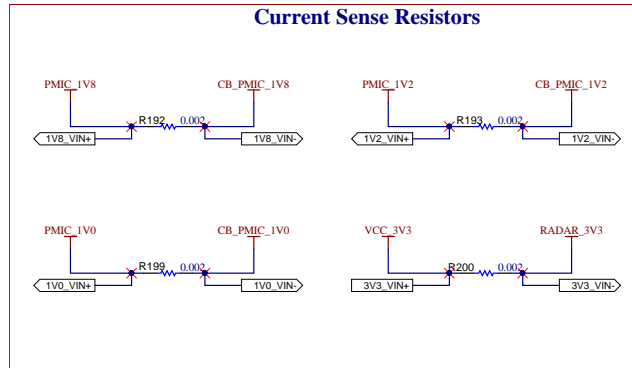
5V LED INDICATION



THE 3V3 OUTPUT FROM DC REGULAOTR IS USED AS PGOOD.



Current Sense Resistors



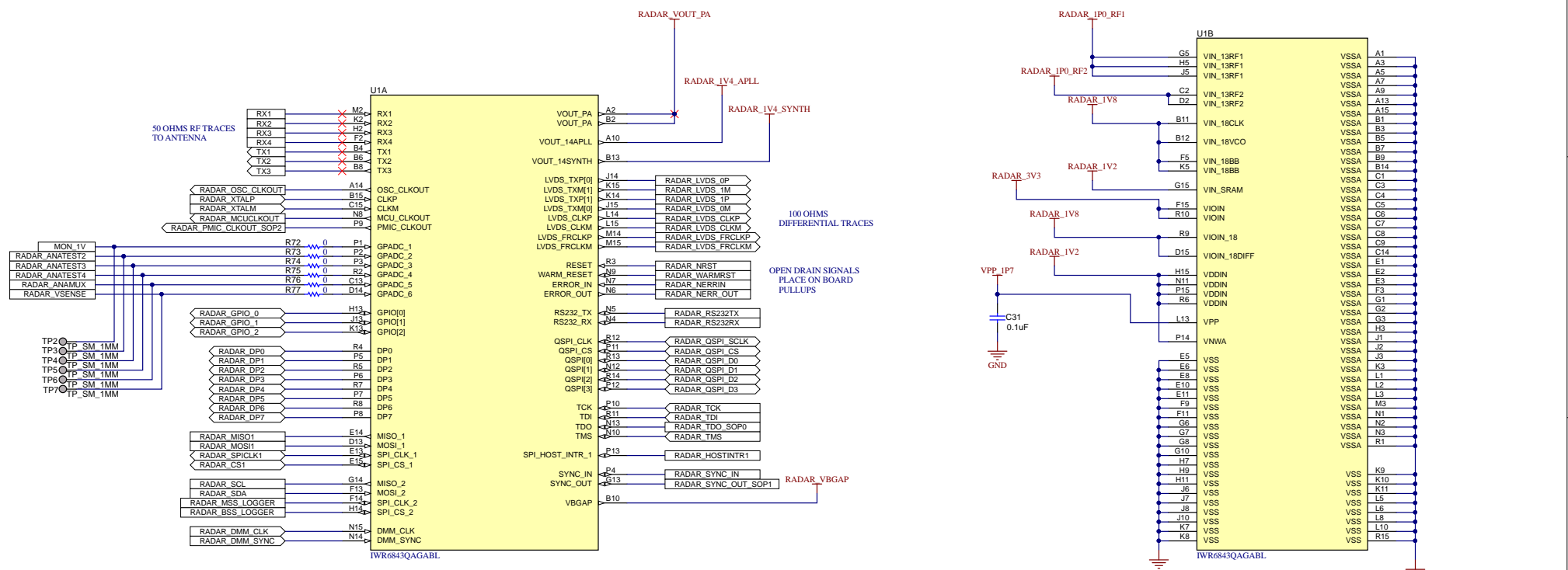
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Number: PROC116	Rev: A	Sheet Title: 5V_PGOOD_LED
SVN Rev: Unknown revision	Assembly Variant: 001_IWR	Sheet: 4 of 14
Drawn By: Chethan Kumar.Y.B	File: PROC116A_5V_PGOOD_LED_SchDoc	Size: B
Engineer: Chethan Kumar.Y.B	Contact: http://www.ti.com/support	http://www.ti.com

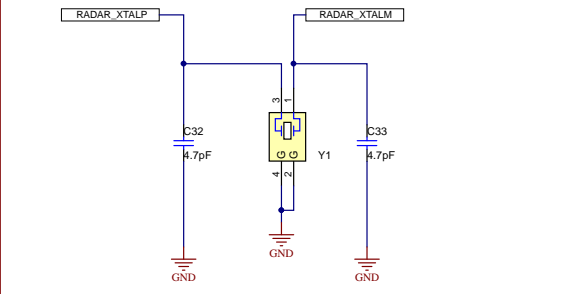


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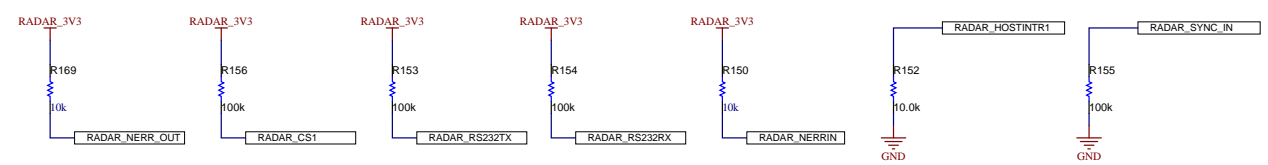
IWR6843 Chip



Crystal Oscillator 40MHz



PULL UPS/DOWNS FOR SPI CS1, NERRIN, RS232, SYNC_IN & HOST_INTn



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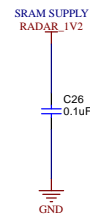
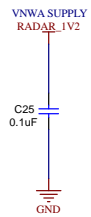
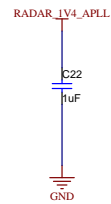
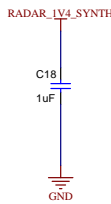
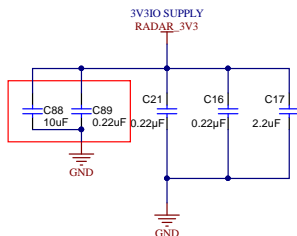
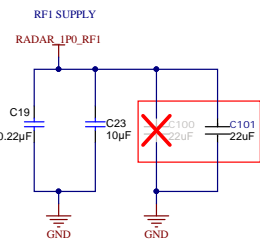
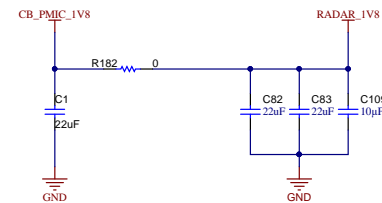
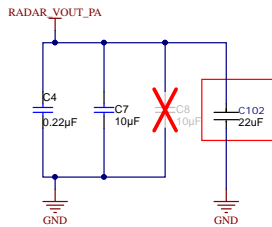
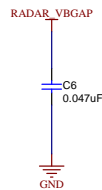
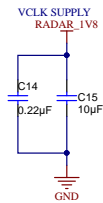
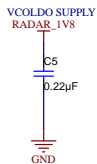
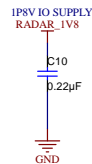
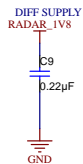
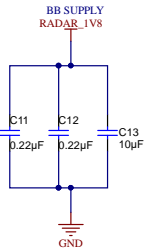
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TID #: N/A	Project Title: IWR6843 LOW COST EVM	
Number: PROC116	[Rev: A] Sheet Title: IWR6843_CHIP	
SVN Rev: 71 [Locally Modified]	Assembly Variant: 001_IWR	Sheet: 5 of 14
Drawn By: Chethan Kumar Y.B	File: PROC116A_IWR6843_Chip_SchDoc	Size: B
Engineer: Chethan Kumar Y.B	Contact: http://www.ti.com/support	



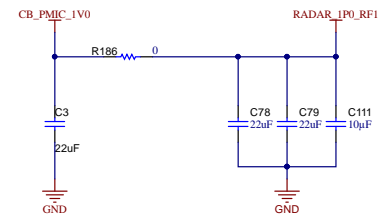
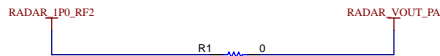
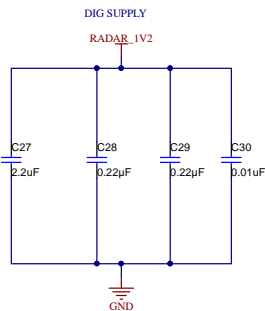
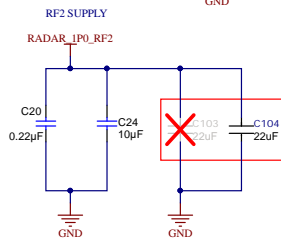
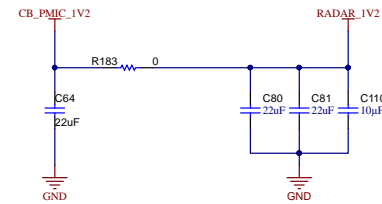
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SUPPLY_DECOUPLING_CAPS

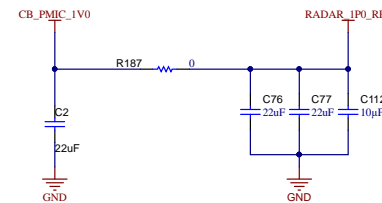
DCDC LC filters



Design note: Alternate Ferrite bead part for R182,R183
BLM18KG121TH1D



Design note: Alternate Ferrite bead part for R186,R187
BLM21PG121SH1D



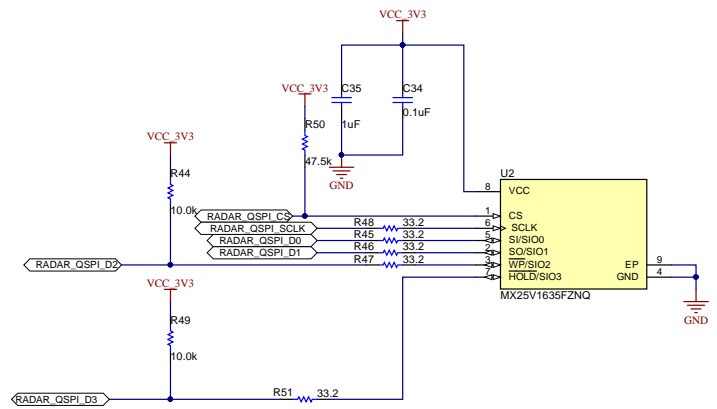
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Orderable: IWR6843LCEVM	Designed for: Public Release	Mod. Date: 4/28/2021
TID #: N/A	Project Title: IWR6843 LOW COST EVM	
Number: PROC116	Rev: A	Sheet Title: Decoupling Caps
SVN Rev: Unknown revision	Assembly Variant: 001_IWR	Sheet: 6 of 14
Drawn By: Chethan Kumar.Y.B	File: PROC116A_Decoupling_caps_SchDoc	Size: B
Engineer: Chethan Kumar.Y.B	Contact: http://www.ti.com/support	http://www.ti.com



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QSPI FLASH



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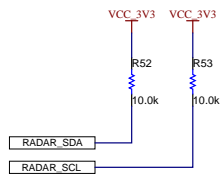
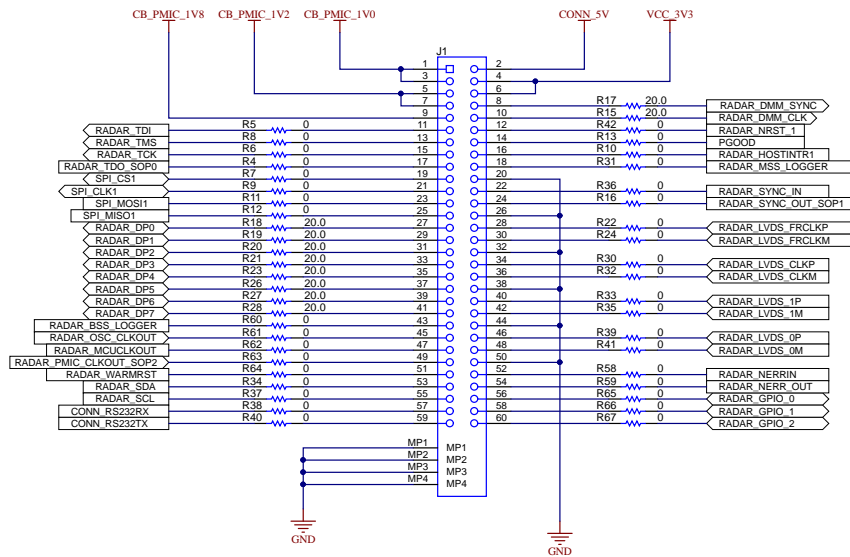
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TID #: N/A	Project Title: IW/R6843 LOW COST EVM	
Number: PROC116 Rev: A	Sheet Title: QSPI Flash	
SVN Rev: Unknown revision	Assembly Variant: 001_IWR	Sheet: 7 of 14
Drawn By: Chethan Kumar.Y.B	File: PROC116A_QSPI_Flash_section.SchDoc	Size: B
Engineer: Chethan Kumar.Y.B	Contact: http://www.ti.com/support	



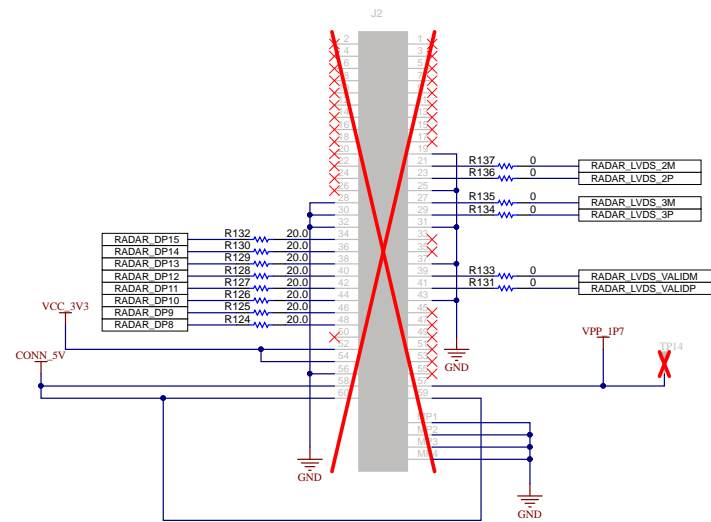
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CONNECTORS

60 PIN HD CONNECTOR



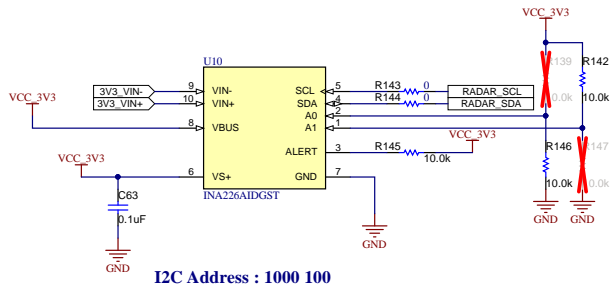
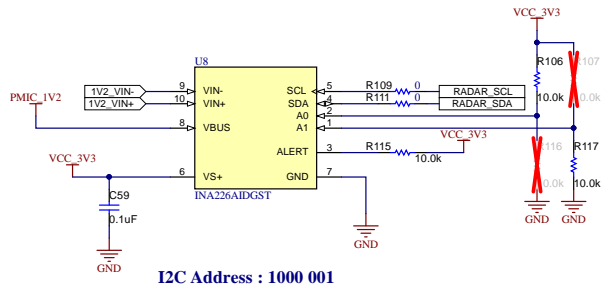
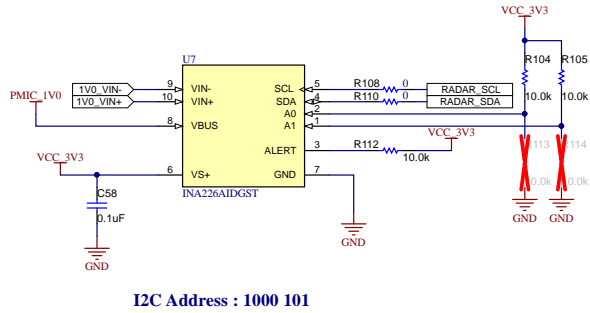
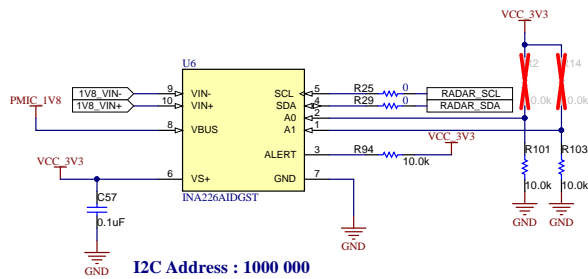
60 PIN HD CONNECTOR FOR xWRxxxx DEVICES COMPATABILITY



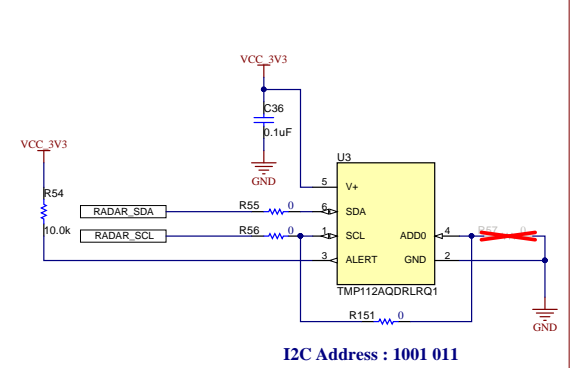
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Orderable: IW6843LCEVM	Designed for: Public Release	Mod. Date: 4/28/2021
TID #: N/A	Project Title: IW6843 LOW COST EVM	
Number: PROC116	Rev: A	Sheet Title: HD Connector
SVN Rev: Unknown revision	Assembly Variant: 001_IWR	Sheet: 8 of 14
Drawn By: Chethan Kumar Y.B	File: PROC116A_HD_Connector_60Pin_SchDoc	Size: B
Engineer: Chethan Kumar Y.B	Contact: http://www.ti.com/support	

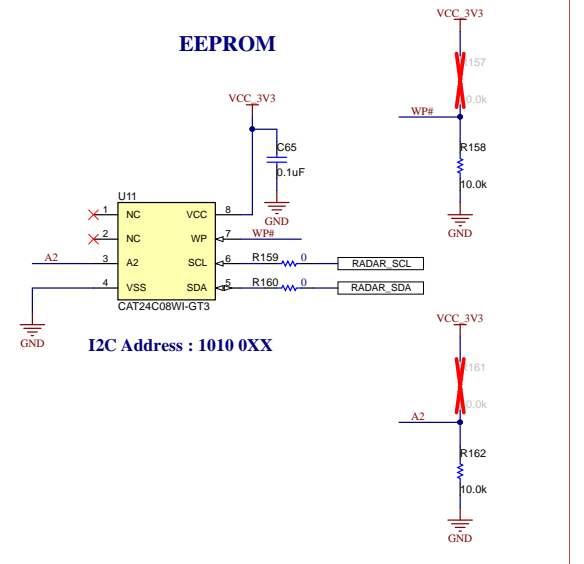
CURRENT SENSOR



TEMPERATURE SENSOR



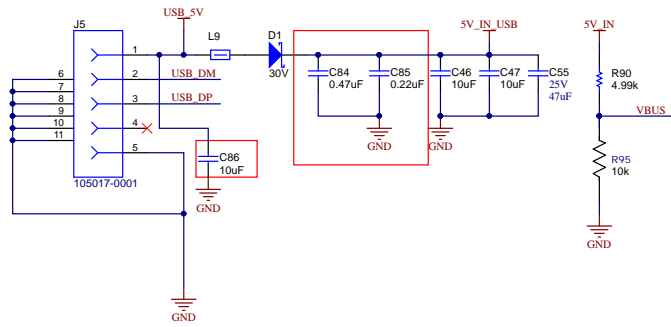
EEPROM



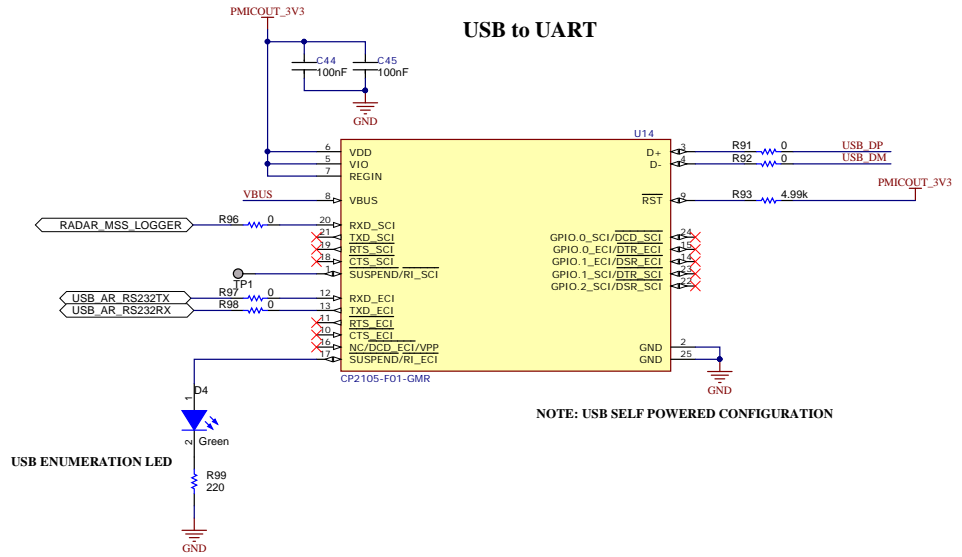
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Orderable: IW/R6843LCEVM	Designed for: Public Release	Mod. Date: 4/28/2021
TID #: N/A	Project Title: IW/R6843 LOW COST EVM	
Number: PROC116	Rev: A	Sheet Title: Temp Current sensor
SVN Rev: Unknown revision	Assembly Variant: 001_IWR	Sheet: 9 of 14
Drawn By: Chethan Kumar.Y.B	File: PROC116A_Temp_Current_sensor_SchDoc	Size: B
Engineer: Chethan Kumar.Y.B	Contact: http://www.ti.com/support	

USB CONNECTOR

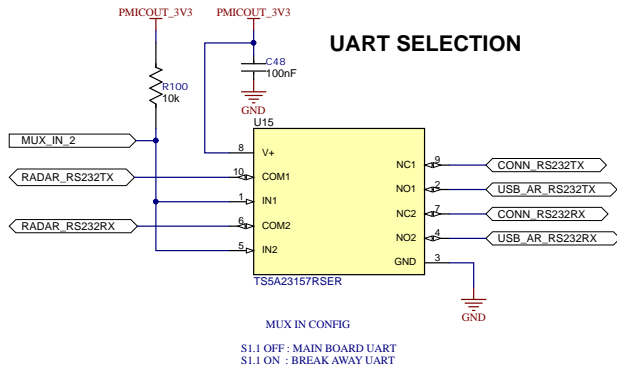


USB to UART

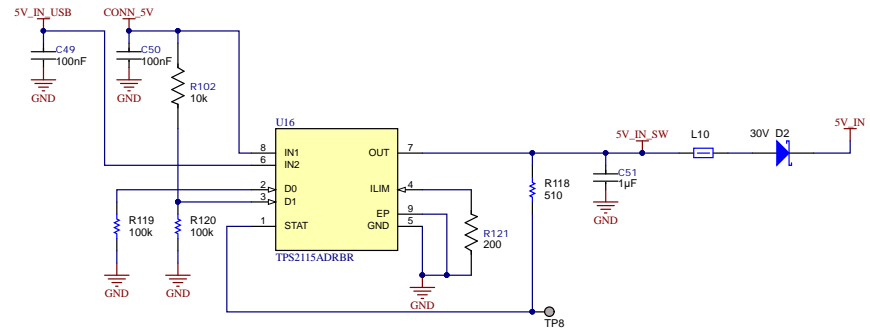


NOTE: USB SELF POWERED CONFIGURATION

UART SELECTION



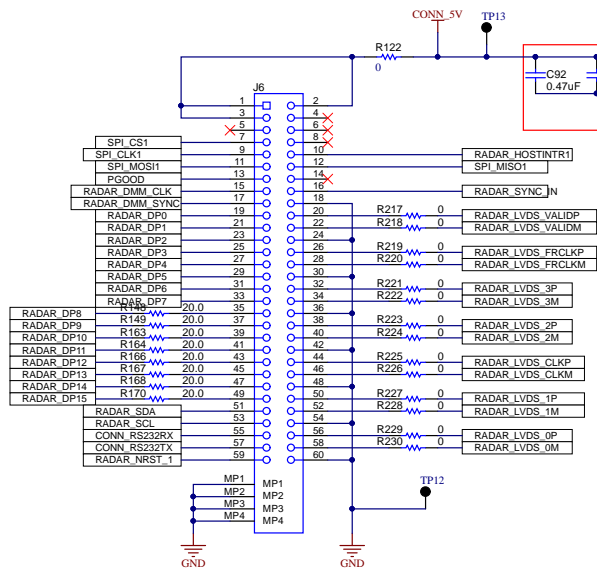
CONNECTOR PWR / USB PWR LOAD SWITCH



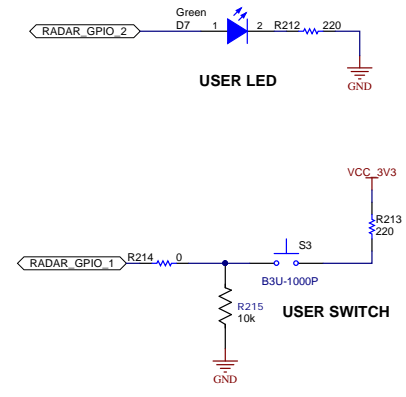
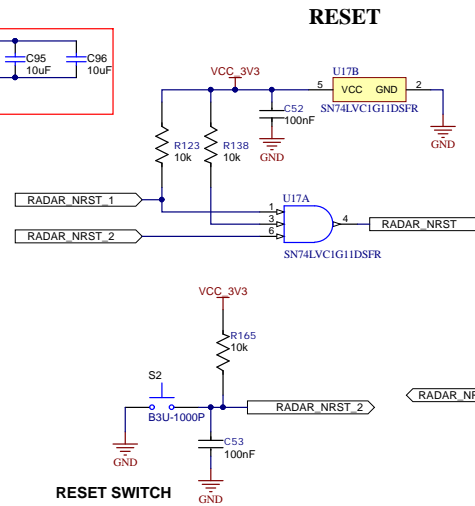
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Orderable: IW/R6843LCEVM	Designed for: Public Release	Mod. Date: 4/28/2021
TID #: N/A	Project Title: IW/R6843 LOW COST EVM	
Number: PROC116	Rev: A	Sheet Title: Flash USB to UART
SVN Rev: Unknown revision	Assembly Variant: 001_IWR	Sheet: 10 of 14
Drawn By: Chethan Kumar Y.B	File: PROC116A_Flash_USB_To_UART.SchDoc	Size: B
Engineer: Chethan Kumar Y.B	Contact: http://www.ti.com/support	

60PIN HD CONNECTOR FOR DCA1000

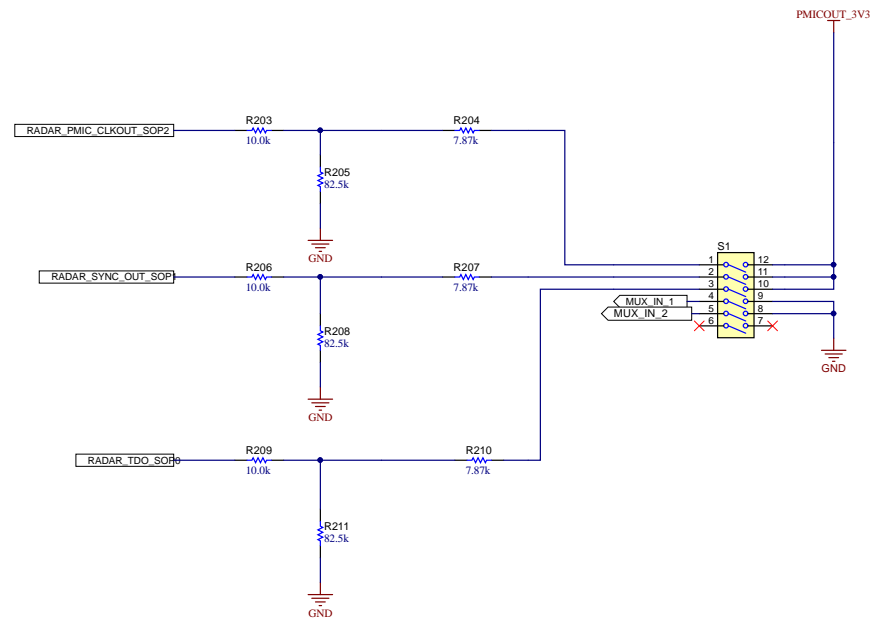


RESET, USER LED and SWITCHES



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TID #: N/A	Project Title: IW/R6843 LOW COST EVM	
Number: PROC116	Rev: A	Sheet Title: HD DCA Connector
SVN Rev: Unknown revision	Assembly Variant: 001_IWR	Sheet 11 of 14
Drawn By: Chethan Kumar.Y.B	File: PROC116A_HD_DCA_Conn.SchDoc	Size: B
Engineer: Chethan Kumar.Y.B	Contact: http://www.ti.com/support	

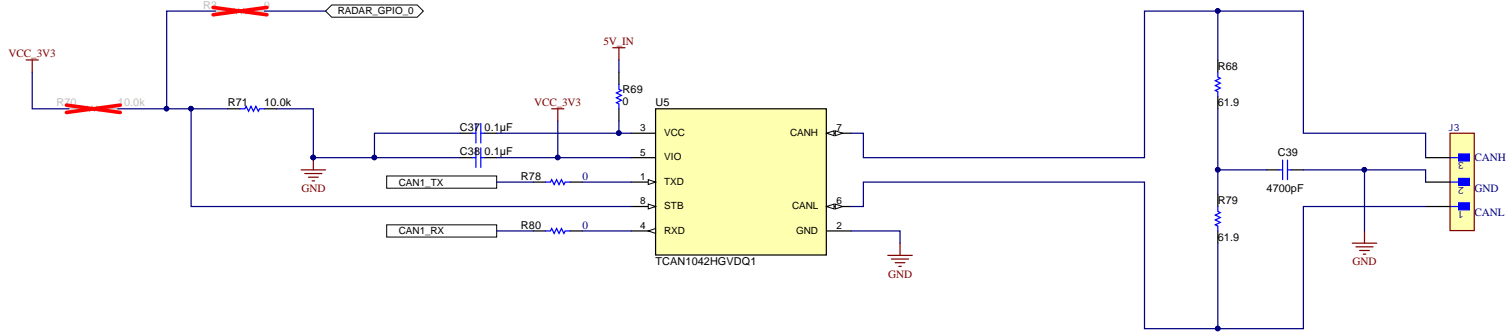


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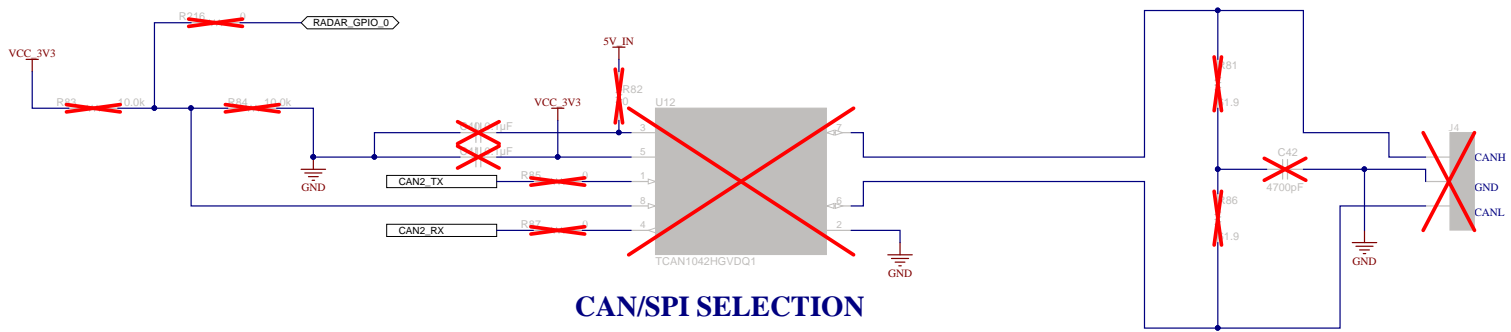
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Number: PROC116	Rev: A	Sheet Title: SOP Control
SVN Rev: Unknown revision	Assembly Variant: 001_IWR	Sheet: 12 of 14
Drawn By: Chethan Kumar.Y.B	File: PROC116A_SOP_Ctrl_SchDoc	Size: B
Engineer: Chethan Kumar.Y.B	Contact: http://www.ti.com/support	



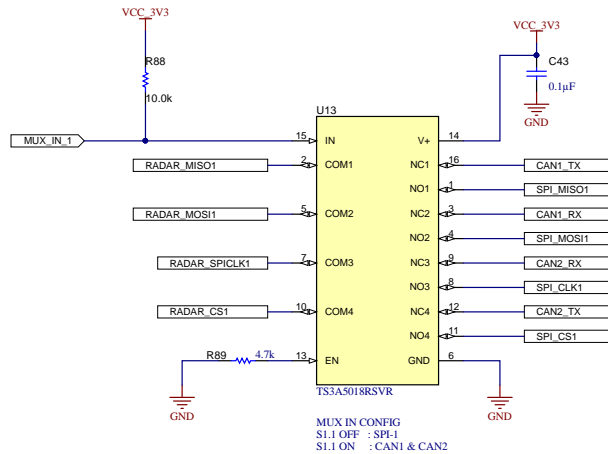
CAN_FD TRANSCEIVER



CAN_FD TRANSCEIVER

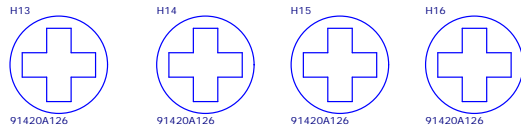
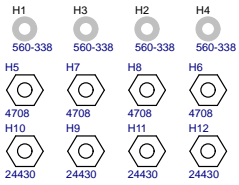


CAN/SPI SELECTION



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Orderable: IW/R6843LCEVM	Designed for: Public Release	Mod. Date: 4/28/2021
TID #: N/A	Project Title: IW/R6843 LOW COST EVM	
Number: PROC116	Rev: A	Sheet Title: CAN Interface
SVN Rev: Unknown revision	Assembly Variant: 001_IWR	Sheet: 13 of 14
Drawn By: Chethan Kumar.Y.B	File: PROC116A_Can_Interface_SchDoc	Size: B
Engineer: Chethan Kumar.Y.B	Contact: http://www.ti.com/support	



PCB Number: PROC116
PCB Rev: A

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FCC disclaimer

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WEEE logo

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CAUTION HOT SURFACE1



CAUTION HOT SURFACE

Variant/Label Table	
Variant	Label Text
001_IWR	IWR6843ISK_LOW_EVM
002_AWR	AWR6843ISK_LOW_EVM

LBL1

PCB Label

TH: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.

CAPACITORS HIGHLIGHTED IN THE RED COLOR BOXES ARE ADDED FOR IMPROVEMENT AND THOSE ARE NOT MANDATORY.

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Orderable: IWR6843LCEVM	Designed for: Public Release	Mod. Date: 4/28/2021
TID #: N/A	Project Title: IWR6843 LOW COST EVM	
Number: PROC116	Rev: A	Sheet Title: Hardware
SVN Rev: Unknown revision	Assembly Variant: 001_IWR	Sheet: 14 of 14
Drawn By: Chethan Kumar.Y.B	File: PROC116A_EVM_Hardware_SchDoc	Size: B
Engineer: Chethan Kumar.Y.B	Contact: http://www.ti.com/support	



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