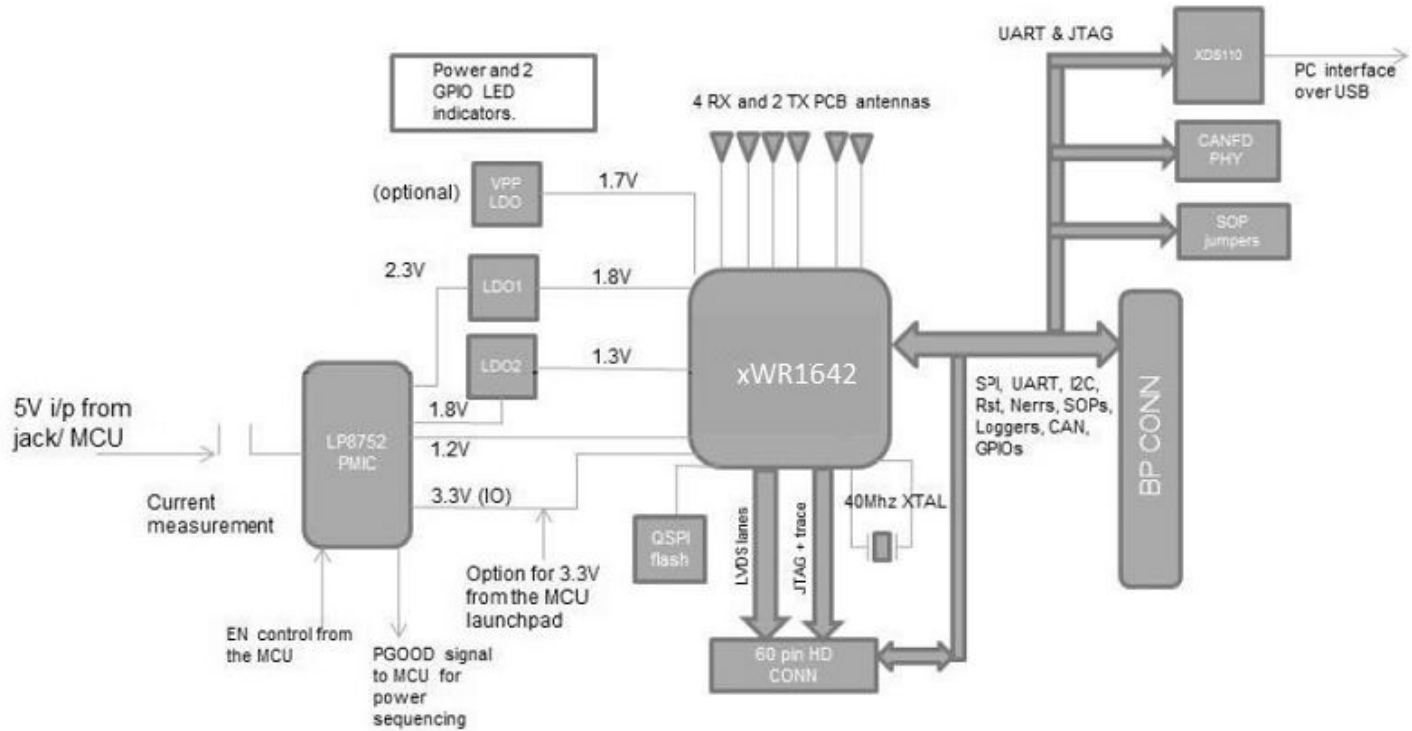


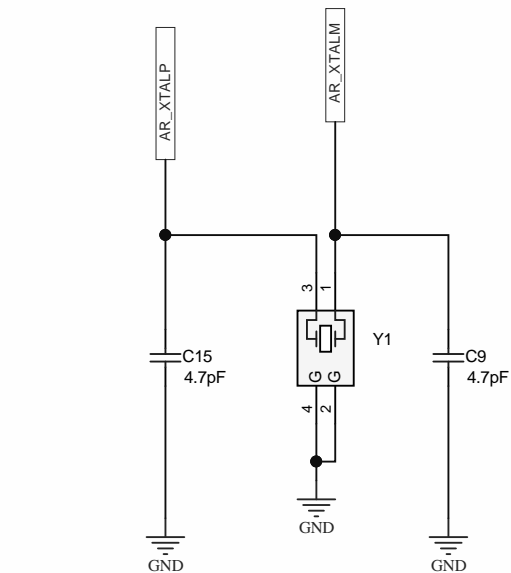
Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
B	1	22/01/2018	Vivek dham	ADDED SWITCH CONTROL TO MOVE between SPI and CAN interface
B	2	22/01/2018	Vivek dham	Enabled by default the 5V supply from the 60pin HD connector.
B	3	22/01/2018	Vivek dham	Enabled by default the SYNC_IN signal connection to J6 connector
B	4	22/01/2018	Vivek dham	Serial flash part number updated to MX25V1635FZNQ
B	5	22/01/2018	Vivek dham	Added series resistors on I2C lines.
B	6	13/02/2018	Vivek dham	Removed the series diode on the NRST signal.
B	7	23/02/2018	J Quintal	added Variant 002, U2, PCB Label, revised AWR1642 to xWR1642
C	1	28/05/2020	Adrian Ozer	Updated C56 from 0.22uF to 22nF

BLOCK DIAGRAM

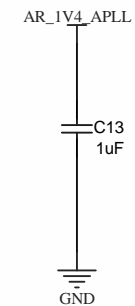
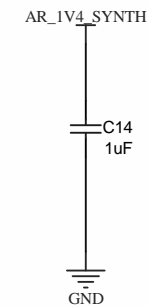
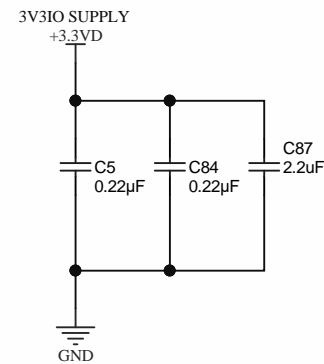
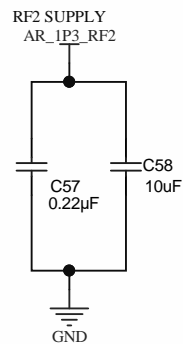
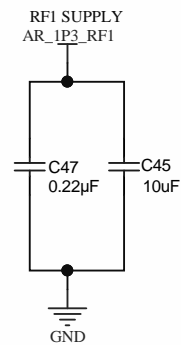
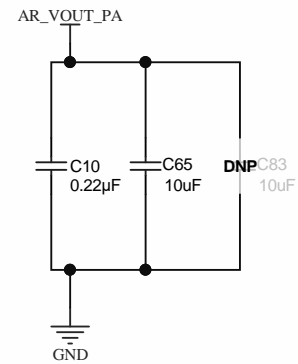
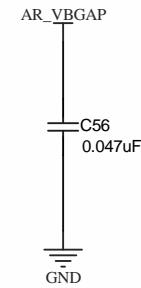
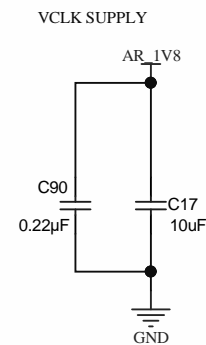
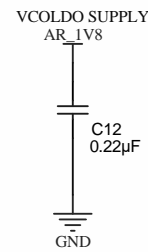
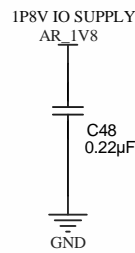
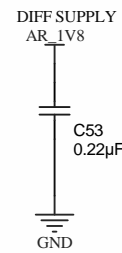
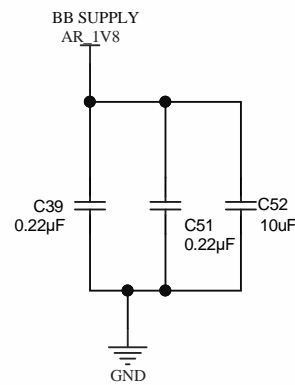
xWR1642BOOST TABLE OF CONTENTS

SHEET NO.	SHEET NAME
1	PROC011C_COVERSHEET
2	PROC011C_DUT
3	PROC011C_Decoupling caps
4	PROC011C_LDO_01 (1.8V Output)
5	PROC011C_LDO_02 (1.3V Output)
6	PROC011C_VPP_Supply
7	PROC011C_Pwr_RST_LEDs
8	PROC011C_PMIC
9	PROC011C_QSPI flash section
10	PROC011C_LP Connector
11	PROC011C_HD Connector
12	PROC011C_XDS110 Interface_1A
13	PROC011C_XDS110 Interface_1B
14	PROC011C_CAN Interface
15	PROC011C_SOP selection
16	PROC011C_Tempsensor
17	PROC011C_Hardware

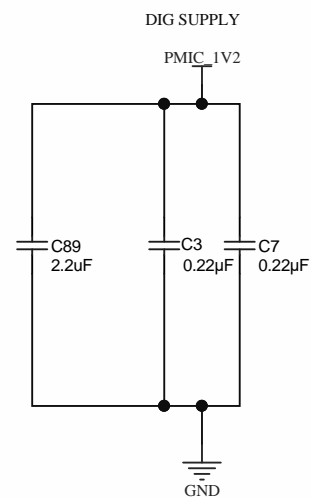
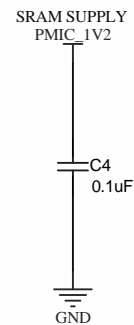
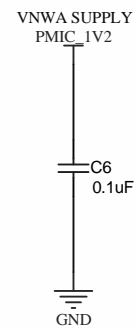
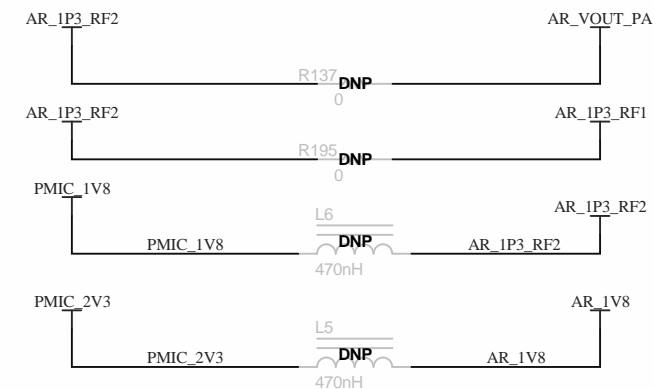





SUPPLY_DECOUPLING_CAPS



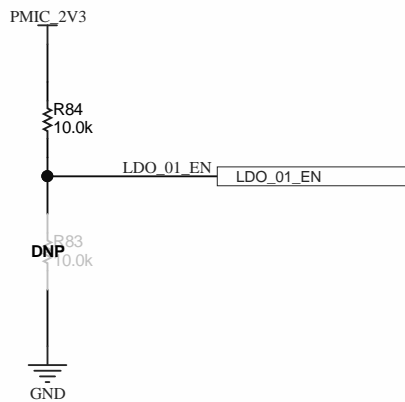
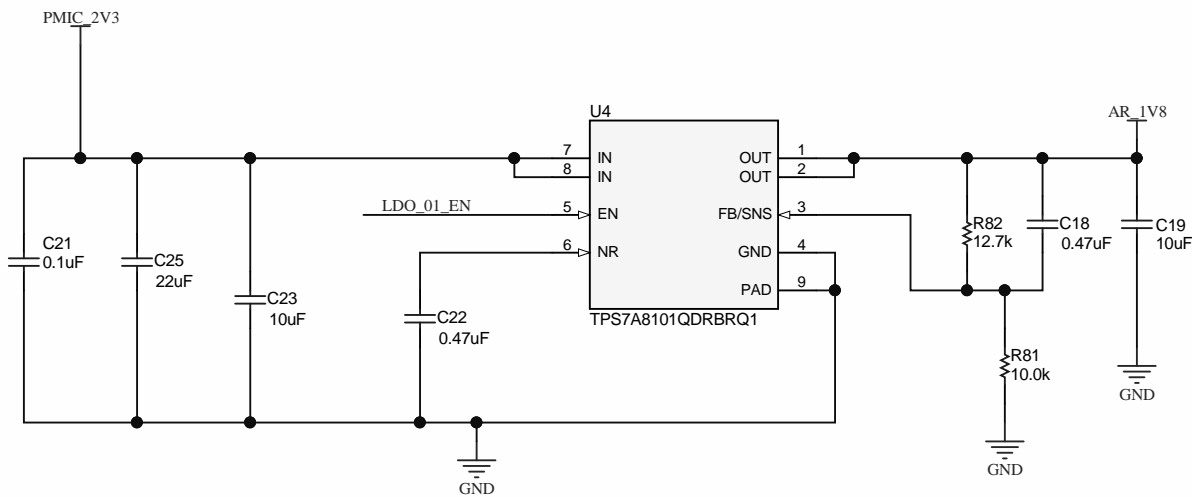
OPTIONS FOR INTERNAL DEBUG ONLY



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TID #: N/A	Project Title: xWR1642BOOST		
Number: PROC011	Rev: C	Sheet Title: Decoupling caps	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 3 of 17	
Drawn By:	File: PROC011C_Decoupling caps.SchDoc	Size: B	
Engineer: Vivek Dham	Contact: http://www.ti.com/support		

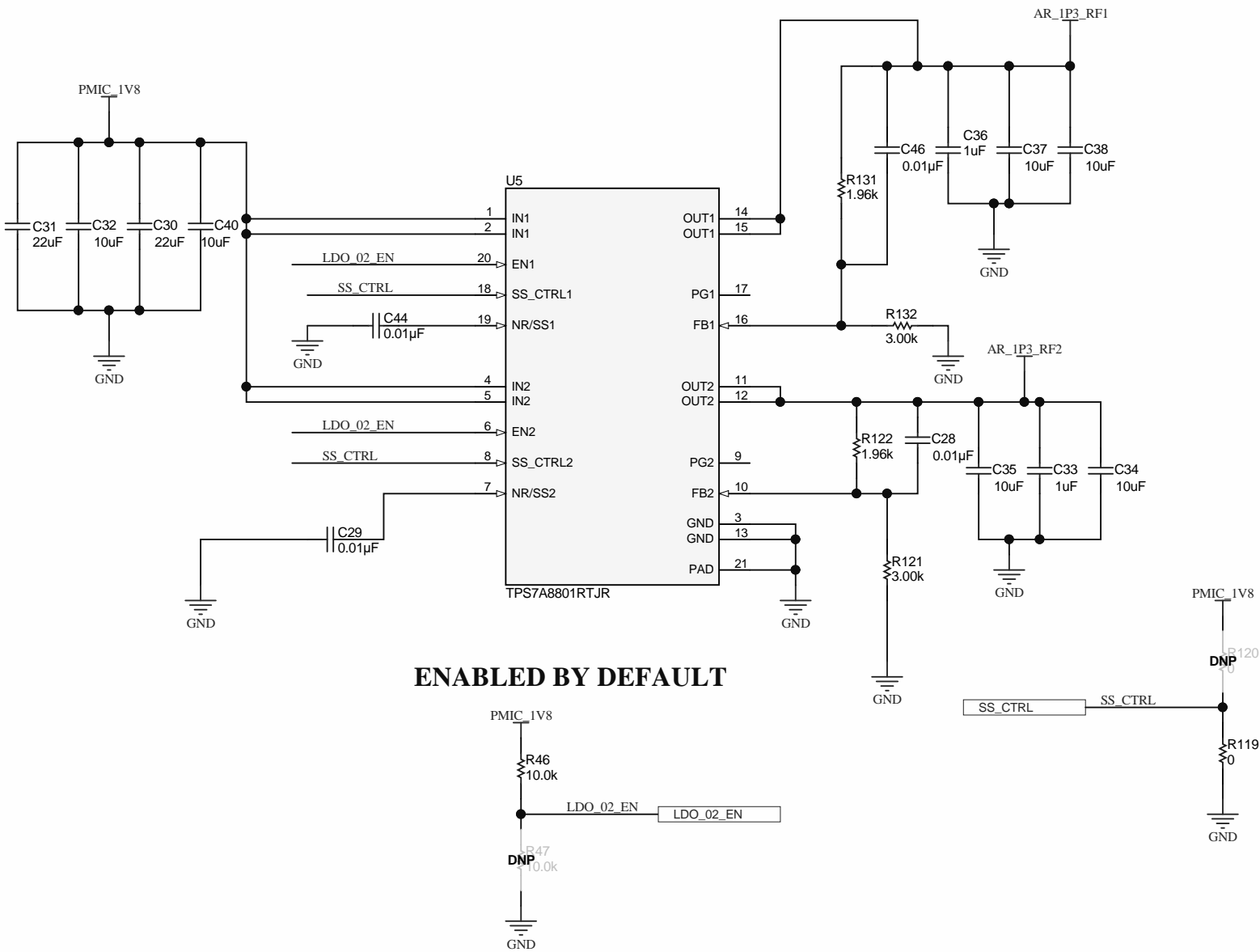
LDO_01 (1.8V OUTPUT)



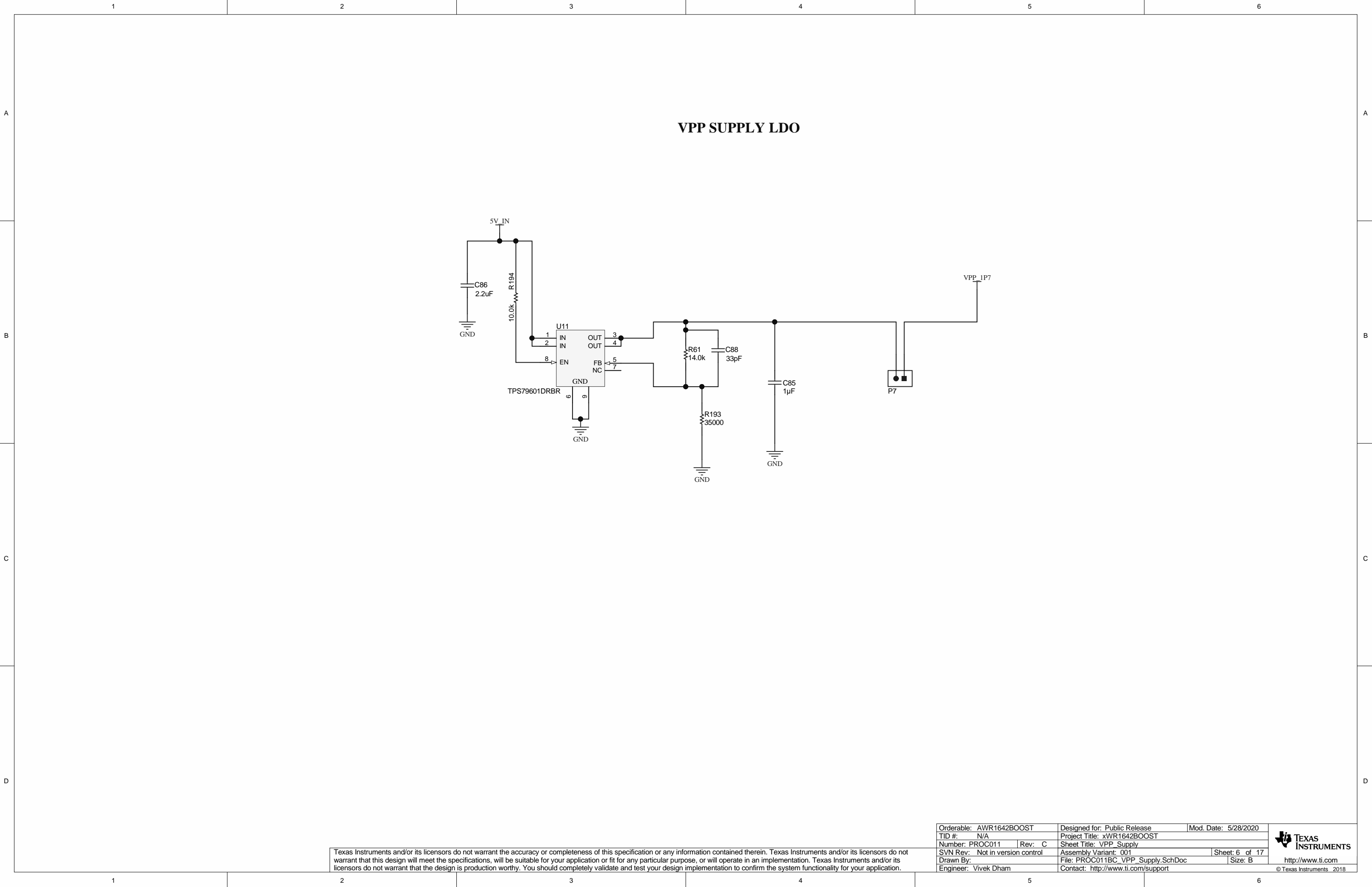
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TID #: N/A		Project Title: xWR1642BOOST	
Number: PROC011	Rev: C	Sheet Title: LDO_01 (1.8V Output)	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 4	of 17
Drawn By:	File: PROC011C_LDO_01 (1.8V Output).SchDoc	Size: B	
Engineer: Vivek Dham	Contact: http://www.ti.com/support		

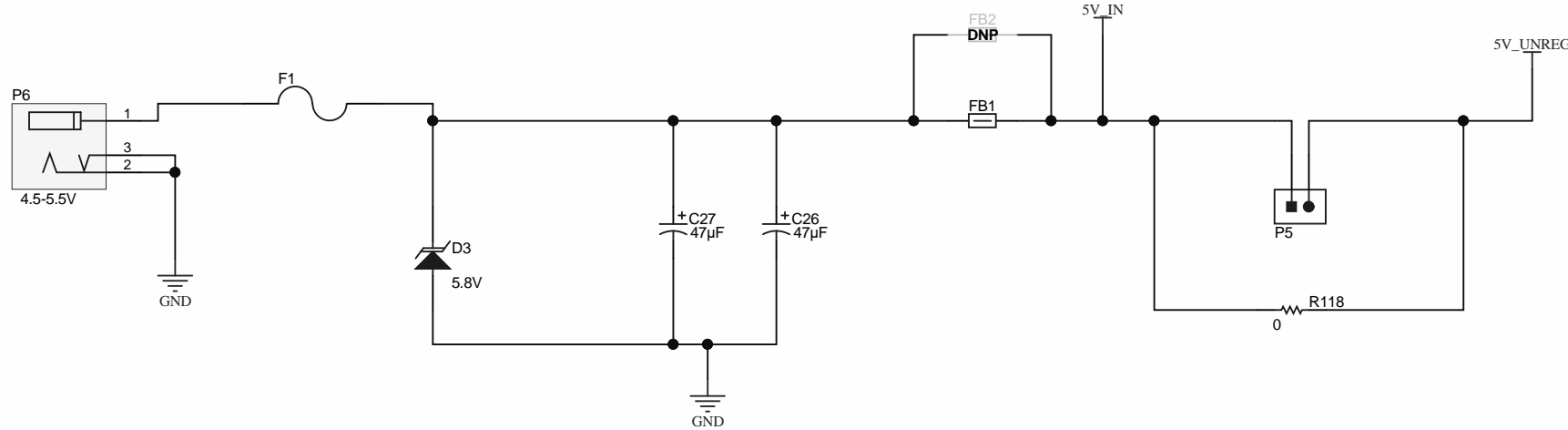
LDO_02 (1.3V LDO)



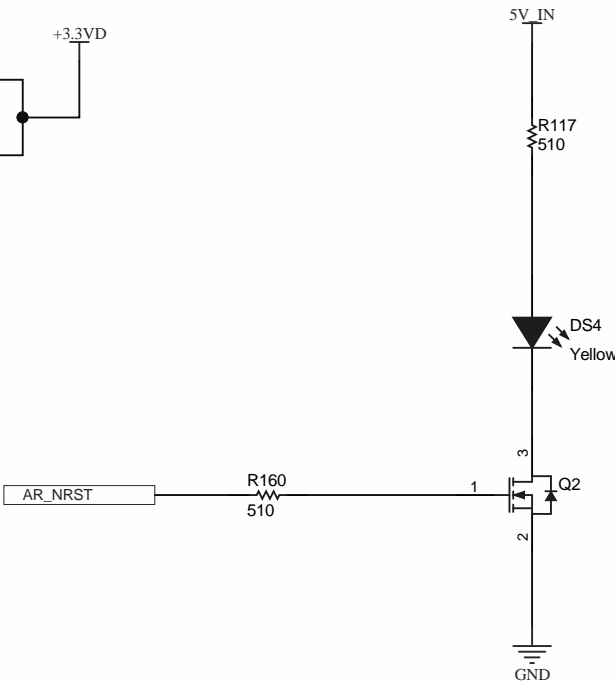
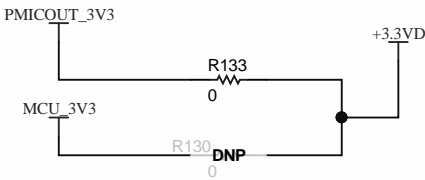
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TID #: N/A		Project Title: xWR1642BOOST	
Number: PROC011	Rev: C	Sheet Title: LDO_02 (1.3V Output)	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 5 of 17
Drawn By:		File: PROC011C_LDO_02 (1.3V Output).SchDoc	Size: B
Engineer: Vivek Dham		Contact: http://www.ti.com/support	



POWER SUPPLY CONNECTOR

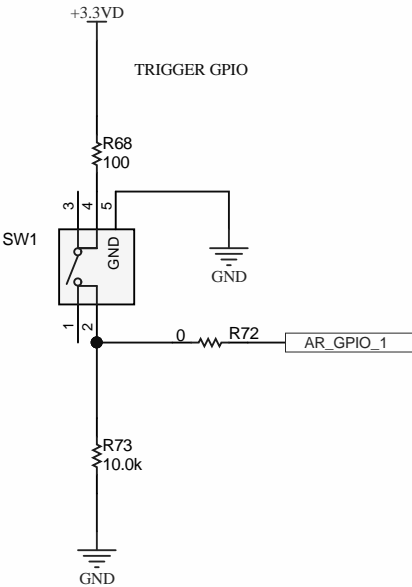
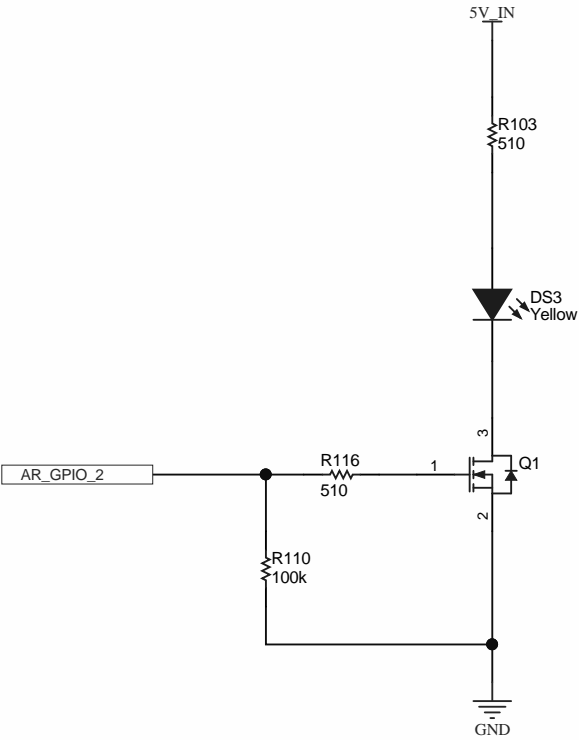
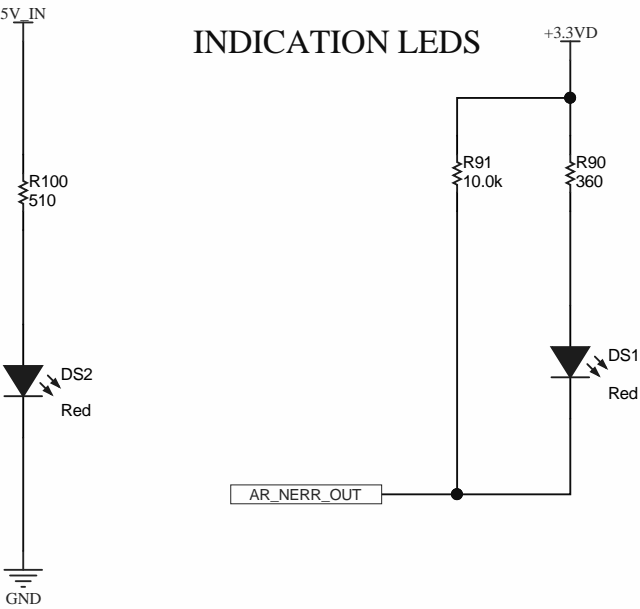
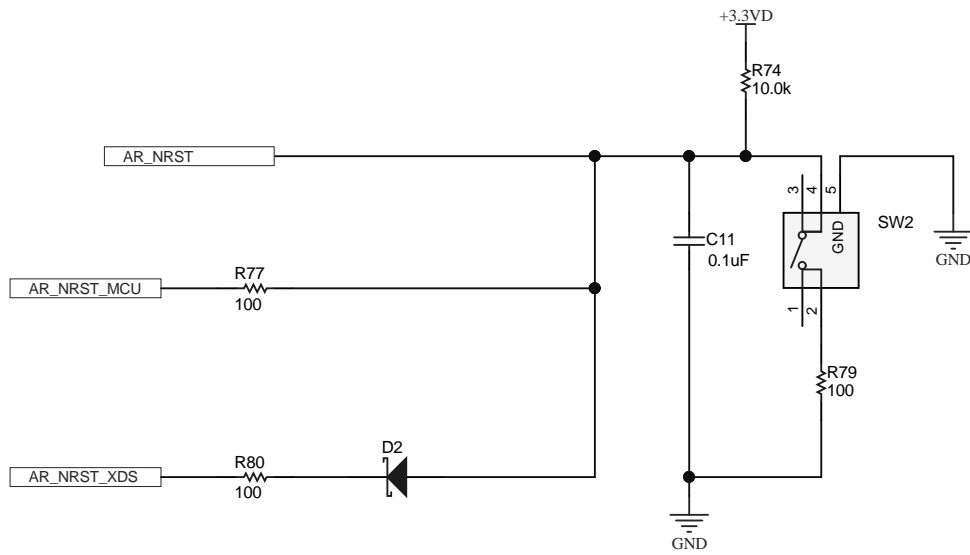


3P3 SUPPLY FROM PMIC OR FROM THE MCU



RESET AND LEDS

INDICATION LEDS

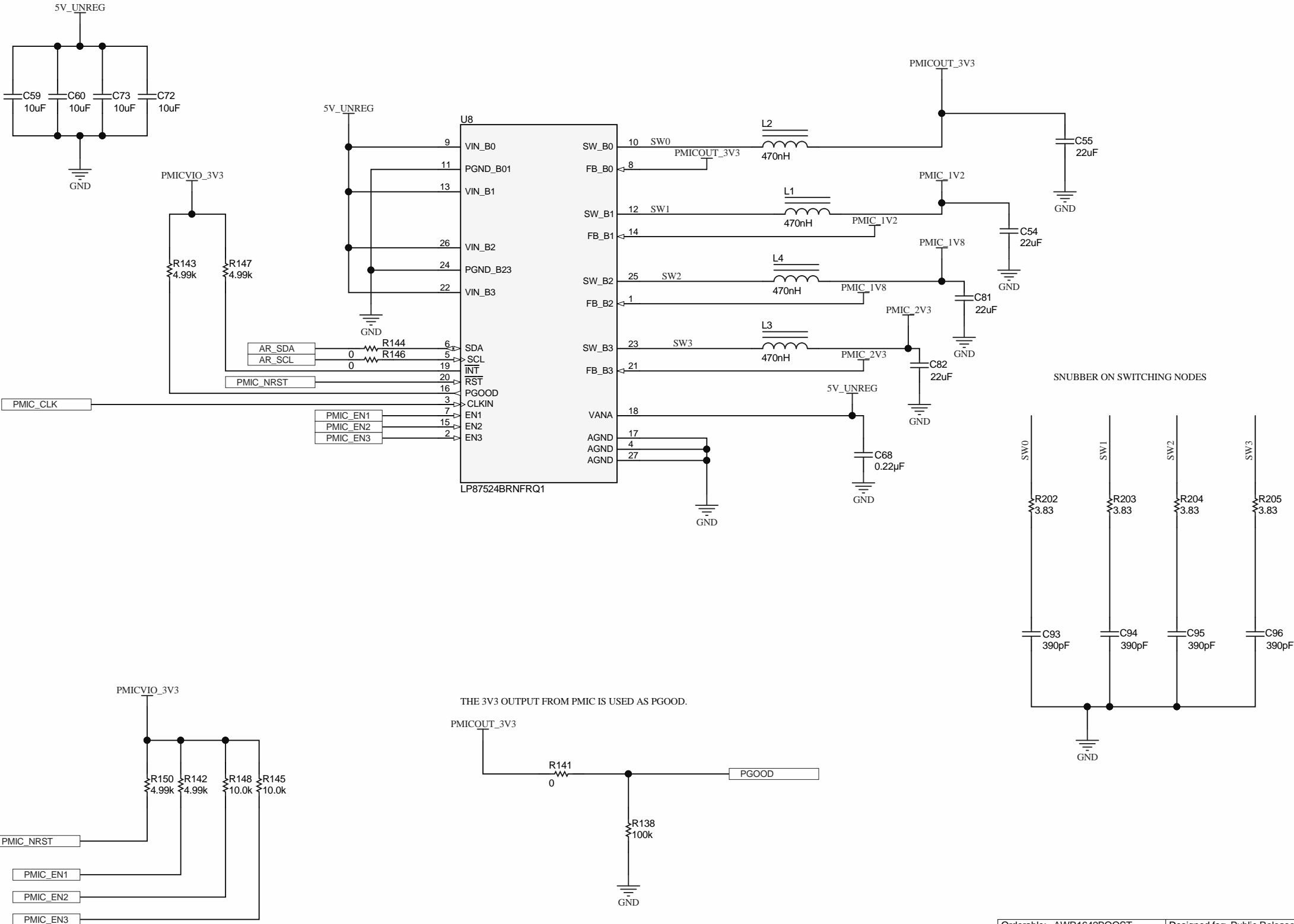


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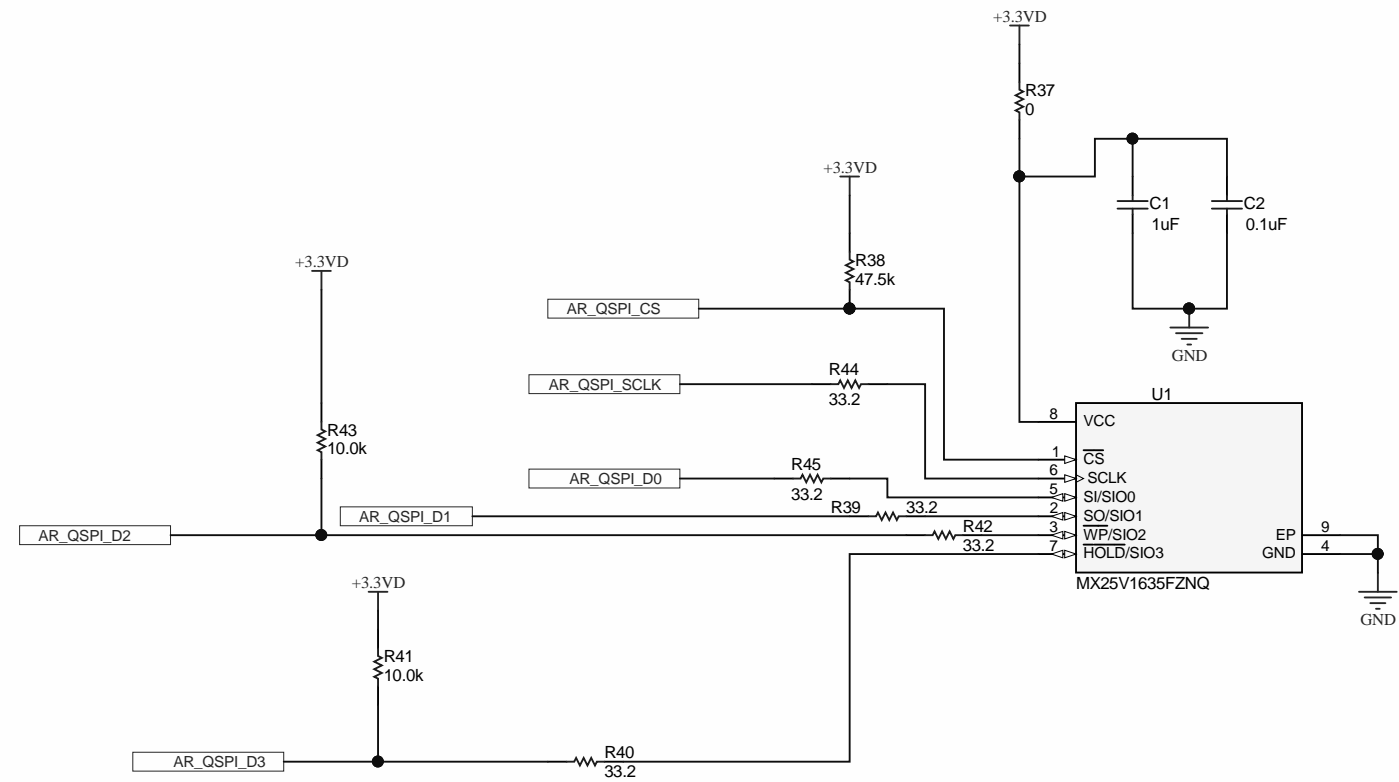
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TID #: N/A	Project Title: xWR1642BOOST	
Number: PROC011	Rev: C	Sheet Title: Pwr_RST_LEDs
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 7 of 17
Drawn By:	File: PROC011C_Pwr_RST_LEDs.SchDoc	Size: B
Engineer: Vivek Dham	Contact: http://www.ti.com/support	© Texas Instruments 2018




PMIC (3.3V, 1.2V, 1.8V, 2.3V OUTPUTS)

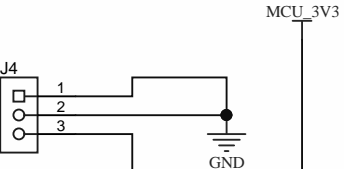
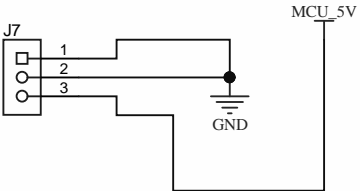
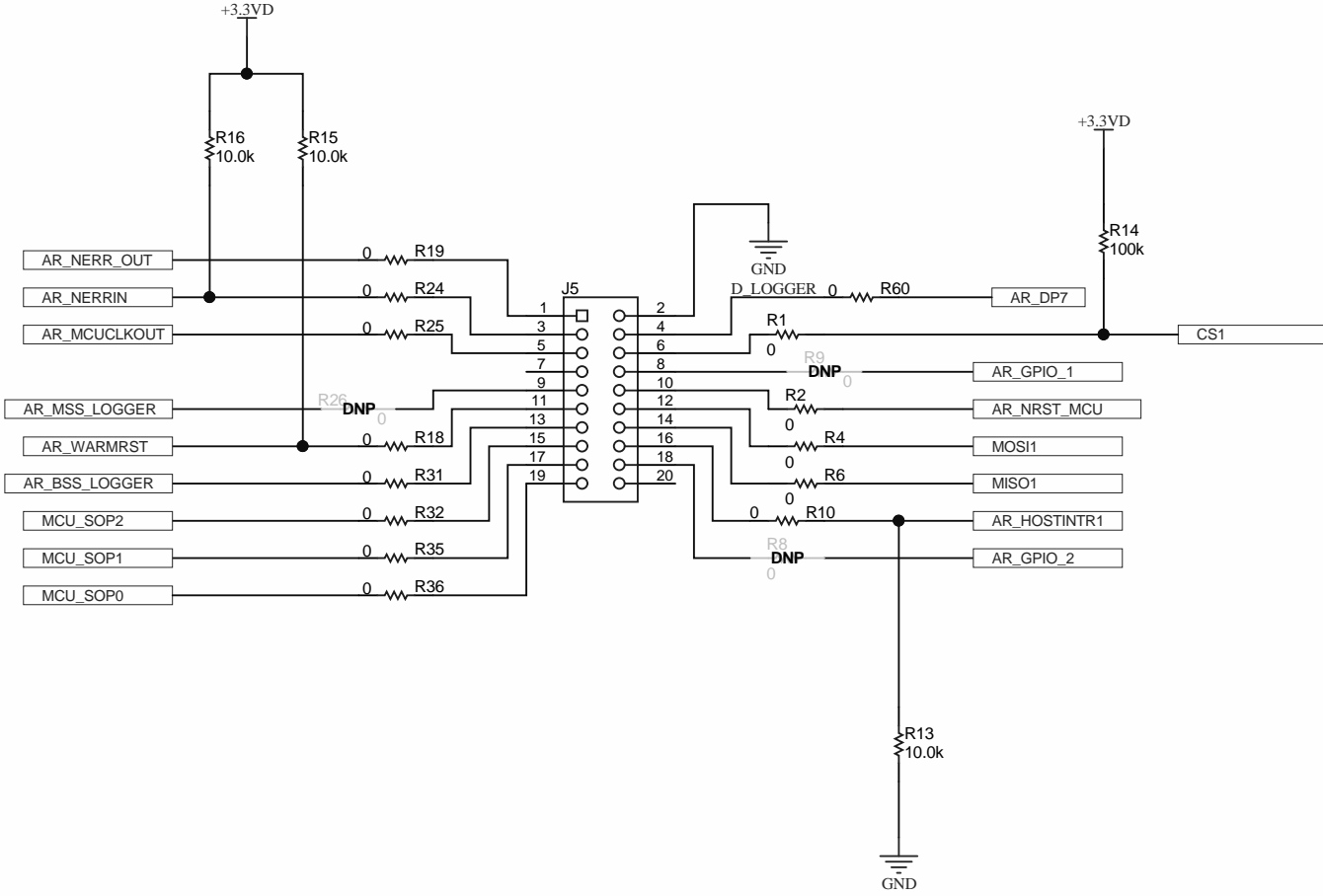
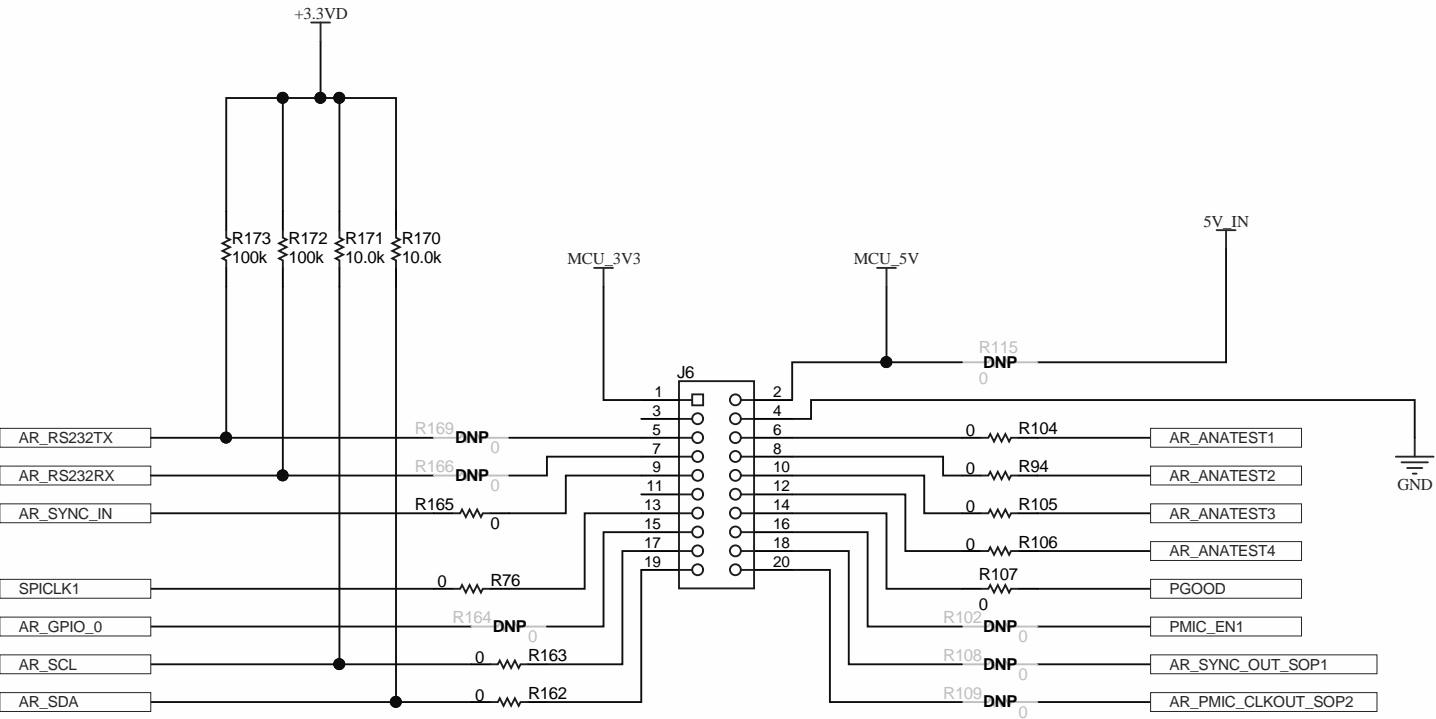


QSPI FLASH

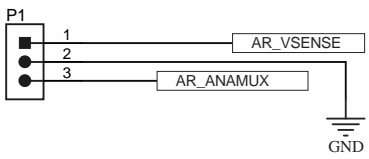


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TID #: N/A	Project Title: xWR1642BOOST		
Number: PROC011	Rev: C	Sheet Title: QSPI flash section	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 9 of 17	
Drawn By:	File: PROC011C_QSPI flash section.SchDoc	Size: B	
Engineer: Vivek Dham	Contact: http://www.ti.com/support		

BP/LP CONNECTOR



ANALOG SIGNALS



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Orderable: AWR1642BOOST		Designed for: Public Release	Mod. Date: 5/28/2020
TID #: N/A		Project Title: xWR1642BOOST	
Number: PROC011	Rev: C	Sheet Title: LP Connector	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 10 of 17
Drawn By:		File: PROC011C_LP Connector.SchDoc	Size: B
Engineer: Vivek Dham		Contact: http://www.ti.com/support	

A

A

HD CONNECTOR FOR LVDS/CSI AND JTAG

B

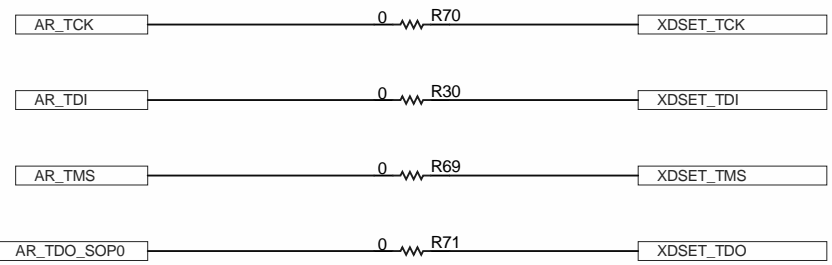
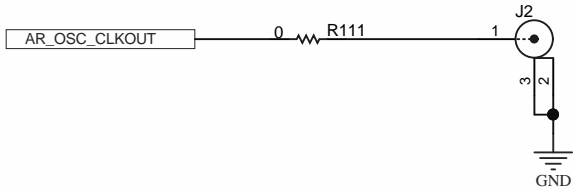
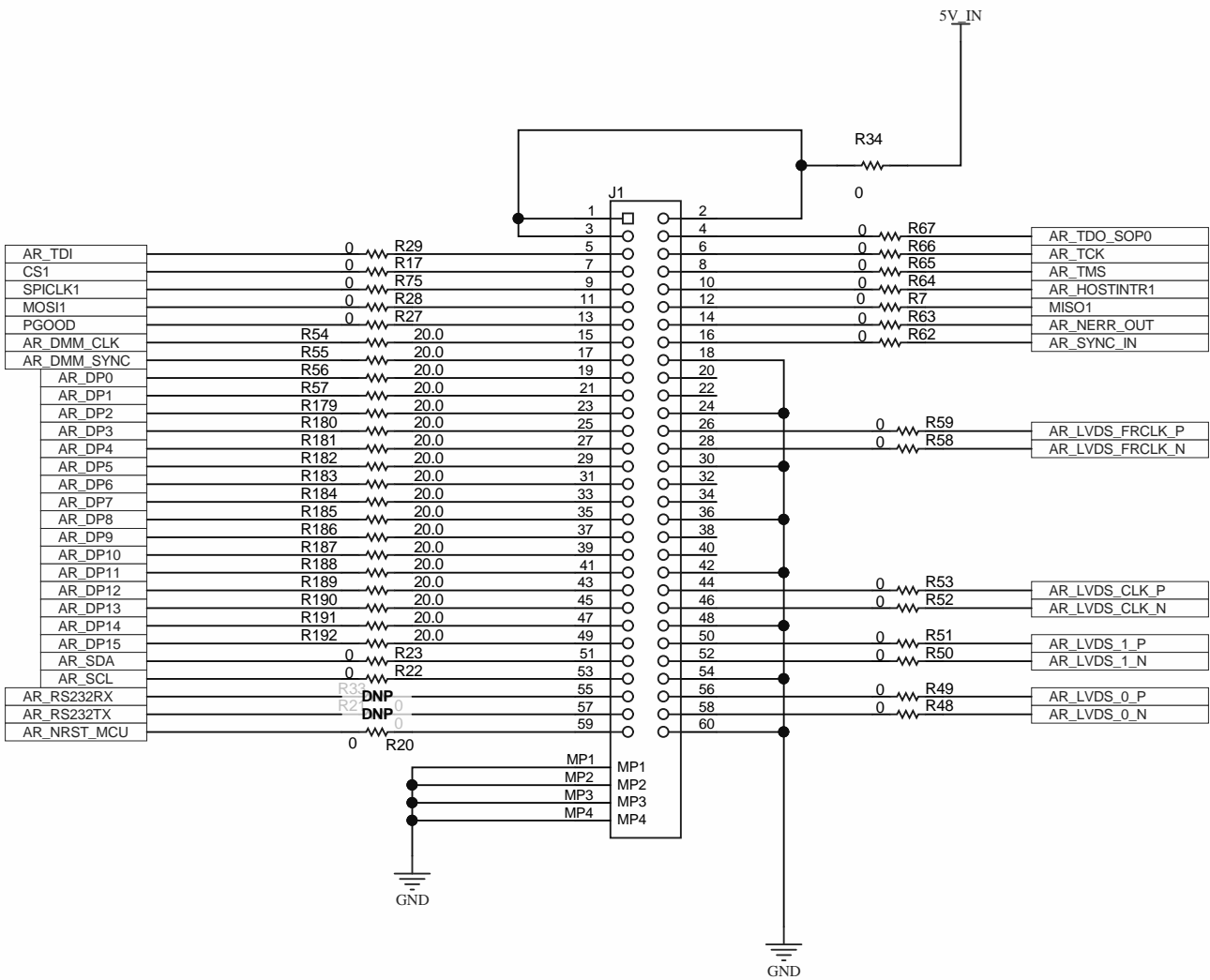
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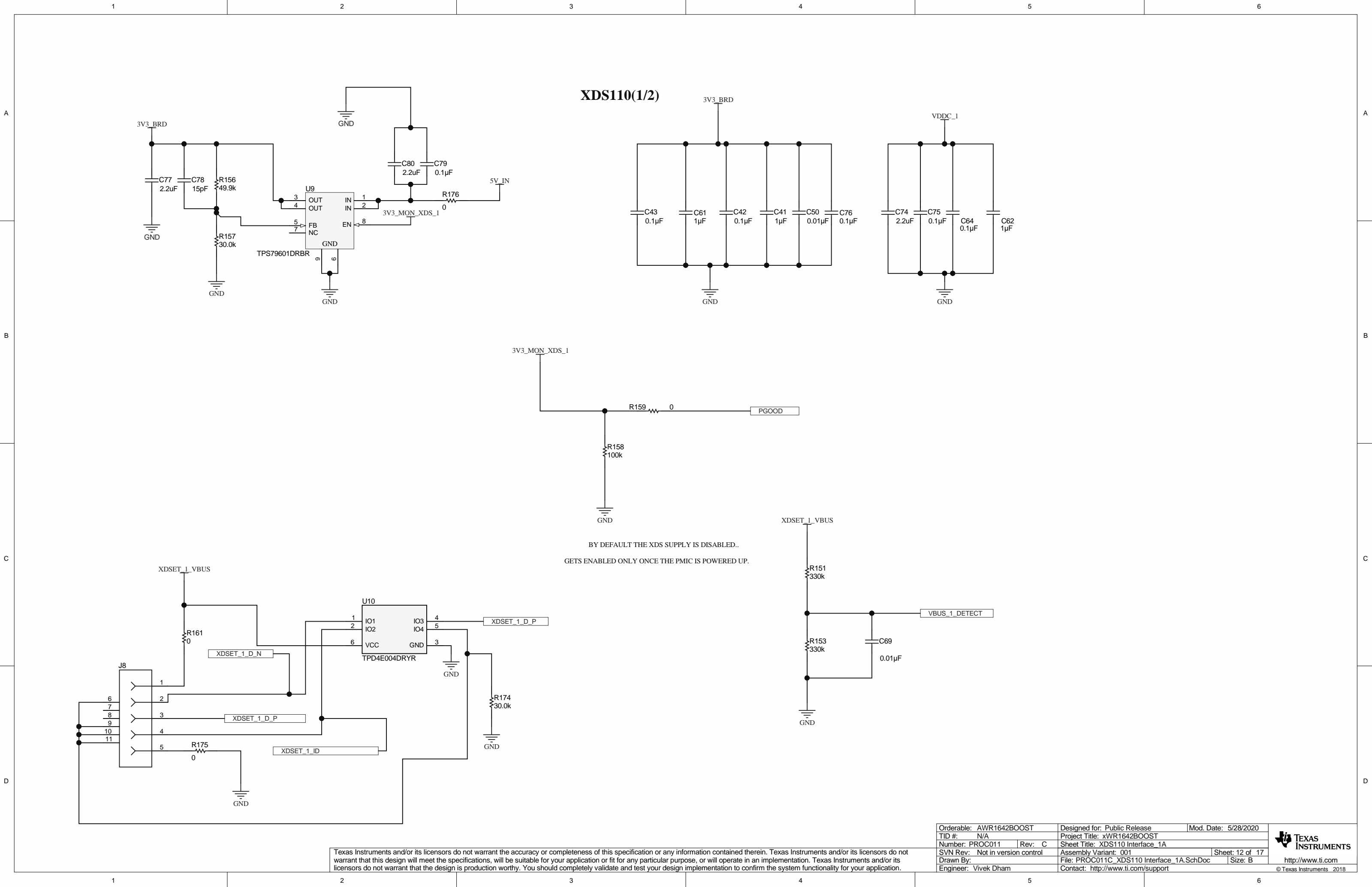
C

C

D

D





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Orderable: AWR1642BOOST	Designed for: Public Release	Mod. Date: 5/28/2020
TID #: N/A	Project Title: xWR1642BOOST	
Number: PROC011	Rev: C	Sheet Title: XDS110 Interface_1A
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 12 of 17
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Engineer: Vivek Dham	Contact: http://www.ti.com/support	

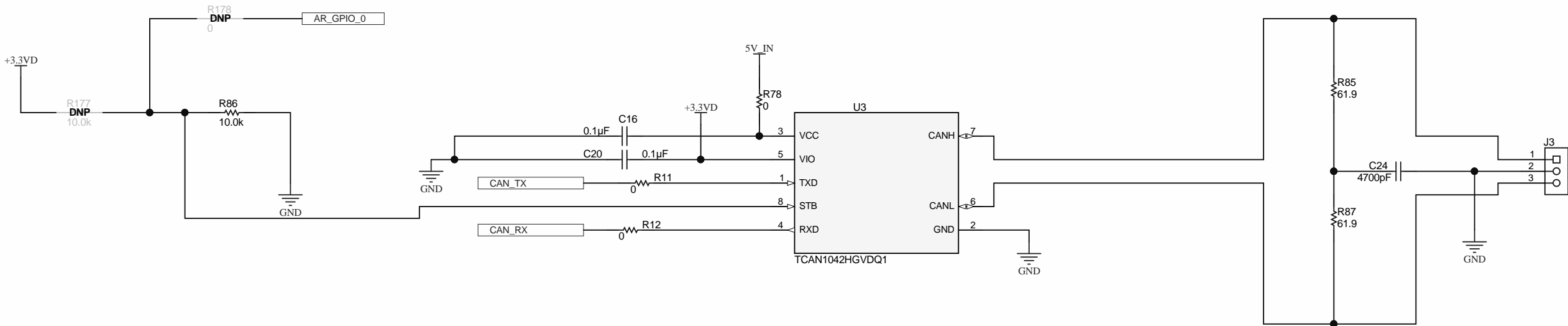
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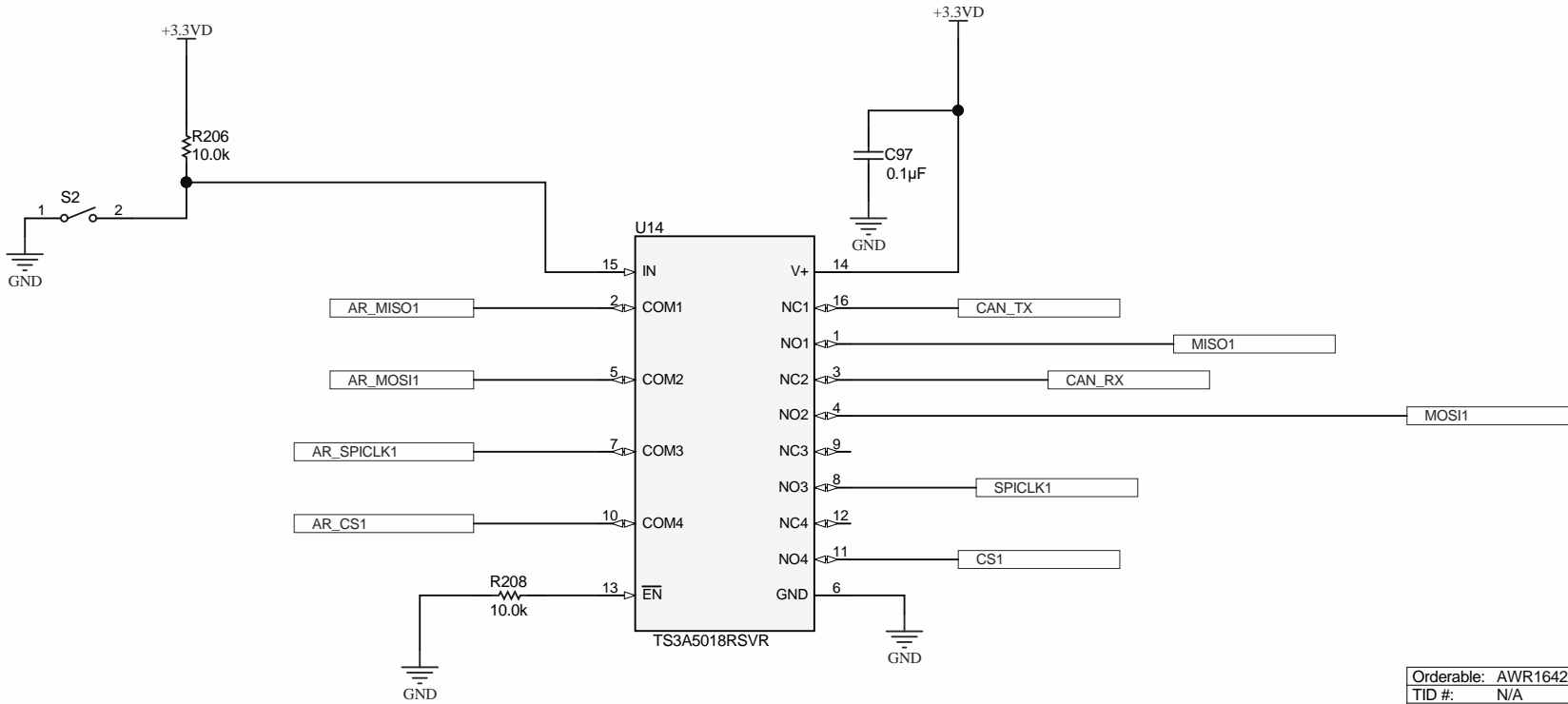
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TID #: N/A	Project Title: xWR1642BOOST	
Number: PROC011	Rev: C	Sheet Title: XDS110 Interface_1B
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 13 of 17
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CAN INTERFACE

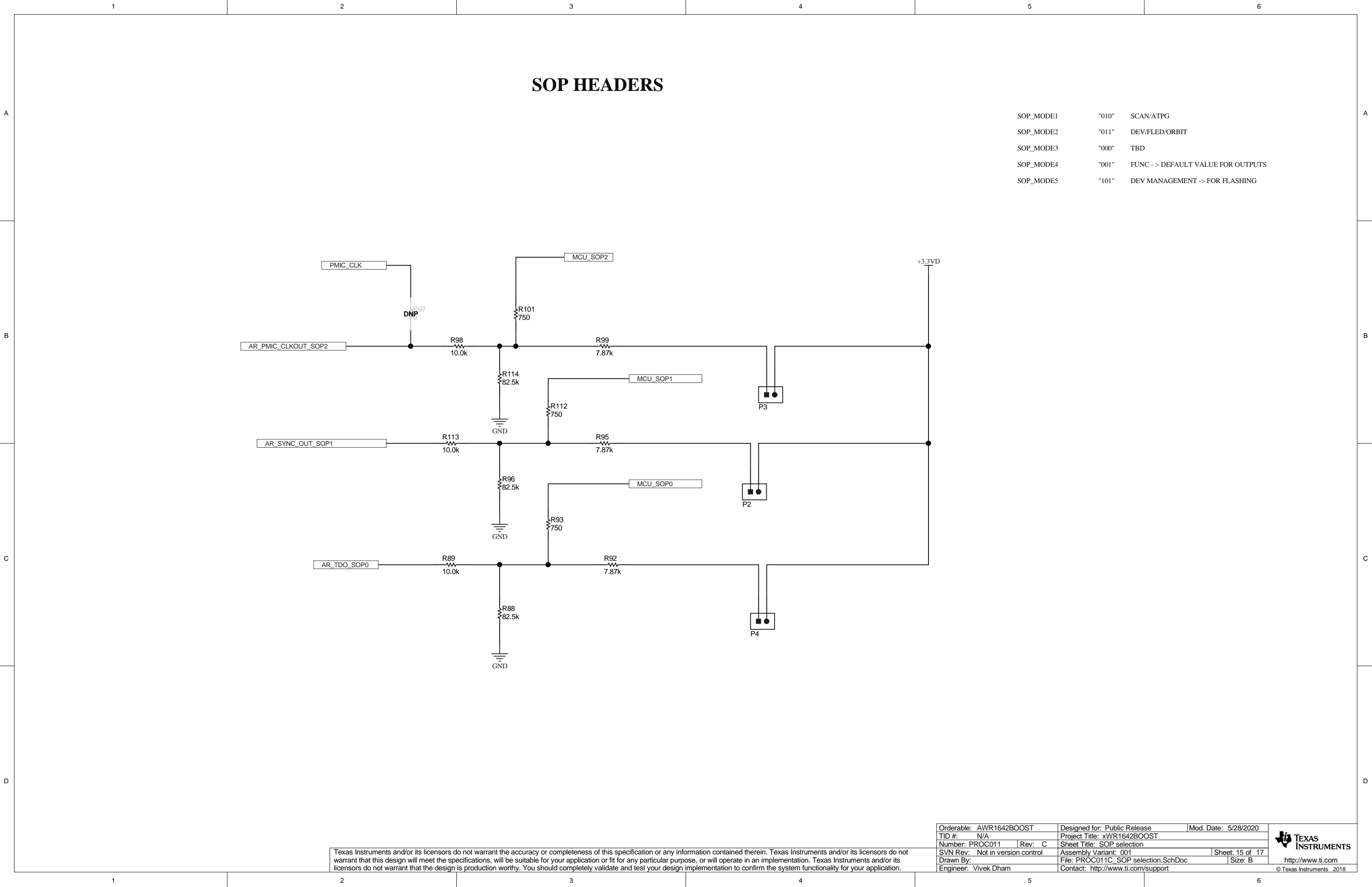


MUX BETWEEN SPI AND CAN INTERFACE



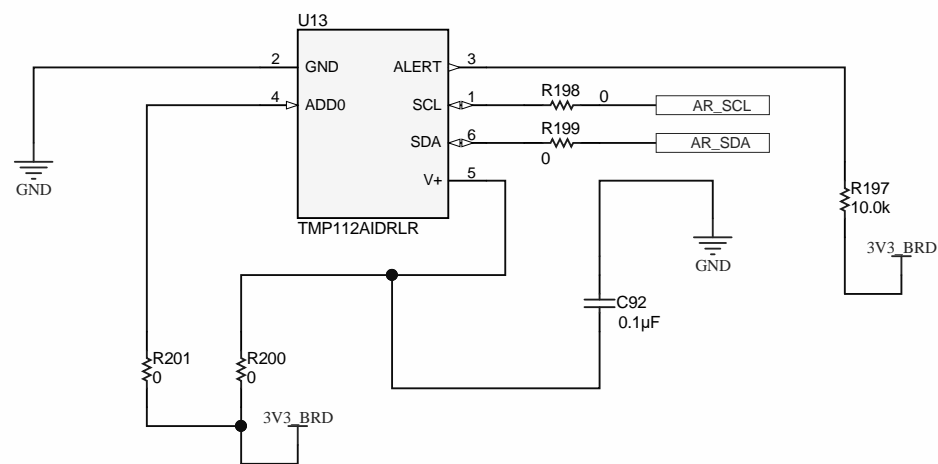
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Orderable: AWR1642BOOST		Designed for: Public Release	Mod. Date: 5/28/2020
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Number: PROC011	Rev: C	Sheet Title: CAN Interface	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 14 of 17	
Drawn By:	File: PROC011C_CAN Interface.SchDoc	Size: B	
Engineer: Vivek Dham	Contact: http://www.ti.com/support		



ONBOARD TEMP SENSORS

DEFAULT I2C ADDRESS 0X49
AND MMWAVE DEVICE
TEMP SENSOR AWAY FROM PMIC



DEFAULT I2C ADDRESS 0X48
TEMP SENSOR CLOSE TO PMIC

