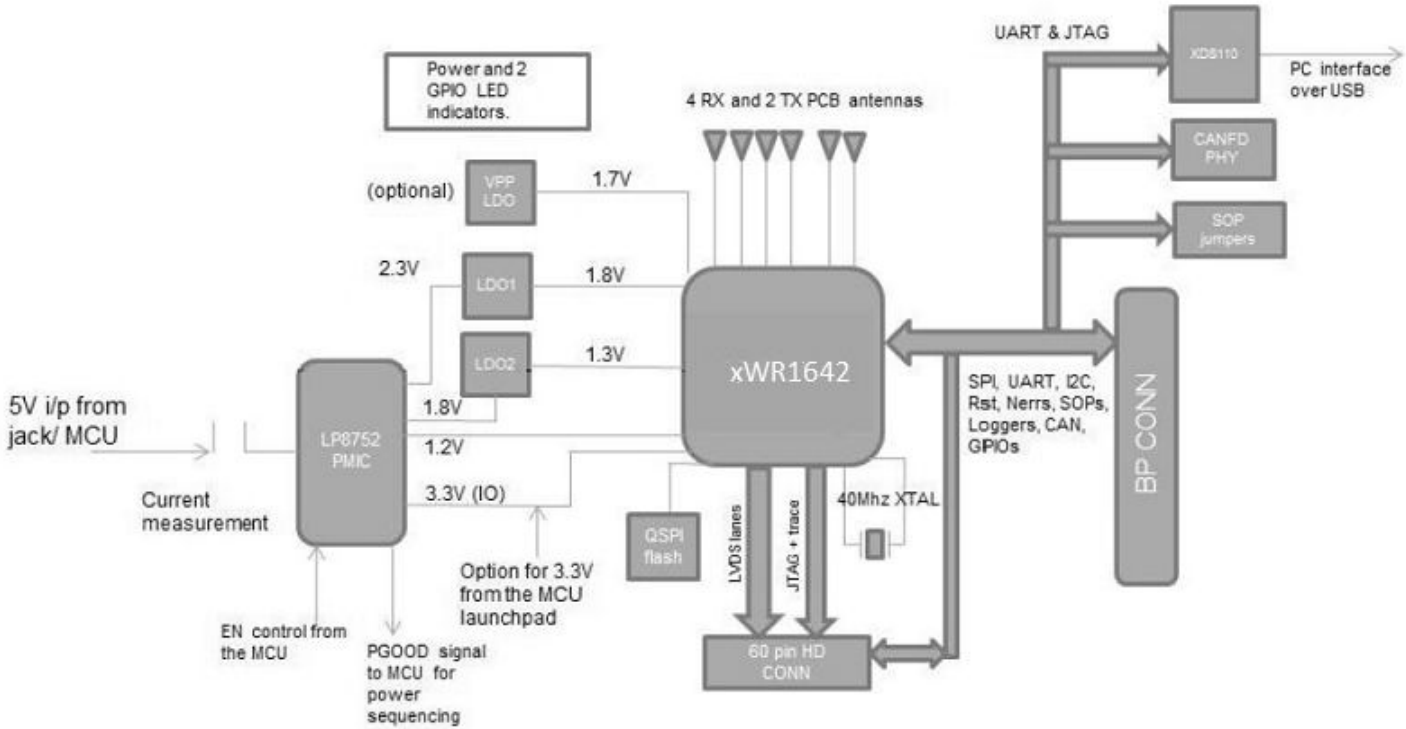


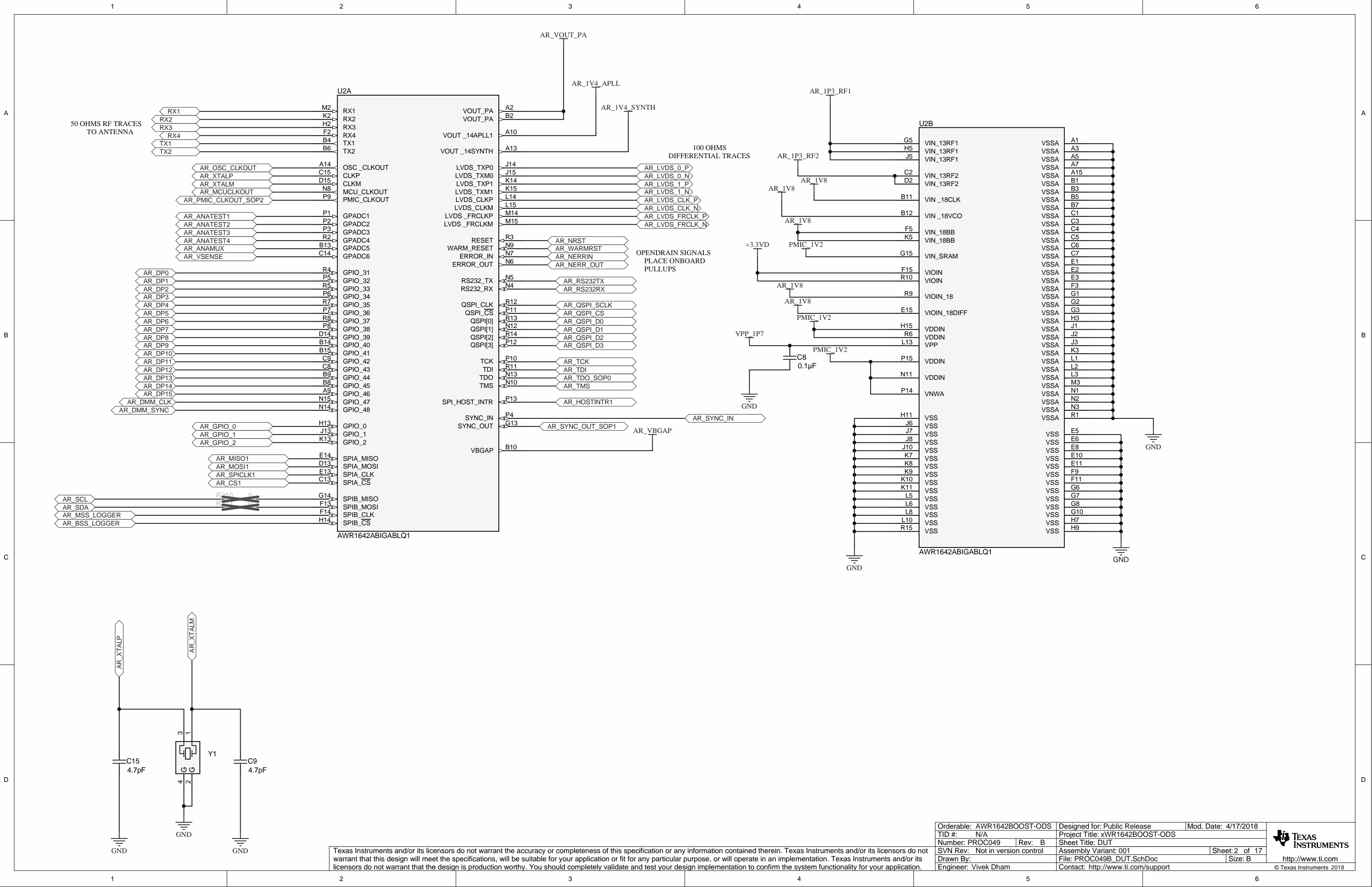
Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
B	1	22/01/2018	Vivek dham	ADDED SWITCH CONTROL TO MOVE between SPI and CAN interface
B	2	22/01/2018	Vivek dham	Enabled by default the 5V supply from the 60pin HD connector.
B	3	22/01/2018	Vivek dham	Enabled by default the SYNC_IN signal connection 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

xWR1642BOOST-ODS

TABLE OF CONTENTS

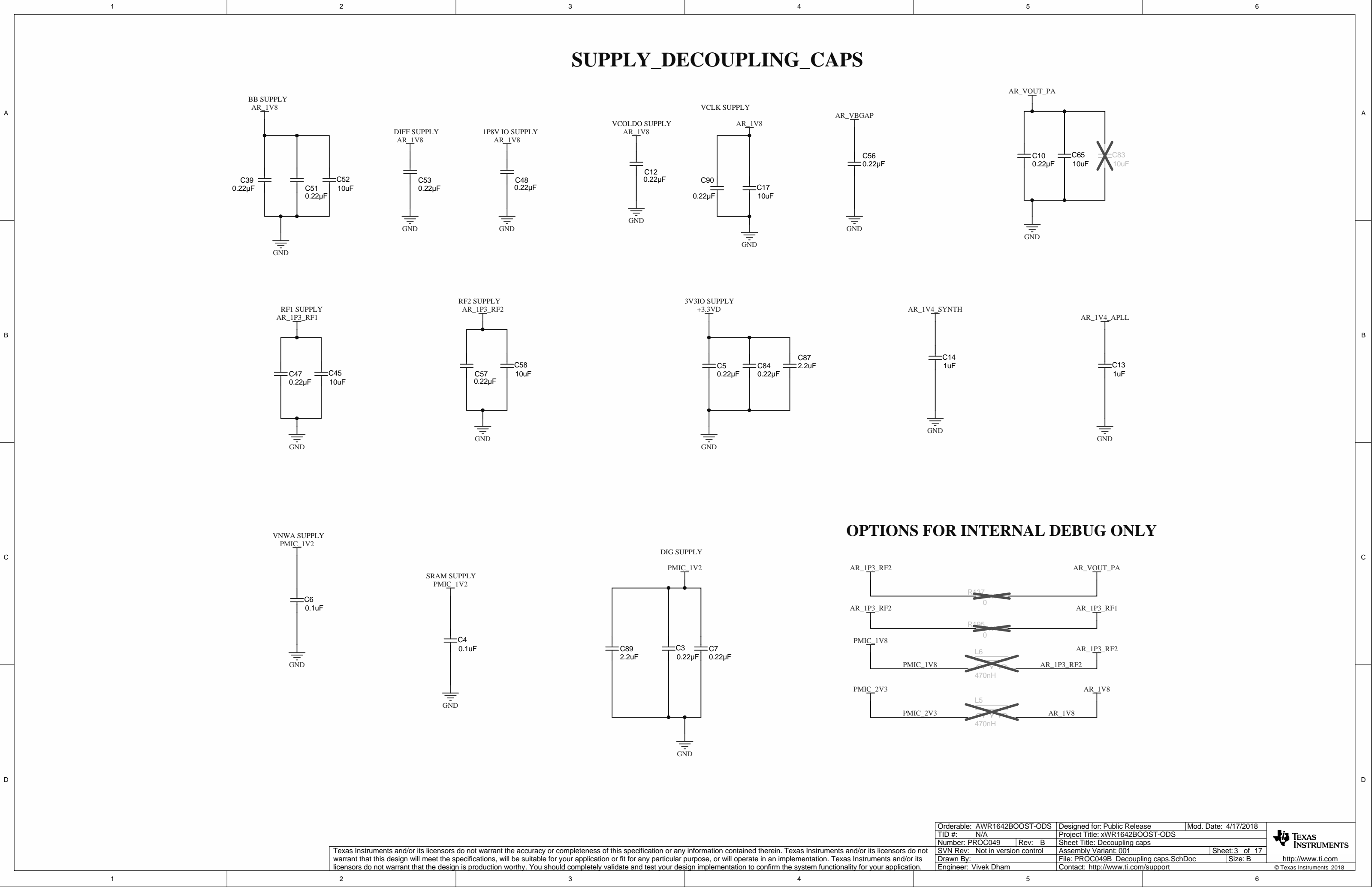
SHEET NO.	SHEET NAME
1	PROC049B_COVERSHEET
2	PROC049B_DUT
3	PROC049B_Decoupling caps
4	PROC049B_LDO_01 (1.8V Output)
5	PROC049B_LDO_02 (1.3V Output)
6	PROC049B_VPP_Supply
7	PROC049B_Pwr_RST_LEDs
8	PROC049B_PMIC
9	PROC049B_QSPI flash section
10	PROC049B_LP Connector
11	PROC049B_HD Connector
12	PROC049B_XDS110 Interface_1A
13	PROC049B_XDS110 Interface_1B
14	PROC049B_CAN Interface
15	PROC049B_SOP selection
16	PROC049B_Tempsensor
17	PROC049B_Hardware



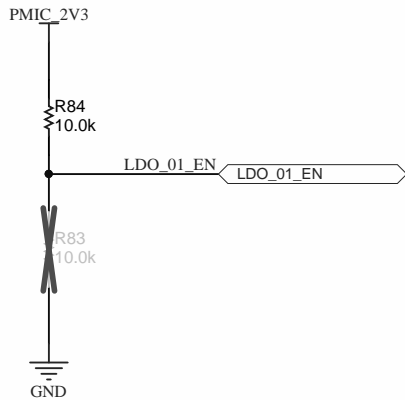
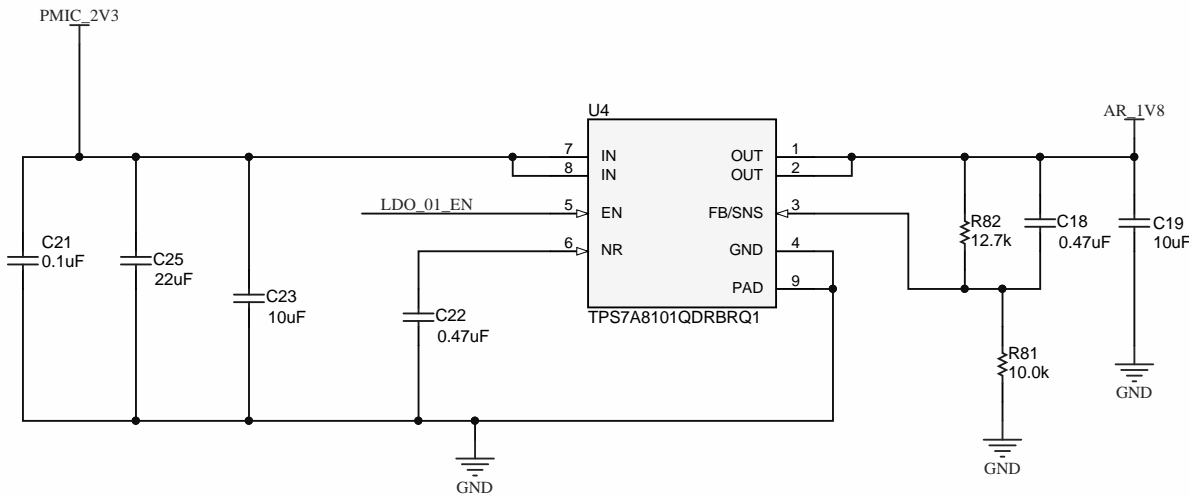


Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

Orderable: AWR1642BOOST-ODS		Designed for: Public Release		Mod. Date: 4/17/2018	
TID #: N/A		Project Title: xWR1642BOOST-ODS			
Number: PROC049		Rev: B		Sheet Title: DUT	
SVN Rev: Not in version control		Assembly Variant: 001		Sheet 2 of 17	
Drawn By:		File: PROC049B_DUT.SchDoc		Size: B	
Engineer: Vivek Dham		Contact: http://www.ti.com/support			




LDO_01 (1.8V OUTPUT)



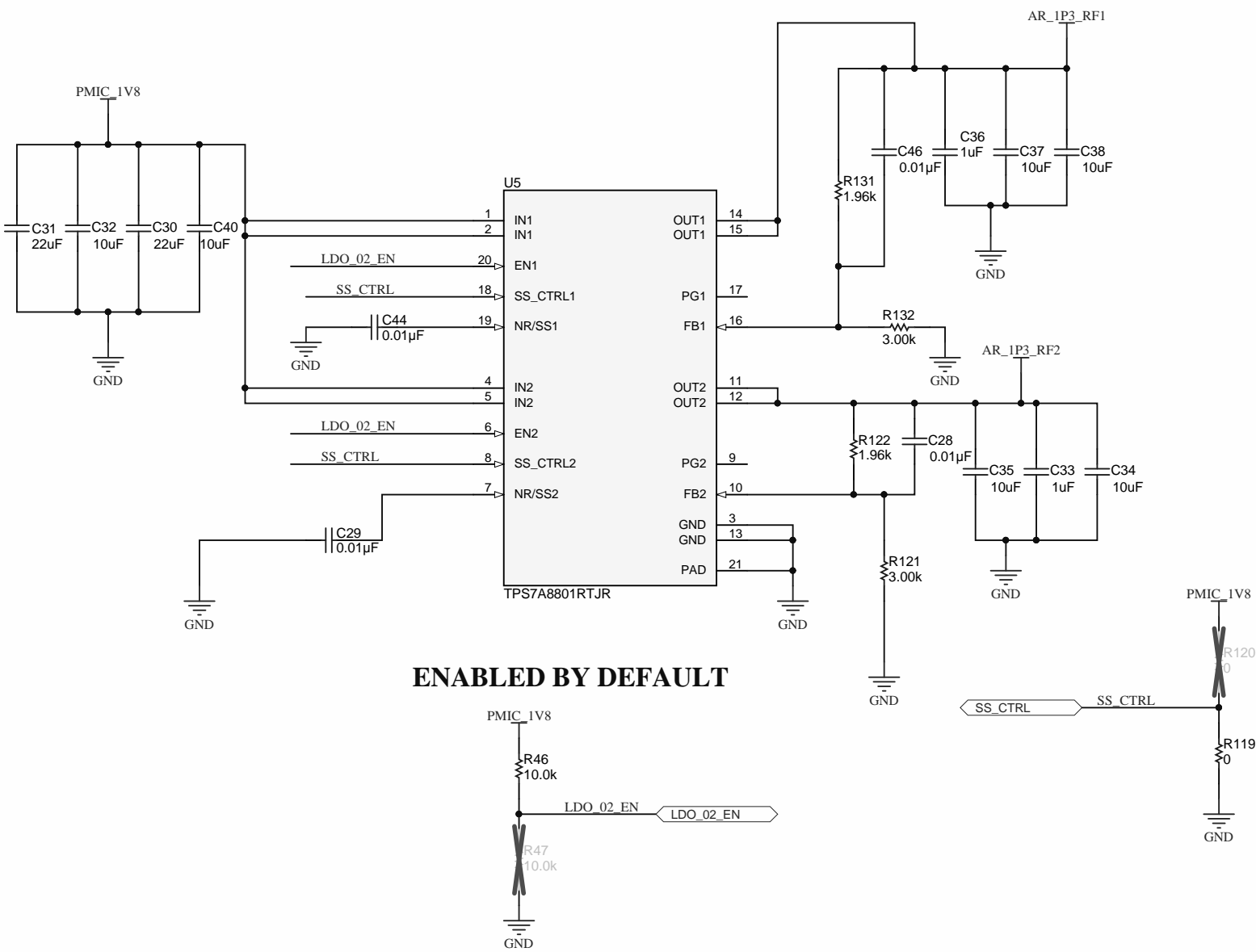
Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

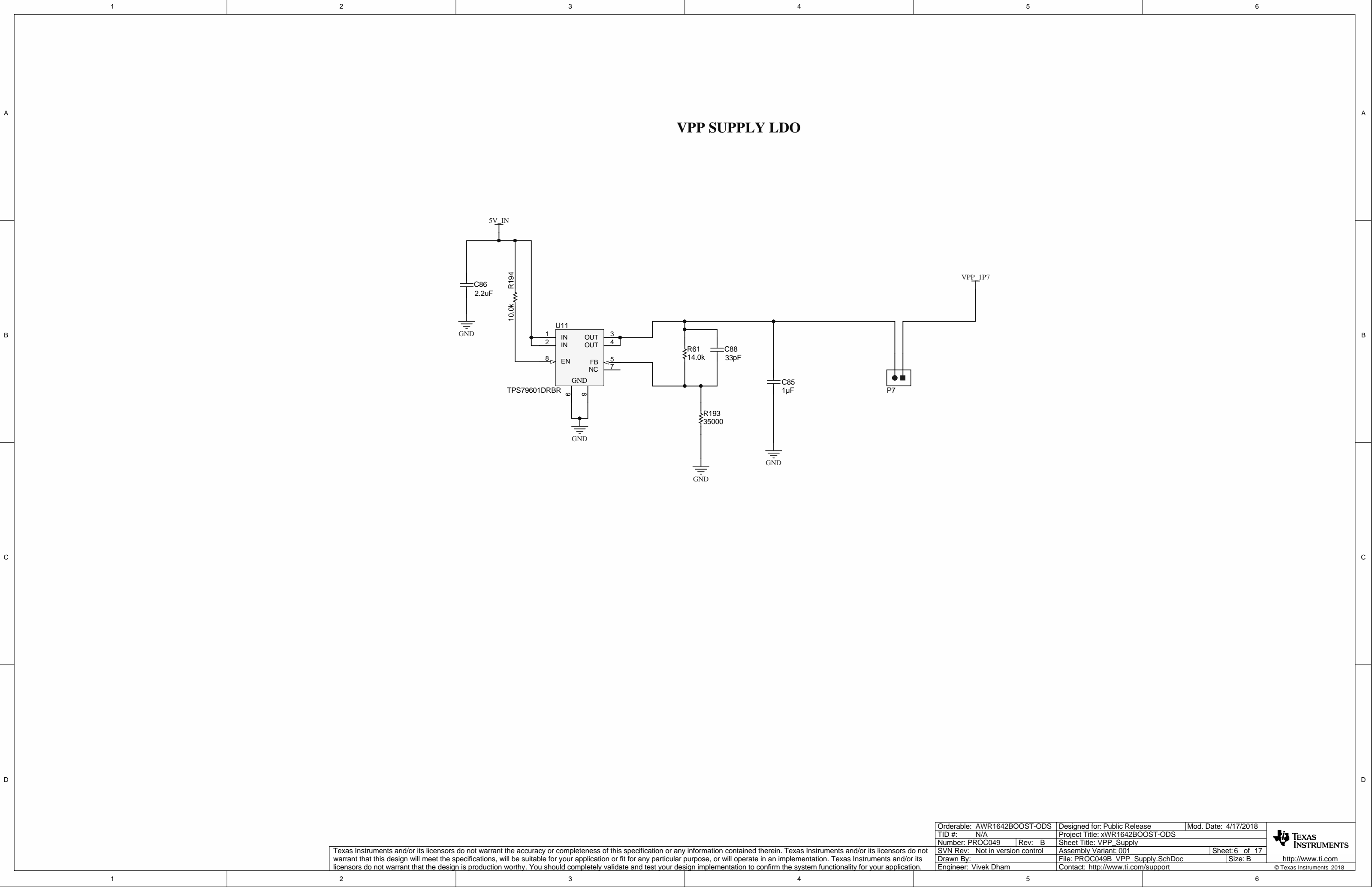
Orderable: AWR1642BOOST-ODS		Designed for: Public Release		Mod. Date: 4/17/2018	
TID #: N/A		Project Title: xWR1642BOOST-ODS			
Number: PROC049		Rev: B		Sheet Title: LDO_01 (1.8V Output)	
SVN Rev: Not in version control		Assembly Variant: 001		Sheet: 4 of 17	
Drawn By:		File: PROC049B_LDO_01 (1.8V Output).SchDoc		Size: B	
Engineer: Vivek Dham		Contact: http://www.ti.com/support			

 **TEXAS
INSTRUMENTS**

<http://www.ti.com>
© Texas Instruments 2018

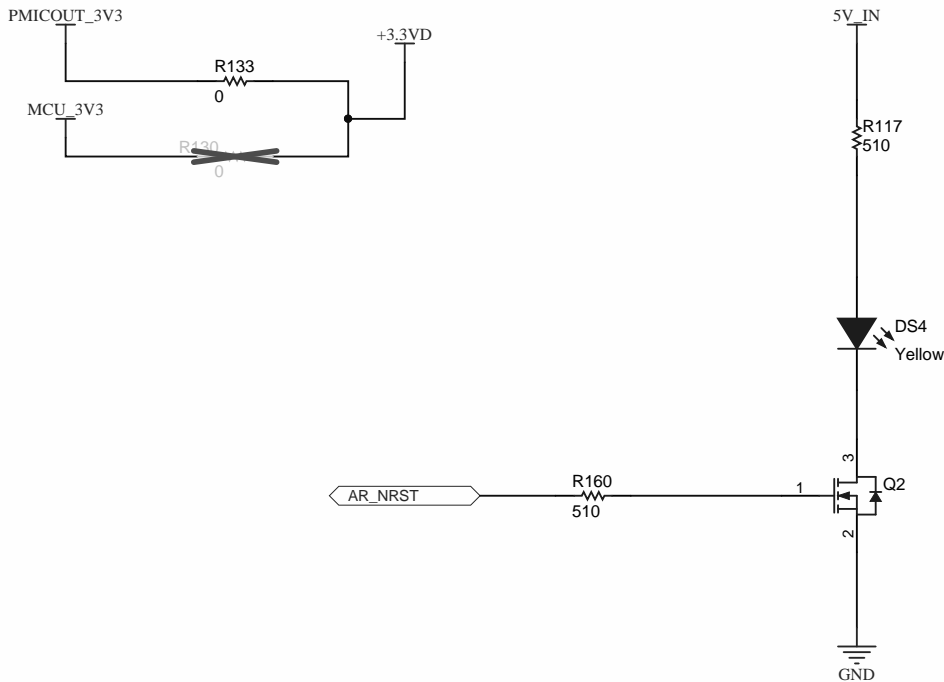
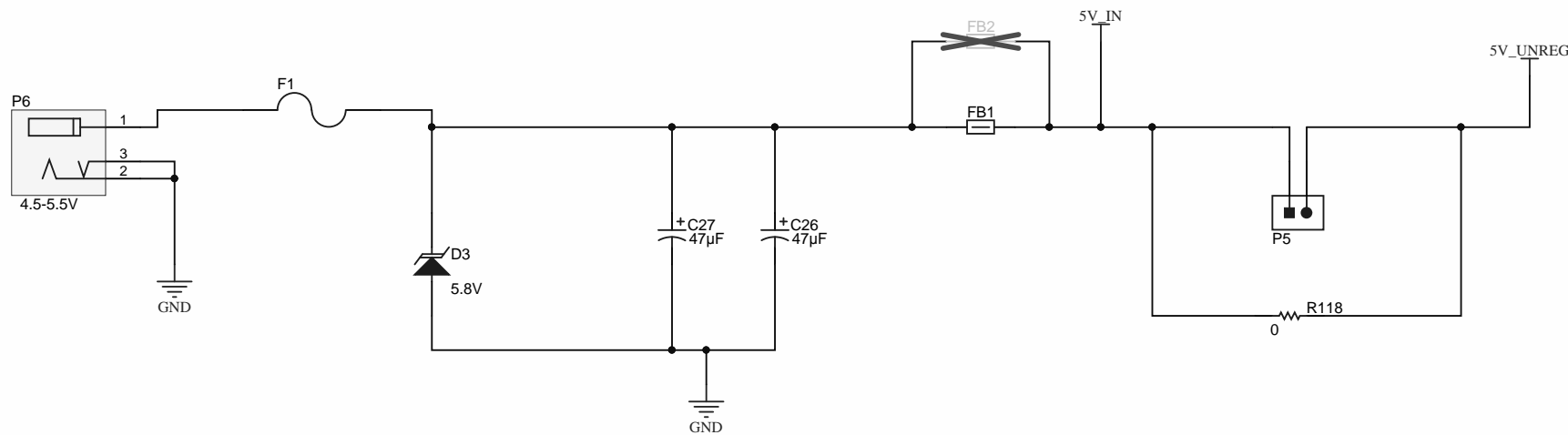
LDO_02 (1.3V LDO)





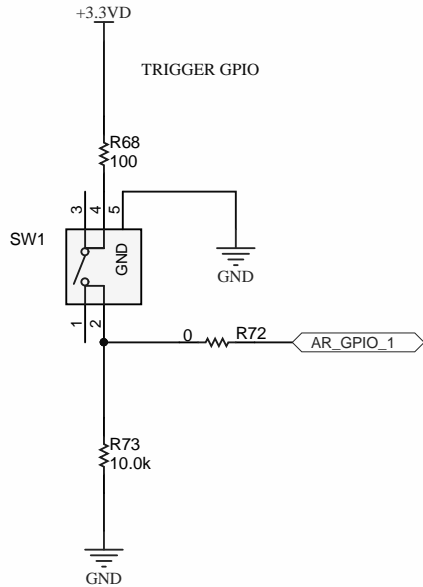
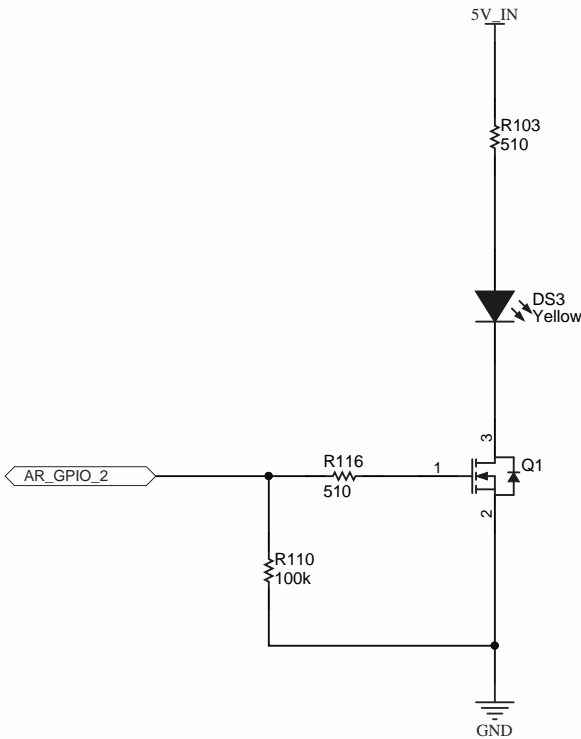
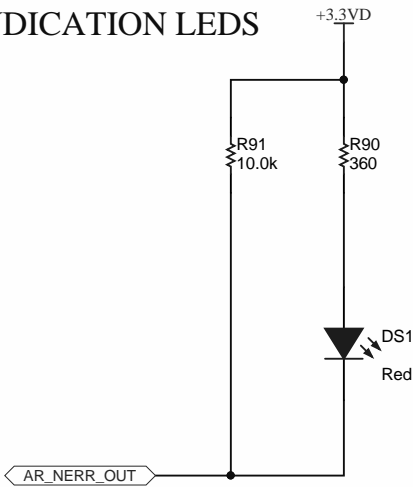
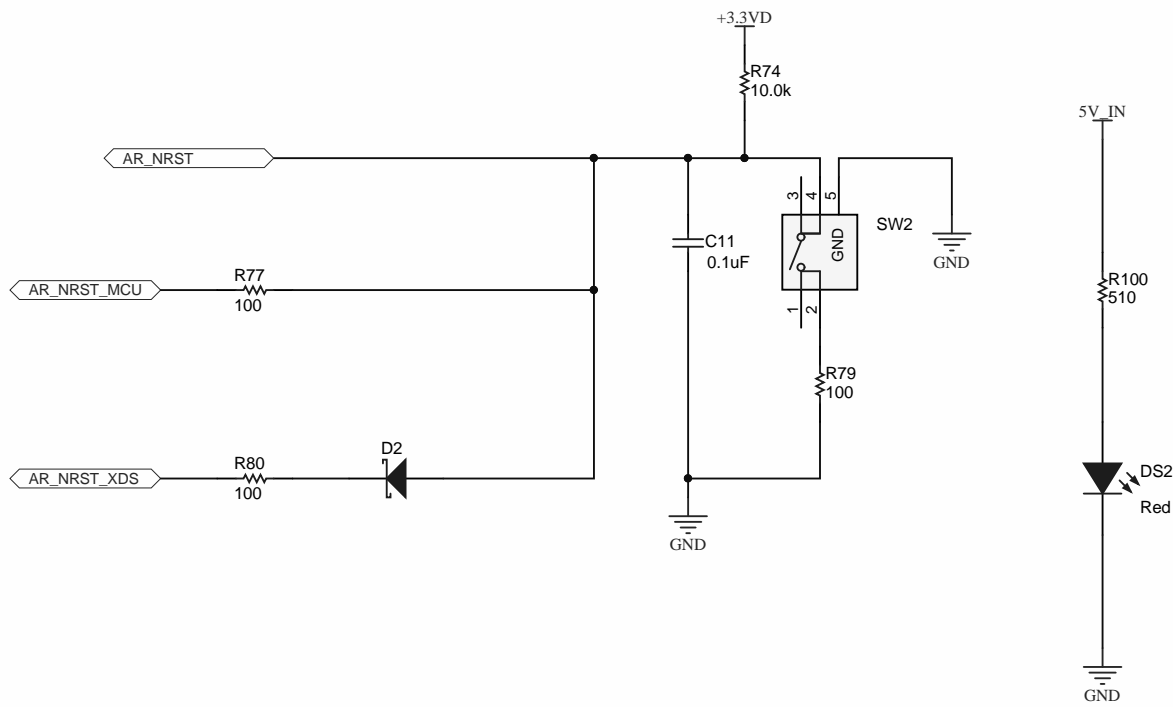
POWER SUPPLY CONNECTOR

3P3 SUPPLY FROM PMIC OR FROM THE MCU



RESET AND LEDS

INDICATION LEDS



Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

Orderable: AWR1642BOOST-ODS	Designed for: Public Release	Mod. Date: 4/17/2018
TID #: N/A	Project Title: xWR1642BOOST-ODS	
Number: PROC049	Rev: B	Sheet Title: Pwr_RST_LEDs
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 7 of 17
Drawn By:	File: PROC049B_Pwr_RST_LEDs.SchDoc	Size: B
Engineer: Vivek Dham	Contact: http://www.ti.com/support	




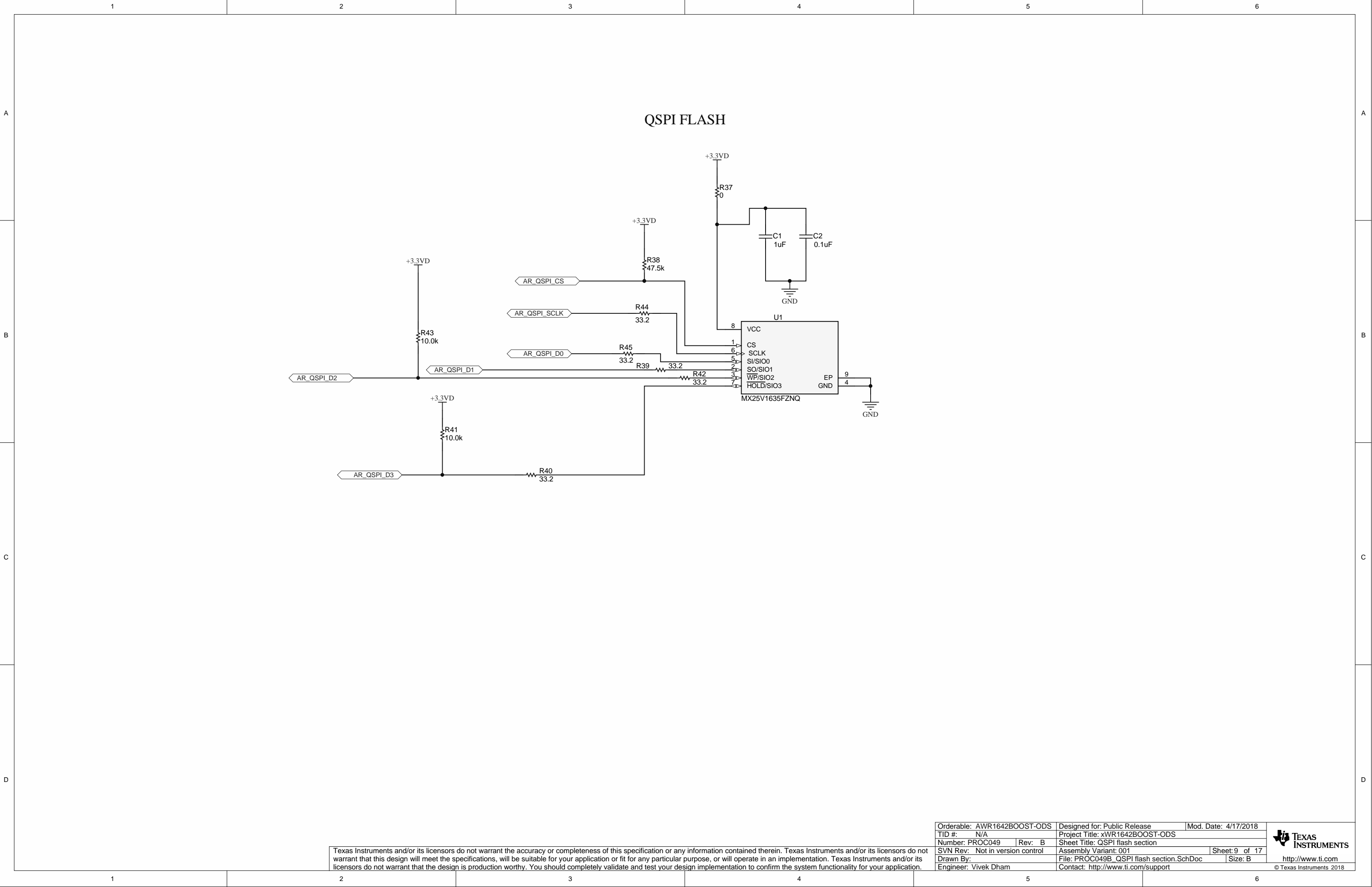
A



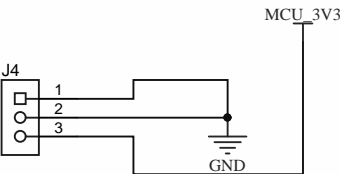
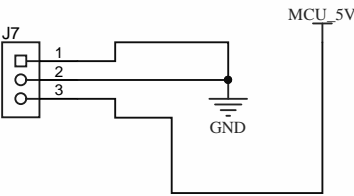
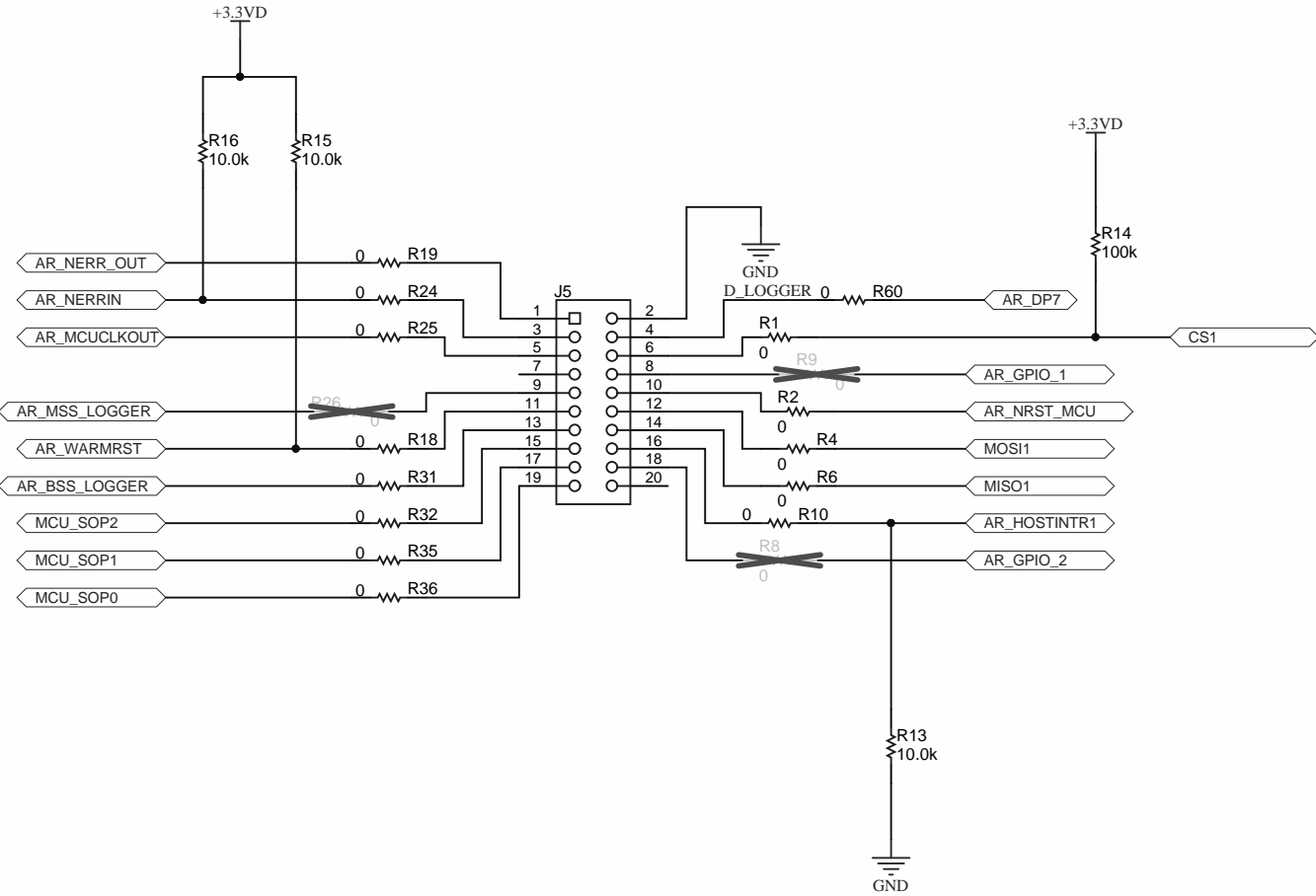
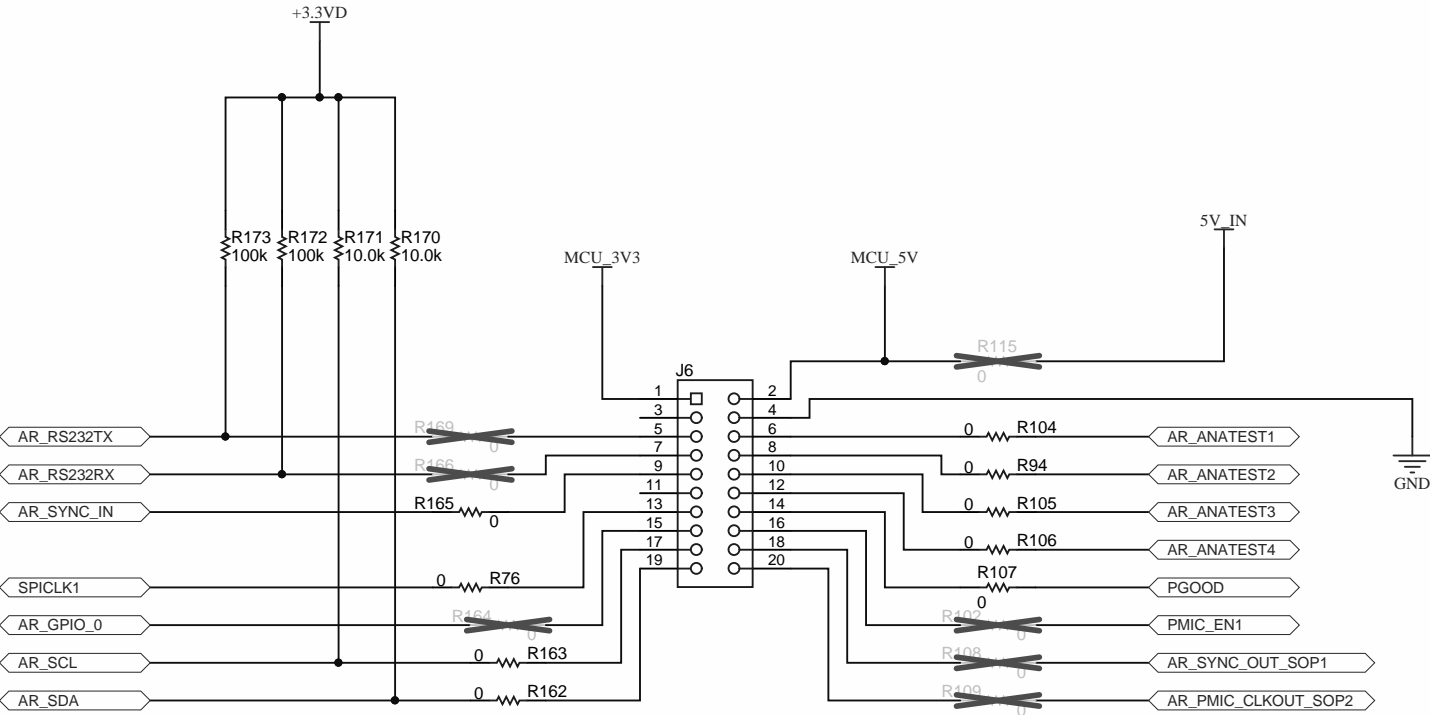
C

D

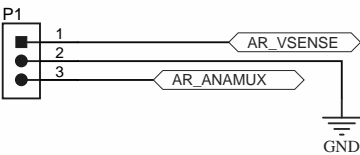
Orderable: AWR1642BOOST-ODS	Designed for: Public Release	Mod. Date: 4/17/2018	 TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2018
TID #: N/A	Project Title: xWR1642BOOST-ODS		
Number: PROC049	Rev: B	Sheet Title: PMIC	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 8 of 17	
Drawn By:	File: PROC049B_PMIC.SchDoc	Size: B	
Engineer: Vivek Dham	Contact: http://www.ti.com/support		



BP/LP CONNECTOR



ANALOG SIGNALS

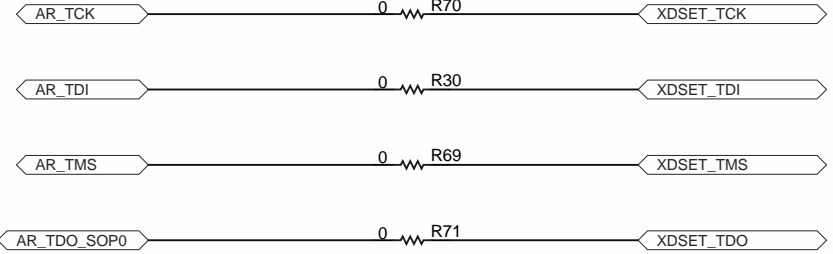
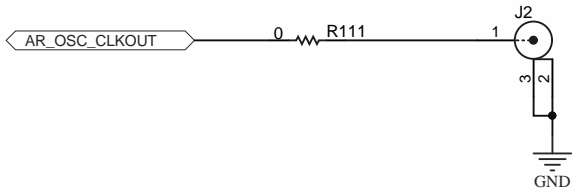
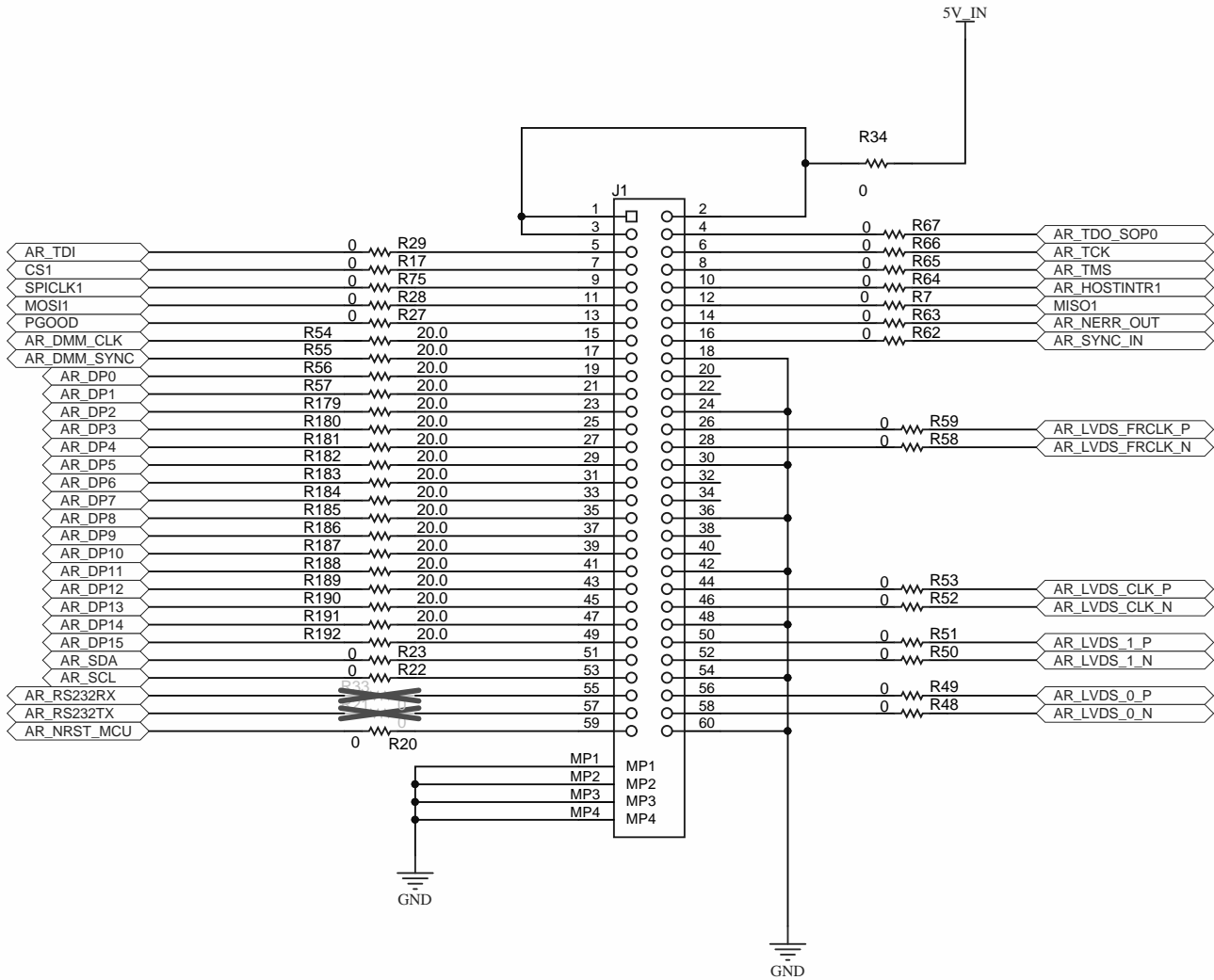


Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

Orderable: AWR1642BOOST-ODS	Designed for: Public Release	Mod. Date: 4/17/2018
TID #: N/A	Project Title: xWR1642BOOST-ODS	
Number: PROC049	Rev: B	Sheet Title: LP Connector
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 10 of 17
Drawn By:	File: PROC049B_LP Connector.SchDoc	Size: B
Engineer: Vivek Dham	Contact: http://www.ti.com/support	



HD CONNECTOR FOR LVDS/CSI AND JTAG



Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

A

B

C

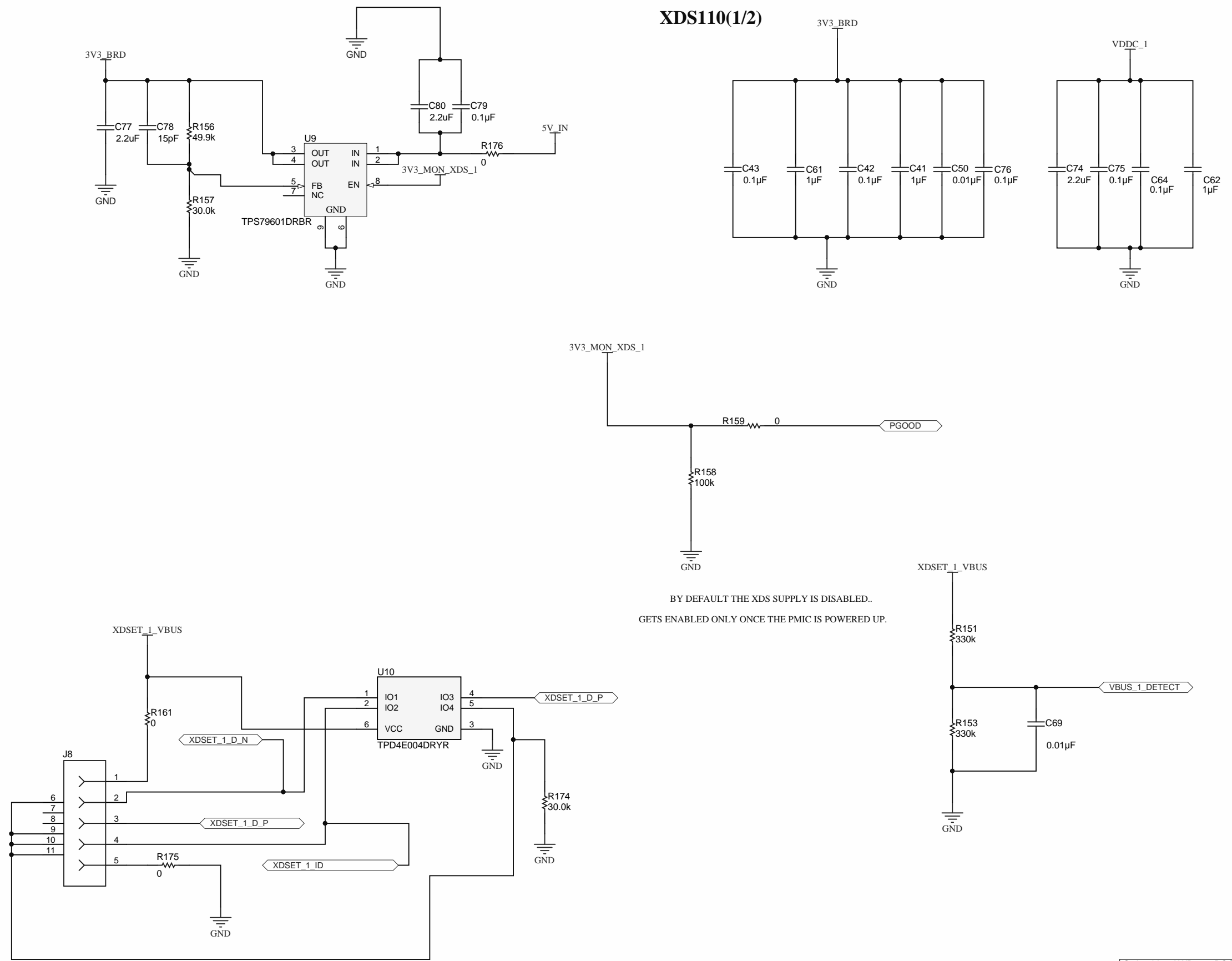
D

A

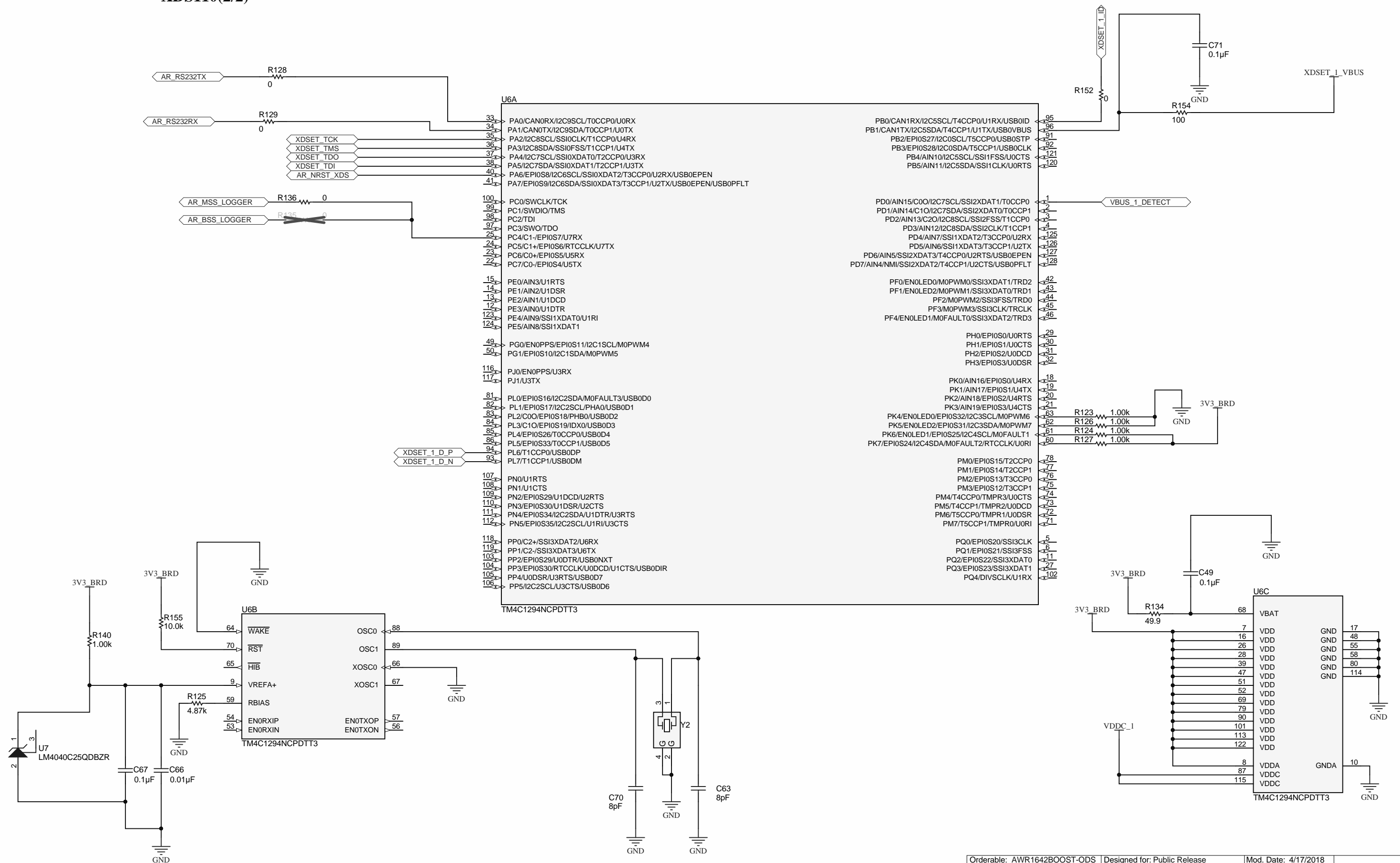
B


C

D

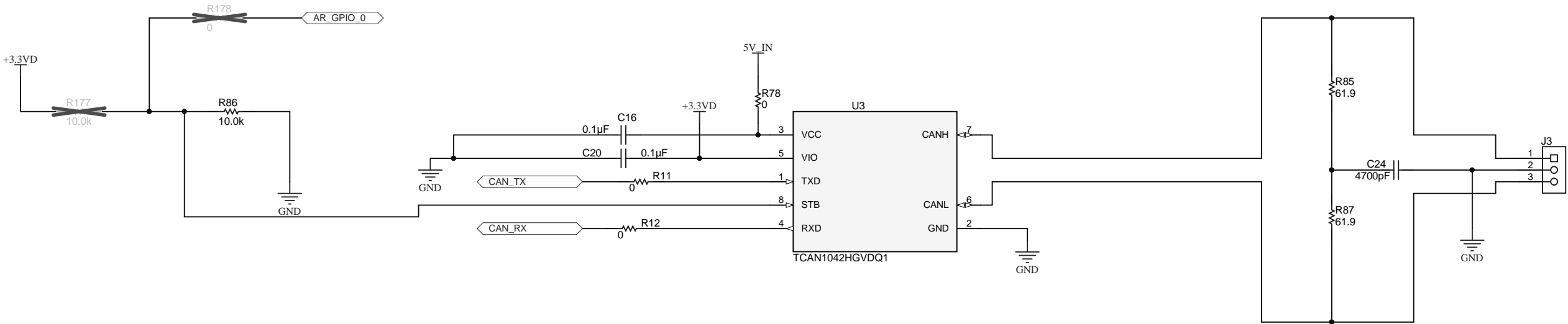


XDS110(2/2)

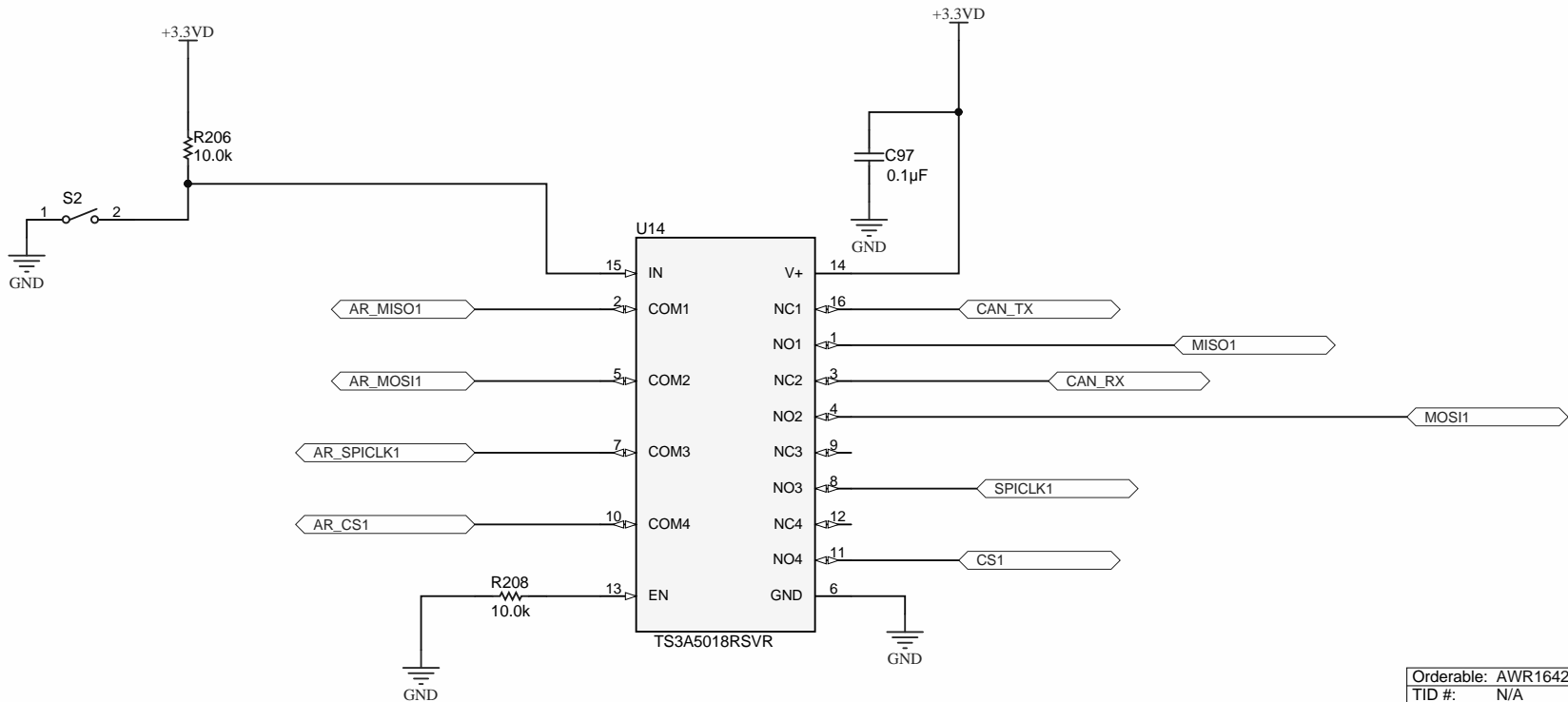


Orderable: AWR1642BOOST-ODS	Designed for: Public Release	Mod. Date: 4/17/2018	 TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2018
TID #: N/A	Project Title: xWR1642BOOST-ODS		
Number: PROC049	Rev: B	Sheet Title: XDS110 Interface_1B	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 13 of 17	
Drawn By:	File: PROC049B_XDS110 Interface_1B.SchDoc	Size: B	
Engineer: Vivek Dham	Contact: http://www.ti.com/support		

CAN INTERFACE



MUX BETWEEN SPI AND CAN INTERFACE



Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

Orderable: AWR1642BOOST-ODS		Designed for: Public Release		Mod. Date: 4/17/2018	
TID #: N/A		Project Title: xWR1642BOOST-ODS			
Number: PROC049		Rev: B		Sheet Title: CAN Interface	
SVN Rev: Not in version control		Assembly Variant: 001		Sheet: 14 of 17	
Drawn By:		File: PROC049B_CAN Interface.SchDoc		Size: B	
Engineer: Vivek Dham		Contact: http://www.ti.com/support			



A

A

C

C

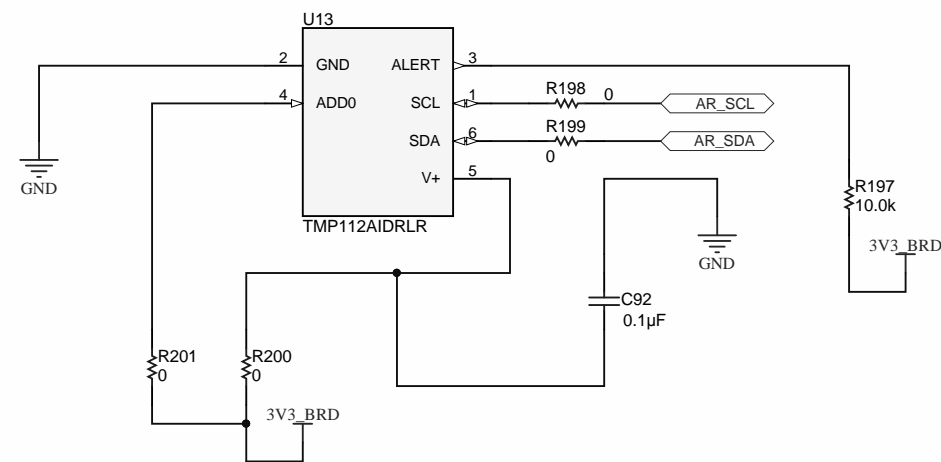
D

D

Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. Texas Instruments and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

ONBOARD TEMP SENSORS

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



DEFAULT I2C ADDRESS 0X48
TEMP SENSOR CLOSE TO PMIC

