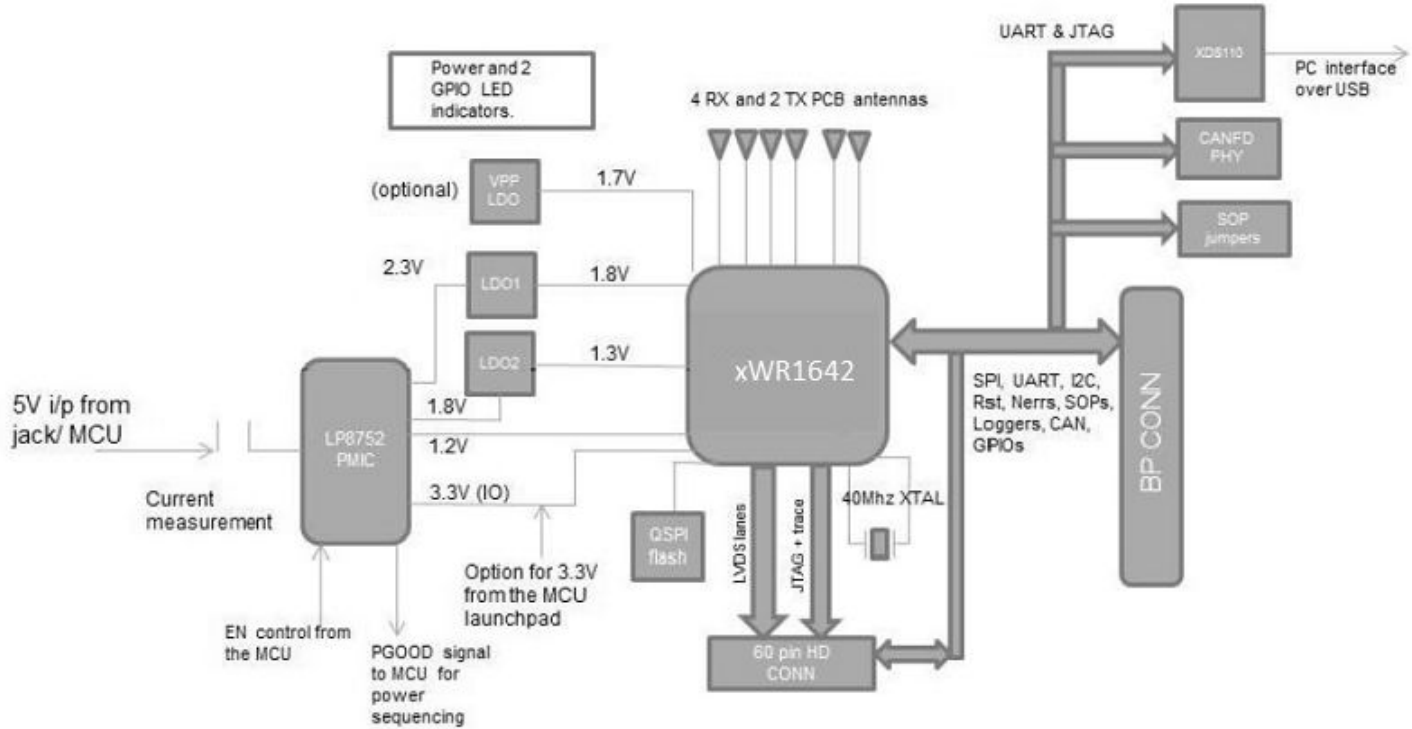


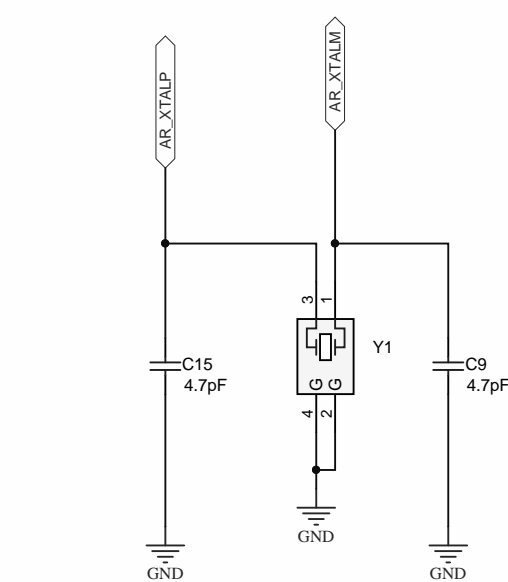
Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
B	1	22/01/2018	Vivek dham	ADDED SWITCH CONTROL TO MOVE between SPI and CAN interface
B	2	22/01/2018	Vivek dham	Enabled by default the 5V supply from the 60pin HD connector.
B	3	22/01/2018	Vivek dham	Enabled by default the SYNC_IN signal connection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

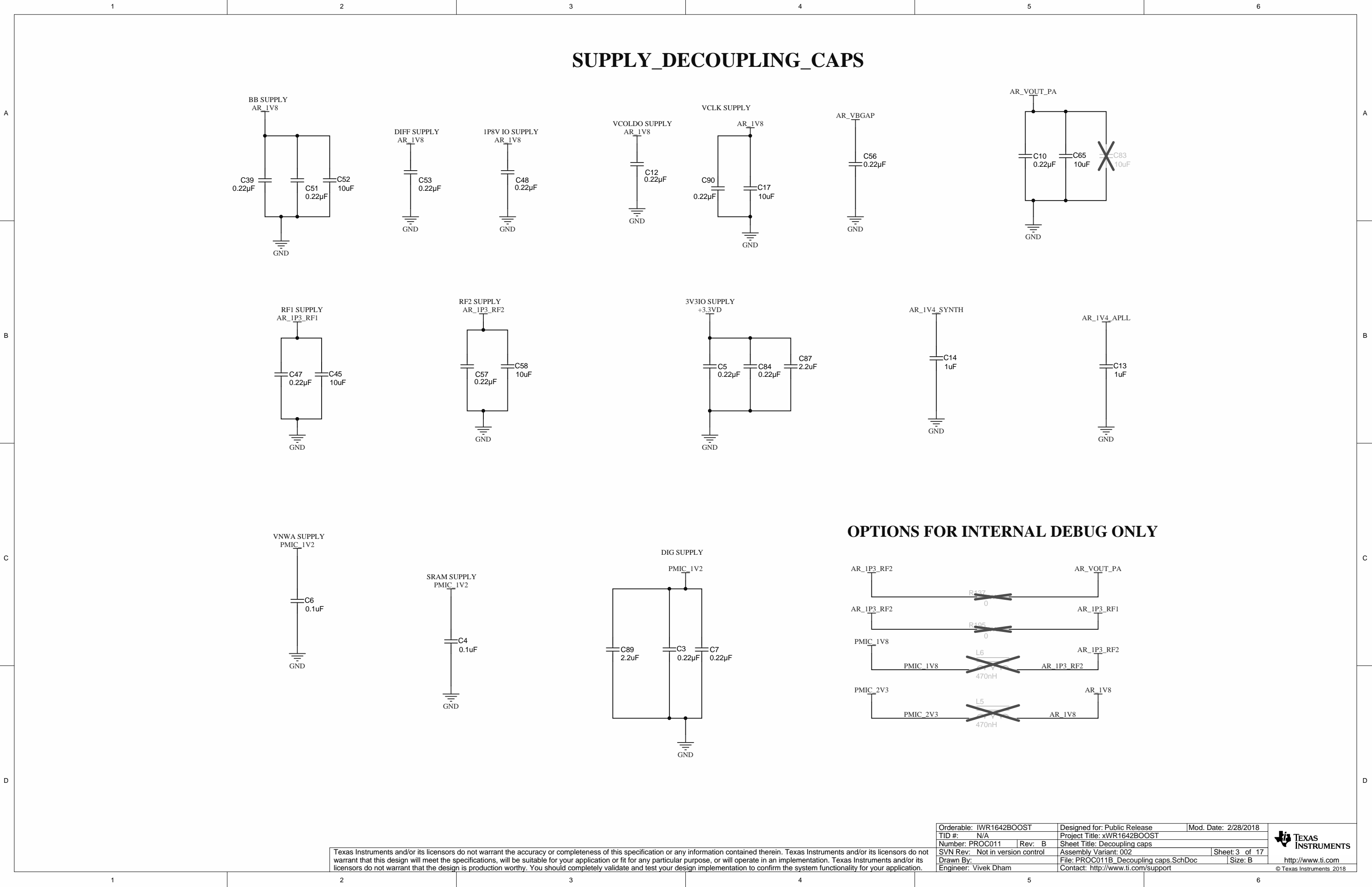
TABLE OF CONTENTS

SHEET NO.	SHEET NAME
1	PROC011B_COVERSHEET
2	PROC011B_DUT
3	PROC011B_Decoupling caps
4	PROC011B_LDO_01 (1.8V Output)
5	PROC011B_LDO_02 (1.3V Output)
6	PROC011B_VPP_Supply
7	PROC011B_Pwr_RST_LEDs
8	PROC011B_PMIC
9	PROC011B_QSPI flash section
10	PROC011B_LP Connector
11	PROC011B_HD Connector
12	PROC011B_XDS110 Interface_1A
13	PROC011B_XDS110 Interface_1B
14	PROC011B_CAN Interface
15	PROC011B_SOP selection
16	PROC011B_Tempsensor
17	PROC011B_Hardware

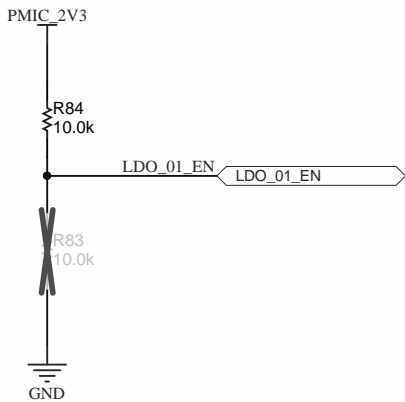
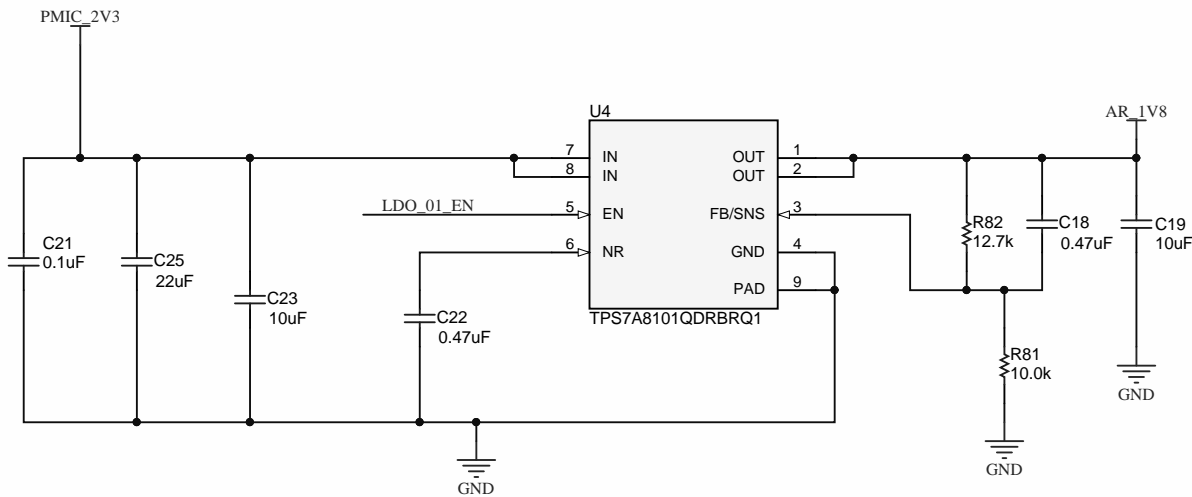




 **TEXAS
INSTRUMENTS**
<http://www.ti.com>
© Texas Instruments 2018



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: IWR1642BOOST	Designed for: Public Release	Mod. Date: 2/28/2018
TID #: N/A	Project Title: xWR1642BOOST	
Number: PROC011	Rev: B	Sheet Title: LDO_01 (1.8V Output)
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 4 of 17
Drawn By:	File: PROC011B_LDO_01 (1.8V Output).SchDoc	Size: B
Engineer: Vivek Dham	Contact: http://www.ti.com/support	http://www.ti.com
© Texas Instruments 2018		



A

A

B

B

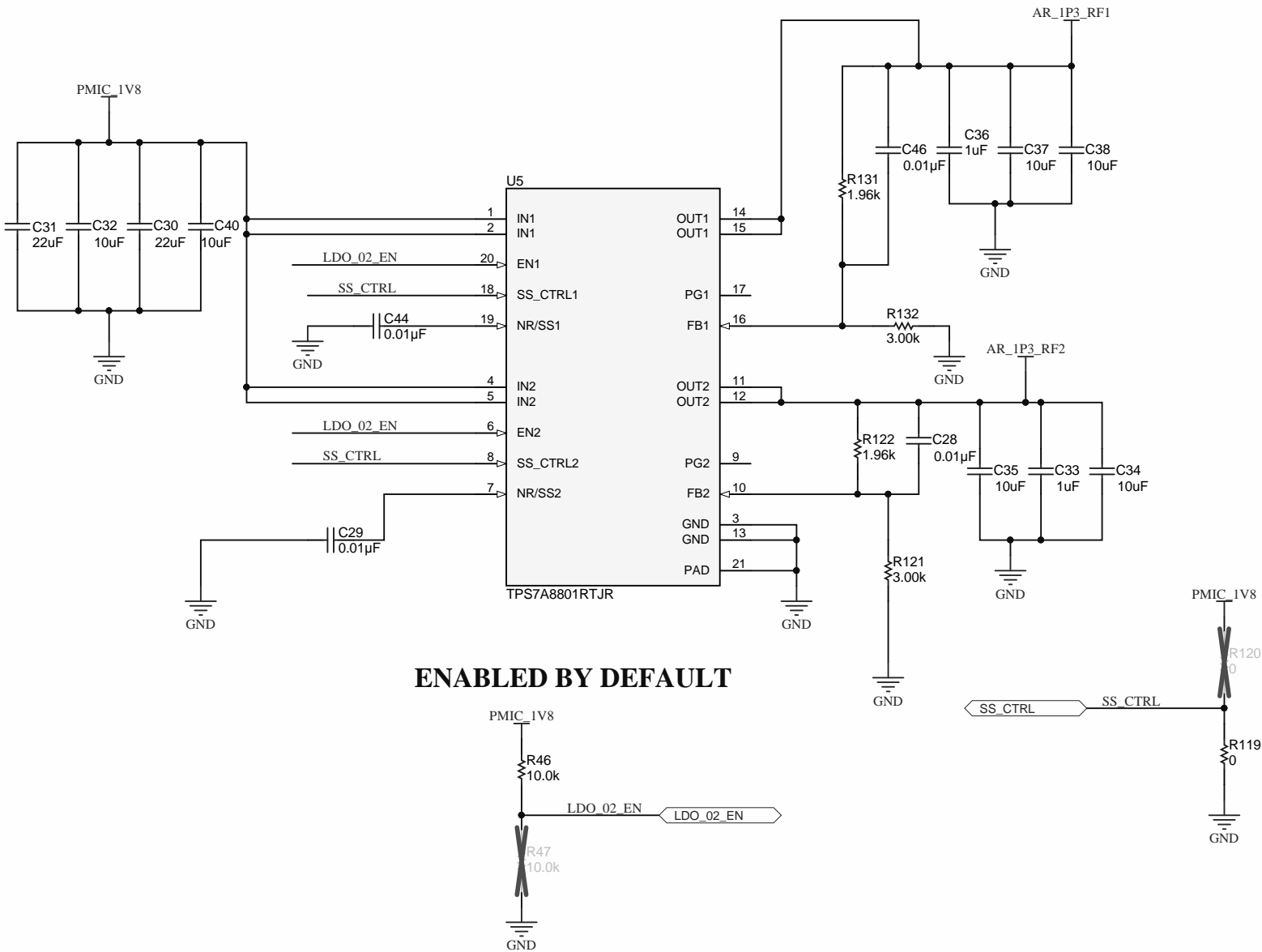
C

C

D

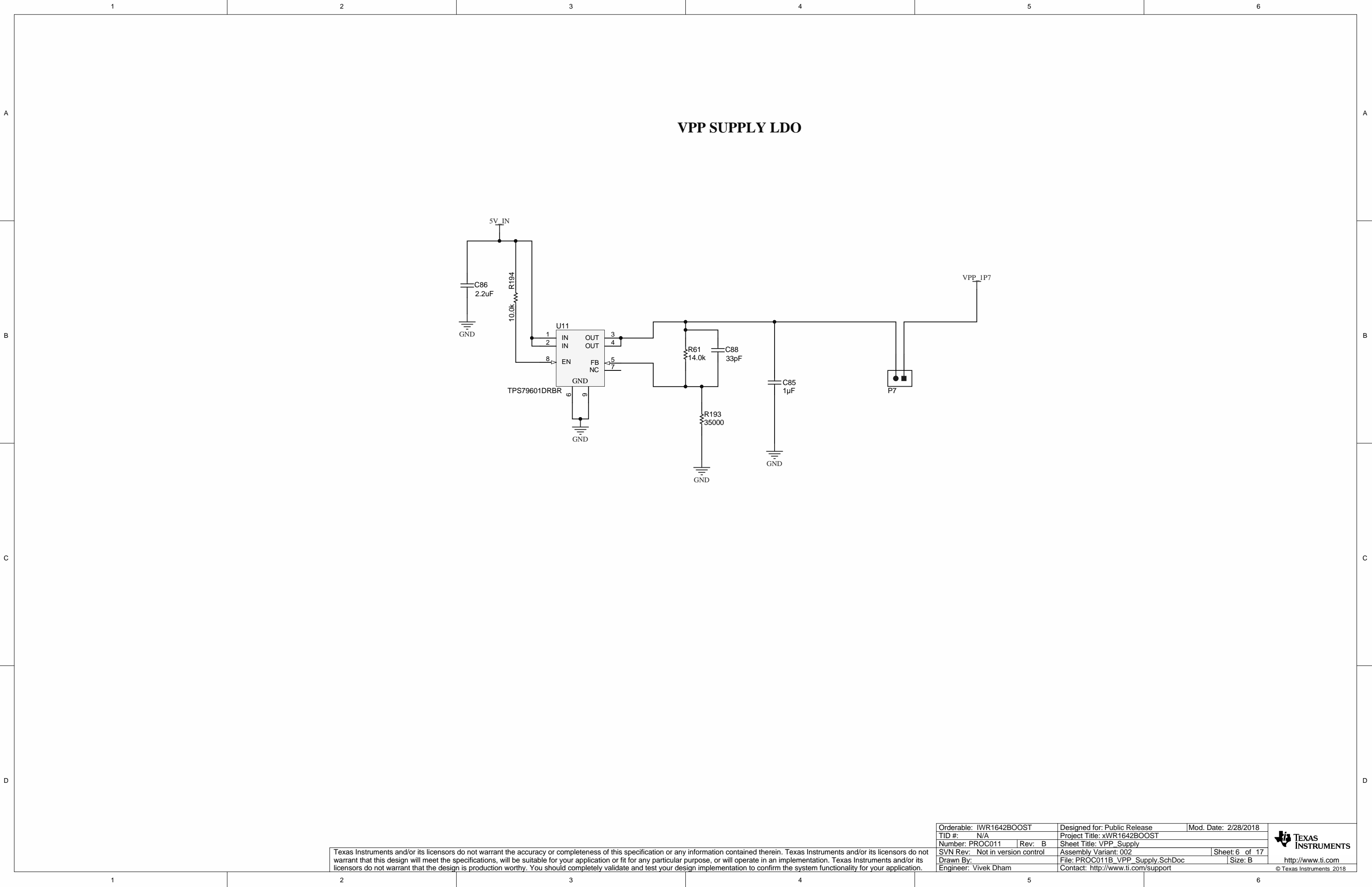
D

LDO_02 (1.3V LDO)

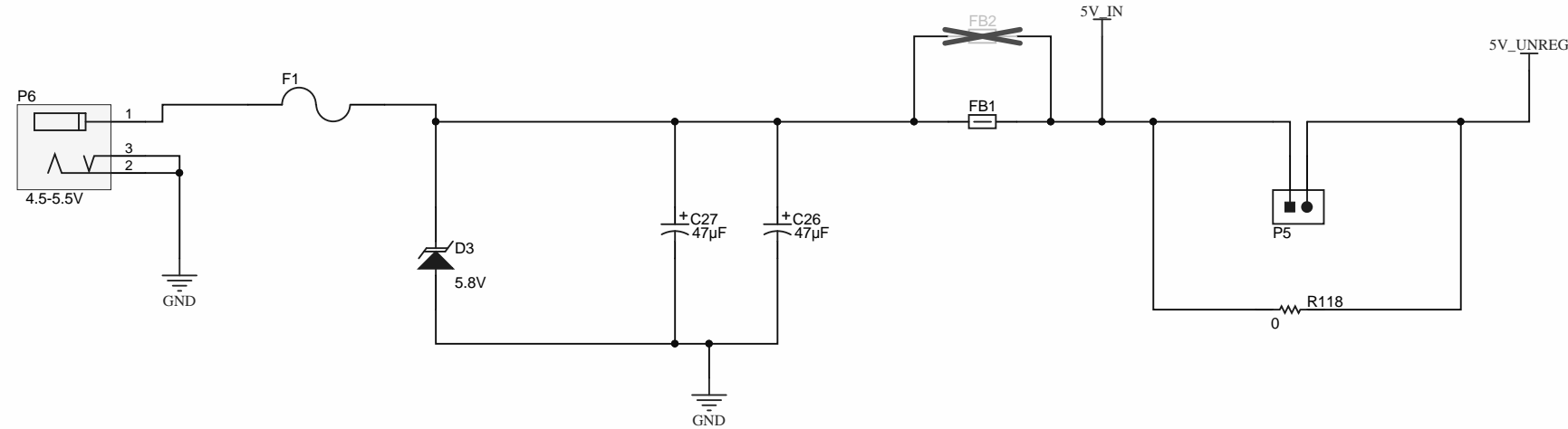


Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular 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.

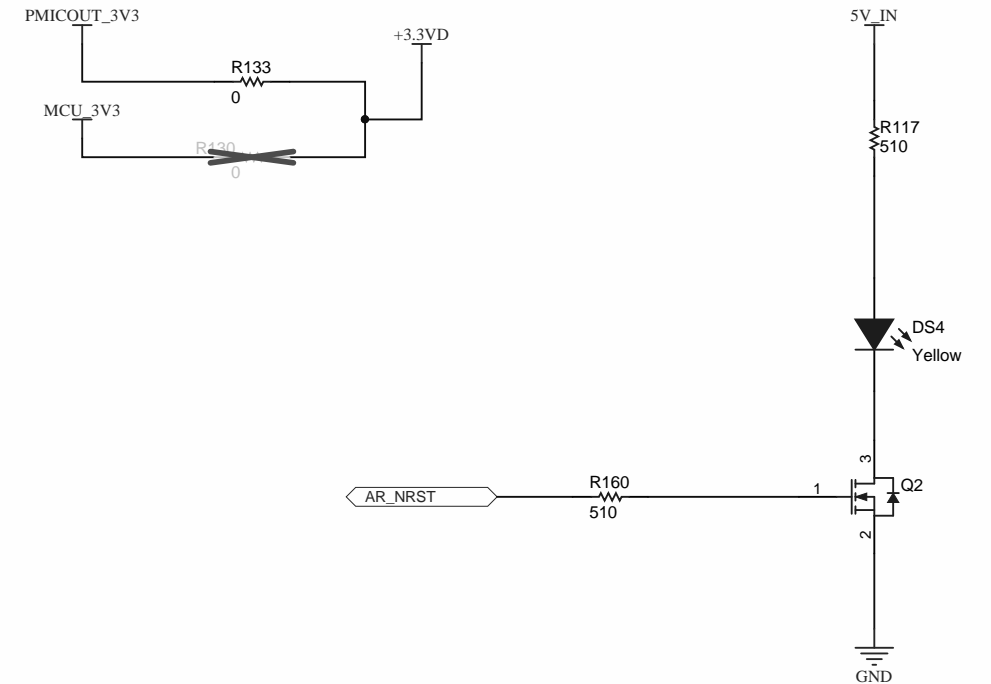
Orderable: IWR1642BOOST		Designed for: Public Release		Mod. Date: 2/28/2018	
TID #: N/A		Project Title: xWR1642BOOST			
Number: PROC011		Rev: B		Sheet Title: LDO_02 (1.3V Output)	
SVN Rev: Not in version control		Assembly Variant: 002			Sheet: 5 of 17
Drawn By:		File: PROC011B_LDO_02 (1.3V Output).SchDoc			Size: B
Engineer: Vivek Dham		Contact: http://www.ti.com/support			



POWER SUPPLY CONNECTOR

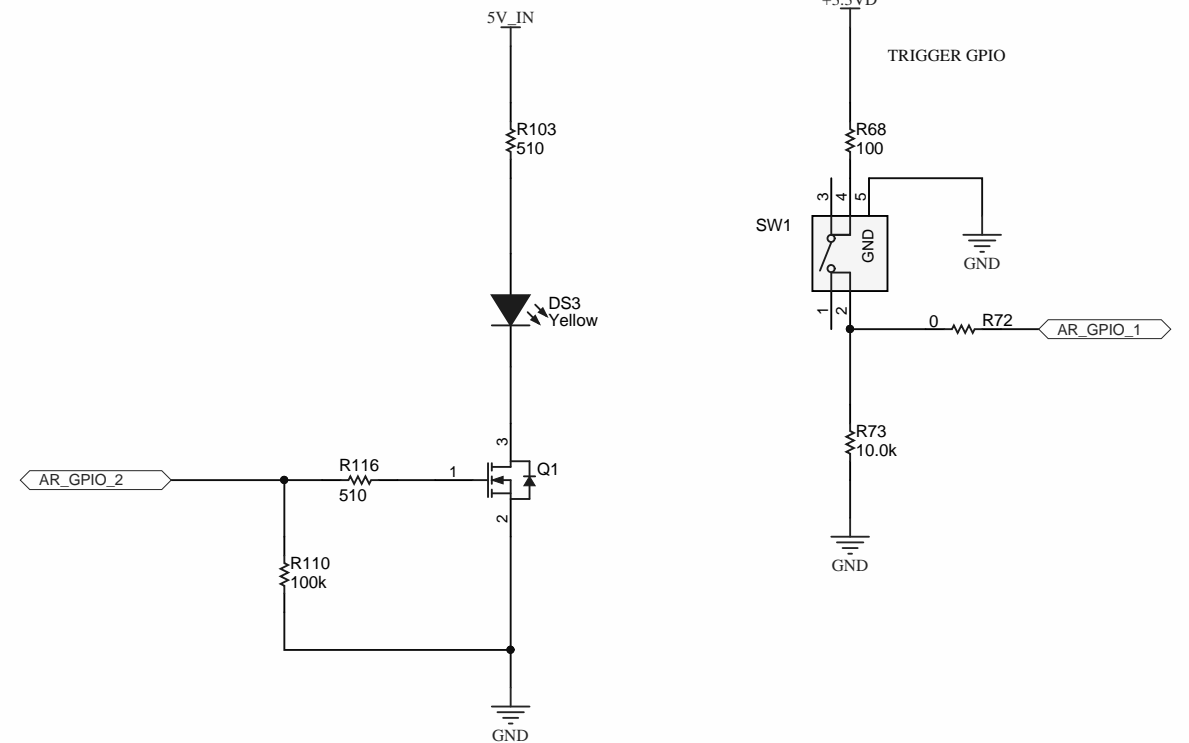
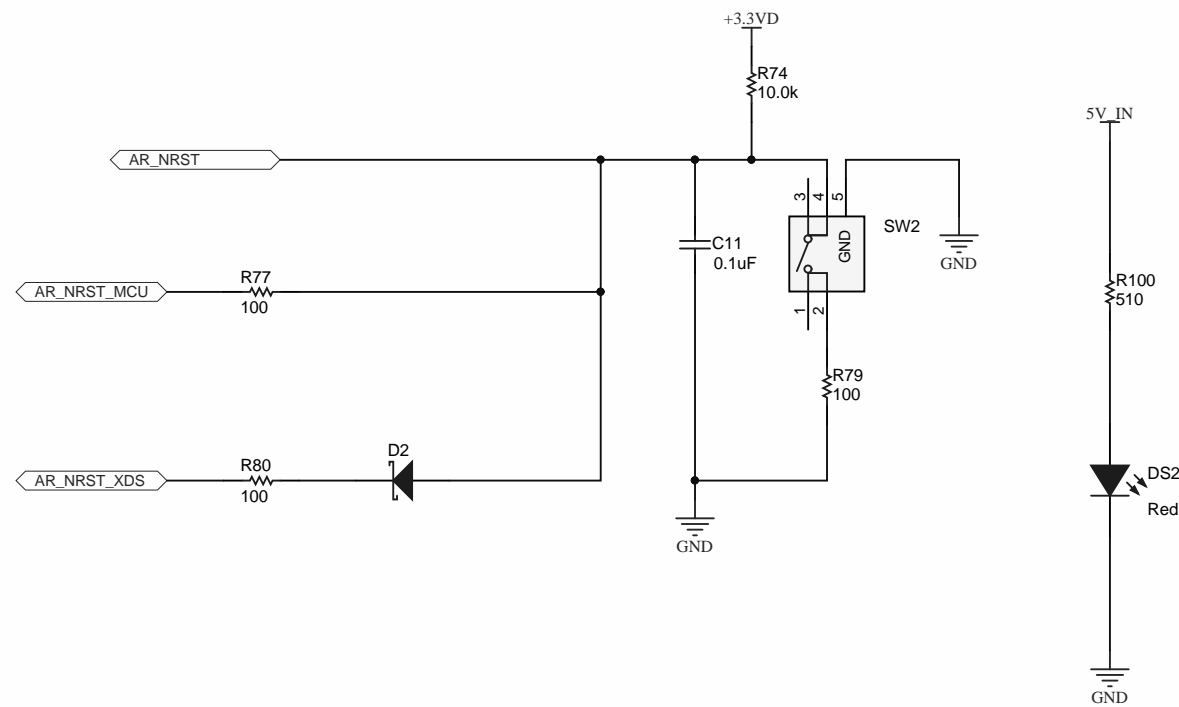
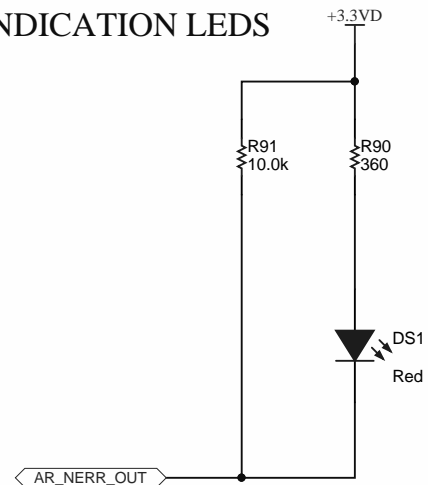


3P3 SUPPLY FROM PMIC OR FROM THE MCU



RESET AND LEDS

INDICATION LEDS

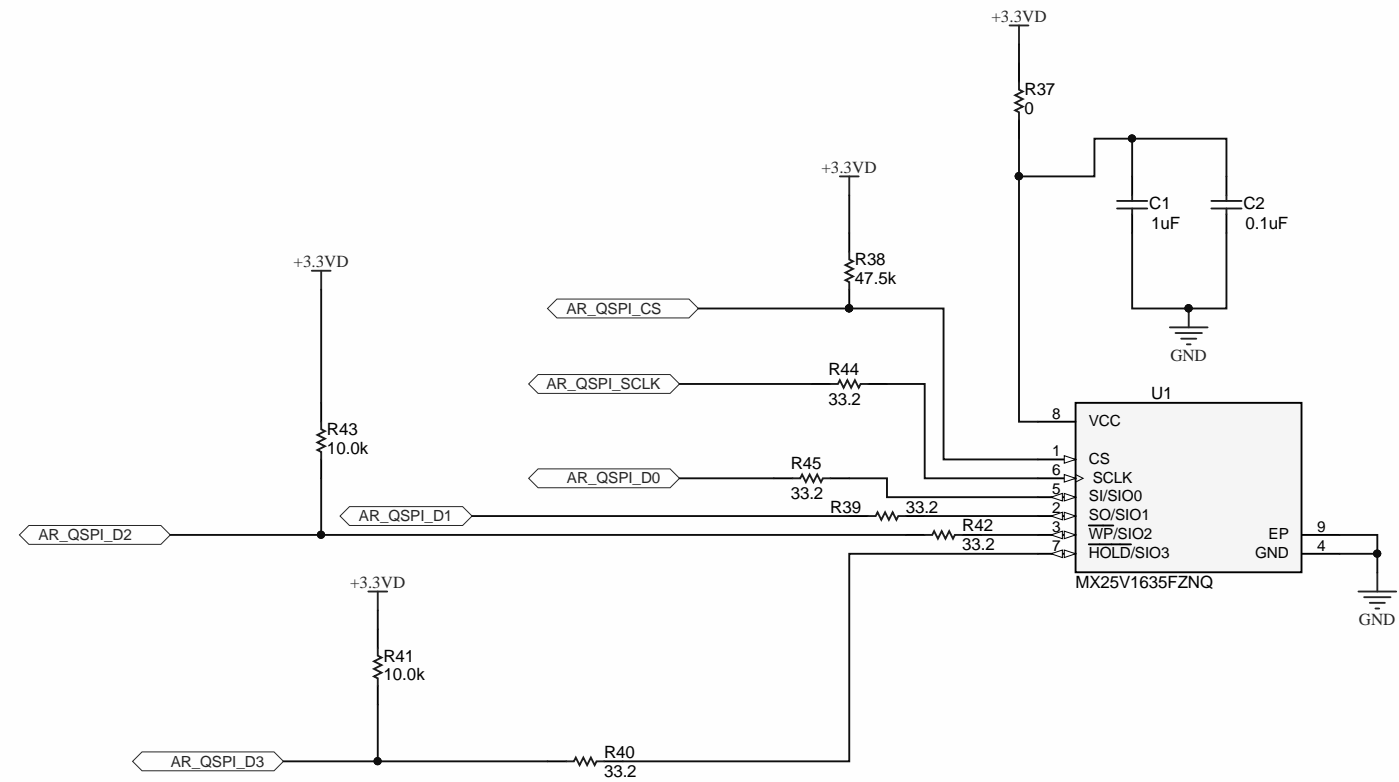



A



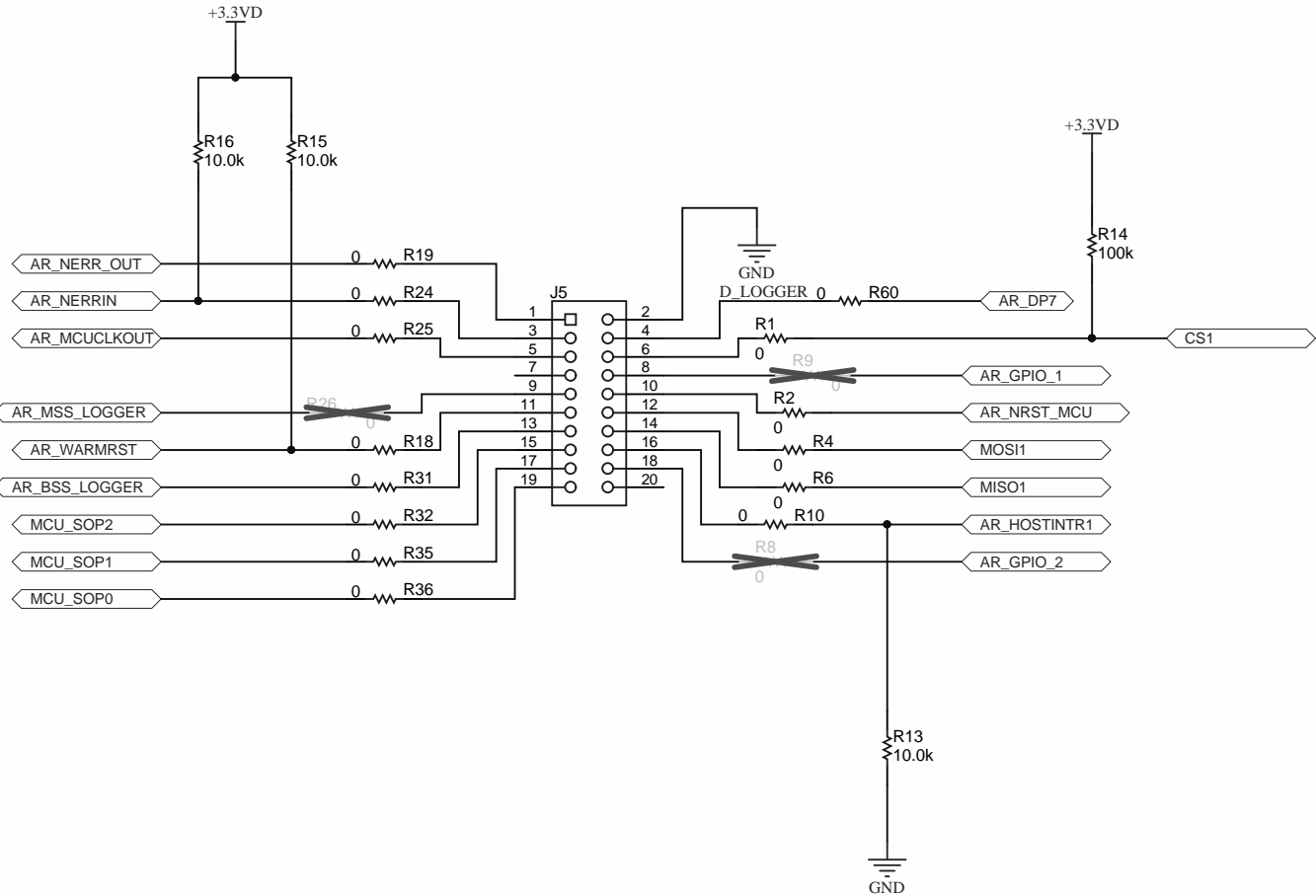
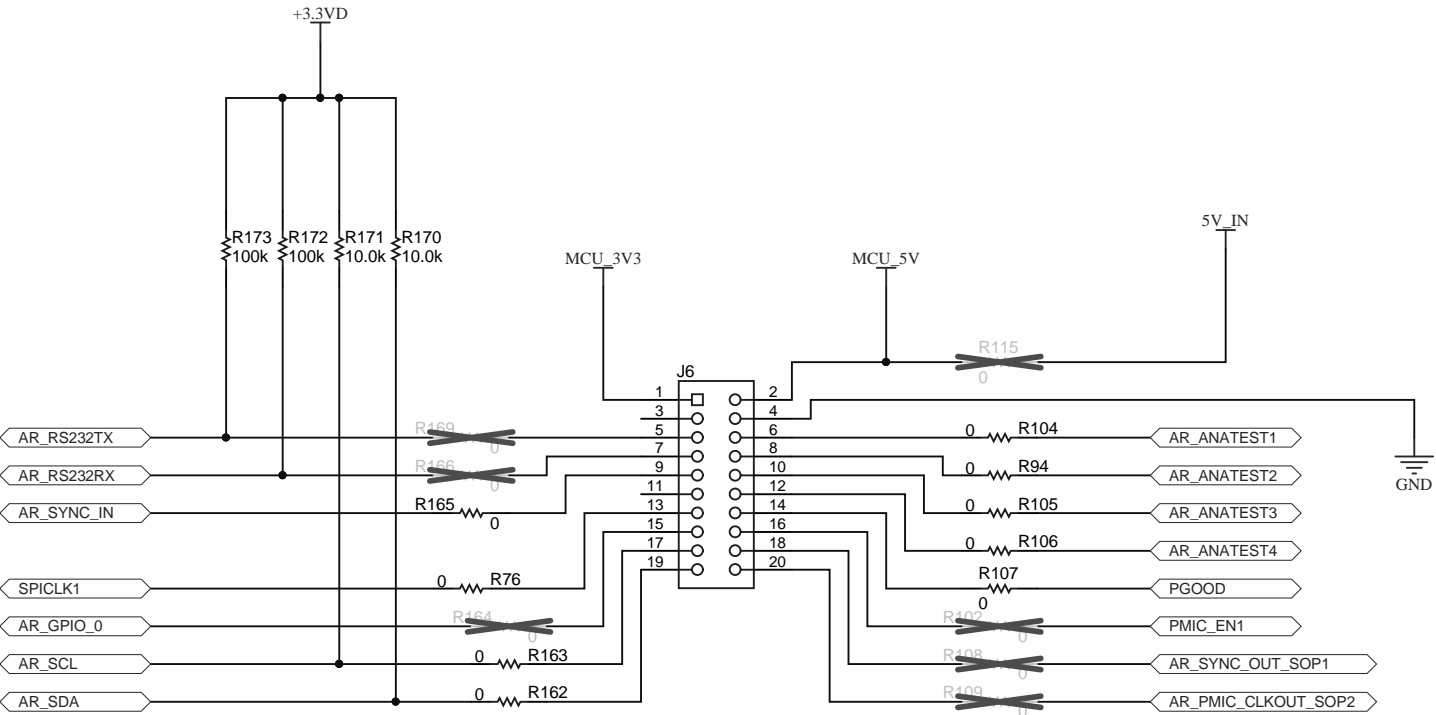
Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular 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.

QSPI FLASH

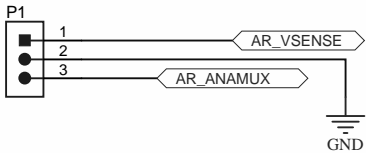


Orderable: IWR1642BOOST	Designed for: Public Release	Mod. Date: 2/28/2018	 TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2018
TID #: N/A	Project Title: xWR1642BOOST		
Number: PROC011	Rev: B	Sheet Title: QSPI flash section	
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 9 of 17	
Drawn By:	File: PROC011B_QSPI flash section.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: IWR1642BOOST	Designed for: Public Release	Mod. Date: 3/7/2018
TID #: N/A	Project Title: xWR1642BOOST	
Number: PROC011	Rev: B	Sheet Title: LP Connector
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 10 of 17
Drawn By:	File: PROC011B_LP Connector.SchDoc	Size: B
Engineer: Vivek Dham	Contact: http://www.ti.com/support	

A

A

B

B

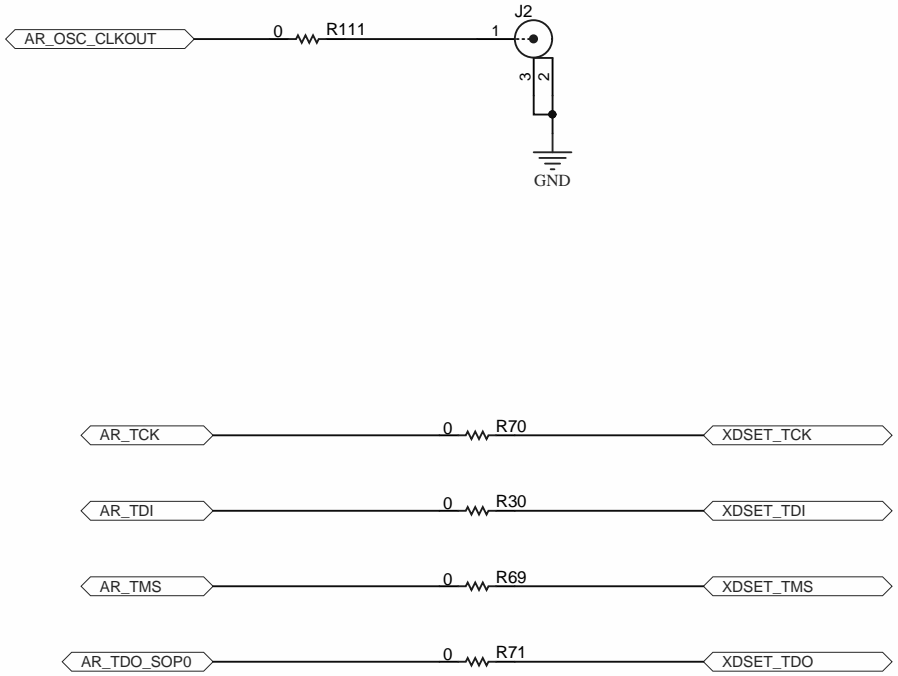
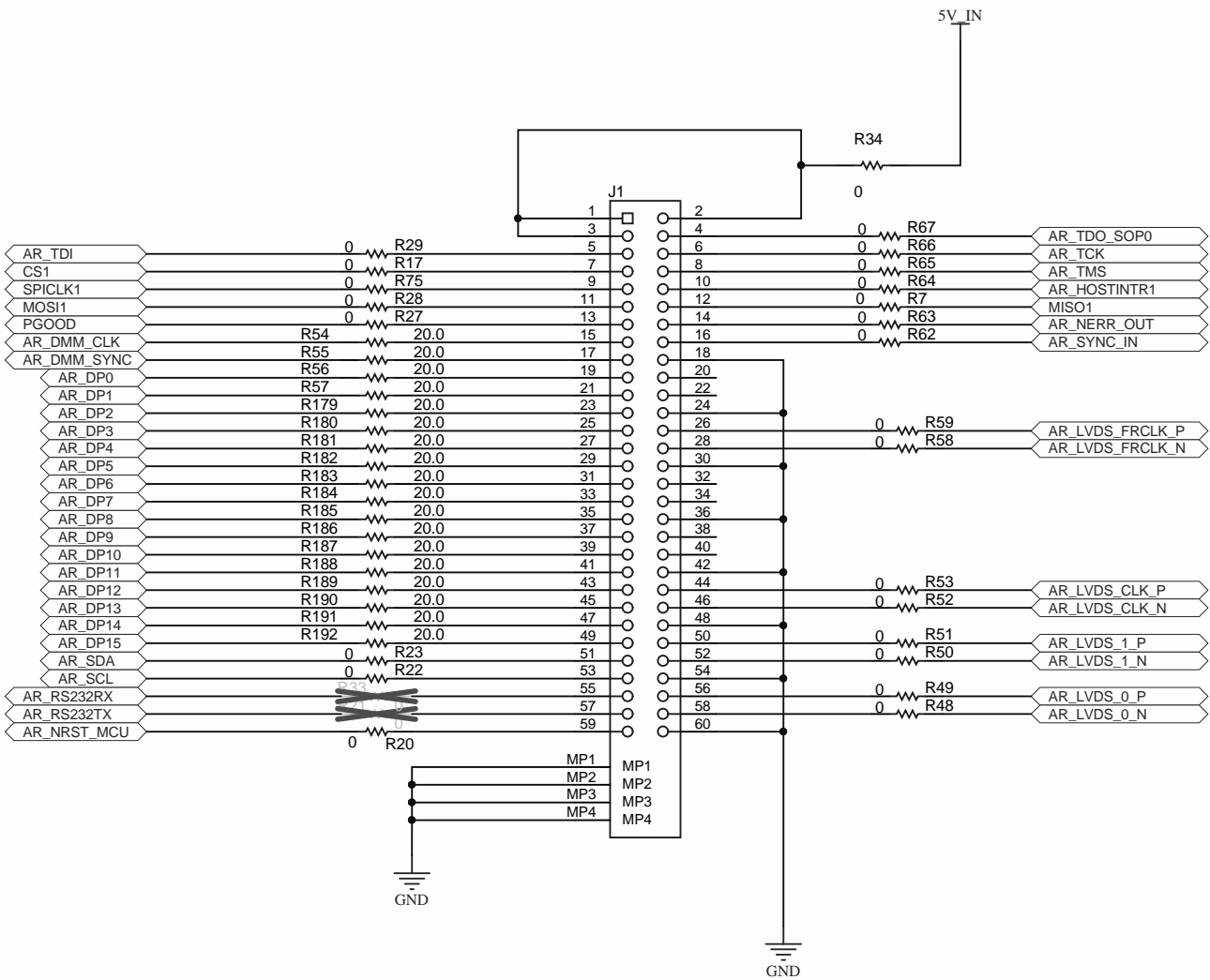
C

C

D

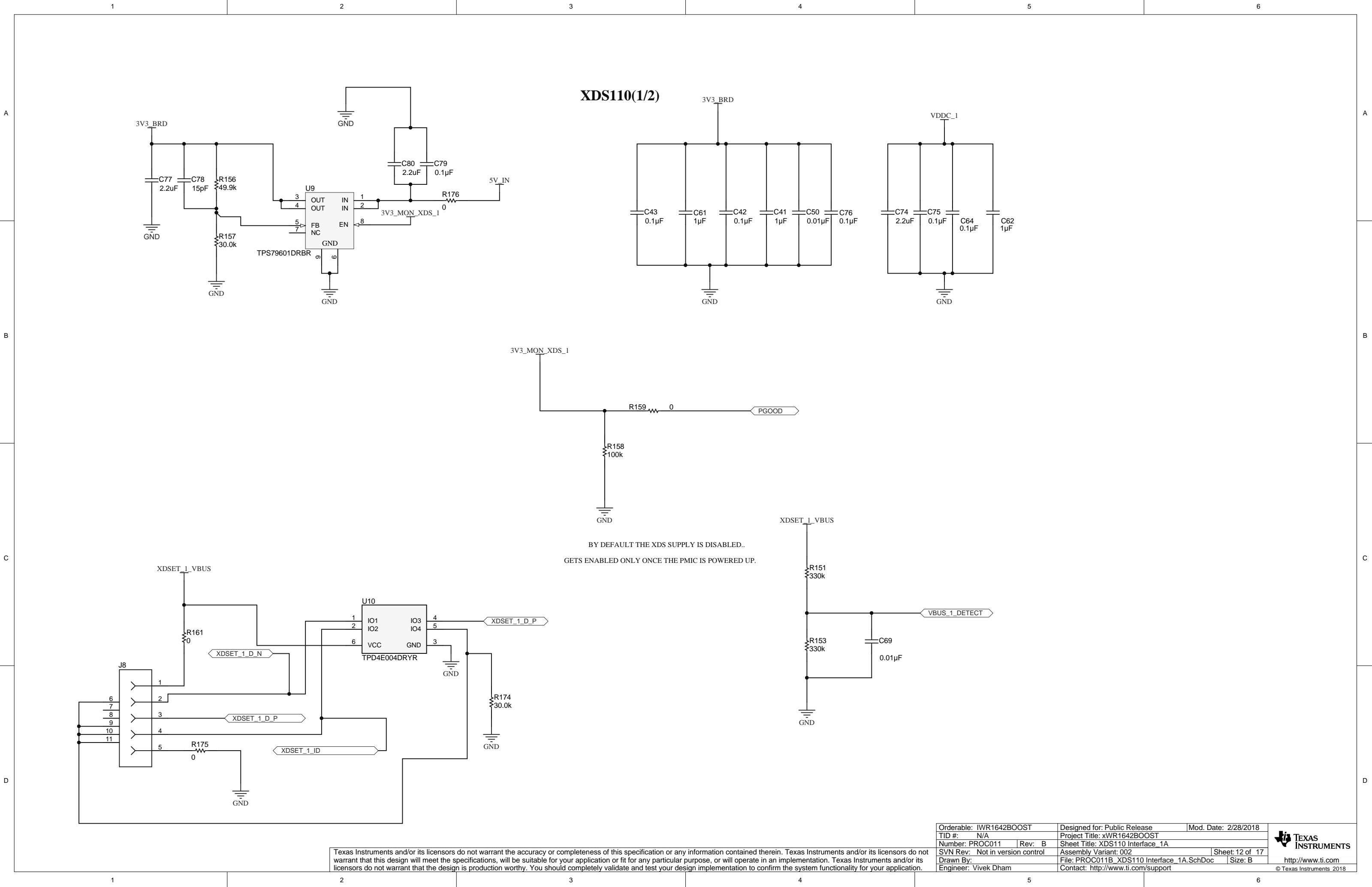
D

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.

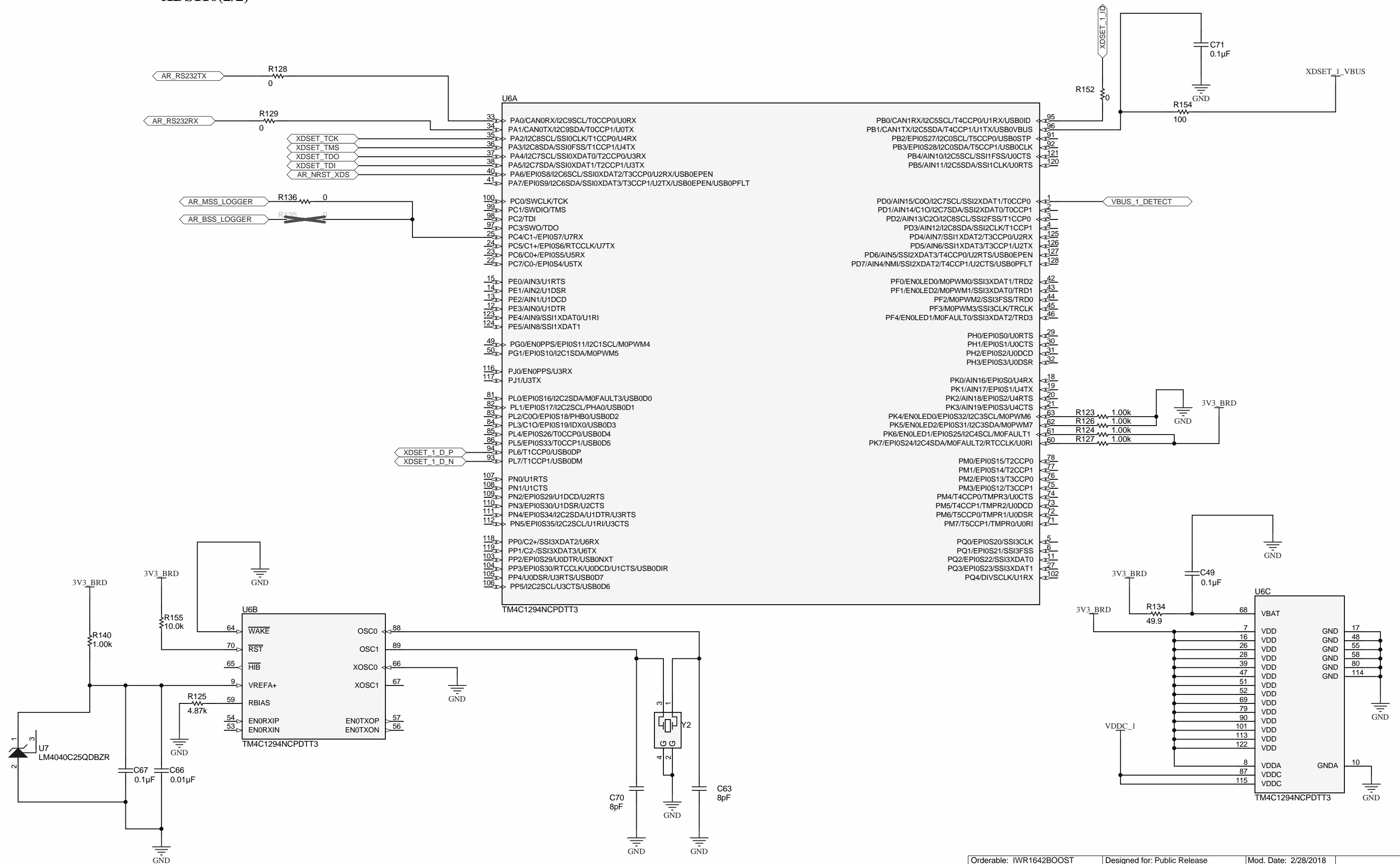
Orderable: IWR1642BOOST	Designed for: Public Release	Mod. Date: 2/28/2018
TID #: N/A	Project Title: xWR1642BOOST	
Number: PROC011	Rev: B	Sheet Title: HD Connector
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 11 of 17
Drawn By:	File: PROC011B_HD Connector.SchDoc	Size: B
Engineer: Vivek Dham	Contact: http://www.ti.com/support	




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.

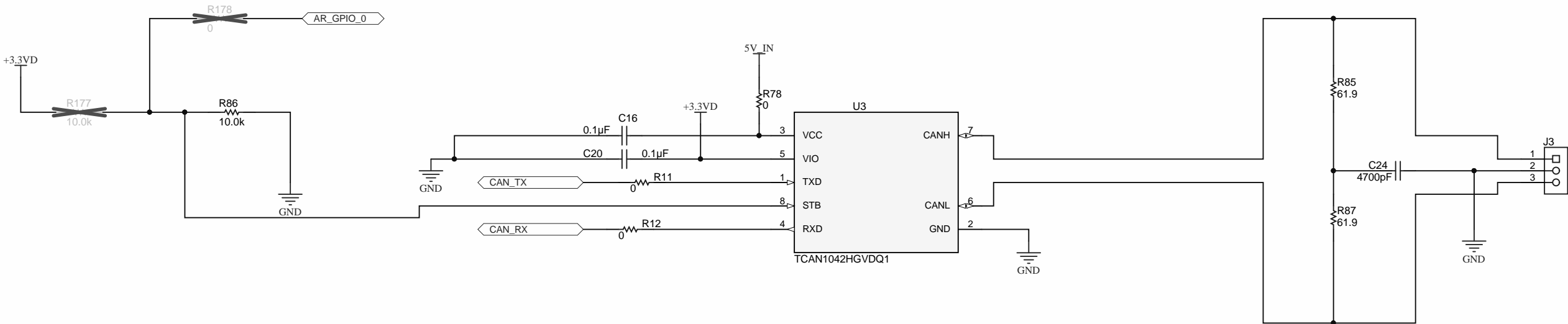
Orderable: IWR1642BOOST		Designed for: Public Release		Mod. Date: 2/28/2018	
TID #: N/A		Project Title: xWR1642BOOST			
Number: PROC011		Rev: B		Sheet Title: XDS110 Interface_1A	
SVN Rev: Not in version control		Assembly Variant: 002		Sheet: 12 of 17	
Drawn By:		File: PROC011B_XDS110 Interface_1A.SchDoc		Size: B	
Engineer: Vivek Dham		Contact: http://www.ti.com/support			

XDS110(2/2)

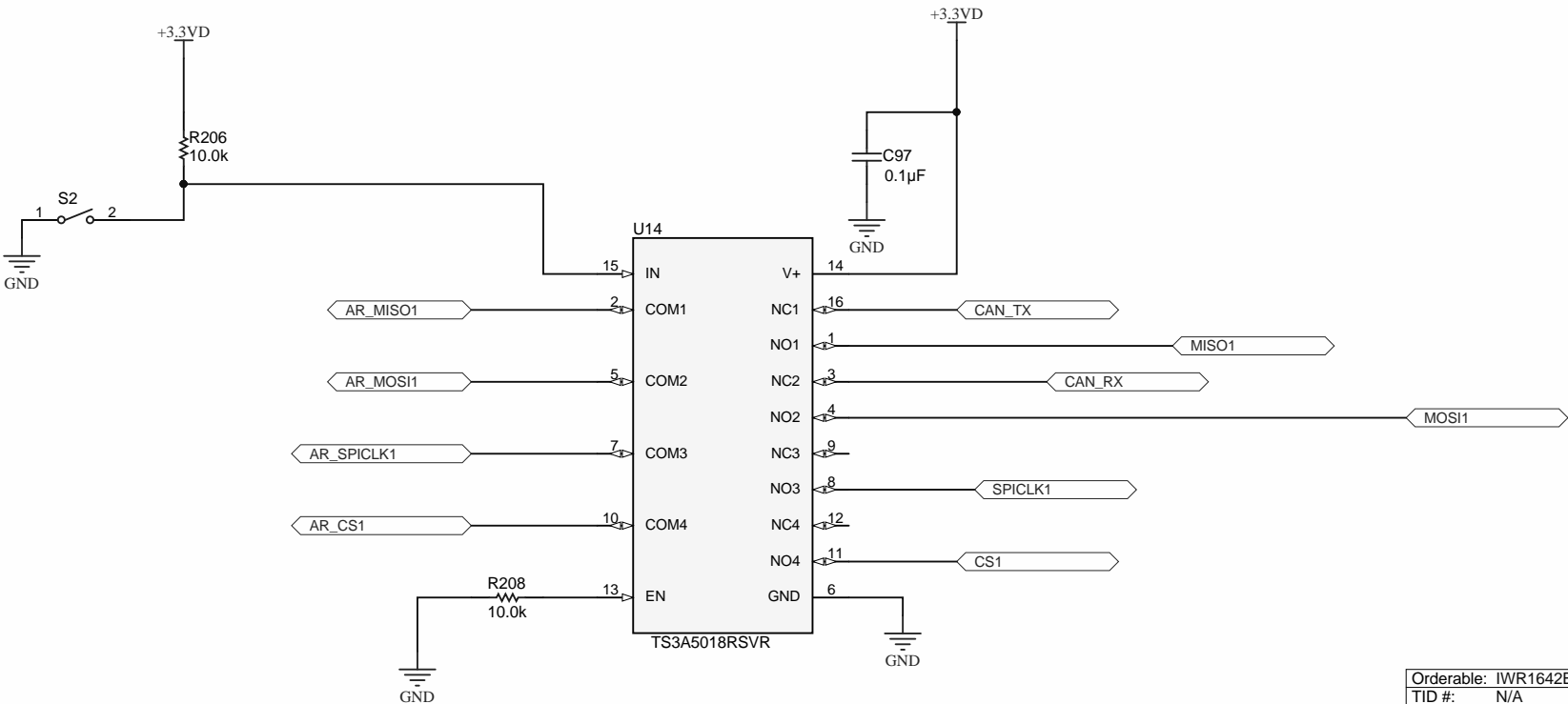


Orderable: IWR1642BOOST	Designed for: Public Release	Mod. Date: 2/28/2018	 TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2018
TID #: N/A	Project Title: xWR1642BOOST		
Number: PROC011	Rev: B	Sheet Title: XDS110 Interface_1B	
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 13 of 17	
Drawn By:	File: PROC011B_XDS110 Interface_1B.SchDoc	Size: B	
Engineer: Vivek Dham	Contact: http://www.ti.com/support		

CAN INTERFACE

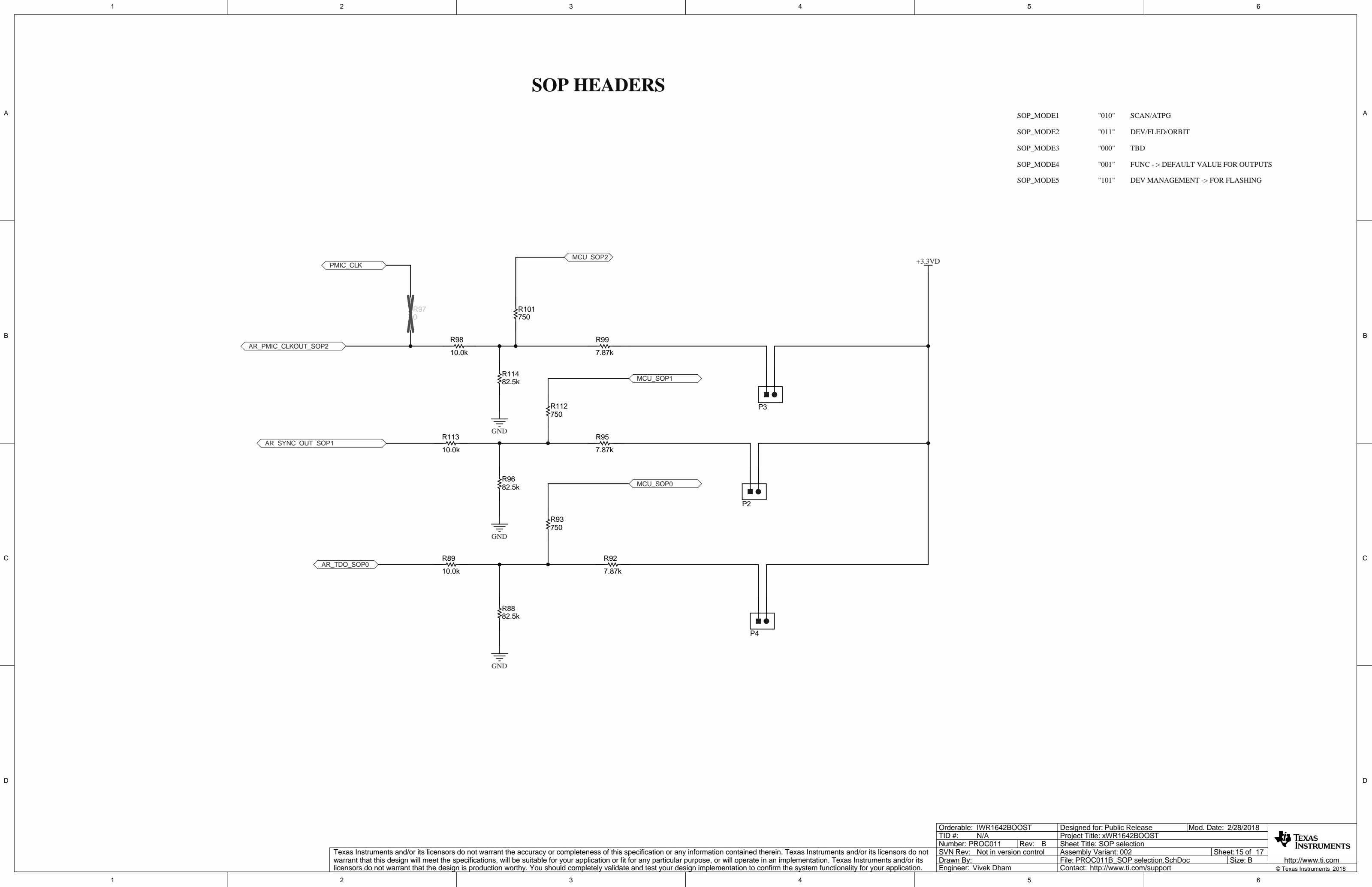


MUX BETWEEN SPI AND CAN INTERFACE



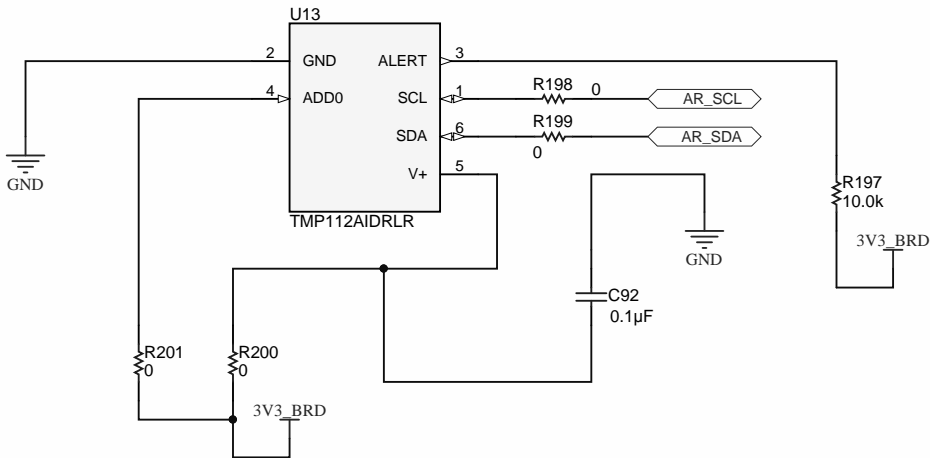
Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular 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: IWR1642BOOST		Designed for: Public Release	Mod. Date: 2/28/2018
TID #:	N/A	Project Title: xWR1642BOOST	
Number: PROC011	Rev: B	Sheet Title: CAN Interface	
SVN Rev: Not in version control		Assembly Variant: 002	Sheet: 14 of 17
Drawn By:		File: PROC011B_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

