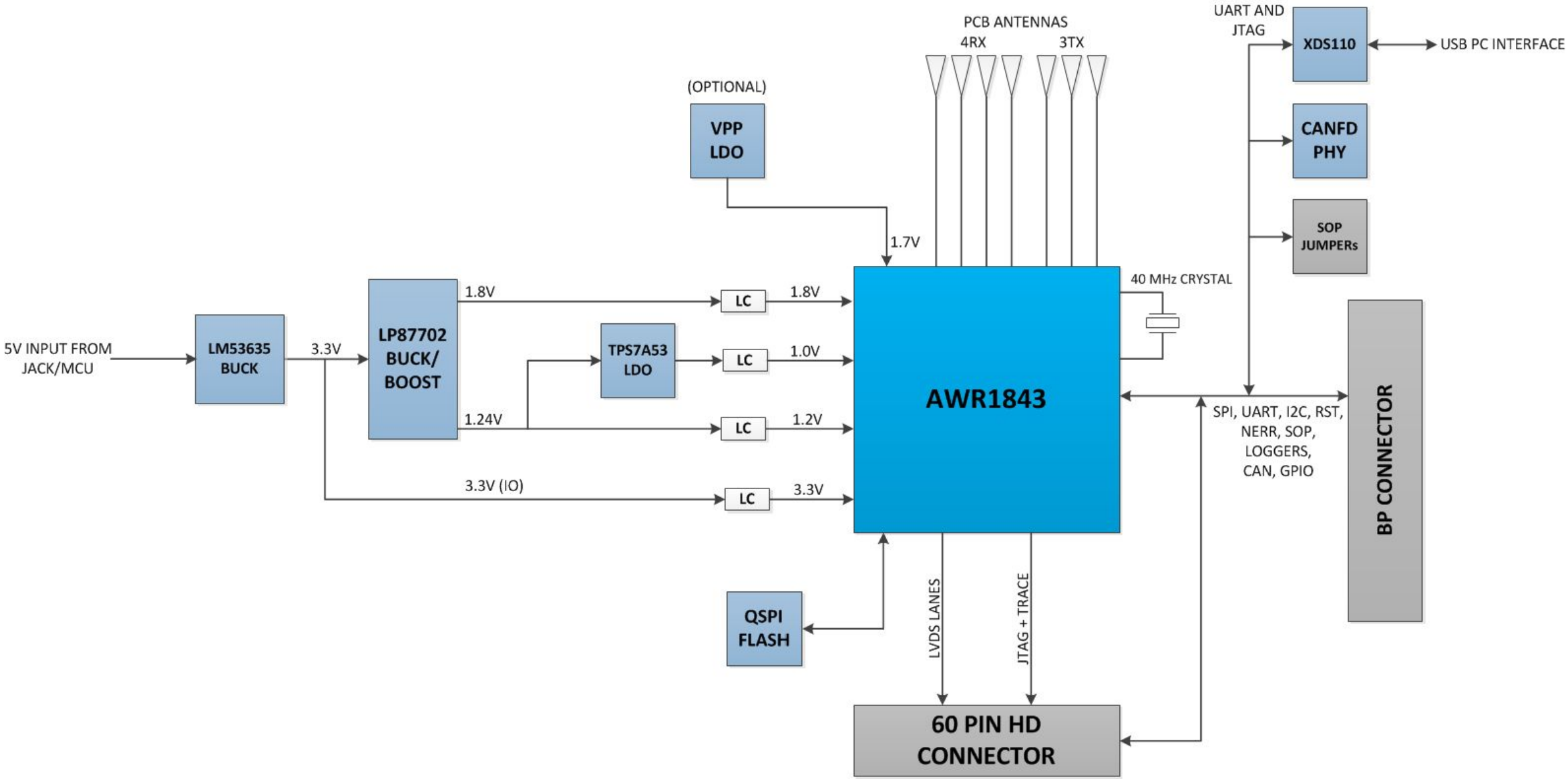


xWR1843BOOST COVER SHEET

Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
C	1	1/1/2019	Adrian Ozer	Increased LDO output cap to 47uF
C	2	1/1/2019	Adrian Ozer	Added two optional 10uF LDO output caps
C	3	1/1/2019	Adrian Ozer	Added 10uF cap to LDO input
C	4	1/1/2019	Adrian Ozer	Added test pad to LDO PG pin
C	5	1/1/2019	Adrian Ozer	Connected LDO DNC pads to GND for thermal performance
C	6	1/1/2019	Adrian Ozer	Added optional bleed resistor on LDO output
C	7	1/1/2019	Adrian Ozer	Changed 1V filtering to BLM18 inductor
C	8	1/1/2019	Adrian Ozer	Added 22uF caps to 1V, 1.24V, and 1.8V LC filters
C	9	1/1/2019	Adrian Ozer	Added 10uF caps to 3.3V and 1.24V LC filter
C	10	1/1/2019	Adrian Ozer	Added additional 10uF caps to 1V LC filter
C	10	1/31/2019	Adrian Ozer	Enabled 3.3V to BP header by default

TABLE OF CONTENTS

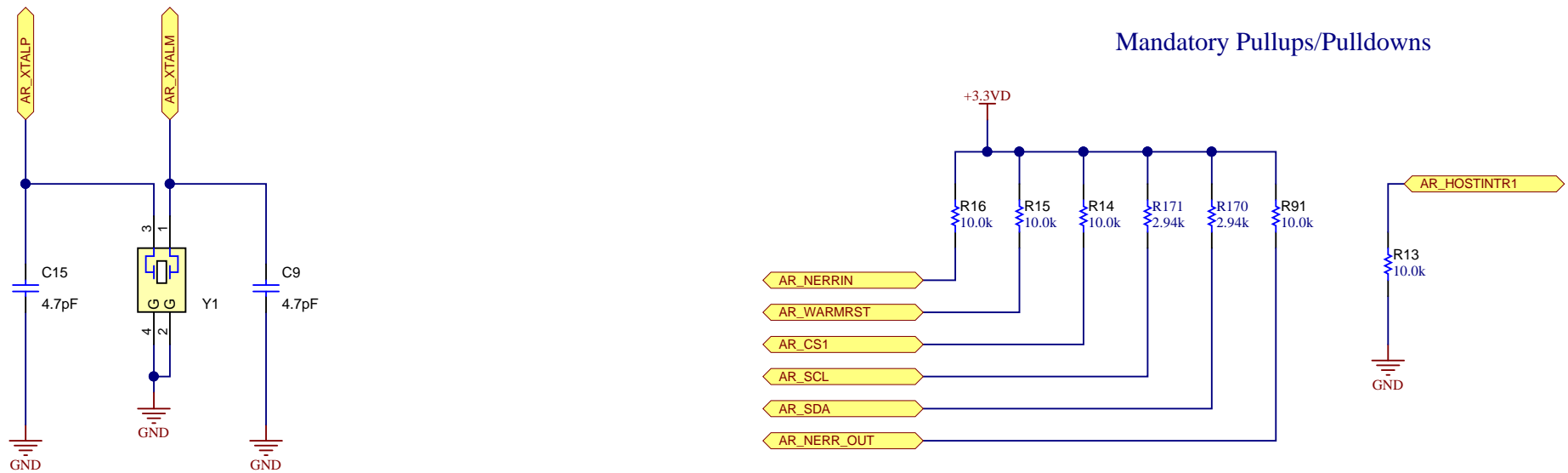
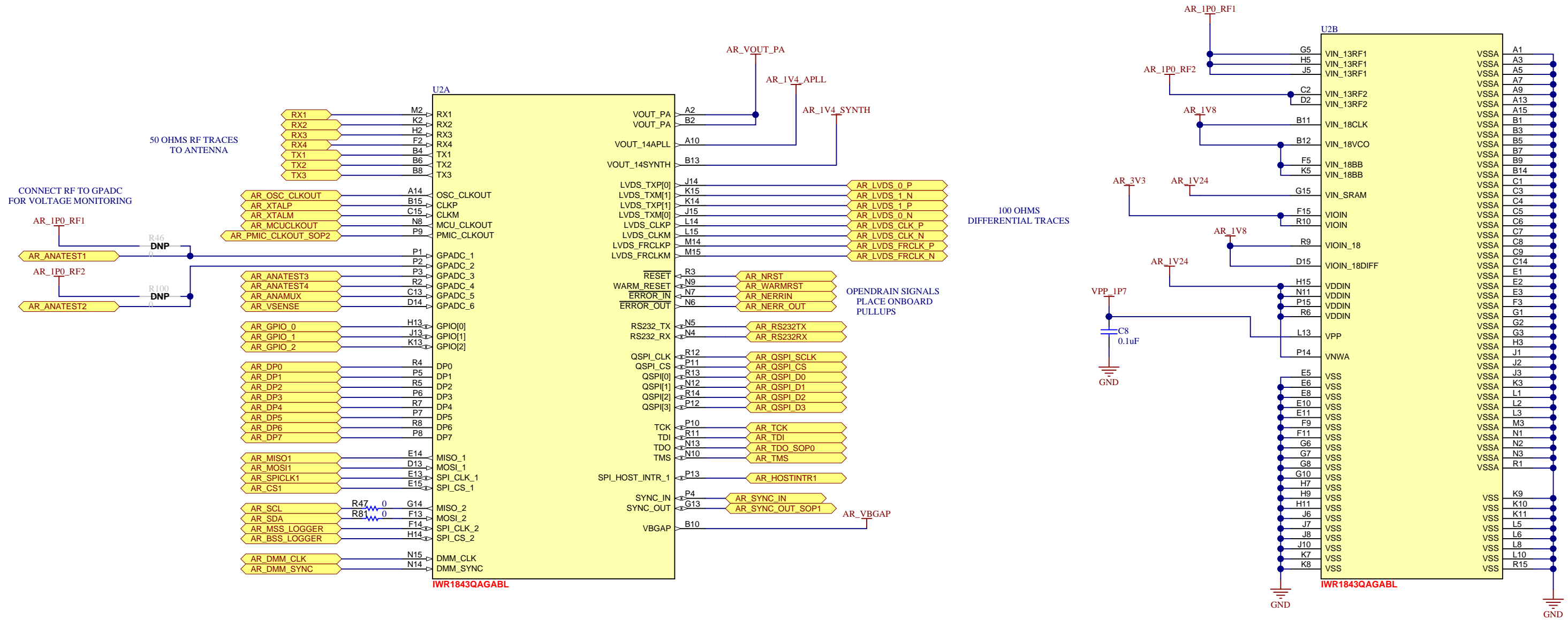
SHEET NO.	SHEET NAME
1	Cover Sheet
2	DUT_Reference
3	Decoupling_Caps_Reference
4	PWR_In_Reference
5	LC_Filtering_Reference
6	QSPI_Flash_Reference
7	SOP_Headers_Reference
8	RST_LEDs
9	VPP_Supply
10	HD_Connector
11	LP_Connector
12	XDS110_Interface_1A
13	XDS110_Interface_1B
14	CAN_Interface
15	Tempsensor
16	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: IWR1843BOOST	Designed for: Public Release	Mod. Date: 2/13/2019
TID #: N/A	Project Title: xWR1843EVM	
Number: PROC051	Rev: C	Sheet Title: Contents
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 1 of 16
Drawn By:	File: PROC051C_Cover_Sheet.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	

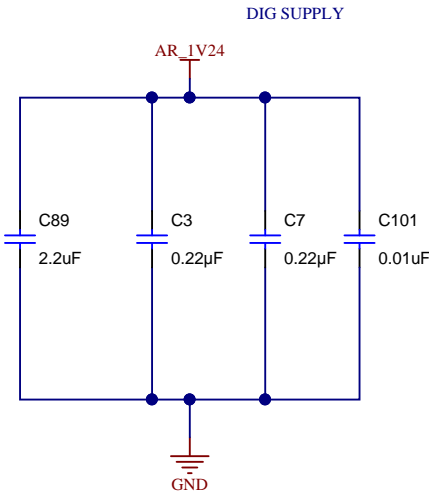
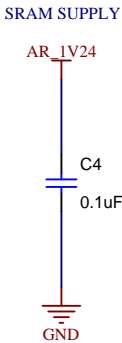
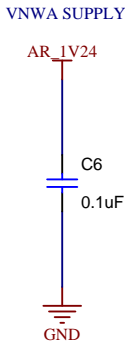
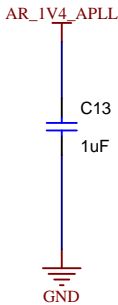
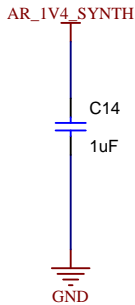
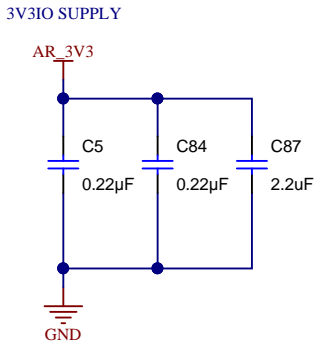
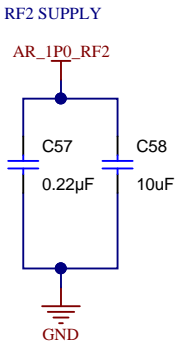
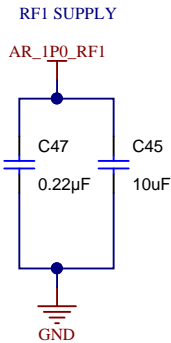
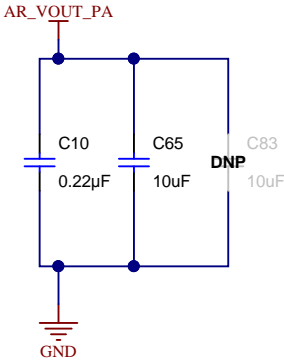
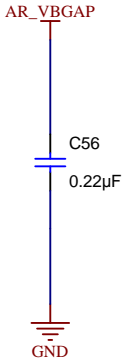
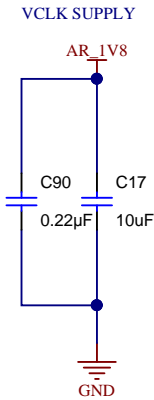
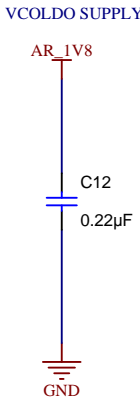
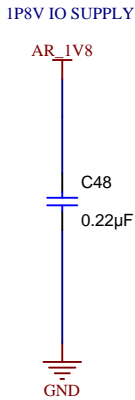
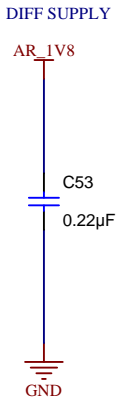
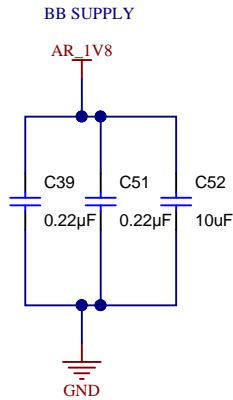
## DUT REFERENCE



Orderable: <a href="#">IWR1843BOOST</a>	Designed for: <a href="#">Public Release</a>	Mod. Date: 1/3/2019	 <b>TEXAS INSTRUMENTS</b>  <a href="http://www.ti.com">http://www.ti.com</a> © Texas Instruments 2018
TID #: <a href="#">N/A</a>	Project Title: <a href="#">xWR1843EVM</a>		
Number: <a href="#">PROC051</a>	Rev: <a href="#">C</a>	Sheet Title: <a href="#">DUT</a>	
SVN Rev: Not in version control	Assembly Variant: <a href="#">002</a>	Sheet: <a href="#">2</a> of <a href="#">16</a>	
Drawn By:	File: <a href="#">PROC051C_DUT_Reference.SchDoc</a>	Size: B	
Engineer: <a href="#">Adrian Ozer</a>	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</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.

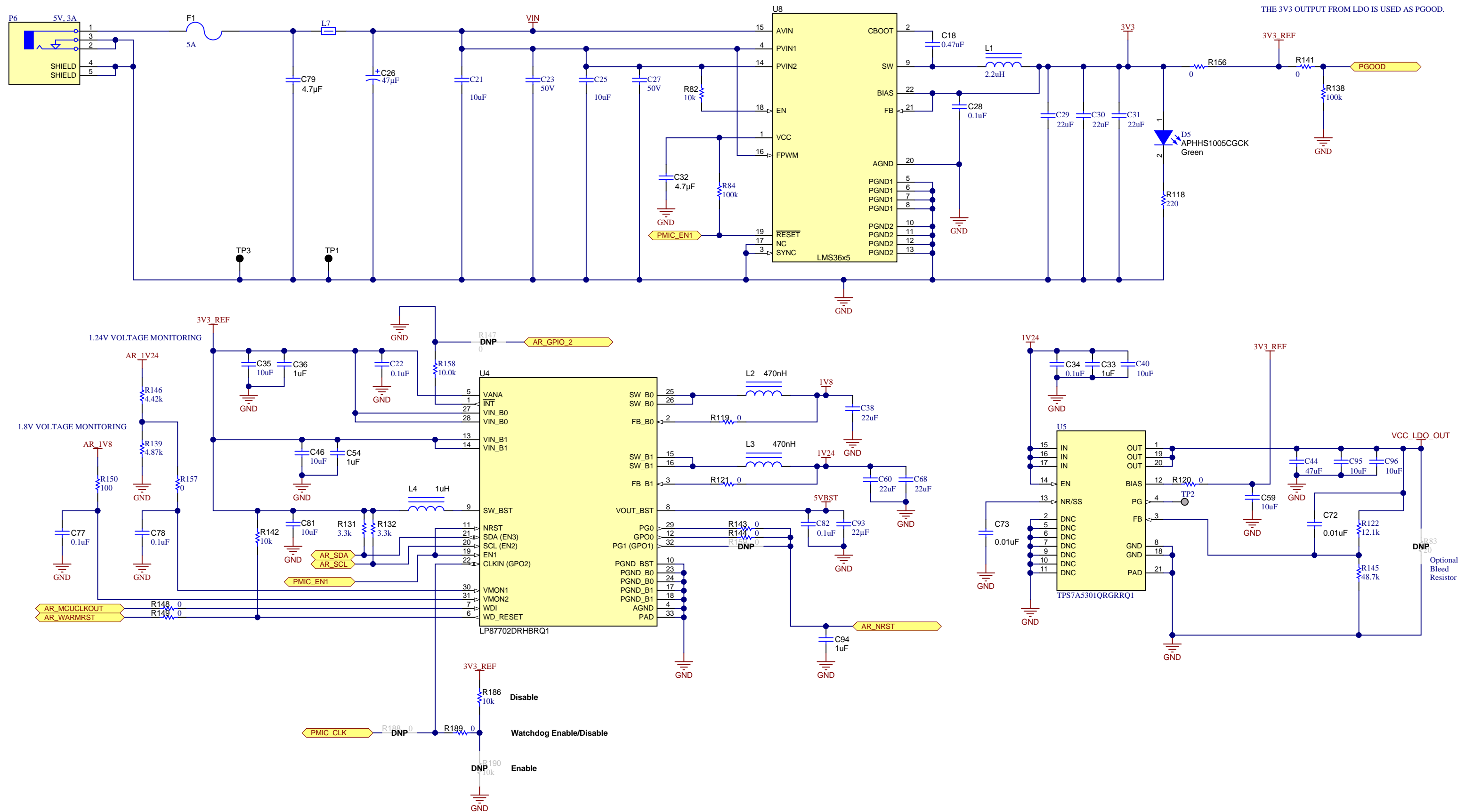
DECOUPLING CAPS REFERENCE




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: IWR1843BOOST	Designed for: Public Release	Mod. Date: 1/3/2019
TID #: N/A	Project Title: xWR1843EVM	
Number: PROC051	Rev: C	Sheet Title: Decoupling_caps
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 3 of 16
Drawn By:	File: PROC051C_Decoupling_Caps_Reference.Sch	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	

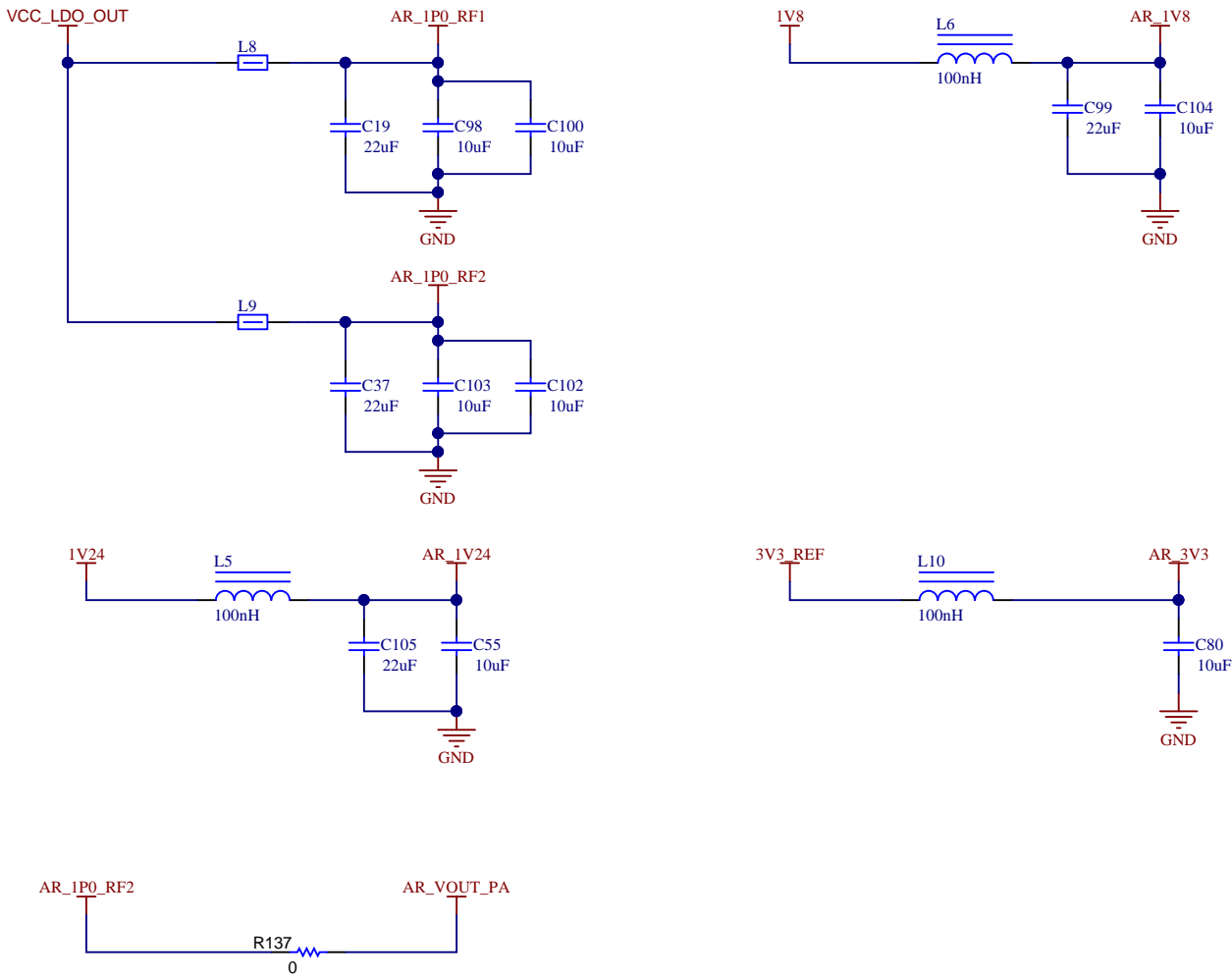
## POWER INPUT REFERENCE



Orderable: <a href="#">IWR1843BOOST</a>	Designed for: <a href="#">Public Release</a>	Mod. Date: 3/6/2019	 <b>TEXAS INSTRUMENTS</b>  <a href="http://www.ti.com">http://www.ti.com</a> © Texas Instruments 2018
TID #: <a href="#">N/A</a>	Project Title: <a href="#">xWR1843EVM</a>		
Number: <a href="#">PROC051</a>	Rev: <a href="#">C</a>	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: <a href="#">002</a>	Sheet: <a href="#">4</a> of <a href="#">16</a>	
Drawn By:	File: <a href="#">PROC051C_PWR_In_Reference.SchDoc</a>	Size: B	
Engineer: <a href="#">Adrian Ozer</a>		Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</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.

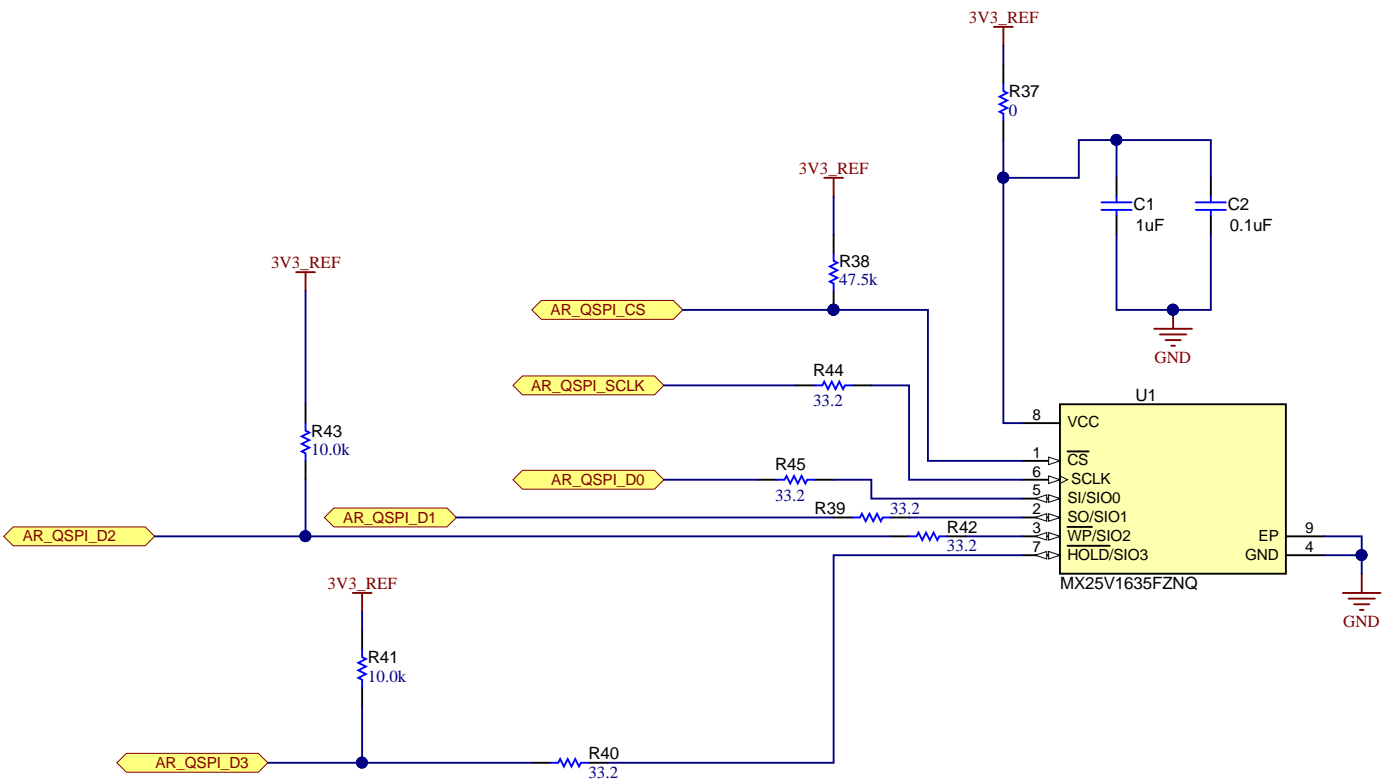
LC FILTERING REFERENCE



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: IWR1843BOOST		Designed for: Public Release	Mod. Date: 3/6/2019
TID #: N/A		Project Title: xWR1843EVM	
Number: PROC051	Rev: C	Sheet Title:	
SVN Rev: Not in version control		Assembly Variant: 002	Sheet: 5 of 16
Drawn By:		File: PROC051C_LC_Filtering_Reference.SchDoc	Size: B
Engineer: Adrian Ozer		Contact: http://www.ti.com/support	

QSPI FLASH REFERENCE

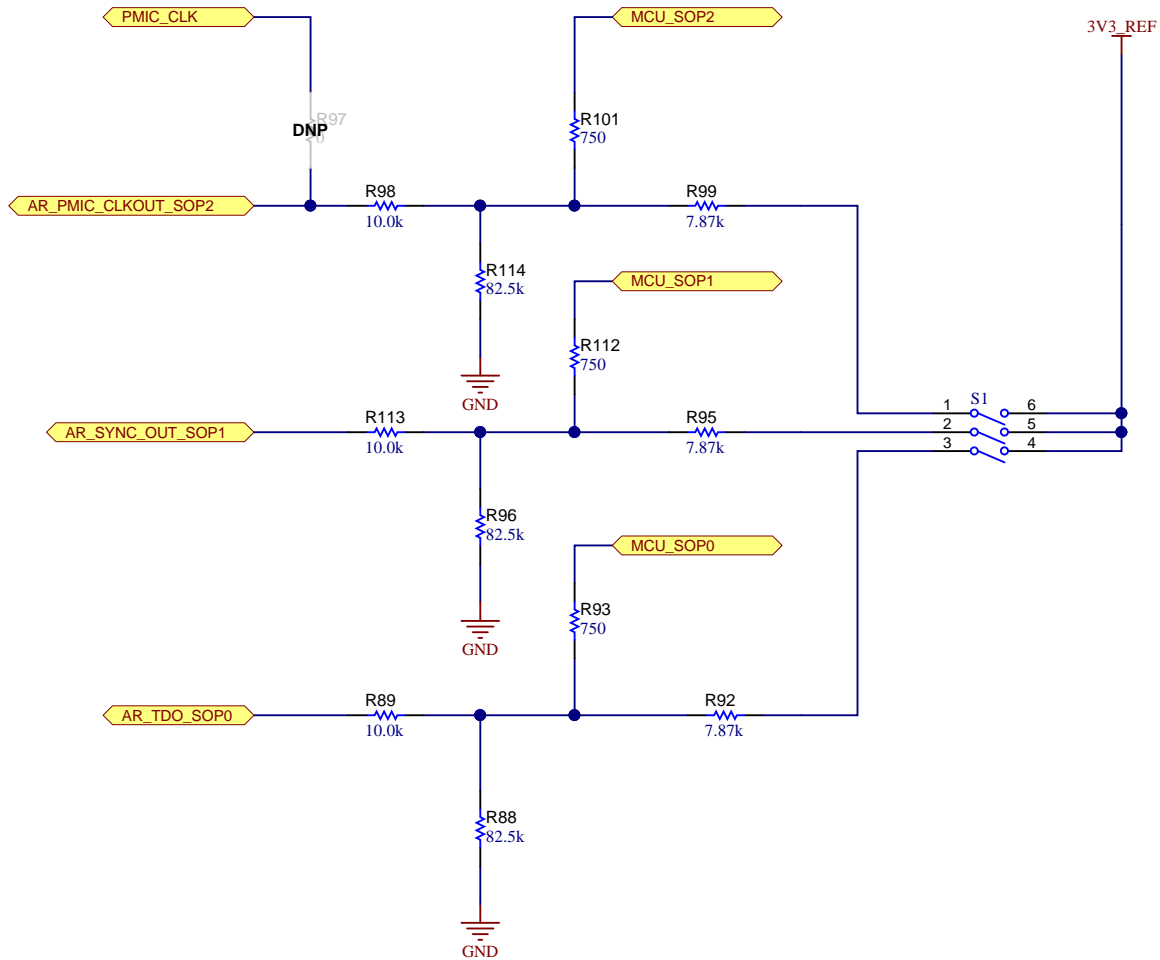


Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular 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: IWR1843BOOST		Designed for: Public Release	Mod. Date: 1/3/2019
TID #: N/A		Project Title: xWR1843EVM	
Number: PROC051	Rev: C	Sheet Title: QSPI flash section	
SVN Rev: Not in version control		Assembly Variant: 002	Sheet: 6 of 16
Drawn By:		File: PROC051C_QSPI_Flash_Reference.SchDoc	Size: B
Engineer: Adrian Ozer		Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	

# SOP HEADERS REFERENCE

SOP_MODE1	"010"	SCAN/ATPG
SOP_MODE2	"011"	DEV/FLED/ORBIT
SOP_MODE3	"000"	THB
SOP_MODE4	"001"	FUNC - > DEFAULT VALUE FOR OUTPUTS
SOP_MODE5	"101"	DEV MANAGEMENT -> FOR FLASHING

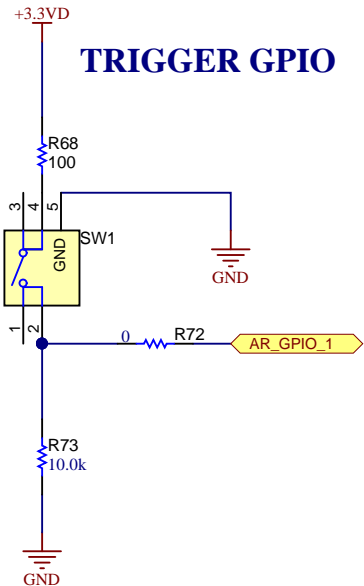
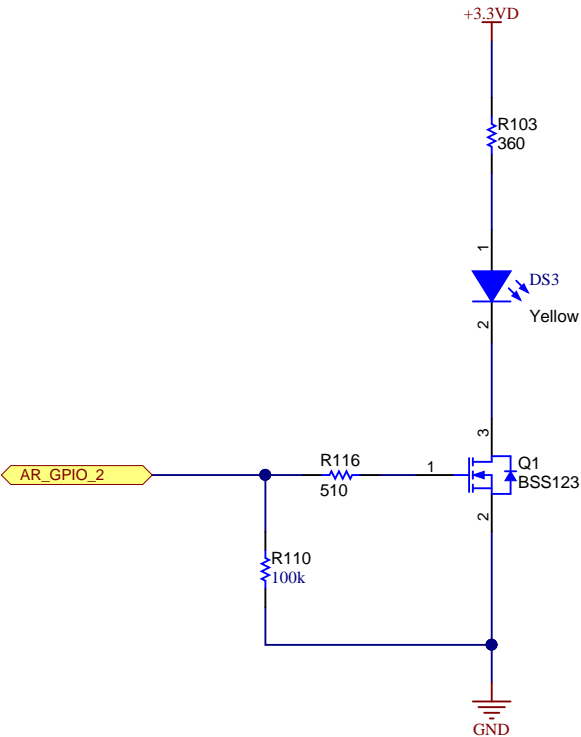
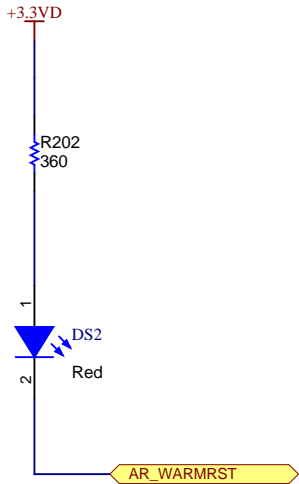
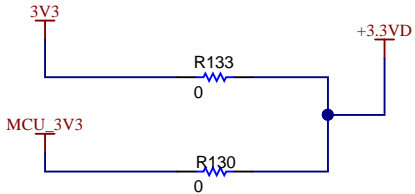
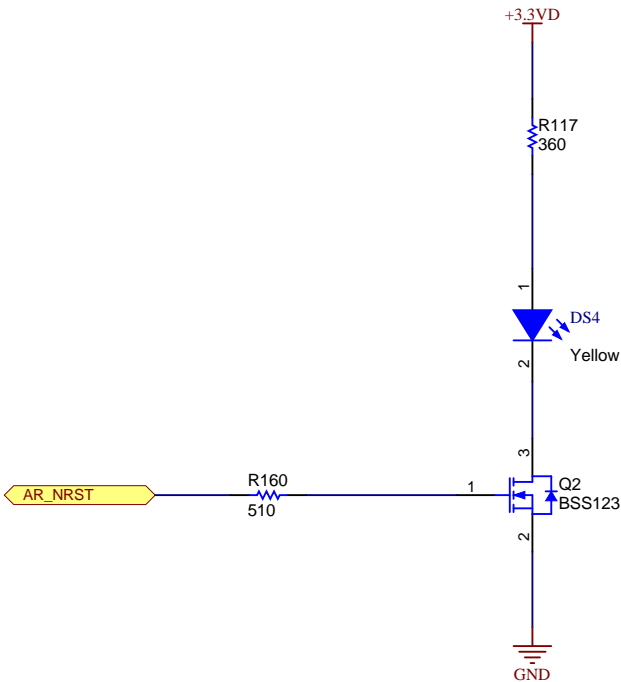
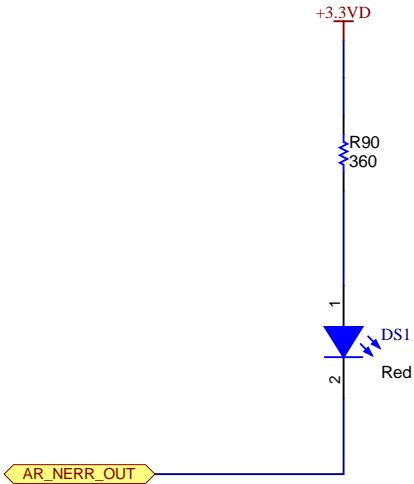
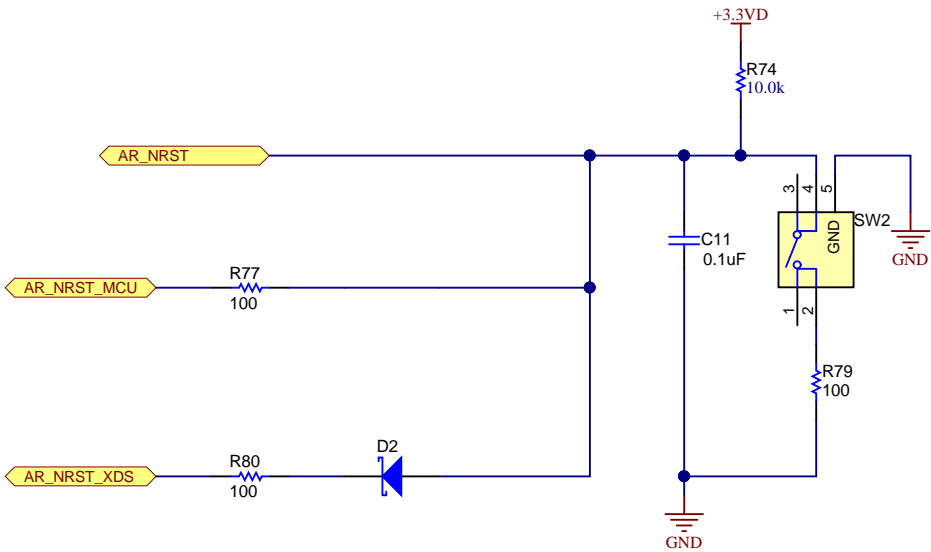


RESET AND LEDS

INDICATION LEDS

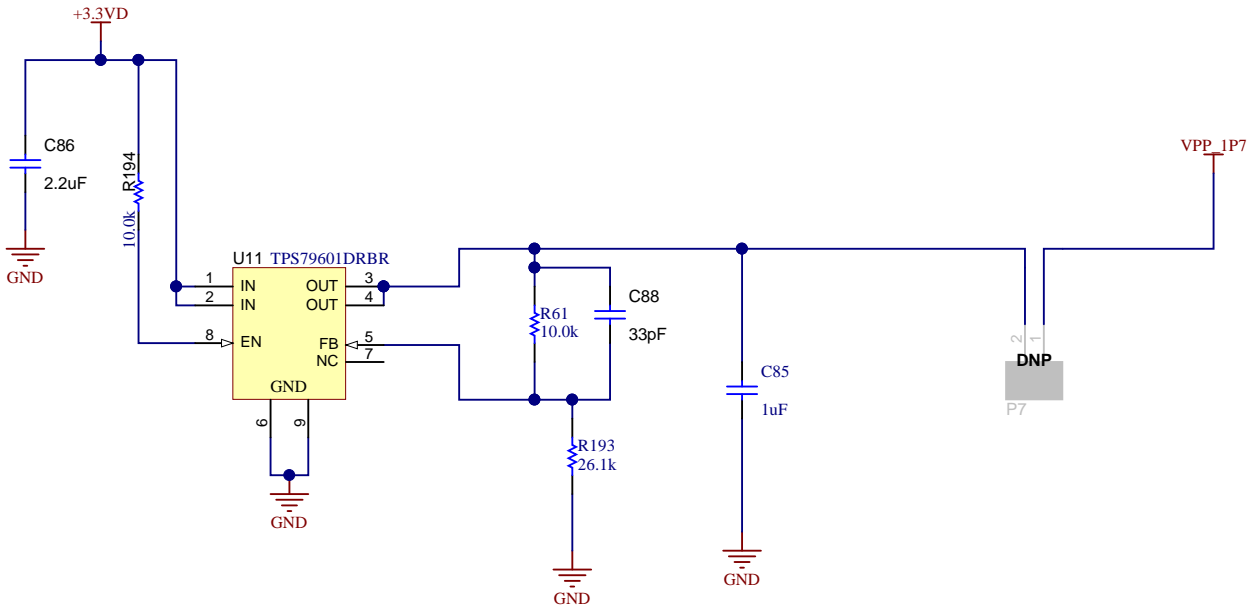
3V3 PERIPHERAL SUPPLY FROM LDO OR FROM THE MCU

TRIGGER GPIO





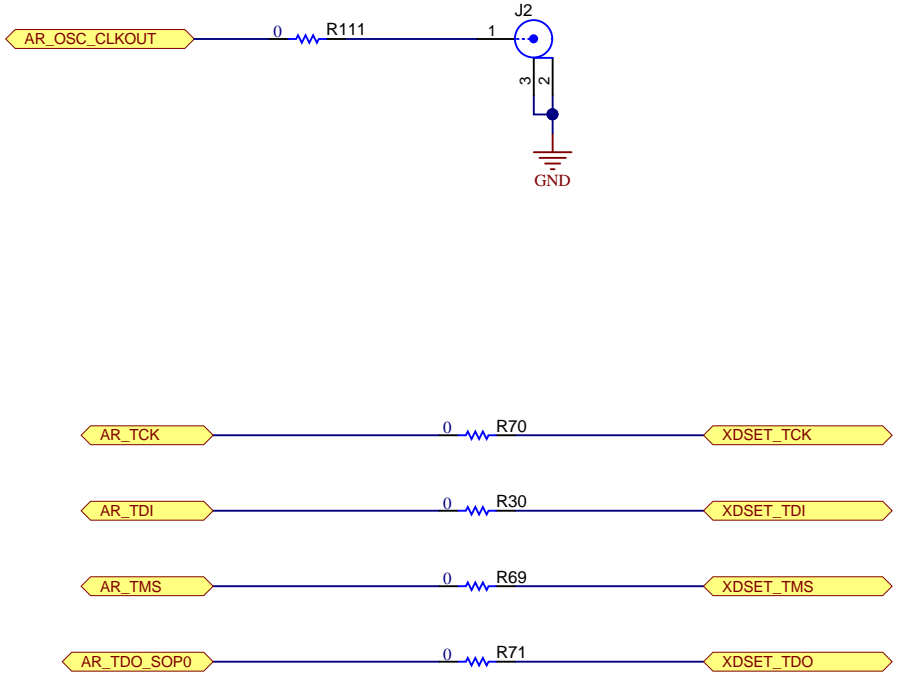
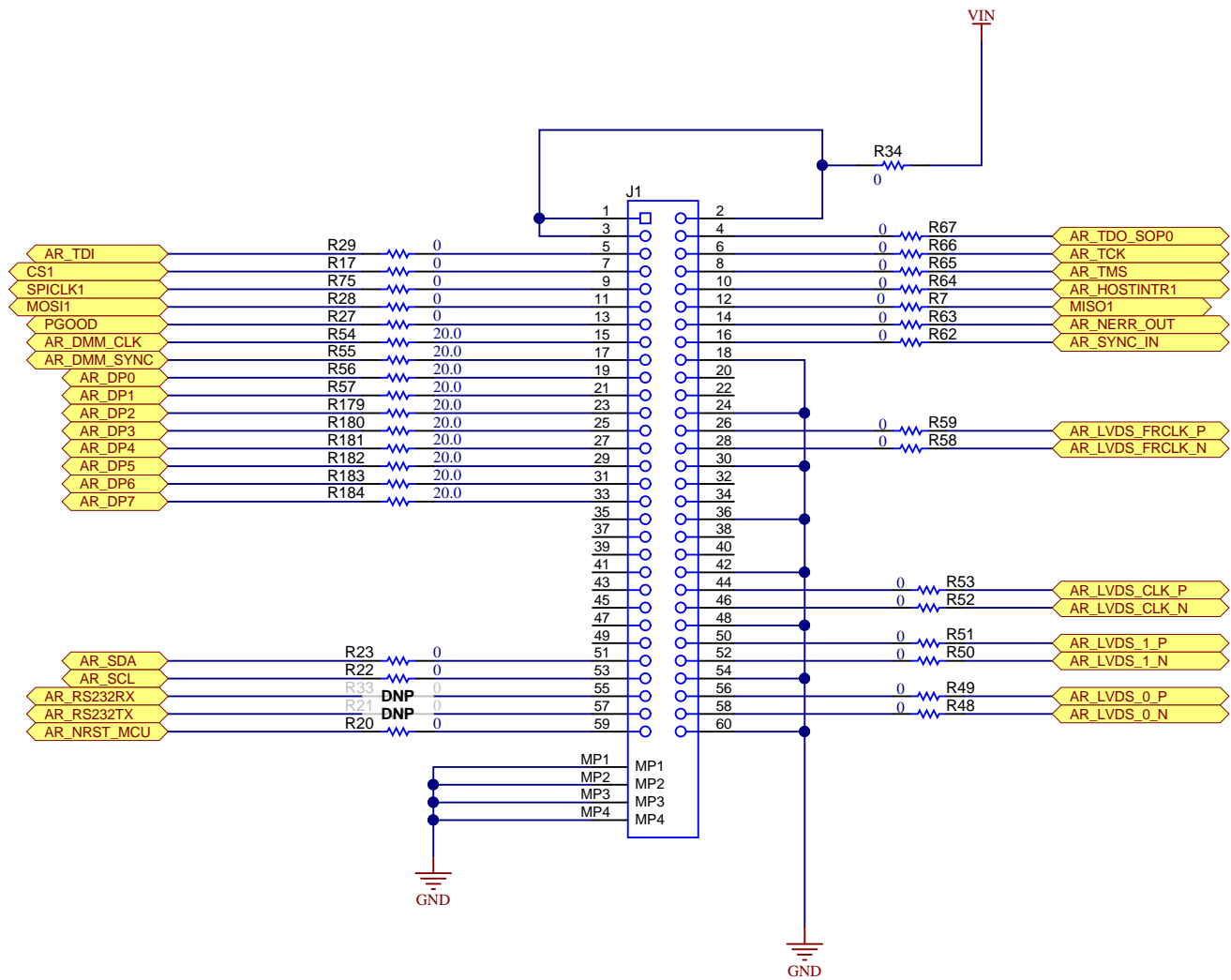
VPP SUPPLY LDO



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.

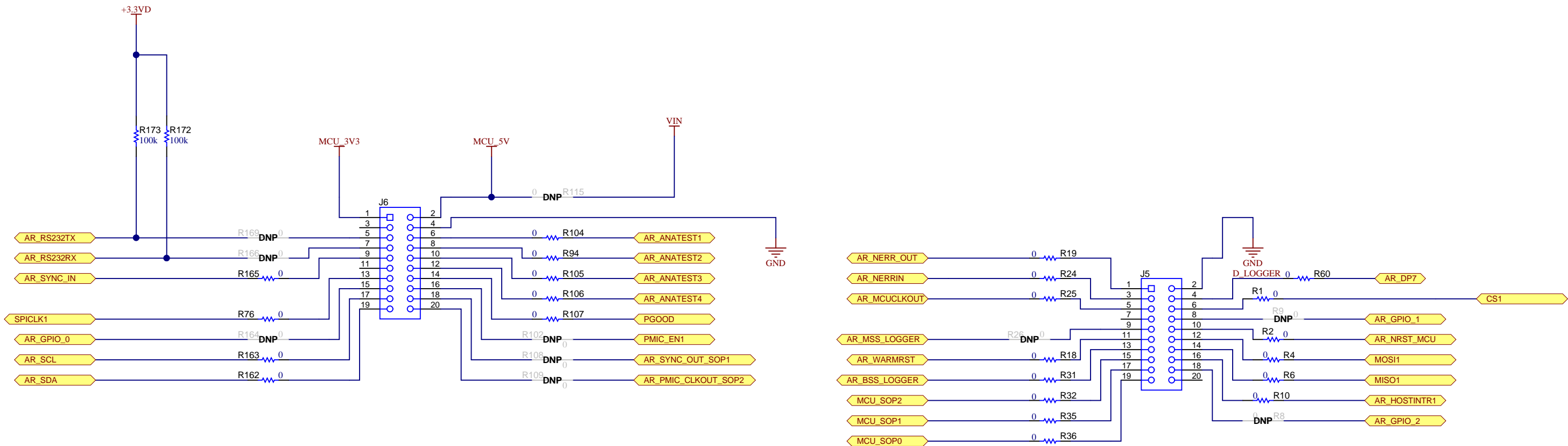
Orderable: <a href="#">IWR1843BOOST</a>		Designed for: <a href="#">Public Release</a>	Mod. Date: 1/3/2019
TID #: <a href="#">N/A</a>		Project Title: <a href="#">xWR1843EVM</a>	
Number: <a href="#">PROC051</a>	Rev: <a href="#">C</a>	Sheet Title: <a href="#">VPP_Supply</a>	
SVN Rev: <a href="#">Not in version control</a>		Assembly Variant: <a href="#">002</a>	Sheet: <a href="#">9</a> of <a href="#">16</a>
Drawn By: <a href="#">Adrian Ozer</a>		File: <a href="#">PROC051C_VPP_Supply.SchDoc</a>	Size: B
Engineer: <a href="#">Adrian Ozer</a>		Contact: <a href="#">http://www.ti.com/support</a>	

HD CONNECTOR FOR LVDS/CSI AND JTAG

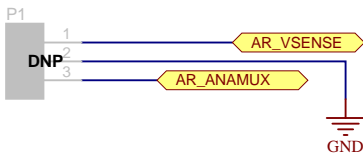


Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular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

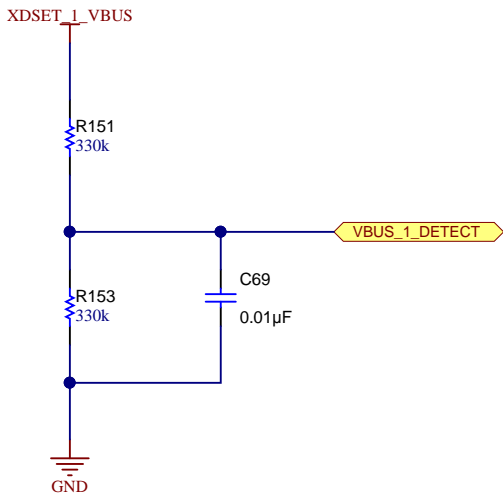
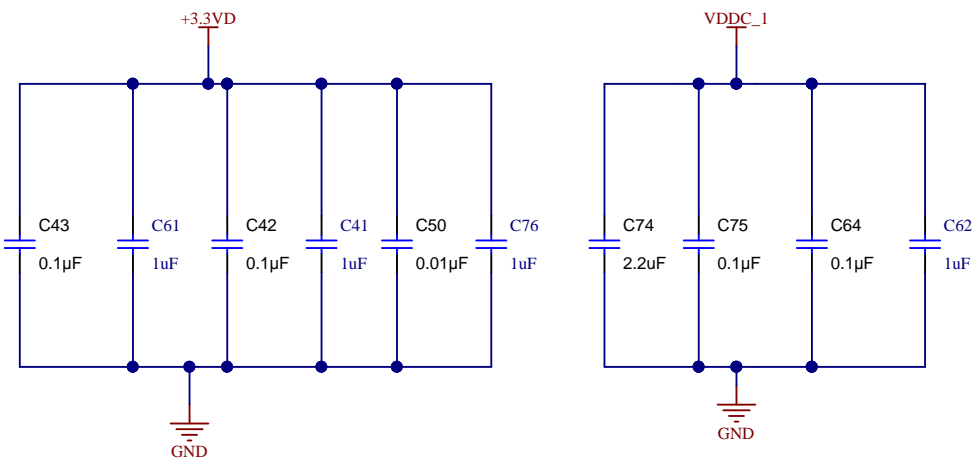
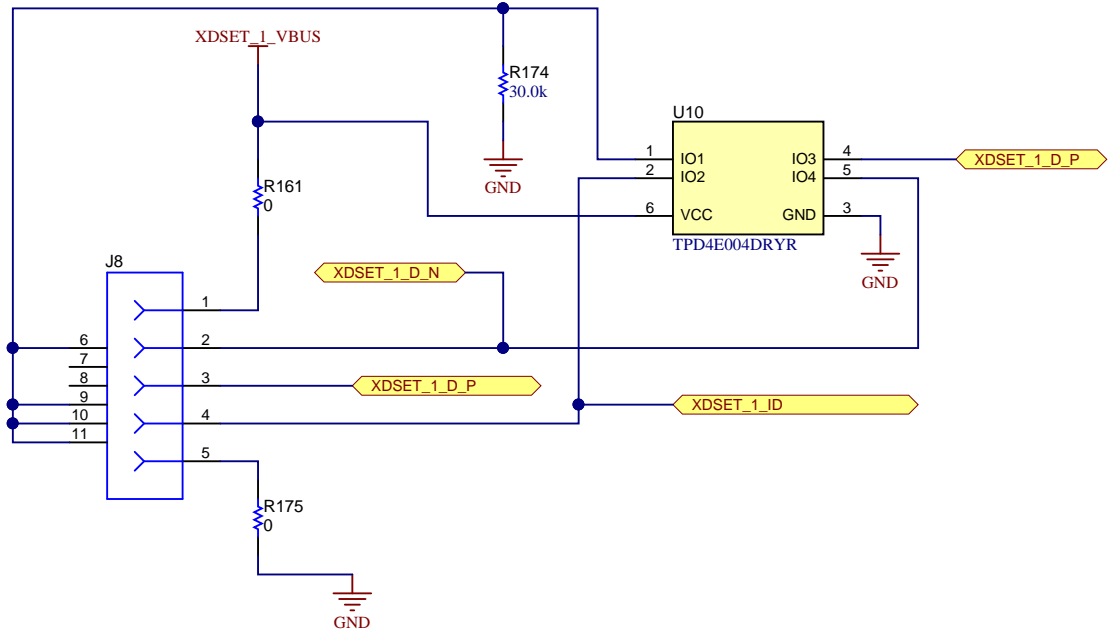
BP/LP CONNECTOR



ANALOG SIGNALS



XDS110(1/2)



Orderable: IWR1843BOOST	Designed for: Public Release	Mod. Date: 1/3/2019
TID #: N/A	Project Title: xWR1843EVM	
Number: PROC051	Rev: C	Sheet Title: XDS110 Interface_1A
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 12 of 16
Drawn By:	File: PROC051C_XDS110 Interface_1A.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	

XDS110(2/2)

A

B

C

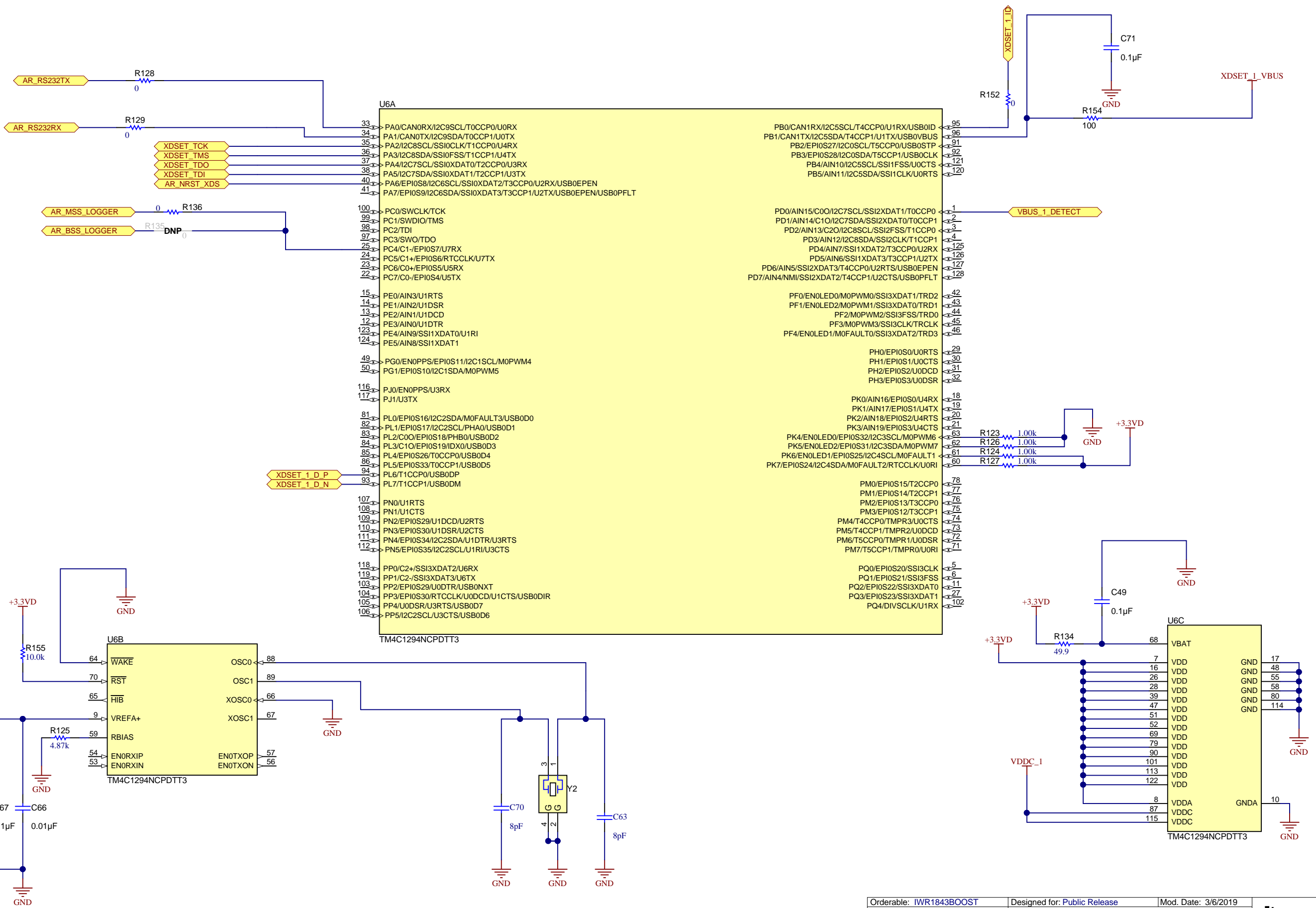
D

A

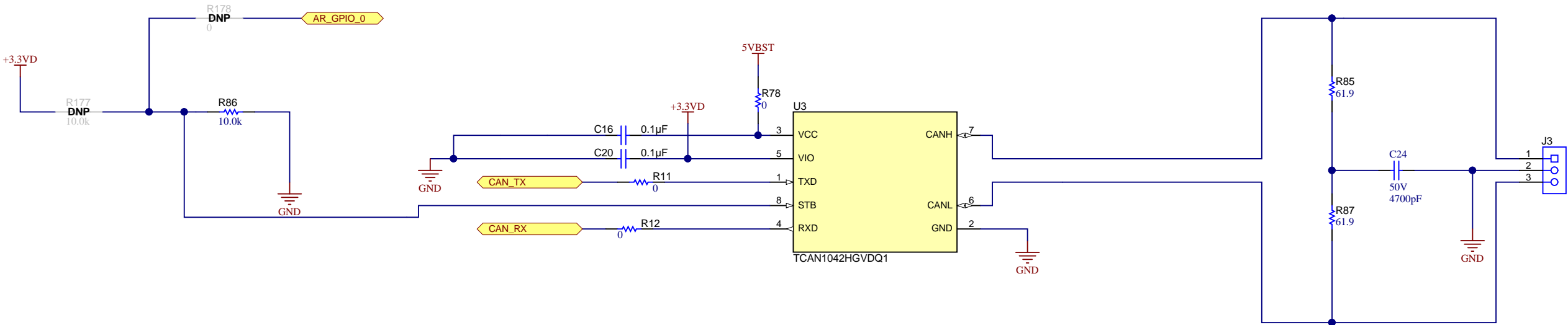
B

C

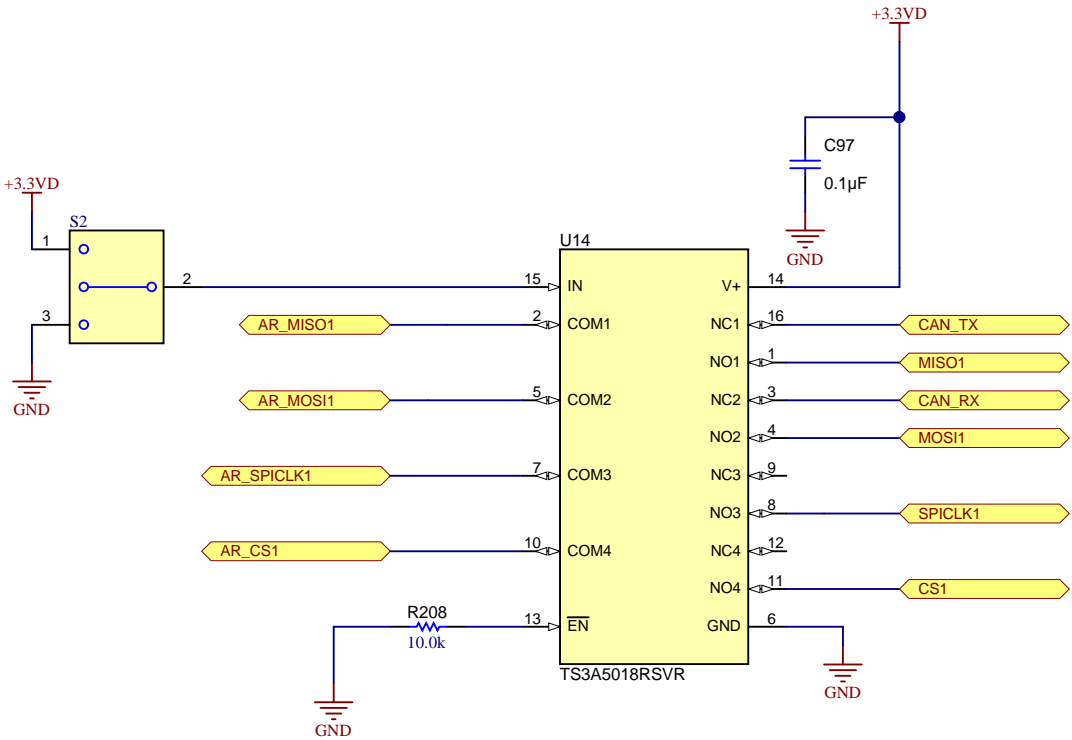
D



CAN INTERFACE

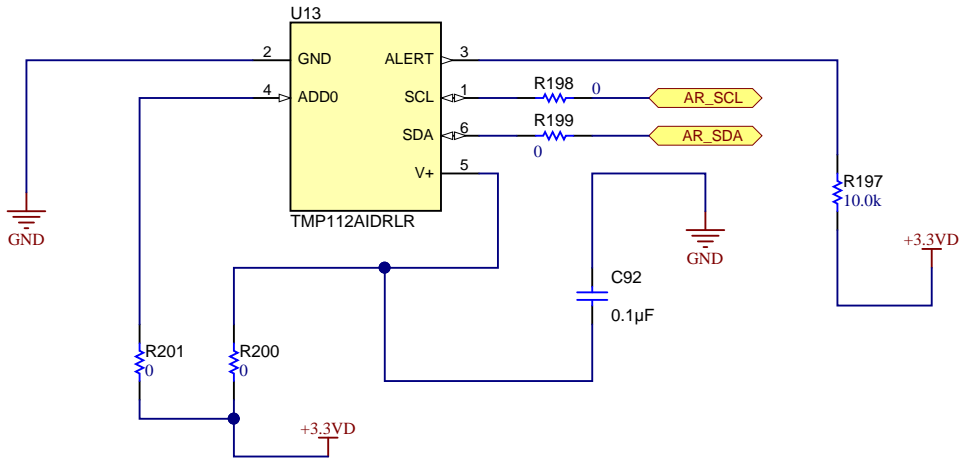


MUX BETWEEN SPI AND CAN INTERFACE

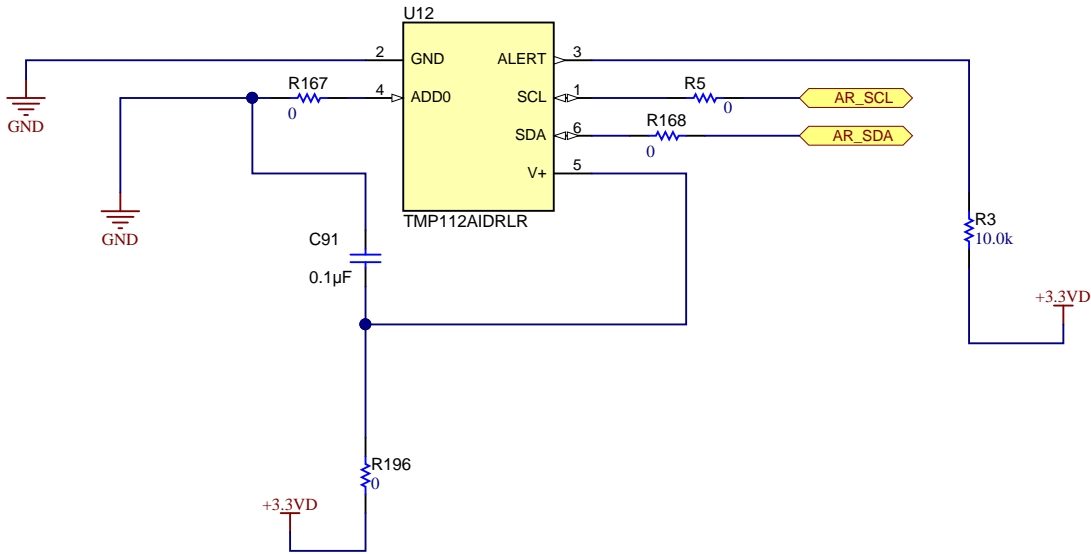


ONBOARD TEMP SENSORS

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



DEFAULT I2C ADDRESS 0X48  
TEMP SENSOR CLOSE TO PMIC



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: IWR1843BOOST	Designed for: Public Release	Mod. Date: 1/3/2019
TID #: N/A	Project Title: xWR1843EVM	
Number: PROC051	Rev: C	Sheet Title: Tempsensor
SVN Rev: Not in version control	Assembly Variant: 002	Sheet: 15 of 16
Drawn By:	File: PROC051C_Tempsensor.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	

