

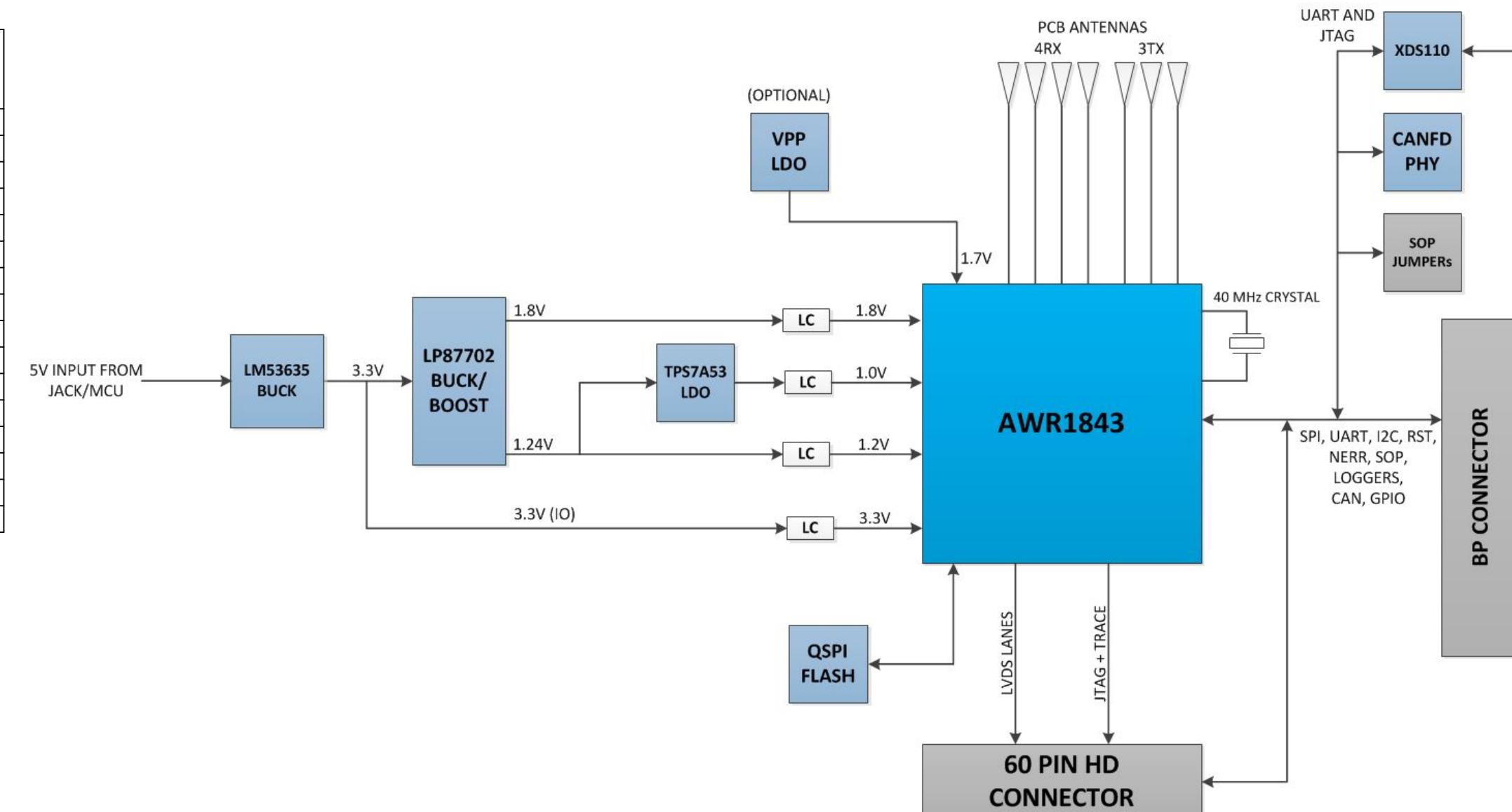
xWR1843BOOST COVER SHEET

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

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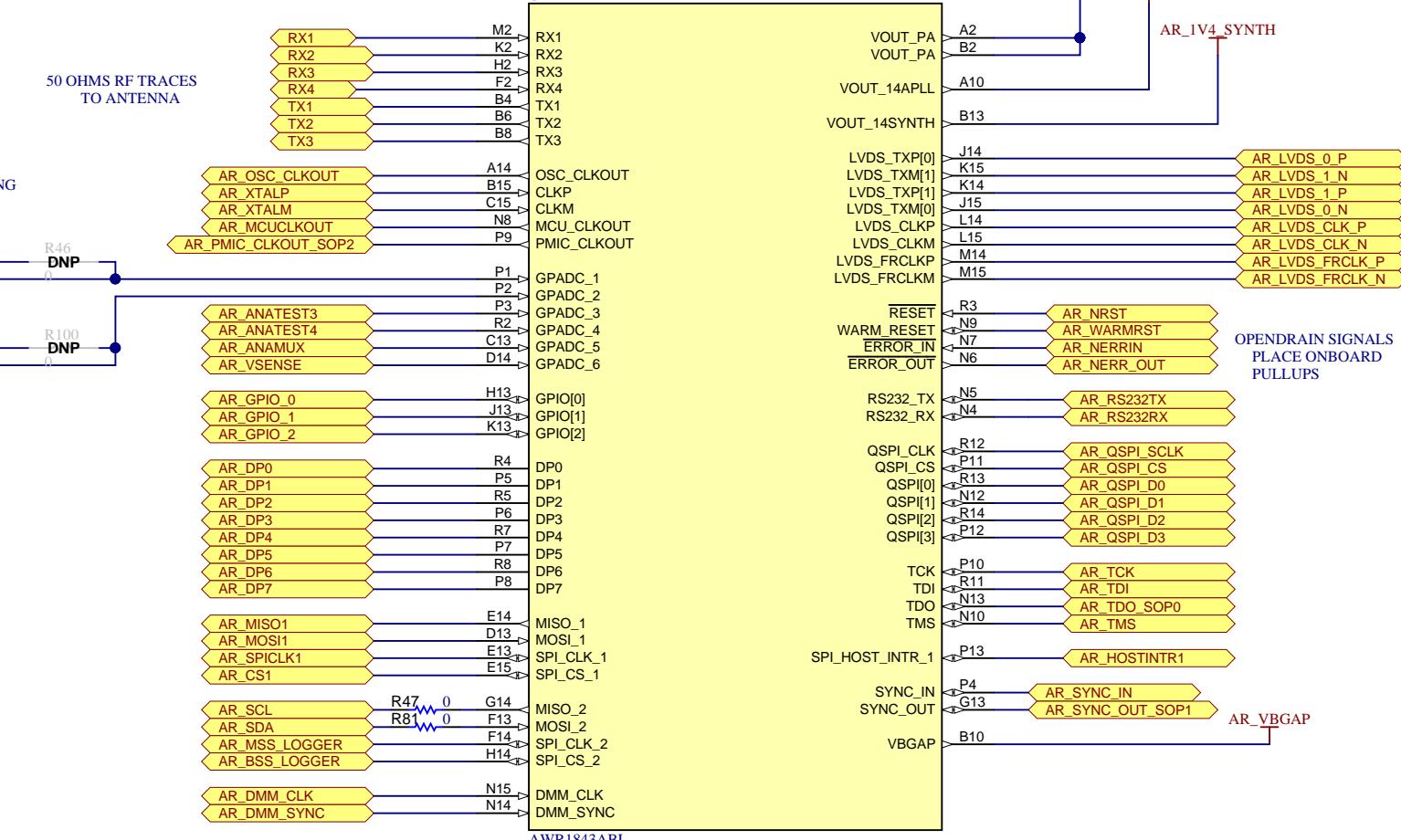


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Orderable: AWR1843BOOST	Designed for: Public Release	Mod. Date: 2/13/2019
TID #: N/A	Project Title: xWR1843EVM	
Number: PROC051	Rev: C	Sheet Title: Contents
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 1 of 16
Drawn By:	File: PROC051C_Cover_Sheet.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

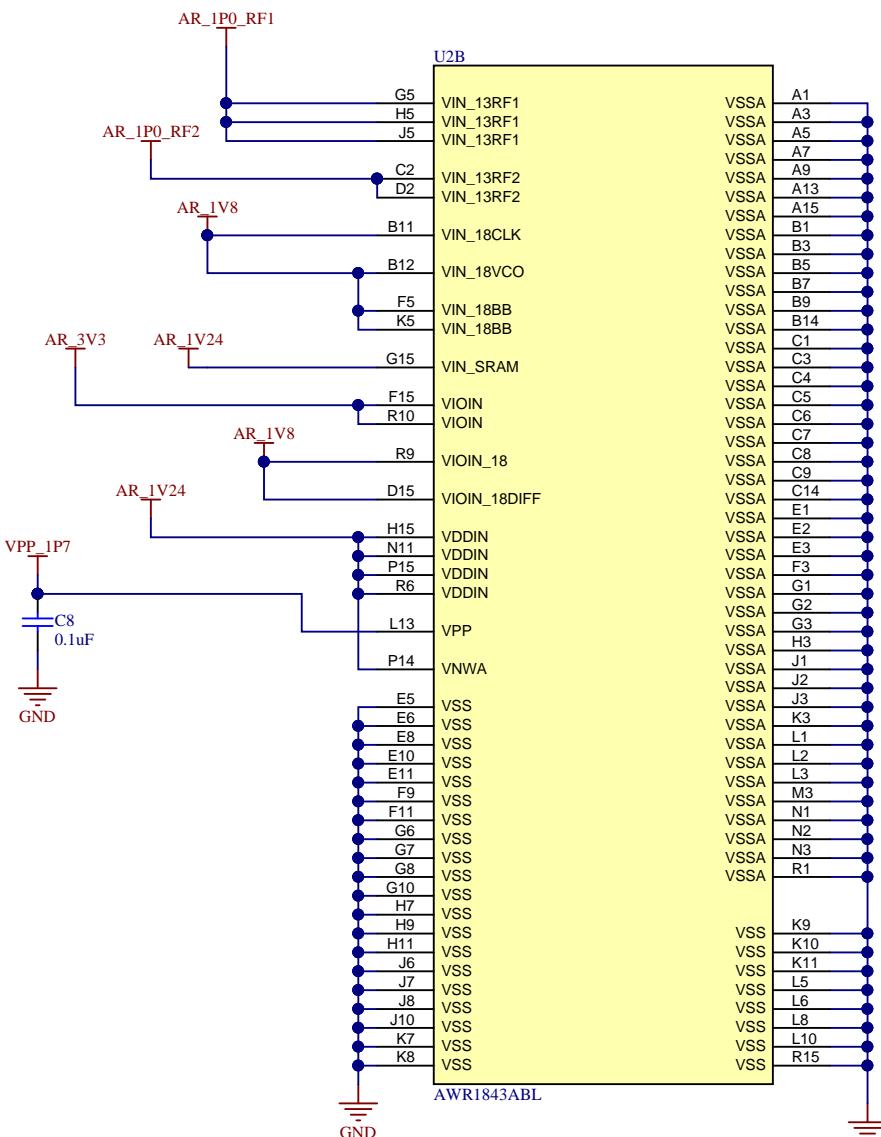
DUT REFERENCE

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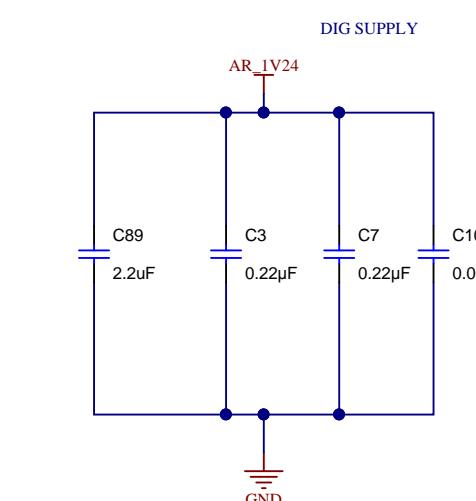
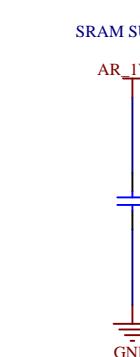
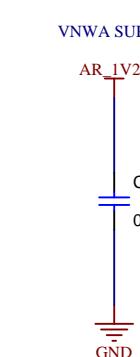
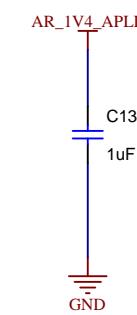
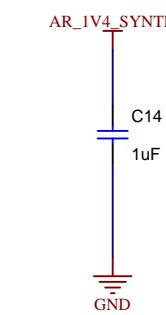
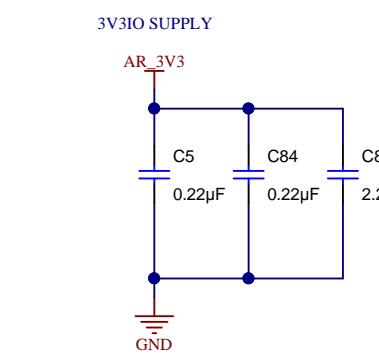
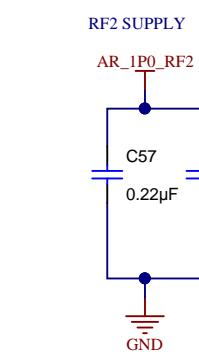
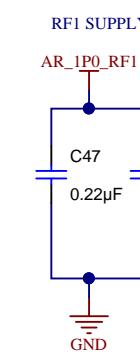
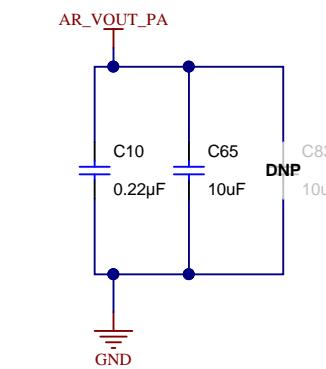
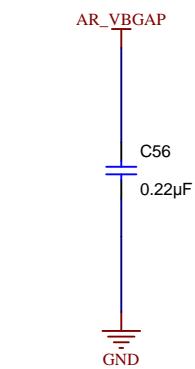
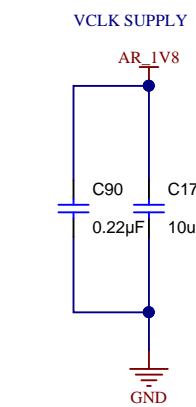
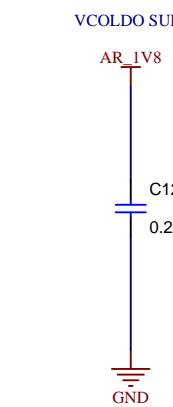
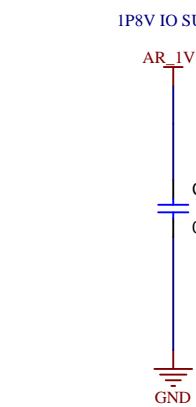
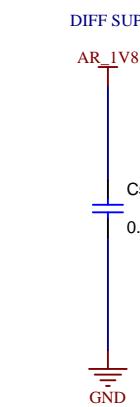
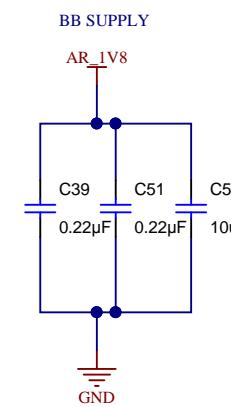


B

100 OHMS DIFFERENTIAL TRACES



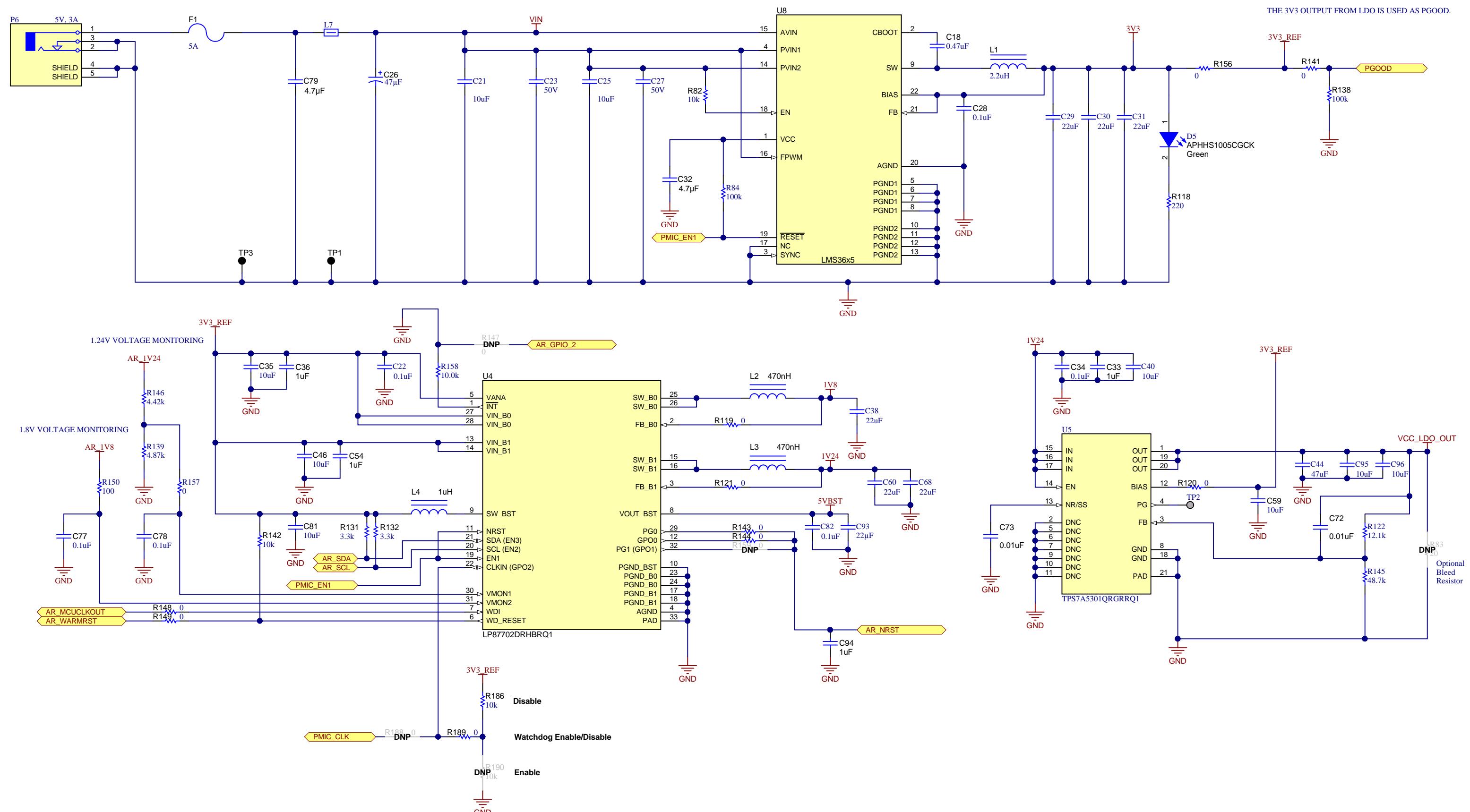
DECOUPLING CAPS REFERENCE



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TID #: N/A	Project Title: xVR1843EVM	
Number: PROC051	Rev: C	Sheet Title: Decoupling_caps
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 3 of 16
Drawn By:	File: PROC051C_Decoupling_Caps_Reference.SchD	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

POWER INPUT REFERENCE



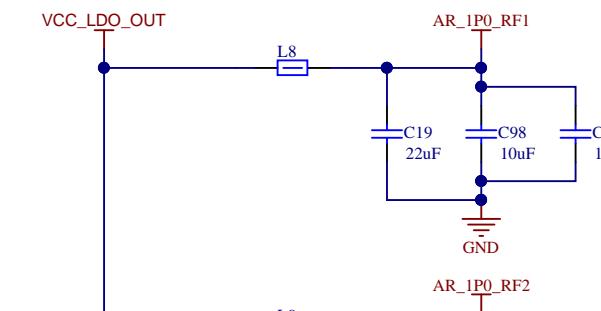
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Orderable: AWR1843BOOST	Designed for: Public Release	Mod. Date: 3/6/2019
TID #: N/A	Project Title: xWR1843EVM	
Number: PROC051	Rev: C	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 4 of 16
Drawn By:	File: PROC051C_PWR_In_Reference.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

LC FILTERING REFERENCE

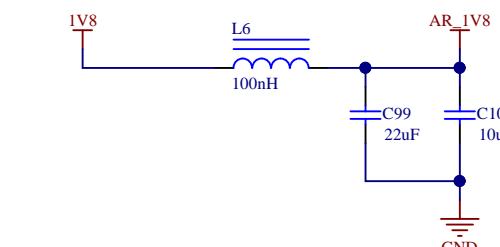
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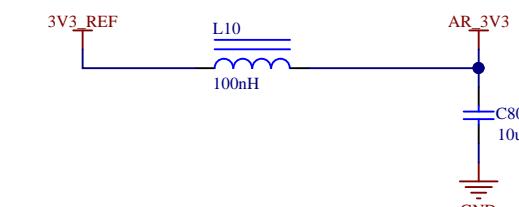
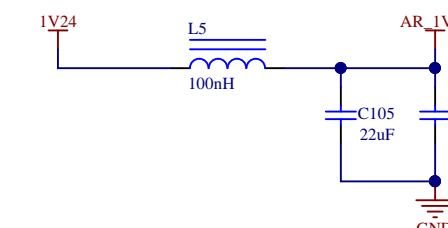
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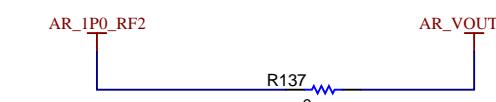
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TID #: N/A	Project Title: xVR1843EVM	
Number: PROC051	Rev: C	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 5 of 16
Drawn By:	File: PROC051C_LC_Filtering_Reference.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

QSPI FLASH REFERENCE

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A

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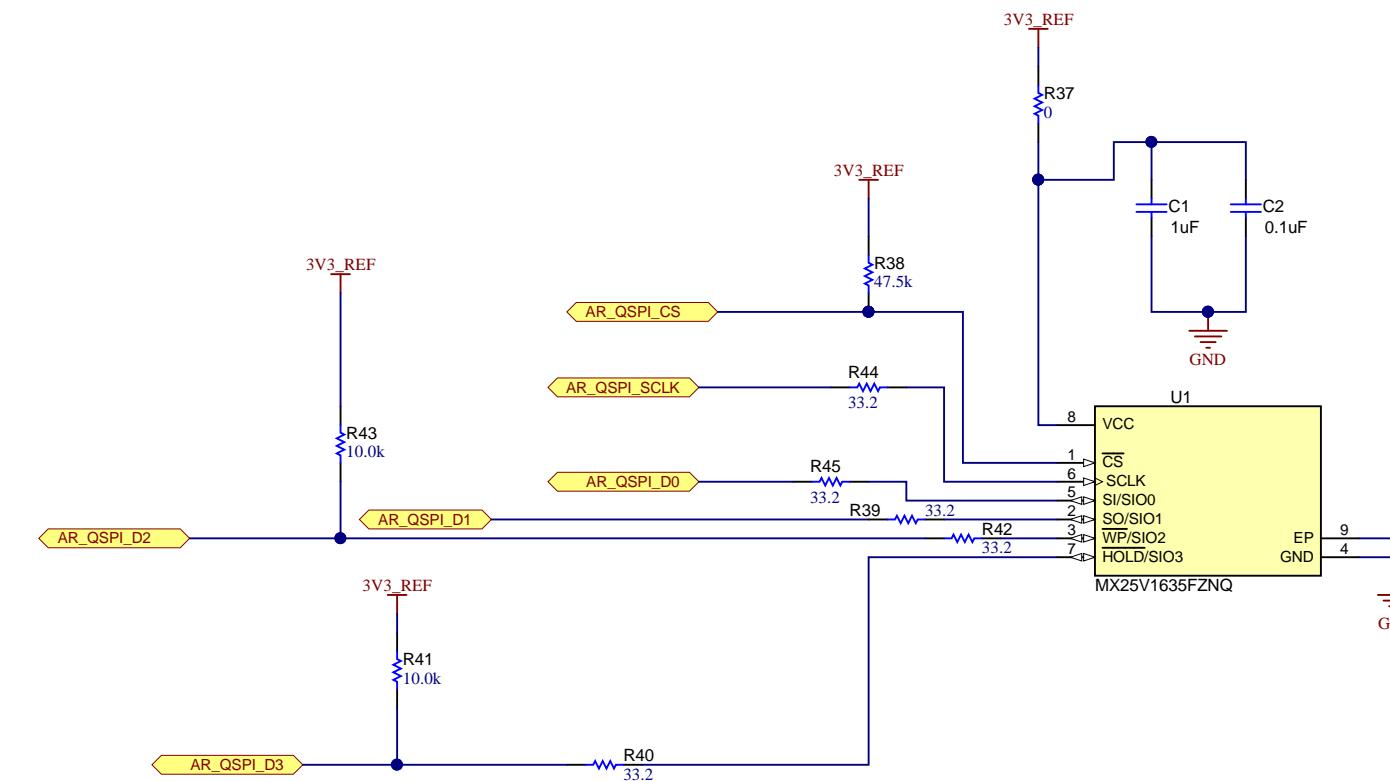
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Orderable: AWR1843BOOST	Designed for: Public Release	Mod. Date: 1/3/2019
TID #: N/A	Project Title: xVR1843EVM	
Number: PROC051	Rev: C	Sheet Title: QSPI flash section
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 6 of 16
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Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

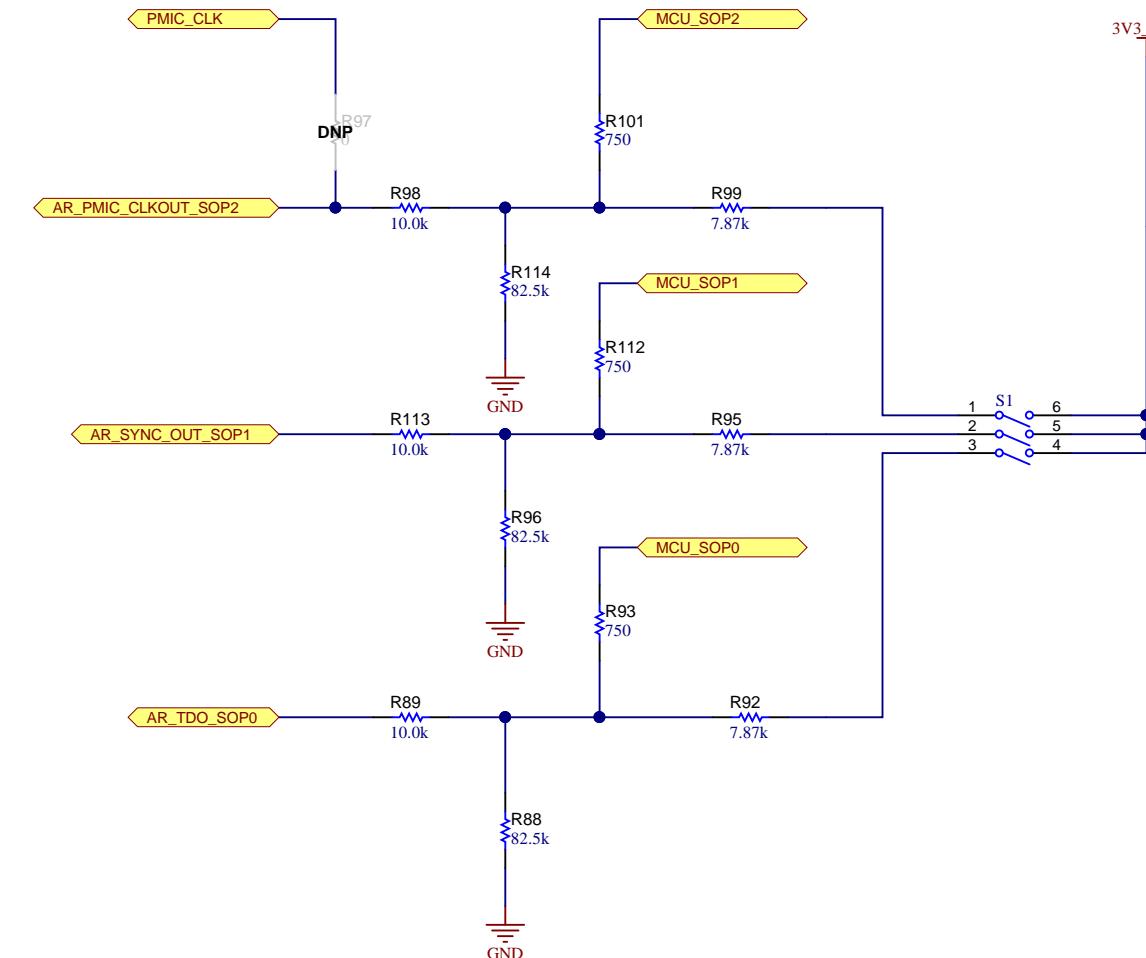
SOP HEADERS REFERENCE

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

A

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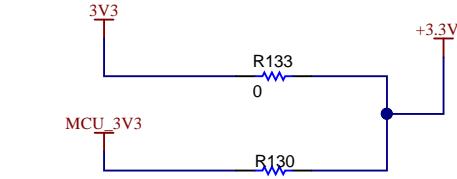
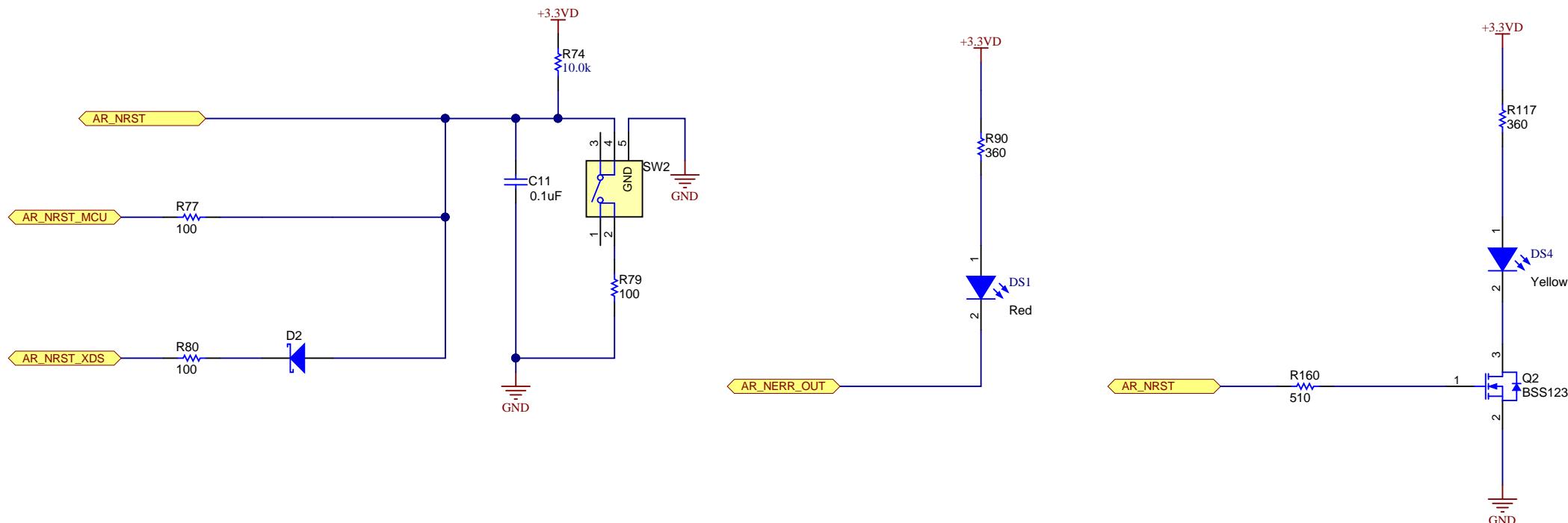
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Orderable: AWR1843BOOST	Designed for: Public Release	Mod. Date: 1/3/2019
TID #:	N/A	Project Title: xWR1843EVM
Number: PROC051	Rev: C	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 7 of 16
Drawn By:	File: PROC051C_SOP_Headers_Reference.SchDd	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

RESET AND LEDs

INDICATION LEDs



A

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B

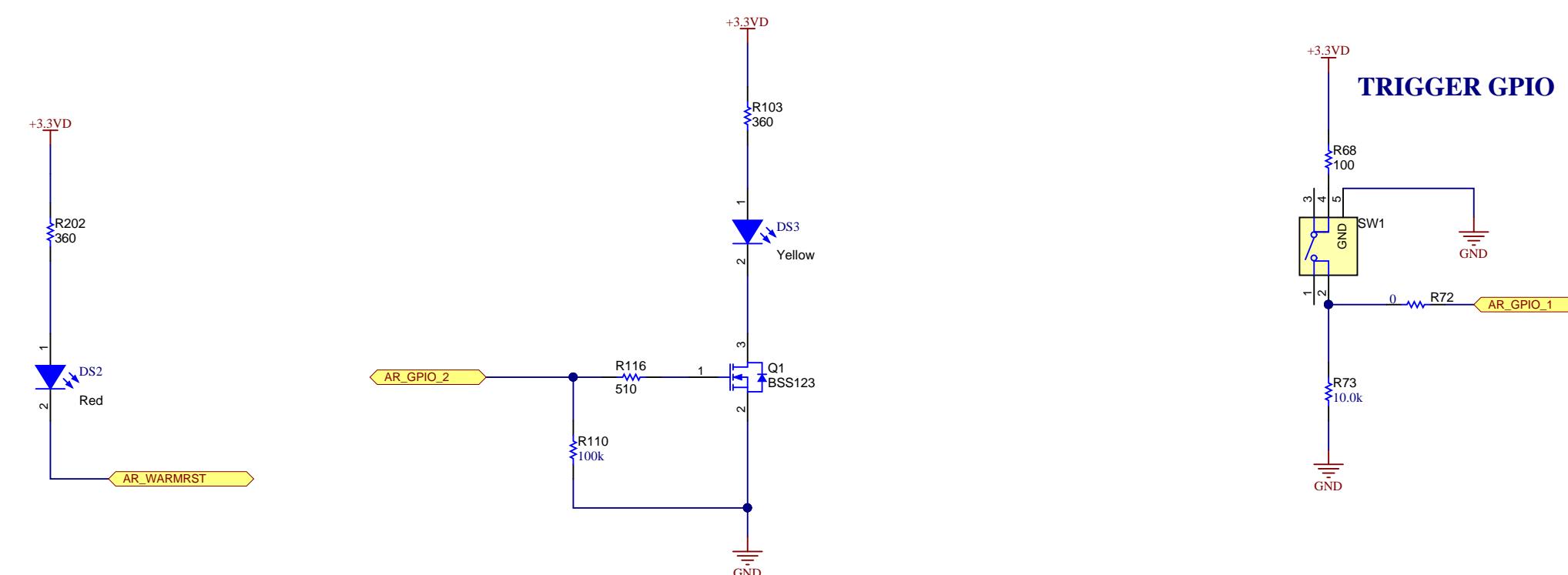
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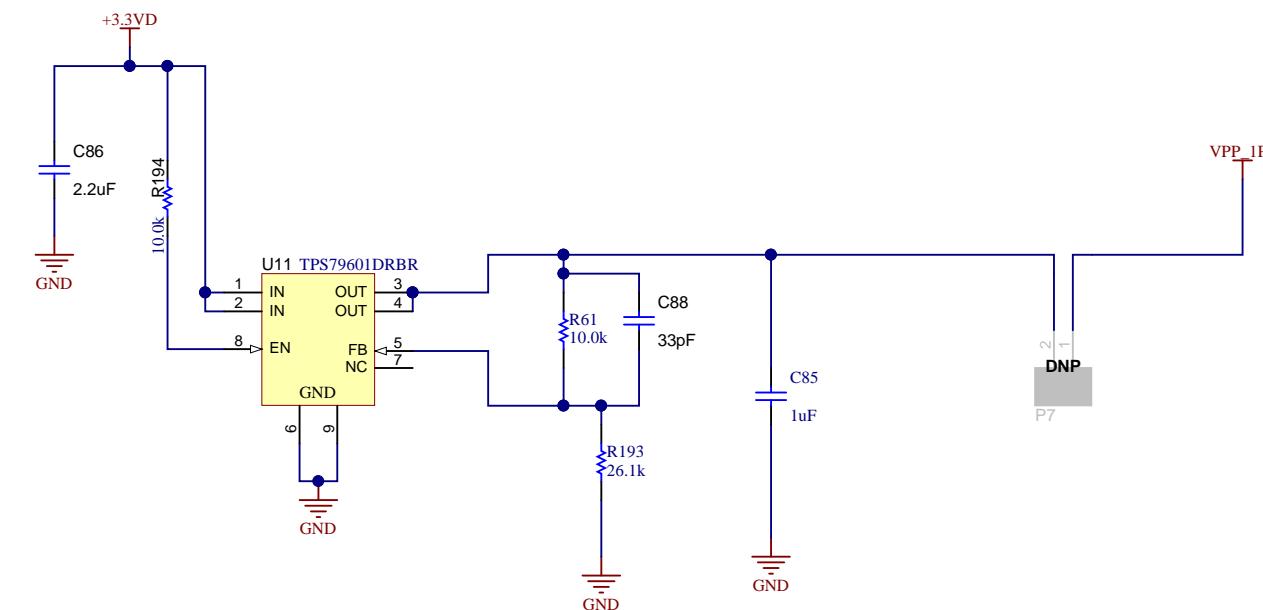
TRIGGER GPIO



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Orderable: AWR1843BOOST	Designed for: Public Release	Mod. Date: 2/20/2019
TID #:	N/A	Project Title: xVR1843EVM
Number: PROC051	Rev: C	Sheet Title: Pwr_RST_LEDs
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 8 of 16
Drawn By:	File: PROC051C_RST_LEDs.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

VPP SUPPLY LDO



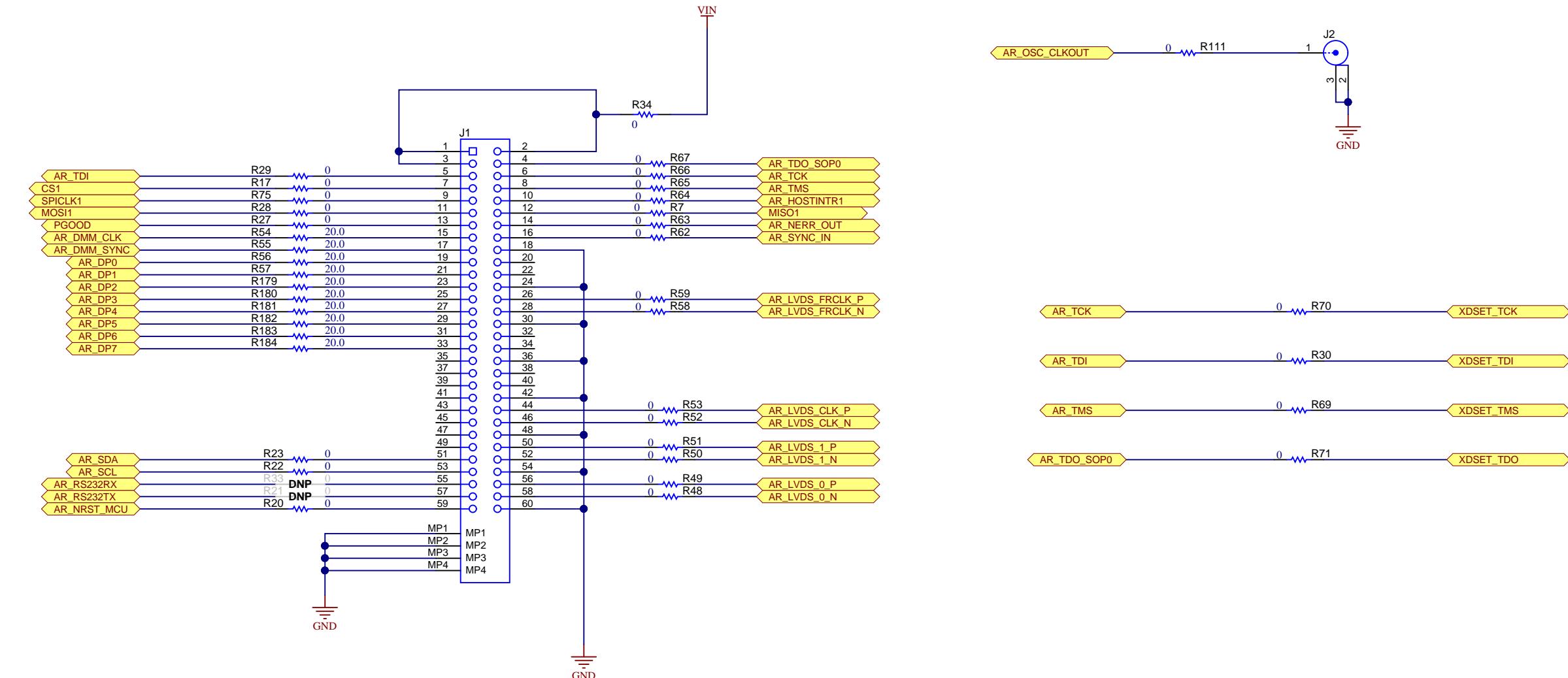
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Orderable: AWR1843BOOST	Designed for: Public Release	Mod. Date: 1/3/2019
TID #: N/A	Project Title: xVR1843EVM	
Number: PROC051	Rev: C	Sheet Title: VPP_Supply
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 9 of 16
Drawn By:	File: PROC051C_VPP_Supply.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

HD CONNECTOR FOR LVDS/CSI AND JTAG

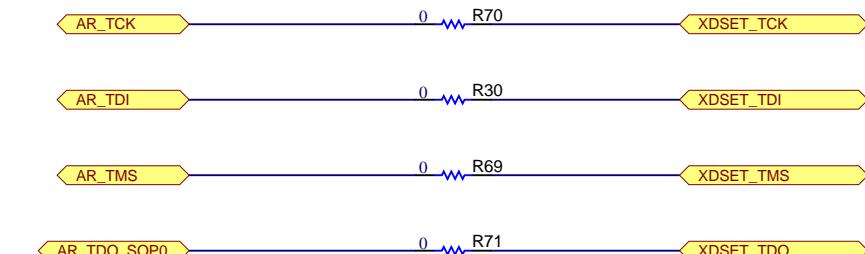
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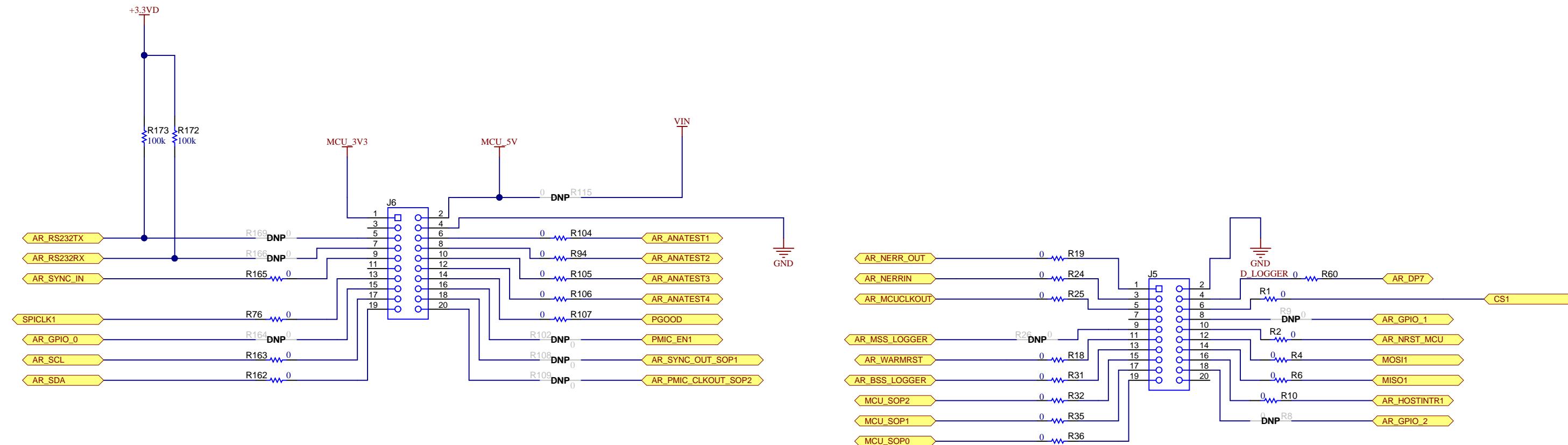
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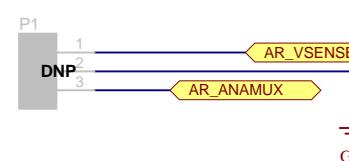
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Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

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BP/LP CONNECTOR



ANALOG SIGNALS



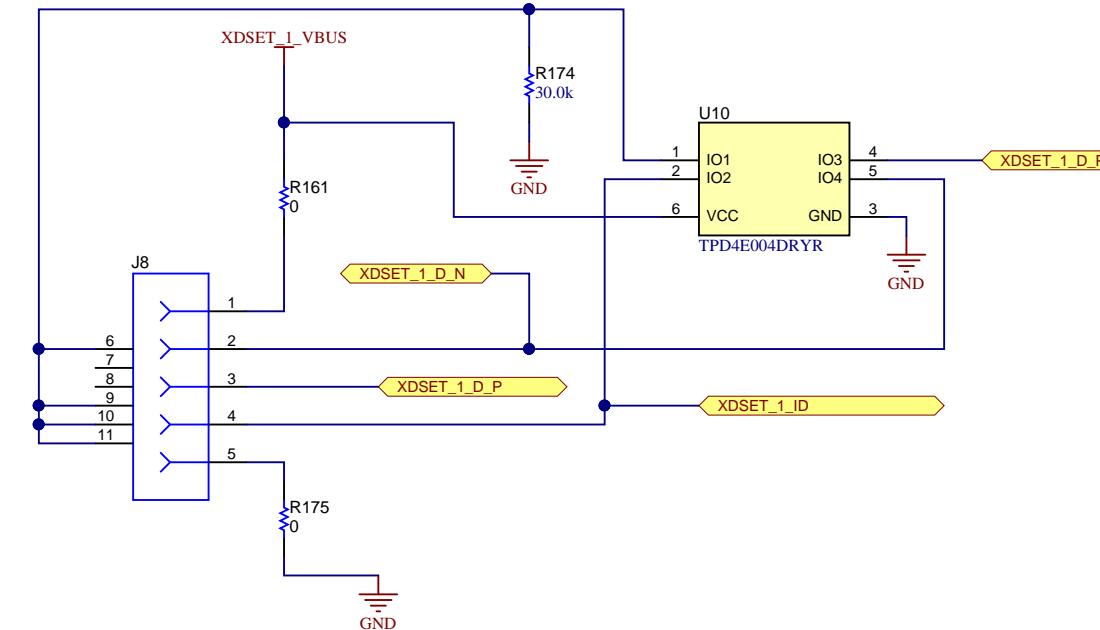
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Number: PROC051	Rev: C	Sheet Title: LP Connector
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 11 of 16
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Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

XDS110(1/2)

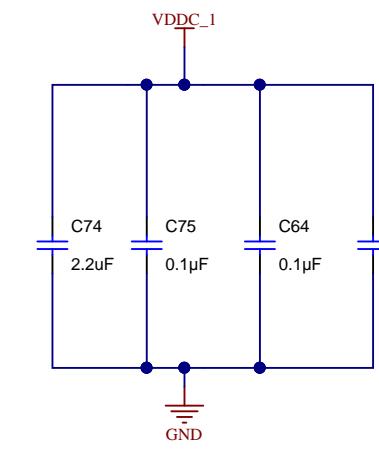
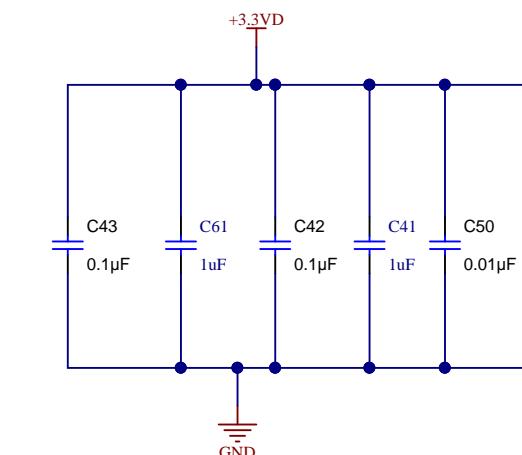
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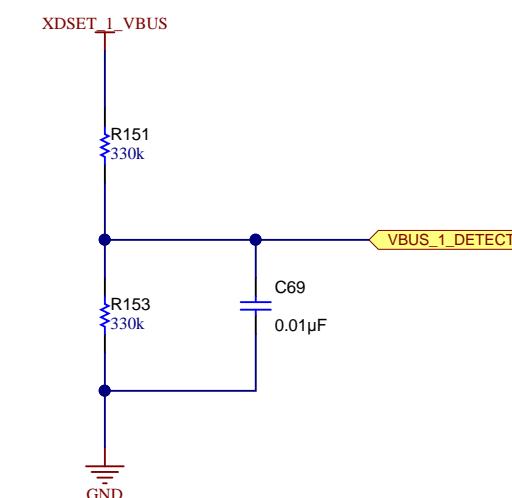
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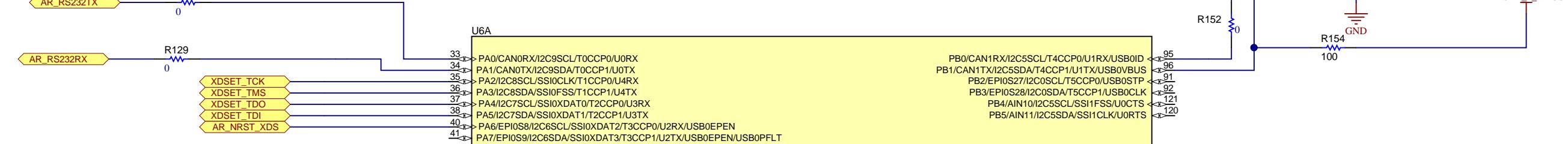
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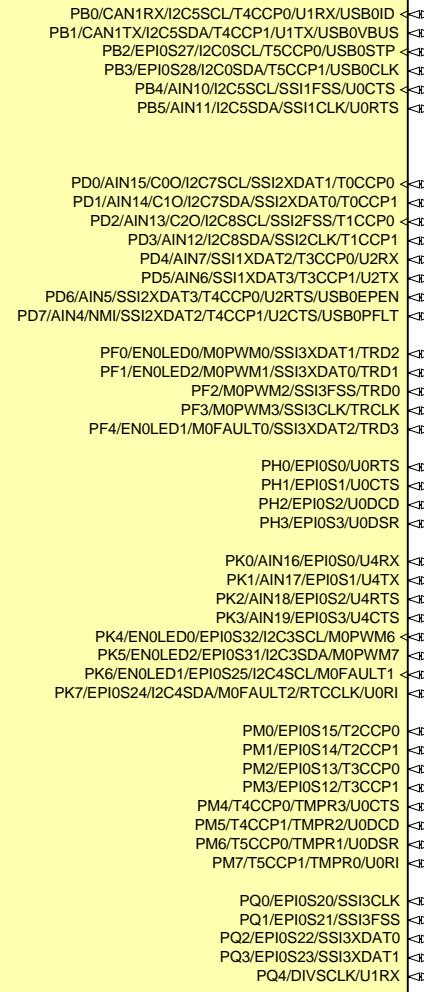
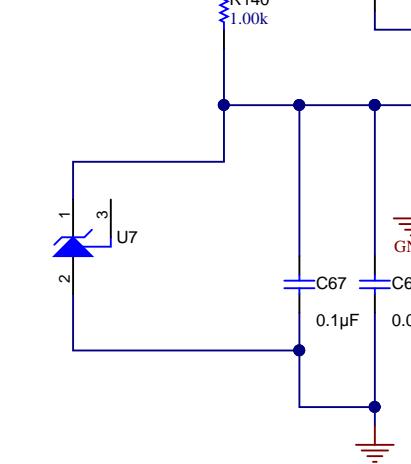
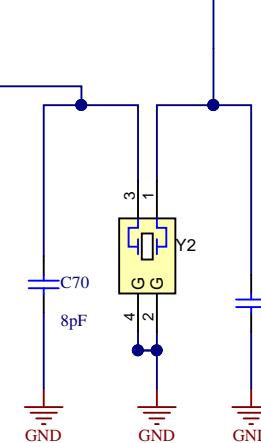
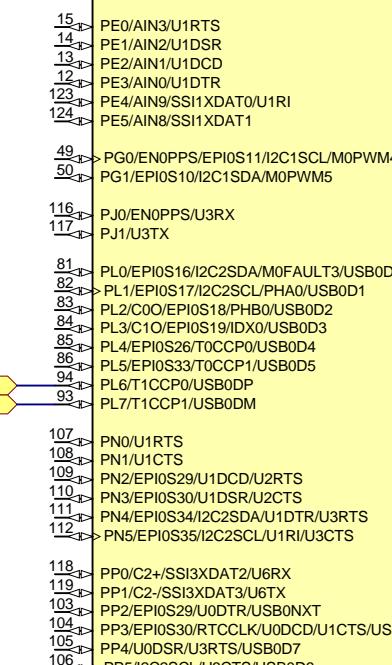
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Number: PROC051	Rev: C	Sheet Title: XDS110 Interface_1A
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 12 of 16
Drawn By:	File: PROC051C_XDS110 Interface_1A.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

XDS110(2/2)

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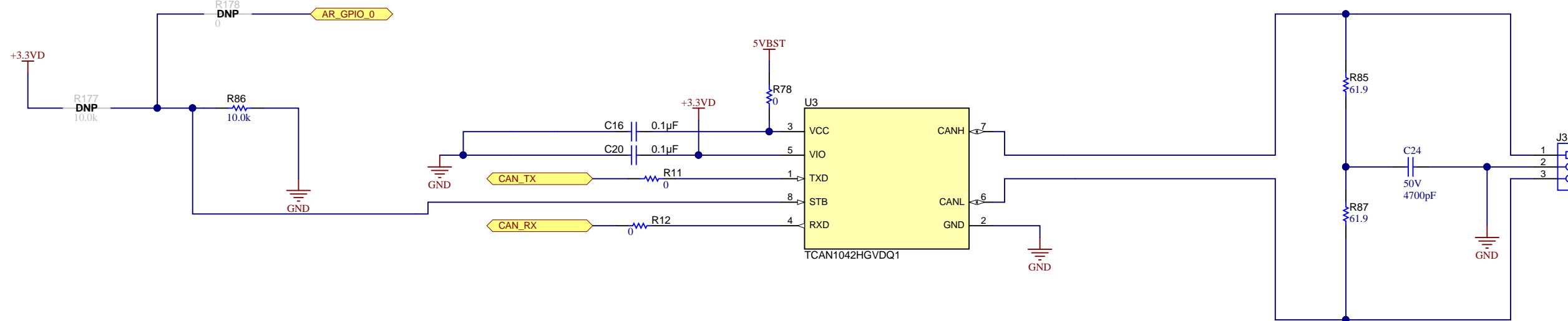


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Number: PROC051	Rev: C	Sheet Title: XDS110 Interface_1B
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 13 of 16
Drawn By: Adrian Ozer	File: PROC051_XDS110 Interface_1B.SchDoc	Size: B
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CAN INTERFACE

A



A

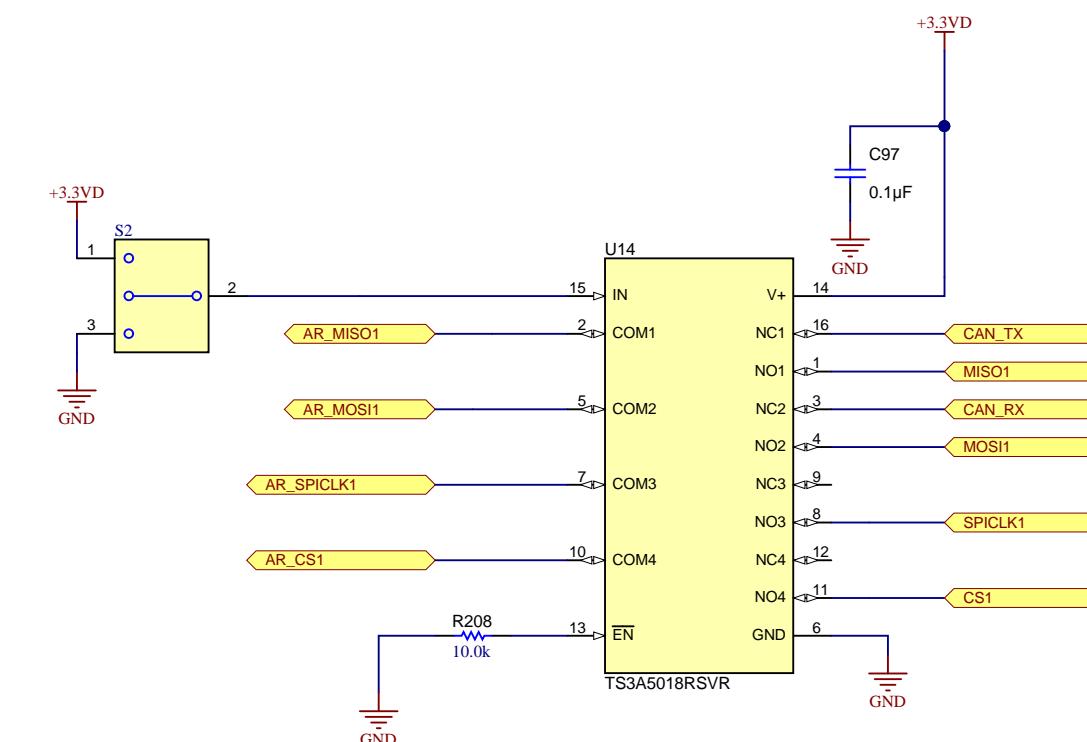
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MUX BETWEEN SPI AND CAN INTERFACE

C

C



D

D

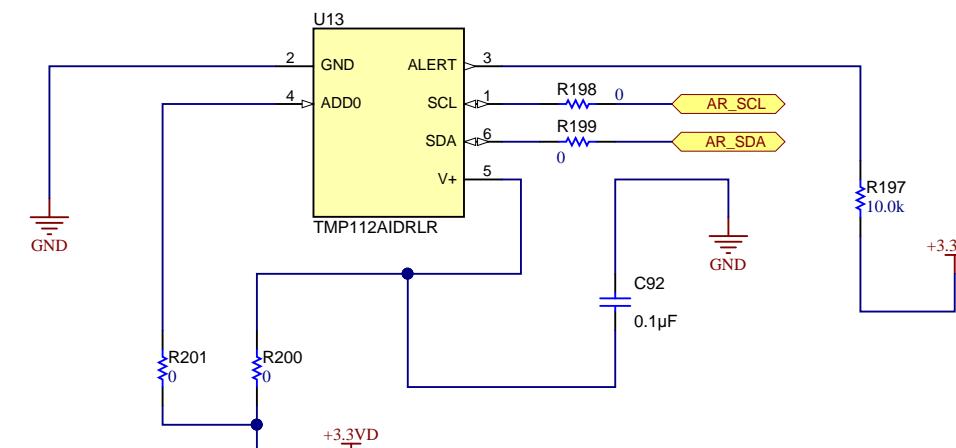
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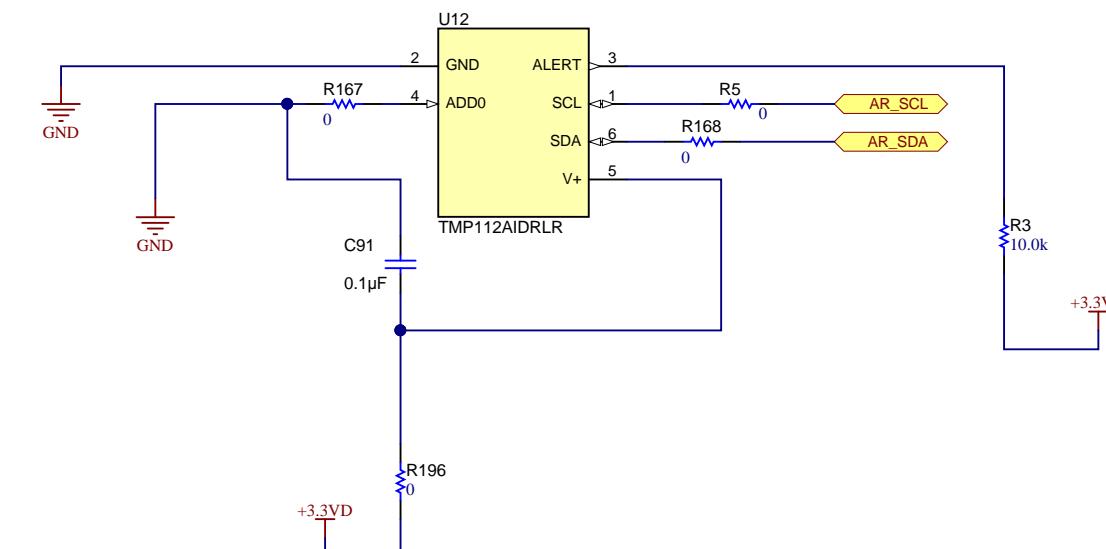
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Number: PROC051	Rev: C	Sheet Title: CAN Interface
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 14 of 16
Drawn By:	File: PROC051C_CAN_Interface.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

ONBOARD TEMP SENSORS

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



**DEFAULT I2C ADDRESS 0X48
TEMP SENSOR CLOSE TO PMIC**



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Orderable: AWR1843BOOST	Designed for: Public Release	Mod. Date: 1/3/2019
TID #: N/A	Project Title: xVR1843EVM	
Number: PROC051	Rev: C	Sheet Title: Tempsensor
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 15 of 16
Drawn By:	File: PROC051C_Tempsensor.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018



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ESD Susceptible

PCB
LOGO
FCC disclaimer

Works With TI LaunchPad Logo
PCB
LOGO
Works With TI LaunchPad Logo

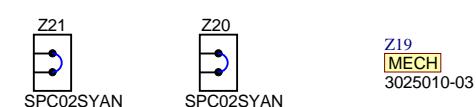
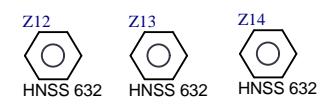
Logo4
PCB
LOGO
WEEE logo



LBL1
PCB Label
Label



CAUTION HOT SURFACE



PCB Number: PROC051
PCB Rev: C

Variant/Label Table	
Variant	Label Text
001	AWR1843BOOST
002	IWR1843BOOST

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
Micro USB cable, Brackets, Screws, Nuts, Jumpers and Bump on need to be placed in a plastic bag

Orderable: AWR1843BOOST	Designed for: Public Release	Mod. Date: 2/20/2019
TID #: N/A	Project Title: xVR1843EVM	
Number: PROC051	Rev: C	Sheet Title: Hardware
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 16 of 16
Drawn By:	File: PROC051C_Hardware.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

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