

A

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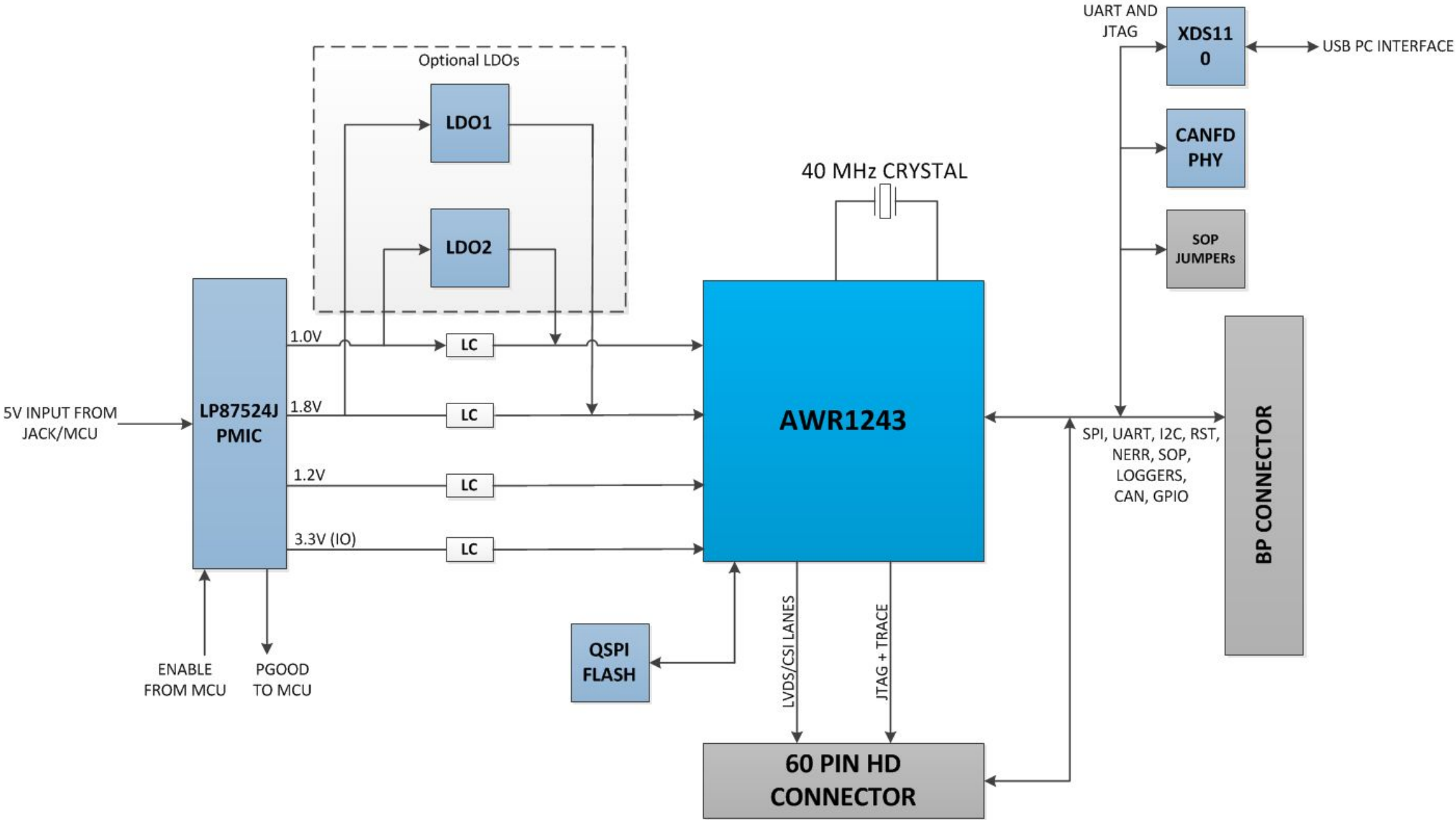
BLOCK DIAGRAM

Revision History

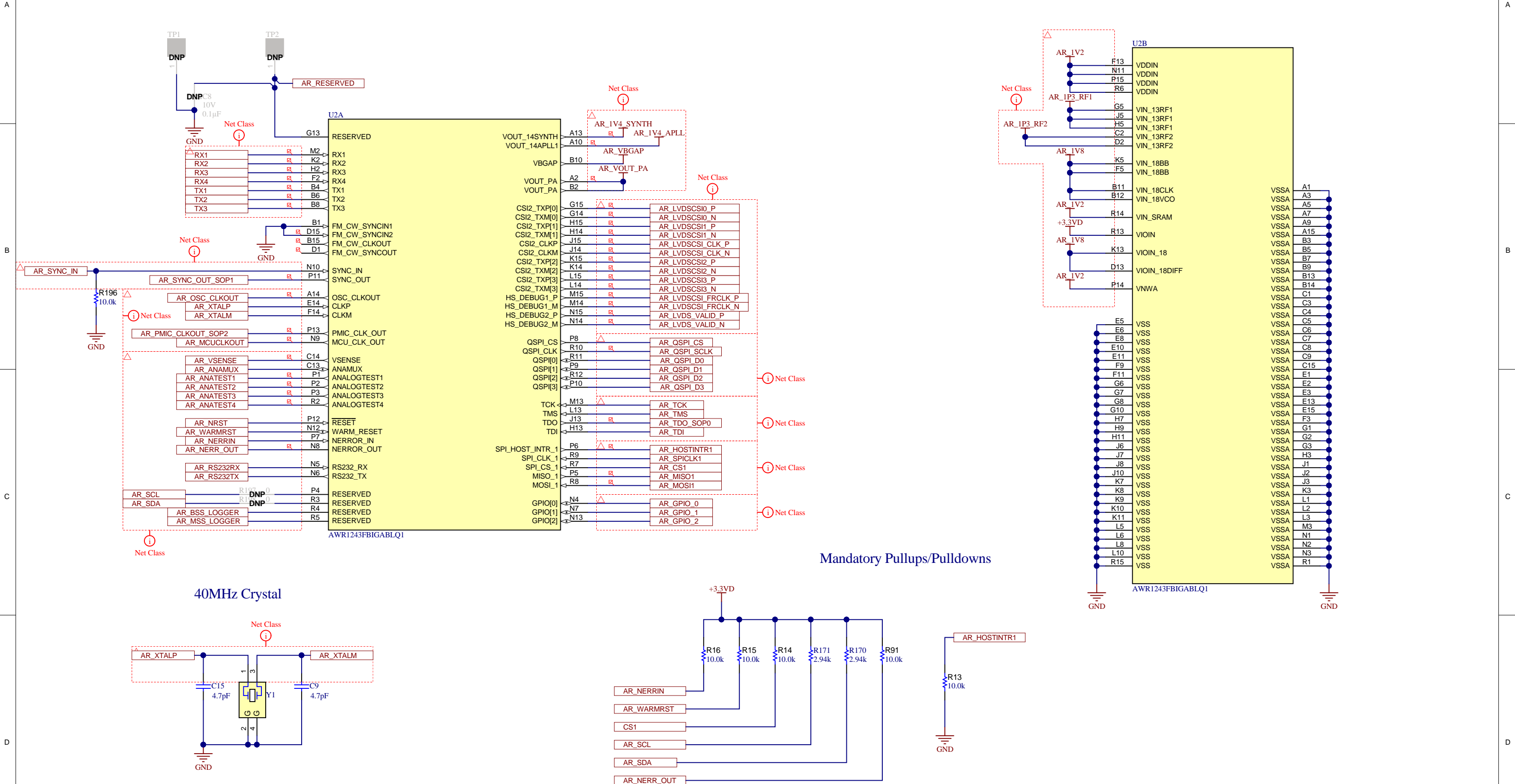
Rev	ECN #	Approved Date	Approved by	Notes
B	1	27/04/2018	Adrian Ozer	Added switch control to move between SPI and CAN interface
B	2	27/04/2018	Adrian Ozer	Enabled by default the 5V supply form the 60pin HD connector
B	3	27/04/2018	Adrian Ozer	Enabled by default the SYNC_IN signal connection to J6 connector
B	4	27/04/2018	Adrian Ozer	Serial flash part number updated to MX25V1635FZNQ
B	5	27/04/2018	Adrian Ozer	Added series resistors on I2C lines
B	6	27/04/2018	Adrian Ozer	Removed the series diode on the NRST signal
B	7	27/04/2018	Adrian Ozer	Enabled by default the LDO bypass option
B	8	27/04/2018	Adrian Ozer	Added variant 002 for AWR1443
B	9	27/04/2018	Adrian Ozer	Added vairant 003 for IWR1443
C	1	25/05/2020	Adrian Ozer	Updated C56 from 0.22uF to 47nF

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11	PROC010C_LP_Connector
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13	PROC010C_XDS110_Interface_1B
14	PROC010C_CAN_Interface
15	PROC010C_Tempsensor
16	PROC010C_Hardware



DUT REFERENCE



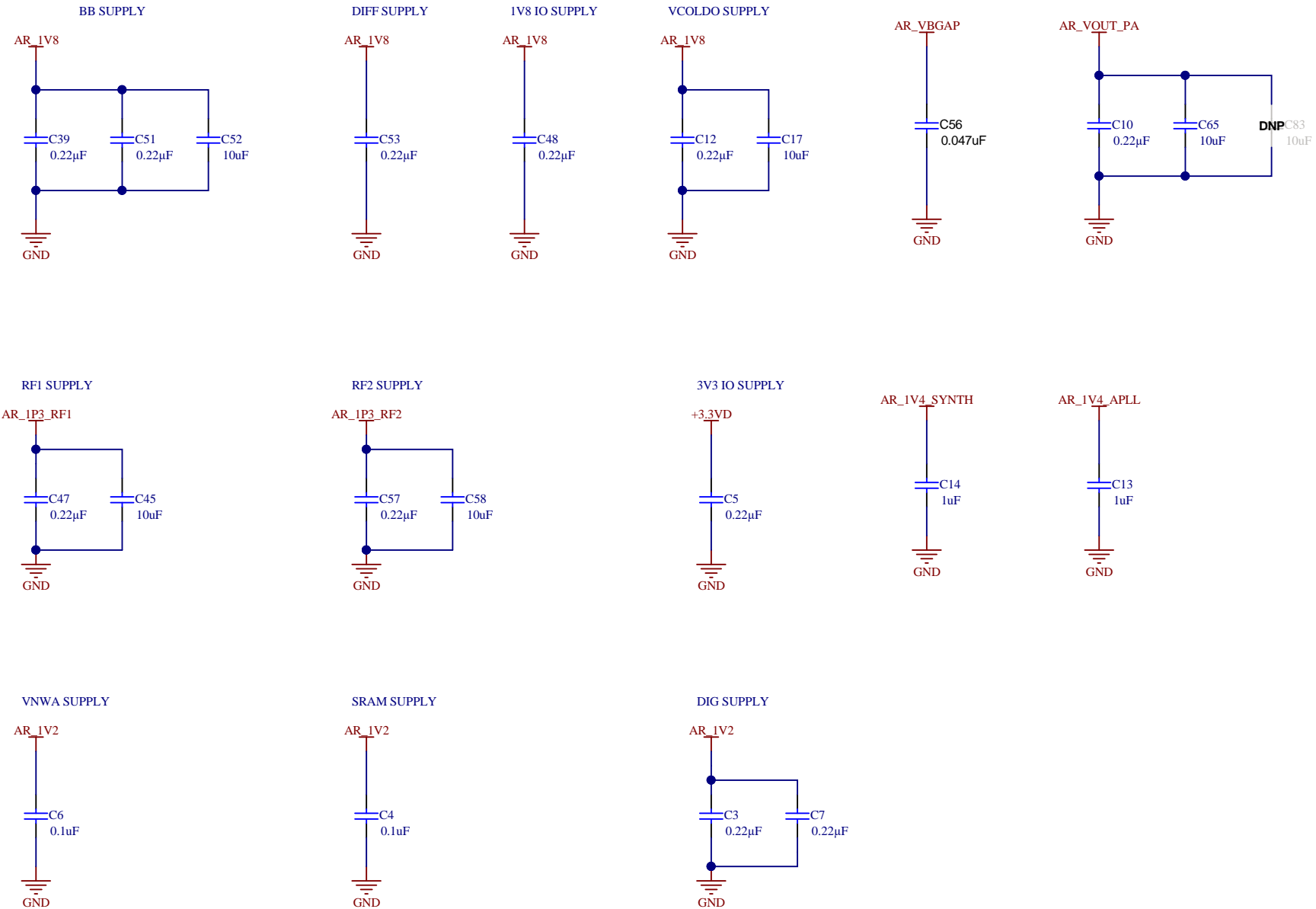
40MHz Crystal

Mandatory Pullups/Pulldowns

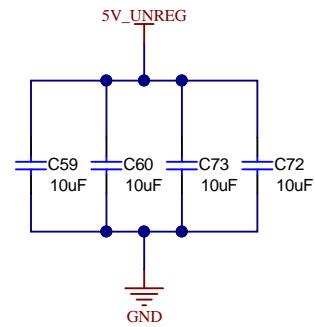
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TID #: N/A	Project Title: PROC010	
Number: PROC010	Rev: C	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 2 of 16
Drawn By: Adrian Ozer	File: PROC010C_DUT_Reference.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	

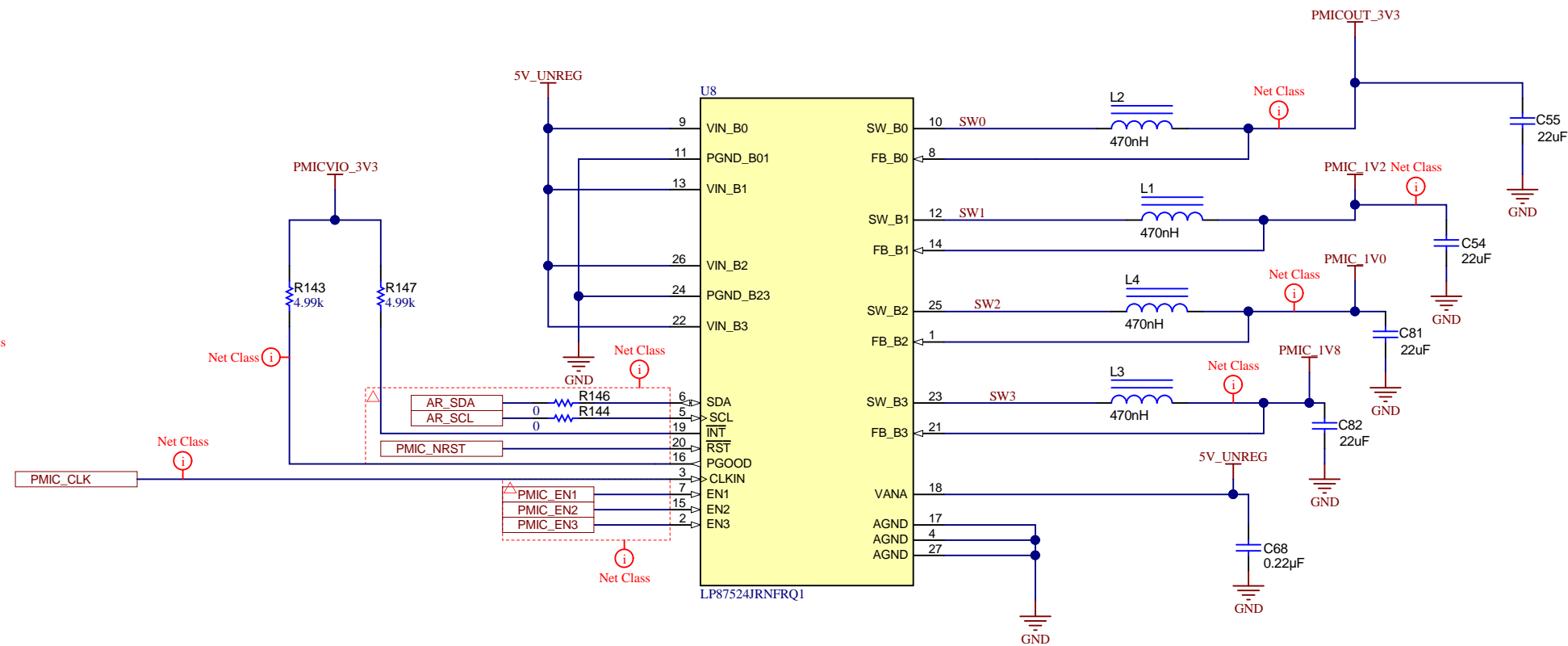
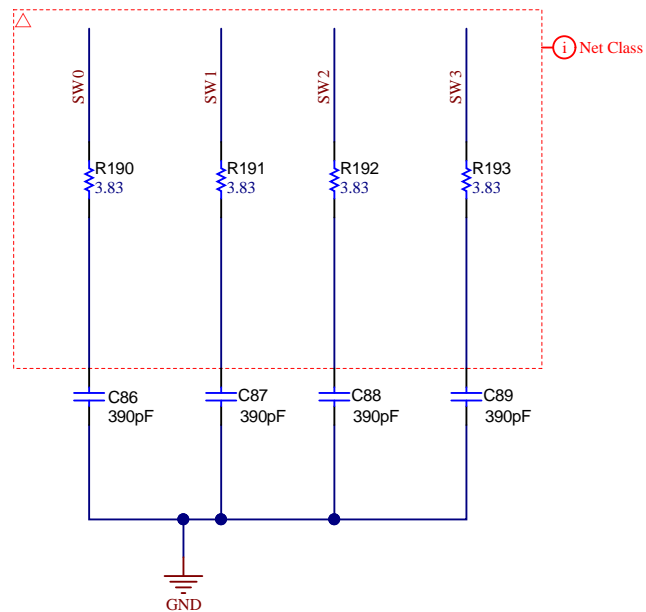
DECOUPLING CAPS REFERENCE



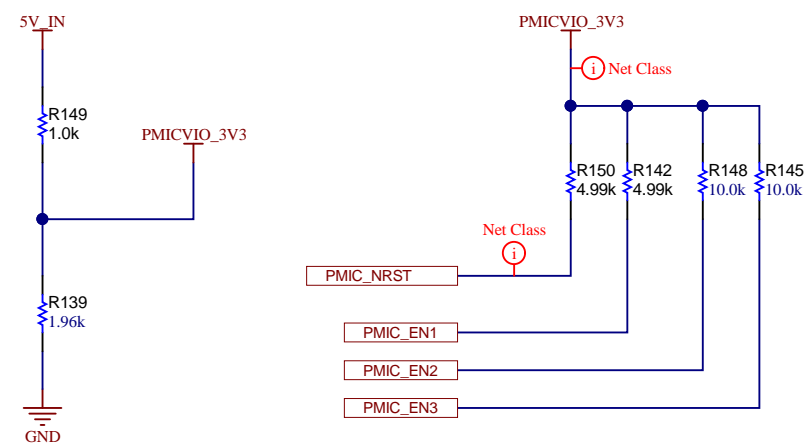
PMIC (3.3V, 1.2V, 1.8V,2.3V OUTPUTS) REFERENCE



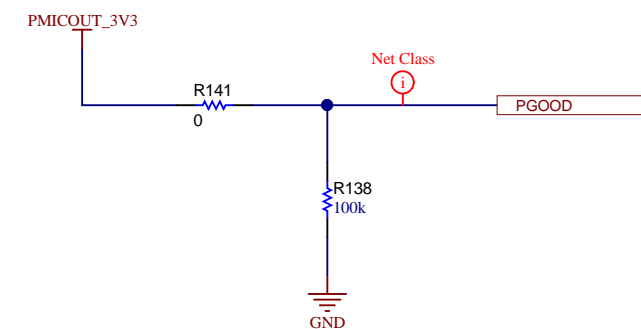
SNUBBER ON SWITCHING NODES



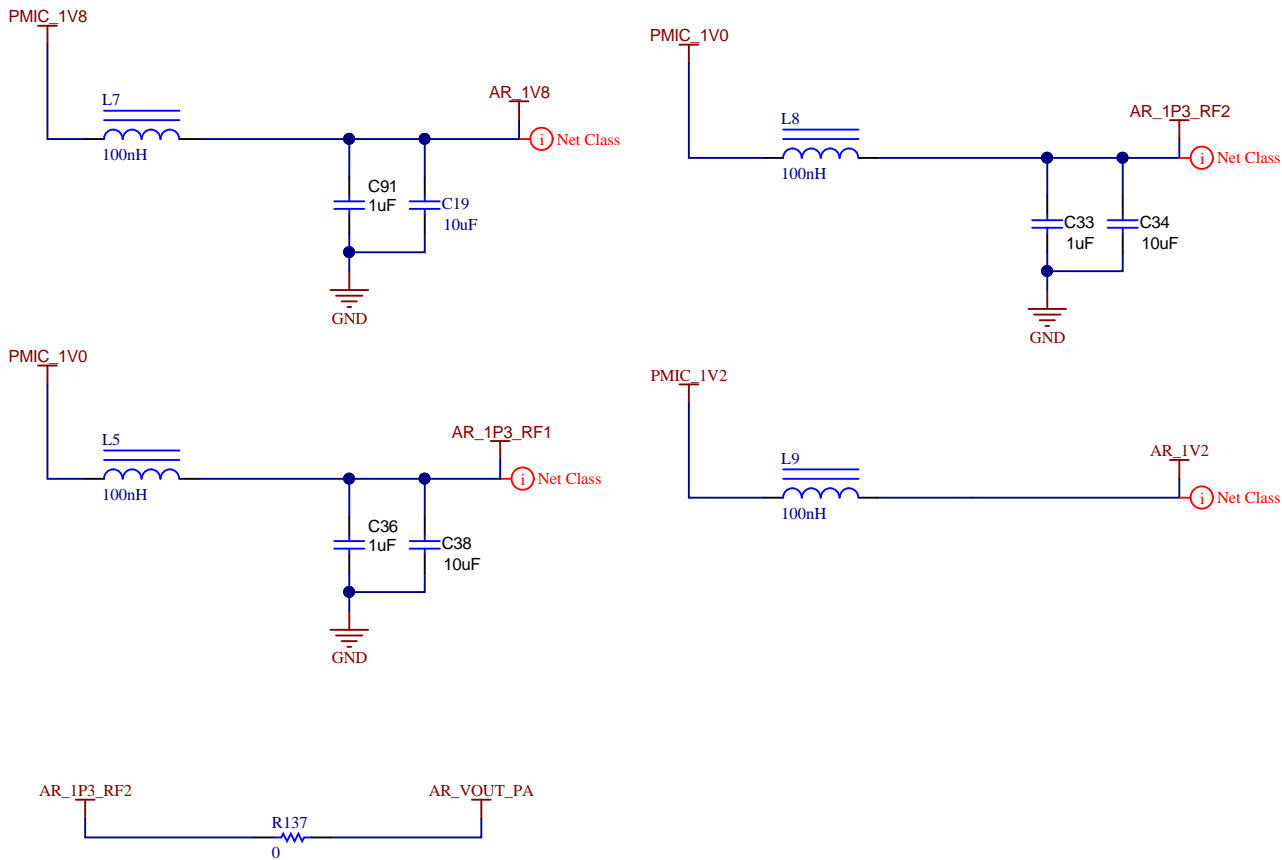
CONTROLS FOR THE PMIC



THE 3V3 OUTPUT FROM PMIC IS USED AS PGOOD.



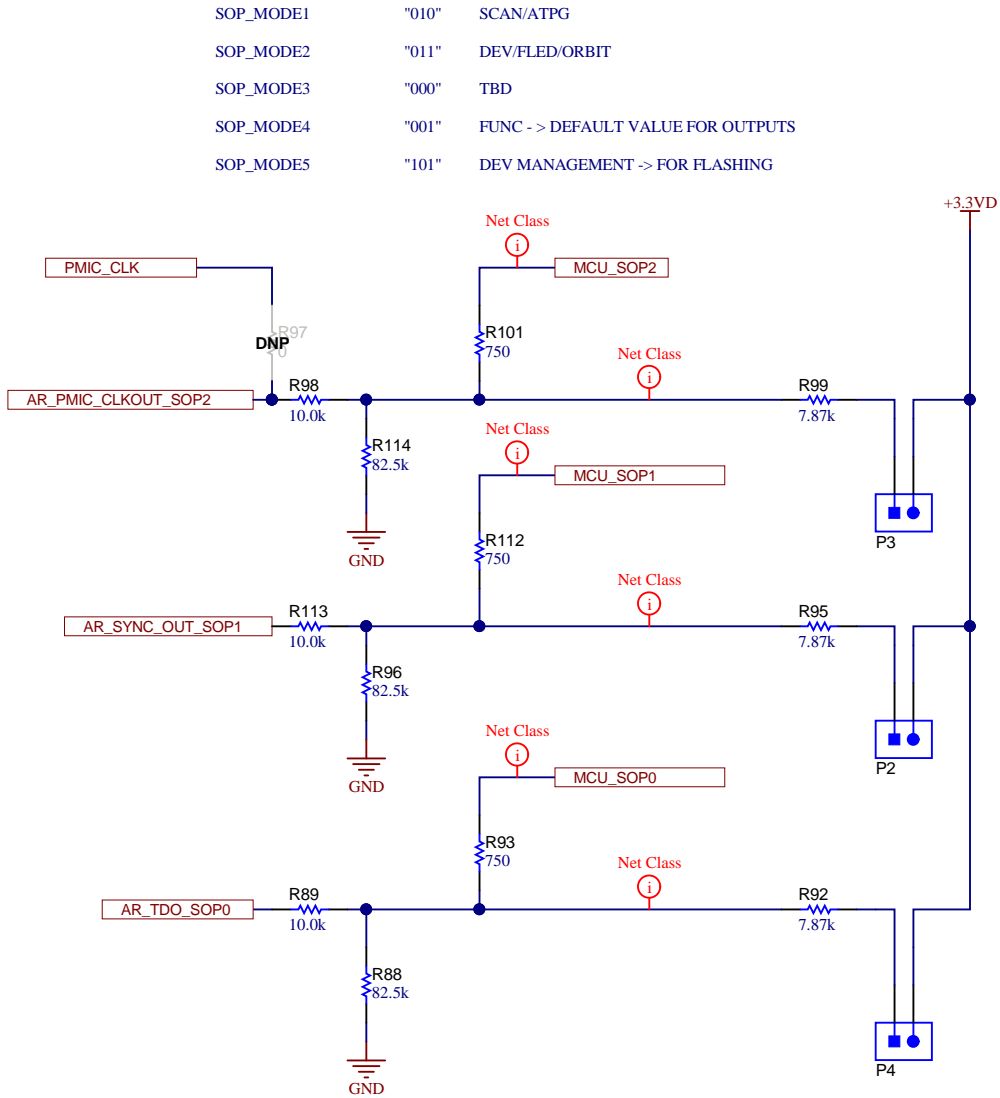
LC FILTERING REFERENCE



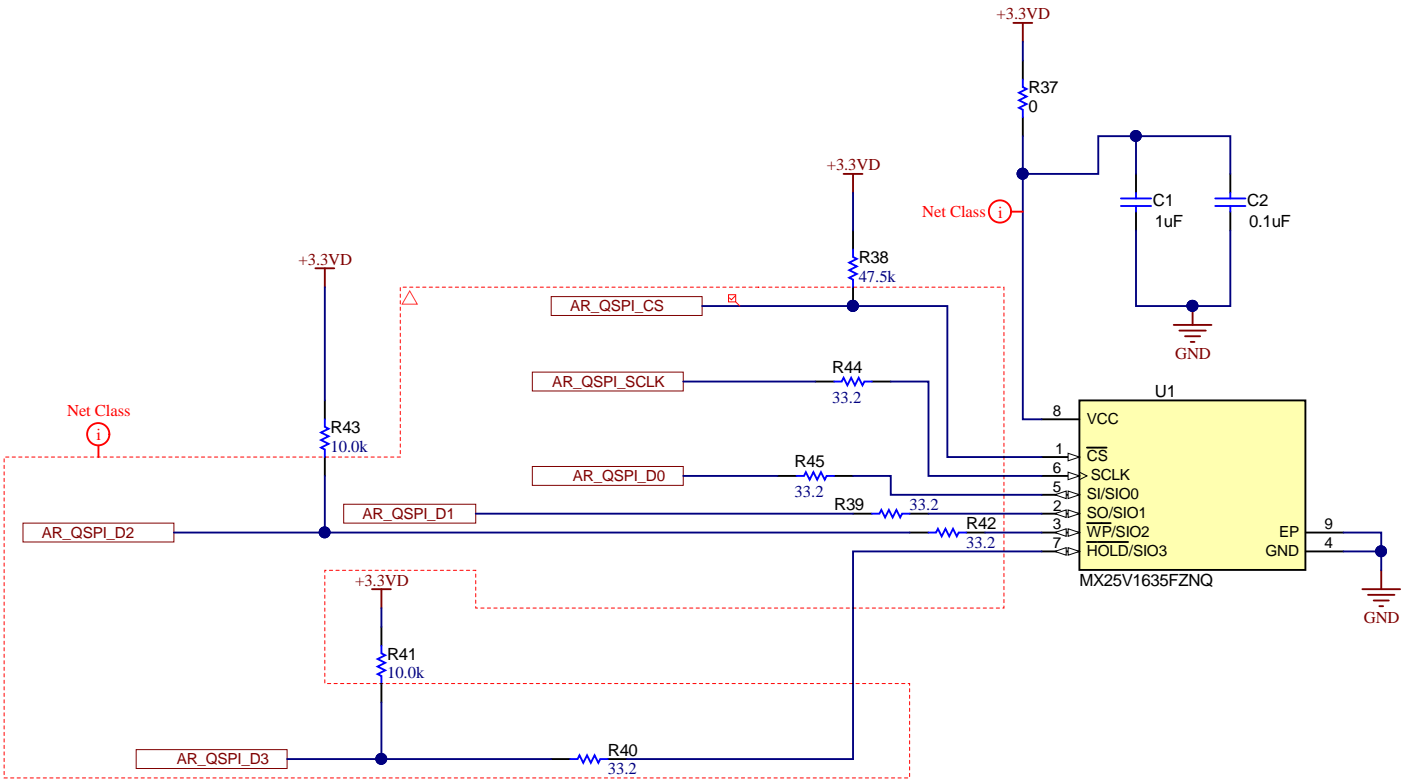
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TID #: N/A		Project Title: PROC010	
Number: PROC010	Rev: C	Sheet Title:	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 5 of 16
Drawn By: Adrian Ozer		File: PROC010C_LC_Filtering_Reference.SchDoc	Size: B
Engineer: Adrian Ozer		Contact: http://www.ti.com/support	

SOP HEADERS REFERENCE



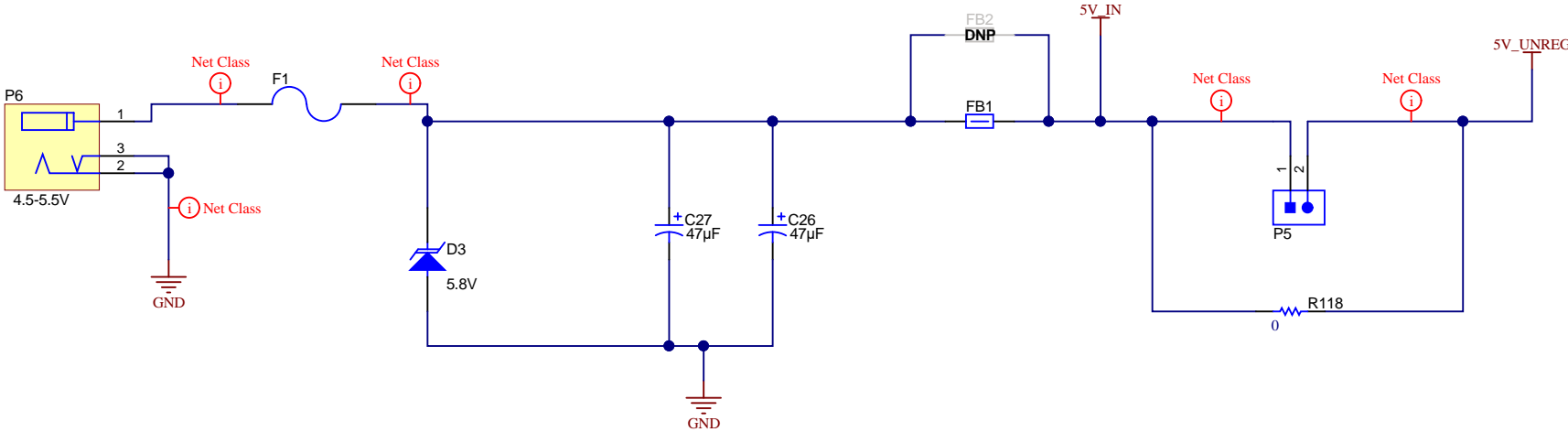
QSPI FLASH REFERENCE



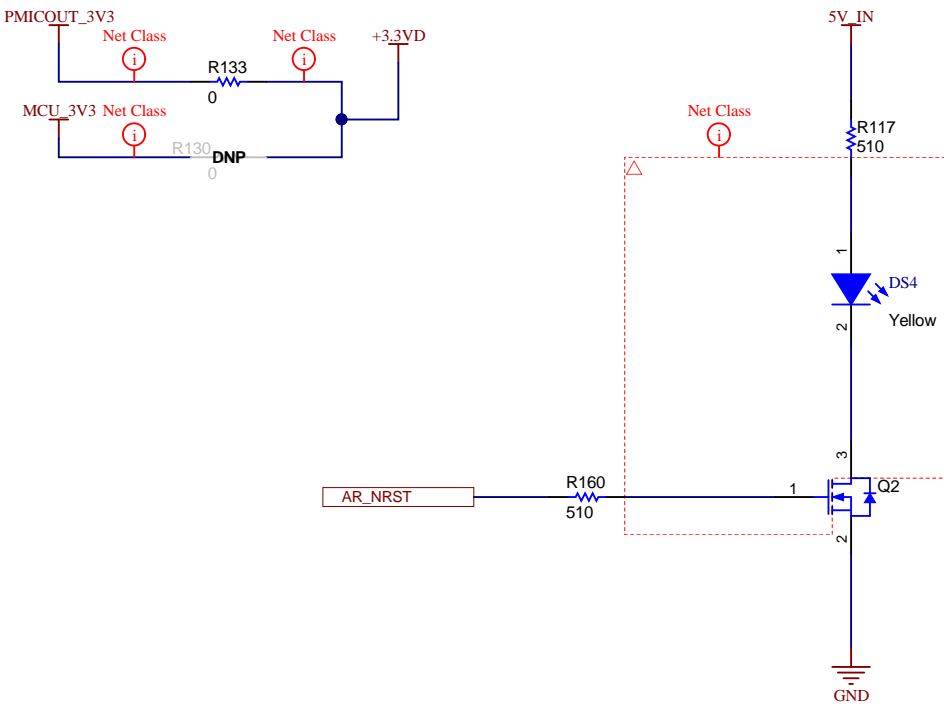
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Orderable: AWR1243BOOST		Designed for: Public Release	Mod. Date: 5/28/2020
TID #: N/A		Project Title: PROC010	
Number: PROC010	Rev: C	Sheet Title: QSPI flash section	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 7 of 16
Drawn By: Adrian Ozer		File: PROC010C_QSPI_Flash_Reference.SchDoc	Size: B
Engineer: Adrian Ozer		Contact: http://www.ti.com/support	

POWER SUPPLY CONNECTOR

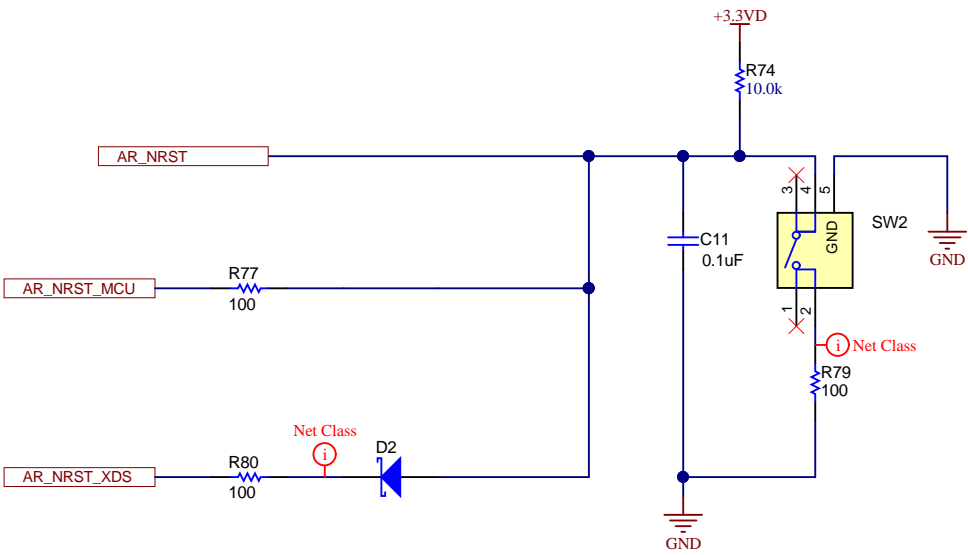


3P3 SUPPLY FROM PMIC OR FROM THE MCU

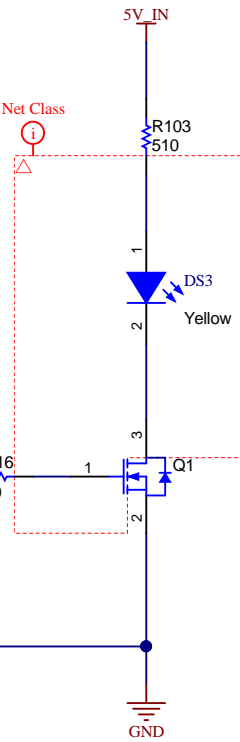
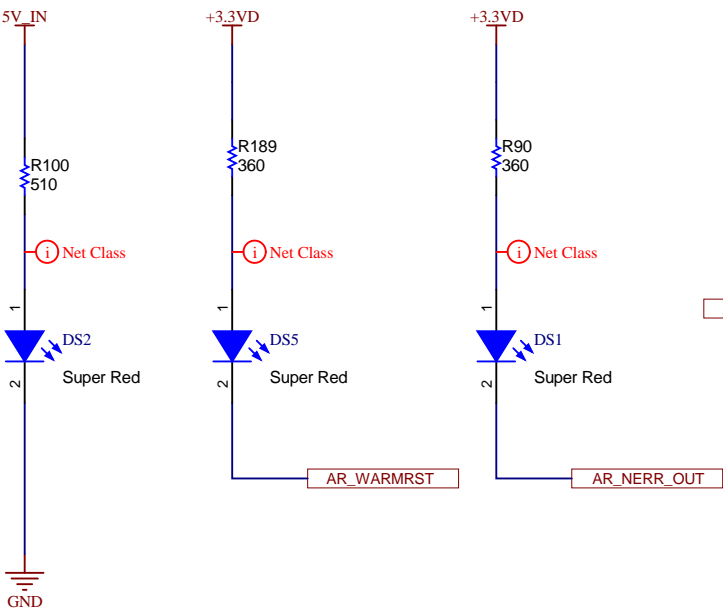


RESET AND LEDS

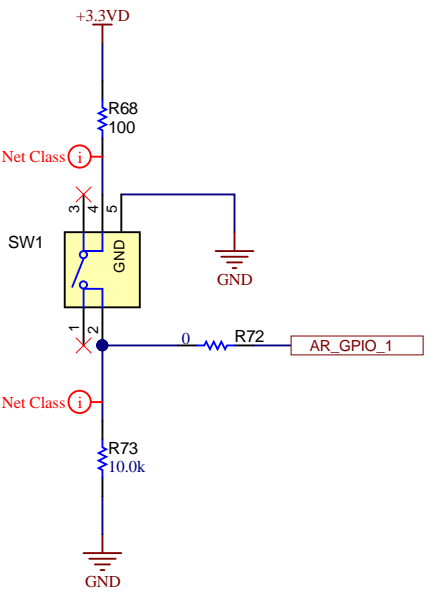
RESET



INDICATION LEDS



TRIGGER GPIO



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Orderable: AWR1243BOOST	Designed for: Public Release	Mod. Date: 5/28/2020
TID #: N/A	Project Title: PROC010	
Number: PROC010	Rev: C	Sheet Title: Pwr_RST_LEDs
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 8 of 16
Drawn By: Adrian Ozer	File: PROC010C_Pwr_RST_LEDs.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	© Texas Instruments 2018

A

B

C

D

A

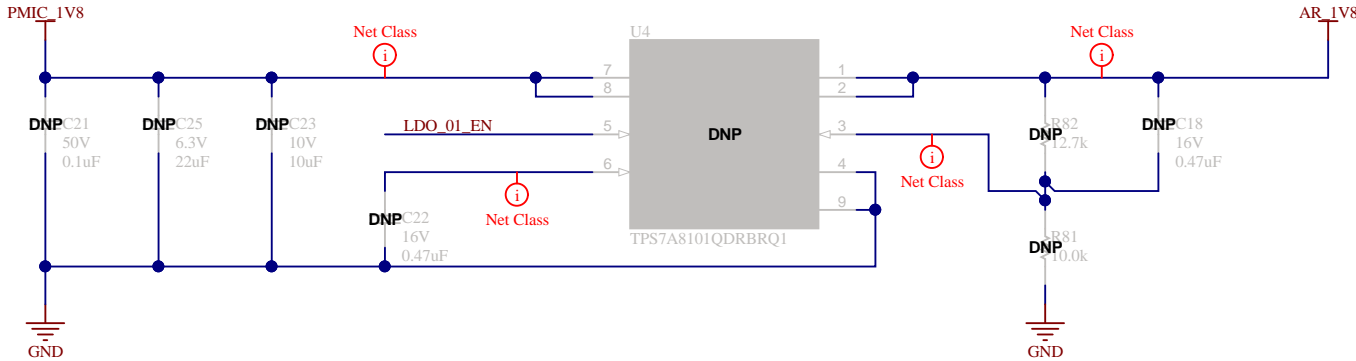
B

C

D

LDO

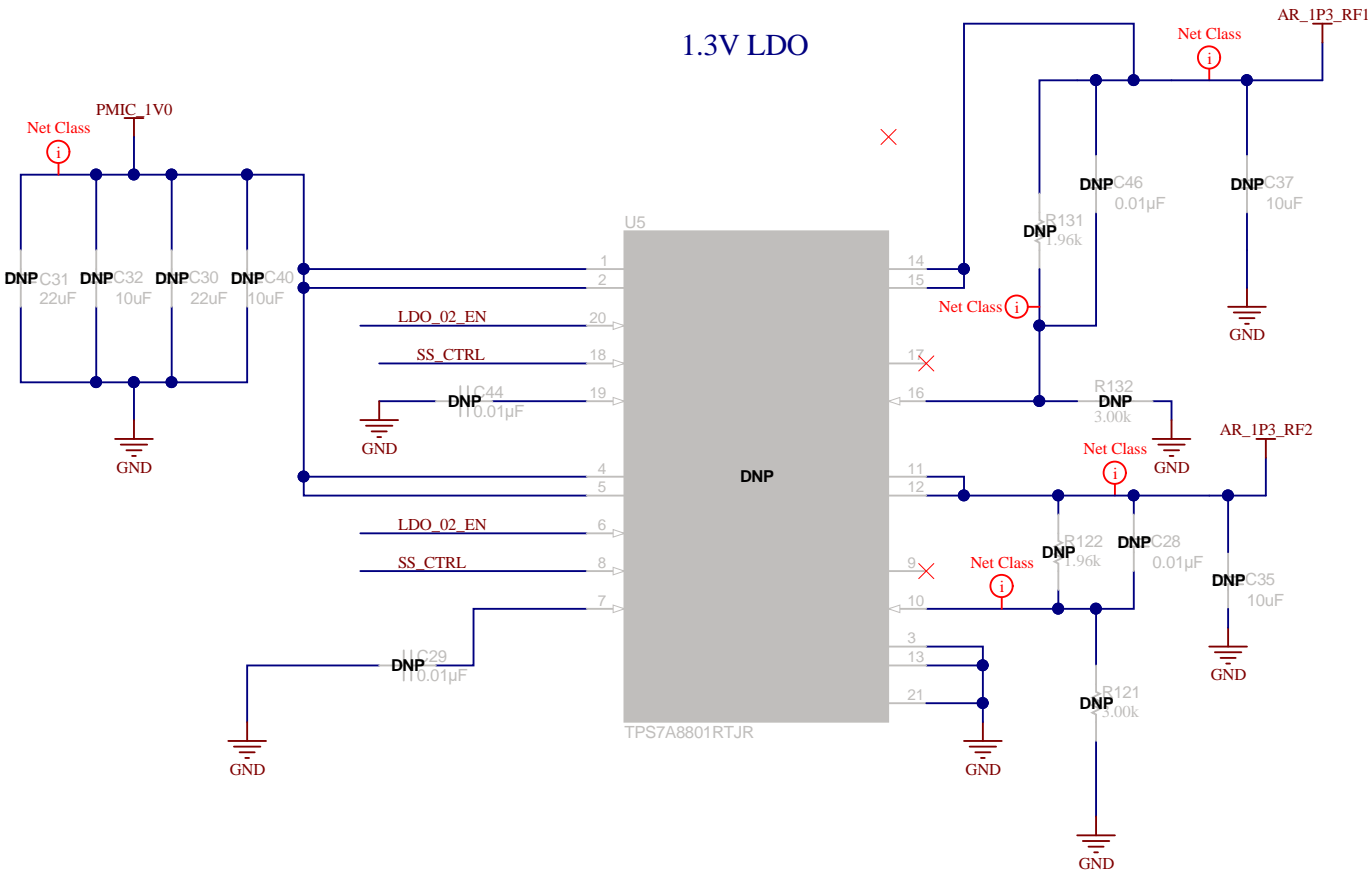
1.8V LDO



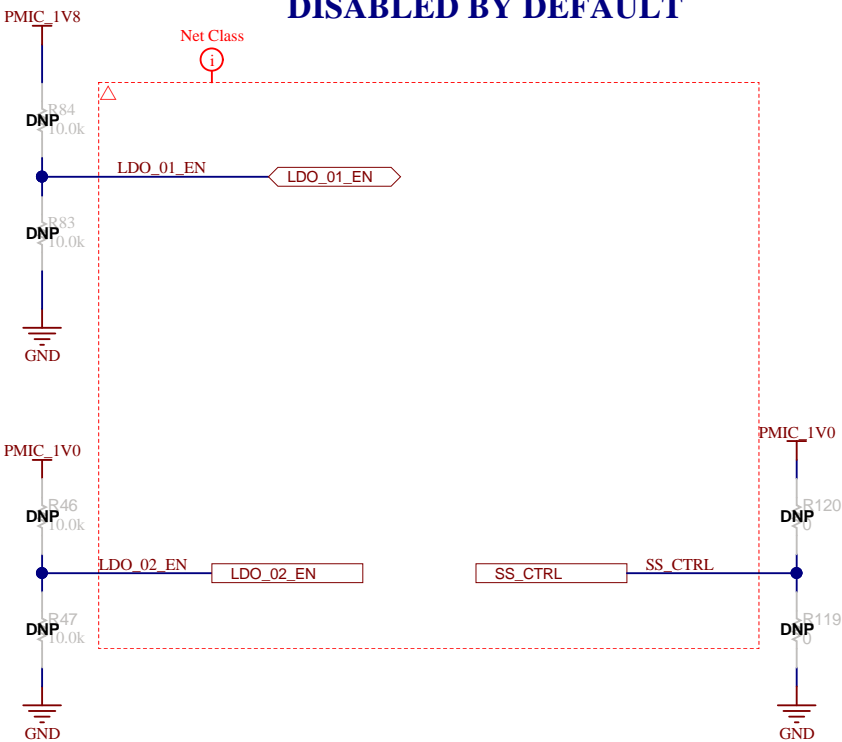
LDOs ARE FOR DEBUG PURPOSES ONLY

DURING LDO OPERATION PMIC_1V8 IS 2.3V AND PMIC_1V0 IS 1.8V

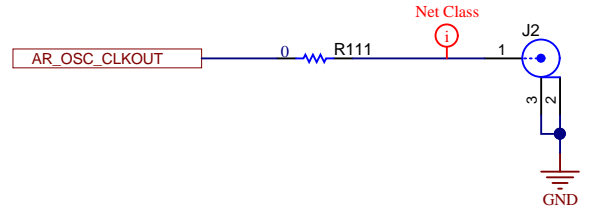
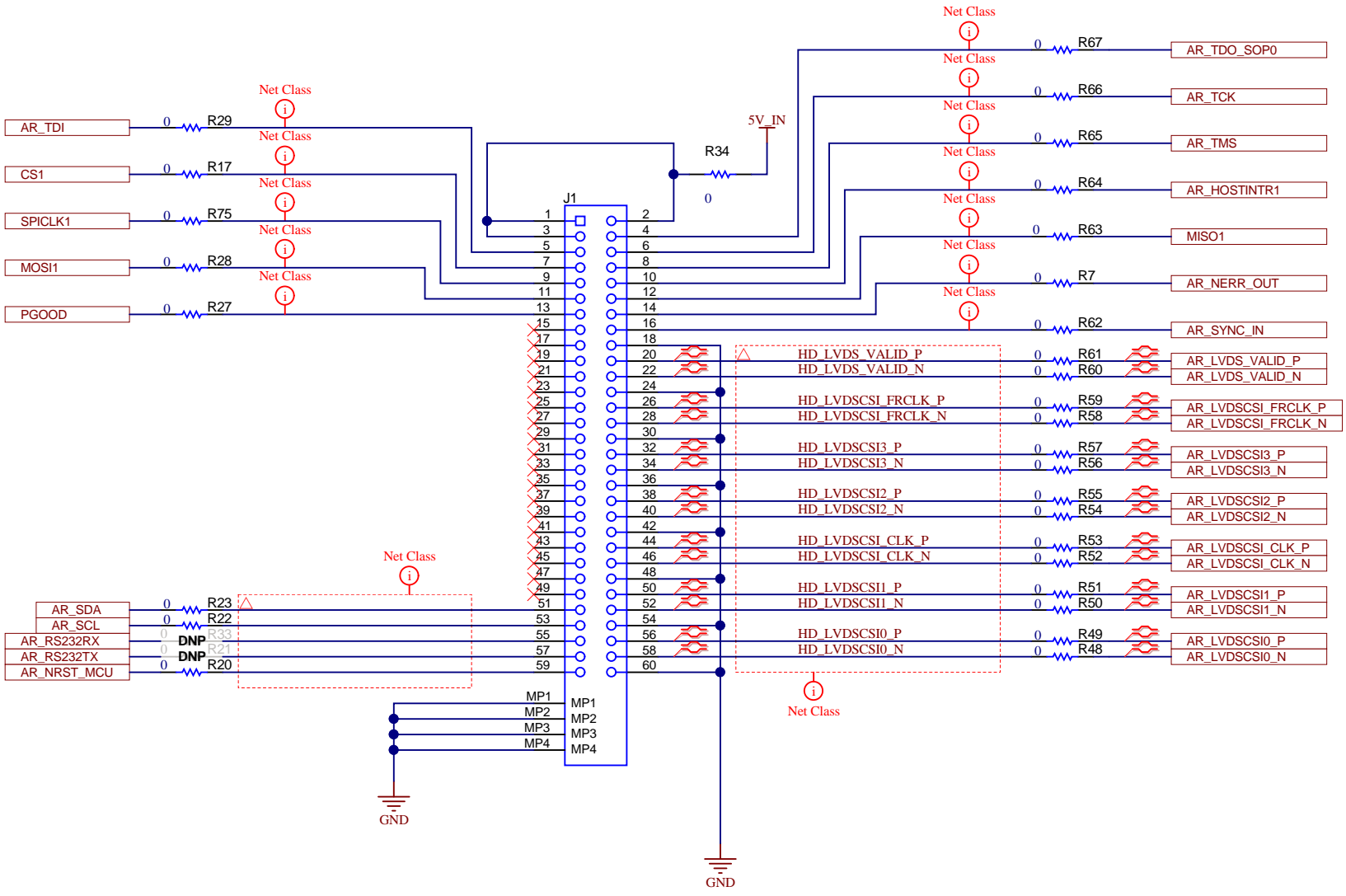
1.3V LDO



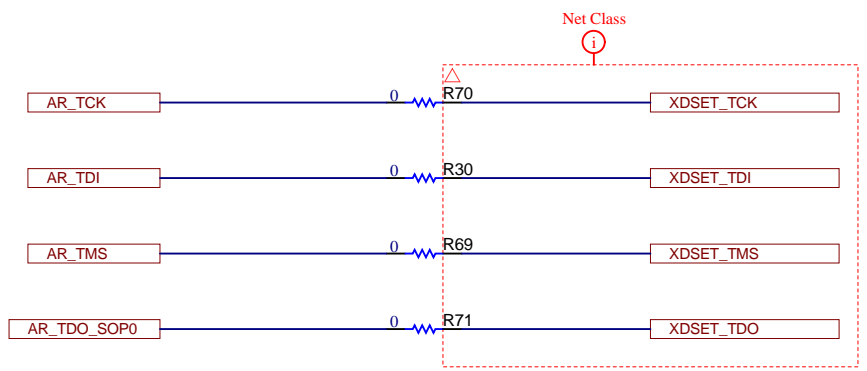
DISABLED BY DEFAULT



HD CONNECTOR FOR LVDS/CSI AND JTAG

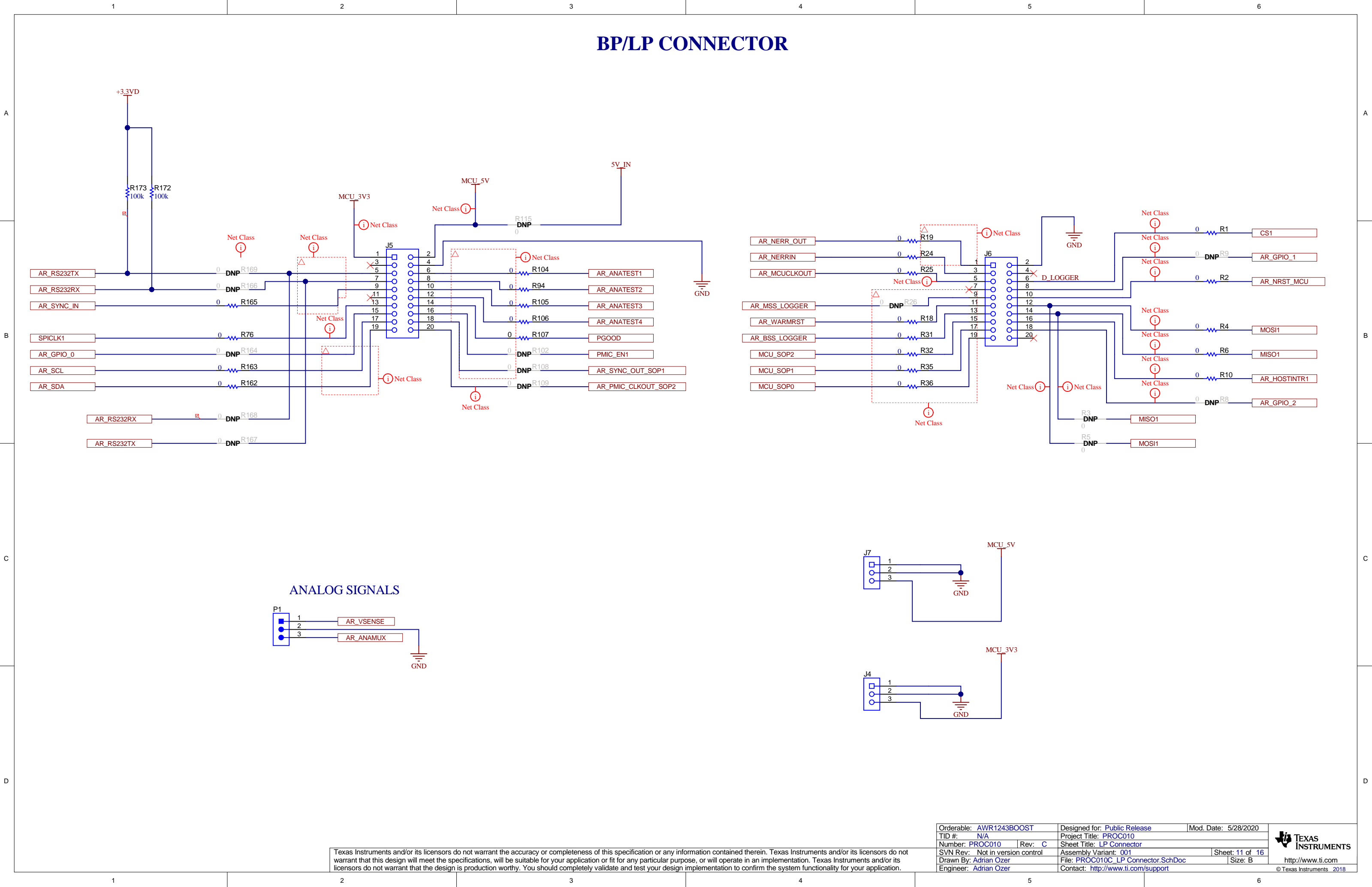


JTAG



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BP/LP CONNECTOR

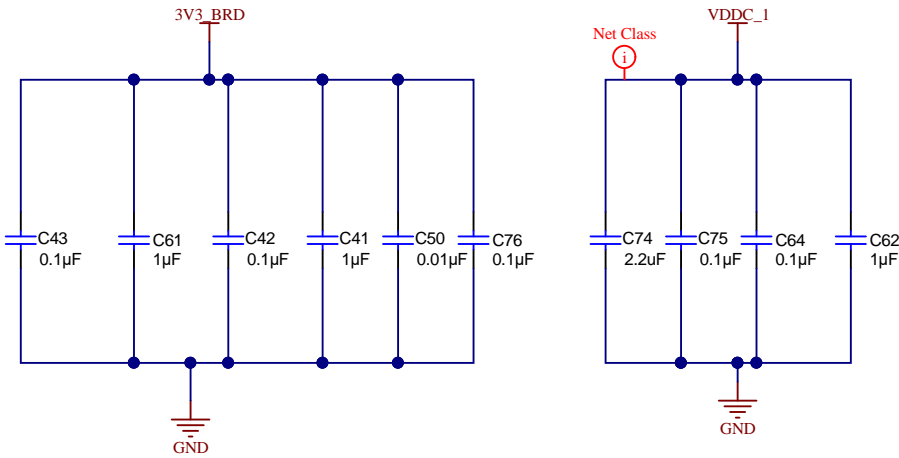
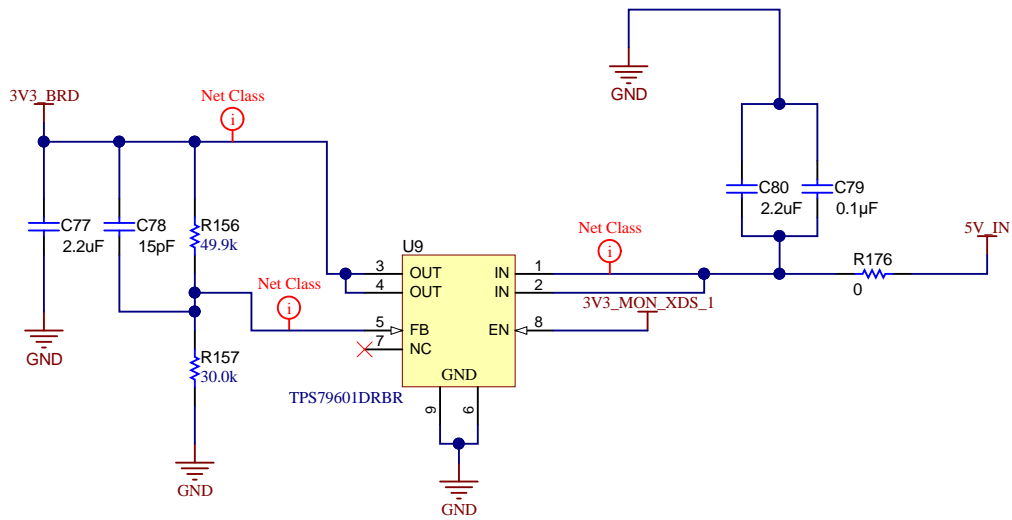


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Orderable: AWR1243BOOST	Designed for: Public Release	Mod. Date: 5/28/2020
TID #: N/A	Project Title: PROC010	
Number: PROC010	Rev: C	Sheet Title: LP Connector
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 11 of 16
Drawn By: Adrian Ozer	File: PROC010C_LP Connector.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	

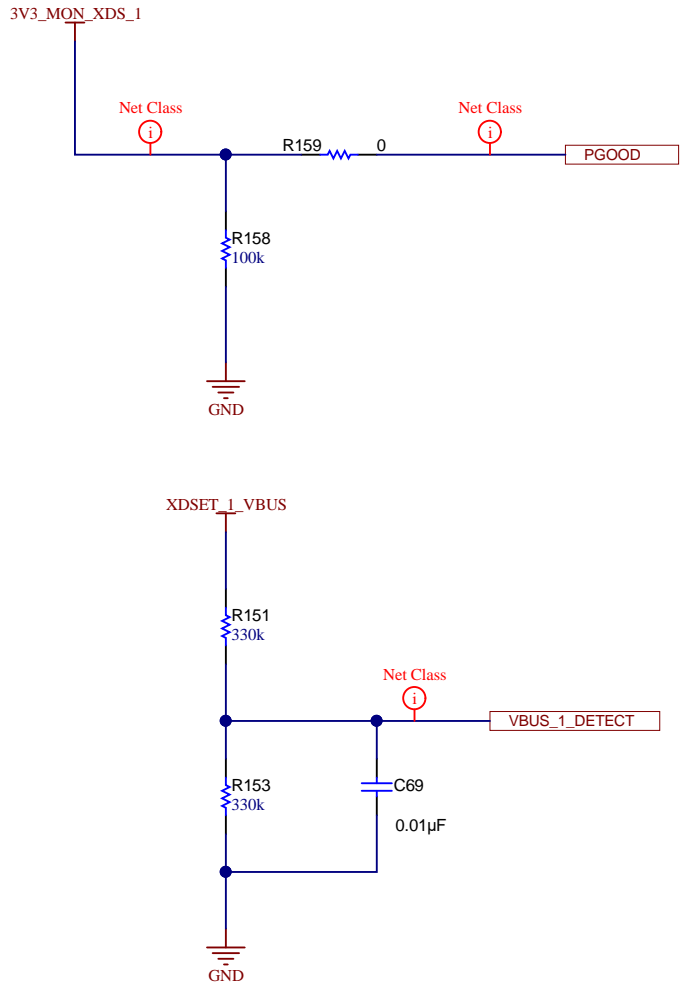
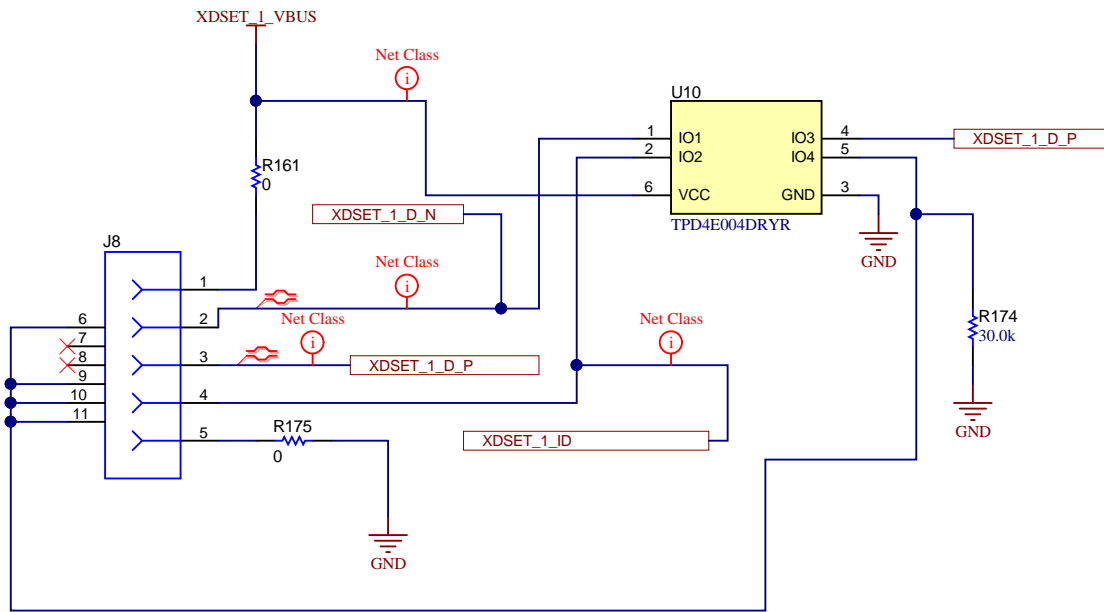
XDS110(1/2)

3.3V LDO FOR PERIPHERALS



BY DEFAULT THE XDS SUPPLY IS DISABLED..
GETS ENABLED ONLY ONCE THE PMIC IS POWERED UP.

USB PORT AND ESD



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Orderable: AWR1243BOOST	Designed for: Public Release	Mod. Date: 5/28/2020
TID #: N/A	Project Title: PROC010	
Number: PROC010	Rev: C	Sheet Title: XDS110 Interface_1A
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 12 of 16
Drawn By: Adrian Ozer	File: PROC010C_XDS110 Interface_1A.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	



XDS110(2/2)

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B

C

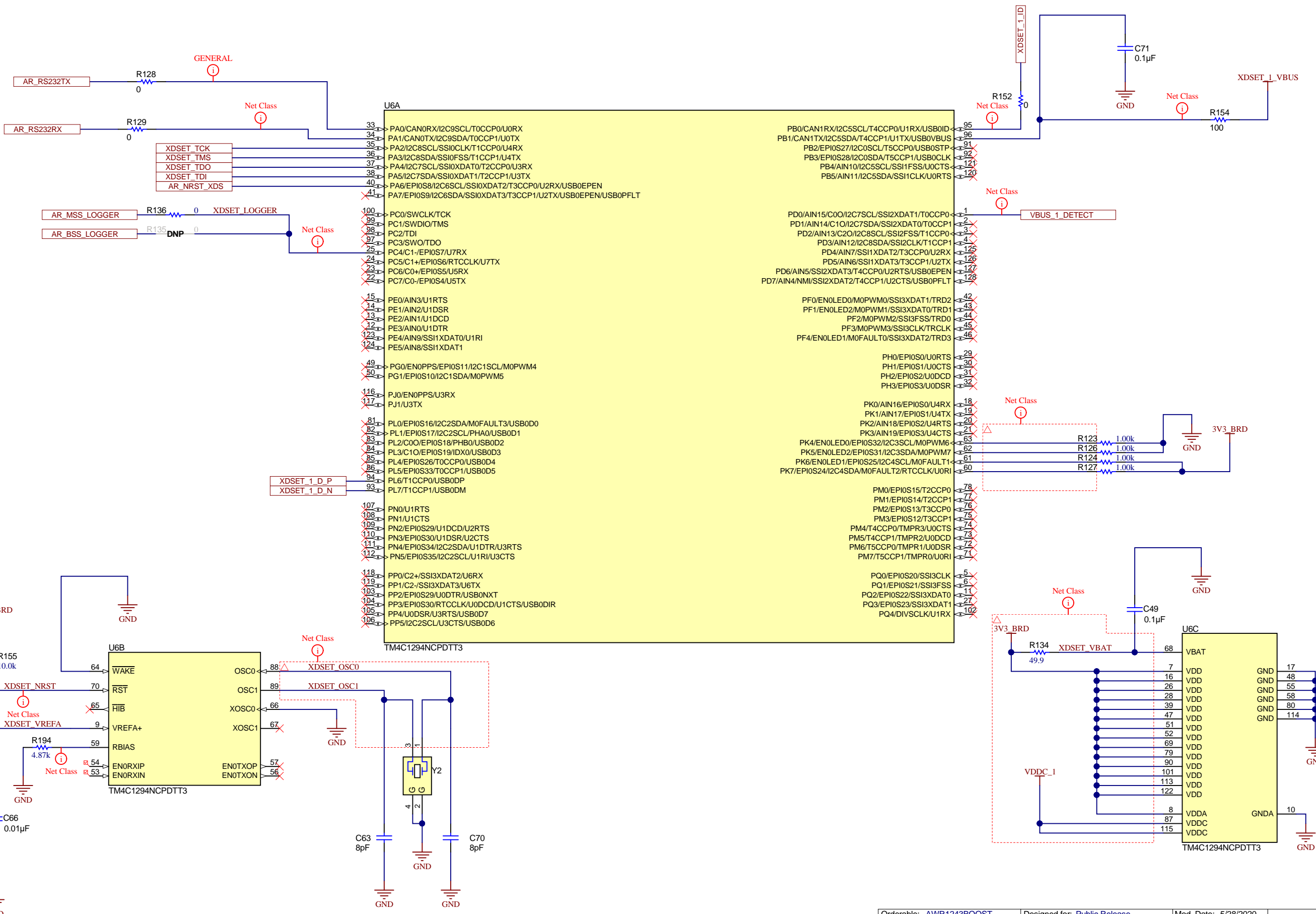
D

A

B

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D

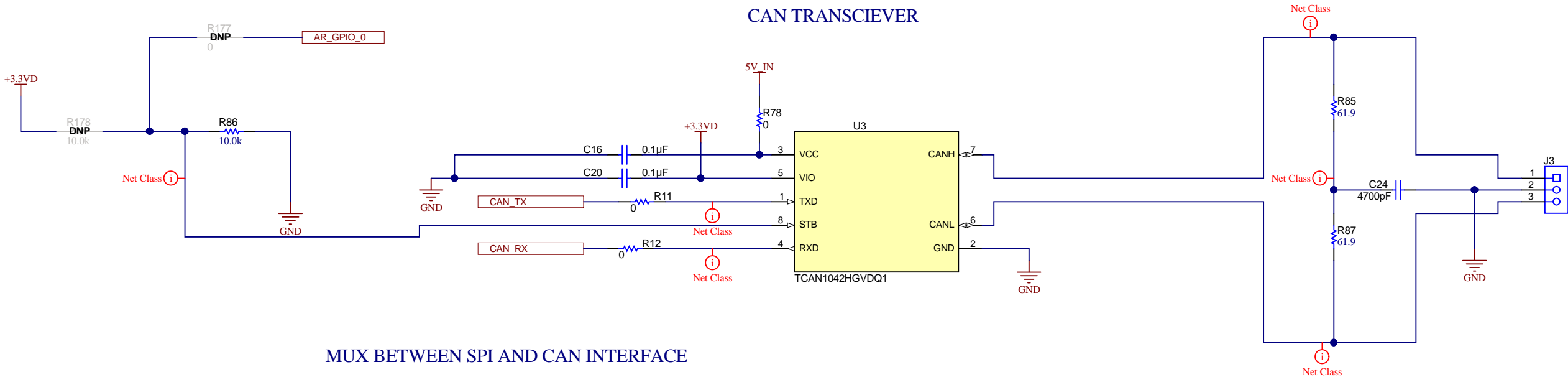


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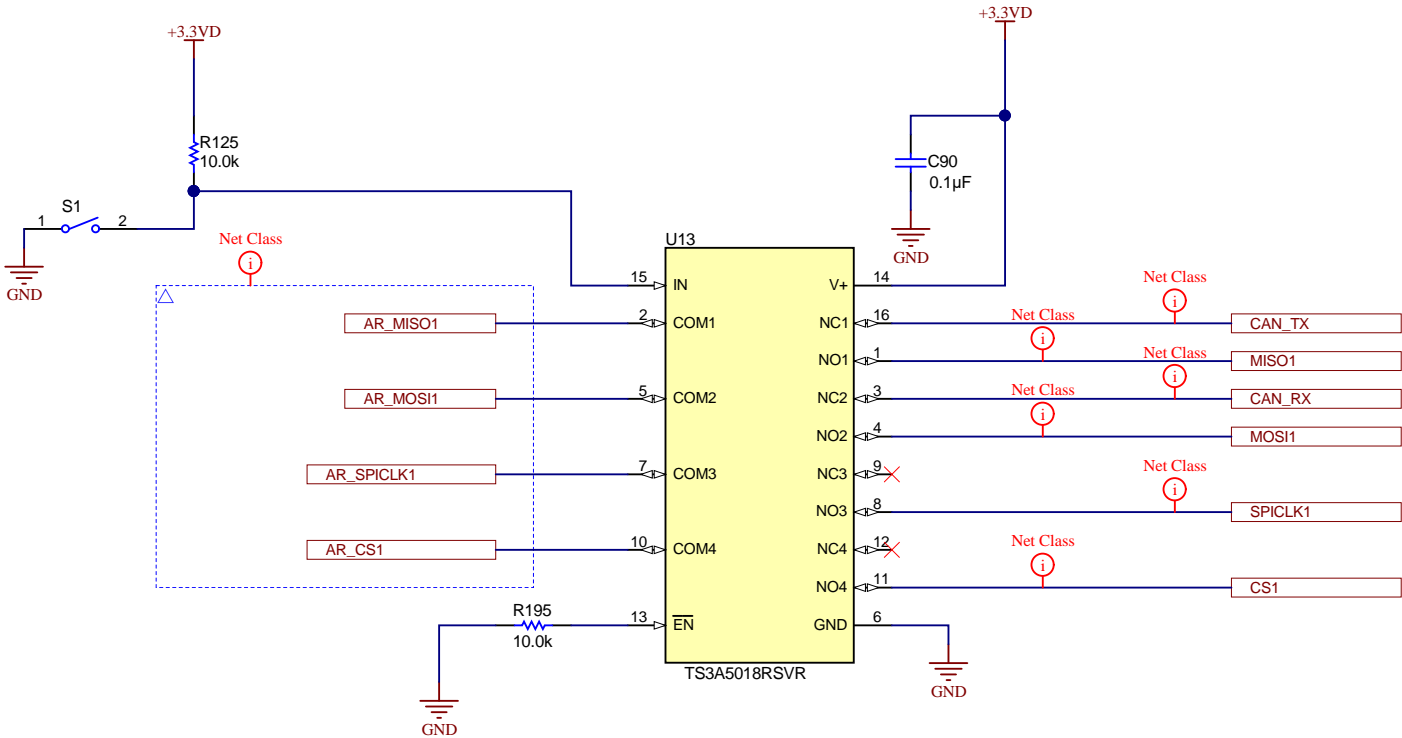
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TID #: N/A	Project Title: PROC010	
Number: PROC010	Rev: C	Sheet Title: XDS110 Interface_1B
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 13 of 16
Drawn By: Adrian Ozer	File: PROC010C_XDS110 Interface_1B.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	

CAN INTERFACE

CAN TRASCIEVER



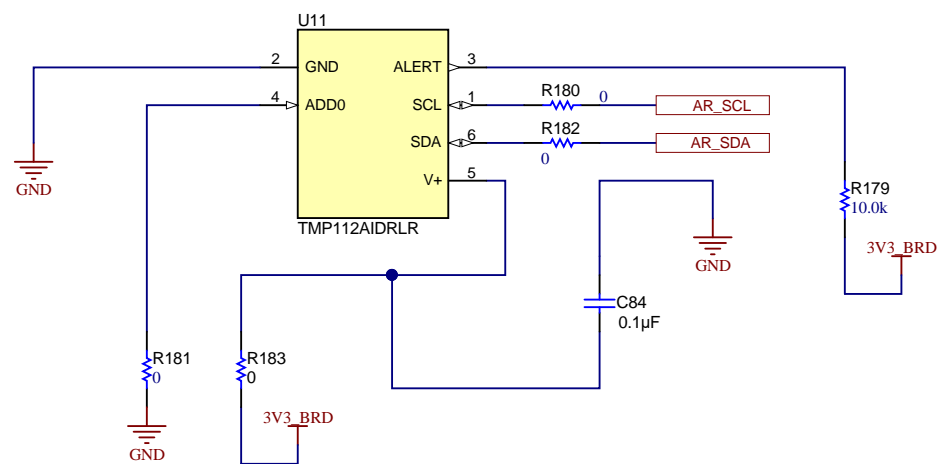
MUX BETWEEN SPI AND CAN INTERFACE



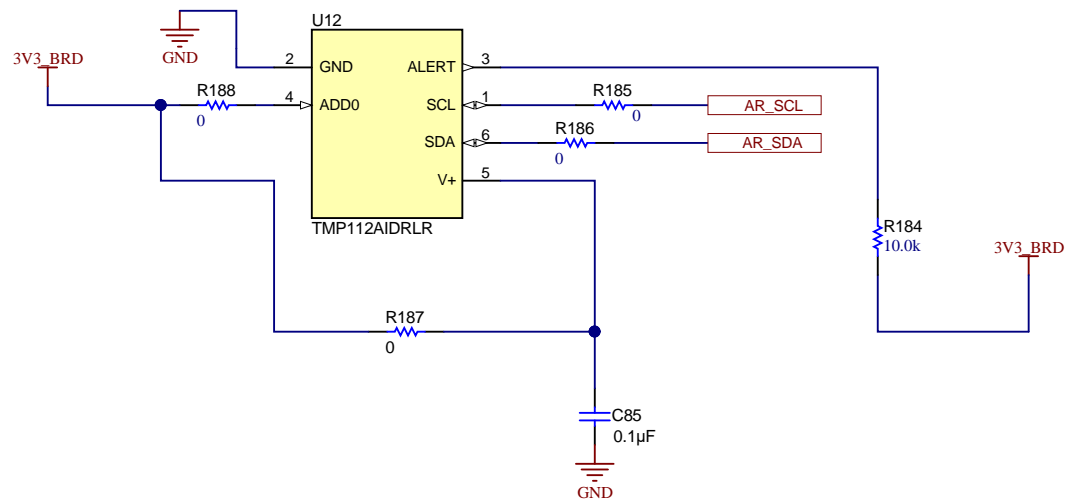
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TID #: N/A		Project Title: PROC010	
Number: PROC010	Rev: C	Sheet Title: CAN Interface	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 14 of 16
Drawn By: Adrian Ozer		File: PROC010C_CAN Interface.SchDoc	Size: B
Engineer: Adrian Ozer		Contact: http://www.ti.com/support	

ONBOARD TEMP SENSORS

DEFAULT I2C ADDRESS 0X48
TEMP SENSOR CLOSE TO PMIC



DEFAULT I2C ADDRESS 0X49
TEMP SENSOR AWAY FROM PMIC



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TID #: N/A	Project Title: PROC010	
Number: PROC010	Rev: C	Sheet Title: Tempsensor
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 15 of 16
Drawn By: Adrian Ozer	File: PROC010C_Tempsensor.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	

