

A

A

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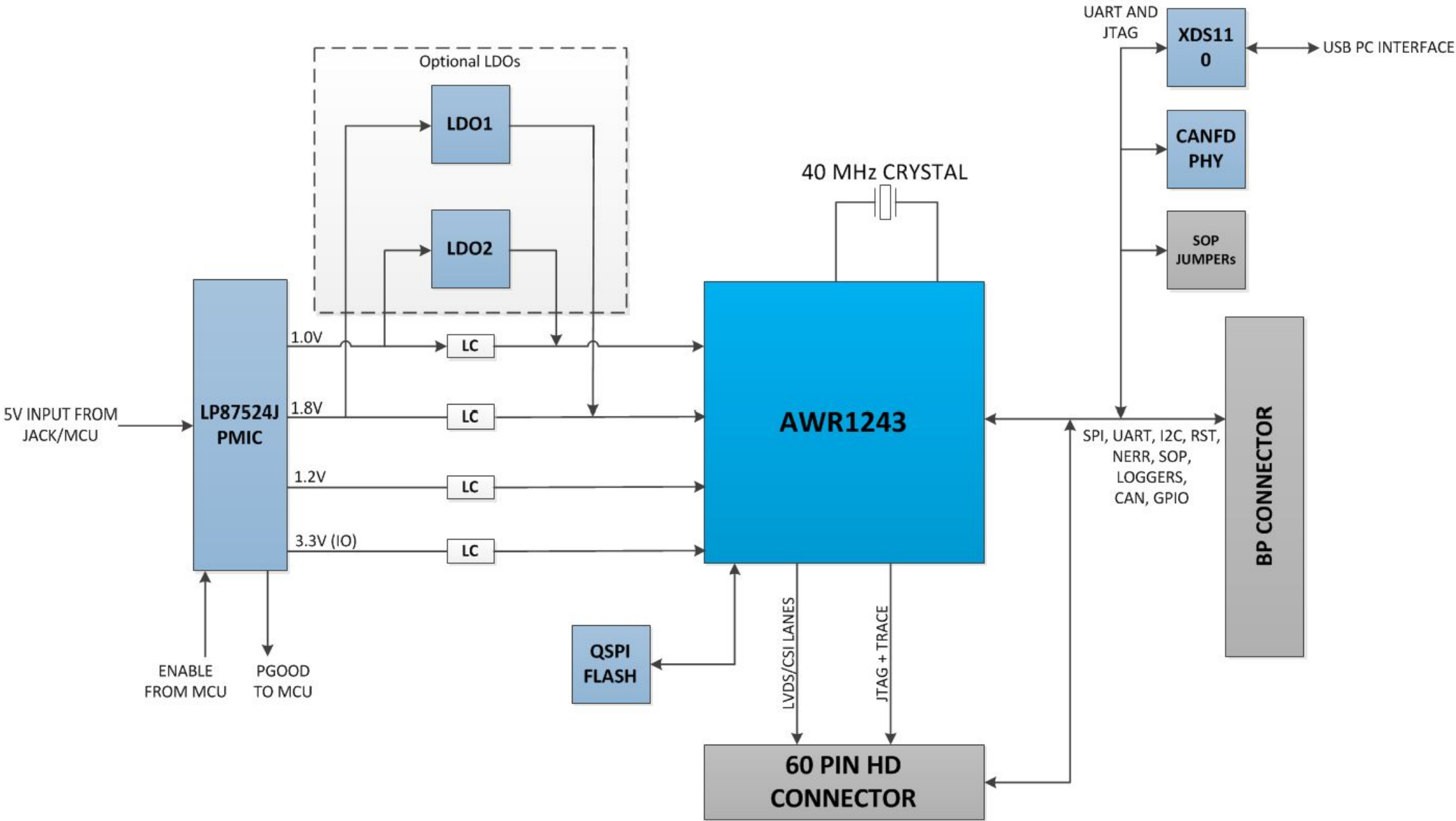
BLOCK DIAGRAM

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

TABLE OF CONTENTS

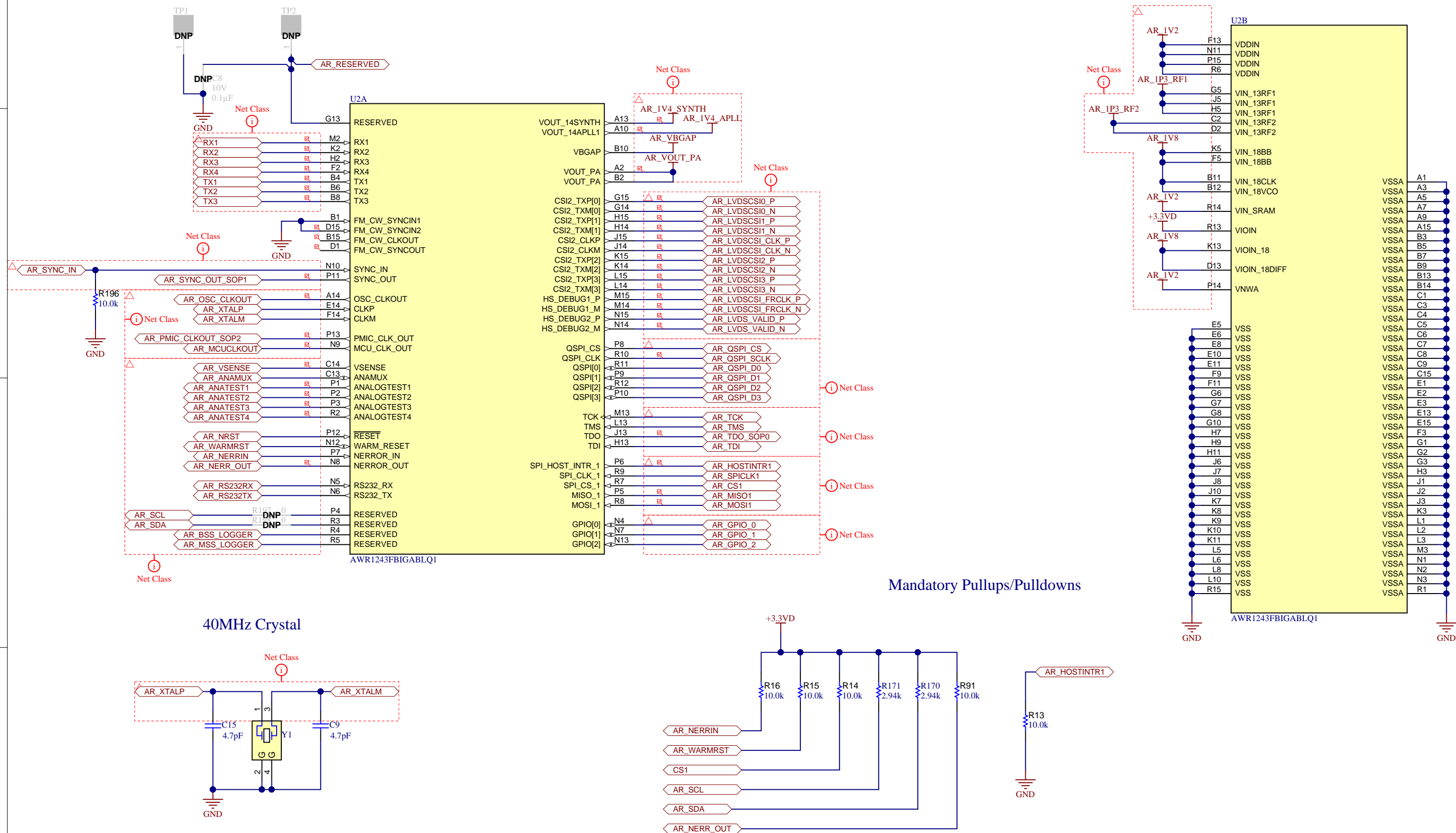
SHEET NO.	SHEET NAME
1	PROC010B_CoverSheet
2	PROC010B_DUT
3	PROC010B_DECOUPLING_CAPS
4	PROC010B_PMIC
5	PROC010B_LC_FILTERING
6	PROC010B_SOP_HEADERS
7	PROC010B_QSPI_Flash
8	PROC010B_Pwr_RST_LEDs
9	PROC010B_LDO
10	PROC010B_HD_Connector
11	PROC010B_LP_Connector
12	PROC010B_XDS110_Interface_1A
13	PROC010B_XDS110_Interface_1B
14	PROC010B_CAN_Interface
15	PROC010B_Tempsensor
16	PROC010B_Hardware




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TID #: N/A	Project Title: PROC010	
Number: PROC010	Rev: B	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 1 of 16
Drawn By: Adrian Ozer	File: PROC010B_CoverSheet.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	

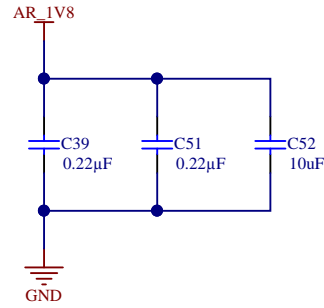
DUT REFERENCE



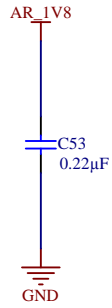
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TID #: N/A	Project Title: PROC010		
Number: PROC010	Rev: B		
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 2 of 16	
Drawn By: Adrian Ozer	File: PROC010B_DUT_Reference.SchDoc	Size: B	
Engineer: Adrian Ozer	Contact: http://www.ti.com/support		

DECOUPLING CAPS REFERENCE

BB SUPPLY



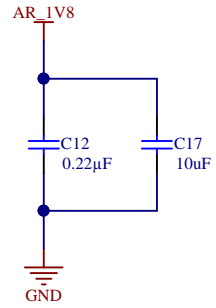
DIFF SUPPLY



1V8 IO SUPPLY



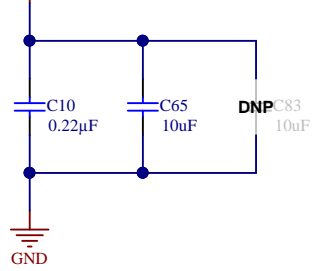
VCOLDO SUPPLY



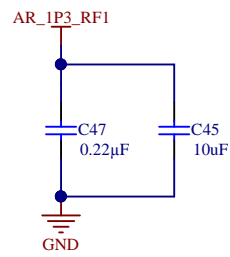
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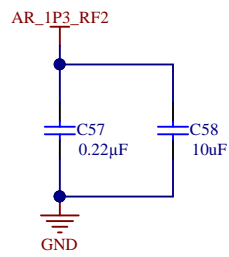
AR_VOUT_PA



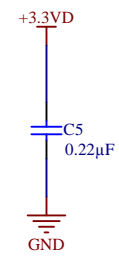
RF1 SUPPLY



RF2 SUPPLY



3V3 IO SUPPLY



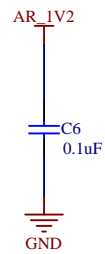
AR_1V4_SYNTH



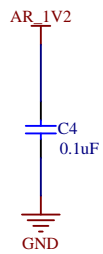
AR_1V4_APLL



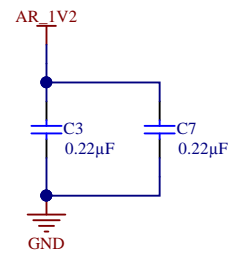
VNWA SUPPLY




SRAM SUPPLY



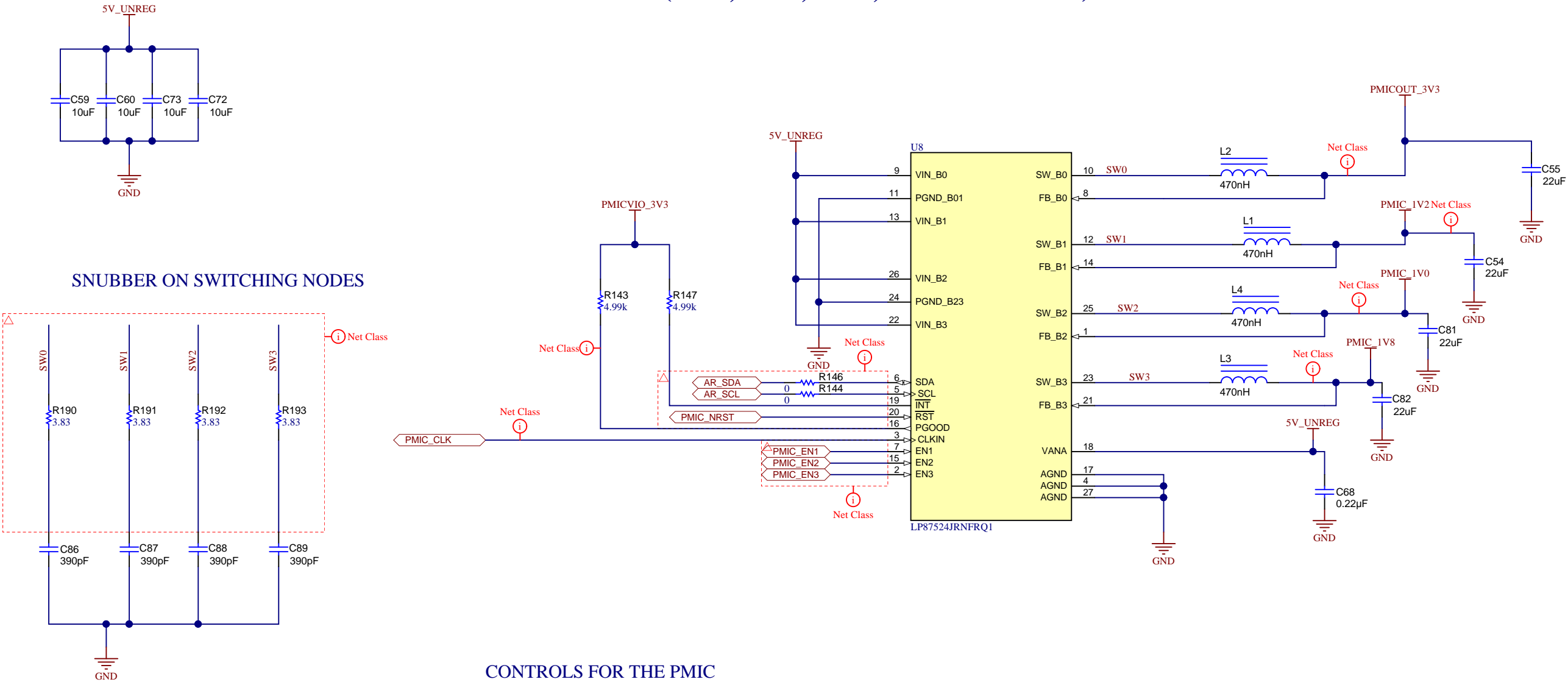
DIG SUPPLY



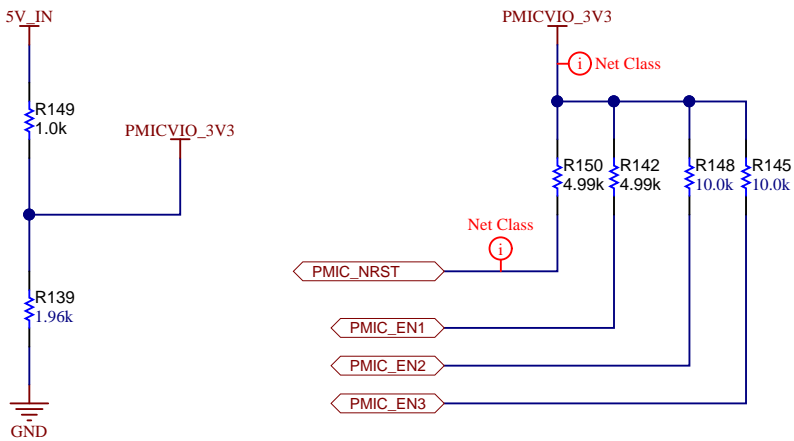
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Number: PROC010	Rev: B	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 3 of 16	
Drawn By: Adrian Ozer	File: PROC010B_Decoupling_Caps_Reference_Sch.Dwg Size: B		
Engineer: Adrian Ozer	Contact: http://www.ti.com/support		

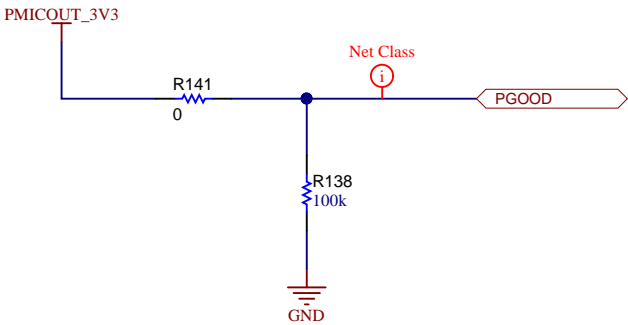
PMIC (3.3V, 1.2V, 1.8V,2.3V OUTPUTS) REFERENCE

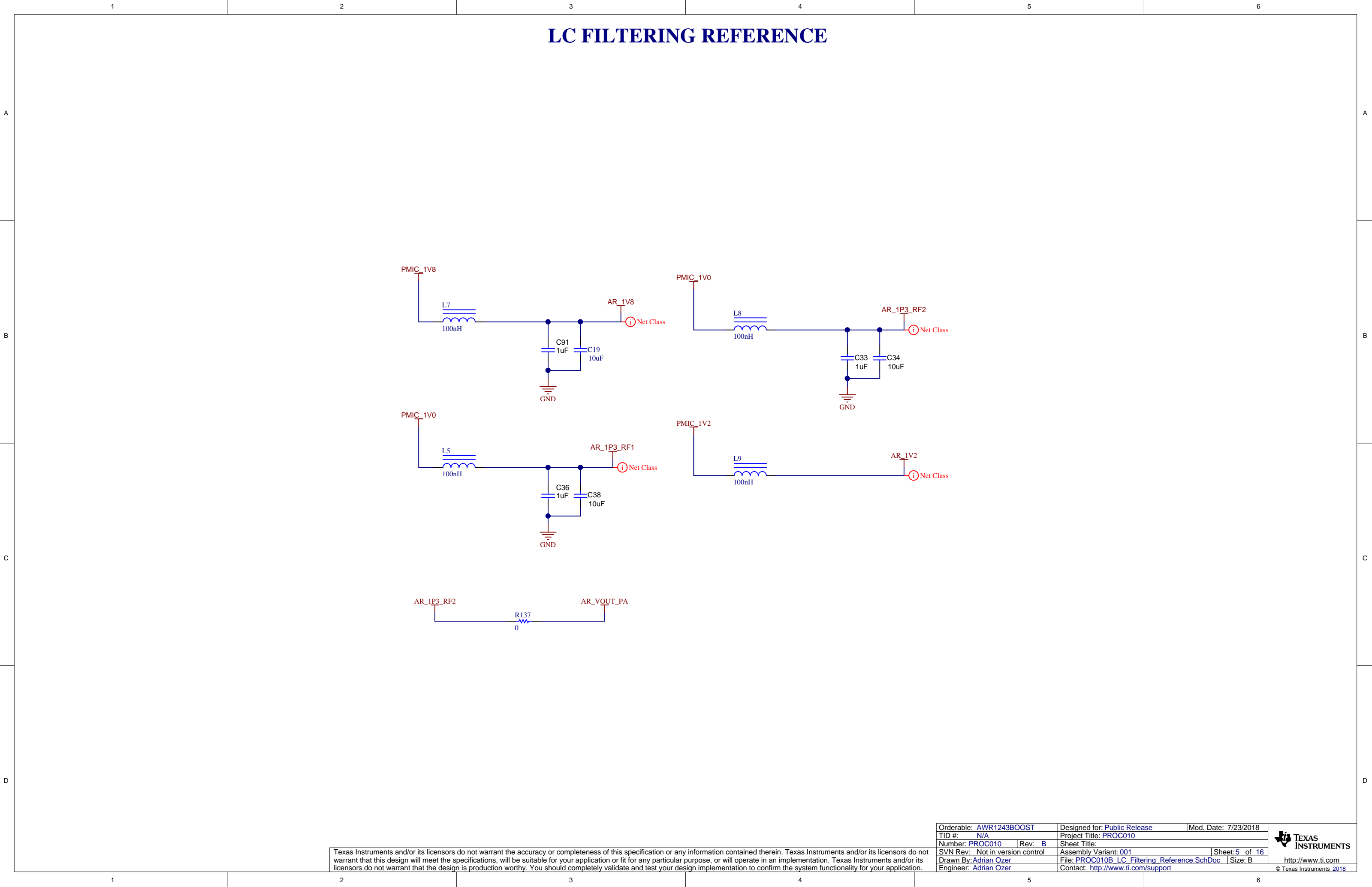


CONTROLS FOR THE PMIC



THE 3V3 OUTPUT FROM PMIC IS USED AS PGOOD.

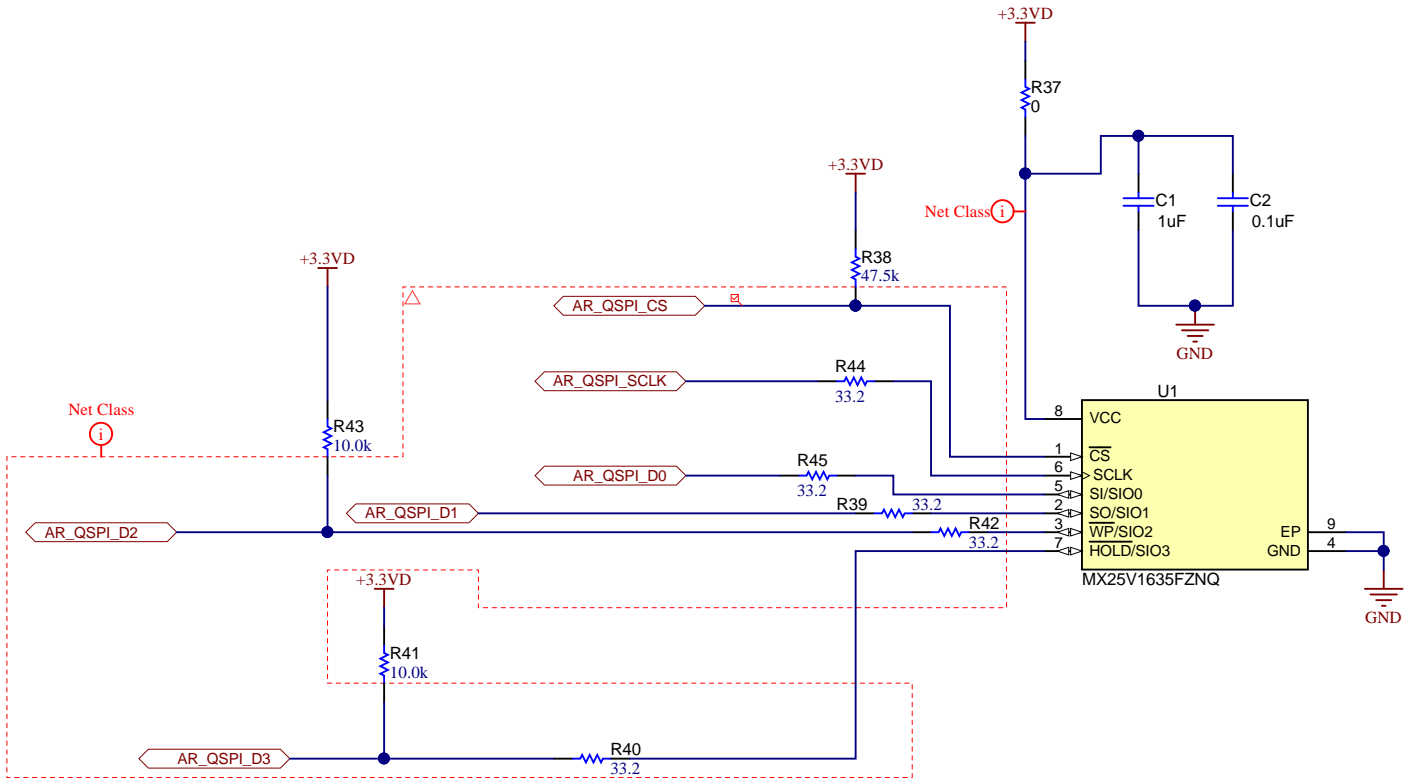




A

BD

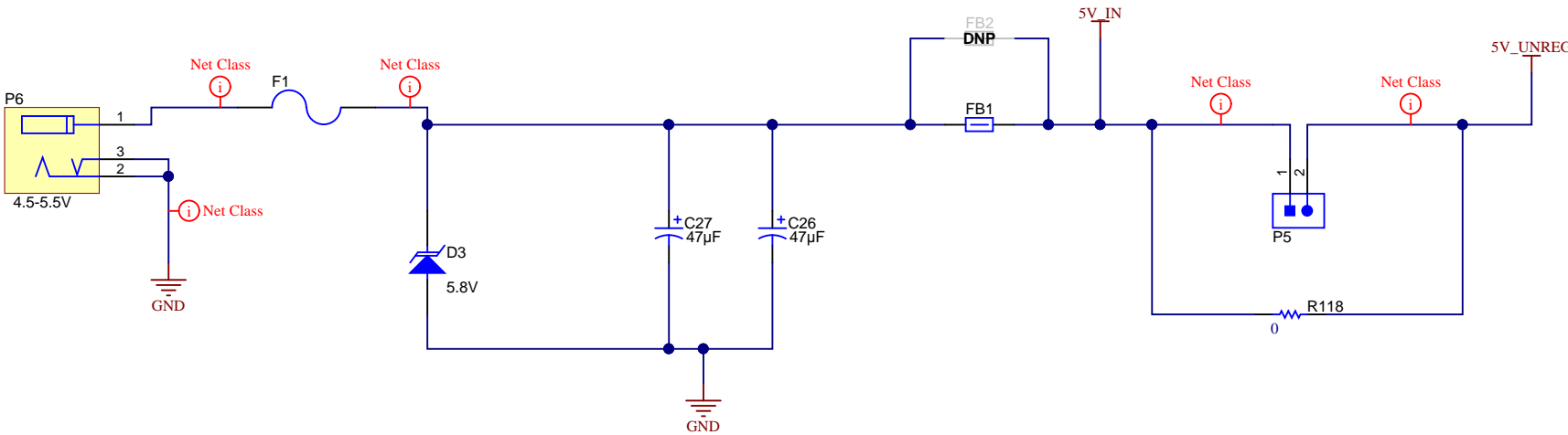
QSPI FLASH REFERENCE



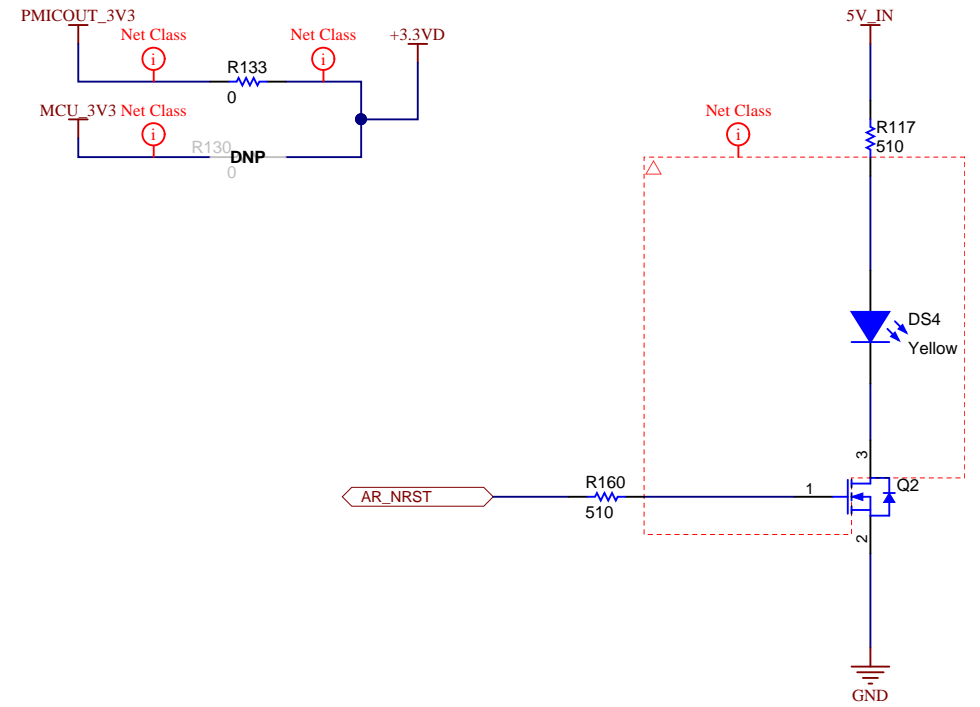
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Orderable: AWR1243BOOST	Designed for: Public Release	Mod. Date: 7/23/2018
TID #: N/A	Project Title: PROC010	
Number: PROC010	Rev: B	Sheet Title: QSPI flash section
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 7 of 16
Drawn By: Adrian Ozer	File: PROC010B_QSPI_Flash_Reference.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	

POWER SUPPLY CONNECTOR

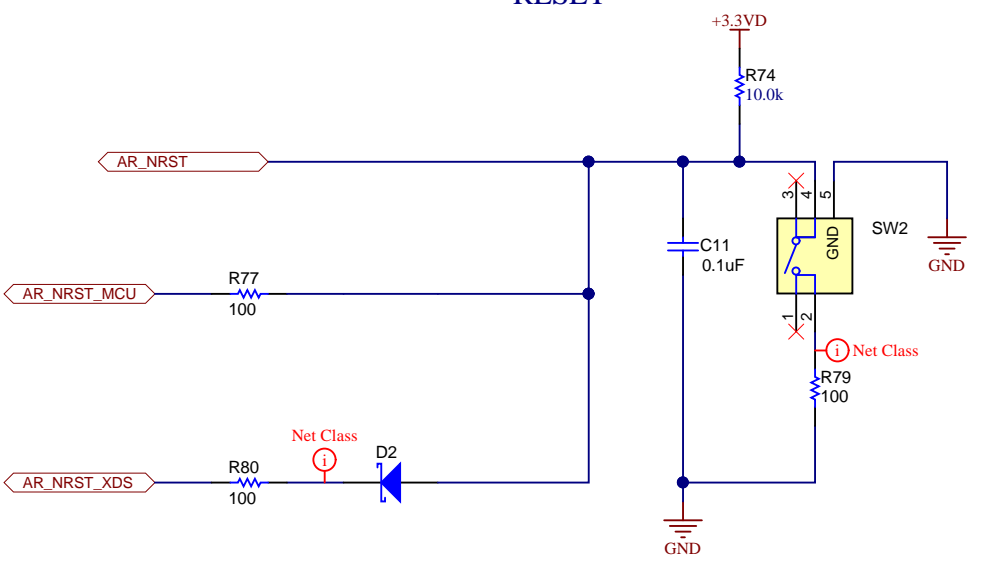


3P3 SUPPLY FROM PMIC OR FROM THE MCU

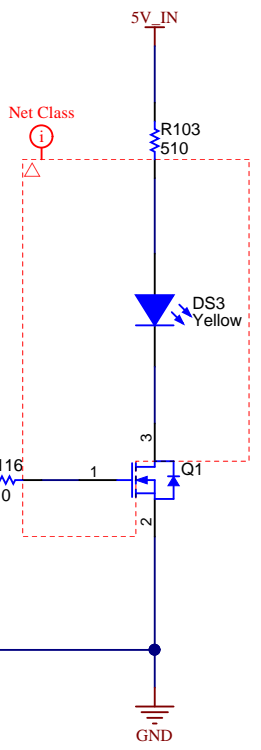
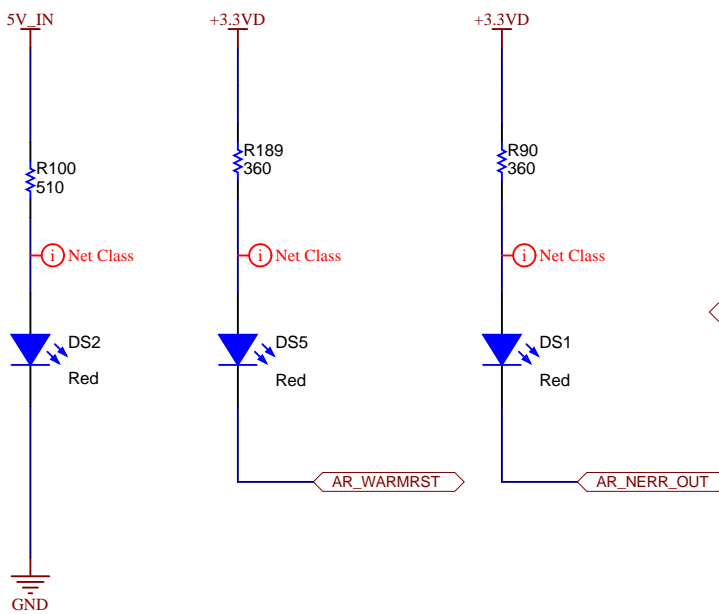


RESET AND LEDS

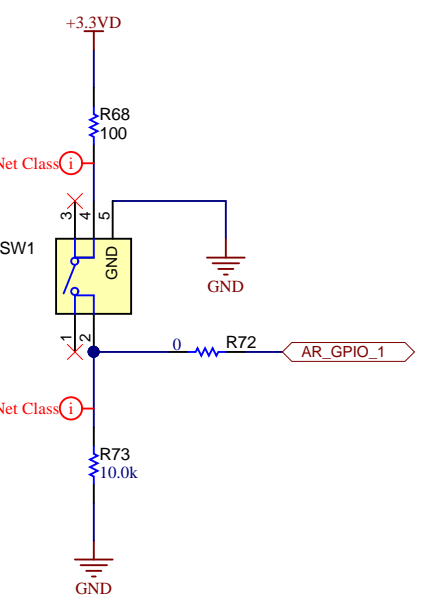
RESET



INDICATION LEDS



TRIGGER GPIO



A

B

C

D

A

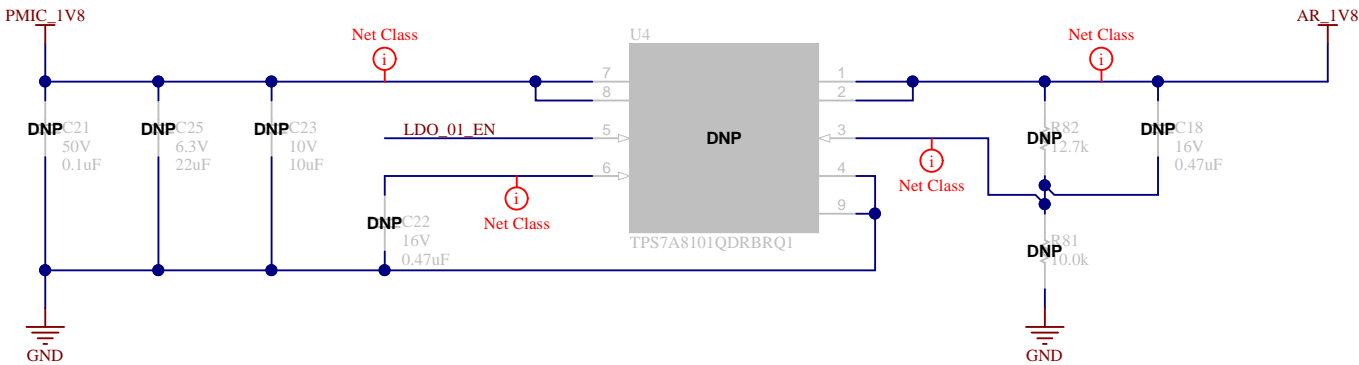
B

C

D

LDO

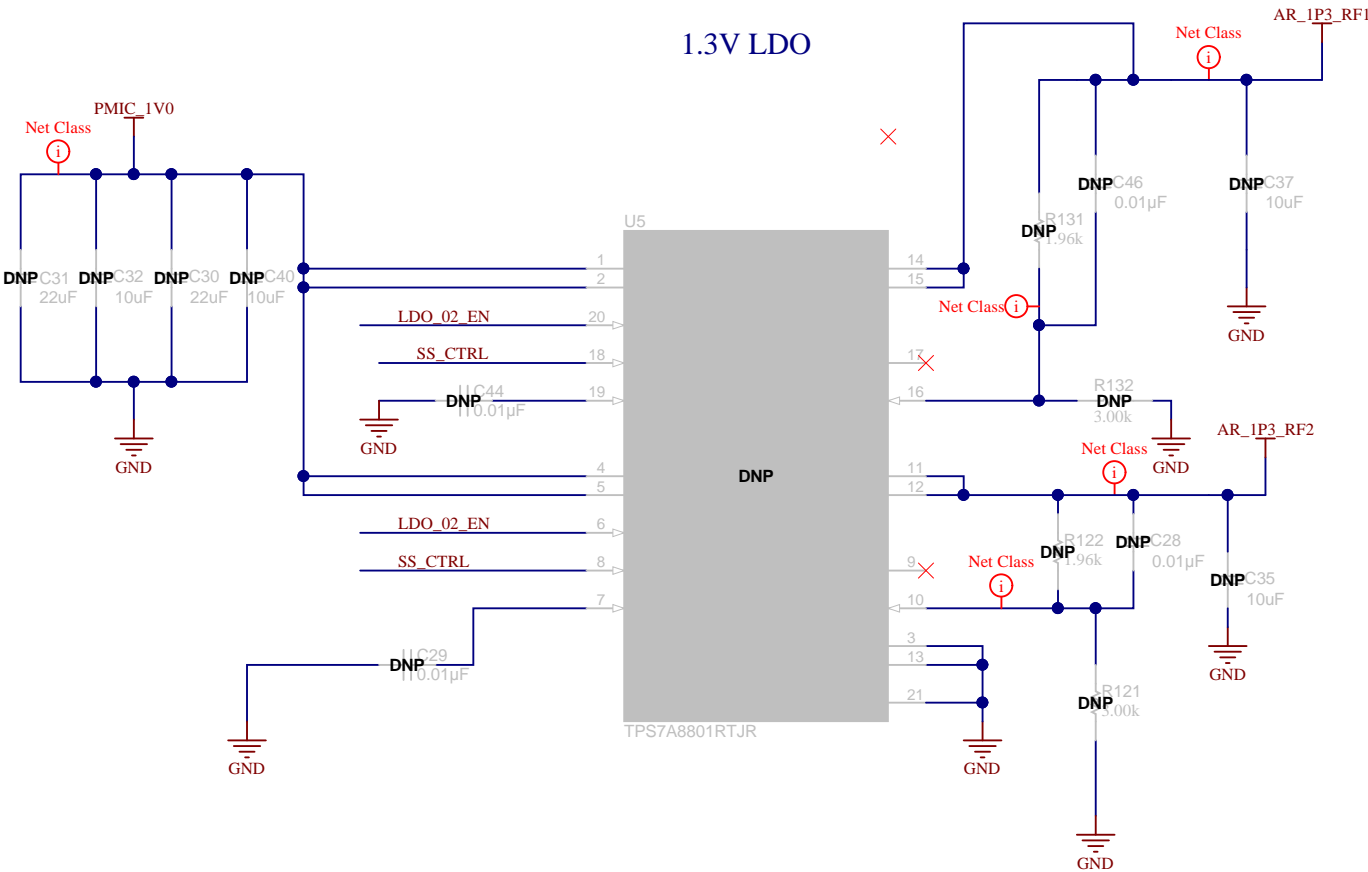
1.8V LDO



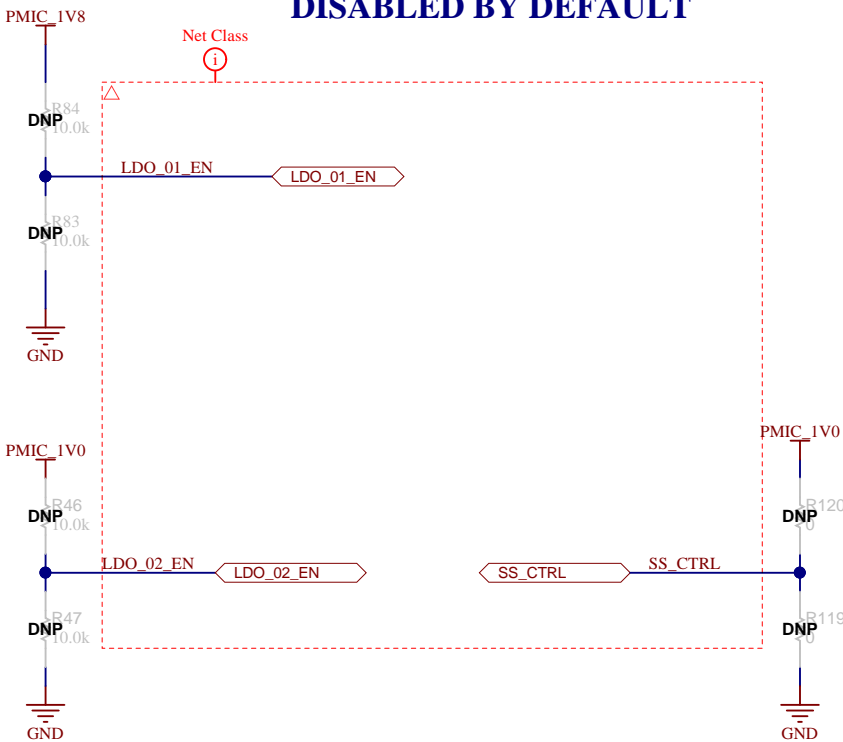
LDOs ARE FOR DEBUG PURPOSES ONLY

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

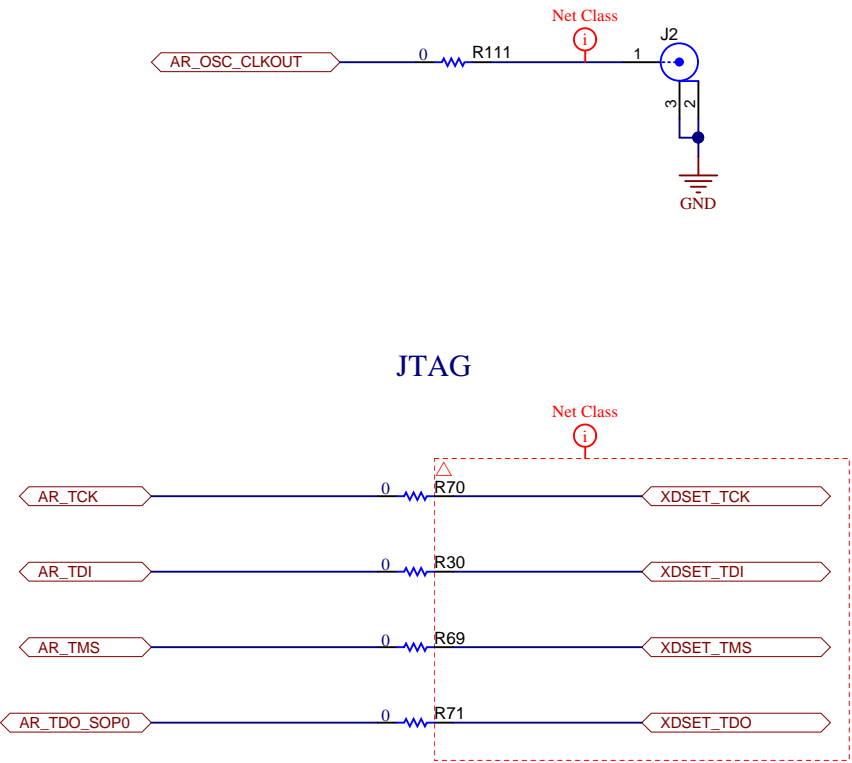
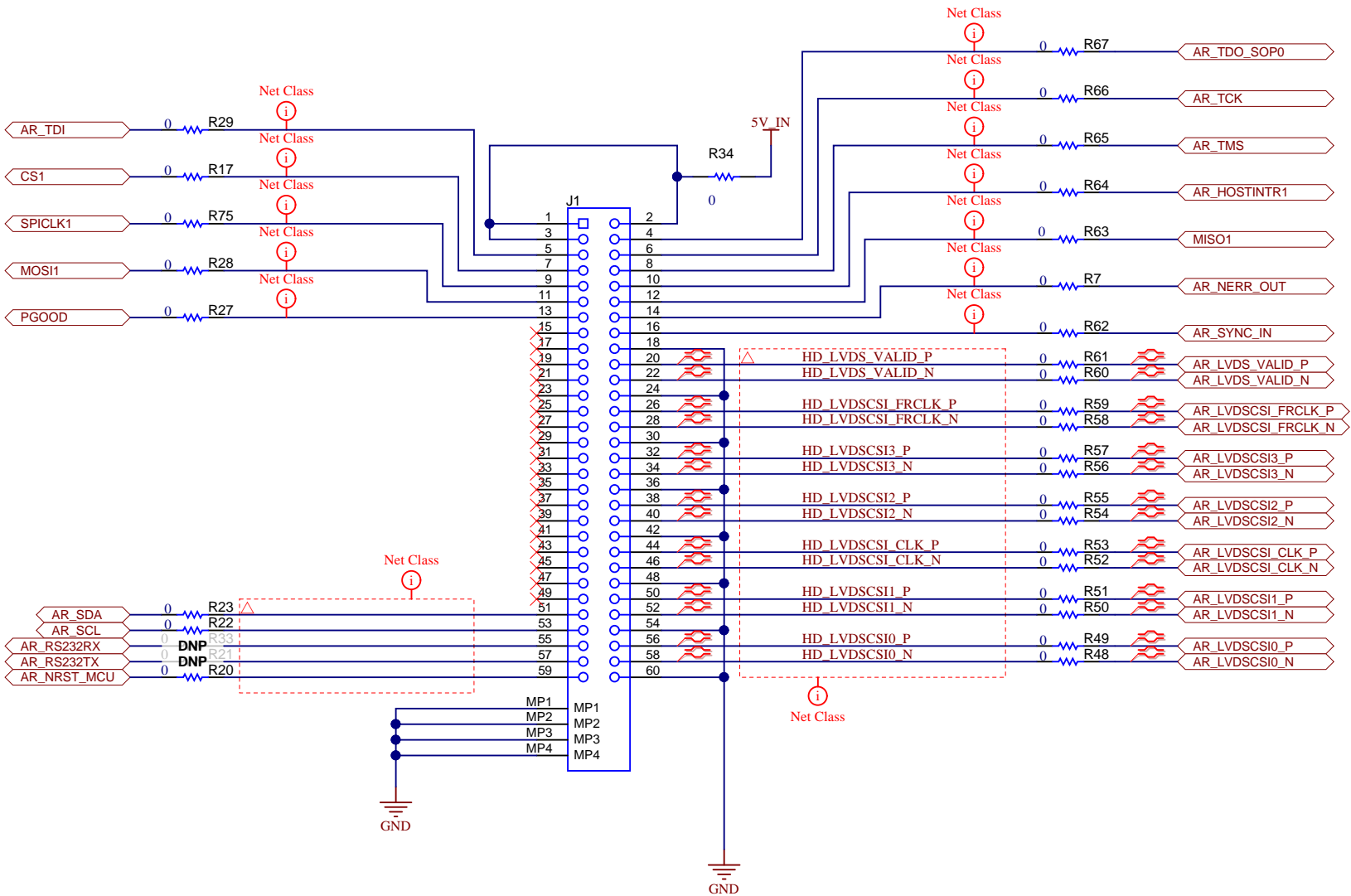
1.3V LDO



DISABLED BY DEFAULT



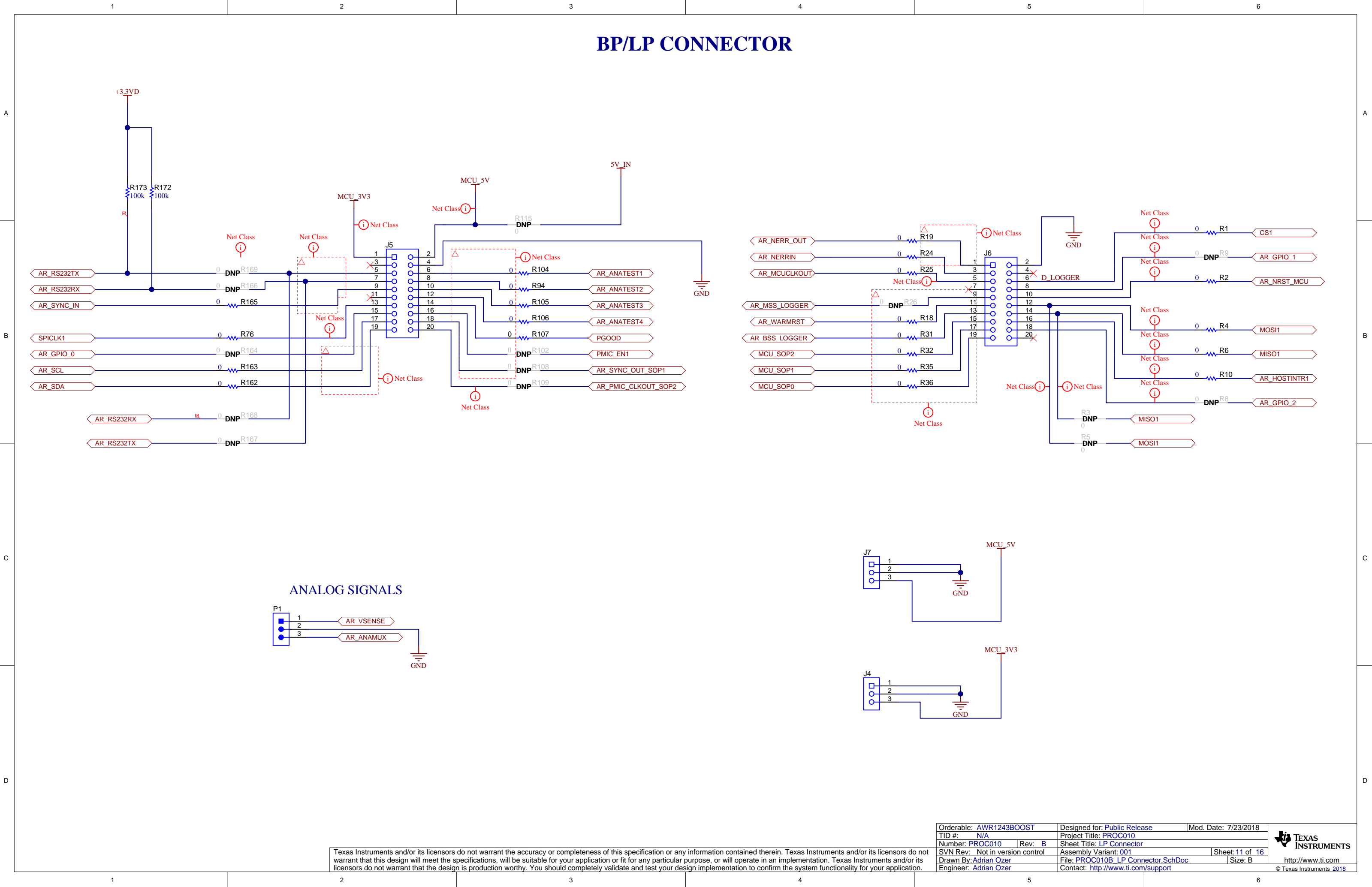
HD CONNECTOR FOR LVDS/CSI AND JTAG



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TID #: N/A	Project Title: PROC010	
Number: PROC010	Rev: B	Sheet Title: HD Connector
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 10 of 16
Drawn By: Adrian Ozer	File: PROC010B_HD Connector.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	

BP/LP CONNECTOR

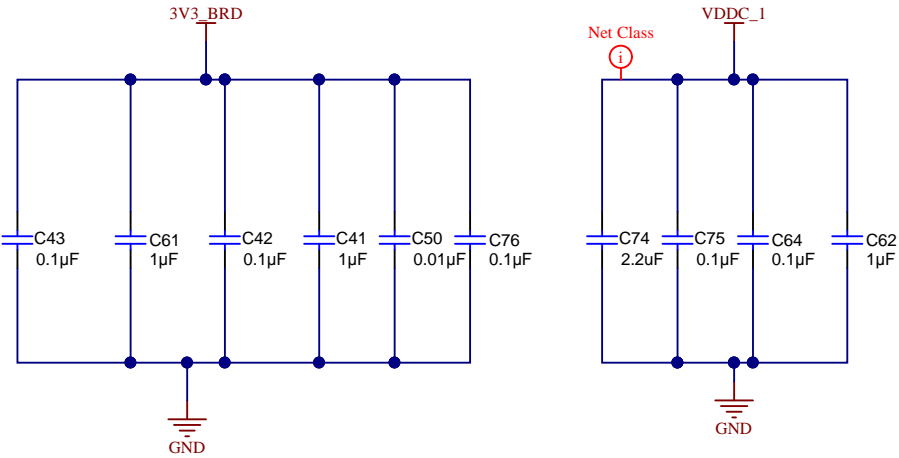
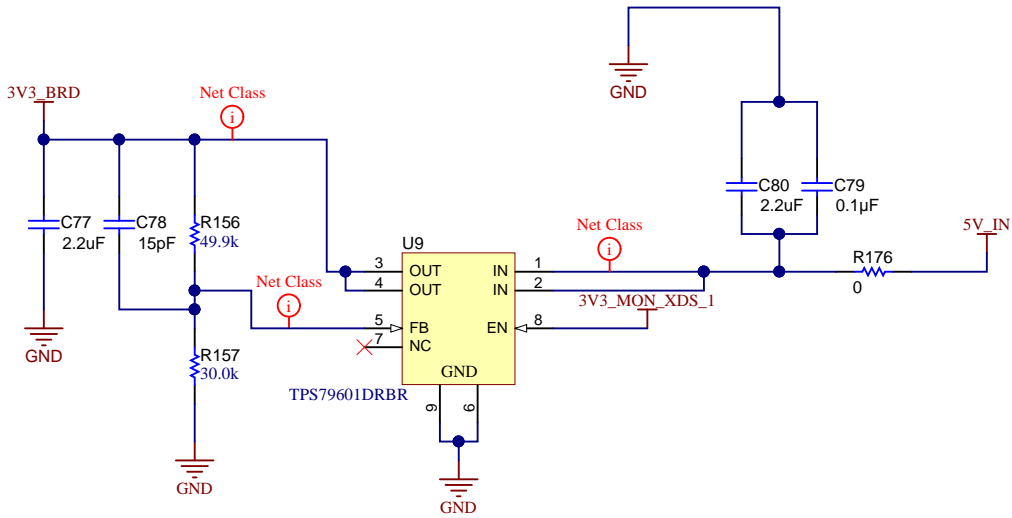


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TID #: N/A	Project Title: PROC010	
Number: PROC010	Rev: B	Sheet Title: LP Connector
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 11 of 16
Drawn By: Adrian Ozer	File: PROC010B_LP Connector.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	

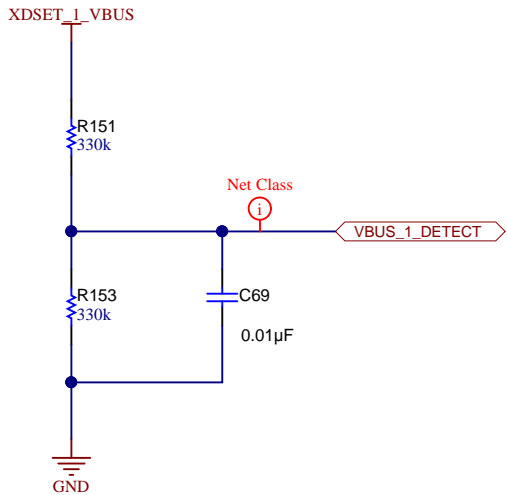
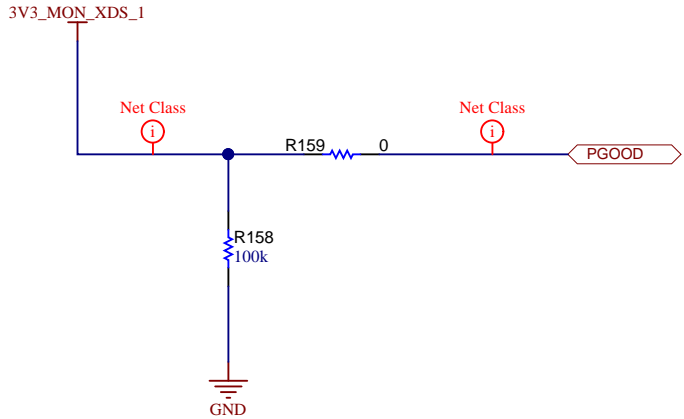
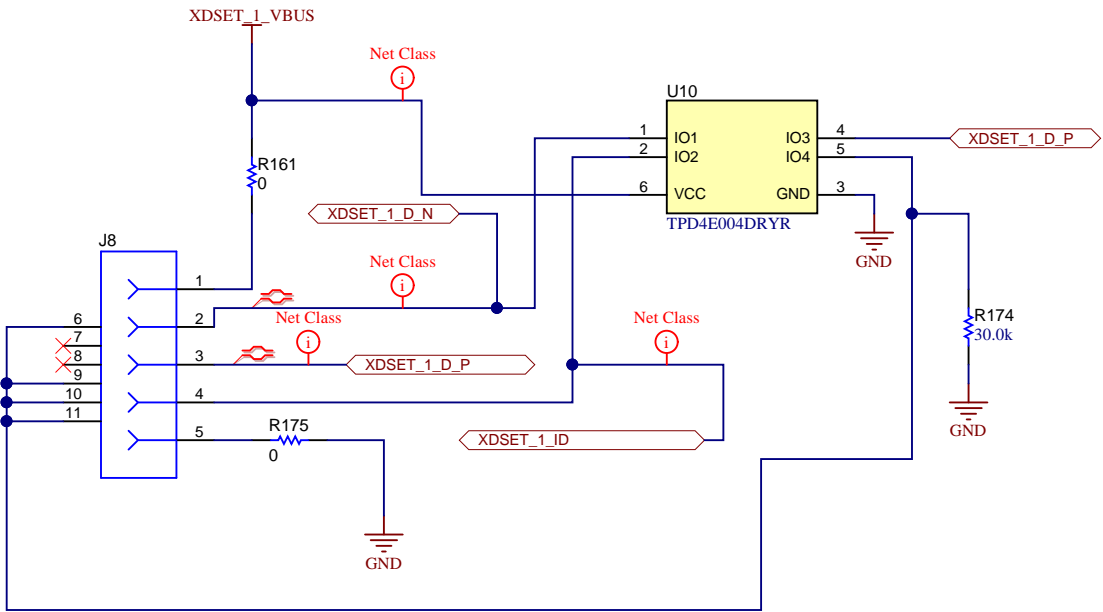
XDS110(1/2)

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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TID #: N/A	Project Title: PROC010		
Number: PROC010	Rev: B	Sheet Title: XDS110 Interface_1A	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 12 of 16	
Drawn By: Adrian Ozer	File: PROC010B_XDS110 Interface_1A.SchDoc	Size: B	
Engineer: Adrian Ozer	Contact: http://www.ti.com/support		

XDS110(2/2)

A

B

C

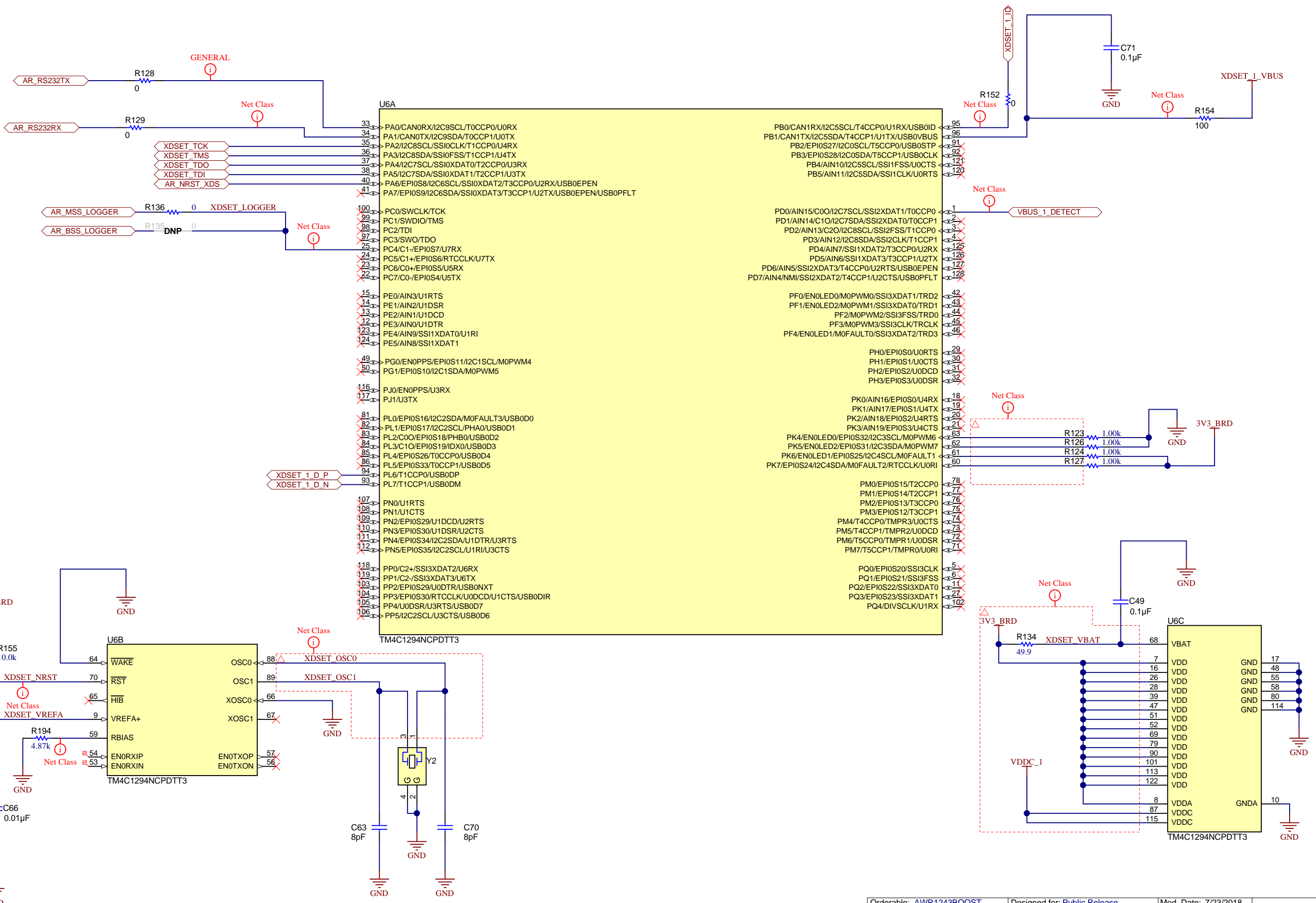
D

A

B

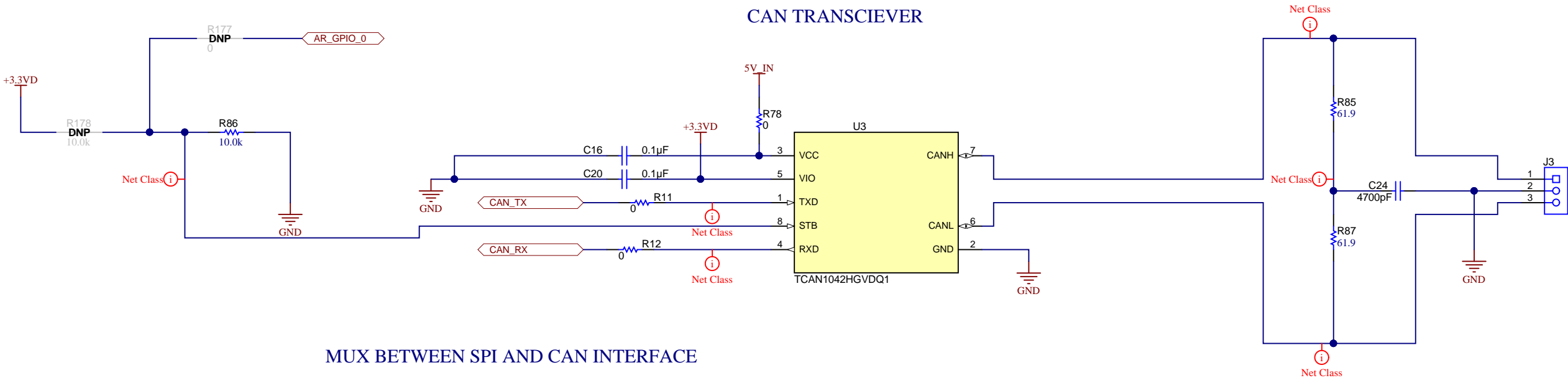
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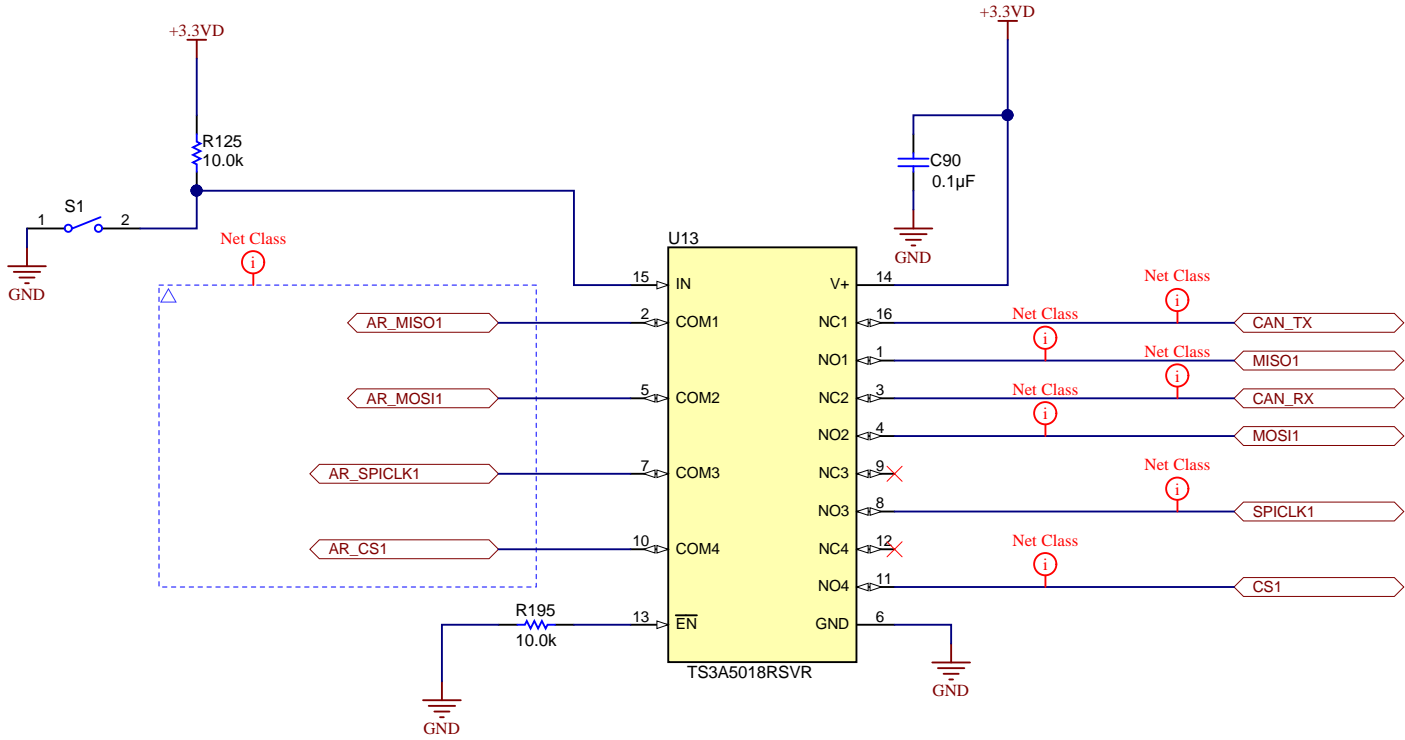


CAN INTERFACE

CAN TRANSCIEVER

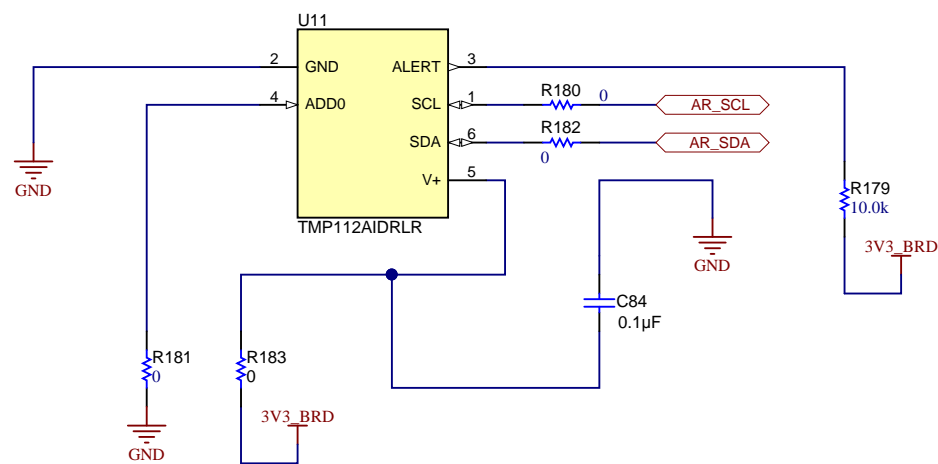


MUX BETWEEN SPI AND CAN INTERFACE

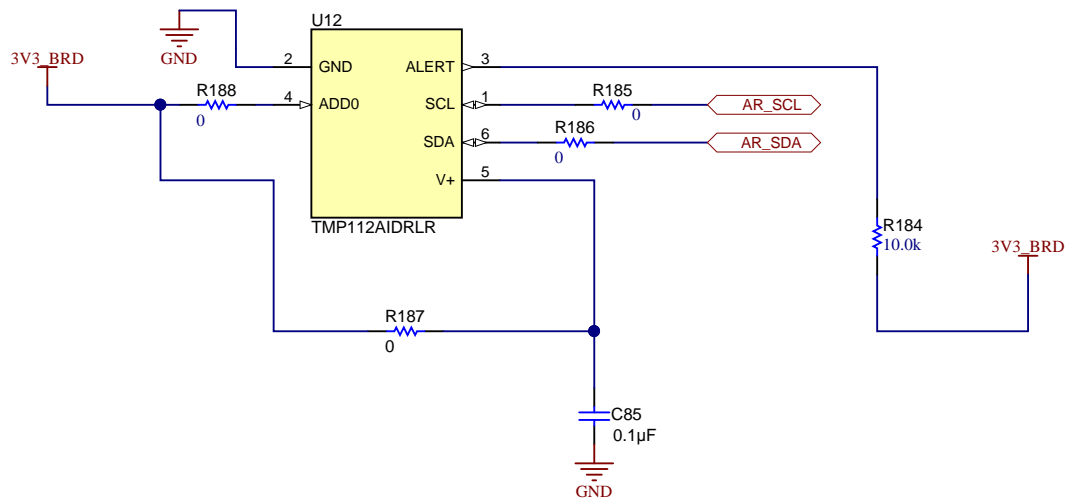


ONBOARD TEMP SENSORS

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: B	Sheet Title: Tempsensor
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 15 of 16
Drawn By: Adrian Ozer	File: PROC010B_Tempsensor.SchDoc	Size: B
Engineer: Adrian Ozer	Contact: http://www.ti.com/support	

