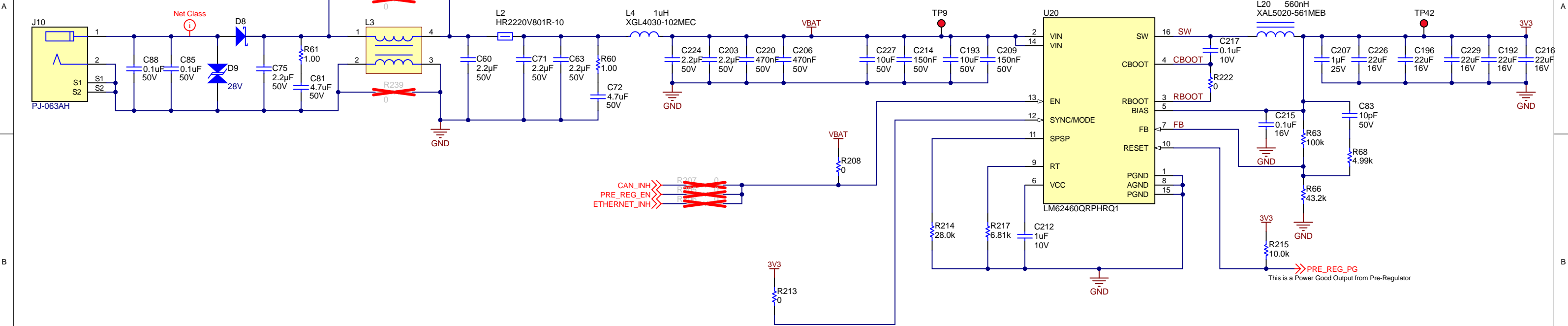
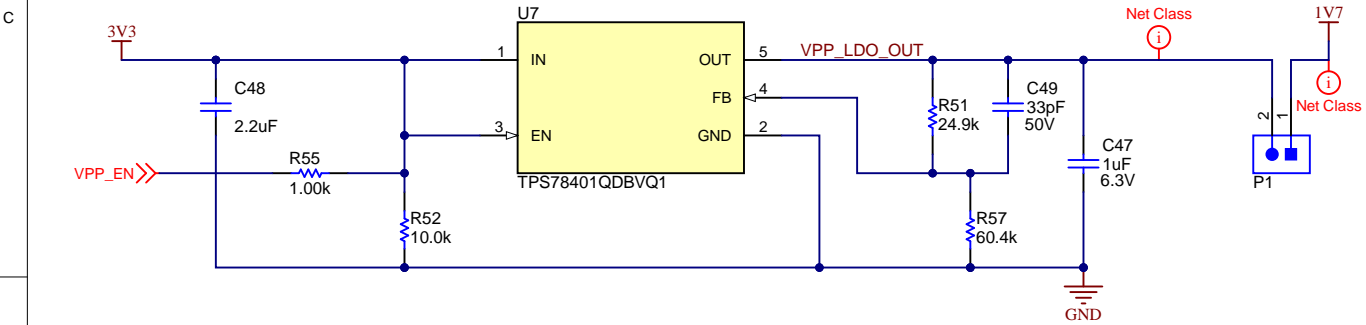


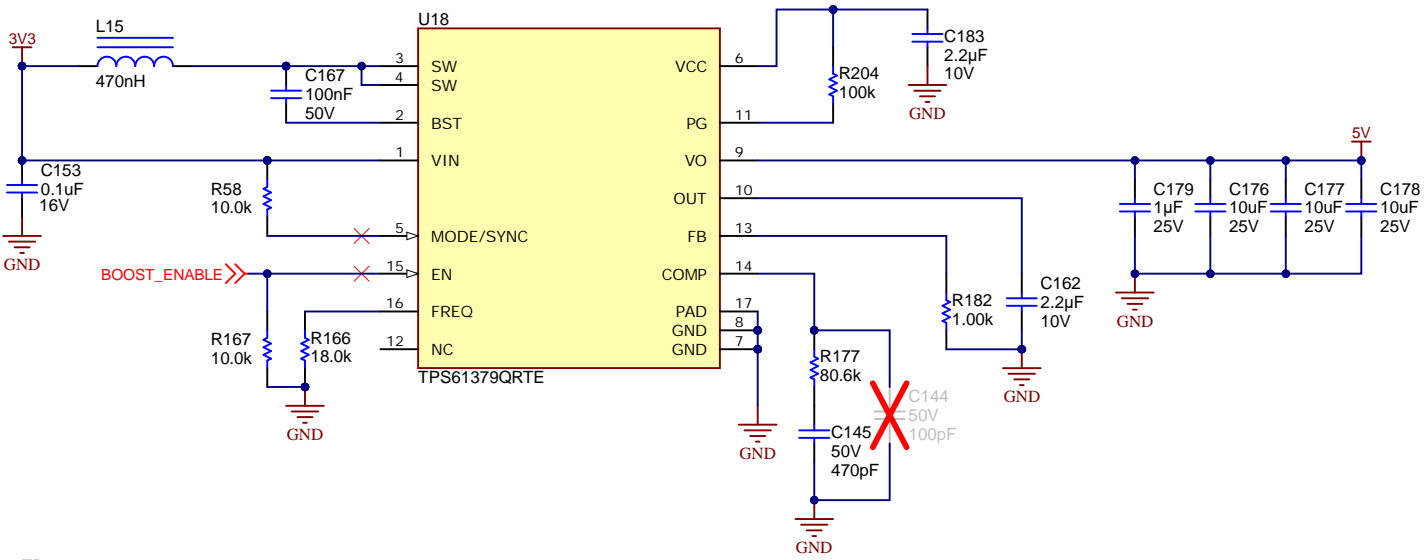
Pre-Regulator



VPP LDO

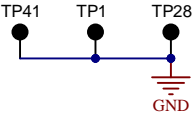


5V Boost



Assembly Variants:

812: DP83TC812 Ethernet and CAN present. WAKE Controlled by Ethernet (DP83TC812)
CAN: DP83TC812 Ethernet and CAN present. WAKE Controlled by CAN (TCAN1043)
811: DP83TC811 Ethernet and CAN present. WAKE Controlled by CAN (TCAN1043)



Orderable: n/a	Designed for: Public Release	Mod. Date: 10/22/2024
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 812 with CAN	Sheet: 1 of 17
Drawn By: B. Shaffer	File: Pre_Reg.SchDoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	



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A

B

C

D

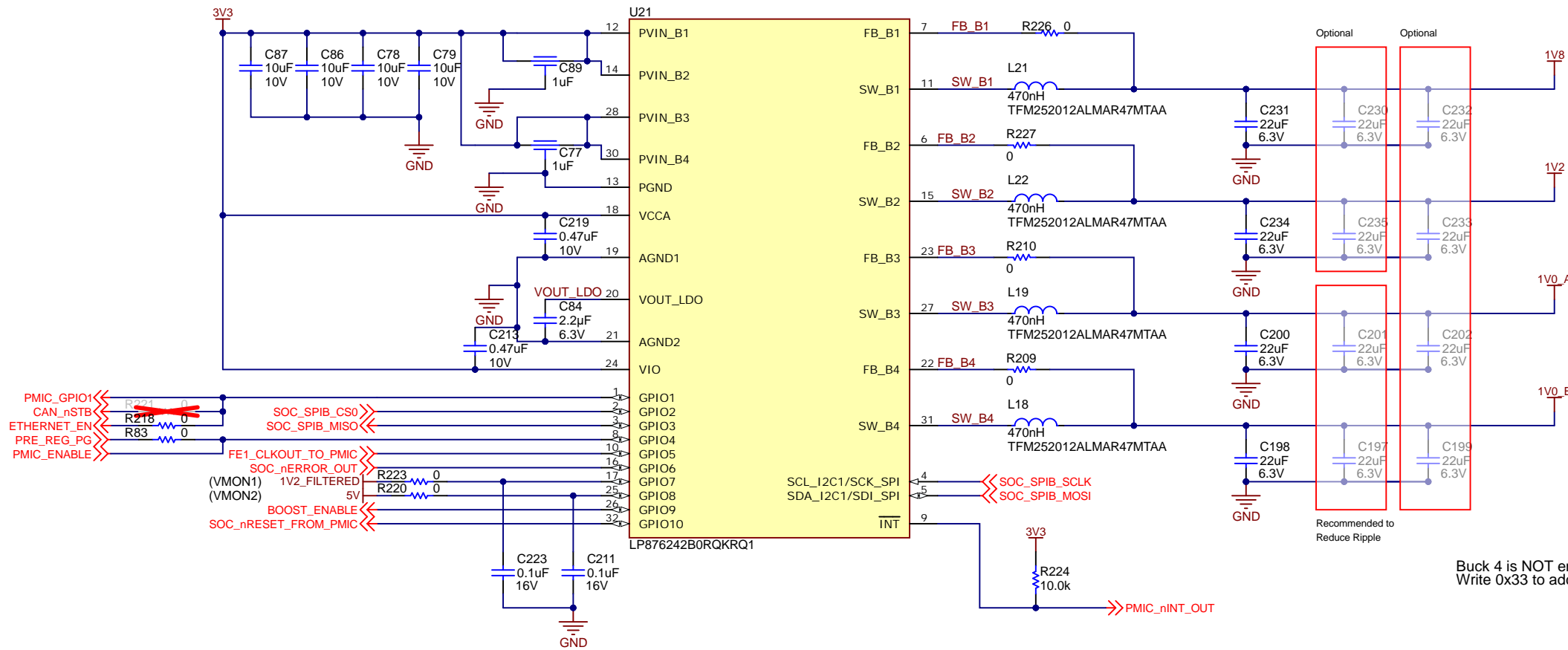
A

B

C

D

PMIC

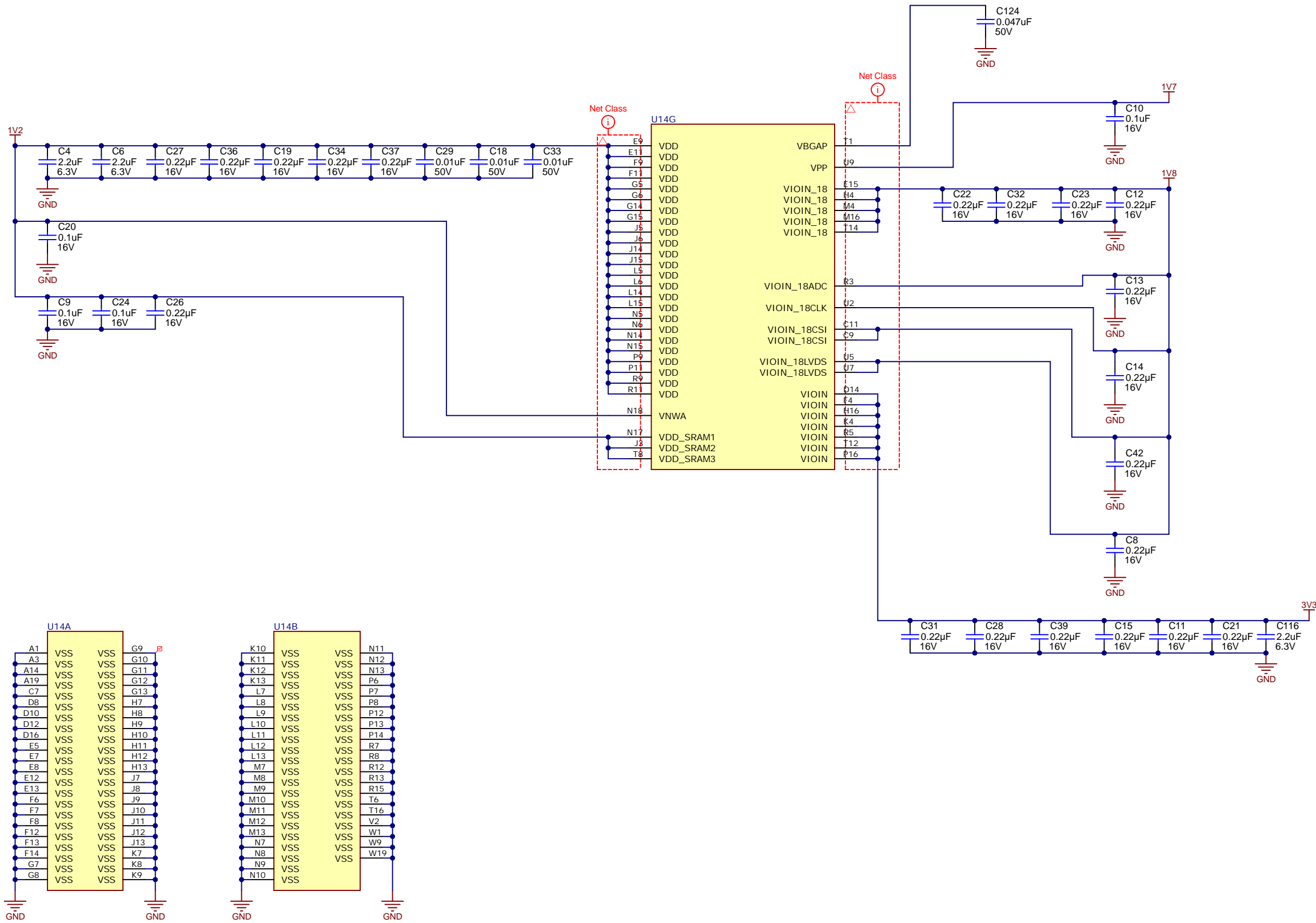


Buck 4 is NOT enabled by default. It must be enabled over SPI. Write 0x33 to address 0x0A

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Orderable: n/a	Designed for: Public Release	Mod. Date: 11/2/2022
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 812 with CAN	Sheet: 2 of 17
Drawn By: B. Shaffer	File: PMIC.schdoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

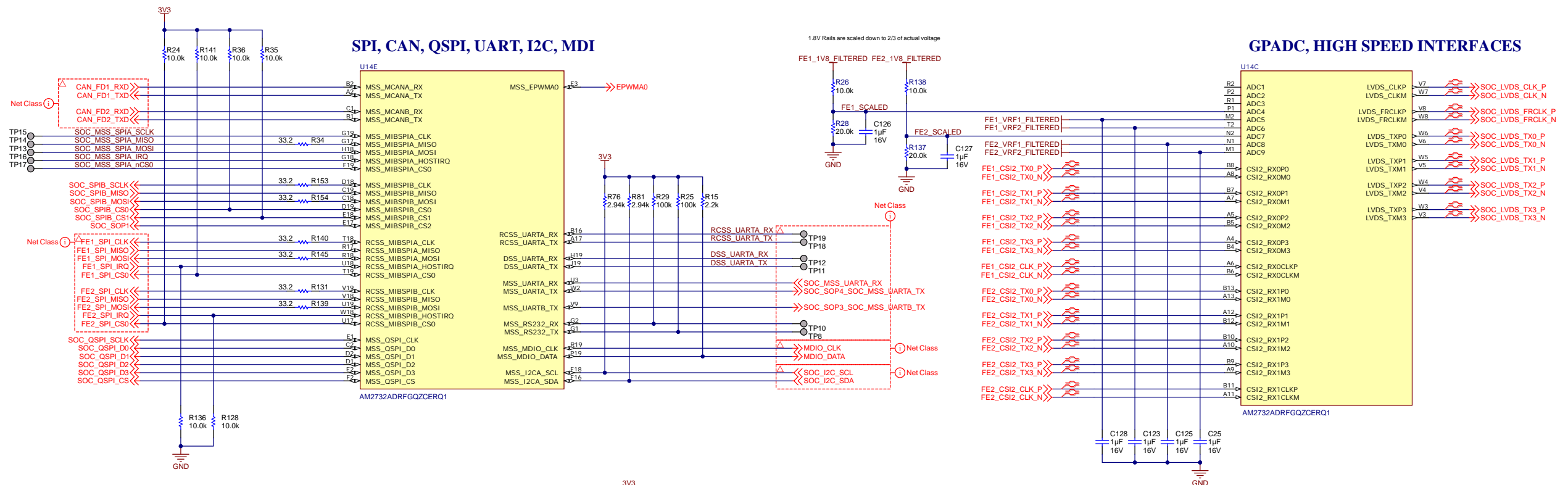
SOC POWER



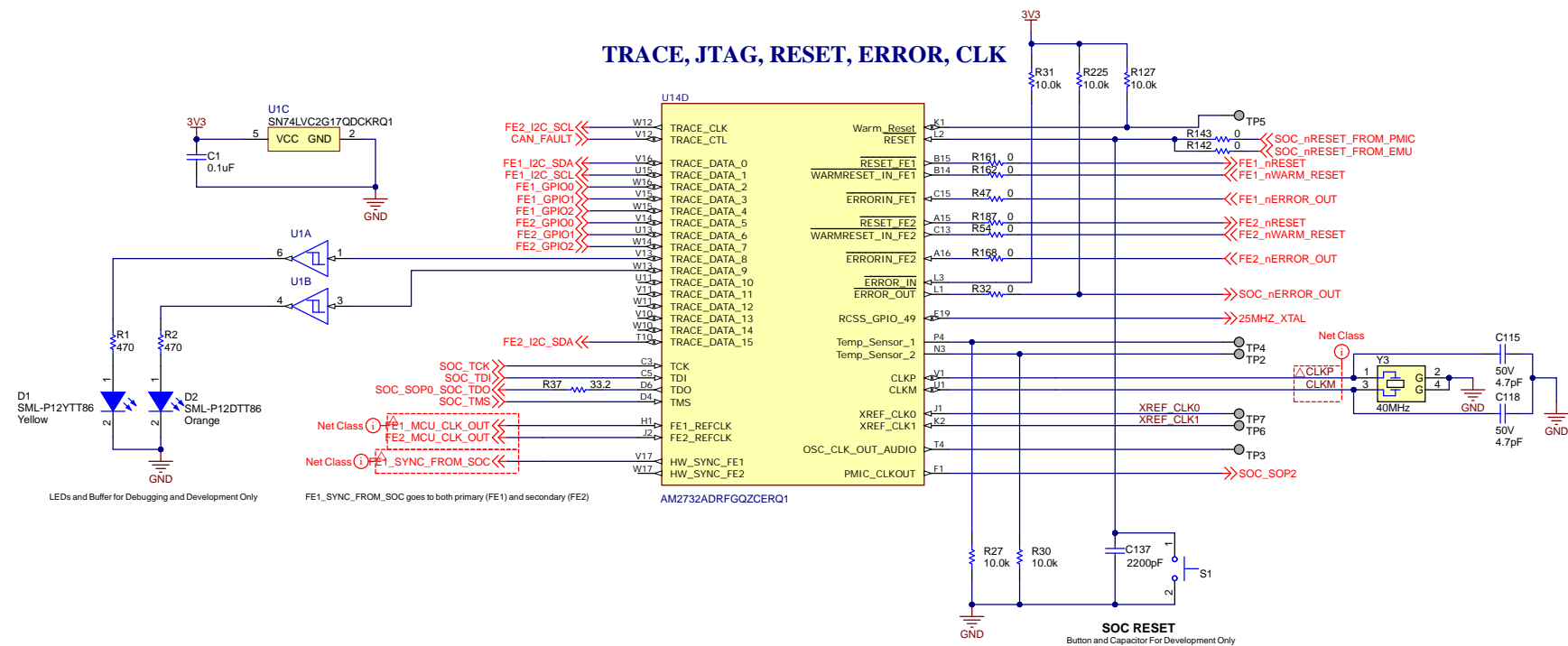
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Orderable: n/a	Designed for: Public Release	Mod. Date: 11/2/2022
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 812 with CAN	Sheet: 3 of 17
Drawn By: B. Shaffer	File: SOC_PWR.SchDoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

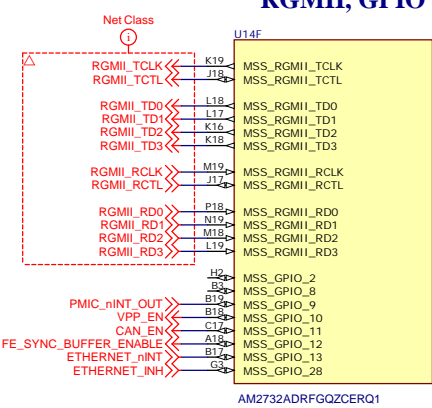
SoC IO



TRACE, JTAG, RESET, ERROR, CLK



RGPII, GPIO



A

B

C

D

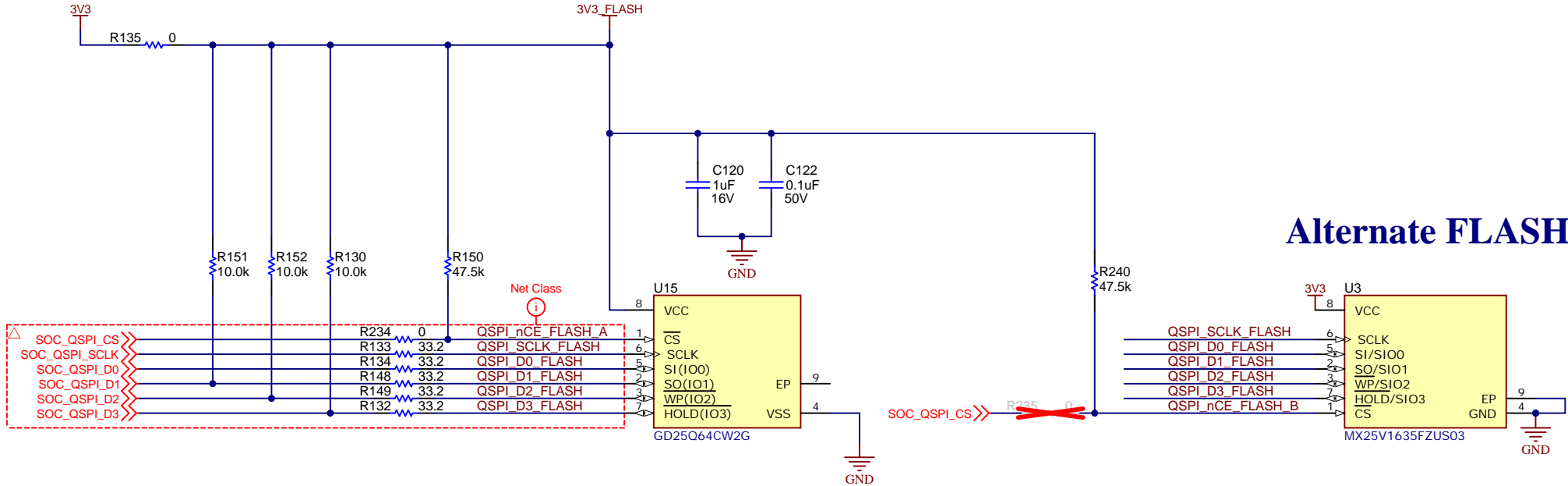
A

B

C

D

QSPI FLASH



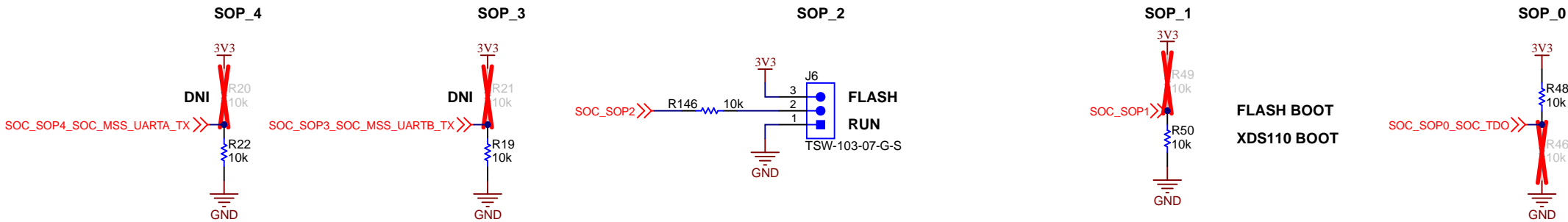
SoC SOP

XTAL DETECT SOP CONFIG

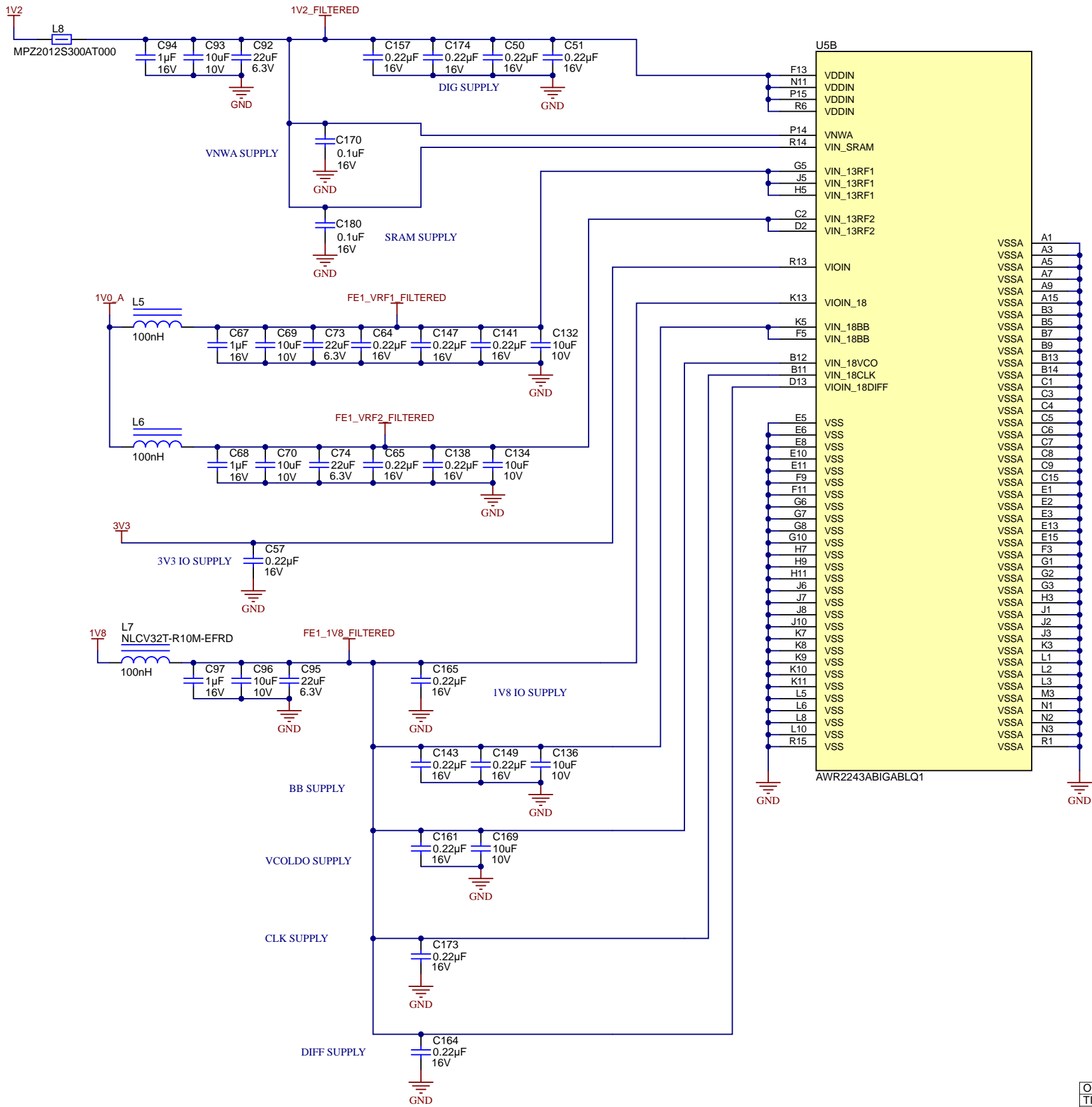
SOP4, SOP3	
40 MHz	00
45.1584 MHz	01
49.152 MHz	10
50 MHz	11

SOP2, SOP1, SOP0

SOP_MODE1	SCAN/ATPG	010
SOP_MODE2	DEV/FLED/ORBIT	011
SOP_MODE3	THB	000
SOP_MODE4	FUNC	001
SOP_MODE5	DEV MANAGEMENT	101



FRONT END #1 POWER CONNECTIONS



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Orderable: n/a	Designed for: Public Release	Mod. Date: 11/2/2022
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 812 with CAN	Sheet: 6 of 17
Drawn By: B. Shaffer	File: FE1_PWR.SchDoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

FRONT END 1

A

B

C

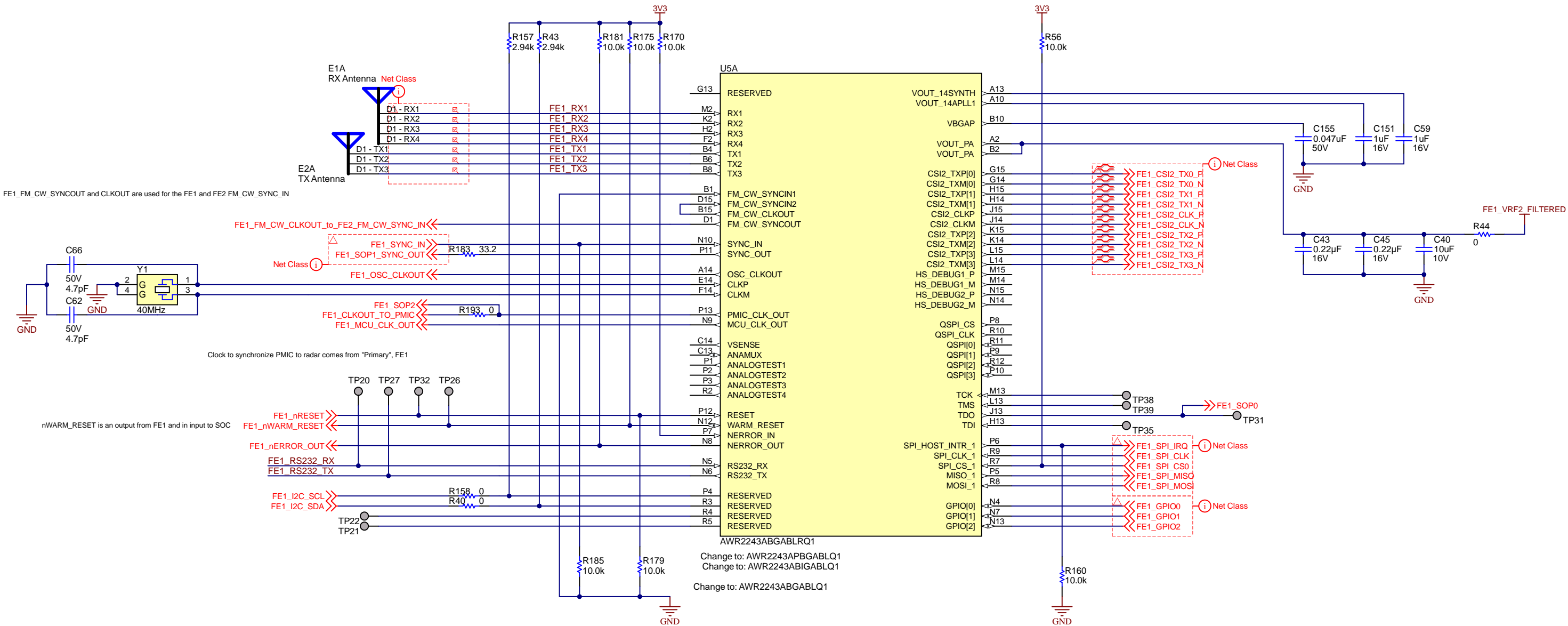
D

A

B

C

D



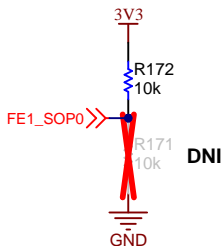
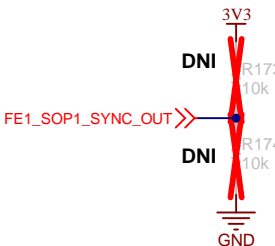
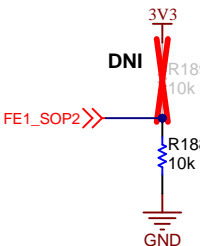
SOP_2

SOP_1

50 ohm Pulldown located on Clock Buffer

SOP_0

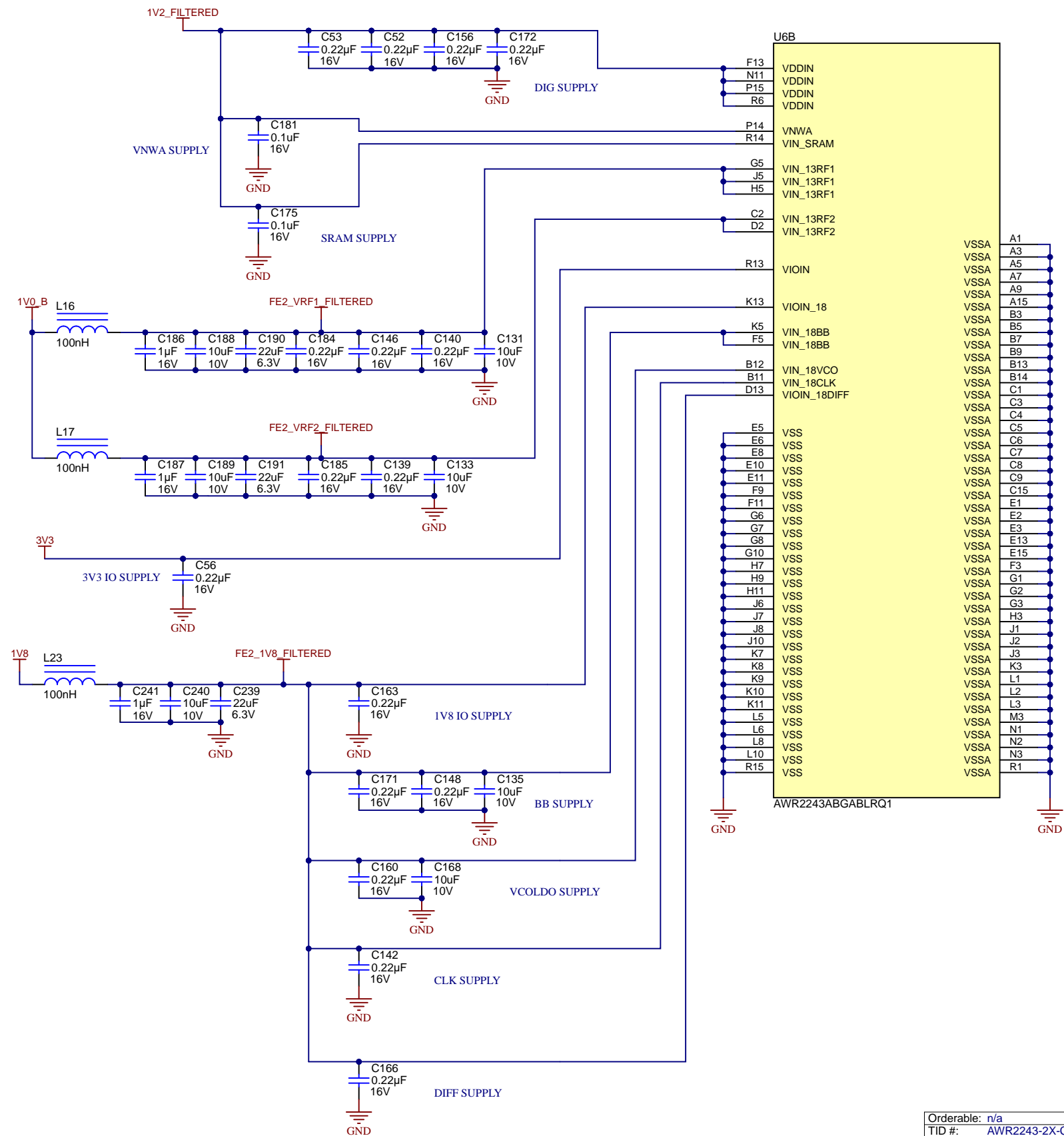
SOP_MODE1	"010"	SCAN/ATPG
SOP_MODE2	"011"	DEV/FLED/ORBIT
SOP_MODE3	"000"	TBD
SOP_MODE4	"001"	FUNC -> DEFAULT VALUE FOR OUTPUTS
SOP_MODE5	"101"	DEV MANAGEMENT -> FOR FLASHING



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Orderable: n/a	Designed for: Public Release	Mod. Date: 11/2/2022
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title: XDS110 Interface_1B
SVN Rev: Not in version control	Assembly Variant: 812 with CAN	Sheet: 7 of 17
Drawn By: B. Shaffer	File: FE1_IO.schdoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

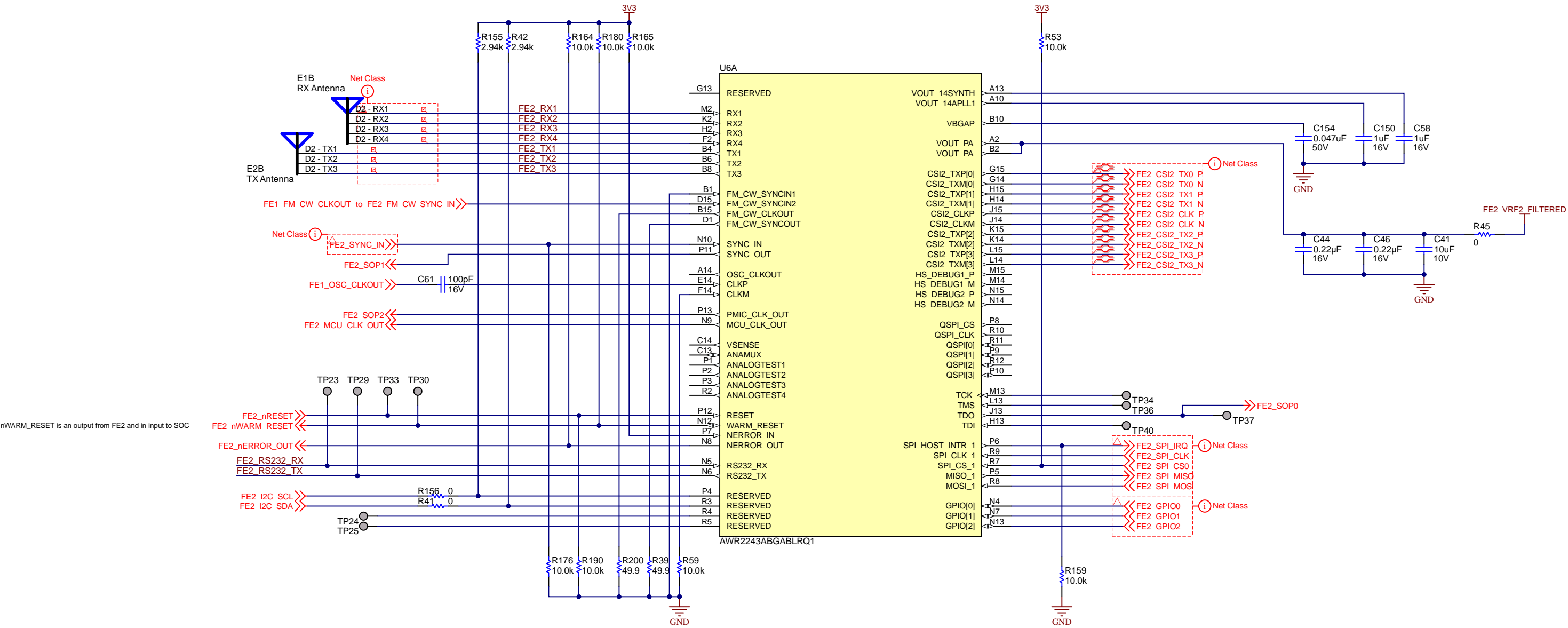
FRONT END #2 POWER CONNECTIONS



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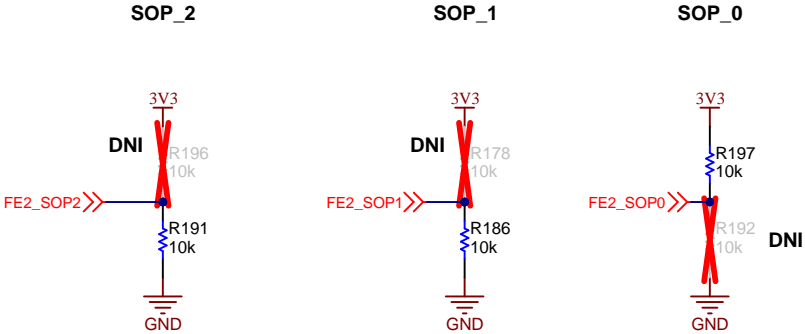
Orderable: n/a	Designed for: Public Release	Mod. Date: 11/1/2022
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 812 with CAN	Sheet: 8 of 17
Drawn By: B. Shaffer	File: FE2_PWR.SchDoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

FRONT END 2

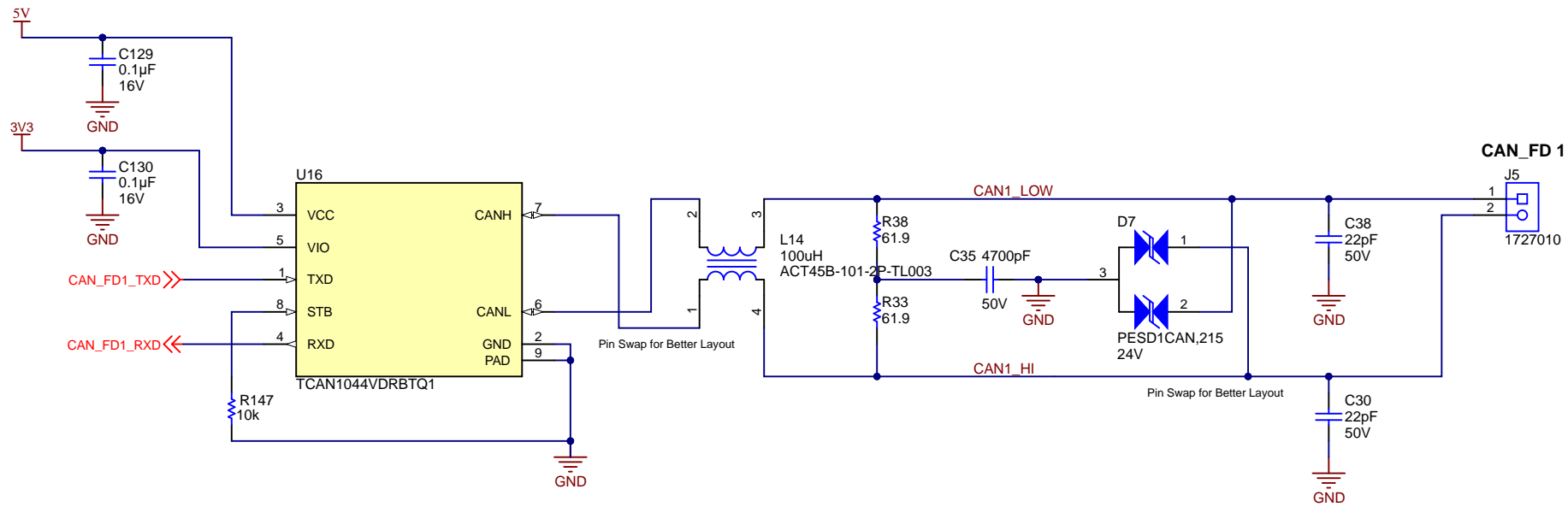
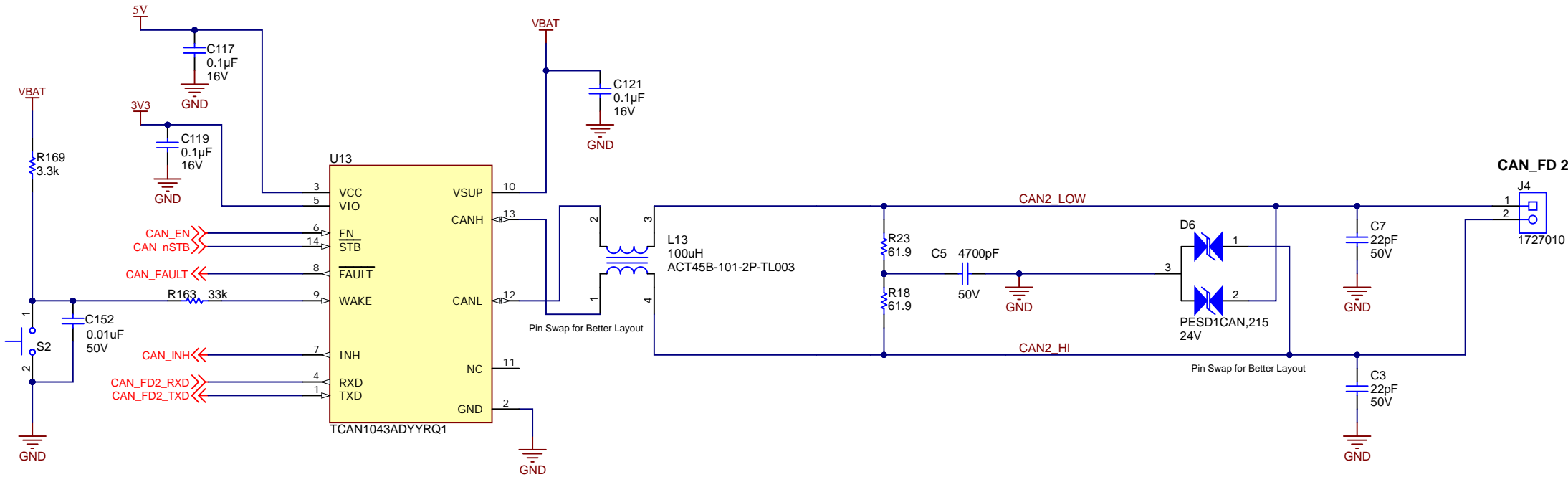


nWARM_RESET is an output from FE2 and in input to SOC

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



CAN INTERFACE



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Orderable: n/a	Designed for: Public Release	Mod. Date: 11/1/2022
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title: CAN Interface
SVN Rev: Not in version control	Assembly Variant: 812 with CAN	Sheet: 10 of 17
Drawn By: B. Shaffer	File: 2CAN.SchDoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

ETHERNET

ETHERNET PHY

BOOTSTRAP CONFIGURATION PINS

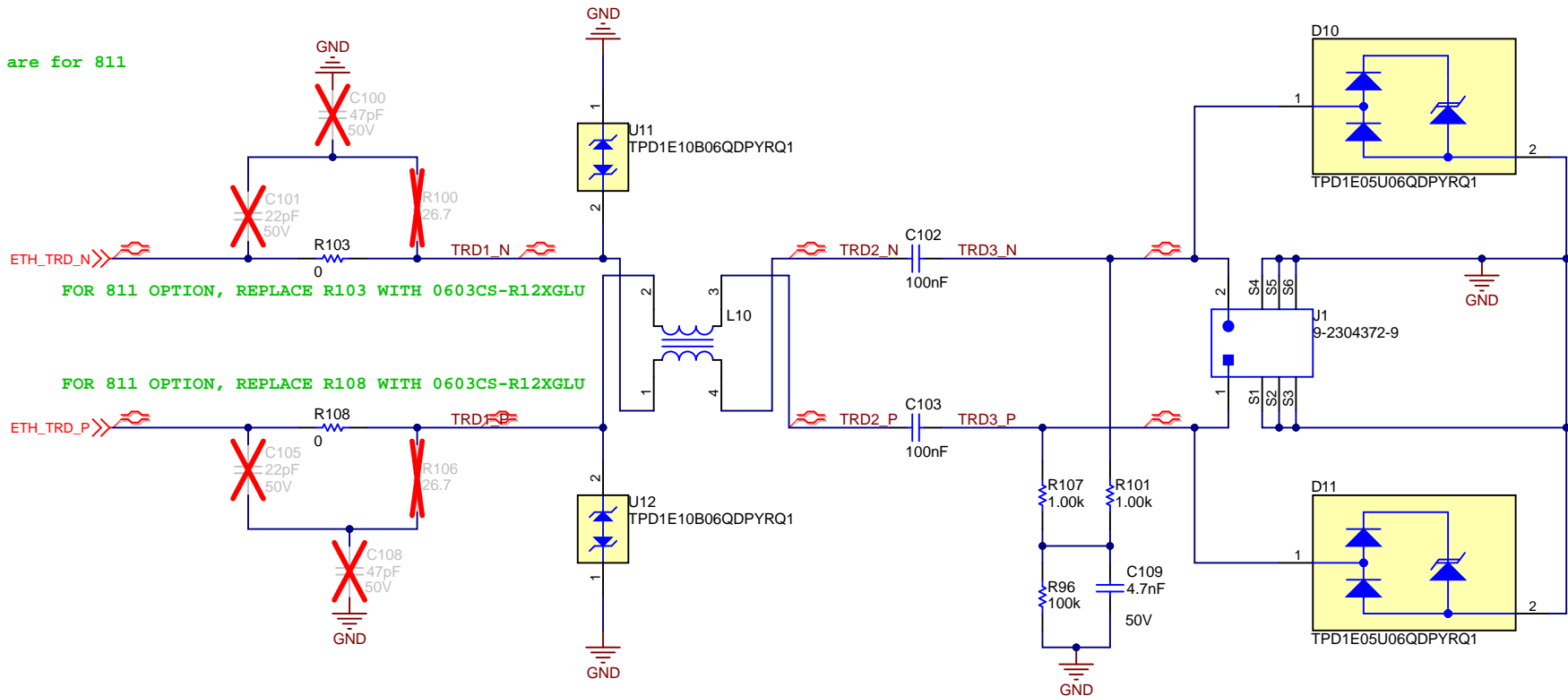
Resistor Values must be changed to change Modes, refer to datasheet for proper values

Orderable: n/a	Designed for: Public Release	Mod. Date: 12/6/2024
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 812 with CAN	Sheet: 11 of 17
Drawn By: B. Shaffer	File: Enet_PHY.SchDoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

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ETHERNET CONNECTOR

Green notes are for 811



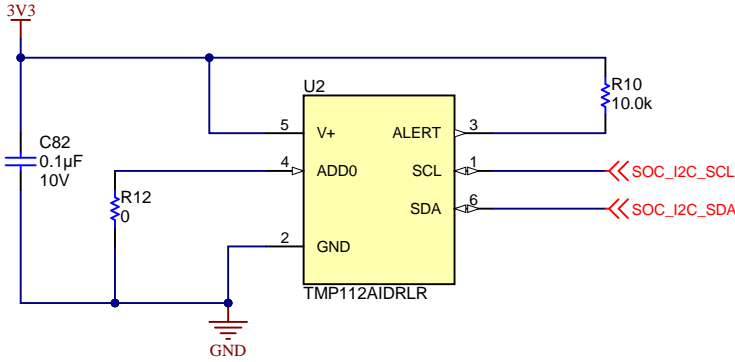
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Orderable: n/a	Designed for: Public Release	Mod. Date: 12/10/2024
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 812 with CAN	Sheet: 12 of 17
Drawn By: B. Shaffer	File: Enet_Conn.SchDoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

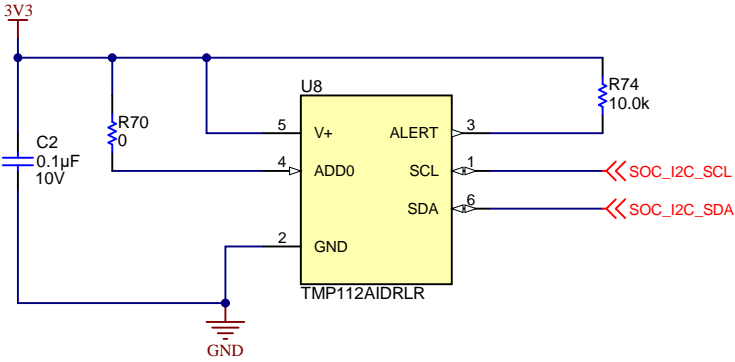
MISC

ONBOARD TEMP SENSORS

TEMP SENSOR AWAY FROM PMIC
I2C ADDRESS 1001000x



TEMP SENSOR CLOSE TO PMIC
I2C ADDRESS 1001001x

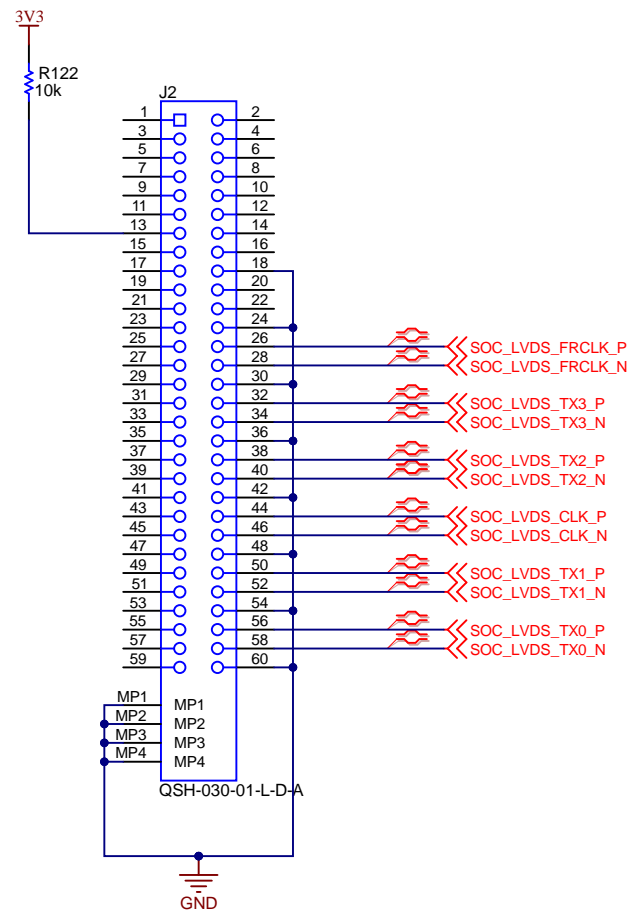


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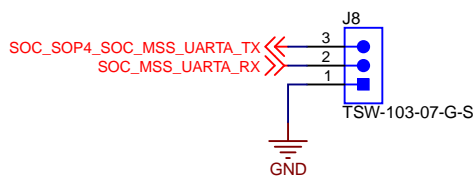
Orderable: n/a	Designed for: Public Release	Mod. Date: 10/22/2024
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title: XDS110 Interface_1A
SVN Rev: Not in version control	Assembly Variant: 812 with CAN	Sheet: 13 of 17
Drawn By: B. Shaffer	File: Temp.schdoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

Connectors

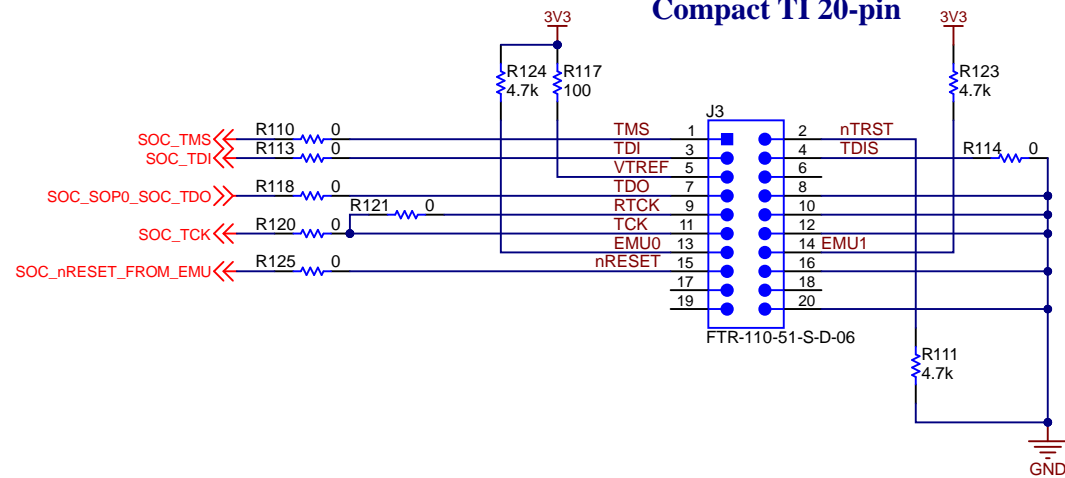
60 PIN DEBUG CONNECTOR



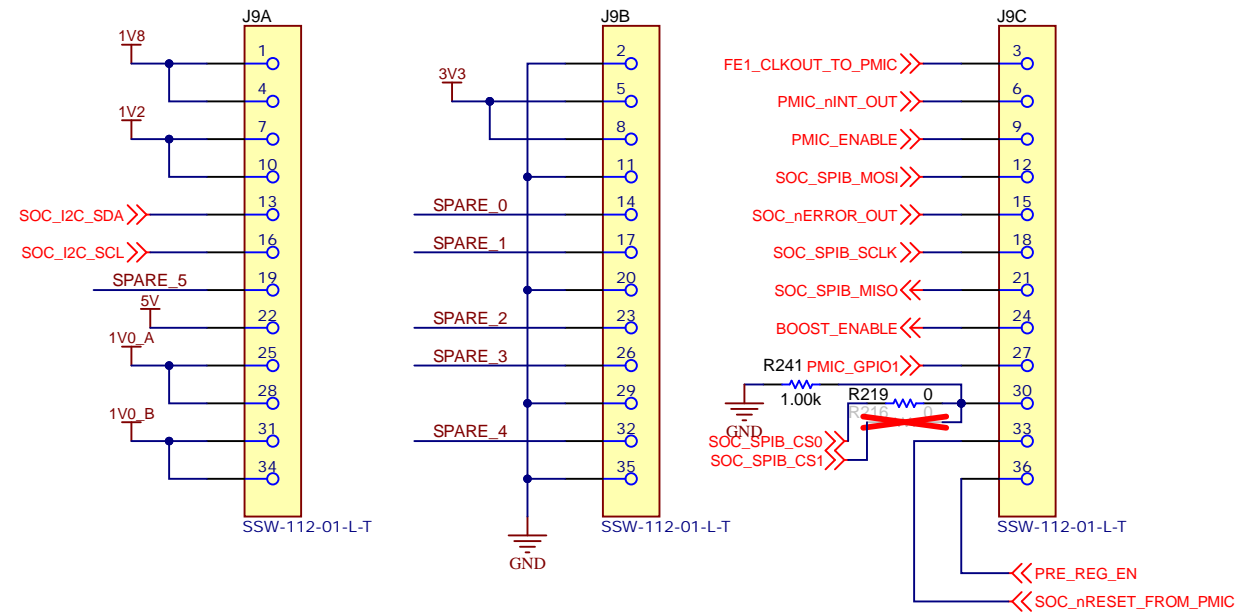
UART Test Pins



Off Board Emulator
Compact TI 20-pin



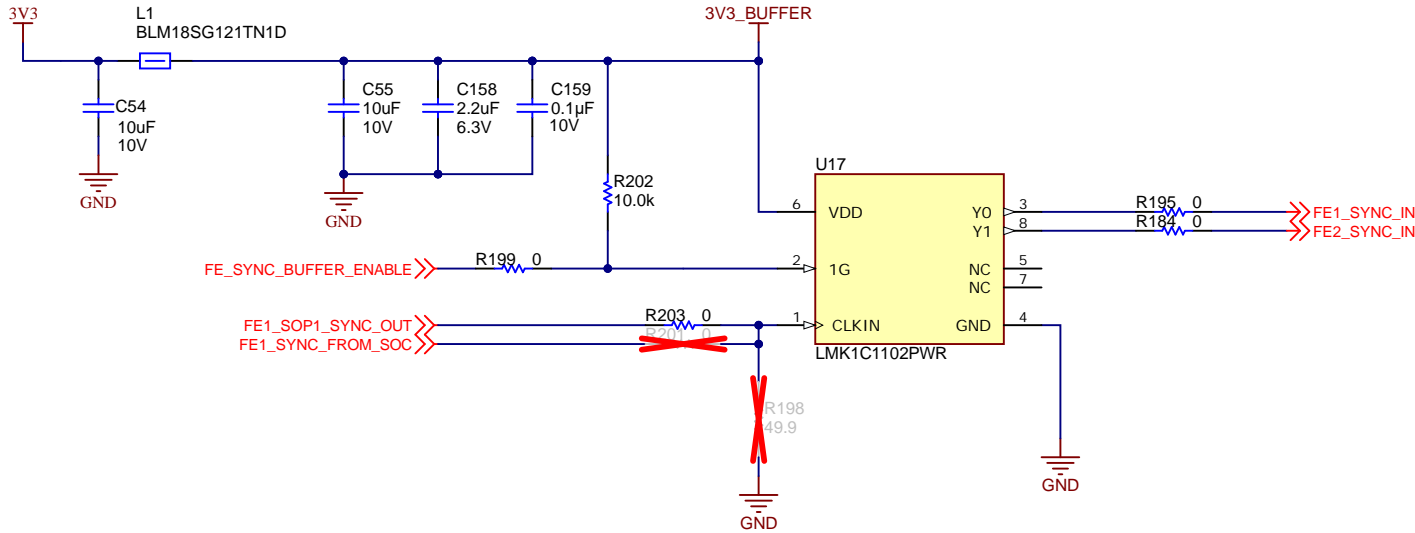
Power Reference Connector



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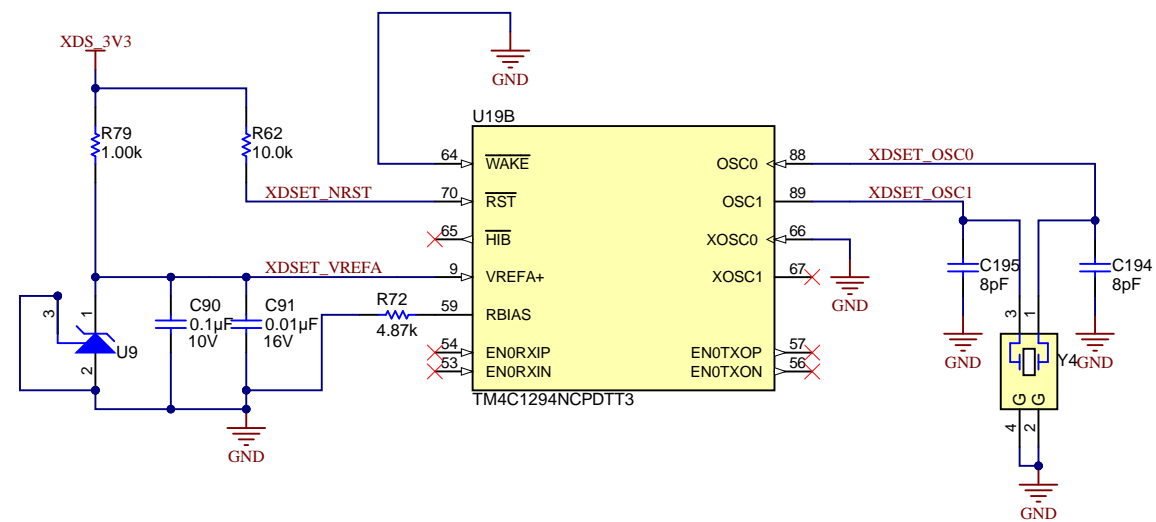
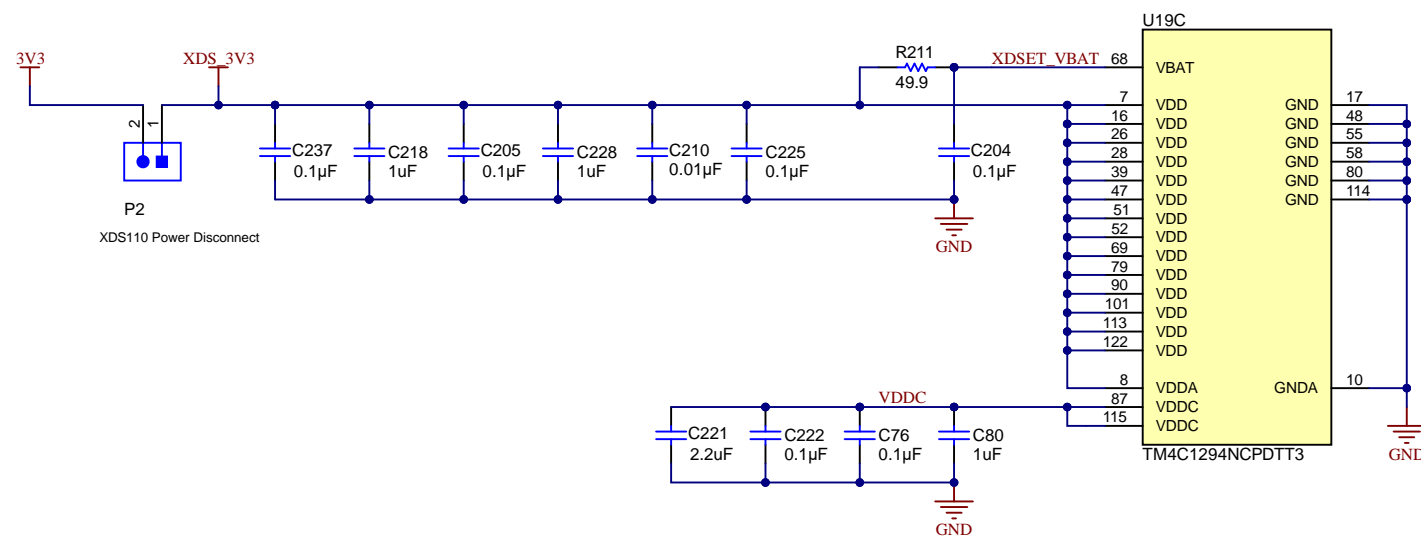
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TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 812 with CAN	Sheet: 14 of 17
Drawn By: B. Shaffer	File: Connectors.schdoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

Clock Distribution



Digital SYNC from FE1 or SOC is buffered and fed into FE1 and FE2

On Board Emulator XDS110



Orderable: n/a	Designed for: Public Release	Mod. Date: 11/2022
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 812 with CAN	Sheet: 16 of 17
Drawn By: B. Shaffer	File: XDS110.schdoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	



PCB Number: PROC206
PCB Rev: C

PCB LOGO
Texas Instruments

PCB LOGO
FCC disclaimer

PCB LOGO
WEEE logo

PCB LOGO
ESD Susceptible



CAUTION HOT SURFACE



Shunt Table		
Shunt	Pinheader	Contacts
Z1	P2	1-2
Z2	J7	2-3
Z3	J6	1-2

Z1



SPC02SYAN

Z2



SPC02SYAN

Z3



SPC02SYAN

H1



NY PMS 440 0025 PH

H2



NY PMS 440 0025 PH

H4



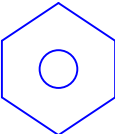
NY PMS 440 0025 PH

H3



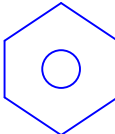
NY PMS 440 0025 PH

MP1



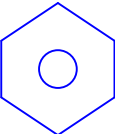
1902D

MP4



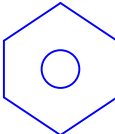
1902D

MP3



1902D

MP2



1902D

LBL1

PCB Label

THT-14-423-10
Size: 0.65" x 0.20 "

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.

Orderable: n/a		Designed for: Public Release		Mod. Date: 11/15/2024	
TID #: AWR2243-2X-CAS-EVM		Project Title: AWR2243-2X-CAS-EVM			
Number: PROC206		Rev: 2		Sheet Title: Hardware	
SVN Rev: Not in version control		Assembly Variant: 812 with CAN		Sheet: 17 of 17	
Drawn By: B. Shaffer		File: Hardware.SchDoc		Size: B	
Engineer: B. Shaffer		Contact: http://www.ti.com/support			

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