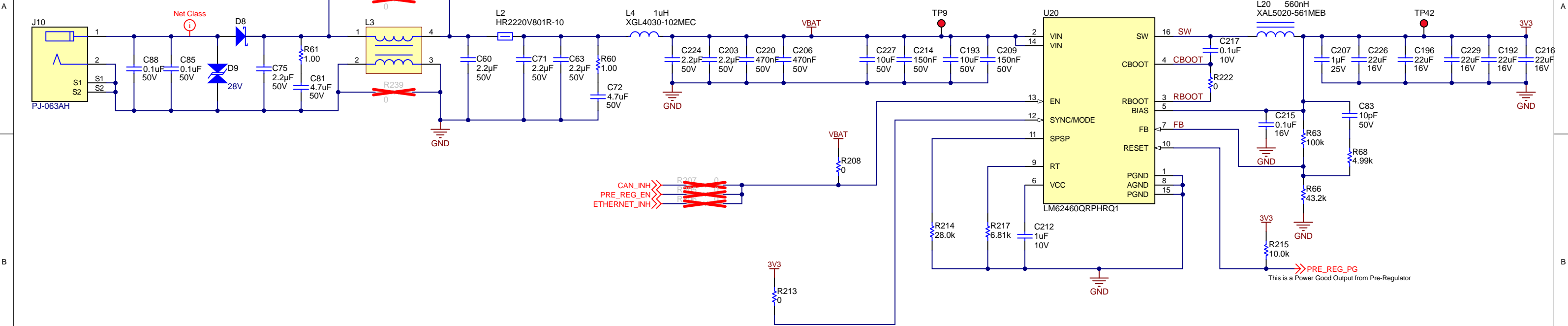
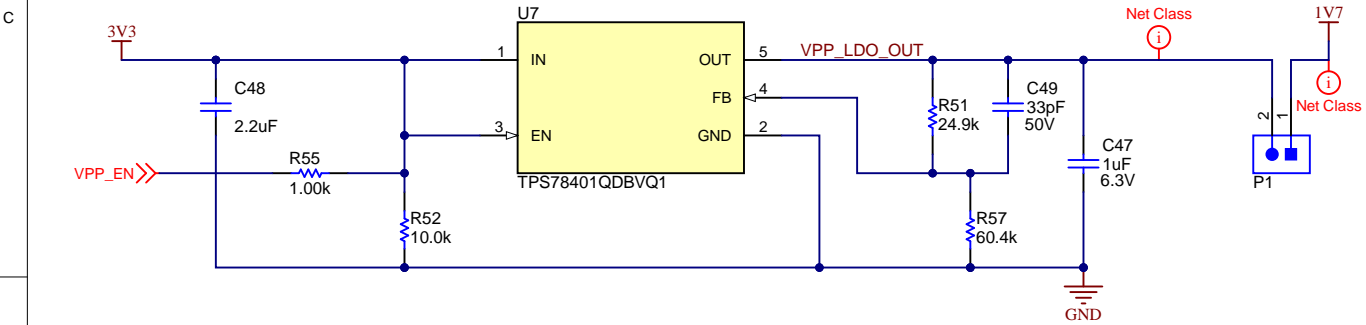


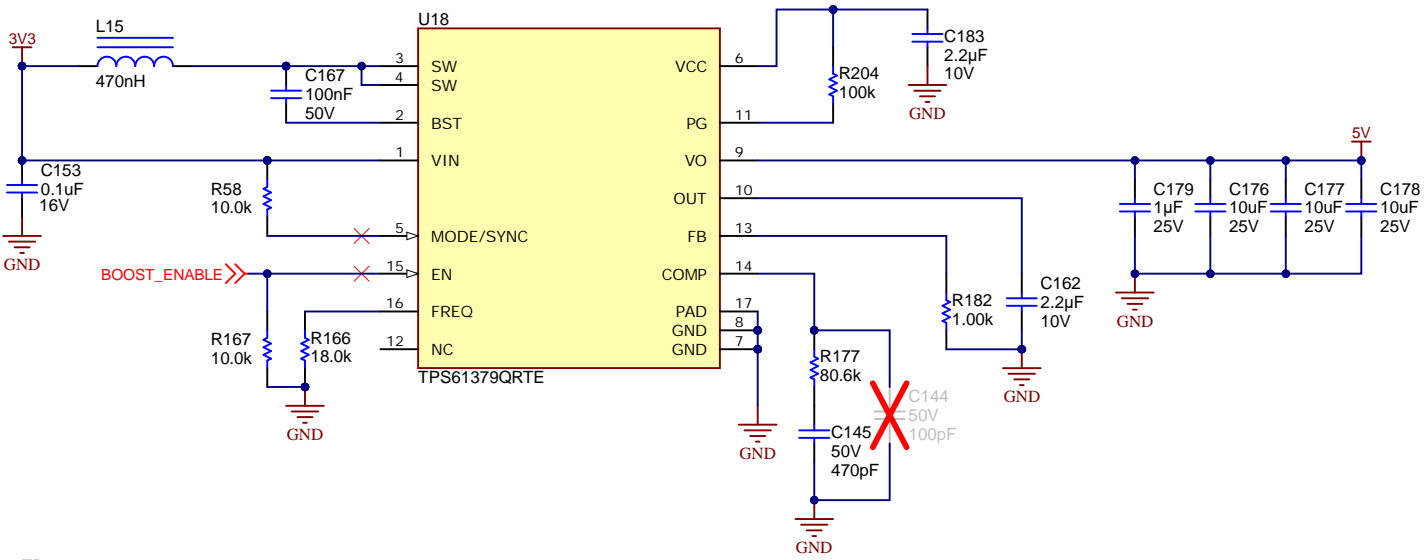
Pre-Regulator



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)

A

B

C

D

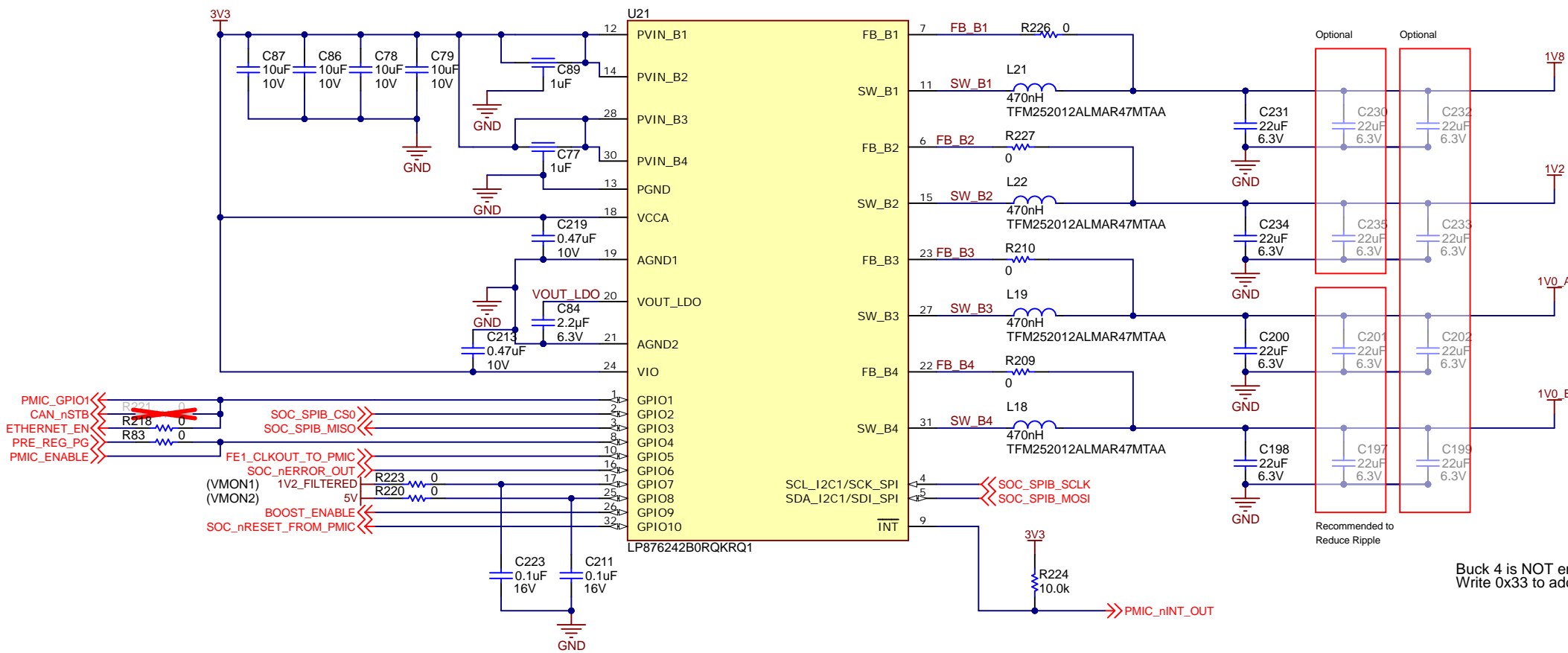
A

B

C

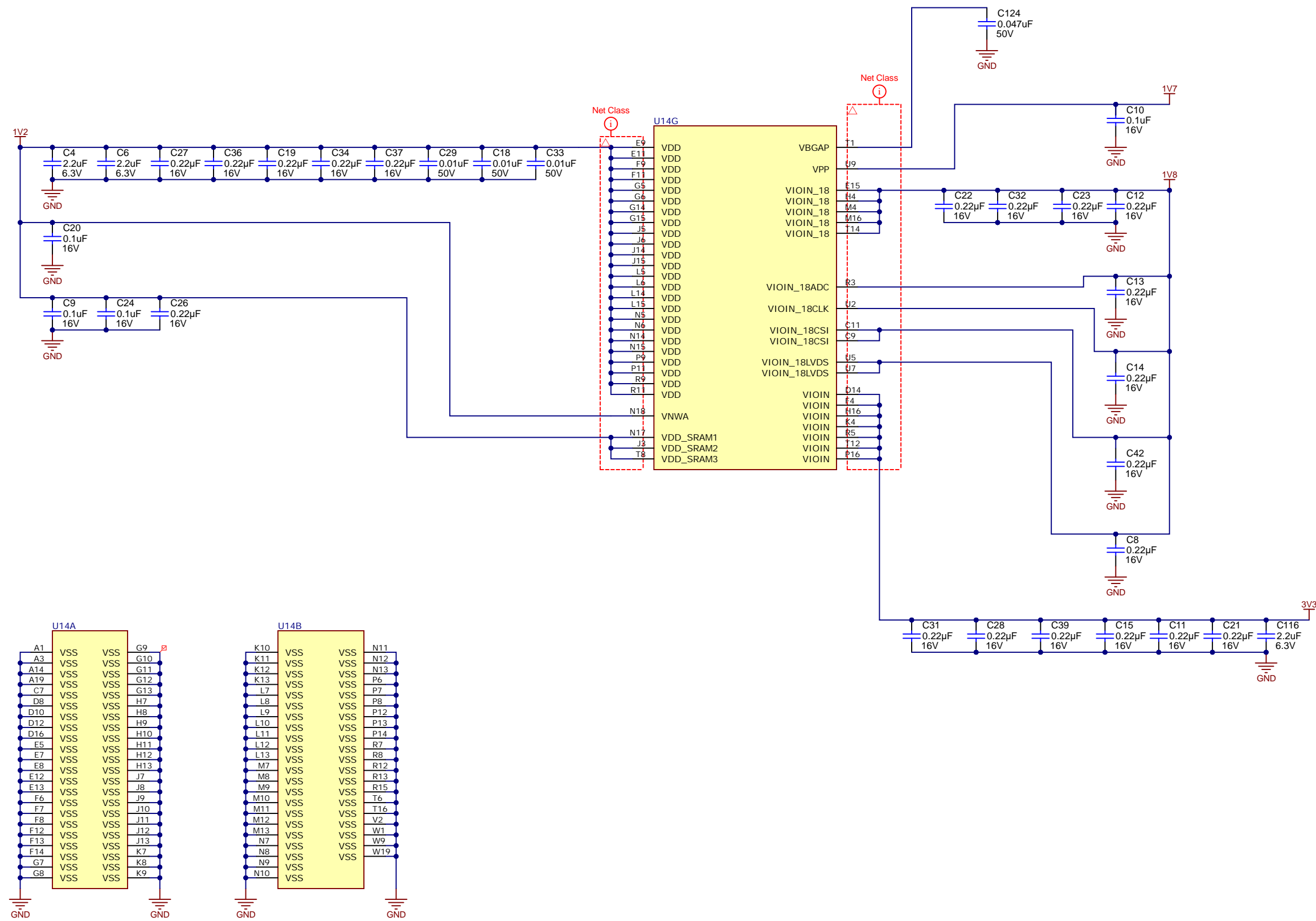
D

PMIC



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

SOC POWER

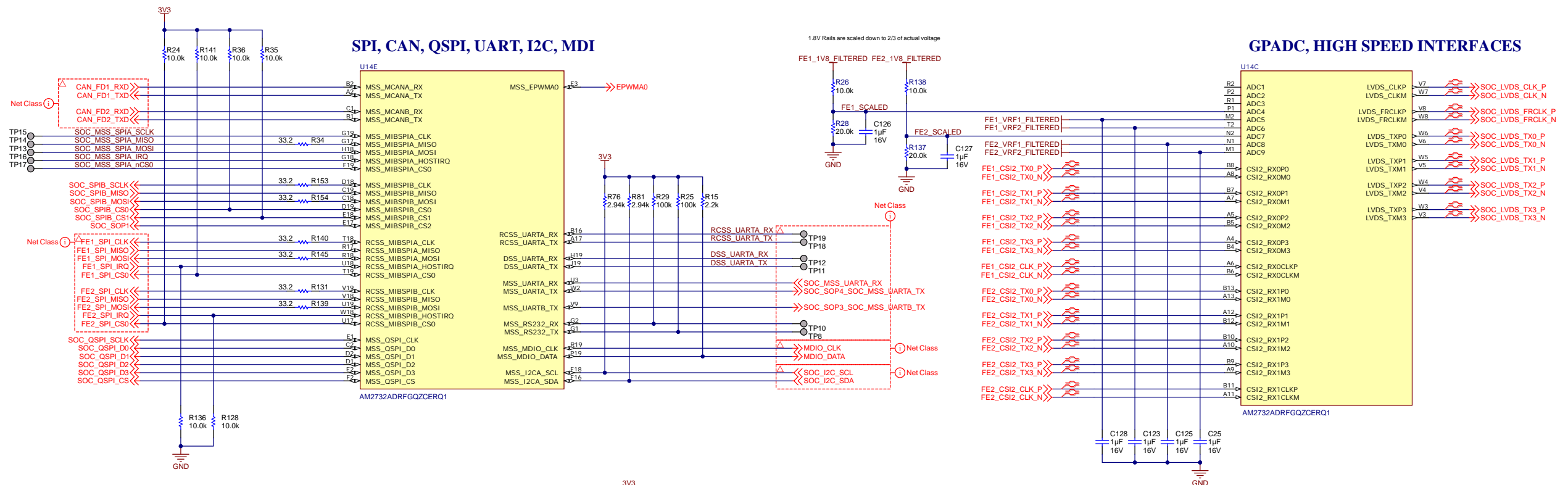


Orderable: n/a	Designed for: Public Release	Mod. Date: 11/2/2022
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: CAN with 812	Sheet: 3 of 17
Drawn By: B. Shaffer	File: SOC_PWR_SchDoc	Size: B
Engineer: B.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

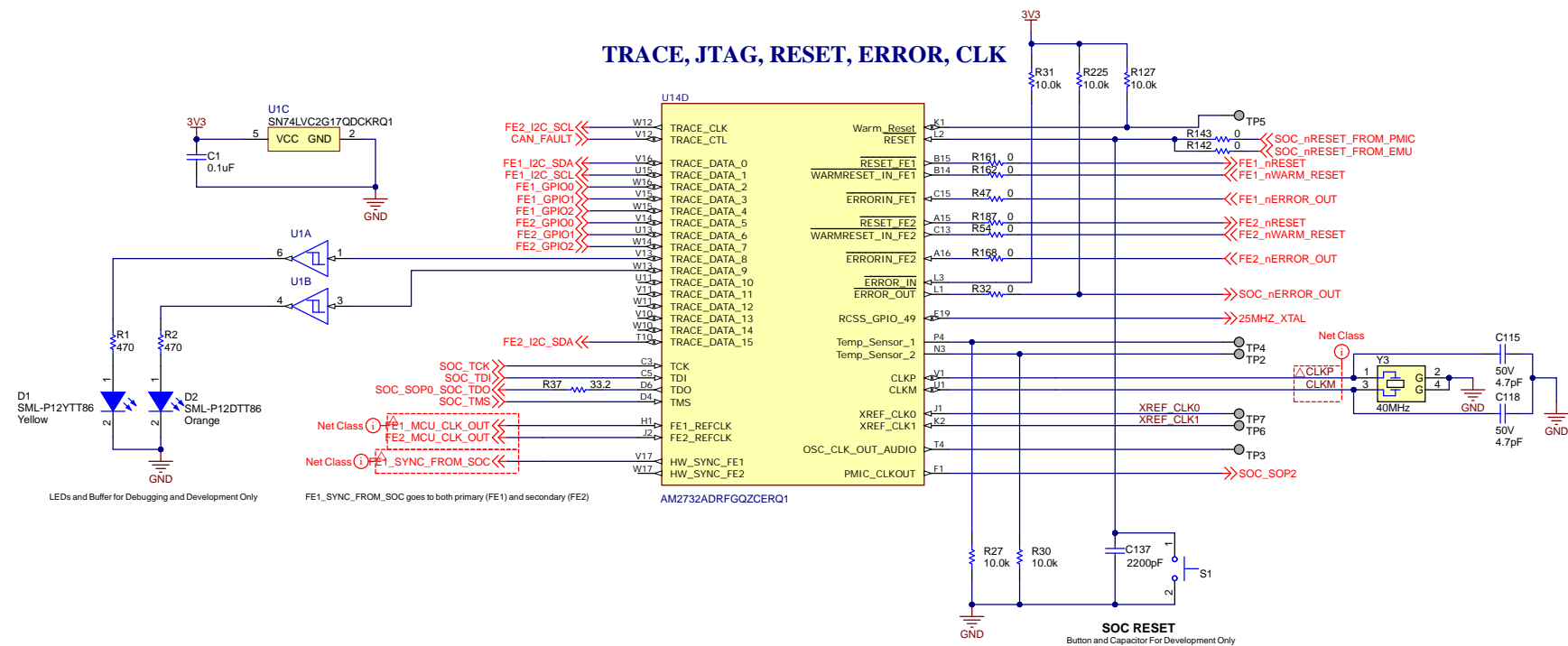


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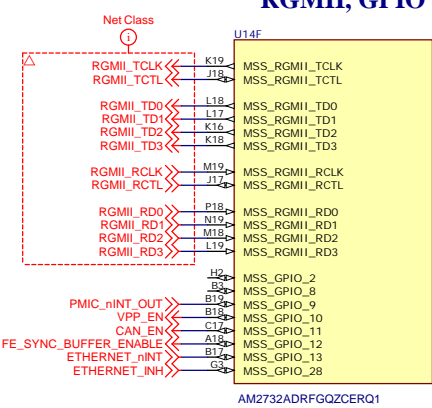
SoC IO



TRACE, JTAG, RESET, ERROR, CLK



RGMII, GPIO



A

B

C

D

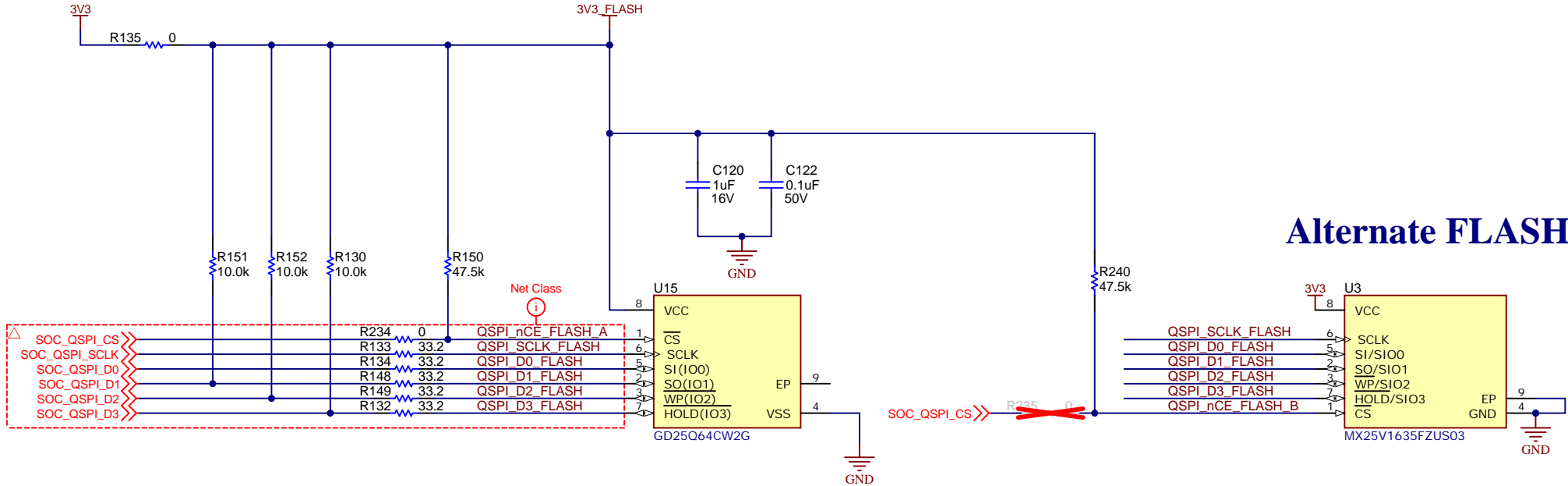
A

B

C

D

QSPI FLASH



Alternate FLASH

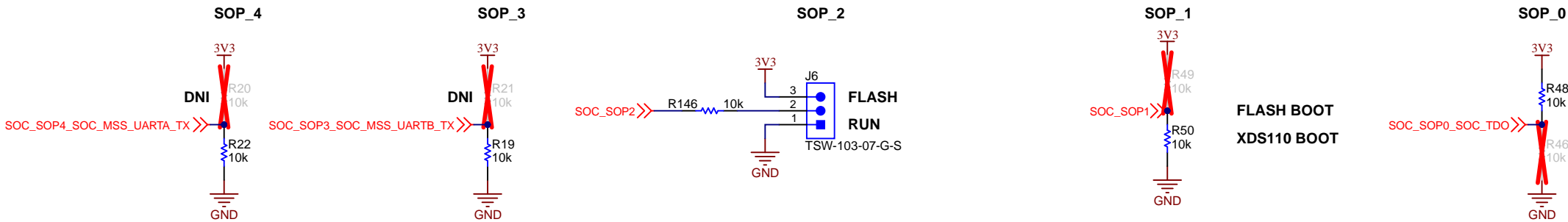
SoC SOP

XTAL DETECT SOP CONFIG

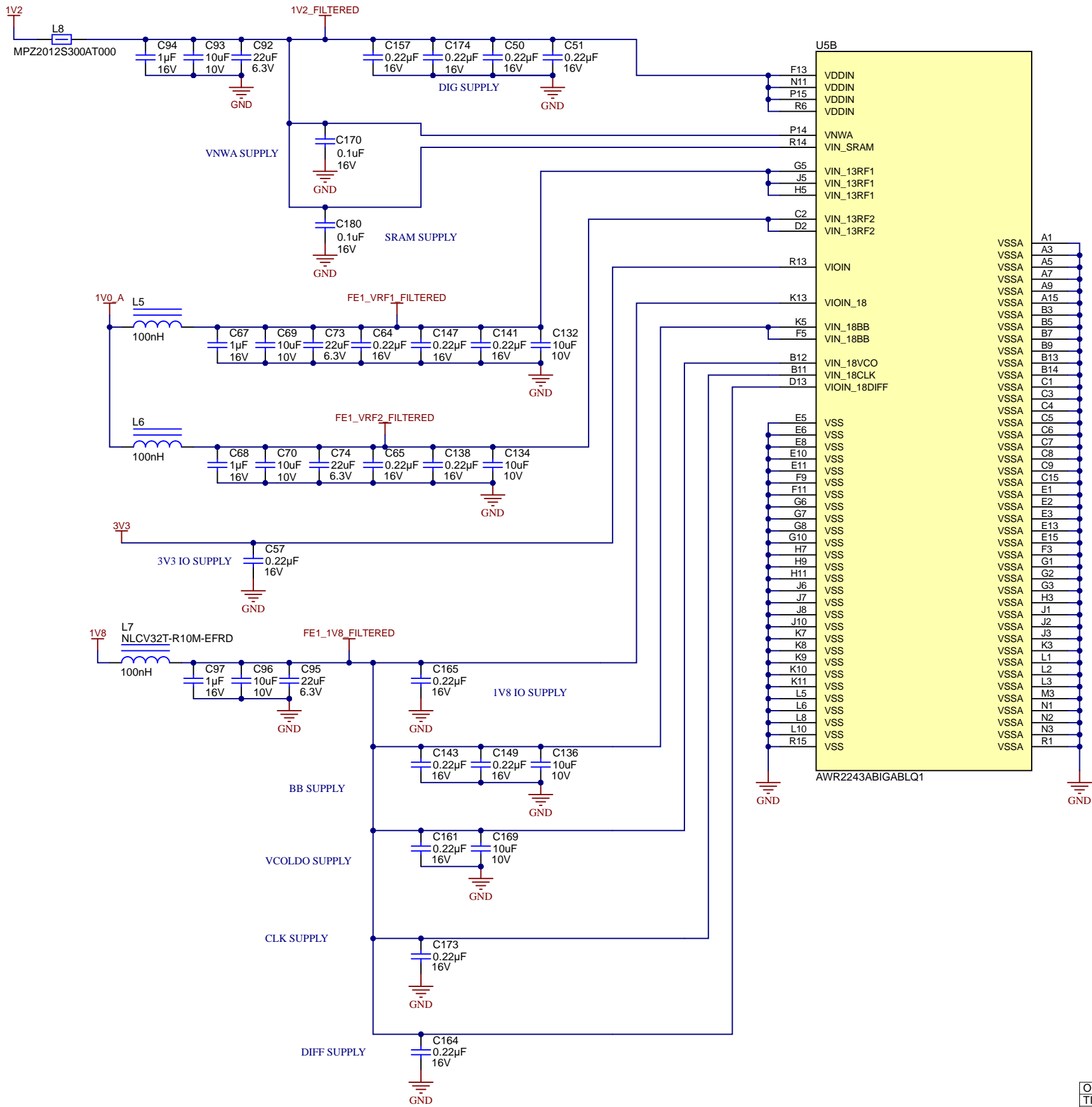
SOP4, SOP3	
40 MHz	00
45.1584 MHz	01
49.152 MHz	10
50 MHz	11

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



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: CAN with 812	Sheet: 6 of 17
Drawn By: B. Shaffer	File: FE1_PWR.SchDoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

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FRONT END 1

A

B

C

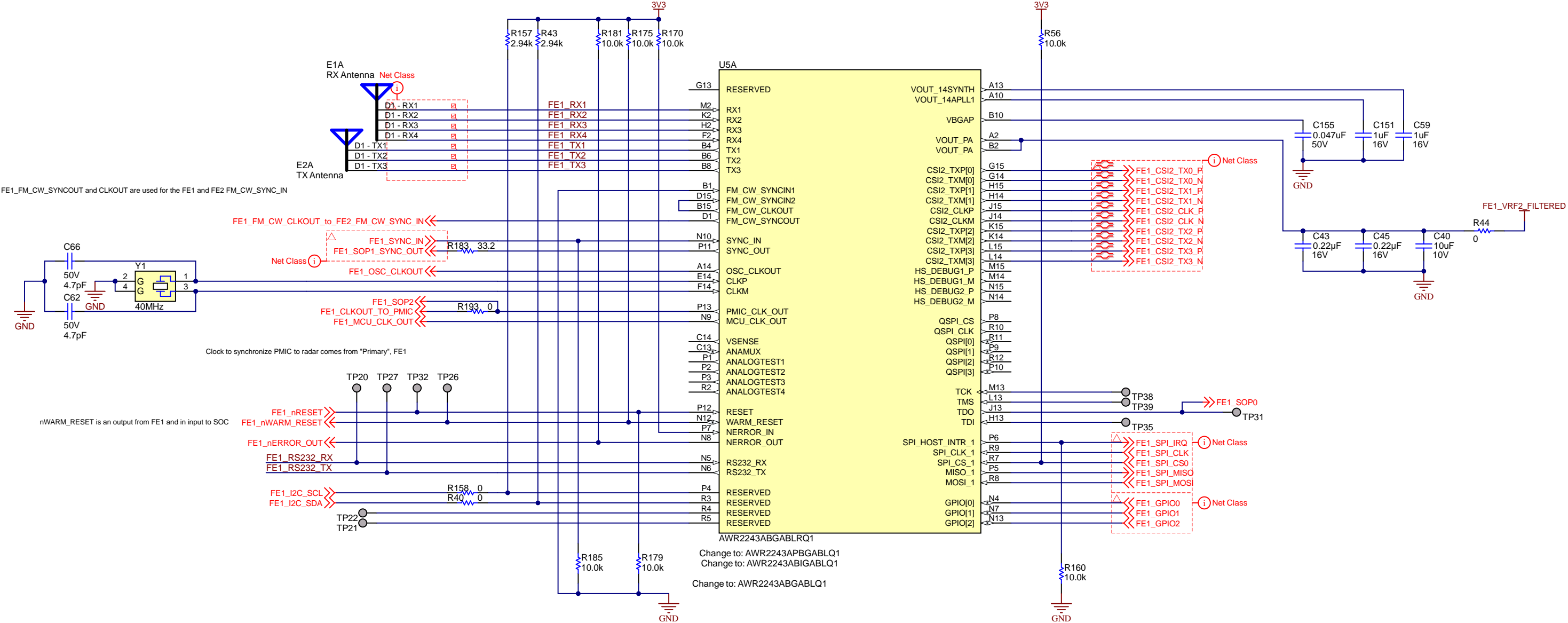
D

A

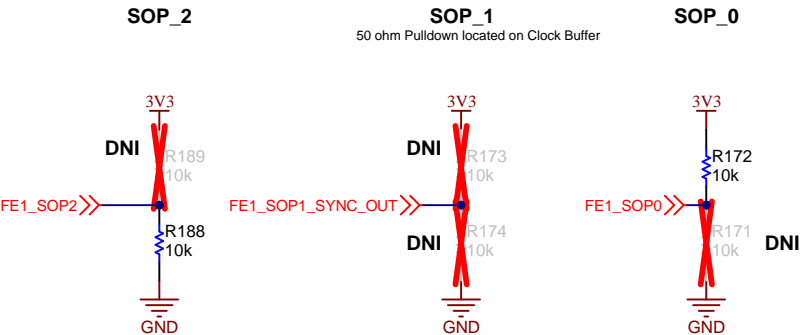
B

C

D



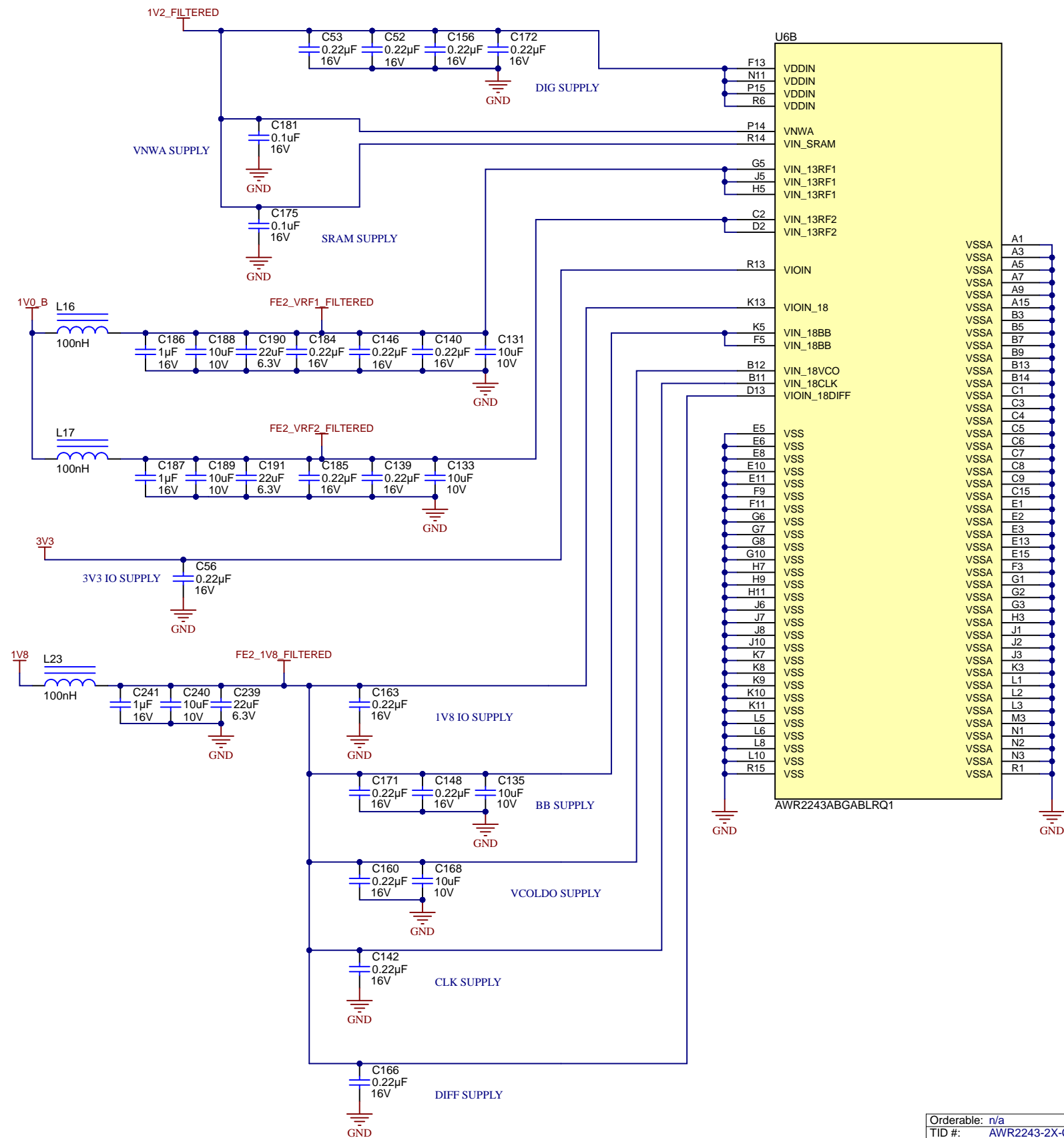
SOP_MODE1	"010"	SCAN/ATPG
SOP_MODE2	"011"	DEV/FLED/ORBIT
SOP_MODE3	"000"	TBD
SOP_MODE4	"001"	FUNC -> DEFAULT VALUE FOR OUTPUTS
SOP_MODE5	"101"	DEV MANAGEMENT -> FOR FLASHING



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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: CAN with 812	Sheet: 7 of 17
Drawn By: B. Shaffer	File: FE1_IO.schdoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

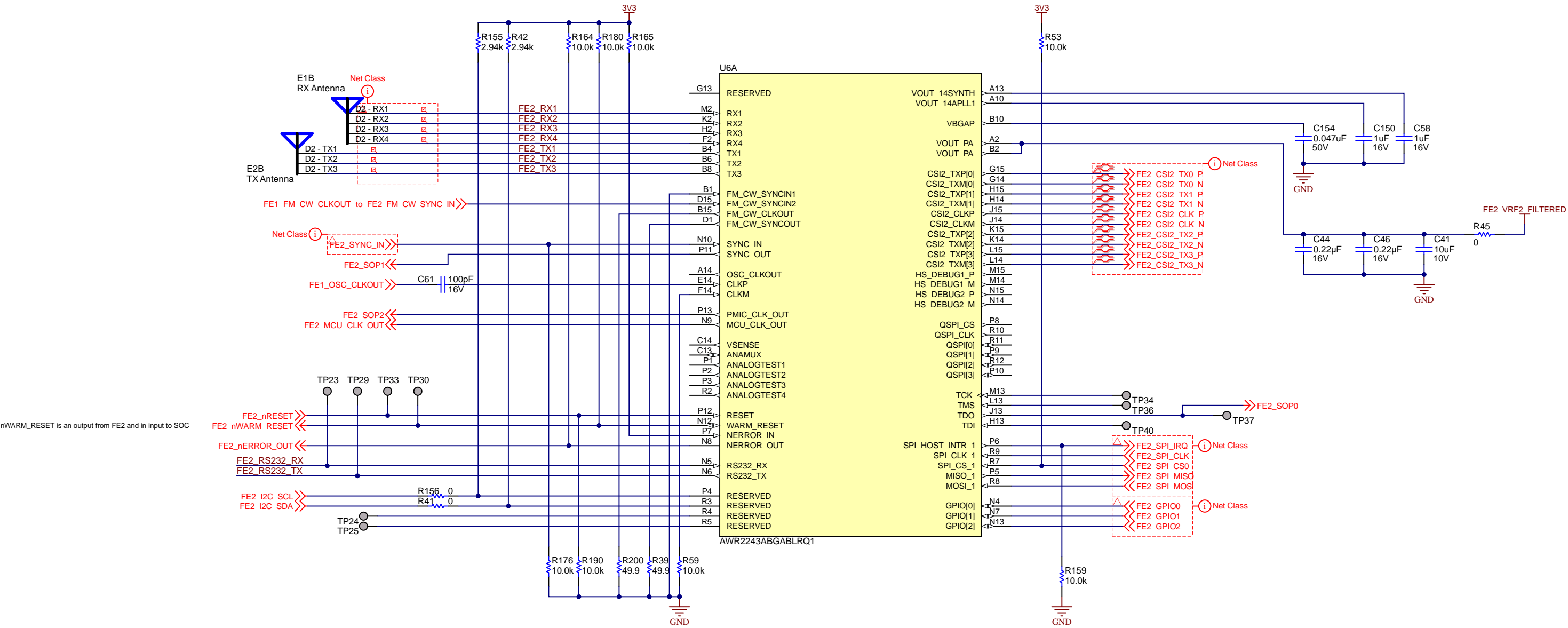
FRONT END #2 POWER CONNECTIONS



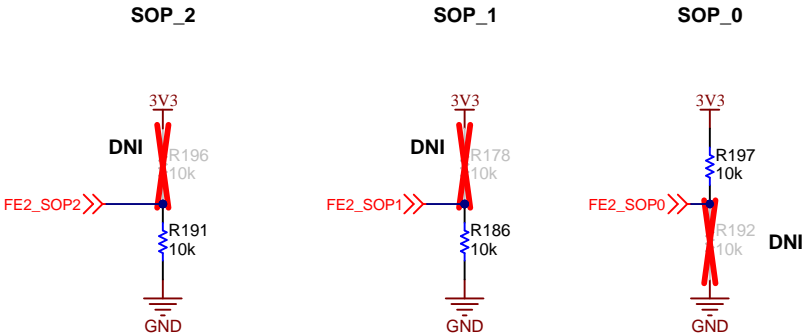
Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular 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: 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: CAN with 812	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



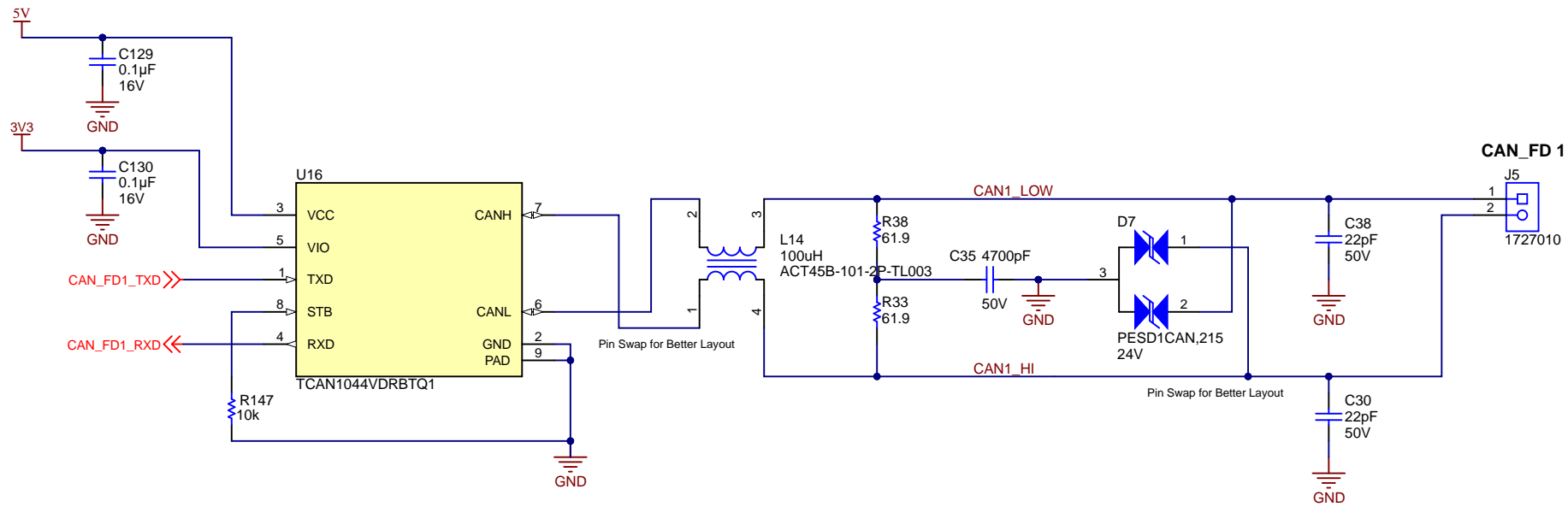
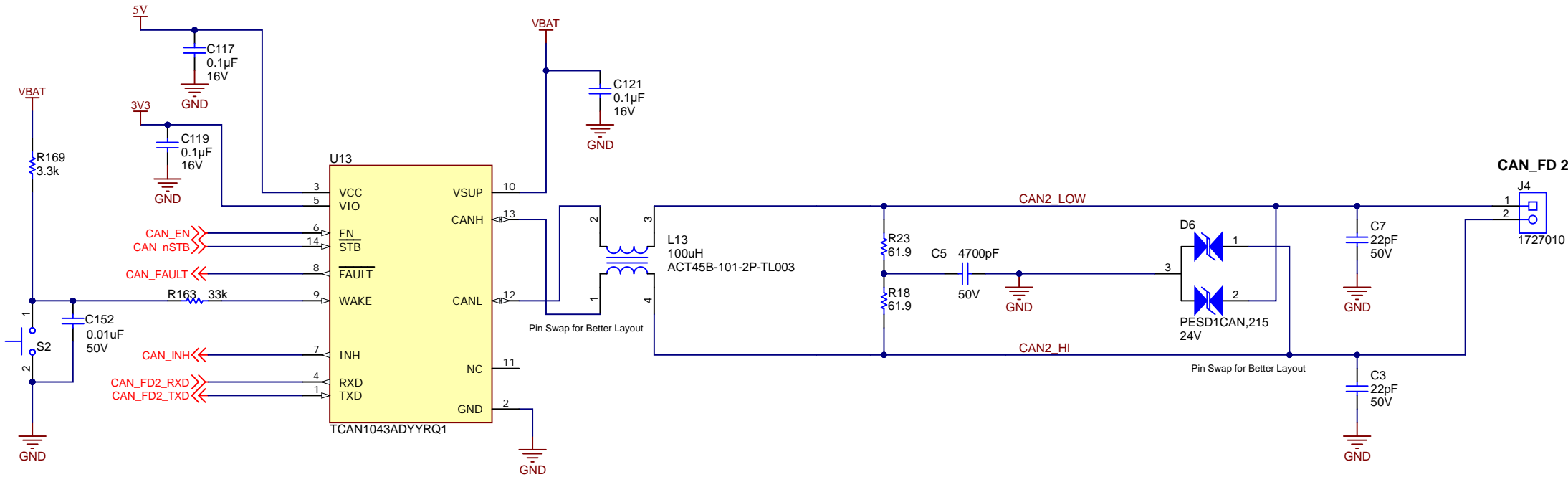
SOP_MODE1	"010"	SCAN/ATPG
SOP_MODE2	"011"	DEV/FLED/ORBIT
SOP_MODE3	"000"	TBD
SOP_MODE4	"001"	FUNC -> DEFAULT VALUE FOR OUTPUTS
SOP_MODE5	"101"	DEV MANAGEMENT -> FOR FLASHING



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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:
SVN Rev: Not in version control	Assembly Variant: CAN with 812	Sheet: 9 of 17
Drawn By: B. Shaffer	File: FE2_IO.schdoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

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: CAN with 812	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

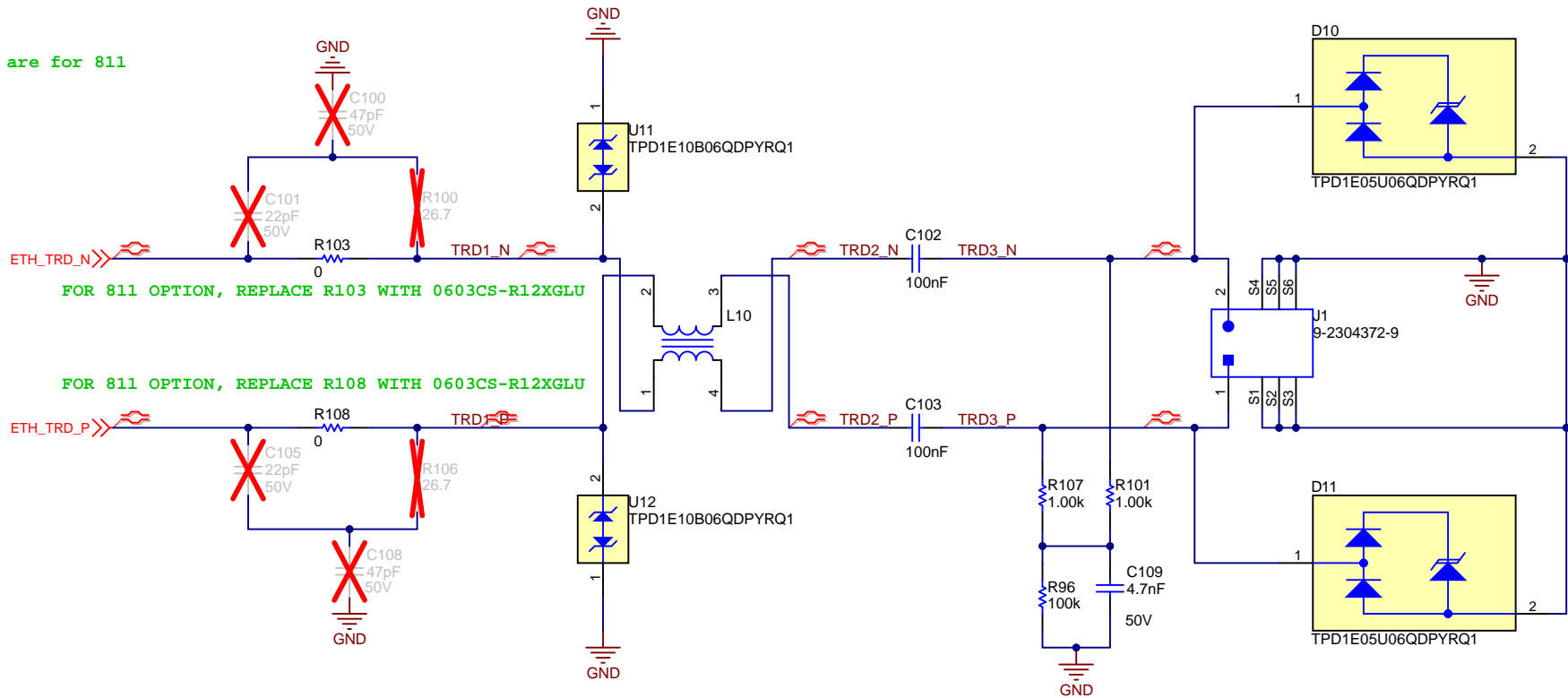
Resistor Values must be changed to change Modes, refer to datasheet for proper values

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: CAN with 812	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



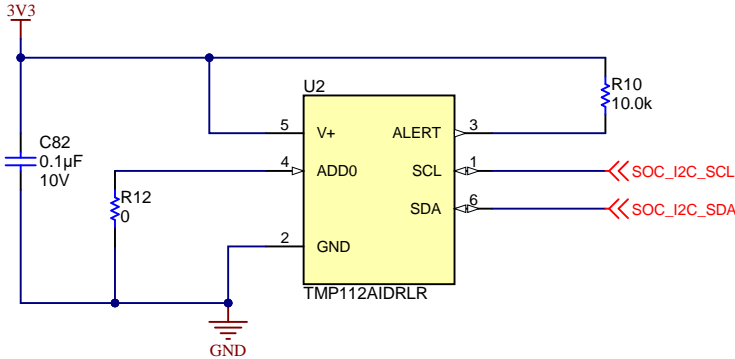
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Orderable: n/a	Designed for: Public Release	Mod. Date: 12/10/2024
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: CAN with 812	Sheet: 12 of 17
Drawn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

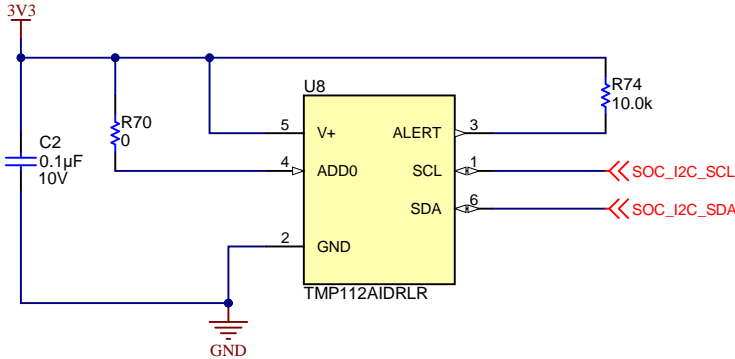
MISC

ONBOARD TEMP SENSORS

TEMP SENSOR AWAY FROM PMIC
I2C ADDRESS 1001000x

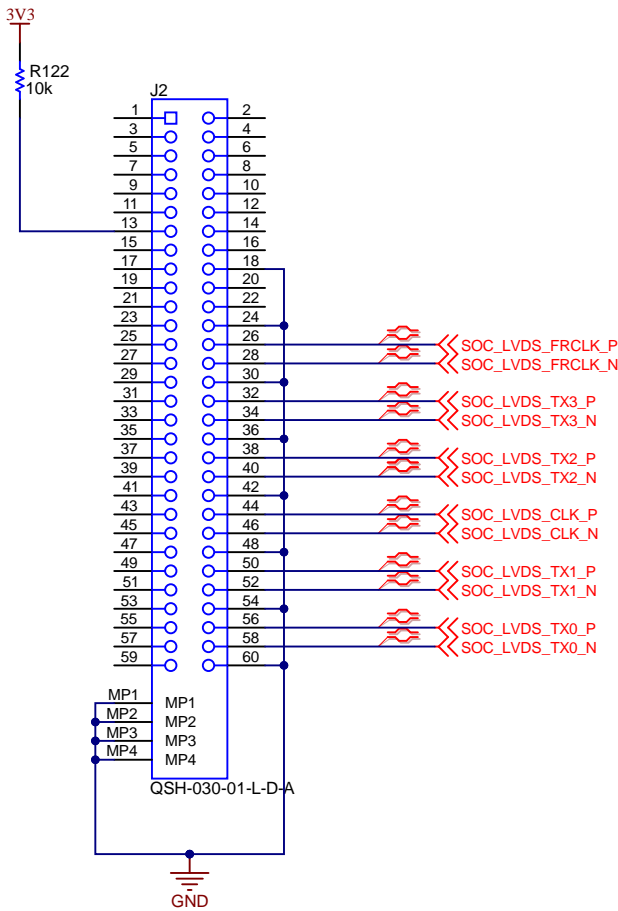


TEMP SENSOR CLOSE TO PMIC
I2C ADDRESS 1001001x

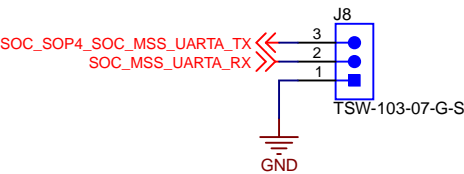


Connectors

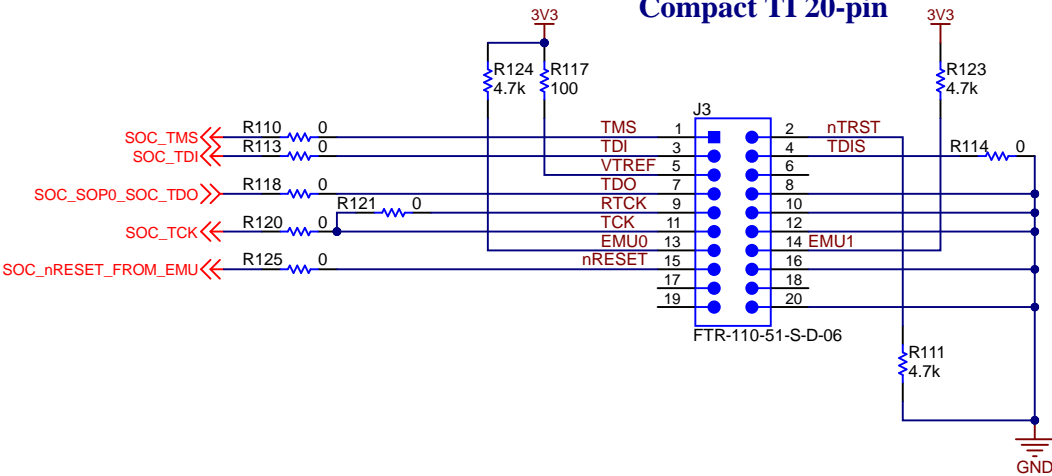
60 PIN DEBUG CONNECTOR



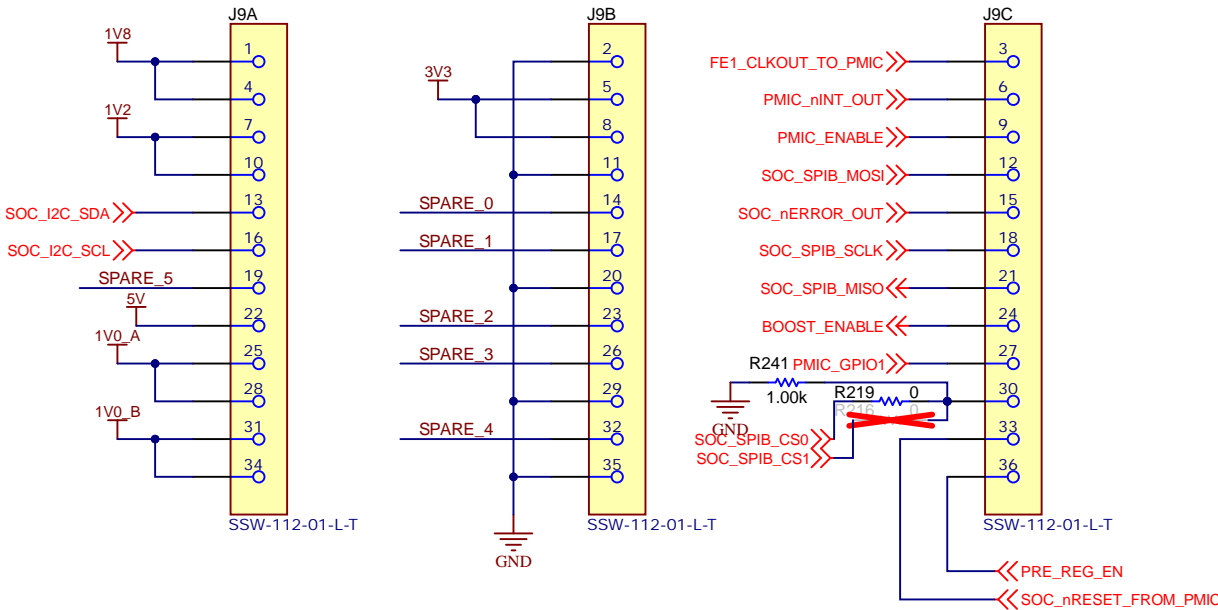
UART Test Pins



Off Board Emulator
Compact TI 20-pin



Power Reference Connector

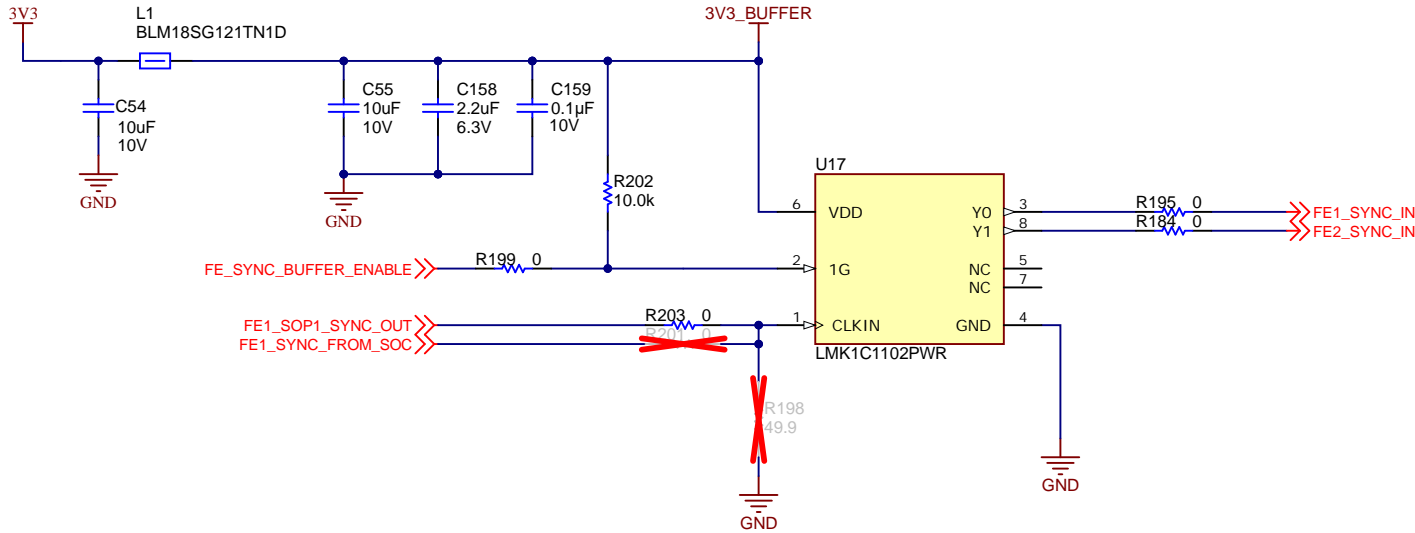


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Orderable: n/a	Designed for: Public Release	Mod. Date: 10/23/2024
TID #: AWR2243-2X-CAS-EVM	Project Title: AWR2243-2X-CAS-EVM	
Number: PROC206	Rev: 2	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: CAN with 812	Sheet: 14 of 17
Drawn By: B. Shaffer	File: Connectors.schdoc	Size: B
Engineer: B. Shaffer	Contact: http://www.ti.com/support	

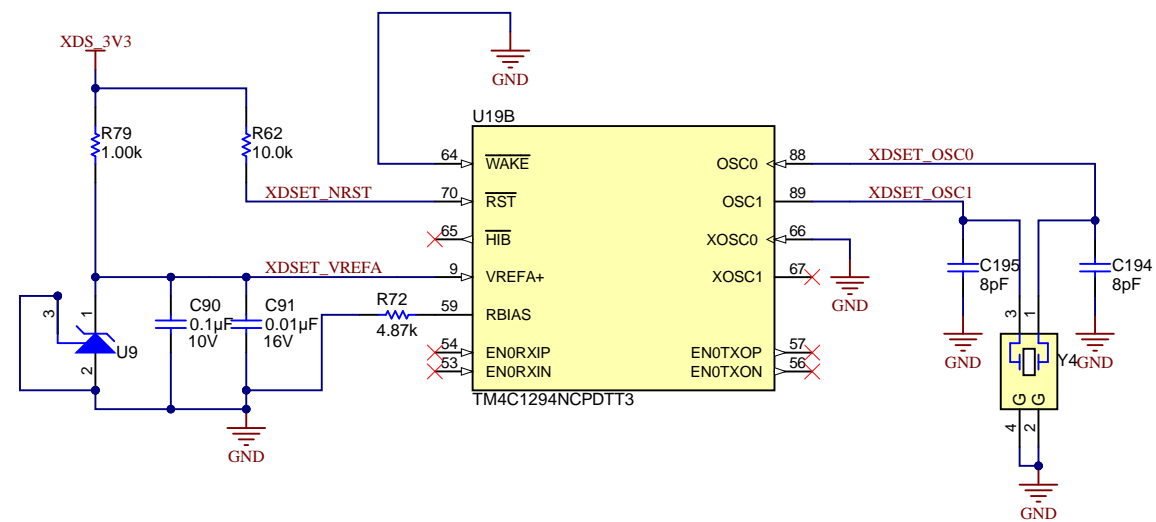
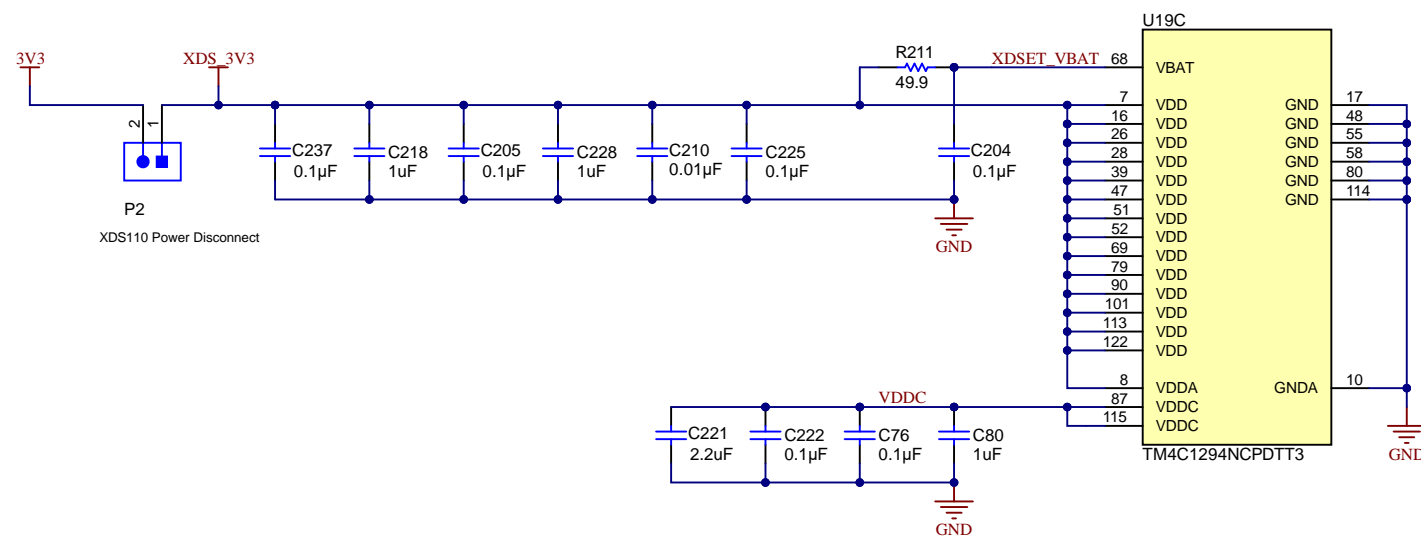
TEXAS INSTRUMENTS
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Clock Distribution



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: 11/2/2022
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: CAN with 812	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



SPC02SYAN



SPC02SYAN



SPC02SYAN



NY PMS 440 0025 PH



NY PMS 440 0025 PH



NY PMS 440 0025 PH



NY PMS 440 0025 PH

LBL1
PCB Label

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

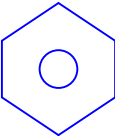
ZZ1
Label Assembly Note
This Assembly Note is for PCB labels only

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.

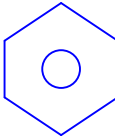
ZZ4
Assembly Note
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

MP1



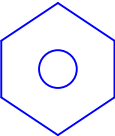
1902D

MP4



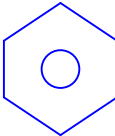
1902D

MP3



1902D

MP2



1902D

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: CAN with 812	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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