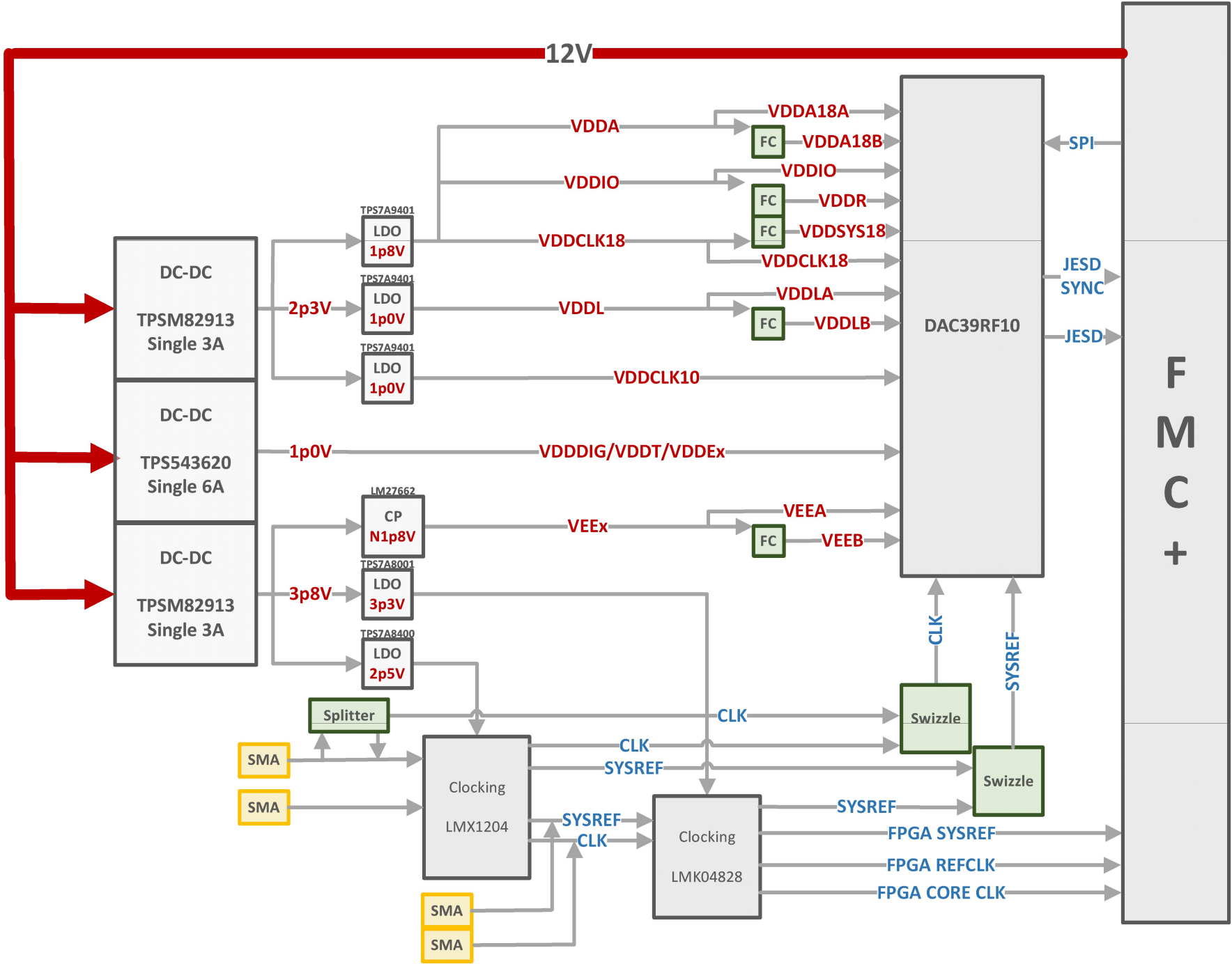


DAC39RF10EVM Block Diagram



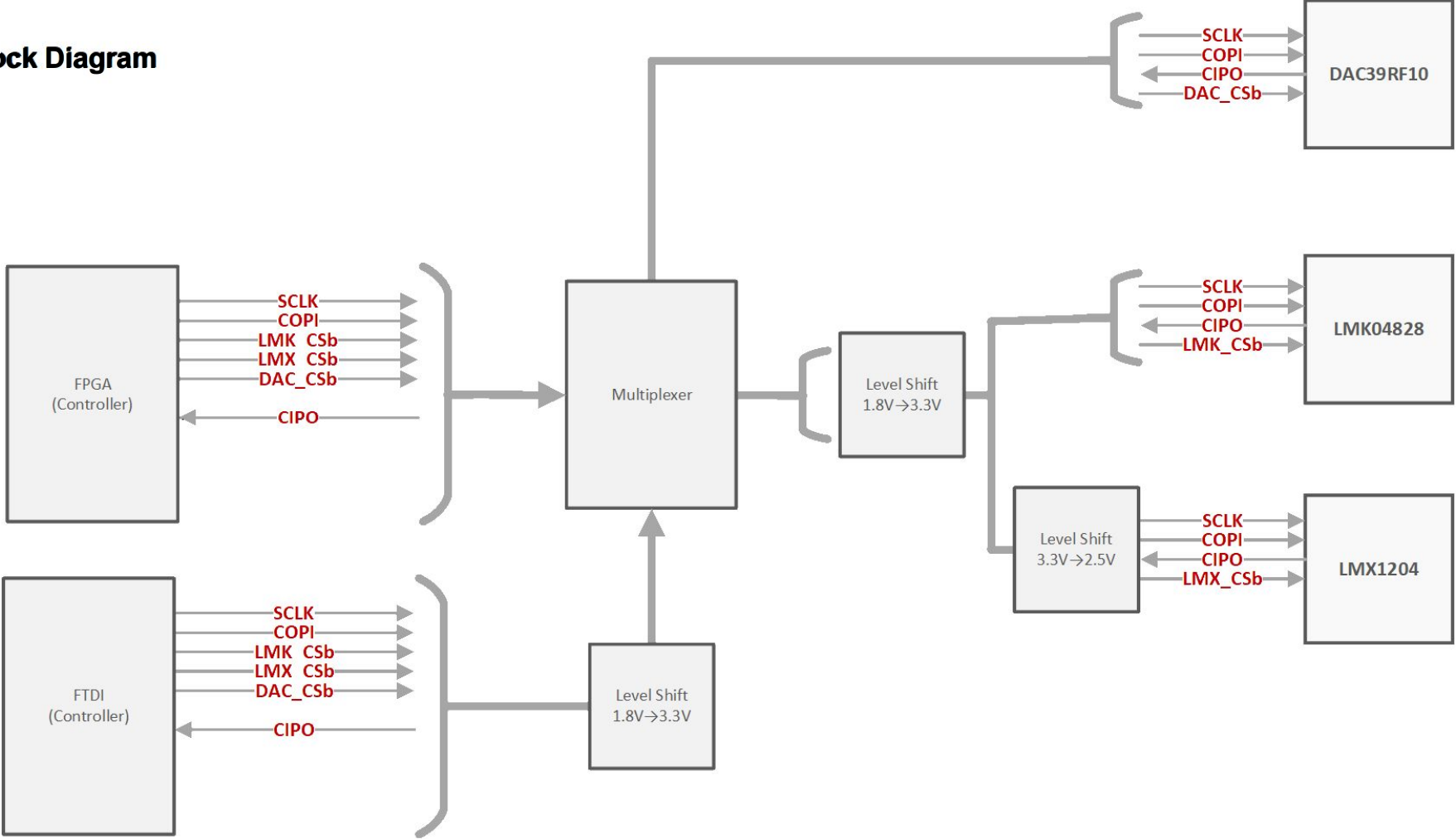
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Orderable: ChangeMe in variant		Designed for: Public Release	Mod. Date: 12/14/2022
TID #:	N/A	Project Title: DAC39RF10 EVM	
Number:	DC180	Rev:	A2
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 1 of 21
Drawn By:		File: Block Diagram RevA.SchDoc	Size: B
Engineer: GBR		Contact: http://www.ti.com/support	

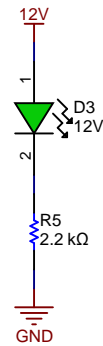
I2C Addresses

Address	Chip	Page	Function
0x40	INA231YFF	3	12V rail power monitor
0x41	INA231YFF	5	DAC 1V digital power monitor
0x42	INA231YFF	7	DAC 1.8V analog power monitor
0x43	INA231YFF	9	DAC 1.0V VDDL power monitor
0x44	INA231YFF	9	DAC 1.0V VDDCLK10 power monitor
0x50	24LC64FT-I/MNY	18	EEPROM for EVM

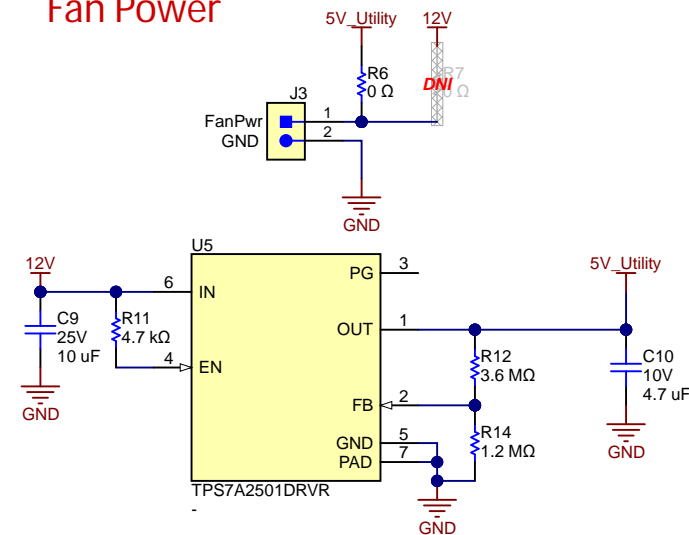
SPI Block Diagram



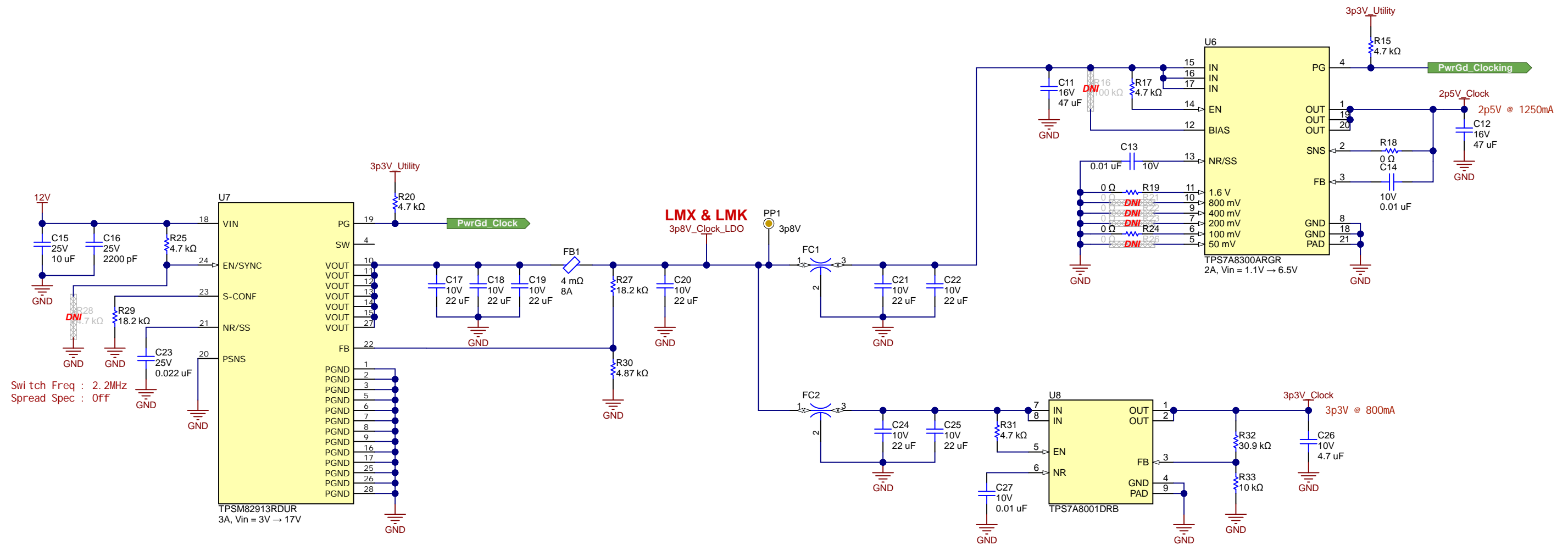
The diagram shows three test points labeled TP1, TP2, and TP3. Each test point is represented by a black dot. Below each dot is a blue wire that connects to a ground symbol, which consists of three horizontal lines of decreasing width. The ground symbol is labeled 'GND' in red text. The labels TP1, TP2, and TP3 are in black text above their respective dots, and the labels GND are in red text below their respective ground symbols.



Fan Power



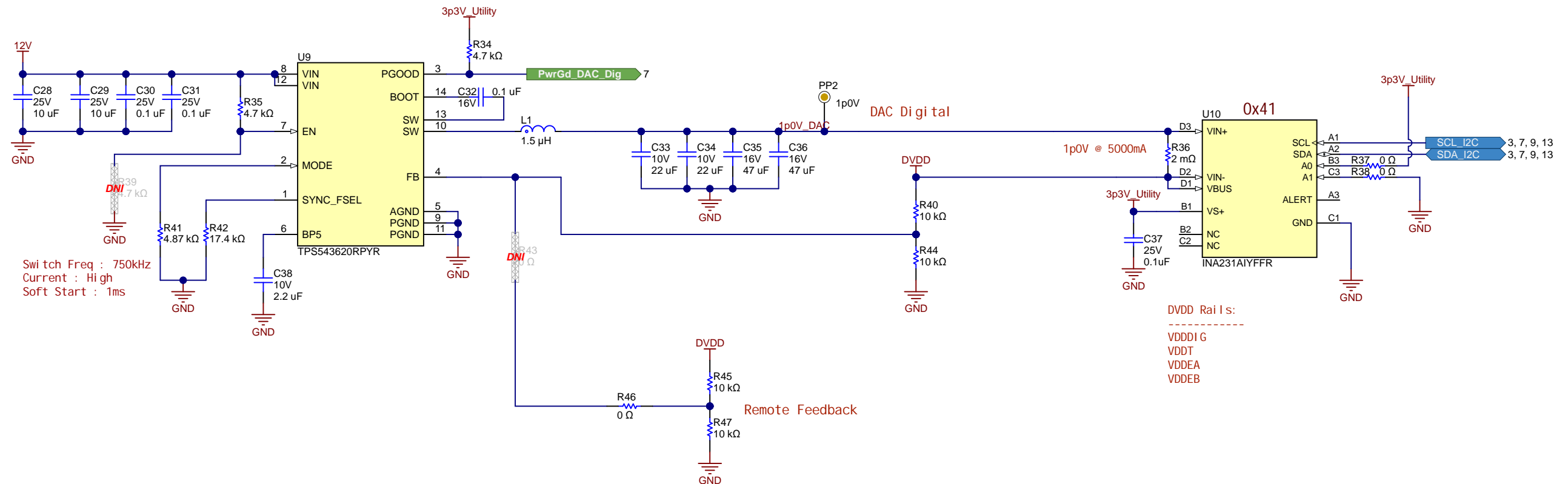
LMX1204 & LMK04832 Power



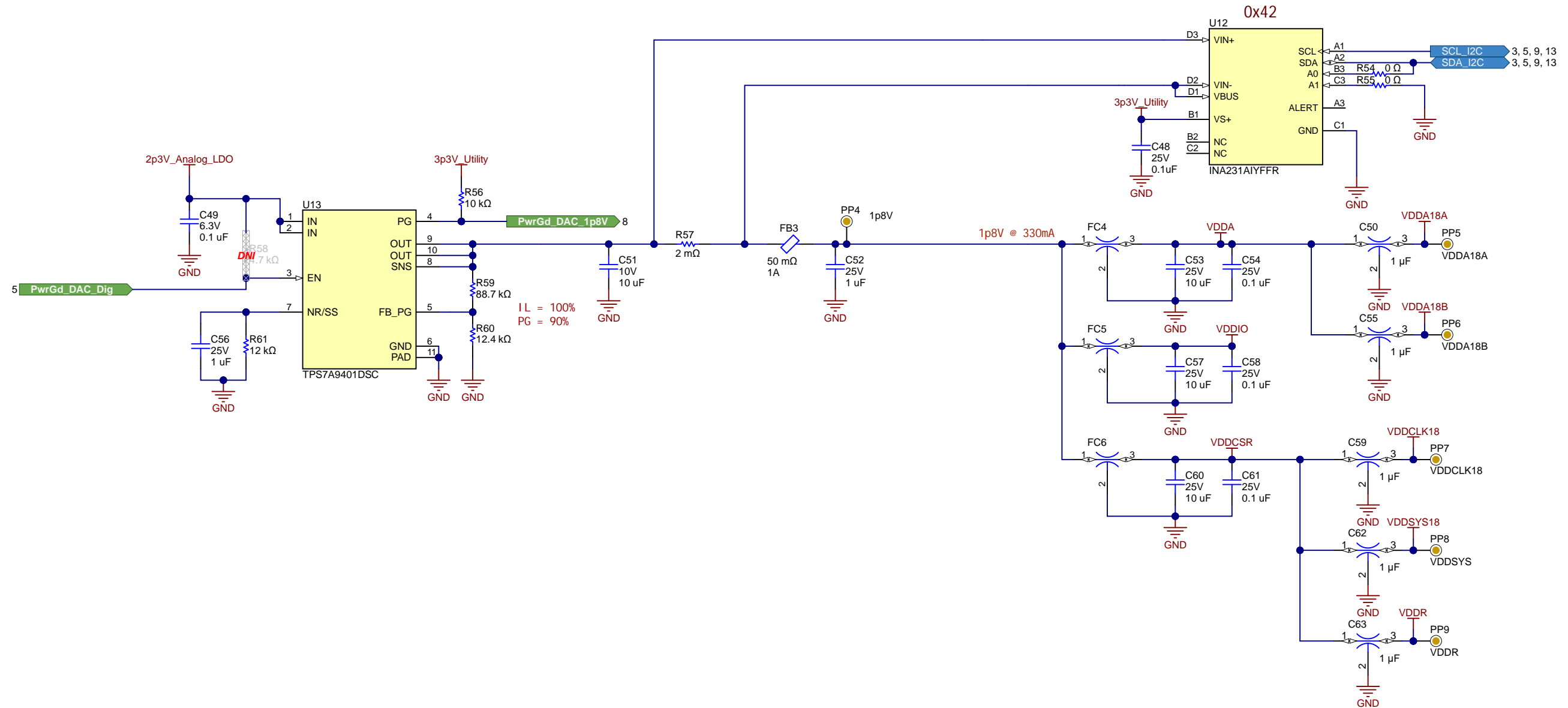
Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/21/2023	 TEXAS INSTRUMENTS
TID #: N/A	Project Title: DAC39RF10 EVM		
Number: DC180	Rev: A2	Sheet Title: LMX1204 & LMK04832 Power	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 4 of 21	
Drawn By:	File: DC-DC LMX LMK Clocking_SchDoc	Size: B	
Engineer: GBR	Contact: http://www.ti.com/support		
			http://www.ti.com © Texas Instruments 2022


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DAC39RF10 Digital Power



DAC39RF10 LDO 1p8V



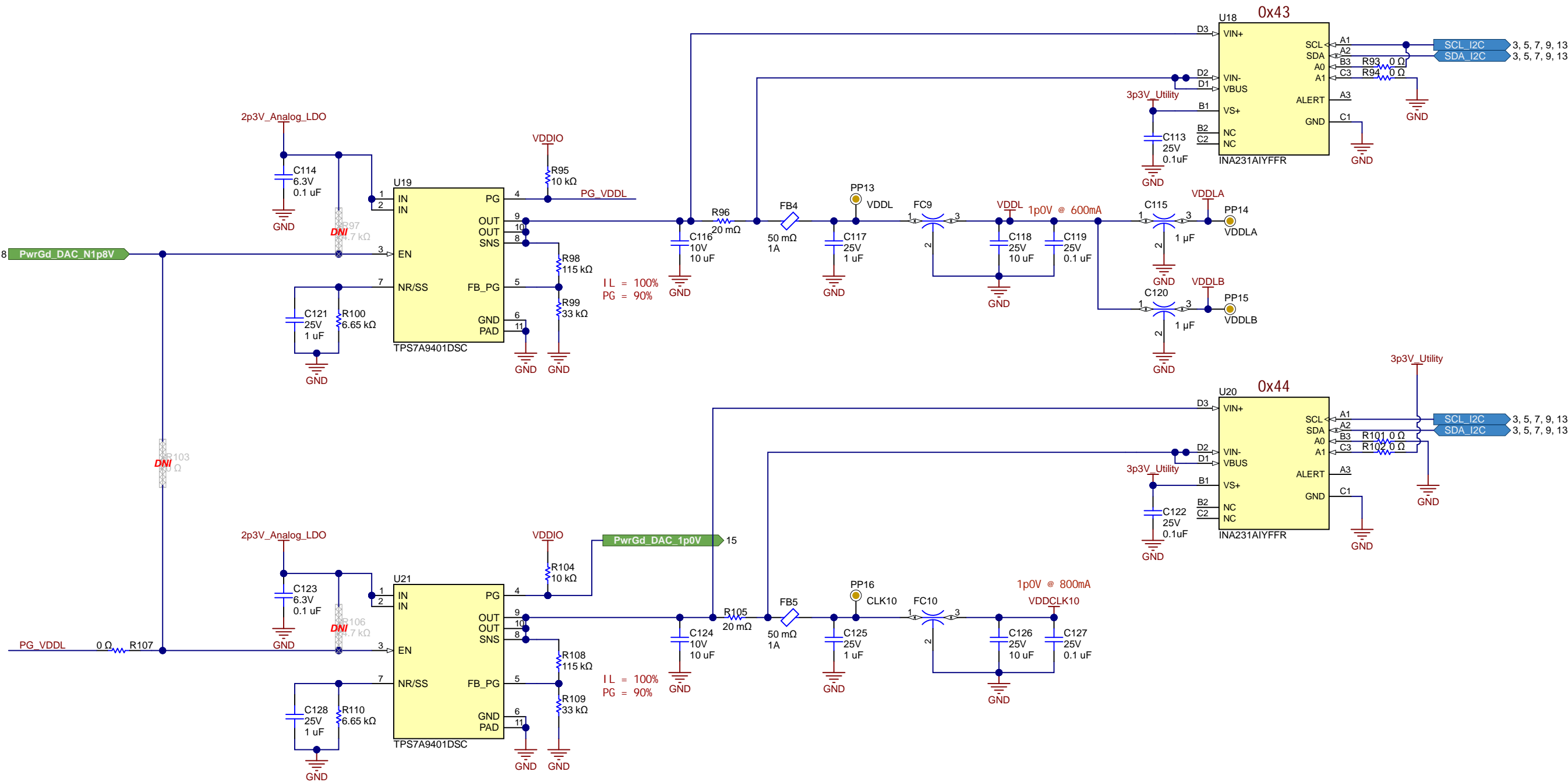
Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/26/2023	 TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2022
TID #: N/A	Project Title: DAC39RF10 EVM		
Number: DC180	Rev: A2	Sheet Title: DAC39RF10 LDO 1p8V	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 7 of 21	
Drawn By:	File: DAC LDO 1p8V RevA.SchDoc	Size: B	
Engineer: GBR	Contact: http://www.ti.com/support		

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A



DAC39RF10 Analog LDO 1p0V



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/26/2023
TID #: N/A	Project Title: DAC39RF10 EVM	
Number: DC180	Rev: A2	Sheet Title: DAC39RF10 Analog LDO 1p0V
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 9 of 21
Drawn By: GBR	File: DAC LDO 1p0V RevA.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

Clocking LMX1204

A

B

C

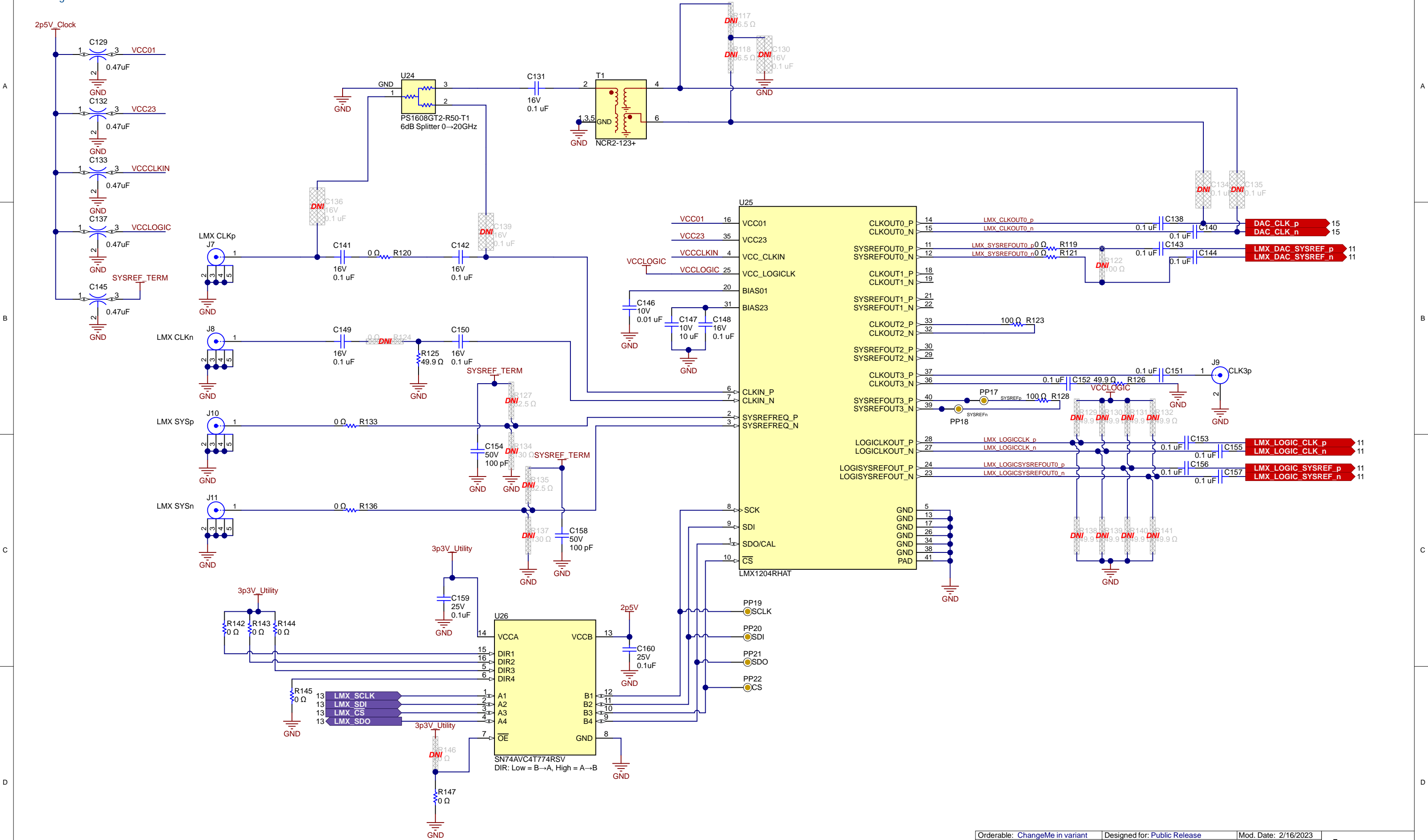
D

A

B

C

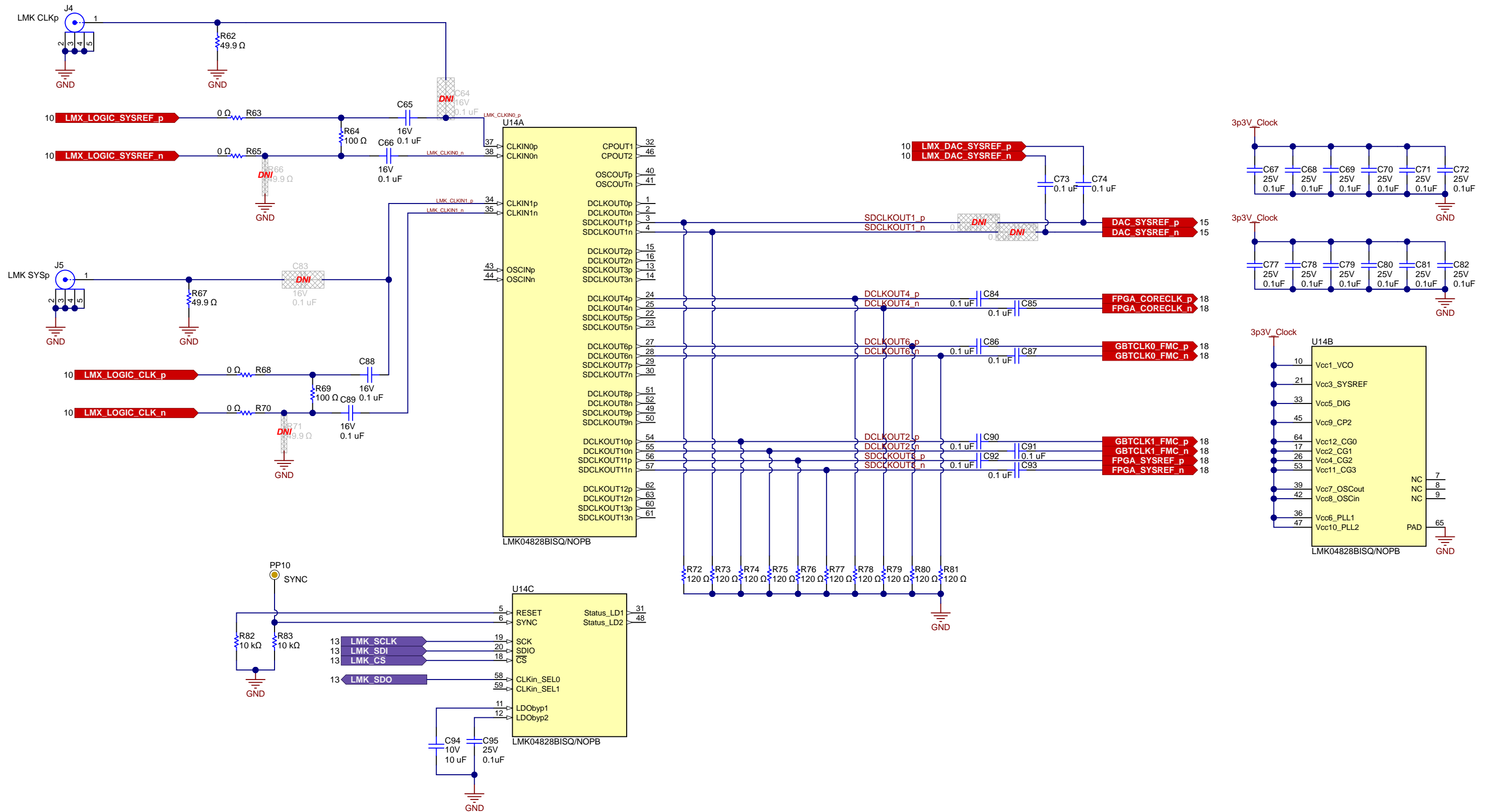
D



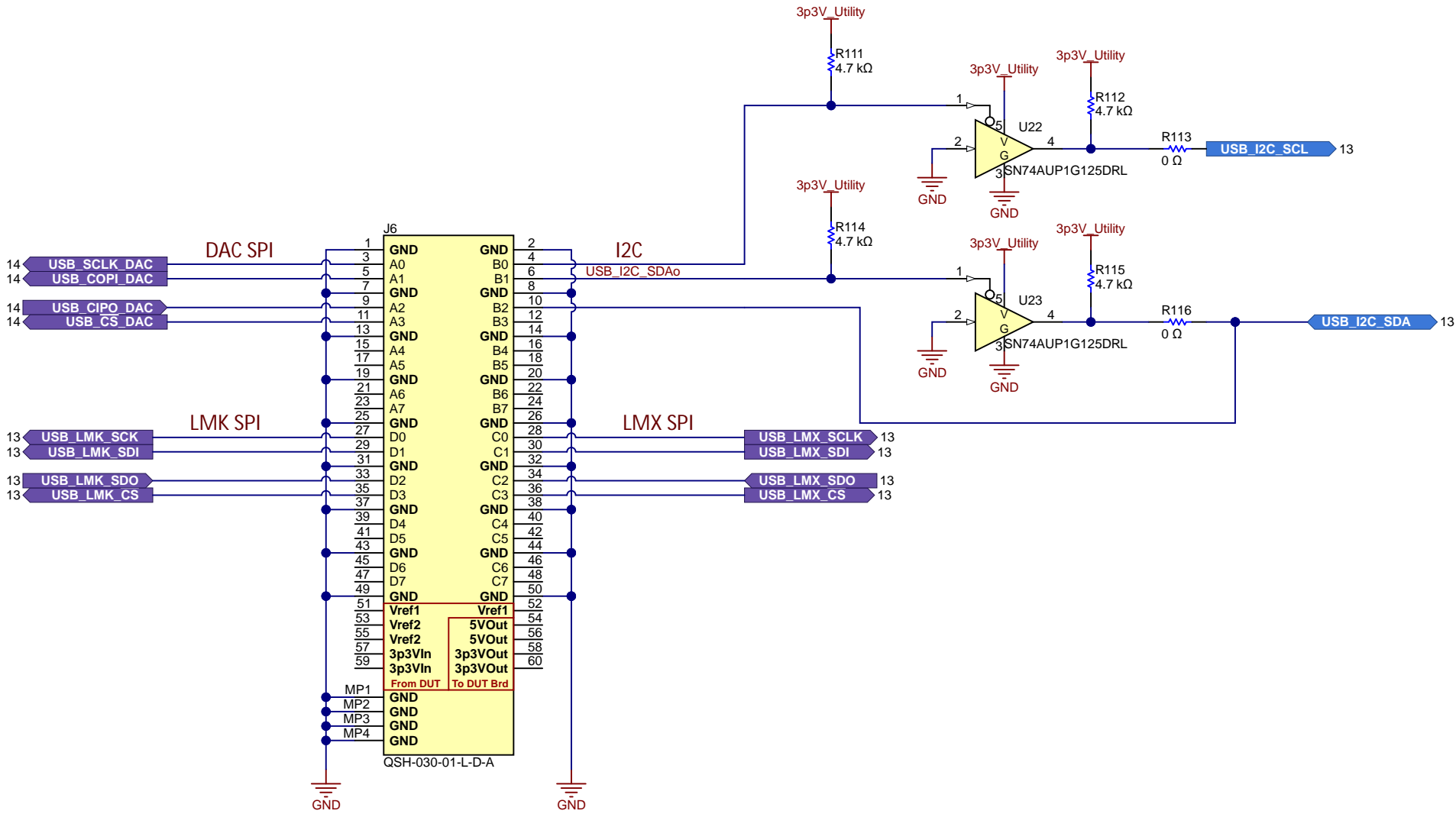
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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/16/2023
TID #: N/A	Project Title: DAC39RF10 EVM	
Number: DC180	Rev: A2	Sheet Title: Clocking LMX1204
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 10 of 21
Drawn By: GBR	File: Clocking LMX1204 RevA.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

Clocking LMK04828



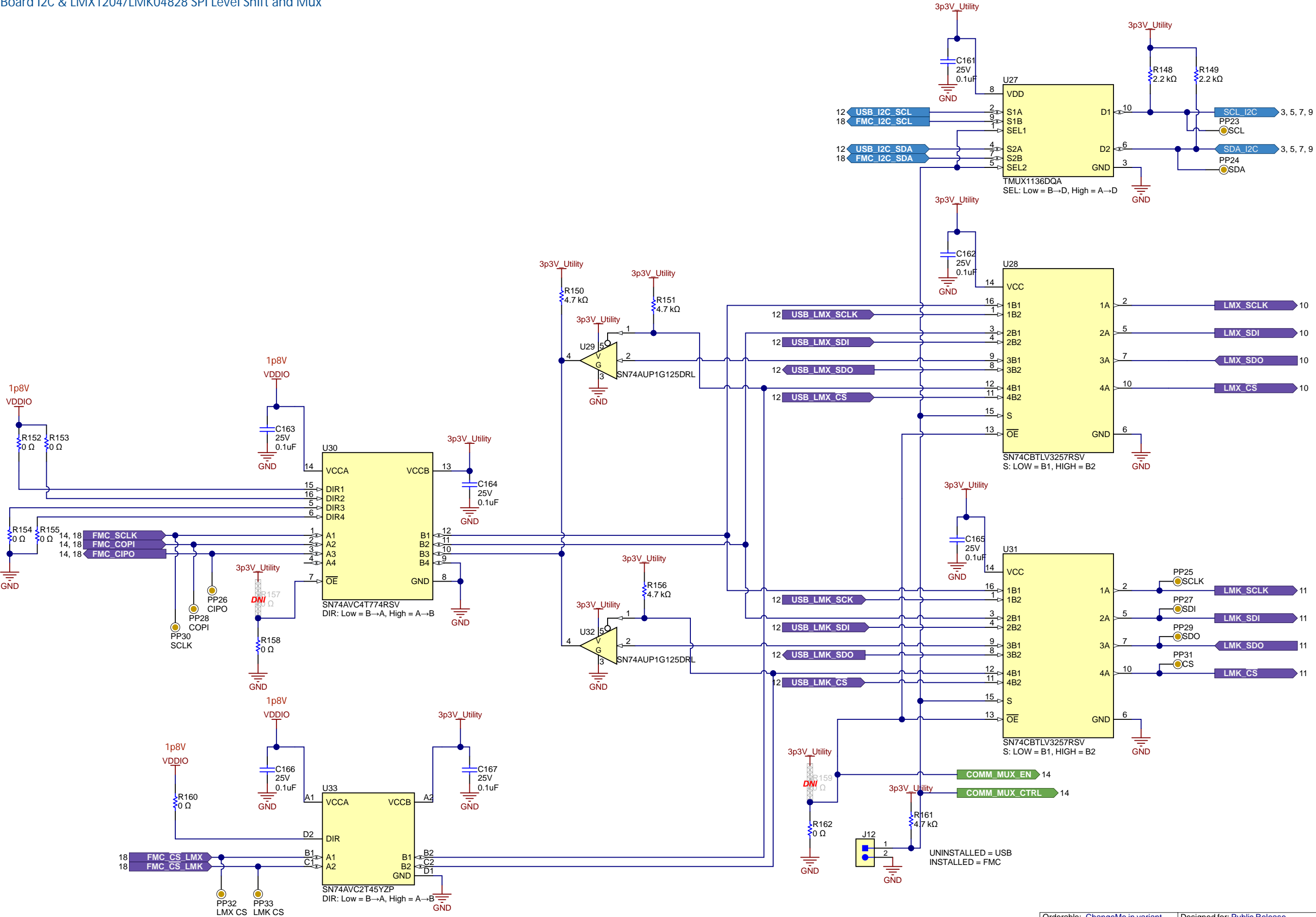
FTDI Debug Dongle Connection



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/21/2023
TID #: N/A	Project Title: DAC39RF10 EVM	
Number: DC180	Rev: A2	Sheet Title: FTDI Debug Dongle Connection
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 12 of 21
Drawn By: GBR	File: USB FTDI Comms RevA.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

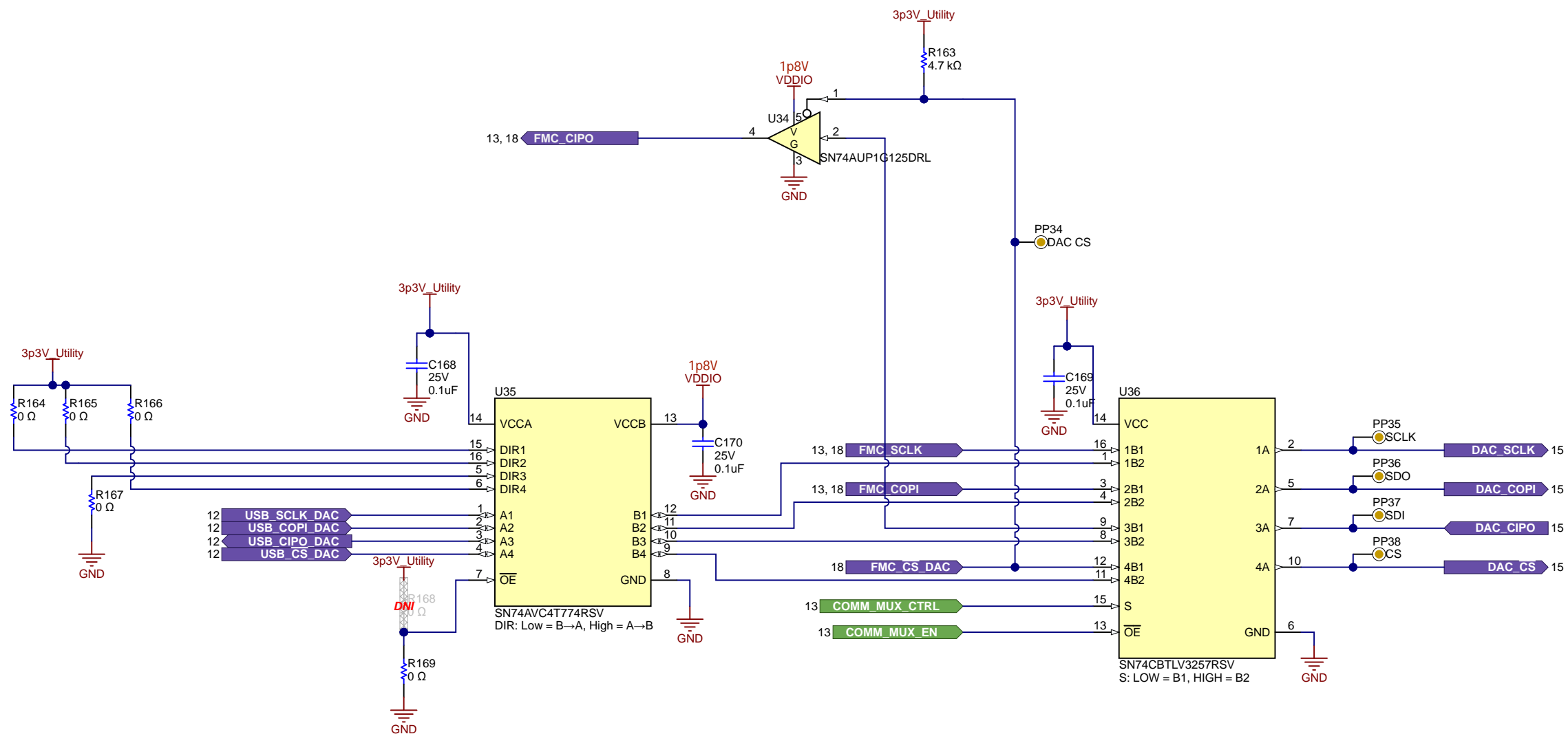
Board I2C & LMX1204/LMK04828 SPI Level Shift and Mux



Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/21/2023
TID #: N/A	Project Title: DAC39RF10 EVM	
Number: DC180	Rev: A2	Sheet Title: Board I2C & LMX1204/LMK04828 SPI Level Shift and Mux
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 13 of 21
Drawn By: GBR	File: Comms I2C LMX LMK Mux RevA.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

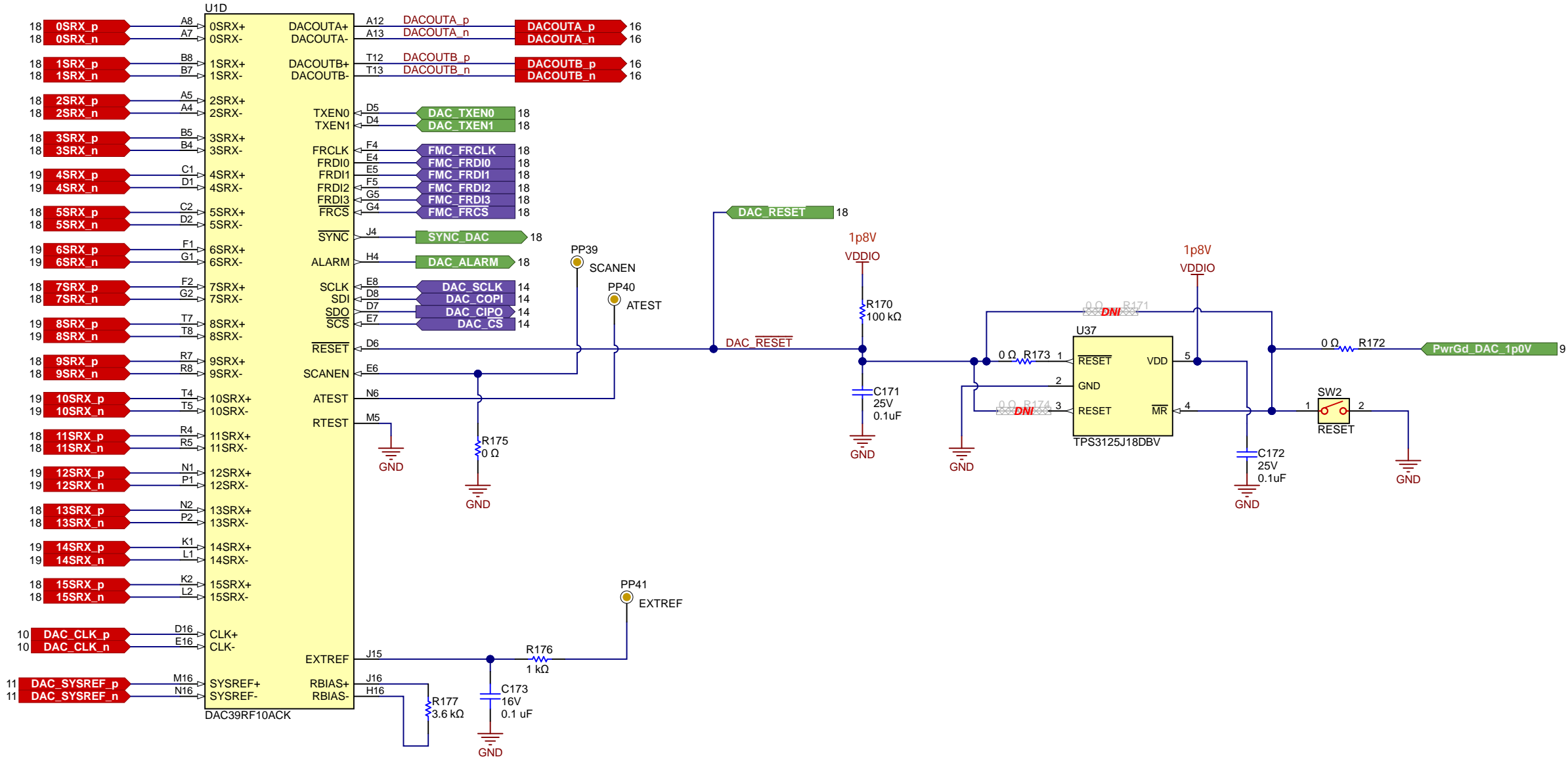
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DAC39RF10 SPI Level Shift & Mux



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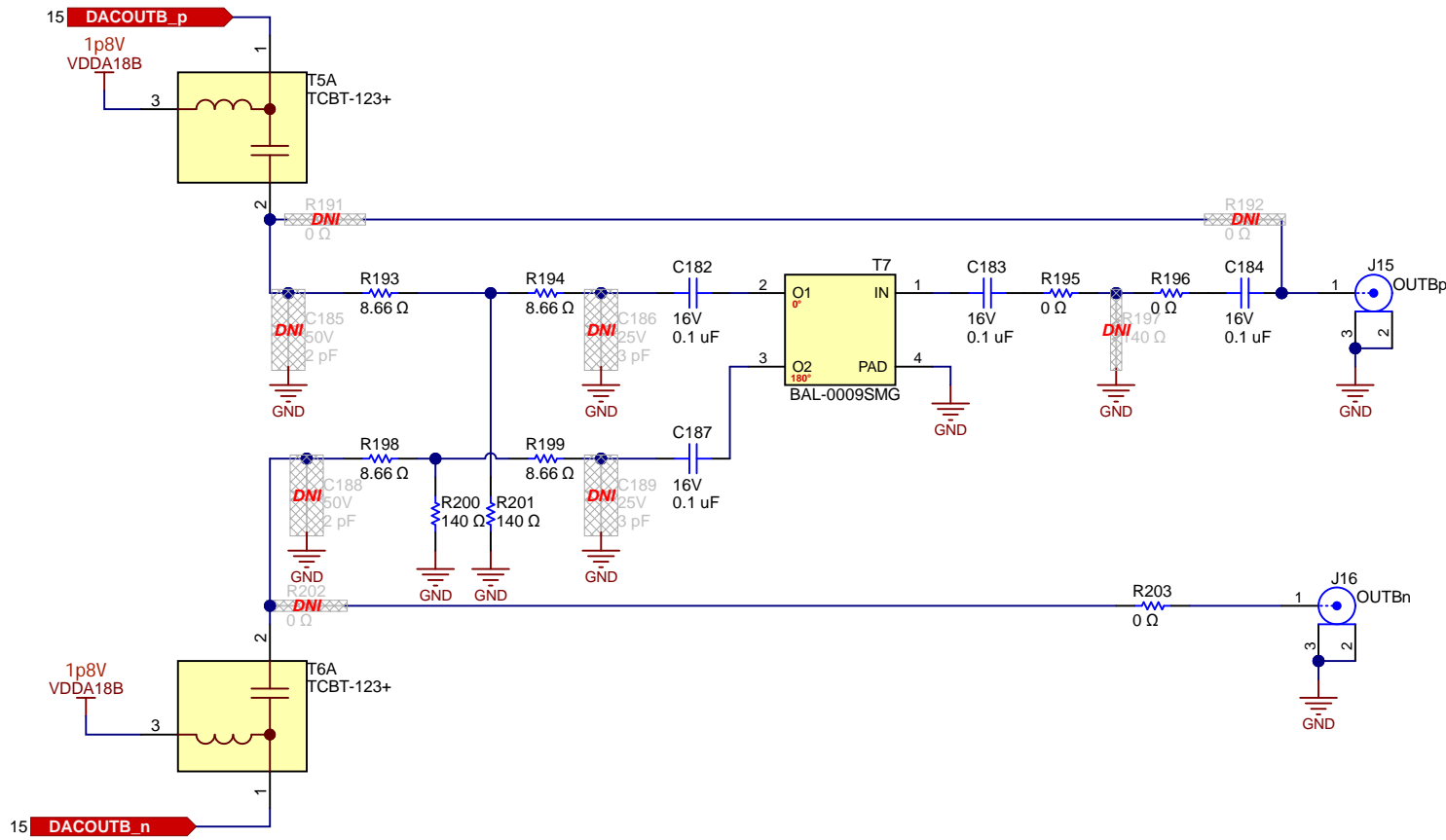
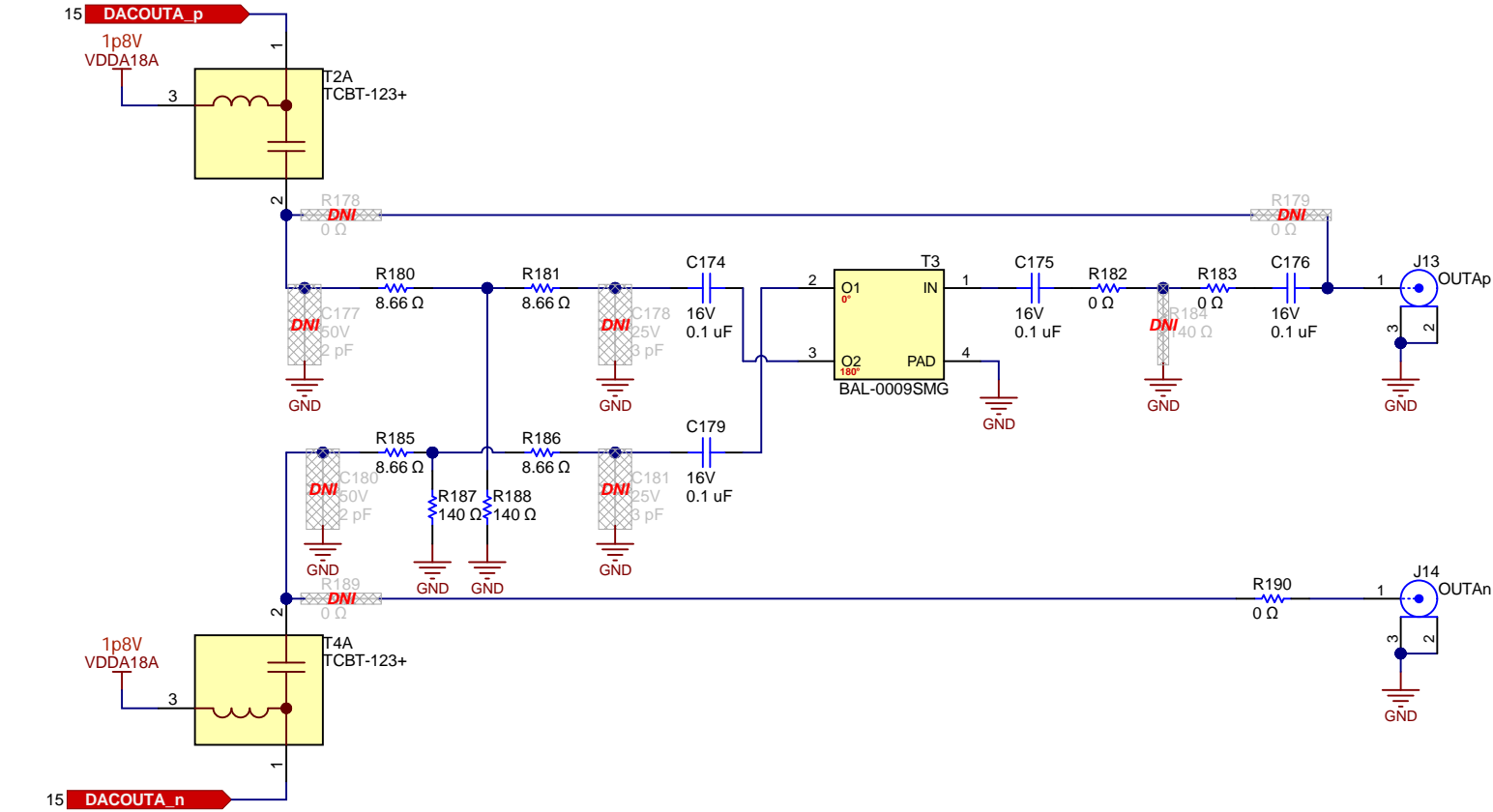
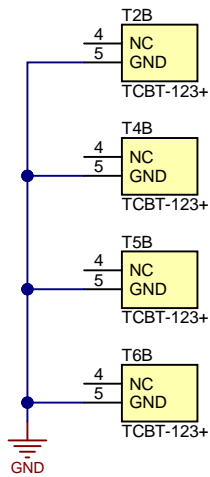
Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/16/2023
TID #: N/A	Project Title: DAC39RF10 EVM	
Number: DC180	Rev: A2	Sheet Title: DAC39RF10 SPI Level Shift & Mux
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 14 of 21
Drawn By: GBR	File: Comms Mux DAC RevA.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/26/2023
TID #: N/A	Project Title: DAC39RF10 EVM	
Number: DC180	Rev: A2	Sheet Title: DAC39RF10 IO
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 15 of 21
Drawn By: GBR	File: DAC39RF10 IO RevA.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

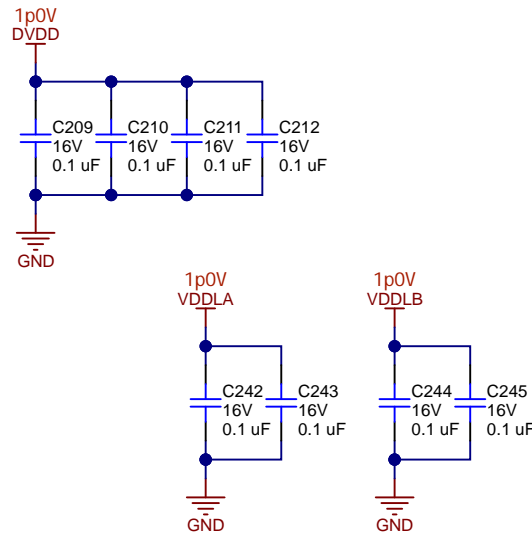
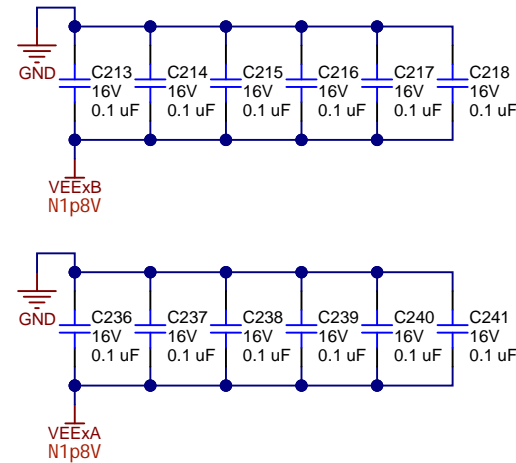
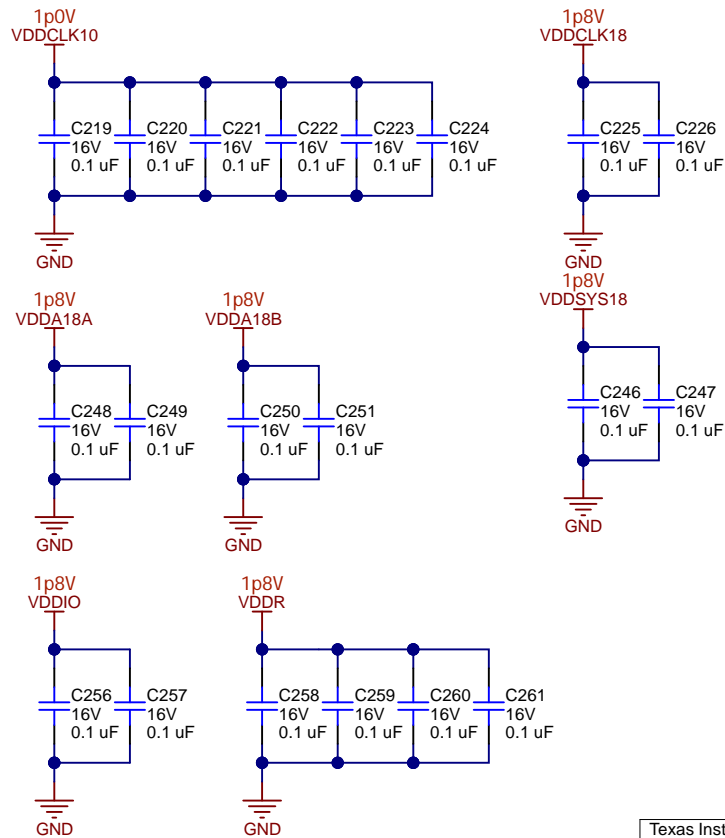
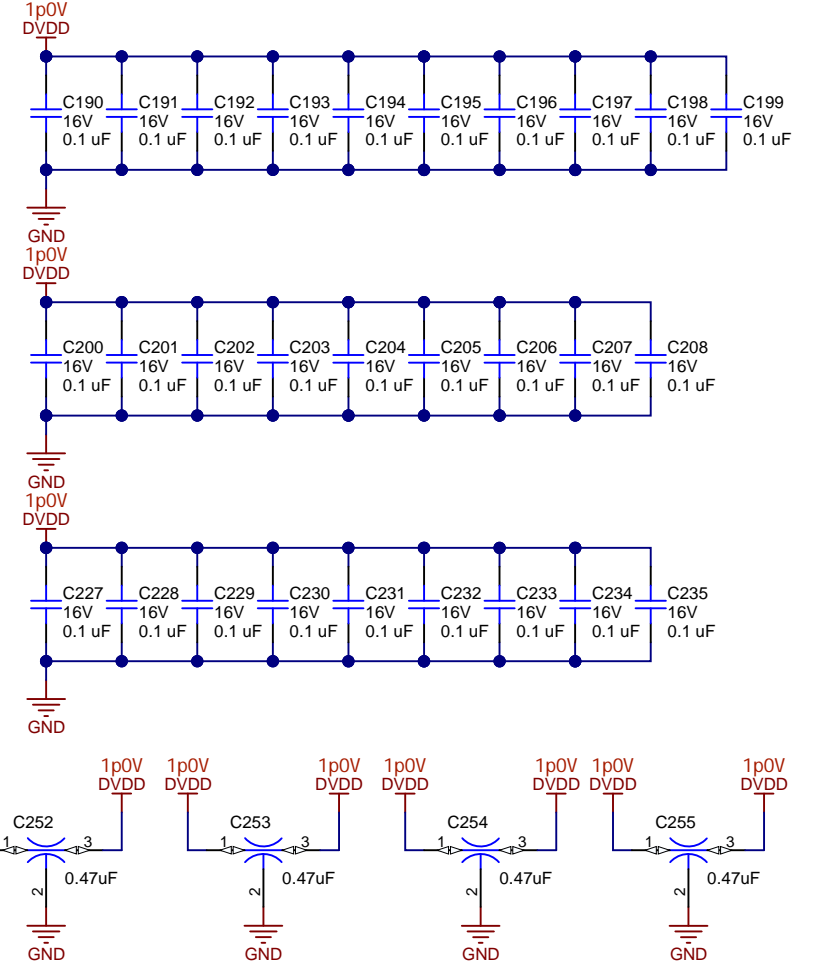
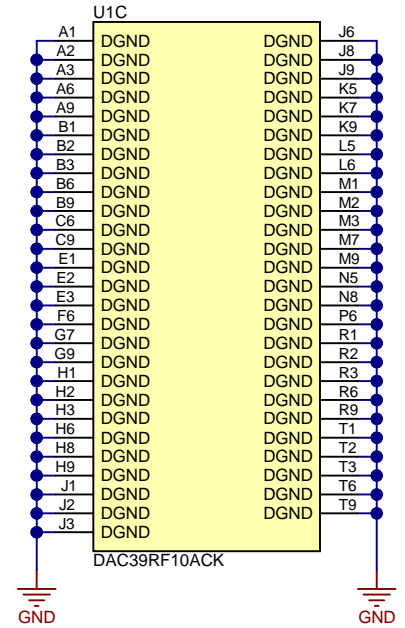
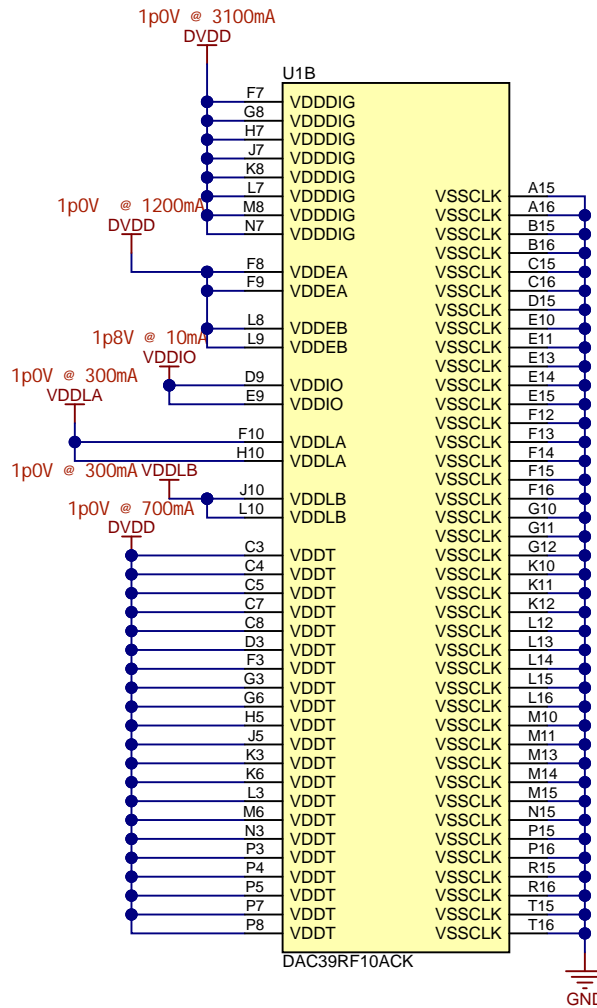
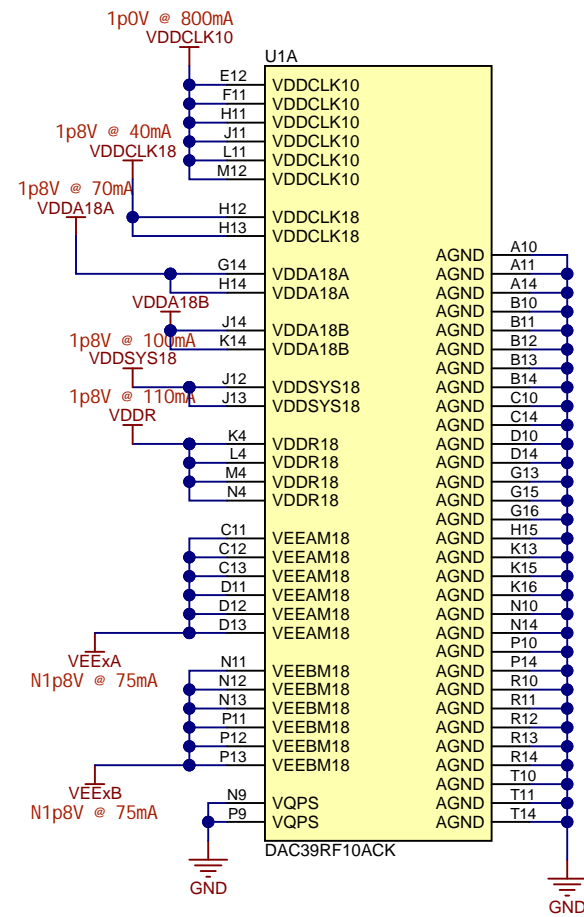
DAC39RF10 Output Baluns



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/26/2023
TID #: N/A	Project Title: DAC39RF10 EVM	
Number: DC180	Rev: A2	Sheet Title: DAC39RF10 Output Baluns
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 16 of 21
Drawn By:	File: DAC39RF10 Outputs.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

DAC39RF10 Power





A

B

C

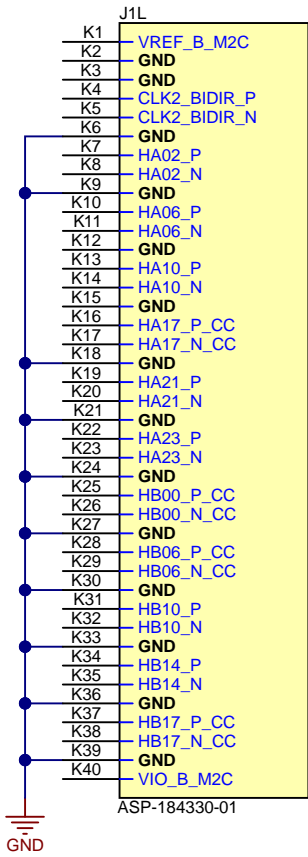
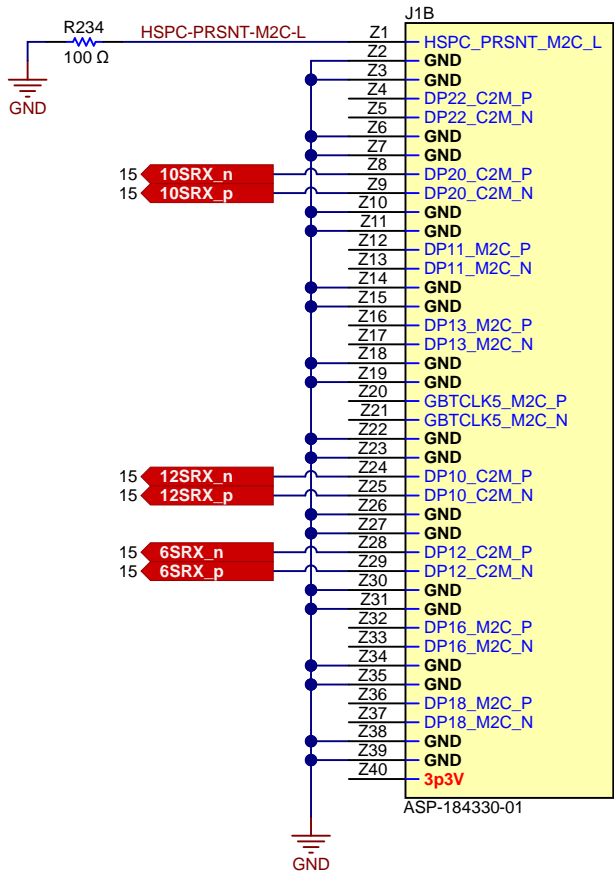
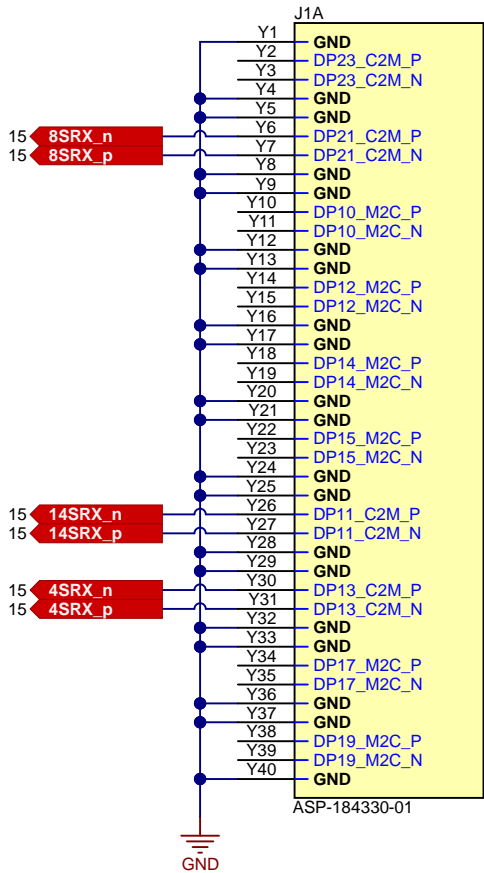
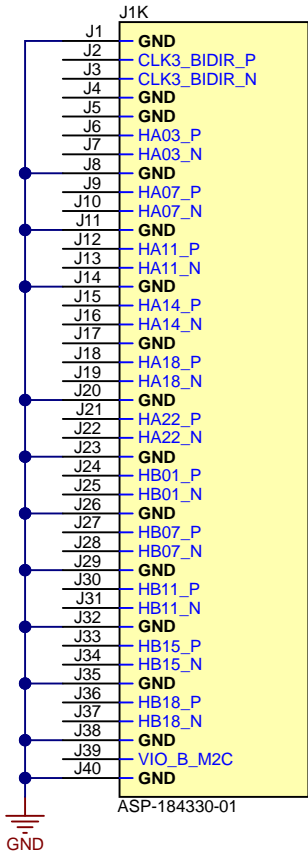
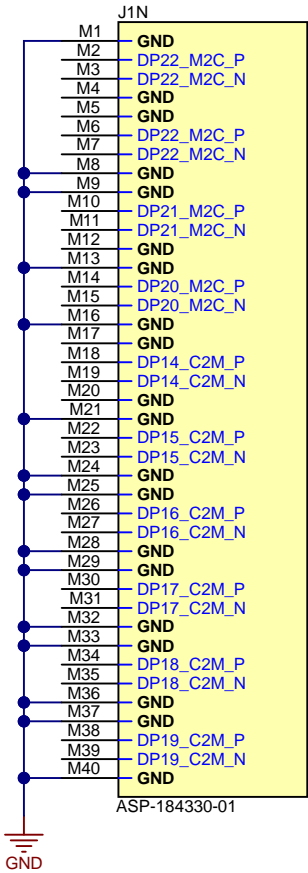
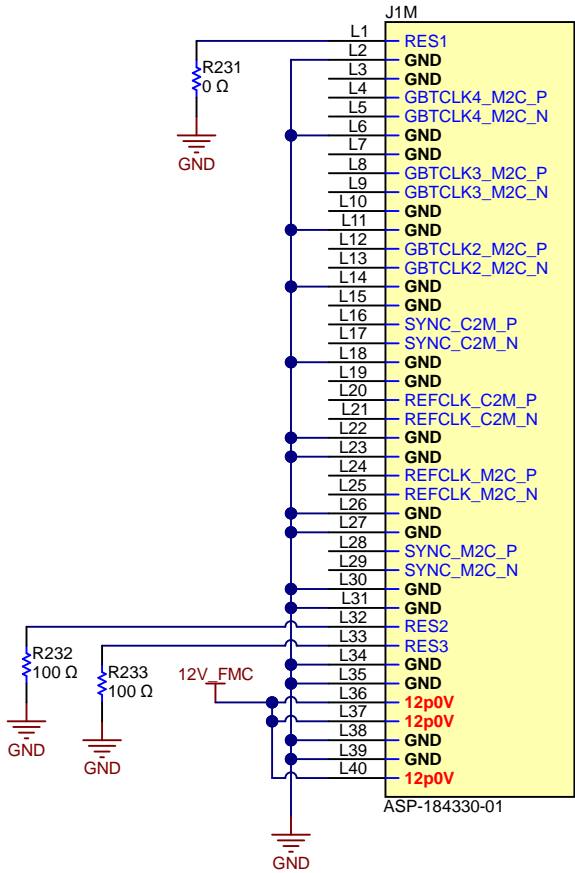
D

A

B

C

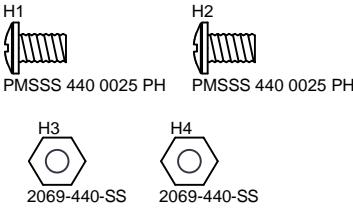
D



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/26/2023
TID #: N/A	Project Title: DAC39RF10 EVM	
Number: DC180	Rev: A2	Sheet Title: FMC+ Banks J → Z
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 19 of 21
Drawn By:	File: FMC+ Sections J - Z RevA.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

DAC39RF10 Hardware



PCB Number: DC180

PCB Rev: A2



PCB

LOGO

FCC disclaimer



CAUTION HOT SURFACE



LBL1

PCB Label

THT-14-423-10

Size: 0.65"x0.20"

ZZ1

Label Assembly Note

This Assembly Note is for PCB labels only

ZZ2

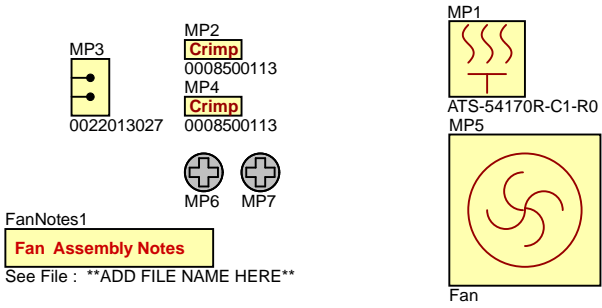
Assembly Note

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

These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

-

Fan Assembly



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Orderable: ChangeMe in variant		Designed for: Public Release	Mod. Date: 12/3/2022
TID #: N/A		Project Title: DAC39RF10 EVM	
Number: DC180	Rev: A2	Sheet Title: DAC39RF10 Hardware	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 20 of 21	
Drawn By:	File: Hardware RevA.SchDoc	Size: B	
Engineer: GBR	Contact: http://www.ti.com/support		

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Revision History

Rev	Release Date	Notes
A	Jan 2023	Initial Release

Variant(s)

Variant	Notes
001	Original DNI components Used for production build
002	• DAC Output changed from 3dB pad to LC network