

Block Diagram

USB Mini B

FTDI

FTDI\_I2C

F2F\_SPI

FPGA\_PROG

F2F\_RESET

FTDI\_SPI

FTDI\_RESET

Power  
Monitors

Comms  
Switch

EEPROM

I2C MUX

FMC\_I2C

Level  
Shift

Level  
Shift

Level  
Shift

Level  
Shift

SPI MUX

Level  
Shift

FMC\_SPI

Reset  
Watchdog

Comms  
Switch

Reset  
Button

GPIO  
Header / SMA

Level  
Shift

ADC3669

GPIO

LVDS Interface

FMC

CHA

CLK

CHB

I2C Addresses

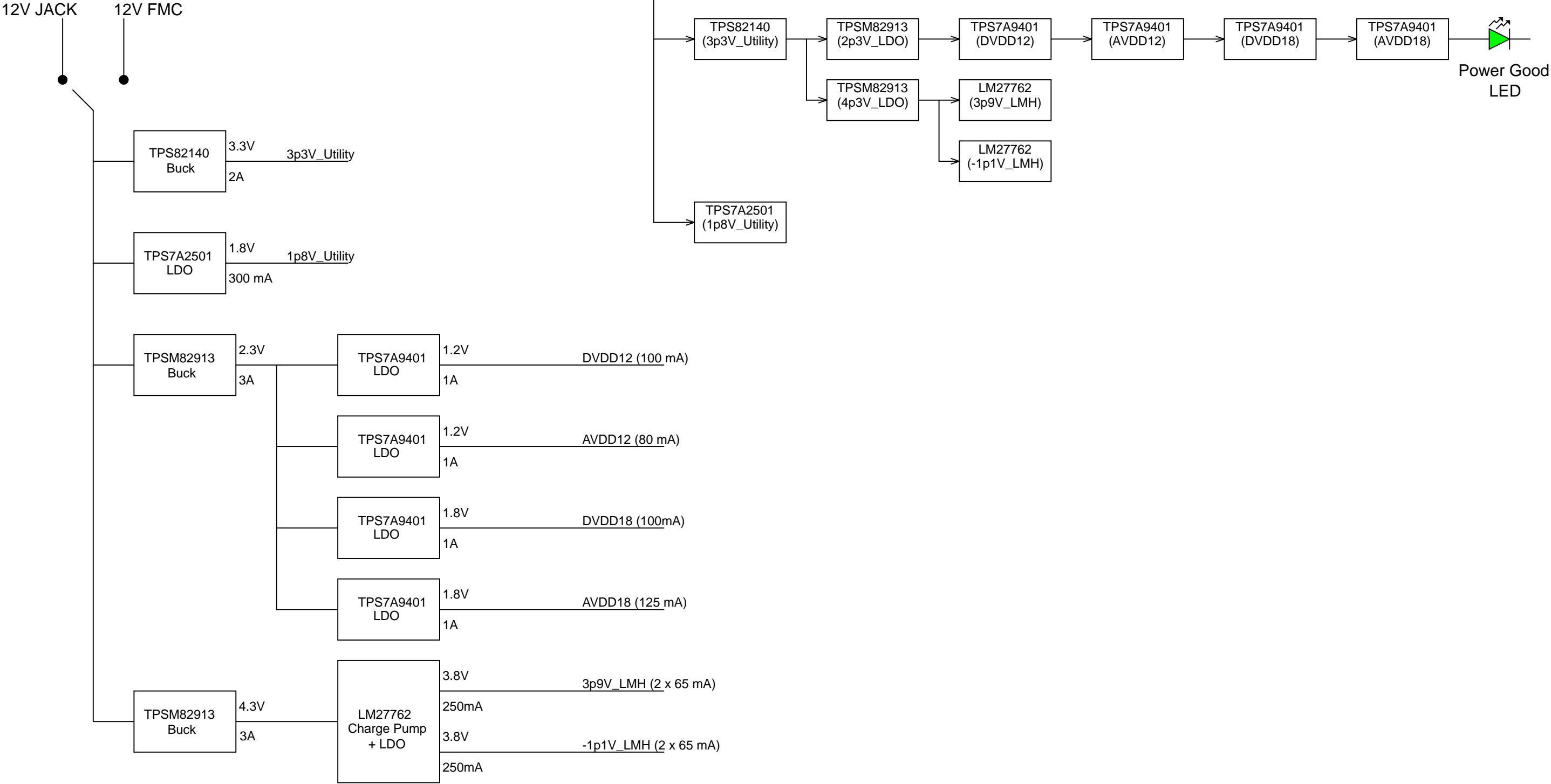
Address	Chip	Page	Function
0x44	ADS1119	3	Current monitor for all ADC power rails
0x45	ADS1119	3	Voltage monitor for all ADC power rails
0x50	24LC65-I/SM	11	EVM EEPROM

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Orderable: <a href="#">ChangeMe in variant</a>	Designed for: <a href="#">Public Release</a>	Mod. Date: 8/27/2025
TID #: <a href="#">N/A</a>	Project Title: <a href="#">ADC3669EVM DC-Coupled</a>	
Number: <a href="#">DC374</a>	Rev: <a href="#">A</a>	Sheet Title: <a href="#">Block Diagram</a>
SVN Rev: <a href="#">e44b0dd8ead652c4e5d6472285c34143da20f6</a>		Sheet: <a href="#">1</a> of <a href="#">17</a>
Drawn By:	File: <a href="#">Block Diagram.SchDoc</a>	Size: <a href="#">B</a>
Engineer: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	

Power Tree

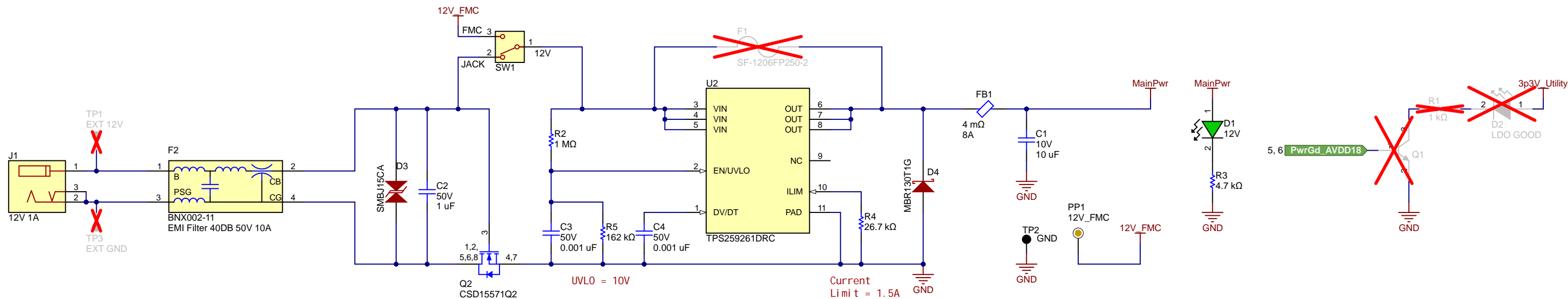
Power Sequence:



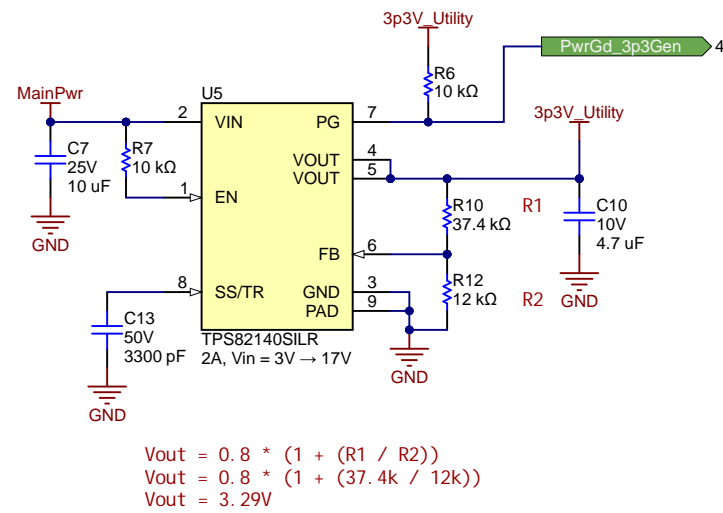
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Number: <a href="#">DC374</a>	Rev: <a href="#">A</a>	Sheet Title: <a href="#">Power Tree</a>
SVN Rev: <a href="#">e44db0dd8ead652c4e5d047285c34143da20f6</a>	File: <a href="#">Power Tree.SchDoc</a>	Size: B
Drawn By: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	

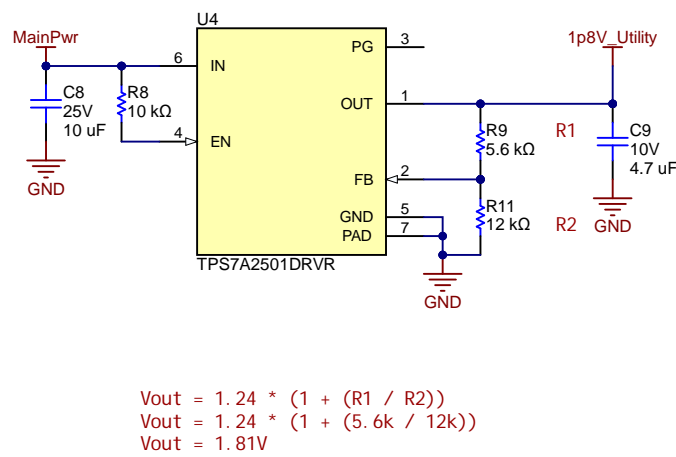
EVM Power



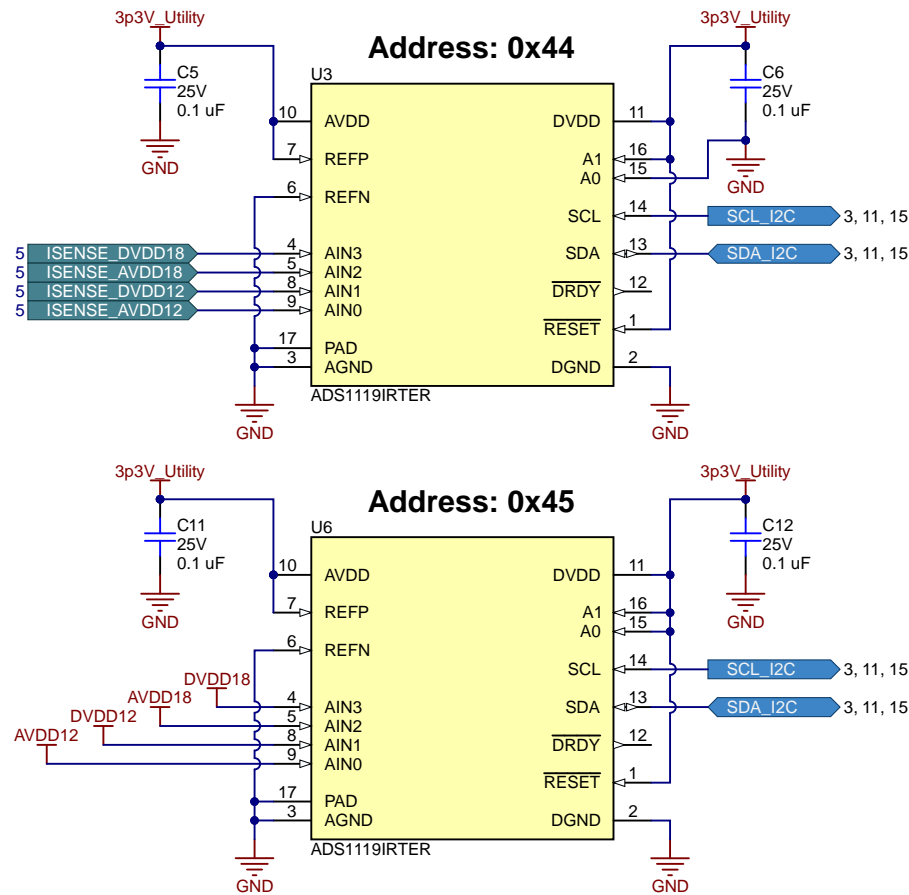
3.3V Utility Rail



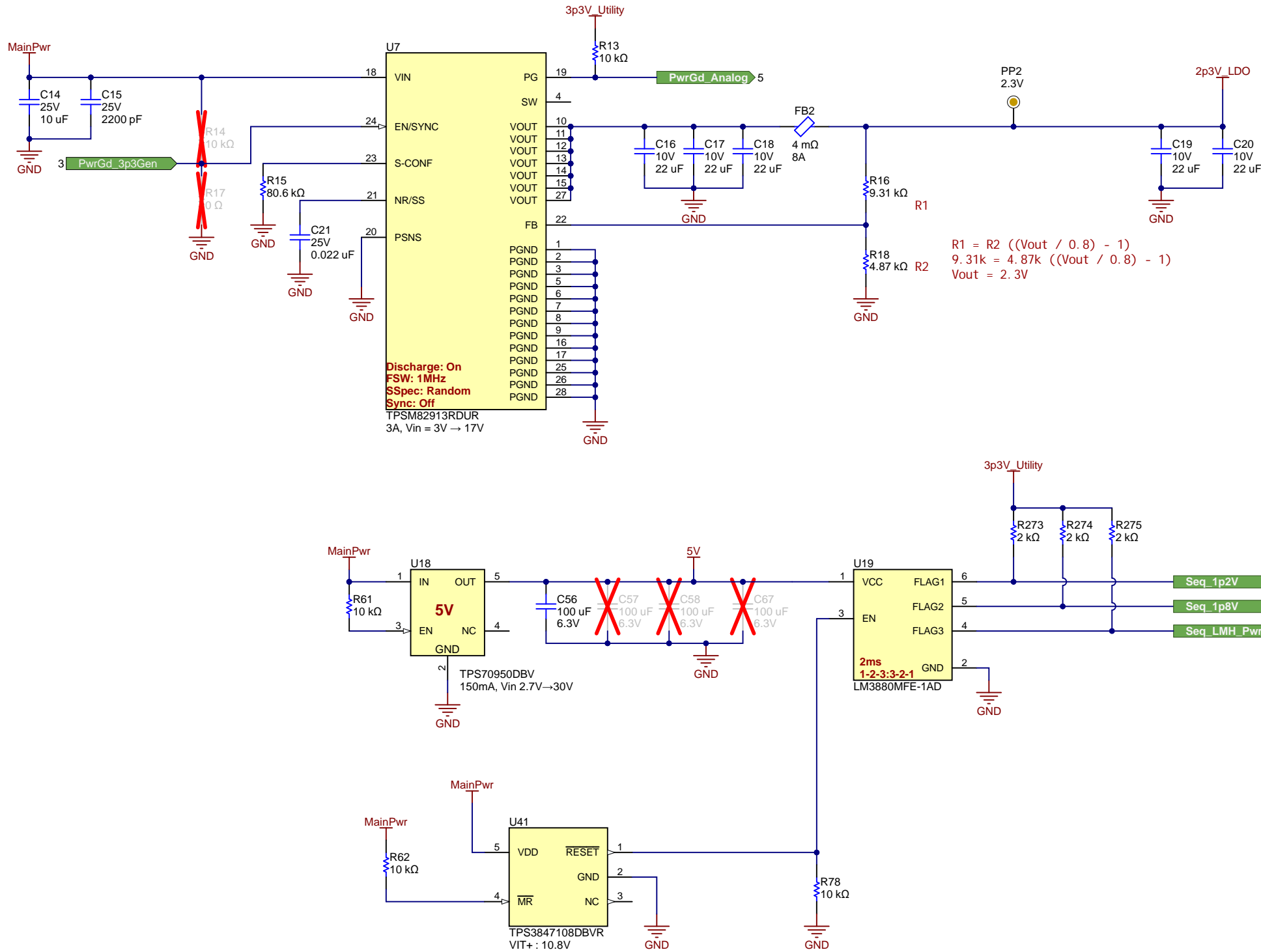
1.8V Utility Rail



Power Monitors



ADC Power DC-DC



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ADC Power LDO

A

B

C

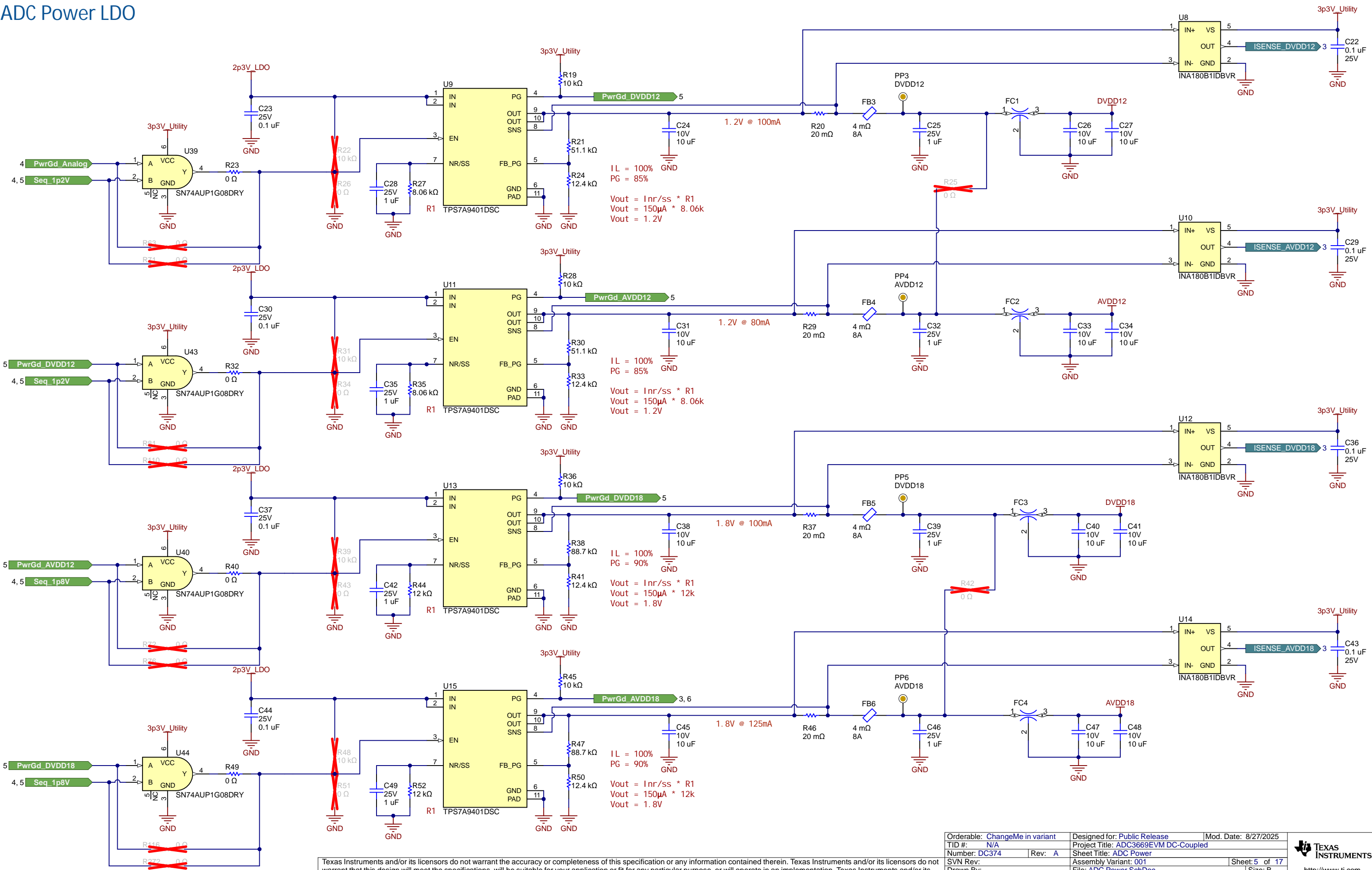
D

A

B

C

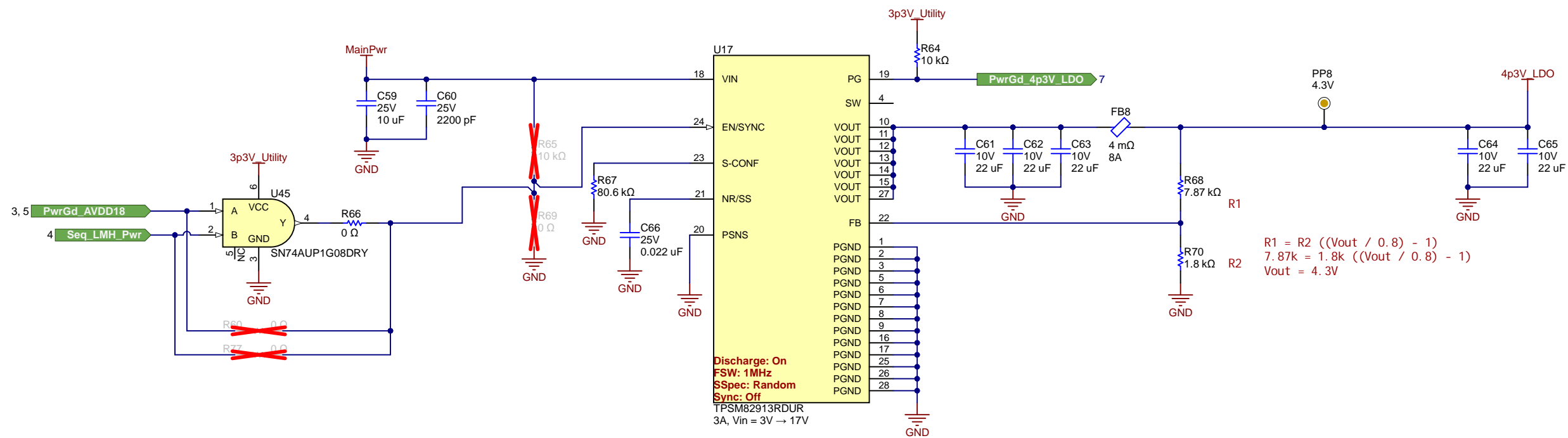
D




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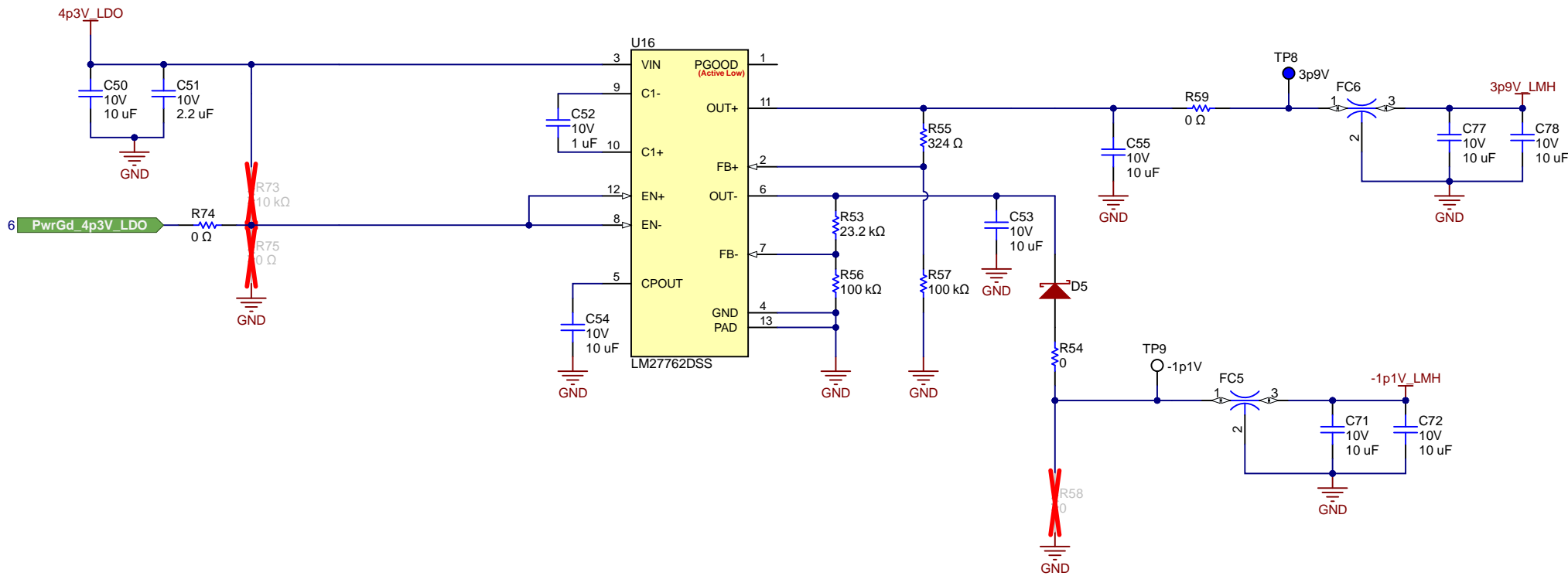
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Number: <a href="#">DC374</a>	Rev: <a href="#">A</a>	Sheet Title: <a href="#">ADC Power</a>
SVN Rev:	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">5 of 17</a>
Drawn By:	File: <a href="#">ADC Power.SchDoc</a>	Size: <a href="#">B</a>
Engineer: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	

## Amplifier Power DC-DC



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TID #: <a href="#">N/A</a>	Project Title: <a href="#">ADC3669EVM DC-Coupled</a>		
Number: <a href="#">DC374</a>	Rev: <a href="#">A</a>	Sheet Title:	
SVN Rev:	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">6</a> of <a href="#">17</a>	
Drawn By:	File: <a href="#">LMH Power DC-DC.SchDoc</a>	Size: B	
Engineer: <a href="#">GBR</a>	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>		

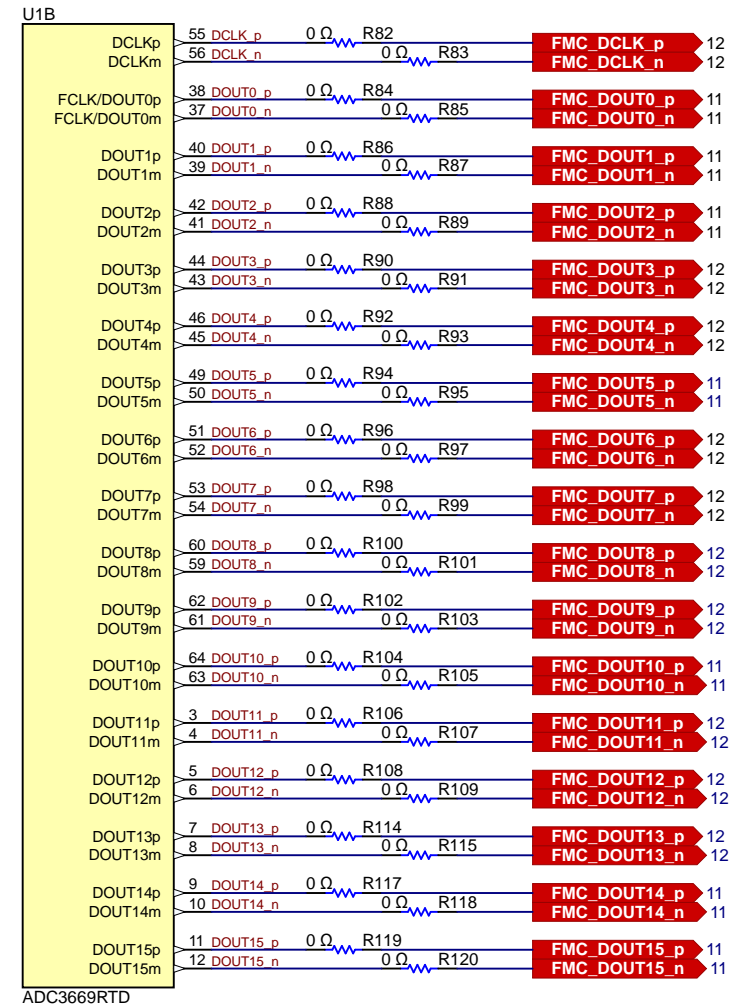
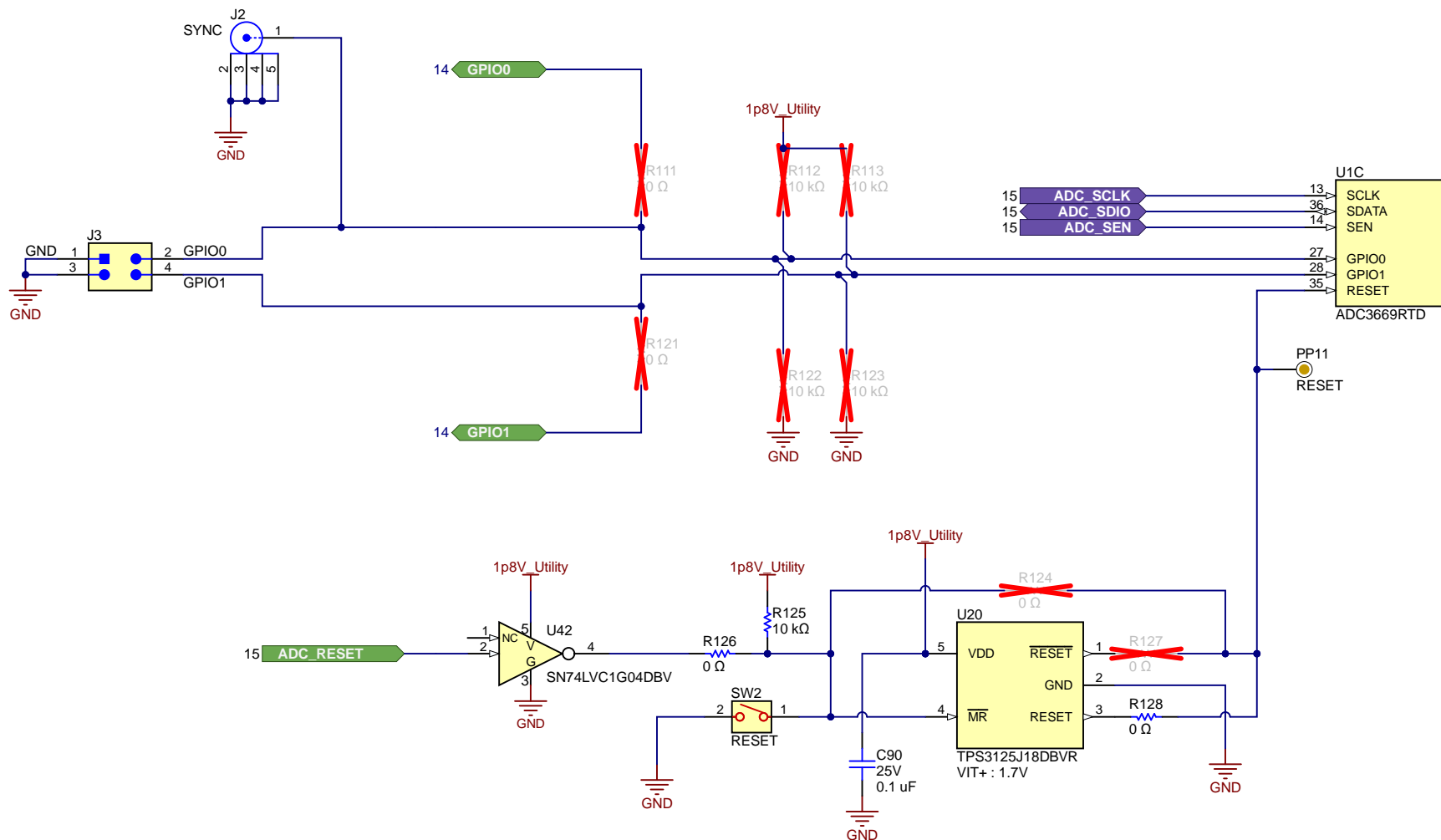
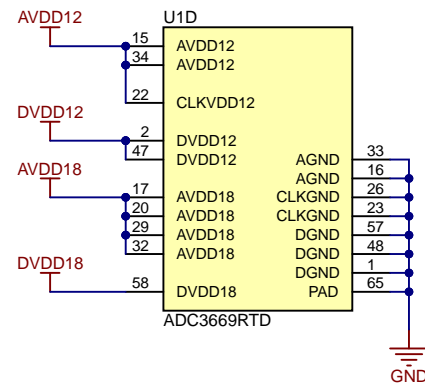
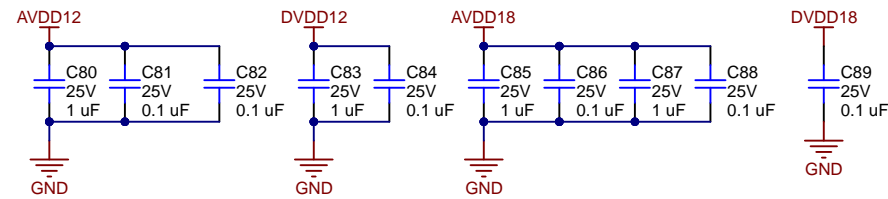
Amplifier Power LDO



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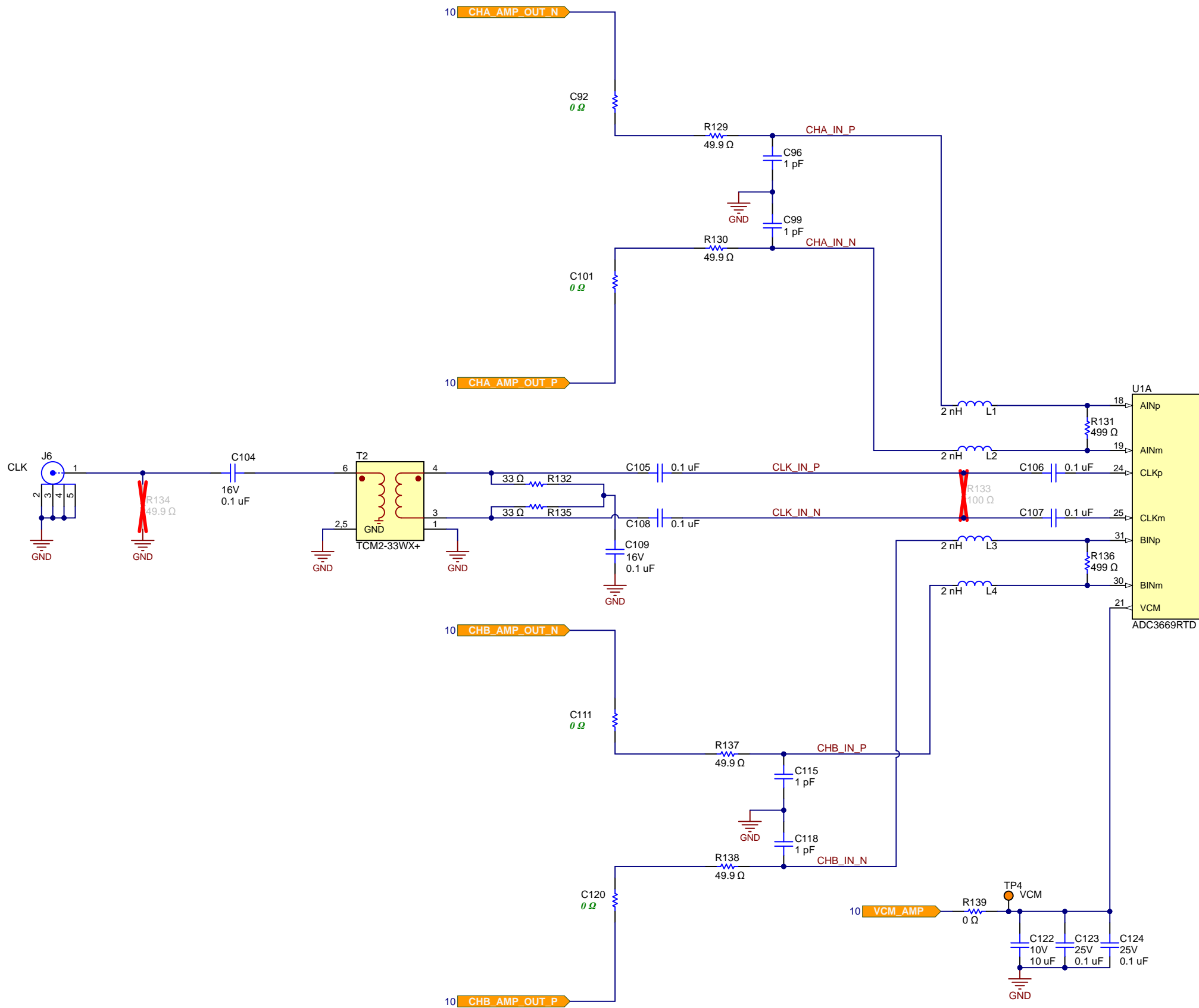
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Number: <a href="#">DC374</a>		Rev: <a href="#">A</a>		Sheet Title:	
SVN Rev:		Assembly Variant: <a href="#">001</a>		Sheet: <a href="#">7</a> of <a href="#">17</a>	
Drawn By:		File: <a href="#">LMH Power LDO.SchDoc</a>		Size: <a href="#">B</a>	
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## ADC IO





ADC Analog Input



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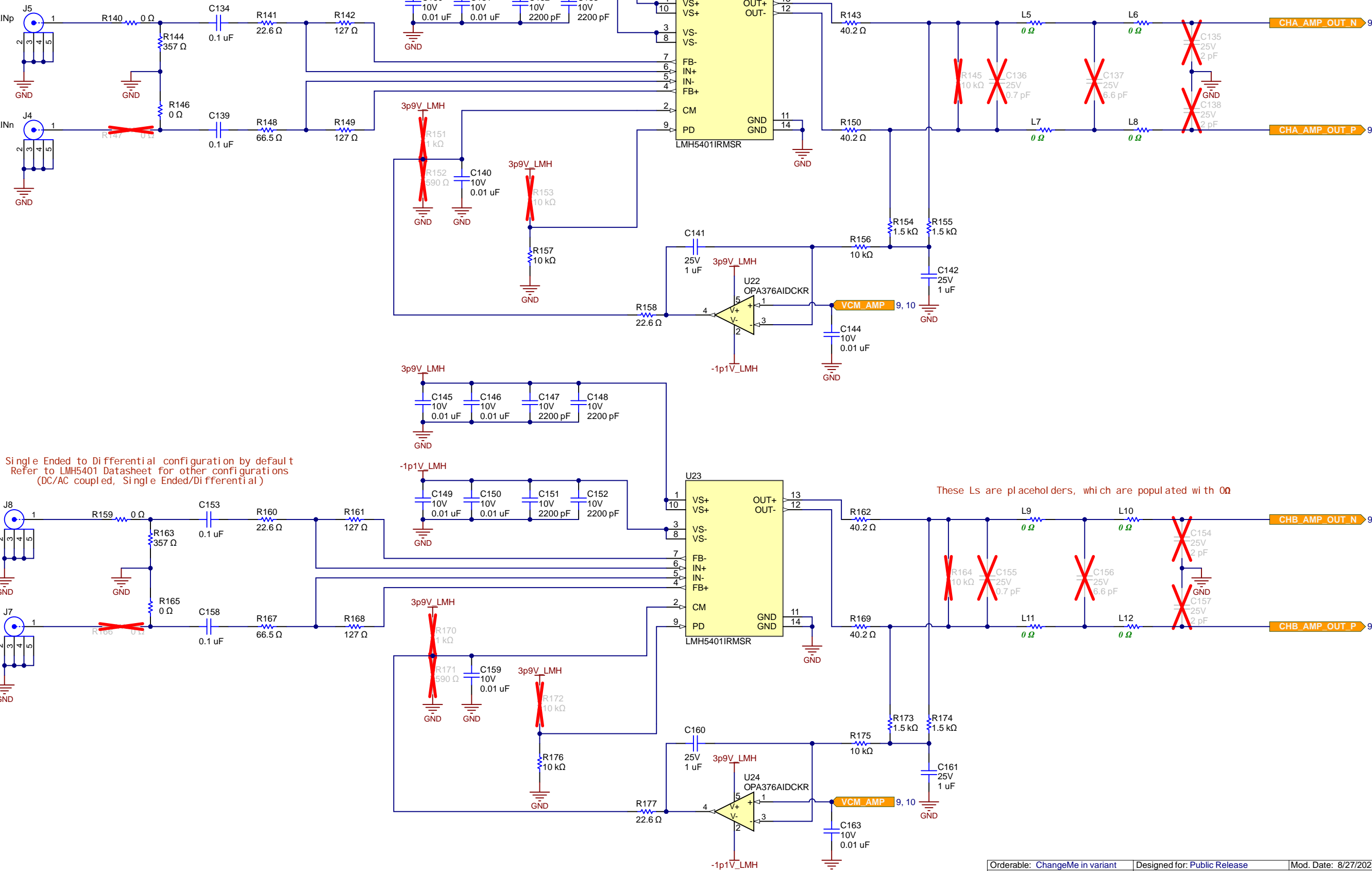
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Number: <a href="#">DC374</a>		Rev: <a href="#">A</a>		Sheet Title:	
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Drawn By:		File: <a href="#">ADC Analog Input.SchDoc</a>		Size: <a href="#">B</a>	
Engineer: <a href="#">GBR</a>		Contact: <a href="#">http://www.ti.com/support</a>			

Amplifier

Single Ended to Differential configuration by default  
Refer to LMH5401 Datasheet for other configurations  
(DC/AC coupled, Single Ended/Differential)

These Ls are placeholders, which are populated with 0Ω

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Number: <a href="#">DC374</a>	Rev: <a href="#">A</a>	Sheet Title:
SVN Rev:	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">10 of 17</a>
Drawn By:	File: <a href="#">Amplifier.SchDoc</a>	Size: <a href="#">B</a>
Engineer: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	

FMC Section Rows A - E

A

B

C

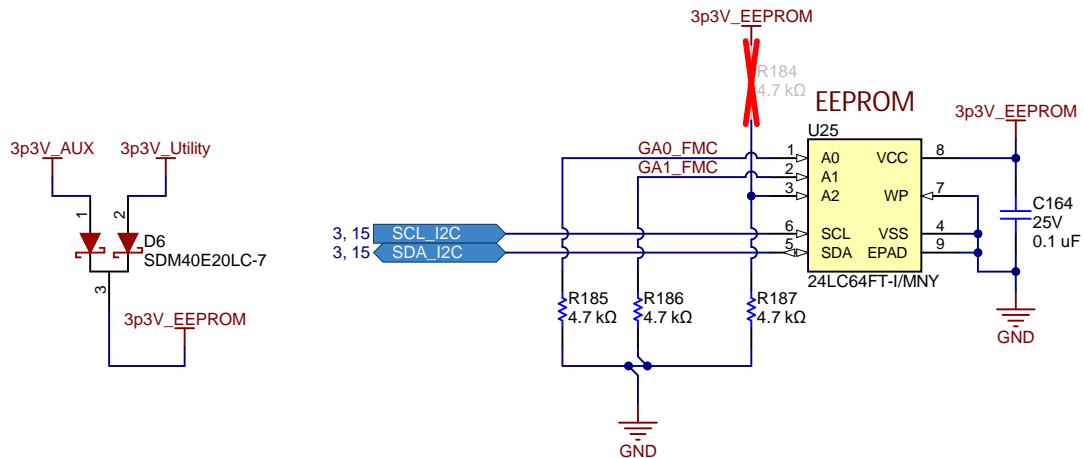
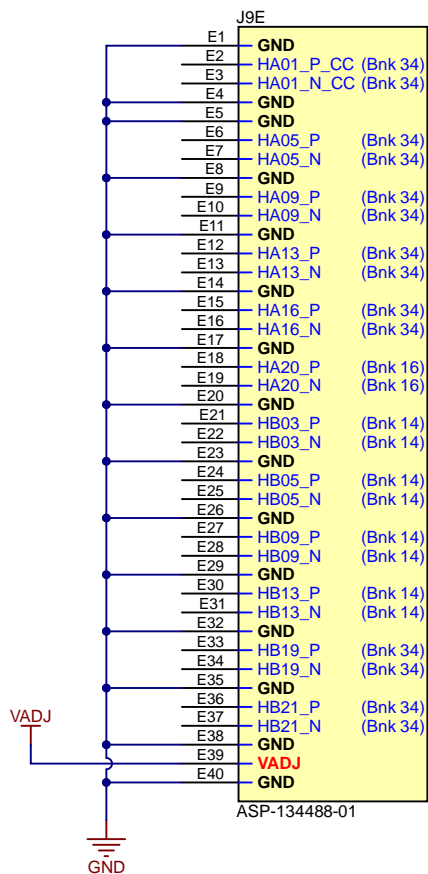
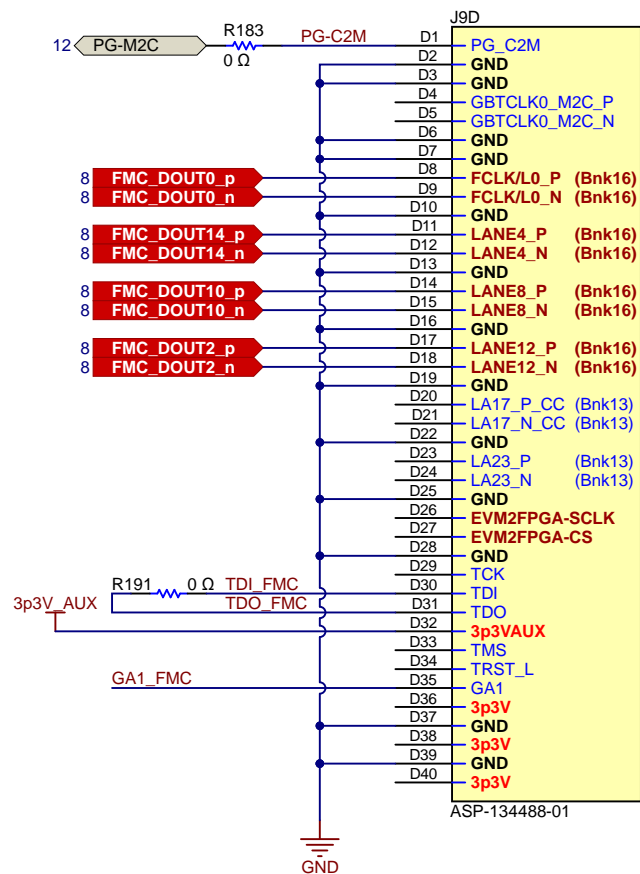
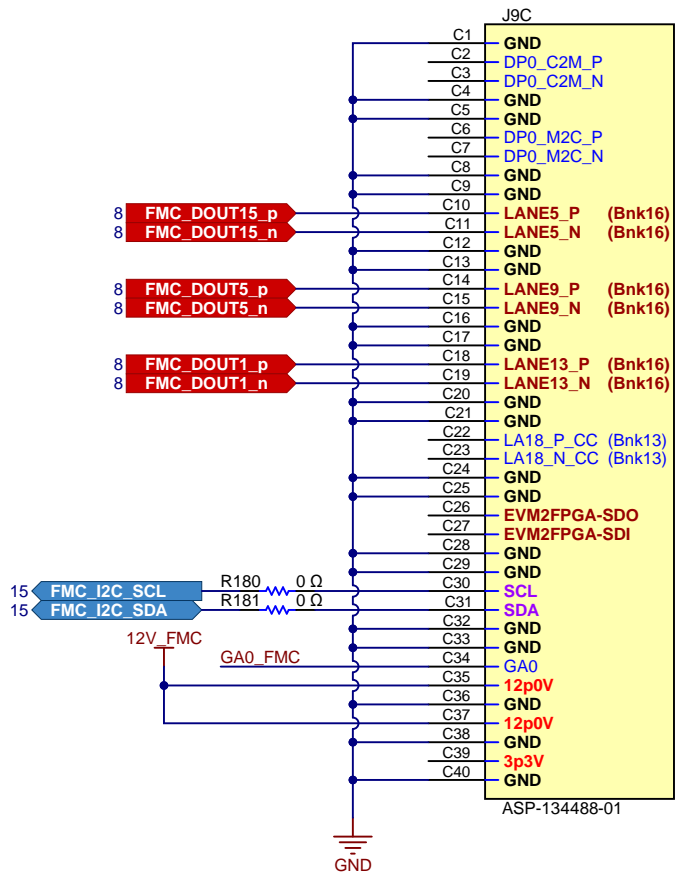
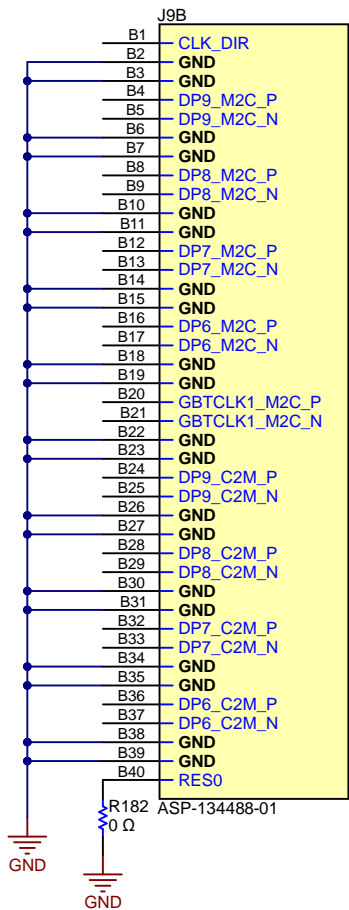
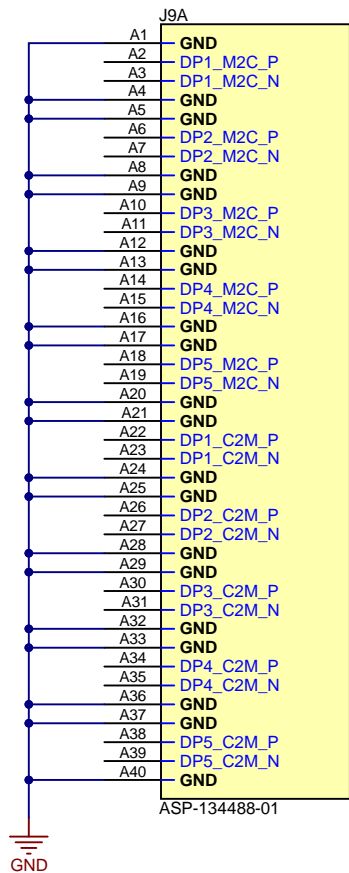
D

A

B

C

D



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Number: <a href="#">DC374</a>	Rev: <a href="#">A</a>	Sheet Title: <a href="#">FMC Section Rows A - E</a>
SVN Rev:	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">11 of 17</a>
Drawn By:	File: <a href="#">FMC Sections 1-7 .SchDoc</a>	Size: <a href="#">B</a>
Engineer: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	

FMC Section Rows F - H, J, K

A

B

C

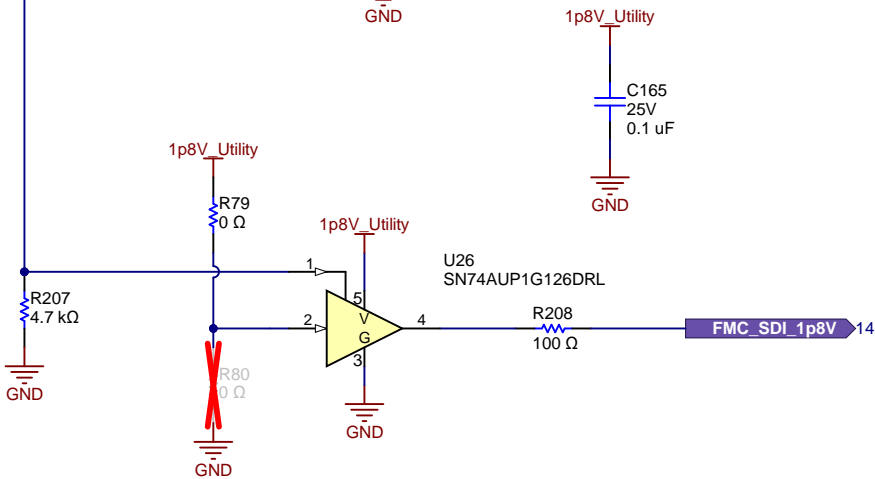
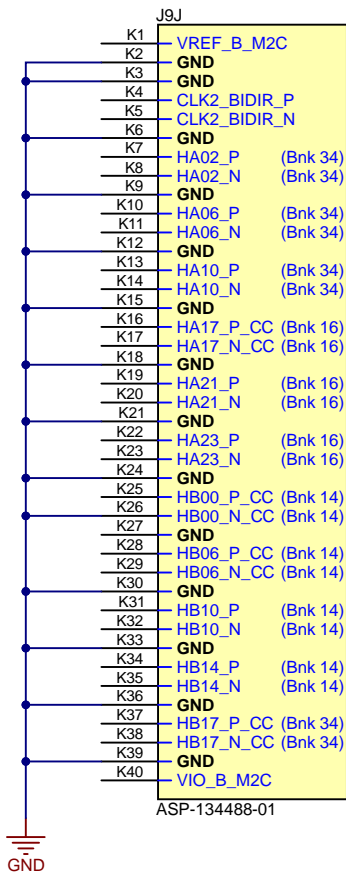
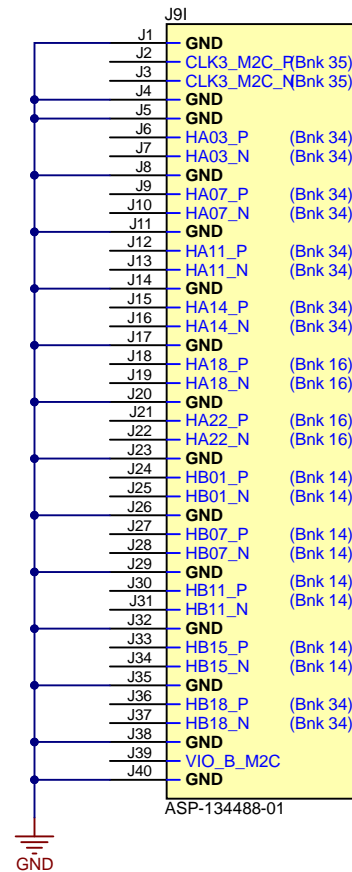
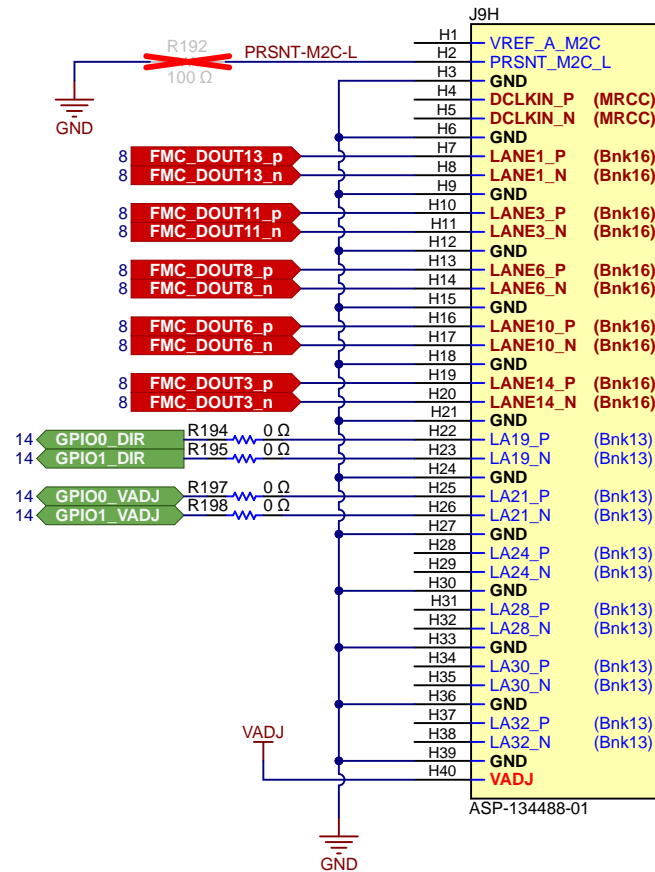
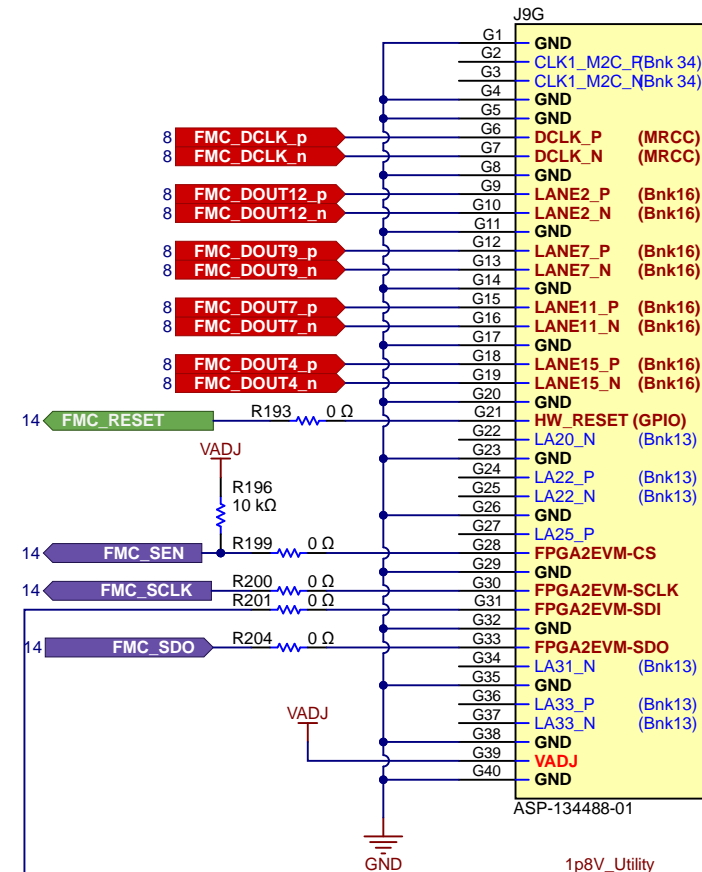
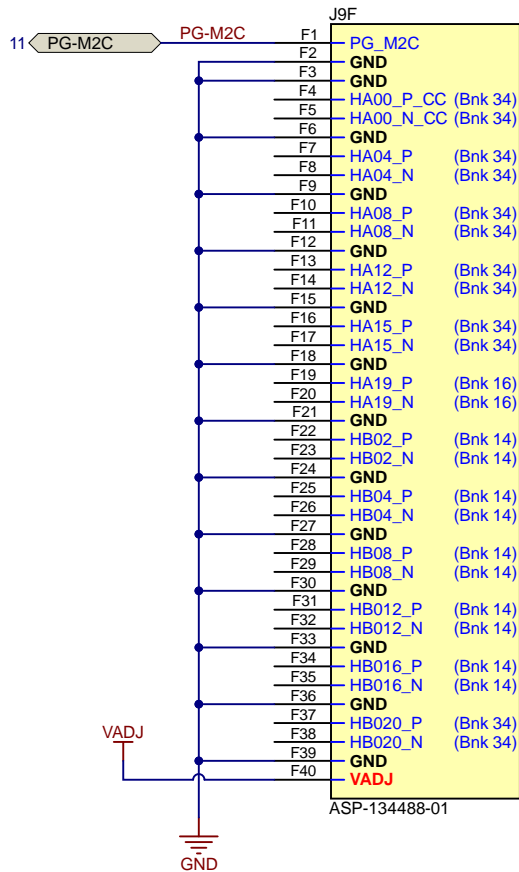
D

A

B

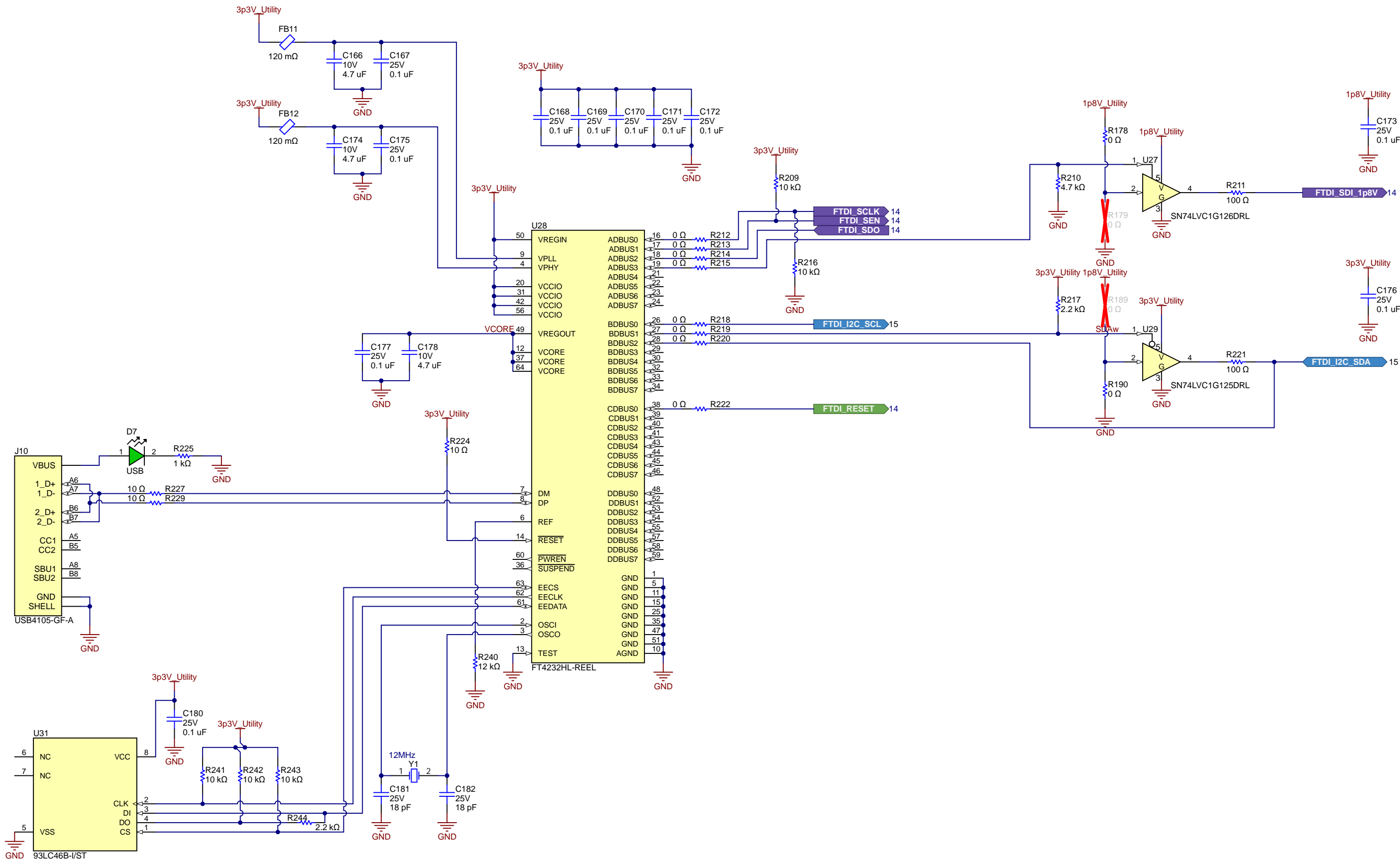
C

D



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TID #: N/A	Project Title: ADC3669EVM DC-Coupled	
Number: DC374	Rev: A	Sheet Title: FMC Section Rows F - H, J, K
SVN Rev:	Assembly Variant: 001	Sheet: 12 of 17
Drawn By:	File: FMC Sections 8-14.SchDoc	Size: B
Engineer: GBR	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	

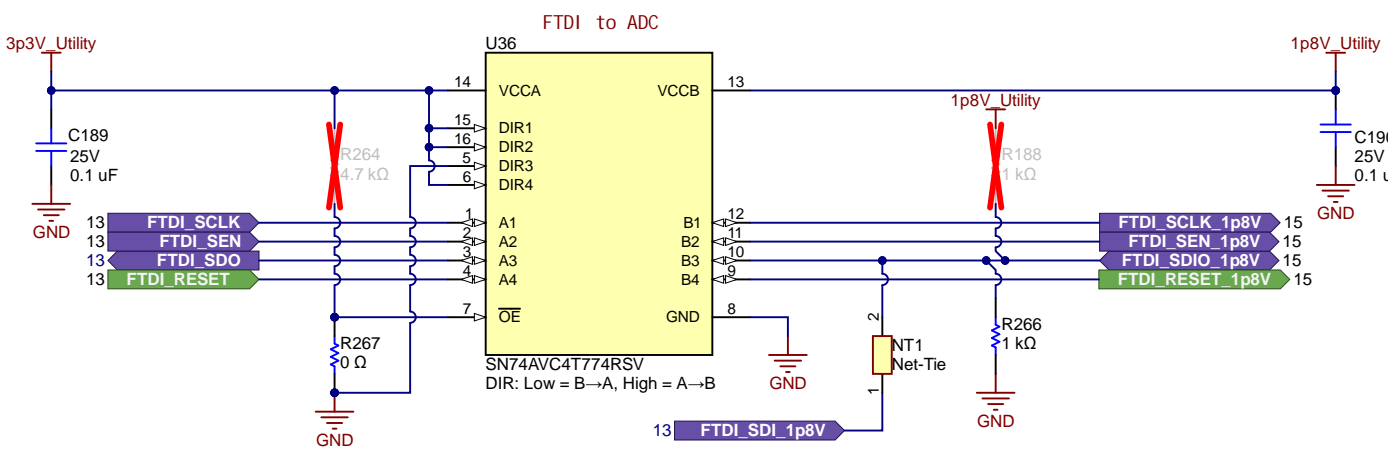
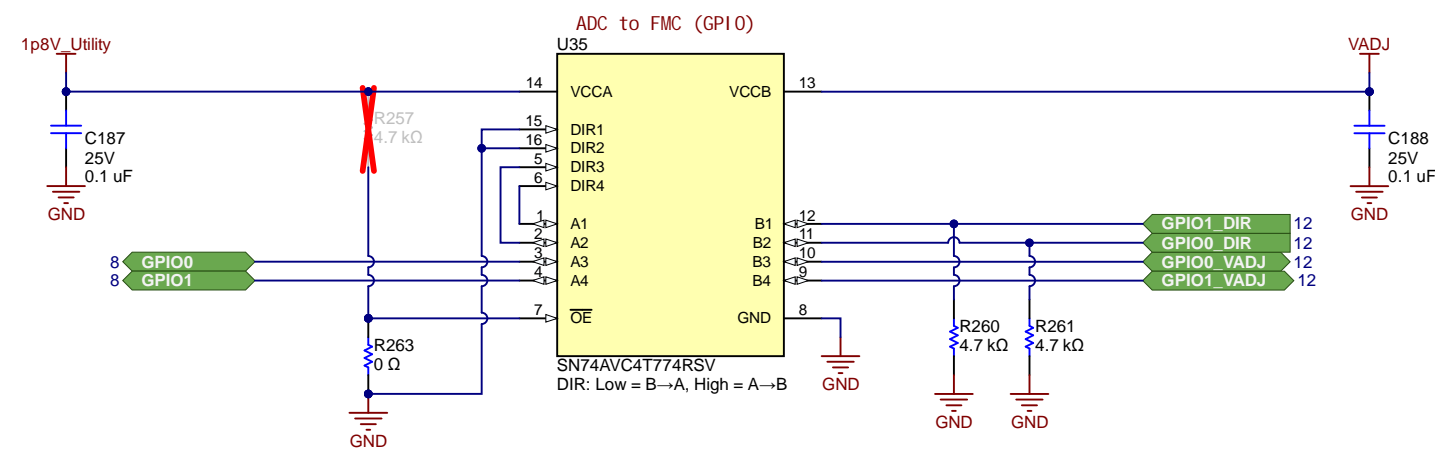
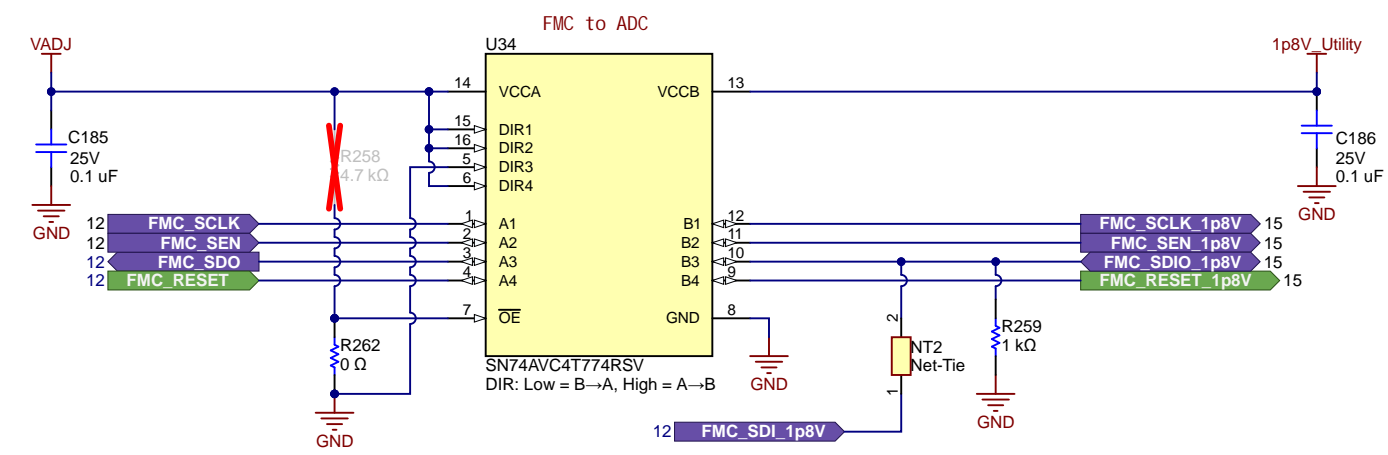
## FTDI USB



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SVN Rev:	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">13</a> of <a href="#">17</a>	
Drawn By:	File: <a href="#">FTDI USB Input.SchDoc</a>	Size: B	
Engineer: <a href="#">GBR</a>	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>		

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Communications Level Shift

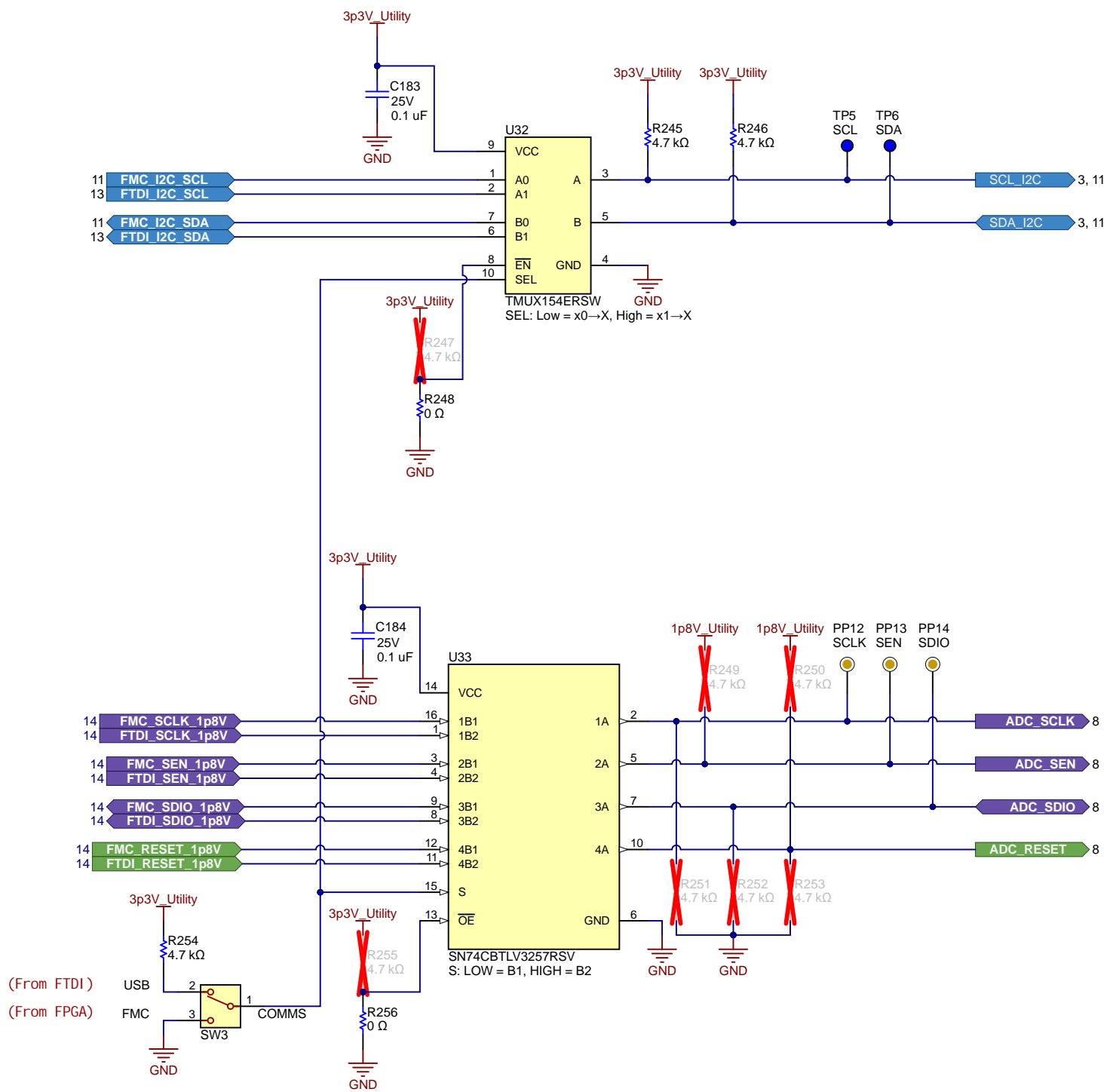


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I2C/SPI Mux

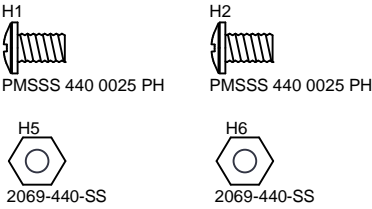


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Mechanicals



PCB Number: DC374  
PCB Rev: A



PCB  
LOGO  
FCC disclaimer

Cannot  
open file  
C:\Users\  
a0864280

Cannot  
open file  
C:\Users\ad  
00617900.T

Size: 0.65"x0.20"  
LBL1

PCB Label  
THT-14-423-10


ZZ1  
Label Assembly Note  
This Assembly Note is for PCB labels only. Put sticker on top of board.

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.

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TID #: <a href="#">N/A</a>		Project Title: <a href="#">ADC3669EVM DC-Coupled</a>	
Number: <a href="#">DC374</a>	Rev: <a href="#">A</a>	Sheet Title: <a href="#">Mechanicals</a>	
SVN Rev:		Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">16</a> of <a href="#">17</a>
Drawn By:		File: <a href="#">Hardware.SchDoc</a>	Size: <a href="#">B</a>
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Rev History & Variants

Revision History

Rev	Release Date	Notes
E1	Jan-2023	Initial Release
A	Oct-2023	Used for preproduction sampling
B	Aug-2024	Released at RTM for production evaluation

Variant(s)

Variant	Notes
001	Original DNI components Used for production build
002	

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SVN Rev:	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">17</a> of <a href="#">17</a>
Drawn By:	File: <a href="#">Revision History.SchDoc</a>	Size: <a href="#">B</a>
Engineer: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	