

Block Diagram

USB Mini B

FTDI

FTDI\_I2C

F2F\_SPI

FPGA\_PROG

F2F\_RESET

FTDI\_SPI

FTDI\_RESET

Level Shift

SPI MUX

Reset Watchdog

Reset Button

ADC3669

Comms Switch

GPIO Header / SMA

Level Shift

GPIO

LVDS Interface

FMC\_I2C

Level Shift

Level Shift

Level Shift

Level Shift

FMC\_SPI

FMC

Power Monitors

Comms Switch

EEPROM

I2C MUX

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

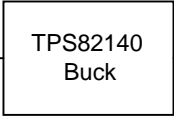
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TID #: <a href="#">N/A</a>	Project Title: <a href="#">ADC3669EVM</a>	
Number: <a href="#">DC276</a>	Rev: <a href="#">C</a>	Sheet Title: <a href="#">Block Diagram</a>
SVN Rev: <a href="#">5f4375ce9b8073c05a471232011694396d35</a>		Sheet: <a href="#">1</a> of <a href="#">14</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

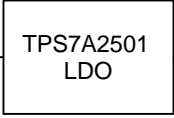
12V JACK

12V FMC



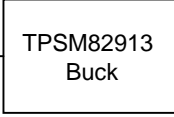
3.3V  
2A

3p3V\_Utility

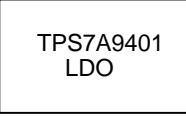


1.8V  
300 mA

1p8V\_Utility

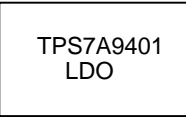


2.3V  
3A



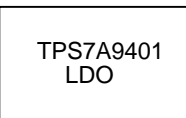
1.2V  
1A

DVDD12 (100 mA)



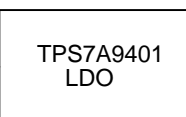
1.2V  
1A

AVDD12 (80 mA)



1.8V  
1A

DVDD18 (100mA)

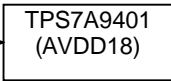
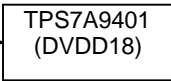
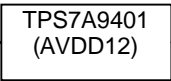
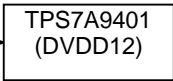
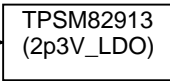
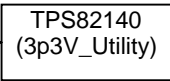


1.8V  
1A

AVDD18 (125 mA)

Power Sequence:

12V



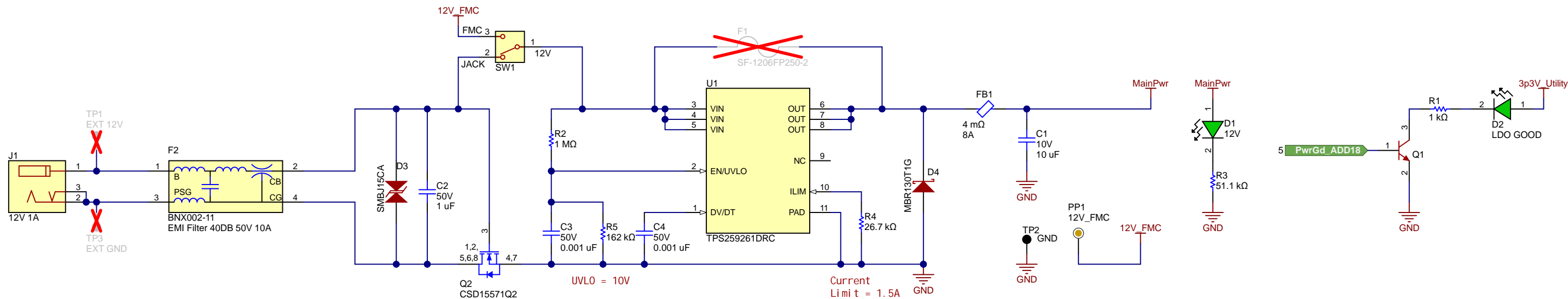
Power Good  
LED

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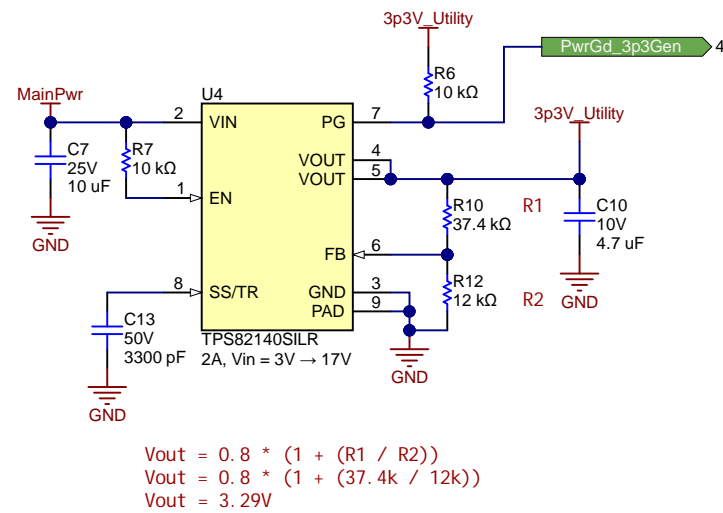
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Number: <a href="#">DC276</a>		Rev: <a href="#">C</a>		Sheet Title:	
SVN Rev: <a href="#">1a5319a59745b3b644272435f08a001201201</a>				Sheet: <a href="#">2</a> of <a href="#">14</a>	
Drawn By:		File: <a href="#">Power Tree.SchDoc</a>			Size: B
Engineer: <a href="#">GBR</a>		Contact: <a href="#">http://www.ti.com/support</a>			

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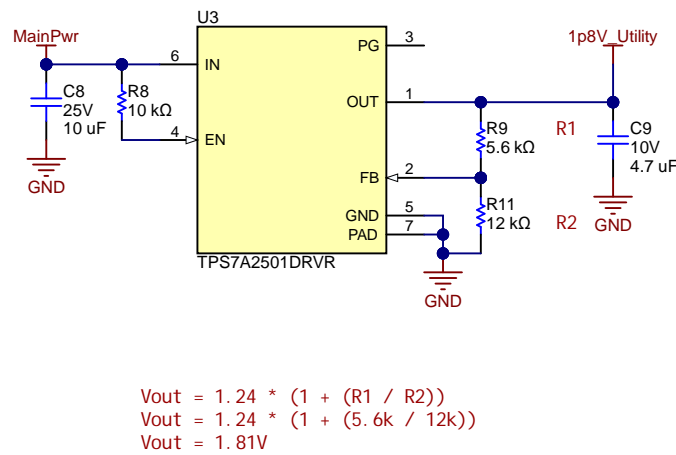
EVM Power



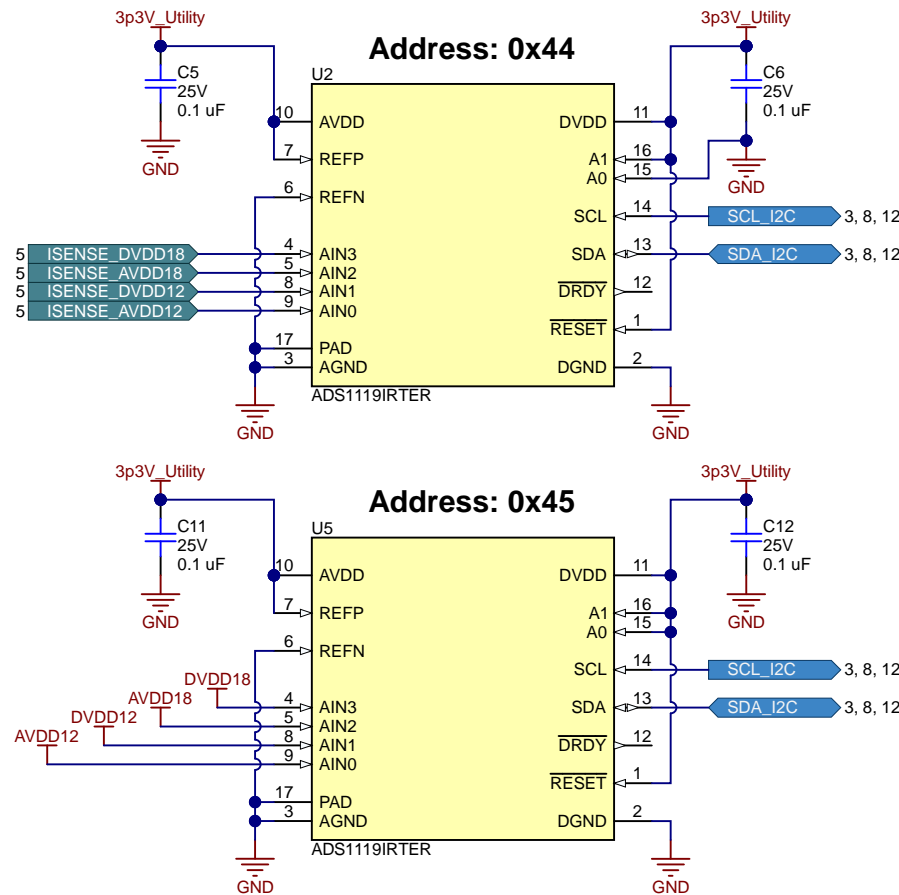
3.3V Utility Rail



1.8V Utility Rail



Power Monitors



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Number: <a href="#">DC276</a>	Rev: <a href="#">C</a>	Sheet Title: <a href="#">EVM Power</a>
SVN Rev:	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">3</a> of <a href="#">14</a>
Drawn By:	File: <a href="#">EVM Power.SchDoc</a>	Size: <a href="#">B</a>
Engineer: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	

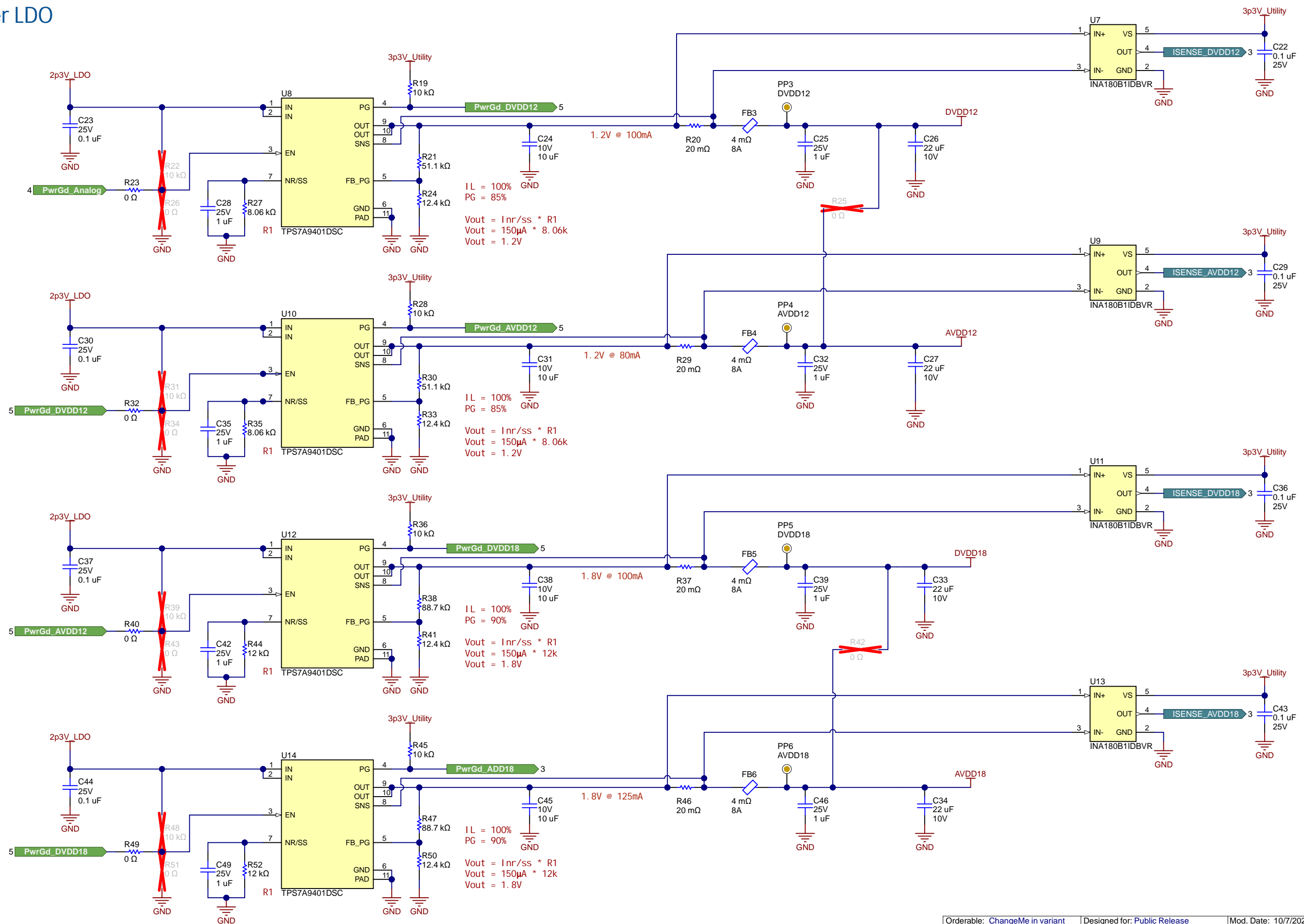
## A



C

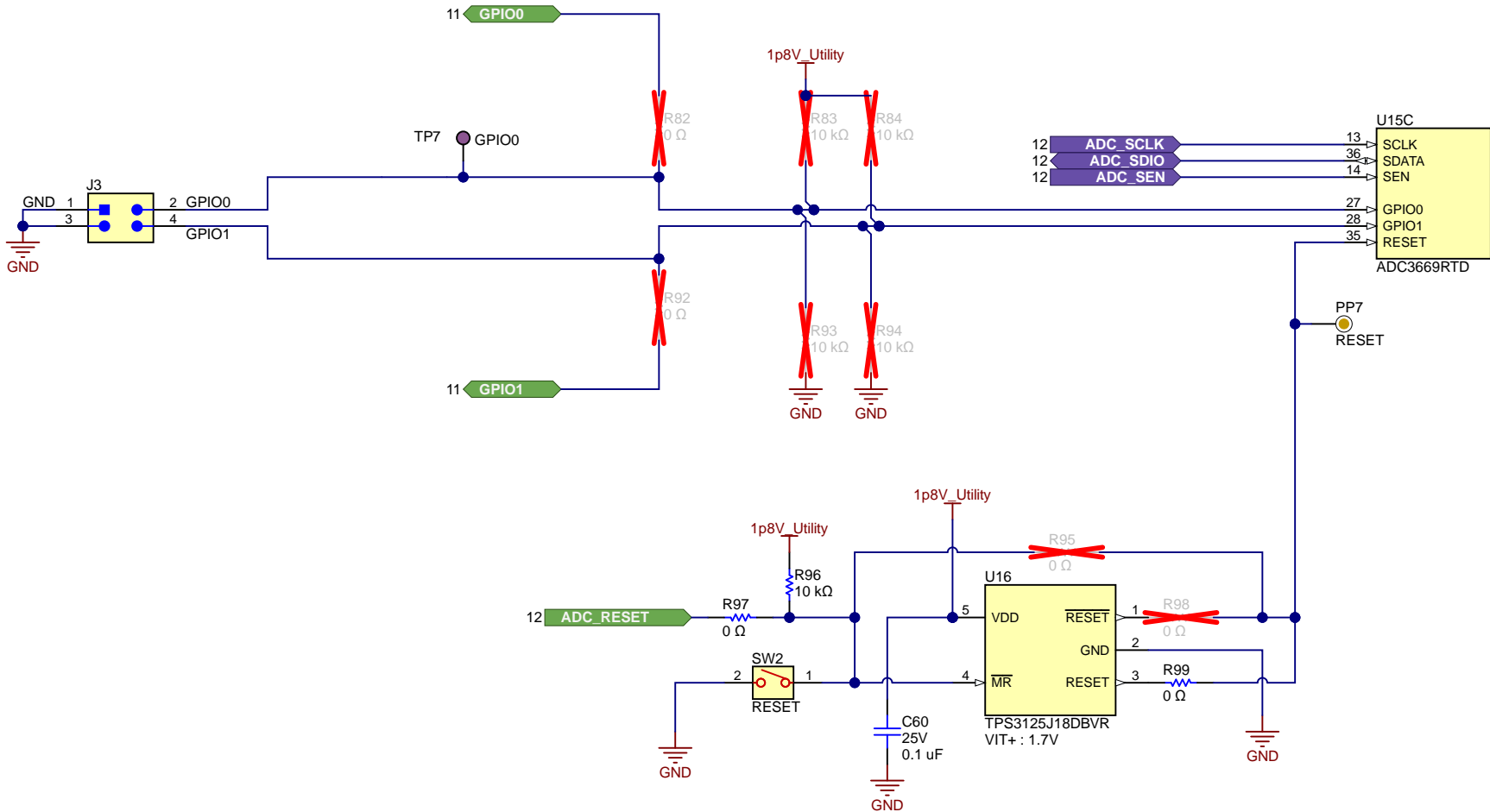
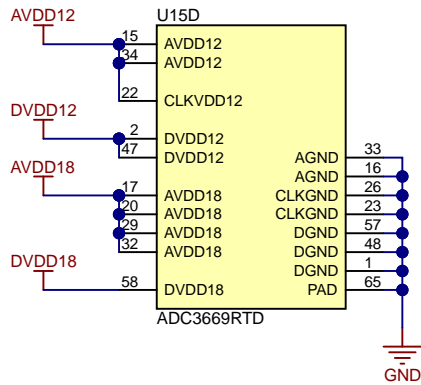
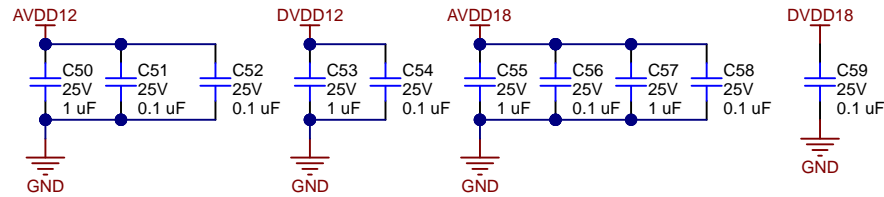
D

## ADC Power LDO



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Number: <a href="#">DC276</a>	Rev: <a href="#">C</a>	Sheet Title: <a href="#">ADC Power</a>
SVN Rev:	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">5</a> of <a href="#">14</a>
Drawn By:	File: <a href="#">ADC Power.SchDoc</a>	Size: B
Engineer: <a href="#">GBR</a>	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	

ADC IO

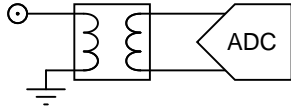
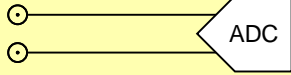


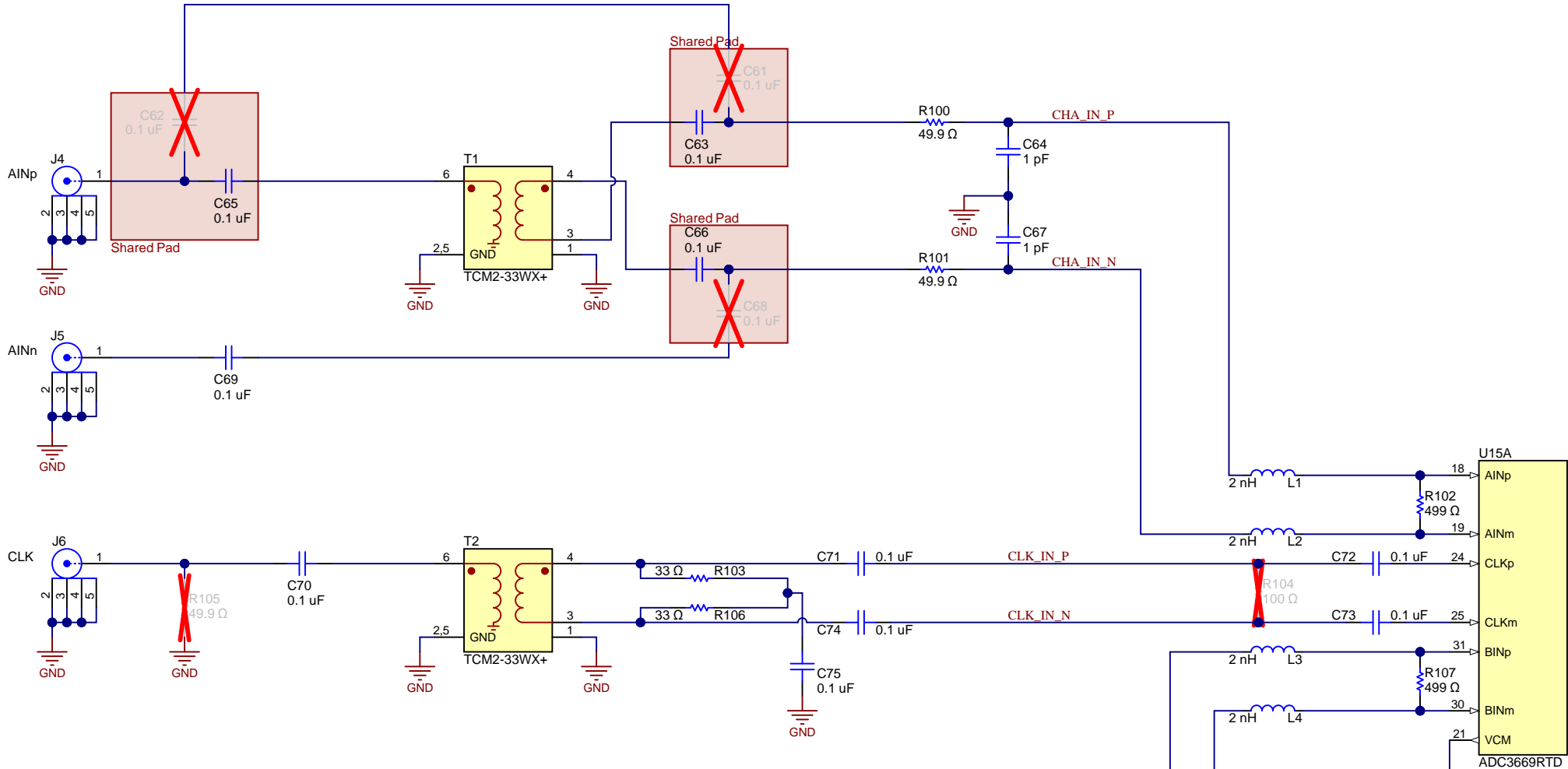
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TID #: N/A	Project Title: ADC3669EVM	
Number: DC276	Rev: C	Sheet Title: ADC Input & Clock
SVN Rev:	Assembly Variant: 001	Sheet 6 of 14
Drawn By:	File: ADC_IO.SchDoc	Size: B
Engineer: GBR	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	

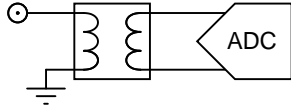
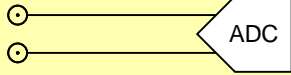
ADC Analog Input

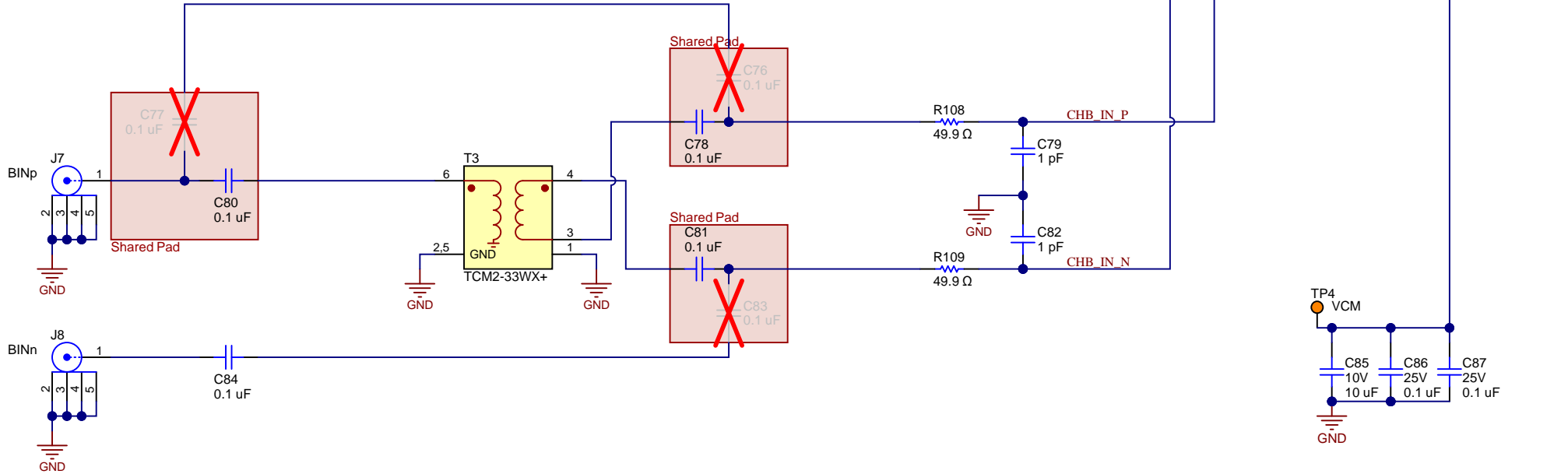
Channel A

Configuration	Visual	Install	Remove
Single to Diff Balun		C65, C63, C66	C62, C69, C68, C61
Differential		C62, C69, C68, C61	C65, C63, C66



Channel B

Configuration	Visual	Install	Remove
Single to Diff Balun		C80, C78, C81	C77, C84, C83, C76
Differential		C77, C84, C83, C76	C80, C78, C81



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TID #: <a href="#">N/A</a>	Project Title: <a href="#">ADC3669EVM</a>	
Number: <a href="#">DC276</a>	Rev: <a href="#">C</a>	Sheet Title:
SVN Rev:	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">7</a> of <a href="#">14</a>
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>	



FMC Section Rows A - E

A

B

C

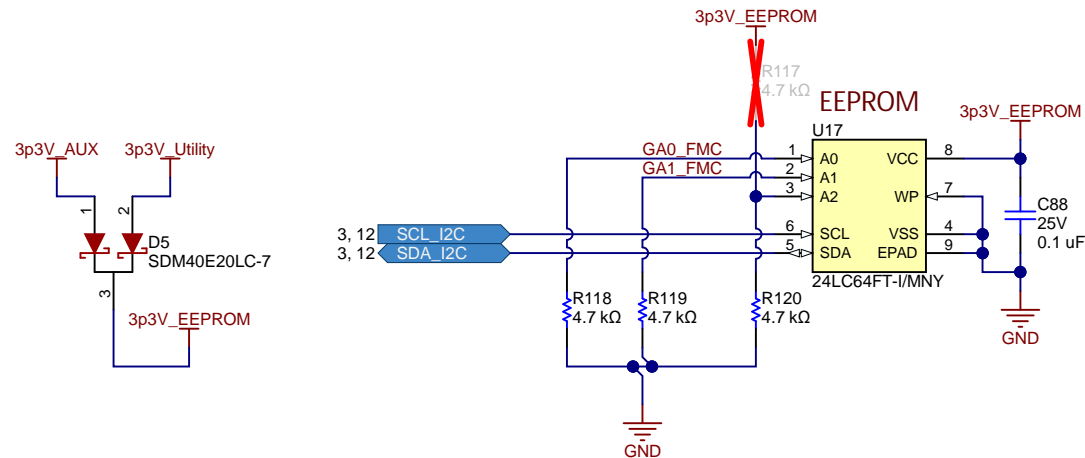
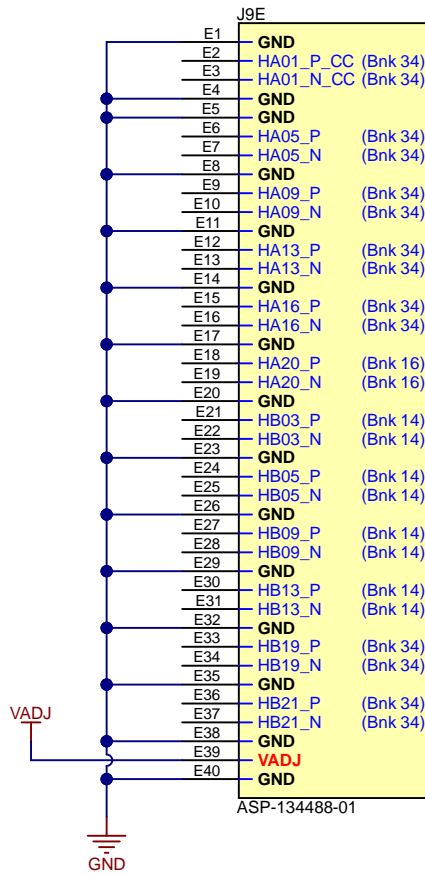
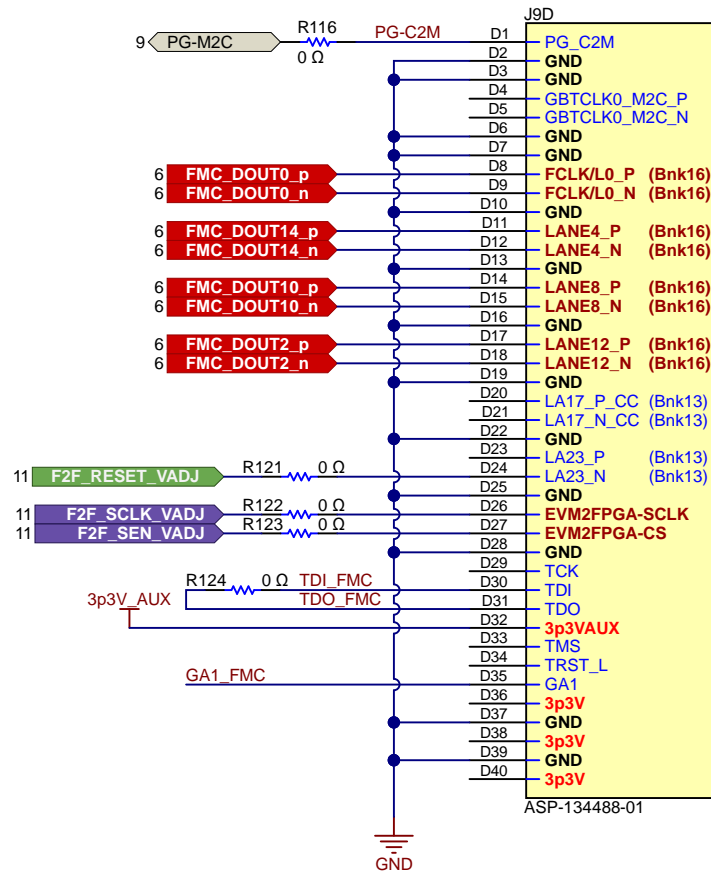
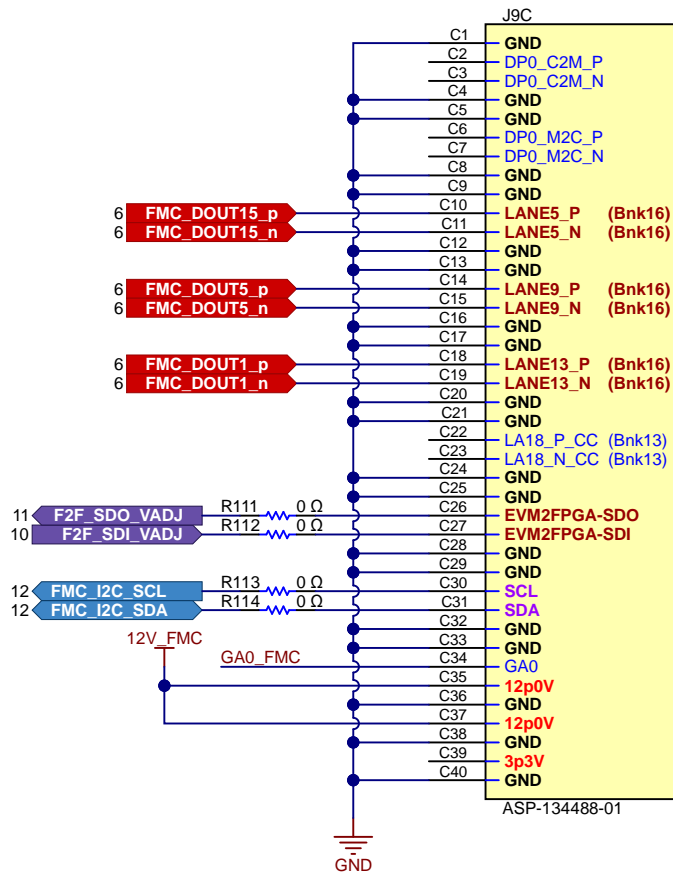
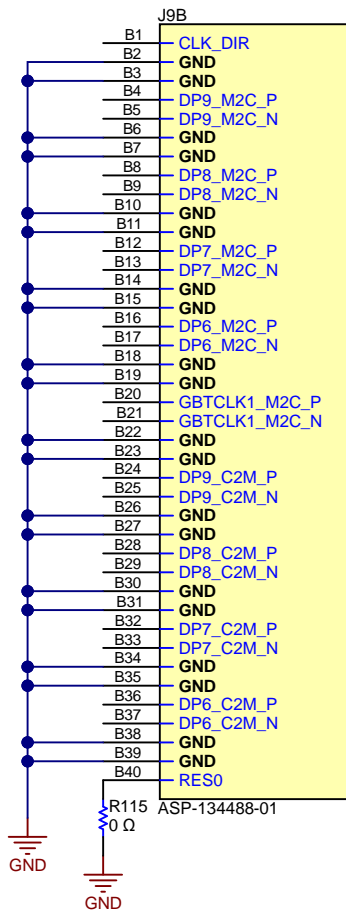
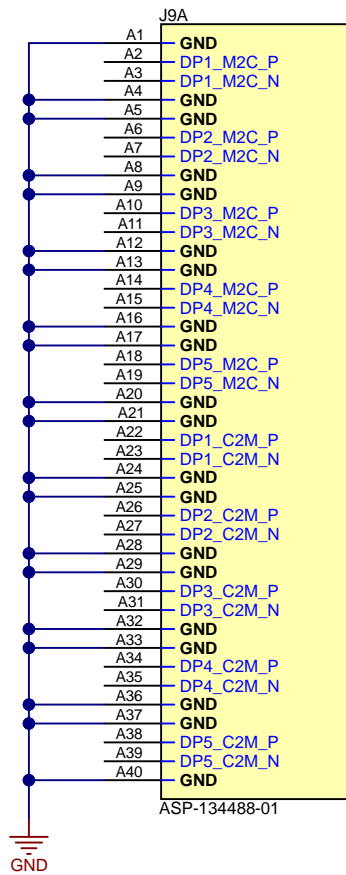
D

A

B

C

D

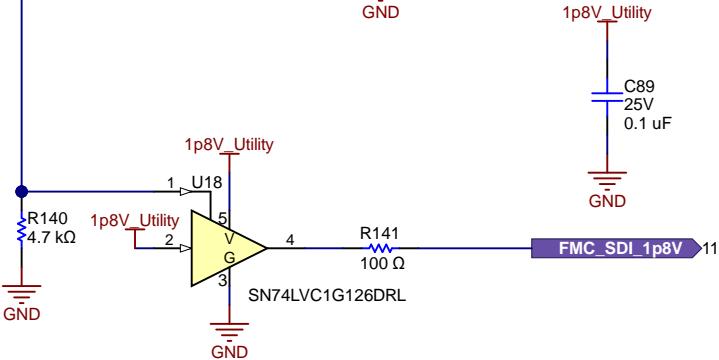
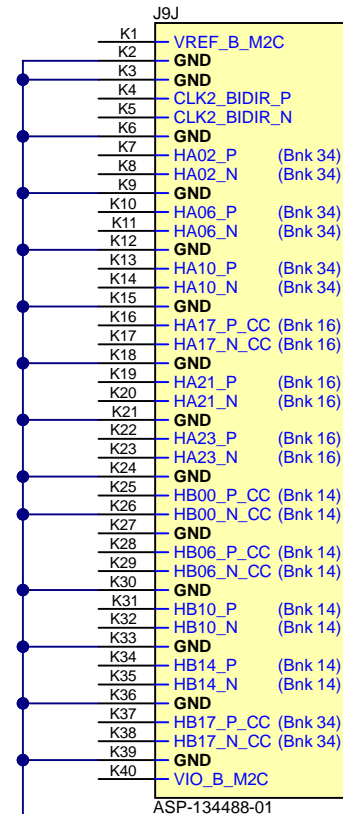
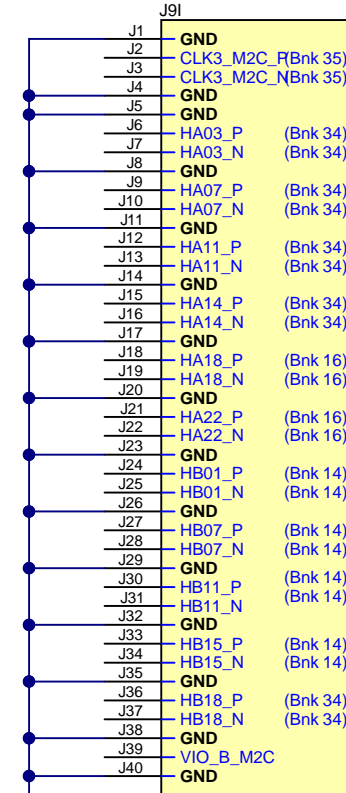
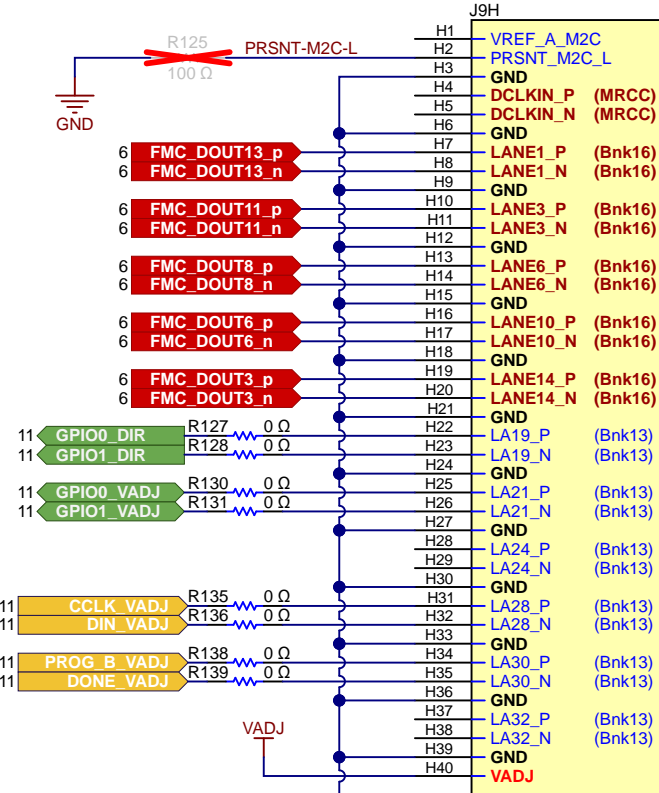
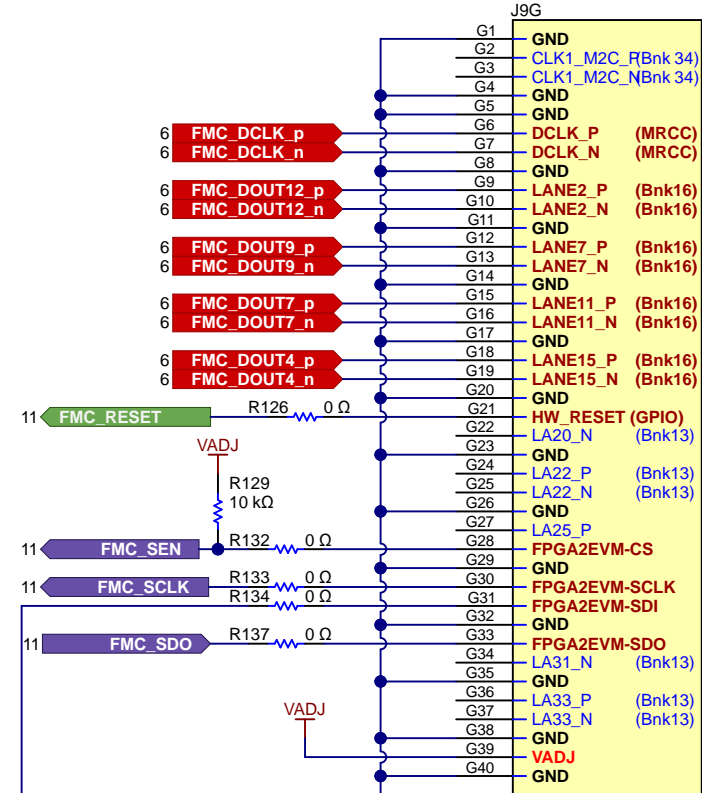
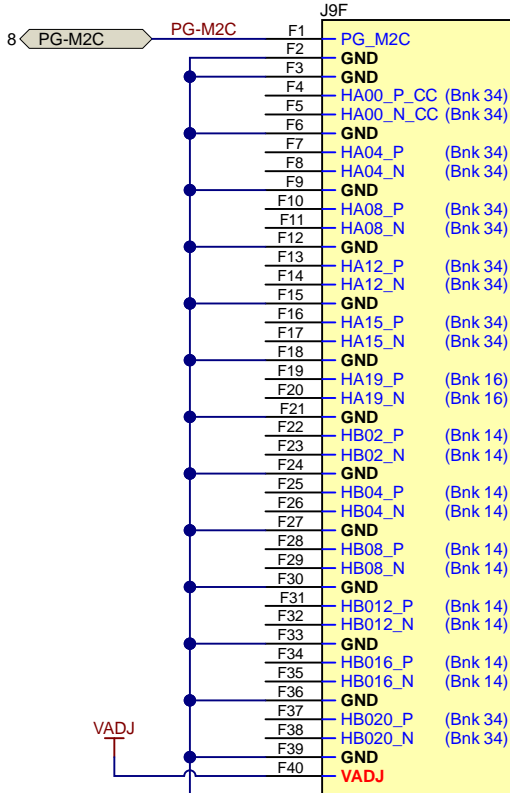


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Number: <a href="#">DC276</a>	Rev: <a href="#">C</a>	Sheet Title: <a href="#">FMC Section Rows A - E</a>
SVN Rev:	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">8</a> of <a href="#">14</a>
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Engineer: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	



FMC Section Rows F - H, J, K

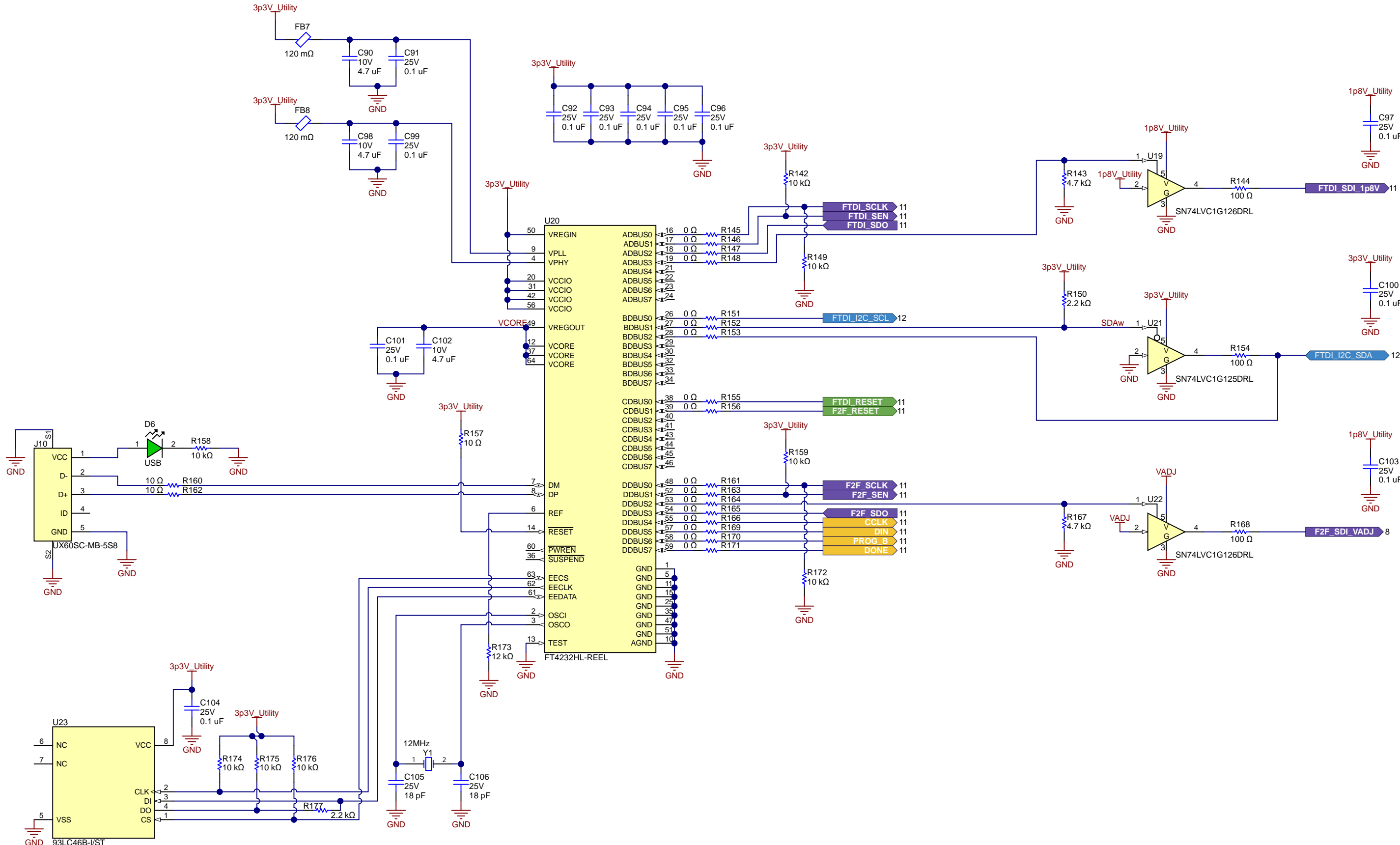


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Number: <a href="#">DC276</a>	Rev: <a href="#">C</a>	Sheet Title: <a href="#">FMC Section Rows F - H, J, K</a>
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## FTDI USB



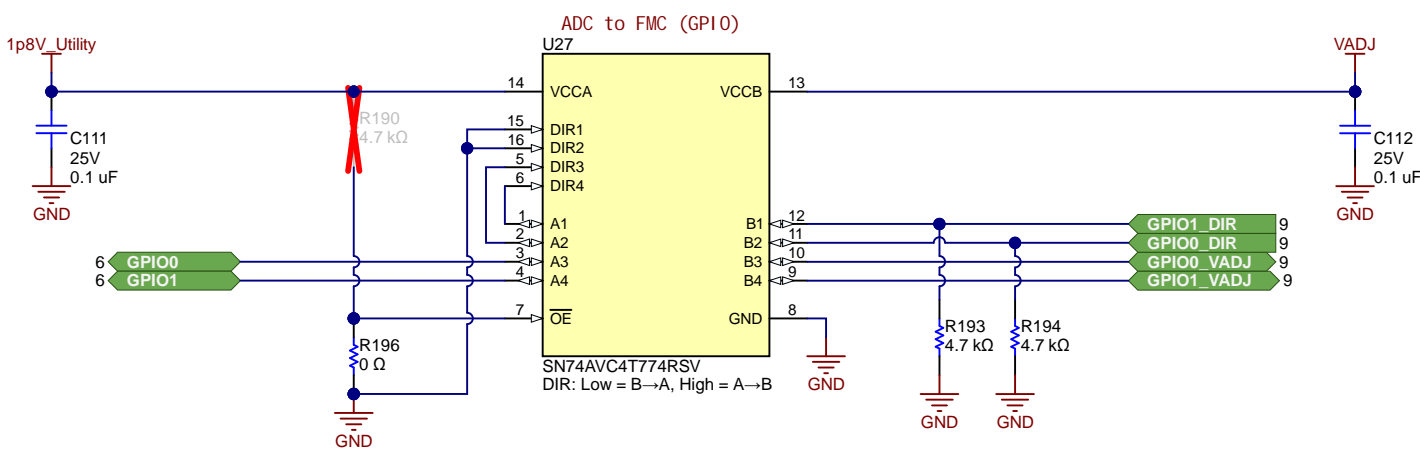
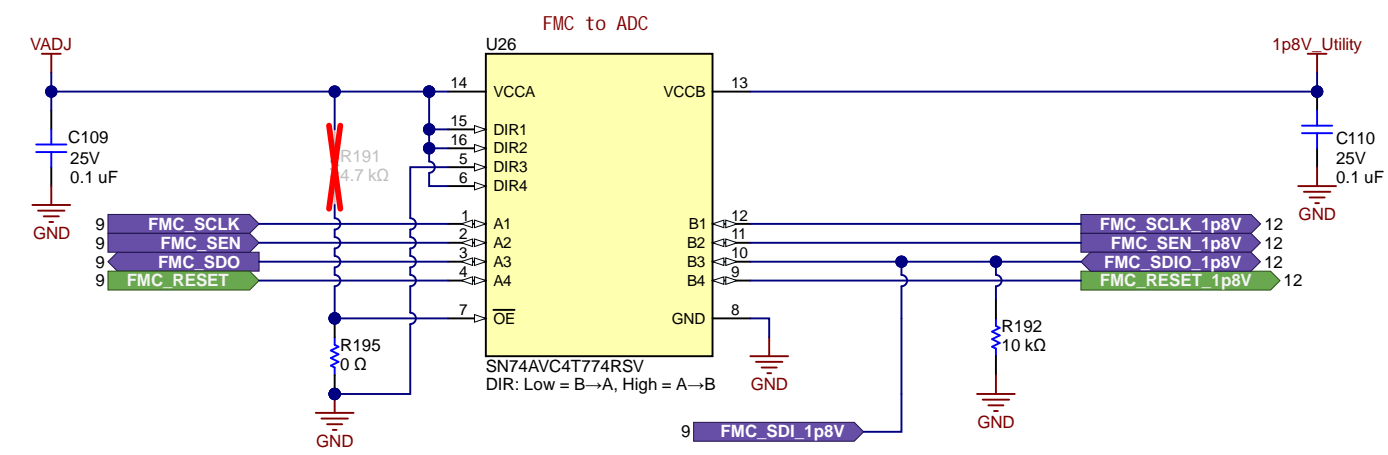
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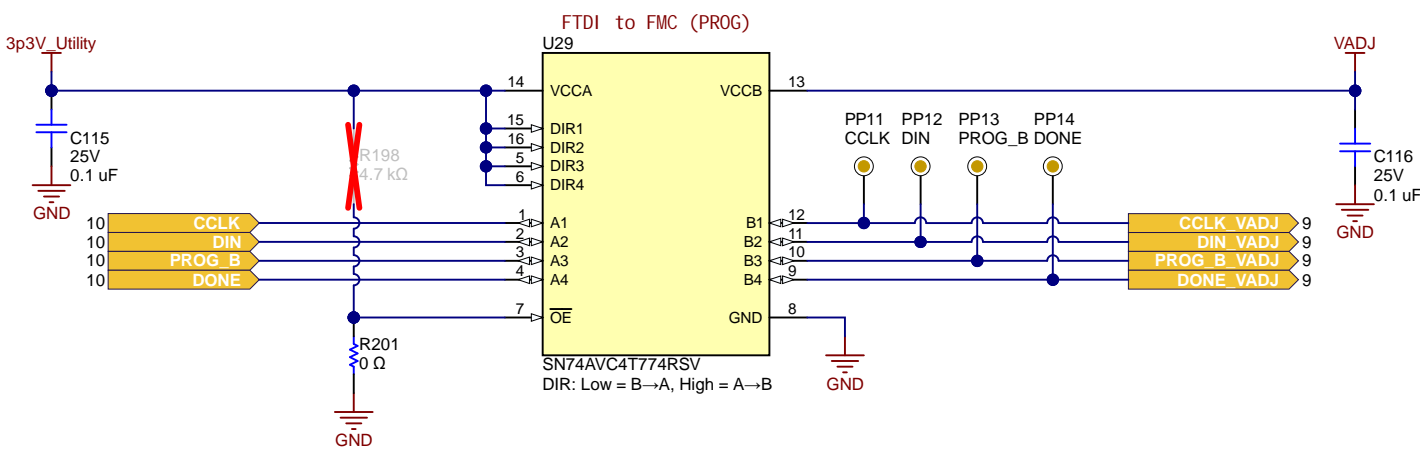
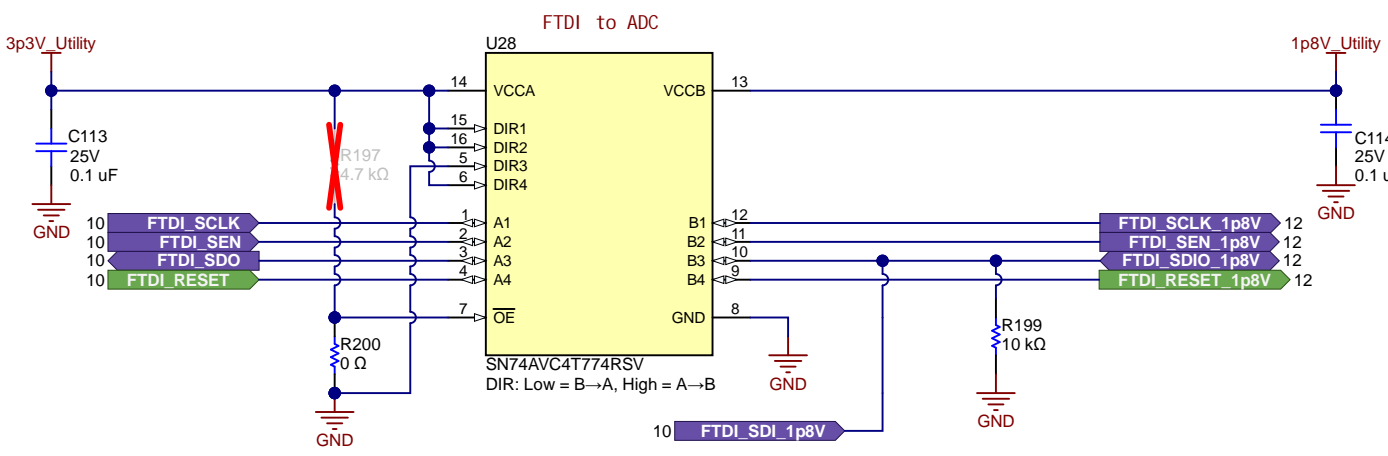
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Communications Level Shift

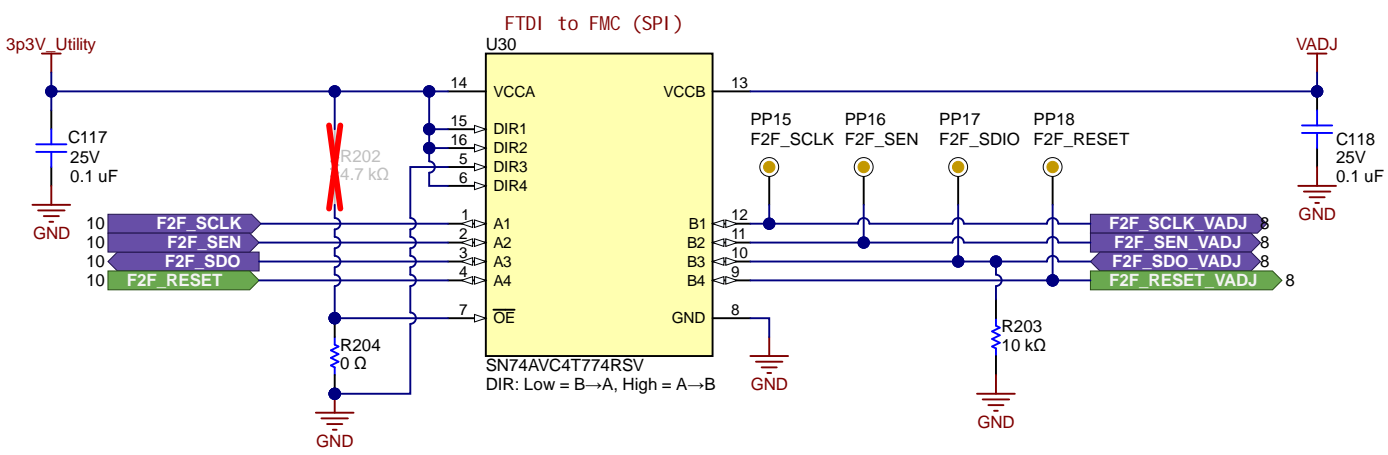
A



B



C



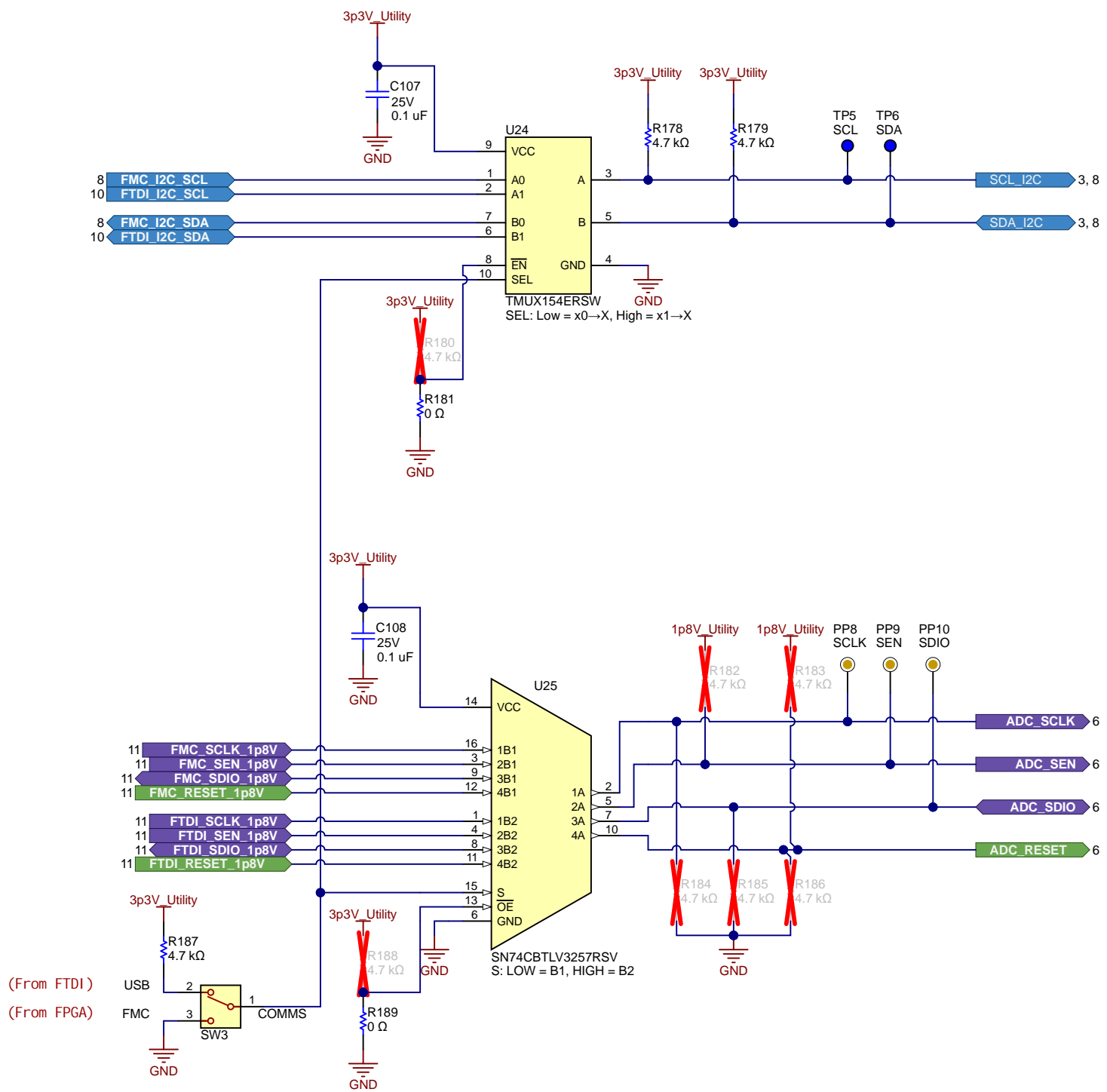
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Number: <a href="#">DC276</a>	Rev: <a href="#">C</a>	Sheet Title:
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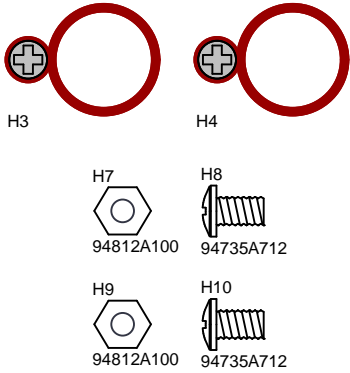
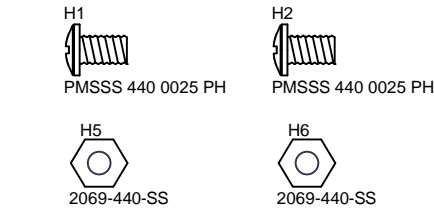
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I2C/SPI Mux



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Mechanicals



PCB Number: DC276

PCB Rev: C



PCB  
LOGO

FCC disclaimer



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</a>			
Number: <a href="#">DC276</a>		Rev: <a href="#">C</a>		Sheet Title: <a href="#">Mechanicals</a>	
SVN Rev:		Assembly Variant: <a href="#">001</a>			Sheet: <a href="#">13</a> of <a href="#">14</a>
Drawn By:		File: <a href="#">Hardware.SchDoc</a>			
Engineer: <a href="#">GBR</a>		Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>			
				Size: B	
				<a href="http://www.ti.com">http://www.ti.com</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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