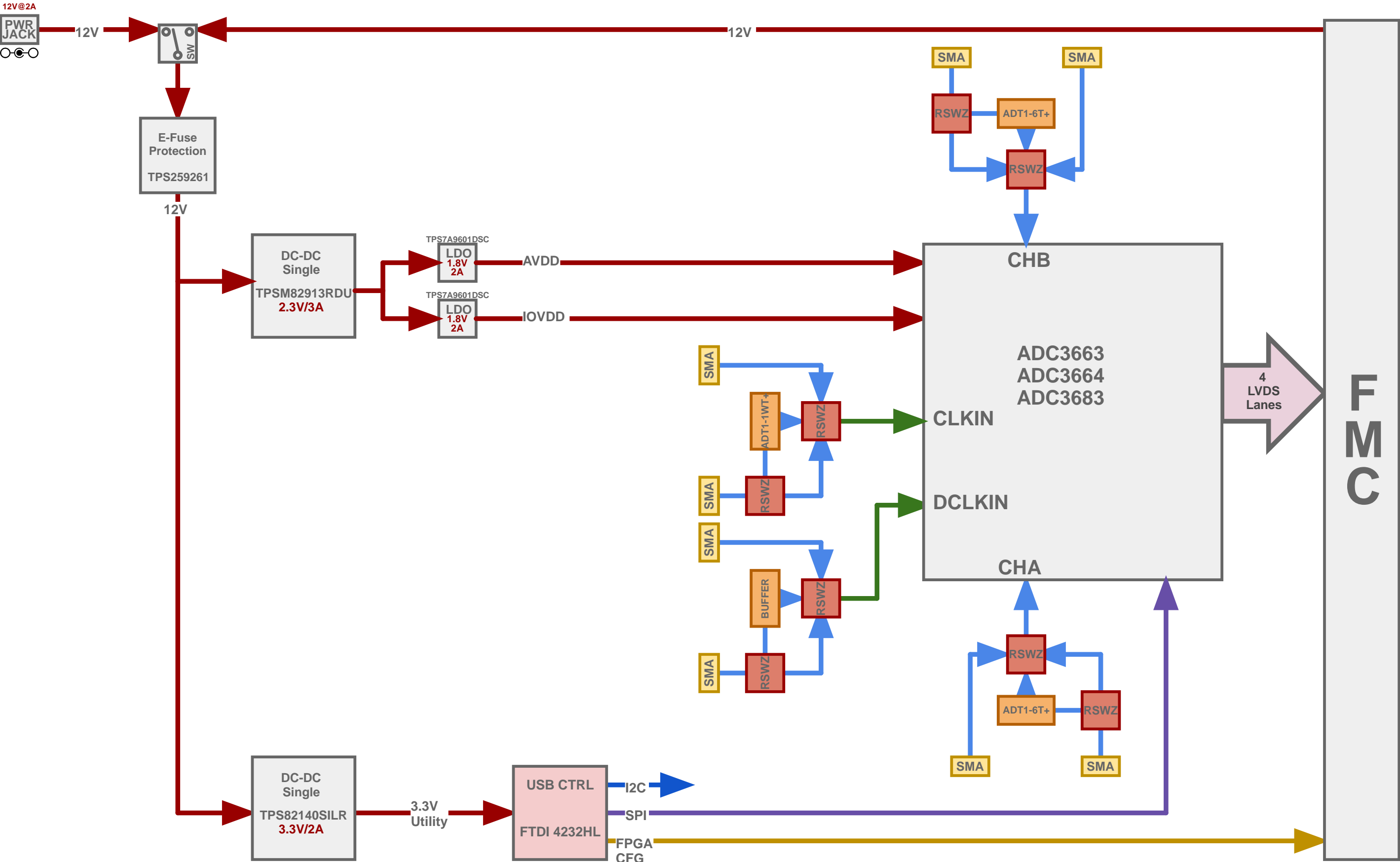


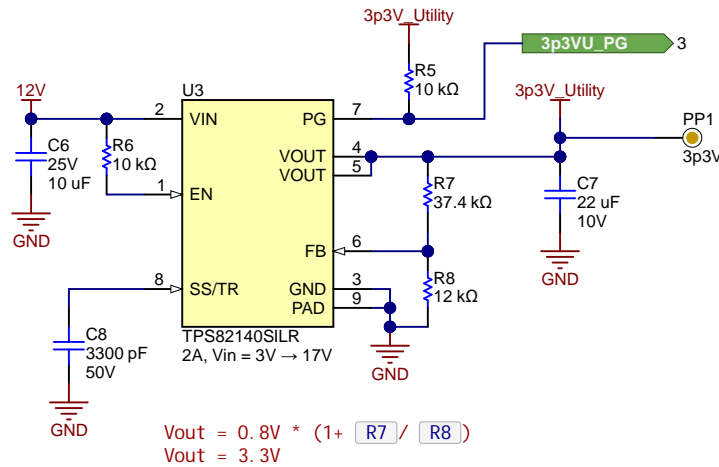
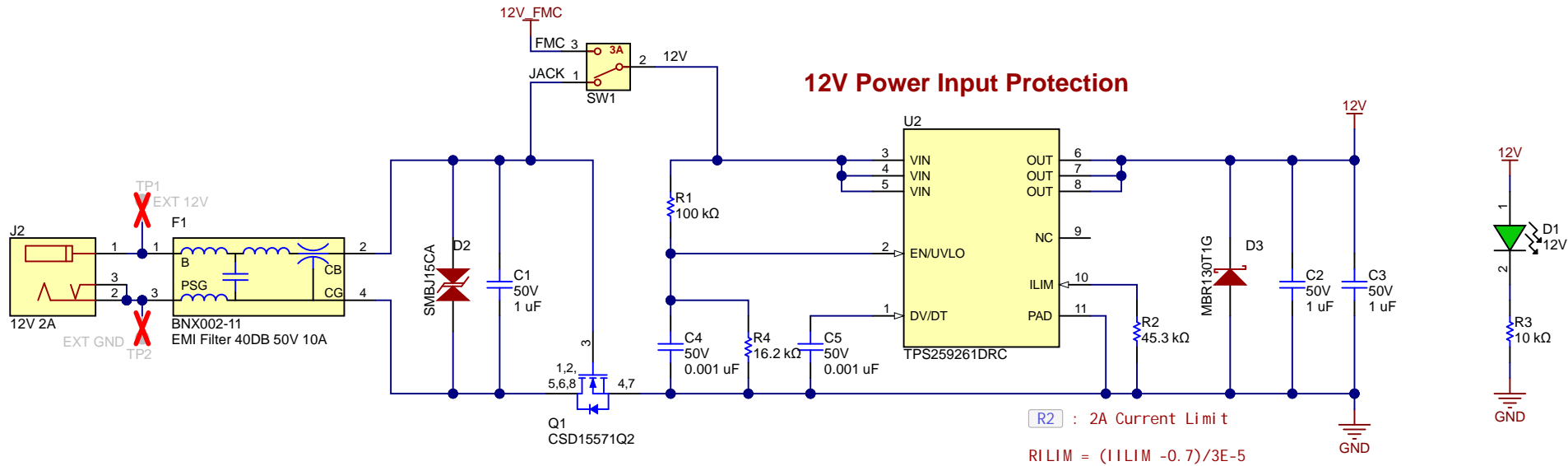
Block Diagram



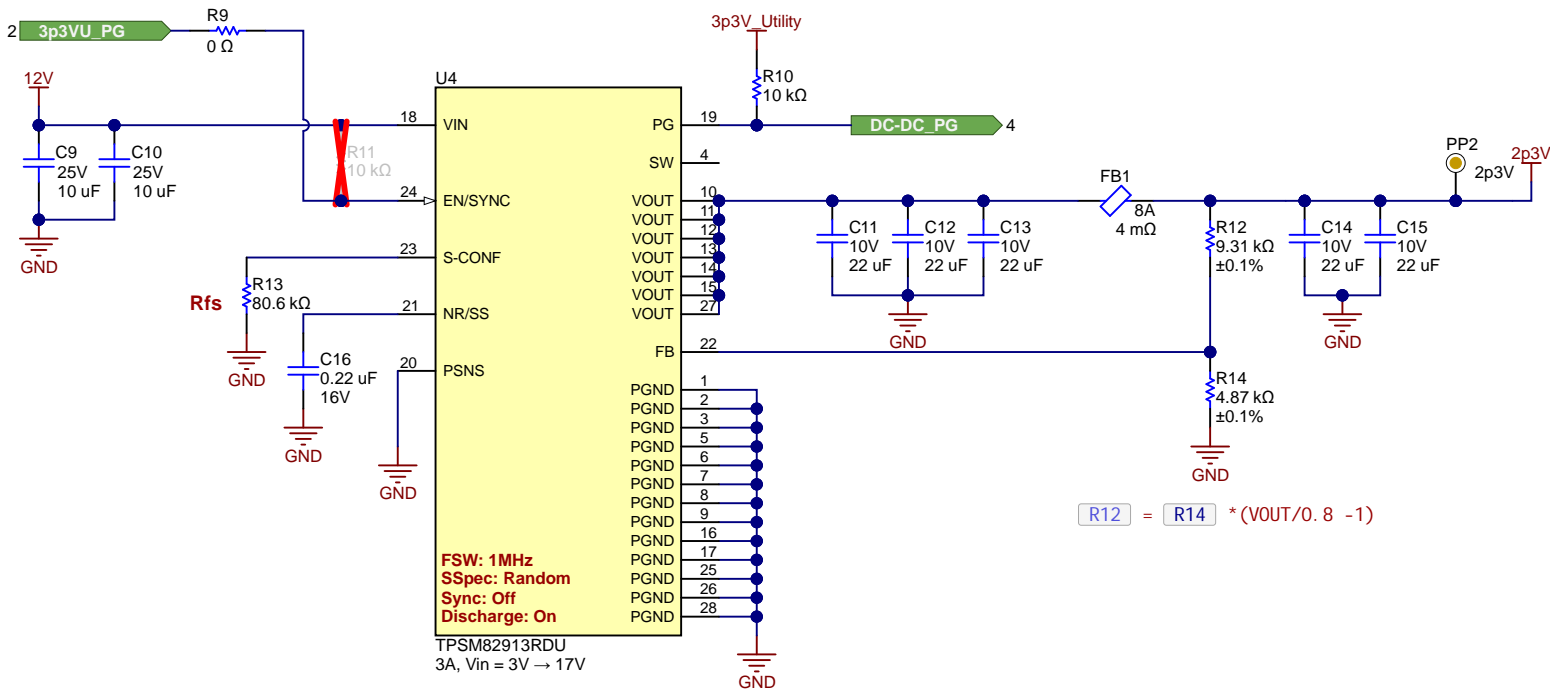
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TID #: <a href="#">N/A</a>		Project Title: <a href="#">ADC3664EVM</a>	
Number: <a href="#">DC134</a>	Rev: <a href="#">G1</a>	Sheet Title: <a href="#">Block Diagram</a>	
SVN Rev: <a href="#">1dc90055ae7bd2ce04bde6666735f1dc063</a>		Device: <a href="#">ADC3683</a>	Sheet: <a href="#">1 of 14</a>
Drawn By: <a href="#">GBR</a>		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>	

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12V Input & 3.3V Utility



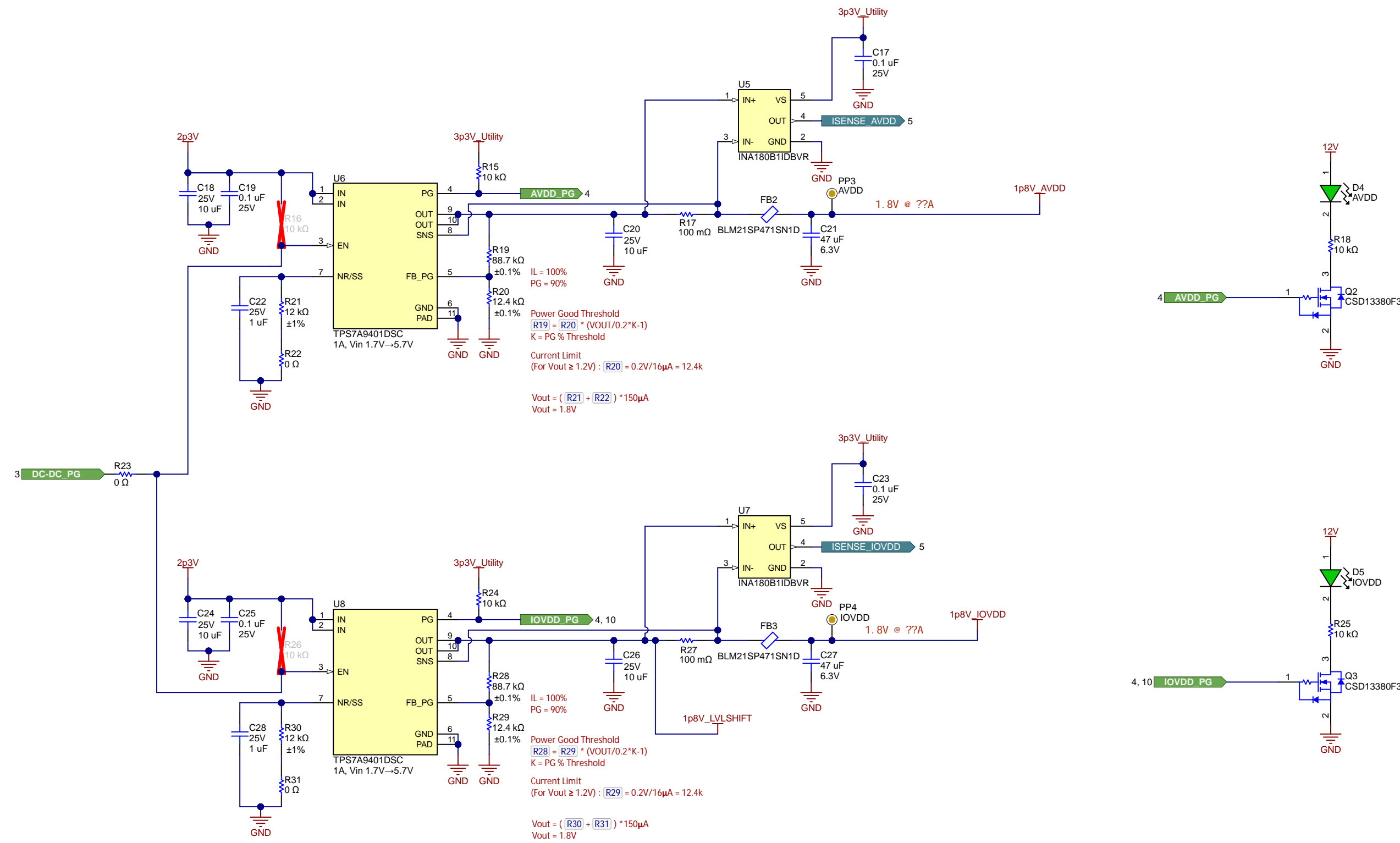
DC/DC regulator



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TID #: <a href="#">N/A</a>	Project Title: <a href="#">ADC3664EVM</a>	
Number: <a href="#">DC134</a>	Rev: <a href="#">G1</a>	Sheet Title: <a href="#">DC/DC regulator</a>
SVN Rev: <a href="#">0ac6a9ec657cede65a7630664885f9667cb8229</a>	<a href="#">ADC3683</a>	Sheet: <a href="#">3</a> of <a href="#">14</a>
Drawn By: <a href="#">GBR</a>	File: <a href="#">Power DC-DC.SchDoc</a>	Size: <a href="#">B</a>
Engineer: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	

LDOs



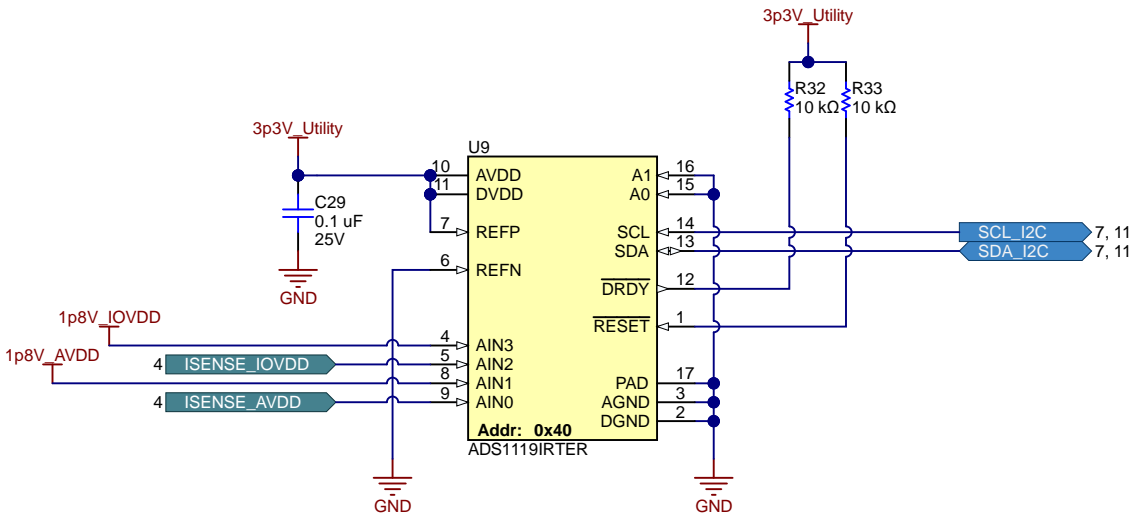
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Orderable: <a href="#">ChangeMe in variant</a>	Designed for: <a href="#">Public Release</a>	Mod. Date: 3/11/2025
TID #: <a href="#">N/A</a>	Project Title: <a href="#">ADC3664EVM</a>	
Number: <a href="#">DC134</a>	Rev: <a href="#">G1</a>	Sheet Title: <a href="#">LDOs</a>
SVN Rev: <a href="#">0ac6a9ec657cede65a7630664885f09670b8229</a>	<a href="#">ADC3683</a>	Sheet: <a href="#">4</a> of <a href="#">14</a>
Drawn By: <a href="#">GBR</a>	File: <a href="#">Power LDO.SchDoc</a>	Size: <a href="#">B</a>
Engineer: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	



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Sense ADC



ADS1119RTE Addresses		
A0	A1	Addr
GND	GND	0x40
GND	DVDD	0x41
GND	SDA	0x42
GND	SCL	0x43
DVDD	GND	0x44
DVDD	DVDD	0x45
DVDD	SDA	0x46
DVDD	SCL	0x47
SDA	GND	0x48
SDA	DVDD	0x49
SDA	SDA	0x4A
SDA	SCL	0x4B
SCL	GND	0x4C
SCL	DVDD	0x4D
SCL	SDA	0x4E
SCL	SCL	0x4F

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Orderable: <a href="#">ChangeMe in variant</a>		Designed for: <a href="#">Public Release</a>	Mod. Date: 3/11/2025
TID #: <a href="#">N/A</a>		Project Title: <a href="#">ADC3664EVM</a>	
Number: <a href="#">DC134</a>	Rev: <a href="#">G1</a>	Sheet Title: <a href="#">Sense ADC</a>	
SVN Rev: <a href="#">0ac6a9ec657cede65a7630664885f967c0b0229</a>		<a href="#">ADC3683</a>	Sheet: <a href="#">5</a> of <a href="#">14</a>
Drawn By: <a href="#">GBR</a>		File: <a href="#">Power Sense ADC.SchDoc</a>	Size: <a href="#">B</a>
Engineer: <a href="#">GBR</a>		Contact: <a href="#">http://www.ti.com/support</a>	

FTDI Control

A

B

C

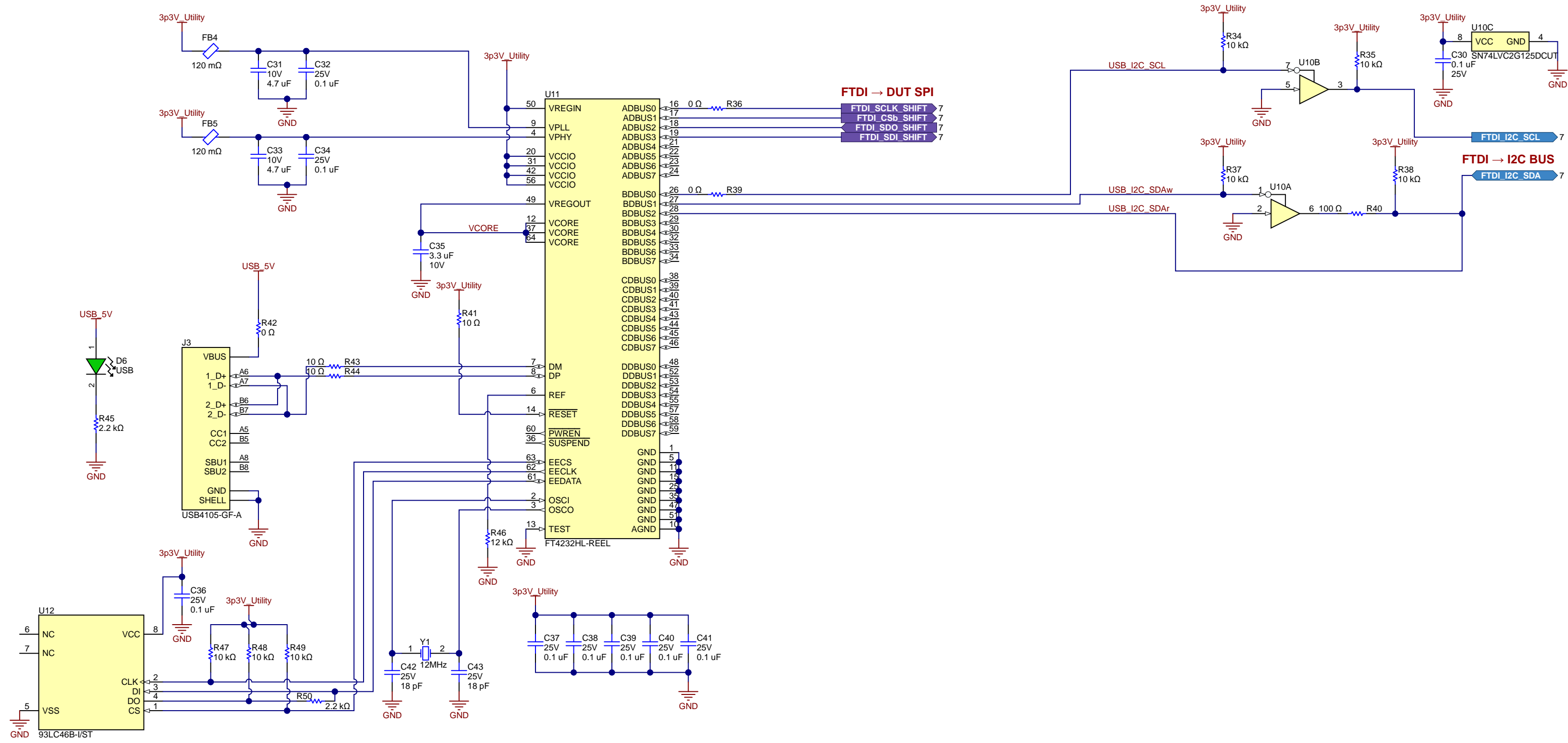
D

A

B


C

D



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Orderable: <a href="#">ChangeMe in variant</a>	Designed for: <a href="#">Public Release</a>	Mod. Date: 3/11/2025
TID #: <a href="#">N/A</a>	Project Title: <a href="#">ADC3664EVM</a>	
Number: <a href="#">DC134</a>	Rev: <a href="#">G1</a>	Sheet Title: <a href="#">FTDI Control</a>
SVN Rev: <a href="#">0ac6a9ec657cede65a76306640855966708229</a>	<a href="#">ADC3683</a>	Sheet: <a href="#">6</a> of <a href="#">14</a>
Drawn By: <a href="#">GBR</a>	File: <a href="#">USB Control FTDI.SchDoc</a>	Size: <a href="#">B</a>
Engineer: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	

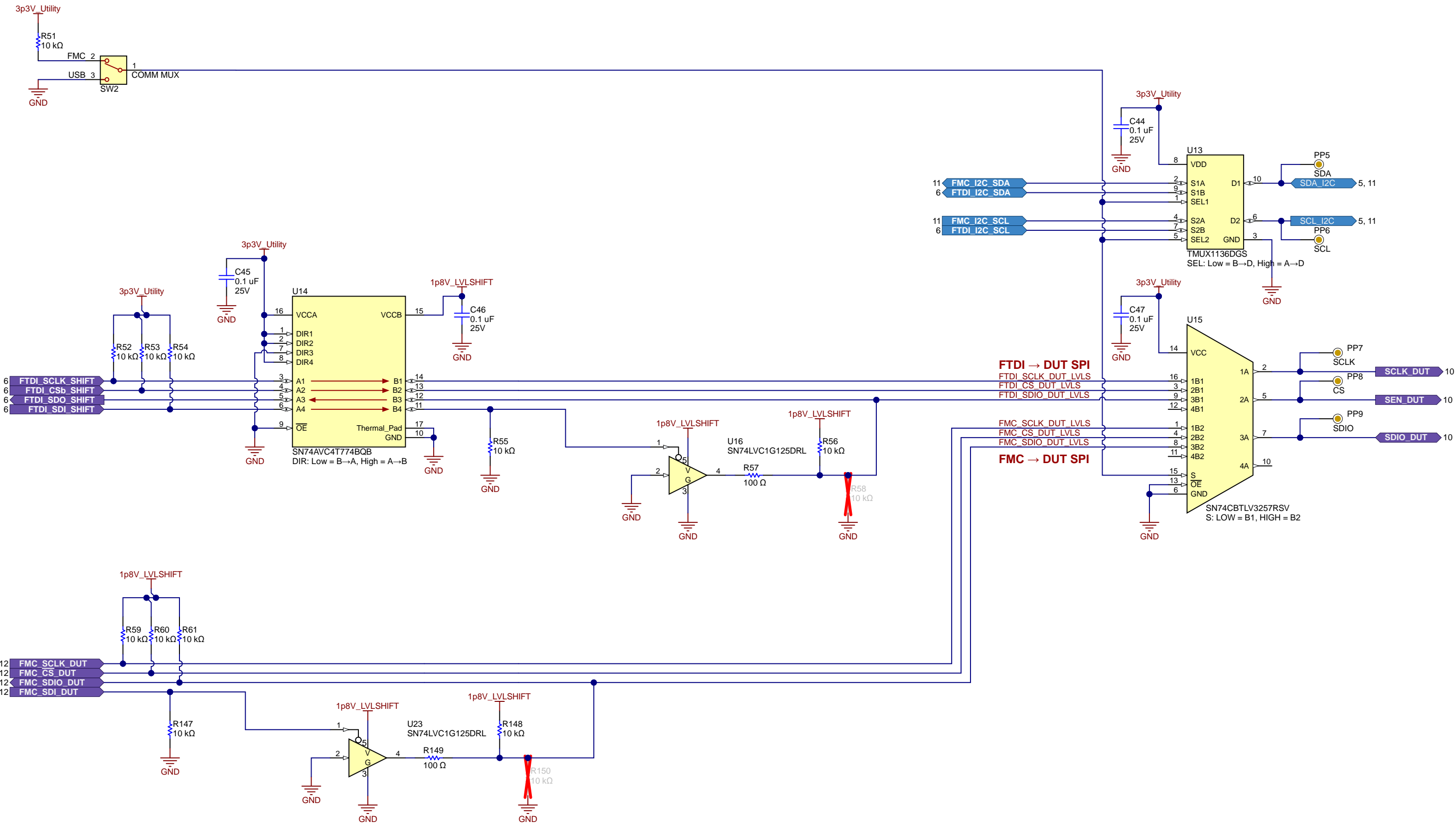


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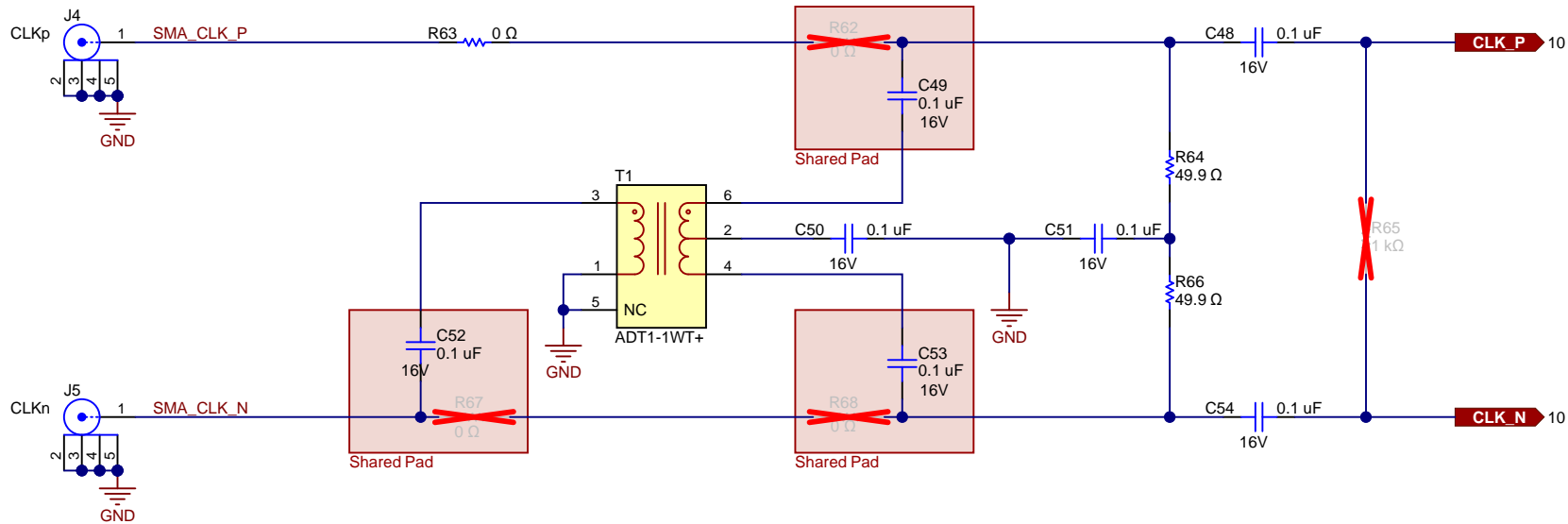
Comms Lvl Shift & Mux



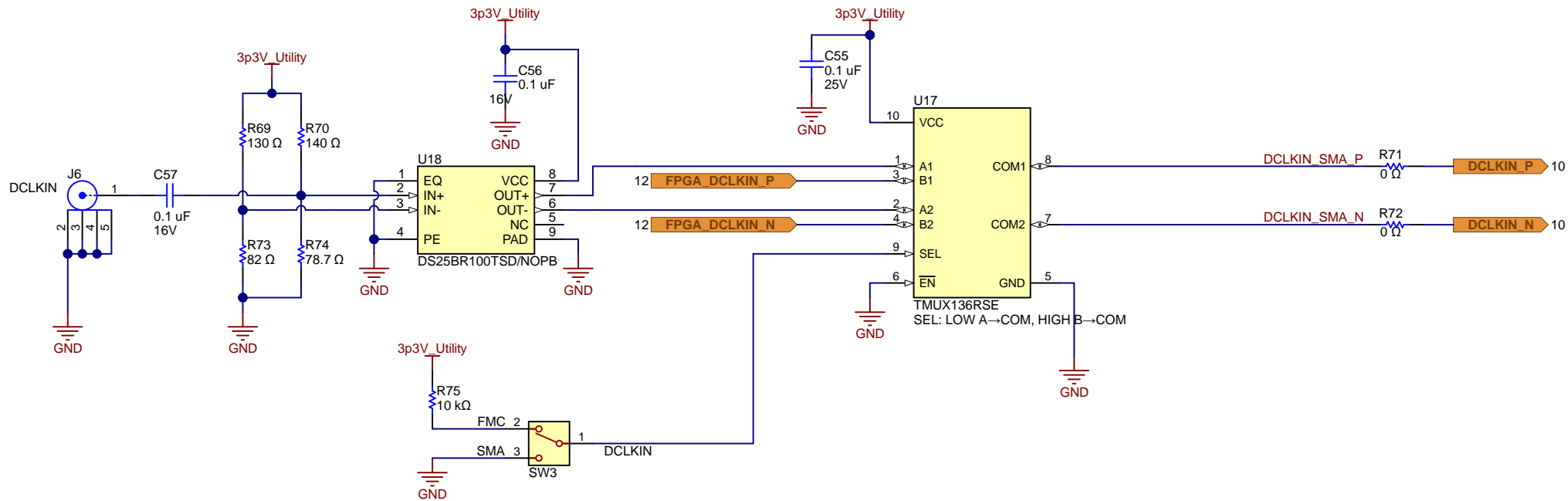
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CLK & DCLKIN

CLK



DCLKIN



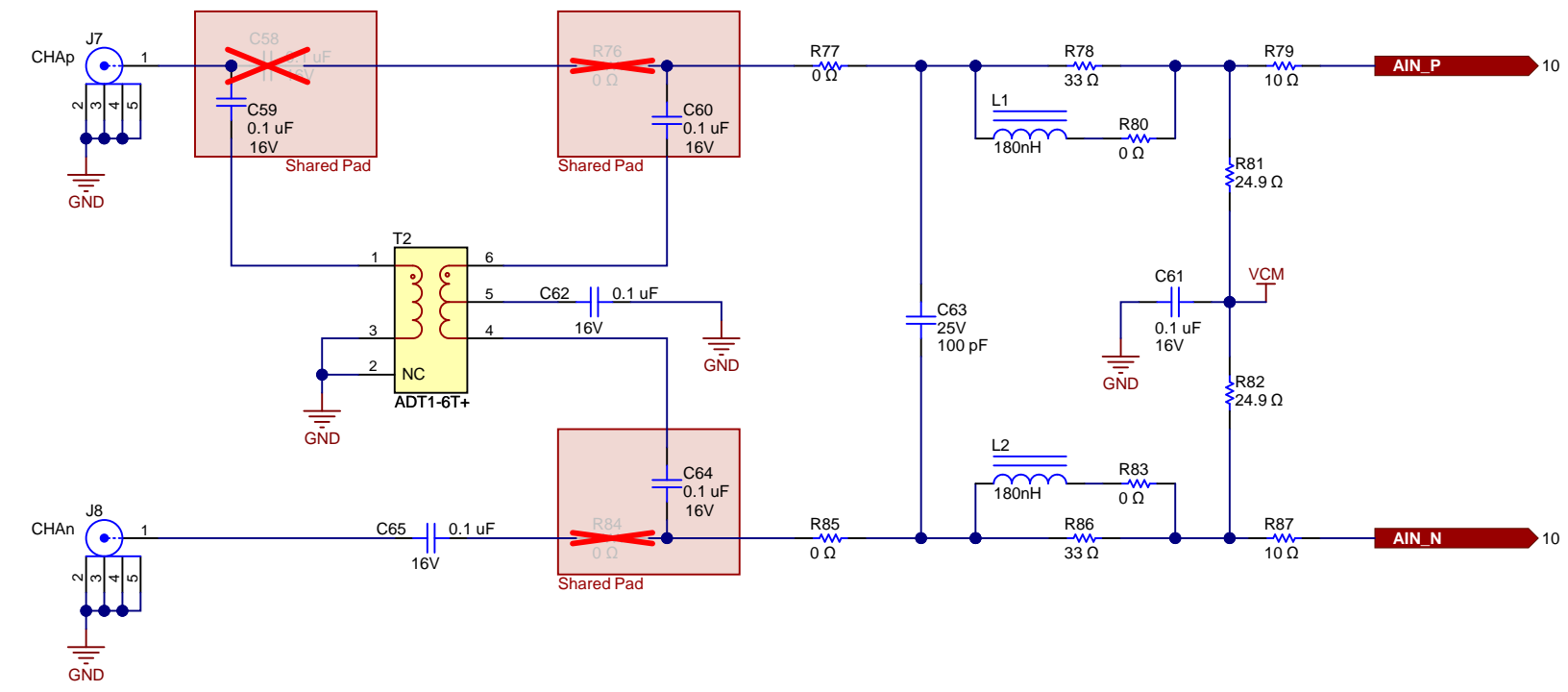
Texas Instruments and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. Texas Instruments and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular 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: <a href="#">ChangeMe in variant</a>	Designed for: <a href="#">Public Release</a>	Mod. Date: 3/27/2025
TID #: <a href="#">N/A</a>	Project Title: <a href="#">ADC3664EVM</a>	
Number: <a href="#">DC134</a>	Rev: <a href="#">G1</a>	Sheet Title: <a href="#">CLK &amp; DCLKIN</a>
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Drawn By: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	

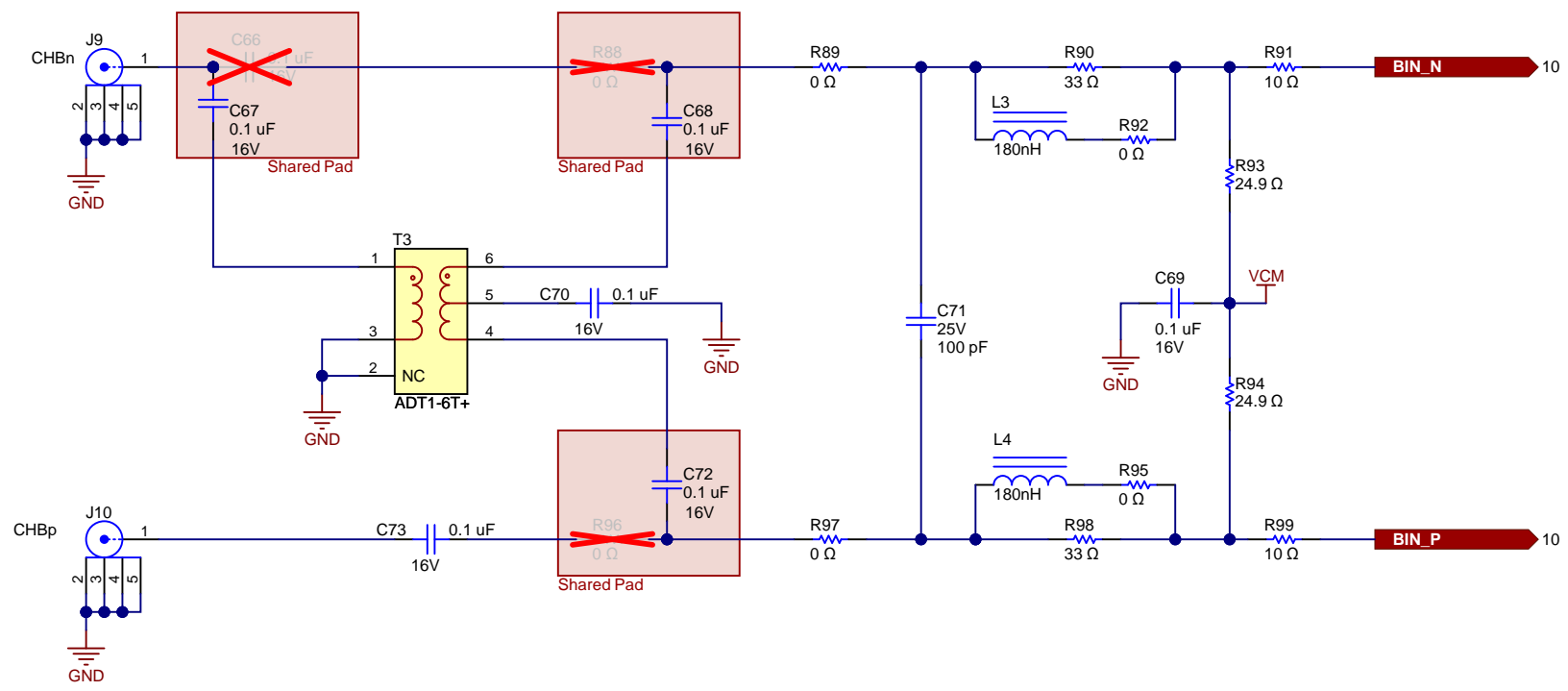


ADC Inputs

CH A



CH B



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ADC IO

A

B

C

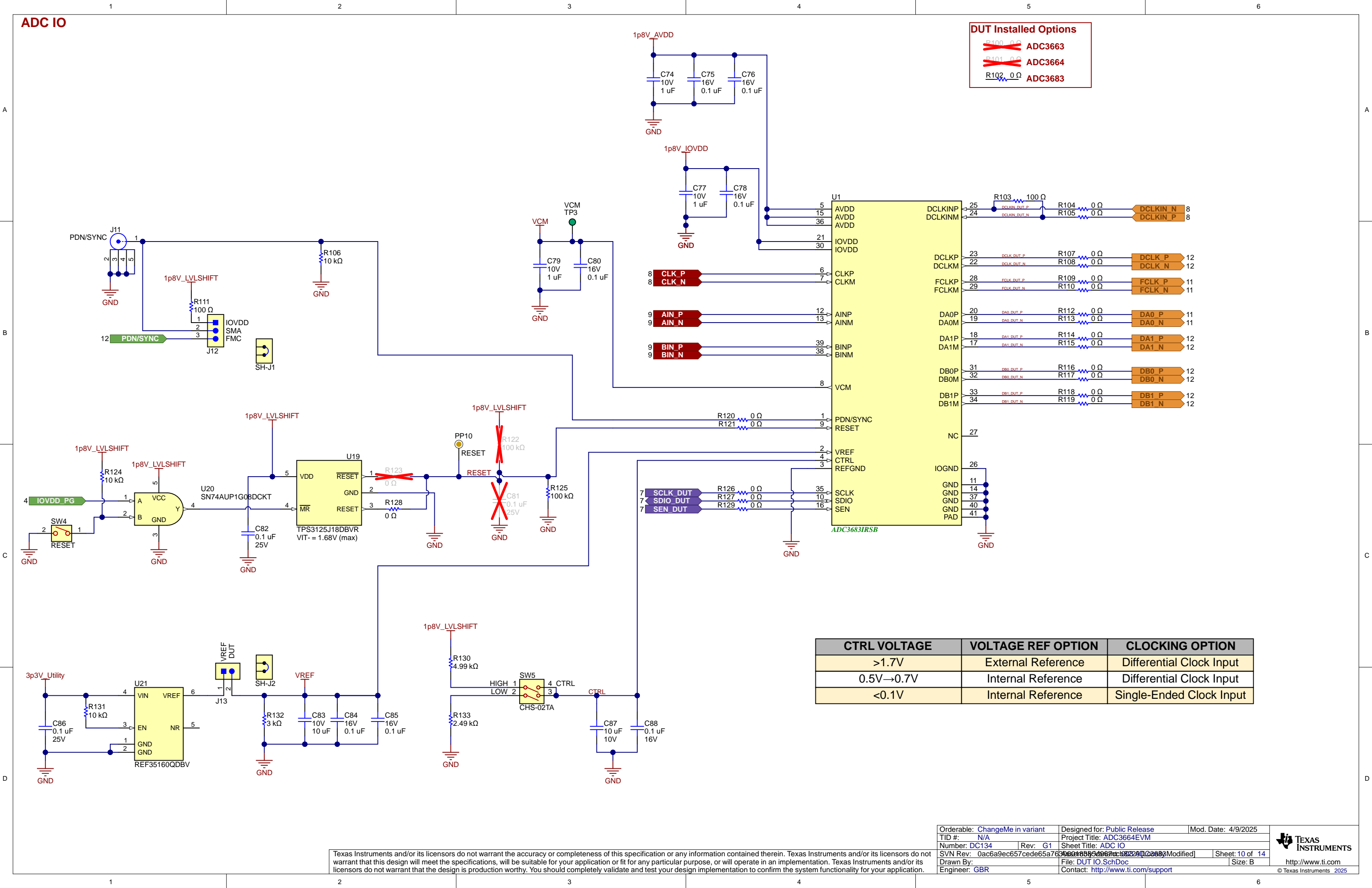
D

A

B

C

D



CTRL VOLTAGE	VOLTAGE REF OPTION	CLOCKING OPTION
>1.7V	External Reference	Differential Clock Input
0.5V→0.7V	Internal Reference	Differential Clock Input
<0.1V	Internal Reference	Single-Ended Clock Input

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Orderable: <a href="#">ChangeMe</a> in variant	Designed for: <a href="#">Public Release</a>	Mod. Date: 4/9/2025
TID #: <a href="#">N/A</a>	Project Title: <a href="#">ADC3664EVM</a>	
Number: <a href="#">DC134</a>	Rev: <a href="#">G1</a>	Sheet Title: <a href="#">ADC IO</a>
SVN Rev: <a href="#">0ac6a9ec657cede65a76306d488954967c102291c0882</a>	Modified: <a href="#">04/09/2025 10:29:00</a>	Sheet: 10 of 14
Drawn By: <a href="#">GBR</a>	File: <a href="#">DUT IO.SchDoc</a>	Size: B
Engineer: <a href="#">GBR</a>	Contact: <a href="#">http://www.ti.com/support</a>	

FMC+ Section Rows A - E

A

B

C

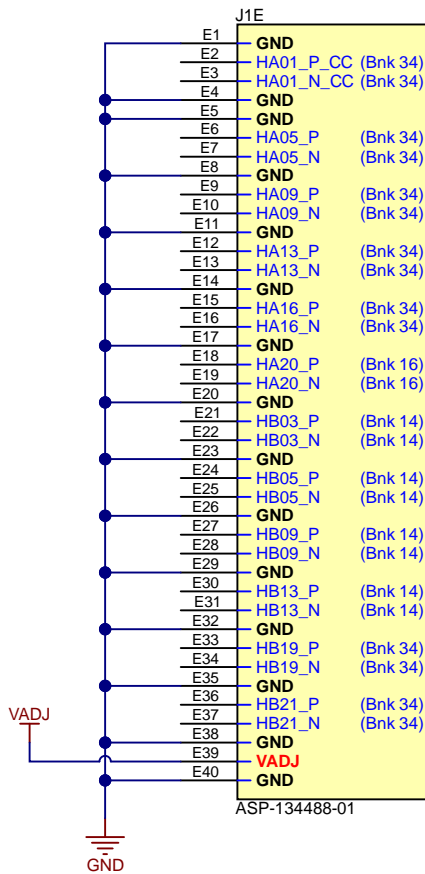
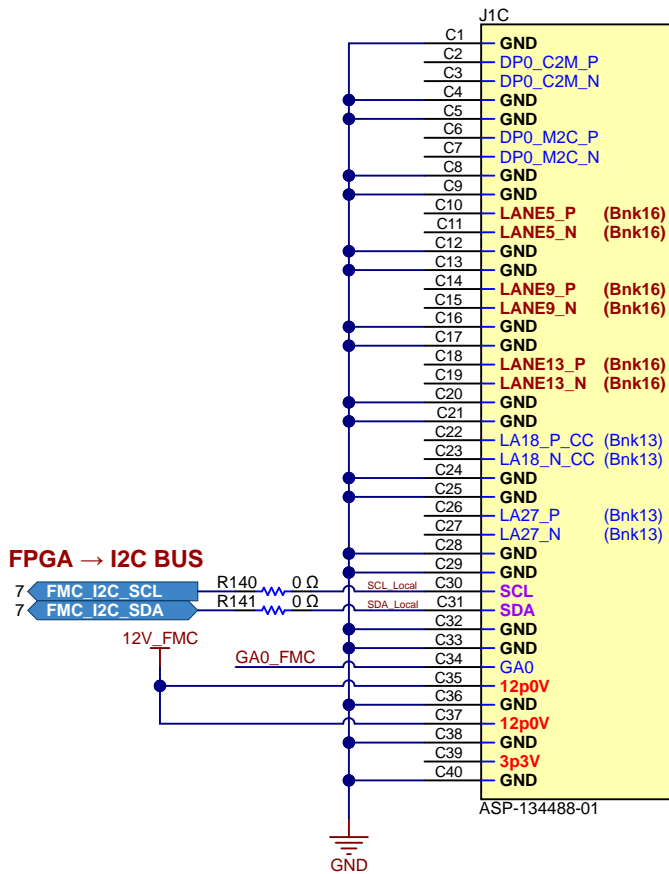
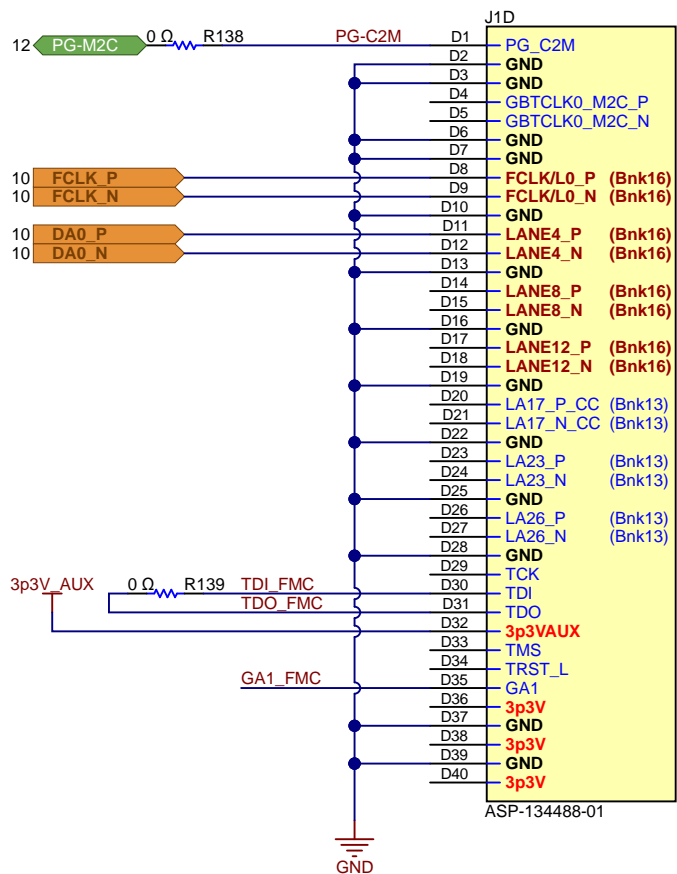
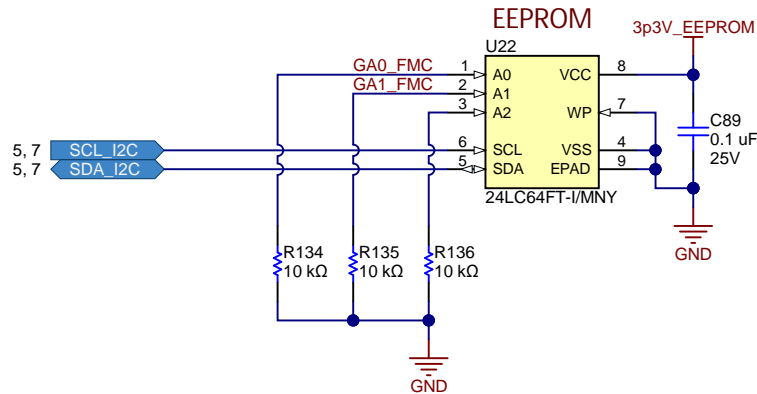
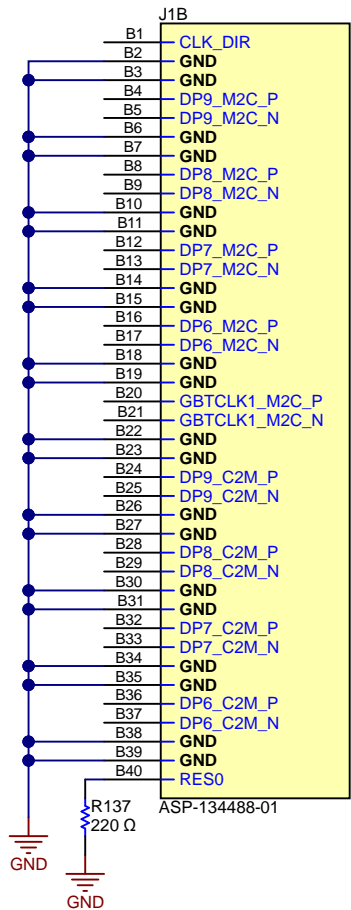
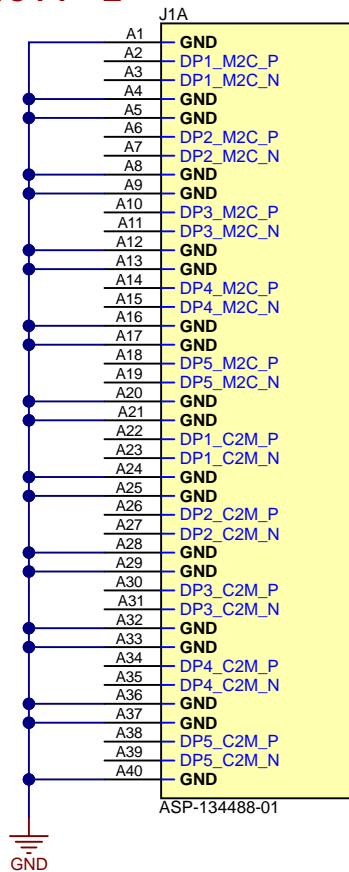
D

A

B

C

D



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 3/11/2025
TID #: N/A	Project Title: ADC3664EVM	
Number: DC134	Rev: G1	Sheet Title: FMC+ Section Rows A - E
SVN Rev: 0ac6a9ec657cede65a76306640850967cb0229	ADC3683	Sheet: 11 of 14
Drawn By:	File: FMC+ Sections A-E.SchDoc	Size: B
Engineer: GBR	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	

FMC+ Section Rows F - H, J, K

A

B

C

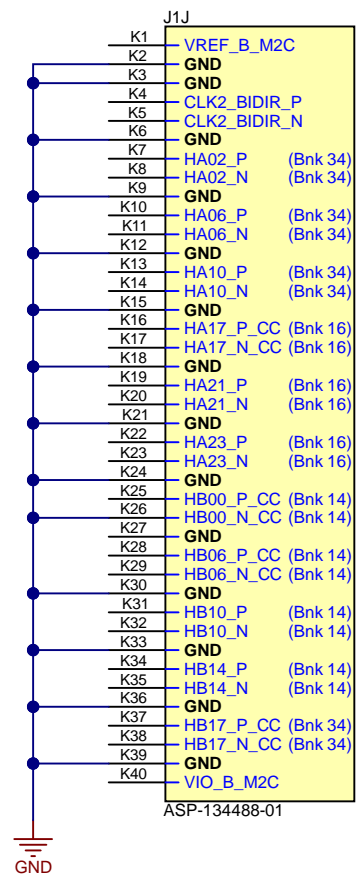
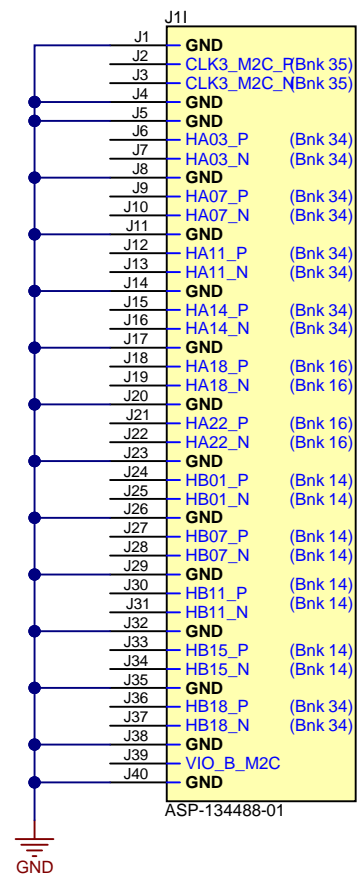
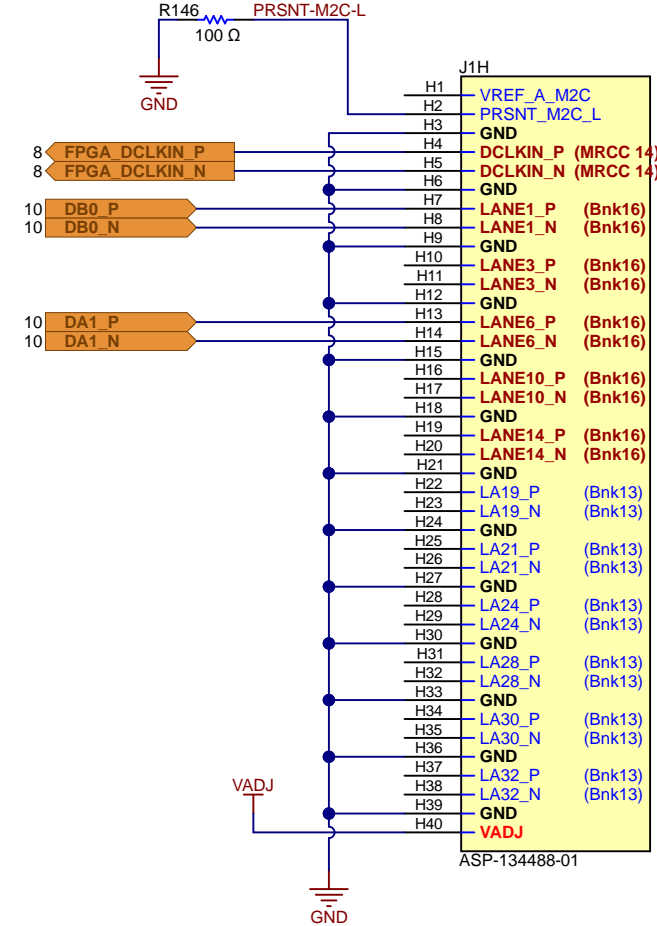
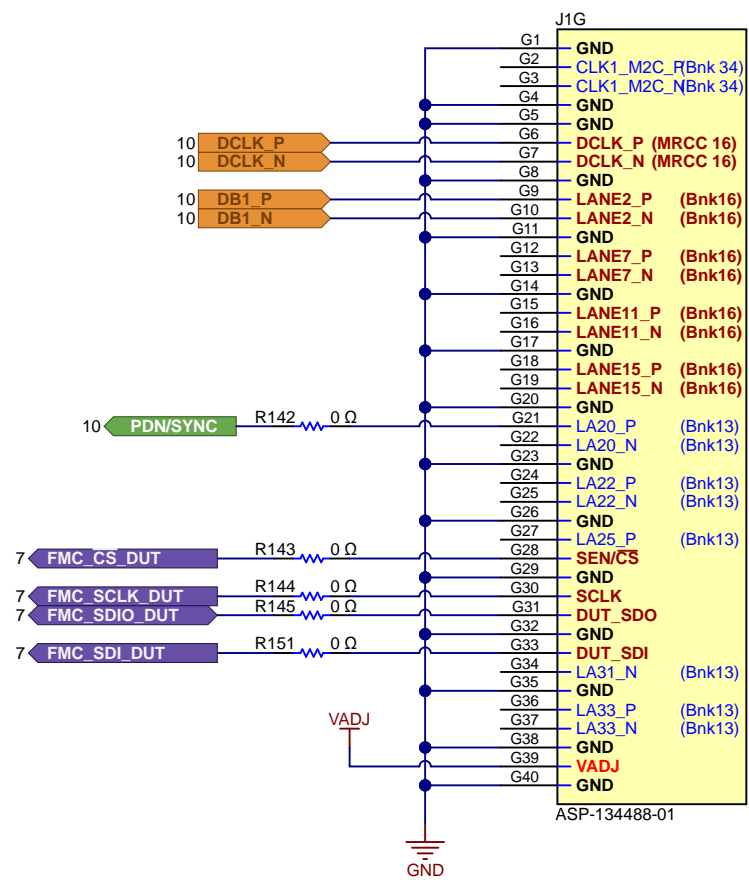
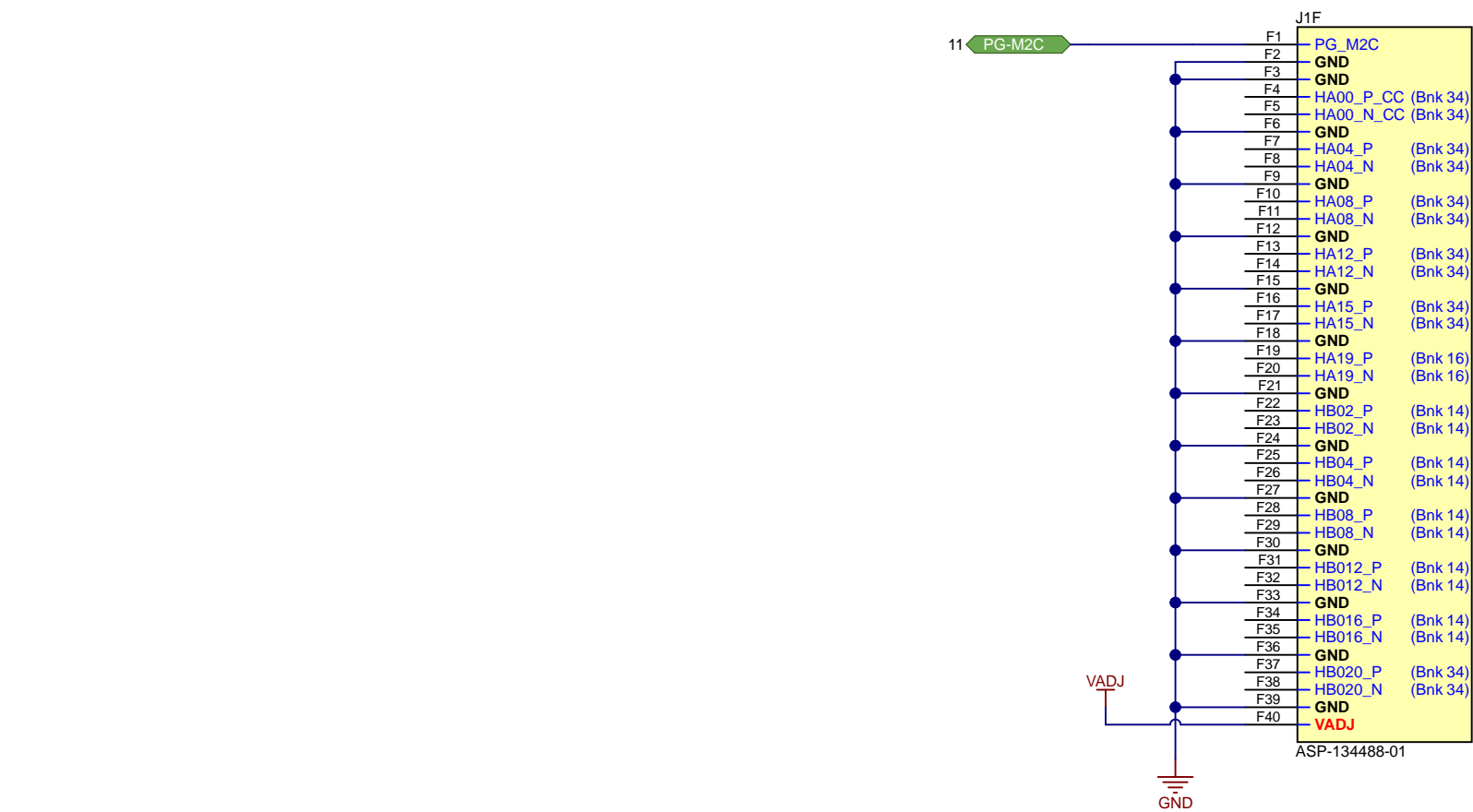
D

A

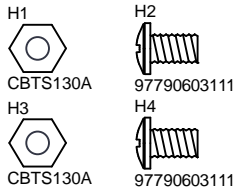
B

C

D



Hardware & Mechanicals



PCB Number: DC134

PCB Rev: G1



PCB

LOGO

FCC disclaimer



LBL1

PCB Label

THT-14-423-10

Size: 0.65"x0.20"

ZZ1

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.

-

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Orderable: <a href="#">ChangeMe in variant</a>		Designed for: <a href="#">Public Release</a>		Mod. Date: 3/11/2025	
TID #: <a href="#">N/A</a>		Project Title: <a href="#">ADC3664EVM</a>			
Number: <a href="#">DC134</a>		Rev: <a href="#">G1</a>		Sheet Title: <a href="#">Hardware &amp; Mechanicals</a>	
SVN Rev: <a href="#">0ac6a9ec657cede65a763066468b50967cb8229</a>		<a href="#">ADC3683</a>		Sheet: <a href="#">13</a> of <a href="#">14</a>	
Drawn By:		File: <a href="#">Hardware &amp; Mechanicals.SchDoc</a>		Size: B	
Engineer: <a href="#">GBR</a>		Contact: <a href="#">http://www.ti.com/support</a>			

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Rev History & Variants

Revision History

Rev	Release Date	Notes
G	Feb - 2024	Complete redesign of EVM

Variant(s)

Variant	Notes
001 (ADC3663)	U1: ADC3663  DNI: TP1, TP2, R10, R15, R23, R55, R59, R60, R63, R65, R66, R71, R80, C63, R83, R91, C71, R95, R103, R112, R108, R109
002 (ADC3664)	U1: ADC3664  DNI: TP1, TP2, R10, R15, R23, R55, R59, R60, R63, R65, R66, R71, R80, C63, R83, R91, C71, R95, R103, R112, R107, R109
003 (ADC3683)	U1: ADC3683  DNI: TP1, TP2, R10, R15, R23, R55, R59, R60, R63, R65, R66, R71, R80, C63, R83, R91, C71, R95, R103, R112, R107, R108

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