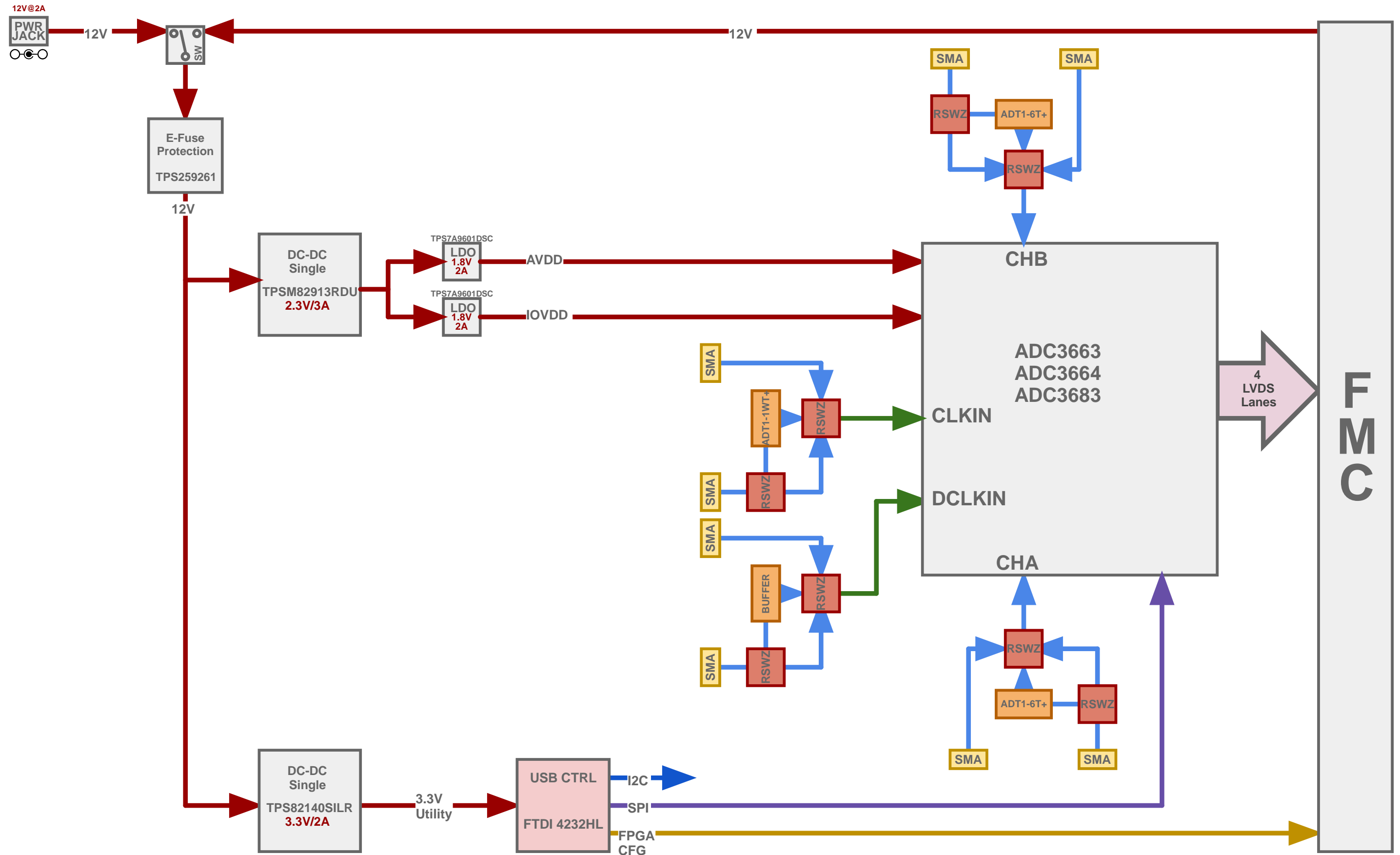



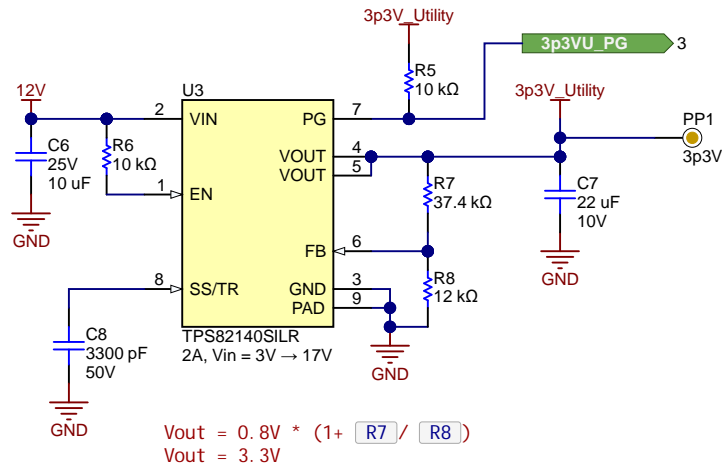
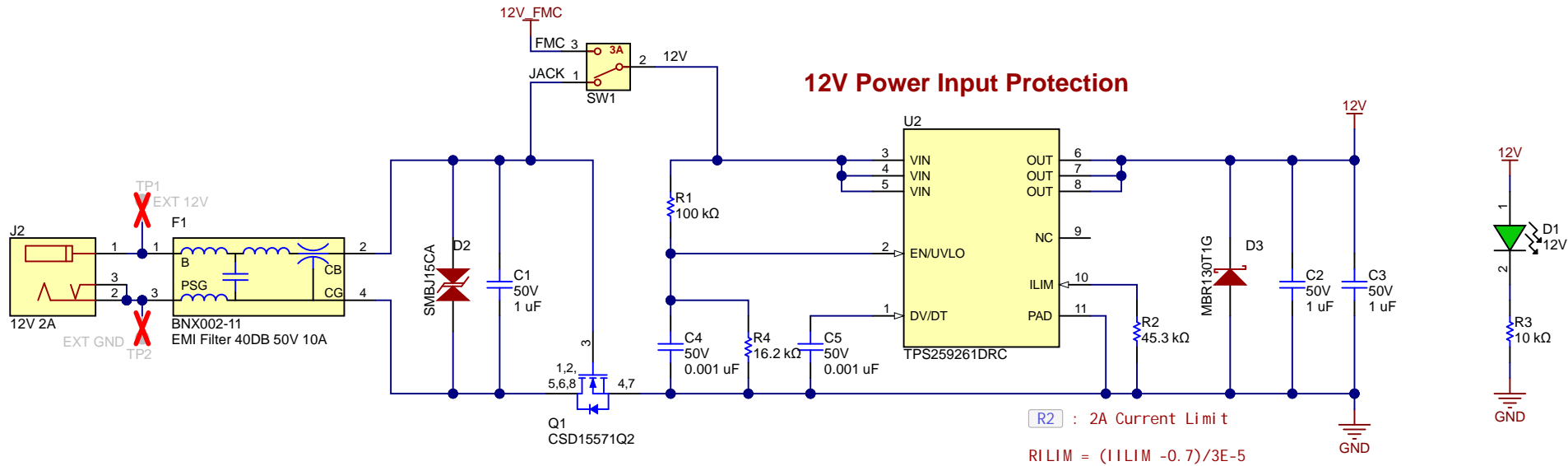
Block Diagram



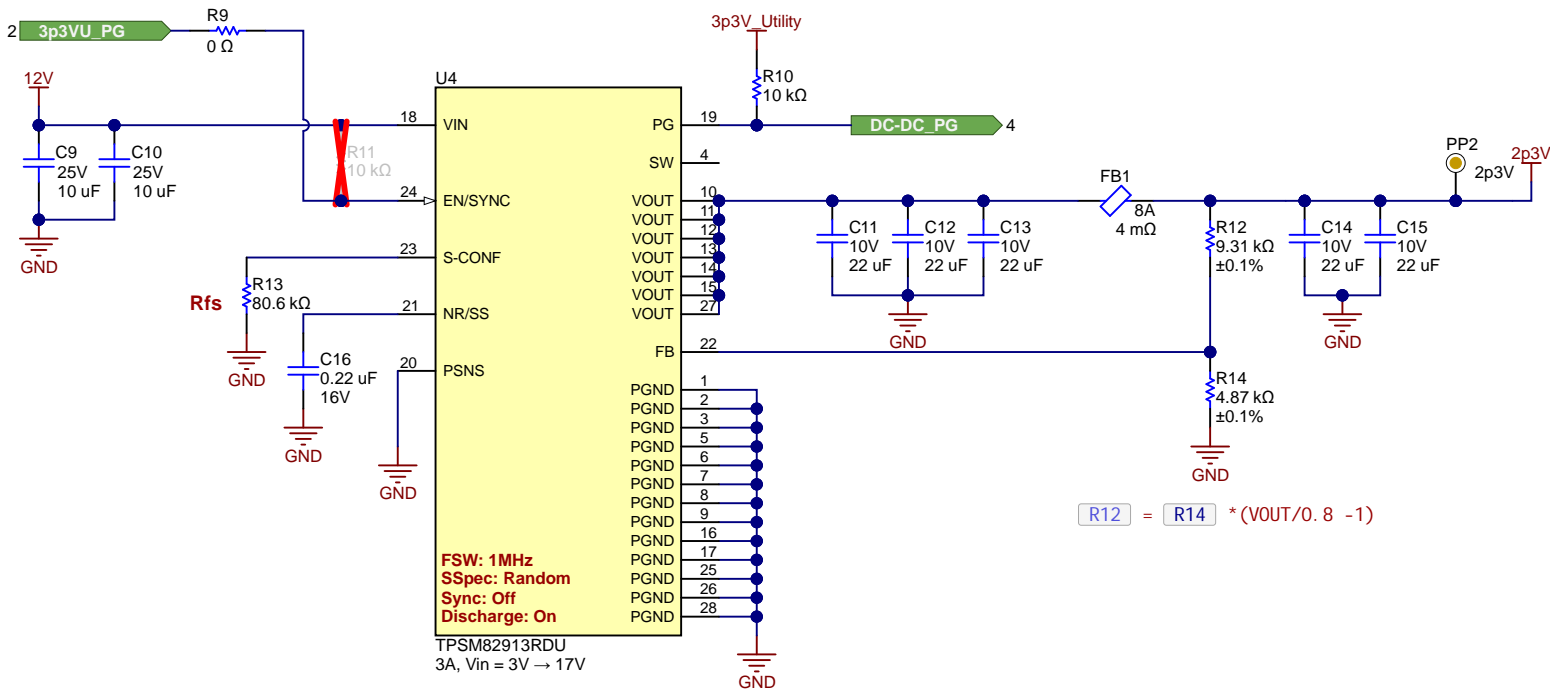
Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/15/2025	 TEXAS INSTRUMENTS
TID #: N/A	Project Title: ADC3664EVM		
Number: DC134	Rev: G1	Sheet Title: Block Diagram	
SVN Rev: 1dc90055ae7bd2ce04bd0e6c077386f1da0e2		Sheet: 1 of 14	
Drawn By:		File: Block Diagram.SchDoc	
Engineer: GBR	Contact: http://www.ti.com/support		http://www.ti.com © Texas Instruments 2025

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12V Input & 3.3V Utility



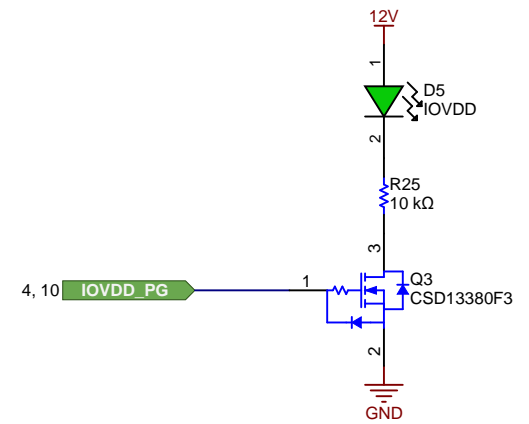
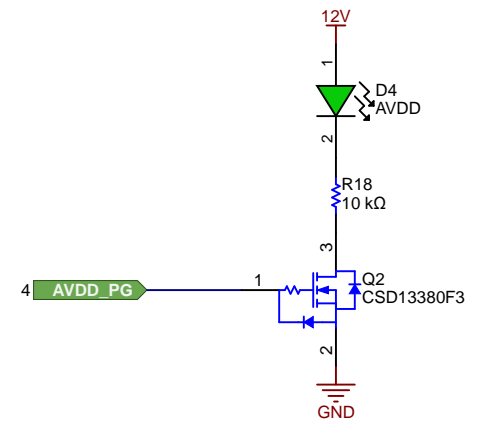
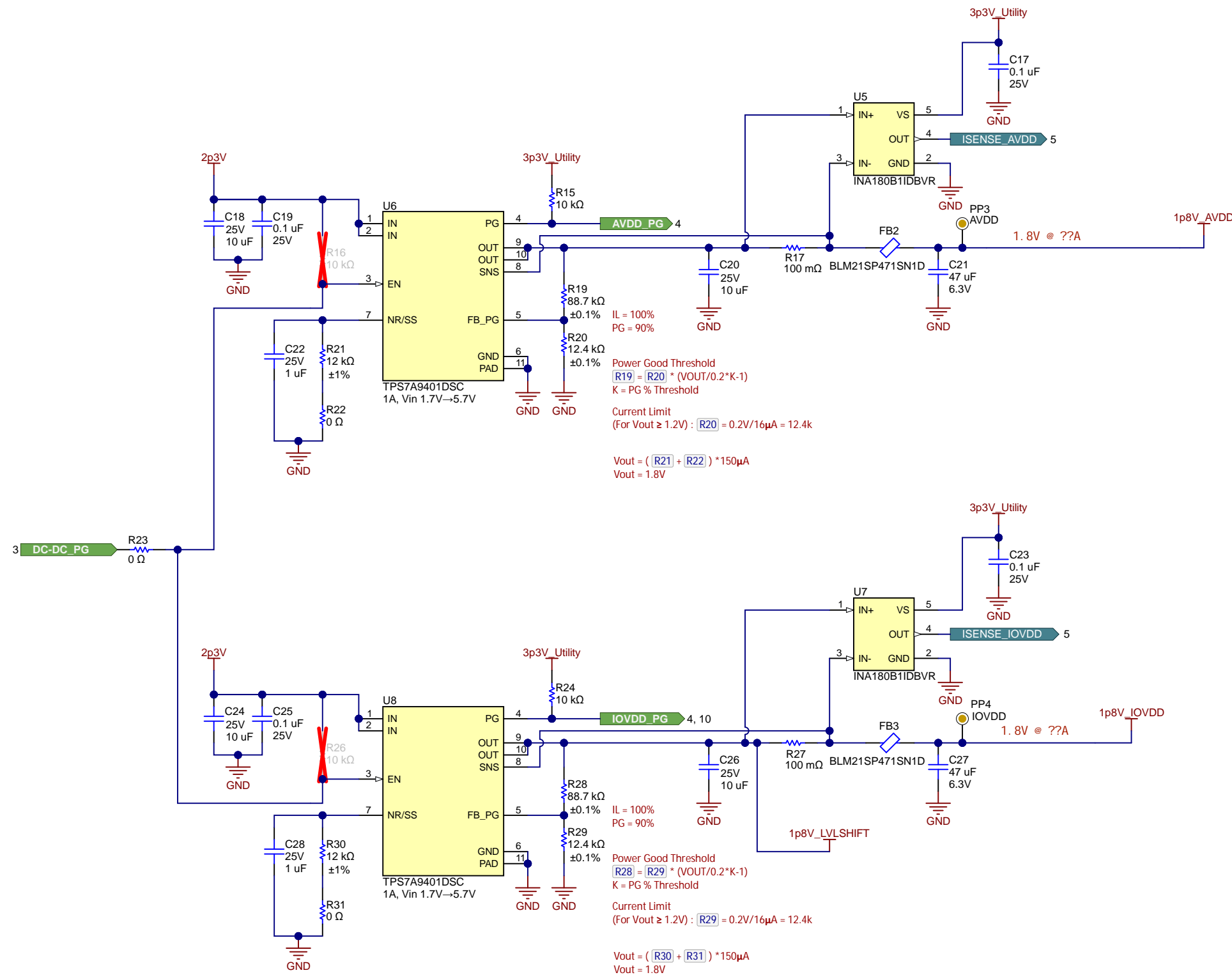
DC/DC regulator




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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: DC/DC regulator
SVN Rev: 0ac6a9ec657cede65a7630664885f9667cb8229	ADC3664	Sheet: 3 of 14
Drawn By: GBR	File: Power DC-DC.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

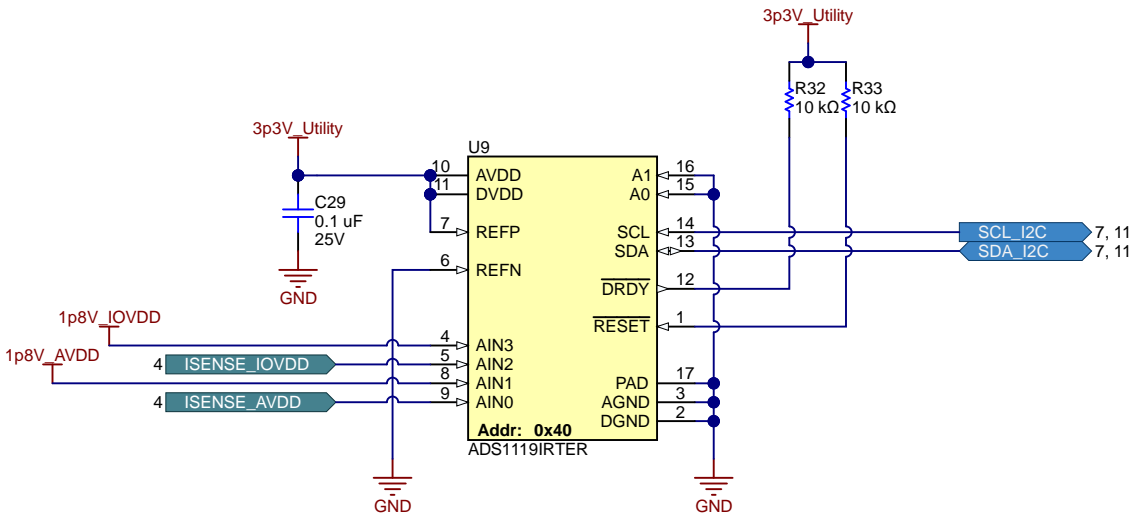
LDOs



Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 3/11/2025	 TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2025
TID #: N/A	Project Title: ADC3664EVM		
Number: DC134	Rev: G1	Sheet Title: LDOs	
SVN Rev: 0ac6a9ec657cede65a763669c8085f9677022	ADC3664	Sheet: 4 of 14	
Drawn By: GBR	File: Power LDO.SchDoc	Size: B	
Engineer: GBR	Contact: http://www.ti.com/support		

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Sense ADC

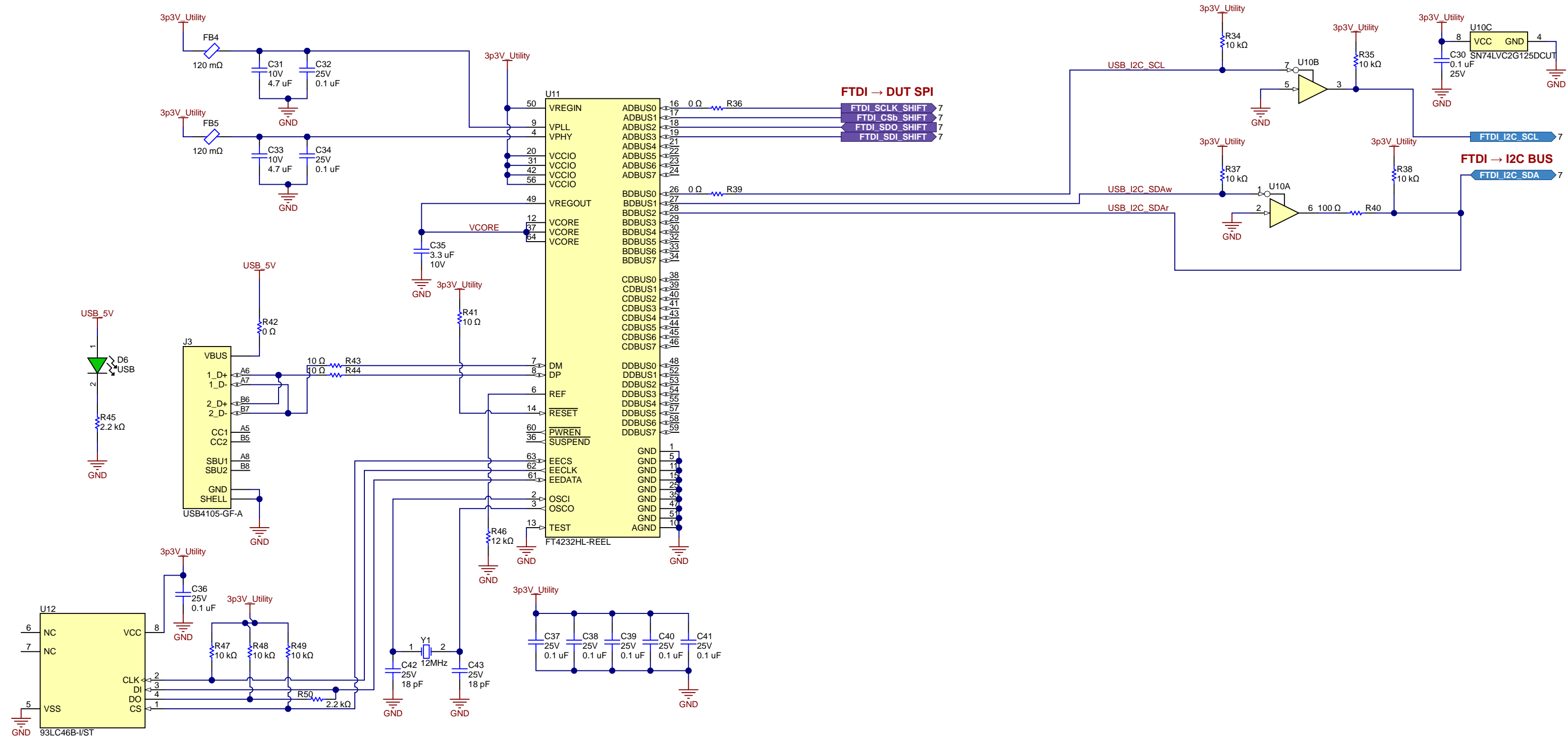


ADS1119RTE Addresses		
A0	A1	Addr
GND	GND	0x40
GND	DVDD	0x41
GND	SDA	0x42
GND	SCL	0x43
DVDD	GND	0x44
DVDD	DVDD	0x45
DVDD	SDA	0x46
DVDD	SCL	0x47
SDA	GND	0x48
SDA	DVDD	0x49
SDA	SDA	0x4A
SDA	SCL	0x4B
SCL	GND	0x4C
SCL	DVDD	0x4D
SCL	SDA	0x4E
SCL	SCL	0x4F

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Orderable: ChangeMe in variant		Designed for: Public Release	Mod. Date: 3/11/2025
TID #: N/A		Project Title: ADC3664EVM	
Number: DC134	Rev: G1	Sheet Title: Sense ADC	
SVN Rev: 0ac6a9ec657cede65a7630664885f967c0b0229		ADC3664	Sheet: 5 of 14
Drawn By: GBR		File: Power Sense ADC.SchDoc	Size: B
Engineer: GBR		Contact: http://www.ti.com/support	

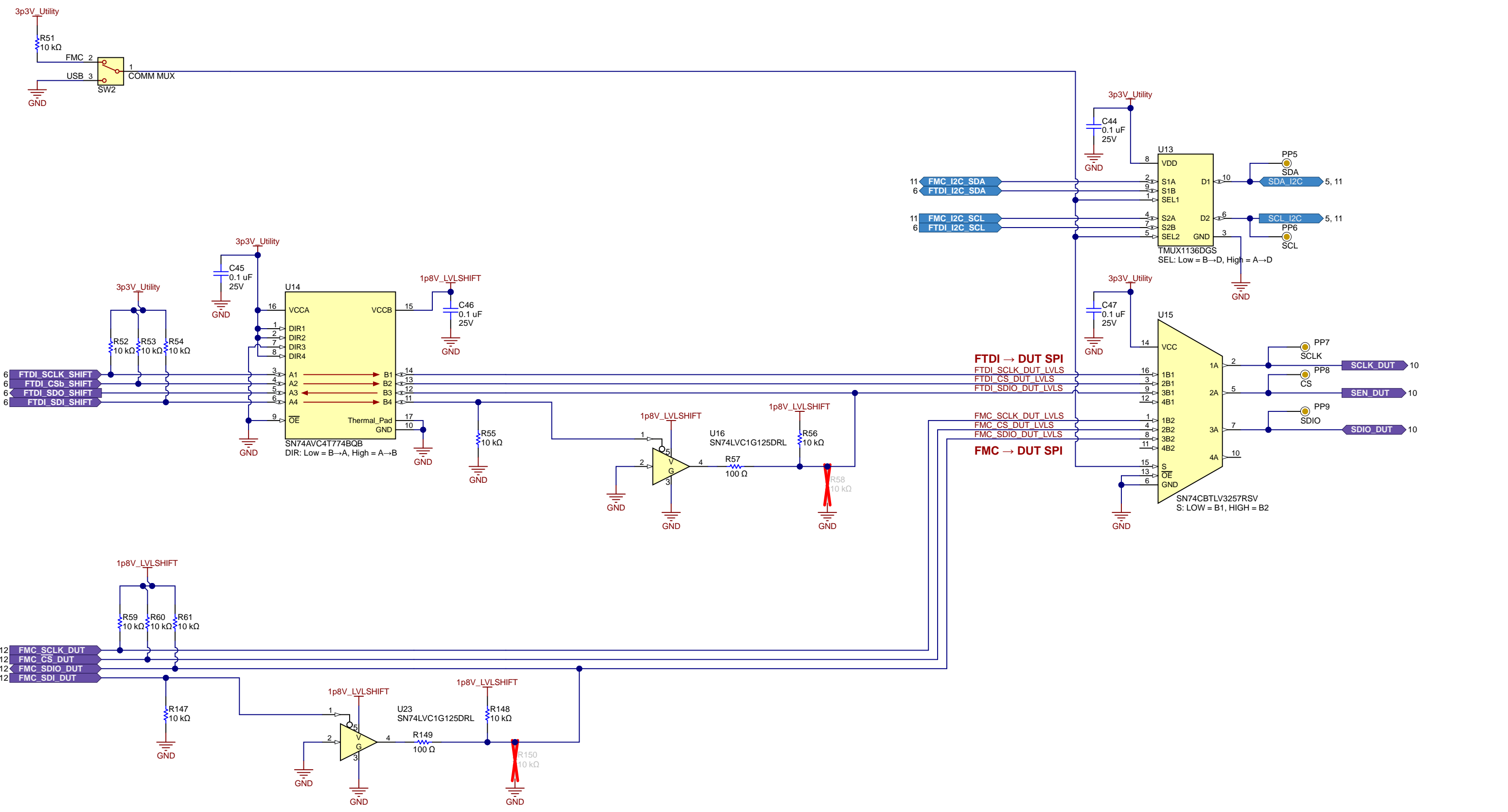
FTDI Control



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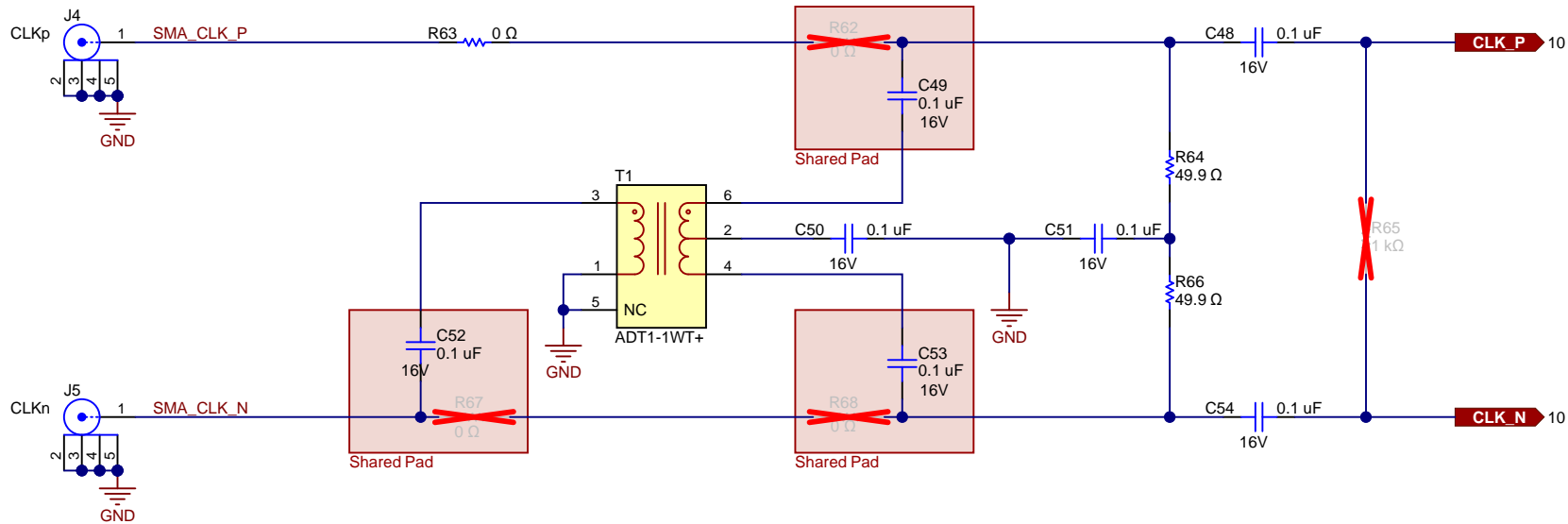
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TID #: N/A	Project Title: ADC3664EVM	
Number: DC134	Rev: G1	Sheet Title: FTDI Control
SVN Rev: 0ac6a9ec657cede65a76306640855966a0b8229ADC3664		Sheet: 6 of 14
Drawn By: GBR	File: USB Control FTDI.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

Comms Lvl Shift & Mux

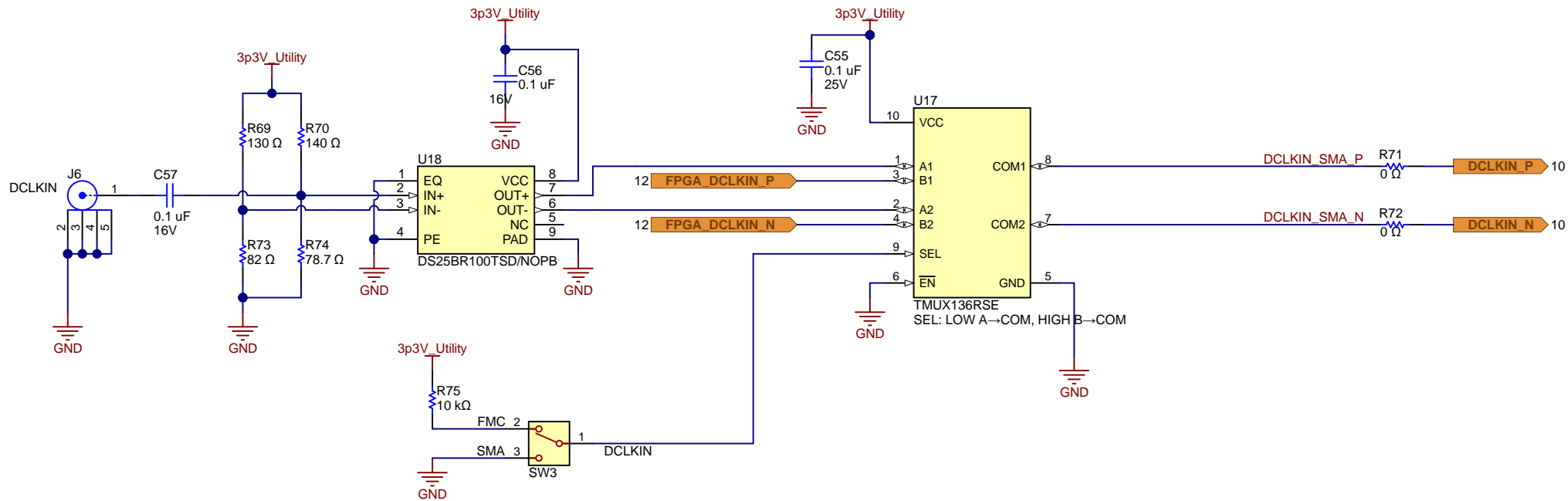


CLK & DCLKIN

CLK



DCLKIN

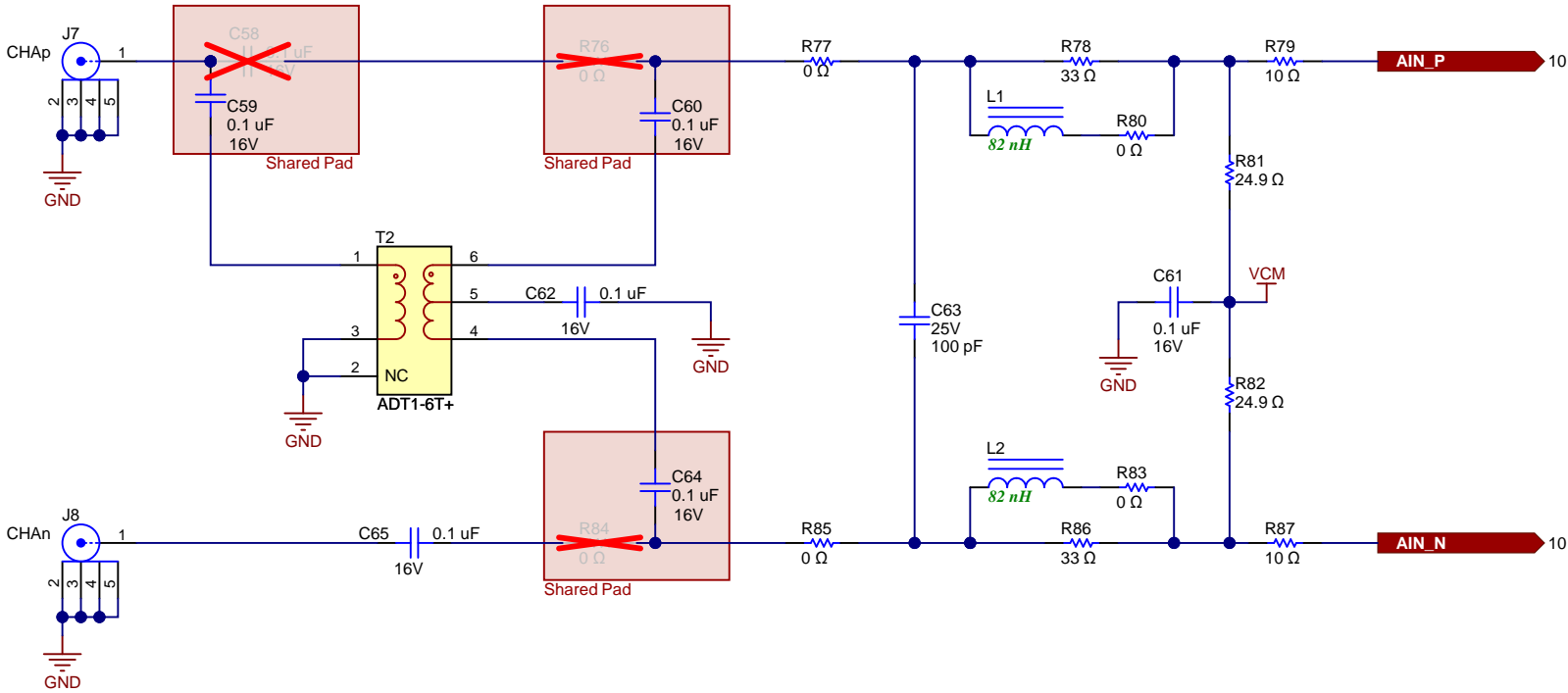


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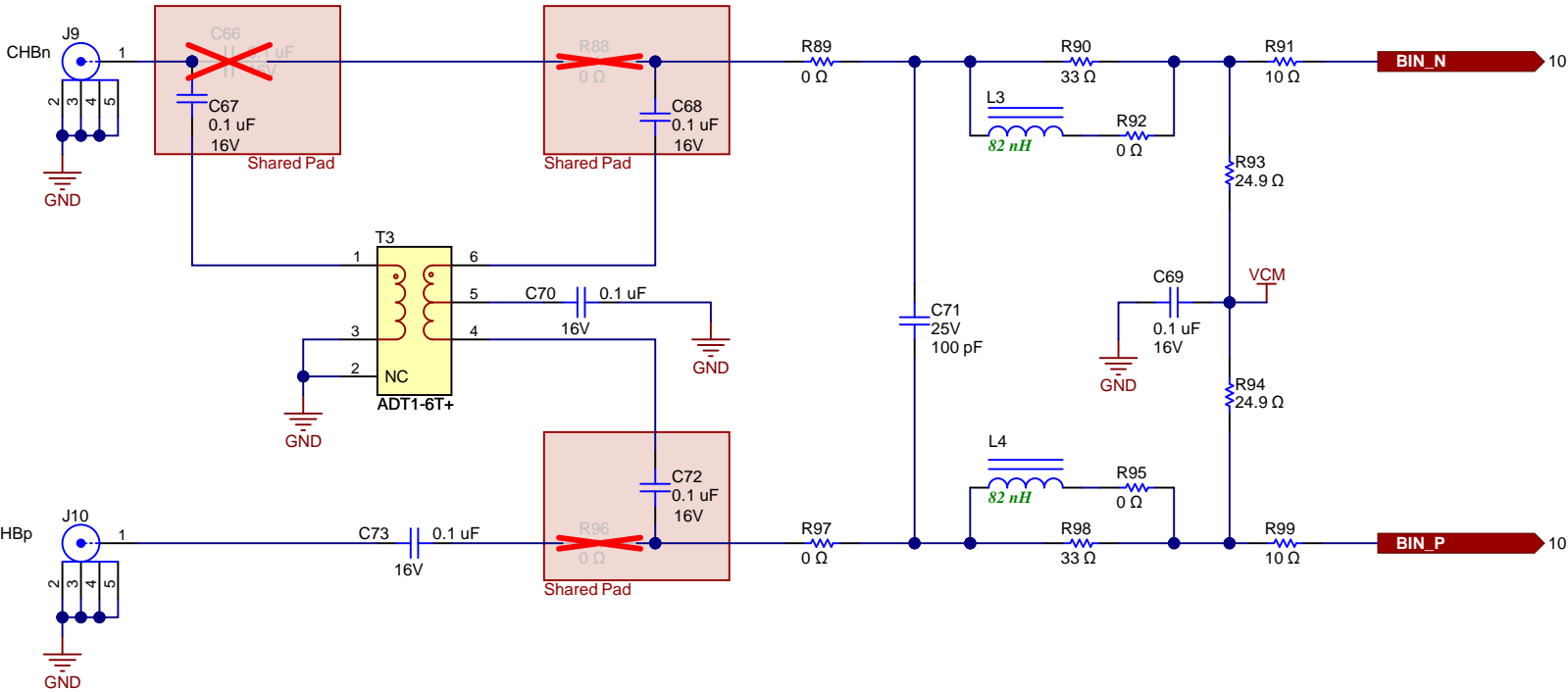
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Number: DC134	Rev: G1	Sheet Title: CLK & DCLKIN
SVN Rev: 10b7eeec73902f913bf703684166591ee220	Project: ADC3664	Sheet: 8 of 14
Drawn By: GBR	File: CLK and DCLKIN.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

ADC Inputs

CH A



CH B



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 3/29/2025
TID #: N/A	Project Title: ADC3664EVM	
Number: DC134	Rev: G1	Sheet Title: ADC Inputs
SVN Rev: 10b7eeec73902f913bf7037684116c991ee22002	Project: ADC3664	Sheet: 9 of 14
Drawn By: GBR	File: ADC Inputs.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

ADC IO

A

B

C

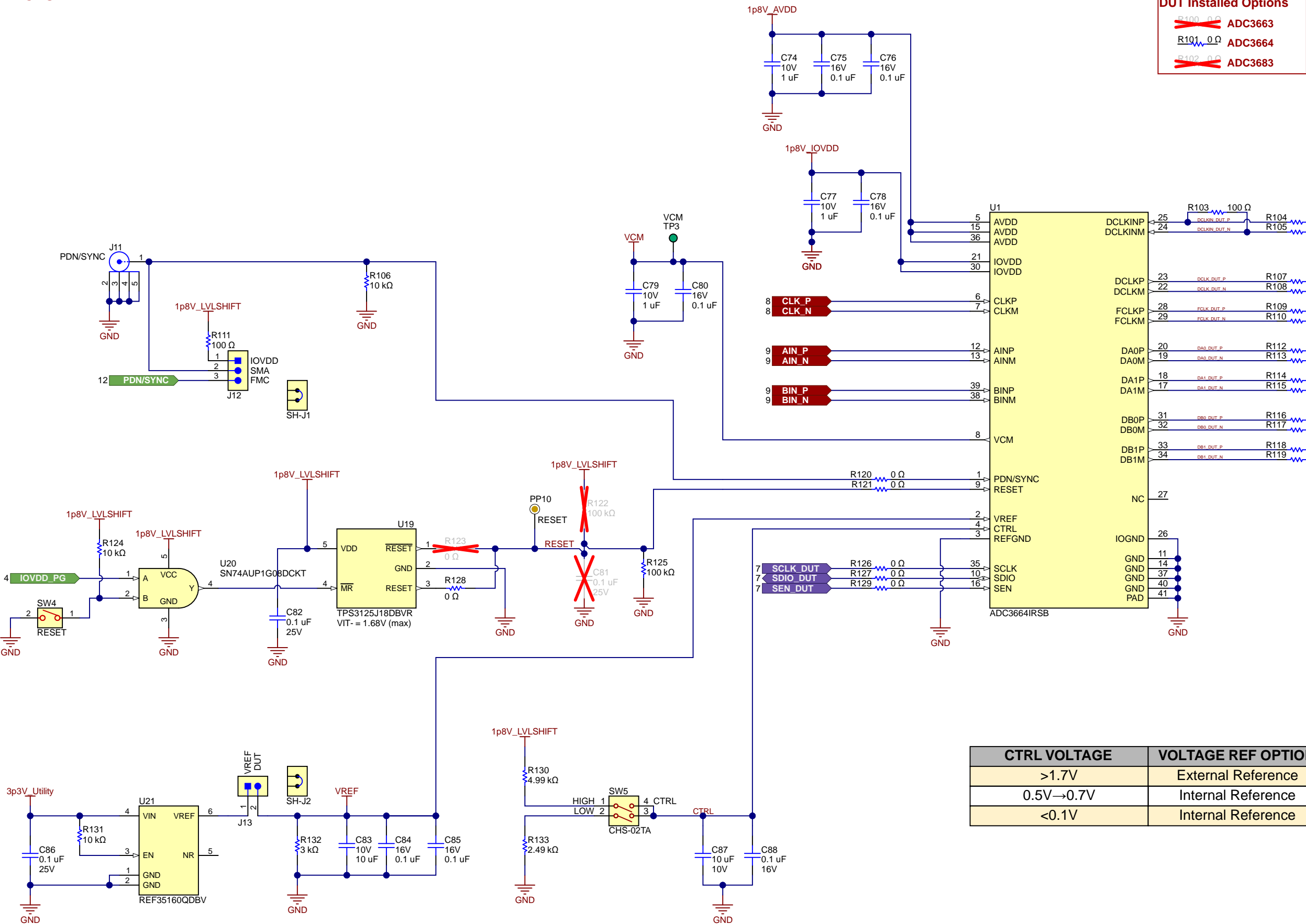
D

A

B

C

D



DUT Installed Options

- ~~R100~~ 0 Ω ADC3663
- R101 0 Ω ADC3664
- ~~R102~~ 0 Ω ADC3683

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: ChangeMe in variant	Designed for: Public Release	Mod. Date: 4/9/2025
TID #: N/A	Project Title: ADC3664EVM	
Number: DC134	Rev: G1	Sheet Title: ADC IO
SVN Rev: 0ac6a9ec657cede65a76306d488934967c102291c084	Modified: 4/9/2025	Sheet: 10 of 14
Drawn By:	File: DUT IO.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

FMC+ Section Rows A - E

A

B

C

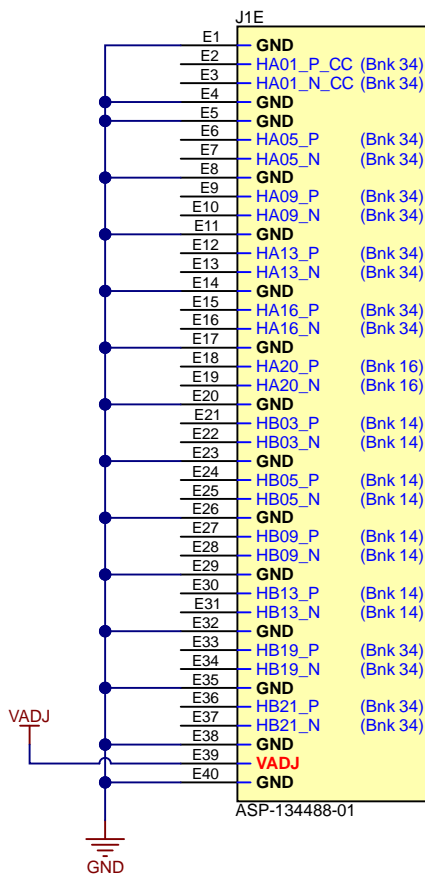
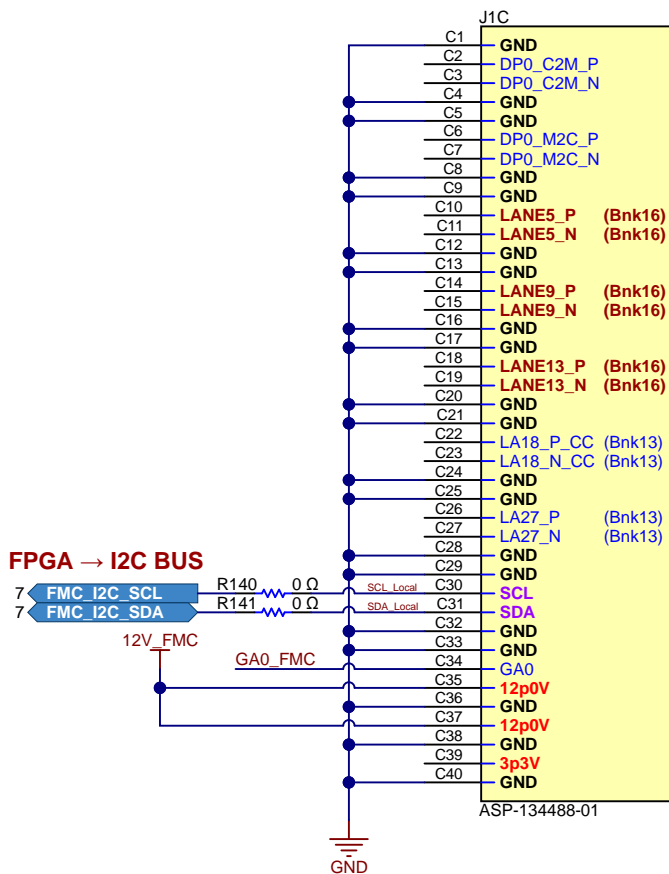
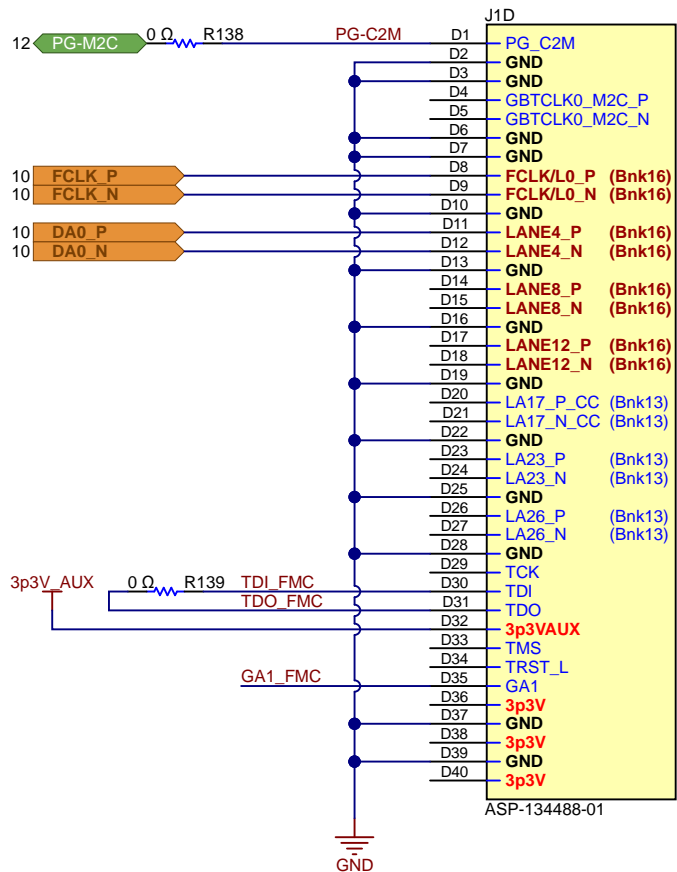
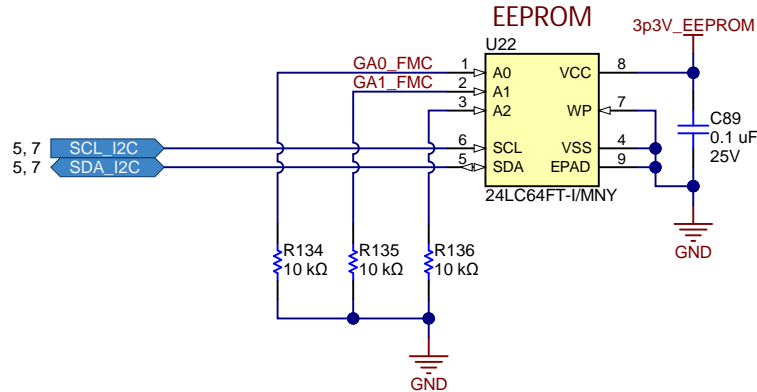
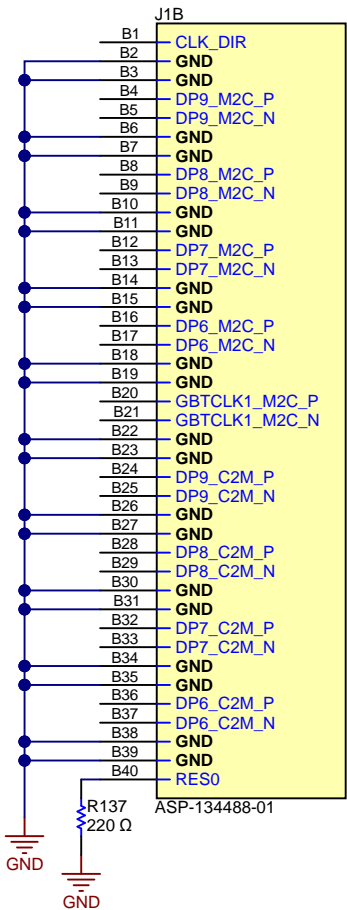
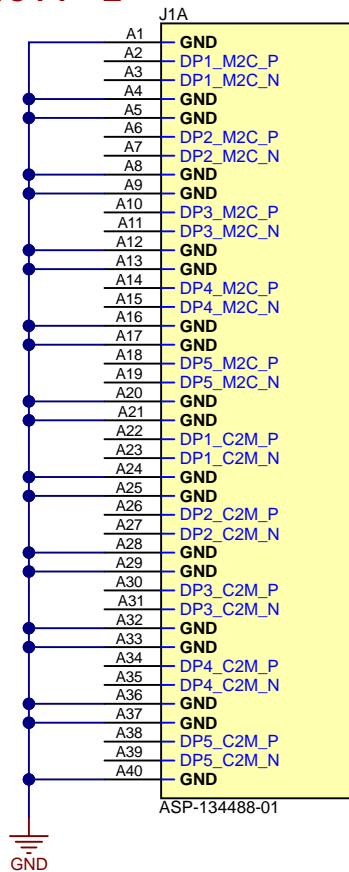
D

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	ADC3664	Sheet: 11 of 14
Drawn By:	File: FMC+ Sections A-E.SchDoc	Size: B
Engineer: GBR	Contact: http://www.ti.com/support	

FMC+ Section Rows F - H, J, K

A

B

C

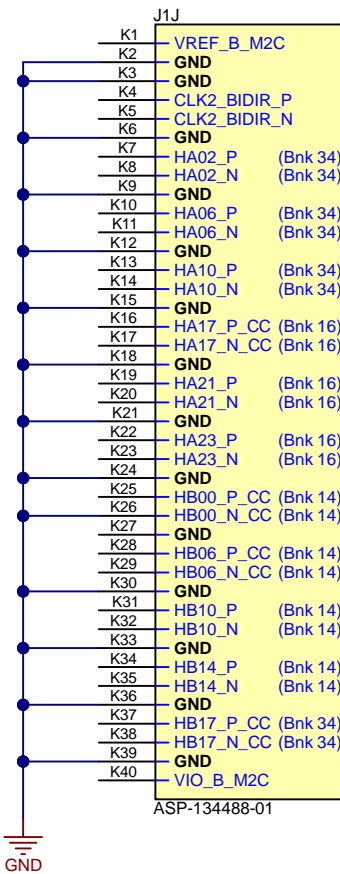
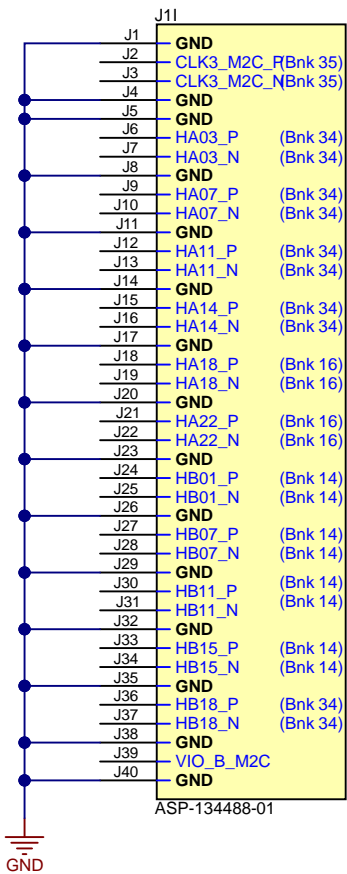
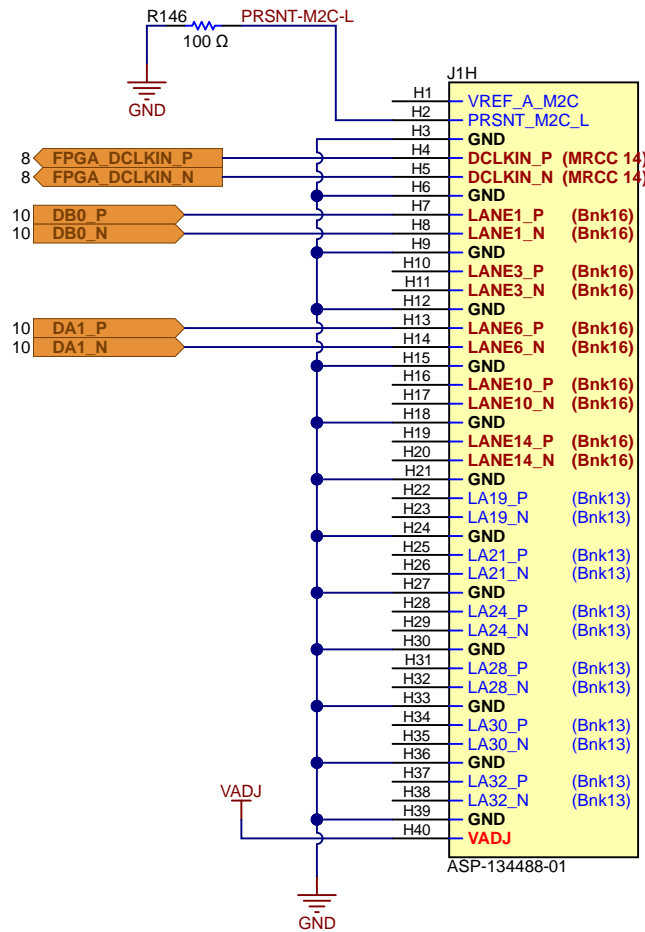
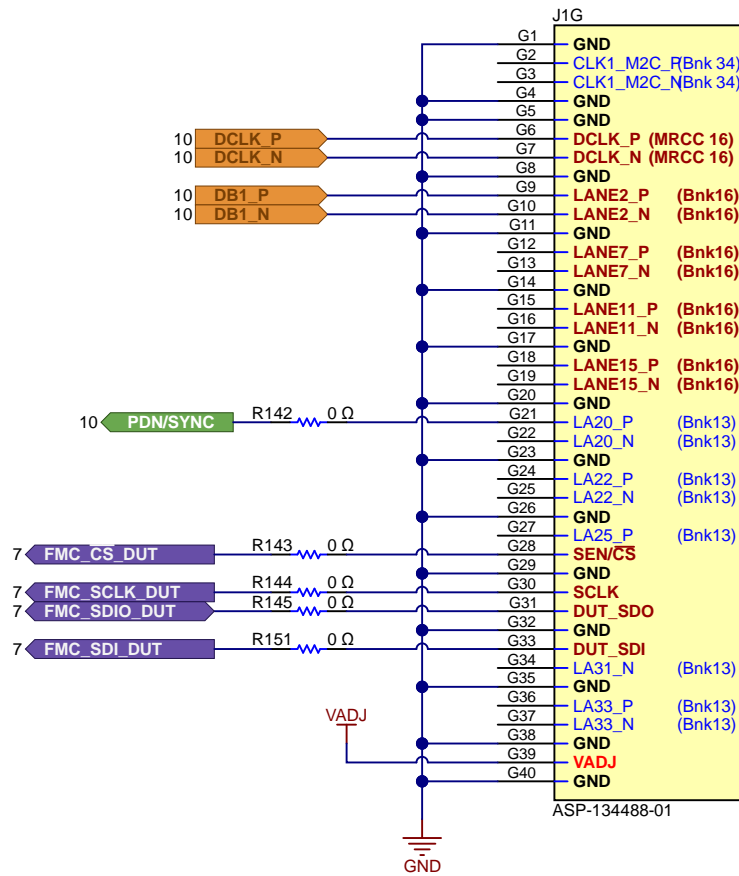
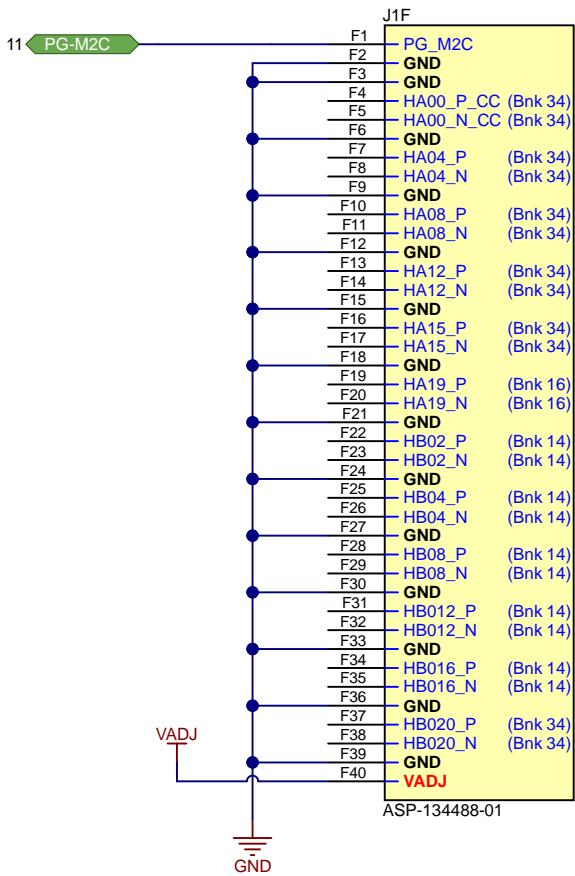
D

A

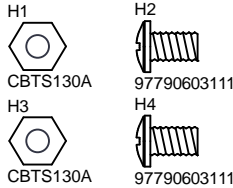
B

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: ChangeMe in variant		Designed for: Public Release		Mod. Date: 3/11/2025	
TID #: N/A		Project Title: ADC3664EVM			
Number: DC134		Rev: G1		Sheet Title: Hardware & Mechanicals	
SVN Rev: 0ac6a9ec657cede65a763066468350967cb8229		ADC3664		Sheet: 13 of 14	
Drawn By:		File: Hardware & Mechanicals.SchDoc		Size: B	
Engineer: GBR		Contact: http://www.ti.com/support			

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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