

U_PSil091_Debug_Connectors
PSIL091A_Debug_Connectors.SchDoc

U_PSil091_DisplayPort
PSIL091A_DisplayPort.SchDoc

U_PSil091_USB_Input
PSIL091A_USB_Input.SchDoc

Port A SS MUX
PSIL091A_SS_MUX.SchDoc

U_PSil091_PD_Controller
PSIL091A_PD_Controller.SchDoc

U_PSil091_Power_Supplies
PSIL091A_Power_Supplies.SchDoc

P_A
PSIL091A_Current_Sense.SchDoc

P_B
PSIL091A_Current_Sense.SchDoc

U_EVM_Hardware
PSIL091A_EVM_Hardware.SchDoc

U_PSil091_Tiva_Debug
PSIL091A_Tiva_Debug.SchDoc

Port B SS MUX
PSIL091A_SS_MUX.SchDoc

Tiva & Debug

Port A Type-C

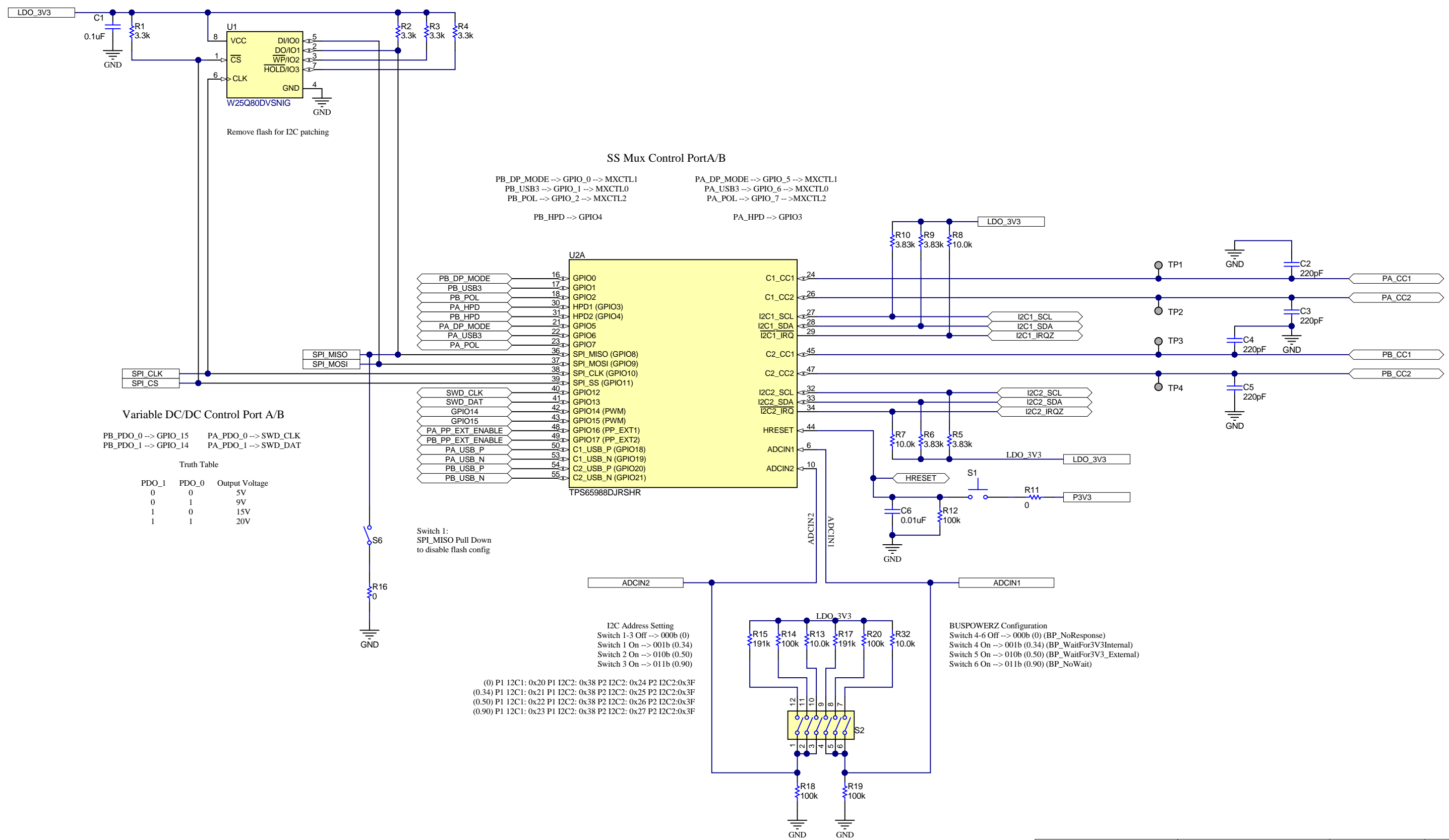
Port B Type-C

Orderable: TPS65988DJEVM	Designed for: Public Release	Mod. Date: 8/14/2019
TID: N/A	Project Title: TPS65988DJEVM	
Number: PSIL091	Rev: A	Sheet Title: TPS65988DJEVM Block Diagram
S/VN Rev: Not in version control	Assembly Variant: 001	Sheet 1 of 12
Drawn By: Jacob Ontiveros	File: PSIL091A_Block_Diagram.SchDoc	Size: C
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

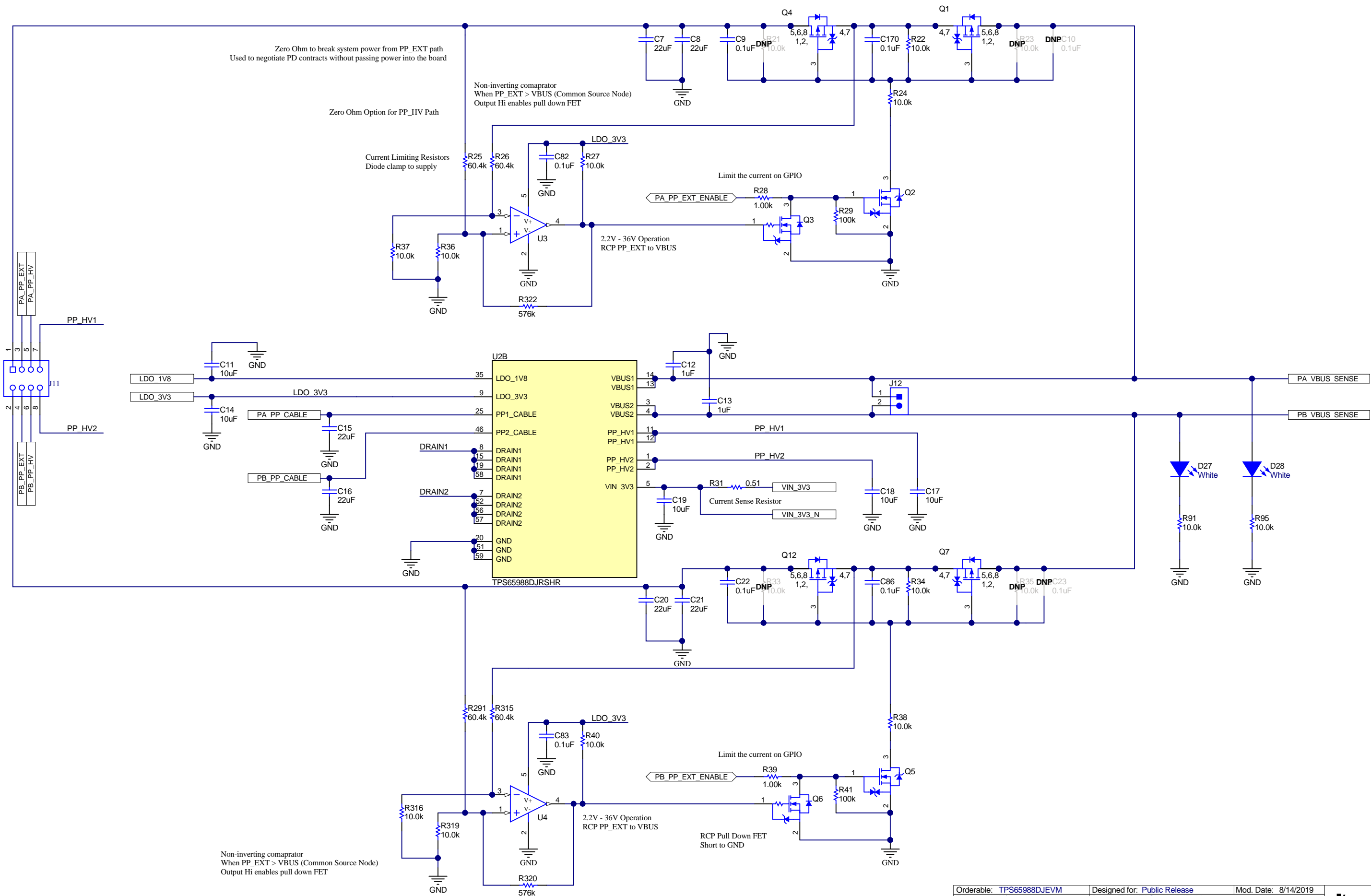
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Zero Ohm to break system power from PP_EXT path
Used to negotiate PD contracts without passing power into the board

Zero Ohm Option for PP_HV Path

Non-inverting comparator
When PP_EXT > VBUS (Common Source Node)
Output Hi enables pull down FET

Current Limiting Resistors
Diode clamp to supply

Limit the current on GPIO

2.2V - 36V Operation
RCP PP_EXT to VBUS

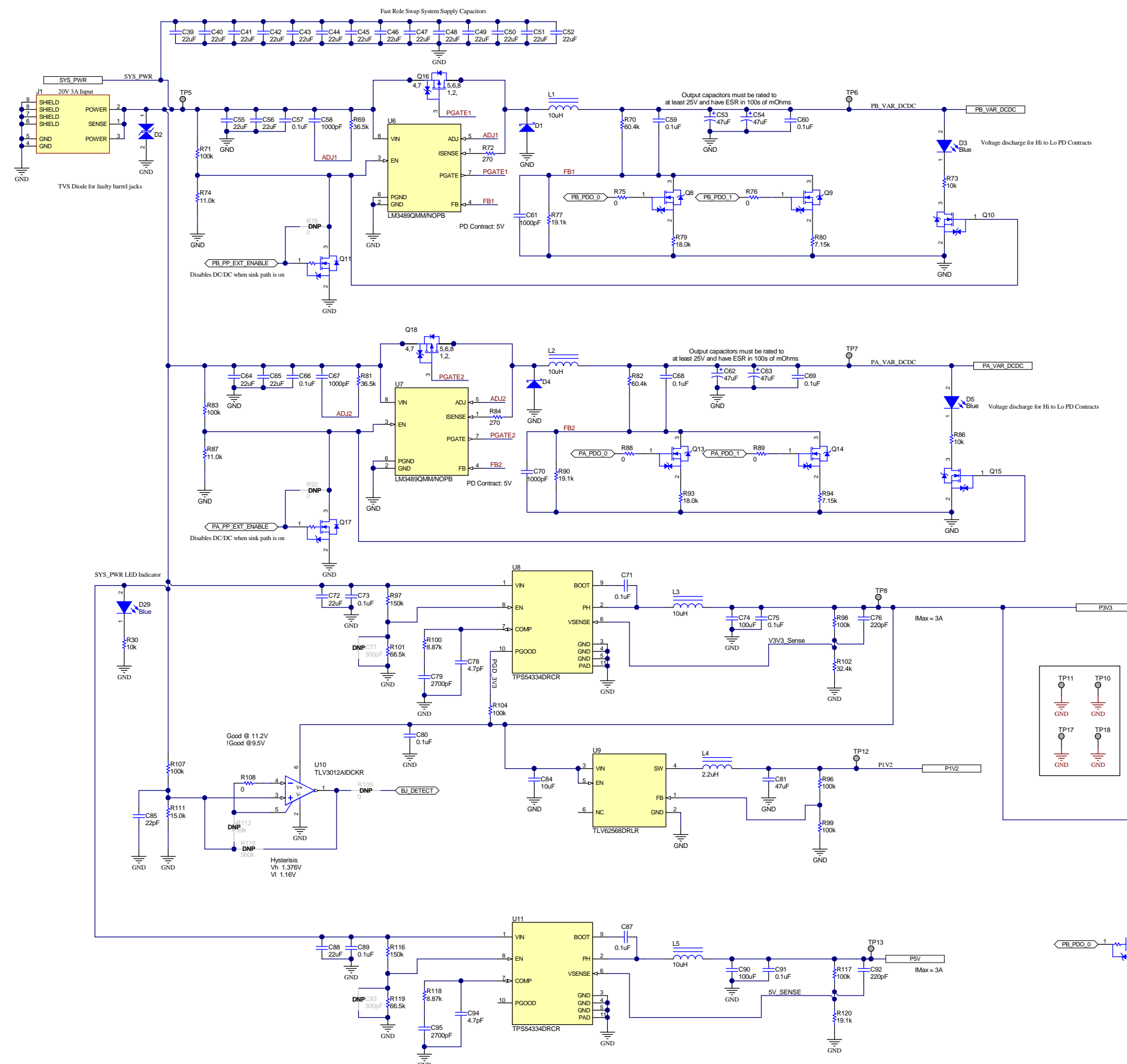
Non-inverting comparator
When PP_EXT > VBUS (Common Source Node)
Output Hi enables pull down FET

Limit the current on GPIO

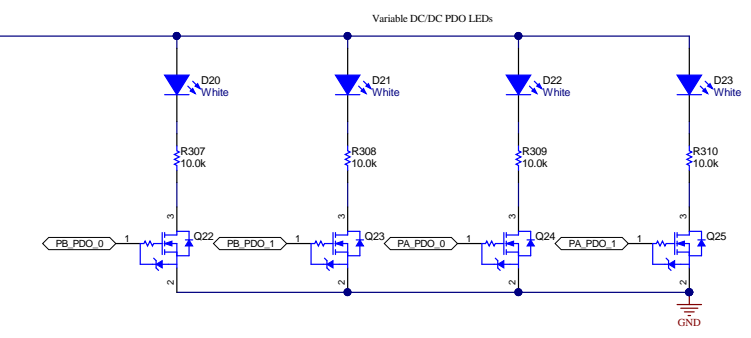
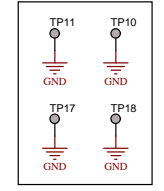
RCP Pull Down FET
Short to GND

Orderable: TPS65988DJEVM	Designed for: Public Release	Mod. Date: 8/14/2019
TID #: N/A	Project Title: TPS65988DJEVM	
Number: PSIL091	Rev: A	Sheet Title: TPS65988 PD Power Path
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 3 of 12
Drawn By: Jacob Ontiveros	File: PSIL091A_PD_Power_Path.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

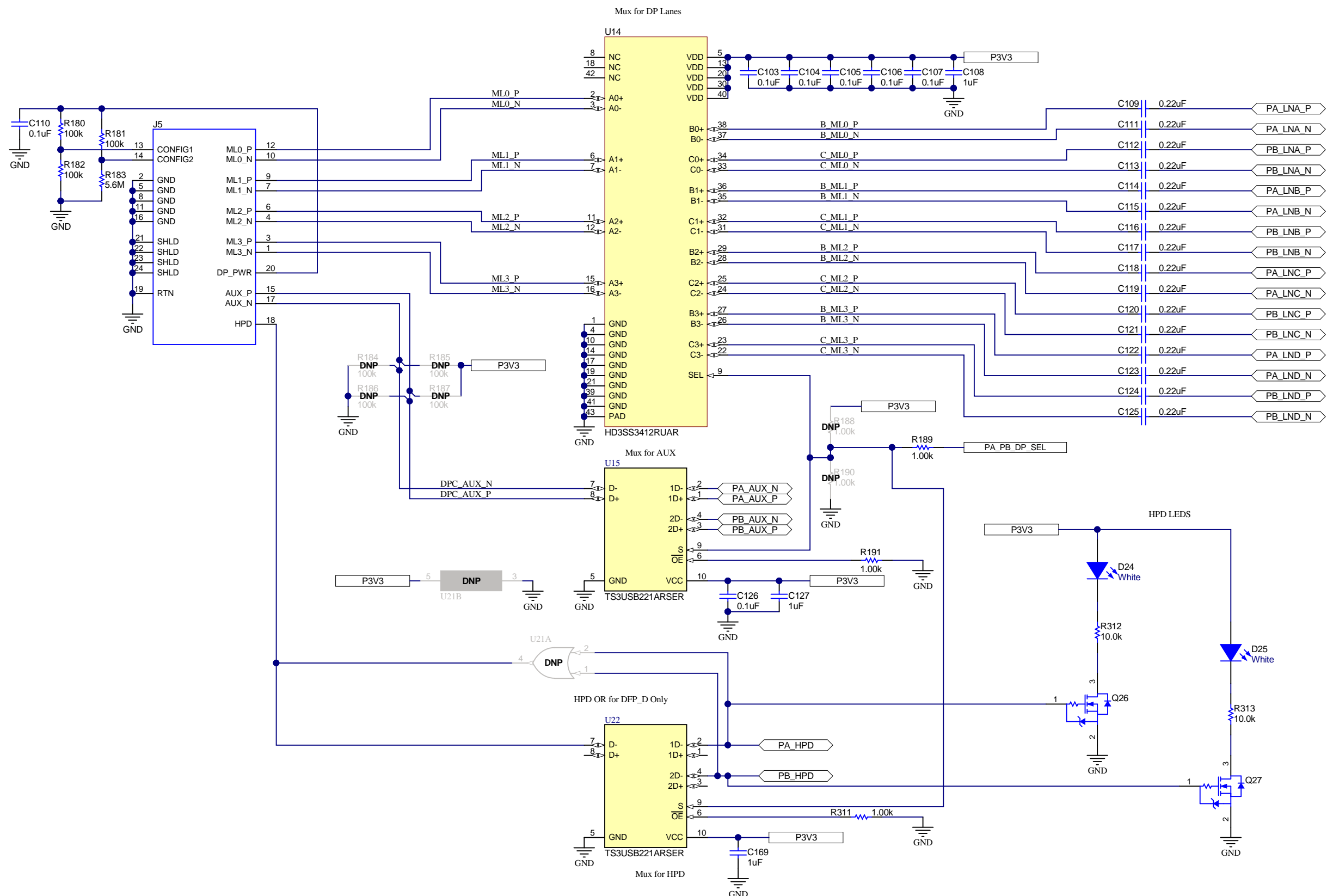
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PDO_1	PDO_0	Output Voltage	Feedback (R1)	Feedback (R2)	Output Voltage
0	0	5V	60.4k	19.1k	5.15V
0	1	9V	60.4k	9.27k	9.20V
1	0	15V	60.4k	5.2k	15.62V
1	1	20V	60.4k	4.04k	19.78V



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Orderable: TPS65988DJEVM	Designed for: Public Release	Mod. Date: 6/3/2019
TID #: N/A	Project Title: TPS65988DJEVM	
Number: PSIL091	Rev: A	Sheet Title: DP Source Mux & Connector
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 5 of 12
Drawn By: Jacob Ontiveros	File: PSIL091A_DisplayPort_SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	



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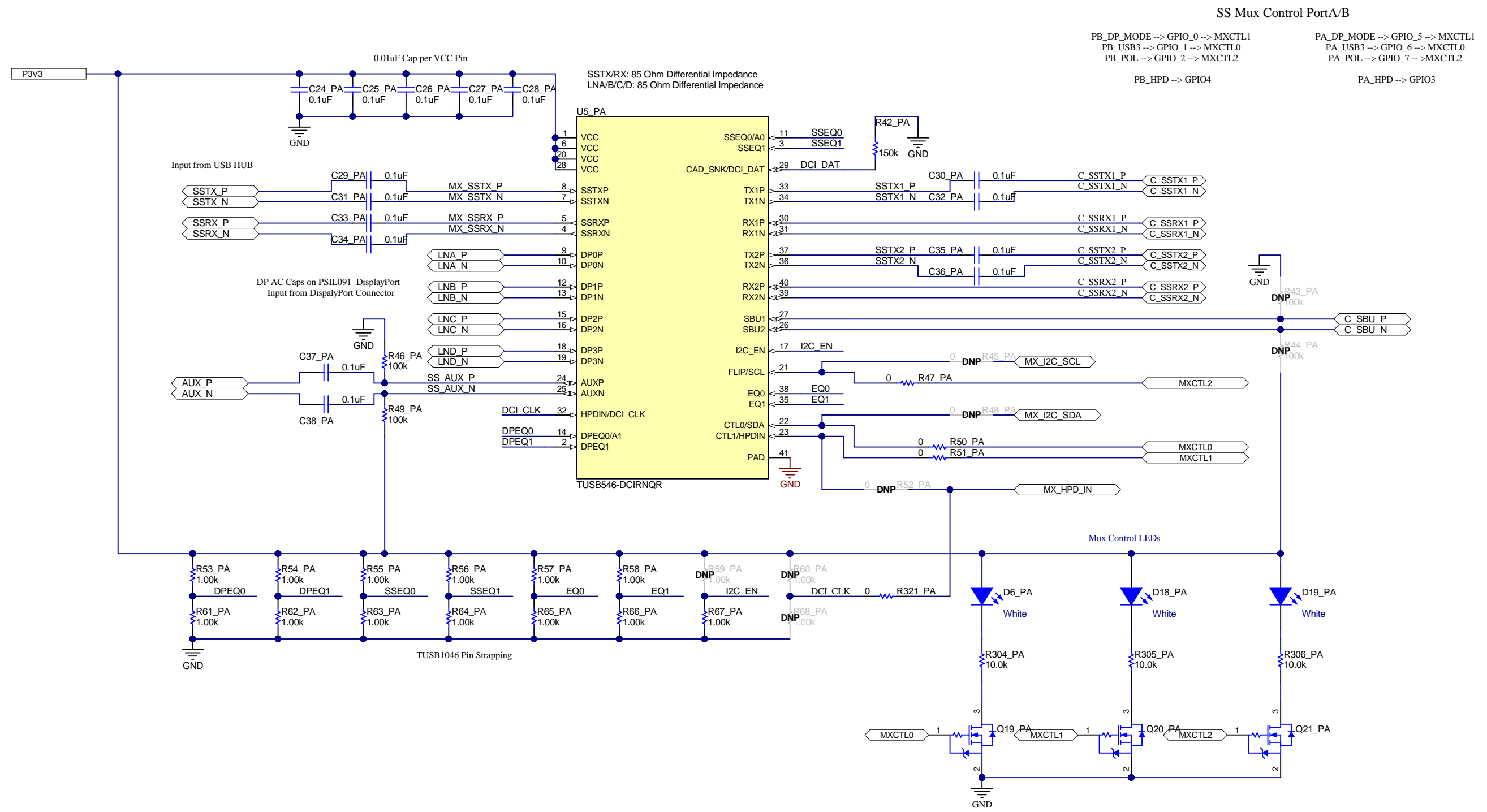
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Orderable: TPS65988DJEVM	Designed for: Public Release	Mod. Date: 6/10/2019
TID #: N/A	Project Title: TPS65988DJEVM	
Number: PSIL091	Rev: A	Sheet Title: Type-C SS Mux
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 6 of 12
Drawn By: Jacob Ontiveros	File: PSIL091A_SS_MUX.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	



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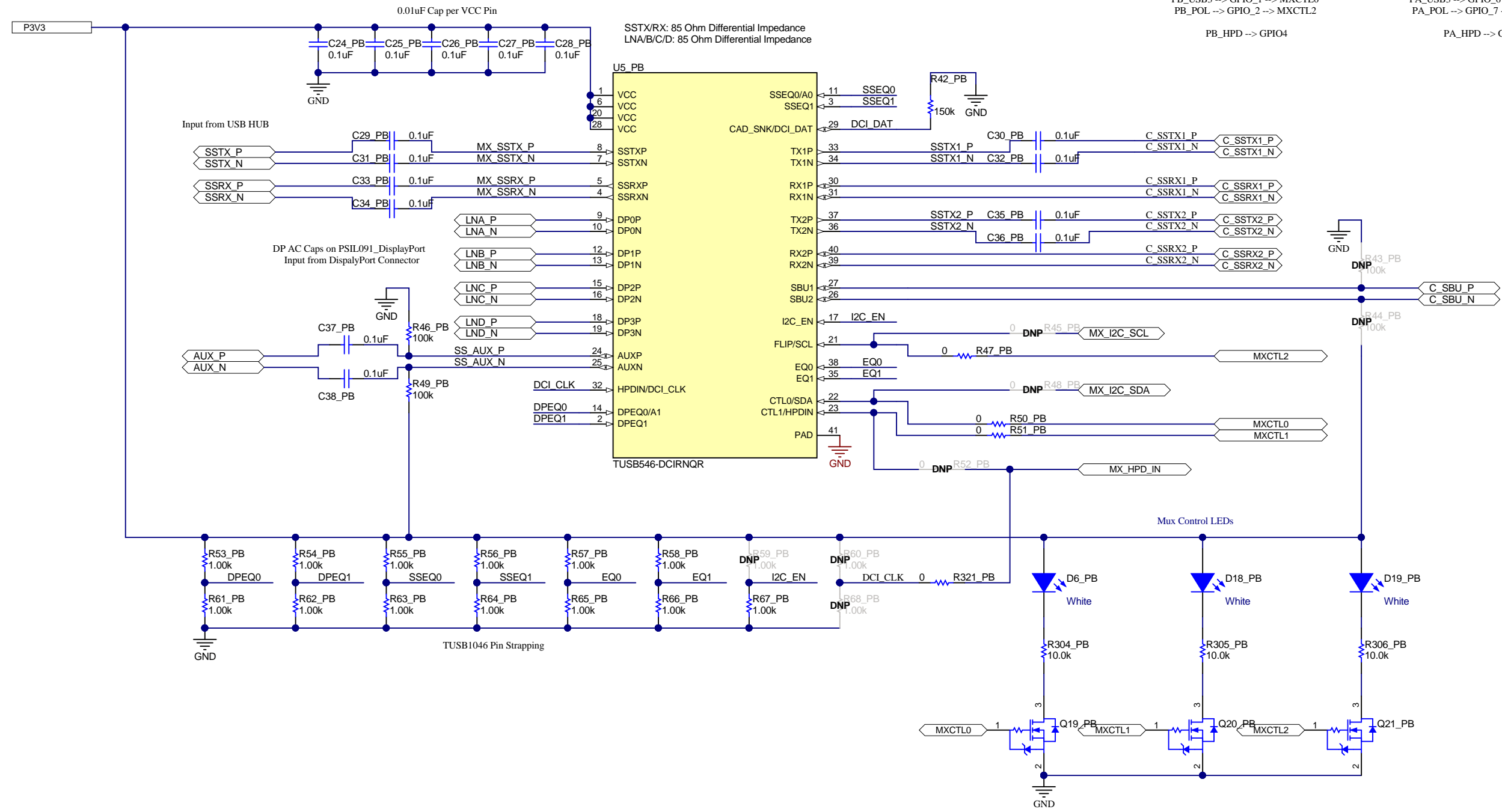
SS Mux Control PortA/B

PB_DP_MODE --> GPIO_0 --> MXCTL1
 PB_USB3 --> GPIO_1 --> MXCTL0
 PB_POL --> GPIO_2 --> MXCTL2

PA_DP_MODE --> GPIO_5 --> MXCTL1
 PA_USB3 --> GPIO_6 --> MXCTL0
 PA_POL --> GPIO_7 --> MXCTL2

PB_HPD --> GPIO4

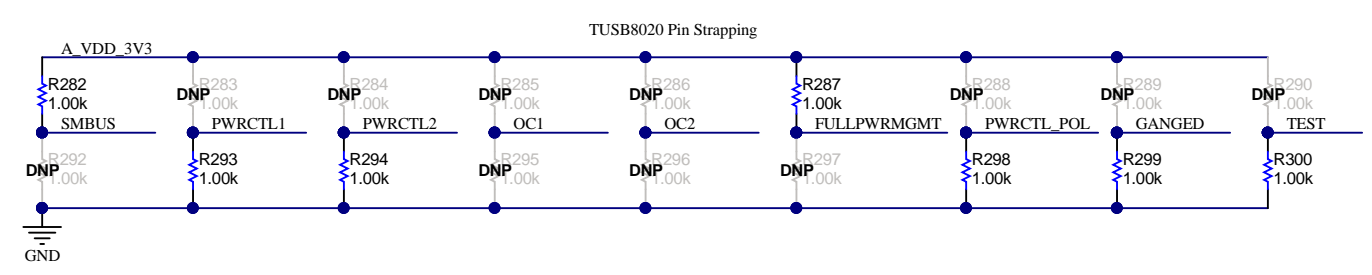
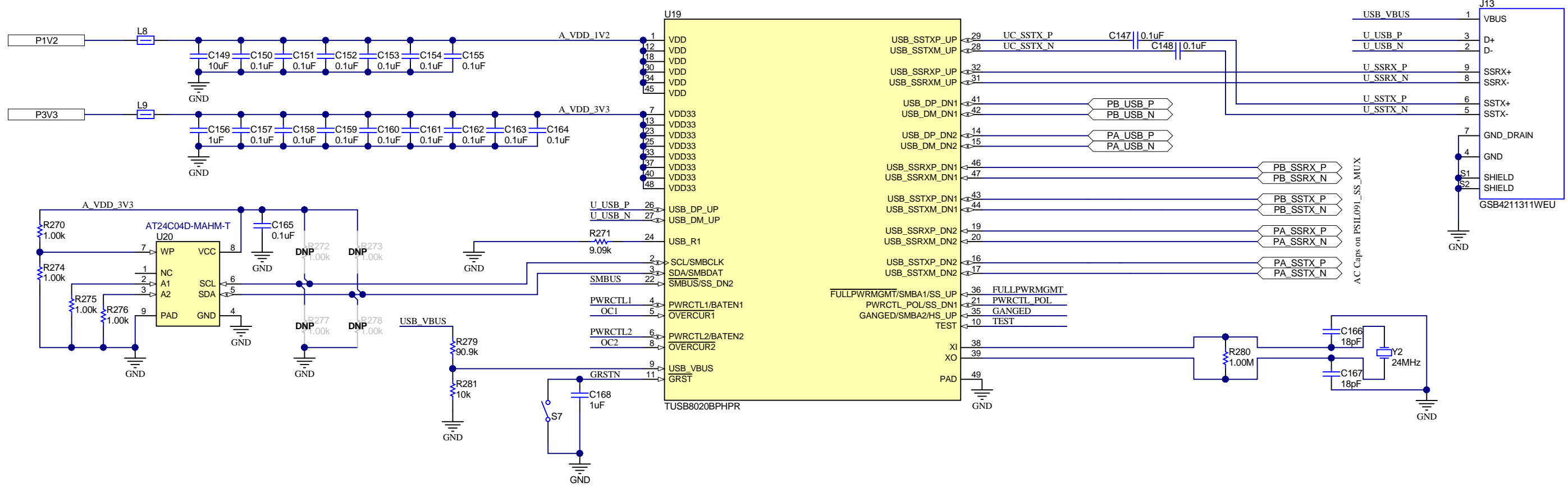
PA_HPD --> GPIO3



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TID #: N/A	Project Title: TPS65988DJEVM	
Number: PSIL091	Rev: A	Sheet Title: Type-C SS Mux
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 6 of 12
Drawn By: Jacob Ontiveros	File: PSIL091A_SS_MUX.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

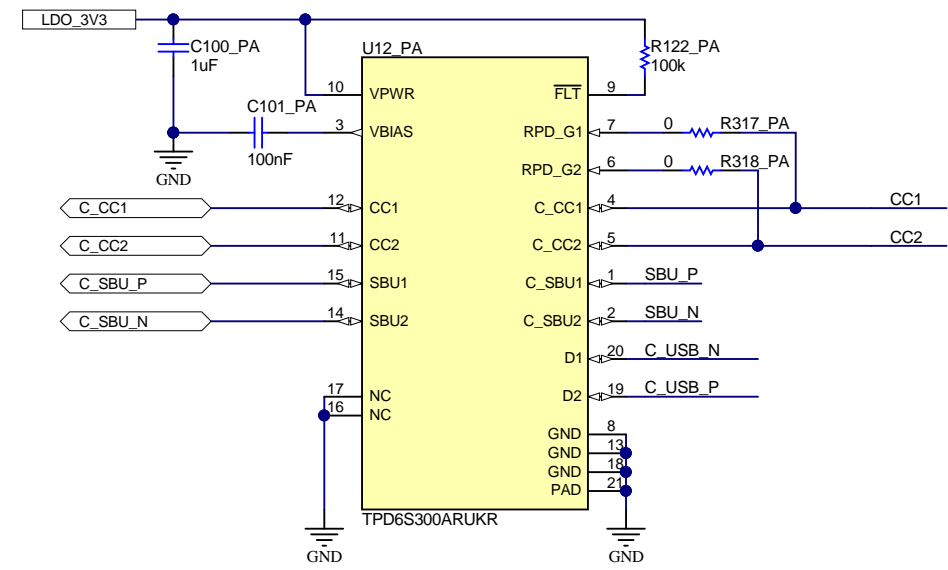
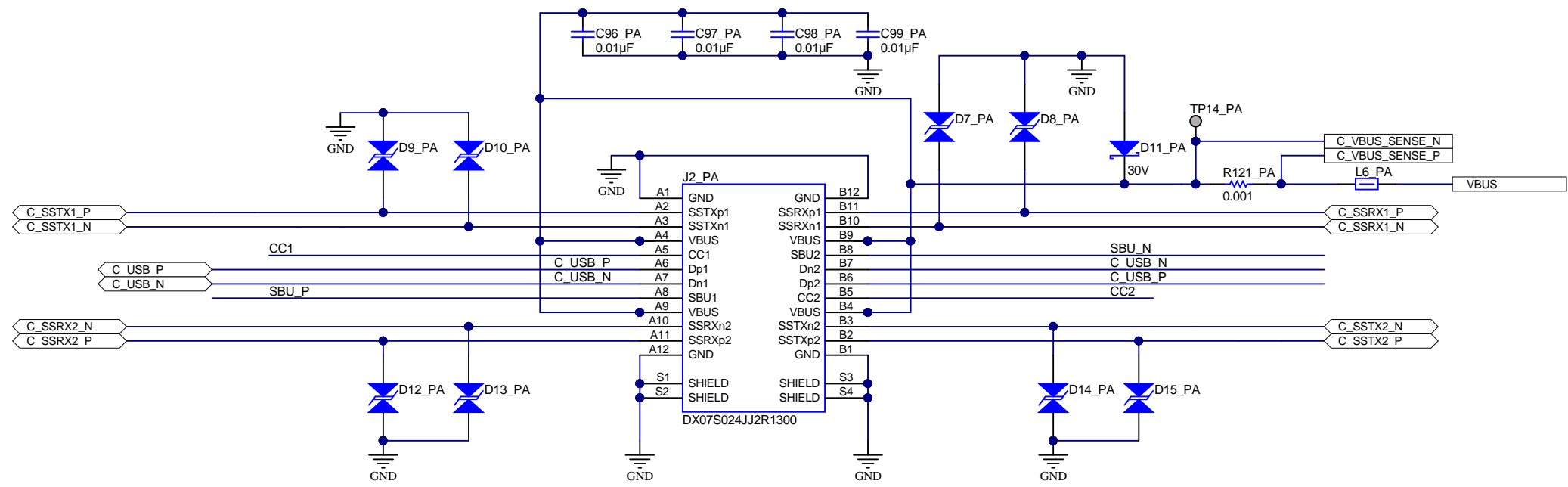




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Orderable: TPS65988DJEVM	Designed for: Public Release	Mod. Date: 6/11/2019
TID #: N/A	Project Title: TPS65988DJEVM	
Number: PSIL091	Rev: A	Sheet Title: USB3 Hub & Type-B Connector
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 7 of 12
Drawn By: Jacob Ontiveros	File: PSIL091A_USB_Input_SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

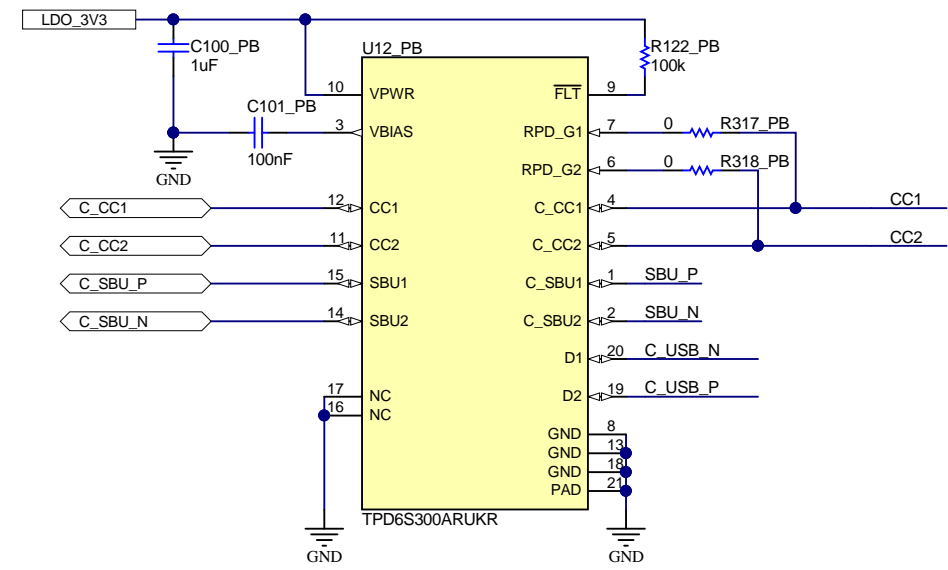
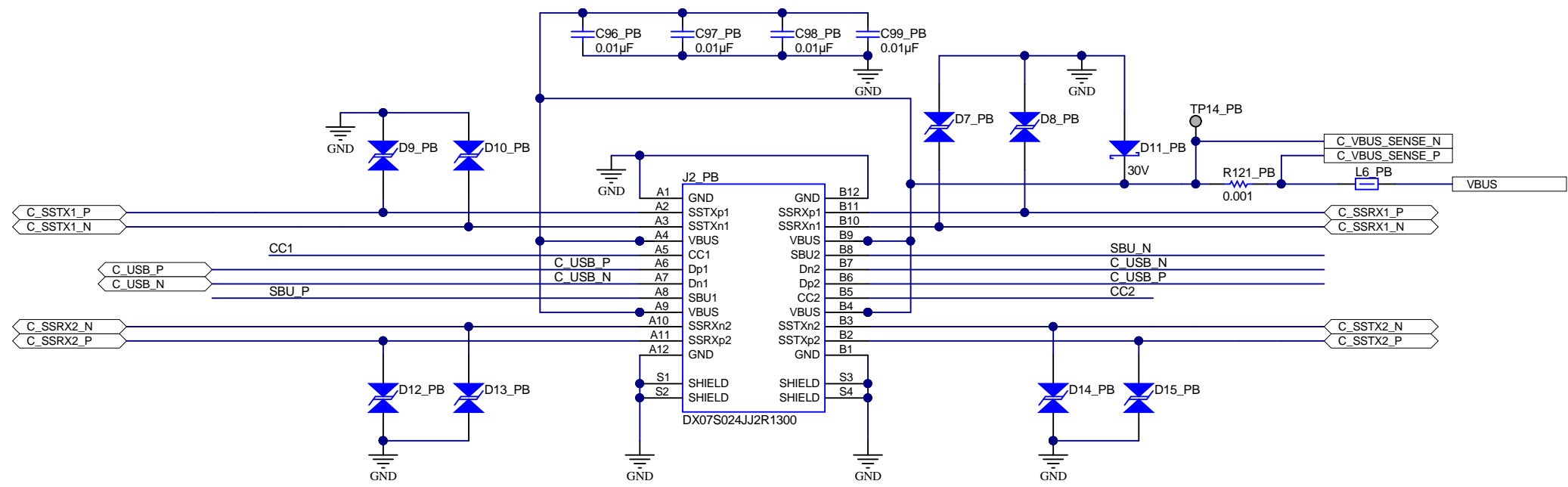




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Orderable: TPS65988DJEVM	Designed for: Public Release	Mod. Date: 8/7/2019
TID #: N/A	Project Title: TPS65988DJEVM	
Number: PSIL091	Rev: A	Sheet Title: Type-C Connector & Protection
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 8 of 12
Drawn By: Jacob Ontiveros	File: PSIL091A_Type_C_SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

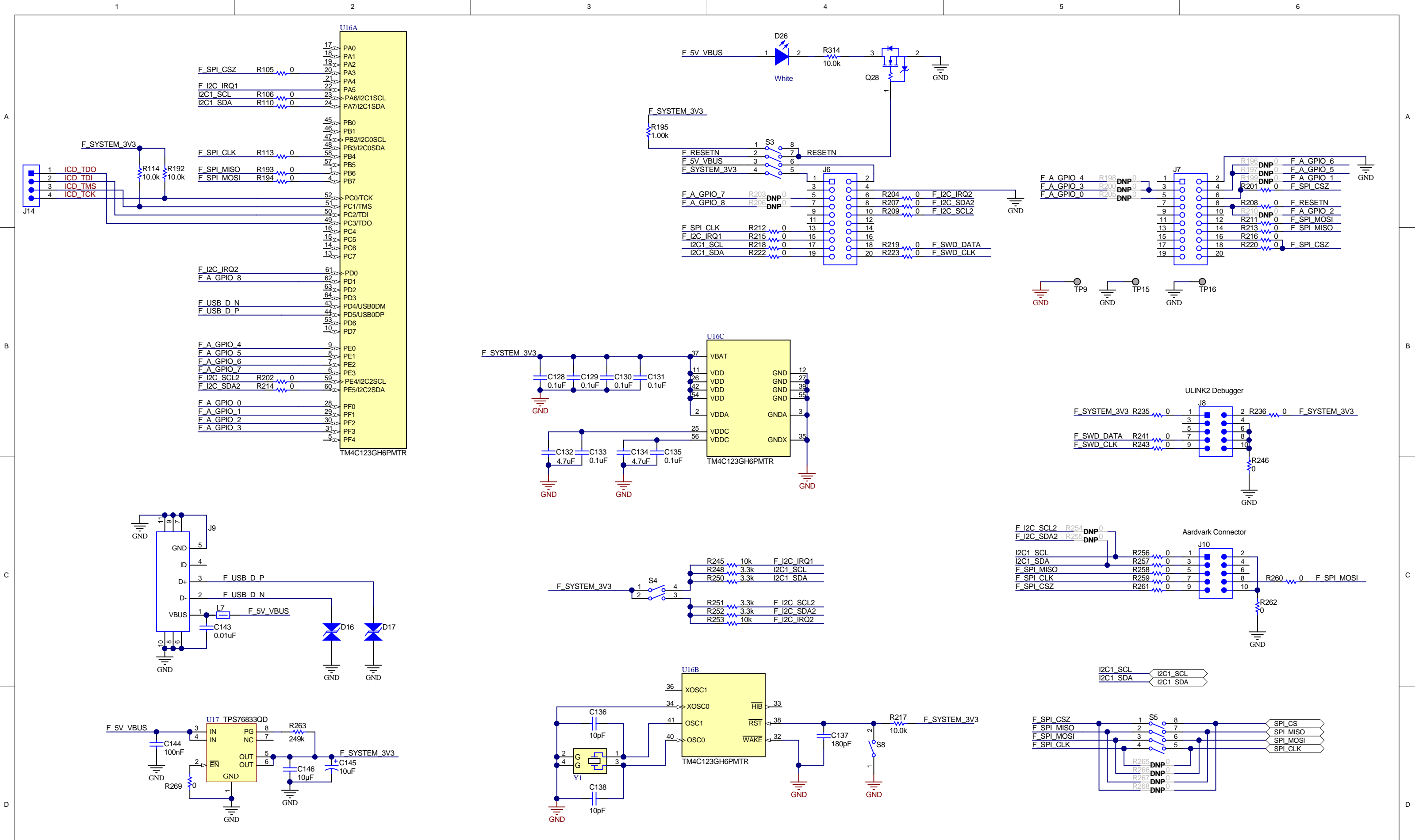




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Orderable: TPS65988DJEVM	Designed for: Public Release	Mod. Date: 8/7/2019
TID #: N/A	Project Title: TPS65988DJEVM	
Number: PSIL091	Rev: A	Sheet Title: Type-C Connector & Protection
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 8 of 12
Drawn By: Jacob Ontiveros	File: PSIL091A_Type_C_SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

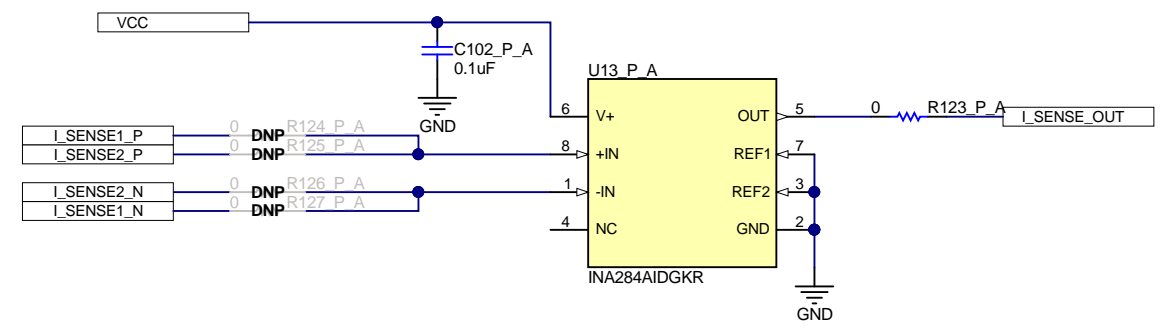





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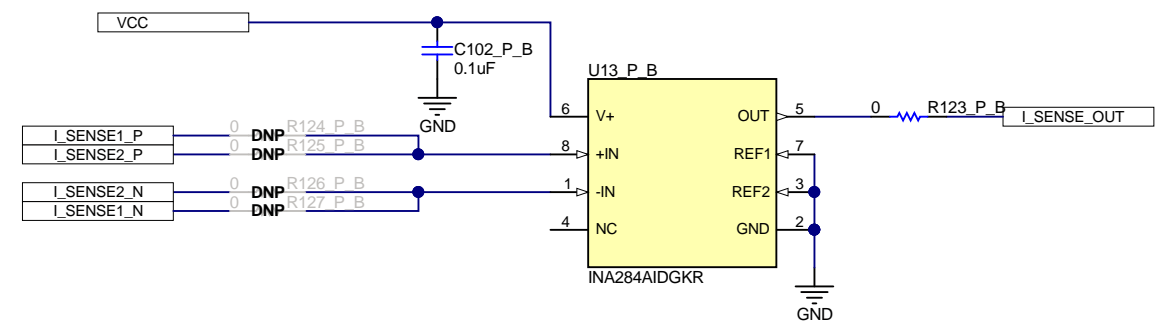
Orderable: TPS65988DJEVM	Designed for: Public Release	Mod. Date: 6/10/2019
TID #: N/A	Project Title: TPS65988DJEVM	
Number: PSIL091	Rev: A	Sheet Title: FTDI Debug Board
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 9 of 12
Drawn By: Jacob Ontiveros	File: PSIL091A_Tiva_Debug_SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	






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TID #: N/A	Project Title: TPS65988DJEVM		
Number: PSIL091	Rev: A	Sheet Title: Current Sense	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 10 of 12	
Drawn By: Jacob Ontiveros	File: PSIL091A_Current_Sense.SchDoc	Size: B	
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support		



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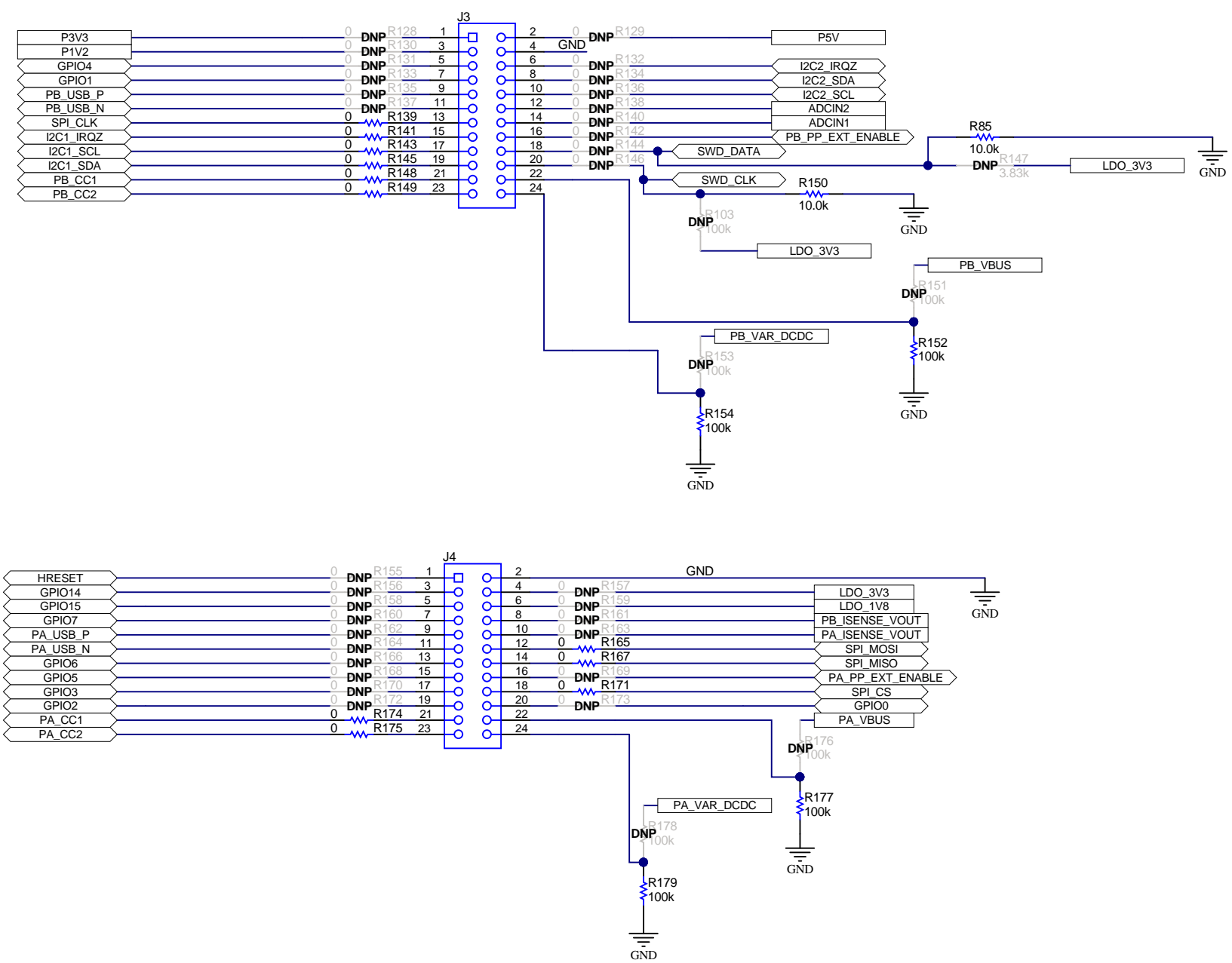
Orderable: TPS65988DJEVM	Designed for: Public Release	Mod. Date: 6/3/2019	 http://www.ti.com © Texas Instruments 2019
TID #: N/A	Project Title: TPS65988DJEVM		
Number: PSIL091	Rev: A	Sheet Title: Current Sense	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 10 of 12	
Drawn By: Jacob Ontiveros	File: PSIL091A_Current_Sense.SchDoc	Size: B	
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support		

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FID1 DNP
 FID2 DNP
 FID3 DNP
 FID4 DNP
 FID5 DNP
 FID6 DNP

SH-J1
 SH-J2
 SH-J3
 SH-J4

PCB LOGO
 ESD Susceptible

PCB LOGO
 WEEE logo

PCB LOGO
 Texas Instruments

PCB LOGO
 FCC disclaimer



PCB Number: PSIL091
 PCB Rev: A

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.

Orderable: TPS65988DJEVM	Designed for: Public Release	Mod. Date: 5/22/2019
TID #: N/A	Project Title: TPS65988DJEVM	
Number: PSIL091	Rev: A	Sheet Title: EVM Hardware
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 12 of 12
Drawn By: Jacob Ontiveros	File: PSIL091A_EVM_Hardware.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

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