BoosterPack Connectors

U_ACS009_Booster_Connectors
ACS009A_Booster_Connectors.SchDoc

P1V2, ADCIN2, ADCIN1, I2C2_IRQZ, I2C2_SDA, I2C2_SCL, I2C1_IRQZ, I2C1_SDA, I2C1_SCL, SPI_CS, SPI_CLK, SPI_MOSI, SPI_MISO, GPIO6, GPIO5, GPIO4, GPIO3, GPIO2, GPIO1, GPIO0, GPIO7, HRESET, P3V3, GPIO15, GPIO14, SWD_CLK, SWD_DATA, PA_USB_N, PA_USB_P, PB_USB_N, PB_USB_P, LDO_1V8, LDO_3V3, PA_PP_EXT_ENABLE, PB_PP_EXT_ENABLE, P5V, PA_ISENSE_VOUT, PB_ISENSE_VOUT, PB_CC1, PB_CC2, PB_VAR_DCDC, PB_VBUS, PA_CC1, PA_CC2, PA_VAR_DCDC, PA_VBUS

Port A SS MUX

PA
ACS009A_SS_MUX.SchDoc

AUX_P, AUX_N, LND_P, LND_N, LNC_P, LNC_N, LNB_P, LNB_N, LNA_P, LNA_N, SSTX_P, SSTX_N, SSRX_P, SSRX_N, MX_I2C_SDA, MX_I2C_SCL, MXCTL0, MXCTL1, MXCTL2, MX_HPD_IN, P3V3, C_SBU_P, C_SBU_N, C_SSTX2_P, C_SSTX2_N, C_SSRX2_P, C_SSRX2_N, C_SSTX1_P, C_SSTX1_N, C_SSRX1_P, C_SSRX1_N

DisplayPort Source

U_ACS009_DisplayPort
ACS009A_DisplayPort.SchDoc

PA_AUX_P, PA_AUX_N, PA_LND_P, PA_LND_N, PA_LNC_P, PA_LNC_N, PA_LNB_P, PA_LNB_N, PA_LNA_P, PA_LNA_N, PA_HPD

USB3.0 Source

U_ACS009_USB_Input
ACS009A_USB_Input.SchDoc

PA_SSTX_P, PA_SSTX_N, PA_SSRX_P, PA_SSRX_N, PA_USB_N, PA_USB_P, P3V3, P1V2

Port A Type-C

PA
ACS009A_Type_C.SchDoc

C_SBU_P, C_SBU_N, C_SSTX2_P, C_SSTX2_N, C_SSRX2_P, C_SSRX2_N, C_SSTX1_P, C_SSTX1_N, C_SSRX1_P, C_SSRX1_N

PA
ACS009A_Current_Sense.SchDoc

VCC, I_SENSE_OUT, I_SENSE1_P, I_SENSE1_N, I_SENSE2_N, I_SENSE2_P, PA_ISENSE_VOUT, C_VBUS_SENSE_P, C_VBUS_SENSE_N, VIN_3V3, VIN_3V3_N

U_ACS009_PD_Controller
ACS009A_PD_Controller.SchDoc

PA_USB3, PA_DP_MODE, PA_POL, PA_HPD, GPIO6, GPIO5, GPIO4, GPIO3, PA_CC1, PA_CC2, PA_USB_N, PA_USB_P, SPI_MISO, SPI_MOSI, SPI_CLK, SPI_CS, PA_PP_EXT_ENABLE, LDO_3V3, P3V3, SWD_CLK, SWD_DAT, GPIO14, GPIO15, I2C1_SCL, I2C1_SDA, I2C1_IRQZ, I2C2_SCL, I2C2_SDA, I2C2_IRQZ, ADCIN1, ADCIN2, HRESET, PB_USB3, PB_DP_MODE, PB_POL, PB_HPD, PB_USB_P, PB_USB_N, PB_CC2, PB_CC1, P1V2, PA_PDO_0, PA_PDO_1, PB_PDO_1, PB_PDO_0, BJ_DETECT

U_ACS009_Power_Supplies
ACS009A_Power_Supplies.SchDoc

PA_PP_EXT_ENABLE, PA_VAR_DCDC, SYS_PWR, P5V, PB_VAR_DCDC, PB_PP_EXT_ENABLE, P3V3, P1V2

System Power

U_ACS009_PD_Power_Path
ACS009A_PD_Power_Path.SchDoc

PA_PP_EXT_ENABLE, PA_PP_HV, PA_PP_CABLE, PA_PP_EXT, PB_PP_EXT, PB_PP_CABLE, PB_PP_HV, PB_PP_EXT_ENABLE, PA_VAR_DCDC, PB_VAR_DCDC, LDO_1V8, VIN_3V3, VIN_3V3_N, LDO_3V3, LDO_1V8

PA_VBUS_SENSE, PB_VBUS_SENSE, PA_VBUS, PB_VBUS, VBUS

Port B Type-C

PB
ACS009A_Current_Sense.SchDoc

VCC, I_SENSE_OUT, I_SENSE2_P, I_SENSE1_P, I_SENSE1_N, I_SENSE2_N, PB_ISENSE_VOUT, VIN_3V3, VIN_3V3_N, C_VBUS_SENSE_P, C_VBUS_SENSE_N

PB
ACS009A_SS_MUX.SchDoc

SSRX_N, SSRX_P, SSTX_N, SSTX_P, LNA_N, LNA_P, LNB_N, LNB_P, LNC_N, LNC_P, LND_N, LND_P, AUX_N, AUX_P, MX_I2C_SDA, MX_I2C_SCL, MXCTL0, MXCTL1, MXCTL2, MX_HPD_IN, P3V3, C_SSRX1_N, C_SSRX1_P, C_SSTX1_N, C_SSTX1_P, C_SSRX2_N, C_SSRX2_P, C_SSTX2_N, C_SSTX2_P, C_SBU_N, C_SBU_P

Port B SS MUX

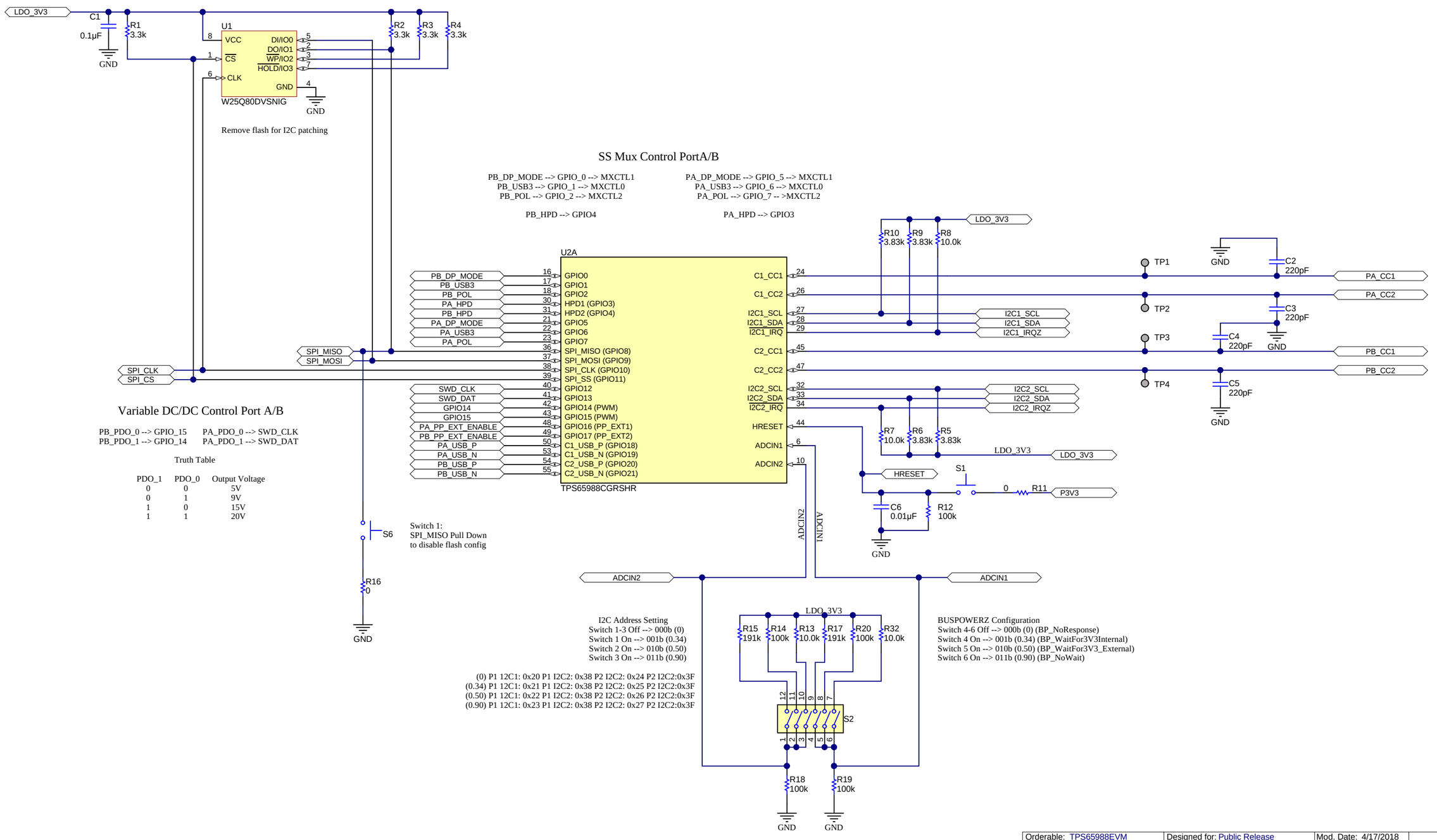
U_EVM_Hardware
ACS009A_EVM_Hardware.SchDoc

U_ACS009_FTDI_Debug
ACS009A_FTDI_Debug.SchDoc

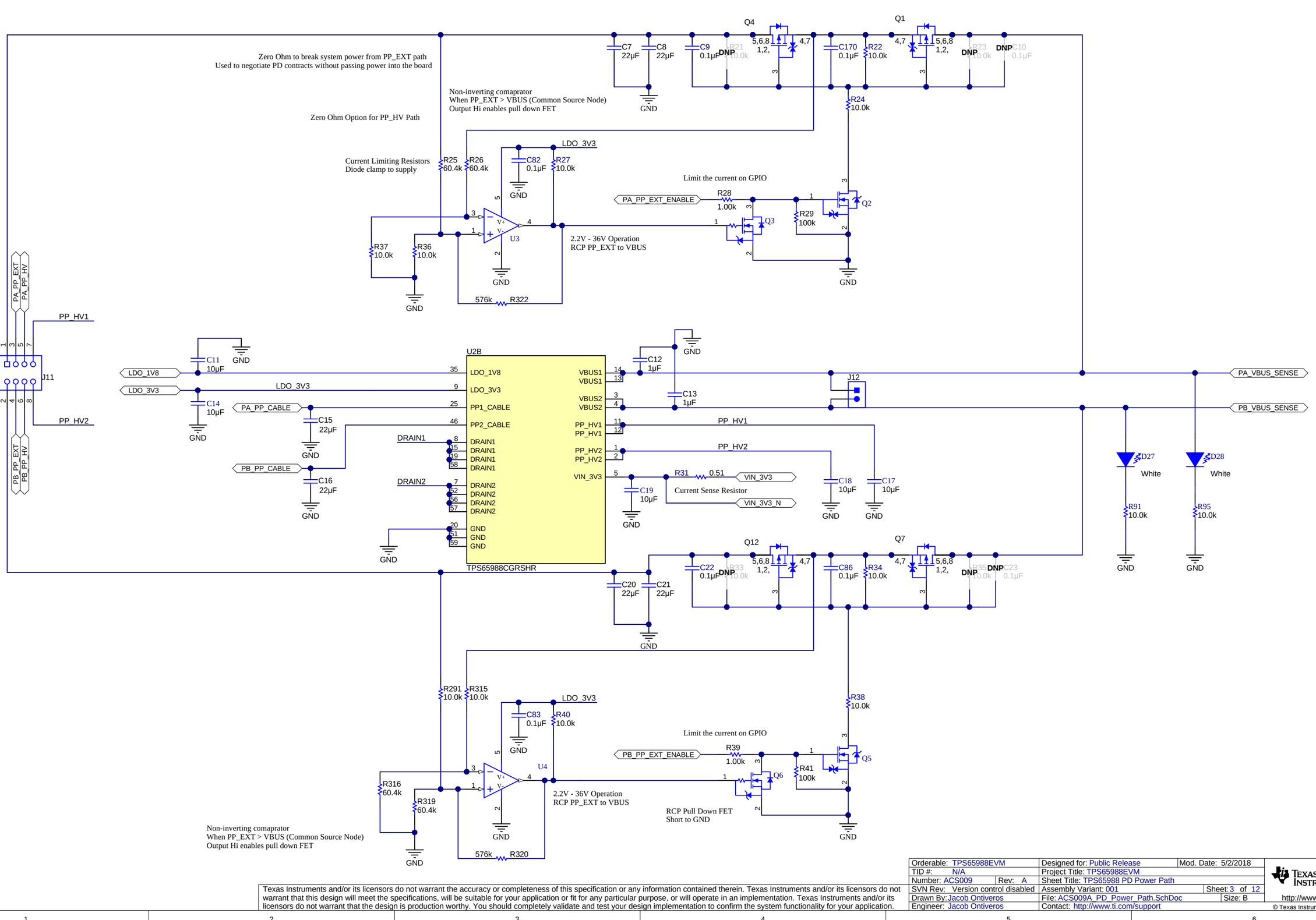
I2C1_SDA, I2C1_SCL, SPI_CS, SPI_CLK, SPI_MOSI, SPI_MISO

FTDI & Debug

Orderable: TPS65988EVM		Designed for: Public Release	Mod. Date: 5/2/2018
TID #: N/A		Project Title: TPS65988EVM	
Number: ACS009	Rev: A	Sheet Title: TPS65988 EVM Block Diagram	
SVN Rev: Version control disabled		Assembly Variant: 001	Sheet: 1 of 12
Drawn By: Jacob Ontiveros		File: ACS009A_Block_Diagram.SchDoc	Size: C
Engineer: Jacob Ontiveros		Contact: http://www.ti.com/support	http://www.ti.com



Orderable: TPS65988EVM		Designed for: Public Release	Mod. Date: 4/17/2018
TID #: N/A		Project Title: TPS65988EVM	
Number: ACS009	Rev: A	Sheet Title: TPS65988 PD Controller	
SVN Rev: Version control disabled		Assembly Variant: 001	Sheet: 2 of 12
Drawn By: Jacob Ontiveros		File: ACS009A_PD_Controller.SchDoc	Size: B
Engineer: Jacob Ontiveros		Contact: http://www.ti.com/support	



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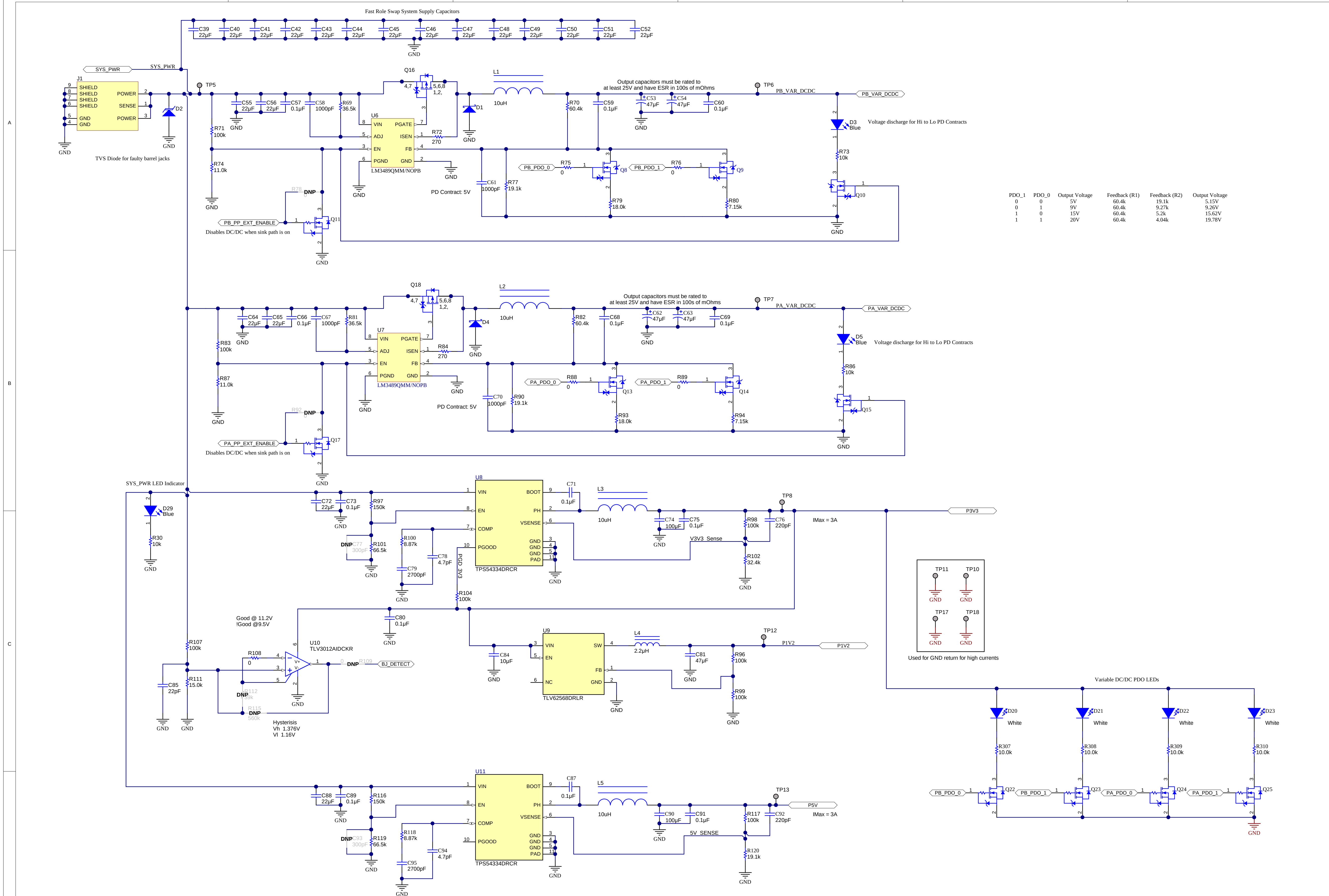
TID #: N/A		Project Title: TPS65988EVM	
Number: ACS009	Rev: A	Sheet Title: TPS65988 PD Power Path	
SVN Rev: Version control disabled		Assembly Variant: 001	Sheet: 3 of 12
Drawn By: Jacob Ontiveros		File: ACS009A_PD_Power_Path.SchDoc	Size: B
Engineer: Jacob Ontiveros		Contact: http://www.ti.com/support	



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	9.26V
1	0	15V	60.4k	5.2k	15.62V
1	1	20V	60.4k	4.04k	19.78V

Orderable: TPS65988EVM	Designed for: Public Release	Mod. Date: 5/2/2018
TID #: N/A	Project Title: TPS65988EVM	
Number: ACS009 Rev: A	Sheet Title: System Power Supplies	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 4 of 12
Drawn By: Jacob Ontiveros	File: ACS009A_Power_Supplies.SchDoc	Size: C
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

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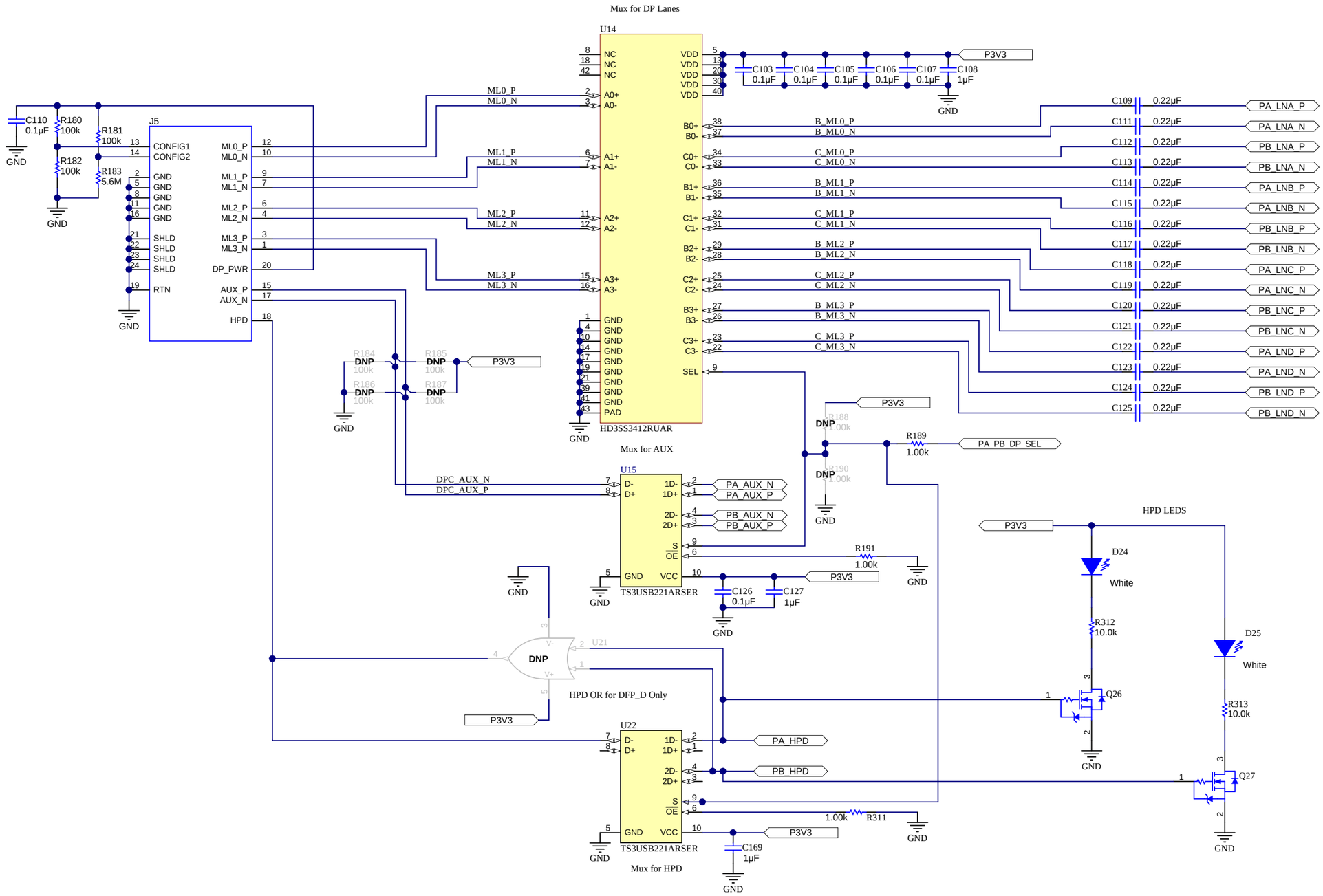
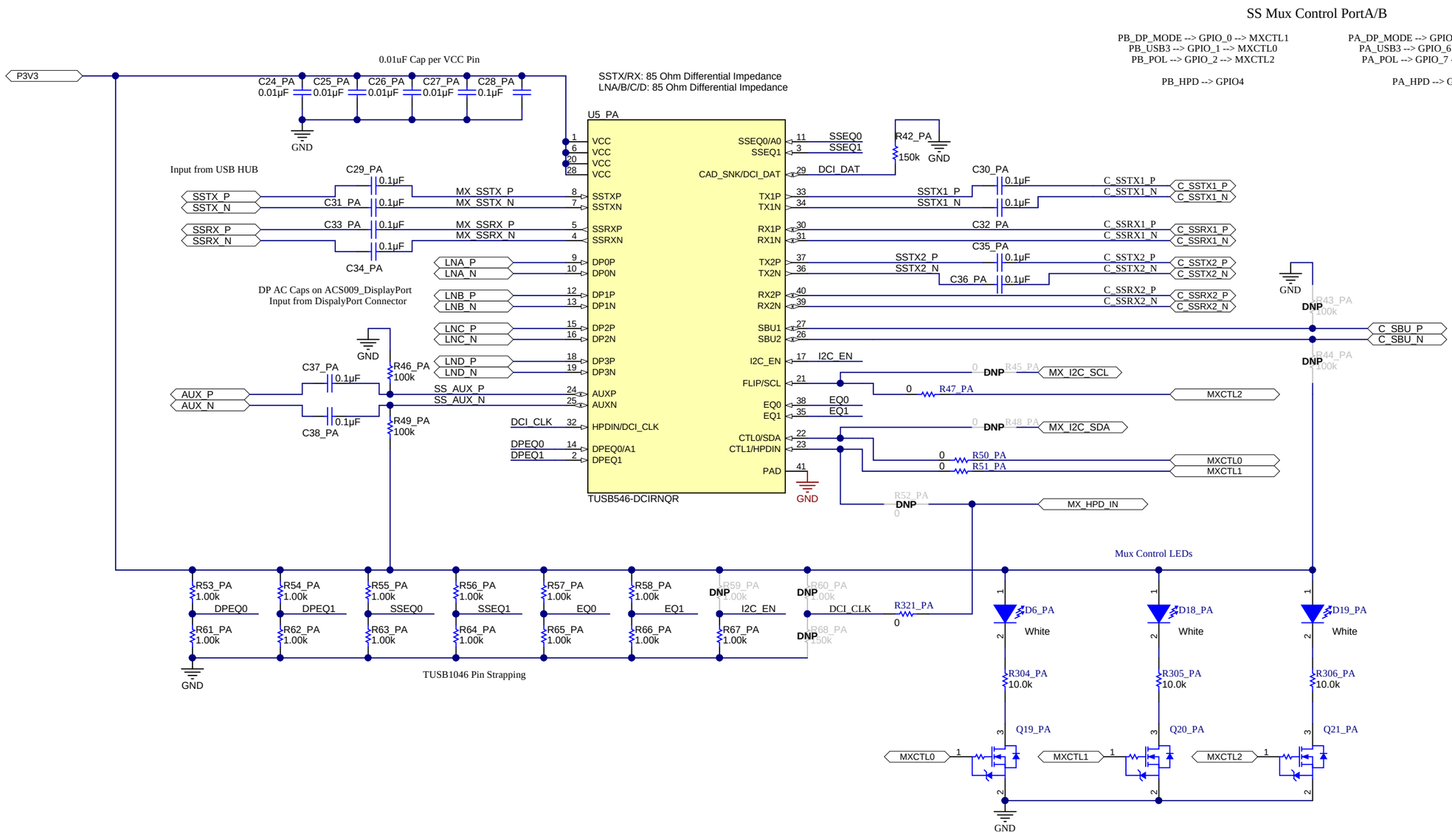


Orderable: TPS65988EVM	Designed for: Public Release	Mod. Date: 4/17/2018	
TID #: N/A	Project Title: TPS65988EVM		
Number: ACS009 Rev: A	Sheet Title: DP Source Mux & Connector		
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 5 of 12	
Drawn By: Jacob Ontiveros	File: ACS009A_DisplayPort.SchDoc	Size: B	
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support		



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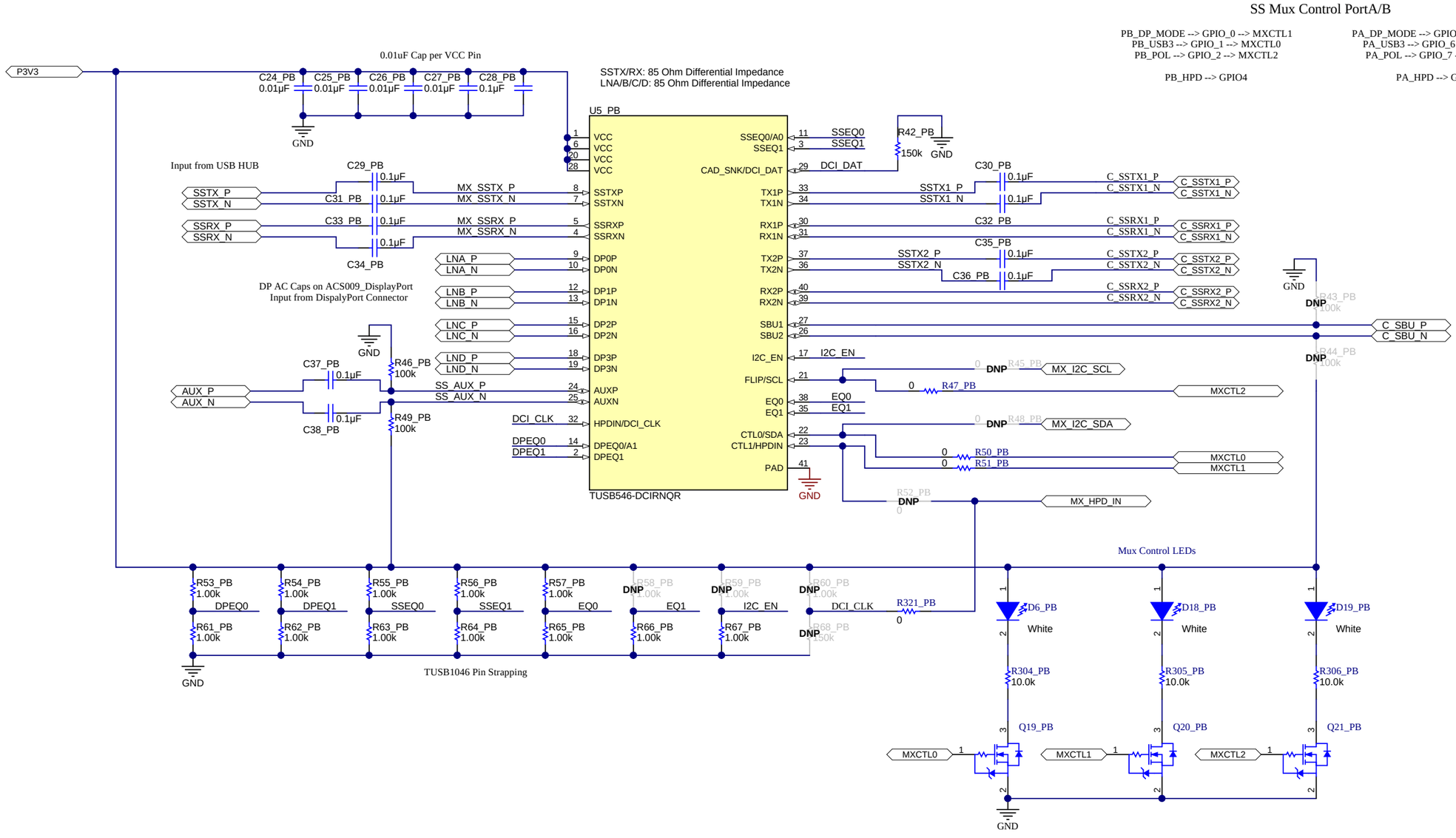
TID #: N/A	Project Title: TPS65988EVM		
Number: ACS009 Rev: A	Sheet Title: Type-C SS Mux		
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 6 of 12	
Drawn By: Jacob Ontiveros	File: ACS009A_SS_MUX.SchDoc	Size: B	
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support		



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Orderable: TPS65988EVM	Designed for: Public Release	Mod. Date: 5/2/2018
TID #: N/A	Project Title: TPS65988EVM	
Number: ACS009 Rev: A	Sheet Title: Type-C SS Mux	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 6 of 12
Drawn By: Jacob Ontiveros	File: ACS009A_SS_MUX.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

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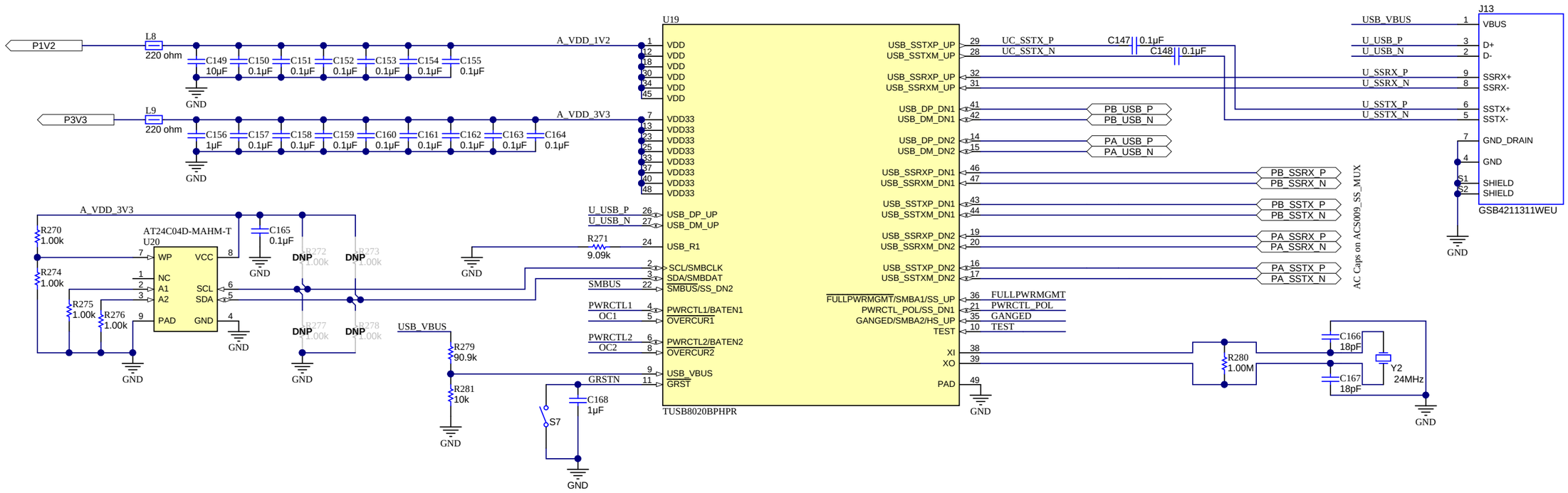

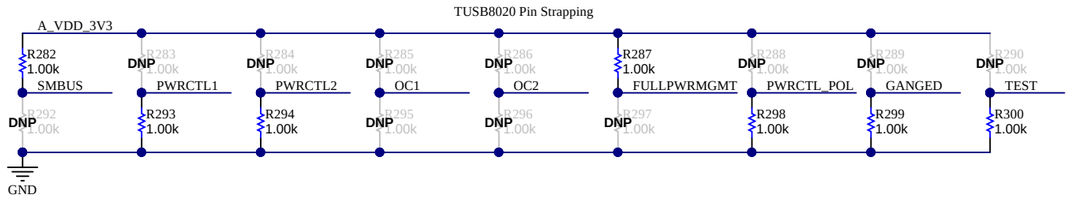

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TID #: N/A	Project Title: TPS65988EVM	
Number: ACS009 Rev: A	Sheet Title: USB3 Hub & Type-B Connector	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 7 of 12
Drawn By: Jacob Ontiveros	File: ACS009A_USB_Input.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

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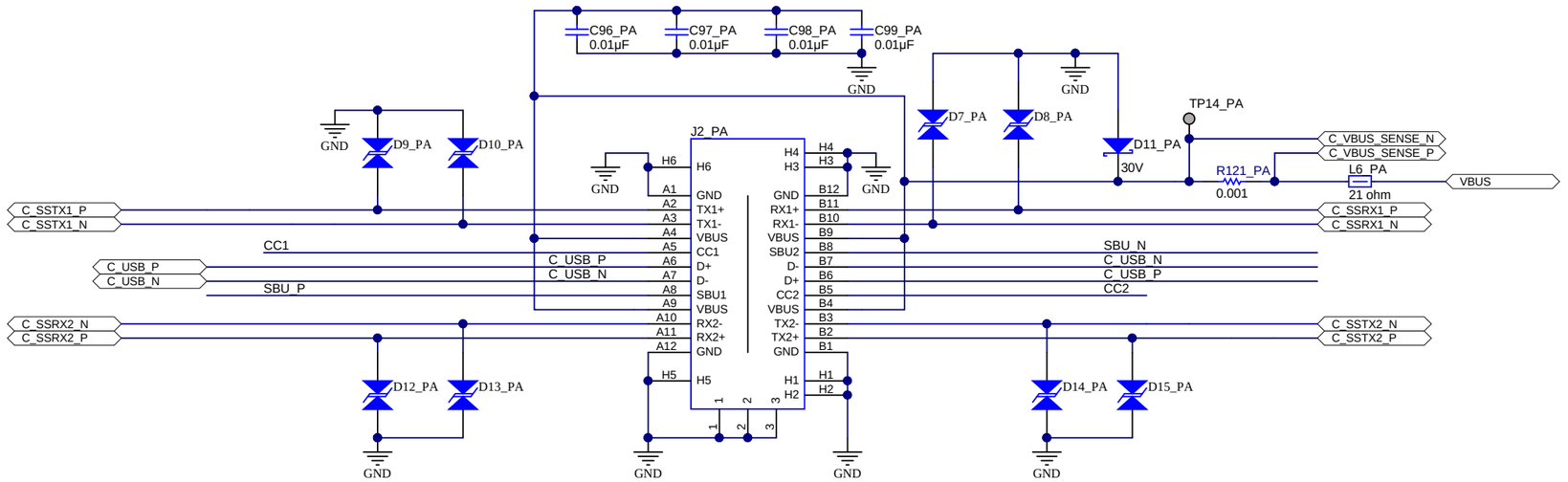

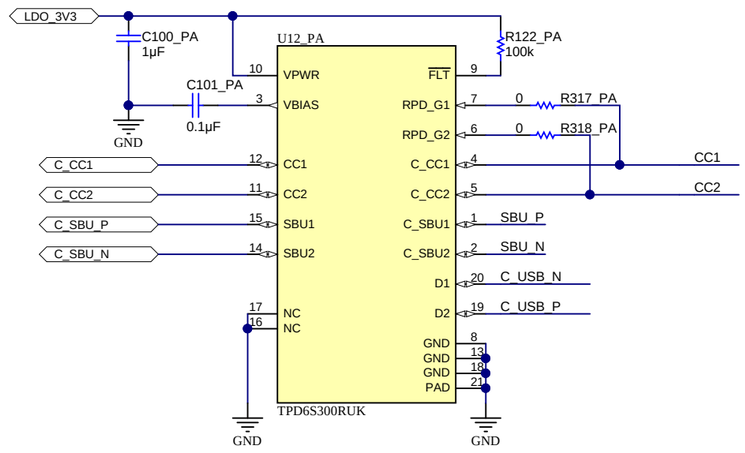

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TID #: N/A	Project Title: TPS65988EVM	
Number: ACS009 Rev: A	Sheet Title: Type-C Connector & Protection	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 8 of 12
Drawn By: Jacob Ontiveros	File: ACS009A_Type_C.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

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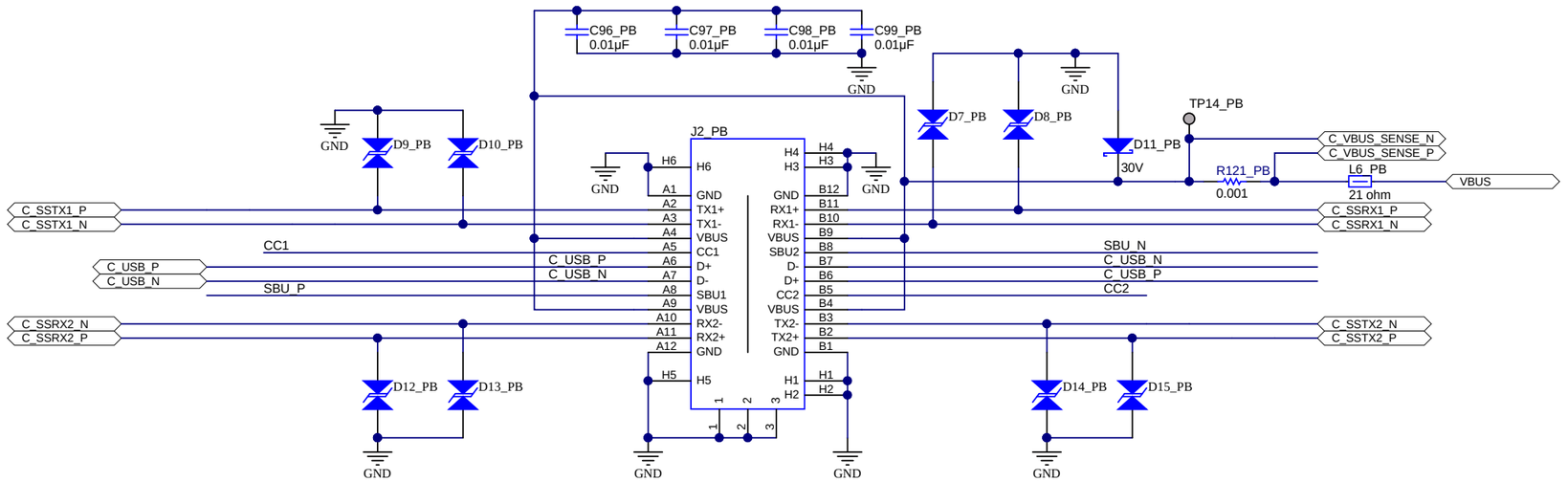

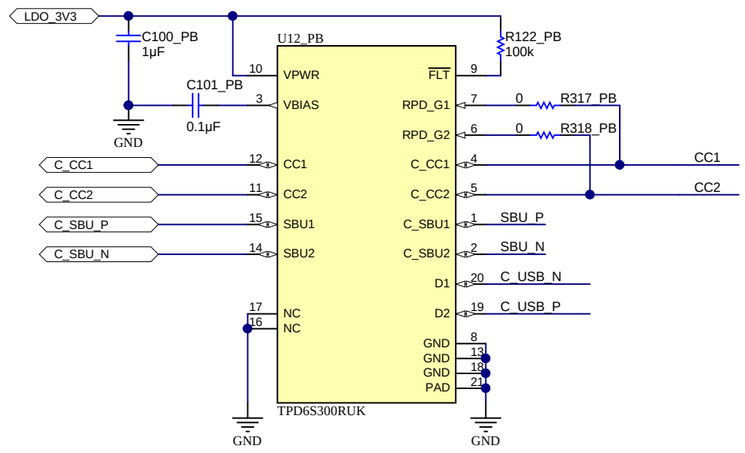

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TID #: N/A	Project Title: TPS65988EVM	
Number: ACS009 Rev: A	Sheet Title: Type-C Connector & Protection	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 8 of 12
Drawn By: Jacob Ontiveros	File: ACS009A_Type_C.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

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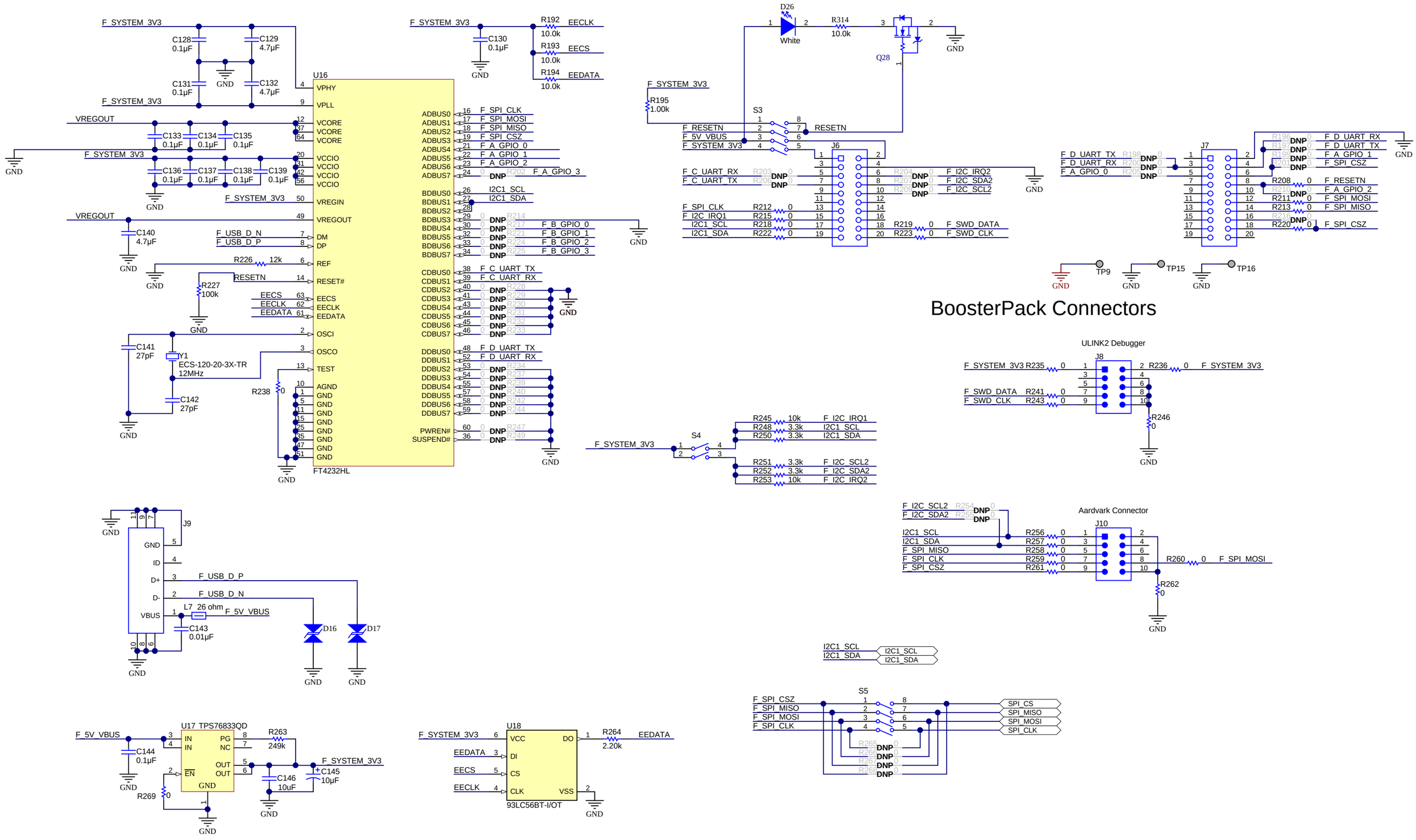

Orderable: TPS65988EVM	Designed for: Public Release	Mod. Date: 5/2/2018
TID #: N/A	Project Title: TPS65988EVM	
Number: ACS009 Rev: A	Sheet Title: FTDI Debug Board	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 9 of 12
Drawn By: Jacob Ontiveros	File: ACS009A_FTDI_Debug.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

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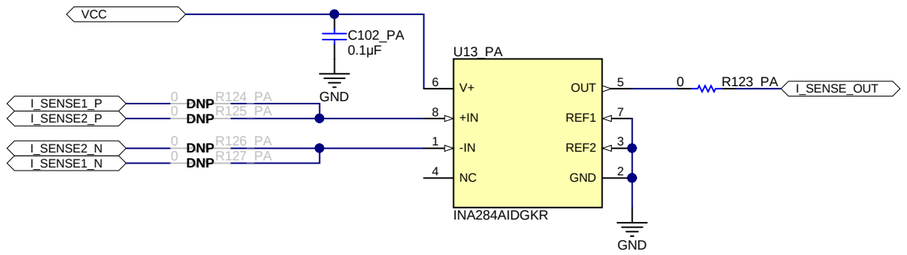

Orderable: TPS65988EVM	Designed for: Public Release	Mod. Date: 5/2/2018
TID #: N/A	Project Title: TPS65988EVM	
Number: ACS009 Rev: A	Sheet Title: Current Sense	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 10 of 12
Drawn By: Jacob Ontiveros	File: ACS009A_Current_Sense.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

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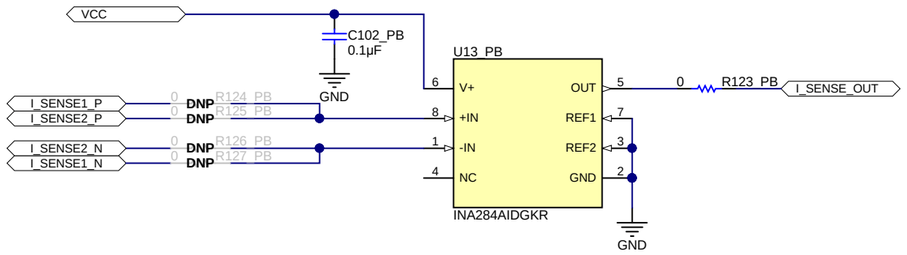

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TID #: N/A	Project Title: TPS65988EVM	
Number: ACS009 Rev: A	Sheet Title: Current Sense	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 10 of 12
Drawn By: Jacob Ontiveros	File: ACS009A_Current_Sense.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

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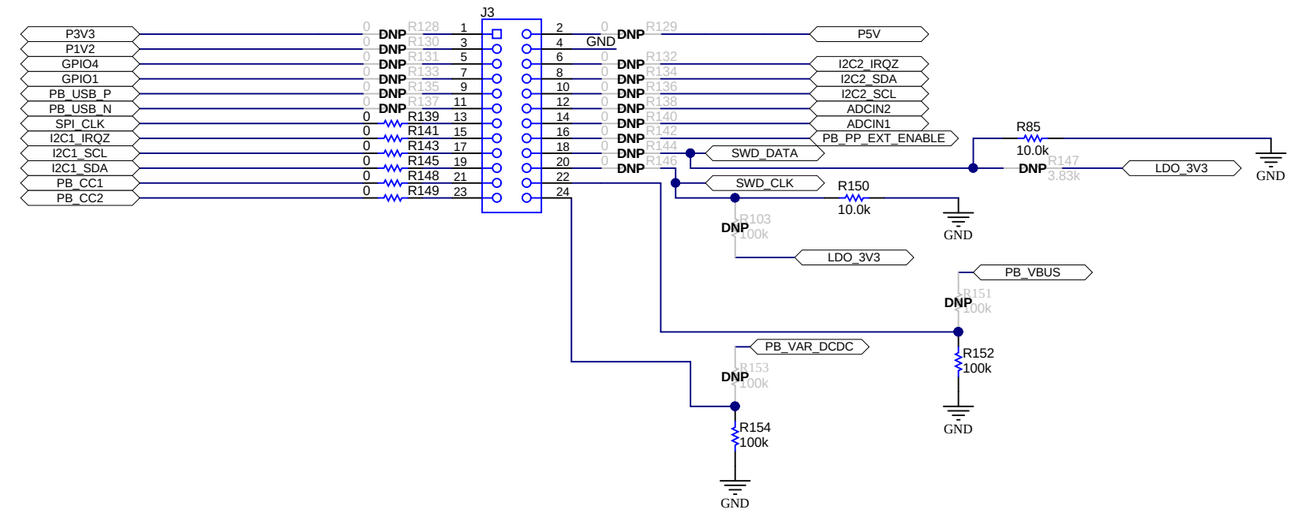

High Current Capable

P5V
PA_VBUS
PA_VAR_DCDC
PB_VBUS
PB_VAR_DCDC

R151/153/177/178
Replace w/ zero Ohm or short

Orderable: TPS65988EVM	Designed for: Public Release	Mod. Date: 4/17/2018
TID #: N/A	Project Title: TPS65988EVM	
Number: ACS009 Rev: A	Sheet Title: Debug Headers	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 11 of 12
Drawn By: Jacob Ontiveros	File: ACS009A_Booster_Connectors.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

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DNP FID1 DNP FID2 DNP FID3

DNP FID4 DNP FID5 DNP FID6

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

PCB LOGO
ESD Susceptible

PCB LOGO
WEEE logo

PCB LOGO
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FCC disclaimer

CE Mark

PCB Number: ACS009
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: TPS65988EVM	Designed for: Public Release	Mod. Date: 4/17/2018
TID #: N/A	Project Title: TPS65988EVM	
Number: ACS009 Rev: A	Sheet Title: EVM Hardware	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 12 of 12
Drawn By: Jacob Ontiveros	File: ACS009A_EVM_Hardware.SchDoc	Size: B
Engineer: Jacob Ontiveros	Contact: http://www.ti.com/support	

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