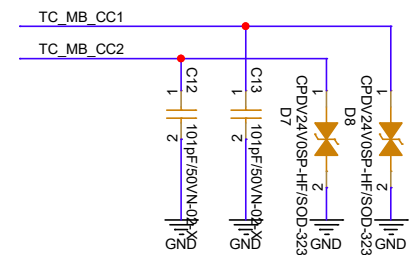
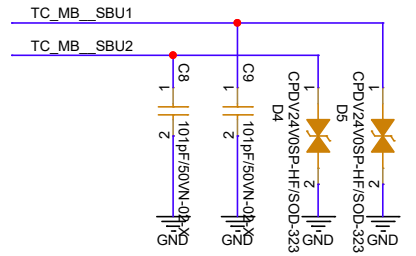
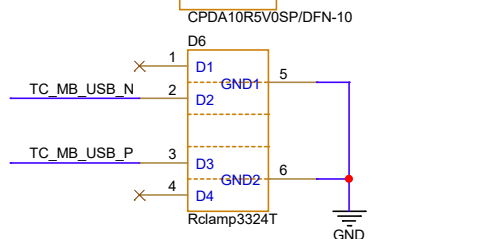
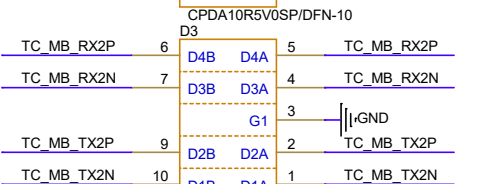
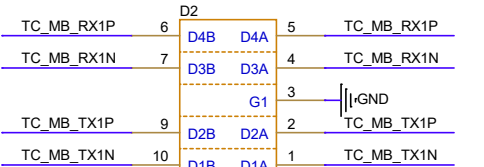


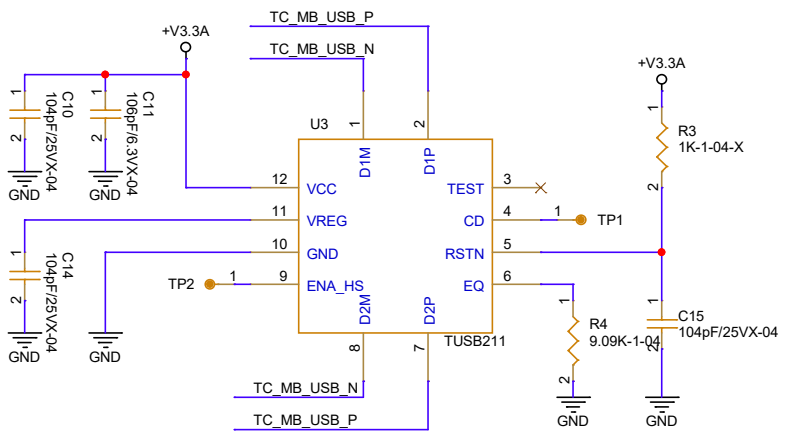
TO USB1064

TO GL3523 HUB

TO TPS65994 MB



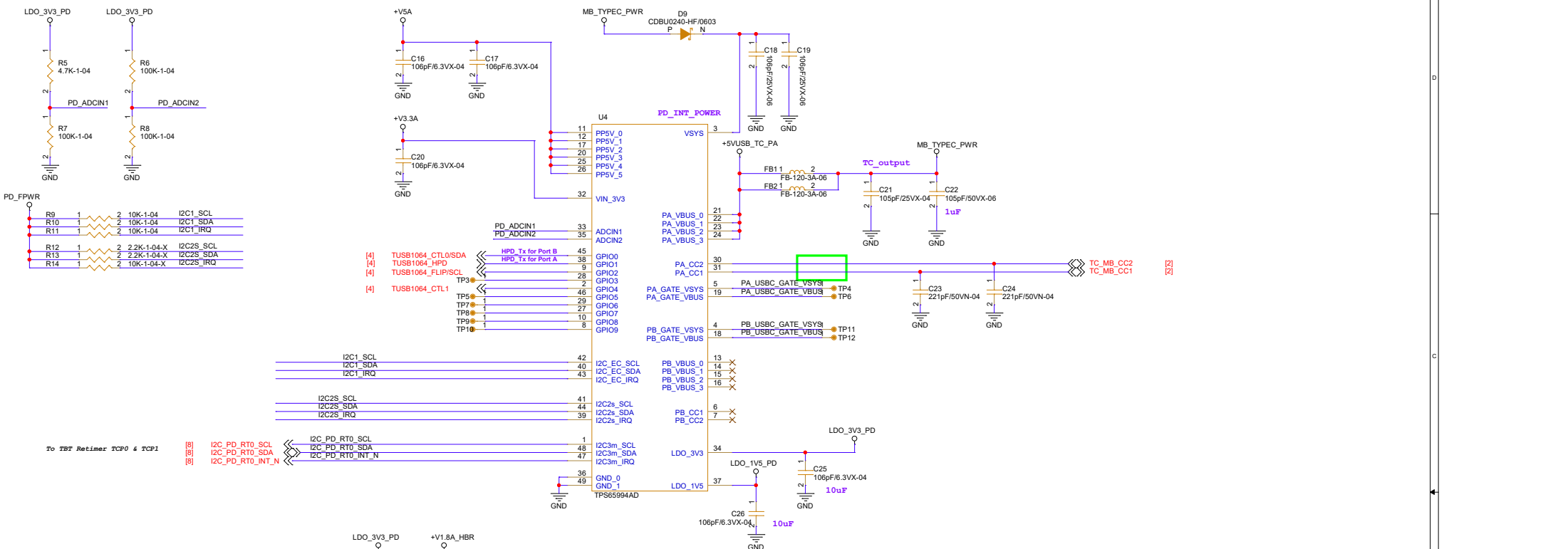
Place U14 close to U16



USB2.0 Redriver

EQ gain setting	R162 [ohms]
Level 0	100
Level 1	1.8k
Level 2 [MAX]	3.9k
Level 3 [MIN]	9.1k

Type-C PD Control



- [4] TUSB1064_CTL0/SDA
- [4] TUSB1064_HPD
- [4] TUSB1064_FLIP/SCL
- [4] TUSB1064_CTL1
- [8] I2C_PD_RT0_SCL
- [8] I2C_PD_RT0_SDA
- [8] I2C_PD_RT0_INT_N

Support dead battery schematic

Table 8-6. Device Configuration using ADCIN1 and ADCIN2

ADCIN1 decoded value (2)	ADCIN2 decoded value (2)	I ² C address Index (1)	Dead Battery Configuration
7	5	#1	AlwaysEnableSink: The device always enables the sink path regardless of the amount of current the attached source is offering. USB PD is disabled until configuration is loaded.
5	5	#2	
2	0	#3	
1	7	#4	SinkRequires_3.0A: The device only enables the sink path if the attached source is offering at least 3.0A. USB PD is disabled until configuration is loaded.
7	4	#1	
4	4	#2	
3	0	#3	SinkRequires_1.5A: The device only enables the sink path if the attached source is offering at least 1.5A. USB PD is disabled until configuration is loaded.
2	7	#4	
7	6	#1	
6	6	#2	NegotiateHighVoltage: The device always enables the sink path during the initial implicit contract regardless of the amount of current the attached source is offering. The PD controller will enter the "APP" mode, enable USB PD PHY, and negotiate a contract for the highest power contract that is offered up to 20 V. This cannot be used when a patch is loaded from EEPROM. This option is not recommended for systems that can boot from 5V.
6	5	#3	
6	7	#4	
7	3	#1	SafeMode: The device does not enable the sink path. USB PD is disabled until configuration is loaded. Note that the configuration could put the device into a source-only mode. This is recommended when the application loads the patch from EEPROM.
3	3	#2	
4	0	#3	
3	7	#4	
7	0	#1	
0	0	#2	
6	0	#3	
5	7	#4	

GPIO control list

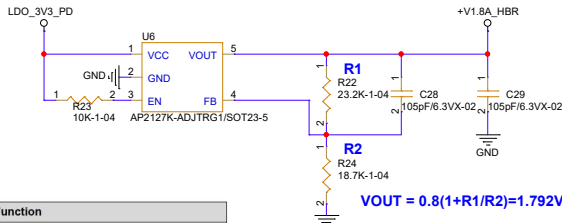
4.2.1 MUX Control LEDs

Table 4-2. Port A MUX CTL LED

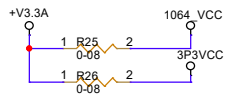
LED Indicator	GPIO	Function
D15 - PA_HPD	GPIO1	HPD
D17 - PA_USB3	GPIO3	USB 3.0 Event
D18 - PA_DP_Mode	GPIO4	DP Mode Select Event
D23 - PA_POL	GPIO9	Cable Orientation Event

Table 4-3. Port B MUX CTL LED

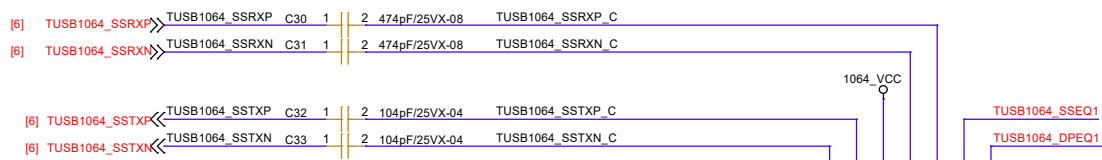
LED Indicator	GPIO	Function
D14 - PB_HPD	GPIO0	HPD
D19 - PB_USB3	GPIO5	USB 3.0 Event
D22 - PB_DP_Mode	GPIO8	DP Mode Select Event
D16 - PB_POL	GPIO2	Cable Orientation Event



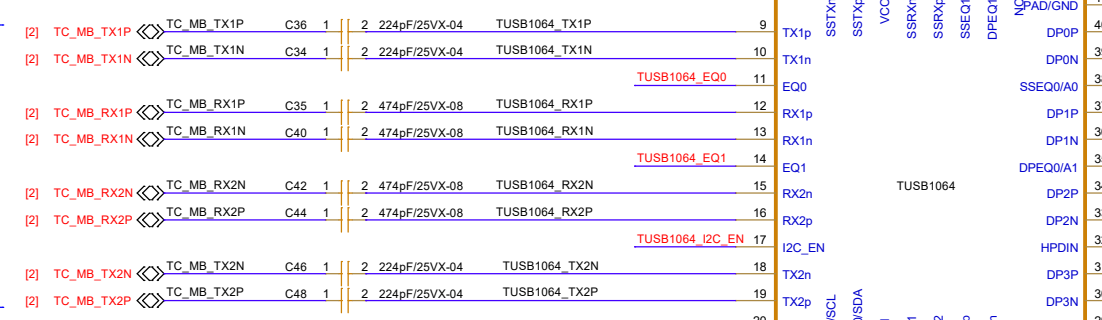
24AA512T (H47938-001)
ADDR = 0X50 (7BIT)



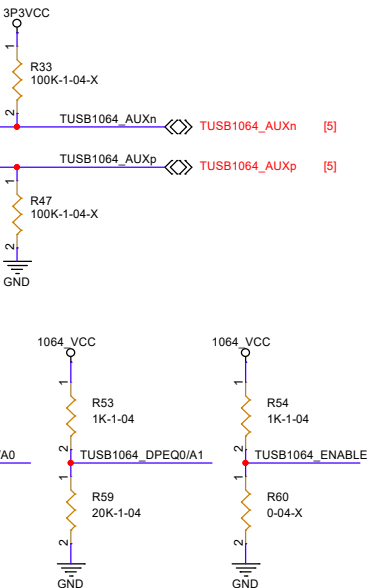
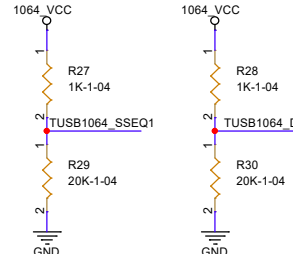
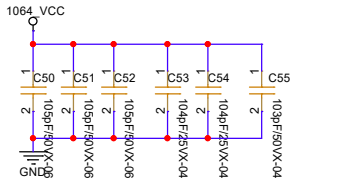
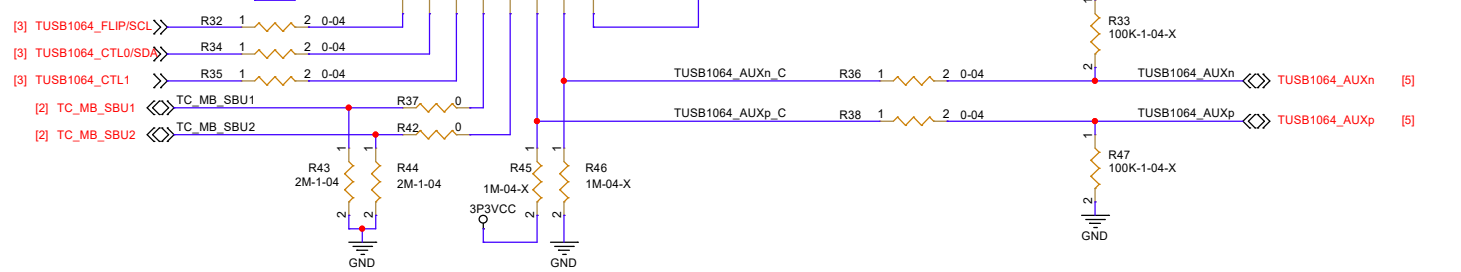
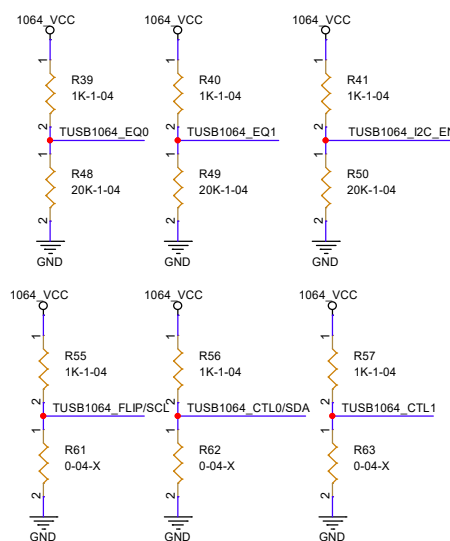
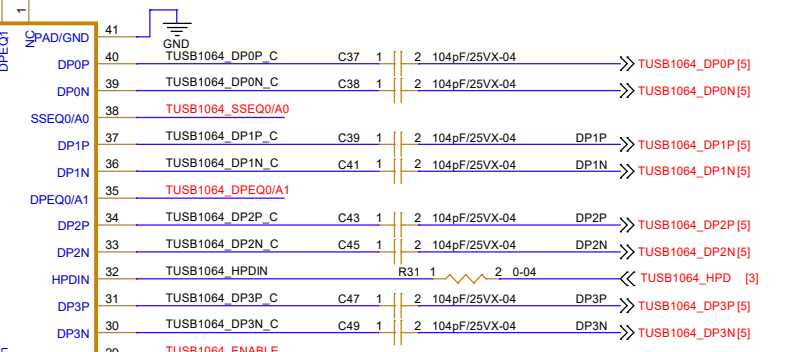
TO GL3523 HUB

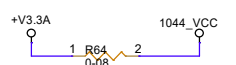


From MB_TypeC

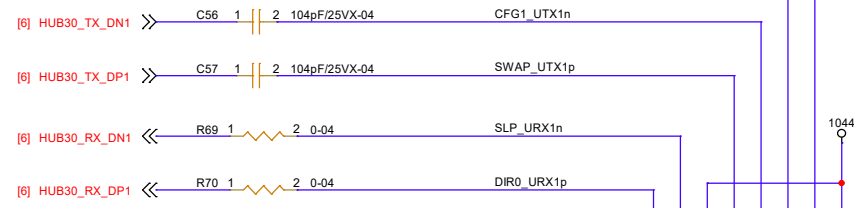


TO TUSB1064 DP

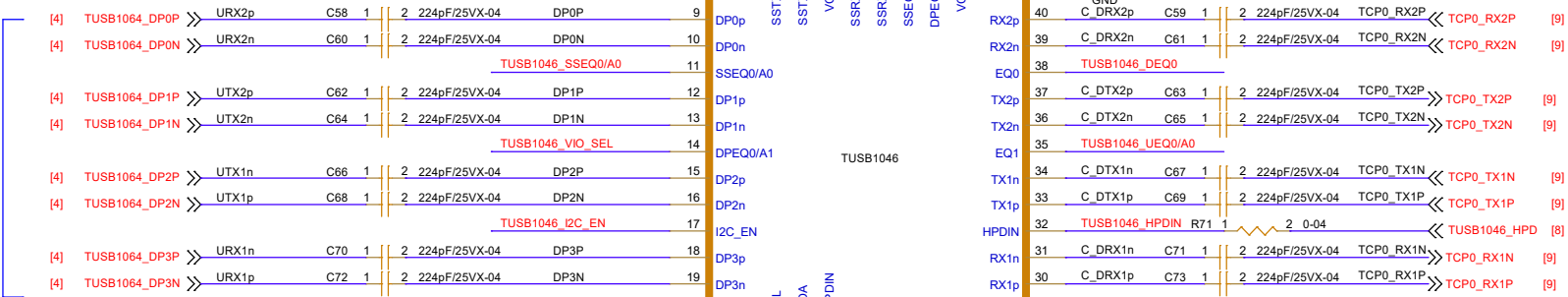




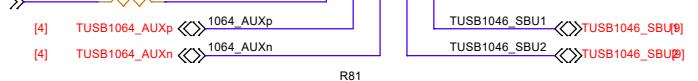
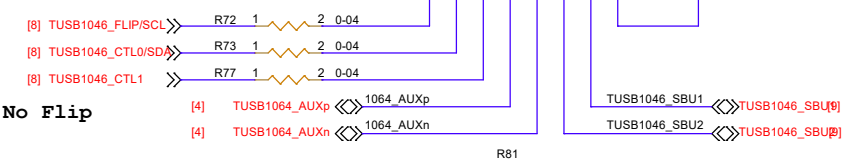
FROM GL3523 HUB



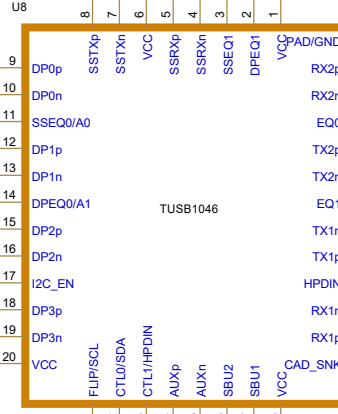
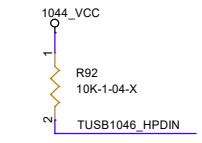
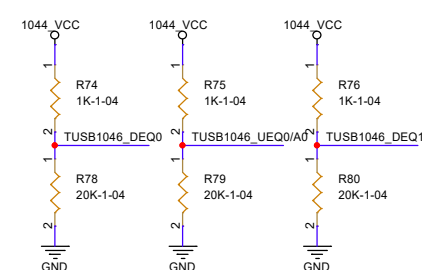
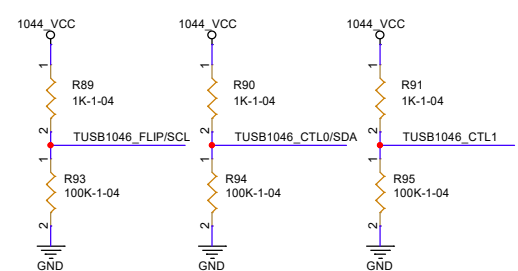
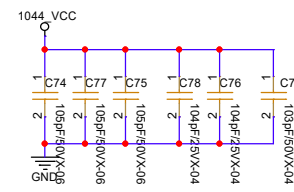
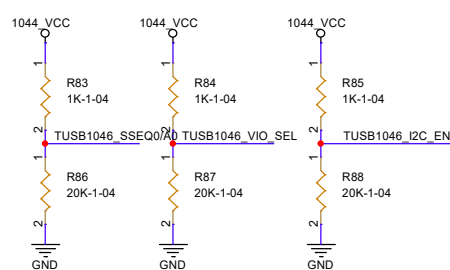
FROM TUSB1064 DP



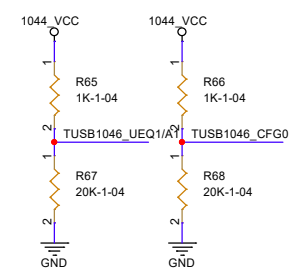
TUSB1046 Set As Sink With No Flip



Note: R1, R2 No Stuff

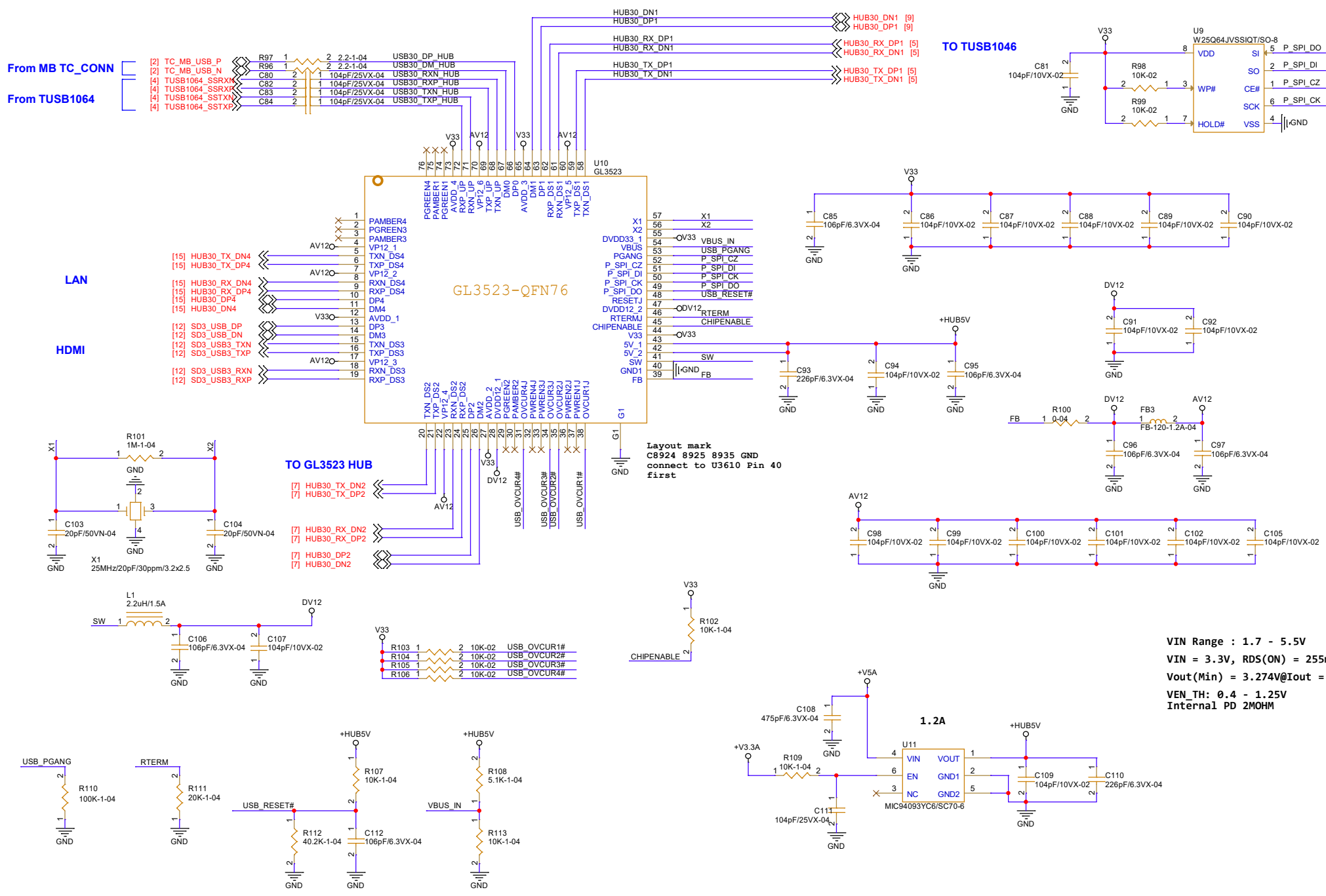


TO TYPE C Conn

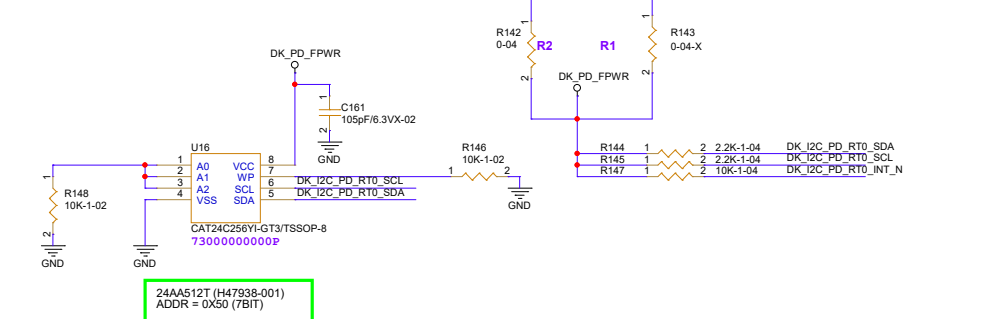
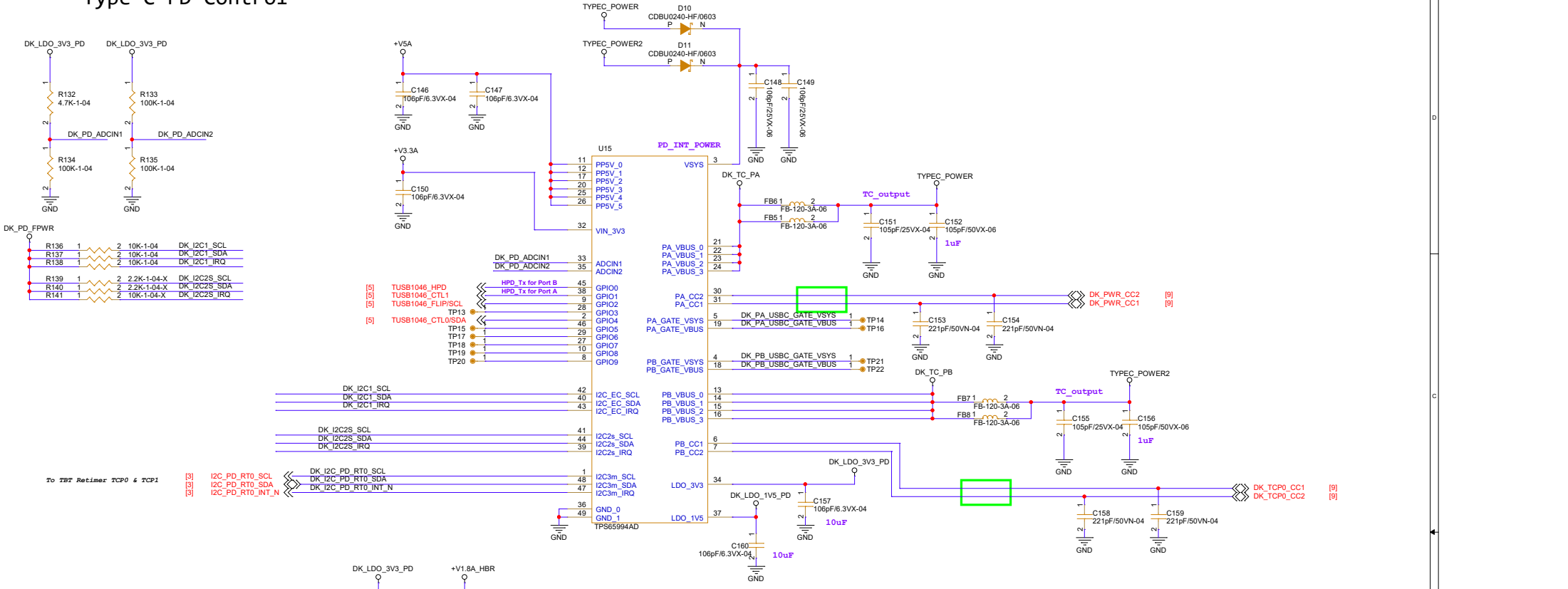


From MB TC_CONN
From USB1064

LAN
HDMI



Type-C PD Control



GPIO control list

4.2.1 MUX Control LEDs

Table 4-2. Port A MUX CTL LED

LED Indicator	GPIO	Function
D15 - PA_HPD	GPIO1	HPD
D17 - PA_USB3	GPIO3	USB 3.0 Event
D18 - PA_DP_Mode	GPIO4	DP Mode Select Event
D23 - PA_POL	GPIO9	Cable Orientation Event

Table 4-3. Port B MUX CTL LED

LED Indicator	GPIO	Function
D14 - PB_HPD	GPIO0	HPD
D19 - PB_USB3	GPIO5	USB 3.0 Event
D22 - PB_DP_Mode	GPIO8	DP Mode Select Event
D16 - PB_POL	GPIO2	Cable Orientation Event

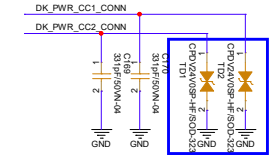
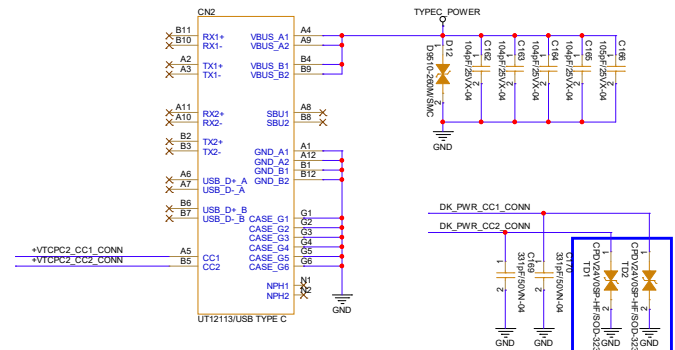
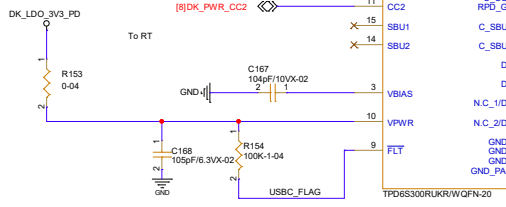
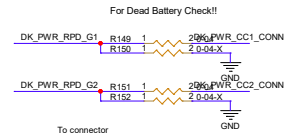
Support dead battery schematic

Table 8-6. Device Configuration using ADCIN1 and ADCIN2

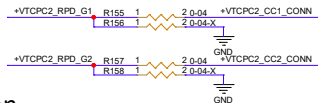
ADCIN1 decoded value (2)	ADCIN2 decoded value (2)	PC address index (1)	Dead Battery Configuration
7	5	#1	
5	5	#2	AlwaysEnableSink: The device always enables the sink path regardless of the amount of current the attached source is offering. USB PD is disabled until configuration is loaded.
2	0	#3	
1	7	#4	
7	4	#1	
4	4	#2	SinkRequires_3.0A: The device only enables the sink path if the attached source is offering at least 3.0A. USB PD is disabled until configuration is loaded.
3	0	#3	
2	7	#4	
7	6	#1	
6	6	#2	SinkRequires_1.5A: The device only enables the sink path if the attached source is offering at least 1.5A. USB PD is disabled until configuration is loaded.
6	5	#3	
6	7	#4	
7	3	#1	
3	3	#2	NegotiateHighVoltage: The device always enables the sink path during the initial implicit contract regardless of the amount of current the attached source is offering. The PD controller will enter the 'APP' mode, enable USB PD PHY and negotiate a contract for the highest power contract that is offered up to 20 V. This cannot be used when a patch is loaded from EEPROM. This option is not recommended for systems that can boot from 5V.
4	0	#3	
3	7	#4	
7	0	#1	
0	0	#2	SafeMode: The device does not enable the sink path. USB PD is disabled until configuration is loaded. Note that the configuration could put the device into a source-only mode. This is recommended when the application loads the patch from EEPROM.
6	0	#3	
5	7	#4	

ESD on CC1/CC2/SBU1/SBU2 is not needed in the designs where port protector is placed next to the Type-C connector

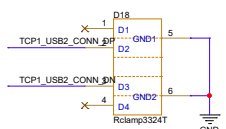
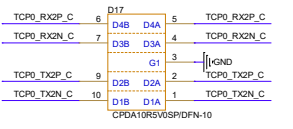
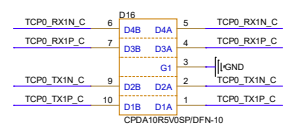
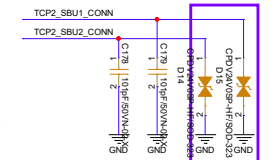
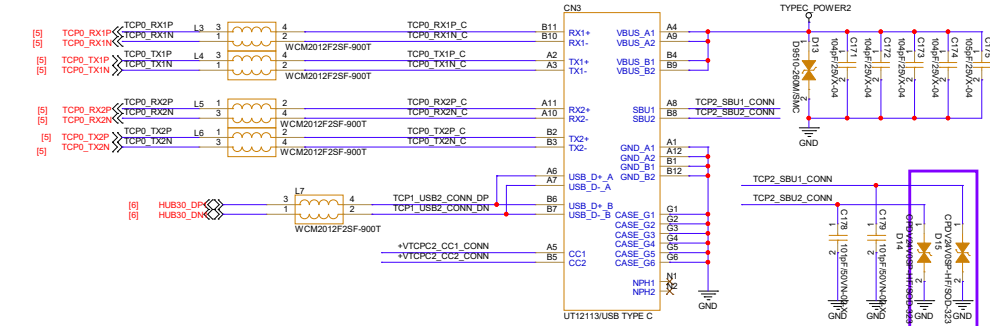
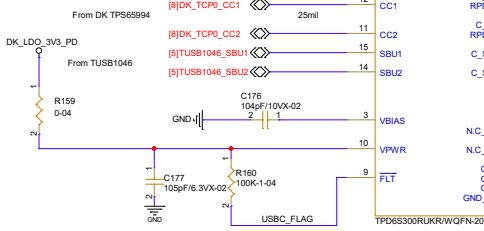
USB3.0-CCpin Protector



For Dead Battery Check!!



USB3.0-CCpin Protector



ESD on CC1/CC2/SBU1/SBU2 is not needed in the designs where port protector is placed next to the Type-C connector