

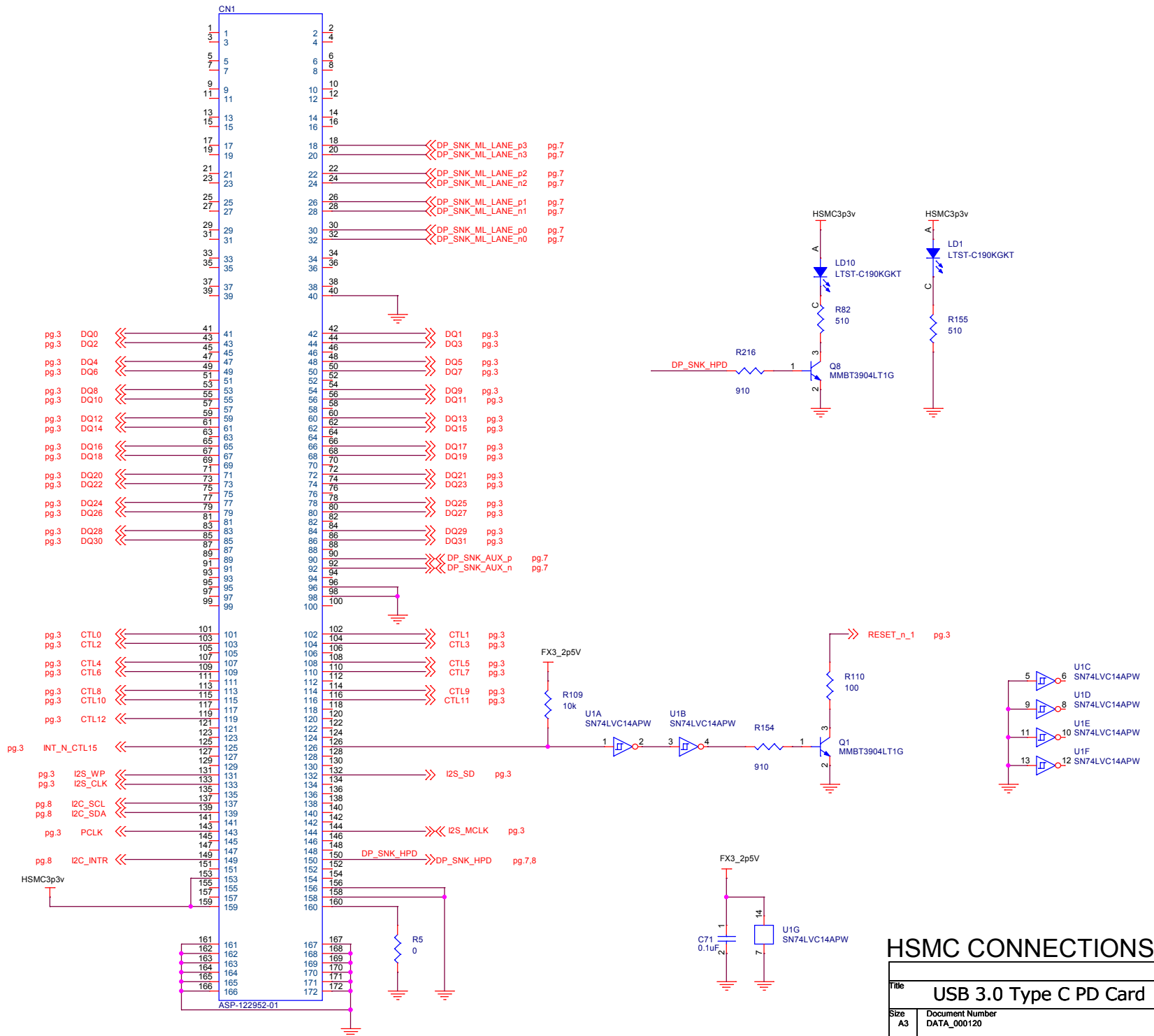
USB 3.0 Type C PD Card

PAGE DESCRIPTION

01	TOP
02	HSMC CONNECTIONS
03	FX3_P-POR,USB2.0,RESET
04	FX3_CLOCK JTAG
05	FX3 POWER & DECOUPLING
06	FX3 POWER 3.3V_2.5V_1.2V
07	FX3_HIGH SPEED MUX USB3.0 TYPE-C CONNECTOR
08	CCG3_CYPD3125
09	CCG3_MOSFET
10	CCG3_VBUS 3.3V_5.0V
11	24V 5A DC POWER IN

Title			USB 3.0 Type C PD Card
Size	Document Number	Rev	
A3	DATA_000120	B	
Date:	2017/03/23	Sheet	1 of 11

HSMC

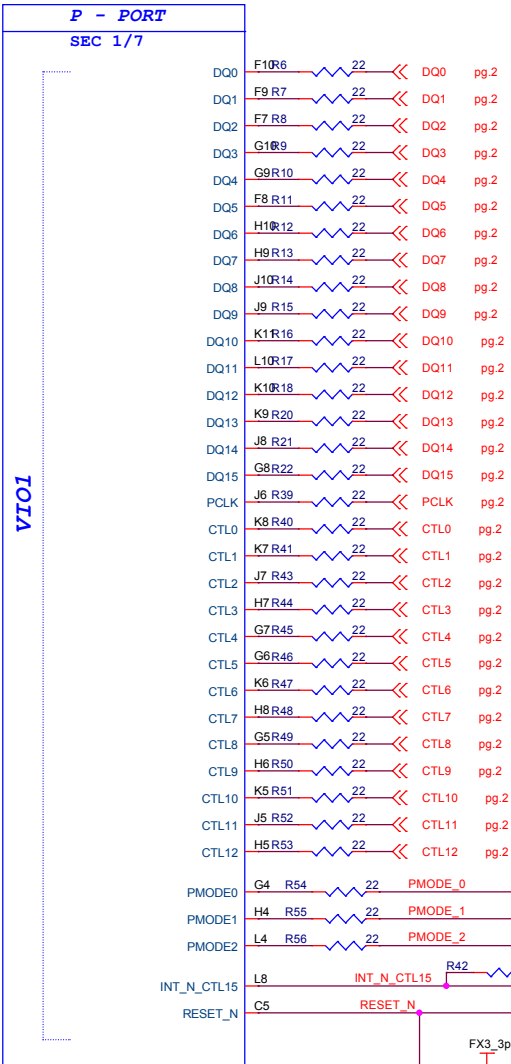


HSMC CONNECTIONS

Title		
USB 3.0 Type C PD Card		
Size	Document Number	Rev
A3	DATA_000120	B
Date:		
Sheet 2 of 11		

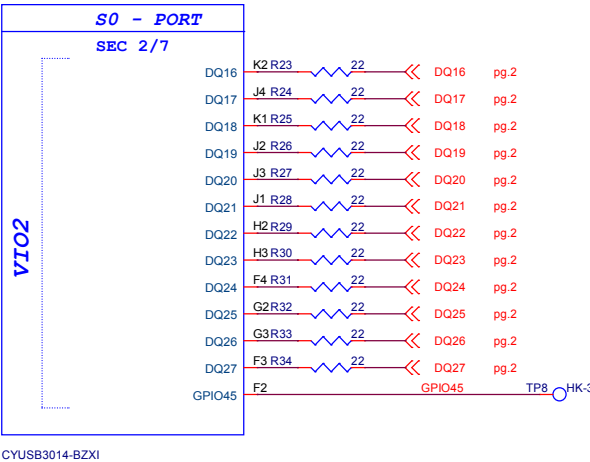
P-PORT CONNECTIONS

U2A



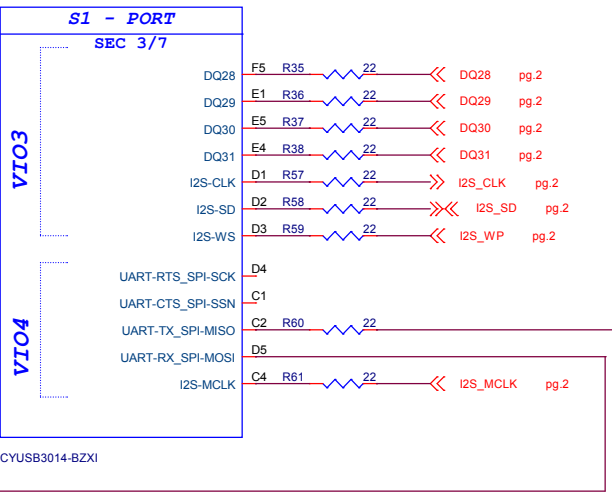
S0-PORT CONNECTIONS

U2B

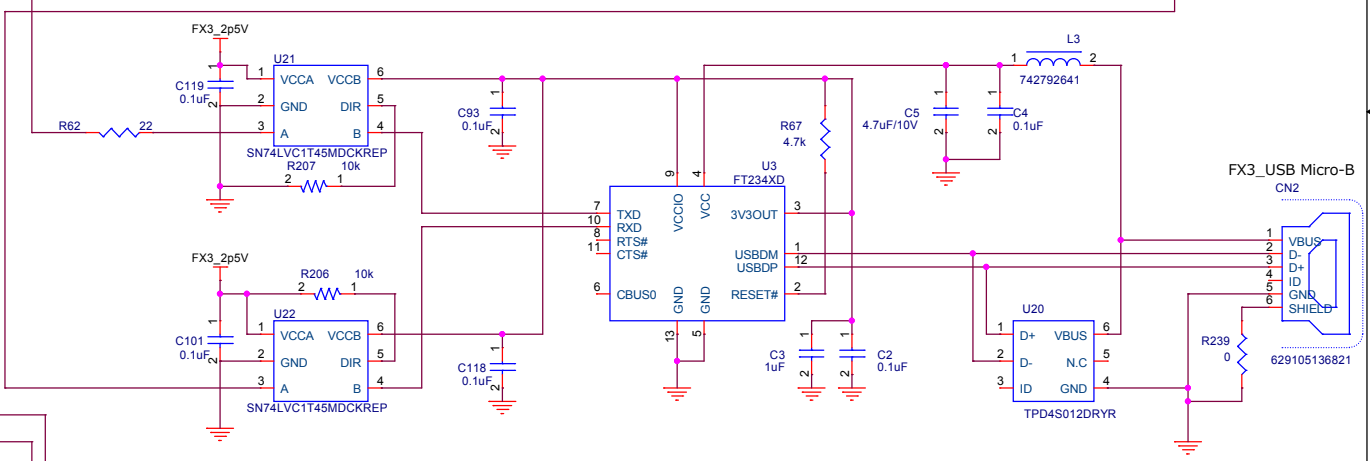


S1-PORT CONNECTIONS

U2C



CYUSB3014-BZXI



PMODE SELECTIONS

Table 2. FX3 Booting Options

PMODE[2:0]	Boot From
F11	USB boot
1FF	I ² C only

SW1

1-8 / ON=1 , OFF=Floating

2-7 / ON=1 , OFF=Floating

3-6 / ON=1 , OFF=Floating

4-5 / ON=with FPGA Reset

OFF=without FPGA Reset

FX3_P-PORT,USB2.0,RESET

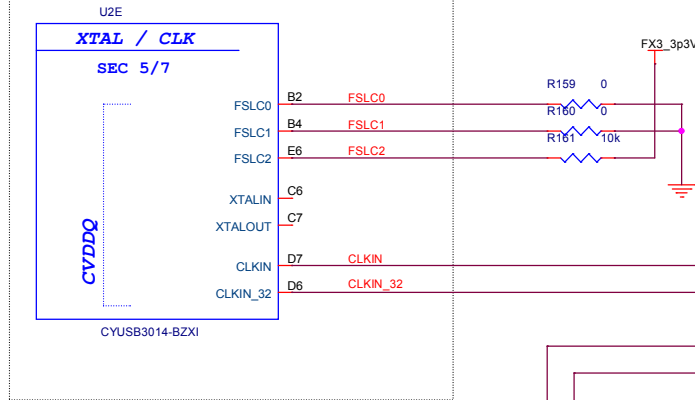
Title			USB 3.0 Type C PD Card
Size	Document Number	Rev	
A3	DATA_000120	B	
Date:		Sheet	3 of 11

FSLC [2..0]

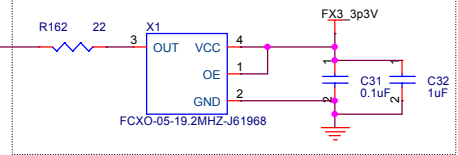
Table 3. Crystal/Clock Frequency Selection

FSLC[2]	FSLC[1]	FSLC[0]	Crystal/Clock Frequency
1	0	0	19.2 MHz input CLK

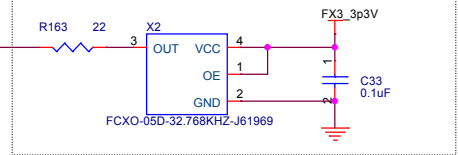
CLOCK SIGNALS



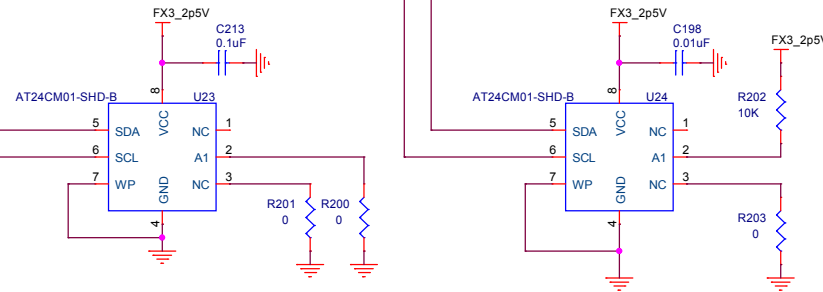
CLOCK IN_19.2MHz



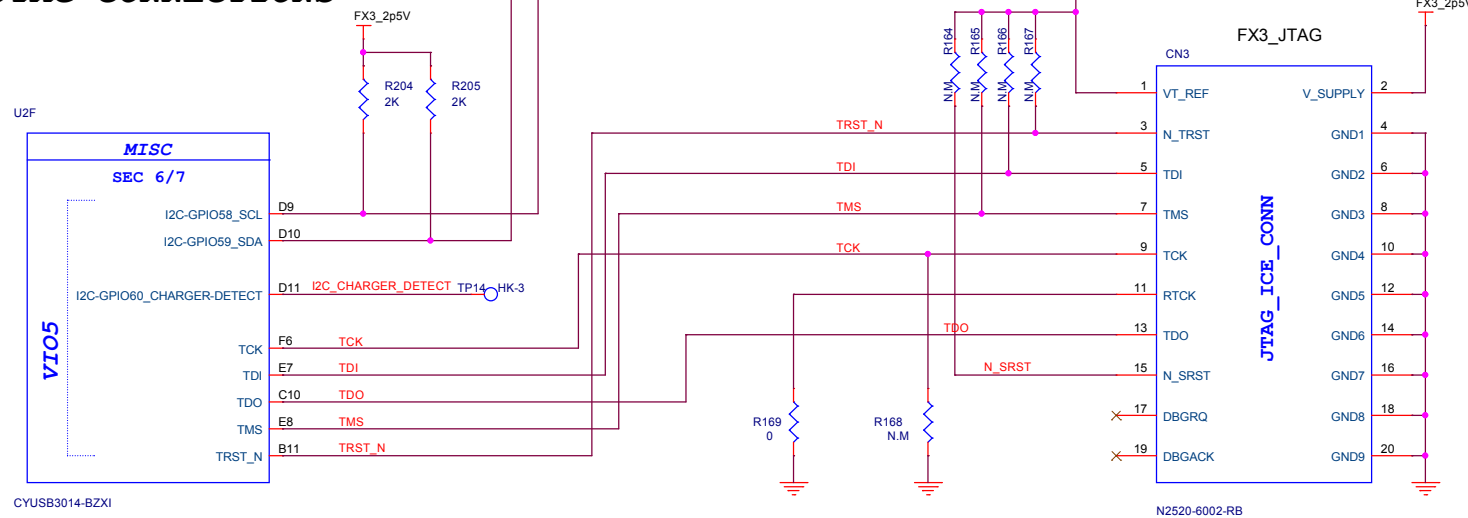
CLOCK IN_32.768kHz



I2C EEPROM

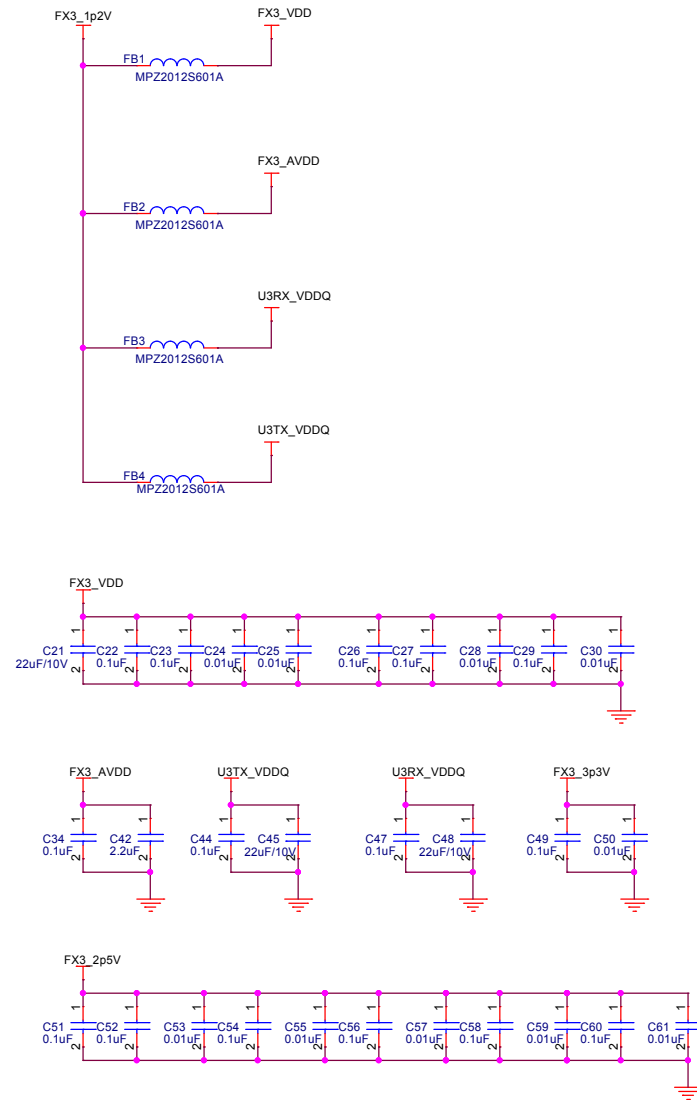


JTAG CONNECTIONS

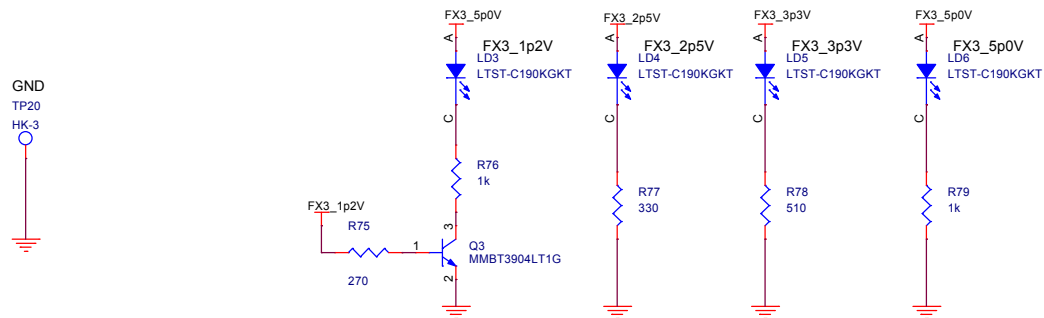
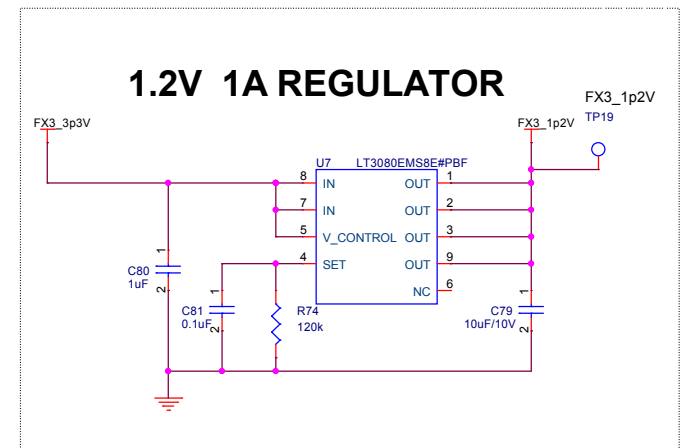


FX3_CLOCK JTAG

Title			
USB 3.0 Type C PD Card			
Size	Document Number		Rev
A3	DATA_000120		B
Date:	Sheet		4 of 11



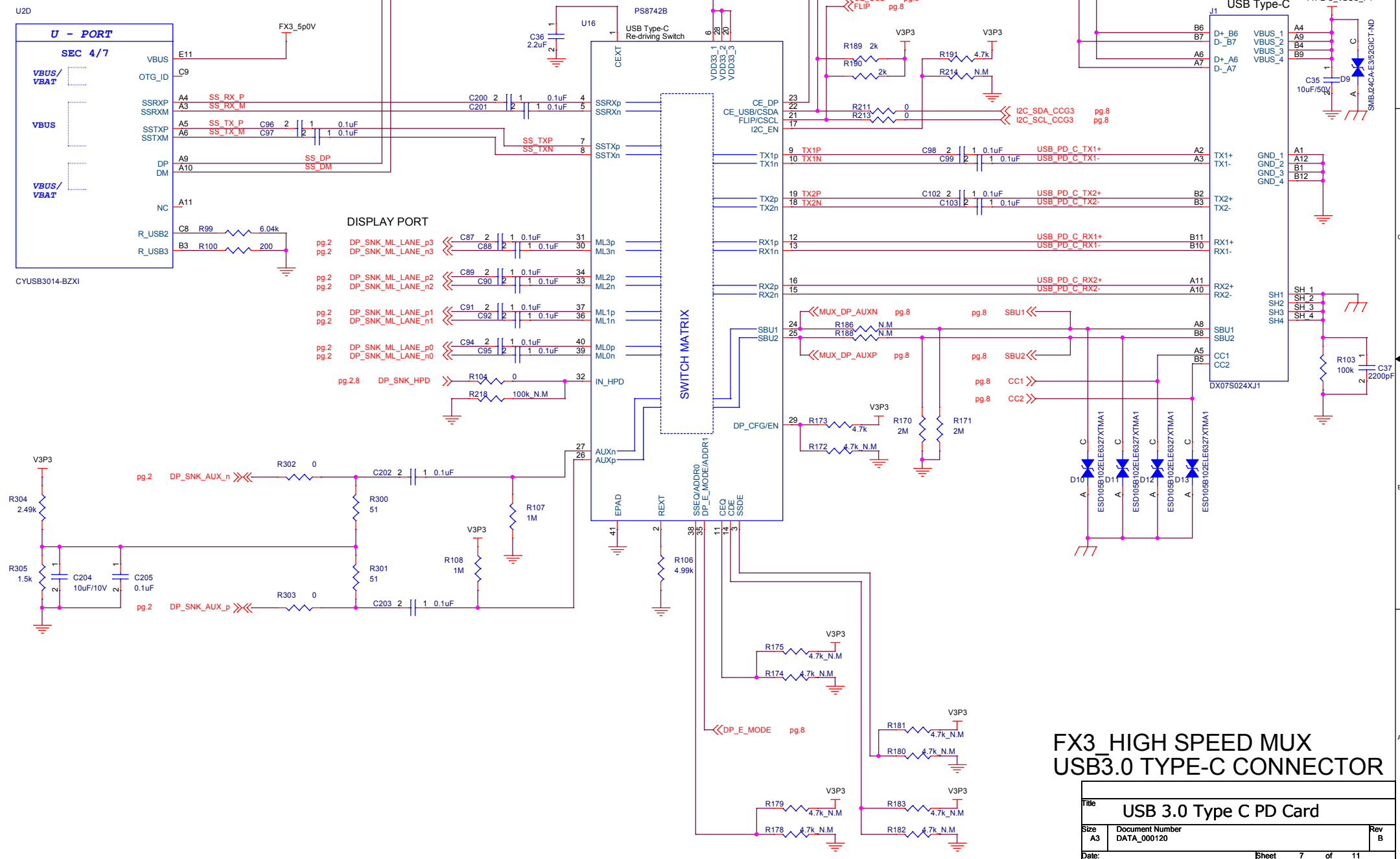
Title			
USB 3.0 Type C PD Card			
Size A3	Document Number DATA_000120		Rev B
Date:	Sheet	5	of 11



FX3 POWER_3.3V_2.5V_1.2V

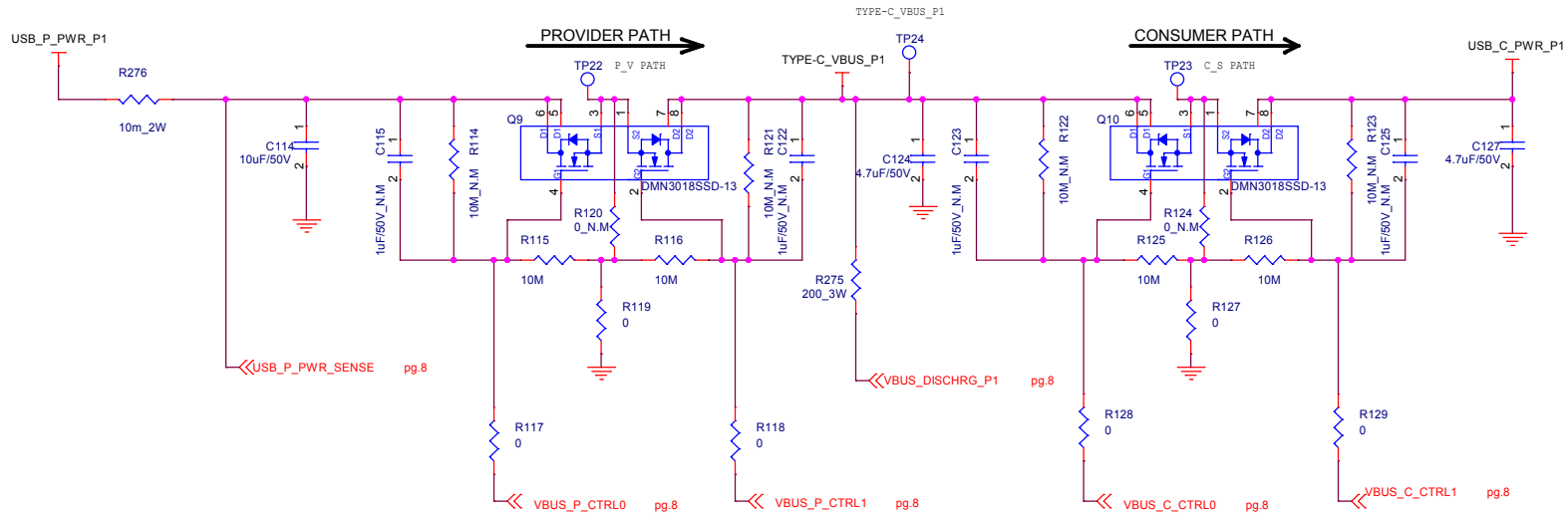
Title			
USB 3.0 Type C PD Card			
Size	Document Number		Rev
A3	DATA_000120		B
Date:	Sheet	6	of 11

USB CONNECTIONS



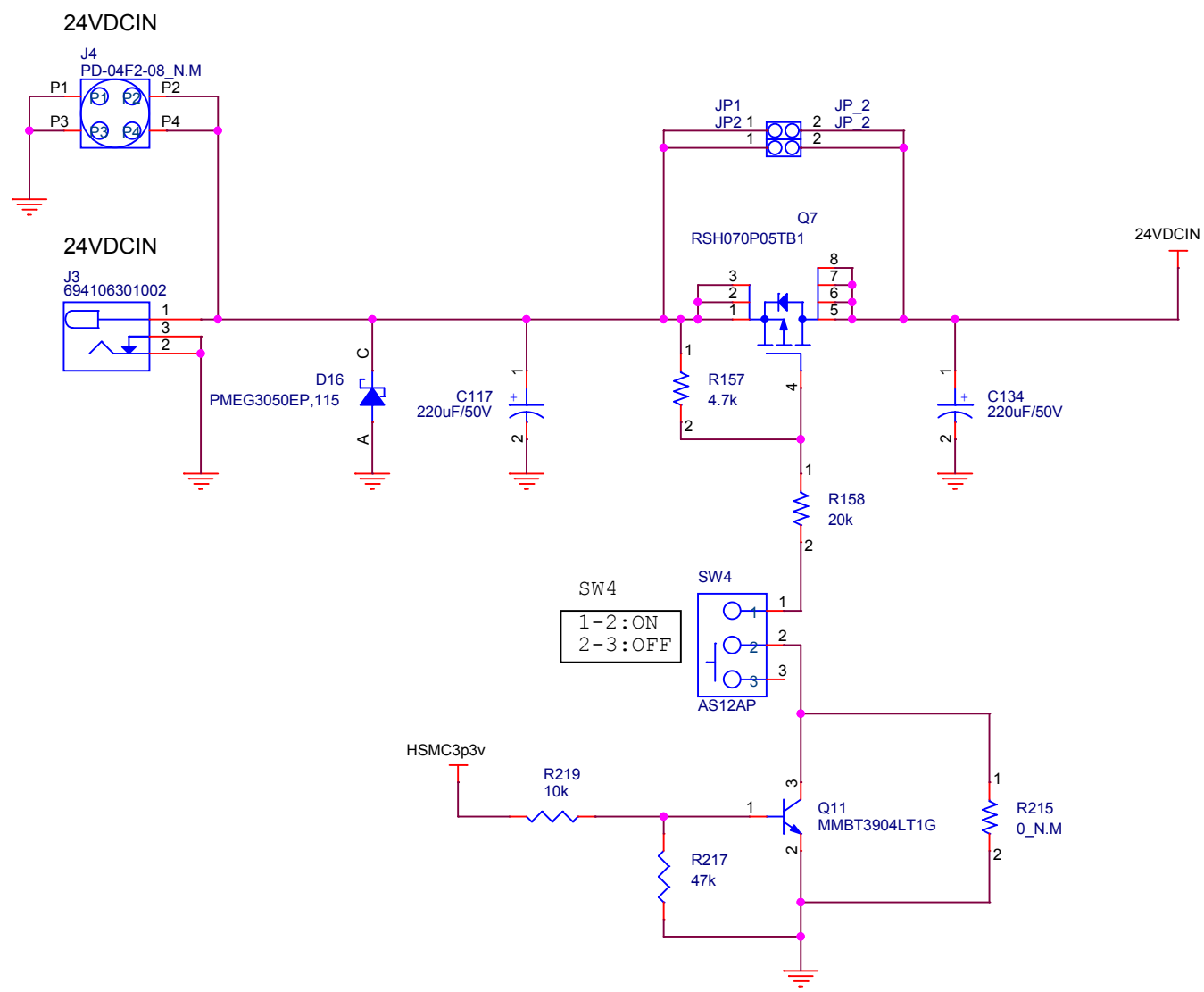
OVER CURRENT SENSE

Ensure layout is suitable for 5A continuous current for below path
USB_P_PWR_P1, TYPE-C_VBUS_P1, USB_C_PWR_P1



CCG3_MOSFET

Title		
USB 3.0 Type C PD Card		
Size	Document Number	Rev
A3	DATA_000120	B
Date:	Sheet 9 of 11	



24V 5A DC POWER IN

Title		
USB 3.0 Type C PD Card		
Size	Document Number	Rev
A4	DATA_000120	B
Date:	Sheet 11 of 11	