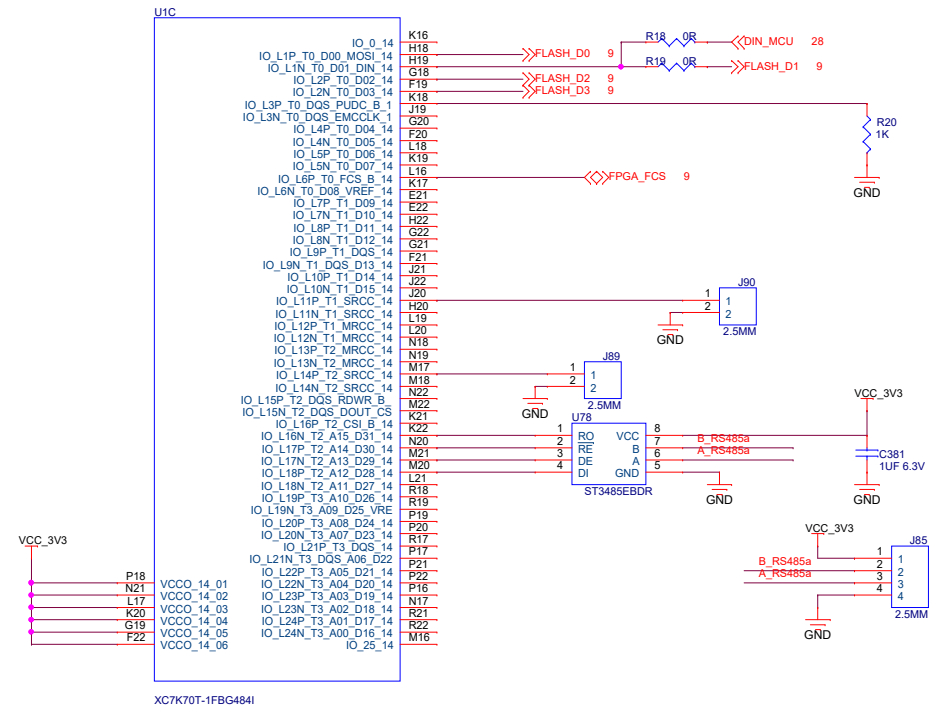
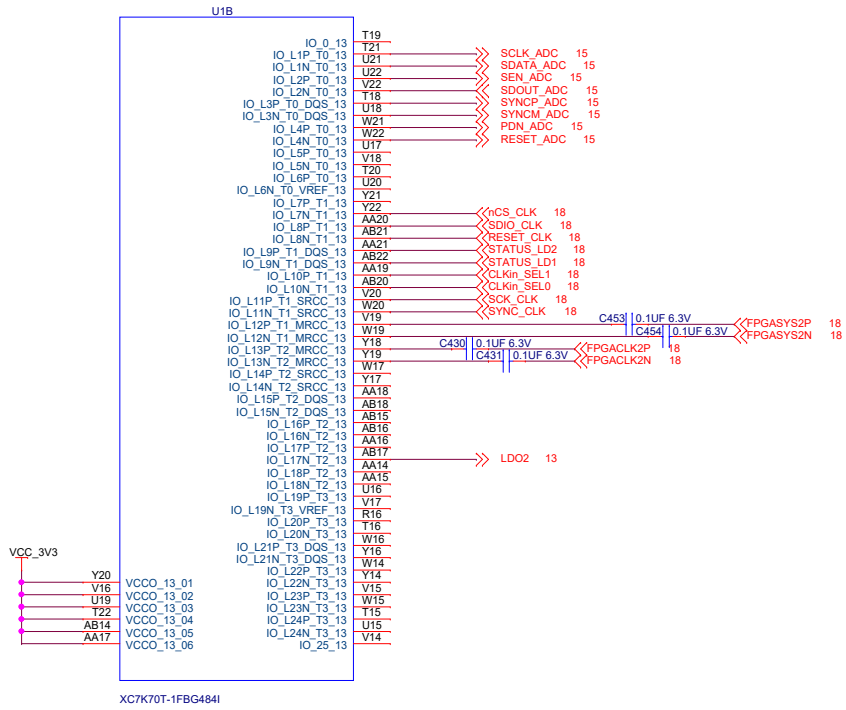
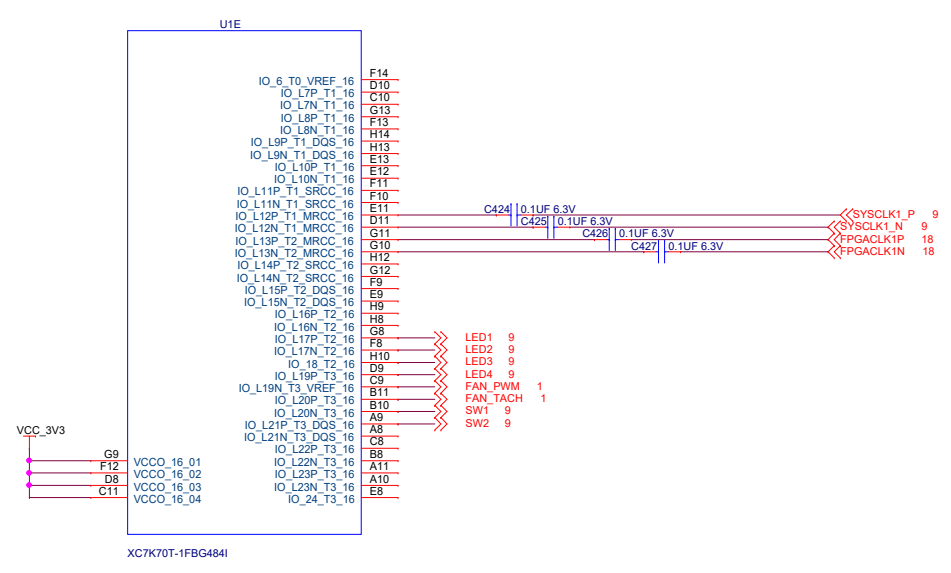
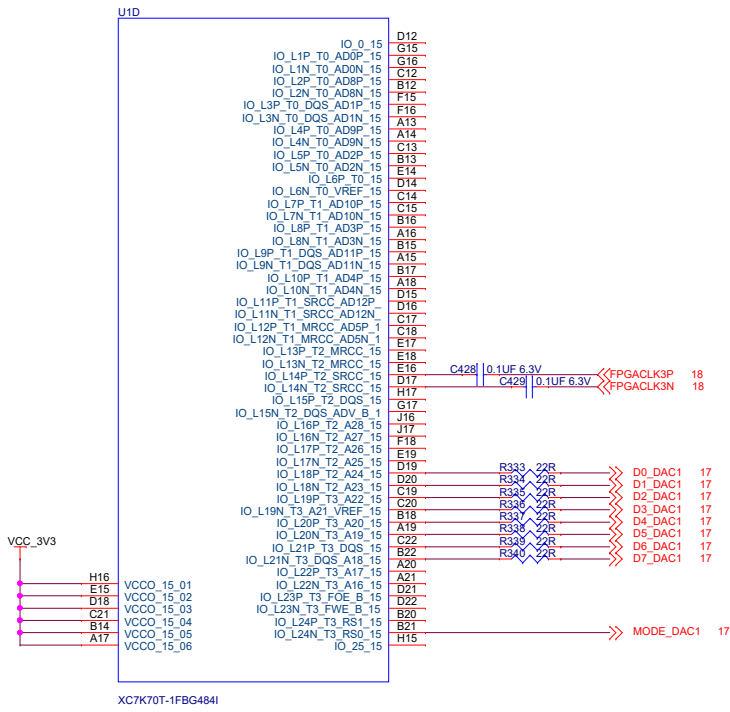


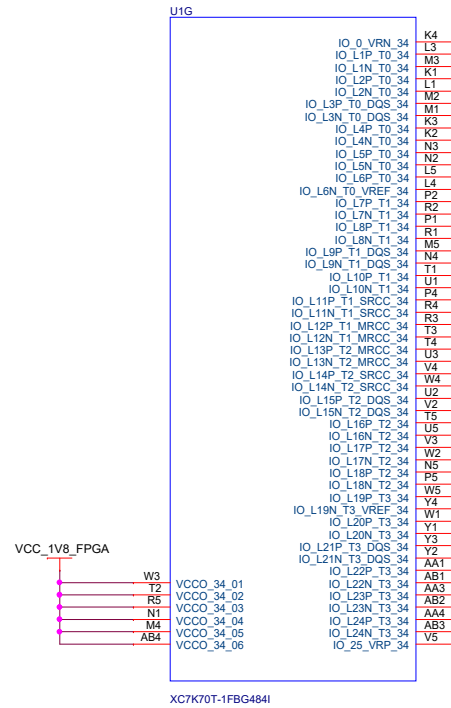
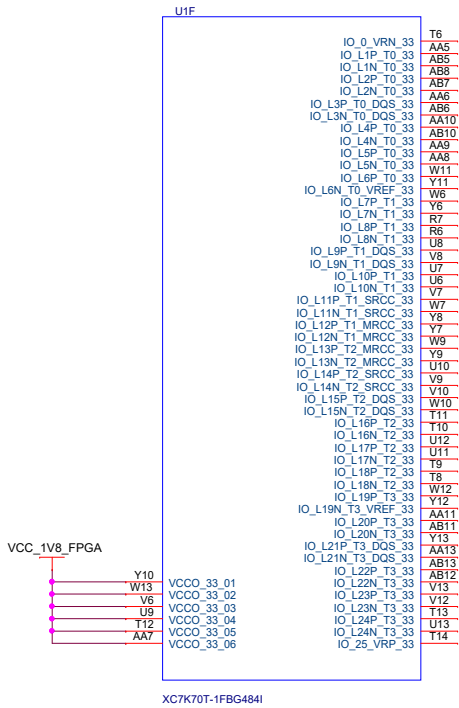
Title		
Fiber Sensing		
Size	Document Number	Rev
B	SCH001-2022	A
Date:	Tuesday, November 08, 2022	Sheet 1 of 29



Title		
Fiber Sensing		
Size B	Document Number SCH001-2022	Rev A
Date:	Tuesday, November 08, 2022	Sheet 2 of 29



Title		
Fiber Sensing		
Size	Document Number	Rev
B	SCH001-2022	A
Date:	Tuesday, November 08, 2022	Sheet 3 of 29

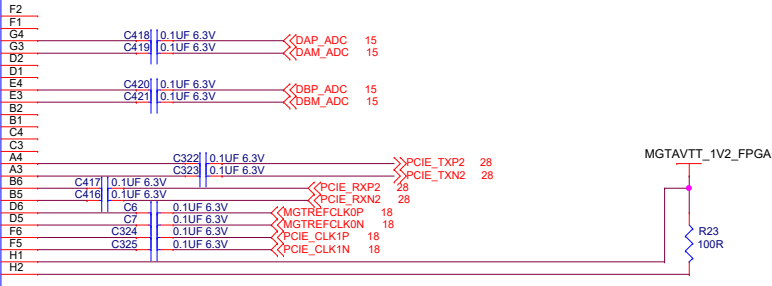


Title		
Fiber Sensing		
Size B	Document Number SCH001-2022	Rev A
Date:	Tuesday, November 08, 2022	Sheet 4 of 29

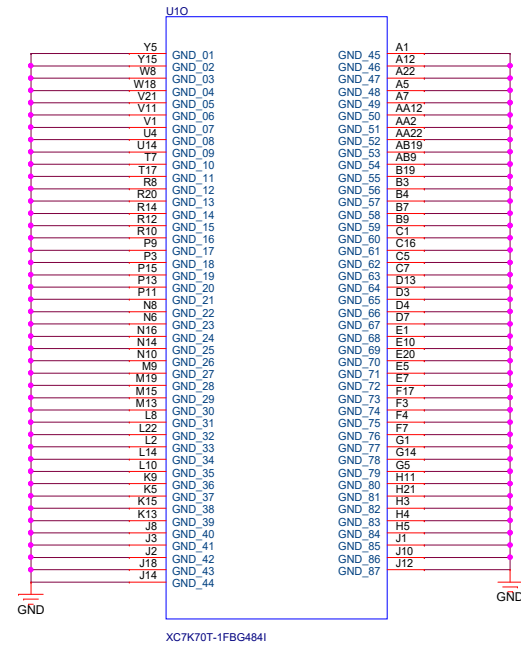
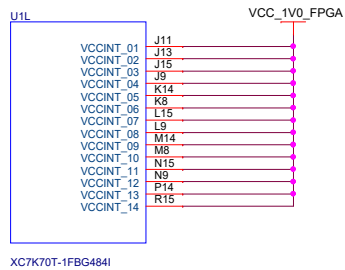
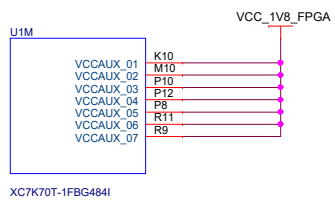
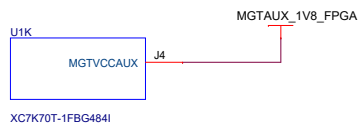
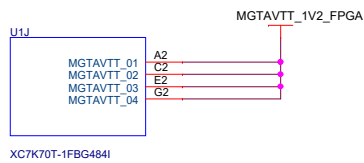
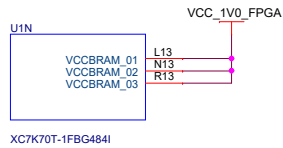
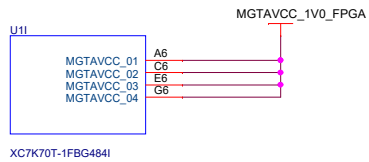
U1H

MGTXXP0_115
 MGTXNX0_115
 MGTXRX0_115
 MGTXRX0_115
 MGTXXP1_115
 MGTXNX1_115
 MGTXRX1_115
 MGTXRX1_115
 MGTXXP2_115
 MGTXNX2_115
 MGTXRX2_115
 MGTXRX2_115
 MGTXXP3_115
 MGTXNX3_115
 MGTXRX3_115
 MGTXRX3_115
 MGTREFCLK0P_115
 MGTREFCLK0N_115
 MGTREFCLK1P_115
 MGTREFCLK1N_115
 MGTAVTTRCAL_115
 MGTTRREF_115

XC7K70T-1FBG4841



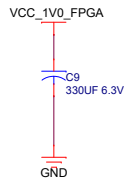
Title		
Fiber Sensing		
Size B	Document Number SCH001-2022	Rev A
Date:	Tuesday, November 08, 2022	Sheet 5 of 29



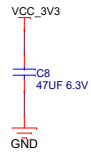
Title		
Fiber Sensing		
Size	Document Number	Rev
B	SCH001-2022	A
Date:	Tuesday, November 08, 2022	Sheet 6 of 29

BYPASS CAPACITORS

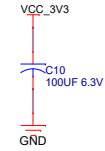
VCCINT 330uF (2)



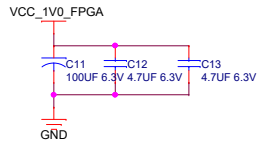
Bank 0 1.5V VCCO



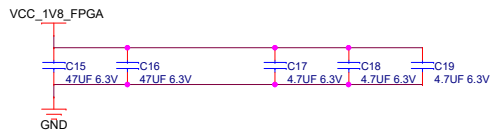
Bank 13/14/15 1.5V VCCO



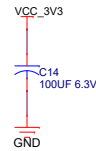
VCCBRAM 100uF (1), 4.7uF (3) 0402



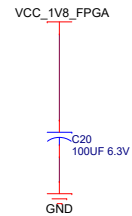
VCCAUX 47uF



Banks 16 3.3V VCCO



Banks 33, 34 1.5V VCCO

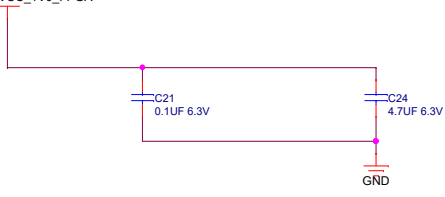


FPGA Bypass Capacitors

Title		Fiber Sensing	
Size	Document	Number	Rev
Custom	SCH001-2022		A
Date:	Tuesday, November 08, 2022	Sheet	7 of 29

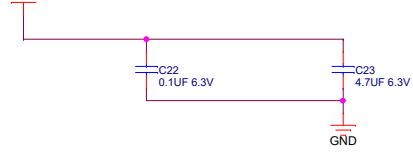
MGTAVCC

MGTAVCC_1V0_FPGA



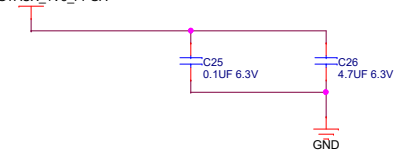
MGTAVTT

MGTAVTT_1V2_FPGA



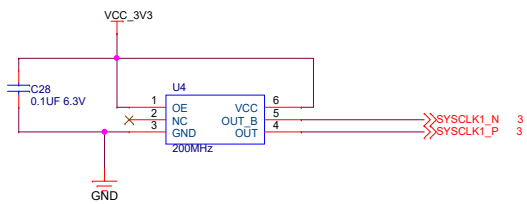
MGTAUX

MGTAUX_1V8_FPGA

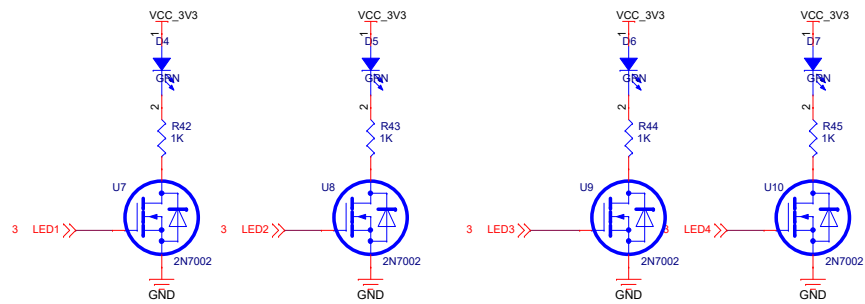
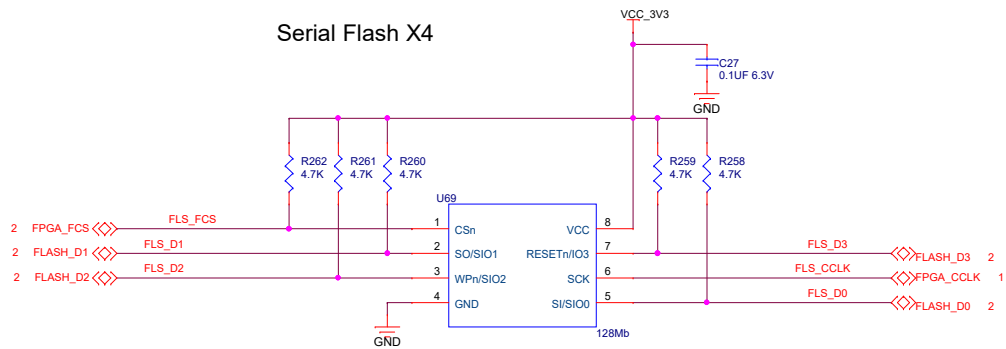


FPGA MGT Bypass Capacitors

Title			Fiber Sensing
Size	Document Number	Rev	
Custom	SCH001-2022	A	
Date:	Tuesday, November 08, 2022	Sheet	8 of 29



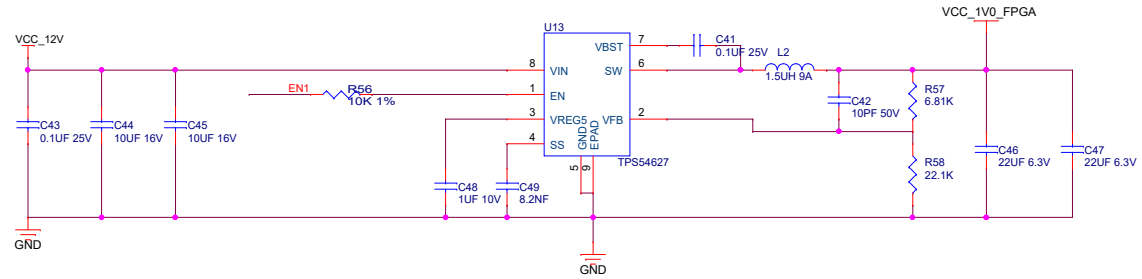
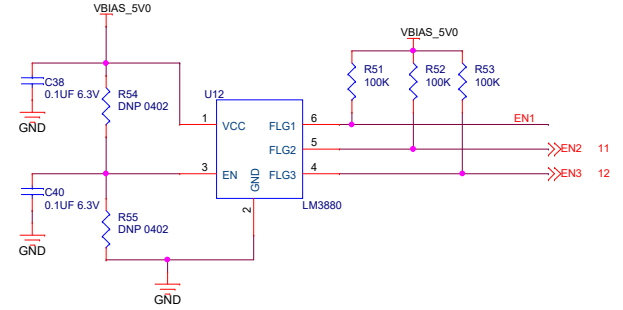
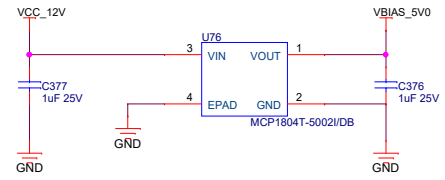
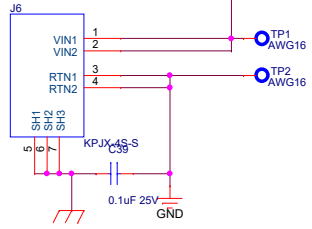
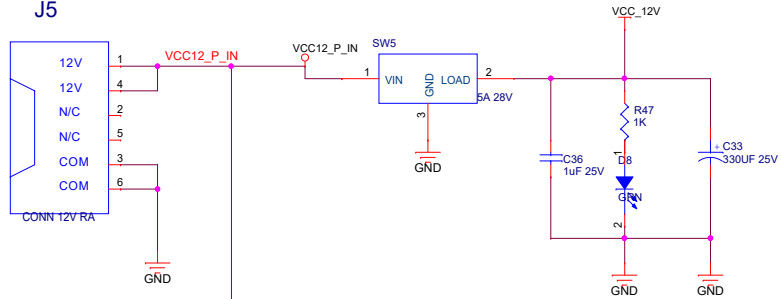
Serial Flash X4



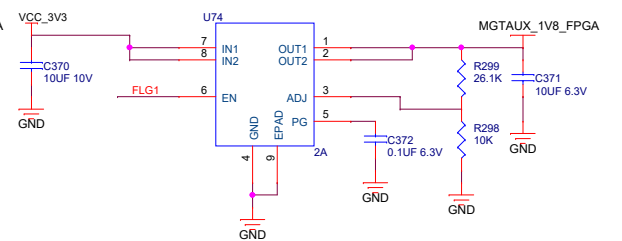
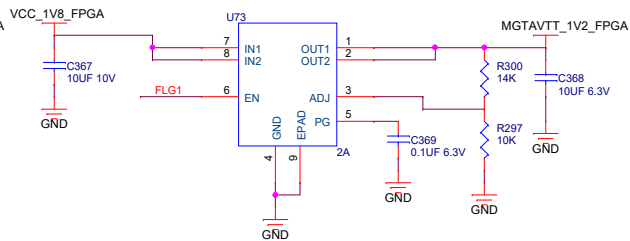
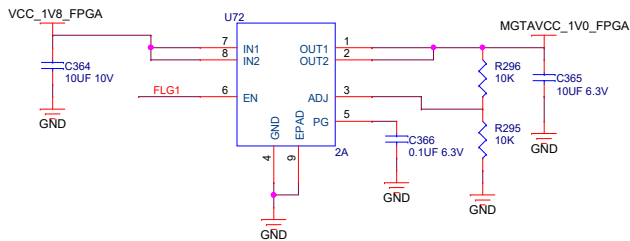
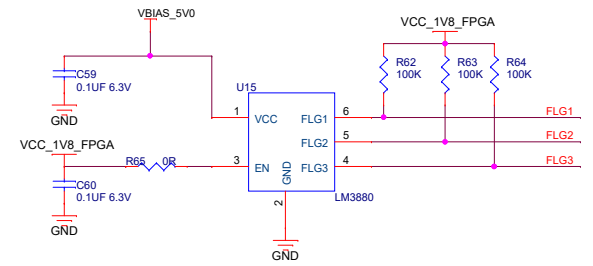
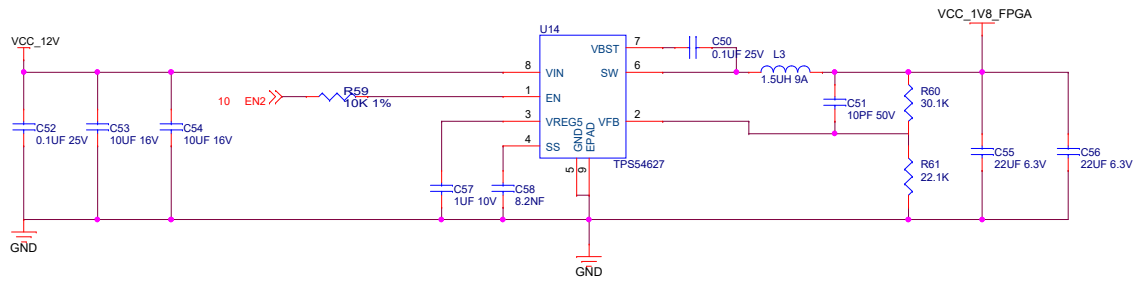
FPGA JTAG, Clock, Flash, Buttons

Title Fiber Sensing		Rev A
Document Number SCH001-2022		
Date: Tuesday, November 08, 2022	Sheet 9 of 29	

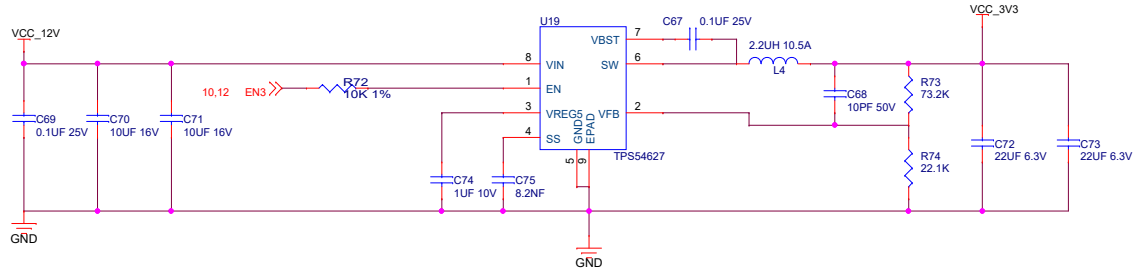
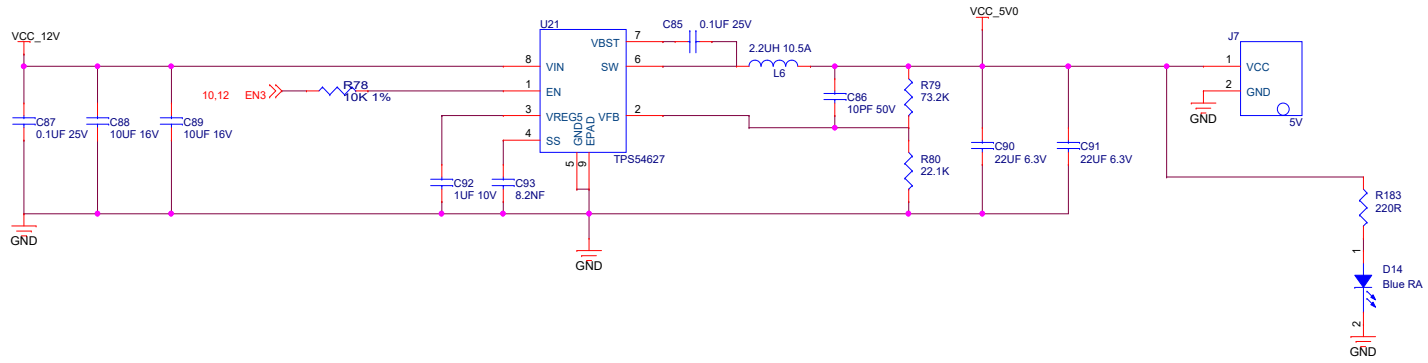
J5



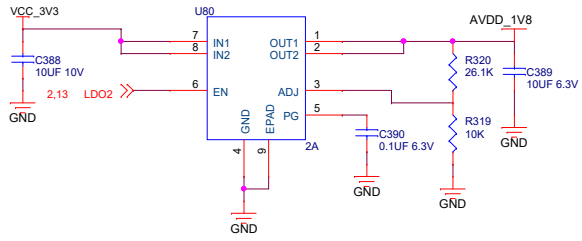
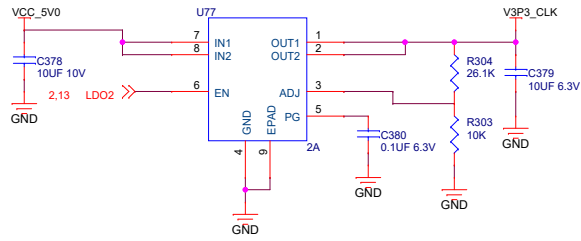
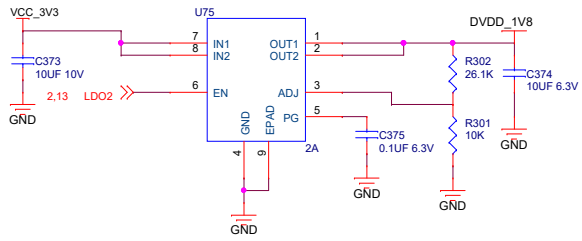
Title		
Fiber Sensing		
Size	Document Number	Rev
B	SCH001-2022	A
Date:	Tuesday, November 08, 2022	Sheet 10 of 29



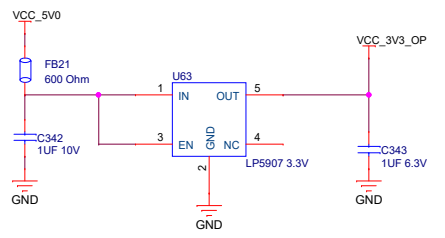
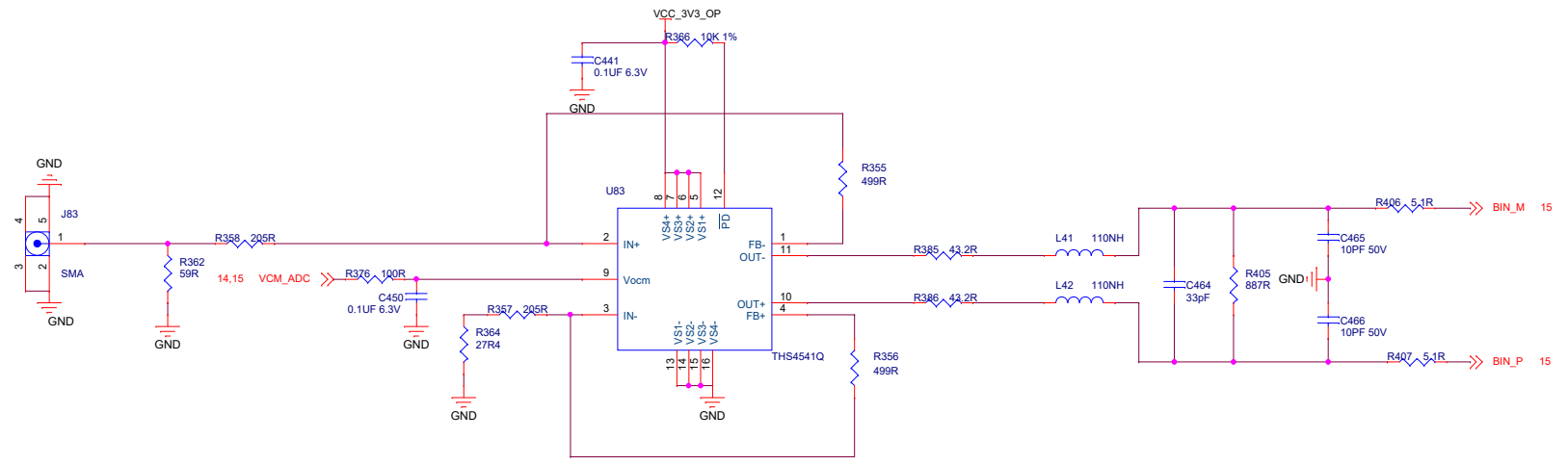
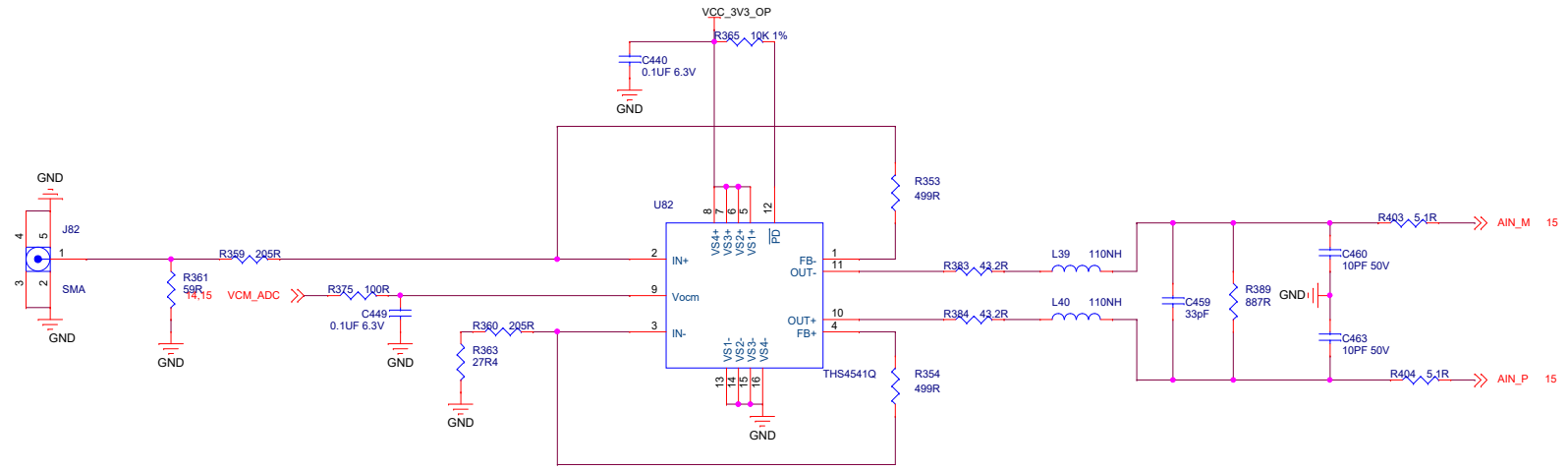
Title		
Fiber Sensing		
Size	Document Number	Rev
B	SCH001-2022	A
Date:	Tuesday, November 08, 2022	Sheet 11 of 29



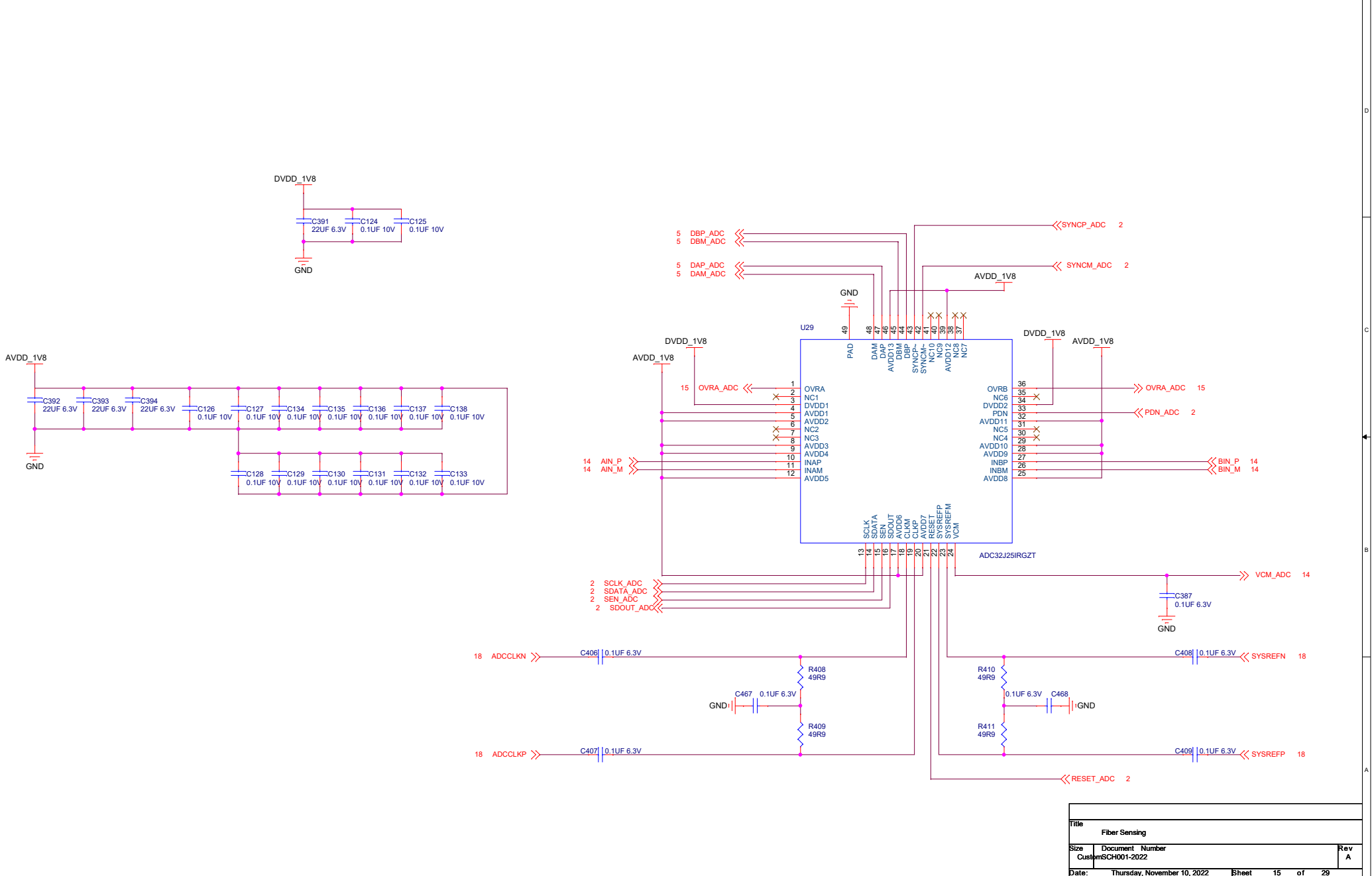
Title		
Fiber Sensing		
Size	Document Number	Rev
B	SCH001-2022	A
Date:	Tuesday, November 08, 2022	Sheet 12 of 29



Title		
Fiber Sensing		
Size	Document Number	Rev
B	SCH001-2022	A
Date:	Tuesday, November 08, 2022	Sheet 13 of 29



Title			Fiber Sensing
Size	Document Number	Rev A	
CustomSCH001-2022			
Date:	Wednesday, November 09, 2022	Sheet	14 of 29



Title		
Fiber Sensing		
Size	Document Number	Rev
CustomSCH001-2022		A
Date:	Thursday, November 10, 2022	Sheet 15 of 29

5

4

3

2

1

D

D

C

C

B

B

A

A

5

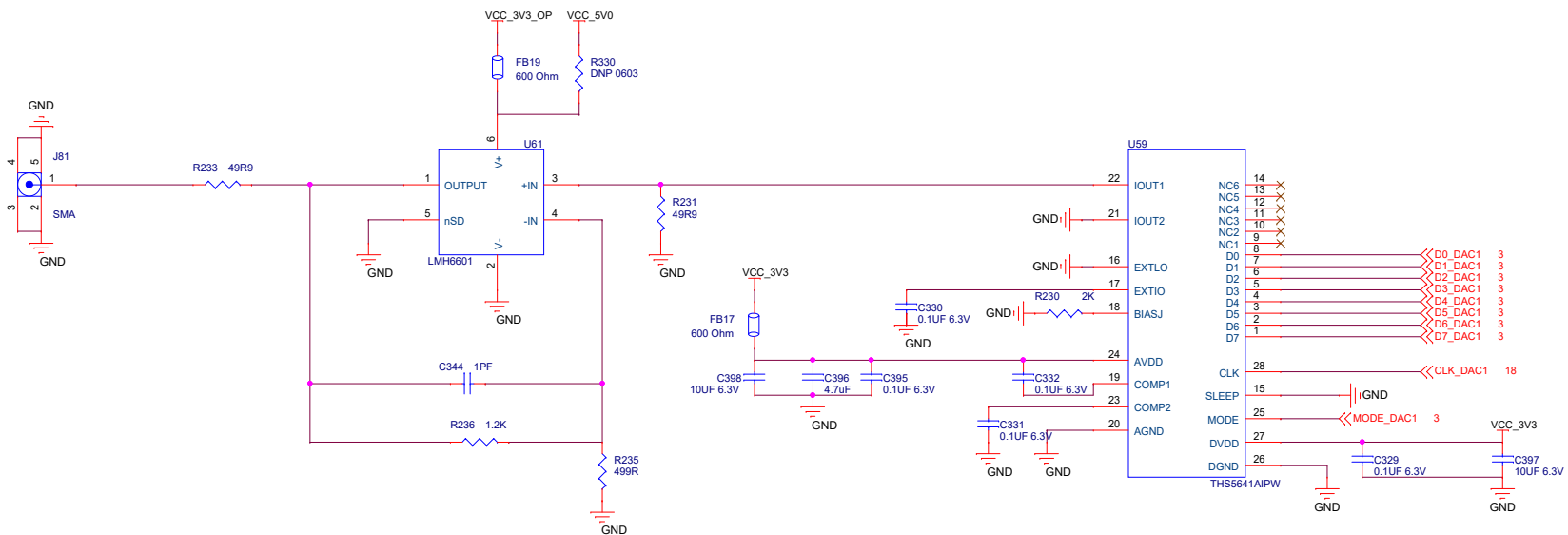
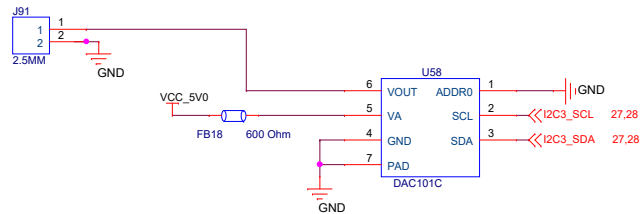
4

3

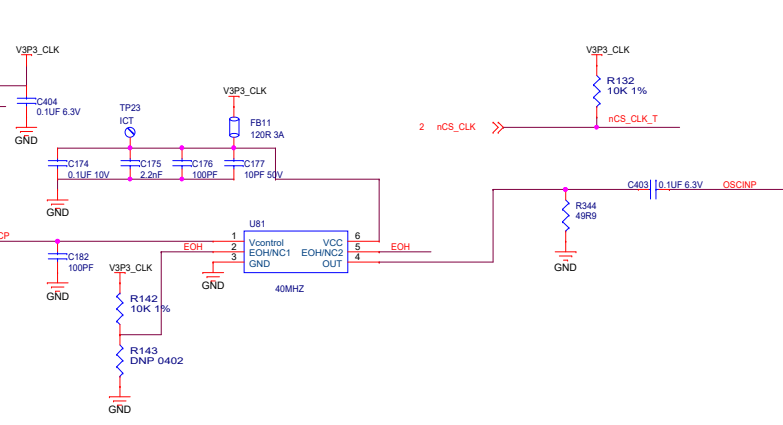
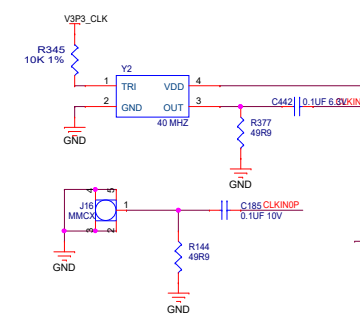
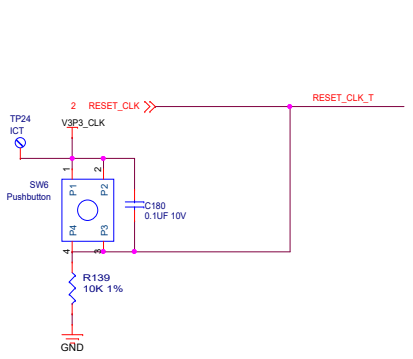
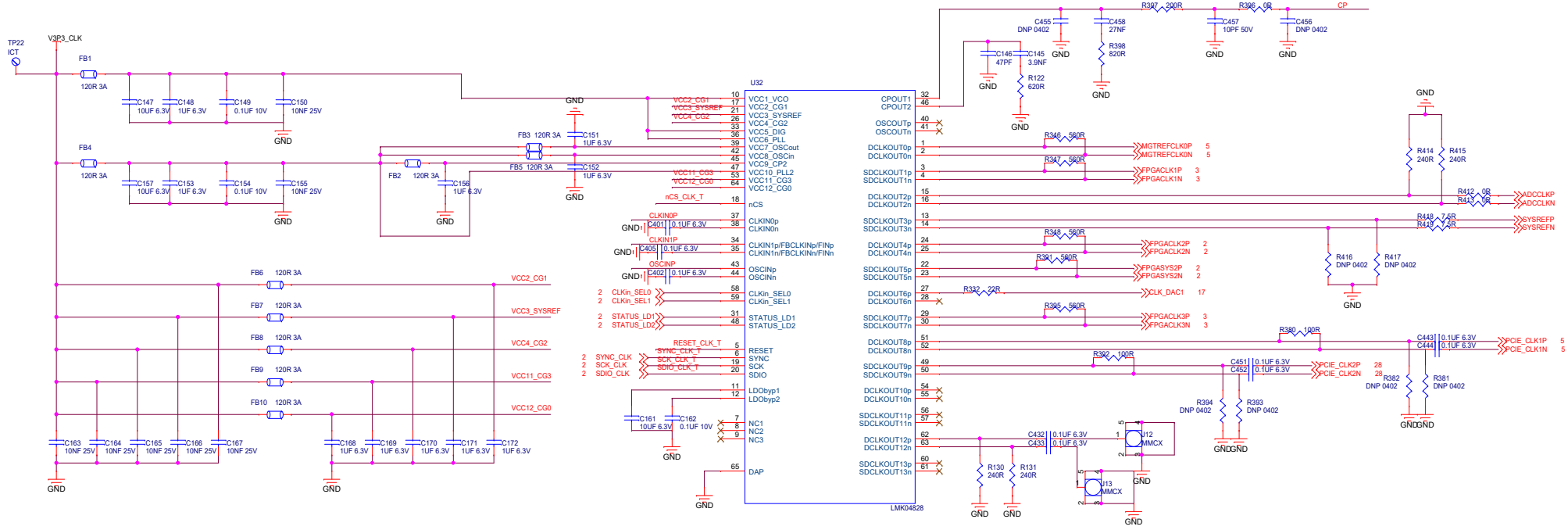
2

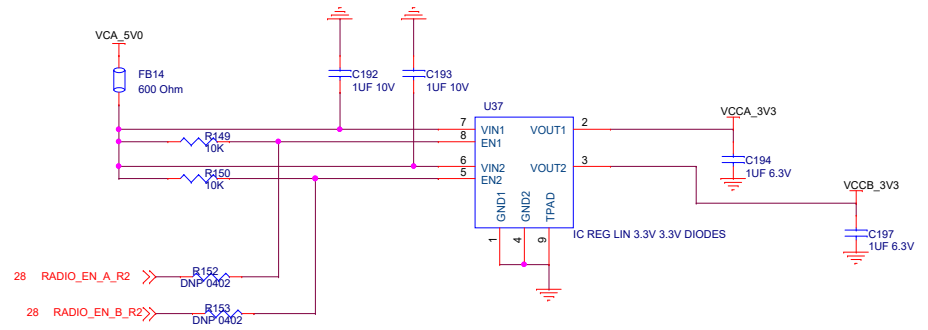
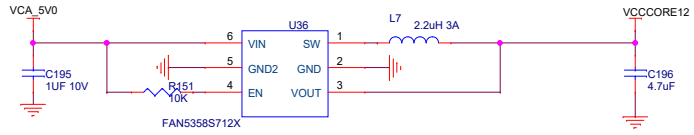
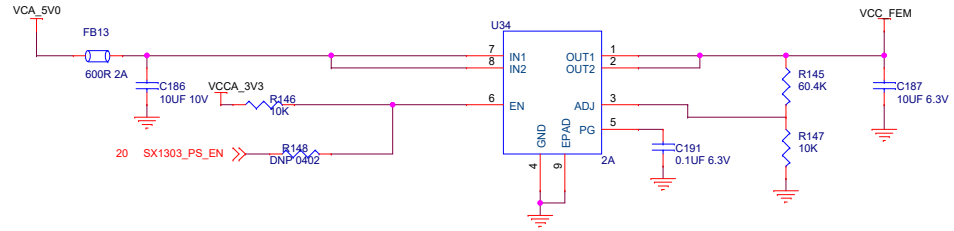
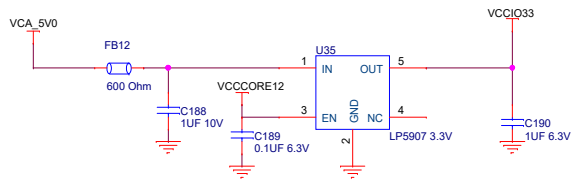
1

Title		
Fiber Sensing		
Size	Document Number	Rev
A	SCH001-2022	<Rev Co
Date:	Tuesday, November 08, 2022	Sheet 16 of 29

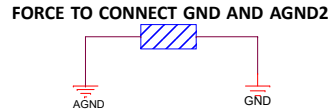
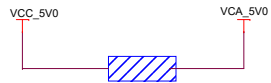


Title		
Fiber Sensing		
Size	Document Number	Rev
Custom	SCH001-2022	A
Date:	Tuesday, November 08, 2022	Sheet 17 of 29

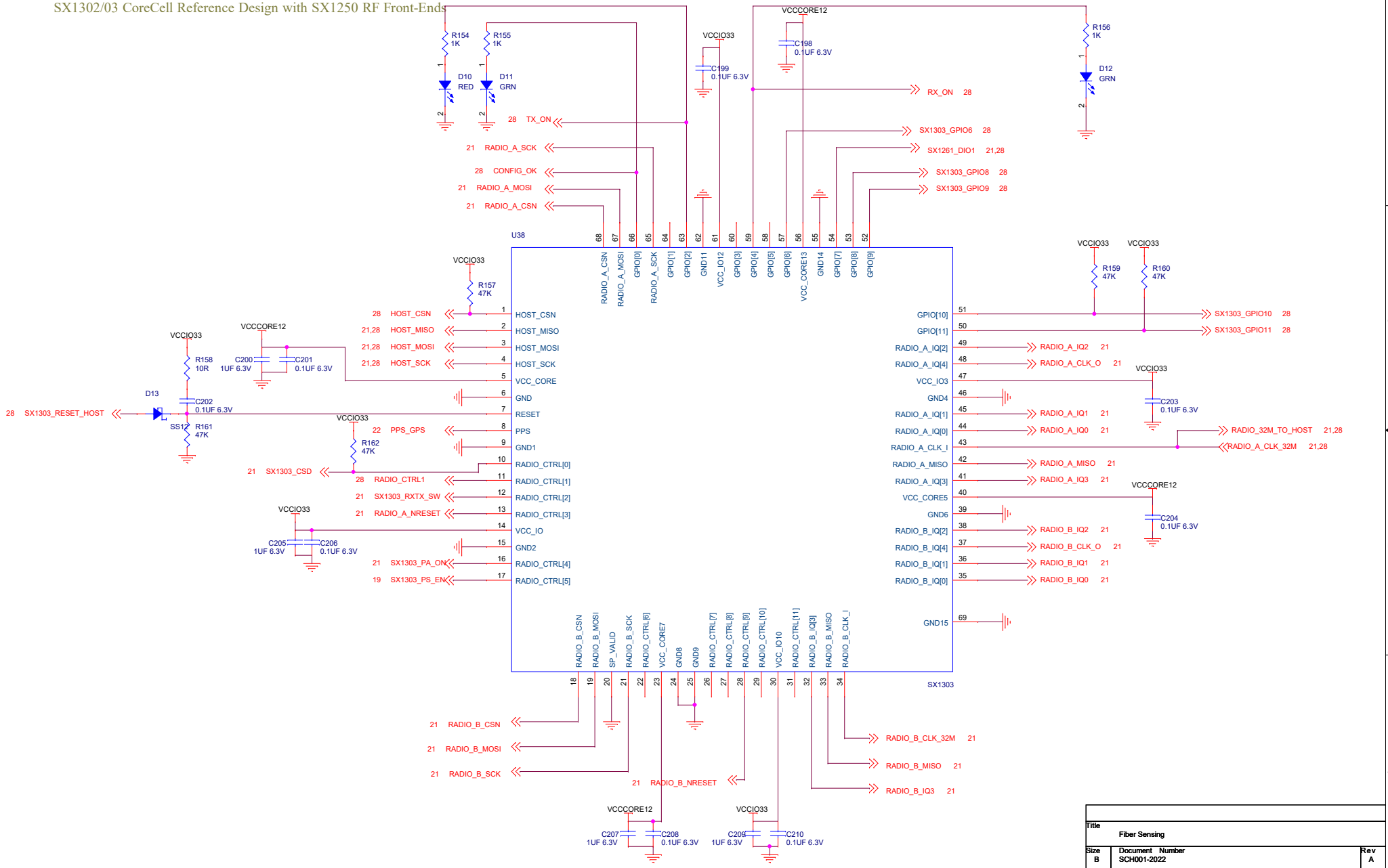




**HOW TO CONNECT gnd TO AGND2?
VIA STICING?
CONNECT POWER PLANE?**

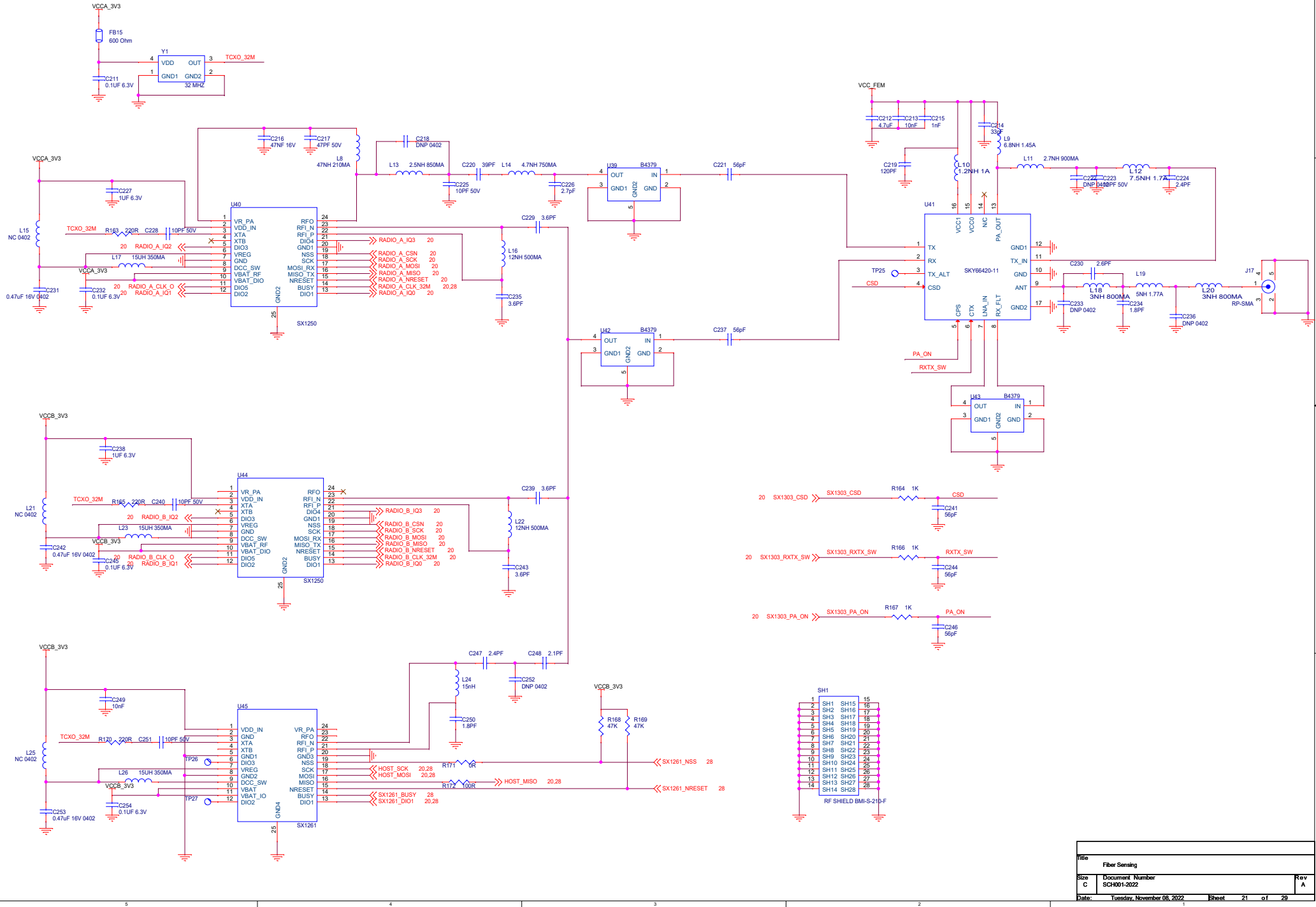


Title		
Fiber Sensing		
Size	Document Number	Rev
B	SCH001-2022	A
Date:	Tuesday, November 08, 2022	Sheet 19 of 29

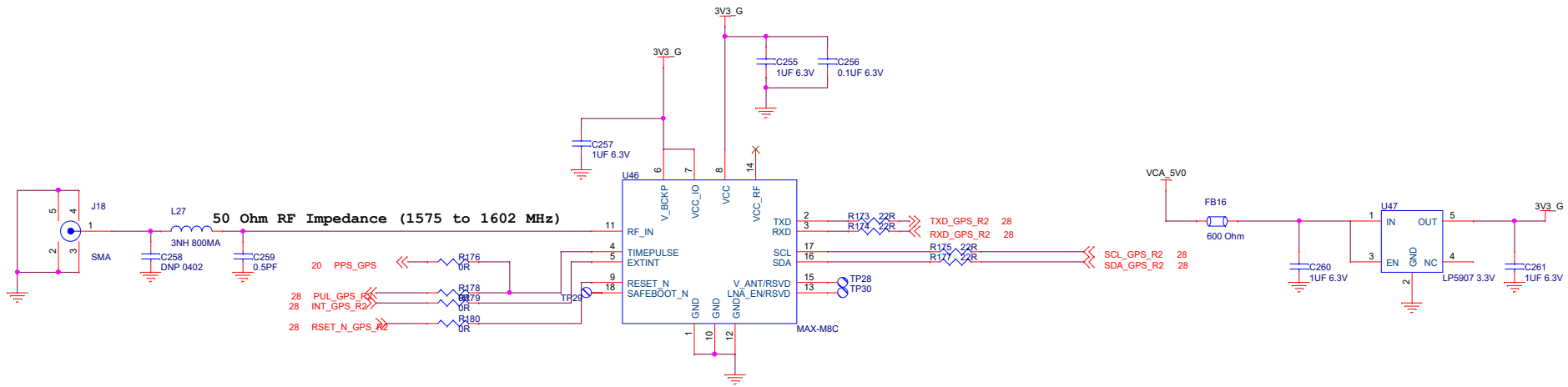


Title		
Fiber Sensing		
Size	Document Number	Rev
B	SCH001-2022	A
Date:	Tuesday, November 08, 2022	Sheet 20 of 29

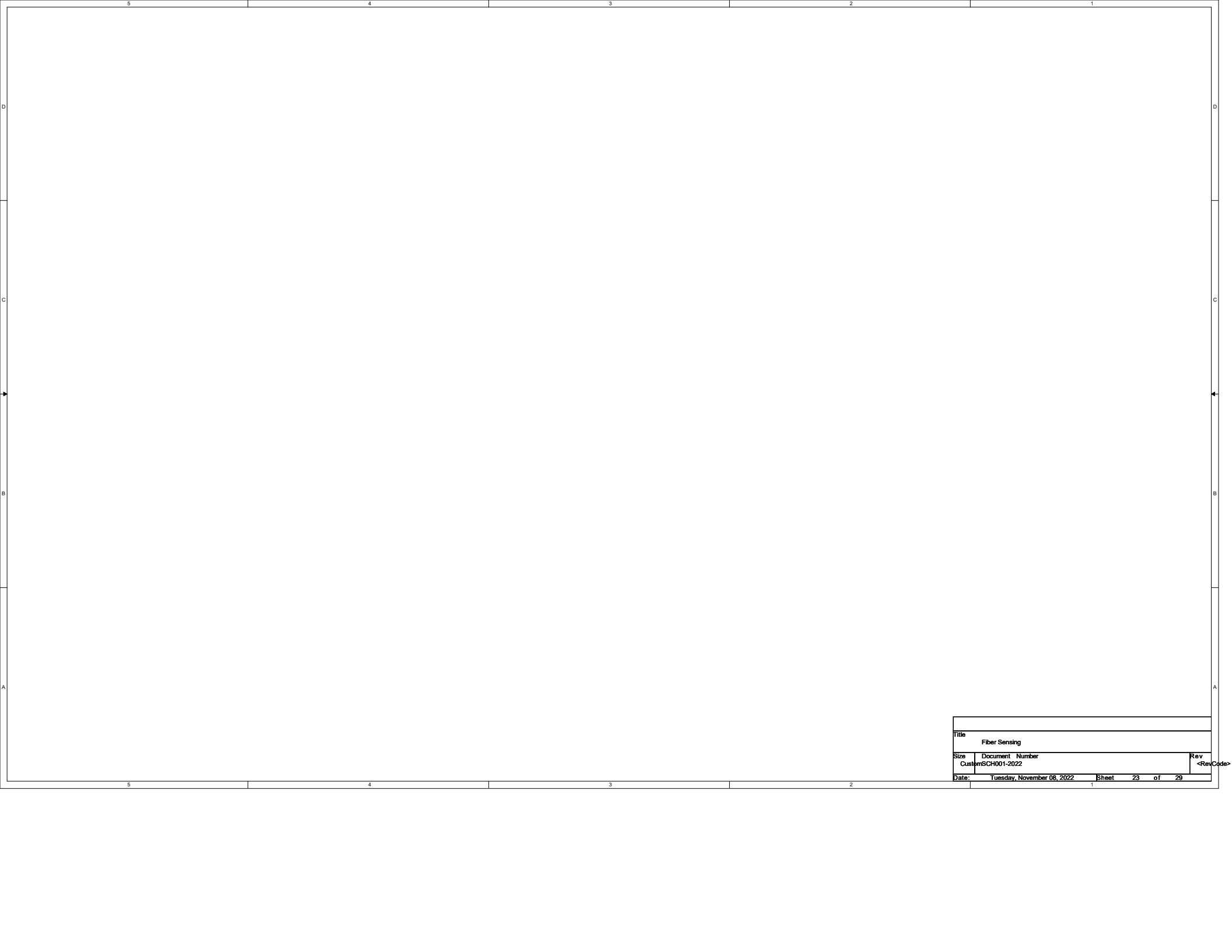
SX130x CoreCell Reference Design - RF Part with 2x SX1250 RF Front-Ends:



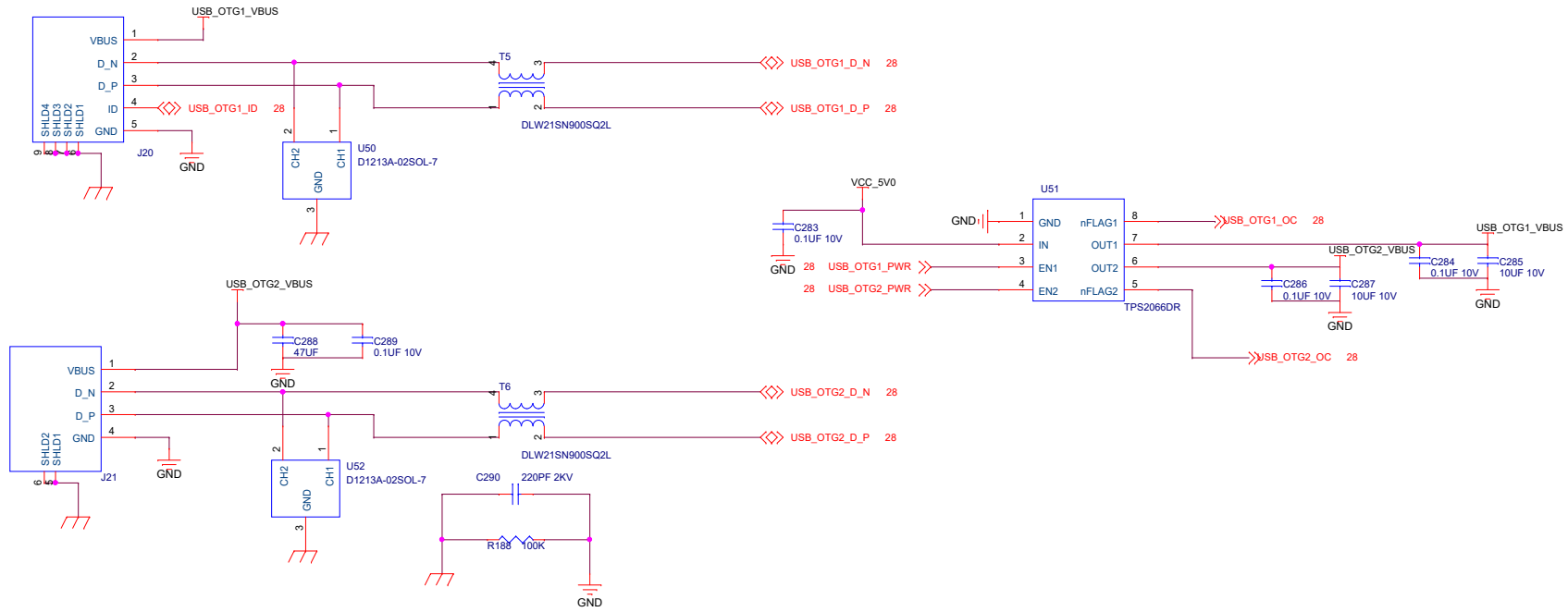
Title		
Fiber Sensing		
Size	Document Number	Rev
C	SCH001-2022	A
Date:	Tuesday, November 08, 2022	Sheet 21 of 29



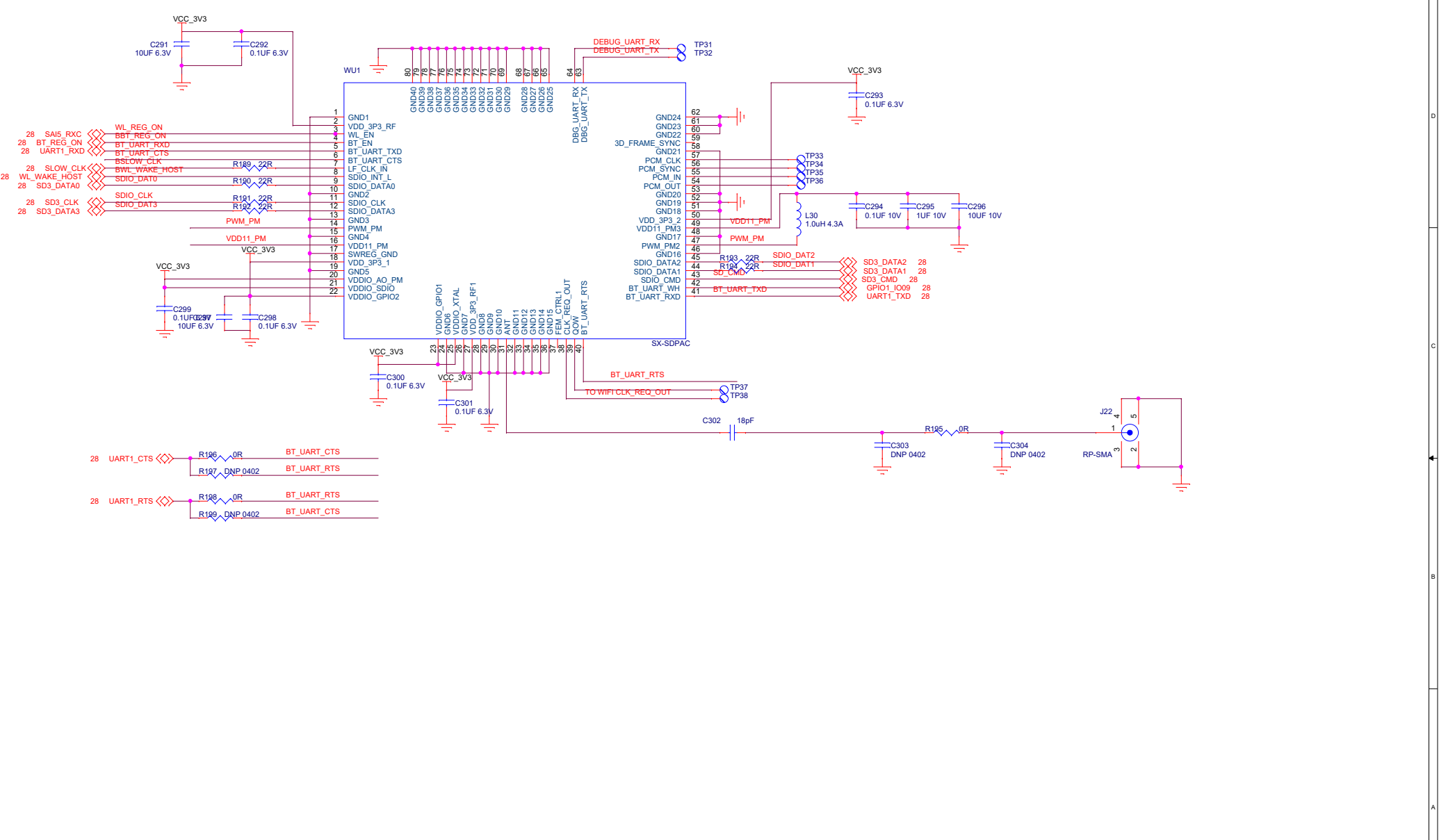
Title			
Fiber Sensing			
Size	Document Number	Rev	
	CustomSCH001-2022	<Rev Code>	
Date:	Tuesday, November 08, 2022	Sheet	22 of 29



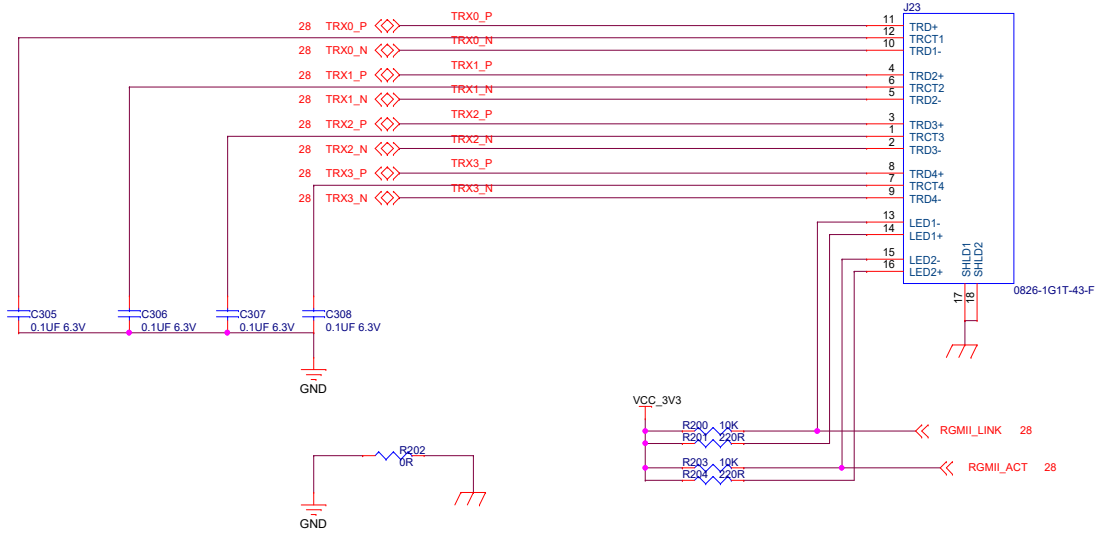
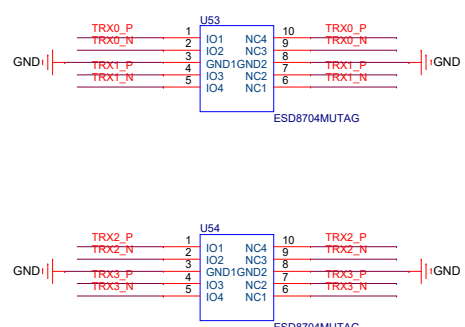
Title			
Fiber Sensing			
Size	Document Number	Rev	
CustomSCH001-2022		<Rev Code>	
Date:	Tuesday, November 08, 2022	Sheet	23 of 29



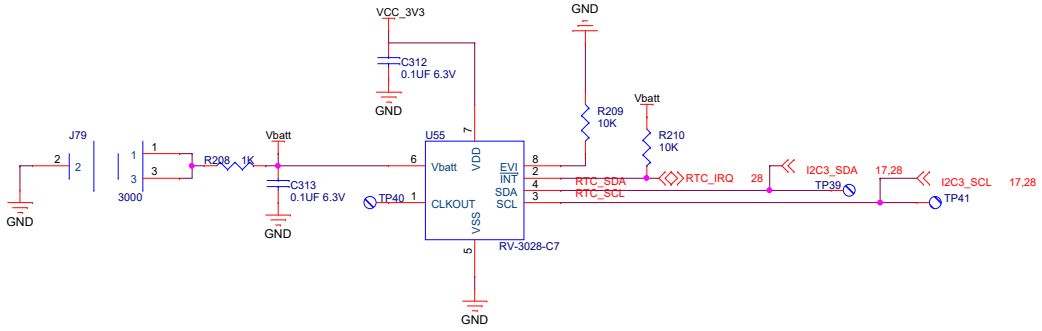
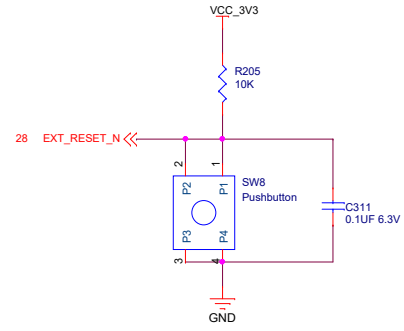
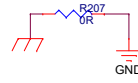
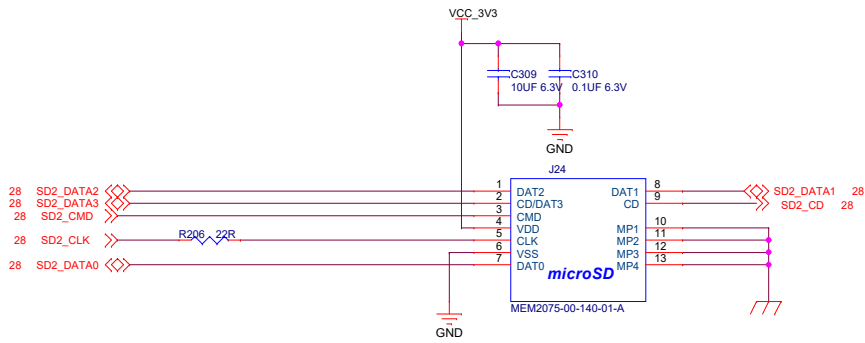
Title			
Fiber Sensing			
Size	Document Number	Rev	
	CustomSCH001-2022	<RevCode>	
Date:	Tuesday, November 08, 2022	Sheet	24 of 29



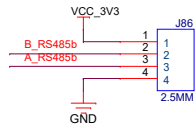
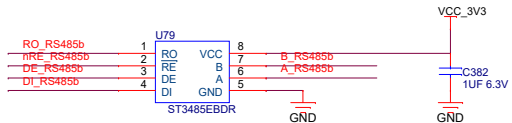
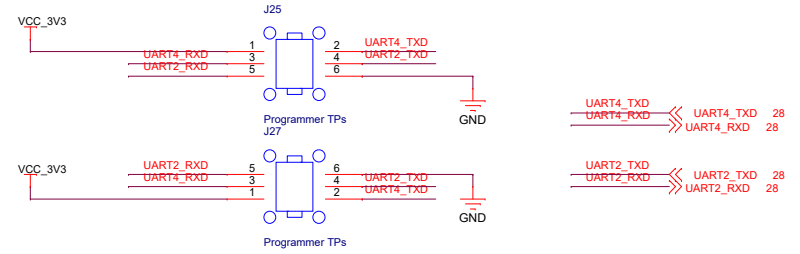
Title		
Fiber Sensing		
Size	Document Number	Rev
	CustomSCH001-2022	<Rev Code>
Date:	Tuesday, November 08, 2022	Sheet 25 of 29



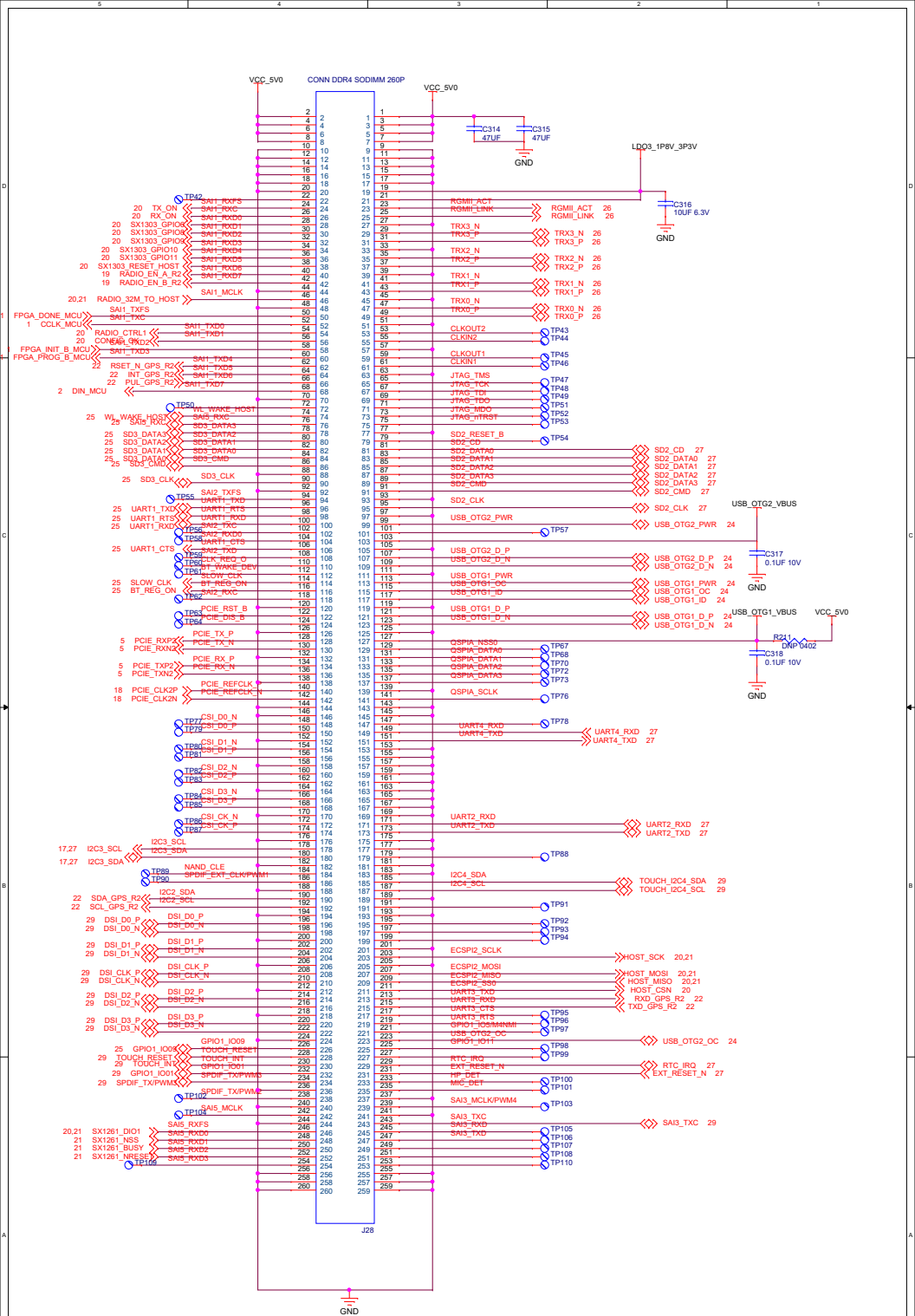
Title			
Fiber Sensing			
Size	Document Number	Rev	
	CustomSCH001-2022	<Rev Code>	
Date:	Tuesday, November 08, 2022	Sheet	26 of 29

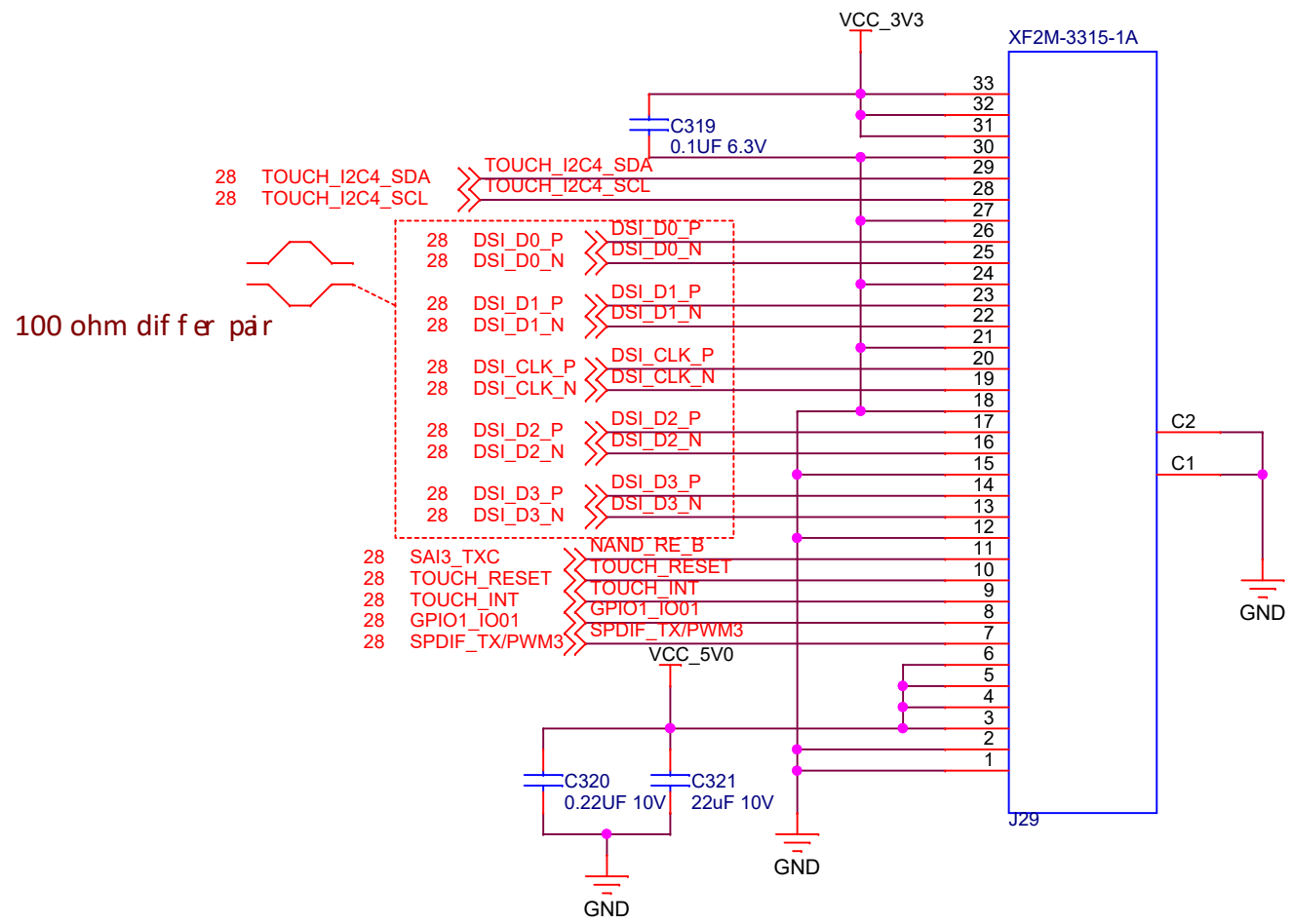


J5 is a flip of J4



Title			Fiber Sensing		
Size	Document Number				Rev
	CustomSCH001-2022				<RevCode>
Date:	Tuesday, November 08, 2022	Sheet	27	of	29





100 ohm dif f er p ar

Title		
Fiber Sensing		
Size	Document Number	Rev
A	SCH001-2022	<Rev Co
Date:	Tuesday, November 08, 2022	Sheet 29 of 29