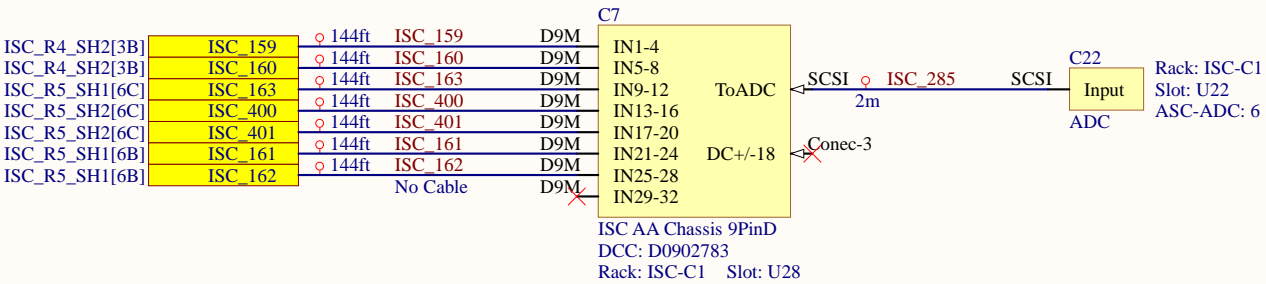
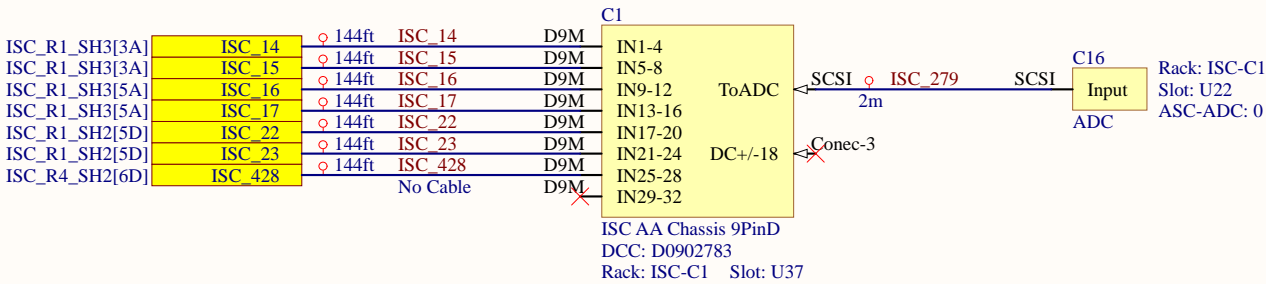
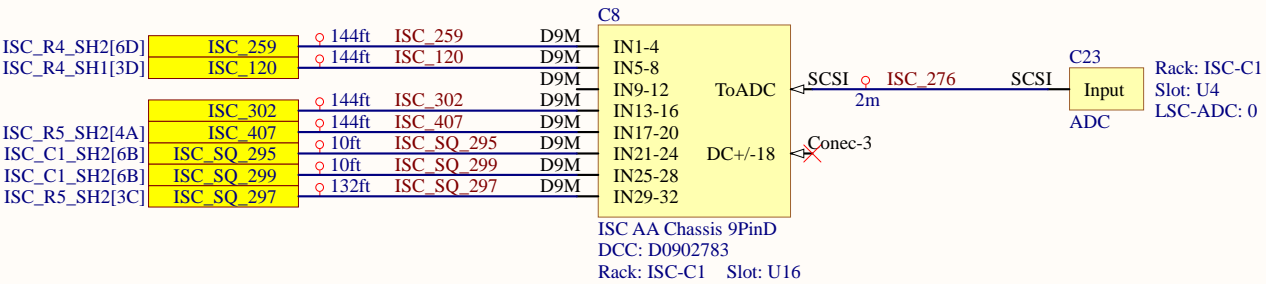
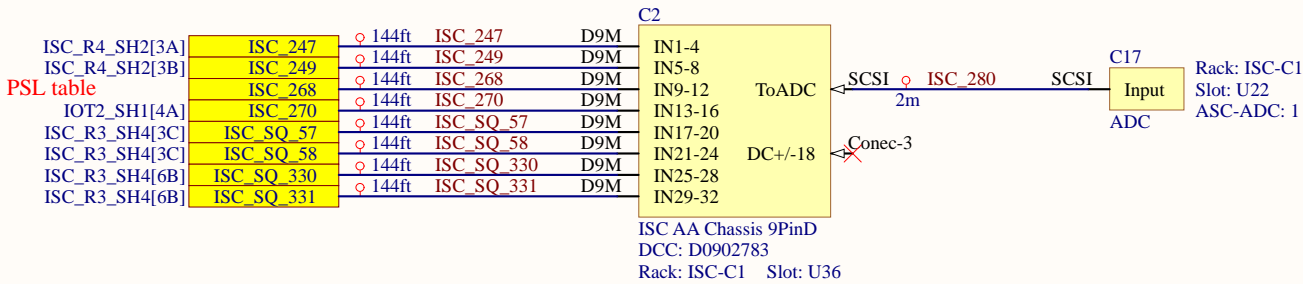


ISC-C1 Rack

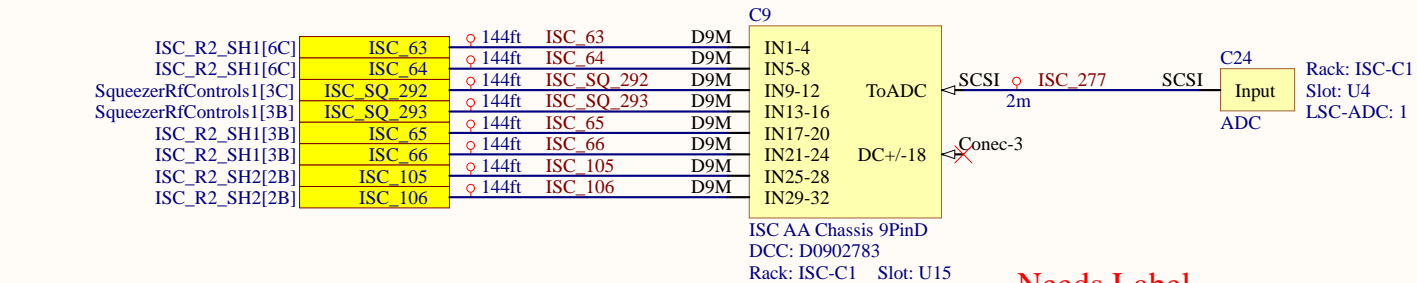
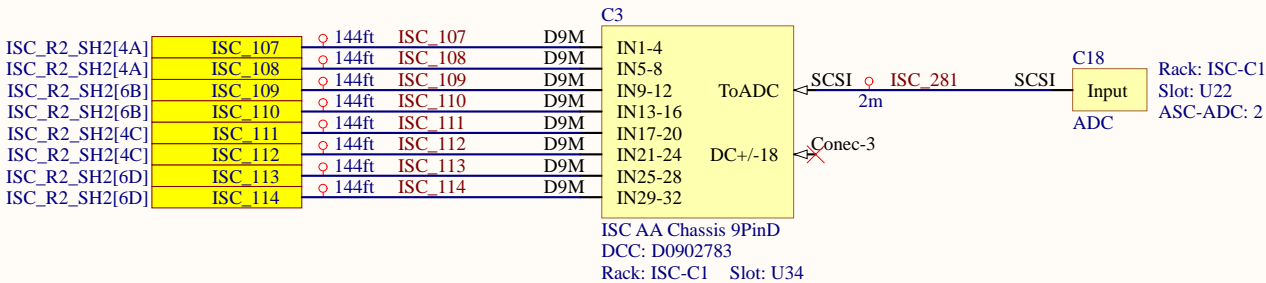
A



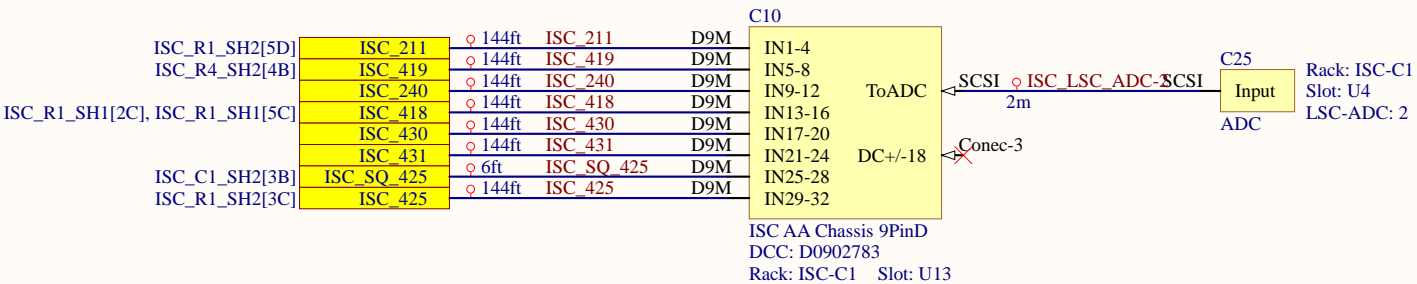
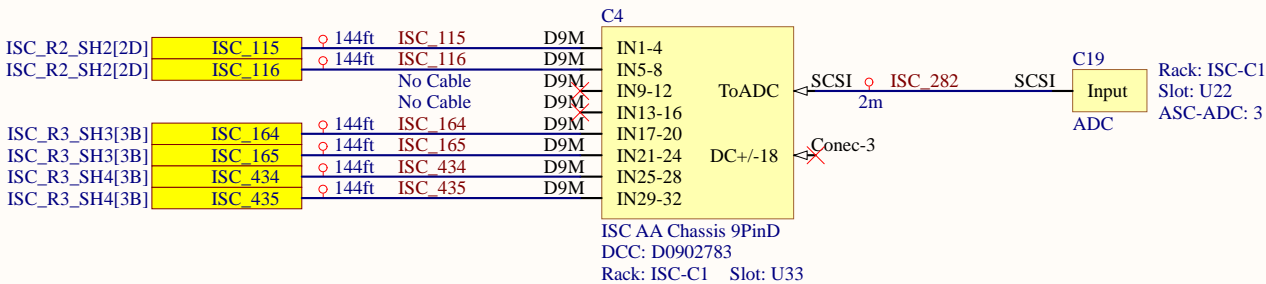
B



C

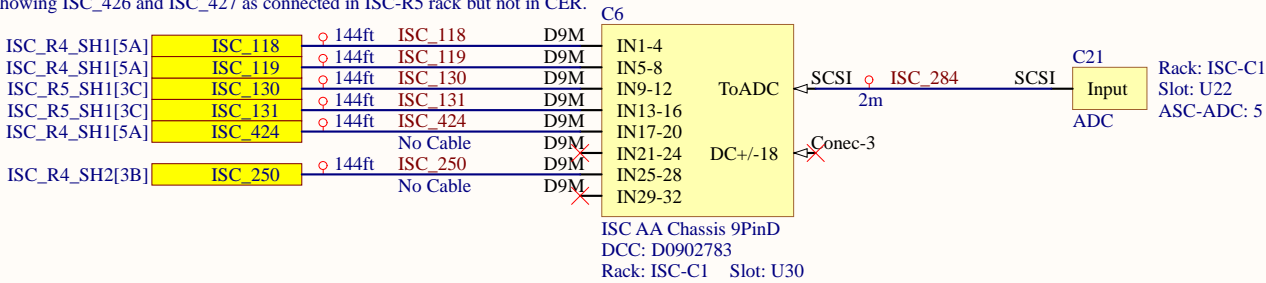


Needs Label



D

Reverify cables, showing ISC_426 and ISC_427 as connected in ISC-R5 rack but not in CER.

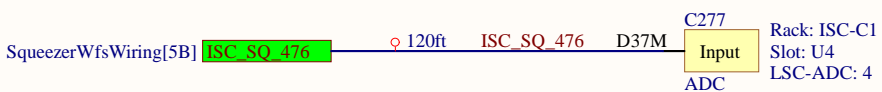
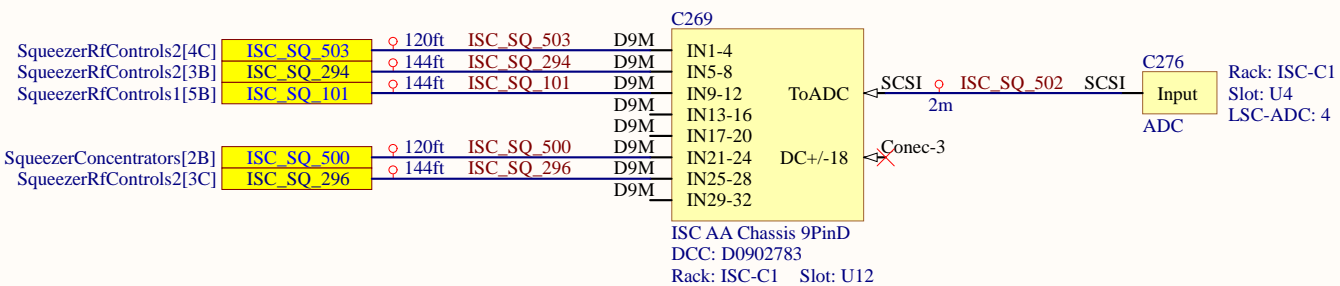
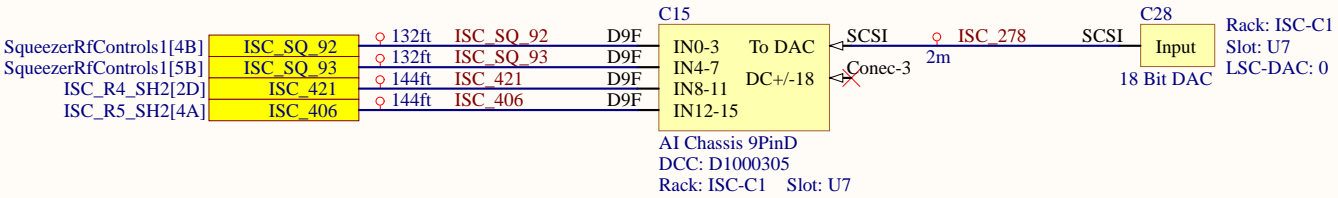
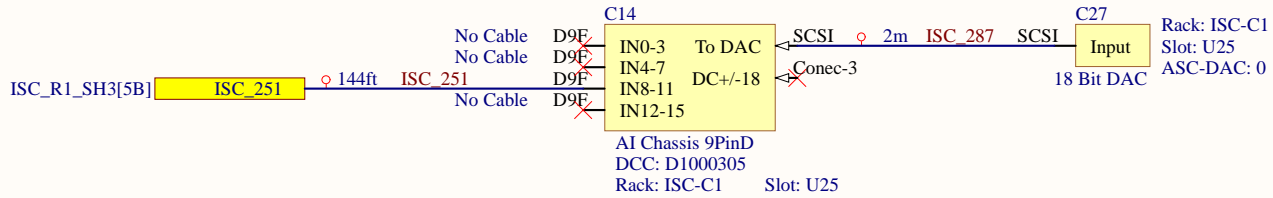
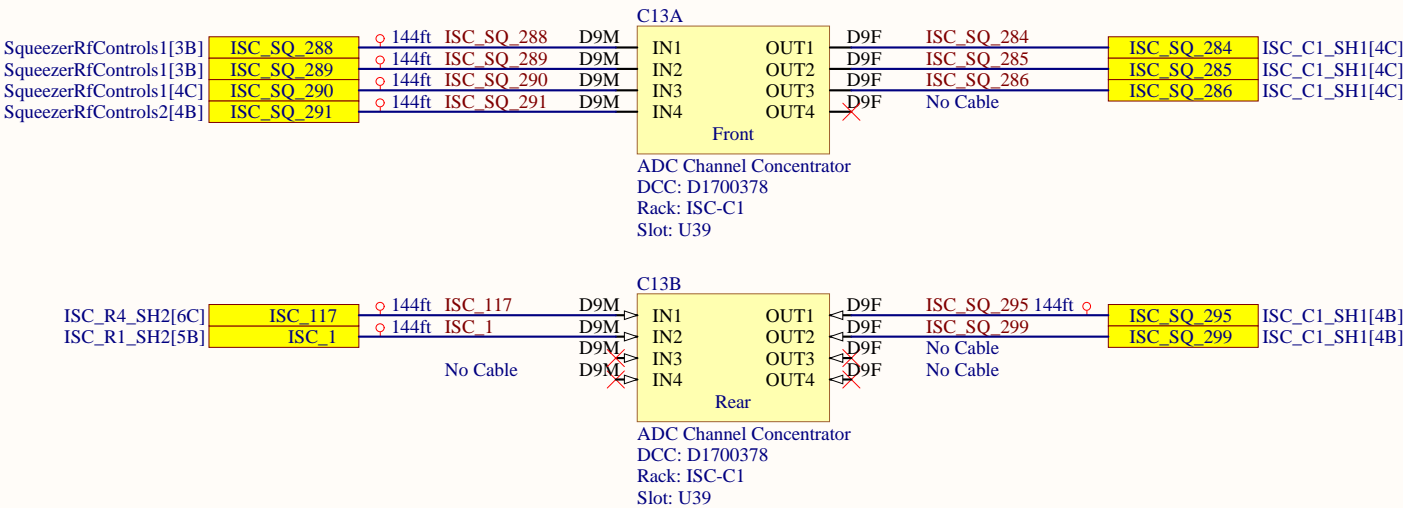
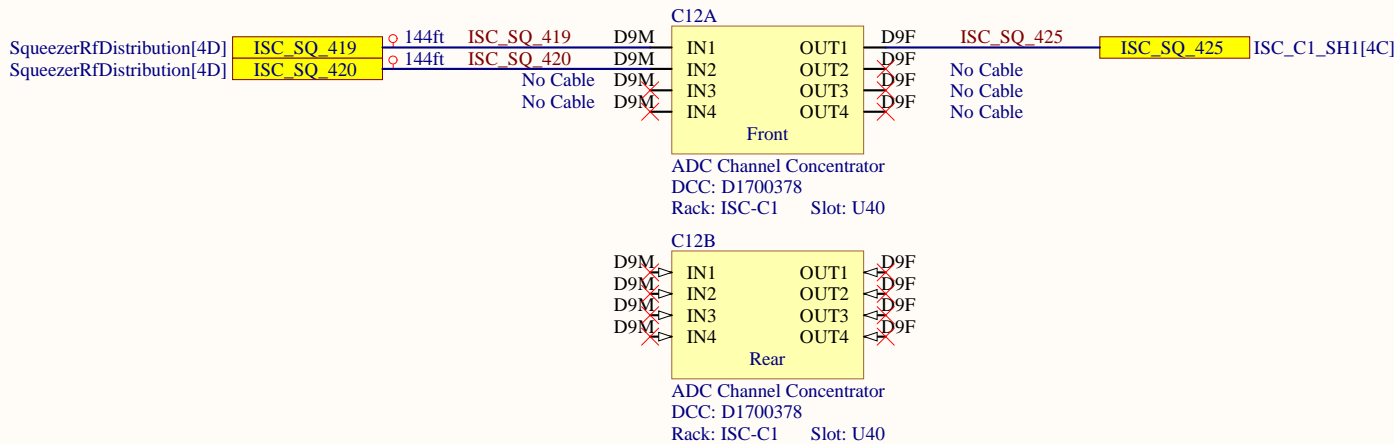


Following cables are not connected in the CER:

ISC_101, ISC_175, ISC_242, ISC_410, ISC_426, and ISC_427

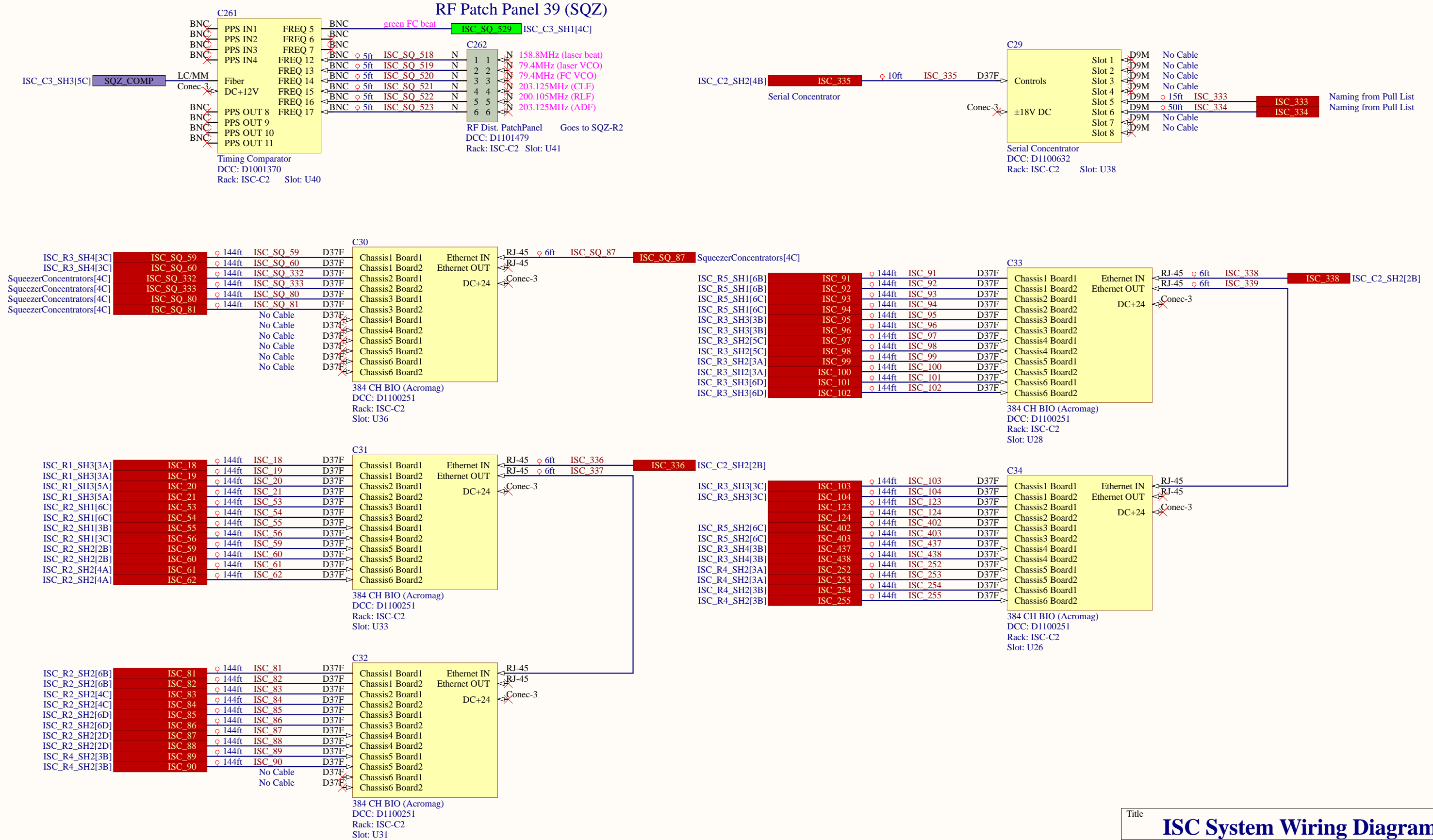
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ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V5
Date:	2/25/2021	Sheet 1 of 38
File:	C:\Users\...\ISC_C1_SH1.SchDoc	Drawn By: Filiberto Clara

ISC-C1 Rack



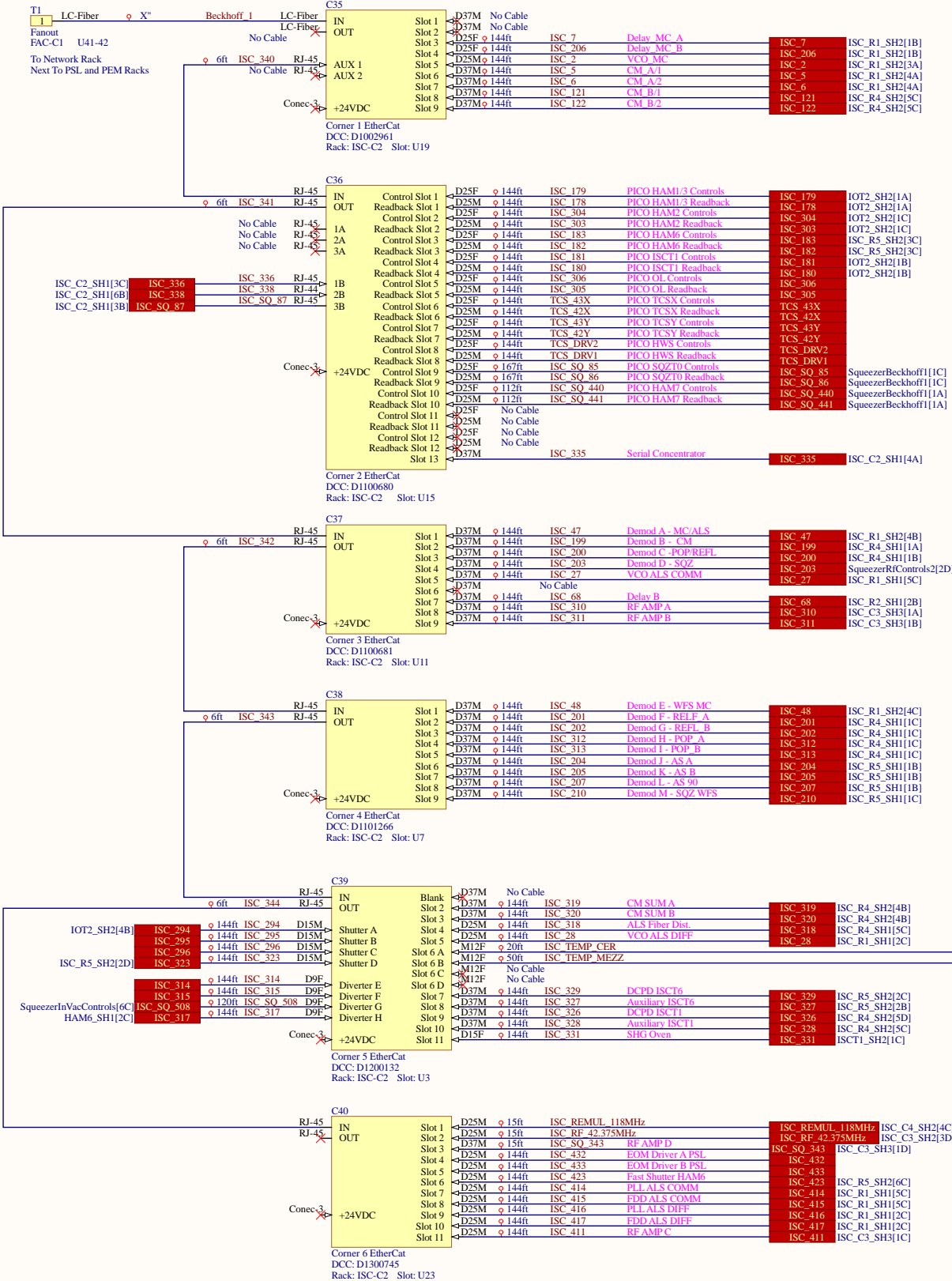
Title			
ISC System Wiring Diagram			
Size	Number	Revision	
B	D1900511	V5	
Date:	2/25/2021	Sheet	2of 38
File:	C:\Users\...\ISC_C1_SH2.SchDoc	Drawn By:	Filiberto Clara

ISC-C2 Rack



Title			ISC System Wiring Diagram		
Size	Number	Revision			
B	D1900511	V5			
Date:	2/25/2021	Sheet	3	of	38
File:	C:\Users\...ISC C2 SH1.SchDoc	Drawn By:	Filiberto Clara		

ISC-C2 Rack

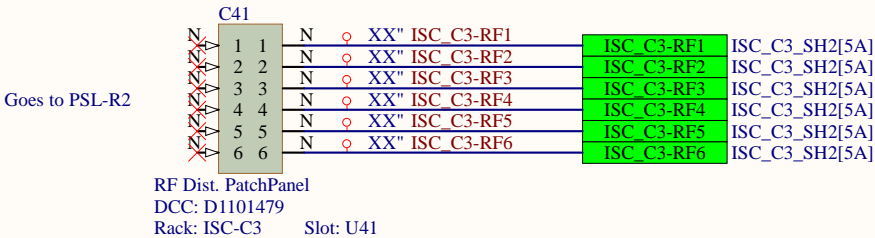


SQZ Drawing has Diff Mix 3.125MHz going to slot 2 need to veri.

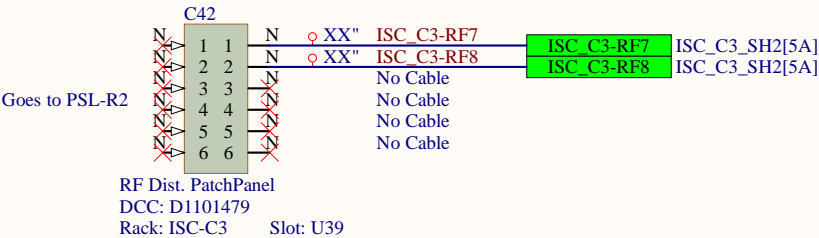
Title			ISC System Wiring Diagram		
Size	Number	Revision			
C	D1900511	V5			
Date:	2/25/2021	Sheet 4 of 38			
File:	C:\Users\JISC_C2_S\2 SchDoc	Drawn By: Filiberto Clara			

ISC-C3 Rack

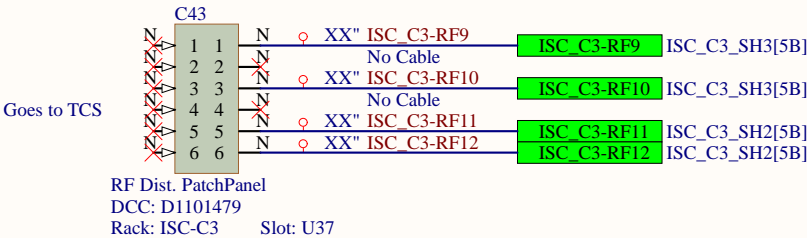
RF Patch Panel 7 (PSL)



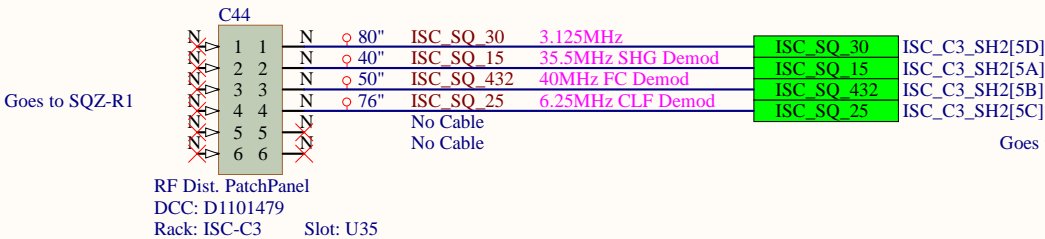
RF Patch Panel 8 (PSL)



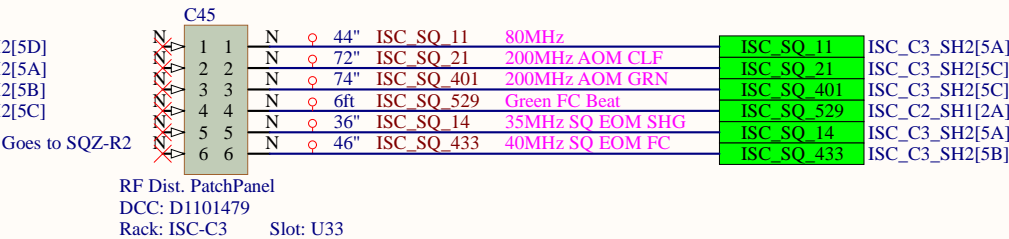
RF Patch Panel 9 (TCS)



RF Patch Panel 32 (SQZ)



RF Patch Panel 33 (SQZ)



Cables that are removed
ISC_SQ_31
ISC_SQ_12
ISC_SQ_78

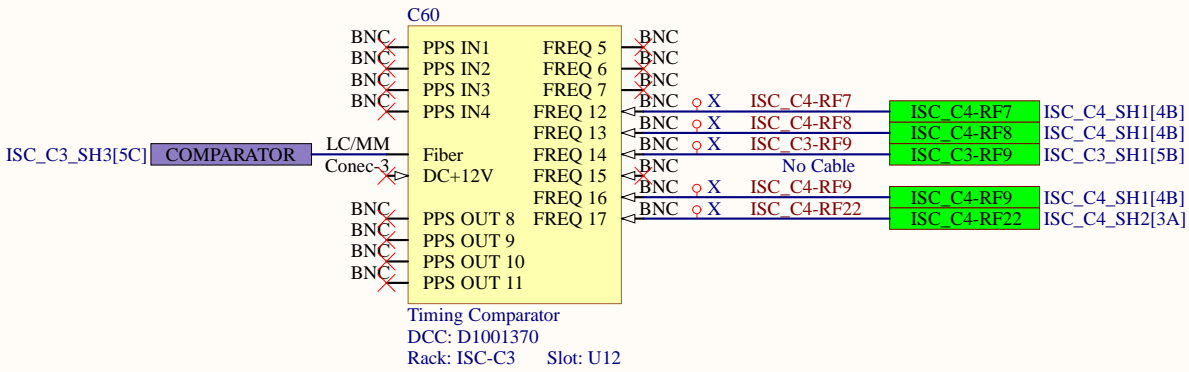
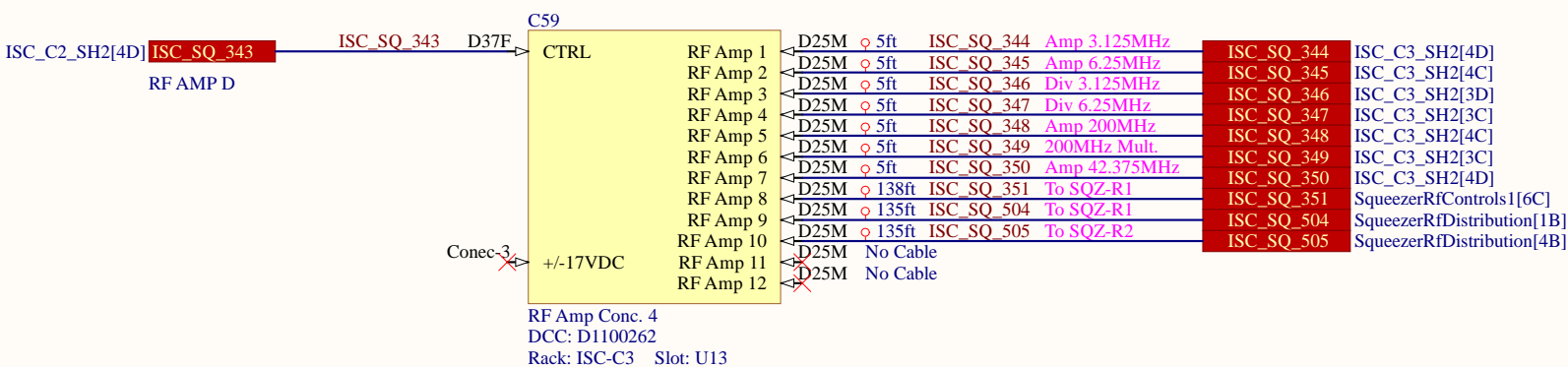
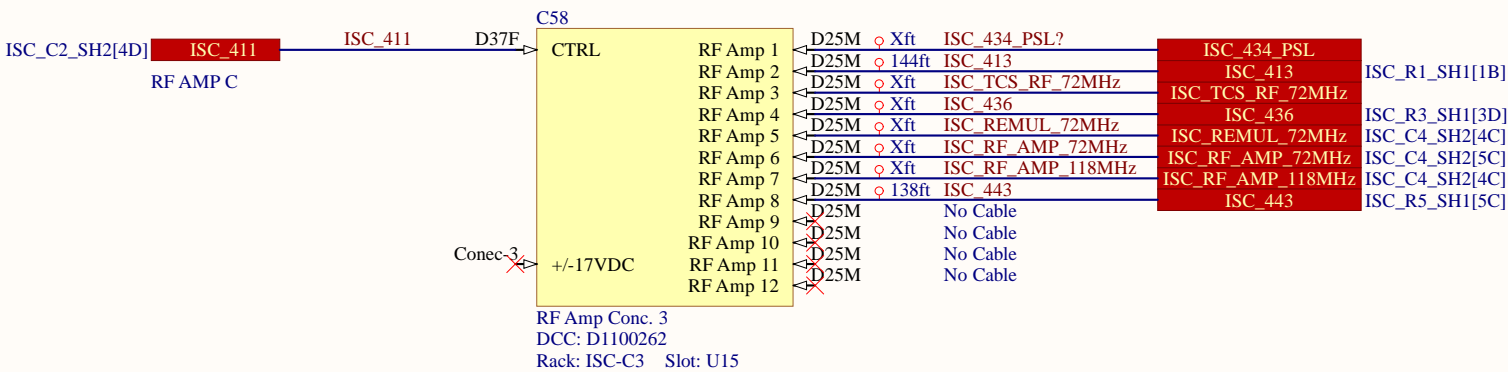
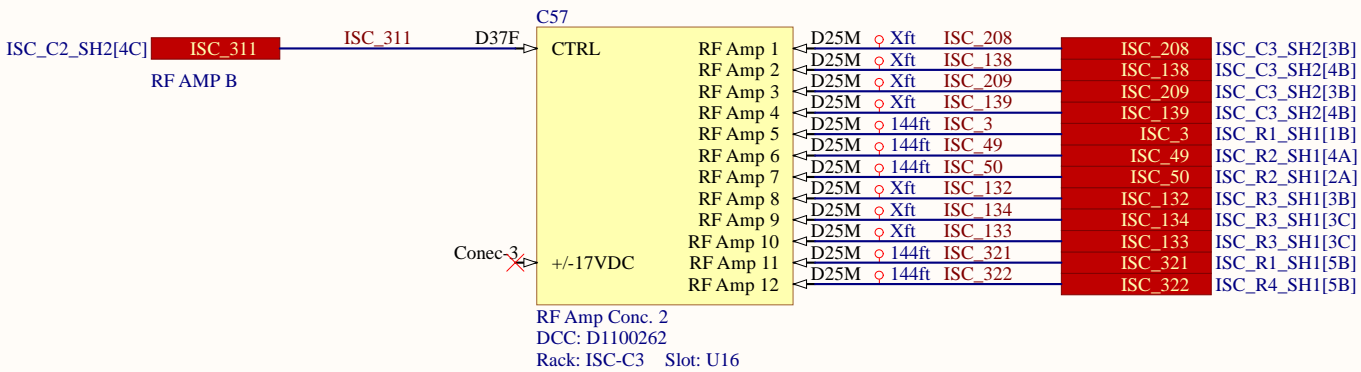
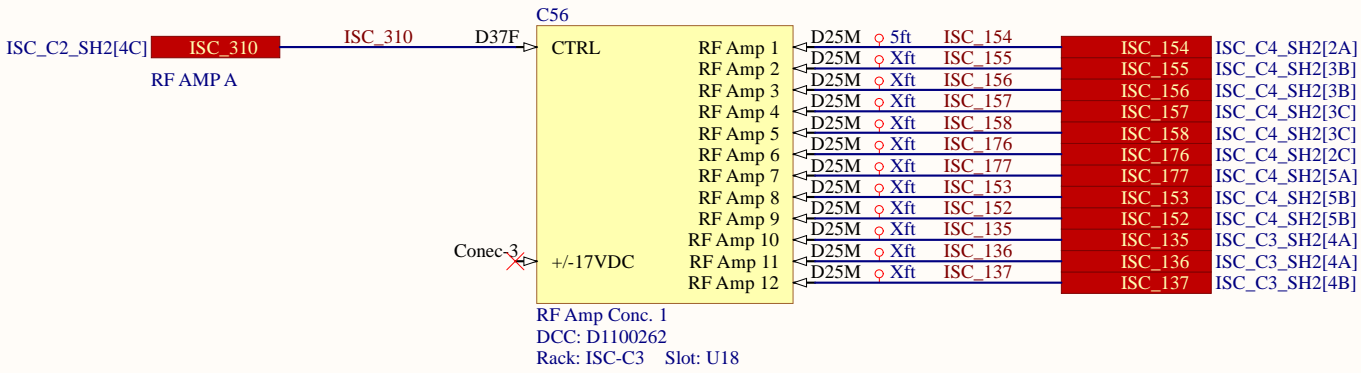
Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V5
Date:	2/25/2021	Sheet 5 of 38
File:	C:\Users\...\ISC_C3_SH1.SchDoc	Drawn By: Filiberto Clara

ISC-C3 Rack

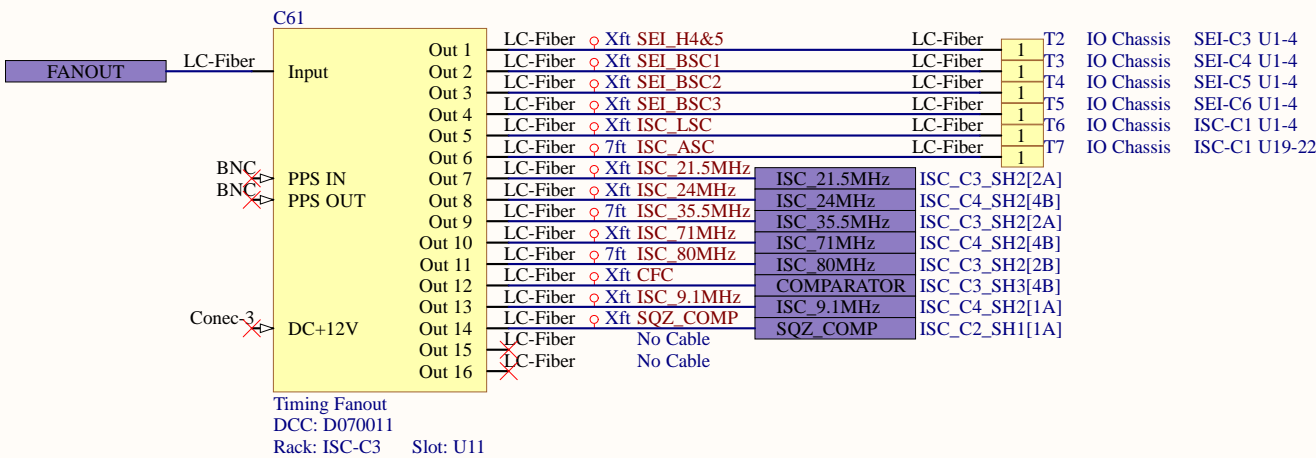


Title			ISC System Wiring Diagram		
Size	Number	Revision			
C	D1900511	V5			
Date:	2/25/2021	Sheet		6	of 38
File:	C:\Users\JSC_C3_SH2\SchDoc	Drawn By:		Eriberto Clara	

ISC-C3 Rack



Need Locations of other ends.
SEI IO Chassis

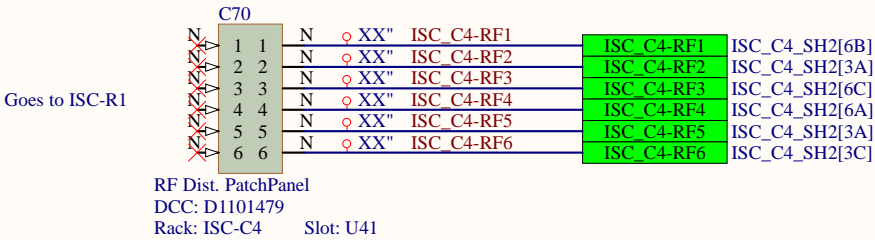


ISC System Wiring Diagram

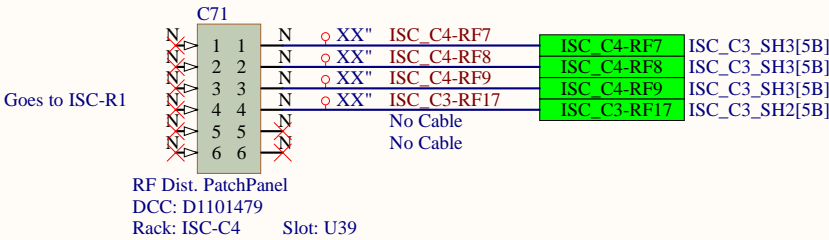
Title	ISC System Wiring Diagram	
Size	Number	Revision
B	D1900511	V5
Date:	2/25/2021	Sheet 7 of 38
File:	C:\Users\...\ISC_C3_SH3.SchDoc	Drawn By: Filiberto Clara

ISC-C4 Rack

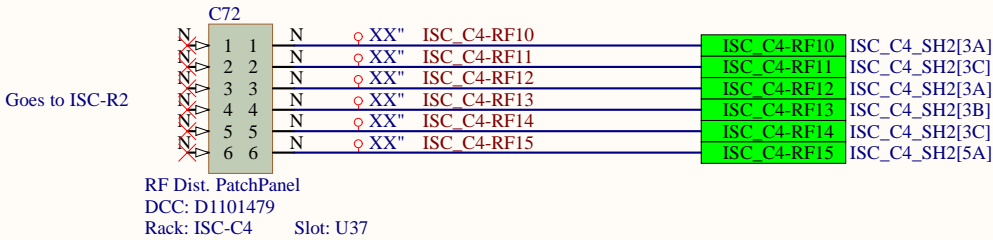
RF Patch Panel 1 (ISC)



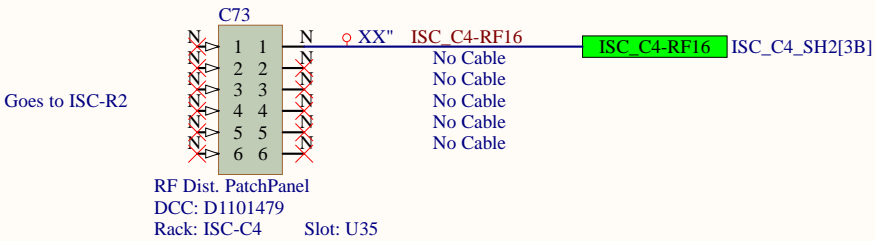
RF Patch Panel 2 (ISC)



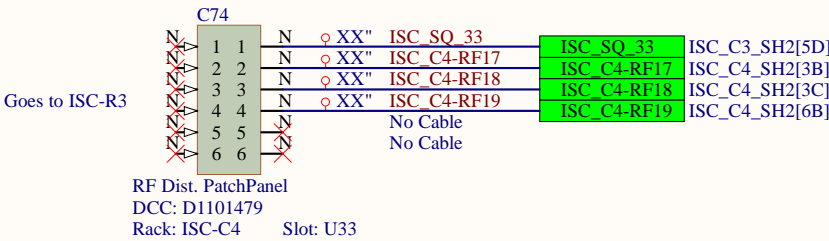
RF Patch Panel 3 (ISC)



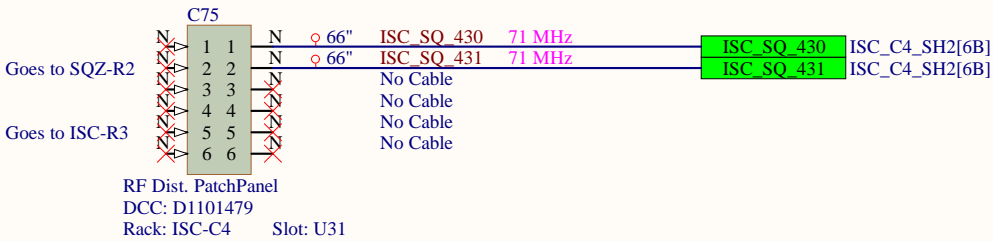
RF Patch Panel 4 (ISC)



RF Patch Panel 5 (ISC)



RF Patch Panel 6 (SQZ/ISC)

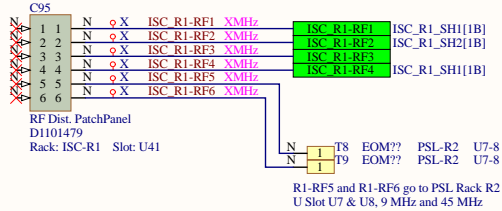


Title			
ISC System Wiring Diagram			
Size	Number	Revision	
B	D1900511	V5	
Date:	2/25/2021	Sheet	8 of 38
File:	C:\Users\...\ISC_C4_SH1.SchDoc	Drawn By:	Filiberto Clara

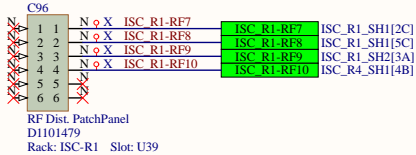
ISC-C4 Rack

Title		
ISC System Wiring Diagram		
Size	Number	Revision
C	D1900511	V5
Date:	2/25/2021	Sheet 9 of 38
File:	C:\Users\...ISC_C4_SH2.SchDoc	Drawn By: Filiberto Clara

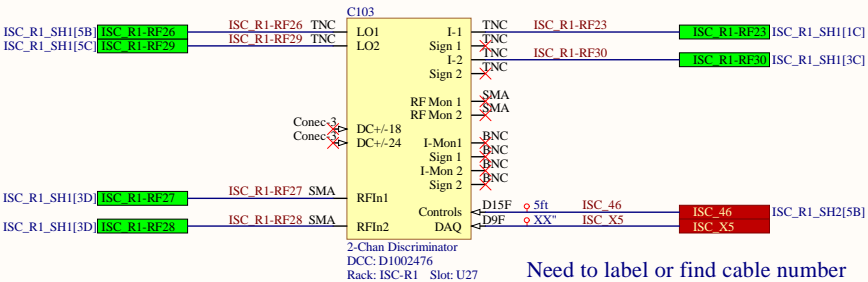
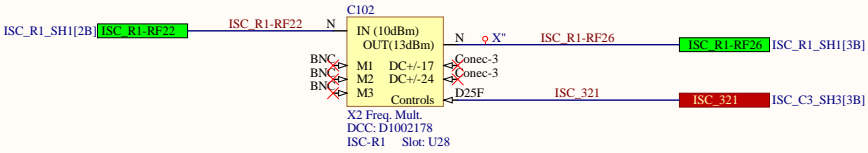
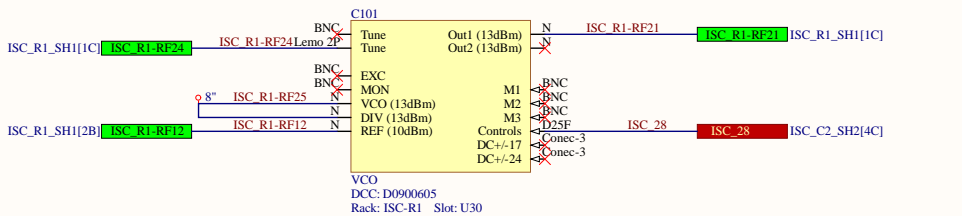
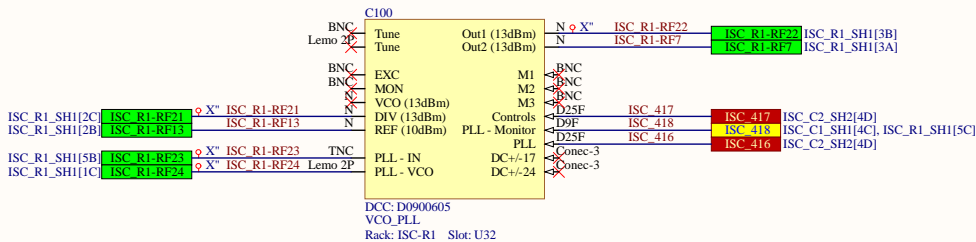
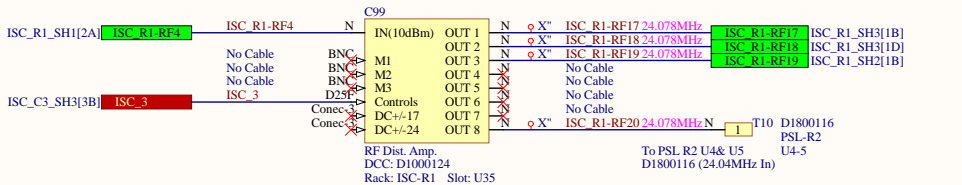
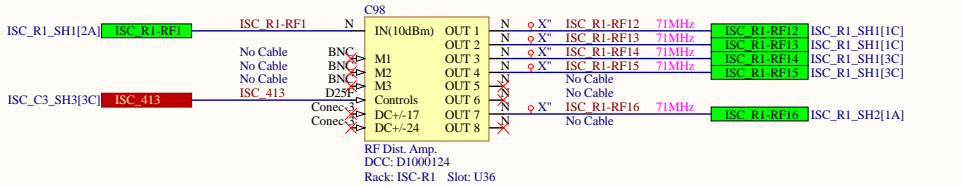
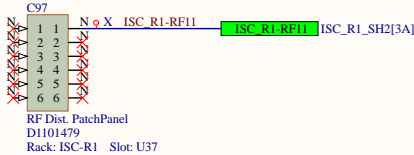
RF Patch Panel 10



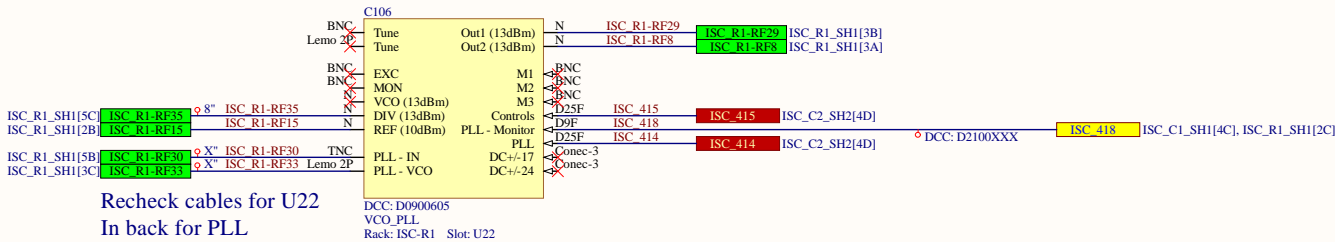
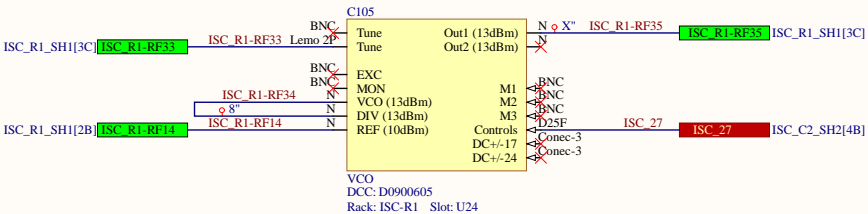
RF Patch Panel 11



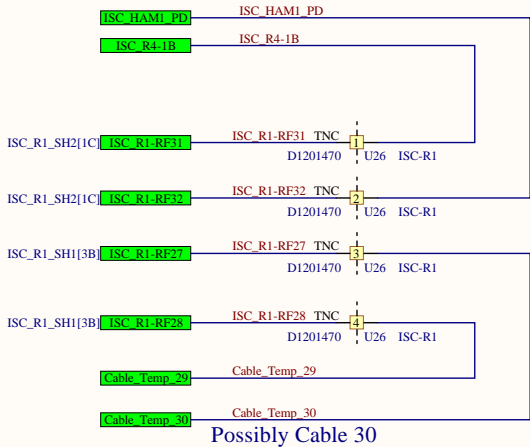
RF Patch Panel 12



Need to label or find cable number



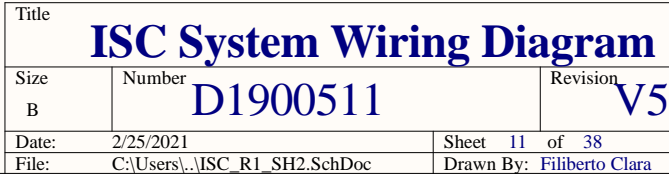
Recheck cables for U22
In back for PLL



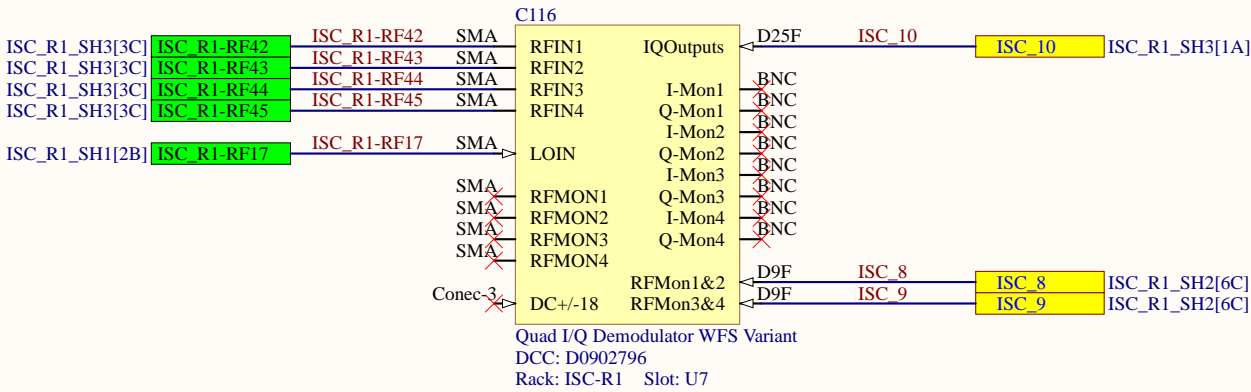
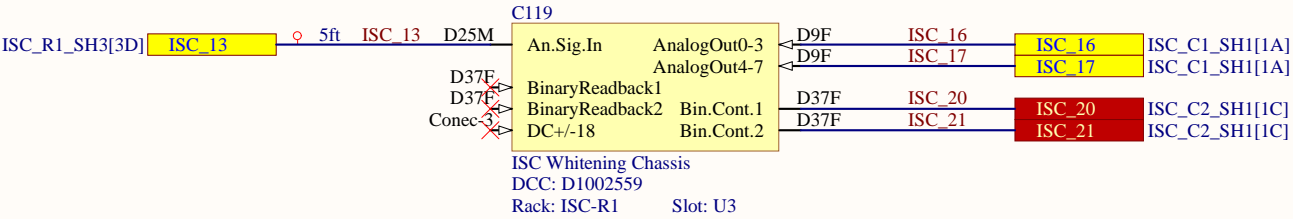
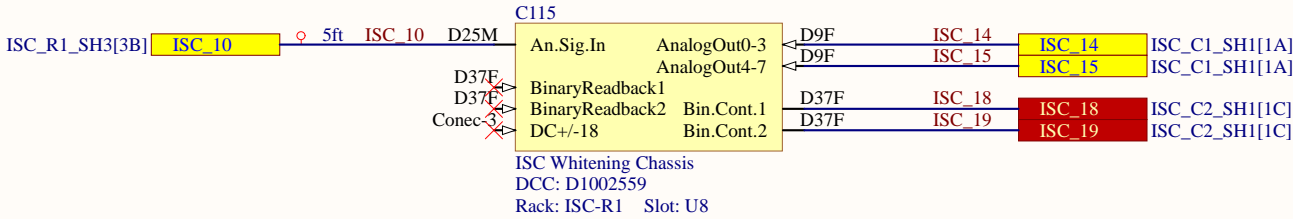
ISC-R1 Rack

Title			
ISC System Wiring Diagram			
Size	Number	Revision	
C	D1900511	V5	
Date:	2/25/2021	Sheet 10 of 38	
File:	C:\Users\j\ISC_R1_SCH\Doc	Drawn By: Filiberto Clara	

Need to Locate other end



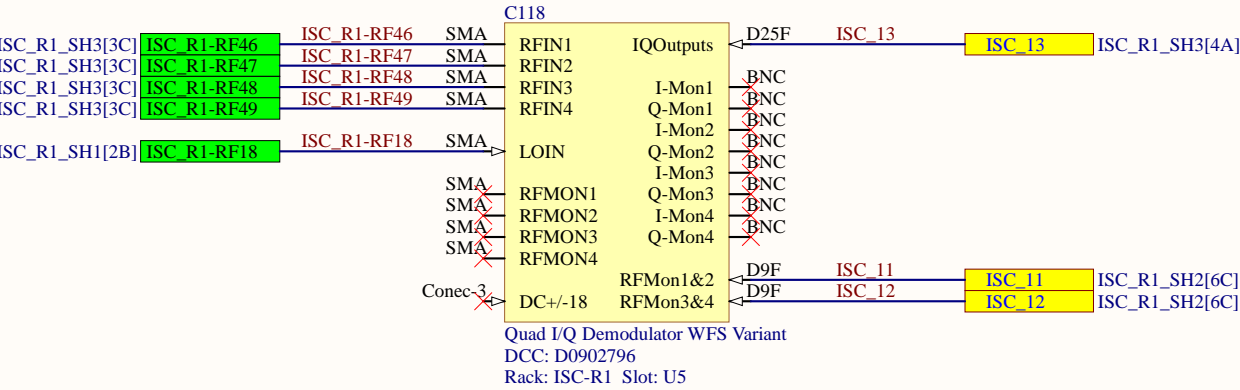
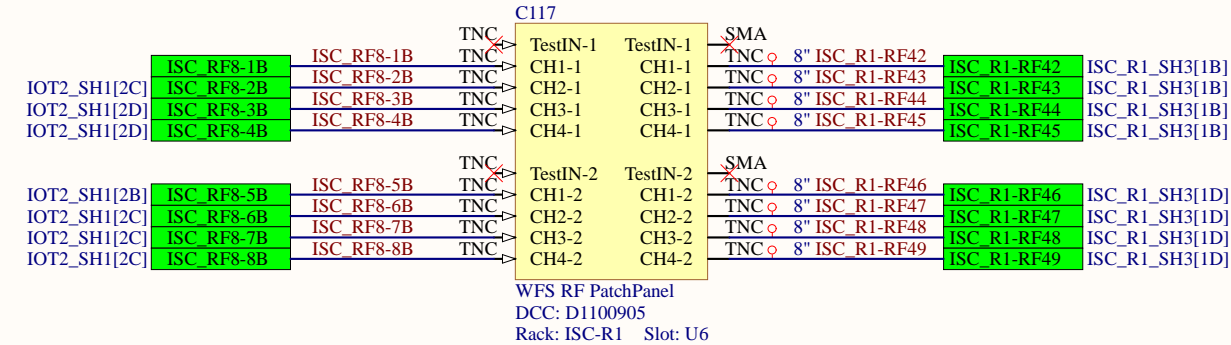
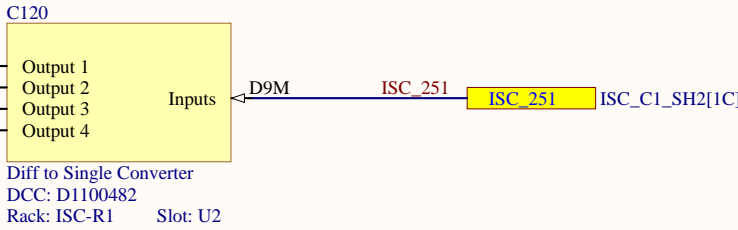
ISC-R1 Rack



Need to locate other end

PSL_SMB_1	PSL_SMB_1	BNC
PSL_SMB_2	PSL_SMB_2	BNC
ISC_434_X	ISC_434	BNC
ISC_435_X	ISC_435	BNC

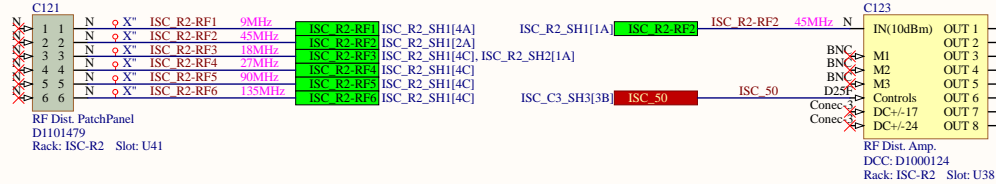
434/435 already used
ASC-POP_X_PIT/YAW



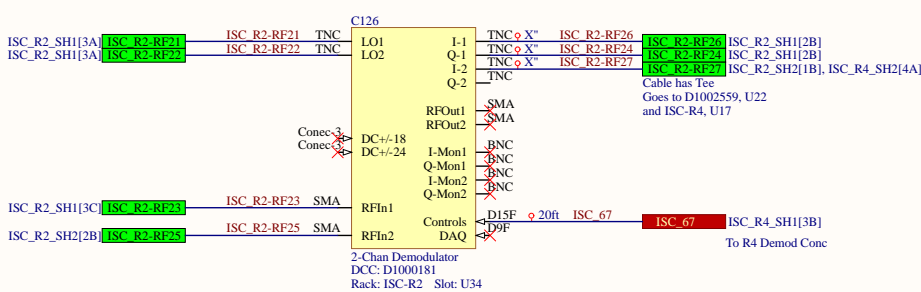
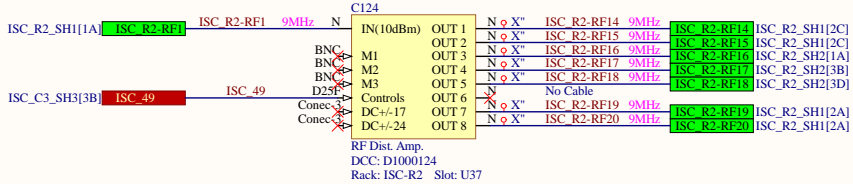
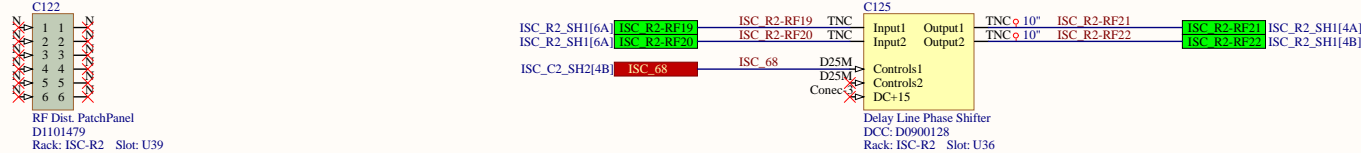
Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V5
Date:	2/25/2021	Sheet 12 of 38
File:	C:\Users\...\ISC_R1_SH3.SchDoc	Drawn By: Filiberto Clara

ISC-R2 Rack

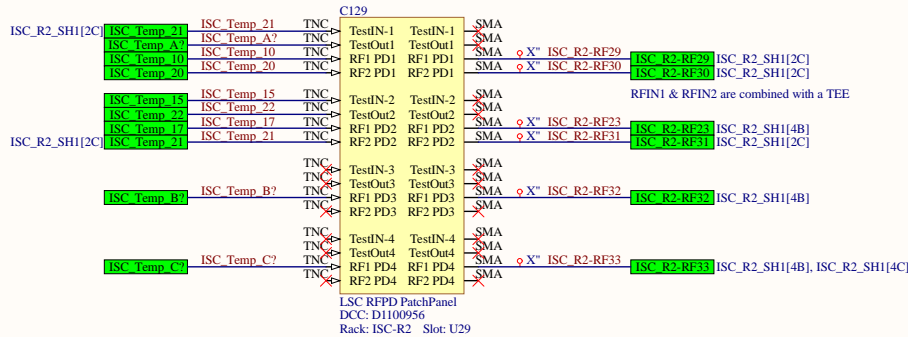
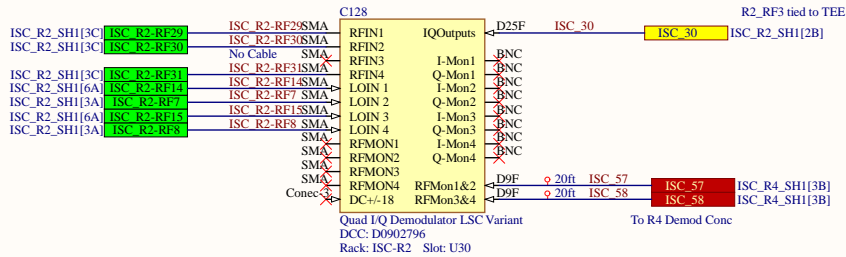
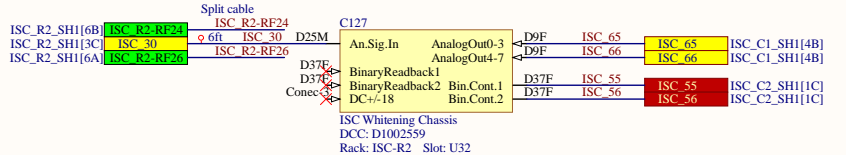
RF Patch Panel 13



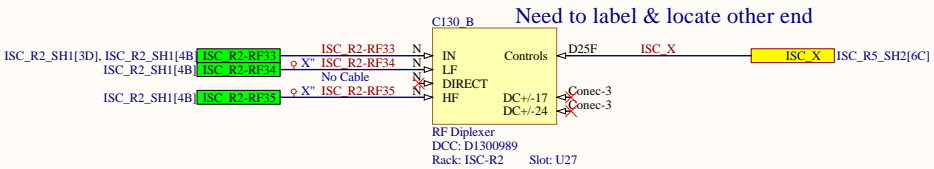
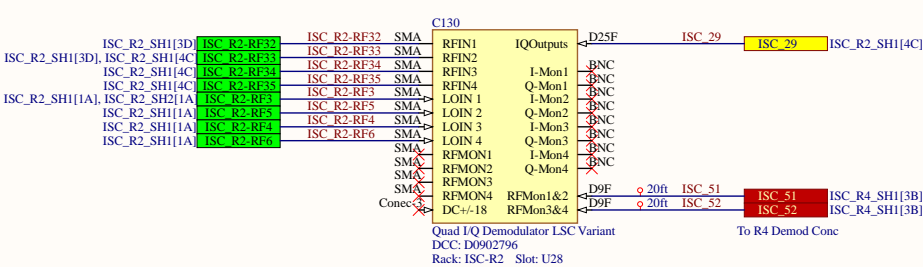
RF Patch Panel 14



LSC POPAIR A 9&45, LSC REFLAIR A 45



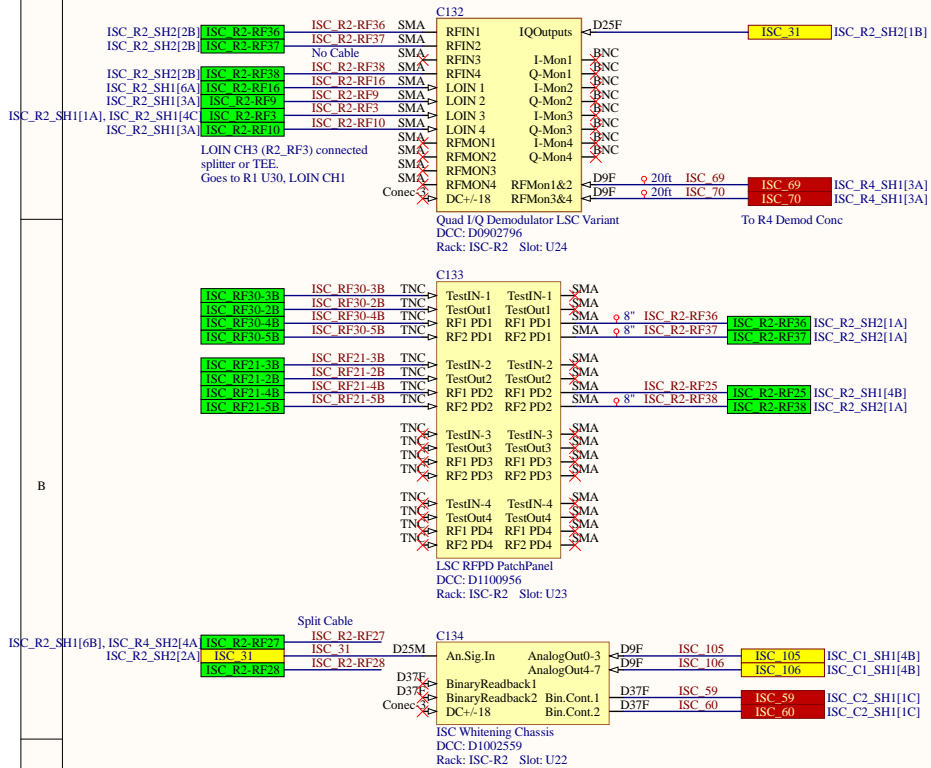
LSC POPAIR B 18&90, LSC REFLAIR B 27&135



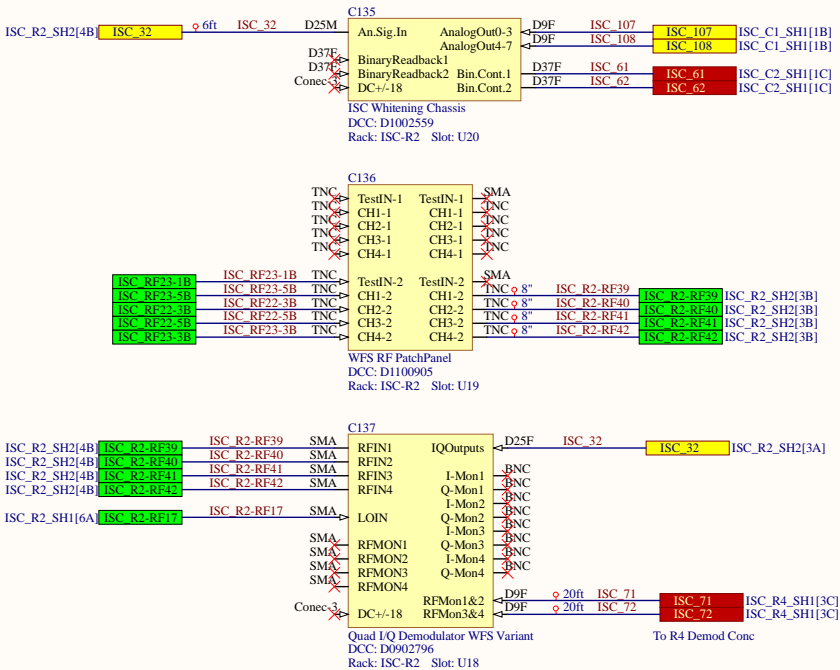
Title		
ISC System Wiring Diagram		
Size	Number	Revision
C	D1900511	V5
Date:	2/25/2021	Sheet 13 of 38
File:	C:\Users\JISC_R2_S1\SchDoc	Drawn By: Filiberto Clara

ISC-R2 Rack

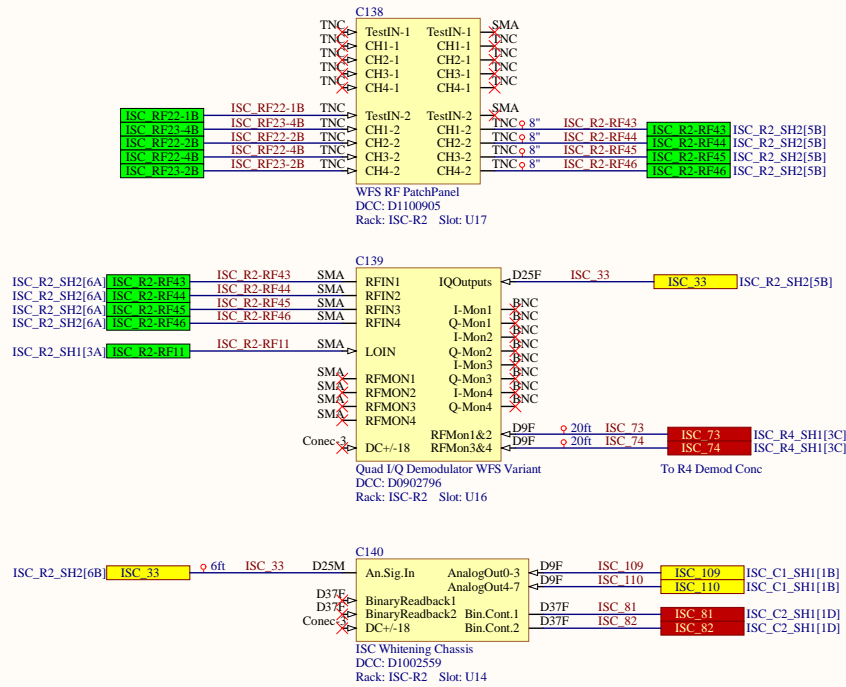
LSC POP, LSC REFL



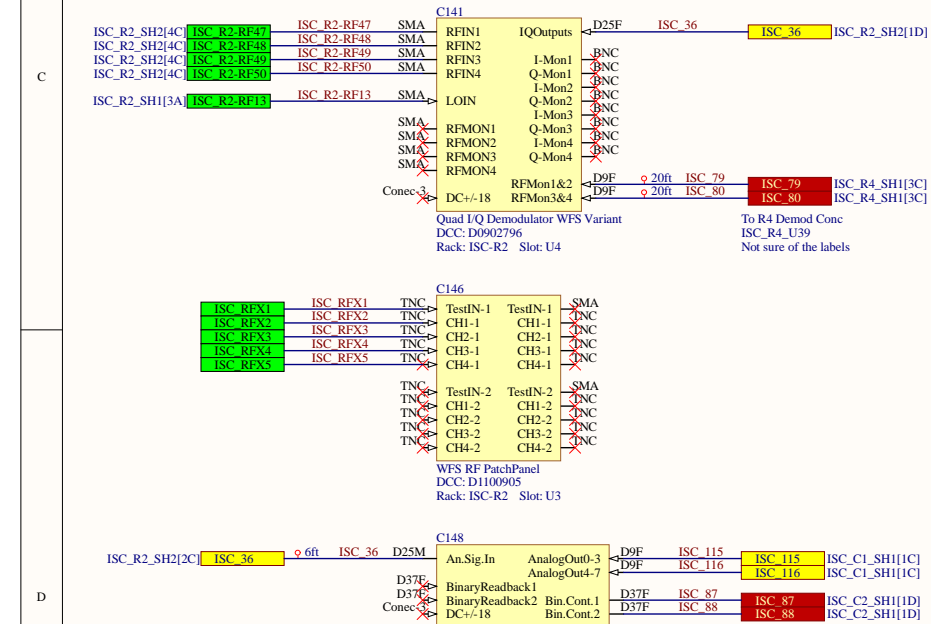
ASC REFL A 9MHz



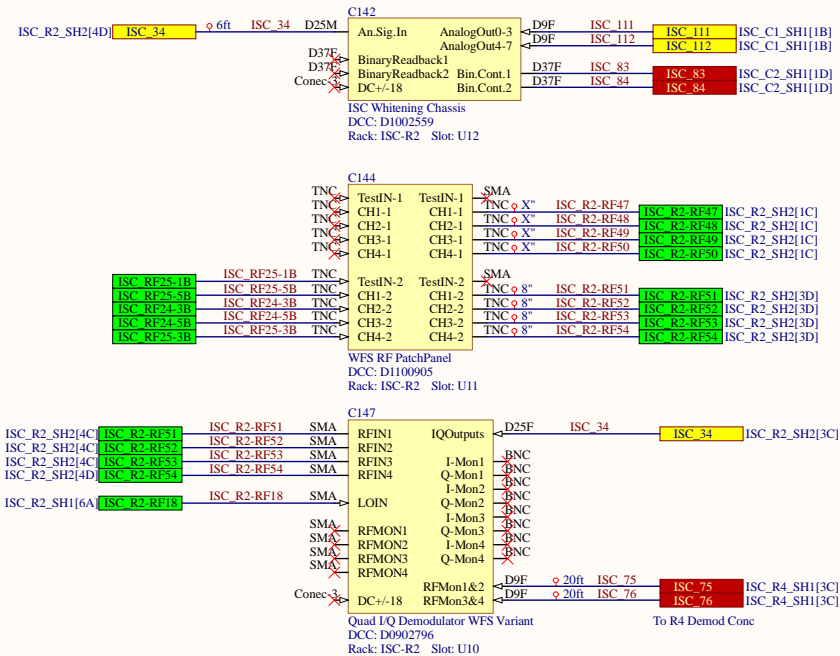
ASC REFL A 45MHz



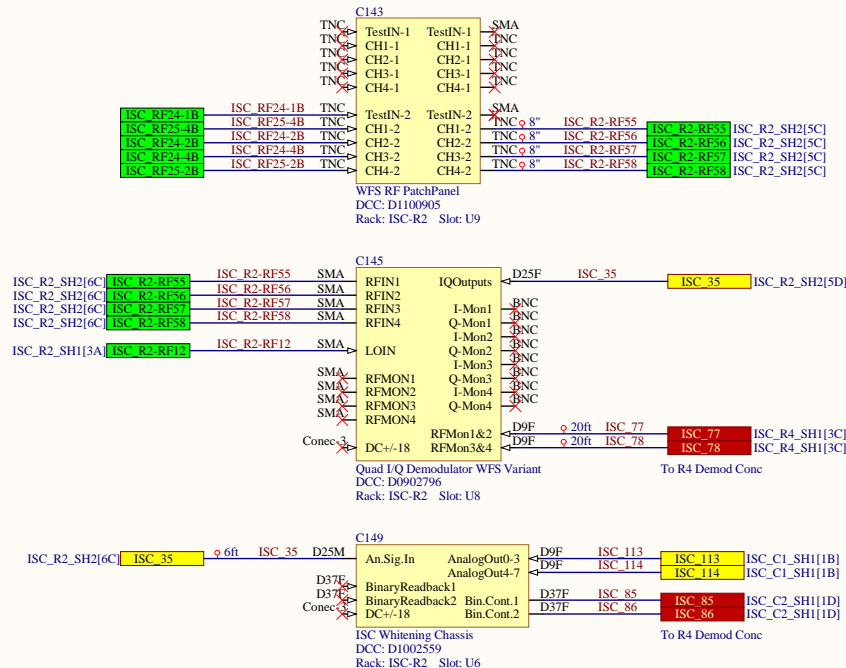
ASC POP A 45MHz



ASC REFL B 9MHz

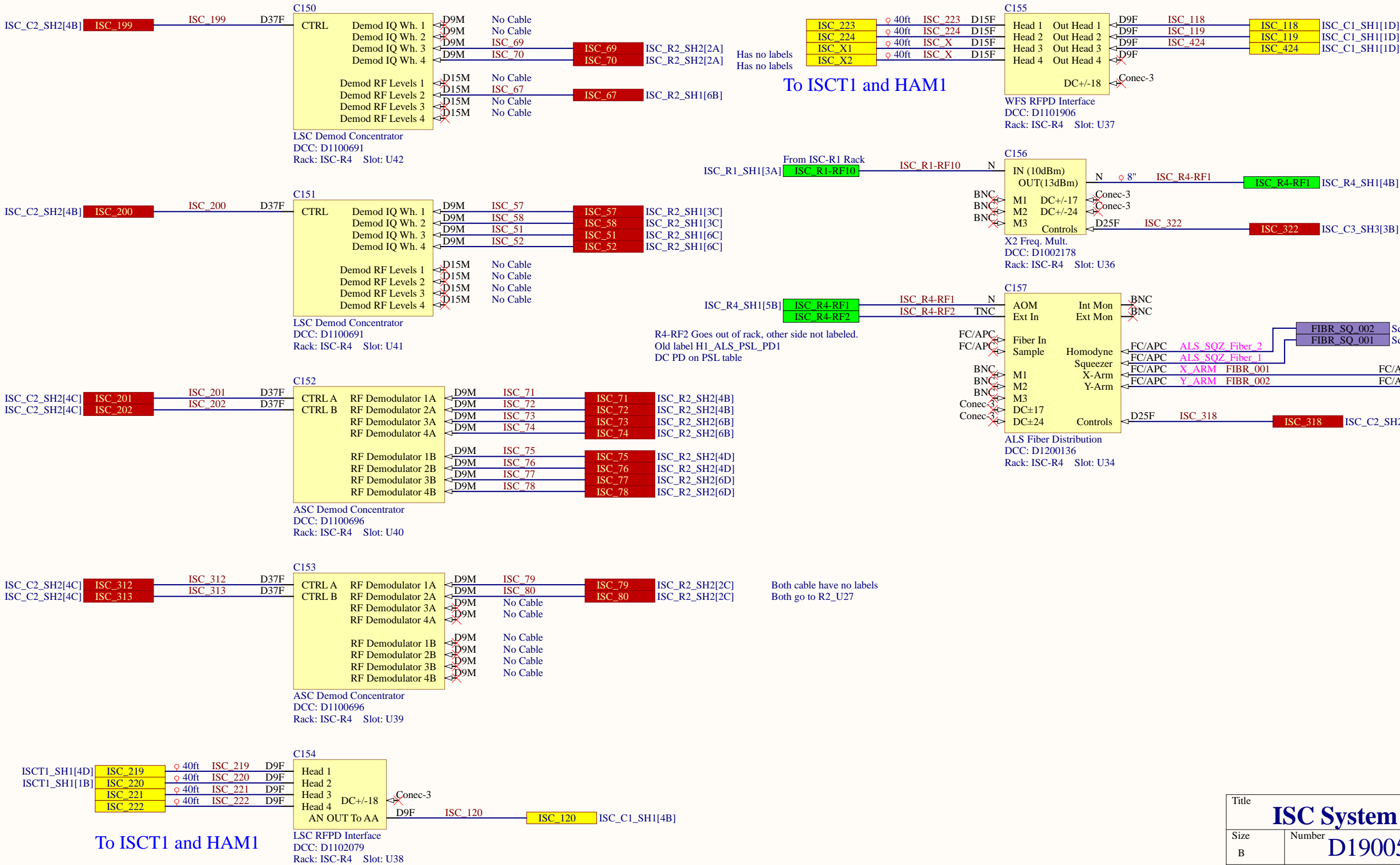


ASC REFL B 45MHz



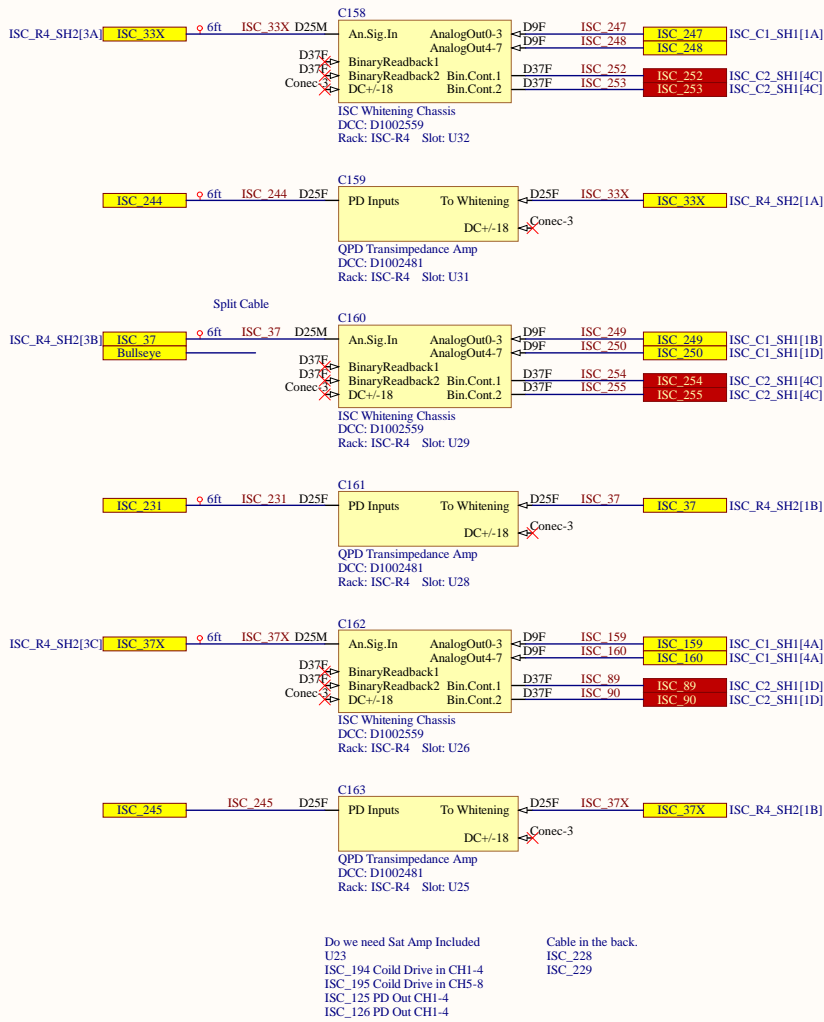
Title			ISC System Wiring Diagram
Size	Number	Revision	
C	D1900511	V5	
Date:	2/25/2021	Sheet	14 of 38
File:	C:\Users\ISC_R2_SH2\SchDoc	Drawn By:	Filberto Clara

ISC-R4 Rack

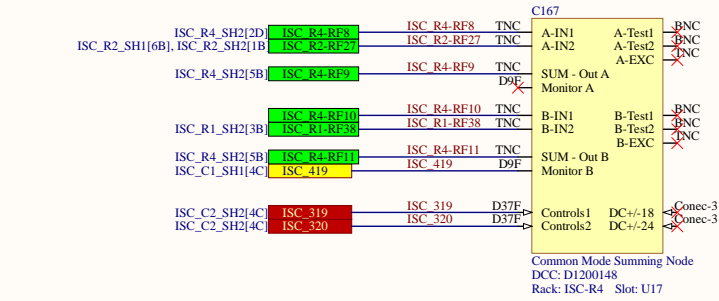


Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V5
Date:	2/25/2021	Sheet 16 of 38
File:	C:\Users\...\ISC_R4_SH1.SchDoc	Drawn By: Filiberto Clara

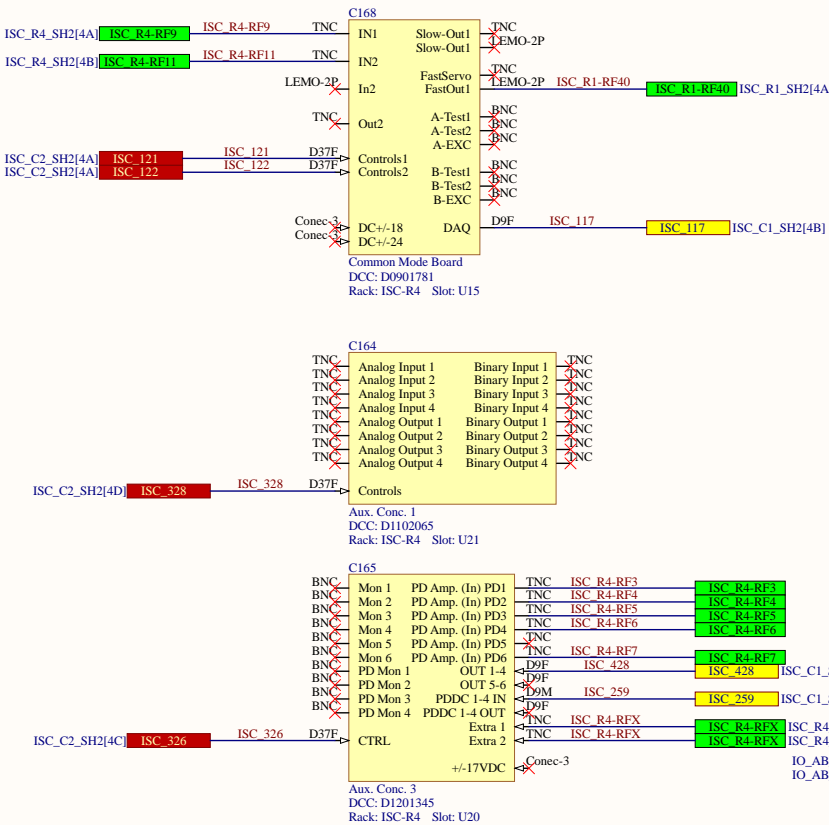
ISC-R4 Rack



Need to locate in CER.



Otherside not labeled. RED
Otherside not labeled. Green
Otherside not labeled. R4 ISC1
Otherside not labeled. R4 ISC2
Otherside not labeled. Old label H1_ALS_PSL_PD1

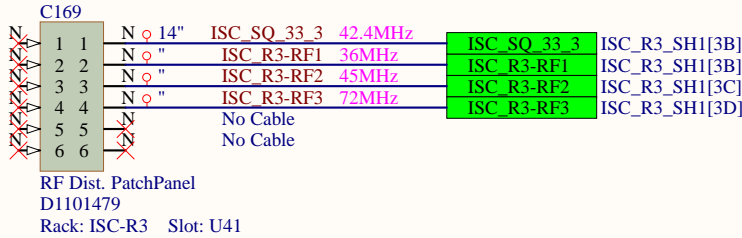


Title		
ISC System Wiring Diagram		
Size	Number	Revision
C	D1900511	V5
Date:	2/25/2021	Sheet 17 of 38
File:	C:\Users\...ISC_R4_SH2.SchDoc	Drawn By: Filiberto Clara

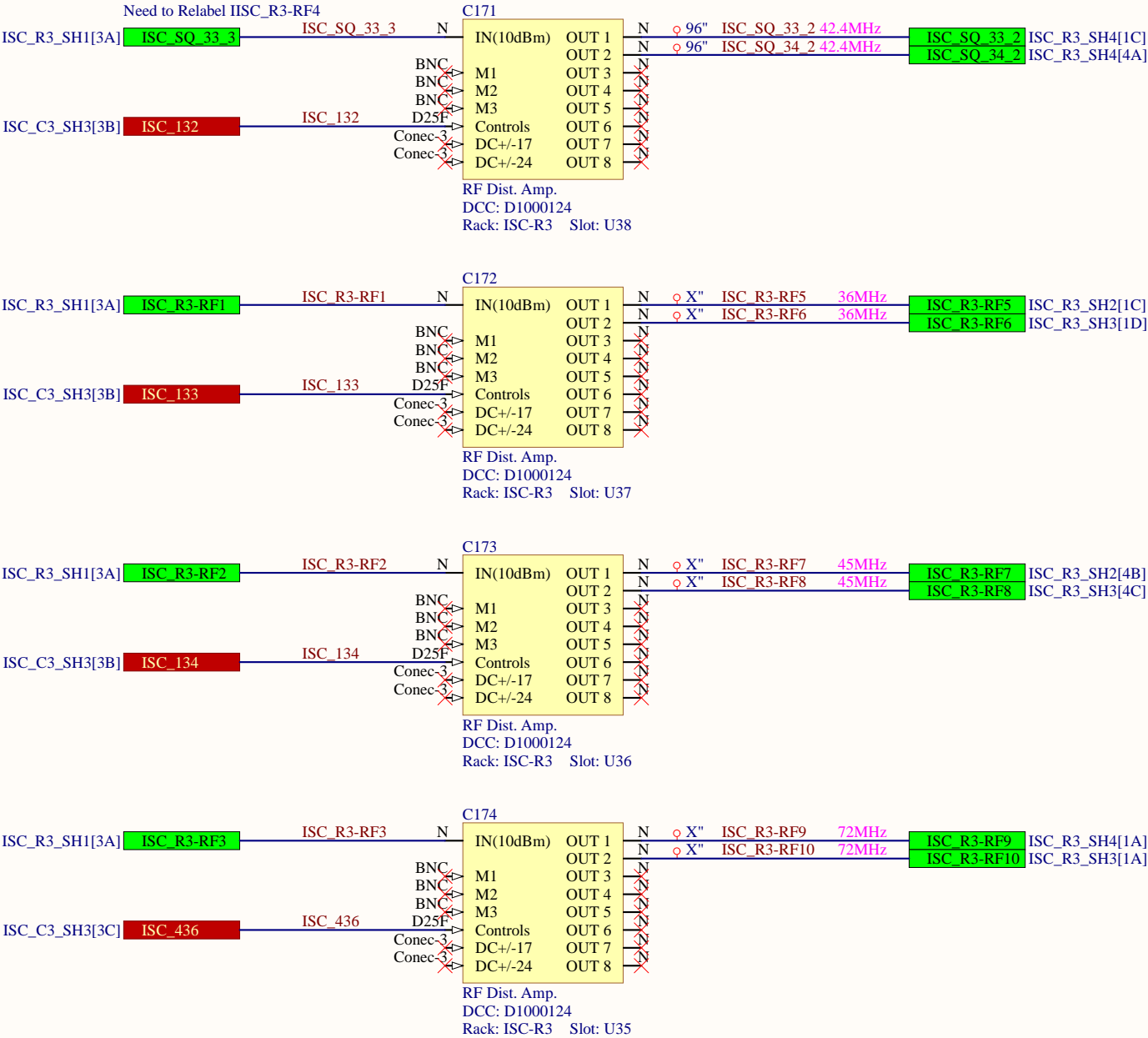
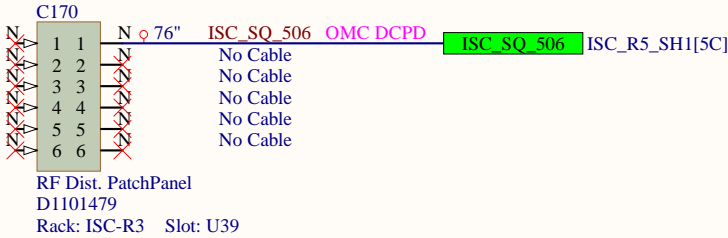
ISC-R3 Rack

Need to Relabel ISC_R3-RF4

RF Patch Panel 15

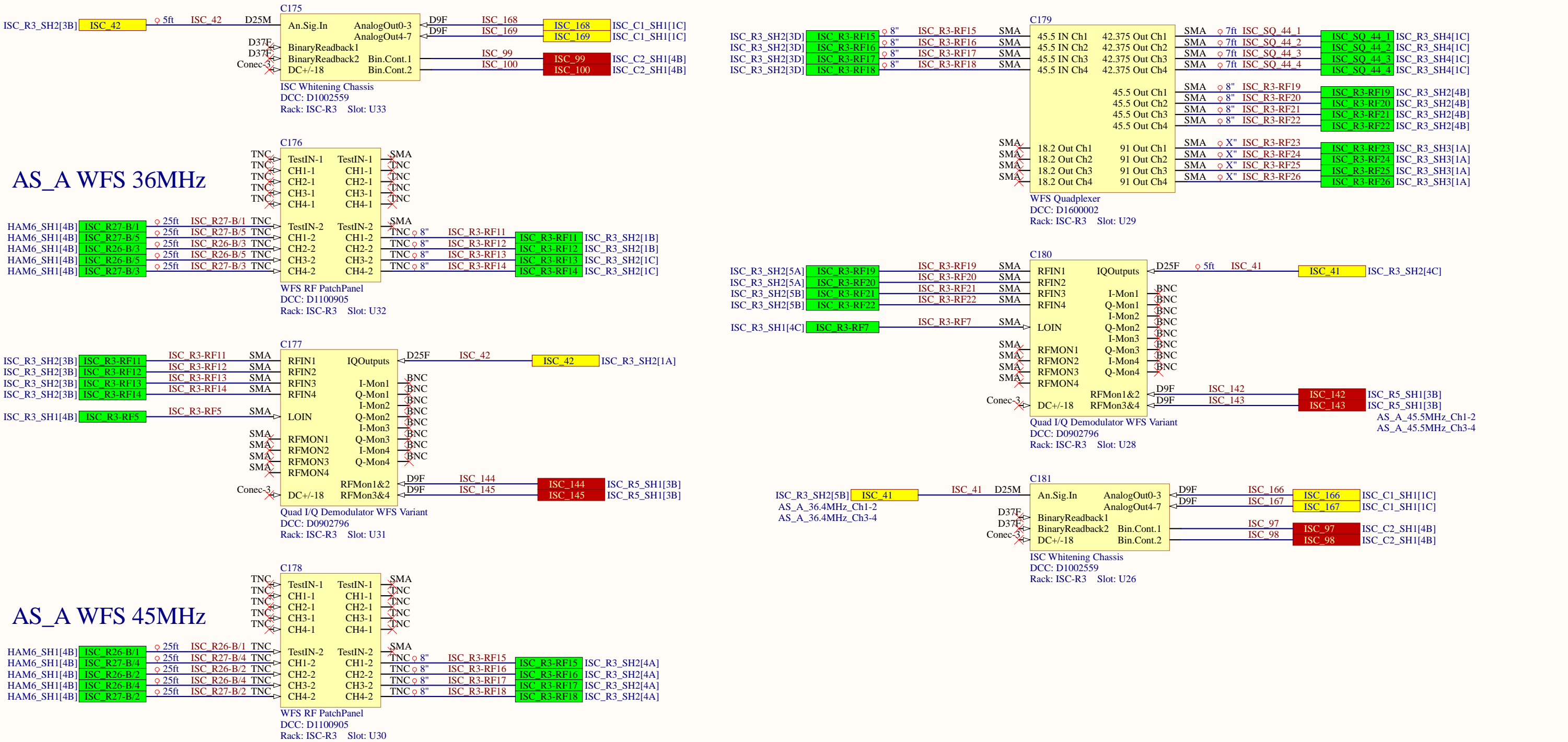


RF Patch Panel 16



Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V5
Date:	2/25/2021	Sheet 18 of 38
File:	C:\Users\...\ISC_R3_SH1.SchDoc	Drawn By: Filiberto Clara

ISC-R3 Rack



Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V5
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File:	C:\Users\...\ISC_R3_SH2.SchDoc	Drawn By: Filiberto Clara

ISC-R3 Rack

A

B

C

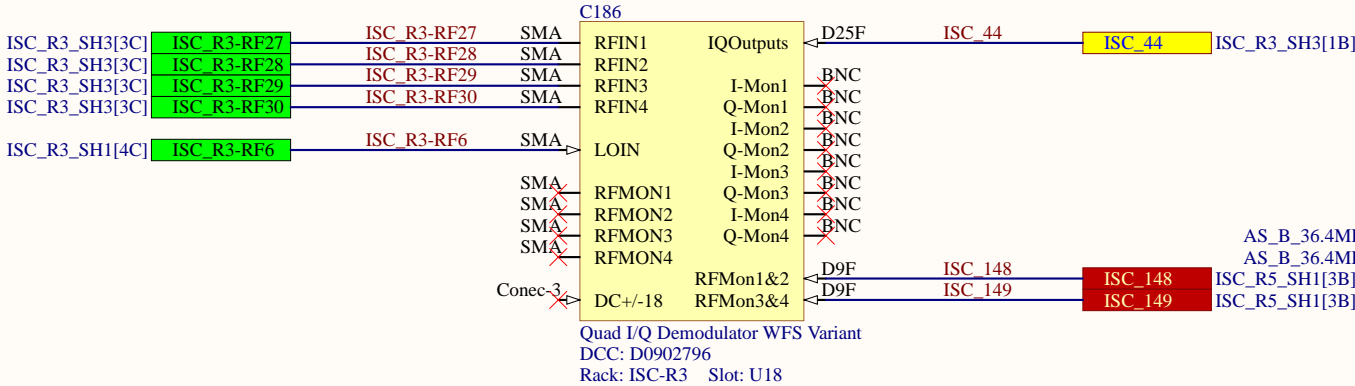
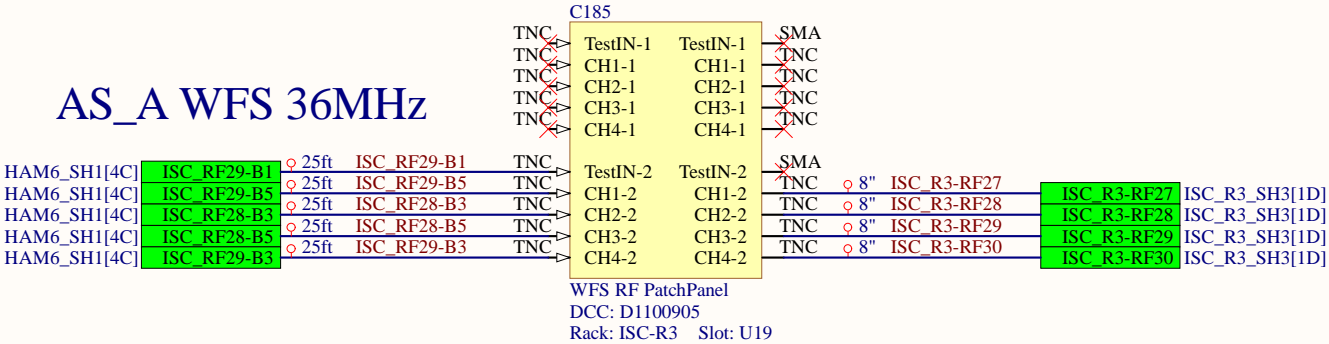
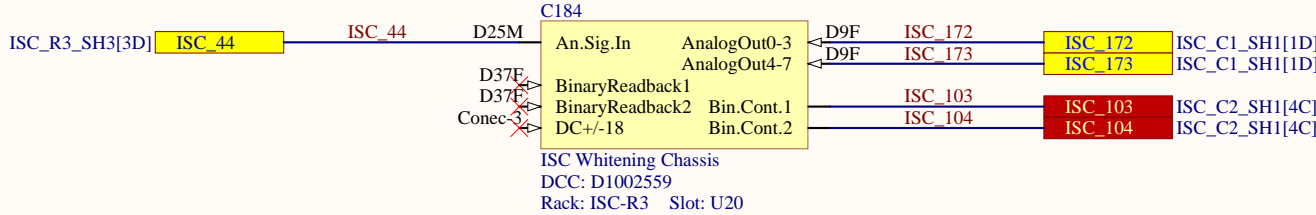
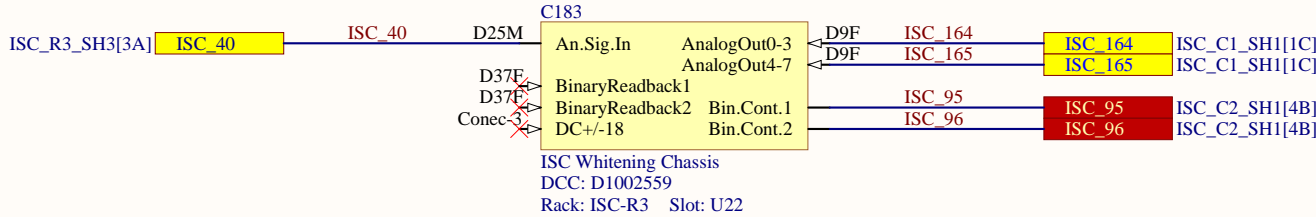
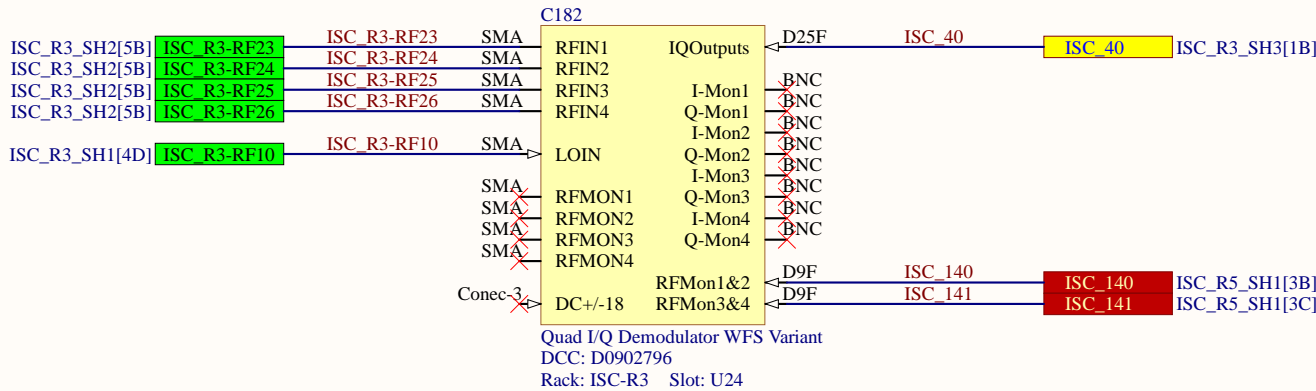
D

A

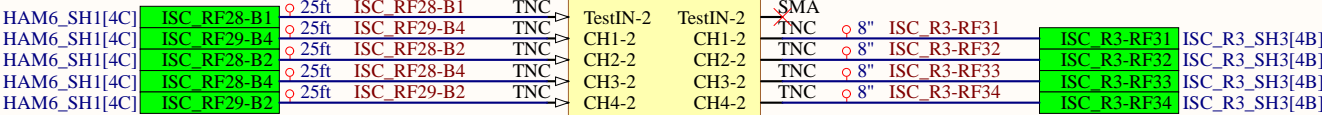
B

C

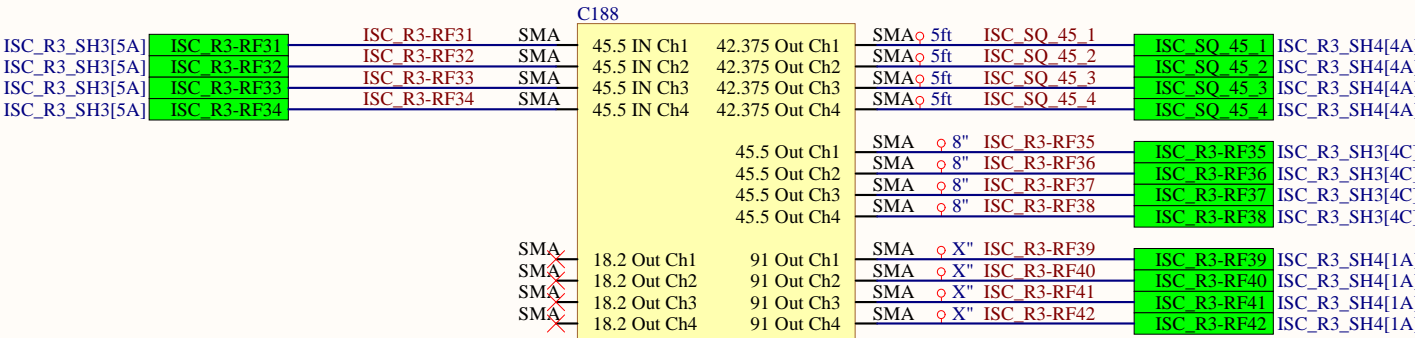
D



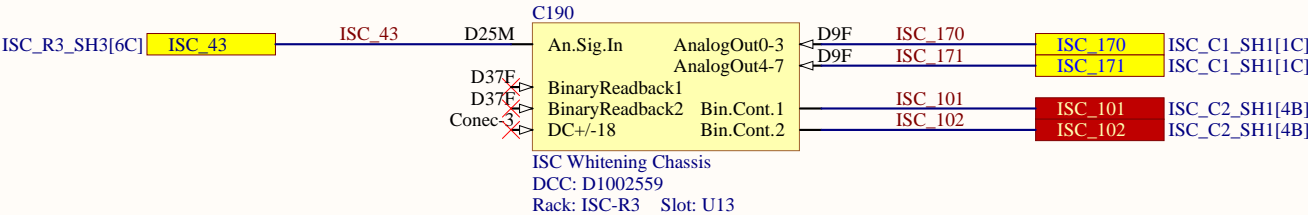
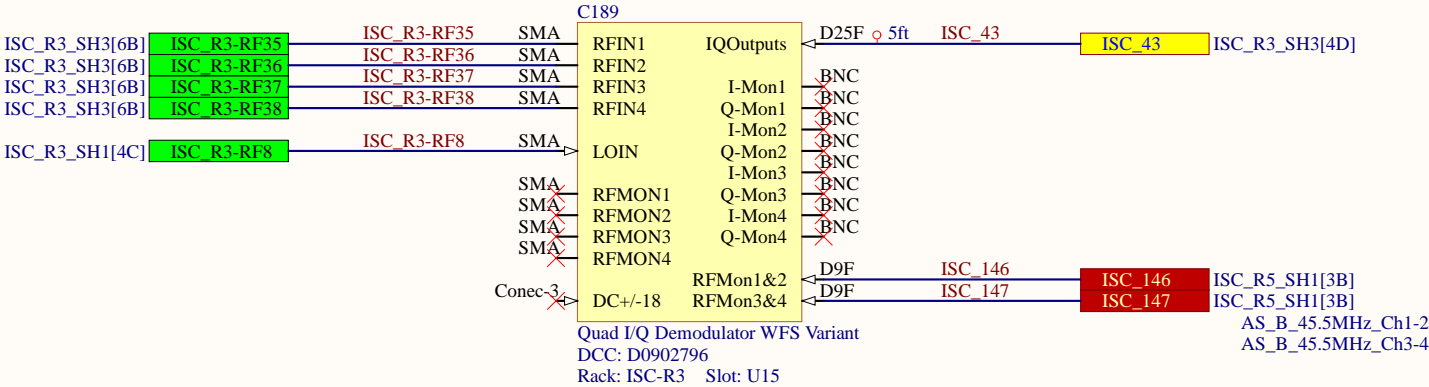
AS_A WFS 45MHz



WFS RF PatchPanel
DCC: D1100905
Rack: ISC-R3 Slot: U17



WFS Quadplexer
DCC: D1600002
Rack: ISC-R3 Slot: U16



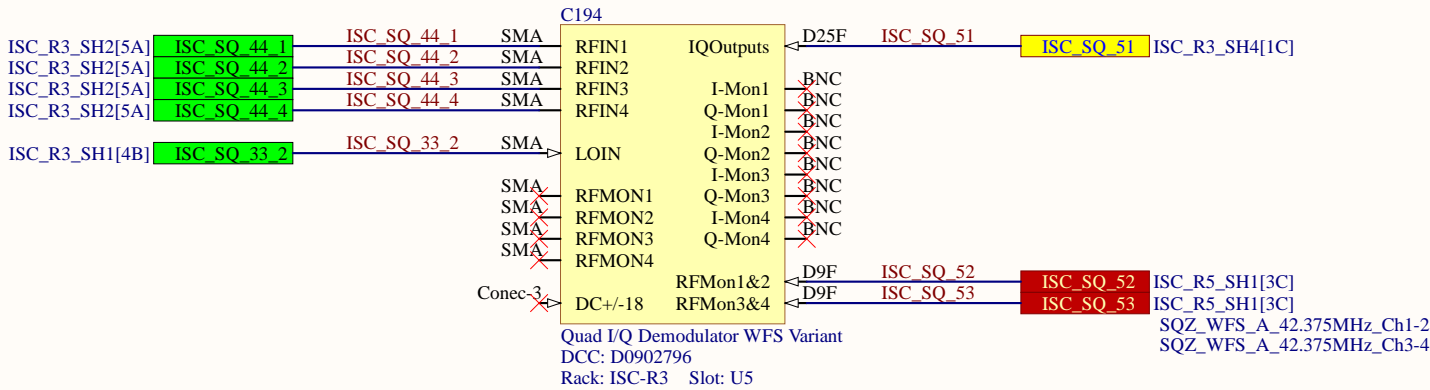
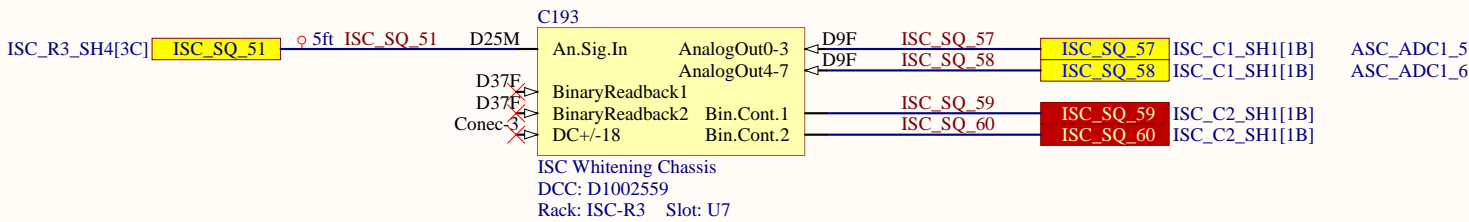
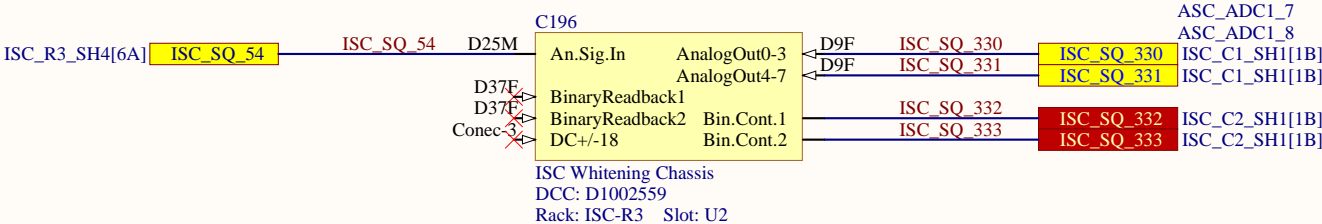
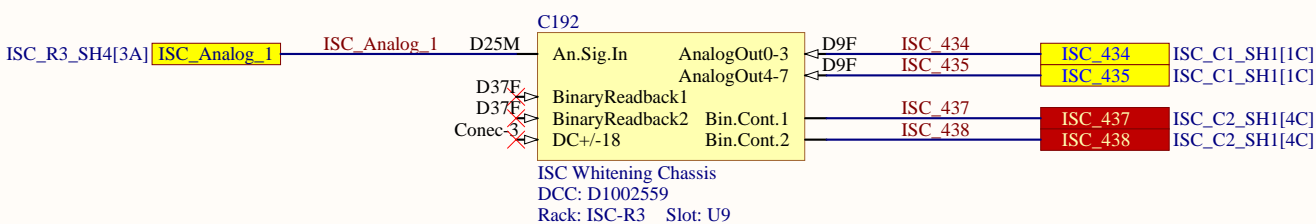
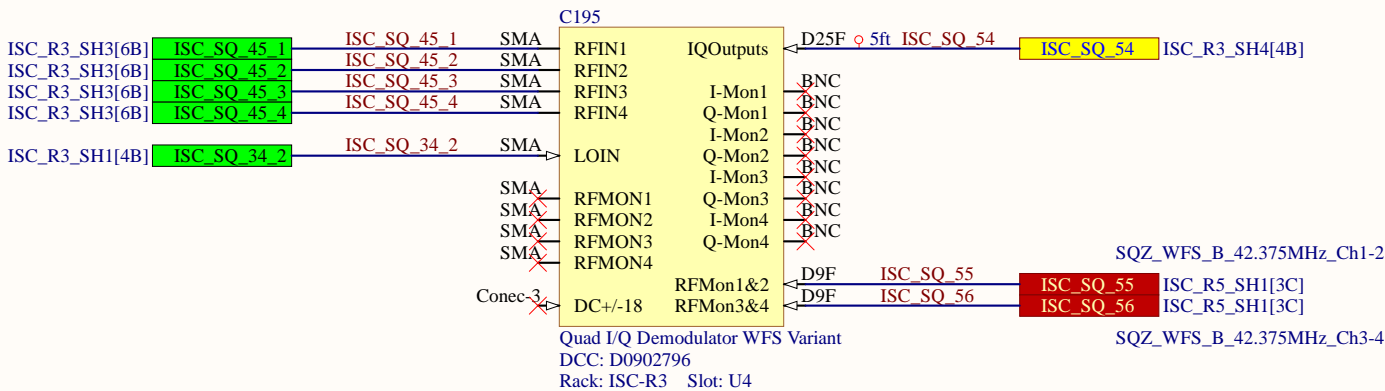
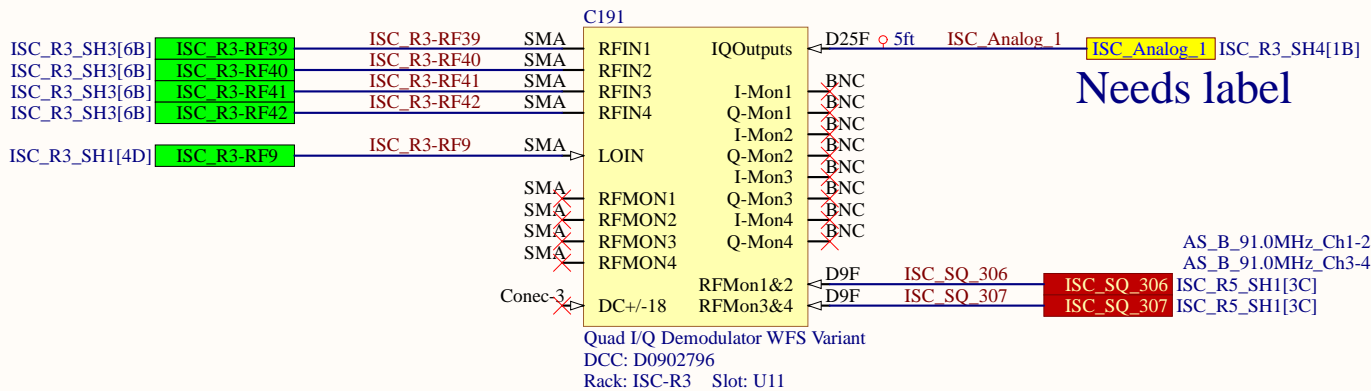
ISC System Wiring Diagram

Title	ISC System Wiring Diagram	
Size	Number	Revision
B	D1900511	V5
Date:	2/25/2021	Sheet 20 of 38
File:	C:\Users\...\ISC_R3_SH3.SchDoc	Drawn By: Filiberto Clara

ISC-R3 Rack

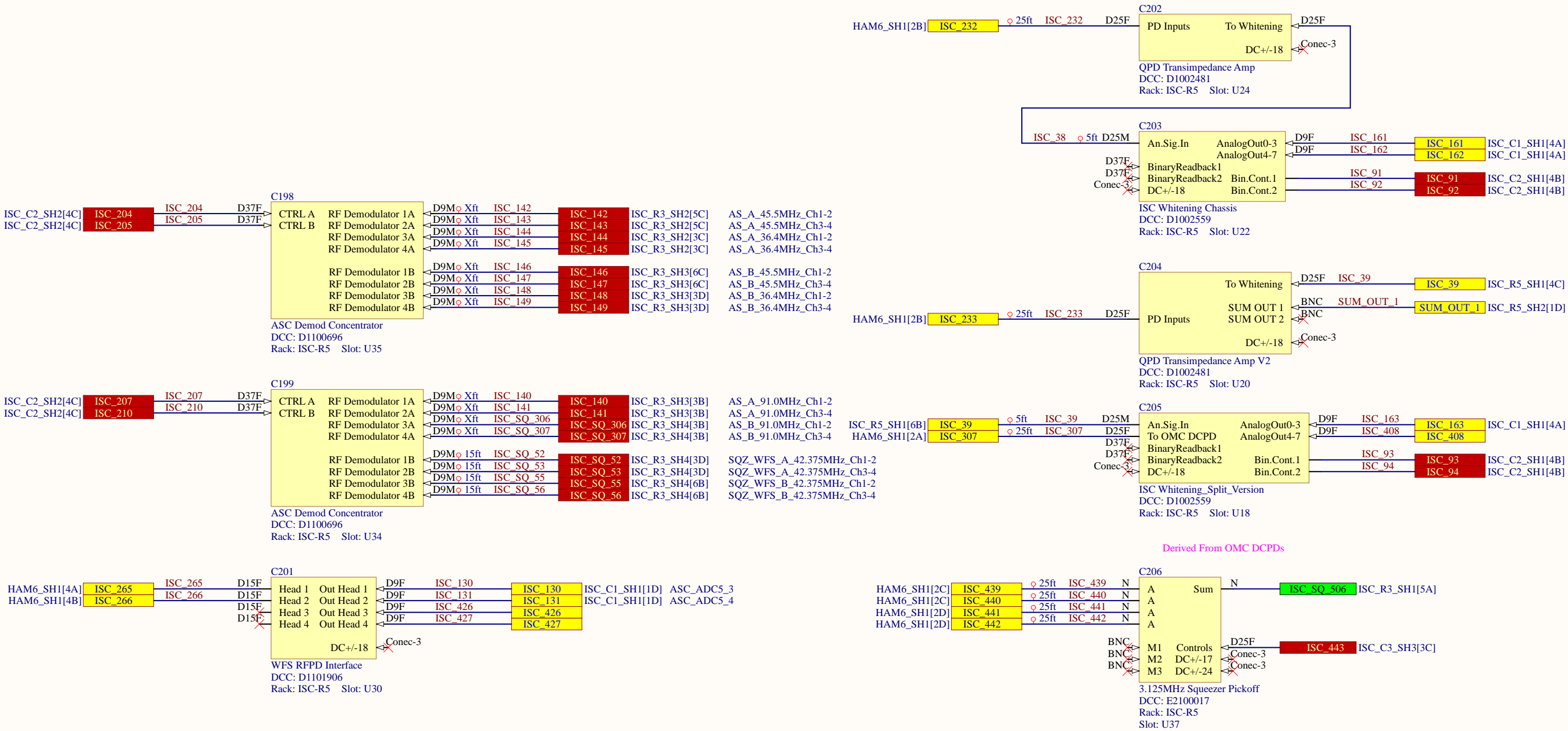
Needs labels

Needs label



Title			ISC System Wiring Diagram		
Size	Number	Revision			
B	D1900511	V5			
Date:	2/25/2021	Sheet	21	of	38
File:	C:\Users\...\ISC_R3_SH4.SchDoc	Drawn By:	Filiberto Clara		

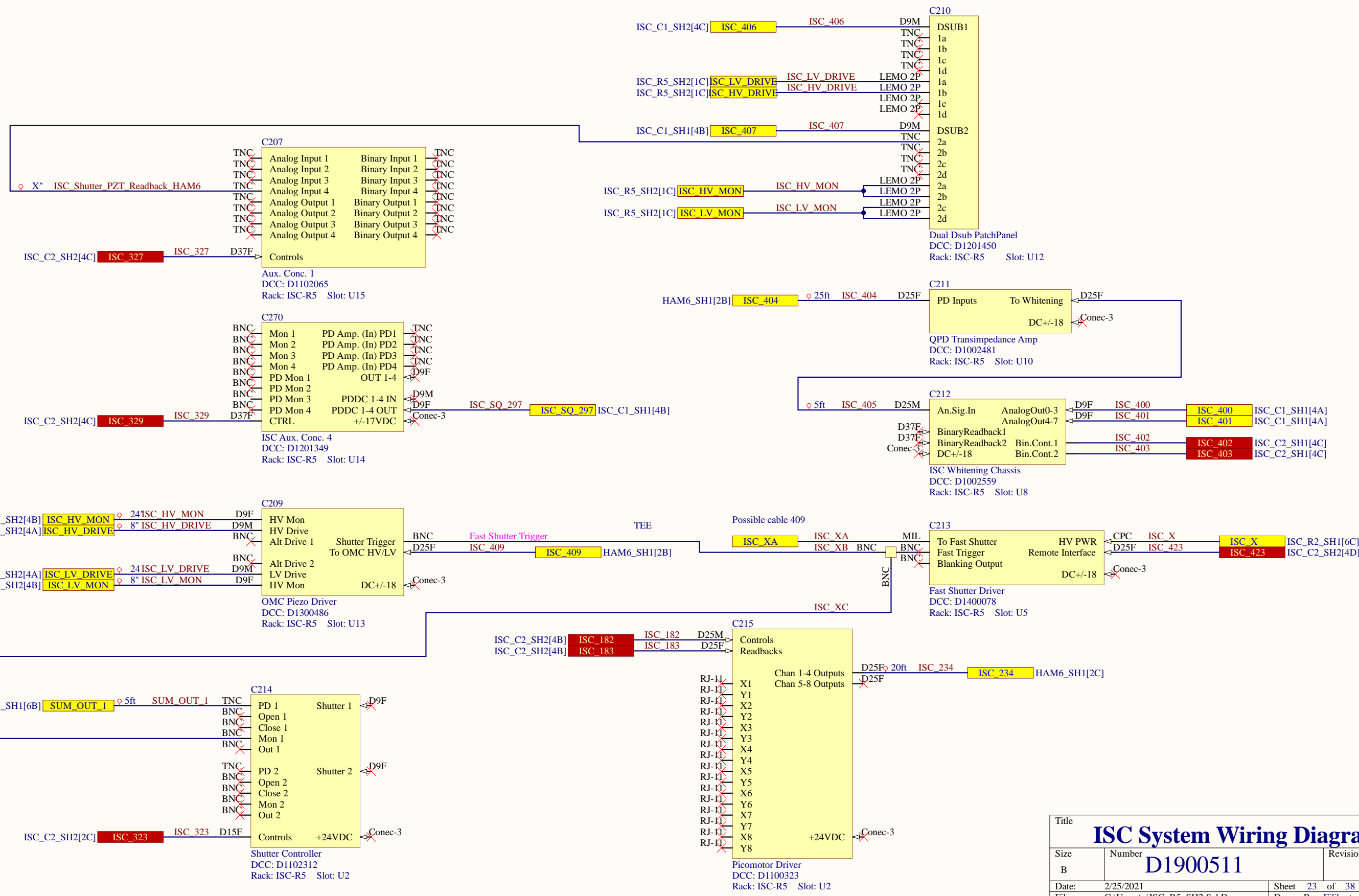
ISC-R5 Rack



The whitening chassis and the OMC berakout will be replaced for the new in-vac DCPDs.
The 3.1MHz signal will be brought out separately on coax.

Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V5
Date:	2/25/2021	Sheet 22 of 38
File:	C:\Users\...\ISC_R5_SH1.SchDoc	Drawn By: Filiberto Clara

ISC-R5 Rack



Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V5
Date:	2/25/2021	Sheet 23 of 38
File:	C:\Users\...\ISC_R5_SH2.SchDoc	Drawn By: Filiberto Clara

ISCT1 - Right Side

Inside Enclosure

LSC RFPD REFL Air A

ASC WFS REFL Air A

Inside Enclosure

ASC WFS REFL Air B

LSC RFPD POP Air A

ISC System Wiring Diagram

D1900511

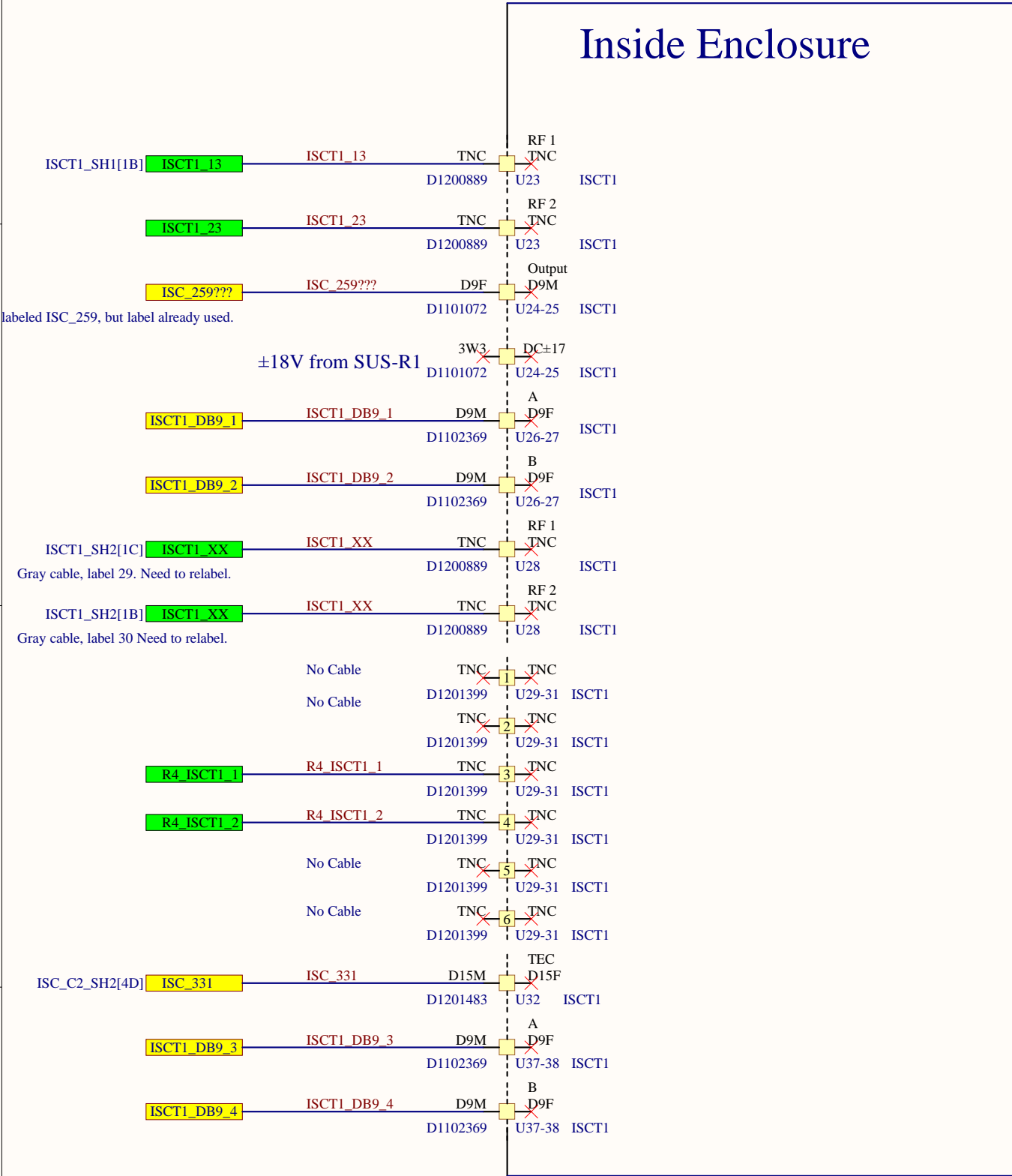
V5

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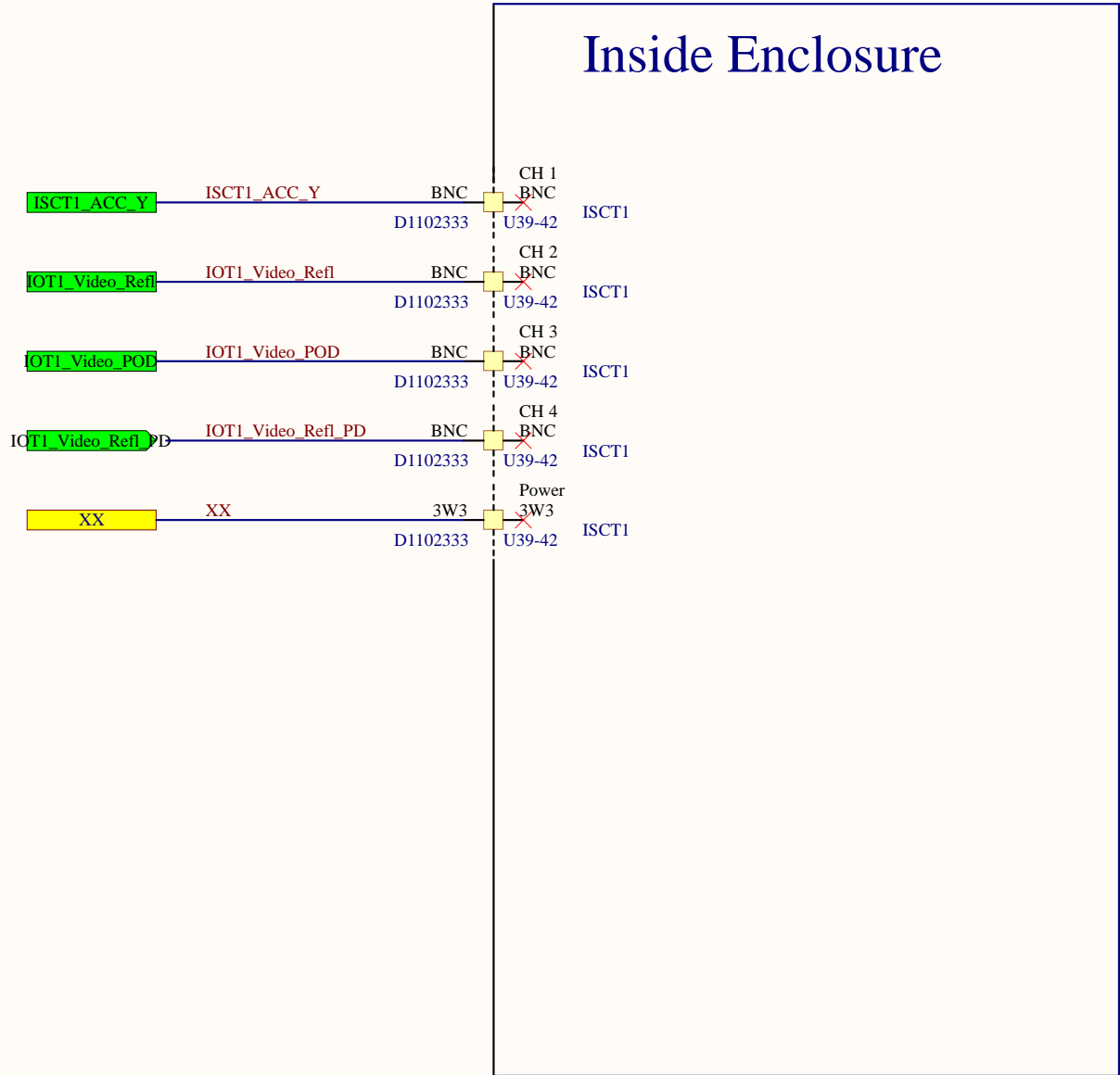
C:\Users\...\ISC1_SH1.SchDoc Drawn By: Filiberto Clara

ISCT1 - Right Side

Inside Enclosure

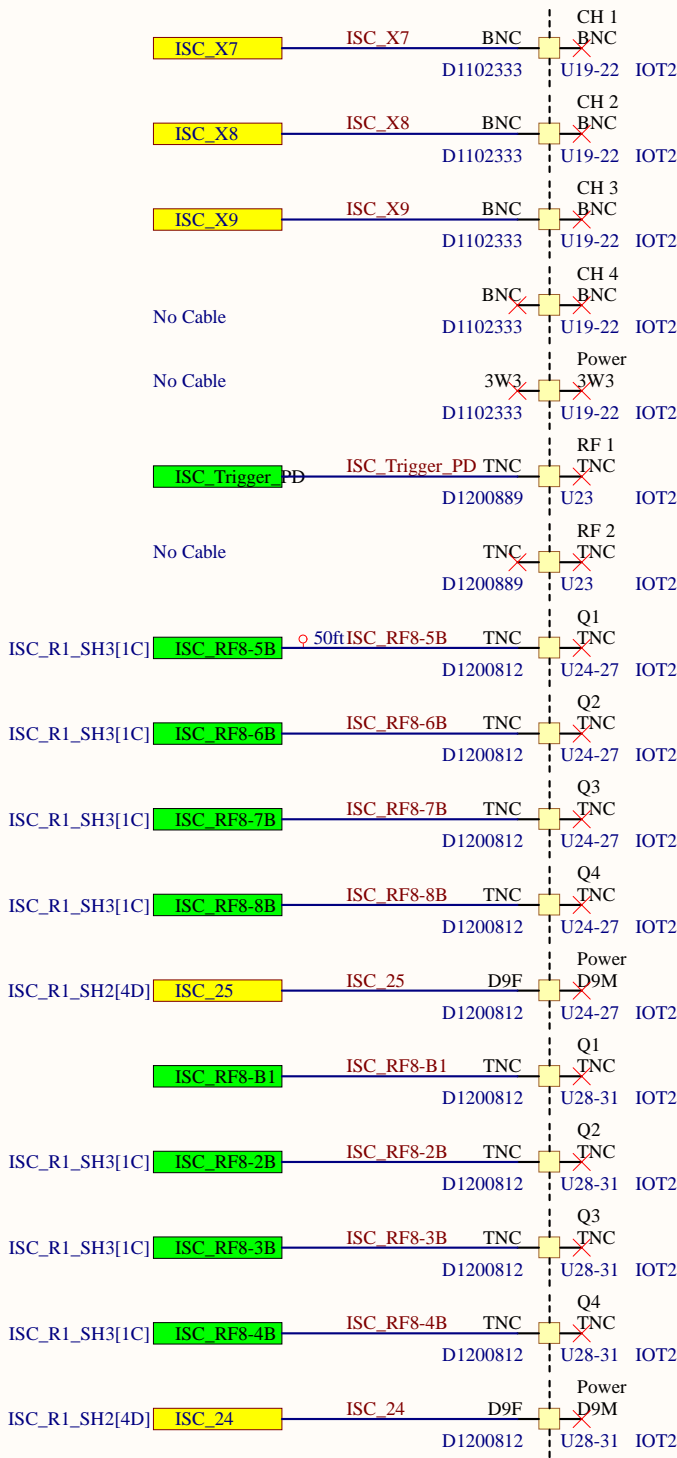


Inside Enclosure

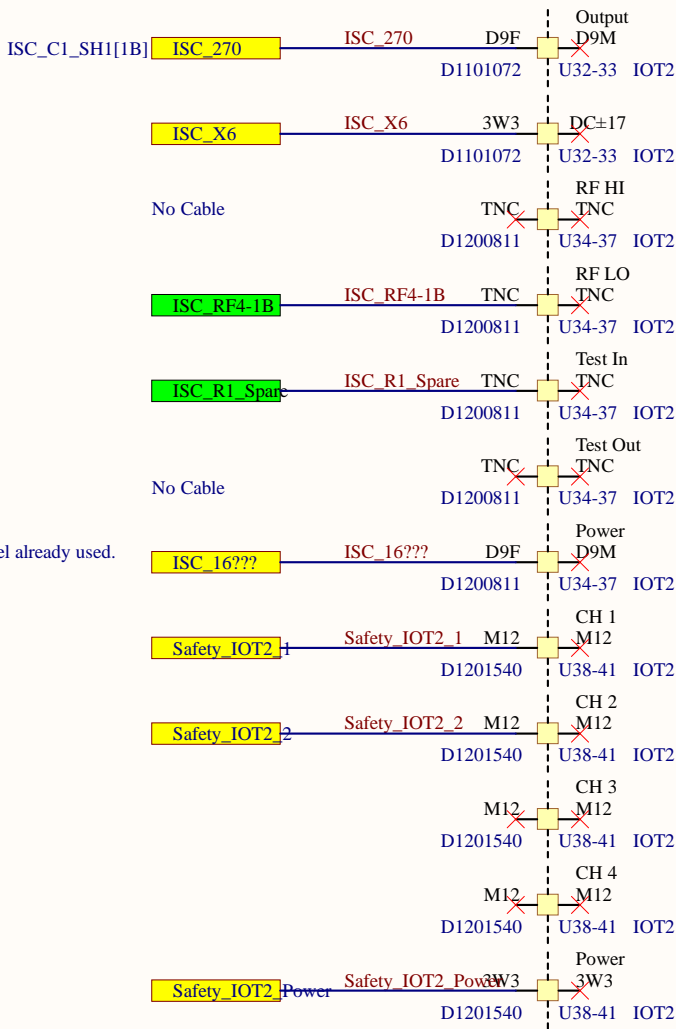


Title			ISC System Wiring Diagram		
Size	Number	Revision			
B	D1900511	V5			
Date:	2/25/2021	Sheet	25	of	38
File:	C:\Users\...\ISCT1_SH2.SchDoc	Drawn By:	Filiberto Clara		

IOT2 - Left Side



Cable labeled ISC_16, but label already used.



Title			ISC System Wiring Diagram		
Size	Number	Revision			
B	D1900511	V5			
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File:	C:\Users\...\IOT2_SH1.SchDoc	Drawn By:	Filiberto Clara		

HAM6 Flange Layout

DCPD

PZTs

OMC QPD

OMCR QPD

AS_C QPD

OMCR/AS
Picomotor

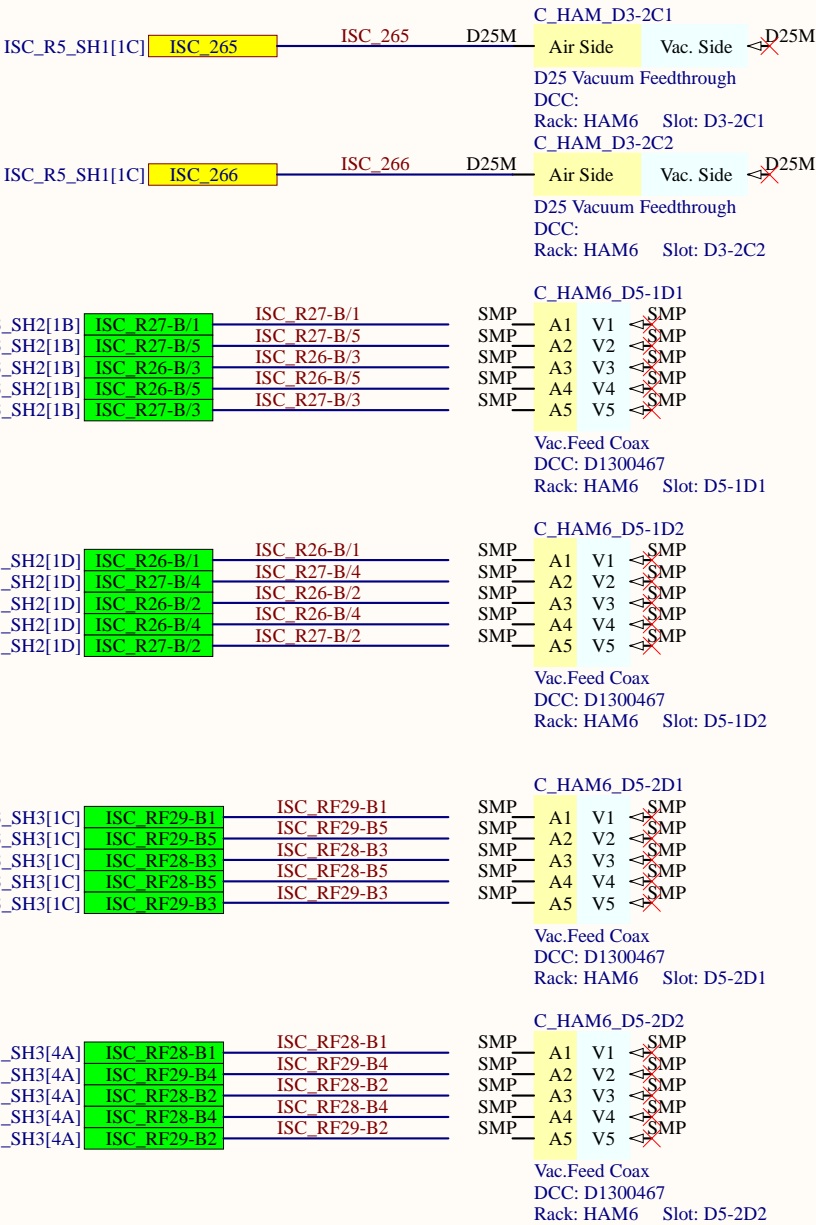
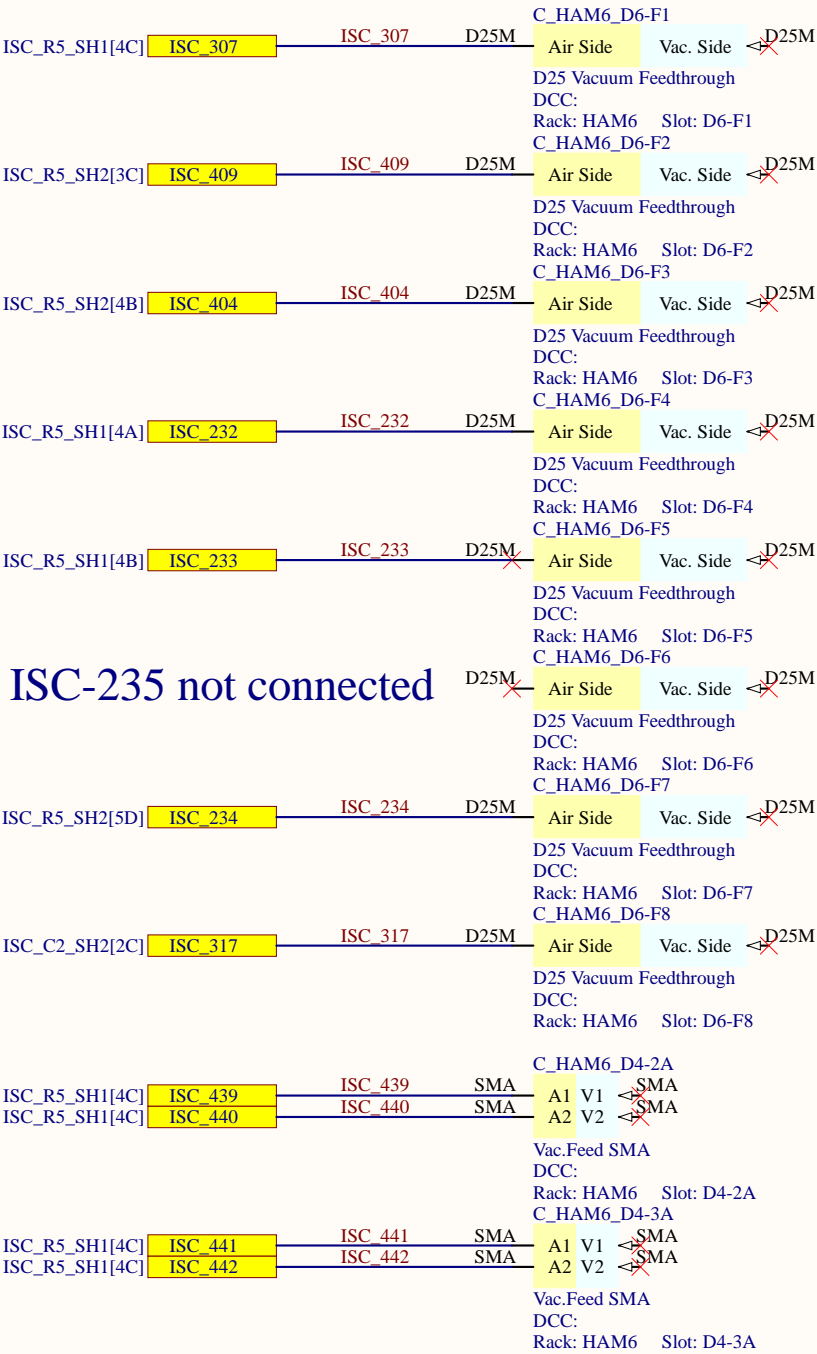
AS_C
Picomotor

Beam diverter

DCPD 3.1MHz A/B

DCPD 3.1MHz C/D

Cable ISC-235 not connected



AS_A WFS DC

AS_B WFS DC

AS_A WFS 36MHz

AS_A WFS 45MHz

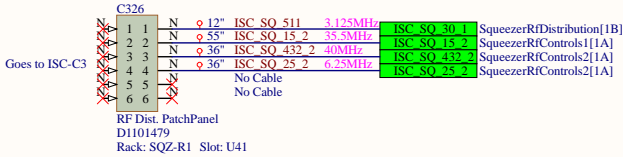
AS_B WFS 36MHz

AS_B WFS 45MHz

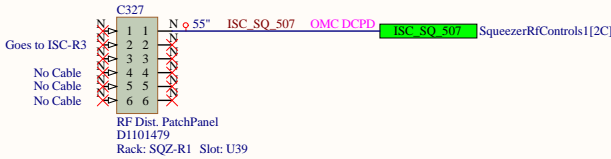
Need to check WFS RF!

Title			
ISC System Wiring Diagram			
Size	Number	Revision	
B	D1900511	V5	
Date:	2/25/2021	Sheet	28 of 38
File:	C:\Users\...\HAM6_SH1.SchDoc	Drawn By:	Filiberto Clara

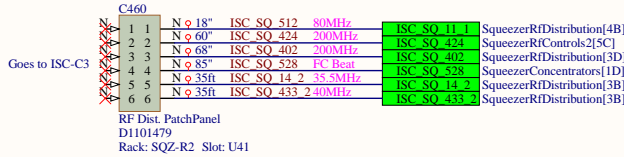
RF Patch Panel 34



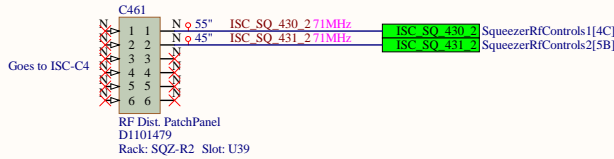
RF Patch Panel 35



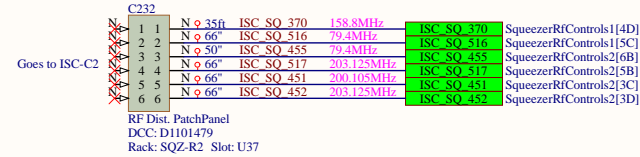
RF Patch Panel 36



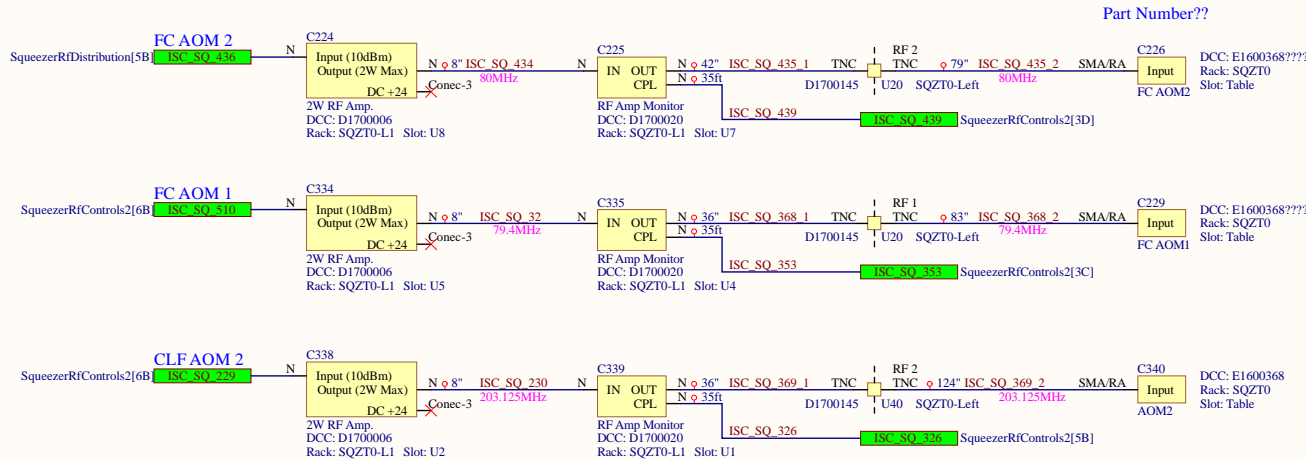
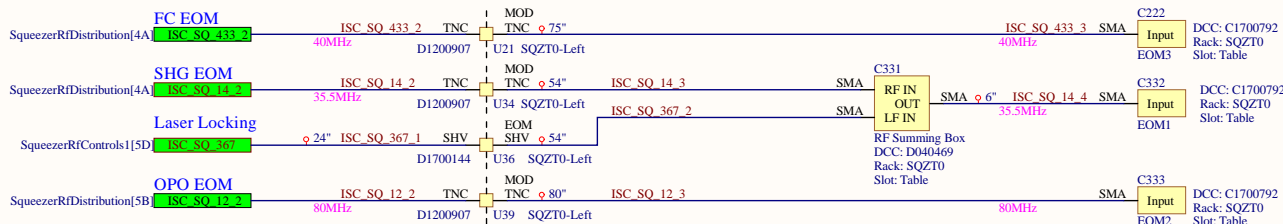
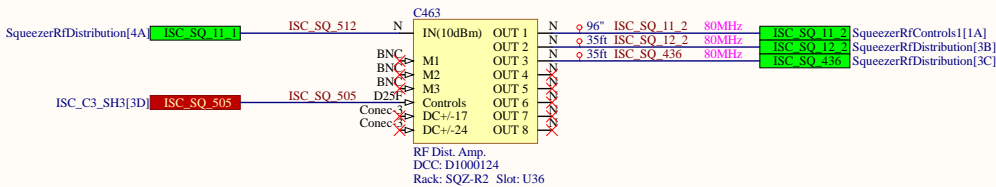
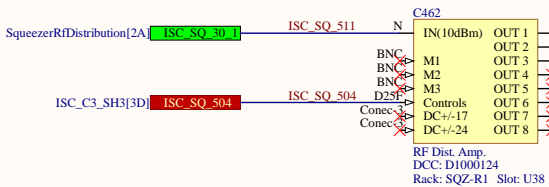
RF Patch Panel 37



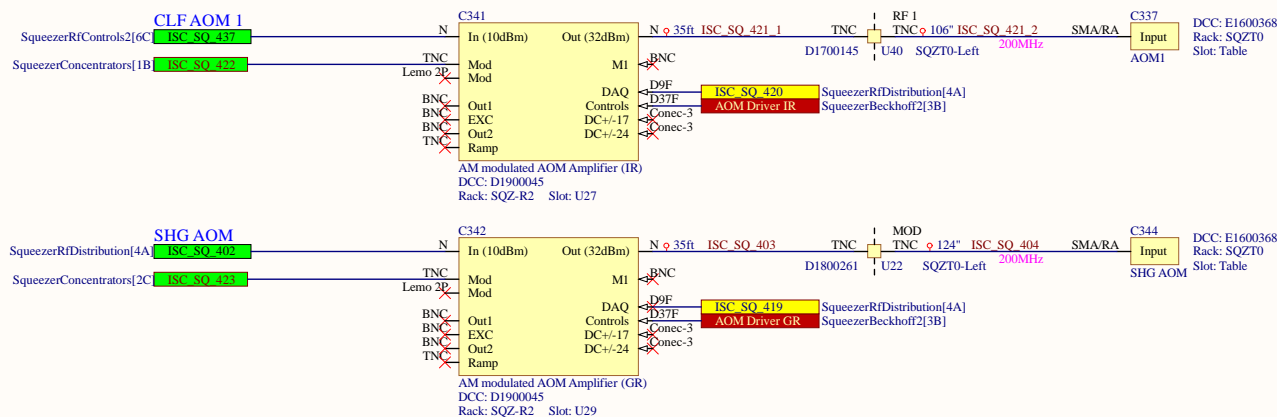
RF Patch Panel 38



New cables for A_ start at ISC_SQ_430

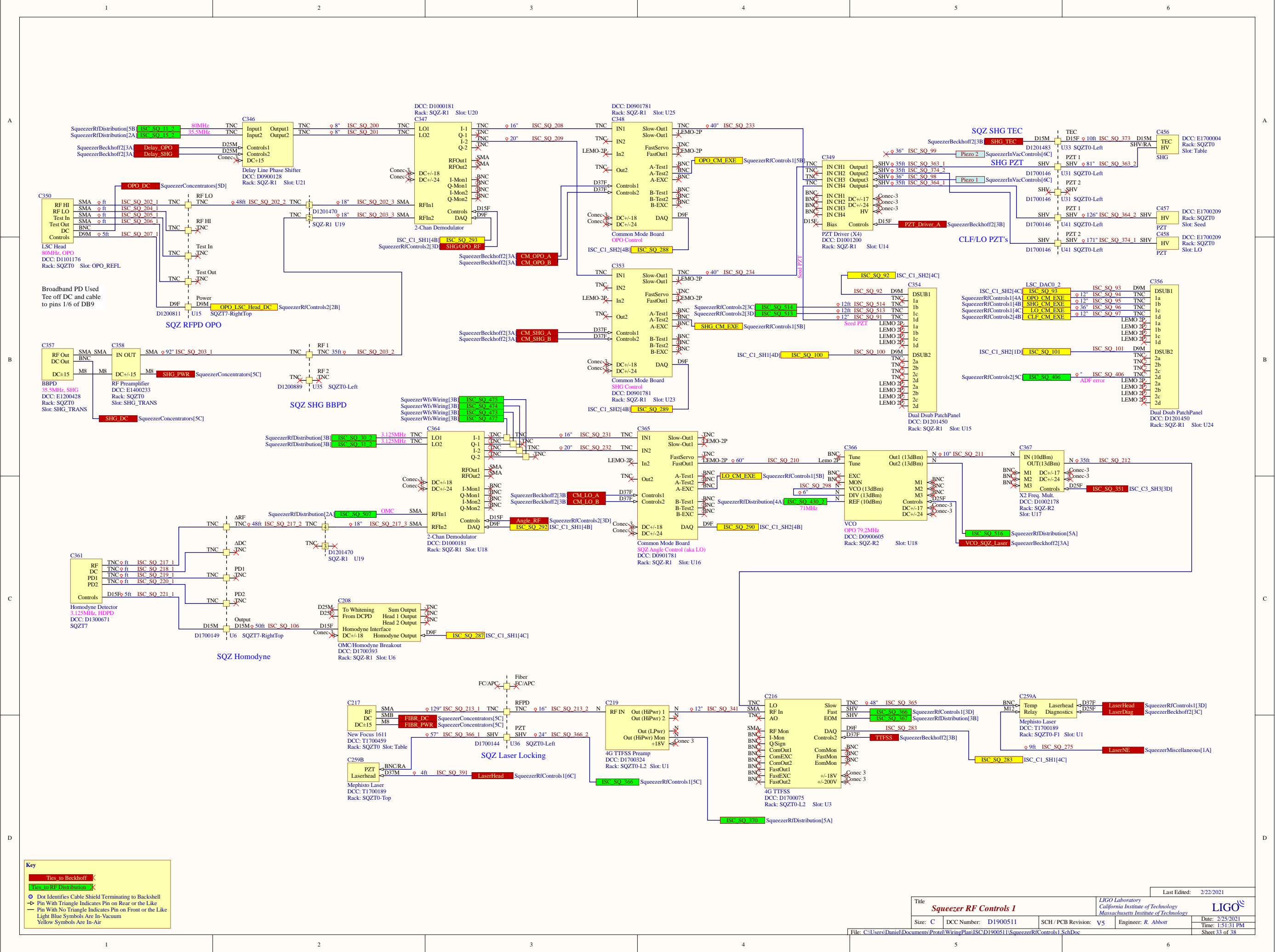


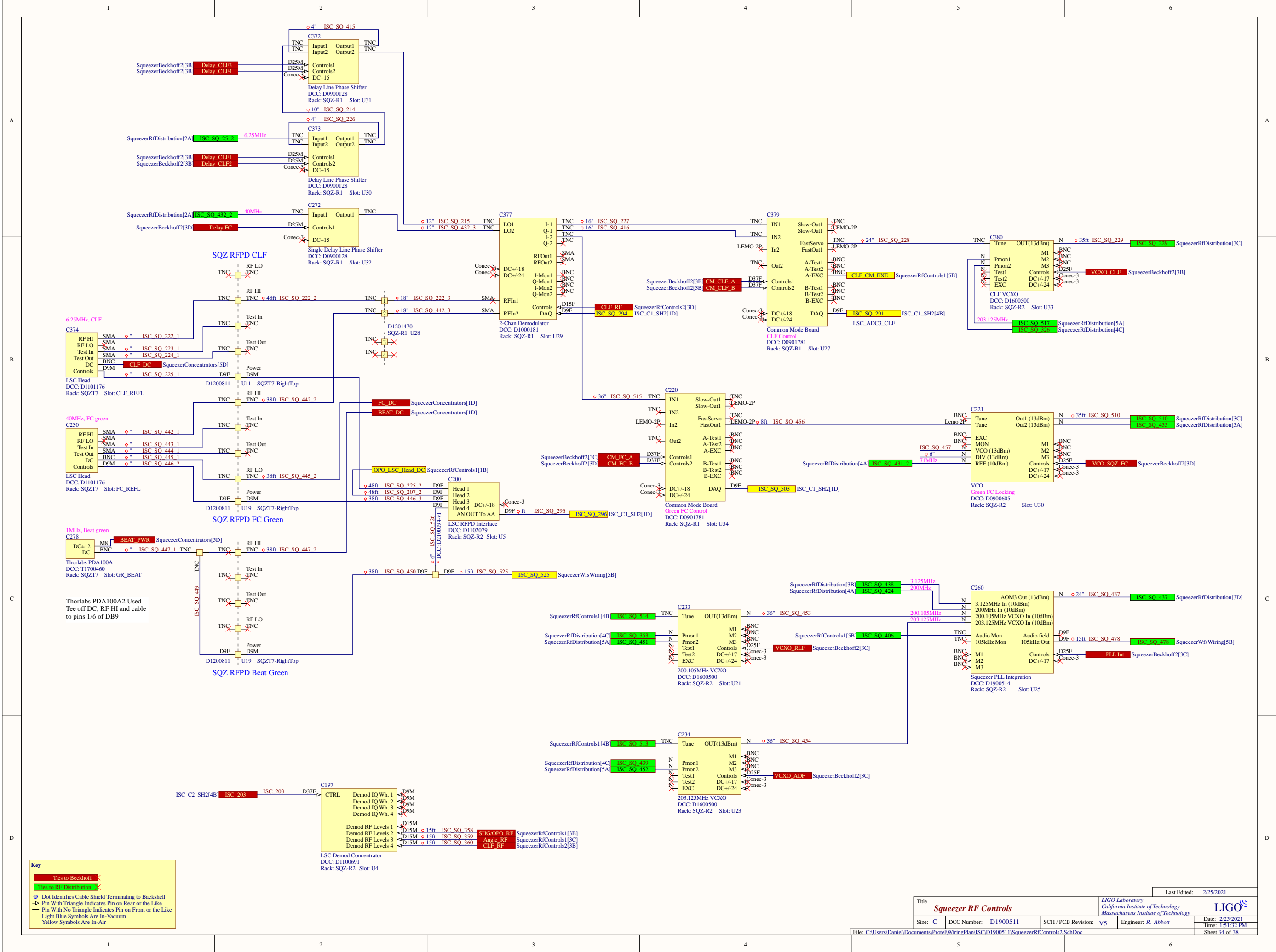
RF cables carrying the AOM signals need to be 1/4" superflexible helical corrugated coax.

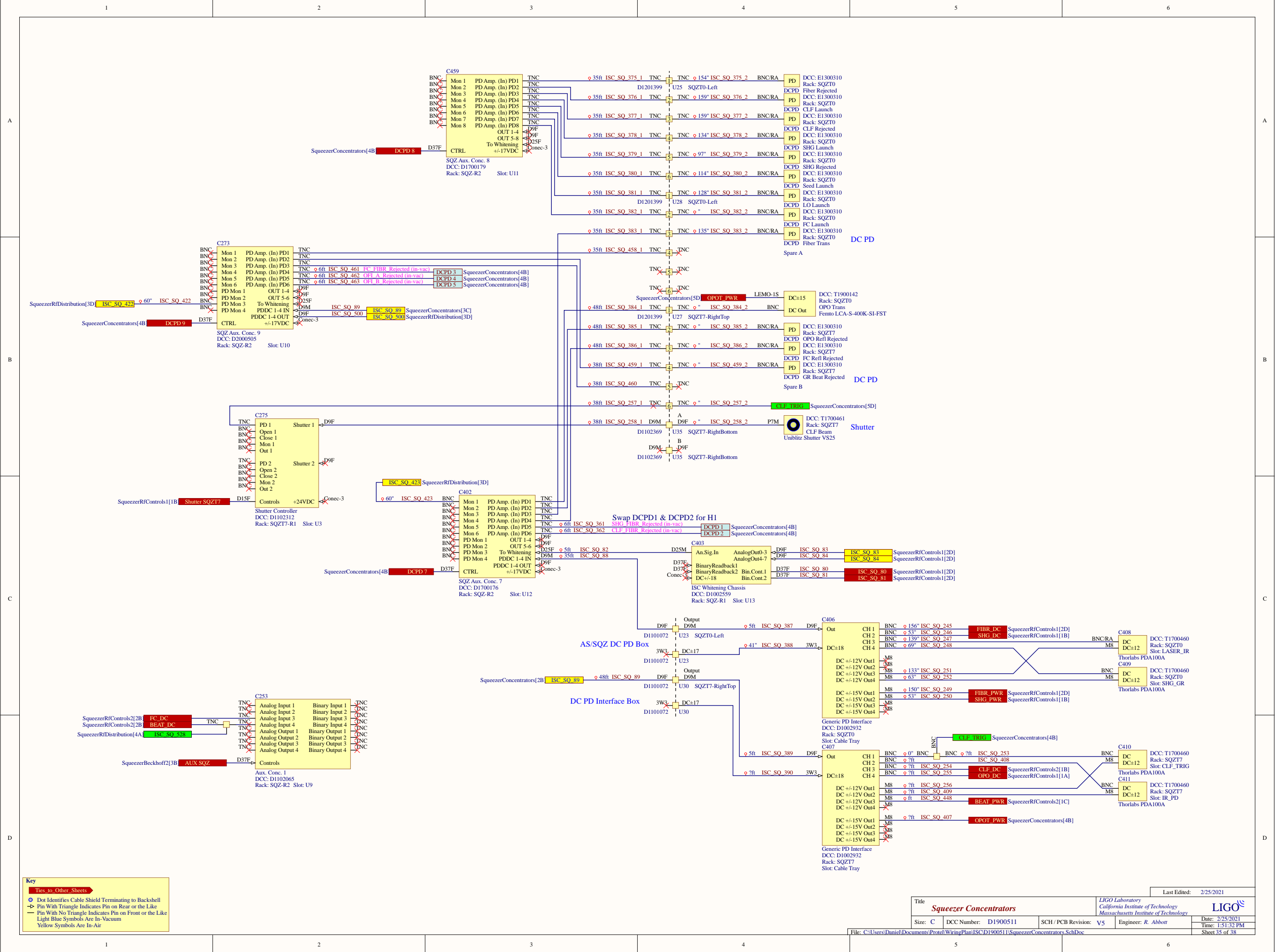


Key	
	Ties to Beckhoff
	Ties to Beckhoff
	Dot Identifies Cable Shield Terminating to Backshell
	Pin With Triangle Indicates Pin on Rear or the Like
	Pin With No Triangle Indicates Pin on Front or the Like
	Light Blue Symbols Are In-Vacuum
	Yellow Symbols Are In-Air

Title		
Squeezer RF Distribution		
Size	Number	Revision
C	D1900511	V5
Date:	2/25/2021	Sheet 38 of 38
File:	C:\Users\...SqueezerRfDistribution.SchDoc Drawn By: R. Abbott	

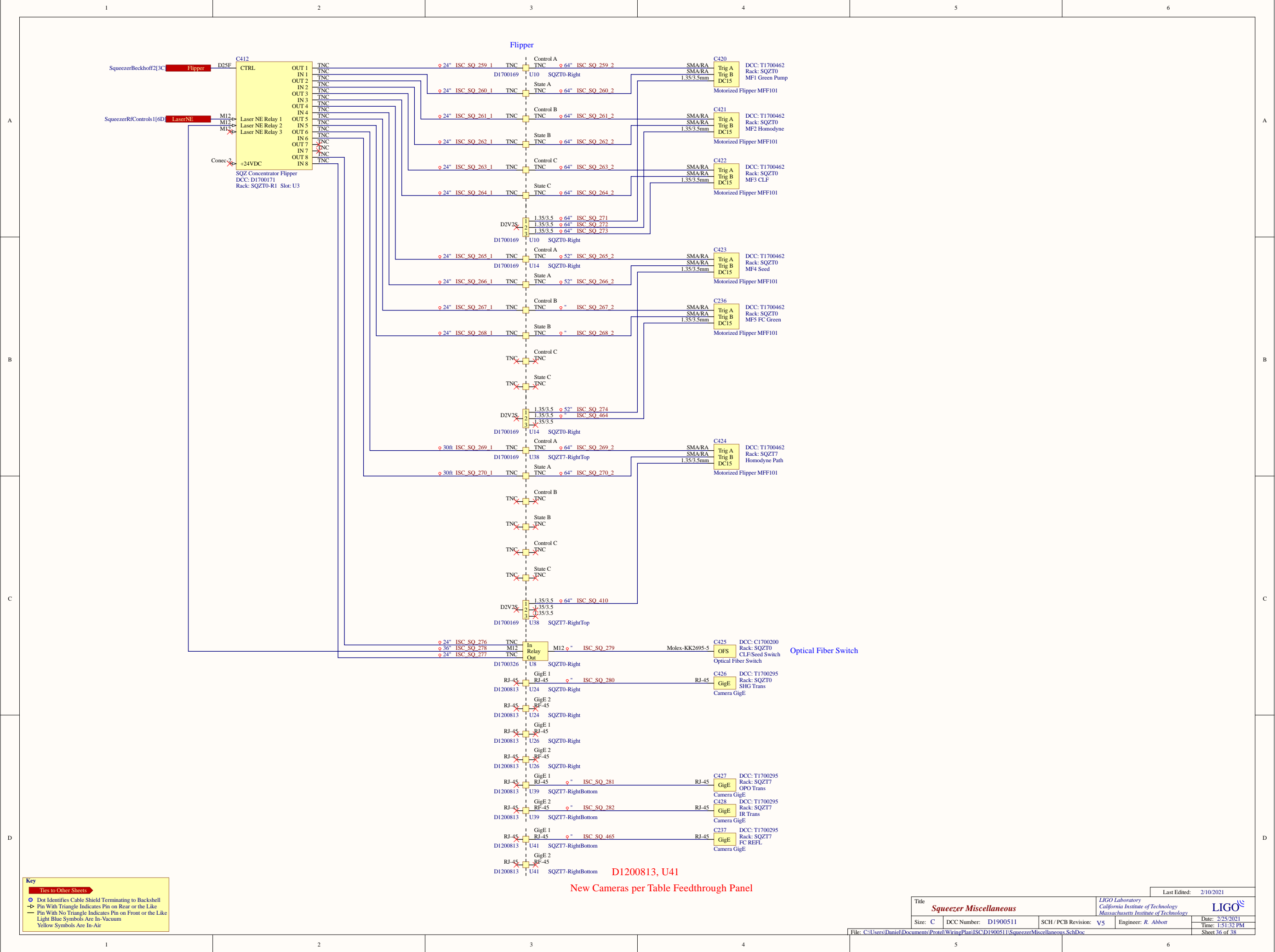






Key


- Ties to Other Sheets
- Dot Identifies Cable Shield Terminating to Backshell
- Pin With Triangle Indicates Pin on Rear or the Like
- Pin With No Triangle Indicates Pin on Front or the Like
- Light Blue Symbols Are In-Vacuum
- Yellow Symbols Are In-Air

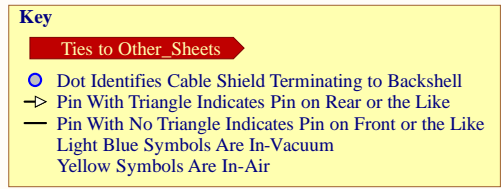


Key

- Ties to Other Sheets
- Dot Identifies Cable Shield Terminating to Backshell
- Pin With Triangle Indicates Pin on Rear or the Like
- Pin With No Triangle Indicates Pin on Front or the Like
- Light Blue Symbols Are In-Vacuum
- Yellow Symbols Are In-Air

New Cameras per Table Feedthrough Panel

Title				LIGO Laboratory California Institute of Technology Massachusetts Institute of Technology			
Size: C		DCC Number: D1900511	SCH / PCB Revision: V5		Engineer: R. Abbott	Date: 2/25/2021	Time: 1:51:32 PM
Documents/Protel/WiringPlan/ISC/D1900511/Squeezer/Miscellaneous/SchDoc					Sheet 36 of 38		



Title			Squeezer Beckhoff Interfaces		
Size	Number	Revision			
B	D1900511	V5			
Date:	2/25/2021	Sheet	37	of	38
File:	C:\Users\...\SqueezerBeckhoff1.SchDoc	Drawn By:	R. Abbott		

