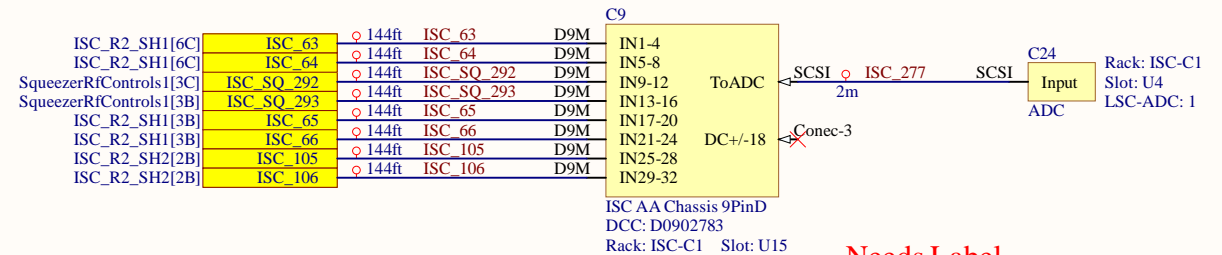
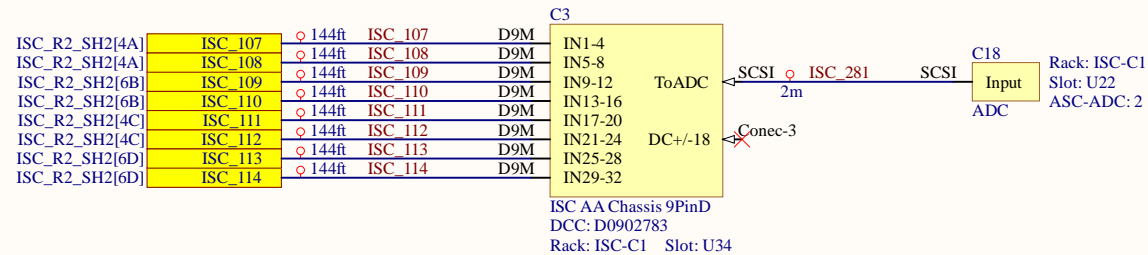
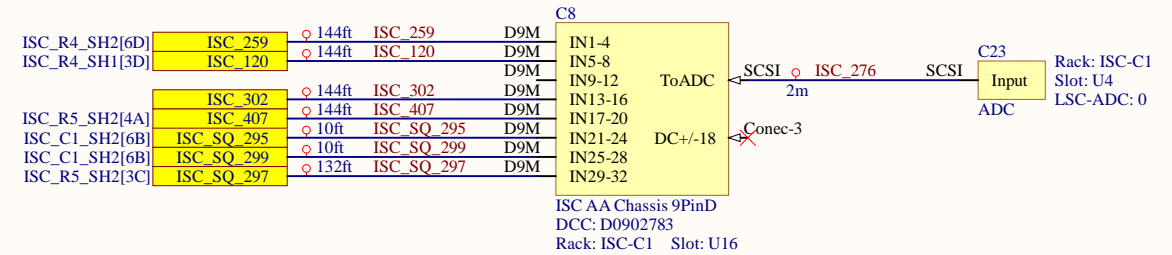
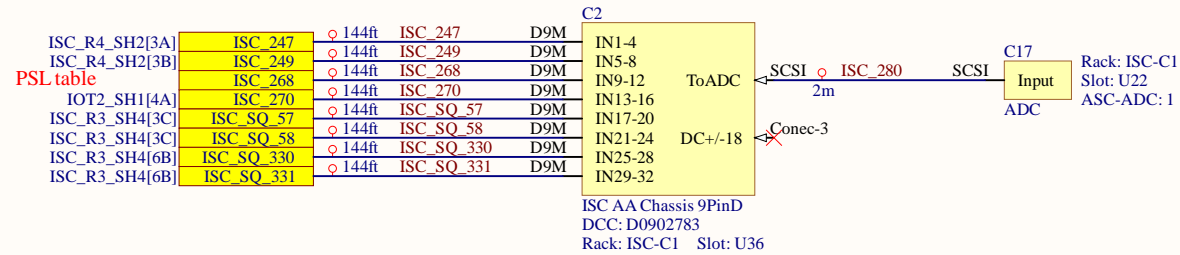
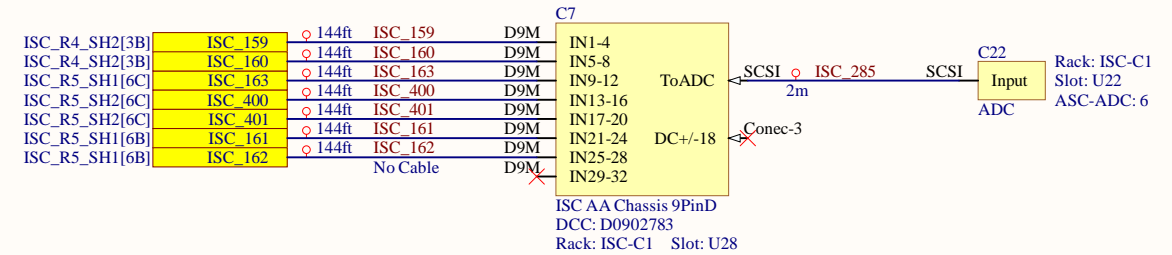
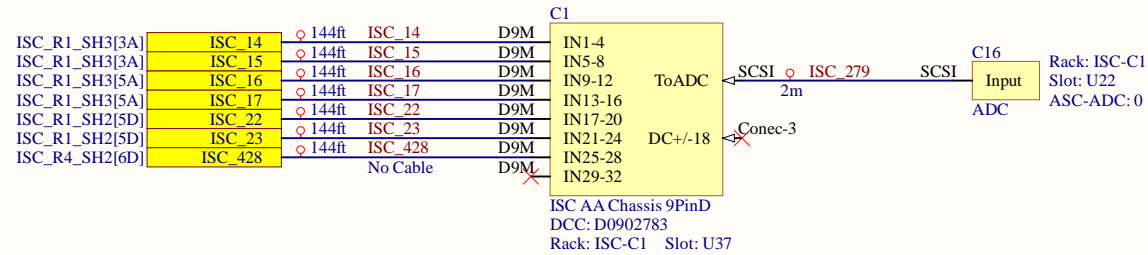
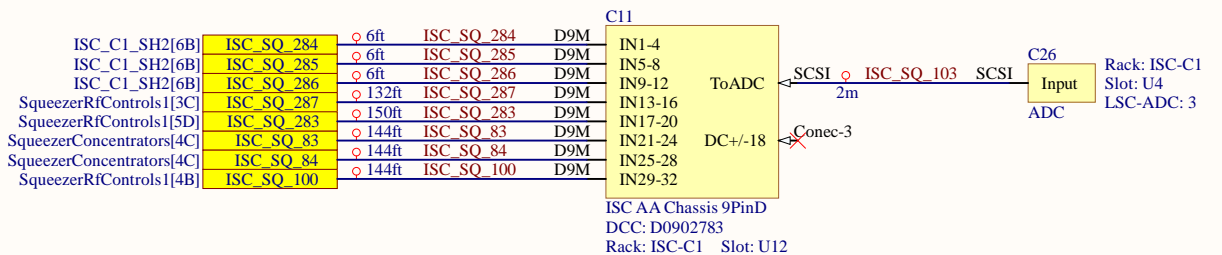
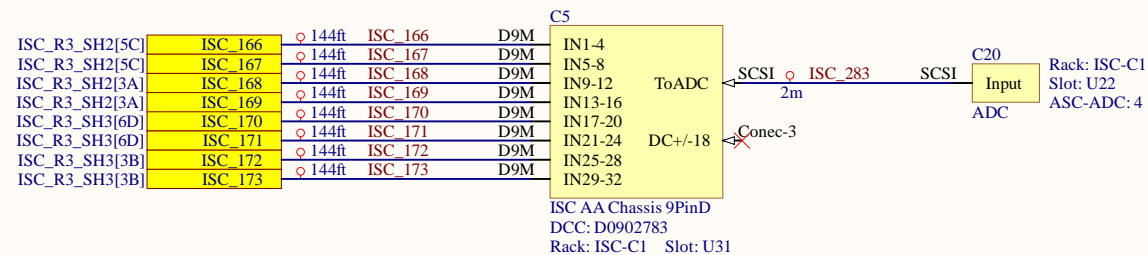
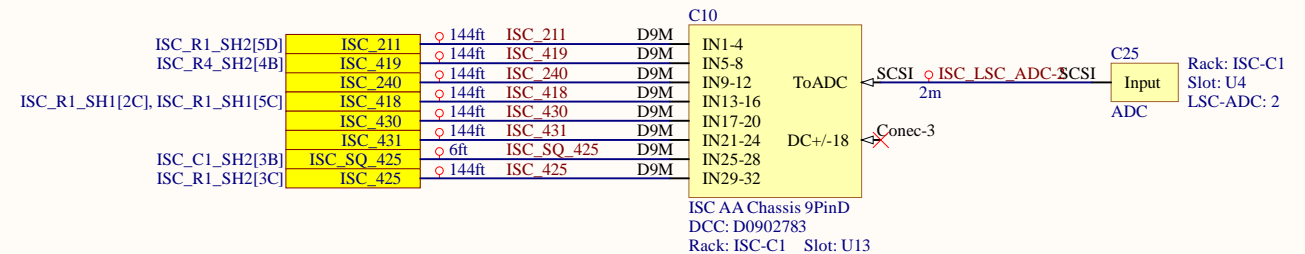
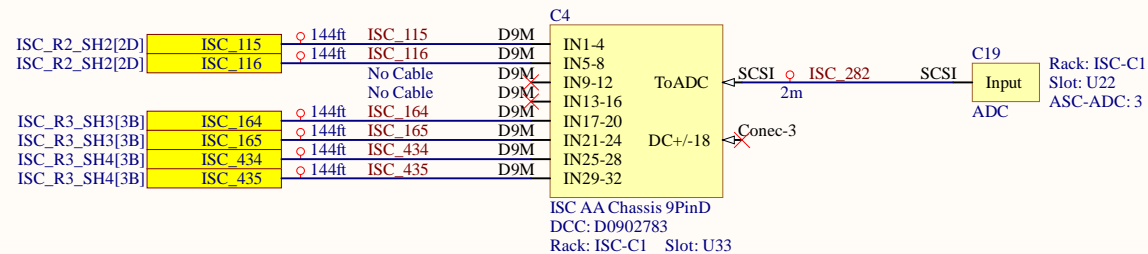


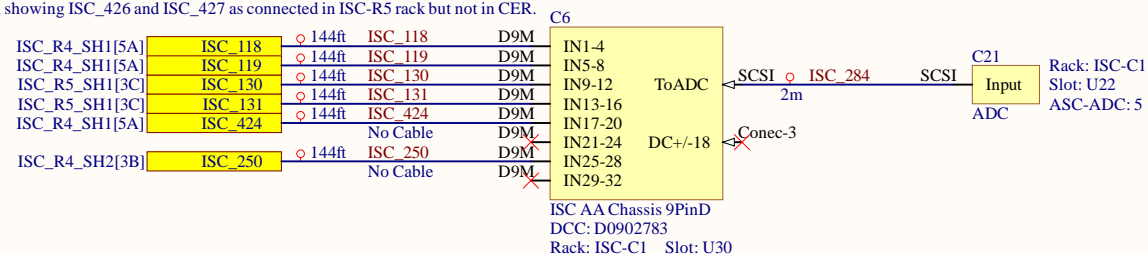
ISC-C1 Rack



Needs Label



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

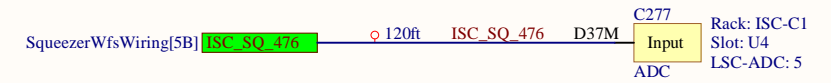
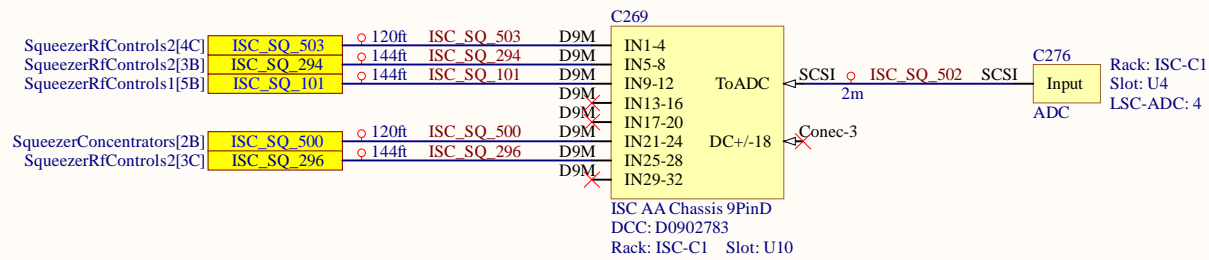
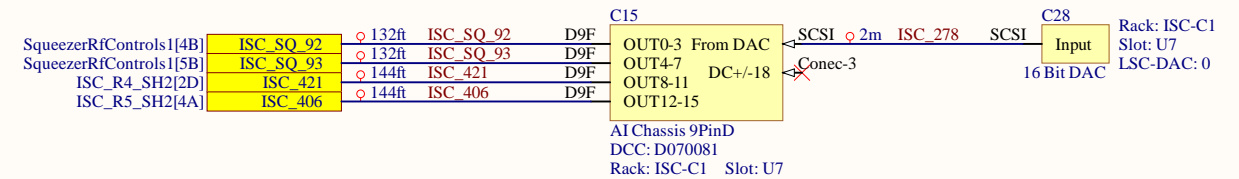
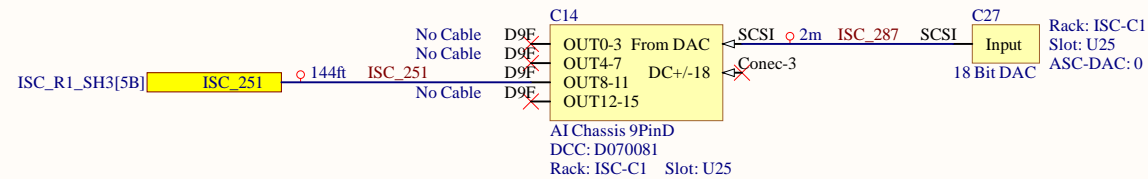
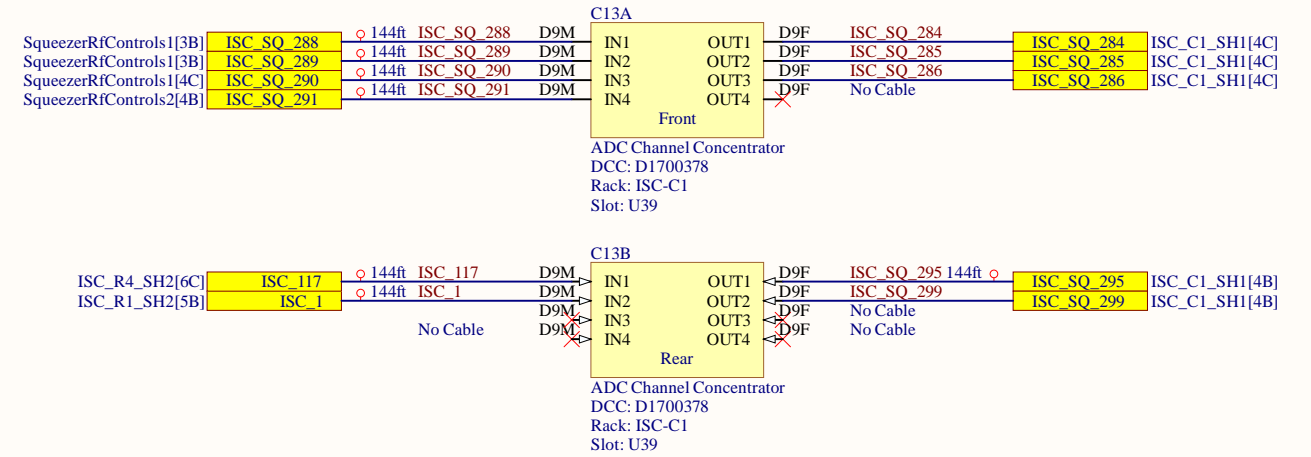
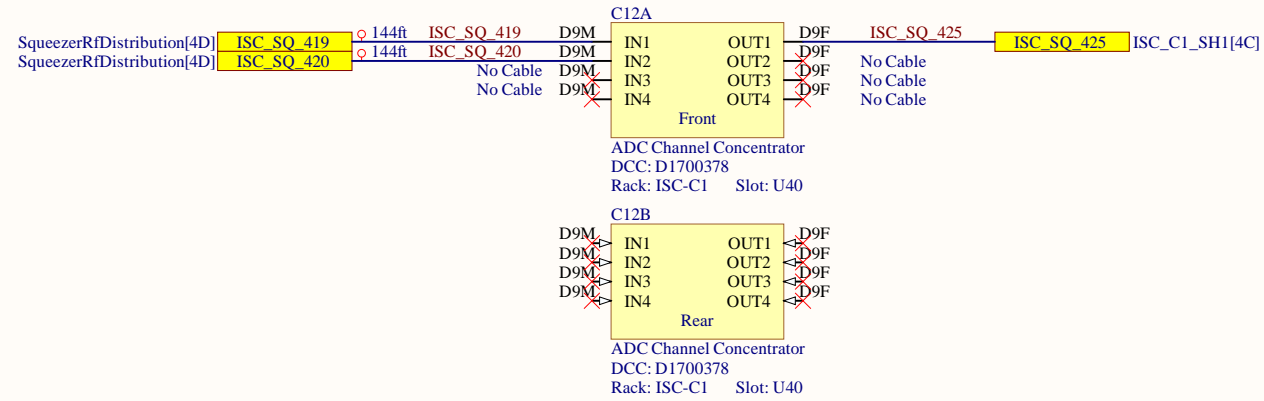


Following cables are not connected in the CER:

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

Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V6
Date:	10/06/2021	Sheet of 1 38
File:	C:\Users\...ISC_C1_SH1.SchDoc	Drawn By: Filiberto Clara

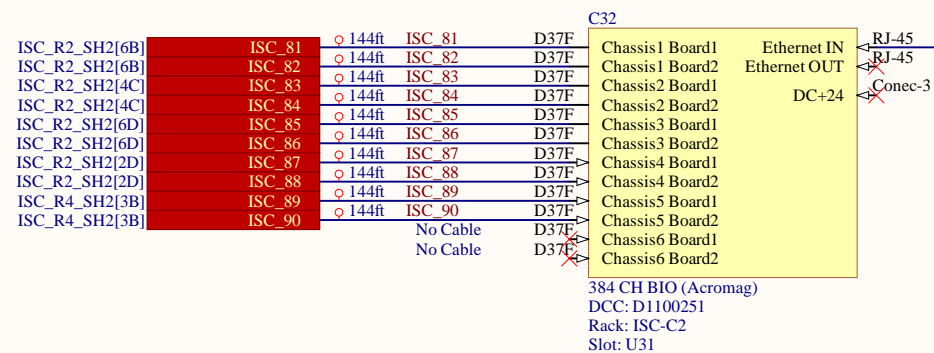
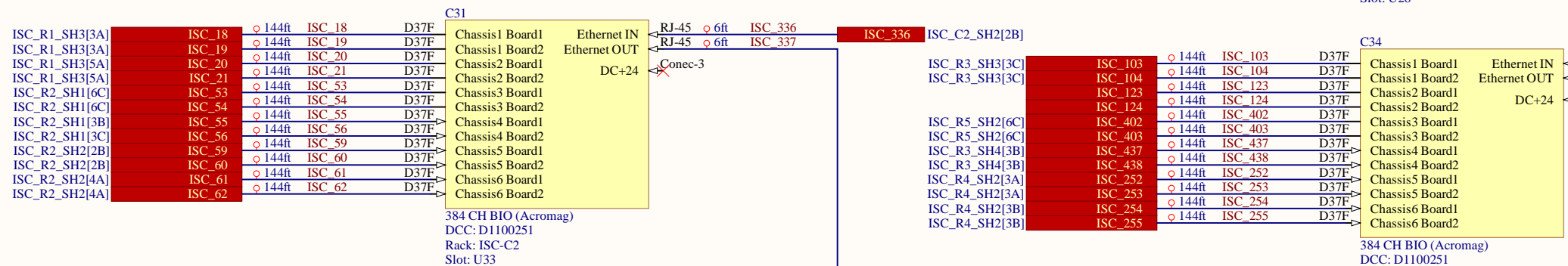
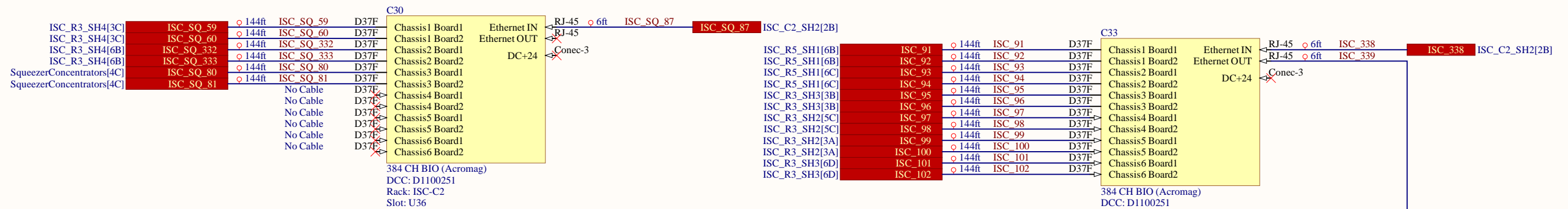
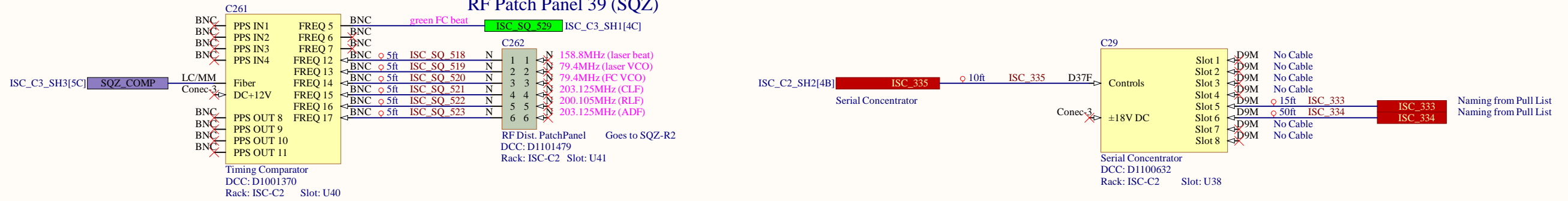
ISC-C1 Rack



Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V6
Date:	10/06/2021	Sheet of 2 38
File:	C:\Users\...\ISC_C1_SH2.SchDoc	Drawn By: Filiberto Clara

ISC-C2 Rack

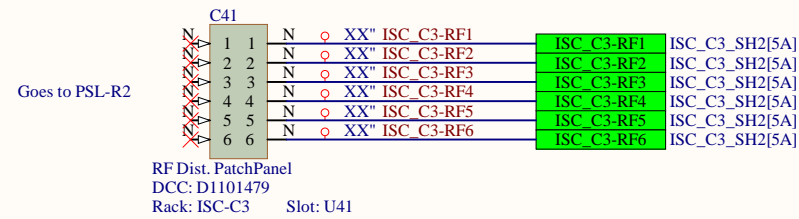
RF Patch Panel 39 (SQZ)



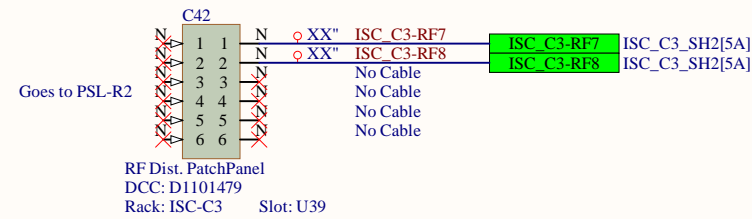
Title			
ISC System Wiring Diagram			
Size	Number	Revision	
B	D1900511	V6	
Date:	10/06/2021	Sheet of 3	38
File:	C:\Users\...\ISC_C2_SH1.SchDoc	Drawn By: Filiberto Clara	

ISC-C3 Rack

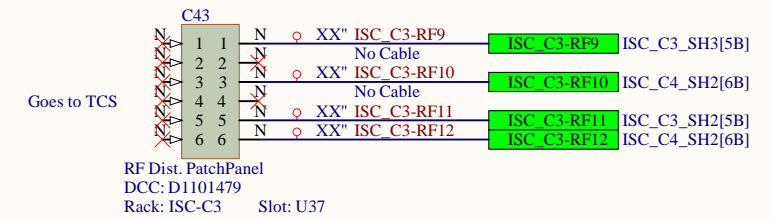
RF Patch Panel 7 (PSL)



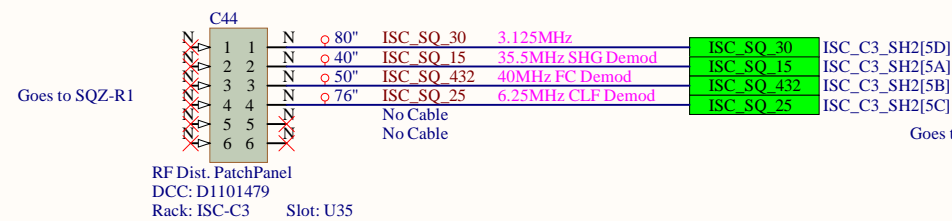
RF Patch Panel 8 (PSL)



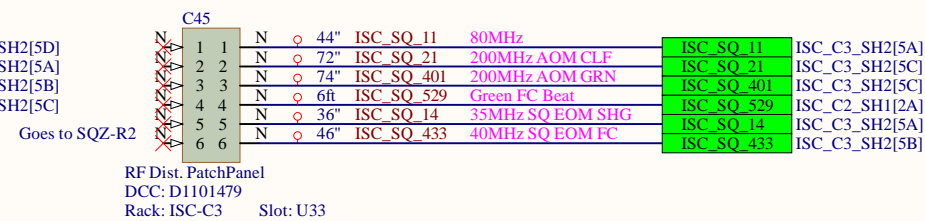
RF Patch Panel 9 (TCS)



RF Patch Panel 32 (SQZ)



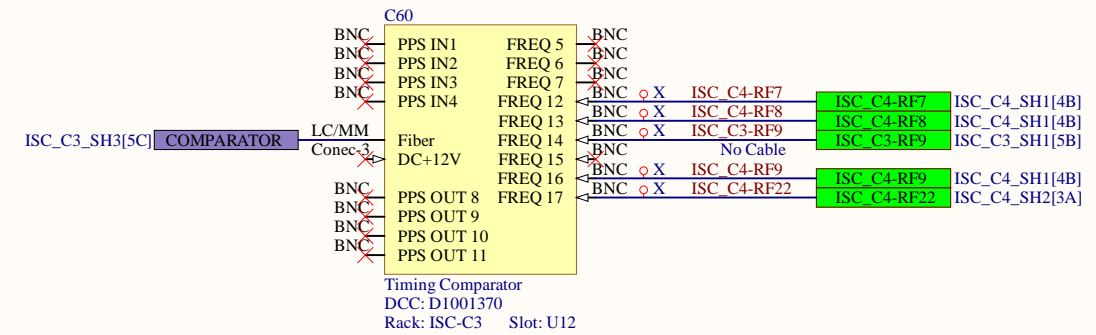
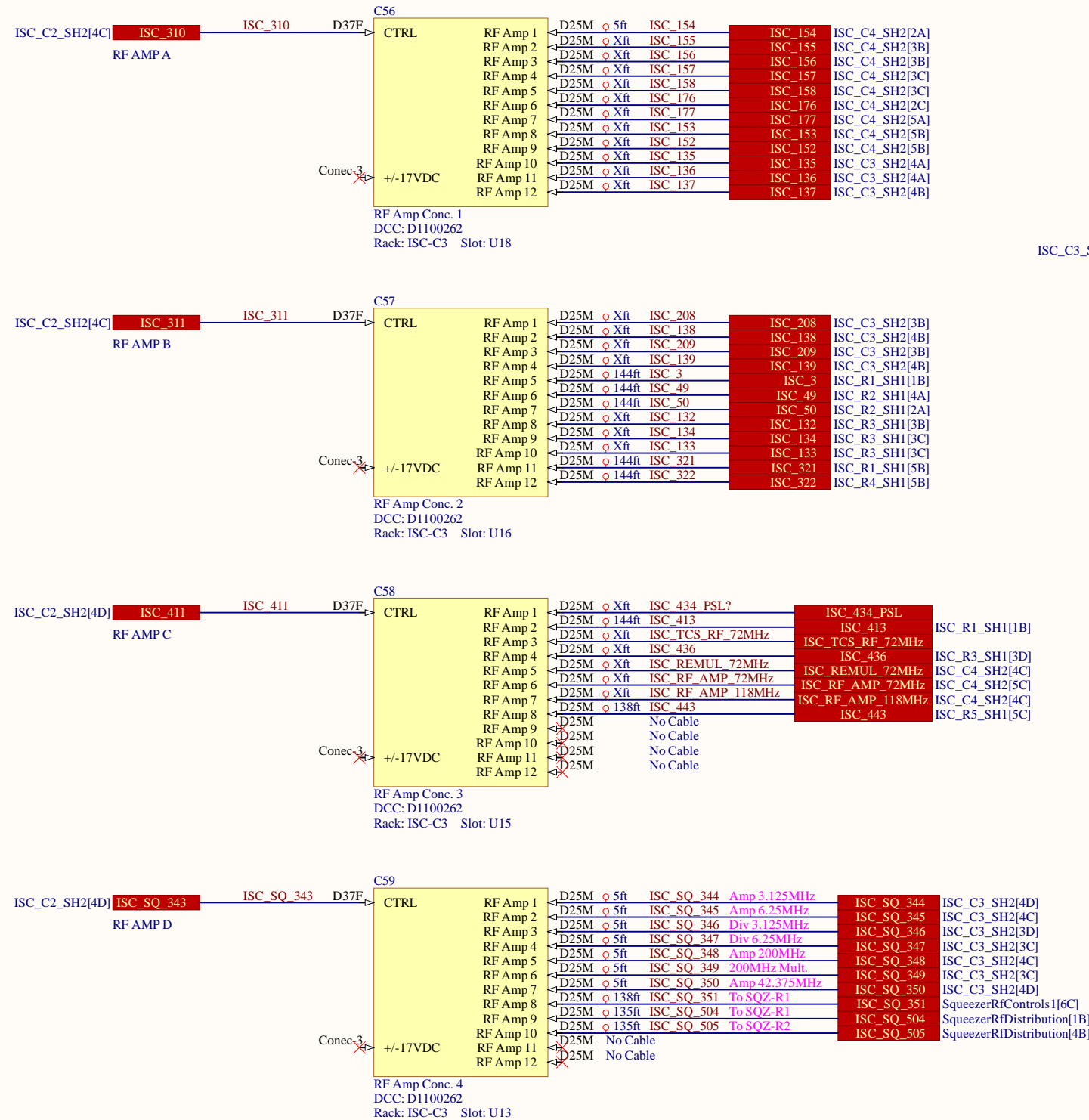
RF Patch Panel 33 (SQZ)



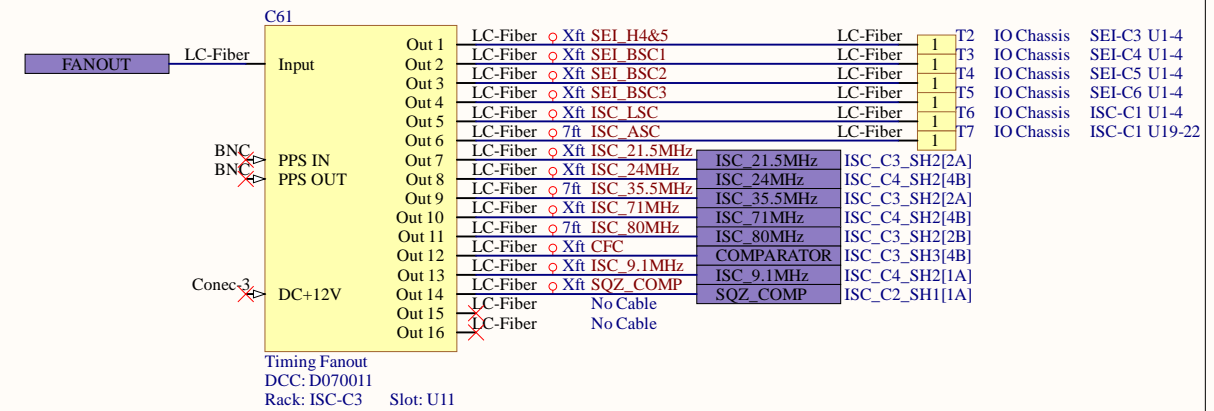
Cables that are removed
ISC_SQ_31
ISC_SQ_12
ISC_SQ_78

Title			ISC System Wiring Diagram		
Size	Number	Revision			
B	D1900511	V6			
Date:	10/06/2021	Sheet of 5	38		
File:	C:\Users\...\ISC_C3_SH1.SchDoc	Drawn By:	Filiberto Clara		

ISC-C3 Rack



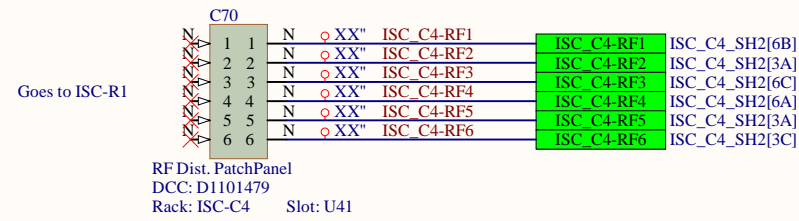
Need Locations of other ends.
 SEI IO Chassis



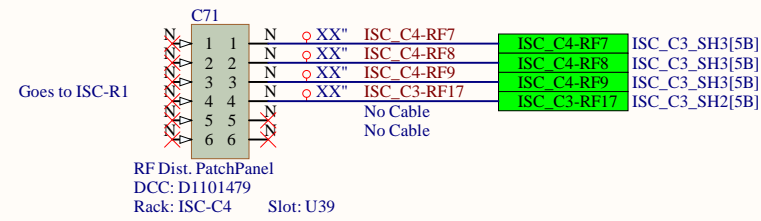
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ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V6
Date:	10/06/2021	Sheet of 7 38
File:	C:\Users\...ISC_C3_SH3.SchDoc	Drawn By: Filiberto Clara

ISC-C4 Rack

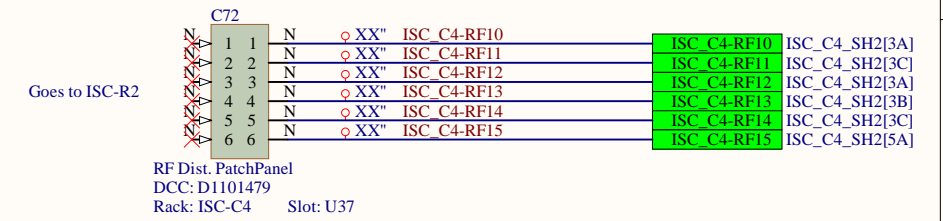
RF Patch Panel 1 (ISC)



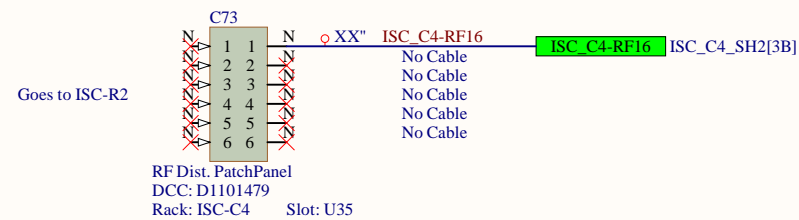
RF Patch Panel 2 (ISC)



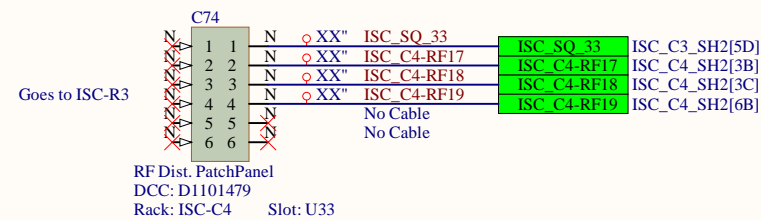
RF Patch Panel 3 (ISC)



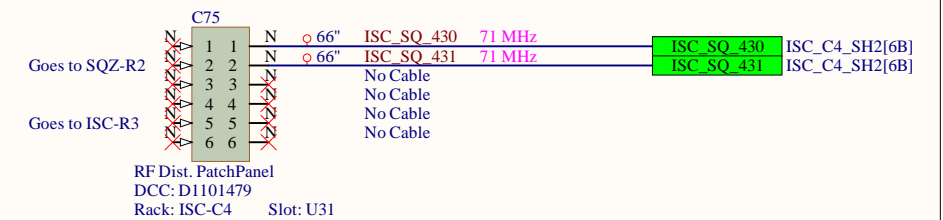
RF Patch Panel 4 (ISC)



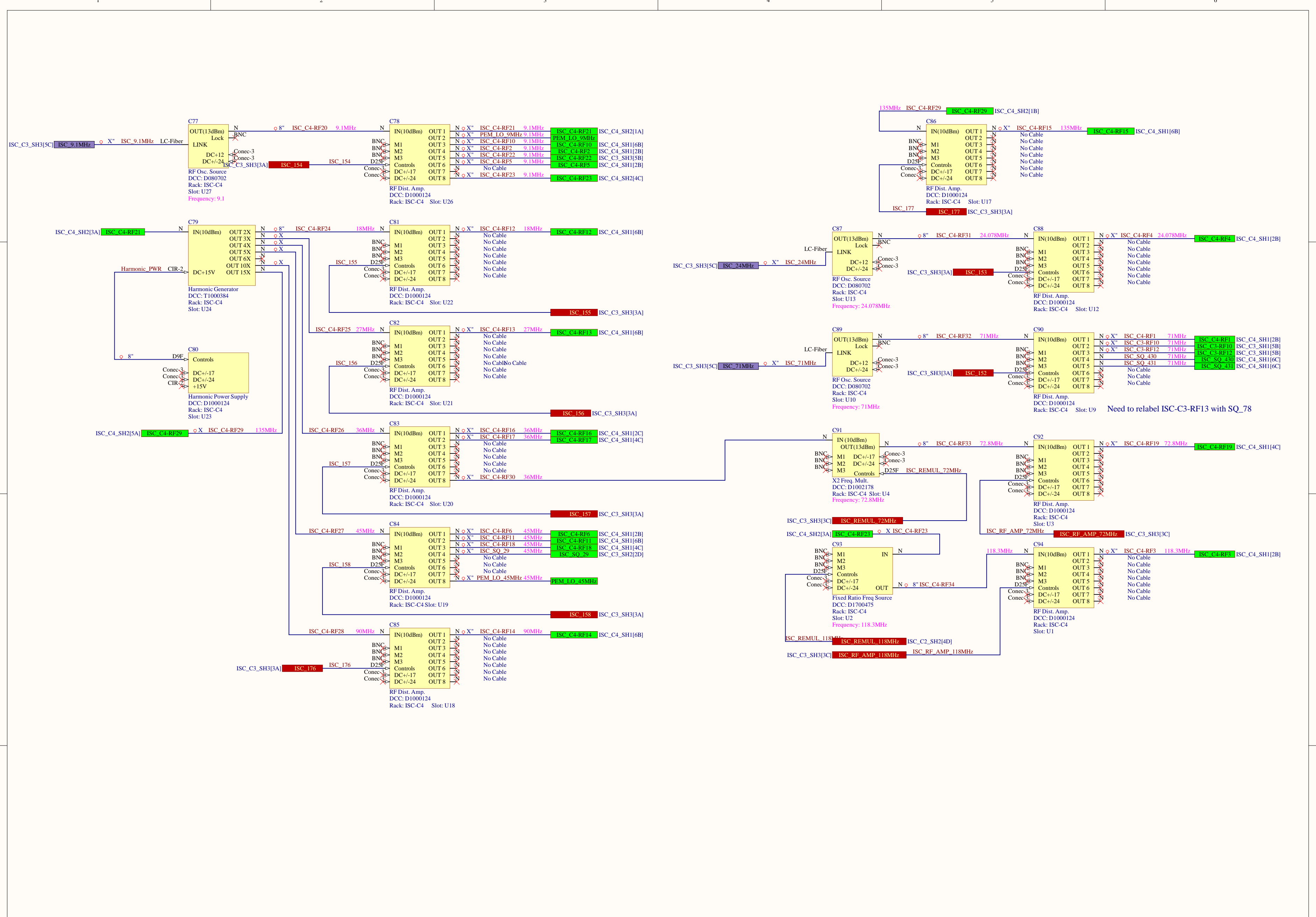
RF Patch Panel 5 (ISC)



RF Patch Panel 6 (SQZ/ISC)



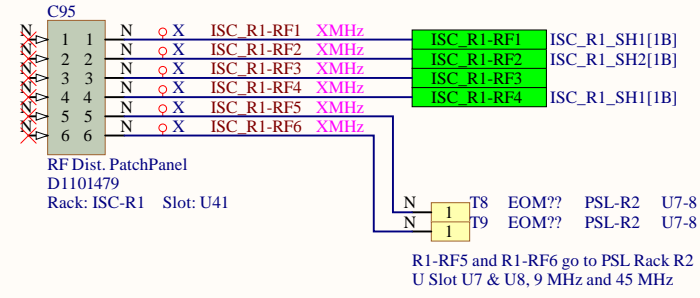
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ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V6
Date:	10/06/2021	Sheet of 8 38
File:	C:\Users\...ISC_C4_SH1.SchDoc	Drawn By: Filiberto Clara



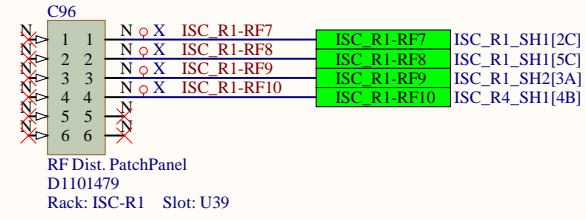
ISC-C4 Rack

Title			
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Size	Number	Revision	
C	D1900511	V6	
Date:	10/06/2021	Sheet of 9	38
File:	C:\Users\...ISC_C4_SH2.SchDoc	Drawn By:	Filiberto Clara

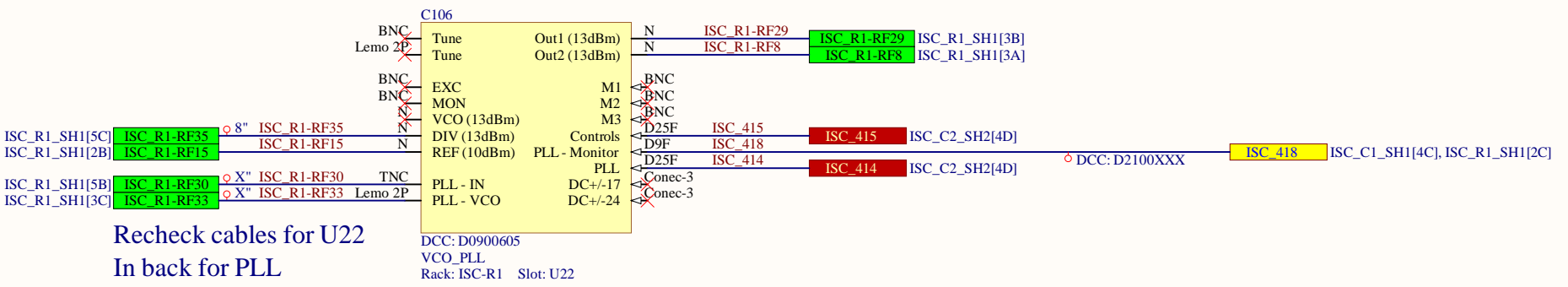
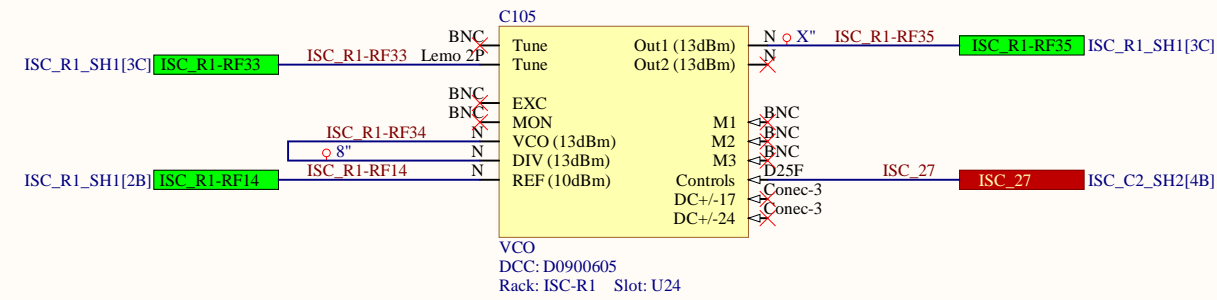
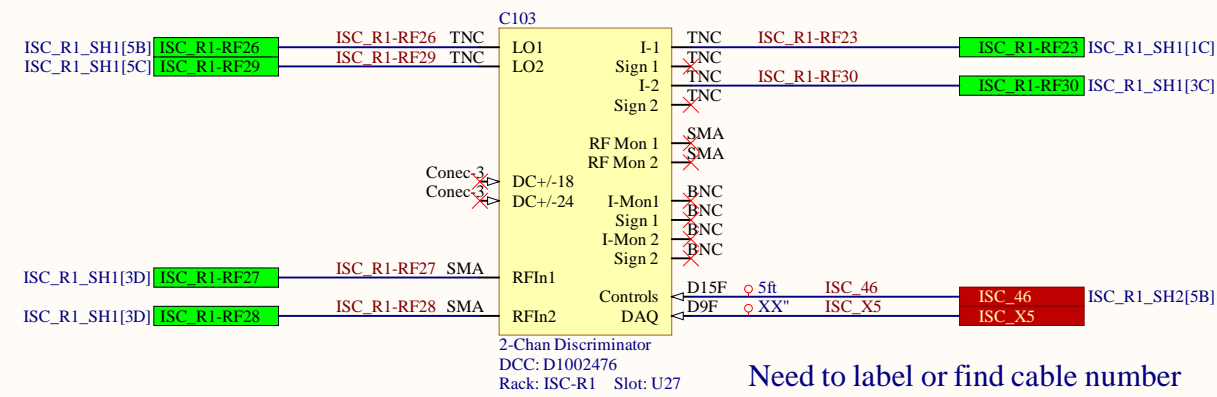
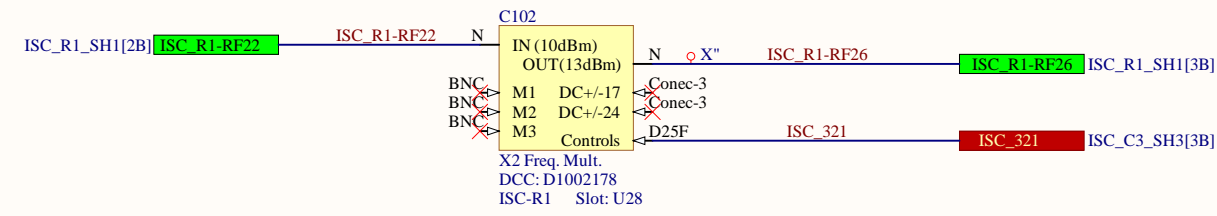
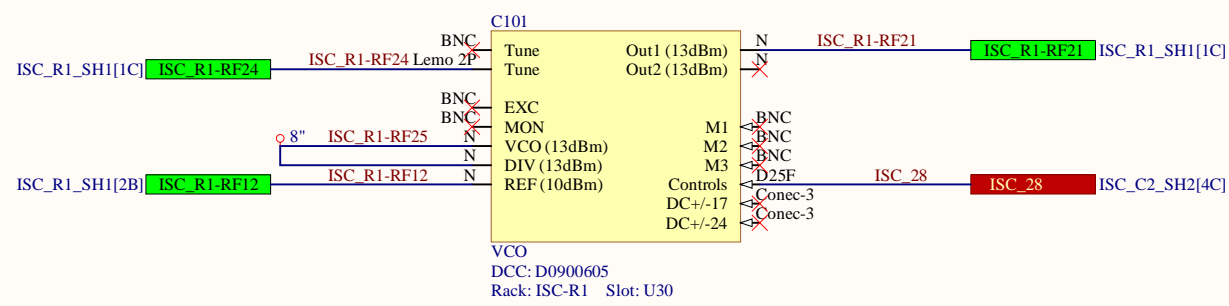
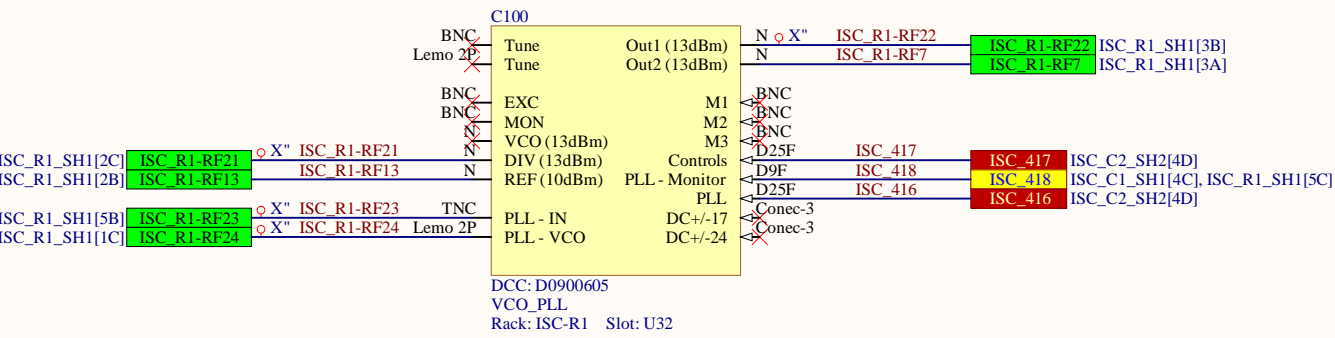
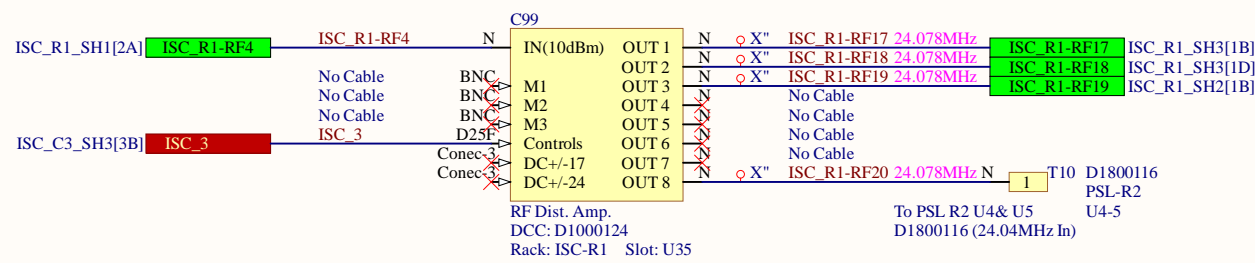
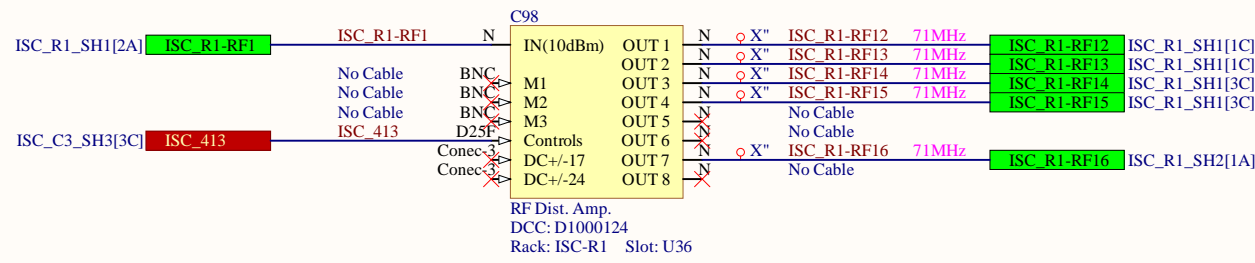
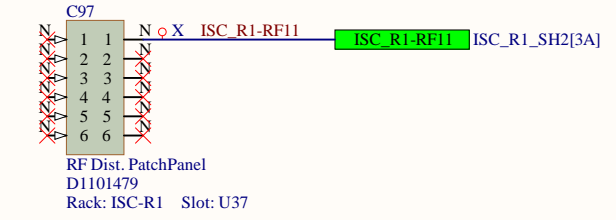
RF Patch Panel 10



RF Patch Panel 11

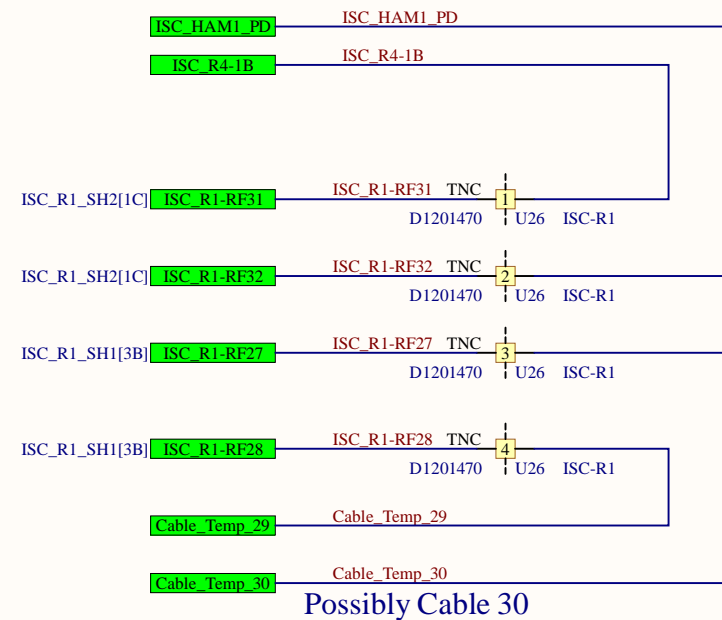


RF Patch Panel 12



Need to label or find cable number

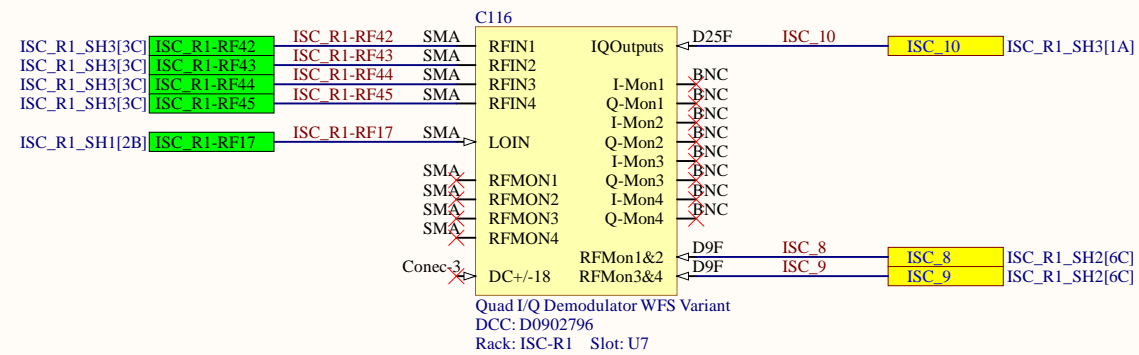
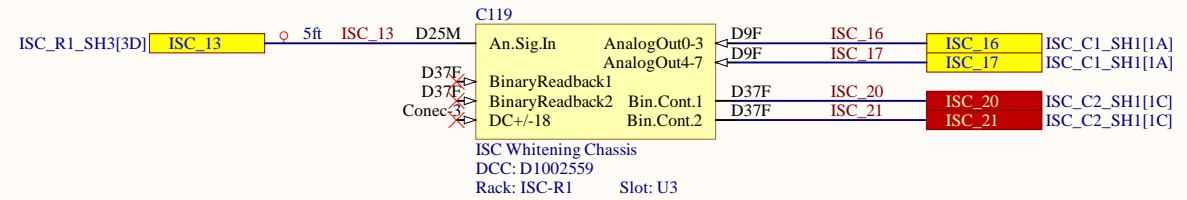
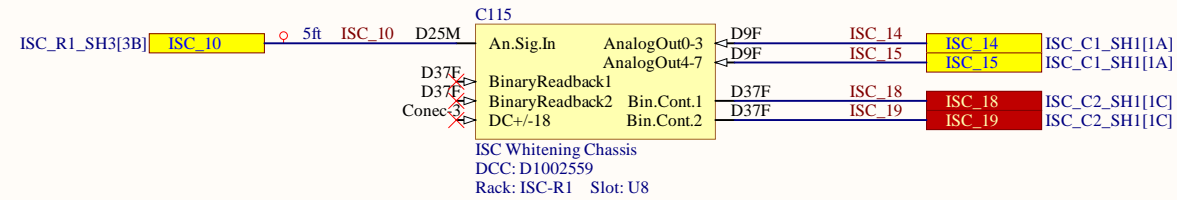
Recheck cables for U22
In back for PLL



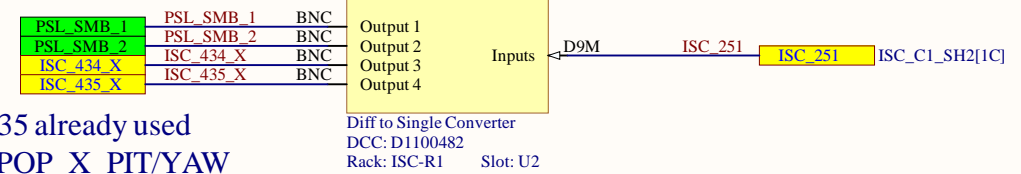
ISC-R1 Rack

Title		
ISC System Wiring Diagram		
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C	D1900511	V6
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File:	C:\Users\...ISC_R1_SchDoc	Drawn By: Filiberto Clara

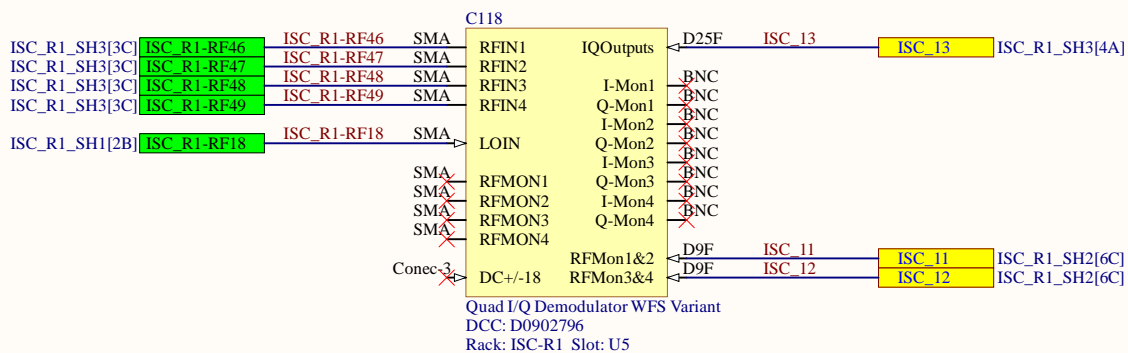
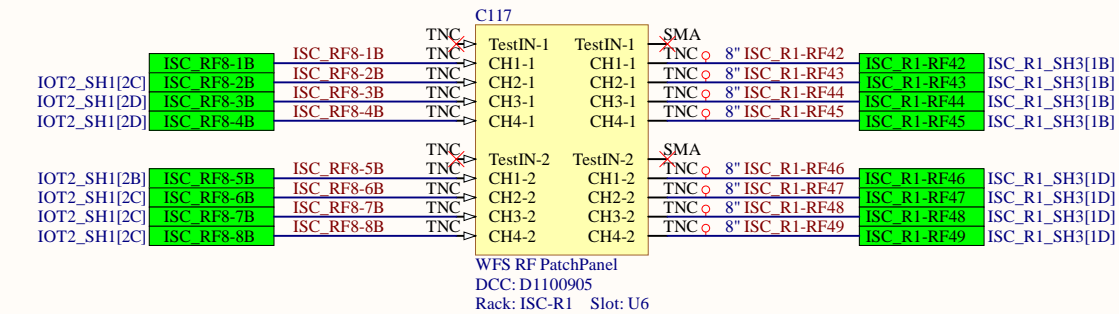
ISC-R1 Rack



Need to locate other end



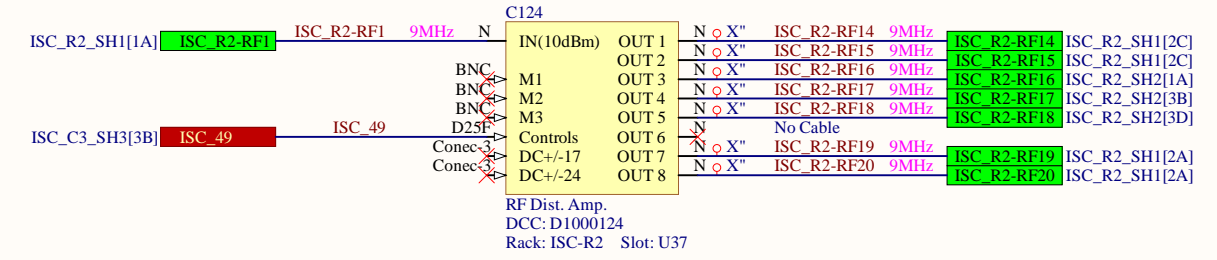
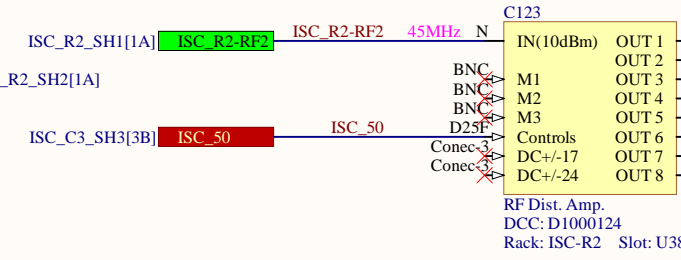
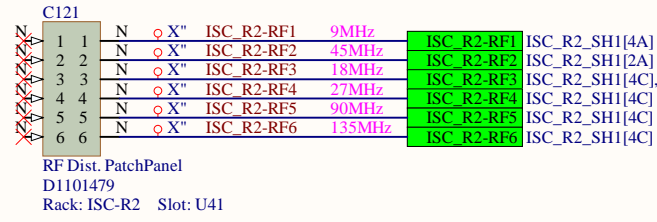
434/435 already used
 ASC-POP_X_PIT/YAW



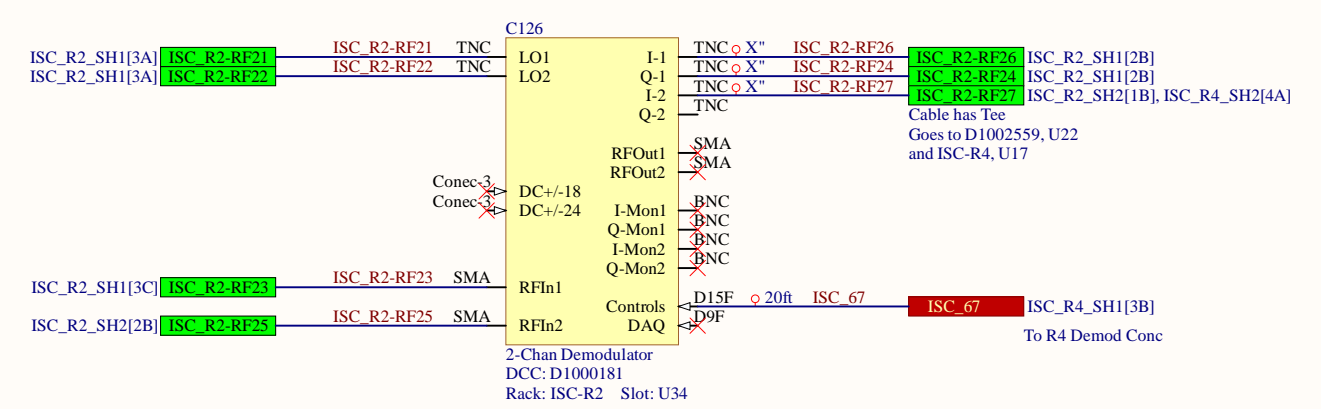
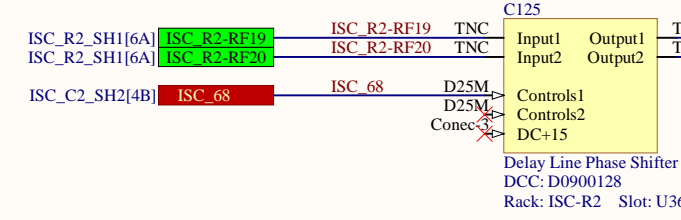
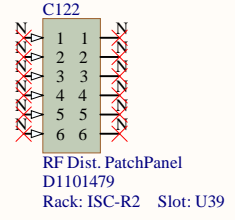
Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V6
Date:	10/06/2021	Sheet of 2 38
File:	C:\Users\...ISC_R1_SH3.SchDoc	Drawn By: Filiberto Clara

ISC-R2 Rack

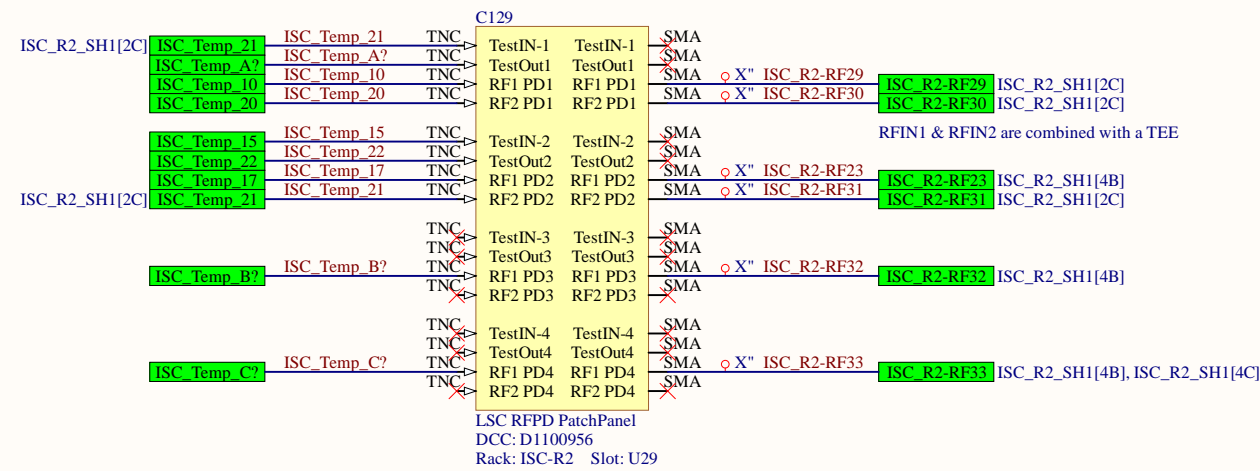
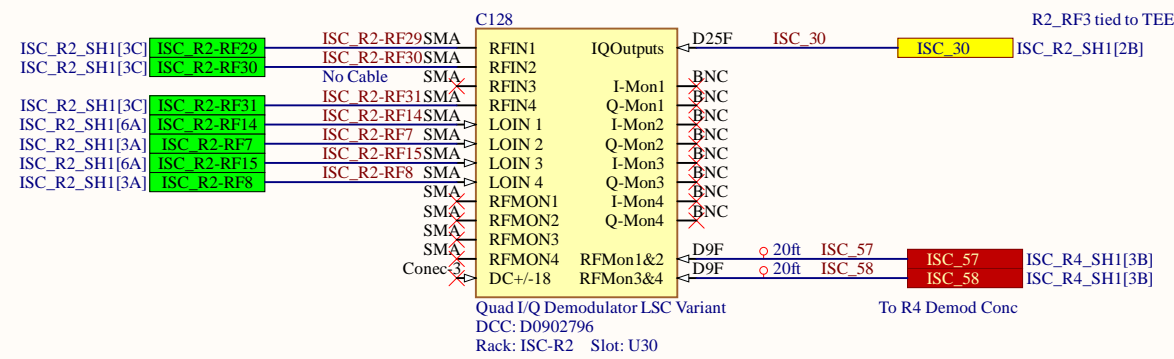
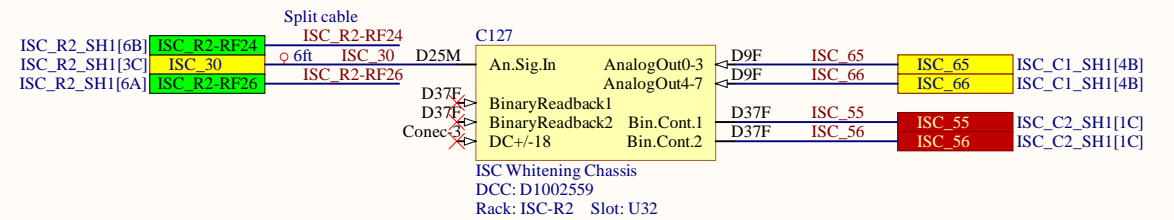
RF Patch Panel 13



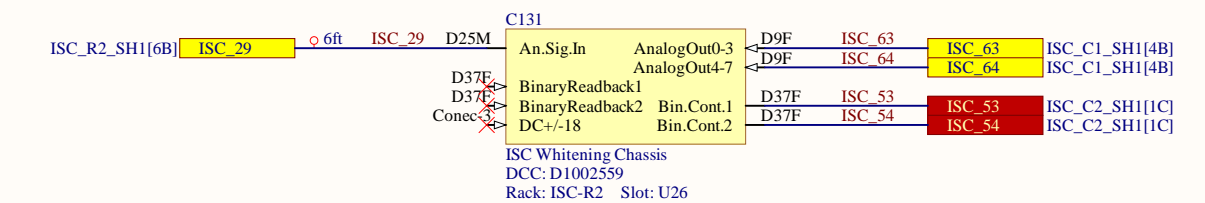
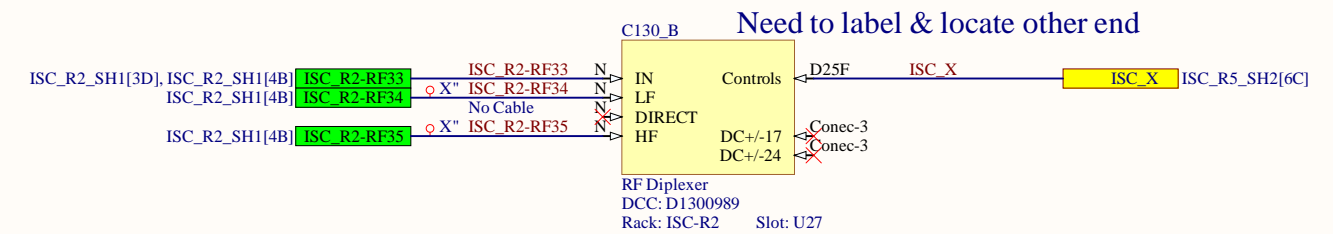
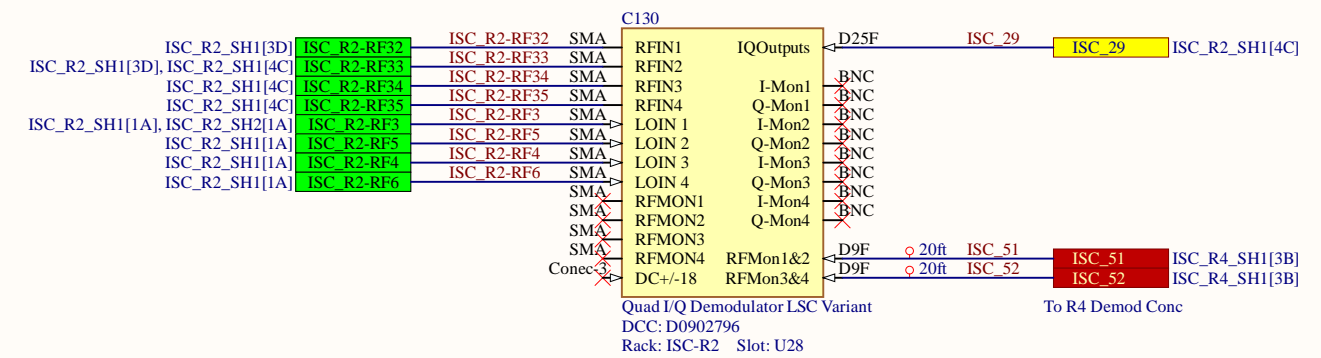
RF Patch Panel 14



LSC POPAIR A 9&45, LSC REFLAIR A 45



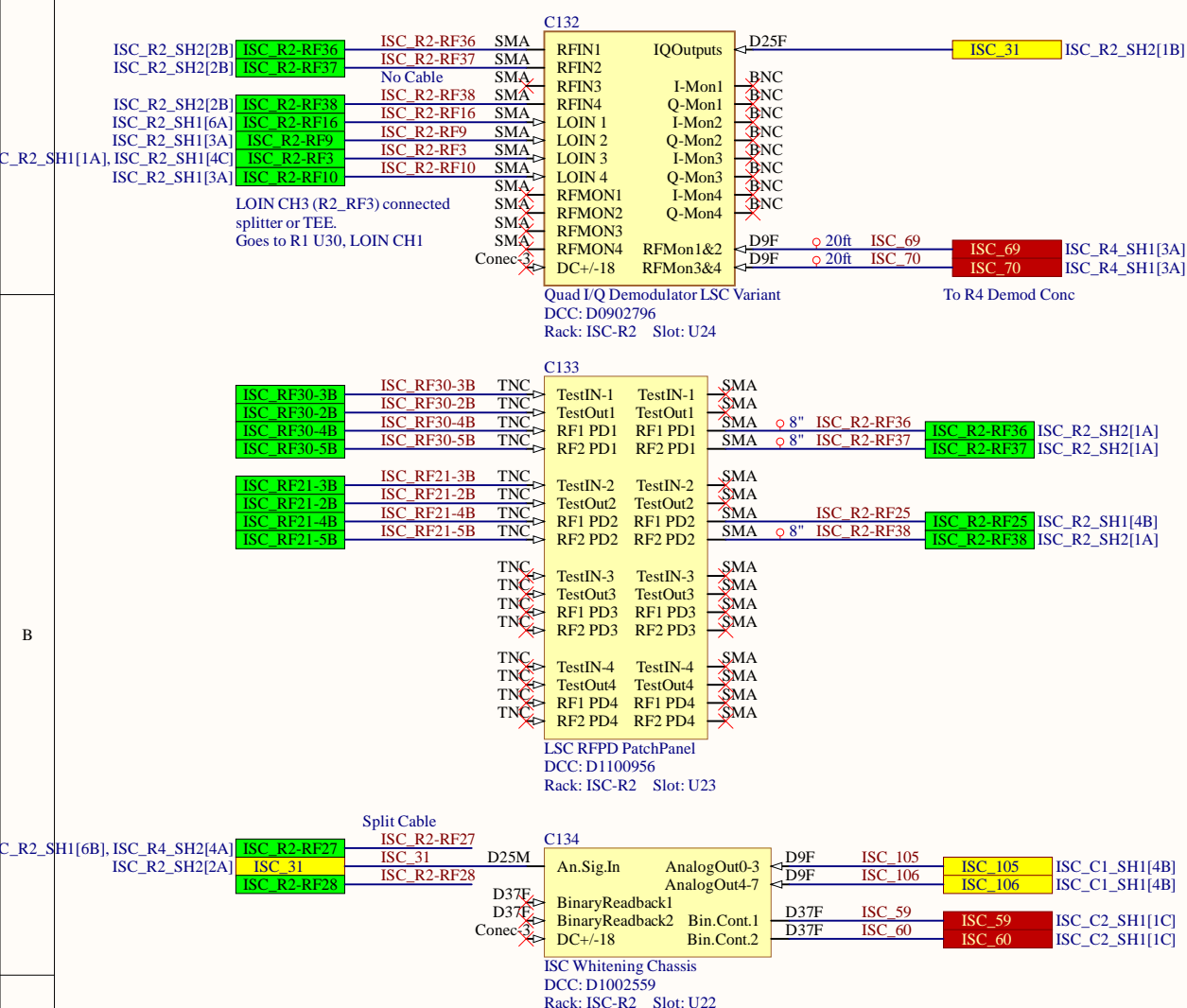
LSC POPAIR B 18&90, LSC REFLAIR B 27&135



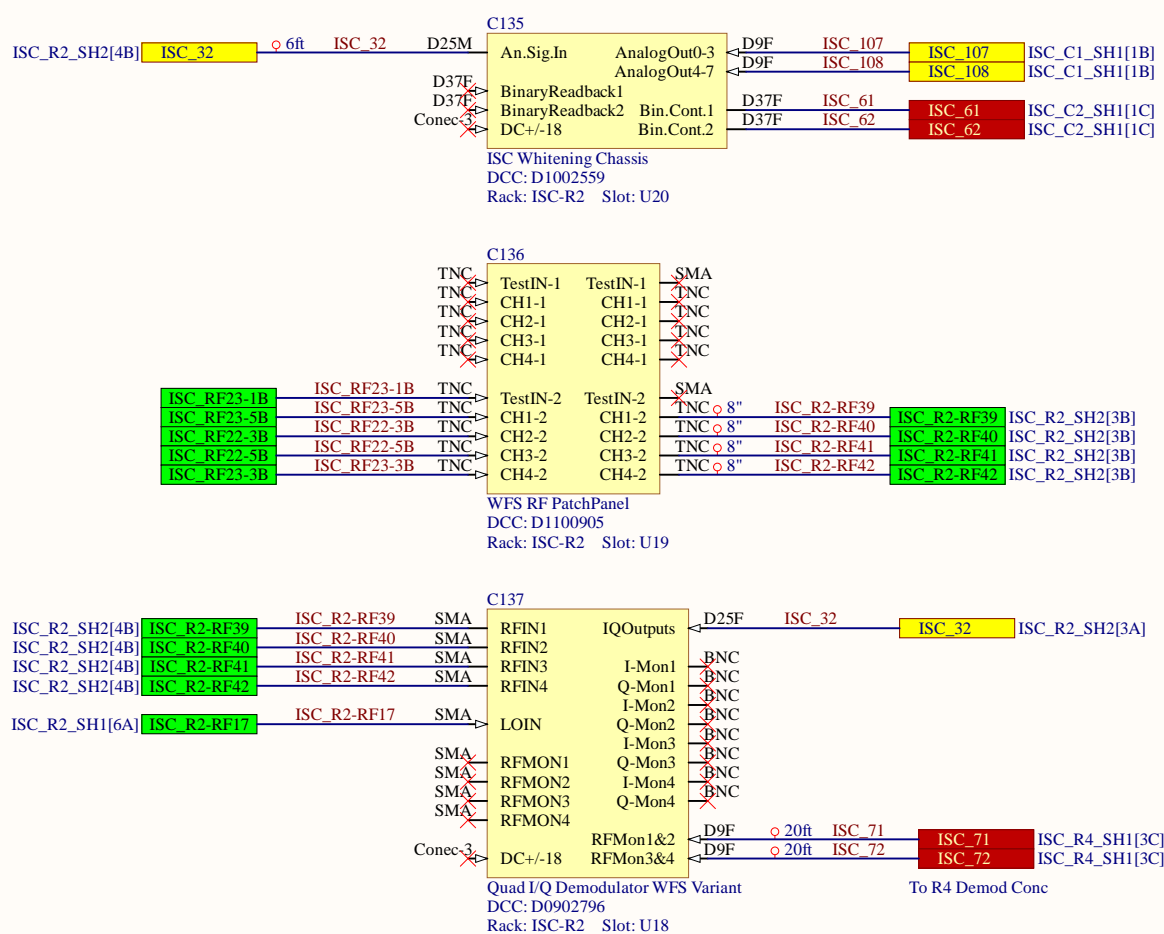
Title			ISC System Wiring Diagram		
Size	Number	Revision			
C	D1900511	V6			
Date:	10/06/2021	Sheet of3	38		
File:	C:\Users\...ISC_R2_SH1.SchDoc	Drawn By:	Filiberto Clara		

ISC-R2 Rack

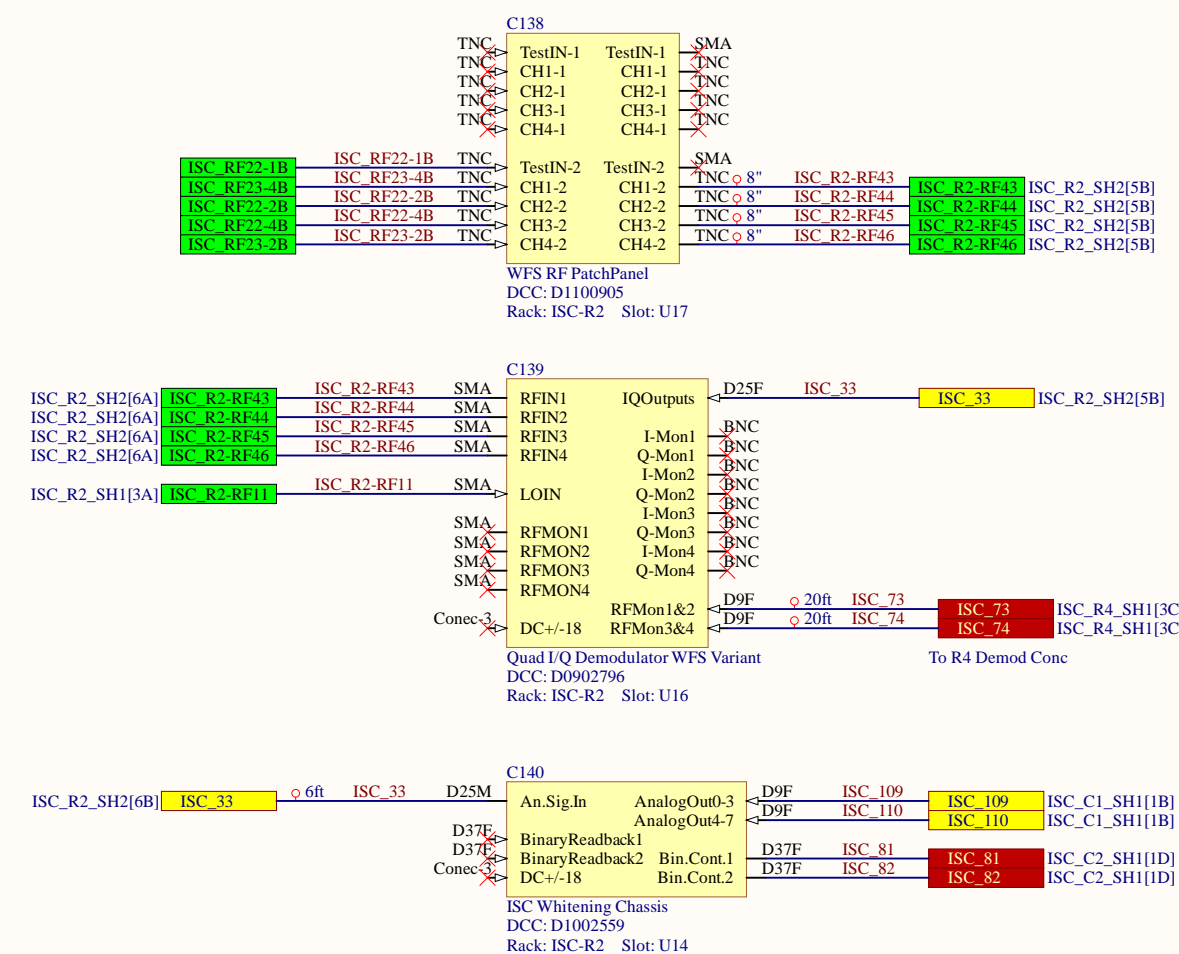
LSC POP, LSC REFL



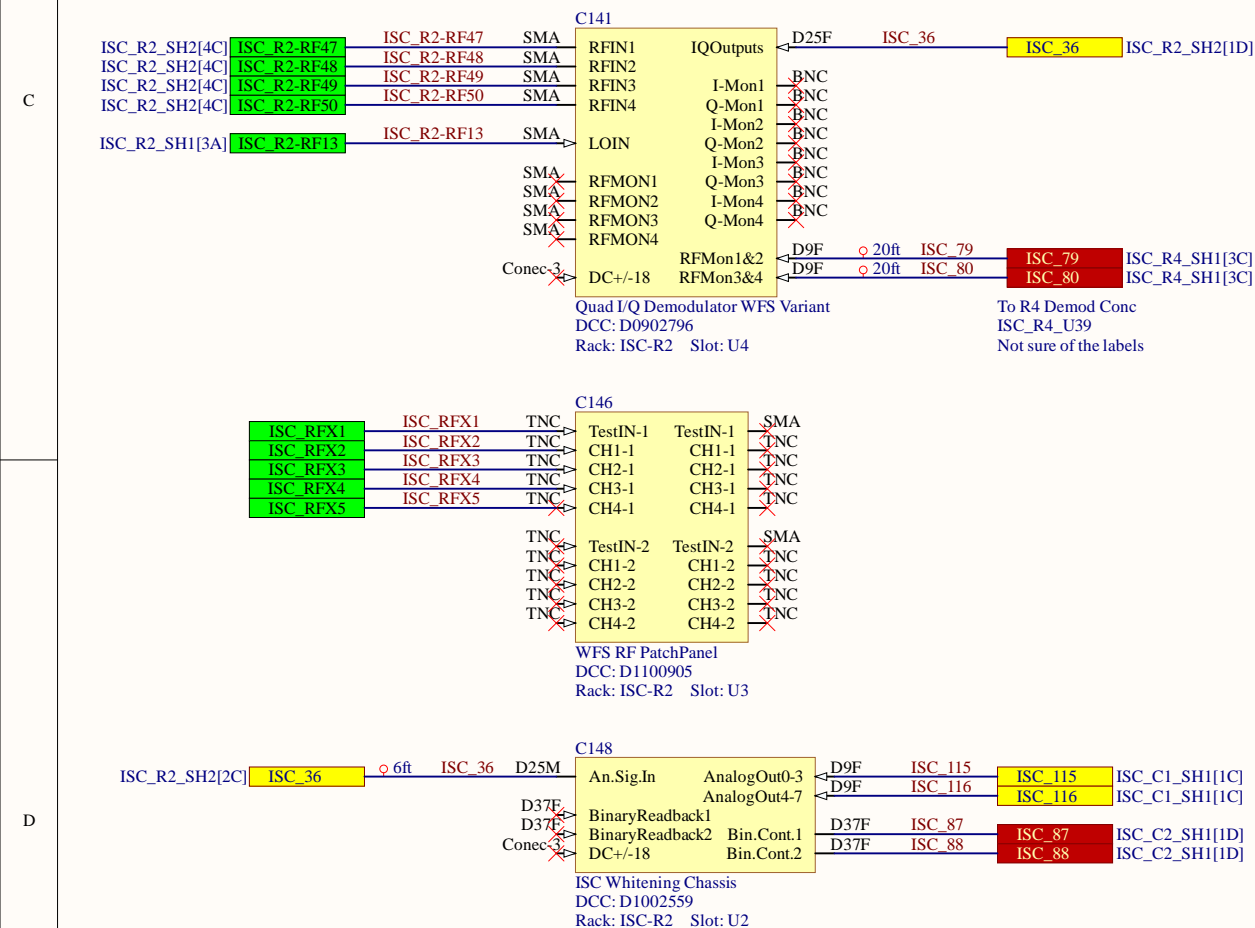
ASC REFL A 9MHz



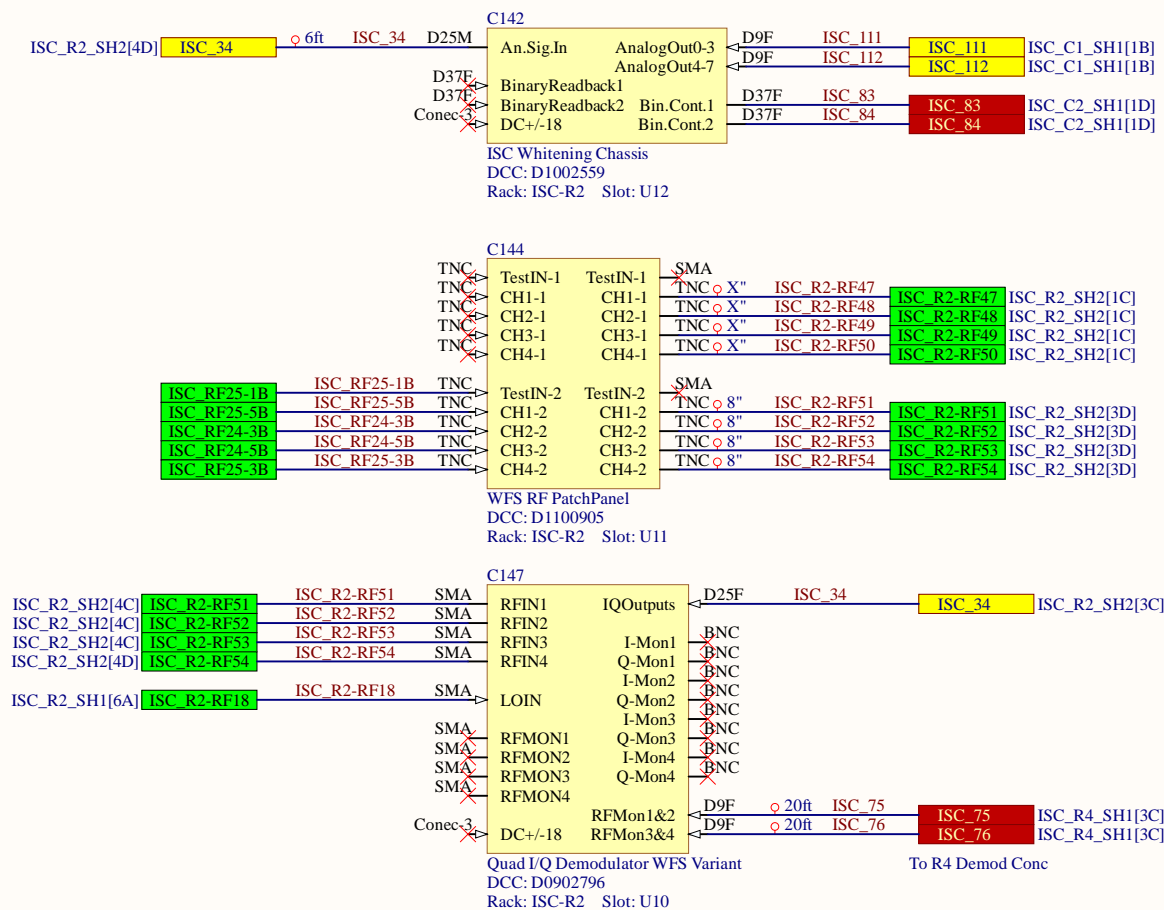
ASC REFL A 45MHz



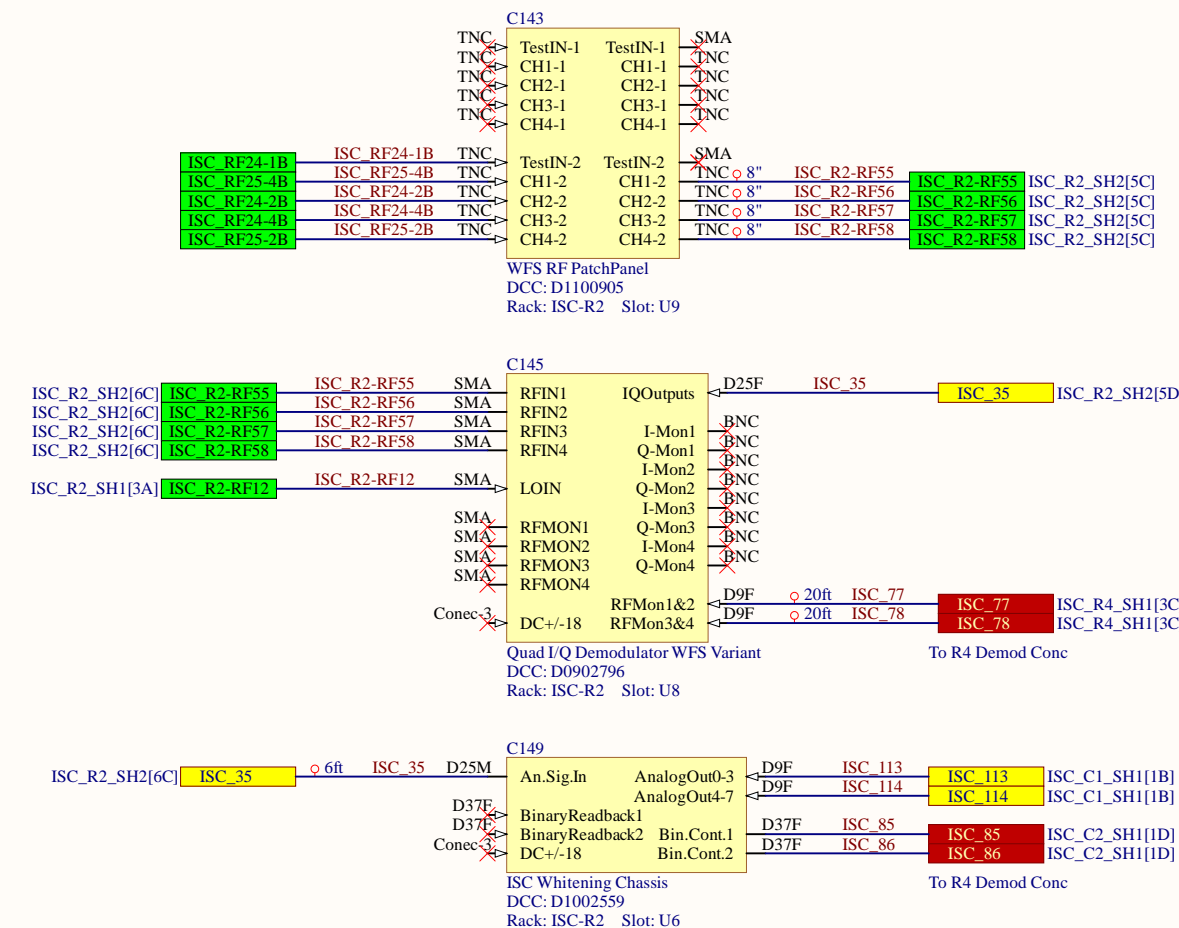
ASC POP A 45MHz



ASC REFL B 9MHz

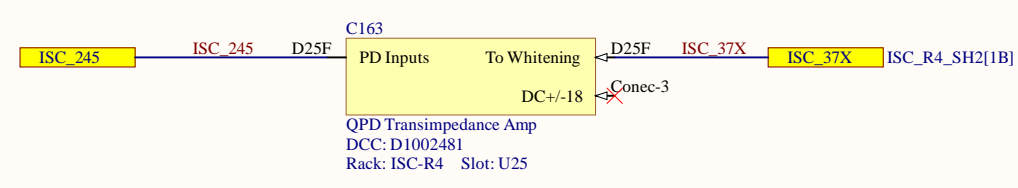
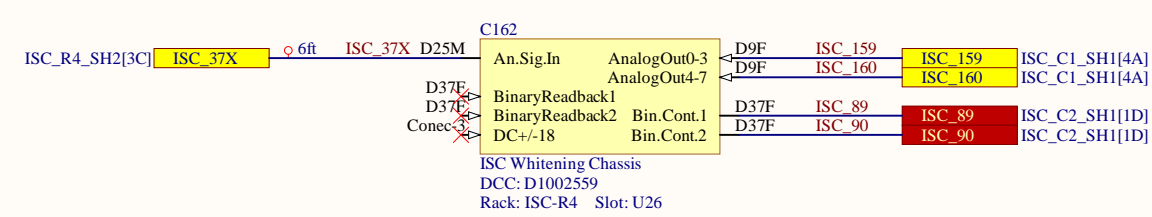
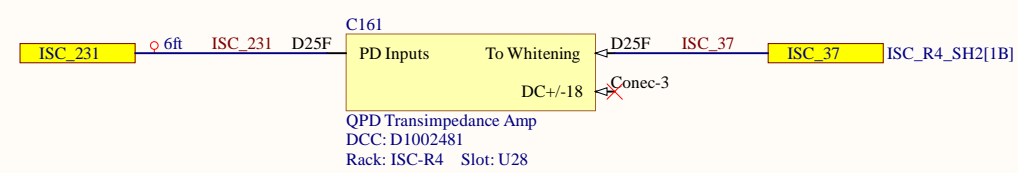
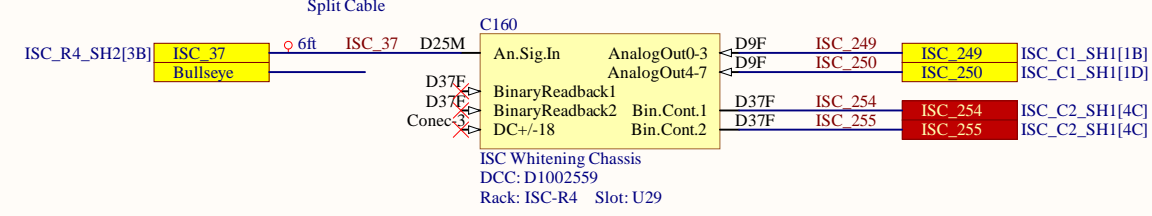
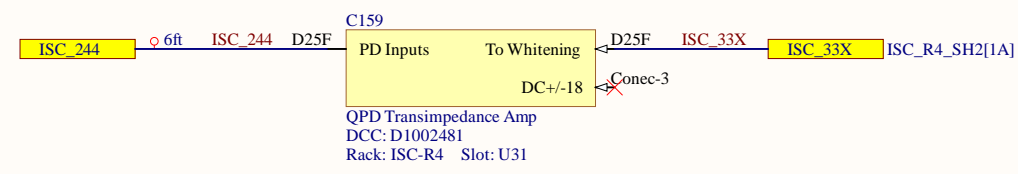
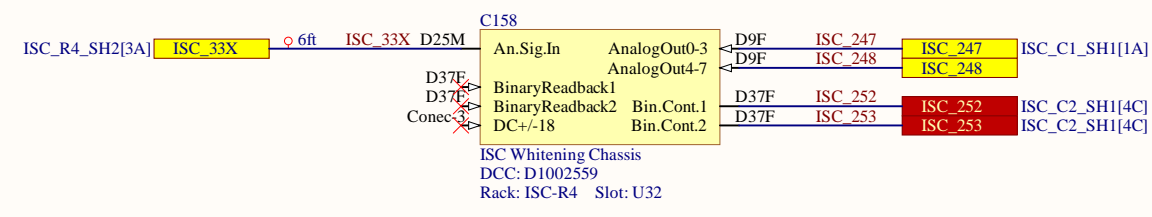


ASC REFL B 45MHz



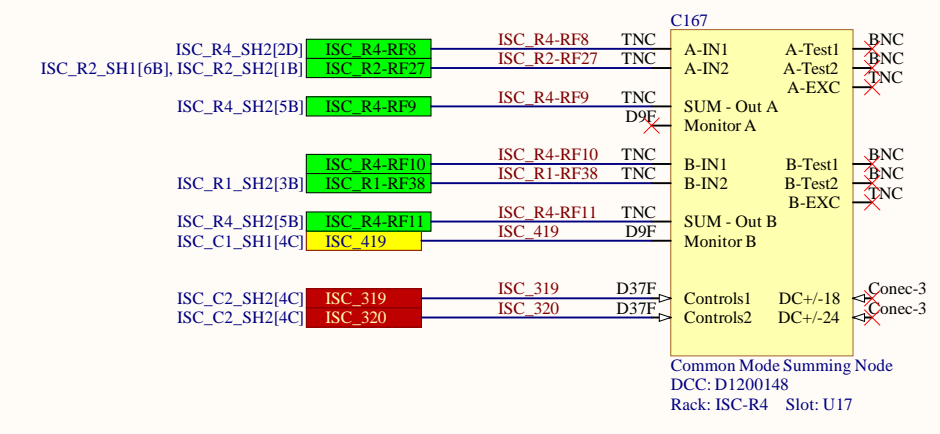
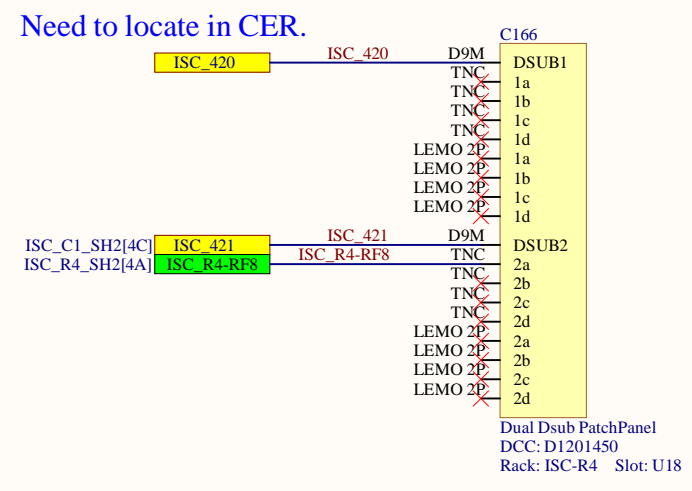
Title			ISC System Wiring Diagram		
Size	Number	D1900511		Revision	V6
C					
Date:	10/06/2021	Sheet of4	38		
File:	C:\Users\...ISC_R2_SH2.SchDoc	Drawn By:	Filiberio Clara		

ISC-R4 Rack

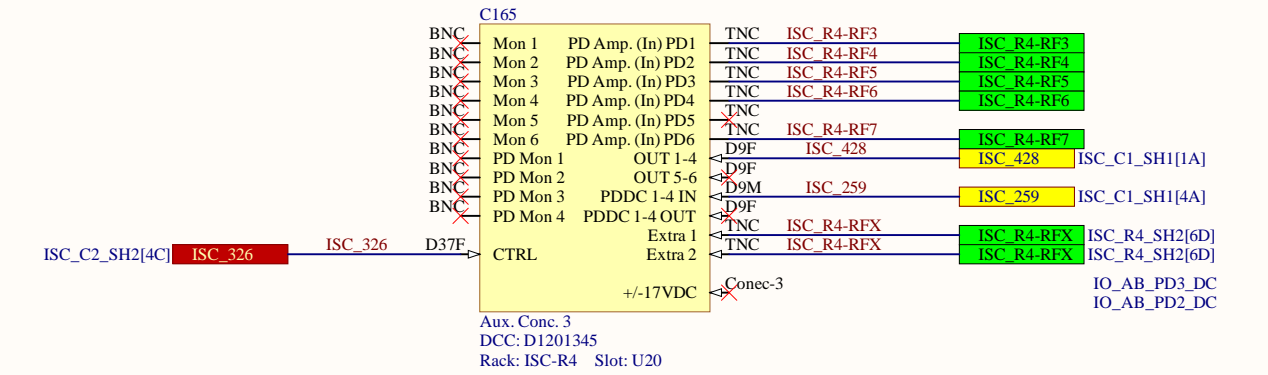
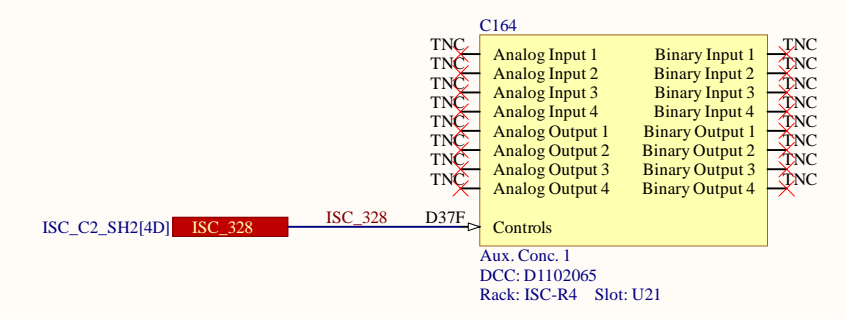
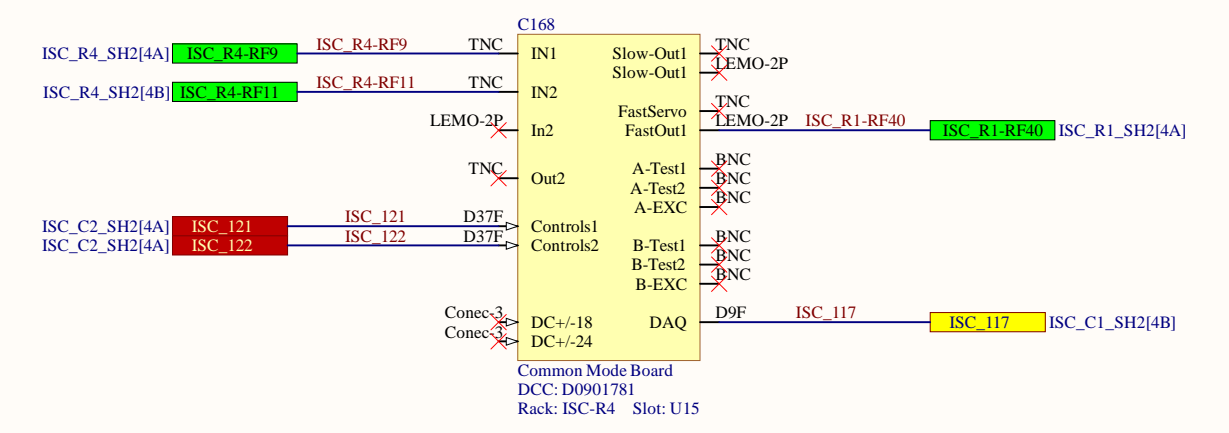


Do we need Sat Amp Included U23
 ISC_194 Coild Drive in CH1-4
 ISC_195 Coild Drive in CH5-8
 ISC_125 PD Out CH1-4
 ISC_126 PD Out CH1-4

Cable in the back.
 ISC_228
 ISC_229



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

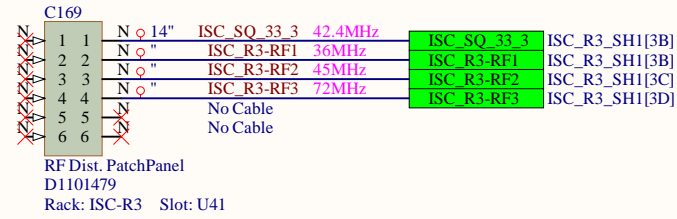


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ISC System Wiring Diagram		
Size	Number	Revision
C	D1900511	V6
Date:	10/06/2021	Sheet of 7 38
File:	C:\Users\...ISC_R4_SH2.SchDoc	Drawn By: Filiberto Clara

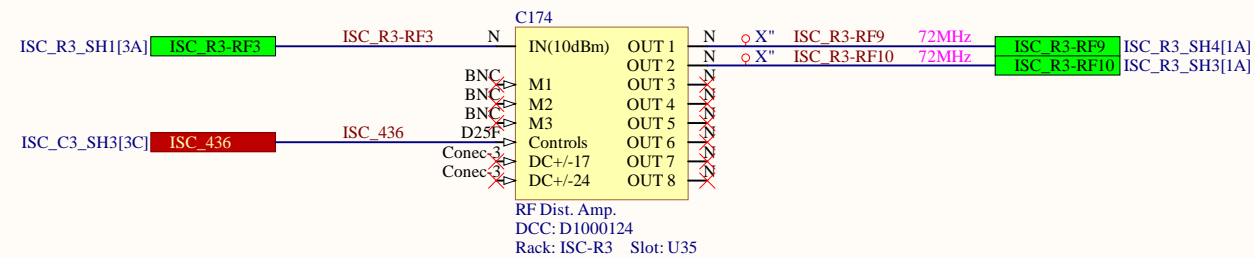
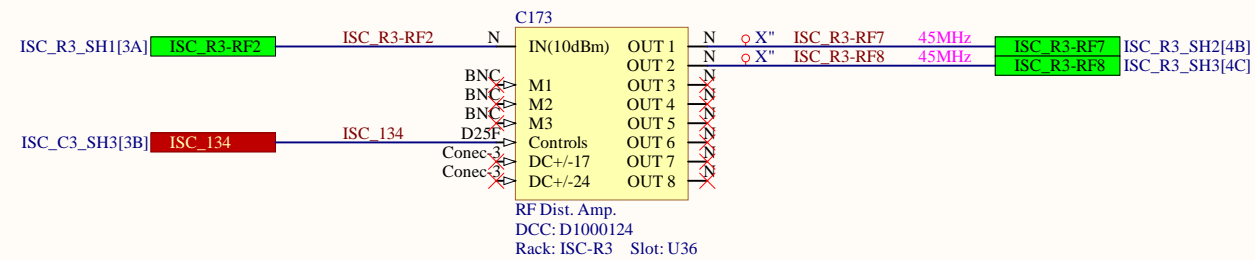
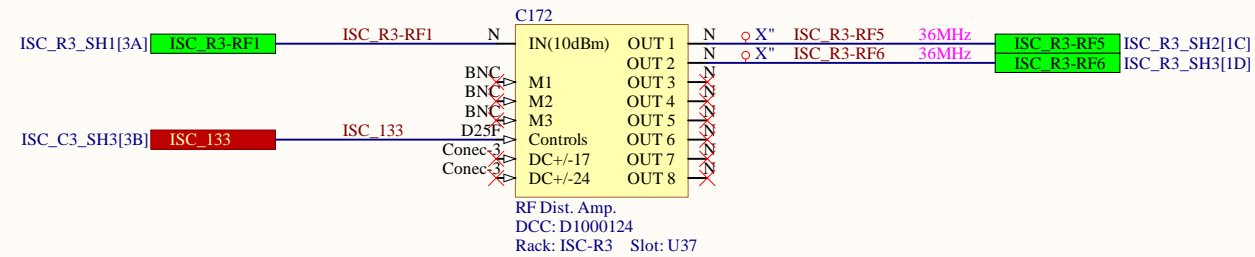
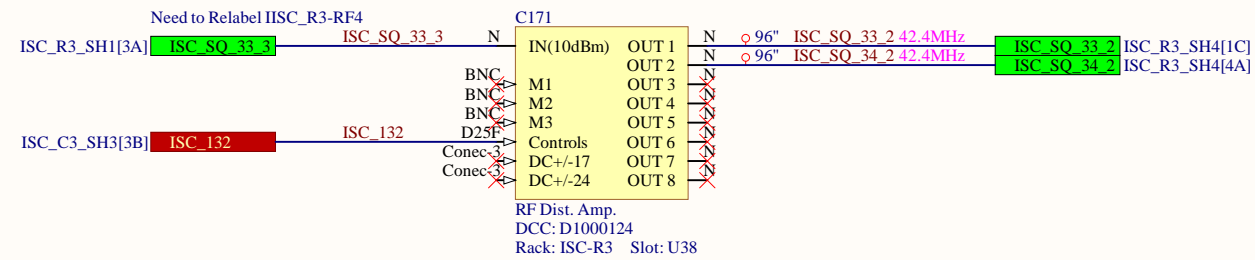
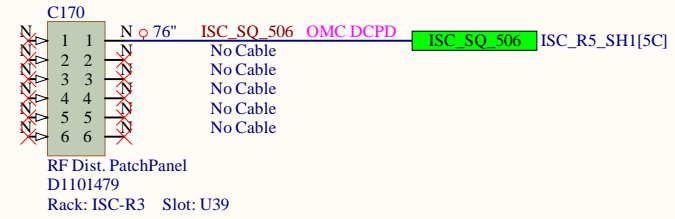
ISC-R3 Rack

Need to Relabel ISC_R3-RF4

RF Patch Panel 15

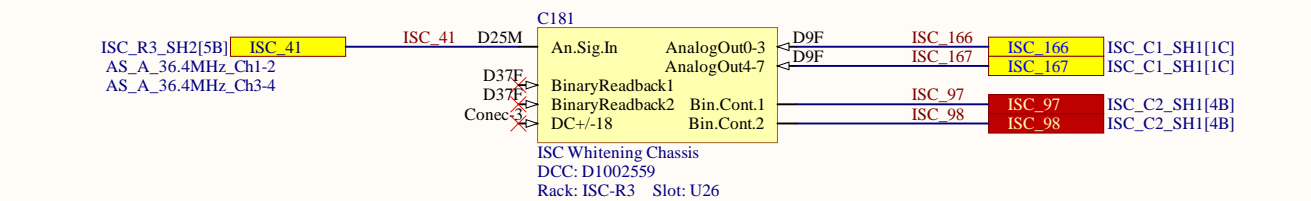
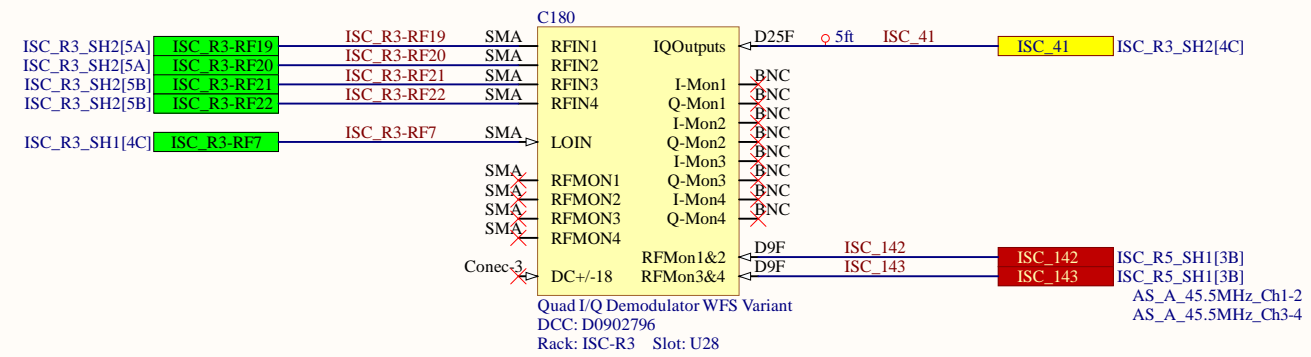
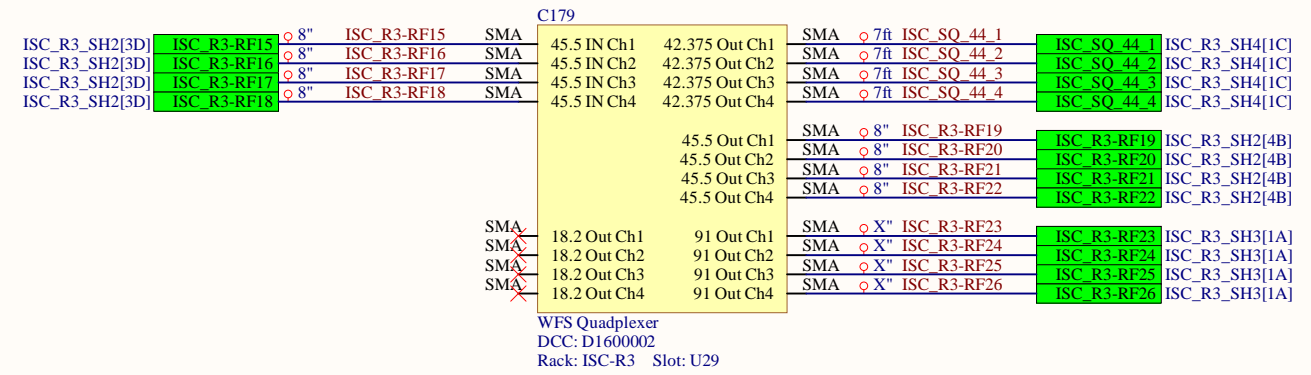
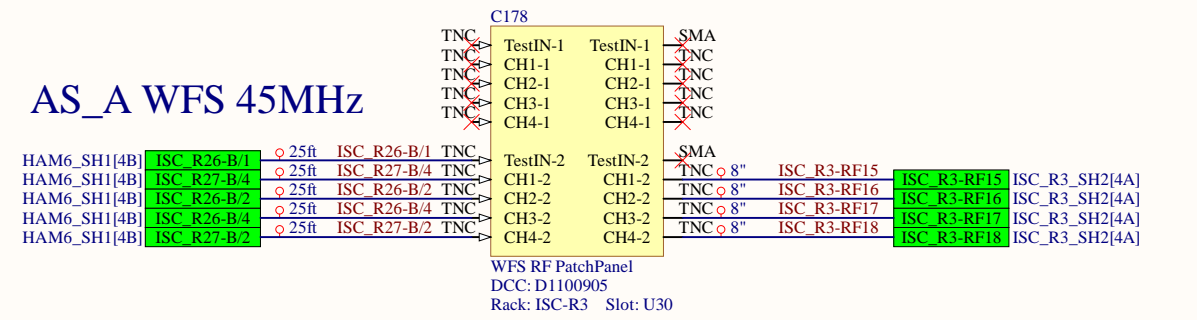
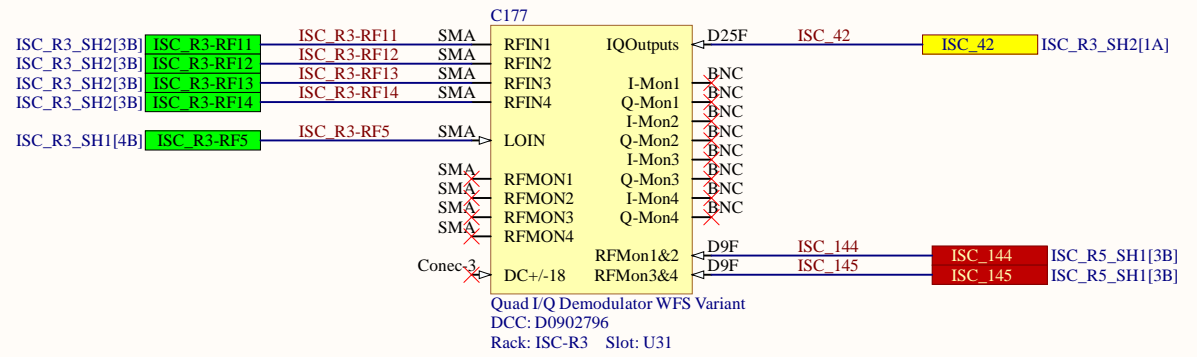
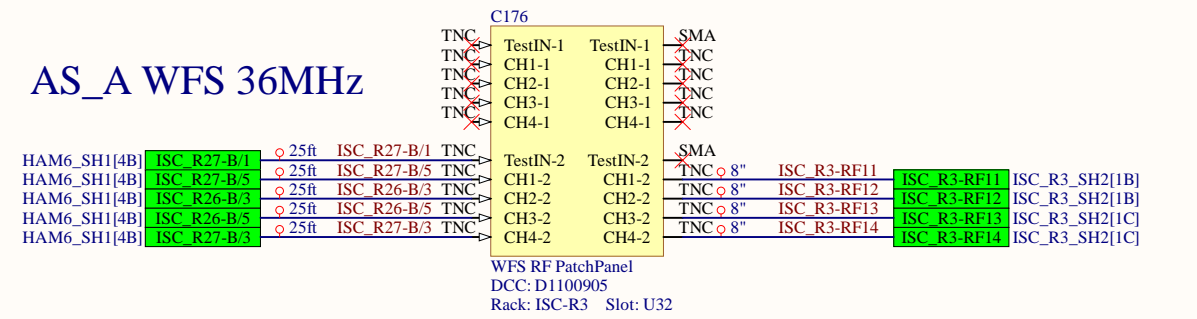
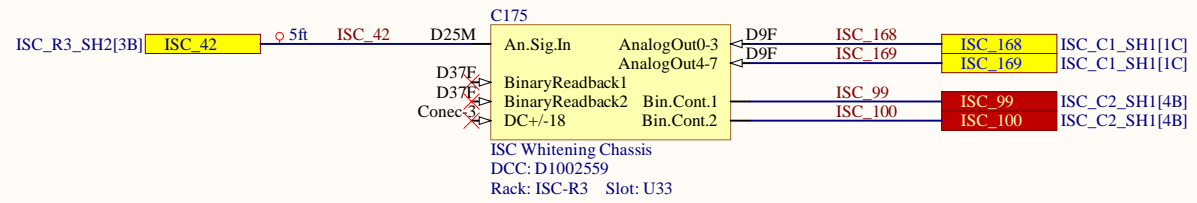


RF Patch Panel 16



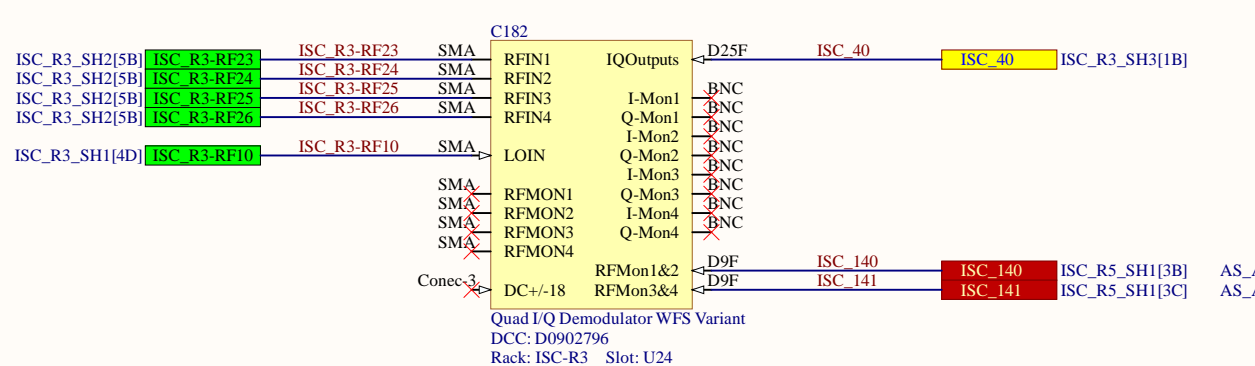
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Size	Number	Revision
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File:	C:\Users\...ISC_R3_SH1.SchDoc	Drawn By: Filiberto Clara

ISC-R3 Rack

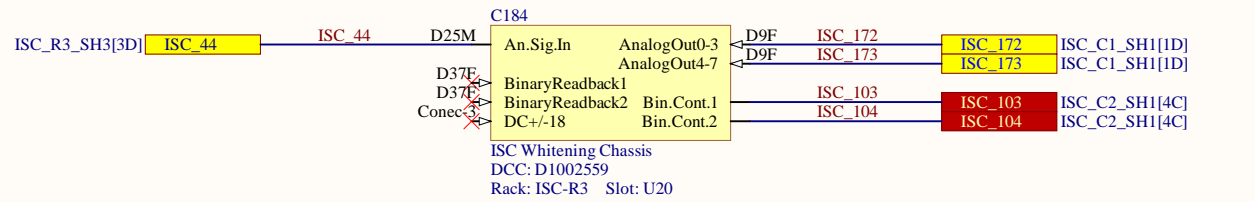
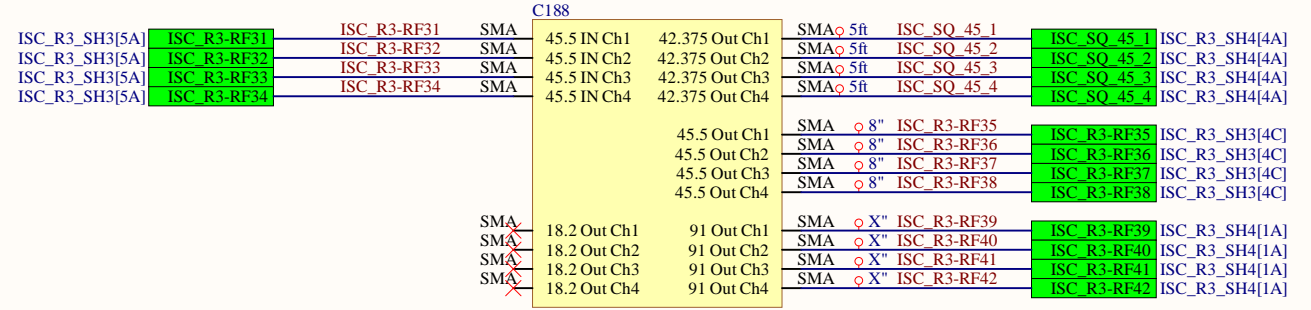
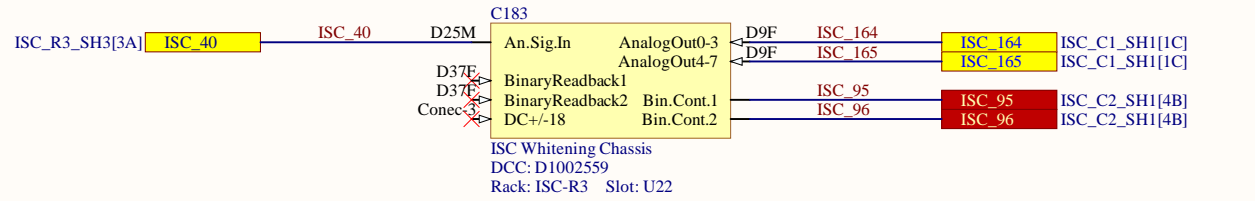
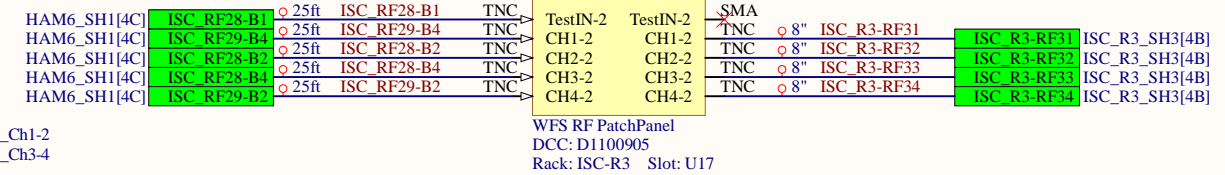


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Size	Number	Revision	
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Date:	10/06/2021	Sheet of	9 38
File:	C:\Users\...ISC_R3_SH2.SchDoc	Drawn By:	Filiberto Clara

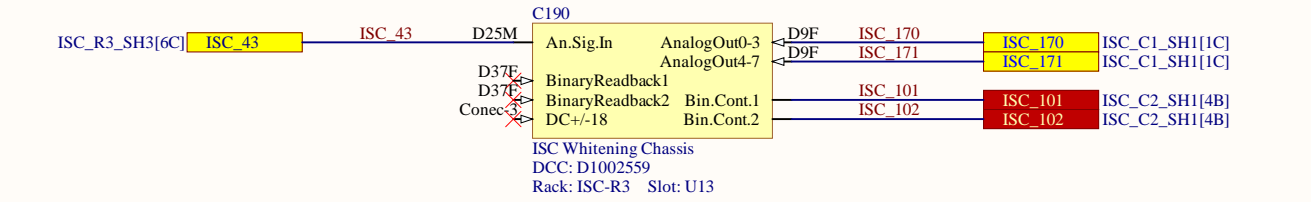
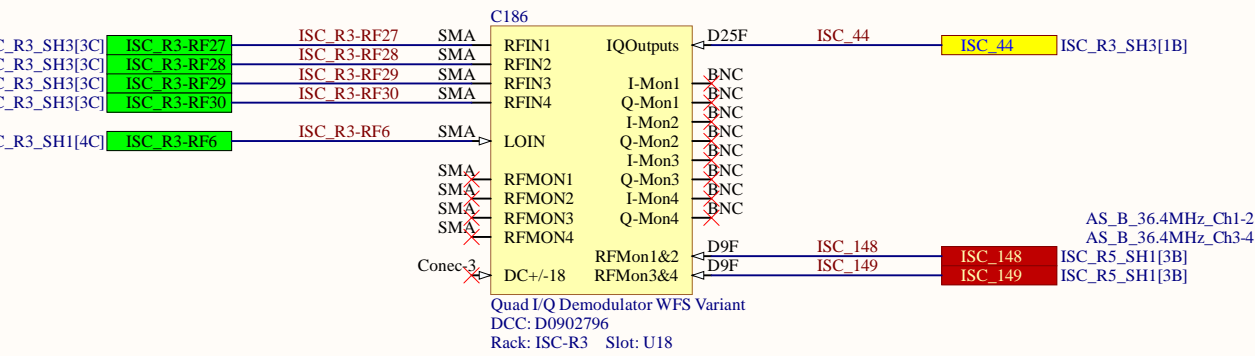
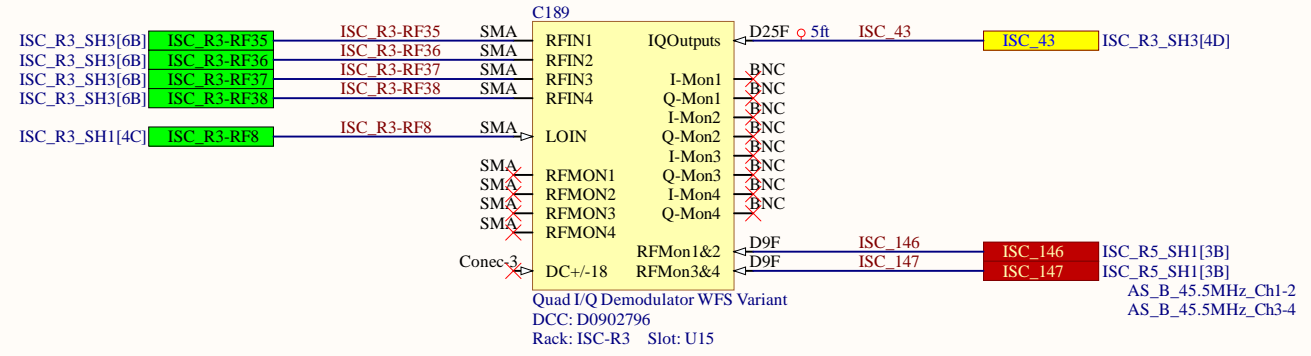
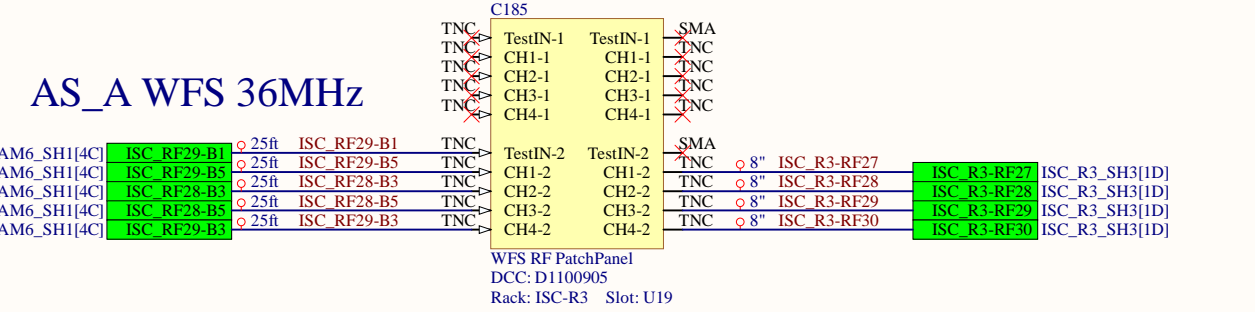
ISC-R3 Rack



AS_A WFS 45MHz



AS_A WFS 36MHz

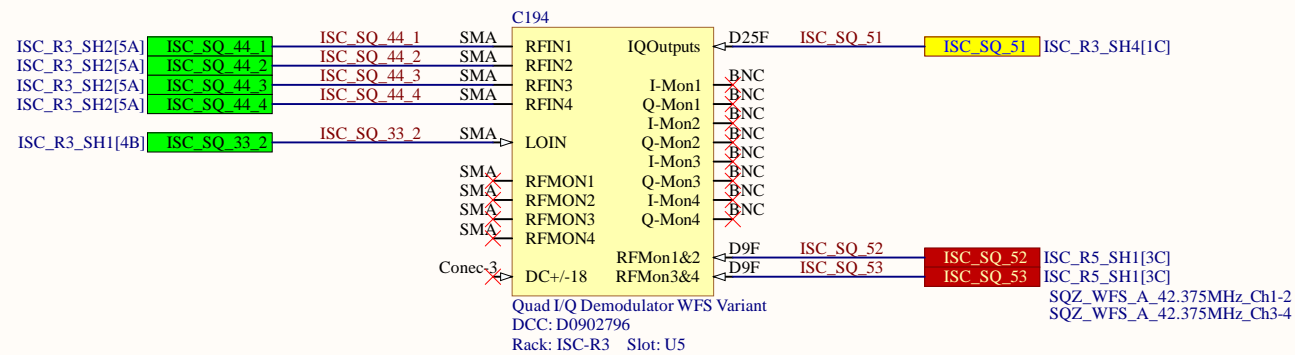
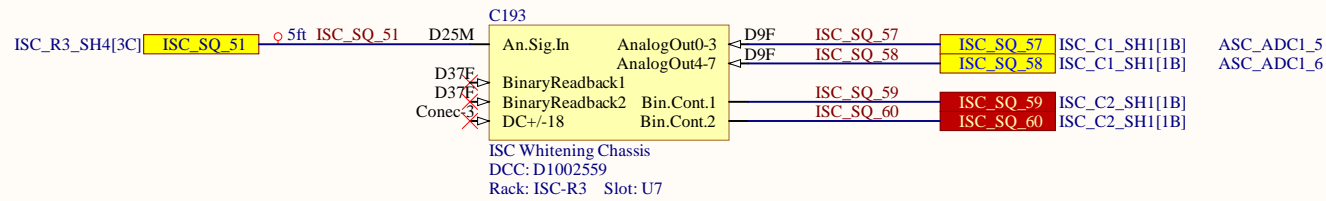
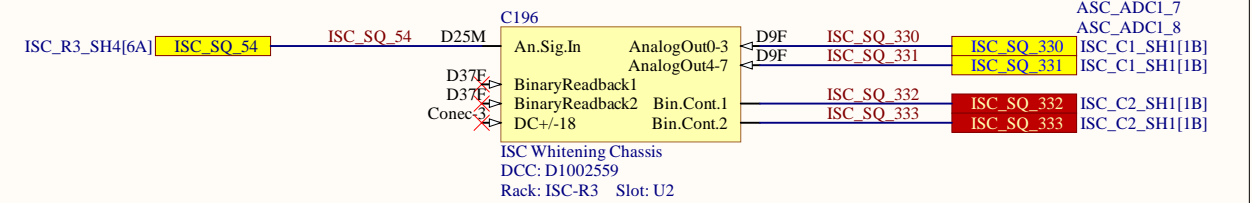
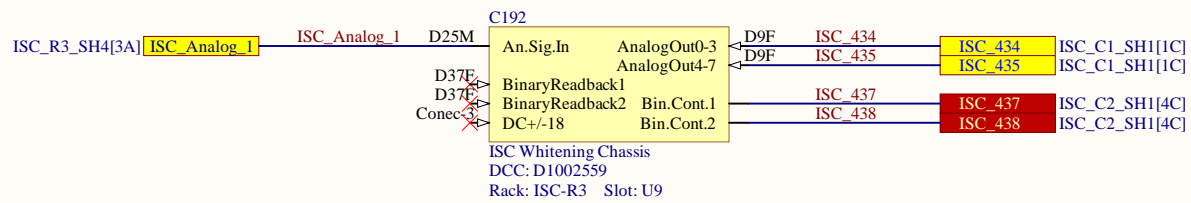
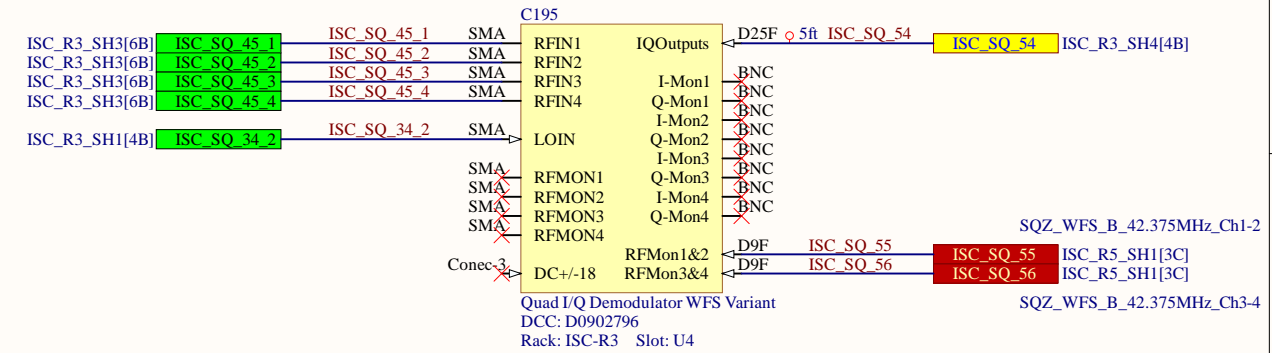
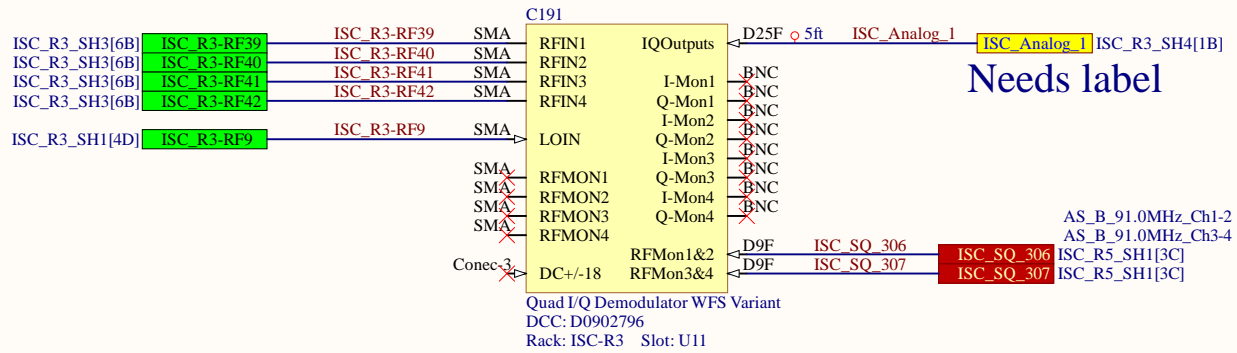


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Size	Number	Revision
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Date:	10/06/2021	Sheet of 0 38
File:	C:\Users\...ISC_R3_SH3.SchDoc	Drawn By: Filiberto Clara

ISC-R3 Rack

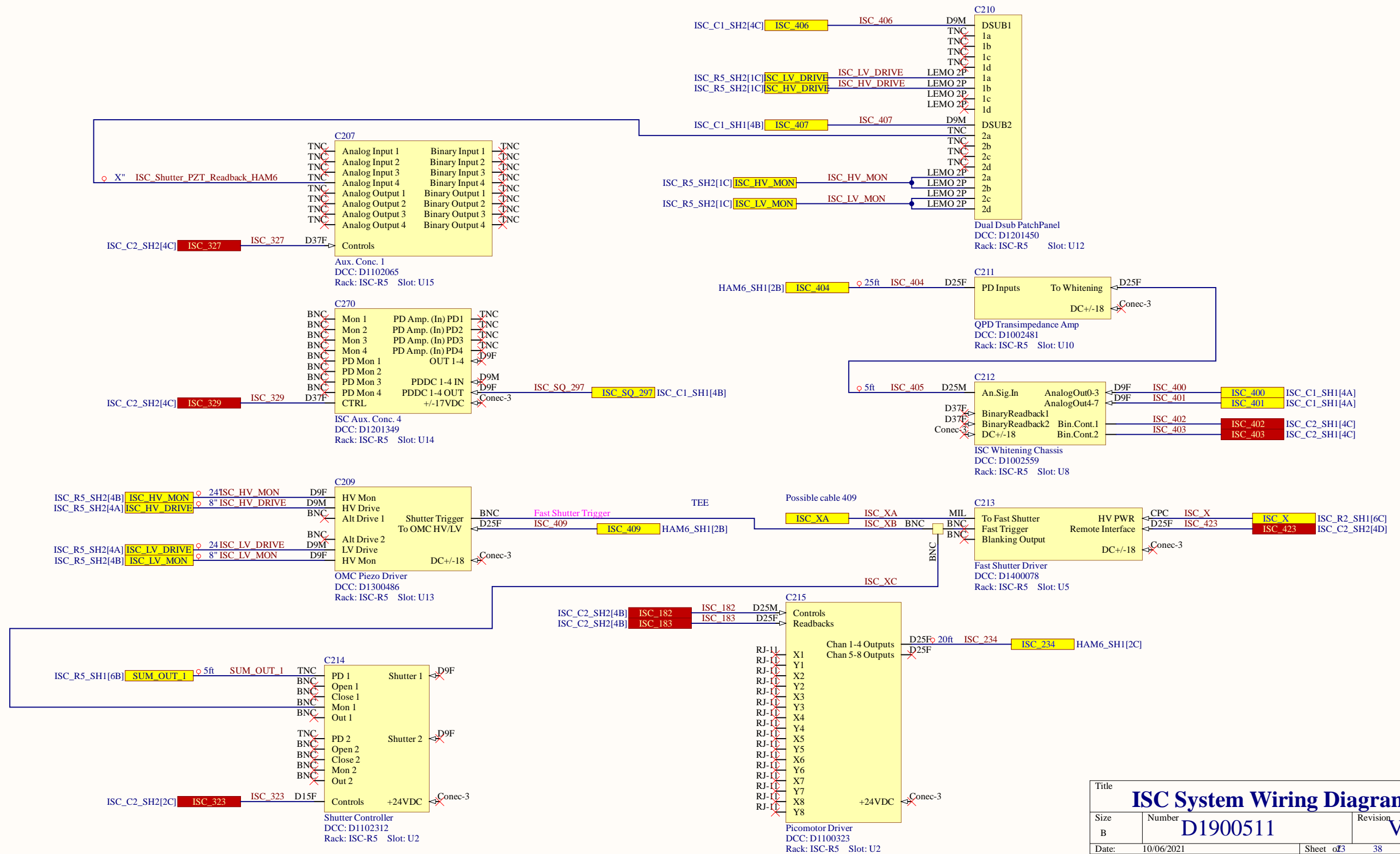
Needs labels

Needs label



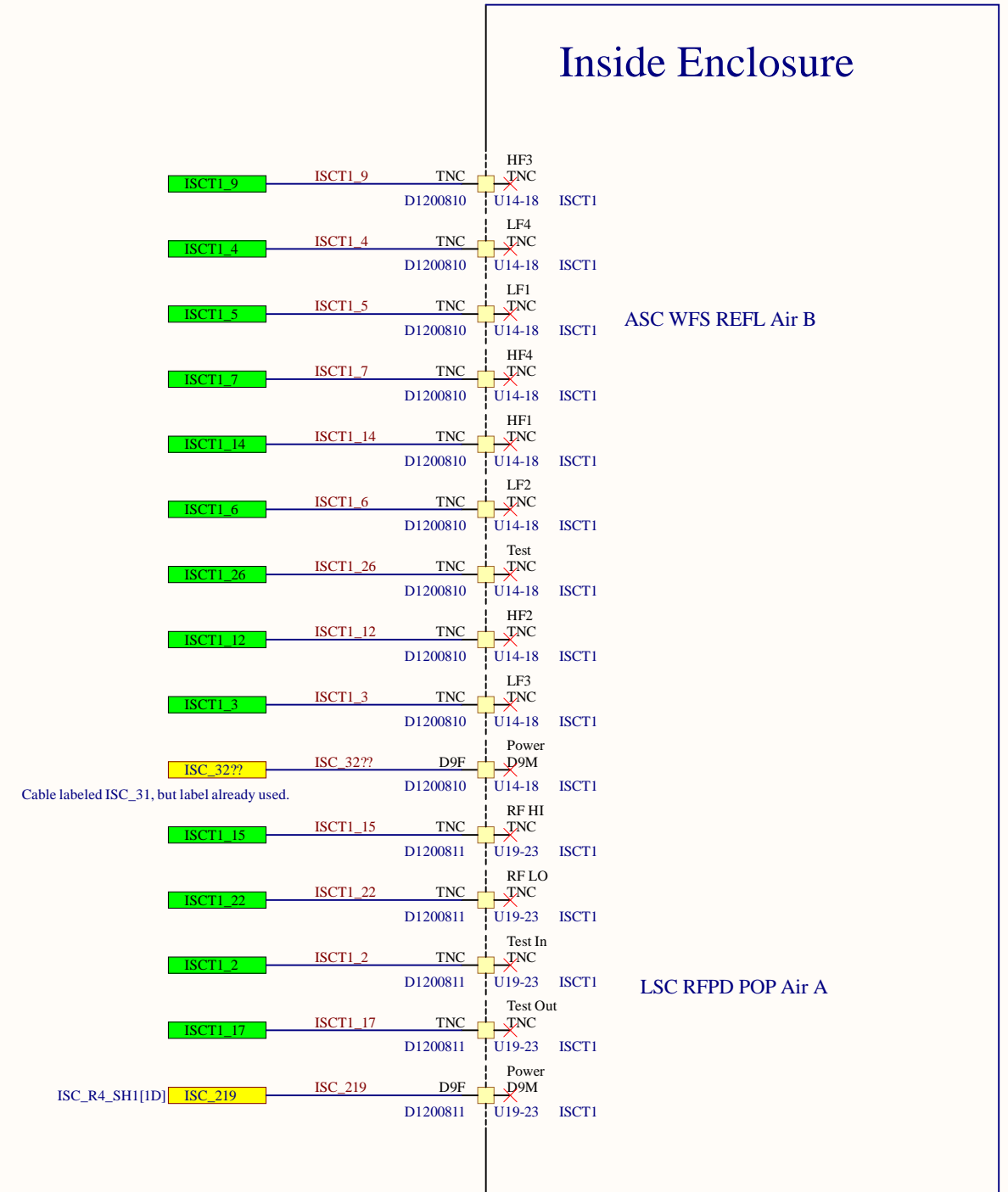
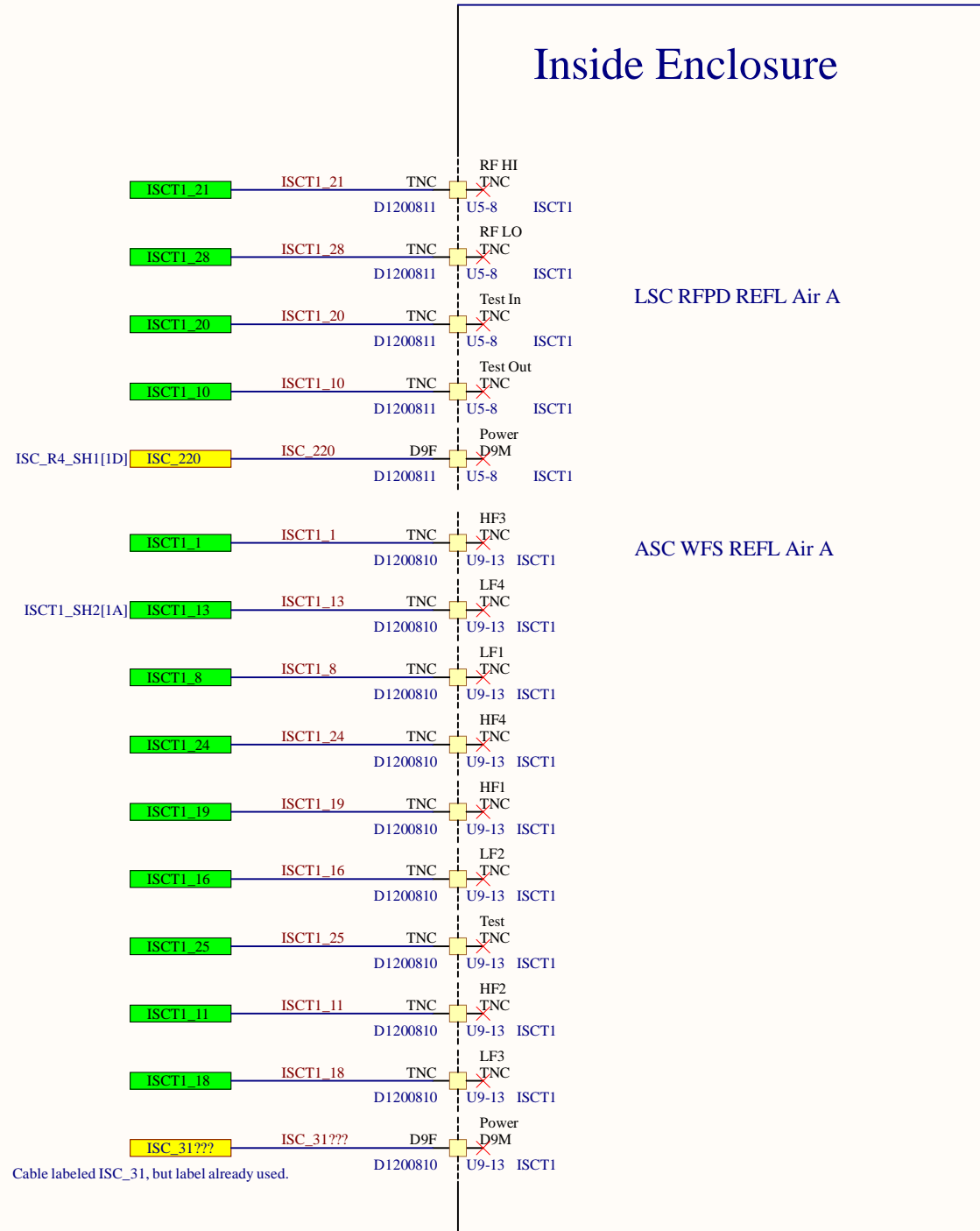
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Size	Number	Revision	
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Date:	10/06/2021	Sheet of	38
File:	C:\Users\...ISC_R3_SH4.SchDoc	Drawn By:	Filiberto Clara

ISC-R5 Rack



Title			
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Size	Number	Revision	
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Date:	10/06/2021	Sheet of	38
File:	C:\Users\...ISC_R5_SH2.SchDoc	Drawn By:	Filiberto Clara

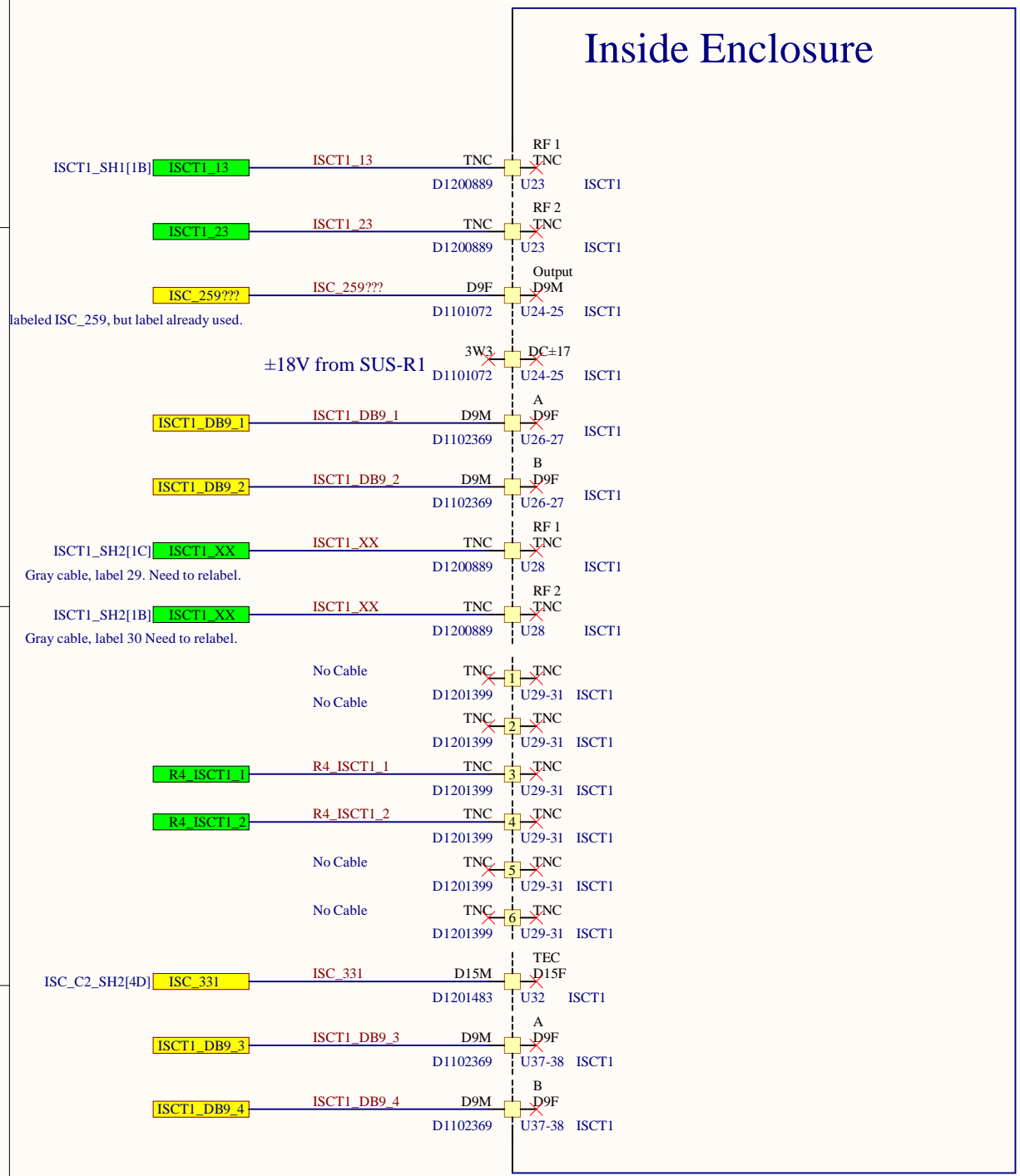
ISCT1 - Right Side



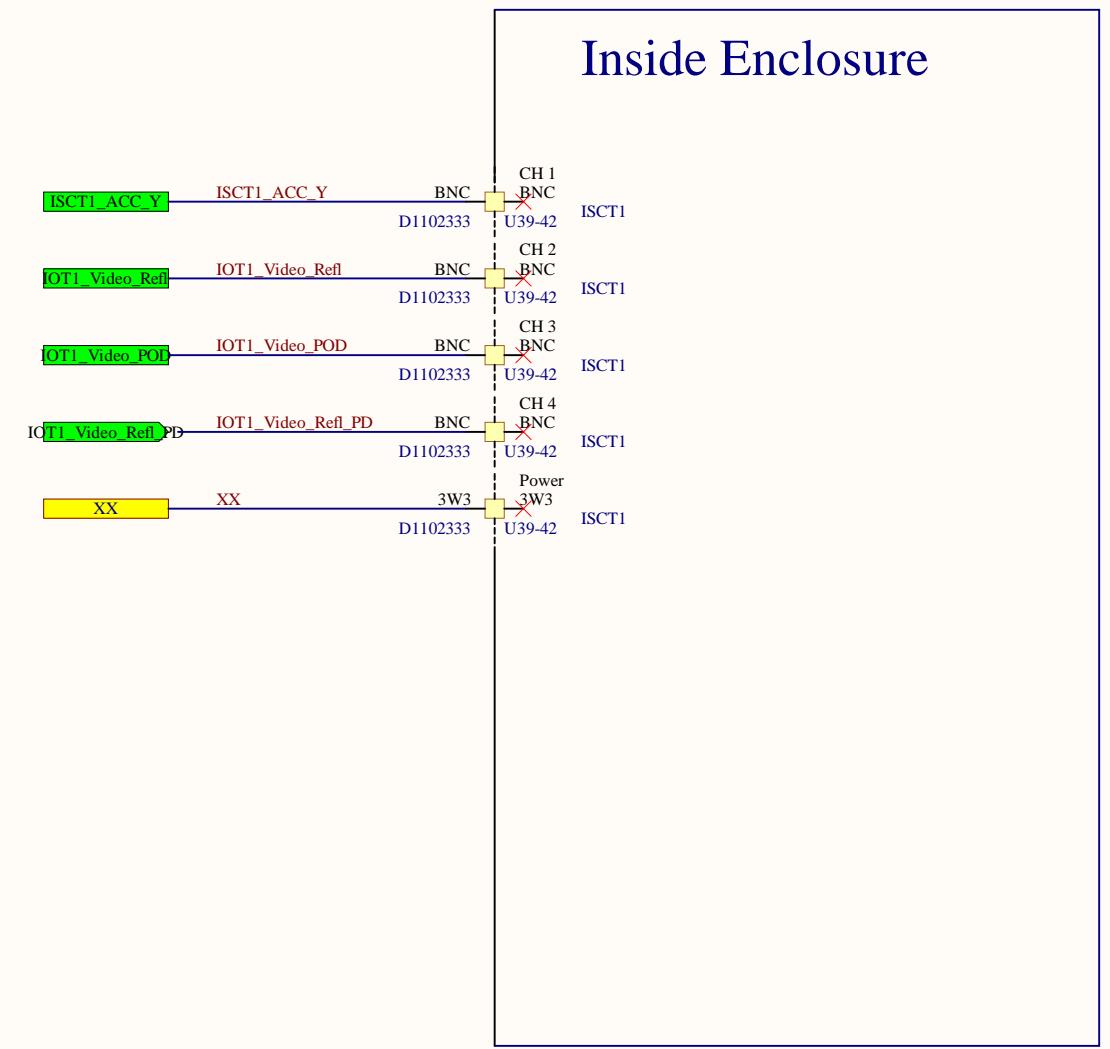
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Size	Number	Revision			
B	D1900511	V6			
Date:	10/06/2021	Sheet	of 4	38	
File:	C:\Users\...\ISCT1_SH1.SchDoc	Drawn By:	Filiberto Clara		

ISCT1 - Right Side

Inside Enclosure

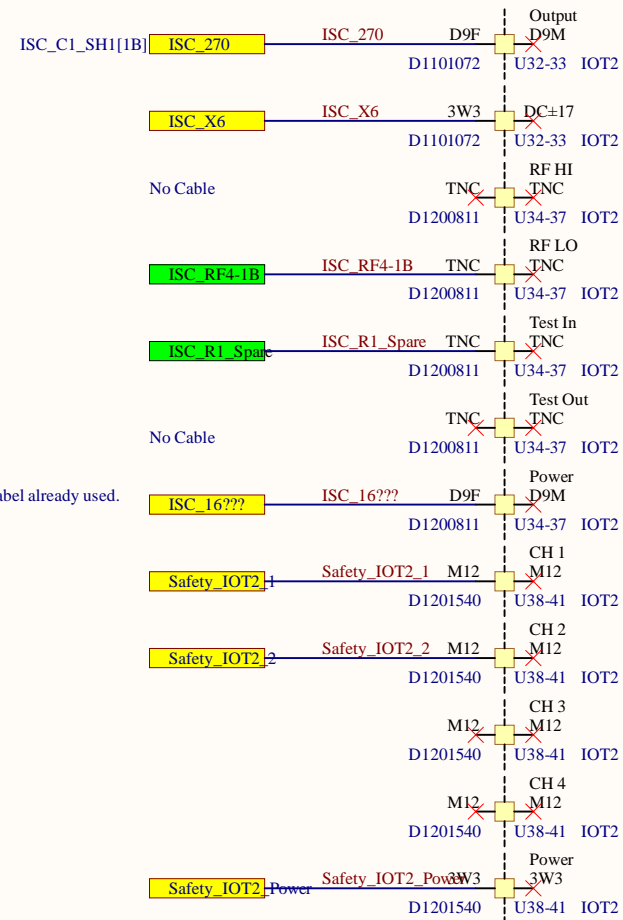
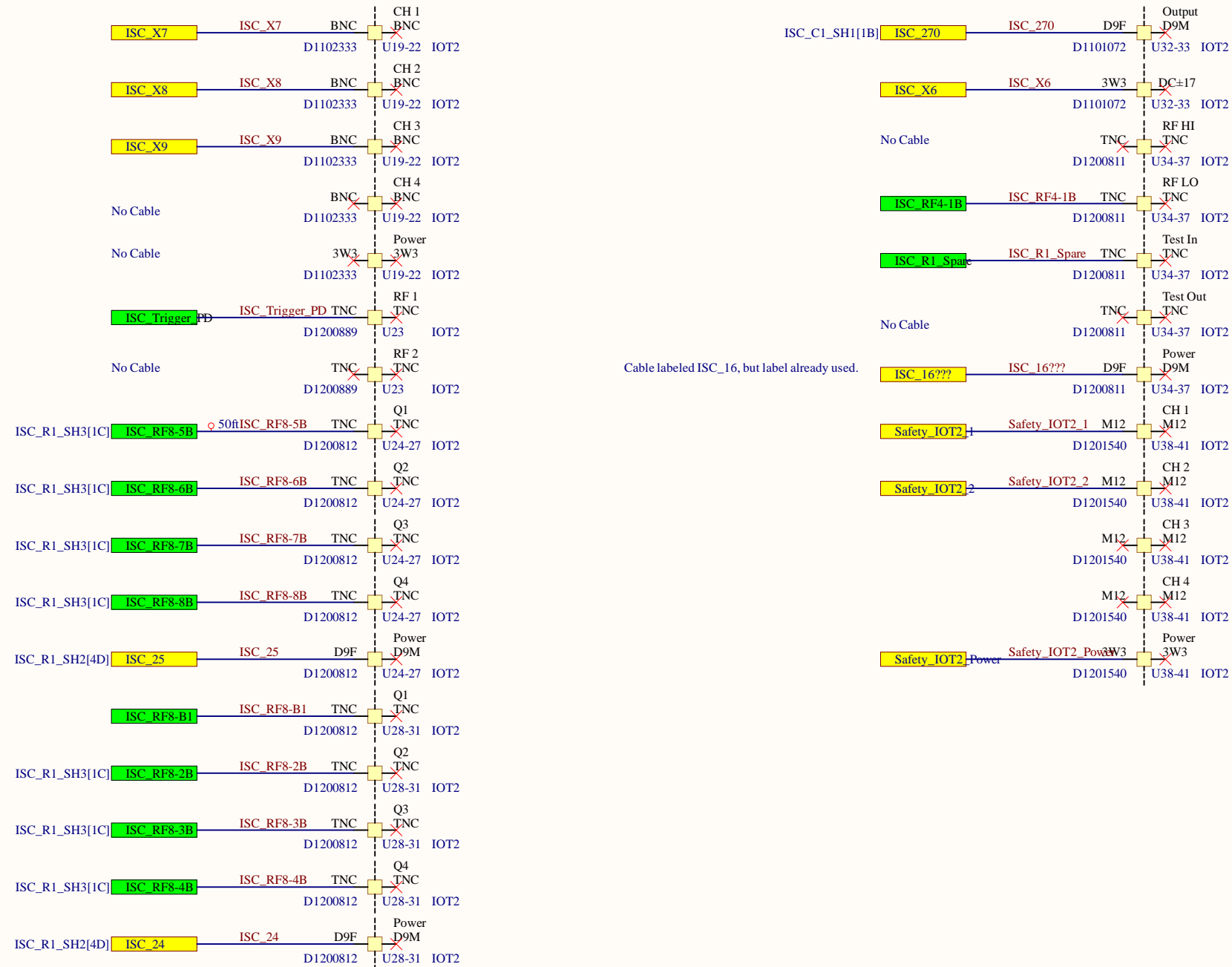


Inside Enclosure

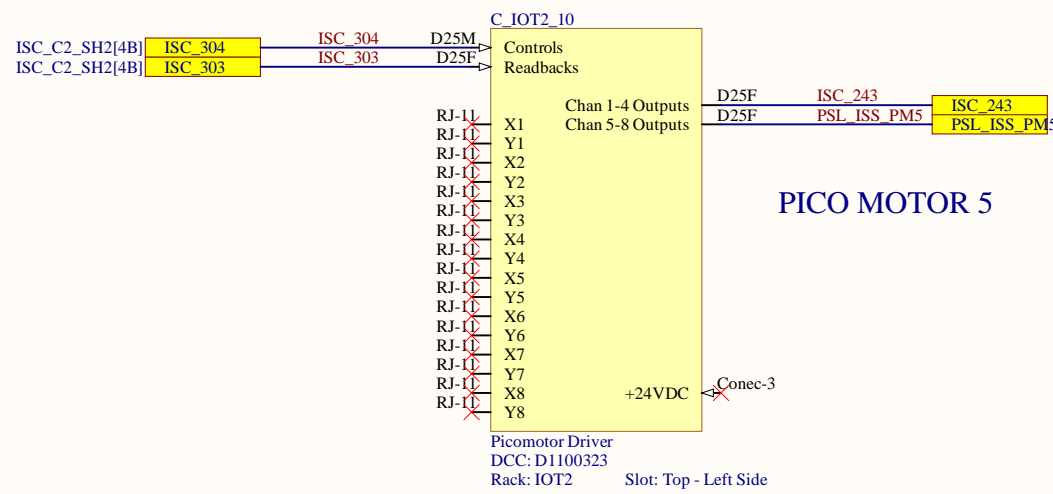
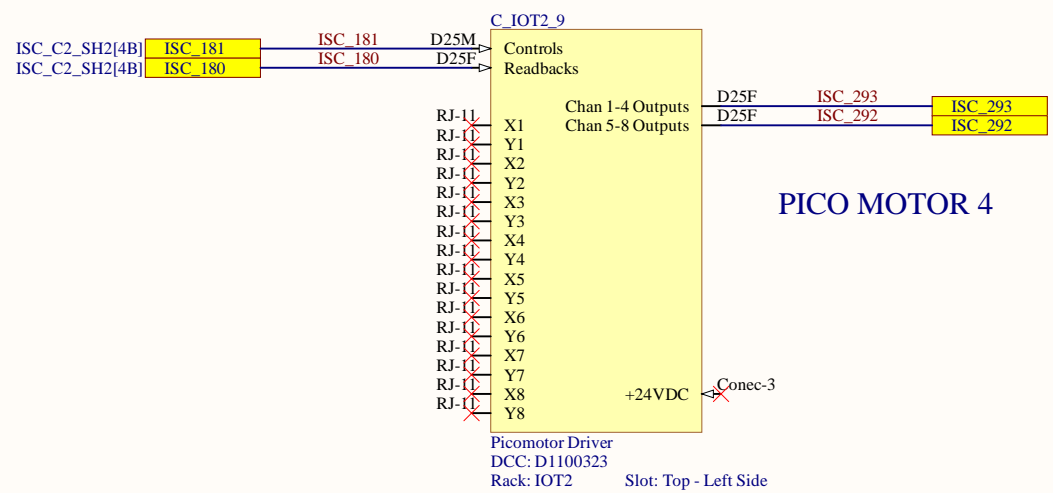
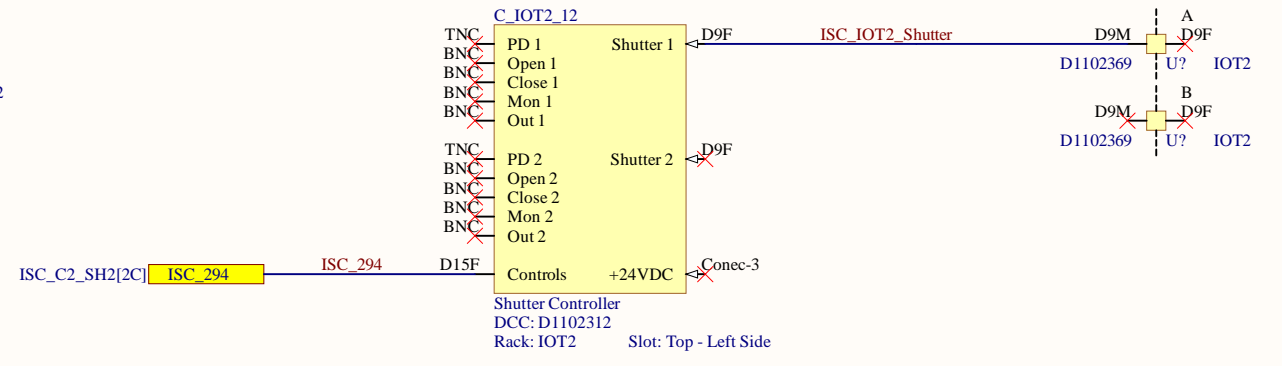
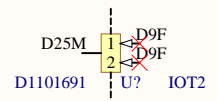
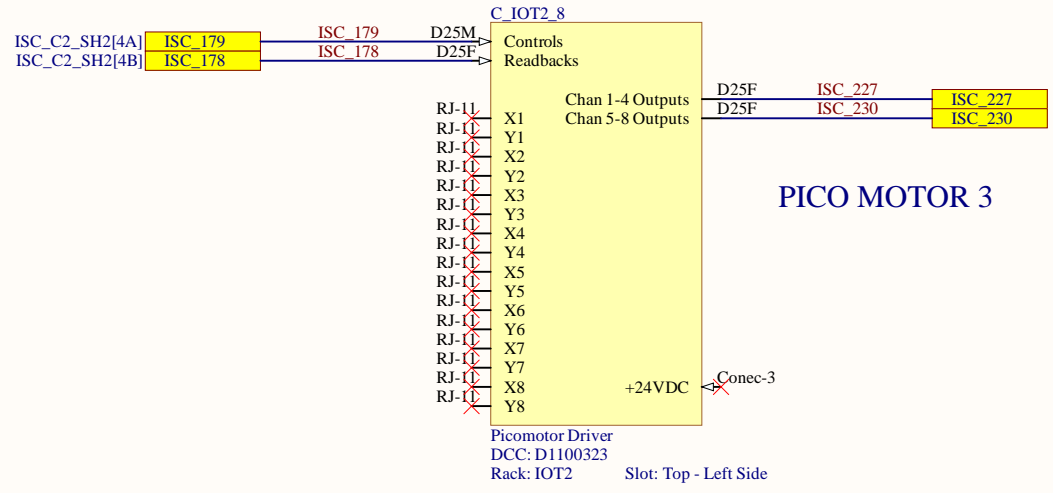


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Size	Number	Revision
B	D1900511	V6
Date:	10/06/2021	Sheet of 5 38
File:	C:\Users\... \ISCT1_SH2.SchDoc	Drawn By: Filiberto Clara

IOT2 - Left Side



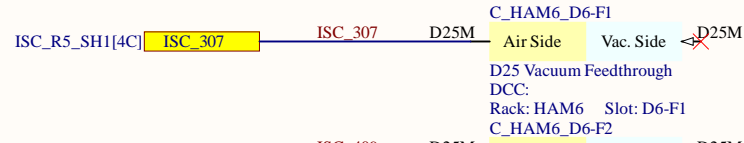
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ISC System Wiring Diagram		
Size	Number	Revision
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Date:	10/06/2021	Sheet of 6 38
File:	C:\Users\... \IOT2_SH1.SchDoc	Drawn By: Filiberto Clara



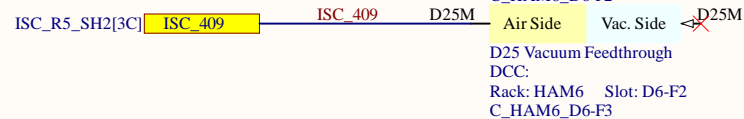
Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V6
Date:	10/06/2021	Sheet of 38
File:	C:\Users\... \IOT2_SH2.SchDoc	Drawn By: Filiberto Clara

HAM6 Flange Layout

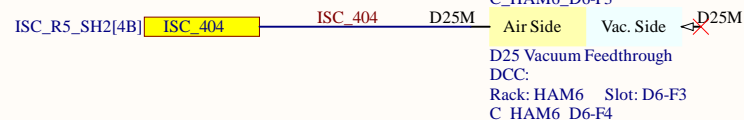
DCPD



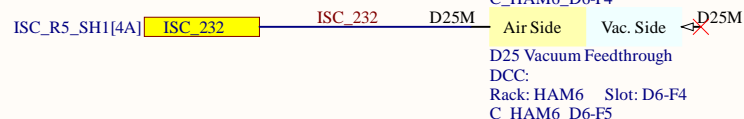
PZTs



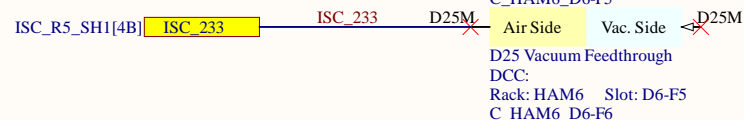
OMC QPD



OMCR QPD

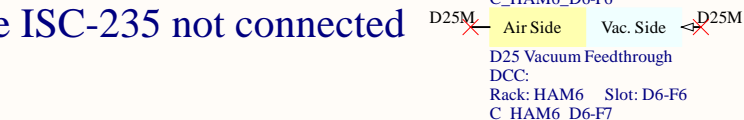


AS_C QPD

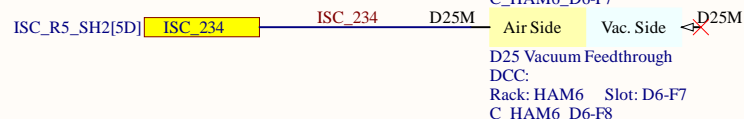


OMCR/AS Picomotor

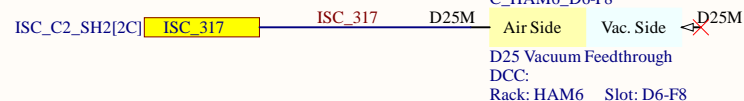
Cable ISC-235 not connected



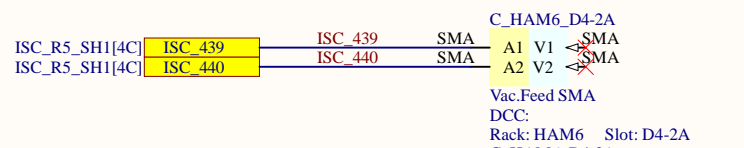
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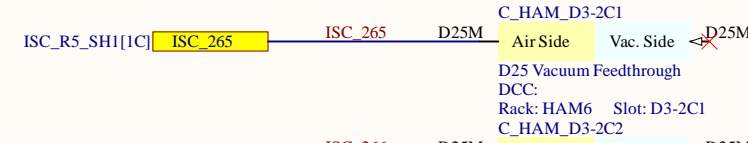
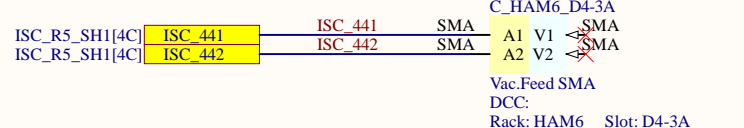
Beam diverter



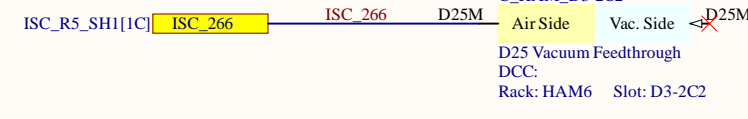
DCPD 3.1MHz A/B



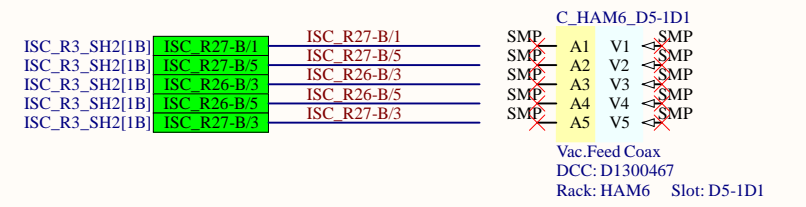
DCPD 3.1MHz C/D



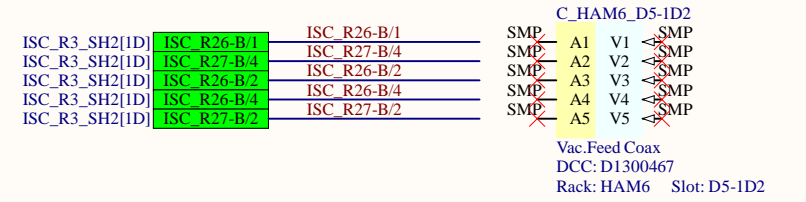
AS_A WFS DC



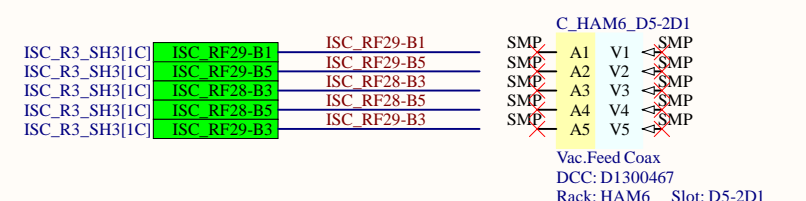
AS_B WFS DC



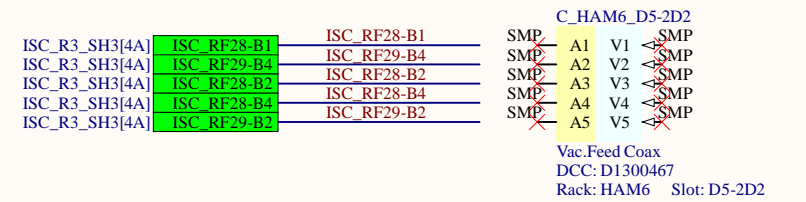
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AS_A WFS 45MHz



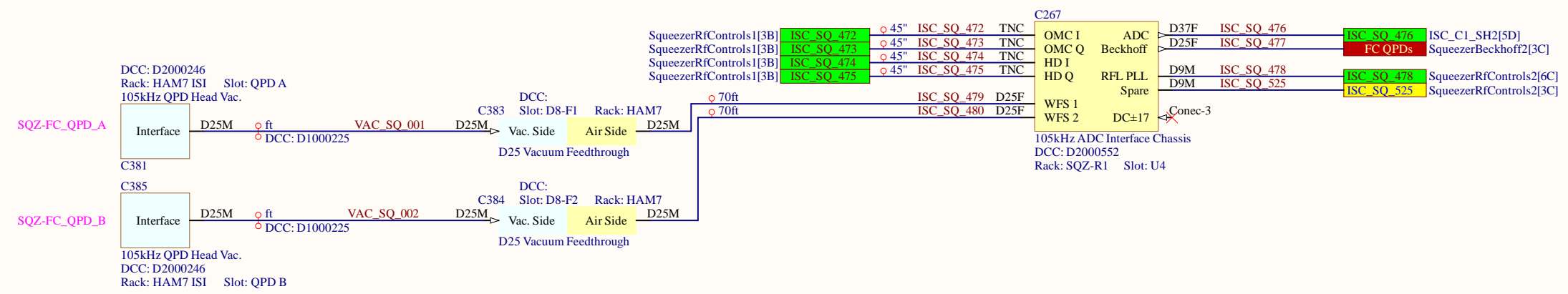
AS_B WFS 36MHz



AS_B WFS 45MHz

Need to check WFS RF!

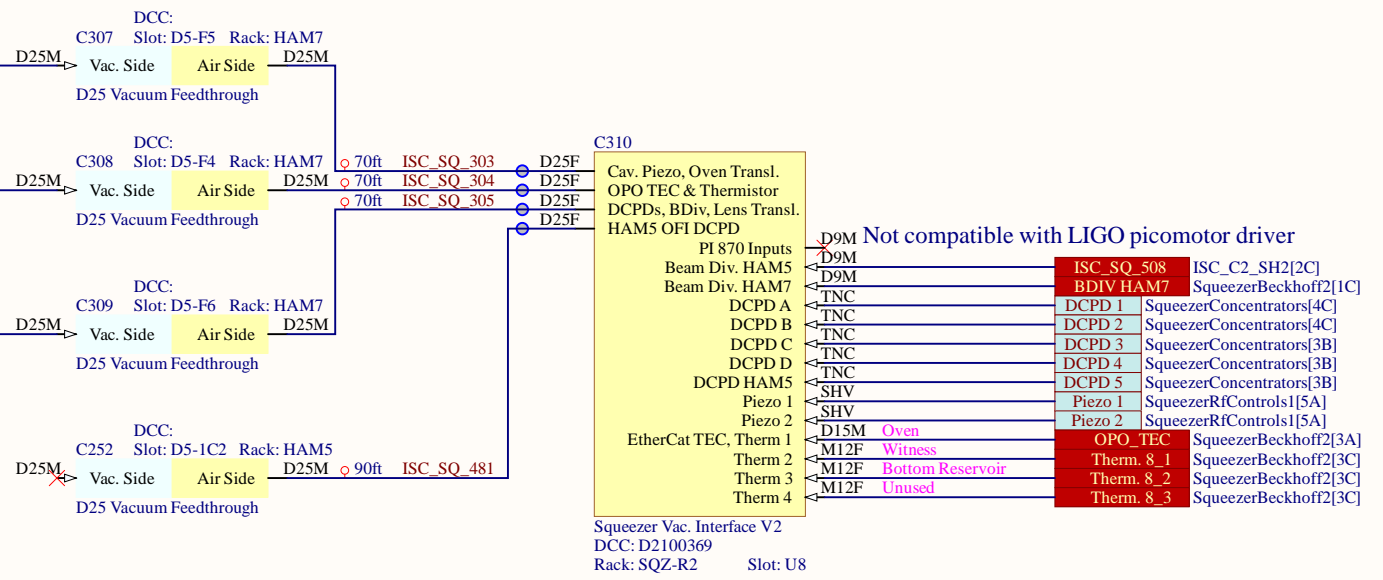
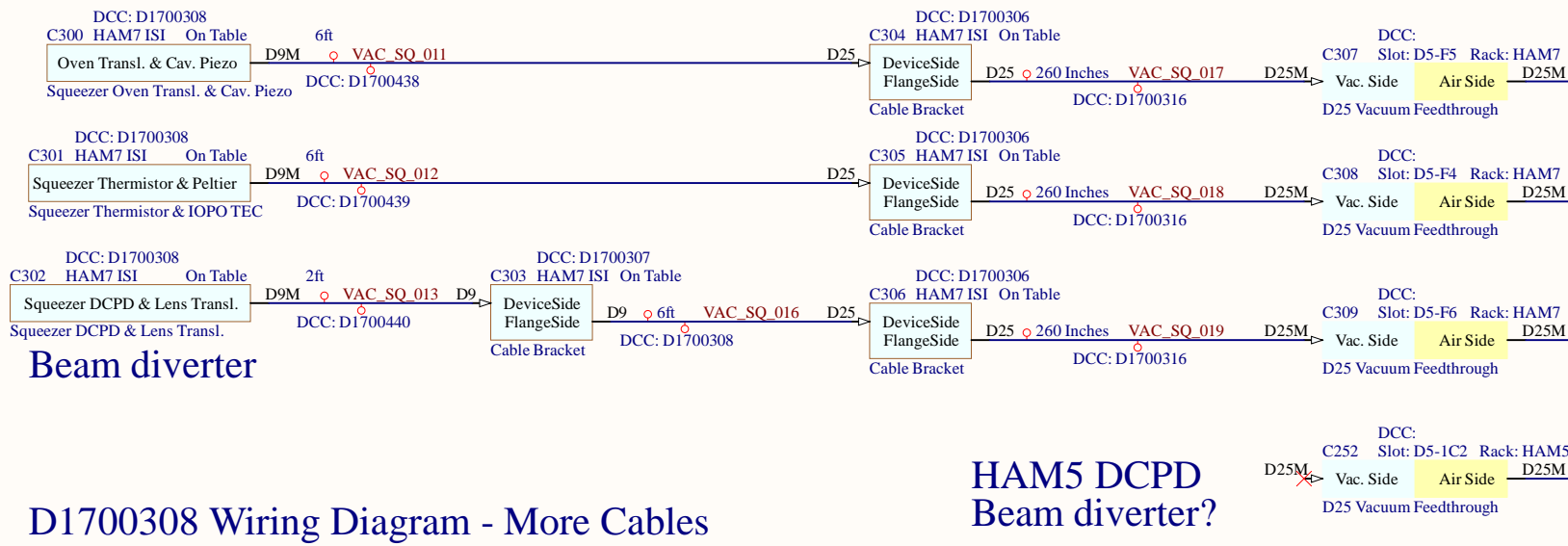
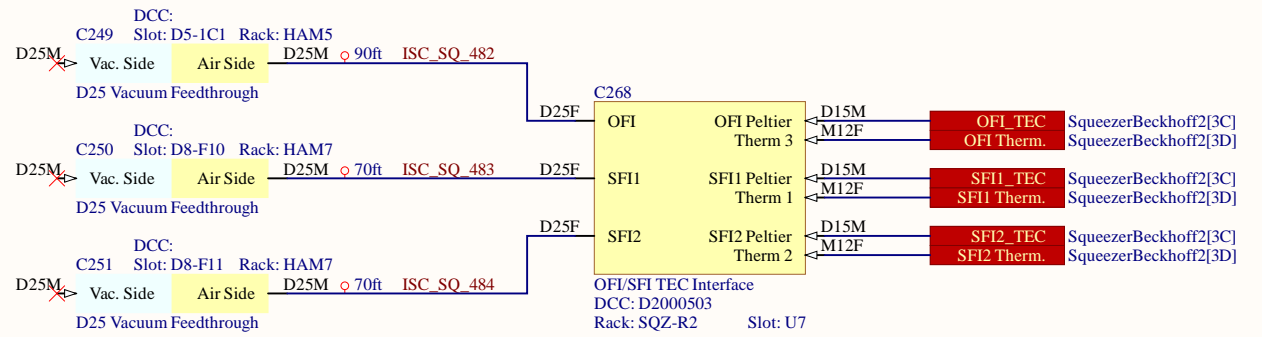
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Size	Number	Revision	
B	D1900511	V6	
Date:	10/06/2021	Sheet of	28 38
File:	C:\Users\...\\HAM6_SH1.SchDoc	Drawn By:	Filiberto Clara



Key

- Ties to Beckhoff
- Ties to RF Distribution
- 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 Wavefront Sensing			
Size	Number	Revision	
B	D1900511	V6	
Date:	10/06/2021	Sheet of	29 38
File:	C:\Users\...\SqueezerWfsWiring.SchDoc	Drawn By:	R. Abbott



Ties to Beckhoff

Key

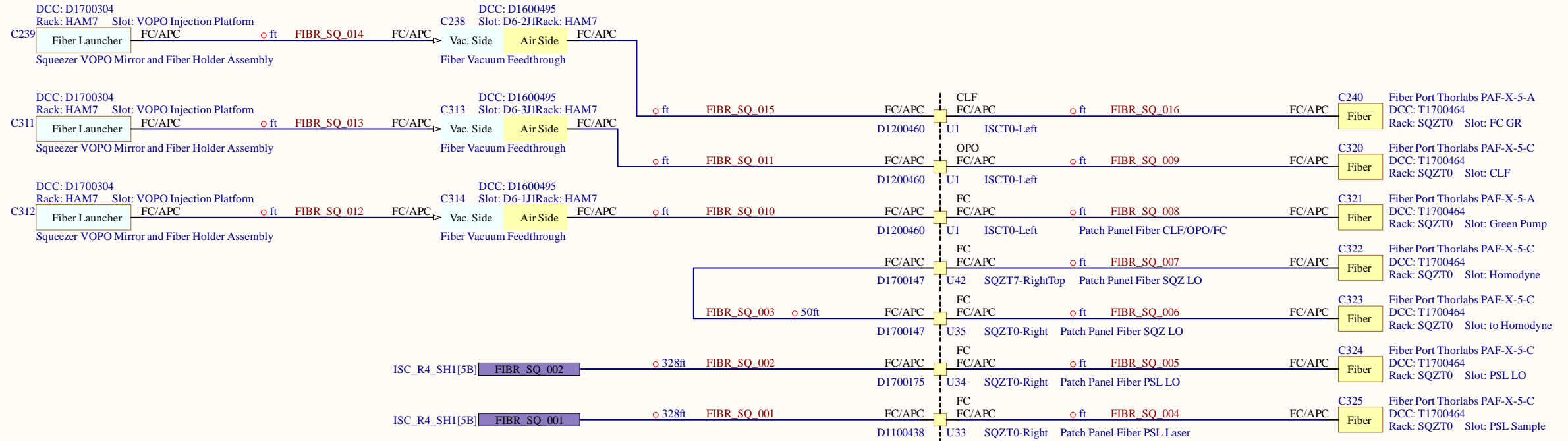
- Dot Identifies Cable Shield Terminating to Backshell
- Pin With Triangle Indicates Pin on Rear or the Like
- Pin With No Triangle Indicates Pin on Front or the Like
- Light Blue Symbols Are In-Vacuum
- Yellow Symbols Are In-Air

	LHO	LLO
DCPD A	Green pump	Green pump
DCPD B	Red CLF	Red CLF
DCPD C	Green FC	Green FC
DCPD D	OPI_A HAM7	OPI_A HAM7
DCPD HAM5	OPI_B HAM5	OPI_B HAM5

FC

CLF

OPO



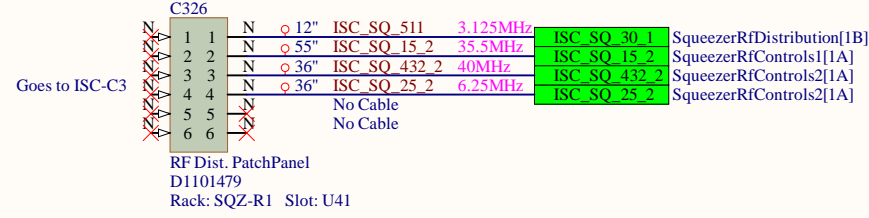
Last Edited: 2/22/2021

Title Squeezer Fiber Connections		LIGO Laboratory California Institute of Technology Massachusetts Institute of Technology		LIGO	
Size: B	DCC Number: D1900511	Revision: V6	Engineer: R. Abbott	Date: 10/6/2021	Time: 9:54:26 AM

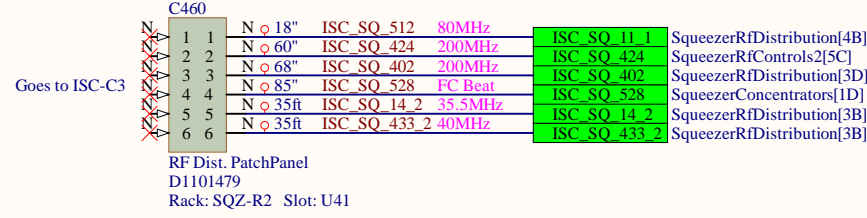
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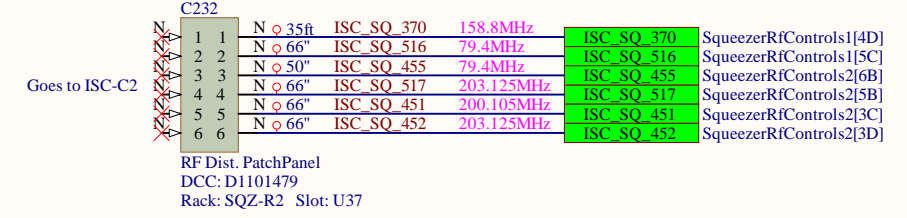
RF Patch Panel 34



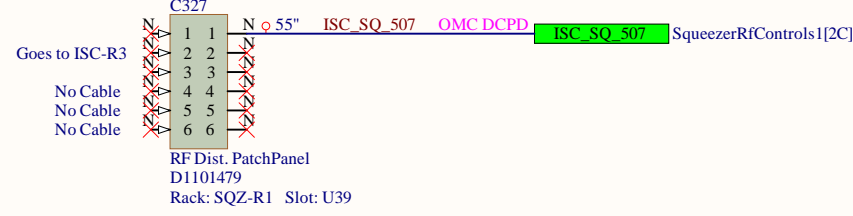
RF Patch Panel 36



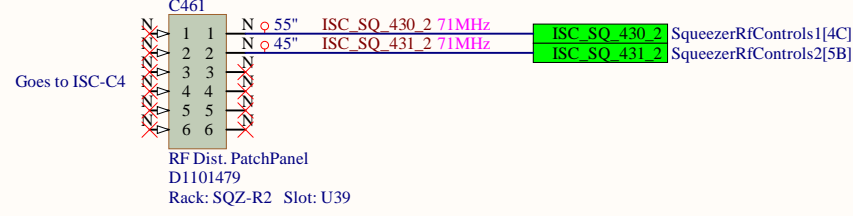
RF Patch Panel 38



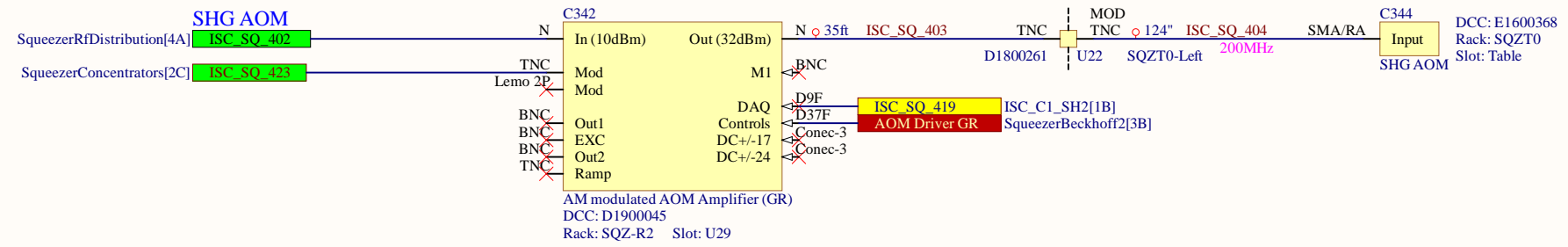
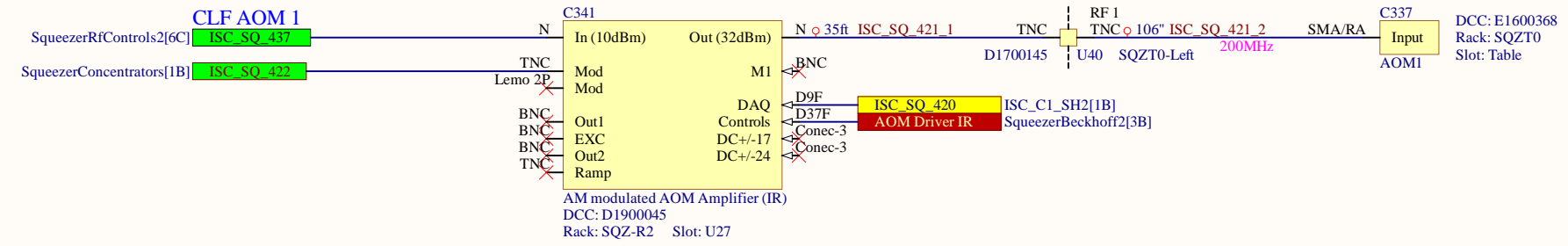
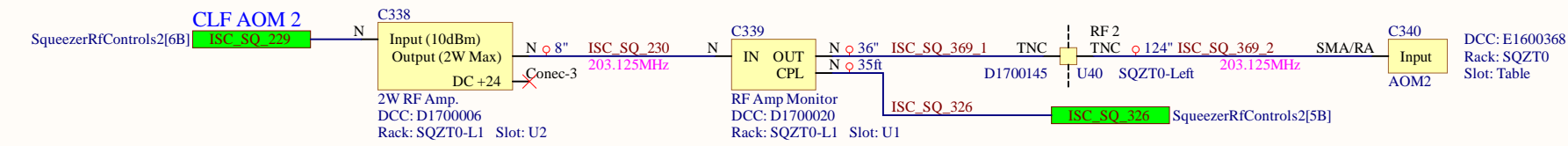
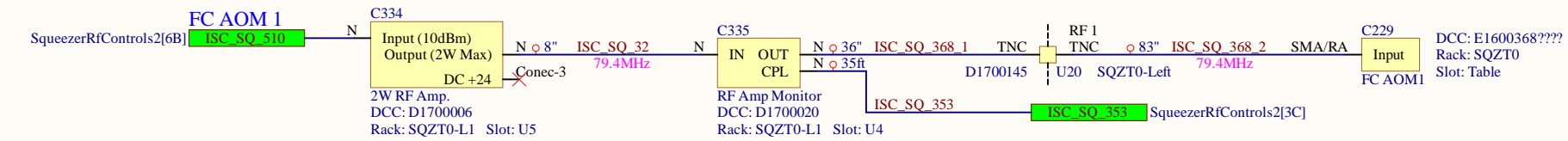
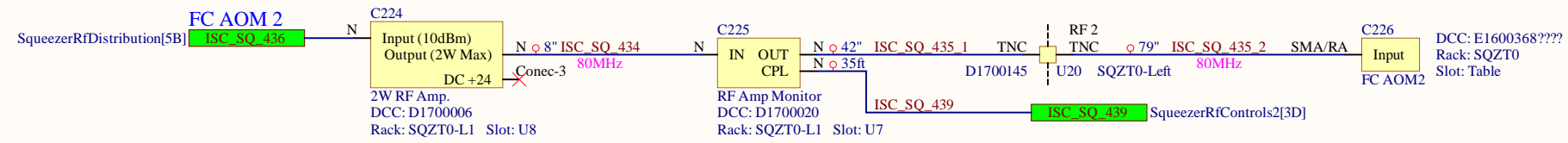
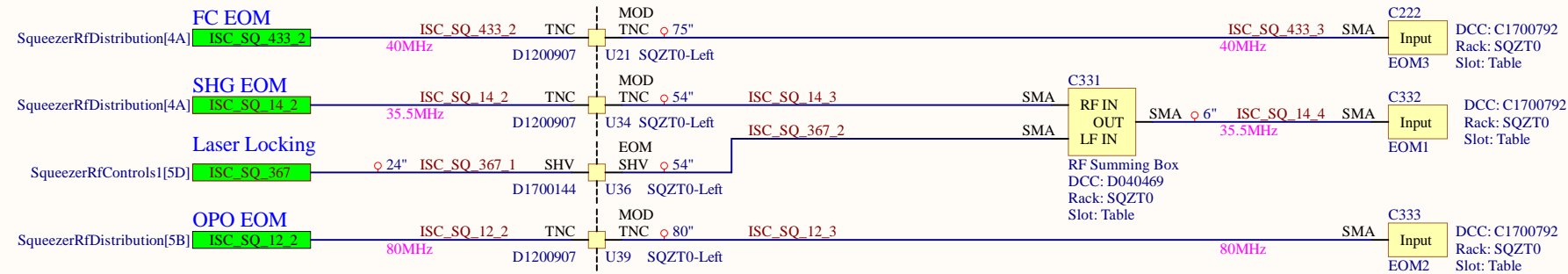
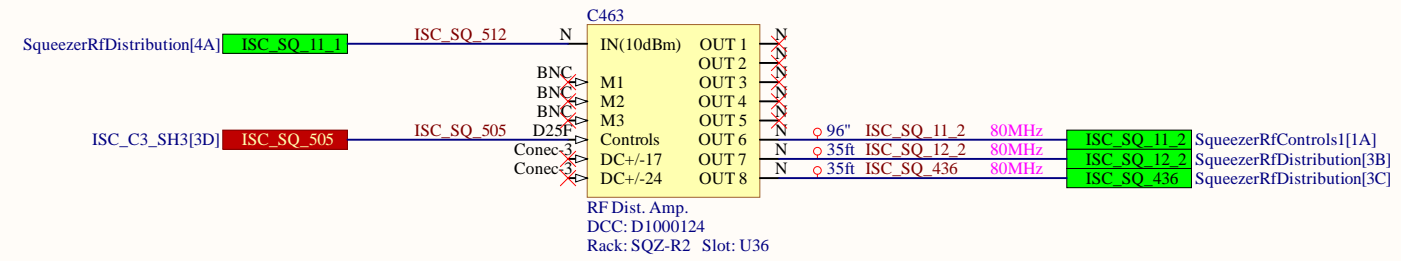
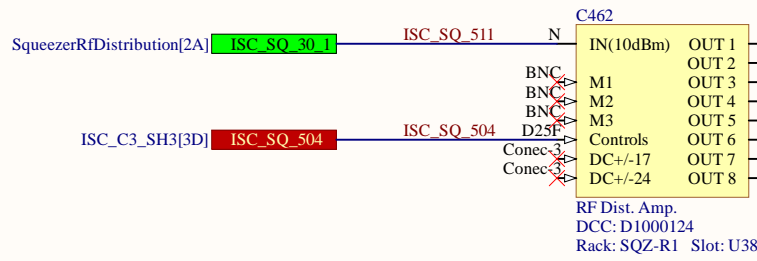
RF Patch Panel 35



RF Patch Panel 37



New cables for A_ start at ISC_SQ_430



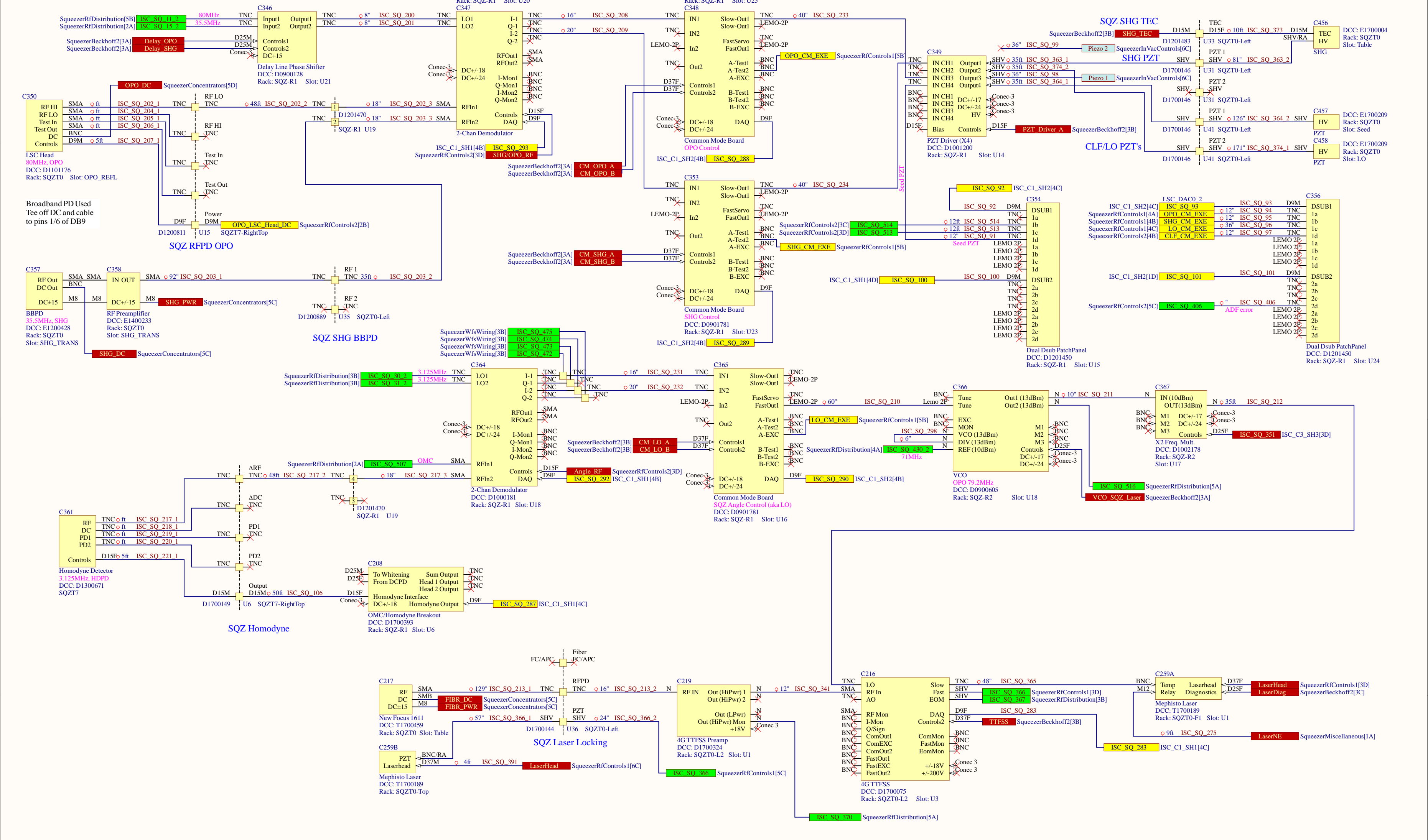
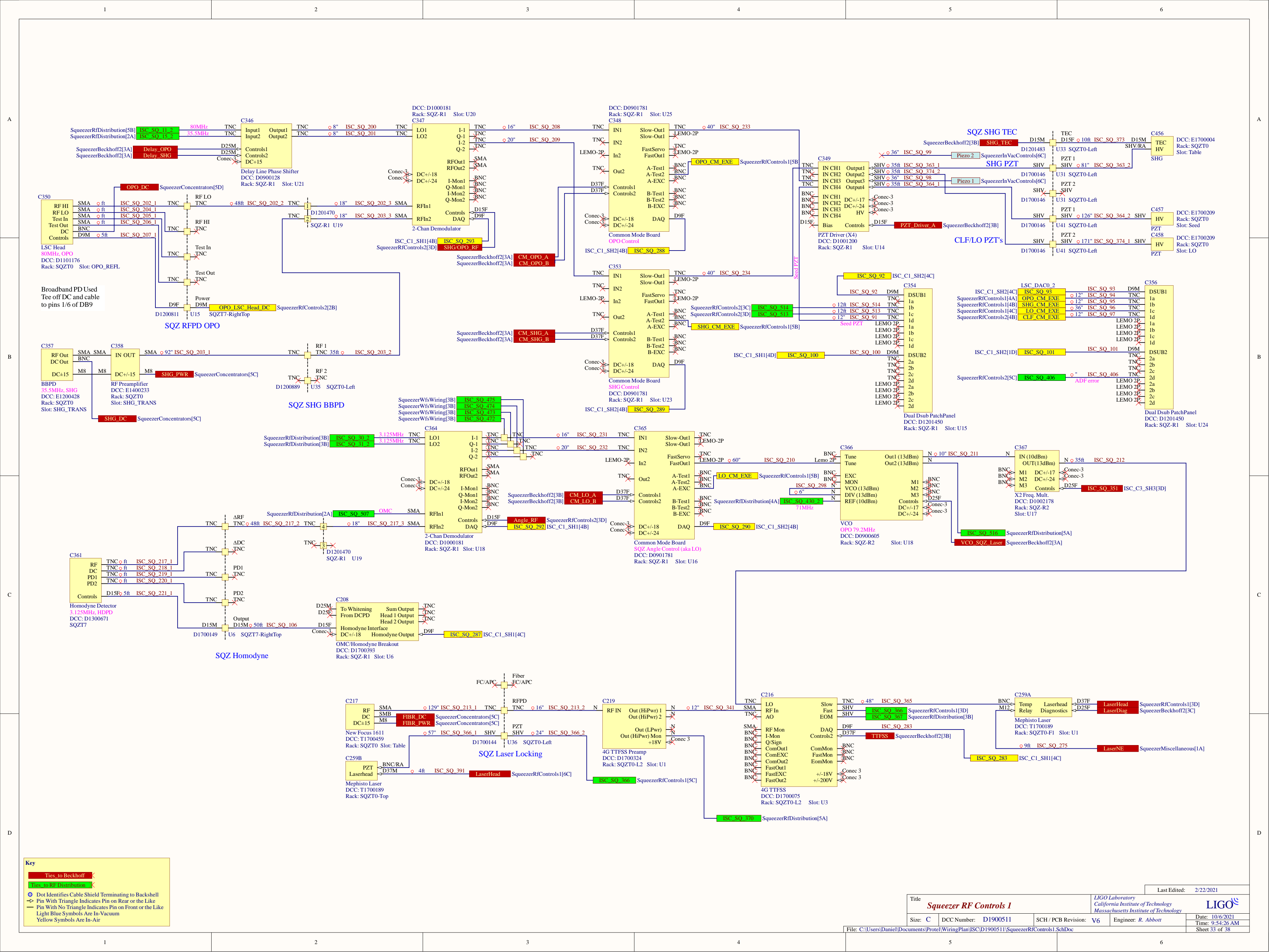
Part Number??

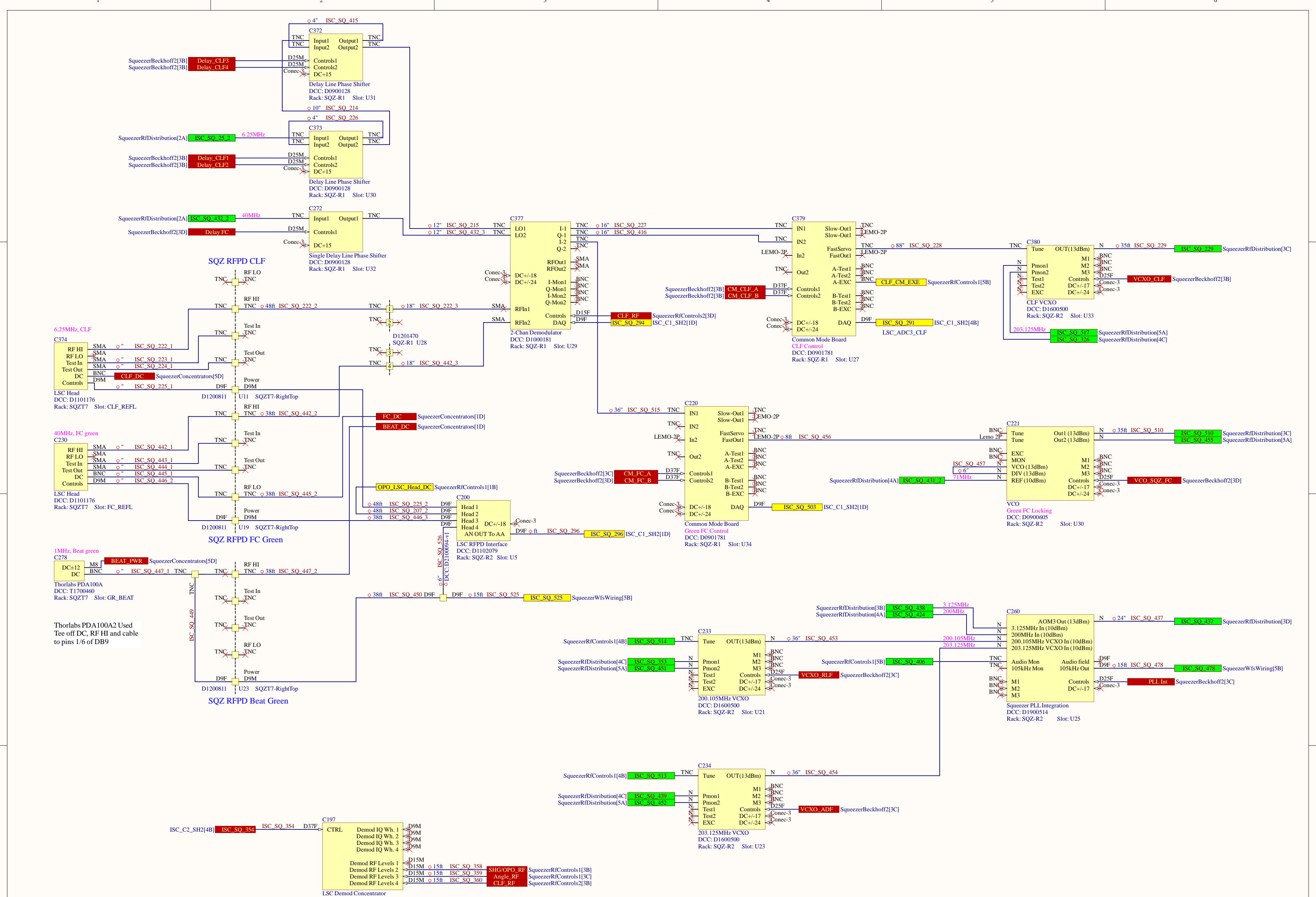
RF cables carrying the AOM signals need to be 1/4" superflexible helical corrugated coax.

Key

- Ties to Beckhoff
- Ties to RF Controls or WFS Wiring
- 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

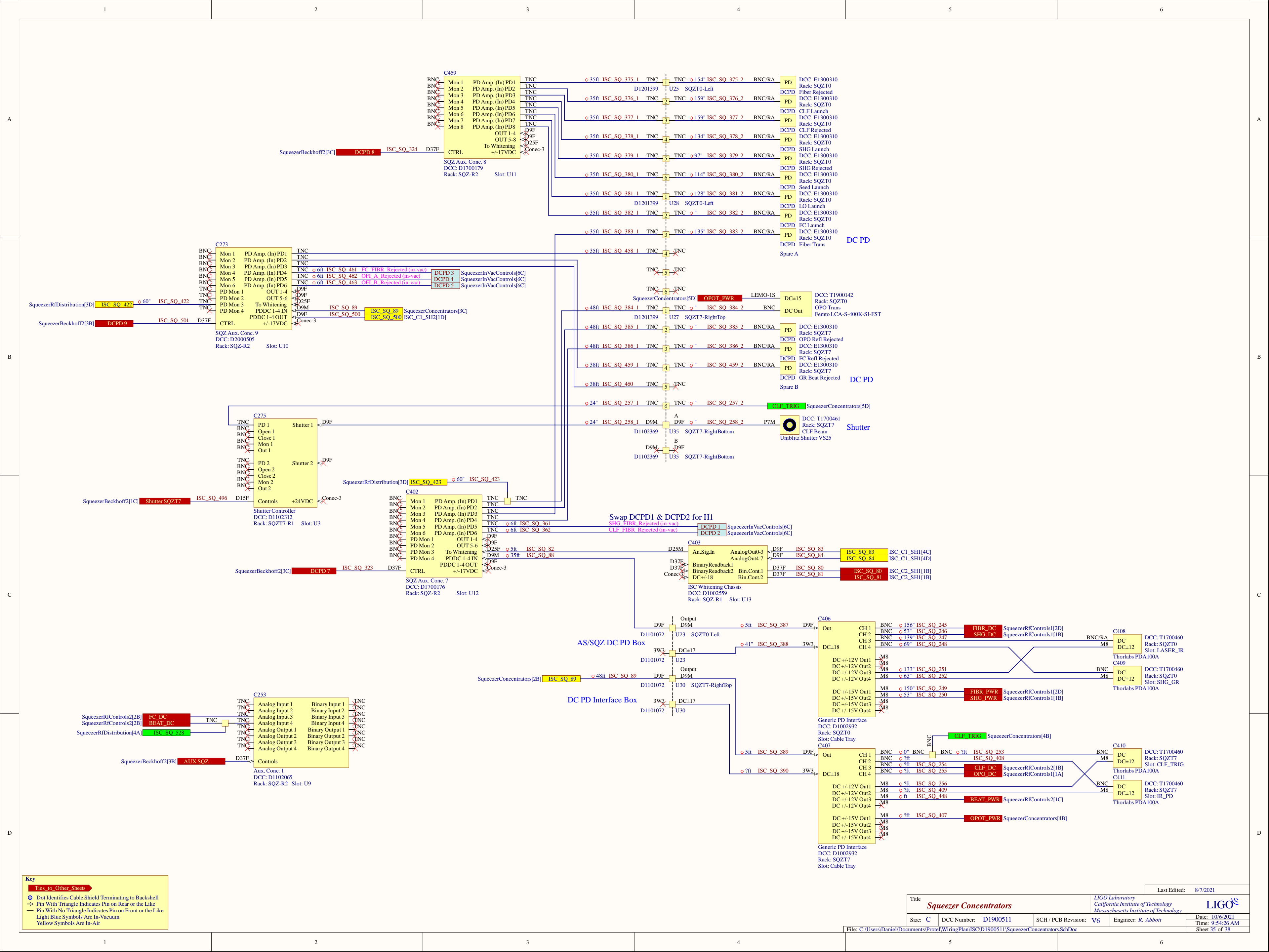
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Squeezer RF Distribution		
Size	Number	Revision
C	D1900511	V6
Date:	10/06/2021	Sheet of 32 38
File:	C:\Users\...SqueezerRfDistribution.SchDxDrawn By: R. Abbott	





Key

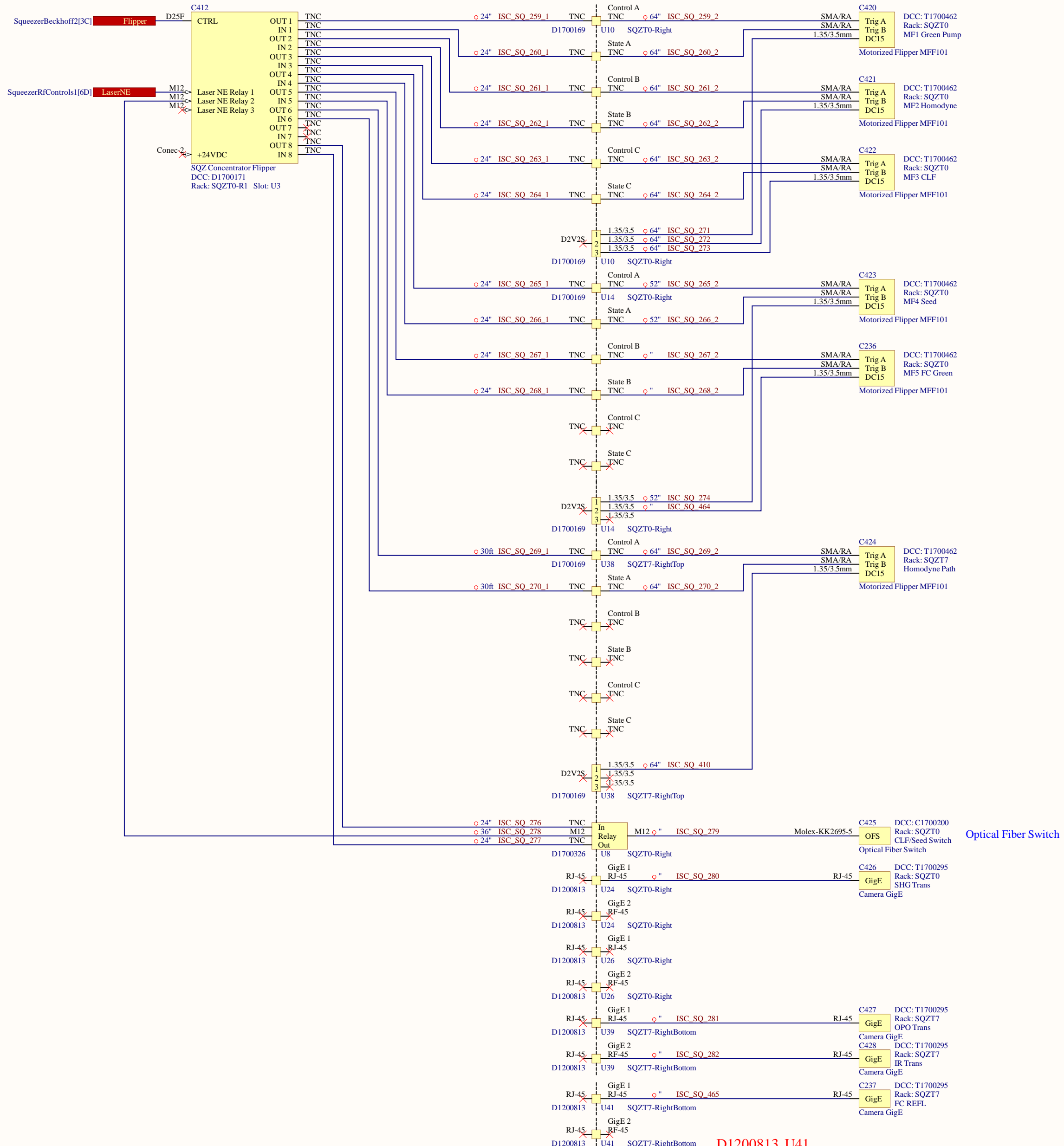
- Ties to Beckhoff
- Ties to RF Distribution
- Dot Identifies Cable Shield Terminating to Backshell
- ↔ Pin With Triangle Indicates Pin on Rear or the Like
- Pin With No Triangle Indicates Pin on Front or the Like
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- Yellow Symbols Are In-Air



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
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- Yellow Symbols Are In-Air

Title Squeezer Concentrators		LIGO Laboratory California Institute of Technology Massachusetts Institute of Technology		Last Edited: 8/7/2021	
Size: C	DCC Number: D1900511	SCH / PCB Revision: V6	Engineer: R. Abbott	Date: 10/6/2021	Time: 9:54:26 AM
File: C:\Users\Daniel\Documents\Protel\WiringPlan\ISCD1900511\SqueezerConcentrators_SchDoc					Sheet 35 of 38

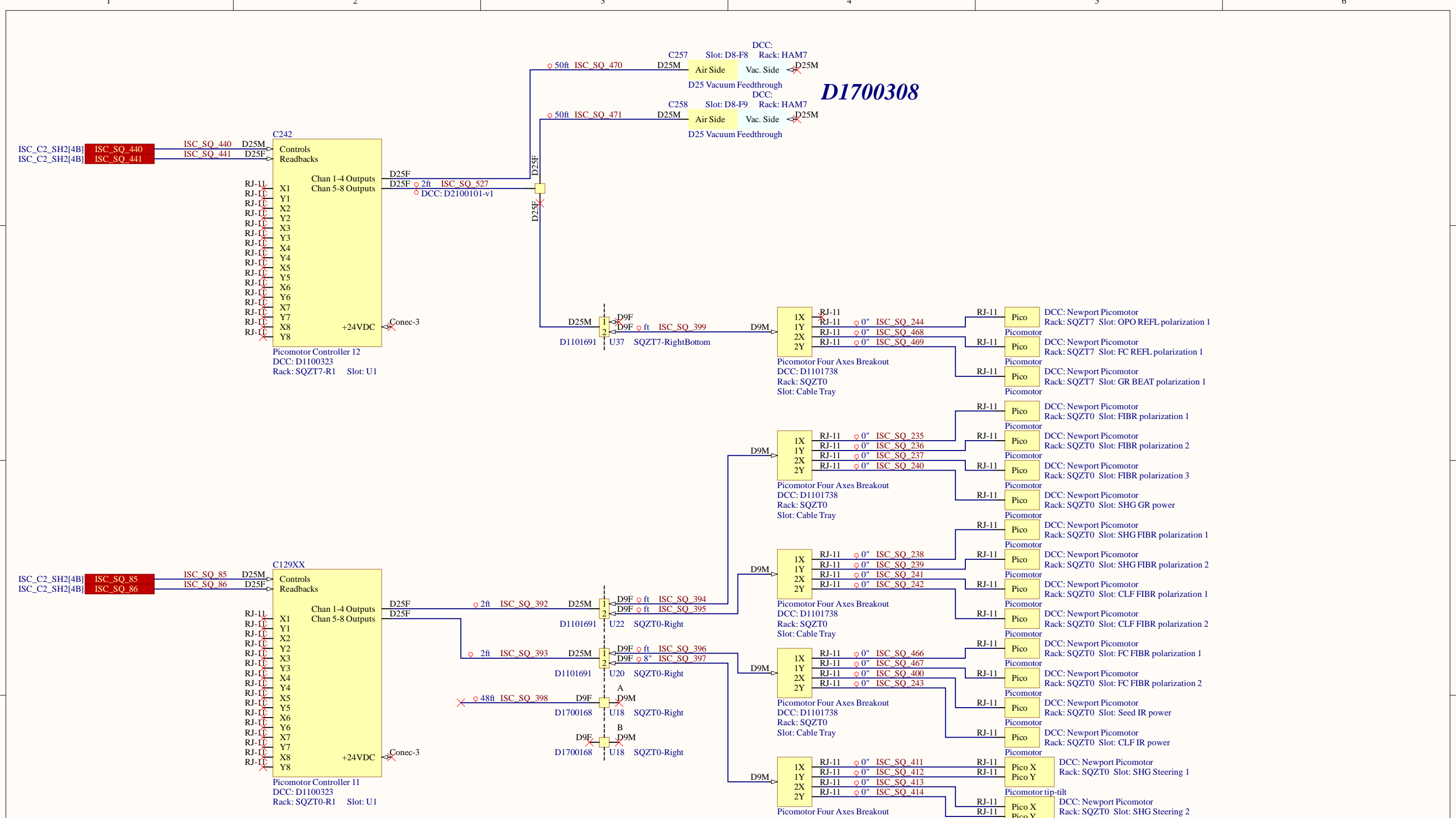


D1200813, U41
New Cameras per Table Feedthrough Panel

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
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- Yellow Symbols Are In-Air

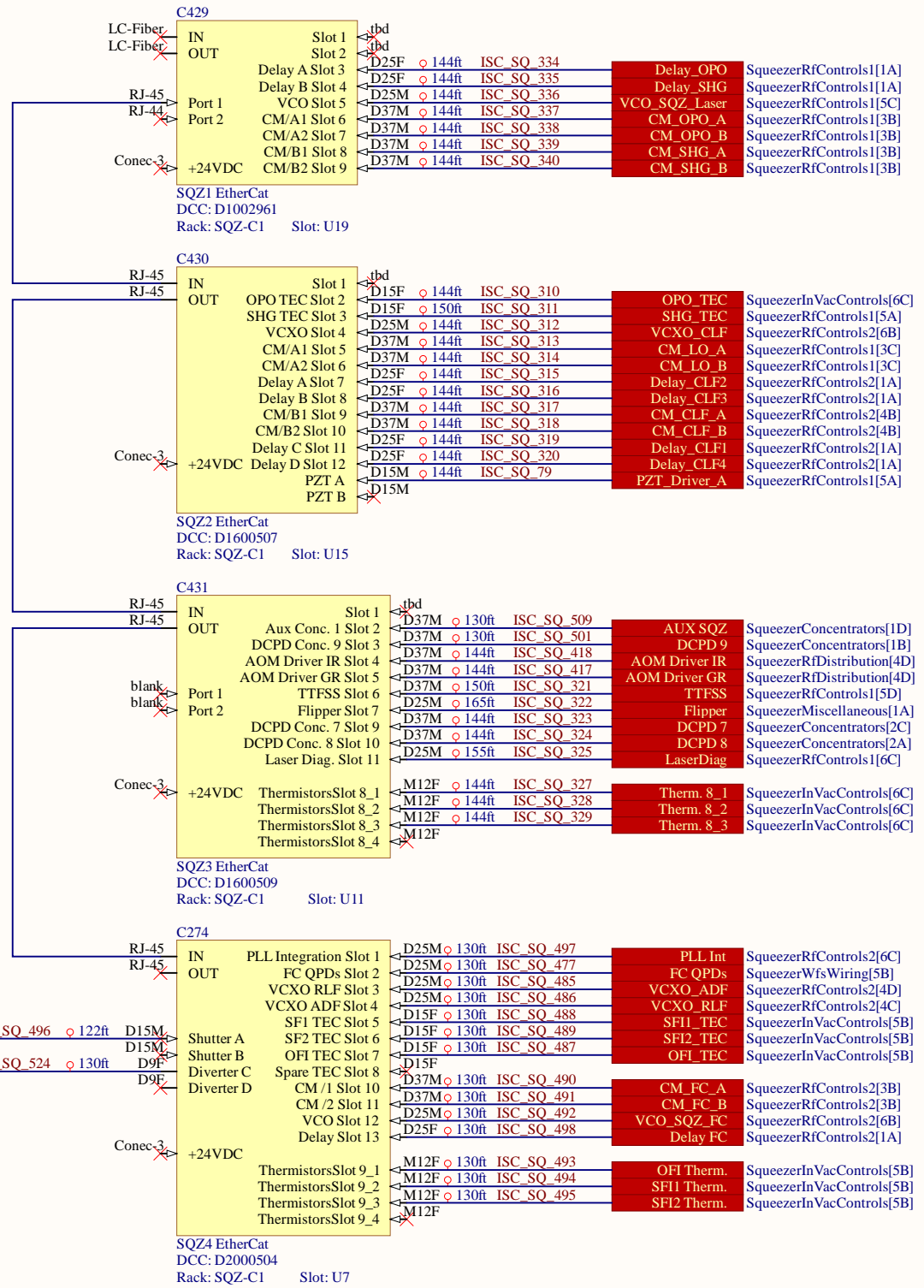
Title Squeezer Miscellaneous		LIGO Laboratory California Institute of Technology Massachusetts Institute of Technology		LIGO	
Size: C	DCC Number: D1900511	SCH / PCB Revision: V6	Engineer: R. Abbott	Date: 10/6/2021	Time: 9:54:27 AM
File: C:\Users\Daniel\Documents\Protel\WiringPlan\ISCD1900511\SqueezerMiscellaneous.SchDoc				Last Edited: 2/10/2021	
				Sheet 36 of 38	



Key

- Ties to Other Sheets
- Dot Identifies Cable Shield Terminating to Backshell
- ▷ Pin With Triangle Indicates Pin on Rear or the Like
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Title		
Squeezer Beckhoff Interfaces		
Size	Number	Revision
B	D1900511	V6
Date:	10/06/2021	Sheet of 7 38
File:	C:\Users\... \SqueezerBeckhoff1.SchDoc	Drawn By: R. Abbott



Key

- Ties to Other Sheets
- Dot Identifies Cable Shield Terminating to Backshell
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Title		
Squeezer Beckhoff Interfaces		
Size	Number	Revision
B	D1900511	V6
Date:	10/06/2021	Sheet of 8 38
File:	C:\Users\... \SqueezerBeckhoff2.SchDoc	Drawn By: R. Abbott