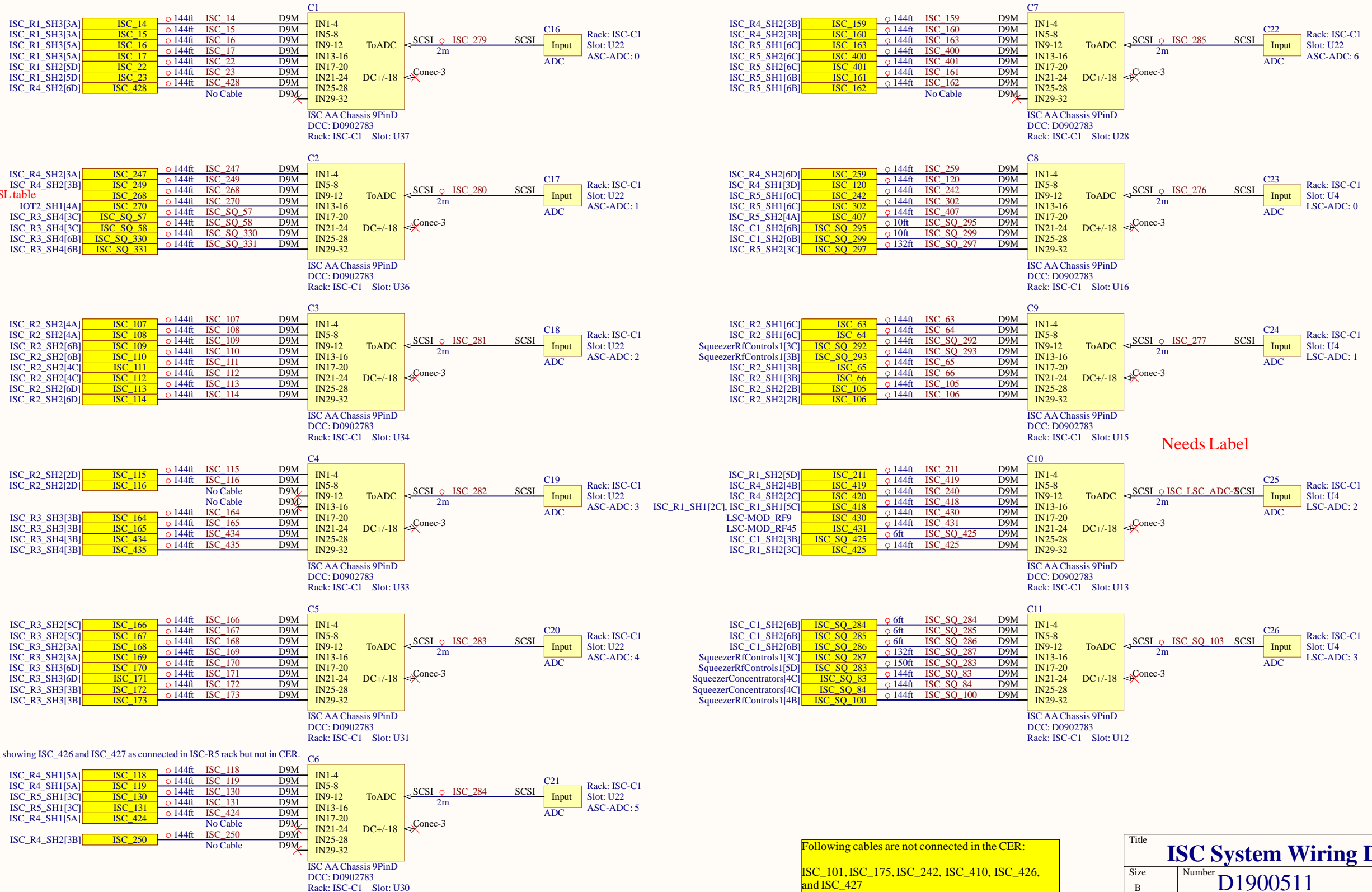


ISC-C1 Rack

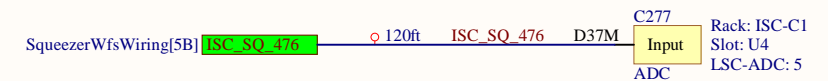
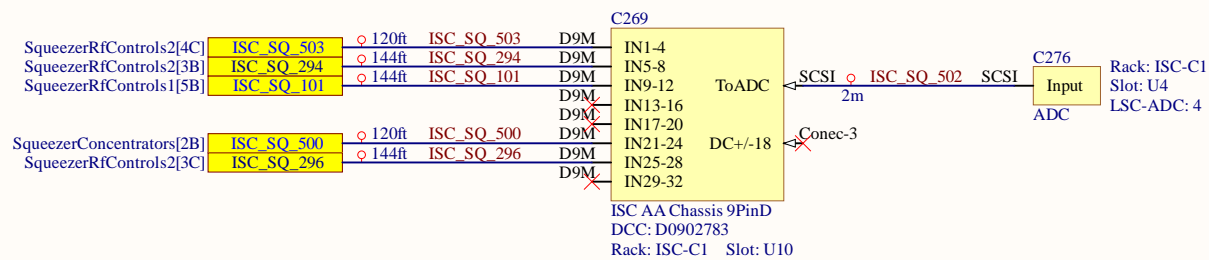
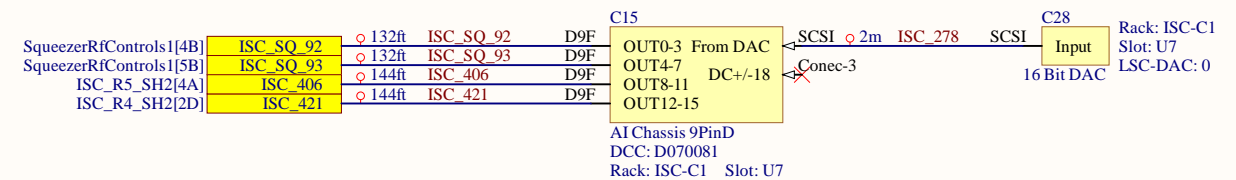
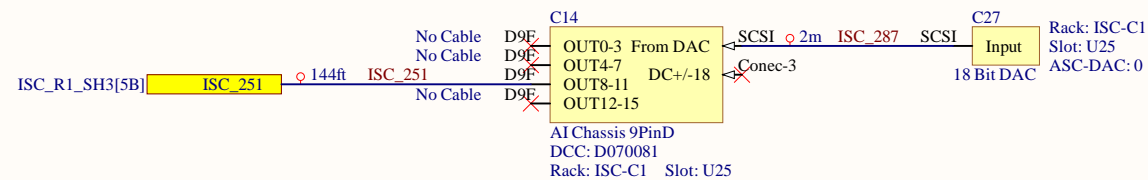
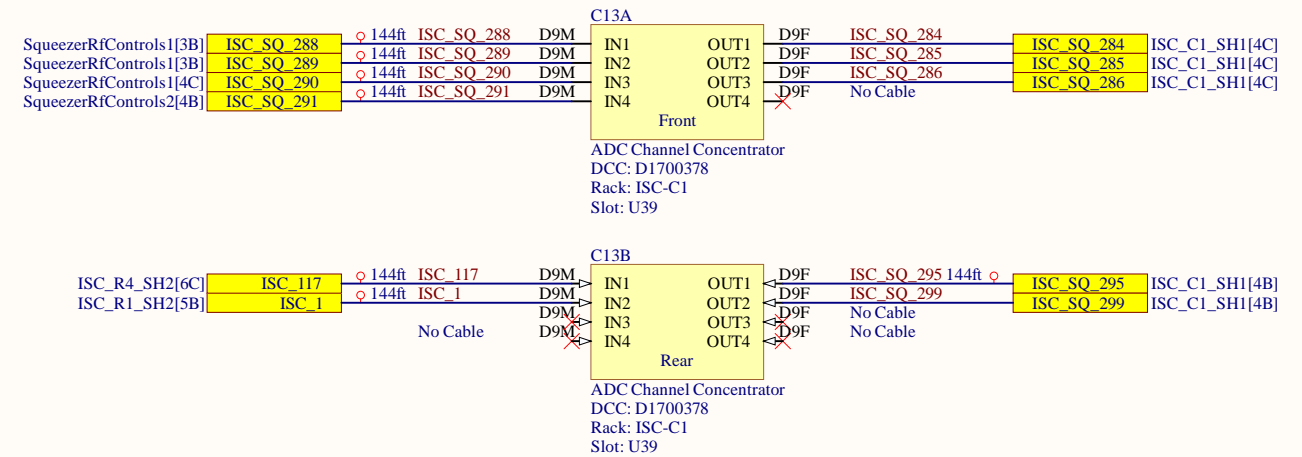
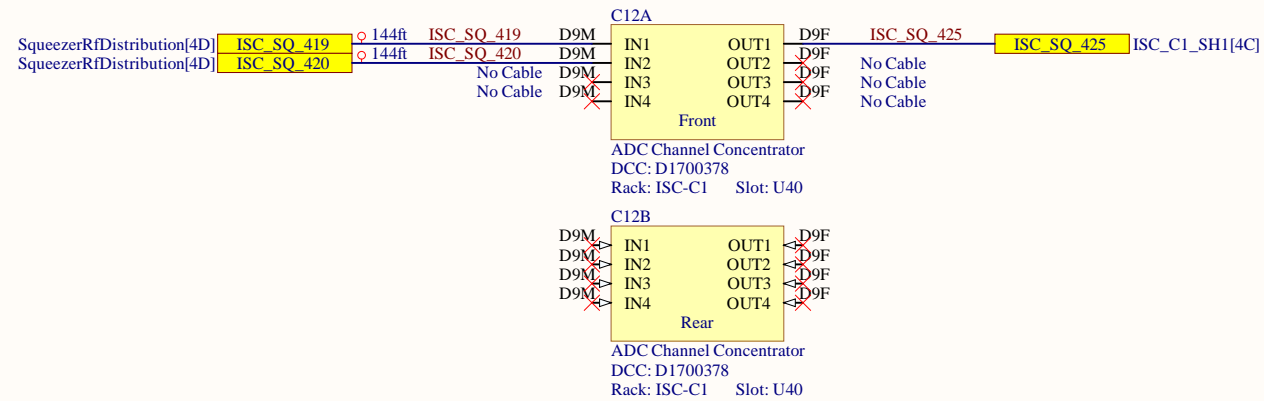


Reverify cables, showing ISC_426 and ISC_427 as connected in ISC-R5 rack but not in CER.

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 B	Number D1900511	Revision V7
Date: 8/24/2022	Sheet of 1	38
File: C:\Users\...ISC_C1_SH1.SchDoc	Drawn By: Filiberto Clara	

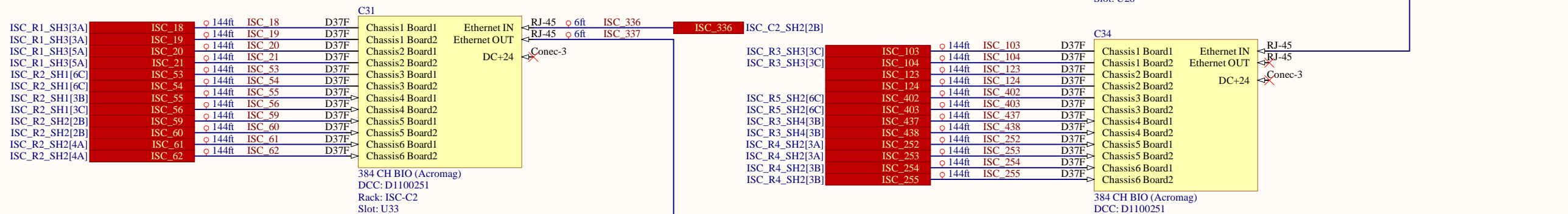
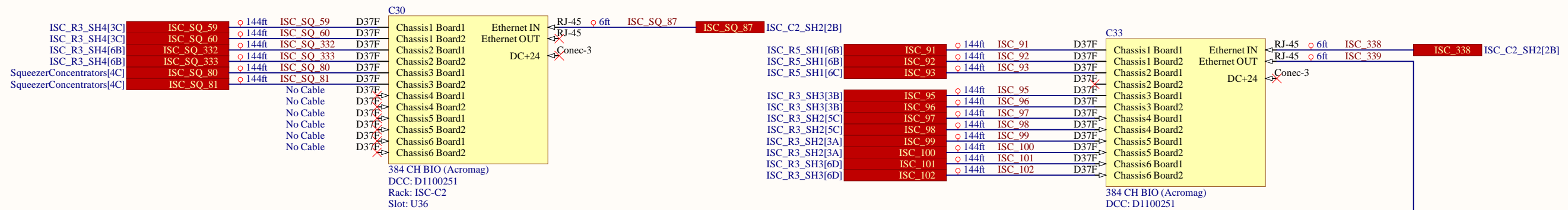
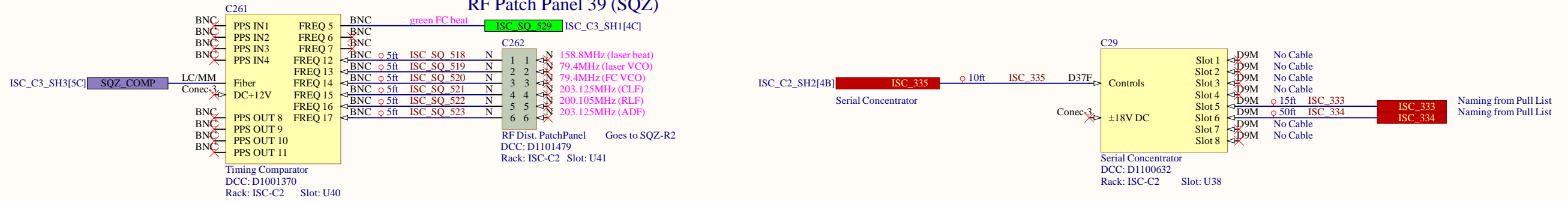
ISC-C1 Rack



Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V7
Date:	8/24/2022	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	V7
Date:	8/24/2022	Sheet of 3 38
File:	C:\Users\...ISC_C2_SH1.SchDoc	Drawn By: Filiberto Clara

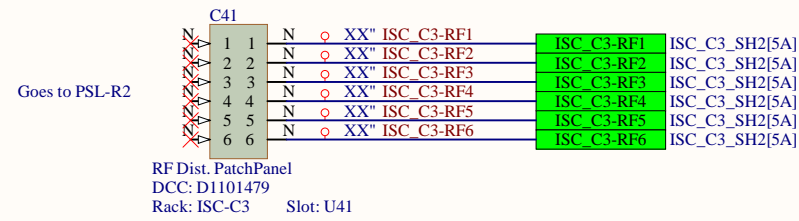
ISC-C2 Rack



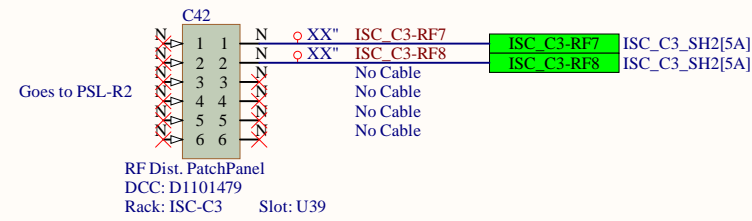
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Size	Number	Revision
C	D1900511	V7
Date:	8/24/2022	Sheet of 38
File:	C:\Users\...ISC_C2_SH2.SchDoc	Drawn By: Filiberto Clara

ISC-C3 Rack

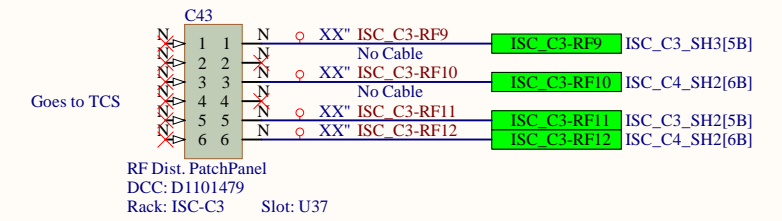
RF Patch Panel 7 (PSL)



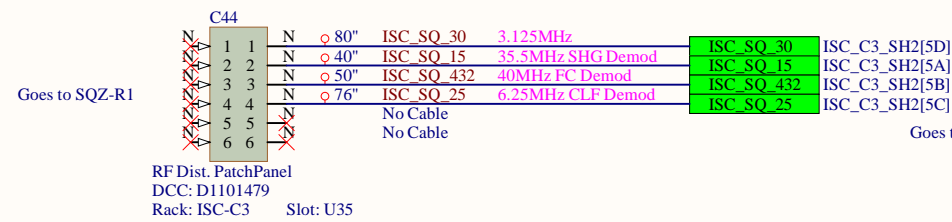
RF Patch Panel 8 (PSL)



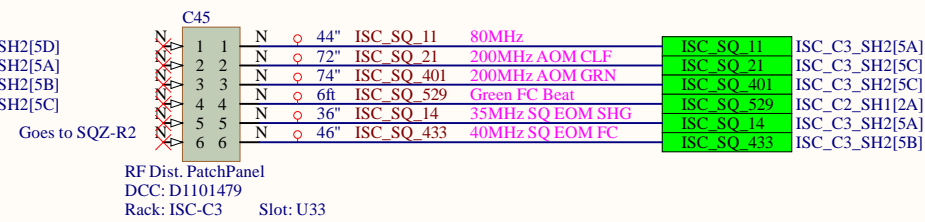
RF Patch Panel 9 (TCS)



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 B	Number D1900511	Revision V7
Date: 8/24/2022	Sheet of 5	38
File: C:\Users\...\ISC_C3_SH1.SchDoc	Drawn By: Filiberto Clara	

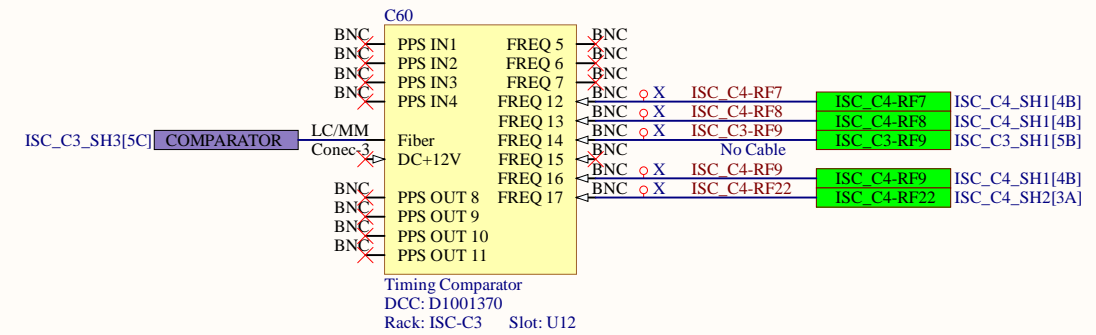
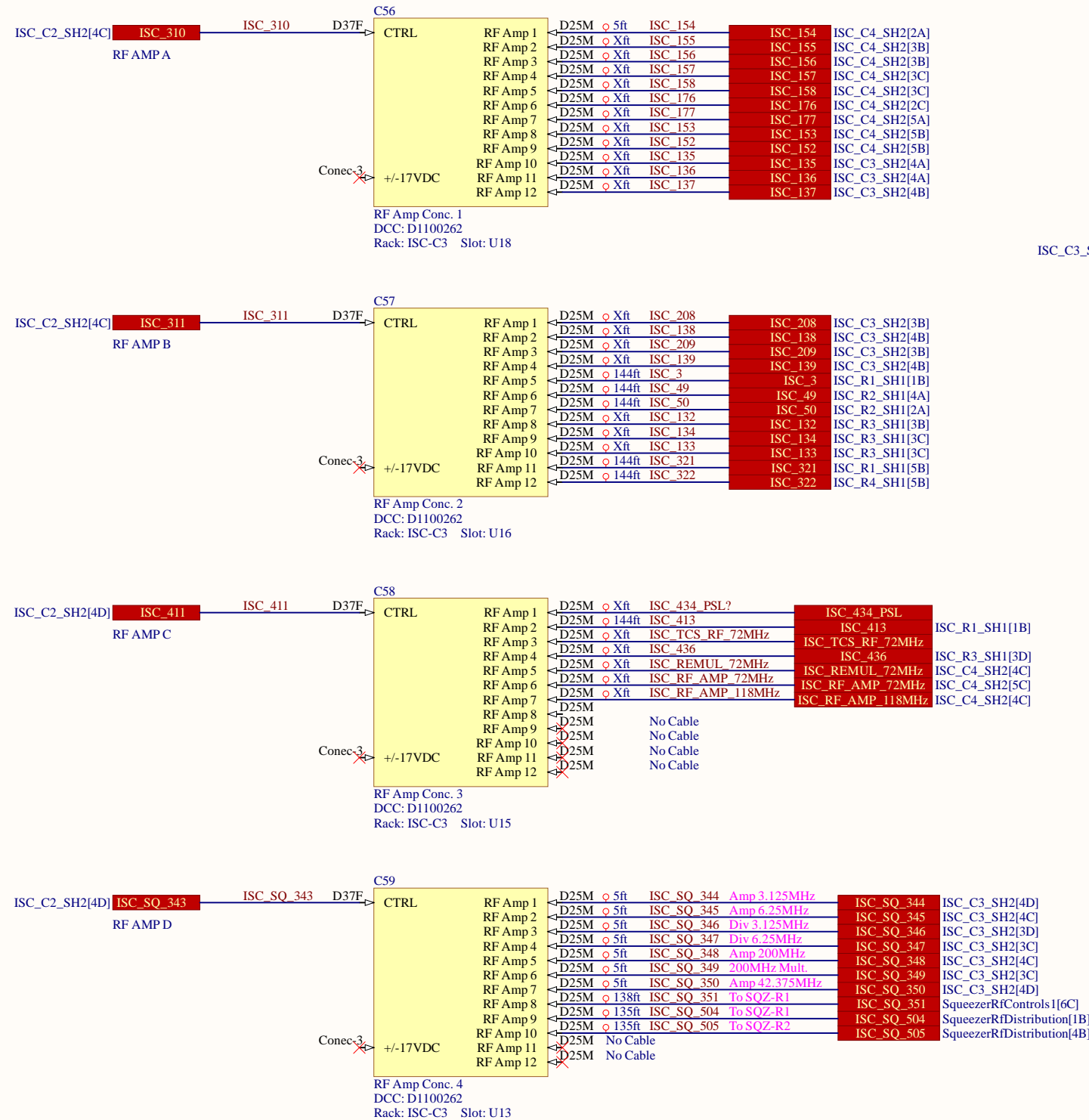
ISC-C3 Rack



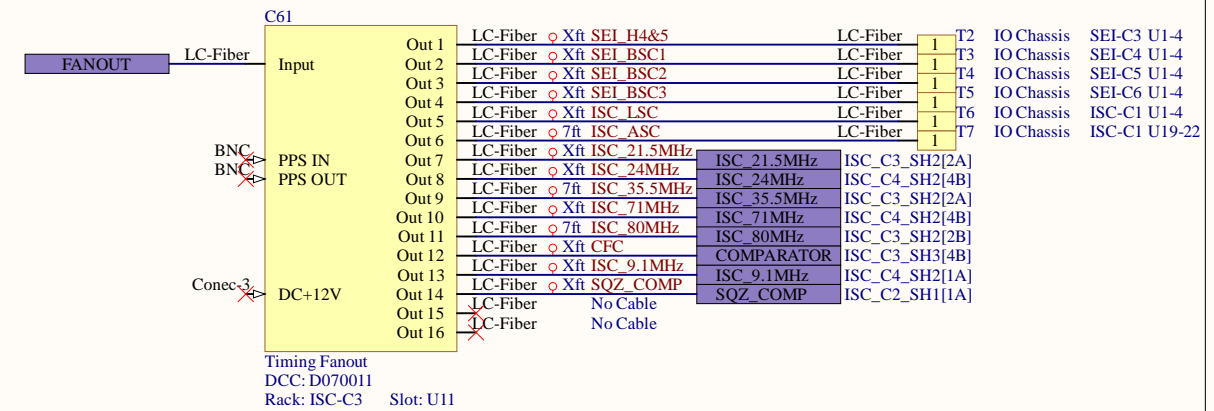
Need to label IFR cable with RF22

Title		ISC System Wiring Diagram	
Size	Number	Revision	
C	D1900511	V7	
Date:	8/24/2022	Sheet of 6	38
File:	C:\Users\...ISC_C3_SH2.SchDoc	Drawn By:	Filiberto Clara

ISC-C3 Rack



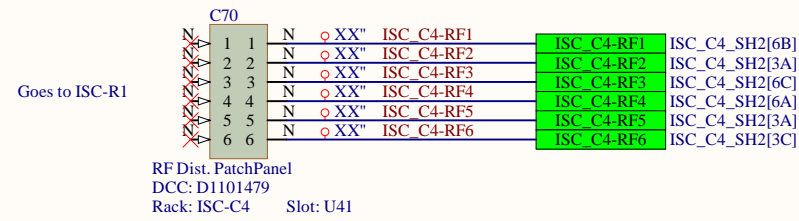
Need Locations of other ends.
 SEI IO Chassis



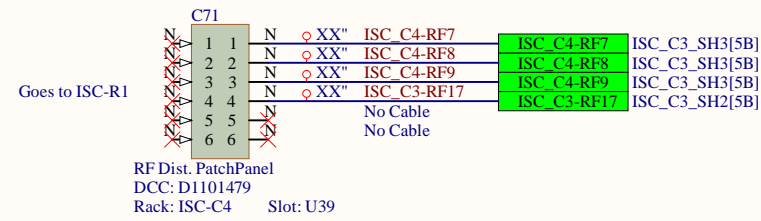
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Size	Number	Revision	
B	D1900511	V7	
Date:	8/24/2022	Sheet of 7	38
File:	C:\Users\...ISC_C3_SH3.SchDoc	Drawn By: Filiberto Clara	

ISC-C4 Rack

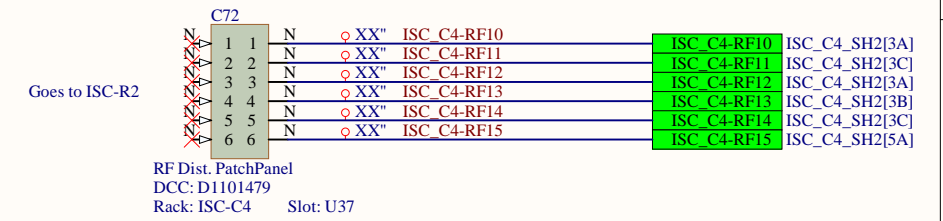
RF Patch Panel 1 (ISC)



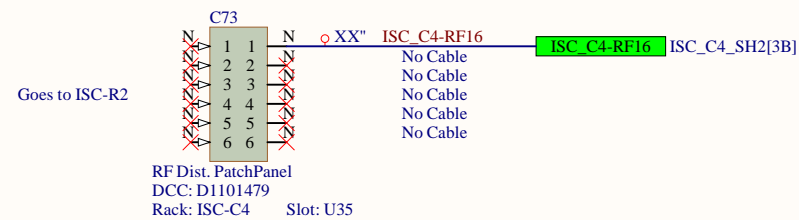
RF Patch Panel 2 (ISC)



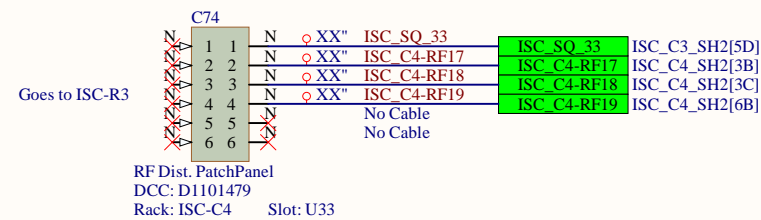
RF Patch Panel 3 (ISC)



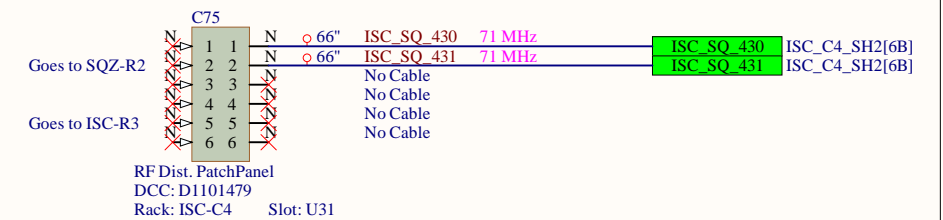
RF Patch Panel 4 (ISC)



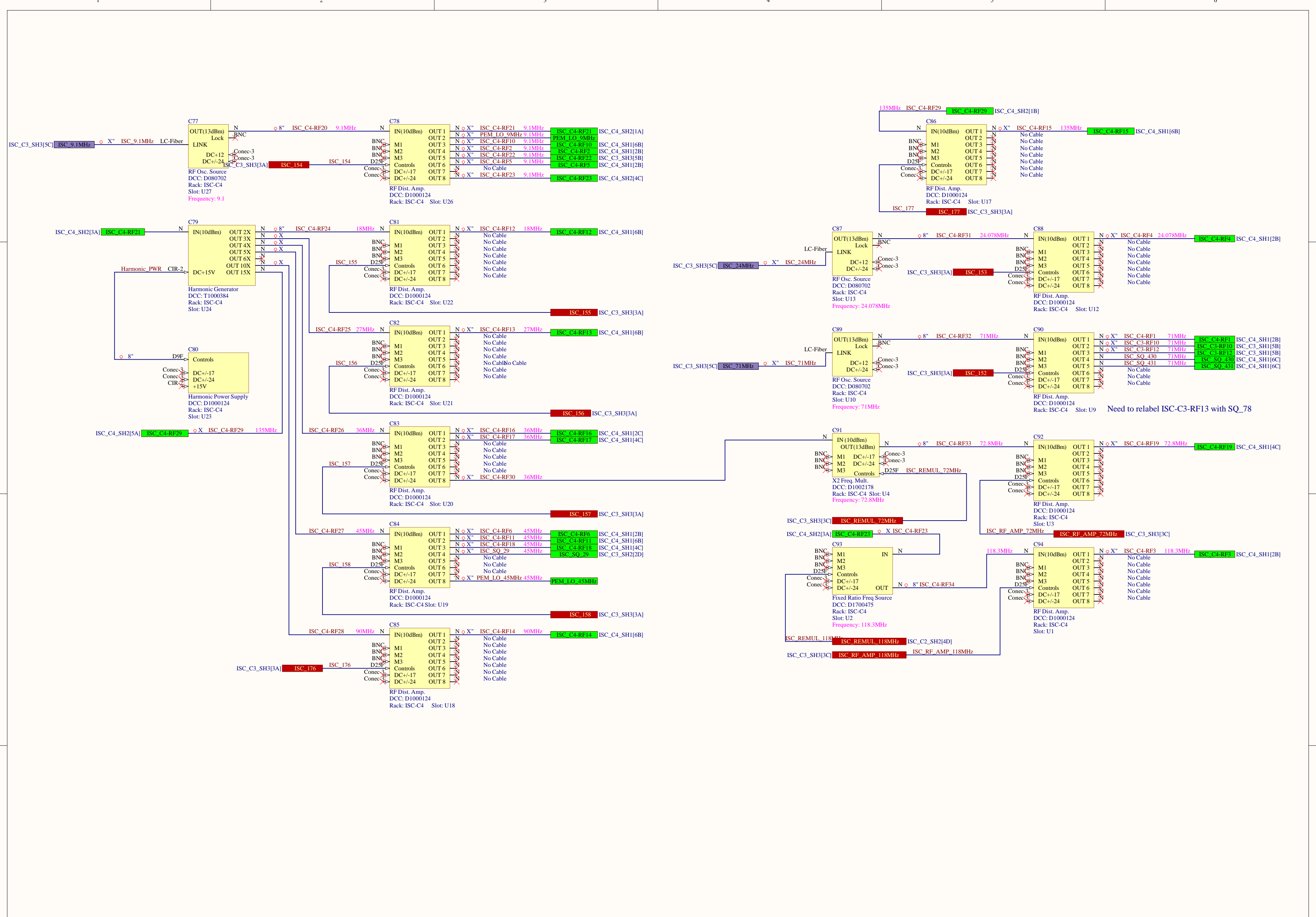
RF Patch Panel 5 (ISC)



RF Patch Panel 6 (SQZ/ISC)



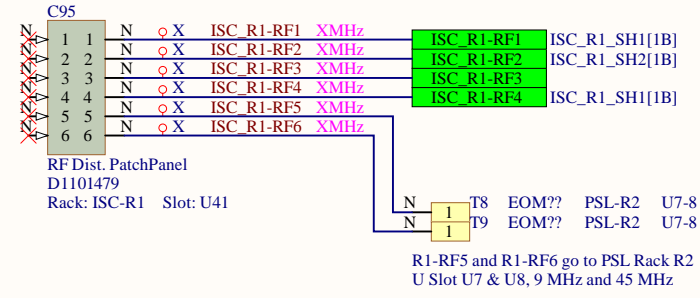
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ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V7
Date:	8/24/2022	Sheet of 8 38
File:	C:\Users\...\ISC_C4_SH1.SchDoc	Drawn By: Filiberto Clara



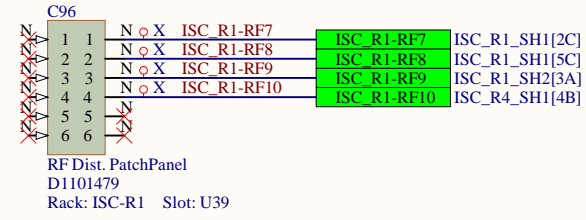
ISC-C4 Rack

Title			
ISC System Wiring Diagram			
Size	Number	Revision	
C	D1900511	V7	
Date:	8/24/2022	Sheet of 9	38
File:	C:\Users\...ISC_C4_SH2.SchDoc	Drawn By: Filiberto Clara	

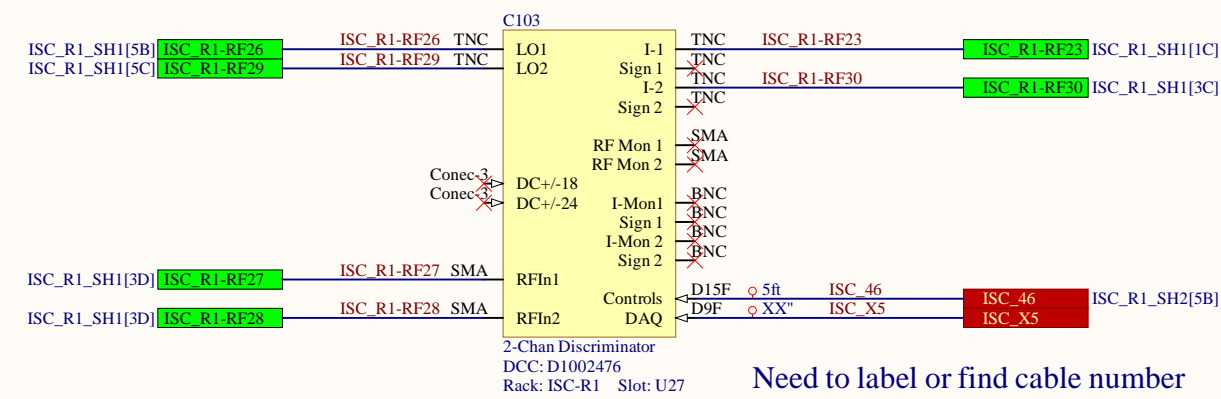
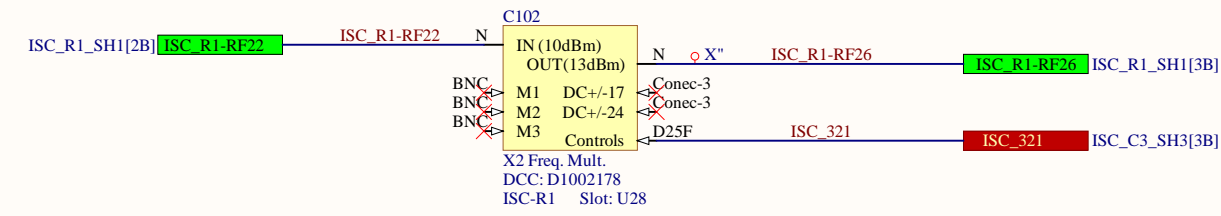
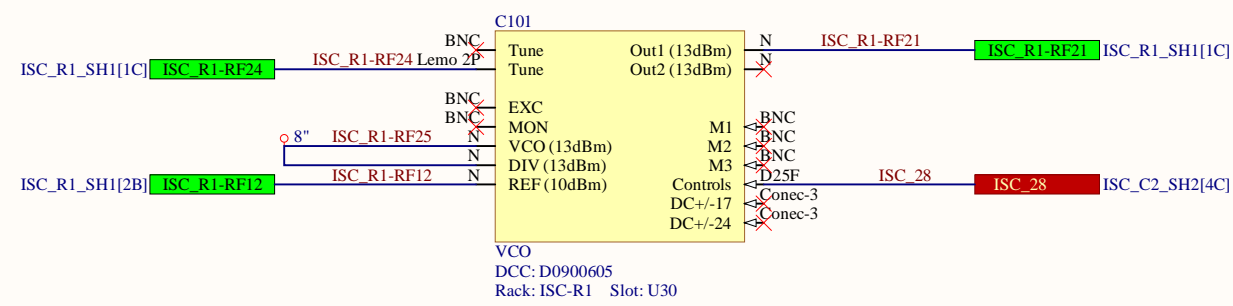
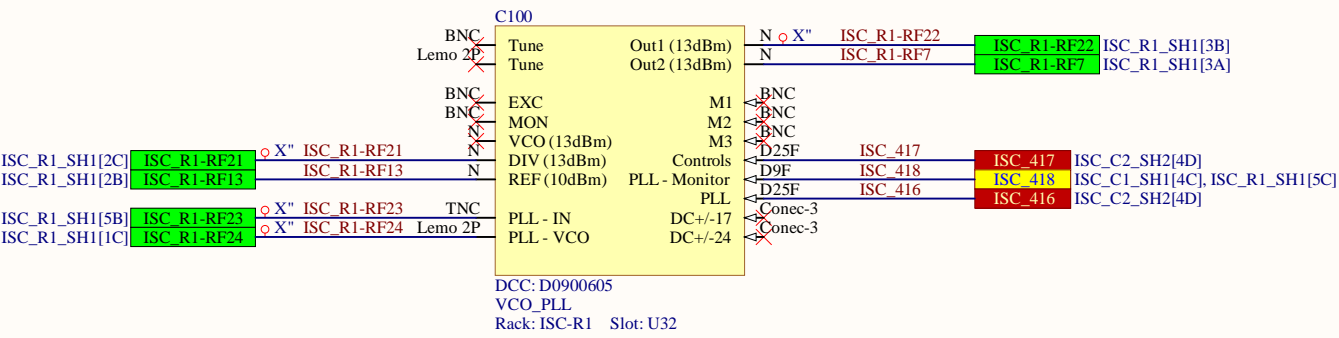
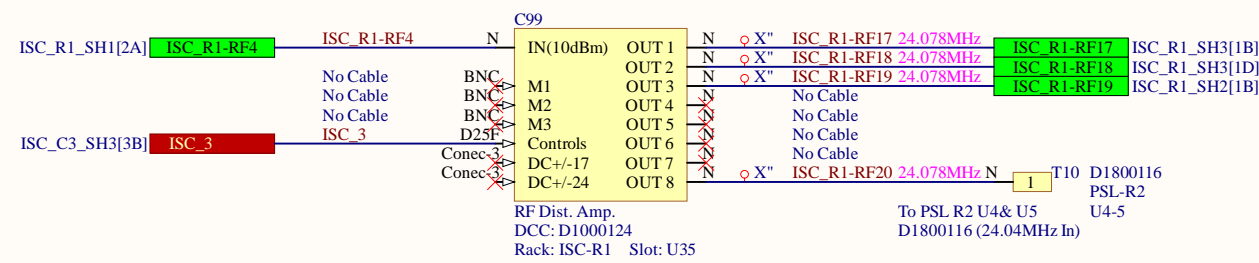
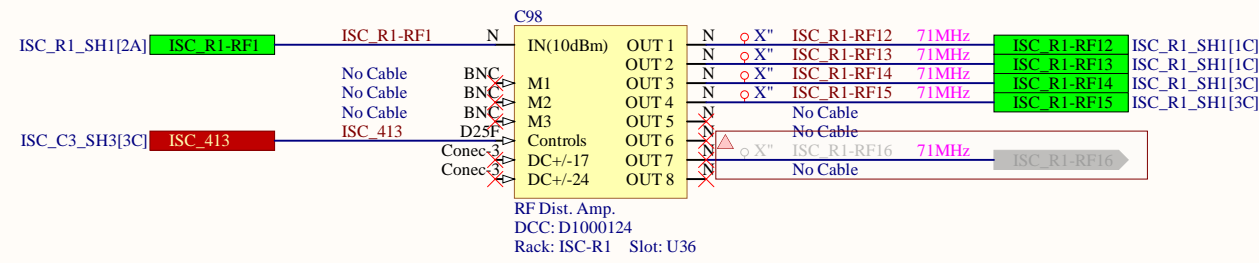
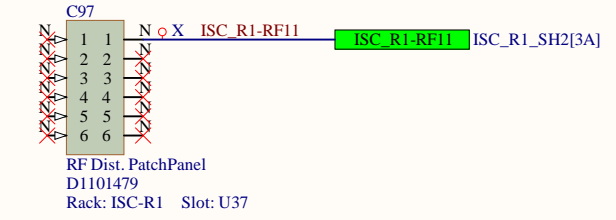
RF Patch Panel 10



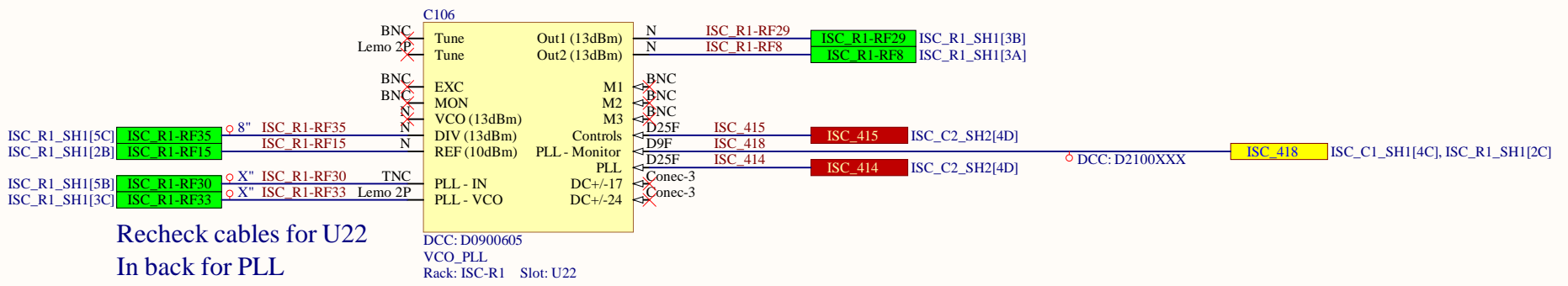
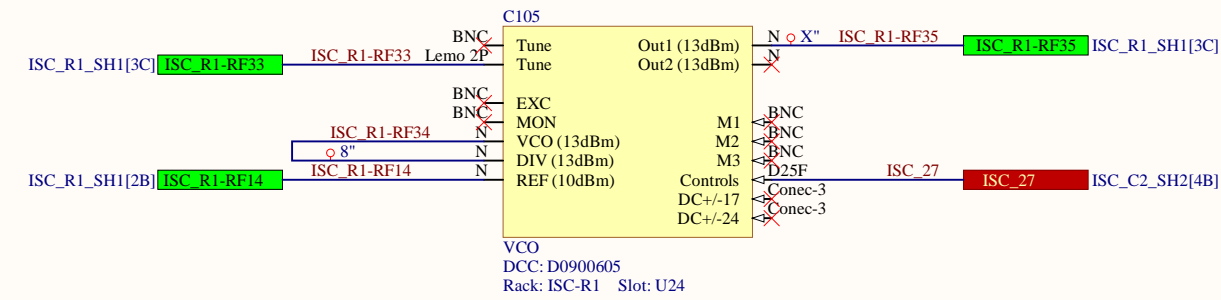
RF Patch Panel 11



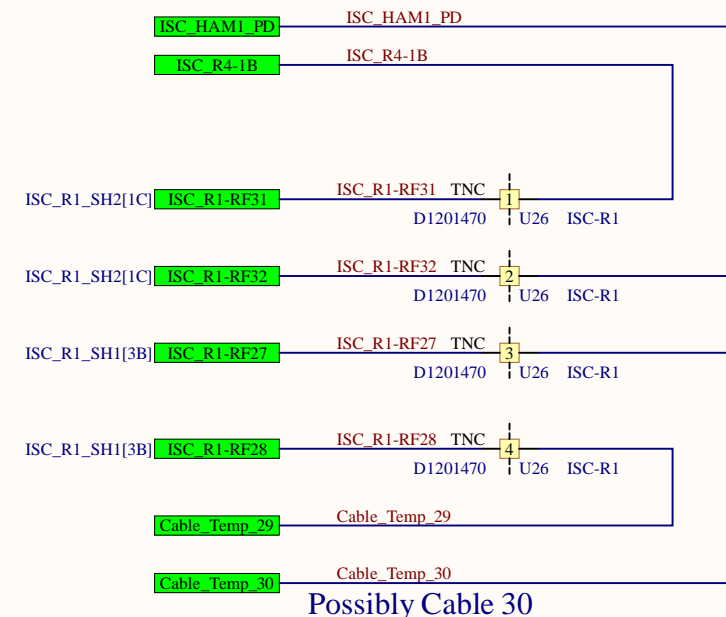
RF Patch Panel 12



Need to label or find cable number



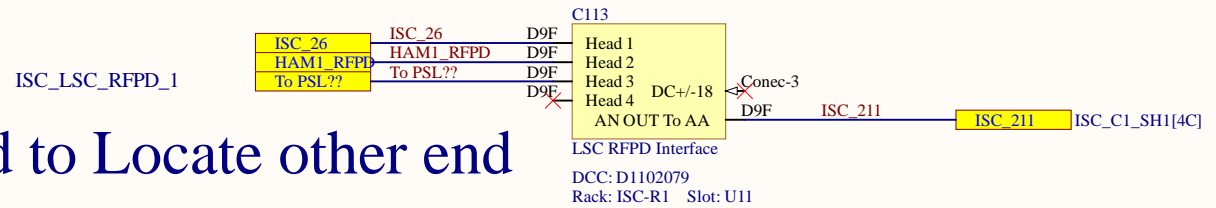
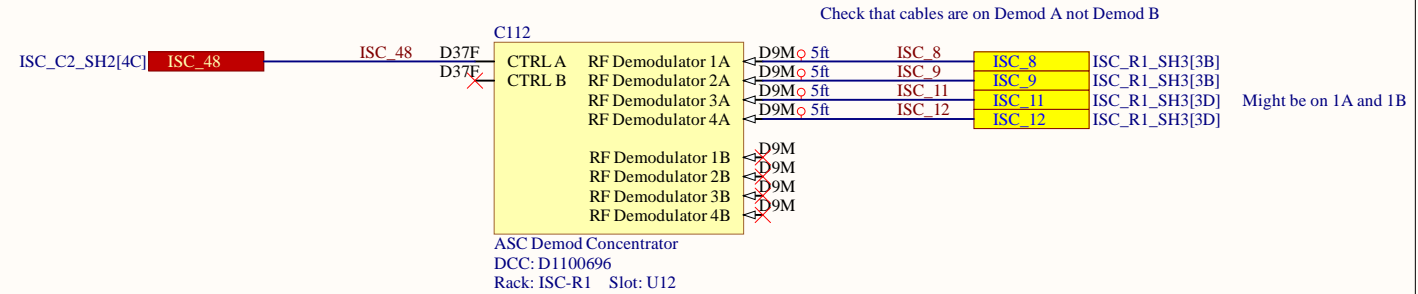
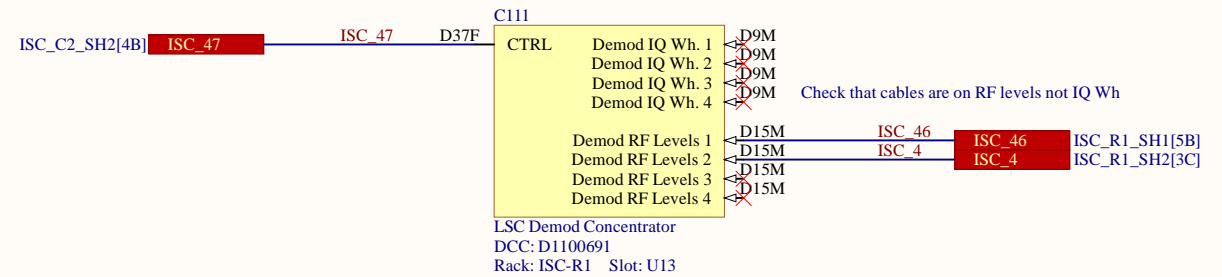
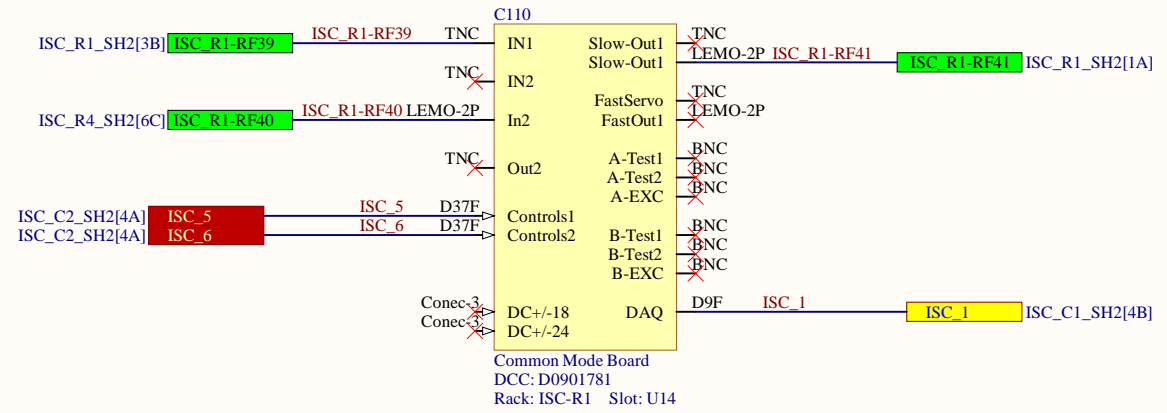
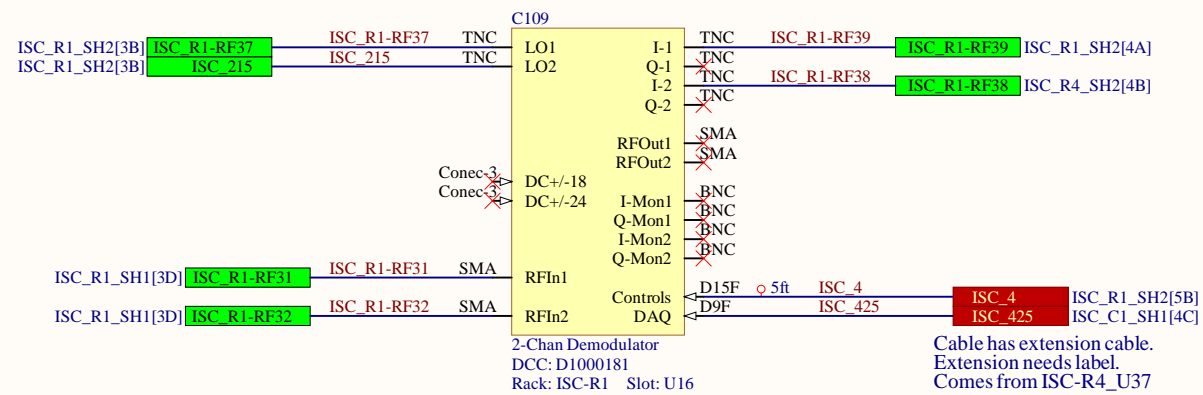
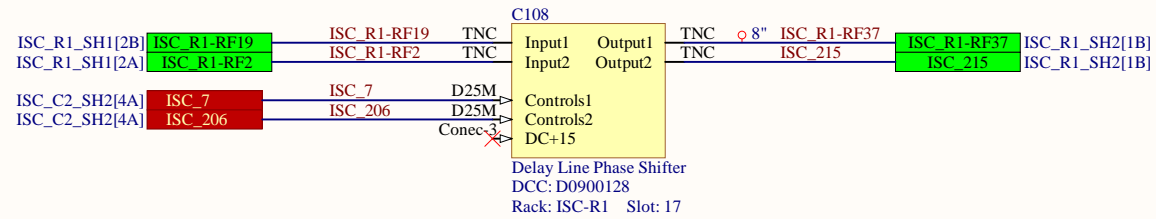
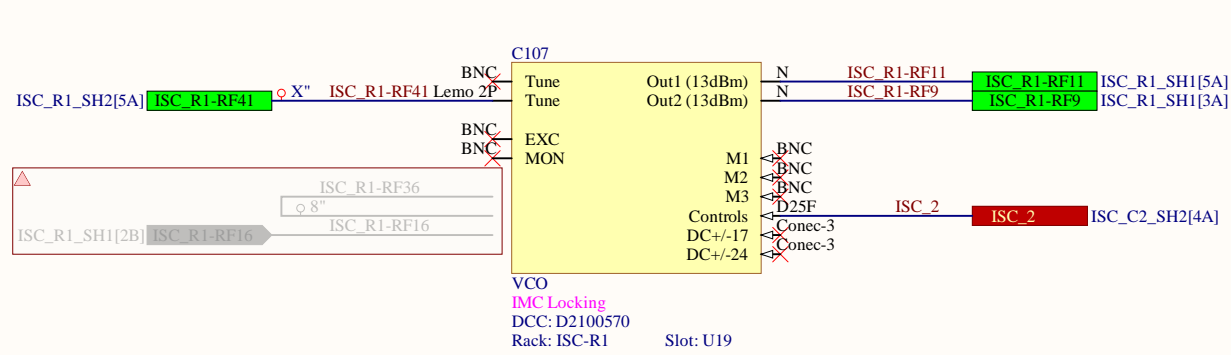
Recheck cables for U22
In back for PLL



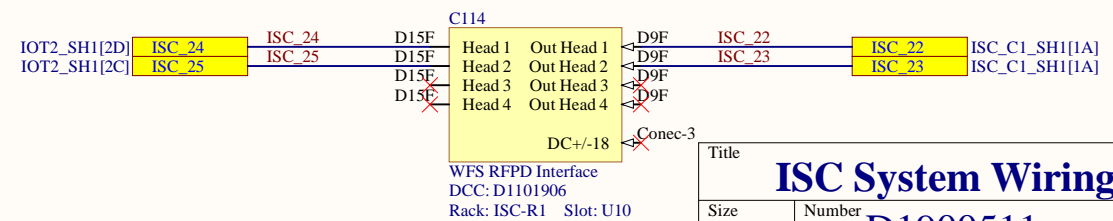
ISC-R1 Rack

Title		
ISC System Wiring Diagram		
Size	Number	Revision
C	D1900511	V7
Date:	8/24/2022	Sheet of 38
File:	C:\Users\...ISC_R1_SchDoc	Drawn By: Filiberto Clara

ISC-R1 Rack

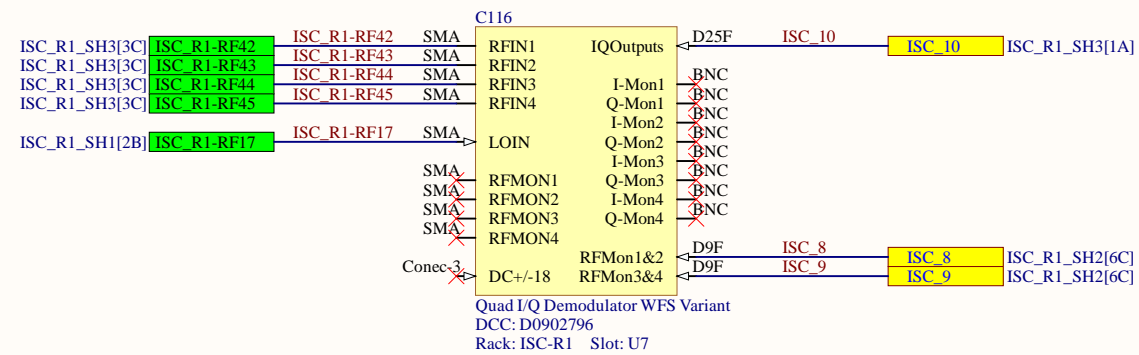
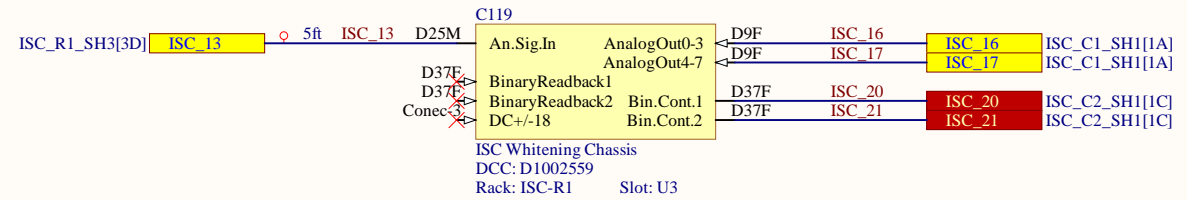
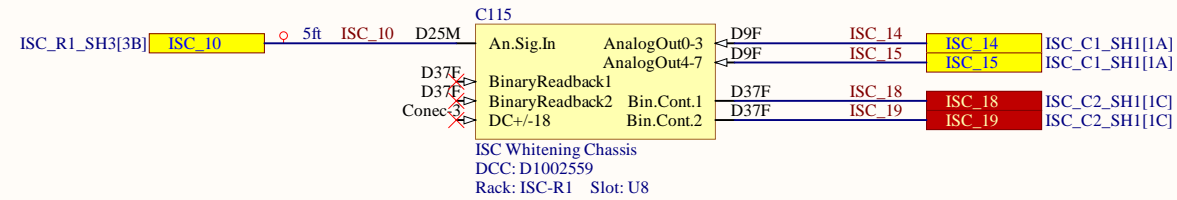


Need to Locate other end

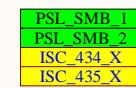


Title			
ISC System Wiring Diagram		Number	Revision
B		D1900511	V7
Date:	8/24/2022	Sheet of	38
File:	C:\Users\...ISC_R1_SH2.SchDoc	Drawn By:	Filiberto Clara

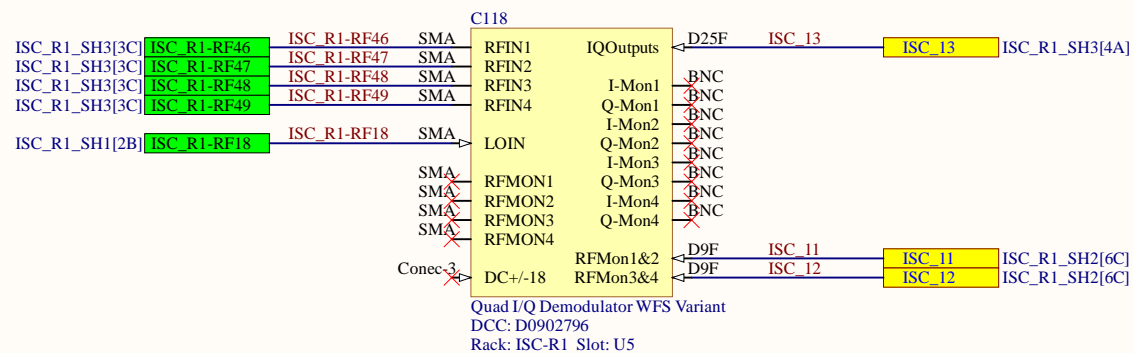
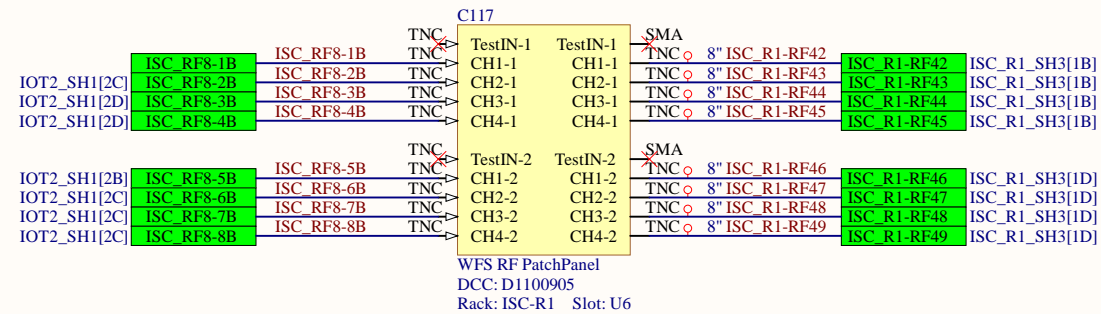
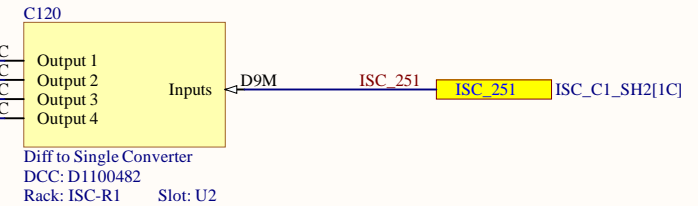
ISC-R1 Rack



Need to locate other end



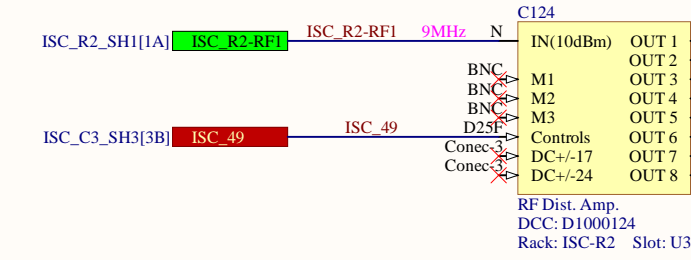
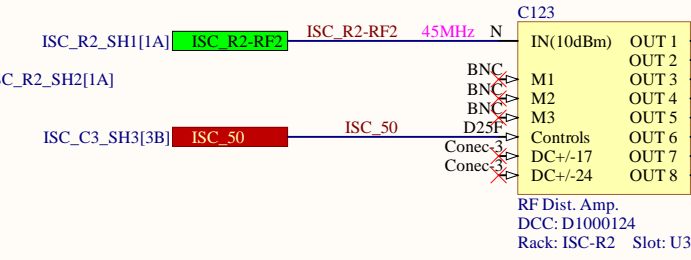
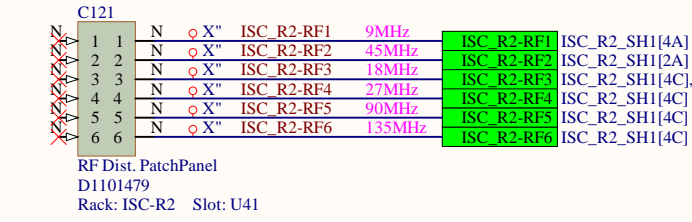
434/435 already used
 ASC-POP_X_PIT/YAW



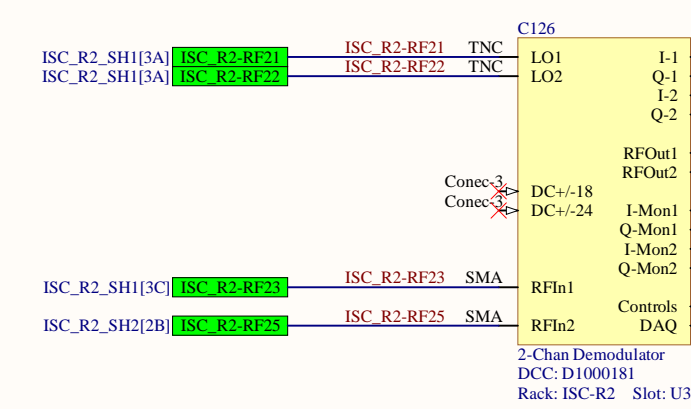
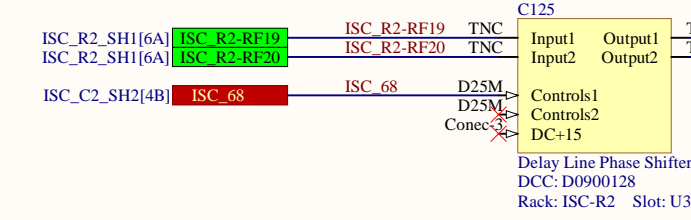
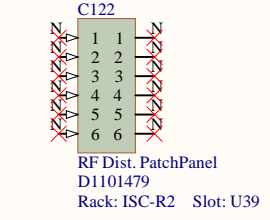
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Size	Number	Revision
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File:	C:\Users\...ISC_R1_SH3.SchDoc	Drawn By: Filiberto Clara

ISC-R2 Rack

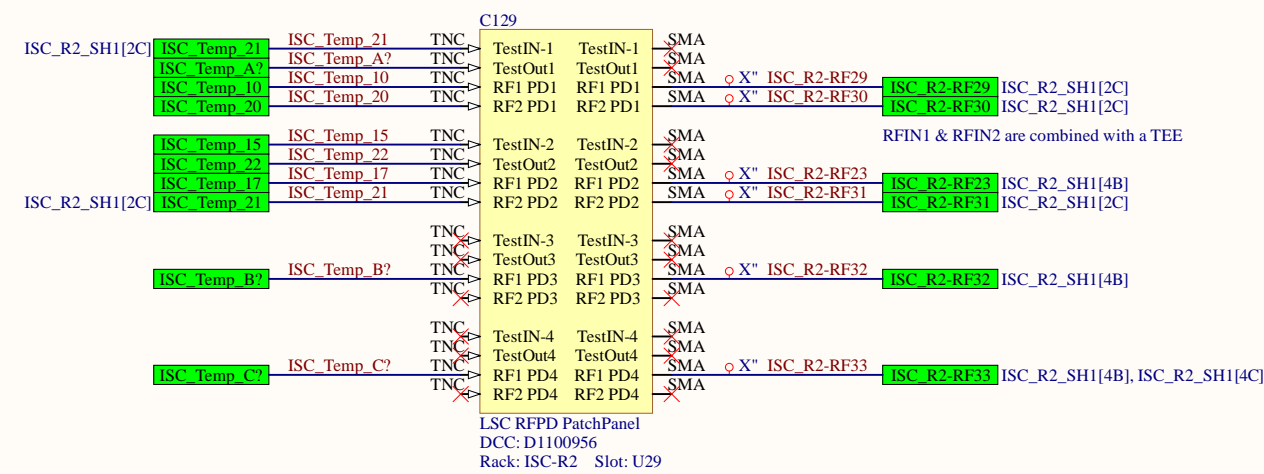
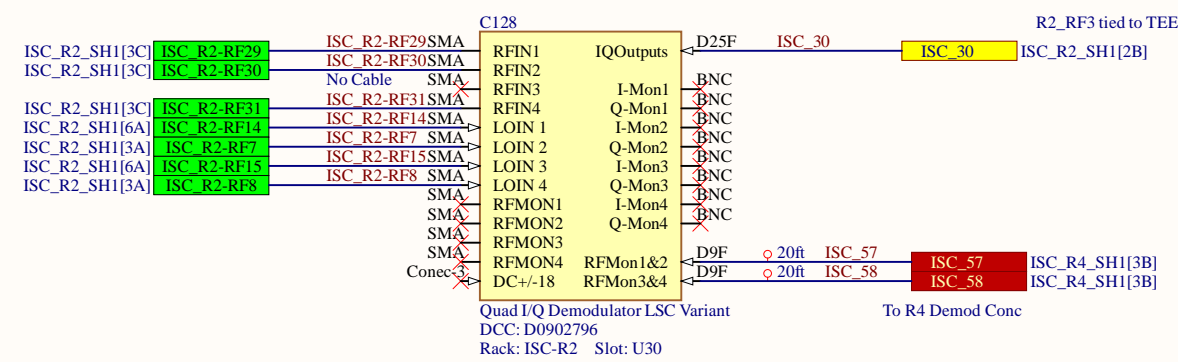
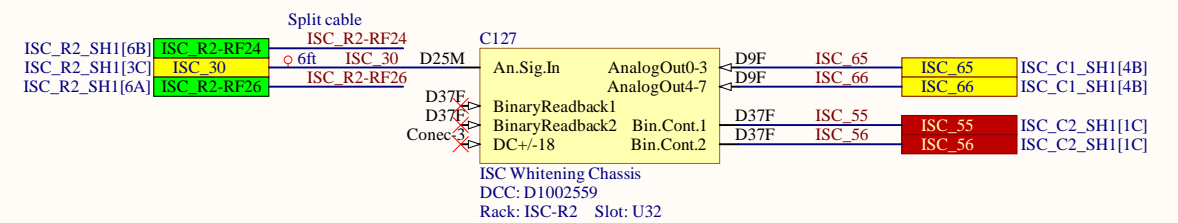
RF Patch Panel 13



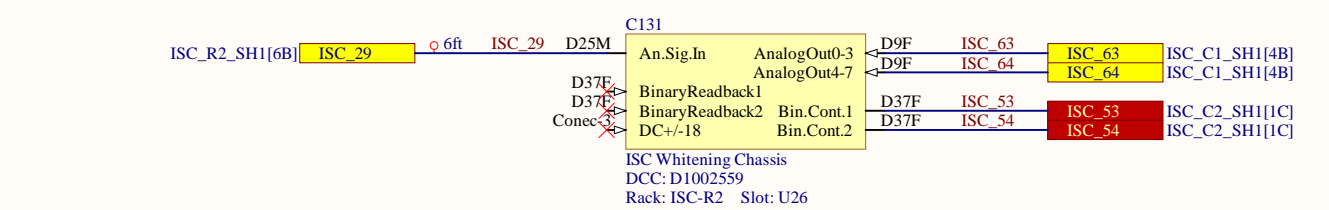
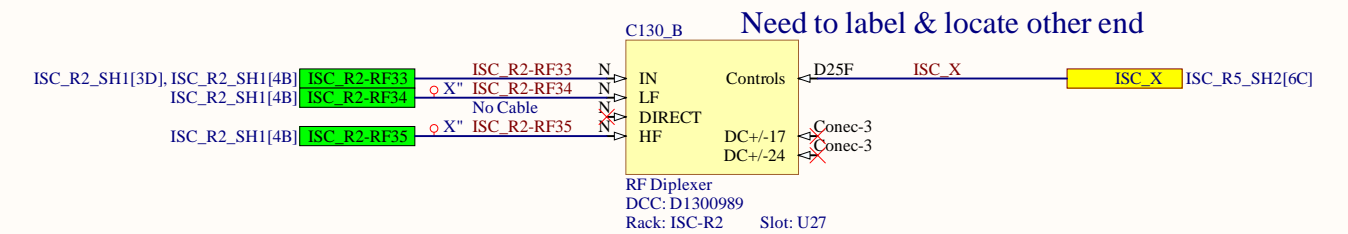
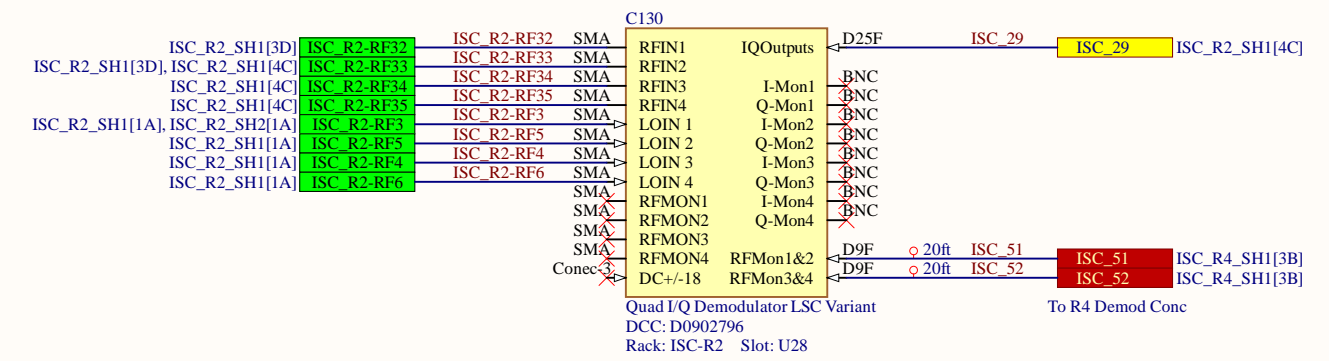
RF Patch Panel 14



LSC POPAIR A 9&45, LSC REFLAIR A 45

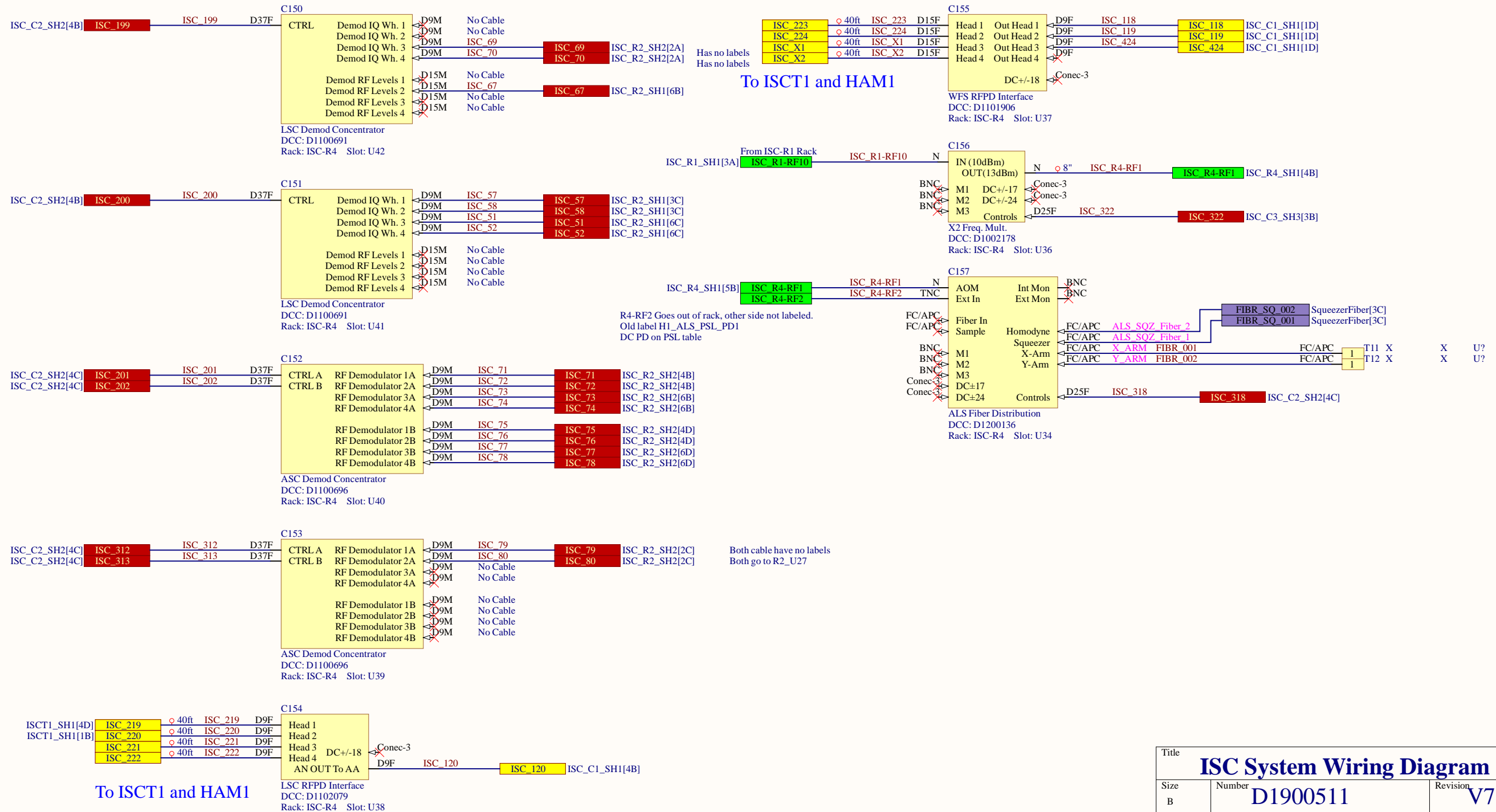


LSC POPAIR B 18&90, LSC REFLAIR B 27&135



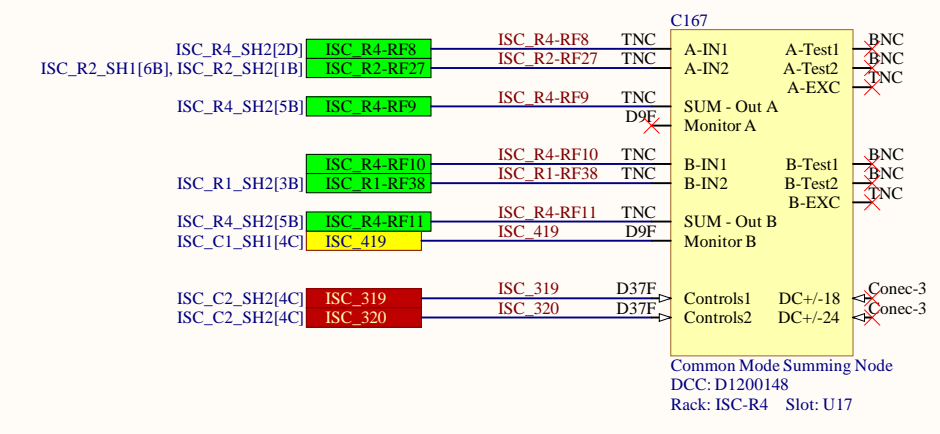
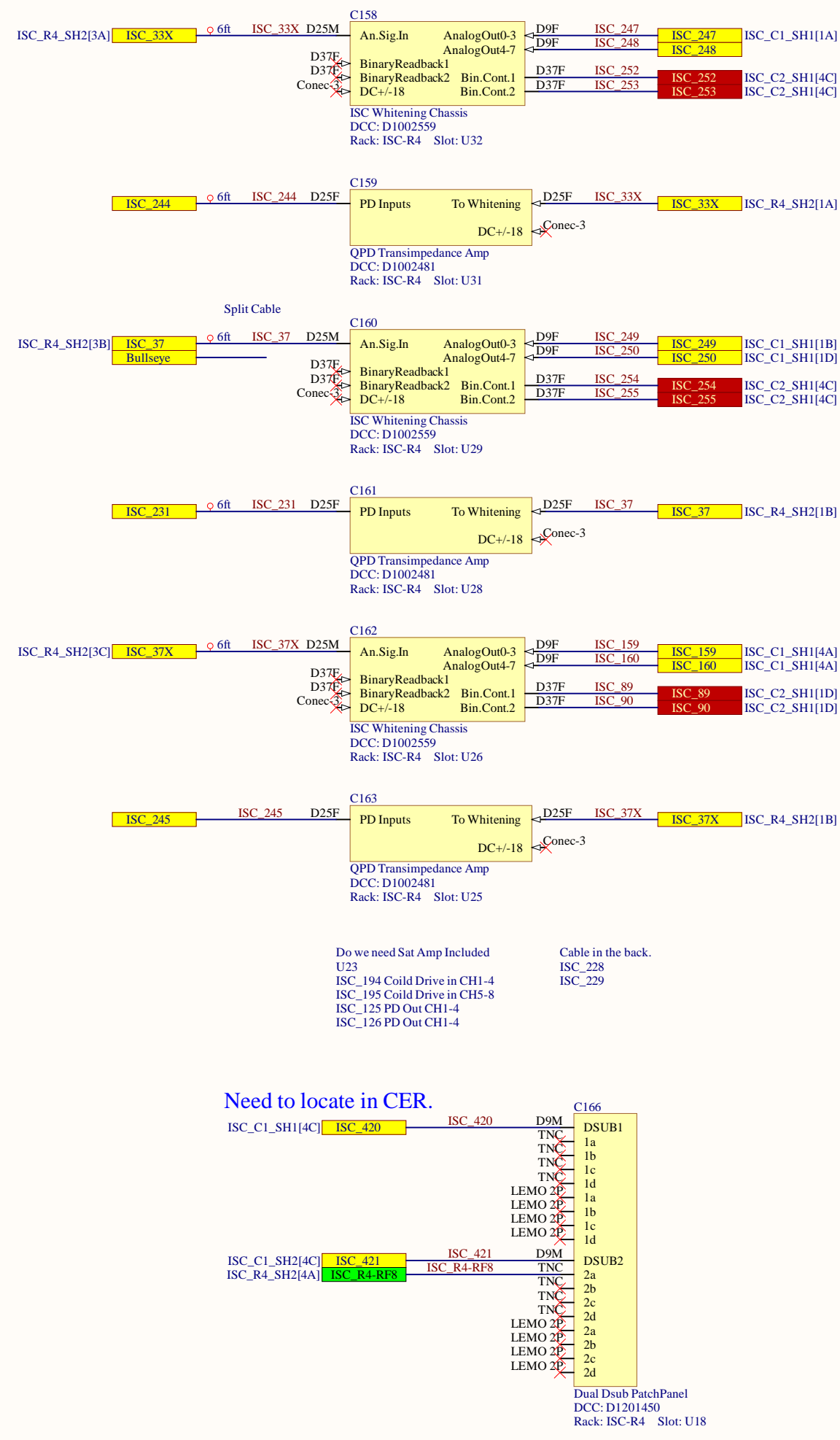
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C	D1900511	V7	
Date:	8/24/2022	Sheet of3	38
File:	C:\Users\...ISC_R2_SH1.SchDoc	Drawn By:	Filiberto Clara

ISC-R4 Rack

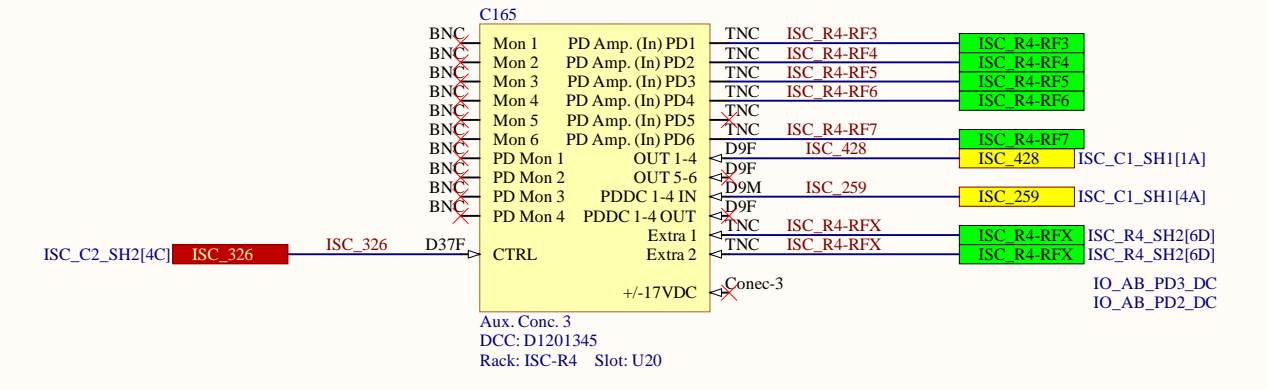
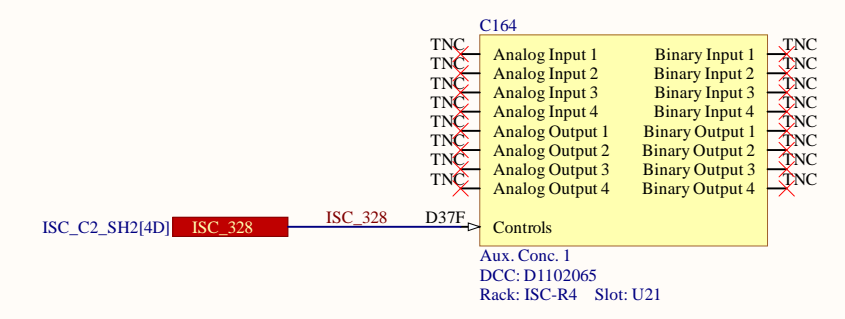
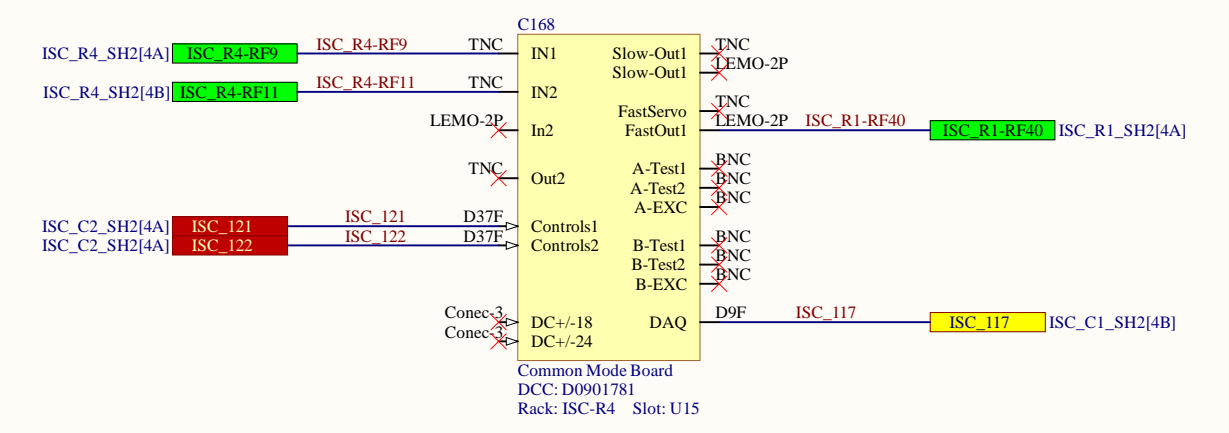


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ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V7
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File:	C:\Users\...ISC_R4_SH1.SchDoc	Drawn By: Filiberto Clara

ISC-R4 Rack



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

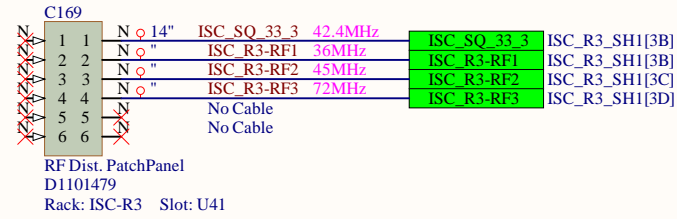


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ISC System Wiring Diagram		
Size	Number	Revision
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Date:	8/24/2022	Sheet of 6 38
File:	C:\Users\...ISC_R4_SH2.SchDoc	Drawn By: Filiberto Clara

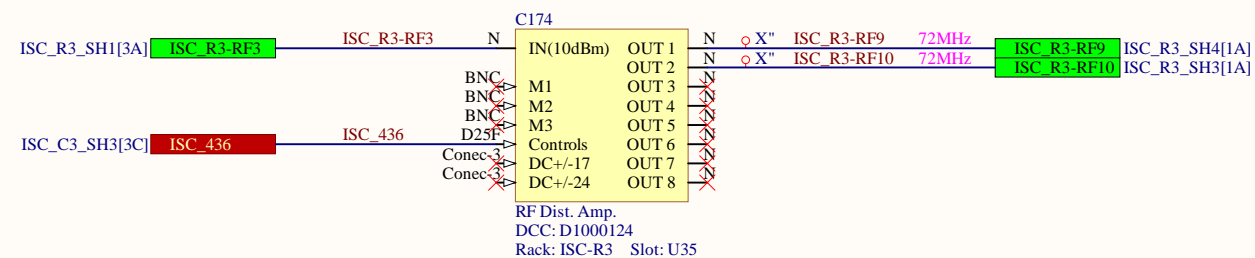
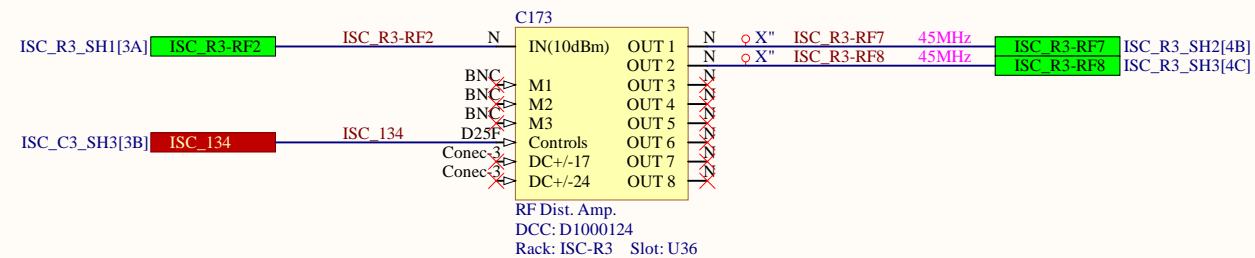
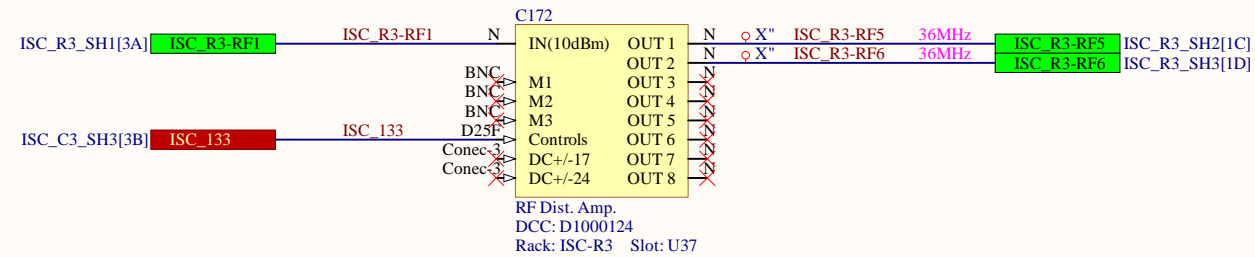
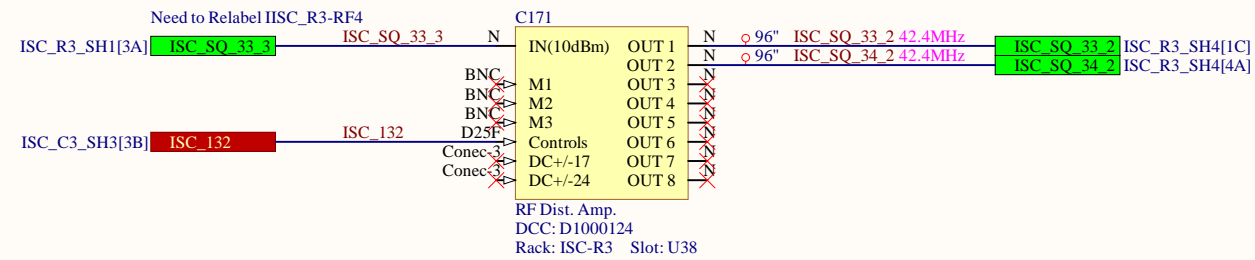
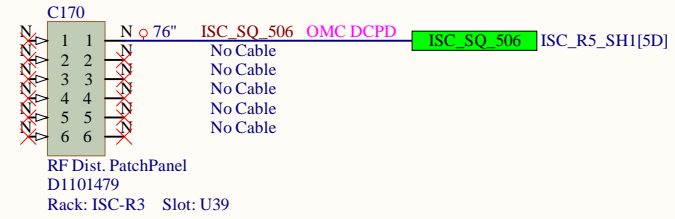
ISC-R3 Rack

Need to Relabel ISC_R3-RF4

RF Patch Panel 15

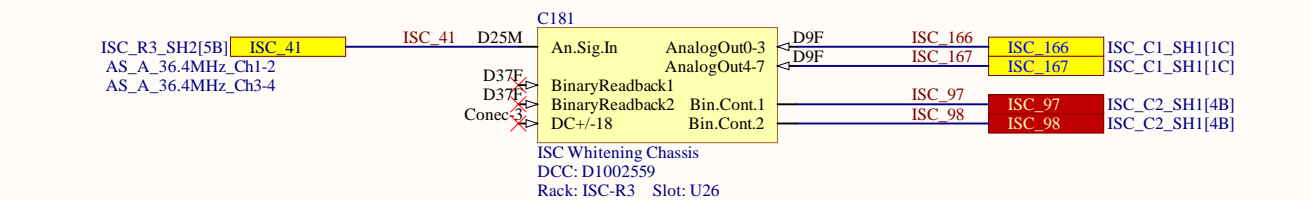
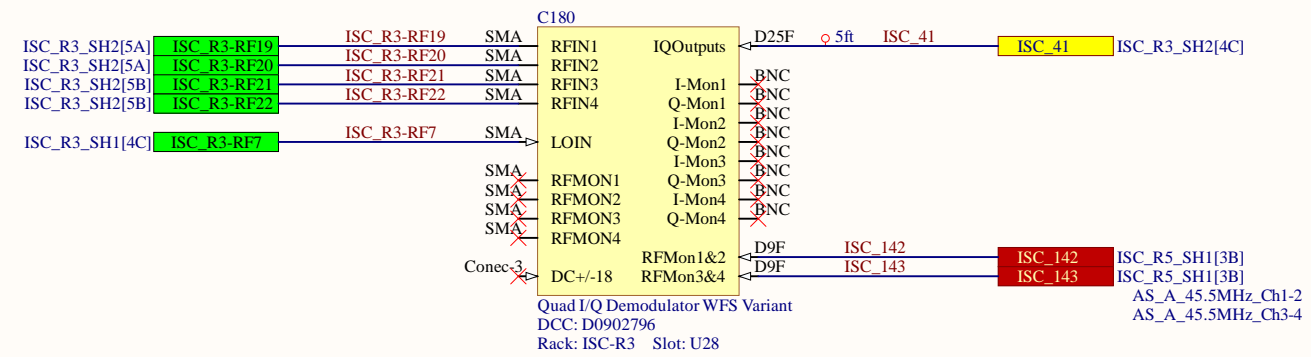
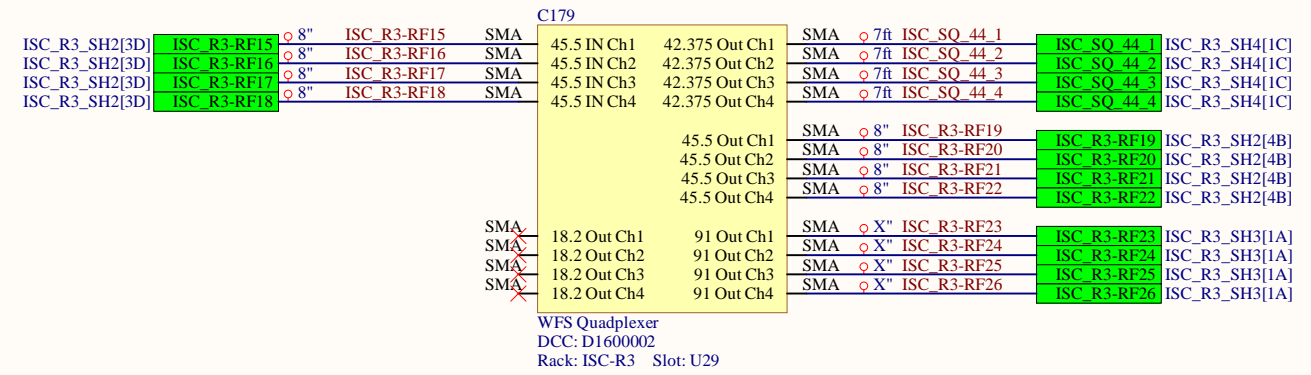
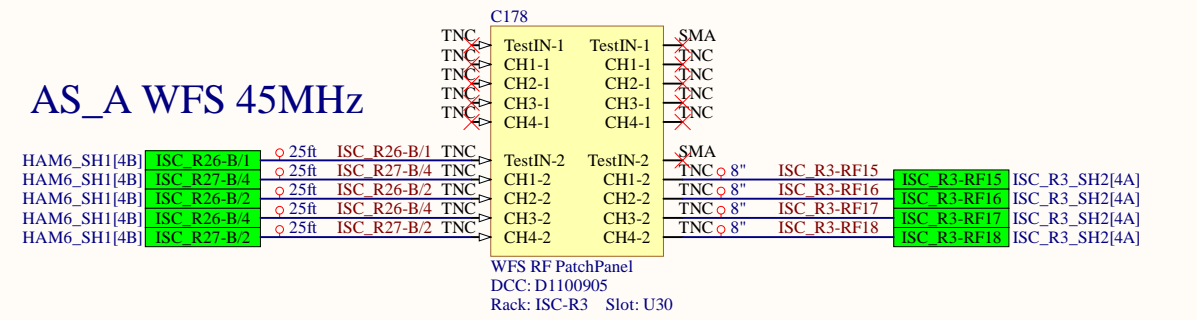
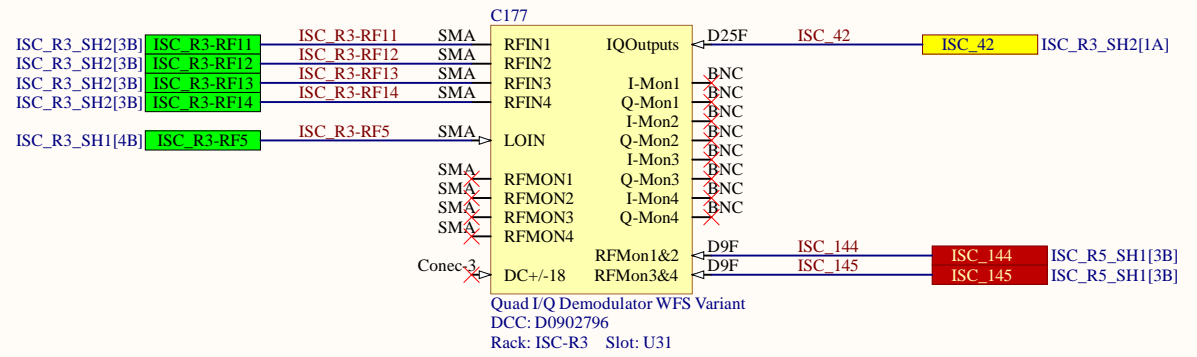
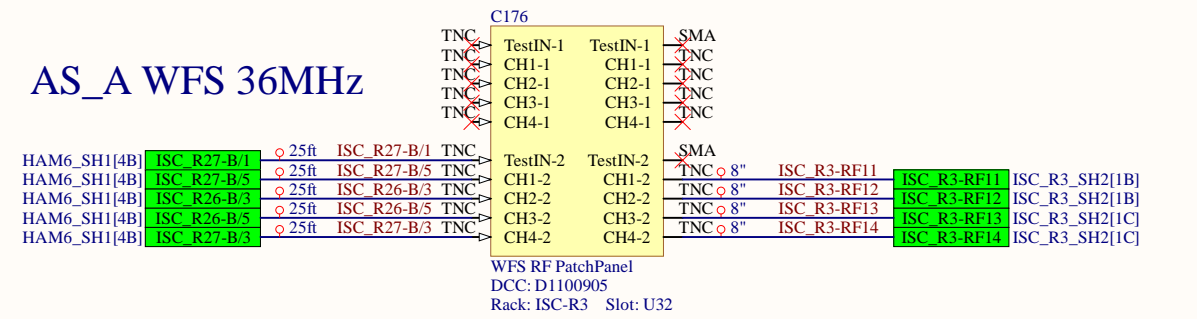
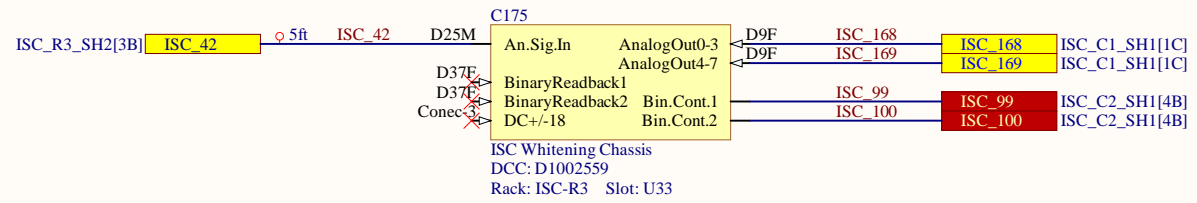


RF Patch Panel 16



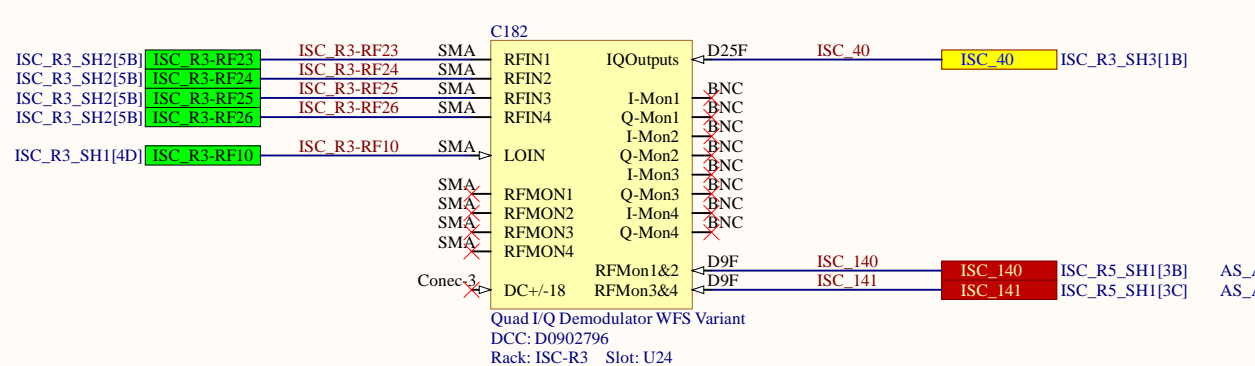
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Size	Number	Revision
B	D1900511	V7
Date:	8/24/2022	Sheet of 7 38
File:	C:\Users\...\ISC_R3_SH1.SchDoc	Drawn By: Filiberto Clara

ISC-R3 Rack

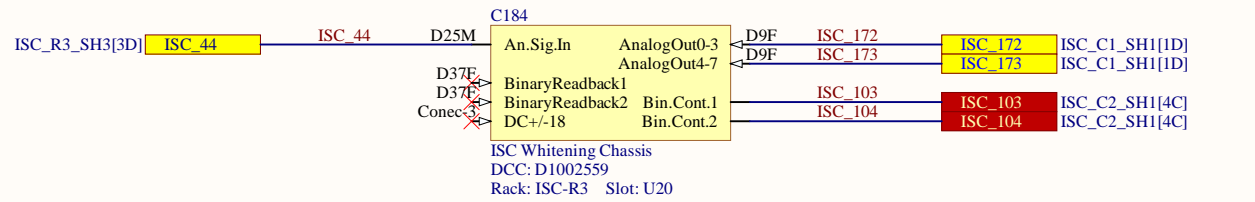
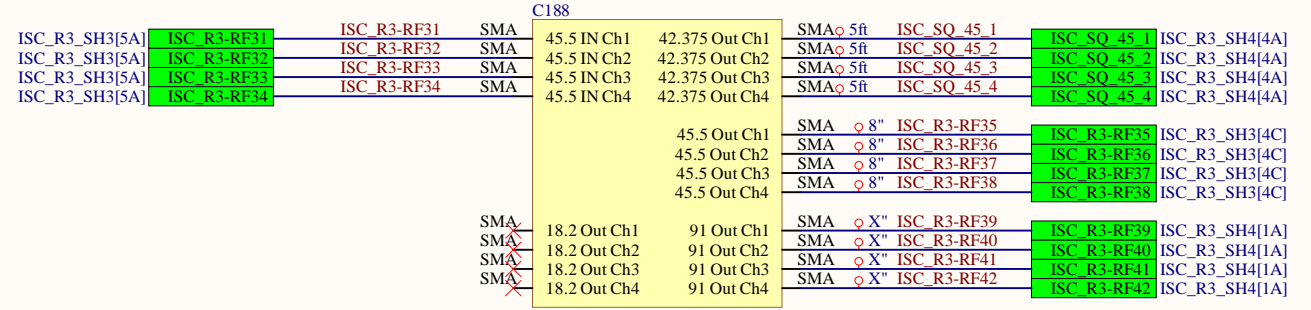
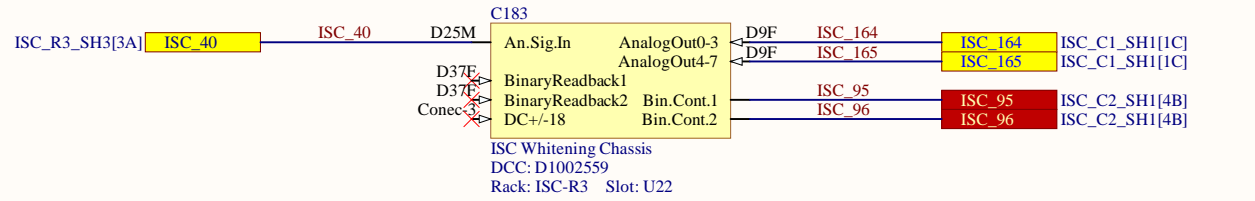
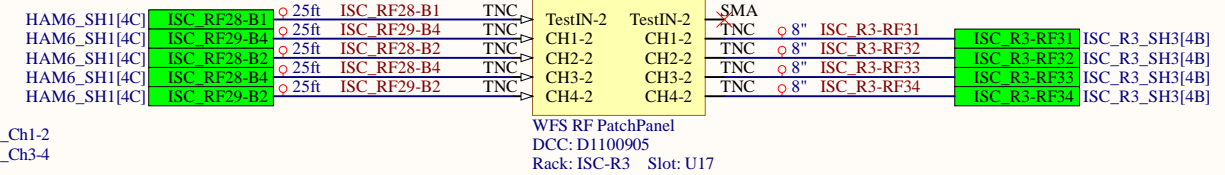


Title		
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Size	Number	Revision
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Date:	8/24/2022	Sheet of 8 38
File:	C:\Users\...ISC_R3_SH2.SchDoc	Drawn By: Filiberto Clara

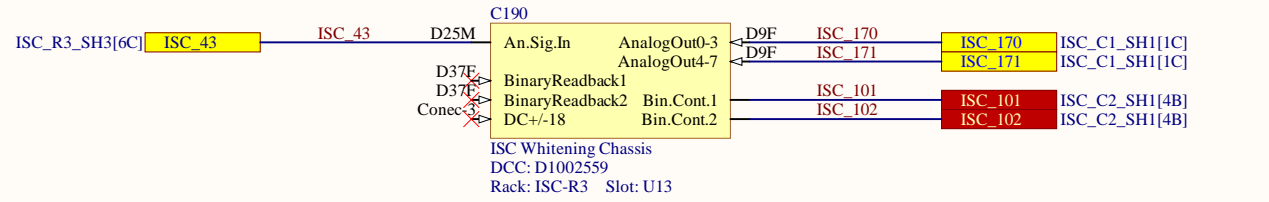
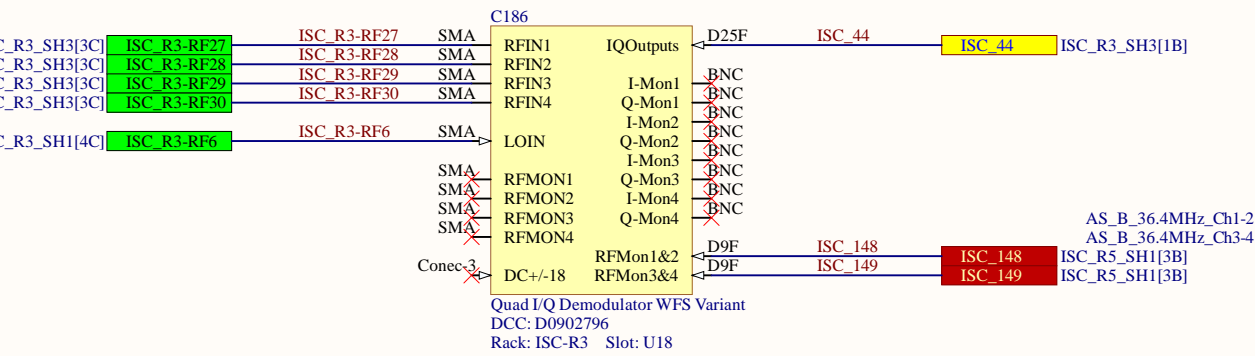
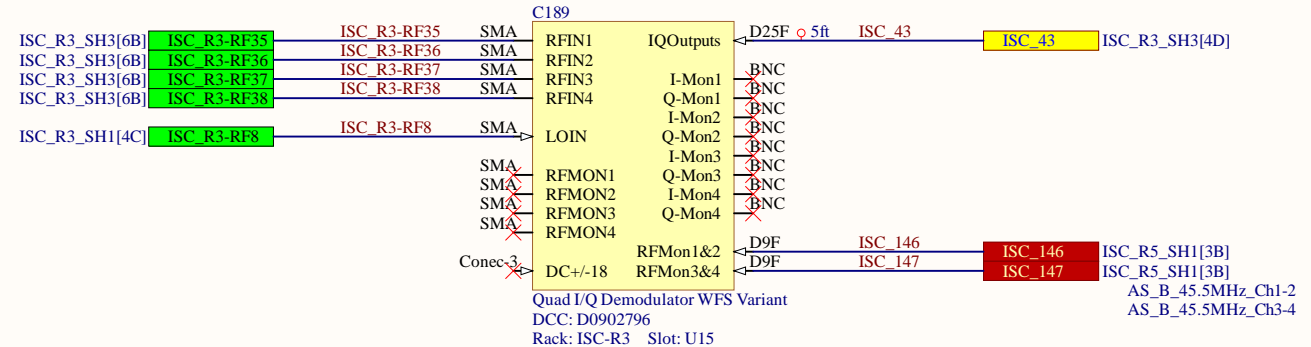
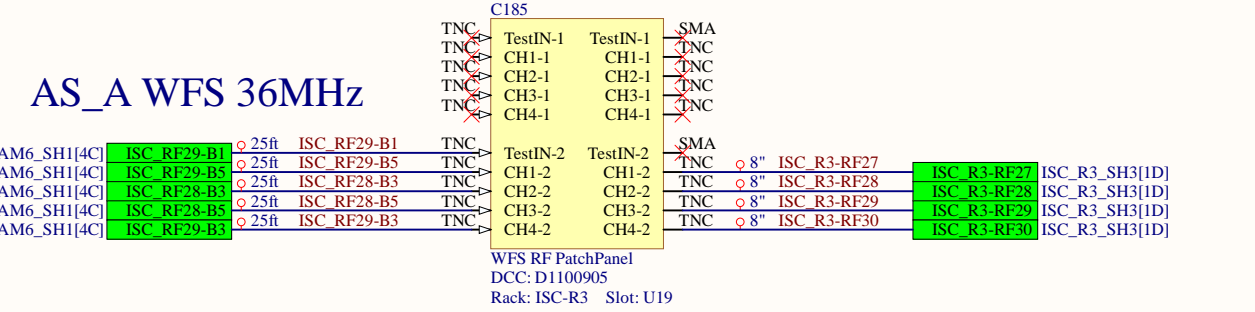
ISC-R3 Rack



AS_A WFS 45MHz



AS_A WFS 36MHz

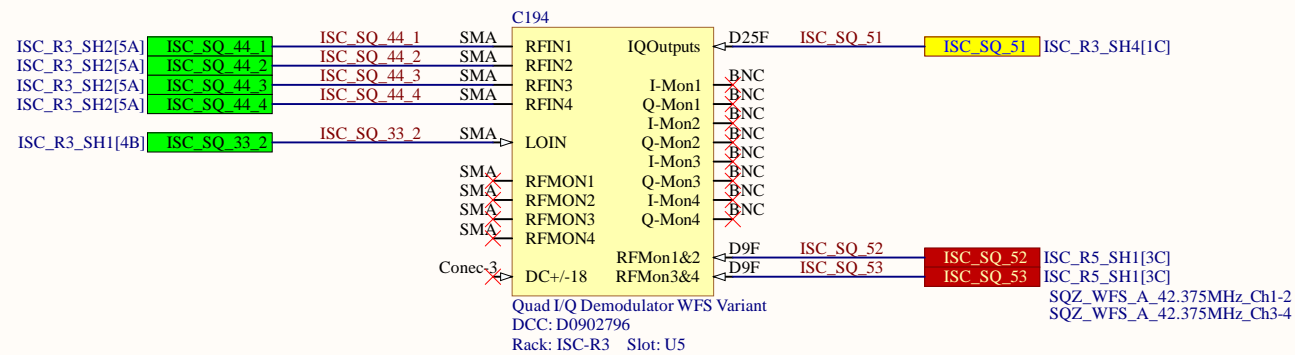
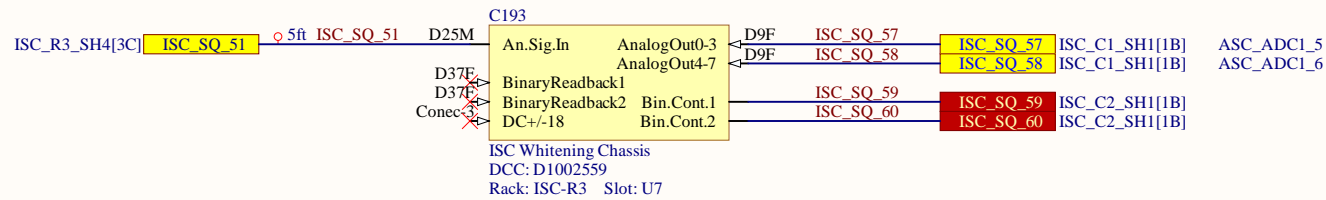
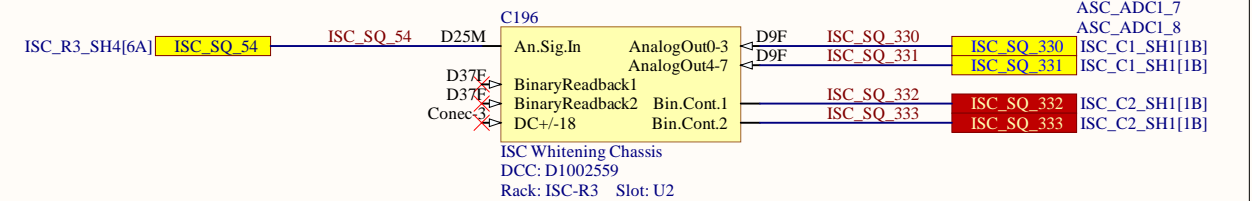
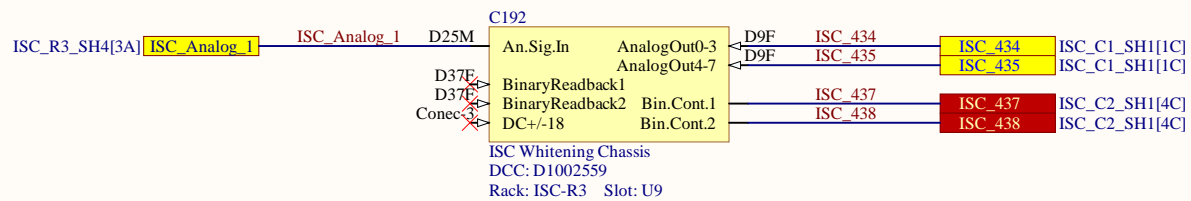
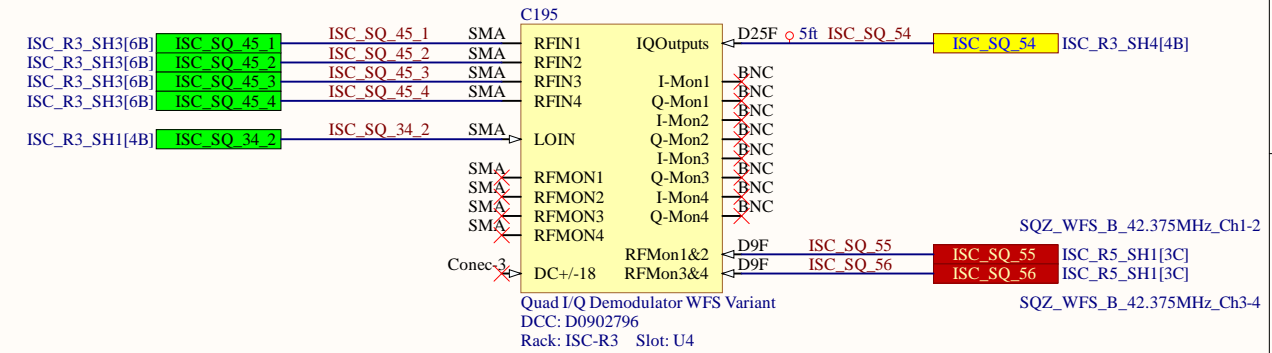
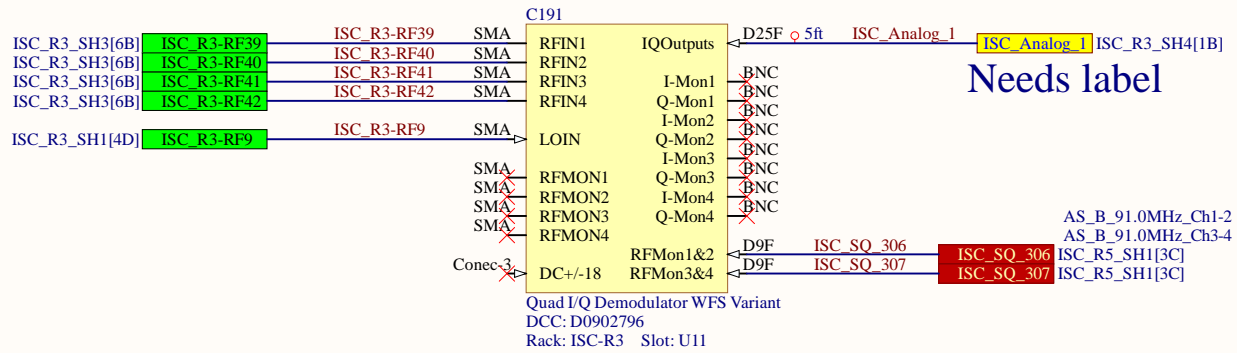


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Size	Number	Revision
B	D1900511	V7
Date:	8/24/2022	Sheet of 9 38
File:	C:\Users\...ISC_R3_SH3.SchDoc	Drawn By: Filiberto Clara

ISC-R3 Rack

Needs labels

Needs label



Title			
ISC System Wiring Diagram			
Size	Number	Revision	
B	D1900511	V7	
Date:	8/24/2022	Sheet of	38
File:	C:\Users\...ISC_R3_SH4.SchDoc	Drawn By:	Filiberto Clara

ISC-R5 Rack

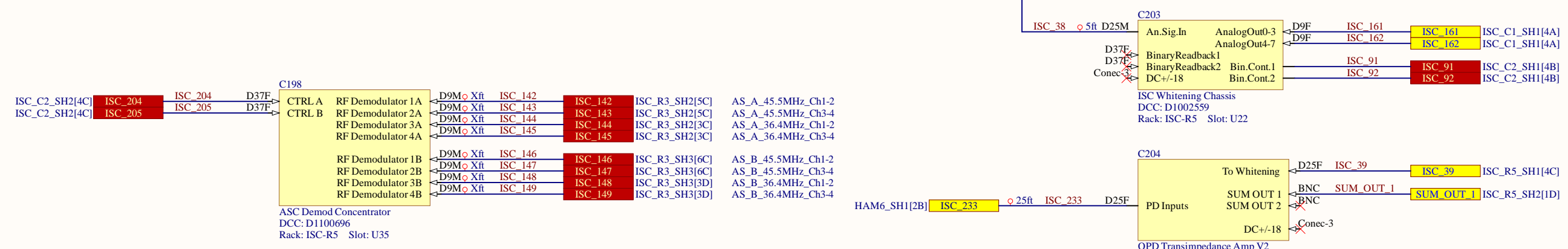
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A



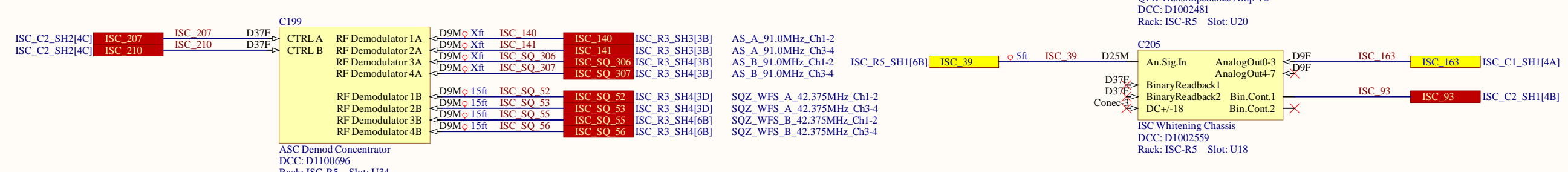
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B



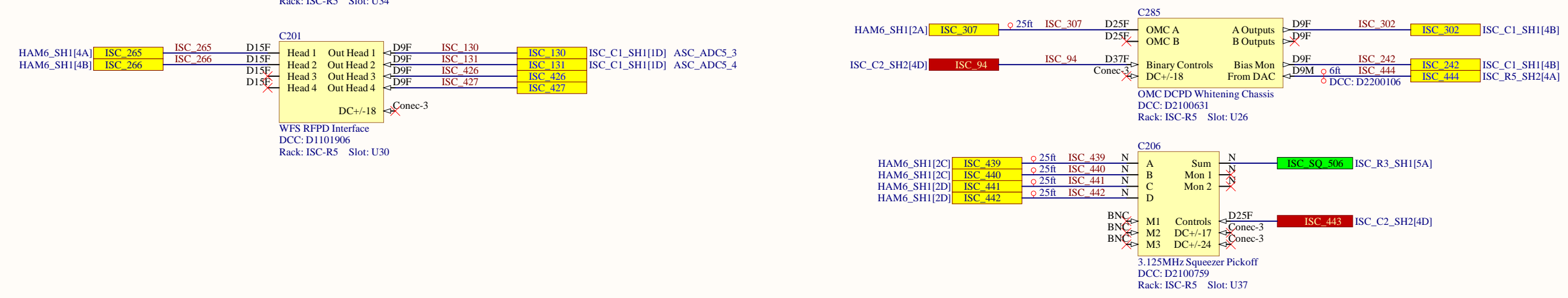
C

C



D

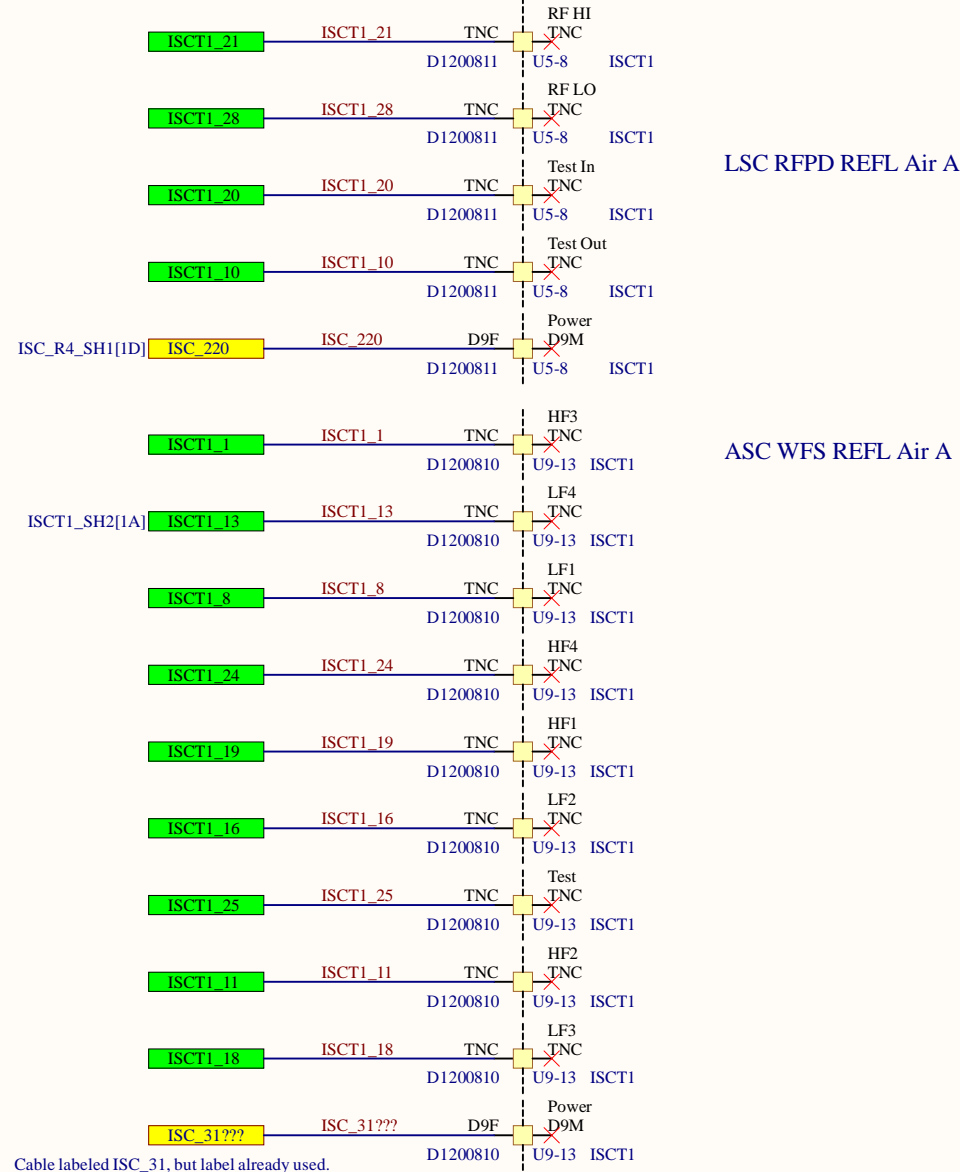
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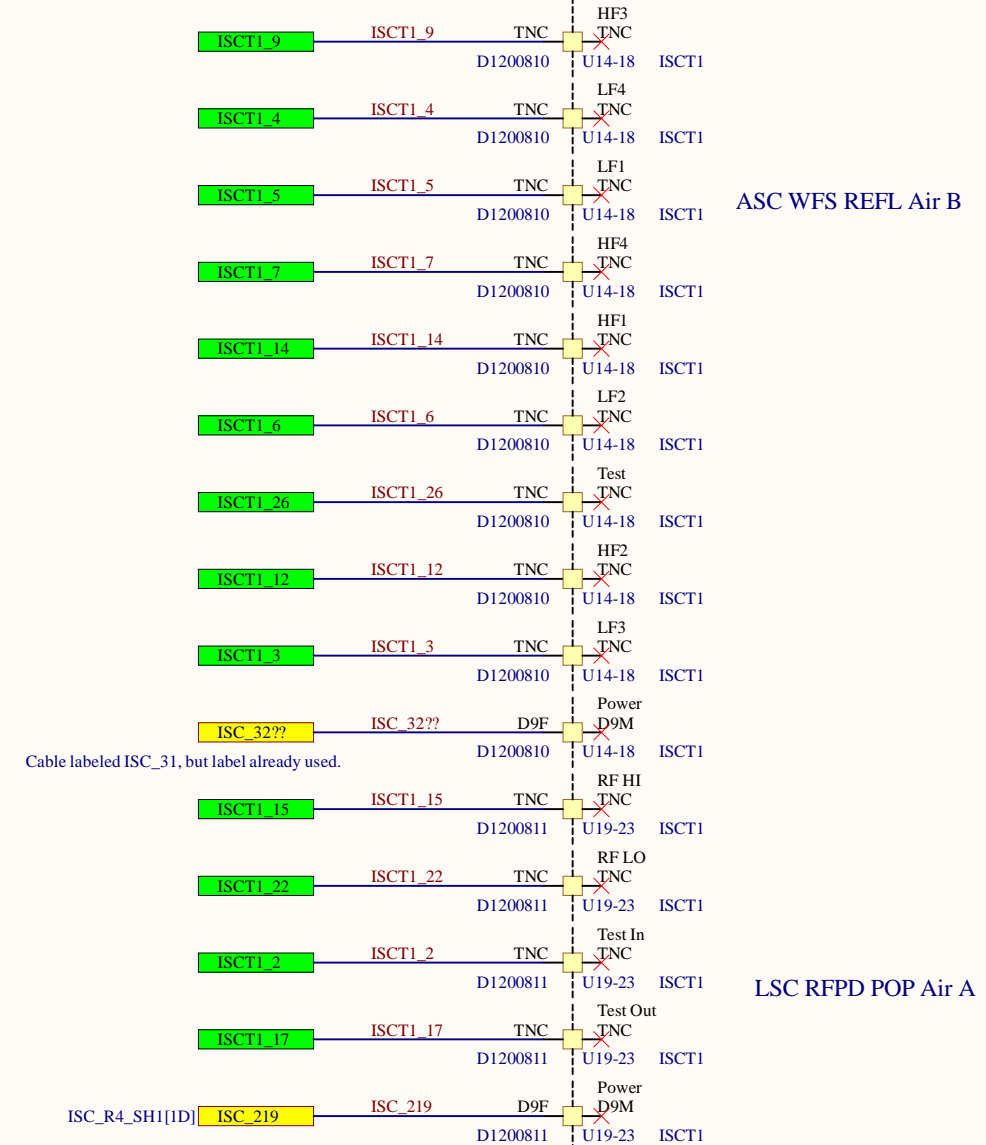
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Size	Number	Revision
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Date:	8/24/2022	Sheet of 1 38
File:	C:\Users\...ISC_R5_SH1.SchDoc	Drawn By: Filiberto Clara

ISCT1 - Right Side

Inside Enclosure



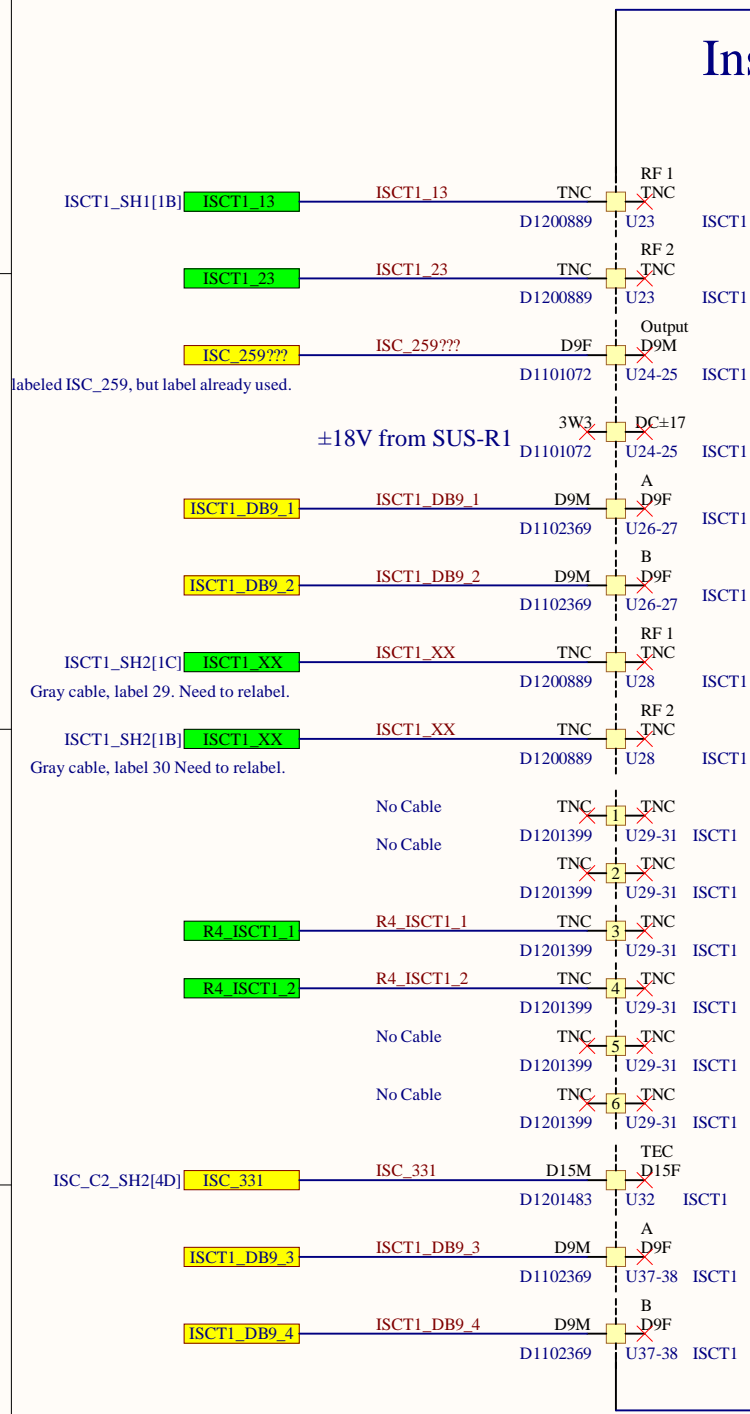
Inside Enclosure



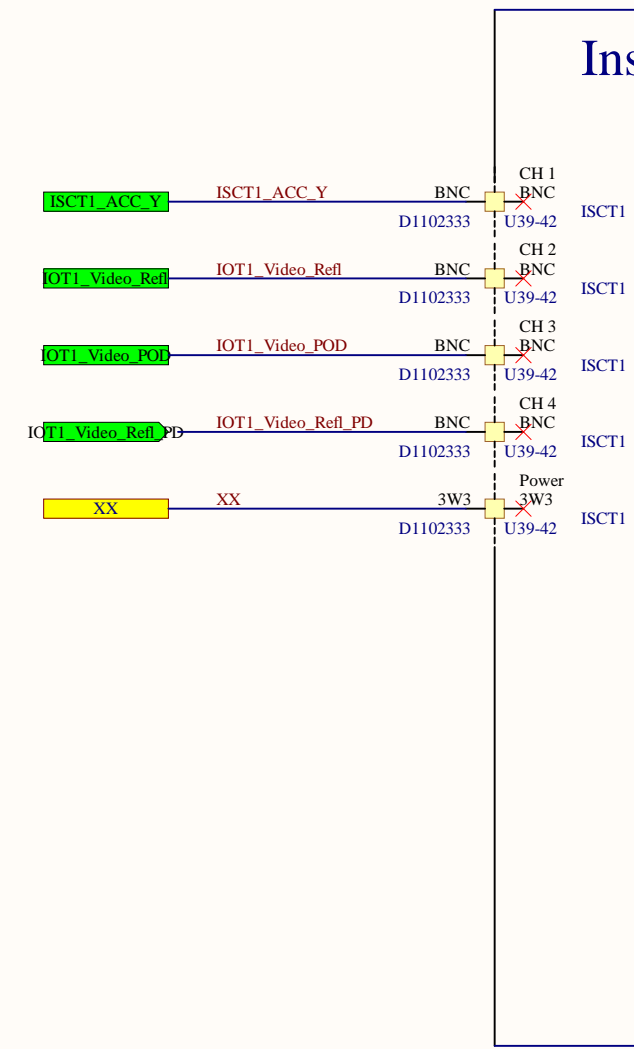
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Size	Number	Revision			
B	D1900511	V7			
Date:	8/24/2022	Sheet of	38		
File:	C:\Users\...\ISCT1_SH1.SchDoc	Drawn By:	Filiberto Clara		

ISCT1 - Right Side

Inside Enclosure

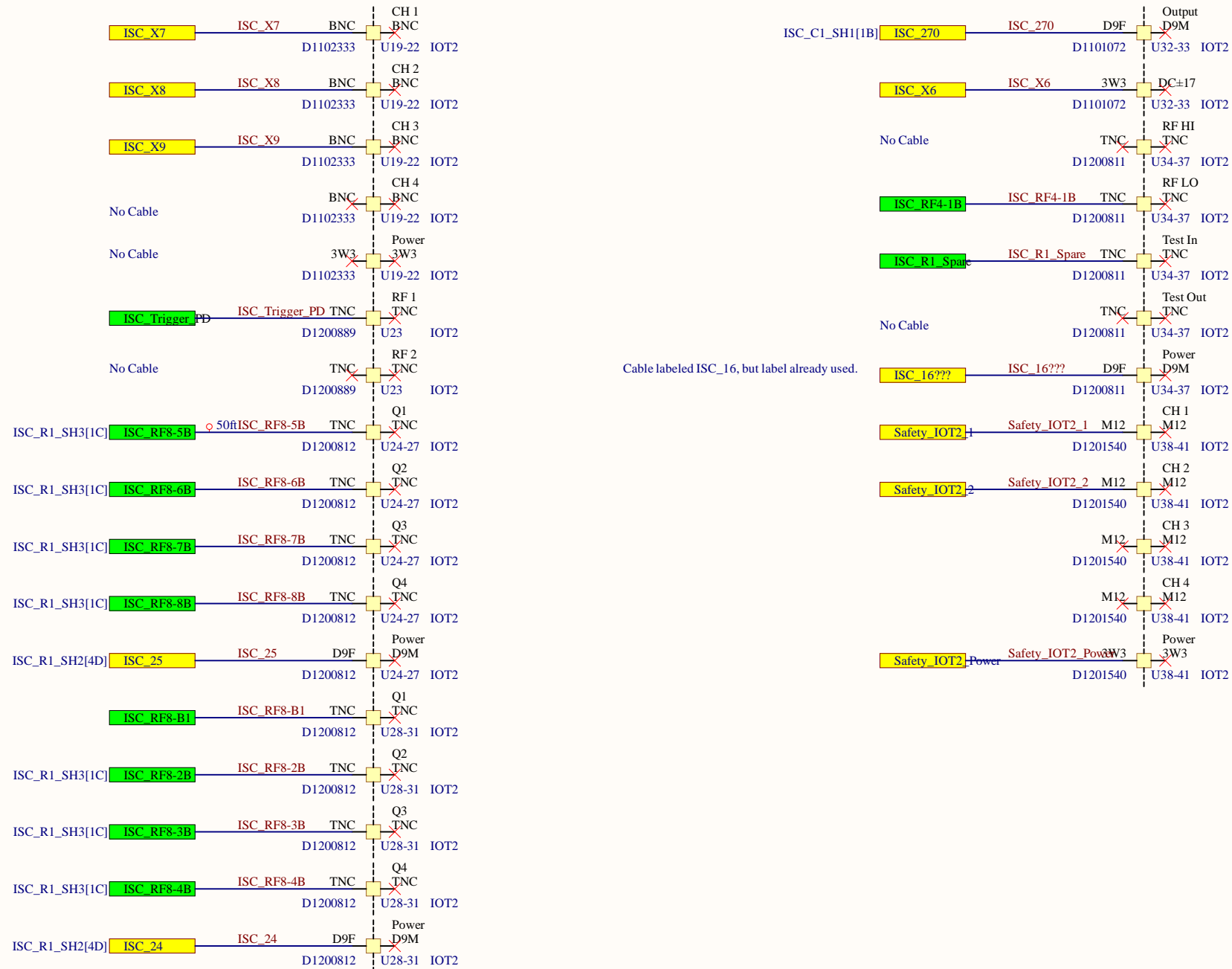


Inside Enclosure

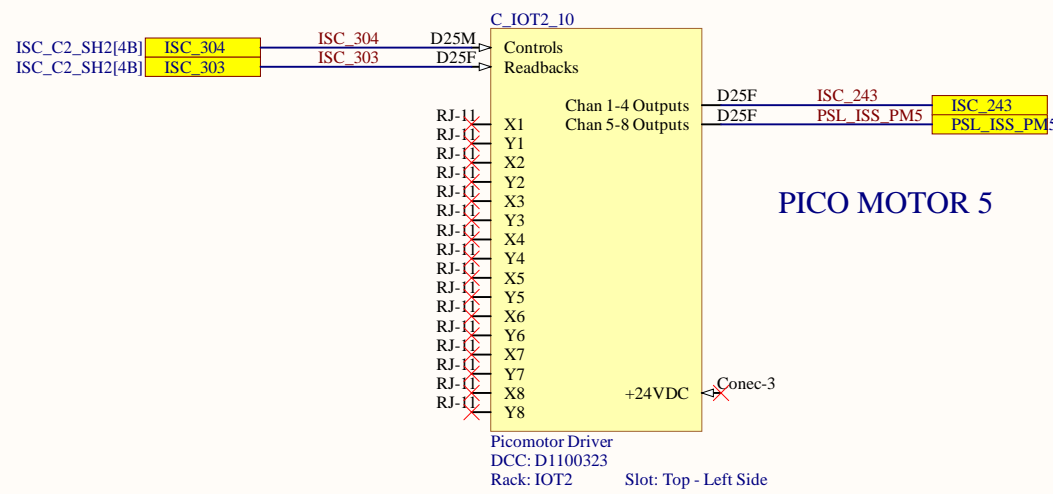
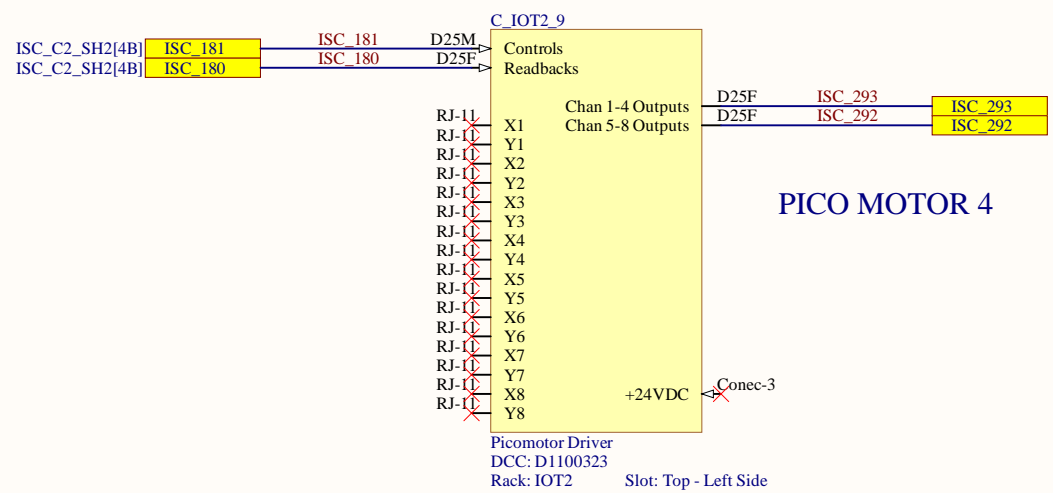
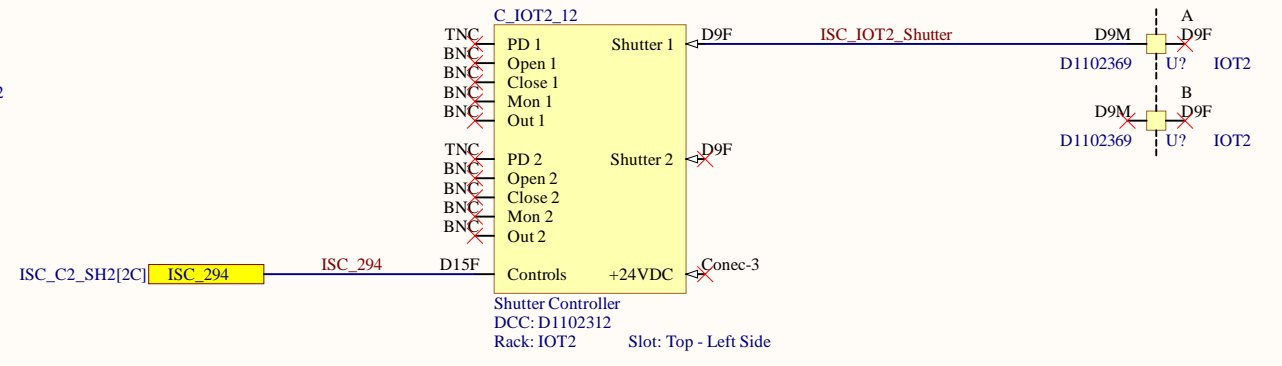
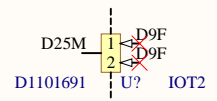
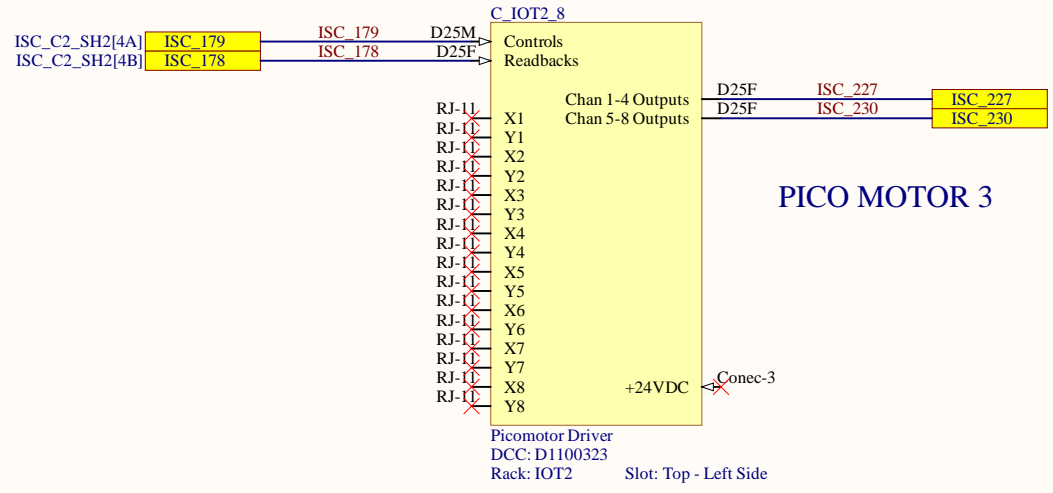


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Size	Number	Revision			
B	D1900511	V7			
Date:	8/24/2022	Sheet of	4	38	
File:	C:\Users\...\ISCT1_SH2.SchDoc	Drawn By:	Filiberto Clara		

IOT2 - Left Side



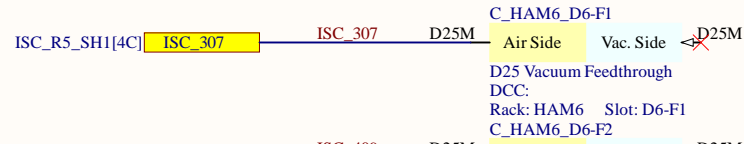
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Size	Number	Revision
B	D1900511	V7
Date:	8/24/2022	Sheet of 5 38
File:	C:\Users\... \IOT2_SH1.SchDoc	Drawn By: Filiberto Clara



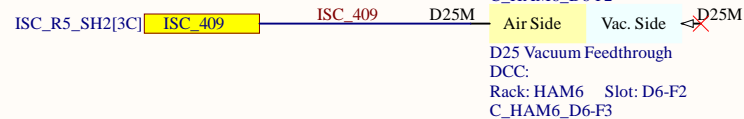
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ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V7
Date:	8/24/2022	Sheet of 38
File:	C:\Users\... \IOT2_SH2.SchDoc	Drawn By: Filiberto Clara

HAM6 Flange Layout

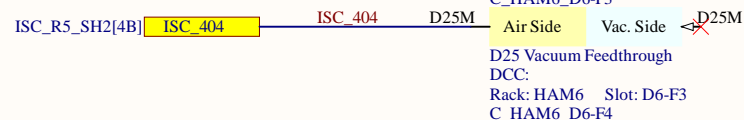
DCPD



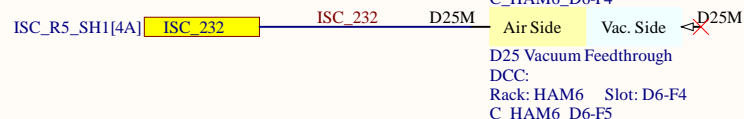
PZTs



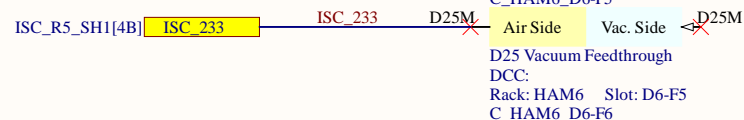
OMC QPD



OMCR QPD

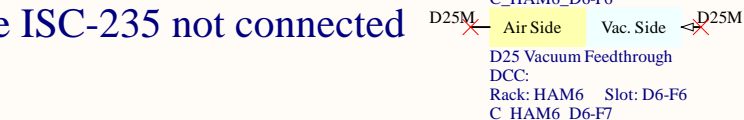


AS_C QPD

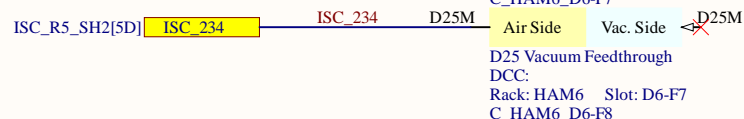


OMCR/AS Picomotor

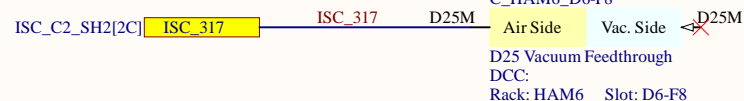
Cable ISC-235 not connected



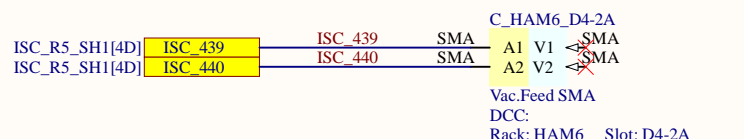
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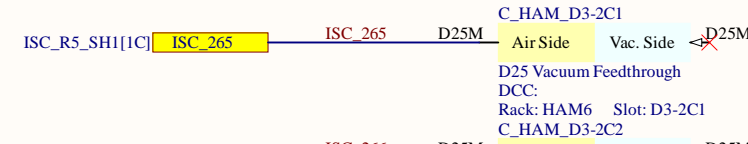
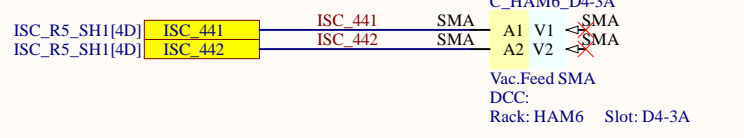
Beam diverter



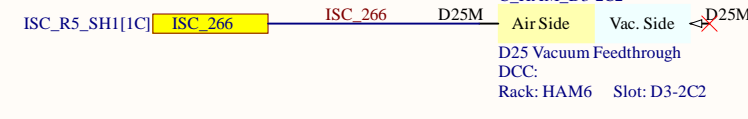
DCPD 3.1MHz A/B



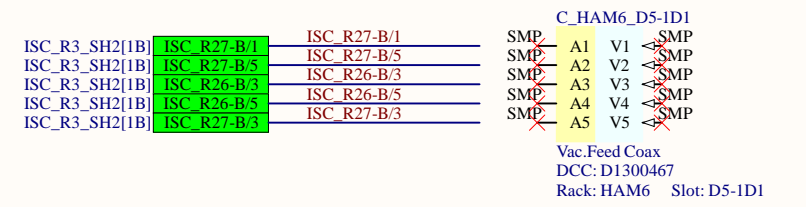
DCPD 3.1MHz C/D



AS_A WFS DC



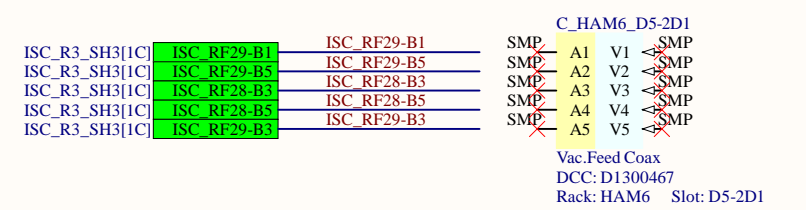
AS_B WFS DC



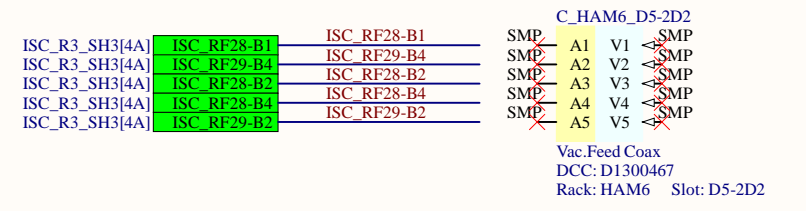
AS_A WFS 36MHz



AS_A WFS 45MHz



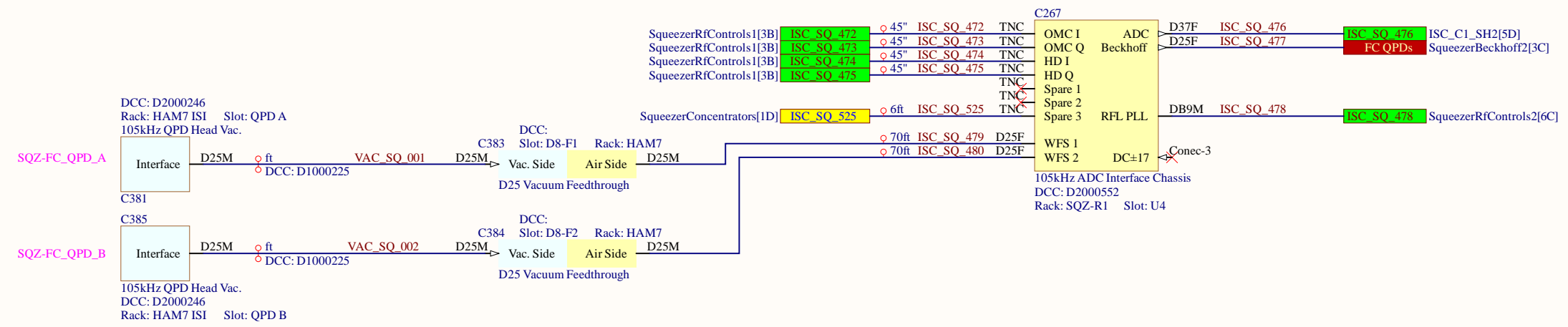
AS_B WFS 36MHz



AS_B WFS 45MHz

Need to check WFS RF!

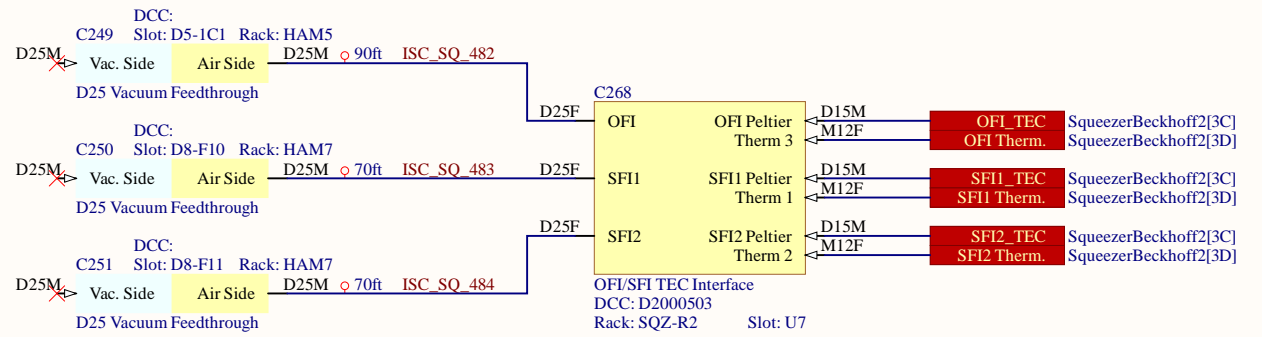
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Size	Number	Revision	
B	D1900511	V7	
Date:	8/24/2022	Sheet of	27 38
File:	C:\Users\...\\HAM6_SH1.SchDoc	Drawn By:	Filiberto Clara



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

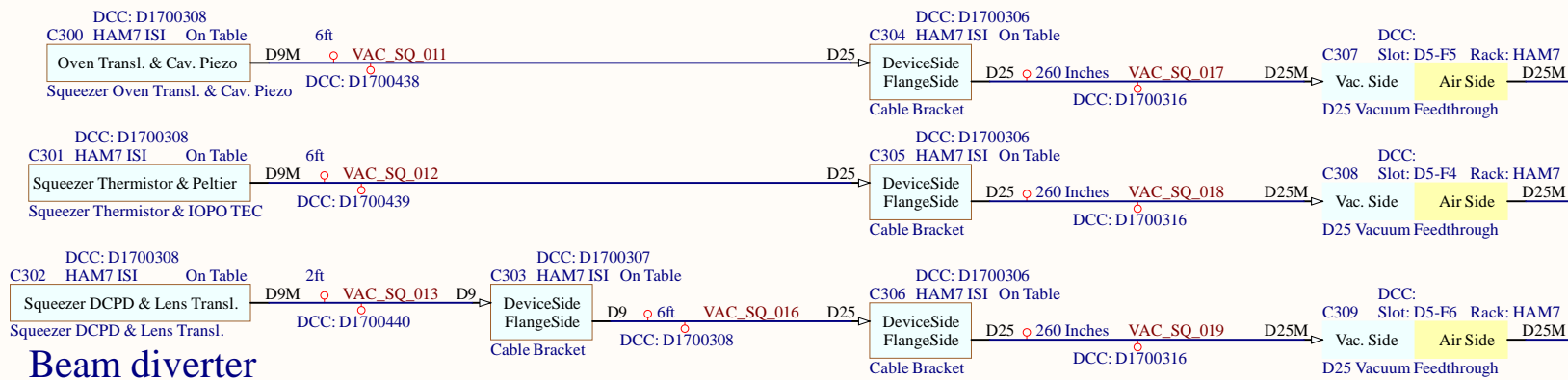
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Size	Number	Revision
B	D1900511	V7
Date:	8/24/2022	Sheet of 28 38
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OFI 2

SFI 1

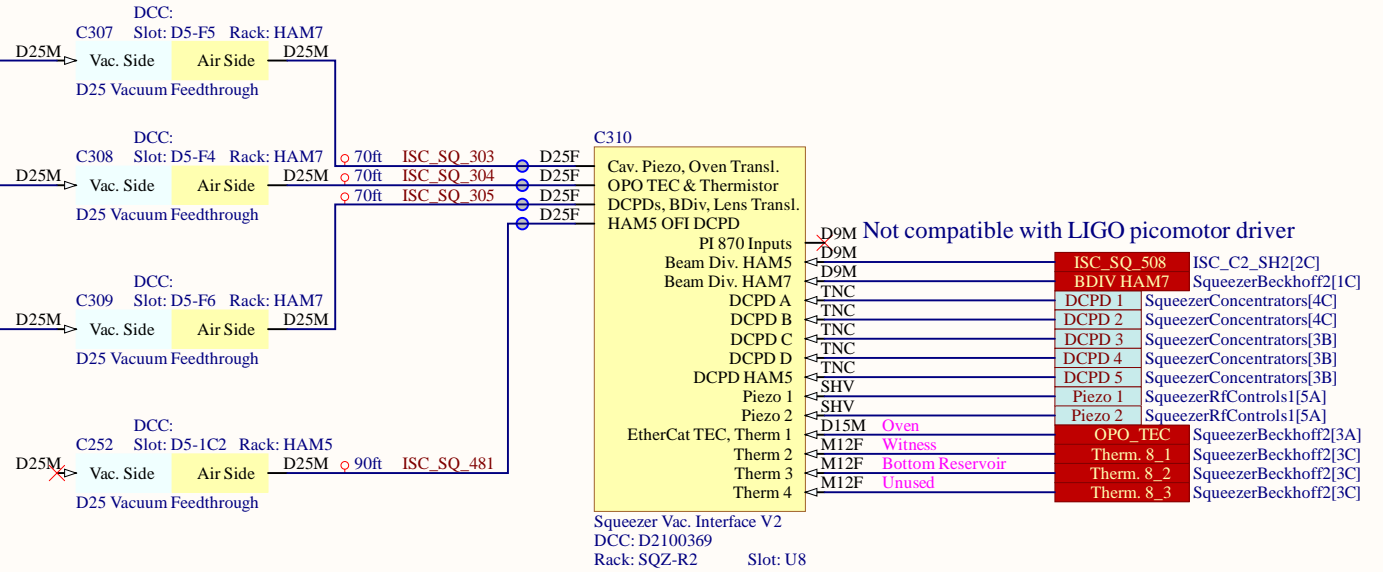
SFI 2



Beam diverter

D1700308 Wiring Diagram - More Cables

HAM5 DCPD
Beam diverter?



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

A

A

B

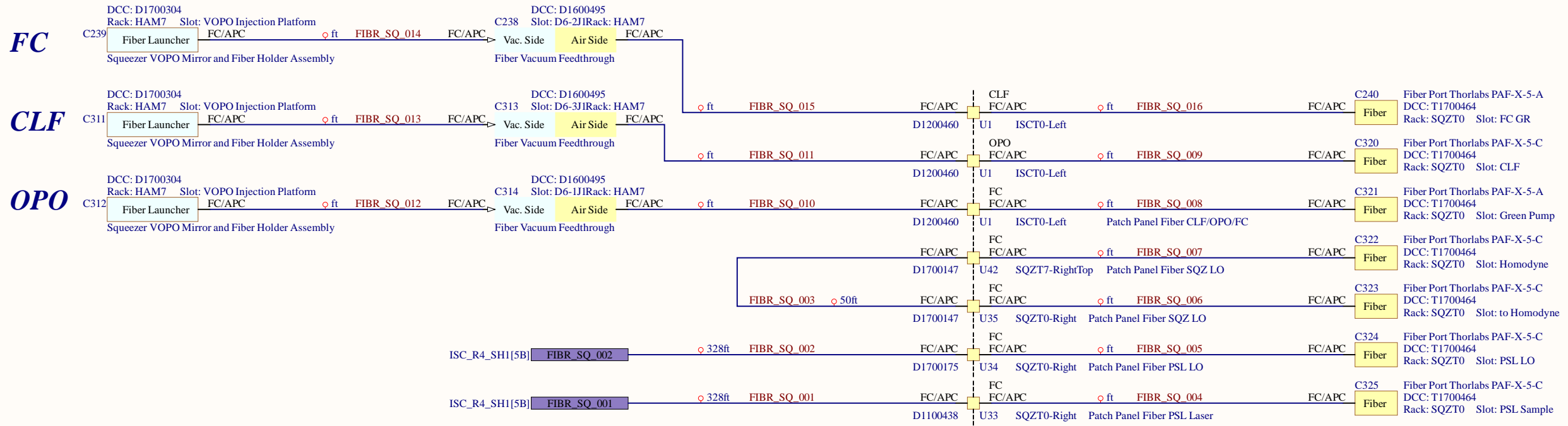
B

C

C

D

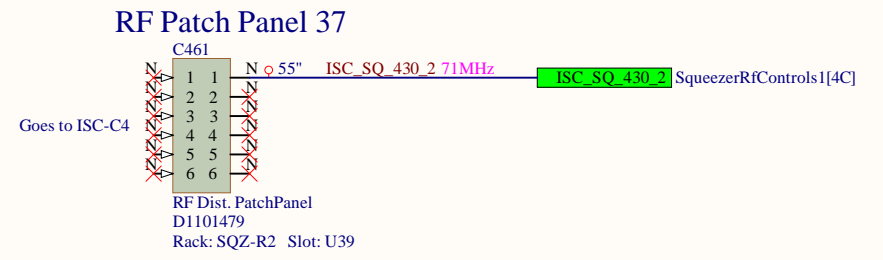
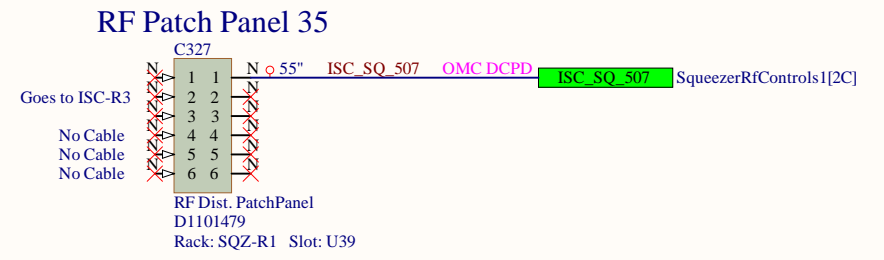
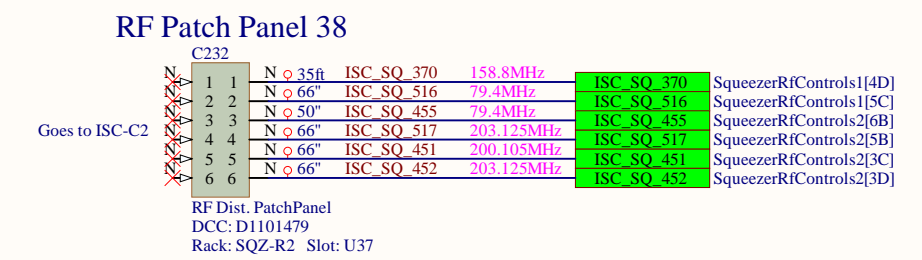
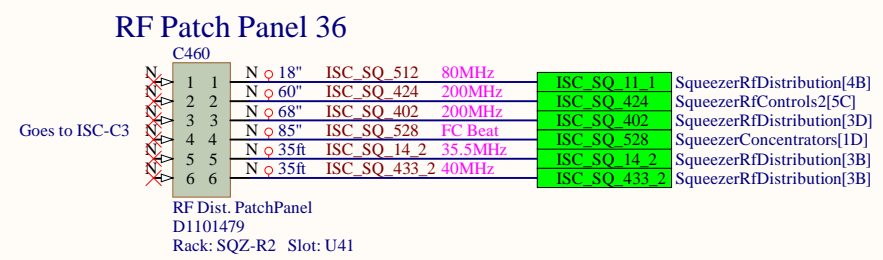
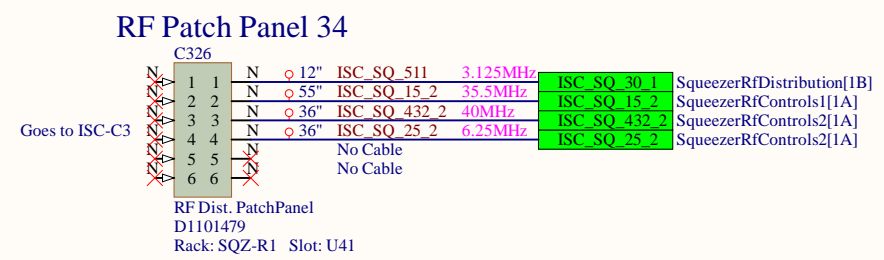
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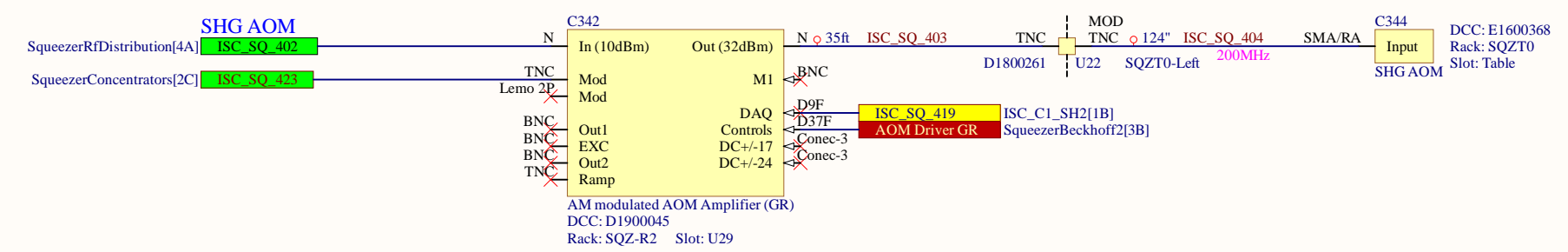
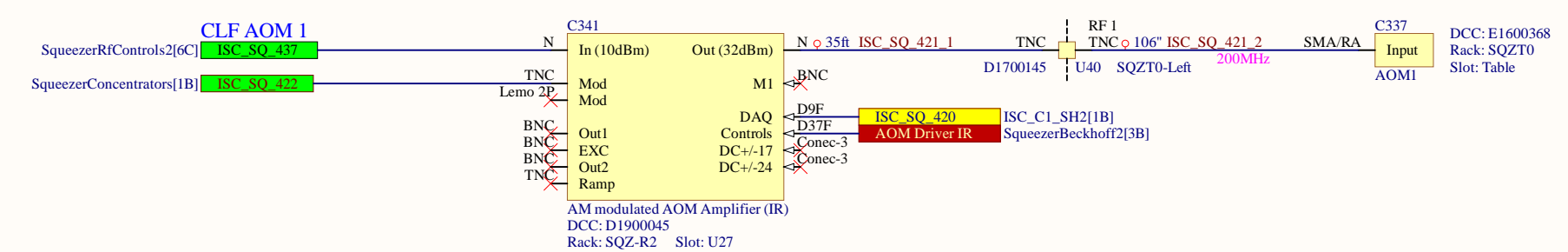
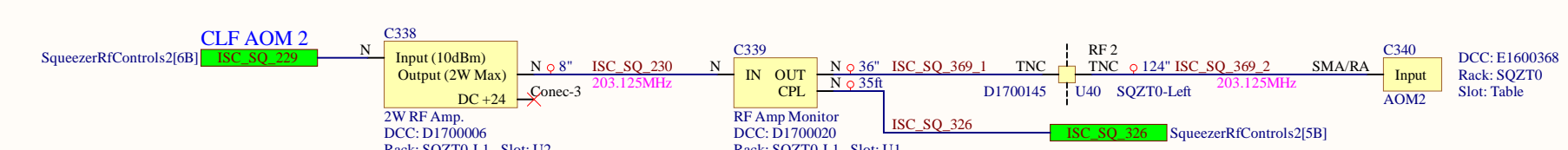
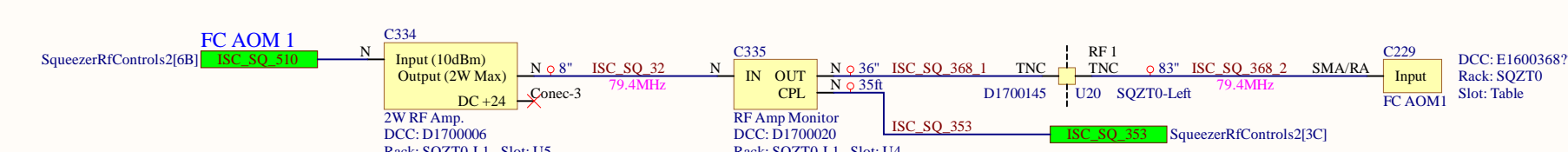
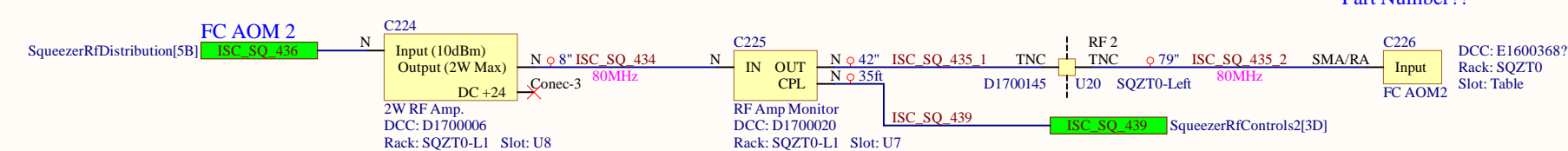
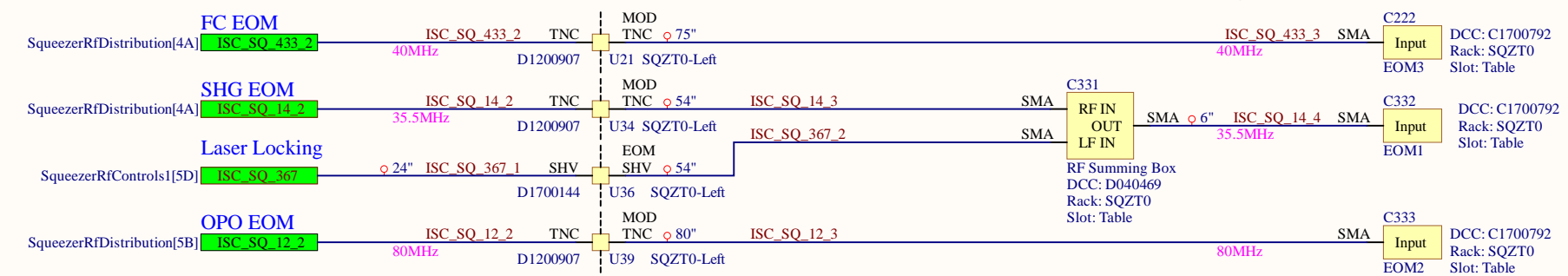
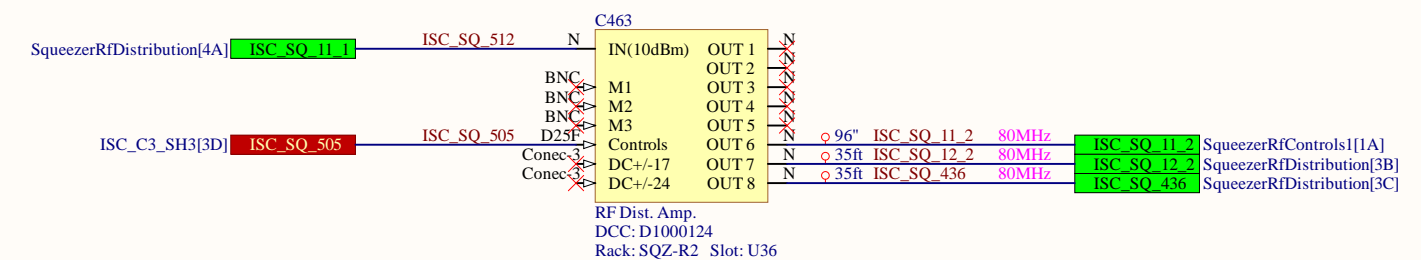
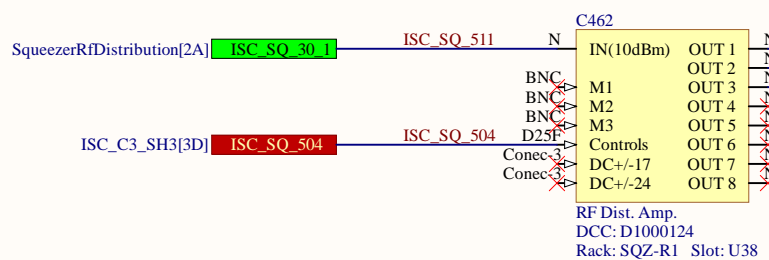
Last Edited: 1/27/2022

Title Squeezer Fiber Connections		LIGO Laboratory California Institute of Technology Massachusetts Institute of Technology		LIGO	
Size: B	DCC Number: D1900511	Revision: V7	Engineer: R. Abbott	Date: 8/24/2022	Time: 10:29:12 AM

File: C:\Users\daniel.sigg\Documents\Protel\WiringPlan\ISC\D1900511\SqueezerFiber.SchDoc



New cables for A_ start at ISC_SQ_430

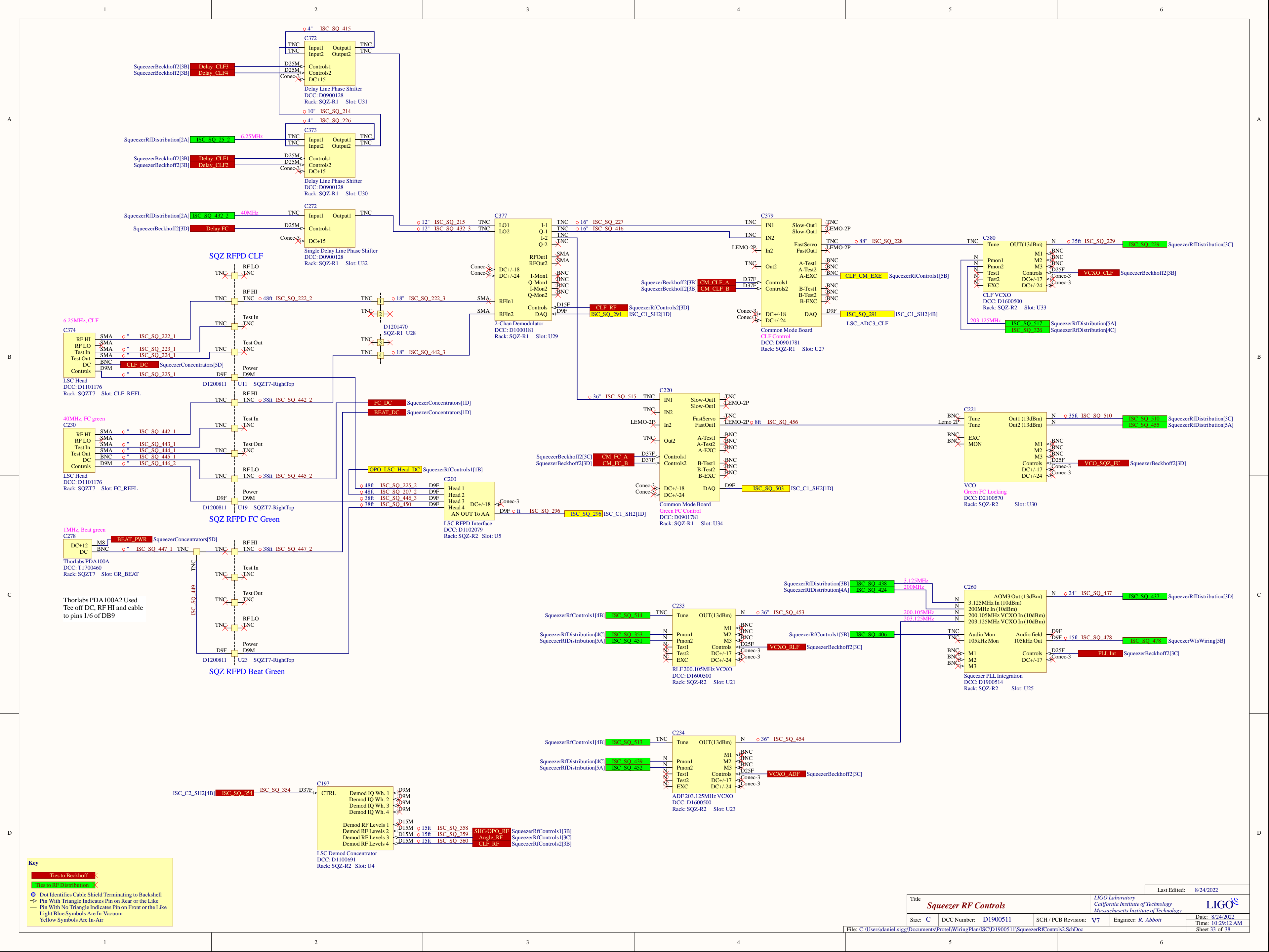


RF cables carrying the AOM signals need to be 1/4" superflexible helical corrugated coax.

Key

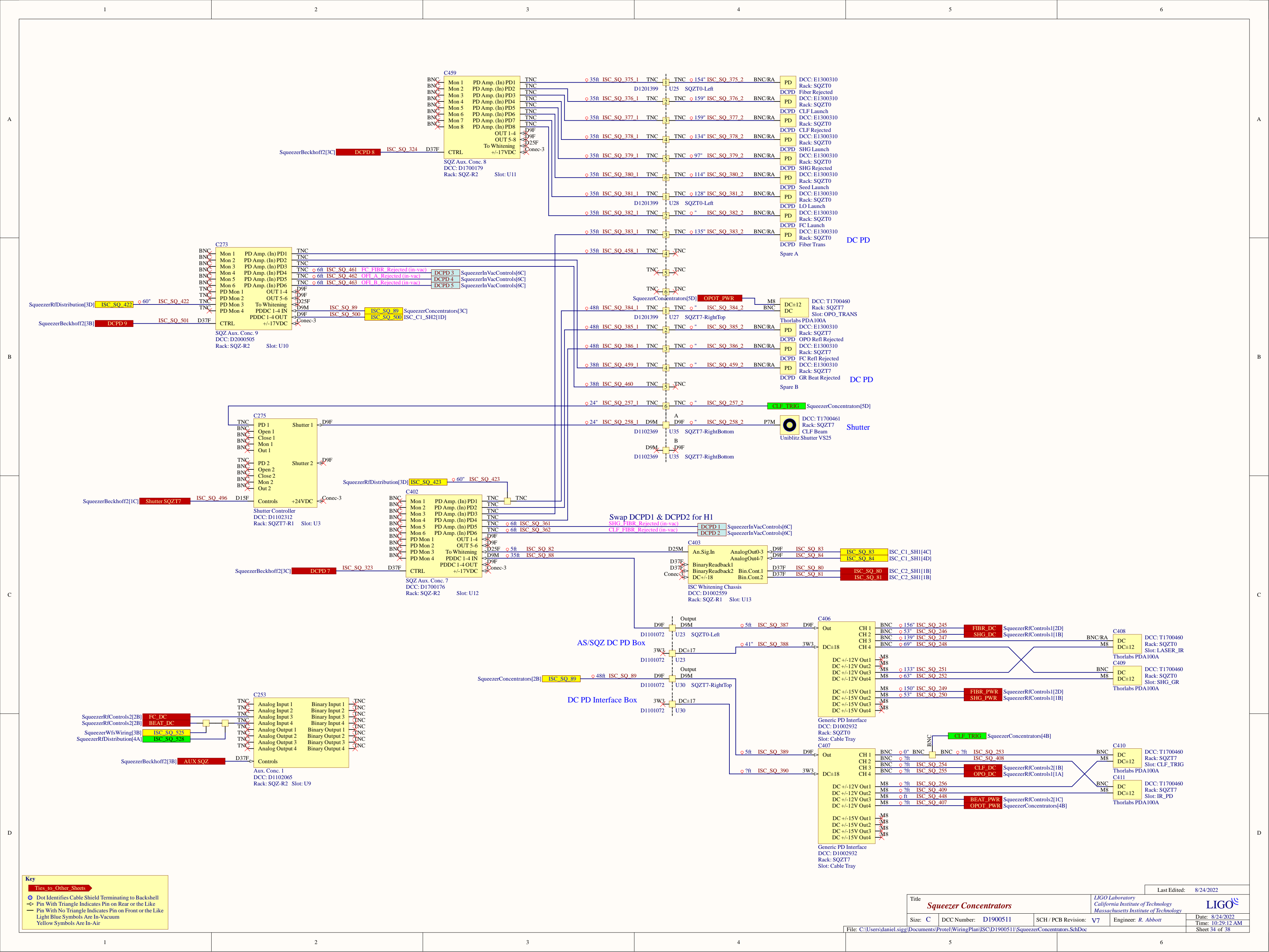
- Ties to Beckhoff
- Ties to RF Controls or WFS Wiring
- Dot Identifies Cable Shield Terminating to Backshell
- Pin With Triangle Indicates Pin on Rear or the Like
- Pin With No Triangle Indicates Pin on Front or the Like
- Light Blue Symbols Are In-Vacuum
- Yellow Symbols Are In-Air

Title		
Squeezer RF Distribution		
Size	Number	Revision
C	D1900511	V7
Date:	8/24/2022	Sheet of 31 38
File:	C:\Users\...SqueezerRfDistribution.SchDb\Drawn By: R. Abbott	



Key

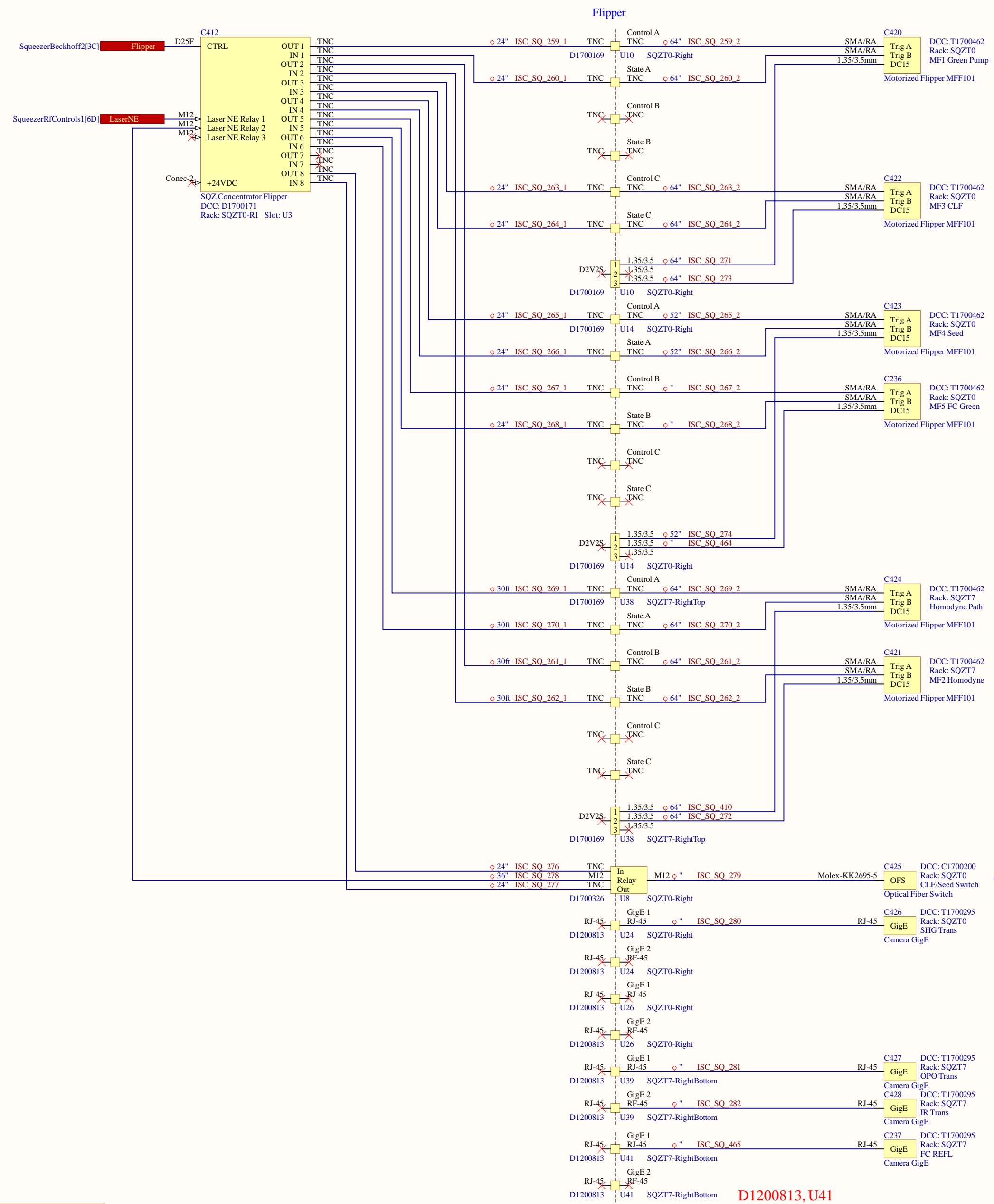
- Ties to Beckhoff
- Ties to RF Distribution
- Dot Identifies Cable Shield Terminating to Backshell
- ↔ Pin With Triangle Indicates Pin on Rear or the Like
- Pin With No Triangle Indicates Pin on Front or the Like
- Light Blue Symbols Are In-Vacuum
- Yellow Symbols Are In-Air



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

Title Squeezer Concentrators		LIGO Laboratory California Institute of Technology Massachusetts Institute of Technology		LIGO	
Size: C	DCC Number: D1900511	SCH / PCB Revision: V7	Engineer: R. Abbott	Date: 8/24/2022	Time: 10:29:12 AM
File: C:\Users\daniel.sig\Documents\Protel\WiringPlan\ISC\D1900511\SqueezerConcentrators.SchDoc				Last Edited: 8/24/2022	
				Sheet 34 of 38	

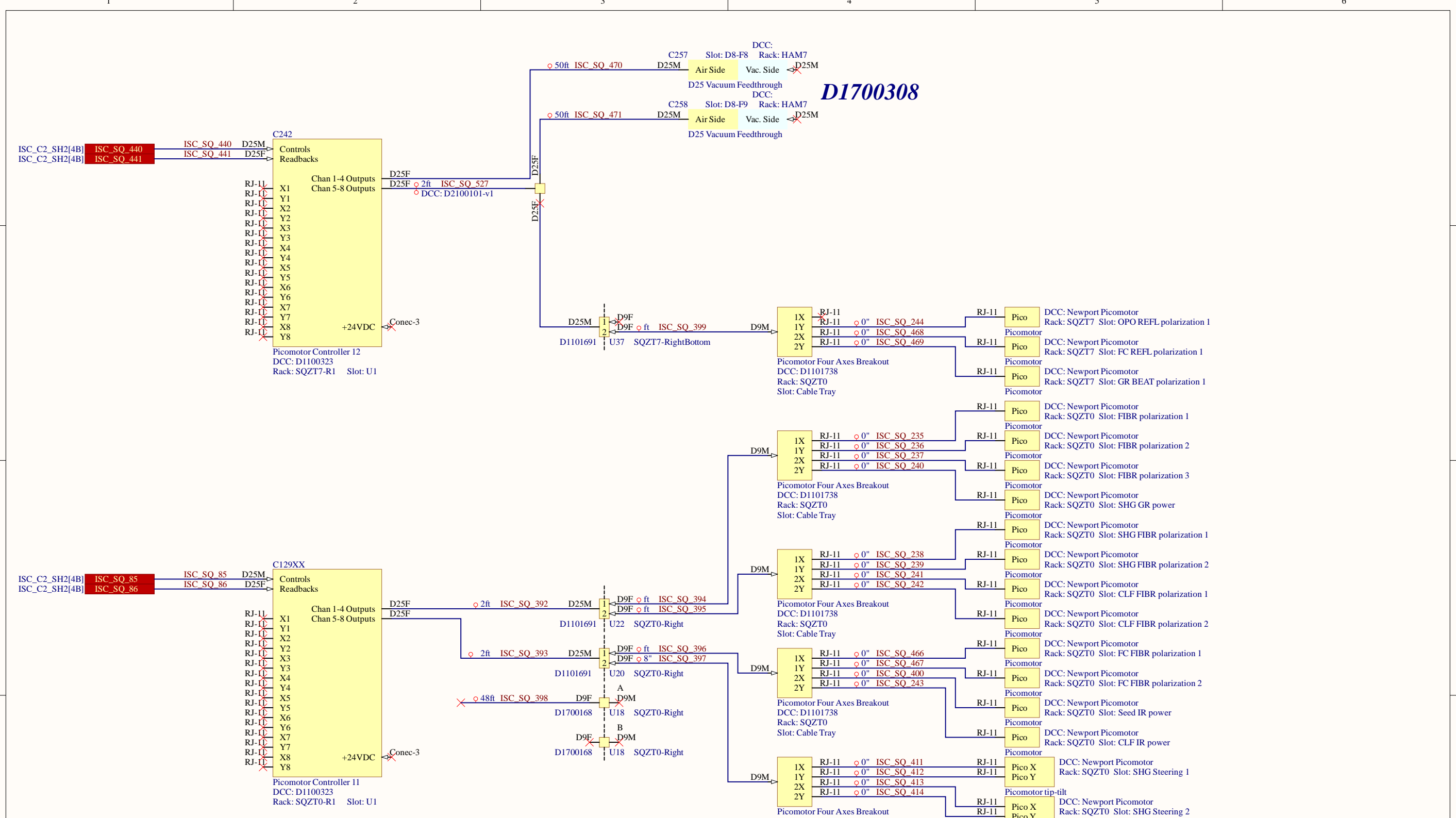


Key

- 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

D1200813, U41
New Cameras per Table Feedthrough Panel

Title Squeezer Miscellaneous		LIGO Laboratory California Institute of Technology Massachusetts Institute of Technology		LIGO	
Size: C	DCC Number: D1900511	SCH / PCB Revision: V7	Engineer: R. Abbott	Date: 8/24/2022	Time: 10:29:13 AM
File: C:\Users\daniel.sig\Documents\Protel\WiringPlan\ISC\D1900511\SqueezerMiscellaneous.SchDoc				Last Edited: 7/27/2022	
				Sheet 55 of 38	

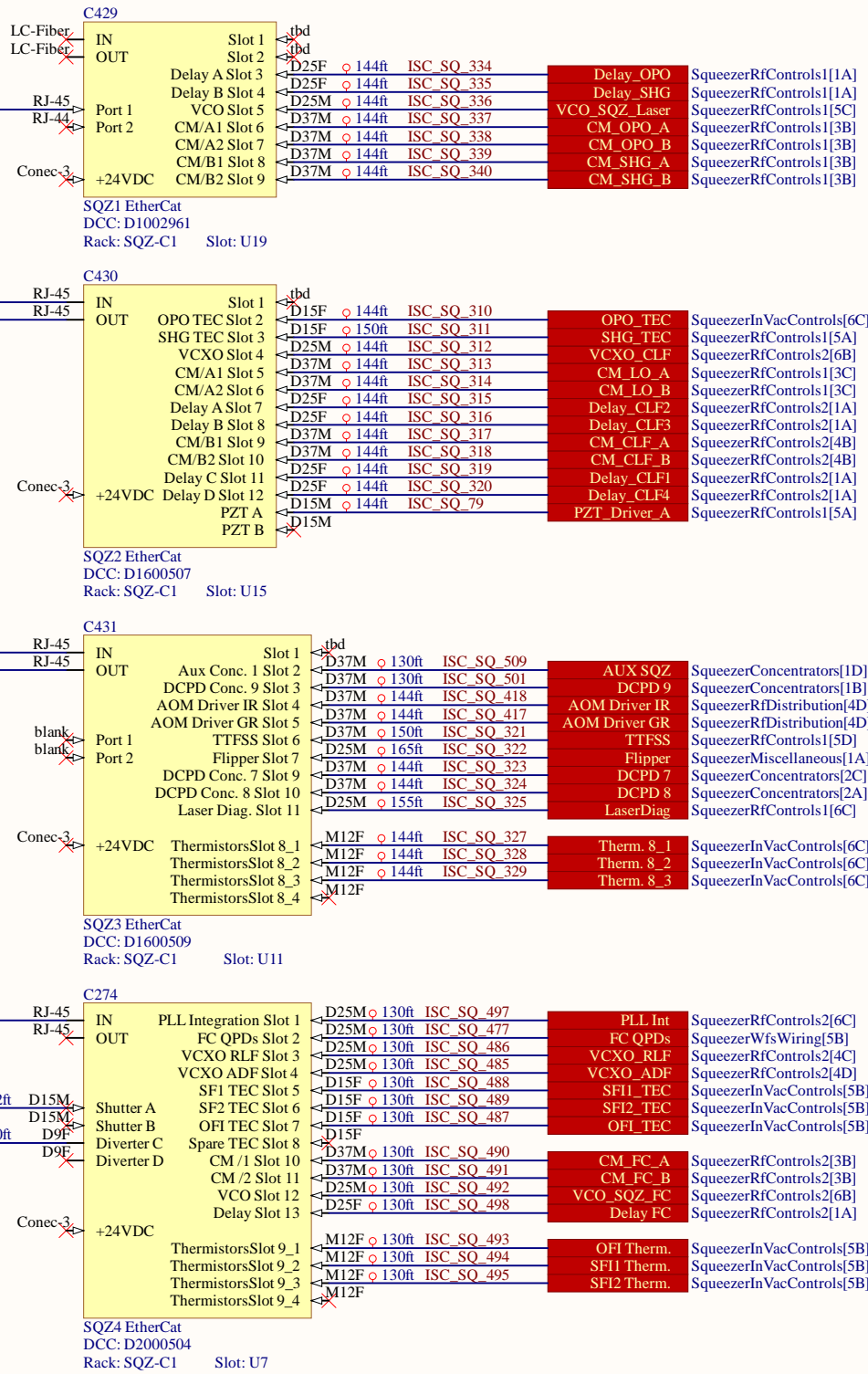


D1700308

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	V7
Date:	8/24/2022	Sheet of 6 38
File:	C:\Users\... \SqueezerBeckhoff1.SchDoc	Drawn By: R. Abbott



Key

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Title		
Squeezer Beckhoff Interfaces		
Size	Number	Revision
B	D1900511	V7
Date:	8/24/2022	Sheet of 7 38
File:	C:\Users\... \SqueezerBeckhoff2.SchDoc	Drawn By: R. Abbott