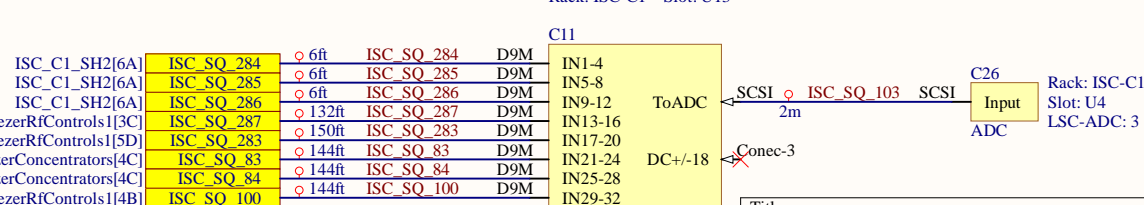
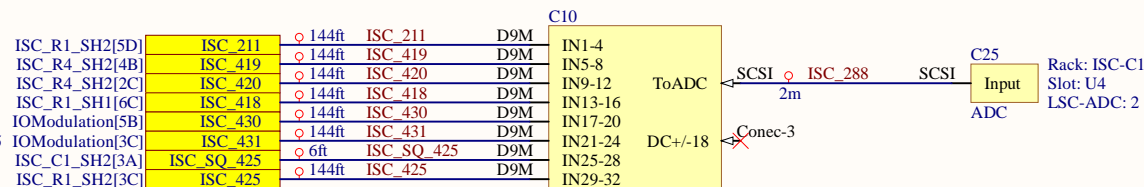
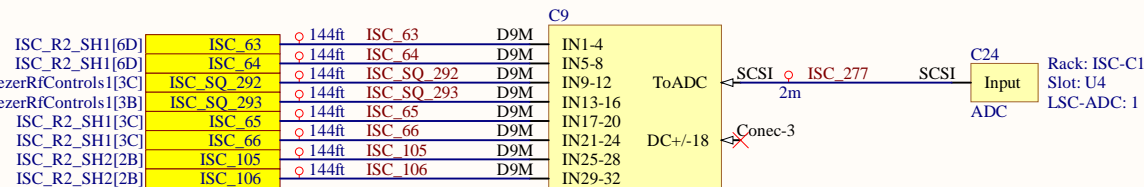
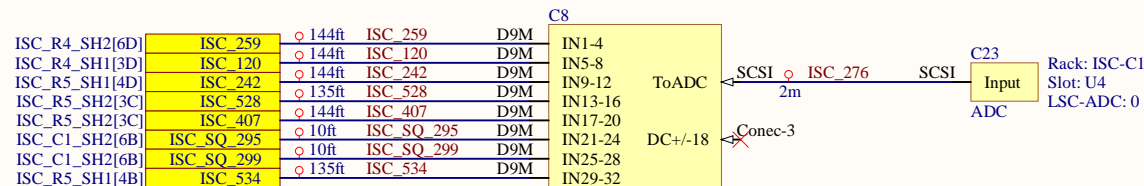
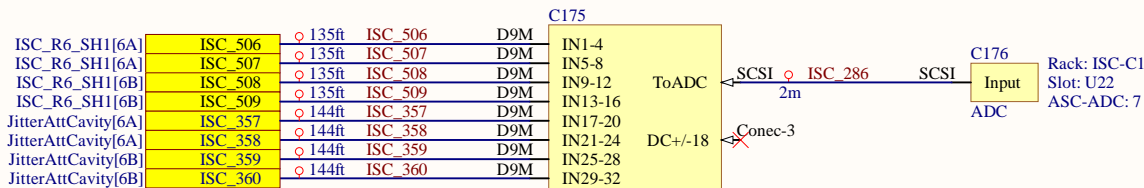
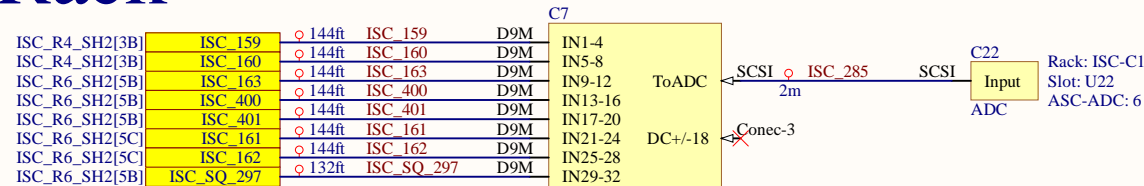
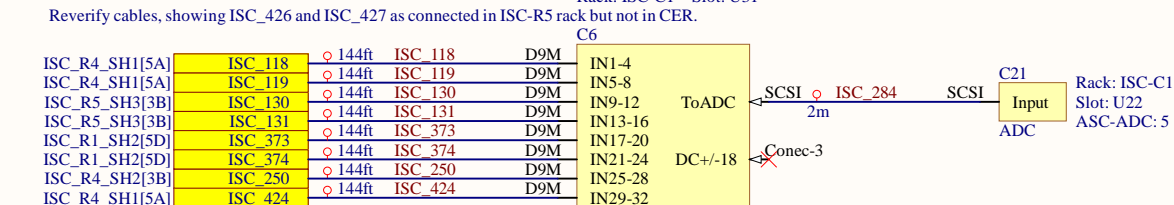
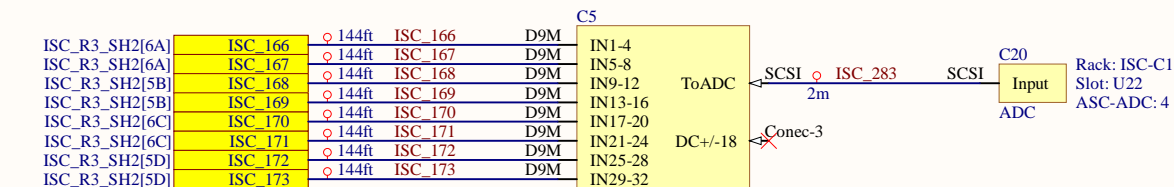
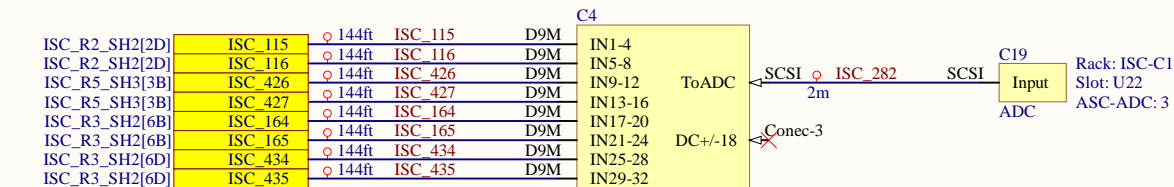
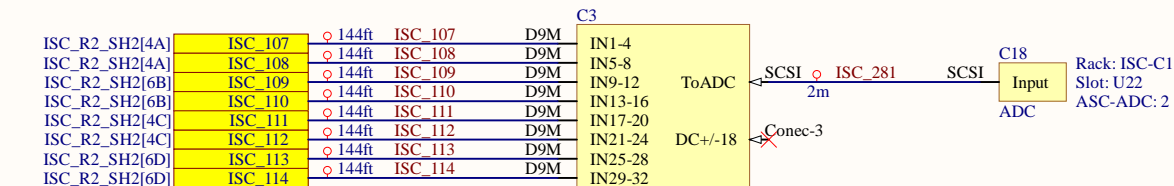
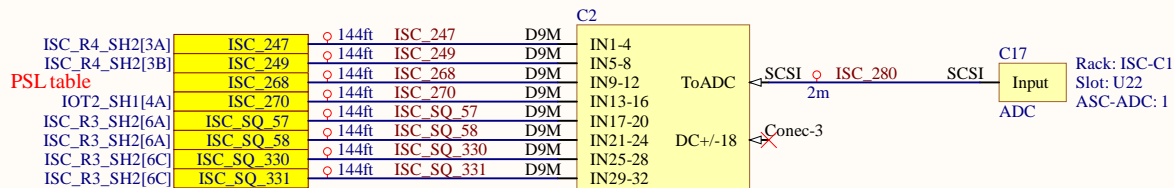
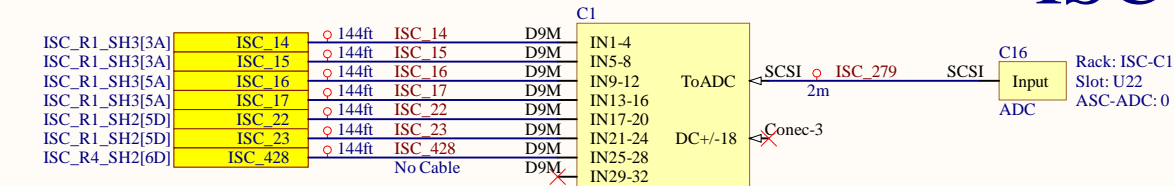


# ISC-C1 Rack

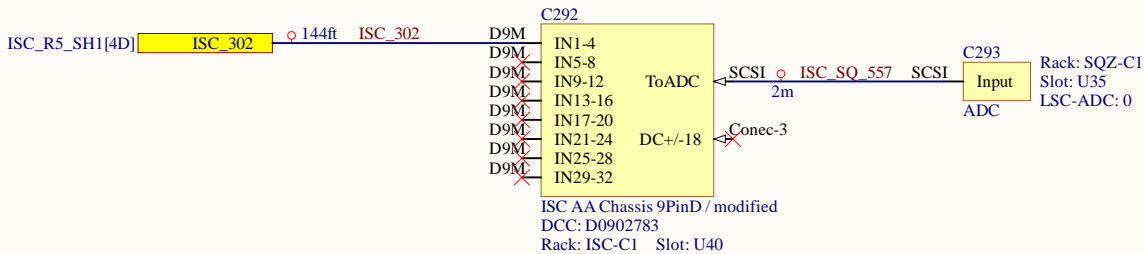
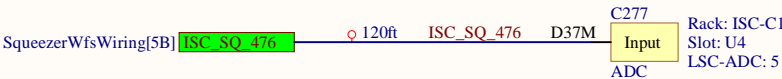
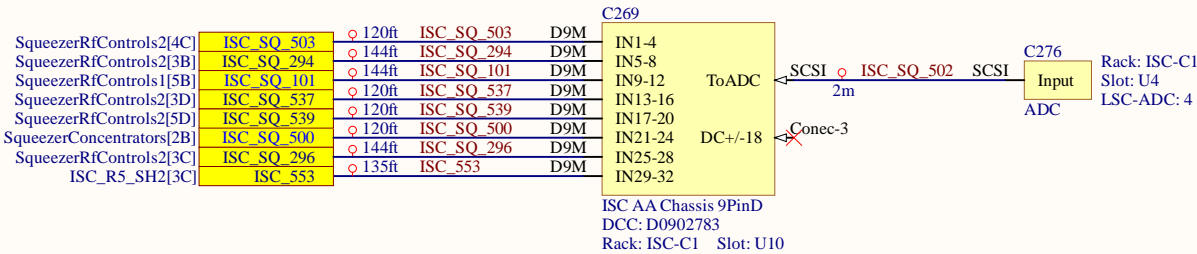
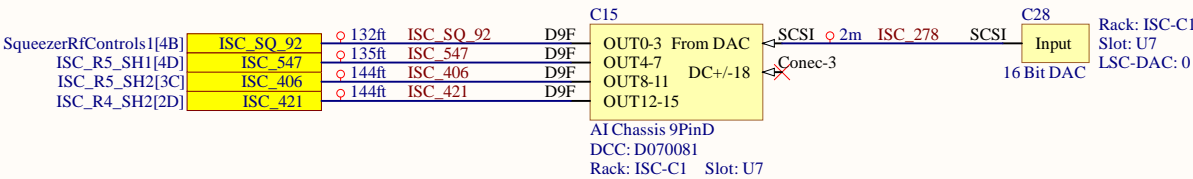
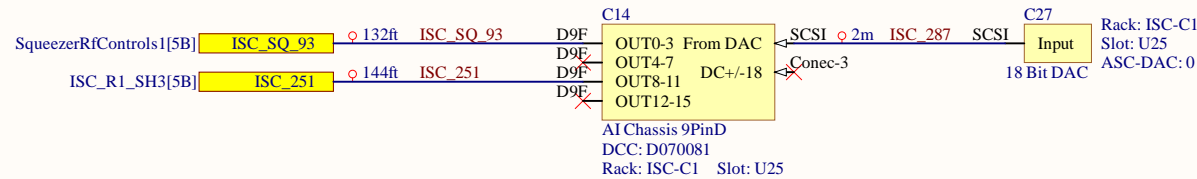
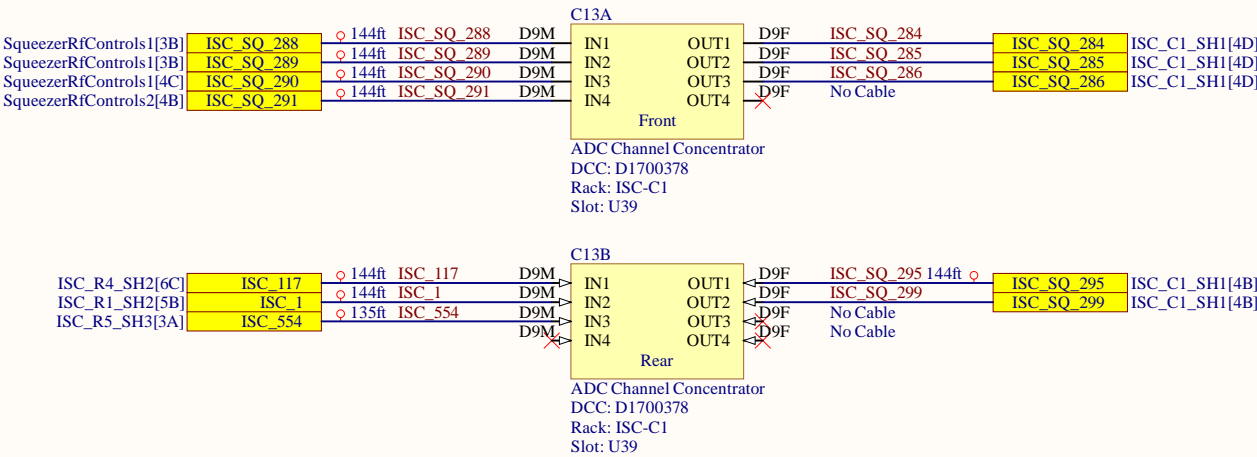
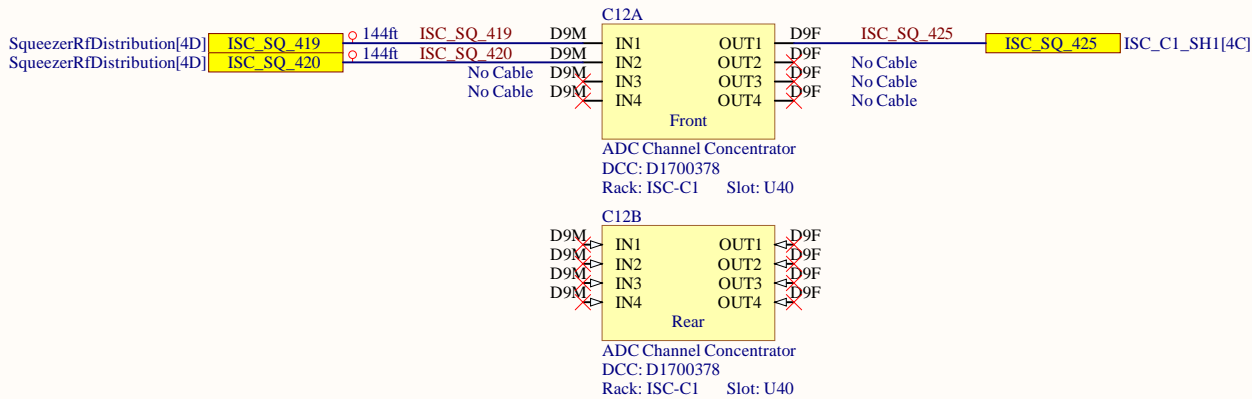


Following cables are not connected in the CER:

ISC\_101,ISC\_175,ISC\_242, ISC\_410.

Title		
ISC System Wiring Diagram		
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# ISC-C1 Rack

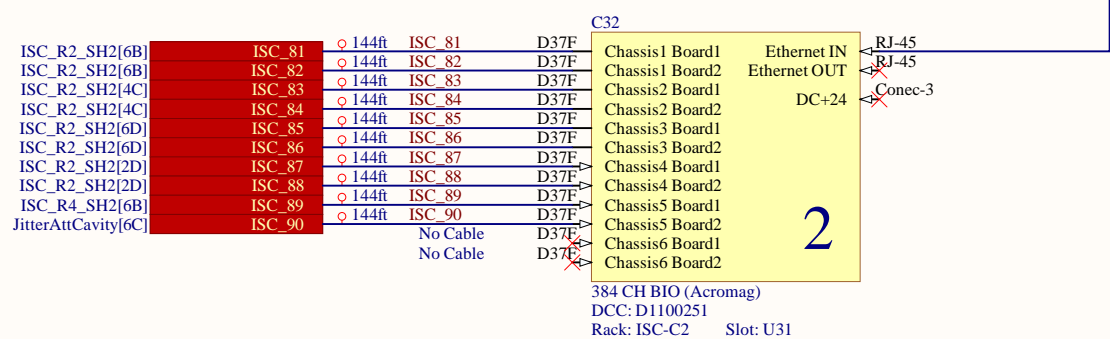
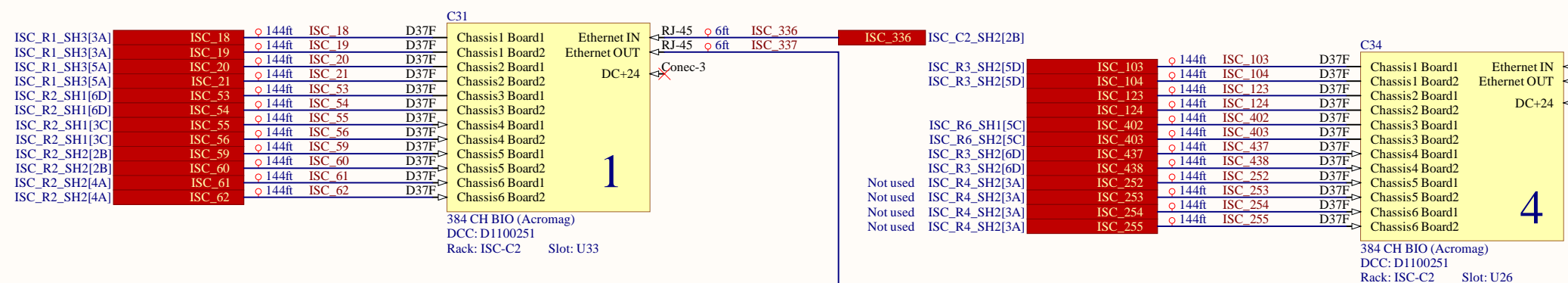
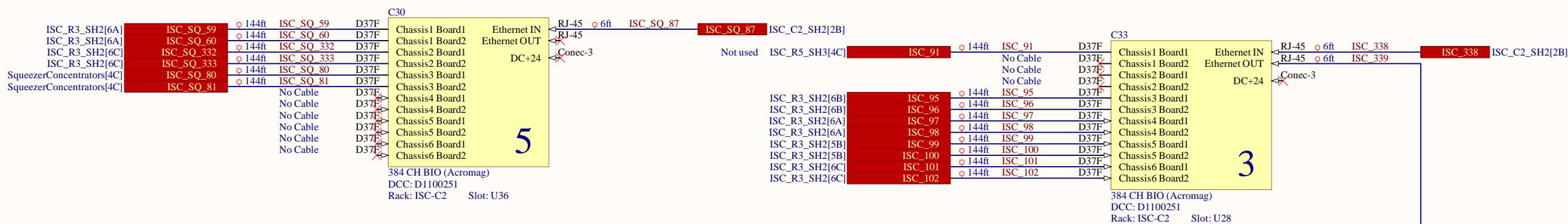
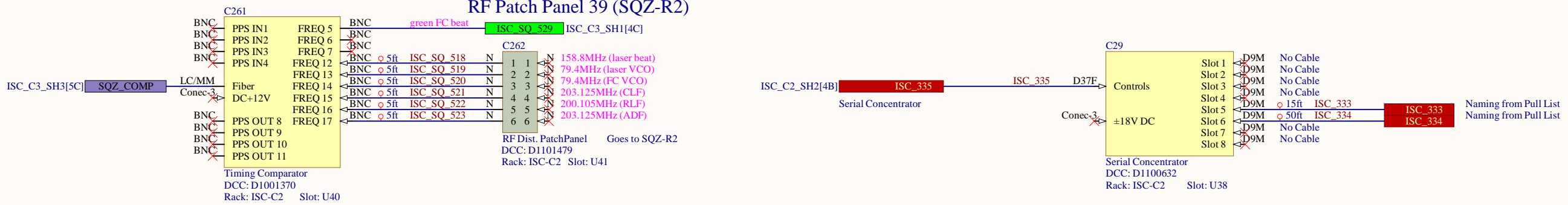


# SQZ-C1 Rack

Title			
ISC System Wiring Diagram			
Size	Number	Revision	
B	D1900511	V11	
Date:	4/21/2025	Sheet of	2 43
File:	C:\Users\...\ISC_C1_SH2.SchDoc	Drawn By:	Filiberto Clara

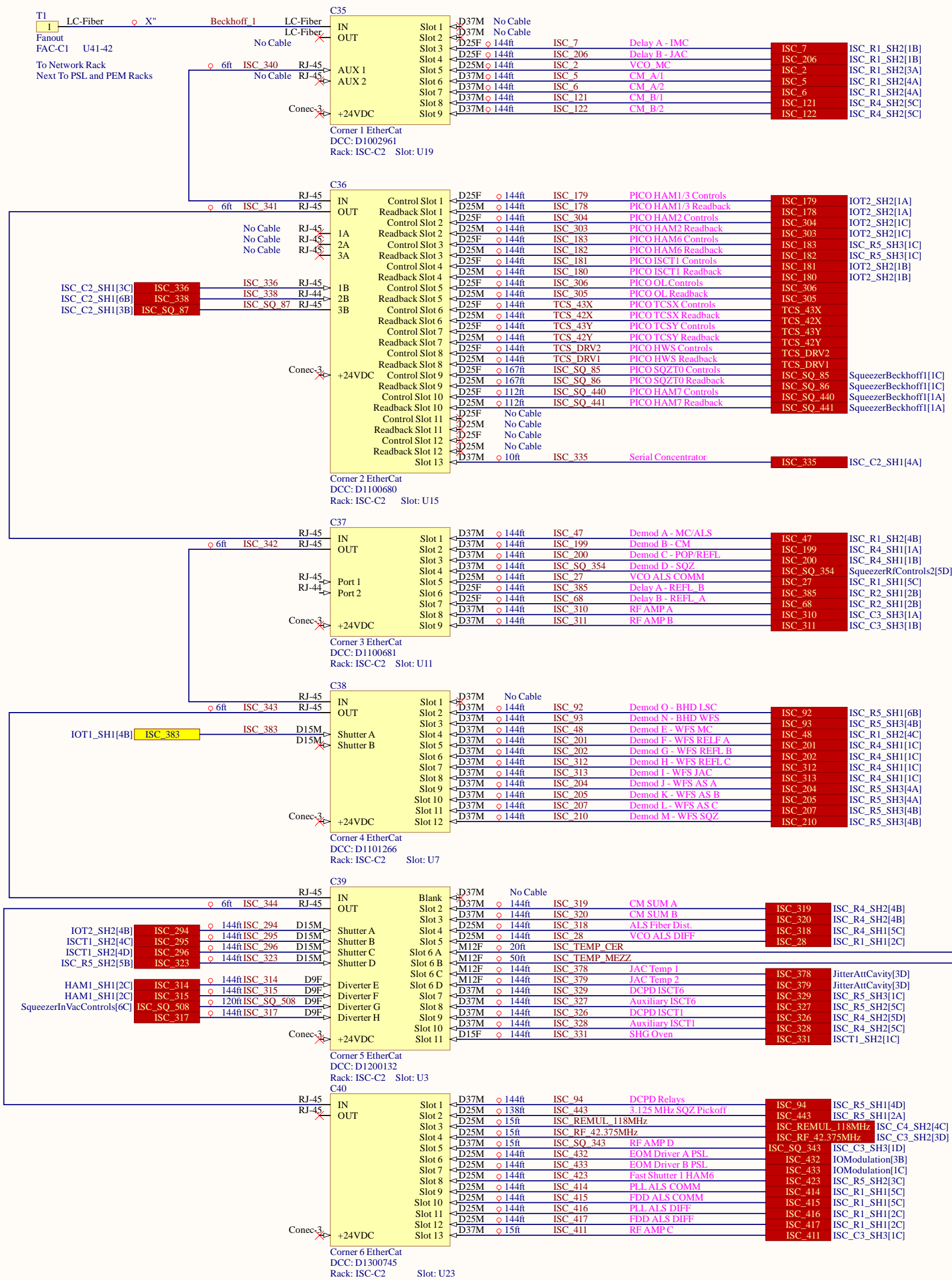
# ISC-C2 Rack

RF Patch Panel 39 (SQZ-R2)



Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V11
Date:	4/21/2025	Sheet of 3 43
File:	C:\Users\...\ISC_C2_SH1.SchDoc	Drawn By: Filiberto Clara

ISC-C2 Rack

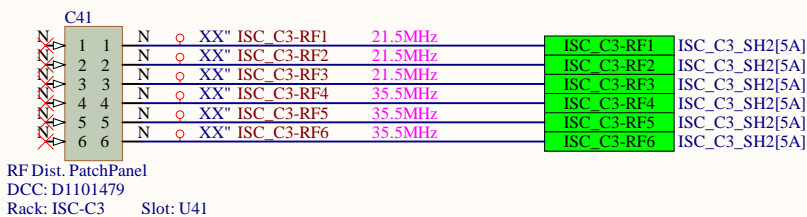




# ISC-C3 Rack

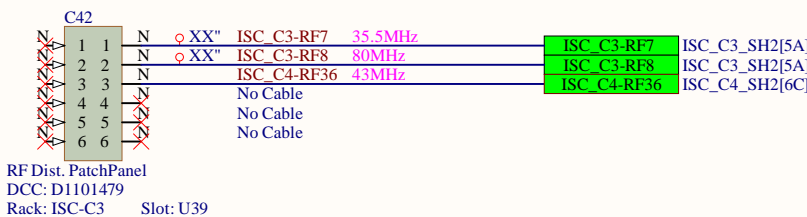
## RF Patch Panel 7 (PSL)

Goes to PSL-R2



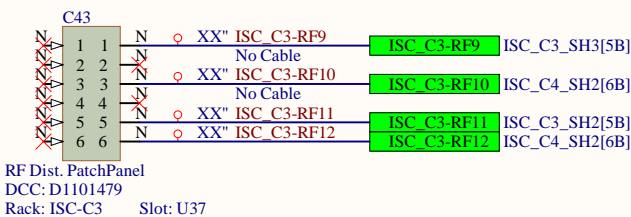
## RF Patch Panel 8 (PSL)

Goes to PSL-R2



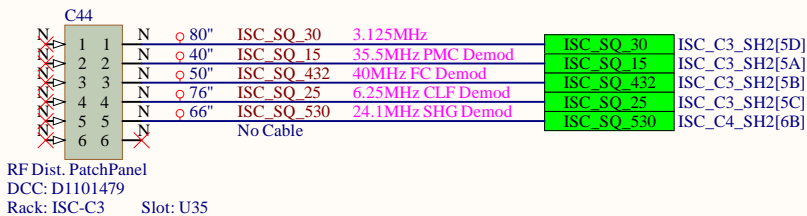
## RF Patch Panel 9 (TCS)

Goes to TCS



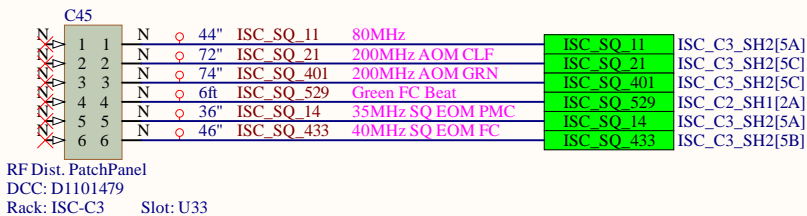
## RF Patch Panel 32 (SQZ-R1)

Goes to SQZ-R1



## RF Patch Panel 33 (SQZ-R2)

Goes to SQZ-R2

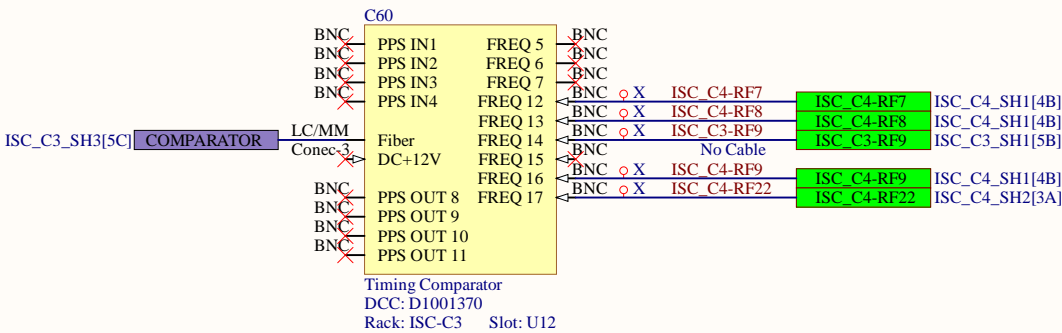
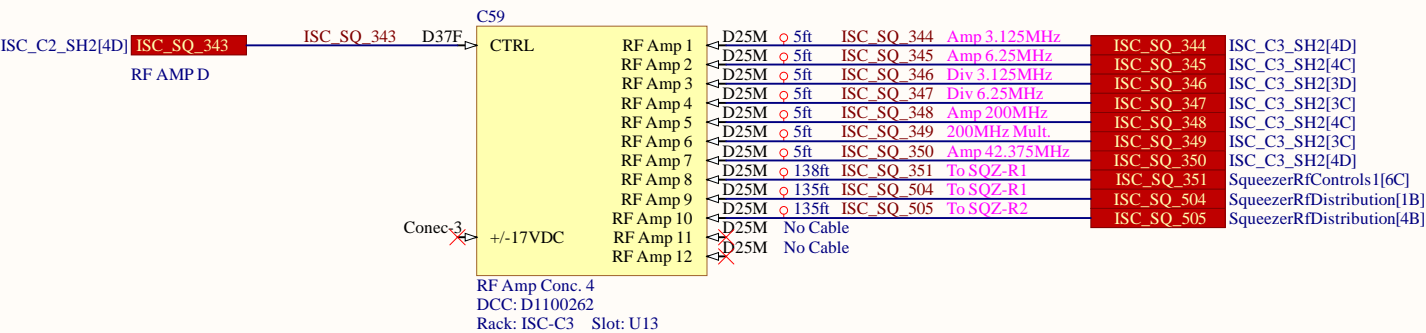
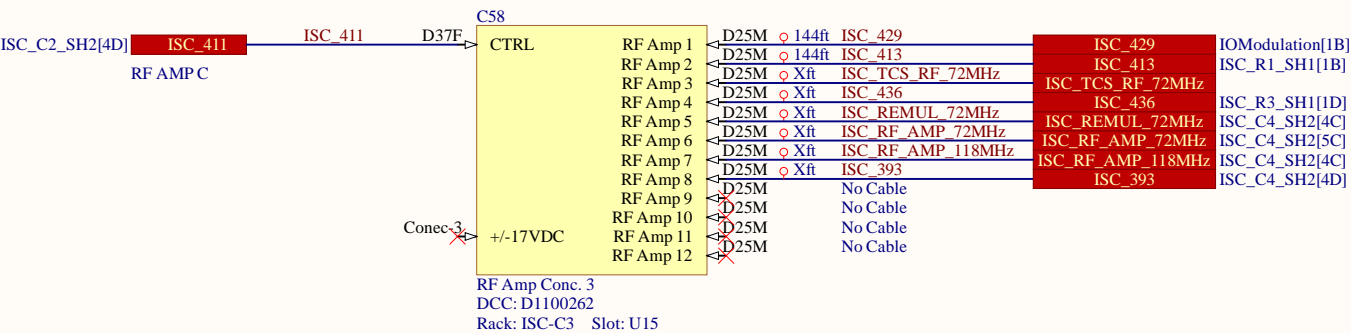
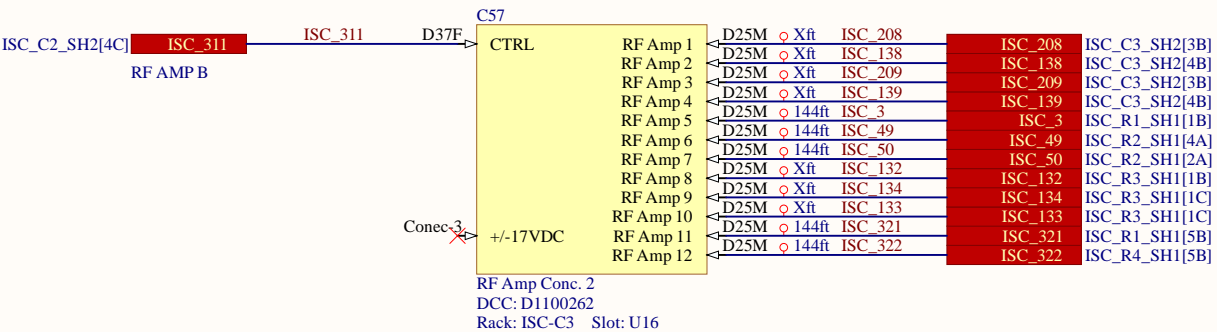
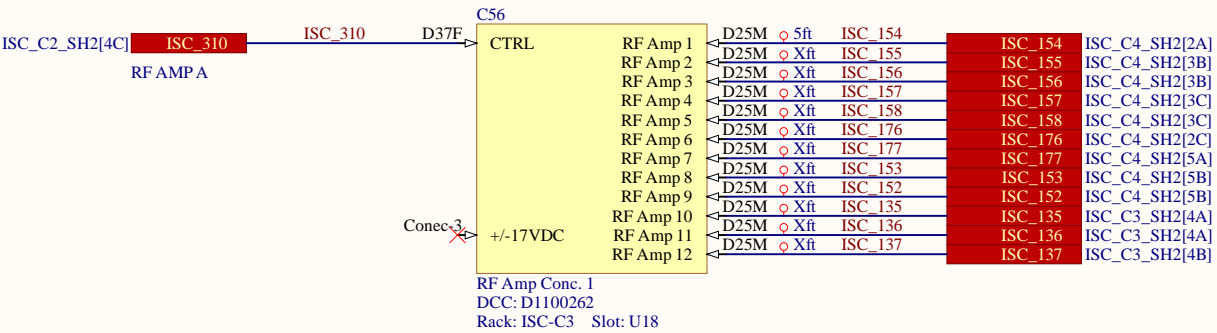


Cables that are removed  
ISC\_SQ\_31  
ISC\_SQ\_12  
ISC\_SQ\_78

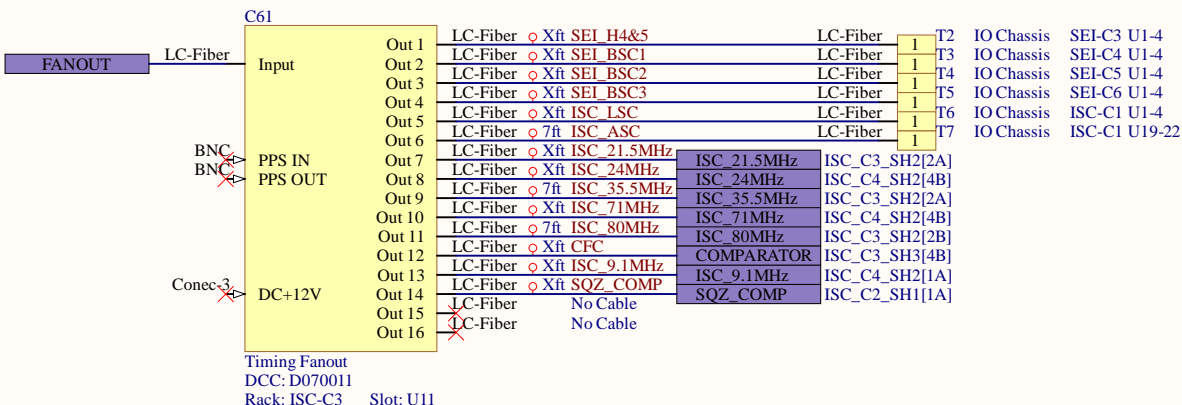
Title			
ISC System Wiring Diagram			
Size	Number	Revision	
B	D1900511	V11	
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## A

# ISC-C3 Rack



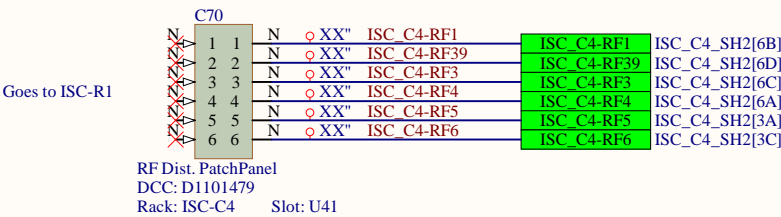
Need Locations of other ends.  
SEI IO Chassis



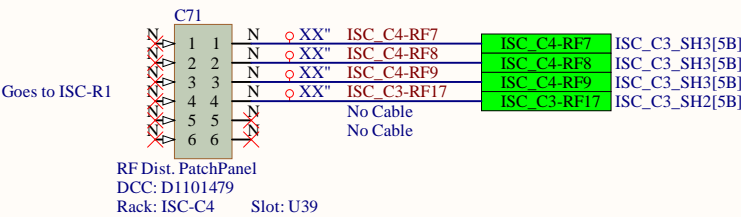
Title			
ISC System Wiring Diagram			
Size	Number	Revision	
B	D1900511	V11	
Date:	4/21/2025	Sheet of	43
File:	C:\Users\...\ISC_C3_SH3.SchDoc	Drawn By:	Filiberto Clara

# ISC-C4 Rack

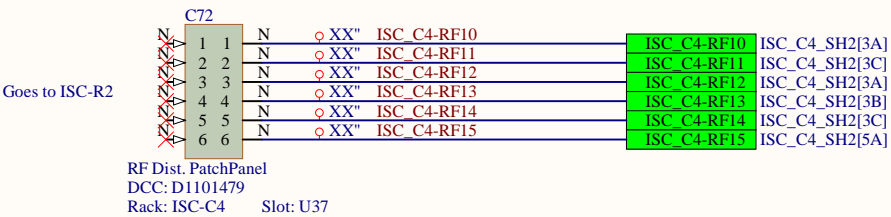
RF Patch Panel 1 (ISC-R1/IO)



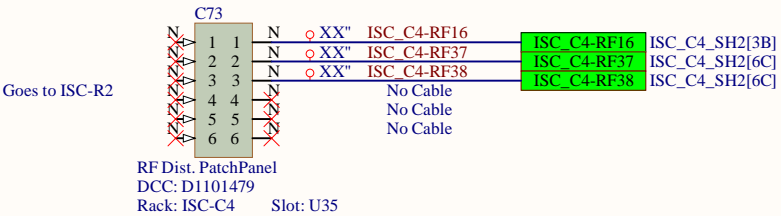
RF Patch Panel 2 (ISC-R1/IO)



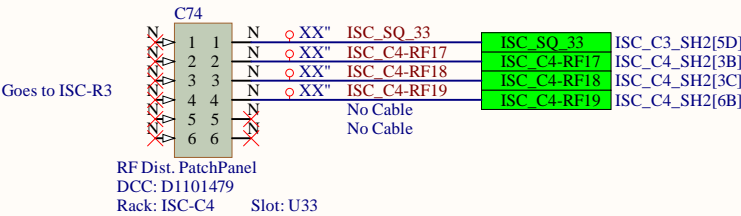
RF Patch Panel 3 (ISC-R2/REFL)



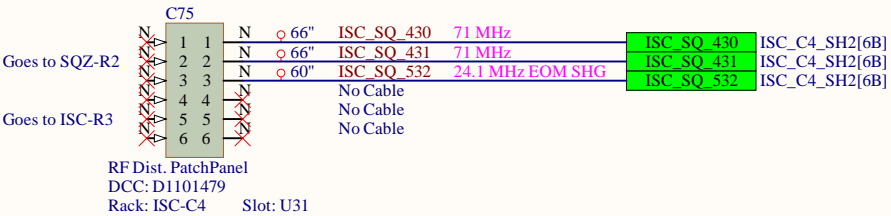
RF Patch Panel 4 (ISC-R2/REFL)



RF Patch Panel 5 (ISC-R3/AS)



RF Patch Panel 6 (SQZ-R2/ISC-R3)



Title		
ISC System Wiring Diagram		
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A

B

C

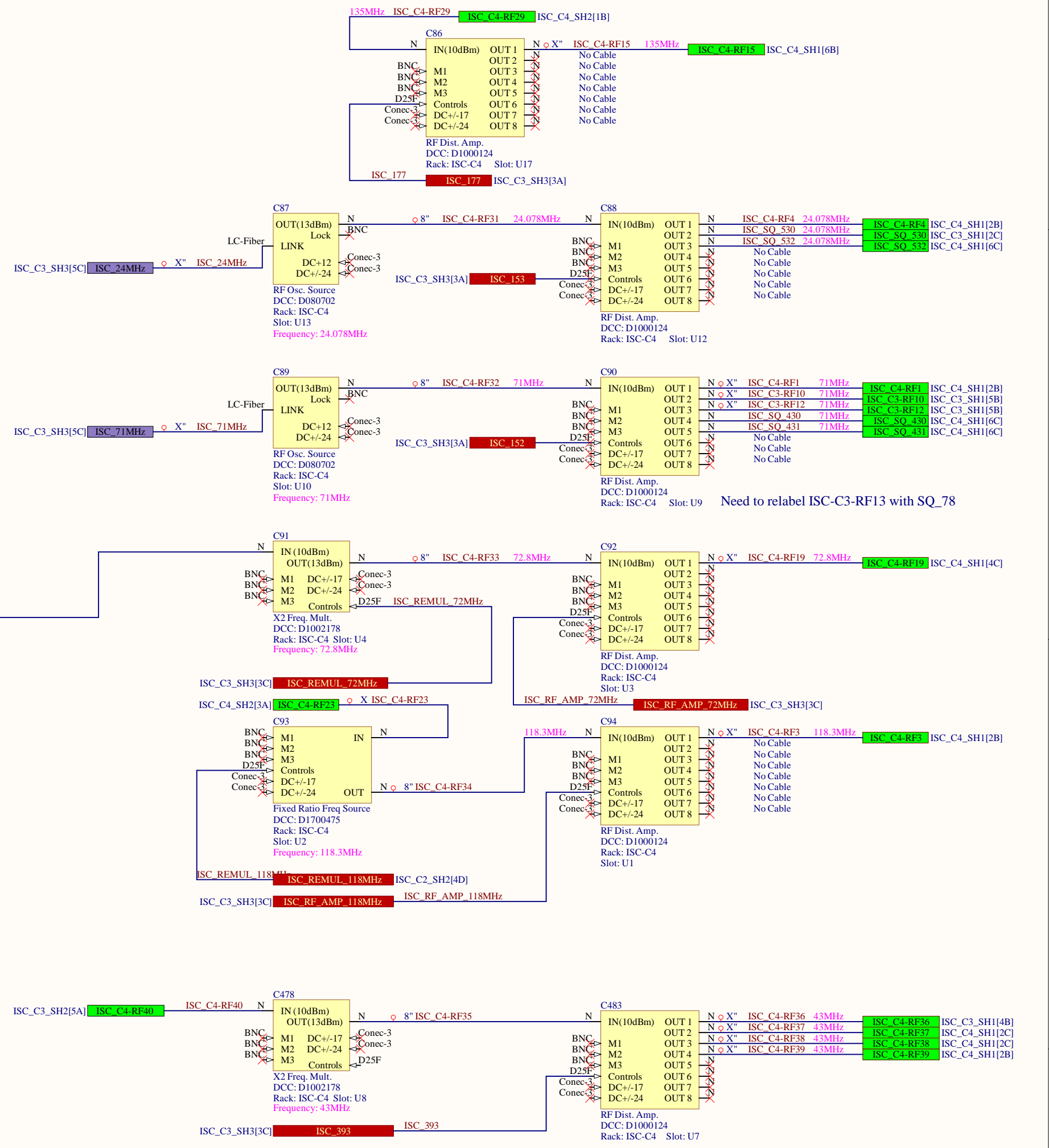
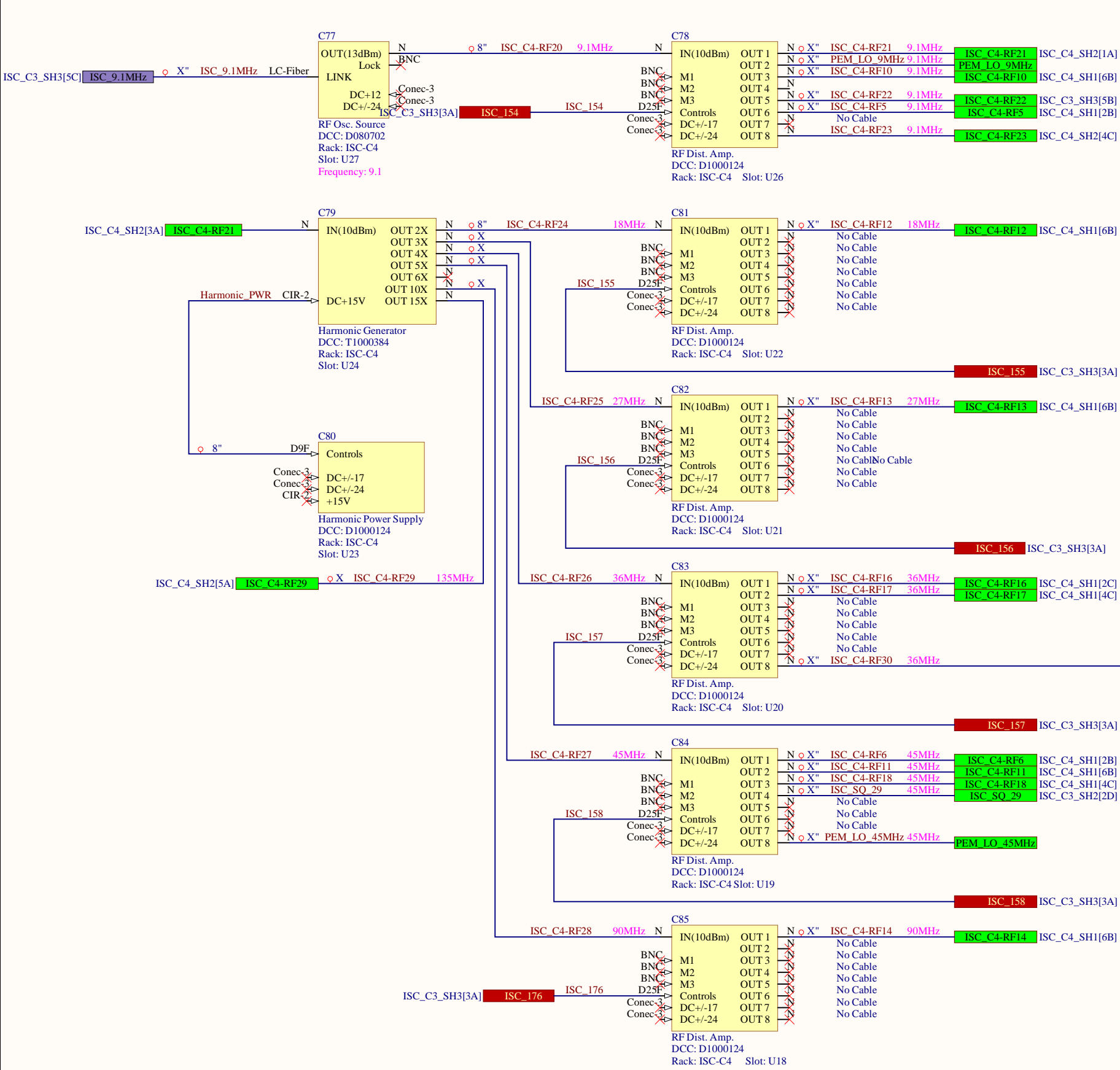
D

A

B

C

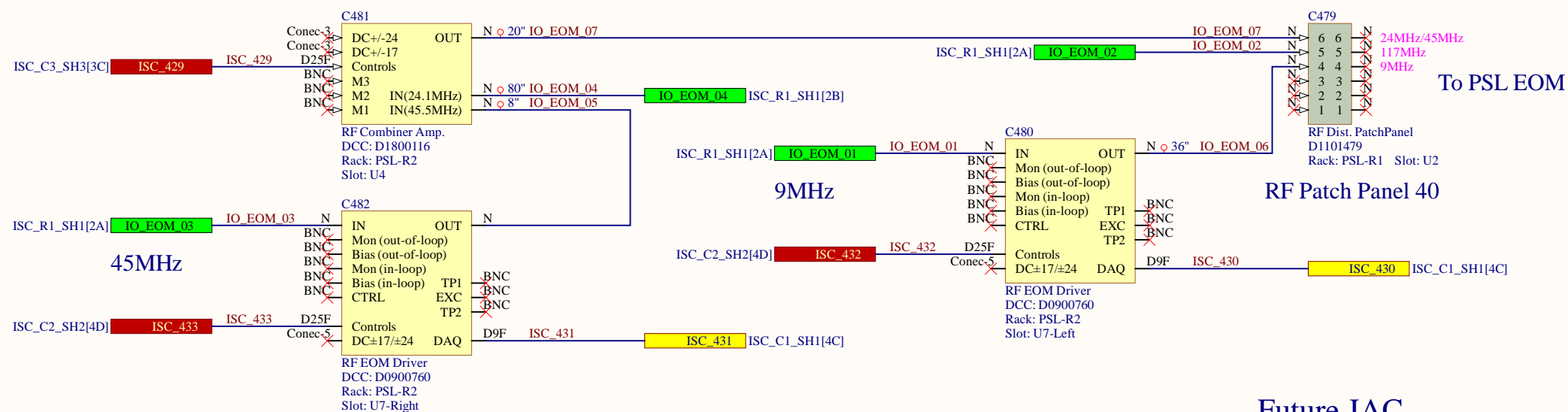
D



# ISC-C4 Rack

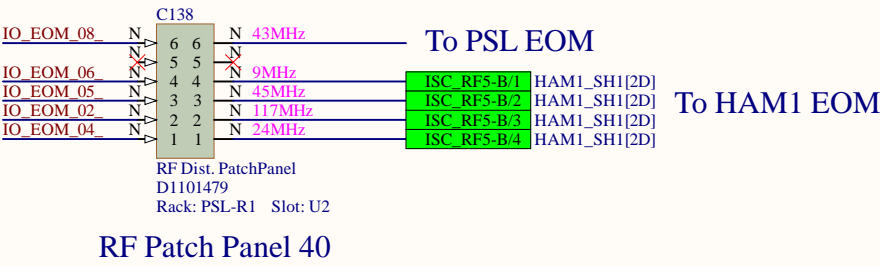
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ISC System Wiring Diagram			
Size	Number	Revision	
C	D1900511	V11	
Date:	4/21/2025	Sheet of	43
File:	C:\Users\ISC_C4_SH2.SchDoc	Drawn By:	Filiberio Clara

# IO Modulation



## Future JAC

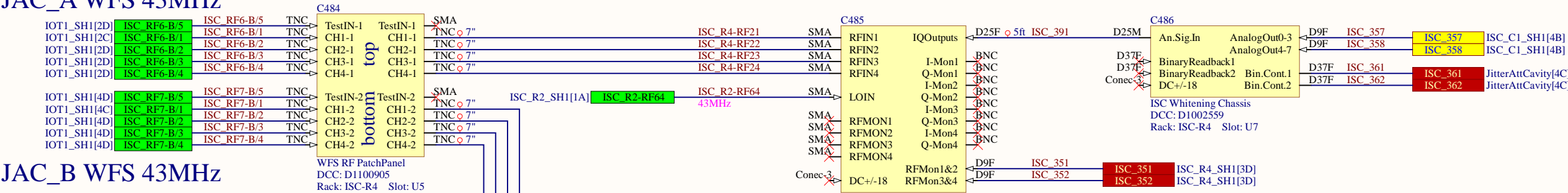
From PSL-R2 RF patch panel 18/3



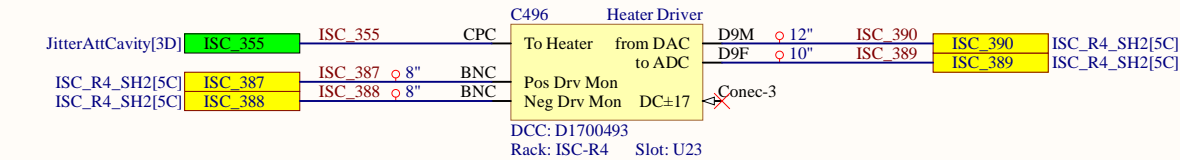
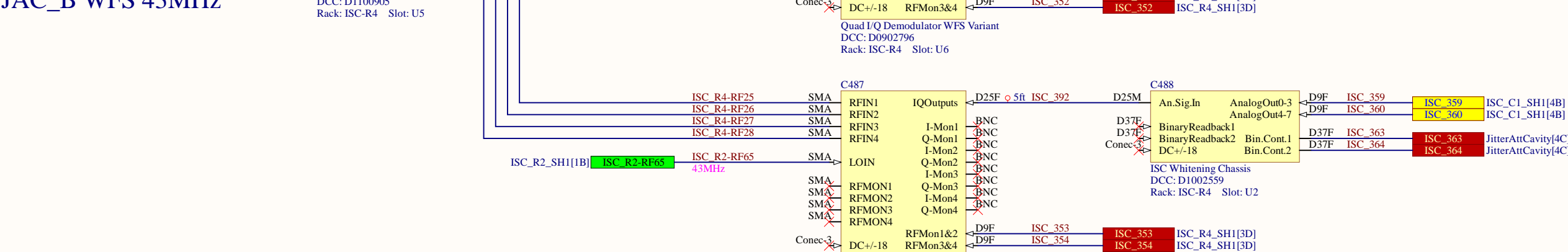
Title			
ISC System Wiring Diagram			
Size	Number	Revision	
B	D1900511	V11	
Date:	4/21/2025	Sheet of	43
File:	C:\Users\...\IOModulation.SchDoc	Drawn By:	Filiberto Clara

# Jitter Attenuation Cavity

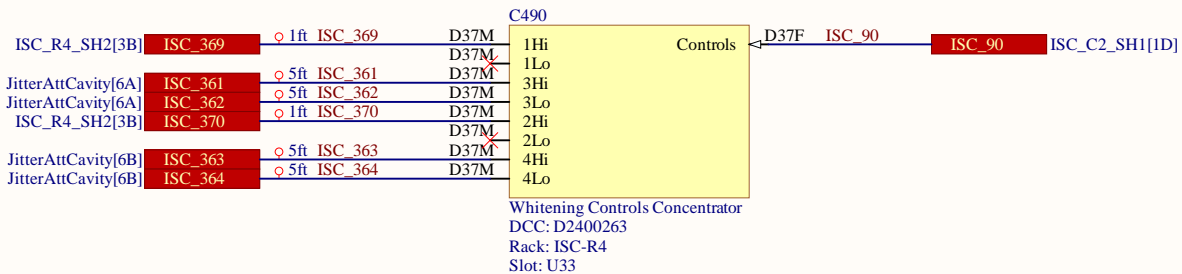
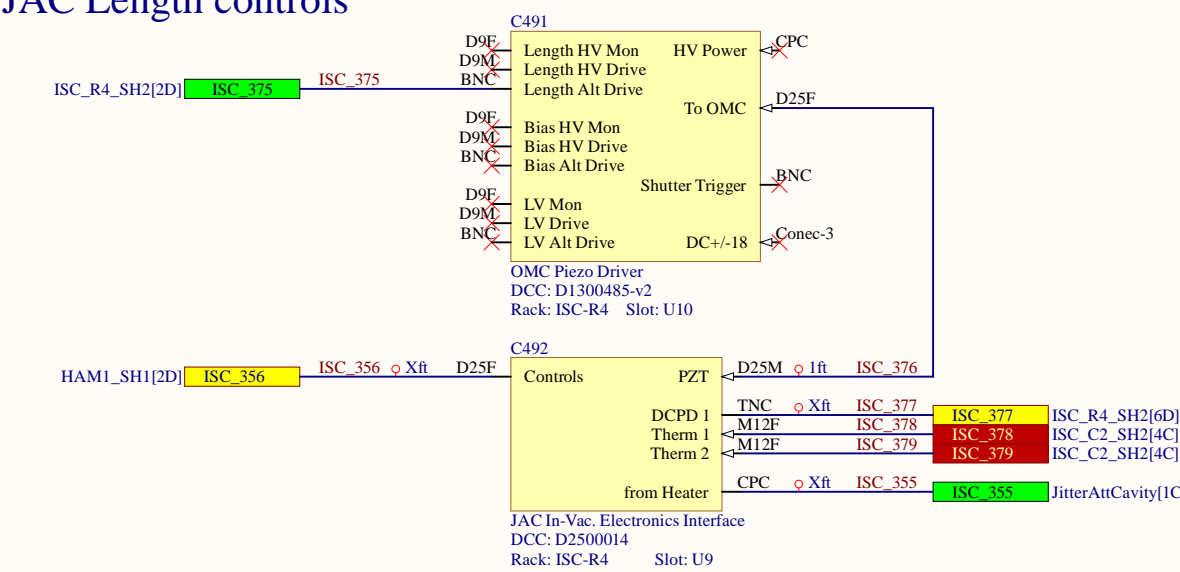
## JAC\_A WFS 43MHz



## JAC\_B WFS 43MHz

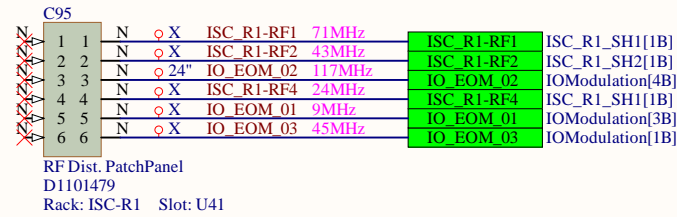


## JAC Length controls

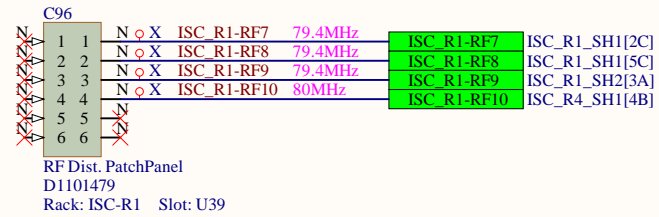


Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V11
Date:	4/21/2025	Sheet of 1 43
File:	C:\Users\...\JitterAttCavity.SchDoc	Drawn By: Filiberto Clara

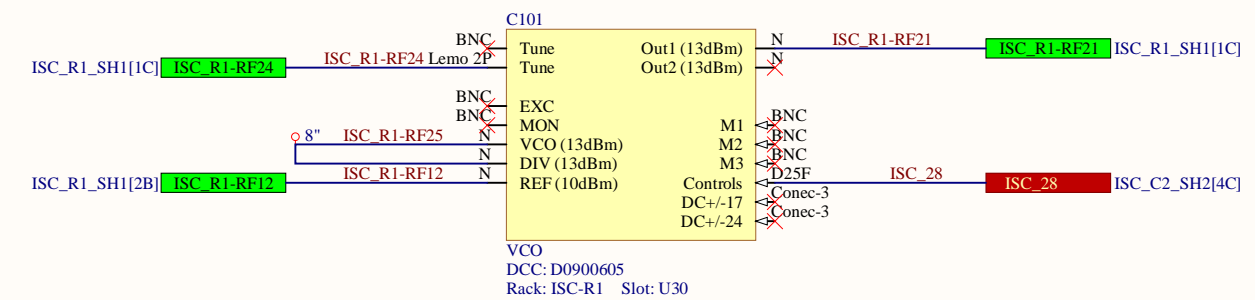
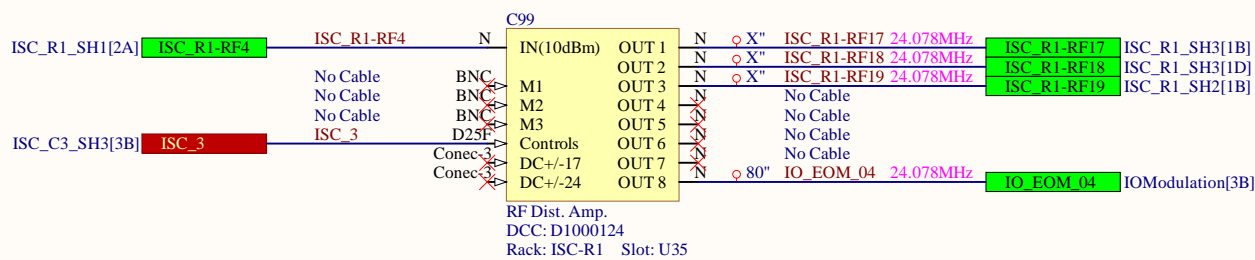
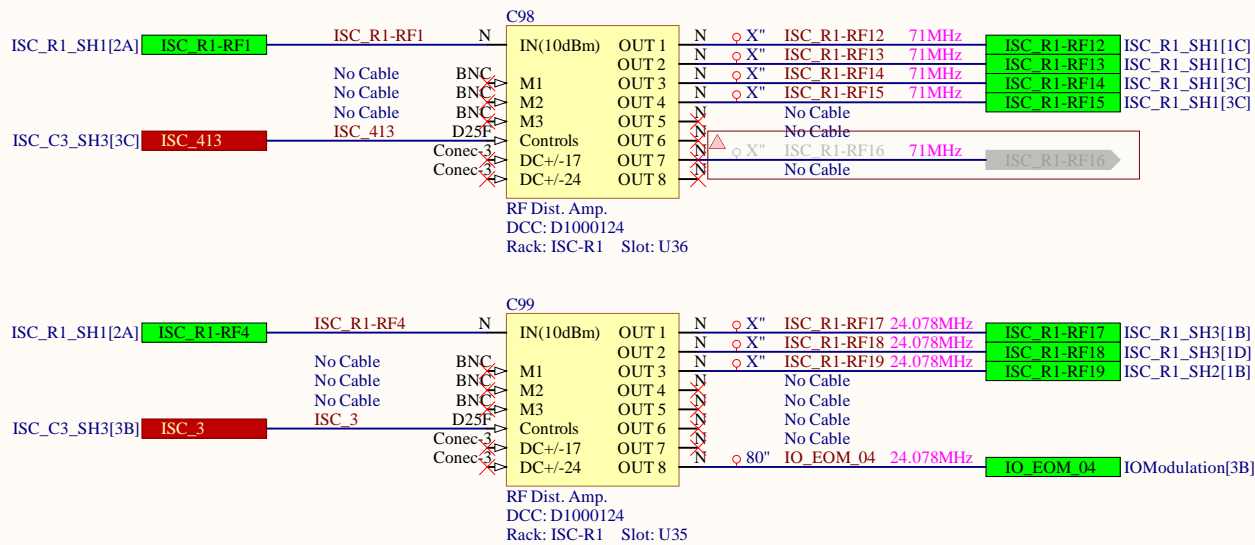
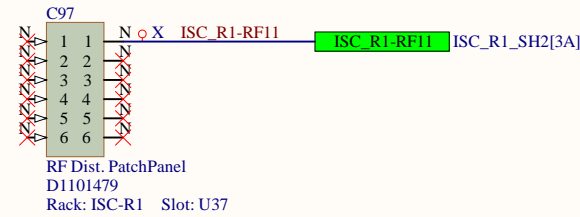
RF Patch Panel 10



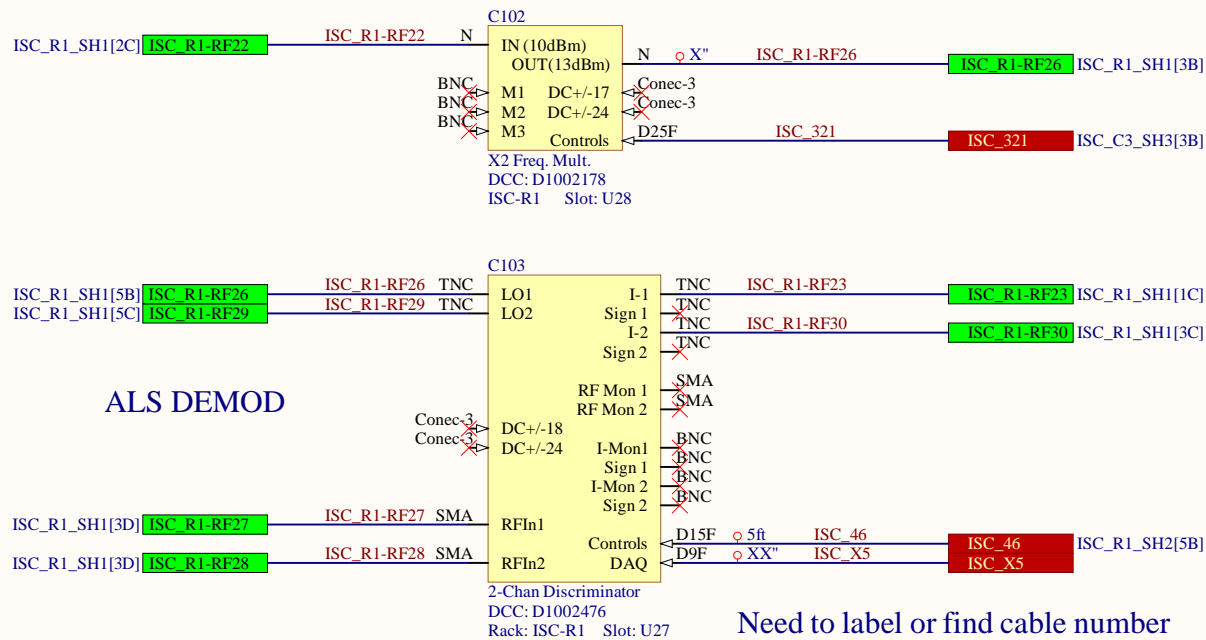
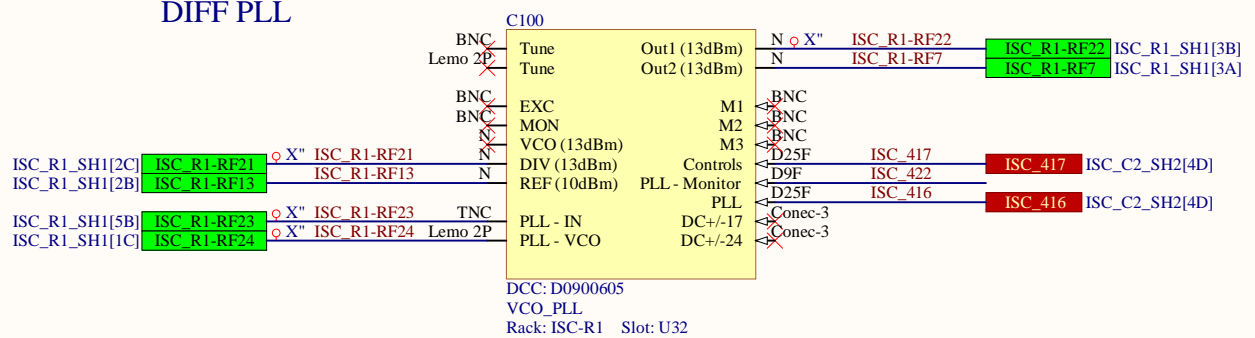
RF Patch Panel 11



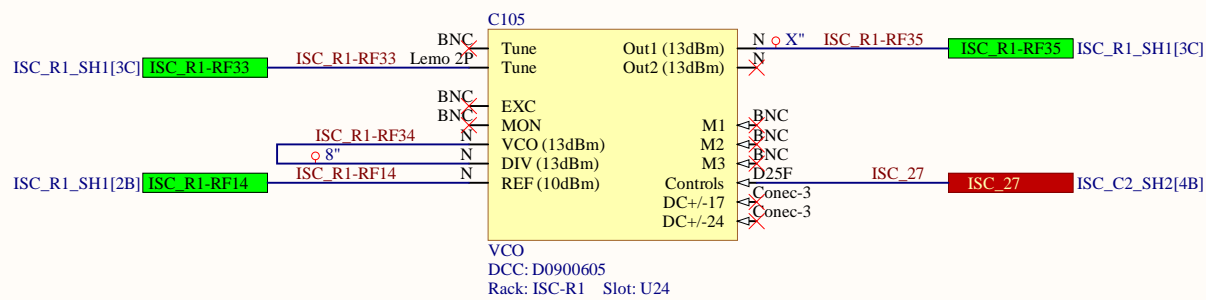
RF Patch Panel 12



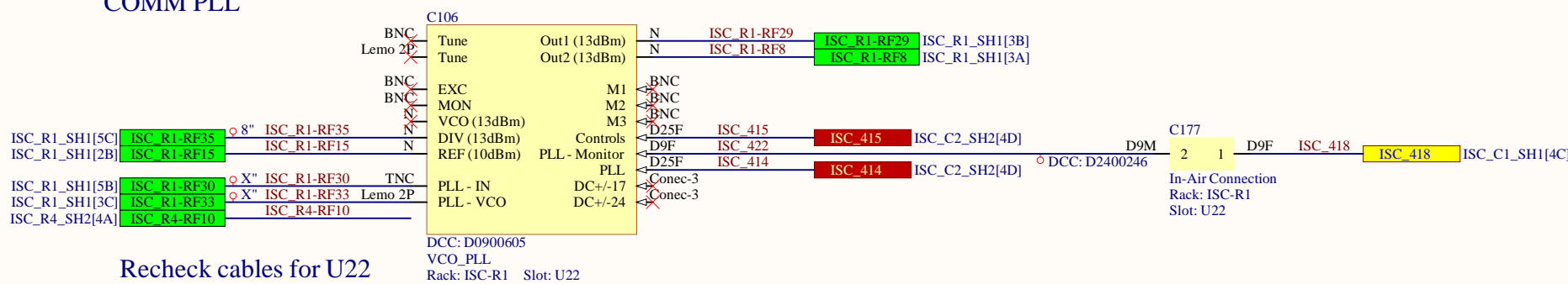
DIFF PLL



ALS DEMOD

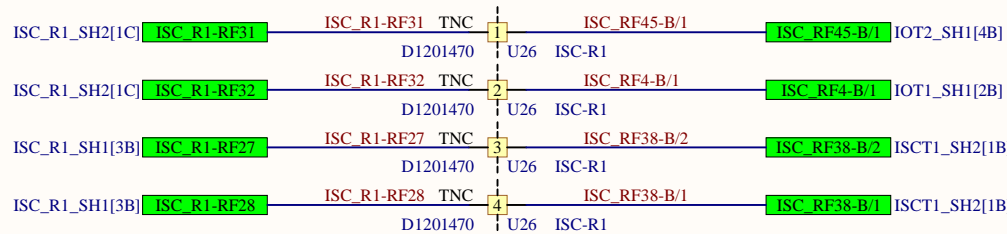


COMM PLL



Recheck cables for U22  
In back for PLL

IMC REFL



JAC REFL

ALS DIFF

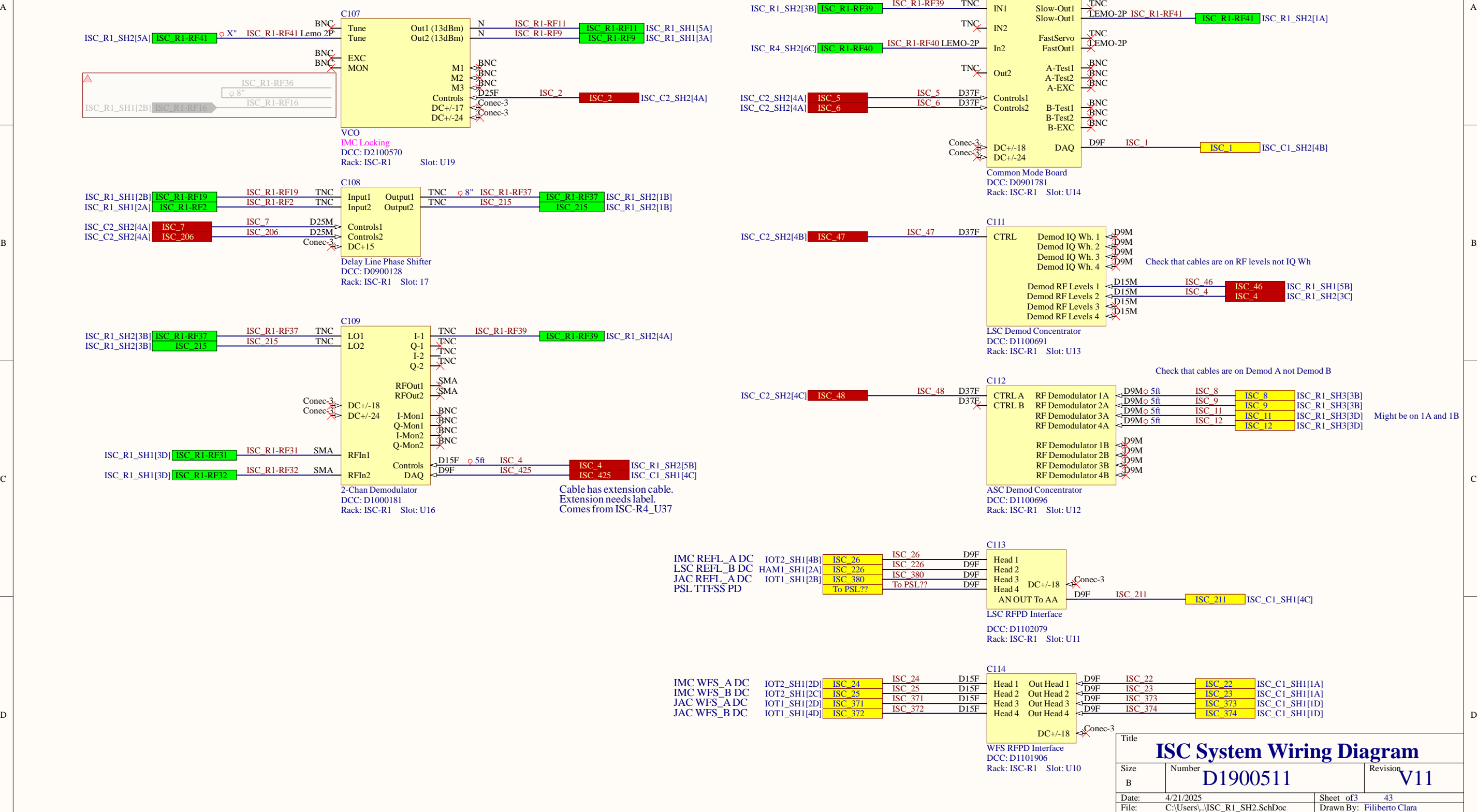
ALS COMM

ISC-R1 Rack

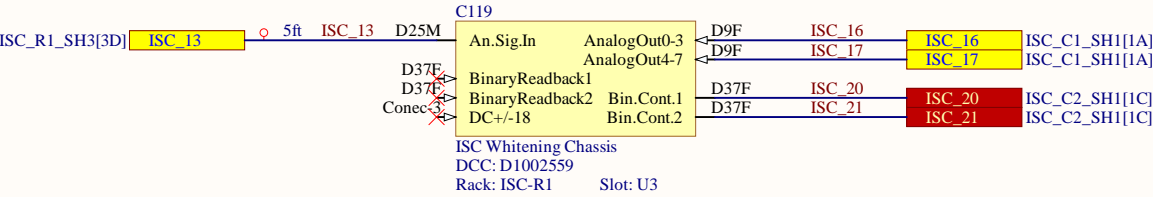
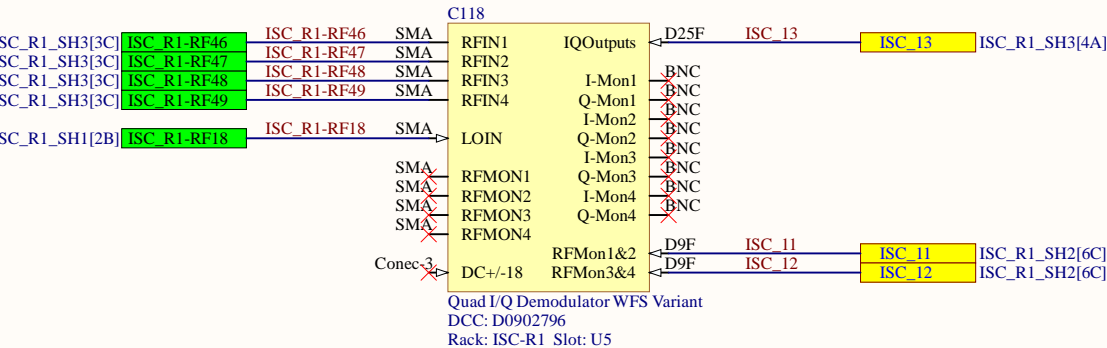
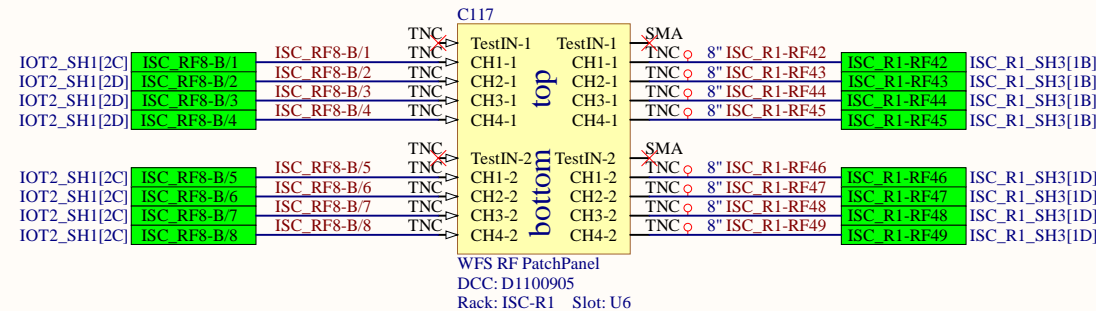
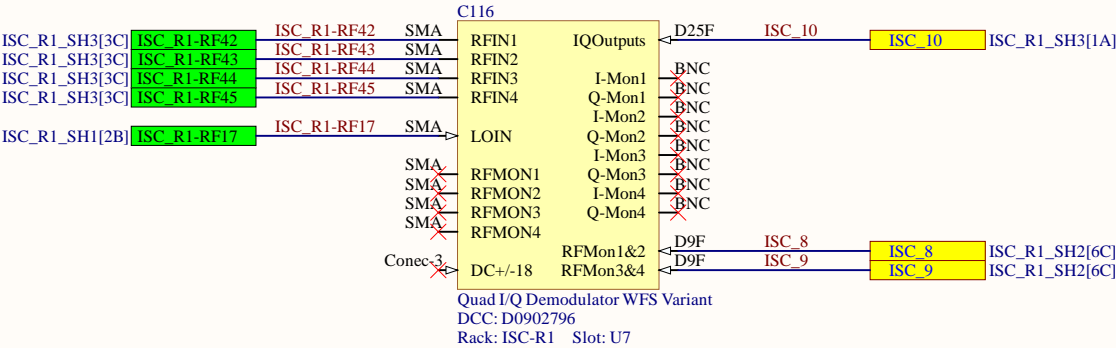
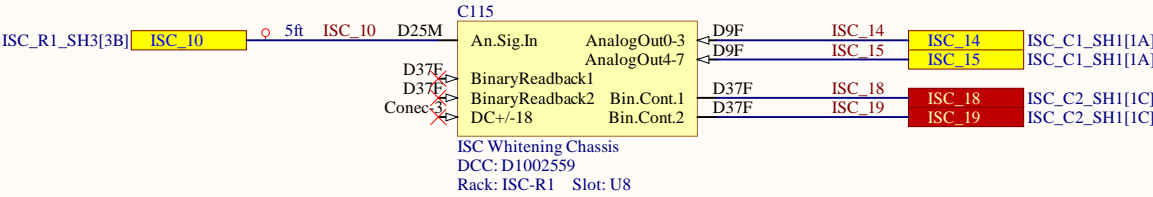
Title		
ISC System Wiring Diagram		
Size	Number	Revision
C	D1900511	V11
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File:	C:\Users\ISC_R1_SchDoc	Drawn By: Filiberto Clara



# ISC-R1 Rack



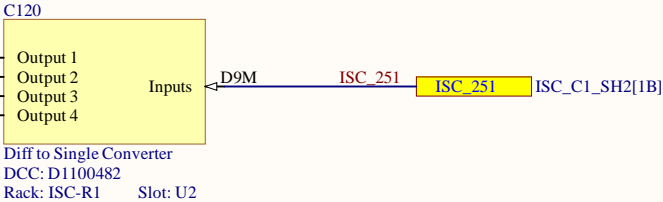
# ISC-R1 Rack



Need to locate other end

PSL_SMB_1	PSL_SMB_1	BNC
PSL_SMB_2	PSL_SMB_2	BNC
ISC_434_X	ISC_434_X	BNC
ISC_435_X	ISC_435_X	BNC

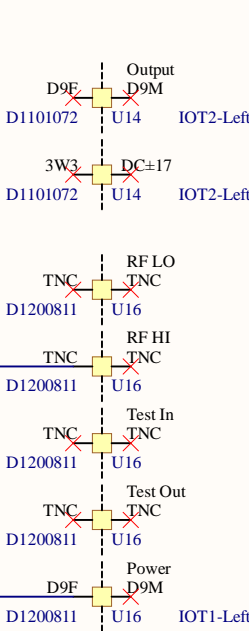
434/435 already used  
ASC-POP\_X\_PIT/YAW



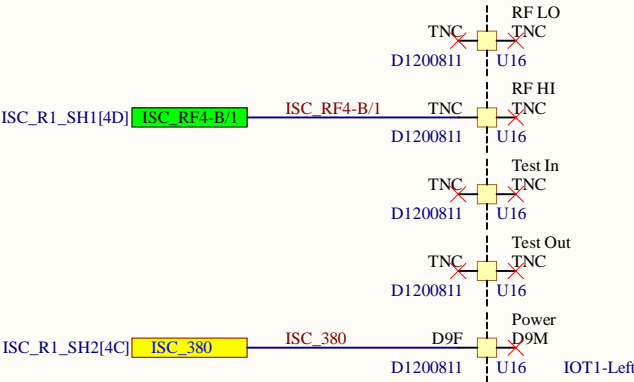
Title <b>ISC System Wiring Diagram</b>			
Size B	Number <b>D1900511</b>	Revision <b>V11</b>	
Date:	4/21/2025	Sheet of	43
File:	C:\Users\...\ISC_R1_SH3.SchDoc	Drawn By:	Filiberto Clara

IOT1

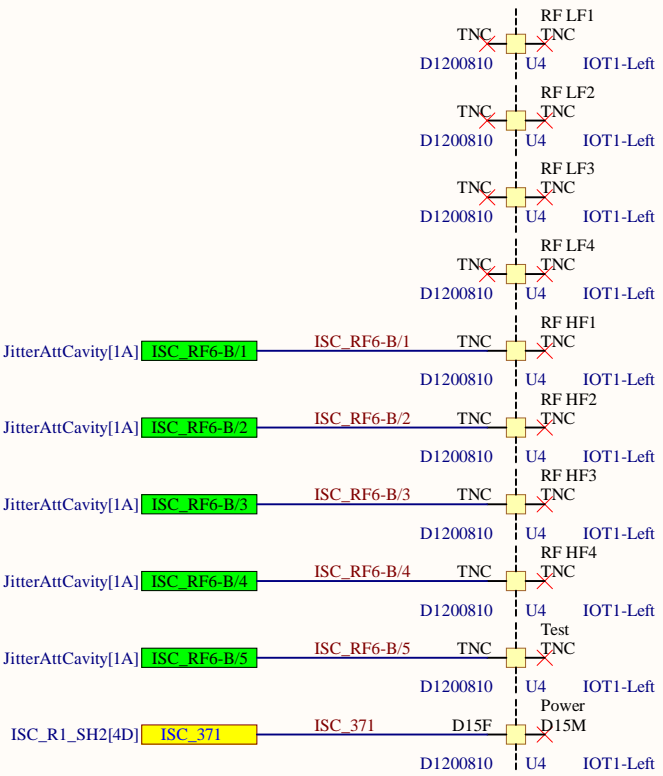
Generic PD Interface



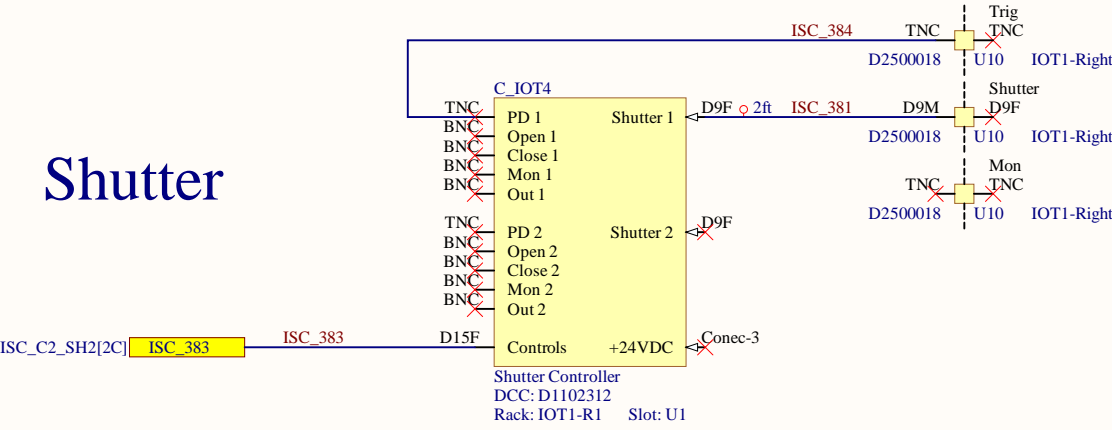
JAC REFL\_A



JAC WFS\_A



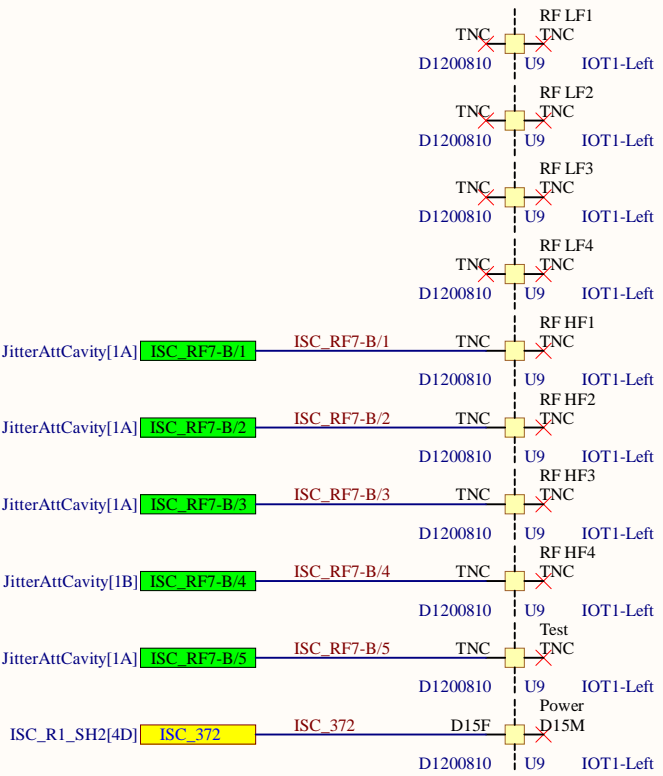
Shutter



Picomotor



JAC WFS\_B



Title		
ISC System Wiring Diagram		
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Date: 4/21/2025	Sheet of 5	43
File: C:\Users\...\IOT1_SH1.SchDoc	Drawn By: Filiberto Clara	

# IOT2 - Left Side

PEM

Trigger PD

IMC WFS1

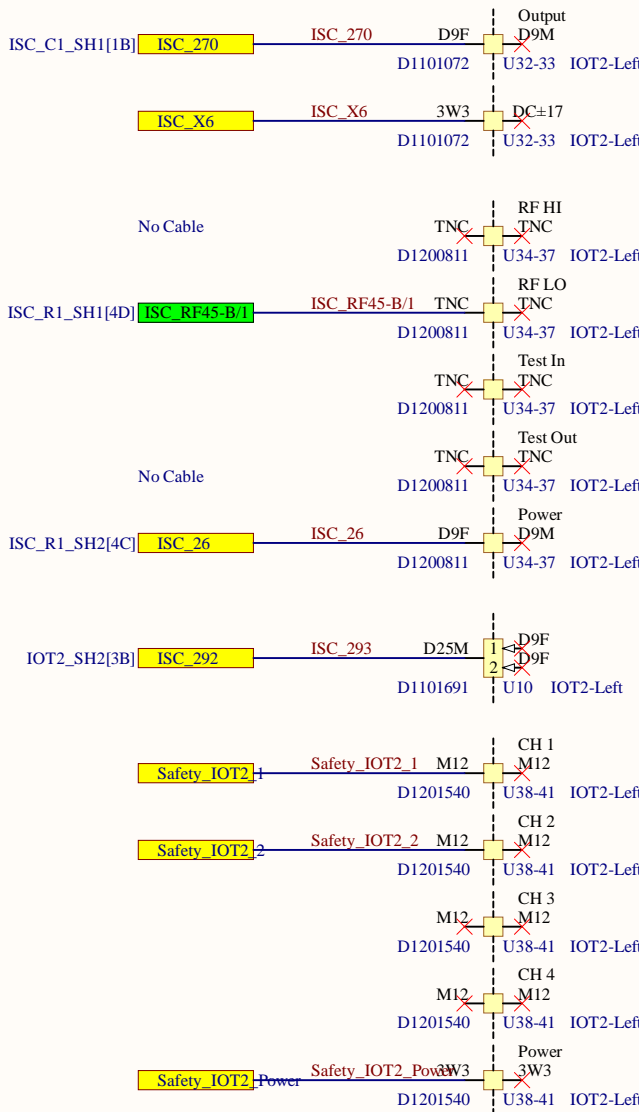
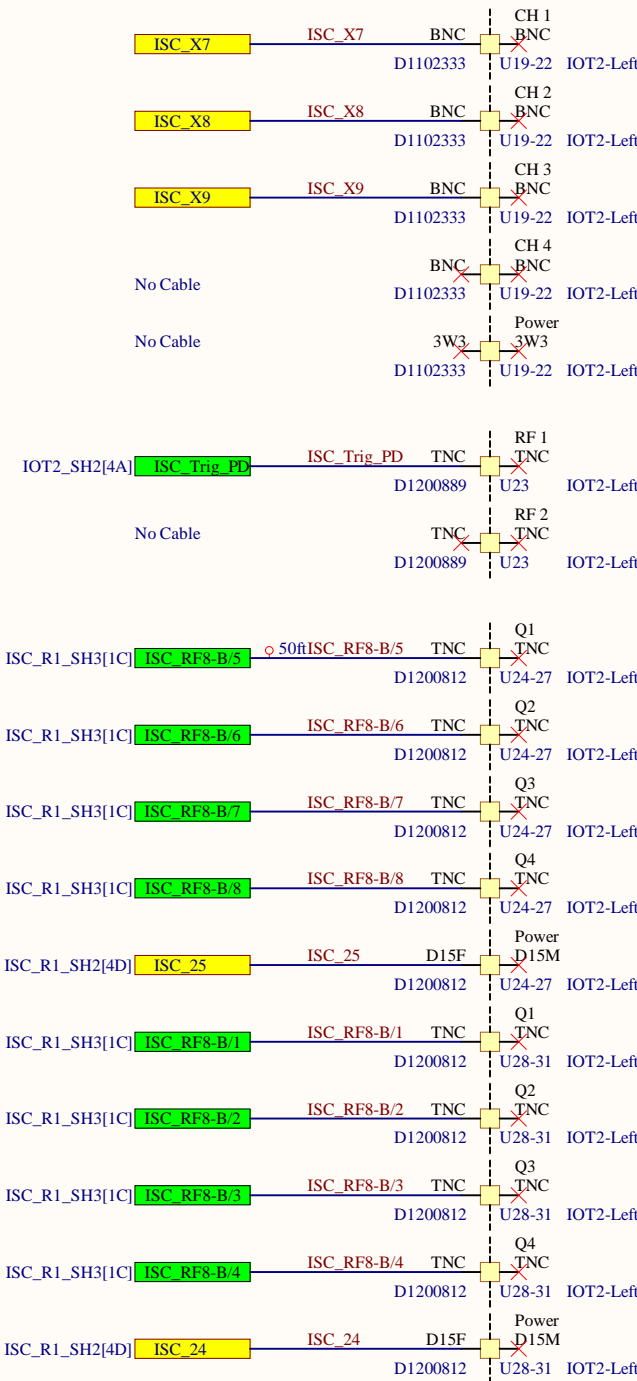
IMC WFS2

Generic PD Interface

IMC REFL\_A

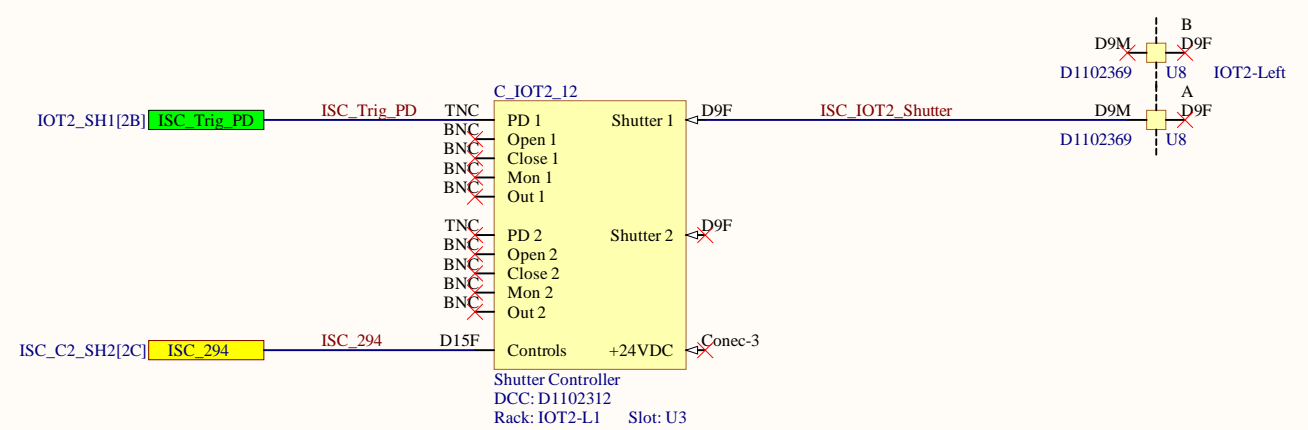
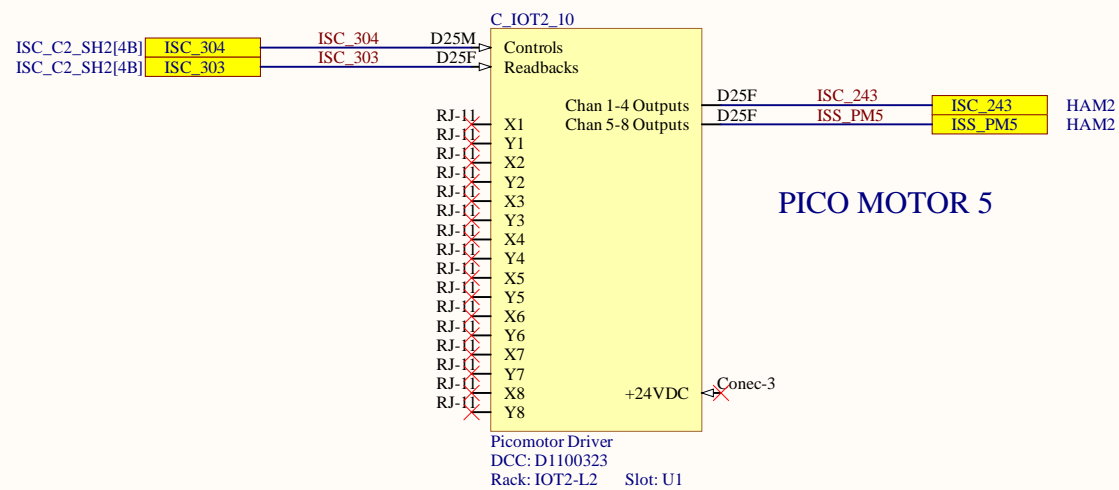
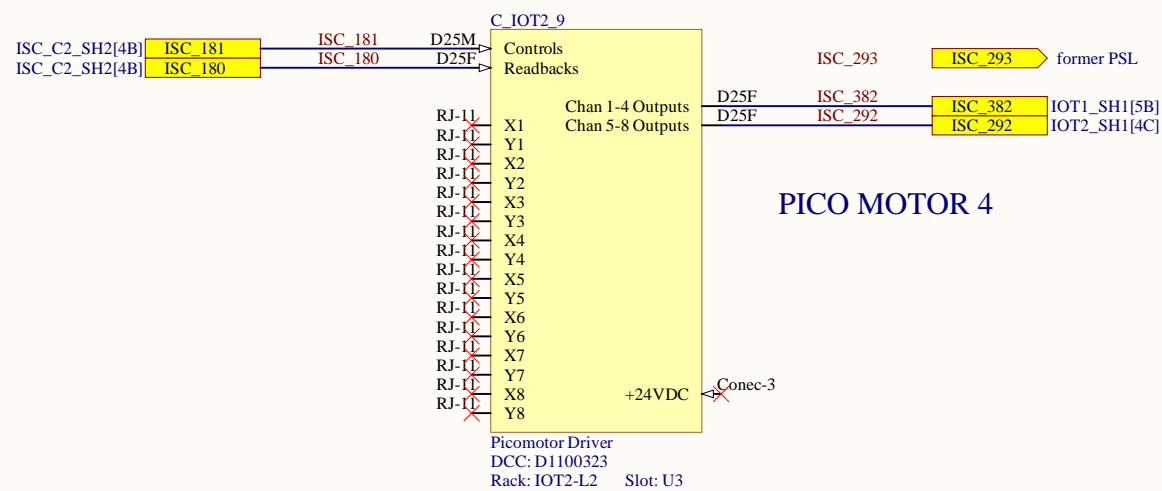
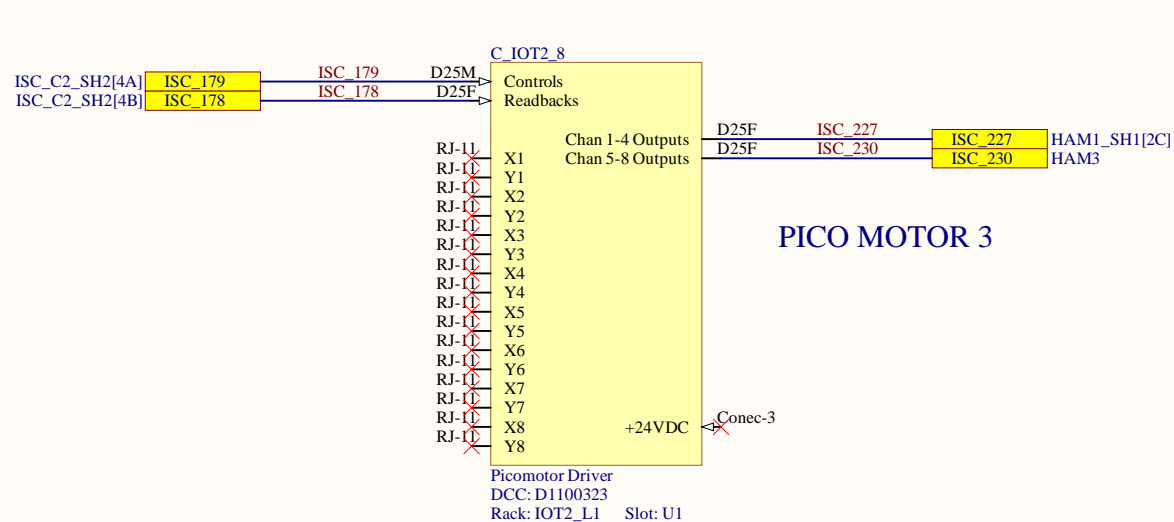
Picomotor

Interlock



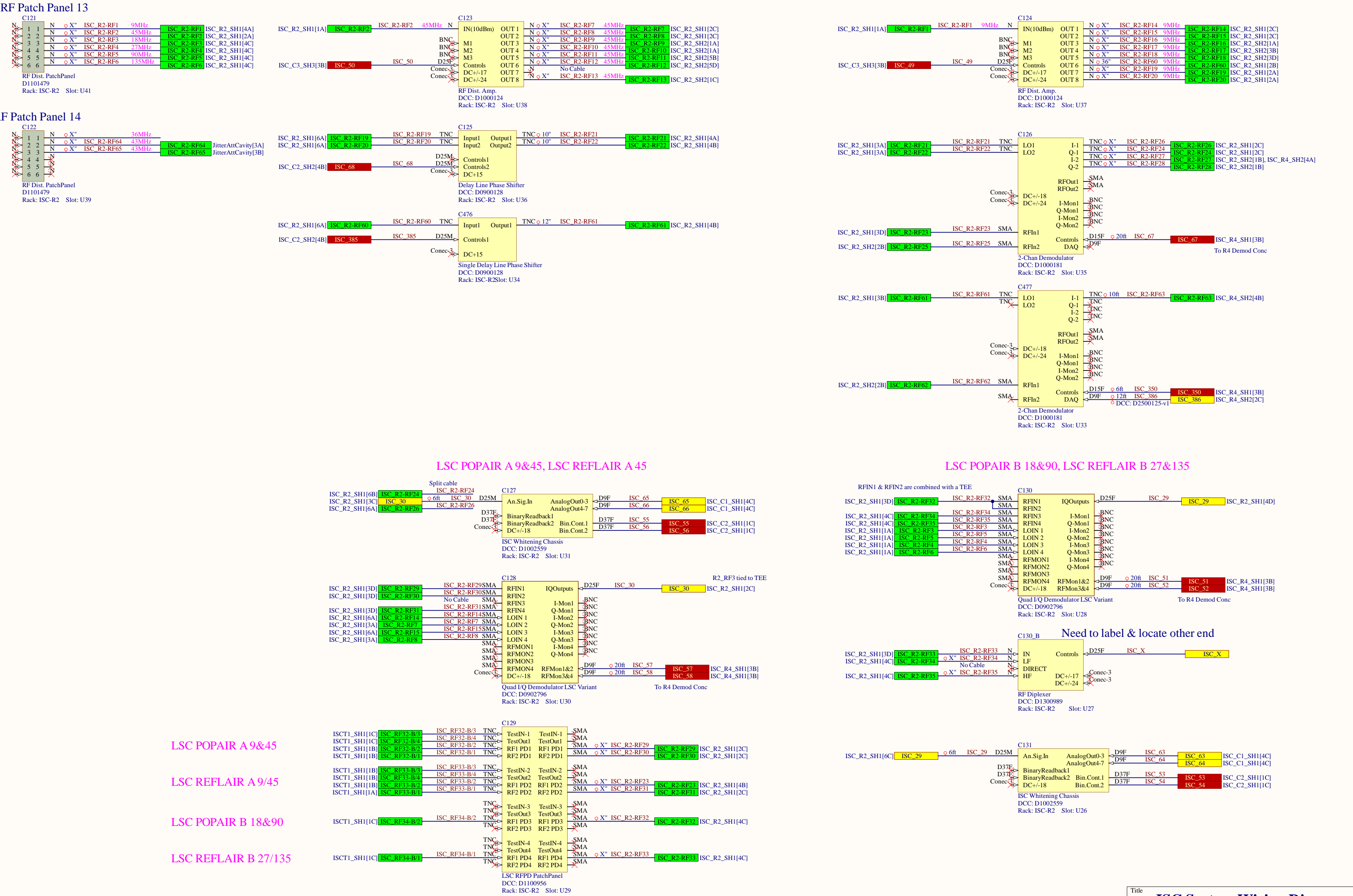
Title			
ISC System Wiring Diagram			
Size	Number	Revision	
B	D1900511	V11	
Date:	4/21/2025	Sheet of	43
File:	C:\Users\...\IOT2_SH1.SchDoc	Drawn By:	Filiberto Clara



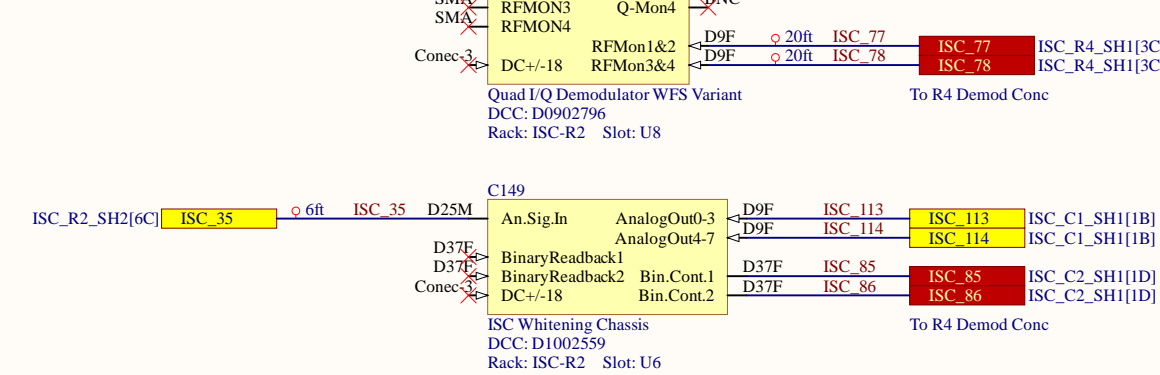
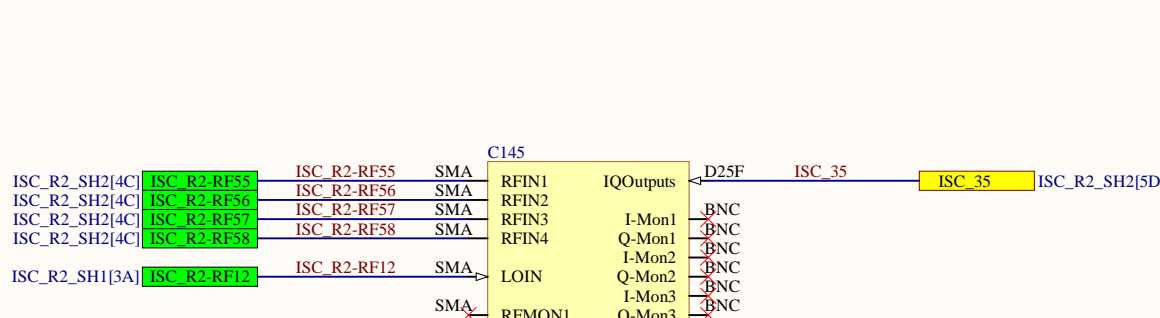
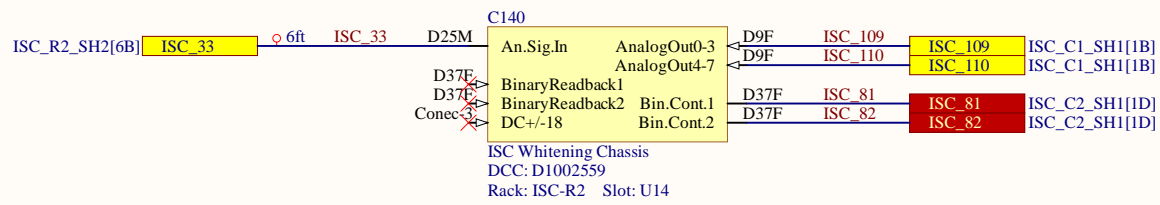
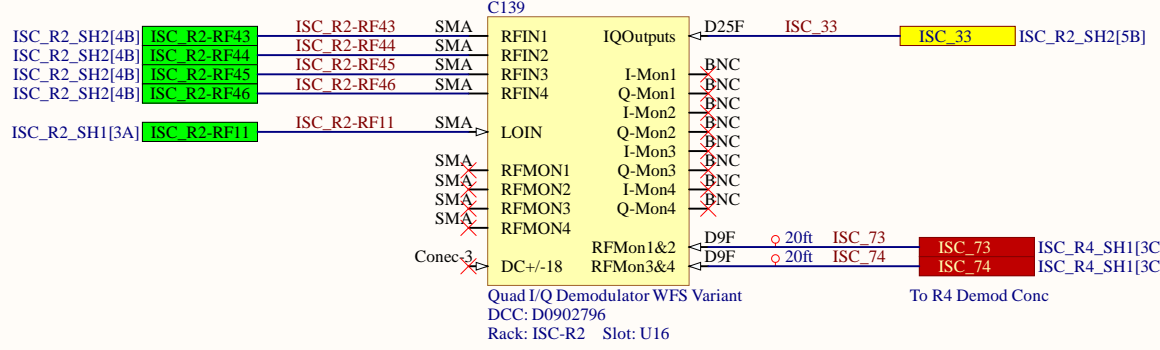
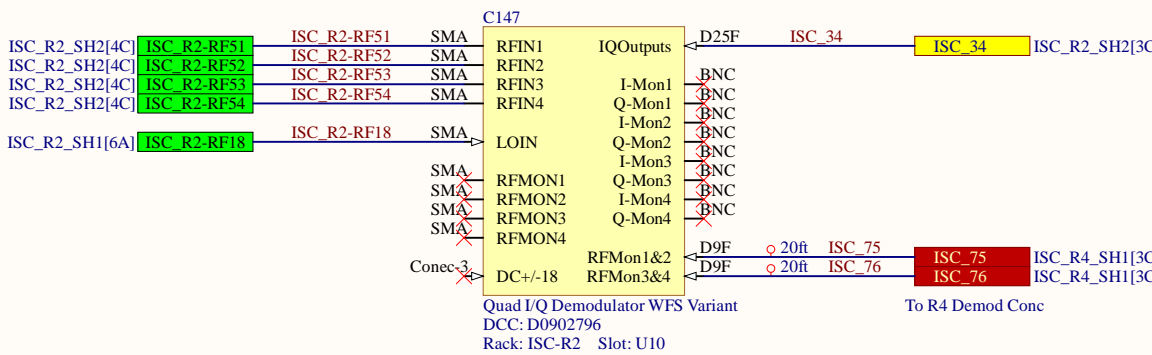
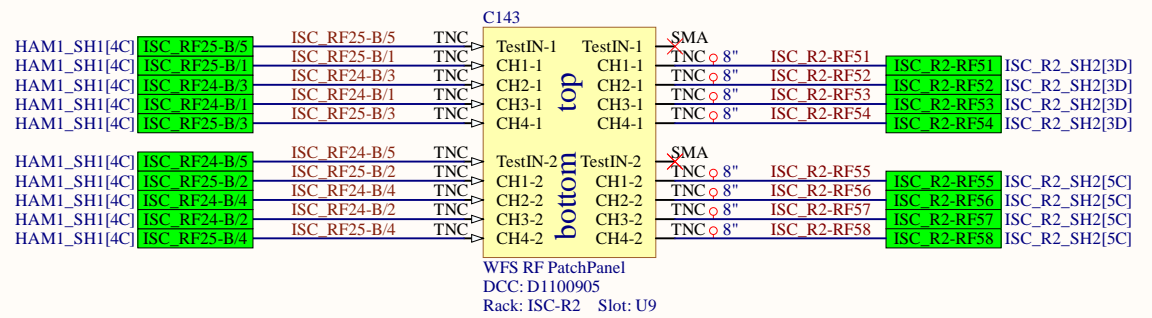
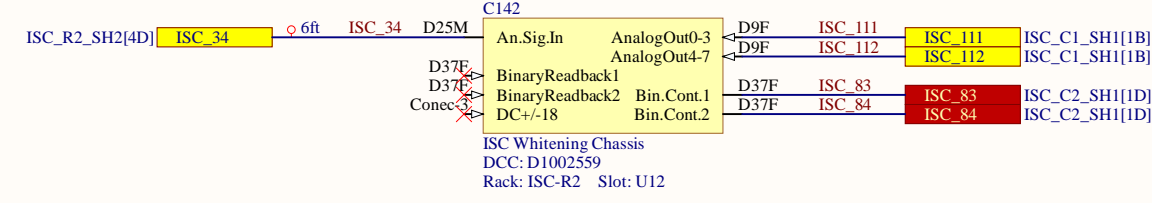
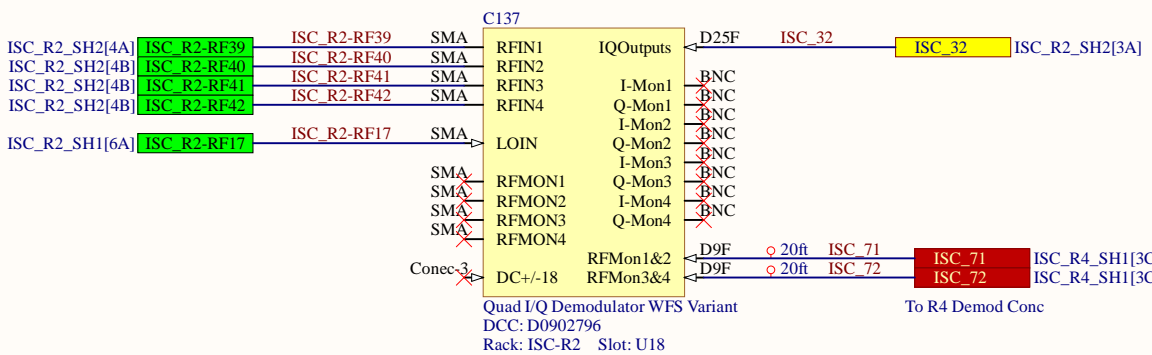
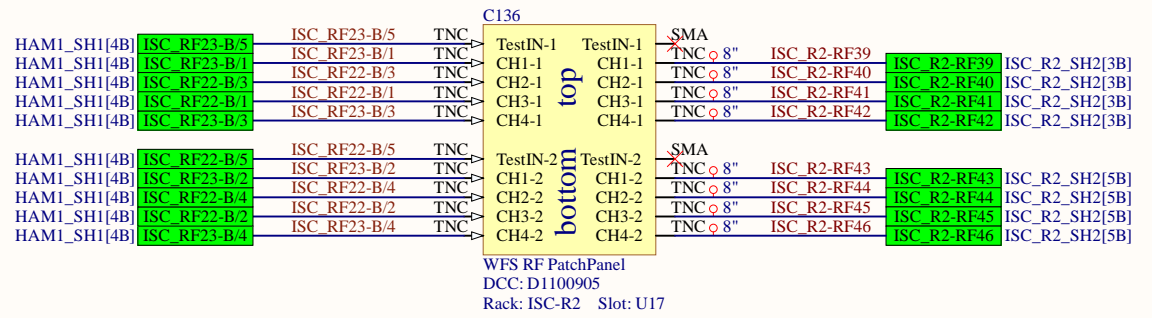
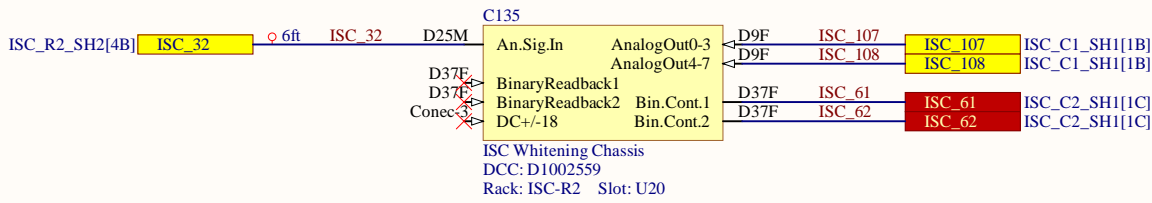
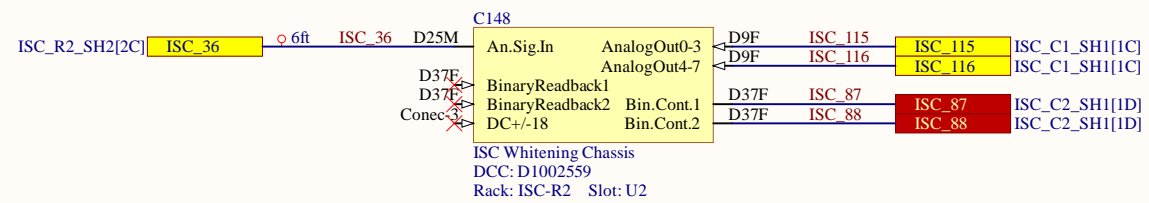
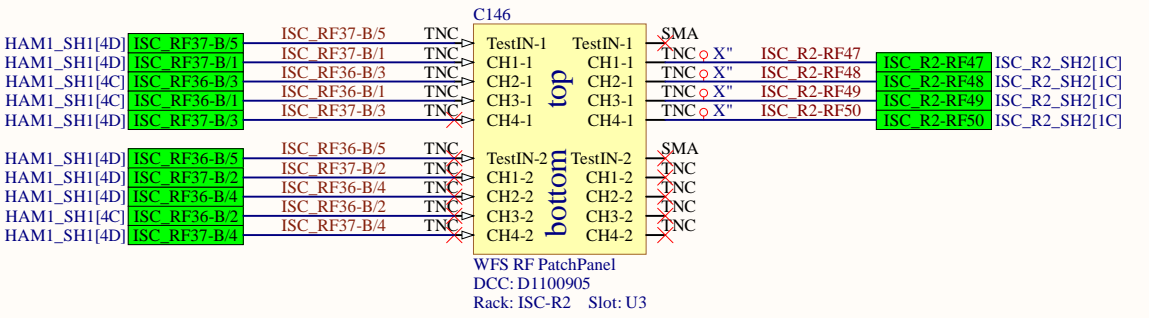
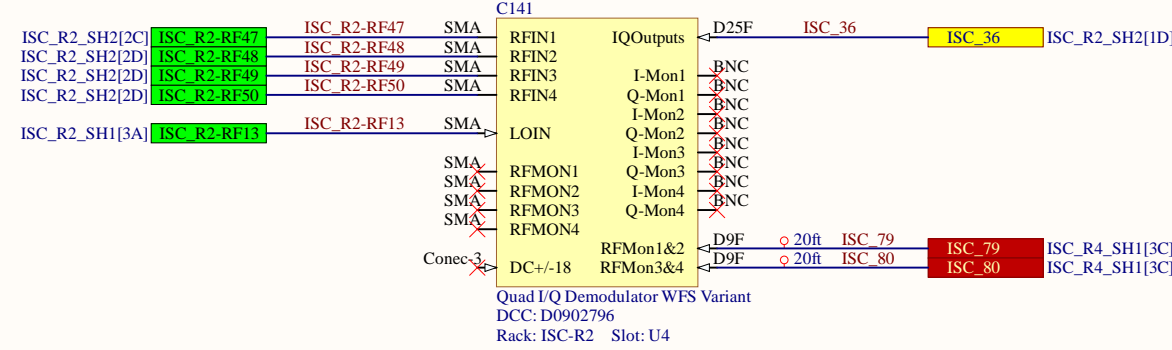
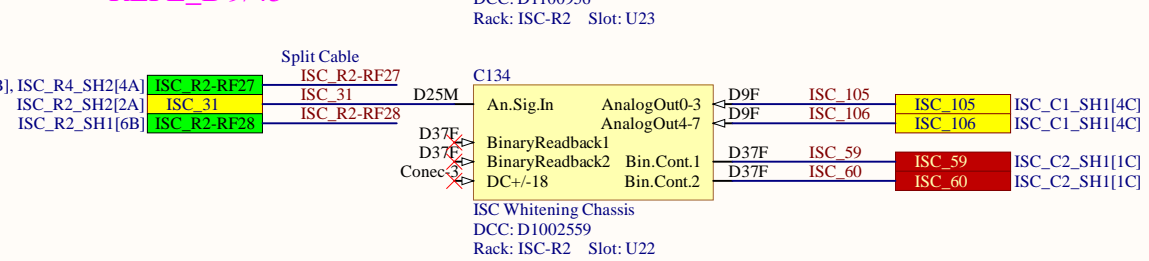
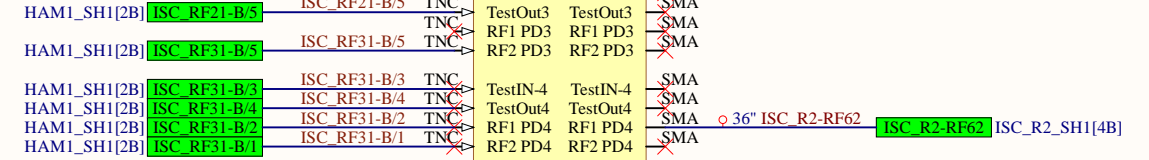
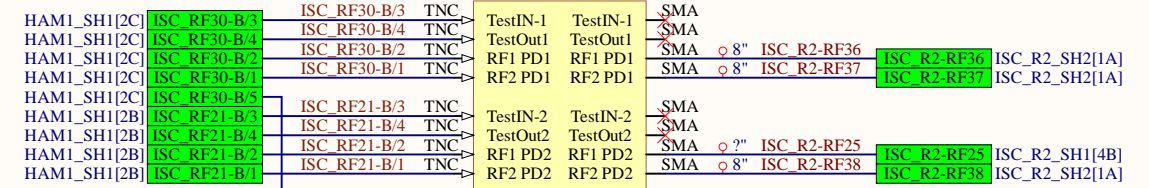
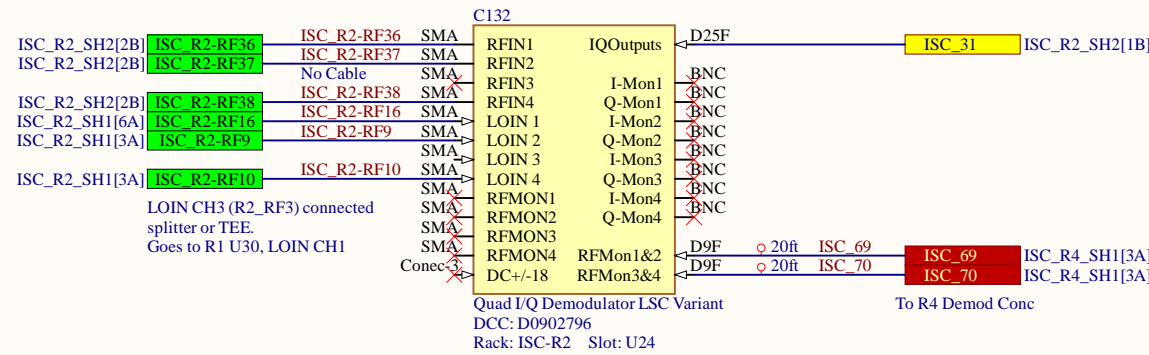


Title <b>ISC System Wiring Diagram</b>		
Size B	Number <b>D1900511</b>	Revision <b>V11</b>
Date: 4/21/2025	Sheet of 43	
File: C:\Users\...IOT2_SH2.SchDoc	Drawn By: Filiberto Clara	

ISC-R2 Rack



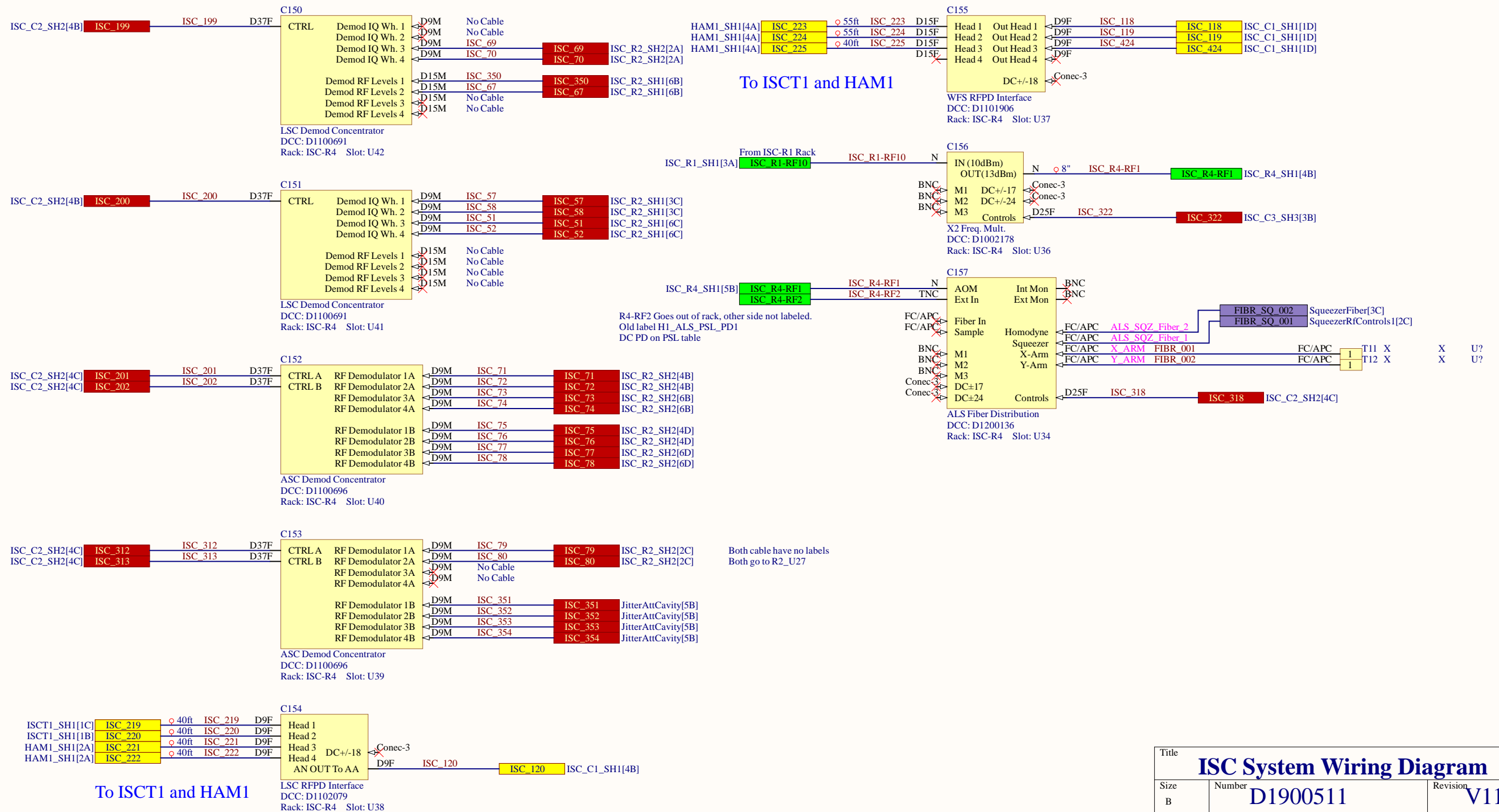
# ISC-R2 Rack



Title			
<h1 style="text-align: center;">ISC System Wiring Diagram</h1>			
Size	Number	Revision	
C	D1900511	V11	
Date:	4/21/2025	Sheet of	43
File:	C:\Users\j\ISC_R2_SH2.SchDoc	Drawn by:	Filberto Clara



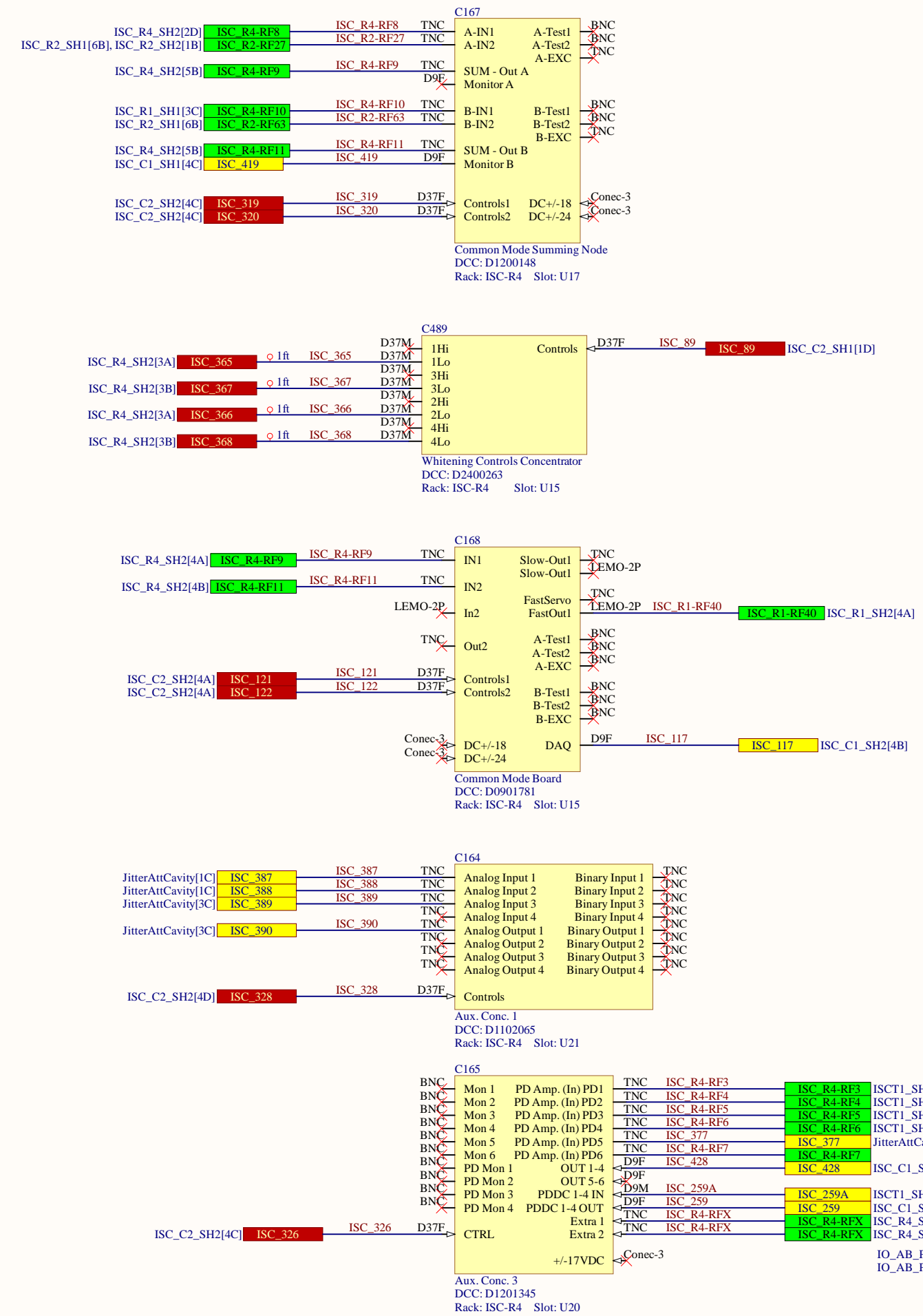
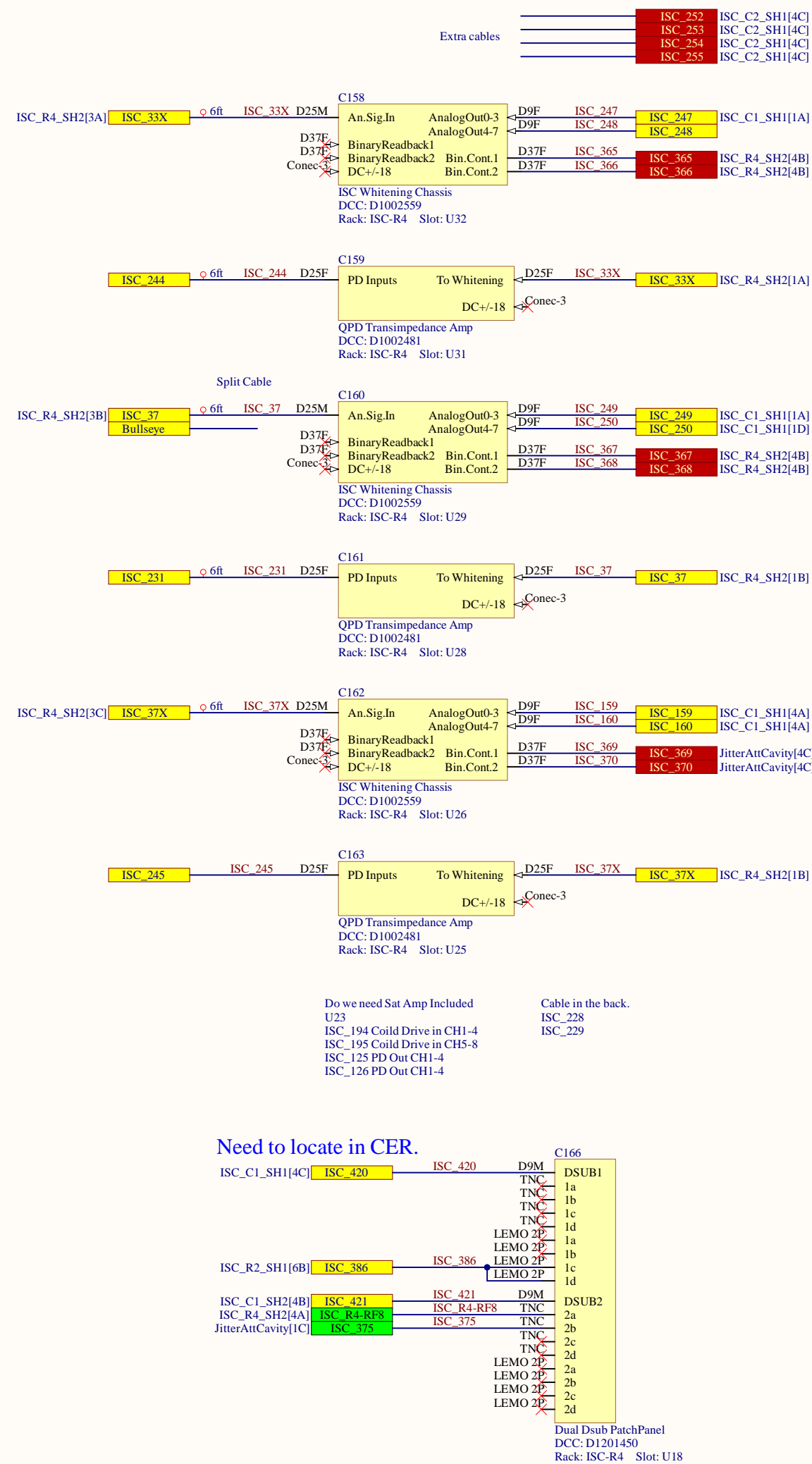
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Title <b>ISC System Wiring Diagram</b>		
Size B	Number <b>D1900511</b>	Revision <b>V11</b>
Date: 4/21/2025	Sheet of 43	File: C:\Users\ISC_R4_SHL\SchDoc Drawn By: <u>Filipberta Clara</u>



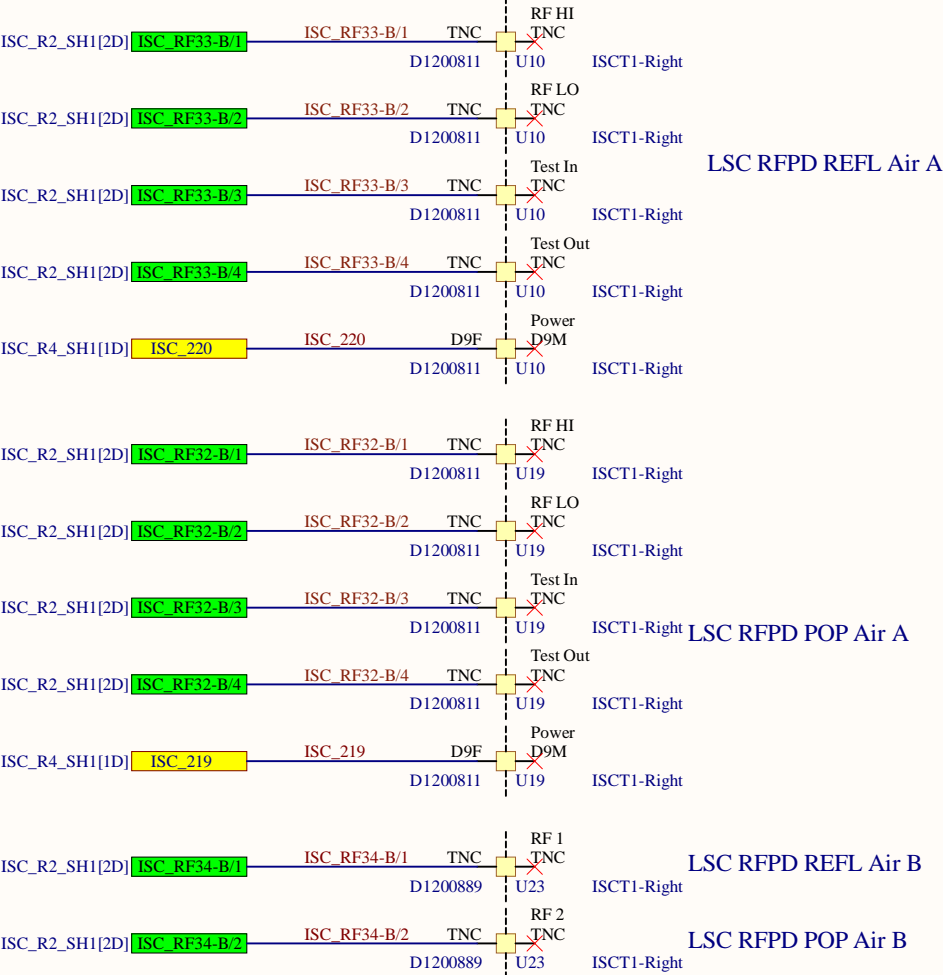
# ISC-R4 Rack



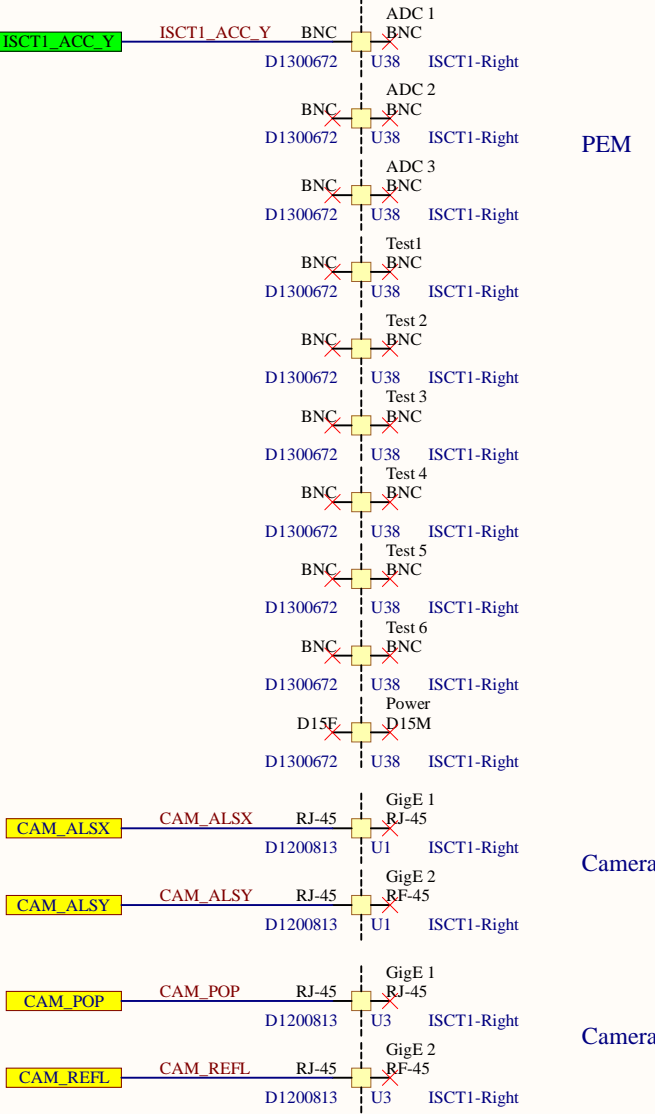
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<h1 style="text-align: center;">ISC System Wiring Diagram</h1>			
Size	Number	Revision	
C	D1900511	V11	
Date:	4/21/2025	Sheet of	43
File:	C:\Users\ISC_R4_SH2\SchDoc	Drawn By:	Filberto Clara

# ISCT1 - Right Side

## Inside Enclosure



## Inside Enclosure

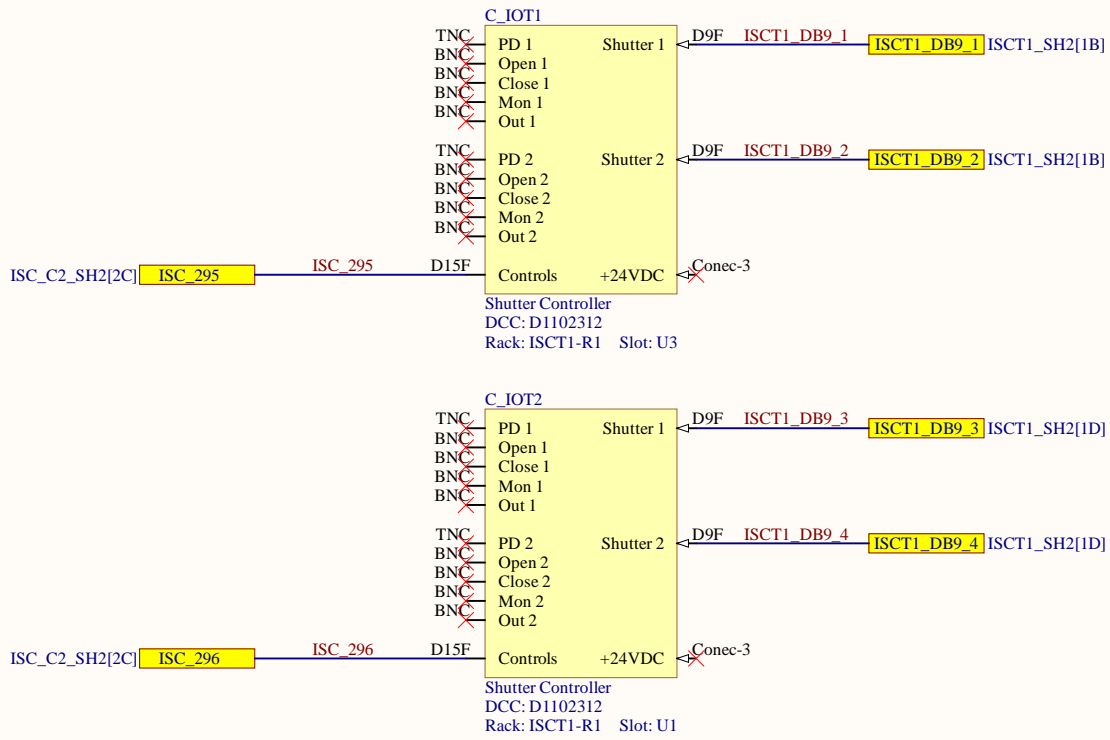
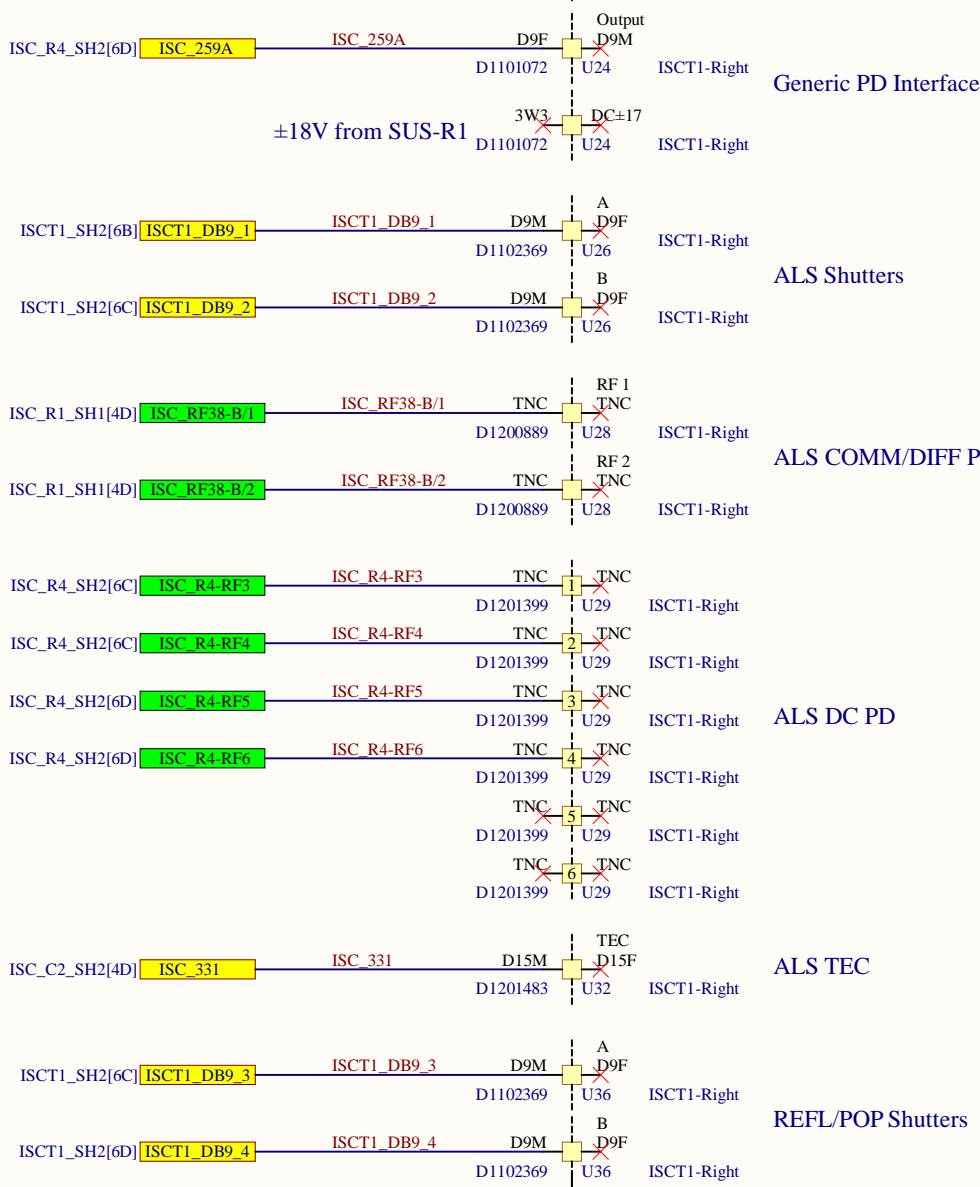


## ISC System Wiring Diagram

Title	Number	Revision
Size B	D1900511	V11
Date:	4/21/2025	Sheet of 2 43
File:	C:\Users\...\ISCT1_SH1.SchDoc	Drawn By: Filiberto Clara

# ISCT1 - Right Side

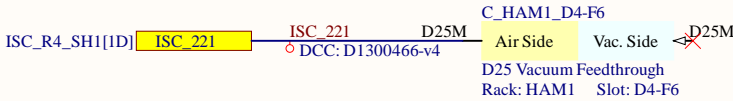
## Inside Enclosure



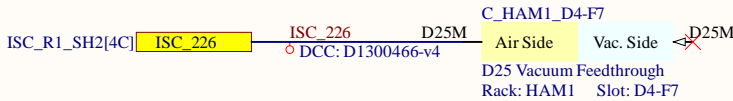
Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V11
Date:	4/21/2025	Sheet of 3 43
File:	C:\Users\... \ISCT1_SH2.SchDoc	Drawn By: Filiberto Clara

# HAM1 Flange Layout

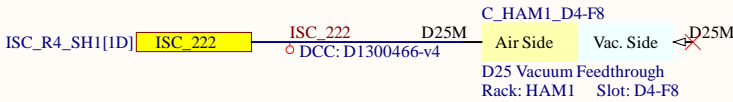
REFL\_A LSC DC



REFL\_B LSC DC



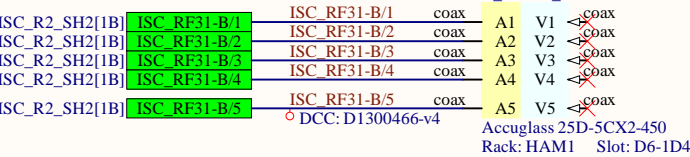
POP\_A LSC DC



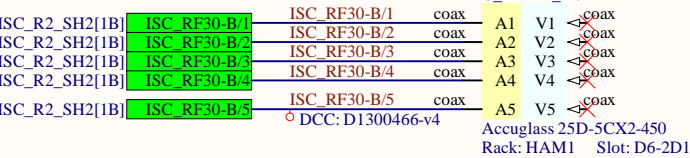
REFL\_A LSC  
9/45MHz



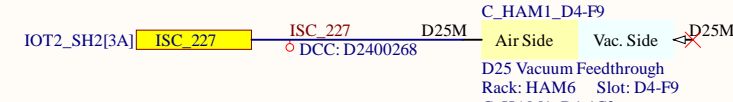
REFL\_B LSC  
9/45MHz



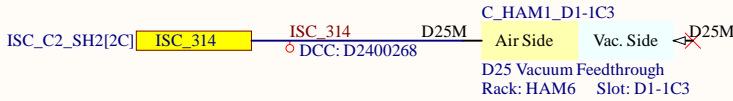
POP\_A LSC  
9/45MHz



Picomotor



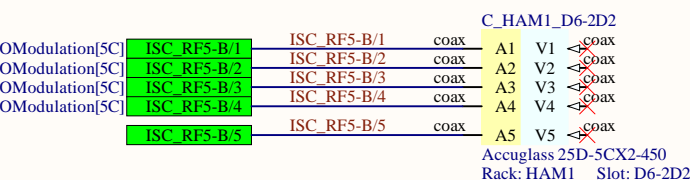
REFL Beam Diverter



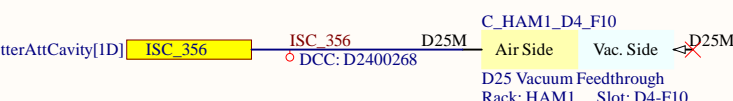
POP Beam Diverter



EOM



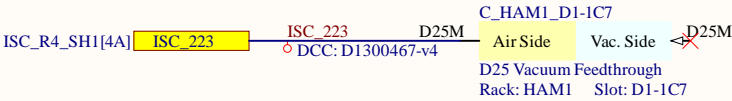
JAC Controls



JAC Heater



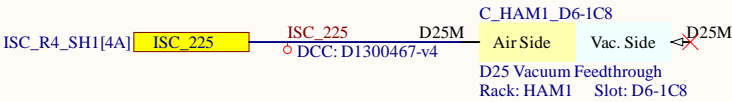
REFL\_A WFS DC



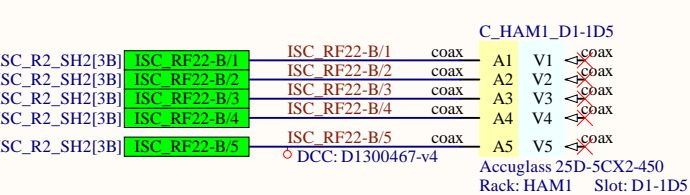
REFL\_B WFS DC



POP\_X WFS DC



REFL\_A WFS 9/45MHz



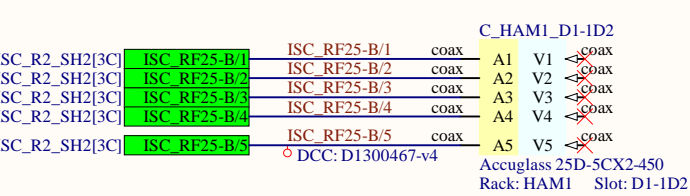
REFL\_A WFS 9/45MHz



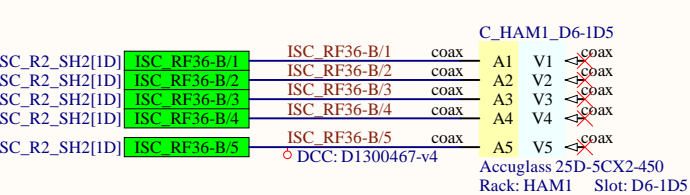
REFL\_B WFS 9/45MHz



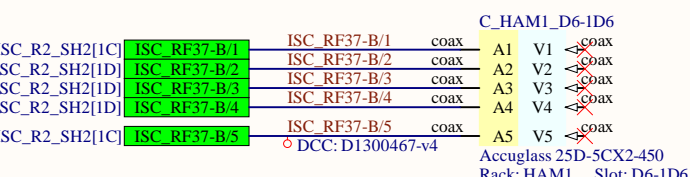
REFL\_B WFS 9/45MHz



POP\_X WFS 36/45MHz



POP\_X WFS 36/45MHz



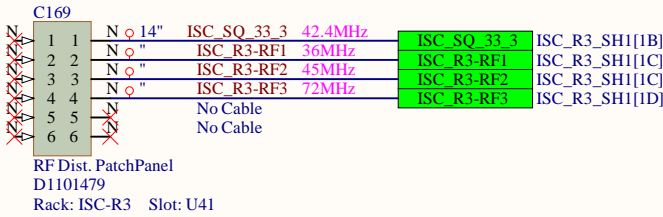
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Size	Number	Revision	
B	D1900511	V11	
Date:	4/21/2025	Sheet of	24 43
File:	C:\Users\...HAM1_SH1.SchDoc	Drawn By:	Filiberto Clara



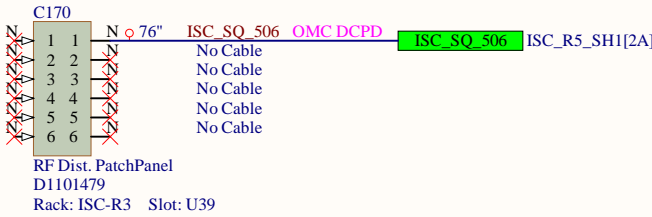
# ISC-R3 Rack

Need to Relabel ISC\_R3-RF4

RF Patch Panel 15

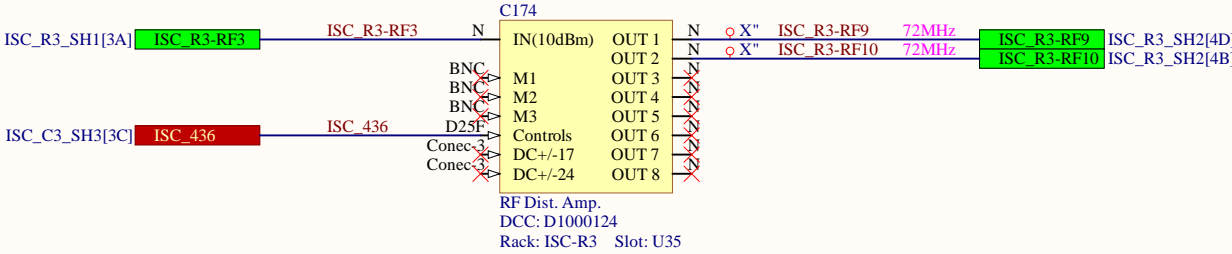
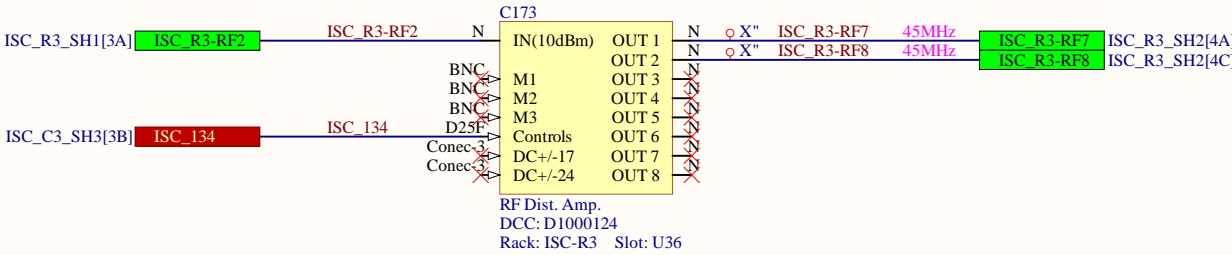
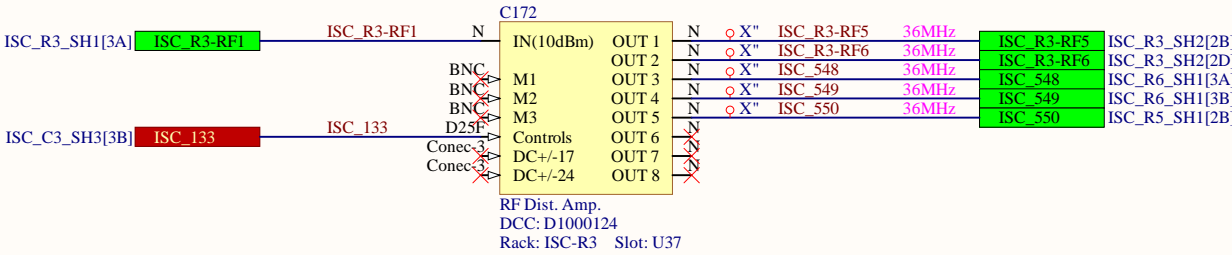
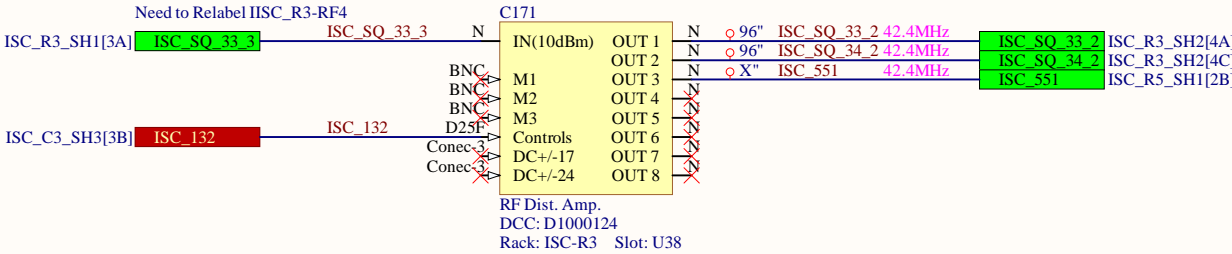


RF Patch Panel 16



Goes to ISC-C4

Goes to SQZ-R1/ISC-C4



Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V11
Date:	4/21/2025	Sheet of5 43
File:	C:\Users\...\ISC_R3_SH1.SchDoc	Drawn By: Filiberto Clara

# ISC-R3 Rack

## AS\_A WFS 42MHz

## AS\_A WFS 45MHz

## AS\_A WFS 72MHz

## AS\_B WFS 42MHz

## AS\_B WFS 45MHz

## AS\_B WFS 72MHz

## AS\_A WFS >45MHz

## AS\_A WFS 36MHz

## LO\_B WFS 45MHz

## AS\_B WFS >45MHz

## AS\_B WFS 36MHz

## AS\_A WFS RF multiplexer

## AS\_B WFS RF multiplexer

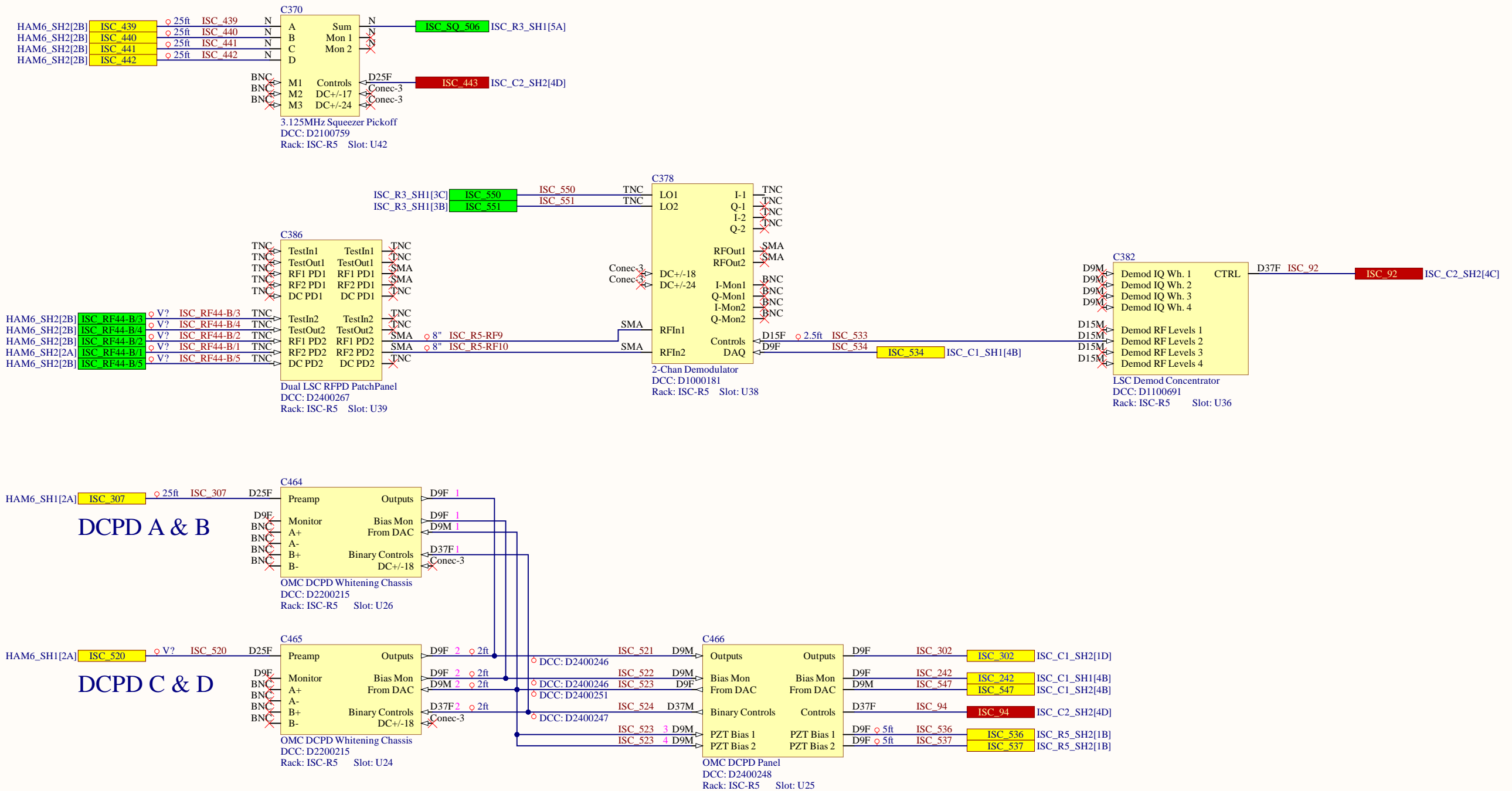
## ISC System Wiring Diagram

Size Number C D1900511 Revision V11

Date: 4/21/2025 Sheet of 26 43

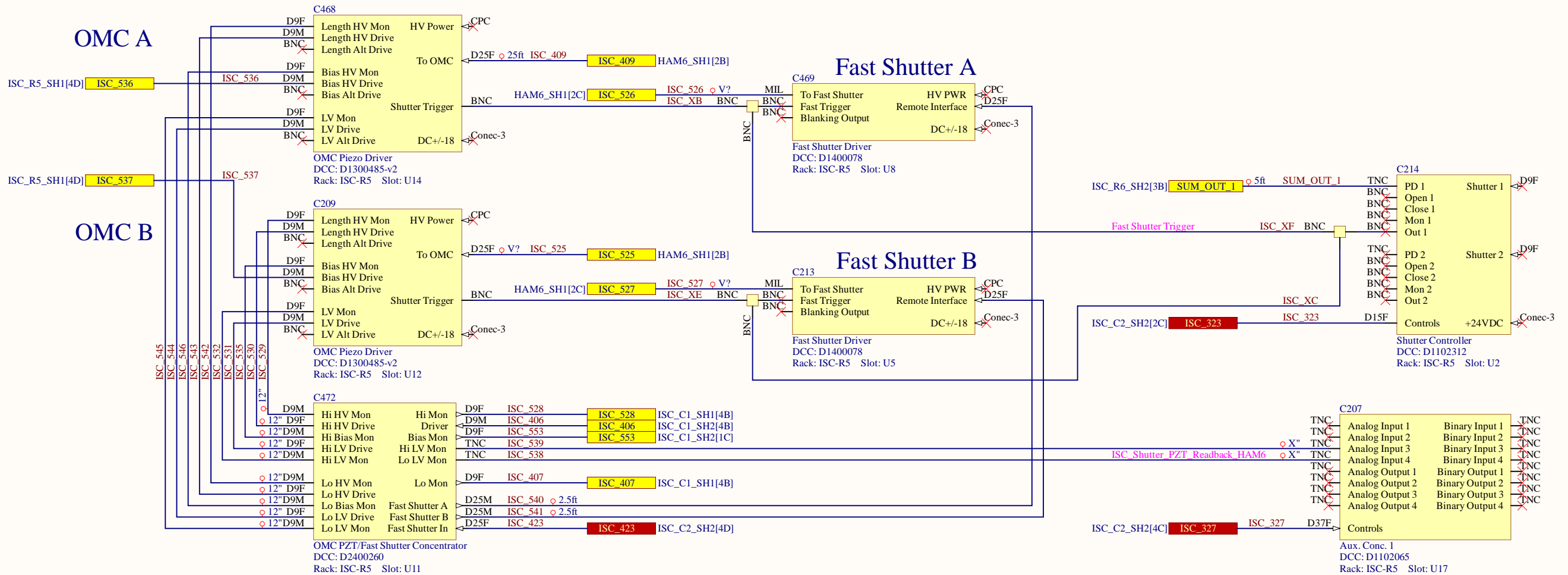
File: C:\Users\...\ISC\_R3\_SH3.SchDoc Drawn By: Filiberto Clara

## ISC-R5 Rack (LSC)



Title <b>ISC System Wiring Diagram</b>		
Size B	Number <b>D1900511</b>	Revision <b>V11</b>
Date: 4/21/2025	Sheet of 7	43
File: C:\Users\...ISC_R5_SH1.SchDoc	Drawn By:	Filberto Clara

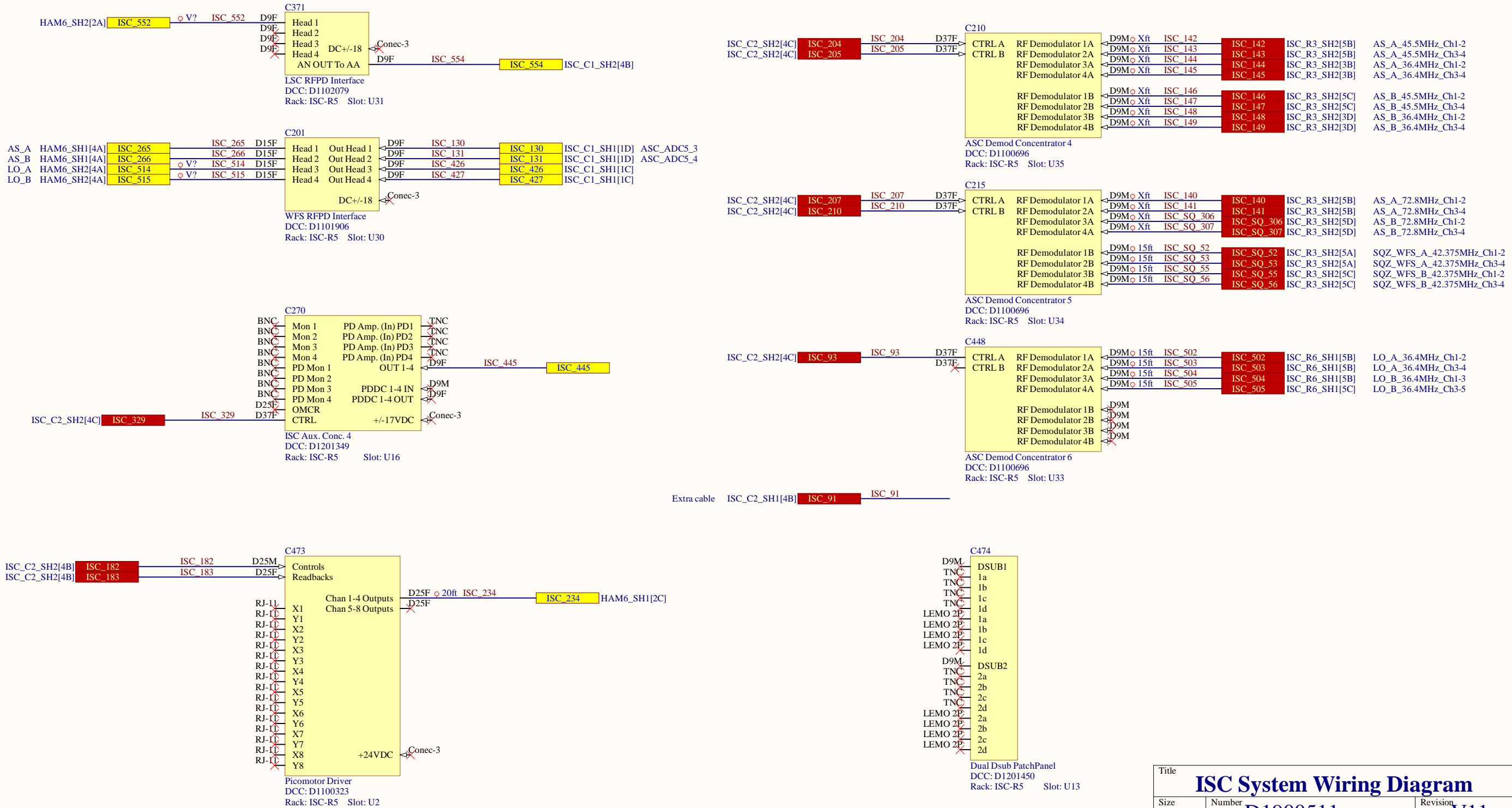
# ISC-R5 Rack



Title <b>ISC System Wiring Diagram</b>		
Size B	Number <b>D1900511</b>	Revision <b>V11</b>
Date: 4/21/2025	Sheet of 8	43
File: C:\Users\ISC_R5_S2\SchDoc	Drawn By:	Filipberta Clara



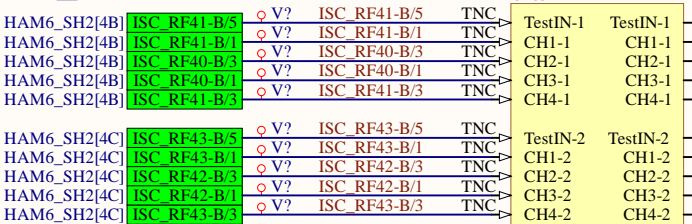
# ISC-R5 Rack



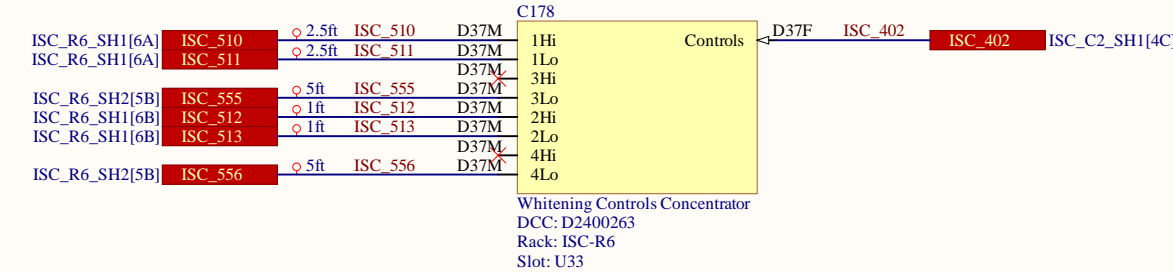
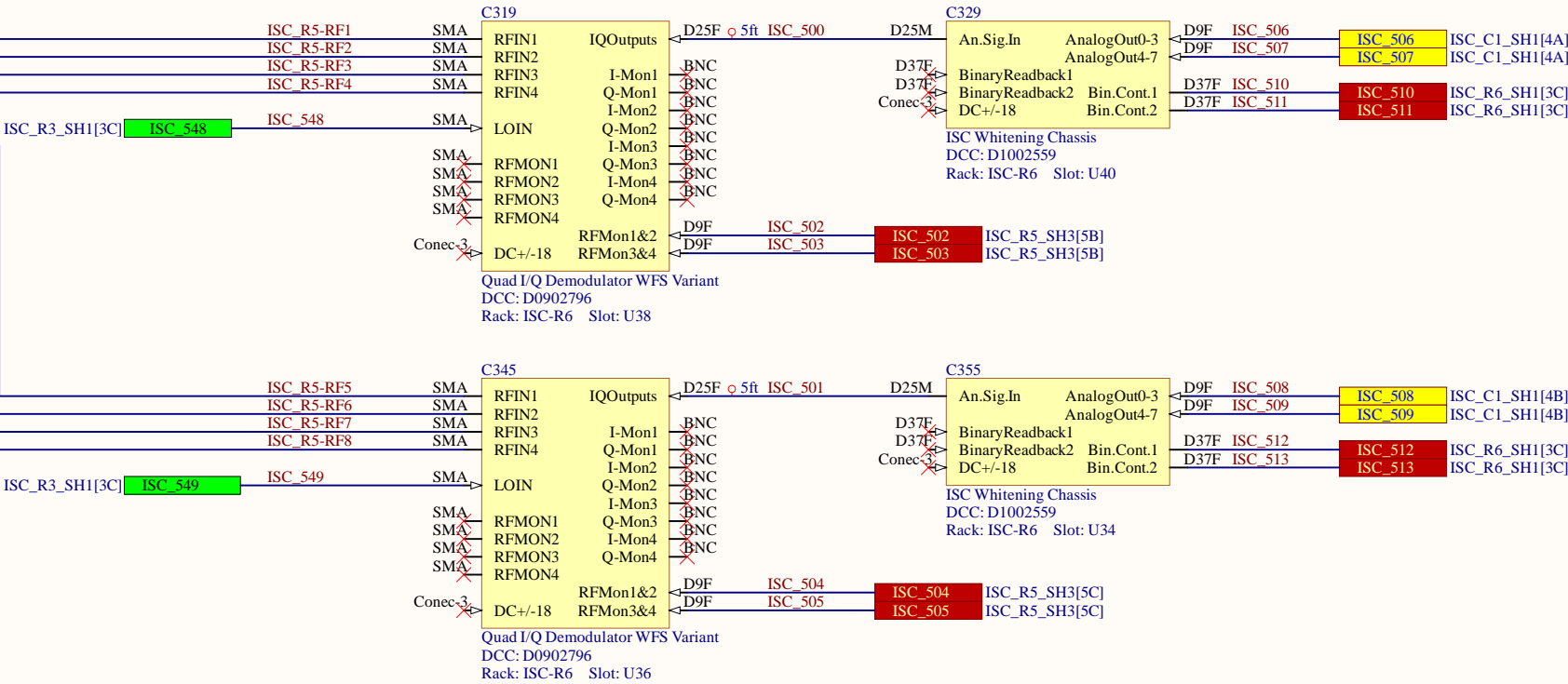
Title			<b>ISC System Wiring Diagram</b>		
Size B	Number <b>D1900511</b>			Revision <b>V11</b>	
Date:	4/21/2025			Sheet	of 43
File:	C:\Users\...\ISC_R5_SH3.SchDoc			Drawn By:	Filiberto Clara

ISC-R6 Rack (ASC)

LO\_A WFS 36MHz

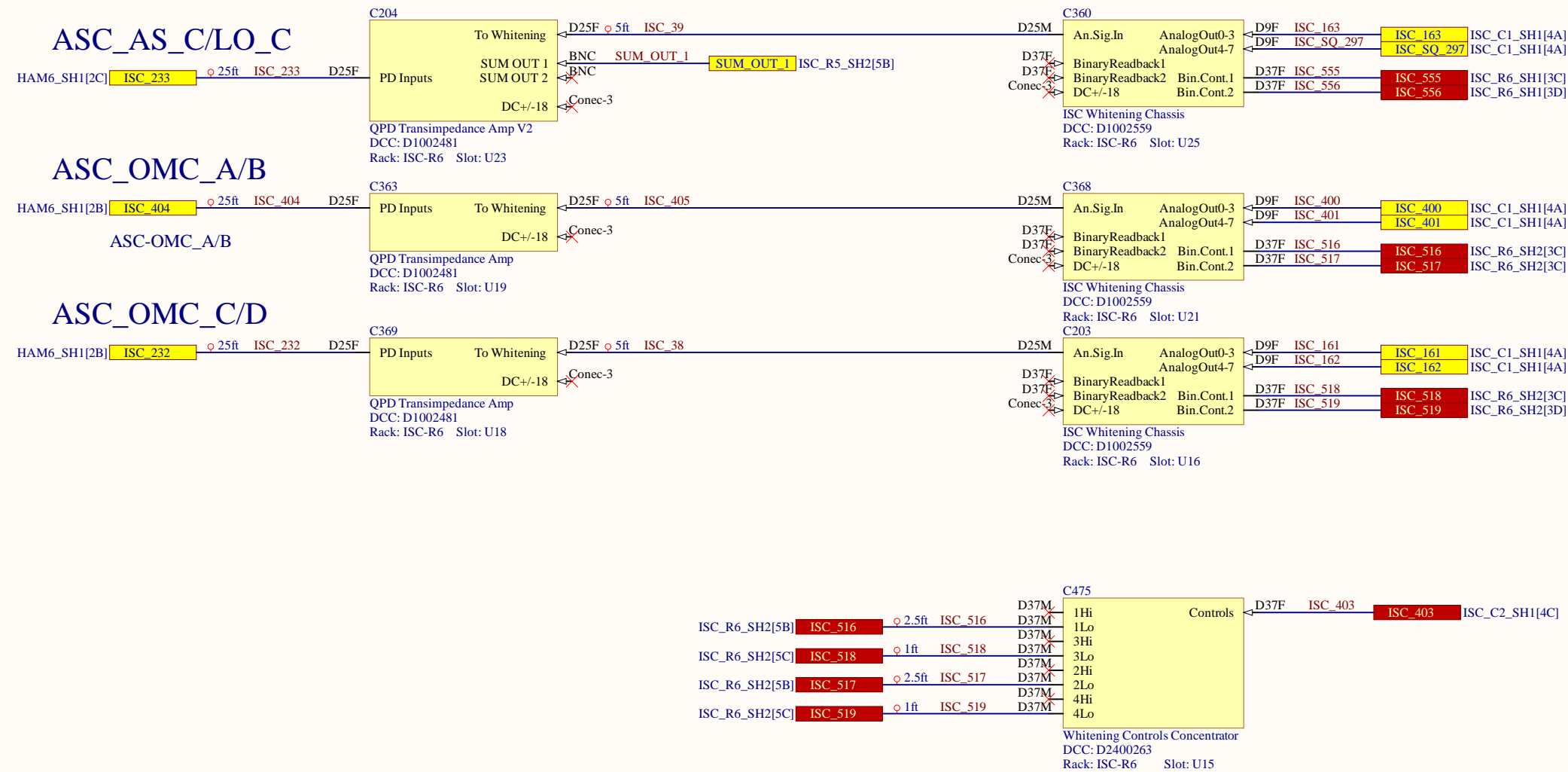


LO\_B WFS 36MHz



Title			ISC System Wiring Diagram	
Size	Number	Revision		
B	D1900511	V11		
Date:	4/21/2025	Sheet	of	43
File:	C:\Users\...\ISC_R6_SH1.SchDoc	Drawn By:	Filiberto Clara	

# ISC-R6 Rack (ASC)



Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V11
Date:	4/21/2025	Sheet of 1 43
File:	C:\Users\...\ISC_R6_SH2.SchDoc	Drawn By: Filiberto Clara

# HAM6 Flange Layout

DCPD A/B

DCPD C/D

OMC A PZTs

OMC B PZTs

OMC A/B QPD

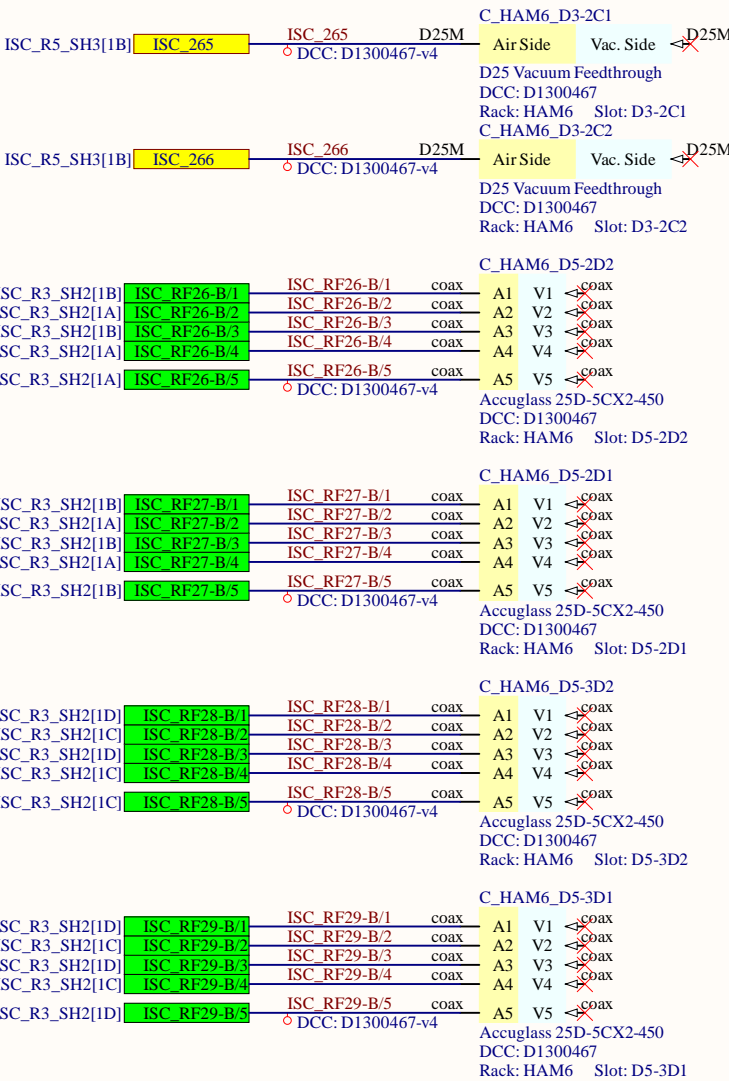
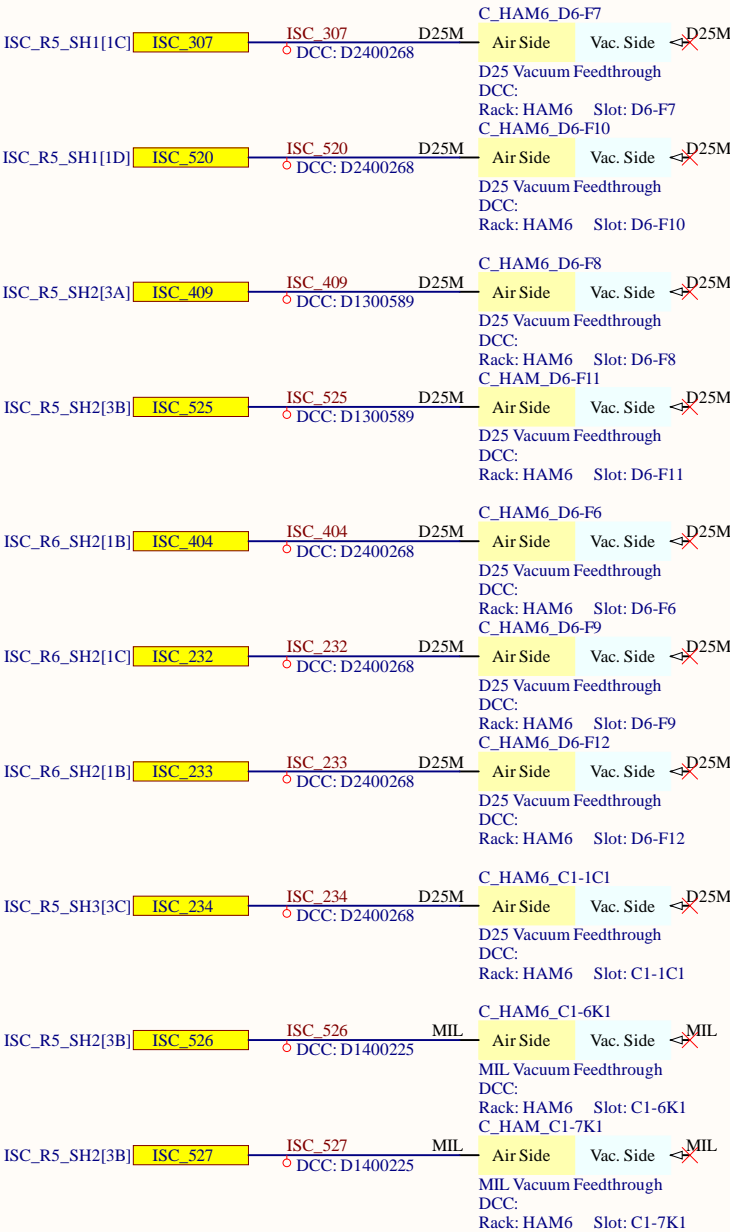
OMC C/D QPD

AS\_C/LO\_C QPD

Picomotor

Fast Shutter 1

Fast Shutter 2



AS\_A WFS DC

AS\_B WFS DC

AS\_A WFS 36/45MHz

AS\_A WFS 36/45MHz

AS\_B WFS 36/45MHz

AS\_B WFS 36/45MHz

Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V11
Date:	4/21/2025	Sheet of 32 43
File:	C:\Users\...\\HAM6_SH1.SchDoc	Drawn By: Filiberto Clara



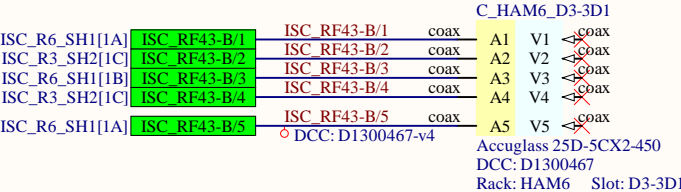
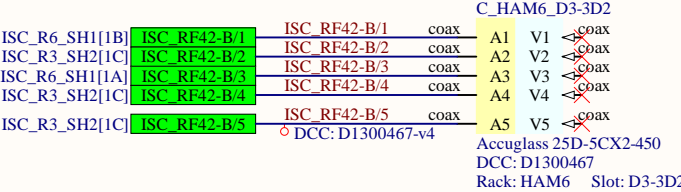
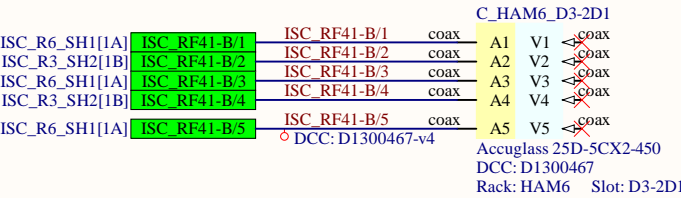
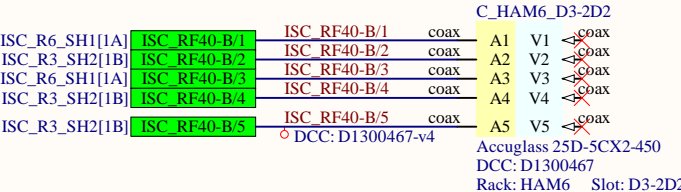
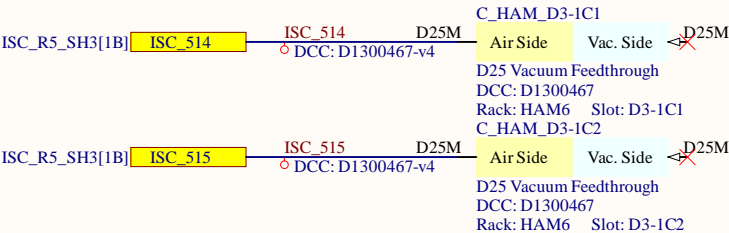
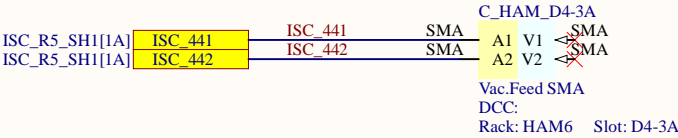
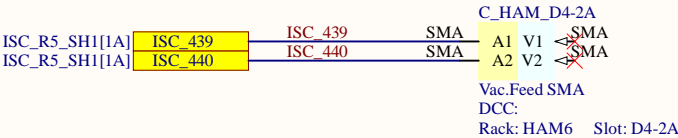
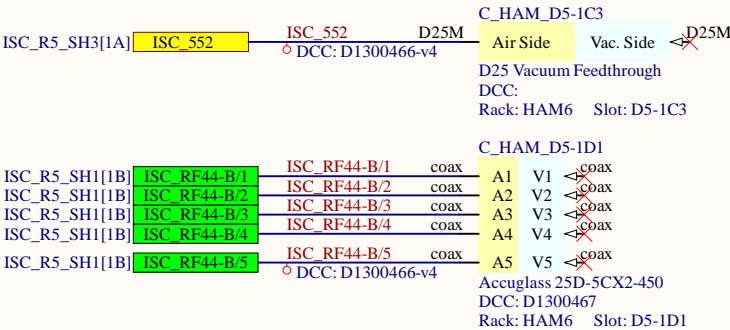
# HAM6 Flange Layout

OMC\_REFL DC

OMC\_REFL\_A

DCPD 3.1MHz A/B

DCPD 3.1MHz C/D



LO\_A WFS DC

LO\_B WFS DC

LO\_A WFS 36/45MHz

LO\_A WFS 36/45MHz

LO\_B WFS 36/45MHz

LO\_B WFS 36/45MHz

Title		
ISC System Wiring Diagram		
Size	Number	Revision
B	D1900511	V11
Date:	4/21/2025	Sheet of 33 43
File:	C:\Users\...\\HAM6_SH2.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	V11
Date:	4/21/2025	Sheet of 34 43
File:	C:\Users\...\SqueezerWfsWiring.SchDoc	Drawn By: R. Abbott

A

A

B

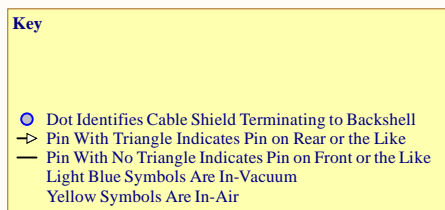
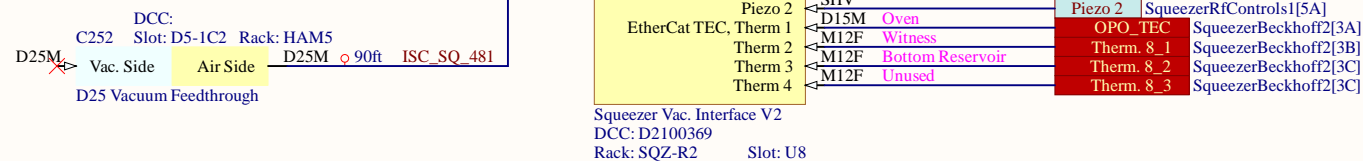
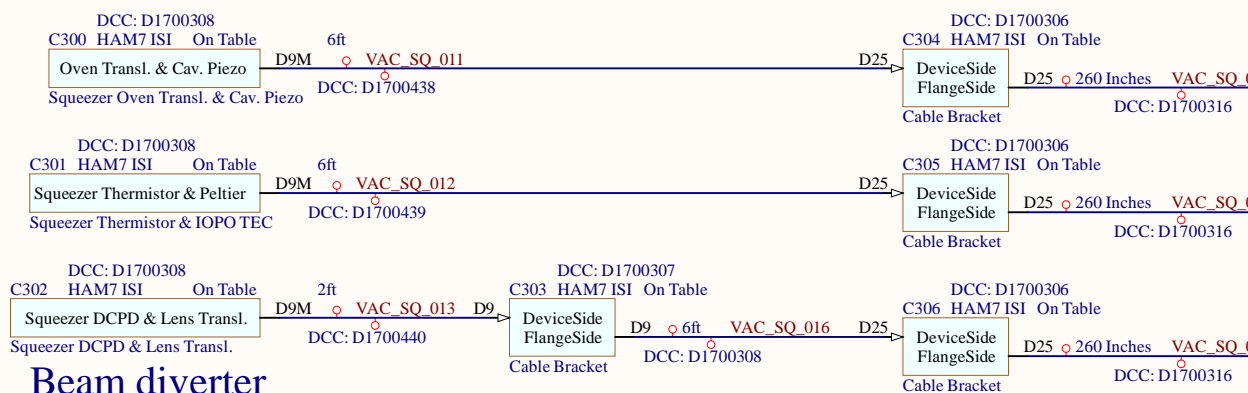
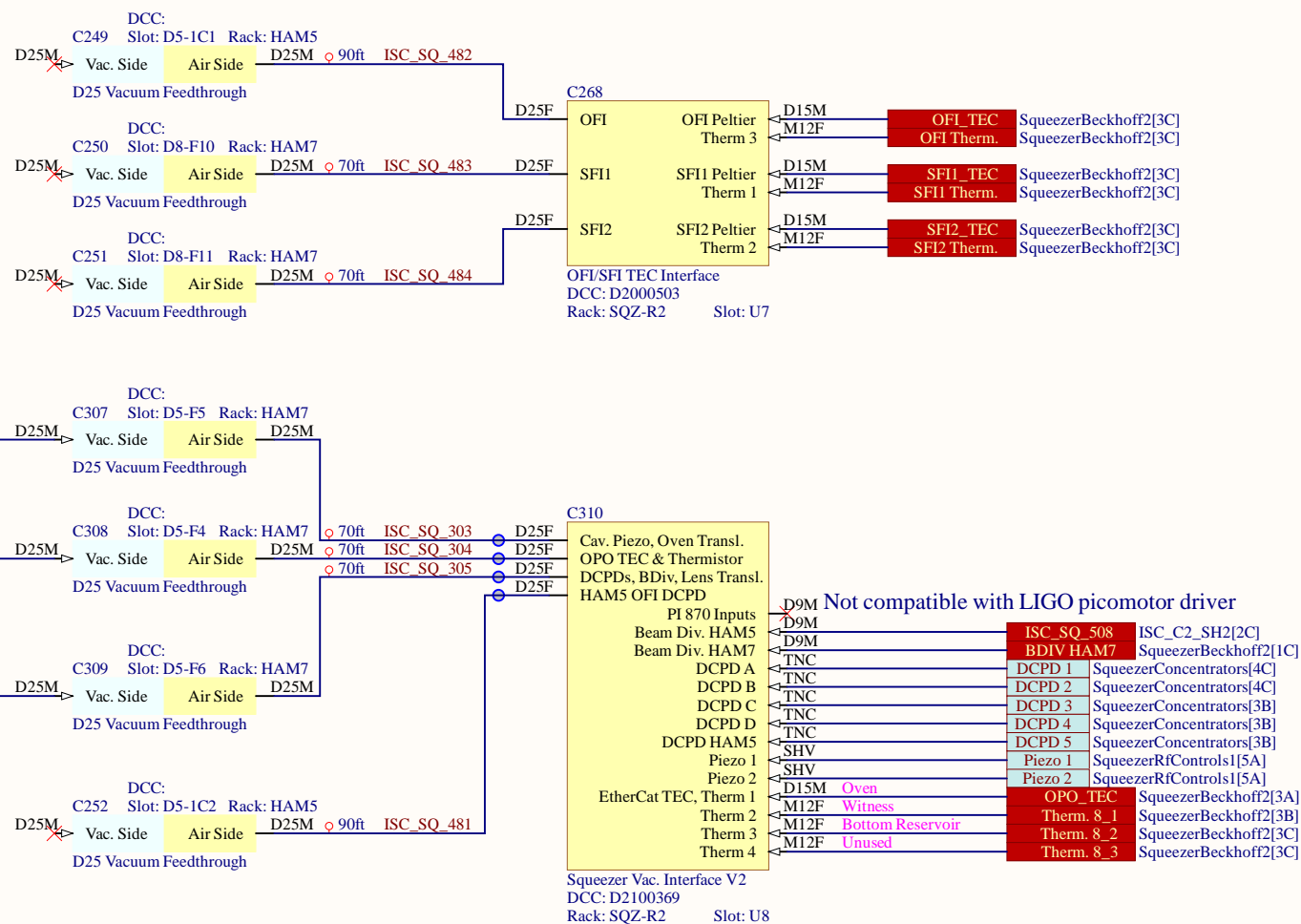
B

C

C

D

D



	LHO	LLO
DCPD A	Green pump	Green pump
DCPD B	Red CLF	Red CLF
DCPD C	Green FC	Green FC
DCPD D	OFI_A HAM7	OFI_A HAM7
DCPD HAM5	OFI_B HAM5	OFI_B HAM5

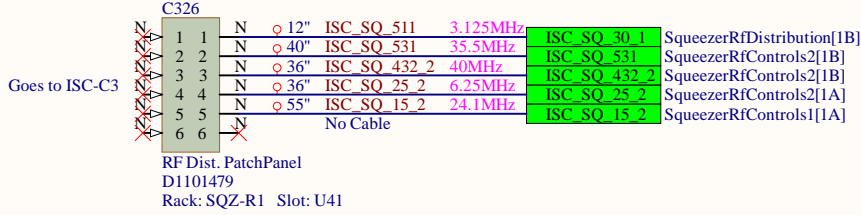




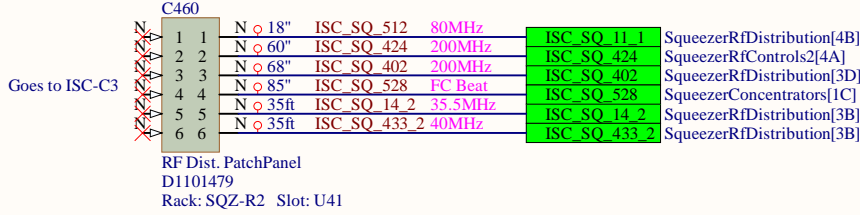
A

A

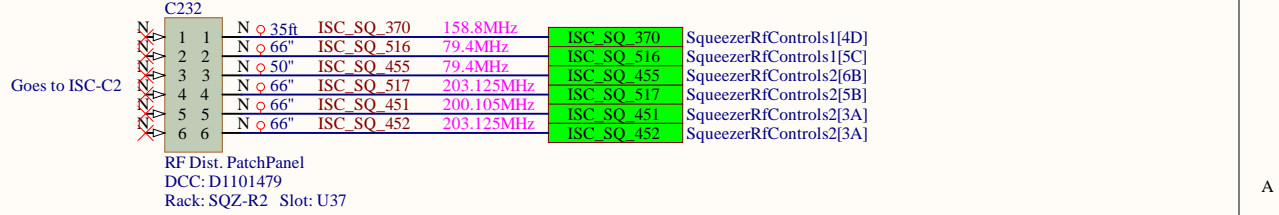
RF Patch Panel 34



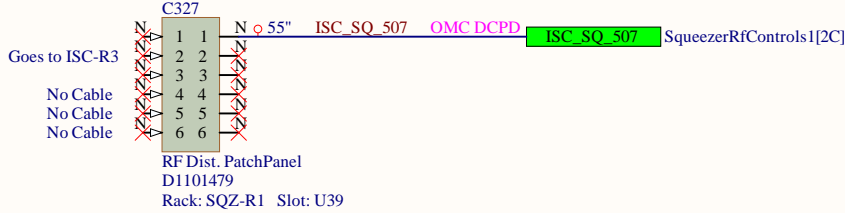
RF Patch Panel 36



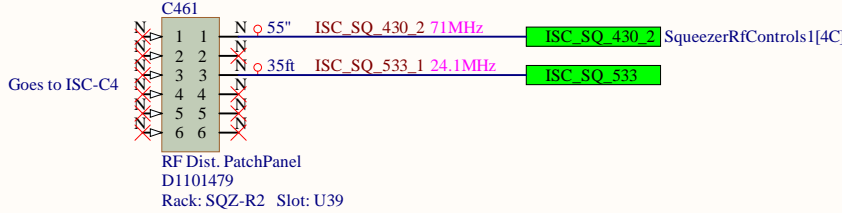
RF Patch Panel 38



RF Patch Panel 35



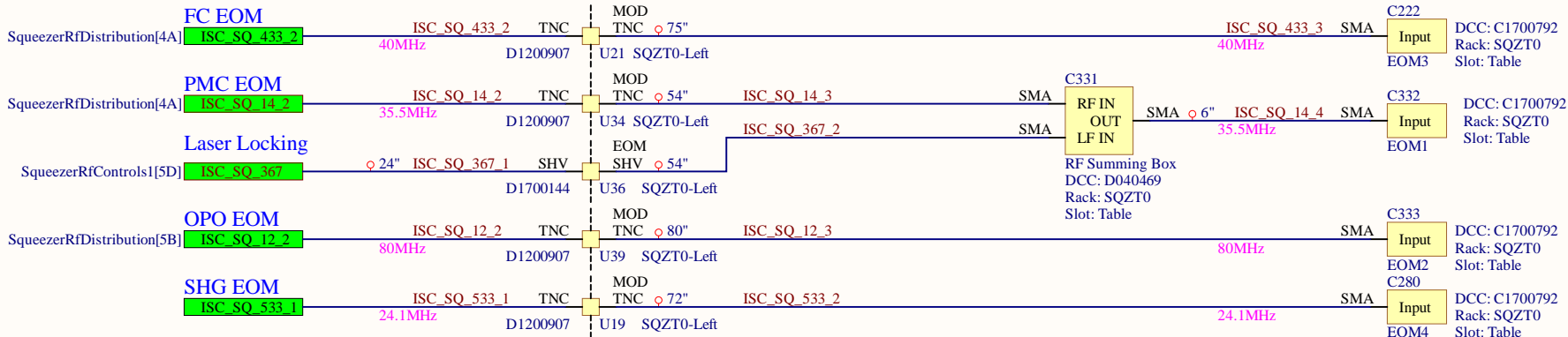
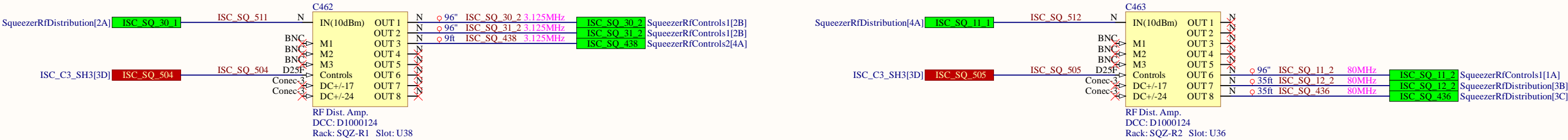
RF Patch Panel 37



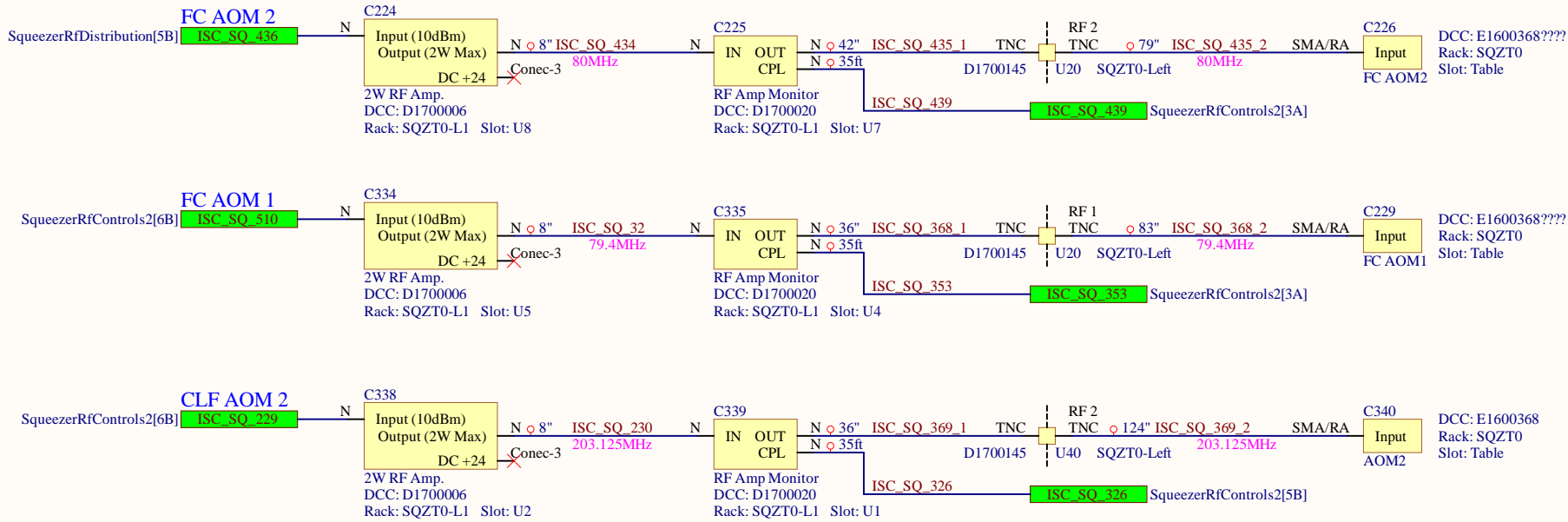
New cables for A\_ start at ISC\_SQ\_430

B

B



Part Number??



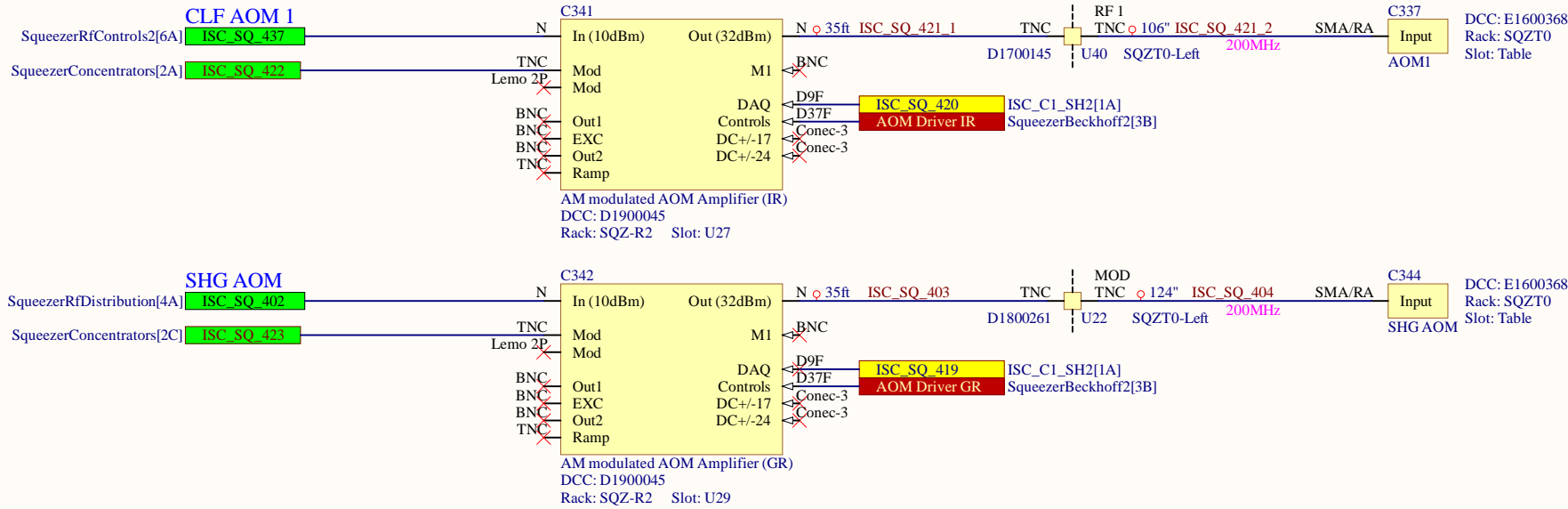
RF cables carrying the AOM signals need to be 1/4" superflexible helical corrugated coax.

D

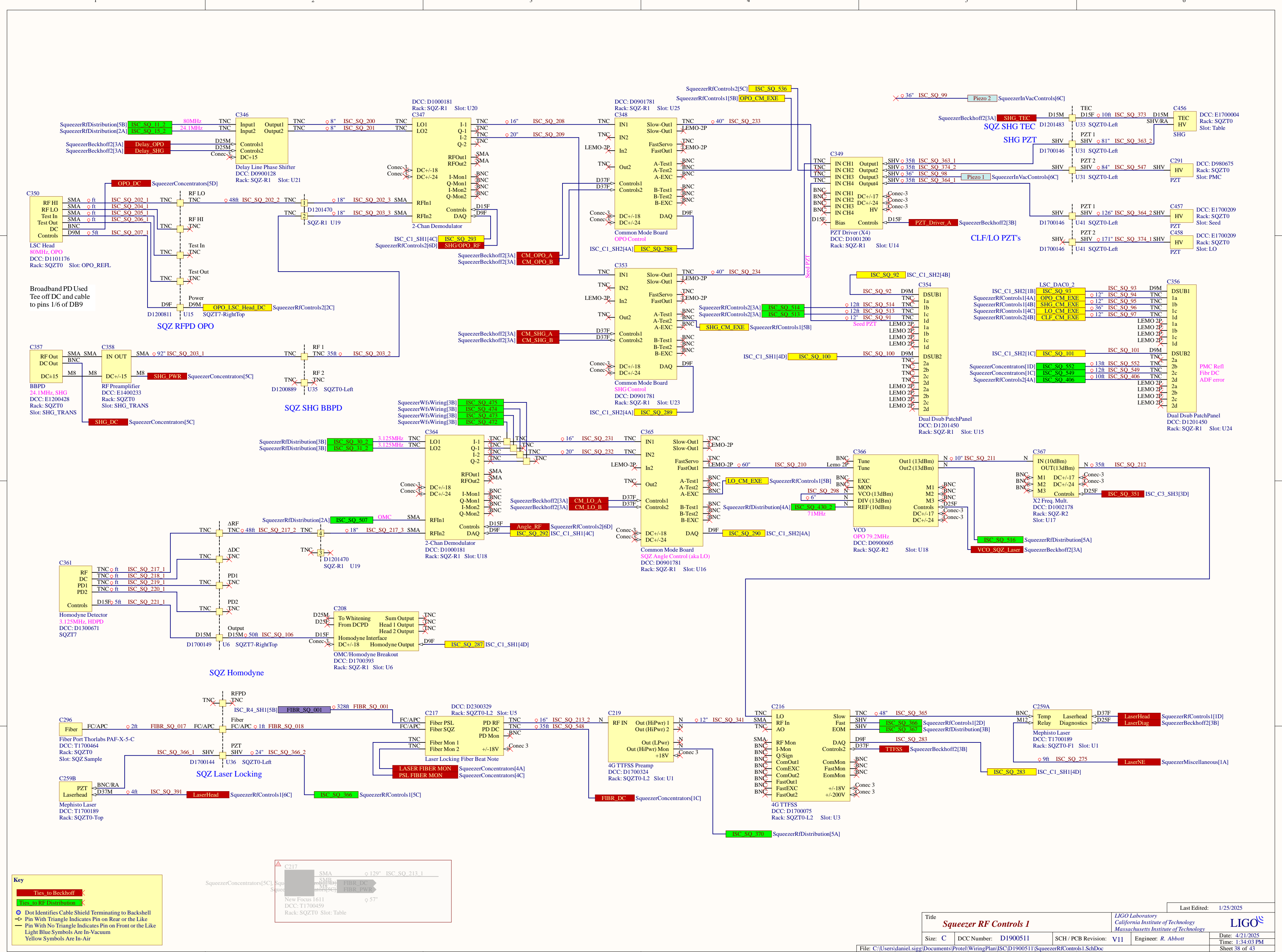
D

**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	V11
Date:	4/21/2025	Sheet of 37 43
File:	C:\Users\...\SqueezerRfDistribution.SchDpDrawn By: R. Abbott	



**Key**

- Ties to Beckhoff
- Ties to RF Distribution
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