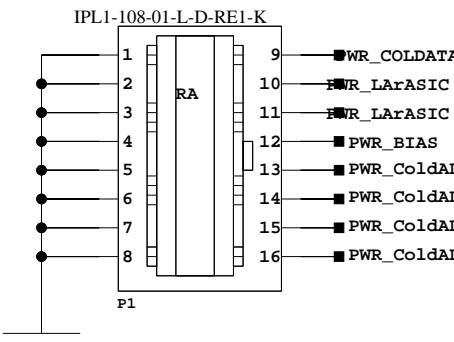


DUNE ASIC TESTER

TABLE OF CONTENTS

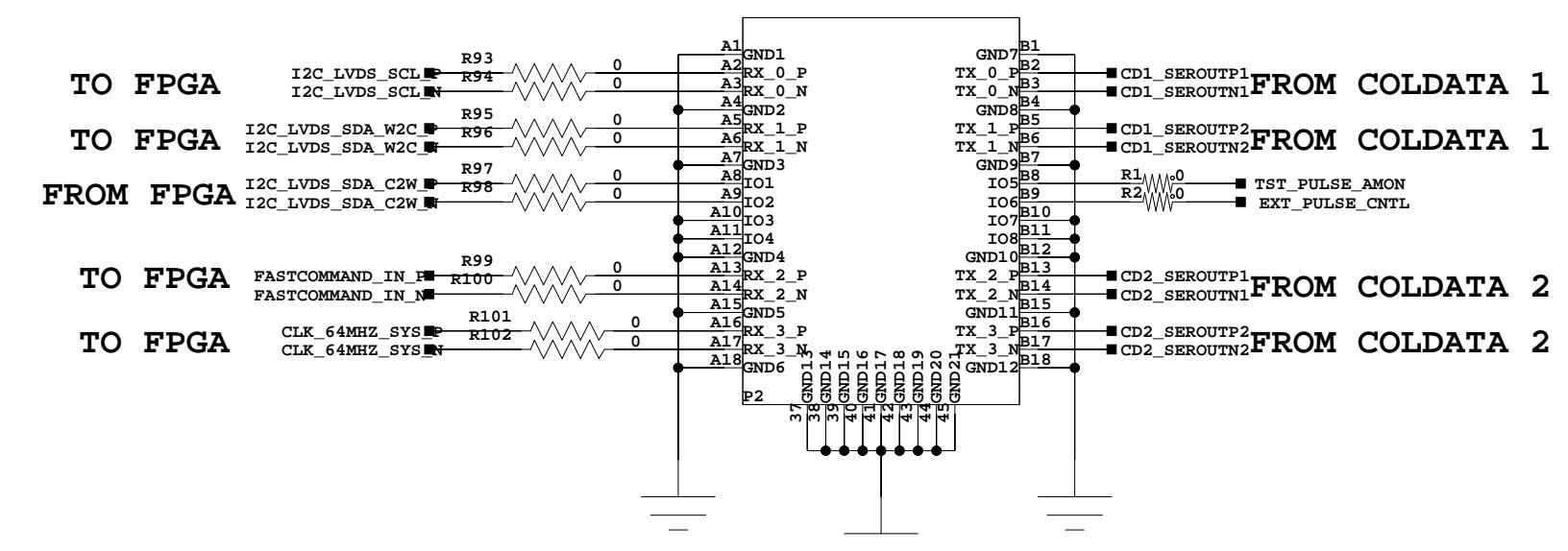
SHEET 1:	Title	SHEET 36:	3:DAT ADC ASIC Socket	SHEET 71:	7:DAT ADC ASIC Cal and Monitor
SHEET 2:	DAT WIB Data and Power Interface	SHEET 37:	3:DAT ADC ASIC Cal and Monitor	SHEET 72:	7:DAT ADC SRC SEL_P
SHEET 3:	DAT COLDATA 1 and 2	SHEET 38:	3:DAT ADC SRC SEL_P	SHEET 73:	7:DAT ADC SRC SEL_N
SHEET 4:	1:DAT CD Power Monitor	SHEET 39:	3:DAT ADC SRC SEL_N	SHEET 74:	8:DAT ASIC Power Monitor
SHEET 5:	1:DAT CD ADC IO	SHEET 40:	4:DAT ASIC Power Monitor	SHEET 75:	8:DAT FE ASIC Socket
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SHEET 10:	2:DAT CD ADC IO	SHEET 45:	4:DAT ADC ASIC Cal and Monitor	SHEET 80:	8:DAT ADC SRC SEL_P
SHEET 11:	2:DAT COLDATA SOCKET	SHEET 46:	4:DAT ADC SRC SEL_P	SHEET 81:	8:DAT ADC SRC SEL_N
SHEET 12:	2:DAT CD Control and Monitor	SHEET 47:	4:DAT ADC SRC SEL_N	SHEET 82:	DAT ADC ASIC Calibration
SHEET 13:	2:DAT CD PWR IO	SHEET 48:	DAT ASIC Chain 5 and 6	SHEET 83:	DAT FE ASIC Calibration
SHEET 14:	DAT ASIC Chain 1 and 2	SHEET 49:	5:DAT ASIC Power Monitor	SHEET 84:	DAT FE ASIC Channel Calibration
SHEET 15:	1:DAT ASIC Power Monitor	SHEET 50:	5:DAT FE ASIC Socket	SHEET 85:	DAT ADC TEST SOURCE SEL
SHEET 16:	1:DAT FE ASIC Socket	SHEET 51:	5:DAT FE ASIC Channel Control	SHEET 86:	DAT ASIC Chain Signal
SHEET 17:	1:DAT FE ASIC Channel Control	SHEET 52:	5:DAT FE ASIC Cal and Monitor	SHEET 87:	DAT FPGA IO
SHEET 18:	1:DAT FE ASIC Cal and Monitor	SHEET 53:	5:DAT ADC ASIC Socket	SHEET 88:	DAT GIG-E SFP
SHEET 19:	1:DAT ADC ASIC Socket	SHEET 54:	5:DAT ADC ASIC Cal and Monitor	SHEET 89:	DAT FPGA Clock
SHEET 20:	1:DAT ADC ASIC Cal and Monitor	SHEET 55:	5:DAT ADC SRC SEL_P	SHEET 90:	DAT FPGA CONFIG
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SHEET 22:	1:DAT ADC SRC SEL_N	SHEET 57:	6:DAT ASIC Power Monitor	SHEET 92:	DAT PWR FE AND ADC Left
SHEET 23:	2:DAT ASIC Power Monitor	SHEET 58:	6:DAT FE ASIC Socket	SHEET 93:	DAT PWR FE AND ADC RIGHT
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SHEET 25:	2:DAT FE ASIC Channel Control	SHEET 60:	6:DAT FE ASIC Cal and Monitor	SHEET 95:	DAT PWR ASIC 3_3V and 2_5V
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SHEET 29:	2:DAT ADC SRC SEL_P	SHEET 64:	6:DAT ADC SRC SEL_N	SHEET 99:	DAT PWR DAC_vref ADC_vref
SHEET 30:	2:DAT ADC SRC SEL_N	SHEET 65:	DAT ASIC Chain 7 and 8	SHEET 100:	DAT Mounting holes
SHEET 31:	DAT ASIC Chain 3 and 4	SHEET 66:	7:DAT ASIC Power Monitor		
SHEET 32:	3:DAT ASIC Power Monitor	SHEET 67:	7:DAT FE ASIC Socket		
SHEET 33:	3:DAT FE ASIC Socket	SHEET 68:	7:DAT FE ASIC Channel Control		
SHEET 34:	3:DAT FE ASIC Channel Control	SHEET 69:	7:DAT FE ASIC Cal and Monitor		
SHEET 35:	3:DAT FE ASIC Cal and Monitor	SHEET 70:	7:DAT ADC ASIC Socket		

A B C D E F

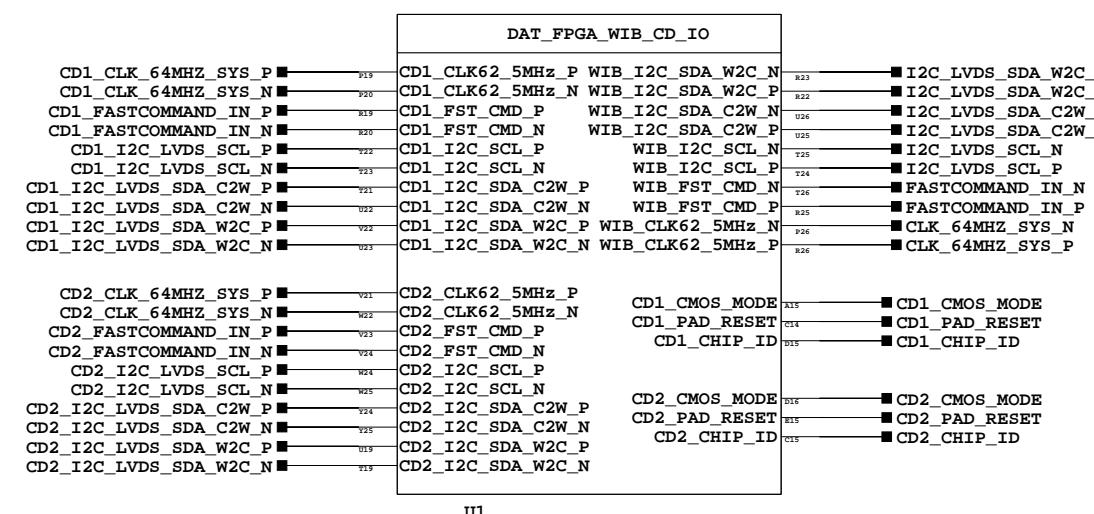
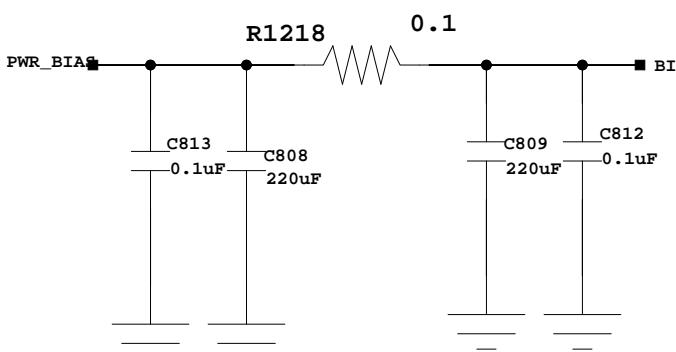


Name of power rails on WIB
 PWR_COLDATA == DC2DC_02_BRDx
 PWR_LArASIC == DC2DC_01_BRDx
 BIAS == BIAS_BRDx
 PWR_ColdADC == DC2DC_03_BRDx

Vertical Mini-SAS

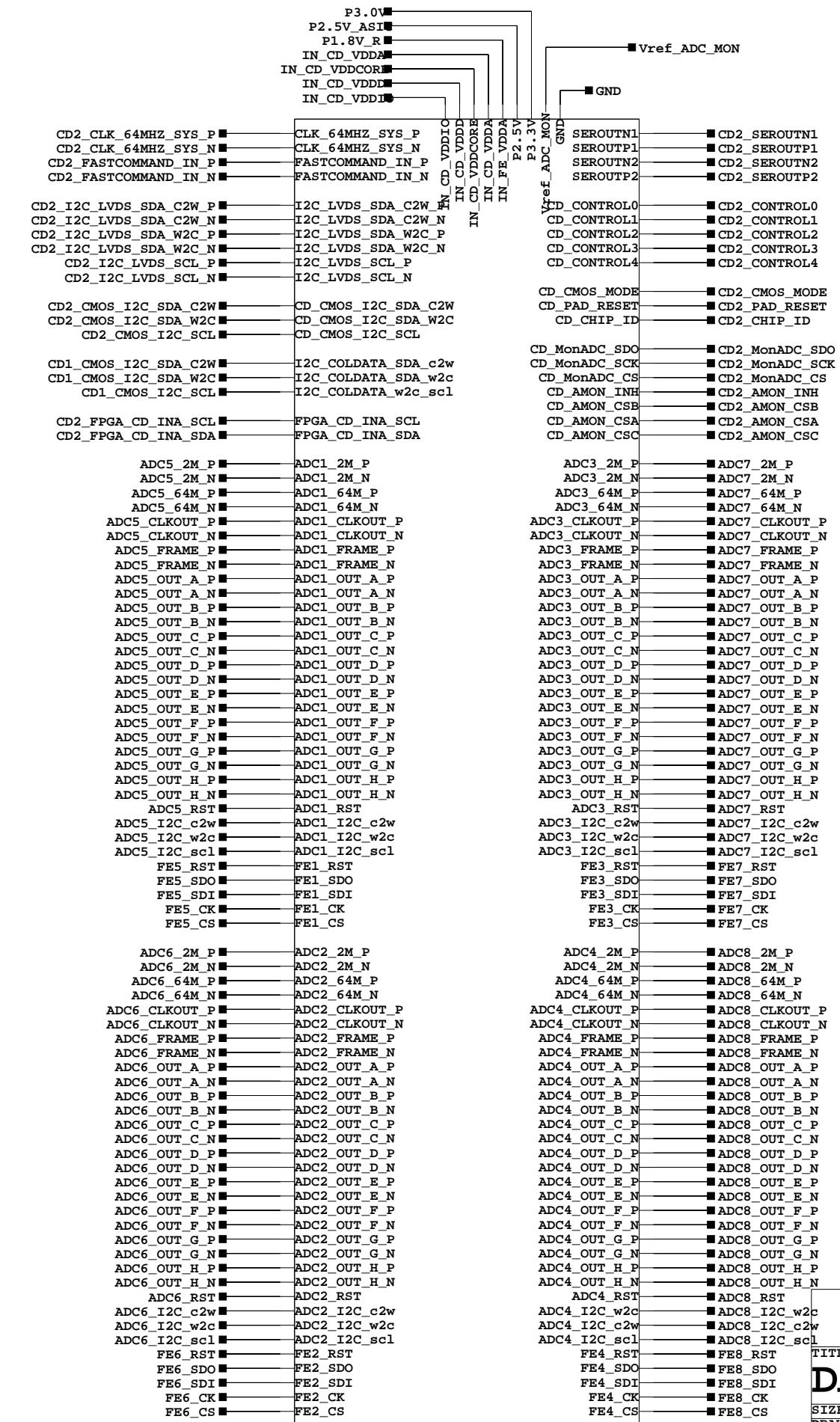
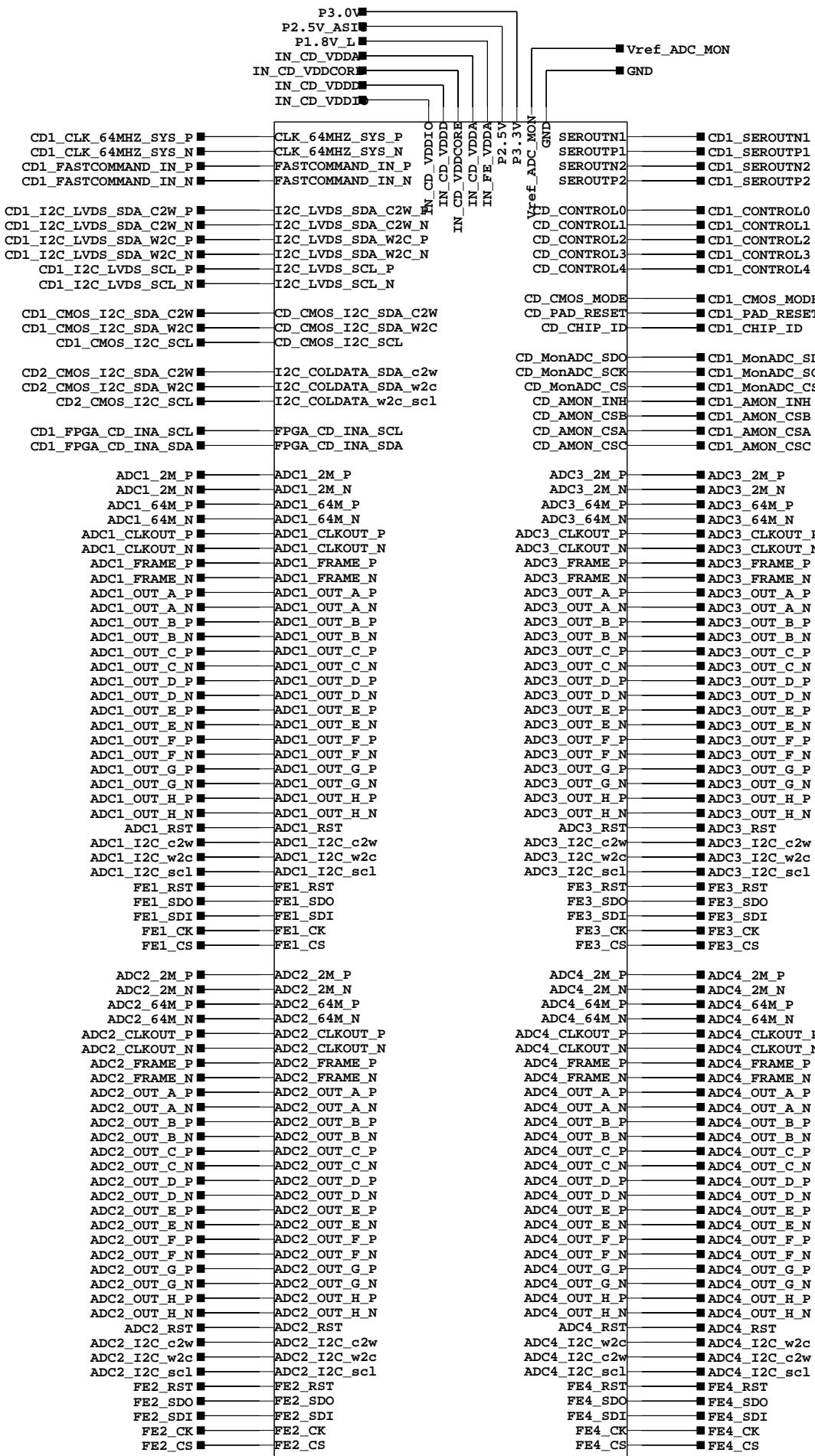


5V bias filter



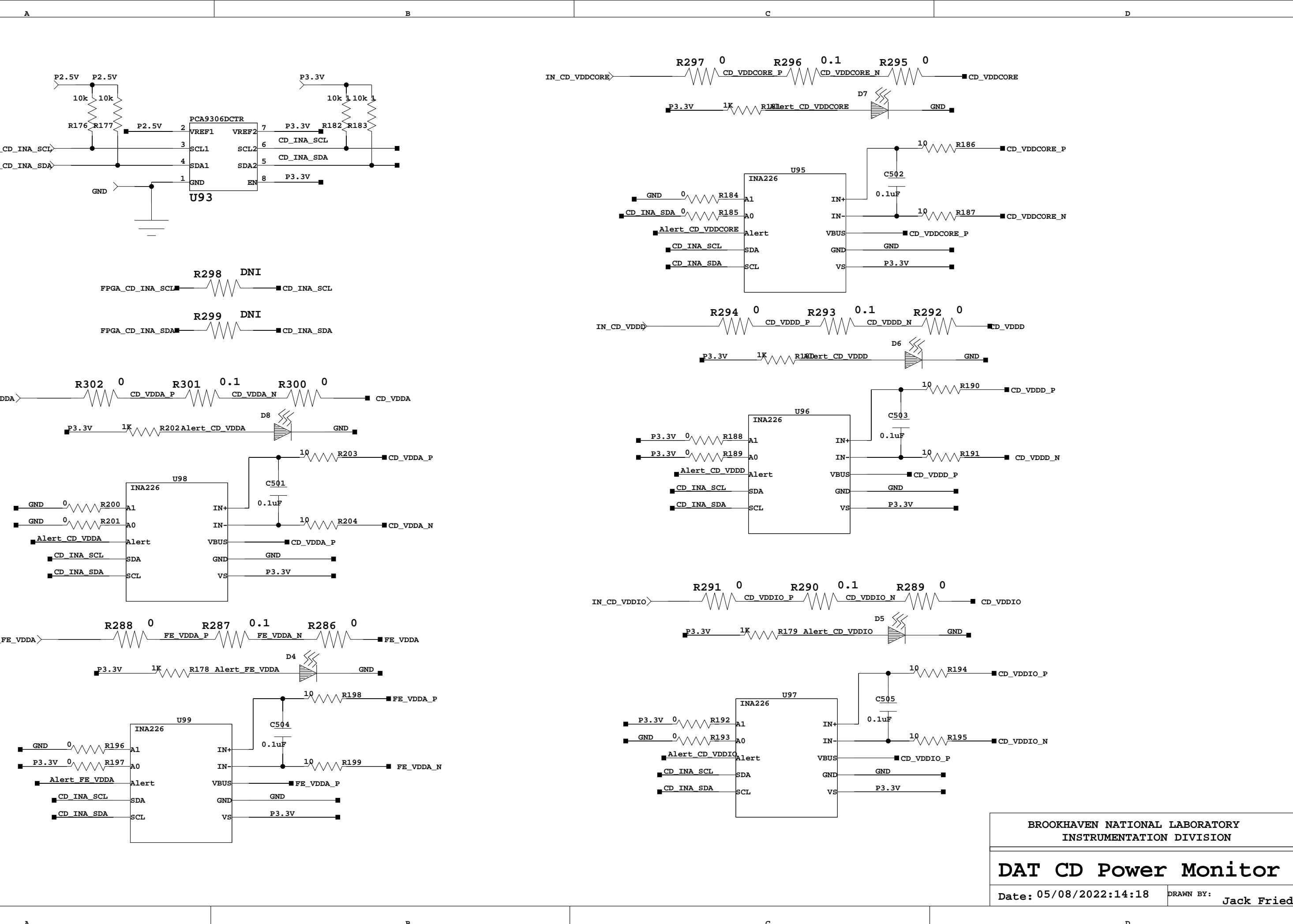
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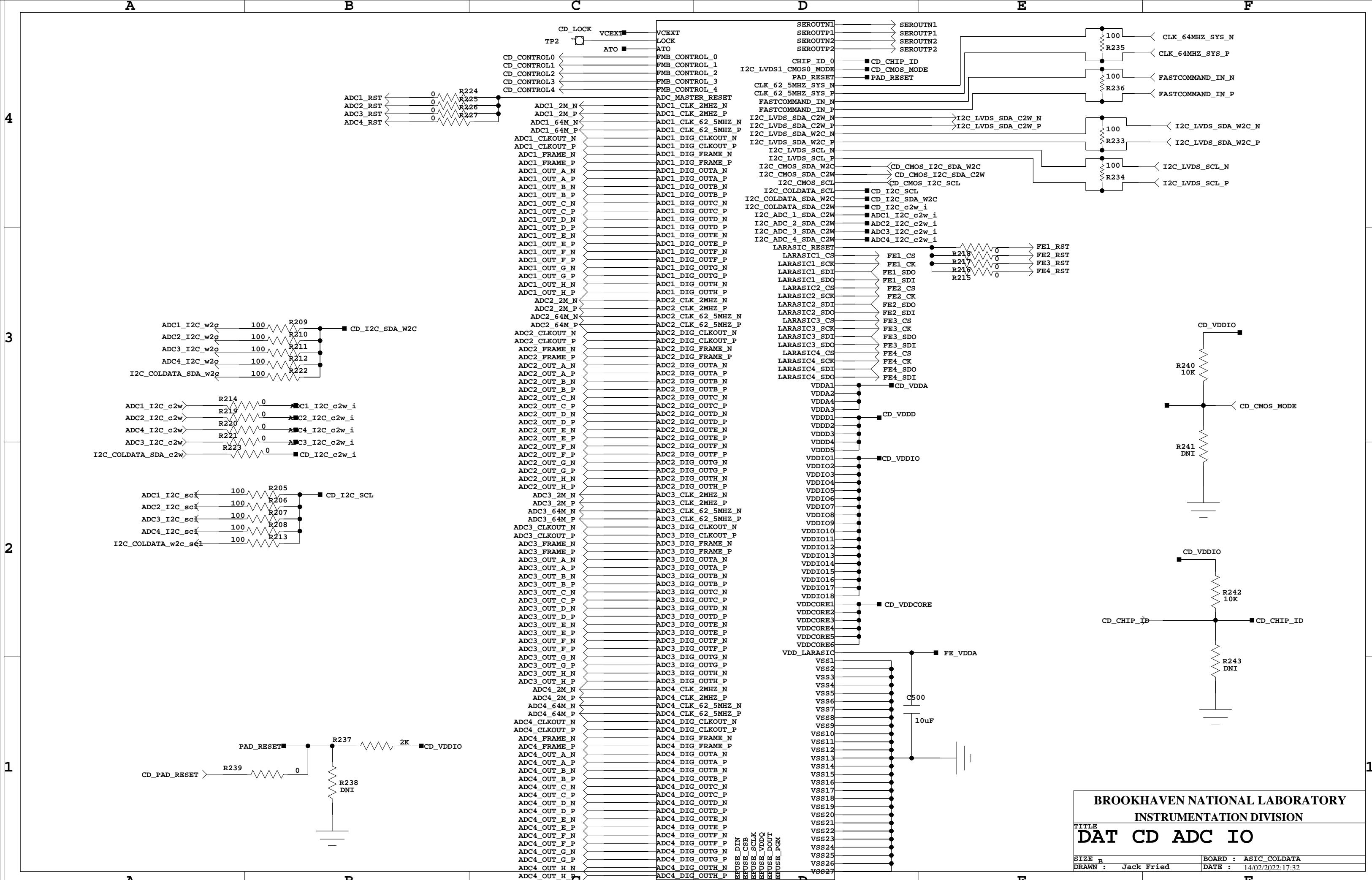
COLDATA 1 COLDATA 2



BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION
DAT COLDATA 1 and 2
TITLE: **DUNE ASIC TESTER**
SIZE: **B** DRAWN: **Jack Fried** DATE: **19/02/2022:15:30**

A B C D E F



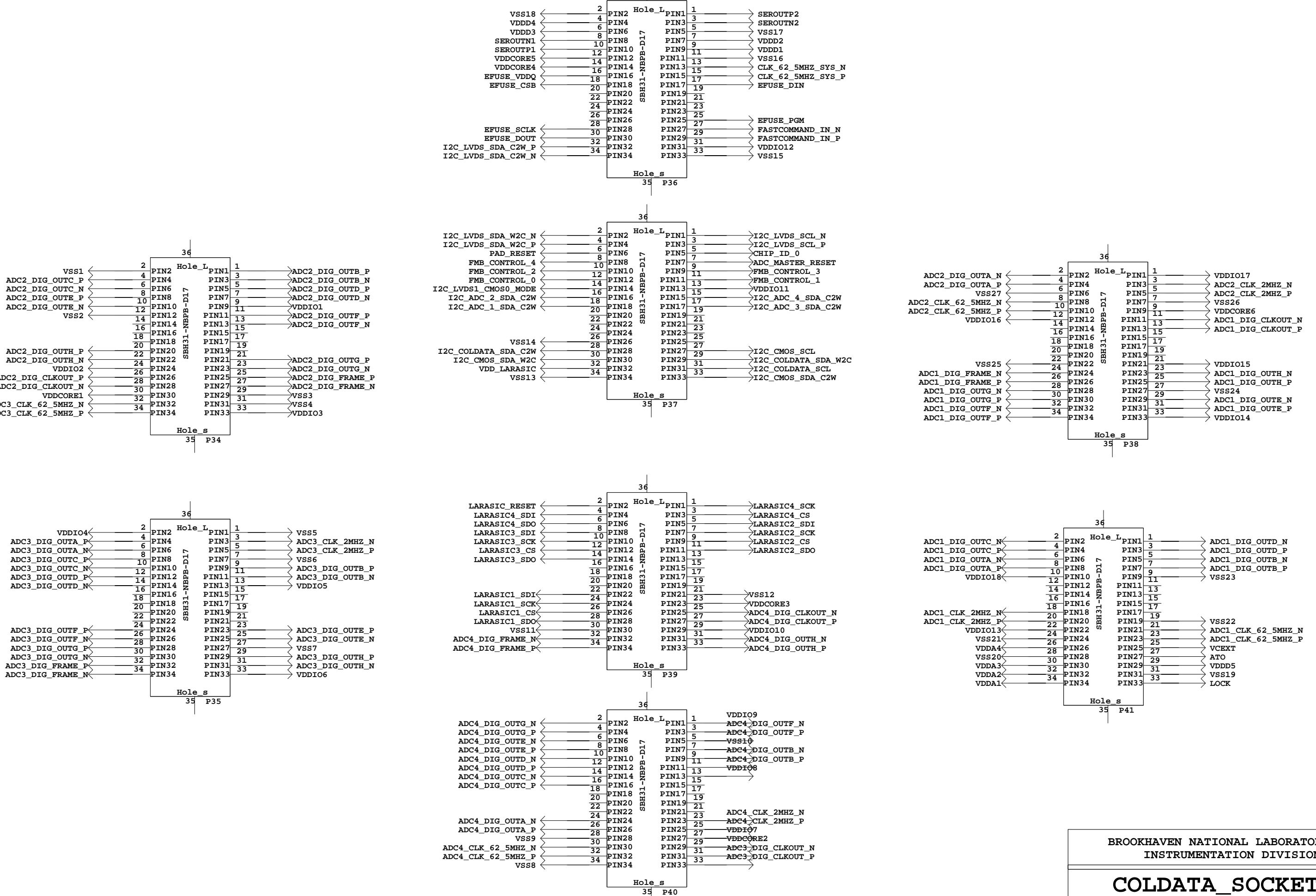


A

B

C

D



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INSTRUMENTATION DIVISION

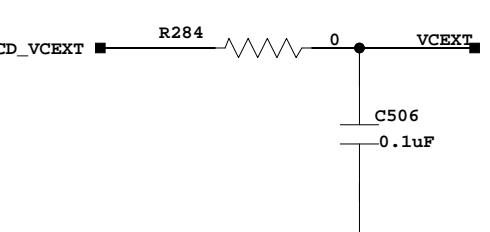
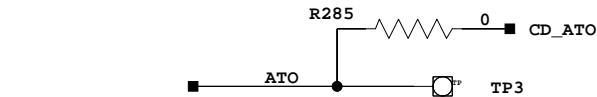
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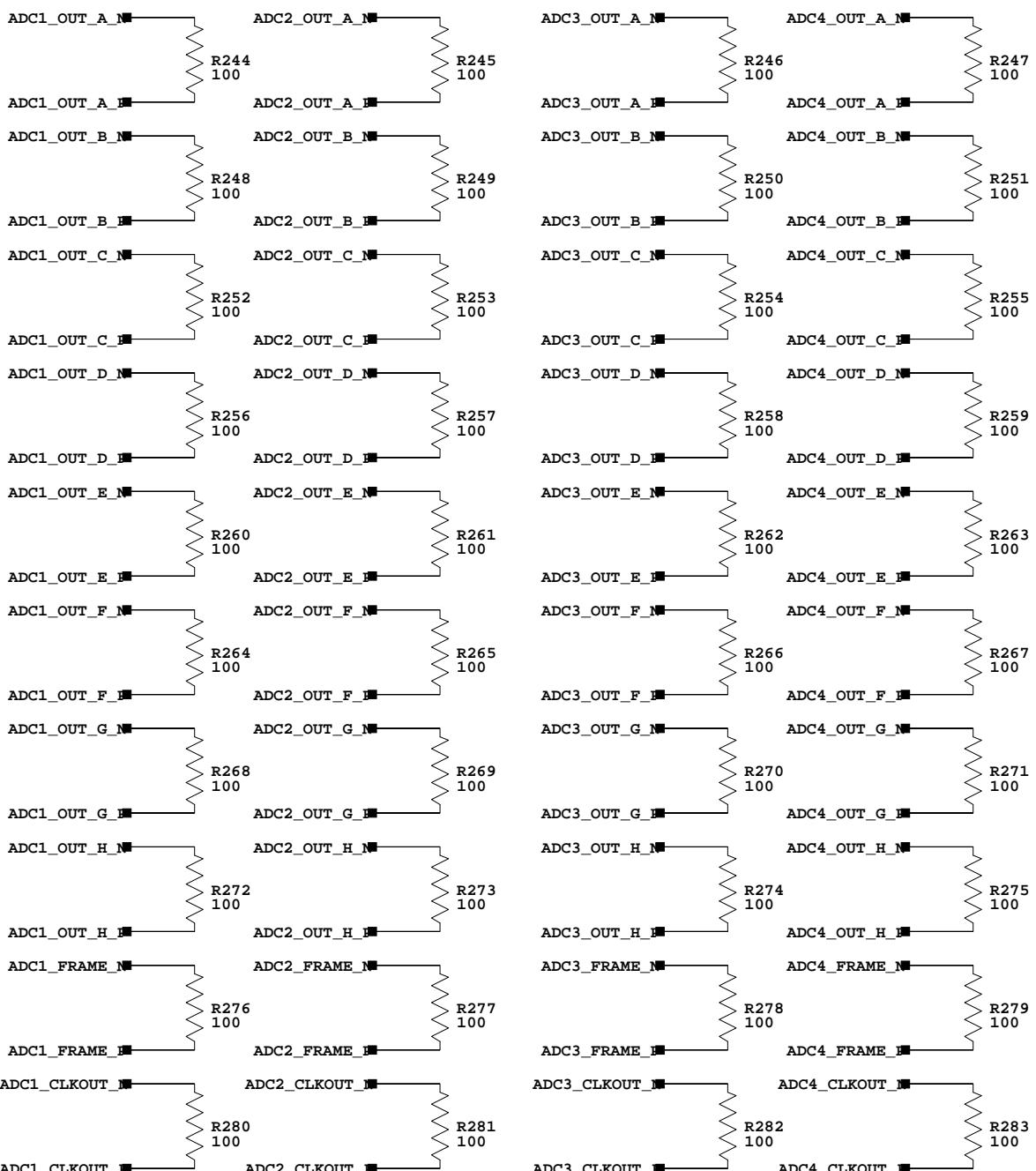
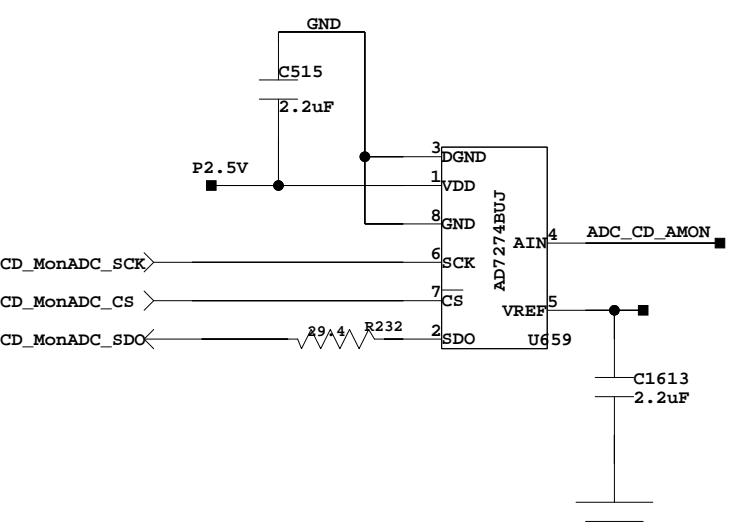
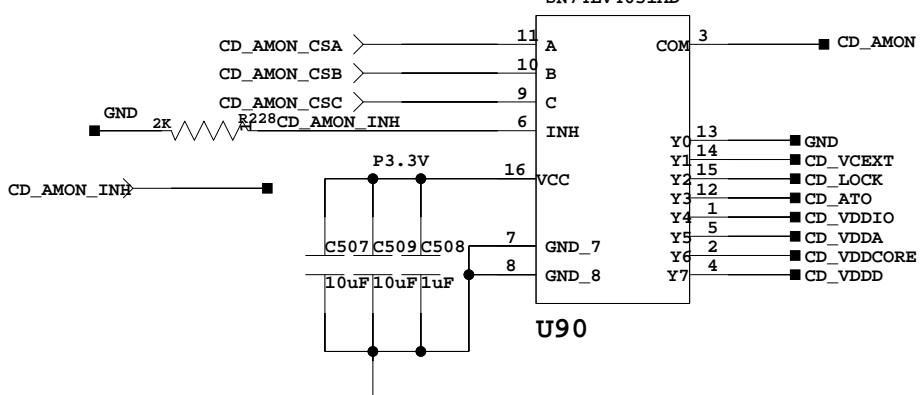
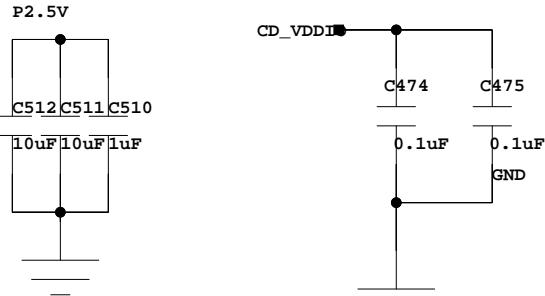
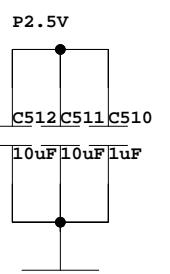
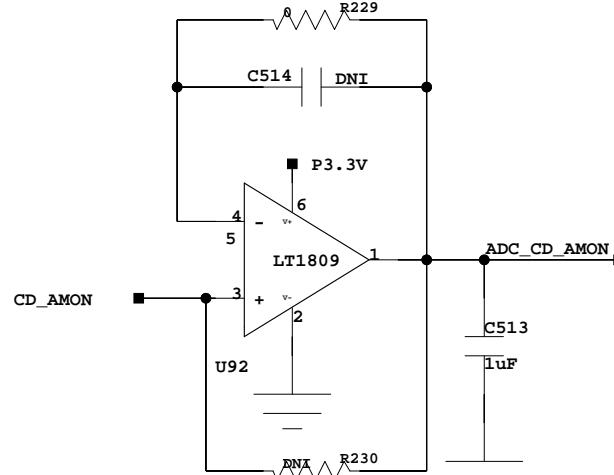
A B C D E F

LVDS TERMINATION

Place next to coldata ASIC



LT1809 and OPA625 are pin compatible



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TITLE

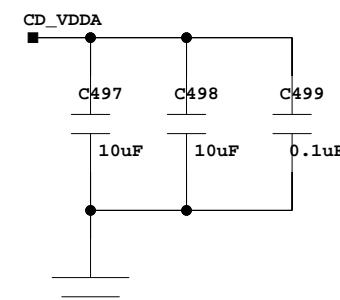
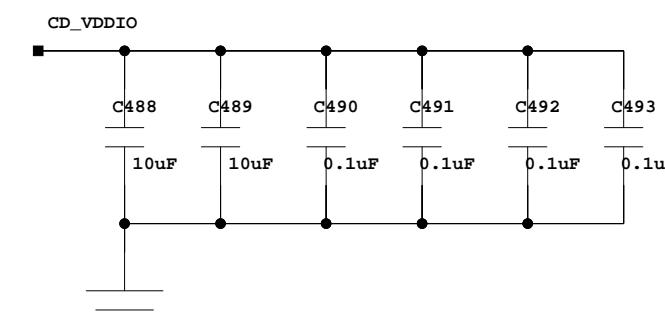
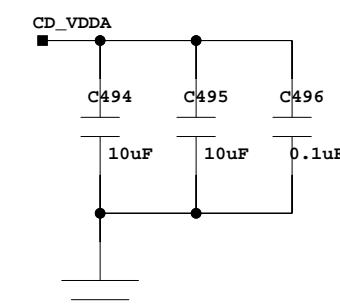
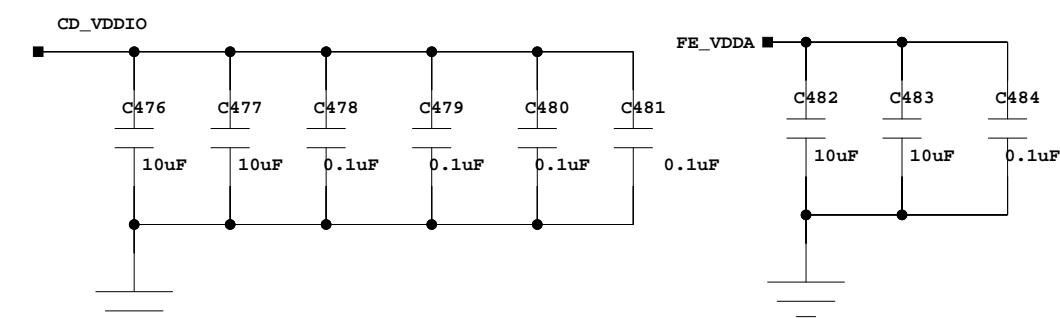
DAT CD Control and Mon

SIZE : B BOARD : ASIC_COLDATA
DRAWN : Jack Fried DATE : 08/07/2022:10:17

A B C D E F

A B C D E F

4



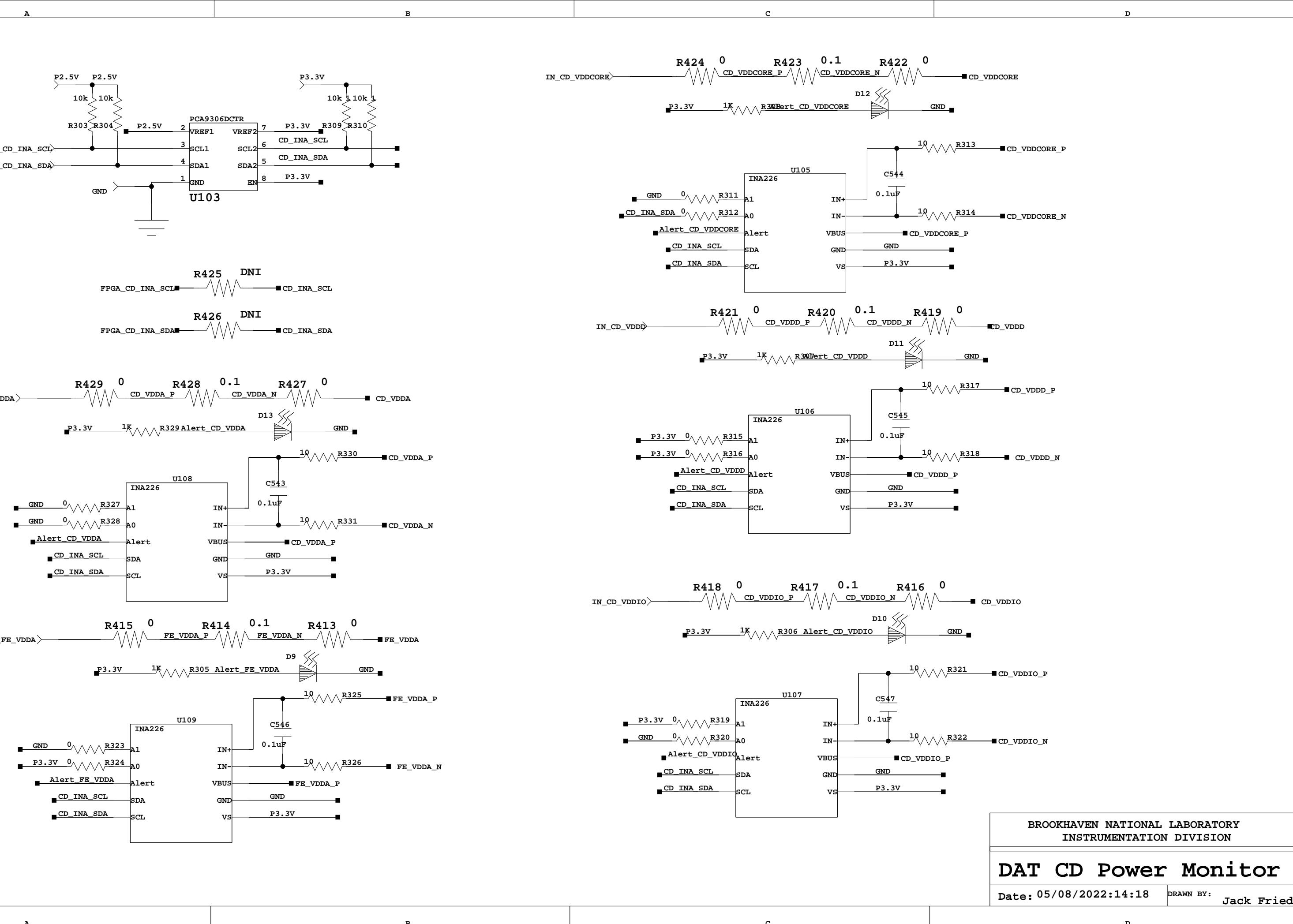
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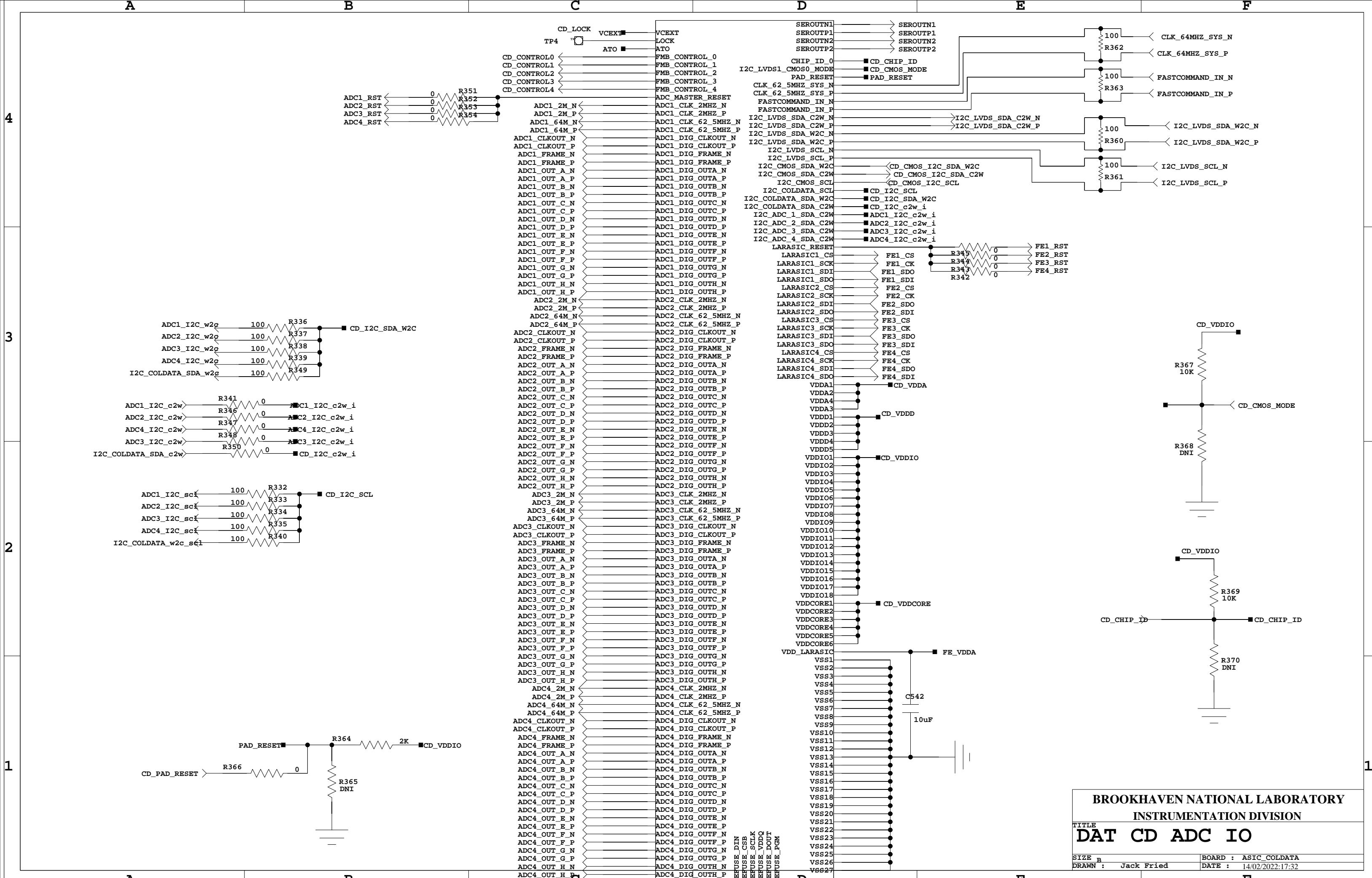
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BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION
TITLE
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DRAWN : Jack Fried DATE : 11/07/2022:17:58

A B C D E F



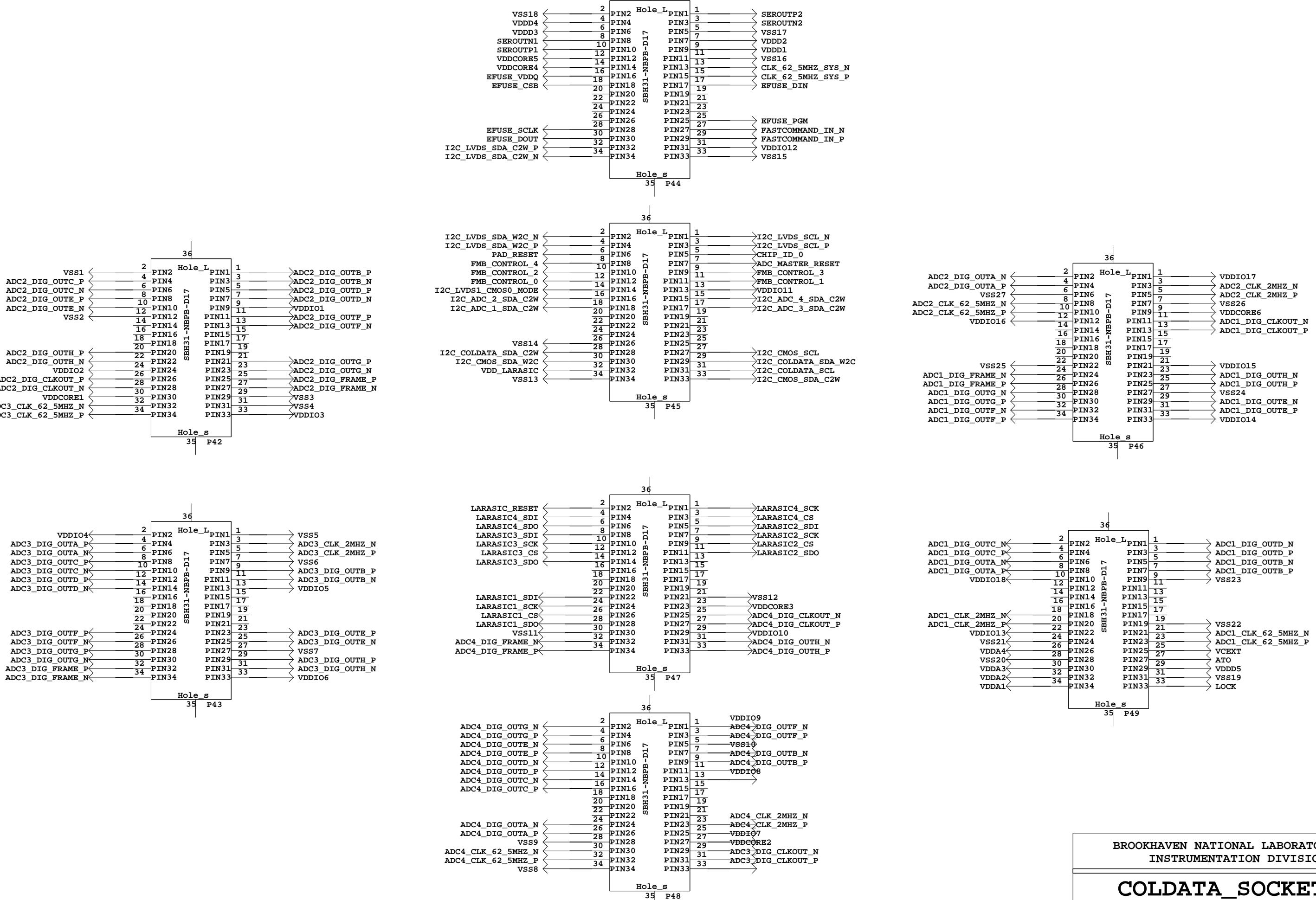


A

B

C

D



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INSTRUMENTATION DIVISION

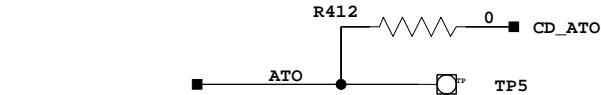
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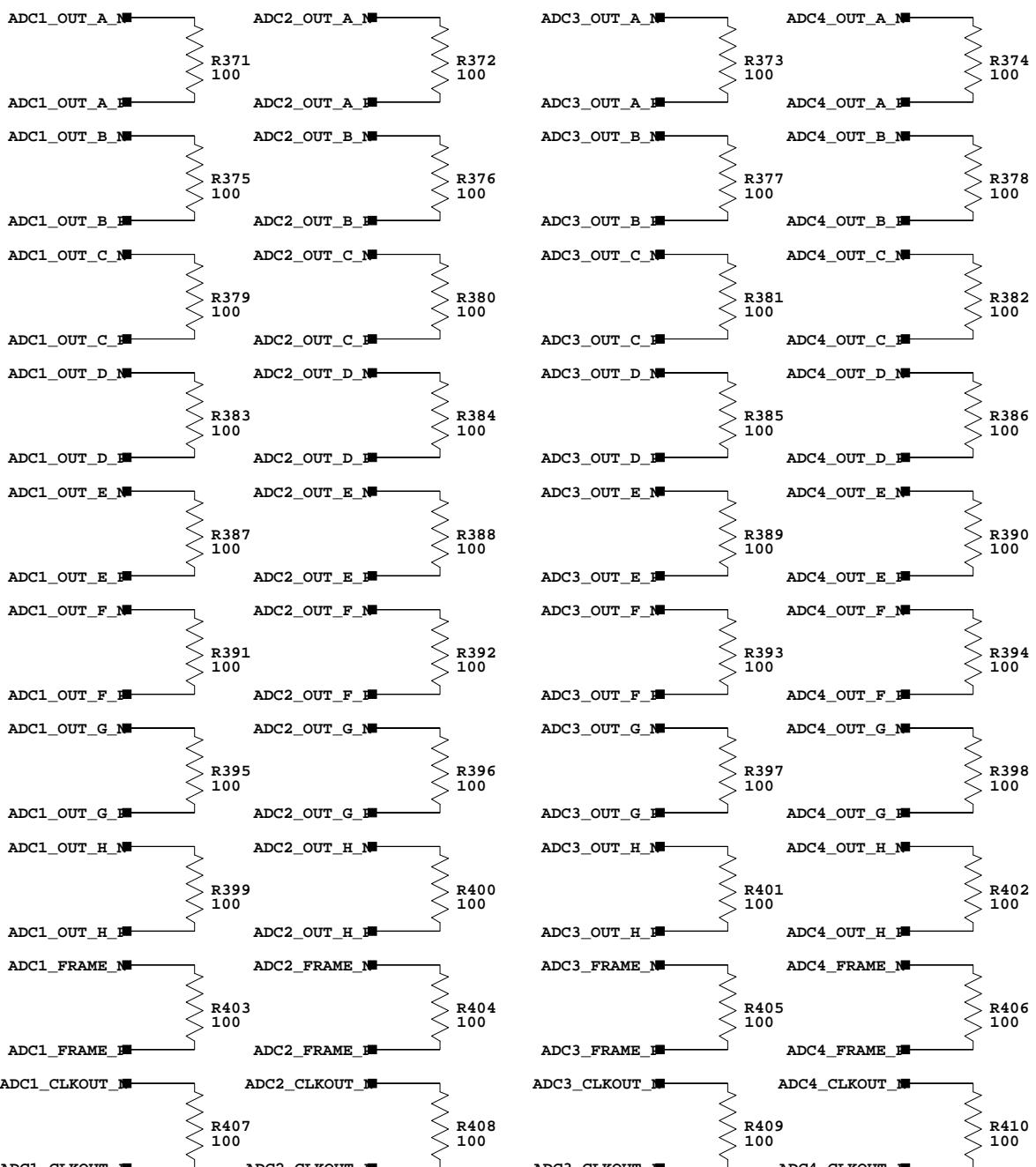
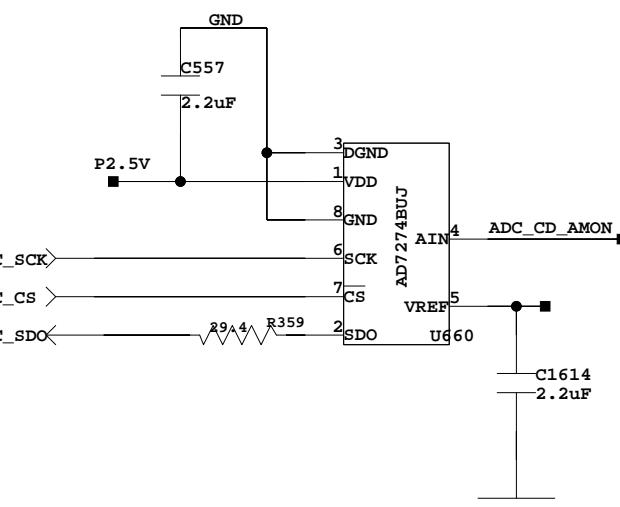
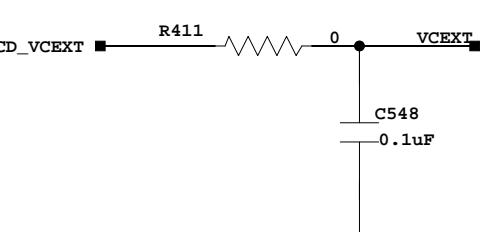
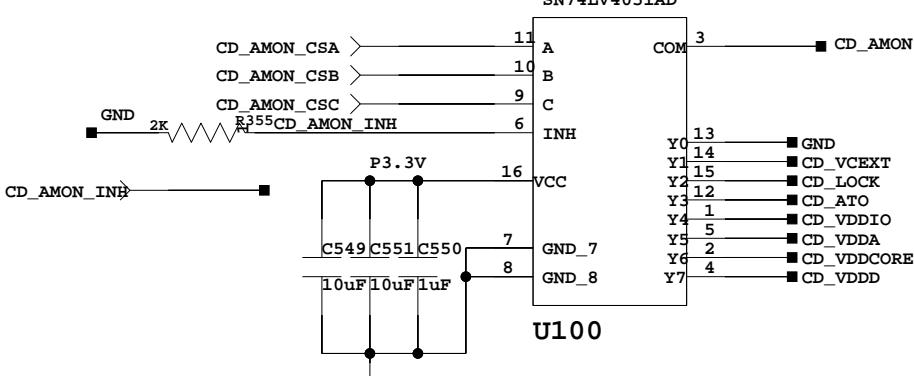
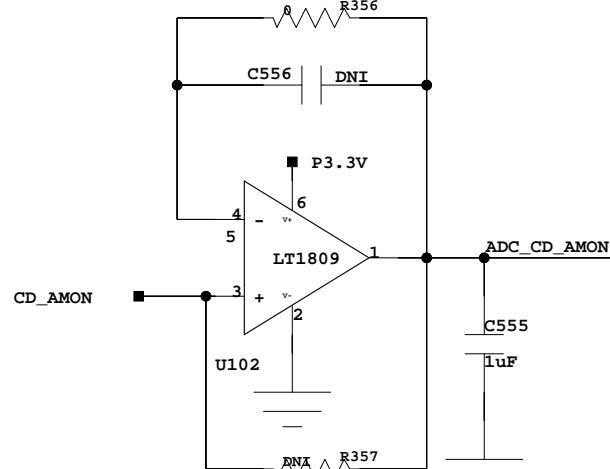
A B C D E F

LVDS TERMINATION

Place next to coldata ASIC



LT1809 and OPA625 are pin compatible



BROOKHAVEN NATIONAL LABORATORY

INSTRUMENTATION DIVISION

TITLE

DAT CD Control and Mon

SIZE : B BOARD : ASIC_COLDATA

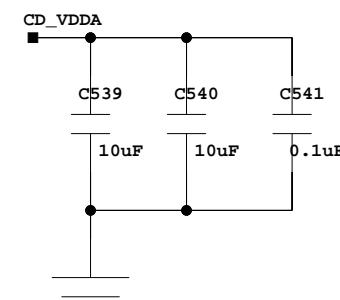
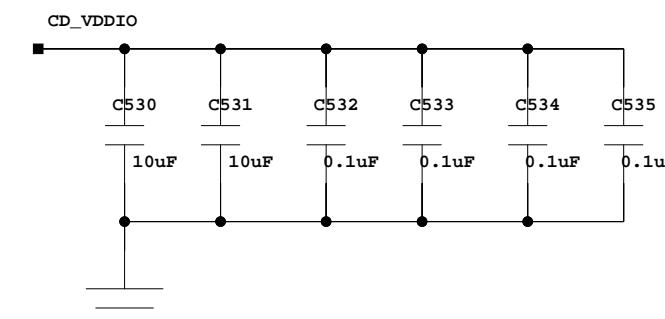
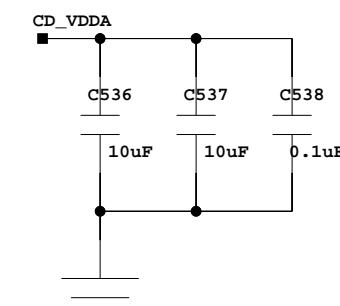
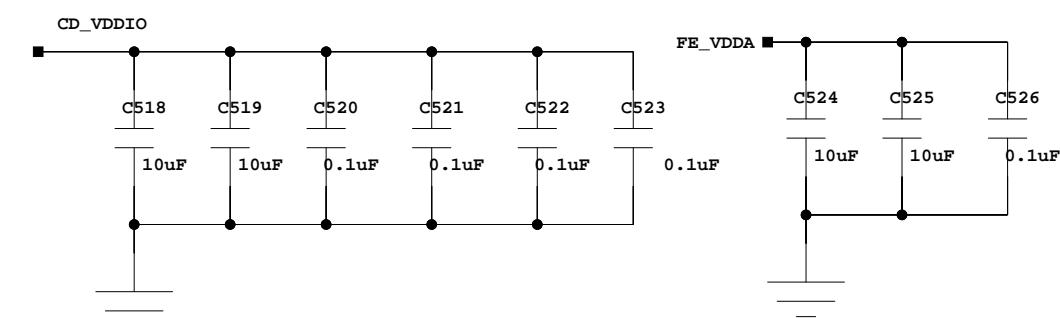
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A B C D E F

A B C D E F

4



3

2

1

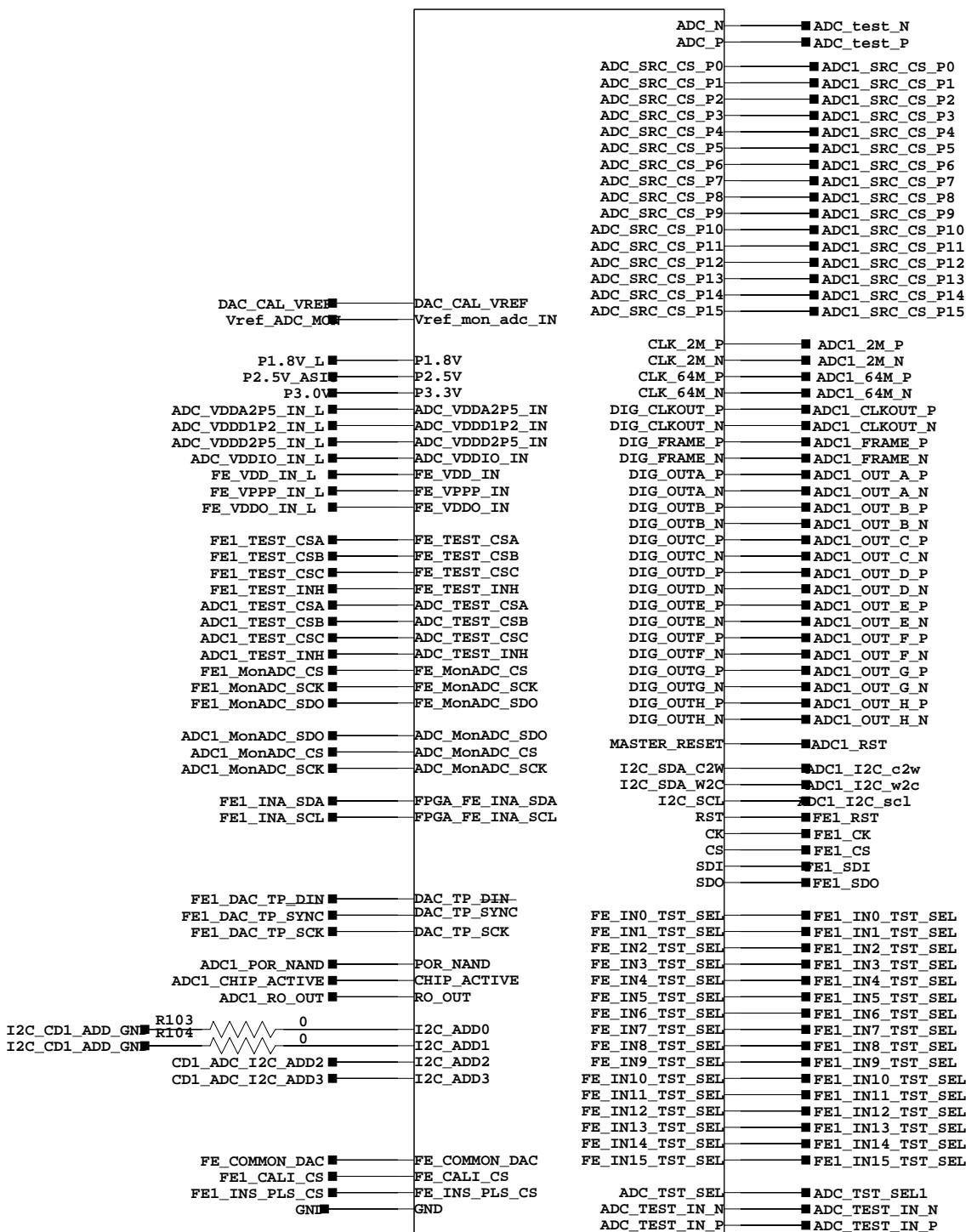
BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION
TITLE
DAT CD PWR IO
SIZE : BOARD : ASIC_COLDATA
DRAWN : Jack Fried DATE : 11/07/2022:17:58

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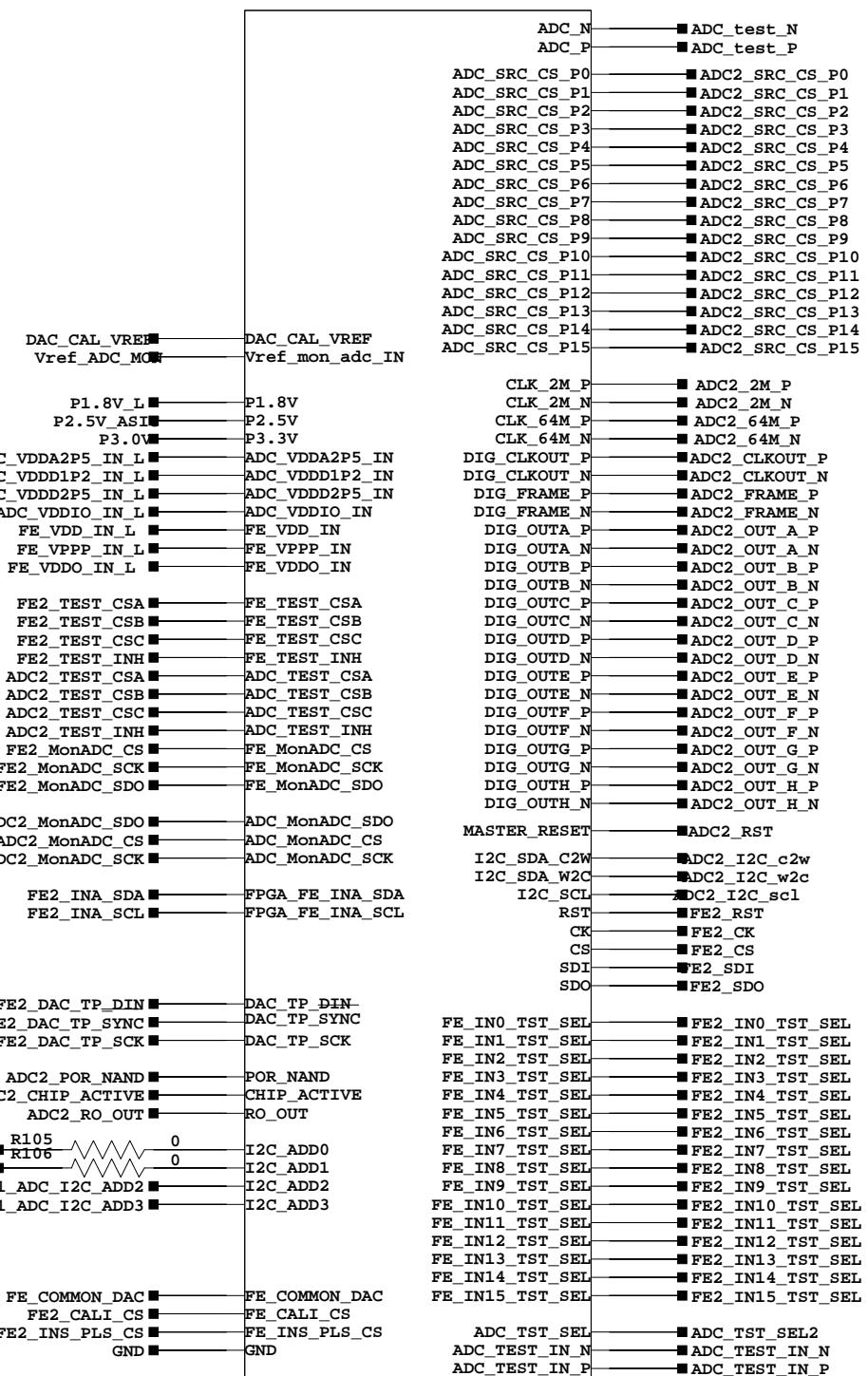
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A B C D E F

ASIC CHAIN 1



ASIC CHAIN 2



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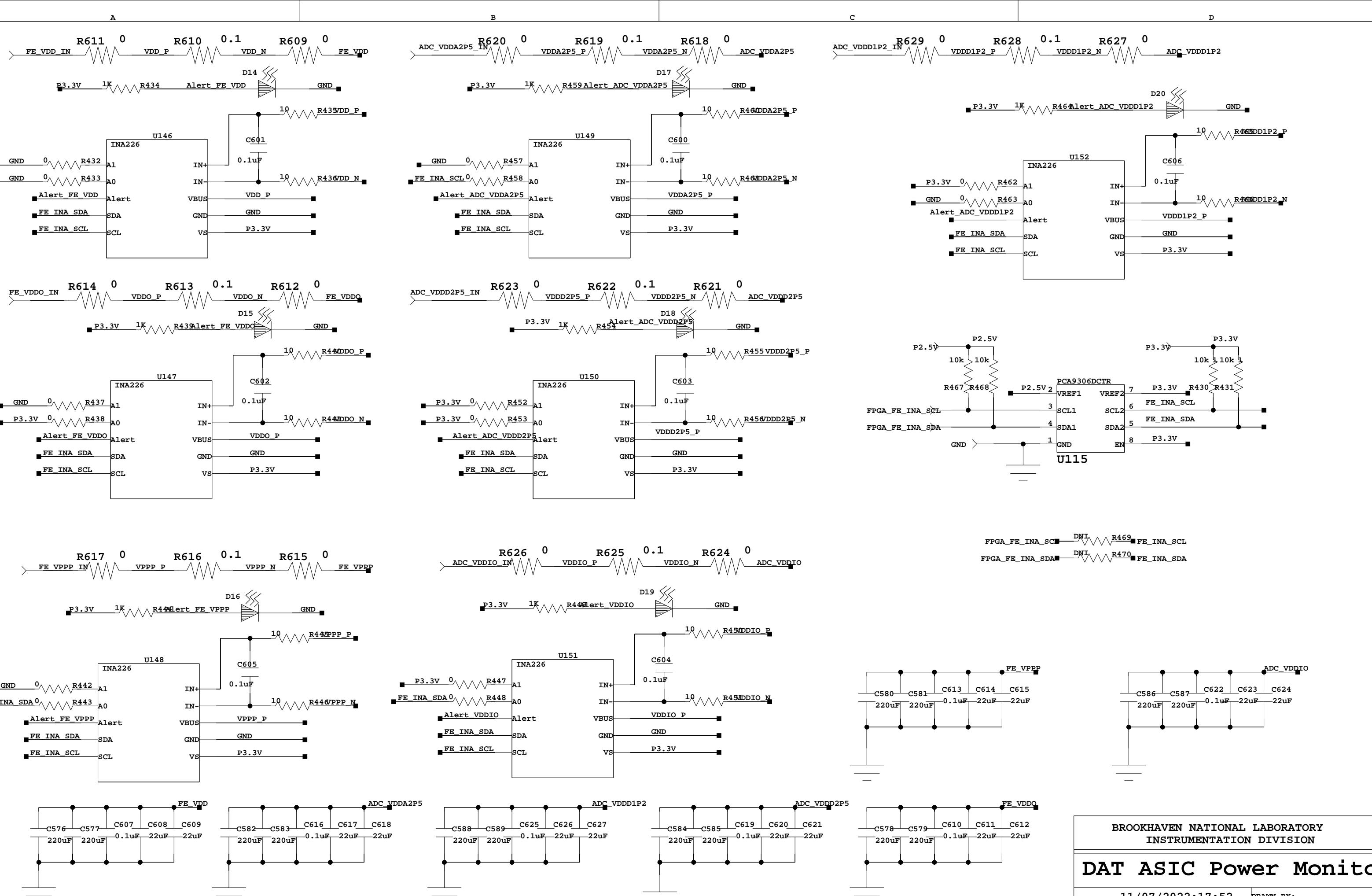
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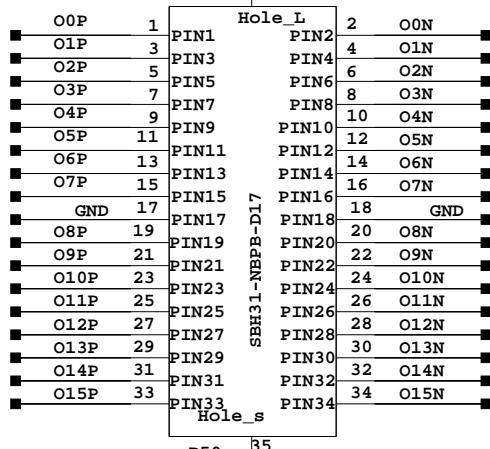
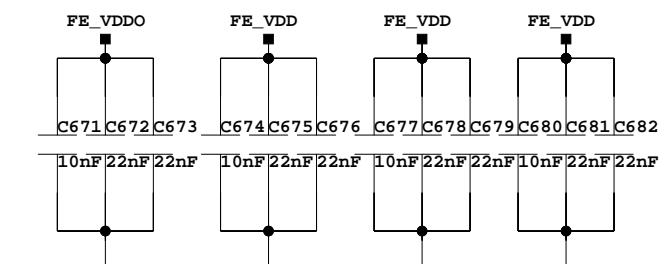
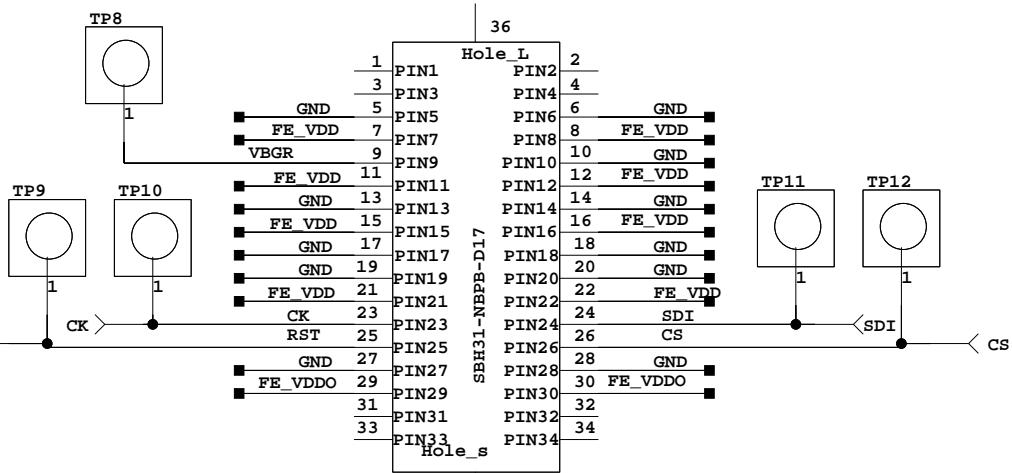
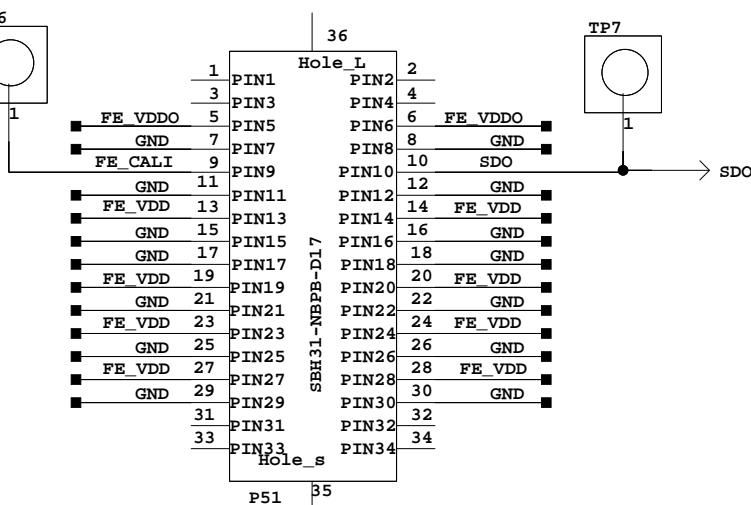
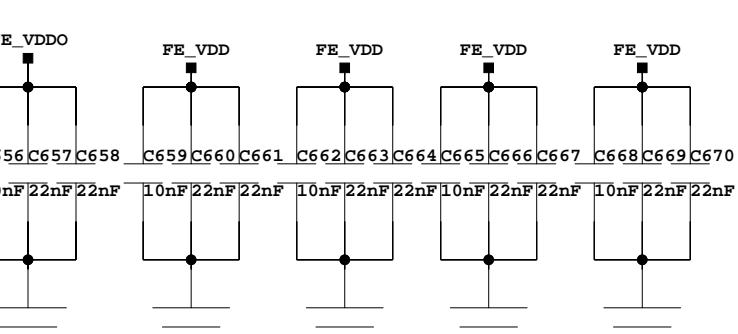
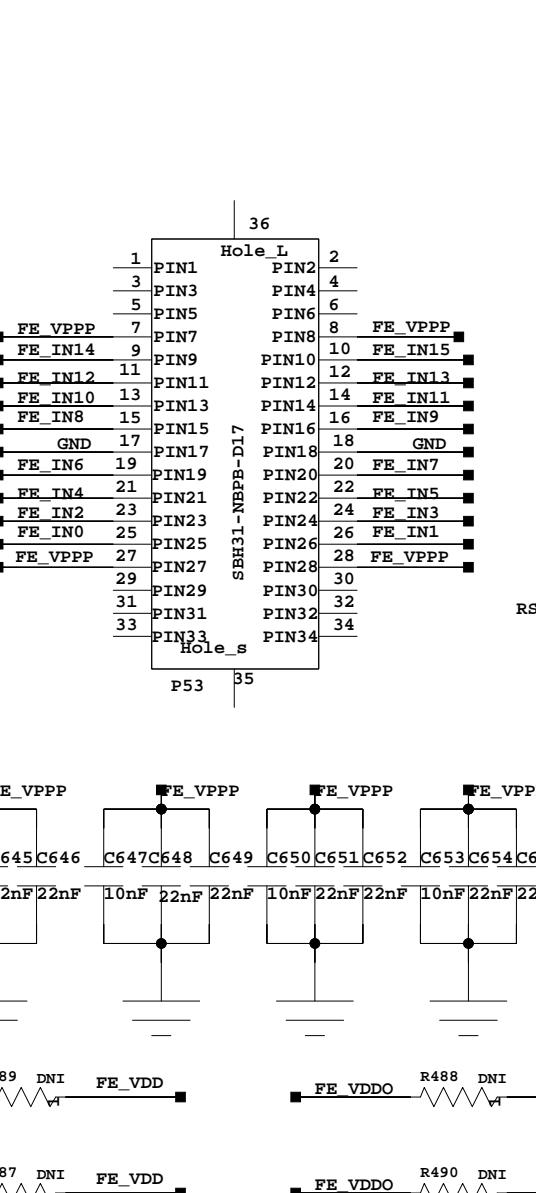
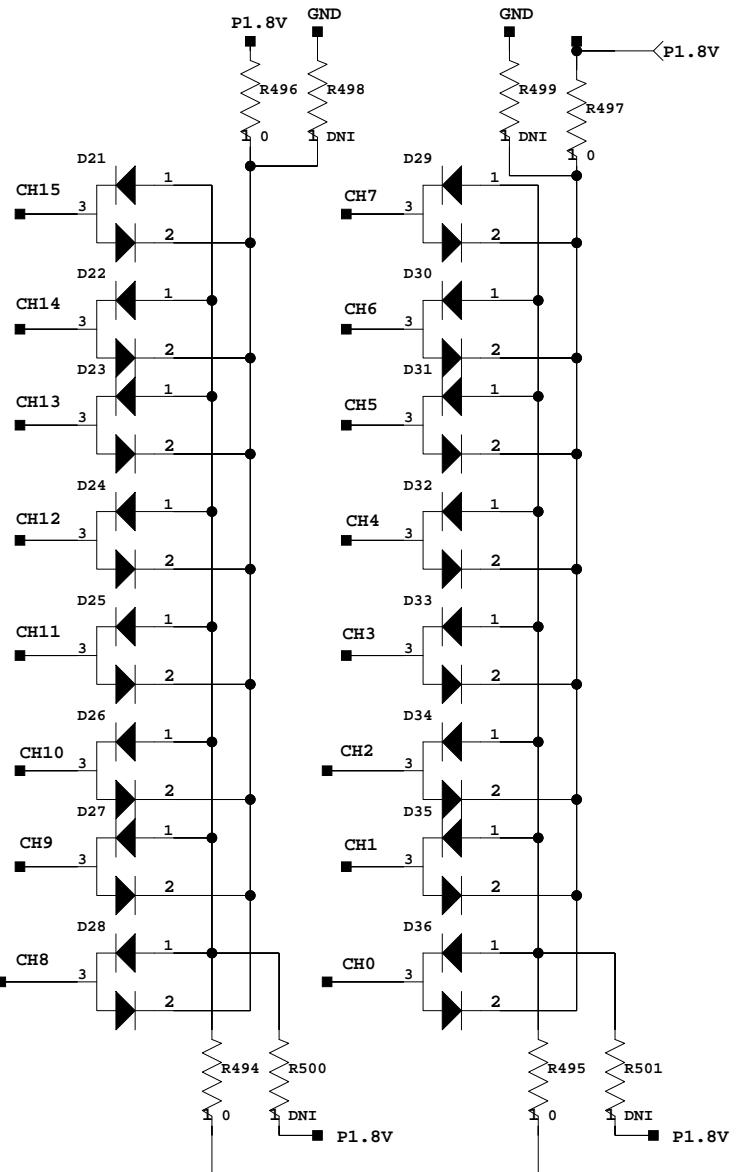
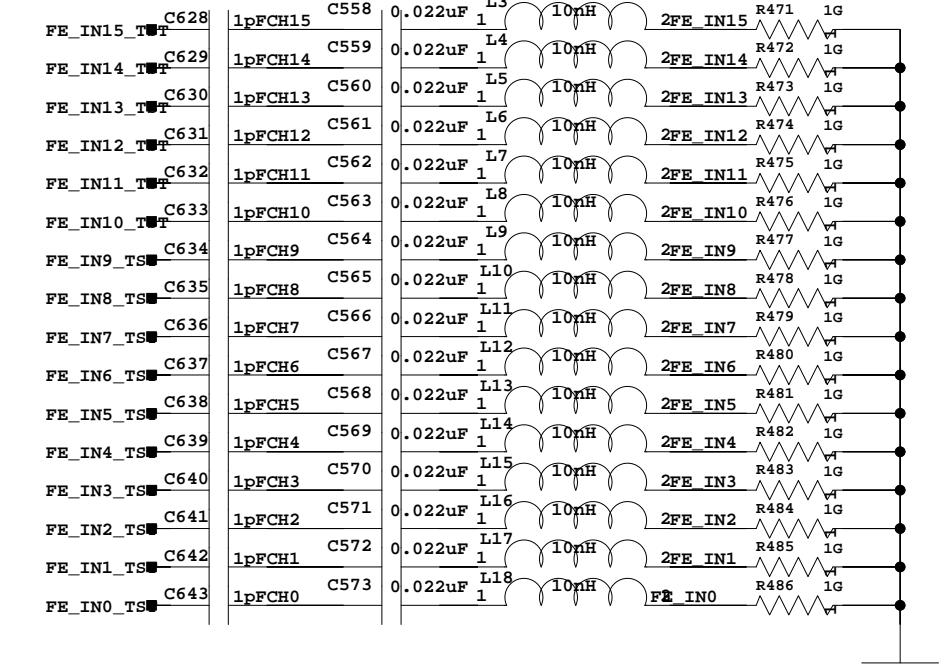
SIZE B BOARD : DUNE ASIC TESTER

DRAWN : Jack Fried

DATE : 28/02/2022:11:05

A B C D E F

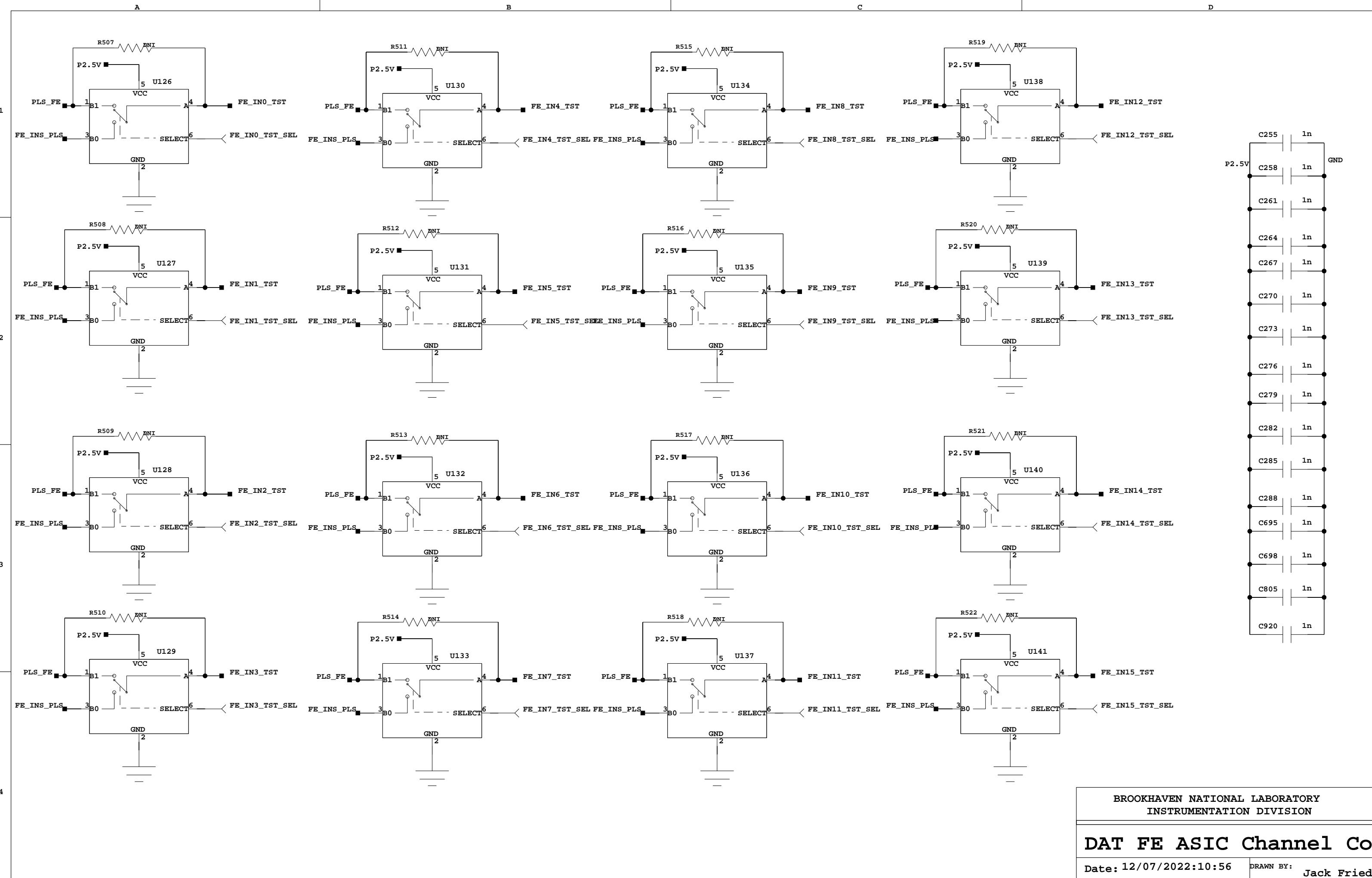


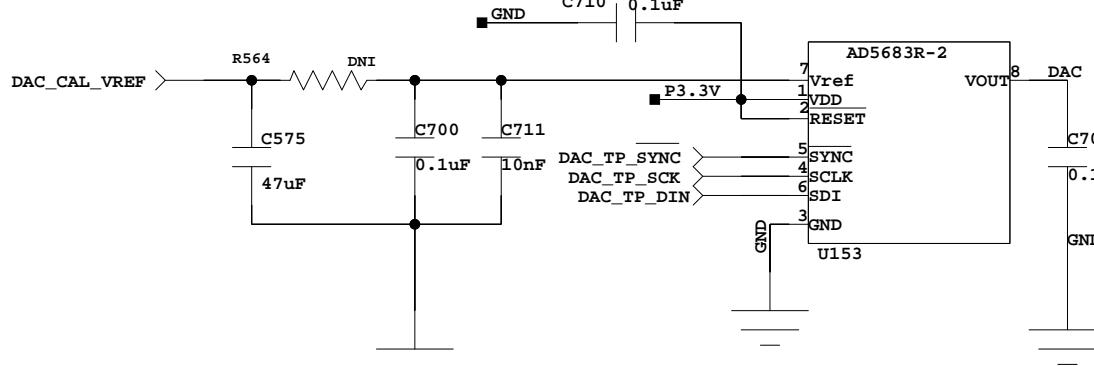
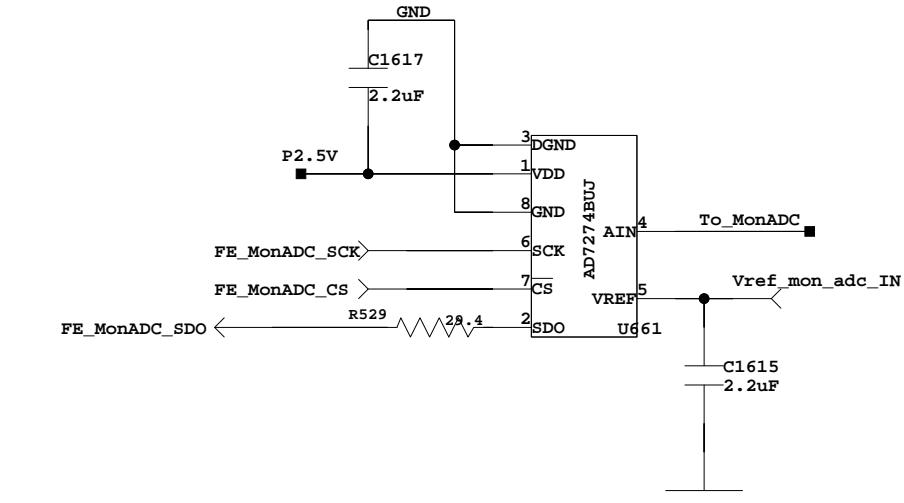
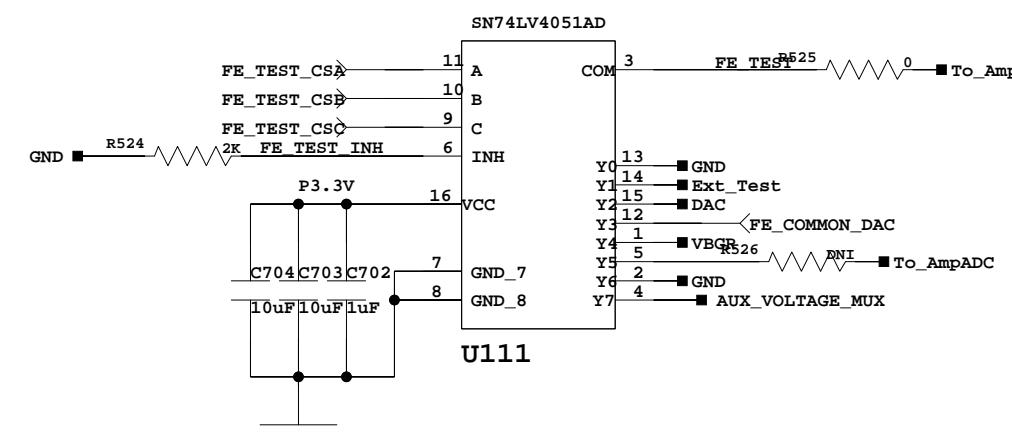
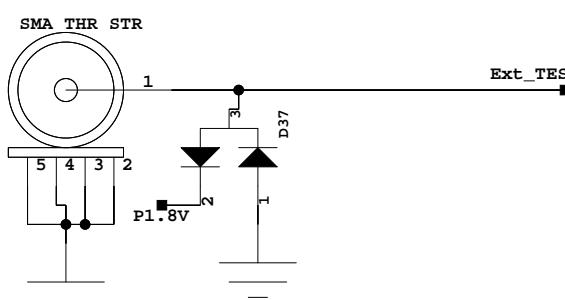
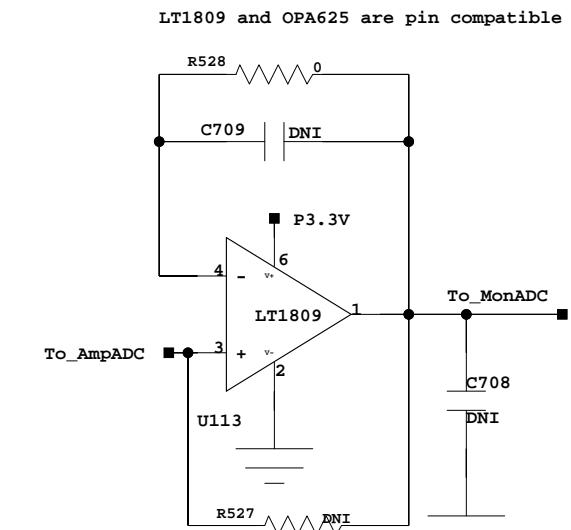
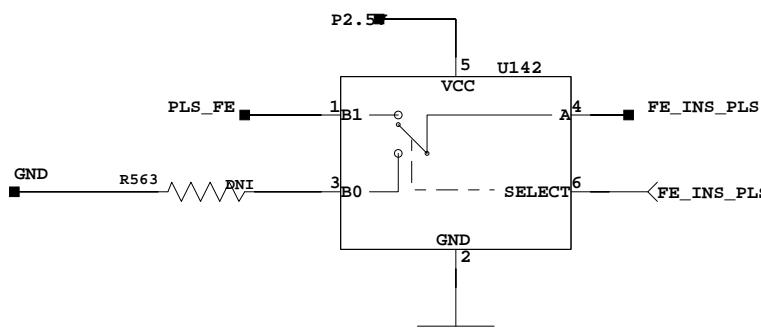
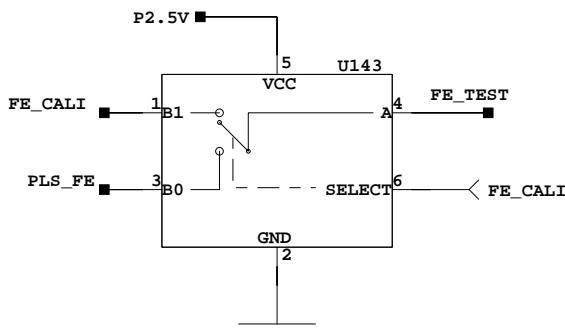


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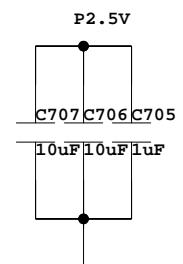
DAT FE ASIC Socket

Date: 12/07/2022:10:33 DRAWN BY: Jack Fried





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O14P	■————■ ADC_chn14_P	O14N	■————■ ADC_chn14_N
O13P	■————■ ADC_chn13_P	O13N	■————■ ADC_chn13_N
O12P	■————■ ADC_chn12_P	O12N	■————■ ADC_chn12_N
O11P	■————■ ADC_chn11_P	O11N	■————■ ADC_chn11_N
O10P	■————■ ADC_chn10_P	O10N	■————■ ADC_chn10_N
O9P	■————■ ADC_chn9_P	O9N	■————■ ADC_chn9_N
O8P	■————■ ADC_chn8_P	O8N	■————■ ADC_chn8_N
O7P	■————■ ADC_chn7_P	O7N	■————■ ADC_chn7_N
O6P	■————■ ADC_chn6_P	O6N	■————■ ADC_chn6_N
O5P	■————■ ADC_chn5_P	O5N	■————■ ADC_chn5_N
O4P	■————■ ADC_chn4_P	O4N	■————■ ADC_chn4_N
O3P	■————■ ADC_chn3_P	O3N	■————■ ADC_chn3_N
O2P	■————■ ADC_chn2_P	O2N	■————■ ADC_chn2_N
O1P	■————■ ADC_chn1_P	O1N	■————■ ADC_chn1_N
OOP	■————■ ADC_chn0_P	OON	■————■ ADC_chn0_N

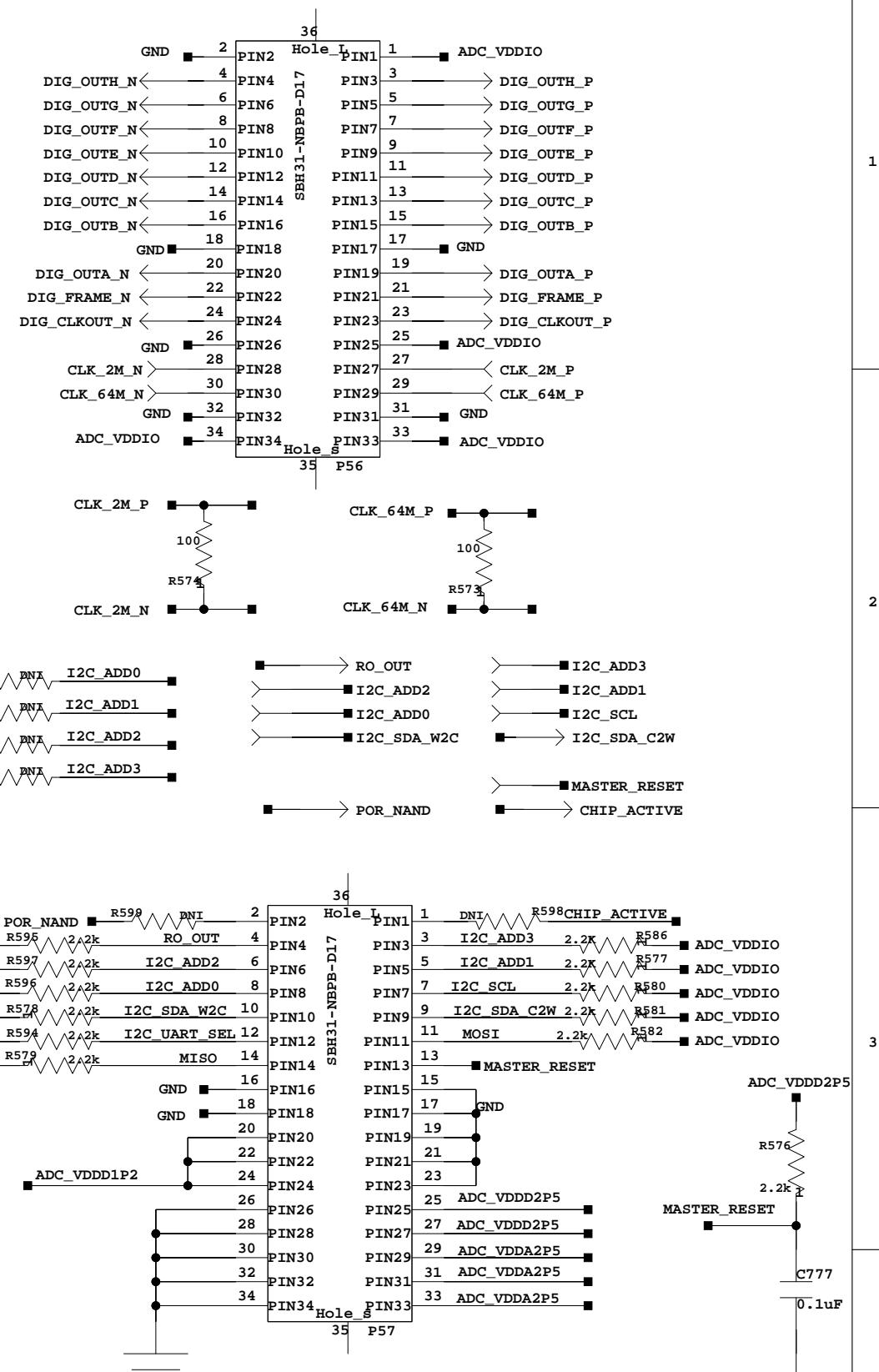
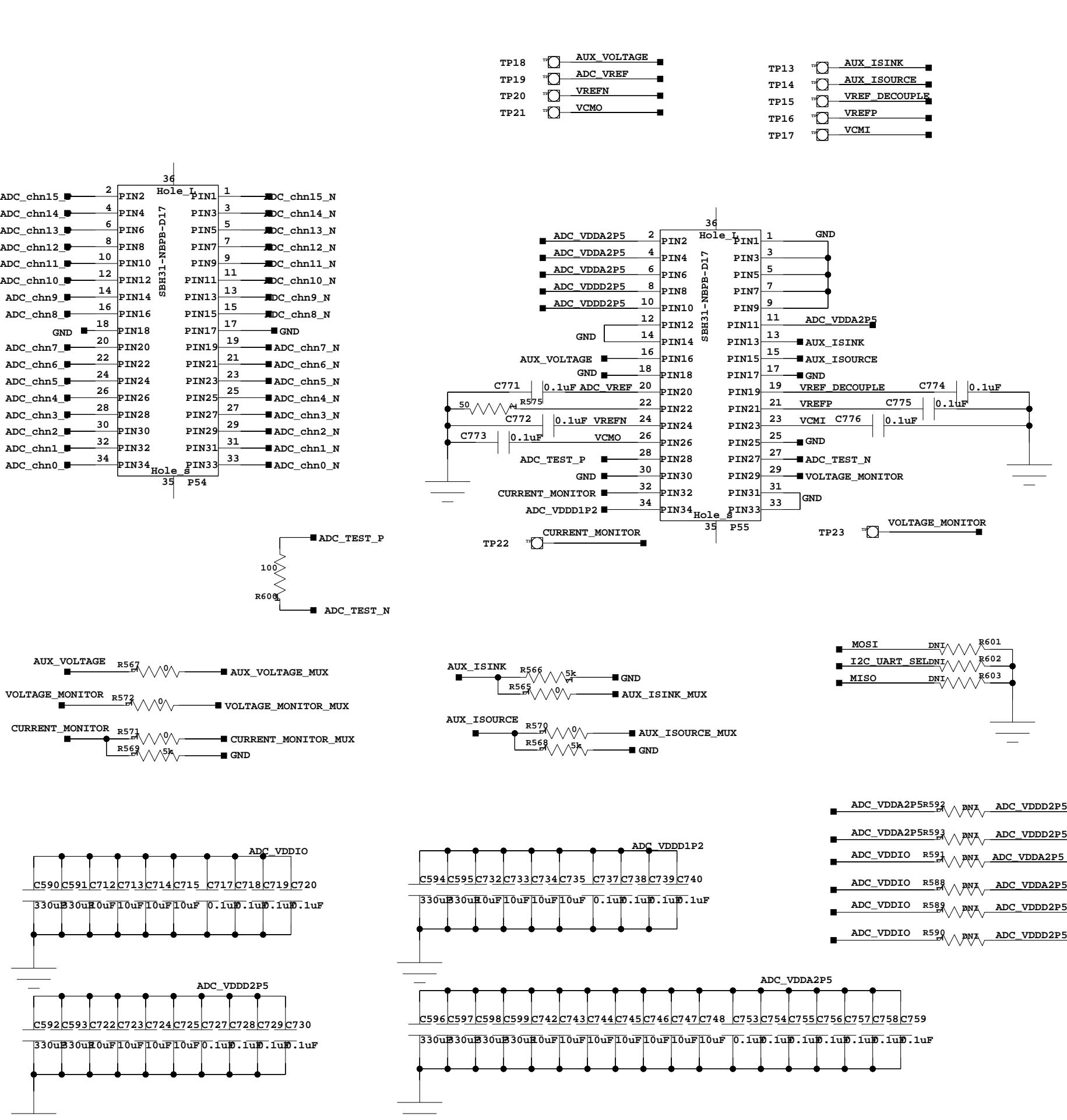


BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION

DAT FE ASIC Calibration and Mo

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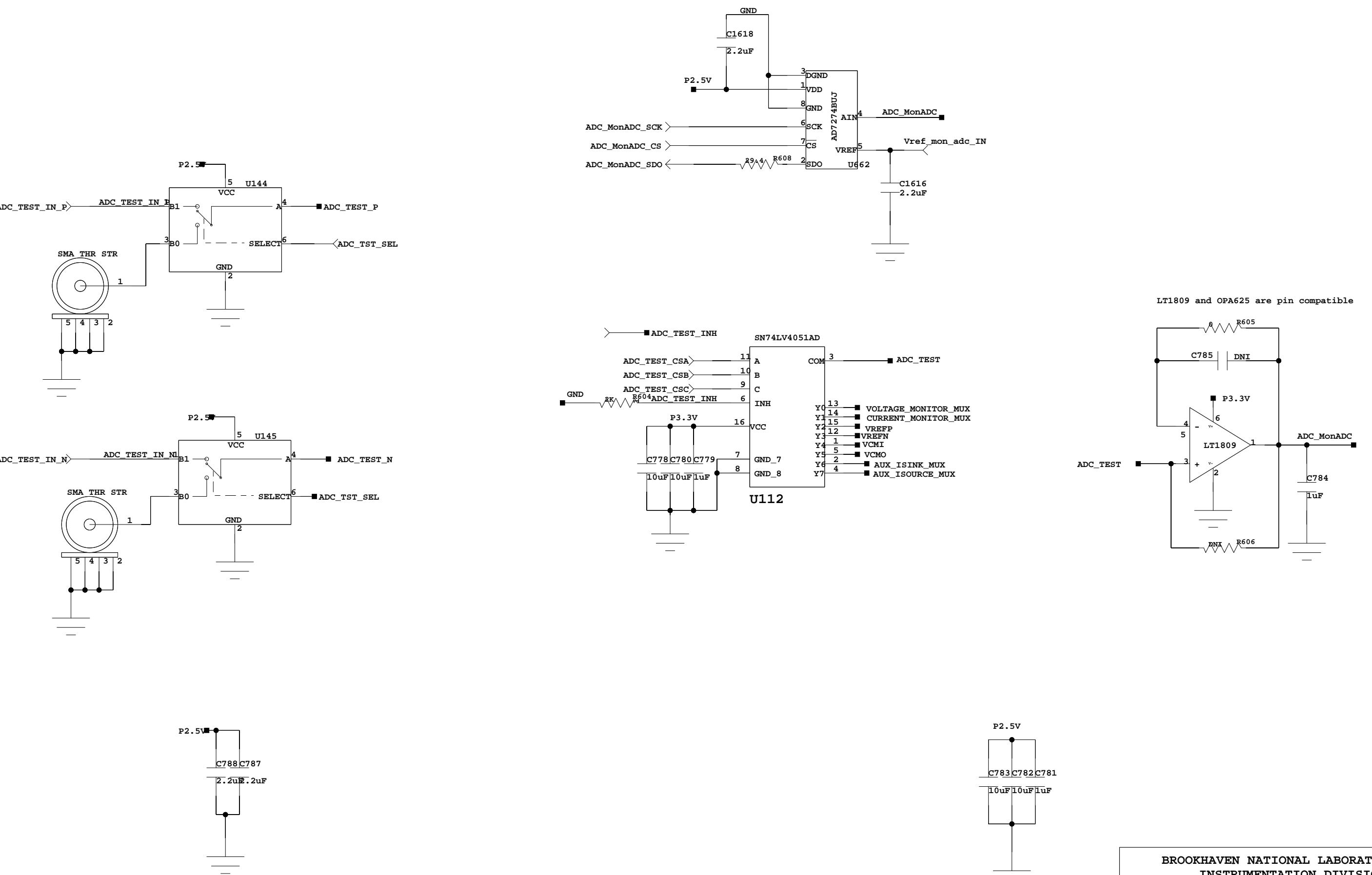
A B C D



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INSTRUMENTATION DIVISION

DAT ADC ASIC Socket

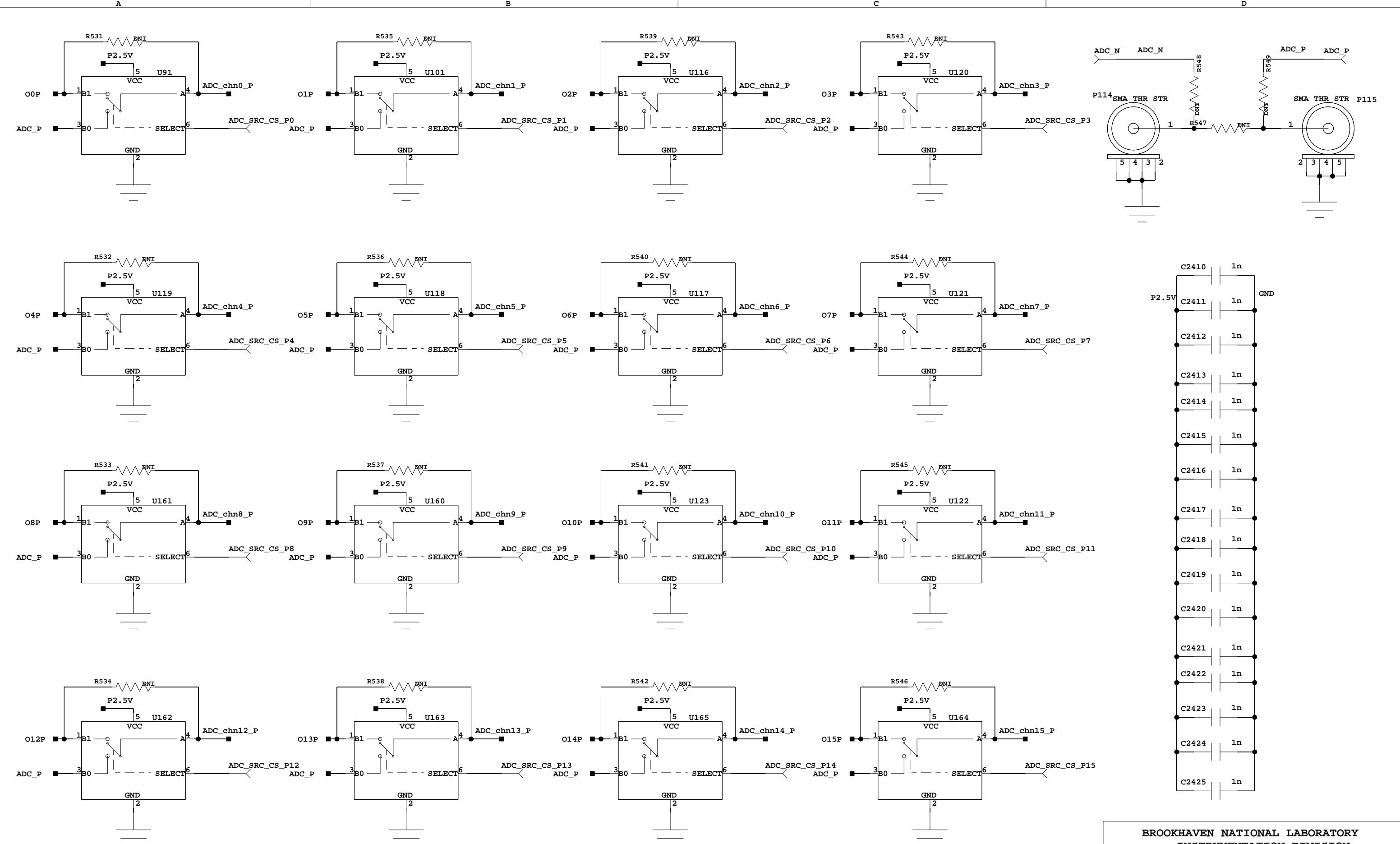
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INSTRUMENTATION DIVISION

DAT ADC ASIC Calibration and

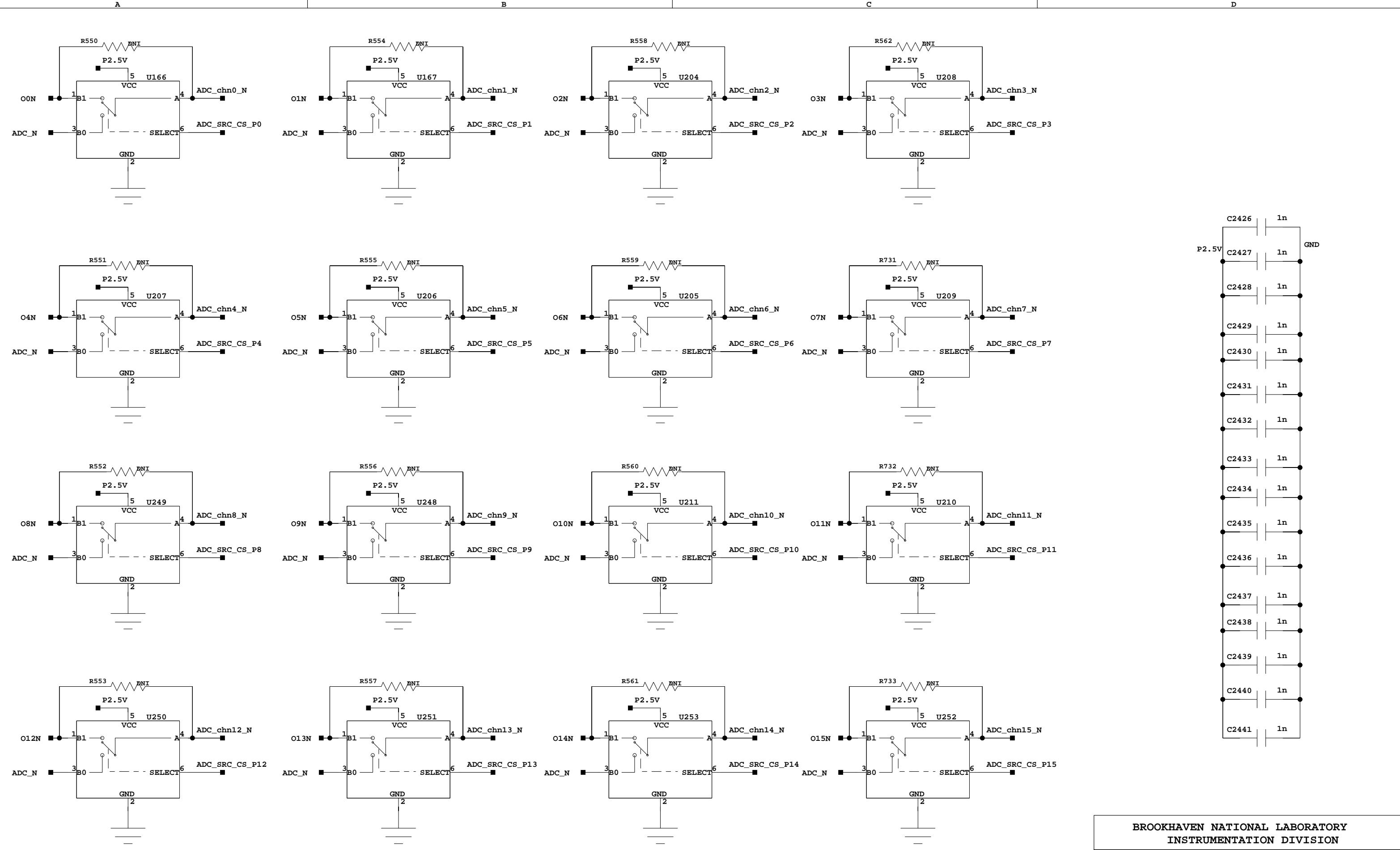
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BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION

DAT ADC SRC SEL_P

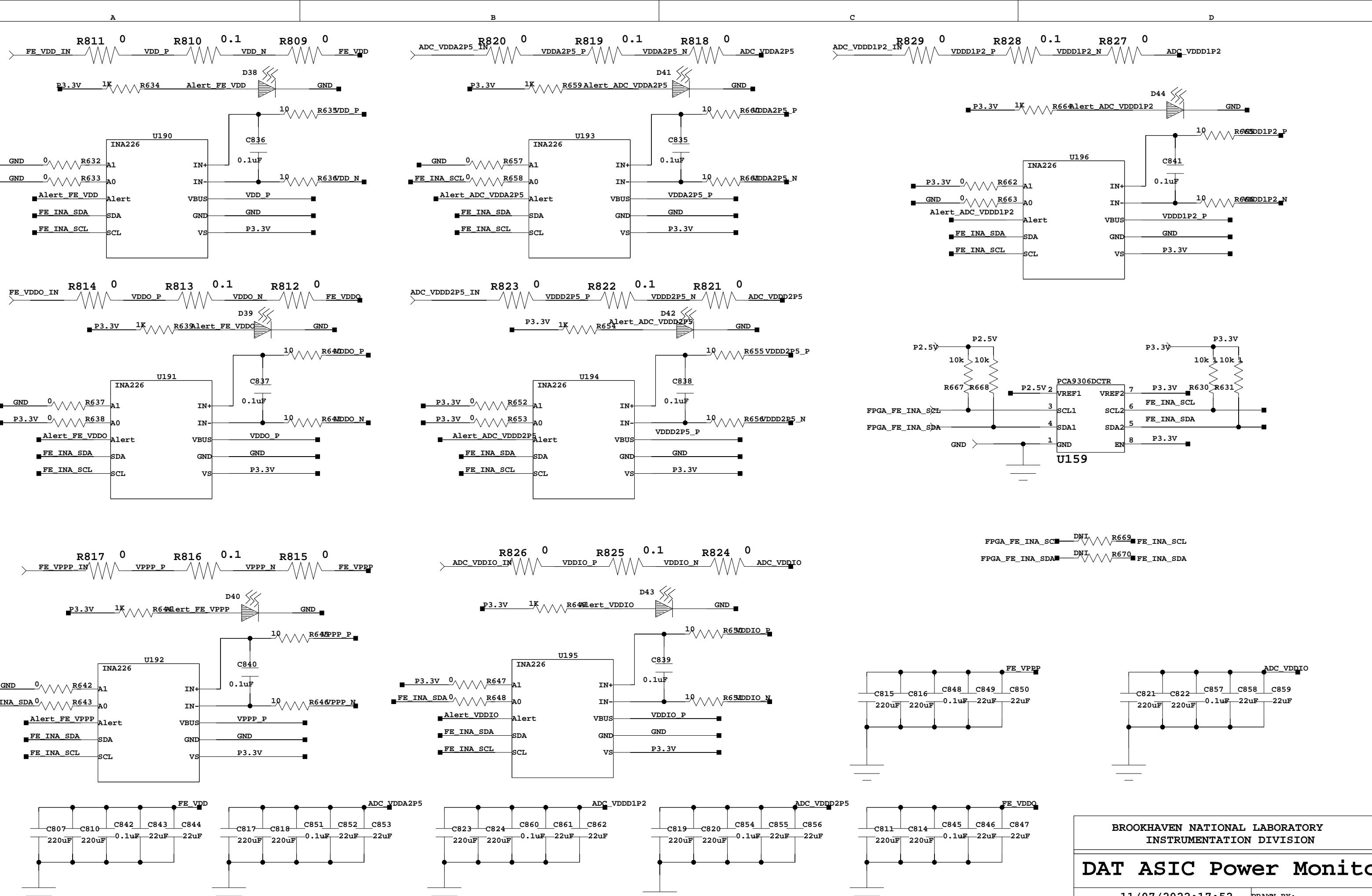
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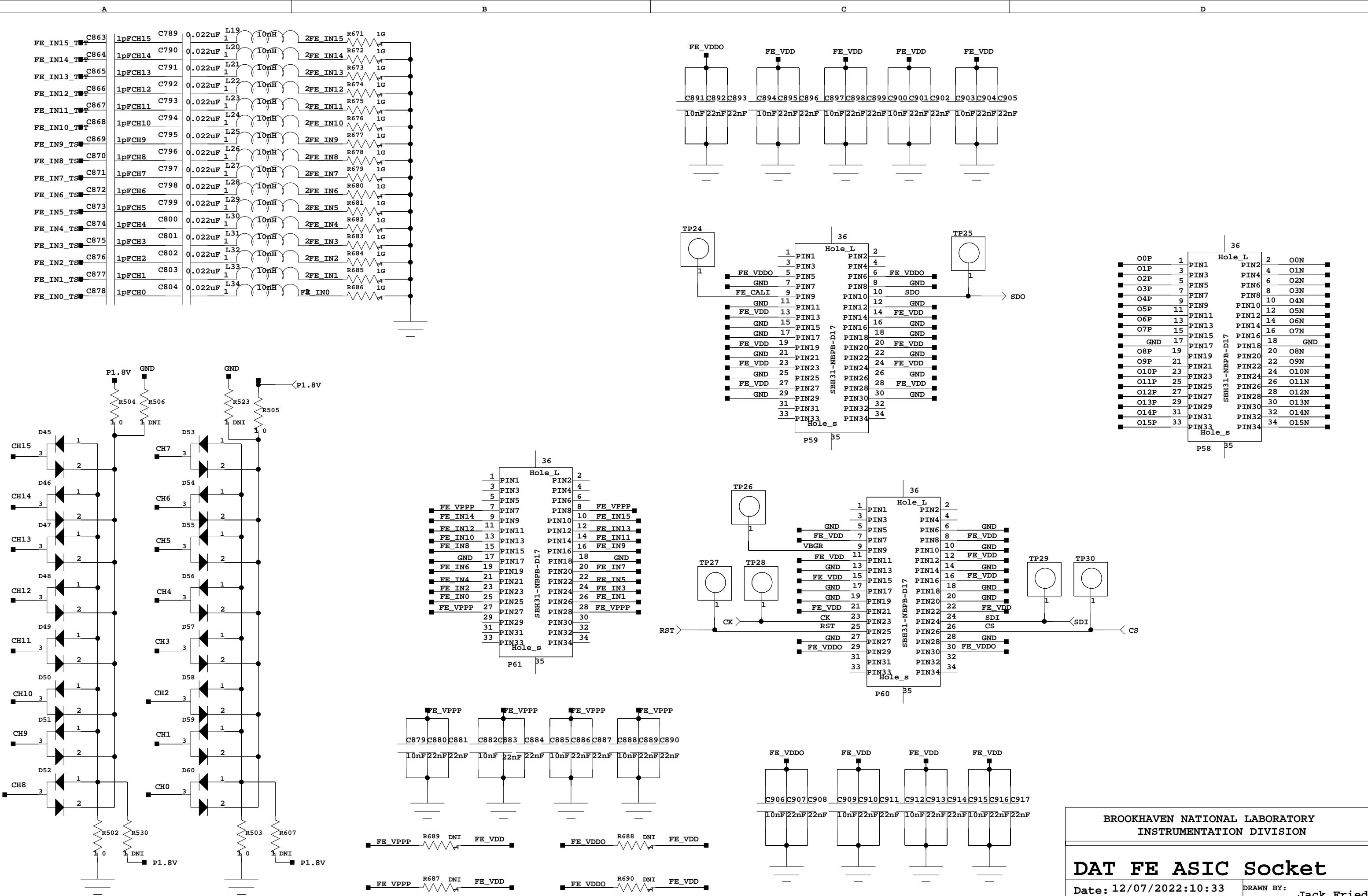


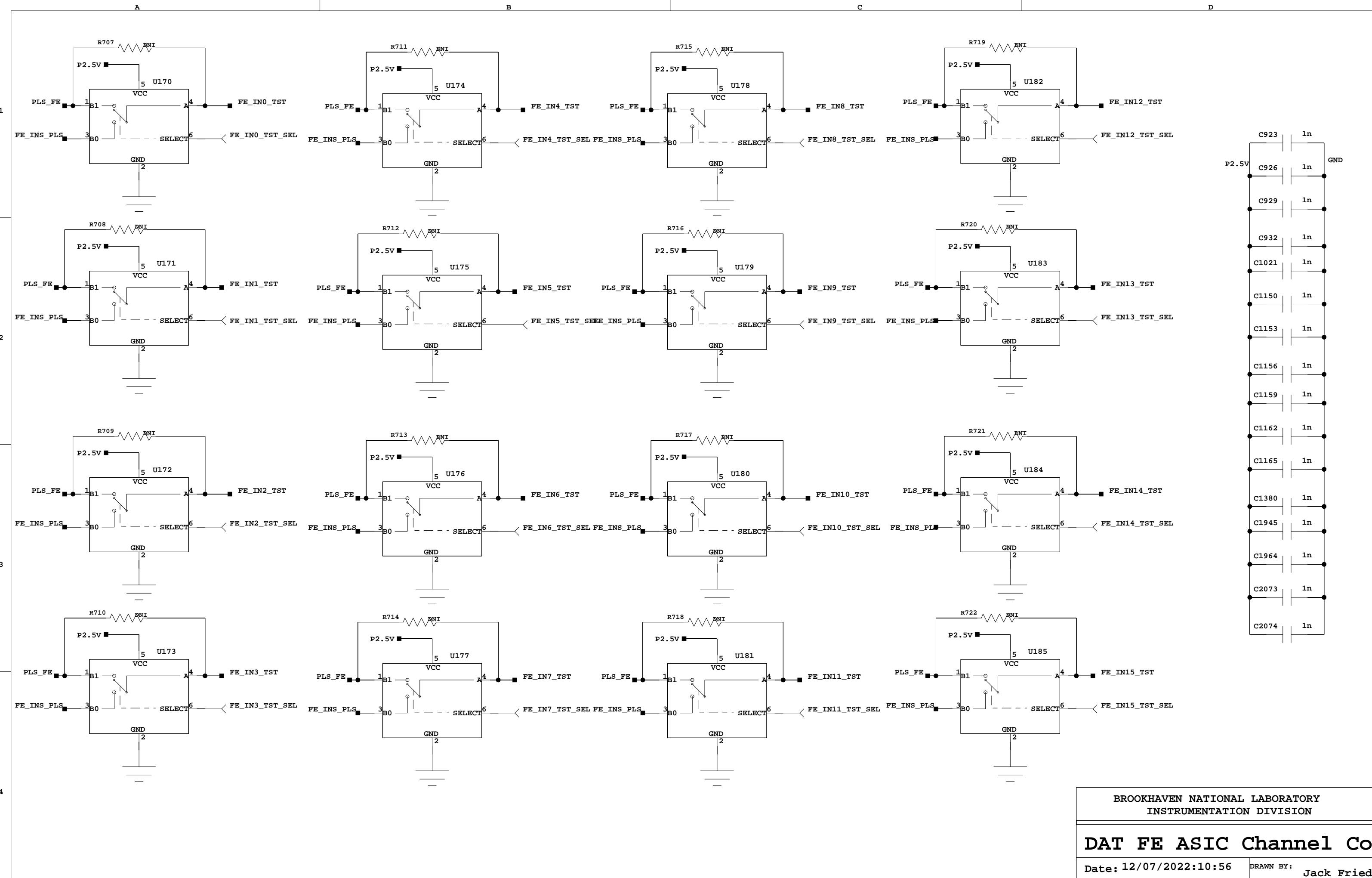
BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION

DAT ADC SRC SEL_N

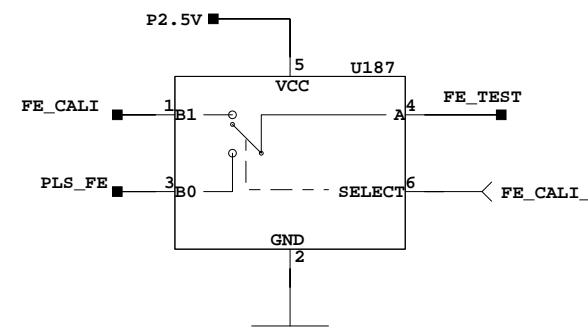
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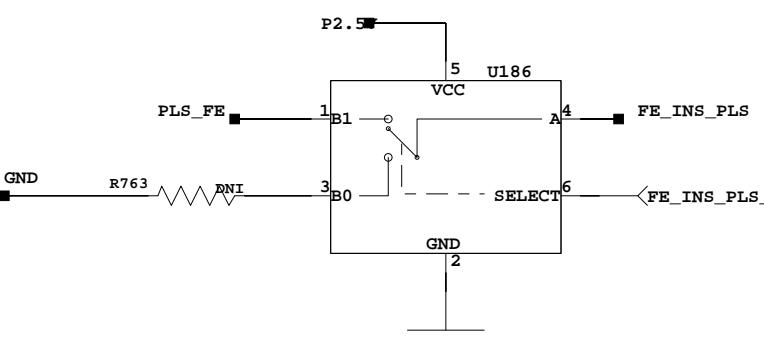




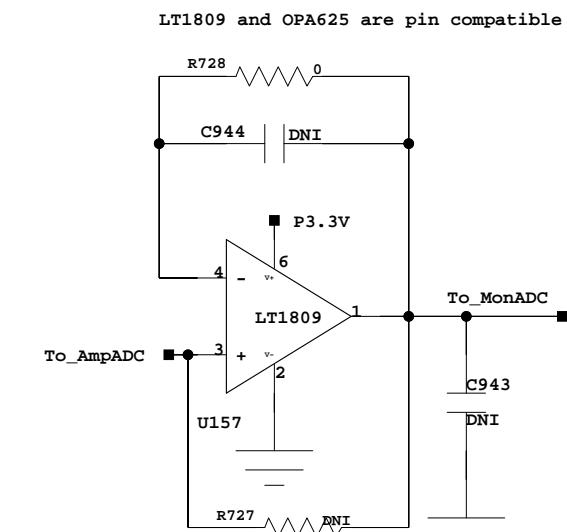
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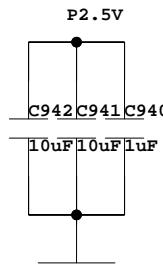
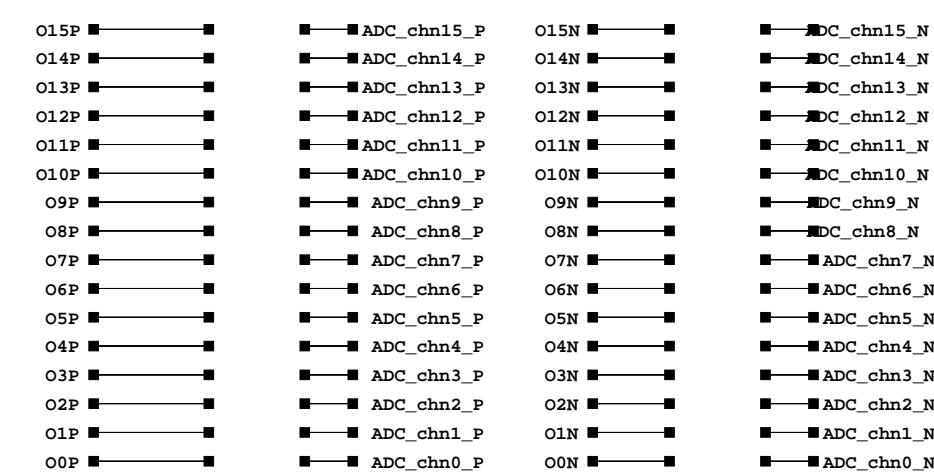
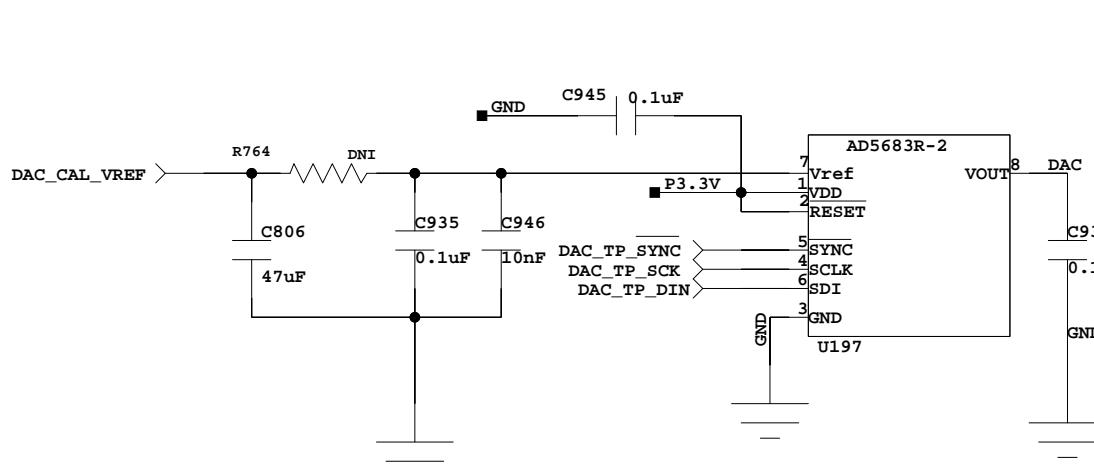
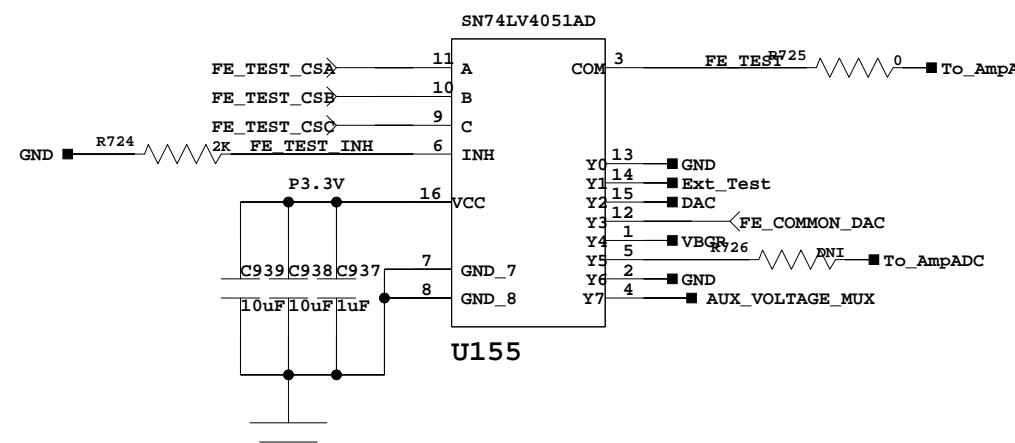
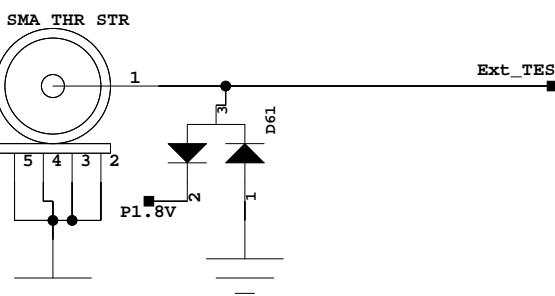
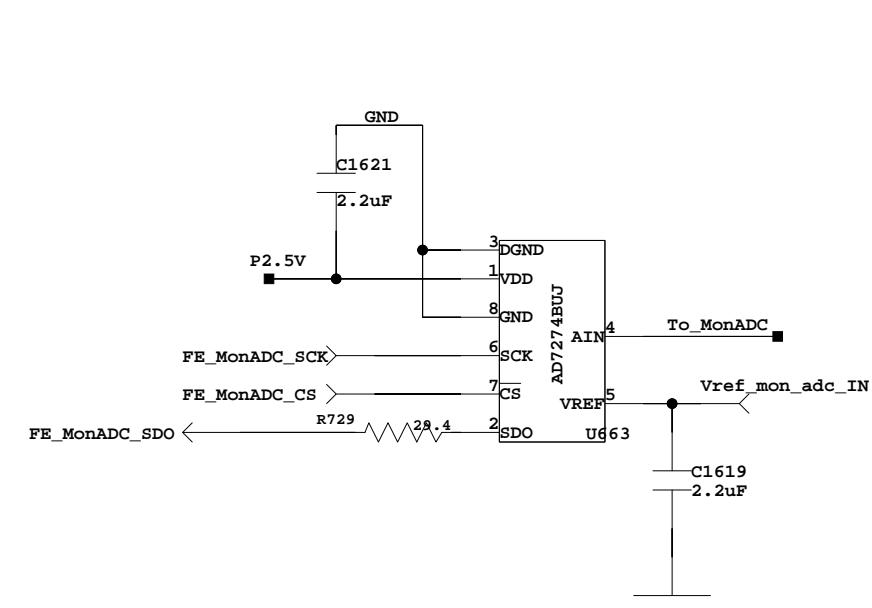
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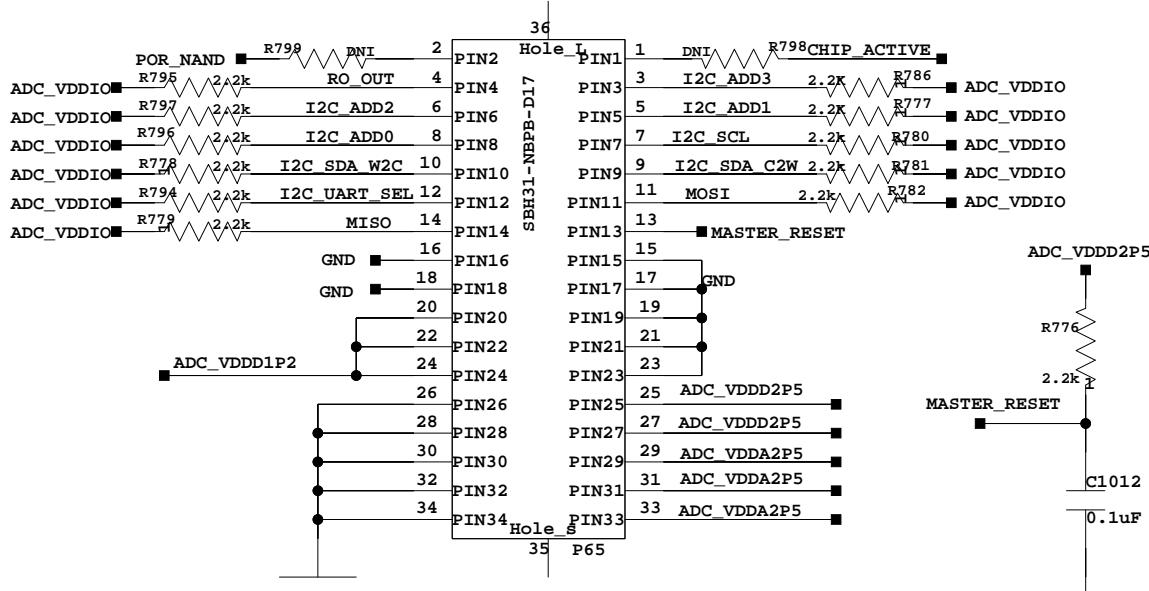
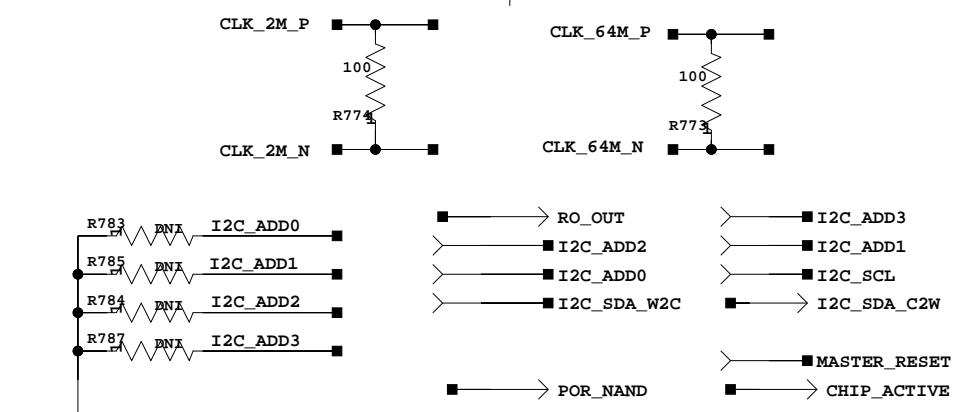
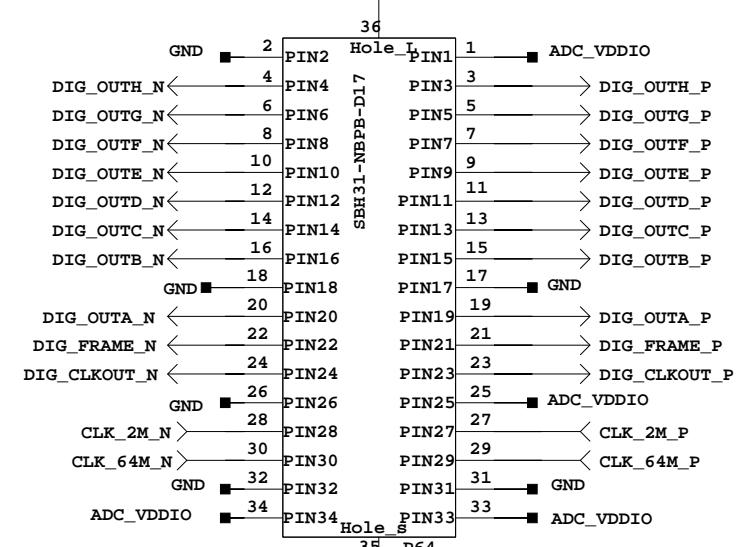
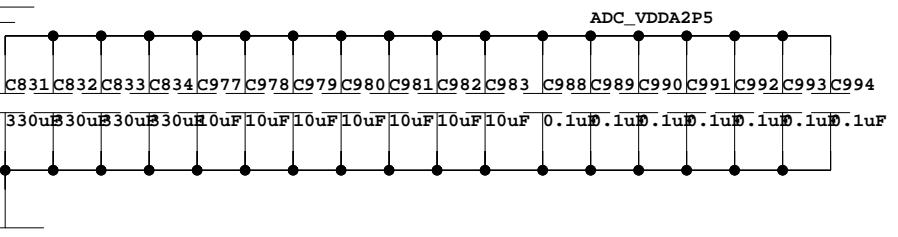
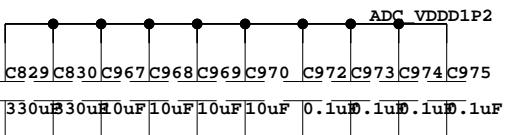
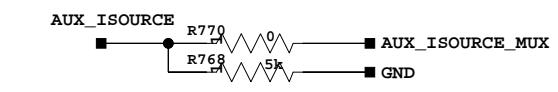
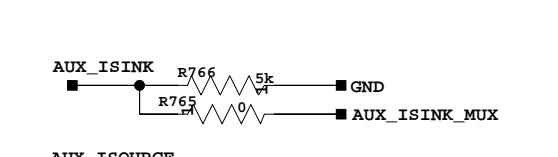
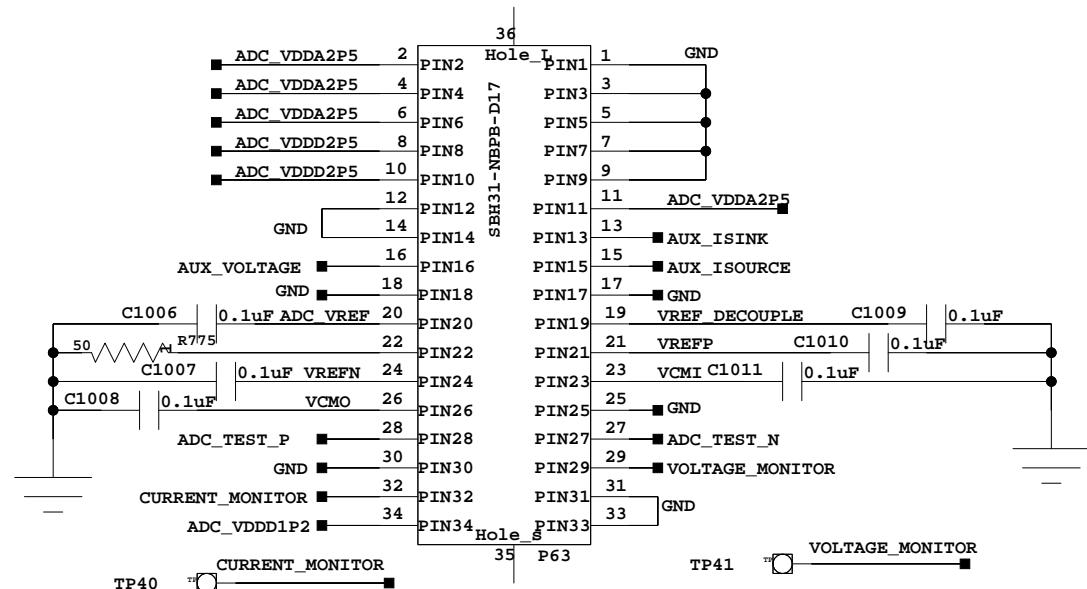
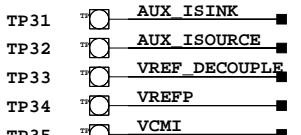
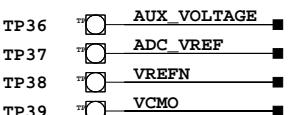
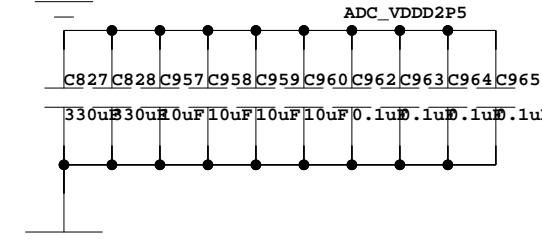
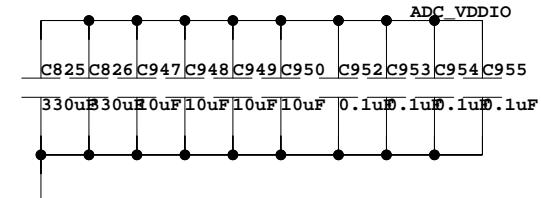
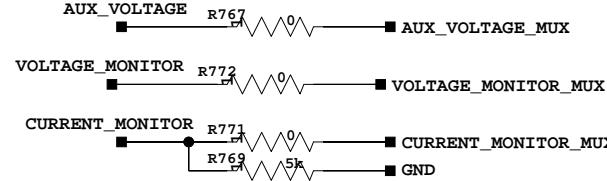
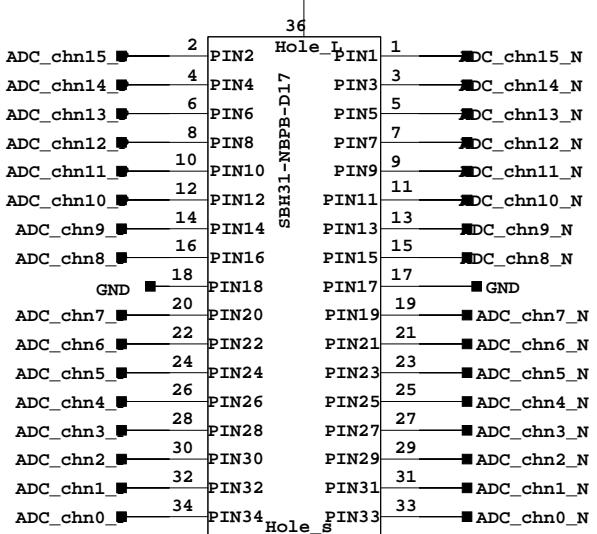


C



LT1809 and OPA625 are pin compatible

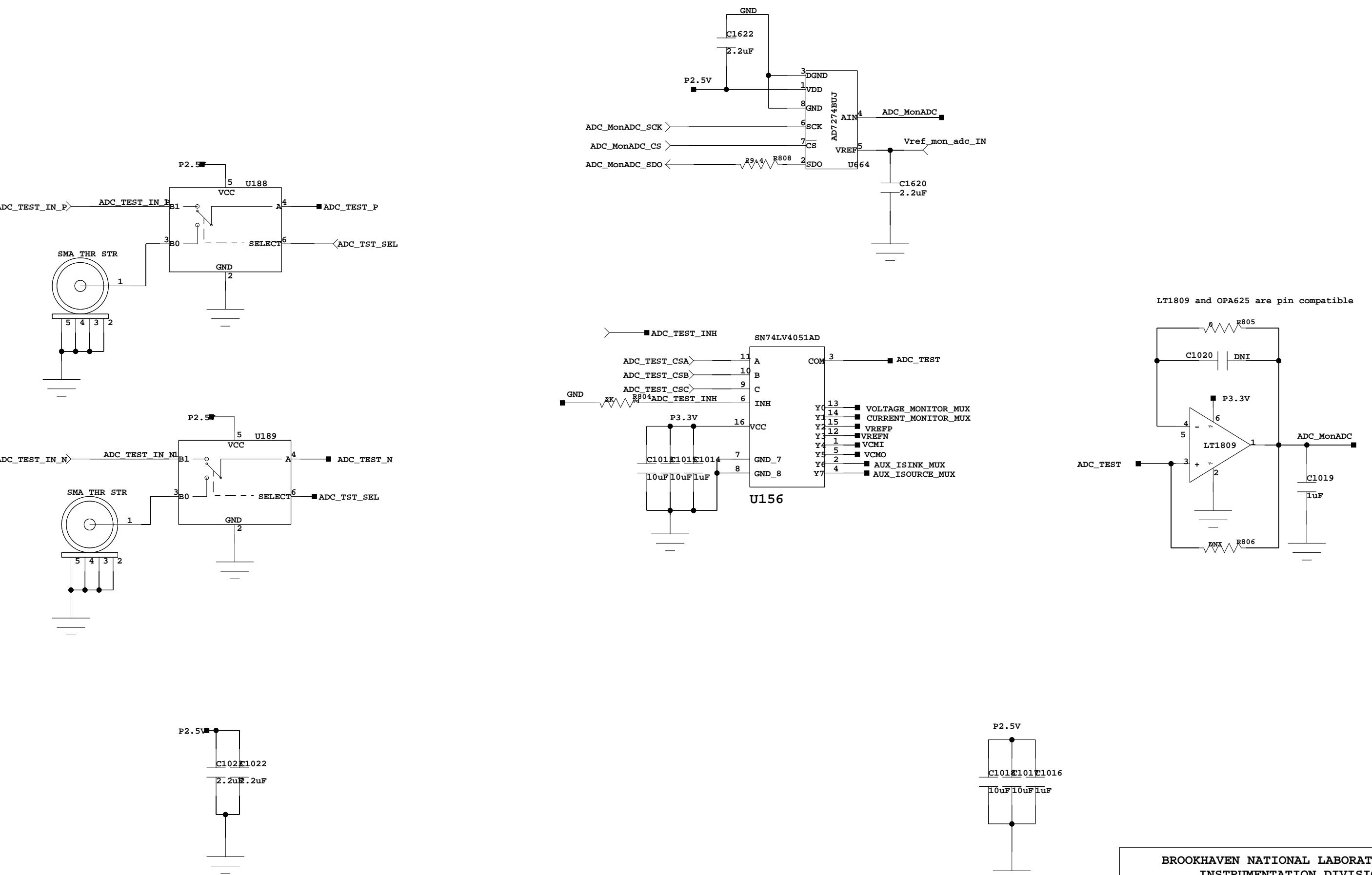
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INSTRUMENTATION DIVISIONDAT FE ASIC Calibration and Mo
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INSTRUMENTATION DIVISION

DAT ADC ASIC Socket

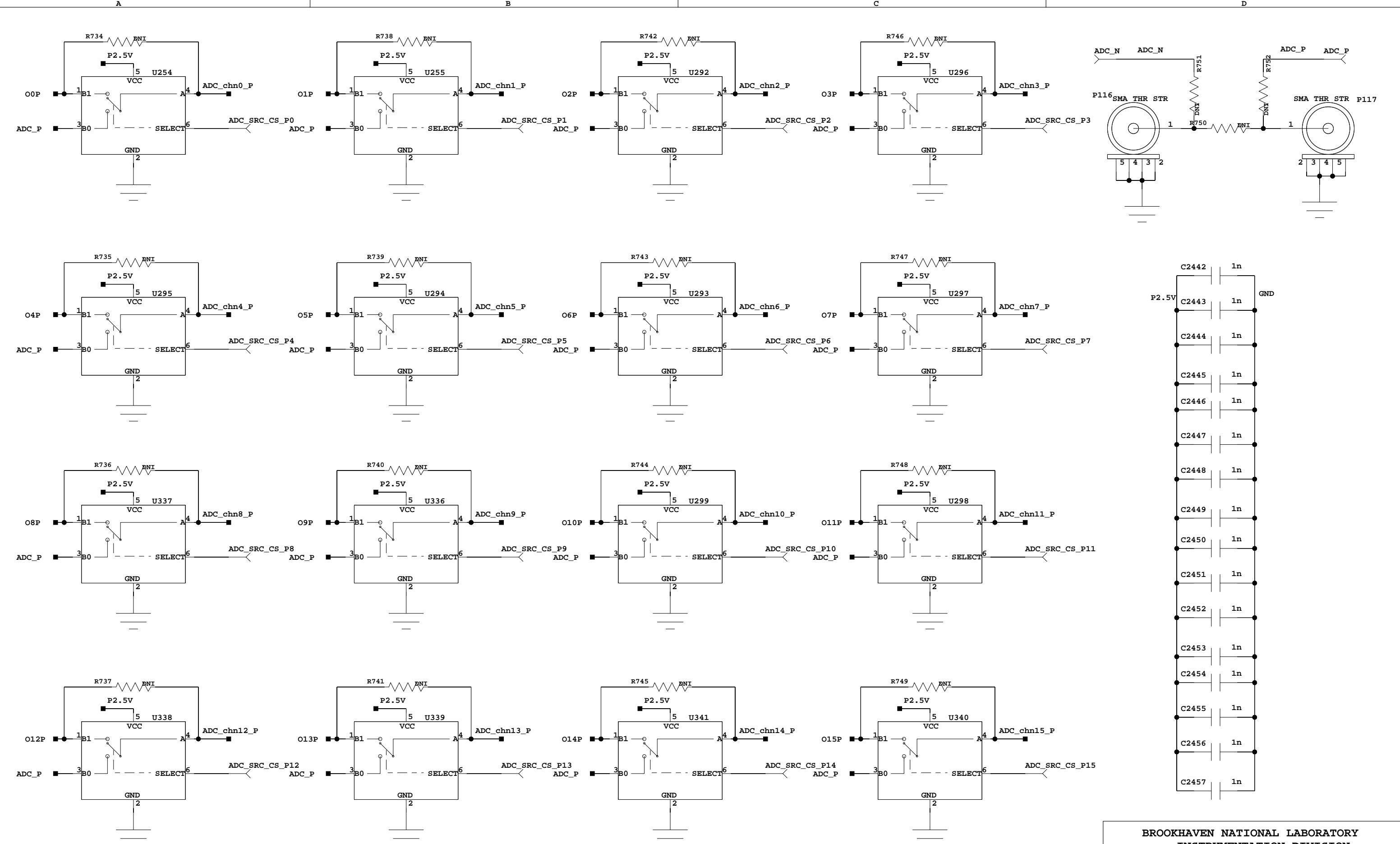
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DAT ADC ASIC Calibration and

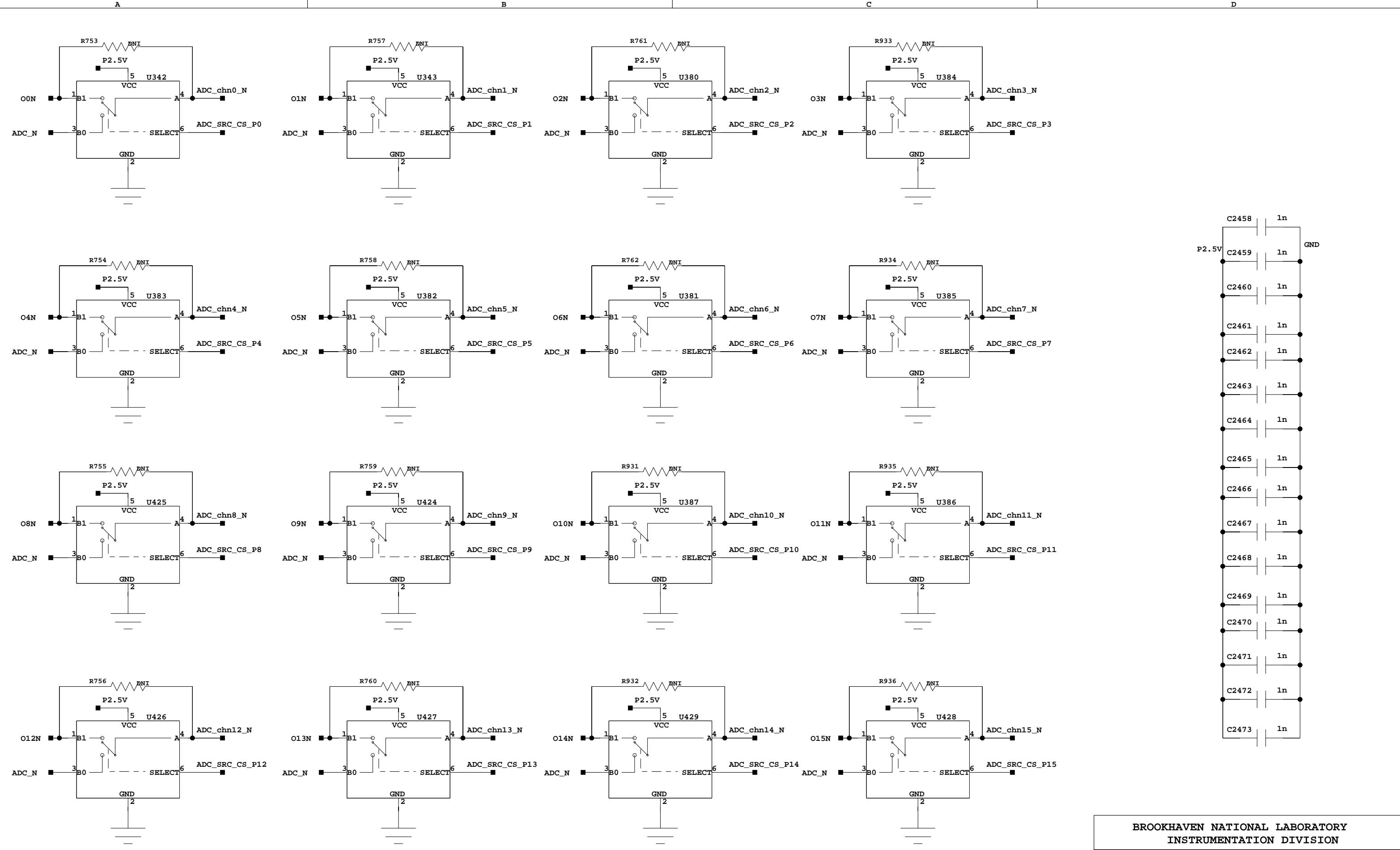
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INSTRUMENTATION DIVISION

DAT ADC SRC SEL_P

Date: 12/07/2022:10:31 DRAWN BY: Jack Fried



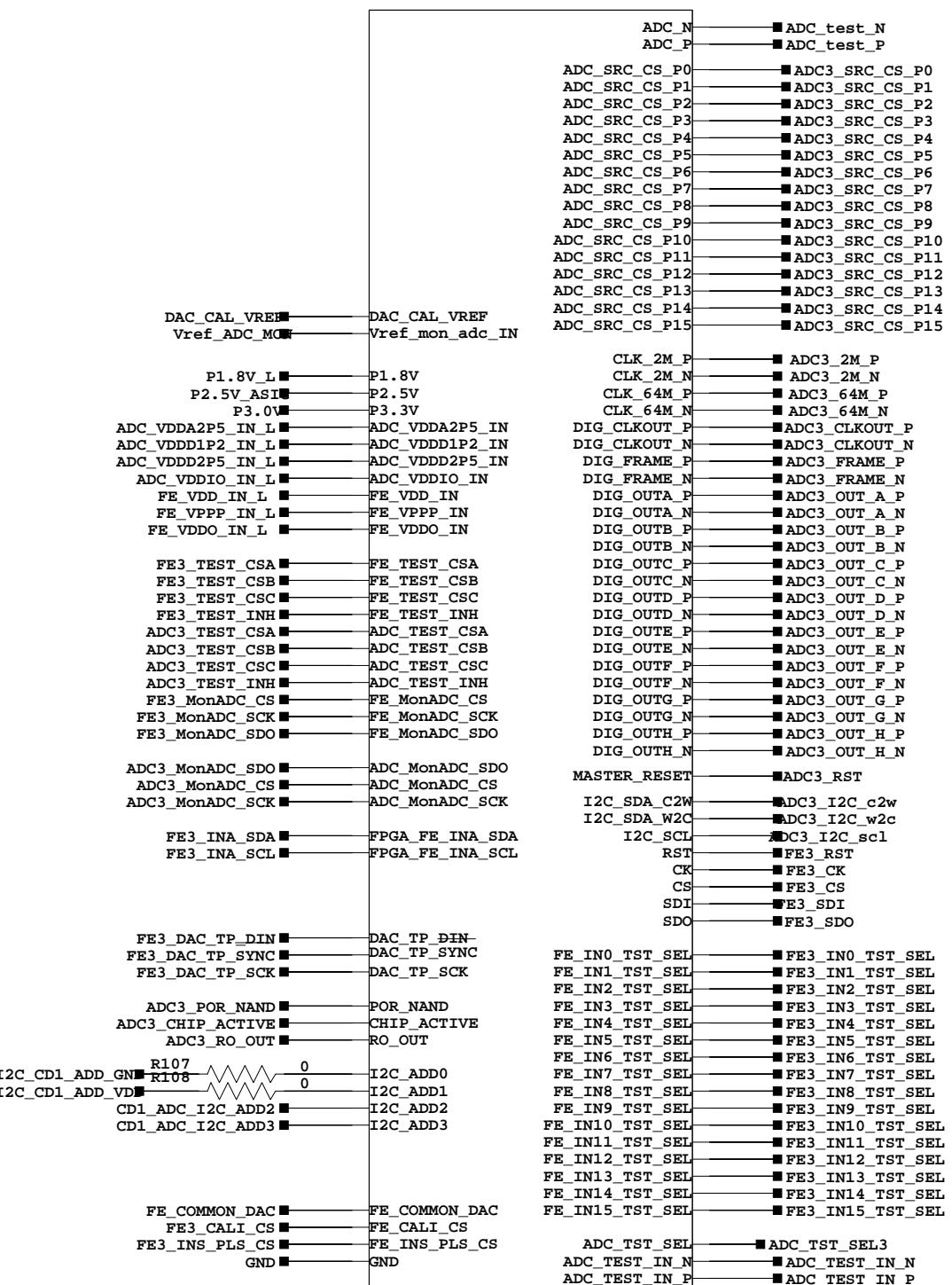
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INSTRUMENTATION DIVISION

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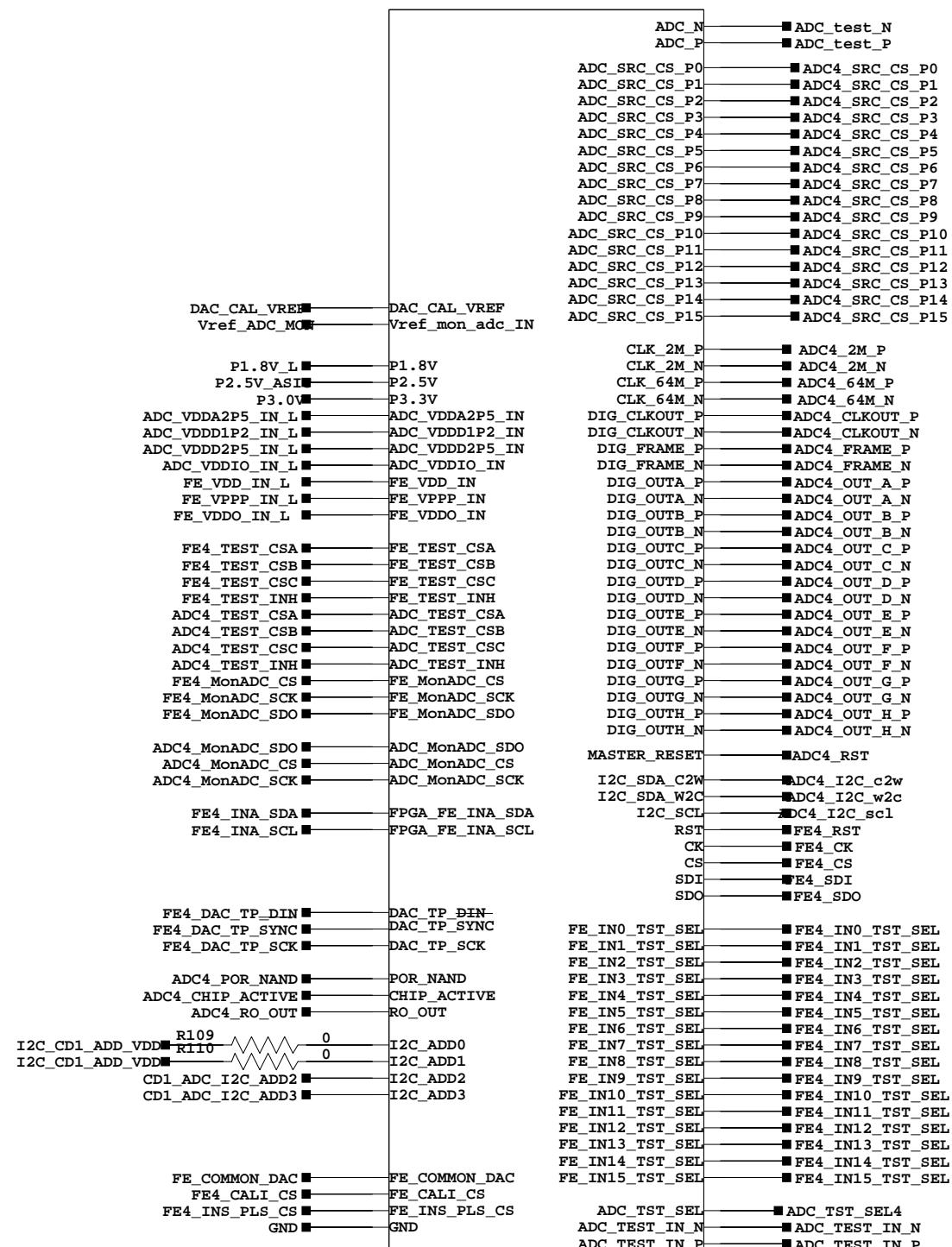
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A B C D E F

ASIC CHAIN 3



ASIC CHAIN 4



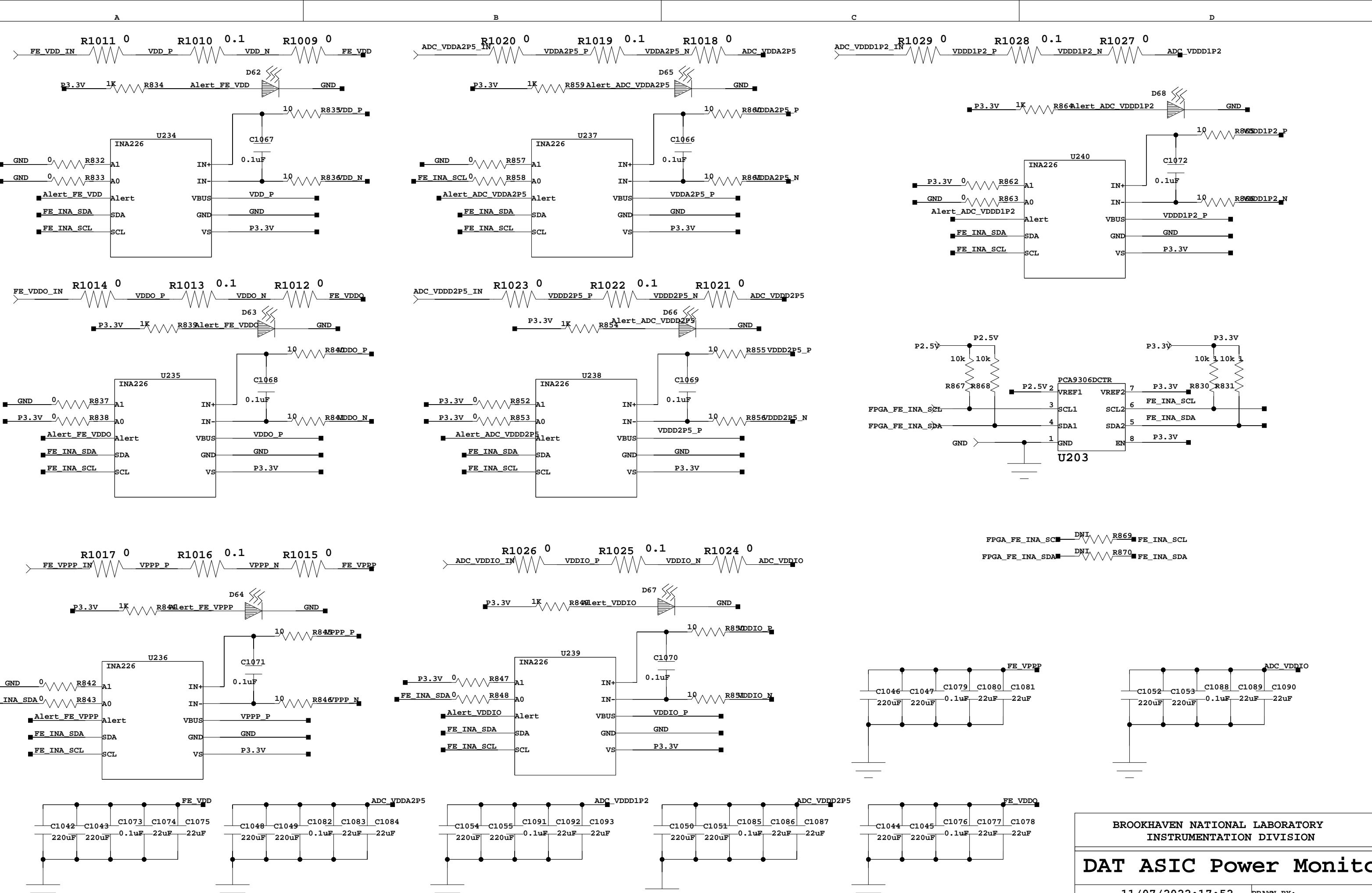
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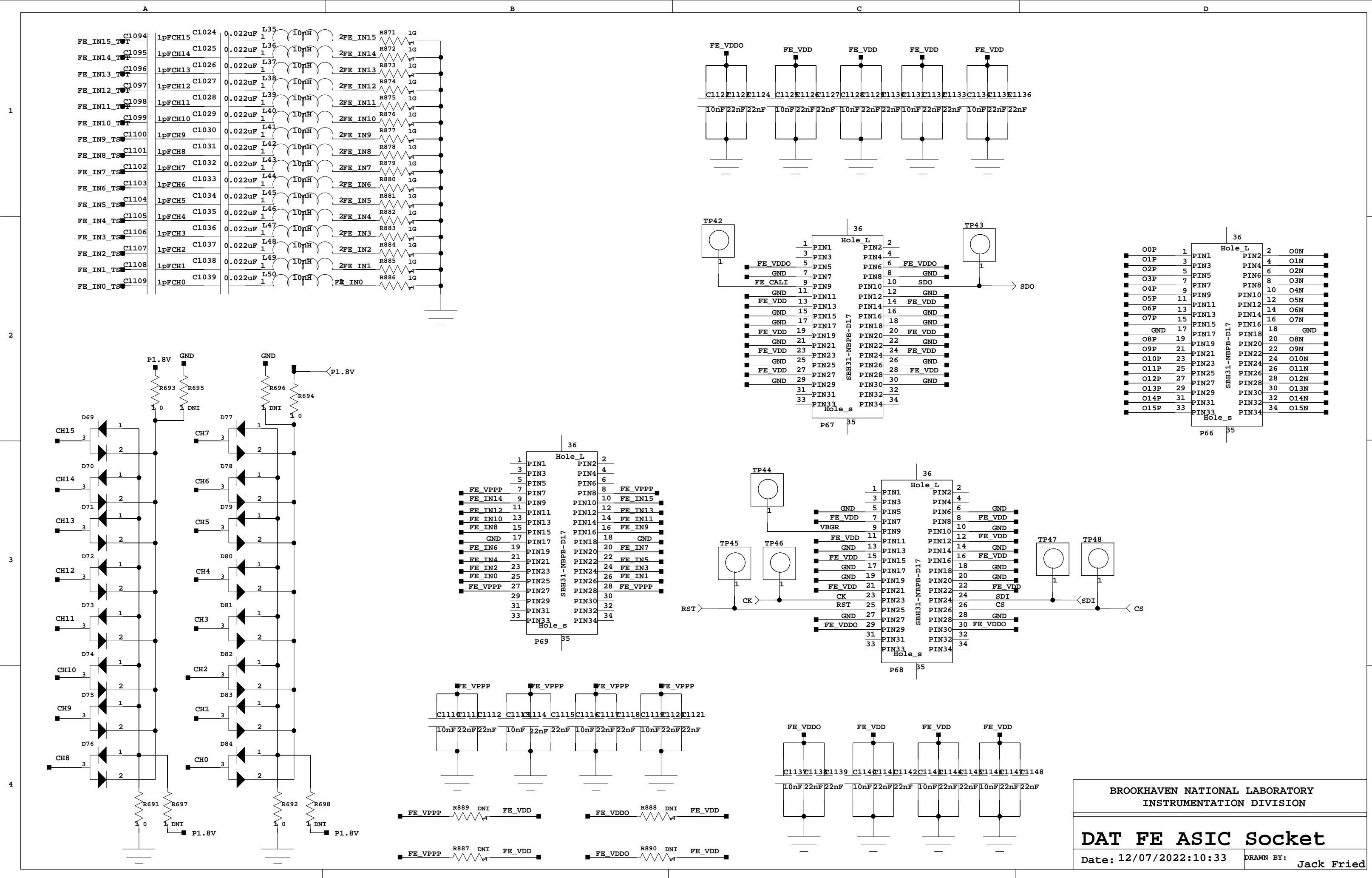
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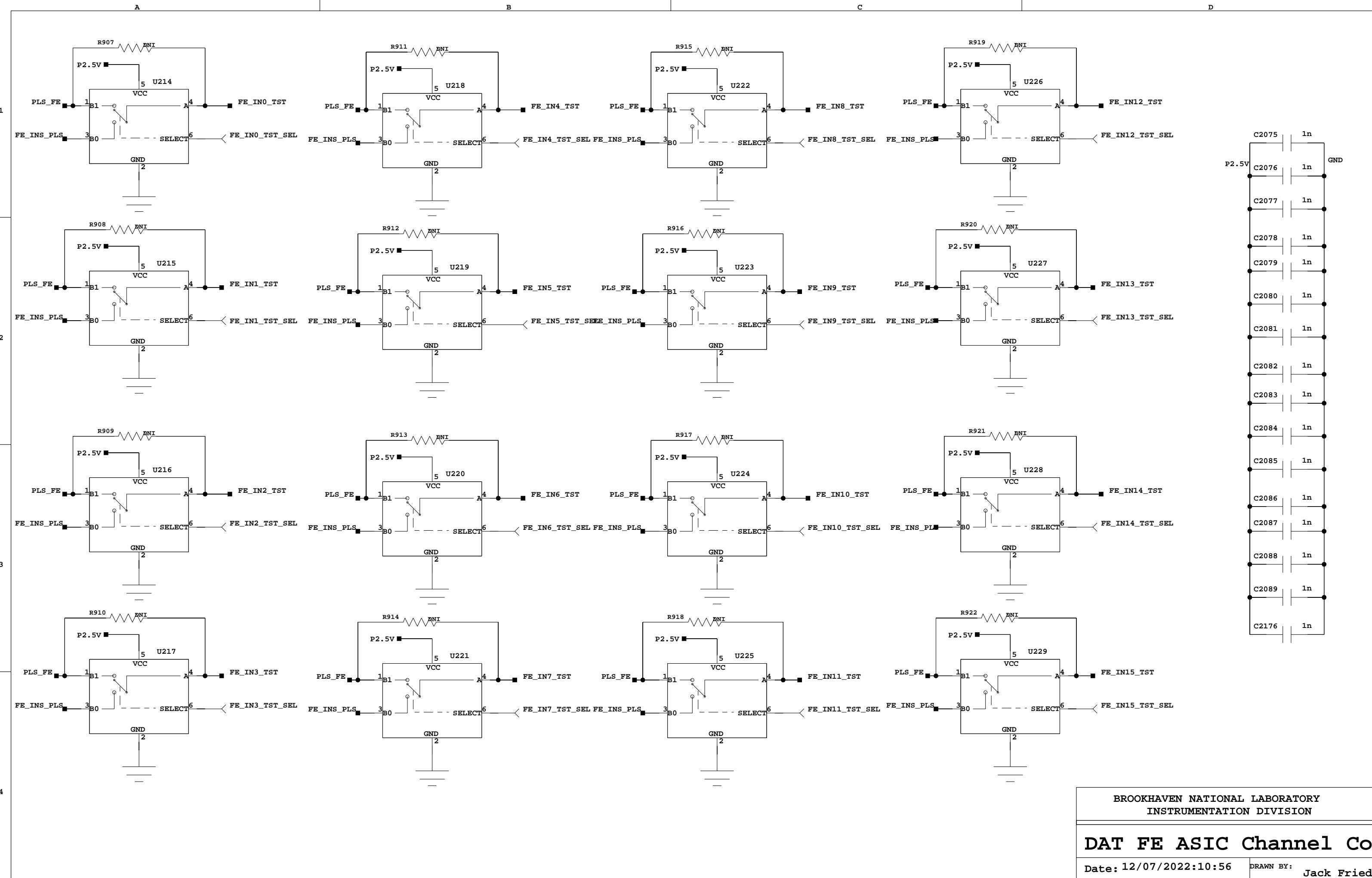
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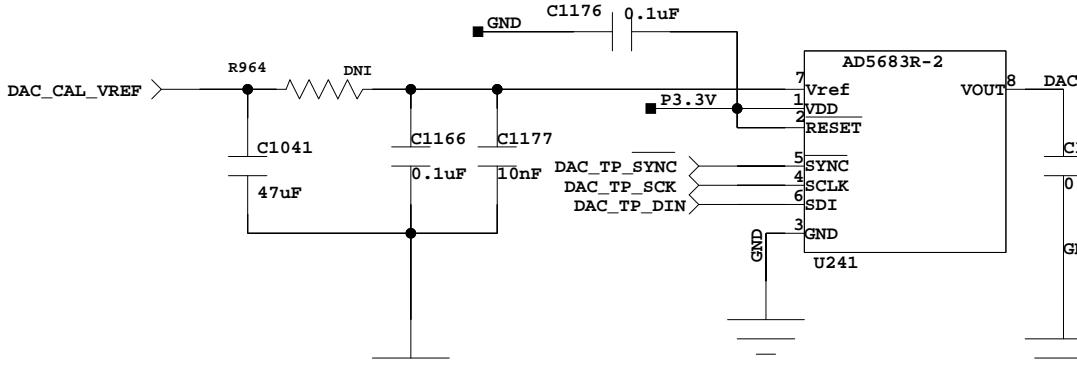
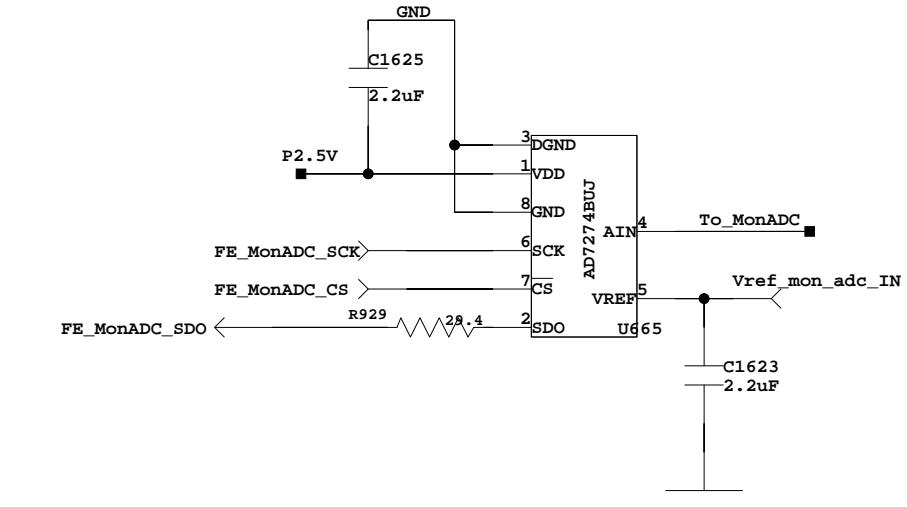
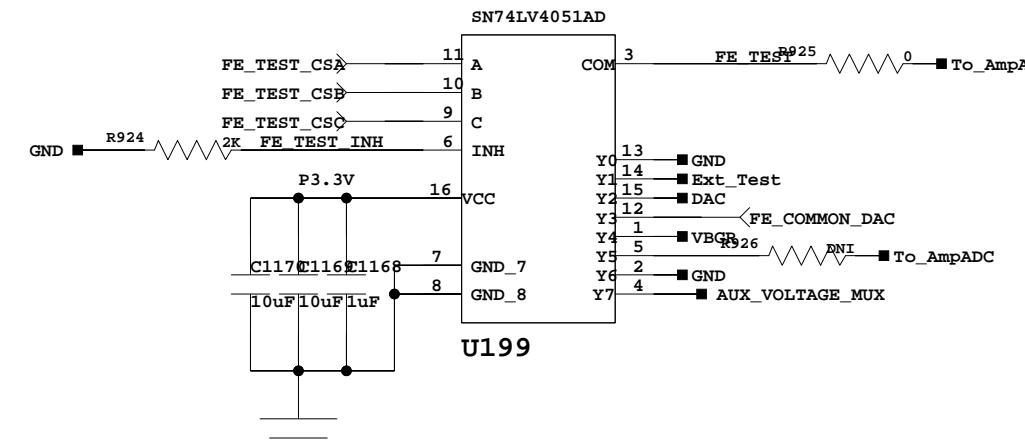
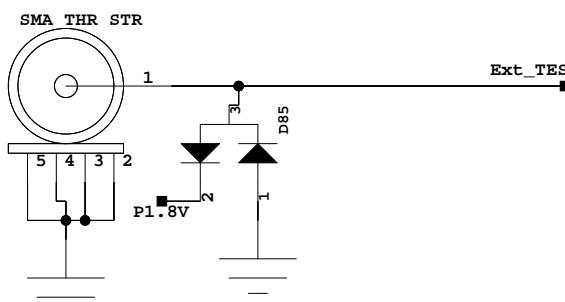
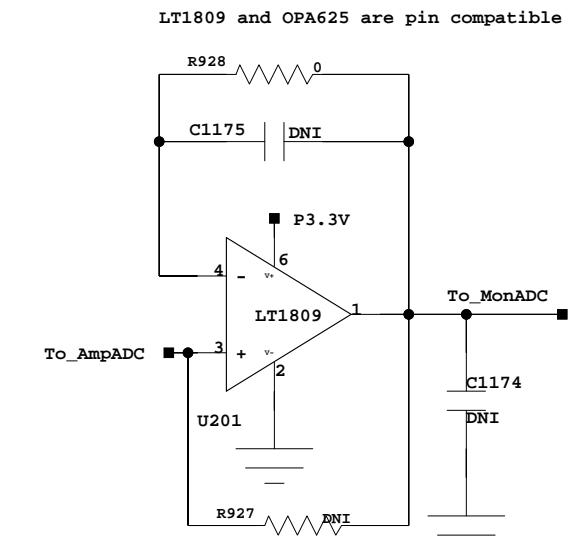
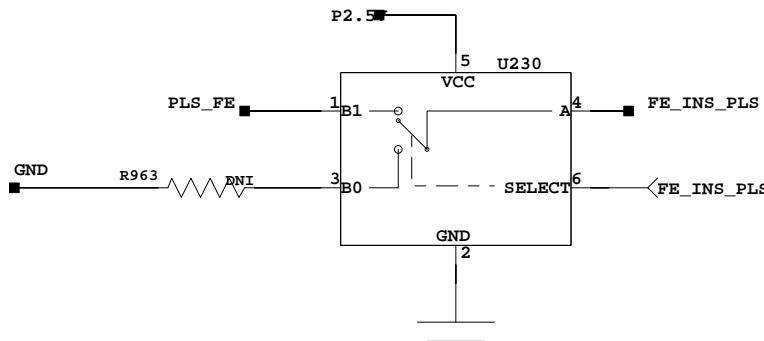
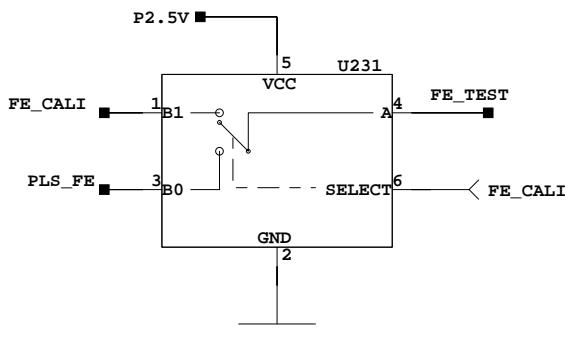
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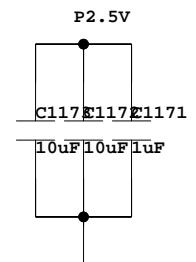








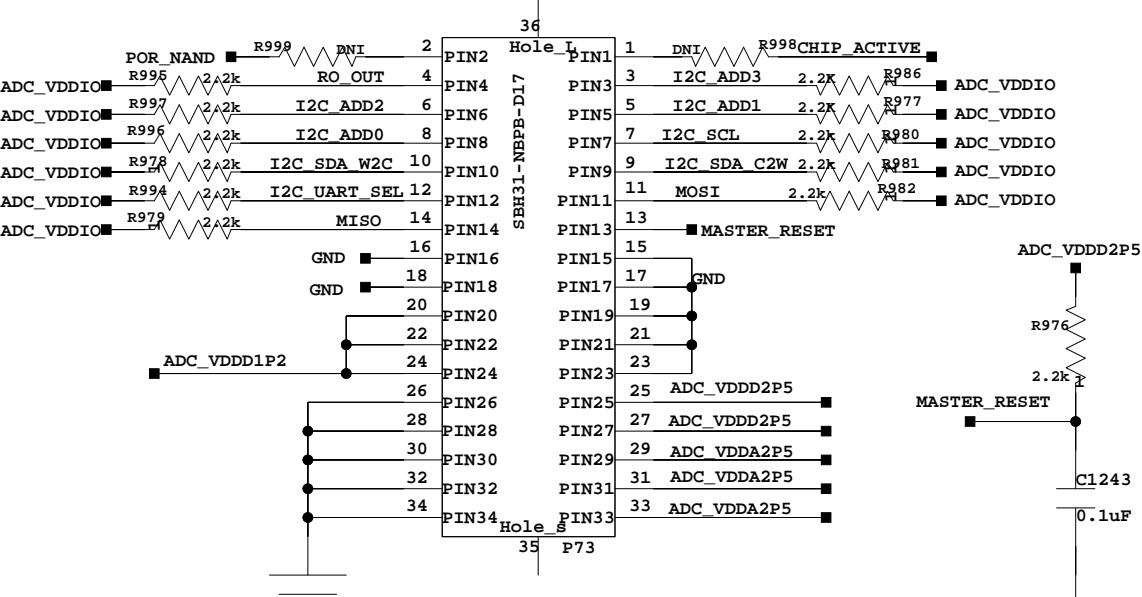
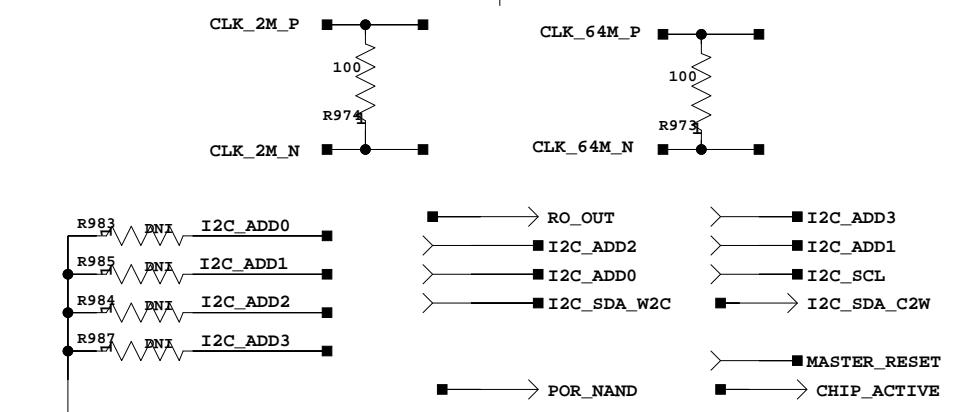
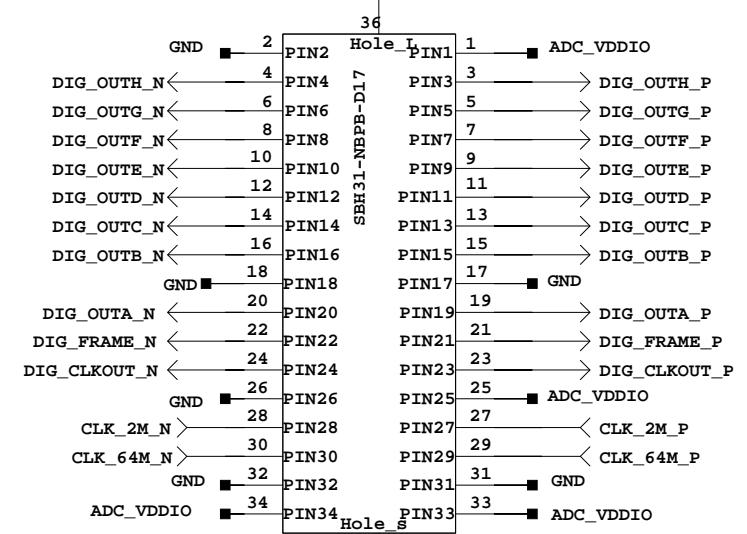
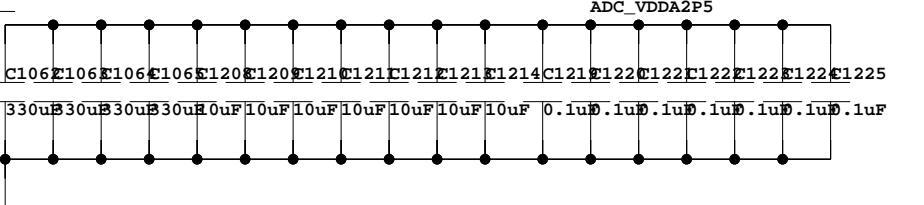
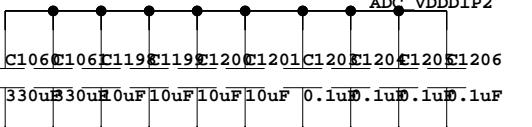
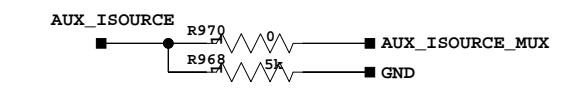
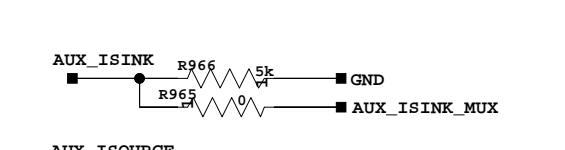
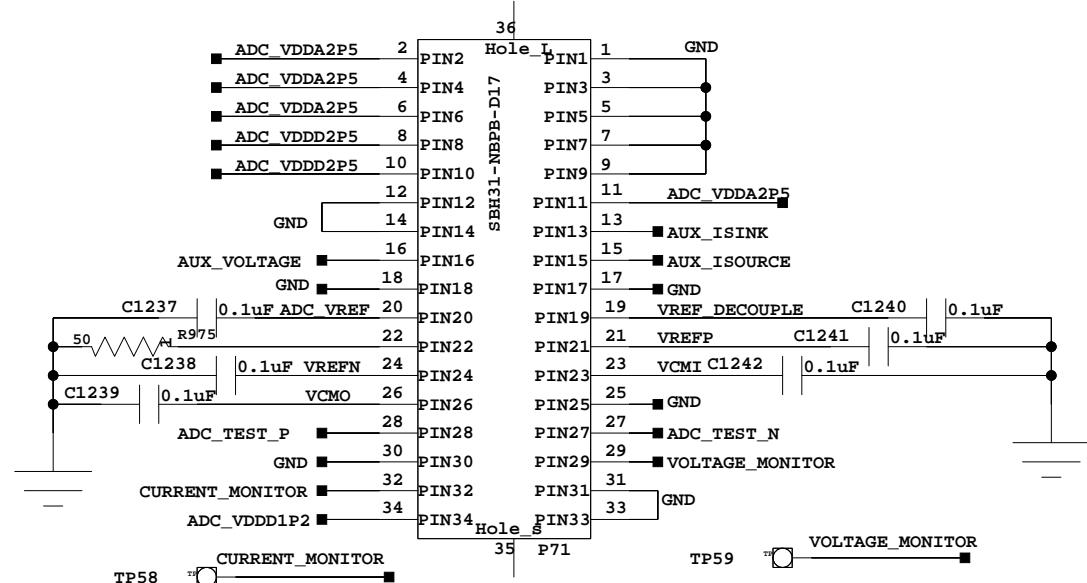
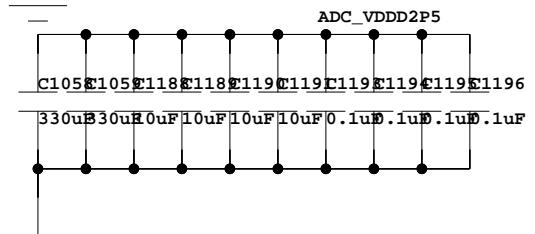
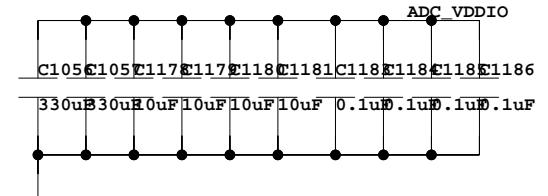
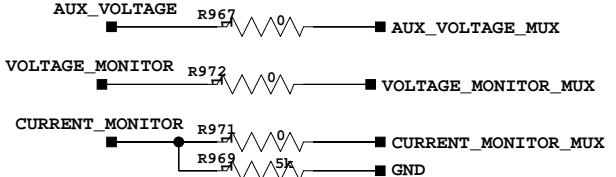
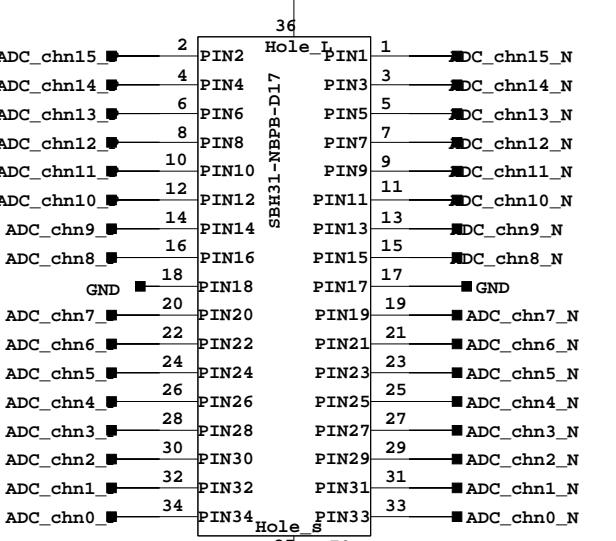
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O13P	■————■	■————■ ADC_chn13_P	O13N	■————■	■————■ ADC_chn13_N
O12P	■————■	■————■ ADC_chn12_P	O12N	■————■	■————■ ADC_chn12_N
O11P	■————■	■————■ ADC_chn11_P	O11N	■————■	■————■ ADC_chn11_N
O10P	■————■	■————■ ADC_chn10_P	O10N	■————■	■————■ ADC_chn10_N
O9P	■————■	■————■ ADC_chn9_P	O9N	■————■	■————■ ADC_chn9_N
O8P	■————■	■————■ ADC_chn8_P	O8N	■————■	■————■ ADC_chn8_N
O7P	■————■	■————■ ADC_chn7_P	O7N	■————■	■————■ ADC_chn7_N
O6P	■————■	■————■ ADC_chn6_P	O6N	■————■	■————■ ADC_chn6_N
O5P	■————■	■————■ ADC_chn5_P	O5N	■————■	■————■ ADC_chn5_N
O4P	■————■	■————■ ADC_chn4_P	O4N	■————■	■————■ ADC_chn4_N
O3P	■————■	■————■ ADC_chn3_P	O3N	■————■	■————■ ADC_chn3_N
O2P	■————■	■————■ ADC_chn2_P	O2N	■————■	■————■ ADC_chn2_N
O1P	■————■	■————■ ADC_chn1_P	O1N	■————■	■————■ ADC_chn1_N
OOP	■————■	■————■ ADC_chn0_P	OON	■————■	■————■ ADC_chn0_N



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DAT FE ASIC Calibration and Mo

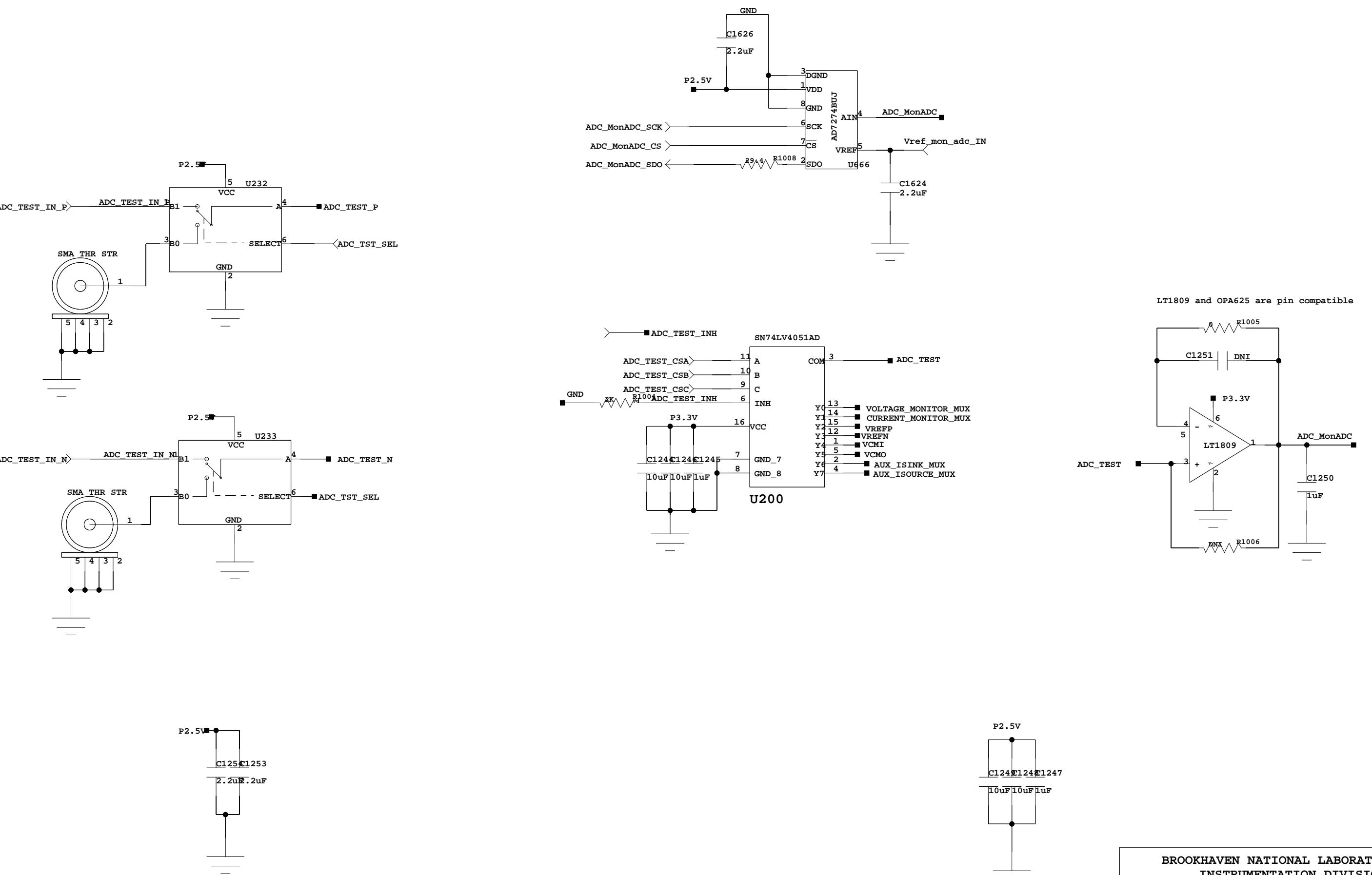
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DAT ADC ASIC Socket

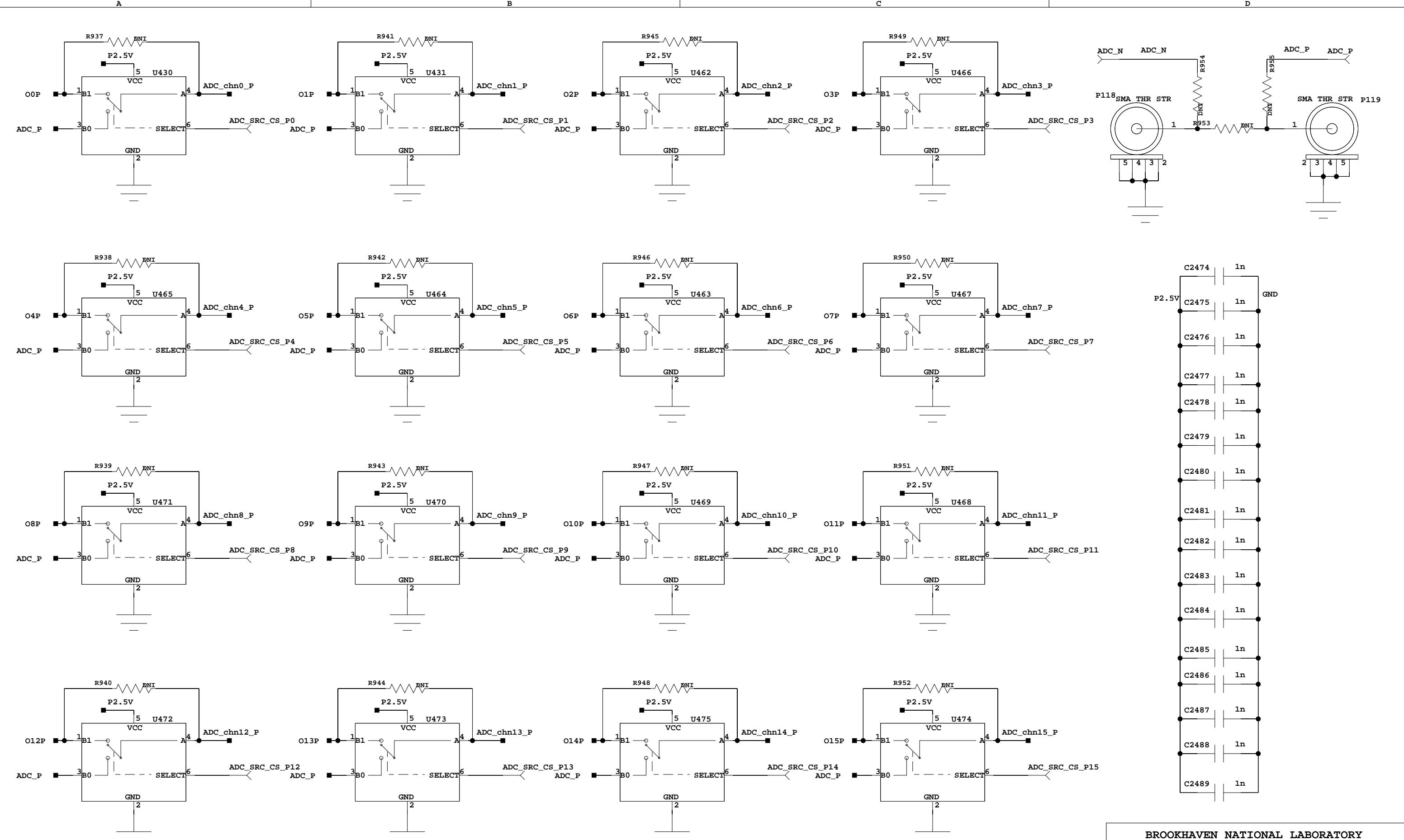
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DAT ADC ASIC Calibration and

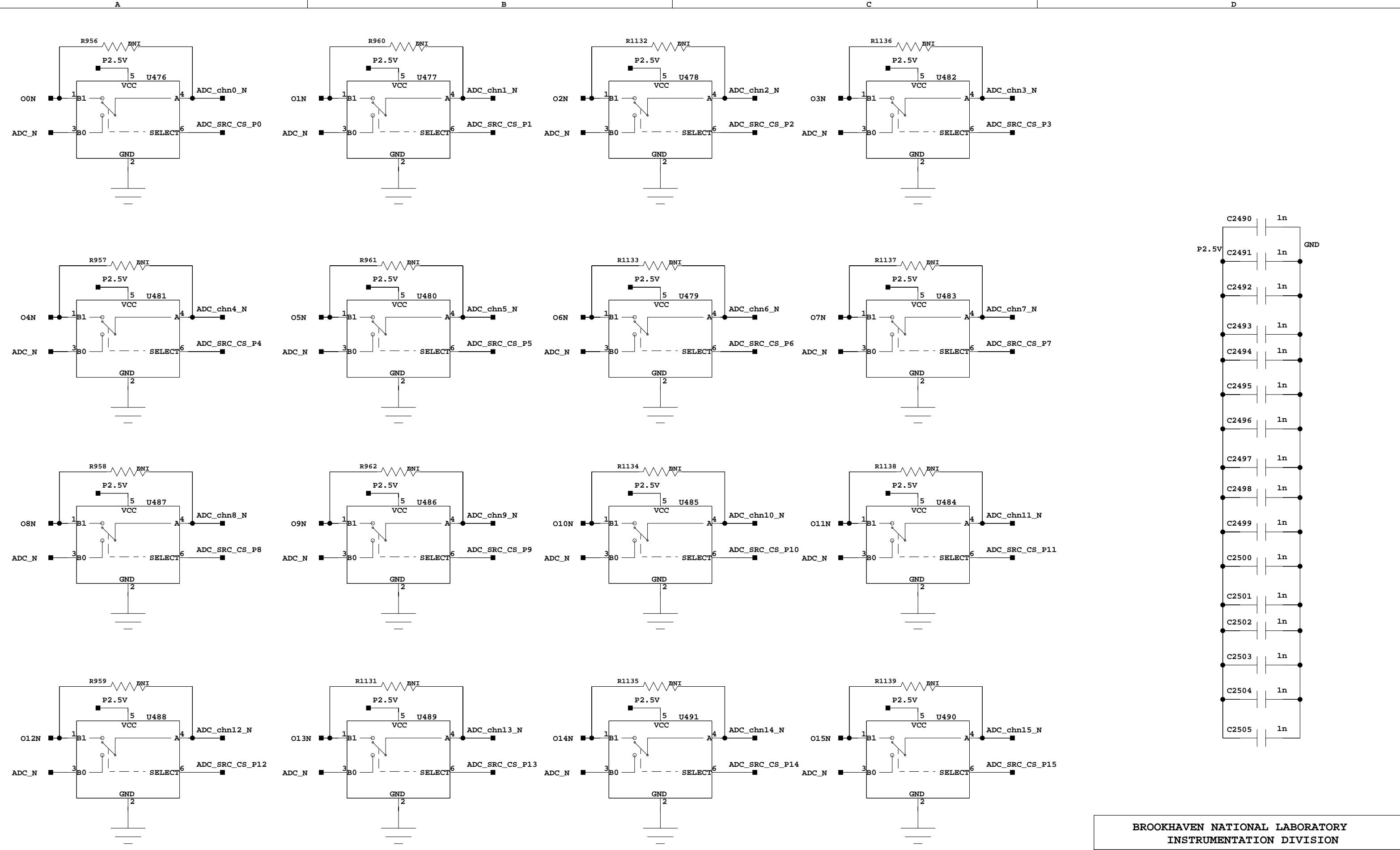
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INSTRUMENTATION DIVISION

DAT ADC SRC SEL_P

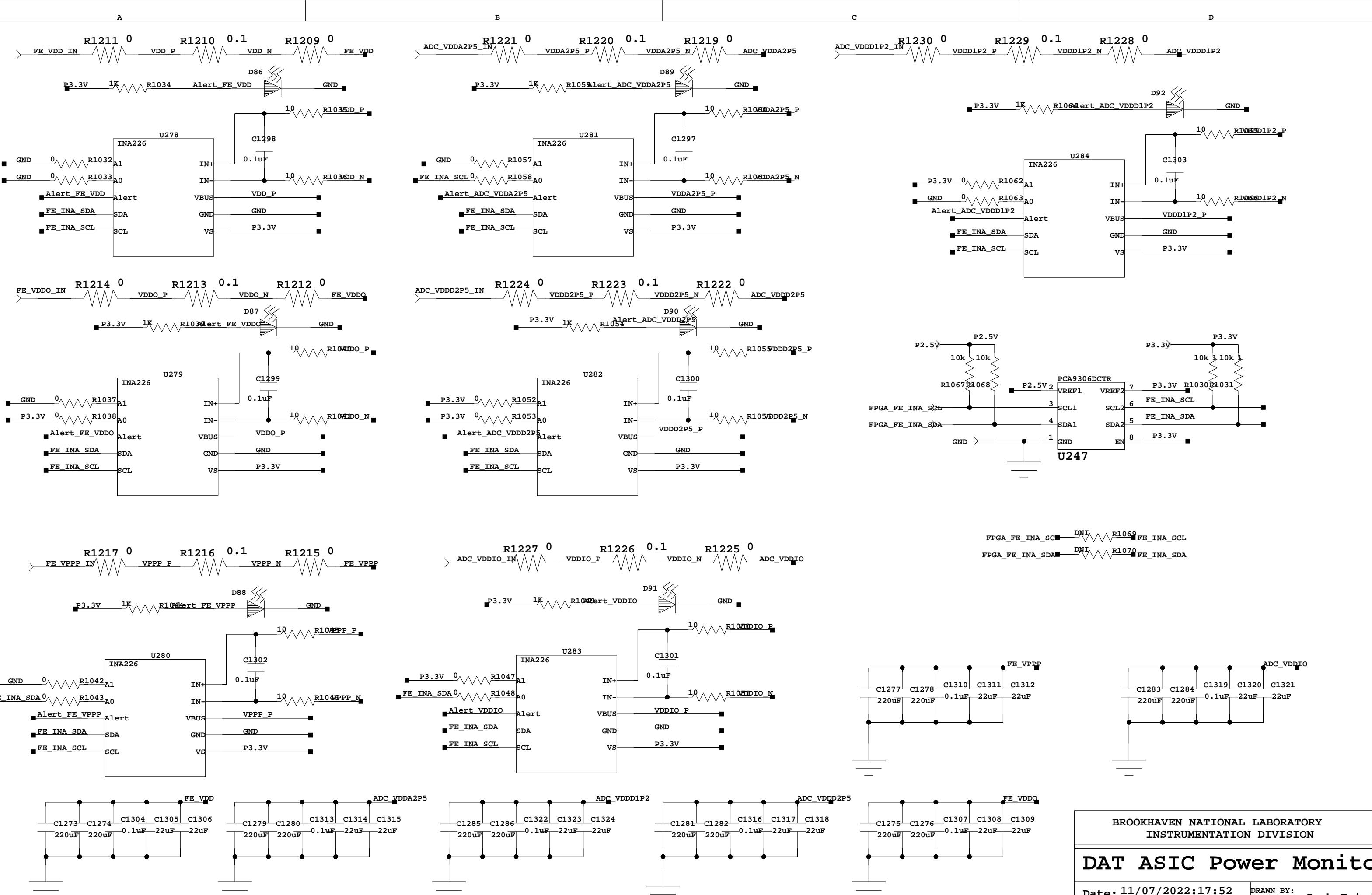
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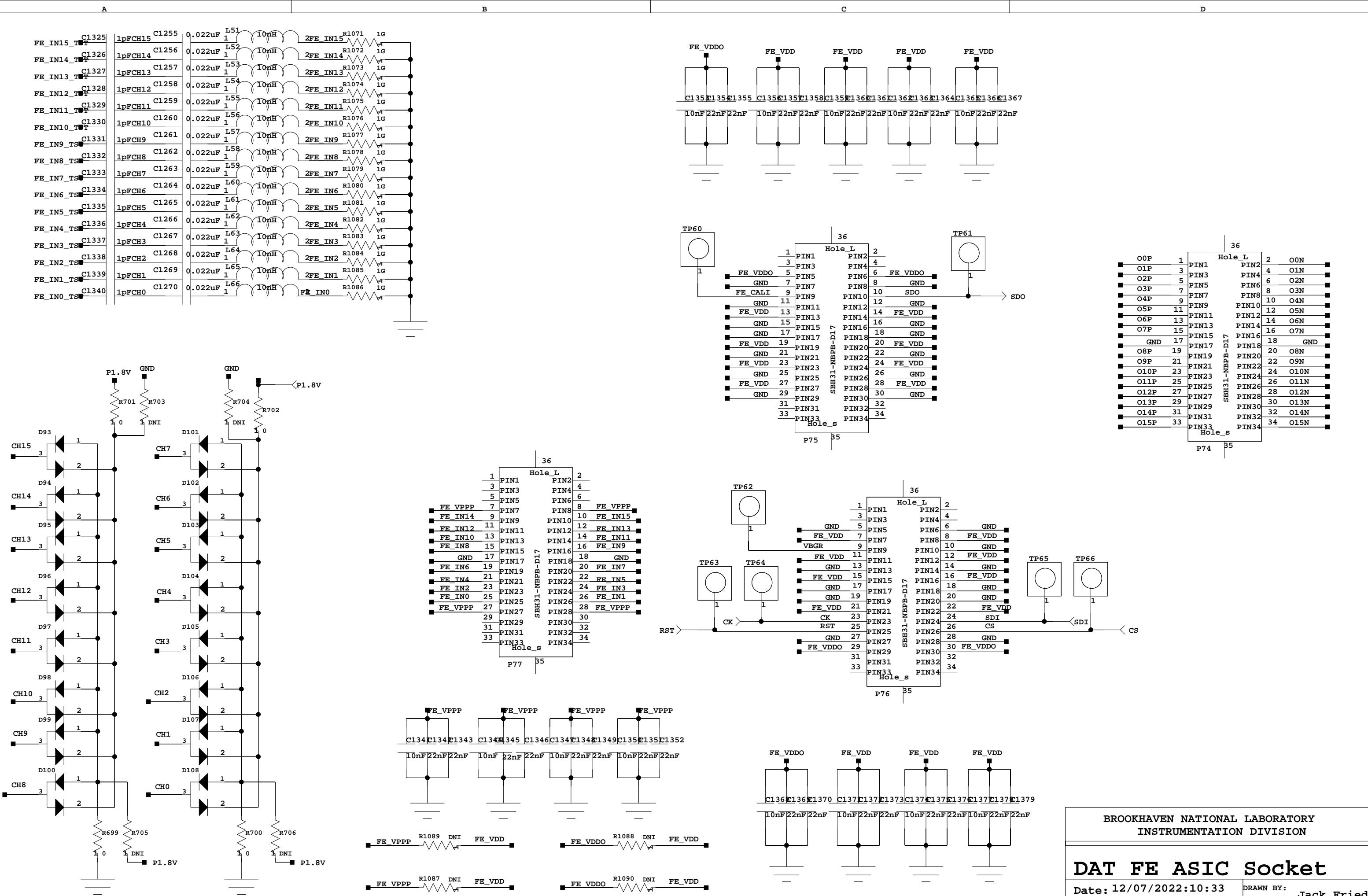


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INSTRUMENTATION DIVISION

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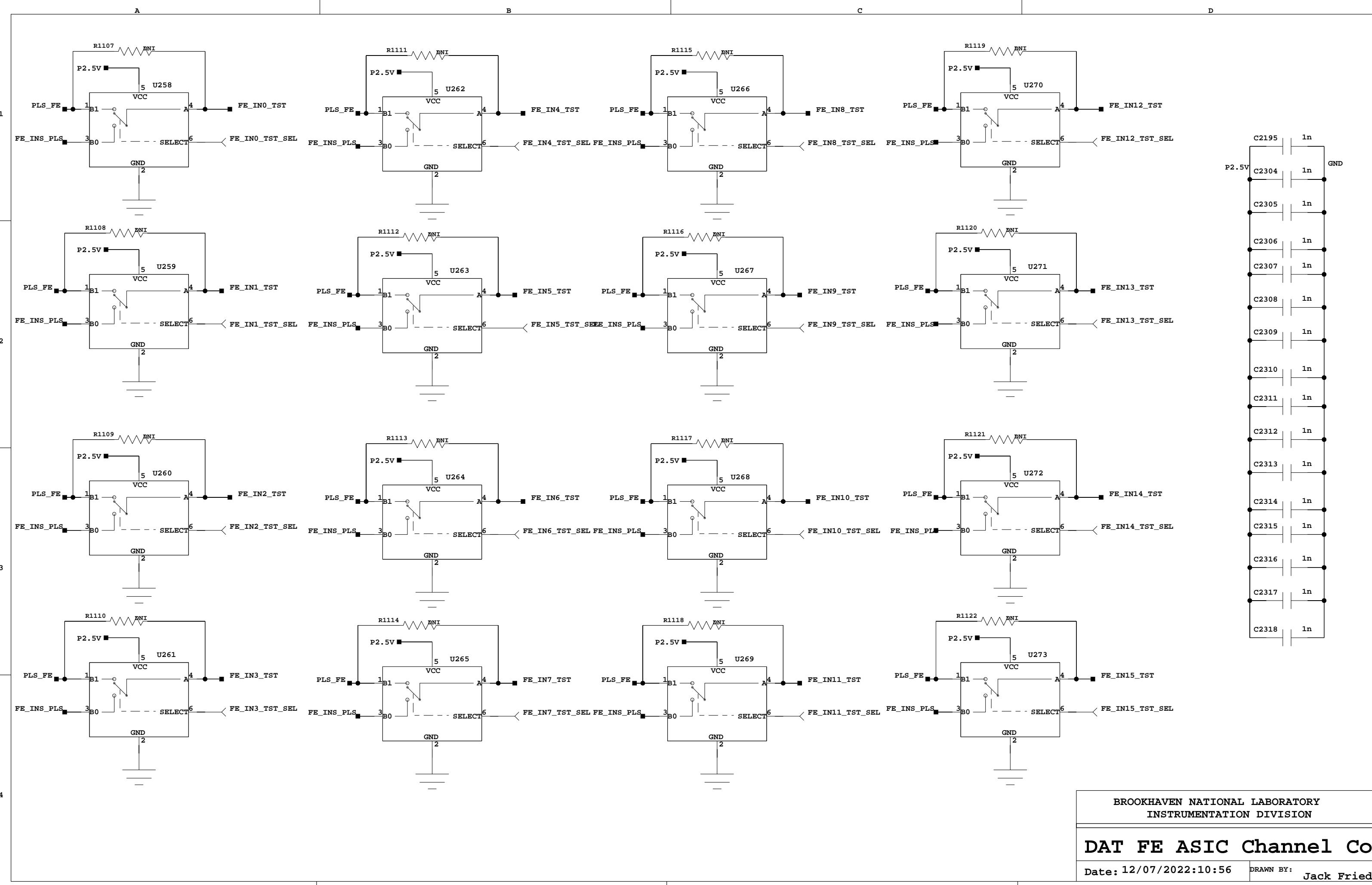


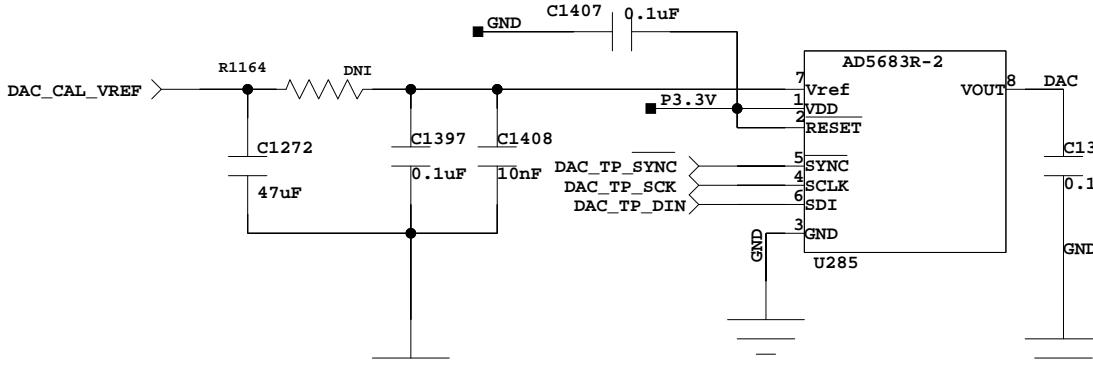
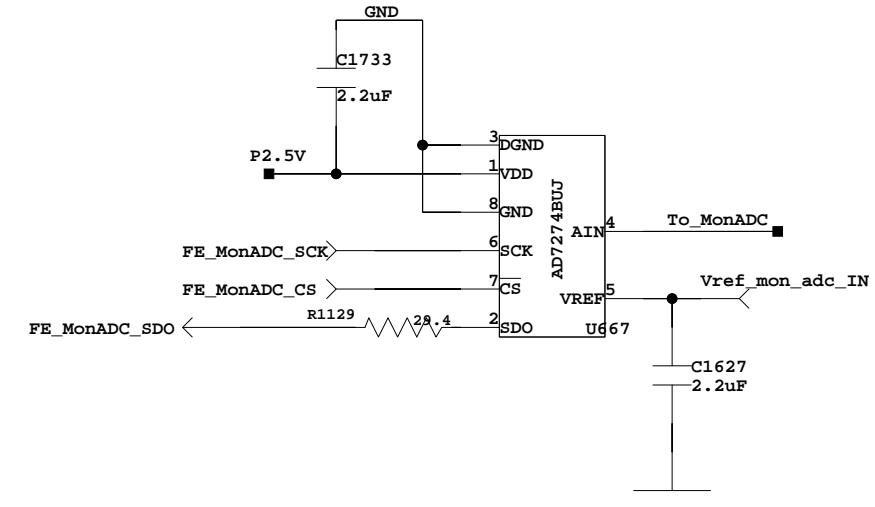
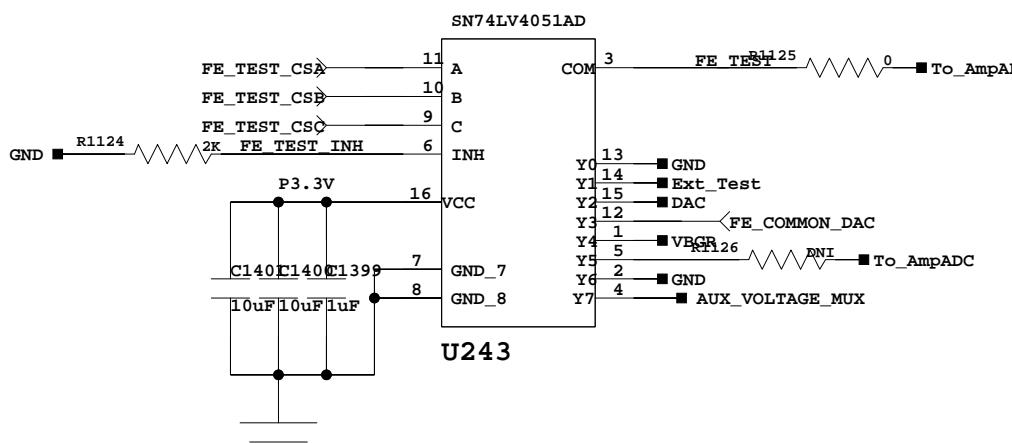
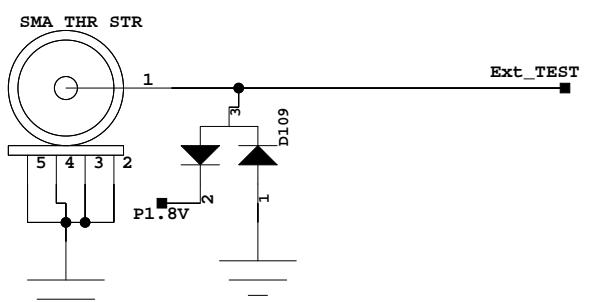
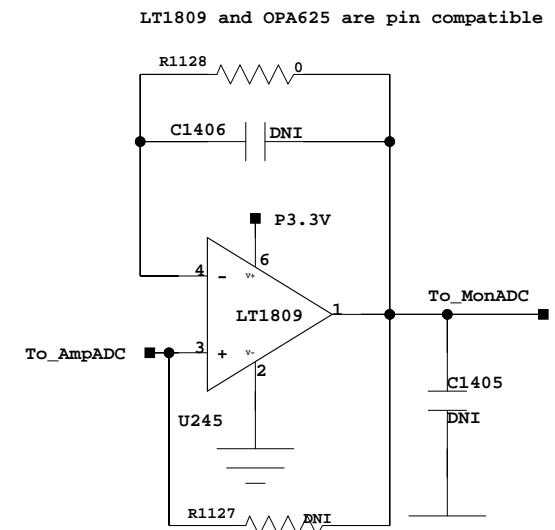
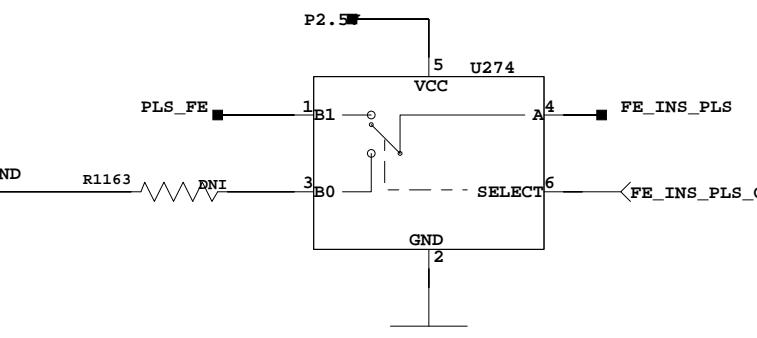
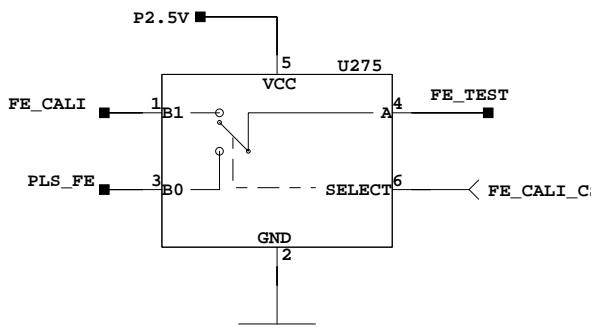


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INSTRUMENTATION DIVISION**

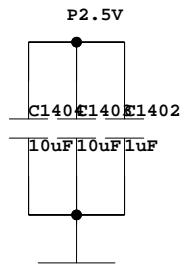
DAT FE ASIC Socket

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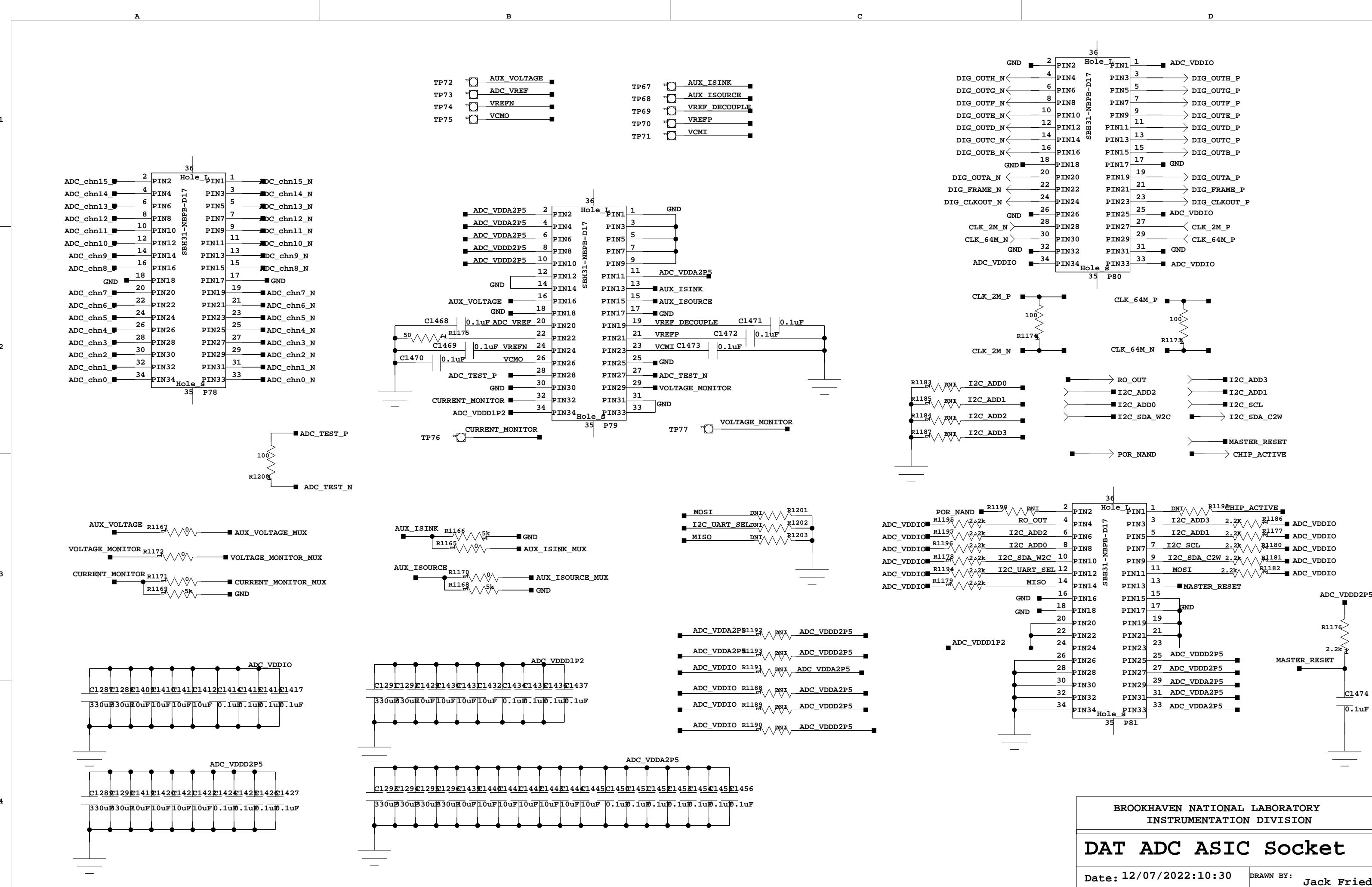
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O14P	ADC_chn14_P	O14N	ADC_chn14_N
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O12P	ADC_chn12_P	O12N	ADC_chn12_N
O11P	ADC_chn11_P	O11N	ADC_chn11_N
O10P	ADC_chn10_P	O10N	ADC_chn10_N
O9P	ADC_chn9_P	O9N	ADC_chn9_N
O8P	ADC_chn8_P	O8N	ADC_chn8_N
O7P	ADC_chn7_P	O7N	ADC_chn7_N
O6P	ADC_chn6_P	O6N	ADC_chn6_N
O5P	ADC_chn5_P	O5N	ADC_chn5_N
O4P	ADC_chn4_P	O4N	ADC_chn4_N
O3P	ADC_chn3_P	O3N	ADC_chn3_N
O2P	ADC_chn2_P	O2N	ADC_chn2_N
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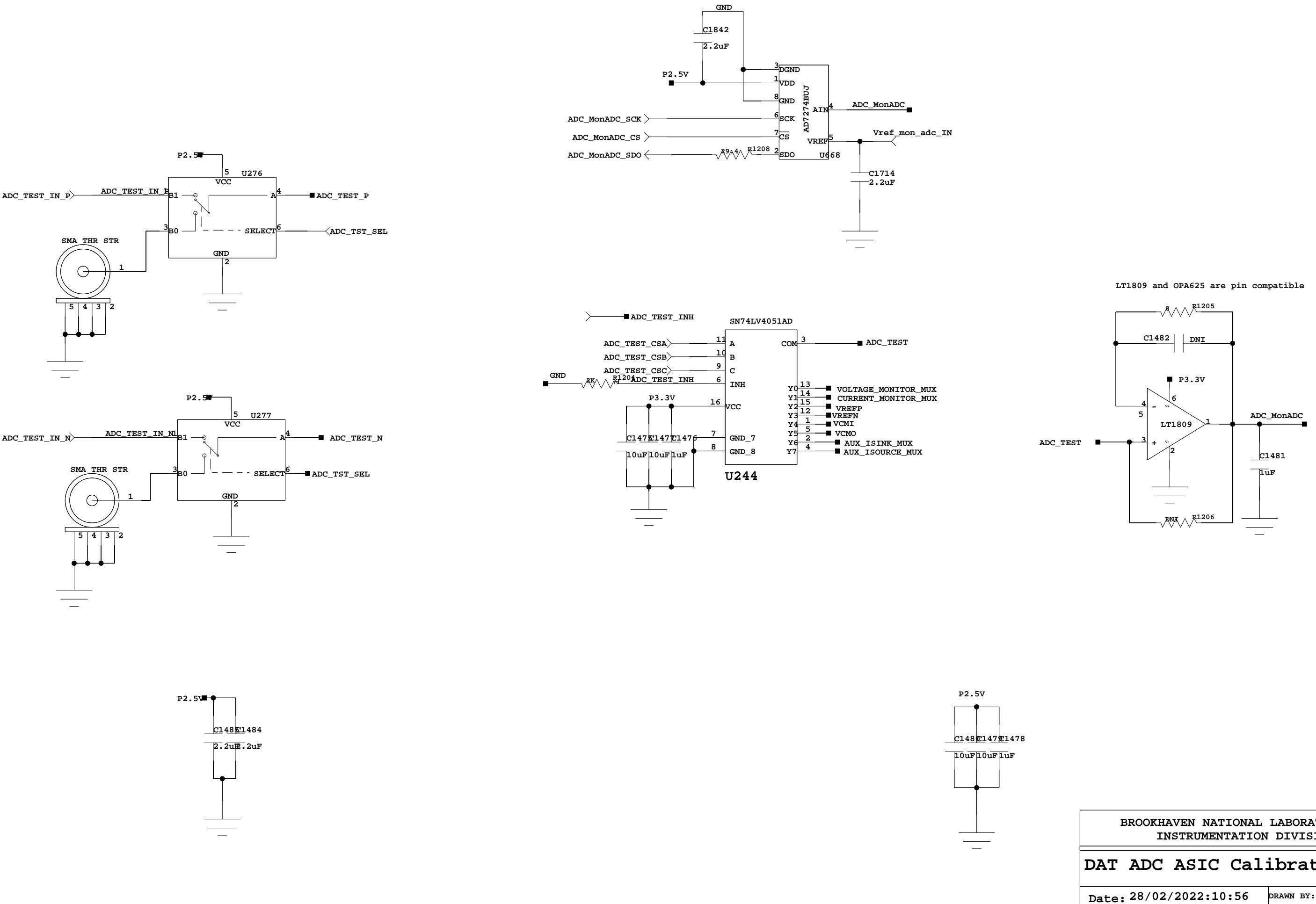


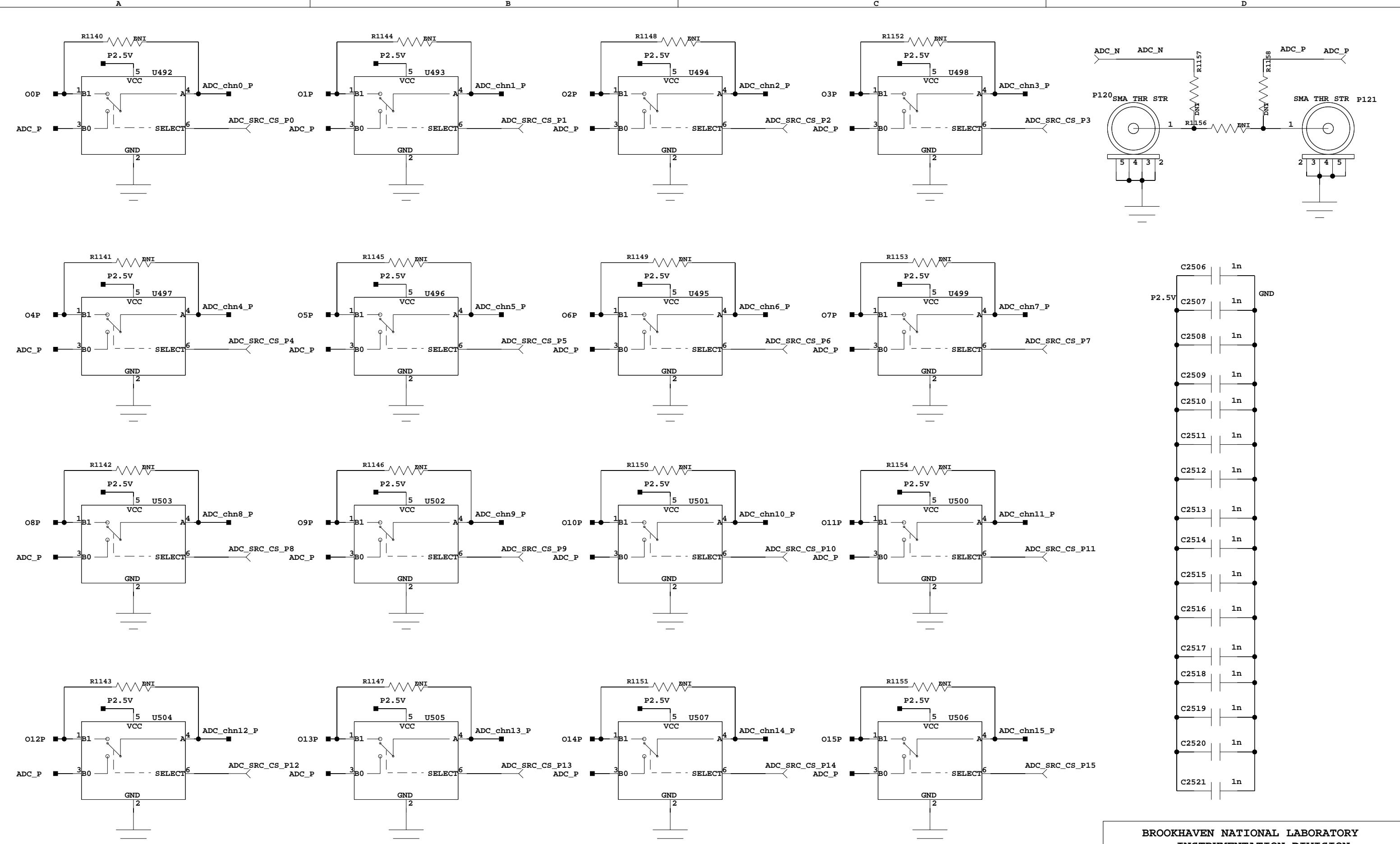
BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION

DAT FE ASIC Calibration and Mo

Date: 07/04/2022:11:09 DRAWN BY: Jack Fried



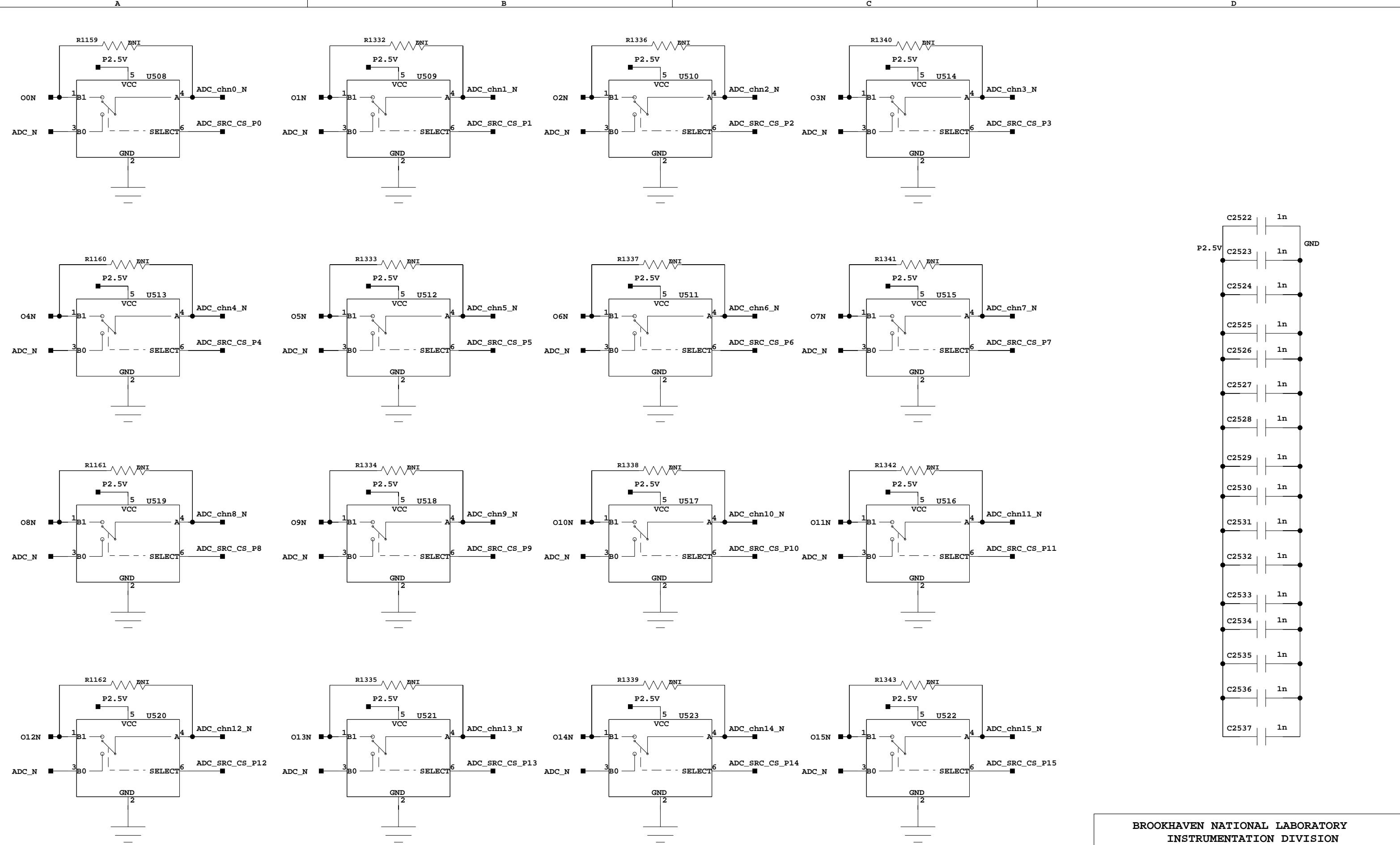




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DAT ADC SRC SEL_P

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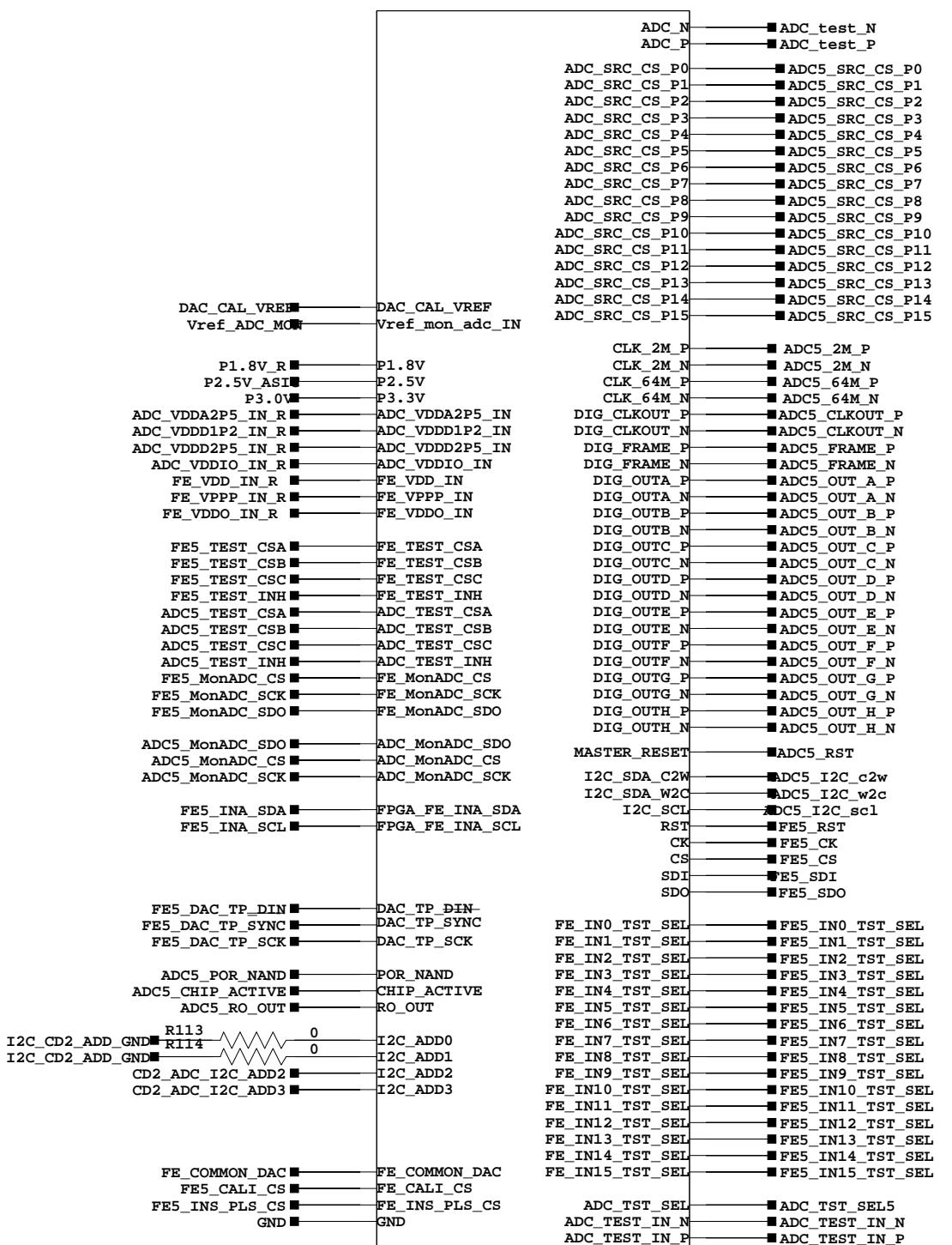
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INSTRUMENTATION DIVISION

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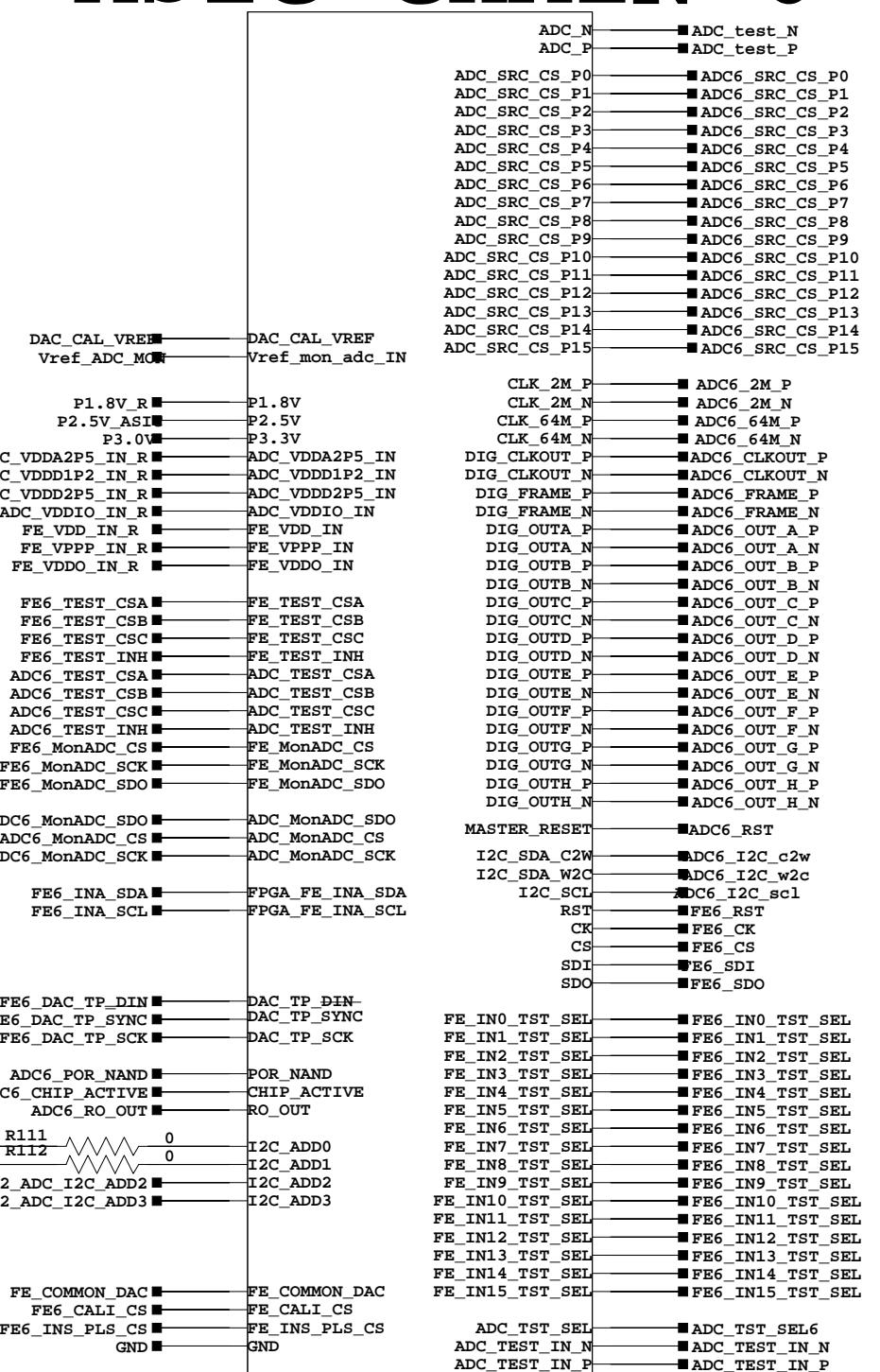
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A B C D E F

ASIC CHAIN 5



ASIC CHAIN 6



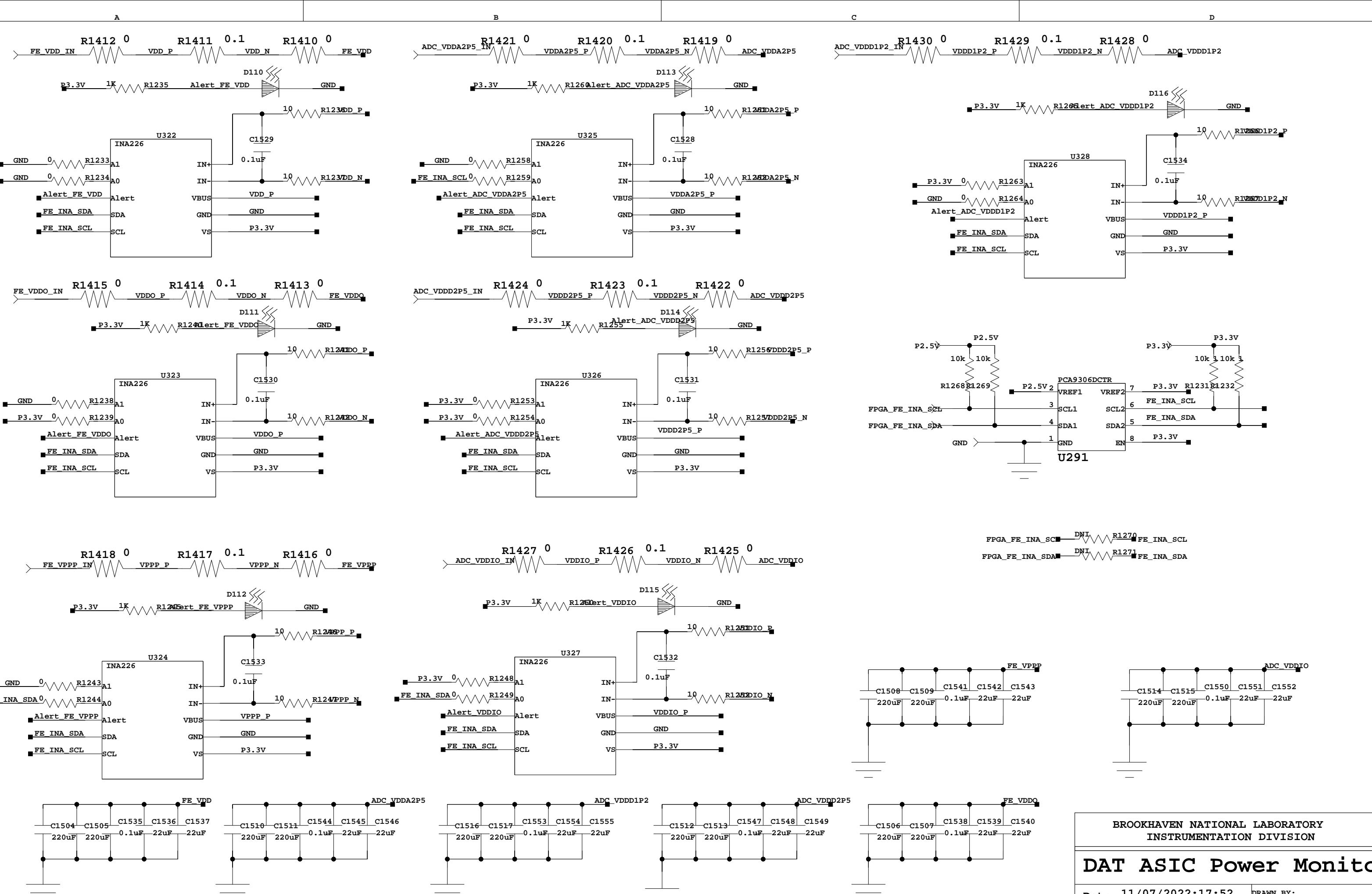
BROOKHAVEN NATIONAL LABORATORY

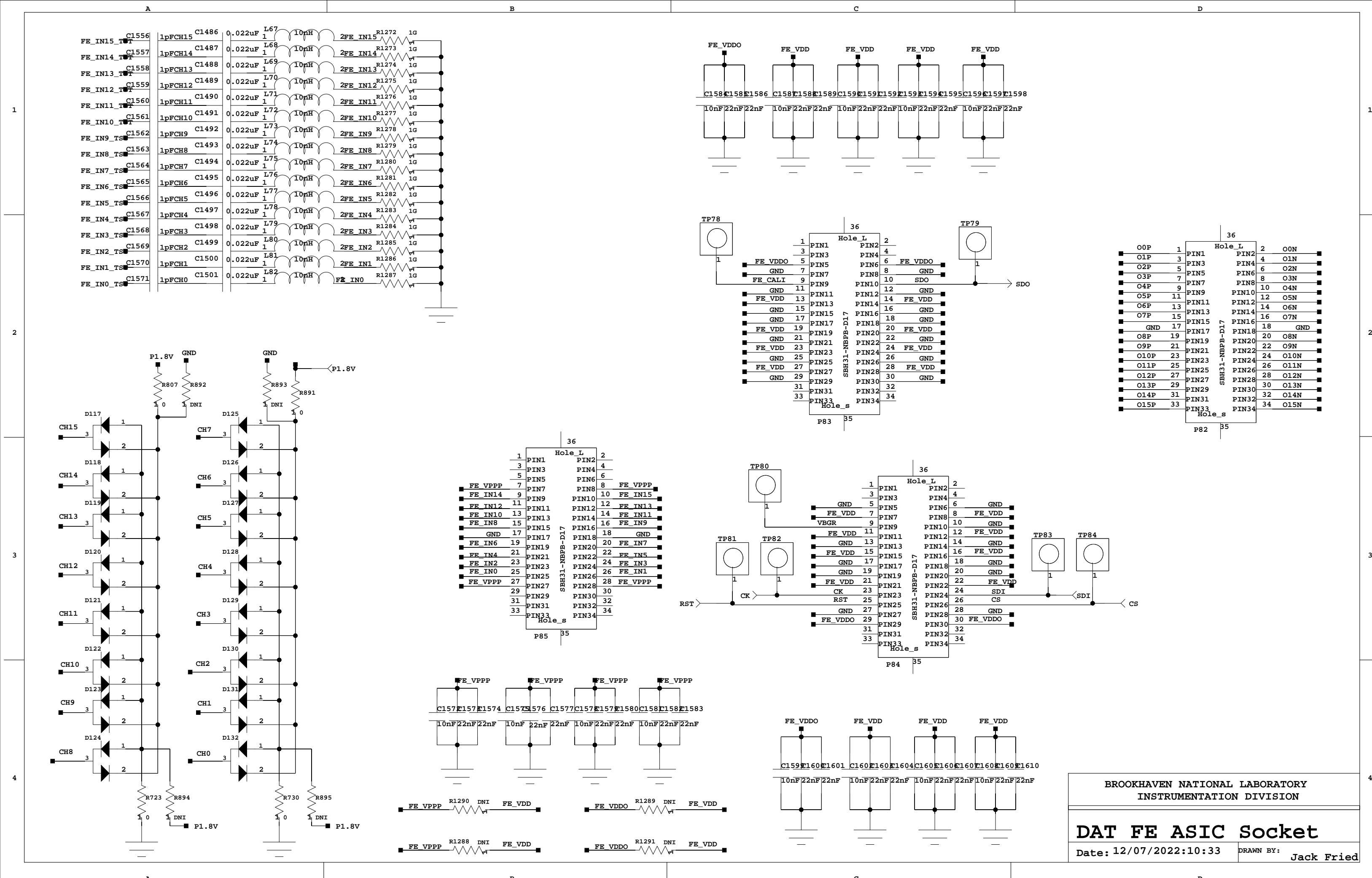
INSTRUMENTATION DIVISION

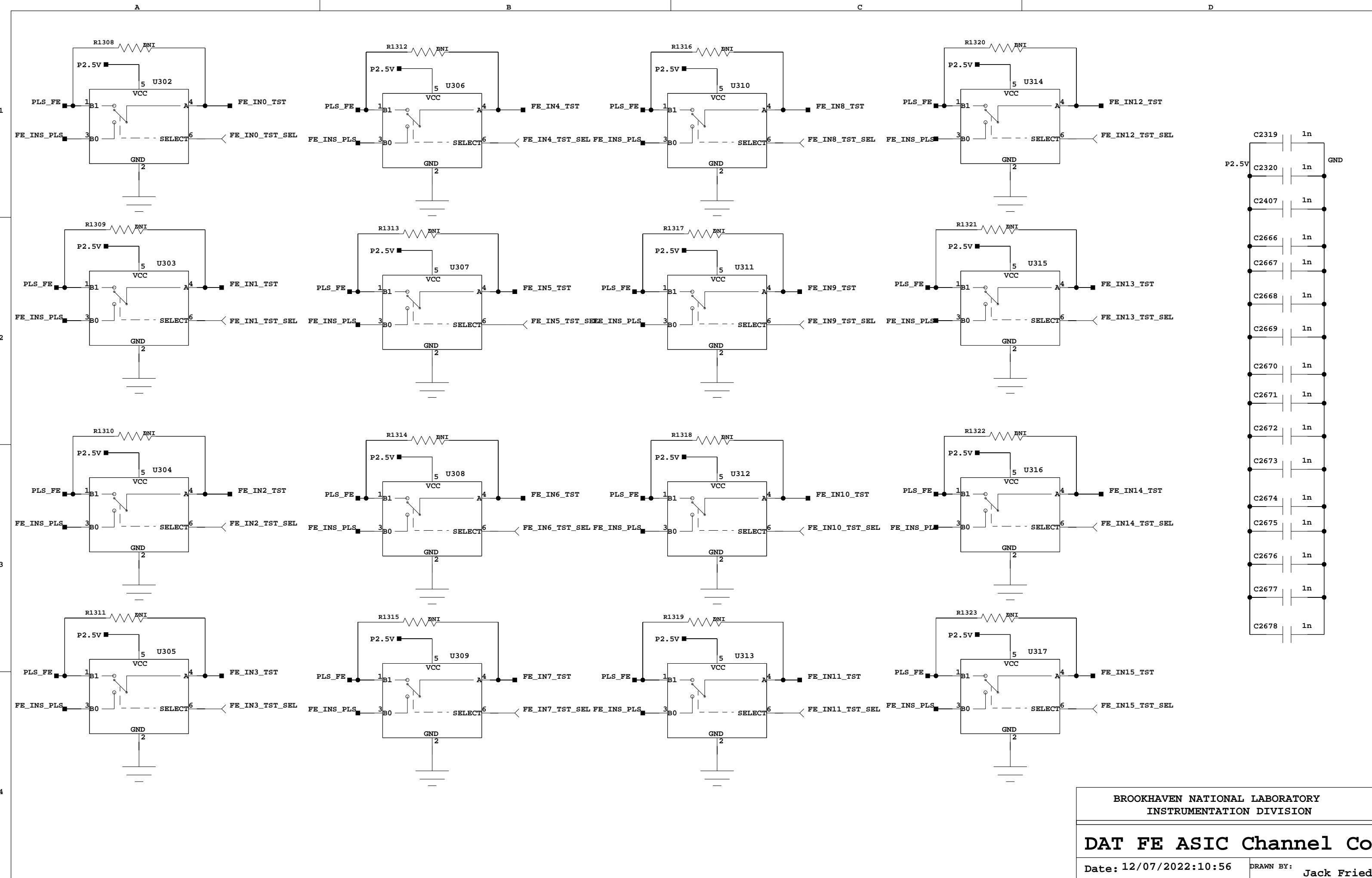
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SIZE B BOARD : DUNE ASIC TESTER
DRAWN : Jack Fried DATE : 28/02/2022:11:06

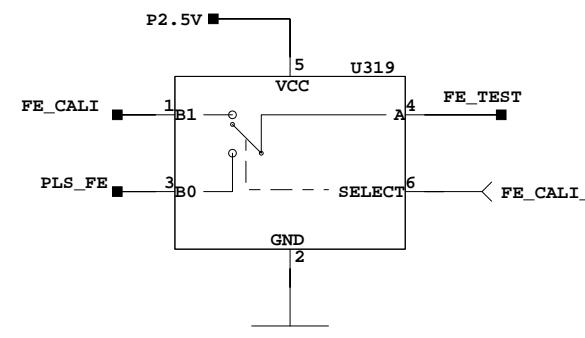
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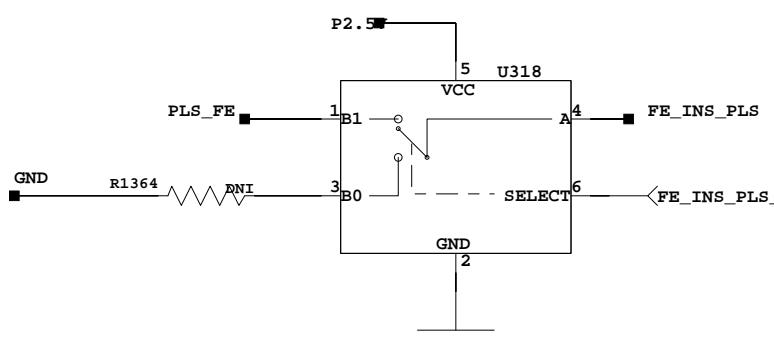




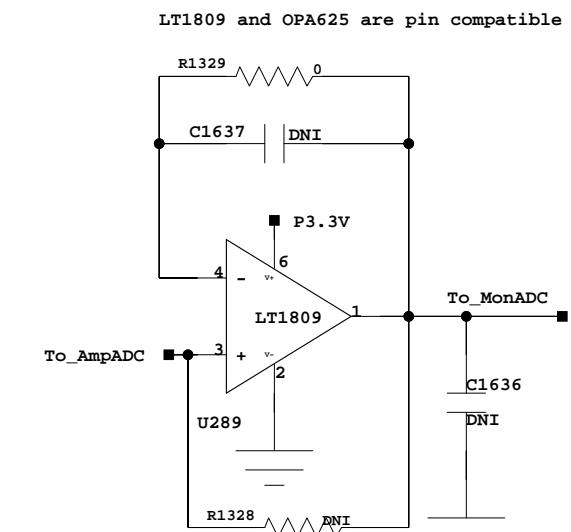
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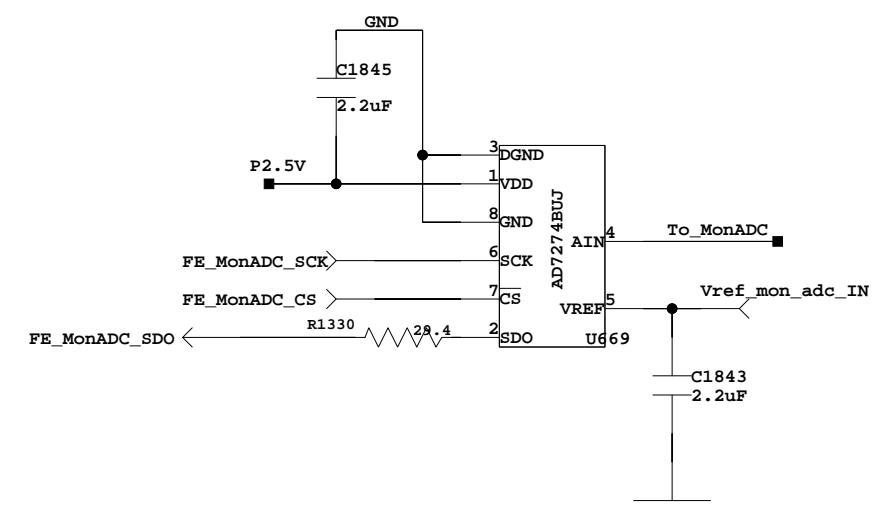
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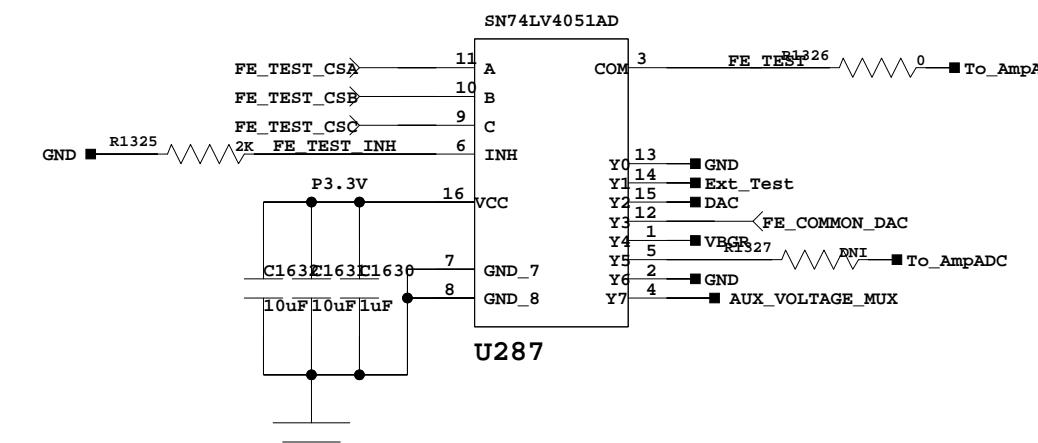
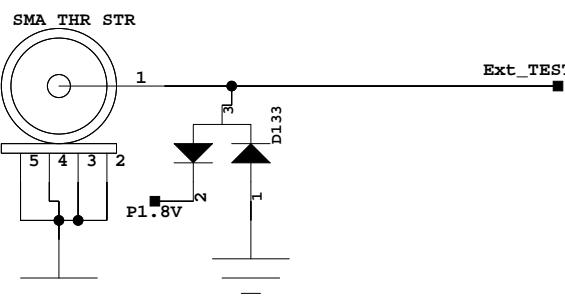
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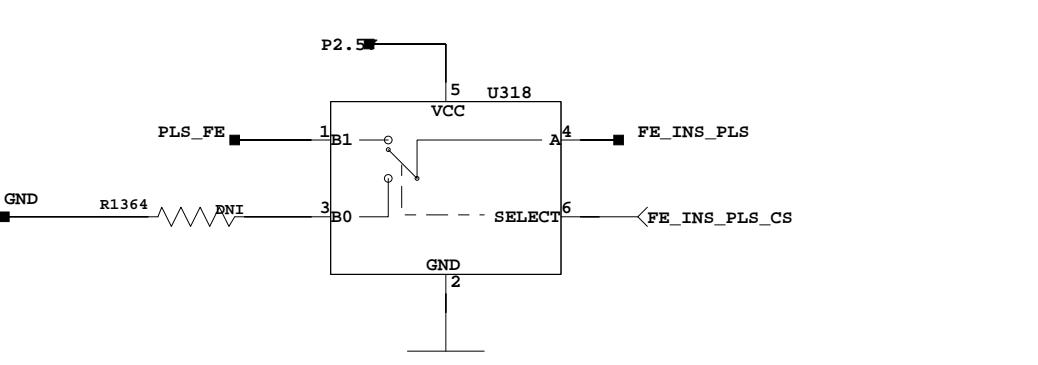
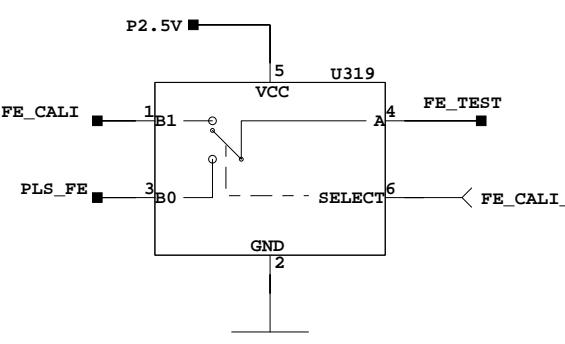
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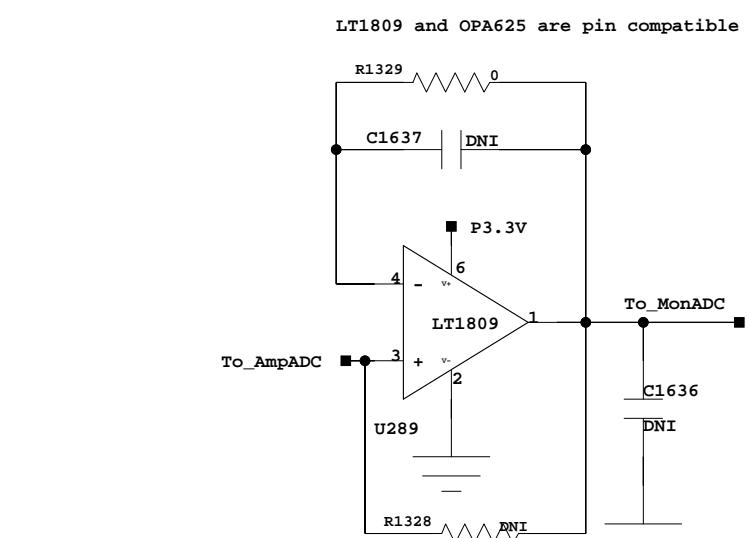
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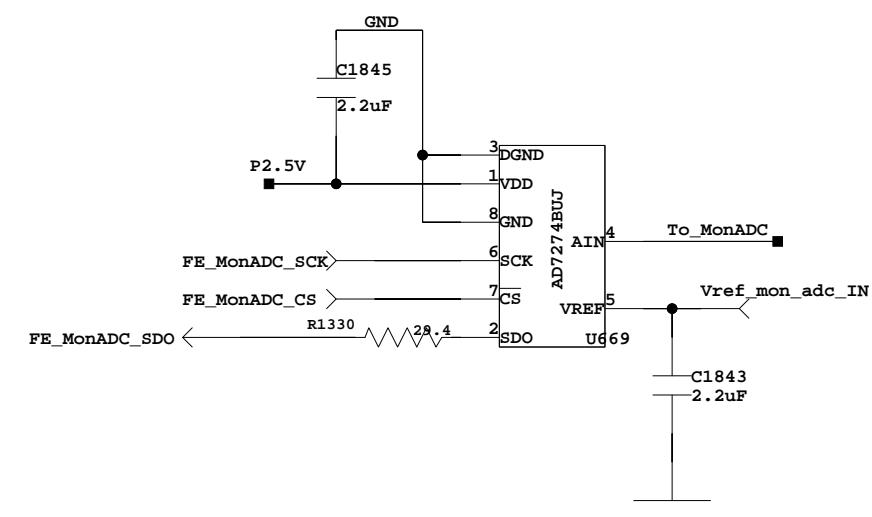
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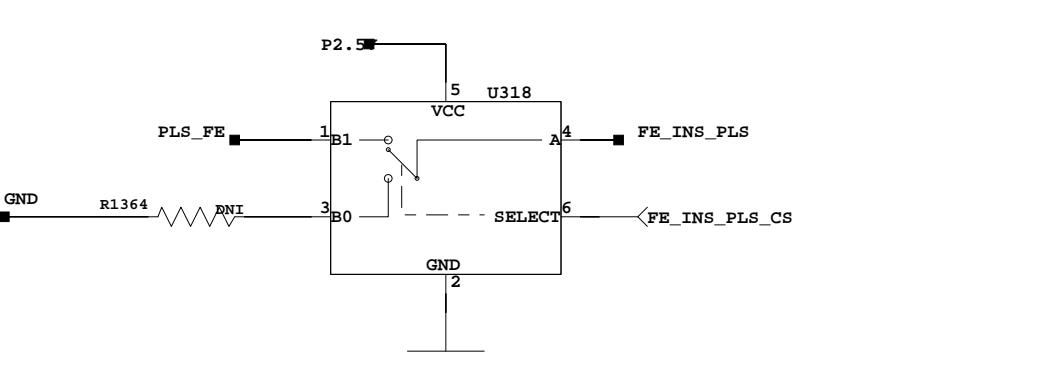
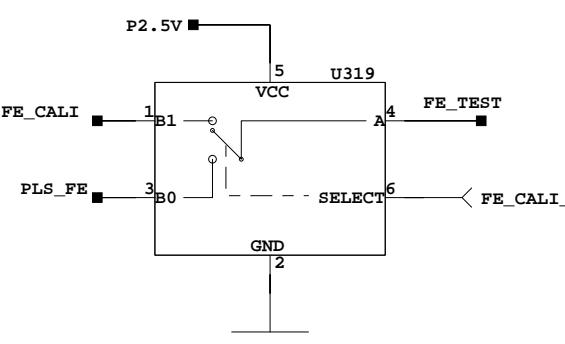
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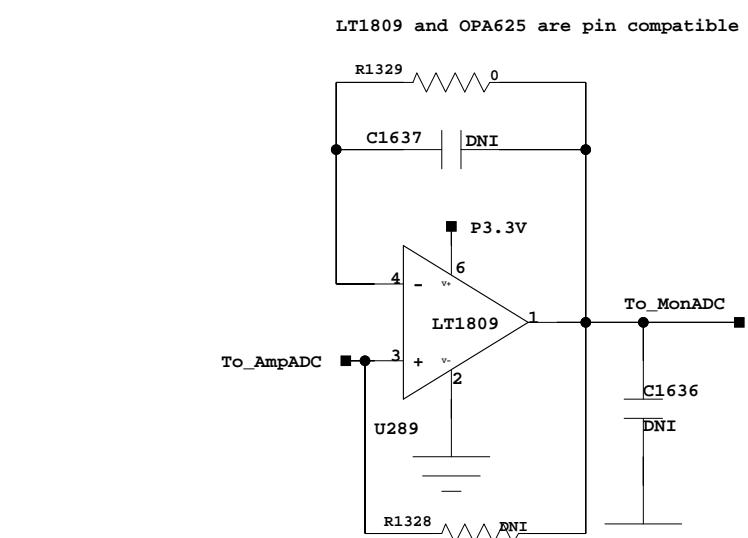
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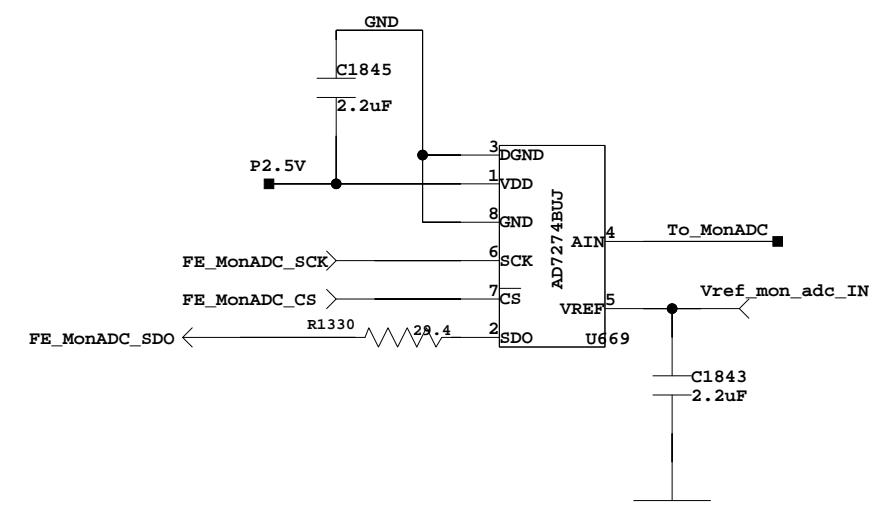
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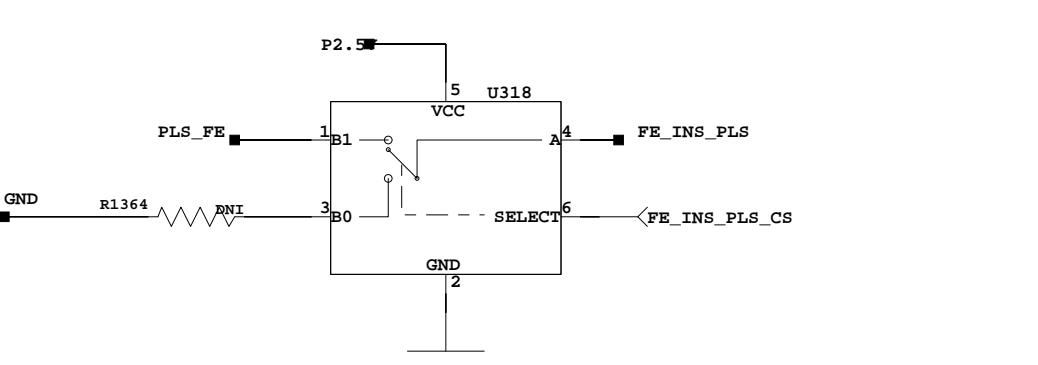
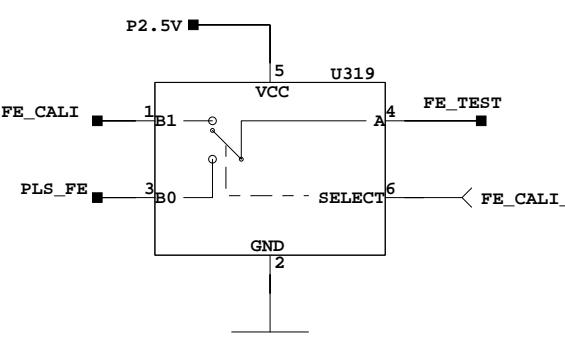
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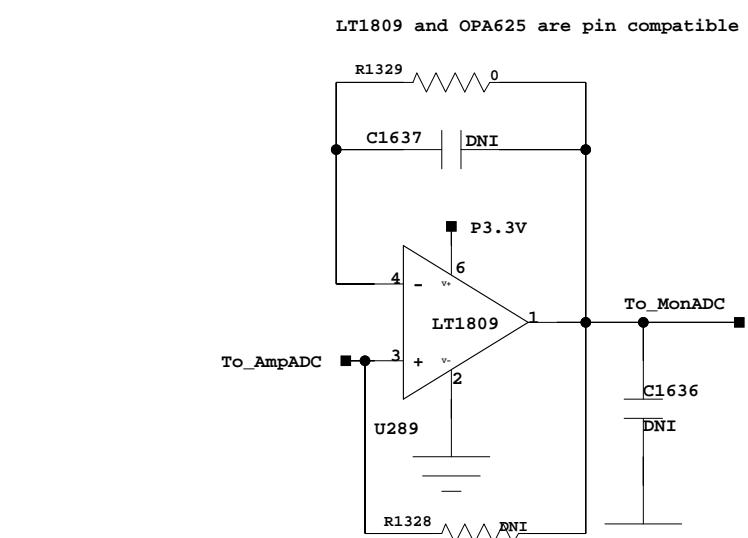
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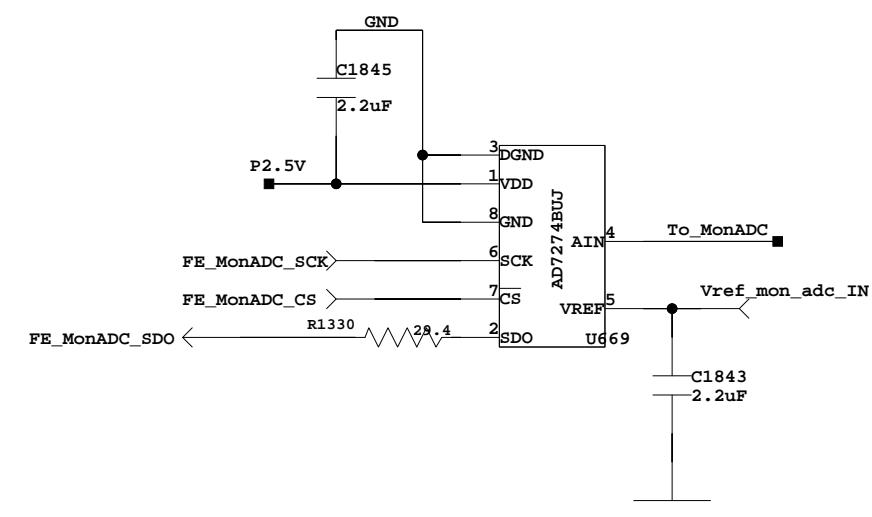
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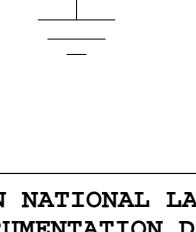
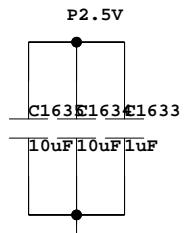
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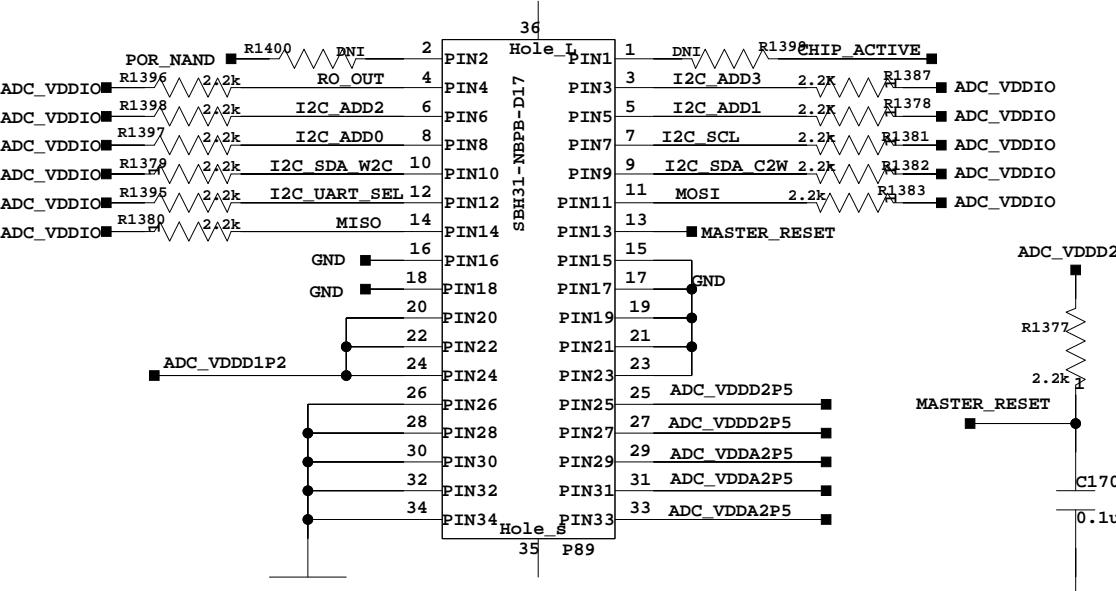
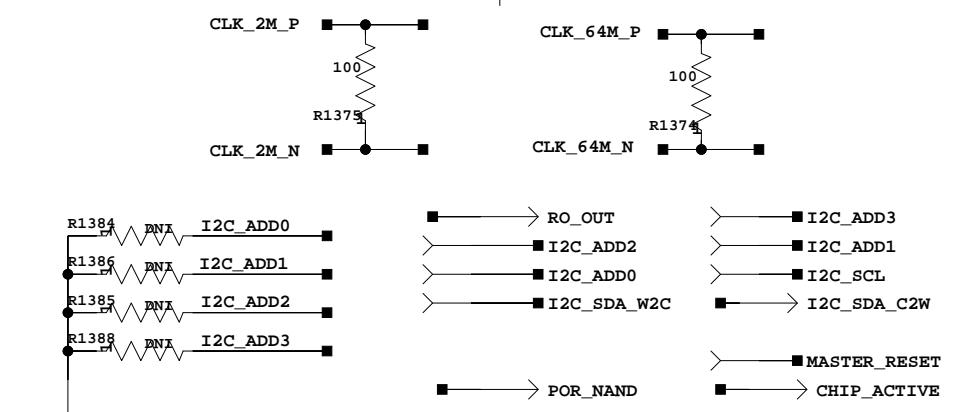
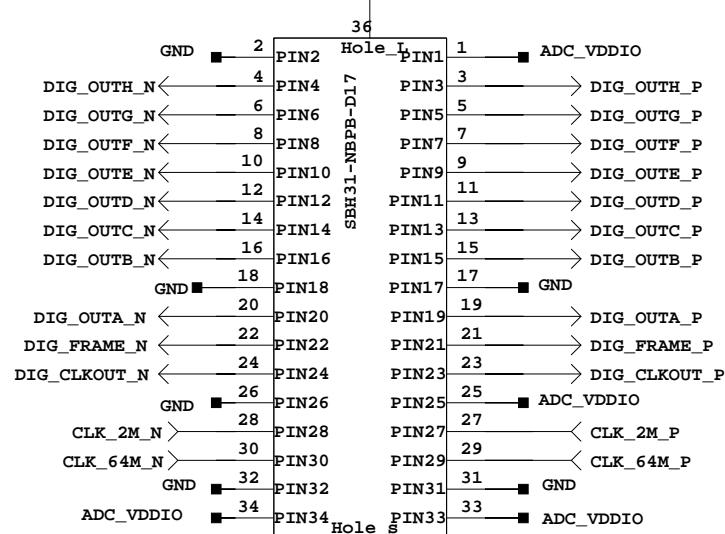
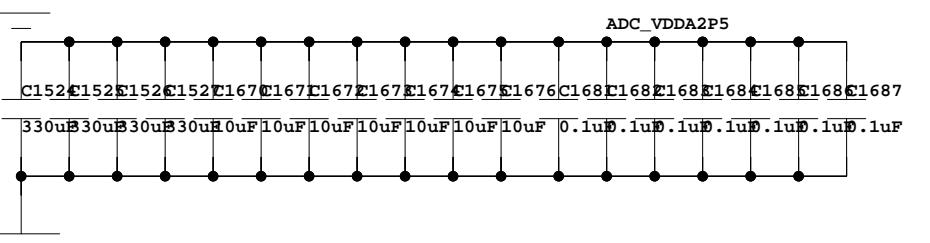
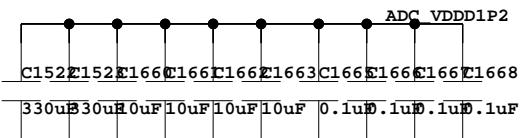
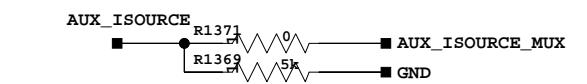
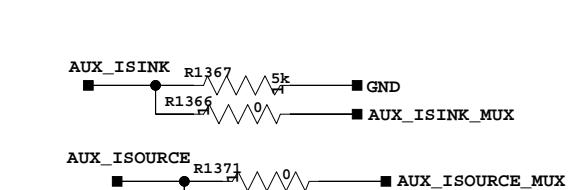
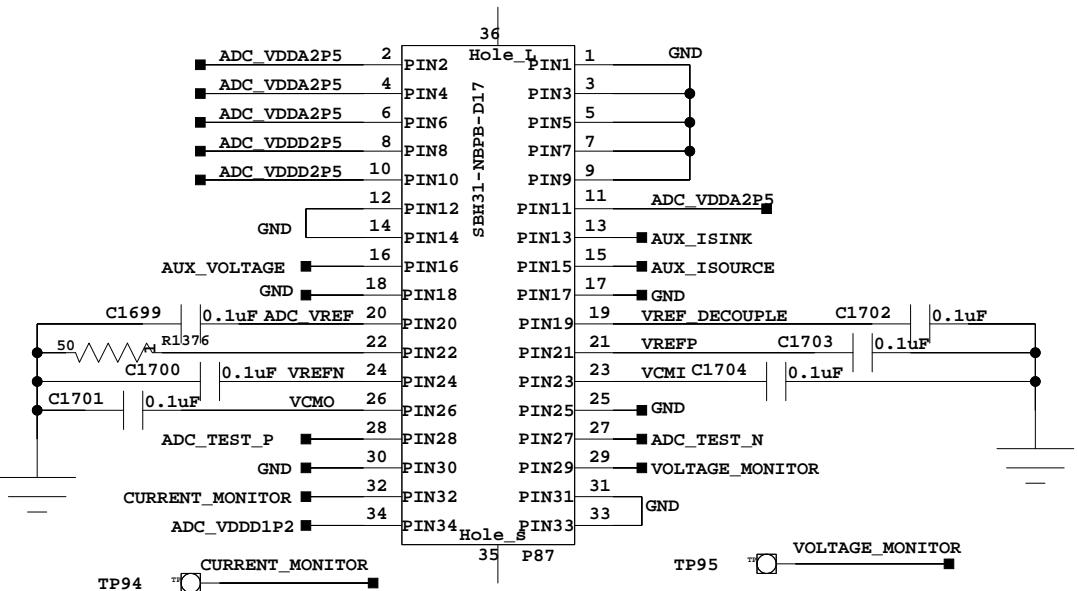
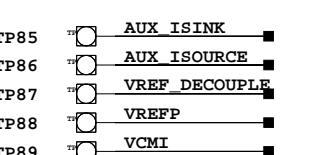
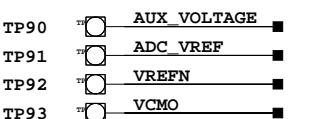
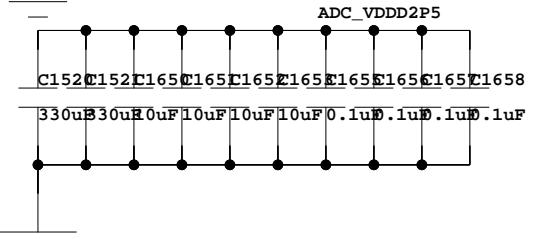
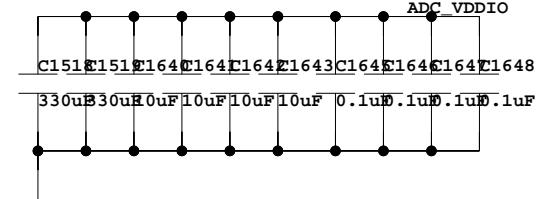
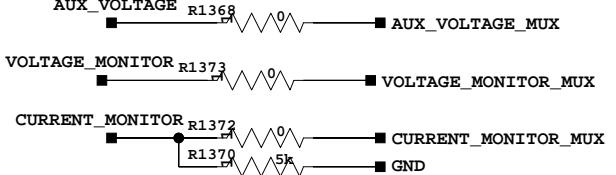
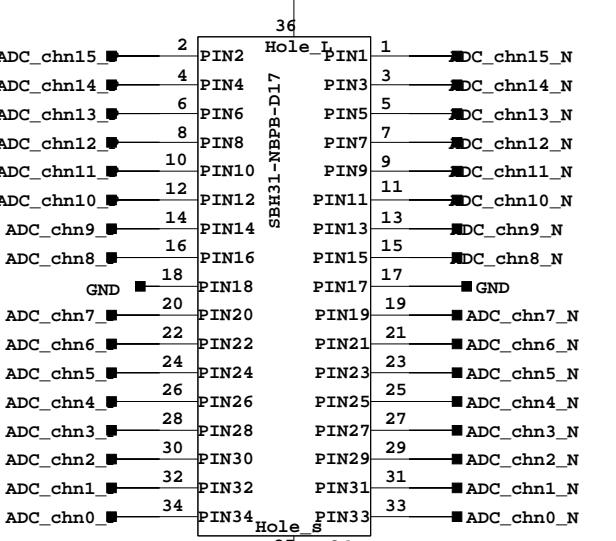


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011P ADC_chn11_P 011N ADC_chn11_N
010P ADC_chn10_P 010N ADC_chn10_N
09P ADC_chn9_P 09N ADC_chn9_N
08P ADC_chn8_P 08N ADC_chn8_N
07P ADC_chn7_P 07N ADC_chn7_N
06P ADC_chn6_P 06N ADC_chn6_N
05P ADC_chn5_P 05N ADC_chn5_N
04P ADC_chn4_P 04N ADC_chn4_N
03P ADC_chn3_P 03N ADC_chn3_N
02P ADC_chn2_P 02N ADC_chn2_N
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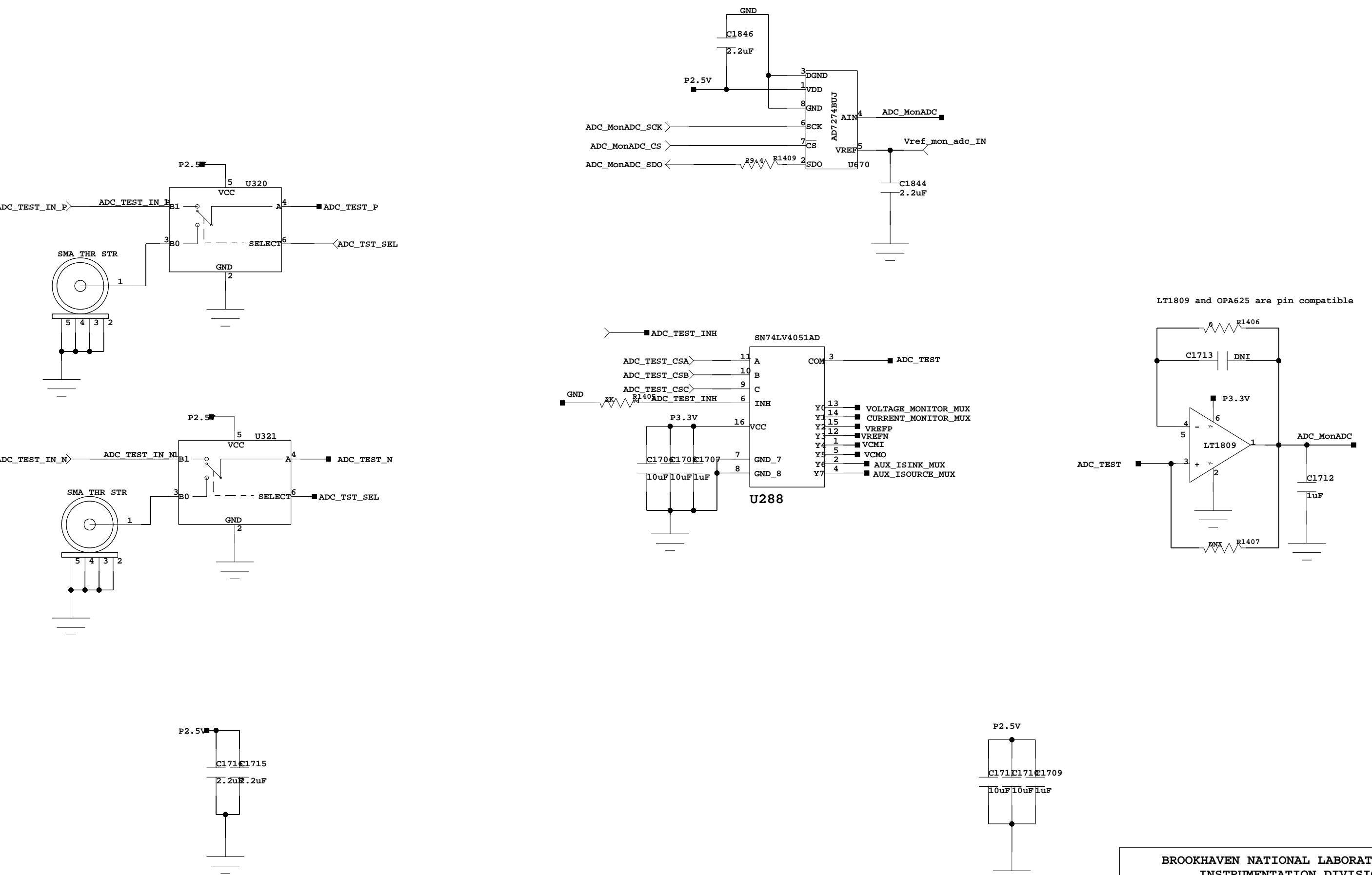
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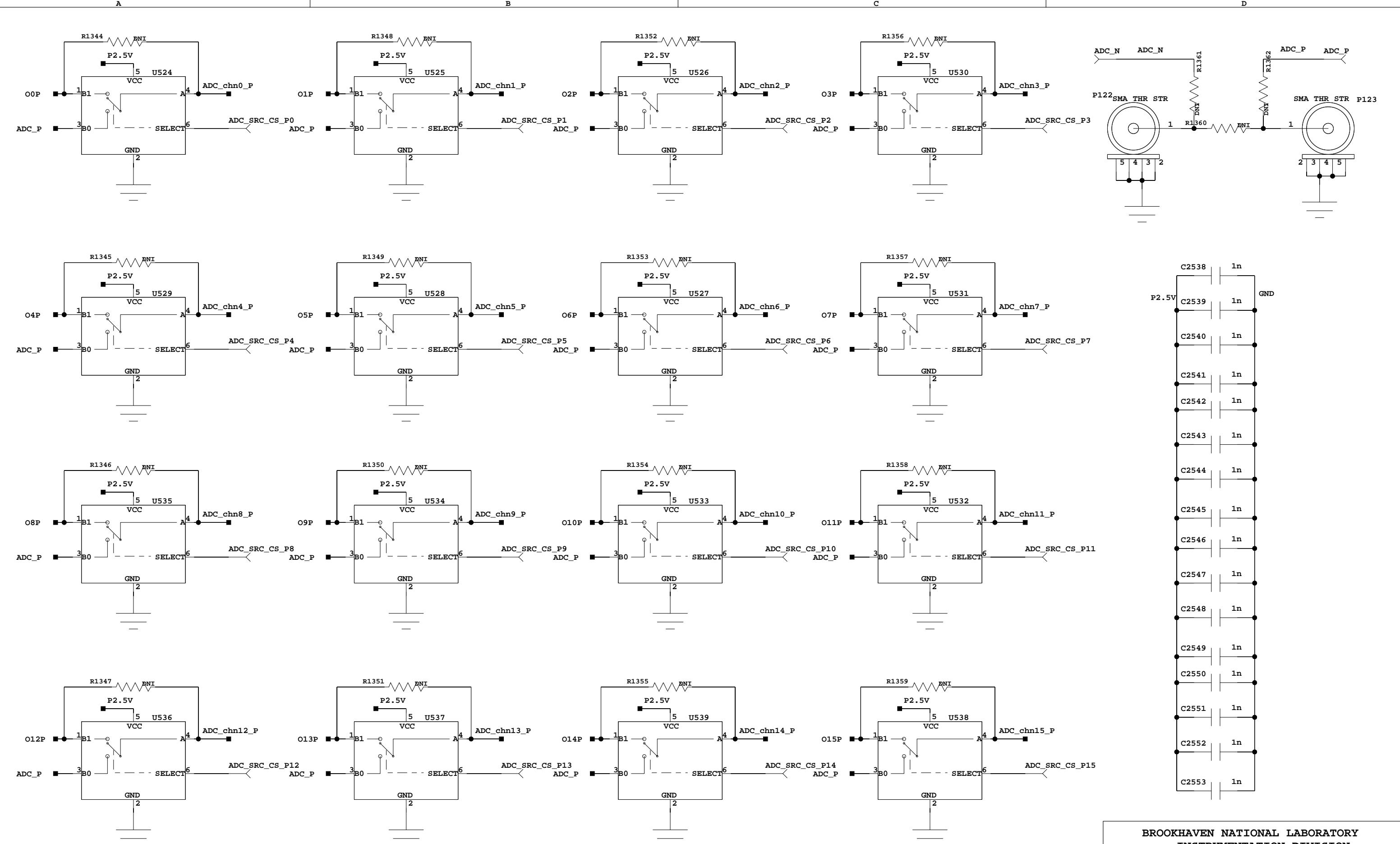
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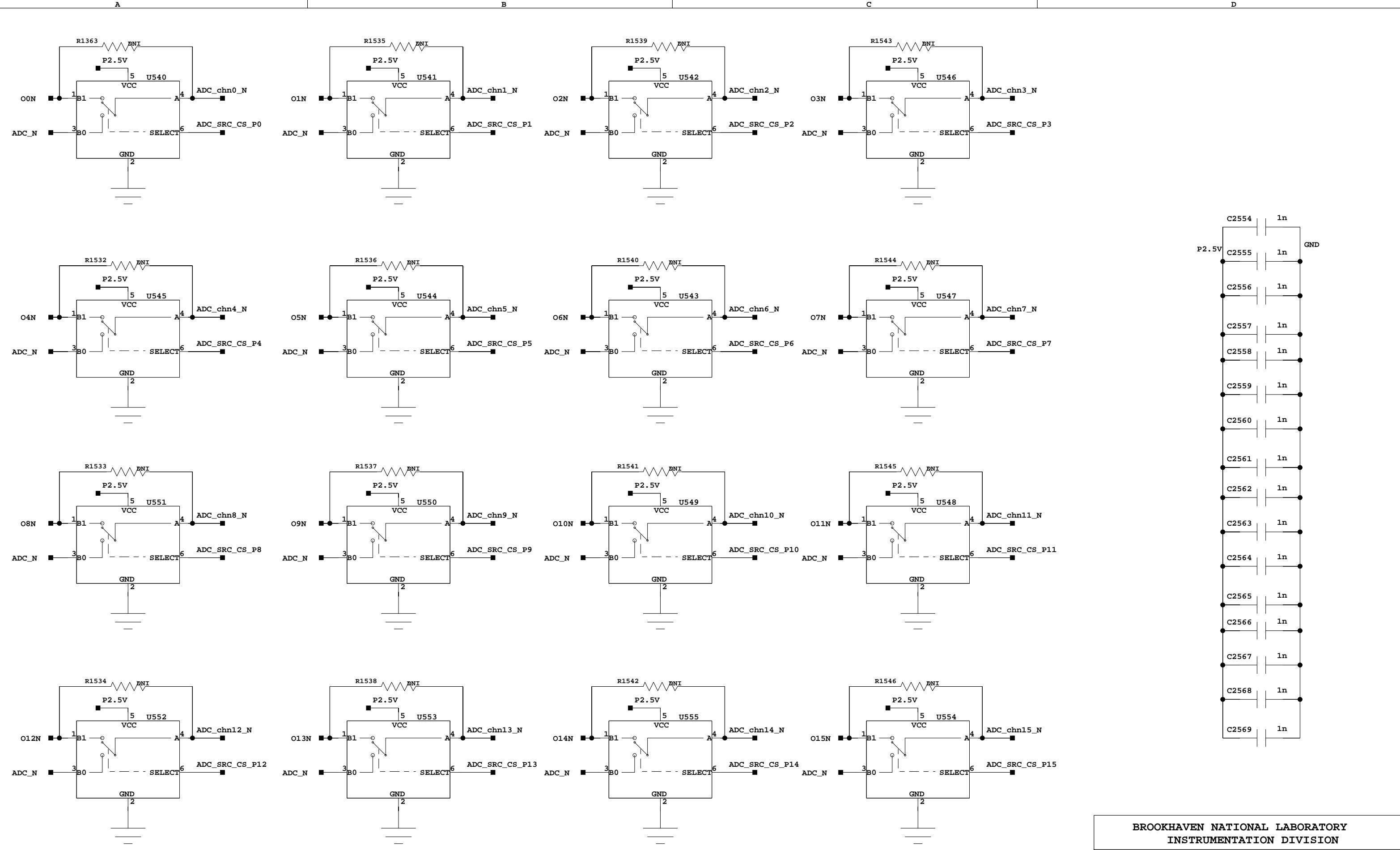
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DAT ADC SRC SEL_P

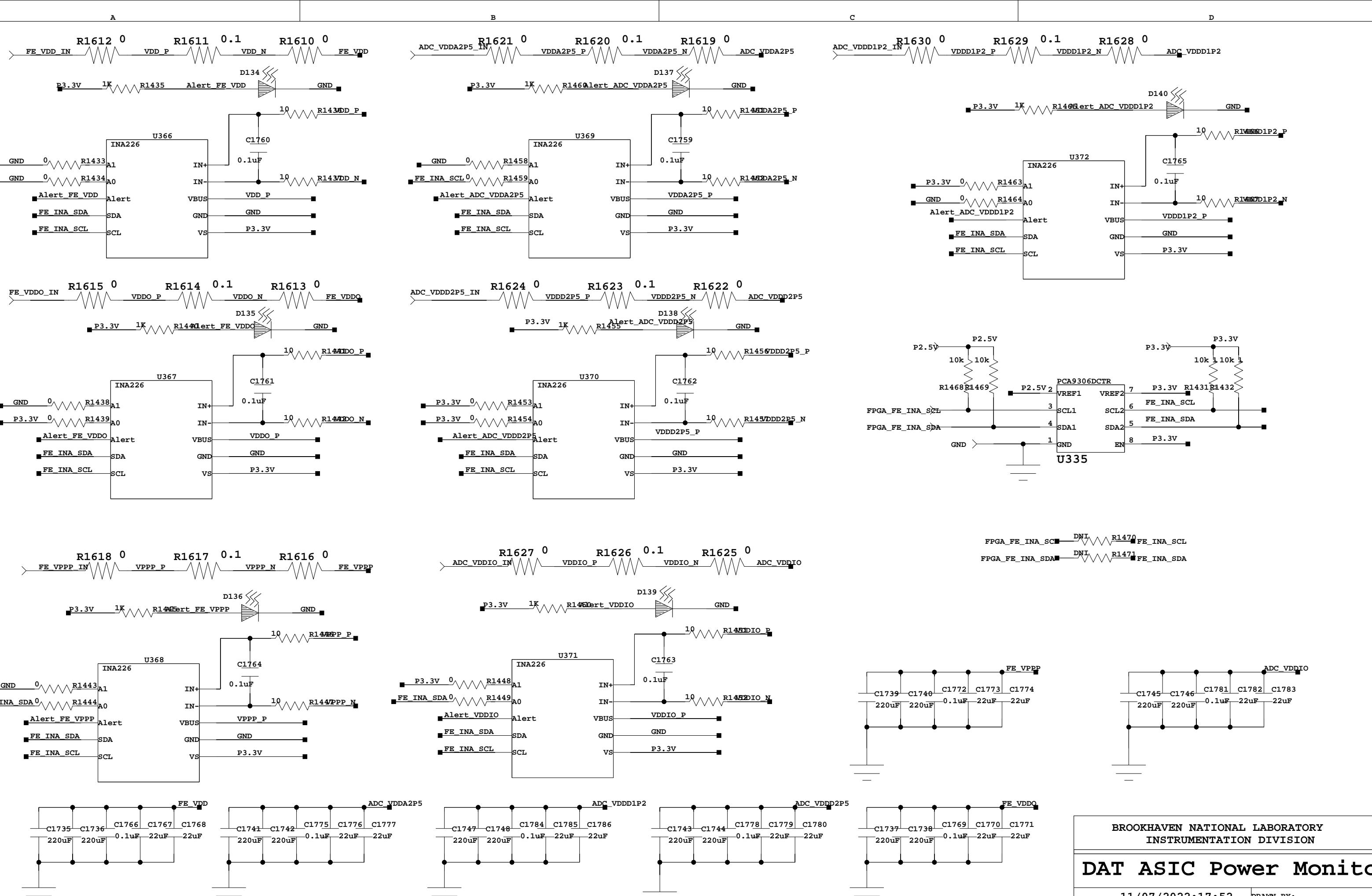
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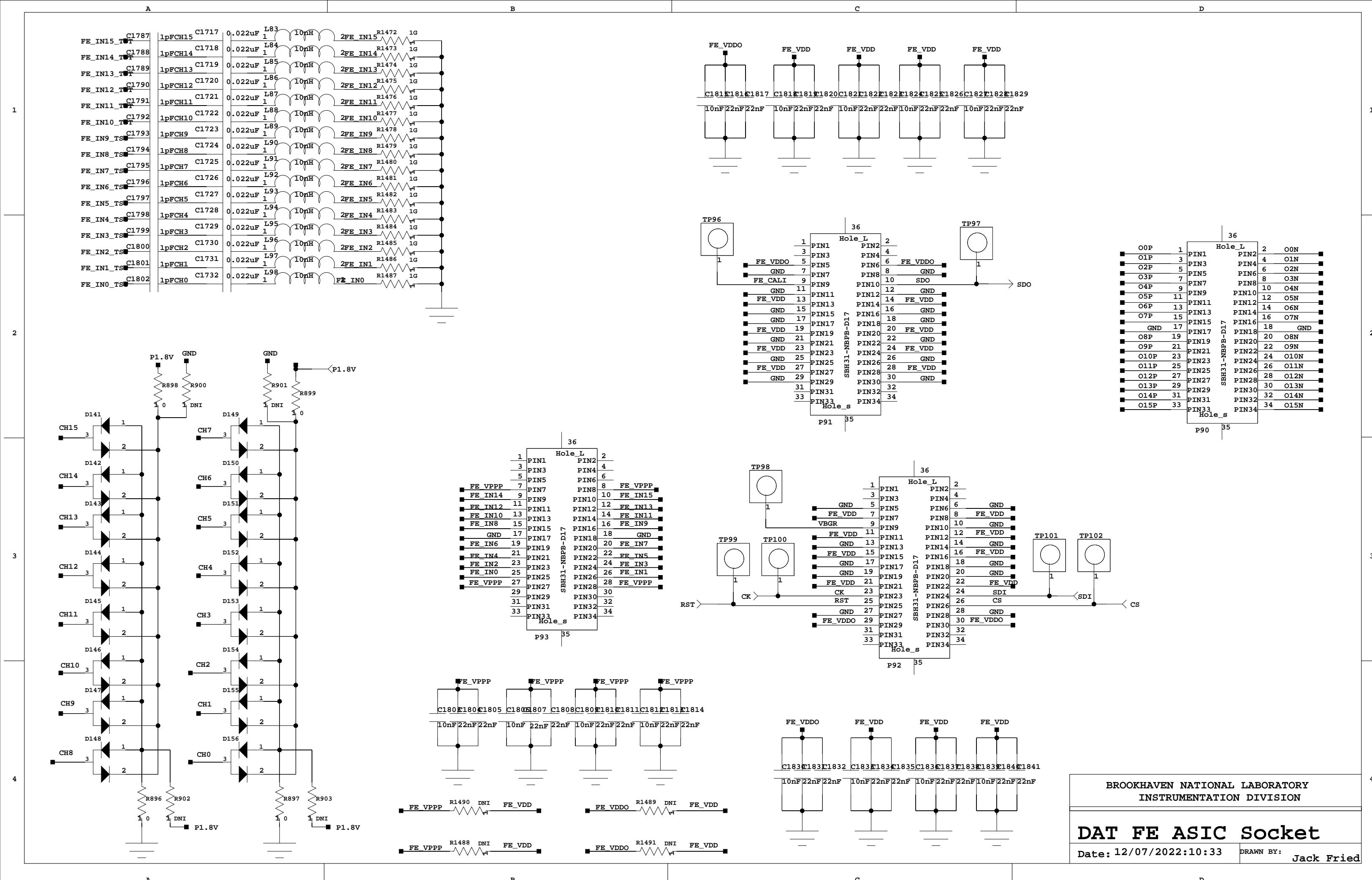


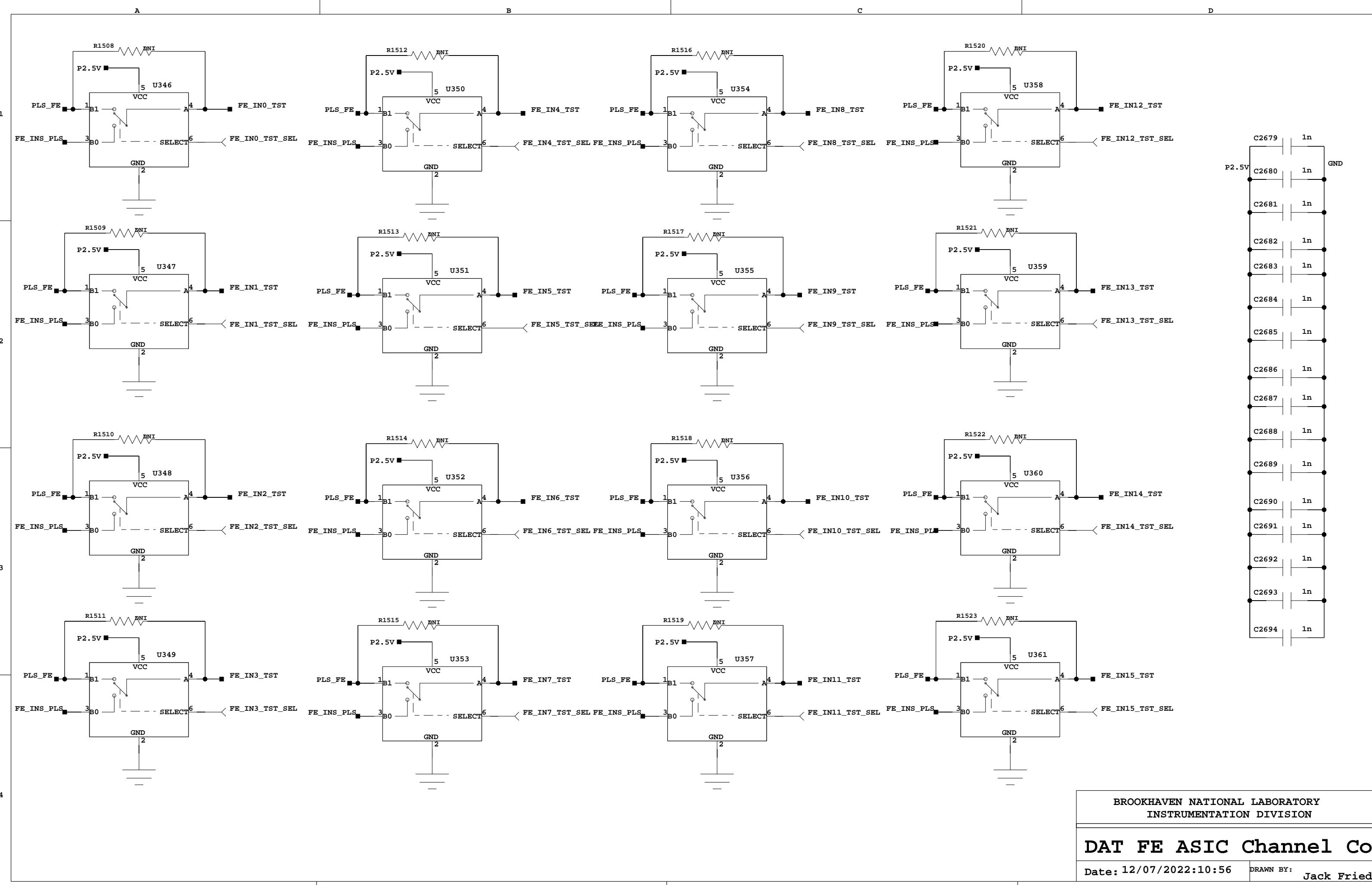
BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION

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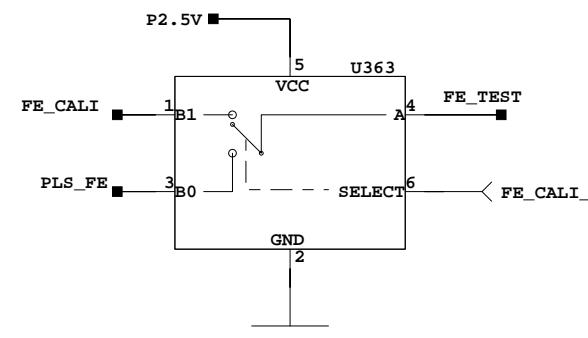
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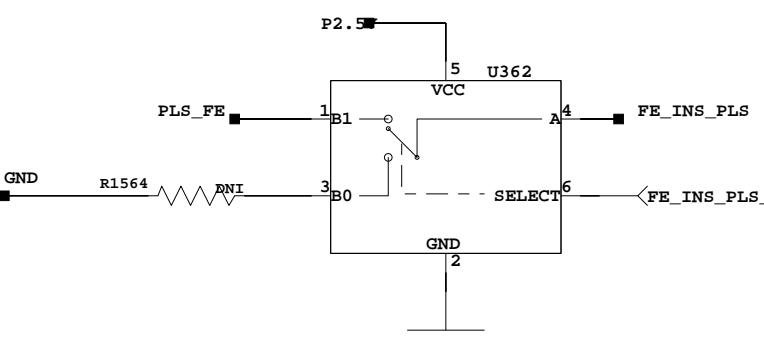




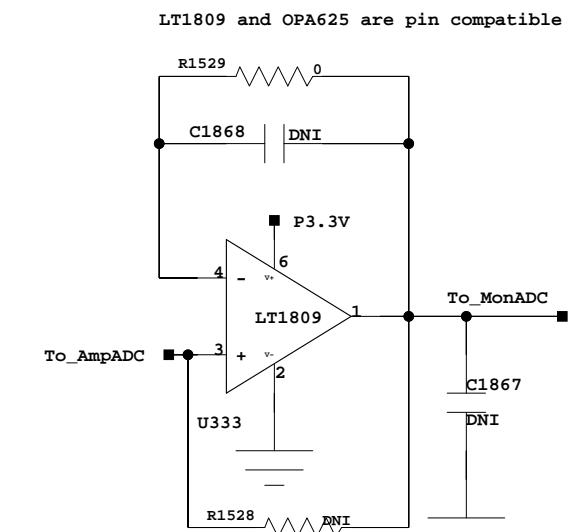
A



B



C

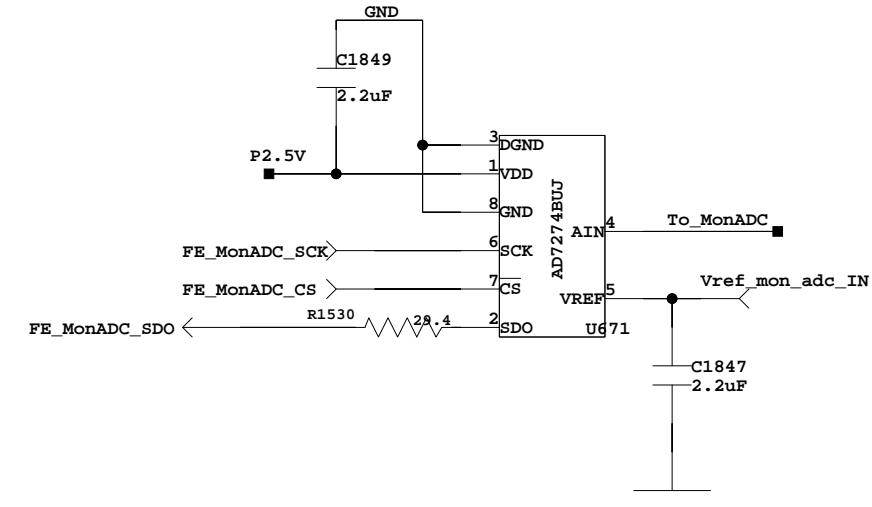
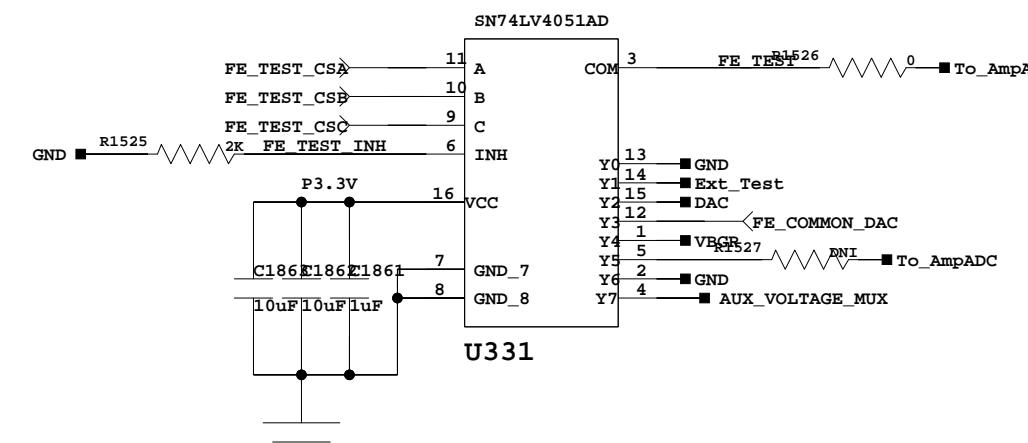
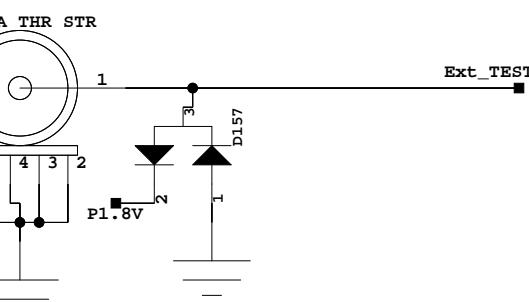


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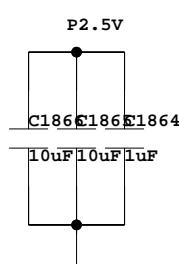
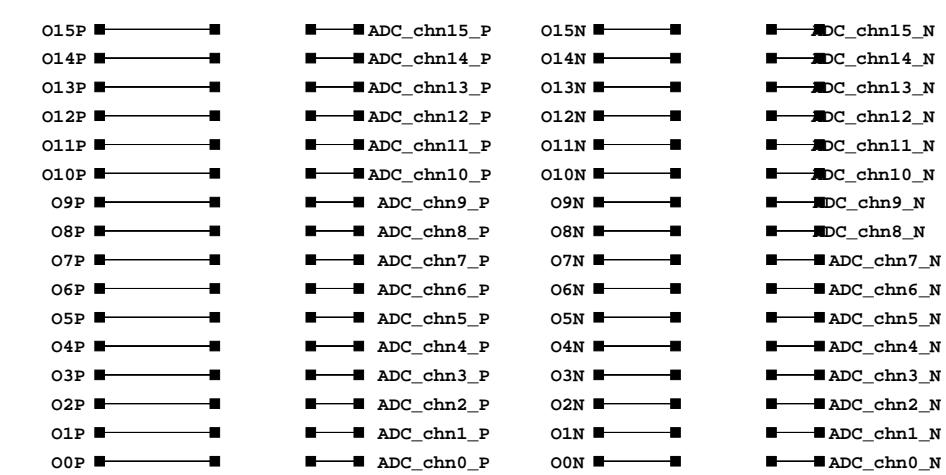
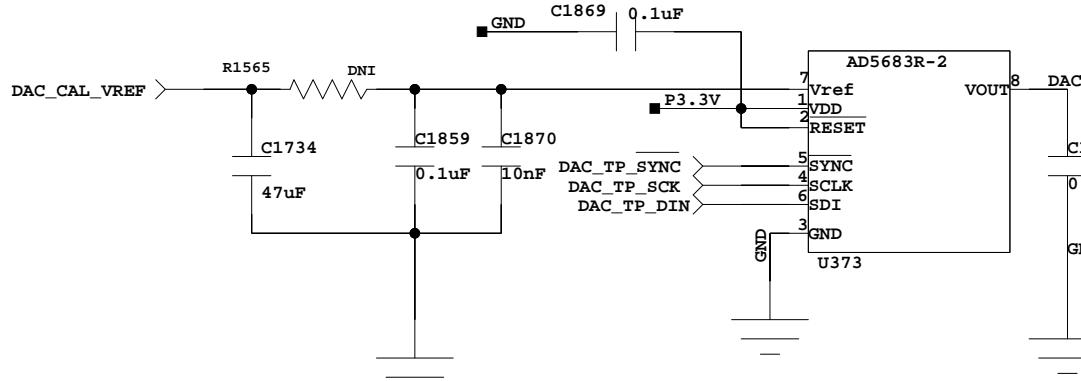
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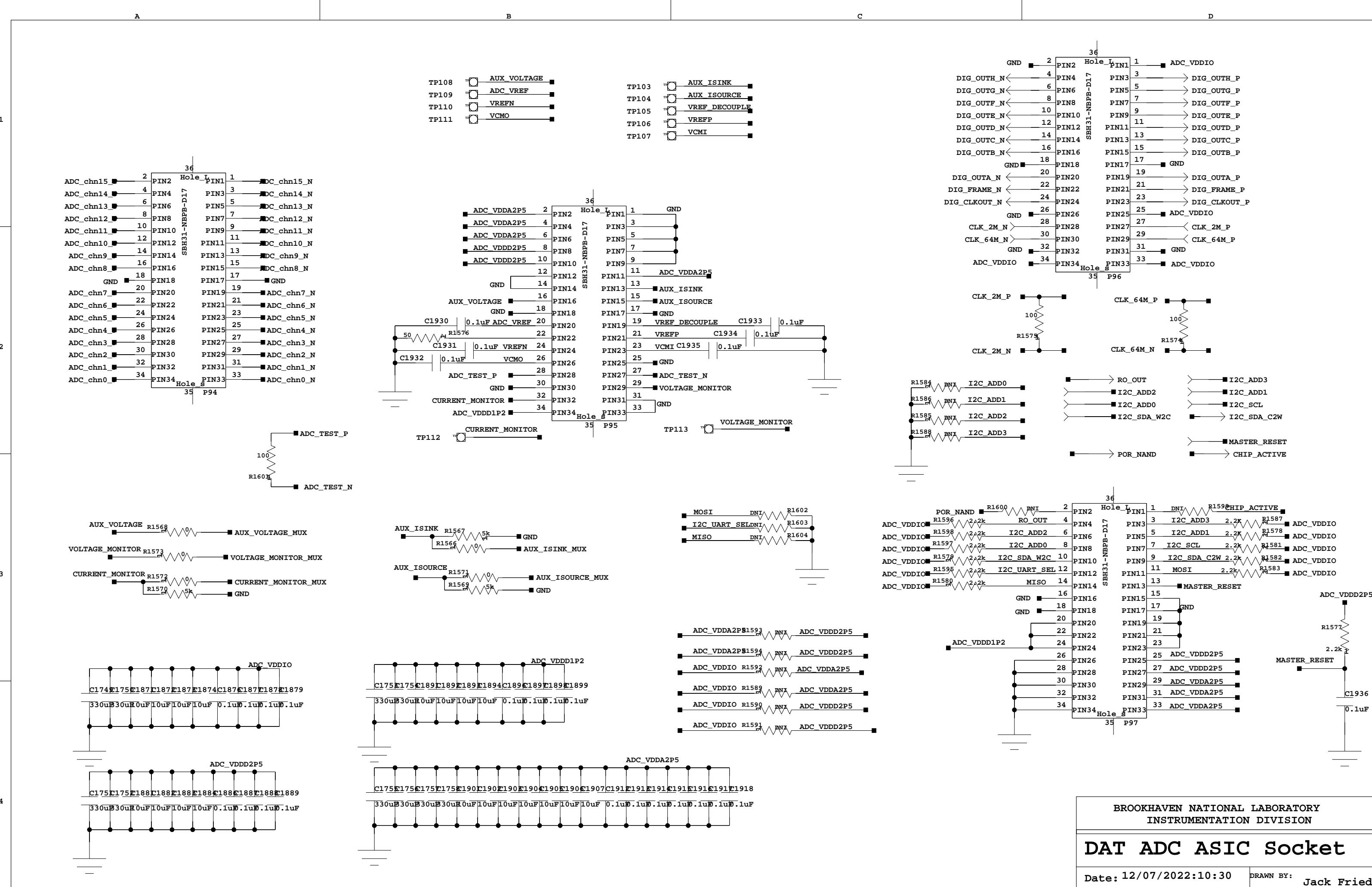
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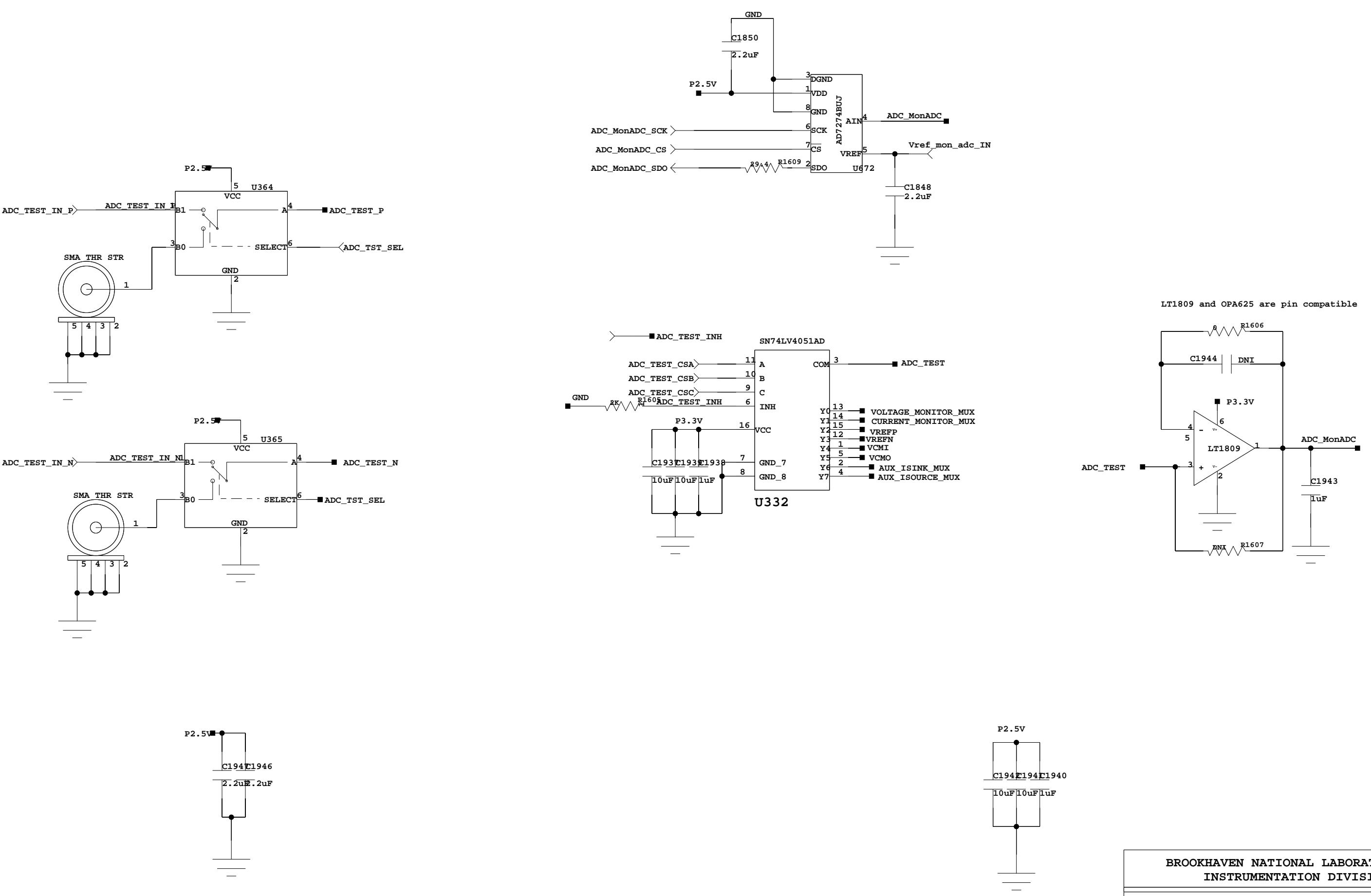


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DAT FE ASIC Calibration and Mo

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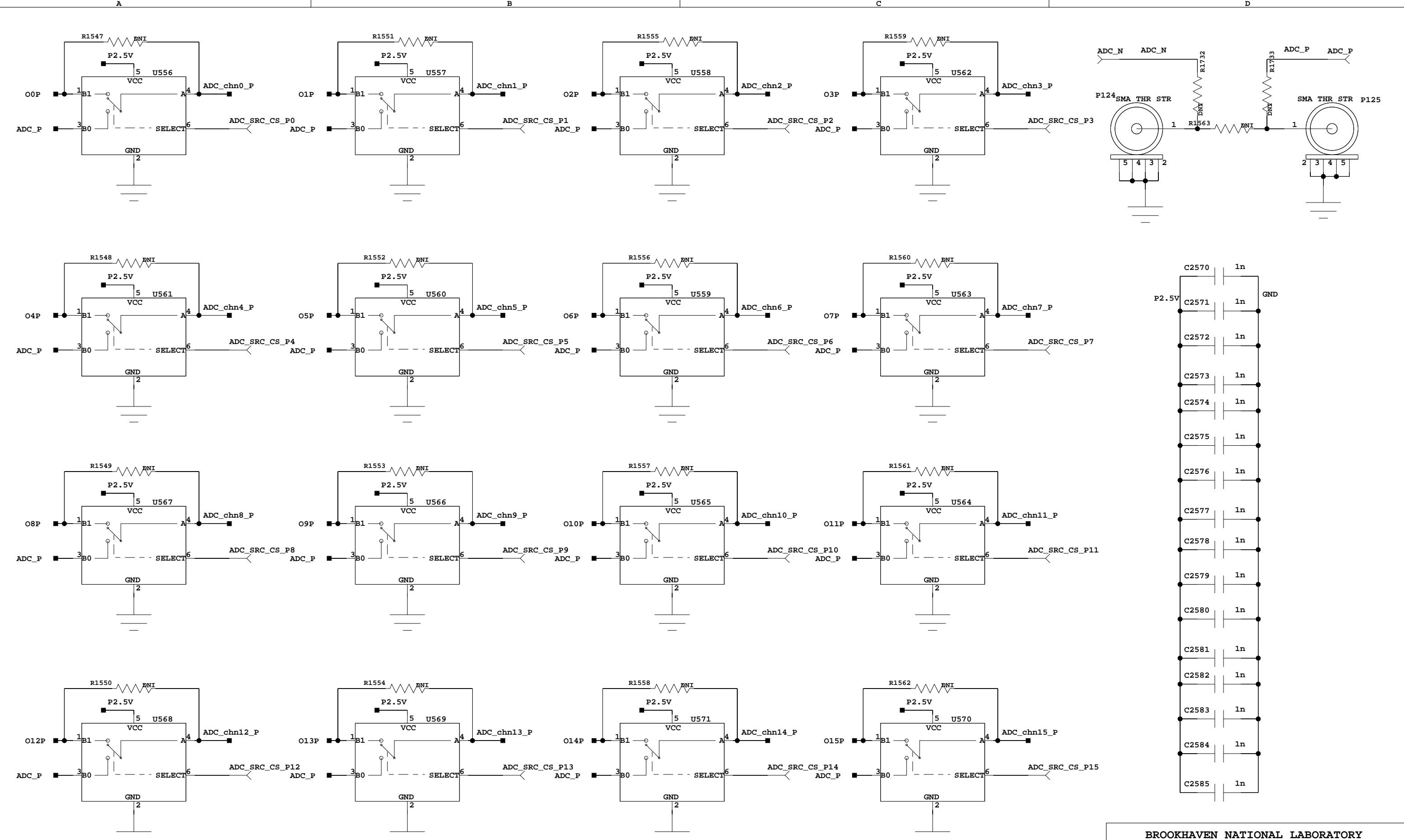




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DAT ADC ASIC Calibration and M

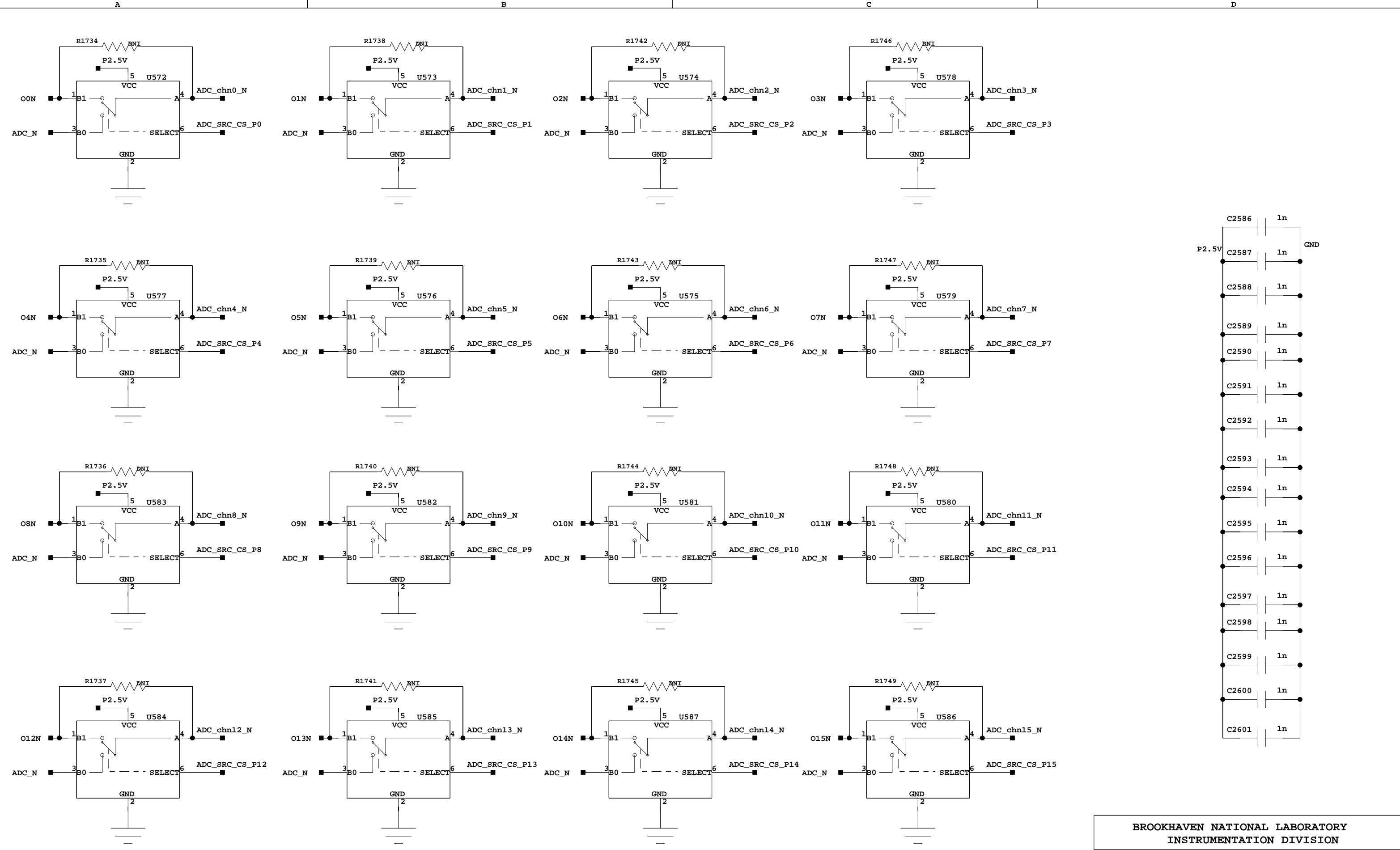
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INSTRUMENTATION DIVISION

DAT ADC SRC SEL_P

Date: 12/07/2022:10:31 DRAWN BY: Jack Fried



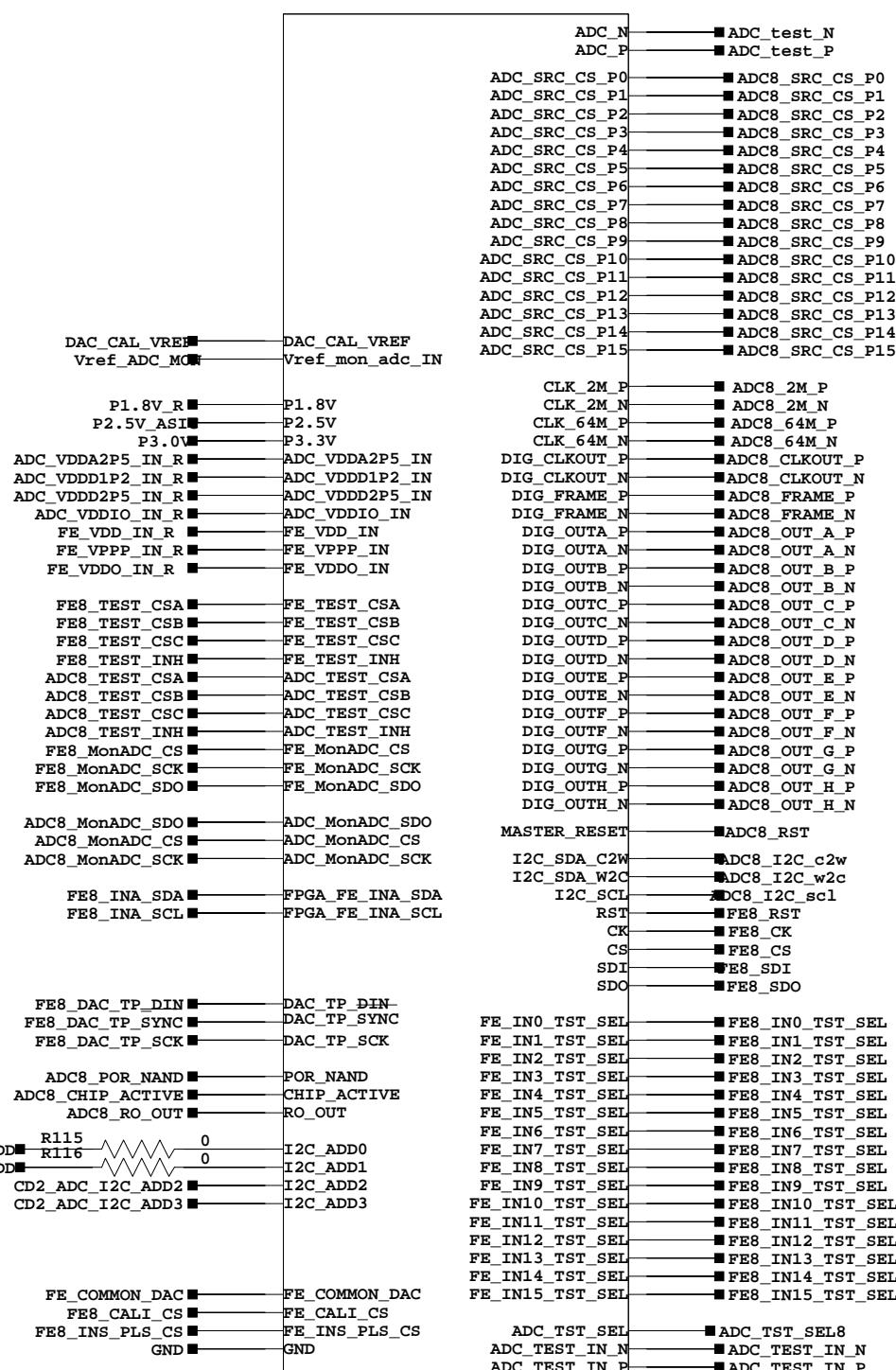
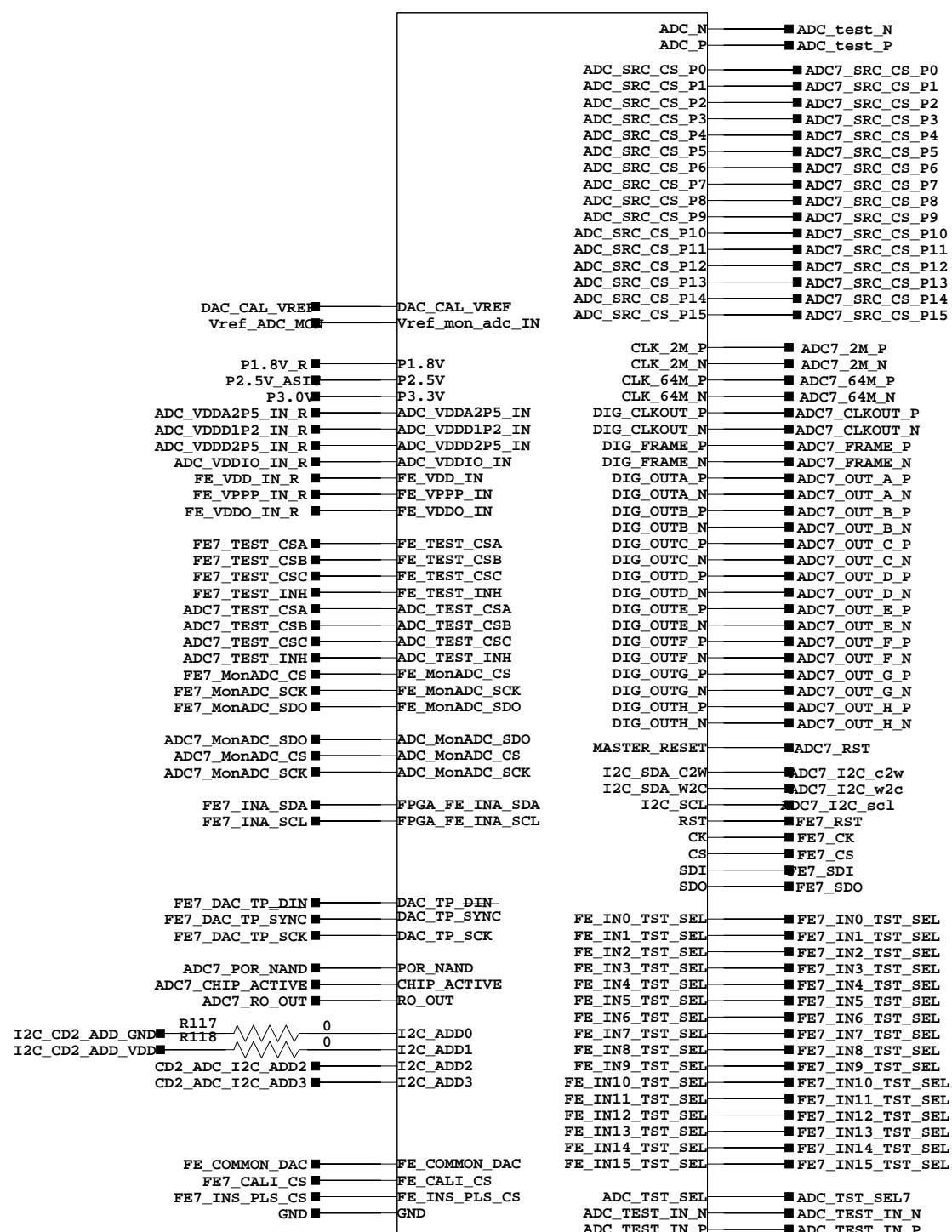
BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION

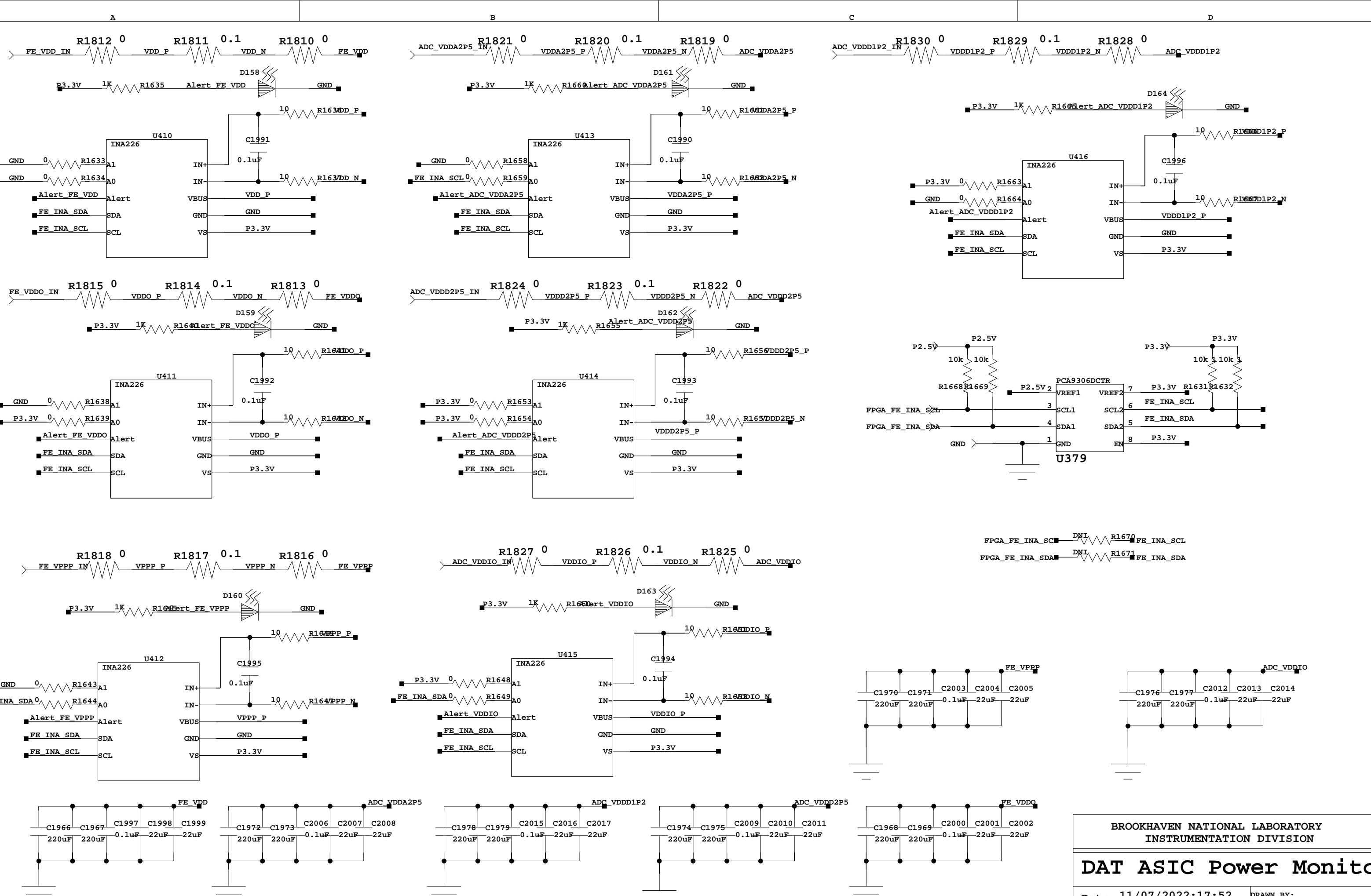
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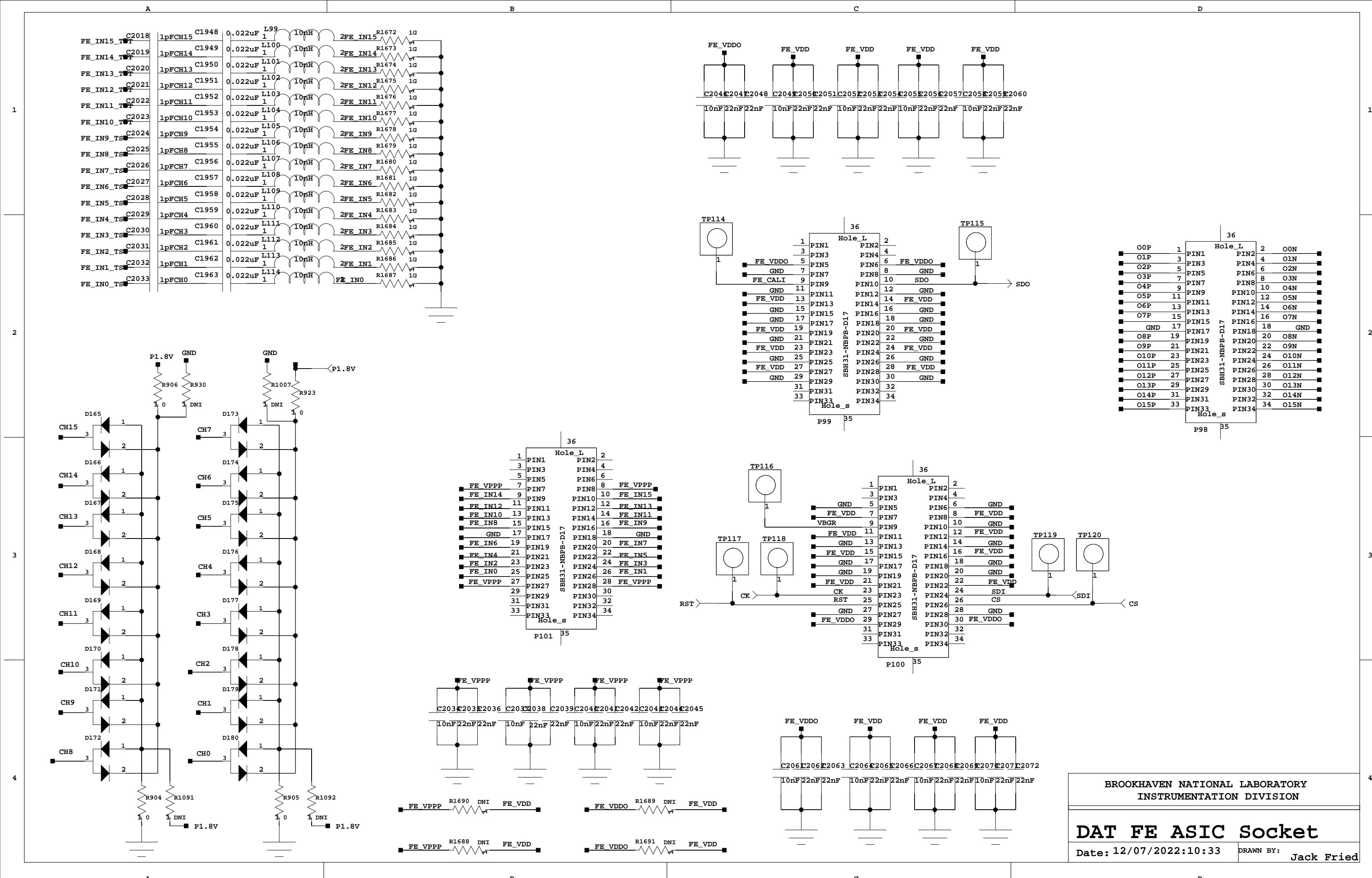
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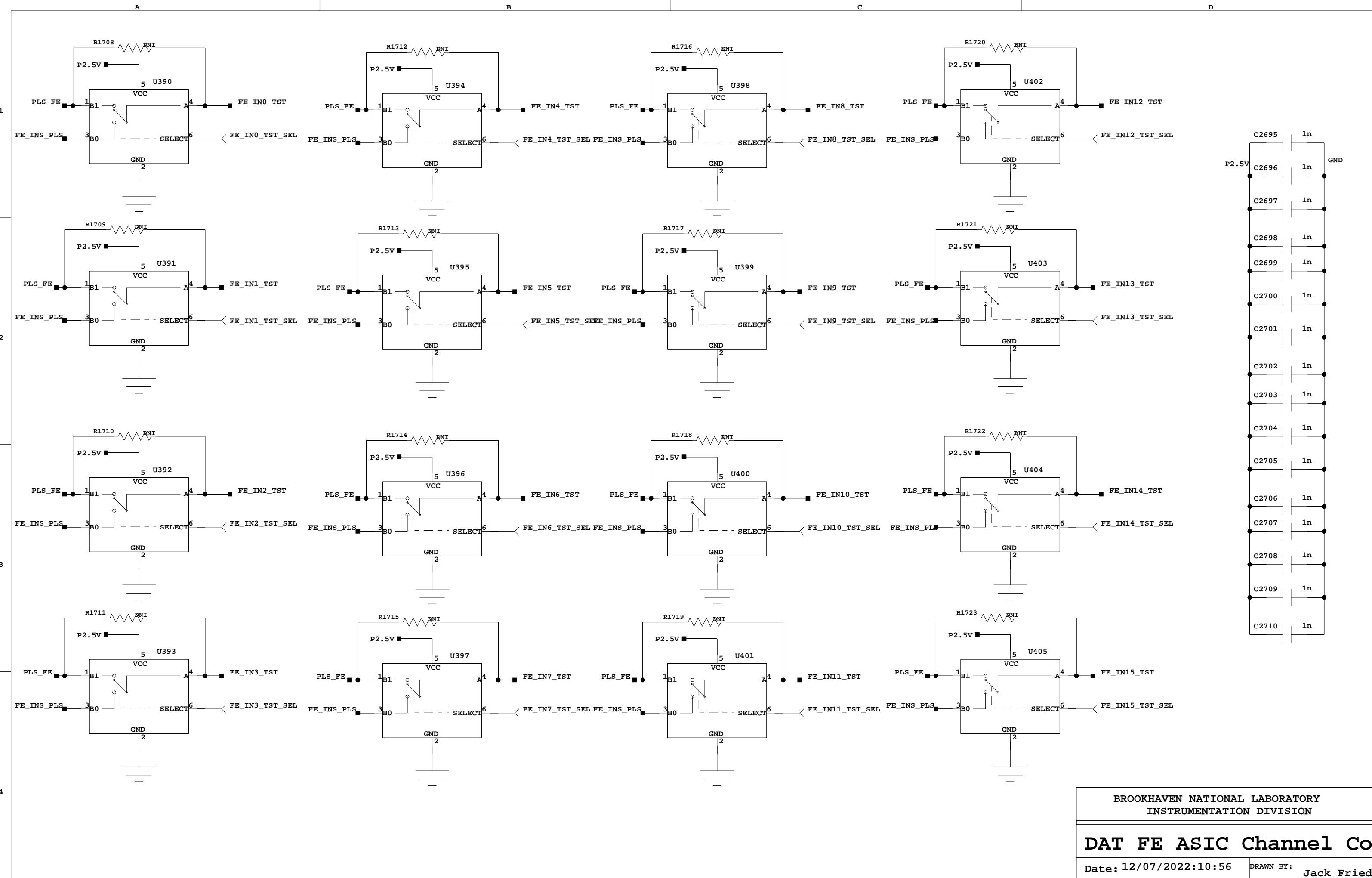
A ASIC CHAIN 7

B ASIC CHAIN 8





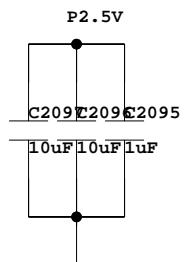
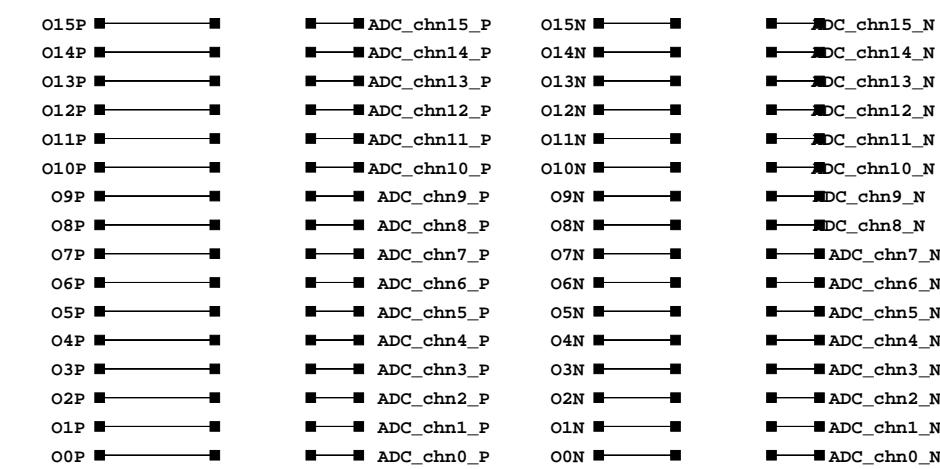
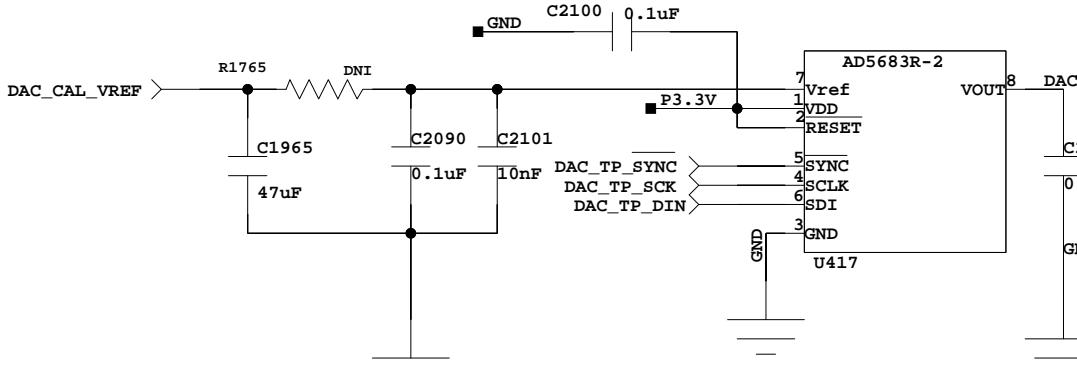
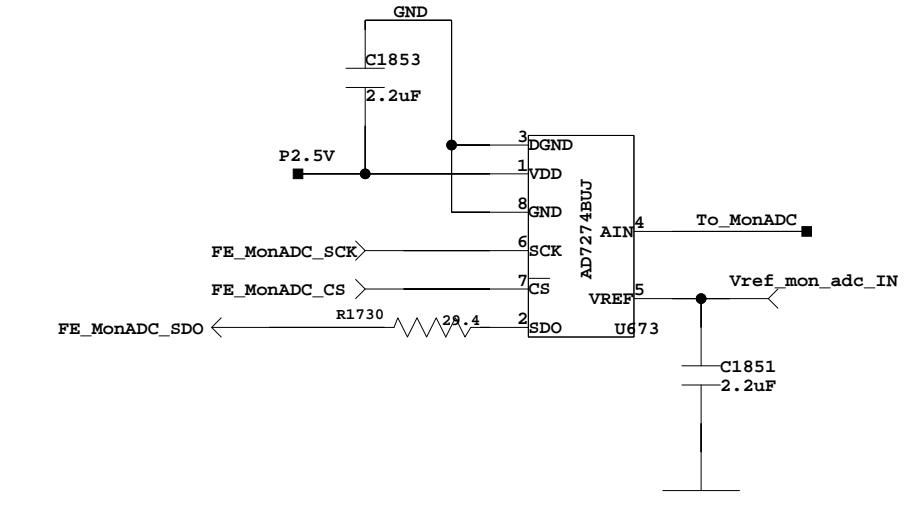
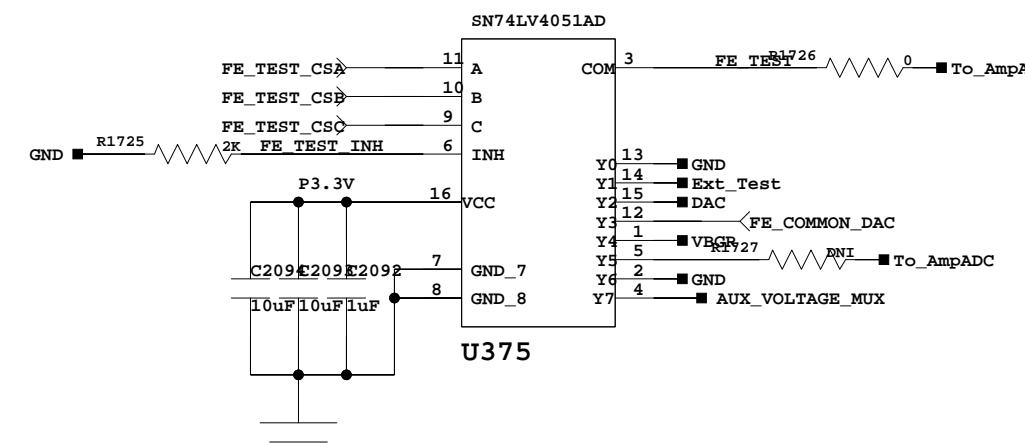
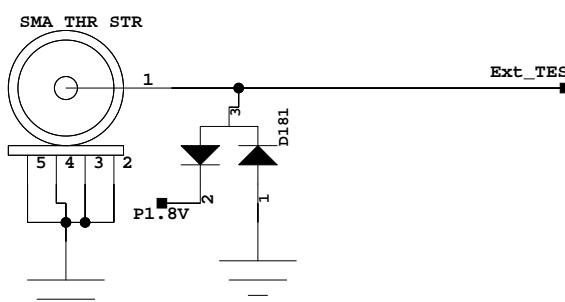
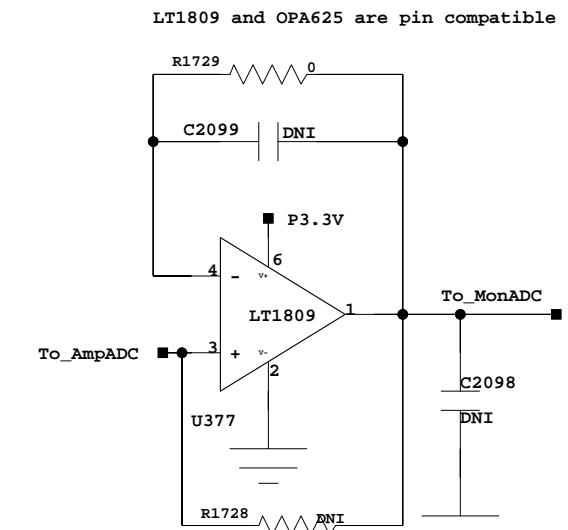
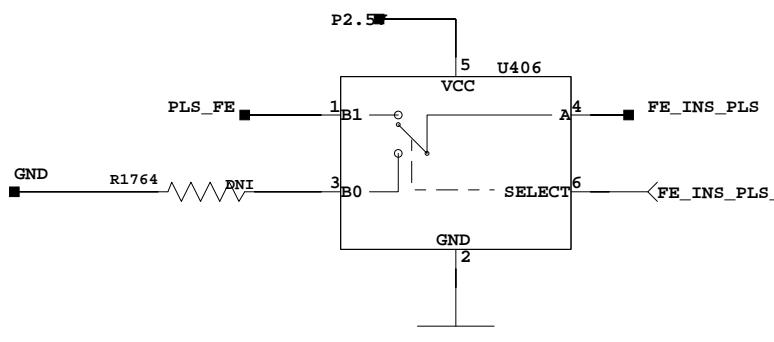
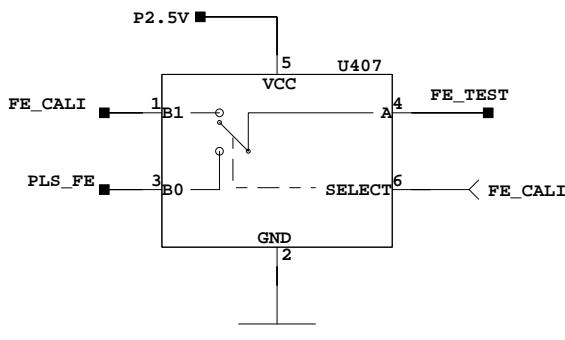




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DAT FE ASIC Channel Cont

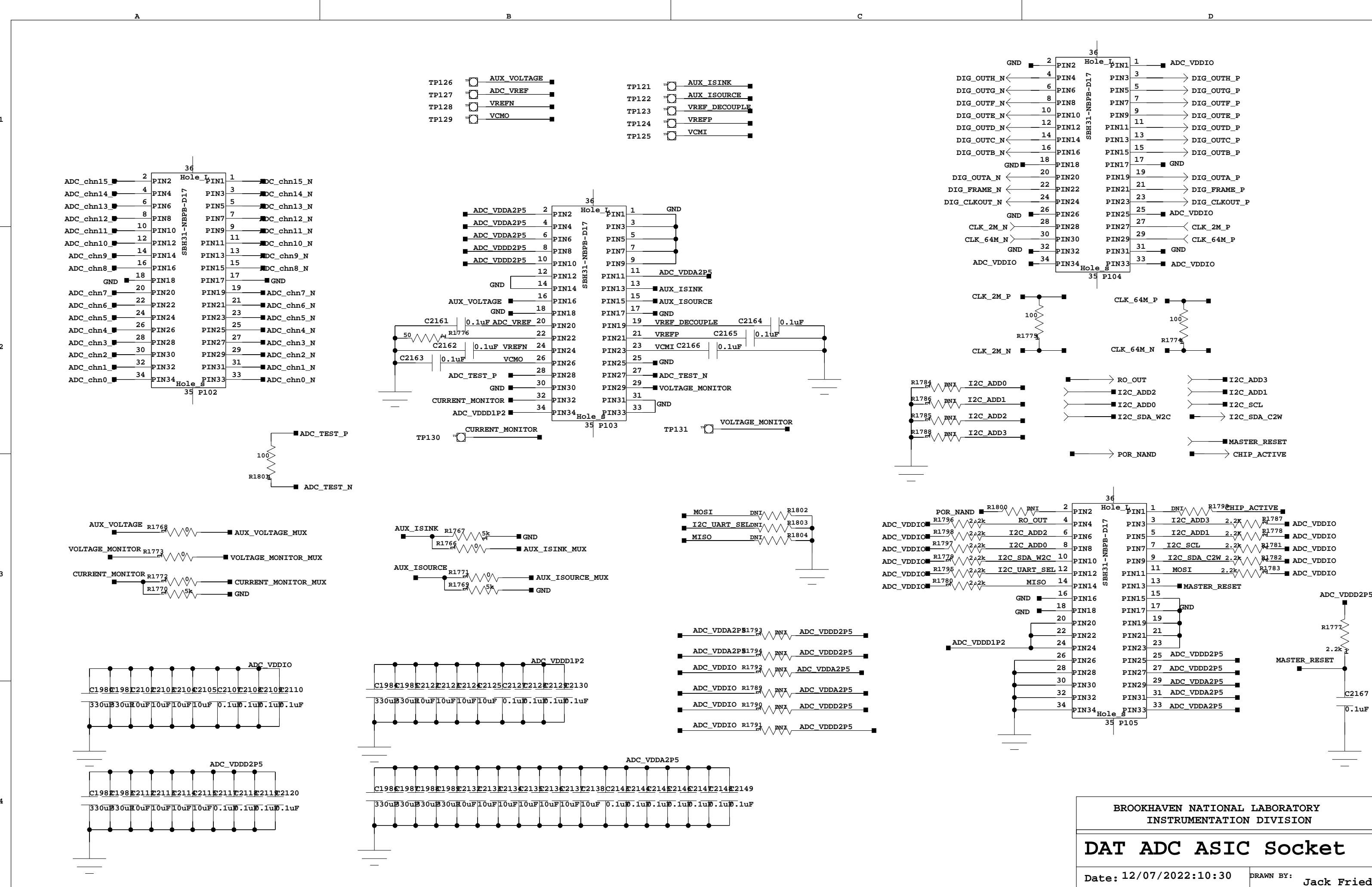
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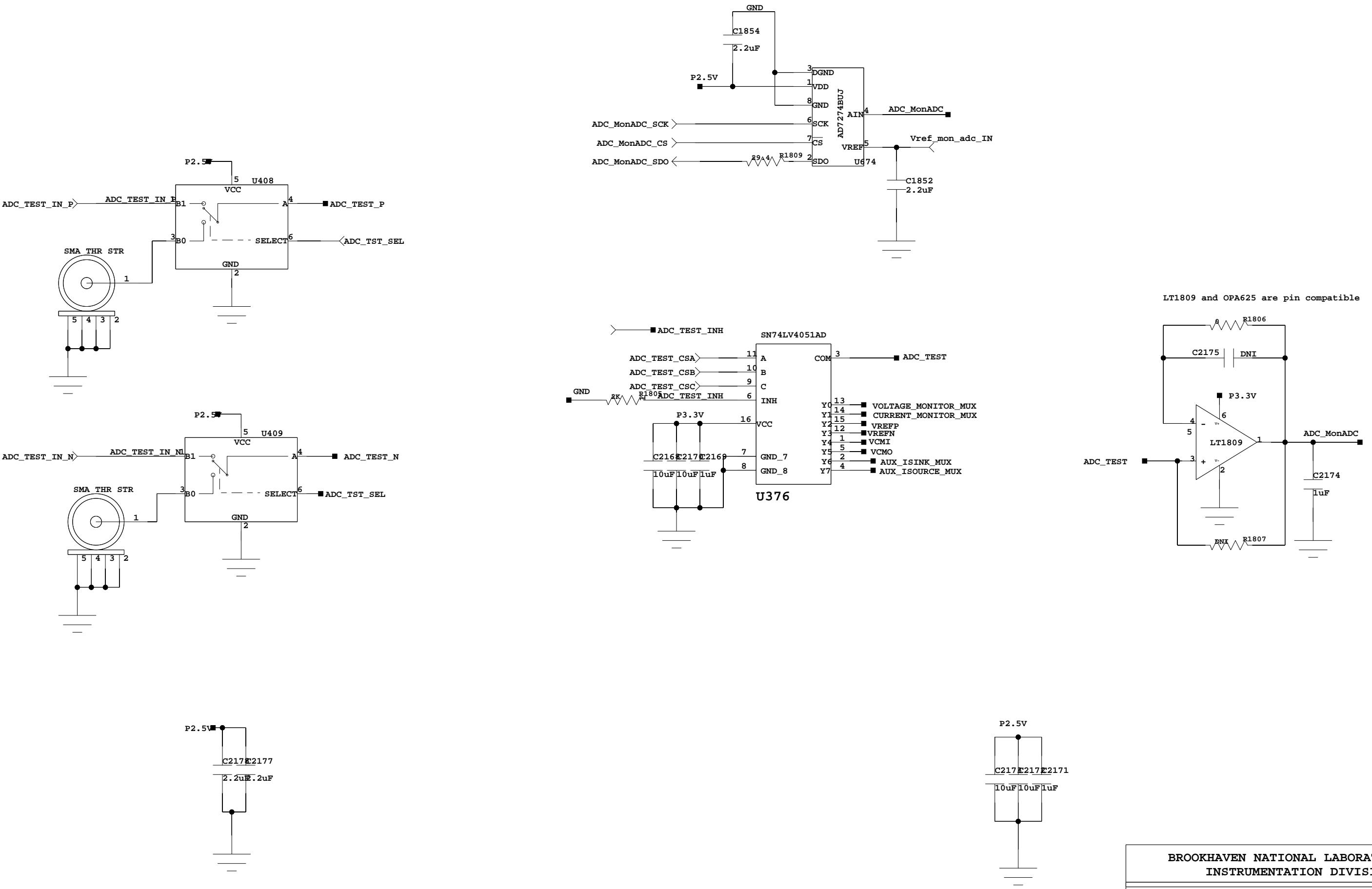


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INSTRUMENTATION DIVISION

DAT FE ASIC Calibration and Mo

Date: 07/04/2022:11:09	DRAWN BY: Jack Fried
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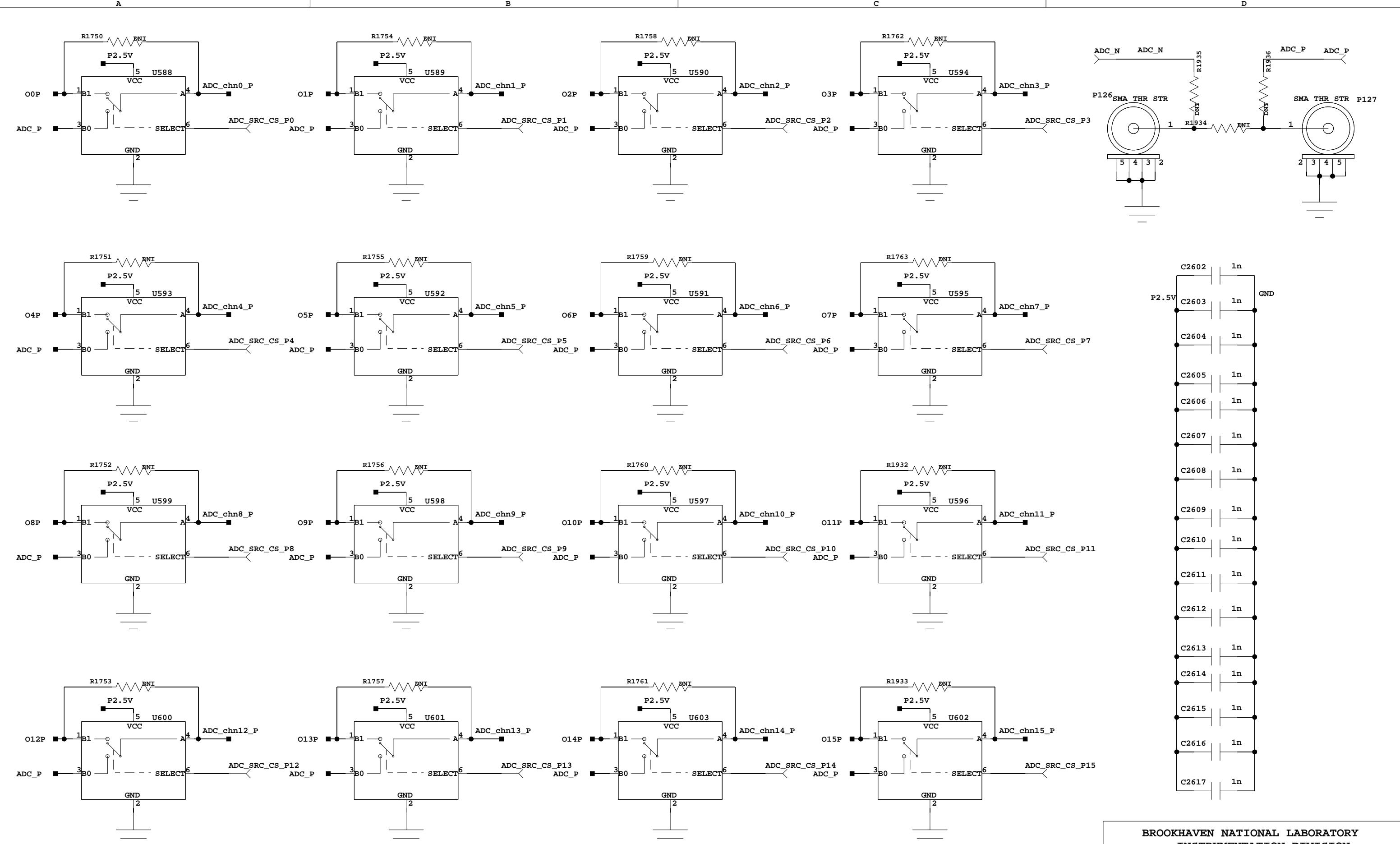




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DAT ADC ASIC Calibration and Measurement

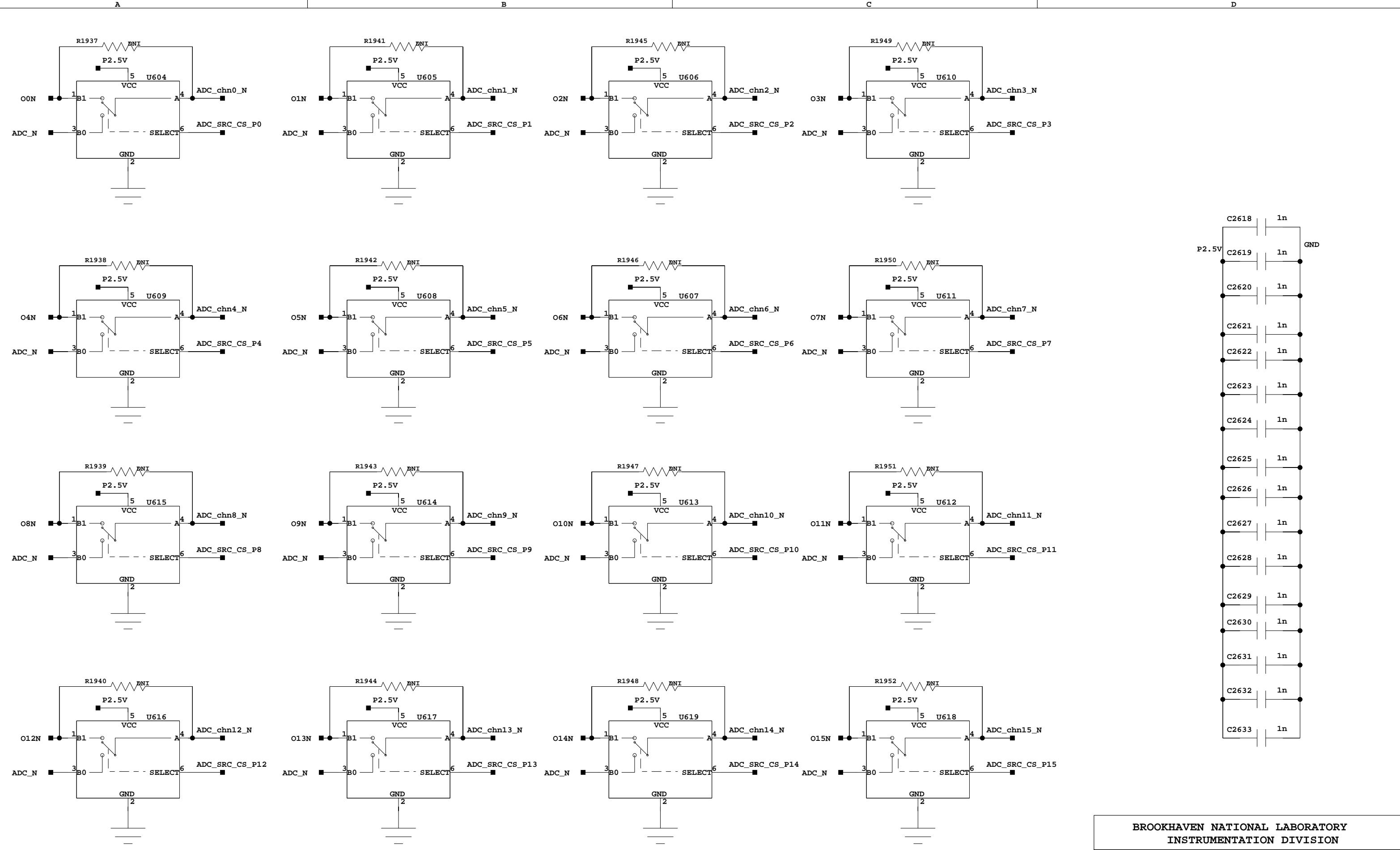
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INSTRUMENTATION DIVISION

DAT ADC SRC SEL_P

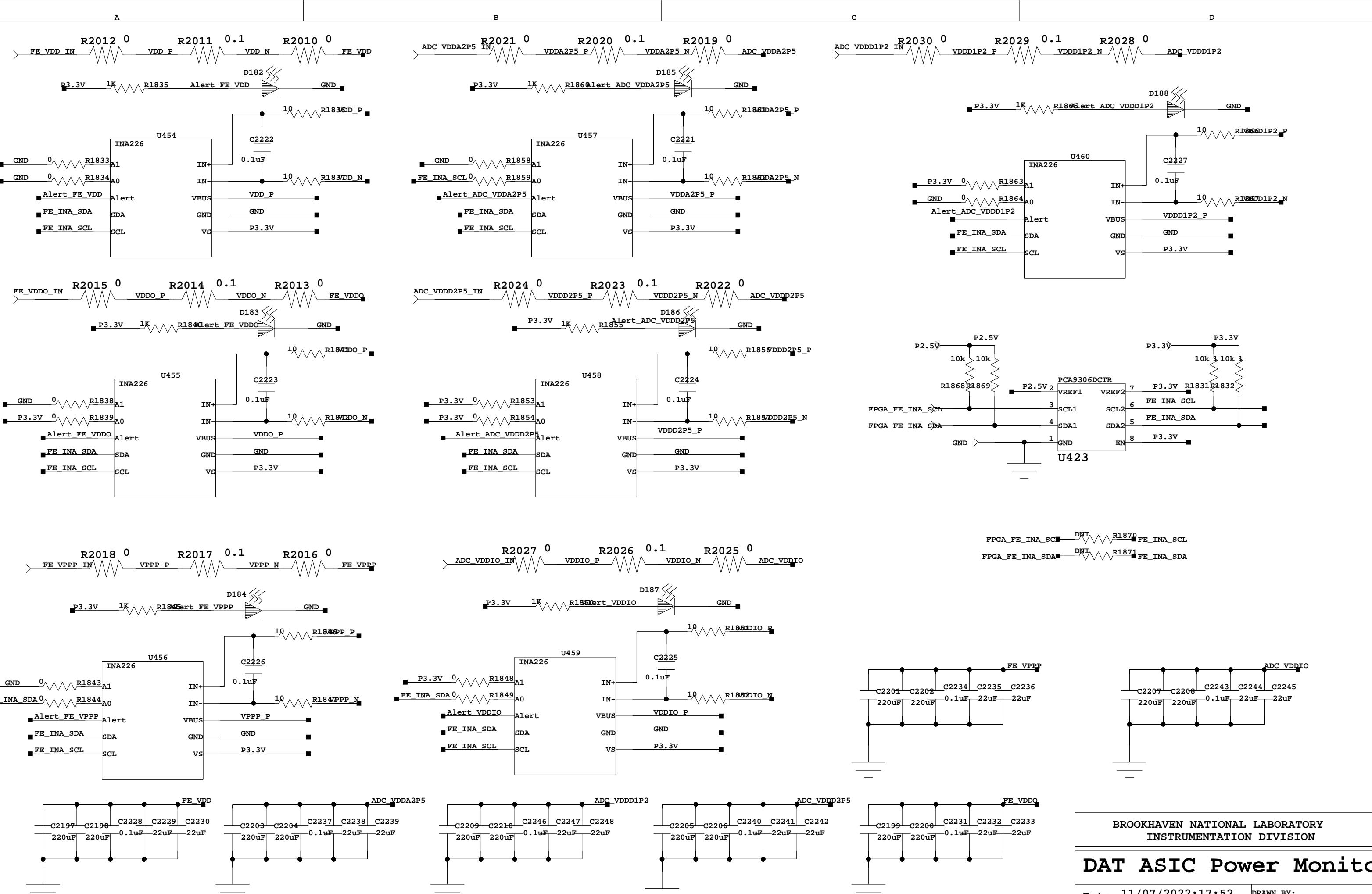
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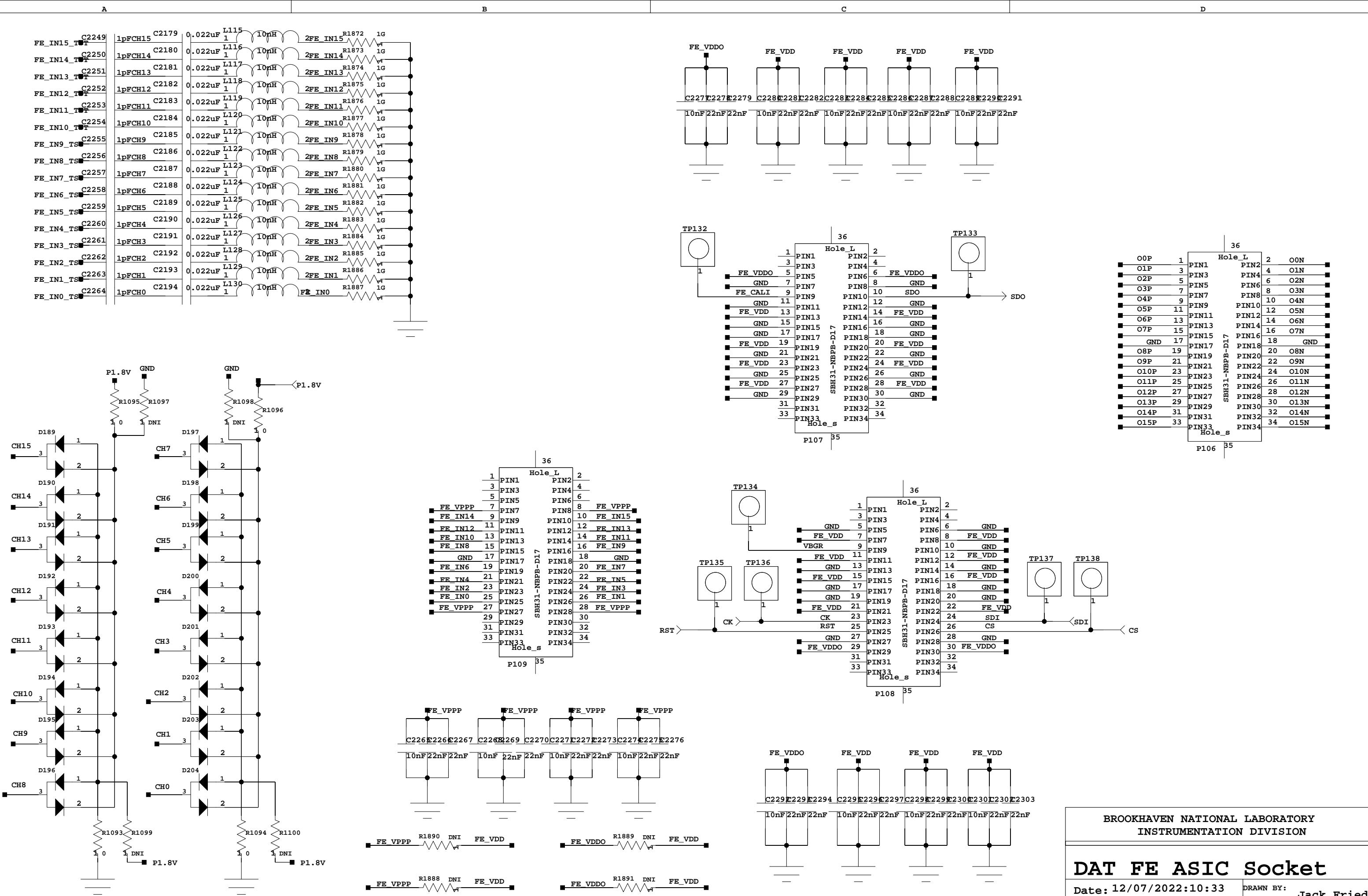


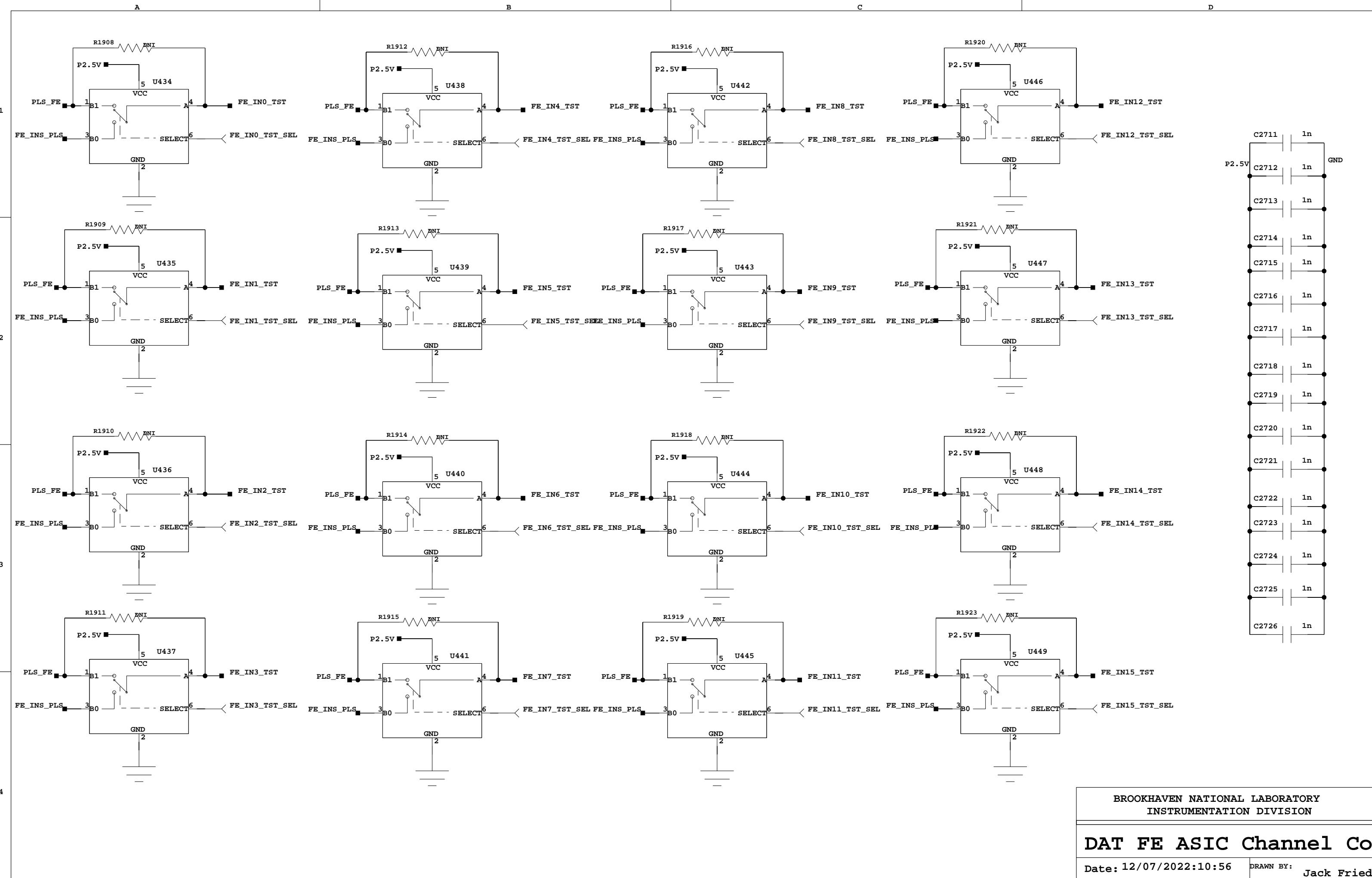
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INSTRUMENTATION DIVISION

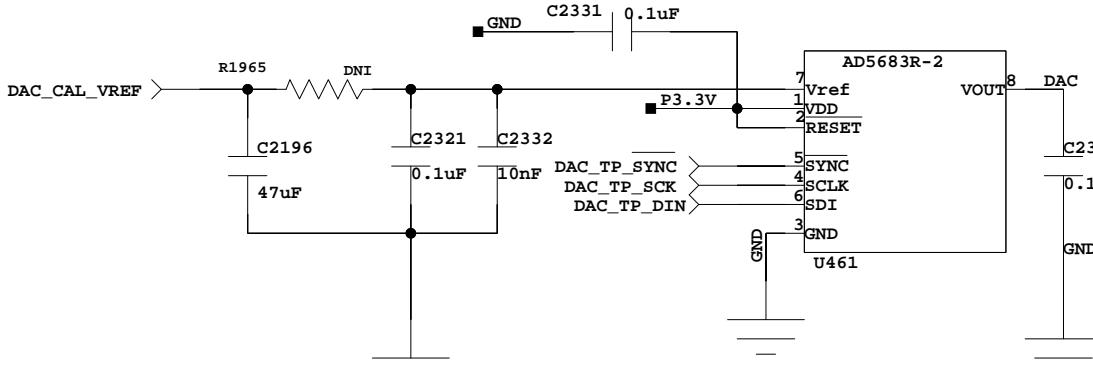
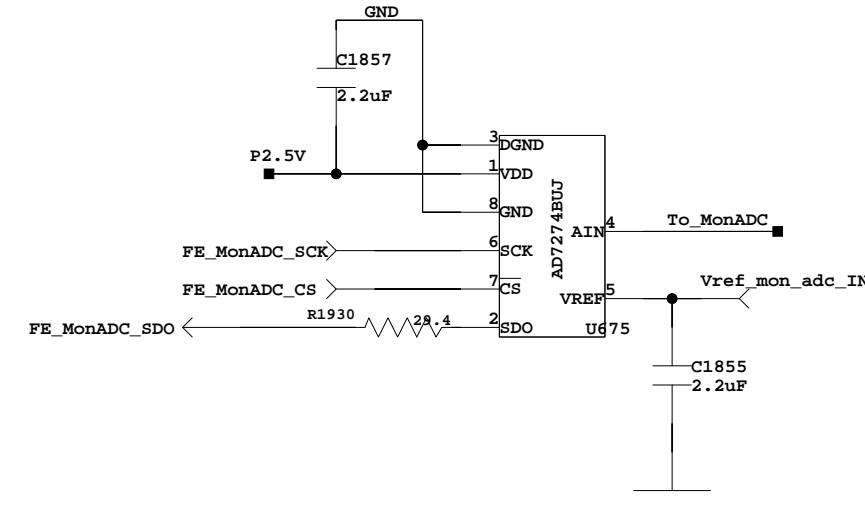
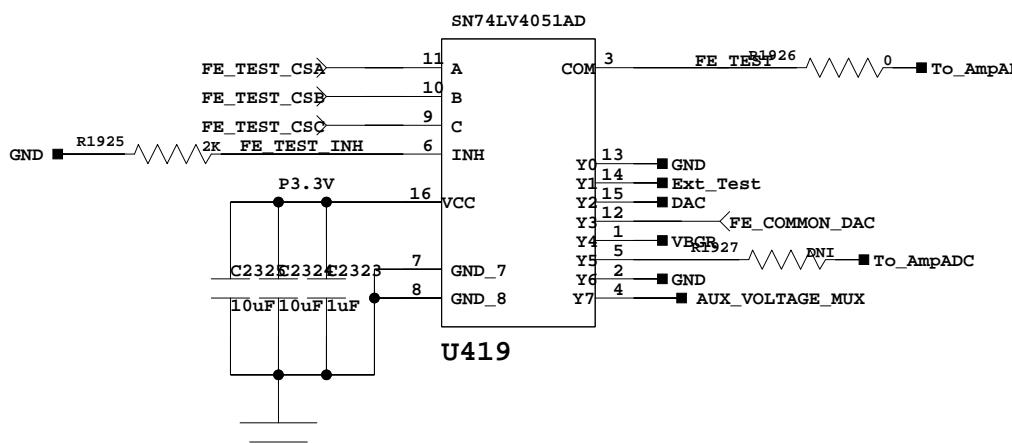
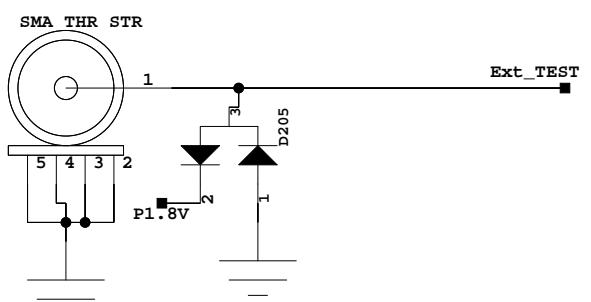
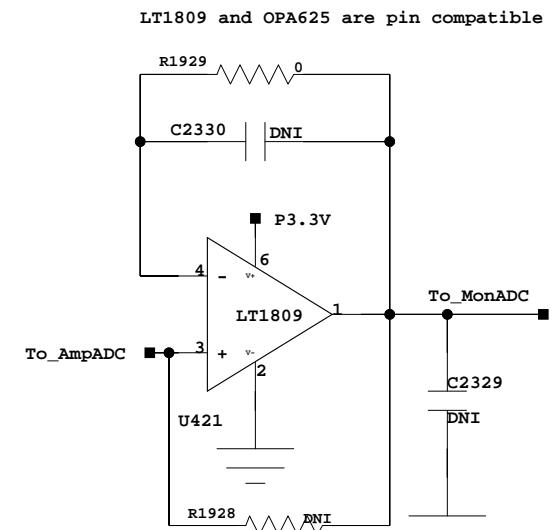
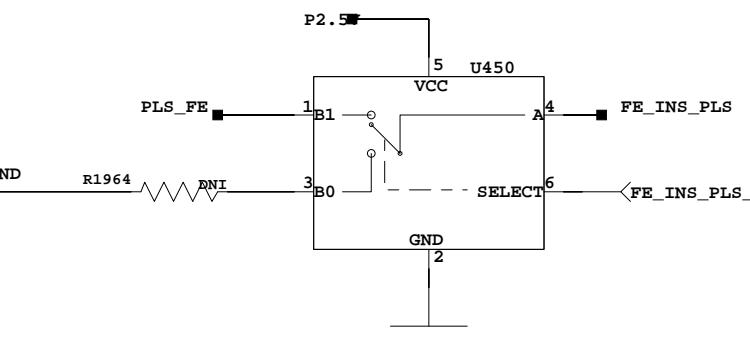
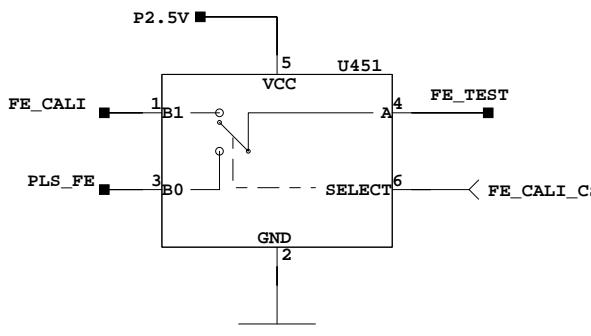
DAT ADC SRC SEL_N

Date: 19/02/2022:14:12 DRAWN BY: Jack Fried

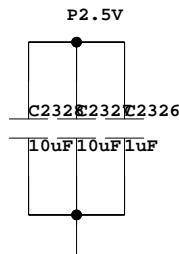








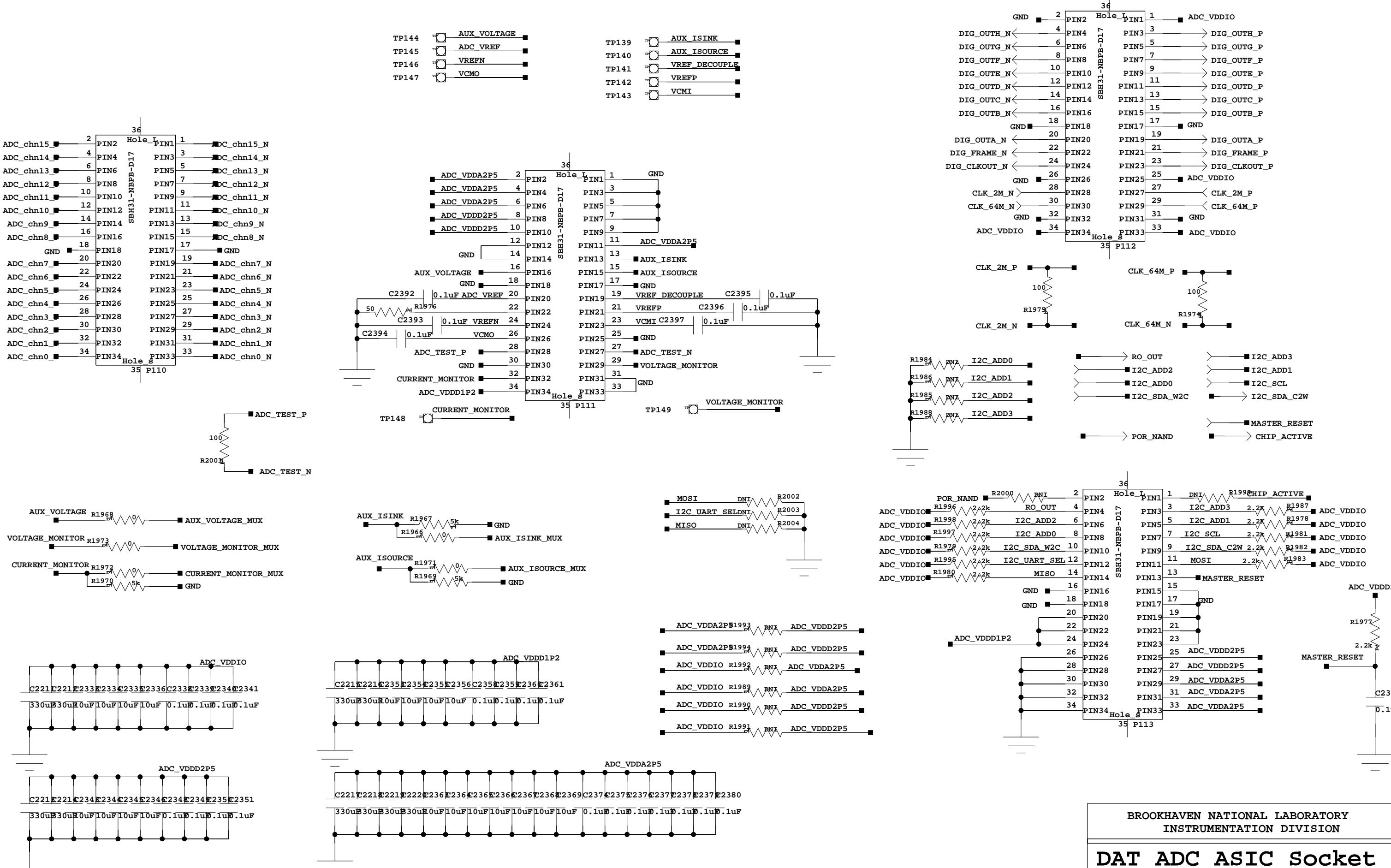
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O14P	ADC_chn14_P	O14N	ADC_chn14_N
O13P	ADC_chn13_P	O13N	ADC_chn13_N
O12P	ADC_chn12_P	O12N	ADC_chn12_N
O11P	ADC_chn11_P	O11N	ADC_chn11_N
O10P	ADC_chn10_P	O10N	ADC_chn10_N
O9P	ADC_chn9_P	O9N	ADC_chn9_N
O8P	ADC_chn8_P	O8N	ADC_chn8_N
O7P	ADC_chn7_P	O7N	ADC_chn7_N
O6P	ADC_chn6_P	O6N	ADC_chn6_N
O5P	ADC_chn5_P	O5N	ADC_chn5_N
O4P	ADC_chn4_P	O4N	ADC_chn4_N
O3P	ADC_chn3_P	O3N	ADC_chn3_N
O2P	ADC_chn2_P	O2N	ADC_chn2_N
O1P	ADC_chn1_P	O1N	ADC_chn1_N
OOP	ADC_chn0_P	OON	ADC_chn0_N



BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION

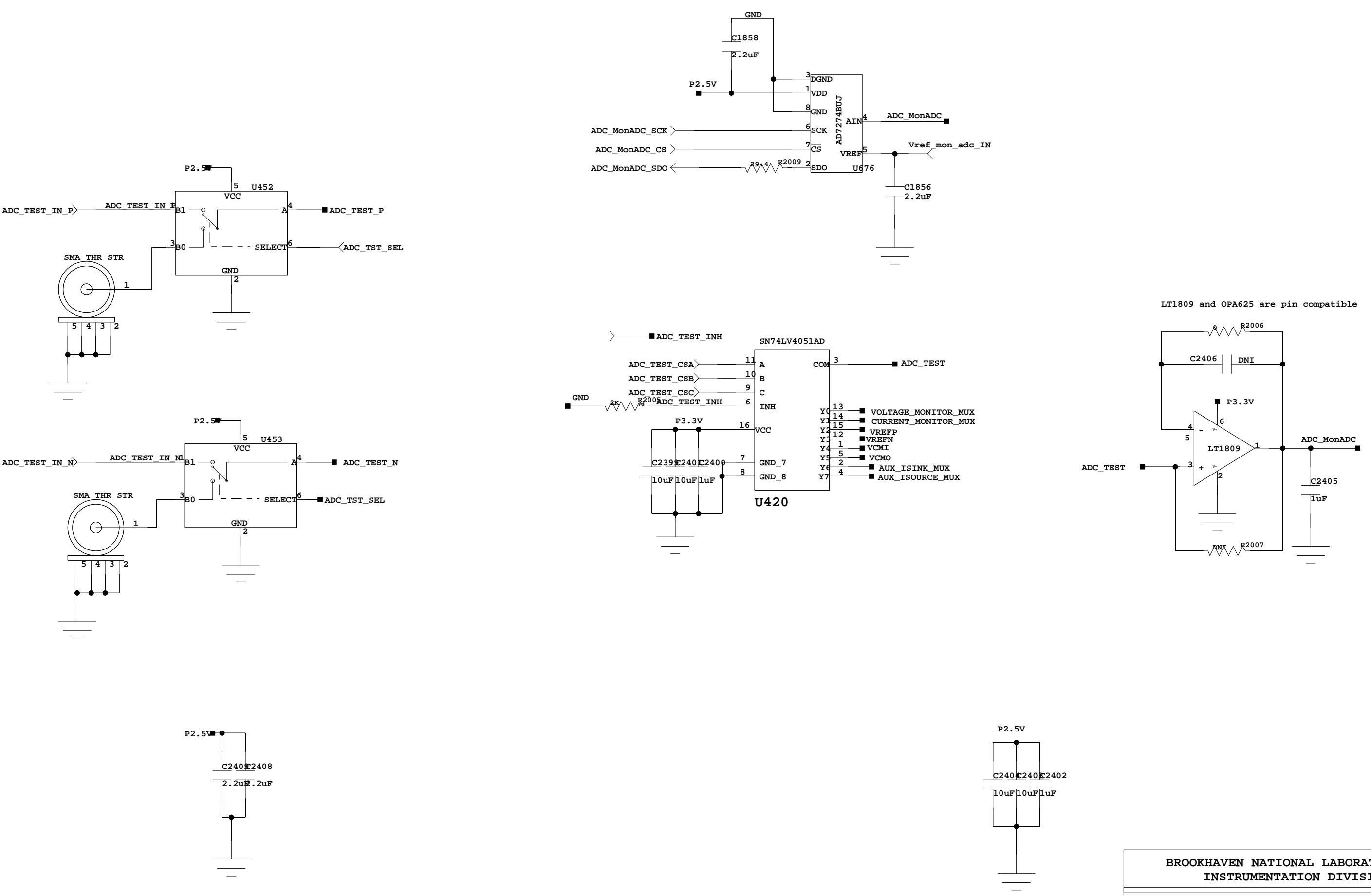
DAT FE ASIC Calibration and Mo

Date: 07/04/2022:11:09 DRAWN BY: Jack Fried



**ROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION**

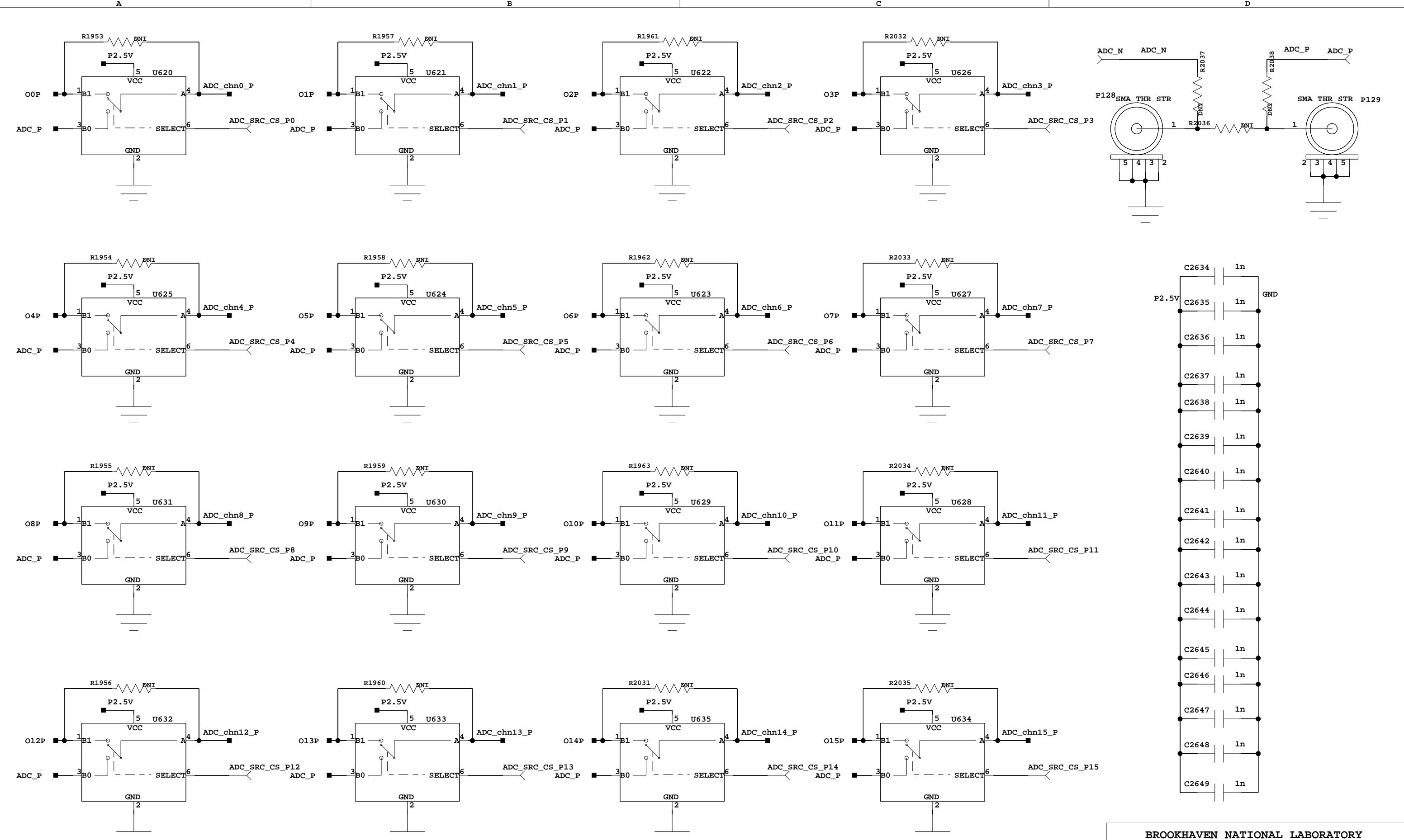
DAT ADC ASIC Socket



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DAT ADC ASIC Calibration and Measurement

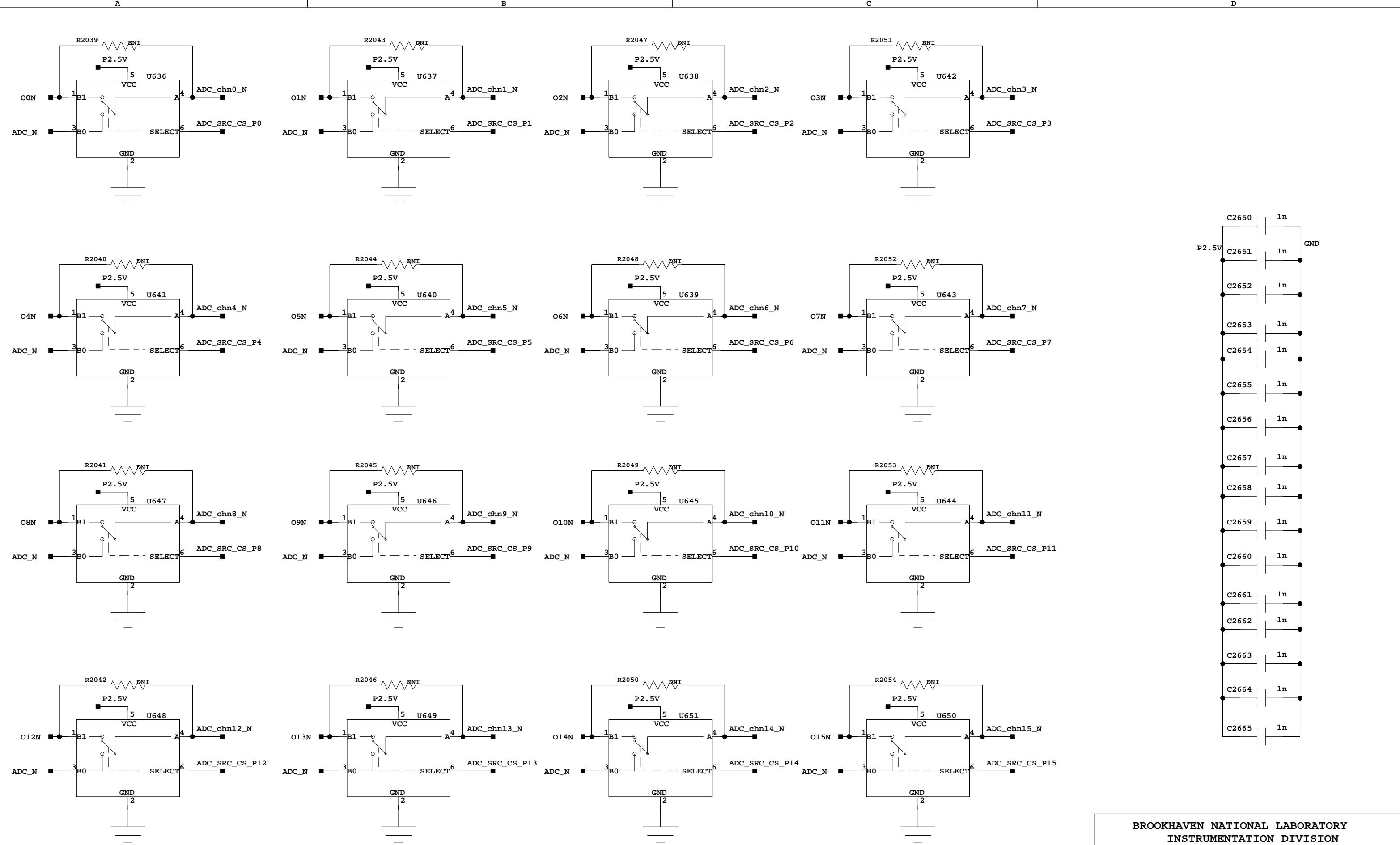
Date: 28/02/2022:10:56 DRAWN BY: Jack Fried



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DAT ADC SRC SEL_P

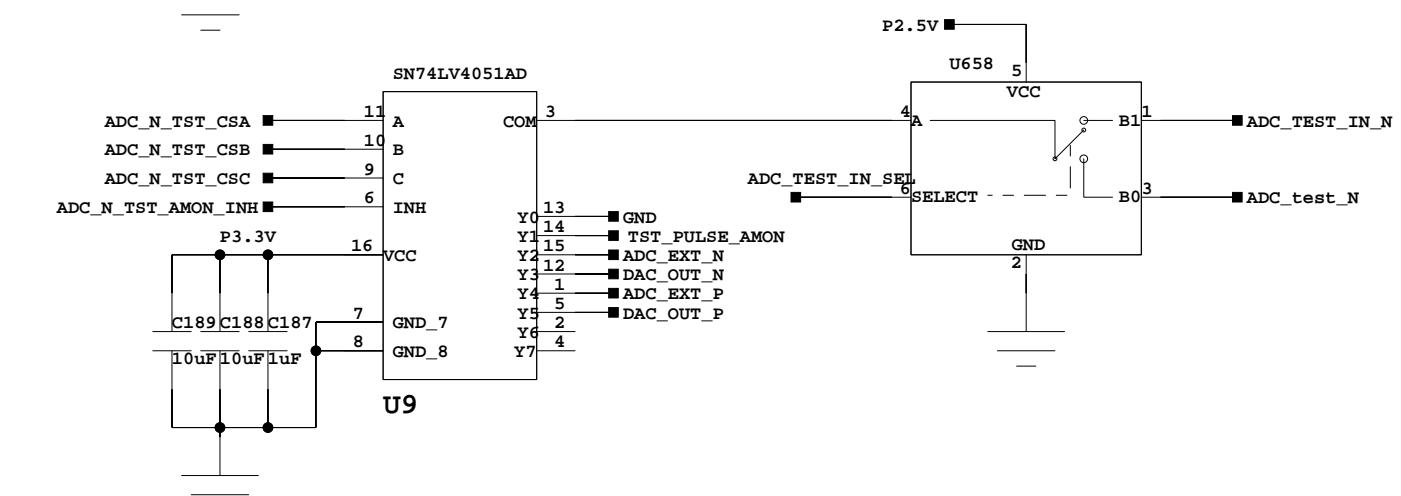
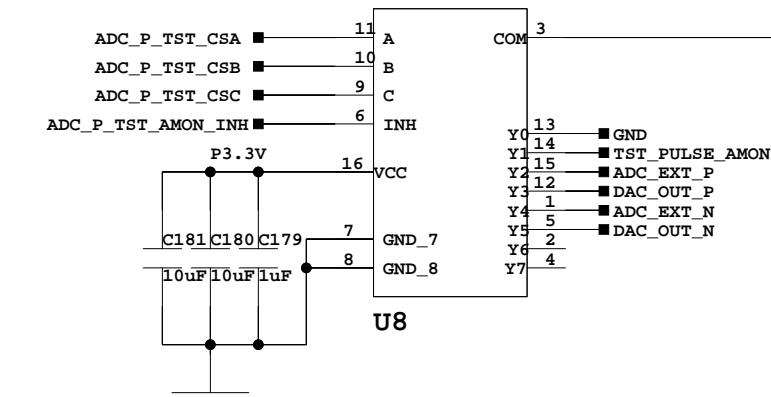
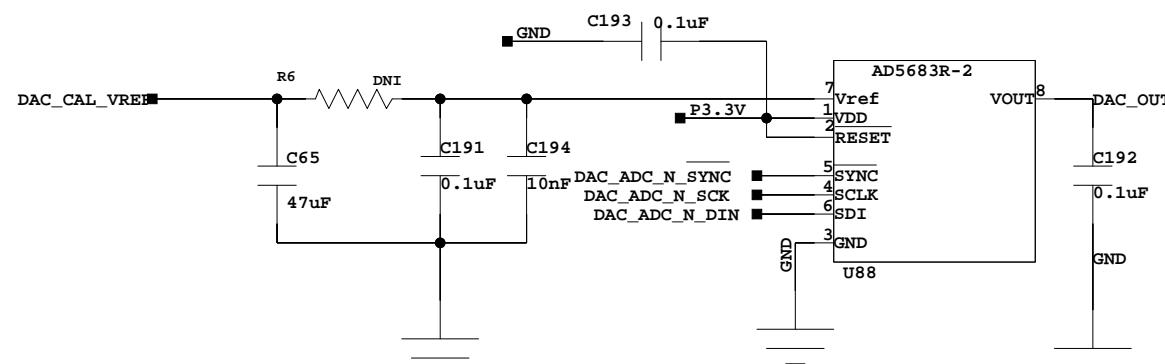
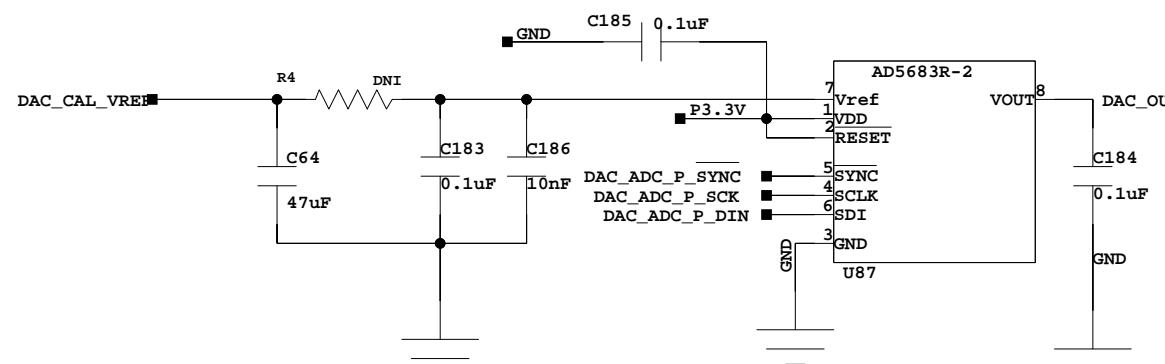
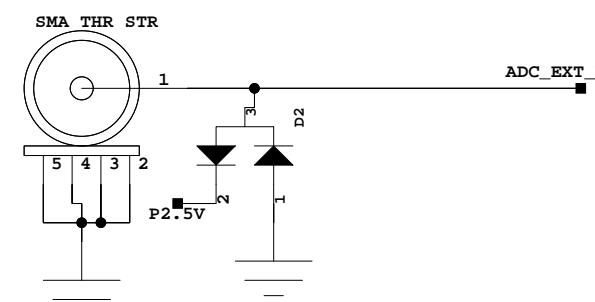
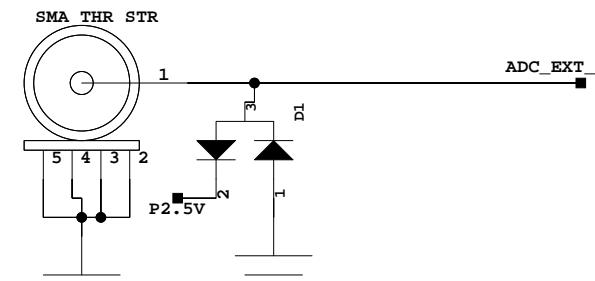
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DAT ADC SRC SEL_N

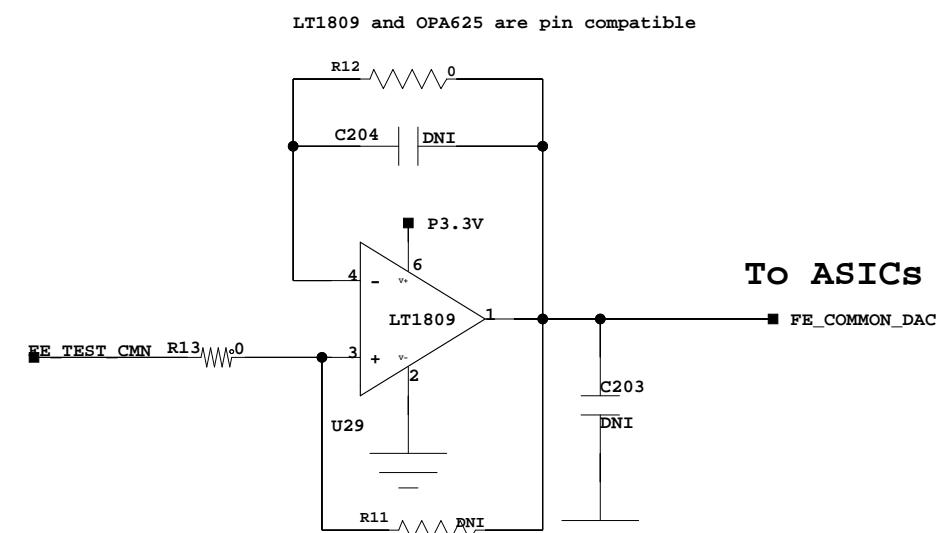
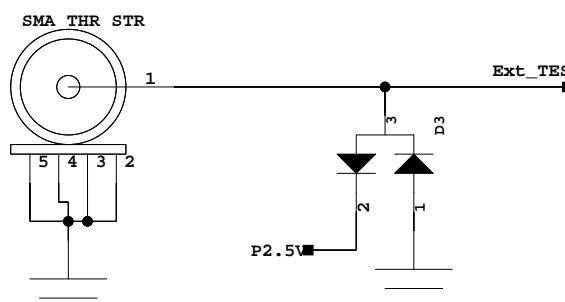
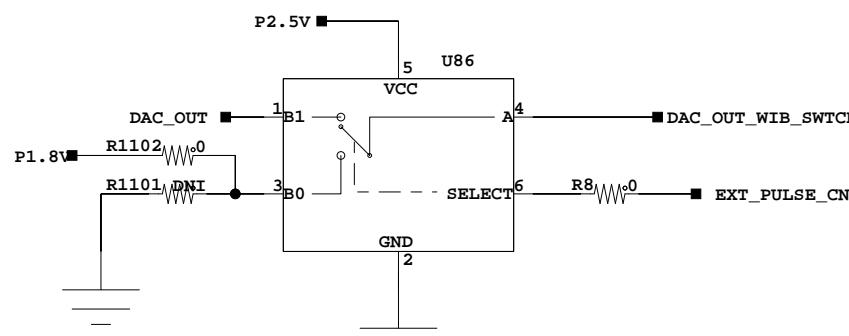
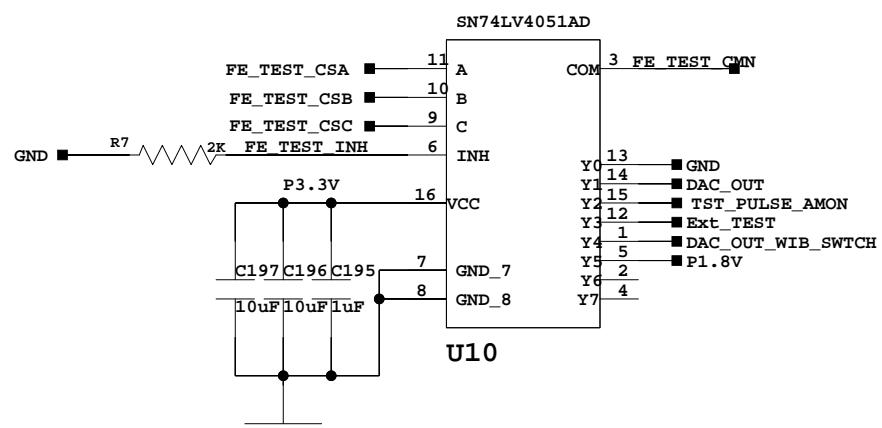
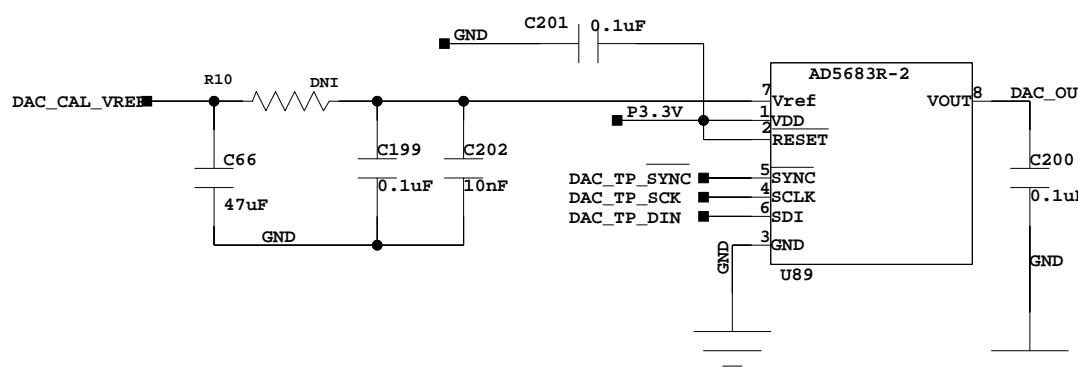
Date: 19/02/2022:14:12 DRAWN BY: Jack Fried

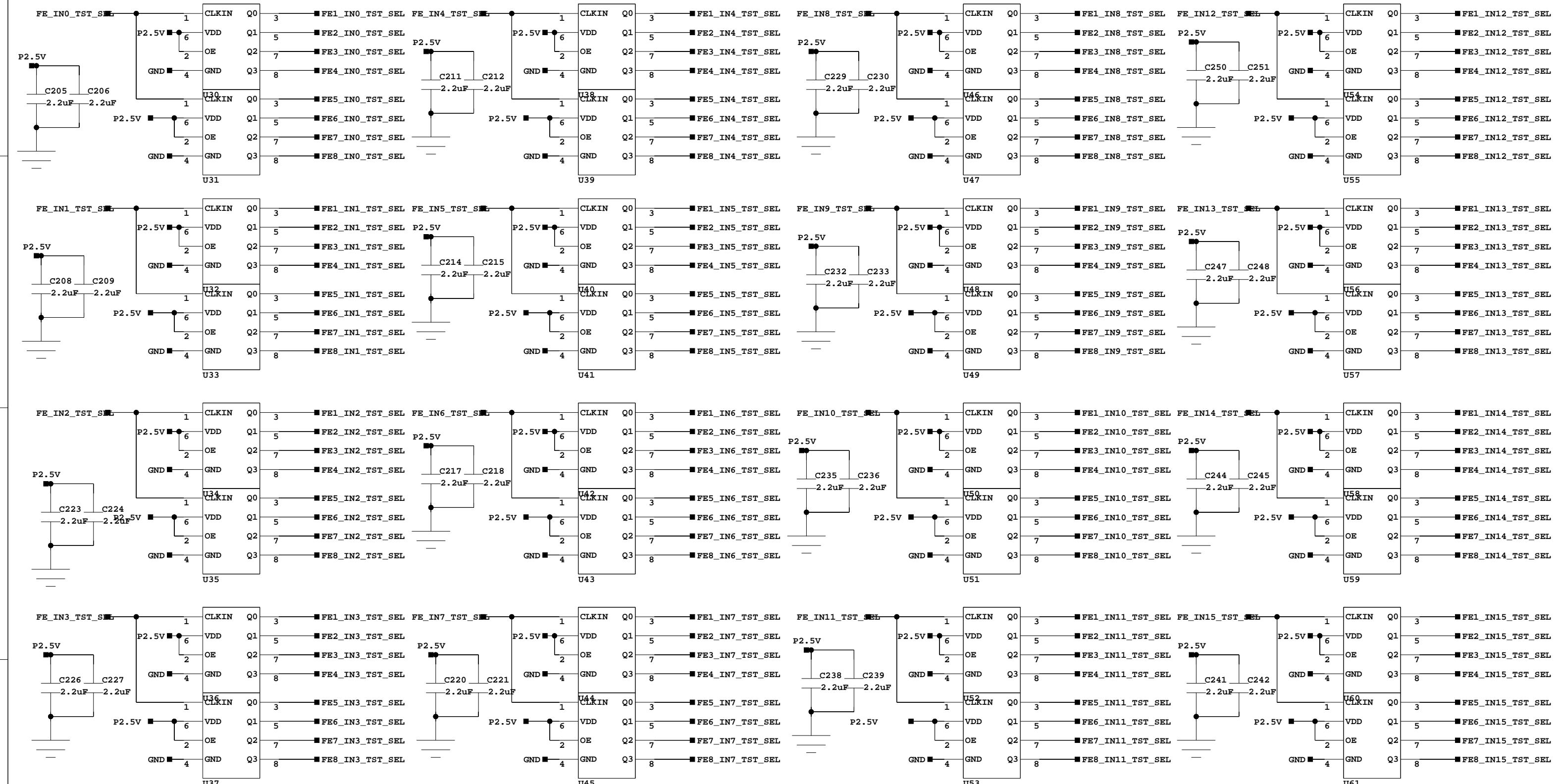


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SIZE : B **BOARD : DUNE ASIC TESTER**
DRAWN : Jack Fried **DATE : 07/04/2022;11:09**

A B C D E F

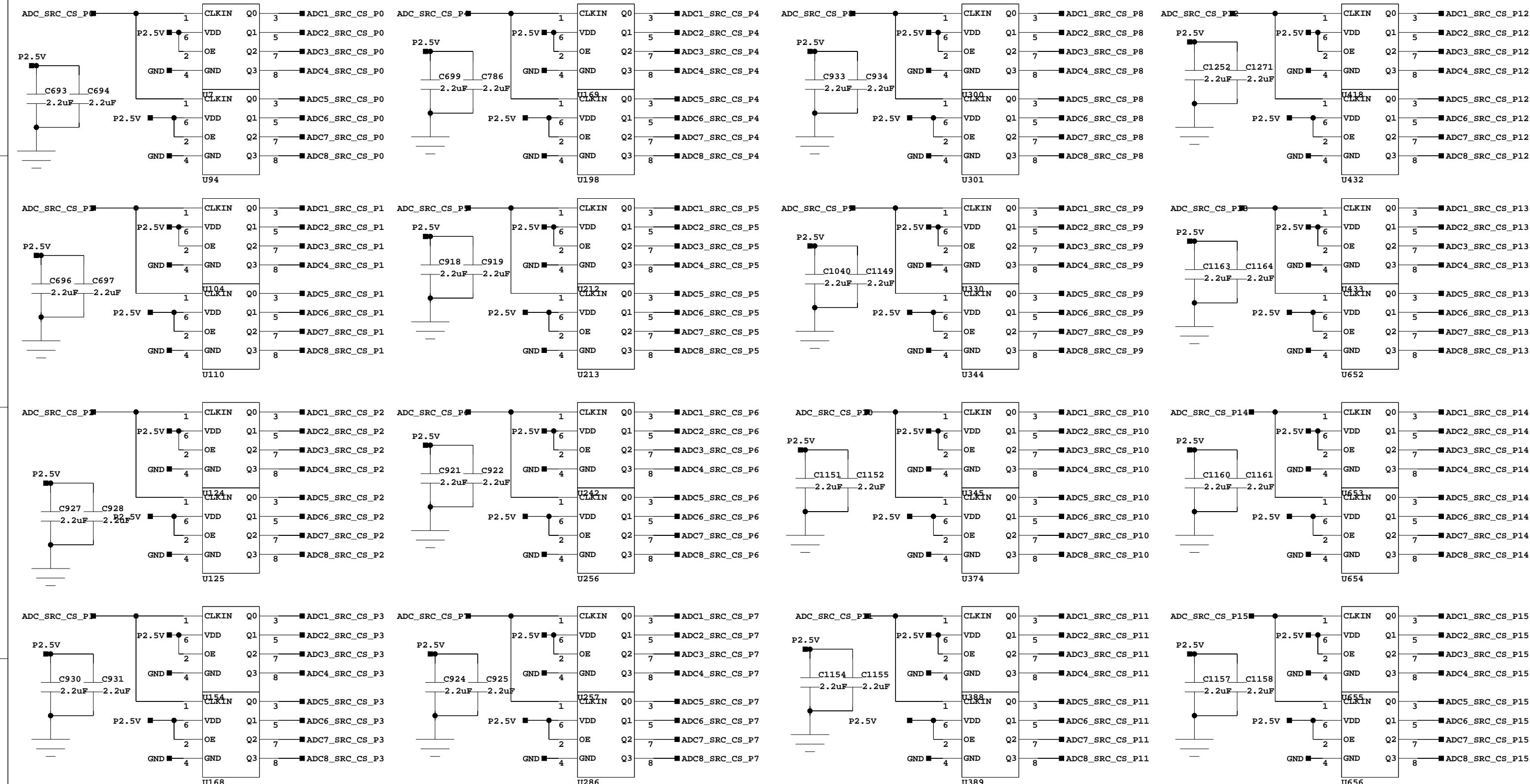


A**B****C****D****E****F**

BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION
DAT FE ASIC Channel Calib

SIZE : B	BOARD : DUNE ASIC TESTER
DRAWN : Jack Fried	DATE : 28/02/2022:10:52

A**B****C****D****E****F**

A**B****C****D****E****F**
BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION

TITLE

DAT ADC TST SRC SEL

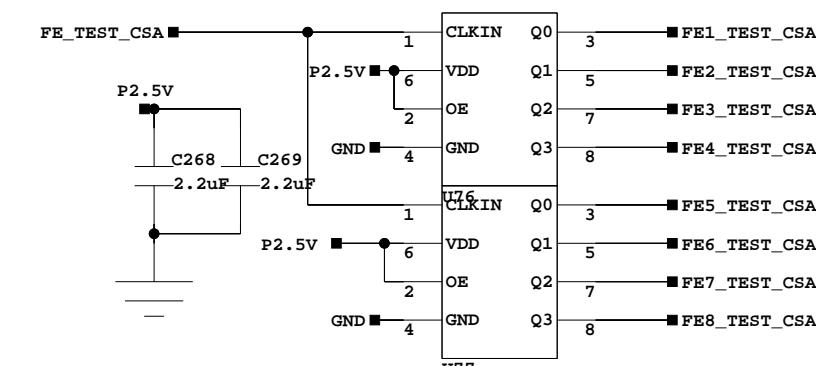
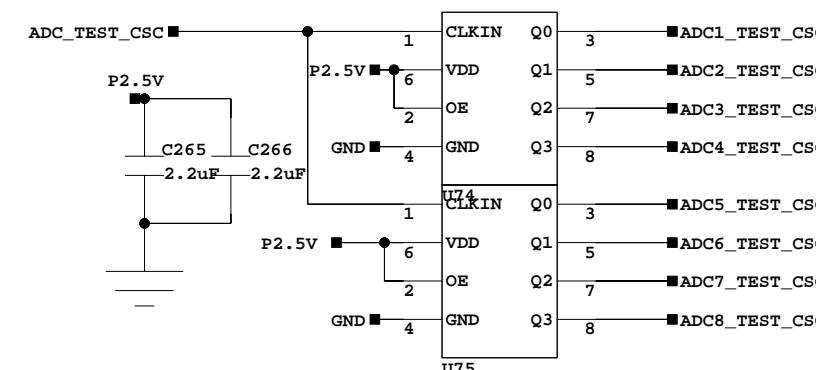
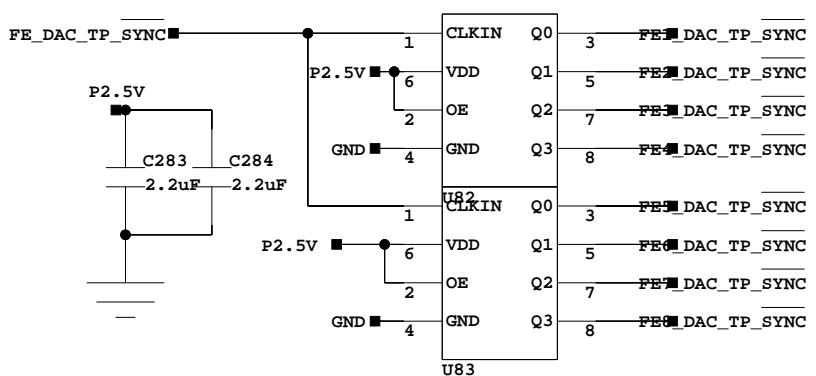
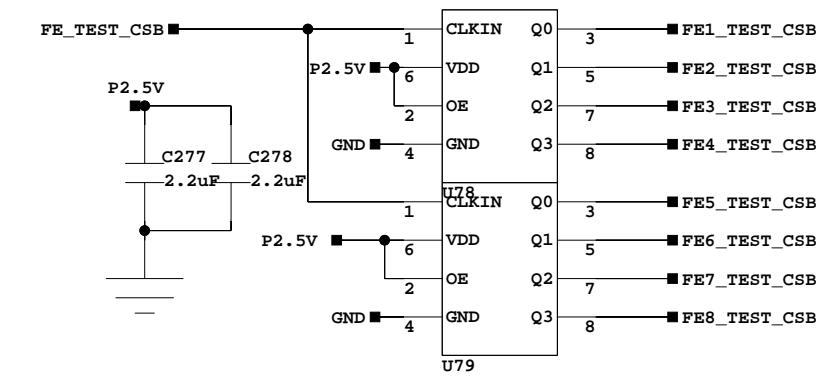
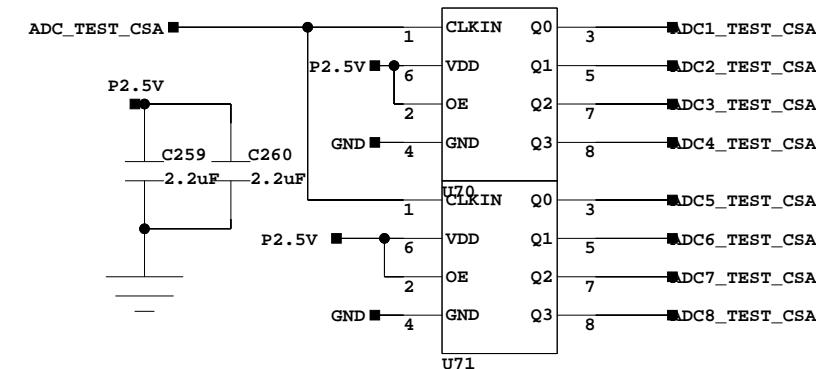
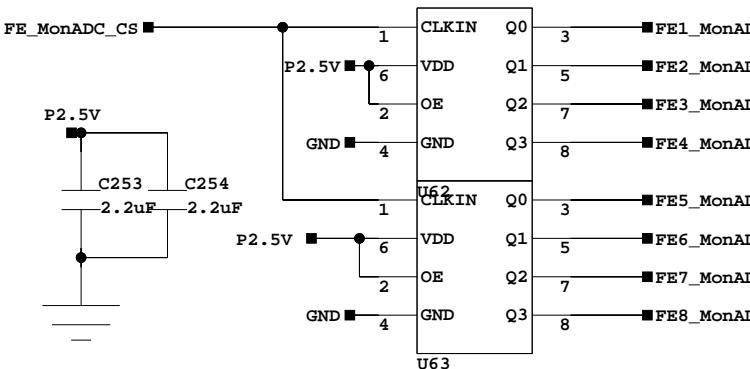
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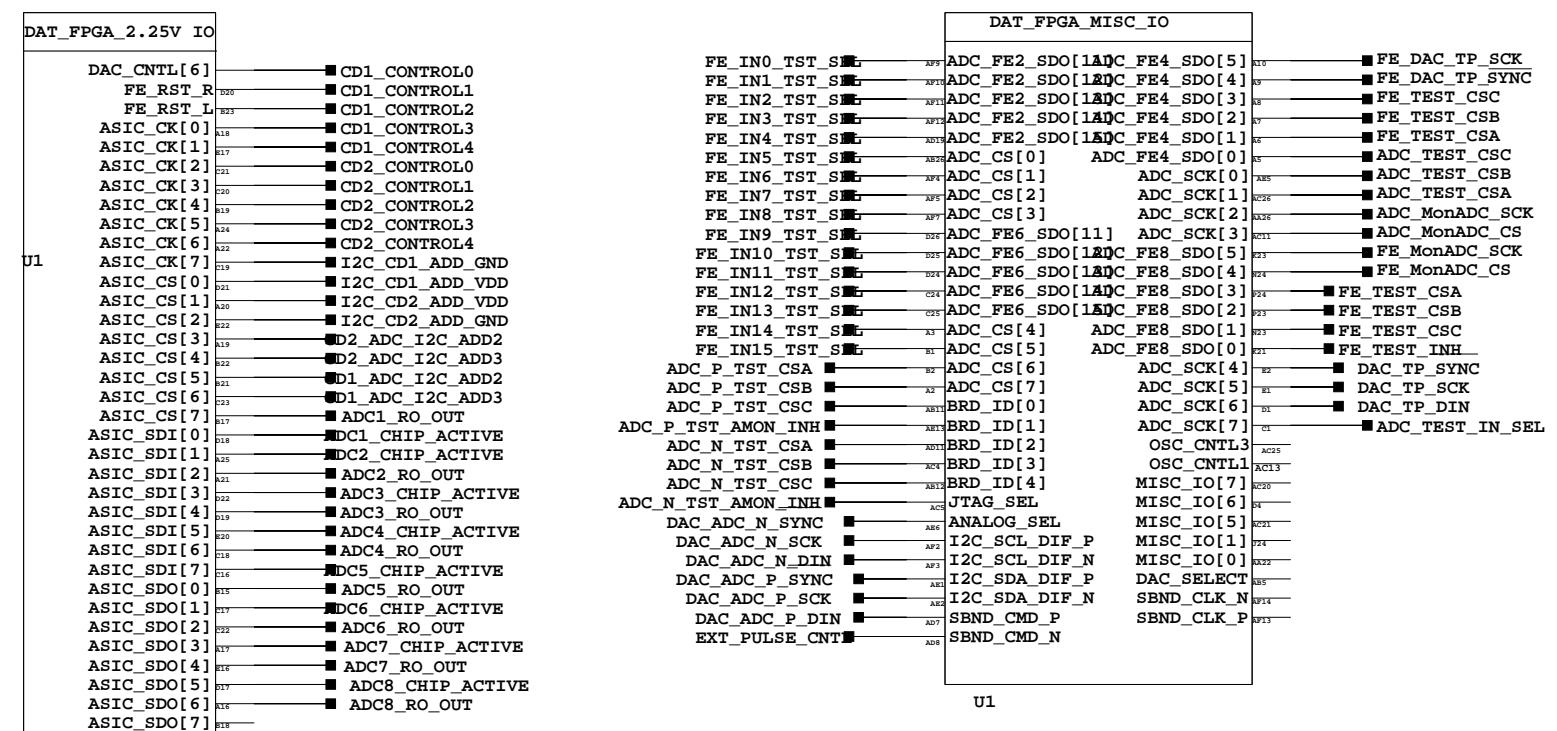
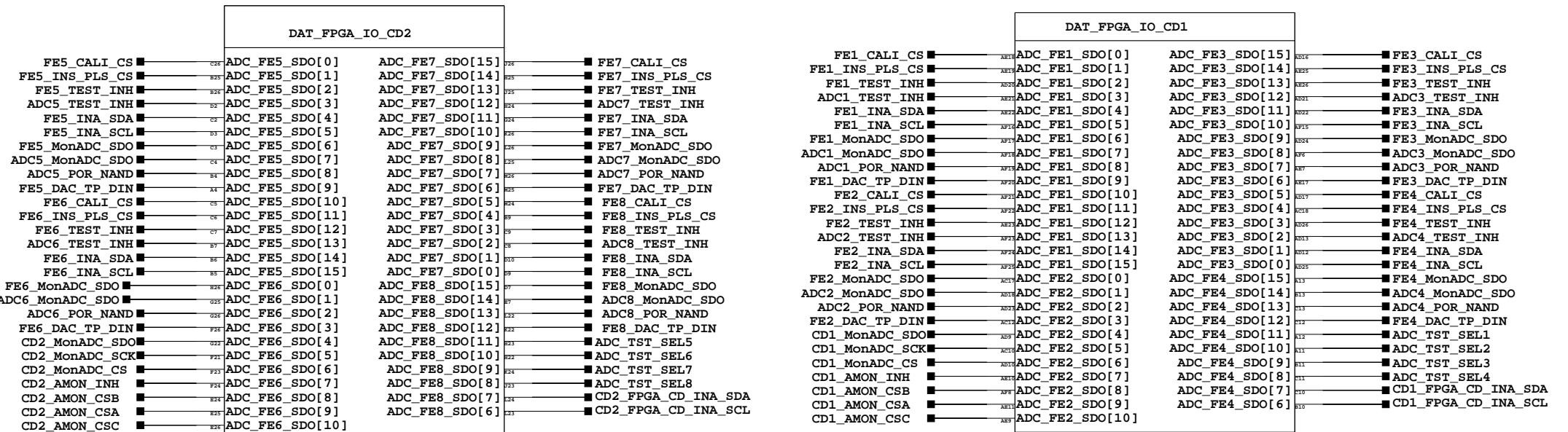
DRAWN : Jack Fried

BOARD : DUNE ASIC TESTER

DATE : 28/02/2022:10:44

A B C D E F





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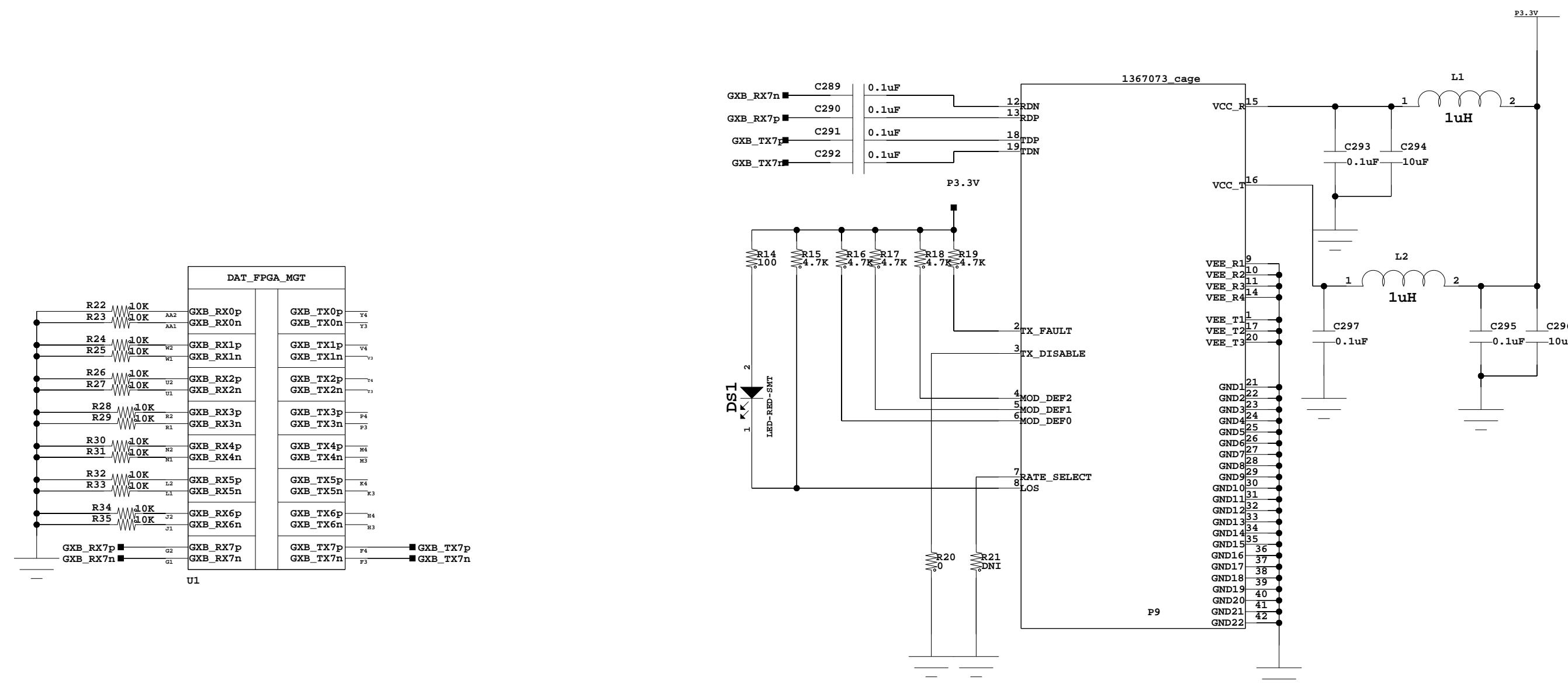
INSTRUMENTATION DIVISION

TITLE : DAT FPGA IO

SIZE : B **BOARD : DUNE ASIC TESTER**

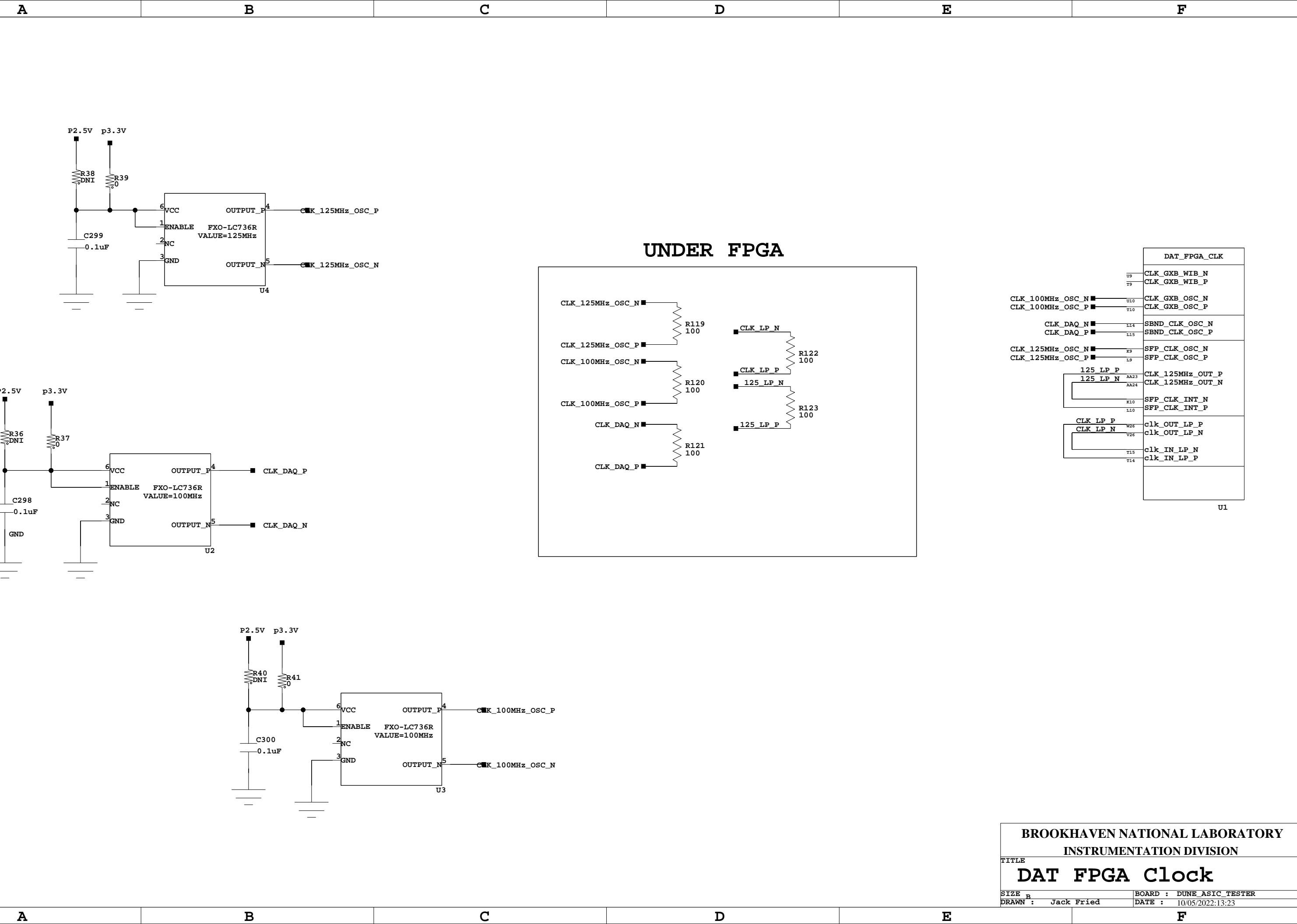
A B C D E F

4
3
2
1

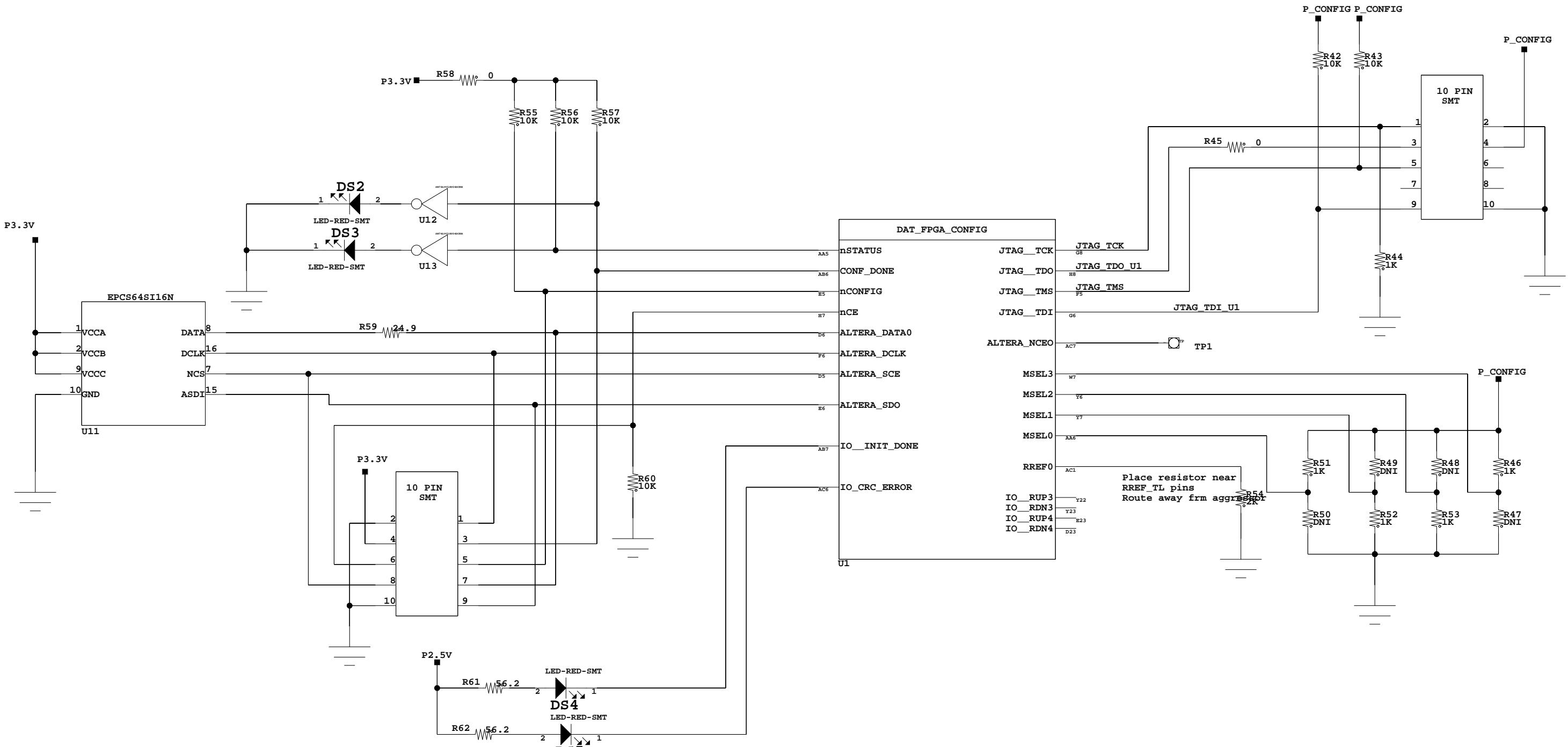


BROOKHAVEN NATIONAL LABORATORY	
INSTRUMENTATION DIVISION	
TITLE	
DAT_GIG-E_SFP	
SIZE : B	BOARD : DUNE ASIC TESTER
DRAWN : Jack Fried	DATE : 14/02/2022:17:32

A B C D E F



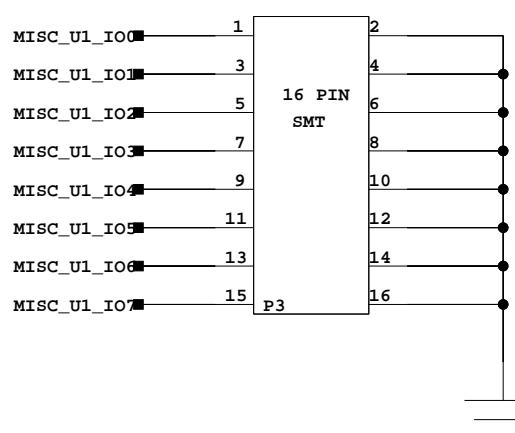
A B C D E F



BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION
TITLE
DAT FPGA CONFIG
SIZE : B BOARD : DUNE ASIC TESTER
DRAWN : Jack Fried DATE : 20/02/2022:16:15

A B C D E F

4



3

2

1

1

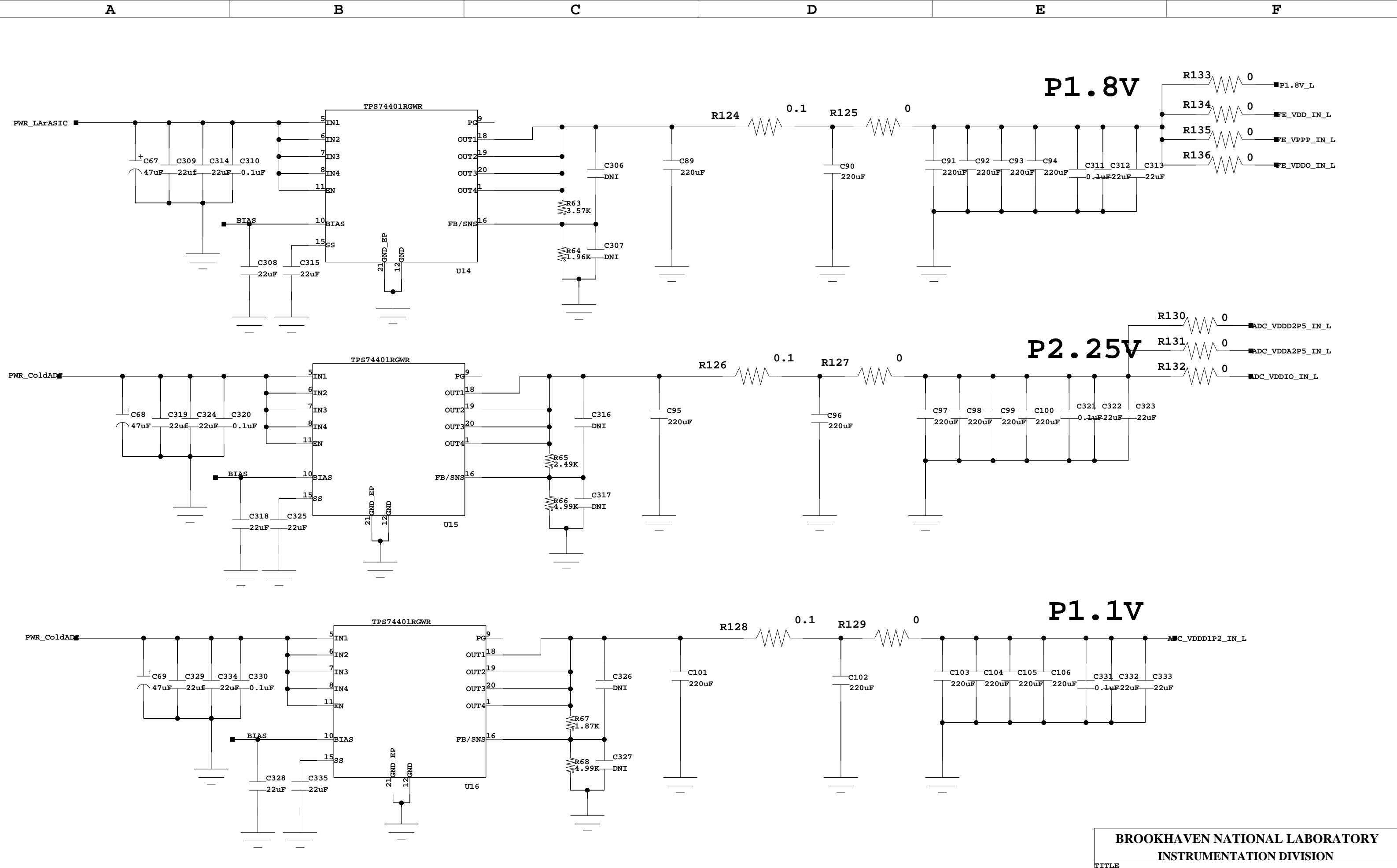
BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION

— 1 —

DAT FPGA MISC IO and

SIZE : B BOARD : DUNE ASIC TESTER

DRAWN : Jack Fried DATE : 19/02/2022:14:30



BROOKHAVEN NATIONAL LABORATORY

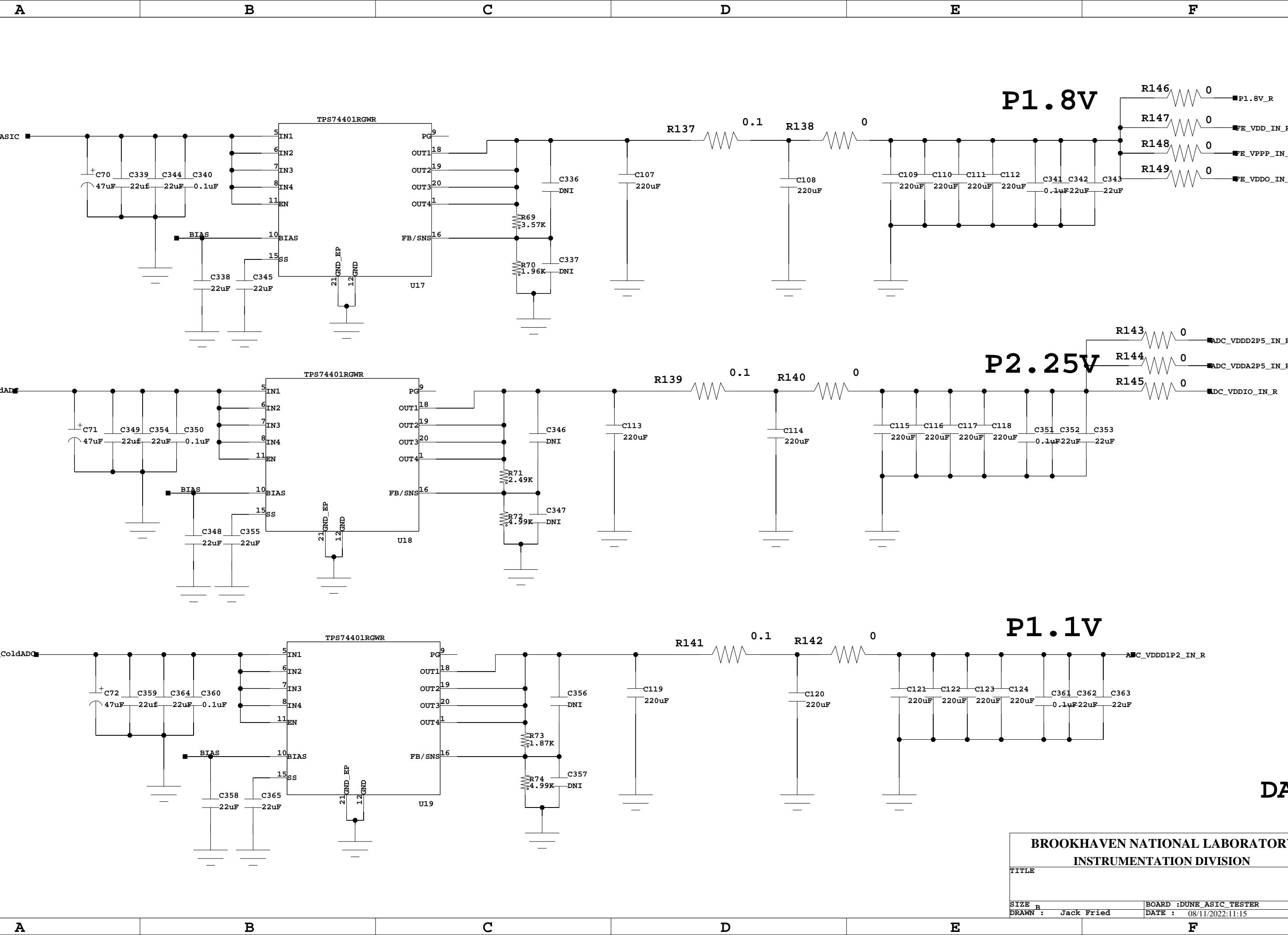
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DAT PWR FF AND ADC Left

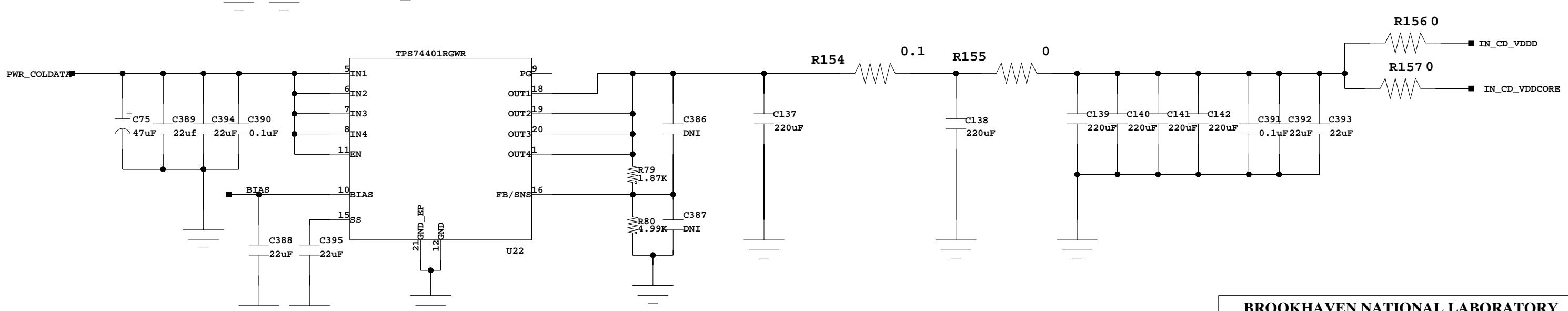
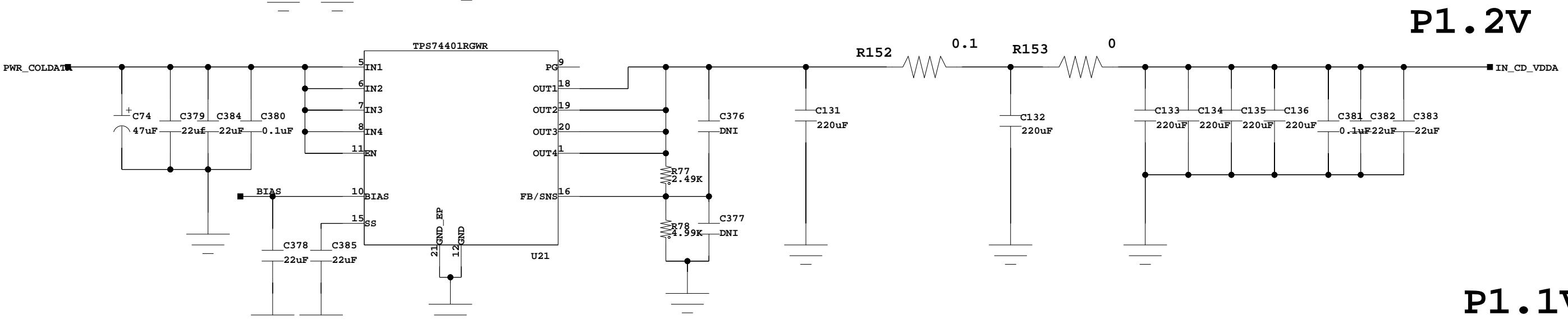
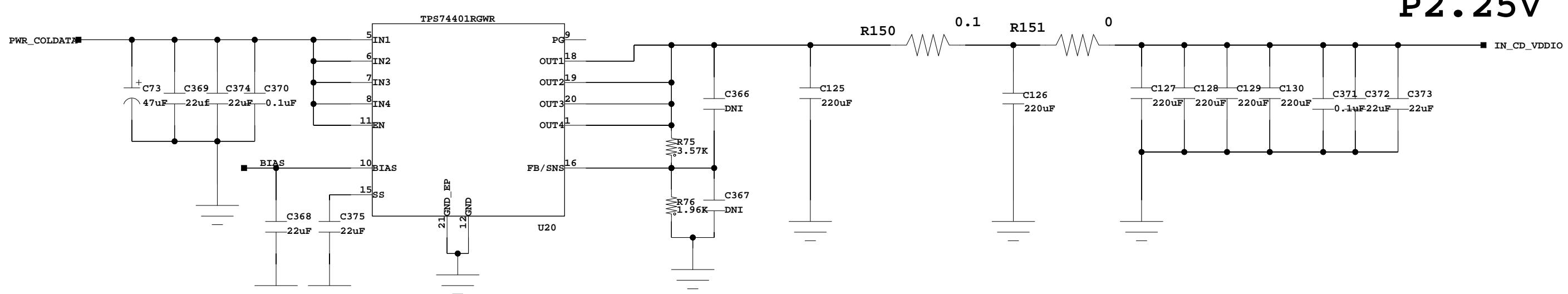
SIZE B
RAWN : Jack Fried

ARD : DUNE ASIC TESTER
E : 10/05/2022:13:29

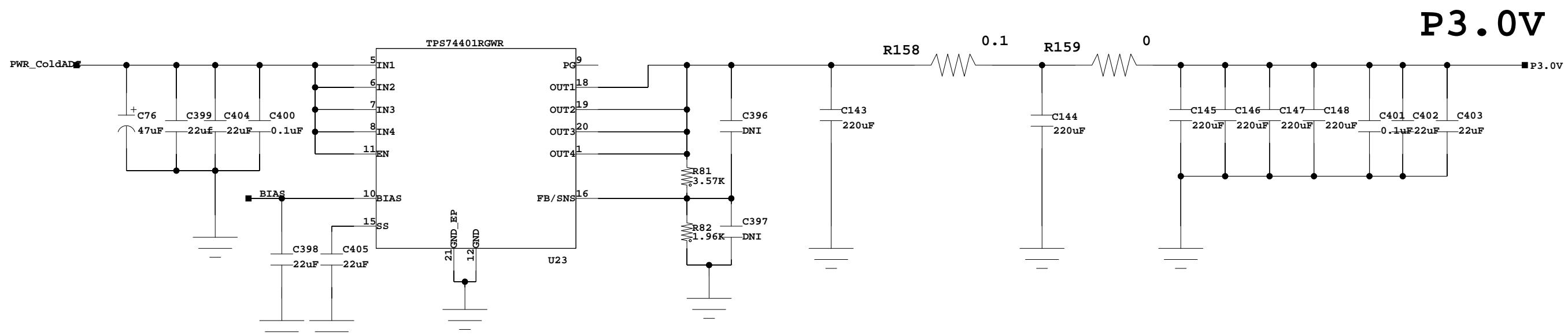
SIZE : B BOARD : DUNE ASIC TESTER
DRAWN : Jack Fried DATE : 10/05/2022 13:29



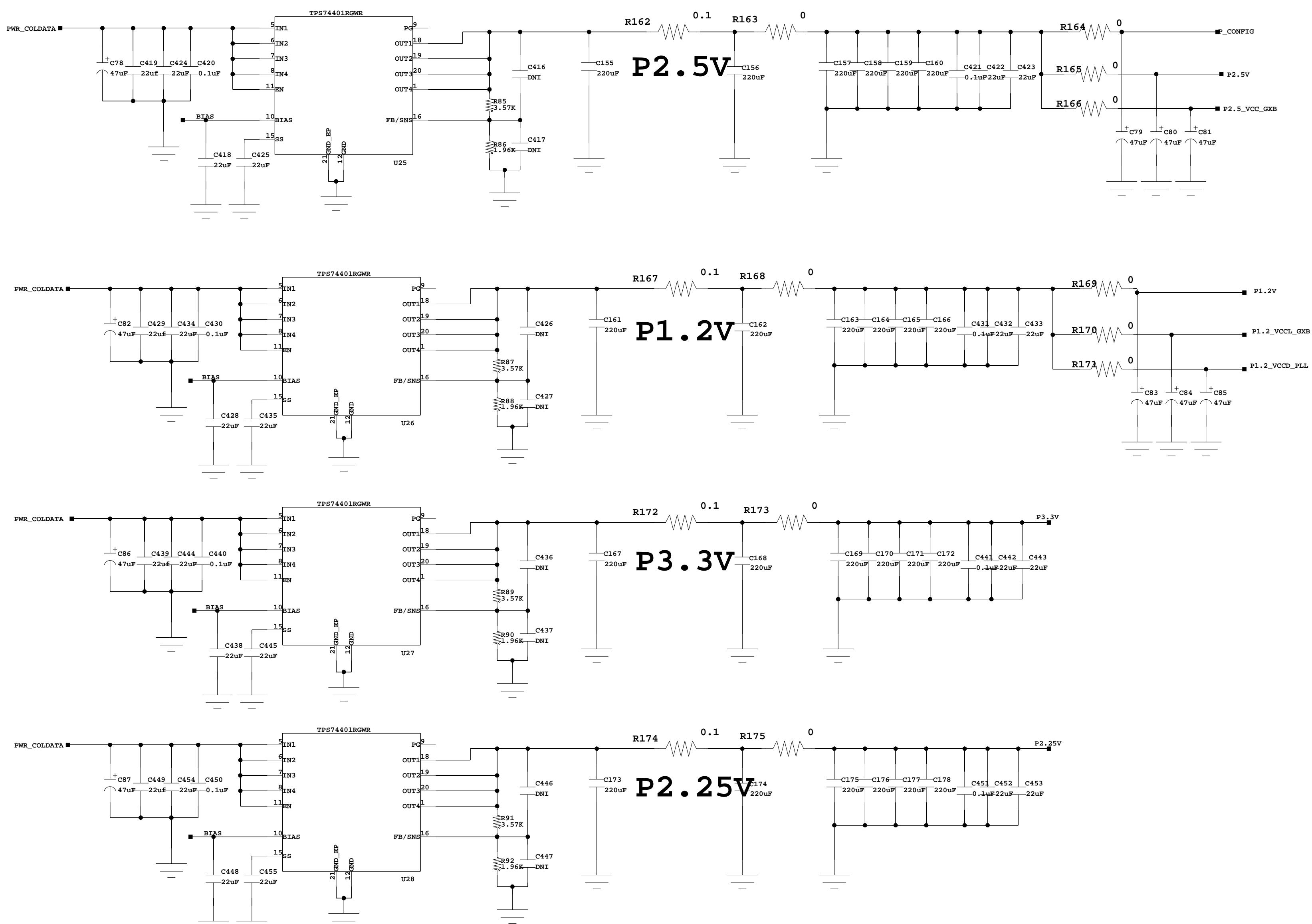
A B C D E F



A B C D E F



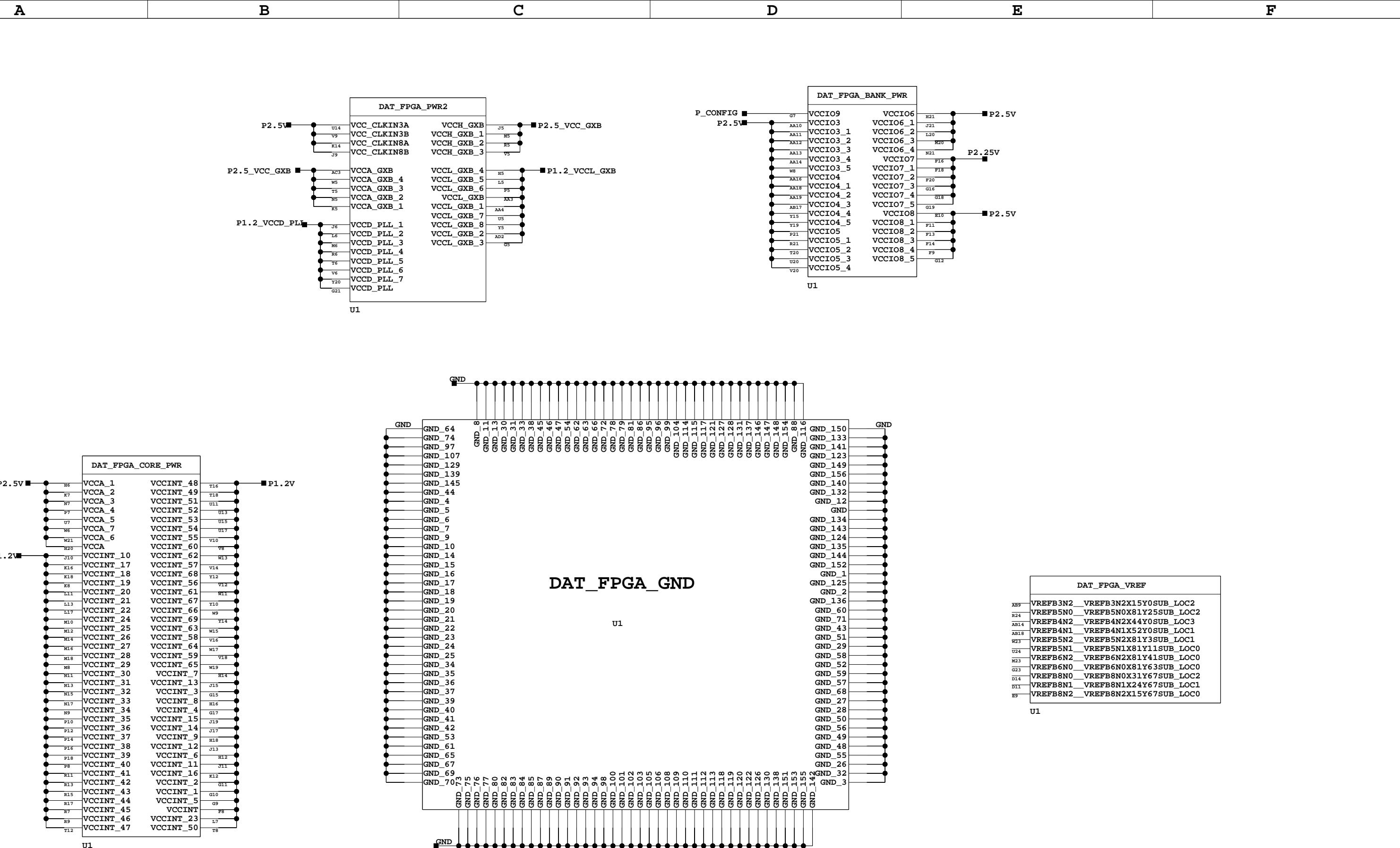
A B C D E F



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INSTRUMENTATION DIVISION

DAT FPGA PWR

Date:	20/02/2022:16:35	DRAWN BY:
		Jack Fried



BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION

TITLE

DAT FPGA PWR IO

SIZE : B BOARD : DUNE ASIC TESTER
DRAWN : Jack Fried DATE : 16/05/2022:10:45

A

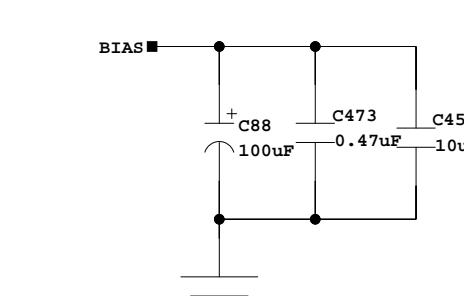
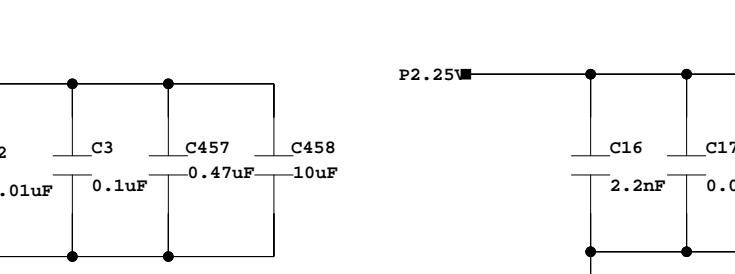
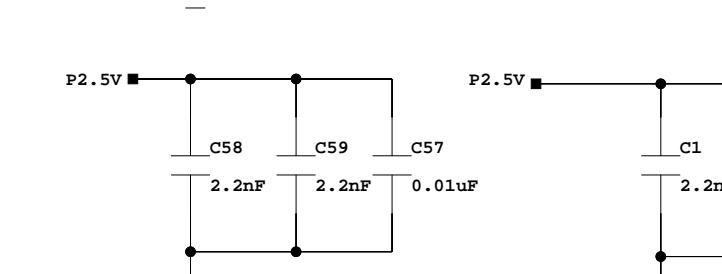
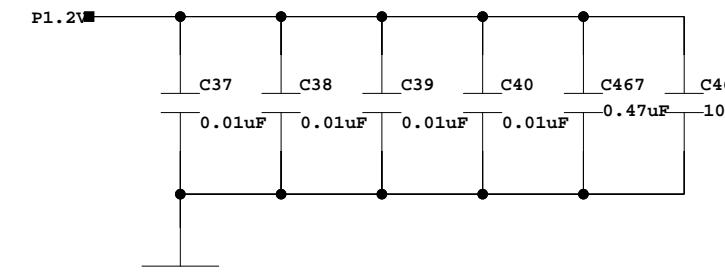
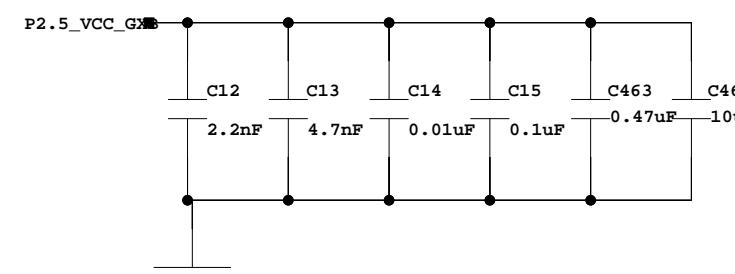
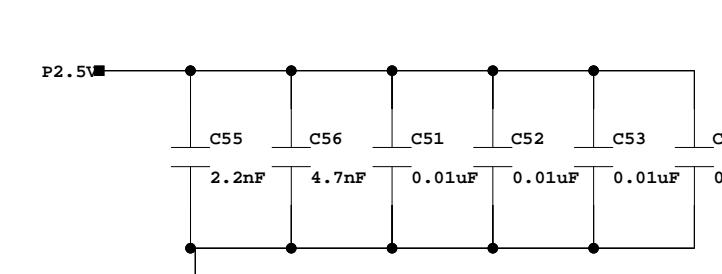
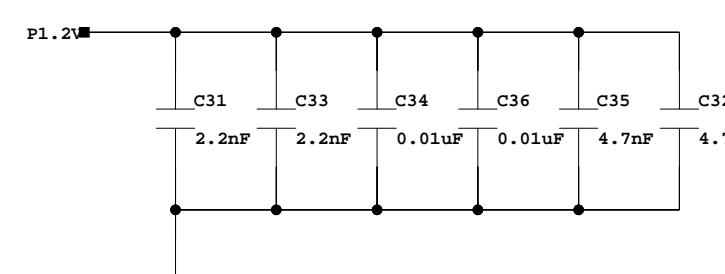
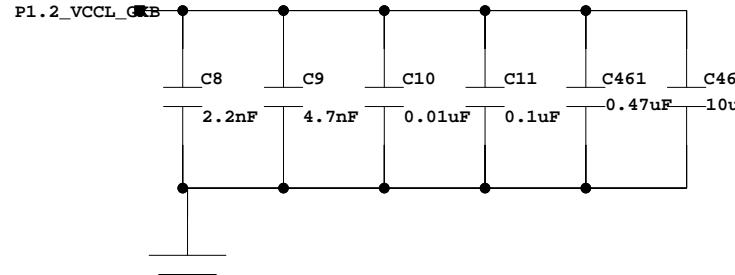
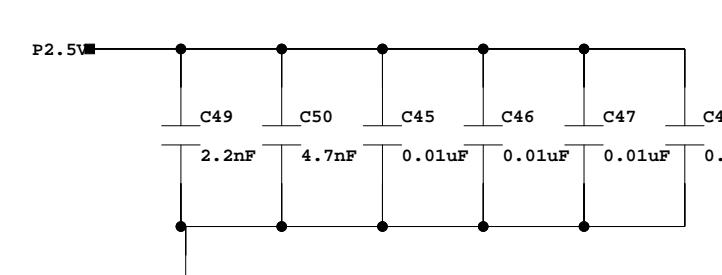
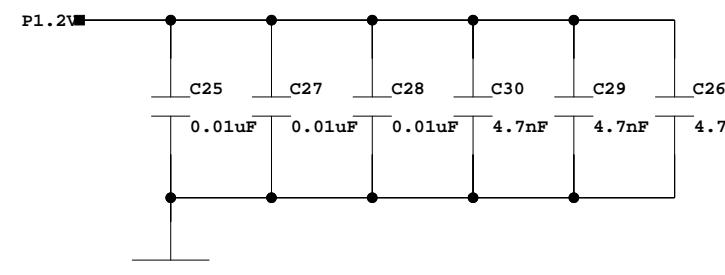
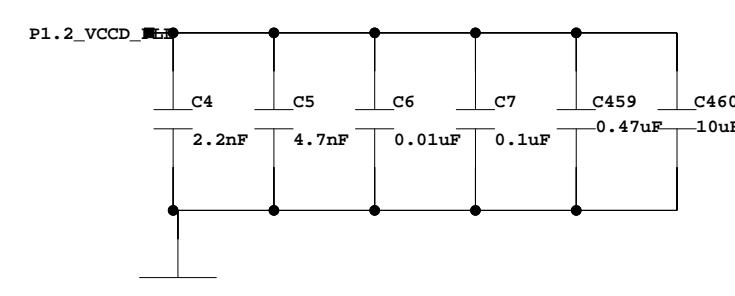
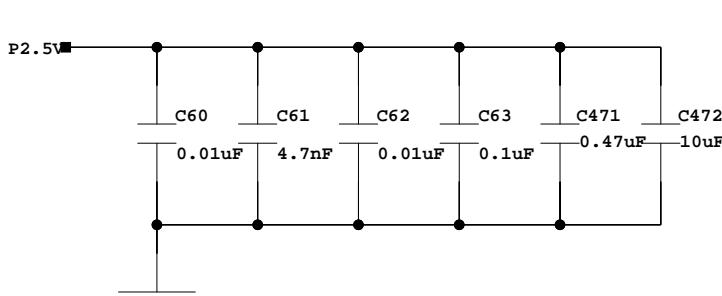
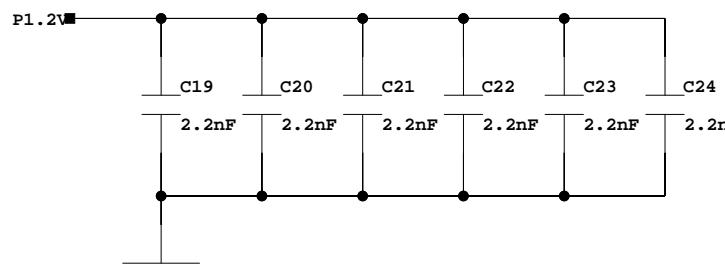
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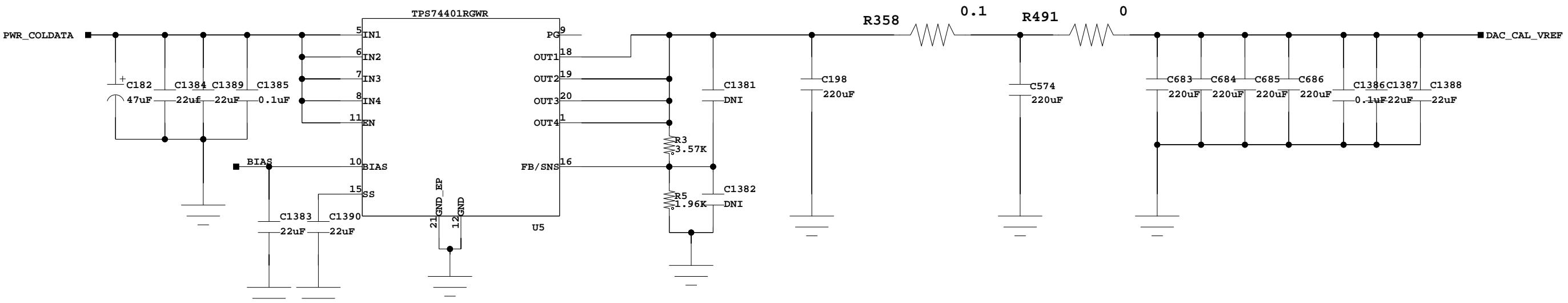
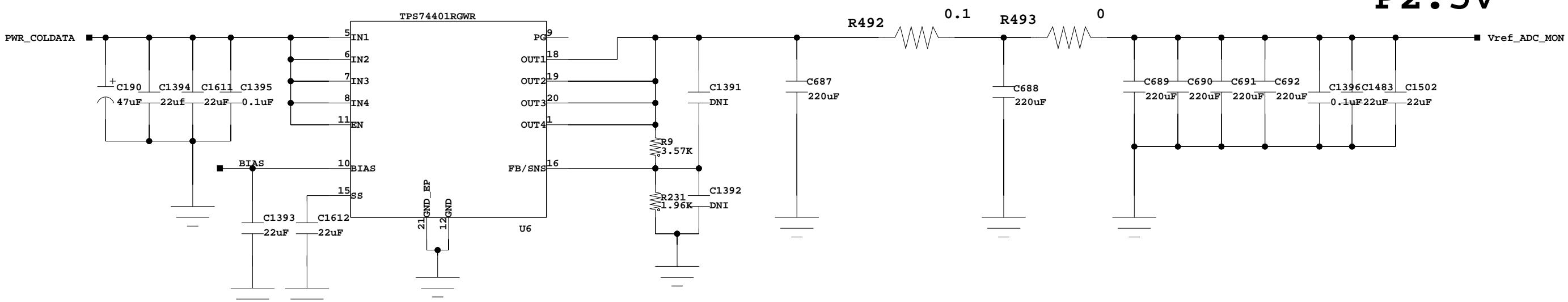
C

D

E

F

A**B****C****D****E****F****A****B****C****D****E****F**

A**B****C****D****E****F****P2.0V****P2.5V**

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INSTRUMENTATION DIVISION

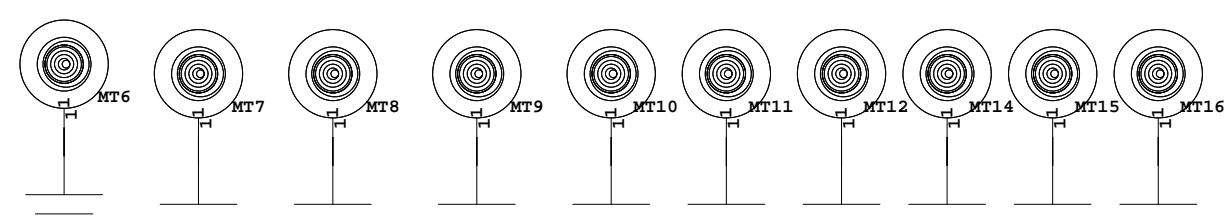
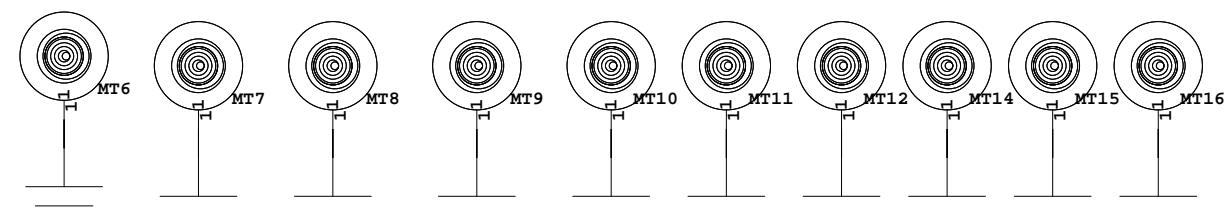
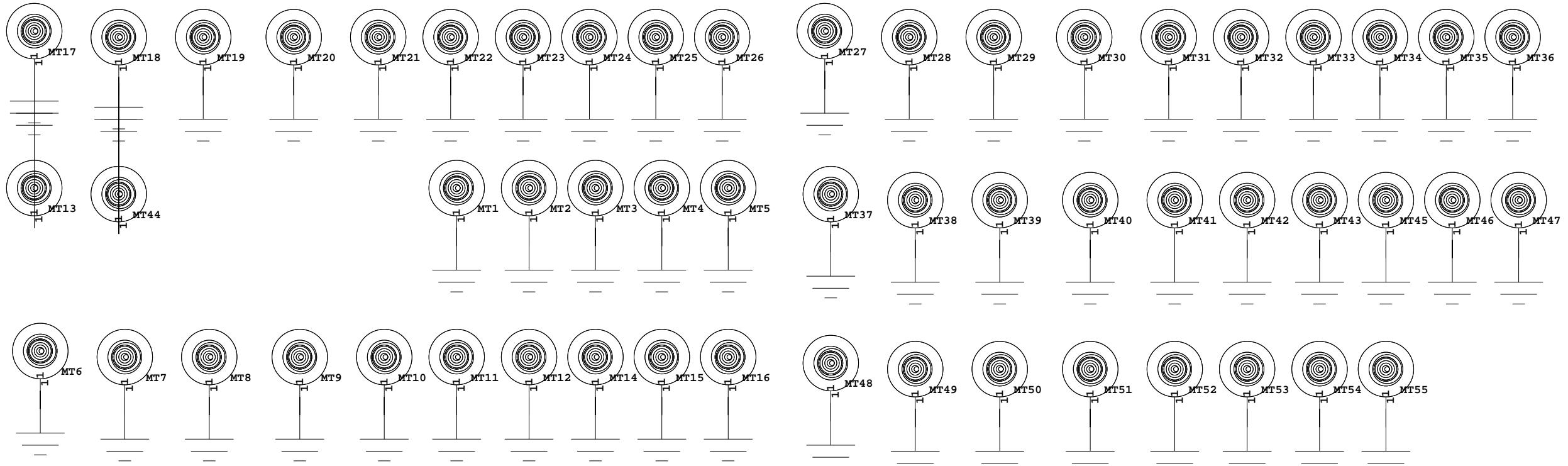
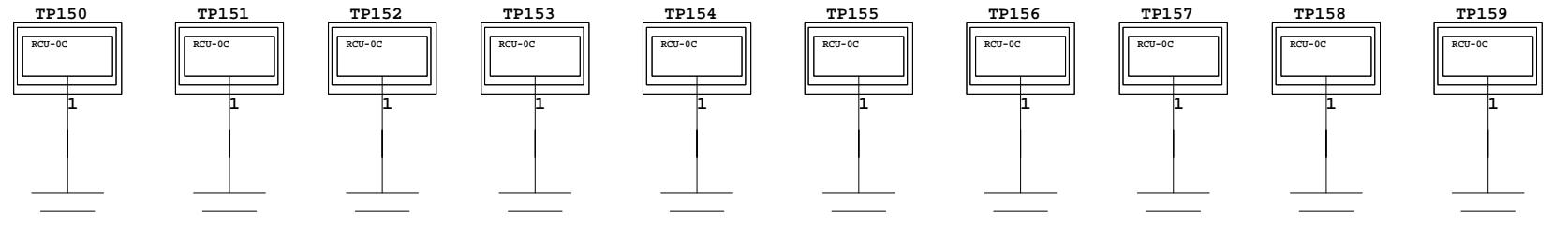
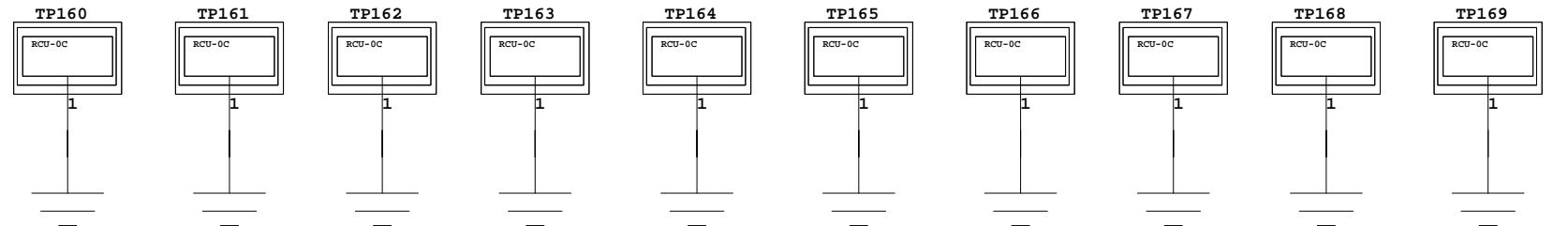
TITLE

35

SIZE : B BOARD : DUNE ASIC TESTER
DRAWN : Jack Fried DATE : 12/07/2022:10:29

A**B****C****D****E****F**

A **B** **C** **D** **E** **F**



FID1 FID2 FID3

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INSTRUMENTATION DIVISION
TITLE: **DAT Mounting holes**
SIZE : B BOARD : DUNE ASIC TESTER
DRAWN : Jack Fried DATE : 11/07/2022:17:55