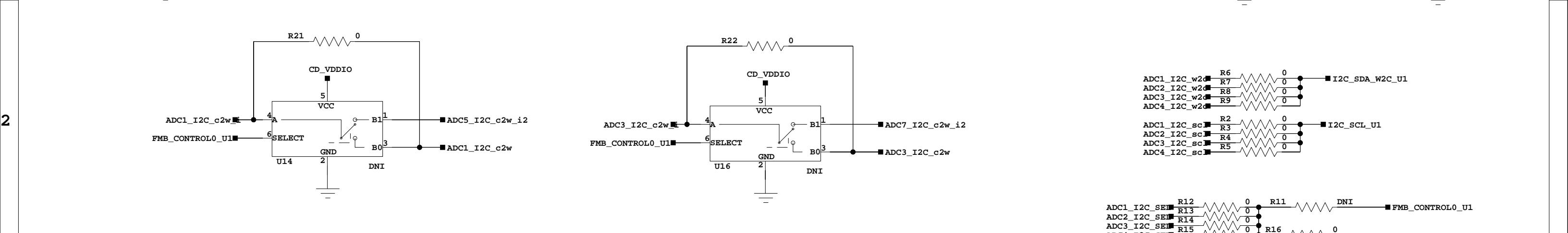
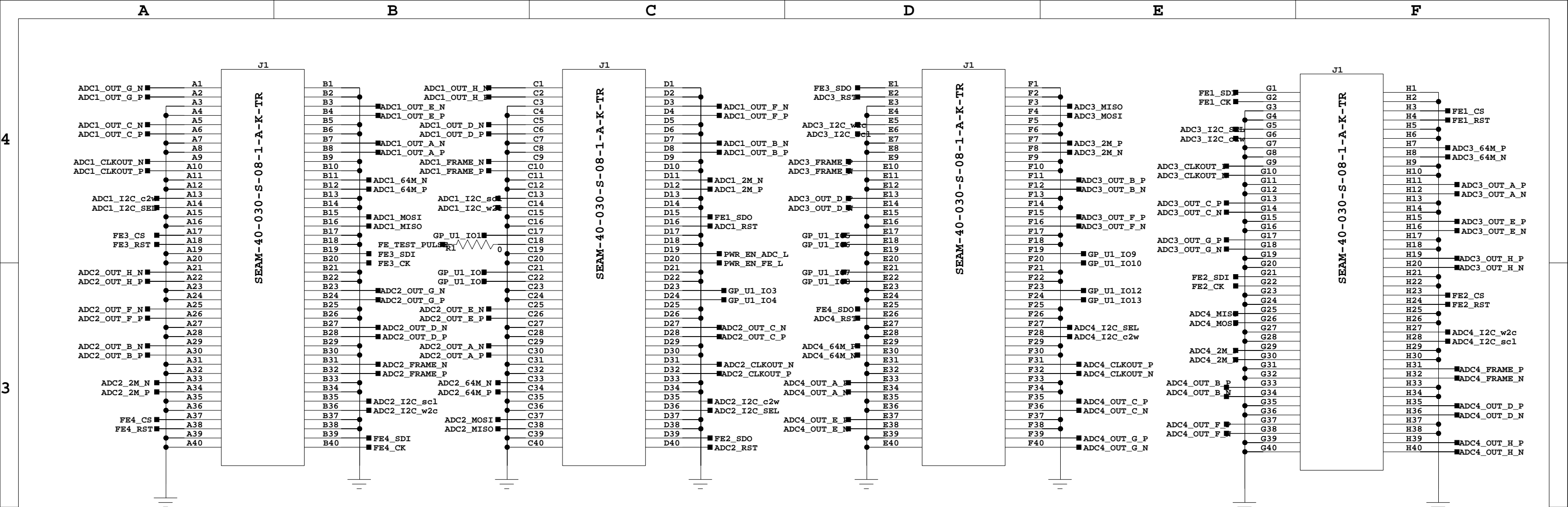


DUNE Coldata Mezzanine (CDM)

TABLE OF CONTENTS

SHEET 1: COLDATA Mezzanine Index
SHEET 2: CDM ADC IO Left
SHEET 3: CDM TERM L and ASIC IO
SHEET 4: CDM ADC IO Right
SHEET 5: CDM TERM R and ASIC IO
SHEET 6: CDM WIB interface
SHEET 7: CDM Left msic io
SHEET 8: CDM Right msic io
SHEET 9: CDM ASIC power IO
SHEET 10: CDM PWR 1_2V and 1_1V
SHEET 11: CDM PWR 2_25V and 1_8V
SHEET 12: CDM EXT DAC or REG CONTROL

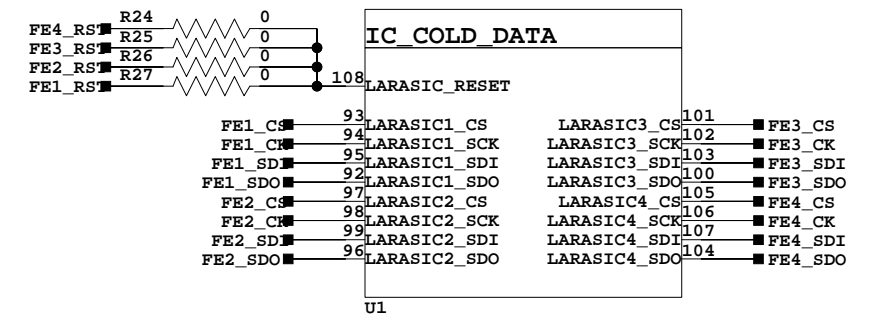
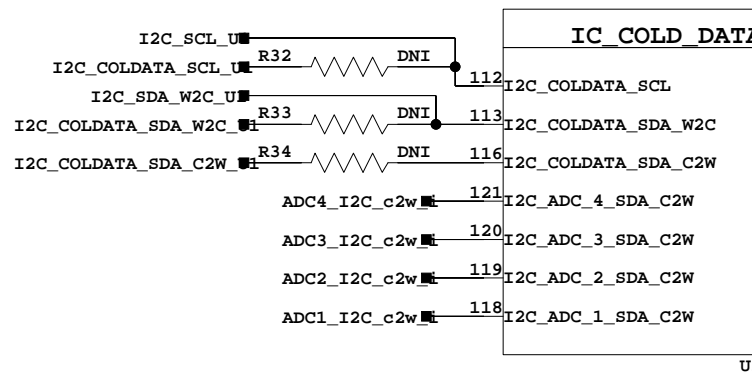
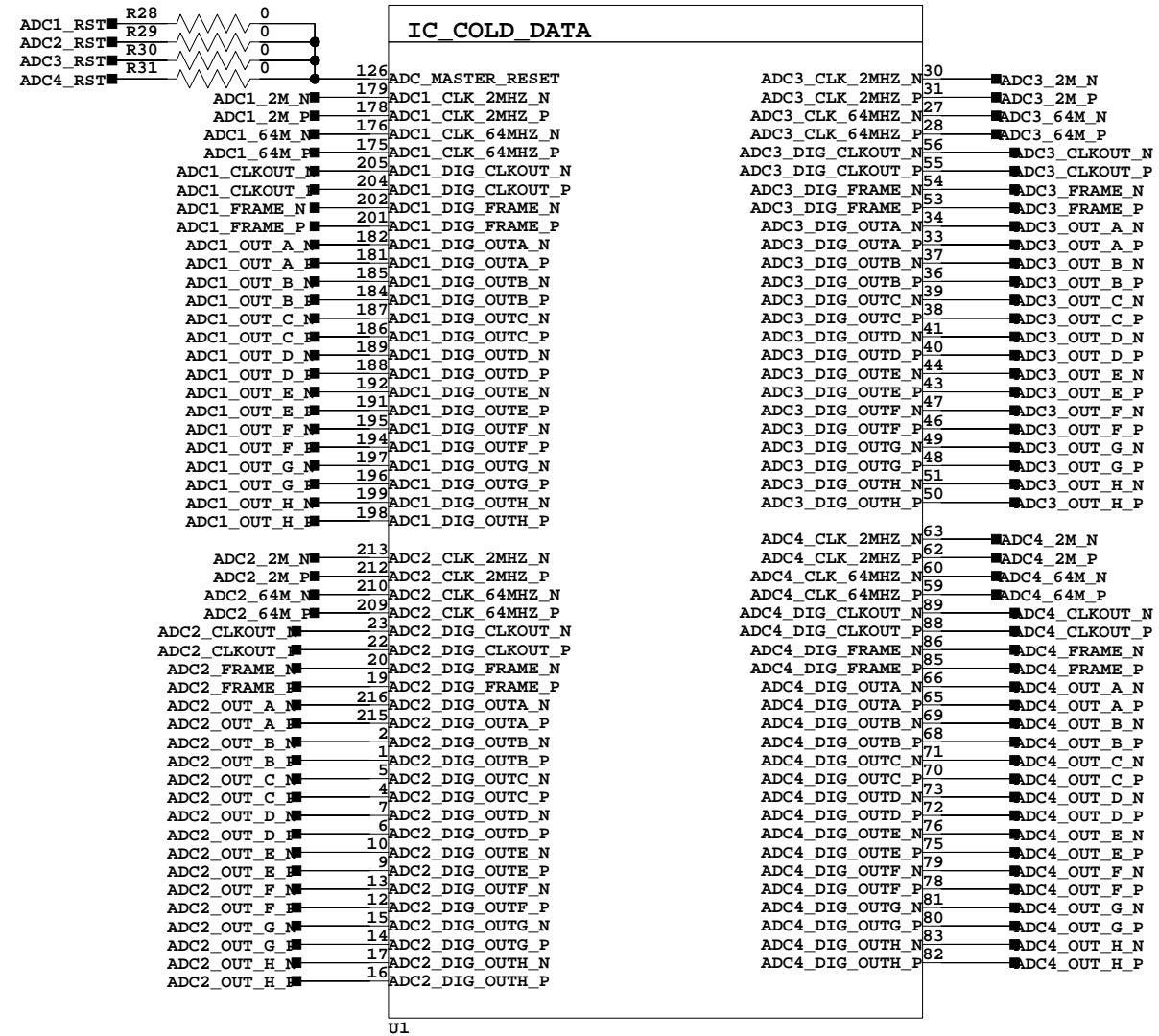
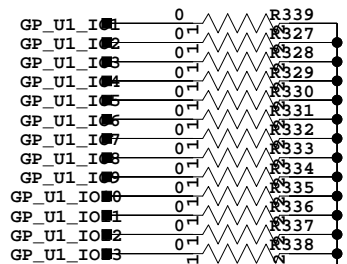
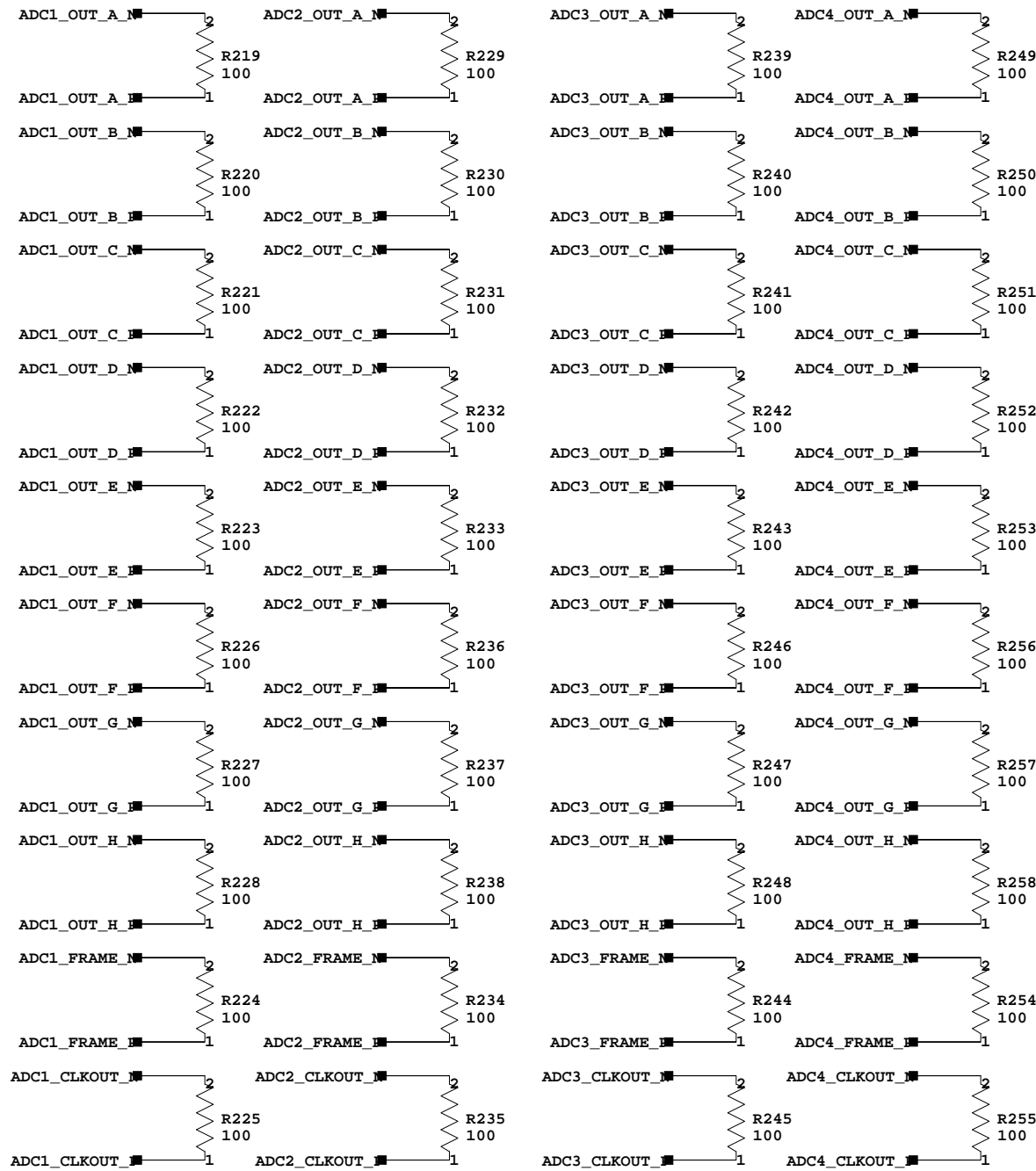
BROOKHAVEN NATIONAL LABORATORY INSTRUMENTATION DIVISION	
TITLE COLDATA Mezzanine Index	
SIZE R	BOARD : COLDATA Mezzanine
DRAWN : Jack Fried	DATE : 21/04/2020:15:44



ProtoDUNE WIB fix:: If on board oscillator does not work
 Not needed for DUNE WIB.

LVDS TERMINATION

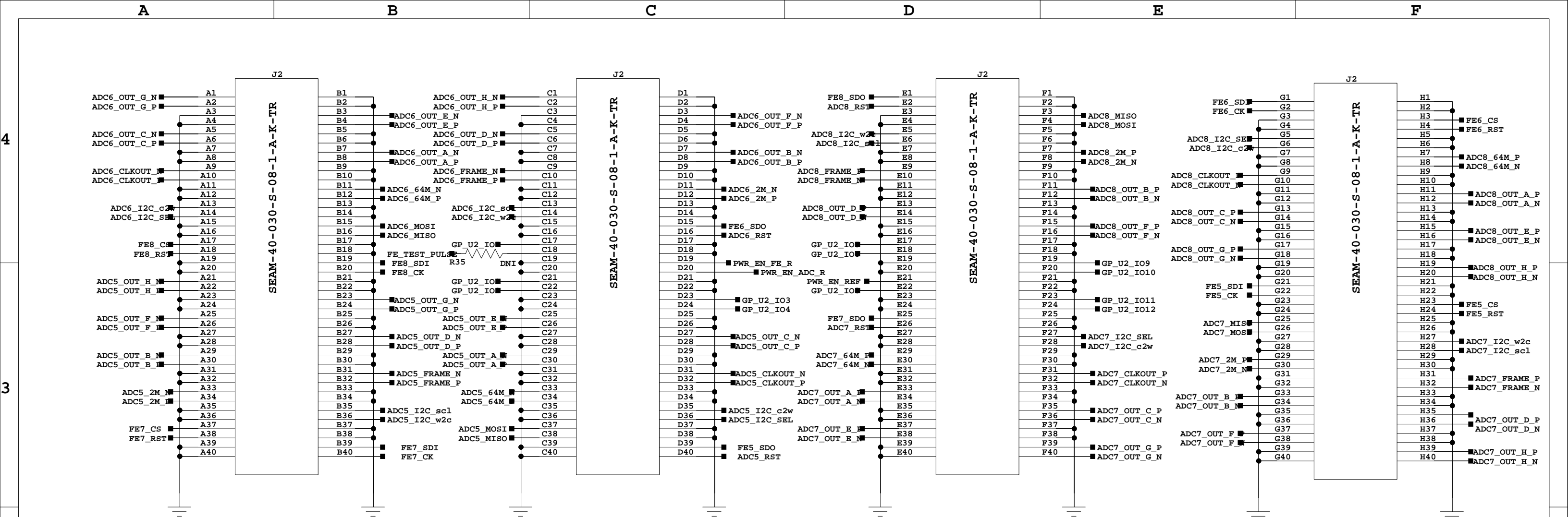
Place next to coldata ASIC



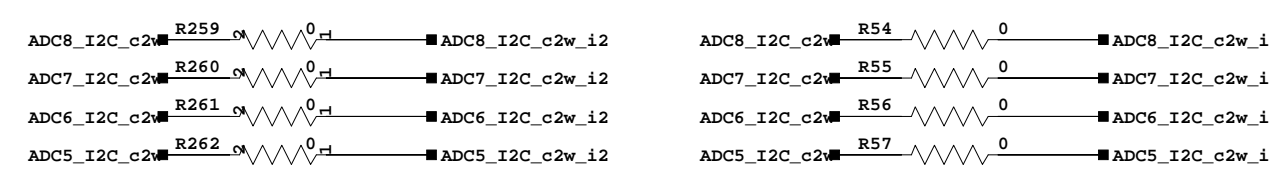
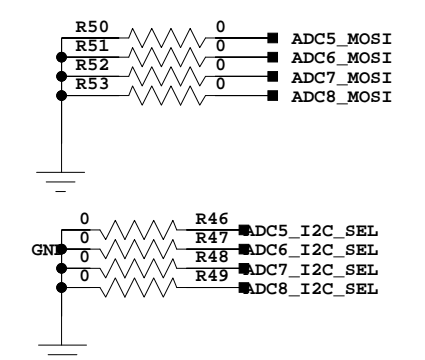
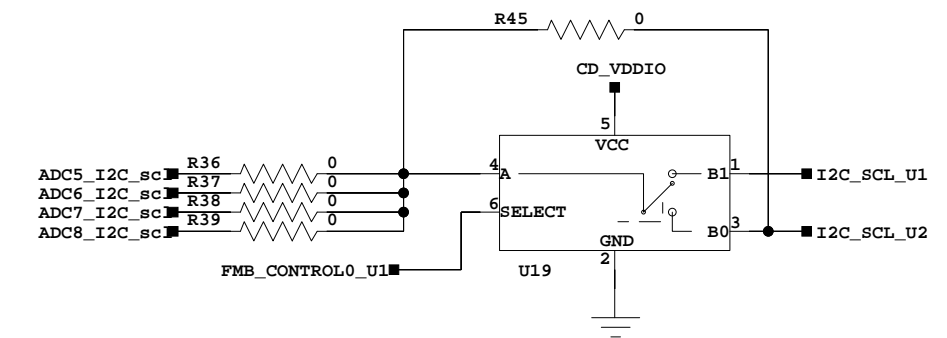
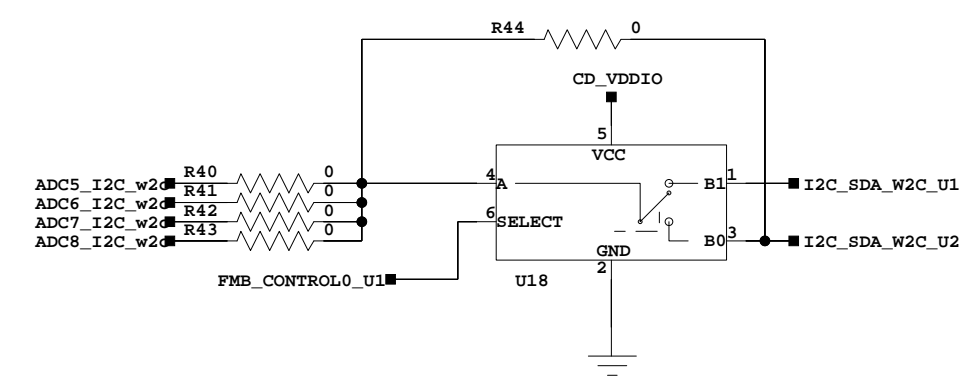
BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION

TITLE
CDM TERM L and ASIC IO

SIZE R BOARD : COLDATA Mezzanine
DRAWN : Jack Fried DATE : 07/06/2020:14:25



ProtoDUNE WIB fix:: If on board oscillator does not work
 Not needed for DUNE WIB.



- ADC5_MISO
- ADC6_MISO
- ADC7_MISO
- ADC8_MISO

BROOKHAVEN NATIONAL LABORATORY
INSTRUMENTATION DIVISION

TITLE
CDM ADC IO Right

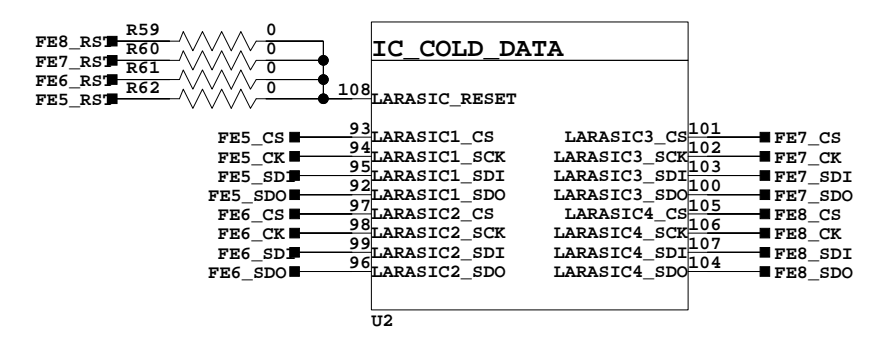
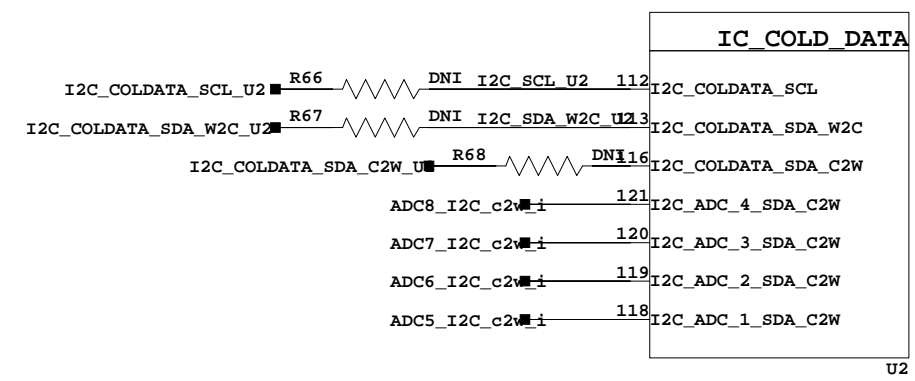
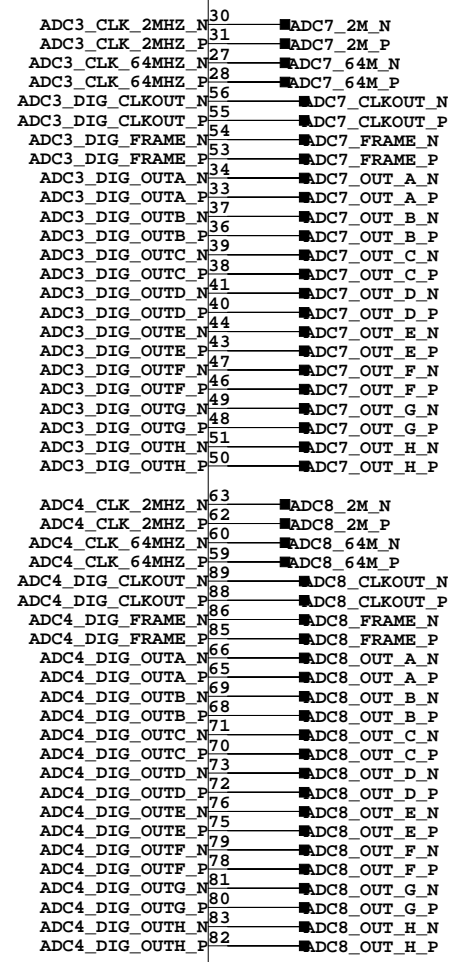
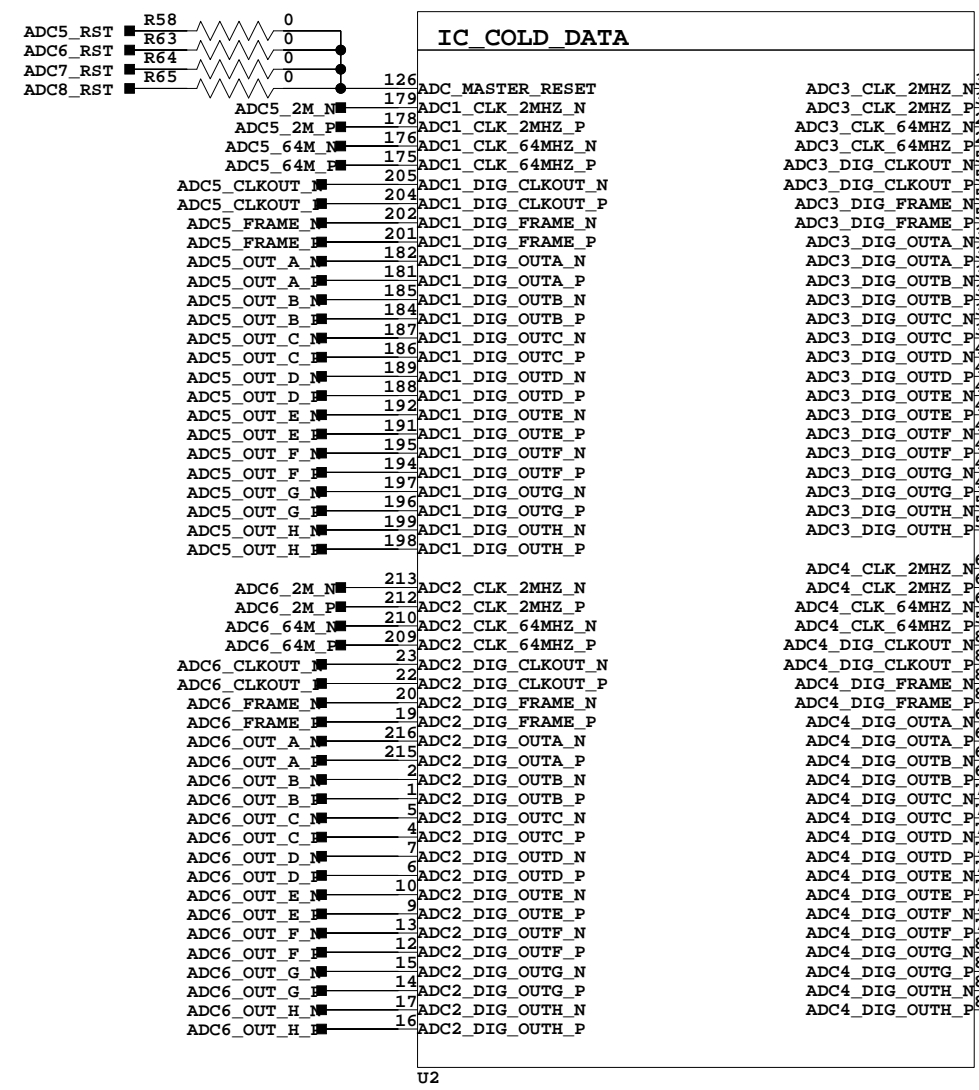
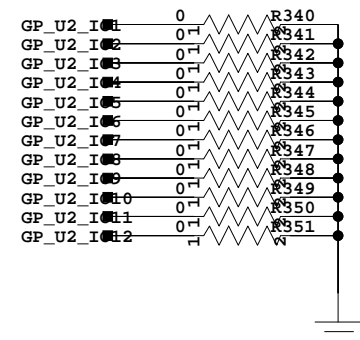
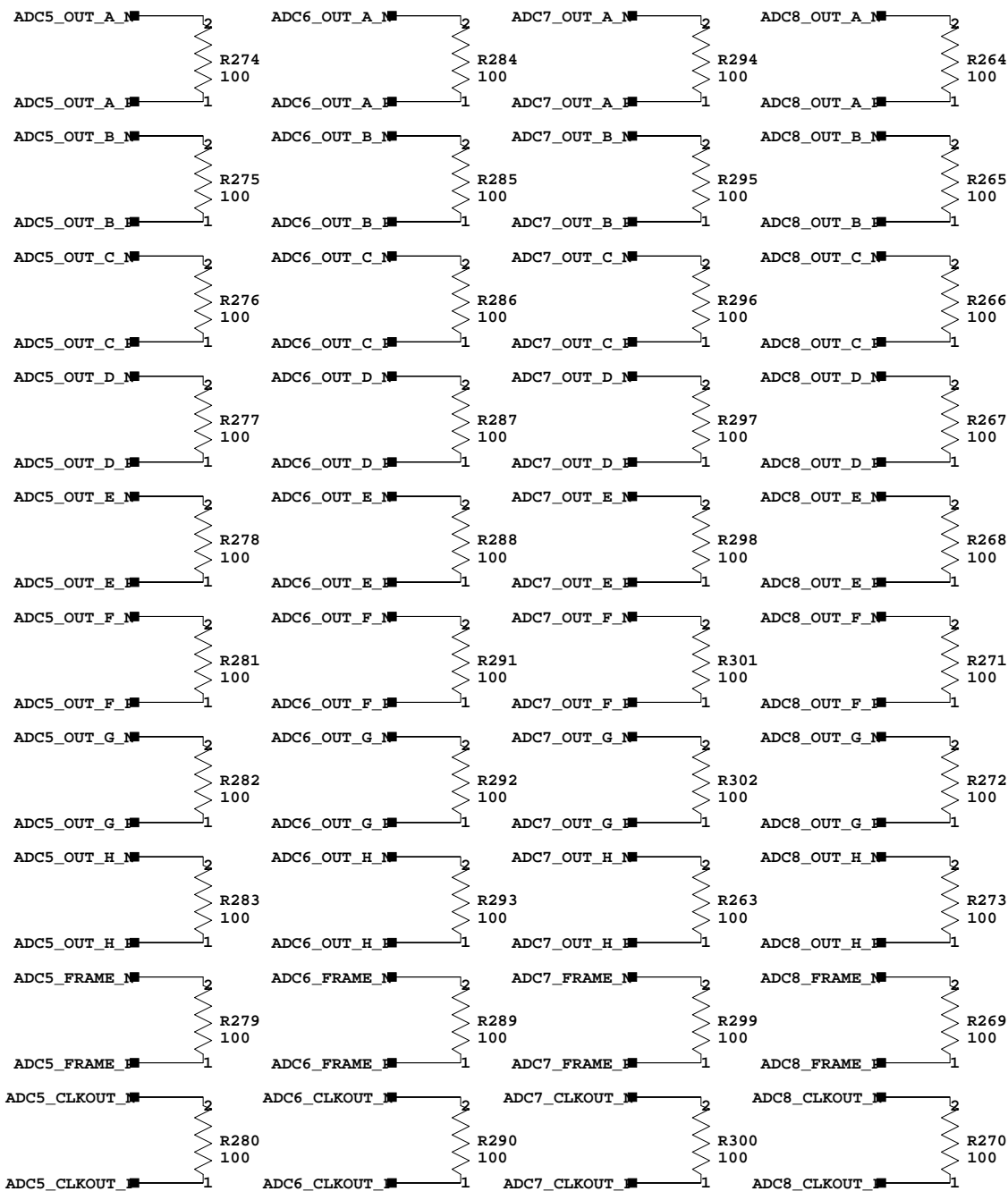
SIZE R **BOARD** : COLDATA Mezzanine
DRAWN : Jack Fried **DATE** : 21/04/2020:15:39

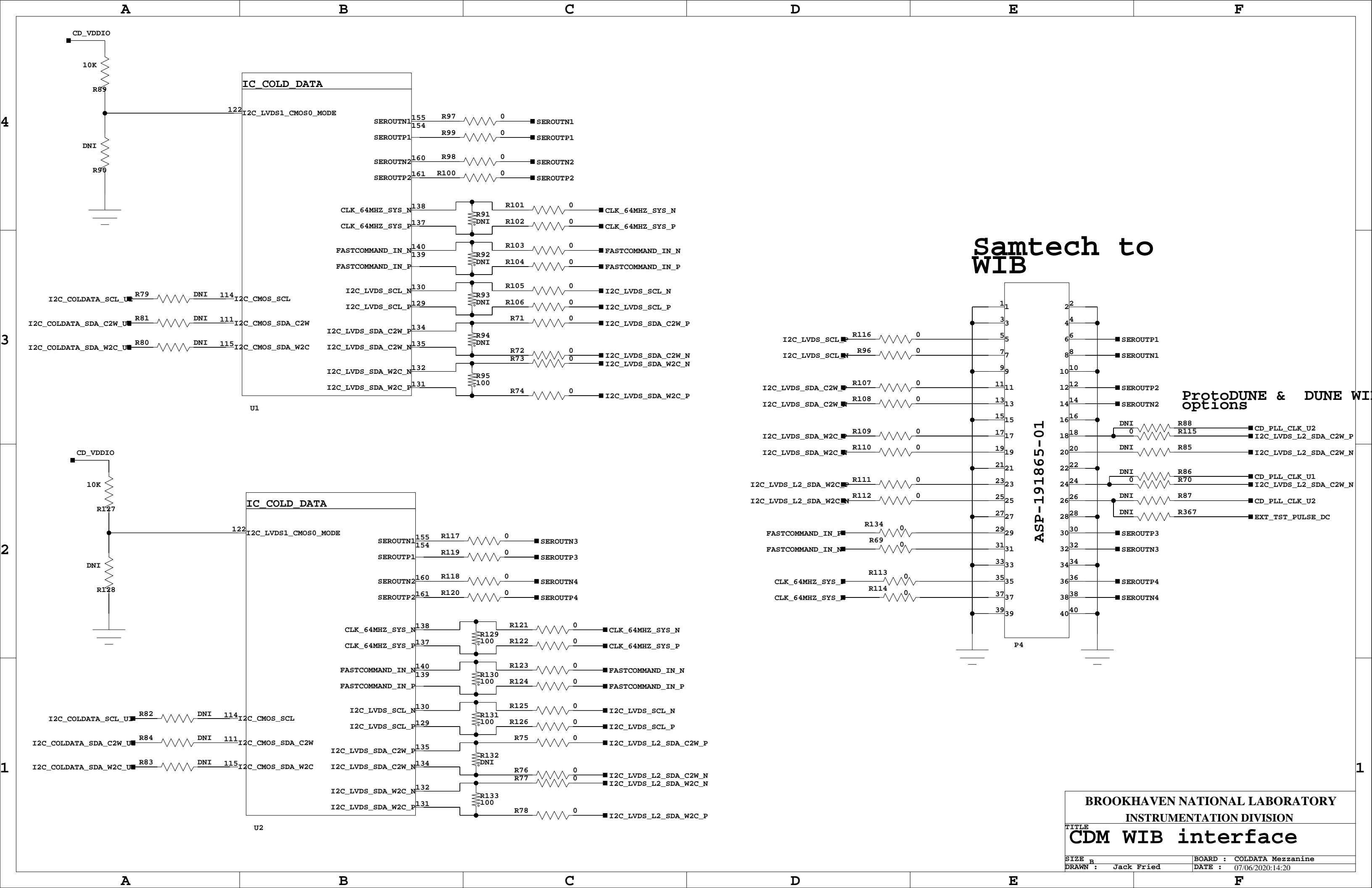
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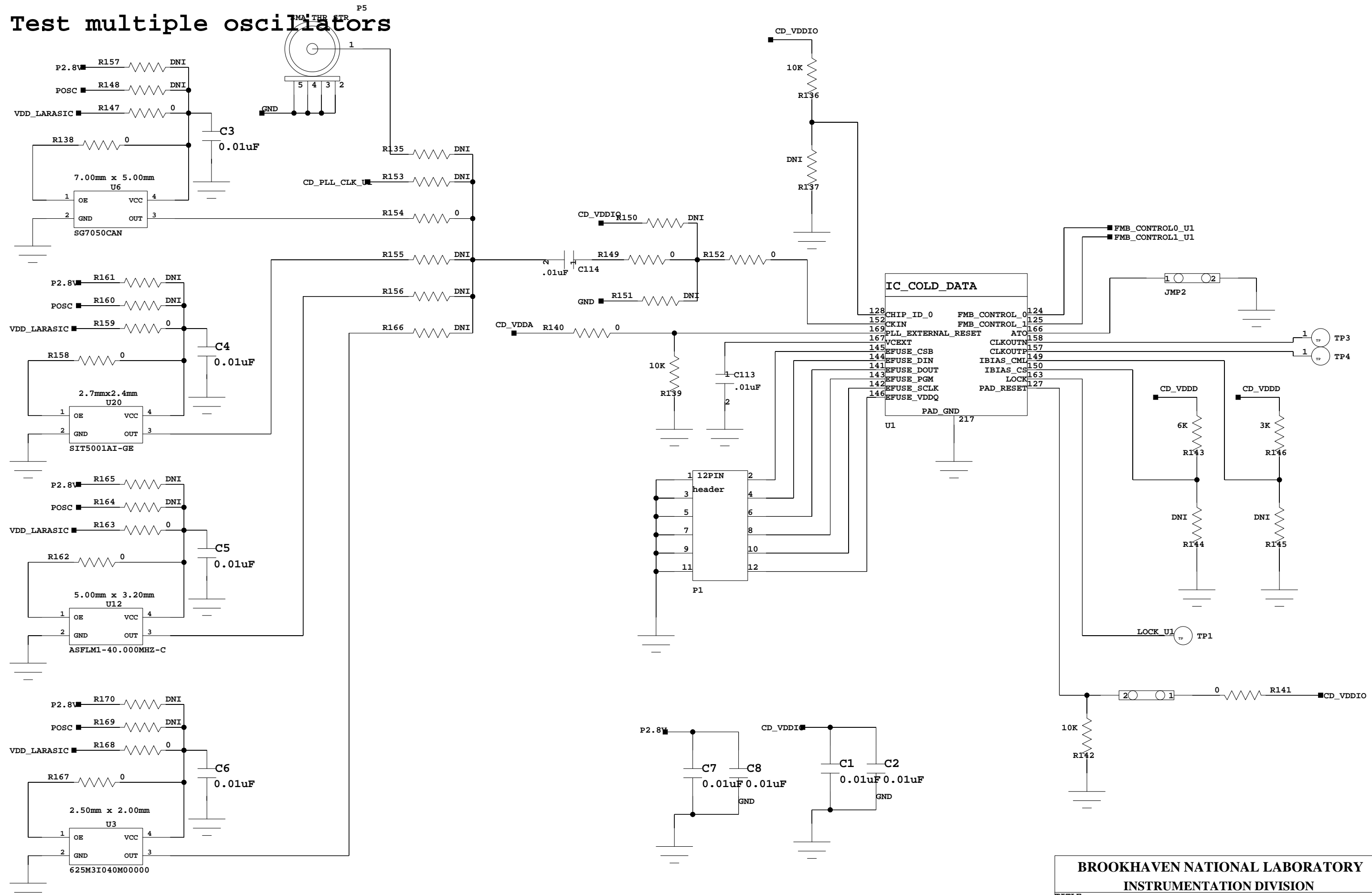
LVDS TERMINATION

Place next to coldata ASIC

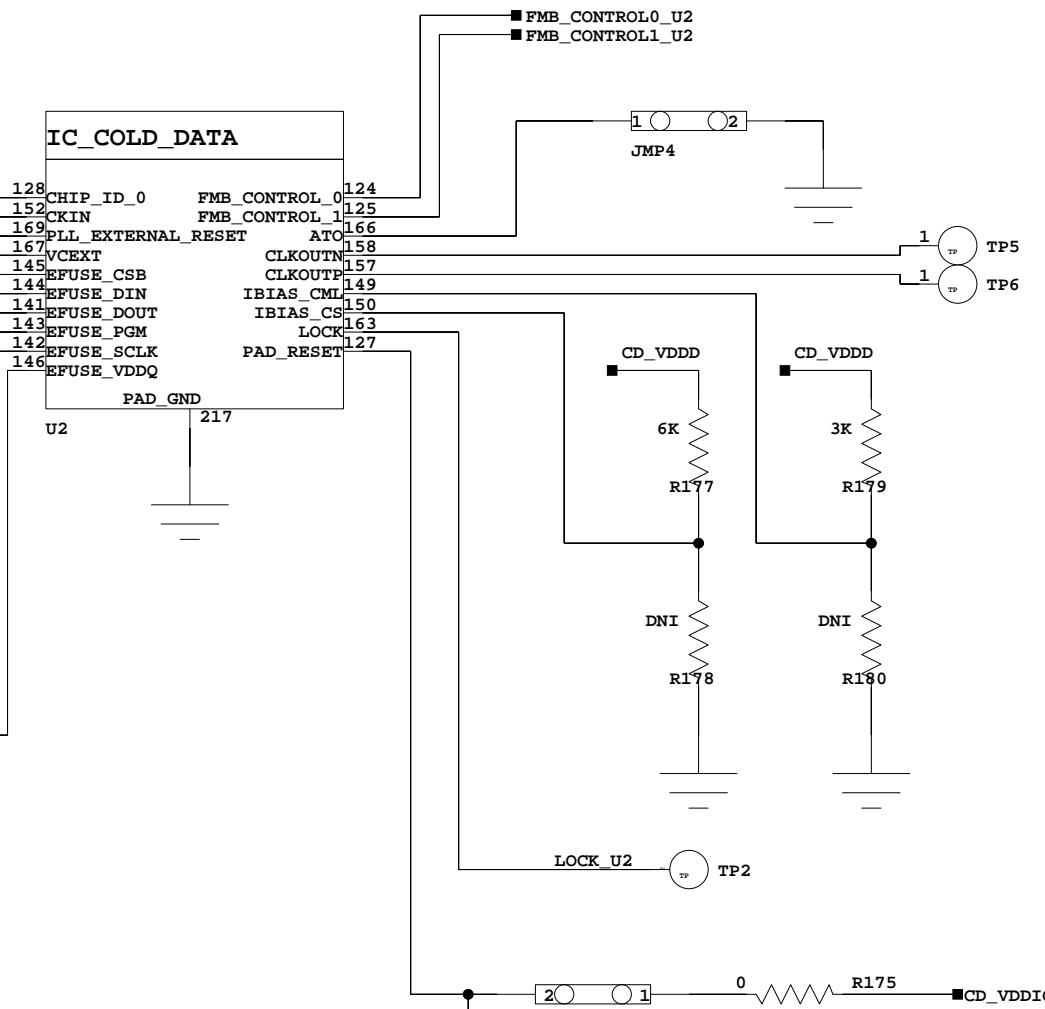
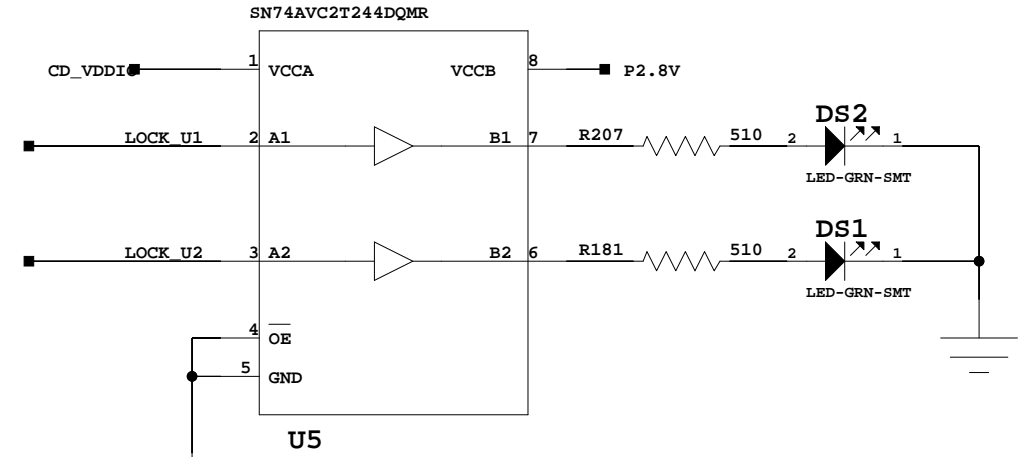
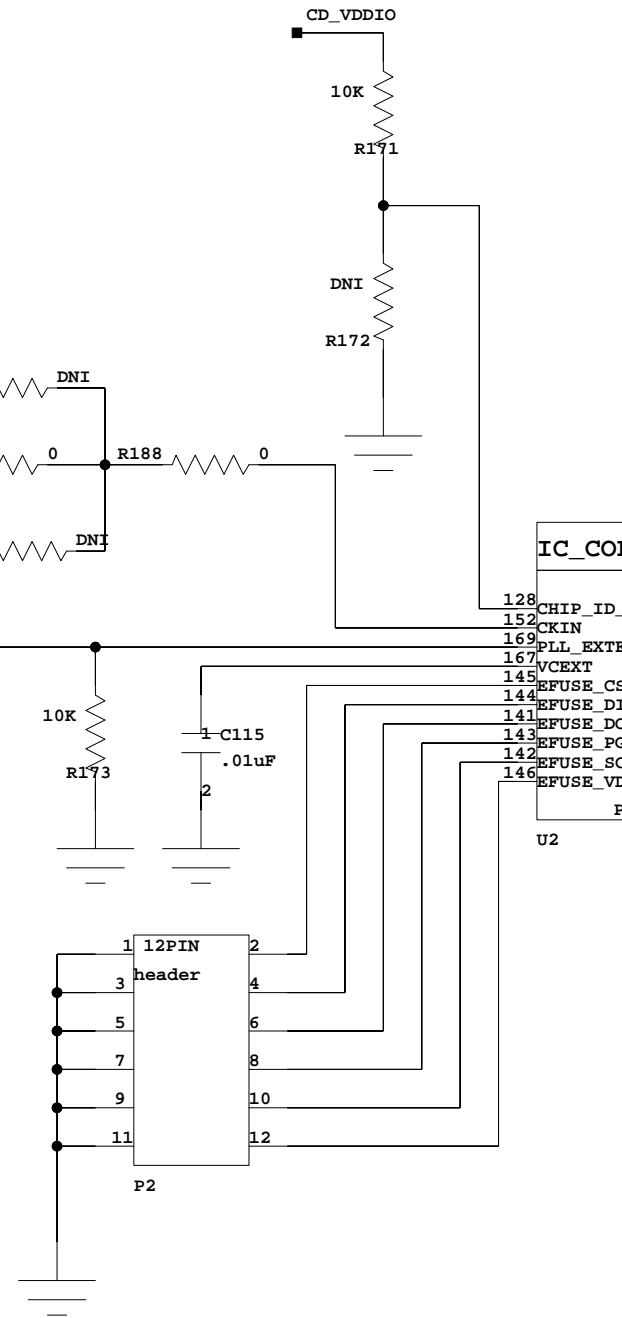
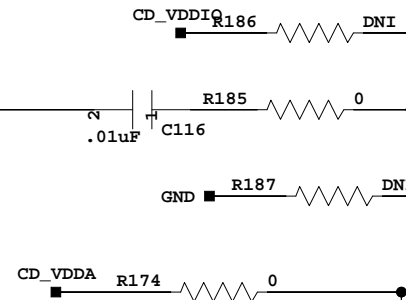
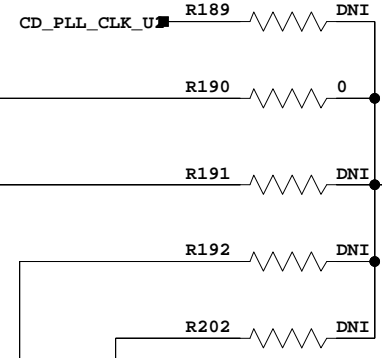
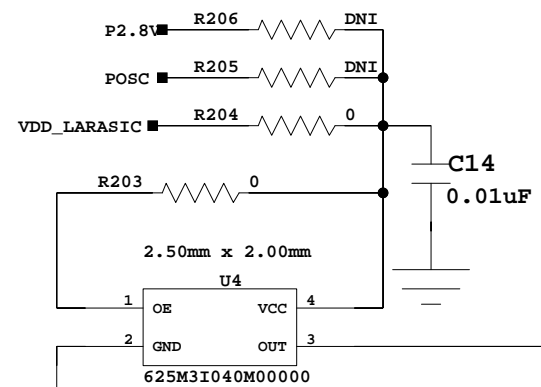
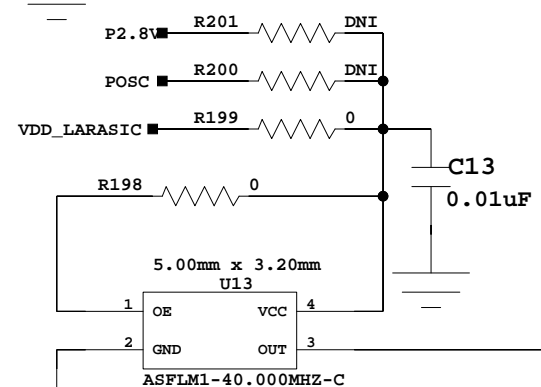
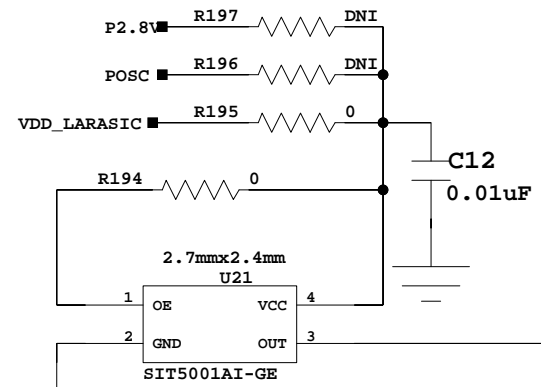
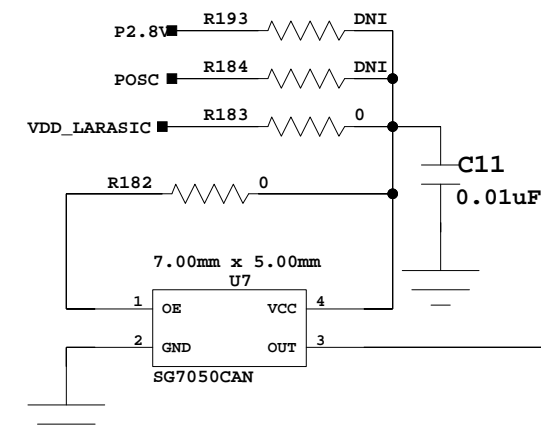


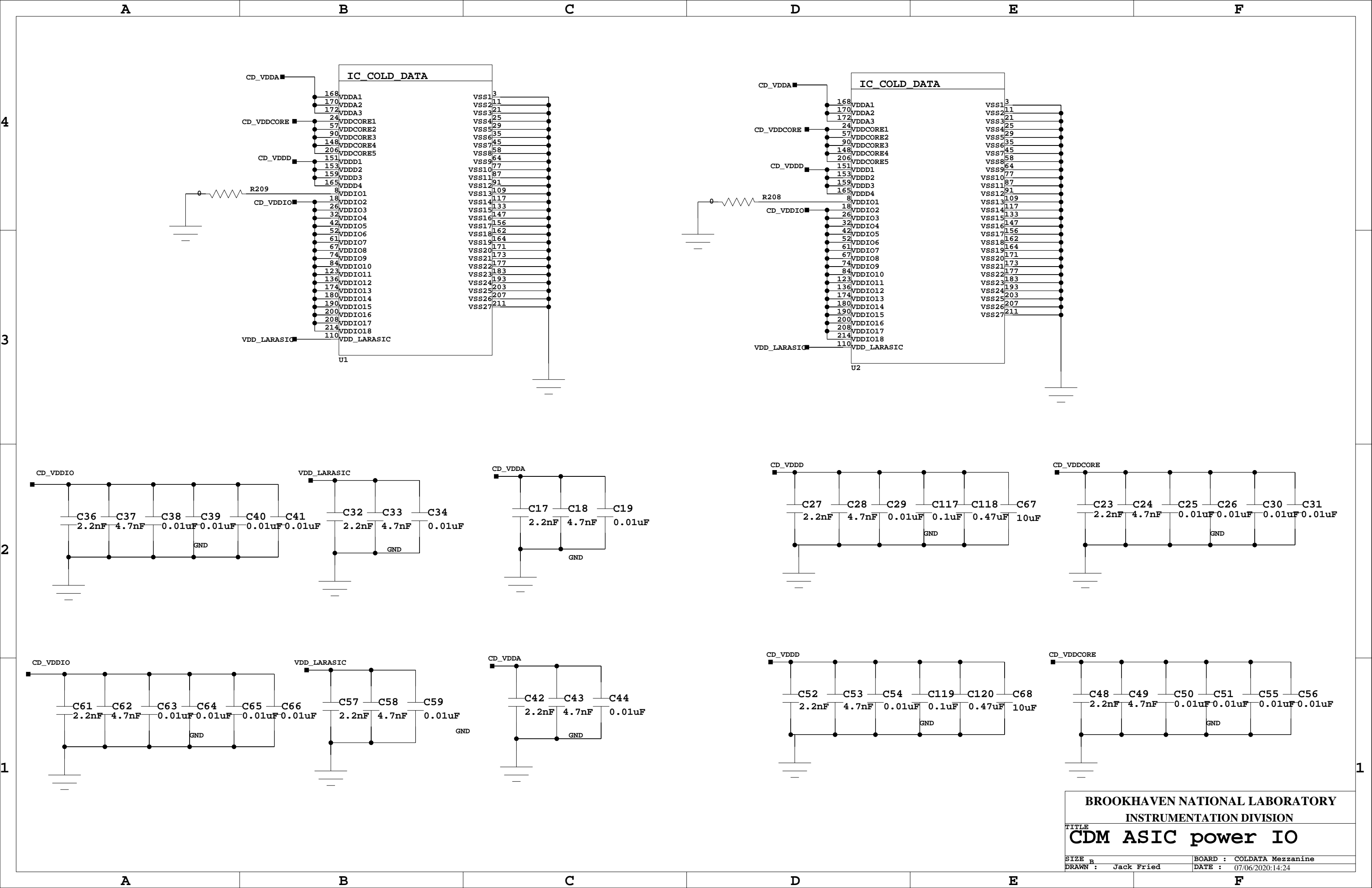


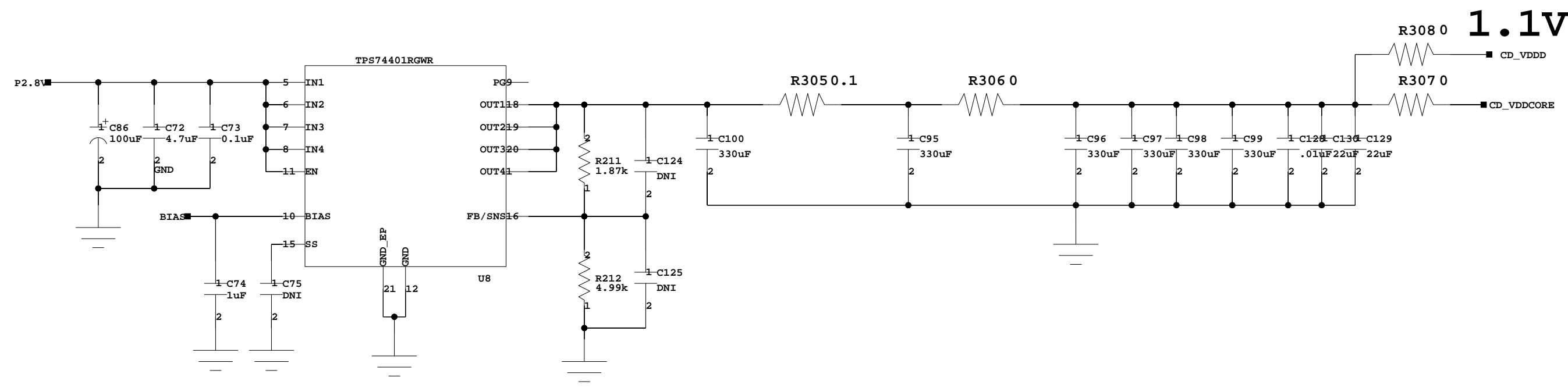
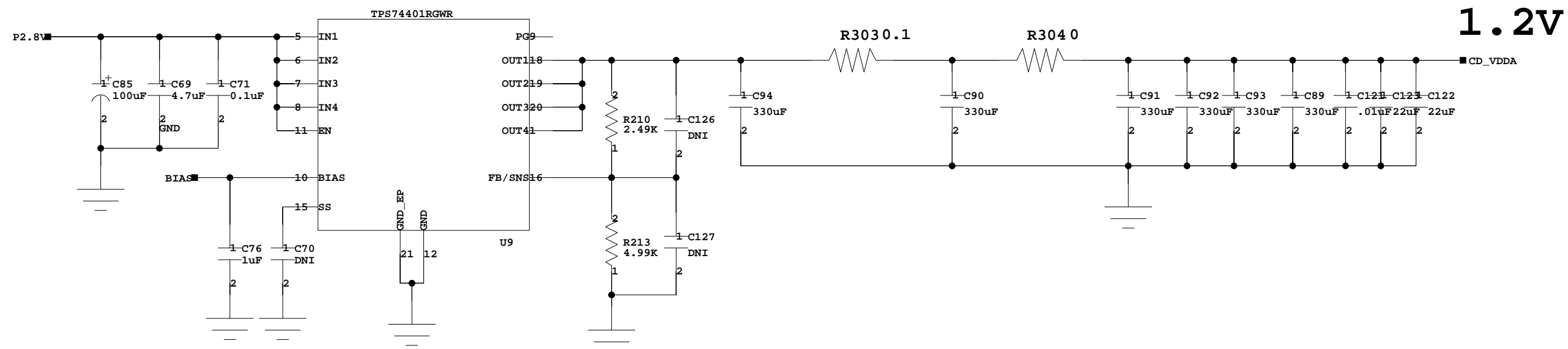
Test multiple oscillators



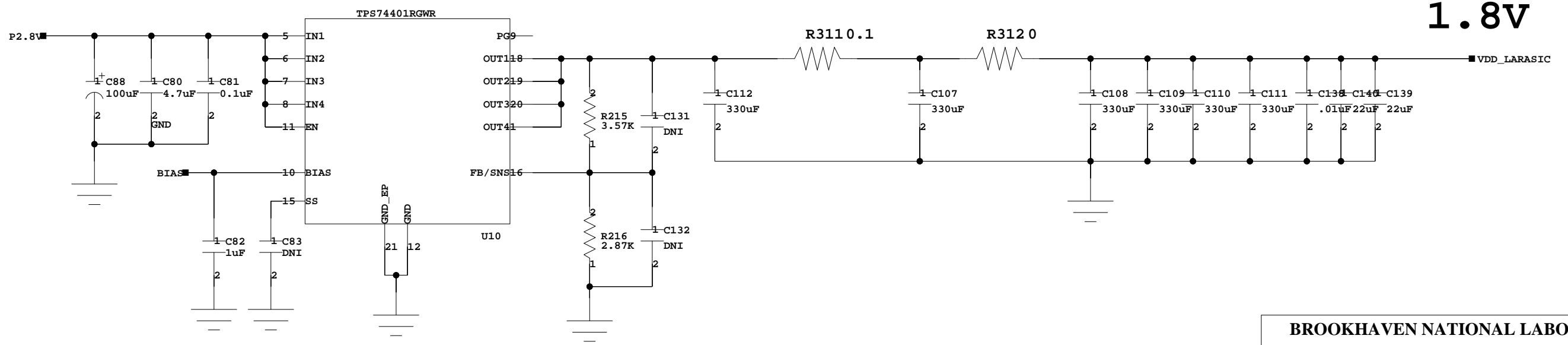
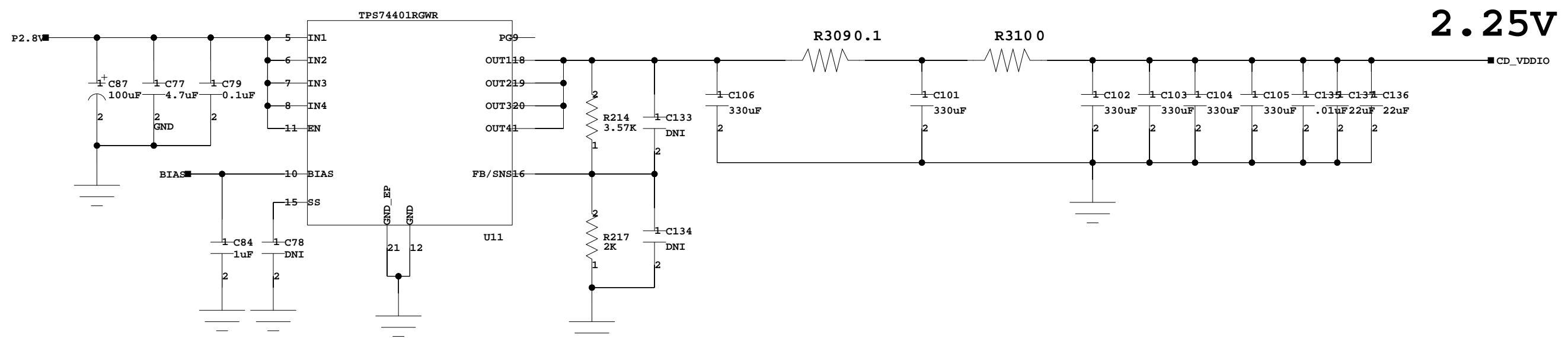
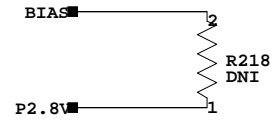
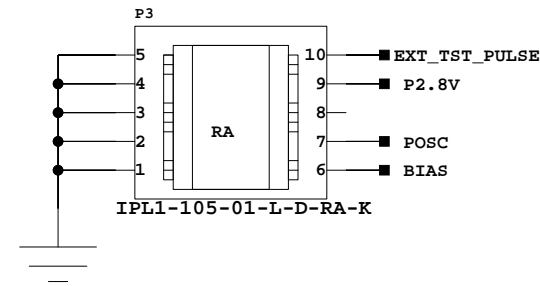
Test multiple oscillators





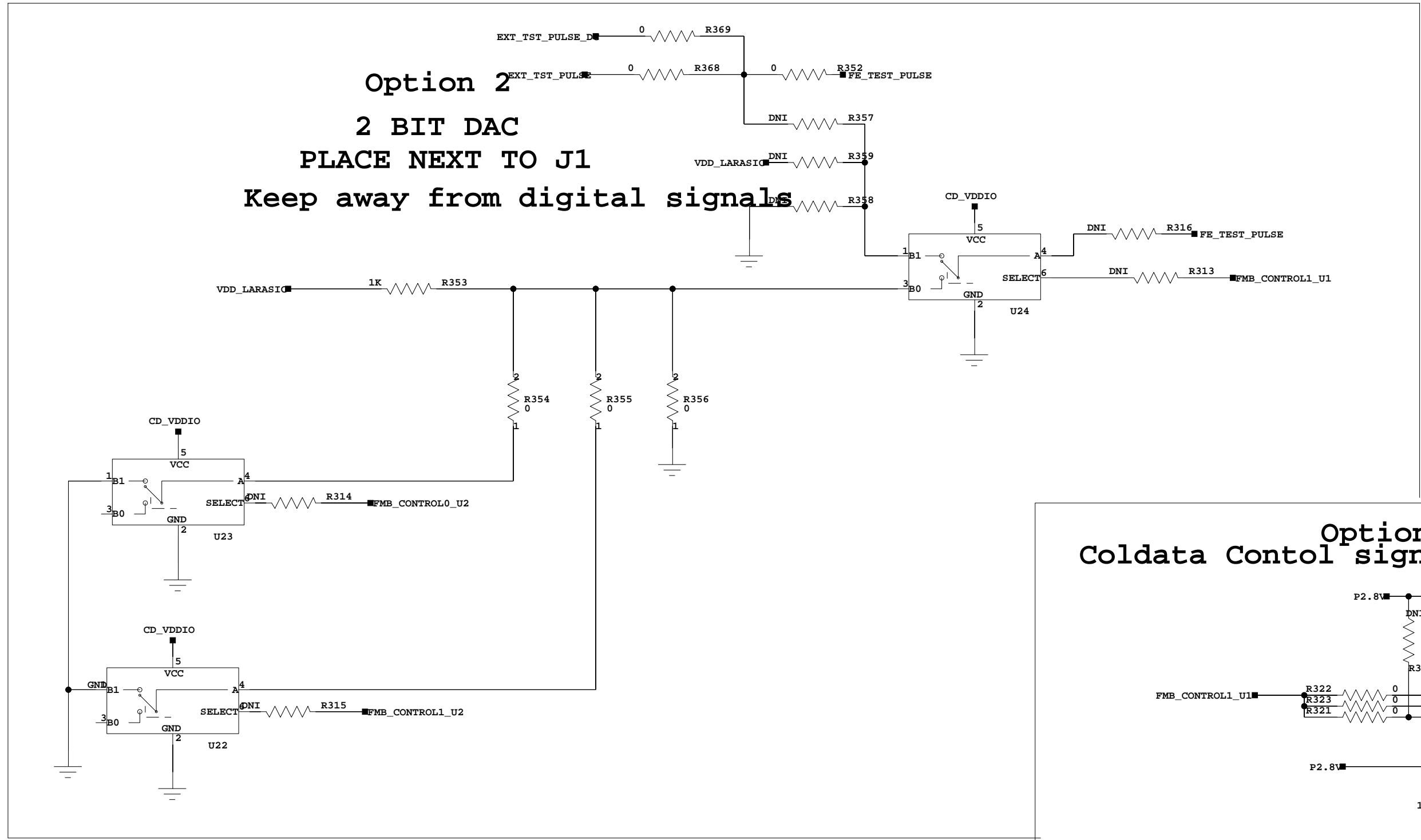


BROOKHAVEN NATIONAL LABORATORY	
INSTRUMENTATION DIVISION	
TITLE CDM PWR 1_2V and 1_1V	
SIZE R	BOARD : COLDATA Mezzanine
DRAWN : Jack Fried	DATE : 09/04/2020:18:26



BROOKHAVEN NATIONAL LABORATORY	
INSTRUMENTATION DIVISION	
CDM PWR 2_25V and 1_8V	
SIZE R	BOARD : COLDATA Mezzanine
DRAWN : Jack Fried	DATE : 21/04/2020:15:39

Option 2
2 BIT DAC
PLACE NEXT TO J1
Keep away from digital signals



Option 1
Coldata Control signals used for regula

