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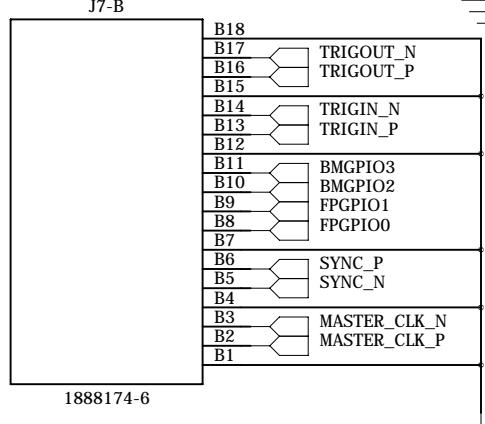
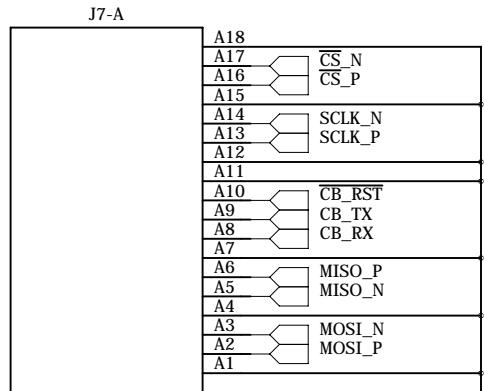
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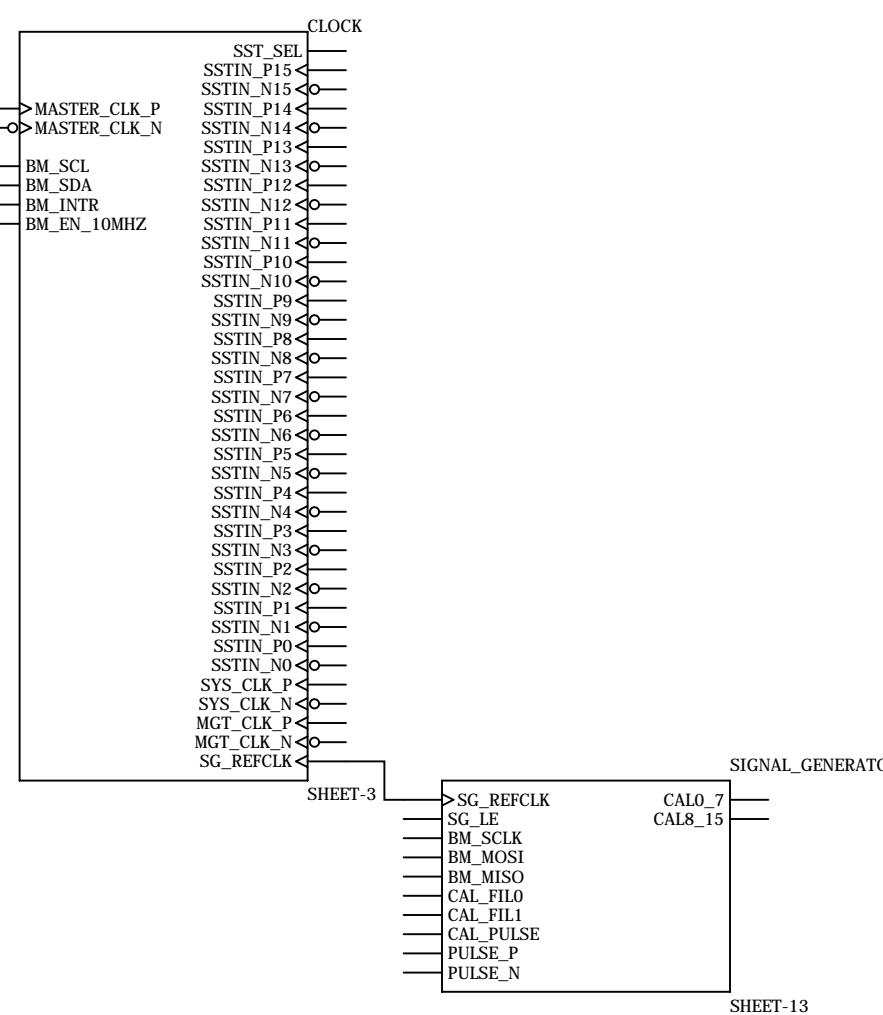
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

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protection diodes somewhere???

ECO 6/2: swap A/B on sideband signals



SFF-8087 connector

Cable is designed with 8 differential pairs

TRIGIN+/-, TRIGOUT+/-, CLK+/-, SYNC+/-

MOSI/GND, MISO/GND (these are implemented as differential pairs!)

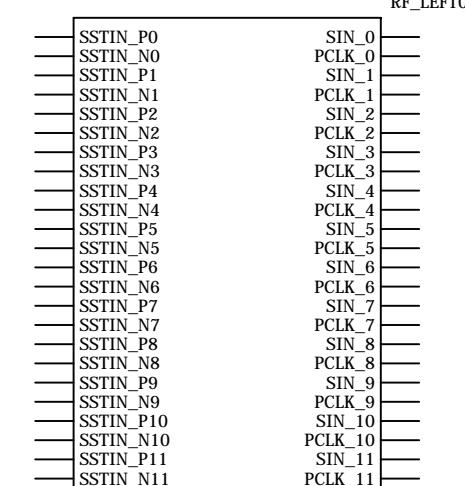
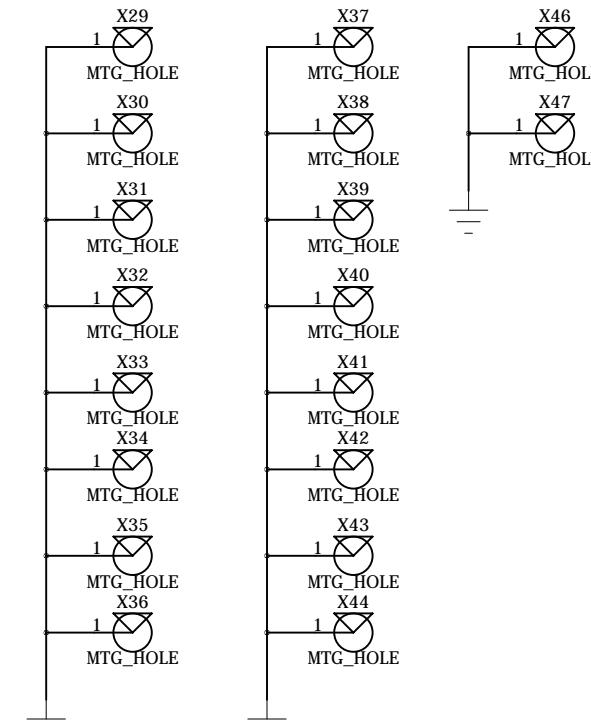
SCLK/GND (allows for a higher-speed FPGA-to-FPGA link)

CS/GND (if used single ended, just drive N side to ground in FPGA)

There are also 8 sideband signals

RX/TX/RST/GND/GPIO[3:0]

At some point I'll finish a top block diagram...



COMPANY:	Ohio State University		
SHEET:	TOP		
DRAWN:	PSA	DATED: 1/22/20	
CHECKED:	PSA	DATED: 2/27/20	
QUALITY CONTROL:	N/A	DATED: N/A	
RELEASED:	N/A	DATED: N/A	
CODE:	SIZE:	DESIGN:	REV:
4	C	RADIANT	A
SCALE: <Scale>	Sheet: 1B	74	

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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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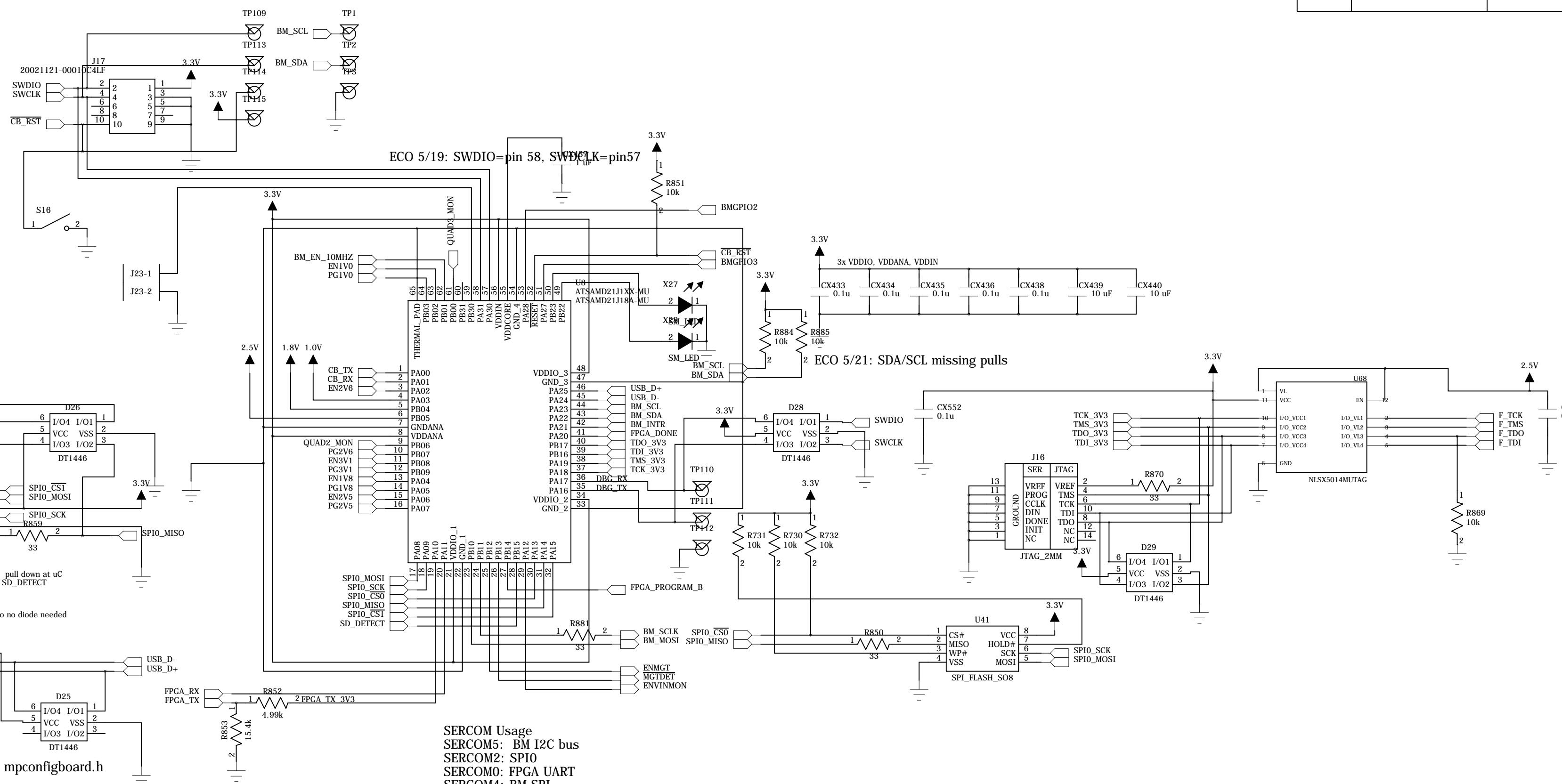
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## Feather M0 Express mpconfigboard.h

```

SPI_FLASH_MOSI_PIN_PA08
SPI_FLASH_MISO_PIN_PA14
SPI_FLASH_SCK_PIN_PA09
SPI_FLASH_CS_PIN_PA13
DEFAULT_I2C_BUS_SCK_PA23
DEFAULT_I2C_BUS_SDA_PA22
DEFAULT_SPI_BUS_SCK_PA11
DEFAULT_SPI_BUS_MOSI_PA10
DEFAULT_SPI_BUS_MISO_PA12

```

Note that the default UART goes to the FPGA

SERCOM Usage  
SERCOM5: BM I2C bus  
SERCOM2: SPI0  
SERCOM0: FPGA UART  
SERCOM4: BM SPI  
SERCOM3: Debug UART  
SERCOM1: CB UART

COMPANY:	Ohio State University		
SHEET:	BOARD_MANAGER		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
RELEASED:	N/A	DATED:	N/A
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REV:	A	RADIANT	A
Sheet:	20F 74		

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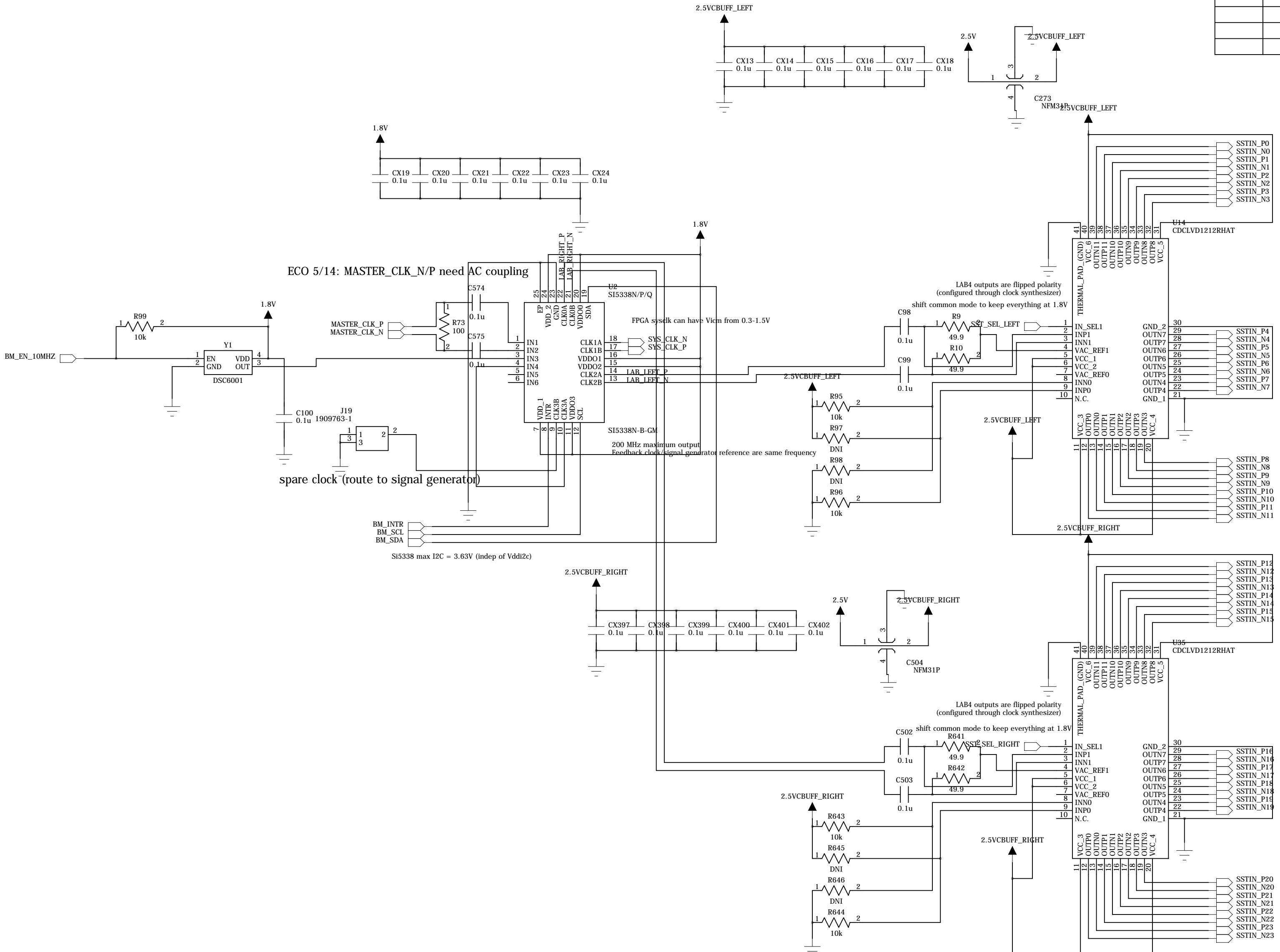
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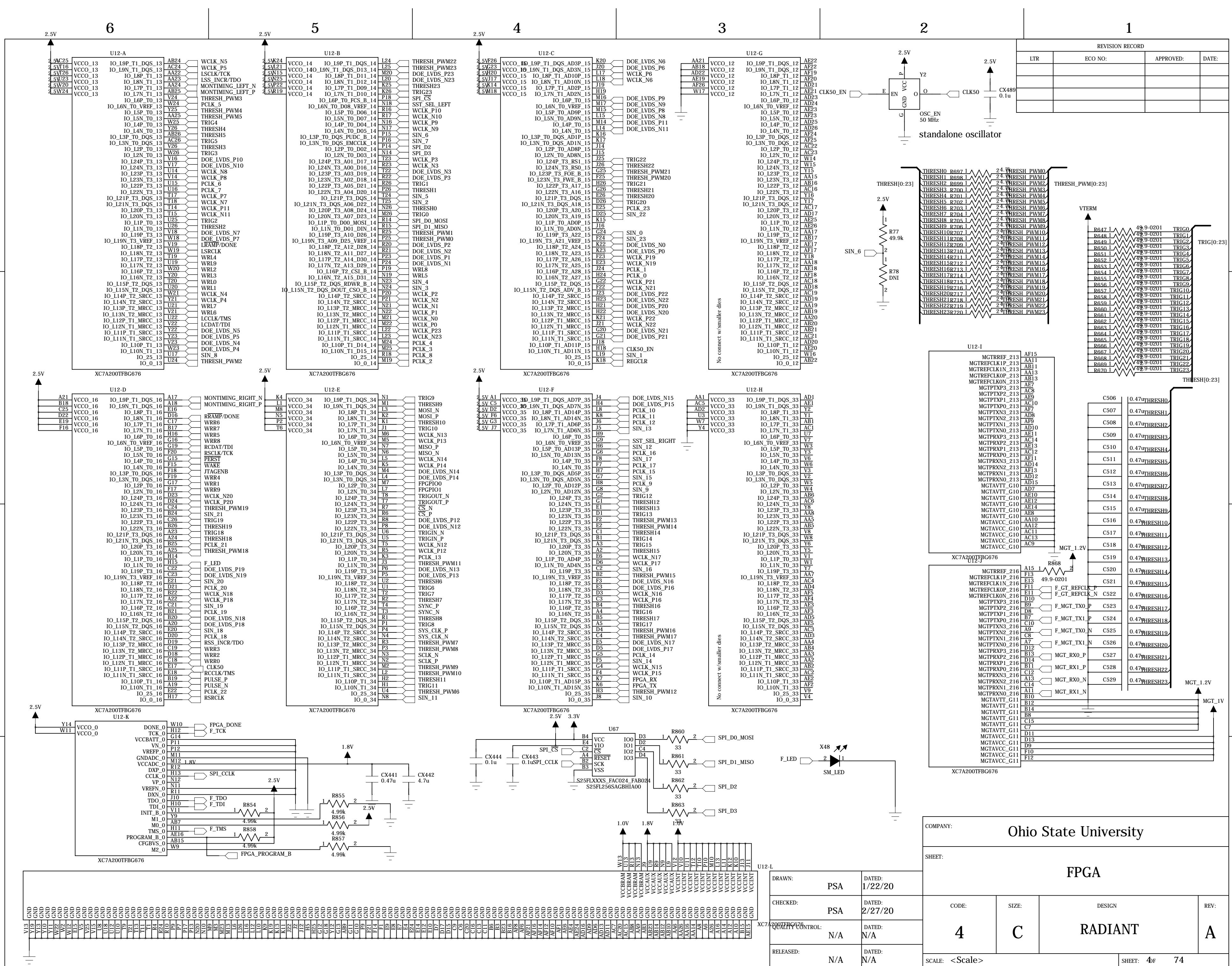
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COMPANY:	Ohio State University		
SHEET:	CLOCK		
CODE:	SIZE:	DESIGN	REV:
4	C	RADIANT	A
SCALE: <Scale>	SHEET: 30F		74



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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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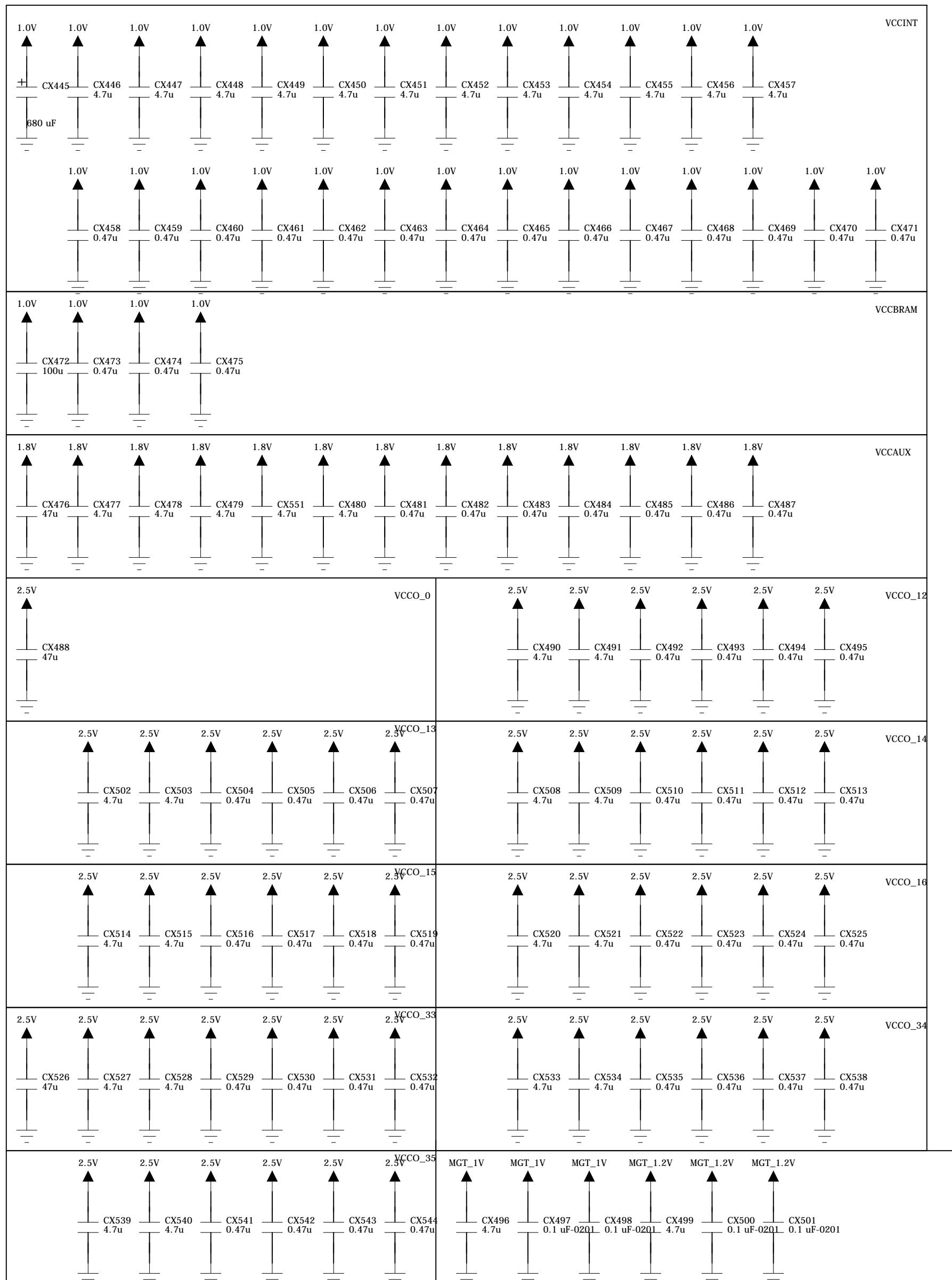
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COMPANY:  
Ohio State UniversitySHEET:  
FPGA\_DECUPLE

DRAWN:	PSA	DATED: 1/22/20	CODE: <b>4</b>	SIZE: <b>C</b>	DESIGN: <b>RADIANT</b>	REV: <b>A</b>
CHECKED:	PSA	DATED: 2/27/20				
QUALITY CONTROL:	N/A	DATED: N/A				
RELEASED:	N/A	DATED: N/A				

SCALE: &lt;Scale&gt; SHEET: 5F 74

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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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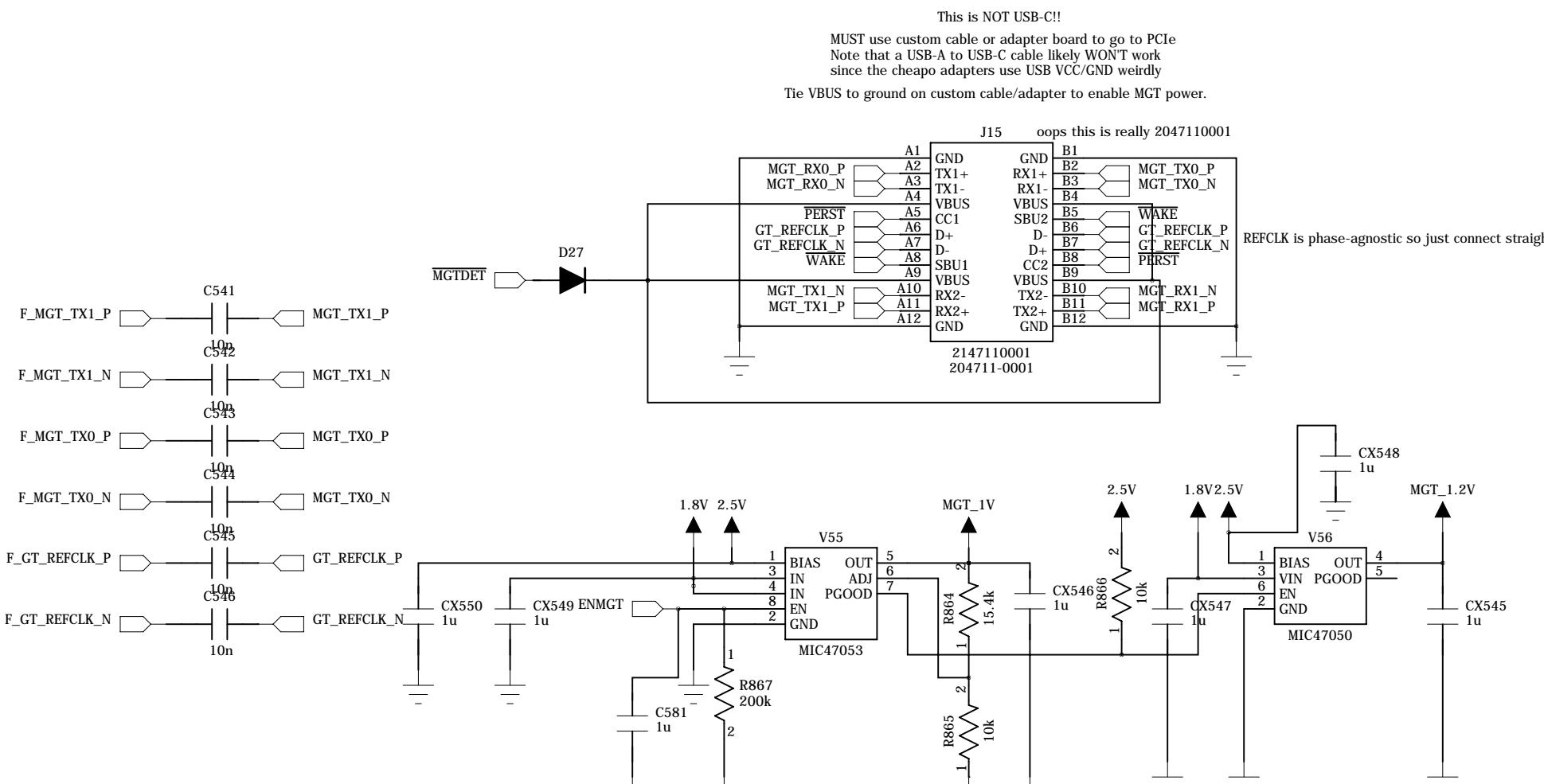
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COMPANY:	Ohio State University		
SHEET:	FPGA-PCIE		
DRAWN:	PSA	DATED: 1/22/20	
CHECKED:	PSA	DATED: 2/27/20	
QUALITY CONTROL:	N/A	DATED: N/A	
RELEASED:	N/A	DATED: N/A	
CODE:	SIZE:	DESIGN	REV:
4	C	RADIANT	A
SCALE: <Scale>	Sheet: 6 of 74		

## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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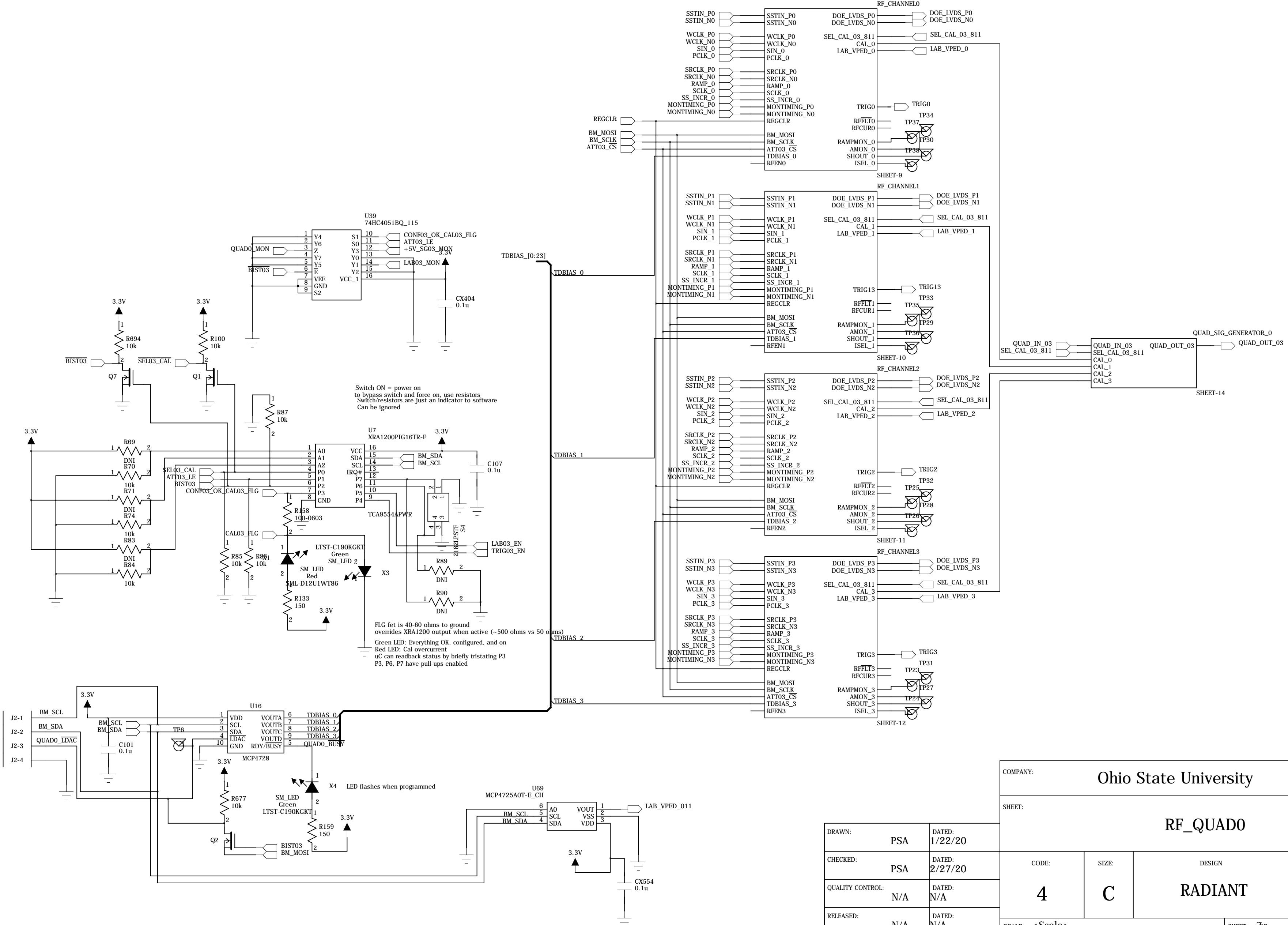
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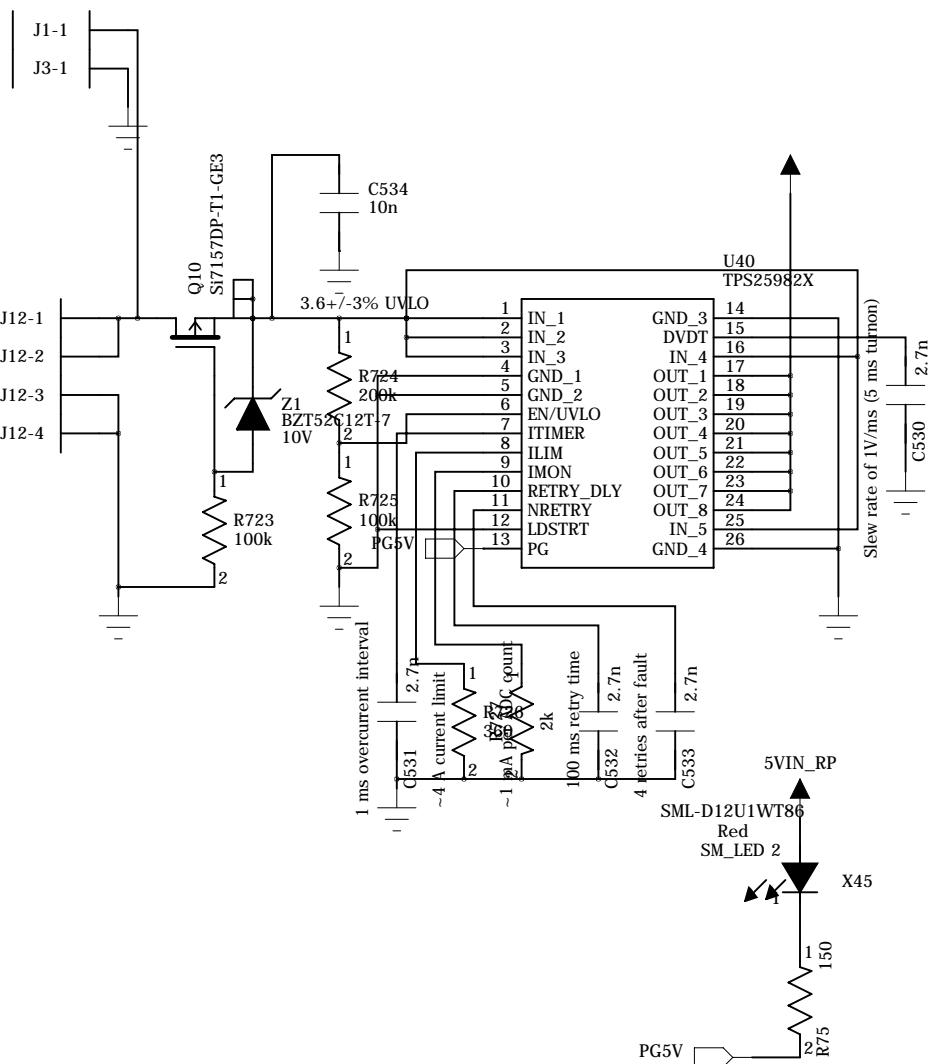


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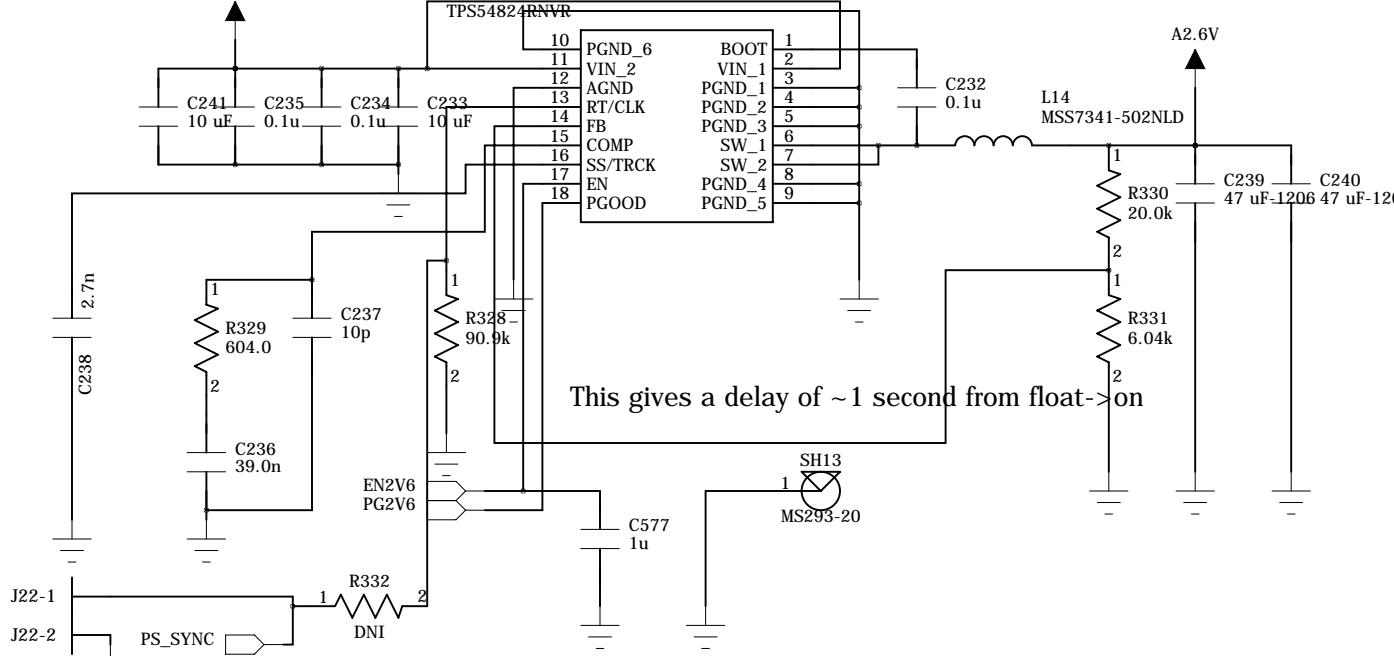
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D

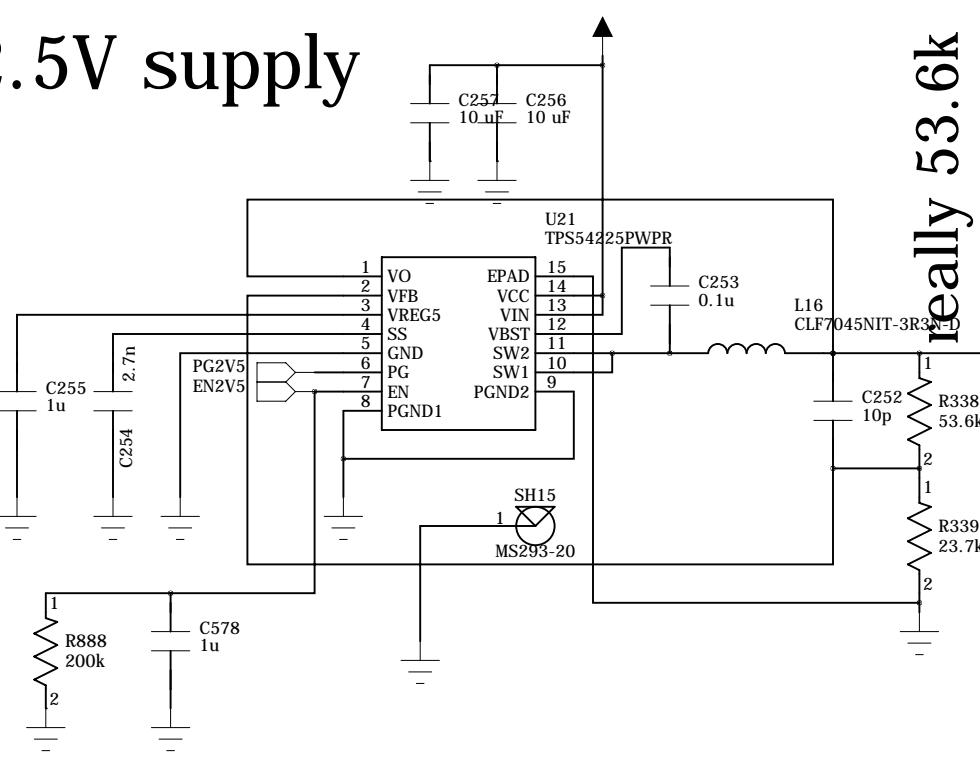
### Input power protection



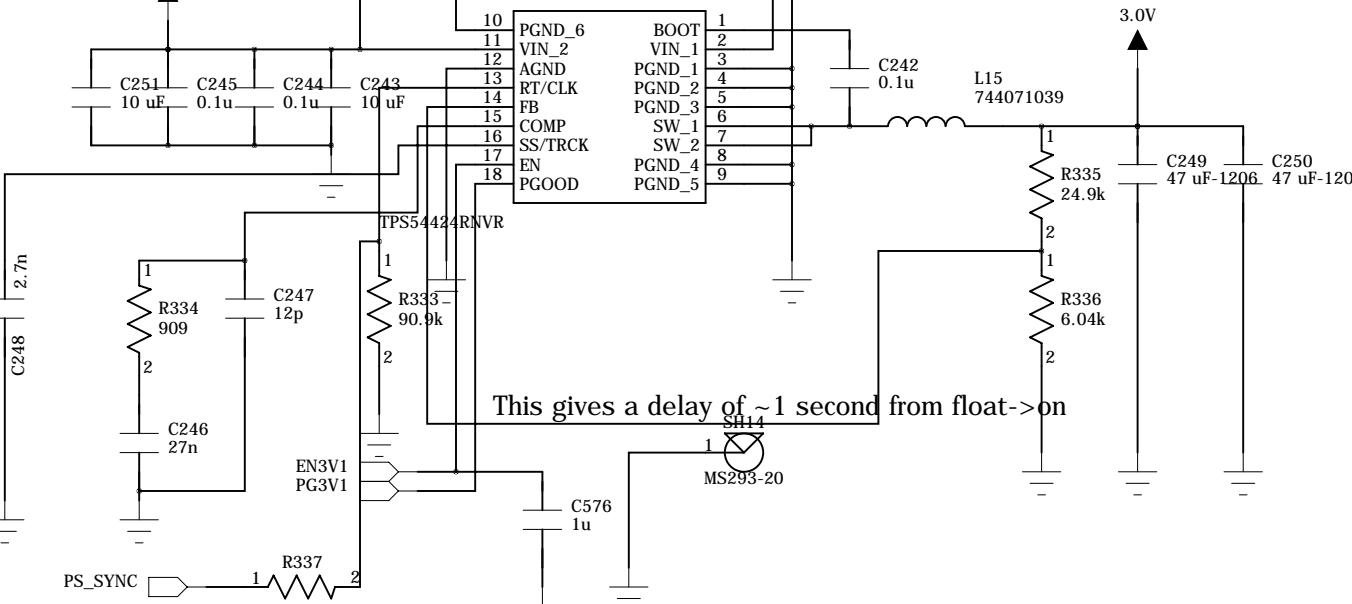
### LAB4D supply (2.6V, regulated to 2.5V)



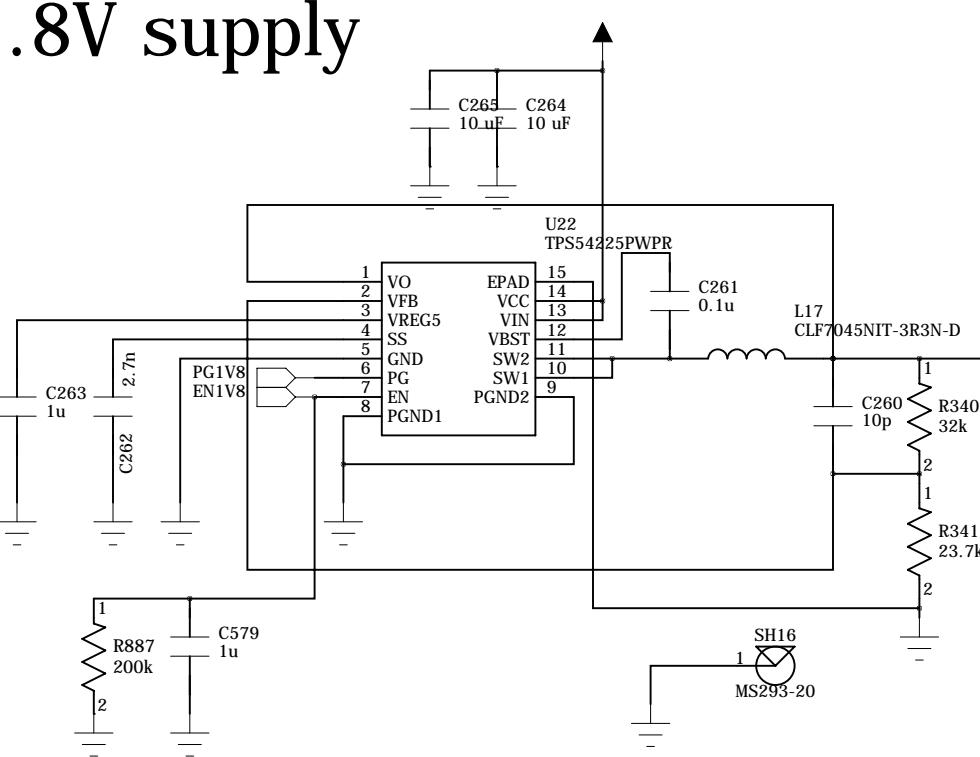
### 2.5V supply



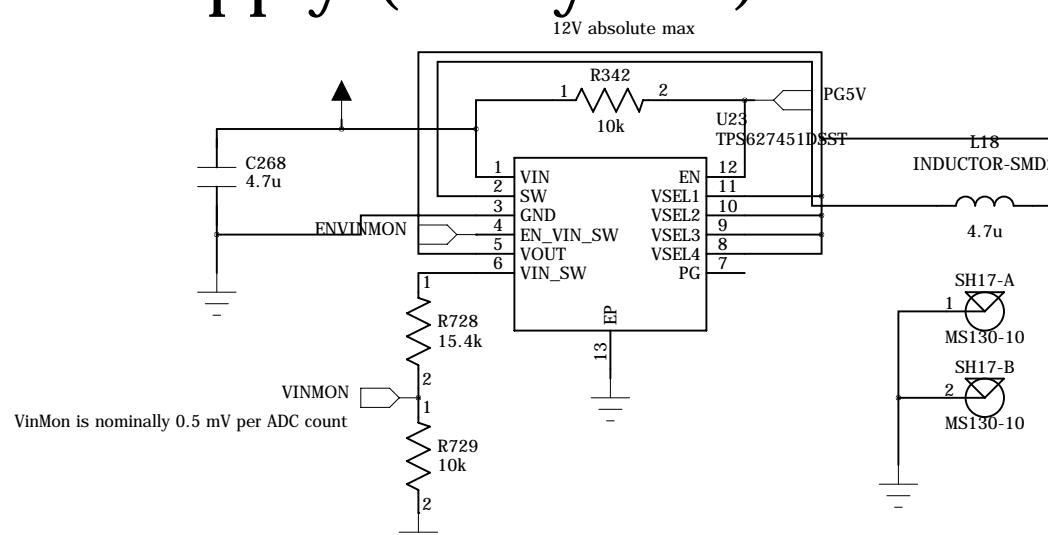
### Trigger supply (3.07V, regulated to 3.0V)



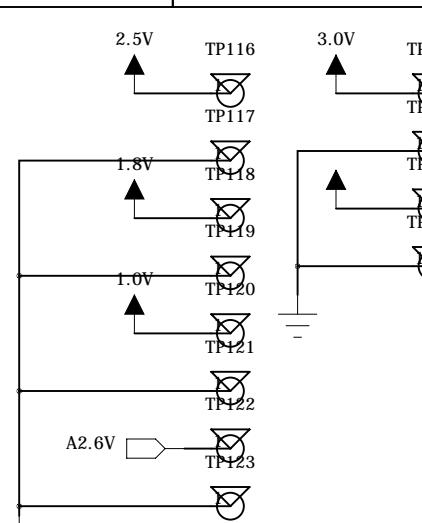
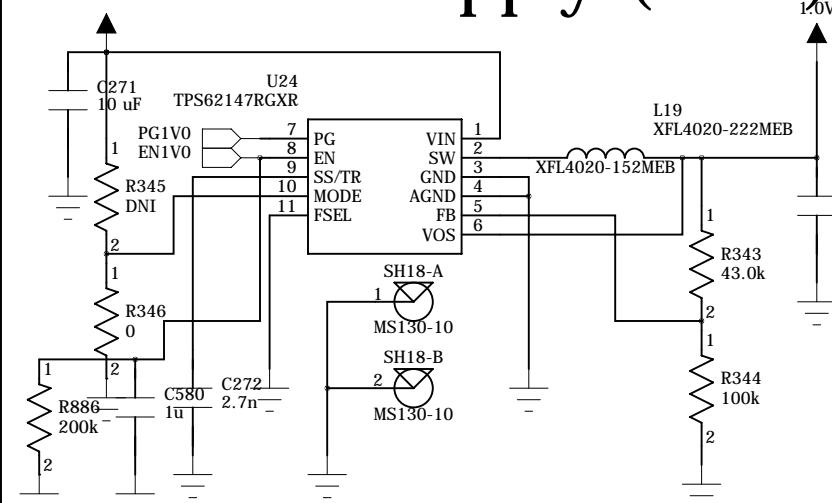
### 1.8V supply



### 3.3V supply (always on)



### FPGA core supply (1.0V)



Ohio State University

POWER

COMPANY:	Ohio State University		
SHEET:	POWER		
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CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
RELEASED:	N/A	DATED:	N/A
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CODE:	C	SIZE:	DESIGN
REV:	A	RADIANT	A
SHEET:	8F	74	

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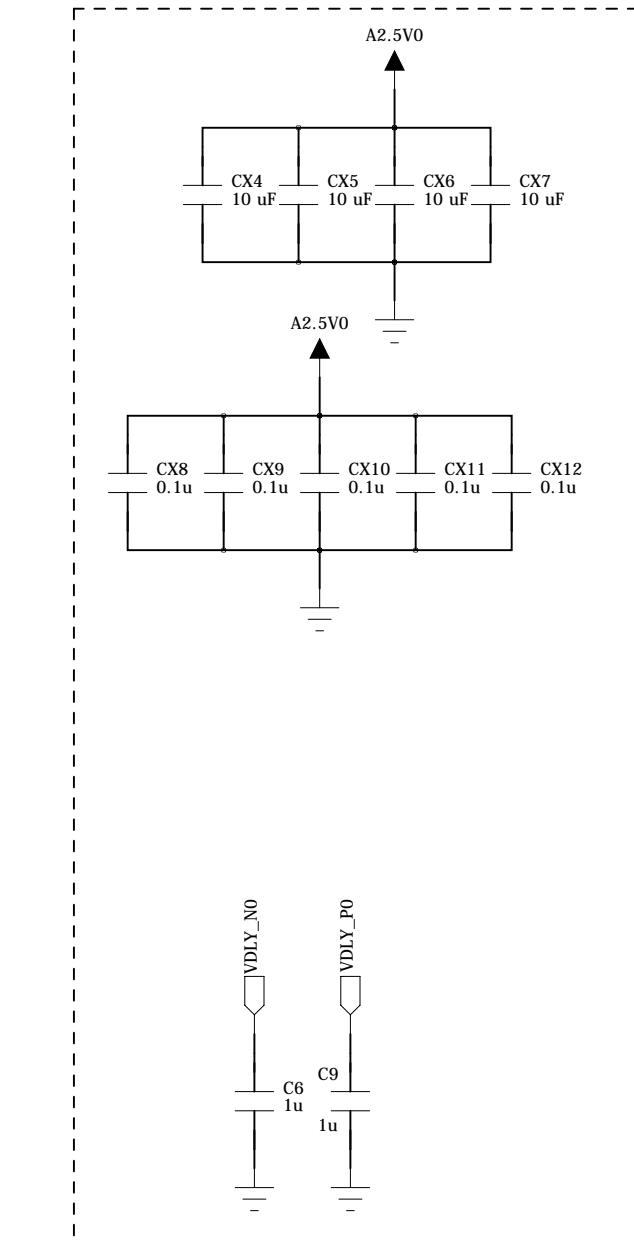
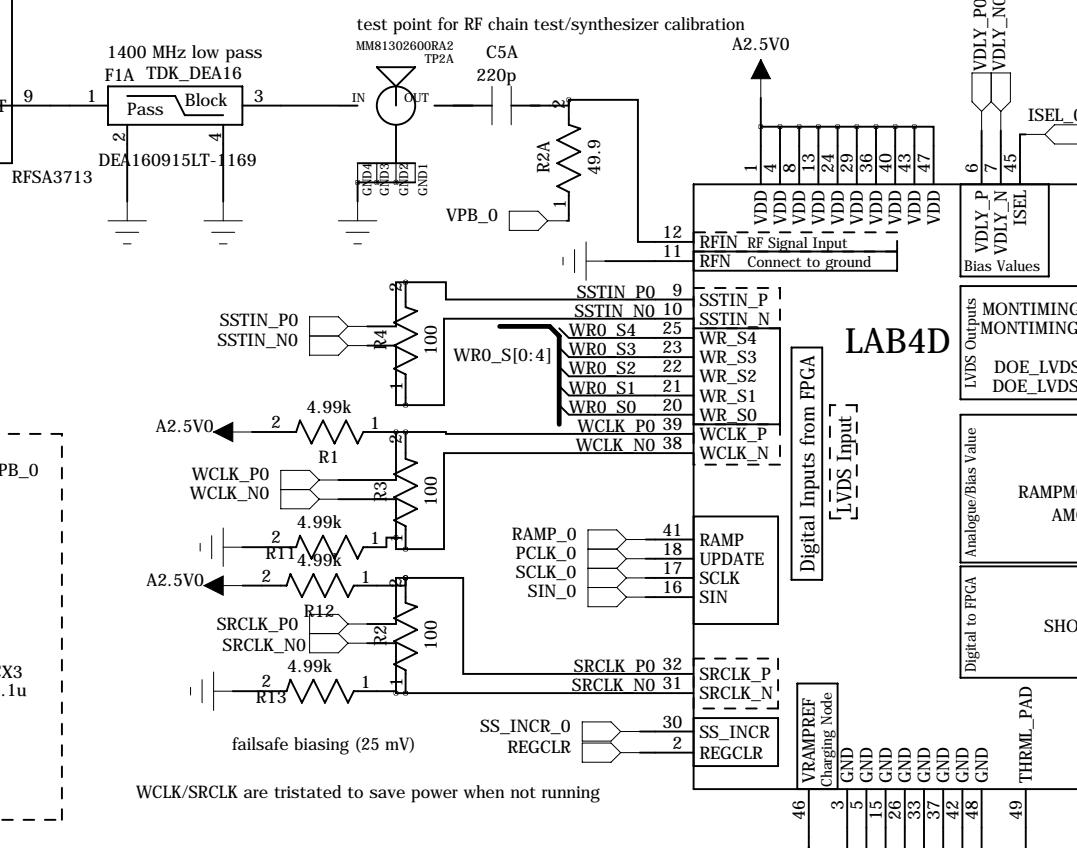
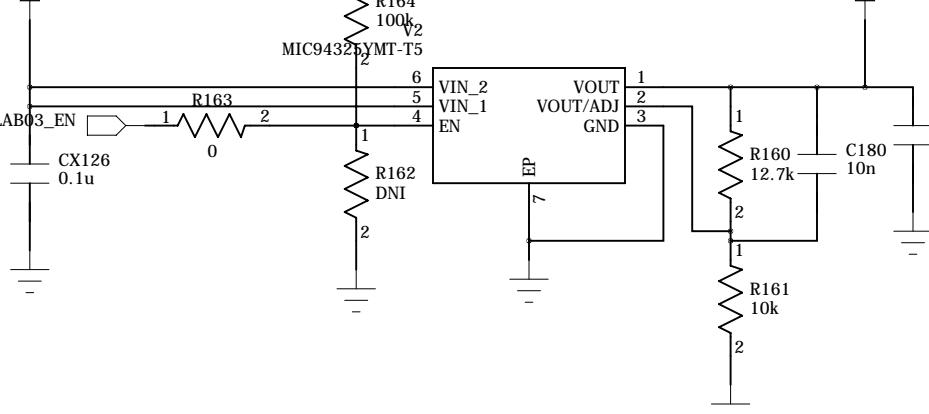
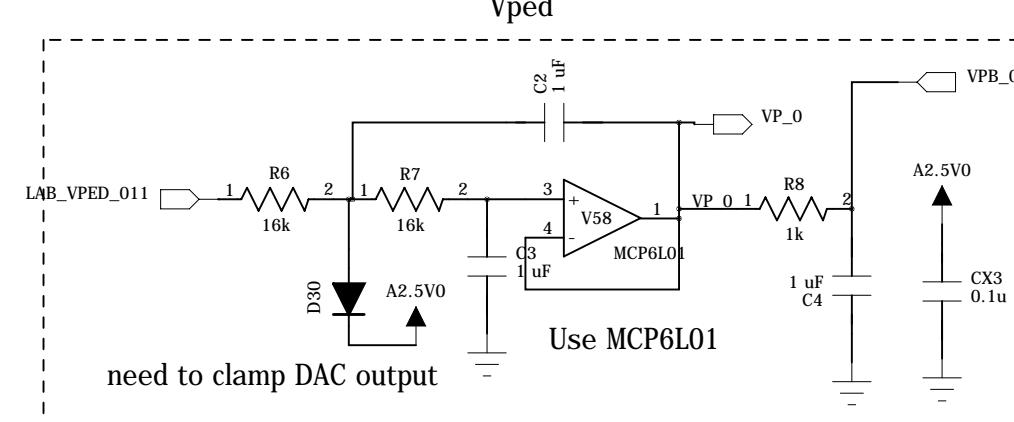
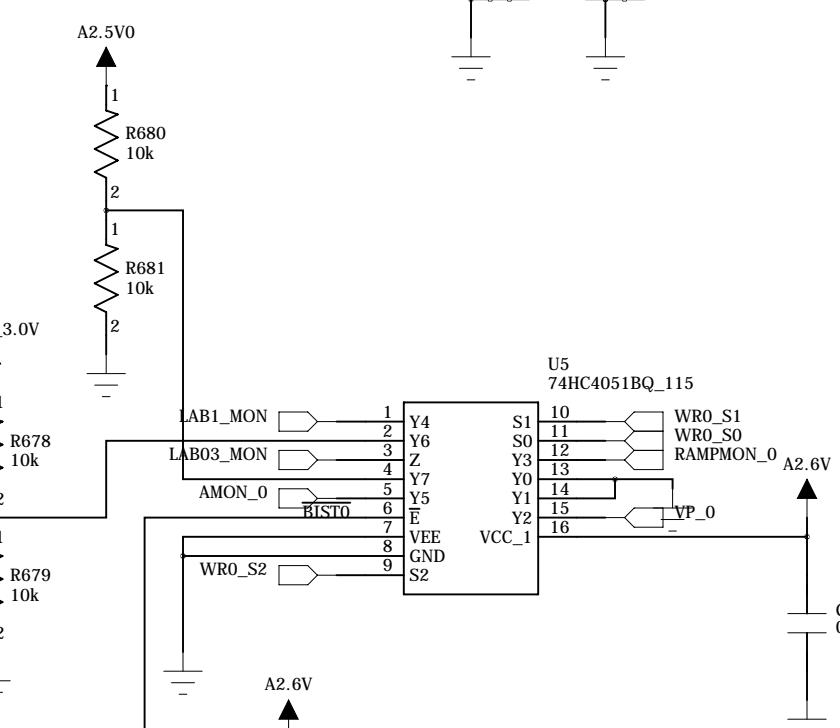
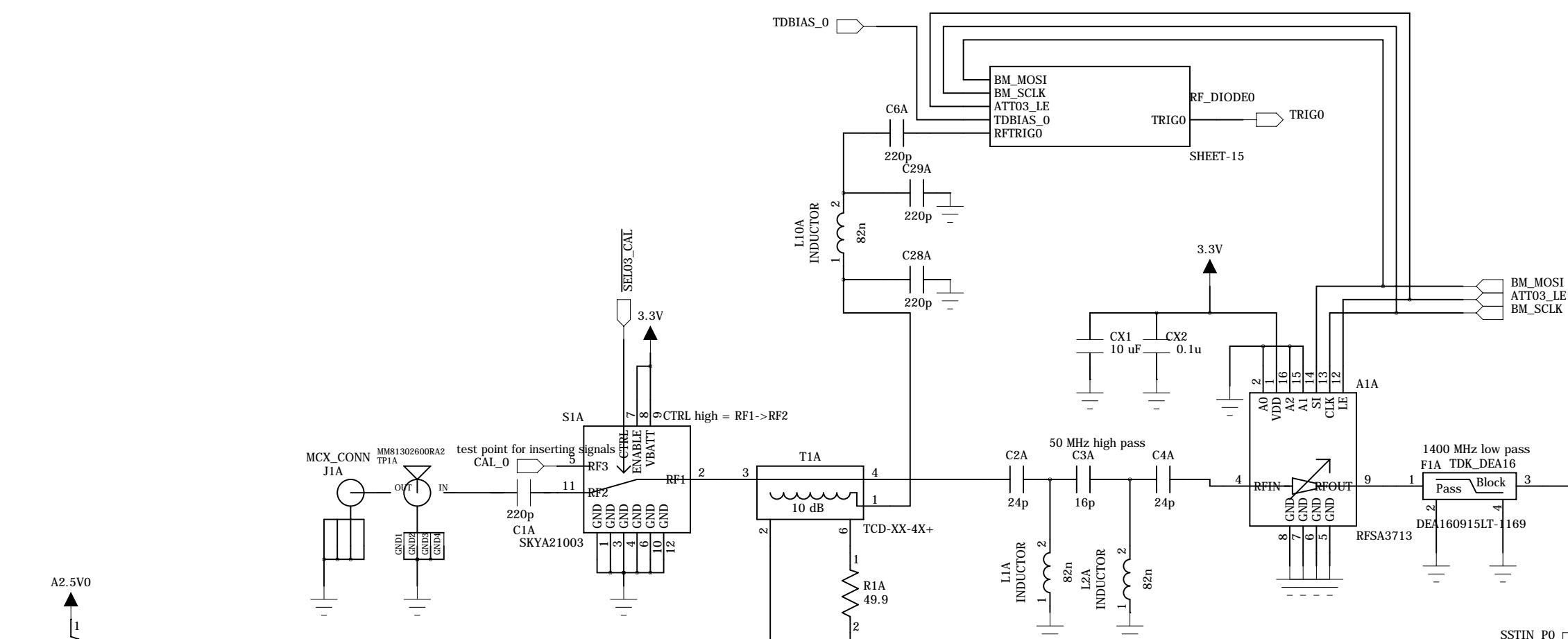
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REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:
	Filtering/bypass capacitors		



Ohio State University

REF CHANNEL 2

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CHECKED: PSA	DATED: 2/27/20	CODE:  4	SIZE:  C	DESIGN  RADIANT	REV:  A
QUALITY CONTROL: N/A	DATED: N/A				
RELEASED: N/A	DATED: N/A	SCALE: <Scale>		SHEET: 9F	74

## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors

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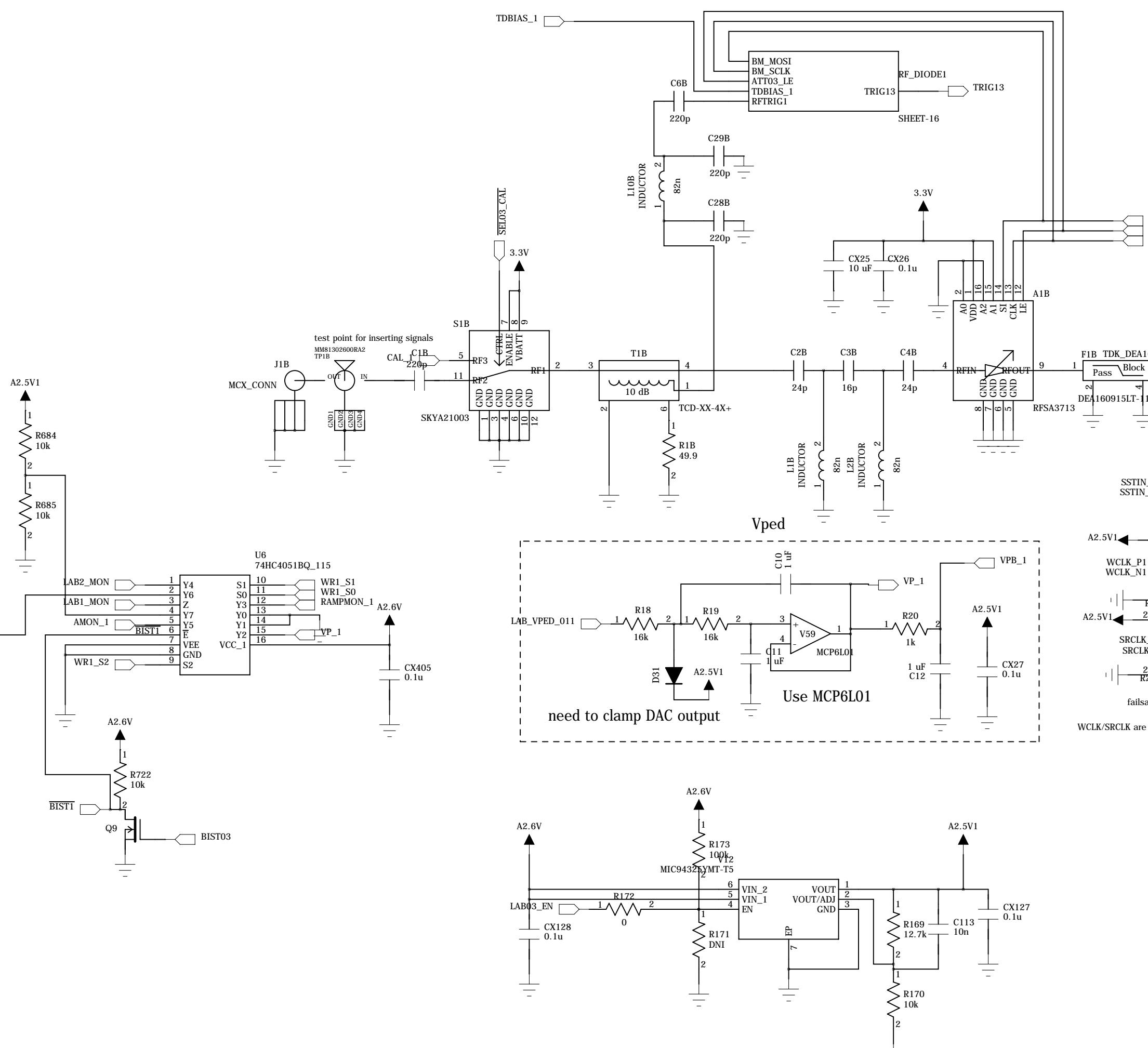
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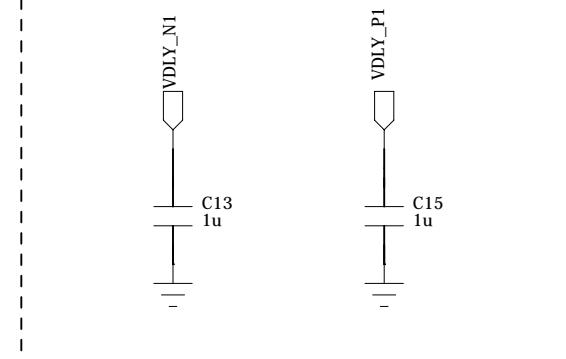
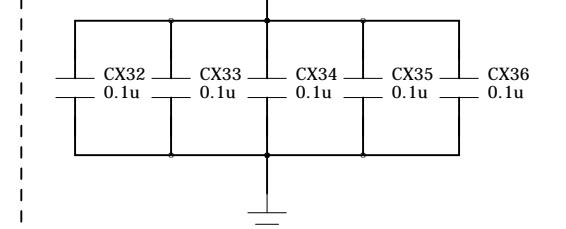
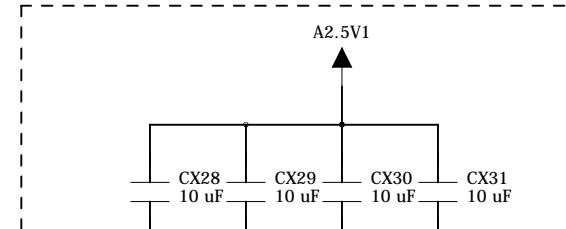
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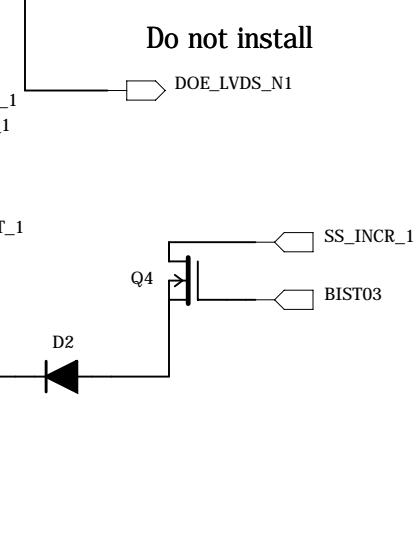
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SHEET:	RF_CHANNEL1		
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RELEASED:	N/A	DATED:	N/A
SCALE:	<Scale>	CODE:	C
		SIZE:	RADIANT
		REV:	A
		SCALE:	10 74



Filtering/bypass capacitors

Do not install

Do not install



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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors

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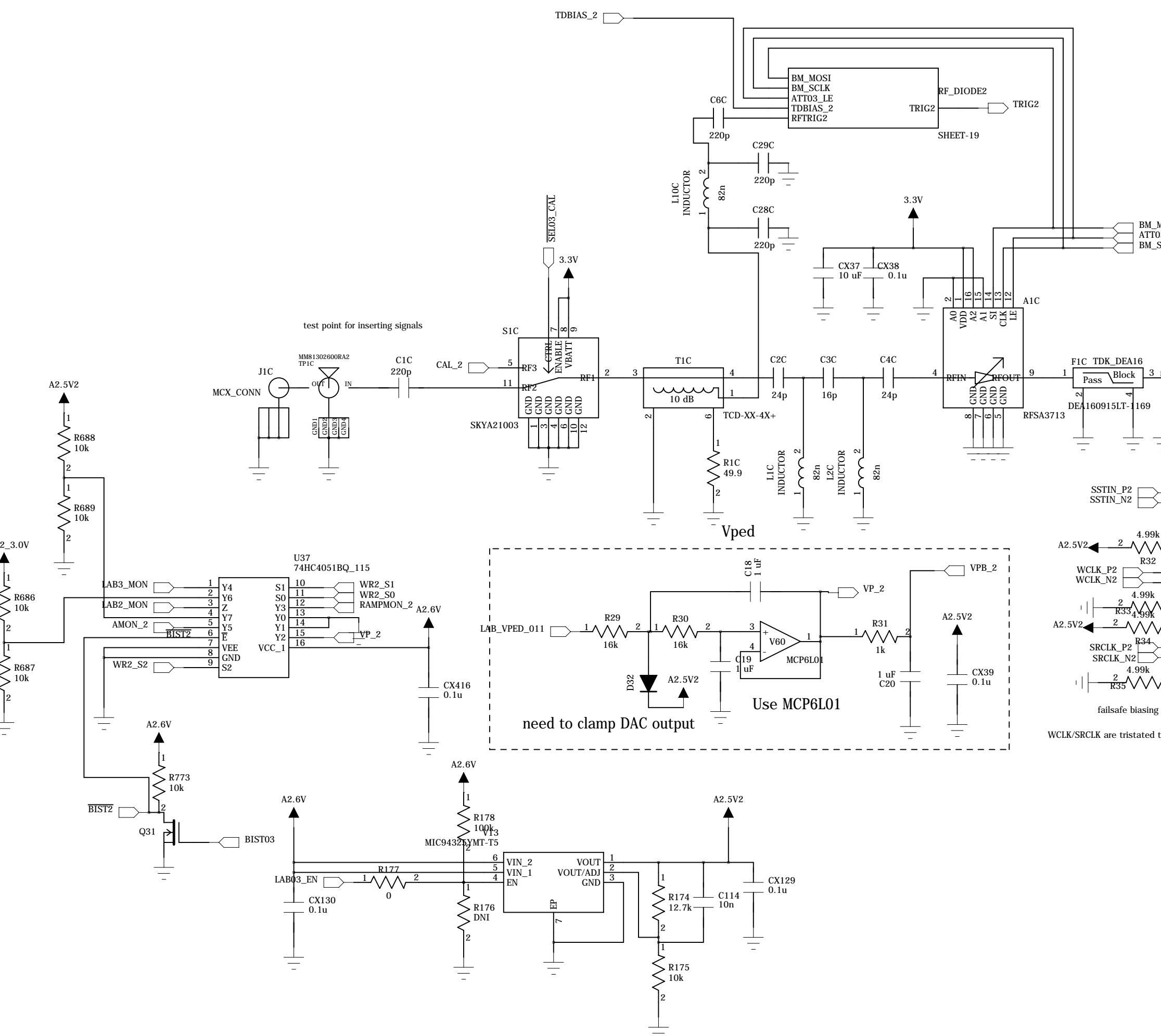
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COMPANY:	Ohio State University		
SHEET:	RF_CHANNEL2		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
RELEASED:	N/A	DATED:	N/A
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors

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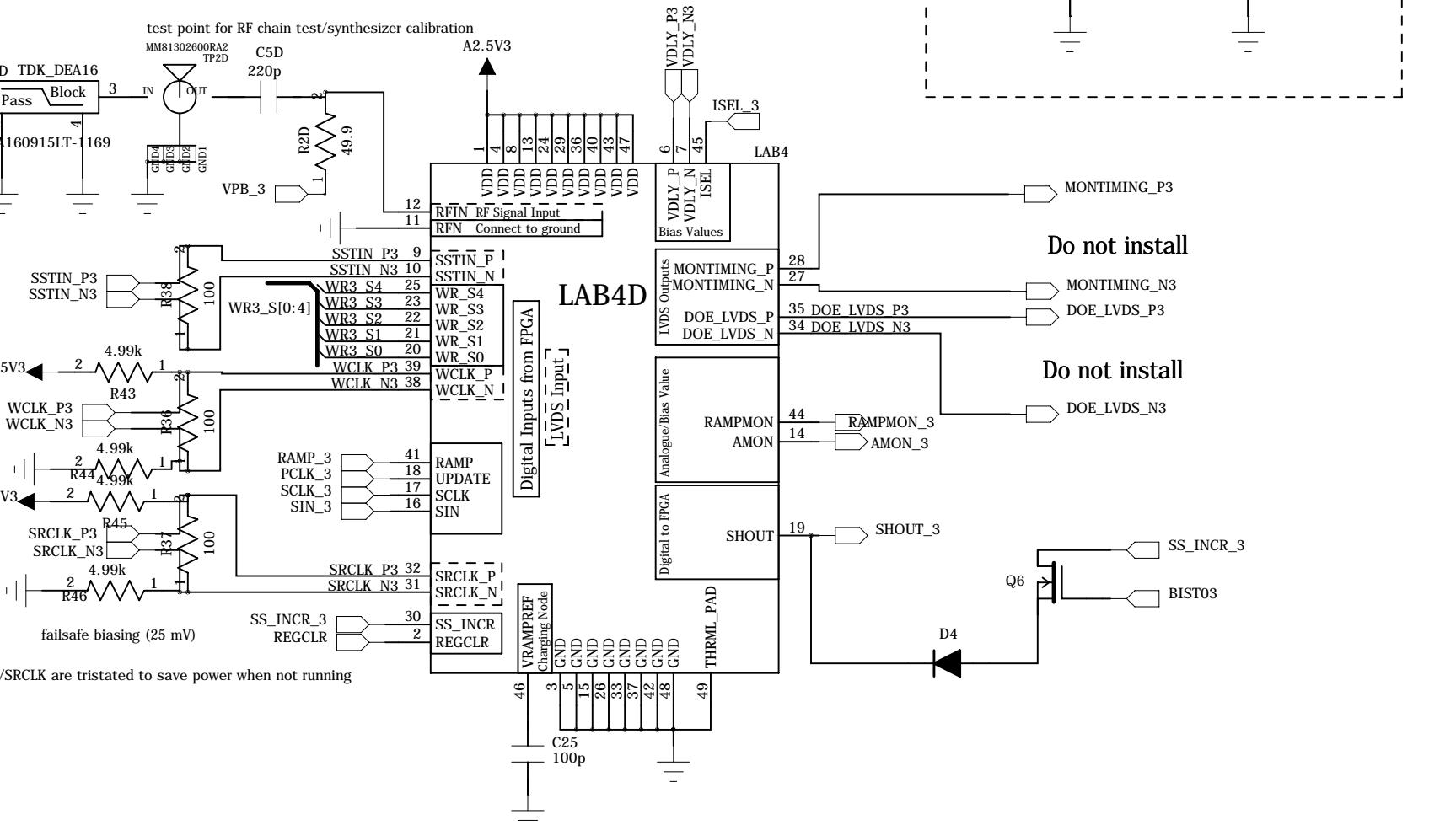
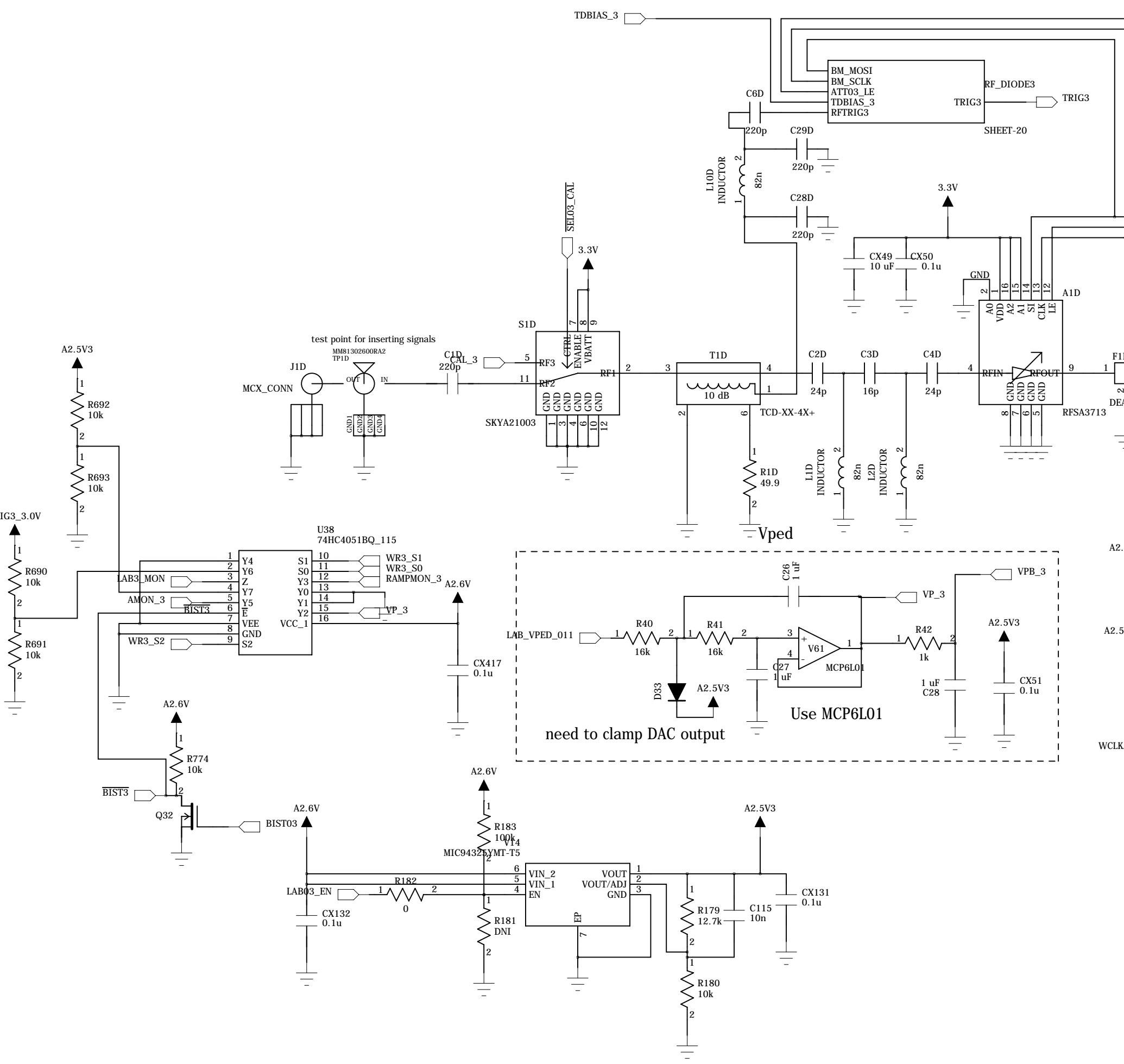
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COMPANY:	Ohio State University		
SHEET:	RF_CHANNEL3		
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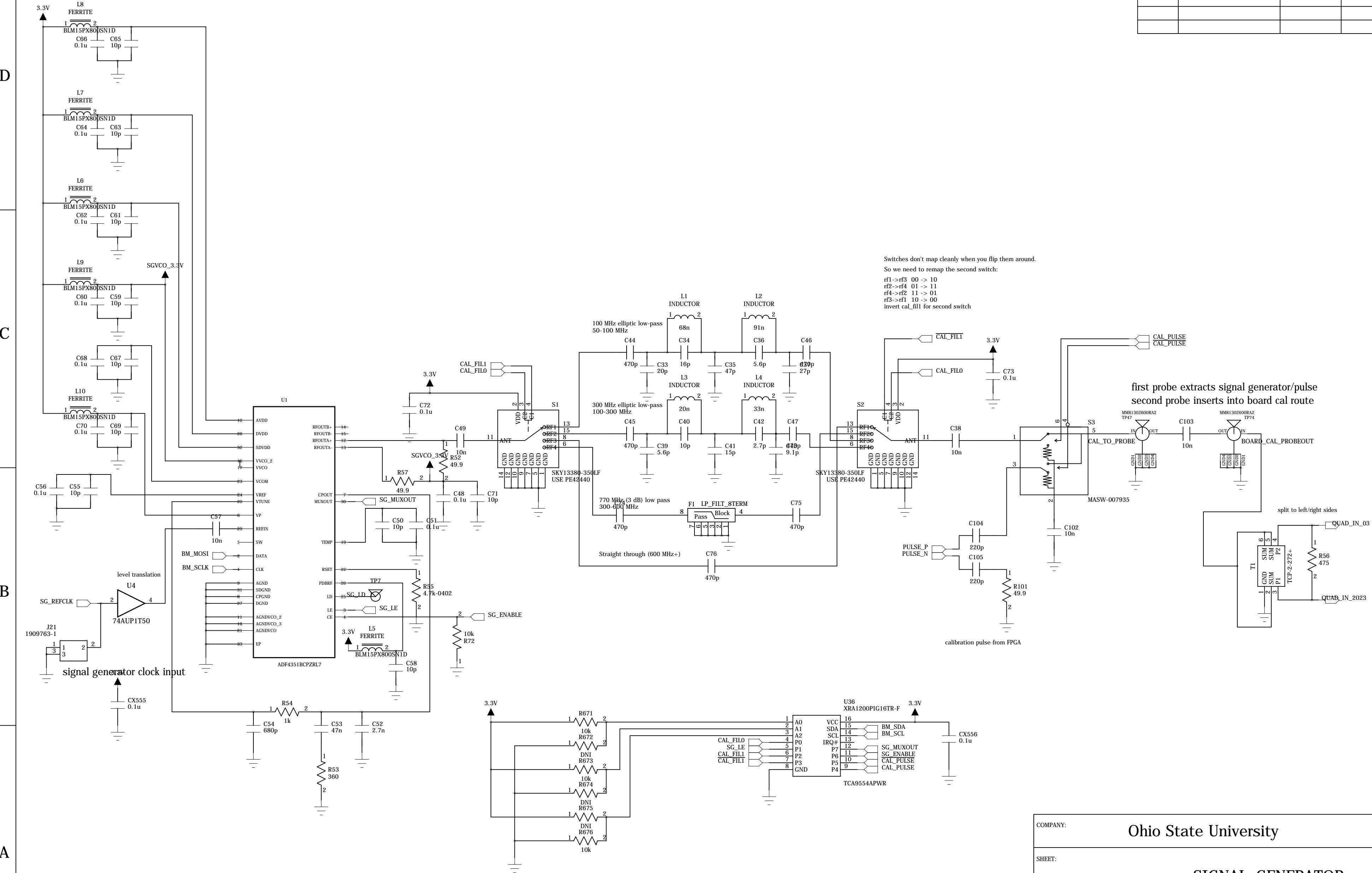
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REVISION RECORD			
	ECO NO:	APPROVED:	DATE:



Ohio State University

## SIGNAL GENERATOR

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CHECKED: PSA	DATED: 2/27/20	CODE:  4	SIZE:  C	DESIGN  RADIANT	REV:  A
QUALITY CONTROL: N/A	DATED: N/A				
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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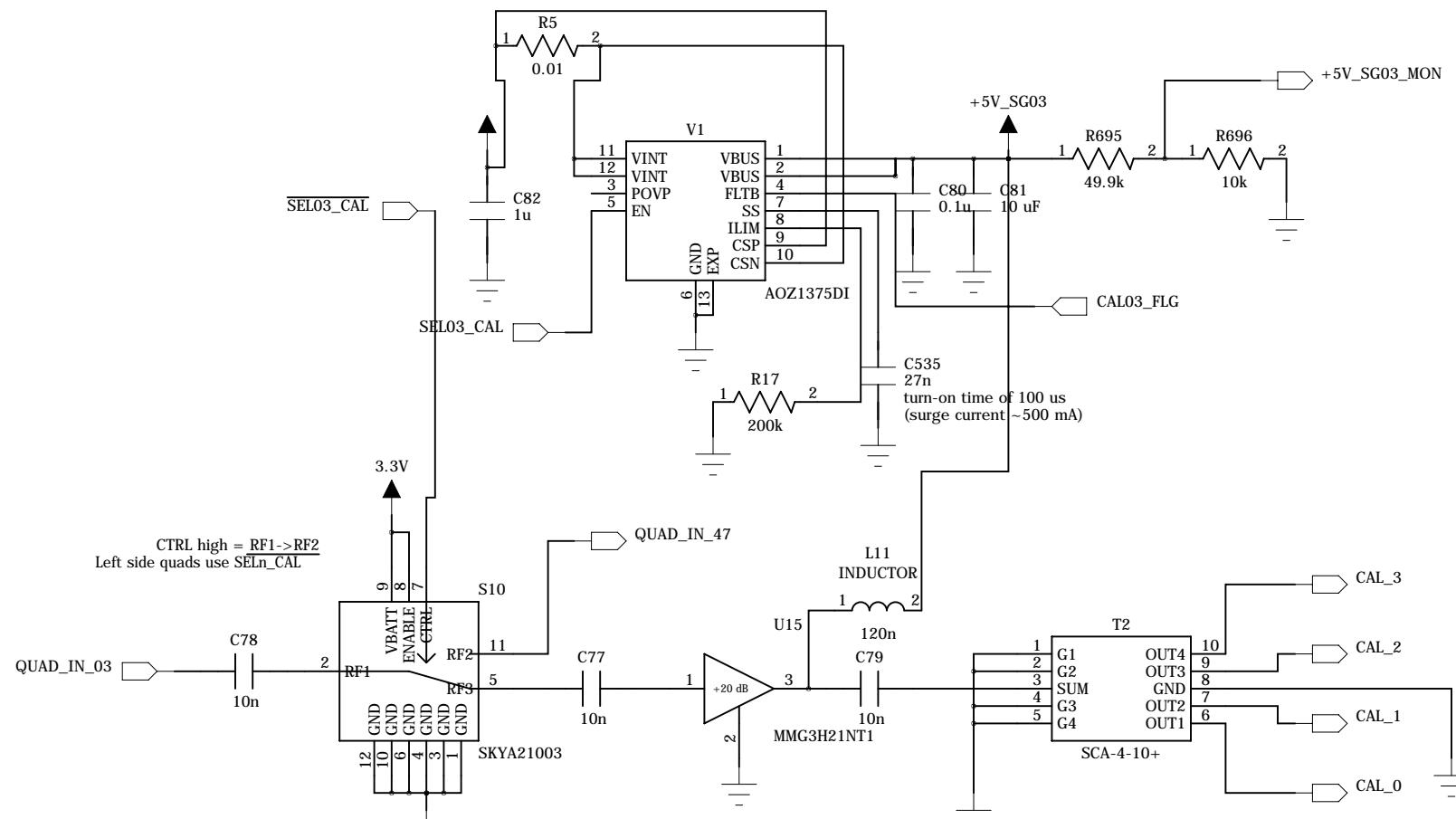
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COMPANY:	Ohio State University		
SHEET:	QUAD_SIG_GENERATOR		
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CHECKED:	PSA	DATED: 2/27/20	
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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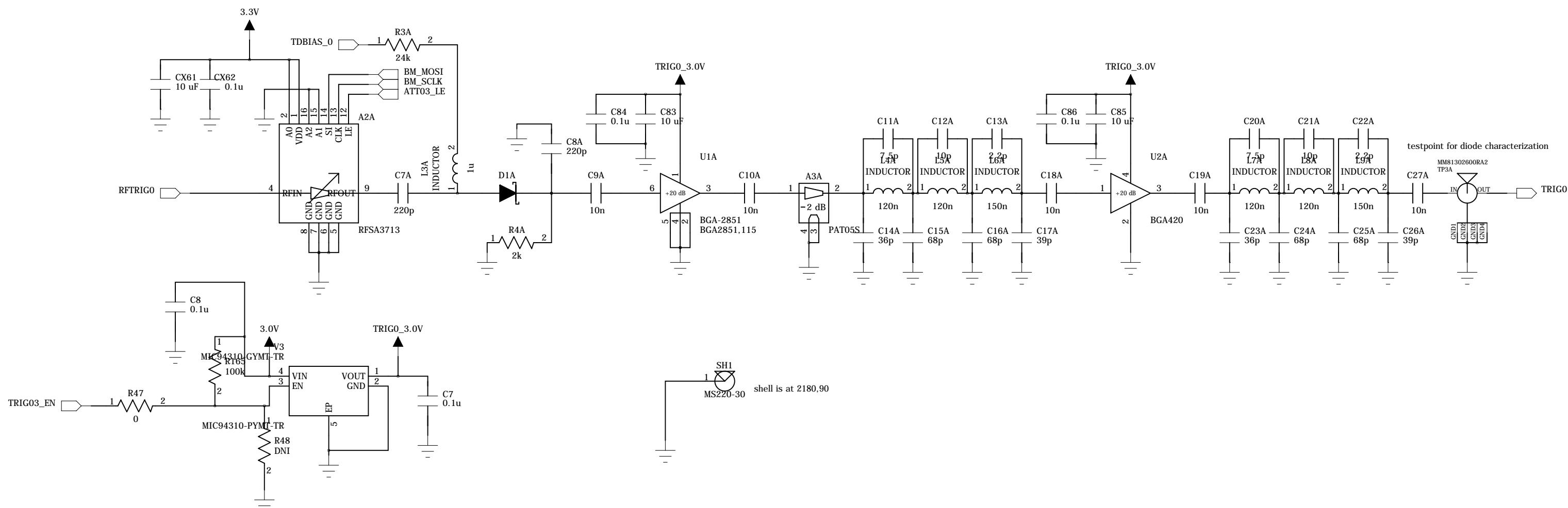
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COMPANY:	Ohio State University		
SHEET:	RF_DIODE0		
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## REVISION RECORD

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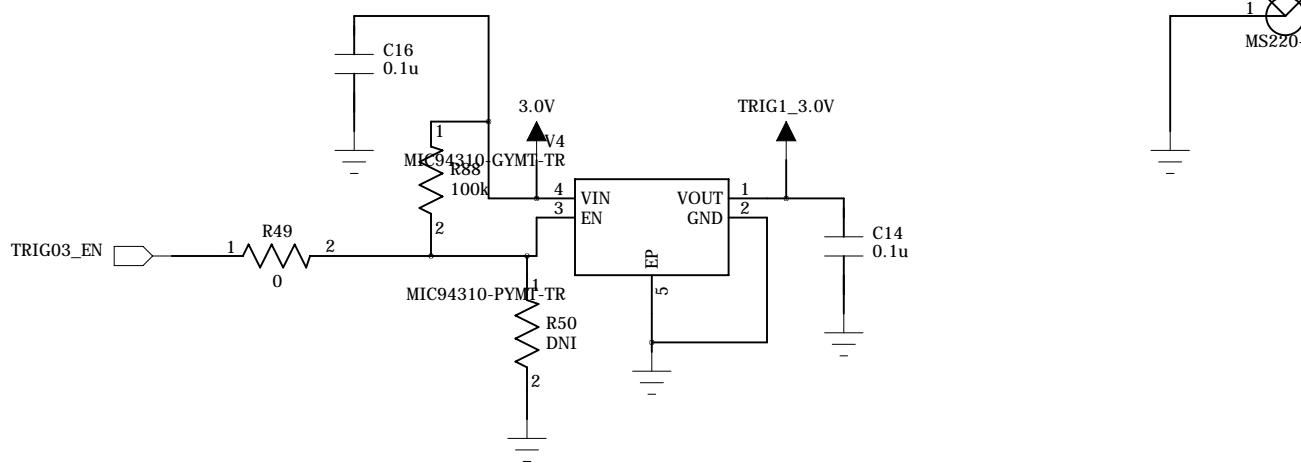
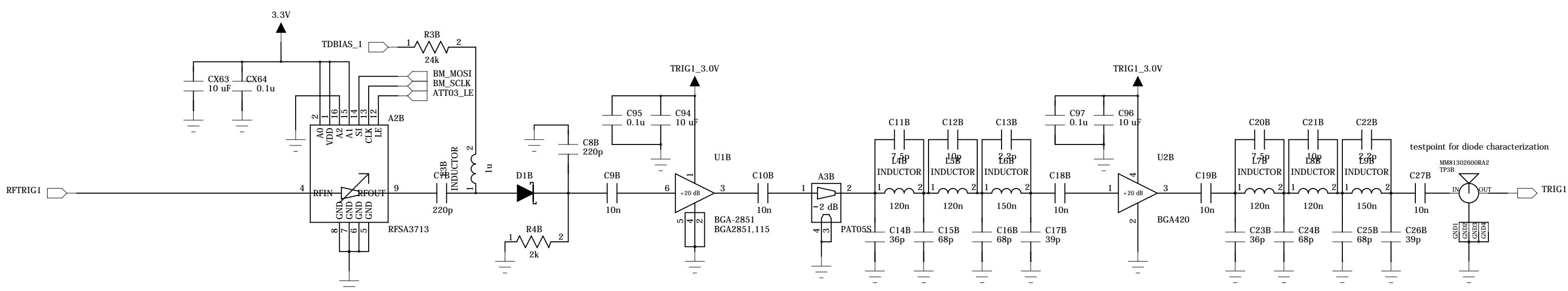
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COMPANY:	Ohio State University		
SHEET:	RF_DIODE1		
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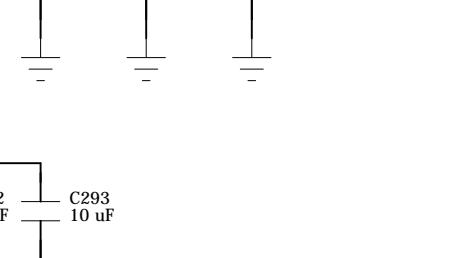
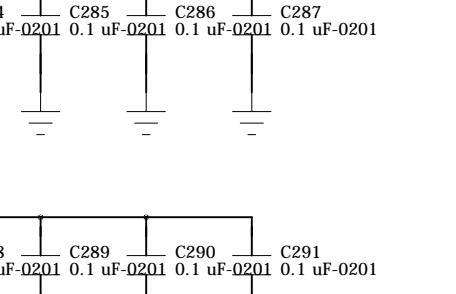
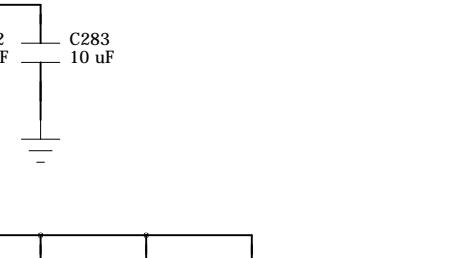
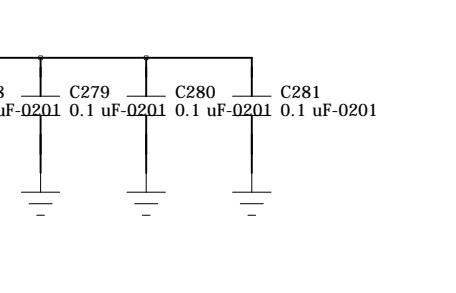
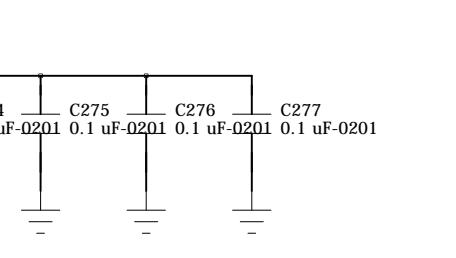
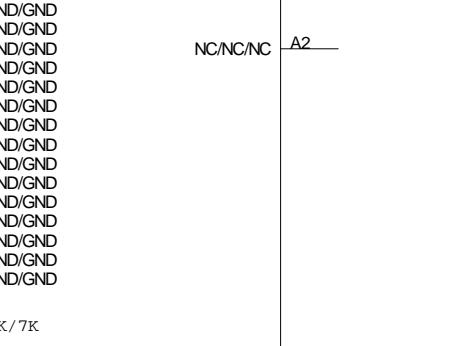
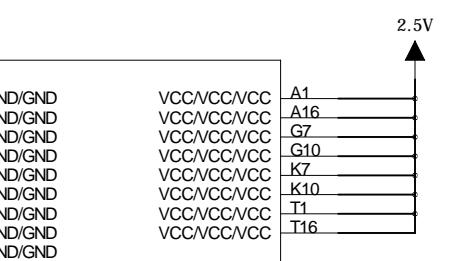
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:



DRAWN:	PSA	DATED:
CHECKED:	PSA	DATED: 2/27/20
QUALITY CONTROL:	N/A	DATED: N/A
RELEASED:	N/A	DATED: N/A

COMPANY: Ohio State University  
SHEET: AUX\_CPLDO  
DRAWN: PSA DATED: 1/22/20  
CHECKED: PSA DATED: 2/27/20  
QUALITY CONTROL: N/A DATED: N/A  
RELEASED: N/A DATED: N/A  
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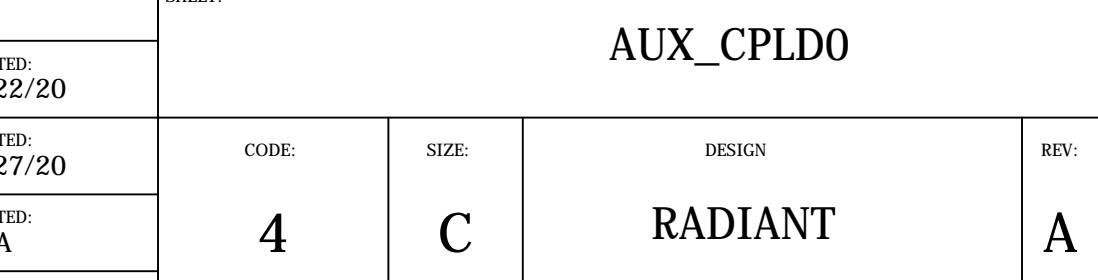
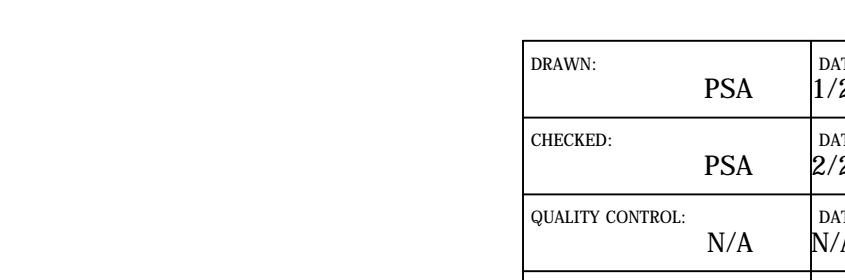
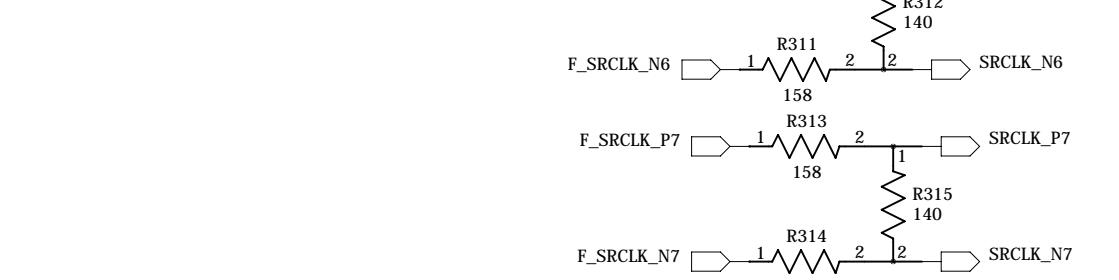
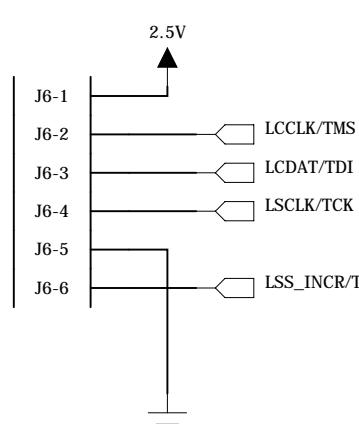
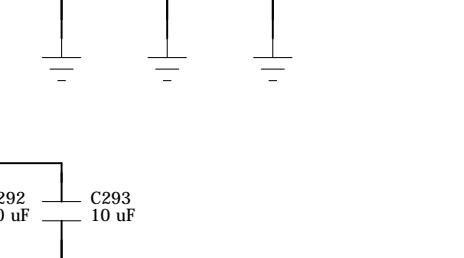
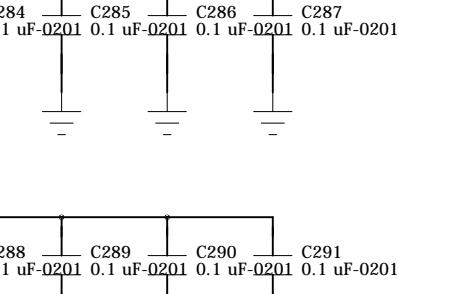
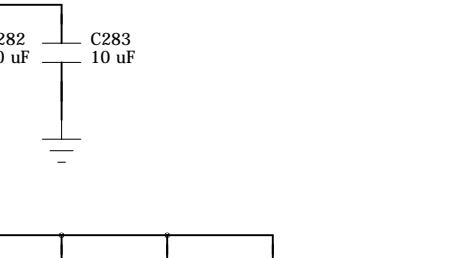
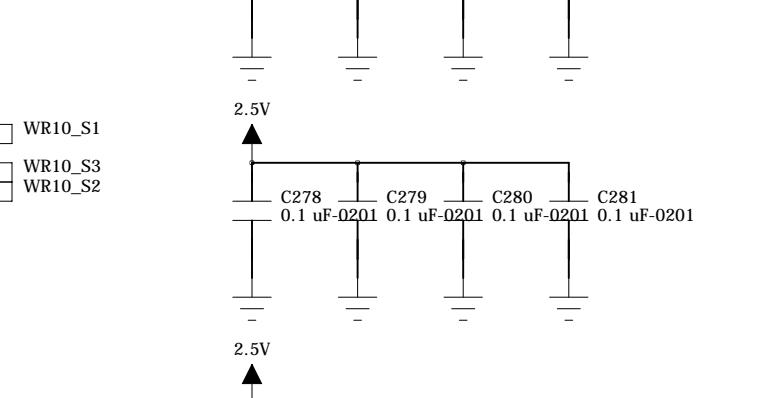
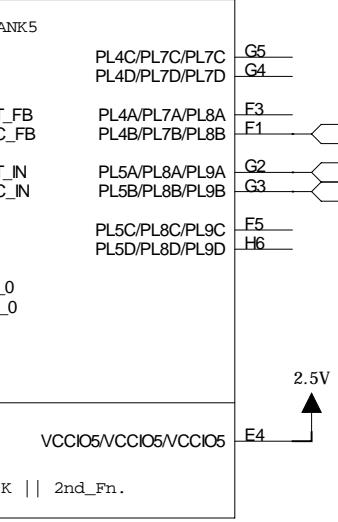
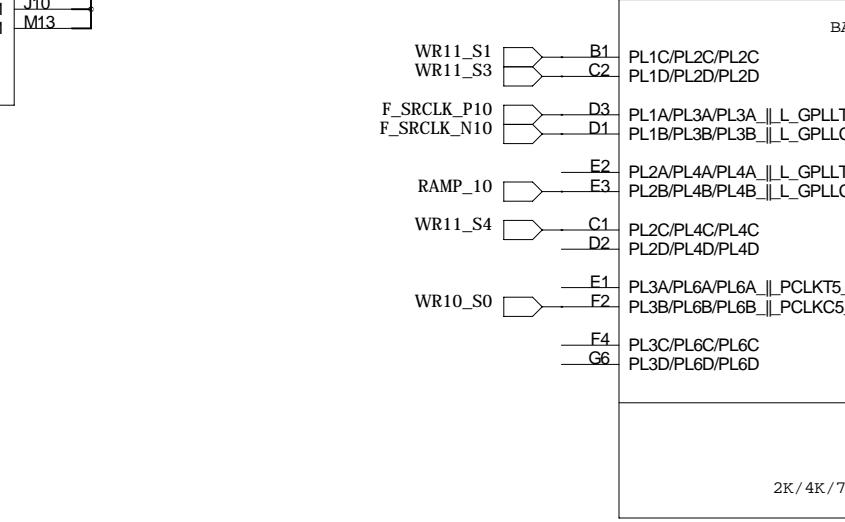
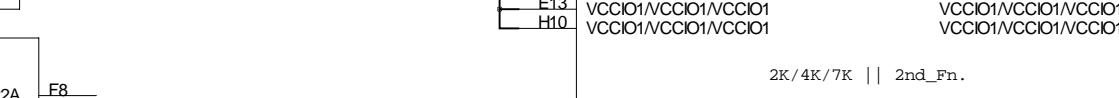
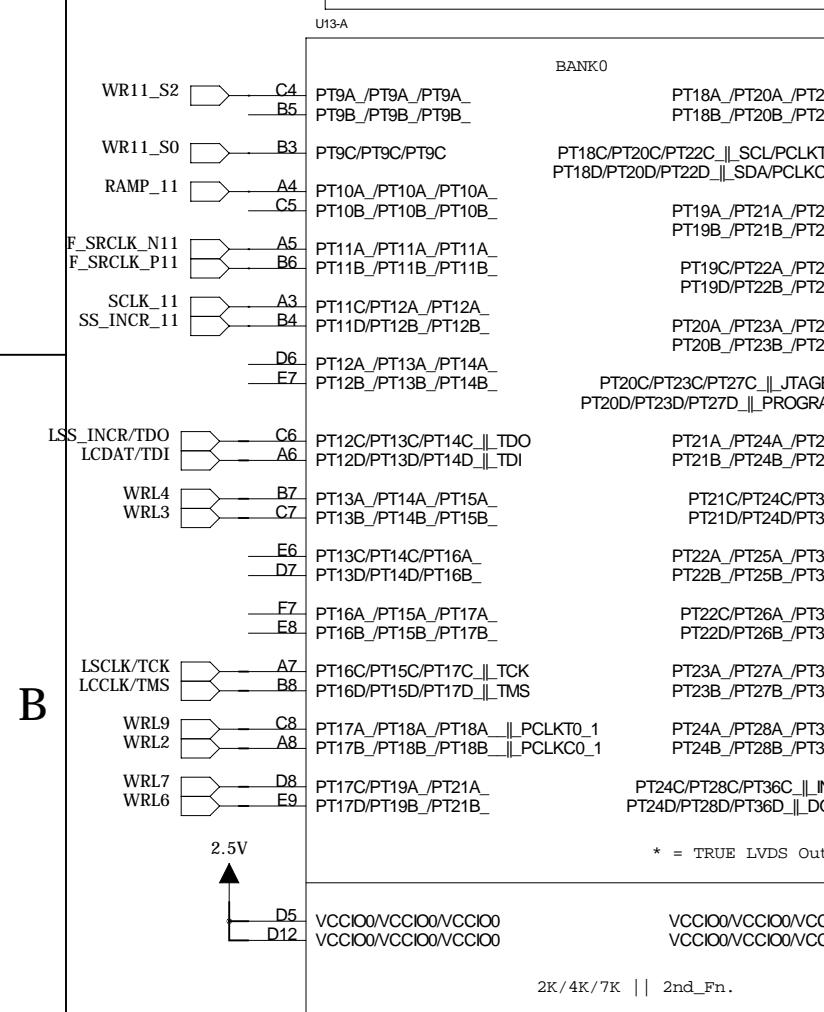
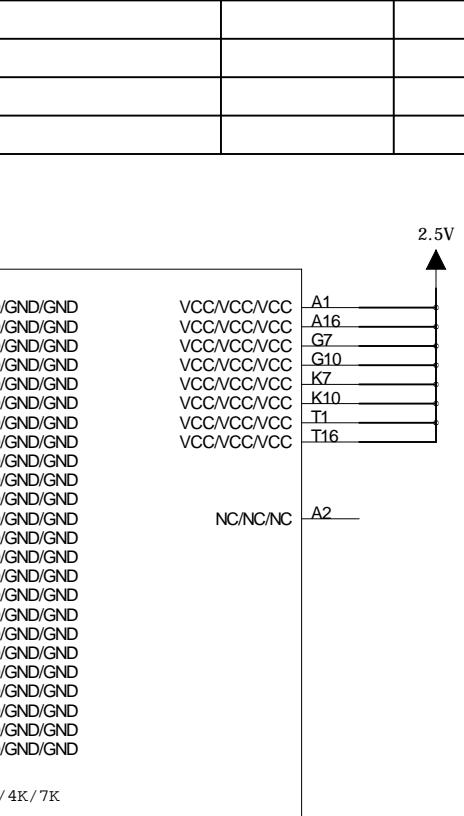
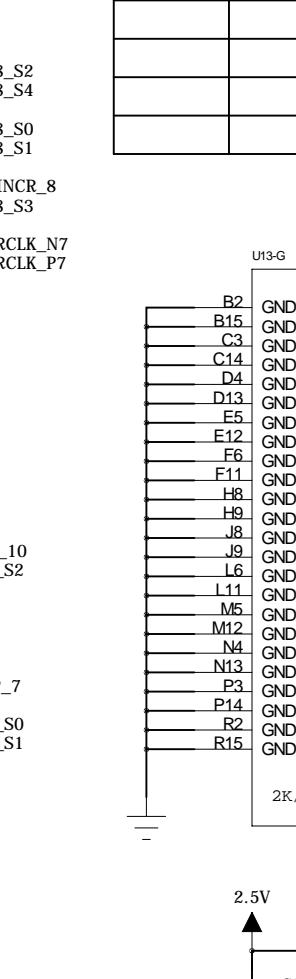
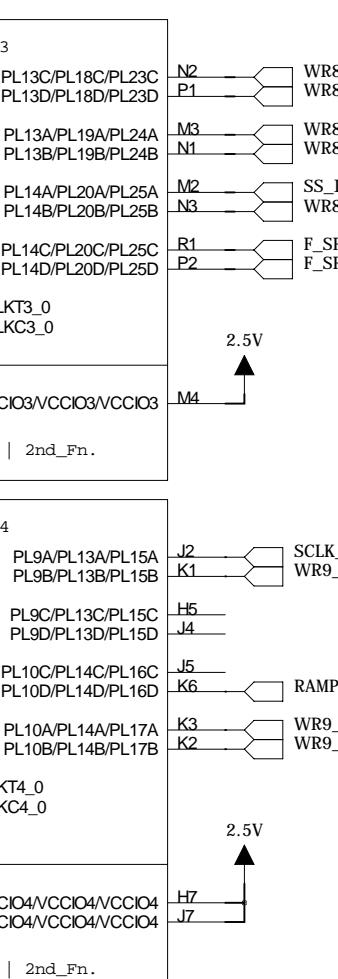
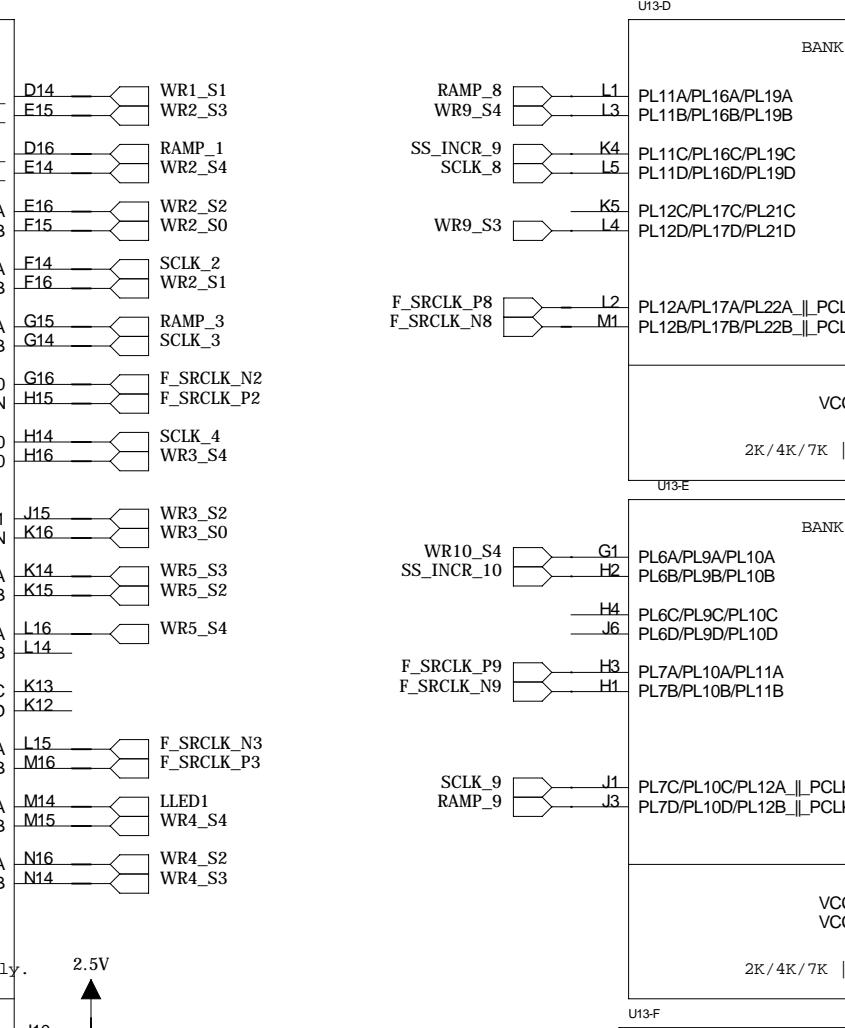
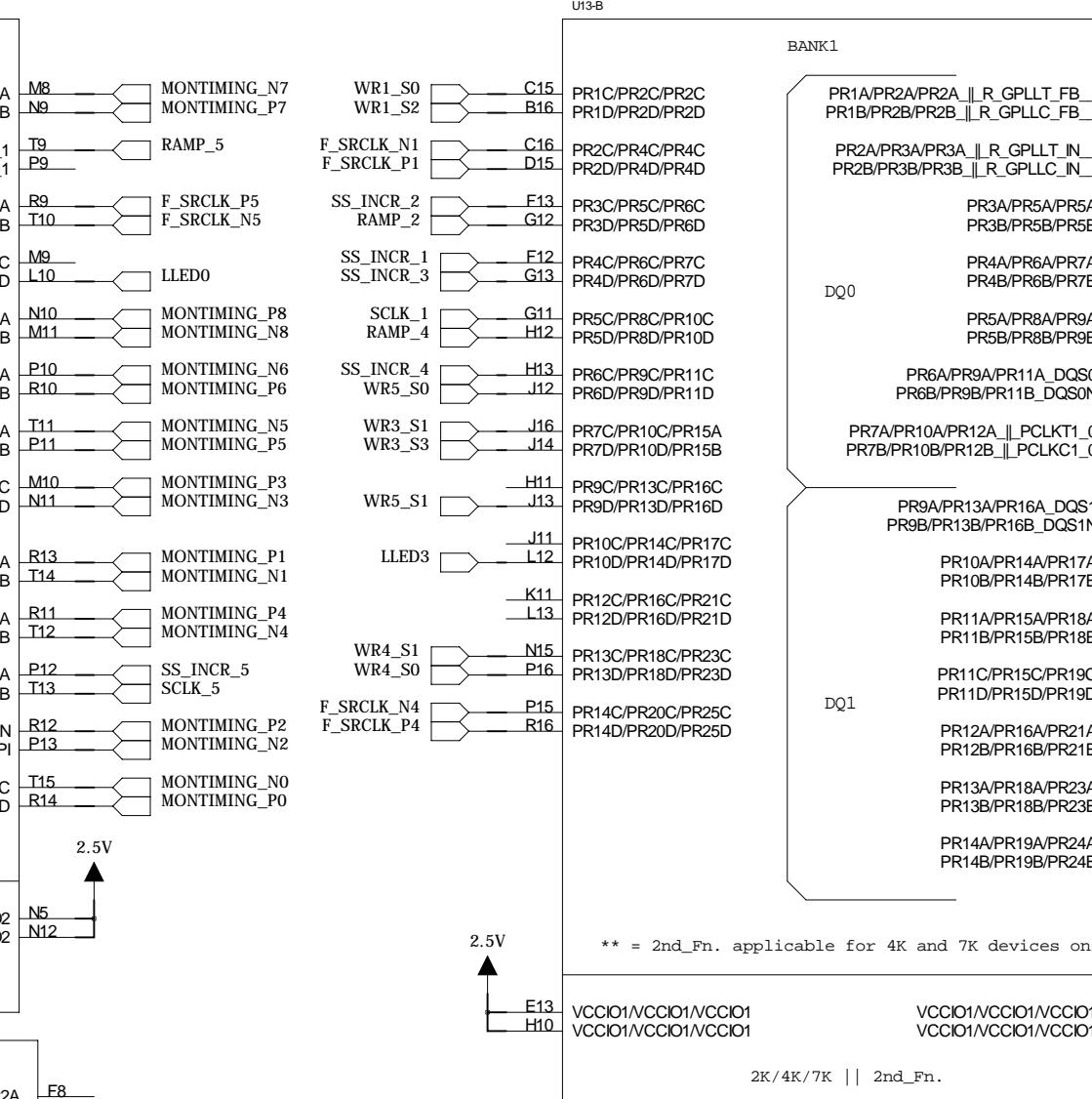
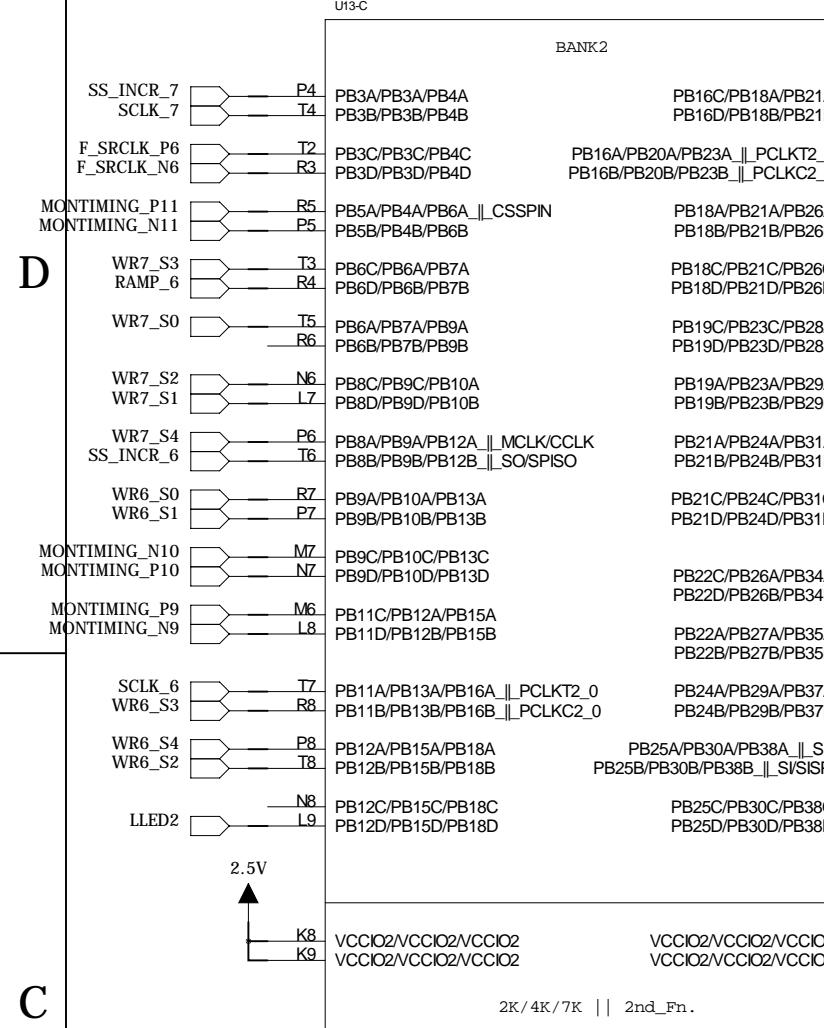
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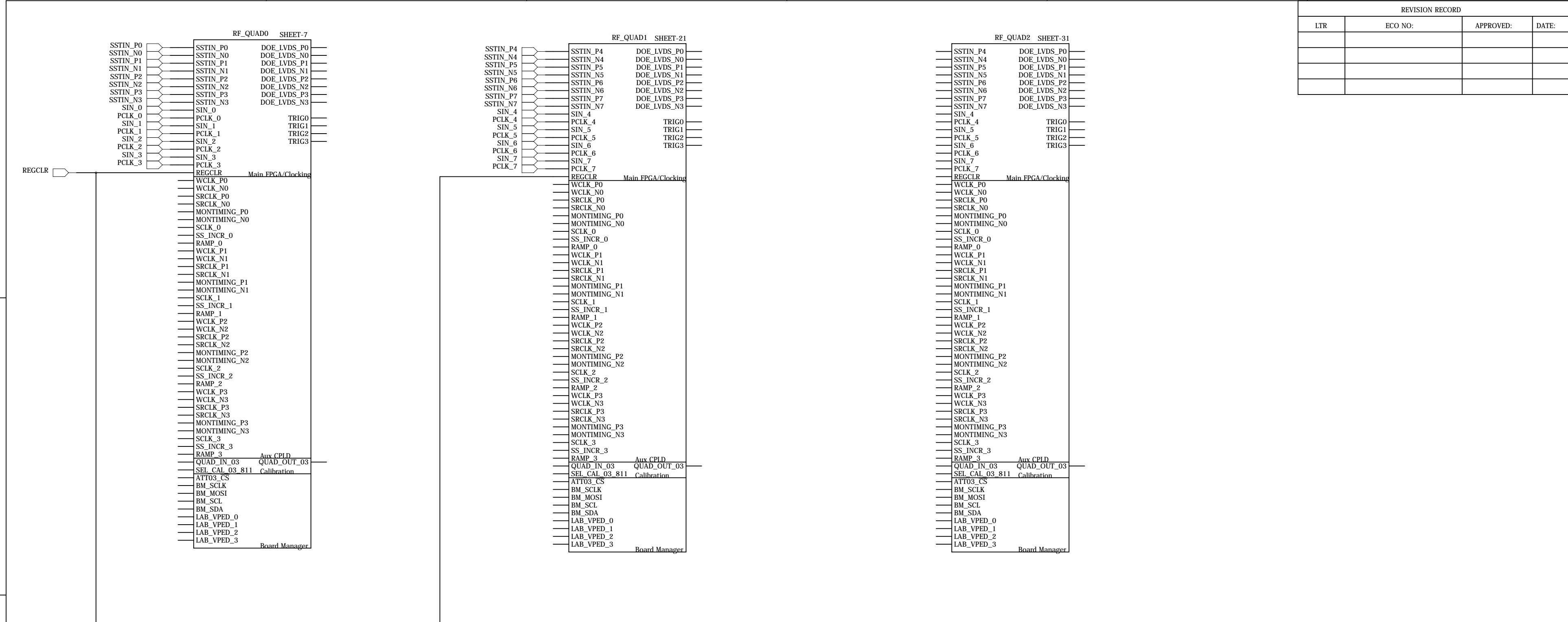
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COMPANY: Ohio State University			
SHEET: RF_LEFT			
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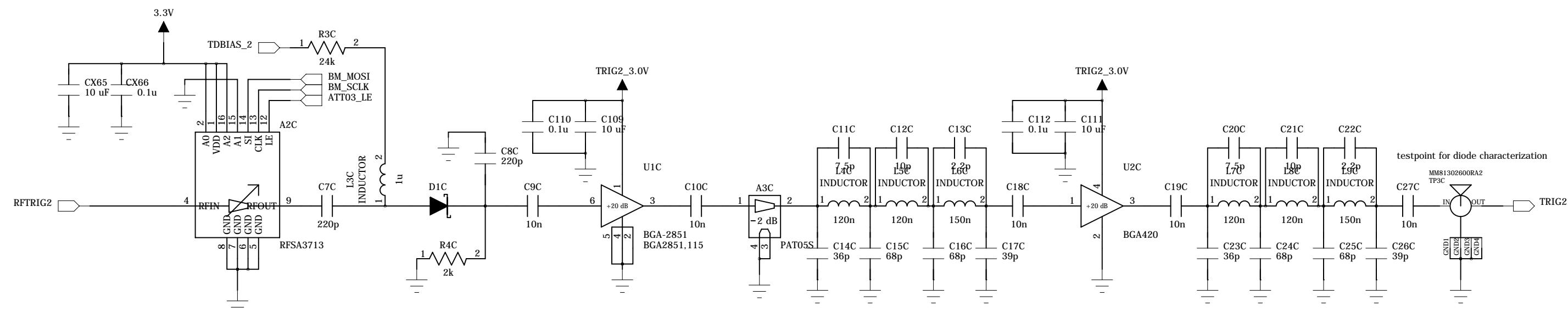
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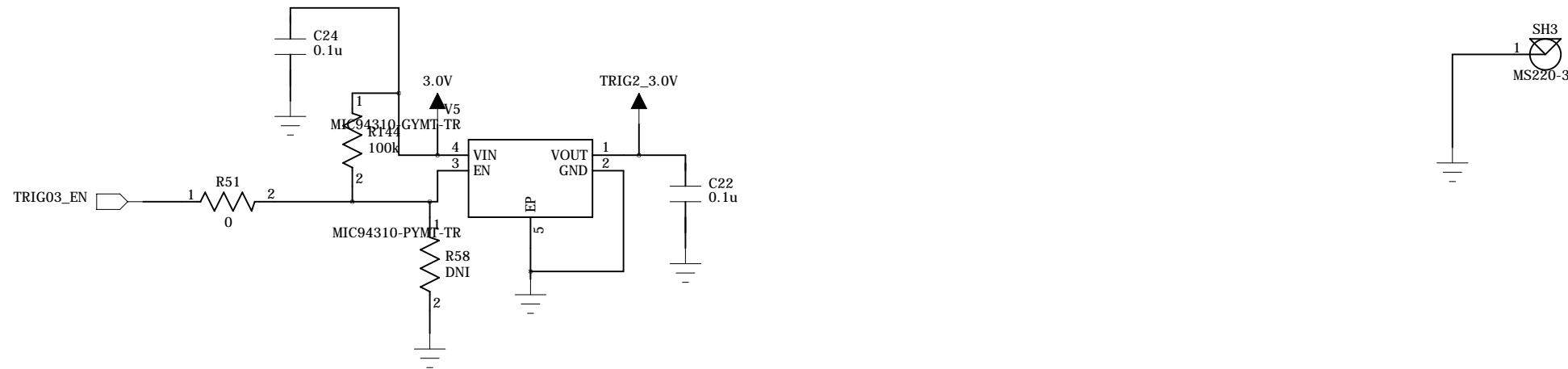
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COMPANY:	Ohio State University		
SHEET:	RF_DIODE2		
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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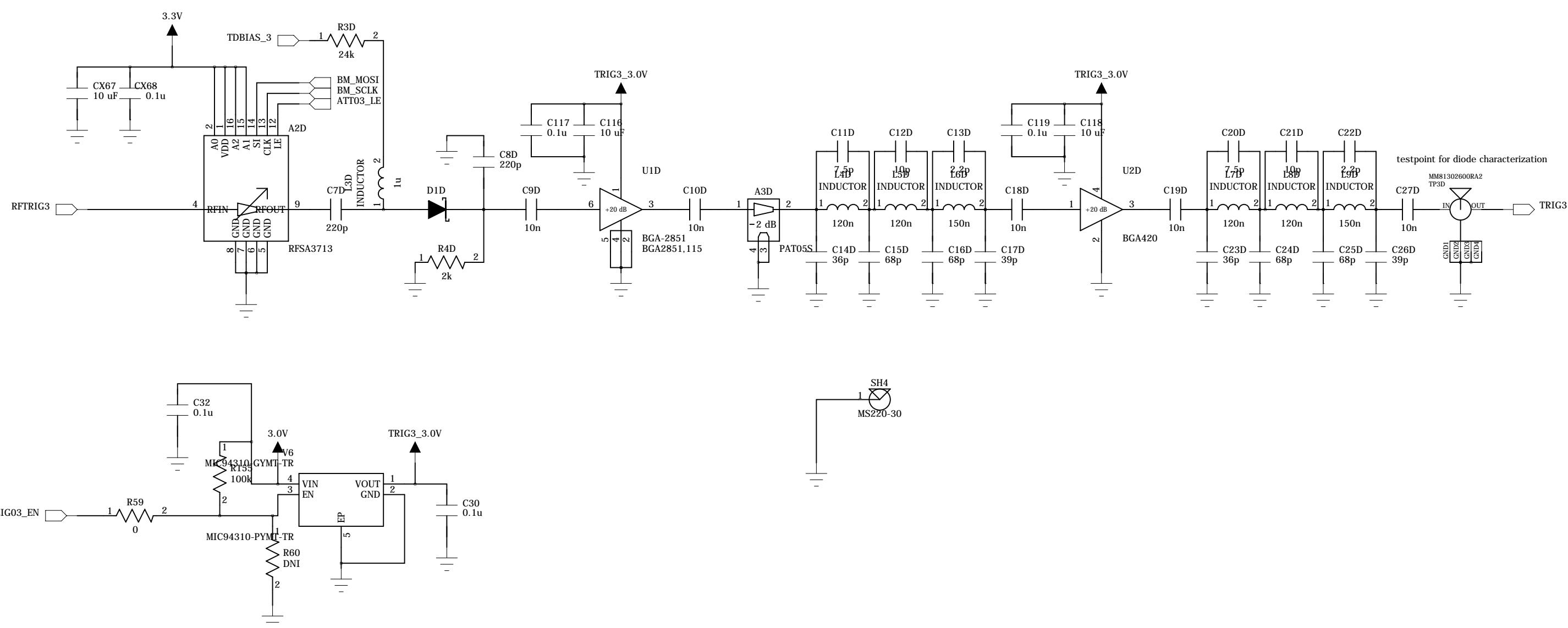
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COMPANY:	Ohio State University		
SHEET:	RF_DIODE3		
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QUALITY CONTROL:	N/A	DATED:	N/A
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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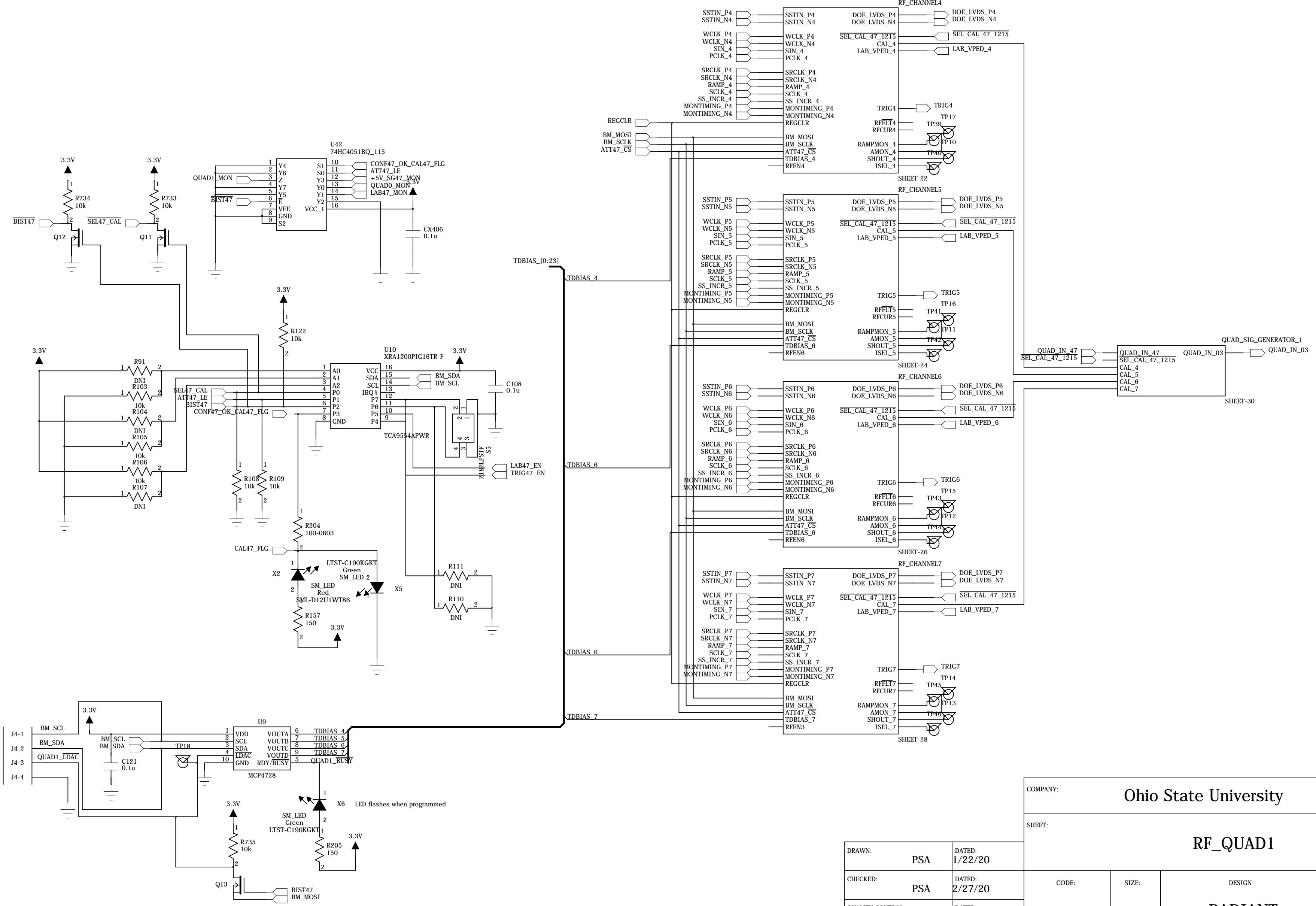
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COMPANY:  
Ohio State UniversitySHEET:  
RF\_QUAD1

DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
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CODE: 4 SIZE: C DESIGN: RADIANT REV: A

SCALE: <Scale> SHEET: 21 74

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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors

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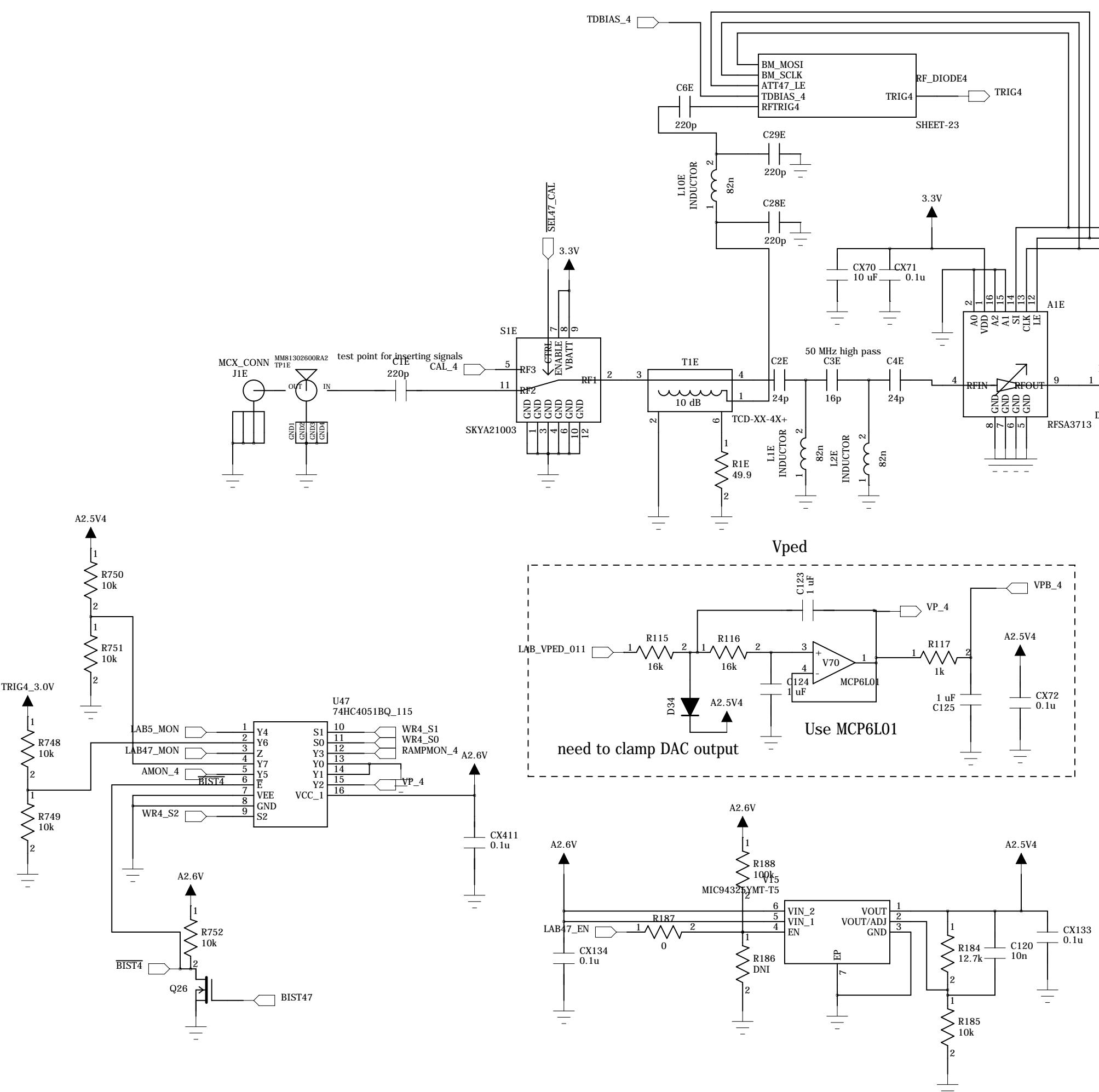
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COMPANY:	Ohio State University		
SHEET:	RF_CHANNEL4		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
RELEASED:	N/A	DATED:	N/A
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REV:	A	CODE:	C
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LTR	ECO NO:	APPROVED:	DATE:

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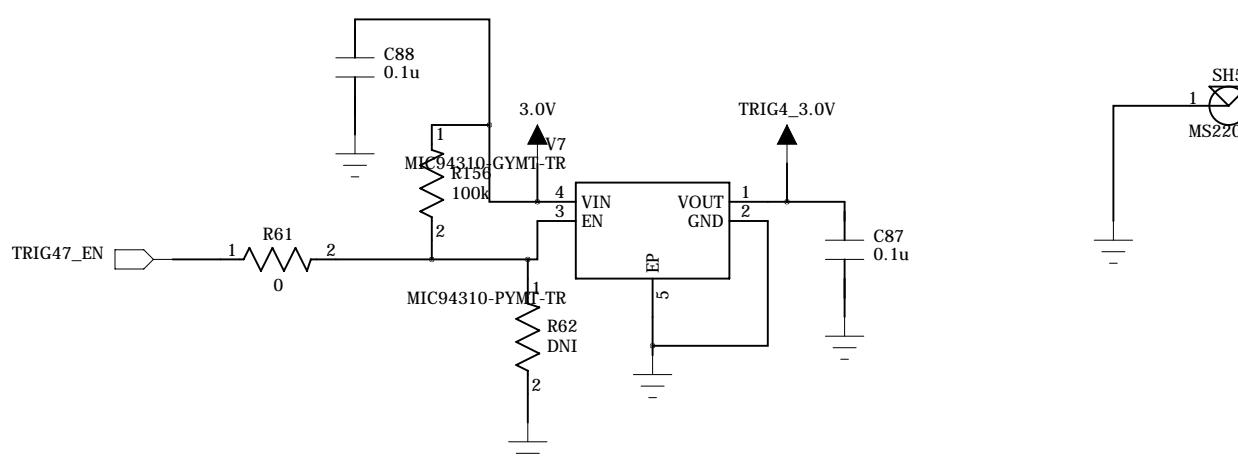
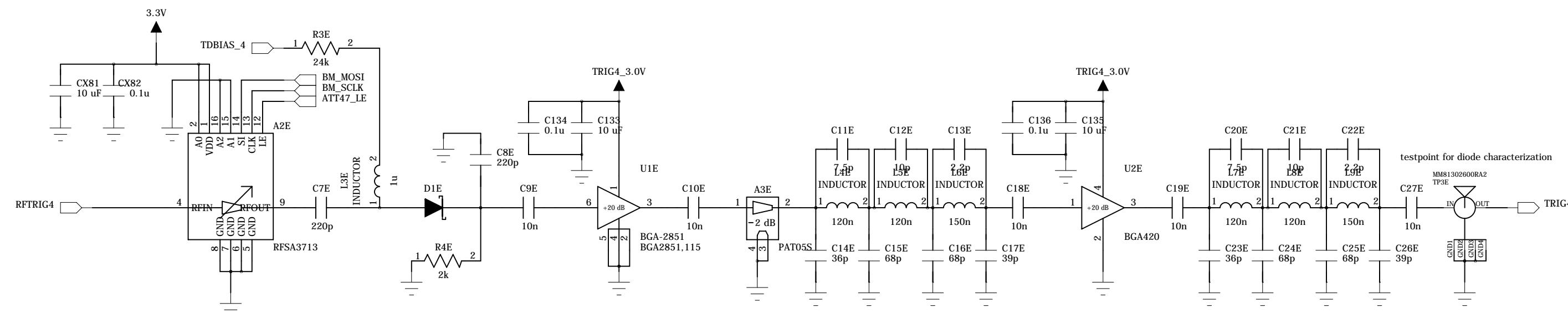
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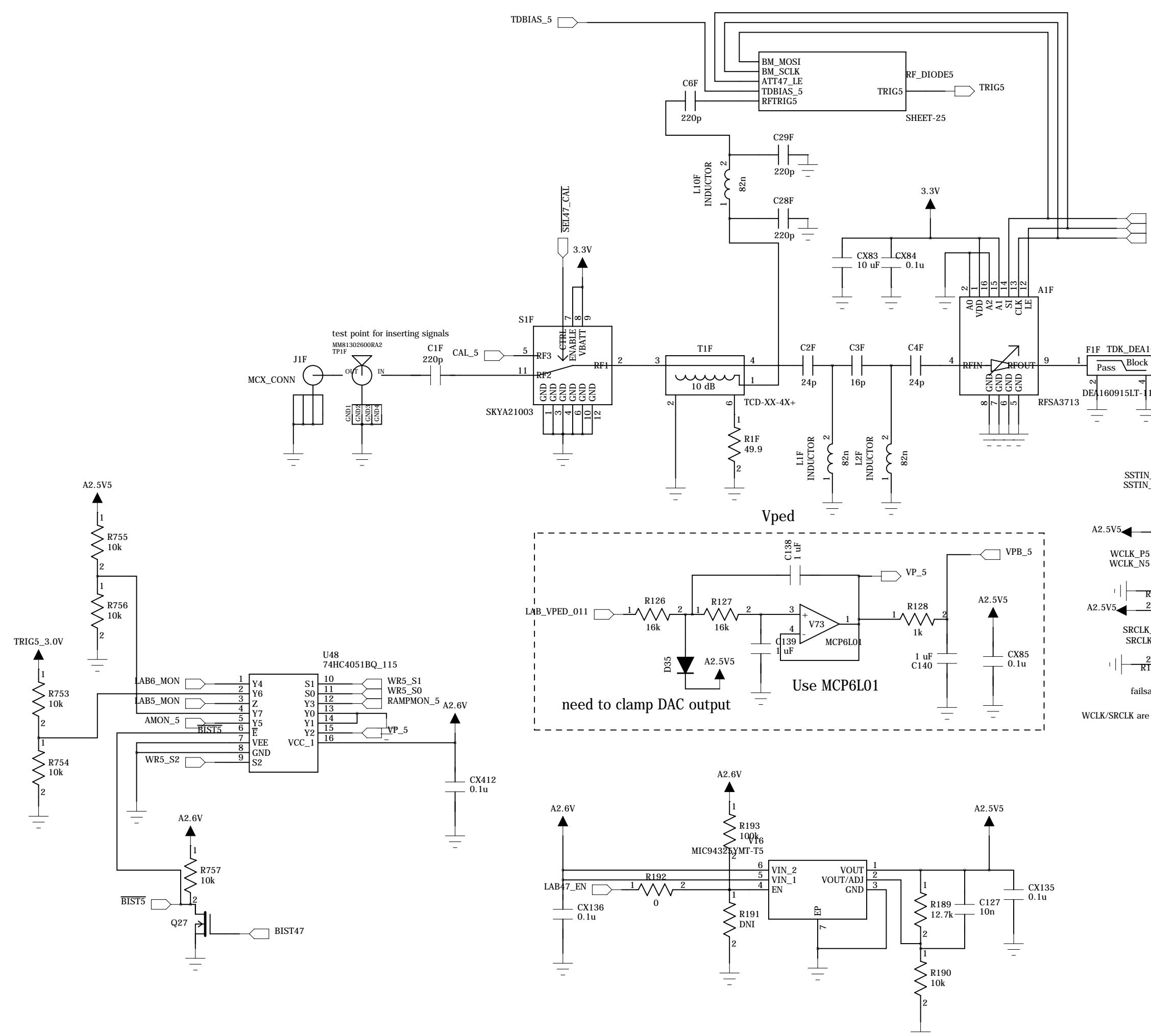


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REV:	A		
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors



COMPANY:	Ohio State University		
SHEET:	RF_CHANNEL5		
DRAWN:	PSA	DATED:	1/22/20
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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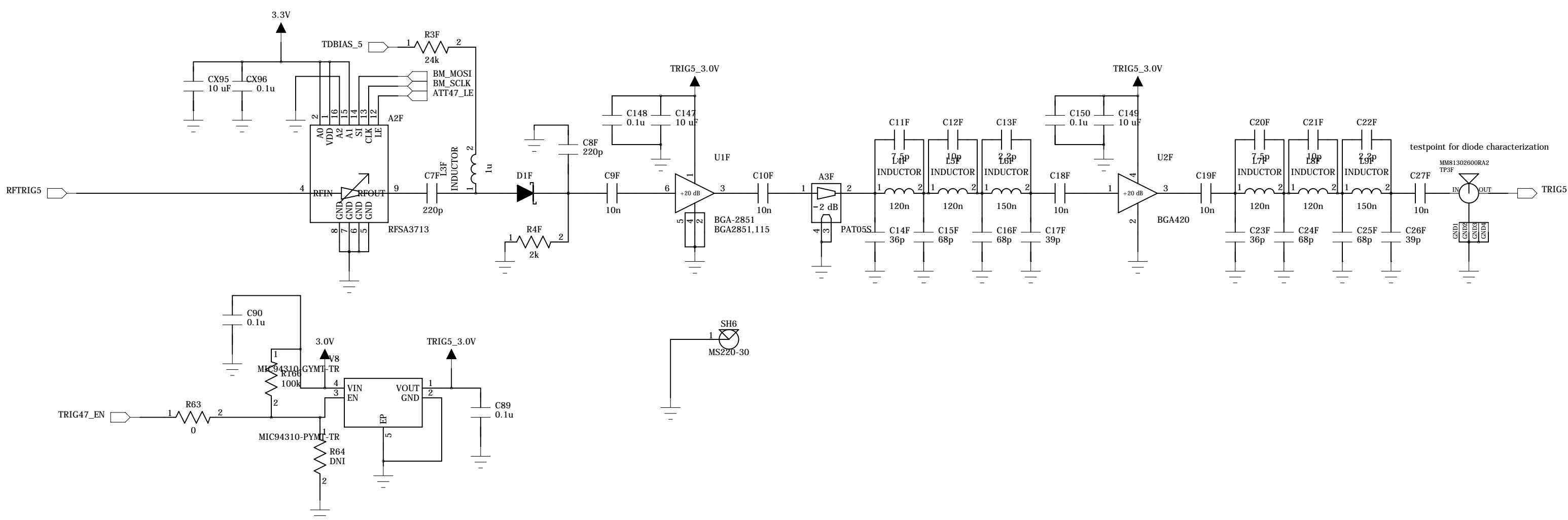
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COMPANY:

Ohio State University

SHEET:

RF\_DIODE5

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SCALE: &lt;Scale&gt; SHEET: 25 74

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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors

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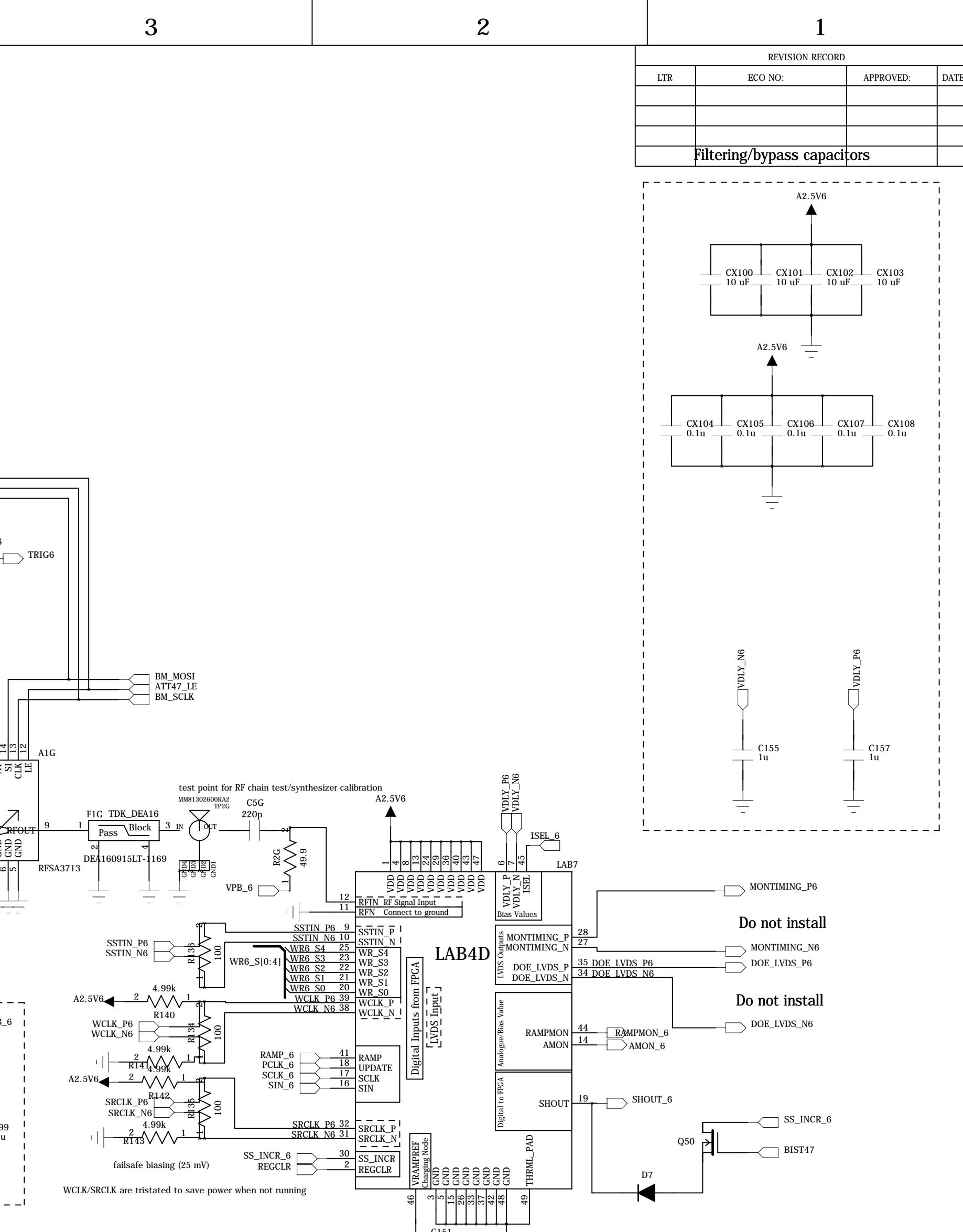
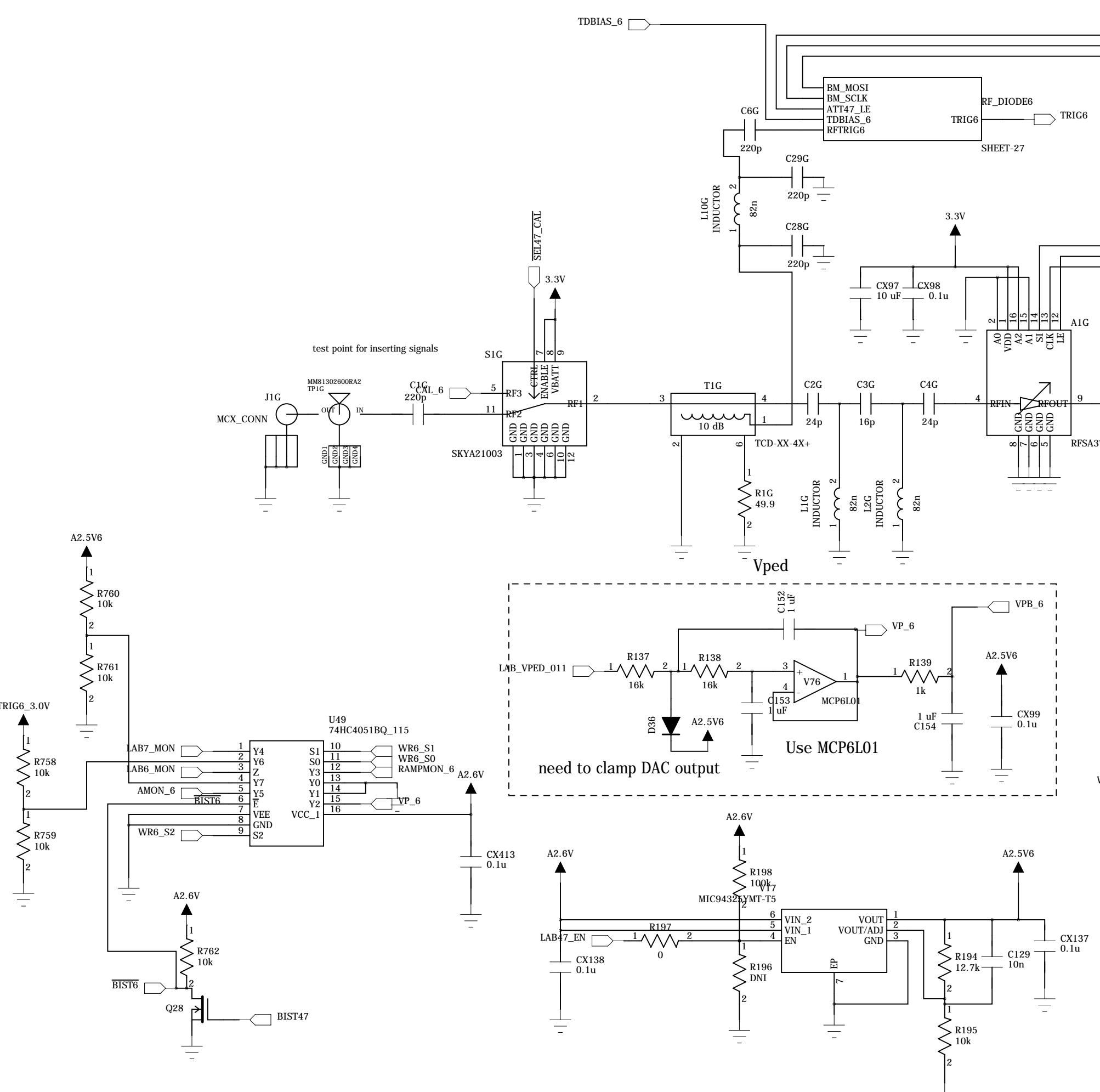
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COMPANY:	Ohio State University		
SHEET:	RF_CHANNEL6		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
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RELEASED:	N/A	DATED:	N/A
SCALE:	<Scale>	CODE:	C
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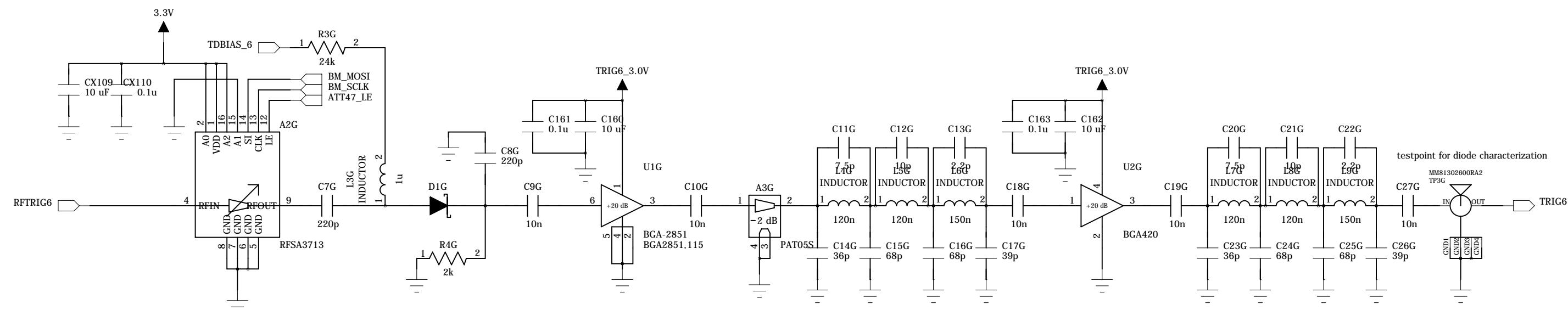
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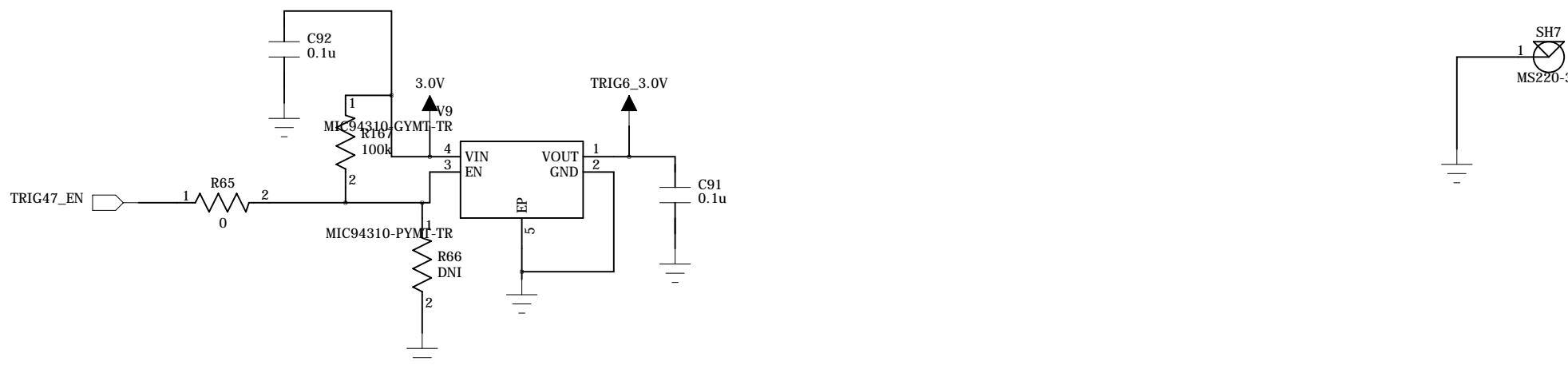
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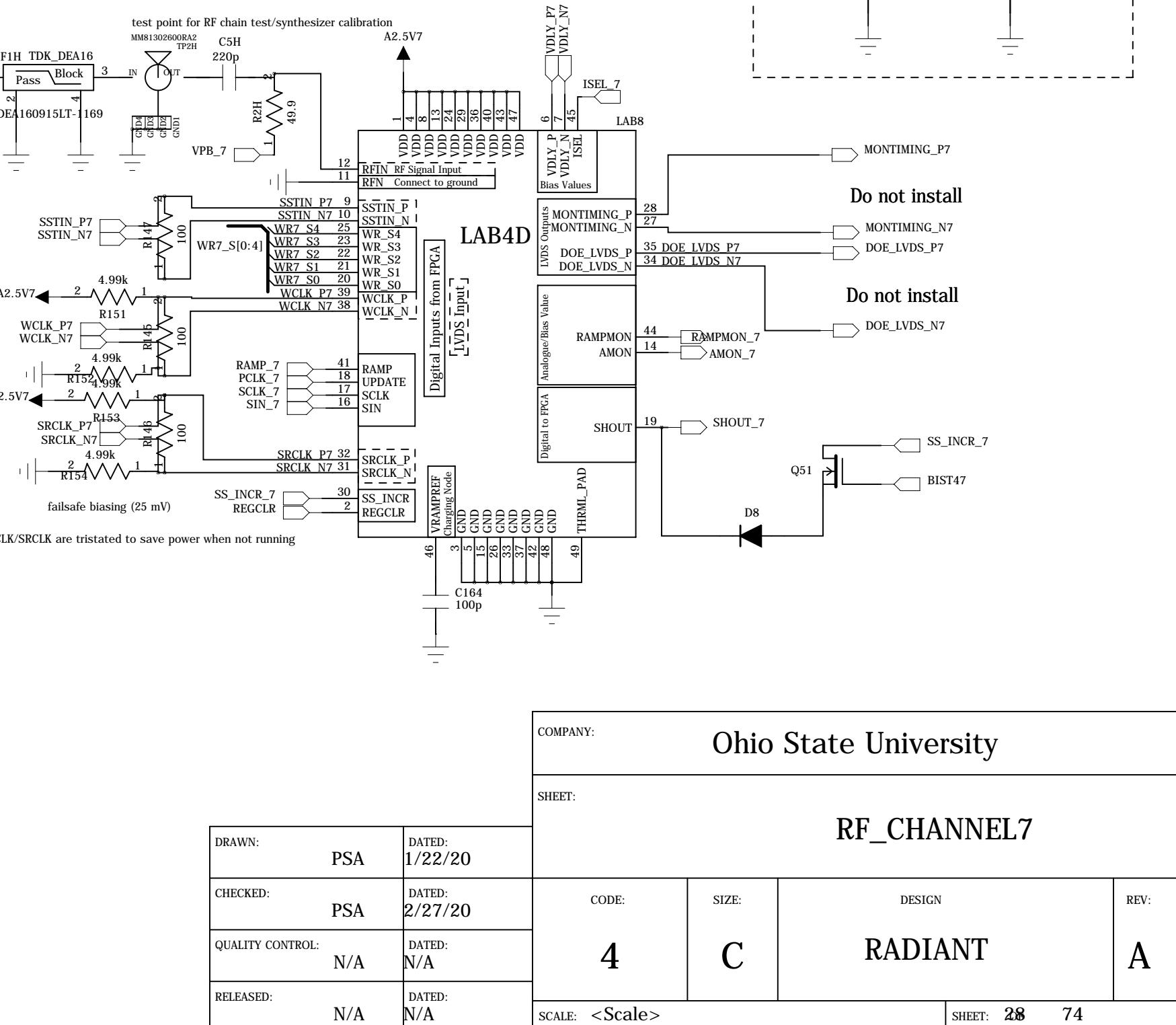
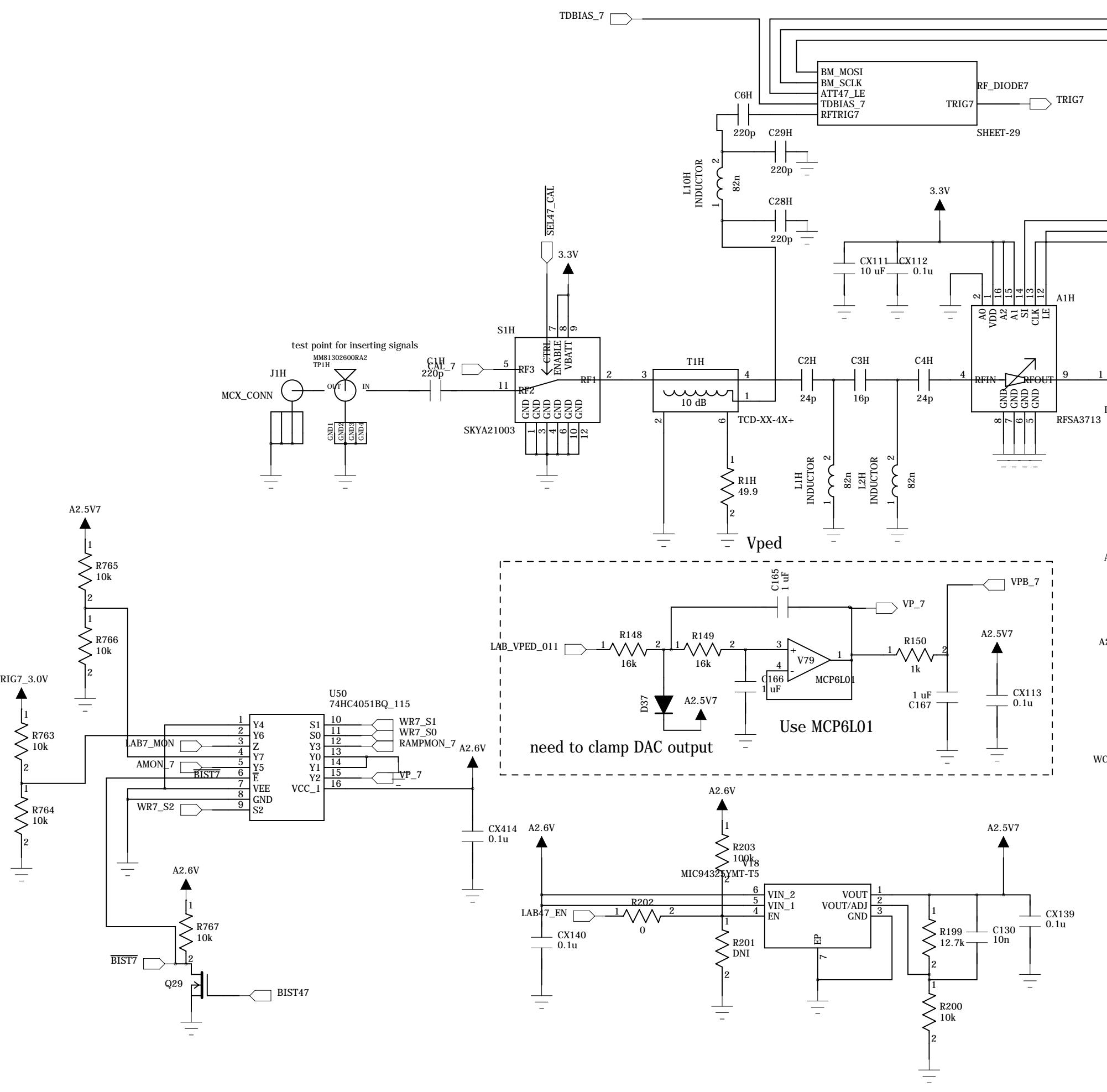
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COMPANY:	Ohio State University		
SHEET:	RF_DIODE6		
DRAWN:	PSA	DATED: 1/22/20	
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QUALITY CONTROL:	N/A	DATED: N/A	
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CODE:	C	SIZE:	DESIGN RADIANT
REV:	A		
SCALE:	<Scale>		Sheet: 27 74

## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors



Ohio State University

RF\_CHANNEL7

COMPANY:	Ohio State University		
SHEET:	RF_CHANNEL7		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
RELEASED:	N/A	DATED:	N/A
SCALE:	<Scale>	CODE:	C
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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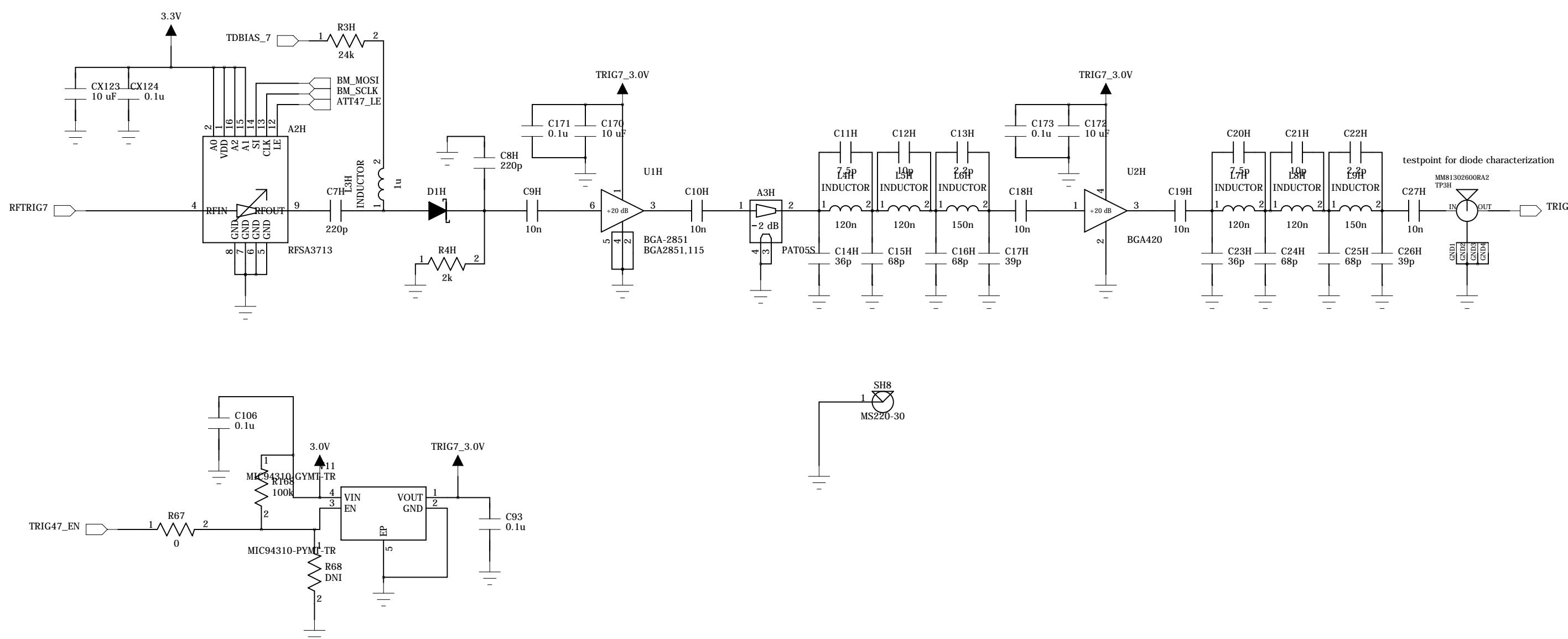
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COMPANY:	Ohio State University		
SHEET:	RF_DIODE7		
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CHECKED:	PSA	DATED: 2/27/20	
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CODE:	C	SIZE:	DESIGN RADIANT
REV:	A		
SCALE:	<Scale>		SCALE: <Scale> SHEET: 20 74

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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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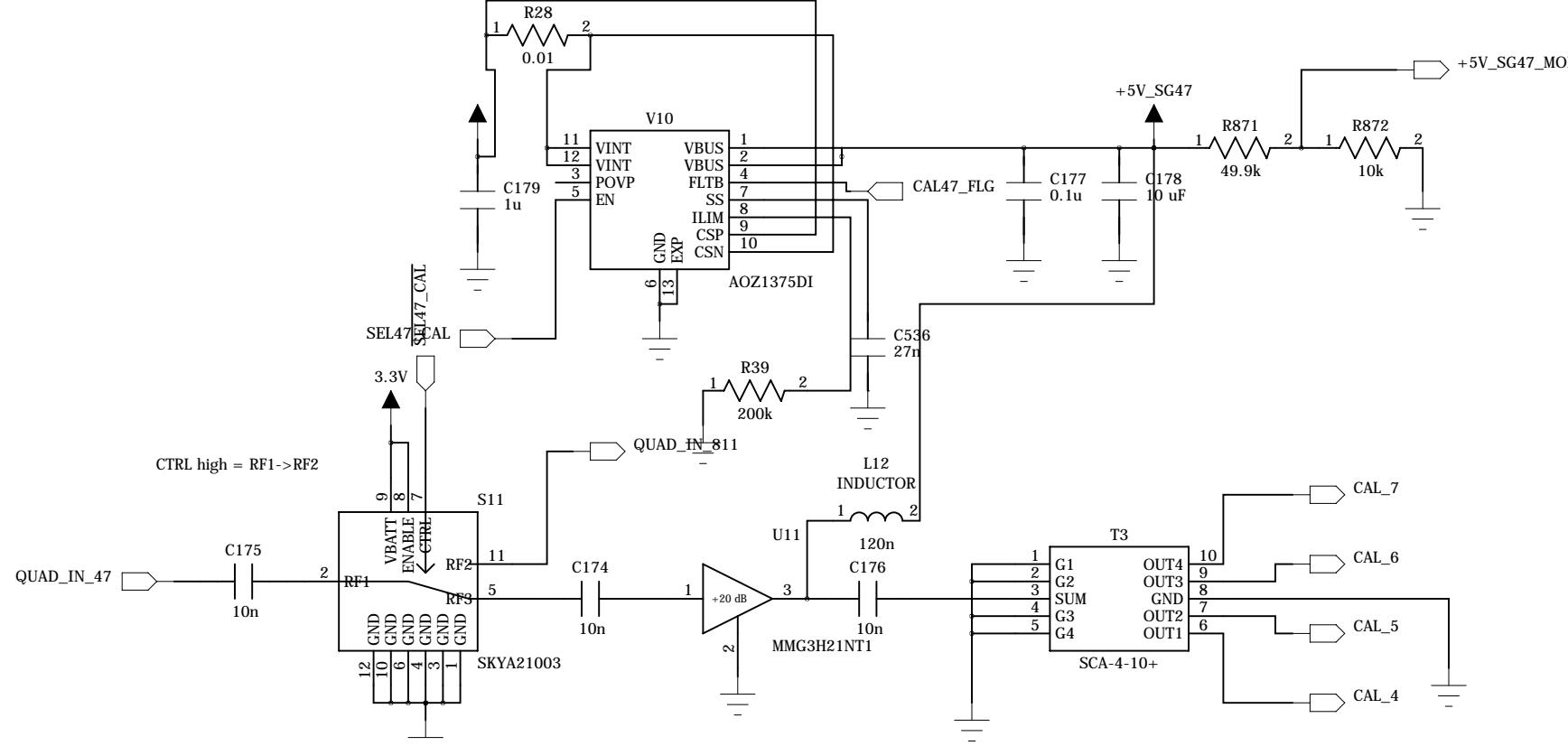
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COMPANY:	Ohio State University		
SHEET:	QUAD_SIG_GENERATOR 1		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
RELEASED:	N/A	DATED:	N/A
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CODE:	SIZE:	DESIGN:	REV:
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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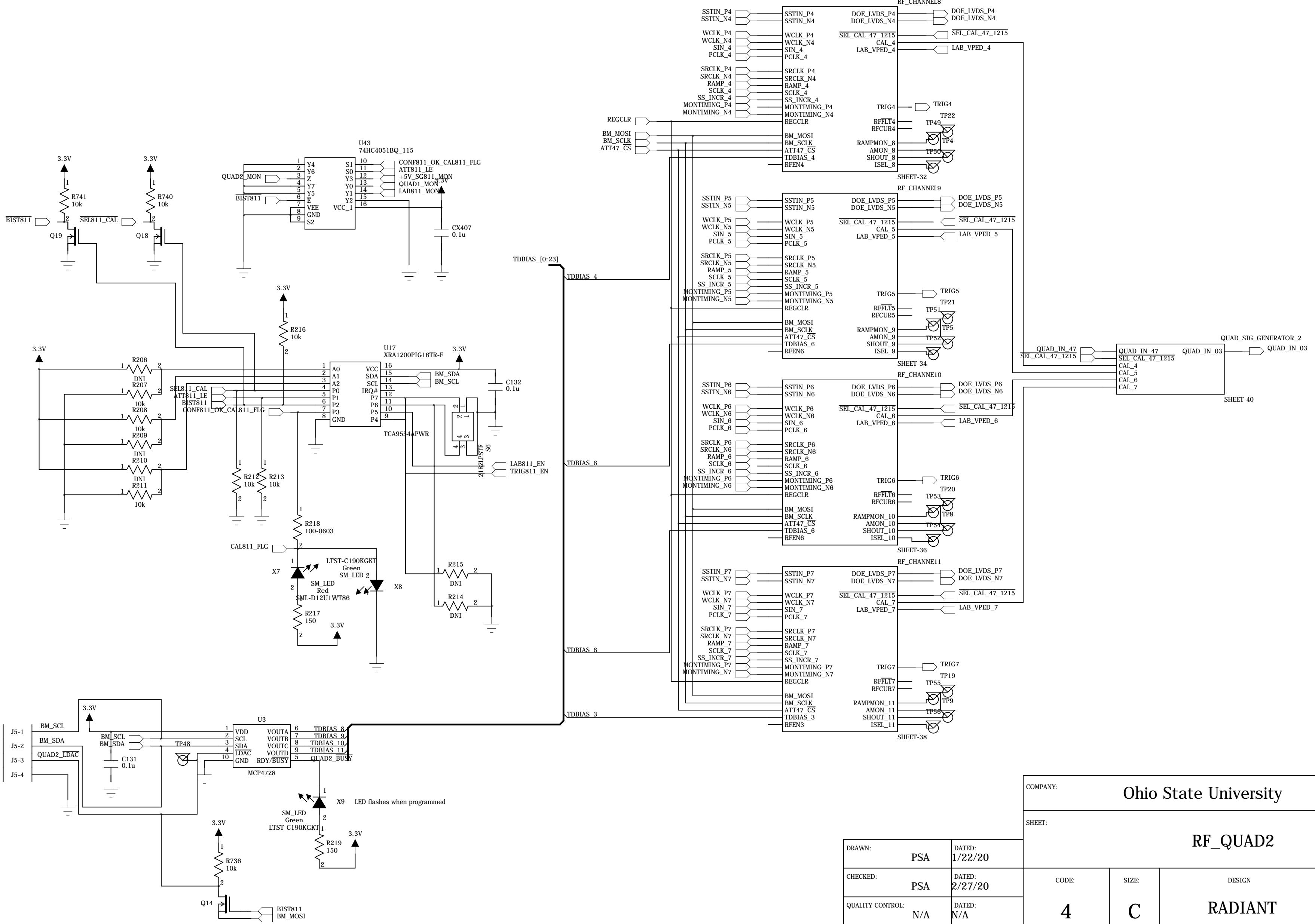
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COMPANY:	Ohio State University		
SHEET:	RF_QUAD2		
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CODE:	SIZE:	DESIGN	REV:
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors

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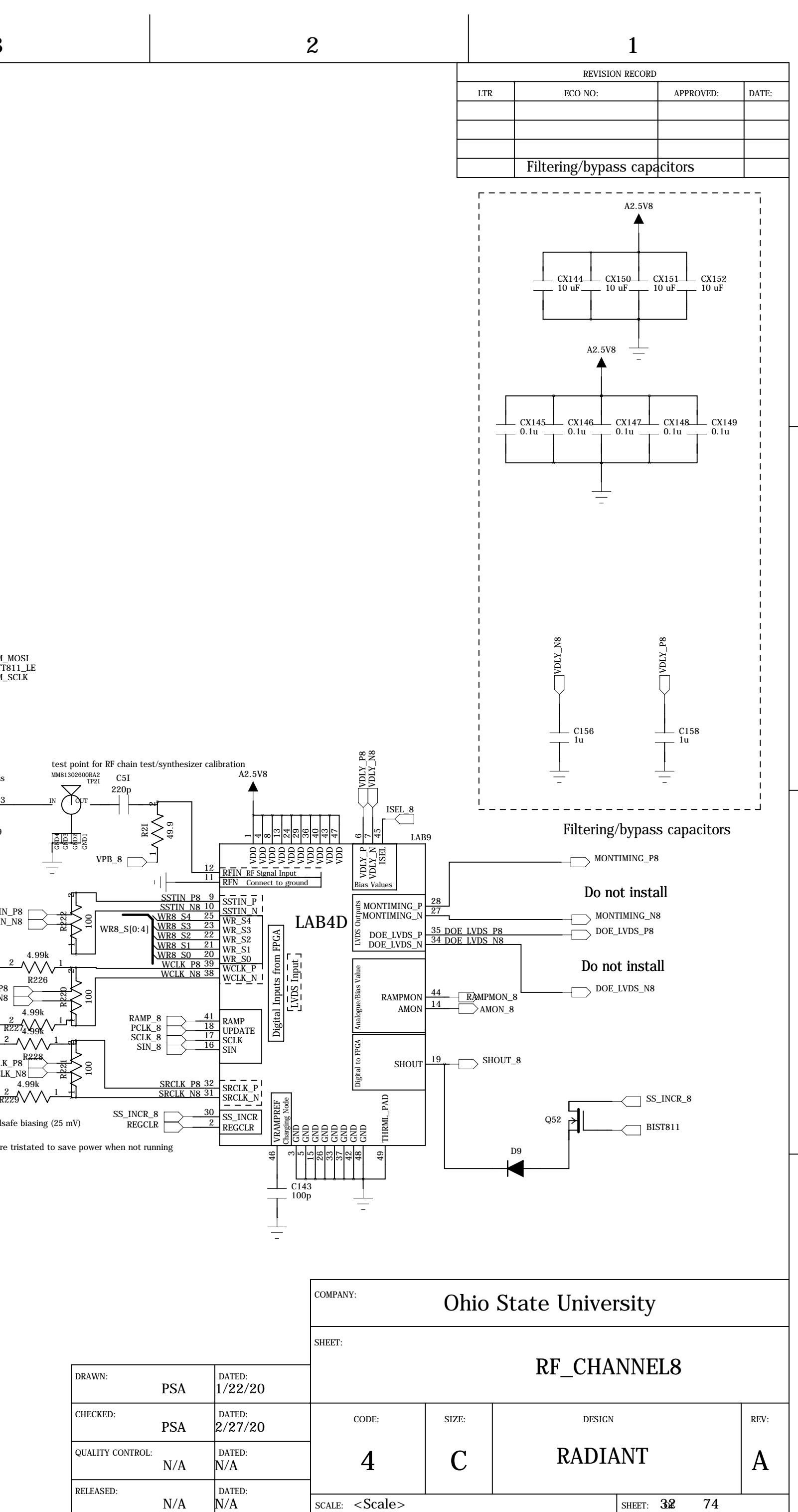
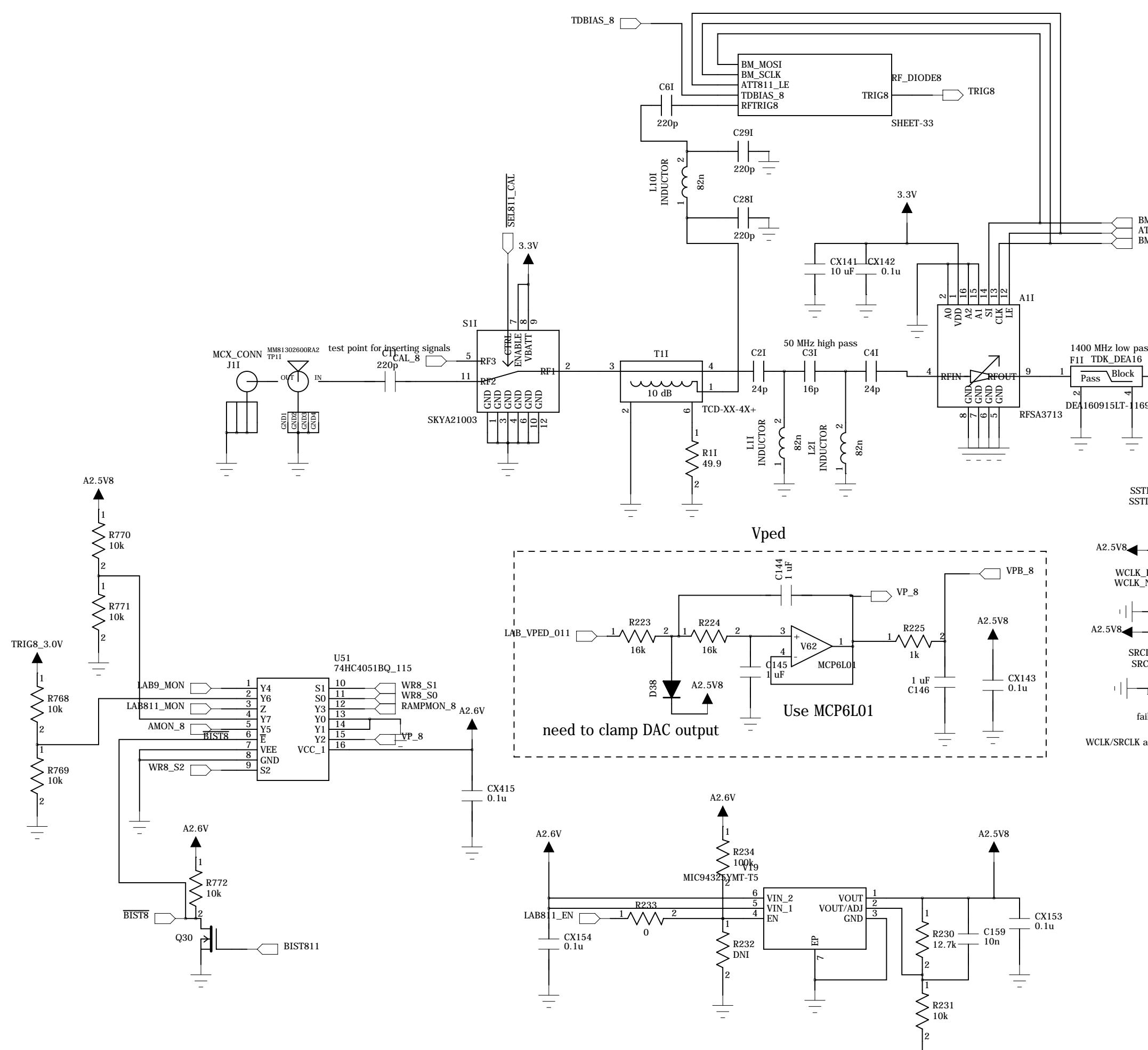
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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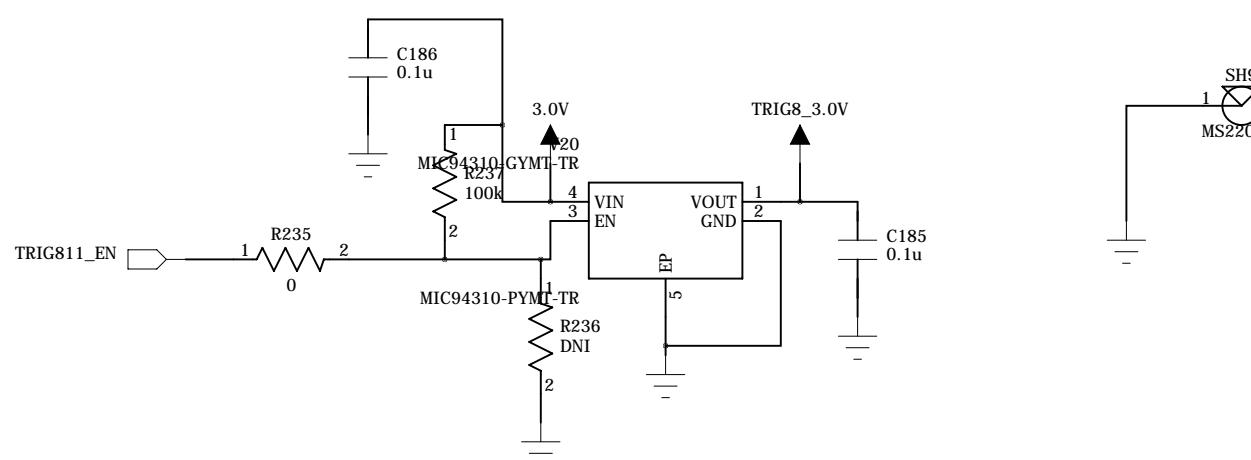
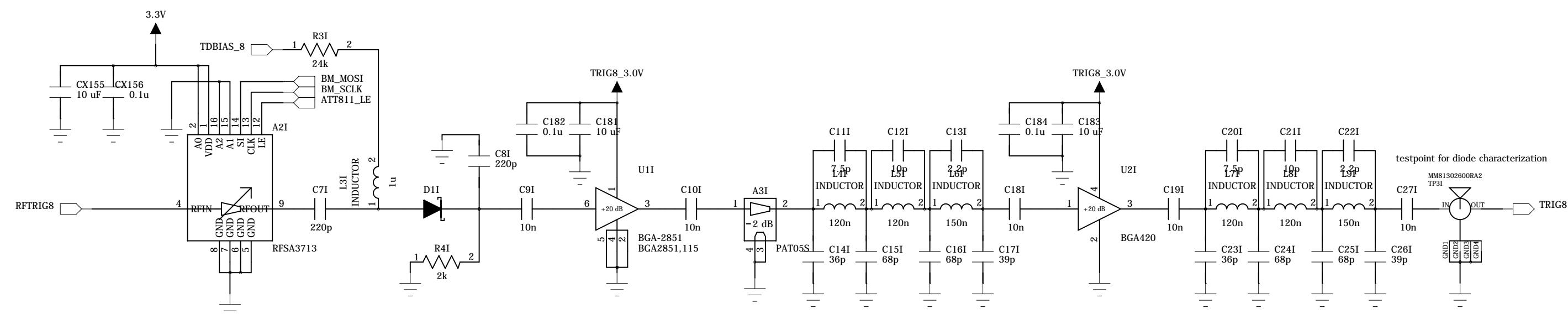
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COMPANY:	Ohio State University		
SHEET:	RF_DIODE8		
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CHECKED:	PSA	DATED:	2/27/20
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	4		RADIANT
REV:			A
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors

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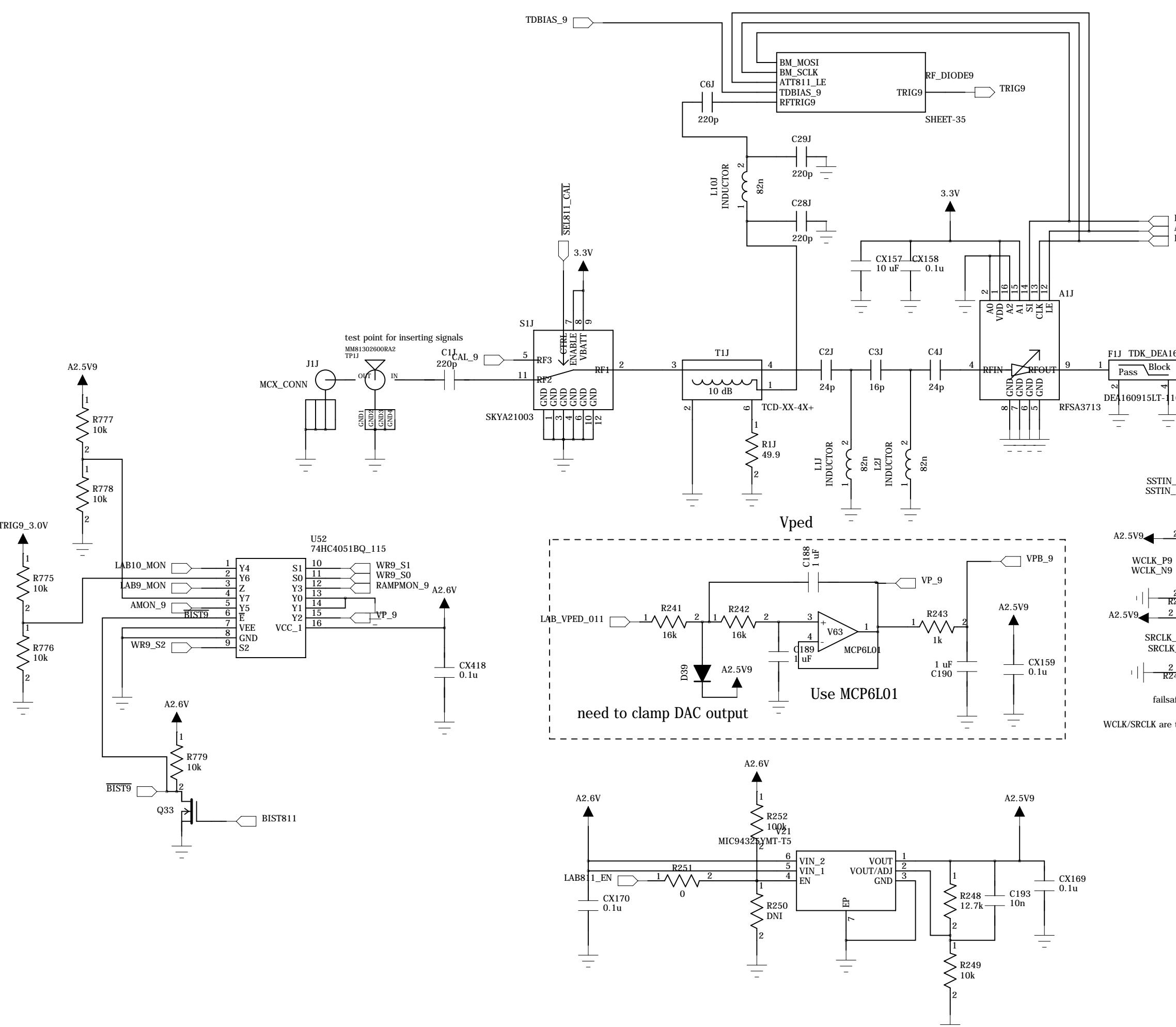
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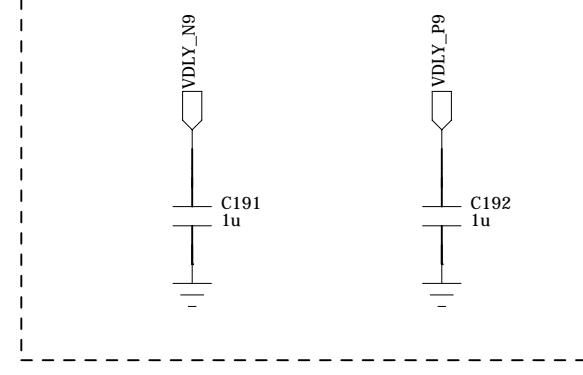
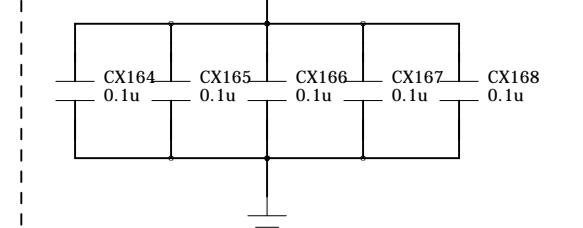
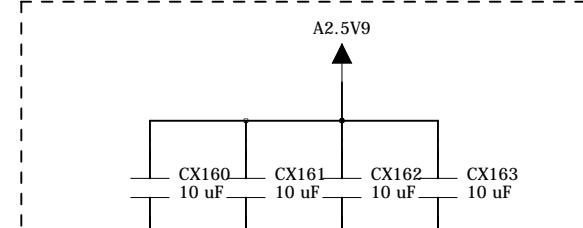
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COMPANY:	Ohio State University		
SHEET:	RF_CHANNEL9		
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CHECKED:	PSA	DATED:	2/27/20
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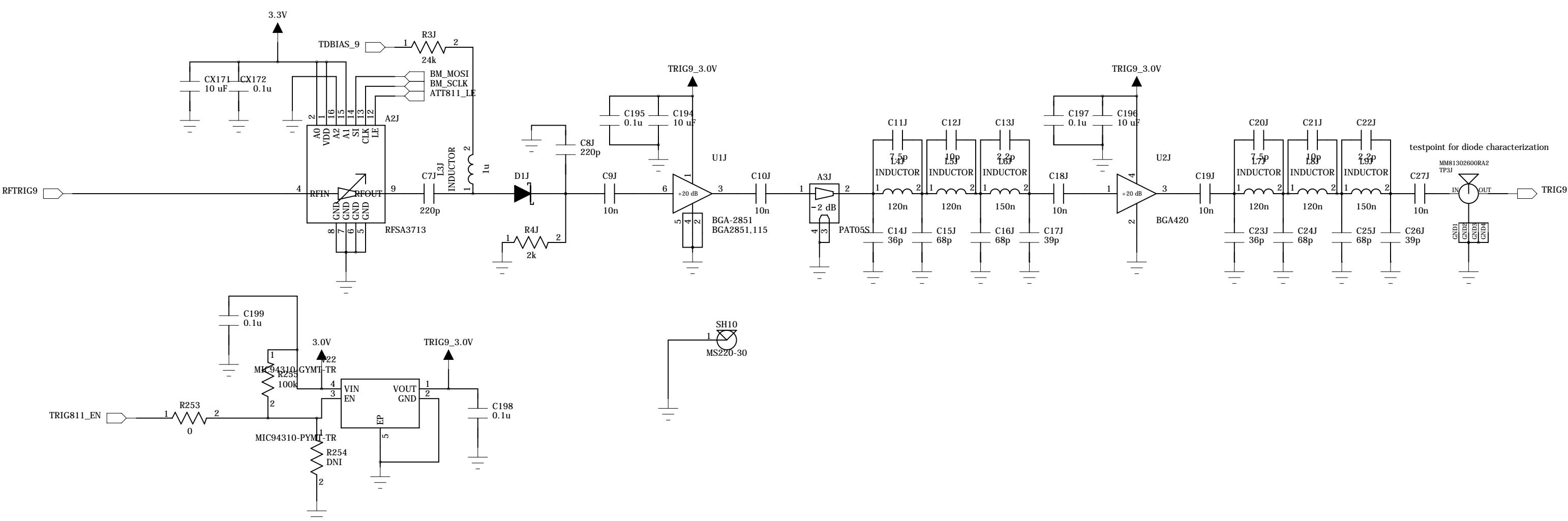
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COMPANY:	Ohio State University		
SHEET:	RF_DIODE9		
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors

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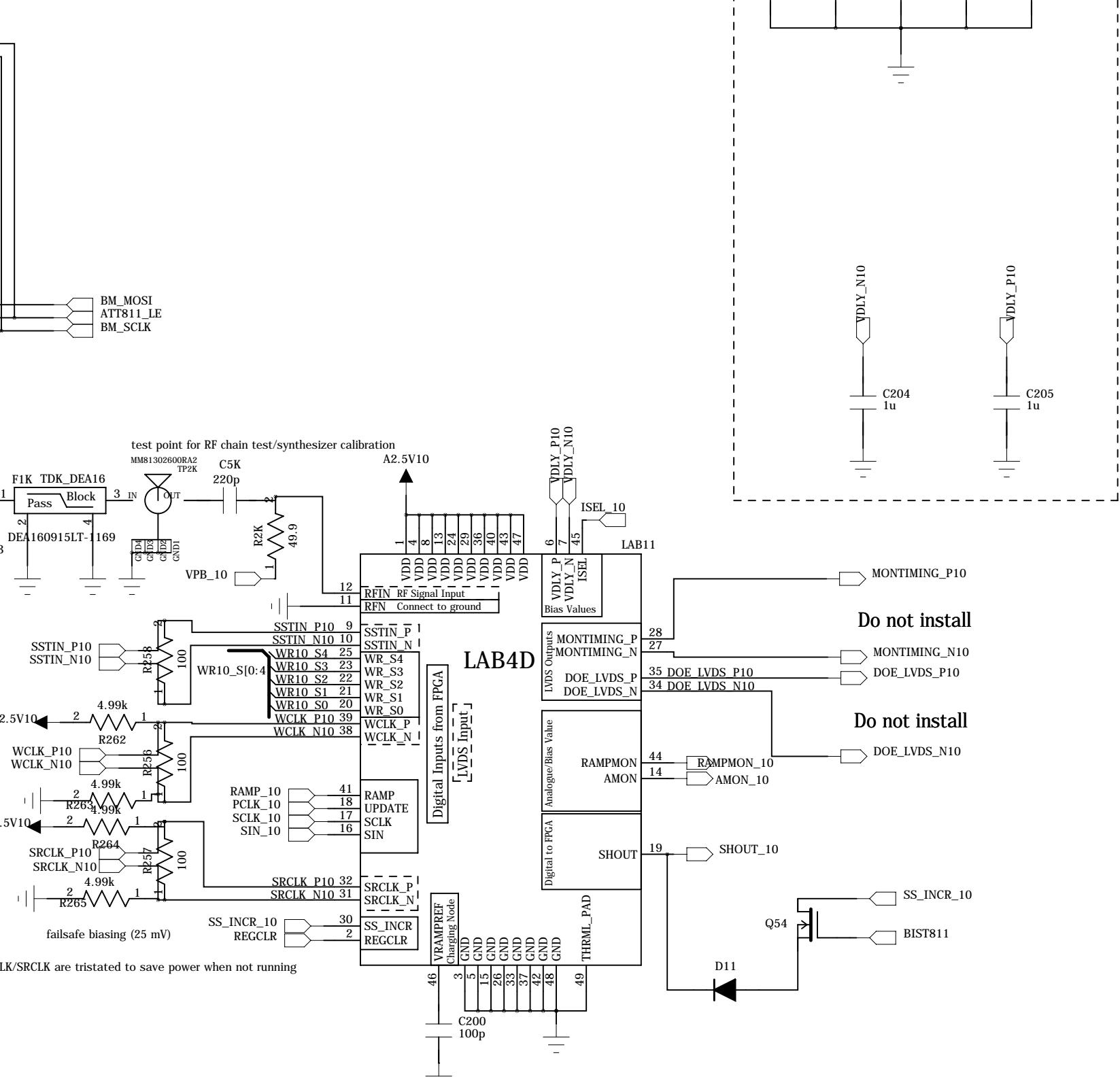
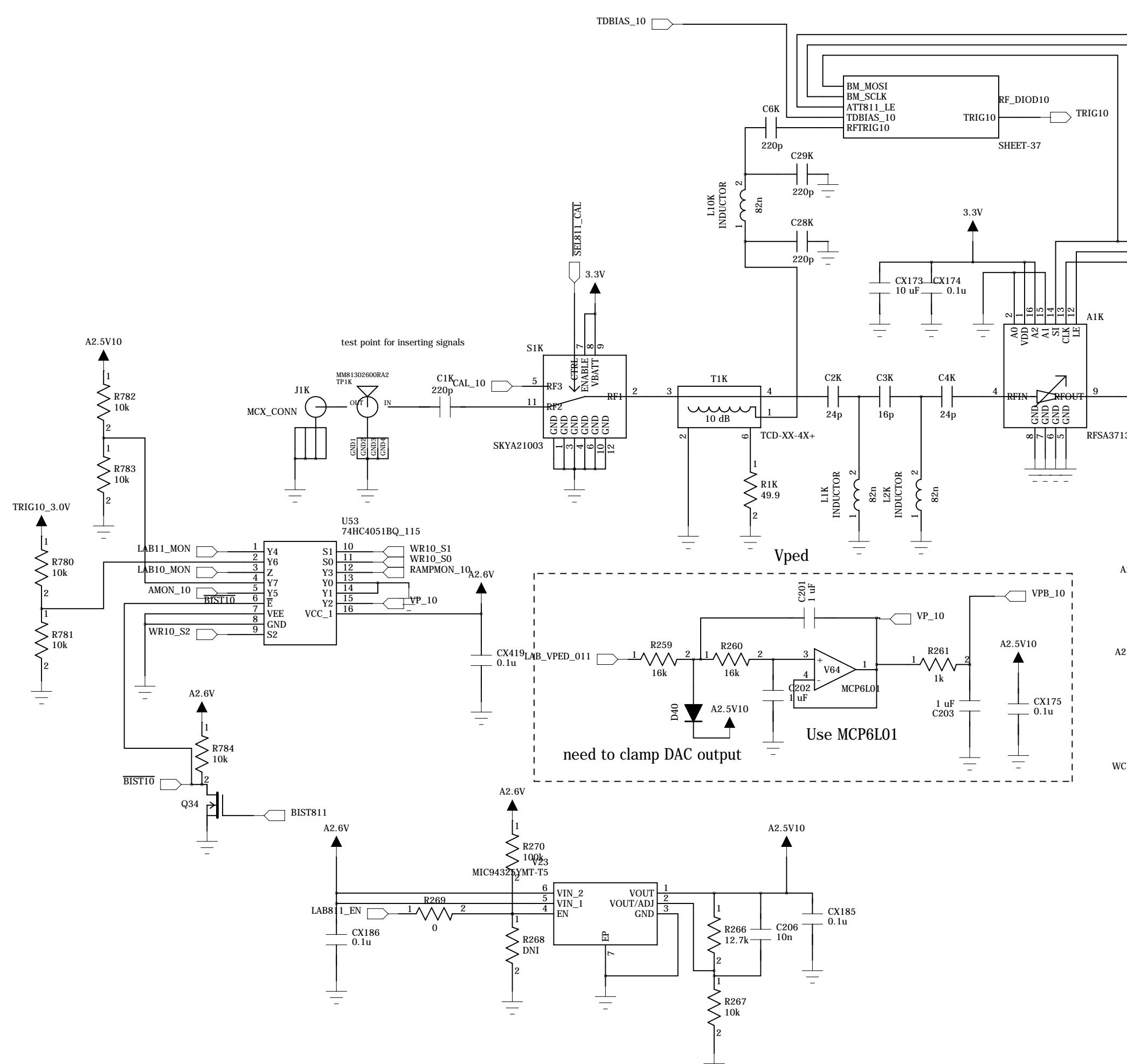
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CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
RELEASED:	N/A	DATED:	N/A

Ohio State University

RF\_CHANNEL10

CODE:	SIZE:	DESIGN	REV:
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SCALE: &lt;Scale&gt;

SHEET: 36 74

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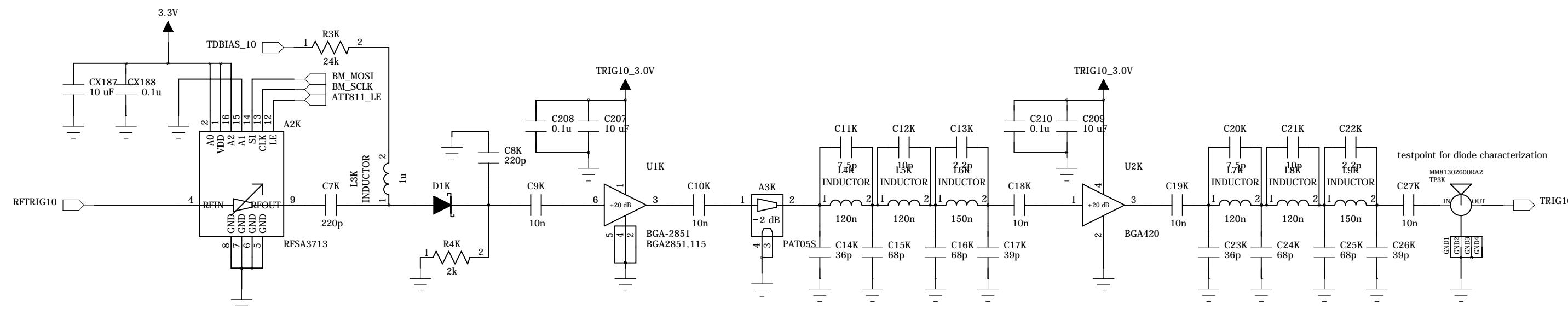
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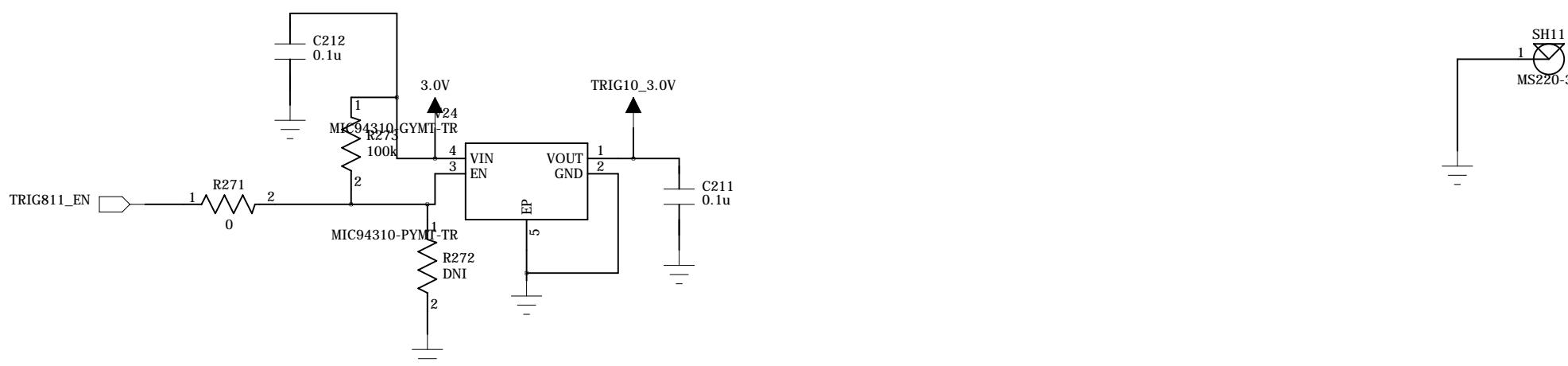
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COMPANY:	Ohio State University		
SHEET:	RF_DIOD10		
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CHECKED:	PSA	DATED:	2/27/20
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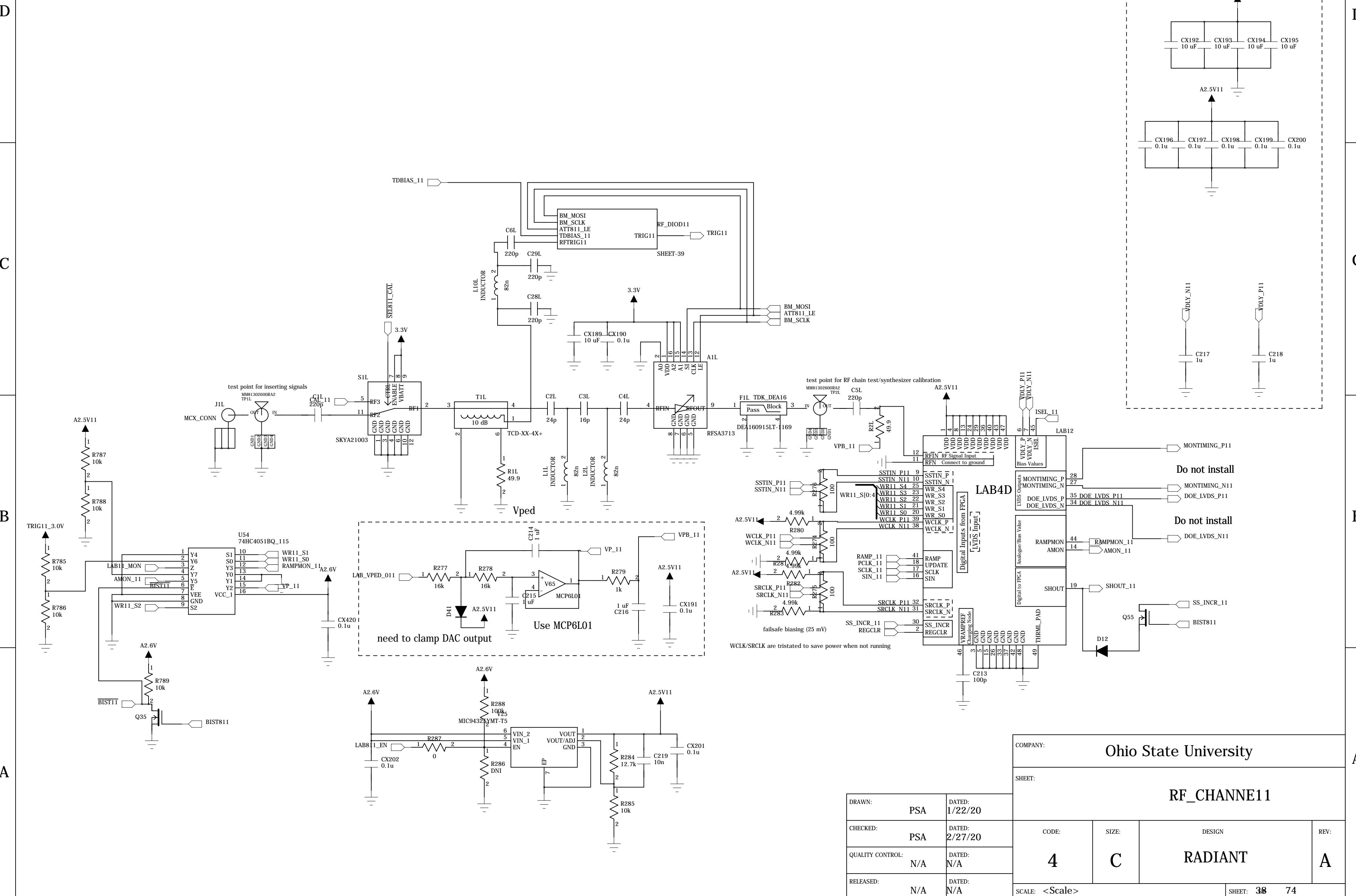
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## REVISION RECORD

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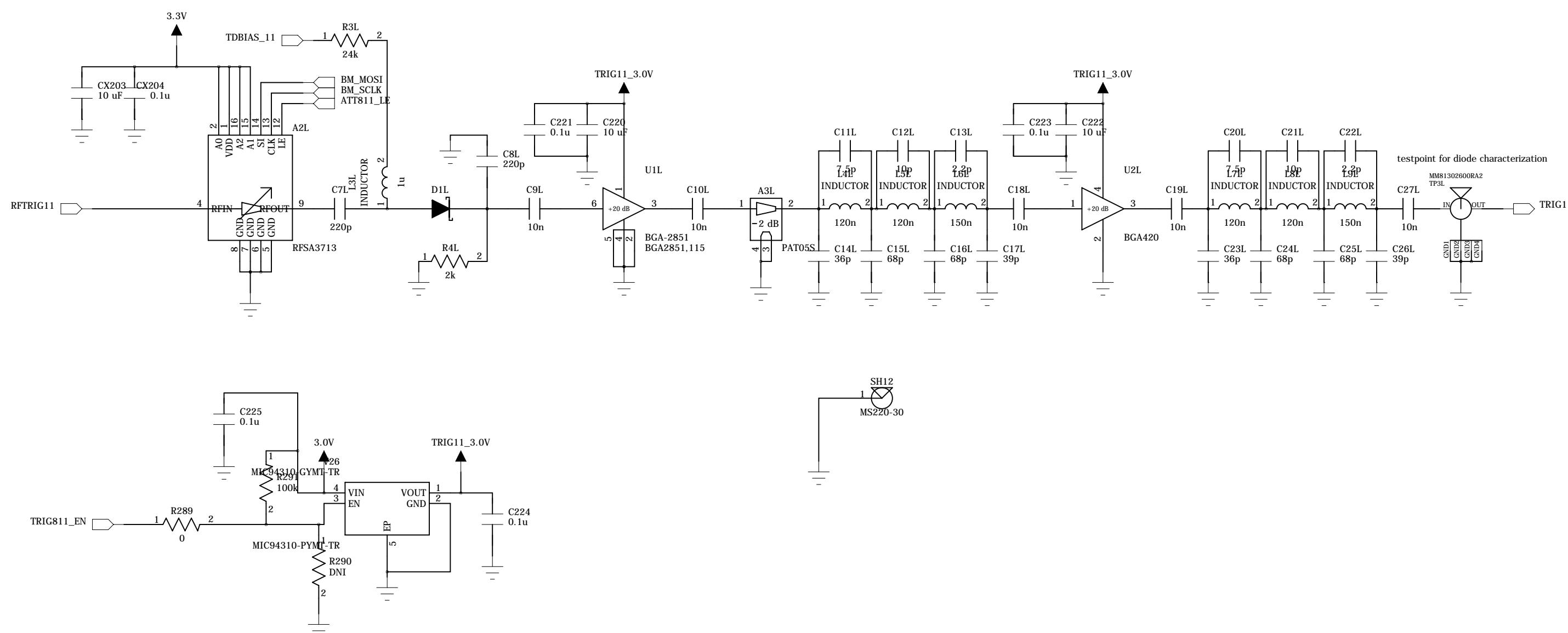
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COMPANY:	Ohio State University		
SHEET:	RF_DIOD11		
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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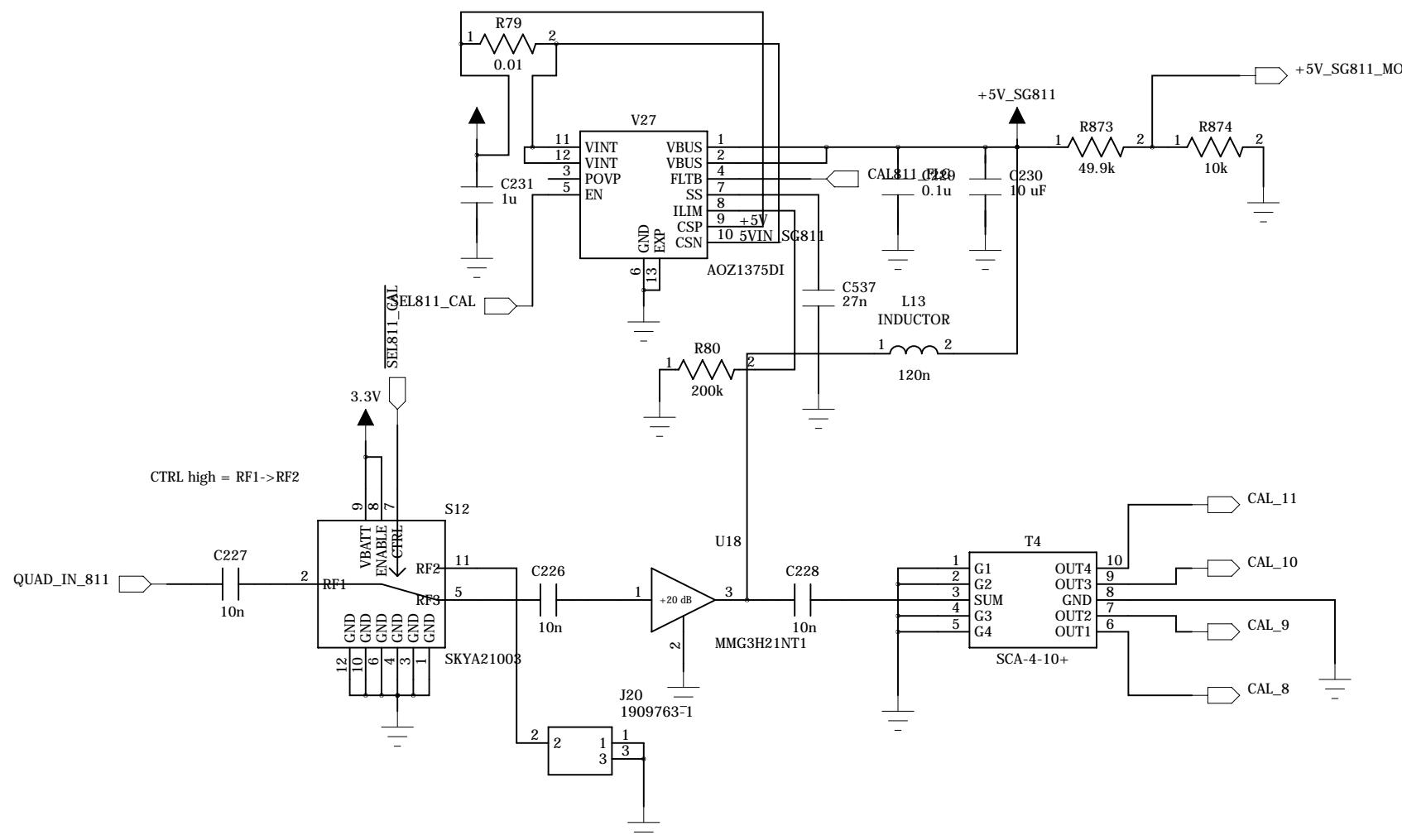
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COMPANY:	Ohio State University		
SHEET:	QUAD_SIG_GENERATOR 2		
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there's stuff here, it's just off-sheet cuz it's too big

COMPANY:		Ohio State University				
SHEET:		AUXCPLDS				
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CHECKED:	PSA	DATED: 2/27/20				
QUALITY CONTROL:	N/A	DATED: N/A				
RELEASED:	N/A	DATED: N/A				
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DRAWN:	PSA	DATED: 1/22/20	CODE: <b>4</b>	SIZE: <b>C</b>	DESIGN: <b>RADIANT</b>	REV: <b>A</b>
CHECKED:	PSA	DATED: 2/27/20				
QUALITY CONTROL:	N/A	DATED: N/A				
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SCALE: <Scale>			SHEET: 41 74			

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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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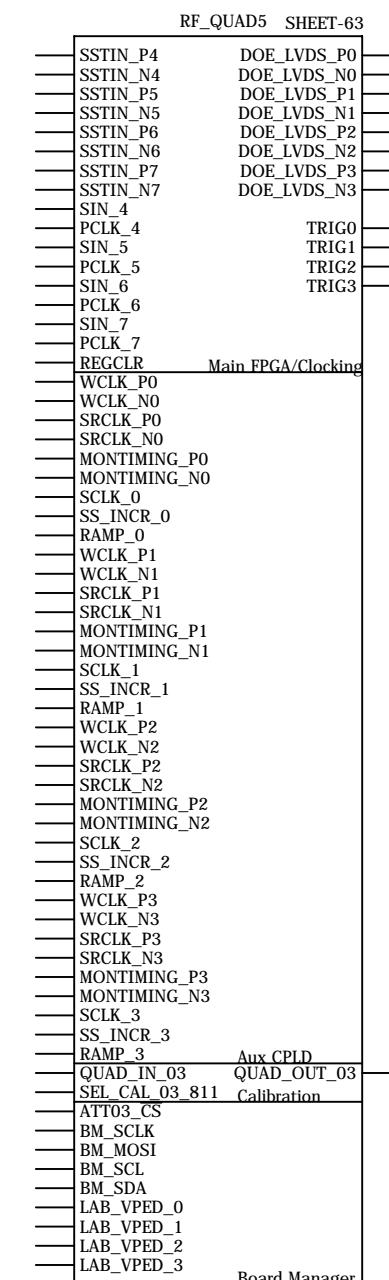
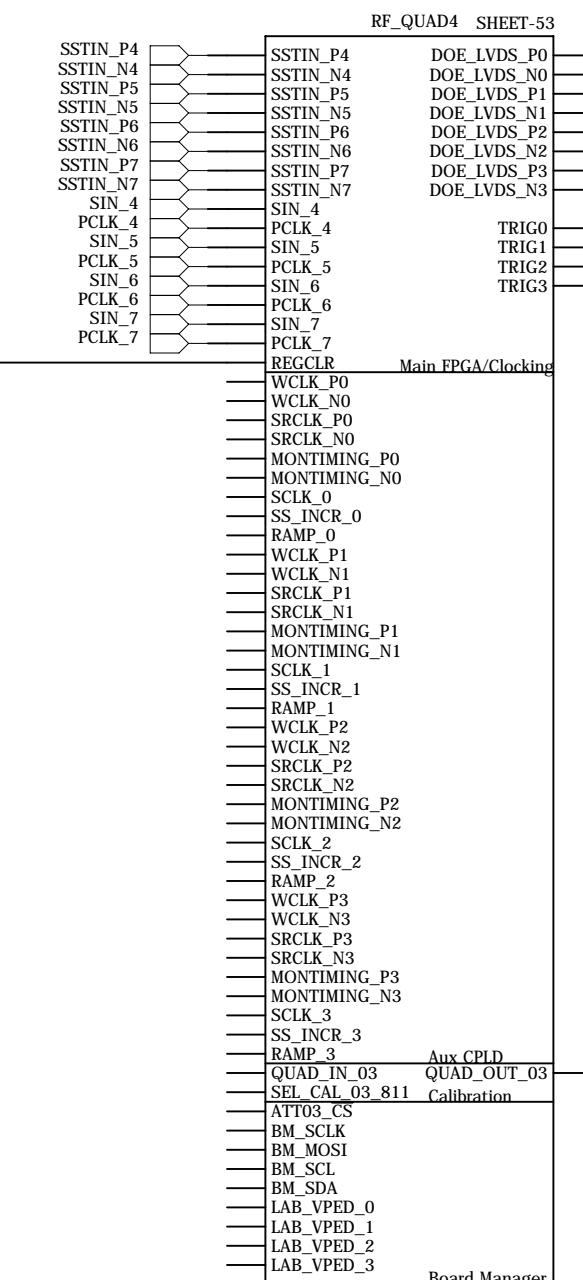
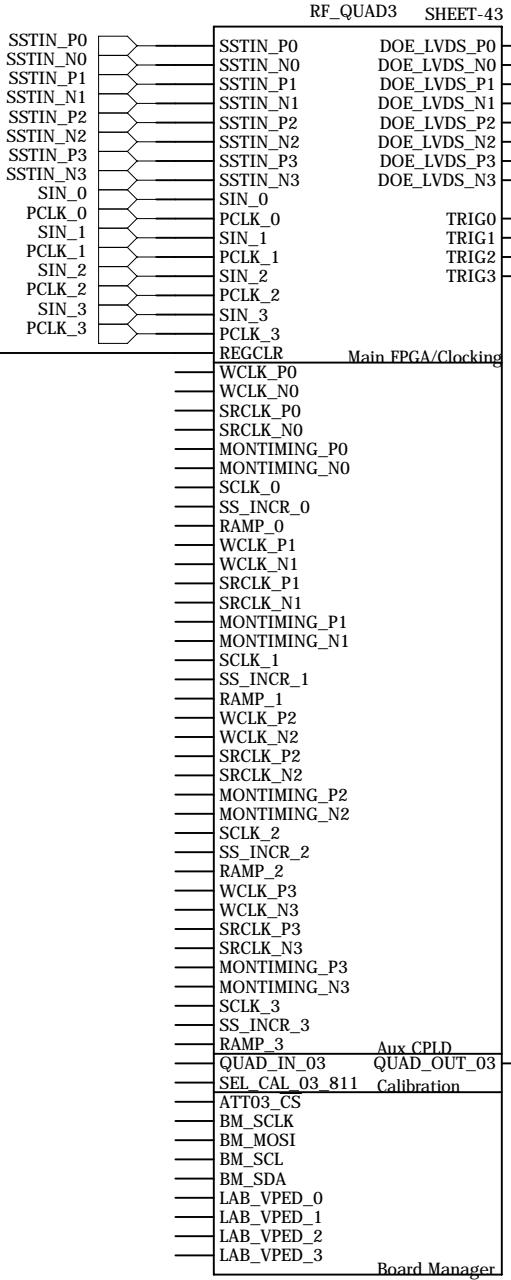
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COMPANY:	Ohio State University		
SHEET:	RF_LEFT0		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
RELEASED:	N/A	DATED:	N/A
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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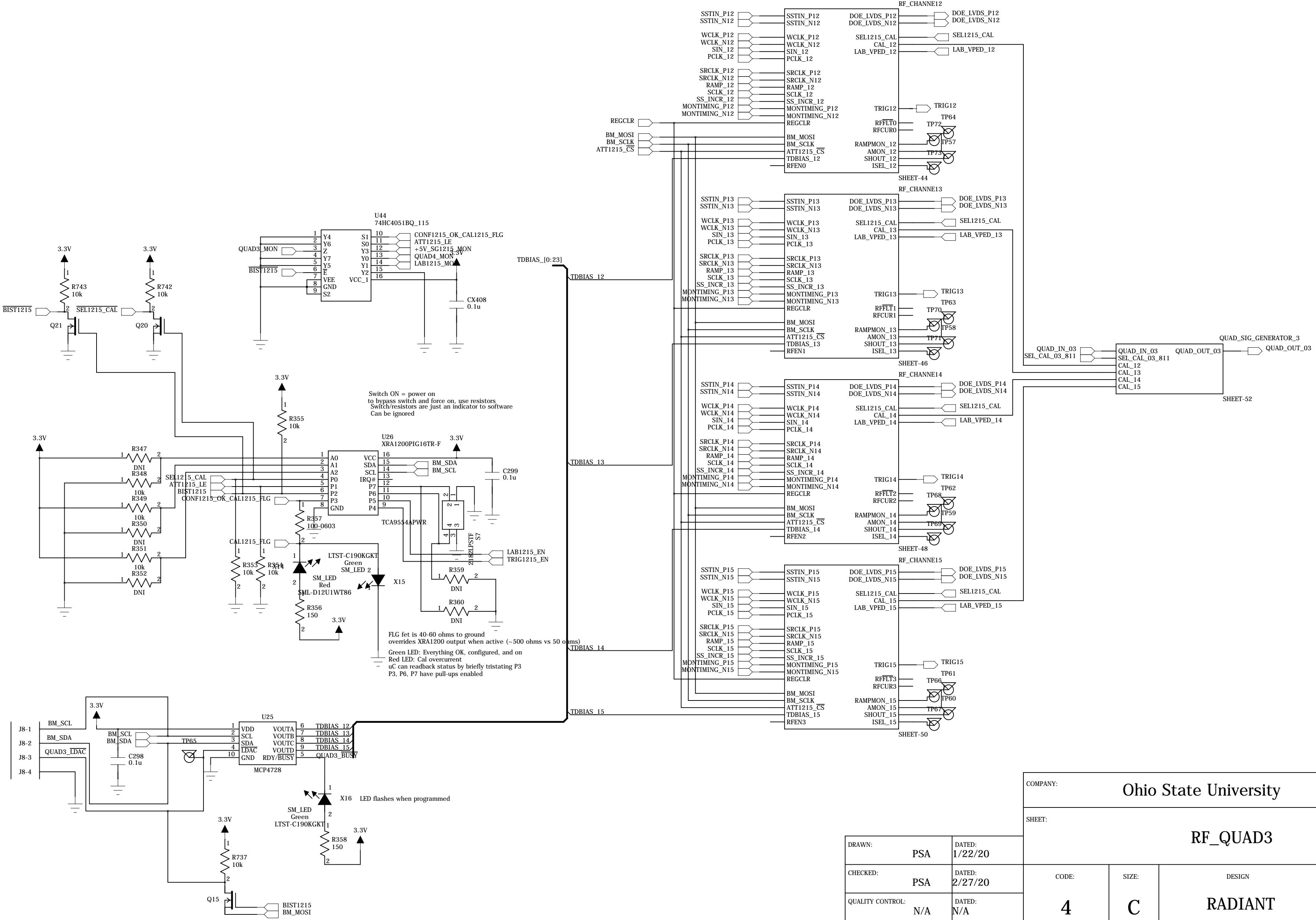
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COMPANY:	Ohio State University		
SHEET:	RF_QUAD3		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
RELEASED:	N/A	DATED:	N/A
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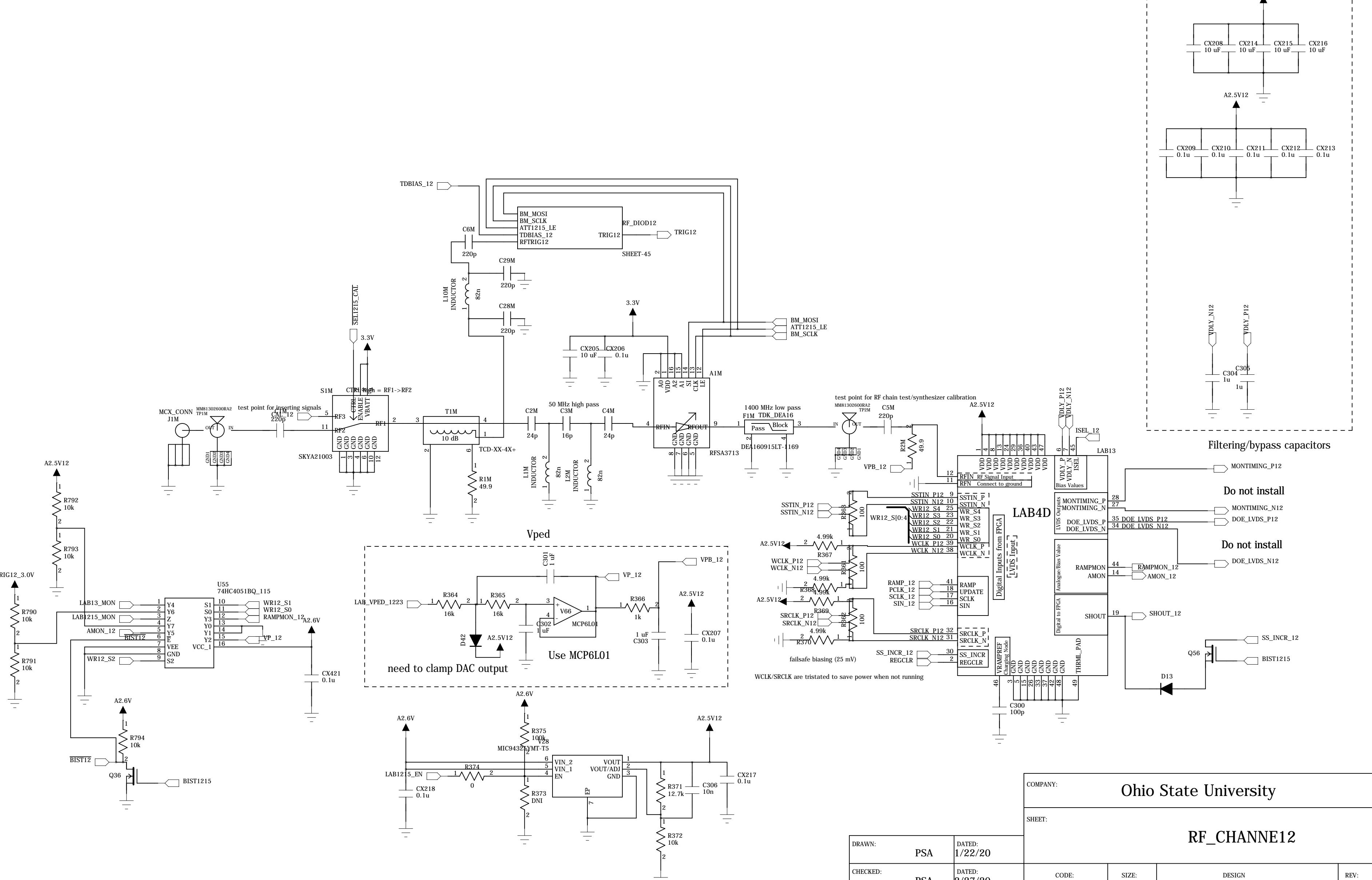
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REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:
	Filtering/bypass capacitors		



DRAWN: PSA	DATED: 1/22/20	RF_CHANNEL2			
CHECKED: PSA	DATED: 2/27/20	CODE:	SIZE:	DESIGN	REV:
QUALITY CONTROL: N/A	DATED: N/A	4	C	RADIANT	A
RELEASED: N/A	DATED: N/A	SCALE: <Scale>			SHEET: 44 74

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REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

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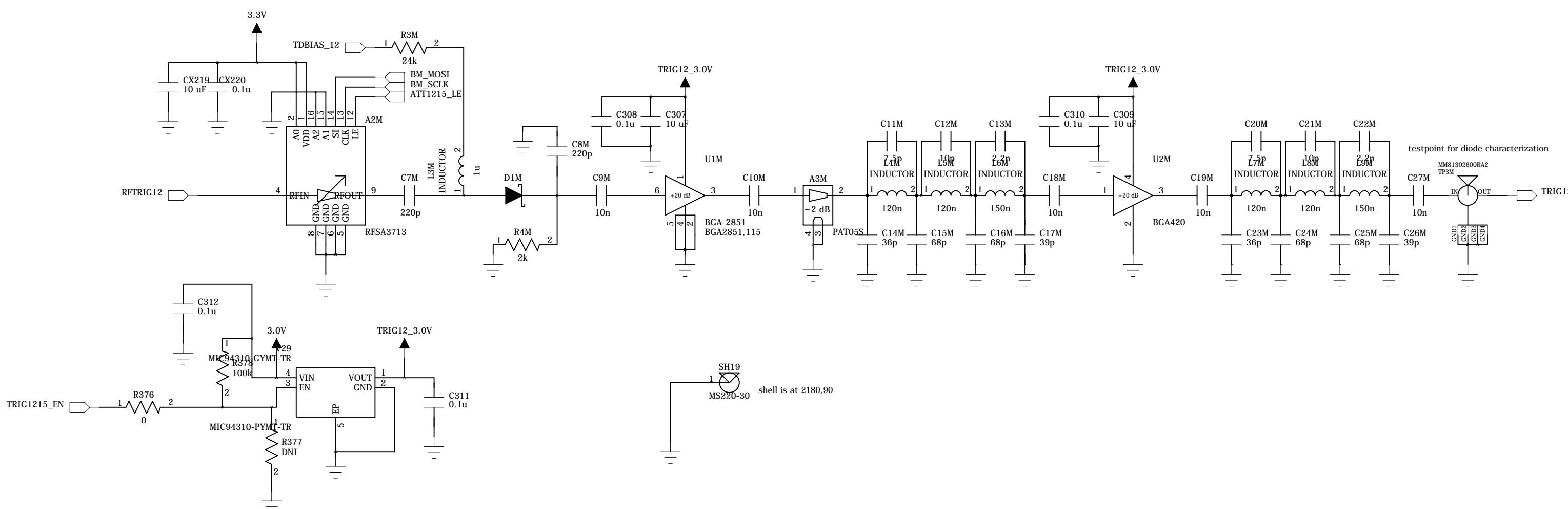
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COMPANY:	Ohio State University		
SHEET:	RF_DIOD12		
CODE:	SIZE:	DESIGN	REV:
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SCALE: <Scale>	SHEET: 45 74		

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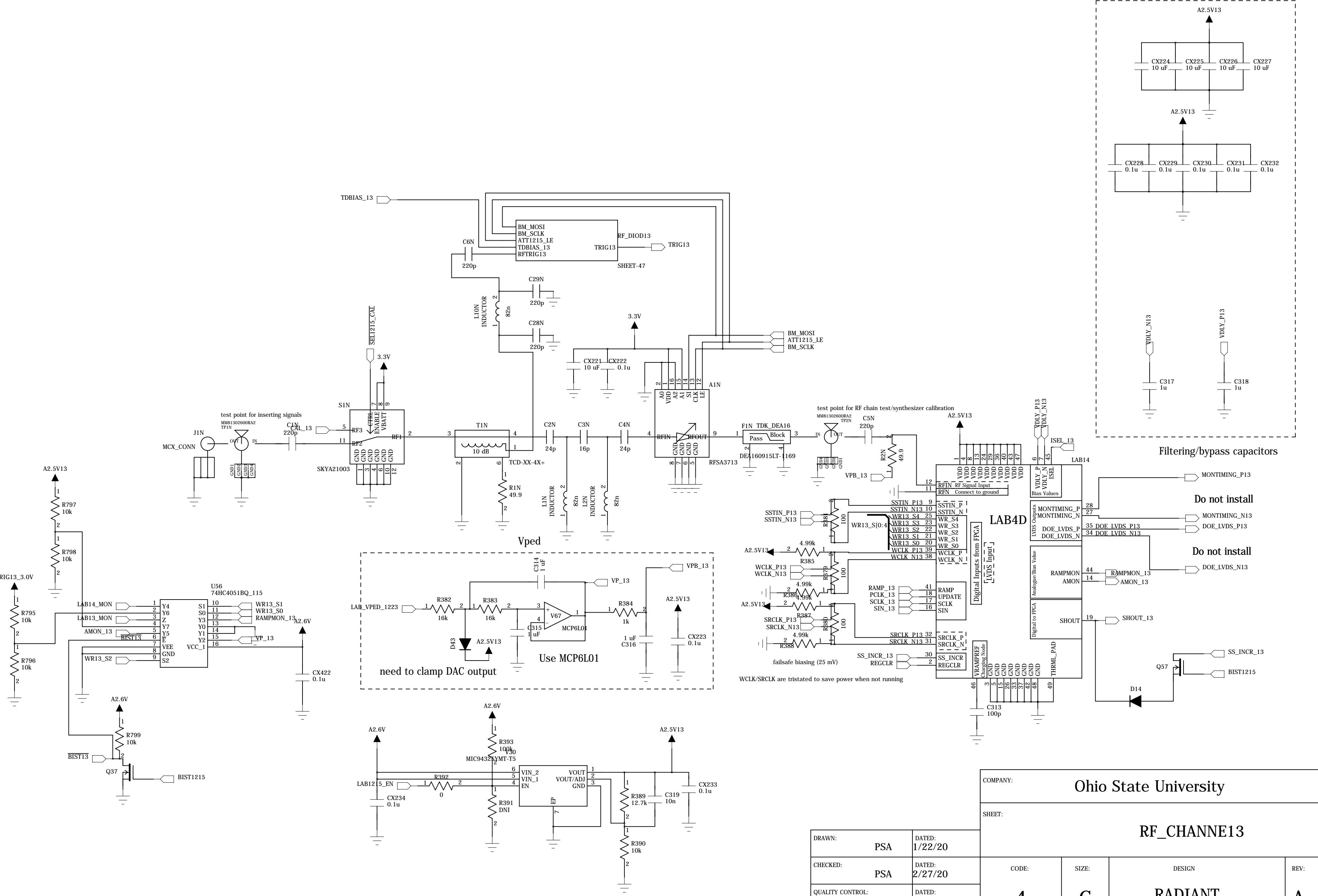
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REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:
	Filtering/bypass capacitors		



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LTR	ECO NO:	APPROVED:	DATE:

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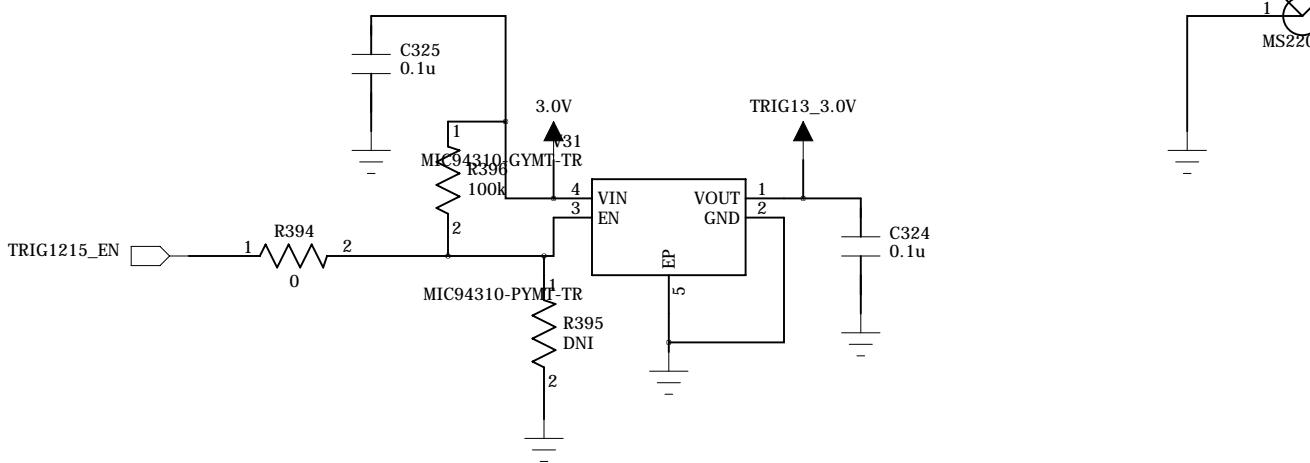
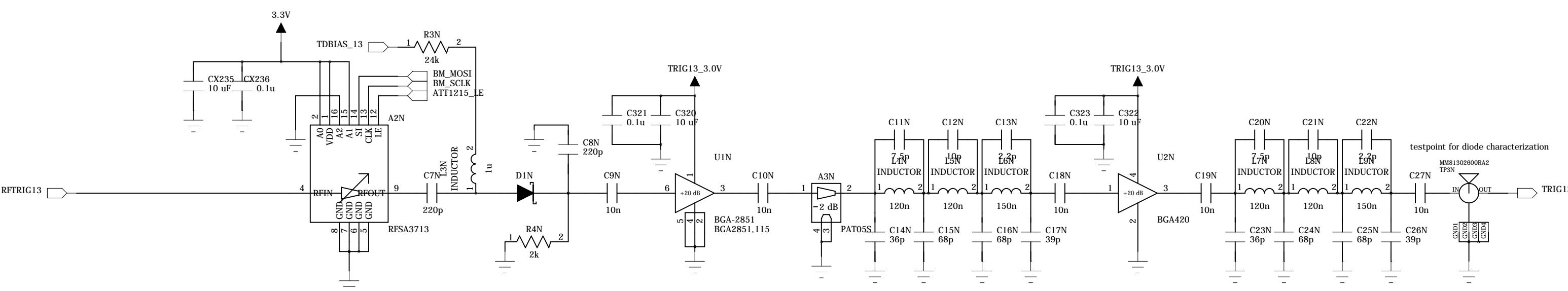
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COMPANY:	Ohio State University		
SHEET:	RF_DIOD13		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
RELEASED:	N/A	DATED:	N/A
CODE:	4	SIZE:	RADIANT
REV:	A	SCALE:	<Scale>
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REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors

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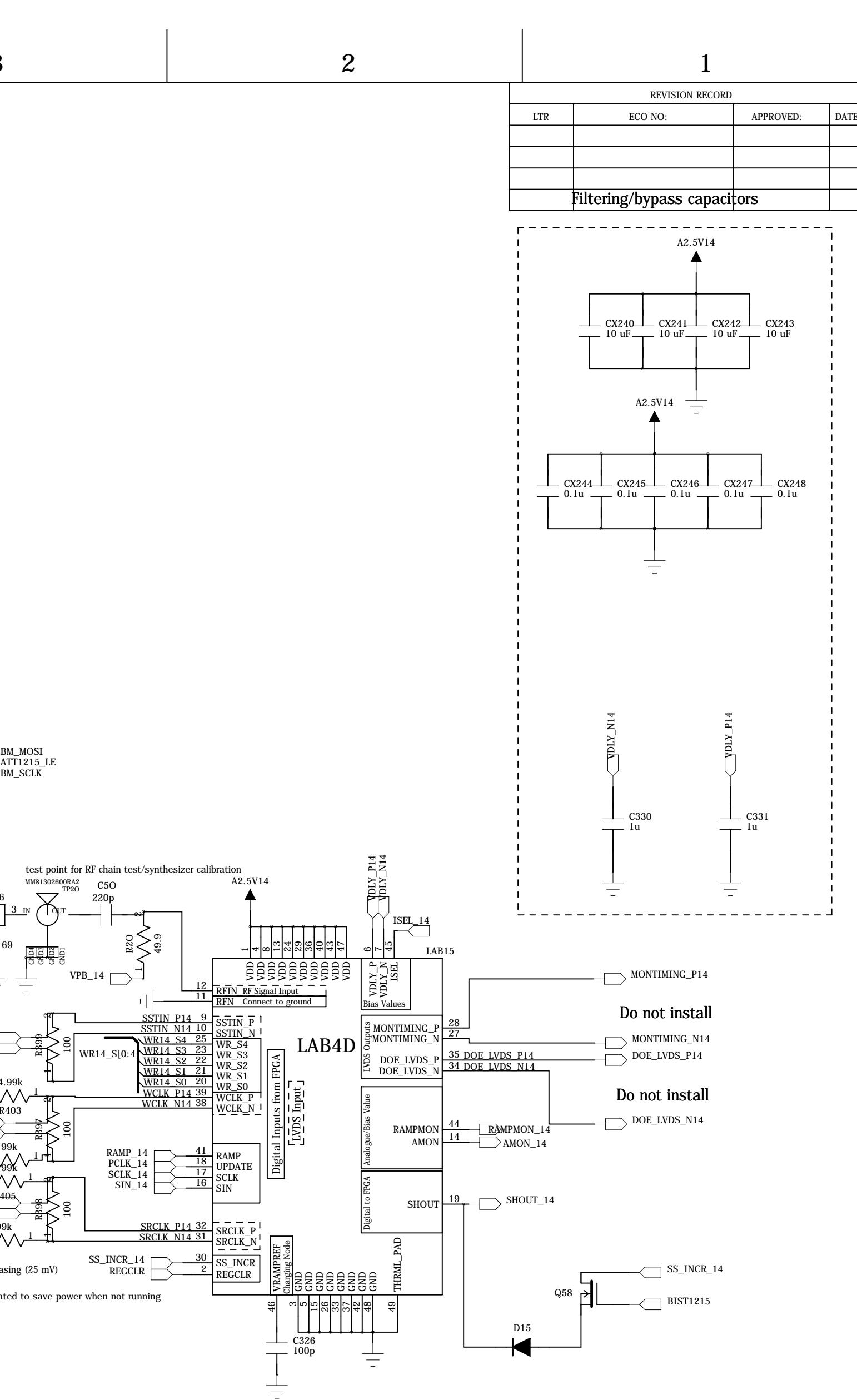
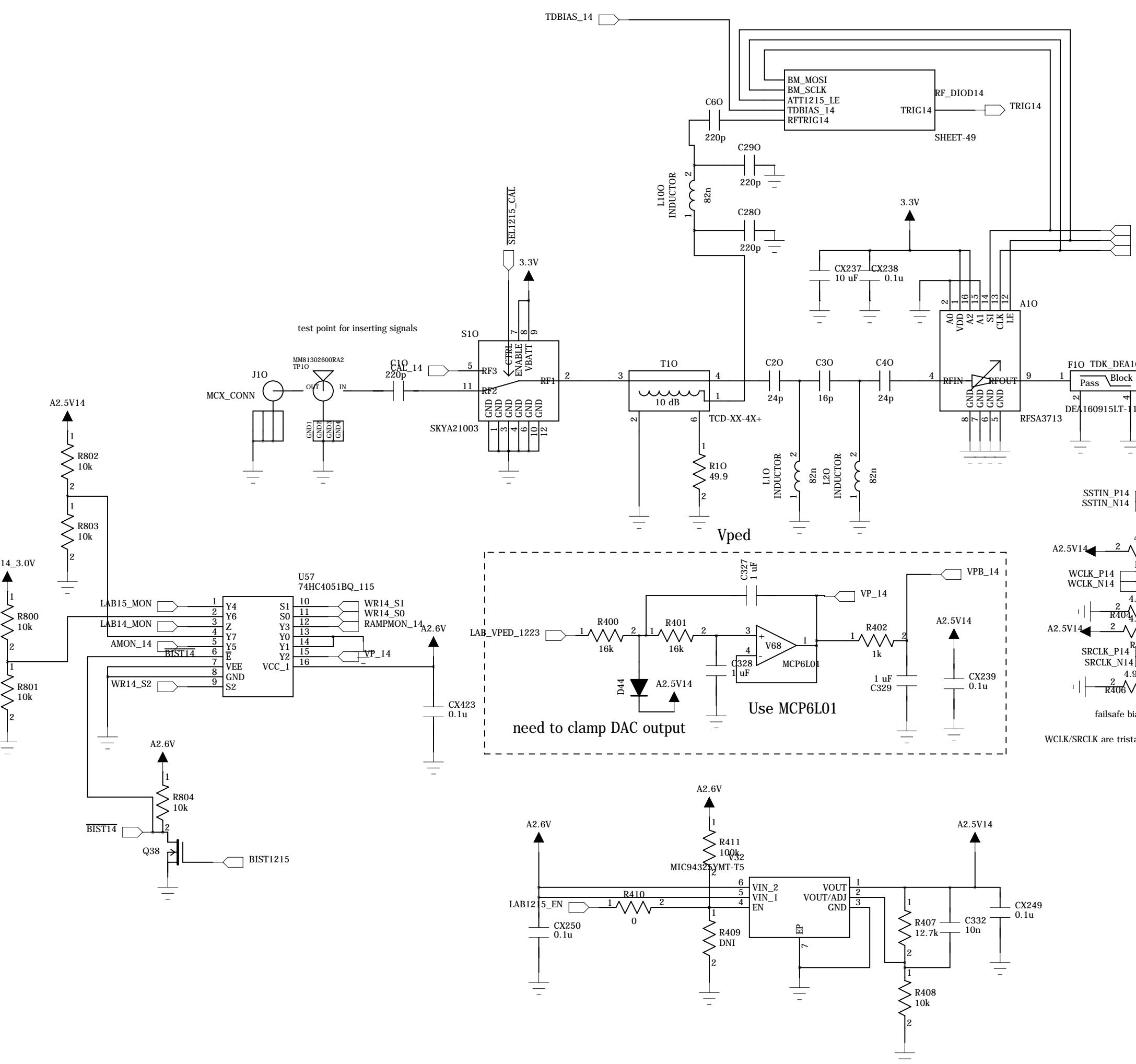
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COMPANY:	Ohio State University		
SHEET:	RF_CHANNEL14		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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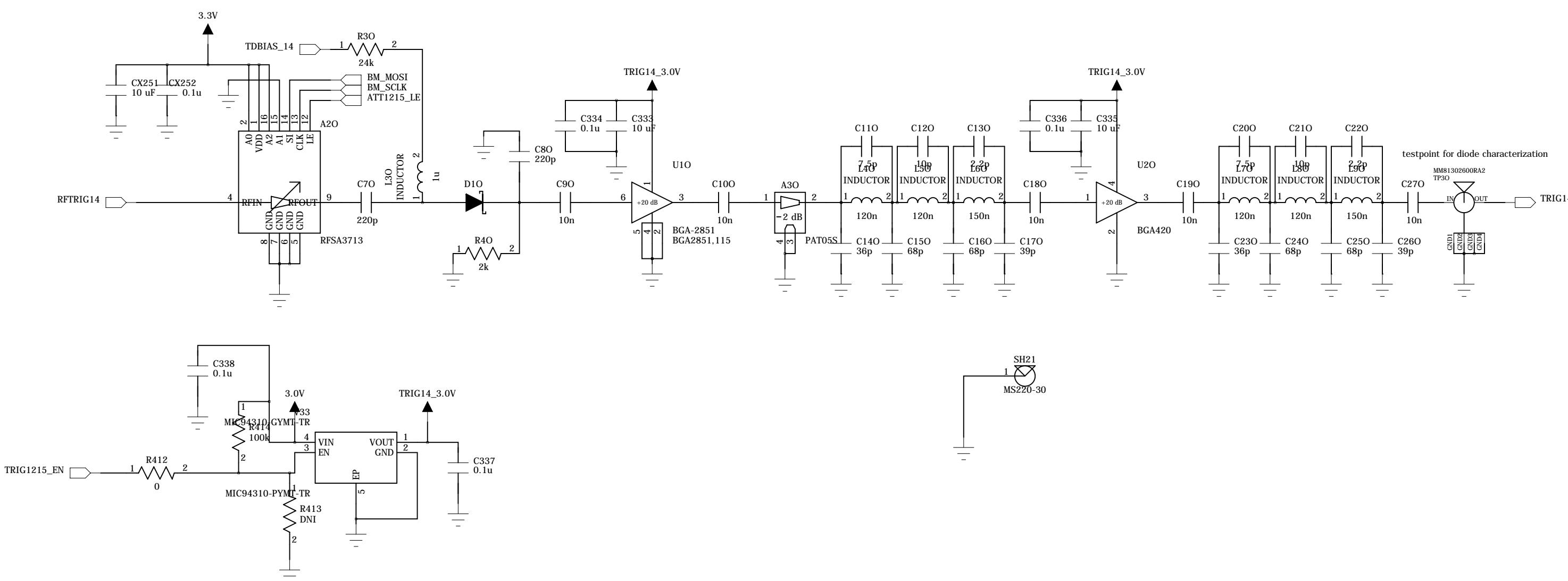
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COMPANY:	Ohio State University		
SHEET:	RF_DIOD14		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
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CODE:	4	SIZE:	RADIANT
REV:	A		
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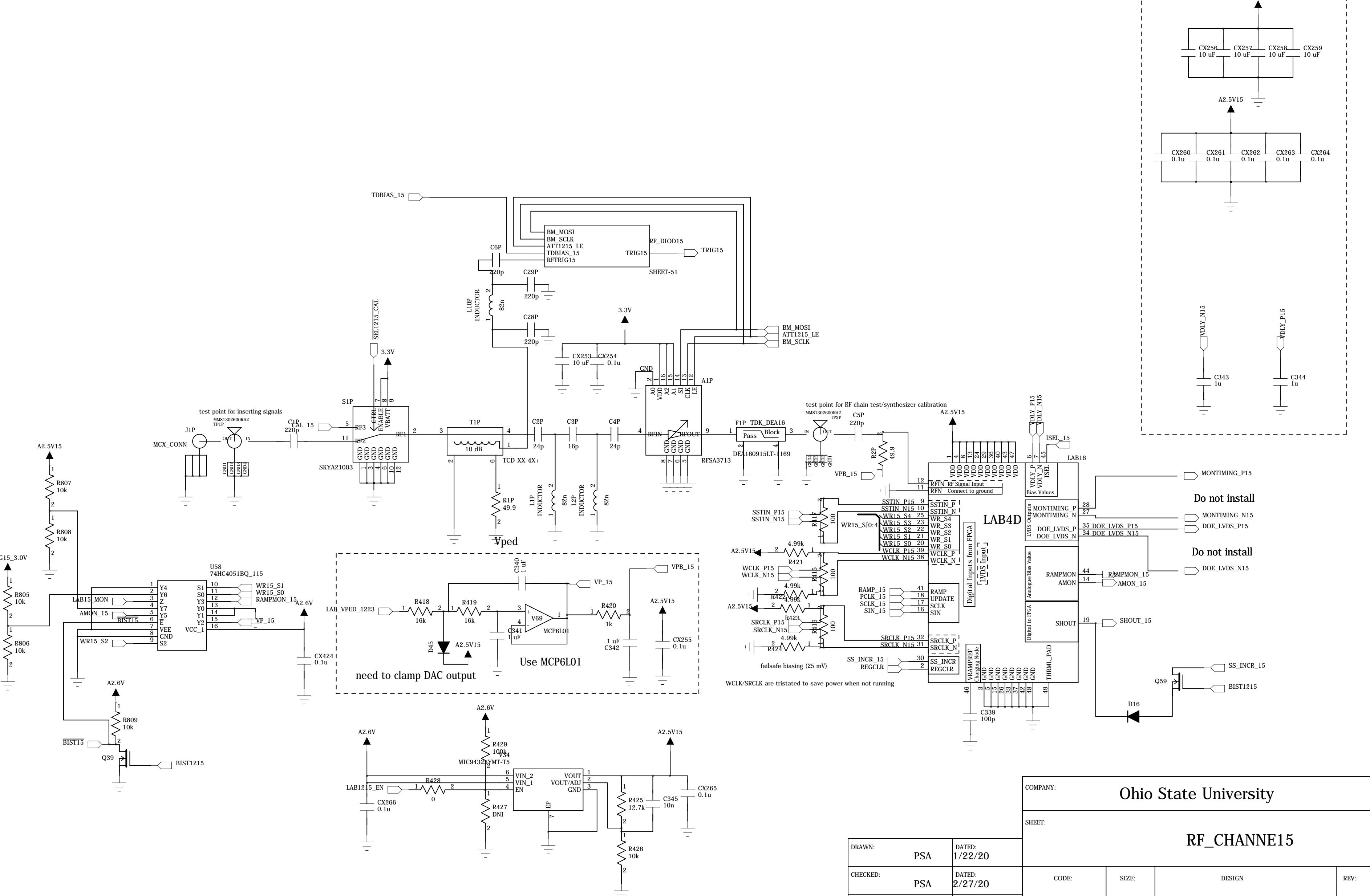
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REVISION RECORD		
ECO NO:	APPROVED:	DATE:
ing/bypass capacitors		



Ohio State University

RF\_CHANNE15

DRAWN: PSA	DATED: 1/22/20	RF_CHANNE15			
CHECKED: PSA	DATED: 2/27/20	CODE:  <b>4</b>	SIZE:  <b>C</b>	DESIGN  <b>RADIANT</b>	REV:  <b>A</b>
QUALITY CONTROL: N/A	DATED: N/A				
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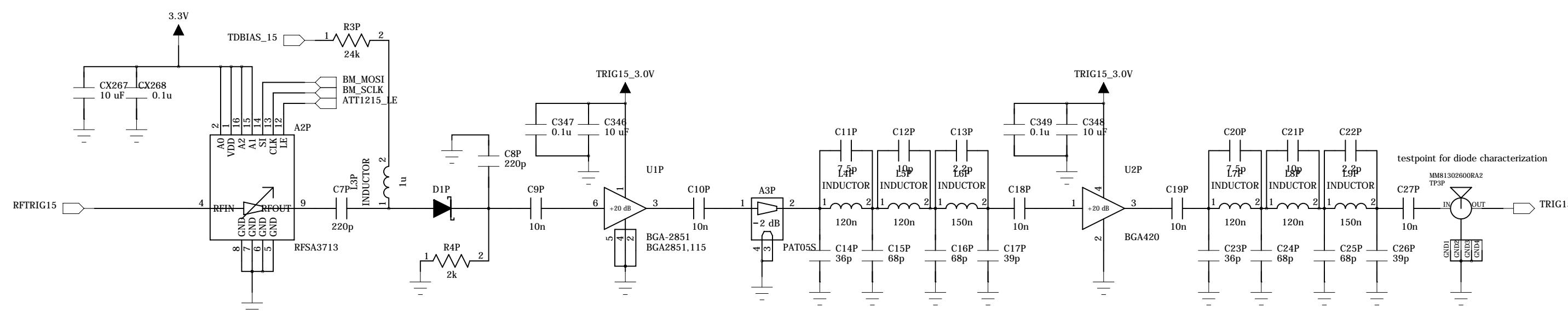
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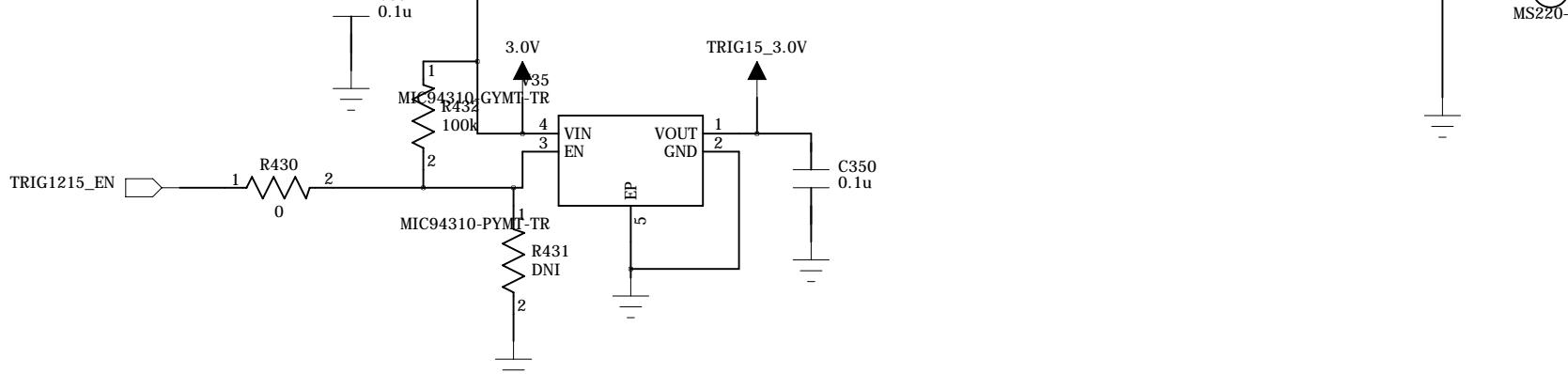
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LTR	ECO NO:	APPROVED:	DATE:

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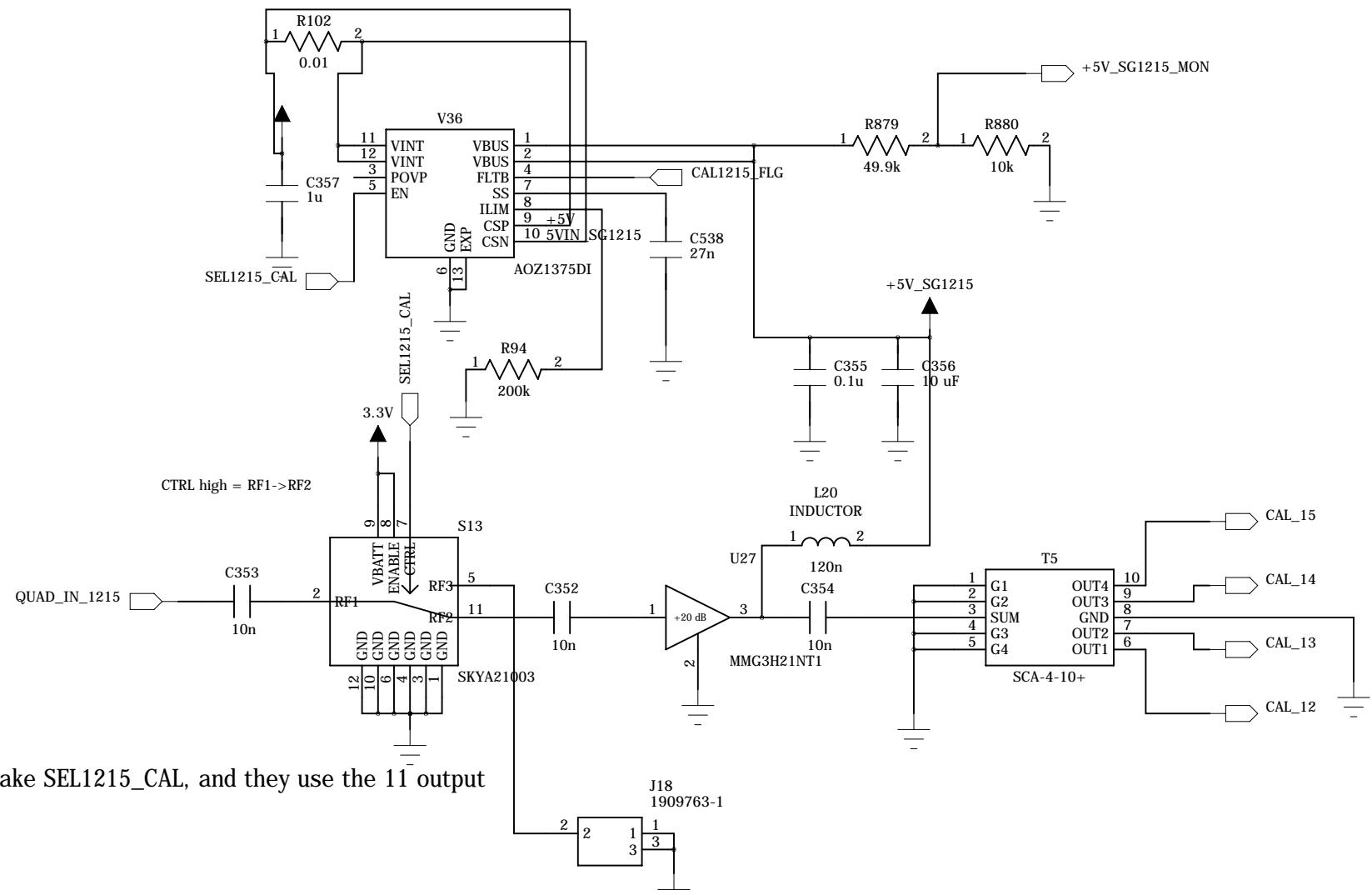
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COMPANY:	Ohio State University		
SHEET:	QUAD_SIG_GENERATOR 3		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
RELEASED:	N/A	DATED:	N/A
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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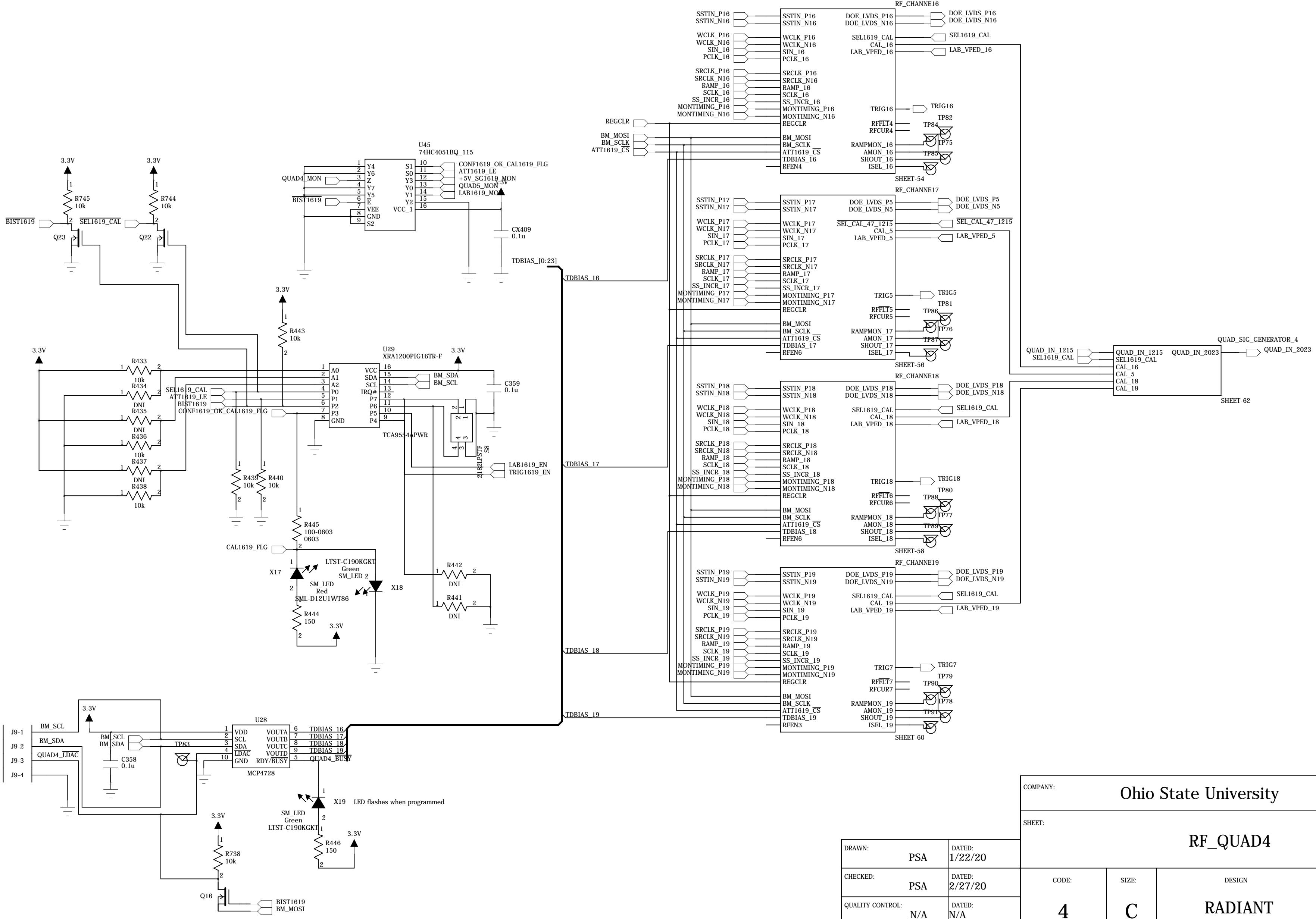
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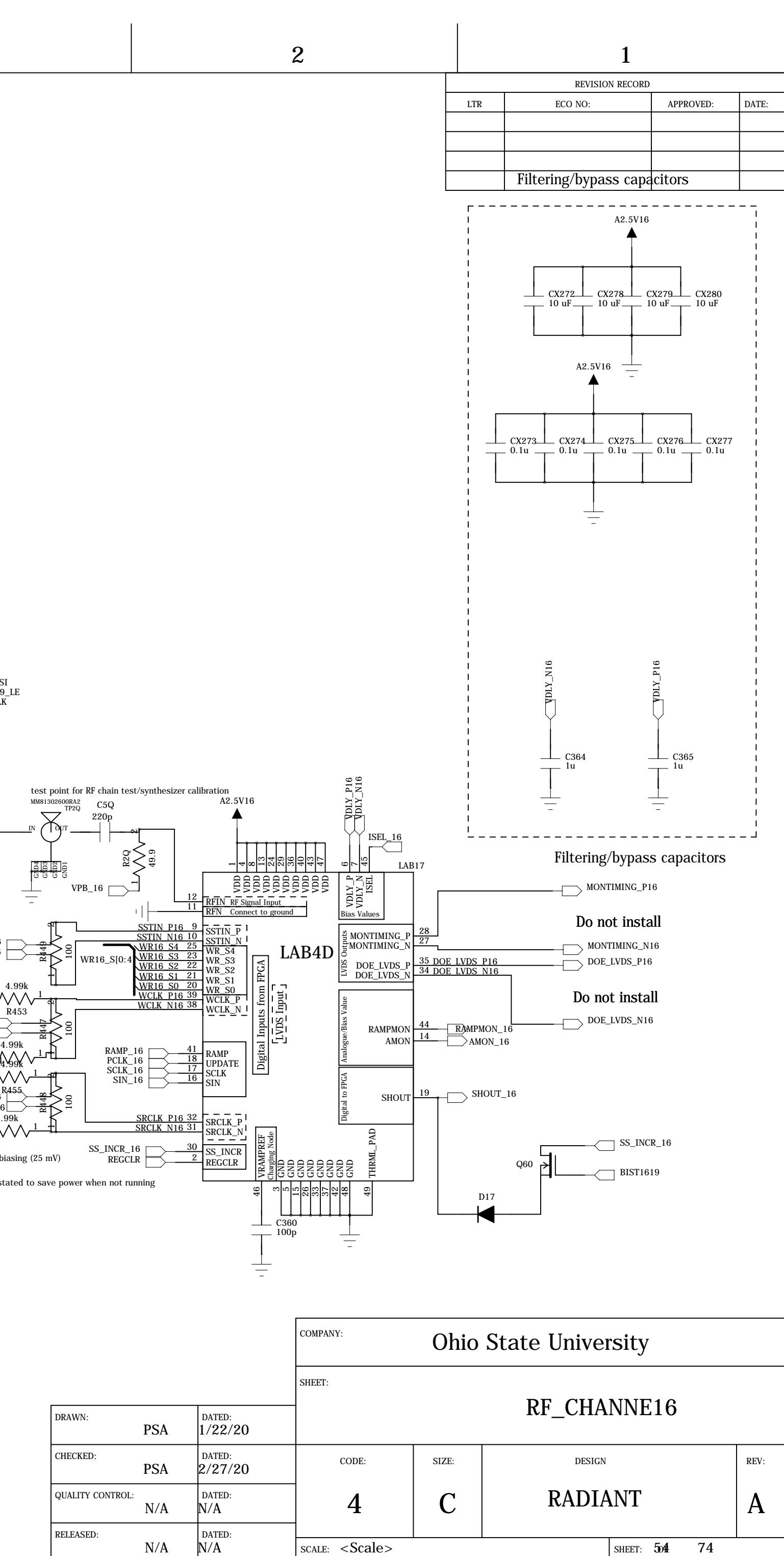
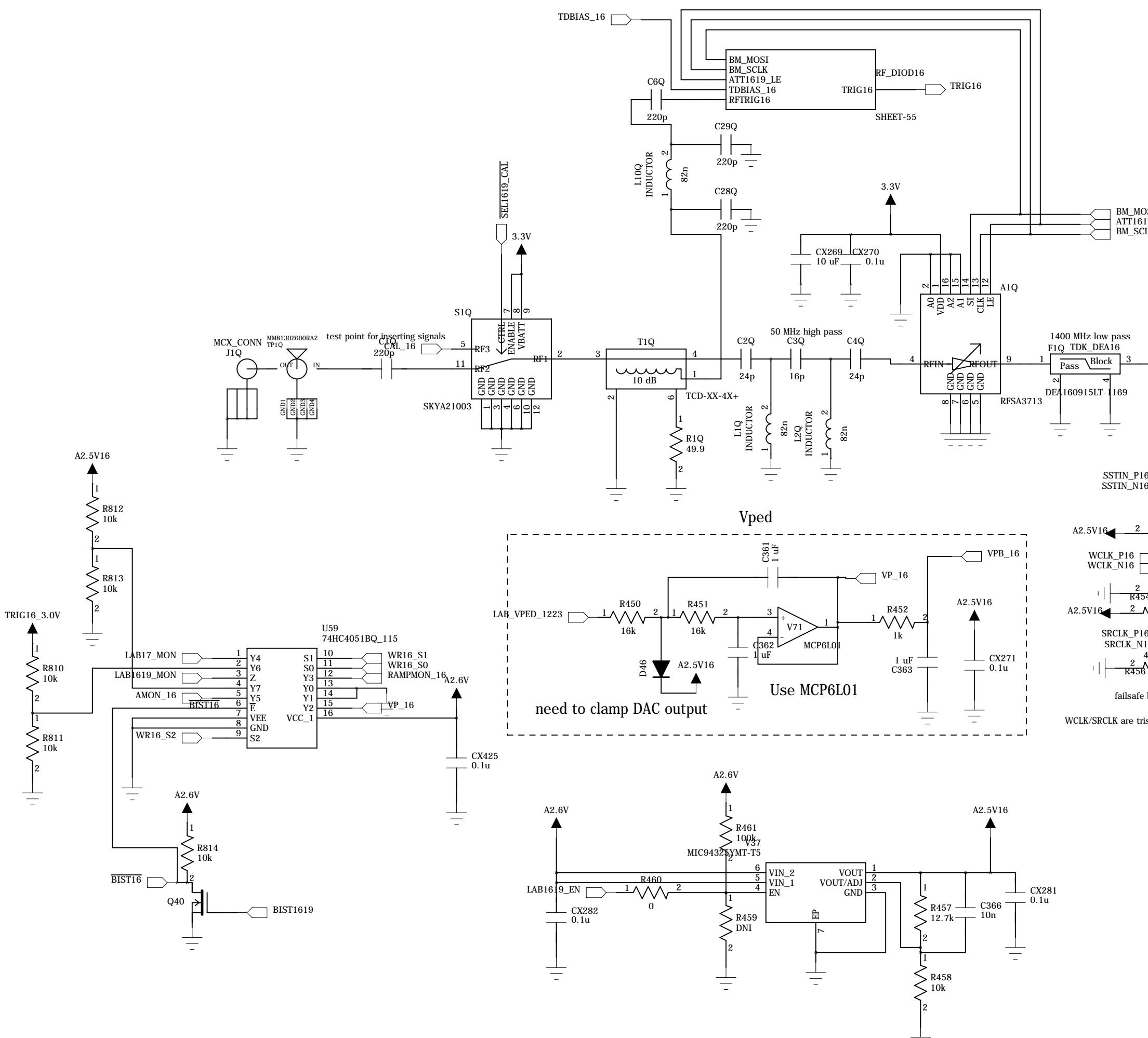
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors



Ohio State University

RF\_CHANNEL16

COMPANY:	Ohio State University		
SHEET:	RF_CHANNEL16		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
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REV:	A		
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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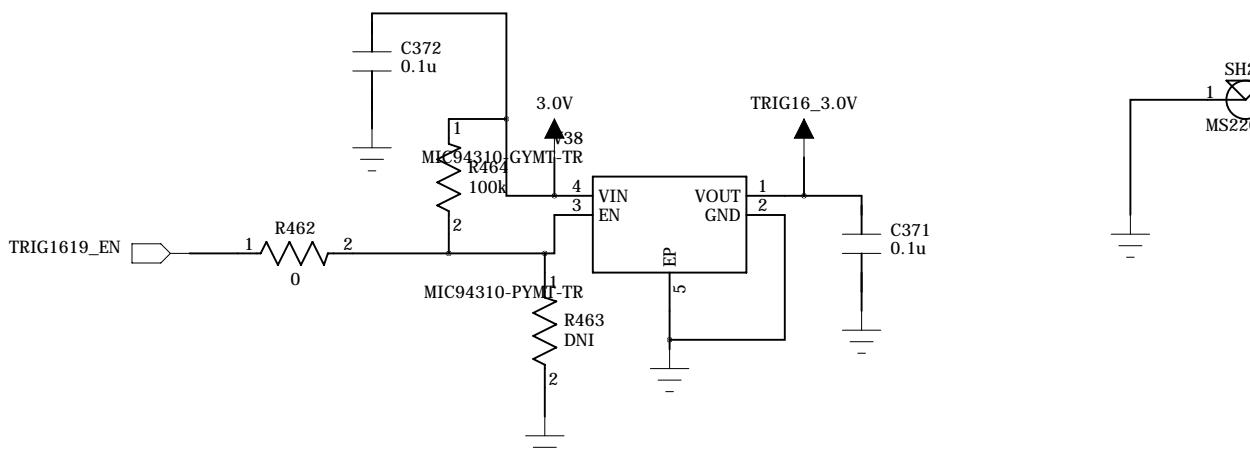
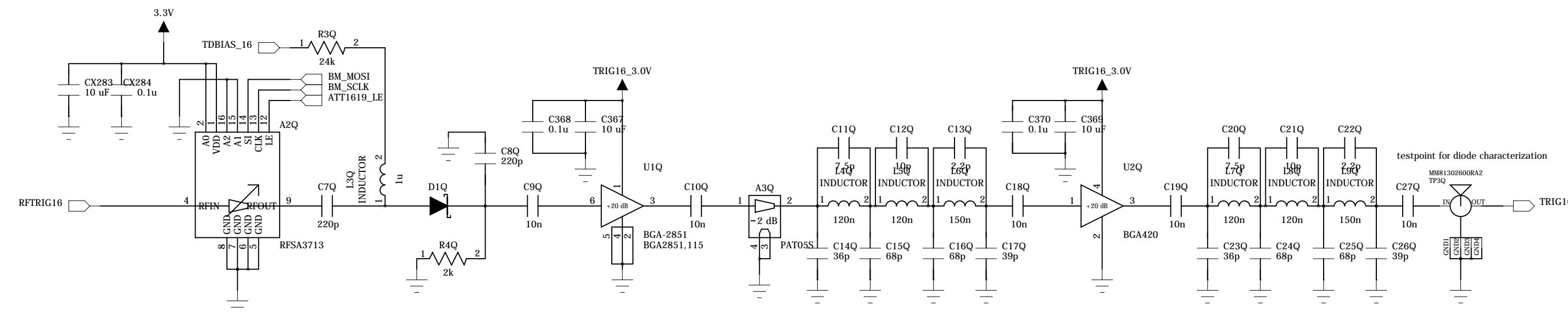
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COMPANY:	Ohio State University		
SHEET:	RF_DIOD16		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
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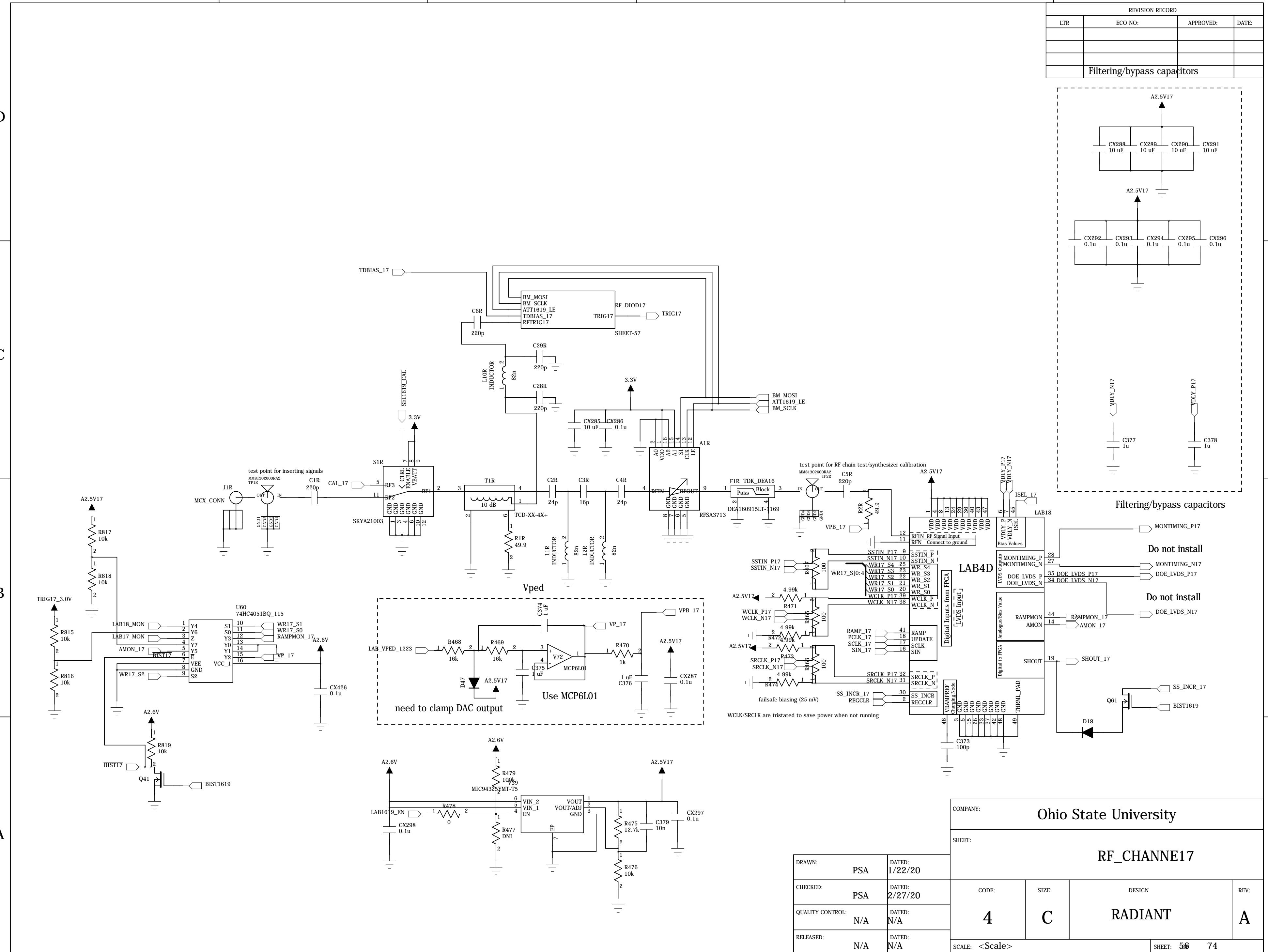
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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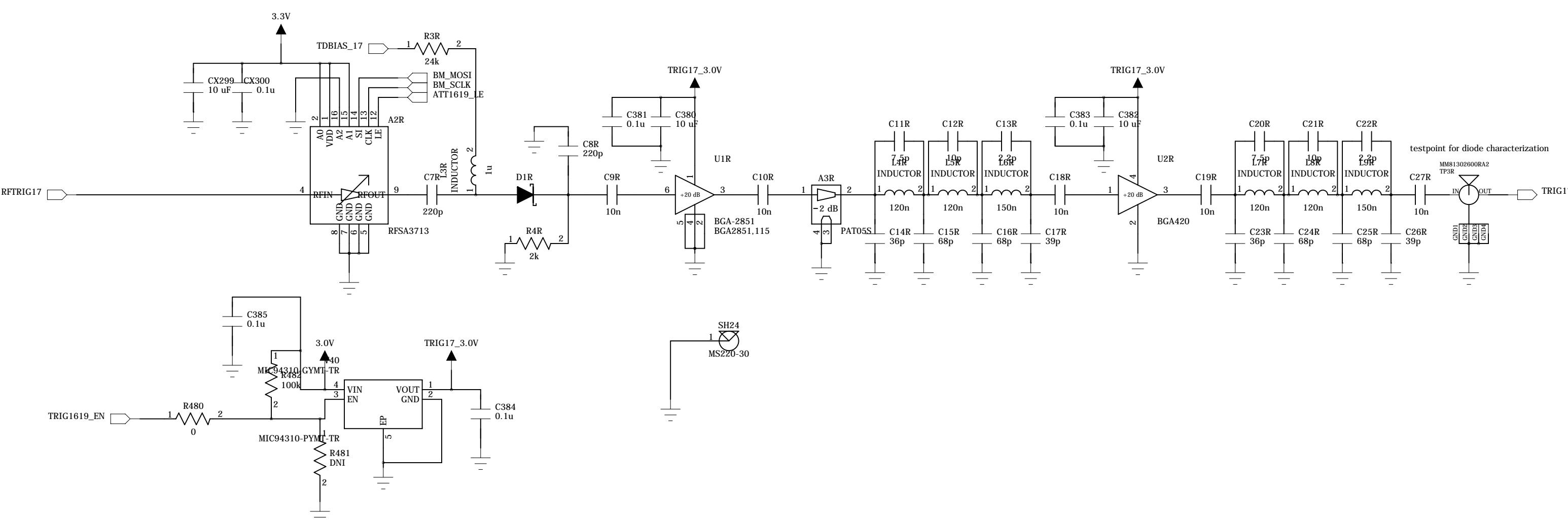
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COMPANY:	Ohio State University		
SHEET:	RF_DIOD17		
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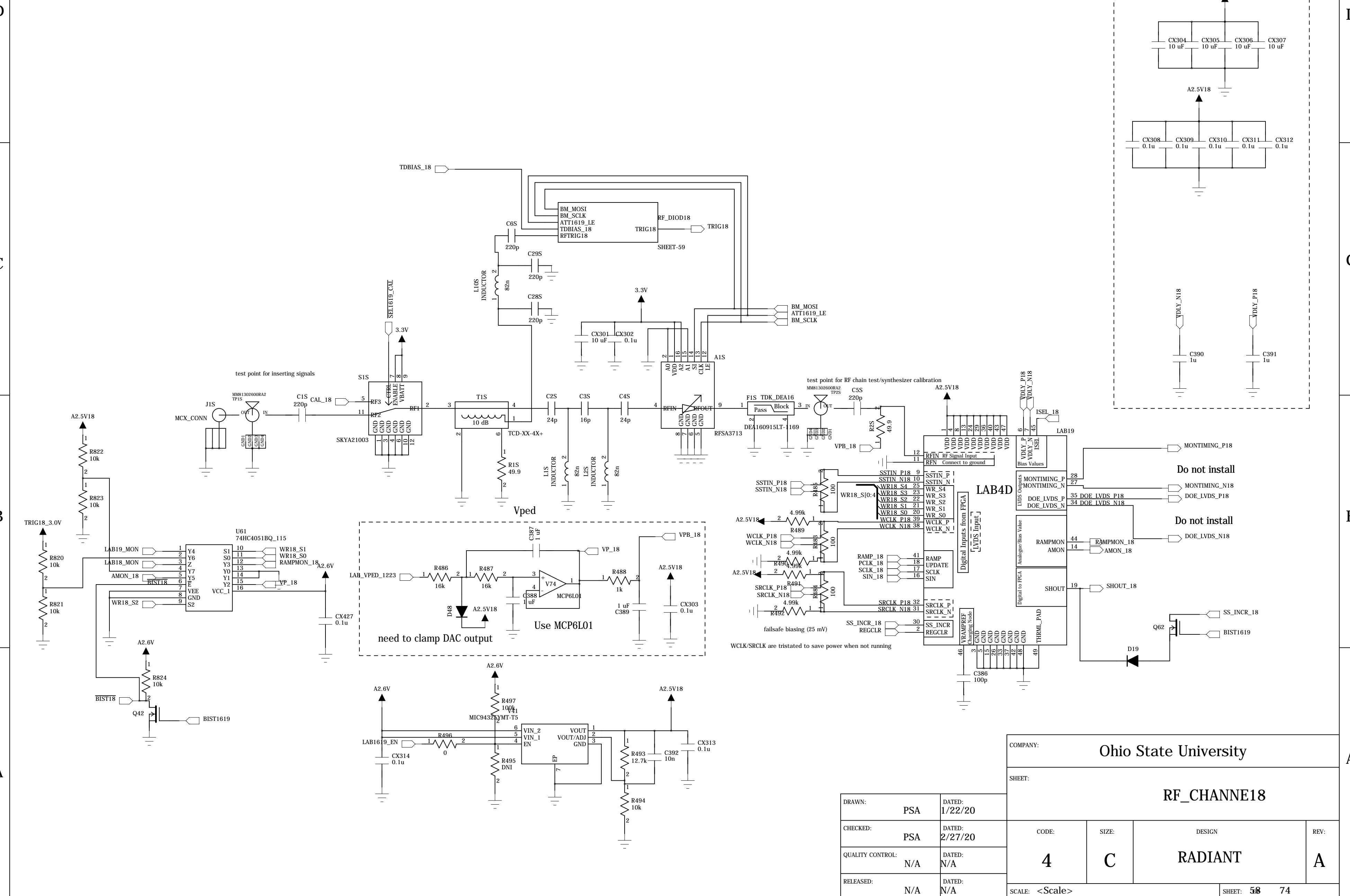
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REVISION RECORD		
ECO NO:	APPROVED:	DATE:
<b>g/bypass capacitors</b>		



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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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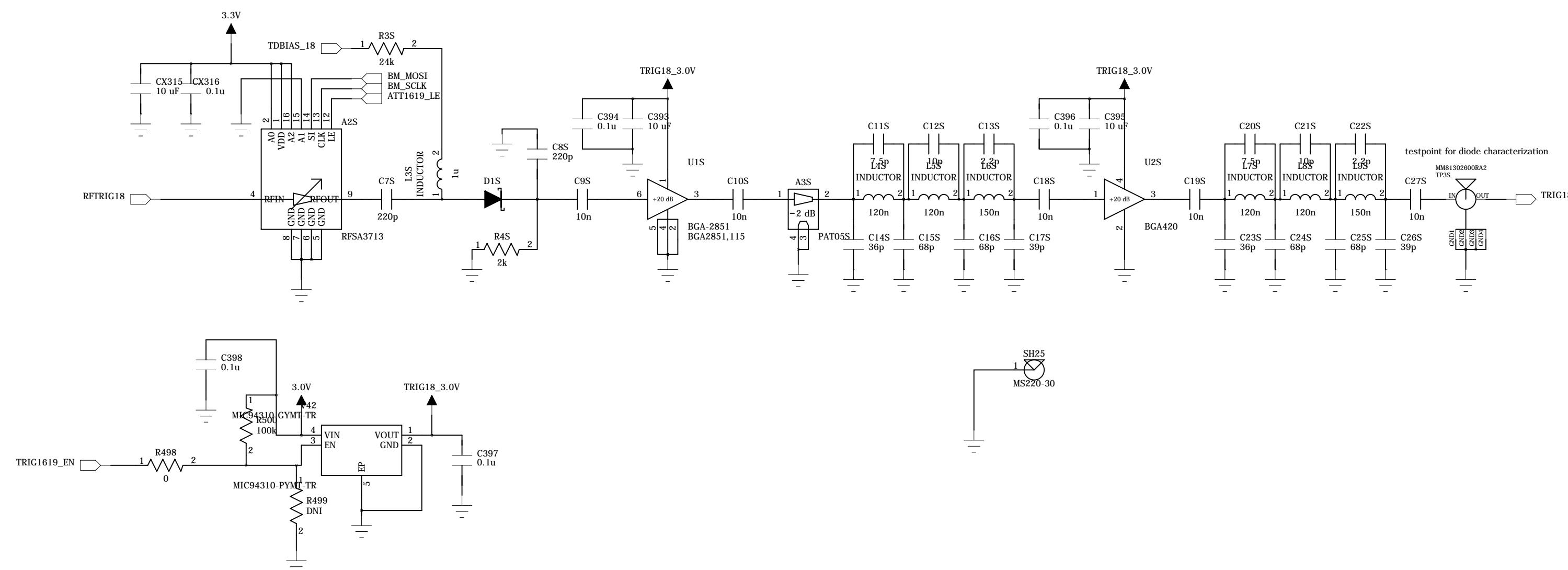
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COMPANY:	Ohio State University		
SHEET:	RF_DIOD18		
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REV:			A
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors

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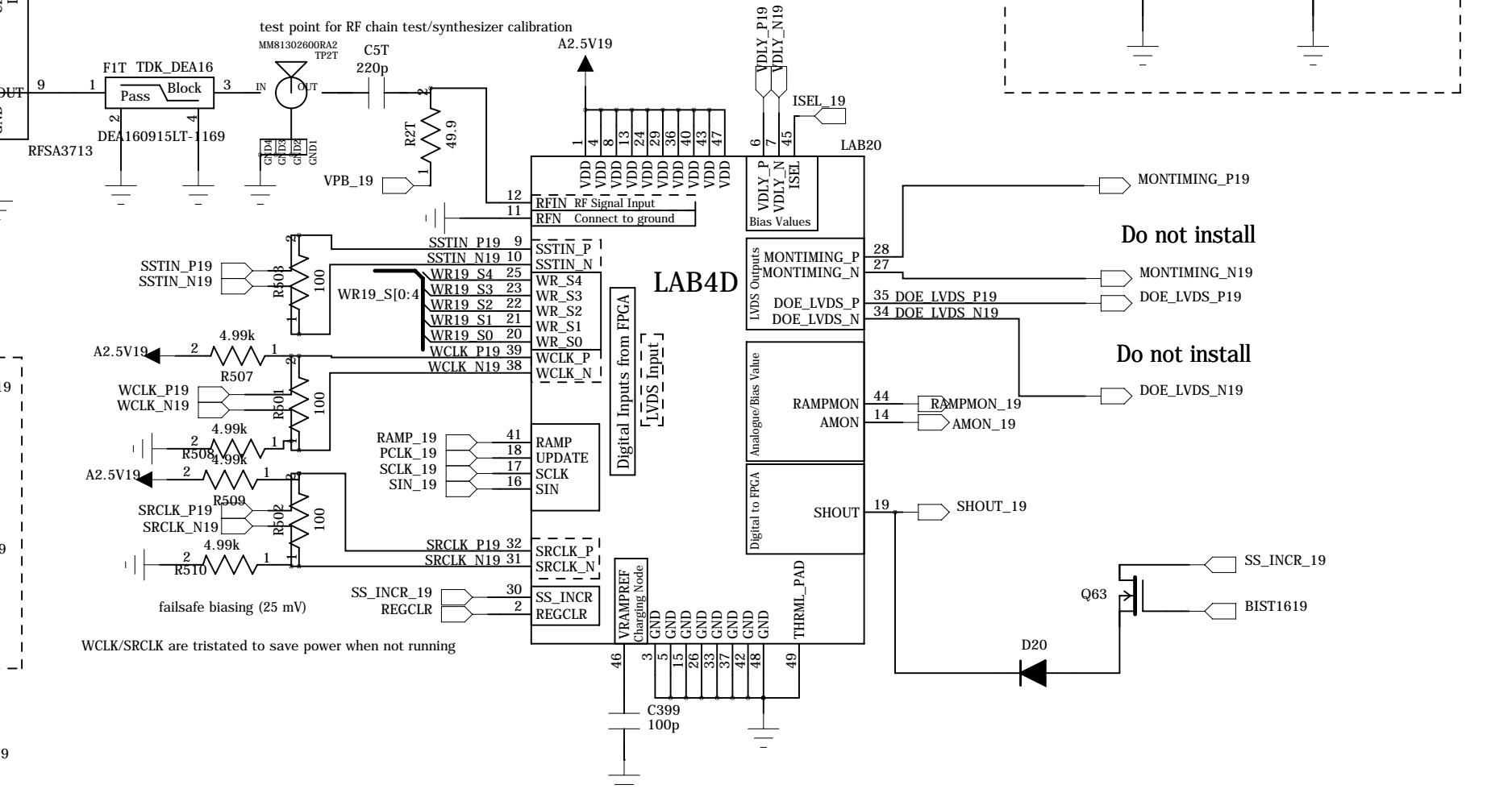
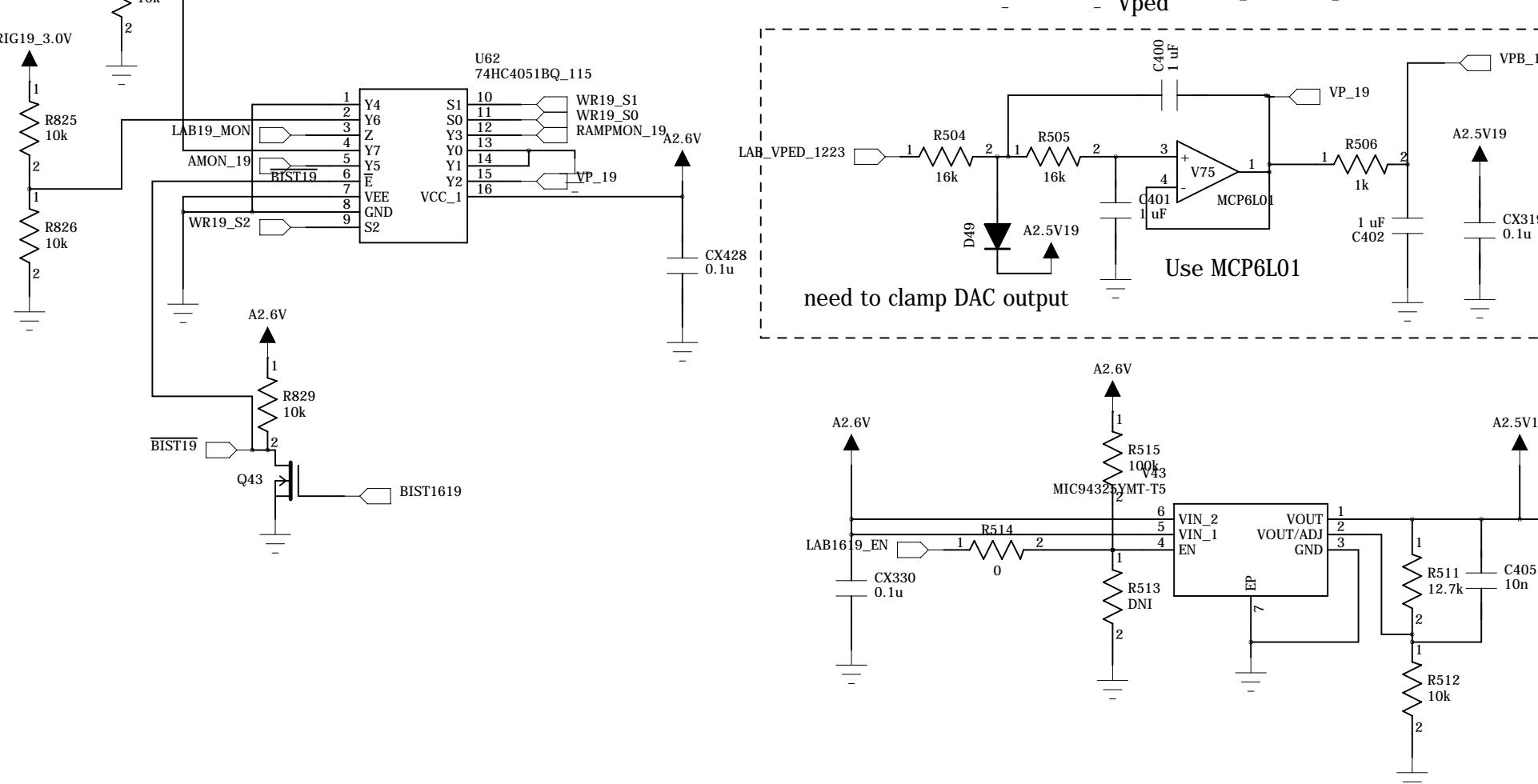
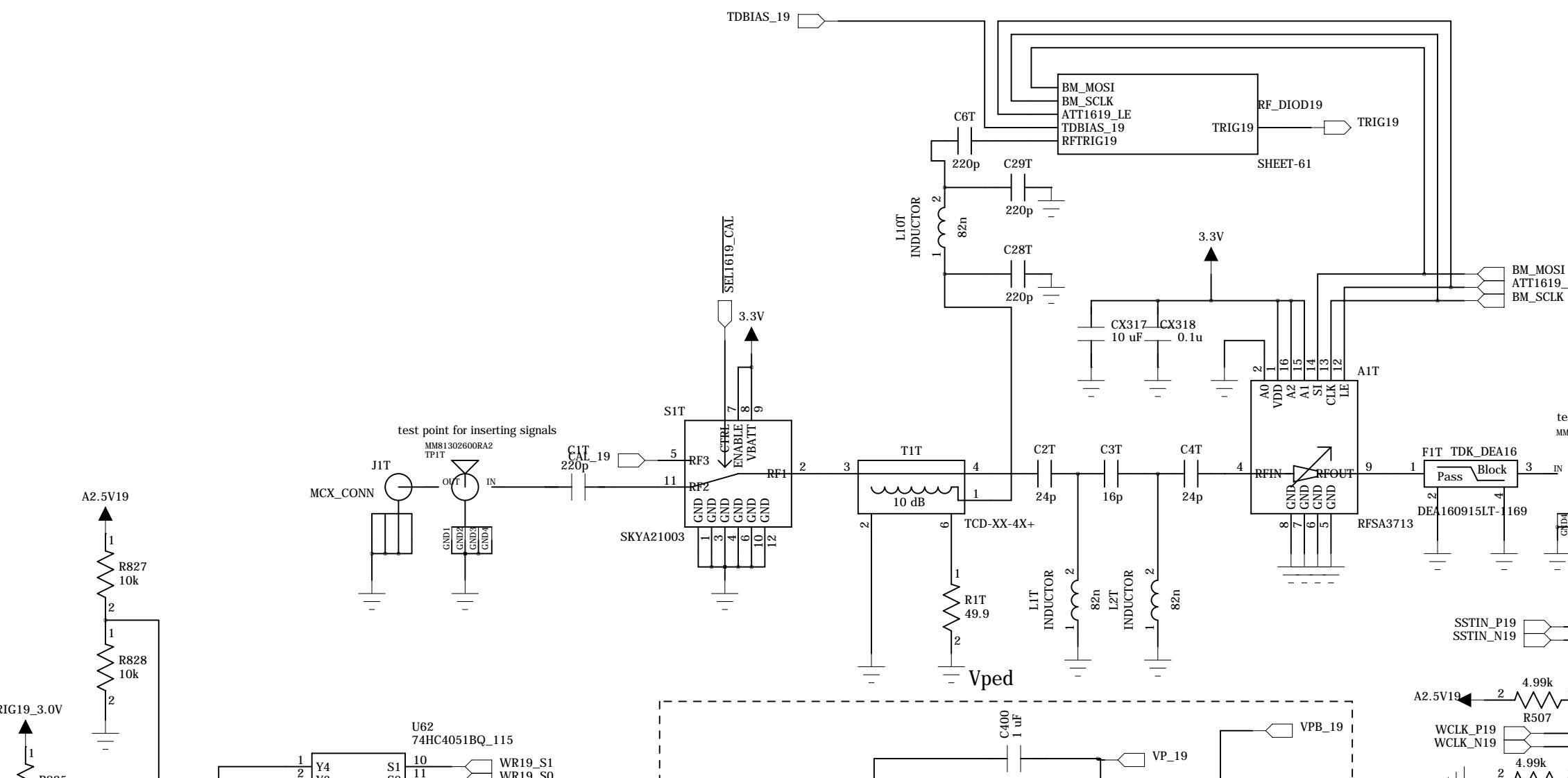
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COMPANY:	Ohio State University		
SHEET:	RF_CHANNE19		
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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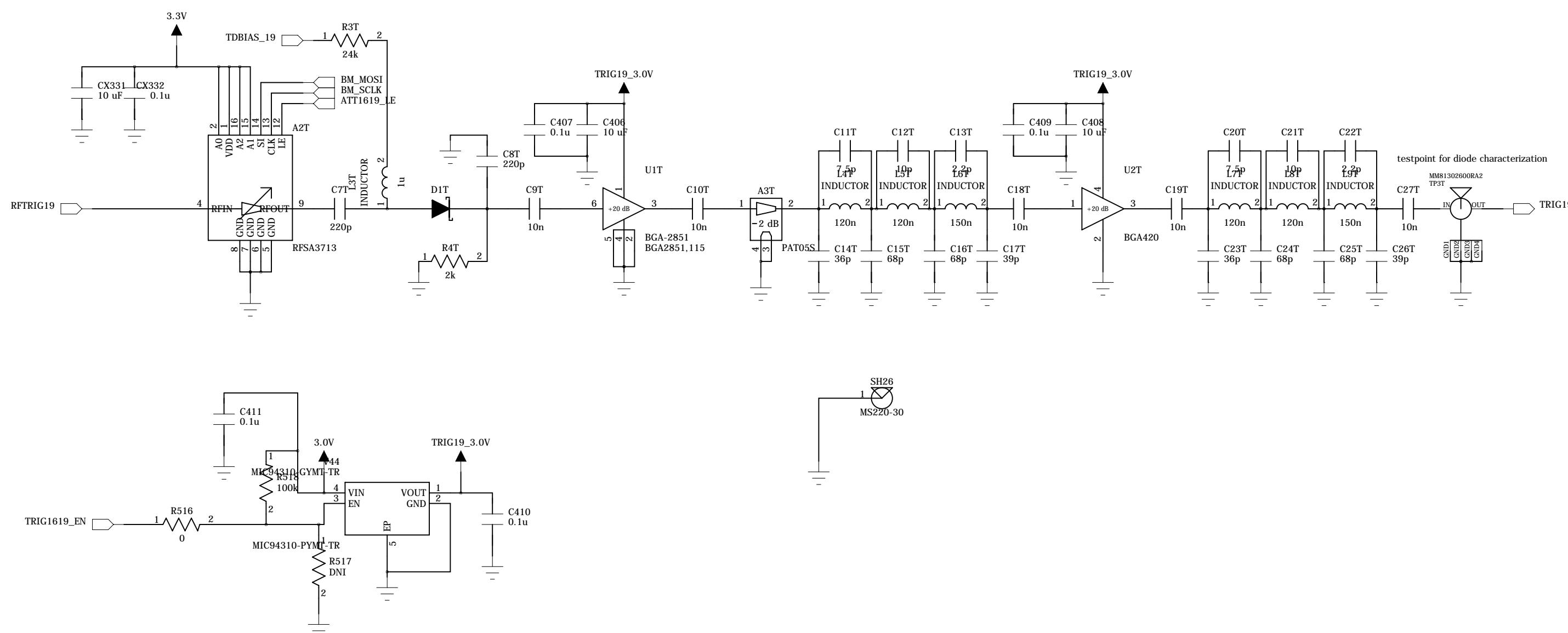
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COMPANY:	Ohio State University		
SHEET:	RF_DIOD19		
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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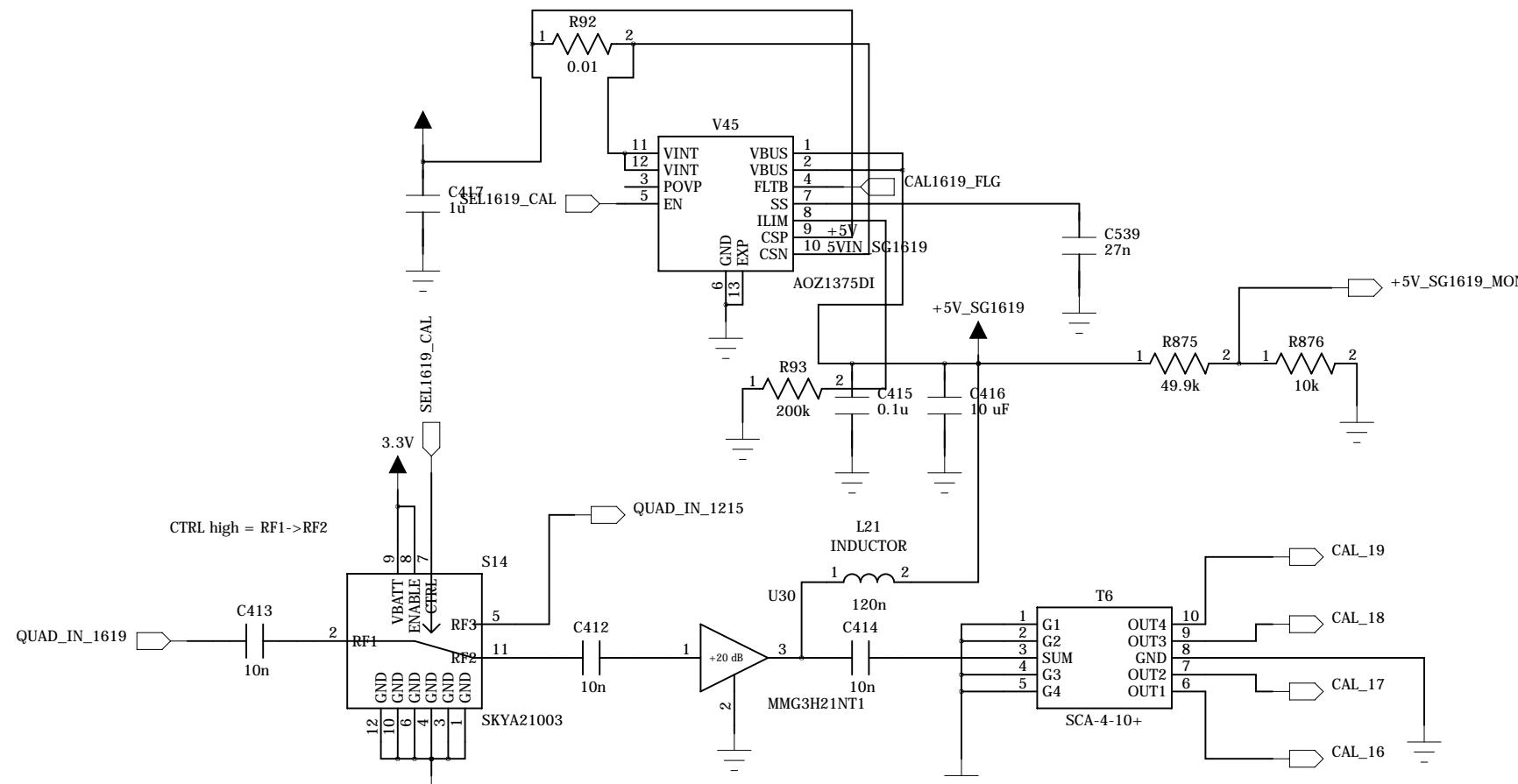
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COMPANY:	Ohio State University		
SHEET:	QUAD_SIG_GENERATOR 4		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
QUALITY CONTROL:	N/A	DATED:	N/A
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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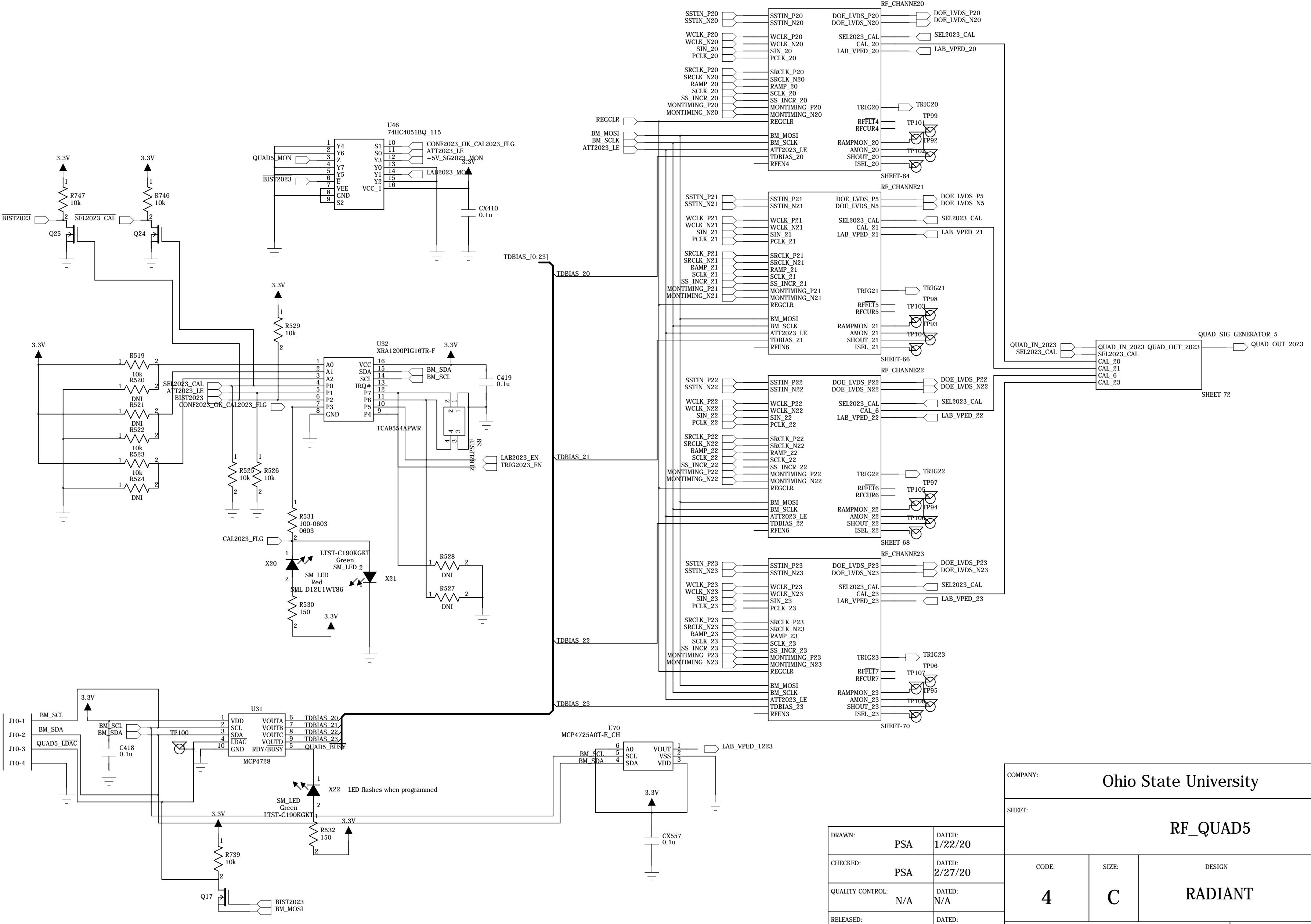
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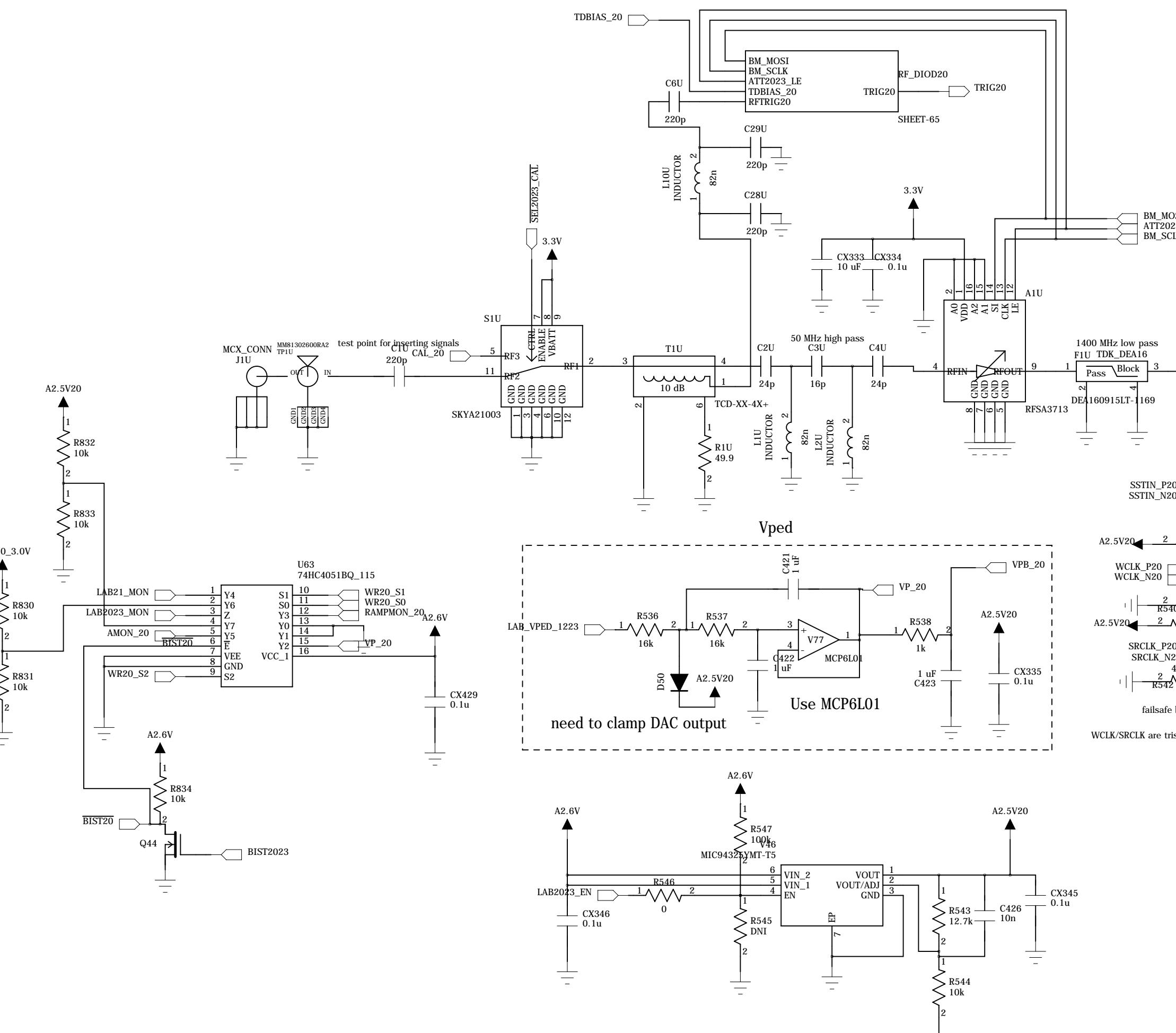
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors

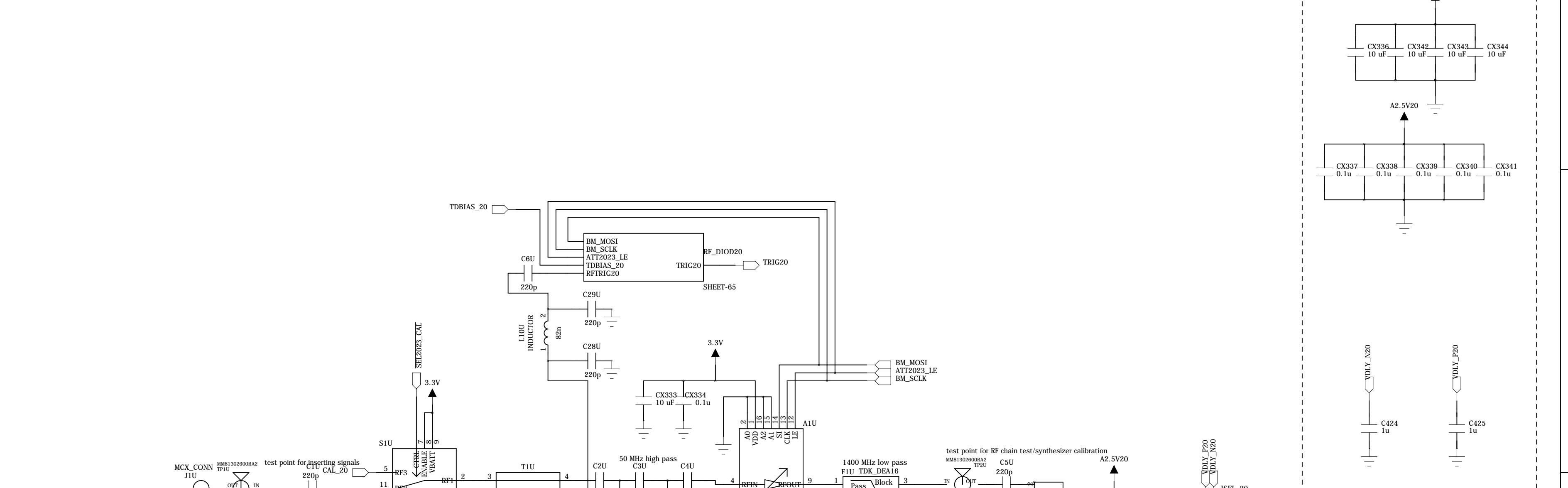


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RELEASED:	N/A	DATED:	N/A

Ohio State University

RF\_CHANNE20

CODE:	SIZE:	DESIGN	REV:
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## REVISION RECORD

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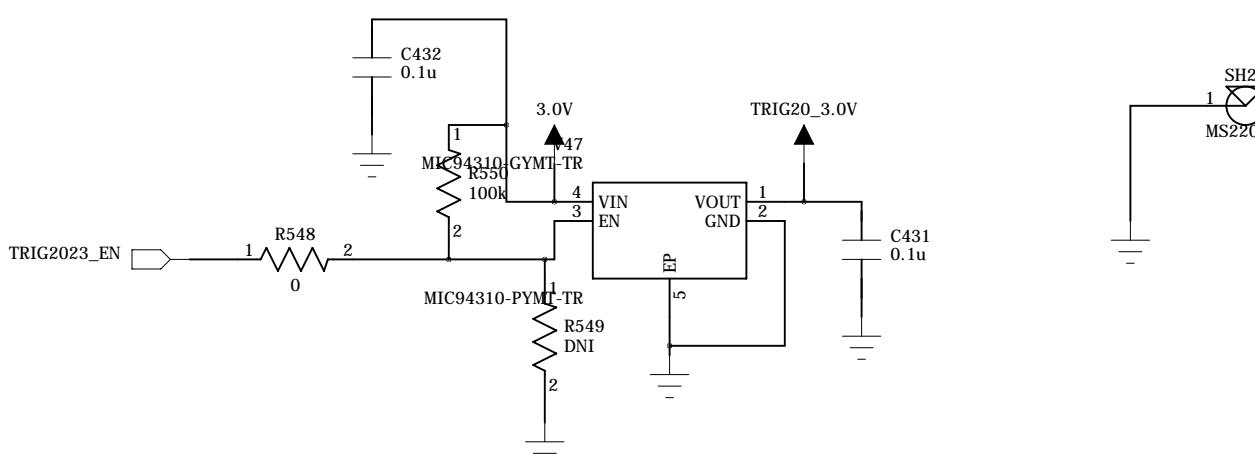
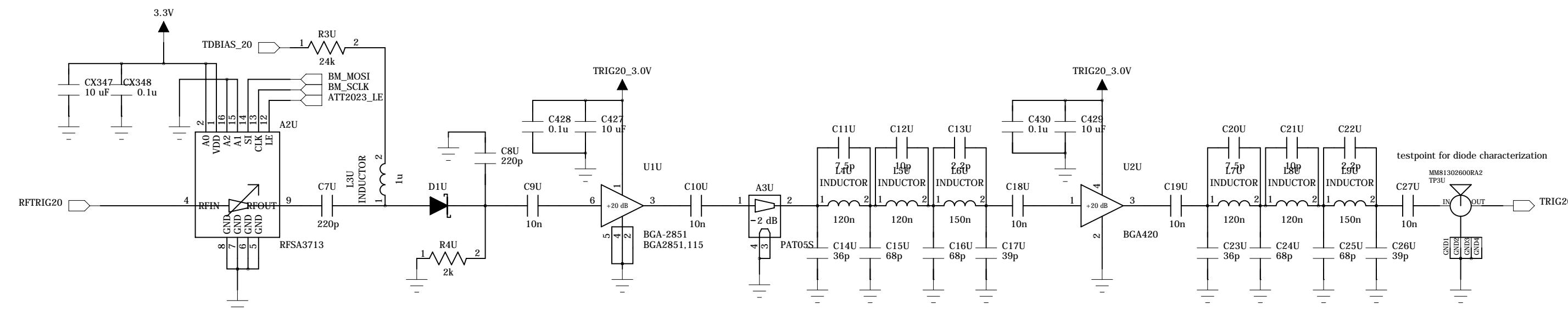
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COMPANY:	Ohio State University		
SHEET:	RF_DIOD20		
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CHECKED:	PSA	DATED:	2/27/20
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REV:	A		
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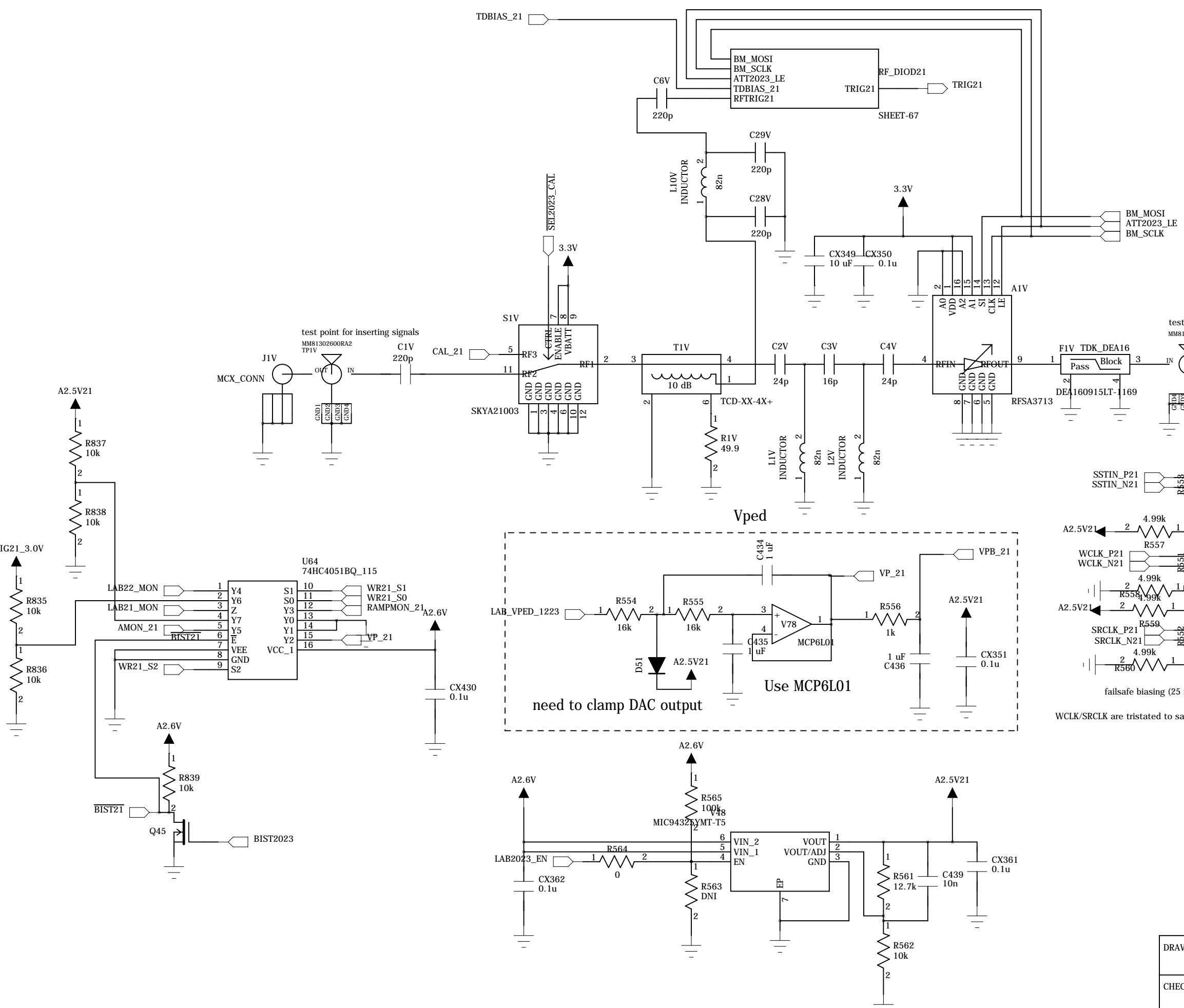
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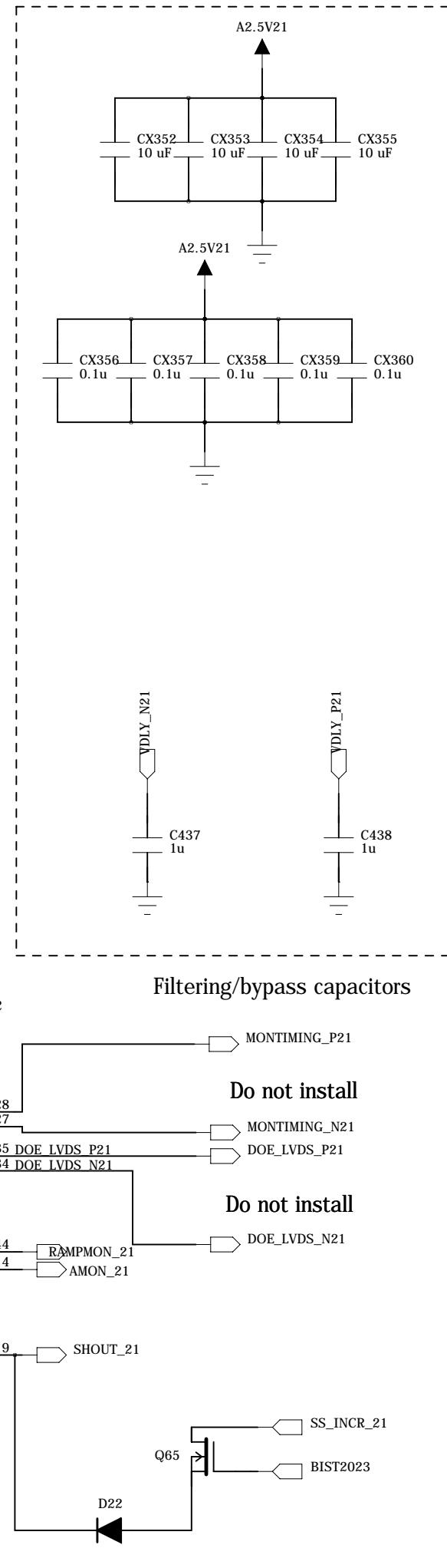
## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Filtering/bypass capacitors



COMPANY:	Ohio State University		
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CHECKED:	PSA	DATED:	2/27/20
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		DESIGN:	
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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

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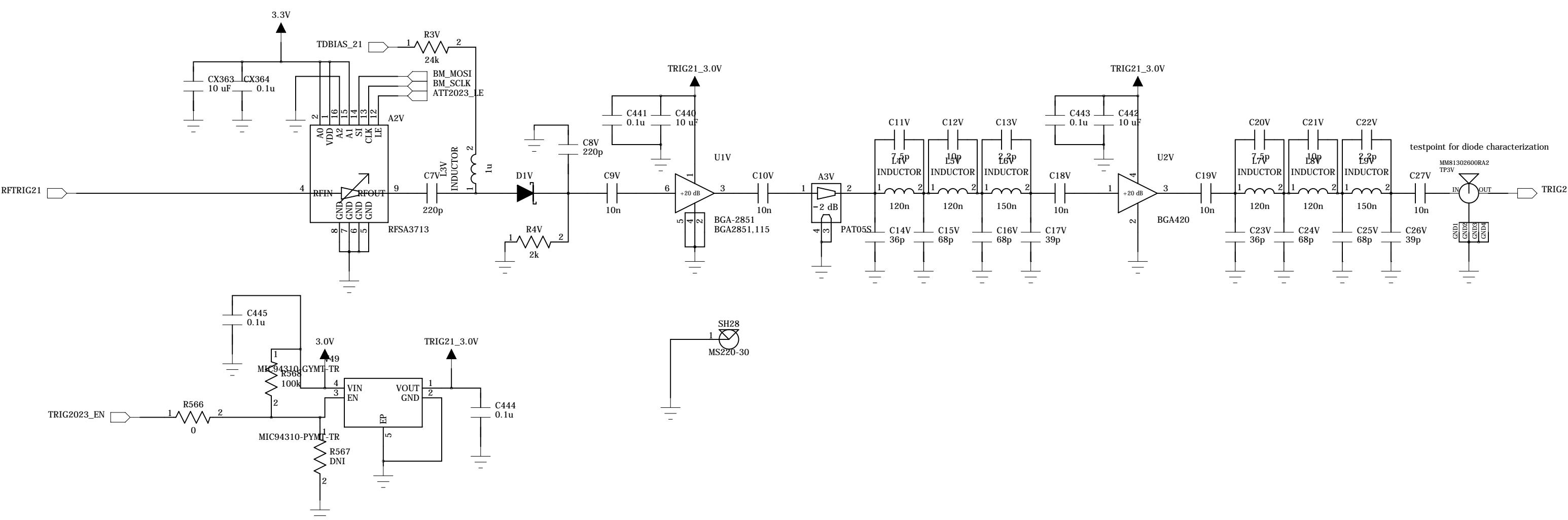
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COMPANY:	Ohio State University		
SHEET:	RF_DIOD21		
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CHECKED:	PSA	DATED: 2/27/20	
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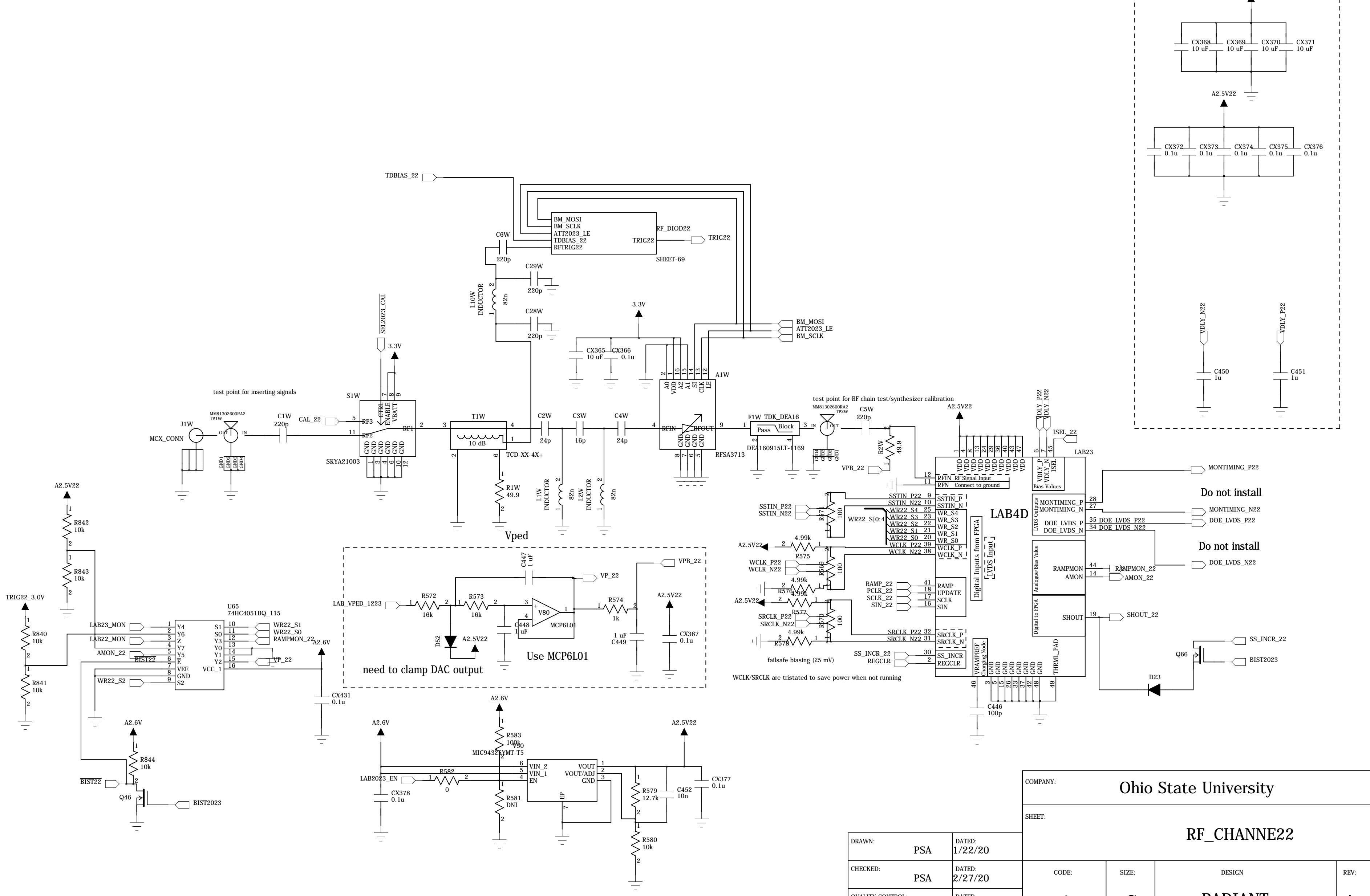
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REVISION RECORD		
ECO NO:	APPROVED:	DATE:
<b>g/bypass capacitors</b>		



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## REVISION RECORD

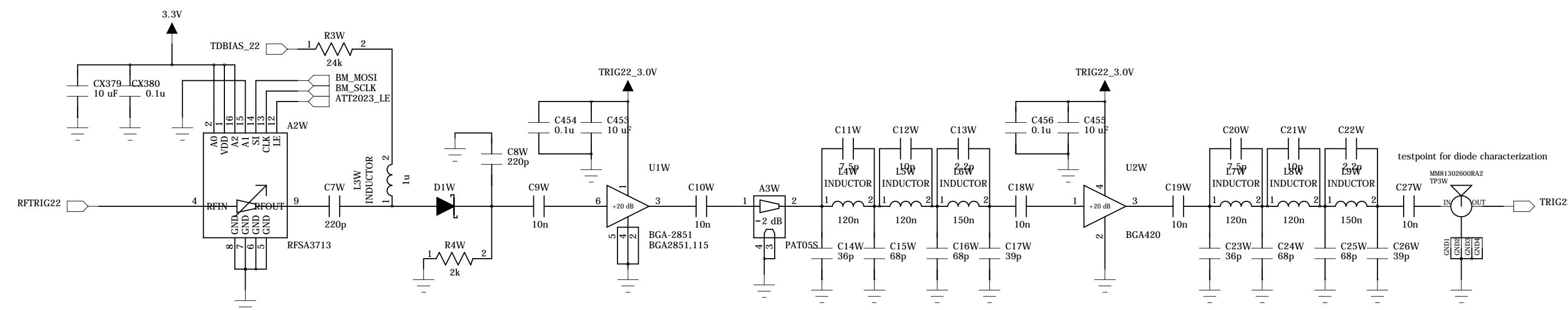
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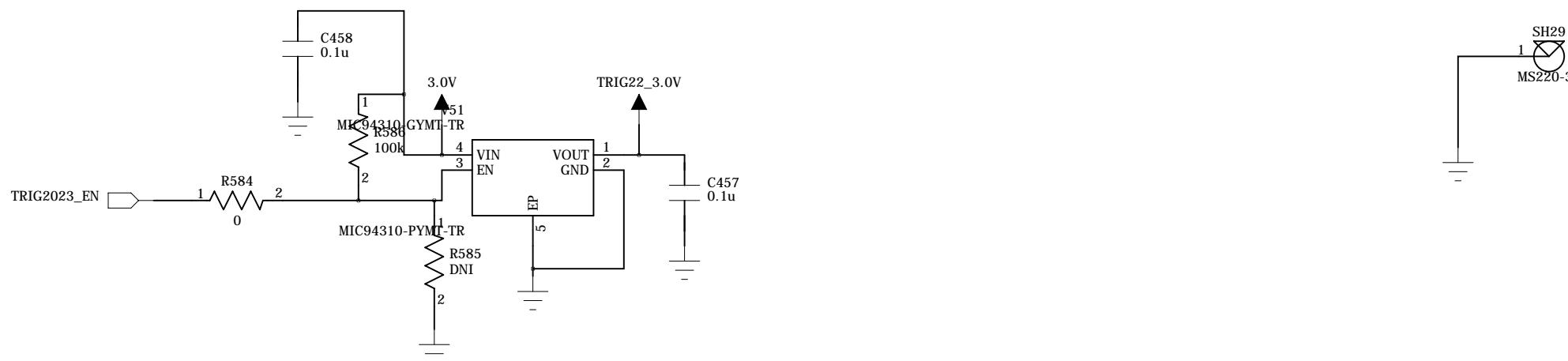
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COMPANY:	Ohio State University		
SHEET:	RF_DIOD22		
DRAWN:	PSA	DATED:	1/22/20
CHECKED:	PSA	DATED:	2/27/20
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CODE:	4	SIZE:	RADIANT
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SCALE:	<Scale>		Sheet: 69 74

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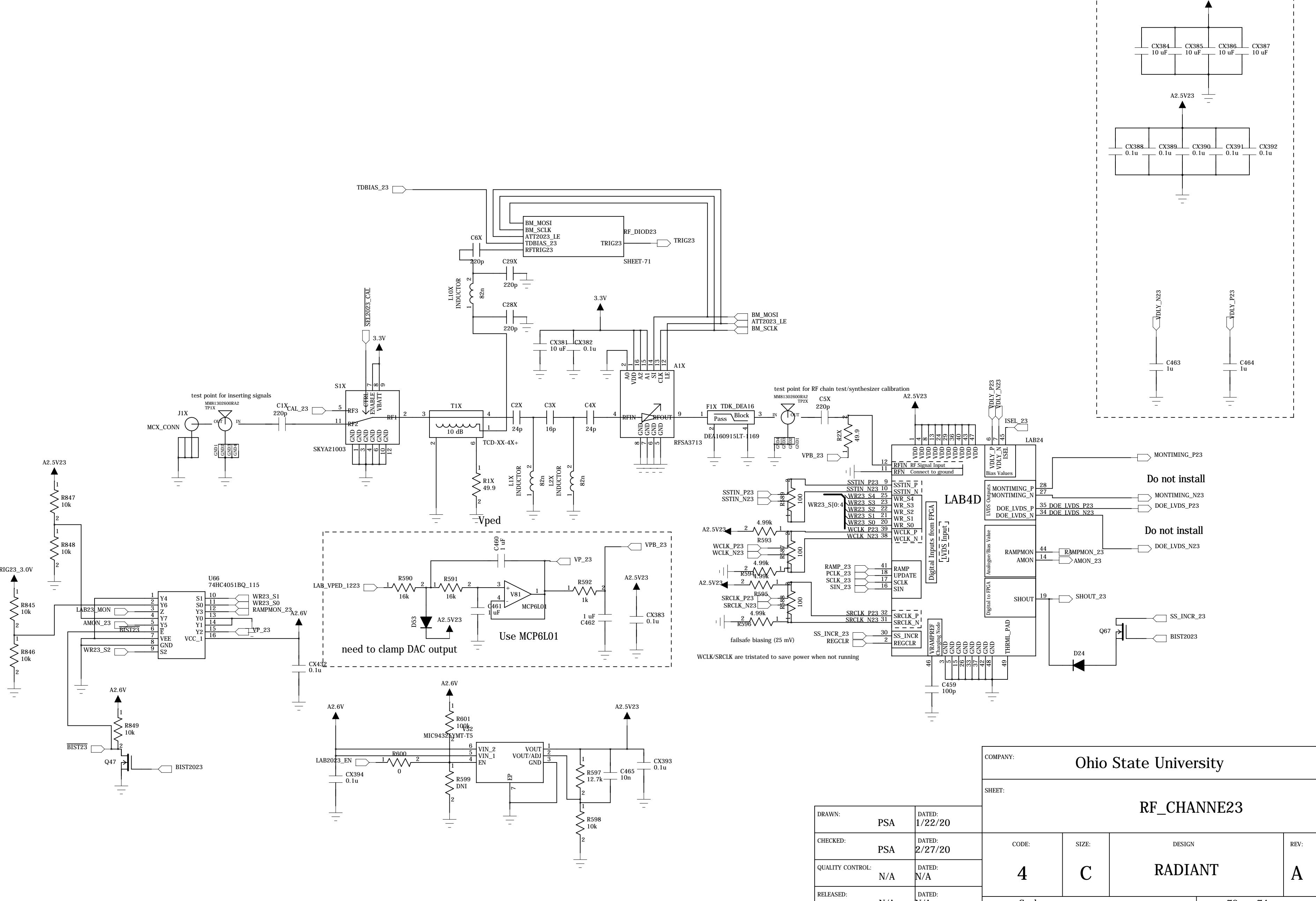
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REVISION RECORD		
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LTR	ECO NO:	APPROVED:	DATE:

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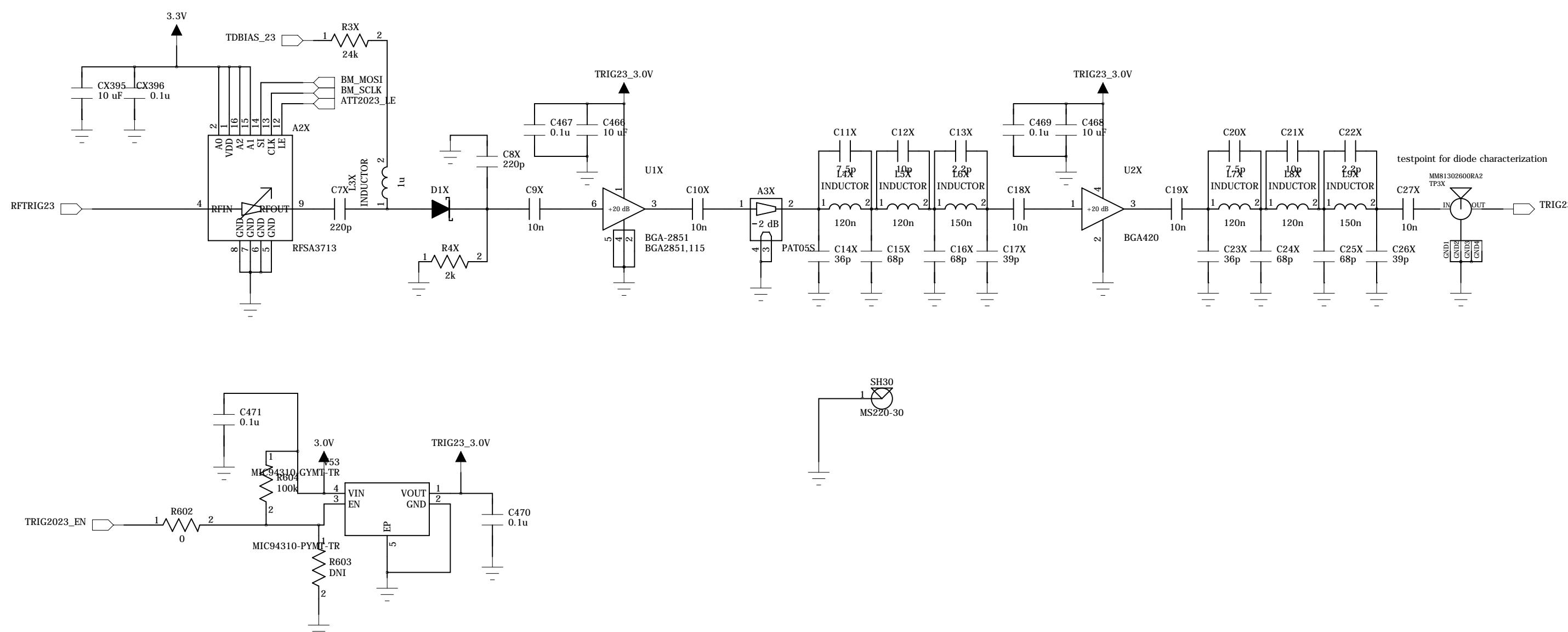
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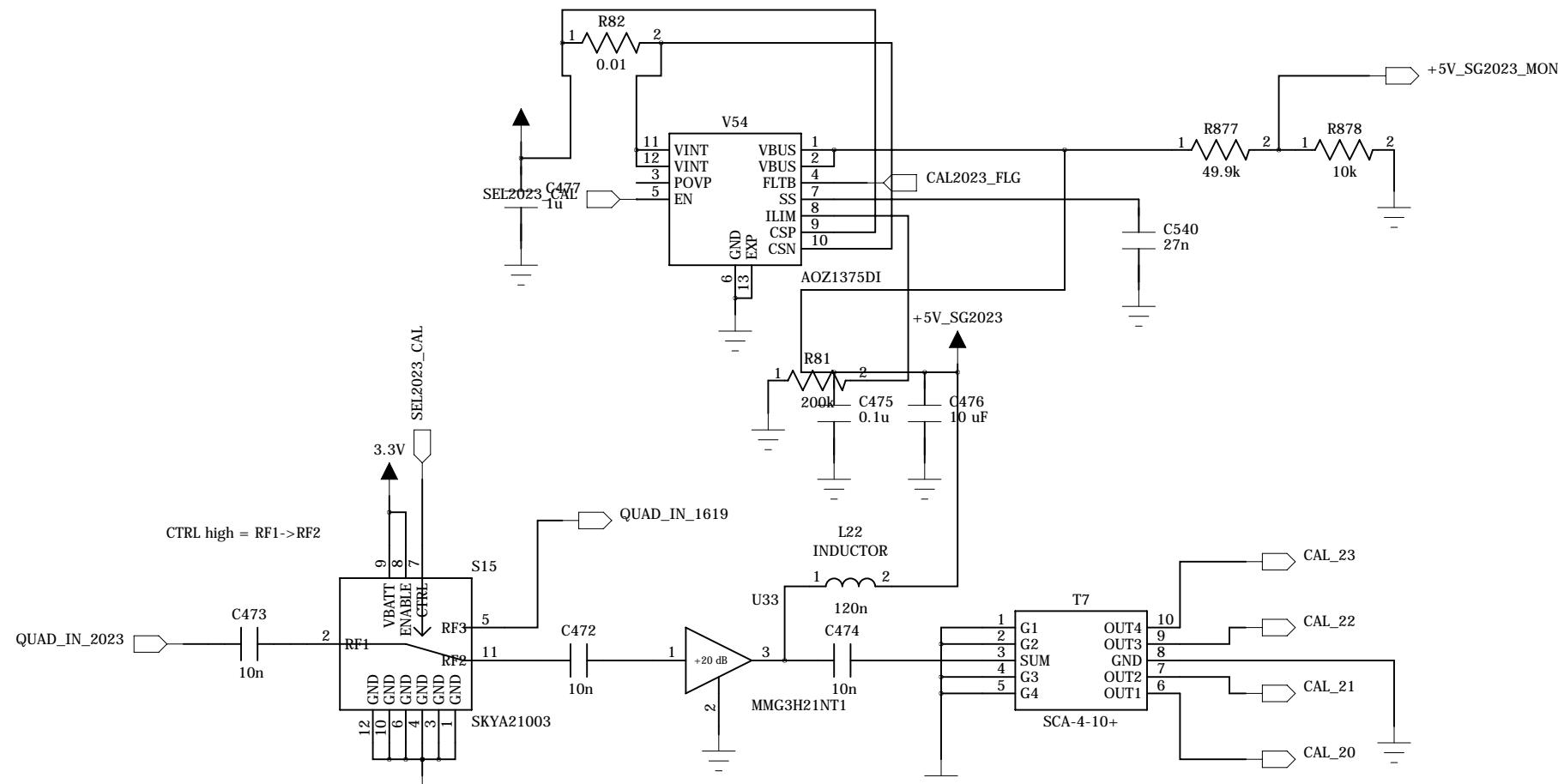
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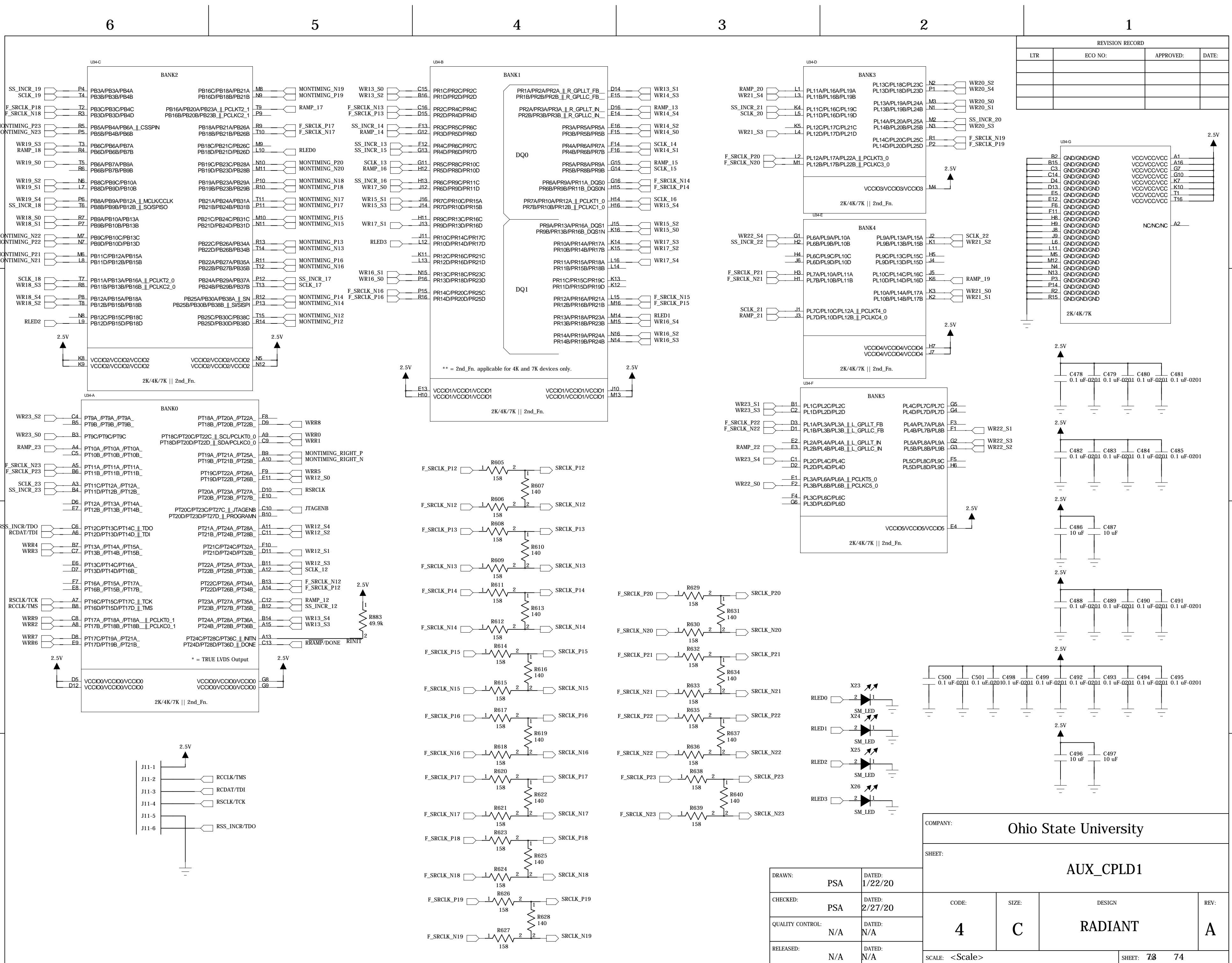
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A



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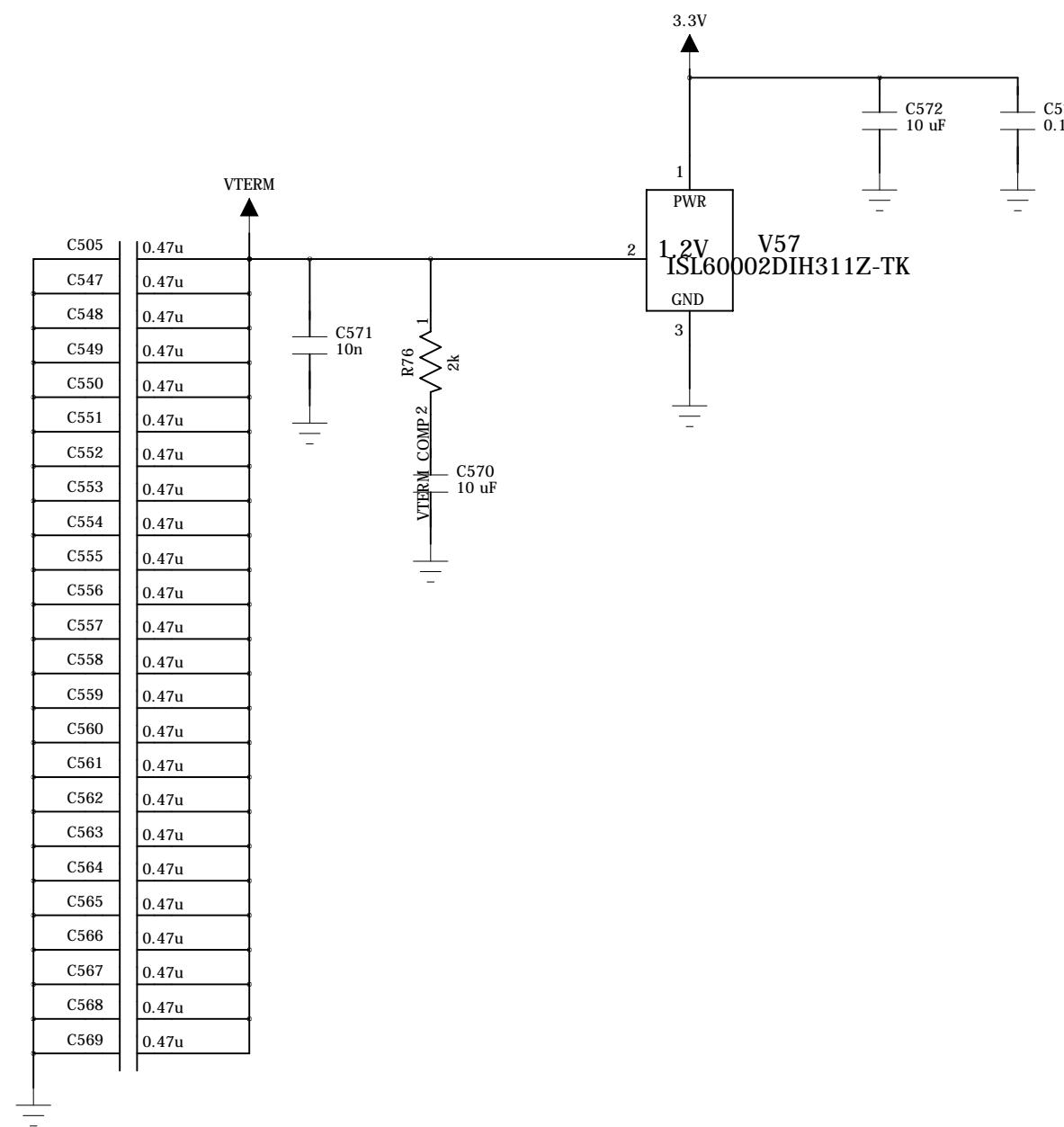
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COMPANY:	Ohio State University		
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