



6

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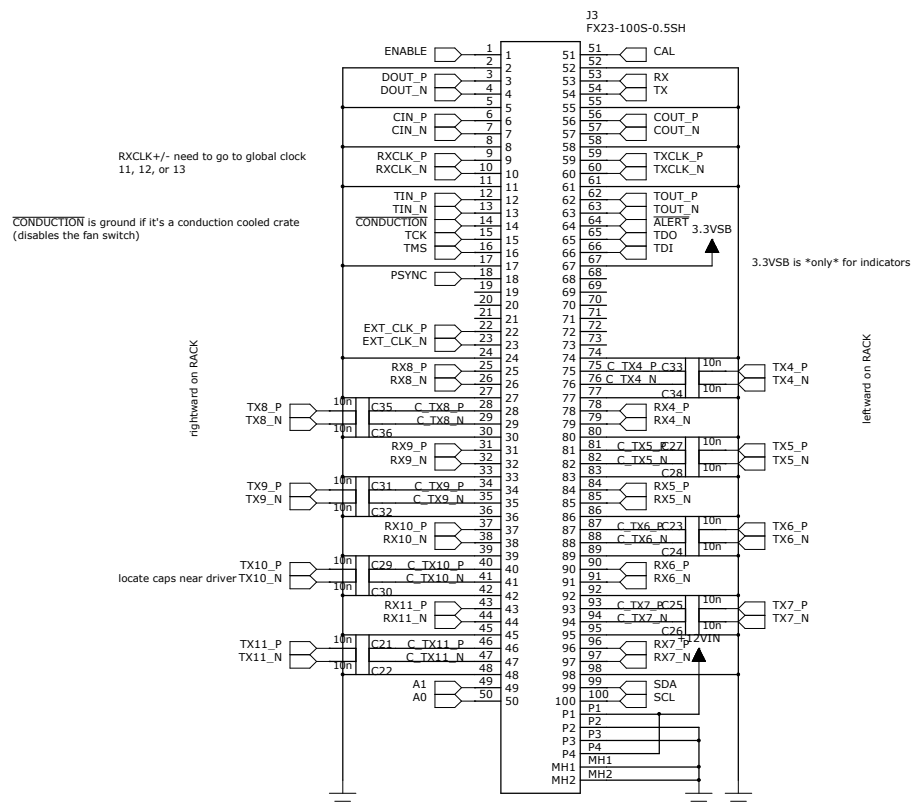
2

1

## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Horizontally this switches left/right at the RACK  
(so connecting 25->75 goes right, 75->25 goes left)



COMPANY:				Ohio State University							
TITLE:				SURFv6							
DRAWN:		DATED:		CODE:		SIZE:		SHEET NAME		REV:	
CHECKED:		DATED:		B		RACKBUS		A			
QUALITY CONTROL:		DATED:									
RELEASED:		DATED:									
SCALE:				SHEET: 2 of 12							



D

C

B

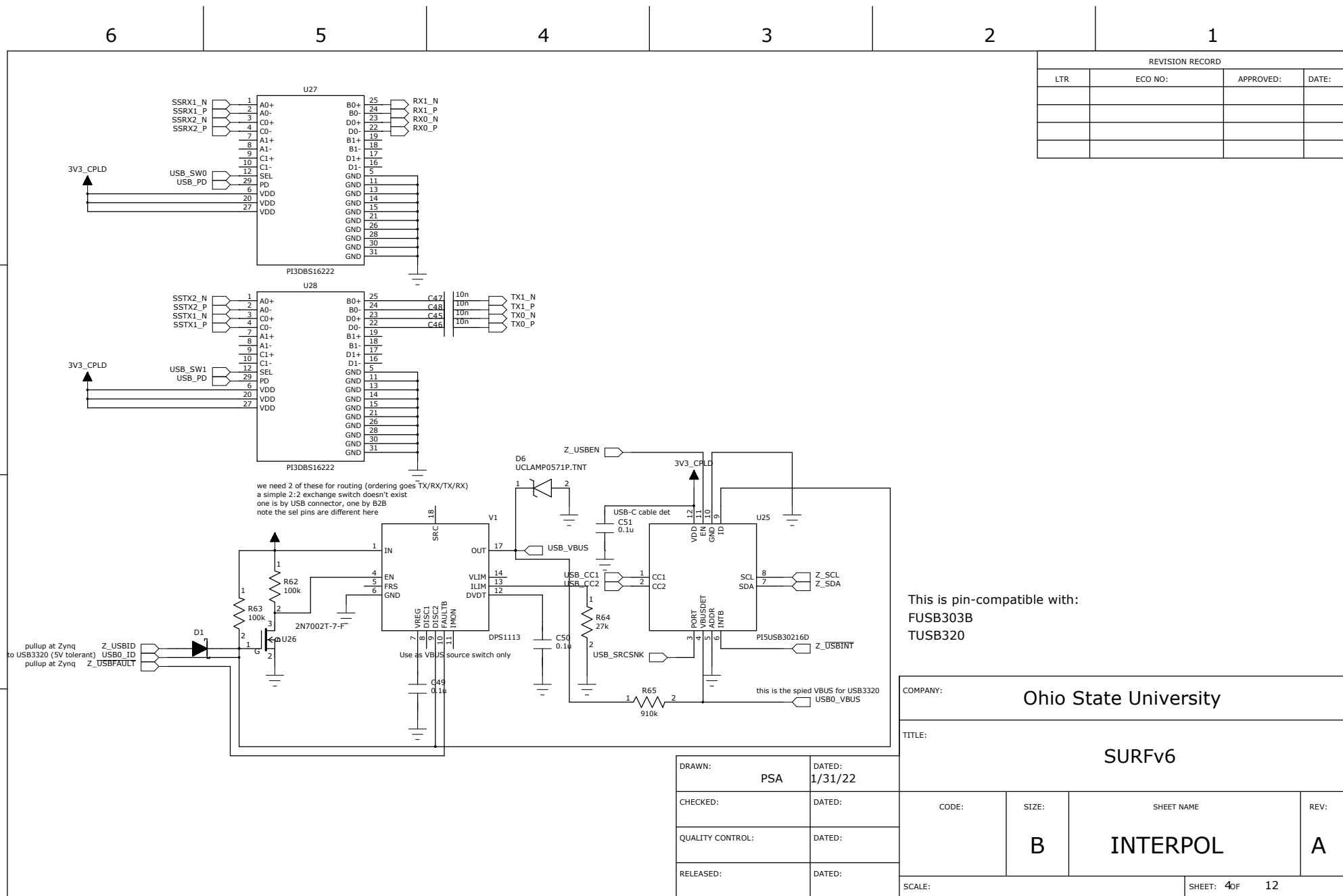
A

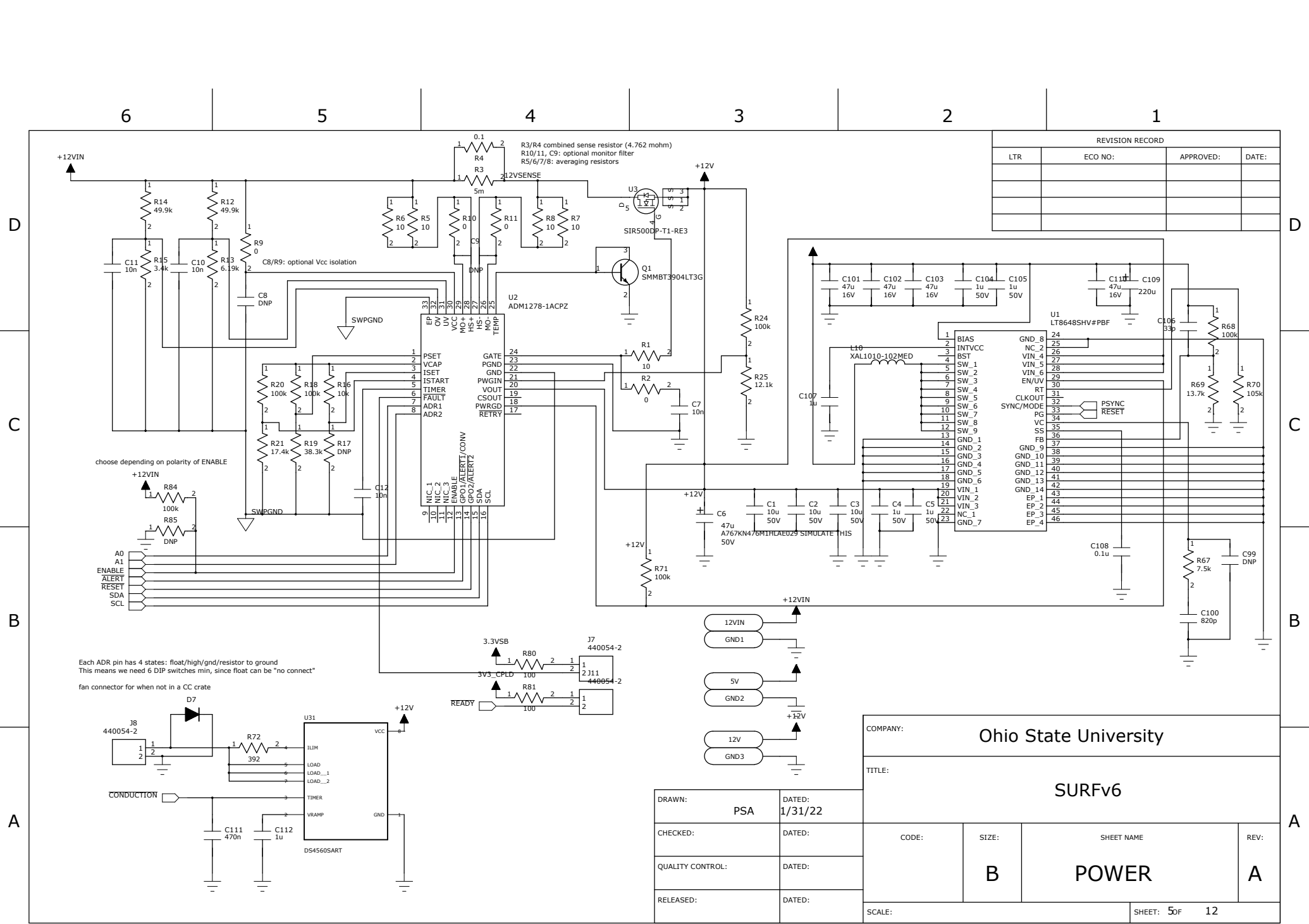
D

C

B

A





REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

COMPANY:				Ohio State University			
TITLE:				SURFv6			
CODE:		SIZE:		SHEET NAME		REV:	
B		POWER		A			
SCALE:				SHEET: 50F		12	

DRAWN: PSA	DATED: 1/31/22
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

D

C

B

A

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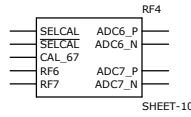
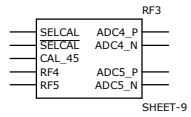
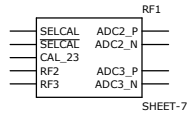
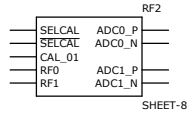
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REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

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B

A

DRAWN: PSA		DATED: 1/31/22		COMPANY: Ohio State University			
CHECKED:		DATED:		TITLE: SURFv6			
QUALITY CONTROL:		DATED:		CODE:	SIZE: B	SHEET NAME RF_CHAIN	REV: A
RELEASED:		DATED:					
SCALE:						SHEET: 6 of 12	

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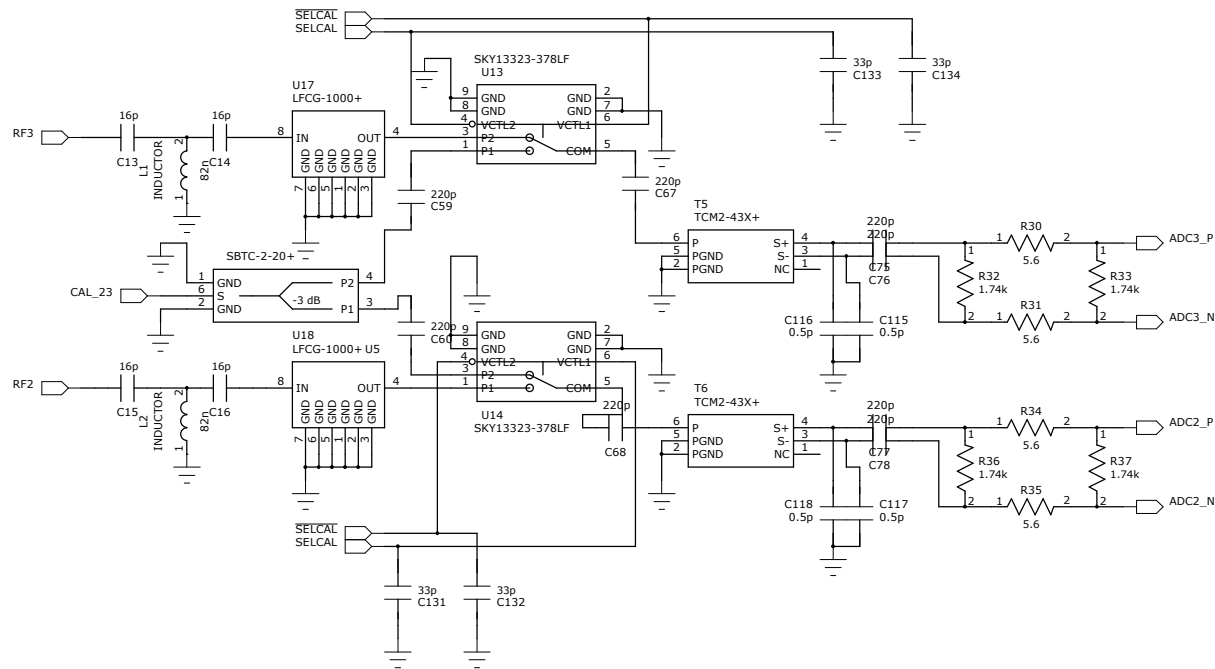
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1

## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Switch inputs are flipped for routing



COMPANY:				Ohio State University							
TITLE:				SURFv6							
DRAWN:		DATED:		CODE:		SIZE:		SHEET NAME		REV:	
PSA		1/31/22				B		RF1		A	
CHECKED:		DATED:									
QUALITY CONTROL:		DATED:									
RELEASED:		DATED:									
SCALE:								SHEET: 7 of 12			

6

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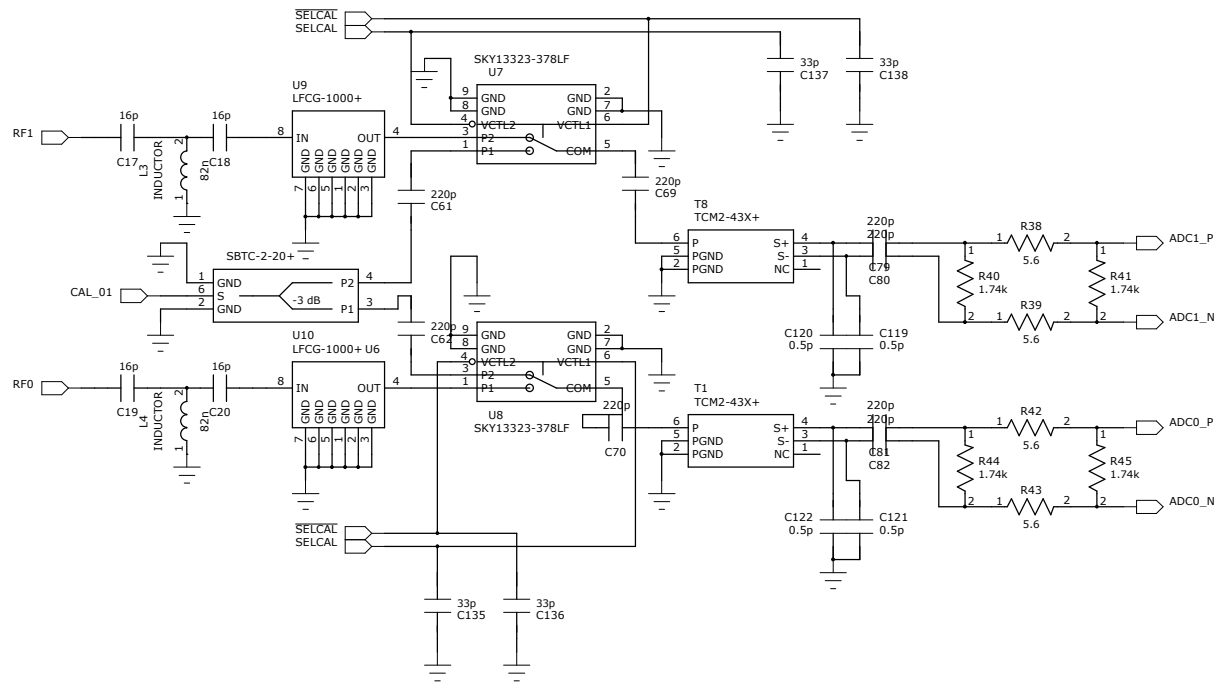
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1

## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Switch inputs are flipped for routing



COMPANY:

Ohio State University

TITLE:

SURFv6

DRAWN:

PSA

DATED:

1/31/22

CHECKED:

DATED:

QUALITY CONTROL:

DATED:

RELEASED:

DATED:

CODE:

SIZE:

SHEET NAME

REV:

B

RF2

A

SCALE:

SHEET: 8 of 12





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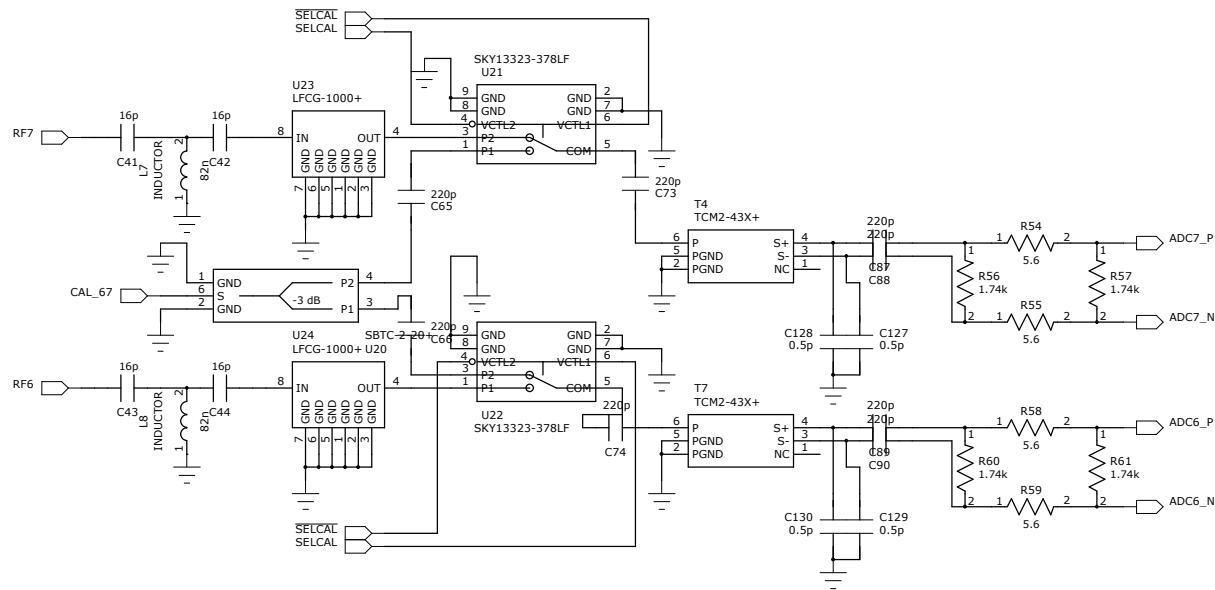
2

1

## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Switch inputs are flipped for routing



COMPANY:

Ohio State University

TITLE:

SURFv6

DRAWN:

PSA

DATED:

1/31/22

CHECKED:

DATED:

QUALITY CONTROL:

DATED:

RELEASED:

DATED:

CODE:

SIZE:

SHEET NAME

REV:

B

RF4

A

SCALE:

SHEET: 10 12

6

5

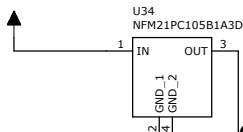
4

3

2

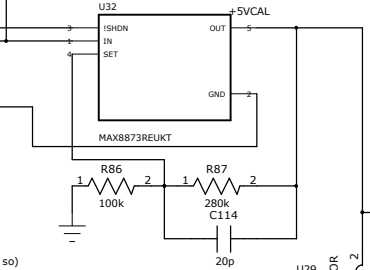
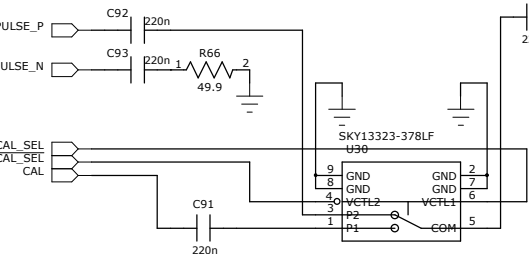
1

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



output is really 4.75V

LVDS is ~250 mV into 100 ohm = -2 dBm  
We throw away half the power (-5 dBm)  
+17.4 dB gain = +12.4 dBm  
Less 16 dB loss = -3.6 dBm  
Should be relatively large at ADC (half-scale or so)



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## REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

Other loads:  
PI3DBS16222 (minimal, mA)  
Spare clock (CTS 626) 40 mA max  
FUSB303B (minimal, microamp)  
TX02612 (minimal, microamp)

