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ADSP—SC584 EZ—Board  
Schematic

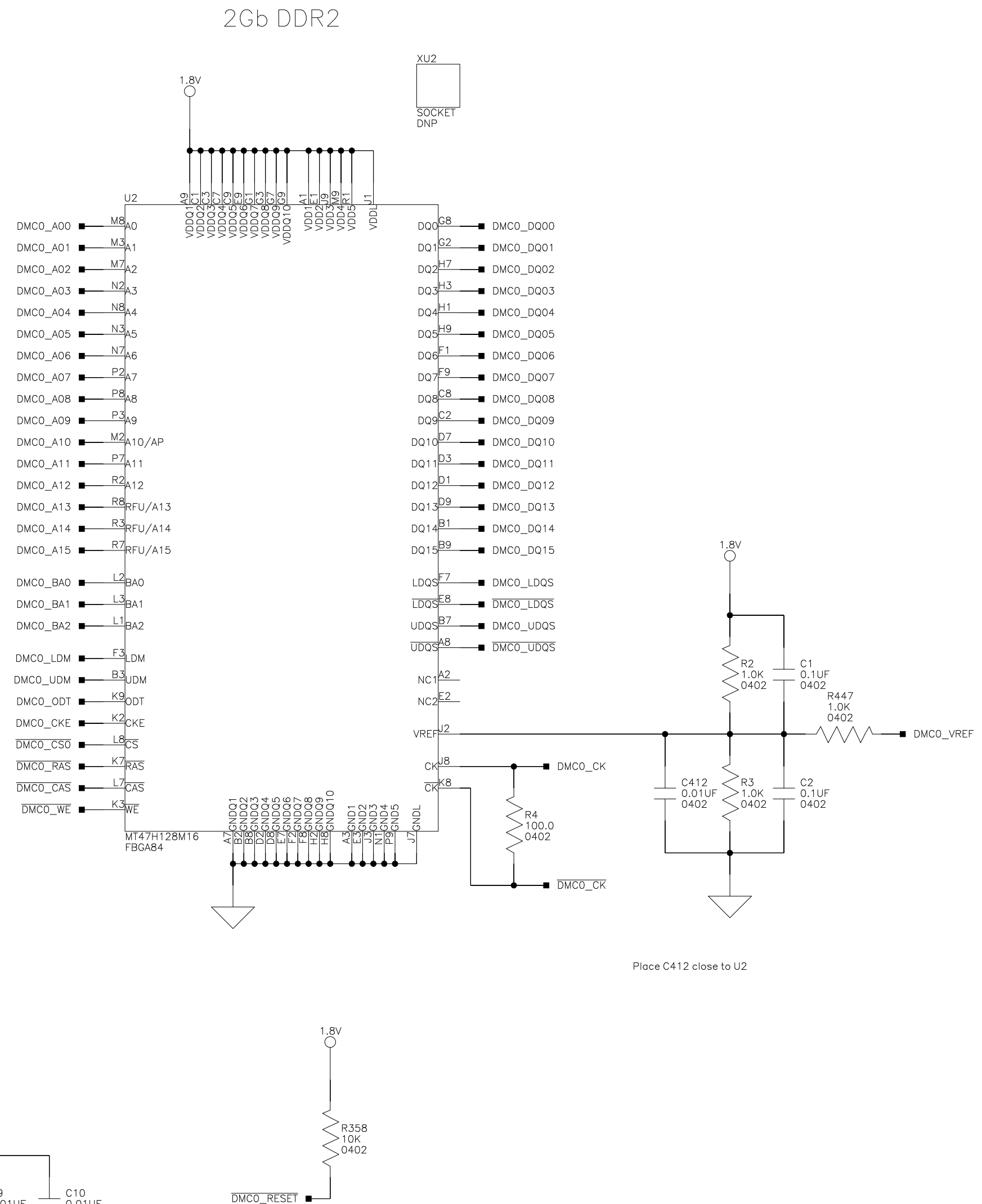
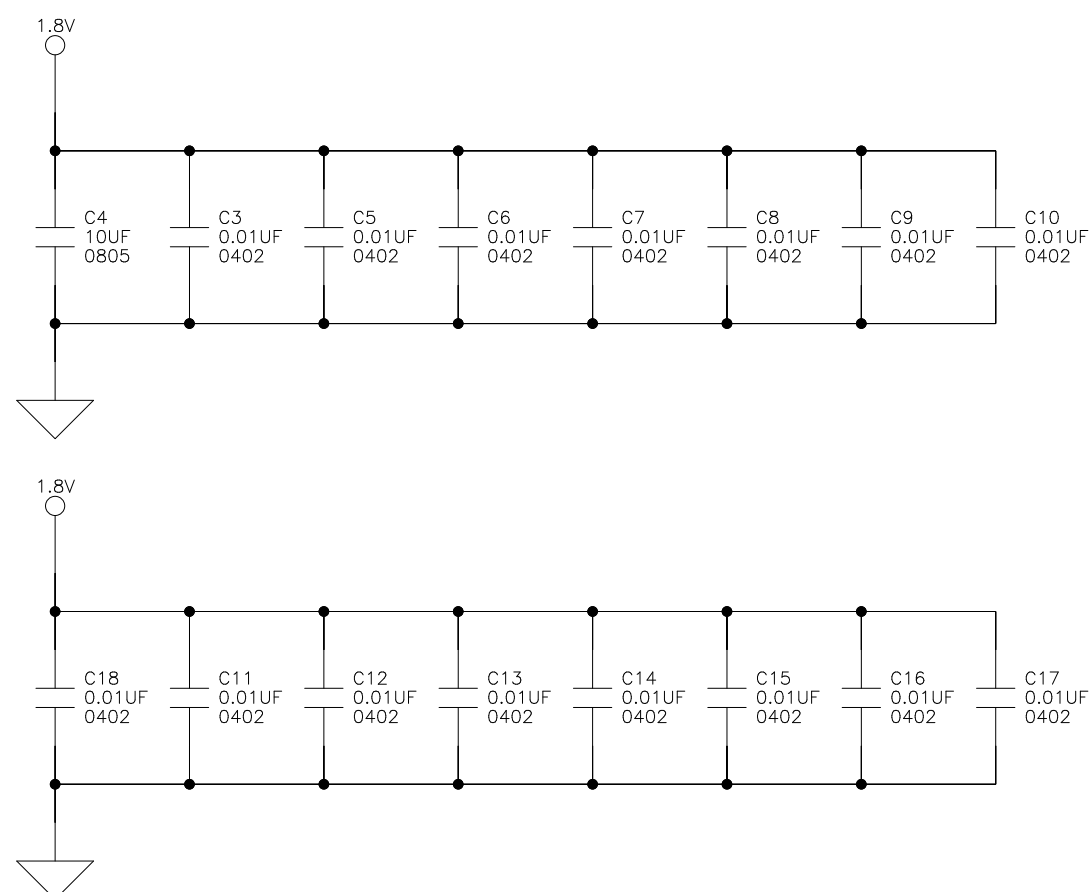
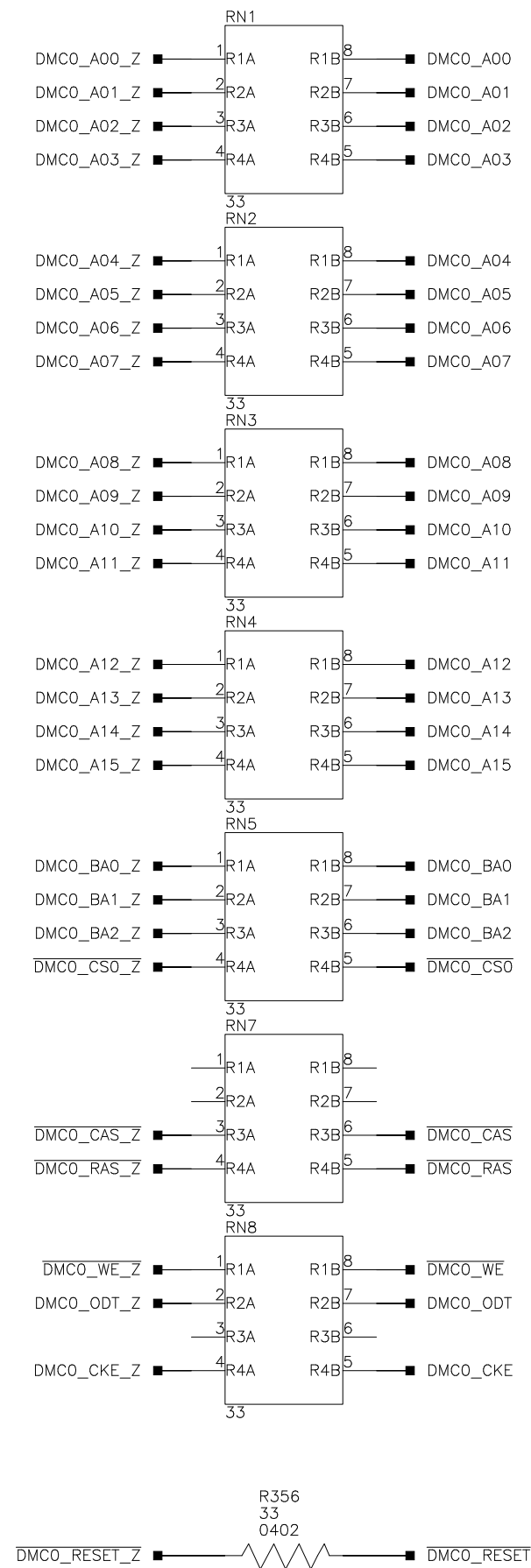
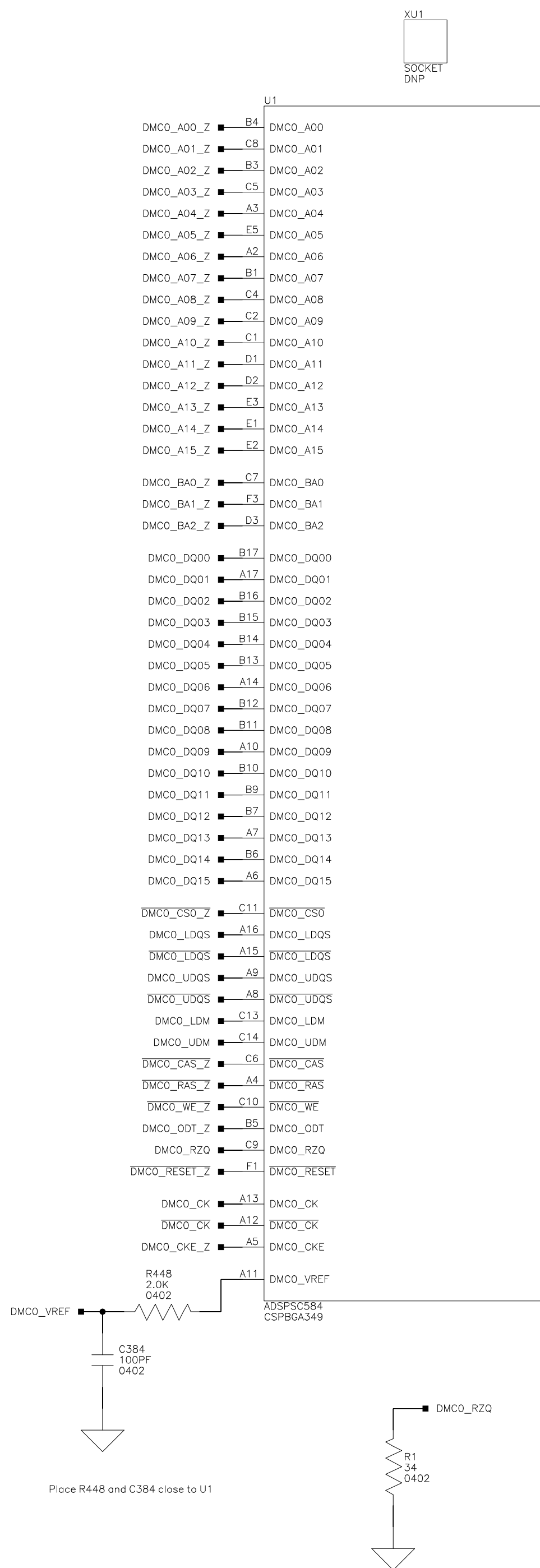
<div><div><div></div></div><div><div>ANALOG</div><div>DEVICES</div></div><div><div>2 Elizabeth Drive</div><div>Chelmsford, MA 01824</div><div>PH: 1-800-ANALOGD</div></div></div>			
Title		ADSP—SC584 EZ—Board Title Block	
Size C	Board No. A0448—2013		Rev 1.1A
Date	1/17/17	Sheet 1	of 29

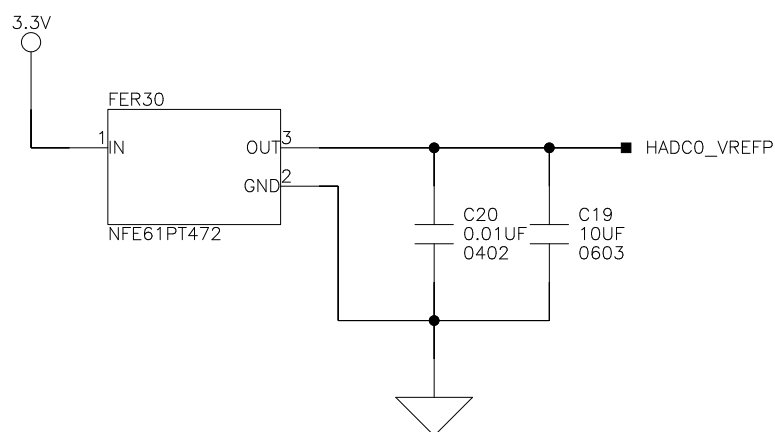
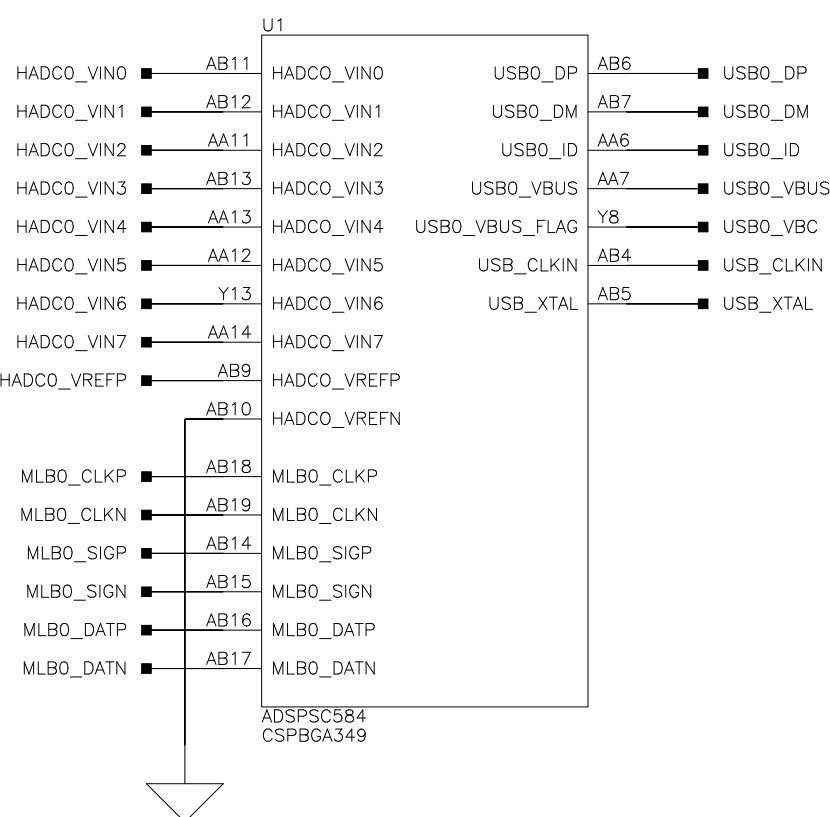
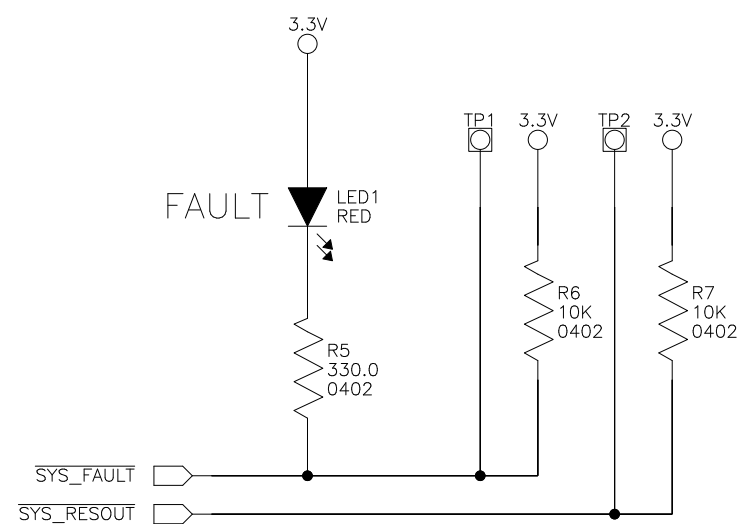
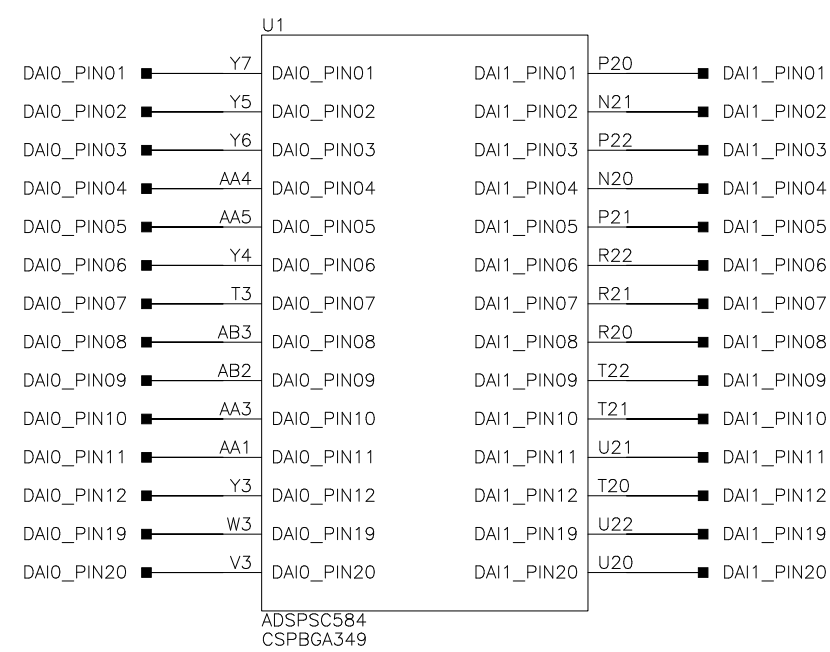
A

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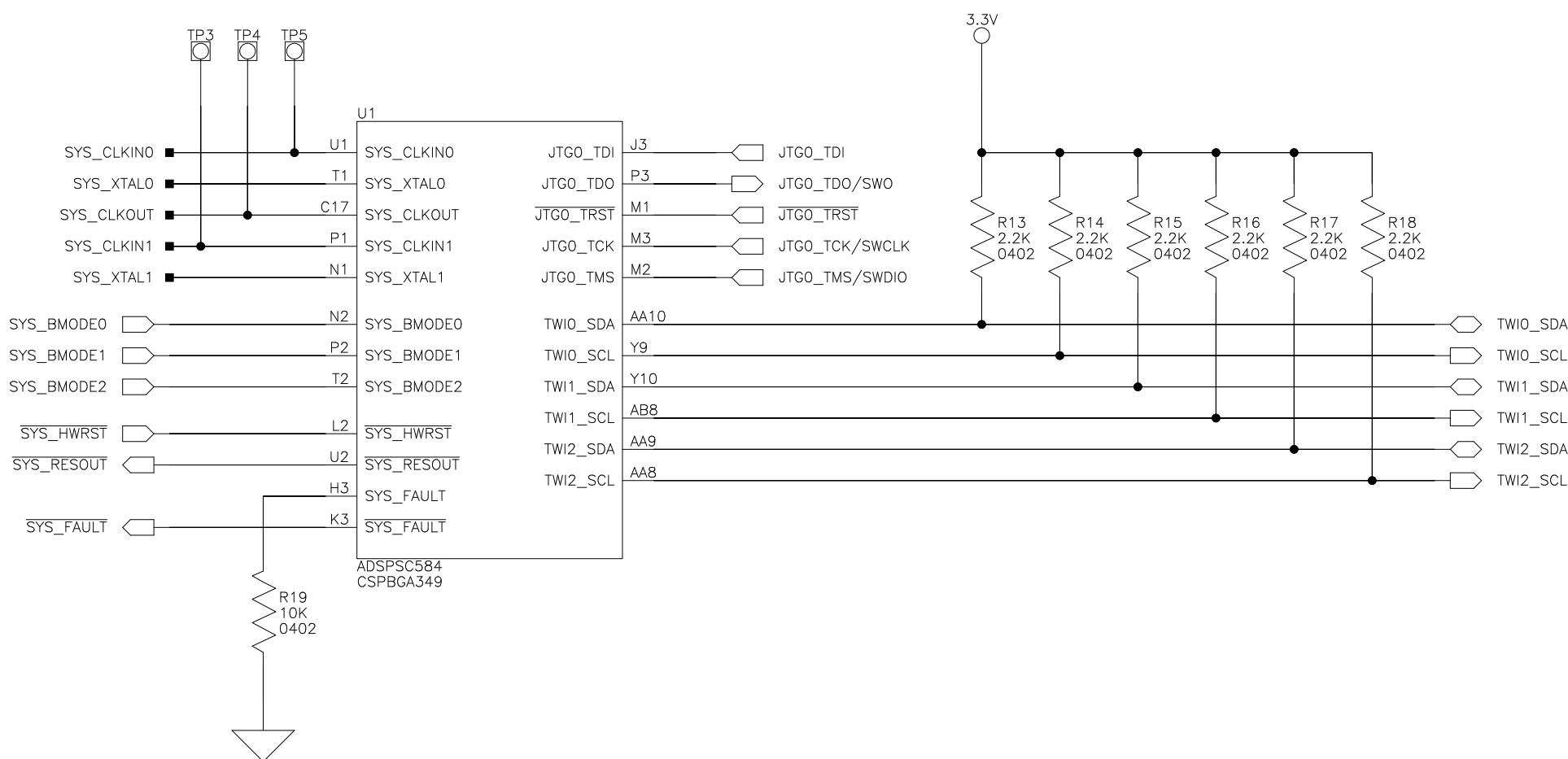
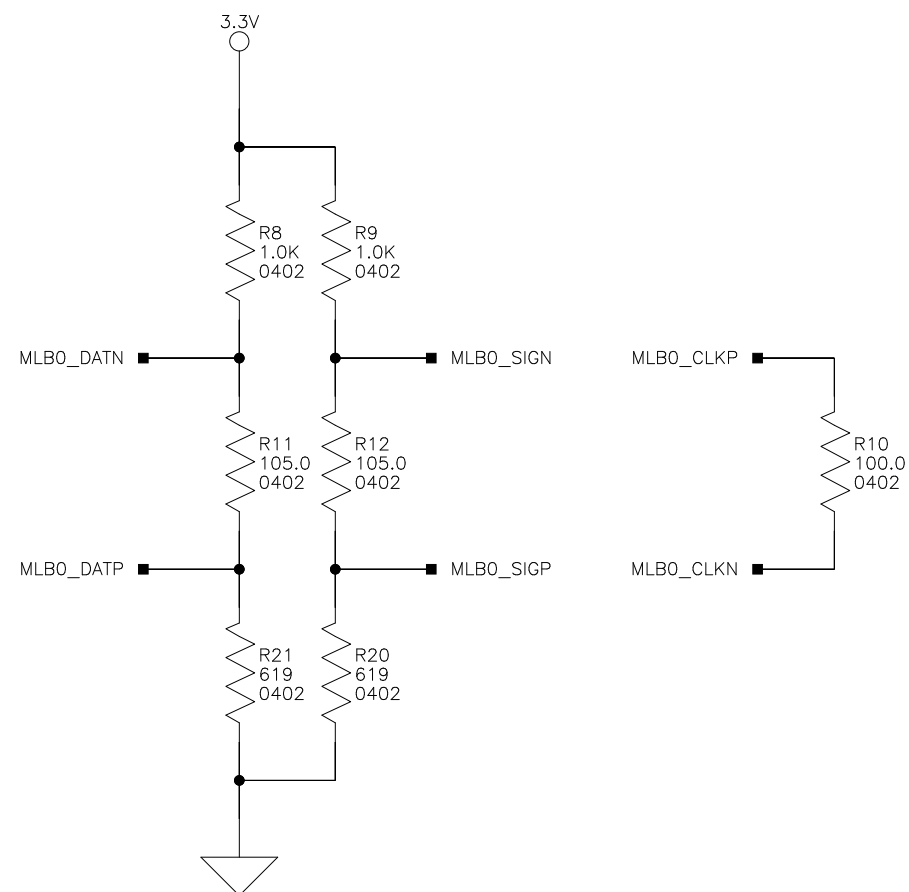
C

D





MLB signals need to be short and matched trace length.



**ANALOG  
DEVICES**

2 Elizabeth Drive  
Chelmsford, MA 01824  
PH: 1-800-ANALOGD

Title				ADSP-SC584 EZ-Board Non-Mux Ports	
Size C	Board No.		A0448-2013		Rev 1.1A
Date	1/17/17		Sheet 3		of 29

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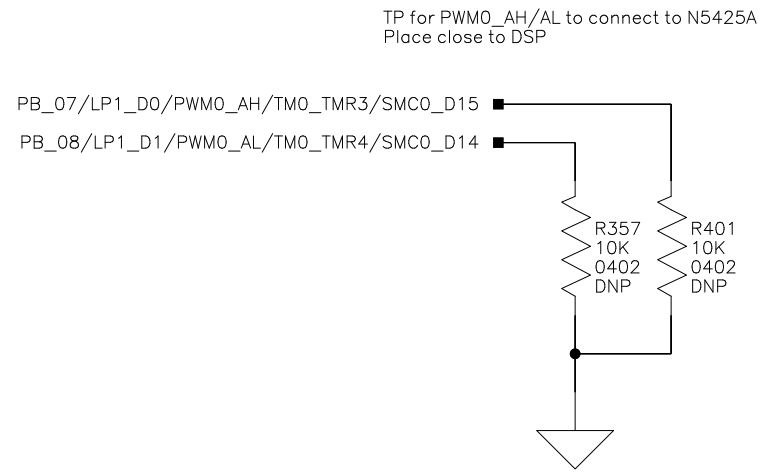
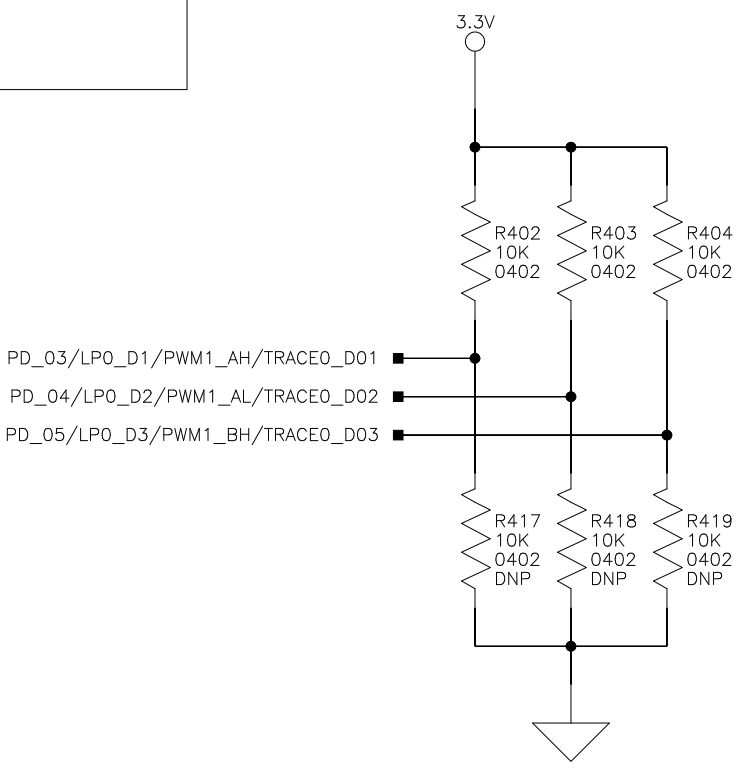
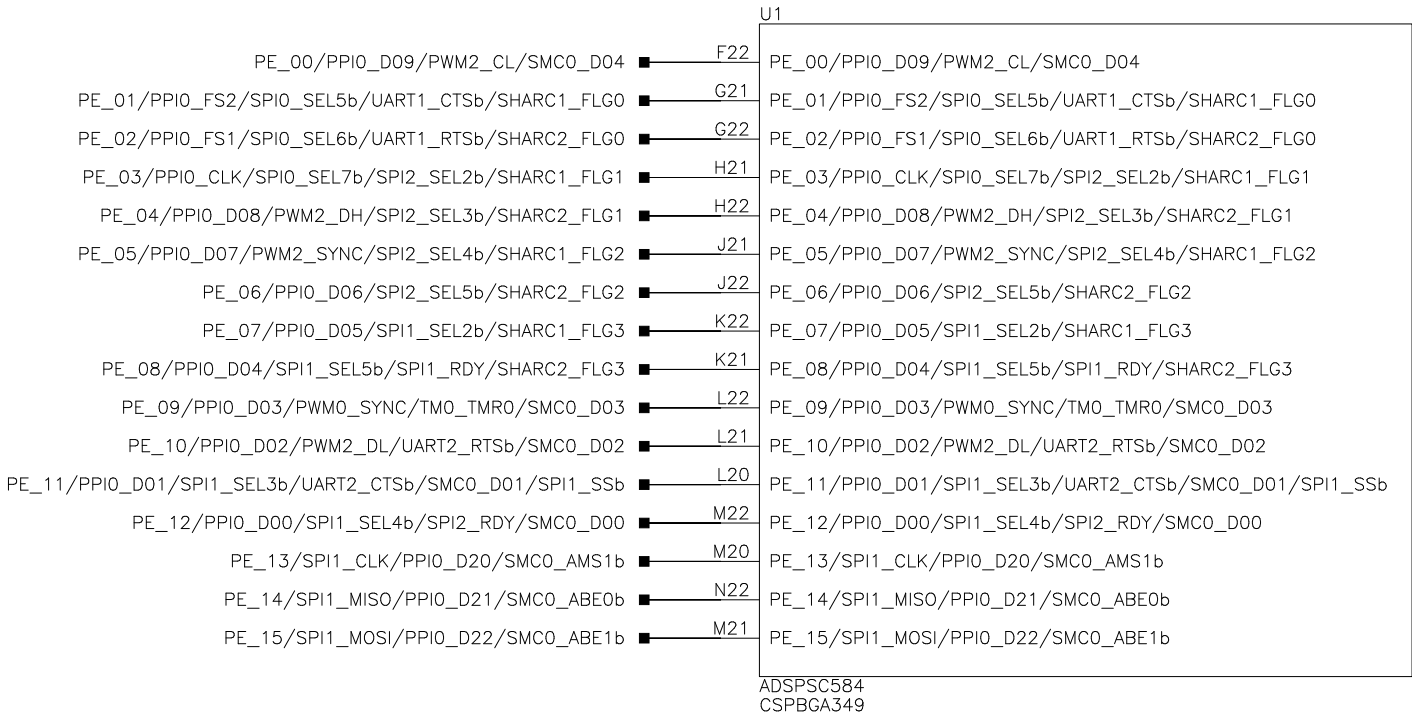
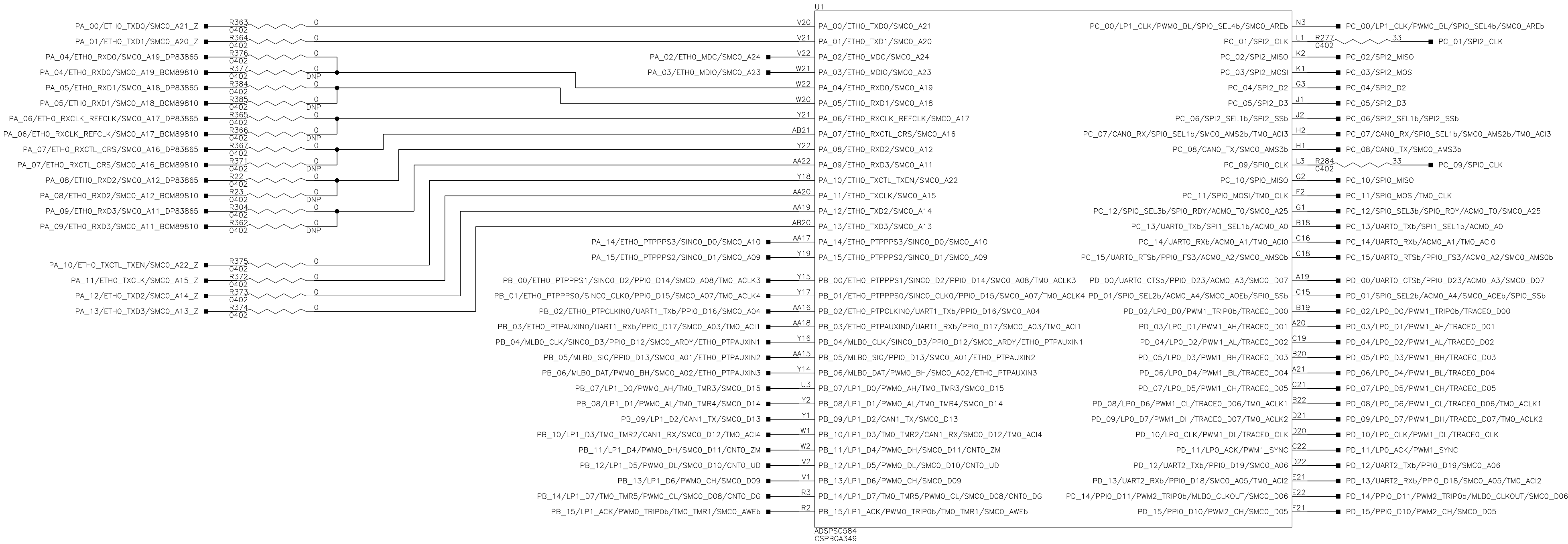
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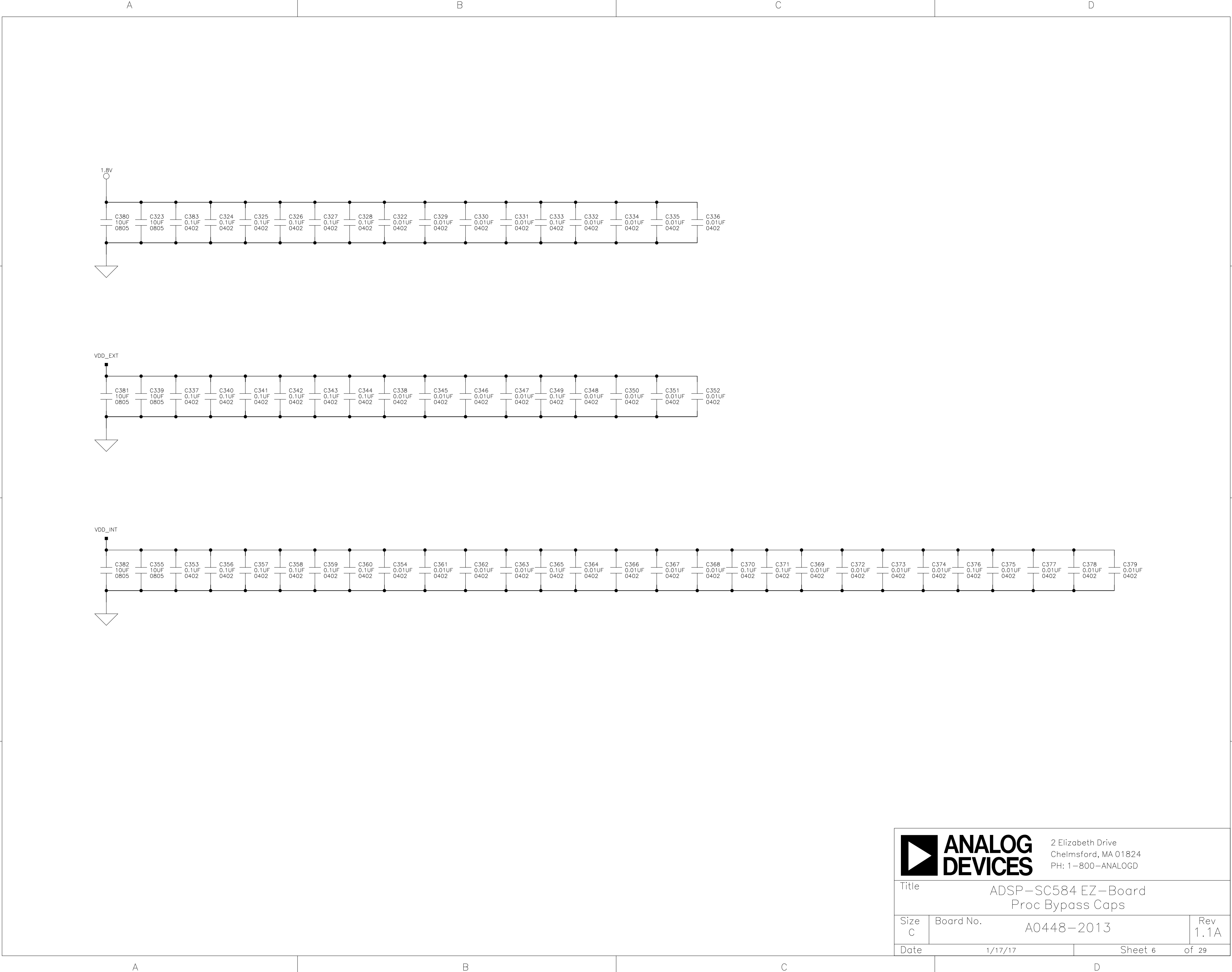
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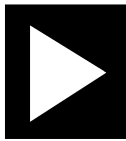


		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
Title ADSP-SC584 EZ-Board Mux Ports			
Size C	Board No. A0448-2013		Rev 1.1A
Date	1/17/17		Sheet 4 of 29





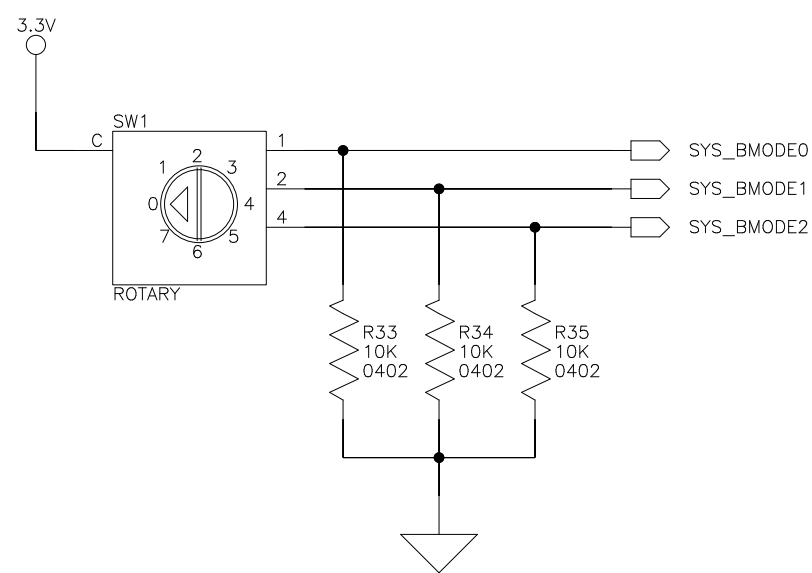




**ANALOG  
DEVICES**

2 Elizabeth Drive  
Chelmsford, MA 01824  
PH: 1-800-ANALOGD

Title		
ADSP-SC584 EZ-Board Proc Bypass Caps		
Size C	Board No. A0448-2013	Rev 1.1A
Date	1/17/17	Sheet 6 of 29



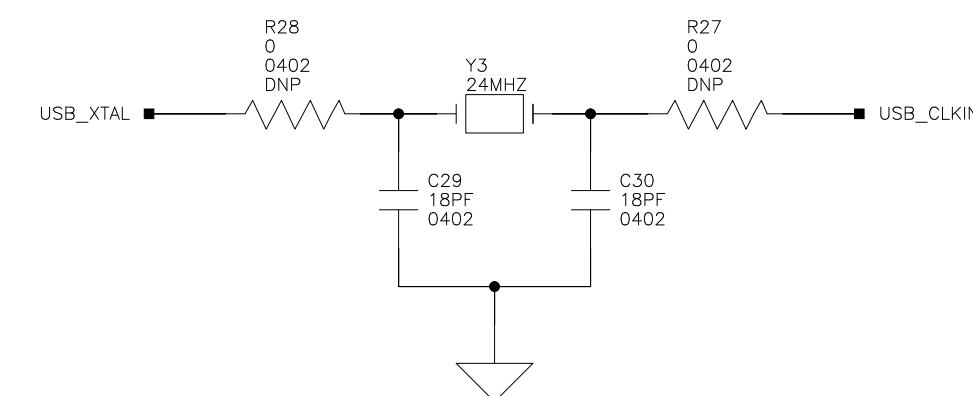
SW1: Boot mode selection switch

BMODE[2:0]	Boot Source
000	No boot/Custom ROM
001	SPI2 master boot
010	SPI2 slave boot
011	Reserved
100	Reserved
101	Reserved
110	LP0 slave boot
111	UART0 slave boot

DEFAULT

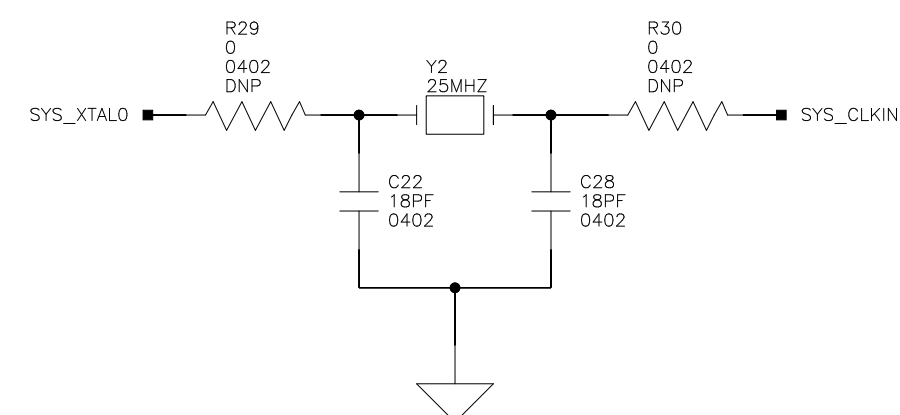
R36 should be depopulated when using the optional circuit

OPTIONAL USB CRYSTAL

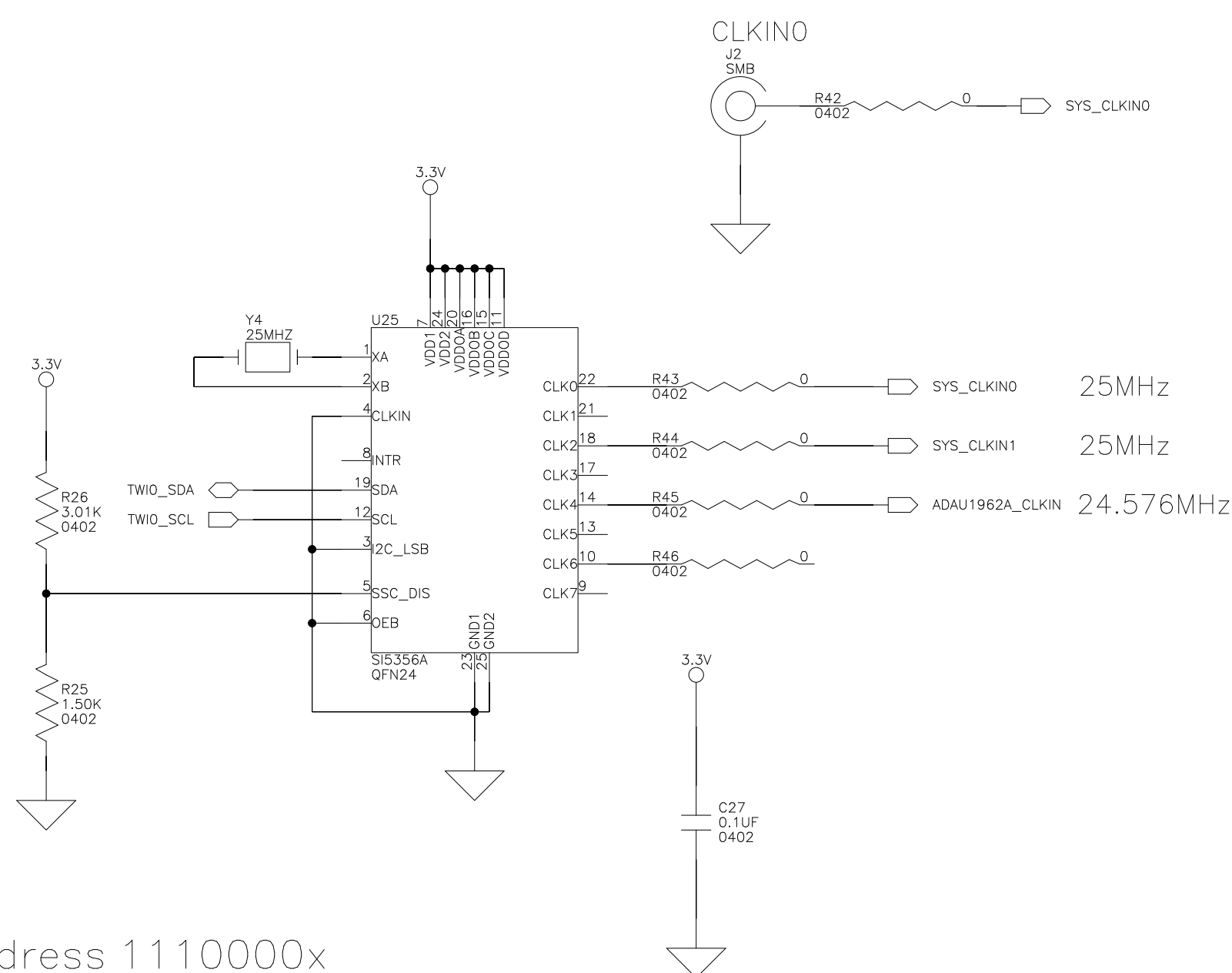
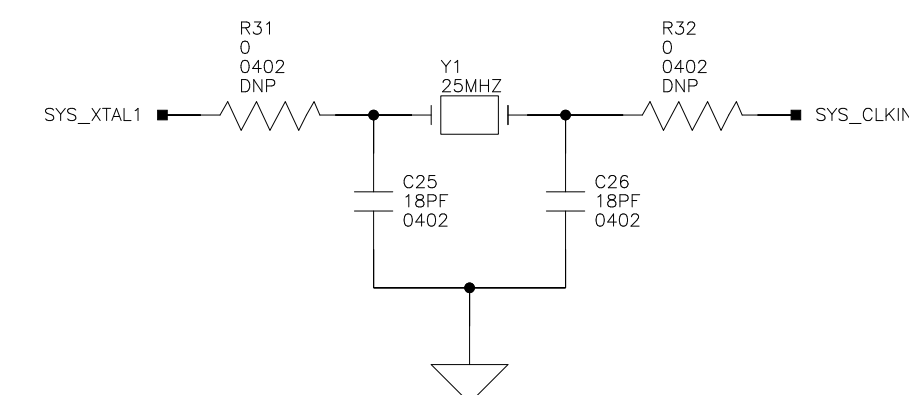


R43 should be depopulated when using the optional circuit

OPTIONAL DSP CRYSTALS

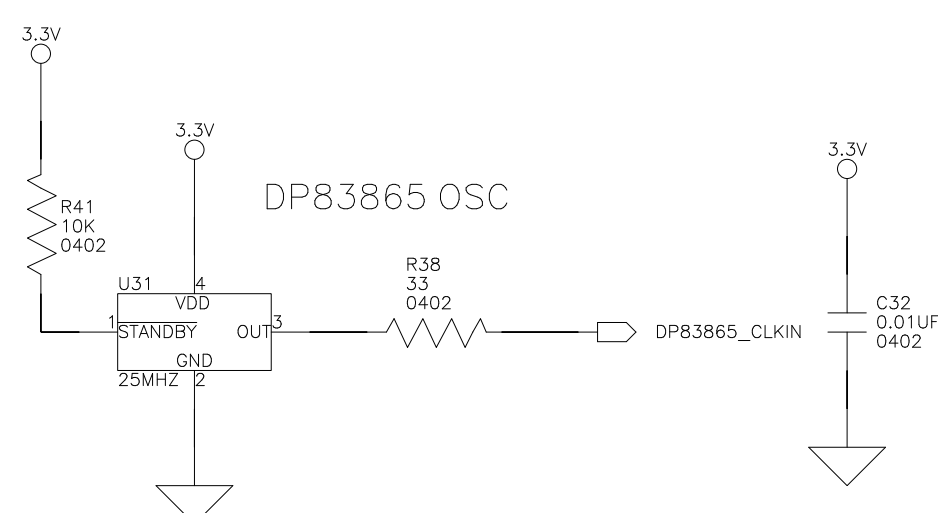
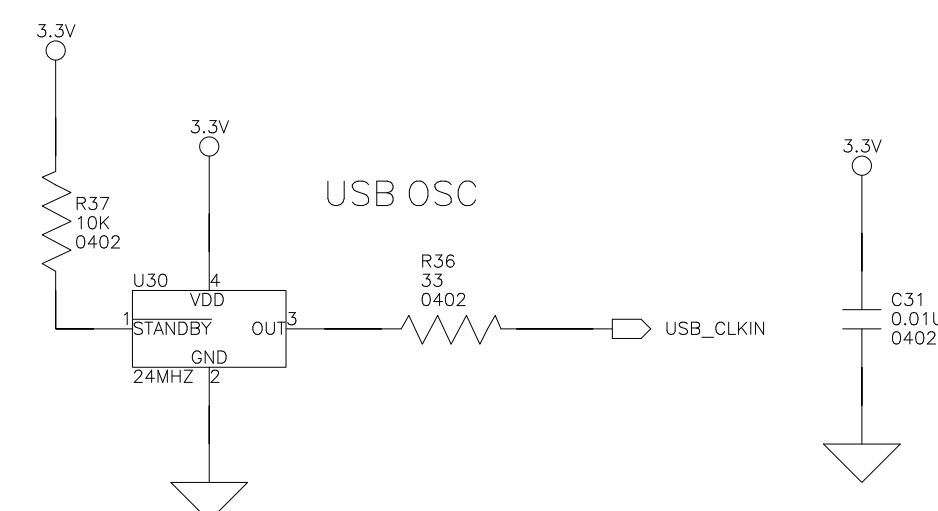


R44 should be depopulated when using the optional circuit

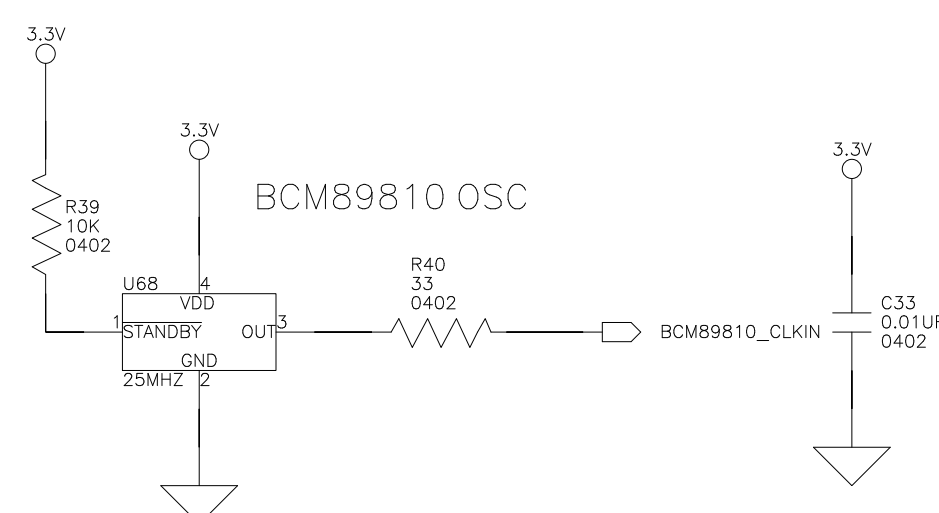


TWI Address 1110000x  
x is the R/W bit. Read – 1, Write – 0

USB OSC

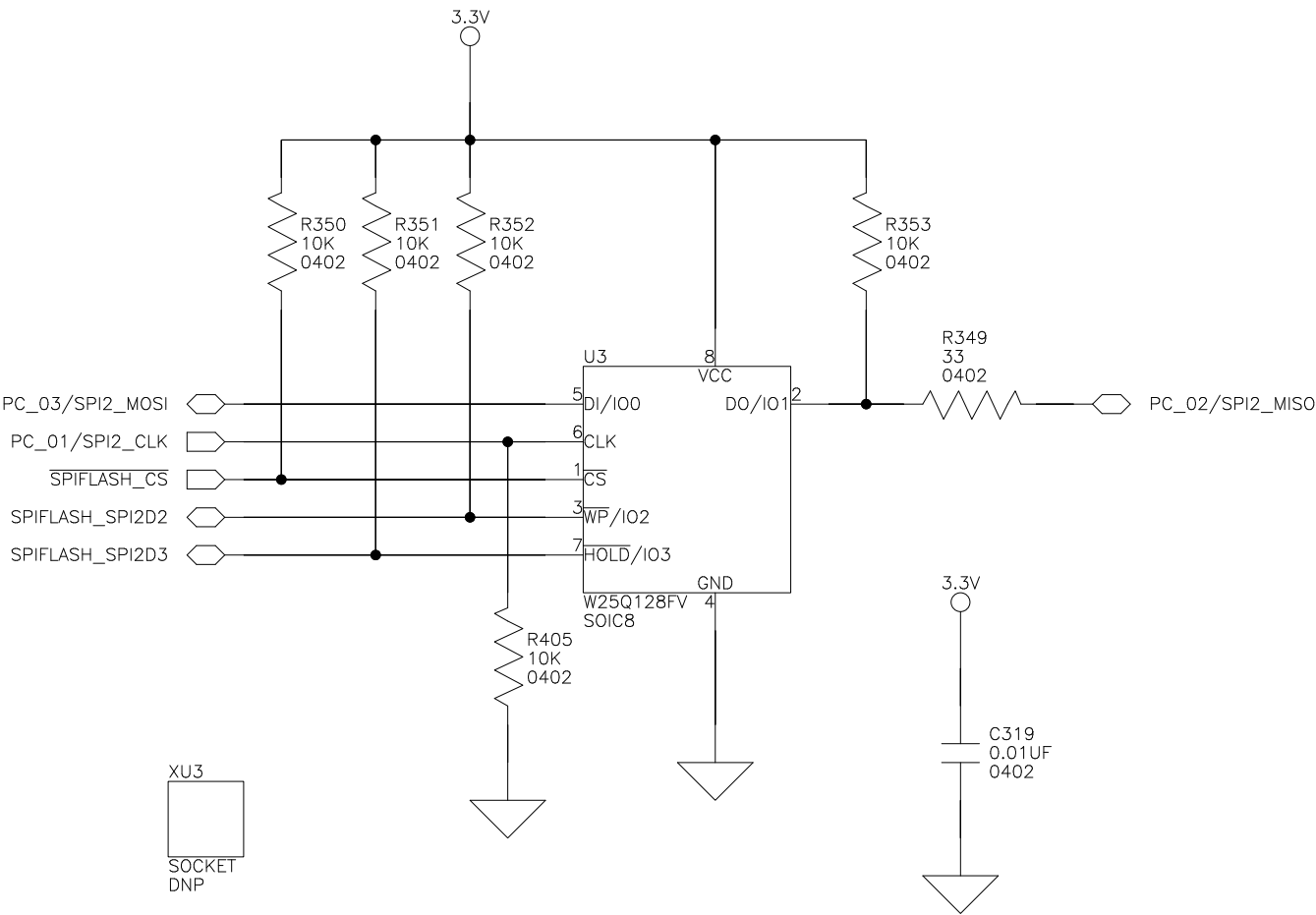


DP83865 OSC

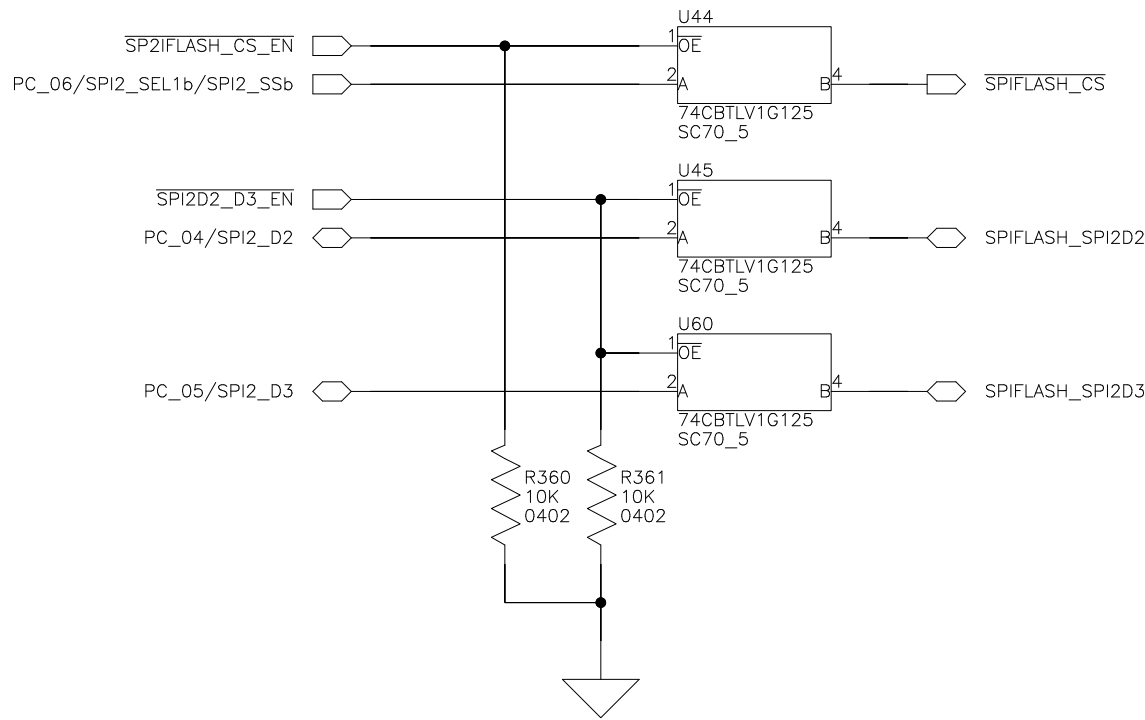
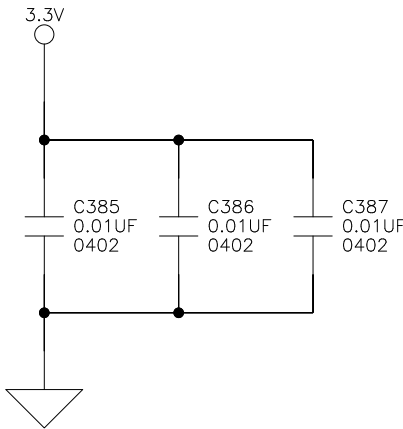
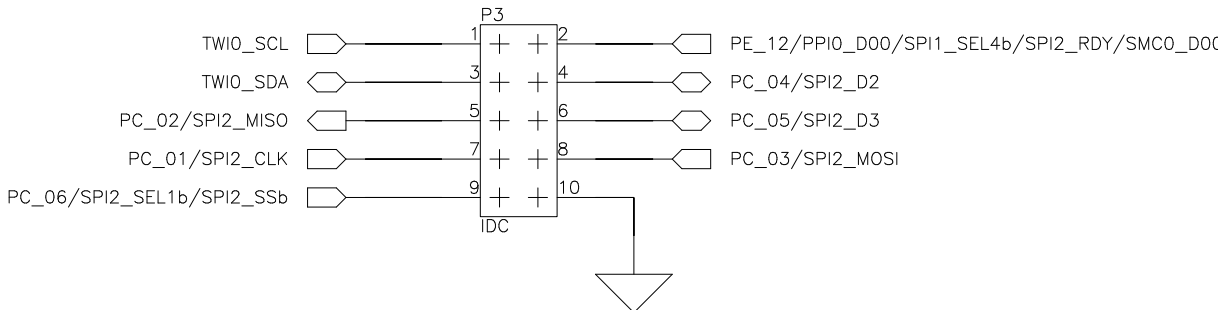
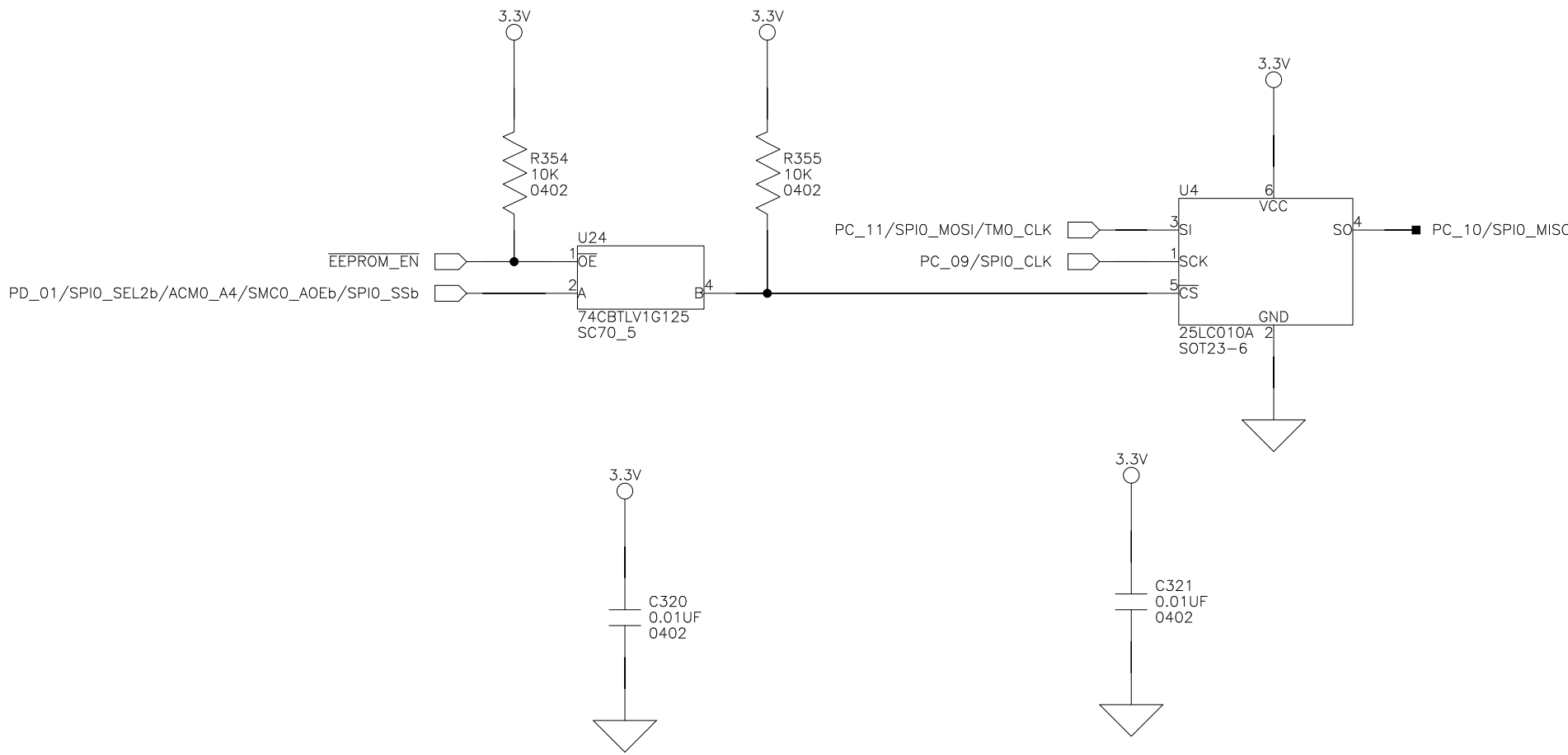



BCM89810 OSC

128Mb QUAD SPI FLASH



1Kb SPI EEPROM



		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
Title ADSP-SC584 EZ-Board SPI Flash			
Size C	Board No. A0448-2013		Rev 1.1A
Date	1/17/17		Sheet 8 of 29



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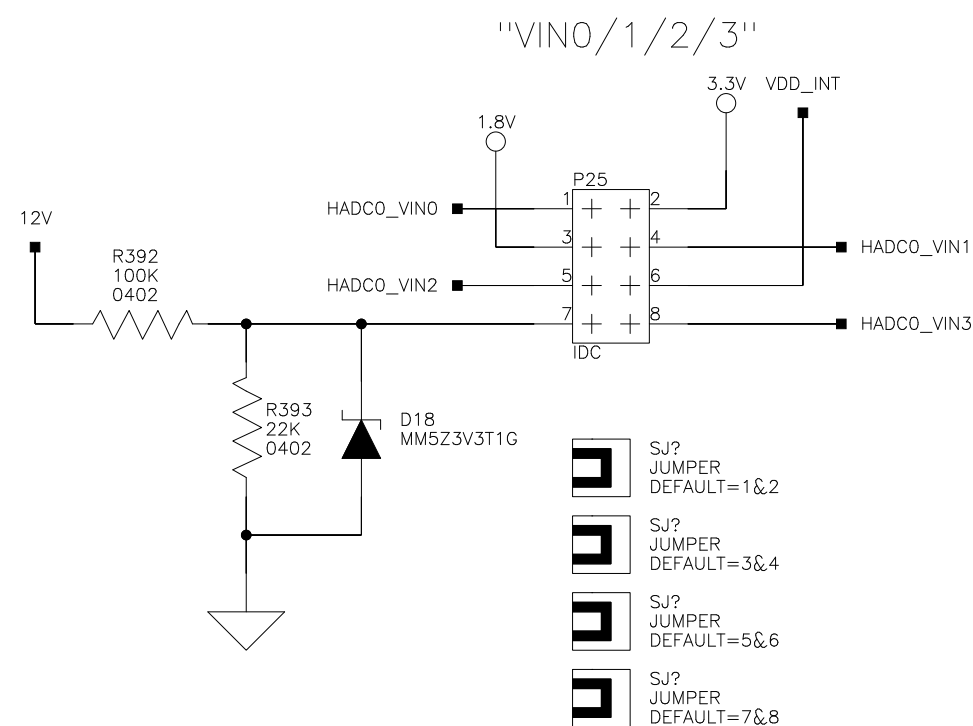
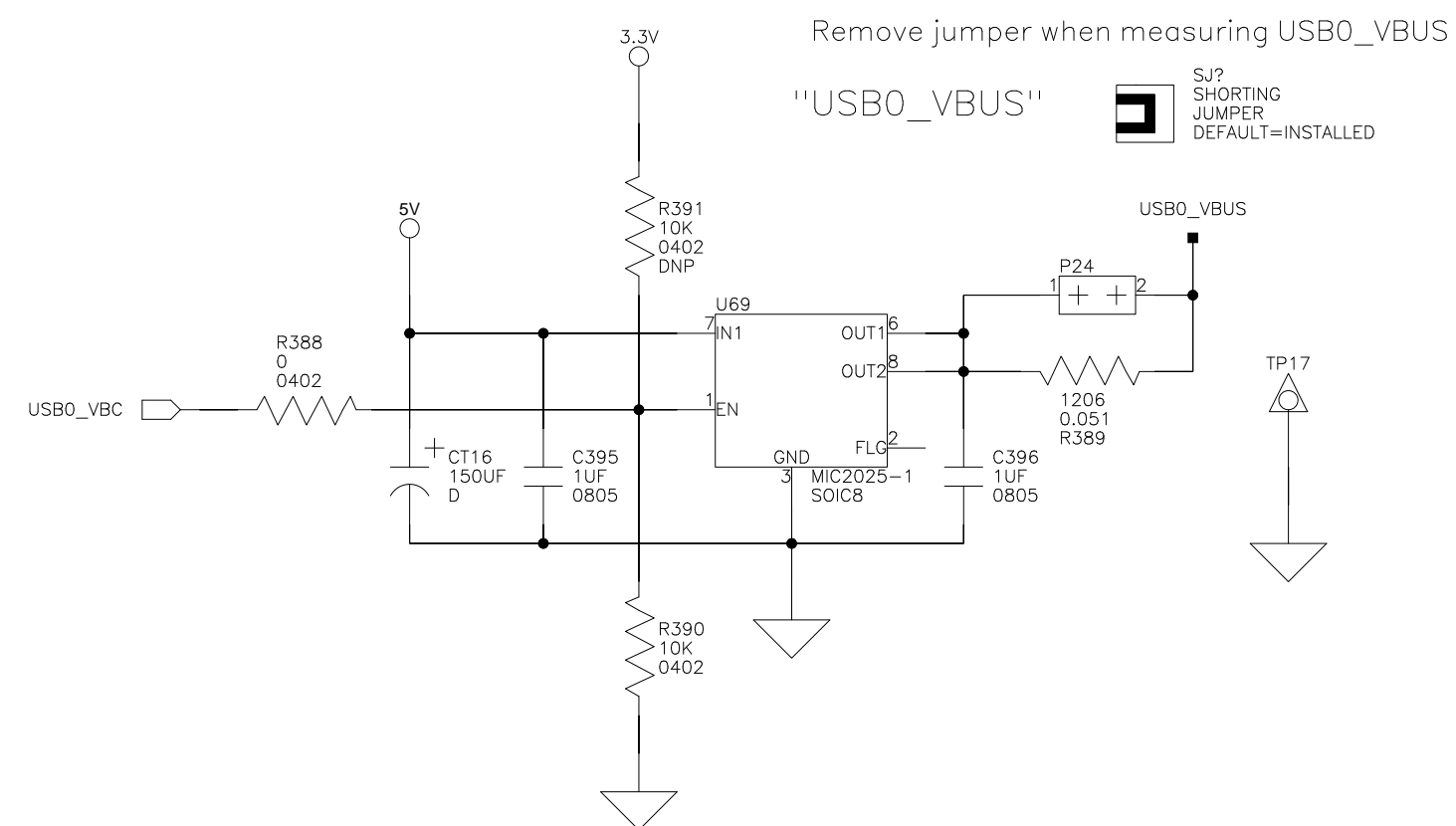
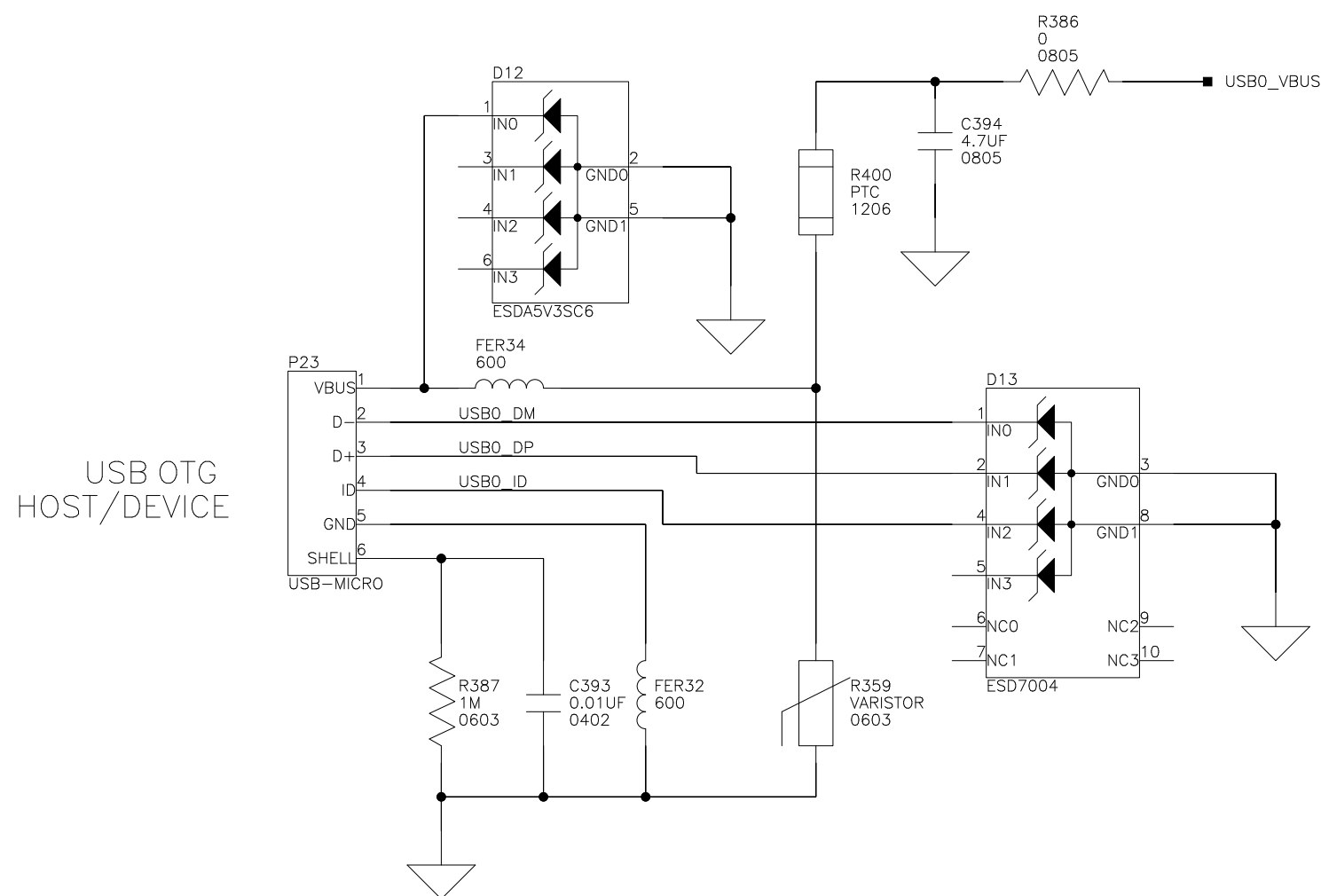
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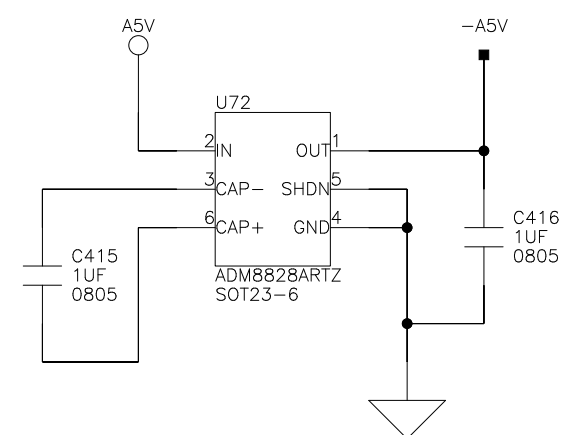
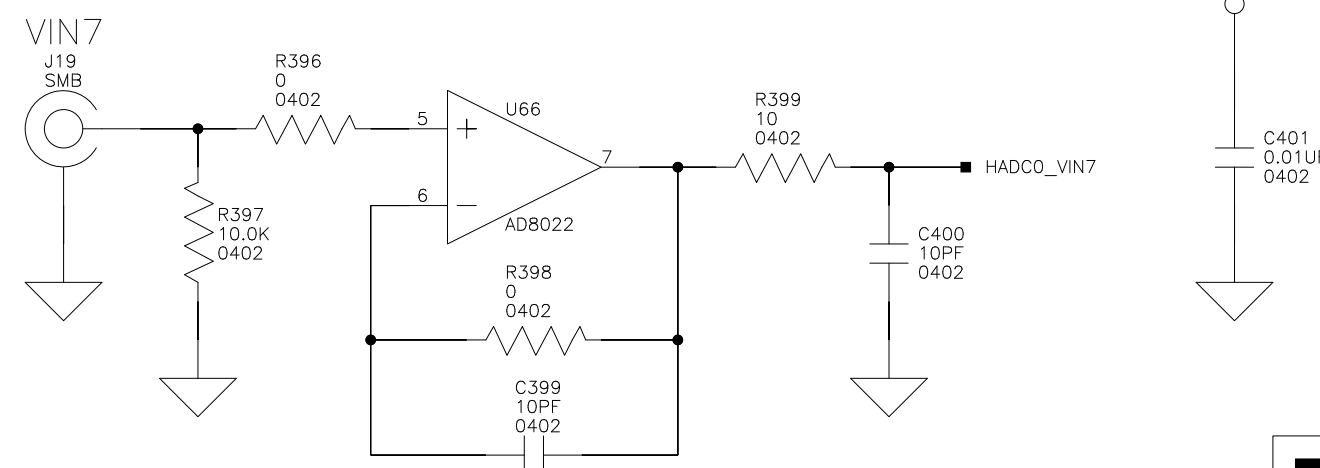
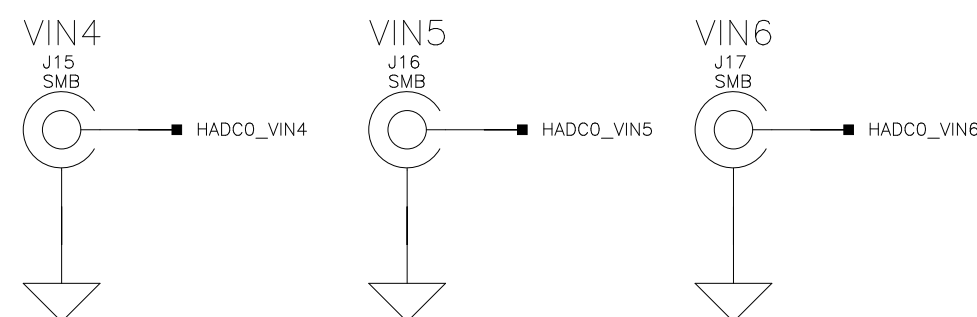
2

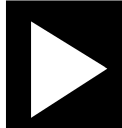
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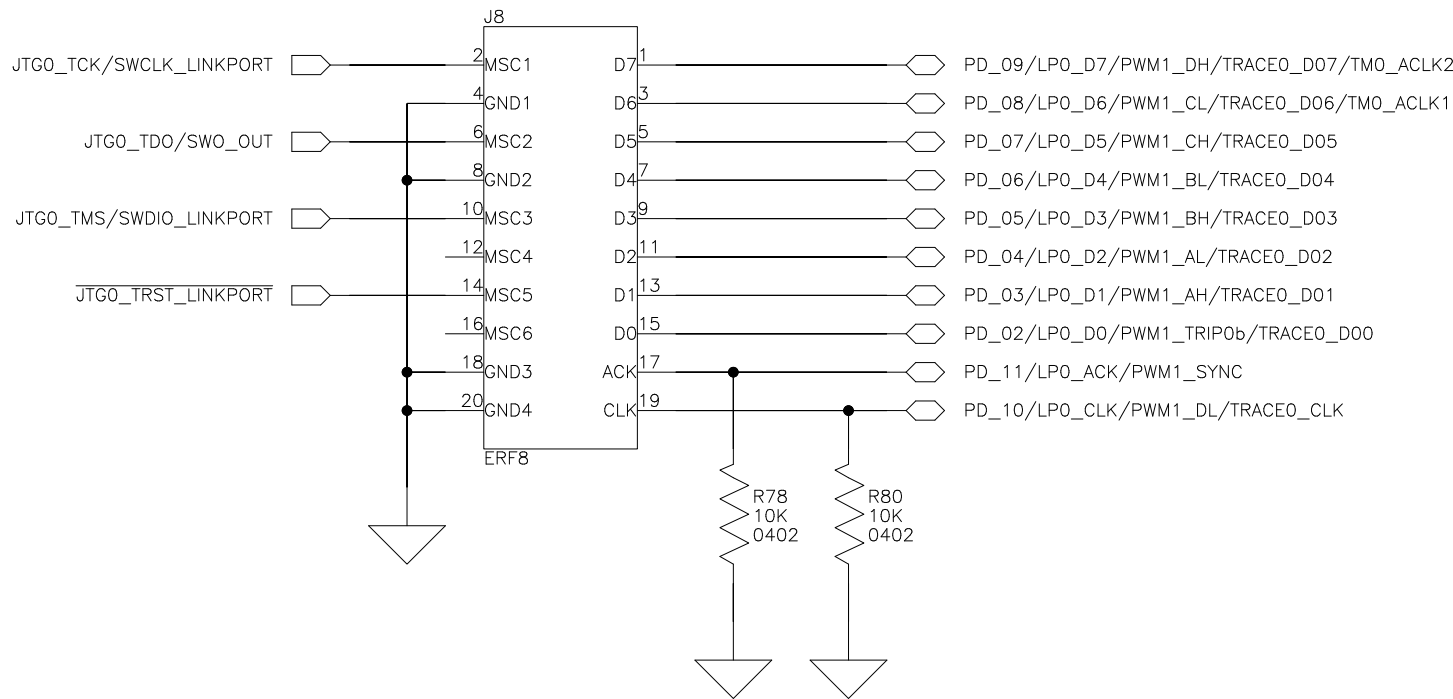
### HADC Connectors



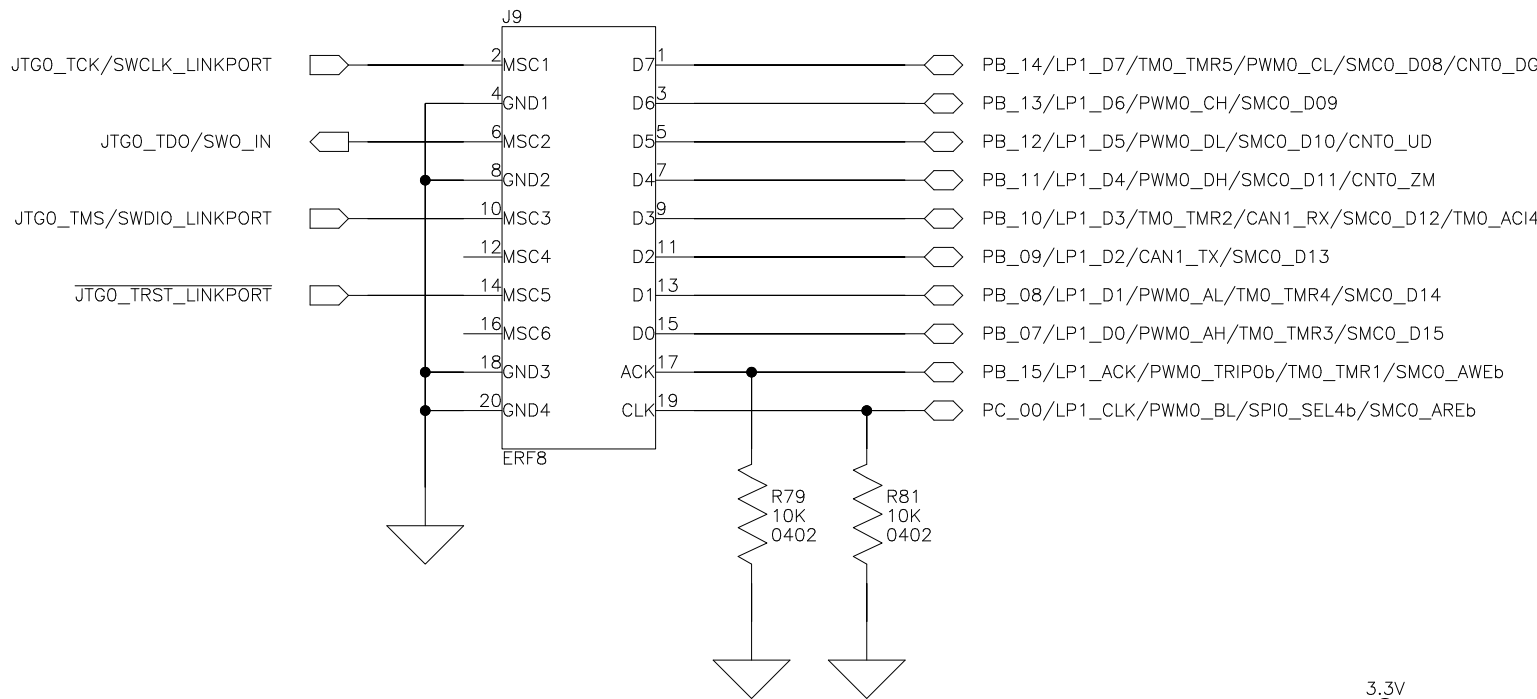
 <b>ANALOG DEVICES</b>		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
Title ADSP-SC584 EZ-Board USB/ADC			
Size C	Board No. A0448-2013		Rev 1.1A
Date	1/17/17	Sheet 10	of 29



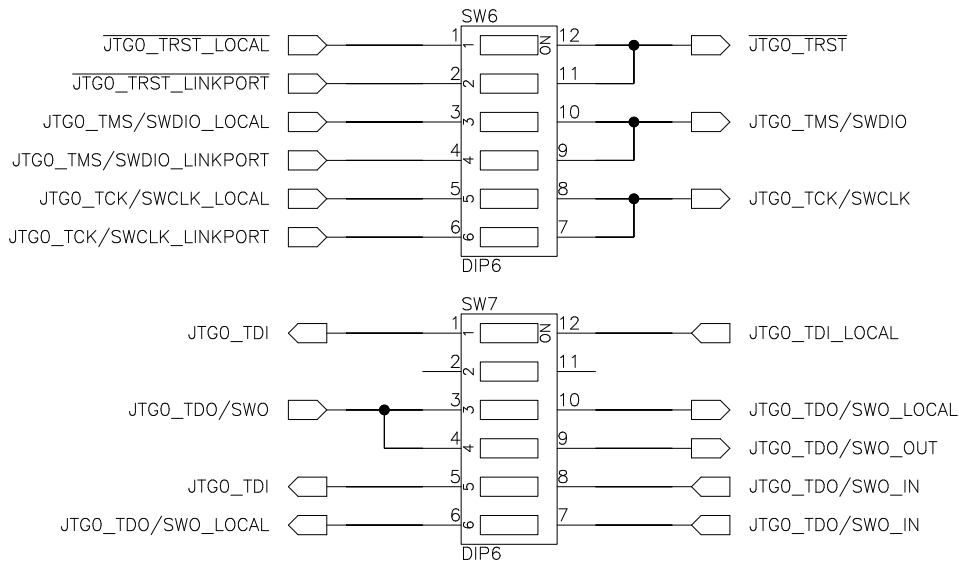
LINK PORT 0 / JTAG OUT



LINK PORT 1 / JTAG IN



JTAG SWITCHES

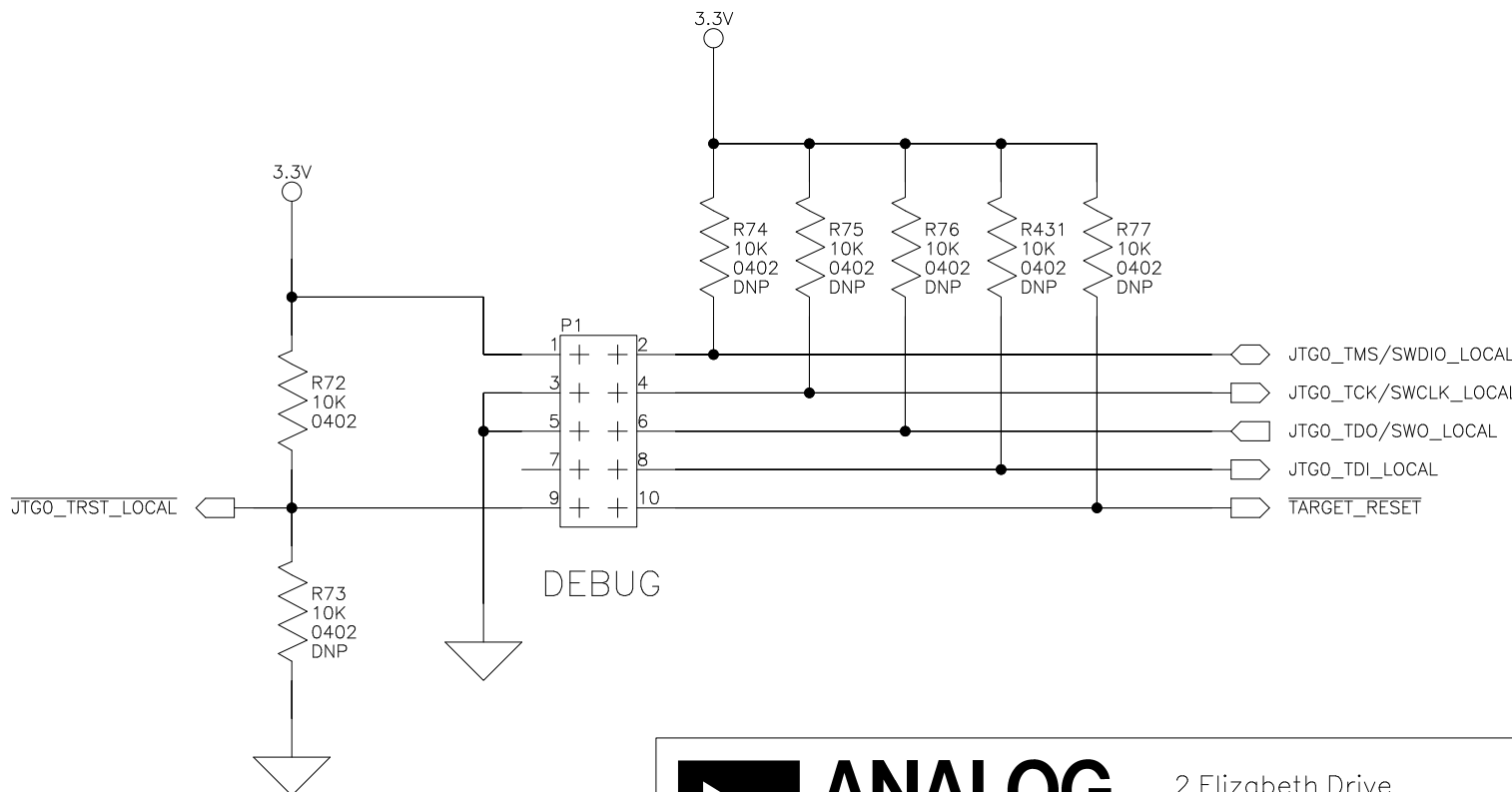
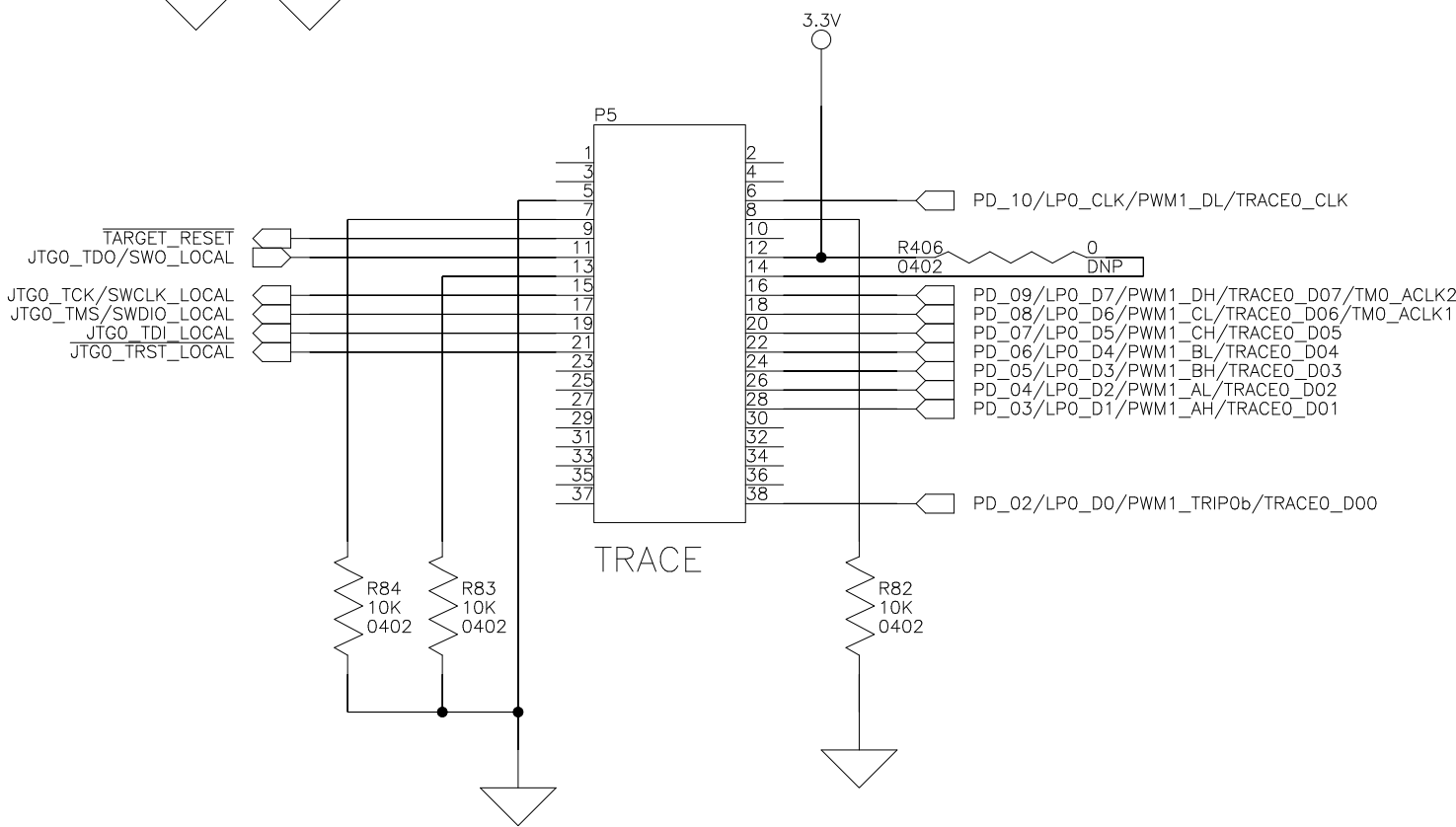



SINGLE PROCESSOR JTAG SETTINGS  
EMULATOR OR DEBUG AGENT (DEFAULT)

BOARD ATTACHED TO EMULATOR	
SWITCH	
SW?.1	ON
SW?.2	OFF
SW?.3	ON
SW?.4	OFF
SW?.5	ON
SW?.6	OFF
SW?.1	ON
SW?.2	OFF
SW?.3	ON
SW?.4	OFF
SW?.5	OFF
SW?.6	OFF

MULTI PROCESSOR JTAG SETTINGS  
USING TWO OR MORE EZ-BOARDS (LINK PORT CABLES  
REQUIRED FOR MORE THAN TWO BOARDS)

BOARD ATTACHED TO EMULATOR		BOARD(S) NOT ATTACHED TO EMULATOR
SWITCH		
SW?.1	ON	OFF
SW?.2	ON	ON
SW?.3	ON	OFF
SW?.4	ON	ON
SW?.5	ON	OFF
SW?.6	ON	ON
SW?.1	ON	OFF
SW?.2	OFF	OFF
SW?.3	OFF	OFF
SW?.4	ON	ON
SW?.5	OFF	ON
SW?.6	ON	OFF





2 Elizabeth Drive  
Chelmsford, MA 01824  
PH: 1-800-ANALOGD

Title ADSP-SC584 EZ-Board Link Port/Debug		
Size C	Board No. A0448-2013	Rev 1.1A
Date	1/17/17	Sheet 12 of 29







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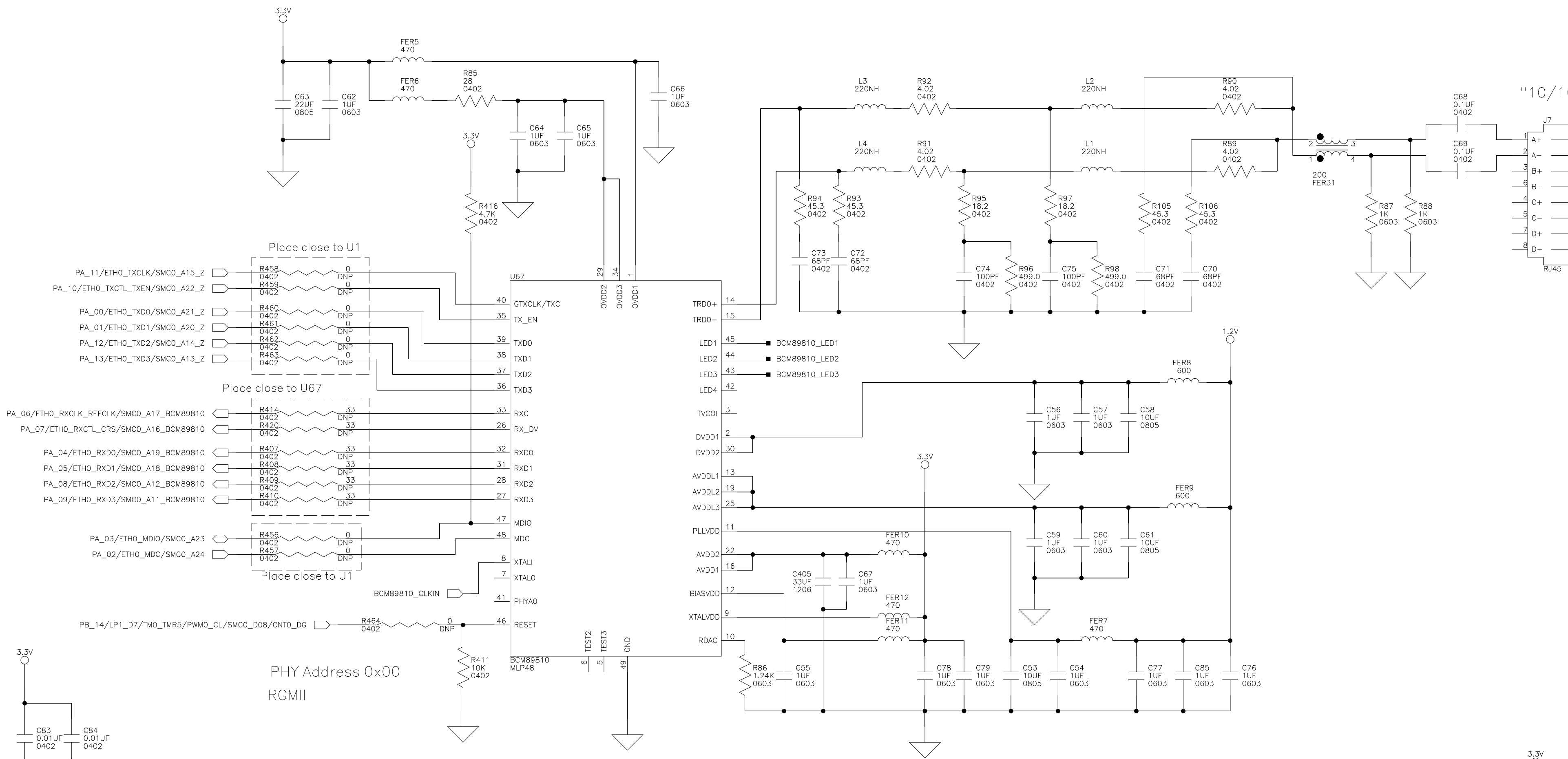
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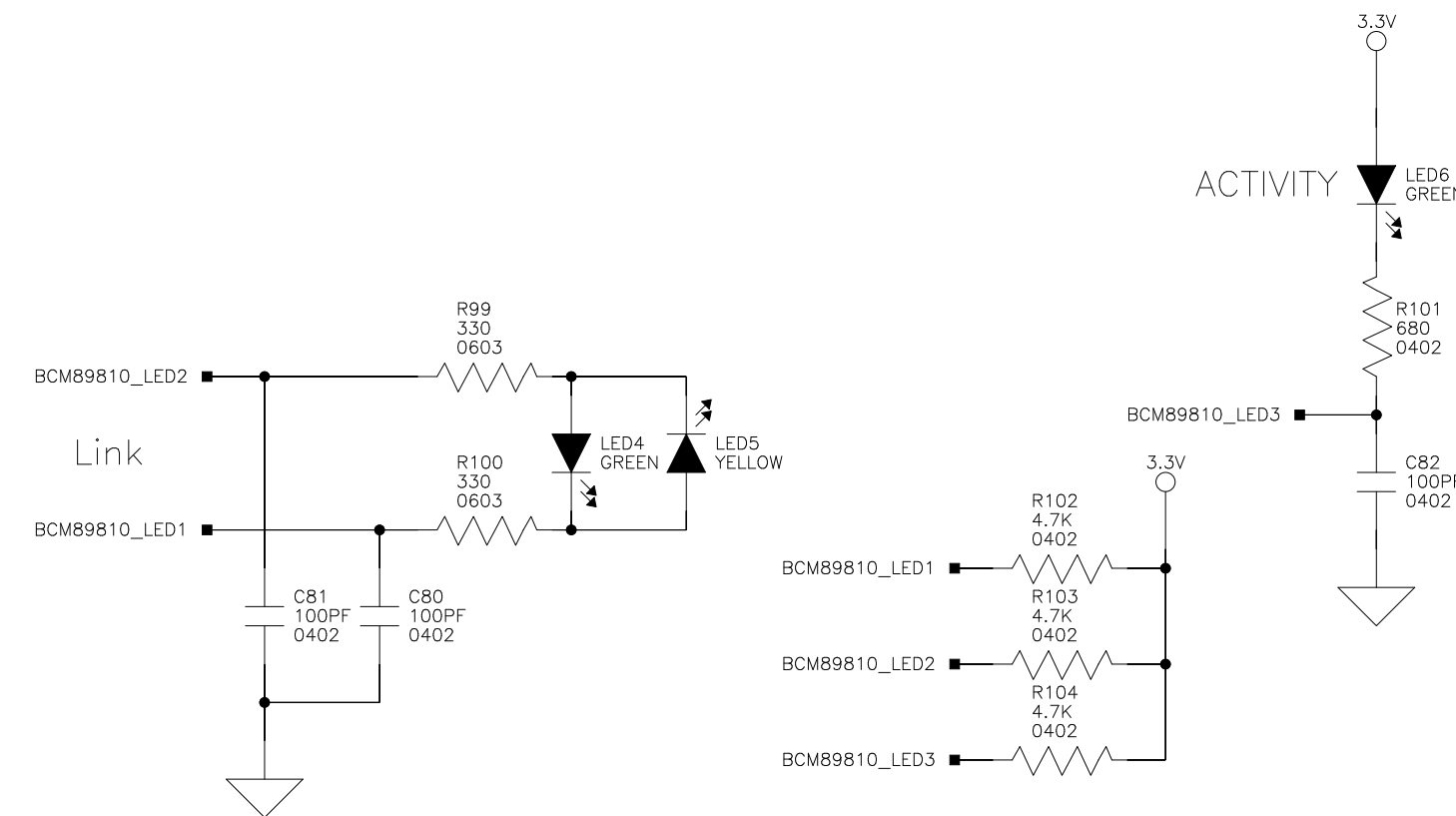
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Set bit 10 of register 0x00 to 1  
to put into isolate mode.

Set bit 5 of register 0x18 (Shadow 010)  
to 1 to put into super isolate mode.





2 Elizabeth Drive  
Chelmsford, MA 01824  
PH: 1-800-ANALOGD

Title ADSP-SC584 EZ-Board BCM89810		
Size C	Board No. A0448-2013	Rev 1.1A
Date	1/17/17	Sheet 15 of 29

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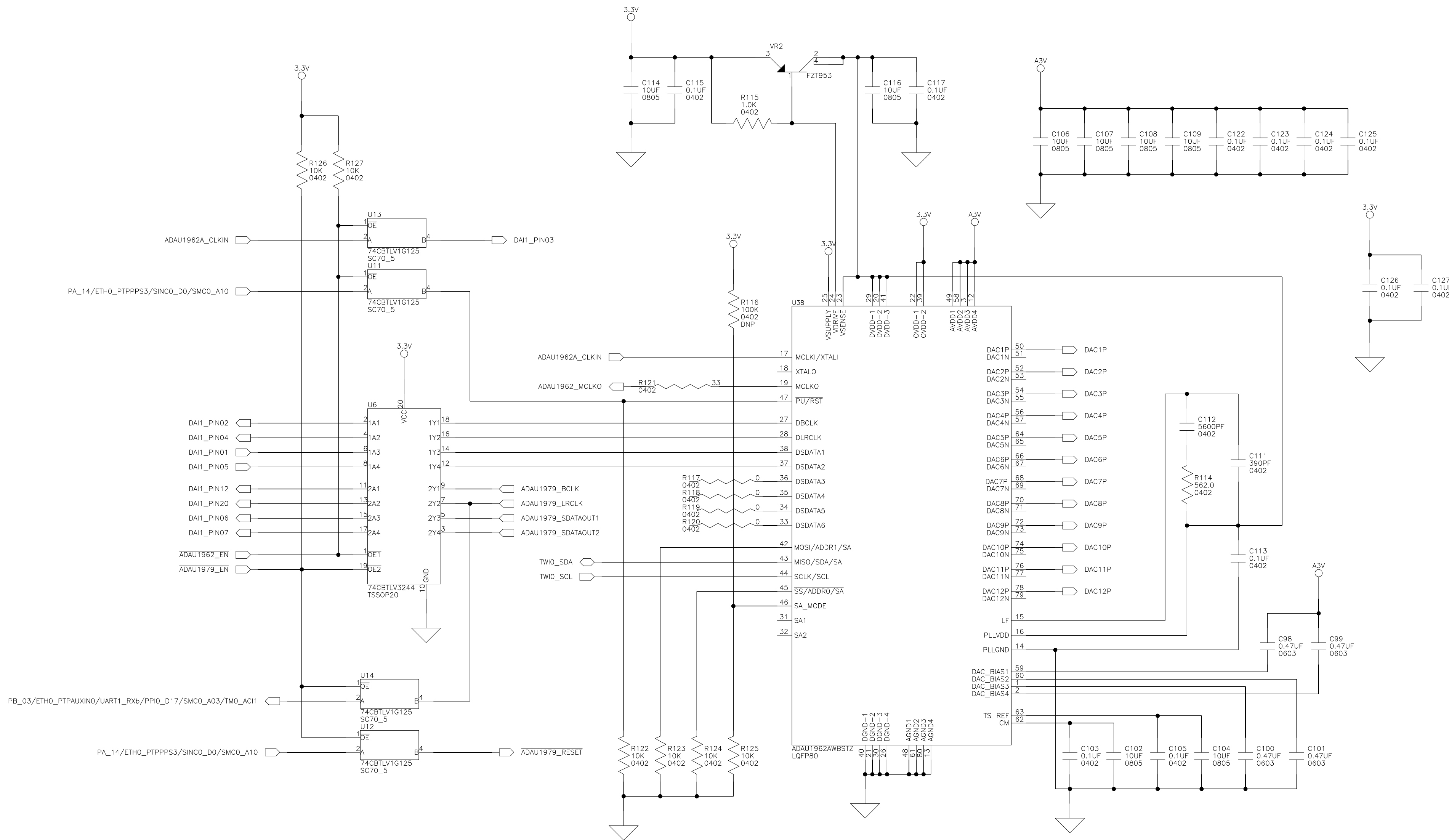
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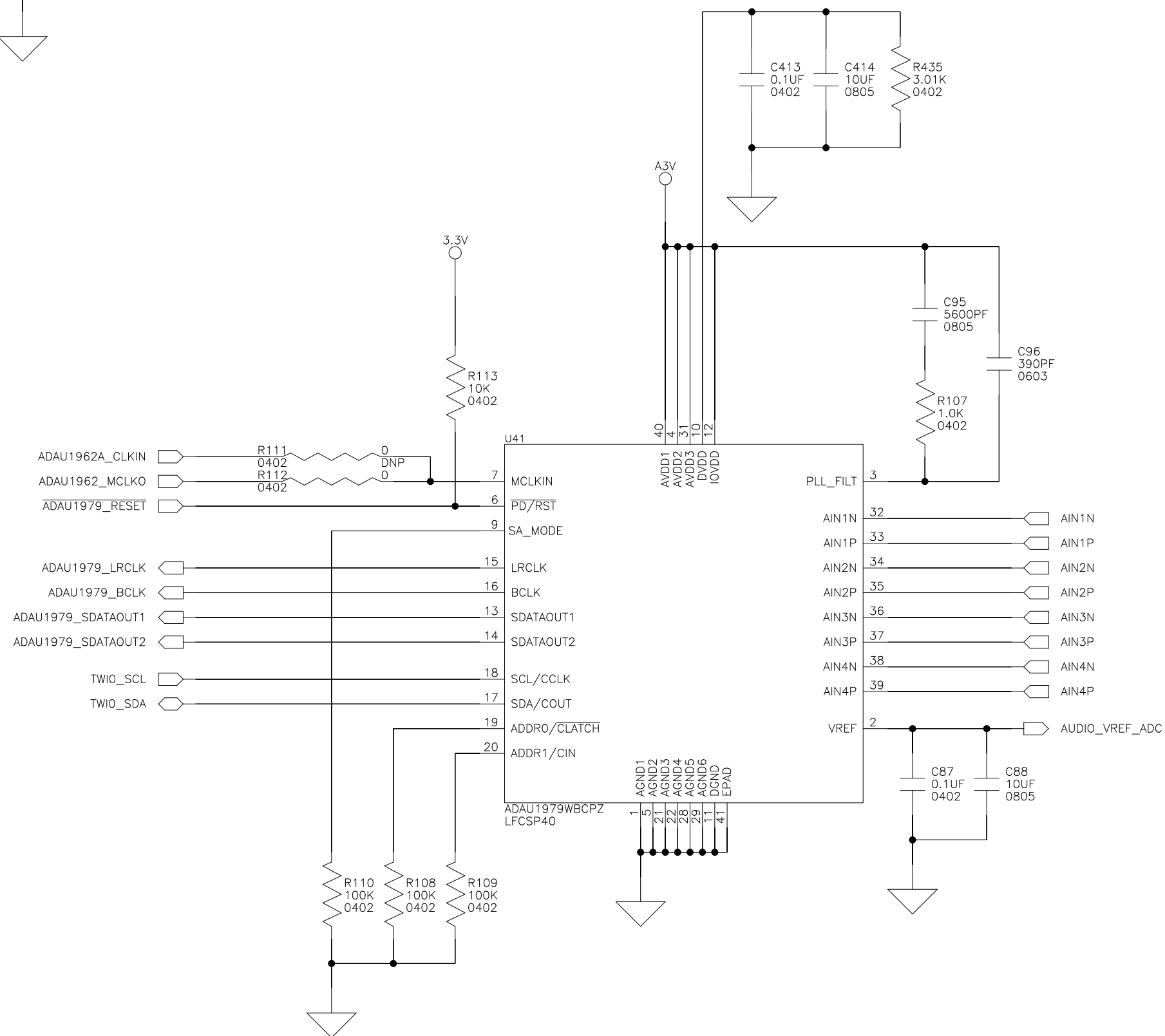
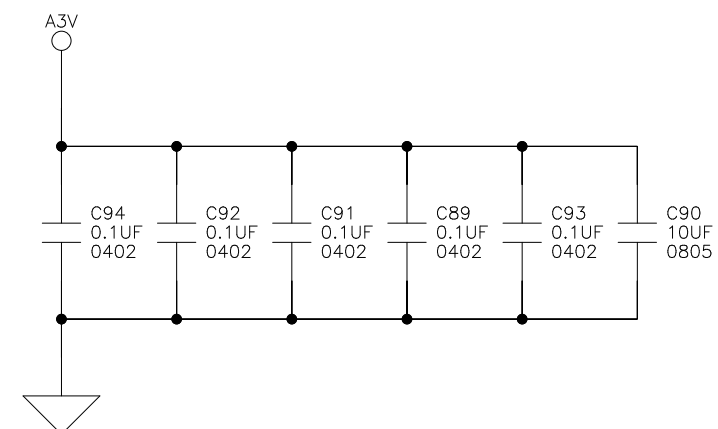
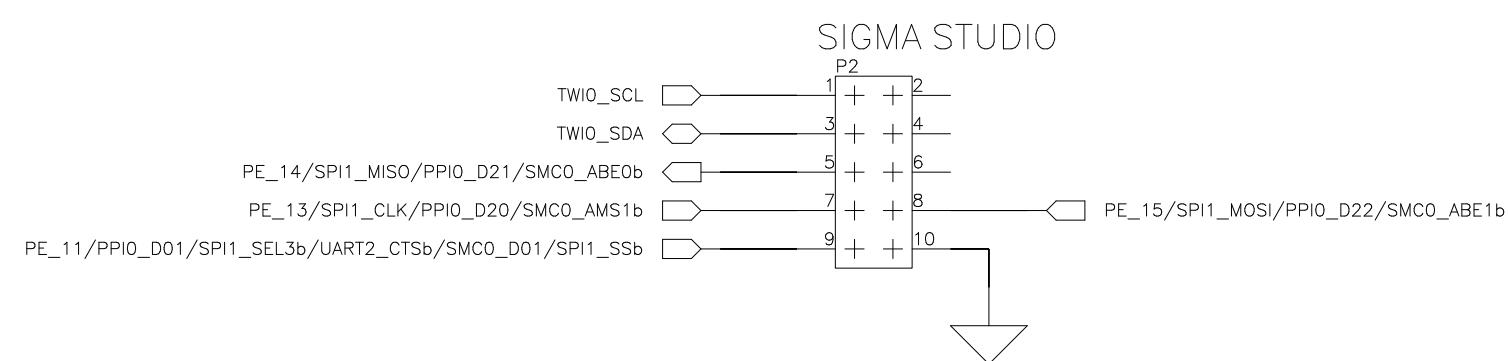
3

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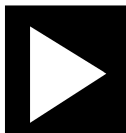
Check for extender conflict  
TWI Address 0000100x  
x is the R/W bit. Read – 1, Write – 0

		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
Title ADSP-SC584 EZ-Board ADAU1962A			
Size C	Board No. A0448-2013		Rev 1.1A
Date	1/17/17		Sheet 16 of 29



Check for extender conflict

TWI Address 0010001x  
x is the R/W bit. Read – 1, Write – 0

		<b>ANALOG DEVICES</b>		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
Title ADSP-SC584 EZ-Board ADAU1979					
Size C	Board No. A0448-2013				Rev 1.1A
Date 1/17/17		Sheet 17 of 29			

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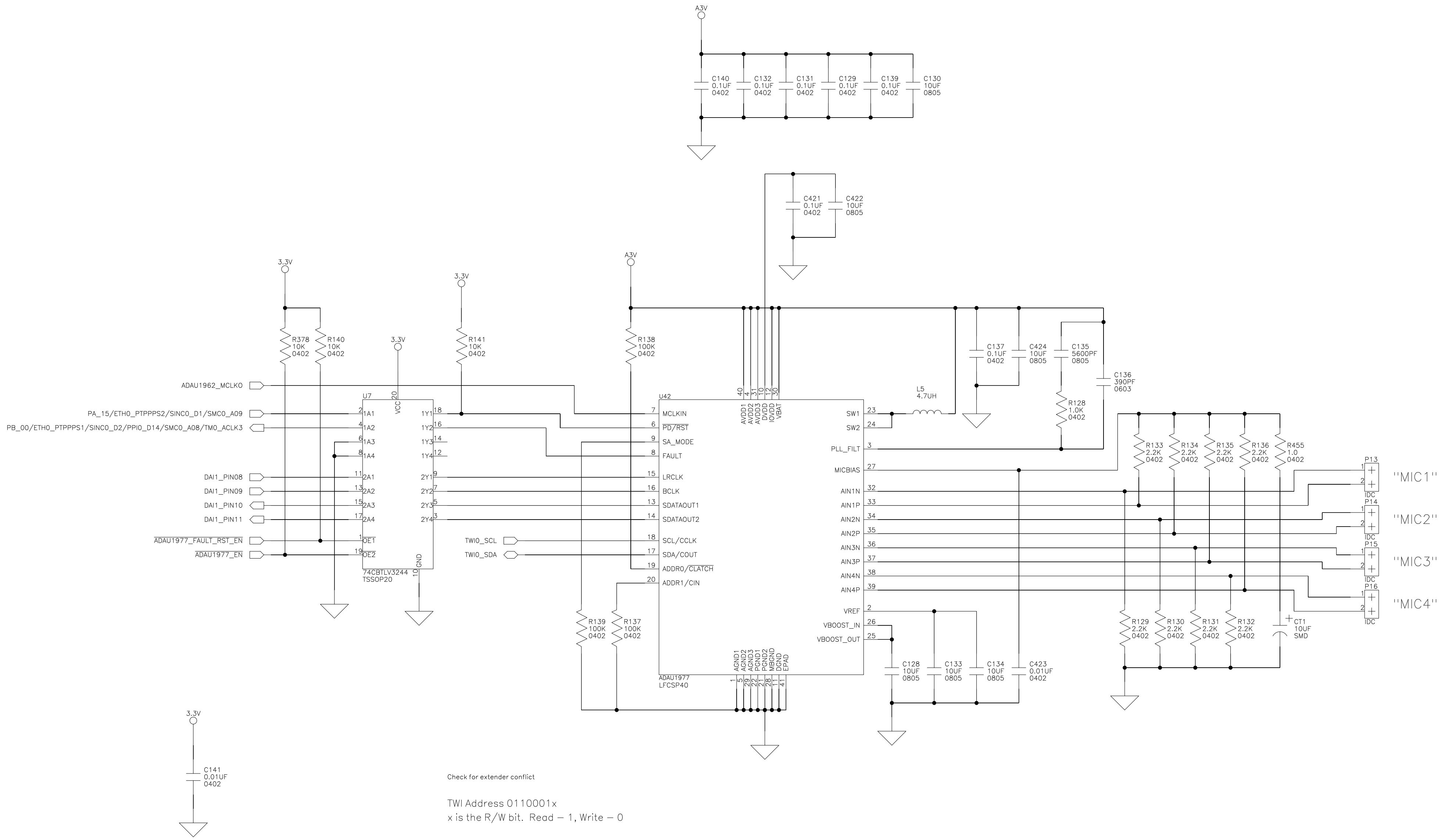
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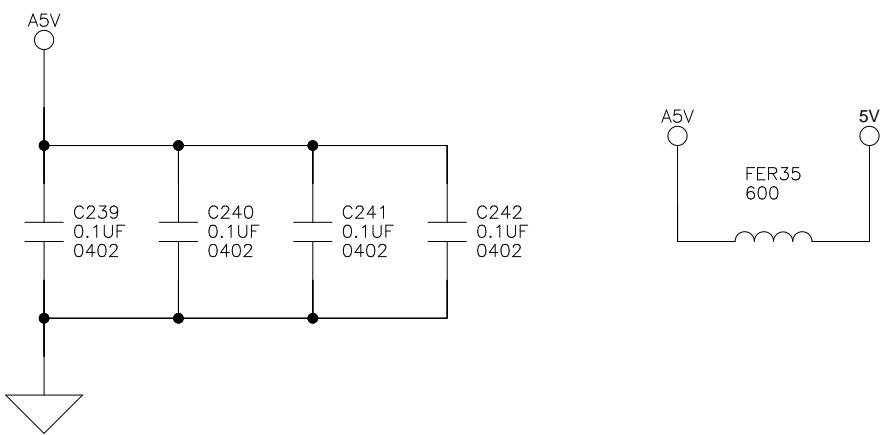
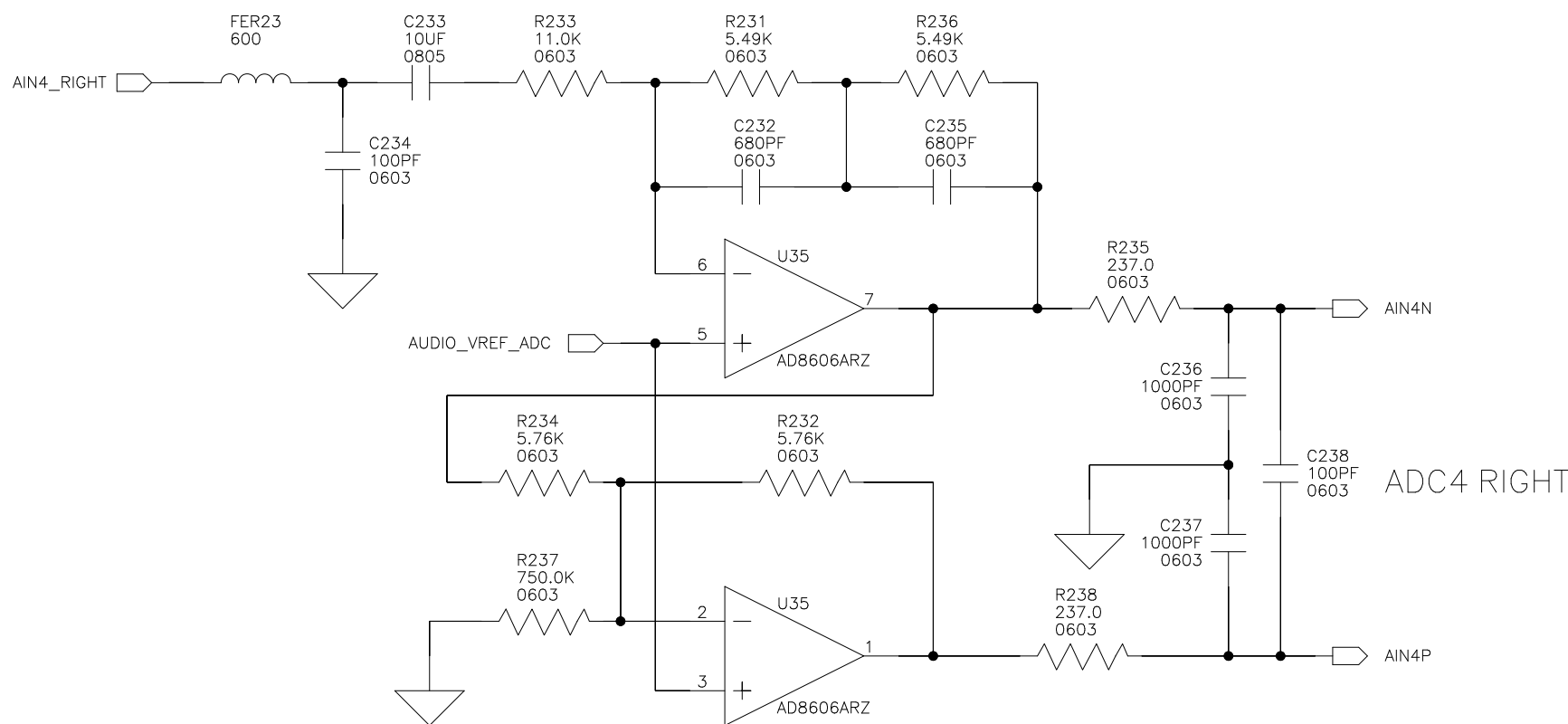
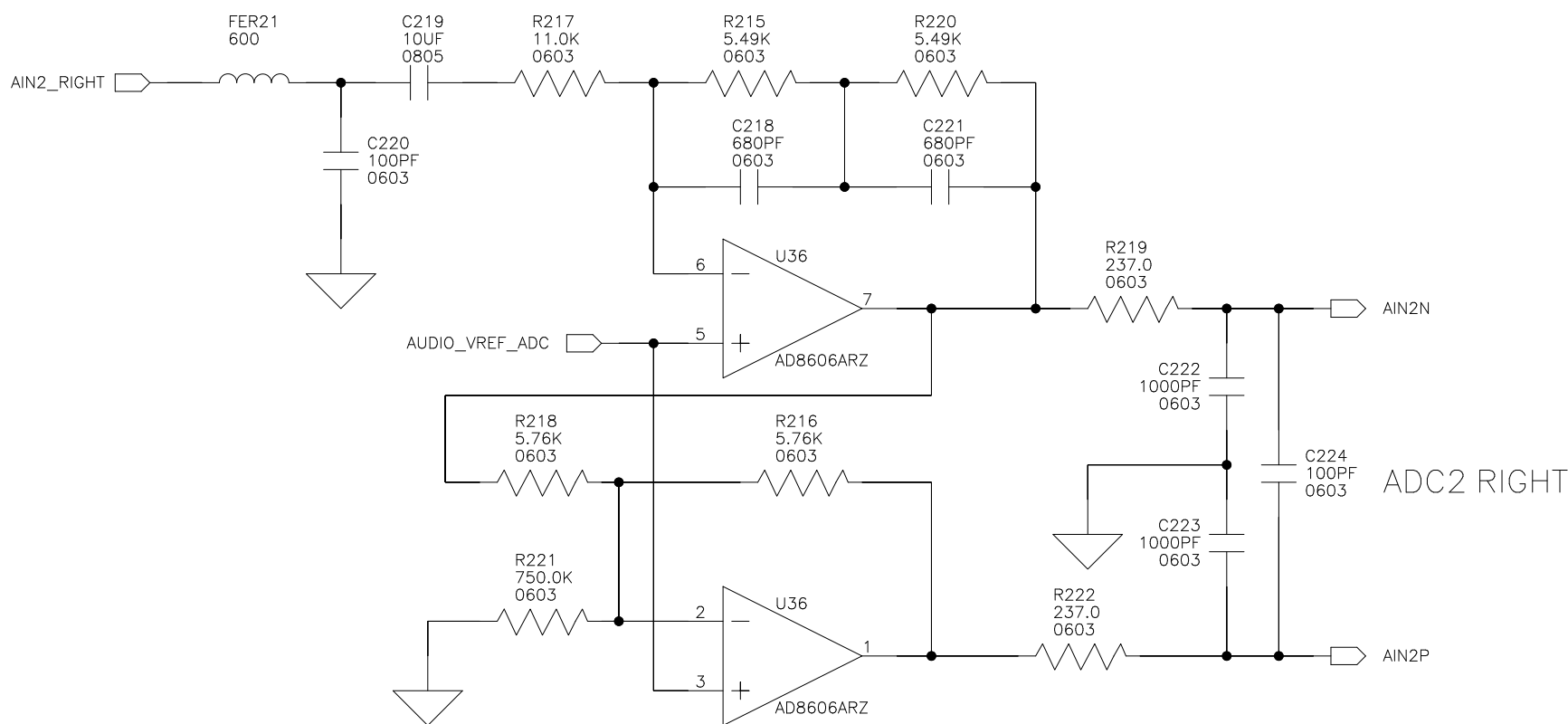
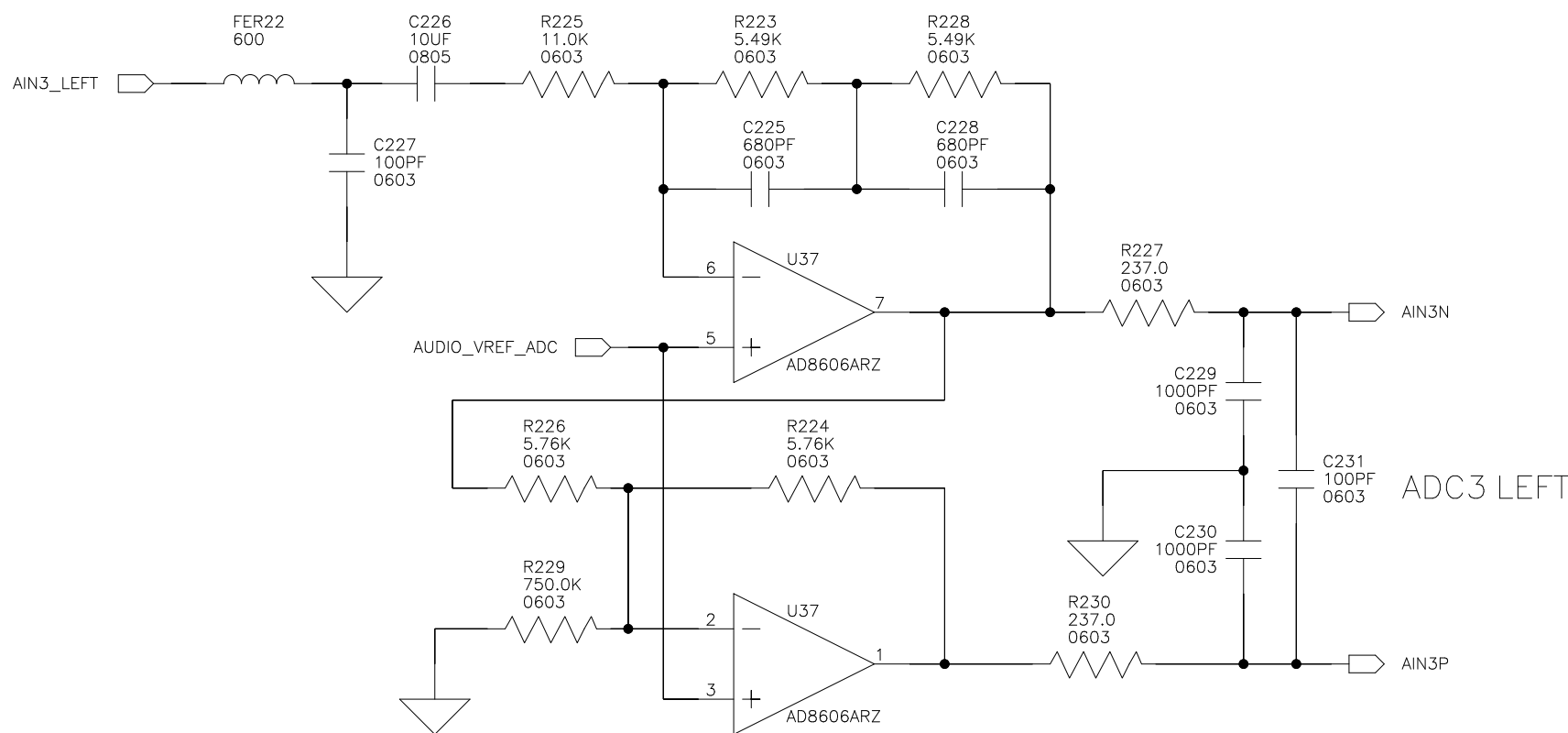
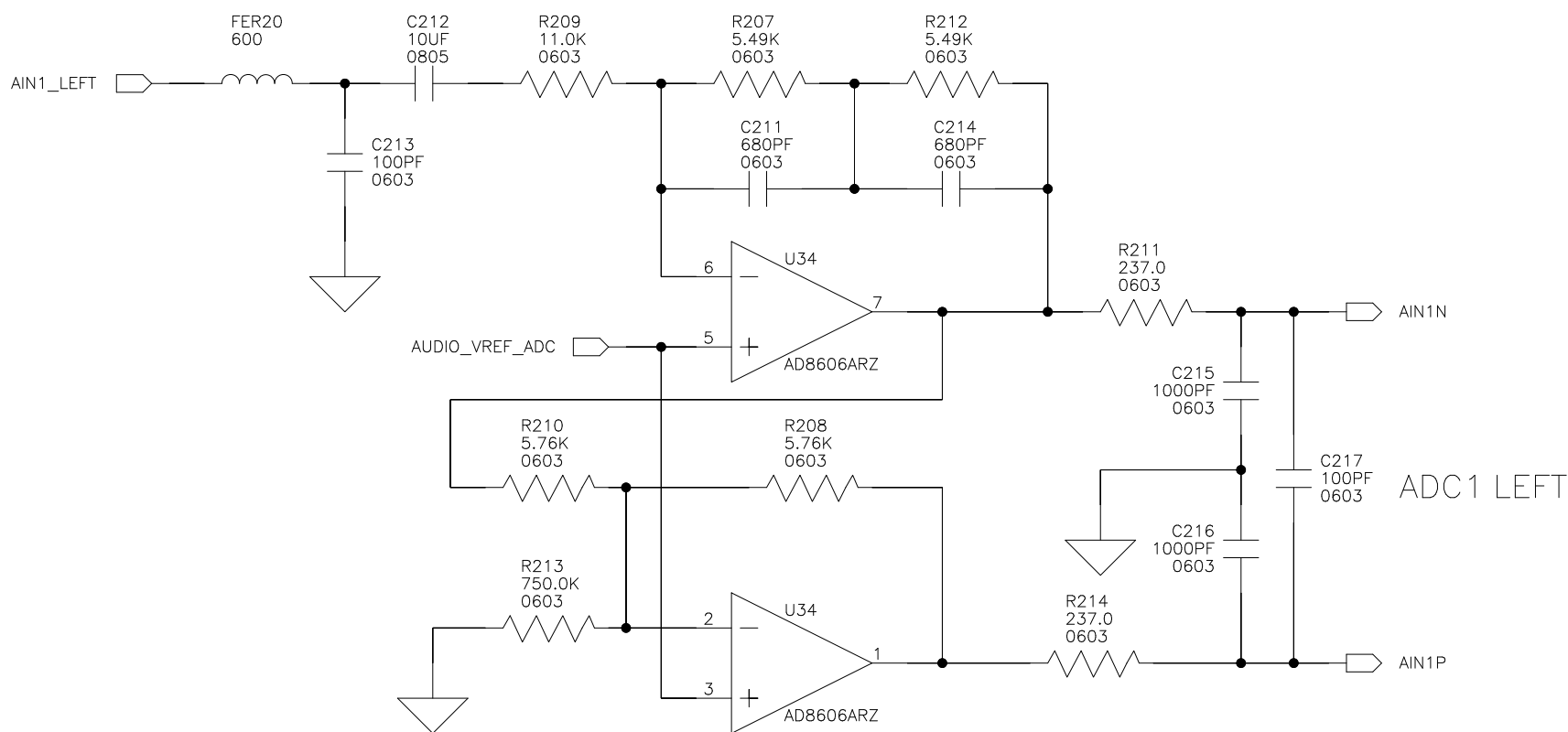
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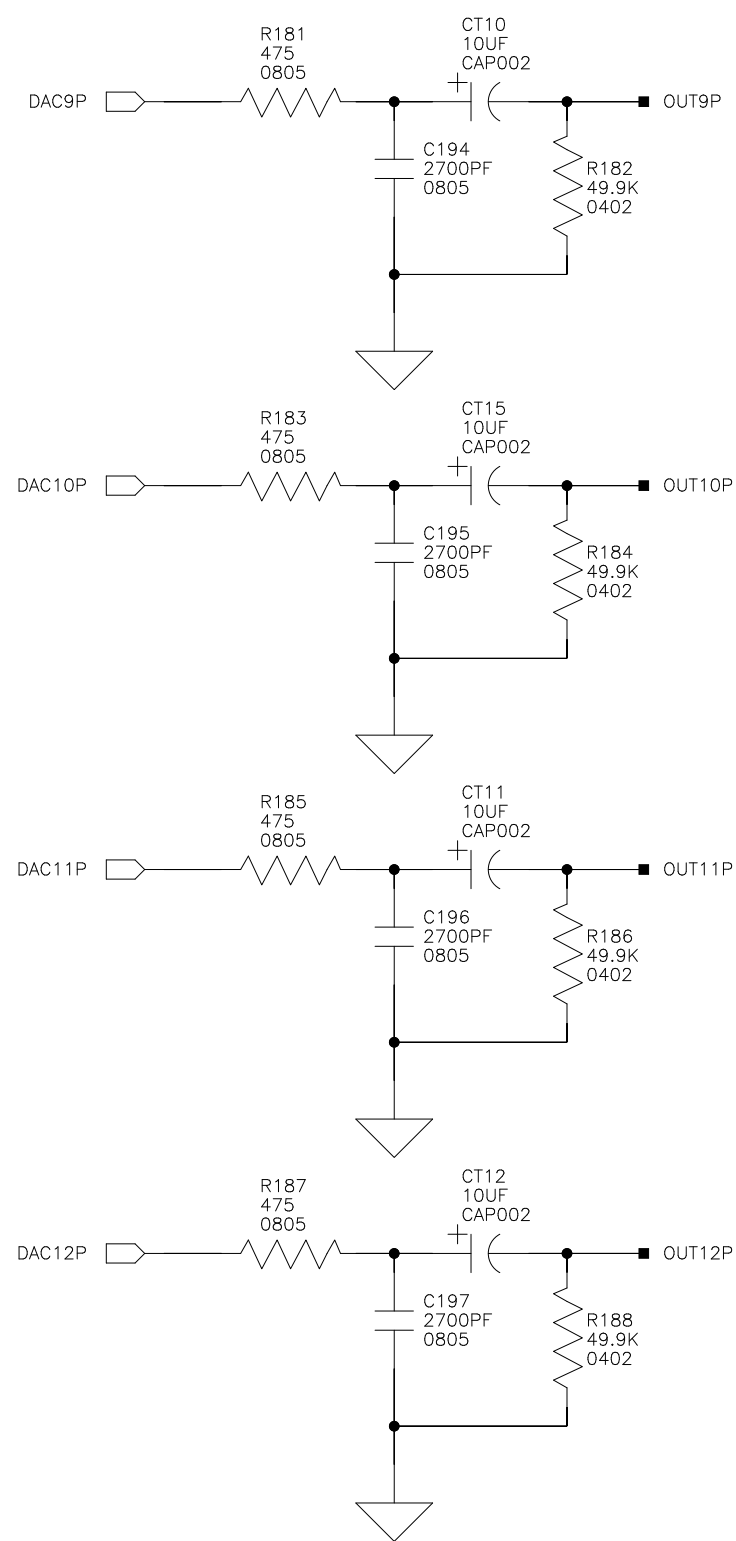
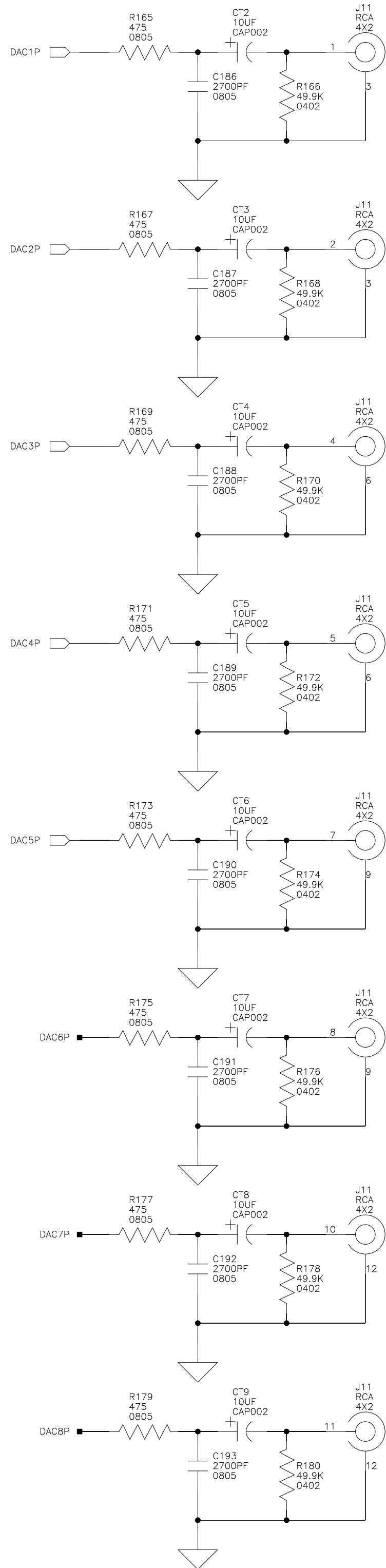


2 Elizabeth Drive  
Chelmsford, MA 01824  
PH: 1-800-ANALOGD

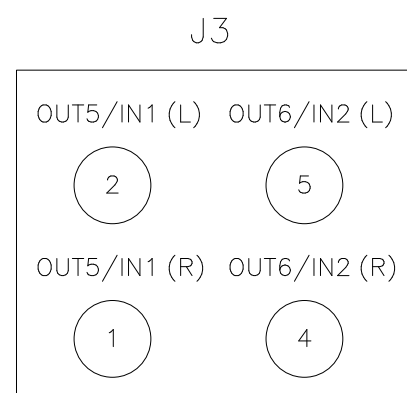
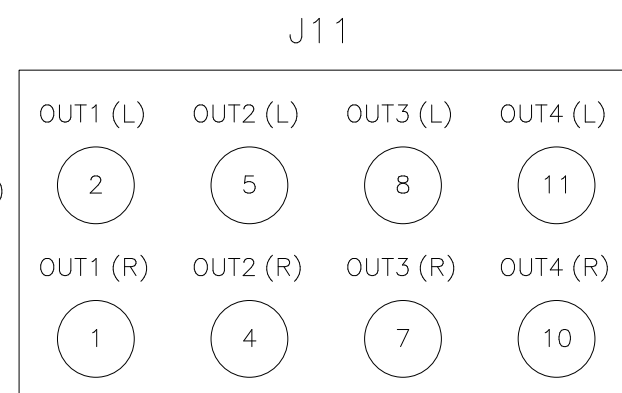
Title ADSP-SC584 EZ-Board  
Audio Input

Size C	Board No. A0448-2013	Rev 1.1A
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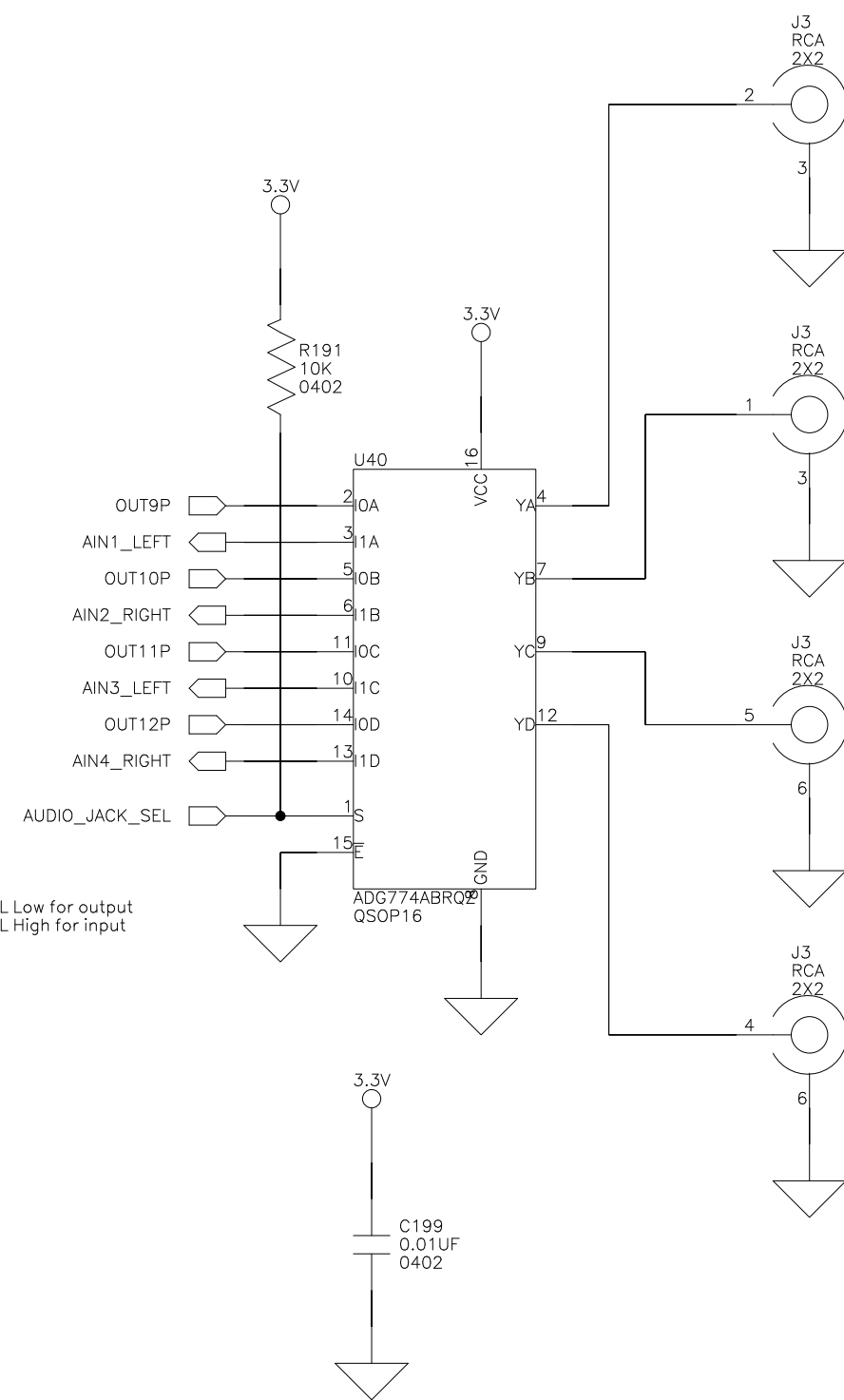
Date 1/17/17	Sheet 19 of 29
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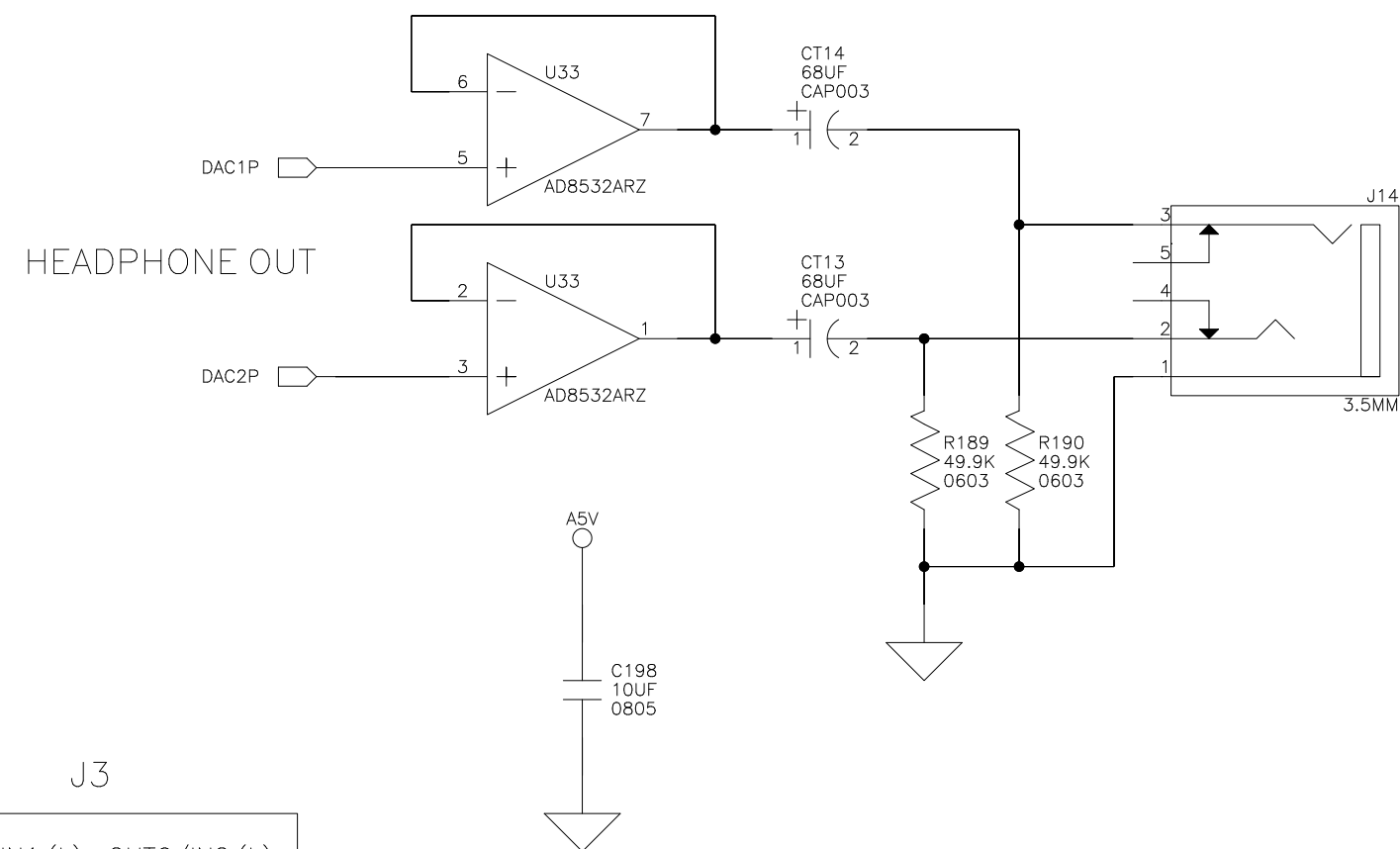
"INPUT"



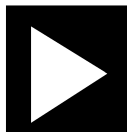
NOTE: THE NUMBER INSIDE EACH OF THE CIRCLES IS THE ACTUAL PIN NUMBER FOR THE RESPECTIVE CONNECTOR.



"INPUT/OUTPUT"



"HEADPHONES"

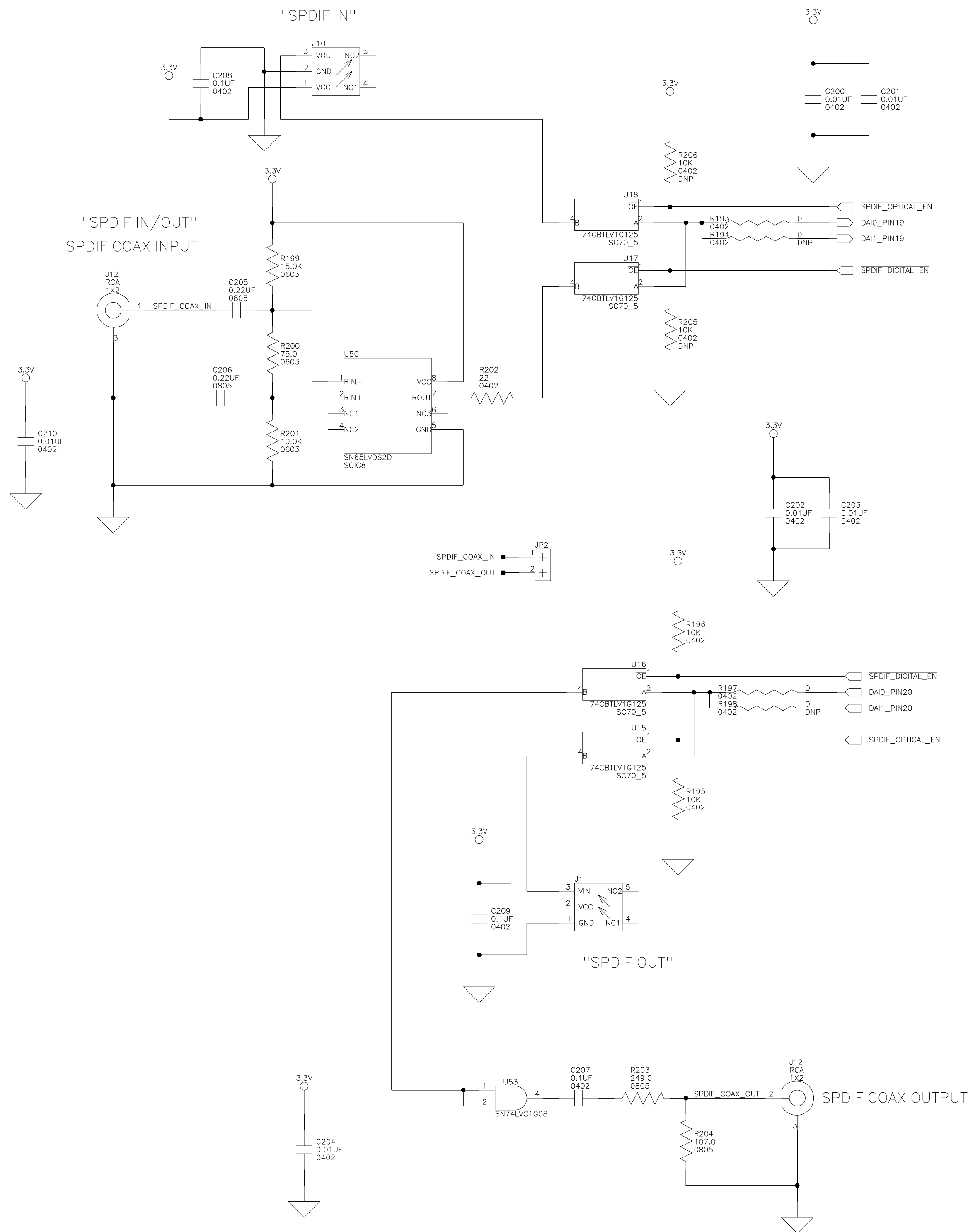


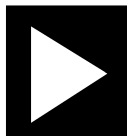
ANALOG  
DEVICES

2 Elizabeth Drive  
Chelmsford, MA 01824  
PH: 1-800-ANALOGD

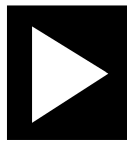
Title			
ADSP-SC584 EZ-Board Audio Connectors			
Size C	Board No. A0448-2013		Rev 1.1A
Date	1/17/17	Sheet 20	of 29



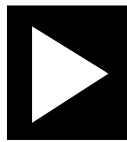


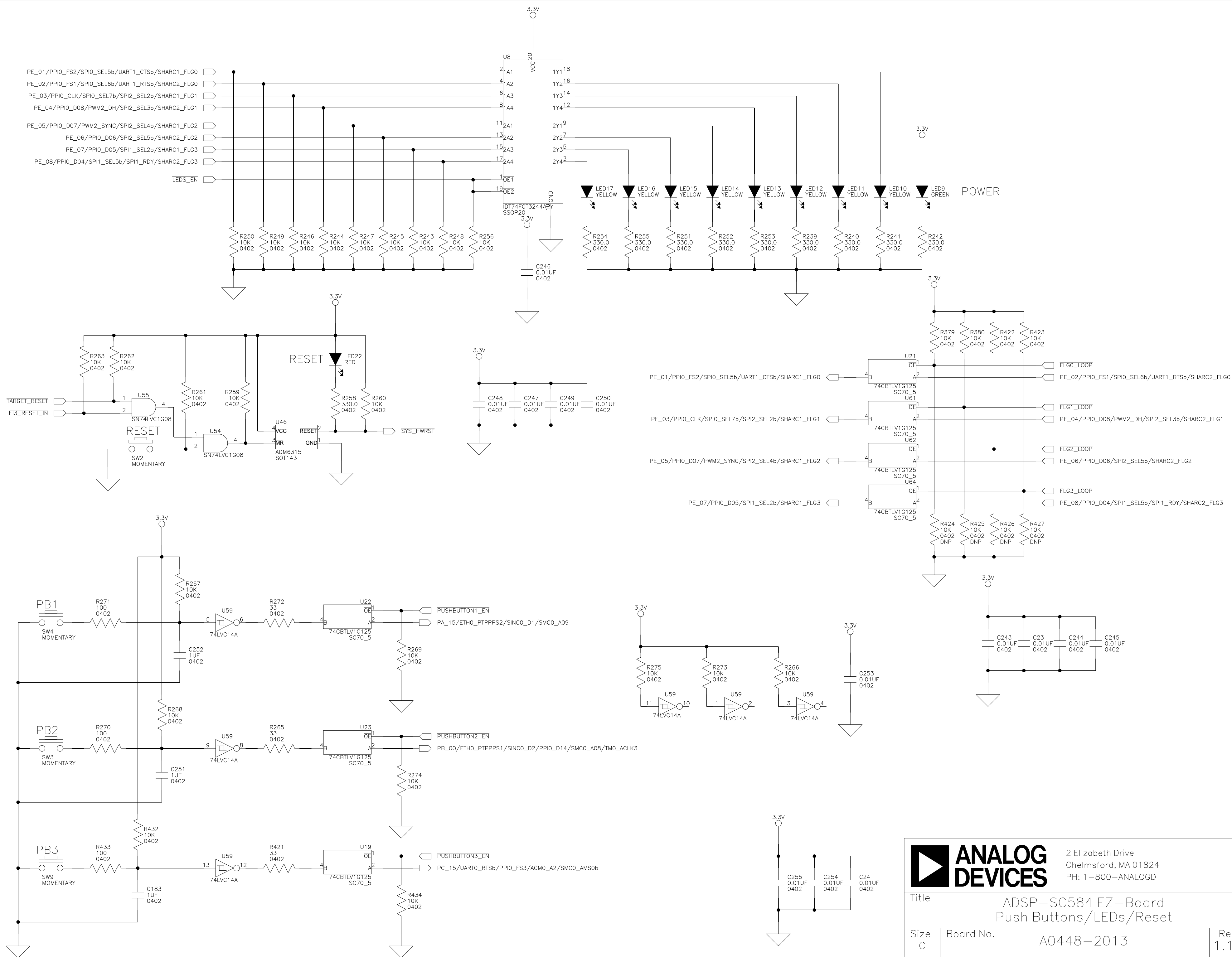
		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
Title ADSP-SC584 EZ-Board SPDIF			
Size C	Board No. A0448-2013		Rev 1.1A
Date	1/17/17	Sheet 21	of 29

Please contact your nearest ADI sales office to complete the Non-Disclosure Agreement (NDA) required to receive additional A2B technical information.

		<b>ANALOG DEVICES</b>	2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD
Title ADSP-SC584 EZ-Board A2B Master Node A			
Size C	Board No. A0448-2013		Rev 1.1A
Date	1/17/17	Sheet 22	of 29

Please contact your nearest ADI sales office to complete the Non-Disclosure Agreement (NDA) required to receive additional A2B technical information.

		<b>ANALOG DEVICES</b>	2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD
Title ADSP-SC584 EZ-Board A2B Master/Slave Node B			
Size C	Board No. A0448-2013		Rev 1.1A
Date	1/17/17	Sheet 23	of 29

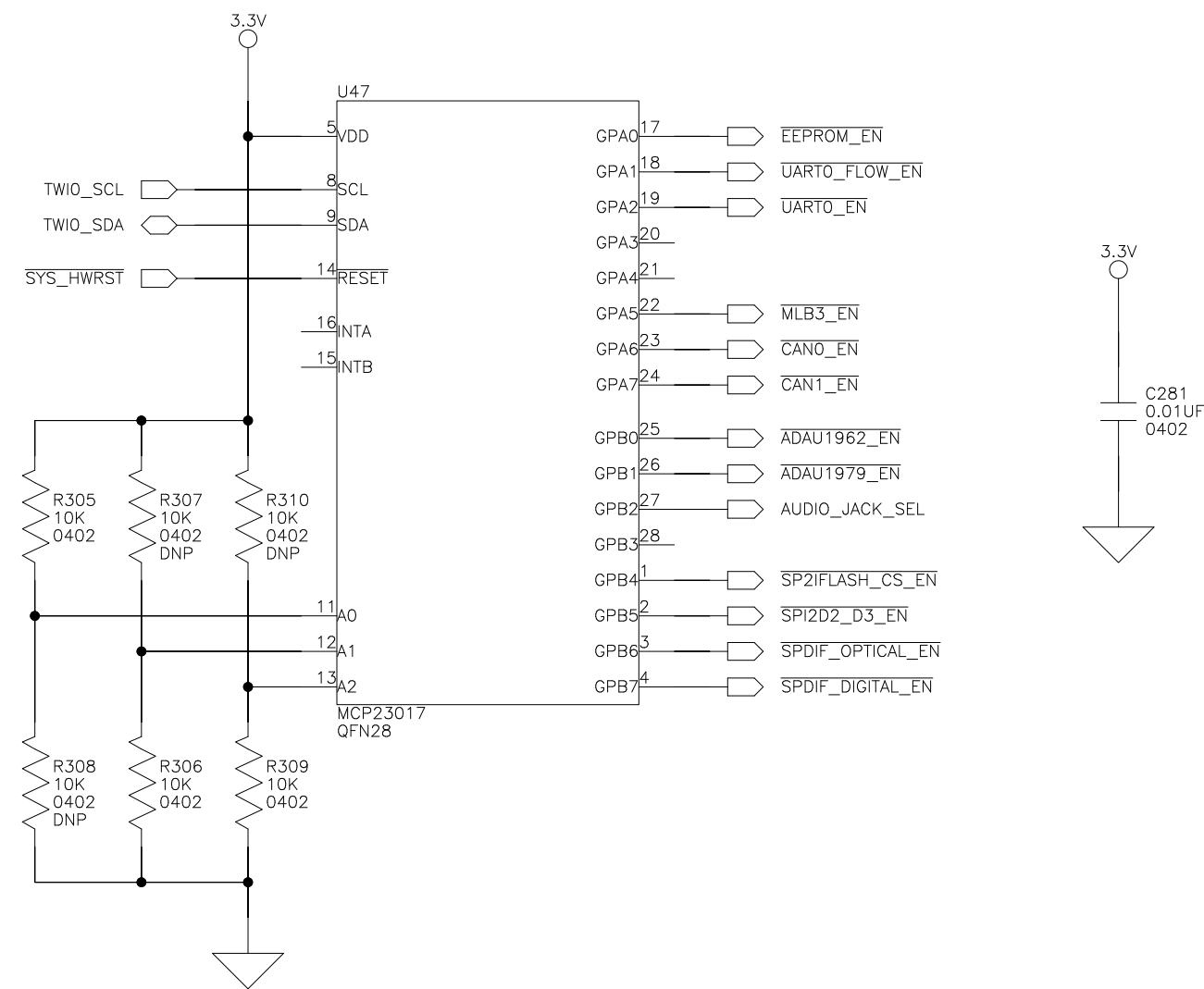


**ANALOG  
DEVICES**

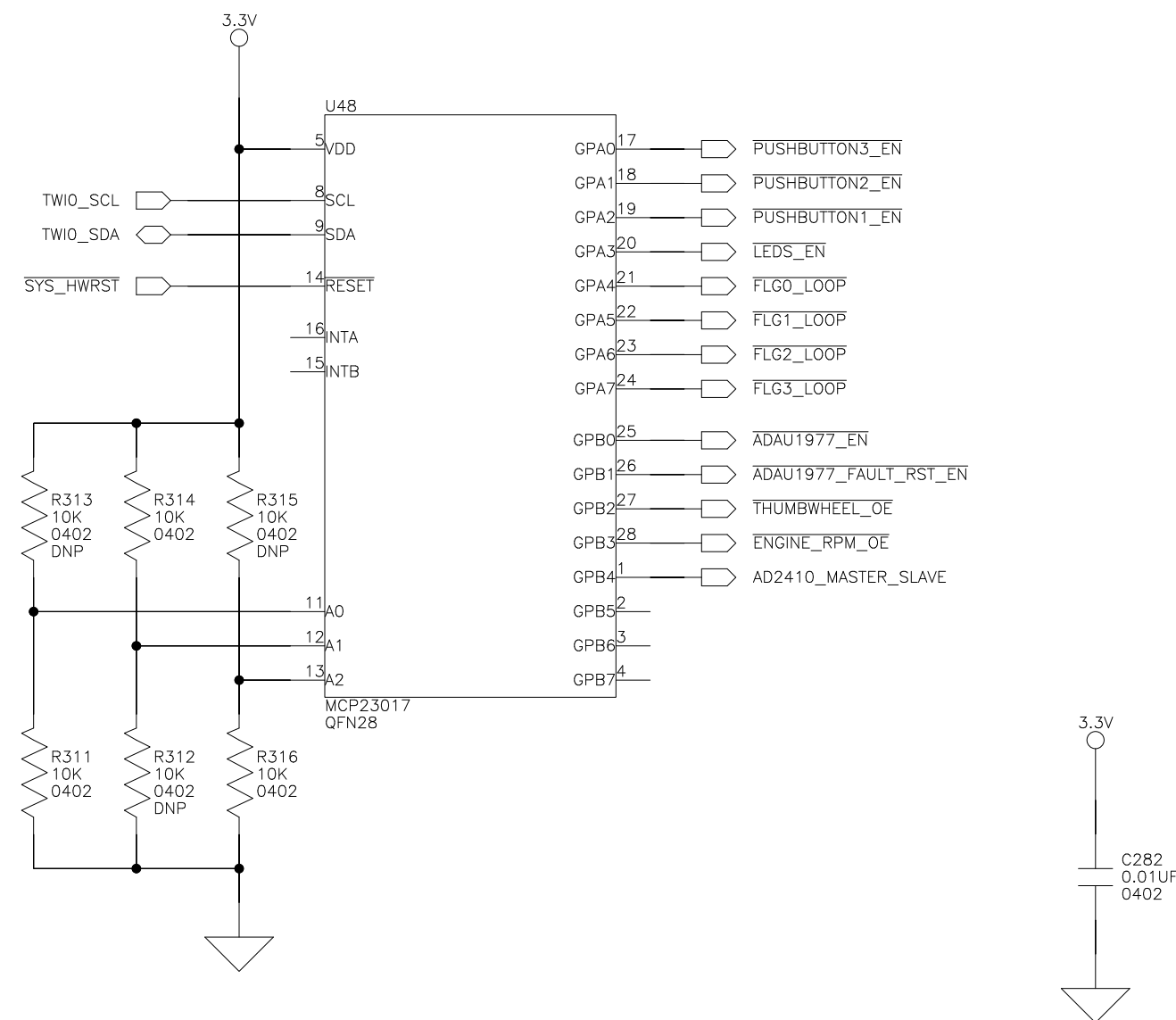
2 Elizabeth Drive  
Chelmsford, MA 01824  
PH: 1-800-ANALOGD


Title			
ADSP-SC584 EZ-Board Push Buttons/LEDs/Reset			
Size C	Board No. A0448-2013		Rev 1.1A
Date	1/17/17	Sheet 24	of 29

TWI Address 0100001x  
x is the R/W bit. Read – 1, Write – 0



TWI Address 0100010x  
x is the R/W bit. Read – 1, Write – 0



		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
Title ADSP-SC584 EZ-Board SoftConfig			
Size C	Board No. A0448-2013		Rev 1.1A
Date	1/17/17	Sheet 25	of 29

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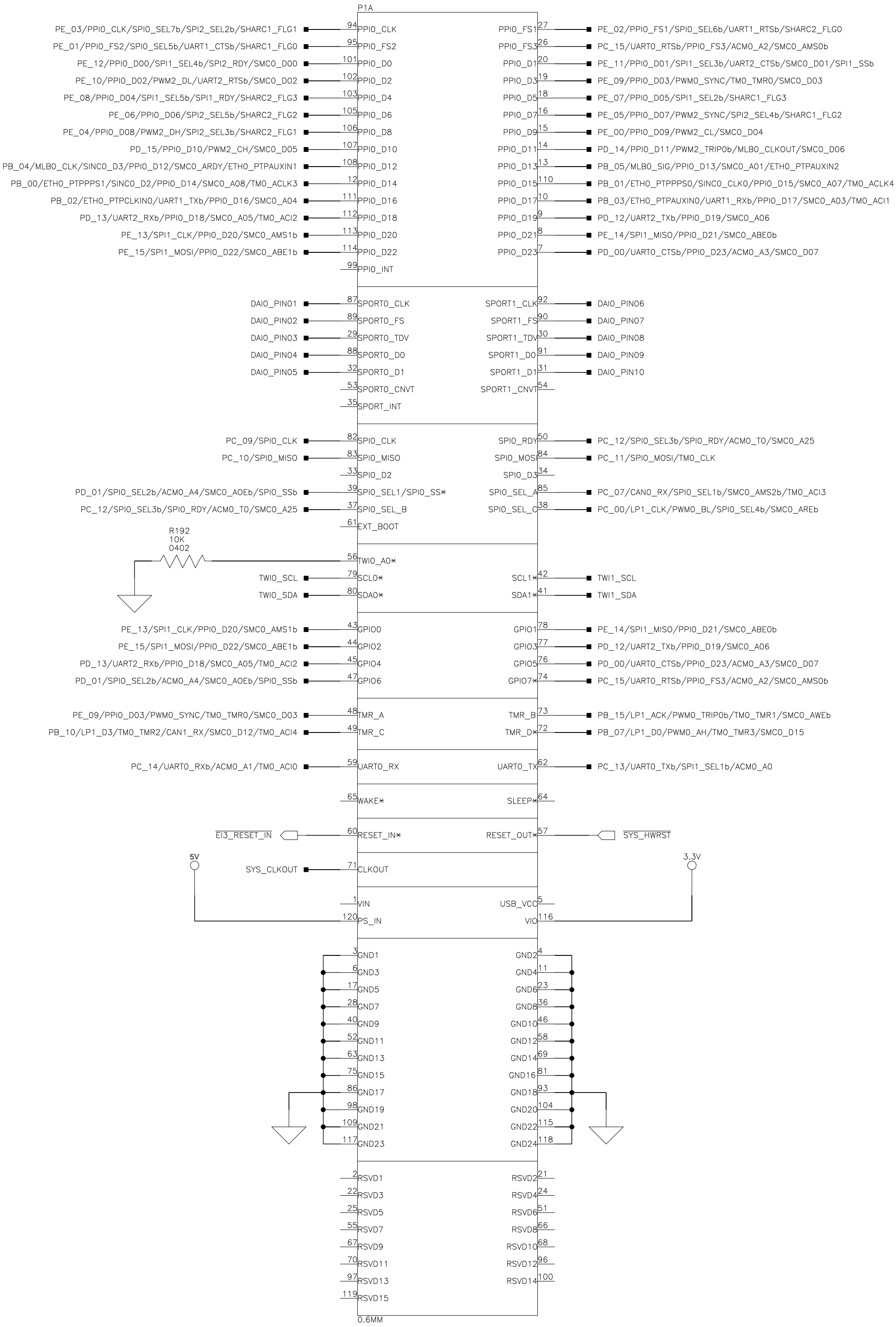
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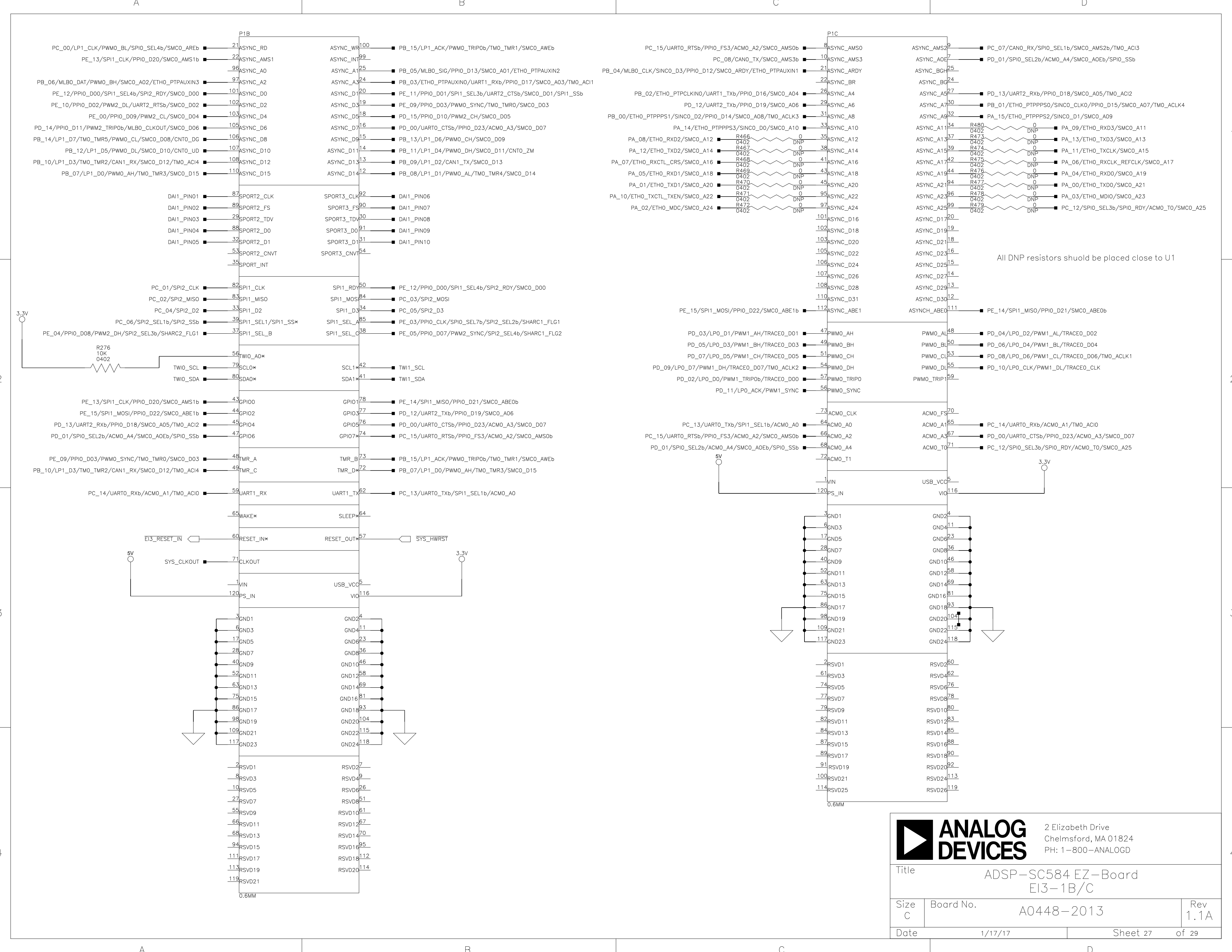
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4

4



		2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD	
Title ADSP-SC584 EZ-Board EI3-1A			
Size C	Board No. A0448-2013		Rev 1.1A
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2 Elizabeth Drive  
Chelmsford, MA 01824  
PH: 1-800-ANALOGD

Title ADSP-SC584 EZ-Board EI3-1B/C			
Size C	Board No. A0448-2013		Rev 1.1A
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GP1

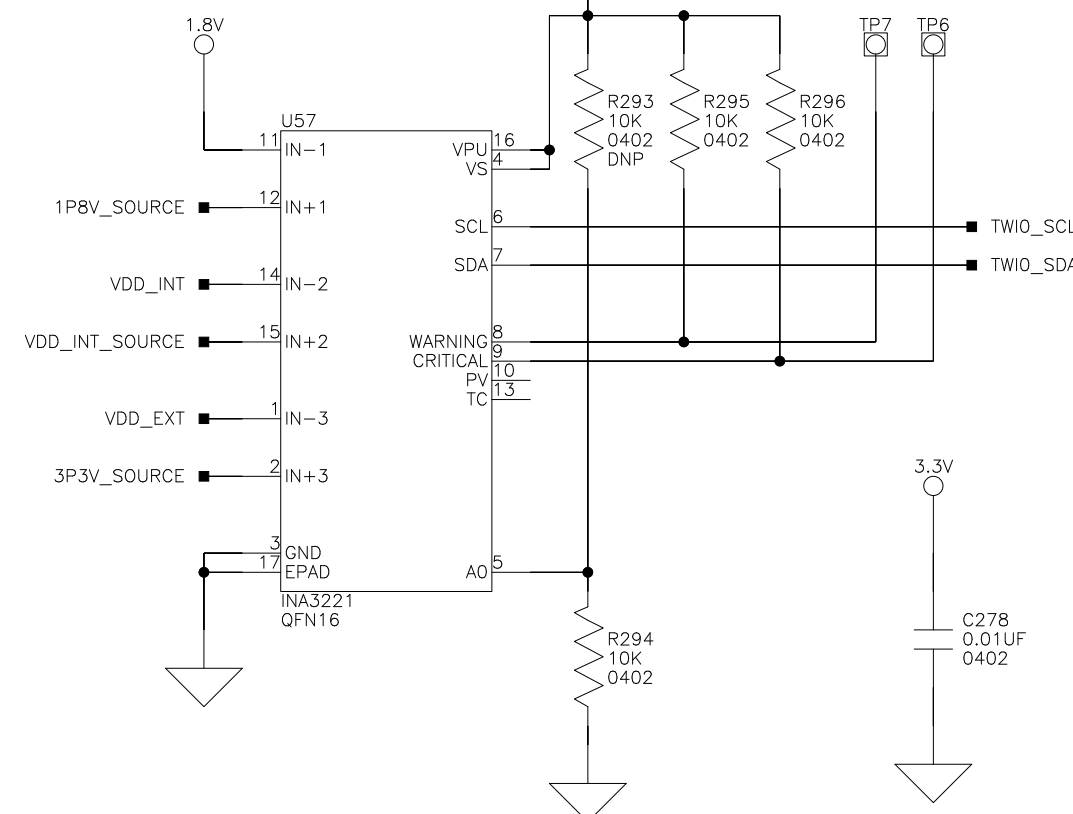



9

g)

SJ?  
SHORTIN  
JUMPER

EXT



 <b>ANALOG DEVICES</b>	2 Elizabeth Drive Chelmsford, MA 01824 PH: 1-800-ANALOGD		
	Title ADSP-SC584 EZ-Board Power		
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