

A

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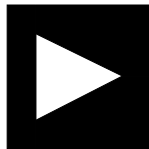
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ADSP-21469 EZ-BOARD SCHEMATIC



**ANALOG
DEVICES**

20 Cotton Road
Nashua, NH 03063
PH: 1-800-ANALOGD

Title	ADSP-21469 EZ-BOARD TITLE
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Size C	Board No. A0221-2008	Rev 0.2
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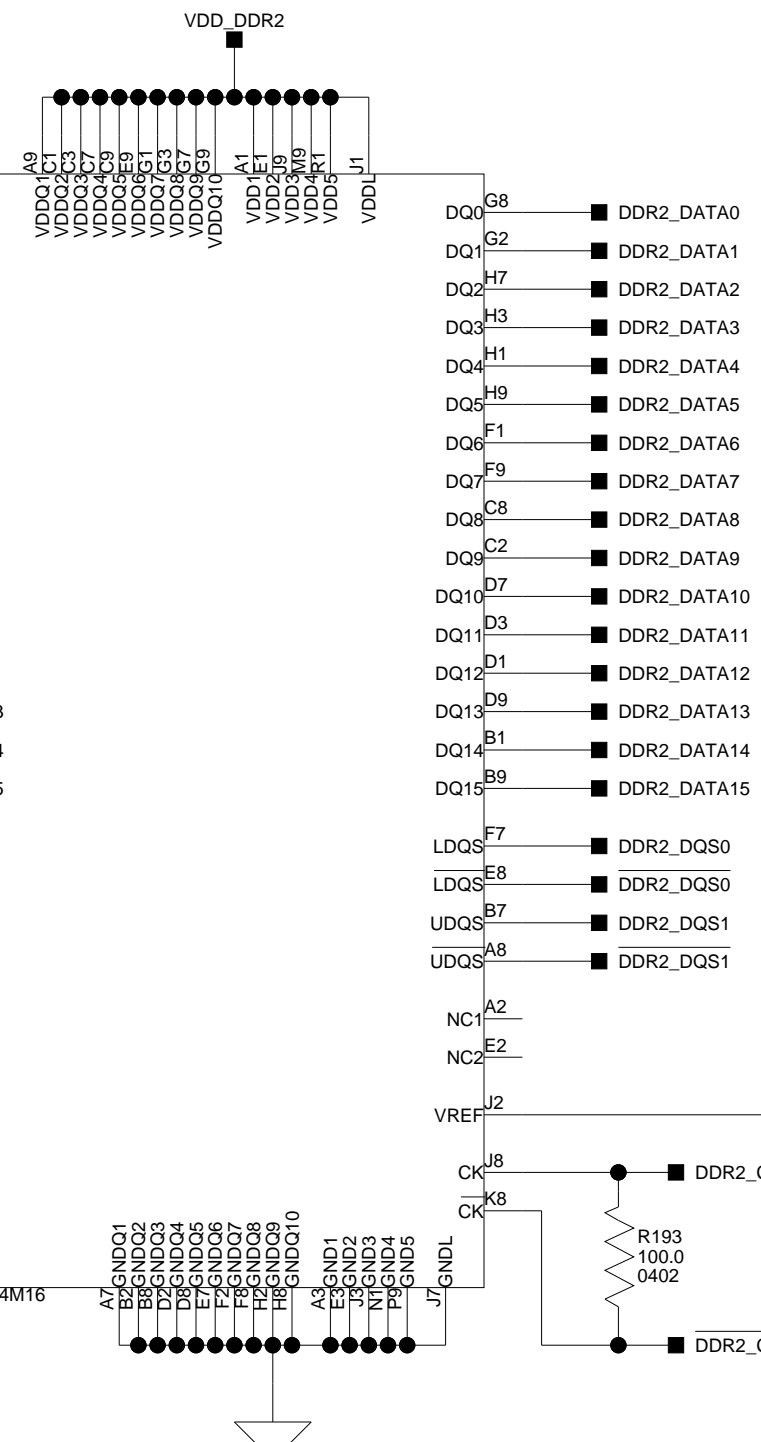
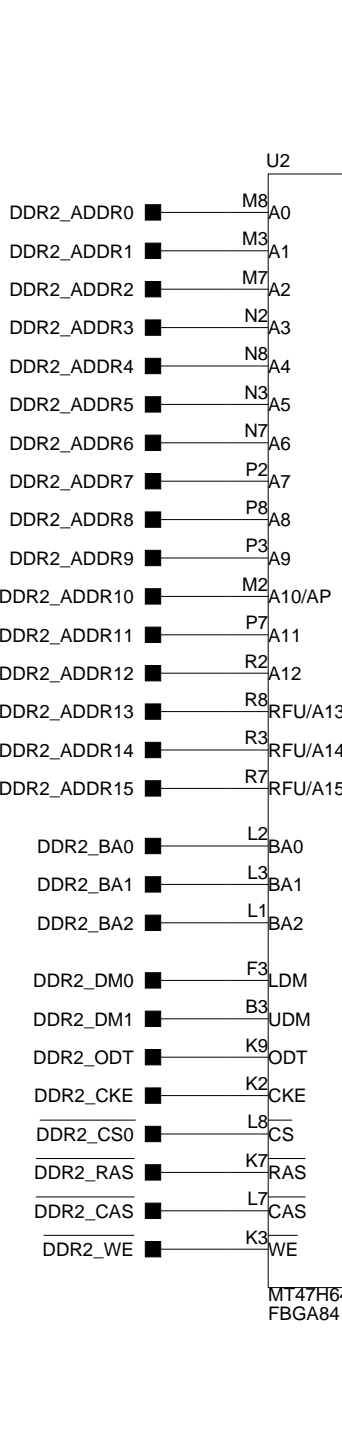
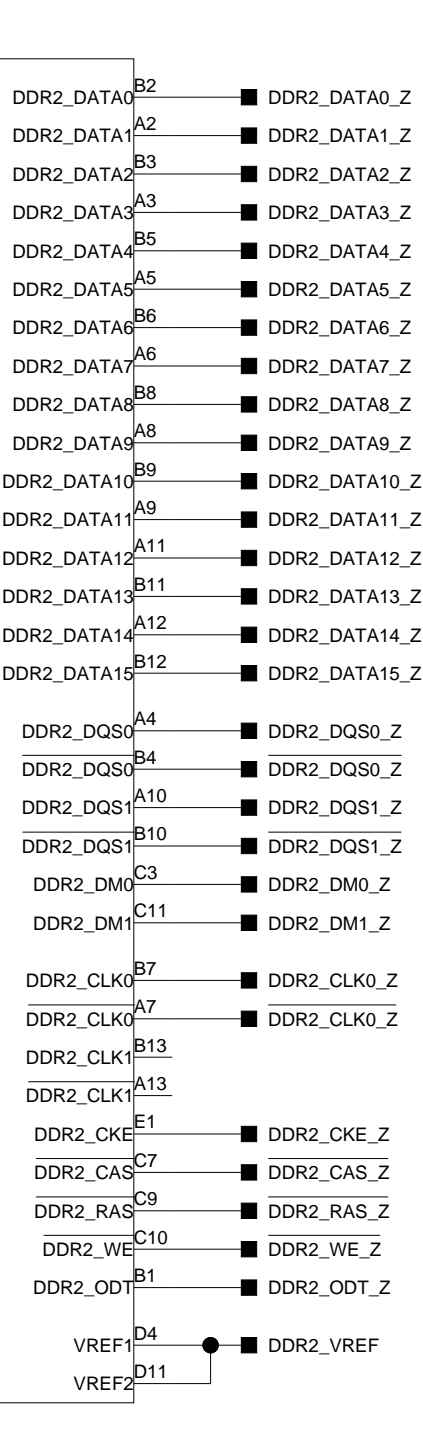
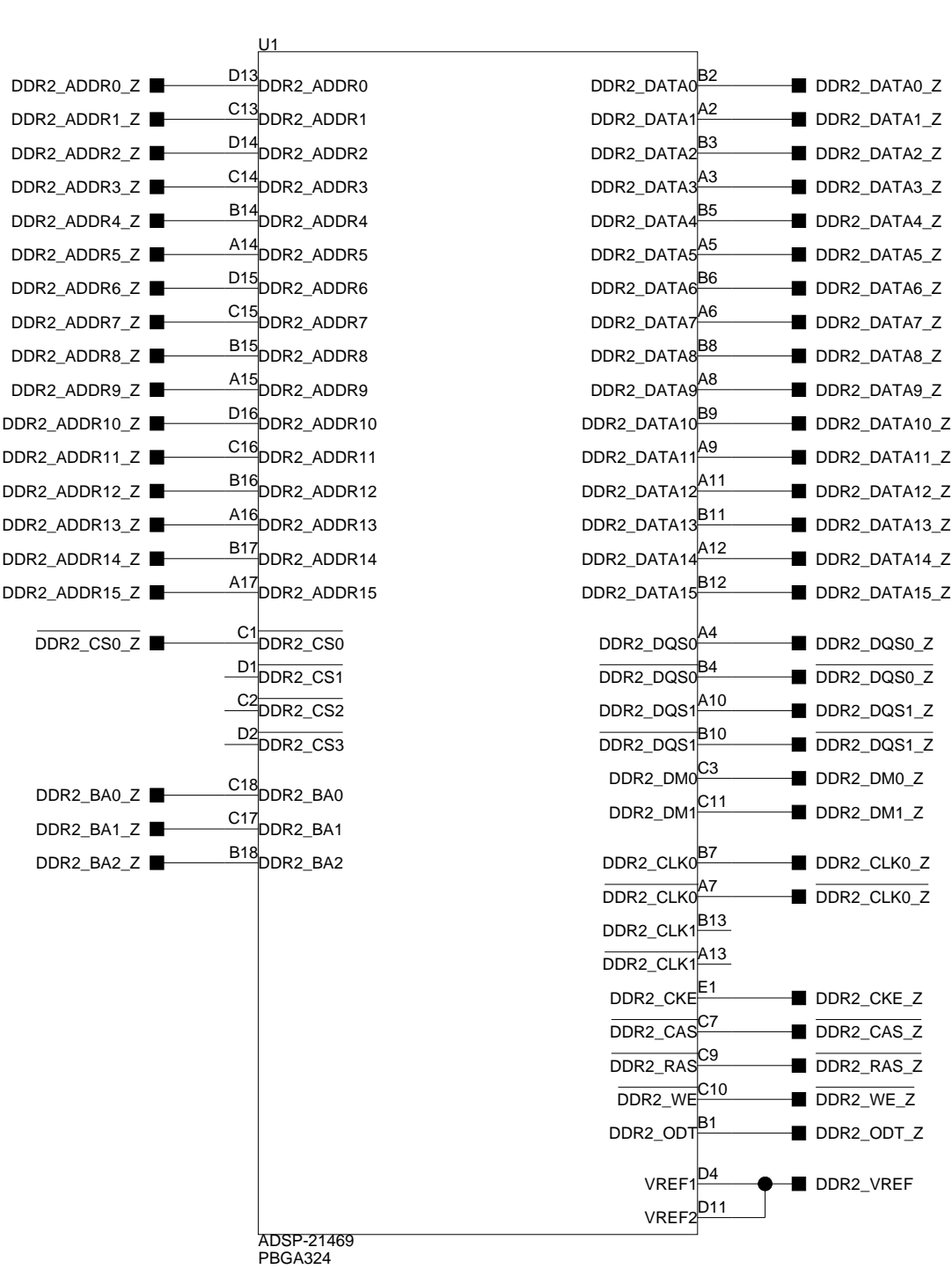
Date 3-13-2009_14:36	Sheet 1 of 16
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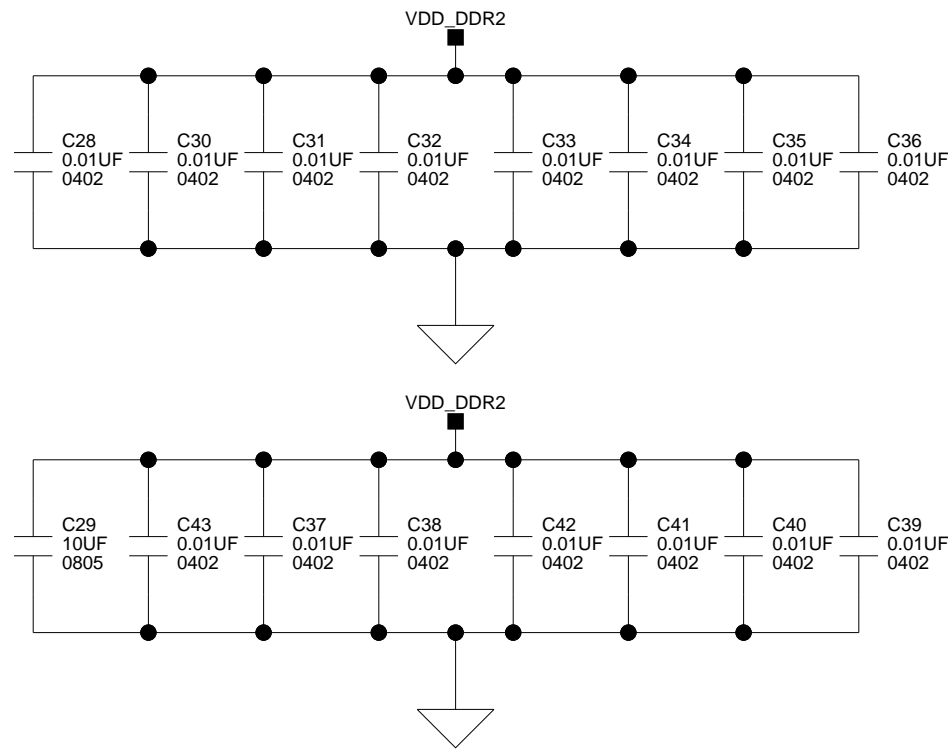
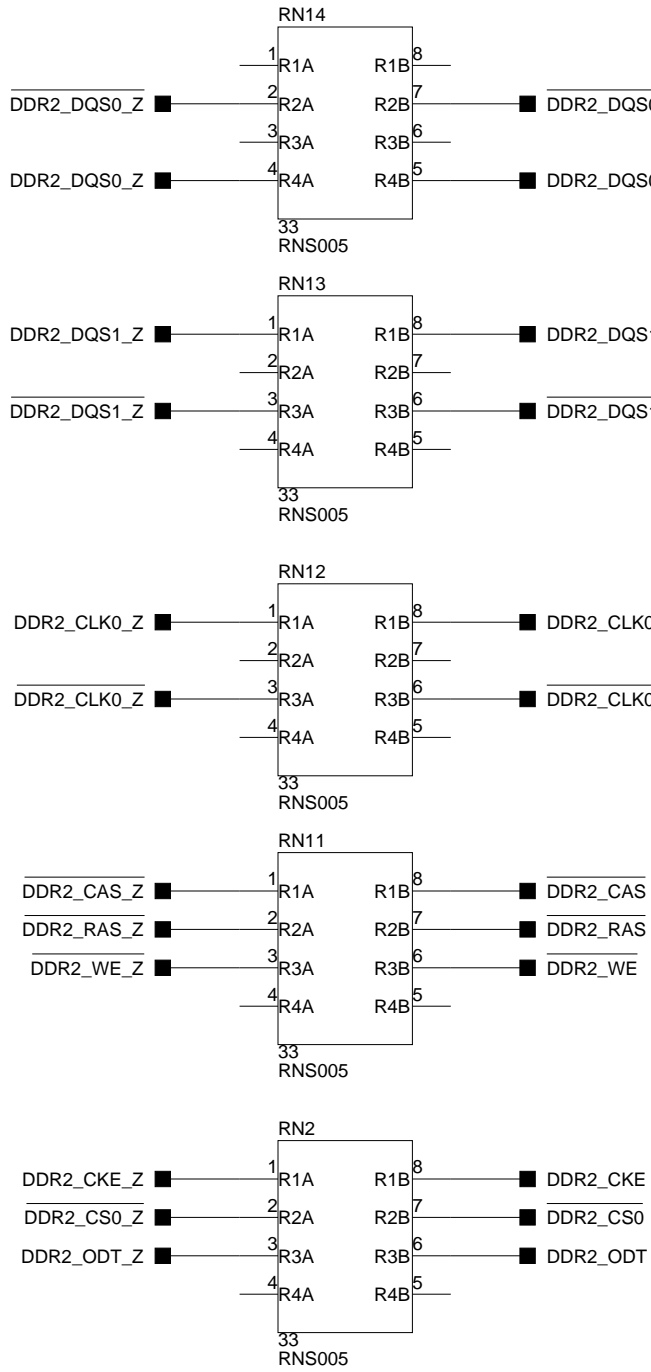
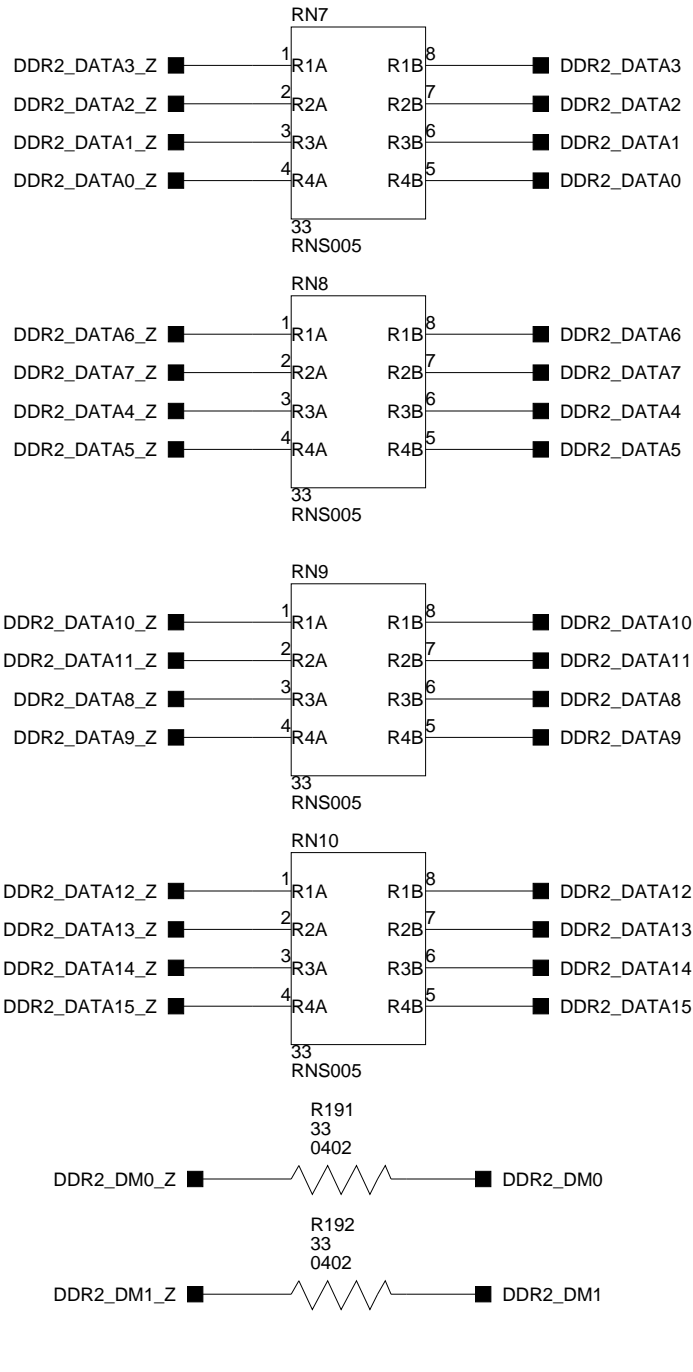
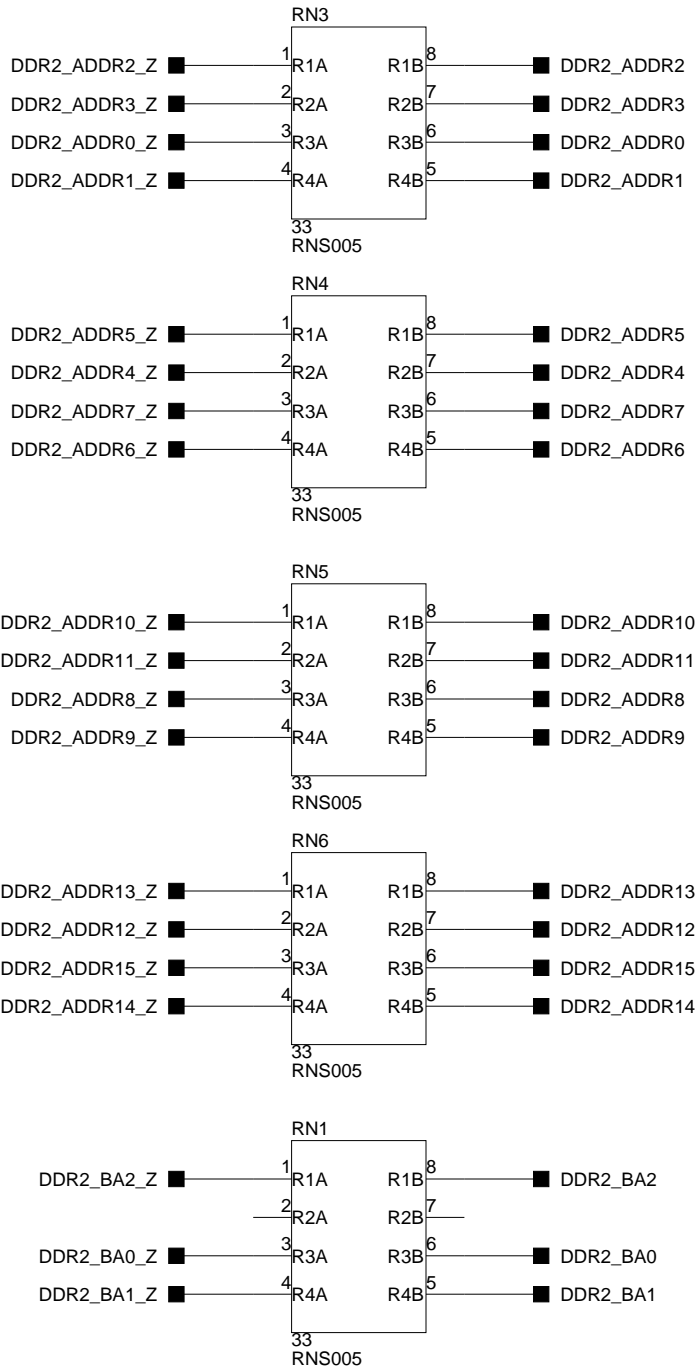
C

D



DDR2 end of line terminators and VTT tracking circuit have been omitted since overall trace length is less than 2.5" for each net.

For a custom design, please adhere to any EE-note from ADI and any recommendations by the memory manufacturer.



**ANALOG
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Title **ADSP-21469 EZ-BOARD
DSP - DDR2 INTERFACE**

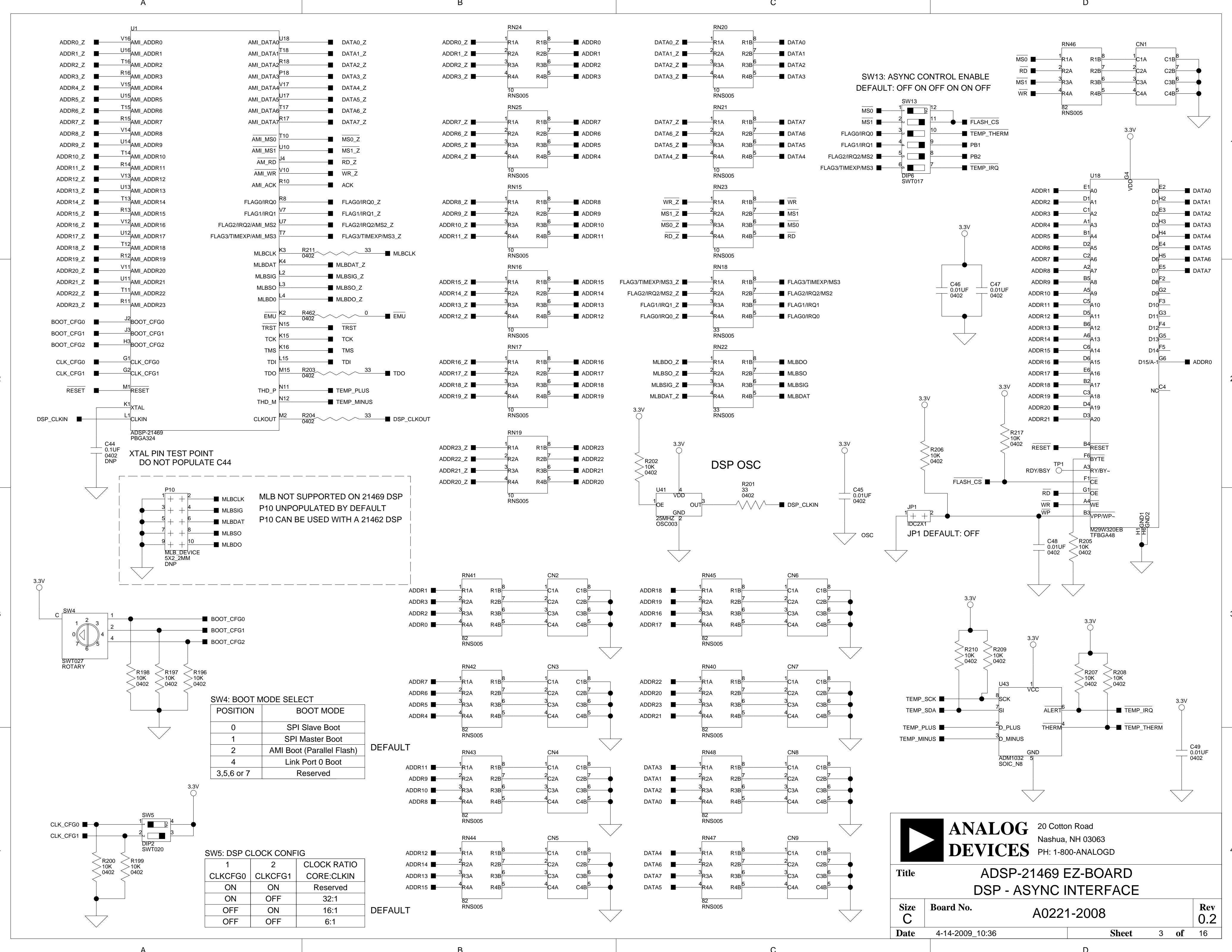
Size C	Board No. A0221-2008	Rev 0.2
Date 3-31-2009_10:10	Sheet 2 of 16	

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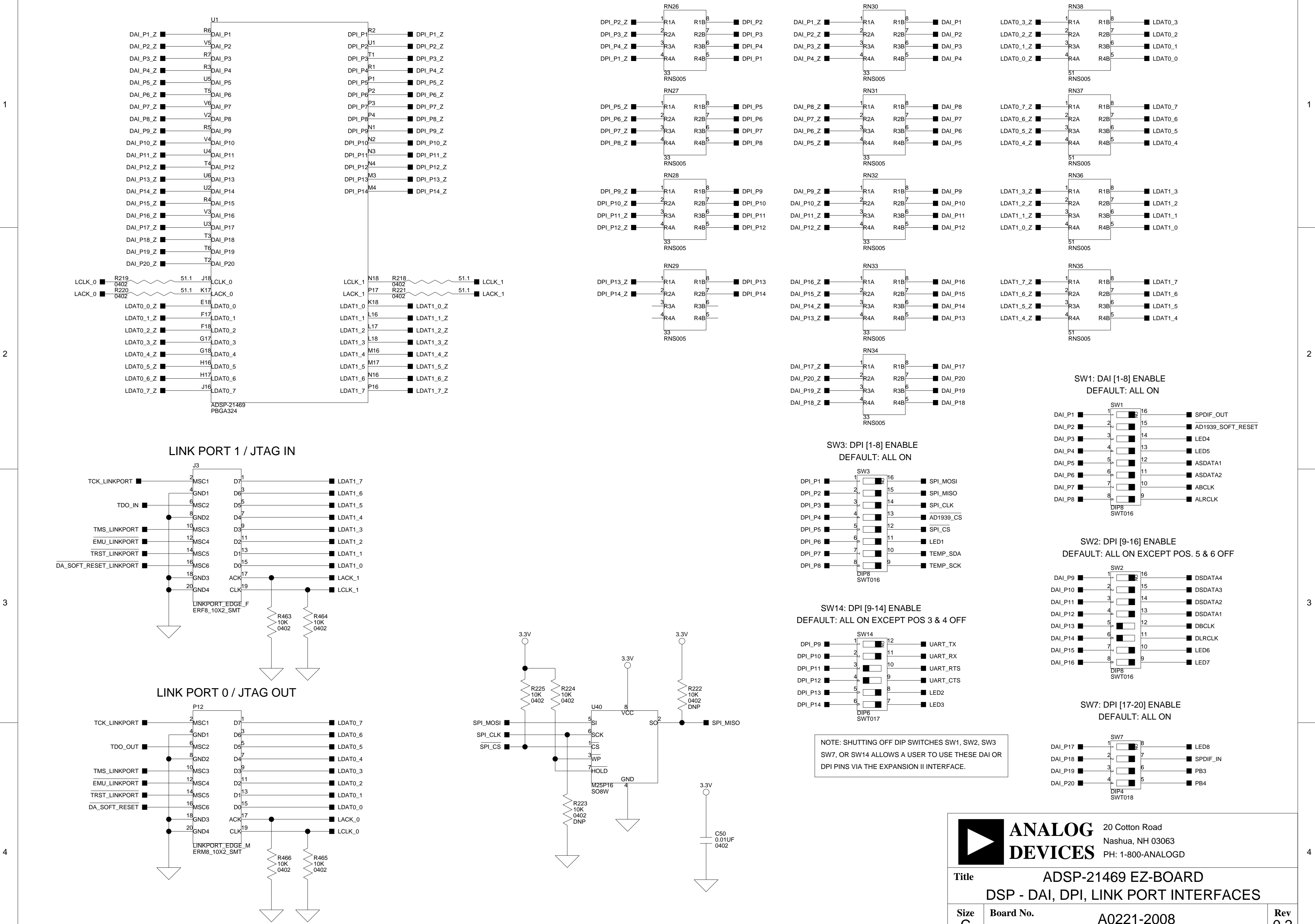


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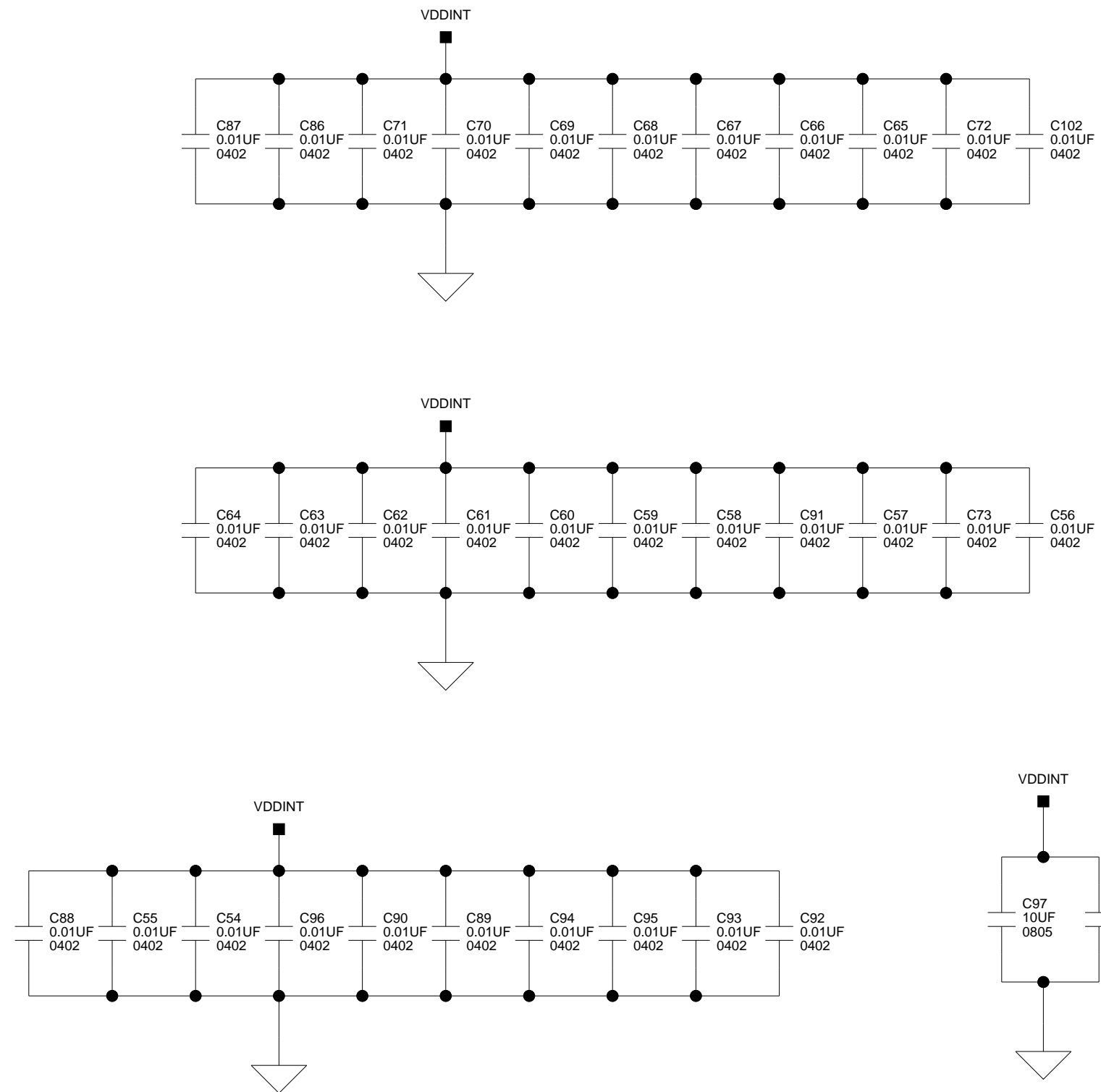
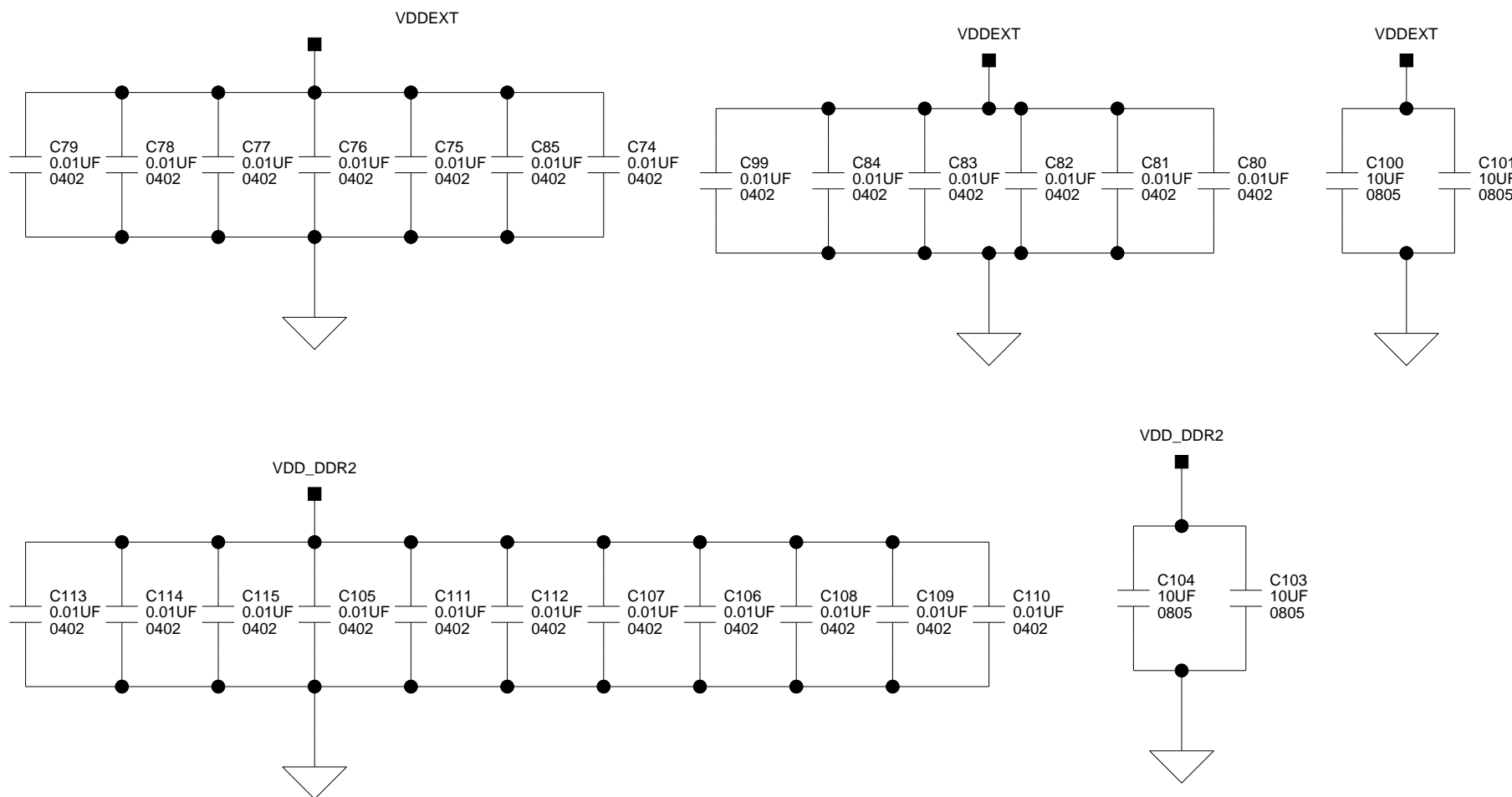
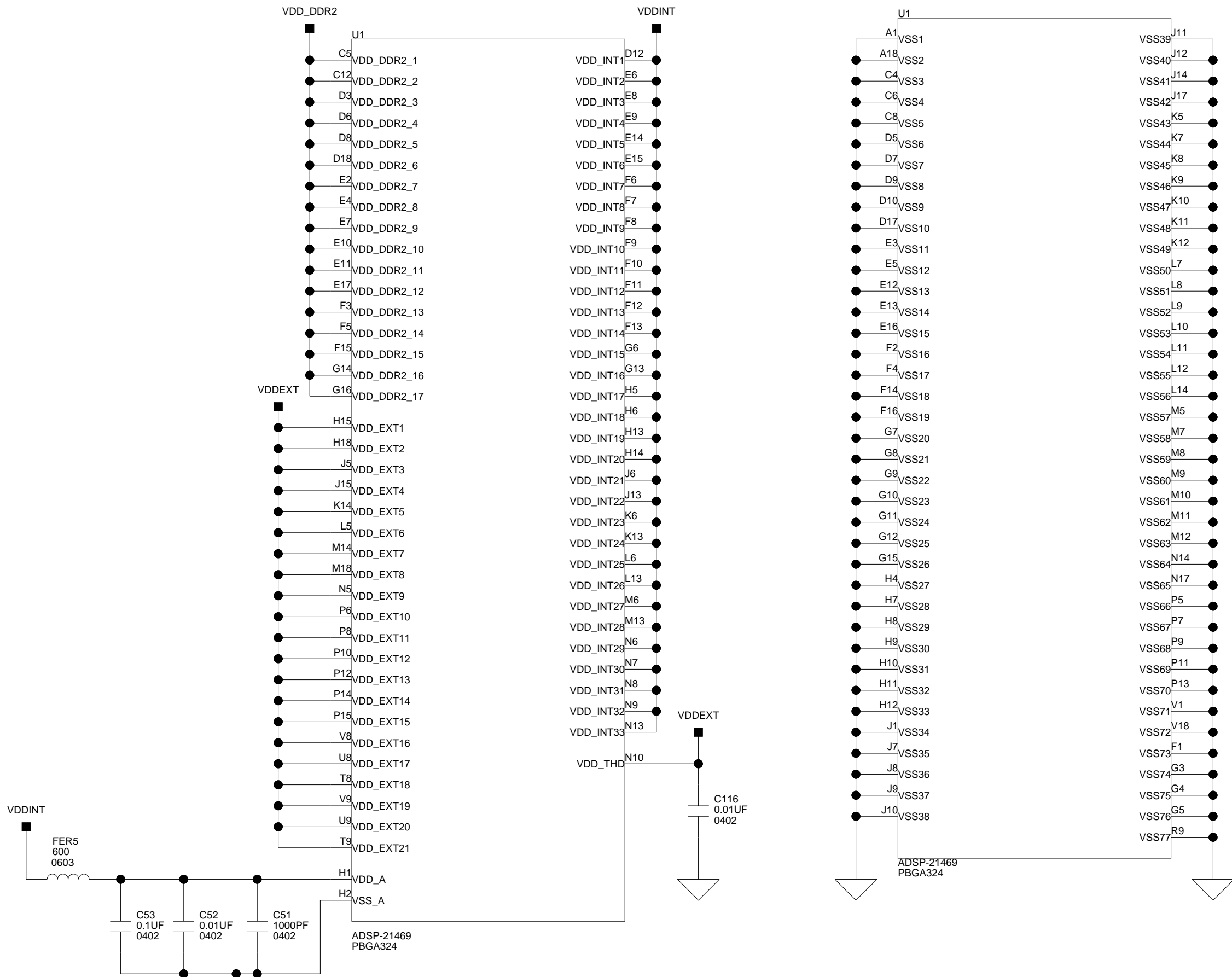
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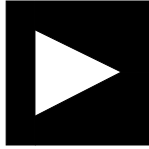
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		ANALOG DEVICES	20 Cotton Road Nashua, NH 03063 PH: 1-800-ANALOGD
Title ADSP-21469 EZ-BOARD DSP - POWER			
Size C	Board No.	A0221-2008	
Date	3-19-2009_12:57	Sheet	5 of 16
		Rev	0.2

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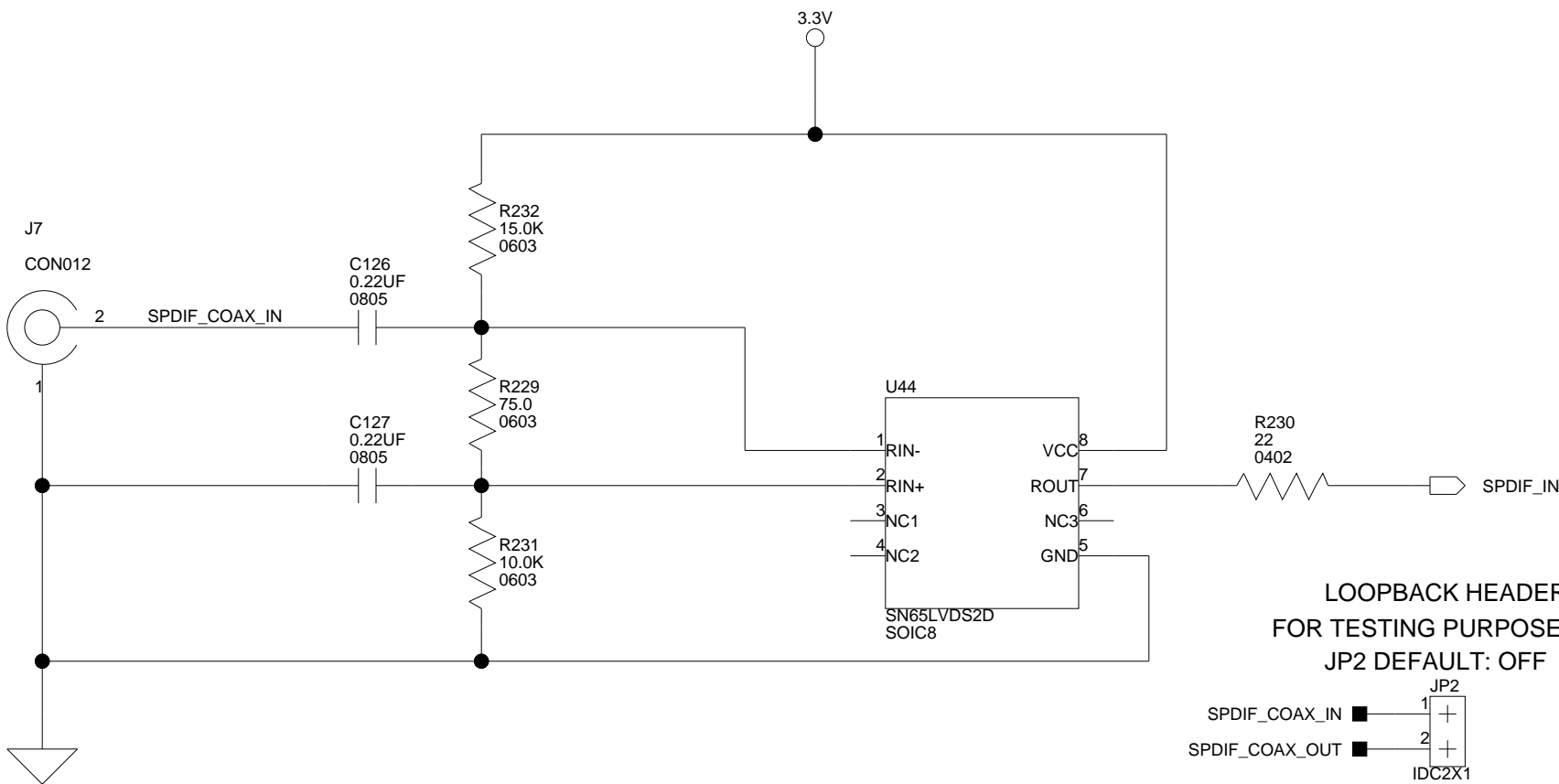
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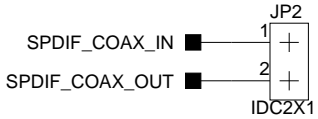
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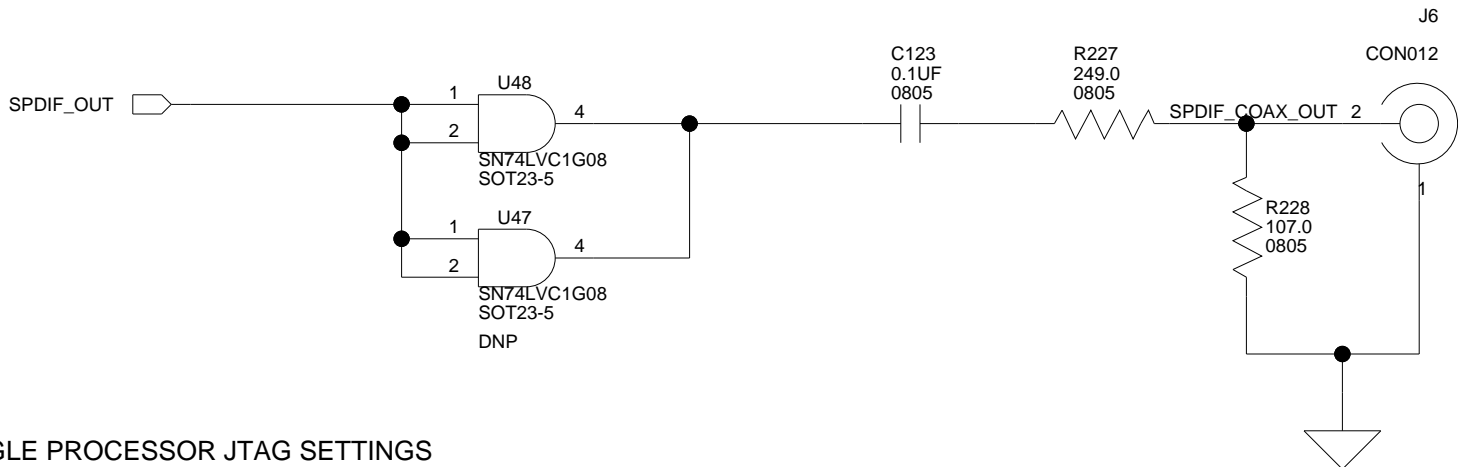
SPDIF COAX INPUT



LOOPBACK HEADER
FOR TESTING PURPOSES ONLY
JP2 DEFAULT: OFF



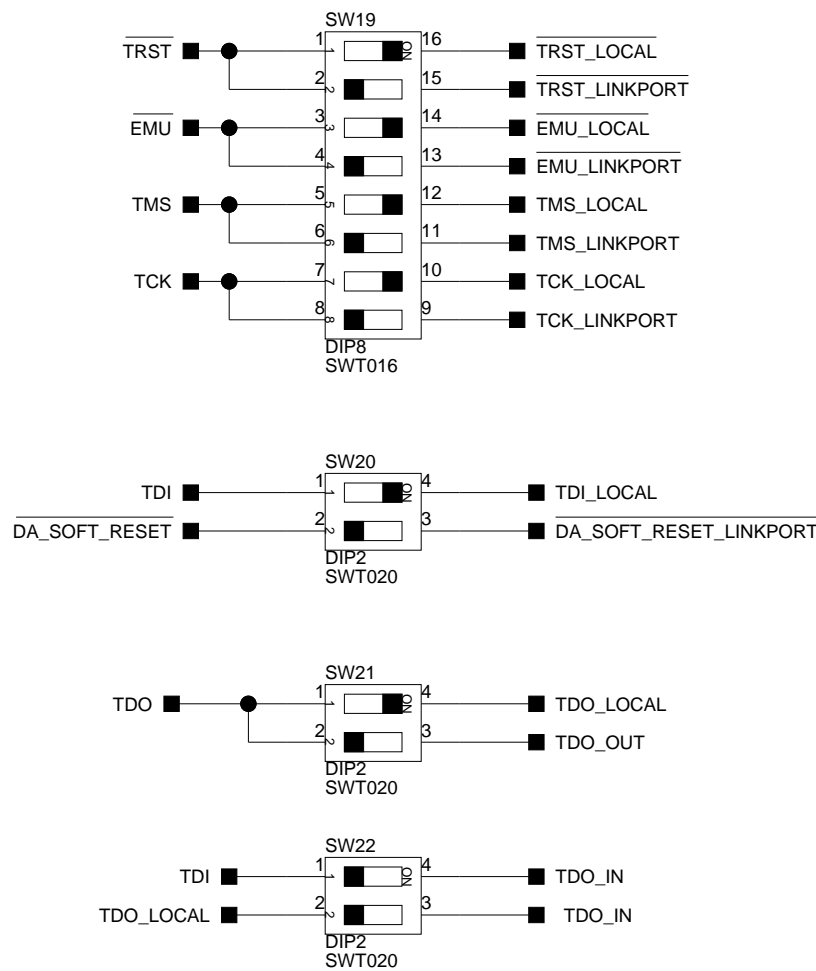
SPDIF COAX OUT



SINGLE PROCESSOR JTAG SETTINGS
VIA HP-USB EMUALTOR OR DEBUG AGENT (DEFAULT)

SWITCH	BOARD ATTACHED TO EMULATOR
SW19.1	ON
SW19.2	OFF
SW19.3	ON
SW19.4	OFF
SW19.5	ON
SW19.6	OFF
SW19.7	ON
SW19.8	OFF
SW20.1	ON
SW20.2	OFF
SW21.1	ON
SW21.2	OFF
SW22.1	OFF
SW22.2	OFF

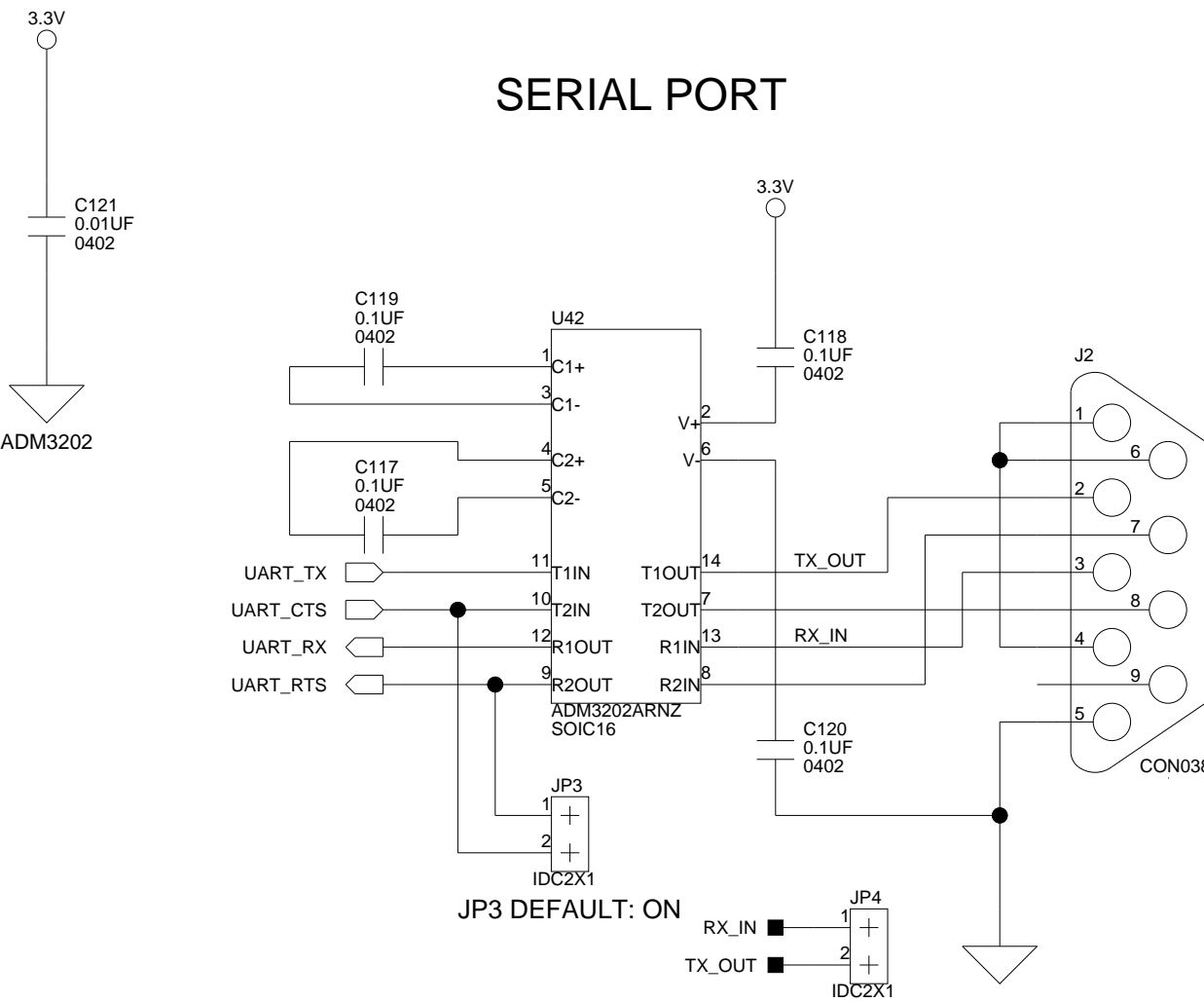
JTAG SWITCHES



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

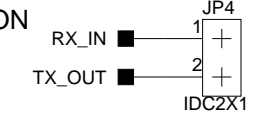
SWITCH	BOARD ATTACHED TO EMULATOR	BOARD(S) NOT ATTACHED TO EMULATOR
SW19.1	ON	OFF
SW19.2	ON	ON
SW19.3	ON	OFF
SW19.4	ON	ON
SW19.5	ON	OFF
SW19.6	ON	ON
SW19.7	ON	OFF
SW19.8	ON	ON
SW20.1	ON	OFF
SW20.2	OFF	OFF
SW21.1	OFF	OFF
SW21.2	ON	ON
SW22.1	OFF	ON
SW22.2	ON	OFF

SERIAL PORT



JP3 DEFAULT: ON

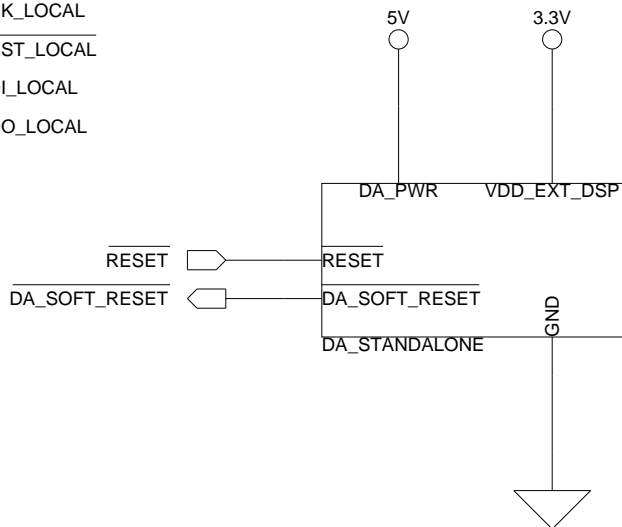
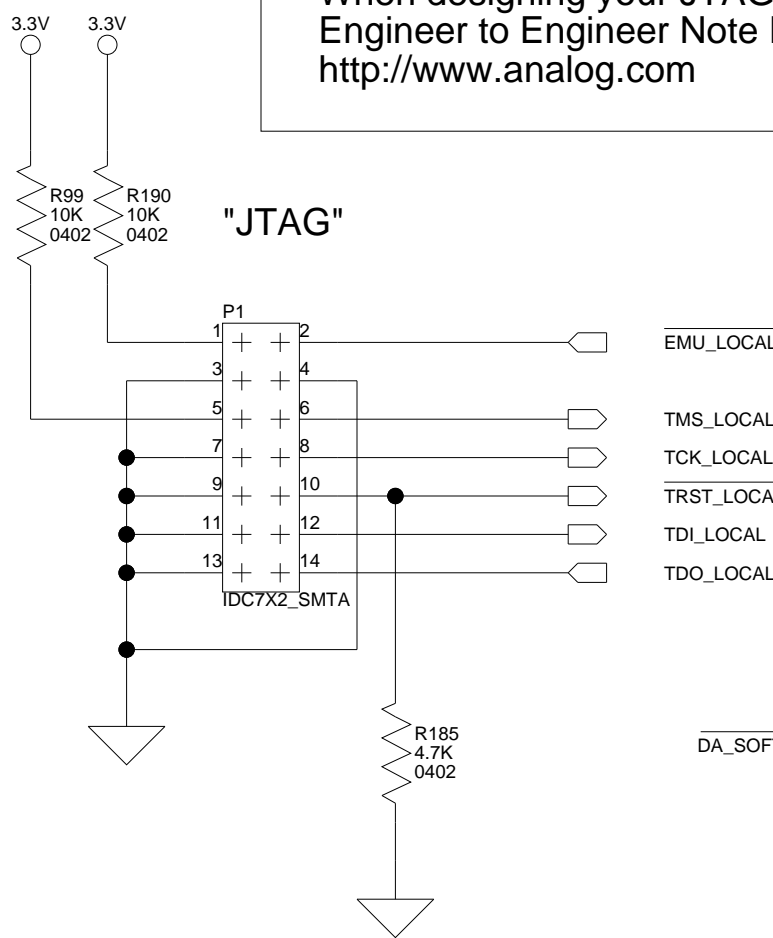
LOOPBACK HEADER
FOR TESTING PURPOSES ONLY
JP4 DEFAULT: OFF



All USB interface circuitry is considered proprietary and has been omitted from this schematic.

When designing your JTAG interface please refer to the Engineer to Engineer Note EE-68 which can be found at <http://www.analog.com>

"JTAG"



**ANALOG
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Title **ADSP-21469 EZ-BOARD
SPDIF, RS-232, JTAG INTERFACES**

Size C	Board No. A0221-2008	Rev 0.2
Date 4-1-2009_17:04	Sheet 6 of 16	

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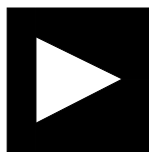
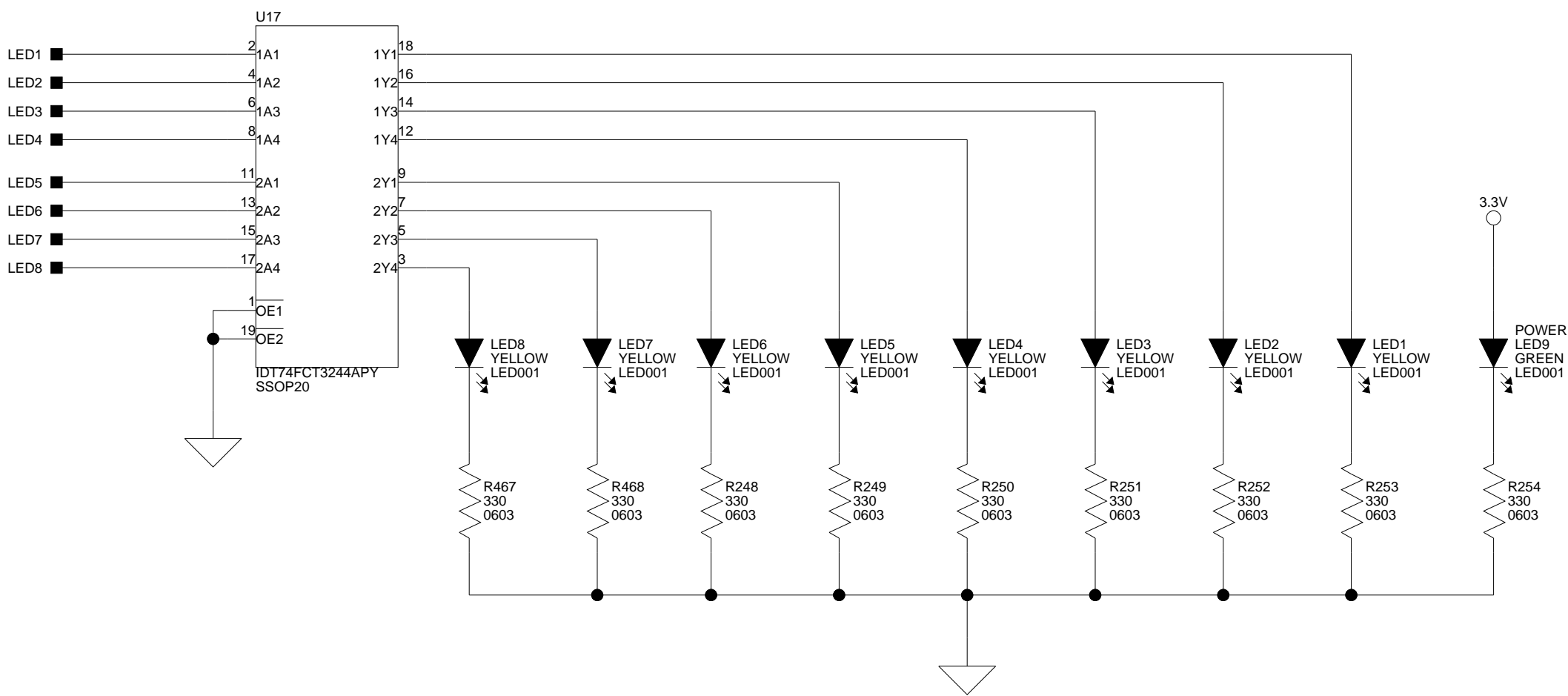
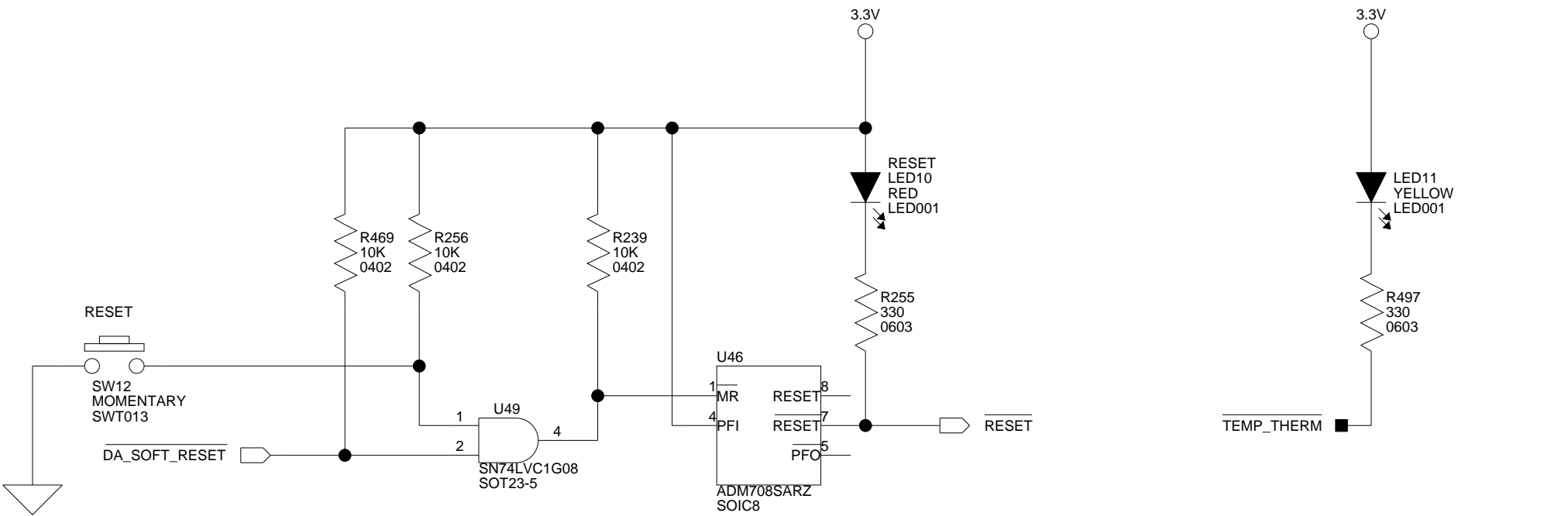
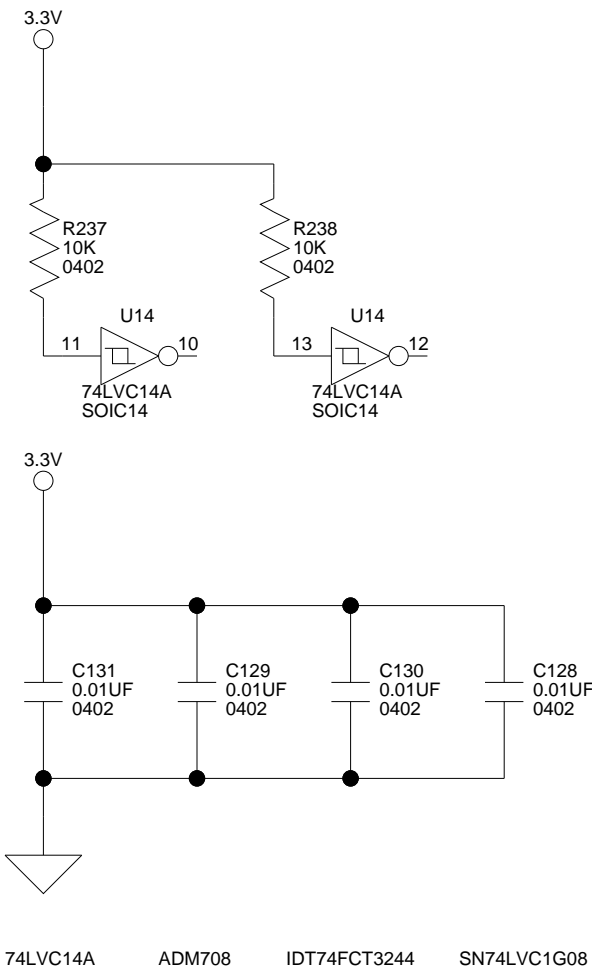
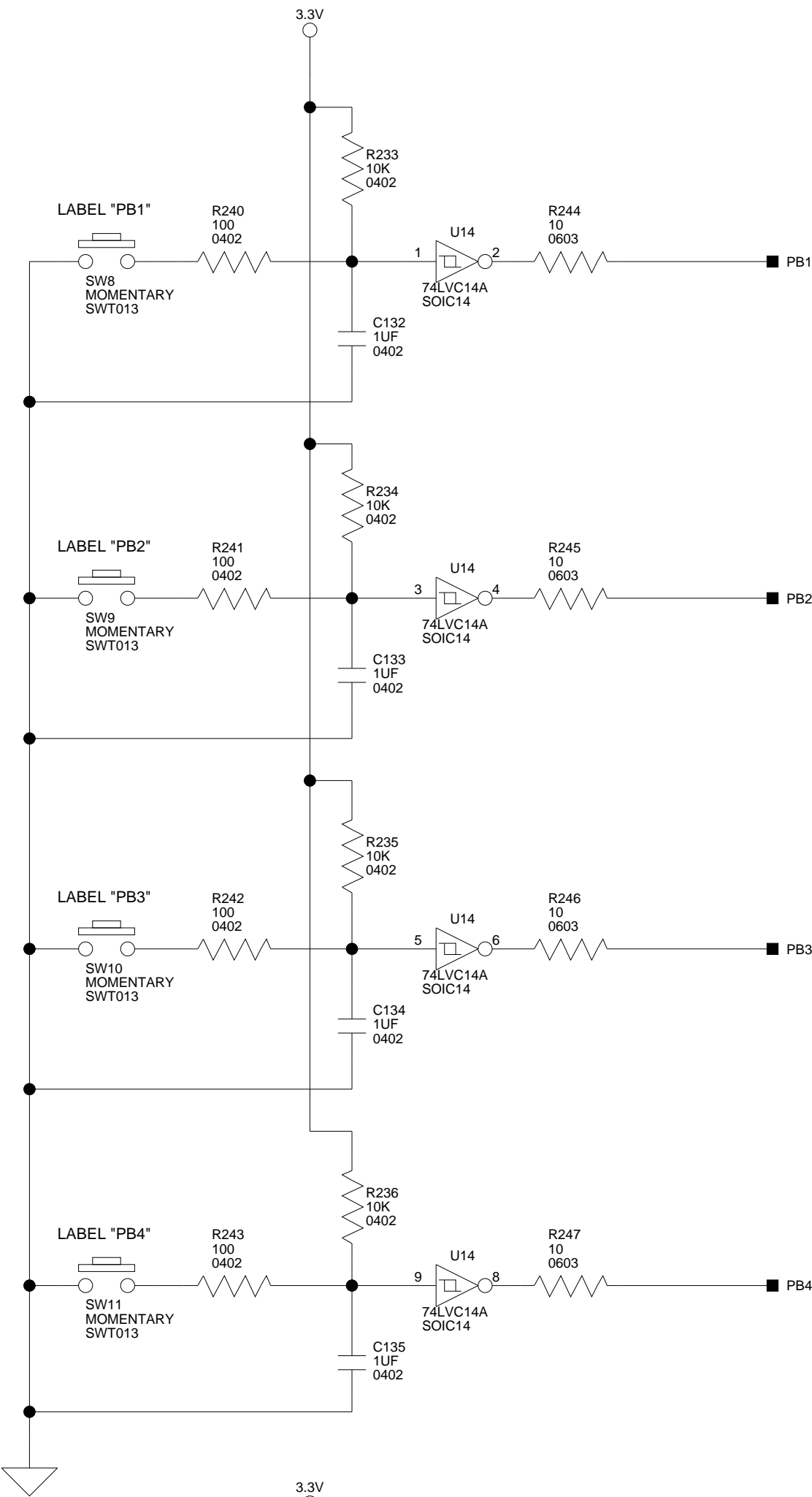
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COMPONENT	DSP PIN CONNECTED TO	CONNECTED VIA SWITCH
PB1	FLAG1/IRQ1	SW13.4
PB2	FLAG2/IRQ2/MS2	SW13.5
PB3	DAI_P19	SW7.3
PB4	DAI_P20	SW7.4
LED1	DPL_P6	SW3.6
LED2	DPI_P13	SW14.5
LED3	DPI_P14	SW14.6
LED4	DAI_P3	SW1.3
LED5	DAI_P4	SW1.4
LED6	DAI_P15	SW2.7
LED7	DAI_P16	SW2.8
LED8	DAI_P17	SW7.1



**ANALOG
DEVICES**

20 Cotton Road
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Title ADSP-21469 EZ-BOARD
RESET CIRCUIT, PUSHBUTTONS, LEDS

Size C Board No. A0221-2008 Rev 0.2

Date 3-31-2009_14:34 Sheet 7 of 16

A

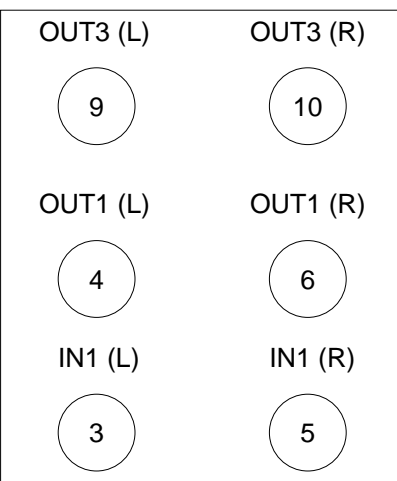
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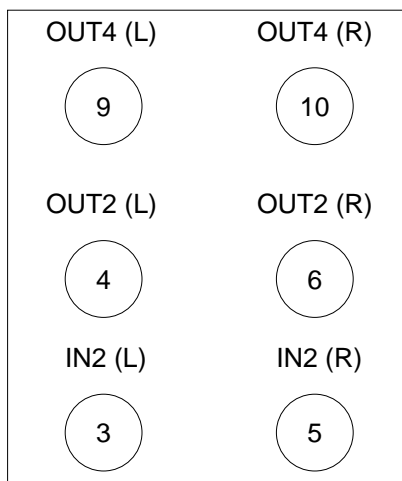
J4

WHITE (LEFT) RED (RIGHT)



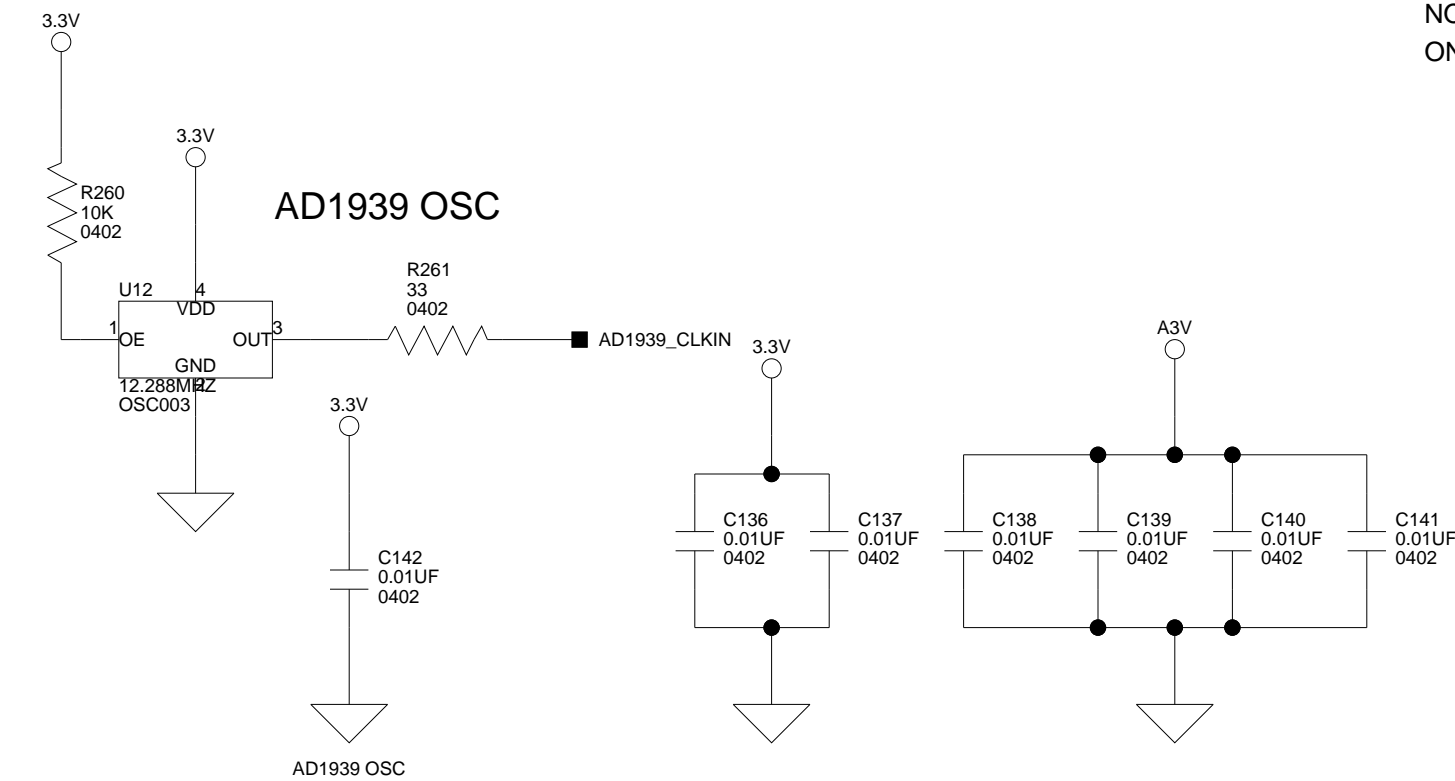
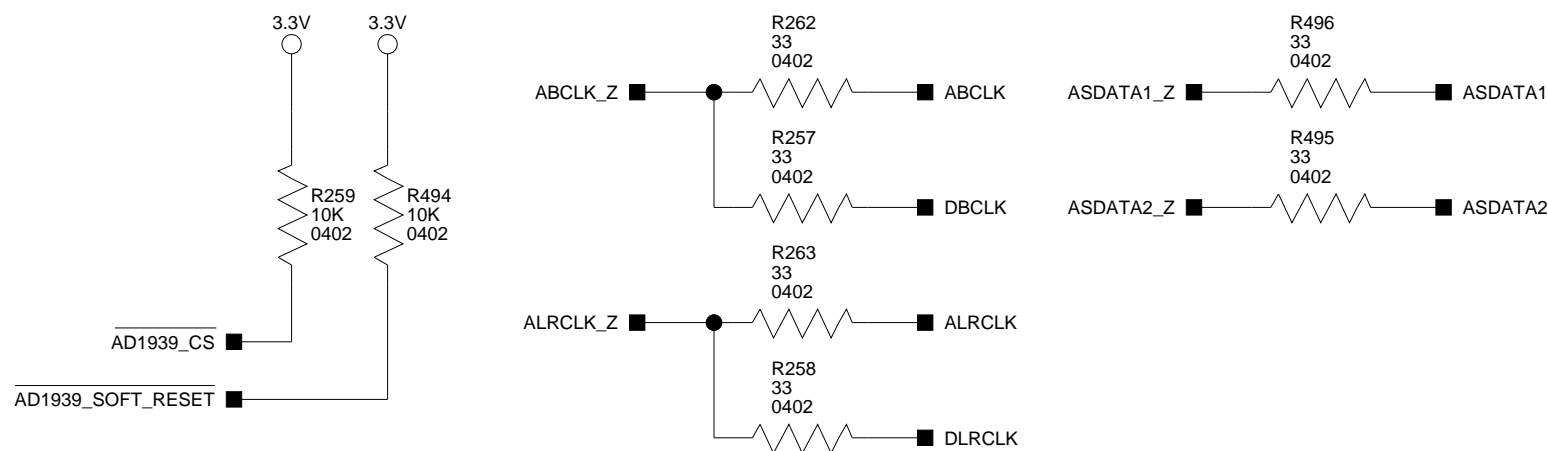
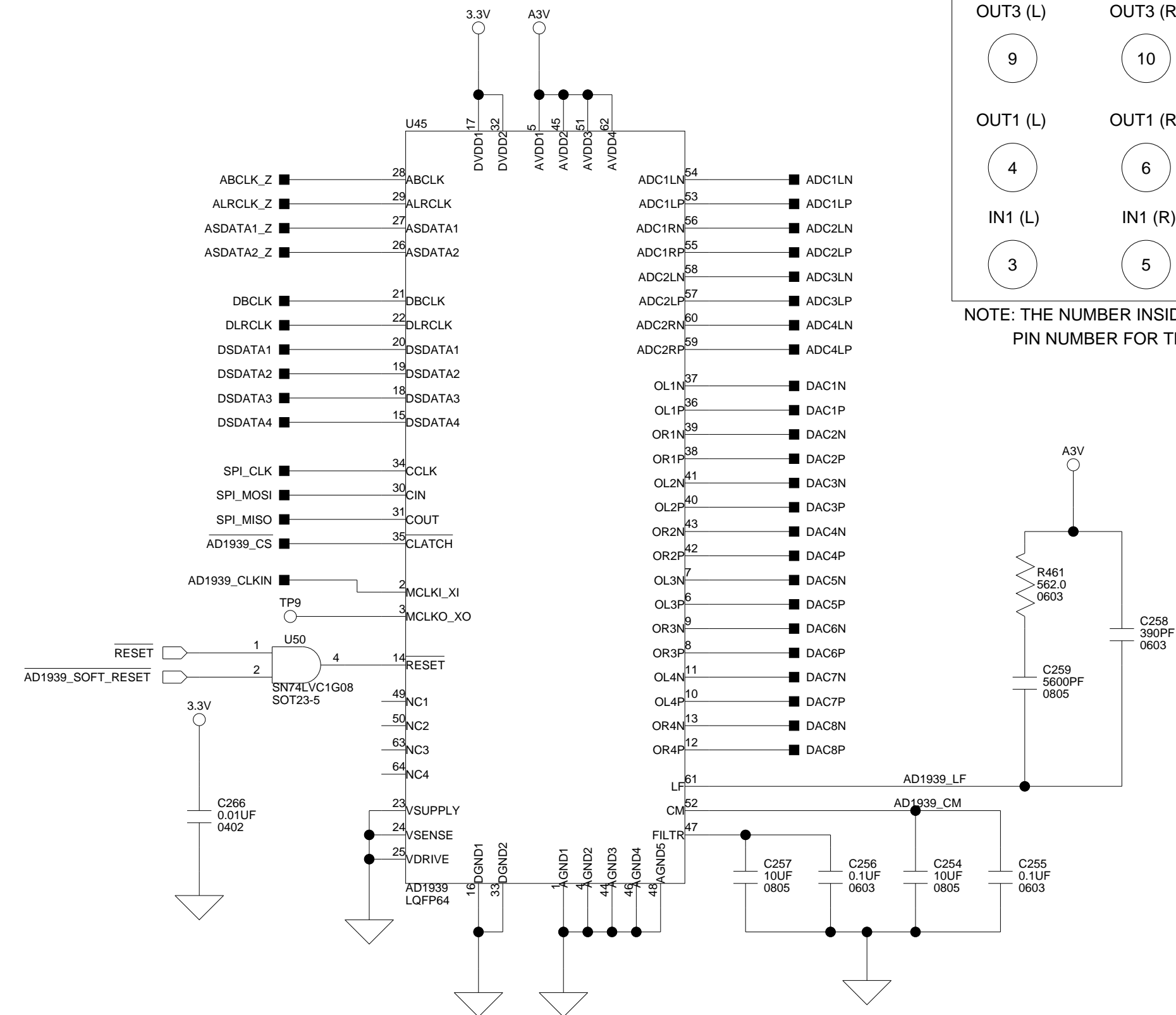
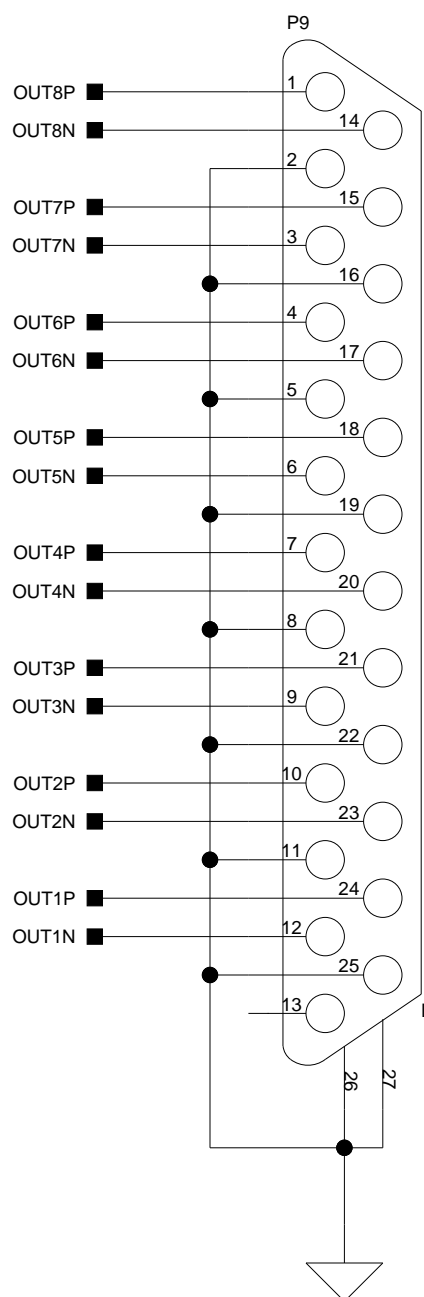
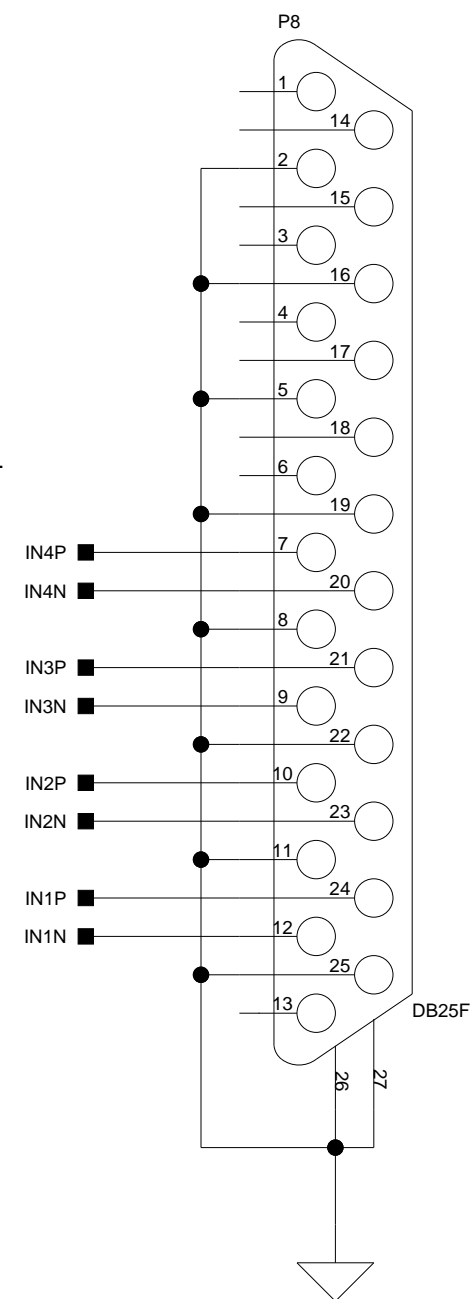
J5

WHITE (LEFT) RED (RIGHT)

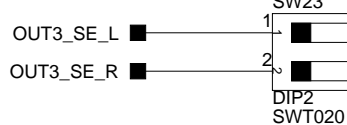


NOTE: THE NUMBER INSIDE EACH OF THE CIRCLES IS THE ACTUAL PIN NUMBER FOR THE RESPECTIVE CONNECTOR.

DB25 Female Connectors for Conversion to XLR Connectors

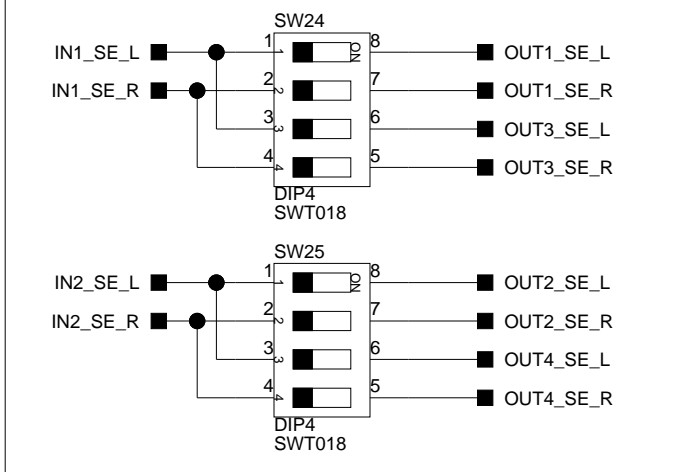


SW23: HEAD PHONE ENABLE
DEFAULT: ALL OFF

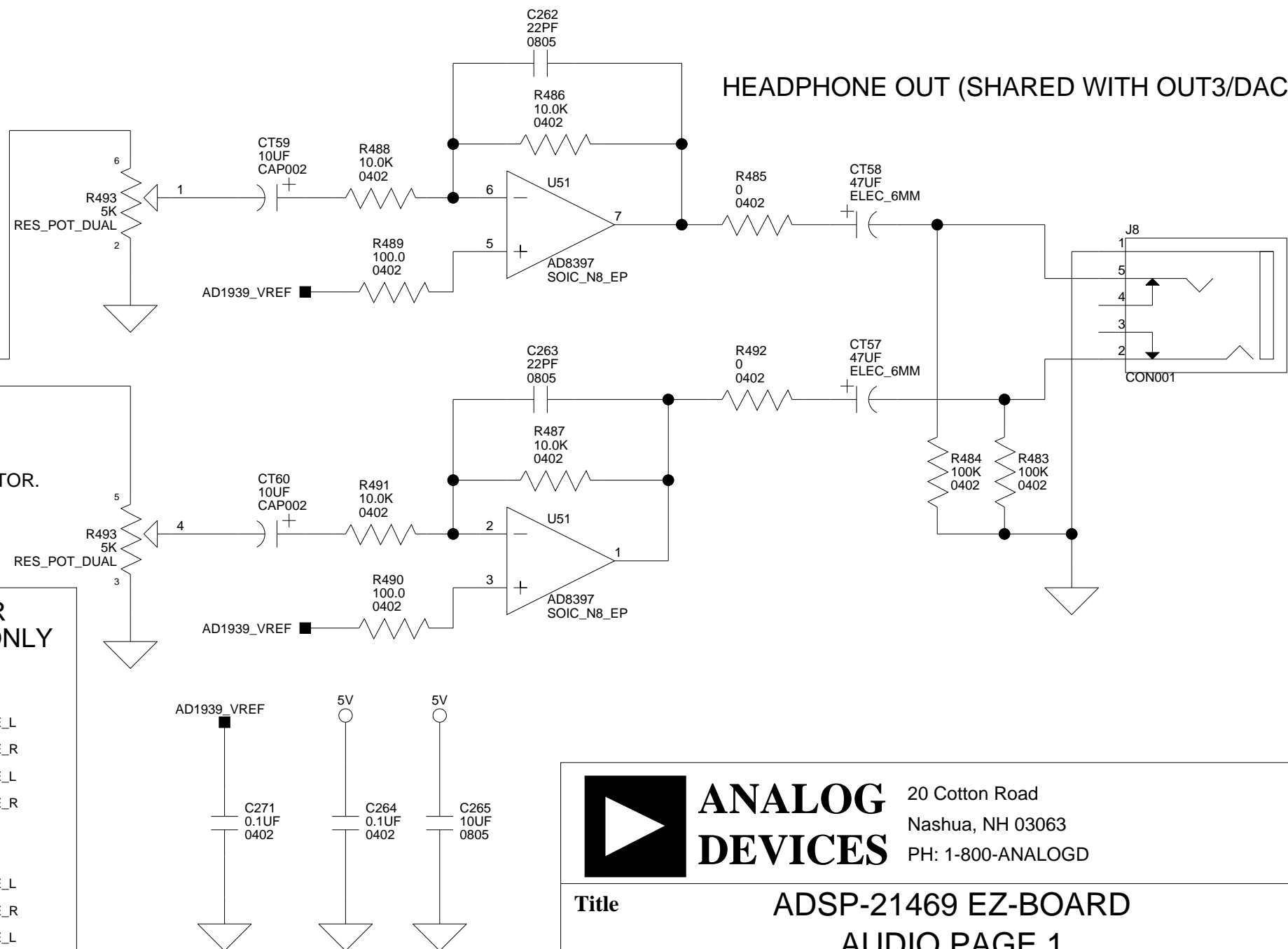


NOTE: A USER NEEDS TO TURN SWITCH SW23 ON IN ORDER TO USE THE HEAD PHONE CONNECTOR.

LOOPBACK CONNECTOR
FOR TESTING PURPOSES ONLY
DEFAULT: ALL OFF



HEADPHONE OUT (SHARED WITH OUT3/DAC5&6)

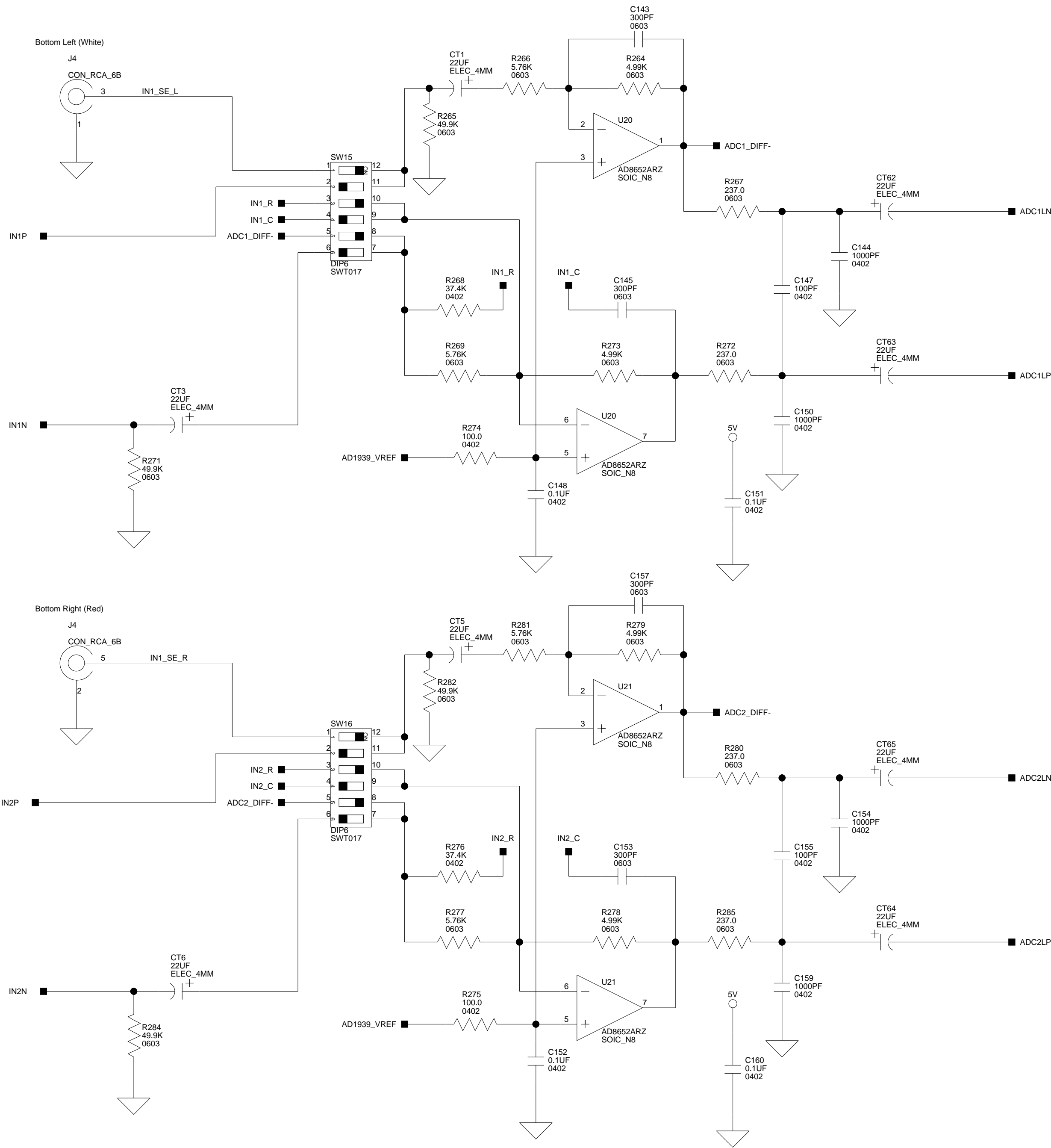


**ANALOG
DEVICES**

20 Cotton Road
Nashua, NH 03063
PH: 1-800-ANALOGD

Title **ADSP-21469 EZ-BOARD**
AUDIO PAGE 1

Size C	Board No. A0221-2008	Rev 0.2
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IN1 (LEFT) SETTINGS

SWITCH	SINGLE ENDED USE	DIFFERENTIAL USE
	RCA IN (DEFAULT)	DB25 IN (P8)
SW15.1	ON	OFF
SW15.2	OFF	ON
SW15.3	ON	OFF
SW15.4	OFF	ON
SW15.5	ON	OFF
SW15.6	OFF	ON

NOTE: DIFFERENTIAL USE REQUIRES A DB25 TO XLR CABLE.

IN1 (RIGHT) SETTINGS

SWITCH	SINGLE ENDED USE	DIFFERENTIAL USE
	RCA IN (DEFAULT)	DB25 IN (P8)
SW16.1	ON	OFF
SW16.2	OFF	ON
SW16.3	ON	OFF
SW16.4	OFF	ON
SW16.5	ON	OFF
SW16.6	OFF	ON

NOTE: DIFFERENTIAL USE REQUIRES A DB25 TO XLR CABLE.



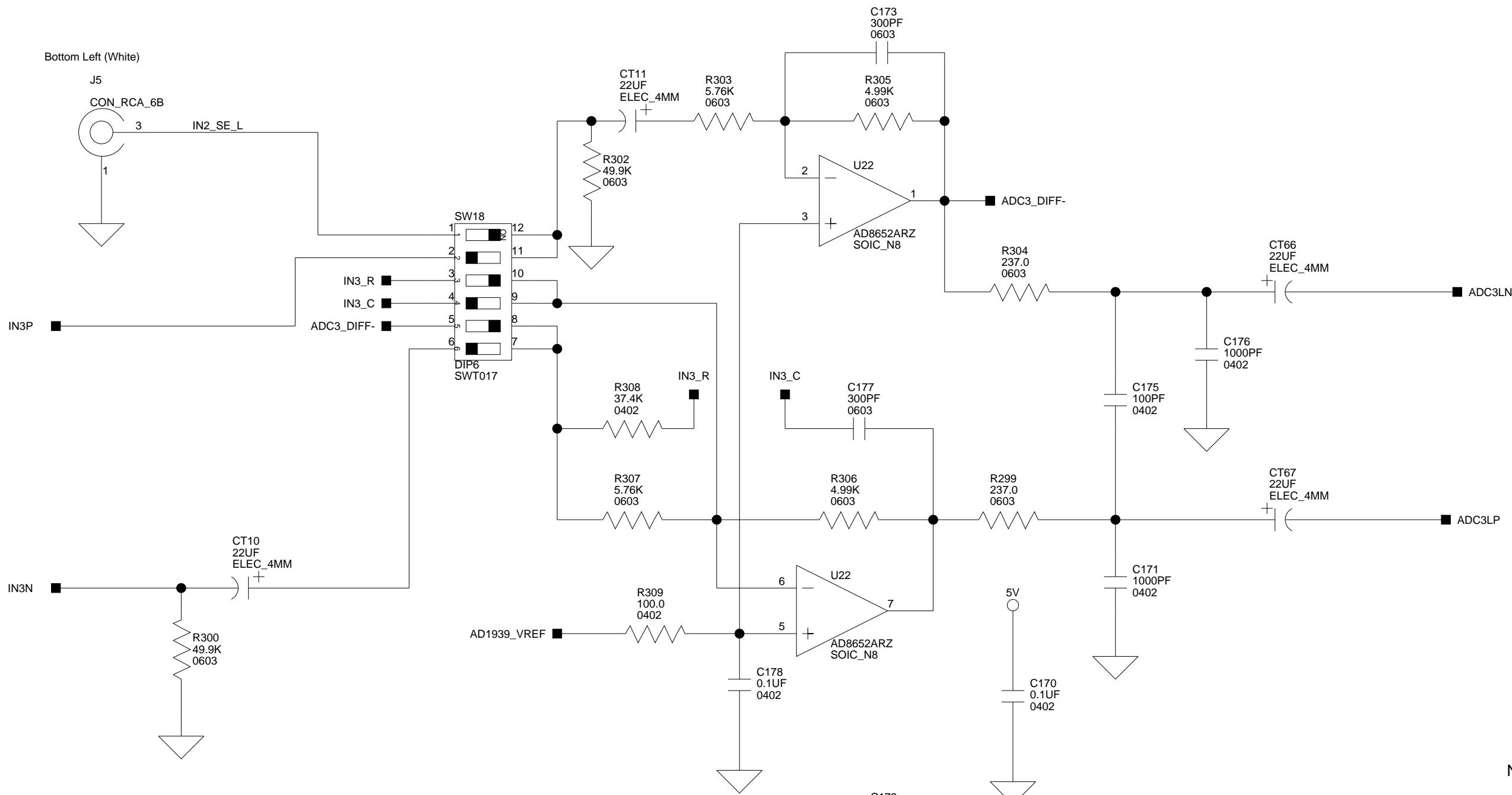
**ANALOG
DEVICES**

20 Cotton Road
Nashua, NH 03063
PH: 1-800-ANALOGD

Title ADSP-21469 EZ-BOARD
AUDIO PAGE 2

Size C	Board No. A0221-2008	Rev 0.2
Date 3-31-2009_14:34	Sheet 9 of	16

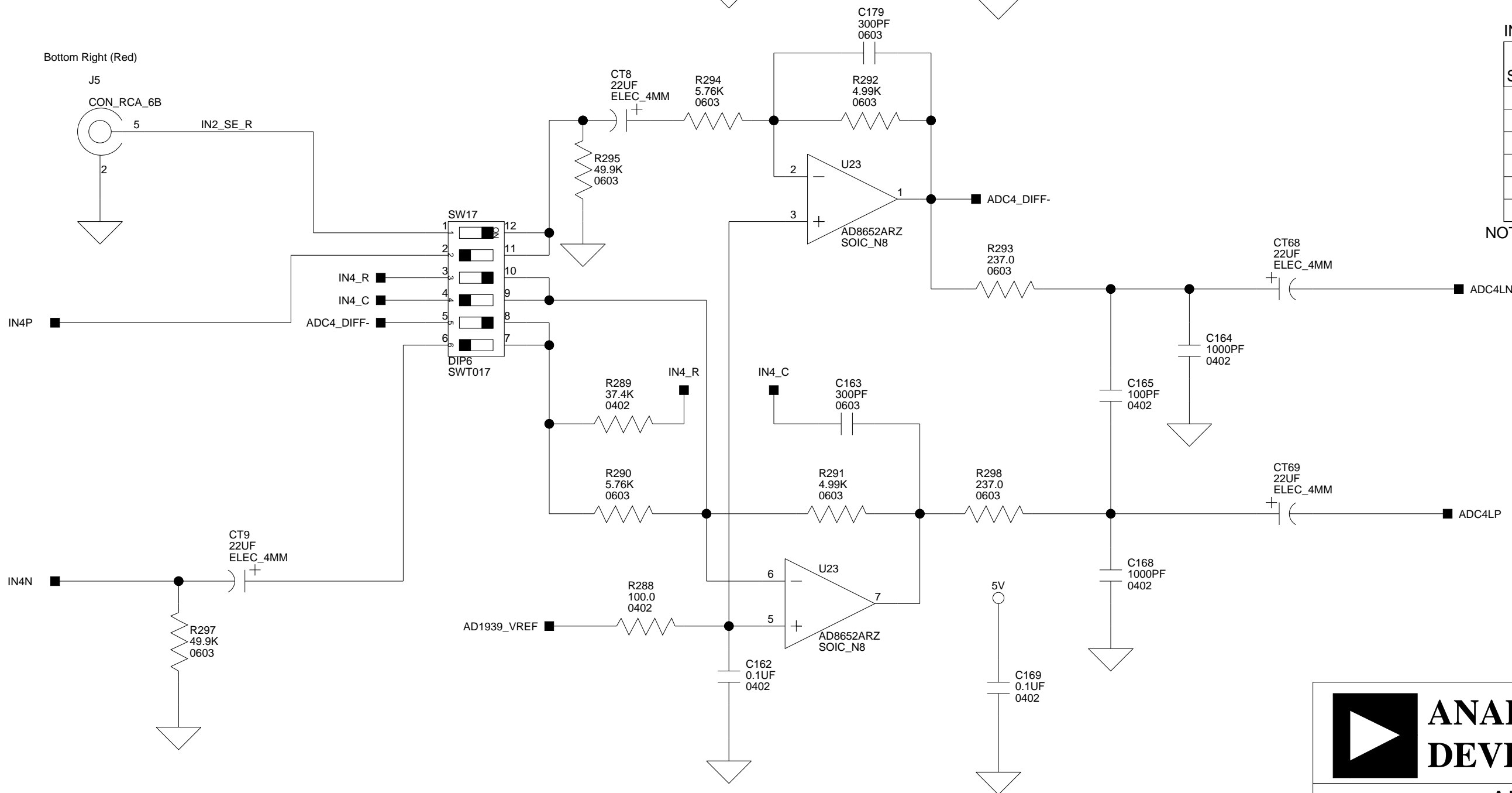
IN2



IN2 (LEFT) SETTINGS

SWITCH	SINGLE ENDED USE RCA IN (DEFAULT)	DIFFERENTIAL USE DB25 IN (P8)
SW18.1	ON	OFF
SW18.2	OFF	ON
SW18.3	ON	OFF
SW18.4	OFF	ON
SW18.5	ON	OFF
SW18.6	OFF	ON

NOTE: DIFFERENTIAL USE REQUIRES A DB25 TO XLR CABLE.



IN2 (RIGHT) SETTINGS

SWITCH	SINGLE ENDED USE RCA IN (DEFAULT)	DIFFERENTIAL USE DB25 IN (P8)
SW17.1	ON	OFF
SW17.2	OFF	ON
SW17.3	ON	OFF
SW17.4	OFF	ON
SW17.5	ON	OFF
SW17.6	OFF	ON

NOTE: DIFFERENTIAL USE REQUIRES A DB25 TO XLR CABLE.



**ANALOG
DEVICES**

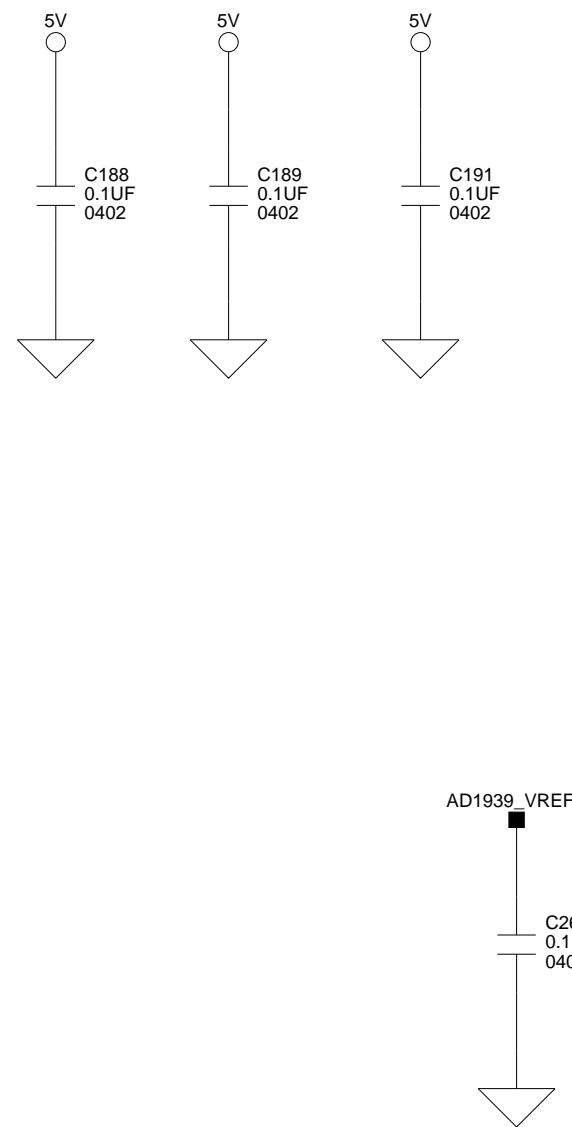
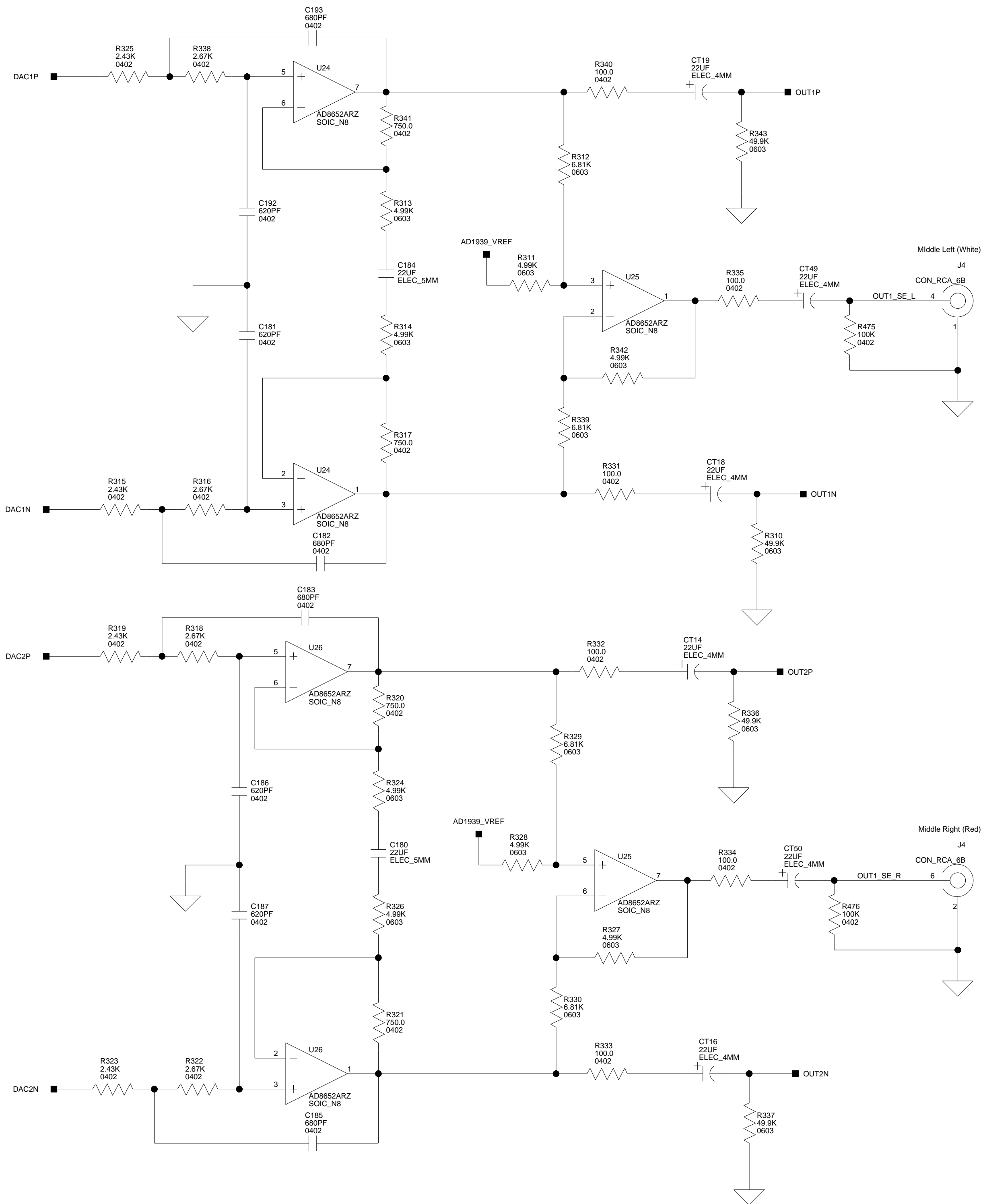
20 Cotton Road
Nashua, NH 03063
PH: 1-800-ANALOGD

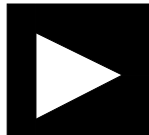
Title
**ADSP-21469 EZ-BOARD
AUDIO PAGE 3**

Size C	Board No. A0221-2008	Rev 0.2
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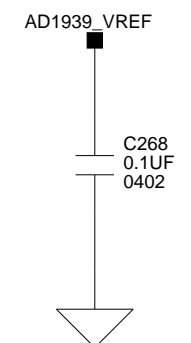
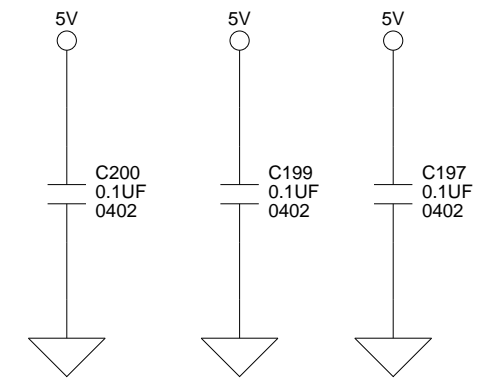
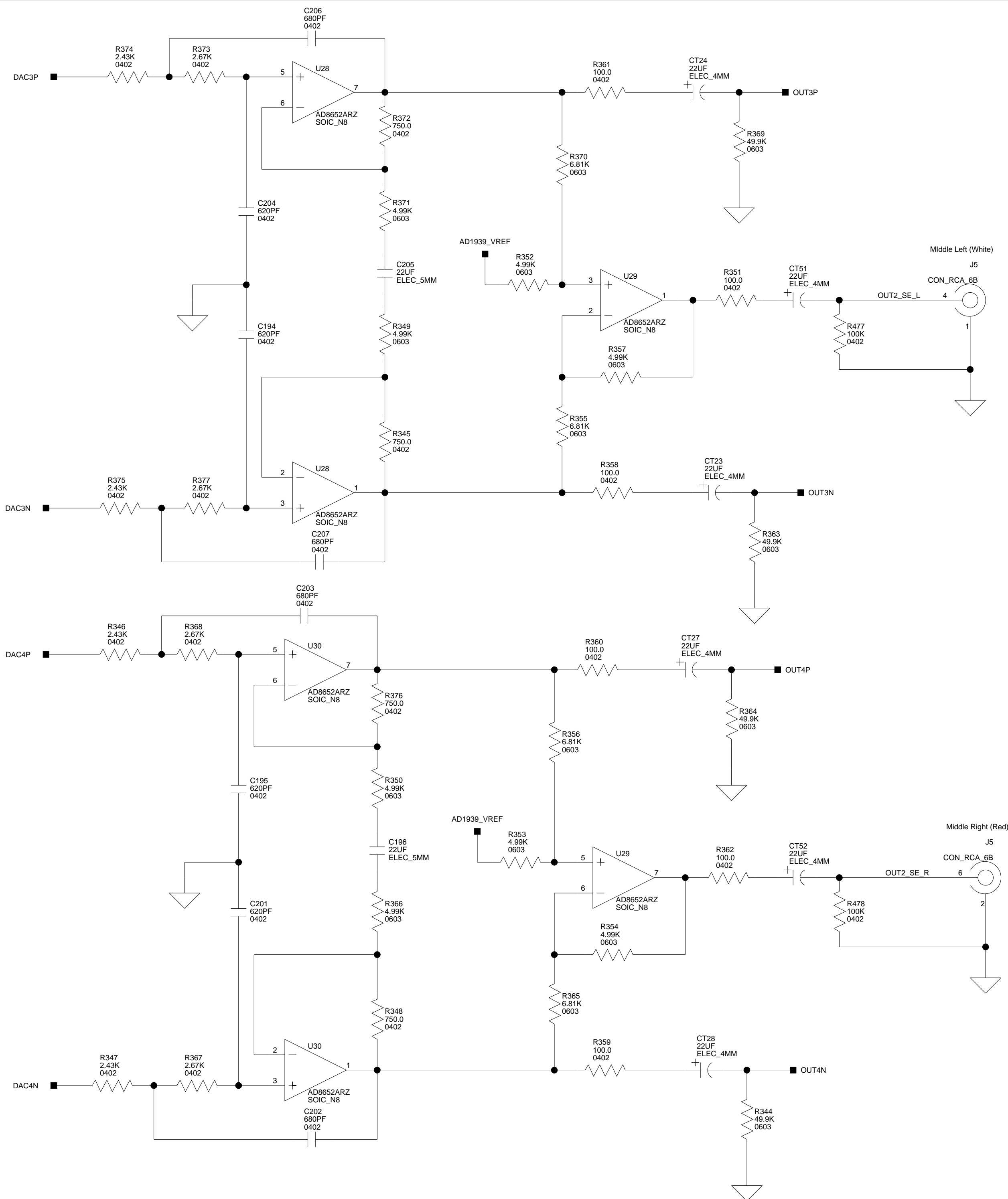
Date 3-31-2009_14:34	Sheet 10 of 16
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OUT1



		20 Cotton Road Nashua, NH 03063 PH: 1-800-ANALOGD	
Title		ADSP-21469 EZ-BOARD AUDIO PAGE 4	
Size C	Board No. A0221-2008		Rev 0.2
Date	3-19-2009 12:57	Sheet	11 of 16

OUT2

**ANALOG
DEVICES**

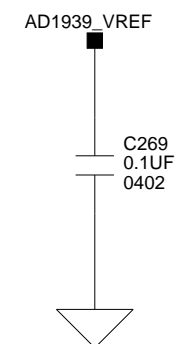
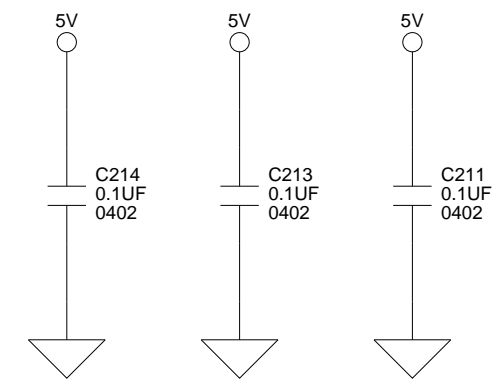
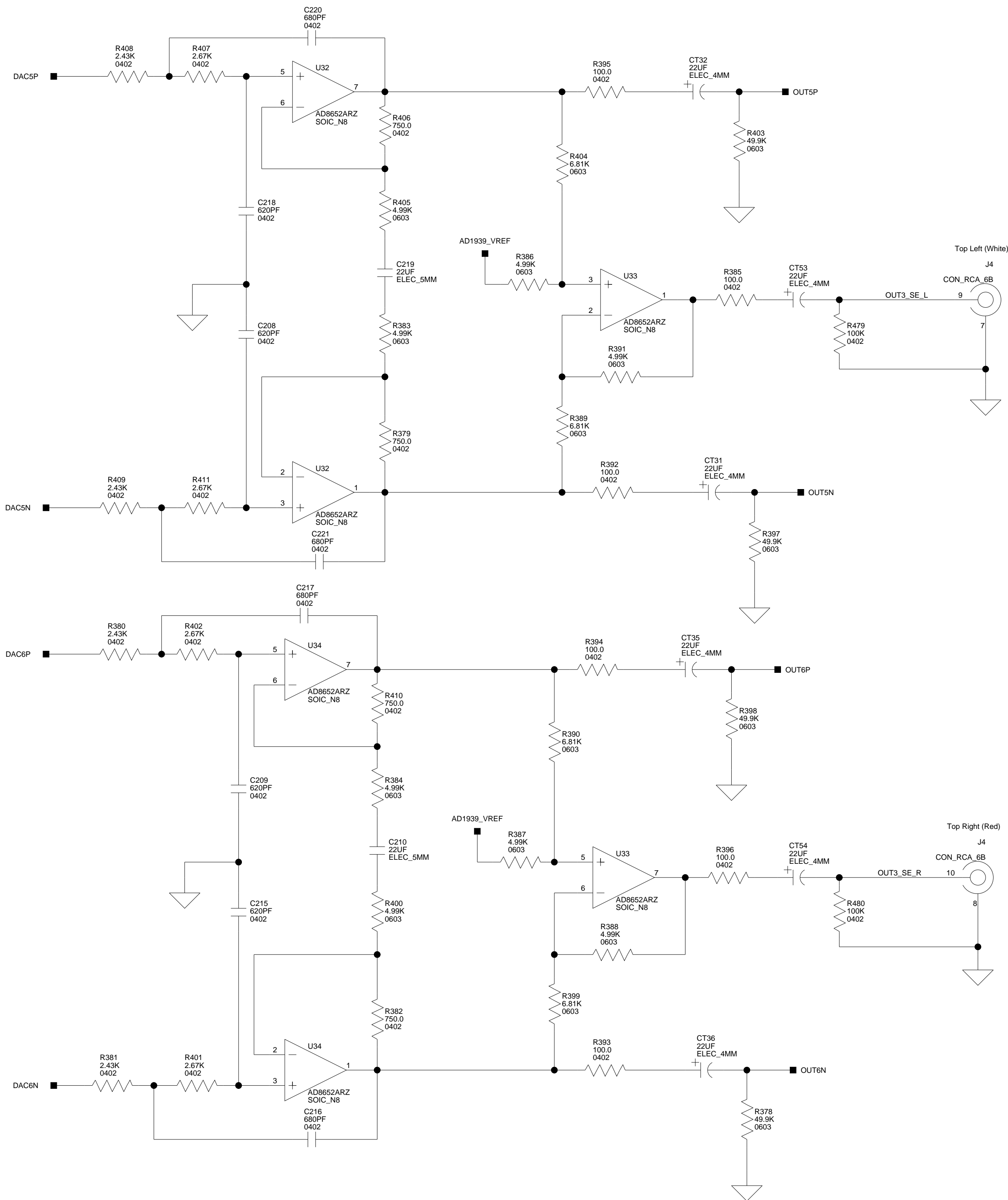
20 Cotton Road
Nashua, NH 03063
PH: 1-800-ANALOGD


Title	ADSP-21469 EZ-BOARD AUDIO PAGE 5
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Size C	Board No. A0221-2008	Rev 0.2
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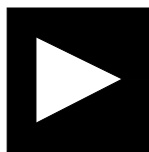
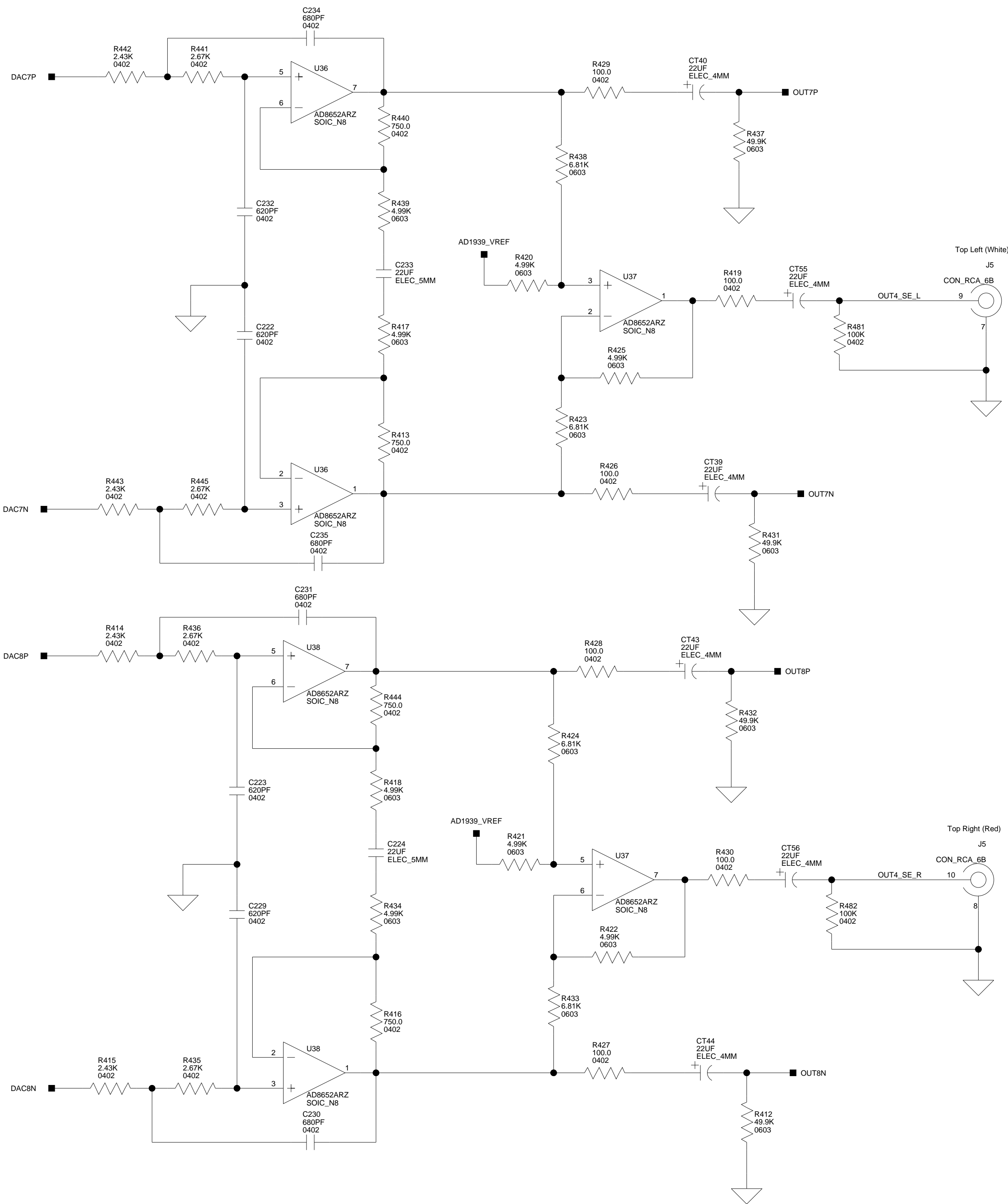
Date	3-19-2009 12:57	Sheet	12 of 16
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OUT3



 ANALOG DEVICES		20 Cotton Road Nashua, NH 03063 PH: 1-800-ANALOGD	
Title			
ADSP-21469 EZ-BOARD AUDIO PAGE 6			
Size C	Board No.		Rev
	A0221-2008		0.2
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			13 of 16

OUT4



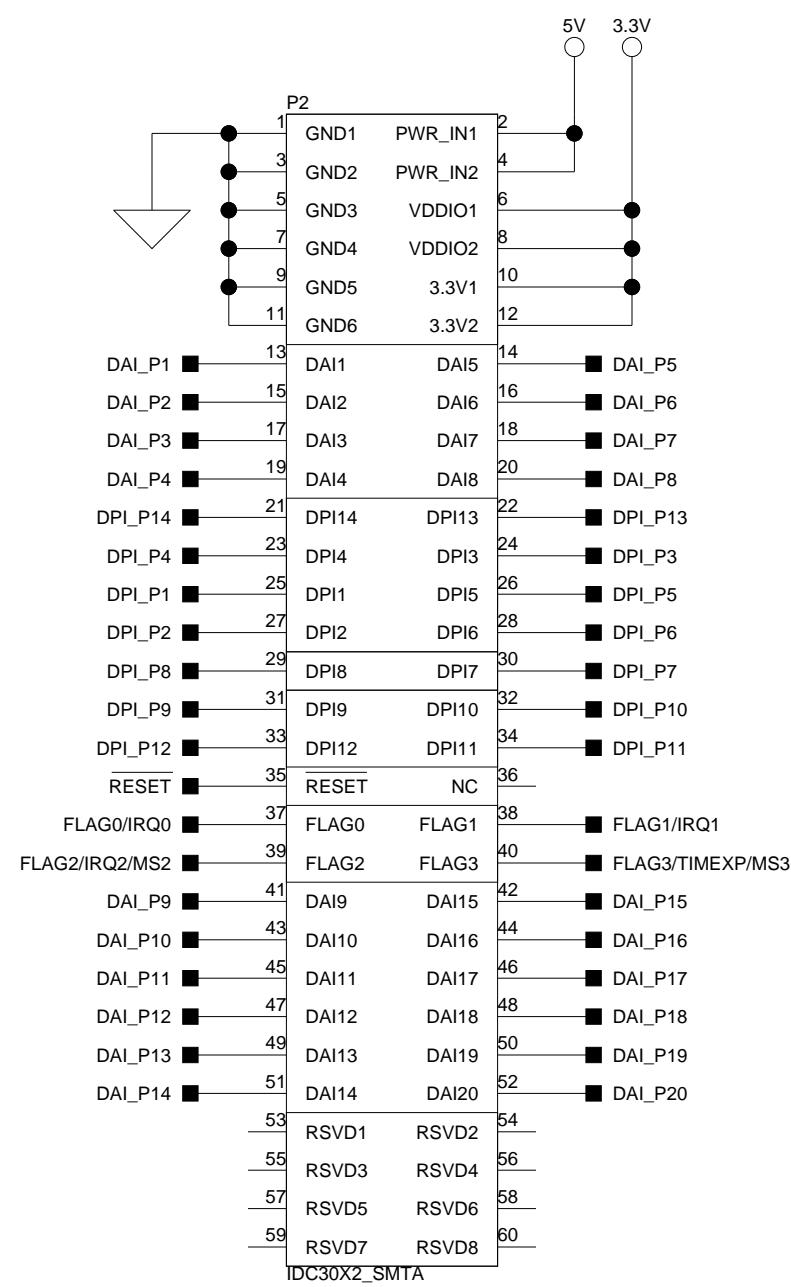
**ANALOG
DEVICES**

20 Cotton Road
Nashua, NH 03063
PH: 1-800-ANALOGD

Title ADSP-21469 EZ-BOARD
AUDIO PAGE 7

Size C	Board No.	Rev
	A0221-2008	0.2

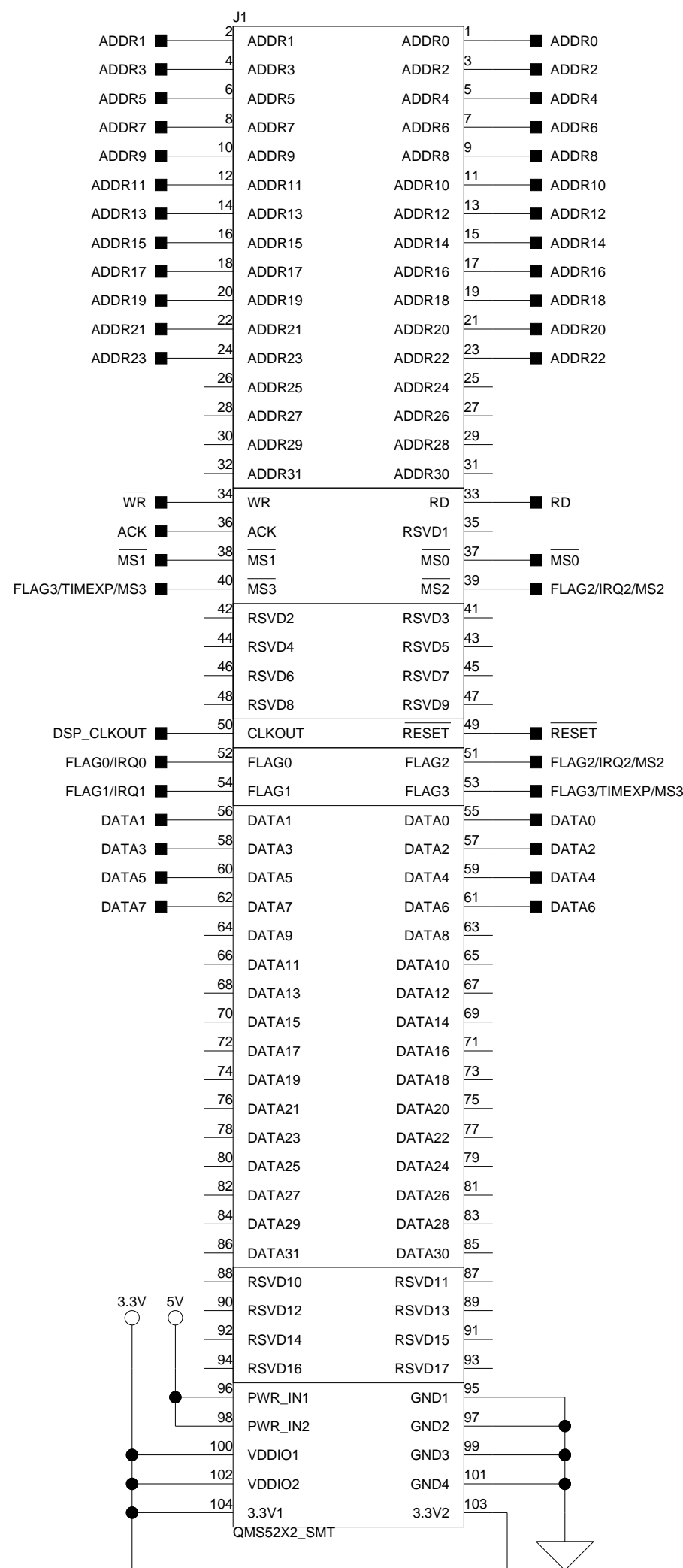
Date	Sheet	14 of	16
3-19-2009_12:57			



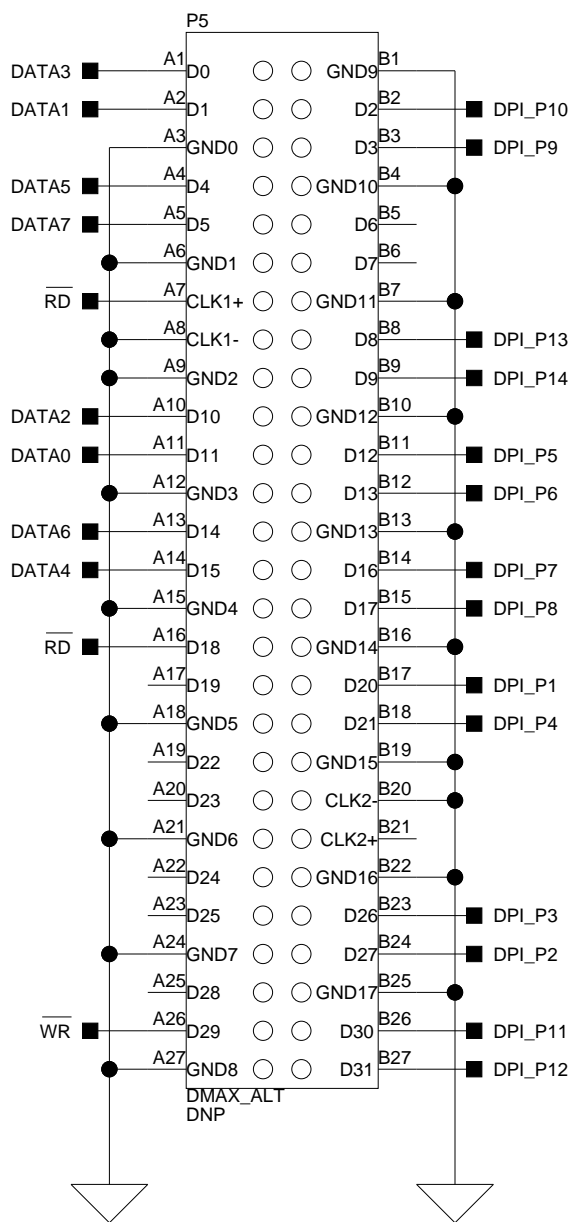
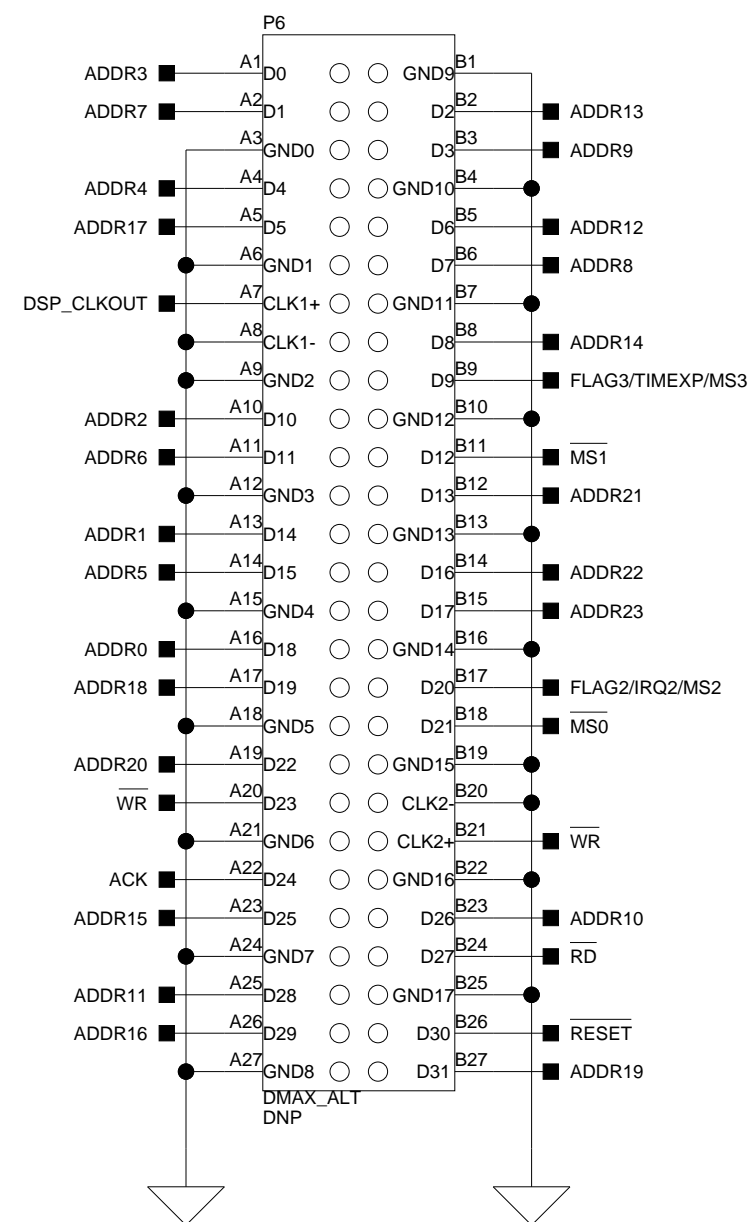
NOTE: SHUTTING OFF ANY OF THE SWITCHES FOR EXPANSION USE
WILL CAUSE LOSS OF FUNCTIONALITY TO THE RESPECTIVE
PERIPHERAL ON THE EZ-BOARD.


DSP PIN NAME	PERIPHERAL NET CONNECTED TO	CONNECTED VIA SWITCH	SWITCH DEFAULT
DPI_P1	SPI_MOSI	SW3.1	ON
DPI_P2	SPI_MISO	SW3.2	ON
DPI_P3	SPI_CLK	SW3.3	ON
DPI_P4	AD1939_CS	SW3.4	ON
DPI_P5	SPI_CS	SW3.5	ON
DPI_P6	LED1	SW3.6	ON
DPI_P7	TEMP_SDA	SW3.7	ON
DPI_P8	TEMP_SCK	SW3.8	ON
DPI_P9	UART_TX	SW14.1	ON
DPI_P10	UART_RX	SW14.2	ON
DPI_P11	UART_RTS	SW14.3	OFF
DPI_P12	UART_CTS	SW14.4	OFF
DPI_P13	LED2	SW14.5	ON
DPI_P14	LED3	SW14.6	ON

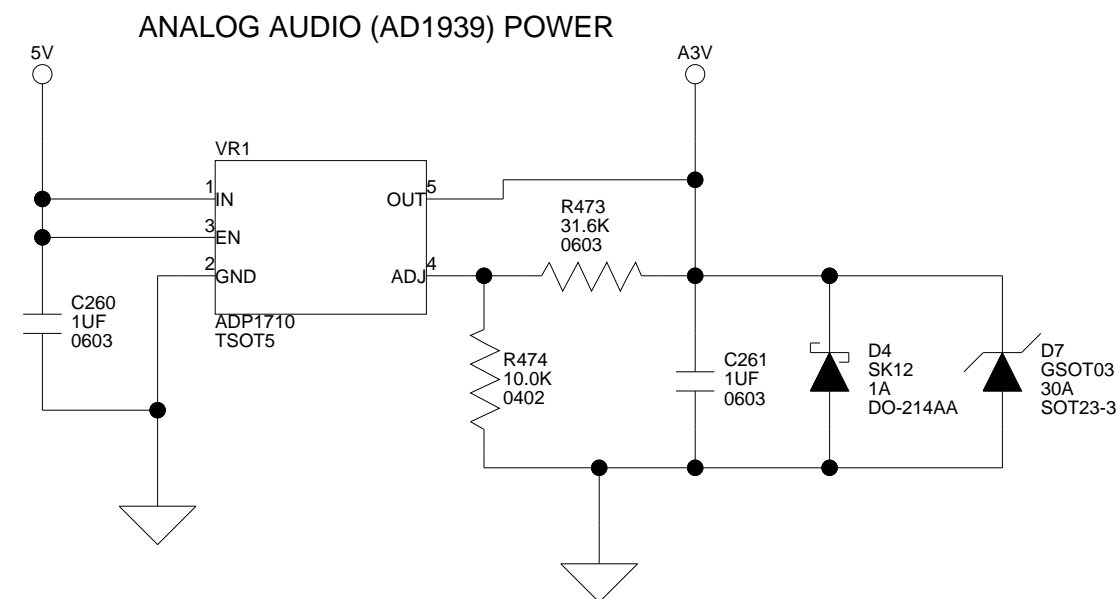
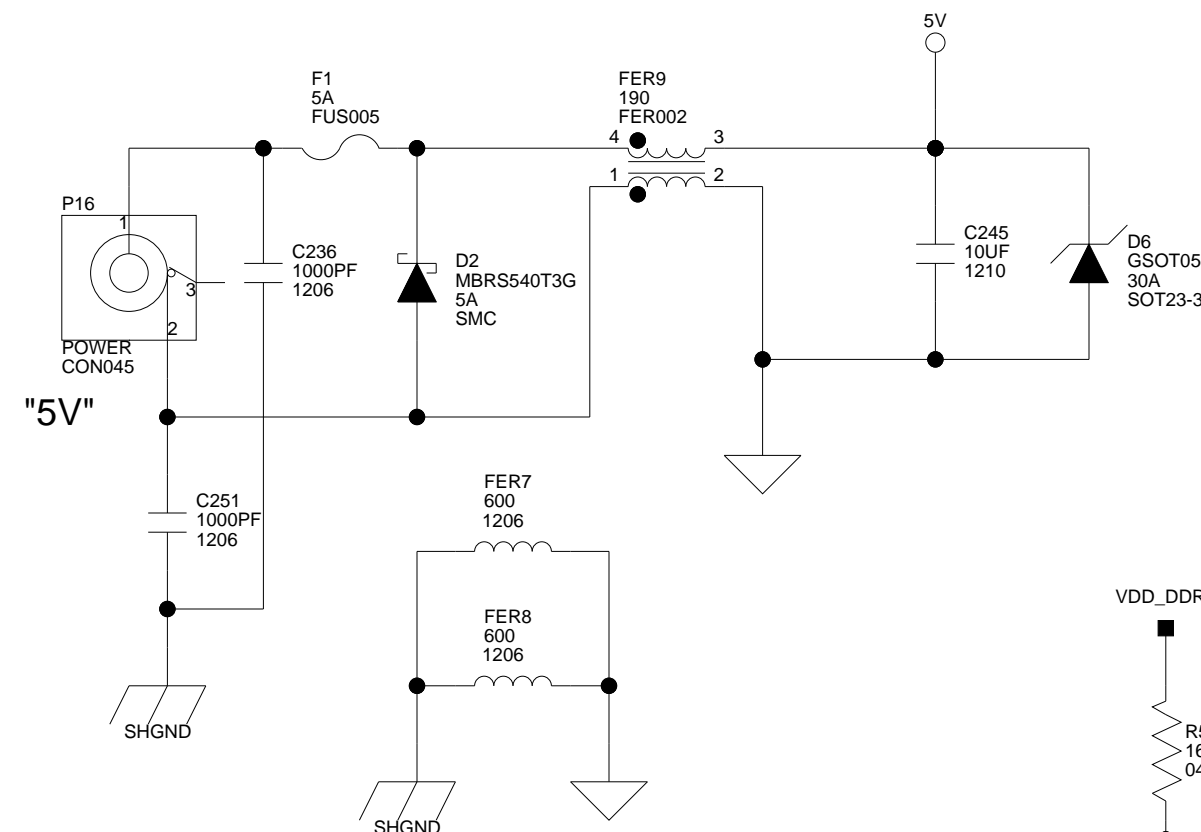
NOTE: SHUTTING OFF ANY OF THE SWITCHES FOR EXPANSION USE
WILL CAUSE LOSS OF FUNCTIONALITY TO THE RESPECTIVE
PERIPHERAL ON THE EZ-BOARD.



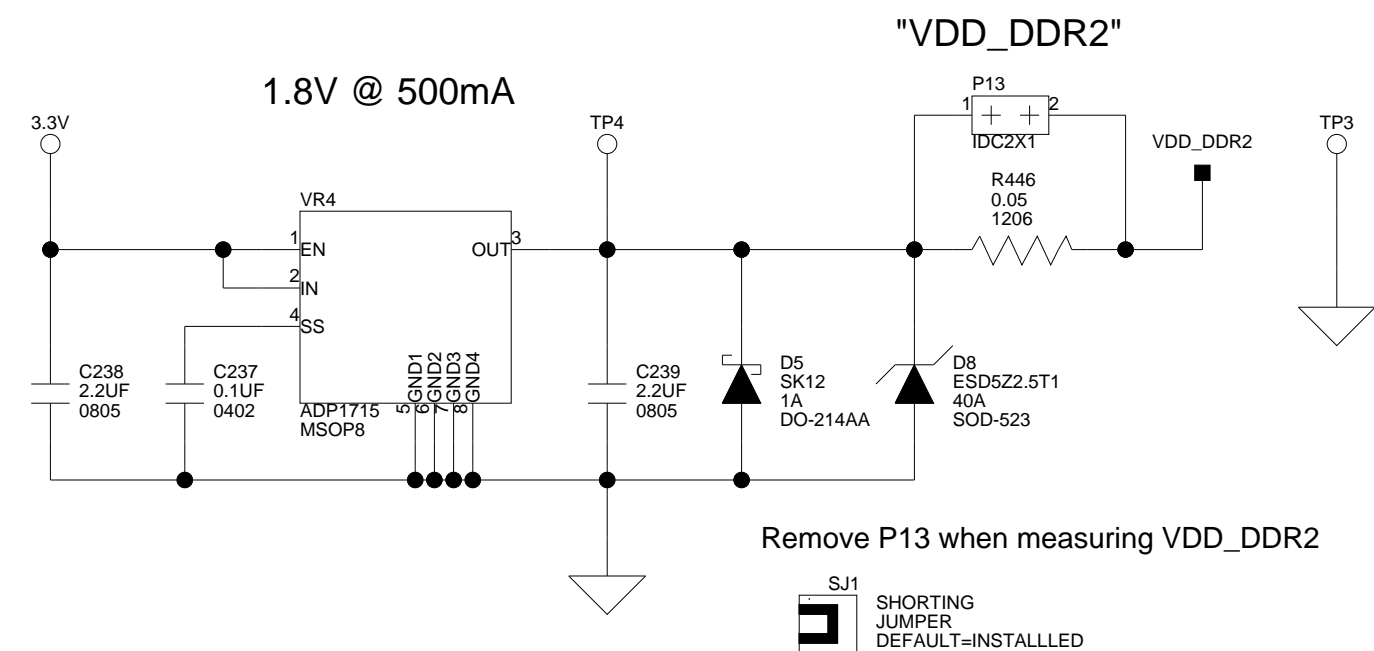
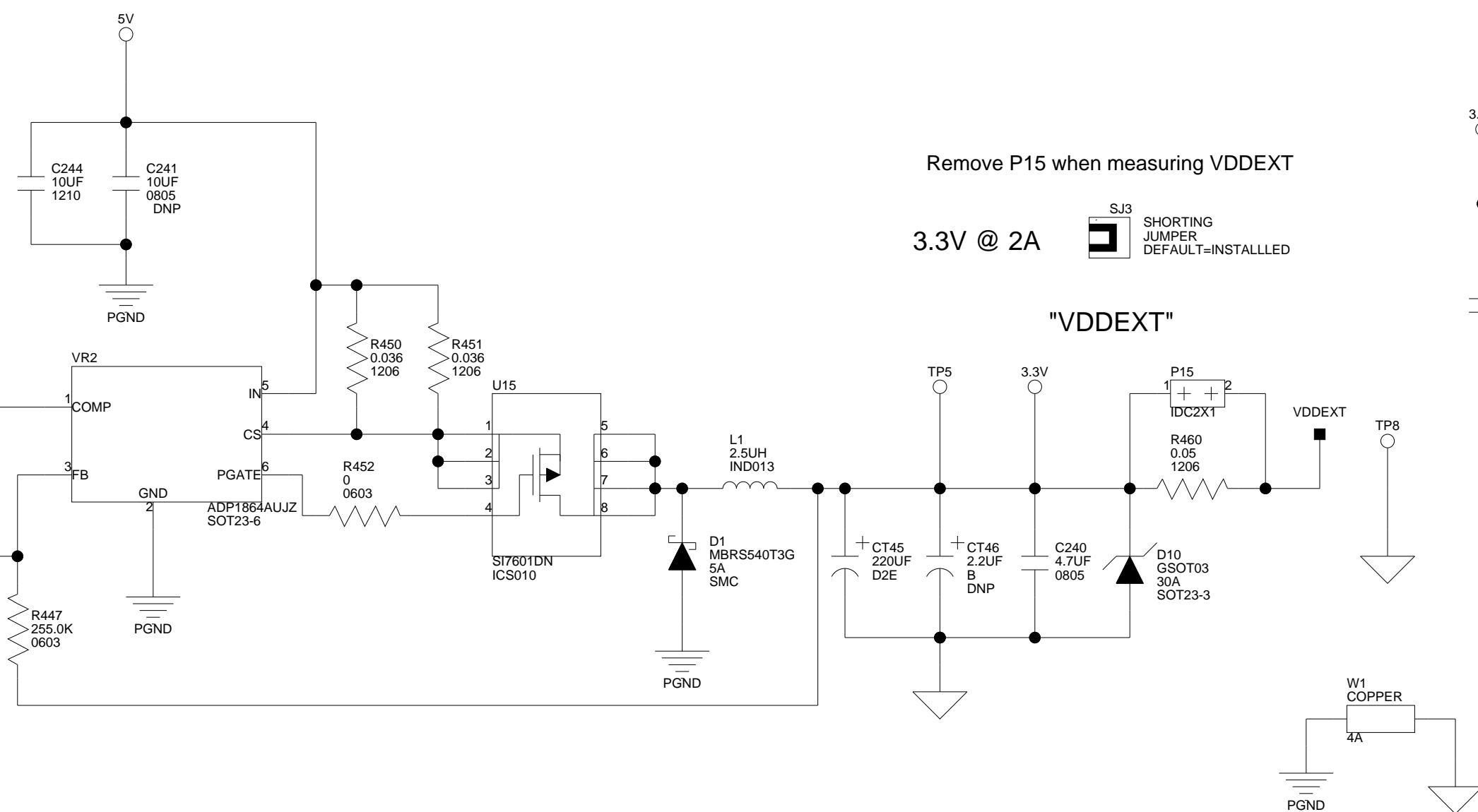
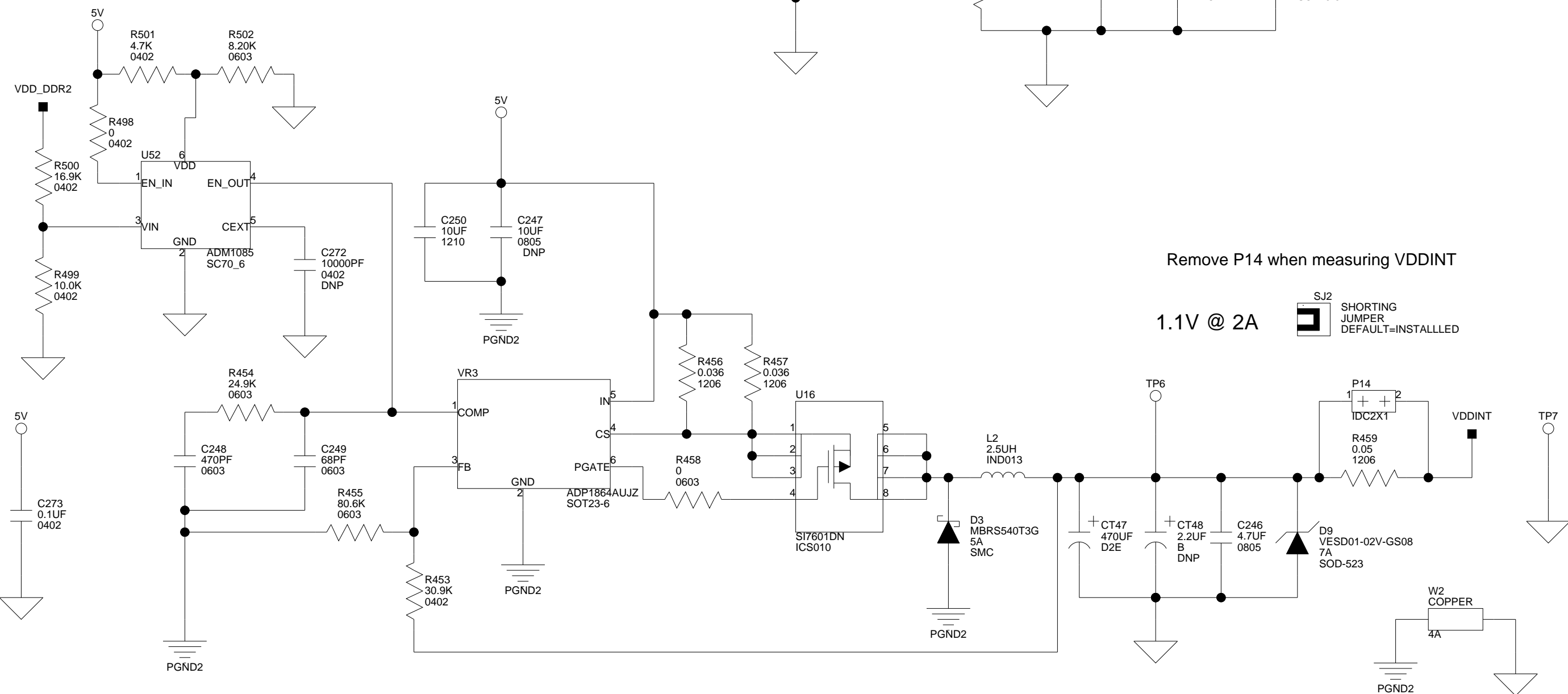
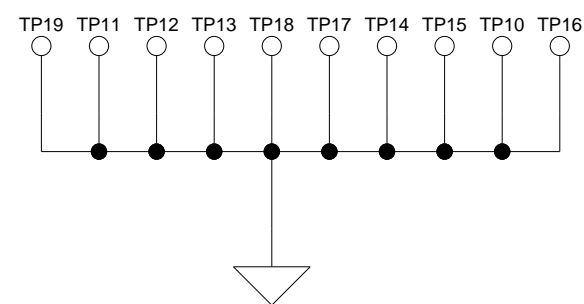
NOTE: SHUTTING OFF ANY OF THE SWITCHES FOR EXPANSION USE
WILL CAUSE LOSS OF FUNCTIONALITY TO THE RESPECTIVE
PERIPHERAL ON THE EZ-BOARD.




 ANALOG DEVICES		20 Cotton Road Nashua, NH 03063 PH: 1-800-ANALOGD	
Title ADSP-21469 EZ-BOARD EXPANSION II INTERFACE / L.A. CONNECTORS			
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GND Test Points are scattered on PCB for Test Measurement Purposes.
LABEL "GND" ON ALL TPs





ANALOG

DEVICES

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Nashua, NH 03063
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Title				ADSP-21469 EZ-BOARD POWER			
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