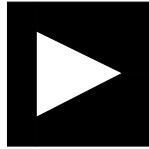


ADSP-21489 SVS EZ-BUB
SCHEMATIC

<div><div></div><div><div>ANALOG DEVICES</div><div>20 Cotton Road Nashua, NH 03063 PH: 1-800-ANALOGD</div></div></div>			
Title		ADSP-21489 SVS EZ-BUB TITLE SHEET	
Size C	Board No. A0301-2011		Rev 1.0
Date	12/12/11	Sheet	1 of 16

A

B

C

D

1

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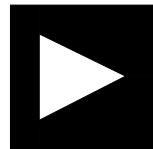
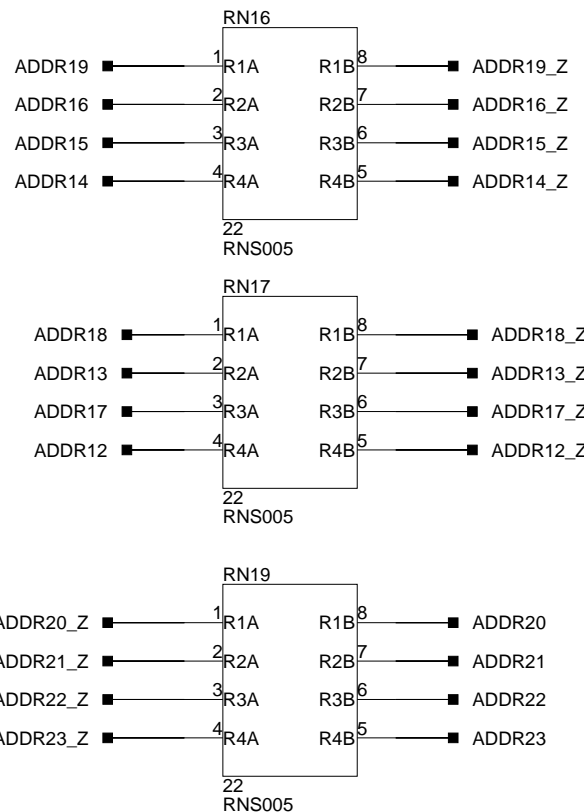
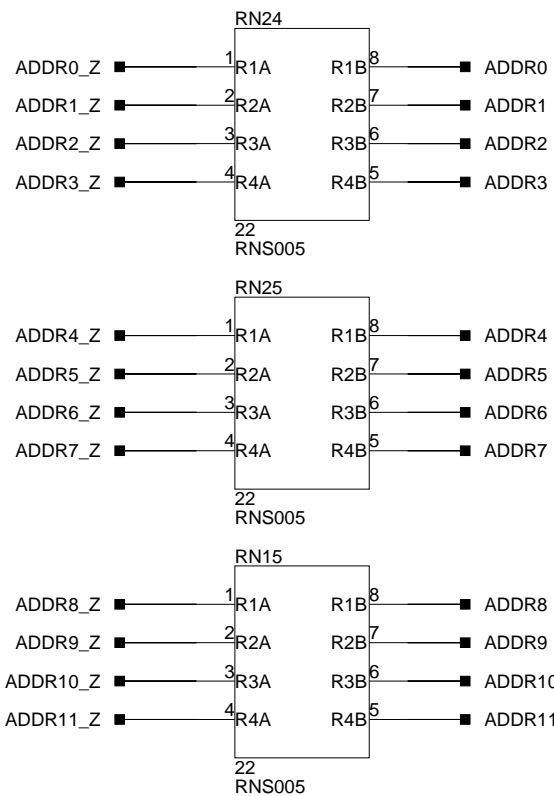
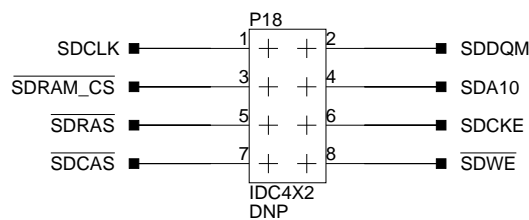
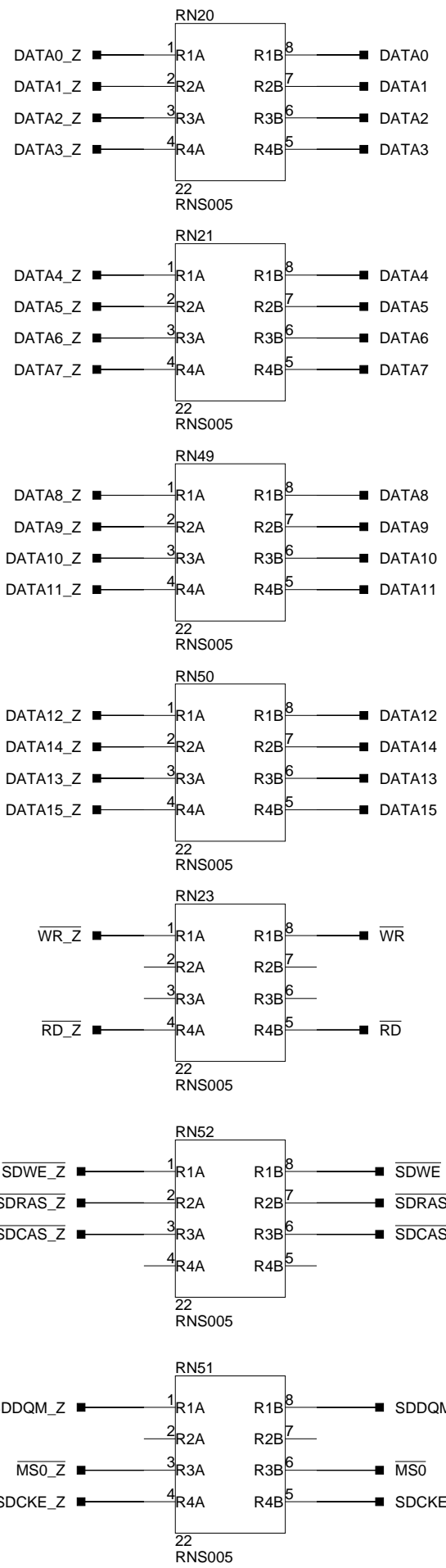
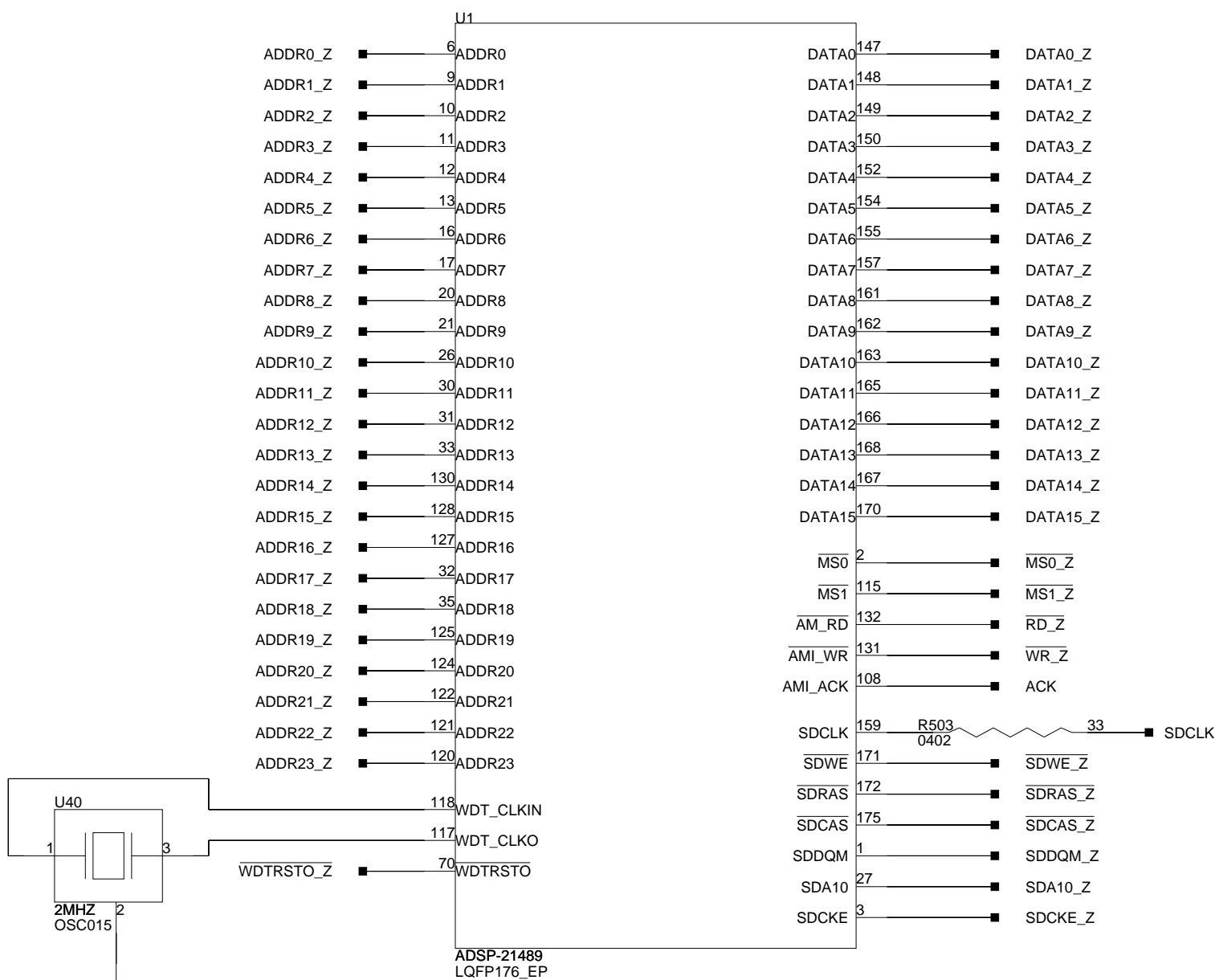
2

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**ANALOG
DEVICES**

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

Title **ADSP-21489 SVS EZ-BUB
DSP-EXTERNAL PORT**

Size C Board No. **A0301-2011** Rev **1.0**

Date 12/12/11 Sheet 2 of 16

A

B

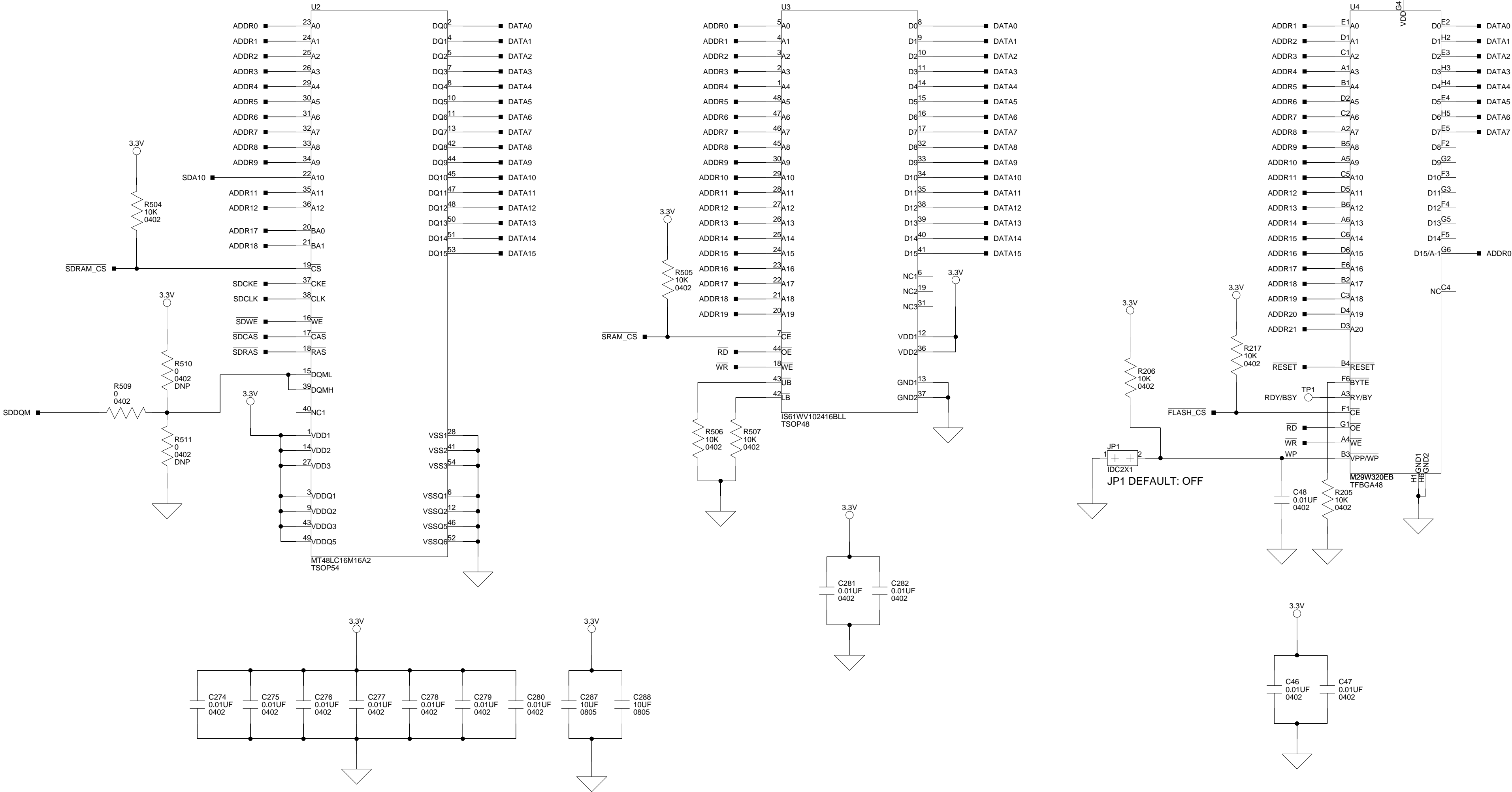
C

D

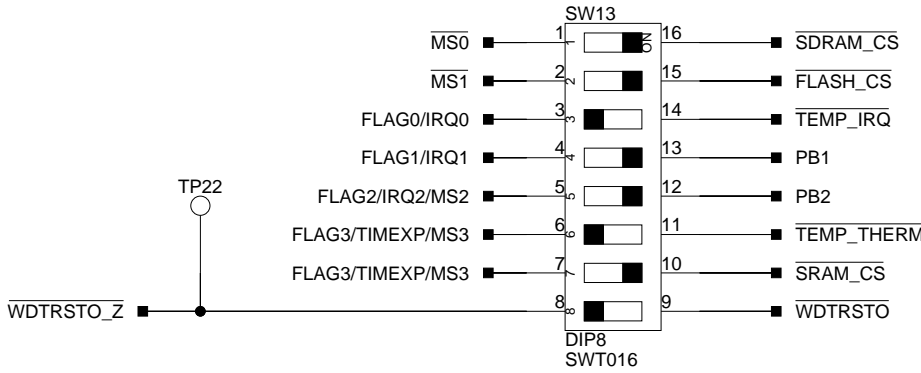
32MB SDRAM
(4 Mbit X 16 X 4 banks)

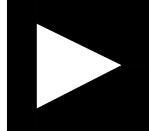
2MB SRAM
(1 Mbit X 16)

4MB FLASH
(4 Mbit X 8)



SW13: EXTERNAL PORT ENABLE
DEFAULT: ON ON OFF ON ON OFF ON OFF



		20 Cotton Road Nashua, NH 03063 PH: 1-800-ANALOGD	
Title ADSP-21489 SVS EZ-BUB MEMORY - PARALLEL			
Size C	Board No. A0301-2011		Rev 1.0
Date	12/12/11		Sheet 3 of 16

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2

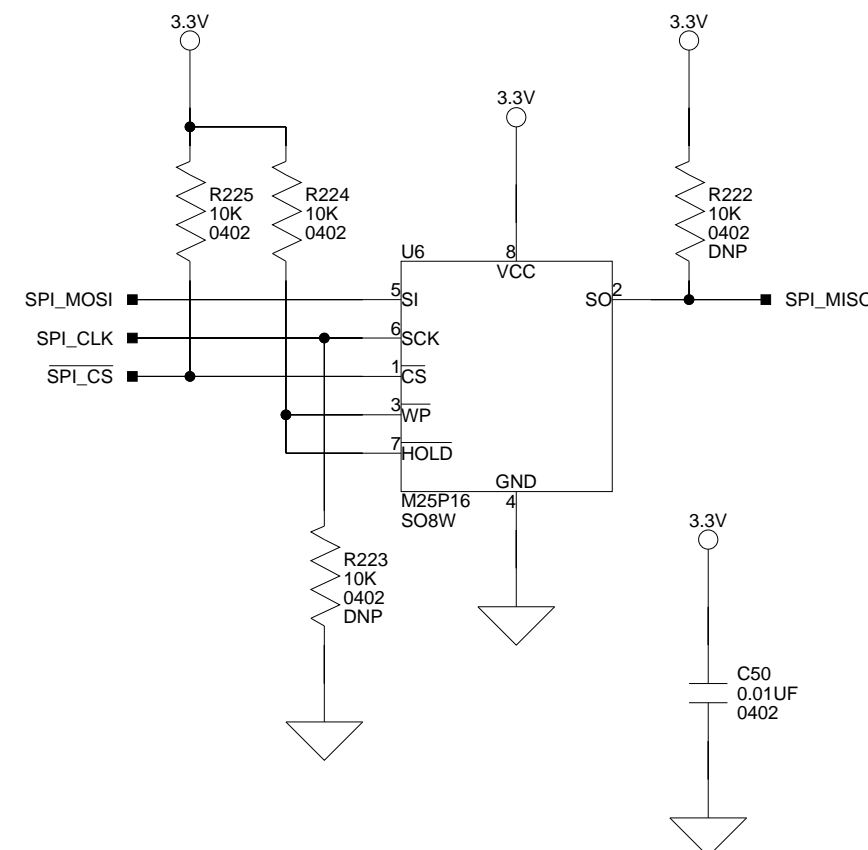
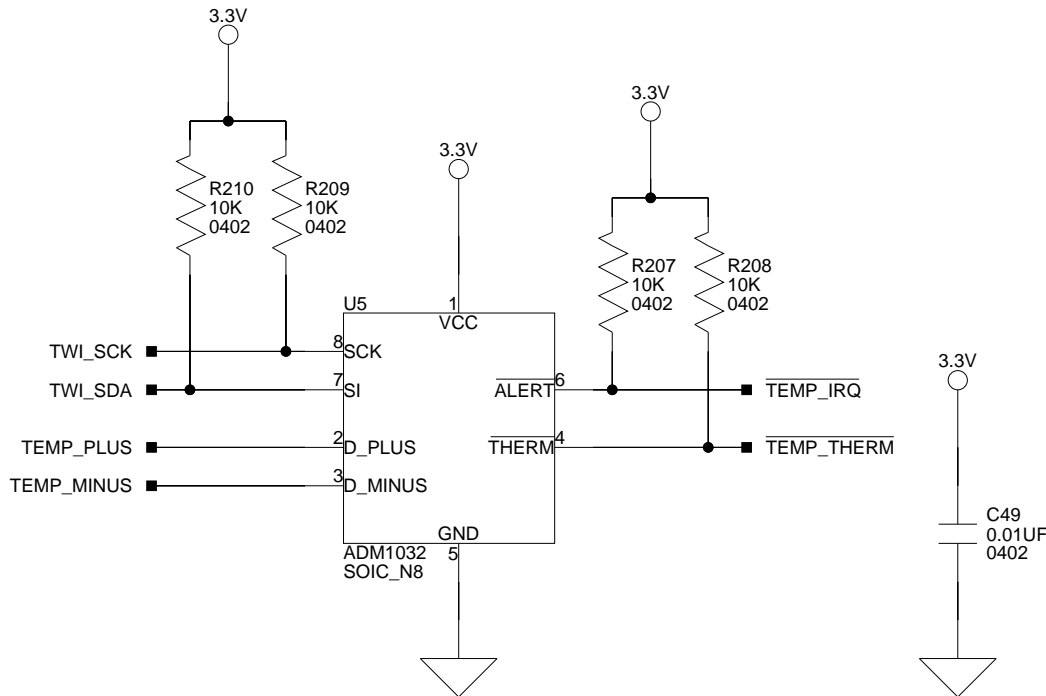
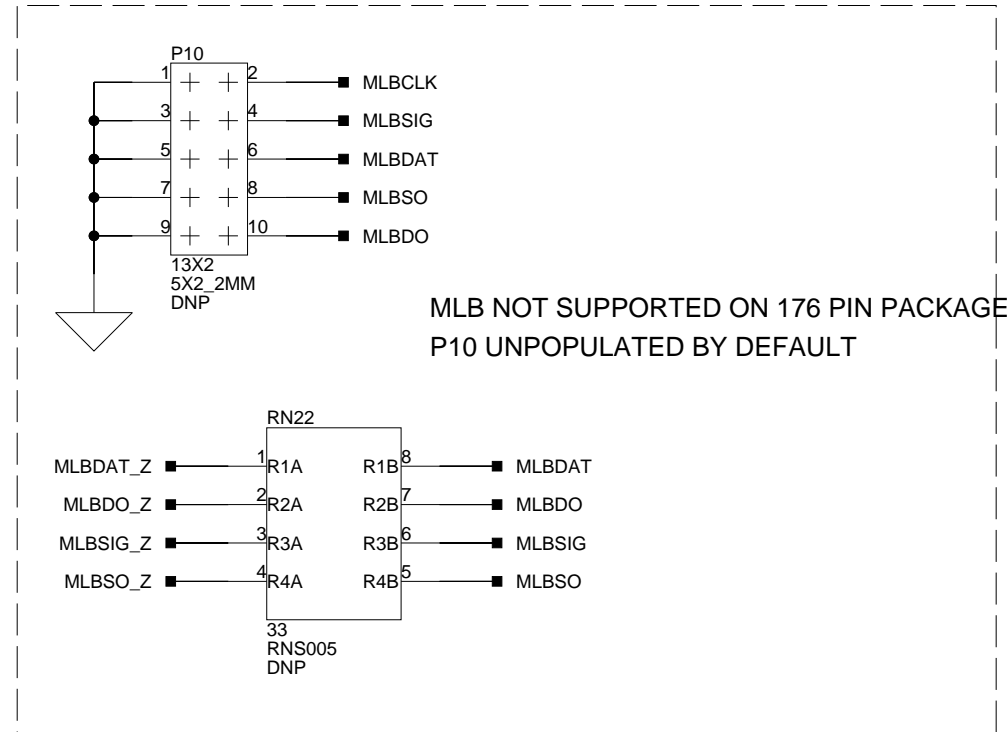
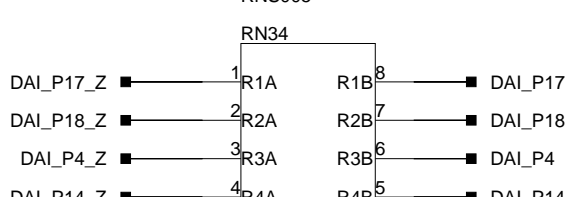
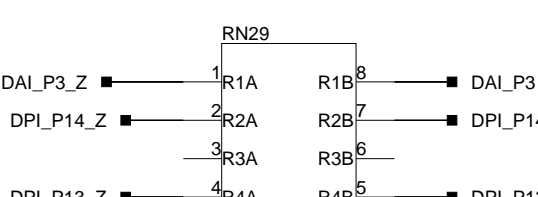
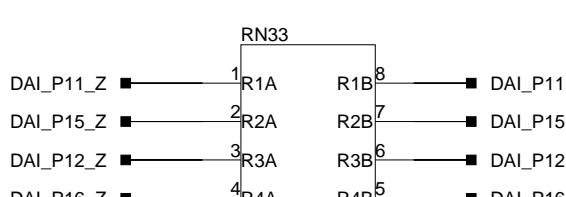
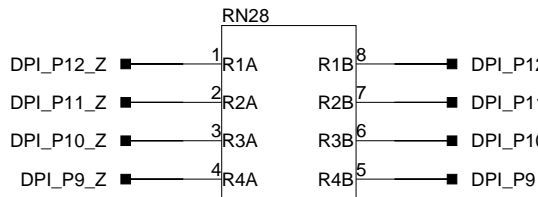
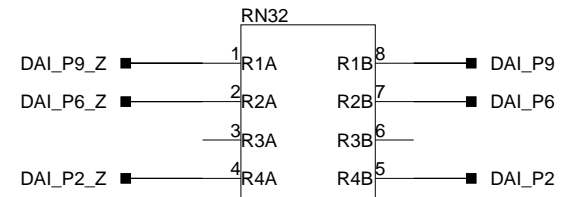
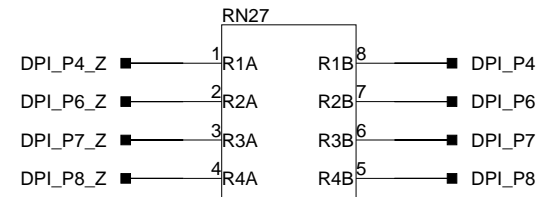
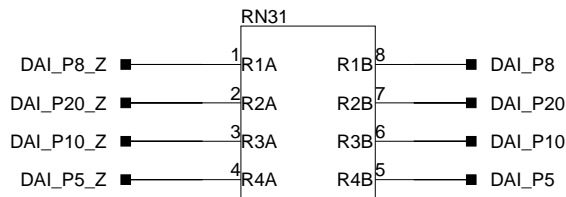
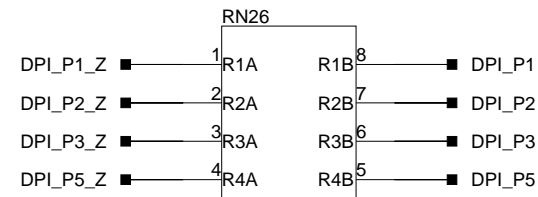
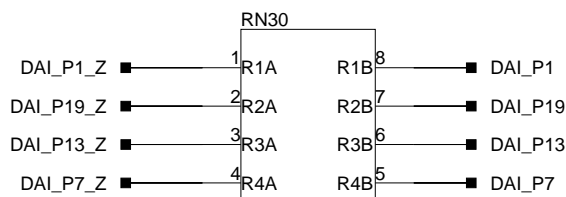
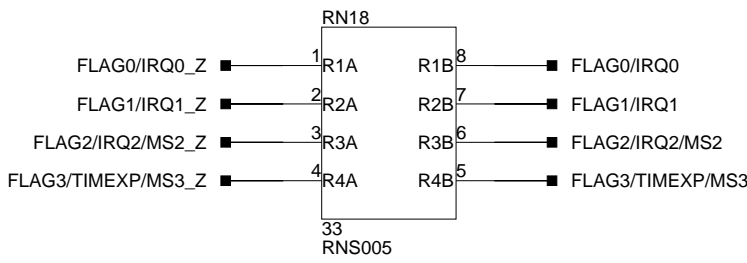
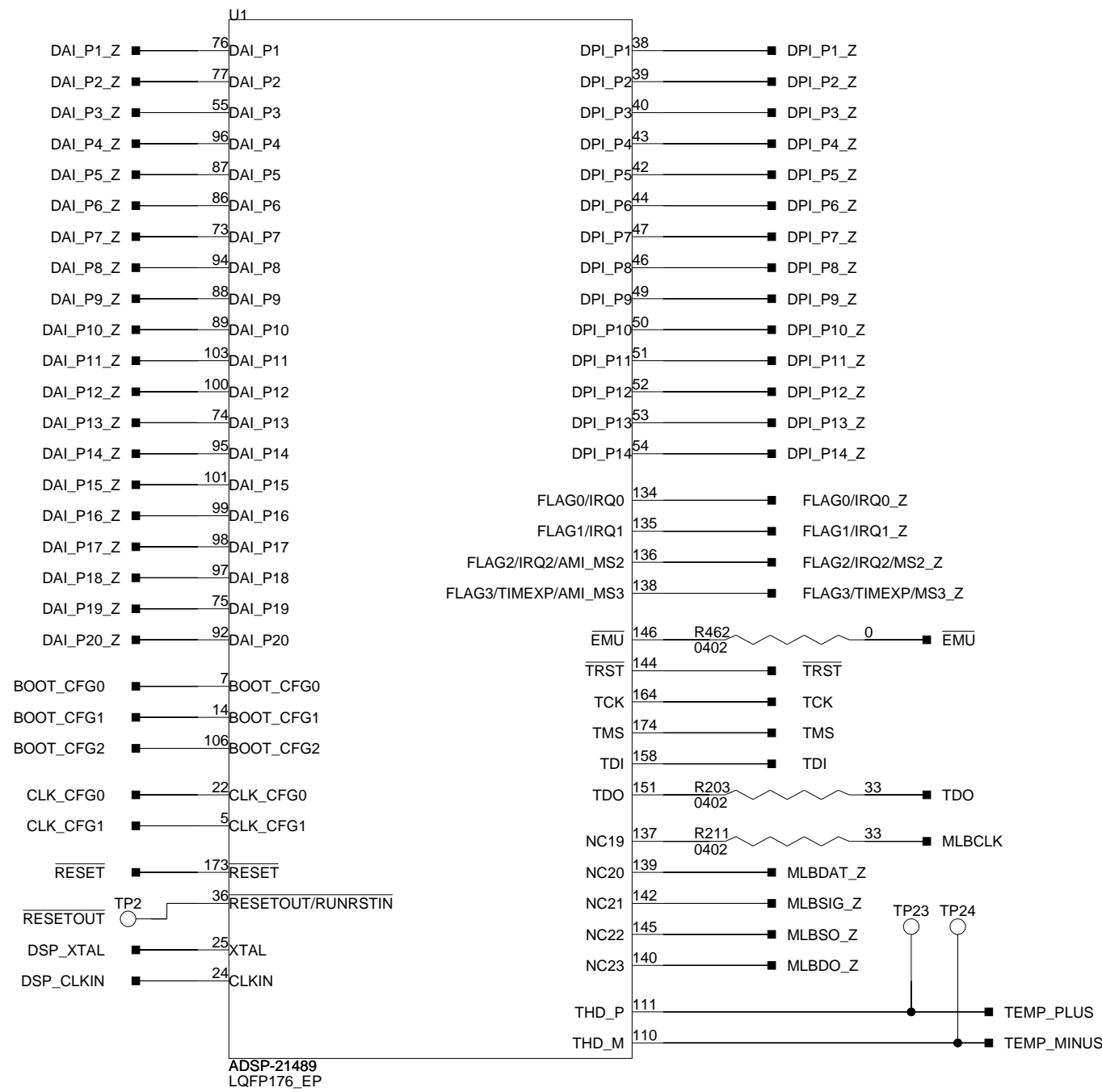
3

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B

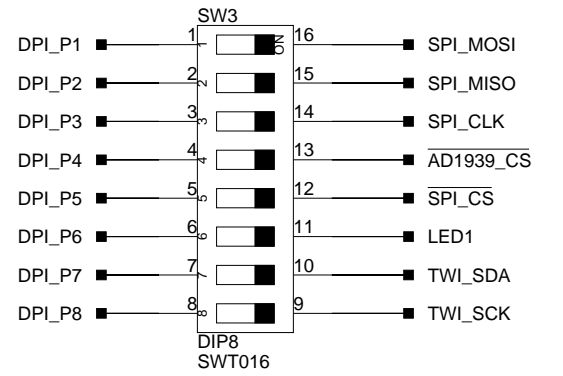
C

D

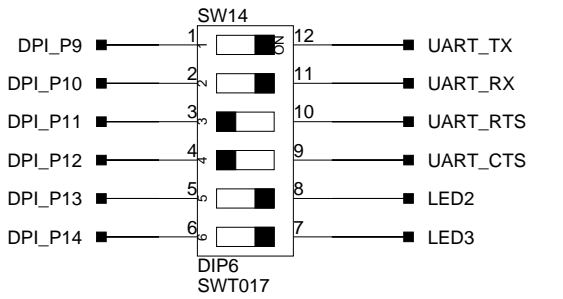


NOTE: SHUTTING OFF DIP SWITCHES SW1, SW2, SW3
SW7, OR SW14 ALLOWS A USER TO USE THESE DAI OR
DPI PINS VIA THE EXPANSION II INTERFACE.

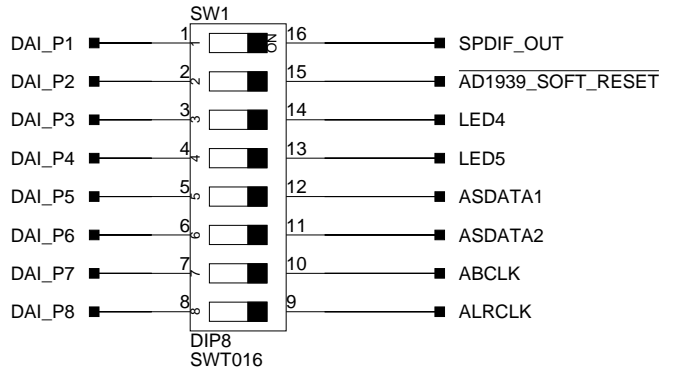
SW3: DPI [1-8] ENABLE
DEFAULT: ALL ON



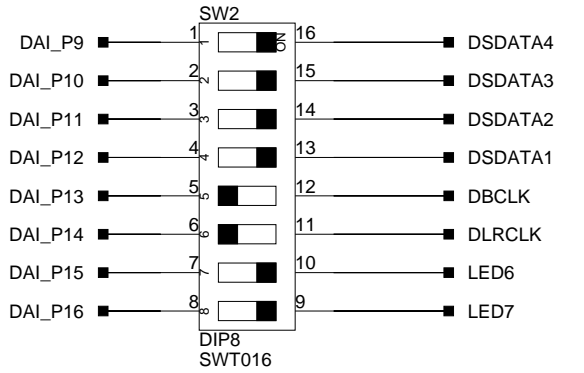
SW14: DPI [9-14] ENABLE
DEFAULT: ALL ON EXCEPT POS 3 & 4 OFF



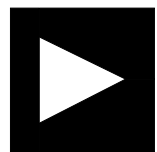
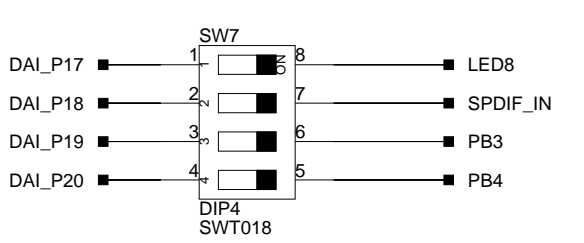
SW1: DAI [1-8] ENABLE
DEFAULT: ALL ON



SW2: DPI [9-16] ENABLE
DEFAULT: ALL ON EXCEPT POS. 5 & 6 OFF



SW7: DPI [17-20] ENABLE
DEFAULT: ALL ON



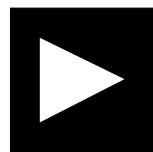
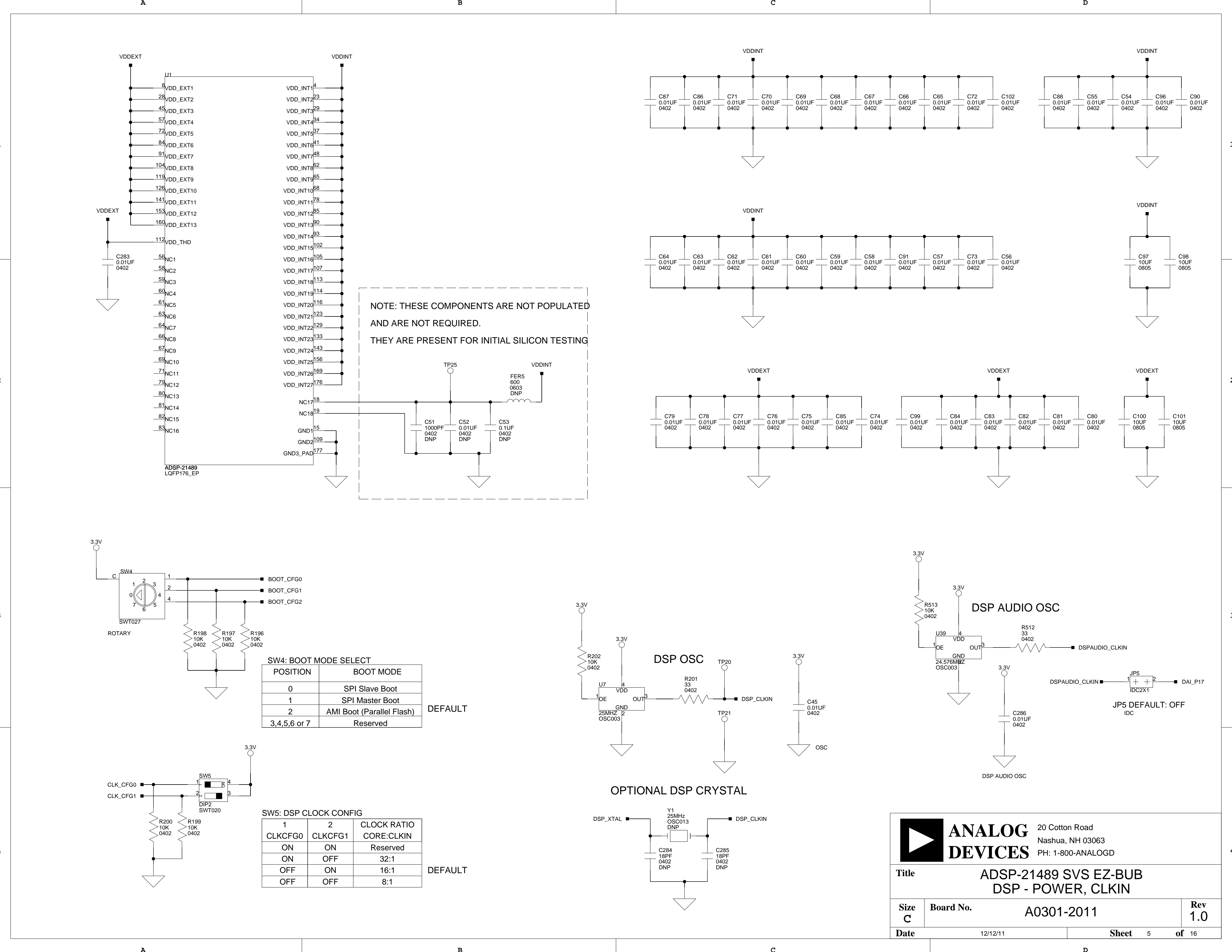
**ANALOG
DEVICES**

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

Title **ADSP-21489 SVS EZ-BUB
DSP - DAI, DPI, MLB INTERFACES**

Size C Board No. **A0301-2011** Rev **1.0**

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**ANALOG
DEVICES**

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Nashua, NH 03063
PH: 1-800-ANALOGD

Title **ADSP-21489 SVS EZ-BUB
DSP - POWER, CLKIN**

Size
C

Board No.

A0301-2011

Rev
1.0

Date

12/12/11

Sheet

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16

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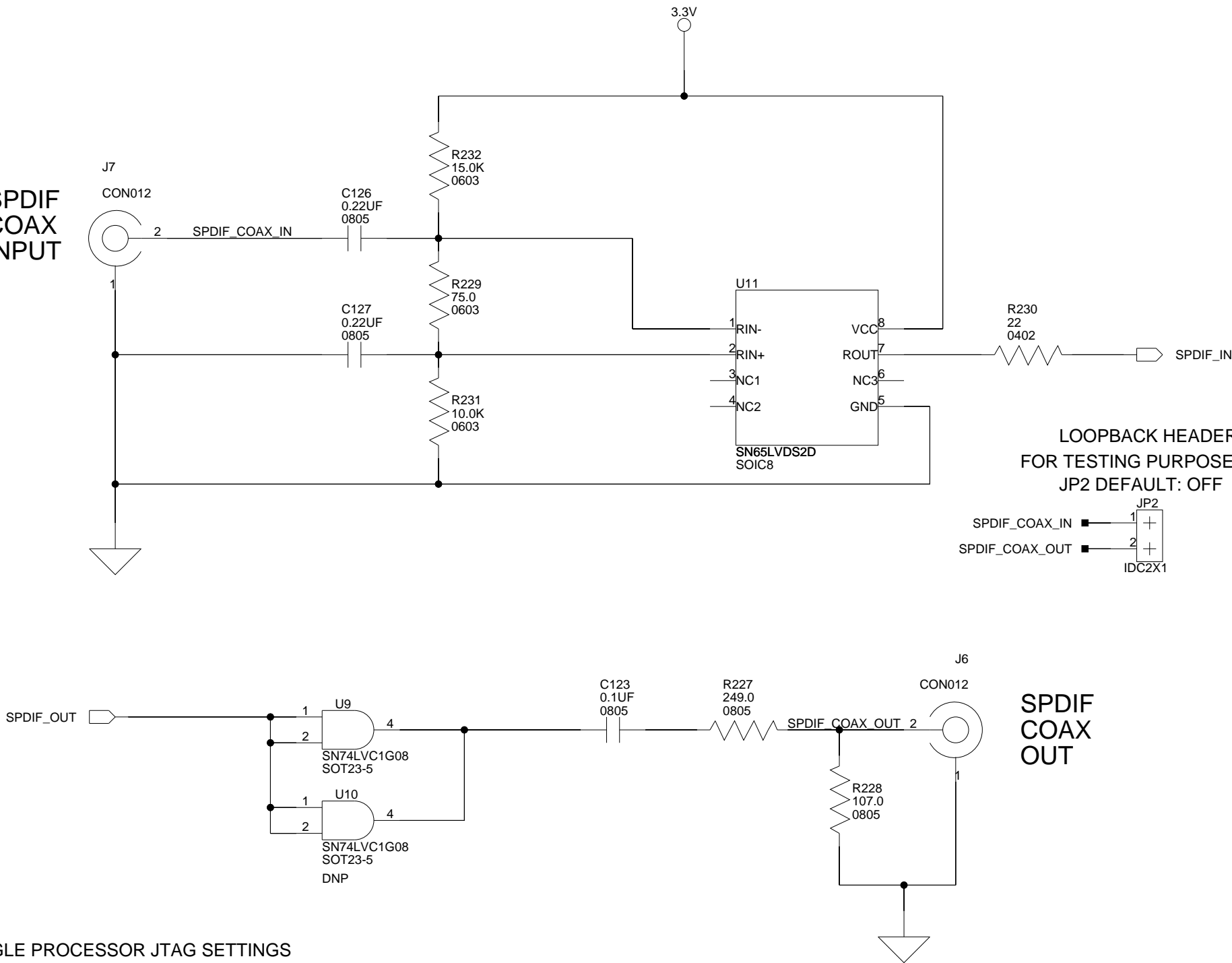
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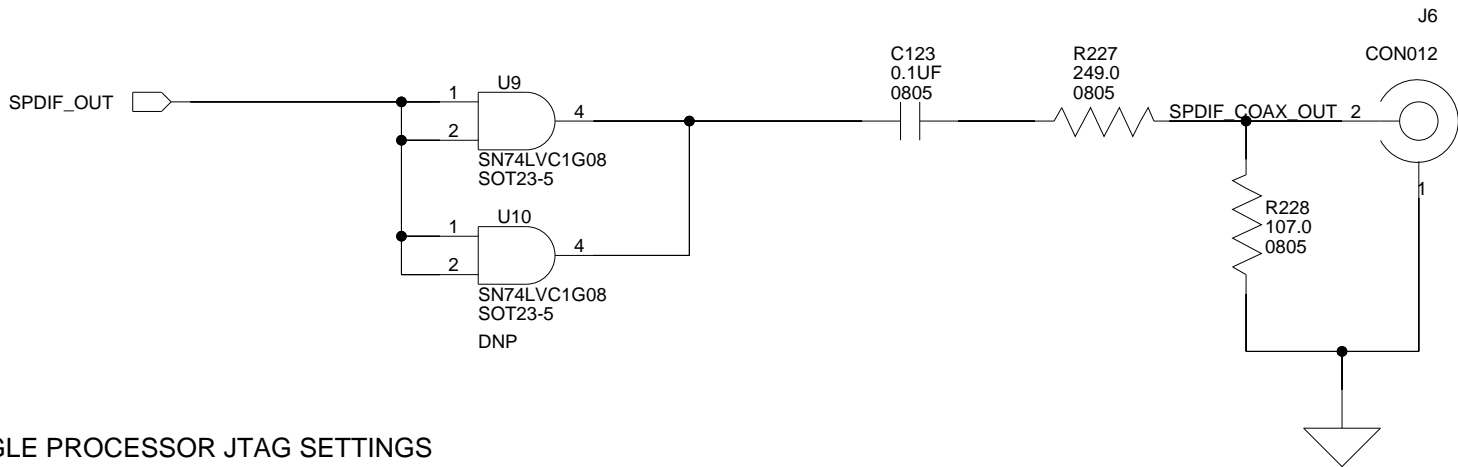
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SPDIF COAX INPUT



SPDIF COAX OUT



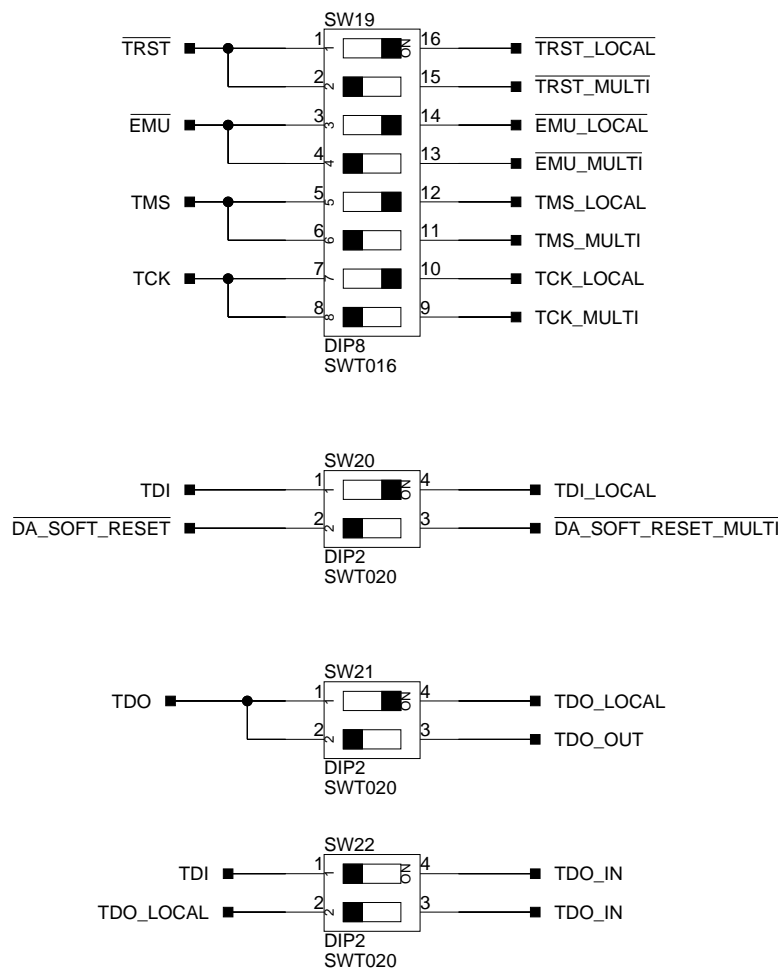
SINGLE PROCESSOR JTAG SETTINGS VIA HP-USB EMULATOR OR DEBUG AGENT (DEFAULT)

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

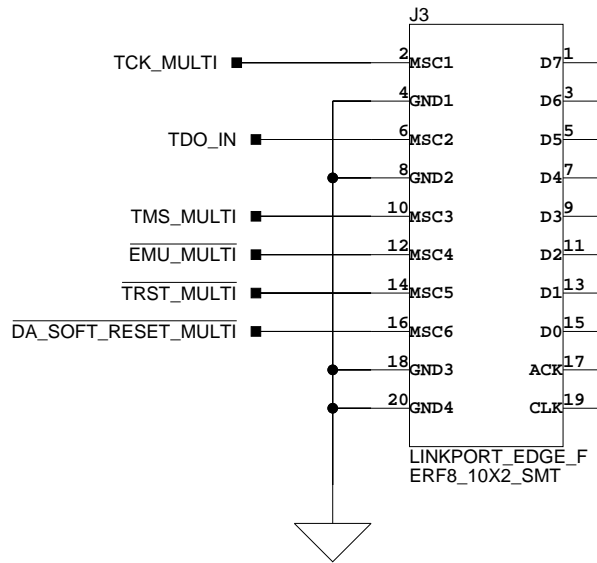
MULTI PROCESSOR JTAG SETTINGS VIA HP-USB EMULATOR USING TWO OR MORE EZ-BOARDS (LINK PORT CABLES REQUIRED FOR MORE THAN TWO BOARDS)

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

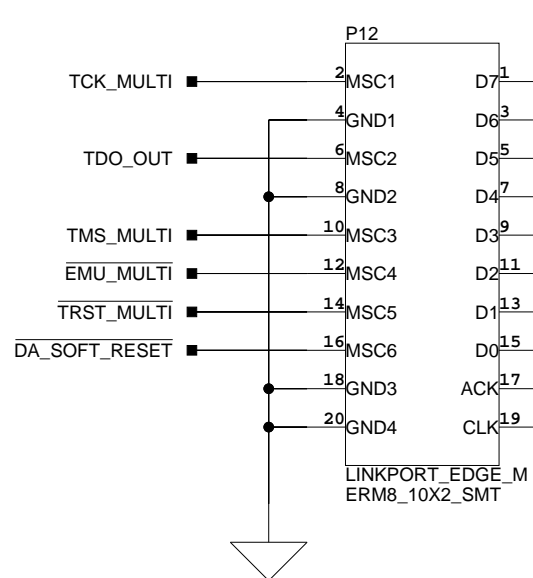
JTAG SWITCHES



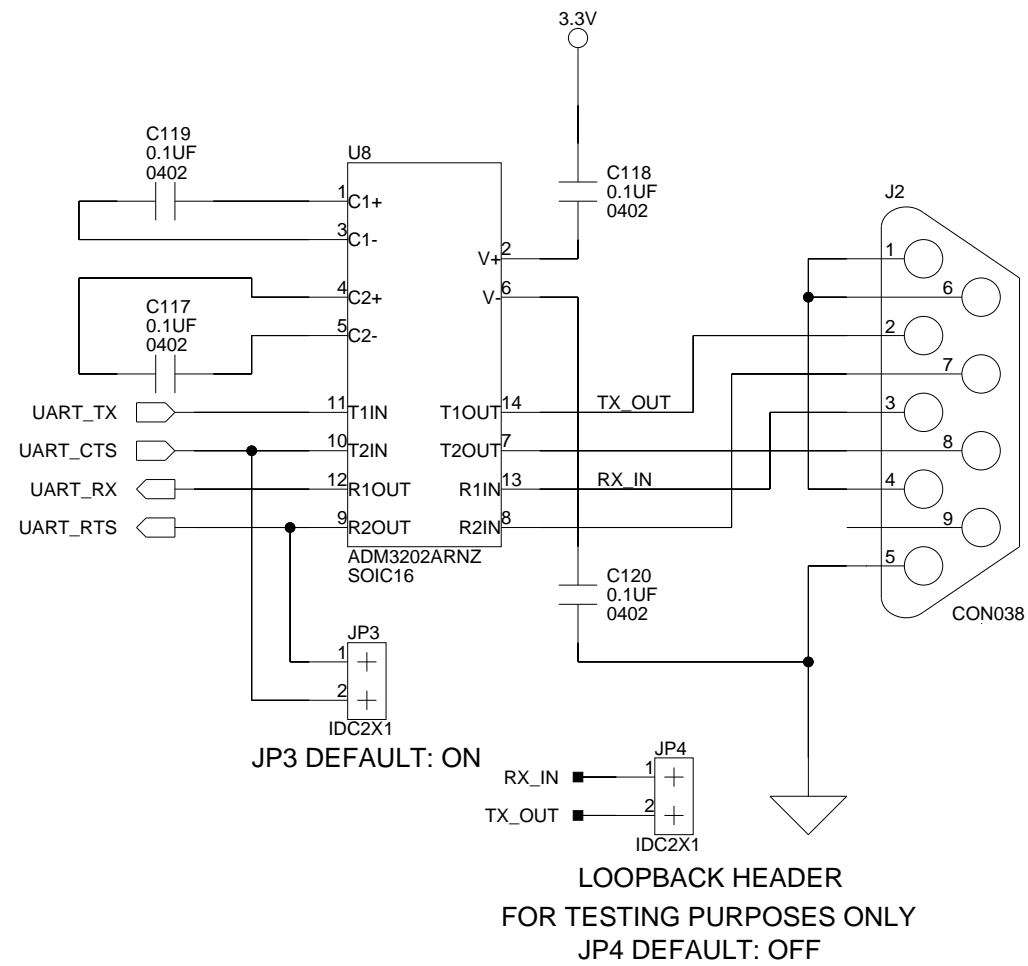
JTAG IN



JTAG OUT



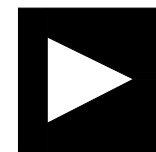
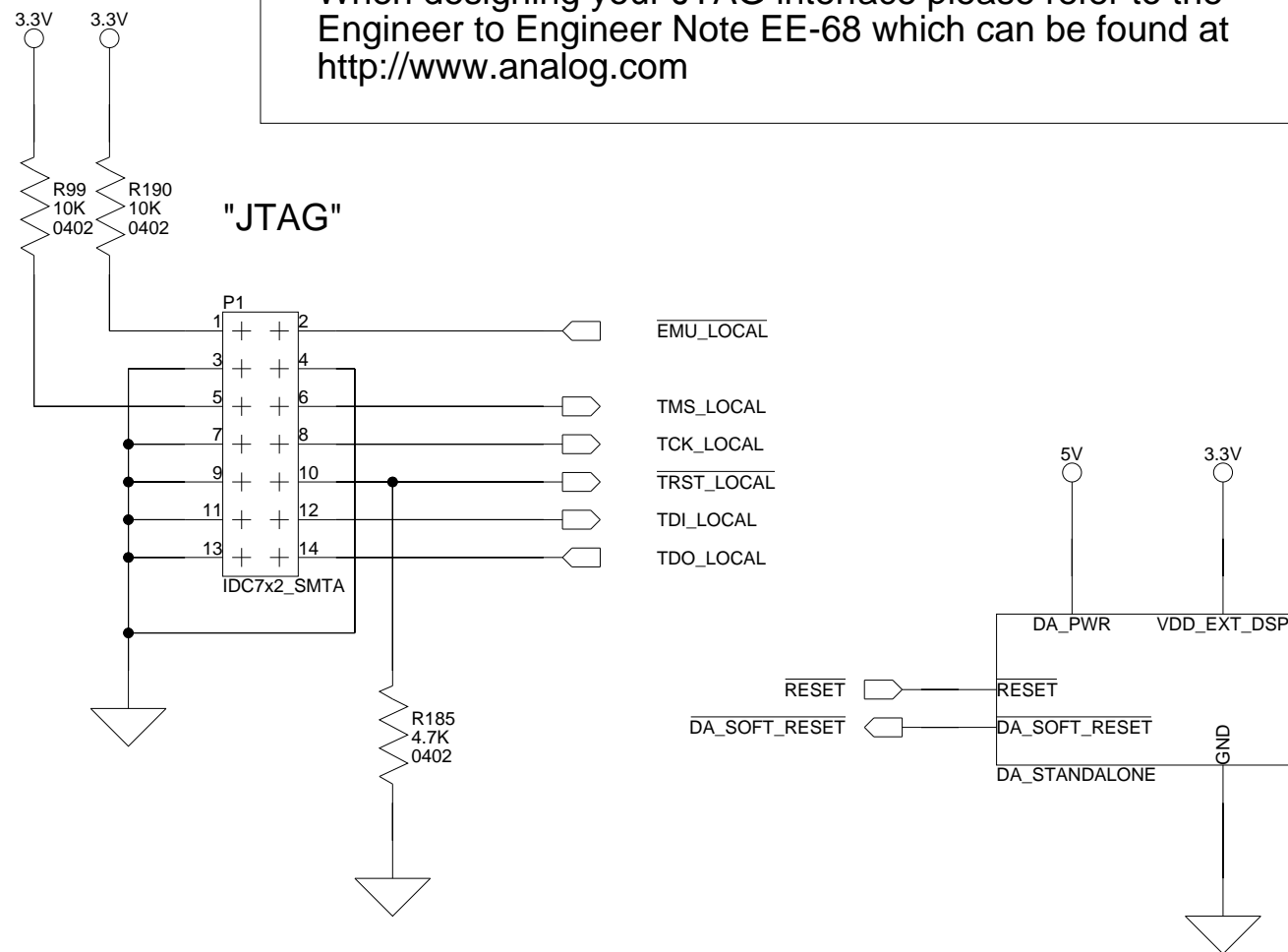
SERIAL PORT



All debug agent 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
DEVICES**

20 Cotton Road
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Title **ADSP-21489 SVS EZ-BUB
SPDIF, RS-232, JTAG INTERFACES**

Size C	Board No. A0301-2011	Rev 1.0
Date	12/12/11	Sheet 6 of 16

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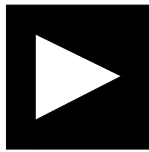
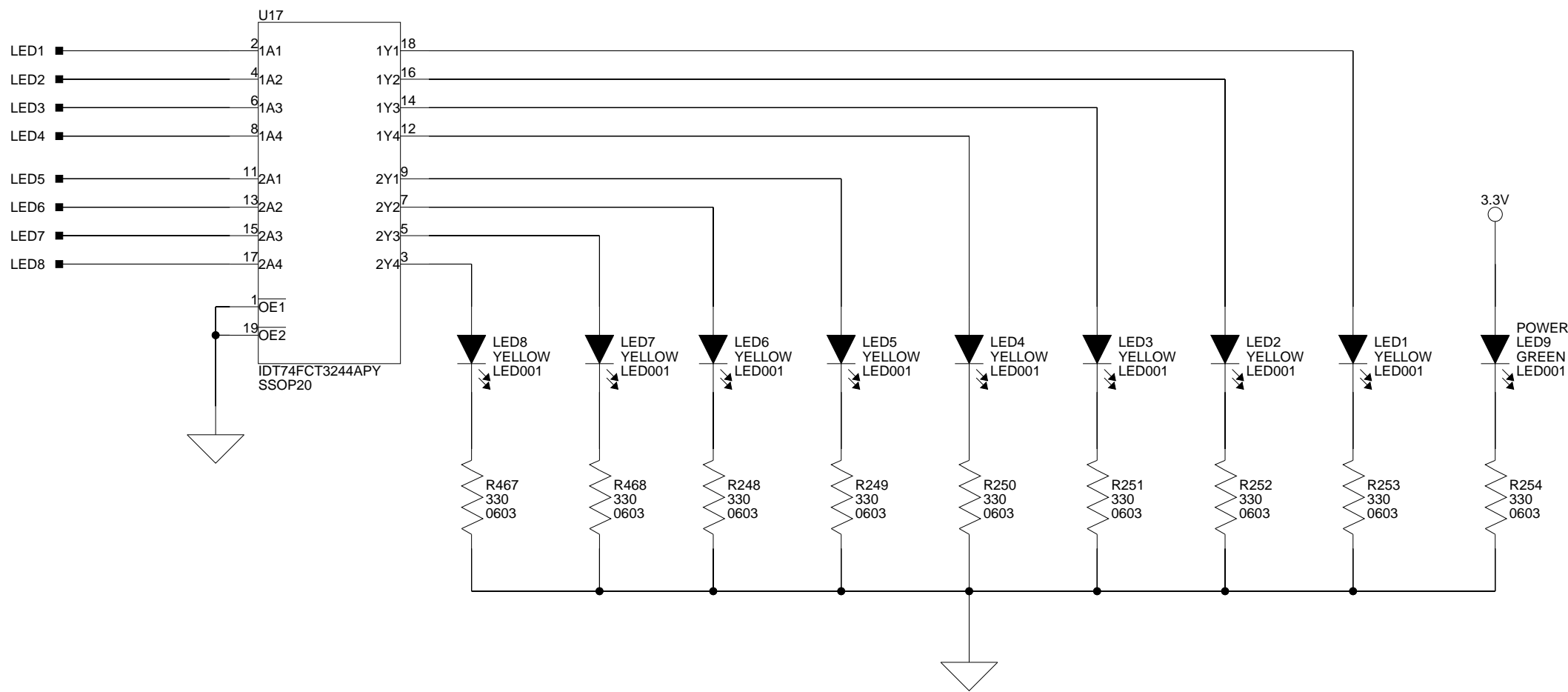
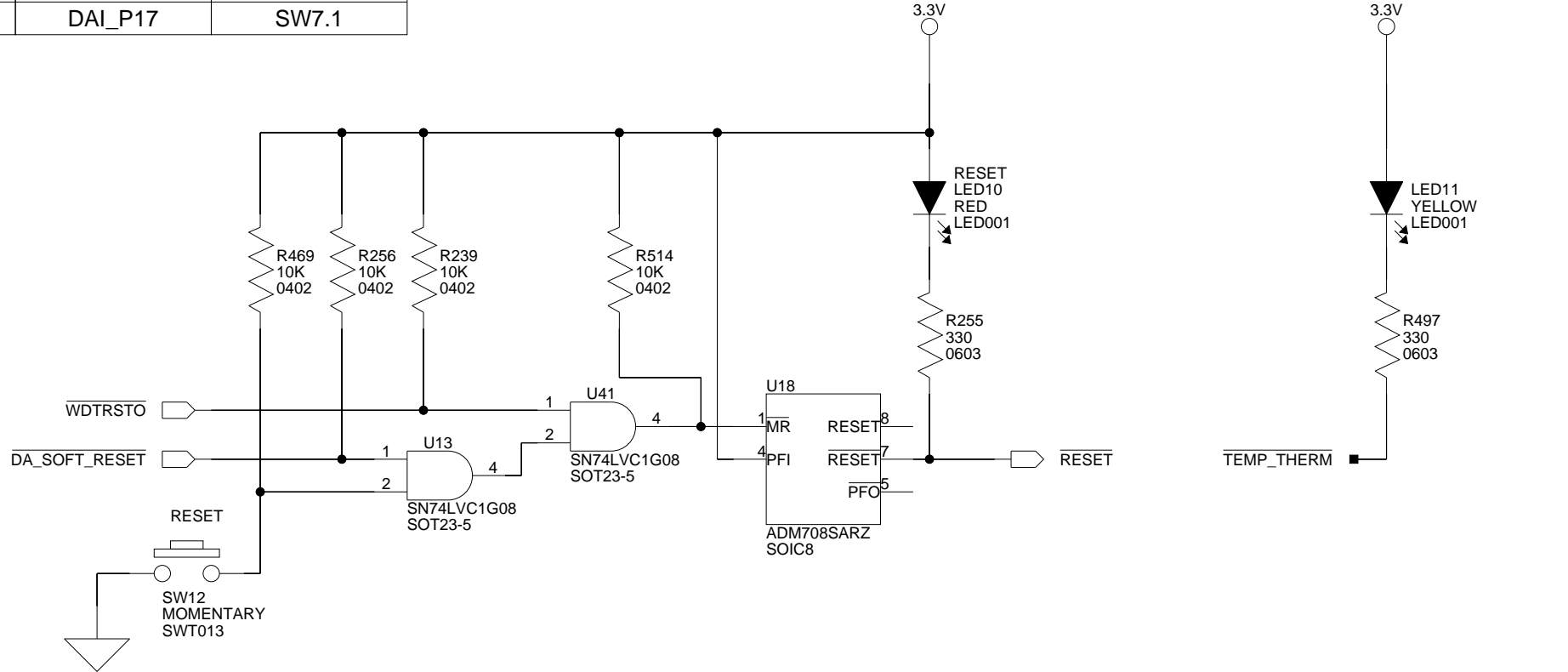
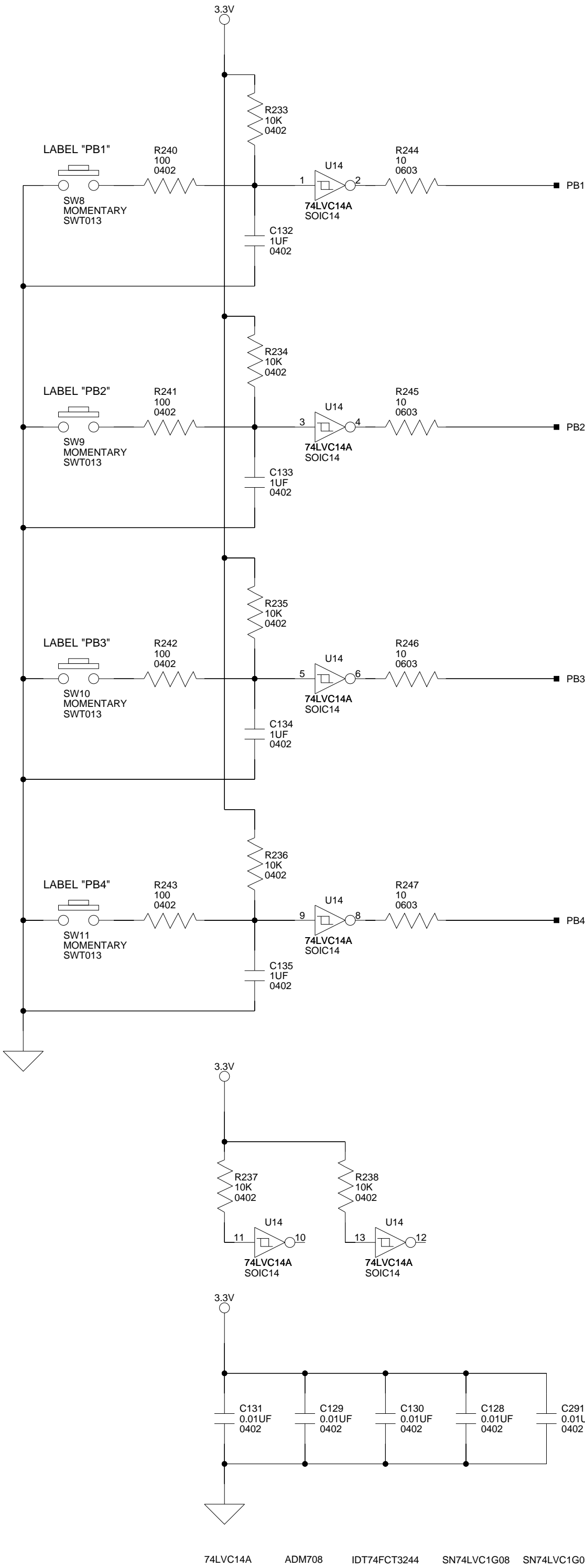
1

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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



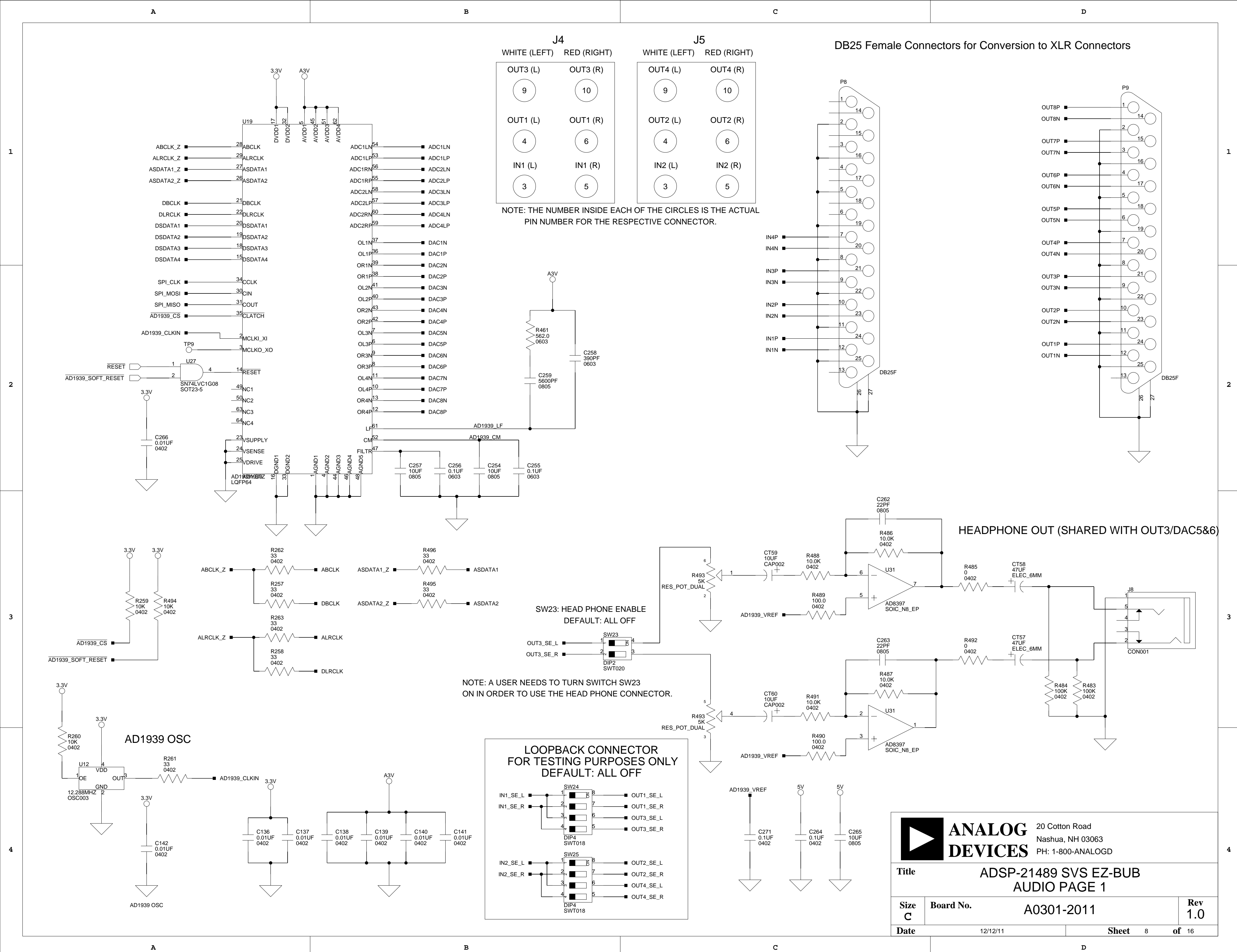
**ANALOG
DEVICES**

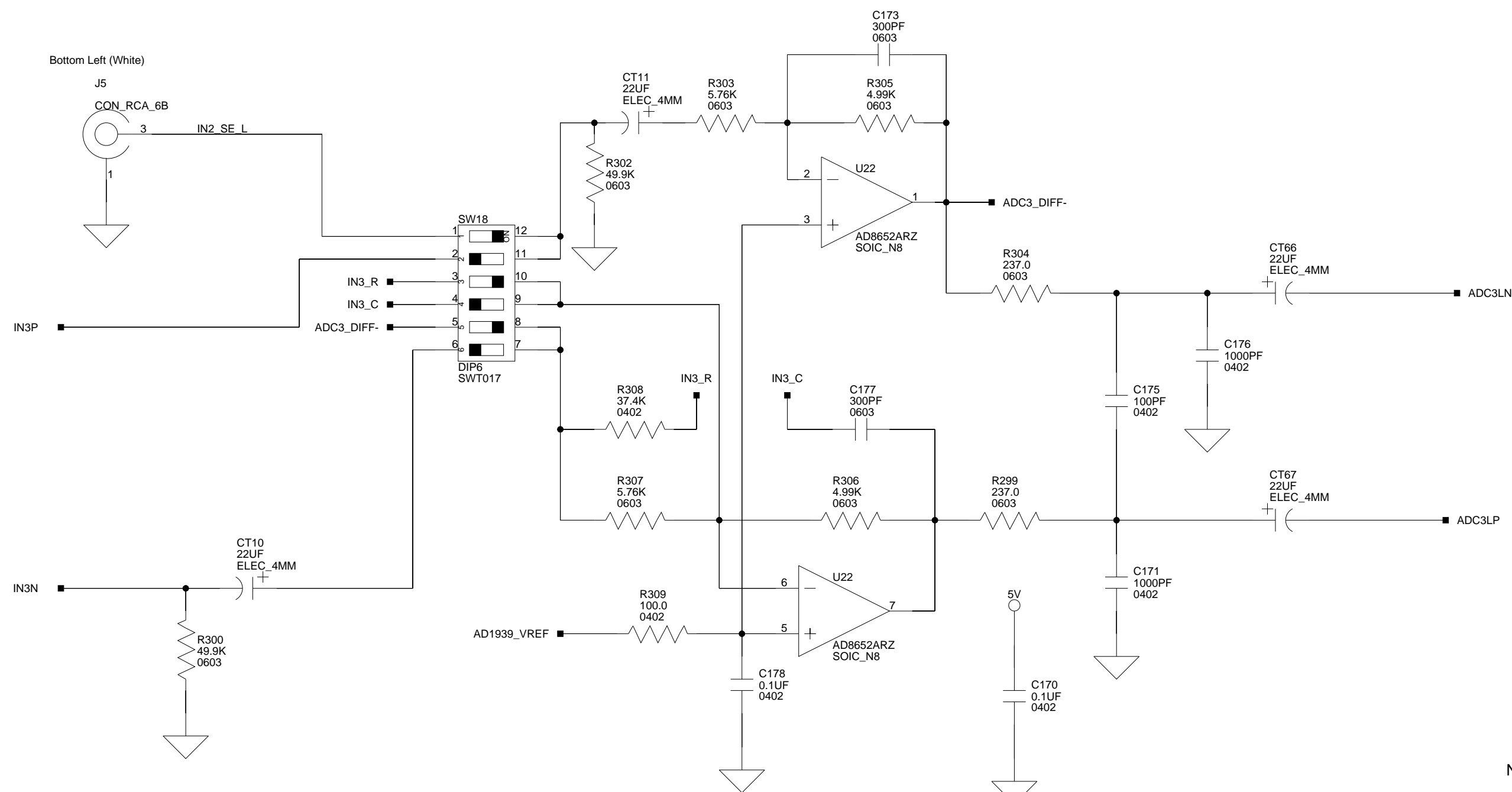
20 Cotton Road
Nashua, NH 03063
PH: 1-800-ANALOGD

Title **ADSP-21489 SVS EZ-BUB
RESET CIRCUIT, PUSHBUTTONS, LEDS**

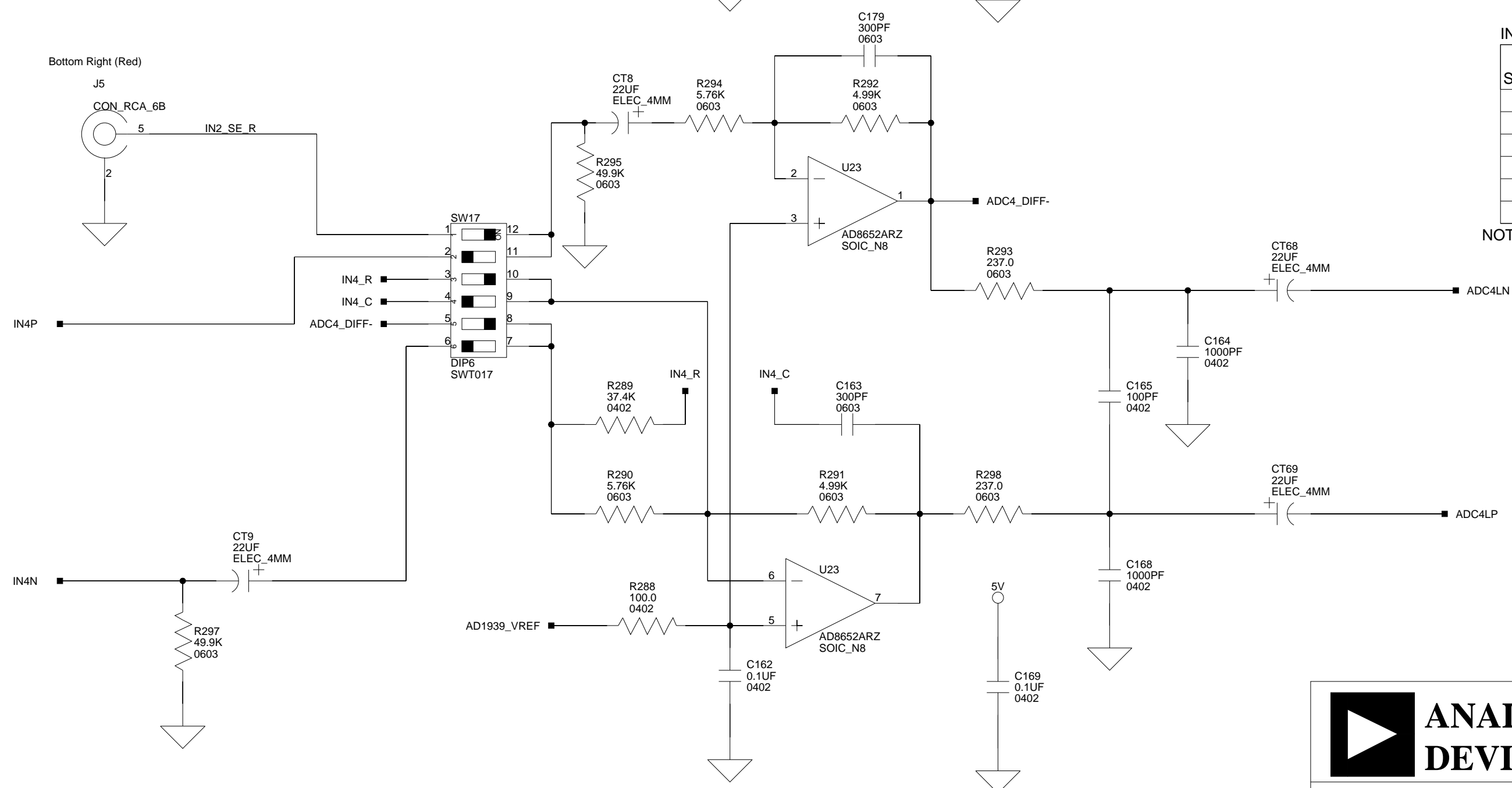
Size C	Board No. A0301-2011	Rev 1.0
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Date	12/12/11	Sheet	7	of	16
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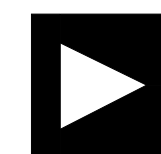




IN2 (LEFT) SETTINGS		
SWITCH	SINGLE ENDED USE RCA IN (DEFAULT)	DIFFERENTIAL USE DB25 IN (P8)
SW18.1	ON	OFF
SW18.2	OFF	ON
SW18.3	ON	OFF
SW18.4	OFF	ON
SW18.5	ON	OFF
SW18.6	OFF	ON



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



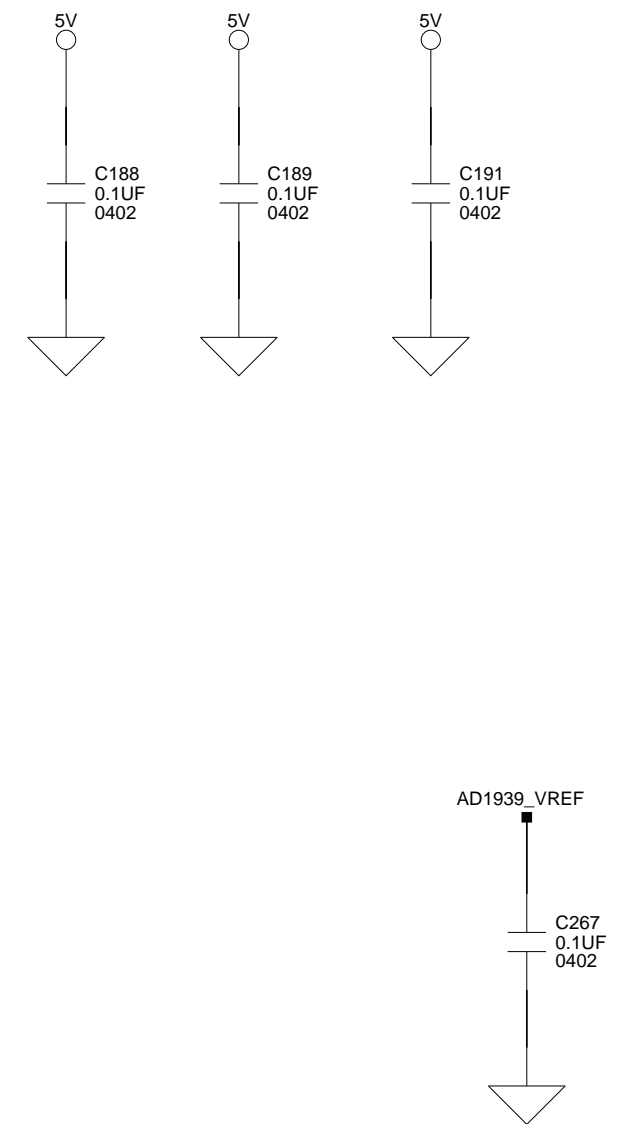
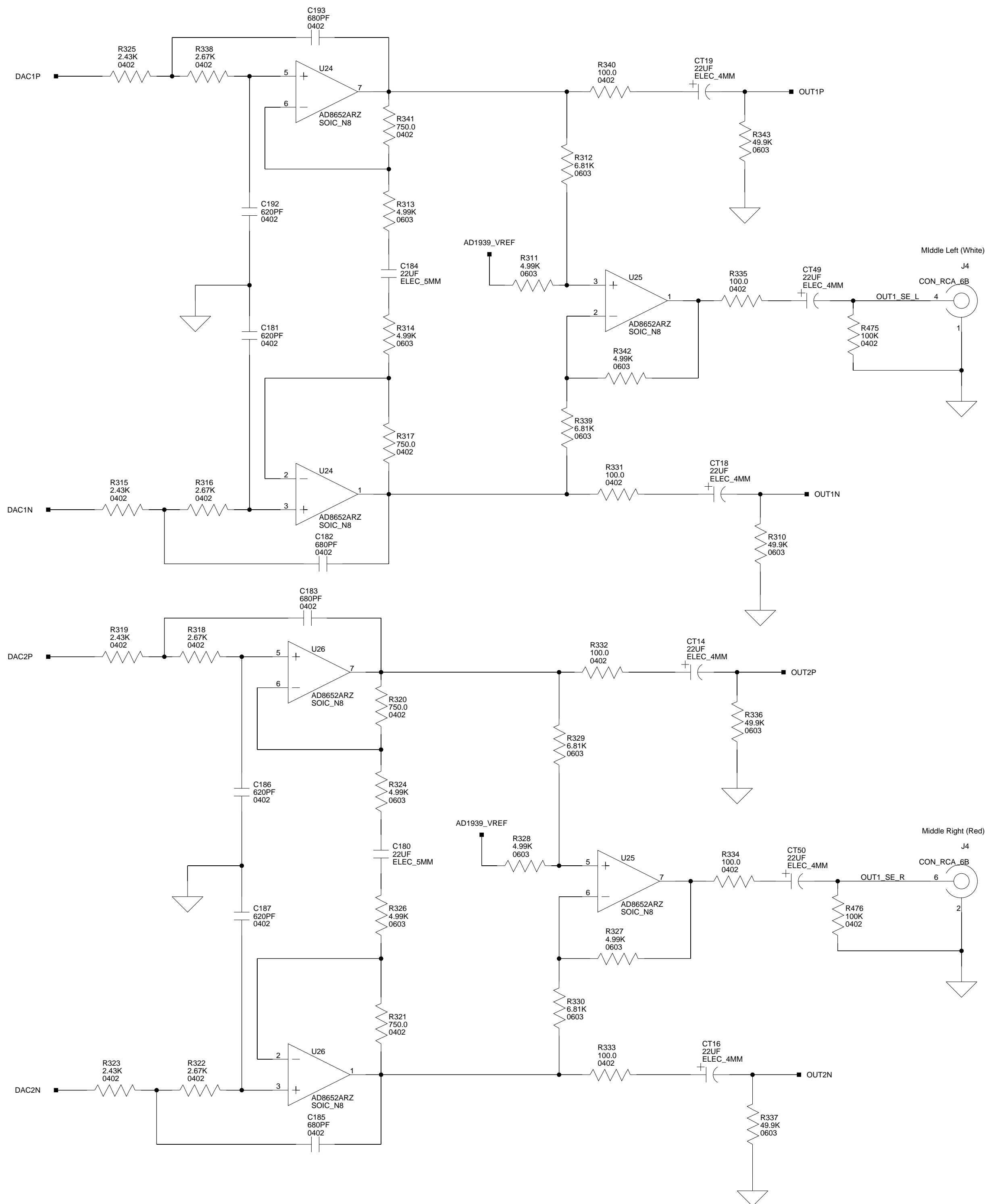
20 Cotton Road
Nashua, NH 03063
PH: 1-800-ANALOGD


Title	ADSP-21489 SVS EZ-BUB AUDIO PAGE 3
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Size C	Board No. A0301-2011	Rev 1.0
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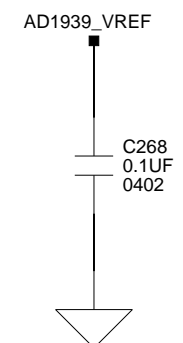
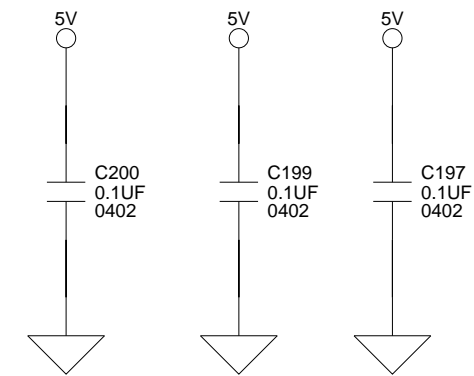
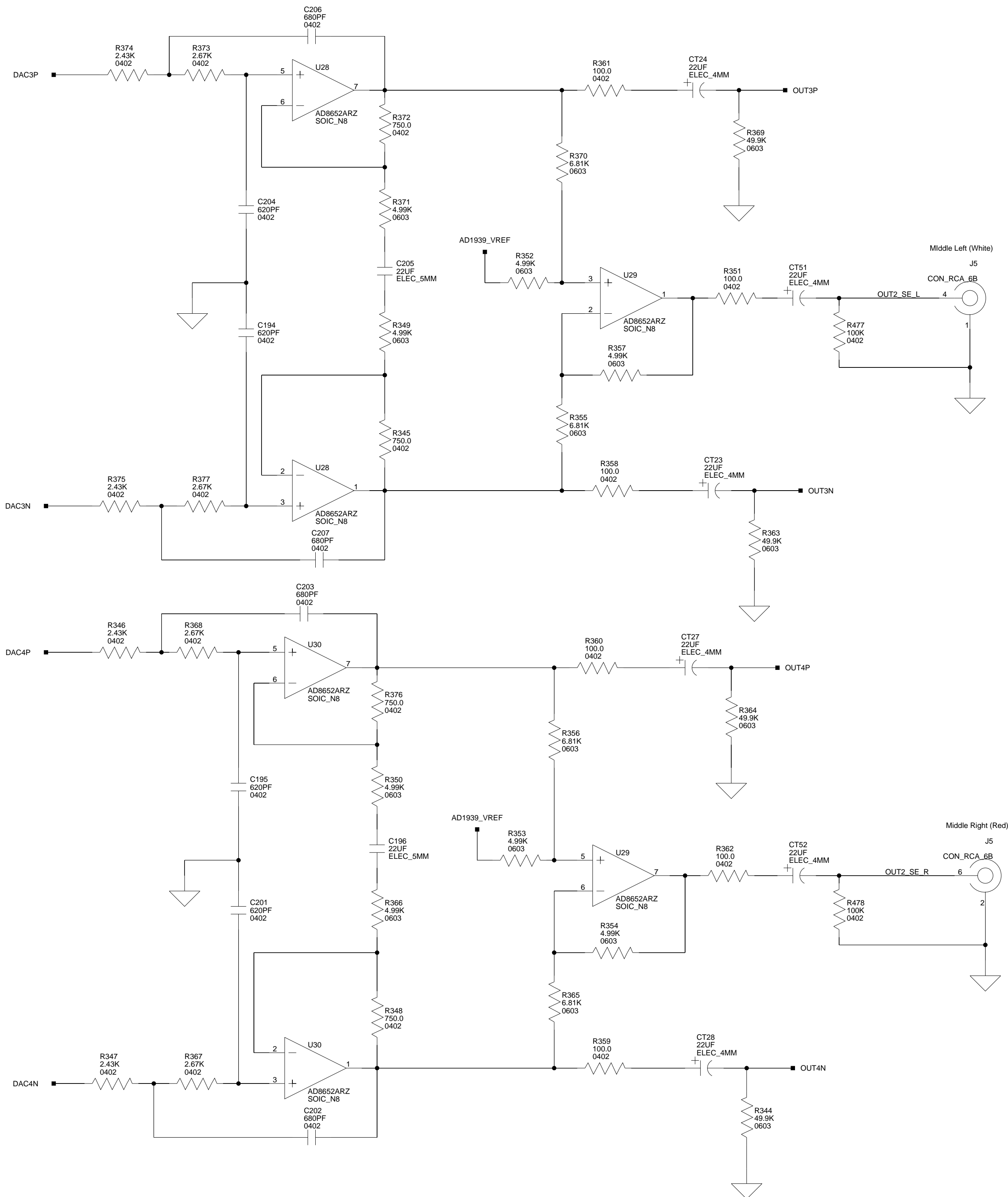
Date	12/12/11	Sheet	10	of	16
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OUT1



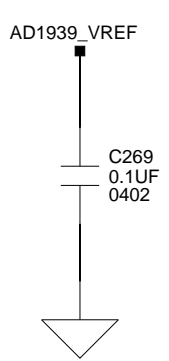
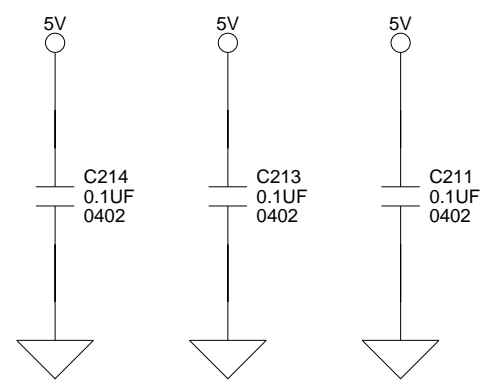
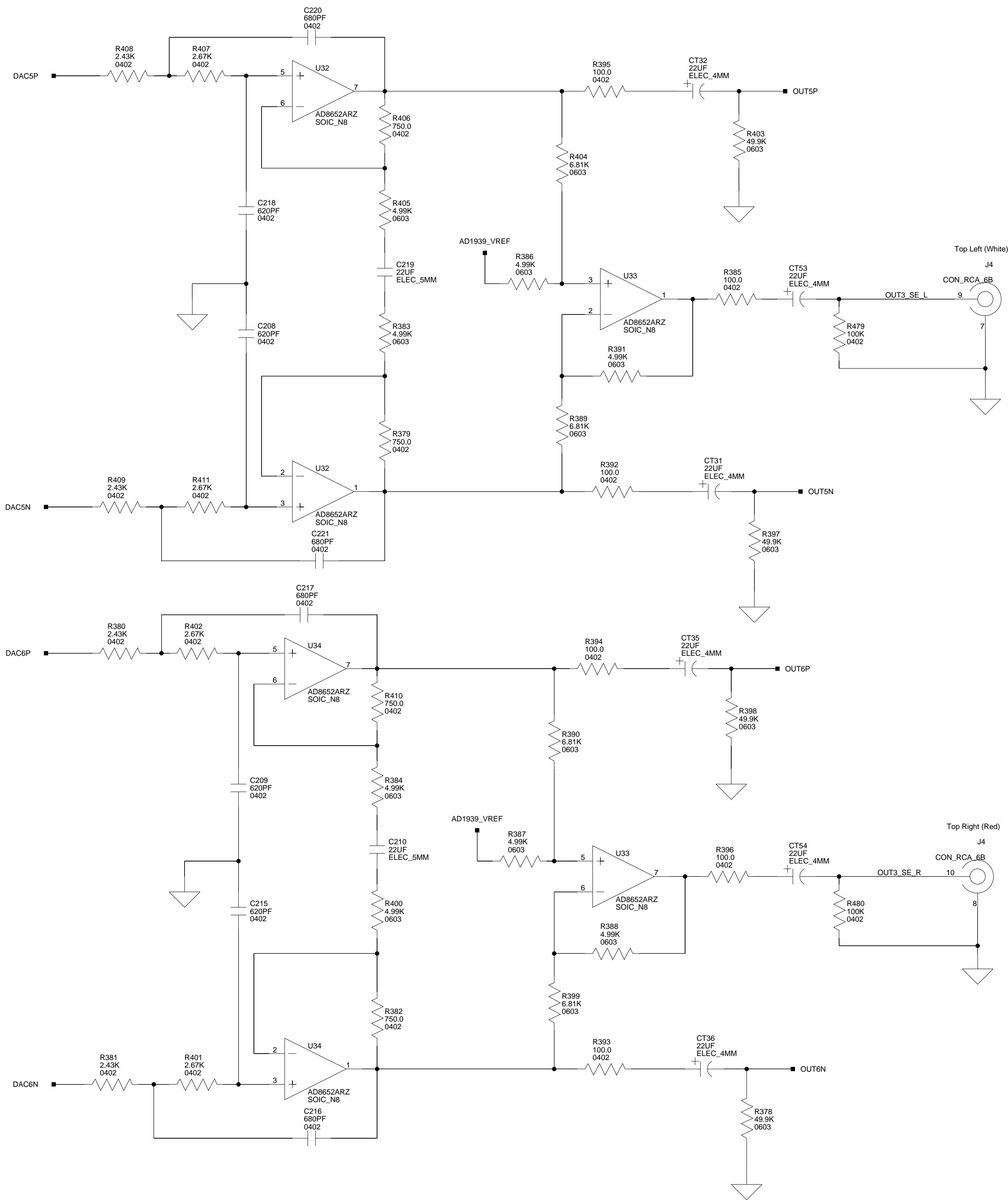
 ANALOG DEVICES		20 Cotton Road Nashua, NH 03063 PH: 1-800-ANALOGD	
Title ADSP-21489 SVS EZ-BUB AUDIO PAGE 4			
Size C	Board No.	A0301-2011	
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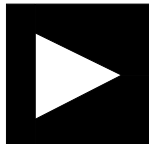
OUT2



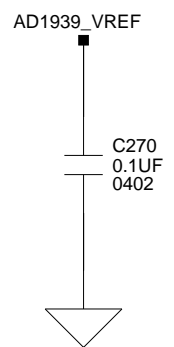
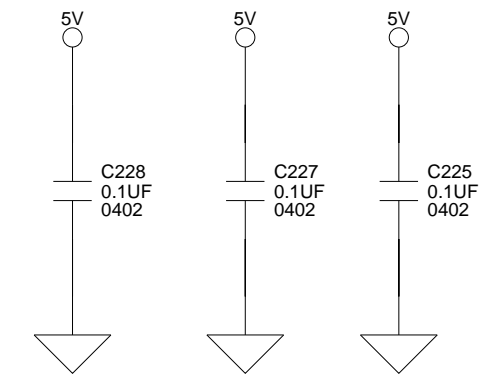
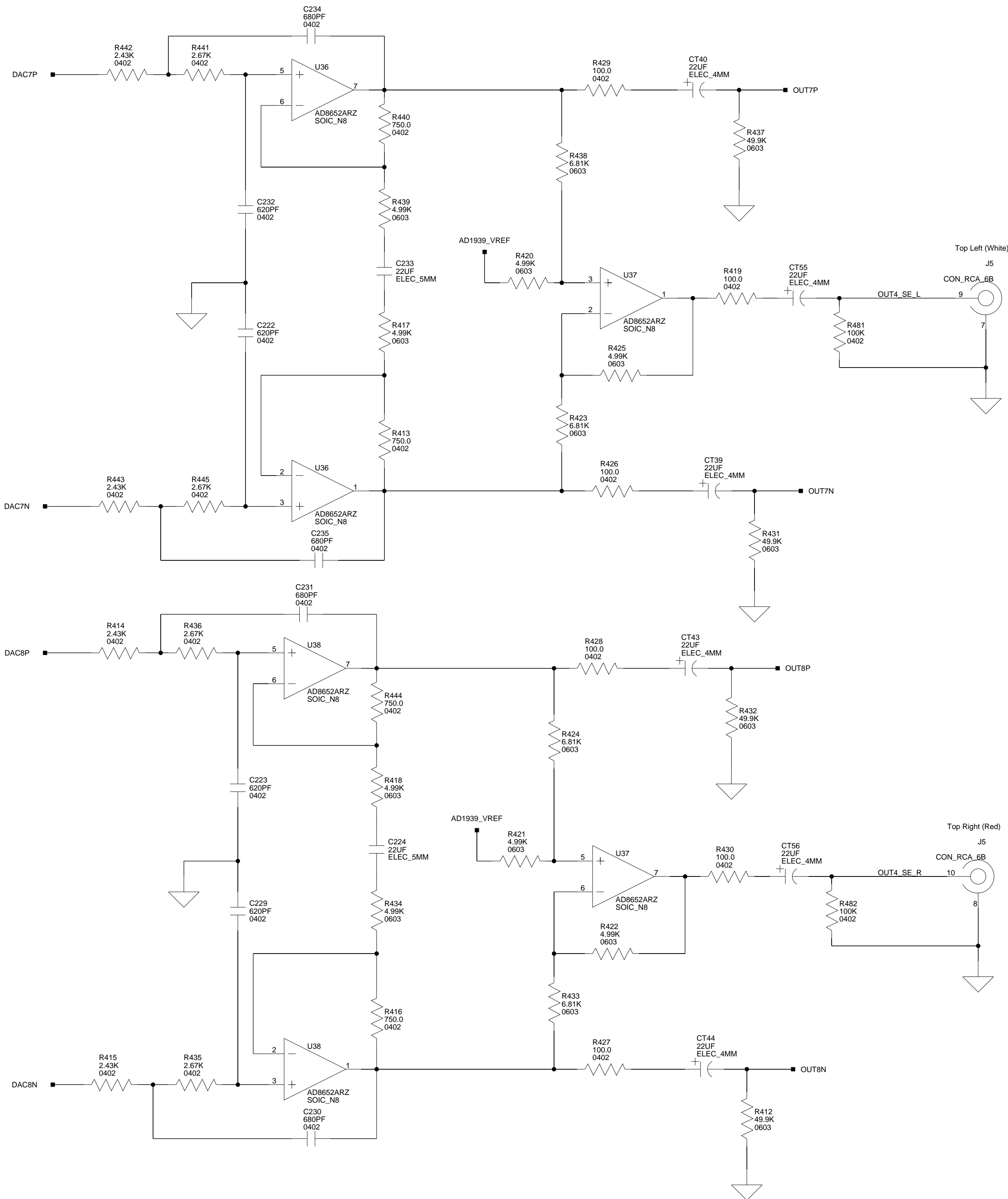
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Title		ADSP-21489 SVS EZ-BUB AUDIO PAGE 5			
Size C	Board No.		A0301-2011		Rev 1.0
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OUT3



		20 Cotton Road Nashua, NH 03063 PH: 1-800-ANALOGD	
Title		ADSP-21489 SVS EZ-BUB AUDIO PAGE 6	
Size C	Board No.	A0301-2011	Rev 1.0
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OUT4

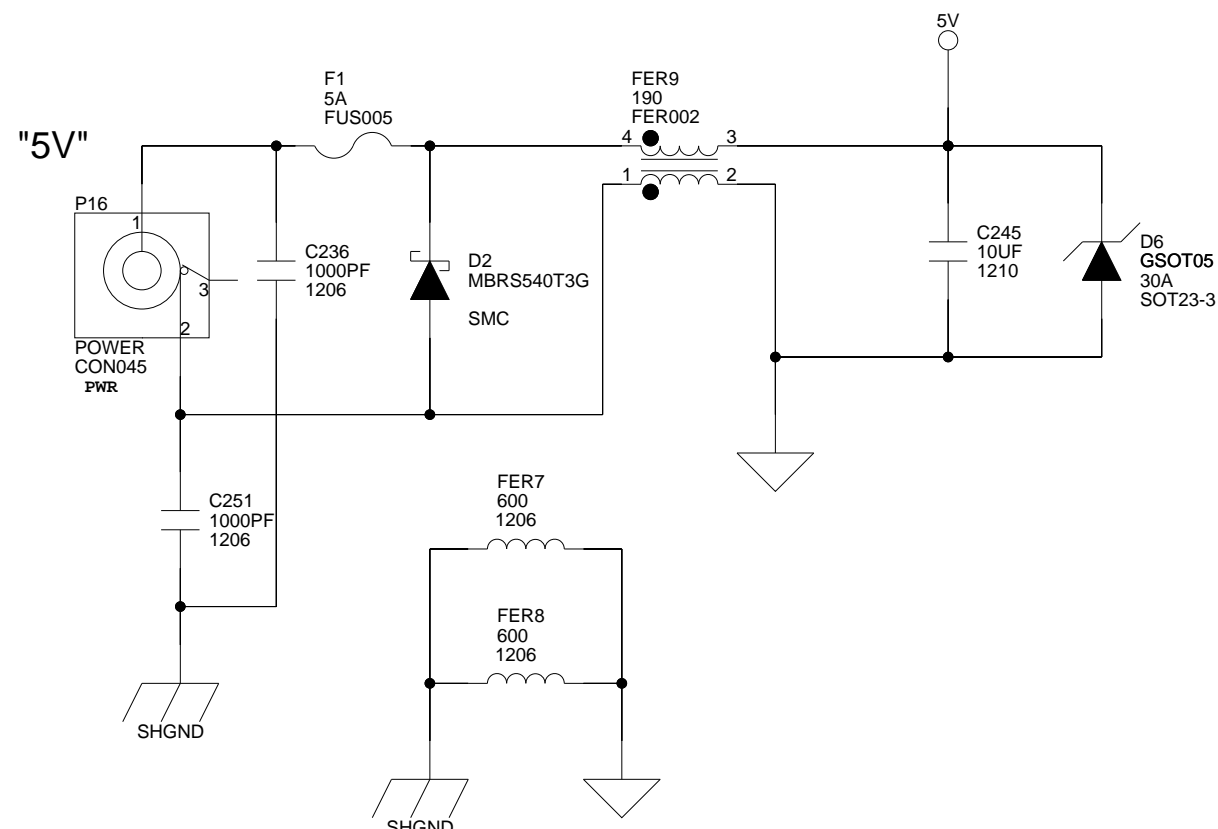
ANALOG
DEVICES

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

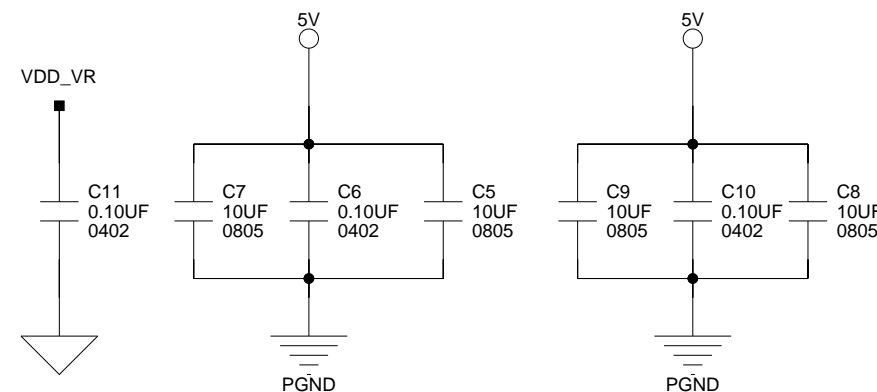
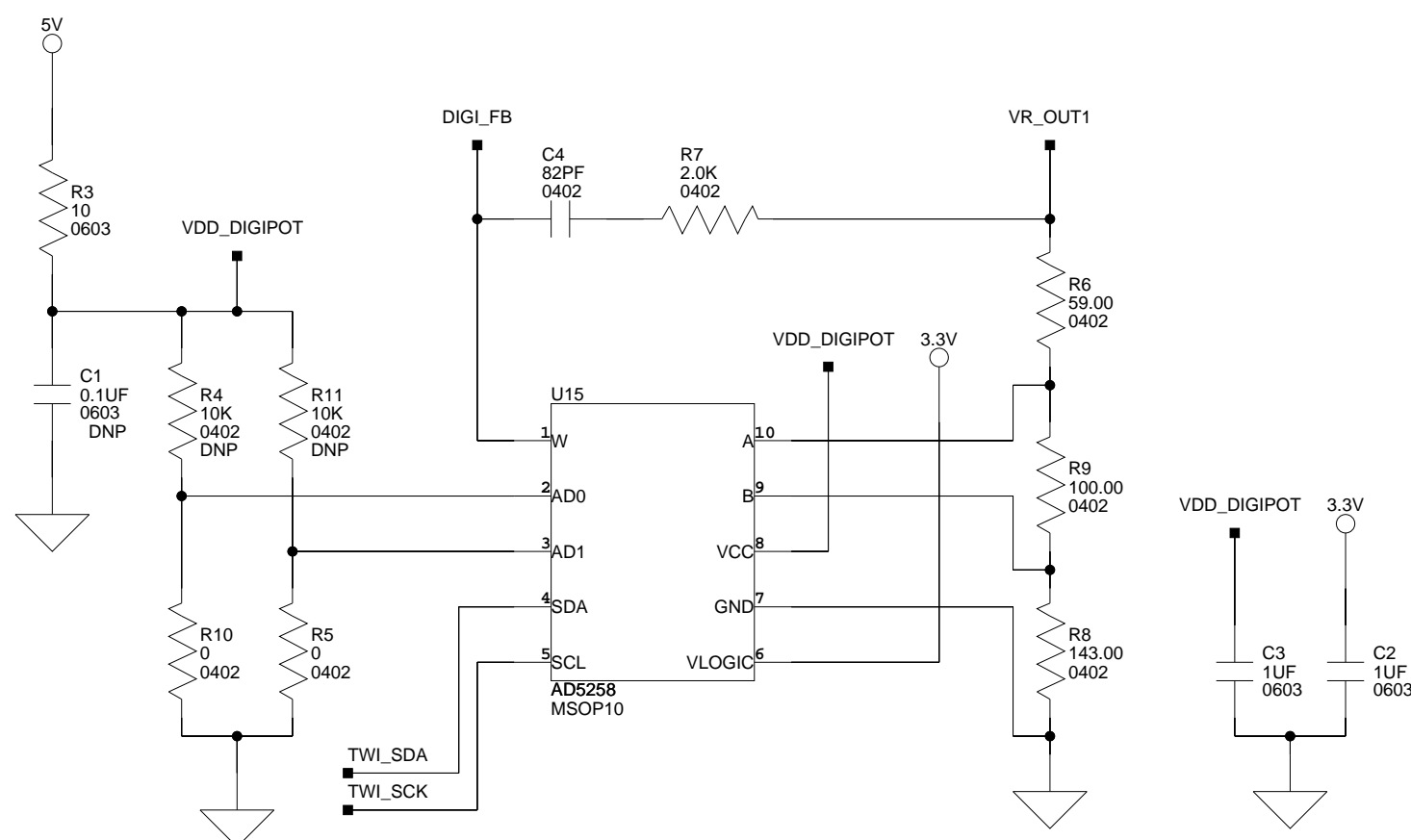
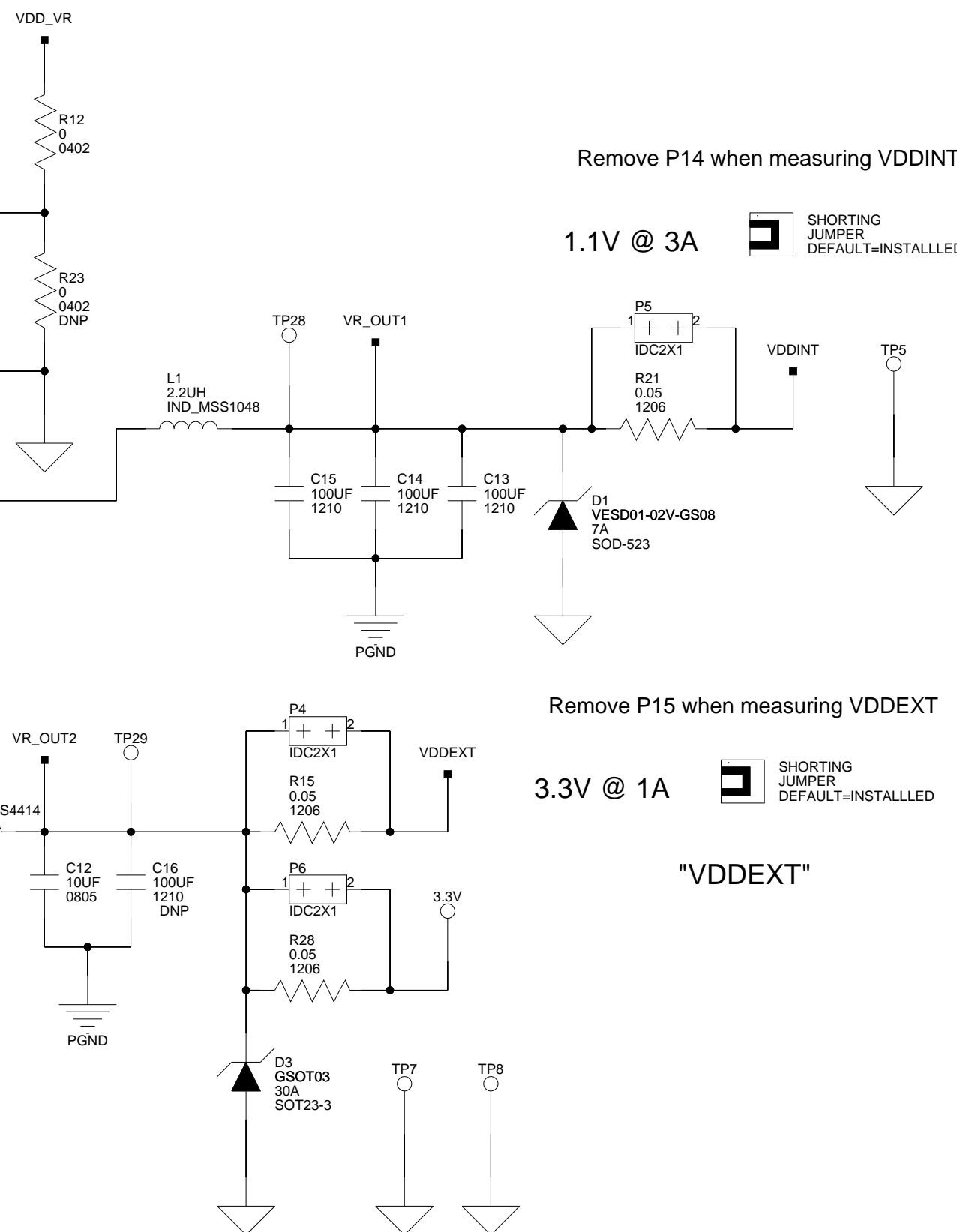
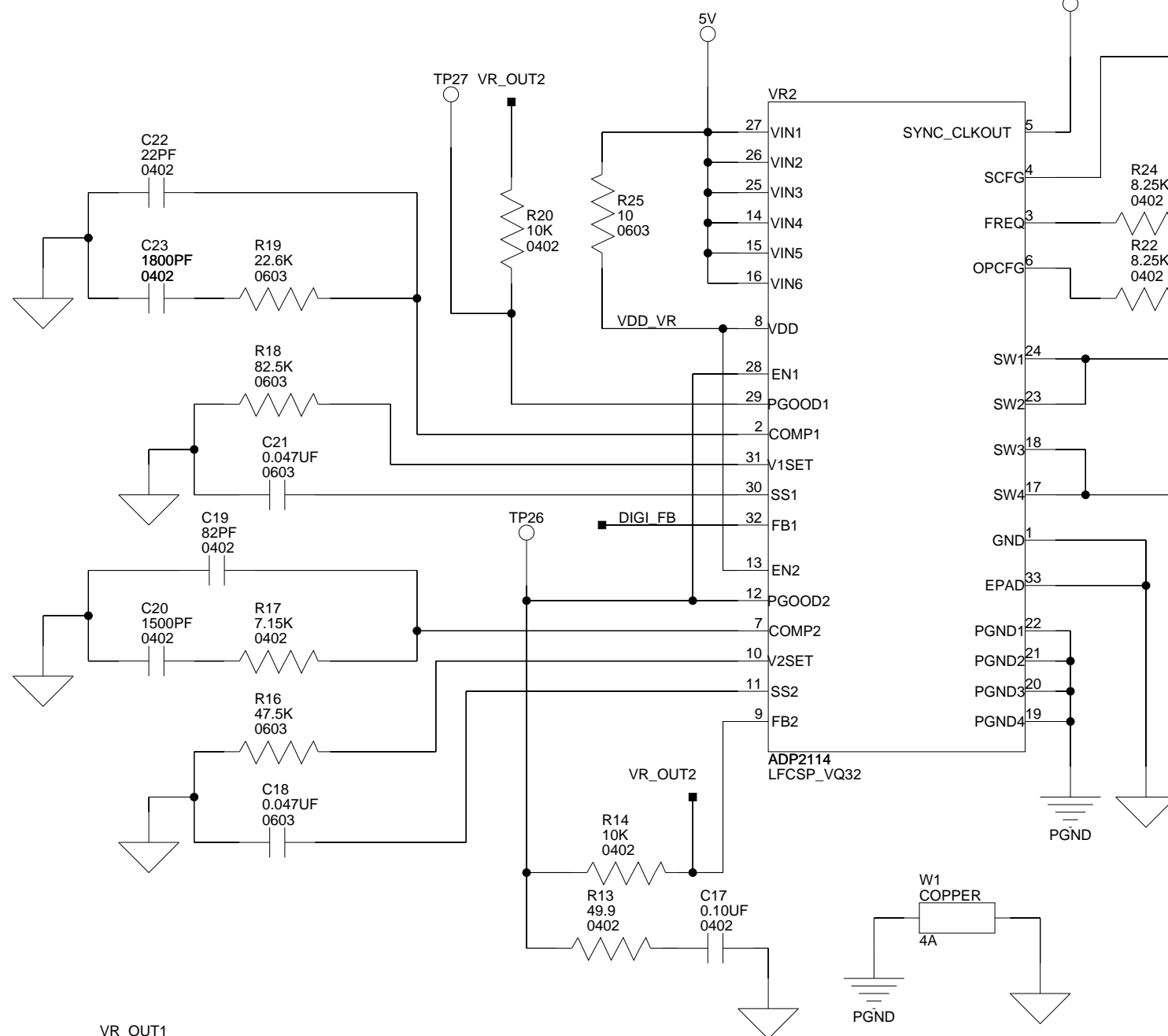
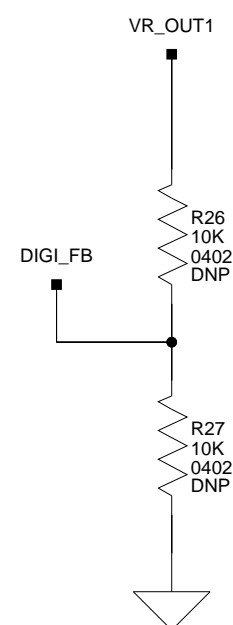
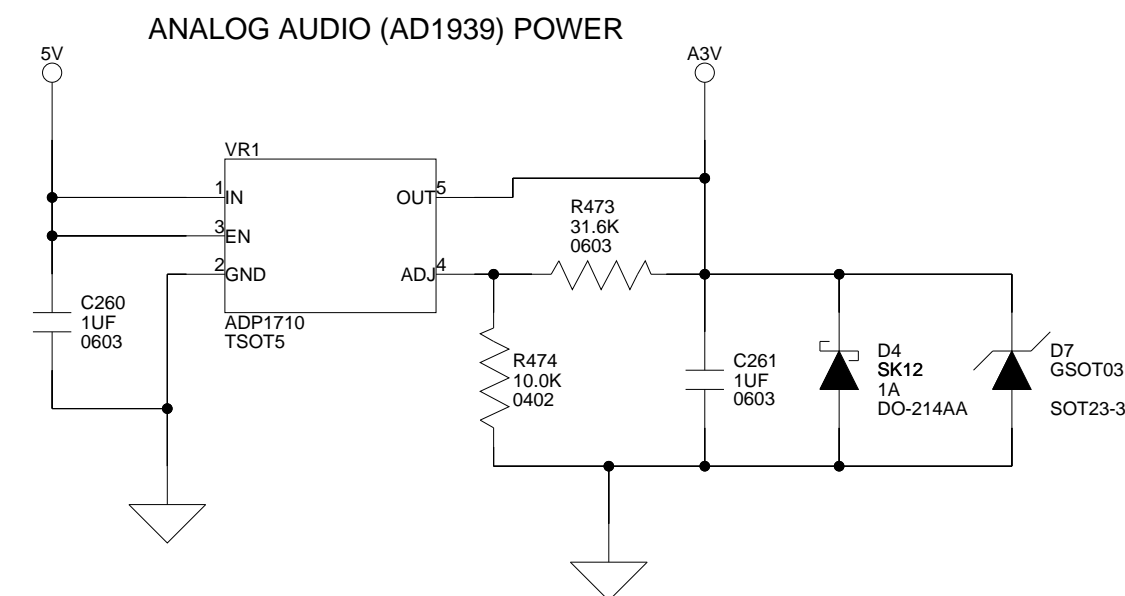
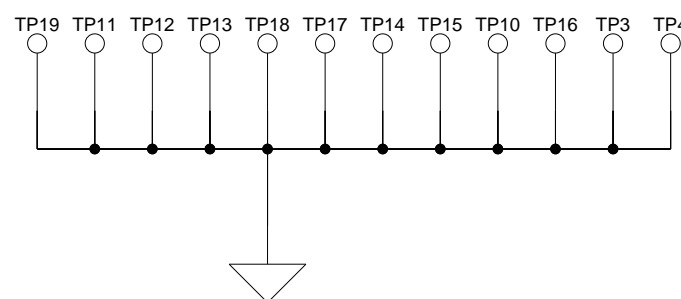
Title	ADSP-21489 SVS EZ-BUB AUDIO PAGE 7
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Size C	Board No. A0301-2011	Rev 1.0
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GND Test Points are scattered on PCB for Test Measurement Purposes.
LABEL "GND" ON ALL TPs



		20 Cotton Road Nashua, NH 03063 PH: 1-800-ANALOGD
Title ADSP-21489 SVS EZ-BUB POWER		
Size C	Board No. A0301-2011	Rev 1.0
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