


ADSP-21375 EZ-KIT Lite

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-21375 EZ-KIT Lite TITLE | |
| Size C | Board No. A0202-2006 | | Rev 1.0 |
| Date | 8-30-2006_10:51 | Sheet | 1 of 13 |

1

2

3

4

B

C

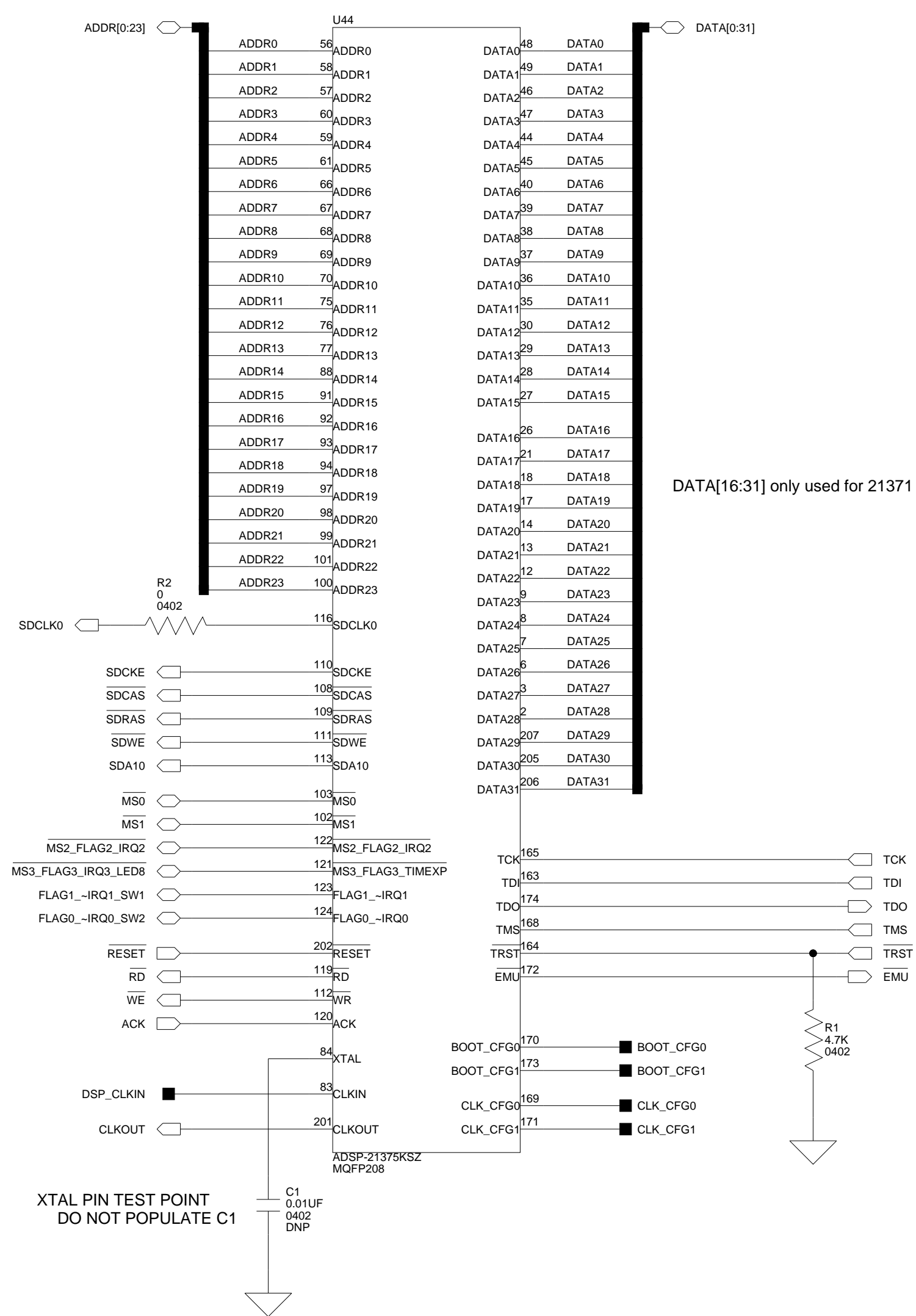
D

1

2

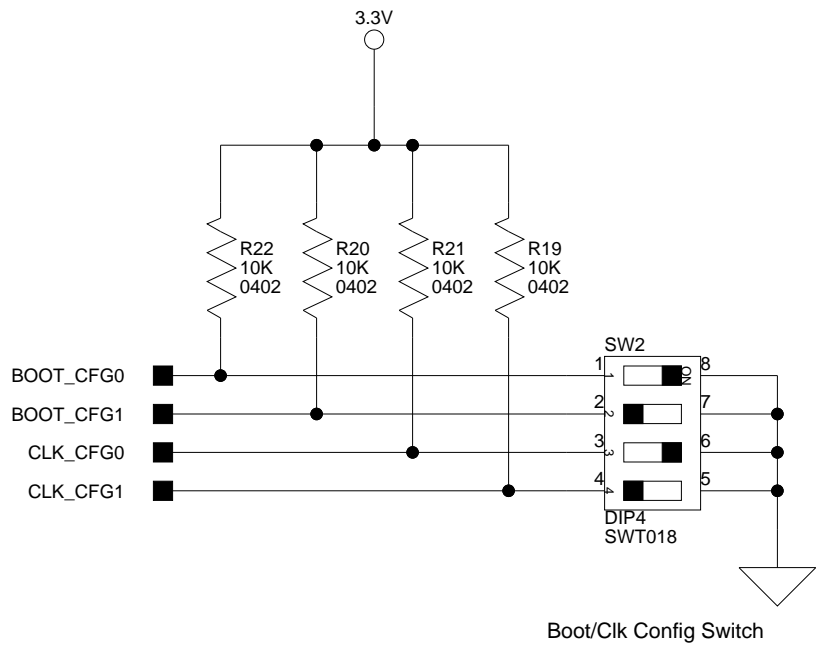
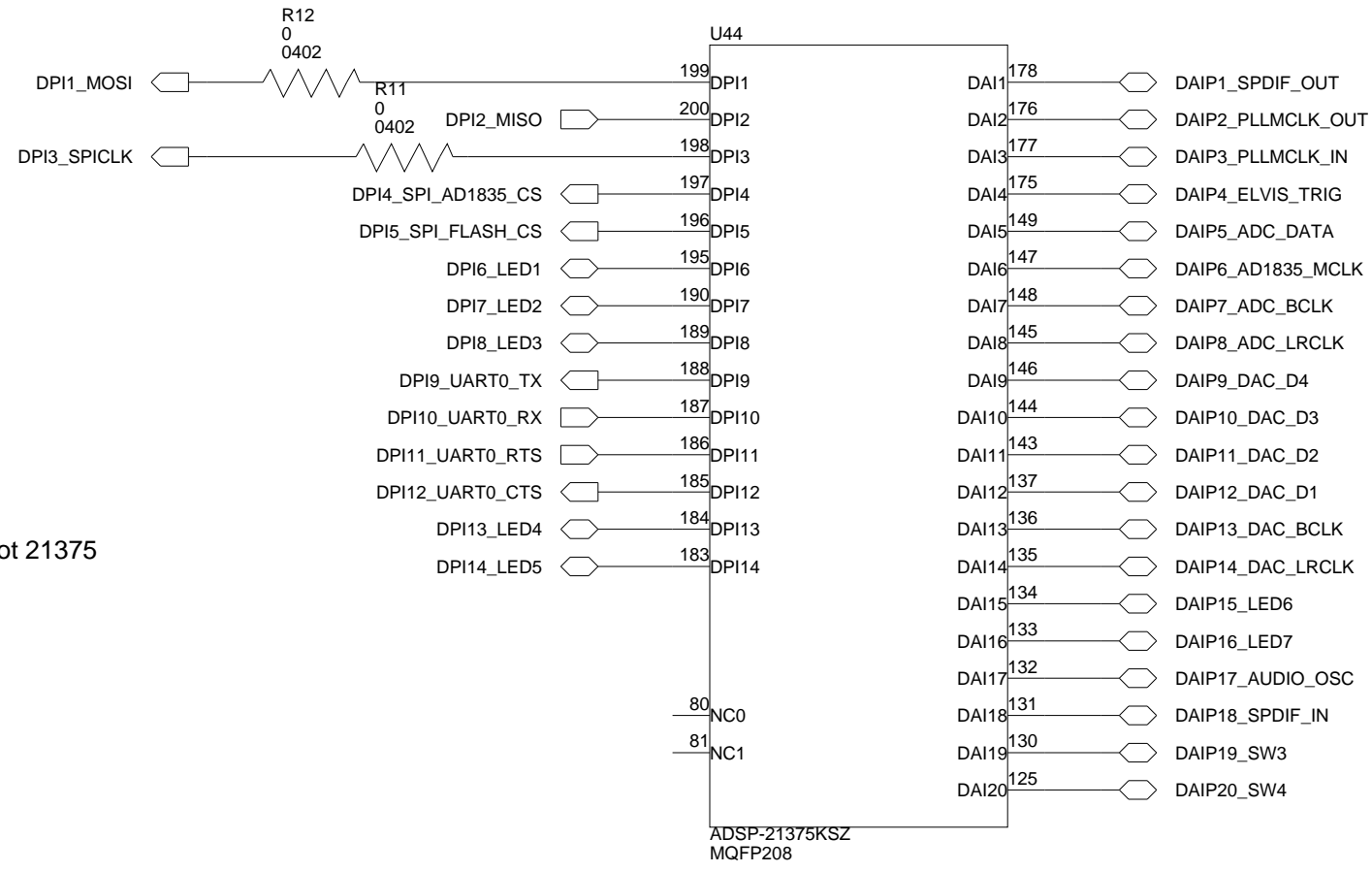
3

4



DATA[16:31] only used for 21371 not 21375

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



SW2: BOOT/CLOCK RATIO SELECT
(Default: 1=ON, 2=OFF, 3=ON, 4=OFF)

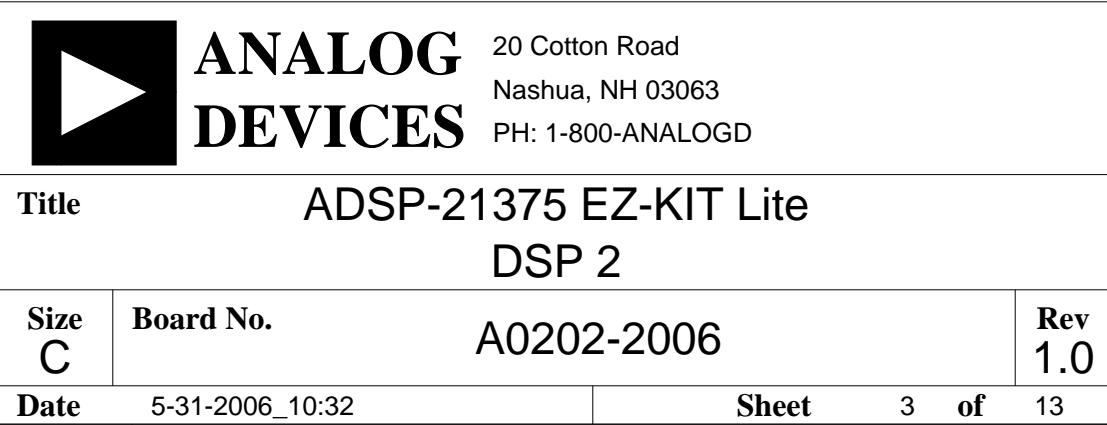
| 1 | 2 | BOOTMODE | |
|----------|----------|------------------|---------|
| BOOTCFG0 | BOOTCFG1 | | |
| ON | ON | SPI SLAVE BOOT | DEFAULT |
| ON | OFF | EPROM/FLASH BOOT | |
| OFF | ON | SPI MASTER BOOT | |
| OFF | OFF | RESERVED | |
| 3 | 4 | CLOCK RATIO | |
| CLKCFG0 | CLKCFG1 | CORE:CLKIN | |
| ON | ON | 6:1 | DEFAULT |
| ON | OFF | 16:1 | |
| OFF | ON | 32:1 | |
| OFF | OFF | RESERVED | |



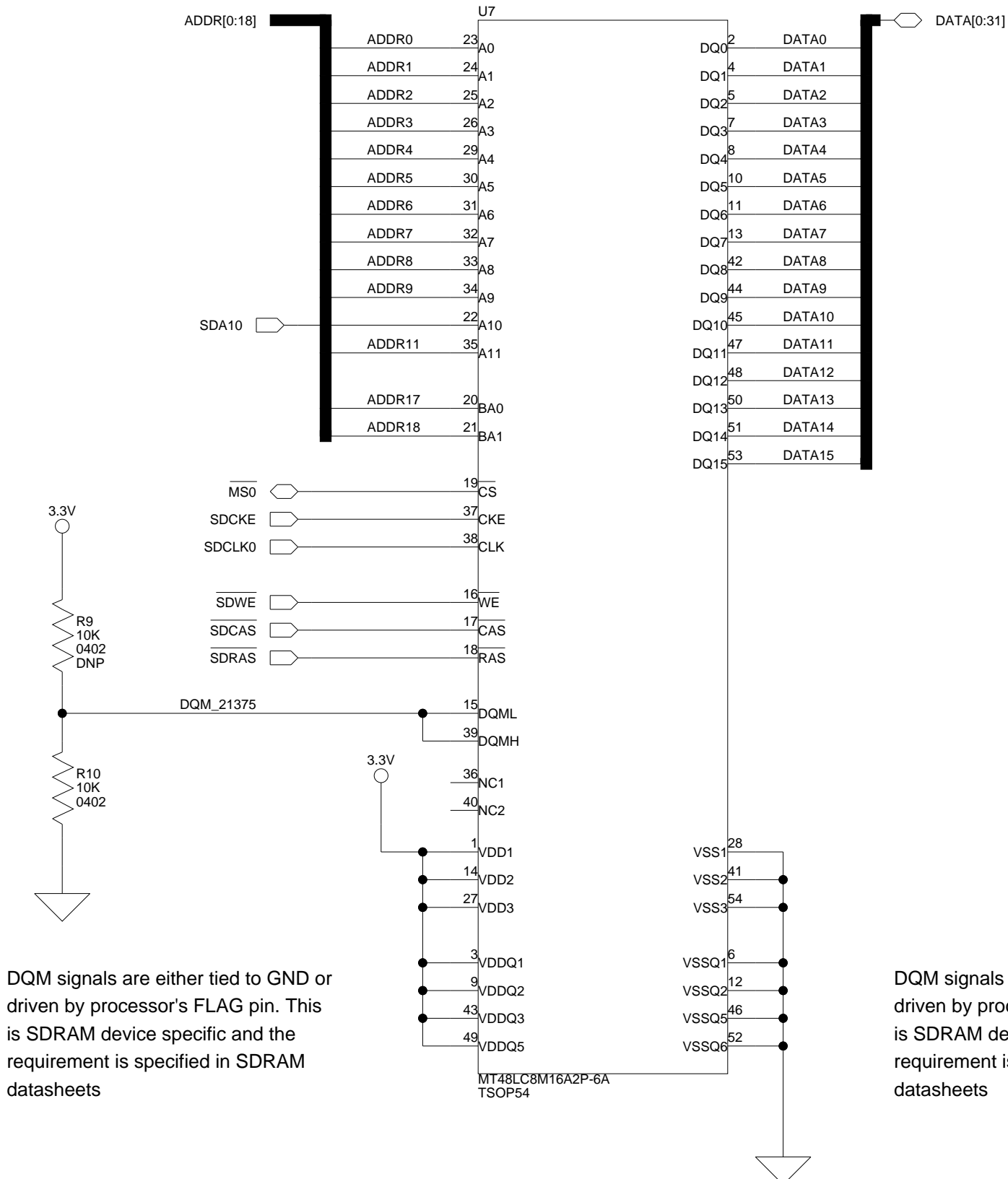
**ANALOG
DEVICES**

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

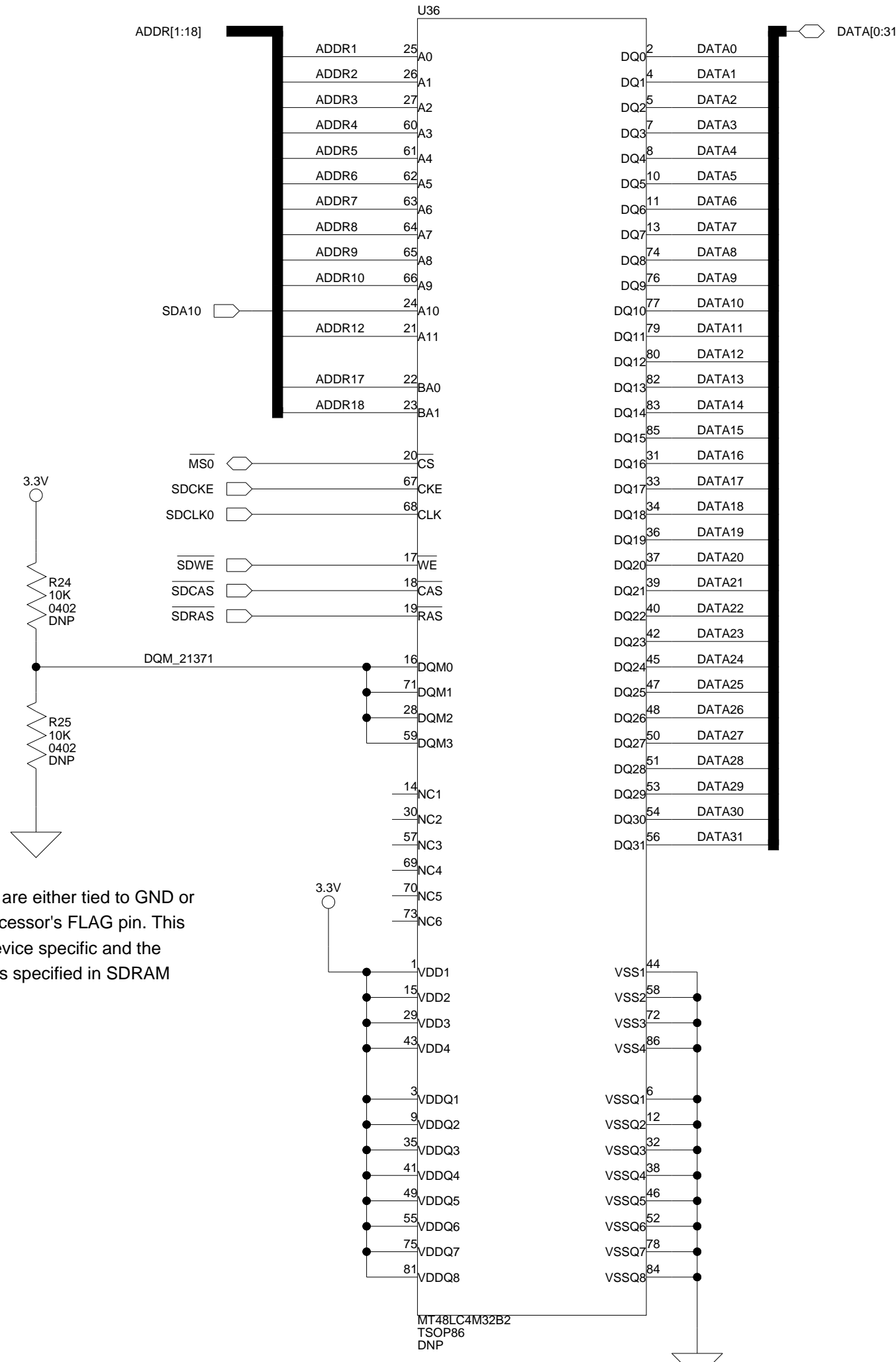
| | | | | | |
|-----------|-----------------|--|-------------------------------|------|------------|
| Title | | | ADSP-21375 EZ-KIT Lite DSP | | |
| Size C | Board No. | | A0202-2006 | | Rev 1.0 |
| Date | 5-31-2006_10:32 | | Sheet | 2 of | 13 |



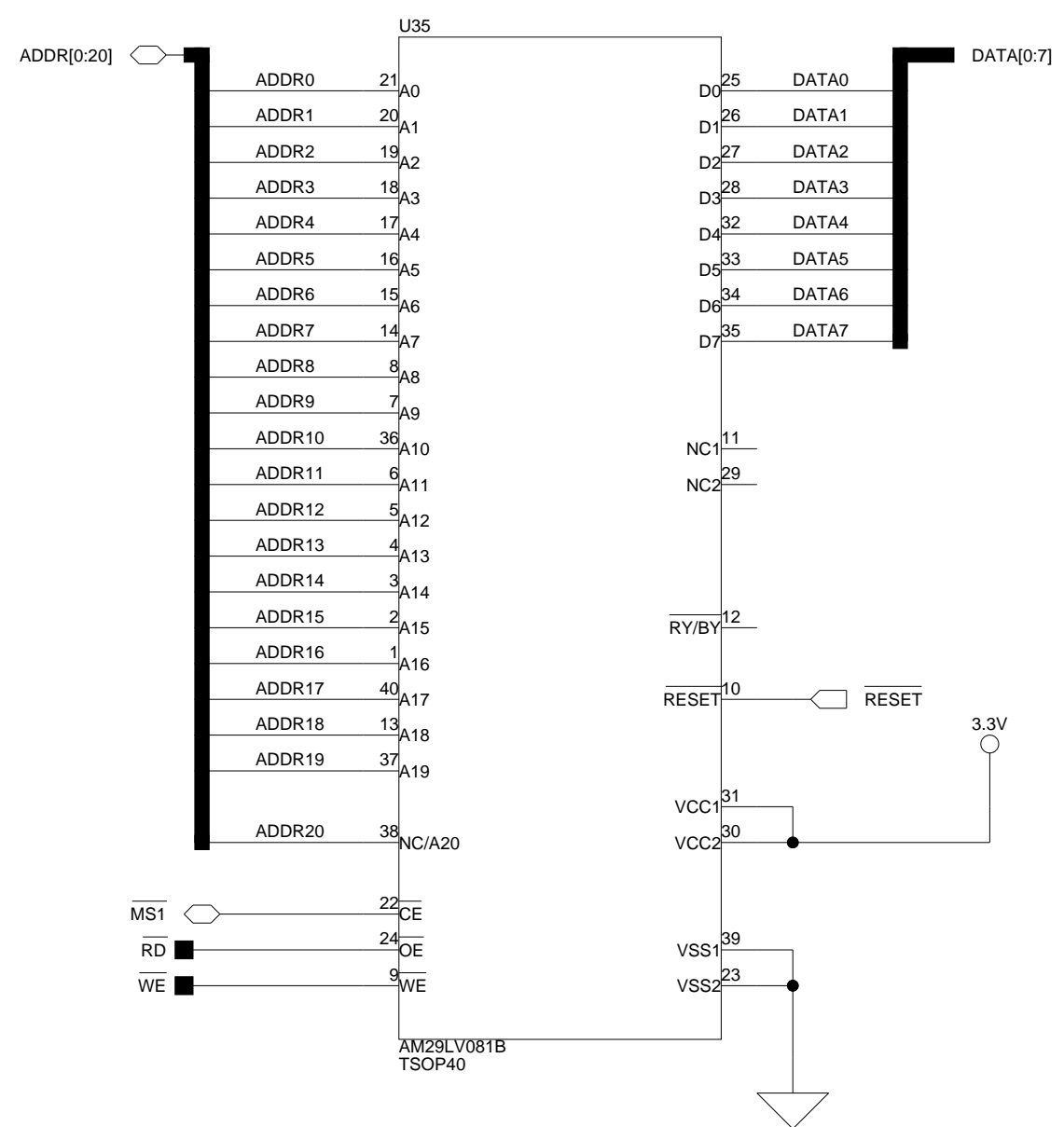
21375 EZ-Kit SDRAM
128Mb (2M x 16-bit x 4 Banks)



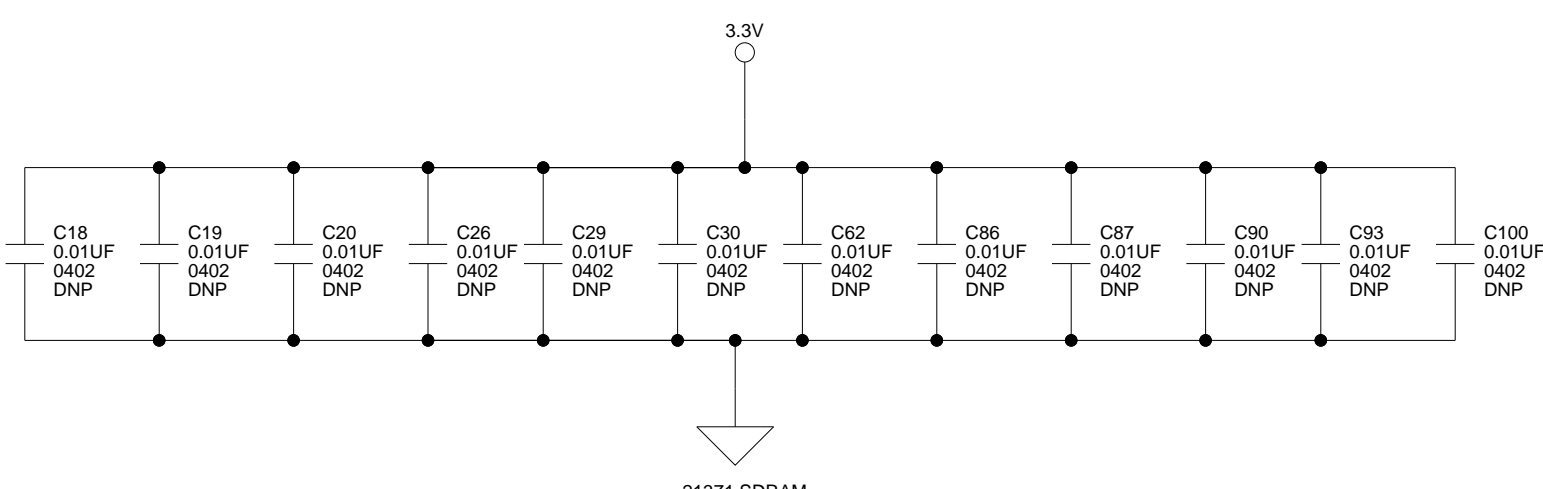
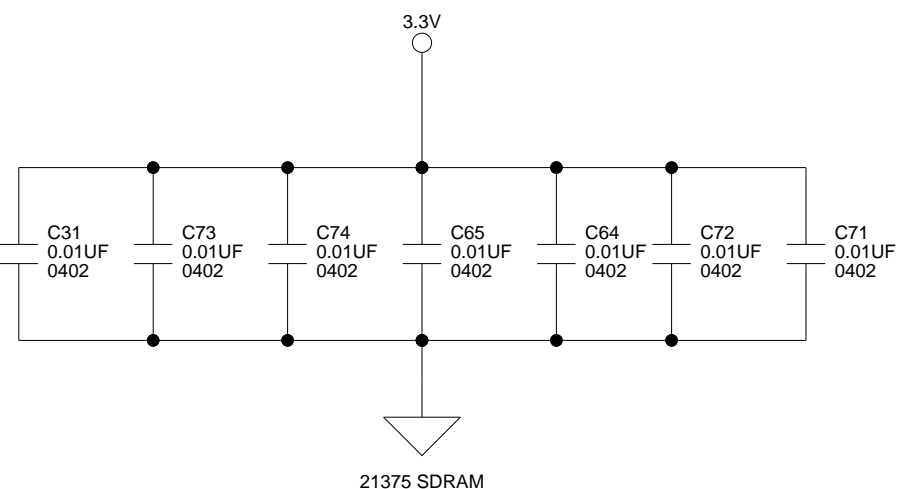
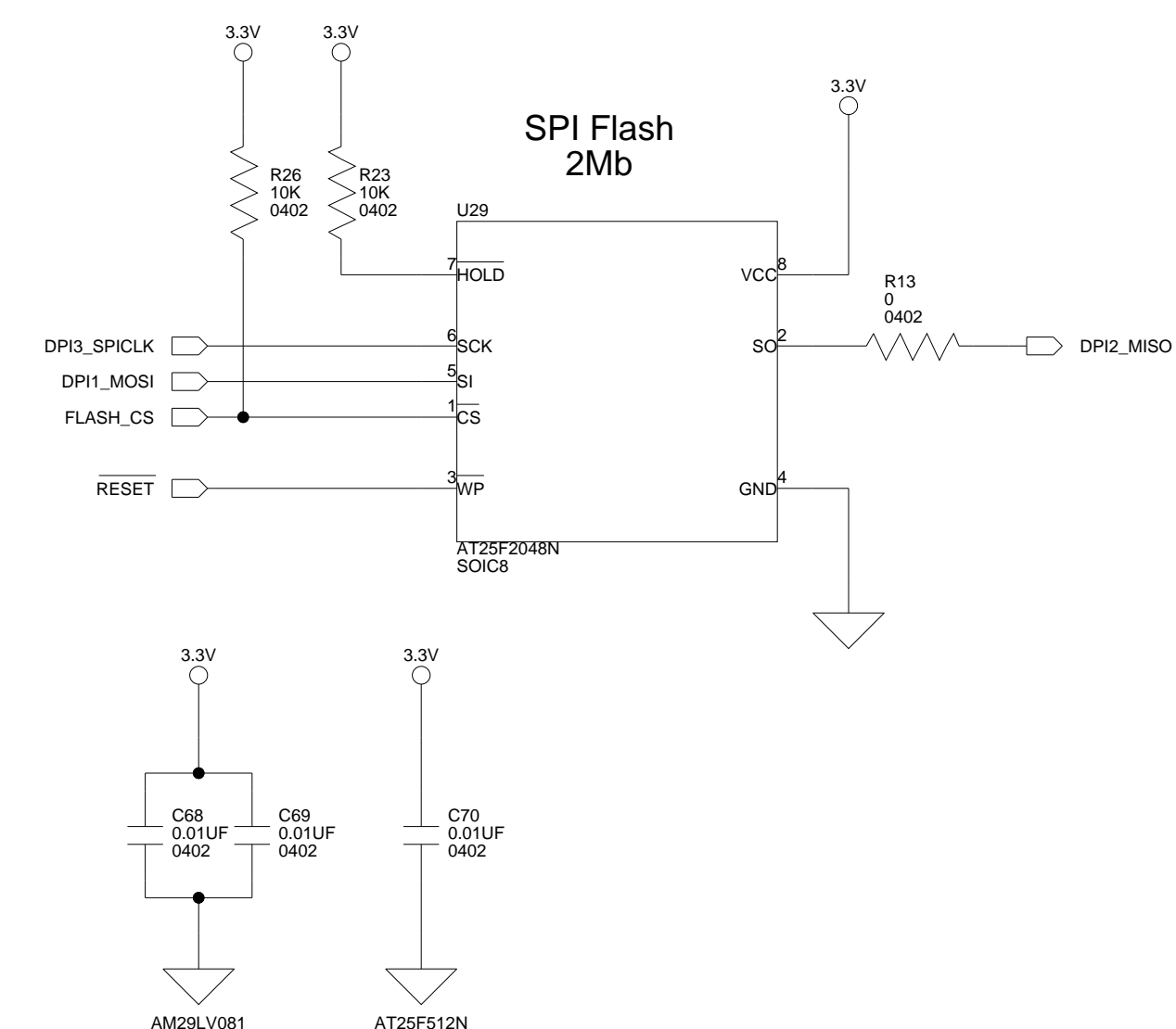
21371 EZ-Kit SDRAM
128Mb (1M x 32-bit x 4 Banks)

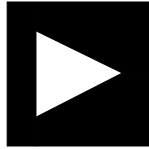


Flash
8Mb (1M x 8-bit)



SPI Flash
2Mb



| | | | |
|---|-----------------------------|---------------------------|---|
|  | | ANALOG DEVICES | 20 Cotton Road Nashua, NH 03063 PH: 1-800-ANALOGD |
| Title ADSP-21375 EZ-KIT Lite MEMORY | | | |
| Size C | Board No. A0202-2006 | | Rev 1.0 |
| Date | 5-31-2006_10:32 | | Sheet 4 of 13 |

1

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B

C

D

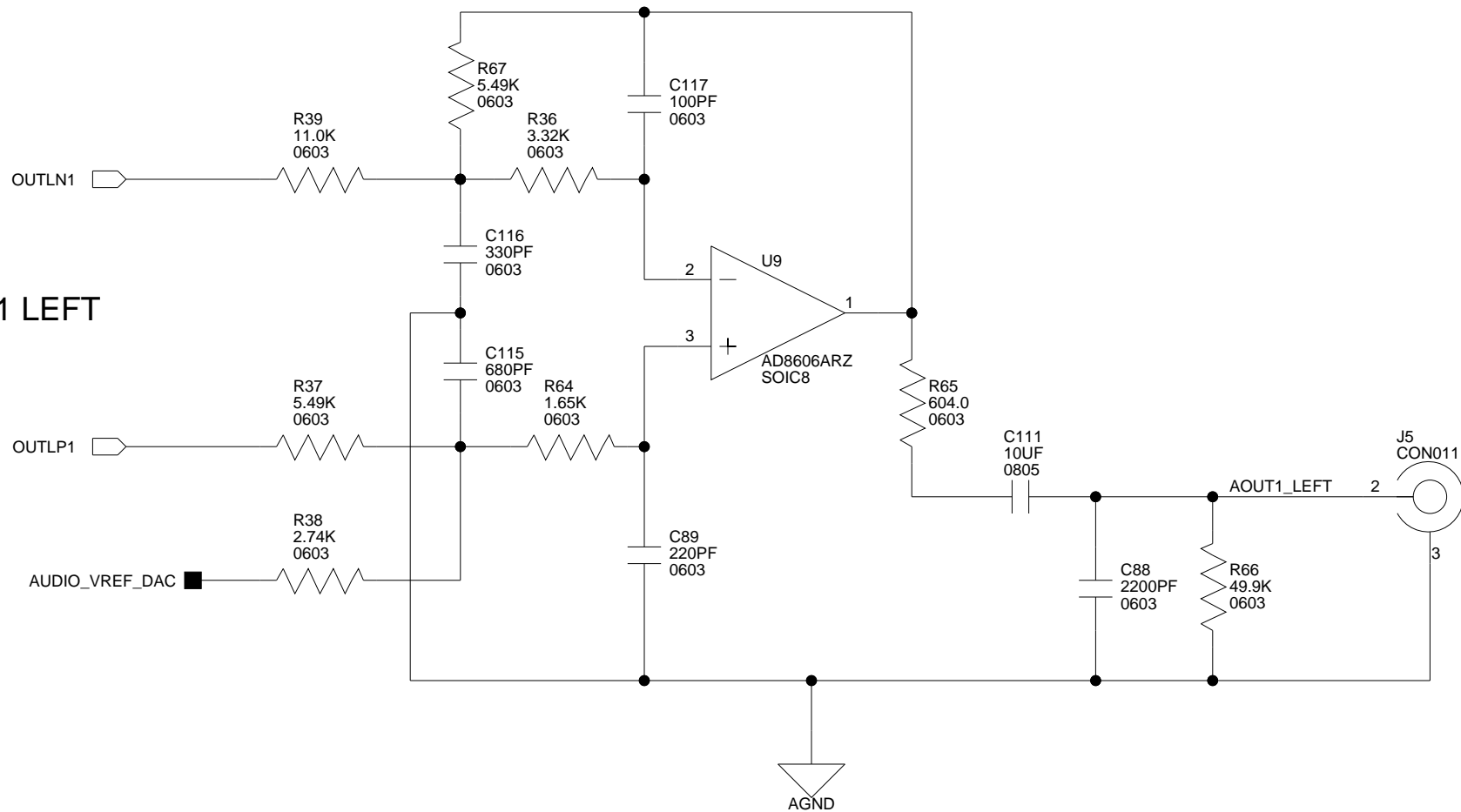
1

2

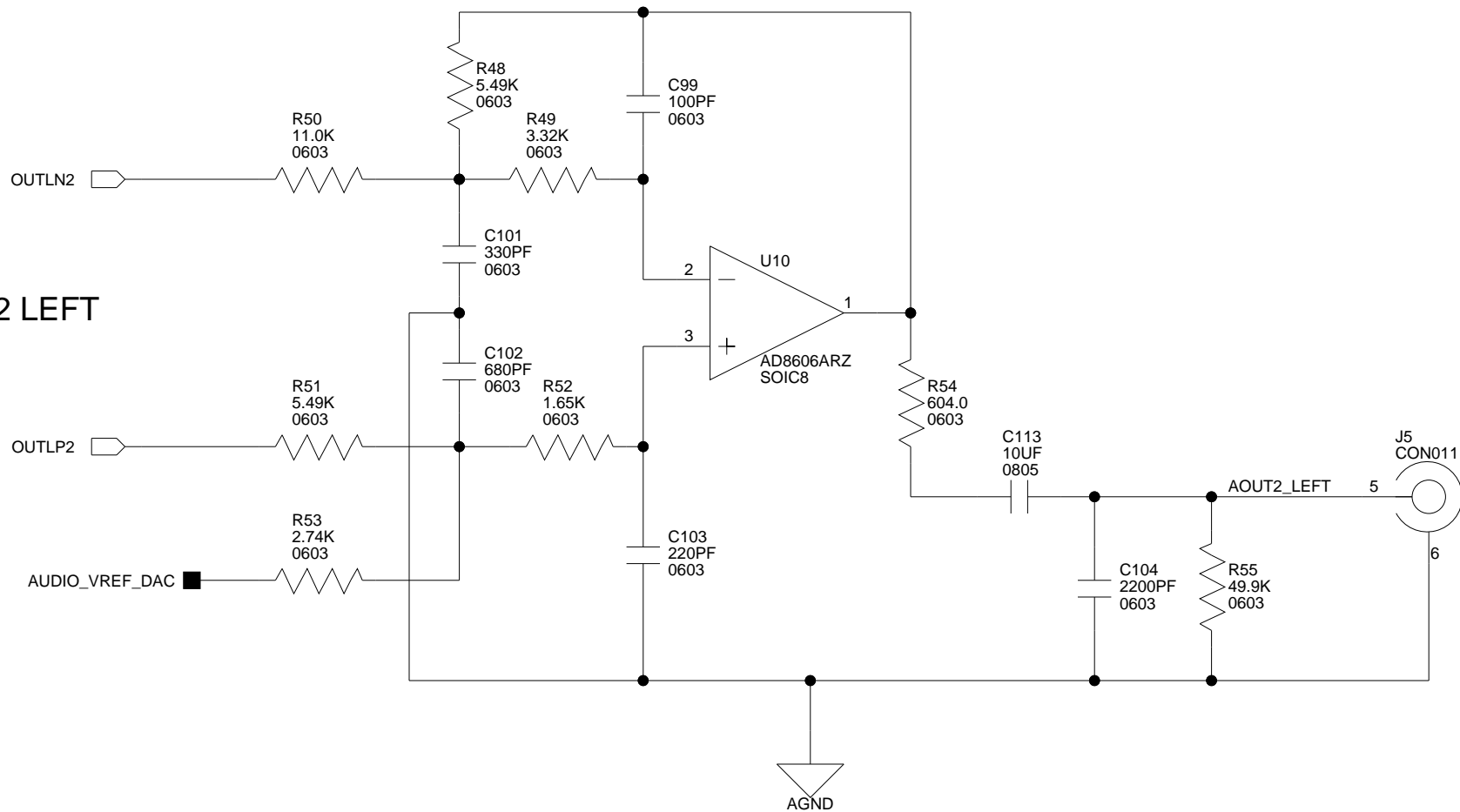
3

4

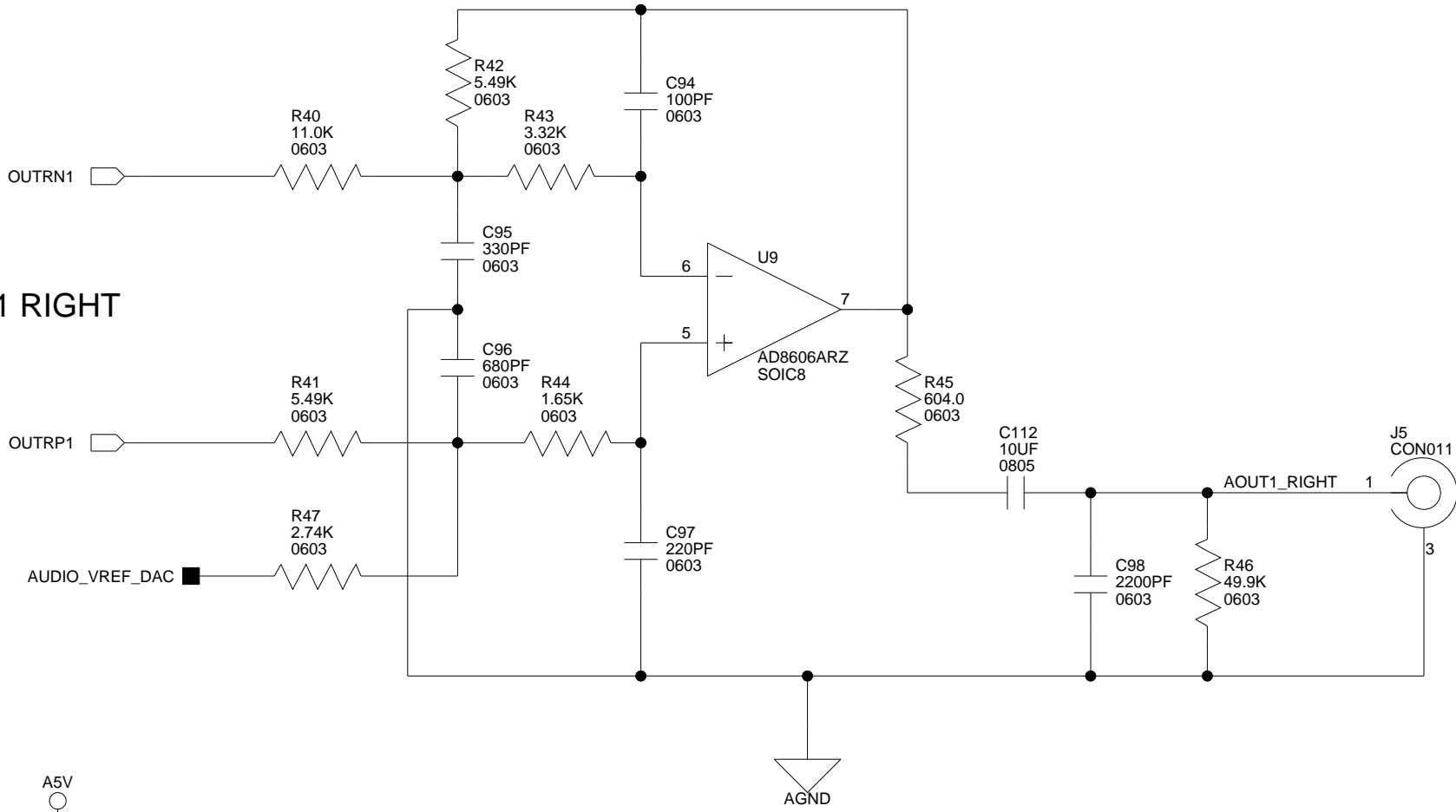
DAC1 LEFT



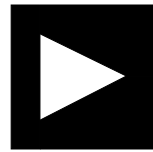
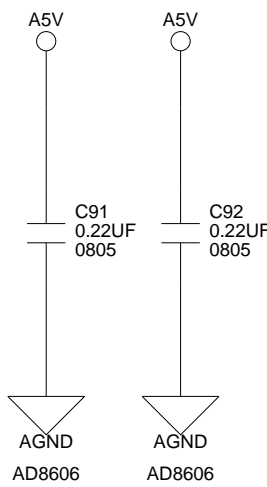
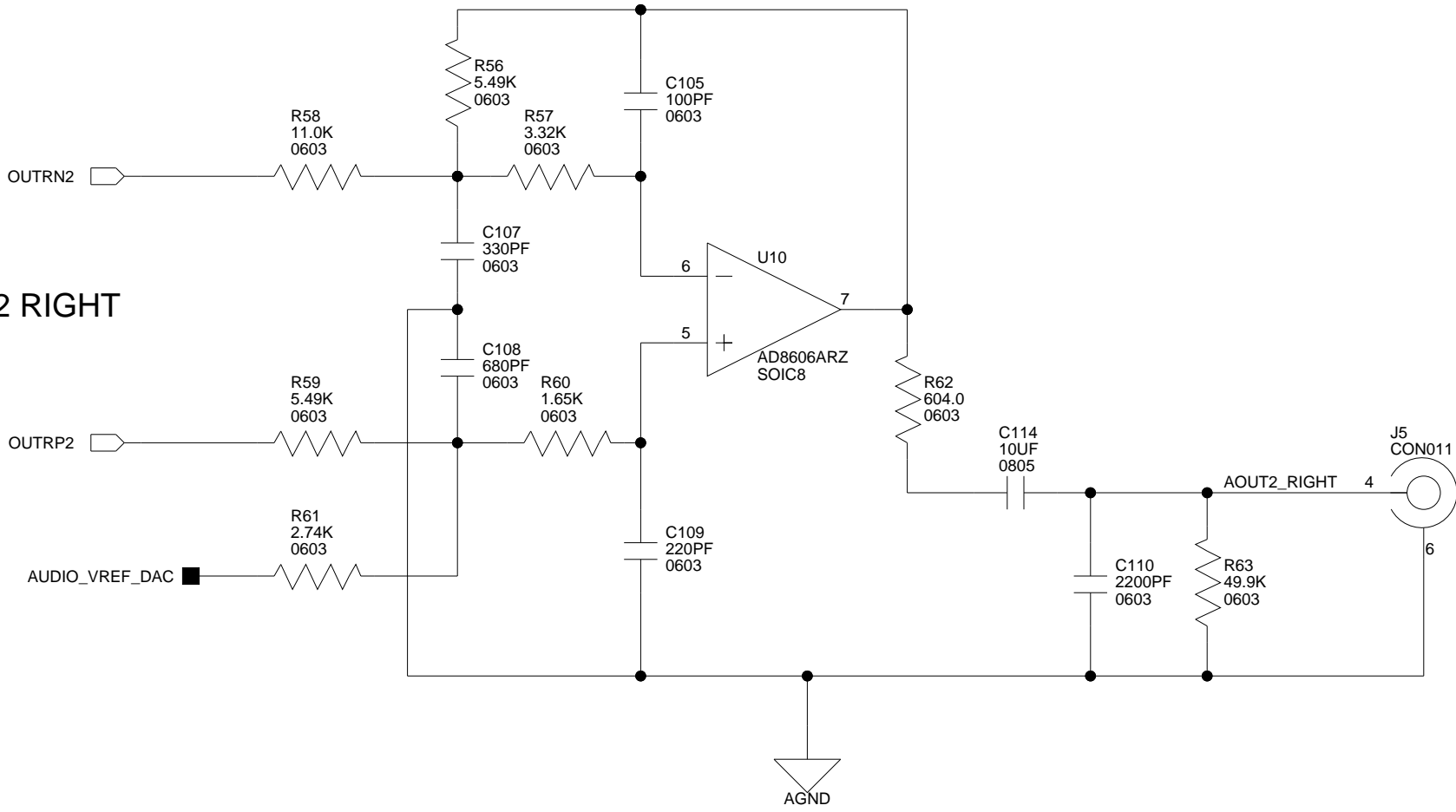
DAC2 LEFT



DAC1 RIGHT



DAC2 RIGHT



**ANALOG
DEVICES**

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

Title **ADSP-21375 EZ-KIT Lite
AUDIO OUT 1**

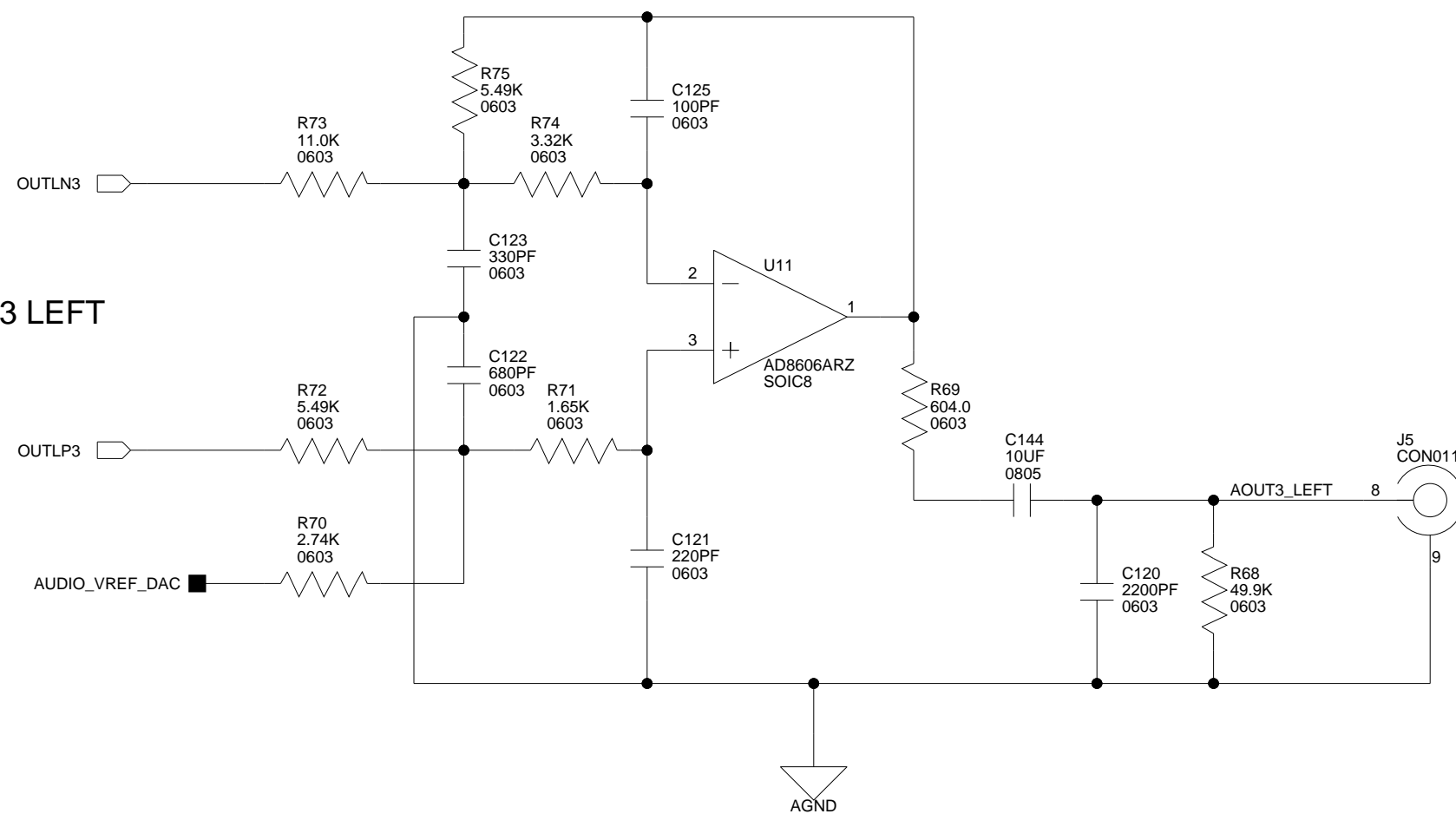
Size **C** Board No. **A0202-2006**

Rev **1.0**

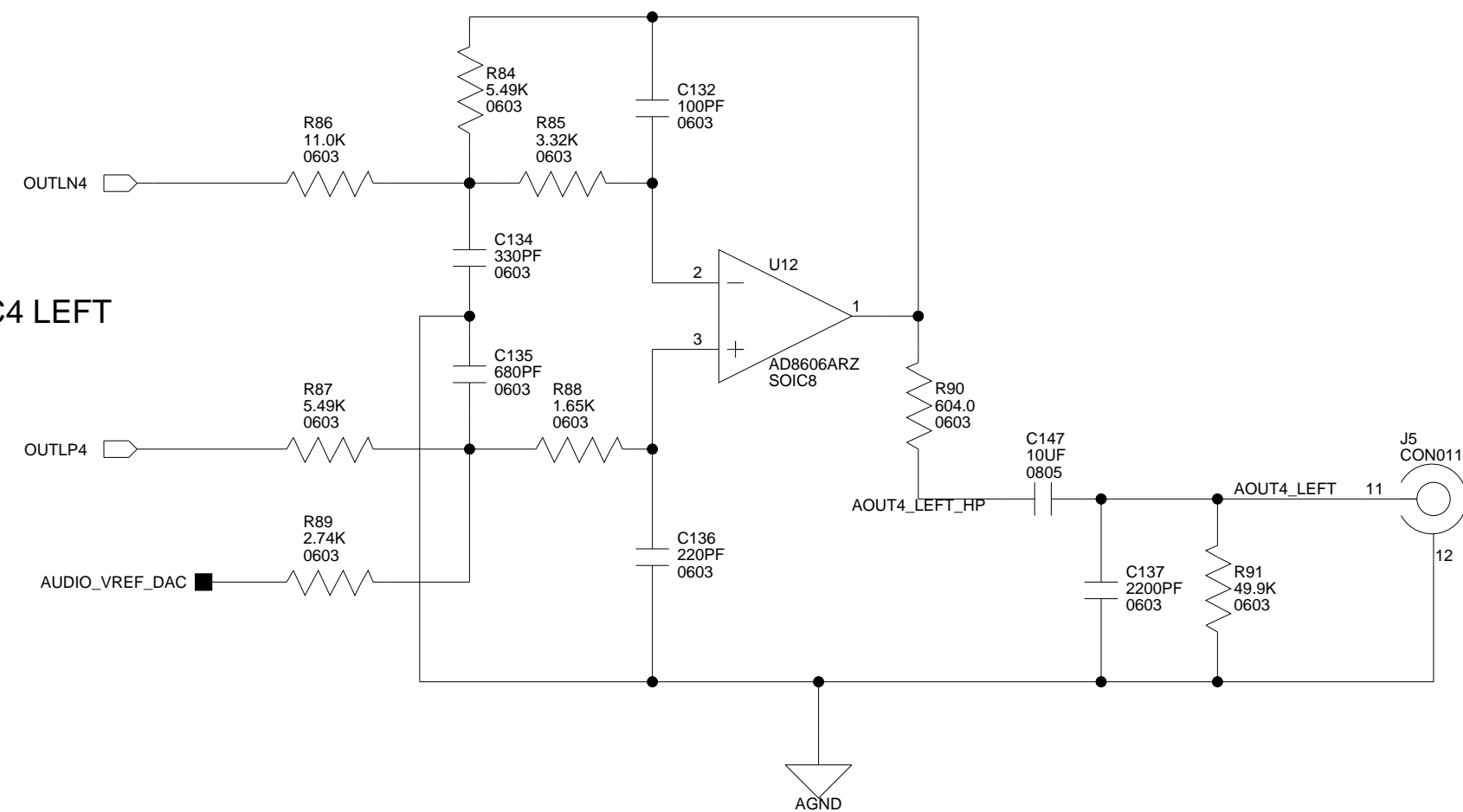
Date 5-31-2006_10:32

Sheet 6 of 13

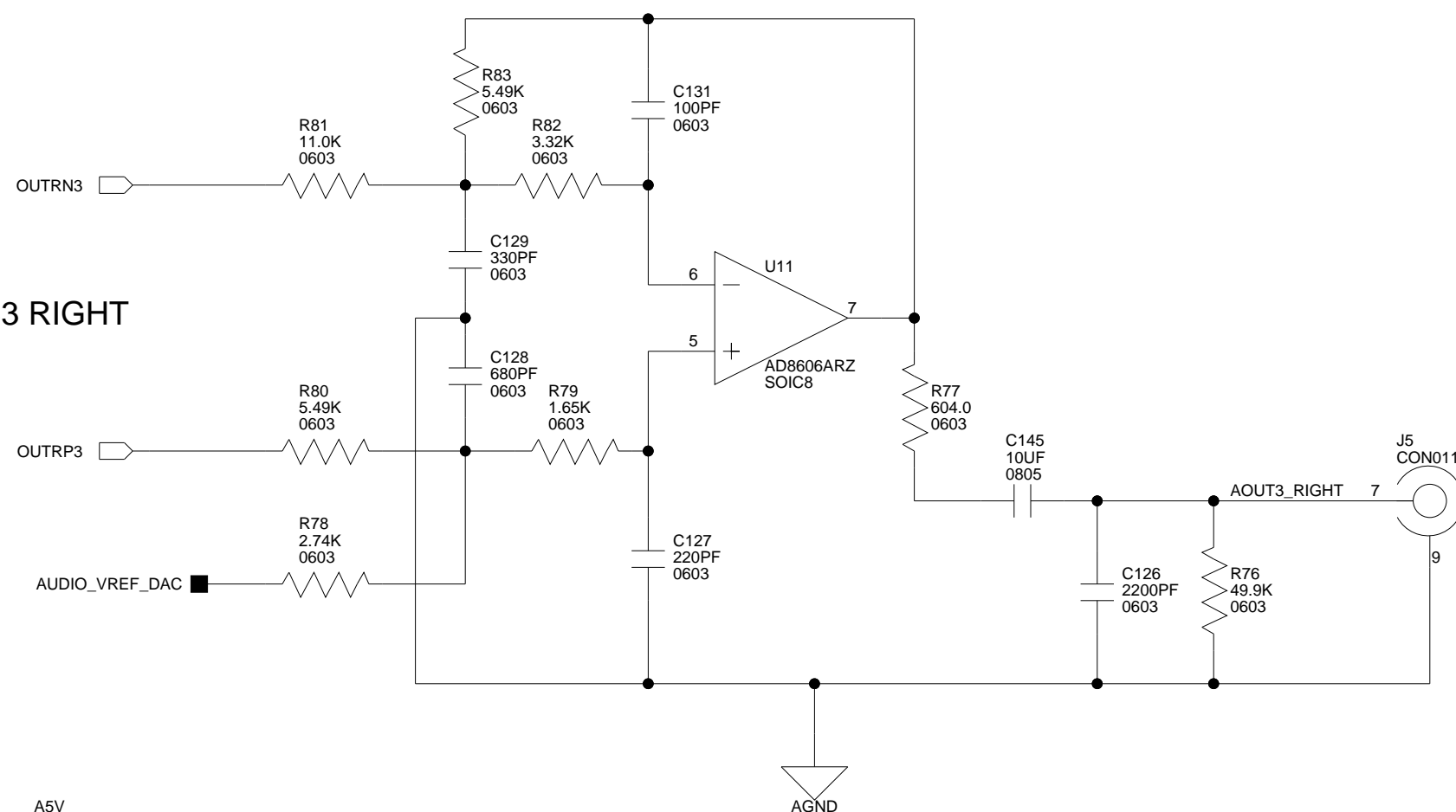
DAC3 LEFT



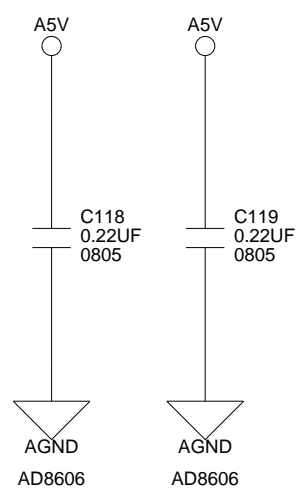
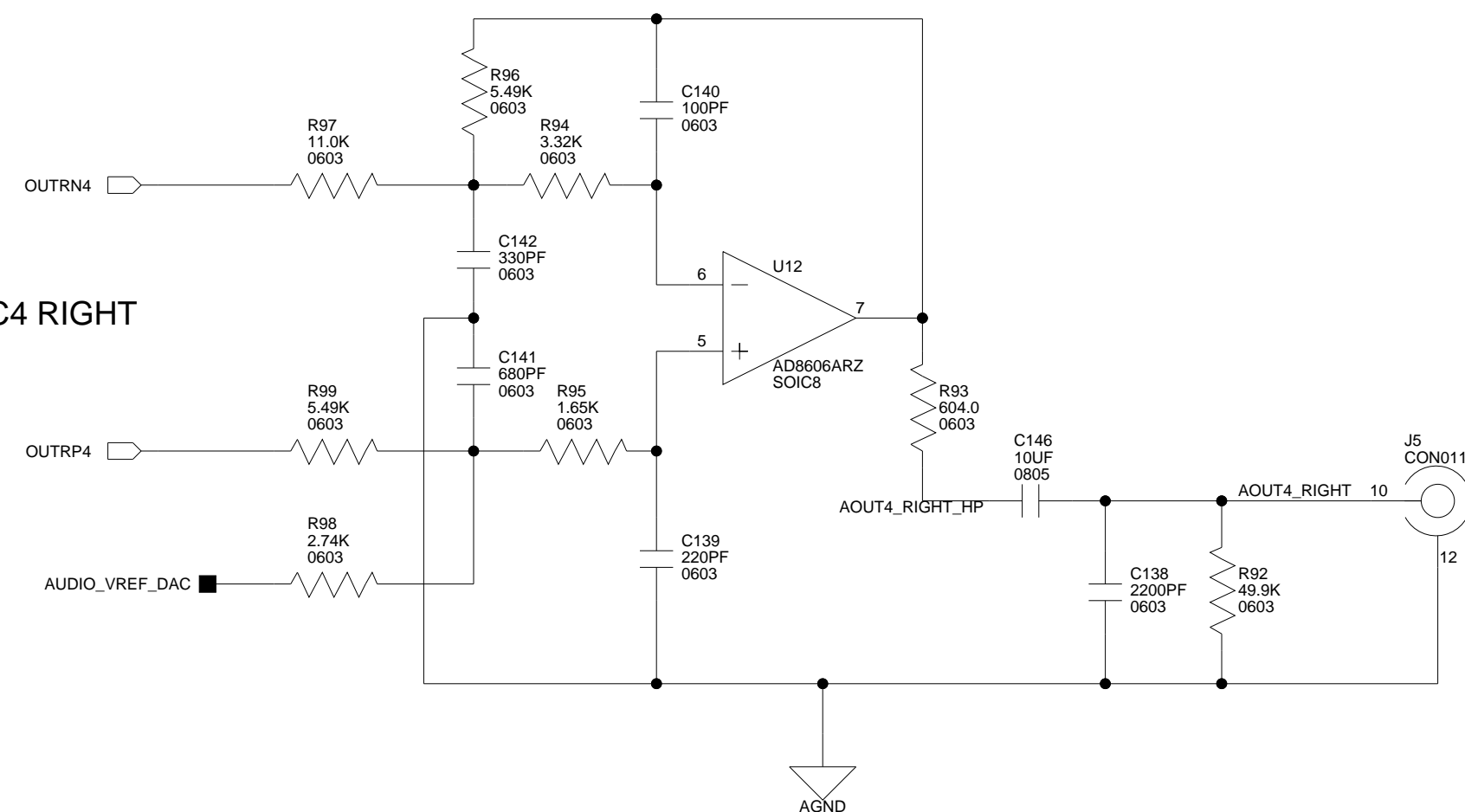
DAC4 LEFT



DAC3 RIGHT



DAC4 RIGHT

**ANALOG
DEVICES**20 Cotton Road
Nashua, NH 03063
PH: 1-800-ANALOGD**Title** ADSP-21375 EZ-KIT Lite
AUDIO OUT 2**Size C** **Board No.** A0202-2006**Rev**
1.0**Date** 5-31-2006_10:32**Sheet** 7 **of** 13

1

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3

4

A

B

C

D

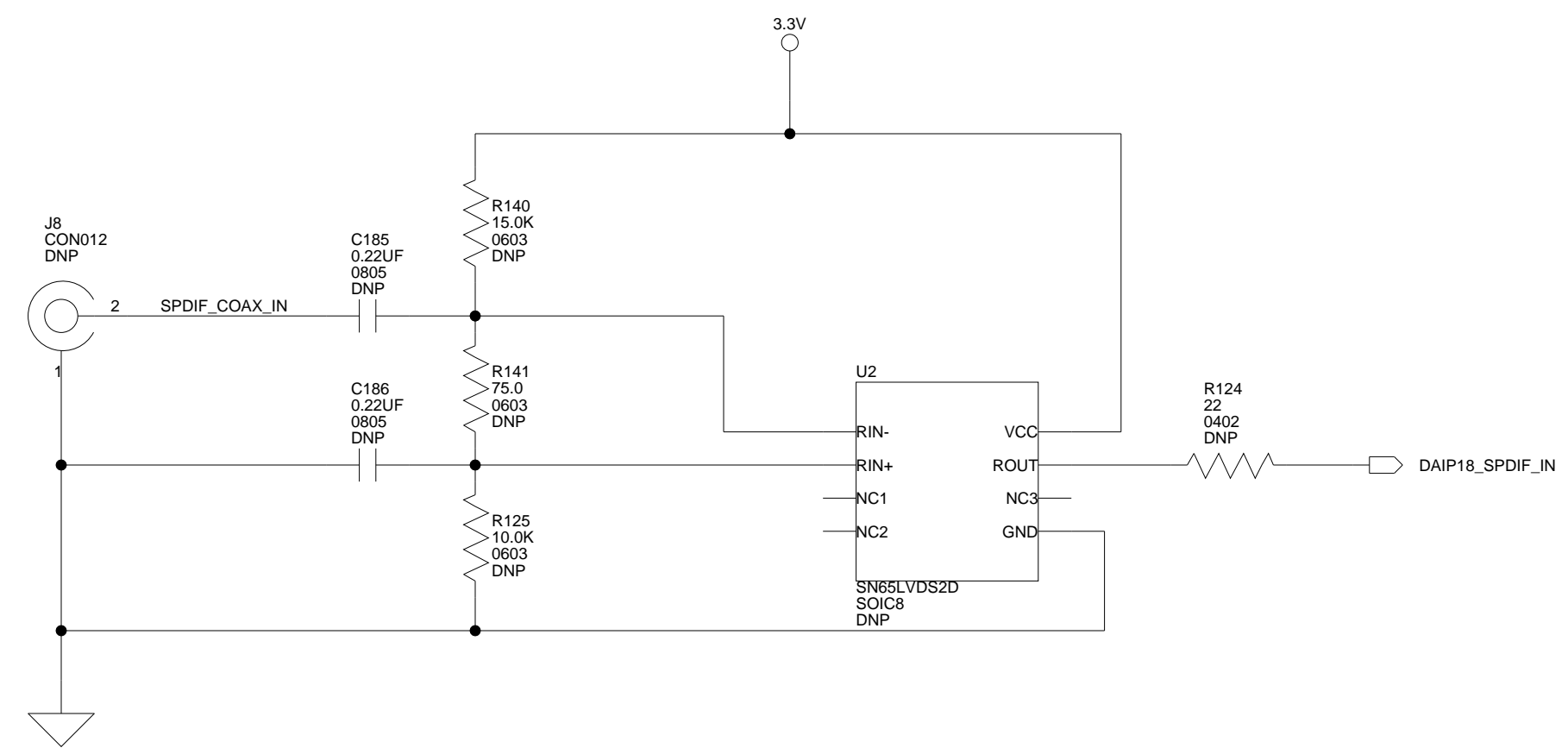
1

2

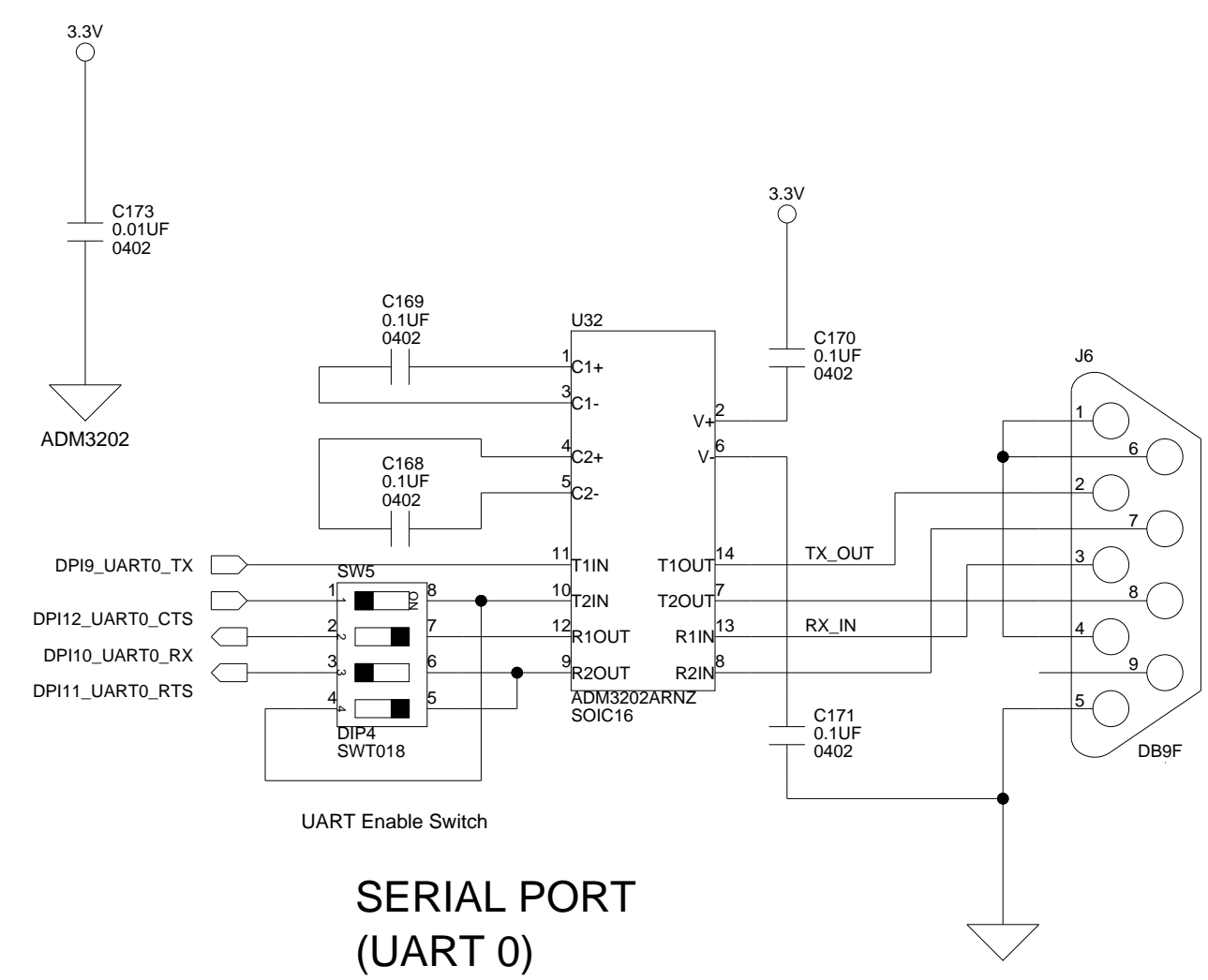
3

4

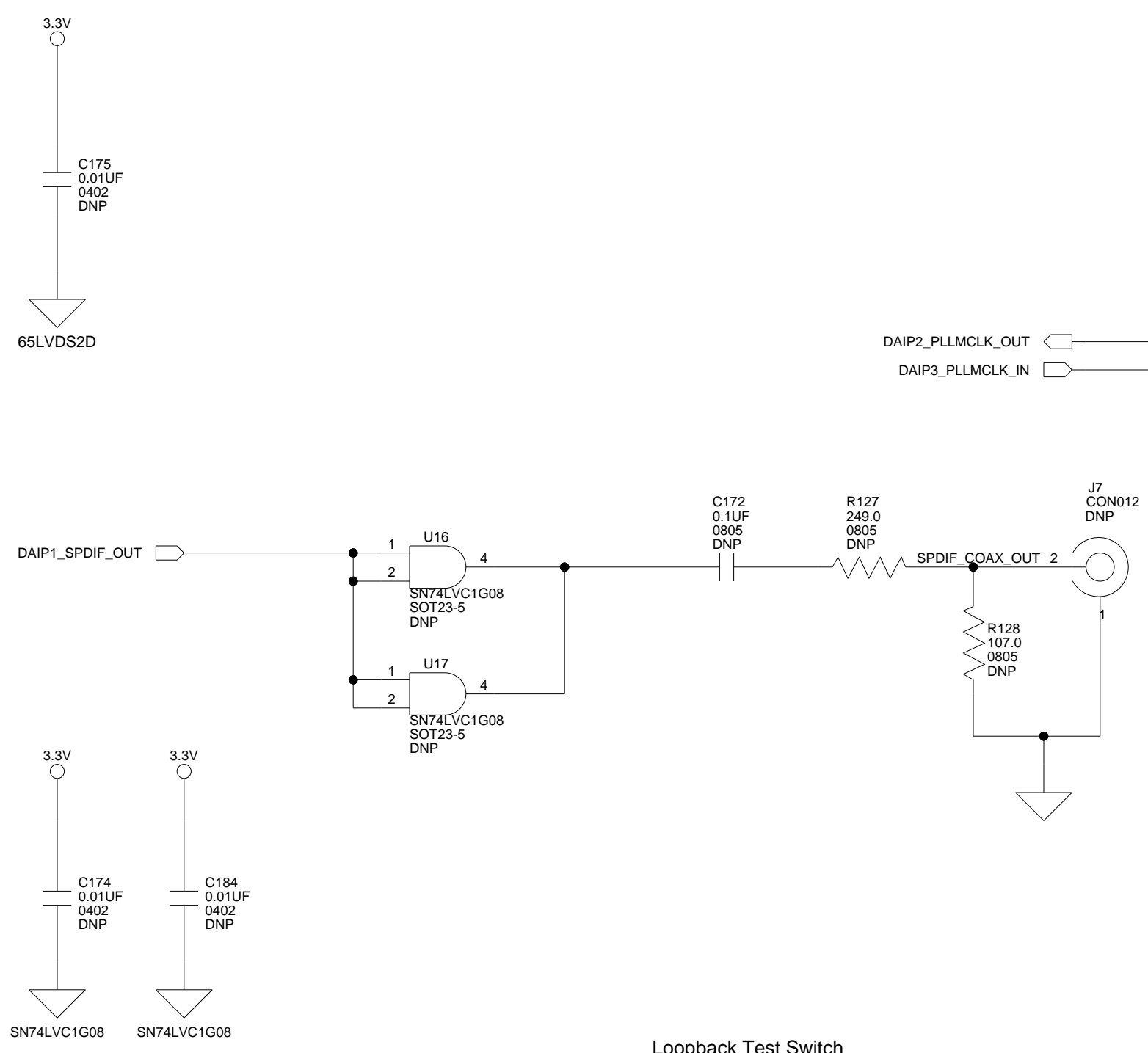
SPDIF COAX INPUT



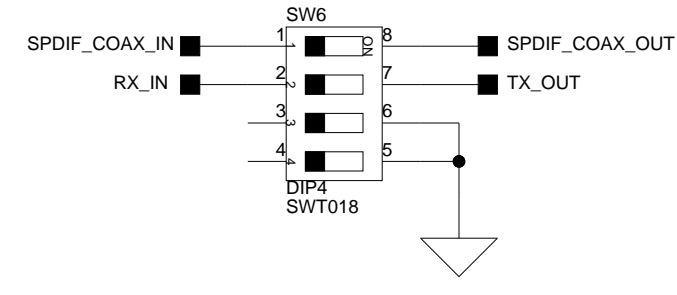
SERIAL PORT (UART 0)




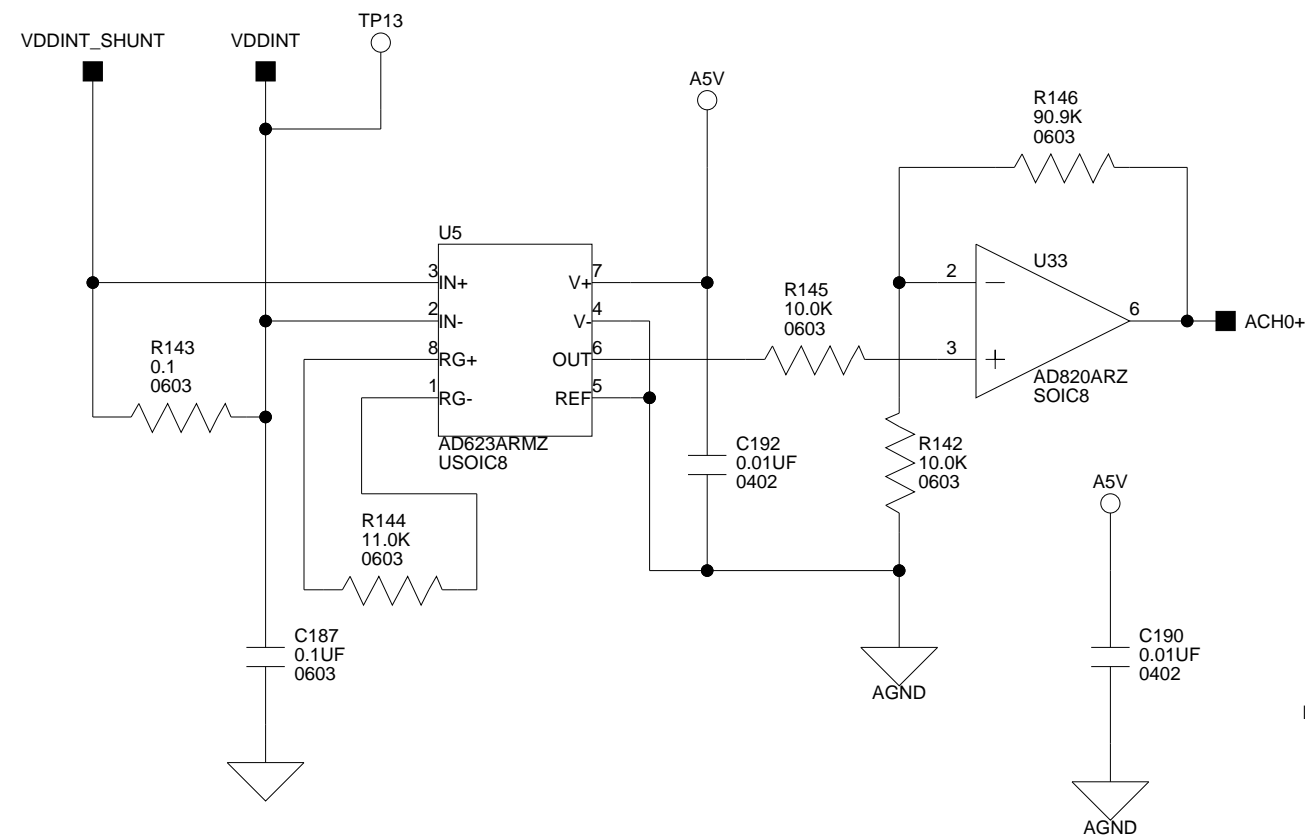
SPDIF COAX OUT



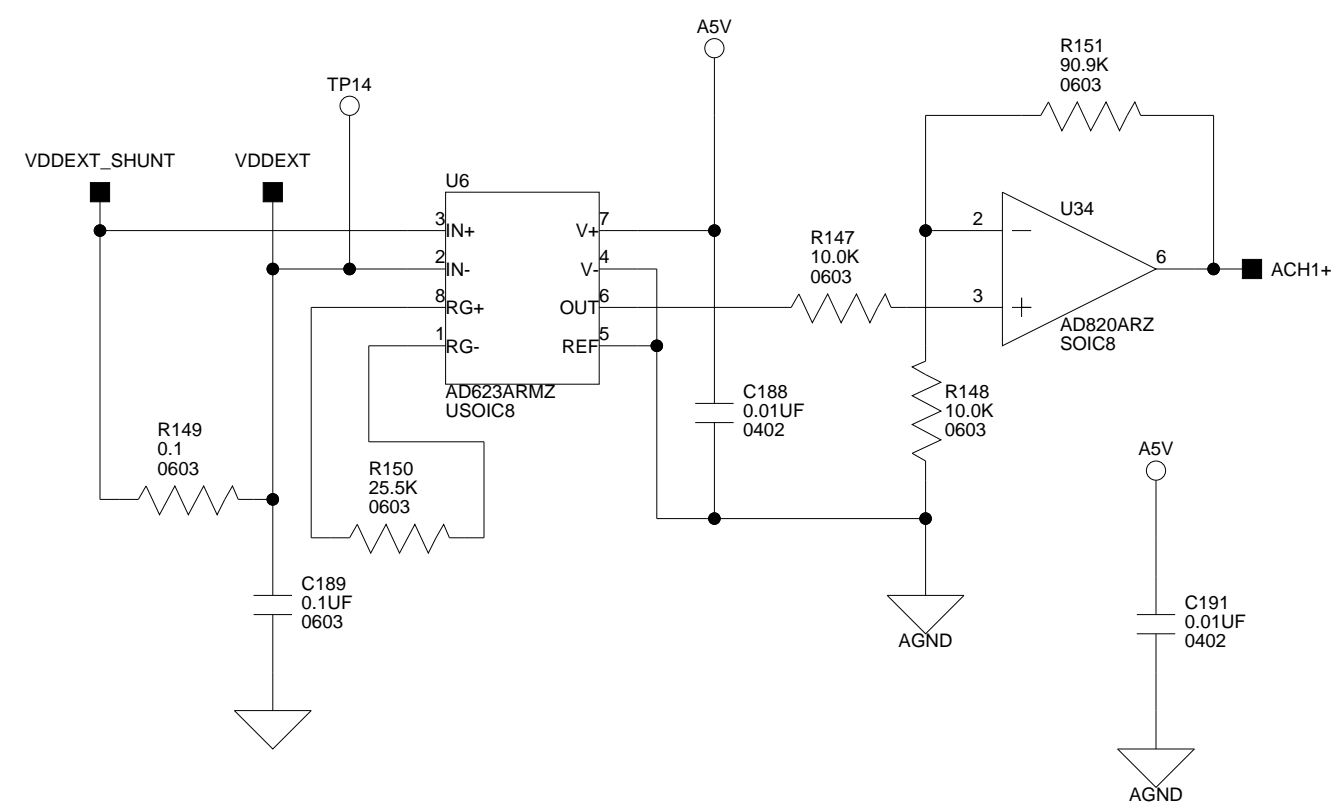
Loopback Test Switch (Default= All OFF) For Test Purposes Only



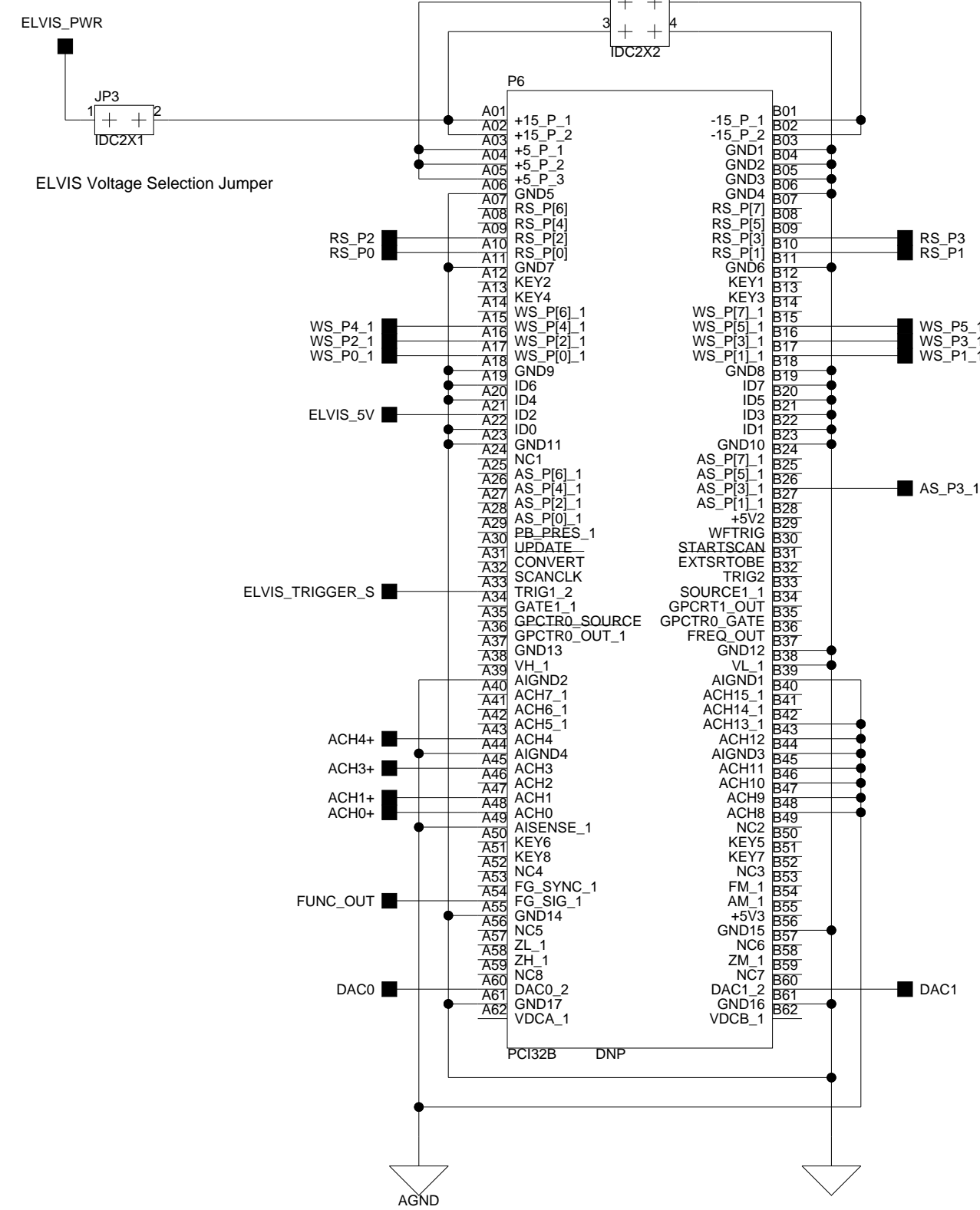
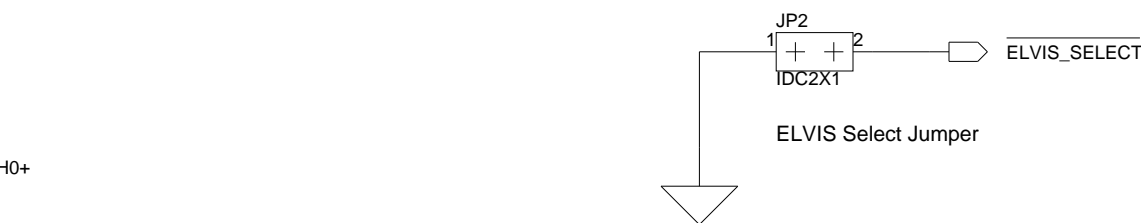
| | | | |
|---|-----------------|---|---------|
|  | | 20 Cotton Road Nashua, NH 03063 PH: 1-800-ANALOGD | |
| Title ADSP-21375 EZ-KIT Lite EXTERNAL PLL, SPDIF, & RS-232 | | | |
| Size C | Board No. | A0202-2006 | |
| Date | 5-31-2006_10:32 | Sheet | 9 of 13 |



DSP CORE CURRENT

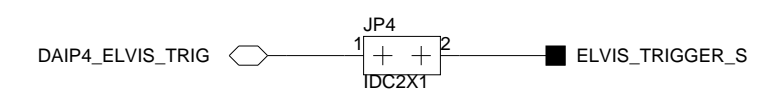


DSP IO CURRENT

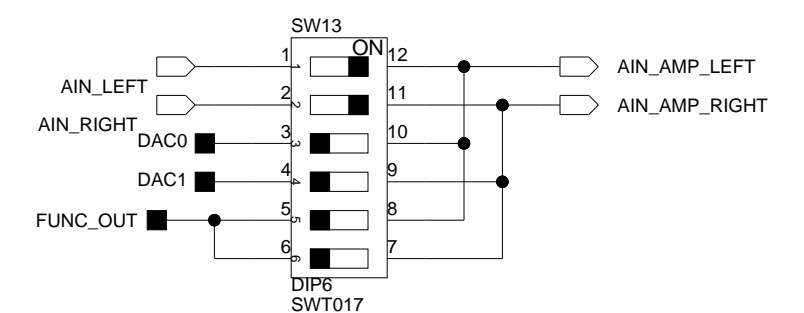


ELVIS CONNECTOR

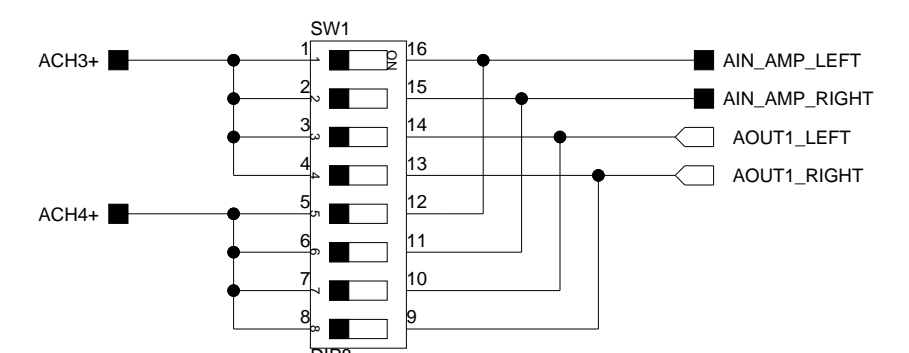
NI ELVIS ID 32 (0010 0000)



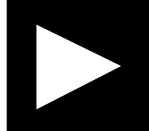
ELVIS Programmable Flag Jumper

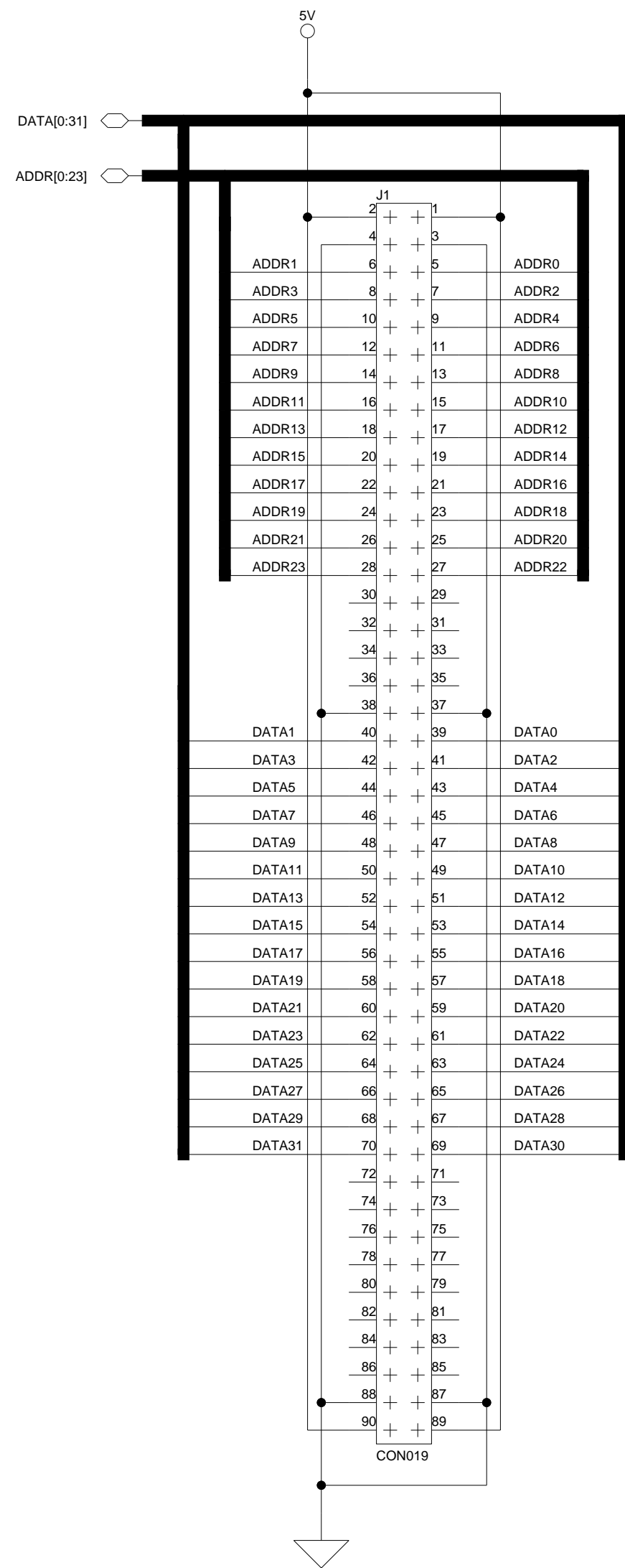


Function Generator Switch

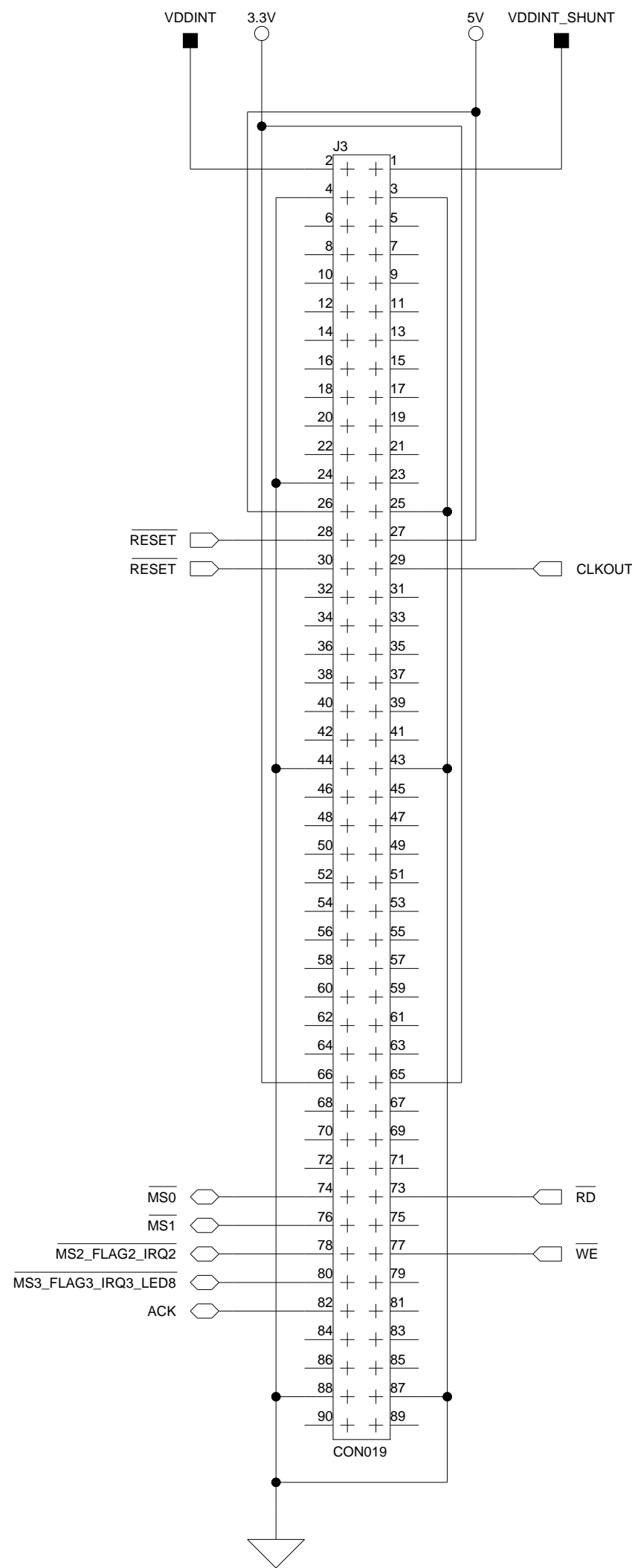
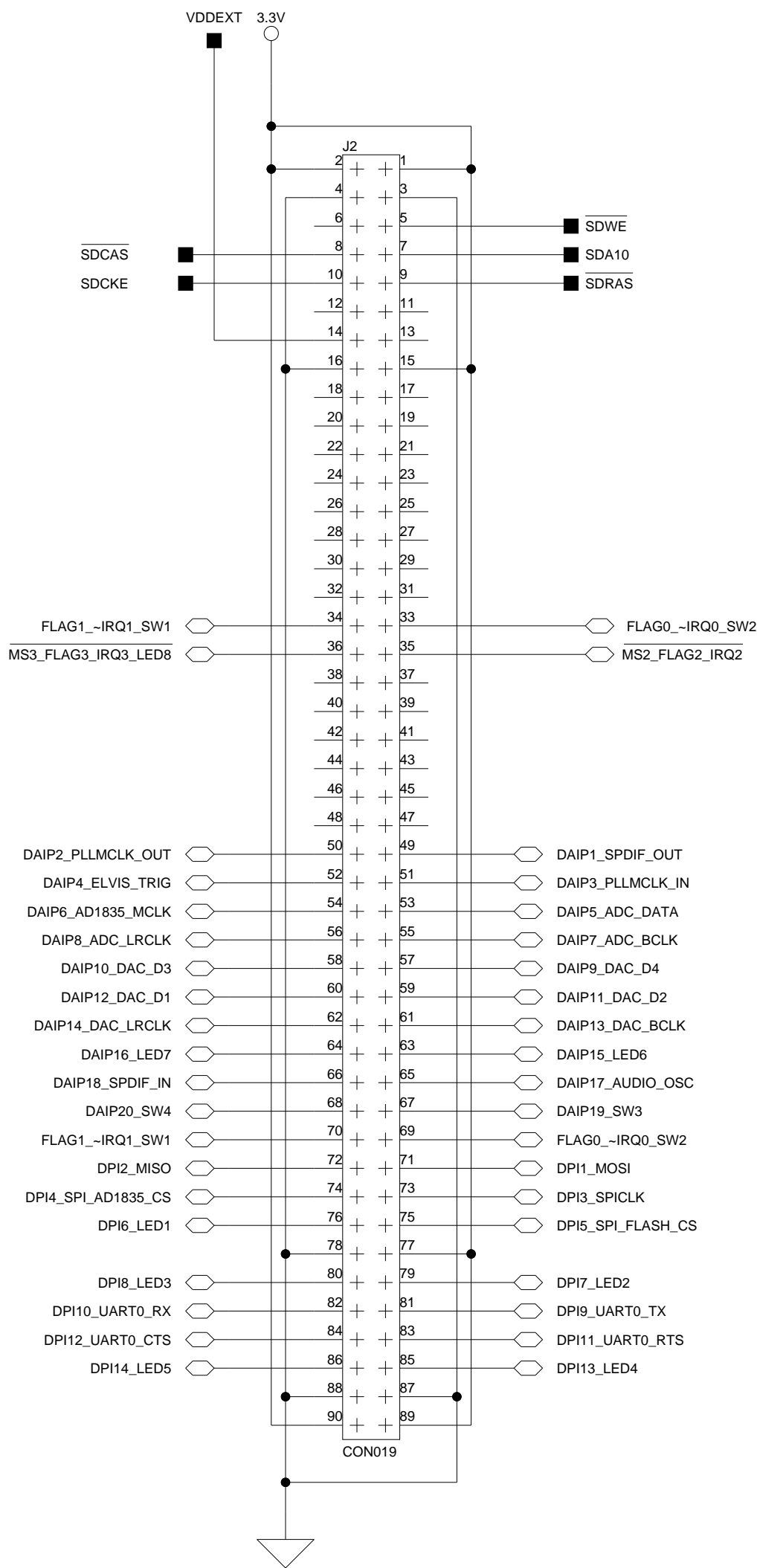


Oscilloscope Select Switch

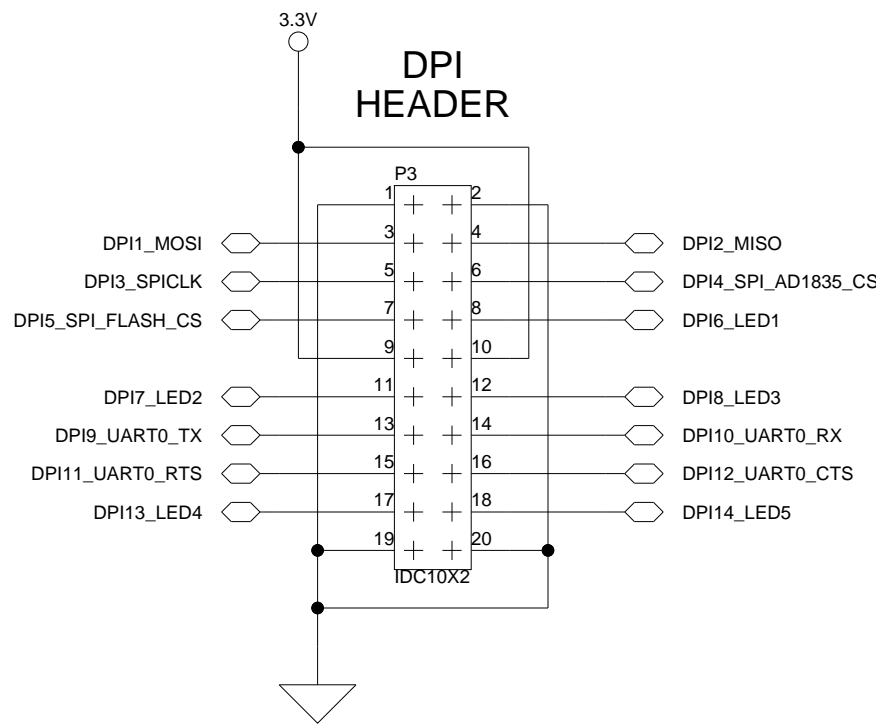
| | | | |
|---|------------------|---|----------|
|  ANALOG DEVICES | | 20 Cotton Road Nashua, NH 03063 PH: 1-800-ANALOGD | |
| | | Title ADSP-21375 EZ-KIT Lite ELVIS INTERFACE | |
| Size C | Board No. | A0202-2006 | |
| Date | 5-31-2006_10:32 | Sheet | 10 of 13 |
| | | Rev | 1.0 |



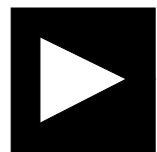
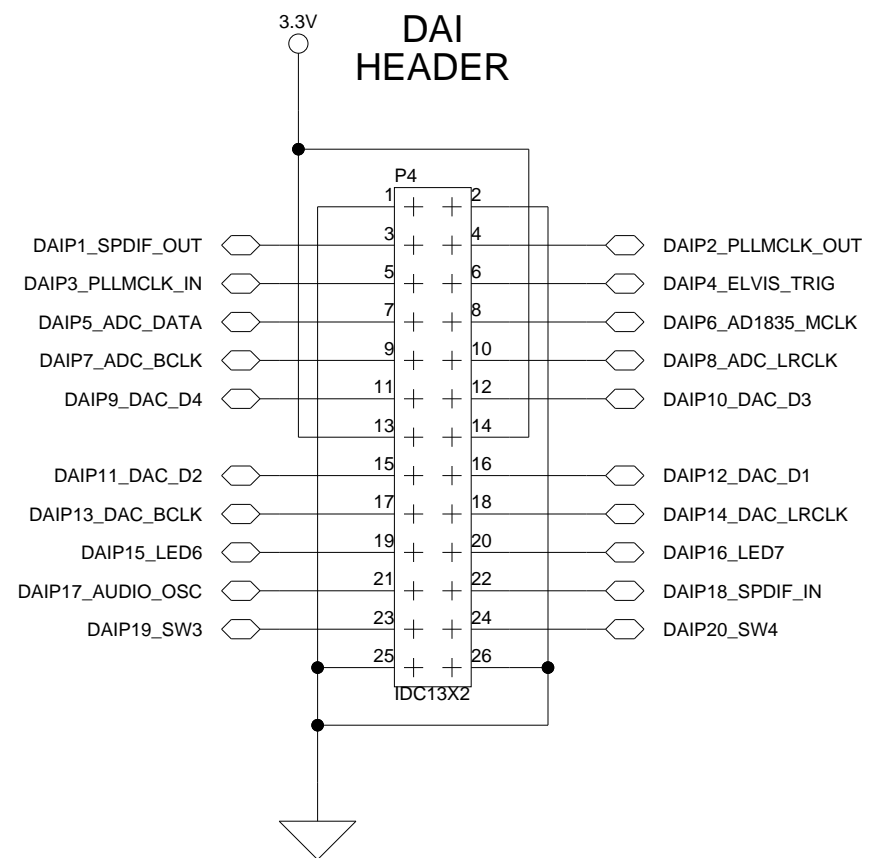
EXPANSION INTERFACE (TYPE A)



DPI HEADER



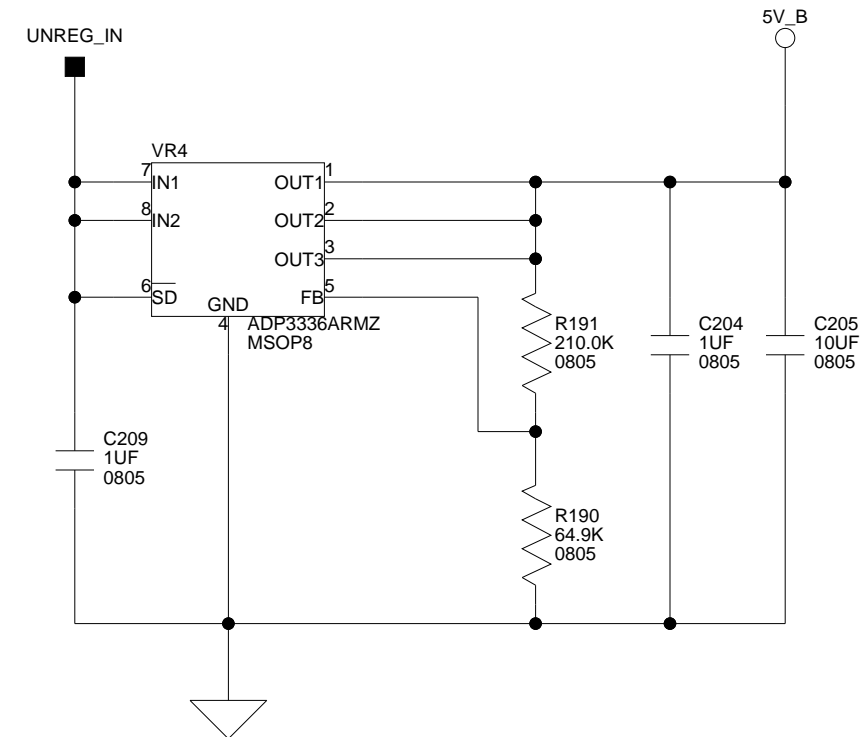
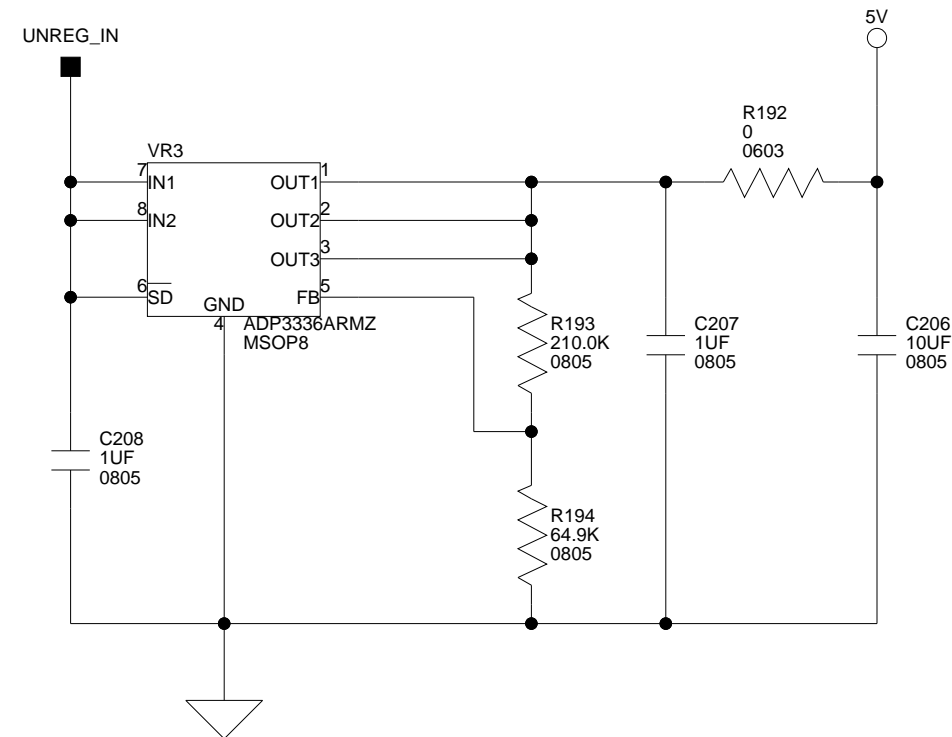
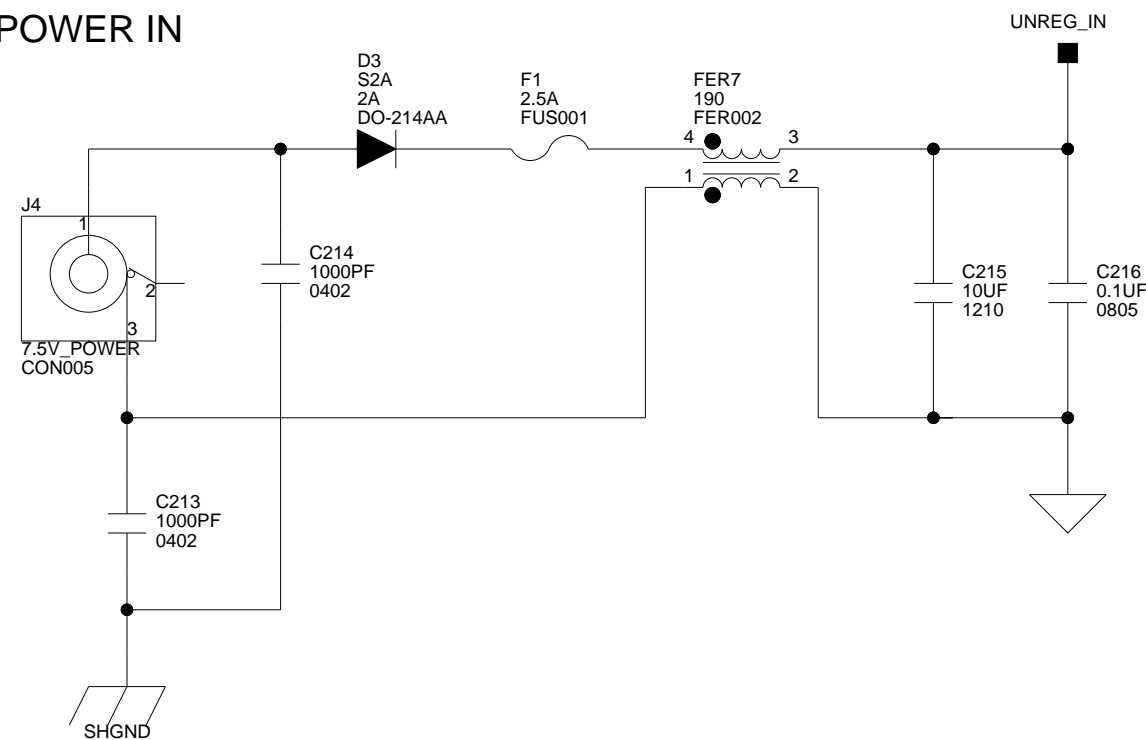
DAI HEADER

**ANALOG
DEVICES**20 Cotton Road
Nashua, NH 03063
PH: 1-800-ANALOGD**Title** ADSP-21375 EZ-KIT Lite
EXPANSION INTERFACE**Size
C****Board No.**

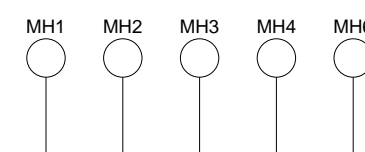
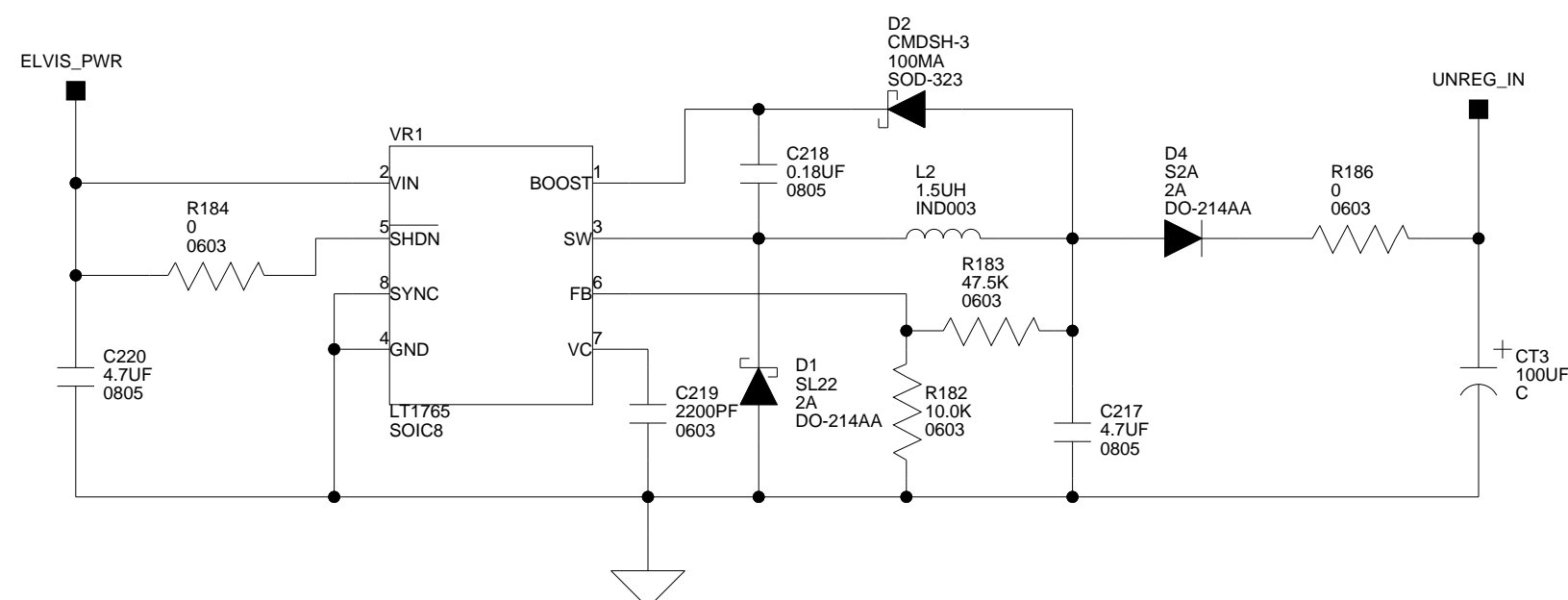
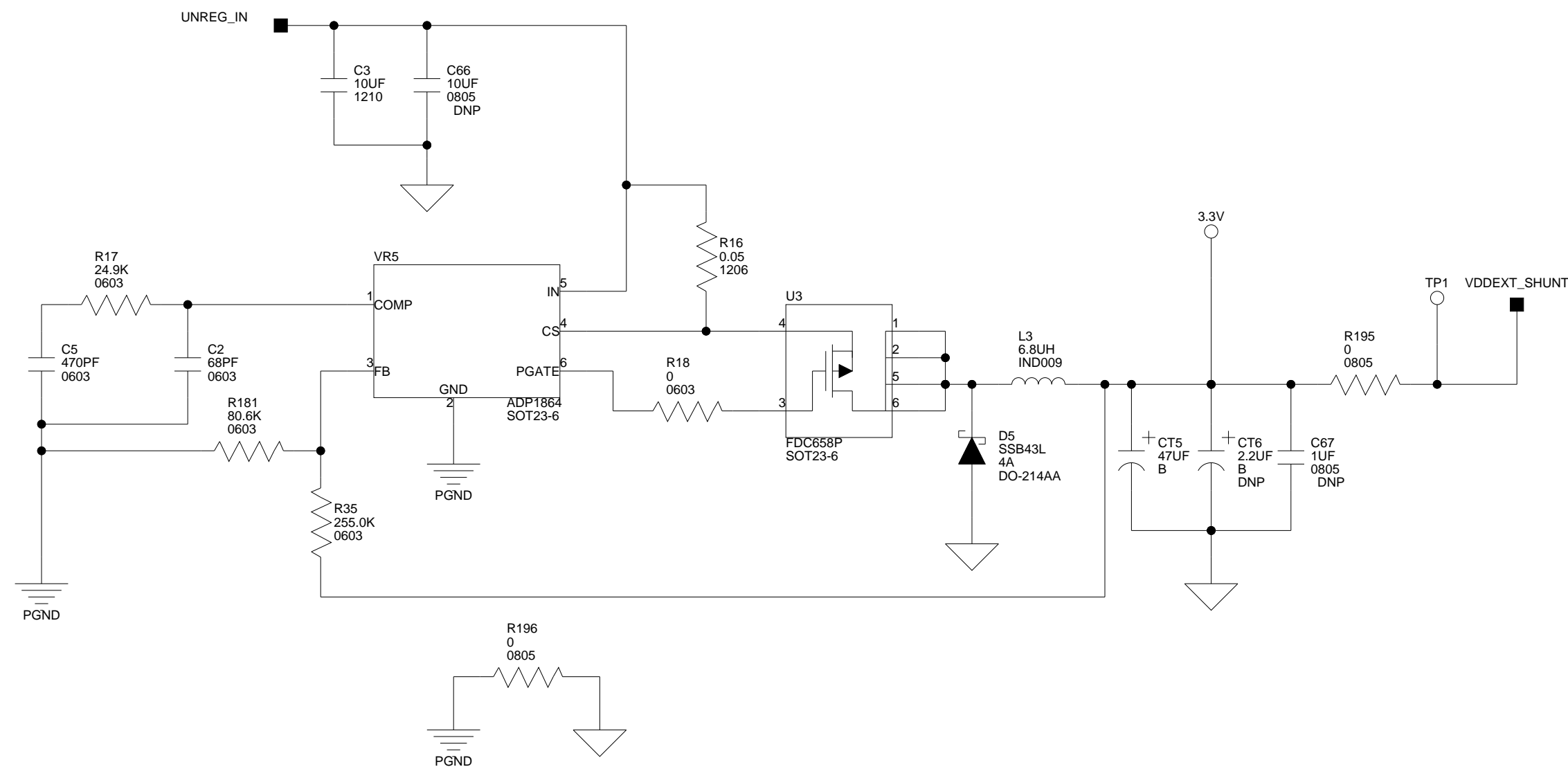
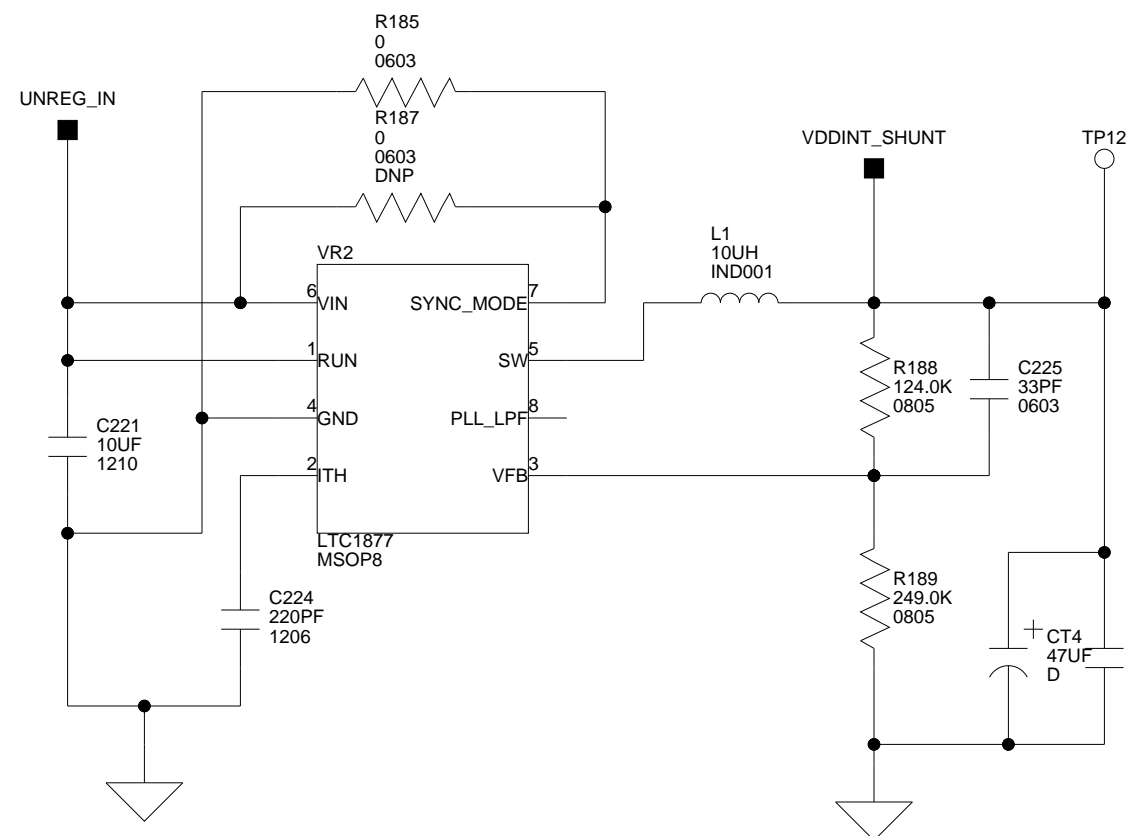
A0202-2006

**Rev
1.0****Date** 5-31-2006_10:32**Sheet** 12 **of** 13

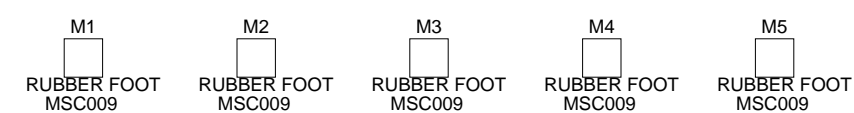
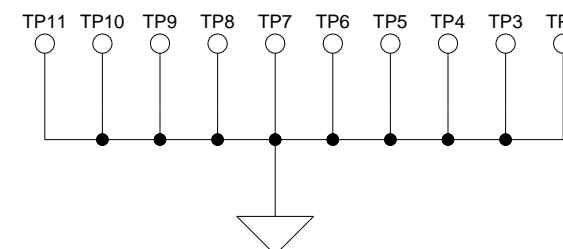
POWER IN



$$\text{VDDINT_SHUNT} = 1.2\text{V}$$
$$\text{VDDINT_SHUNT} = 0.8\text{V} (1 + R188/R189)$$



GND Test Points are scattered on PCB for Test Measurement Purposes.
LABEL "GND" ON ALL TPs



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

| | | | | | |
|-----------|-----------------|--|---------------------------------|-------|------------|
| Title | | | ADSP-21375 EZ-KIT Lite POWER | | |
| Size C | Board No. | | A0202-2006 | | Rev 1.0 |
| Date | 6-26-2006_11:16 | | Sheet | 13 of | 13 |