

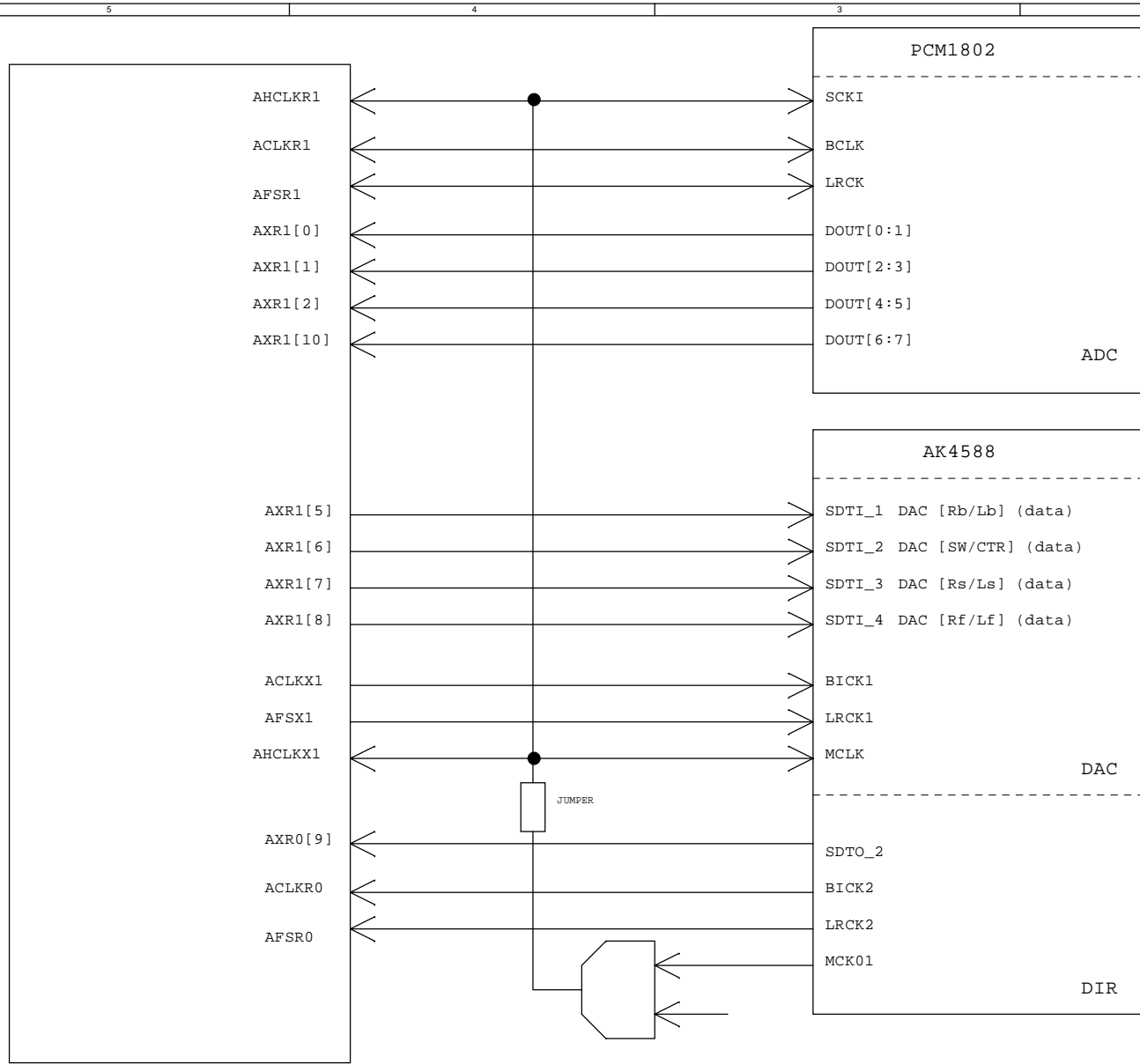
SCHMATIC CONTENTS

- SHEET01 - TITLE PAGE
- SHEET02 - CONTROL BLOCK DIAGRAM
- SHEET03 - IO EXPANSION CONNECTOR
- SHEET04 - AK4588 DAC/DIR
- SHEET05 - DIGITAL I/O, CLOCKS, MUTE
- SHEET06 - ANALOG IN 0,1
- SHEET07 - ANALOG IN 2,3
- SHEET08 - ANALOG IN 4,5
- SHEET09 - ANALOG IN 6, 7
- SHEET10 - ANALOG OUT 0-3
- SHEET11 - ANALOG OUT 4-7
- SHEET12 - POWER +12/-12V CONVERTOR
- SHEET13 - POWER

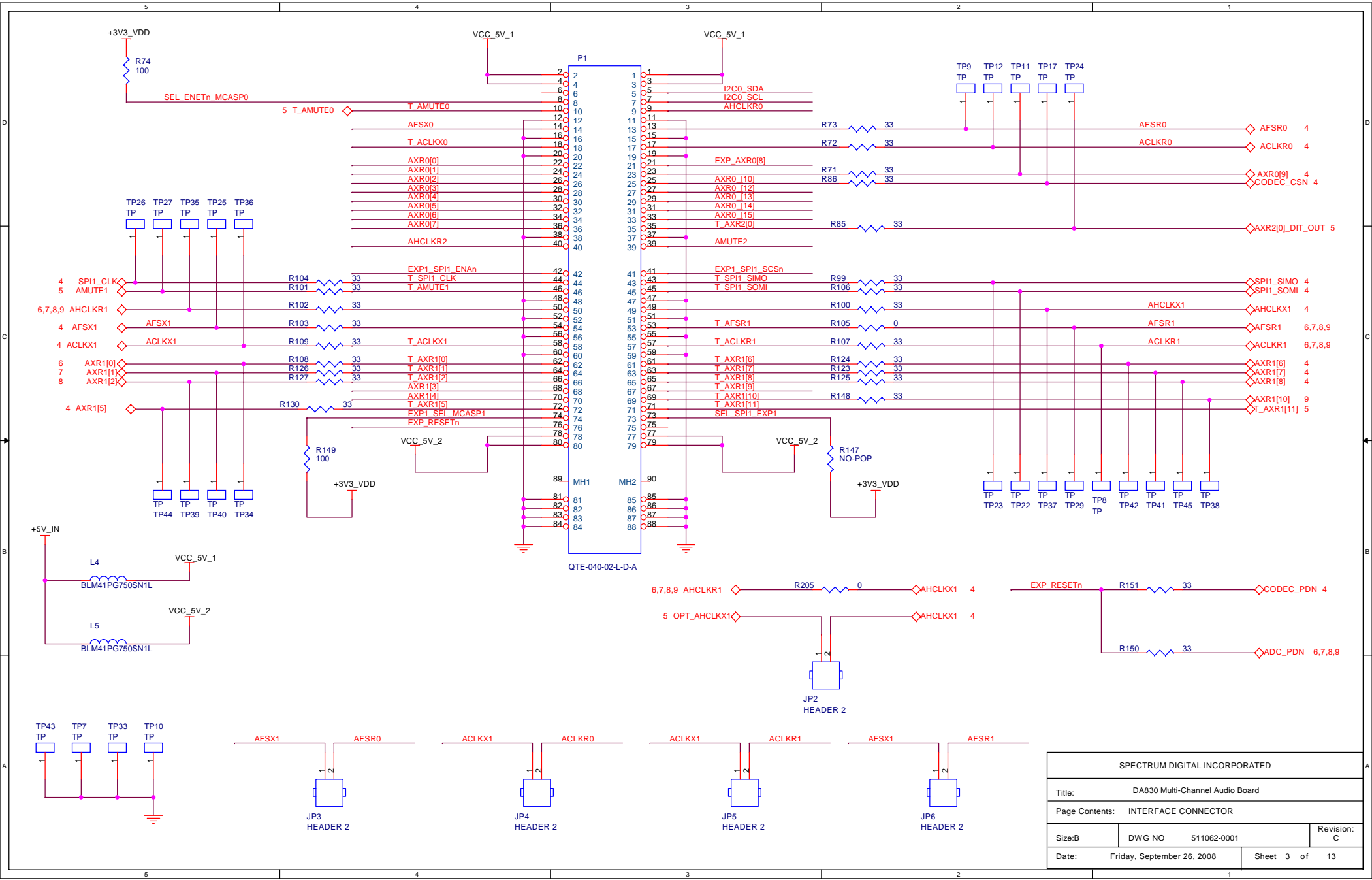
REVISION STATUS OF SHEETS

REV	1	2	3	4	5	6	7	8	9	10	APPLICATION	USED ON	DATE	BY		
														DWN	R.R.P.	06/01/2008
														CHK	T.W.K.	06/01/2008
SH														ENGR	R.R.P.	12/01/2006
REV	A	A	A											ENGR-MGR	R.R.P.	06/01/2008
SH	11	12	13											QA	C.M.D.	06/01/2008
REV	C	C	C	B	C	A	A	A	A		NEXT ASSY	USED ON		MFG	R.R.P.	06/01/2008
SH	1	2	3	4	5	6	7	8	9	10				RLSE	R.R.P.	06/01/2008

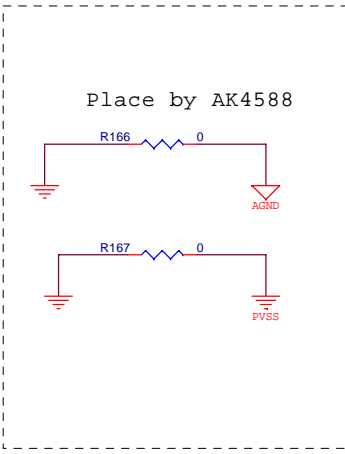
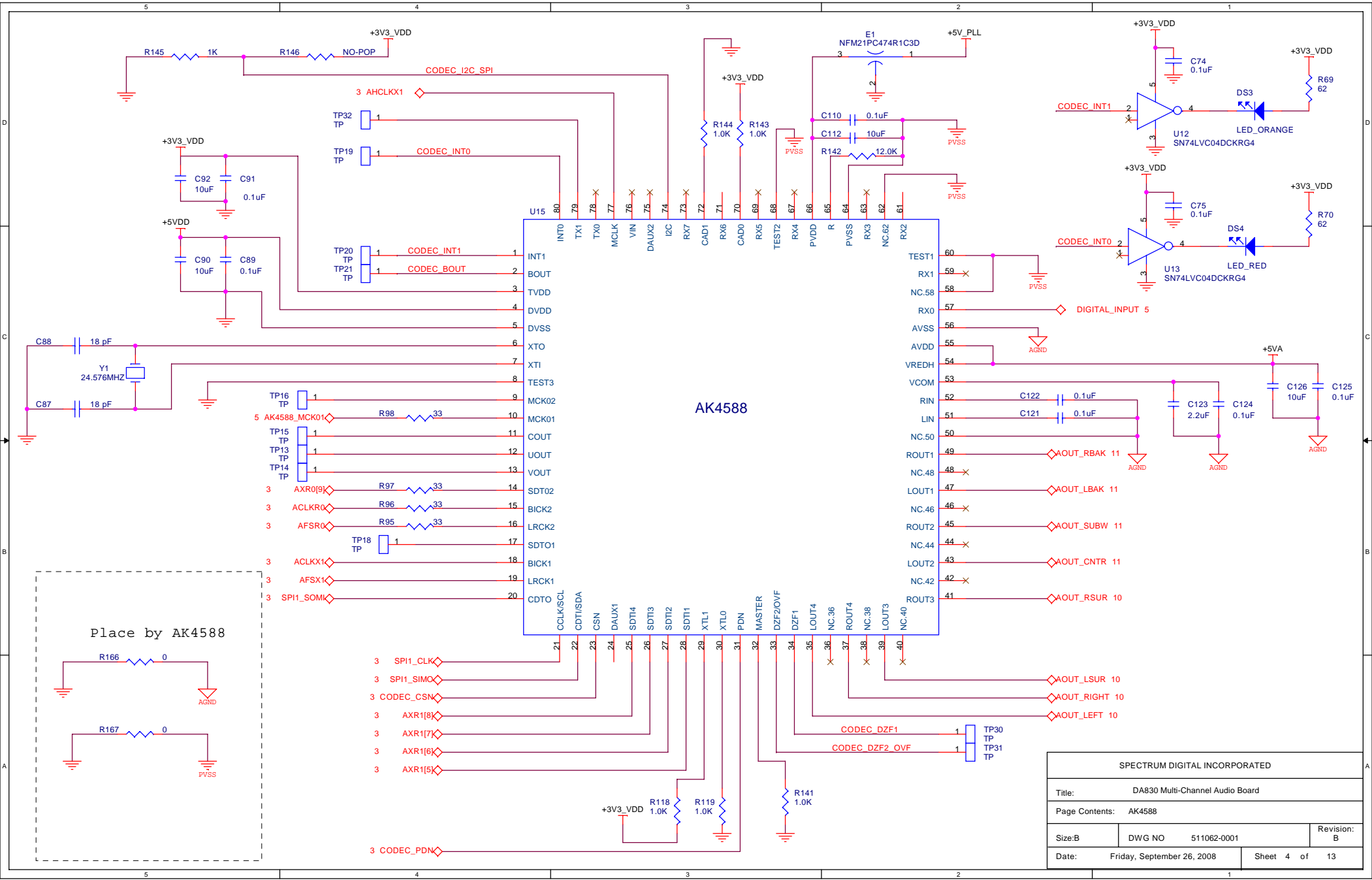
SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: TITLE PAGE			
Size: B	DWG NO	511062-0001	Revision: C
Date:	Friday, September 26, 2008		Sheet 1 of 13



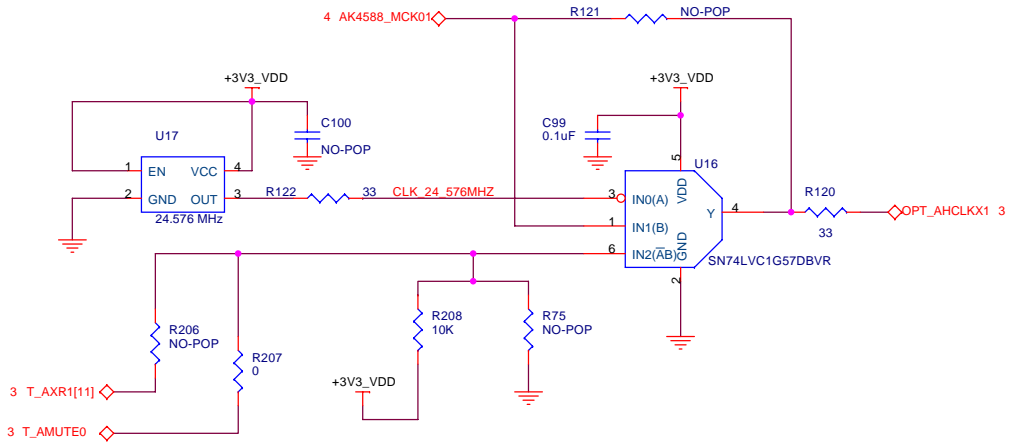
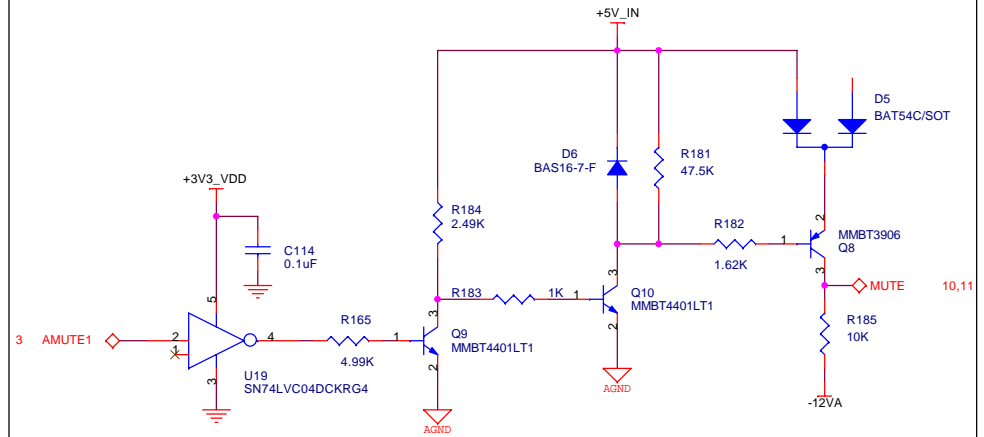
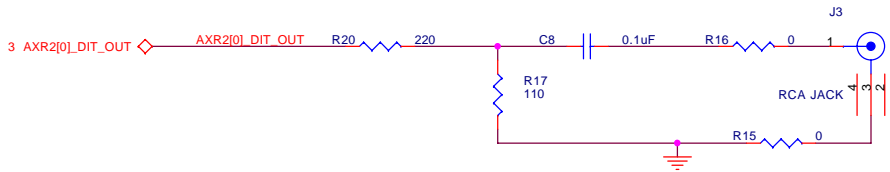
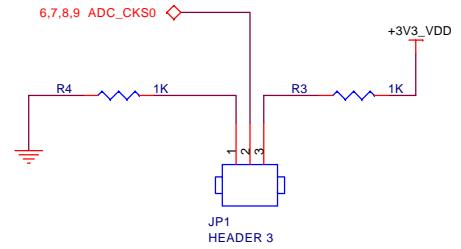
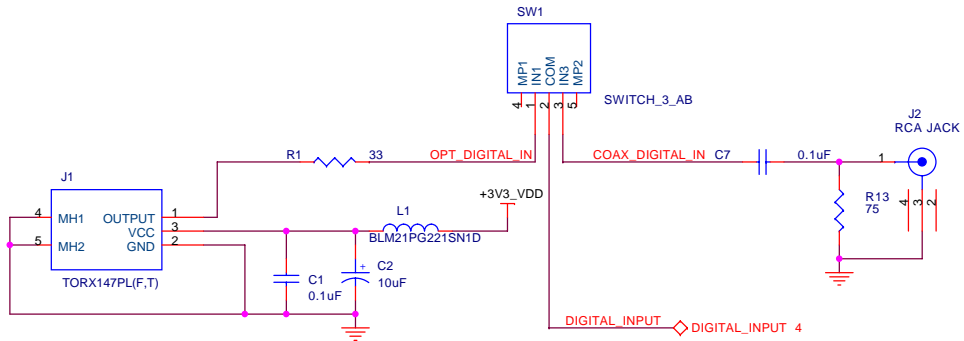
SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: CONTROL DIAGRAM			
Size: B	DWG NO	511062-0001	Revision: C
Date:	Friday, September 26, 2008	Sheet 2 of	13



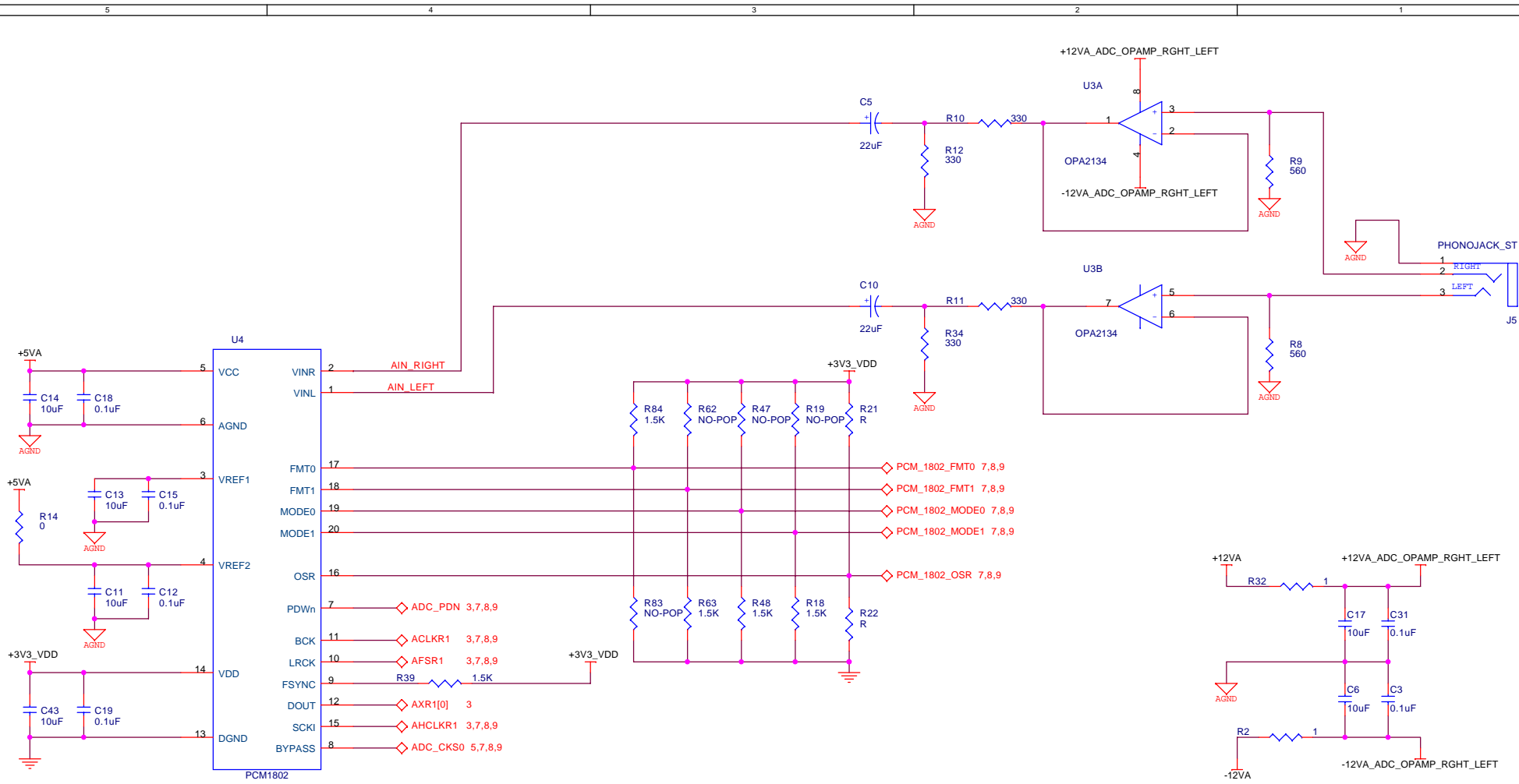
SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: INTERFACE CONNECTOR			
Size: B	DWG NO	511062-0001	Revision: C
Date:	Friday, September 26, 2008	Sheet 3 of	13



SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: AK4588			
Size: B	DWG NO	511062-0001	Revision: B
Date:	Friday, September 26, 2008	Sheet 4 of	13



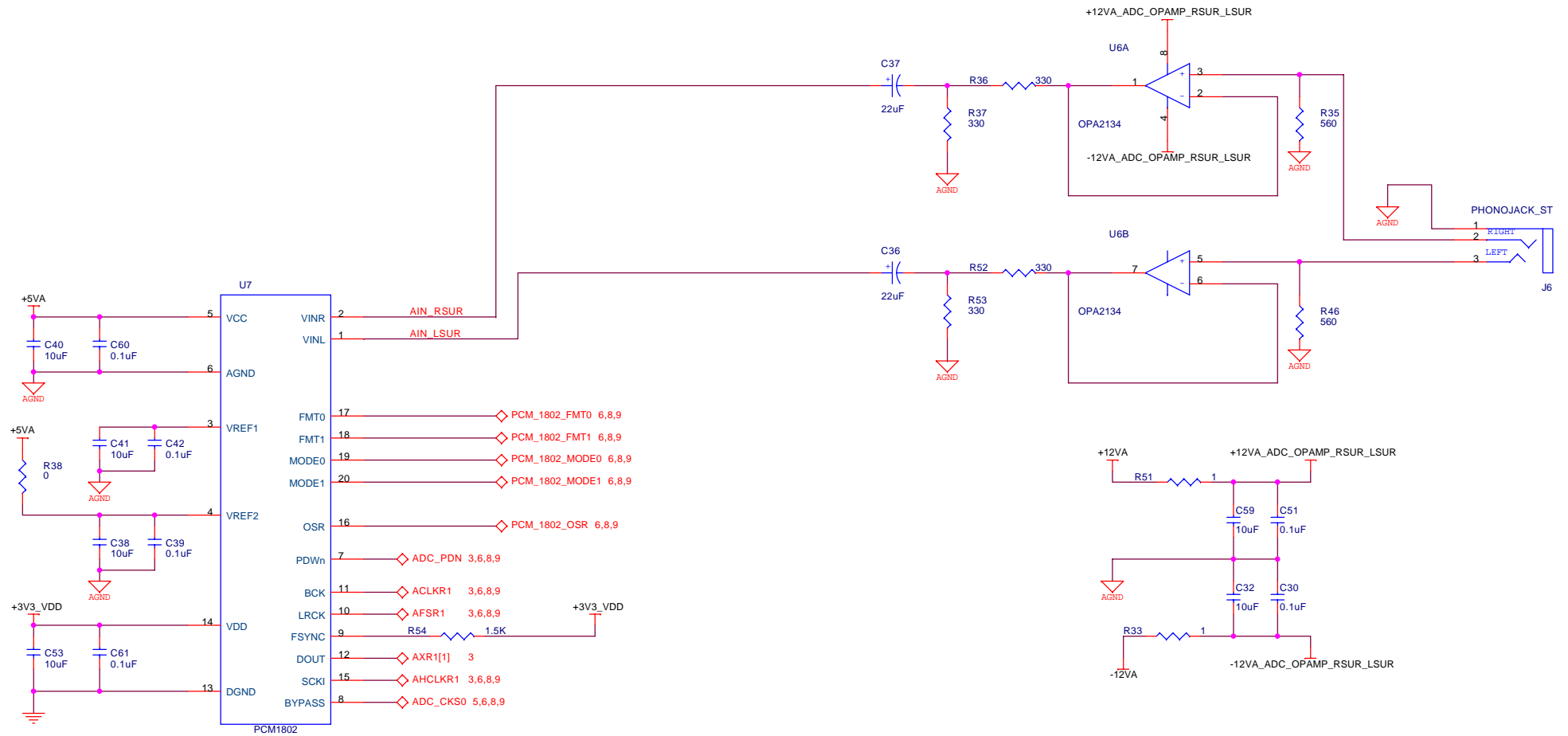
SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: DIGITAL IO / MUTE/ CLKS			
Size: B	DWG NO	511062-0001	Revision: C
Date:	Friday, September 26, 2008	Sheet 5 of	13



24 BIT I2S MODE - FMT 1:0 --> 01

MODE 0:1 --> 0:0 SLAVE 256FS,384FS,512FS,784FS

SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: ANALOG INPUTS 0-1			
Size: B	DWG NO	511062-0001	Revision: A
Date:	Friday, September 26, 2008	Sheet 6 of	13

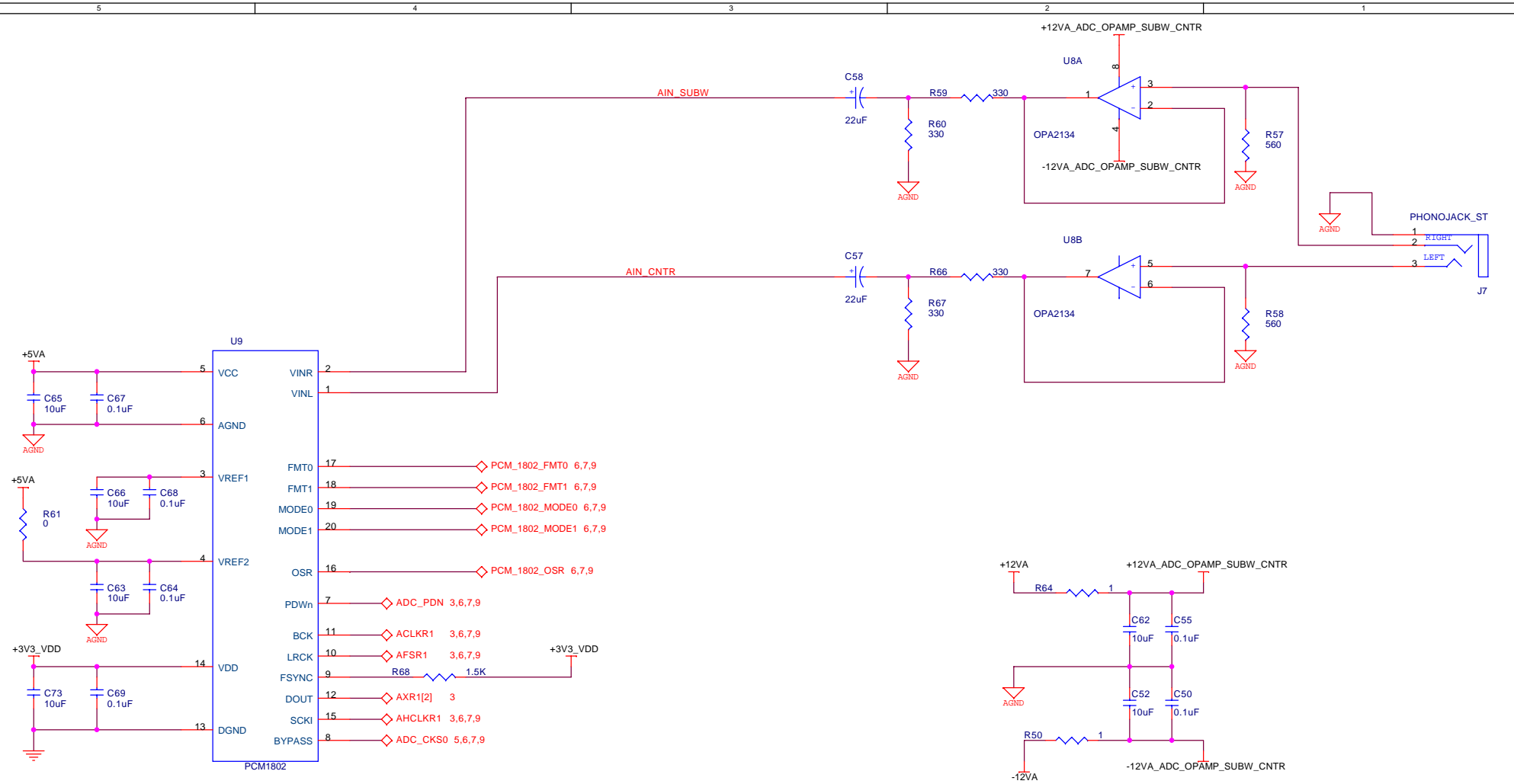


24 BIT I2S MODE - FMT 1:0 --> 01

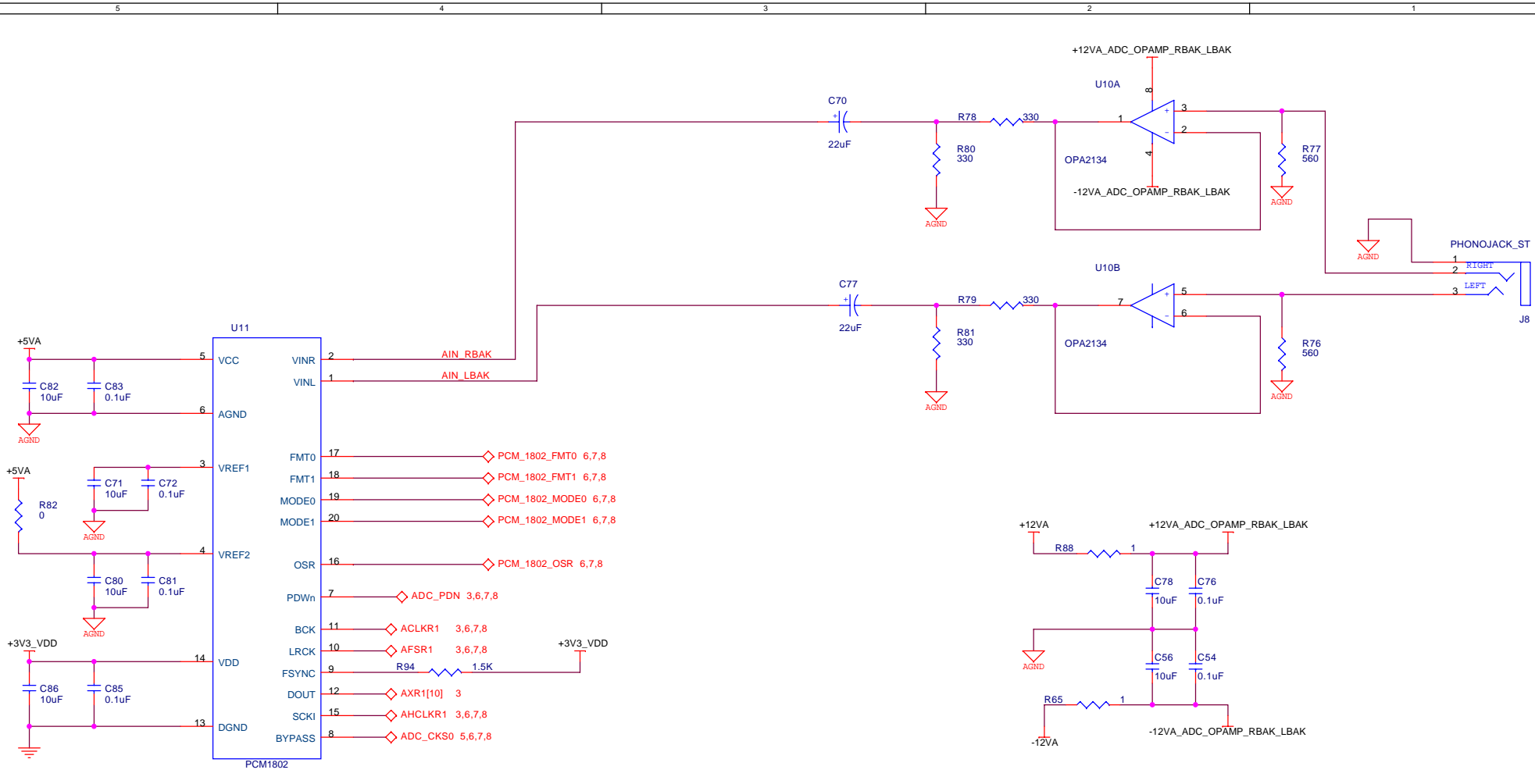
MODE 0:1 --> 0:0 SLAVE 256FS,384FS,512FS,784FS

SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: ANALOG INPUTS 2-3			
Size: B	DWG NO	511062-0001	Revision: A
Date:	Friday, September 26, 2008	Sheet 7	of 13

24 BIT I2S MODE - FMT 1:0 --> 01
 MODE 0:1 --> 0:0 SLAVE 256FS,384FS,512FS,784FS

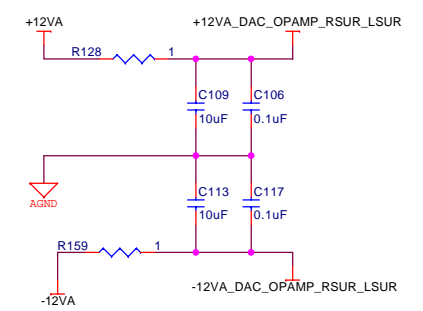
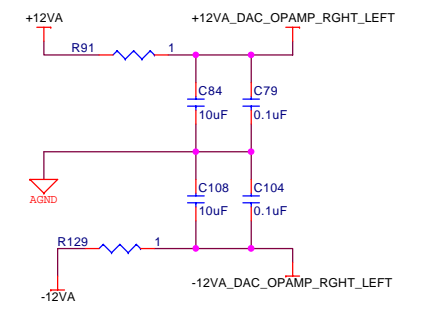
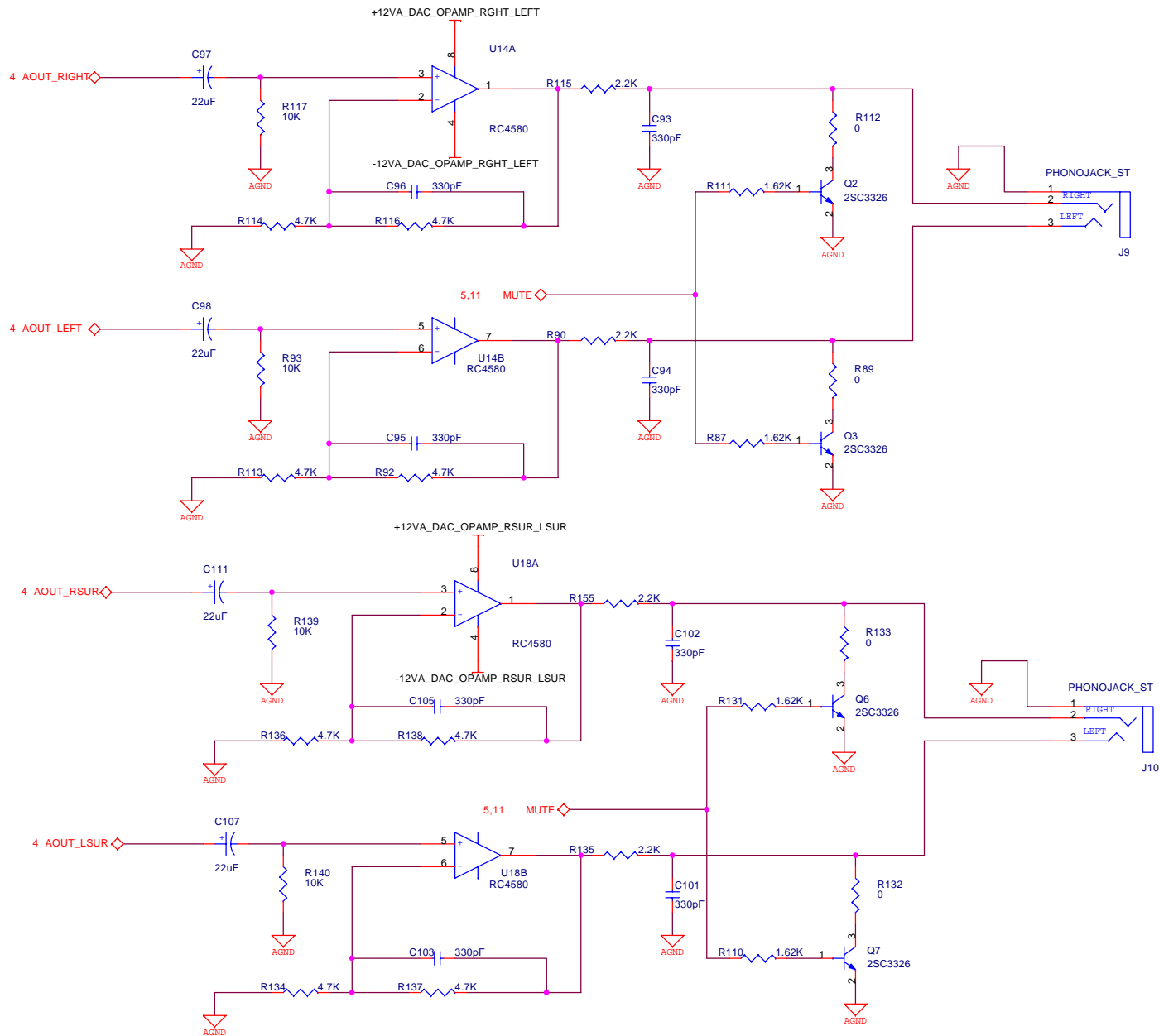


SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: ANALOG INPUTS 4-5			
Size: B	DWG NO	511062-0001	Revision: A
Date:	Friday, September 26, 2008	Sheet 8 of	13

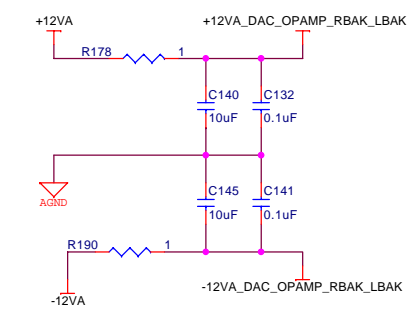
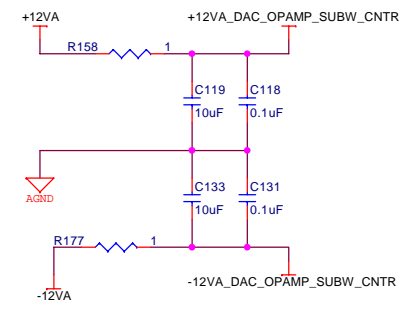
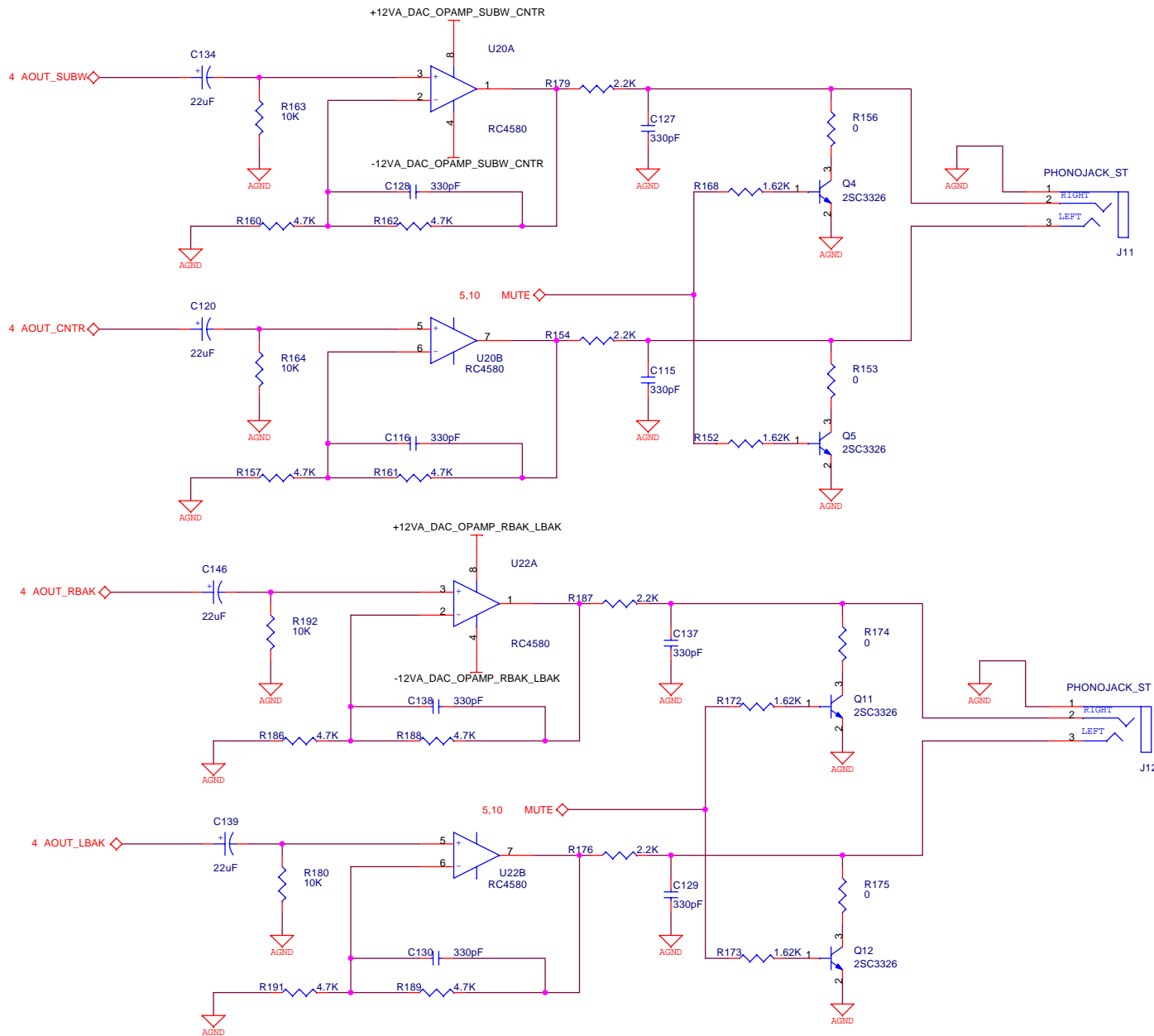


MODE 0:1 --> 0:0 SLAVE 256FS,384FS,512FS,784FS
 24 BIT I2S MODE - FMT 1:0 --> 01

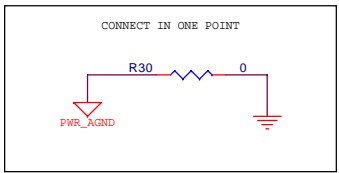
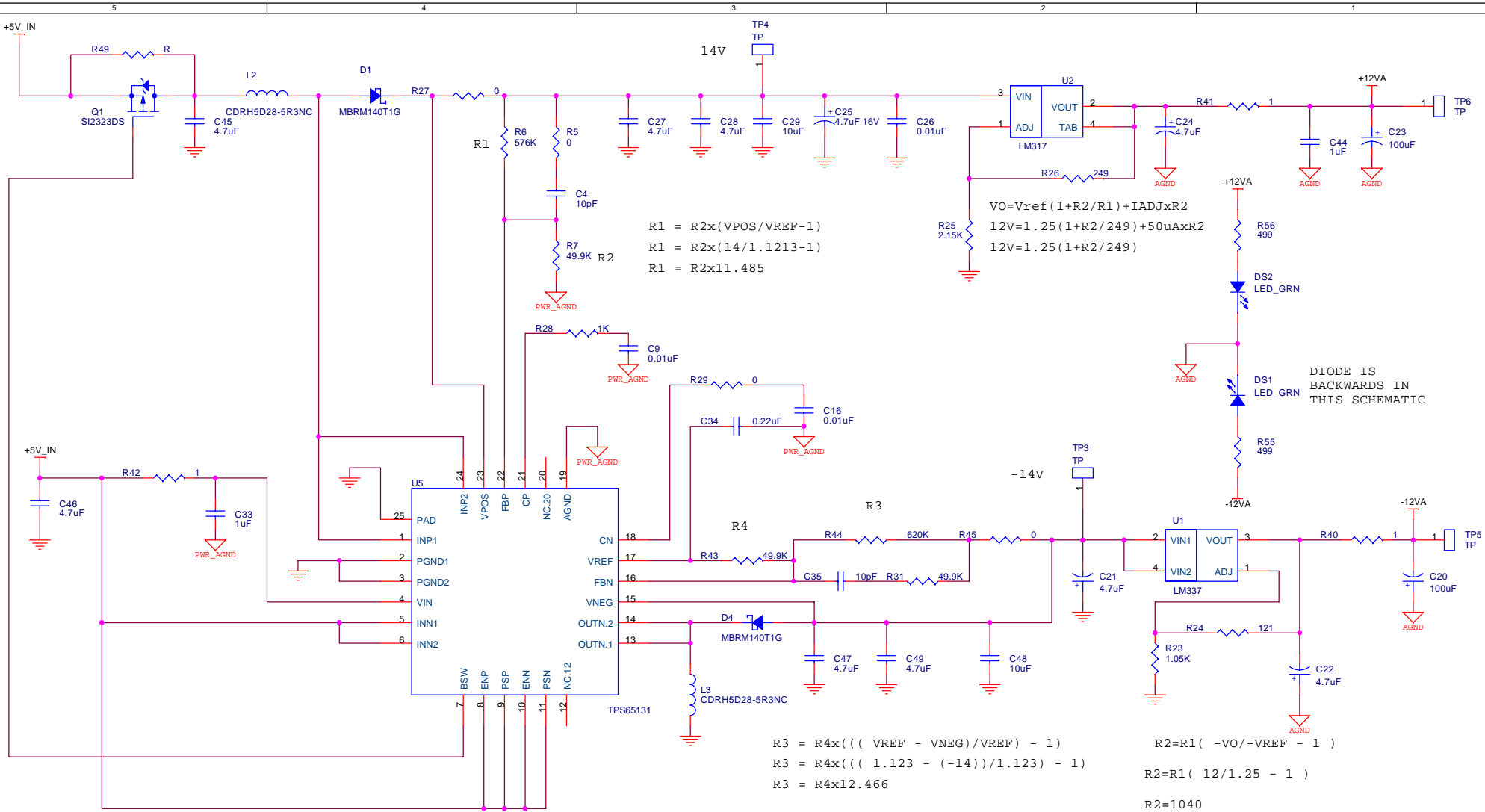
SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: ANALOG INPUTS 6-7			
Size: B	DWG NO	511062-0001	Revision: A
Date:	Friday, September 26, 2008	Sheet 9	of 13



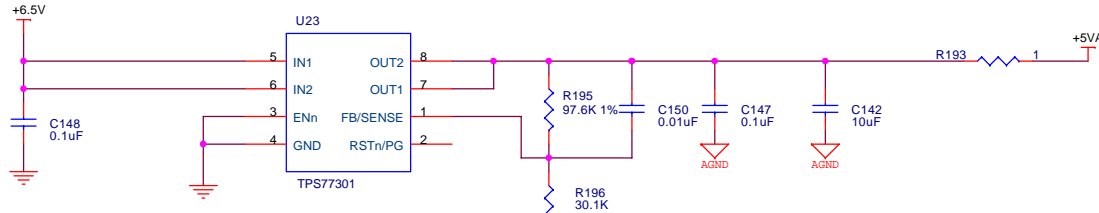
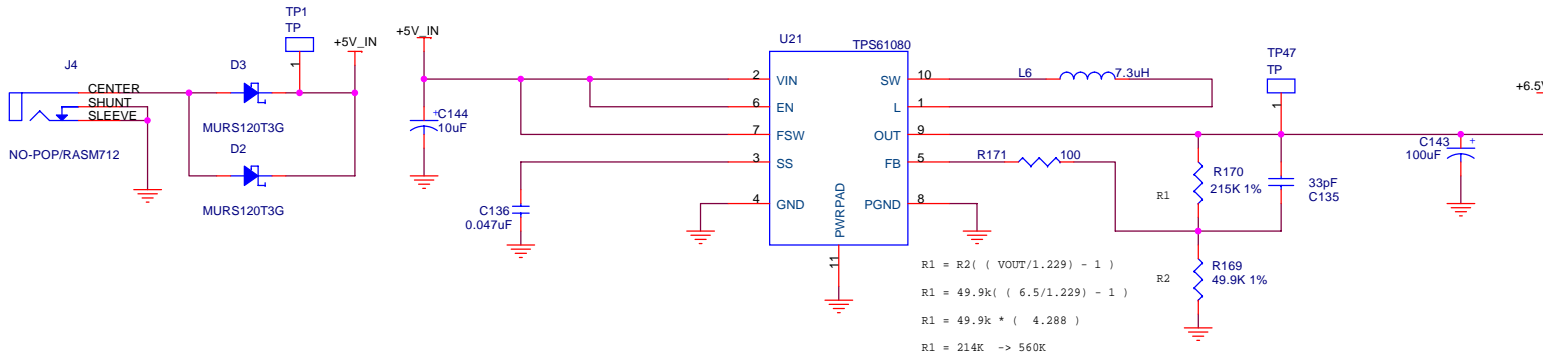
SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: ANALOG OUTPUTS 0-3			
Size: B	DWG NO	511062-0001	Revision: A
Date:	Friday, September 26, 2008	Sheet	10 of 13



SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: ANALOG OUTPUTS 4-7			
Size: B	DWG NO	511062-0001	Revision: A
Date:	Friday, September 26, 2008	Sheet	11 of 13

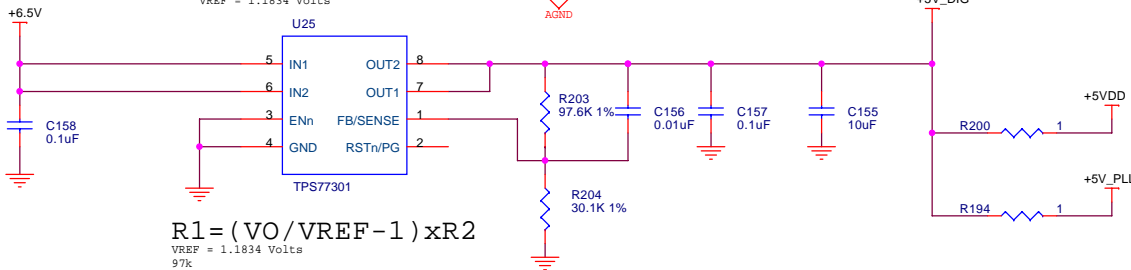


SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: POWER SUPPLIES			
Size: B	DWG NO	511062-0001	Revision: A
Date:	Friday, September 26, 2008	Sheet	12 of 13



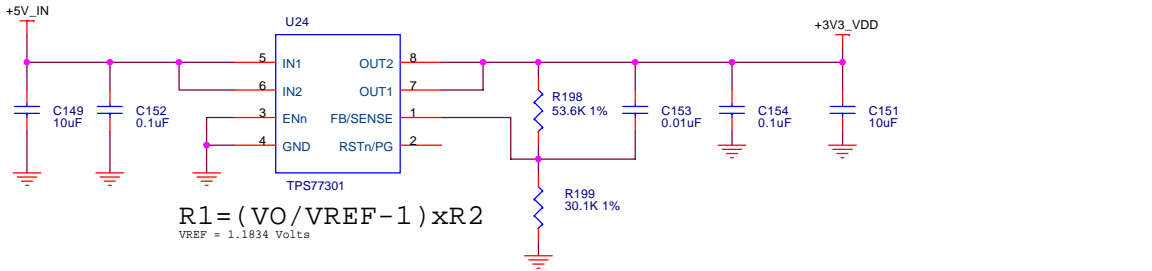
$$R1 = (VO / VREF - 1) \times R2$$

VREF = 1.1834 Volts



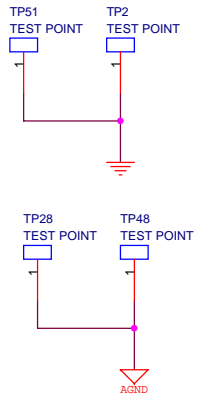
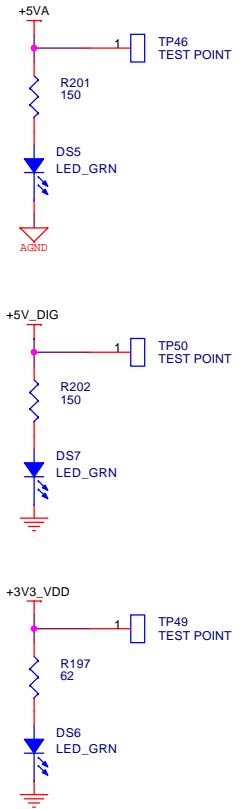
$$R1 = (VO / VREF - 1) \times R2$$

VREF = 1.1834 Volts
97k



$$R1 = (VO / VREF - 1) \times R2$$

VREF = 1.1834 Volts



SPECTRUM DIGITAL INCORPORATED			
Title: DA830 Multi-Channel Audio Board			
Page Contents: POWER INPUT			
Size: B	DWG NO	511062-0001	Revision: A
Date:	Friday, September 26, 2008	Sheet 13 of	13