

8

7

6

5

4

3

2

1

CHANGE LIST (CHANGES FROM M72/M78)

6AUG07

- 1. REPLACED MAX9722 WITH MAX9724
- 2. PER 1 ABOVE, DELETED GROUND FEEDBACK NET FROM LO CONNECTOR PAGE

29AUG07

- 3. ALTERNATE PART NUMBER FOR CAPACITOR REMOVED FROM PAGE 62 (CAP NO LONGER USED)
- 4. REPLACED J6701, J6702, J6704 WITH PROPER SYMBOL AND REMOVED "OMIT" LABEL
- 5. CLEANED UP ALTERNATE TABLE ON PAGE 99 FOR DUAL FET
- 6. DELETED OMIT TABLE FOR CONNECTORS LISTED IN CHANGE 4 AS IT IS UNNEEDED

30AUG07

- 7. COPIED IPHONE HEADSET SUPPORT CIRCUITRY FROM LENG'S M88 PROJECT AND ADDED TO PAGE99.

31AUG07

- 8. ADDED EMC FERRITE BEADS AND STATIC ZAPS TO OUTGOING HS MIC LEADS

4SEP07

- 9. CHANGED J9900 FROM 20 TO 22 PINS FOR IPHONE HS SUPPORT

5SEP07

- 10. CONNECTED IPHS MIC HIGH SIGNAL TO PIN 3 OF SUPERJACK ACCORDING TO HANK CHING, ALSO ATTACHED IPHS MIC LOW SIGNAL TO AUDIO GROUND AT THE CONNECTOR.

3OCT07

- 11. TABLED IN IMAC SUPERJACK (514-0499) AS THE SYMBOL IS NOT READY.

1NOV07

- 12. REMOVED TABLE FOR SUPERJACK.
- 13. NO STUFFED TRANSISTORS AND VARIOUS RCS TO ELIMINATE SUPPORT FOR SUPERJACK.

8NOV07

- 14. REMOVED NO TEST PROPERTIES FOR AUD\_BI\_PORT\_B\_R, AUD\_VREF\_PORT\_B, AUD\_SPDIFO\_GND.

12NOV07

- 15. CHANGED C6818 TO 8200PF FROM 1000PF TO ELIMINATE SPKR AMP SWITCHING ARTIFACTS.

9JAN08

- 16. ADDED 1UF ALTERNATE FOR LI CAPS.

www.laptop-schematics.com

www.laptop-schematics.com

www.laptop-schematics.com

# " POLKA " AUDIO

### AUDIO: CODEC

SYNC\_MASTER=AUDIO SYNC\_DATE=08/04/2006

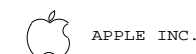
#### NOTICE OF PROPRIETARY PROPERTY

THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING

I TO MAINTAIN THE DOCUMENT IN CONFIDENCE

II NOT TO REPRODUCE OR COPY IT

III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART



SIZE	DRAWING NUMBER	REV.
D	051-7487	0.1.0
SCALE	SHT 1 OF 11	
NONE		

8

7

6

5

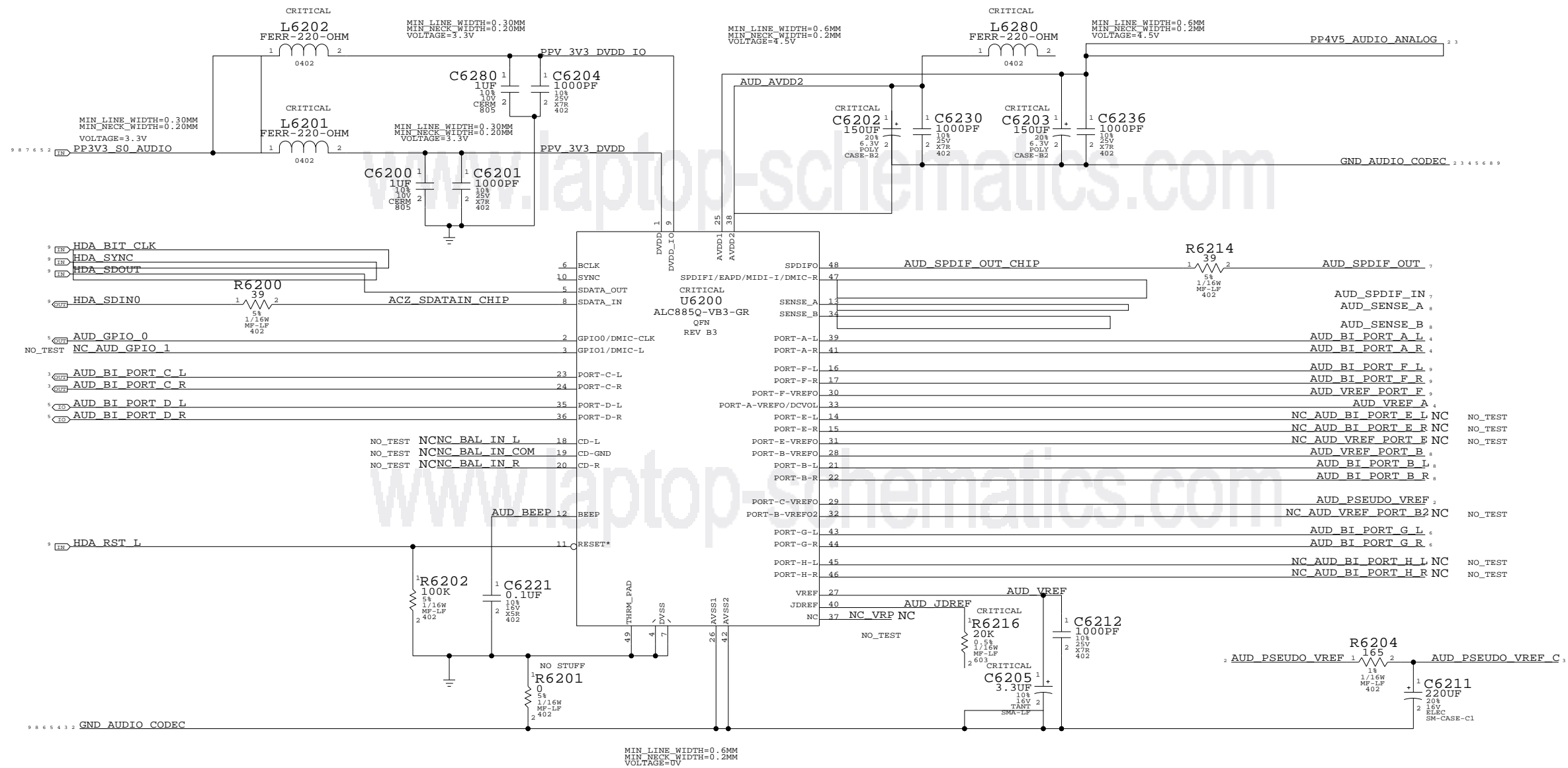
4

3

2

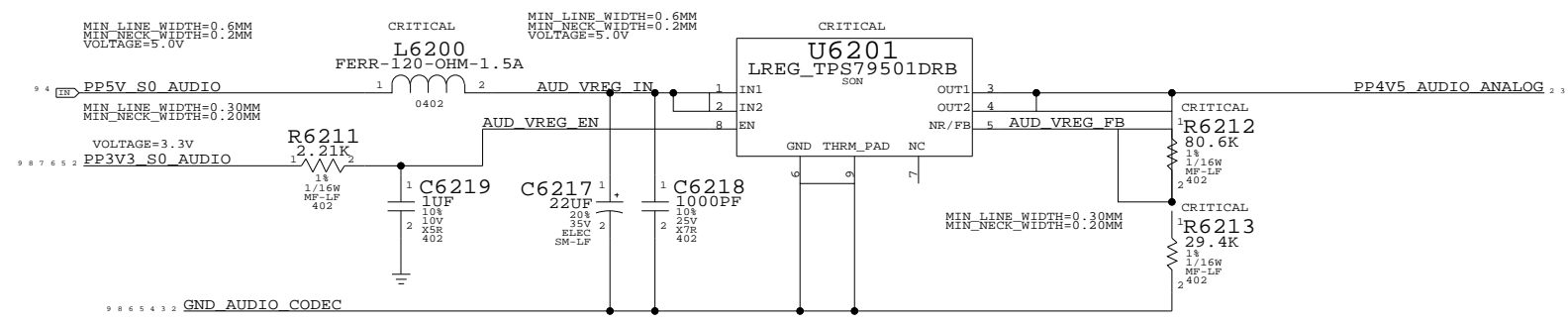
1

# AUDIO CODEC APPLE P/N 353S1538



4.5V POWER SUPPLY FOR CODEC AND LINE IN AMP  
 $V_{OUT} = 1.2246 \times (1 + (80.6K/29.4K)) = 4.58V$

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
820-2299	1	PCB, FAB, AUDIO, K2/K3	MLB1		



**AUDIO: CODEC**  
 SYNC\_MASTER=AUDIO SYNC\_DATE=08/04/2006  
**NOTICE OF PROPRIETARY PROPERTY**  
 THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING  
 I TO MAINTAIN THE DOCUMENT IN CONFIDENCE  
 II NOT TO REPRODUCE OR COPY IT  
 III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

APPLE INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7487	0.1.0
SCALE	SHT	OF	
NONE	2	11	

8

7

6

5

4

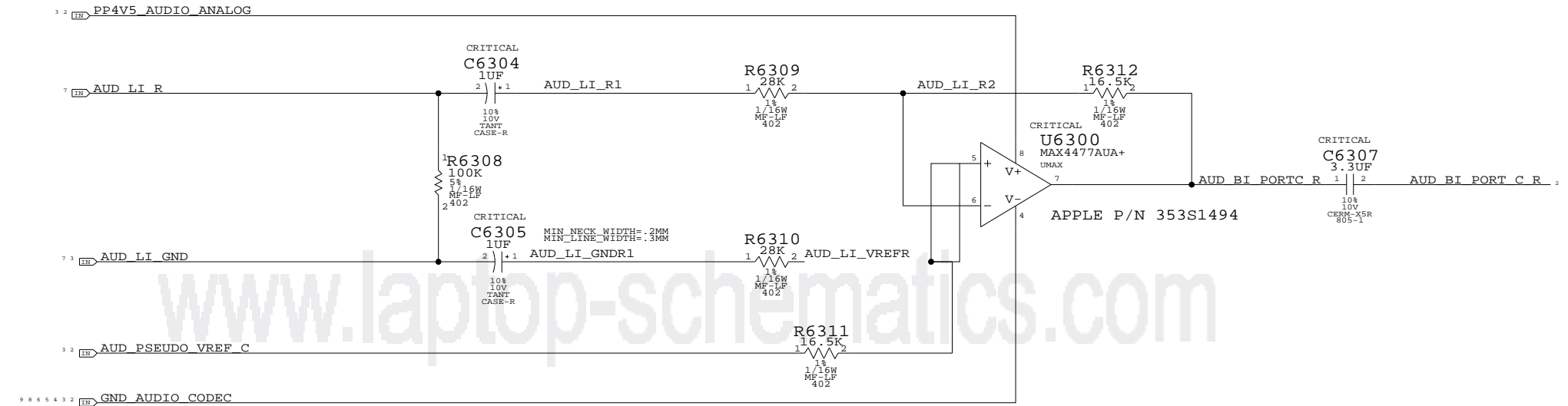
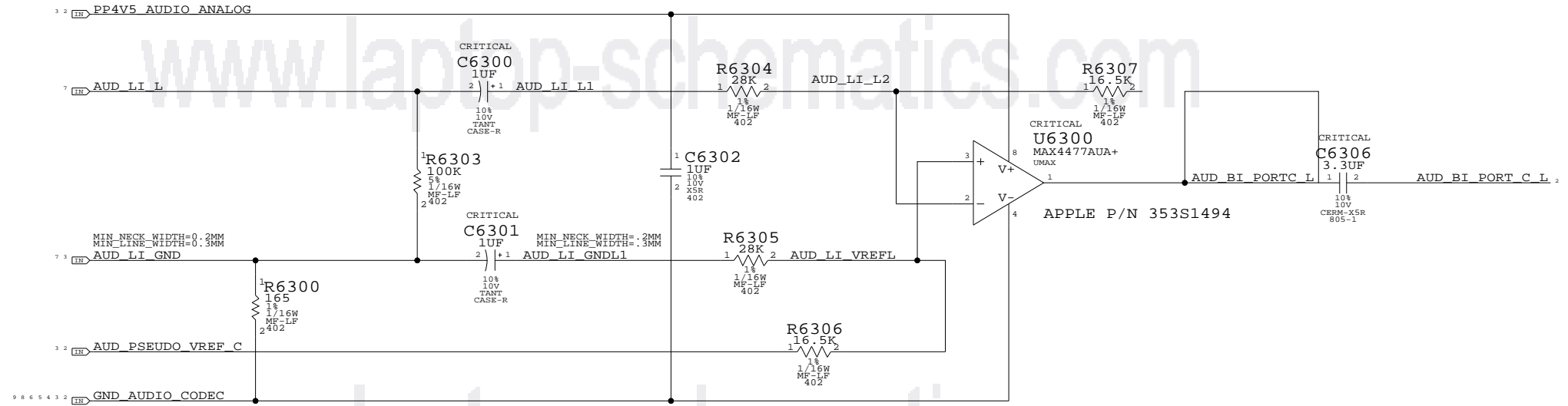
3

2

1

LINE IN PSEUDO-DIFFERENTIAL AMP

AV = 0.59  
FC = 5.7 HZ



AUDIO: LINE INPUT AMP

NOTICE OF PROPRIETARY PROPERTY

THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING

I TO MAINTAIN THE DOCUMENT IN CONFIDENCE

II NOT TO REPRODUCE OR COPY IT

III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

APPLE INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7487	0.1.0
SCALE	SHT 3 OF 11		
NONE			

8

7

6

5

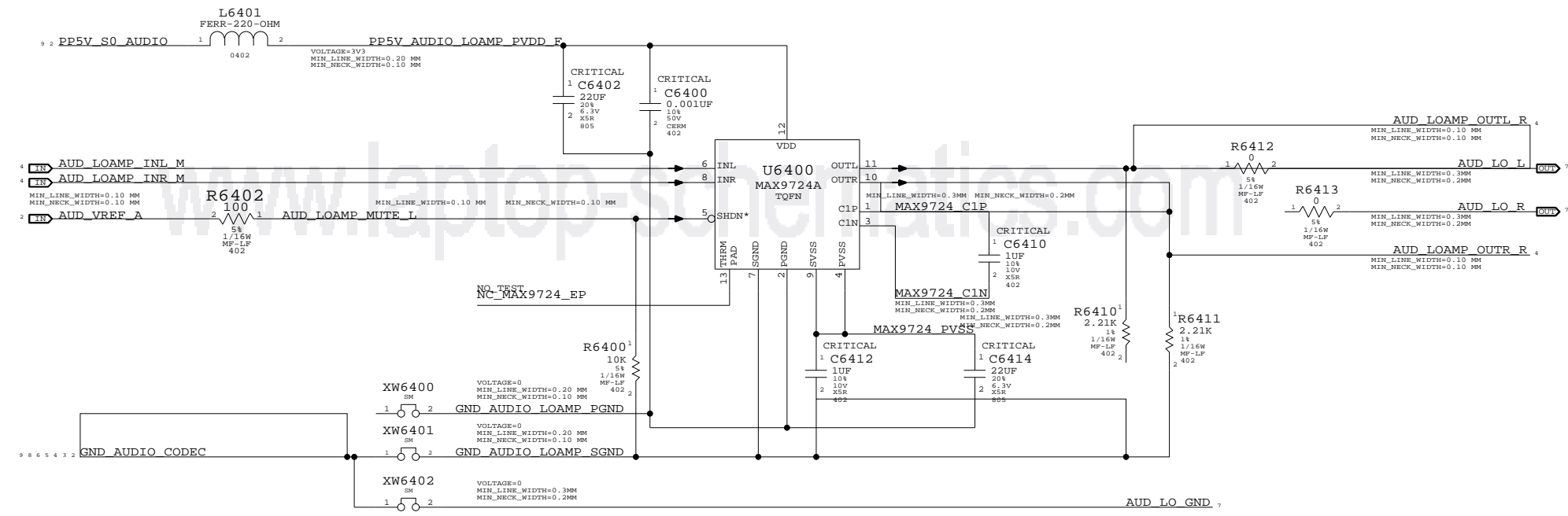
4

3

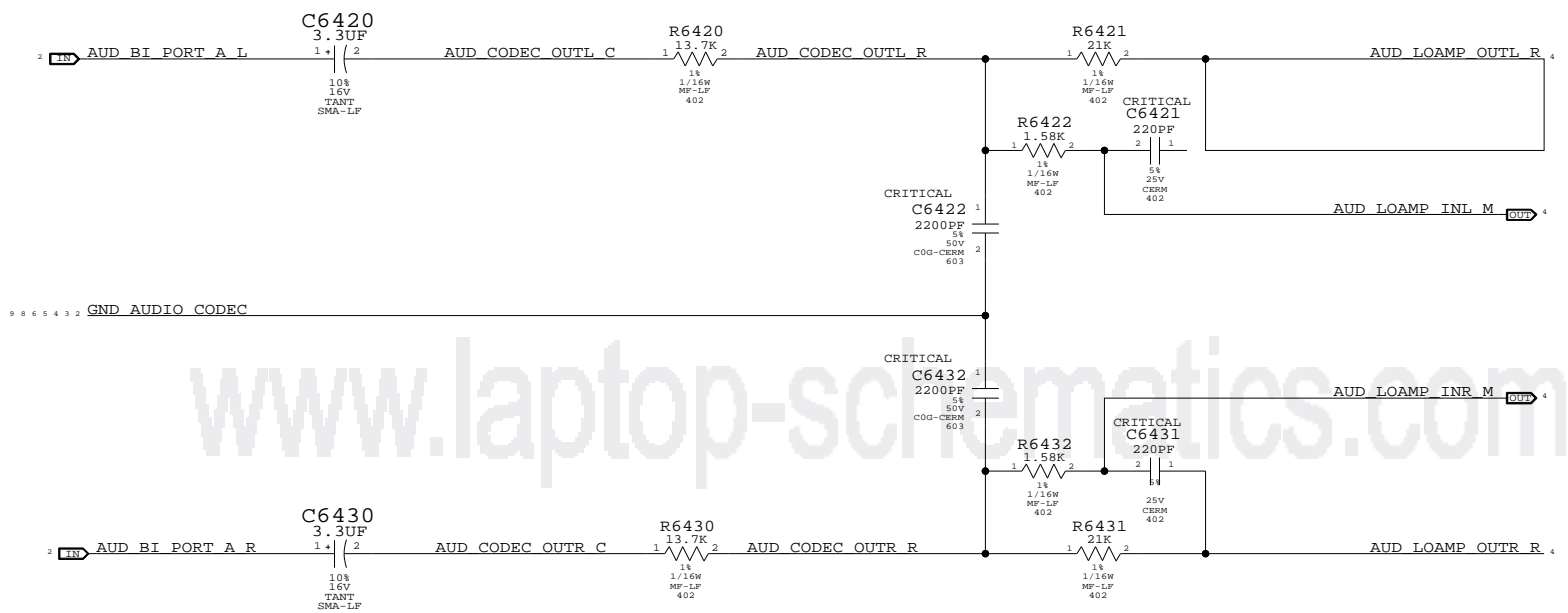
2

1

LINE OUT AMPLIFIER (MAX9724A)  
 APN:353S1637  
 VOLTAGE GAIN:1.53, 3.69DB



2nd Order DAC Filter  
 HP:3.52HZ LP:39KHZ

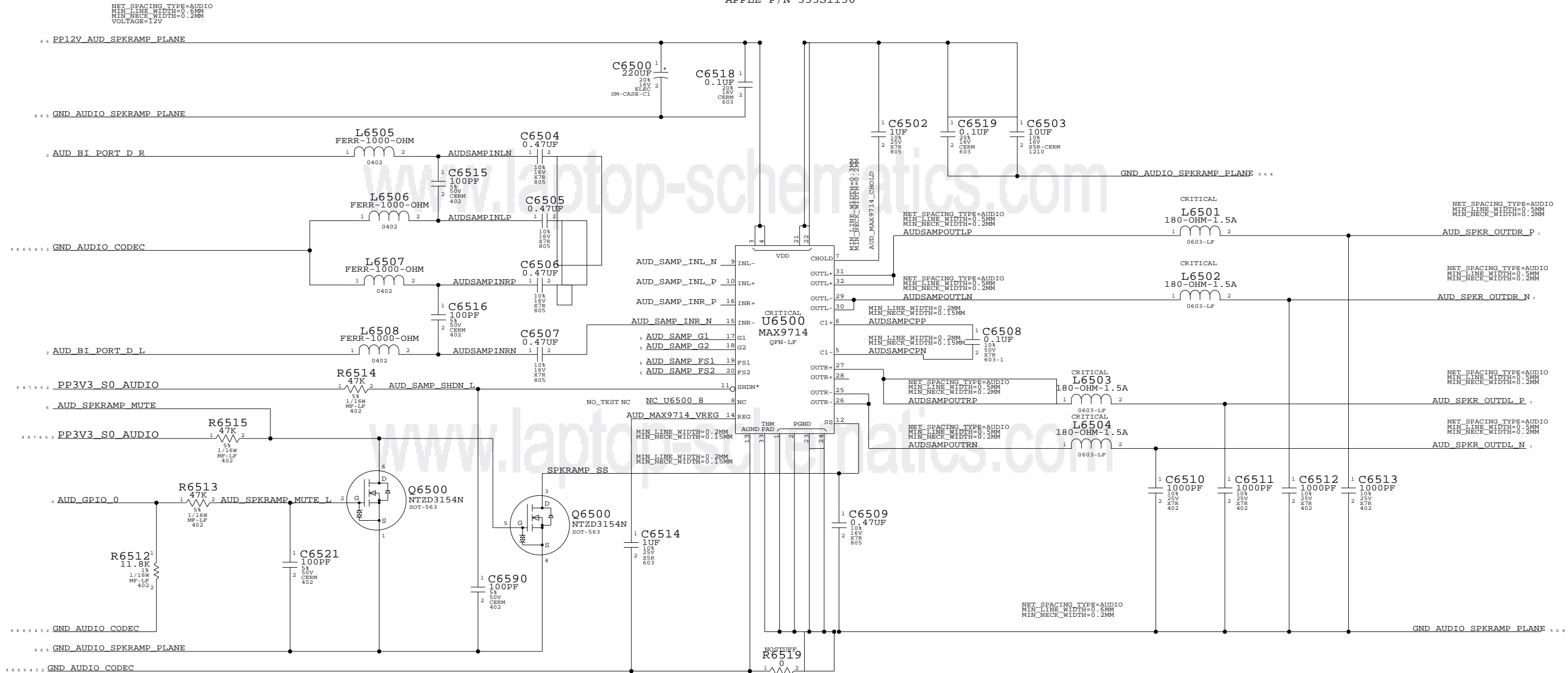


AUDIO: HEADPHONES AMP

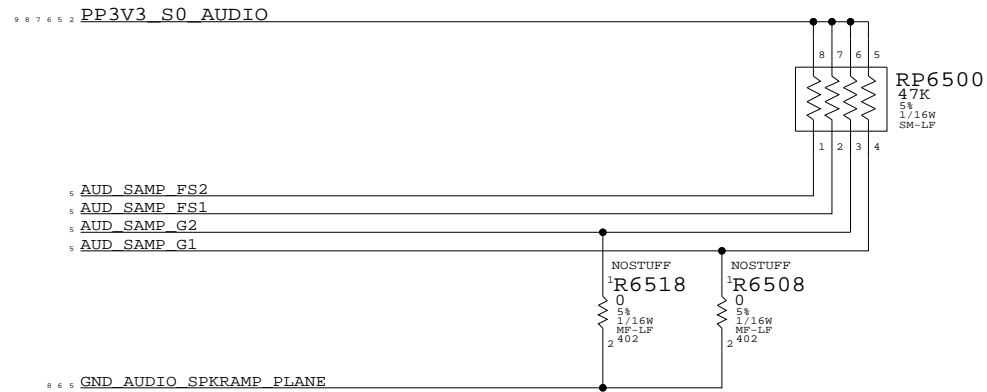
NOTICE OF PROPRIETARY PROPERTY  
 THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING  
 I TO MAINTAIN THE DOCUMENT IN CONFIDENCE  
 II NOT TO REPRODUCE OR COPY IT  
 III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

APPLE INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7487	0.1.0
SCALE	SHT	OF	REV.
NONE	4	11	

SPEAKER AMP  
APPLE P/N 353S1156



GAIN SETTINGS: +16DB  
MODULATION SETTING: LOW EMI  
GAIN AND SWITCHING FREQUENCY STUFF OPTIONS



AUDIO: SPEAKER AMP\_1

SYNC\_MASTER=AUDIO SYNC\_DATE=08/04/2006

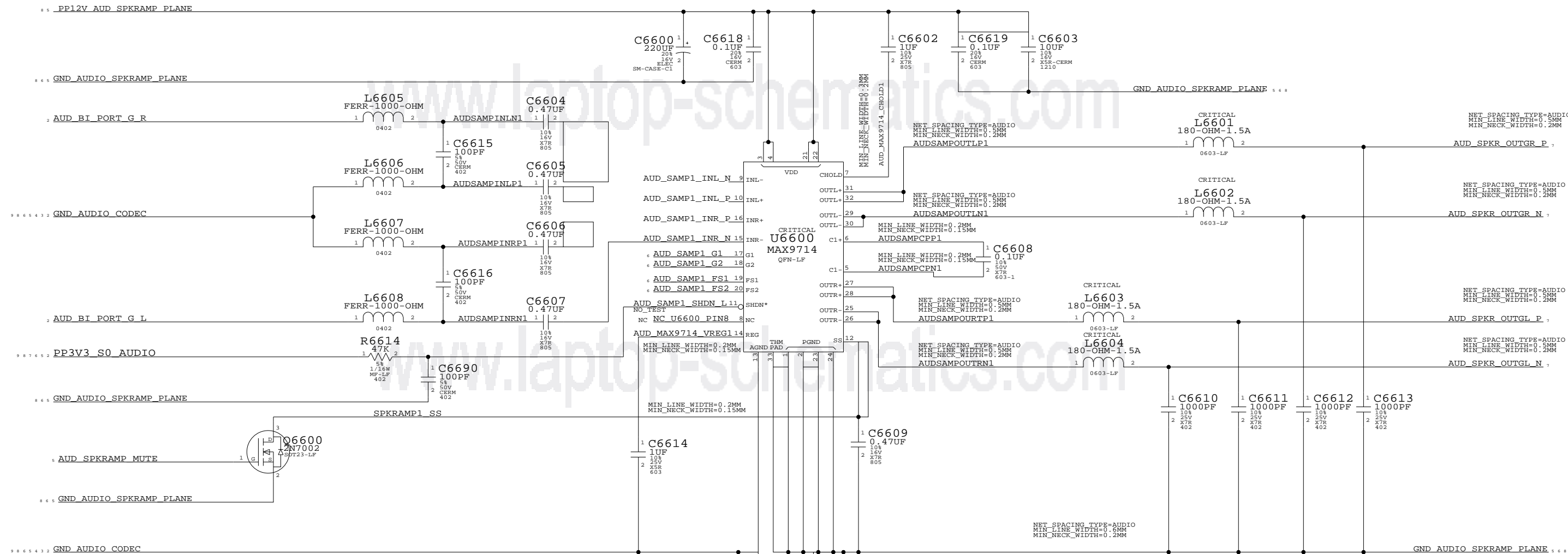
NOTICE OF PROPRIETARY PROPERTY

THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING  
I TO MAINTAIN THE DOCUMENT IN CONFIDENCE  
II NOT TO REPRODUCE OR COPY IT  
III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

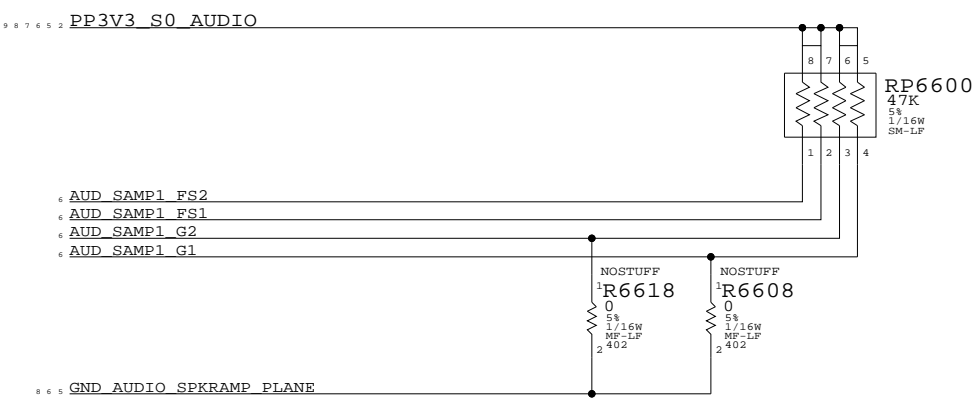
APPLE INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7487	0.1.0
SCALE	SHT	OF	
NONE	5	11	

SPEAKER AMP  
APPLE P/N 353S1156

NET SPACING TYPE=AUDIO  
MIN\_LINE\_WIDTH=0.6MM  
MIN\_NECK\_WIDTH=0.2MM  
VOLTAGE=1.2V

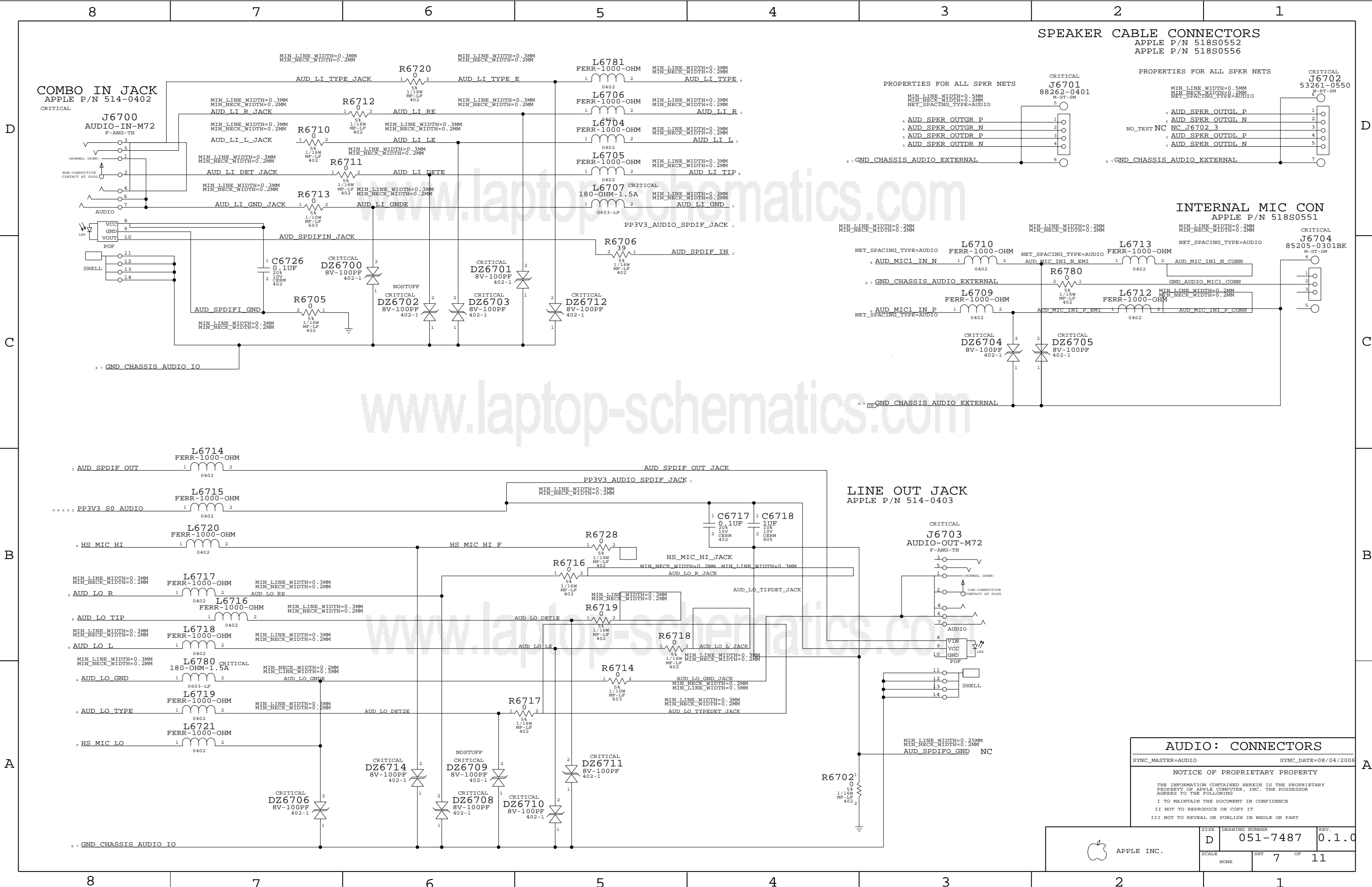


GAIN SETTINGS: +16DB  
MODULATION SETTING: LOW EMI  
GAIN AND SWITCHING FREQUENCY STUFF OPTIONS



**AUDIO: SPEAKER AMP**  
SYNC\_MASTER=AUDIO SYNC\_DATE=08/04/2006  
NOTICE OF PROPRIETARY PROPERTY  
THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING  
I TO MAINTAIN THE DOCUMENT IN CONFIDENCE  
II NOT TO REPRODUCE OR COPY IT  
III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

APPLE INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7487	0.1.0
SCALE	SHT	OF	REV.
NONE	6	11	



**SPEAKER CABLE CONNECTORS**  
 APPLE P/N 518S0552  
 APPLE P/N 518S0556

PROPERTIES FOR ALL SPKR NETS  
 MIN\_LINE\_WIDTH=0.5MM  
 MIN\_NECK\_WIDTH=0.2MM  
 NET\_SPACING\_TYPE=AUDIO

PROPERTIES FOR ALL SPKR NETS  
 MIN\_LINE\_WIDTH=0.5MM  
 MIN\_NECK\_WIDTH=0.2MM  
 NET\_SPACING\_TYPE=AUDIO

CRITICAL  
**J6701**  
 88262-0401  
 M-ST-SM

CRITICAL  
**J6702**  
 53261-0550  
 M-ST-SM

**INTERNAL MIC CON**  
 APPLE P/N 518S0551

CRITICAL  
**J6704**  
 85205-0301BK  
 M-ST-SM

MIN\_LINE\_WIDTH=0.2MM  
 MIN\_NECK\_WIDTH=0.2MM

MIN\_LINE\_WIDTH=0.2MM  
 MIN\_NECK\_WIDTH=0.2MM

MIN\_LINE\_WIDTH=0.2MM  
 MIN\_NECK\_WIDTH=0.2MM

**LINE OUT JACK**  
 APPLE P/N 514-0403

CRITICAL  
**J6703**  
 AUDIO-OUT-M72  
 F-ANG-TH

**AUDIO: CONNECTORS**

SYNC\_MASTER=AUDIO SYNC\_DATE=08/04/2006

**NOTICE OF PROPRIETARY PROPERTY**

THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING:  
 I TO MAINTAIN THE DOCUMENT IN CONFIDENCE  
 II NOT TO REPRODUCE OR COPY IT  
 III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART



APPLE INC.

SIZE	DRAWING NUMBER	REV.
D	051-7487	0.1.0
SCALE	SHT	OF
NONE	7	11

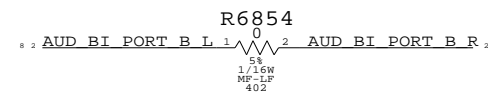
CODEC OUTPUT SIGNAL PATHS

FUNCTION	VOLUME	DAC	PIN COMPLEX	MUTE CONTROL	DET ASSIGNMENT
HEADPHONES	0X0D(13)	0X03	0X15(21)(PORT A)	VREF A	0X15(21)(PORT A)
SPKR AMP(M72/M78)	0X0C(12)	0X02	0X14(20)(PORT D)	GPIO 0	N/A
SPKR AMP(M72/M78)	0X0E(14)	0X04	0X16(22)(PORT G)	GPIO 0	N/A
SPDIFOUT		CONVERTER=0X06	PIN=0X1E(30)		PIN 0X1B(27)(PORT E)
		DETECT DELEGATE PIN	0X1B(27)(PORT E)		

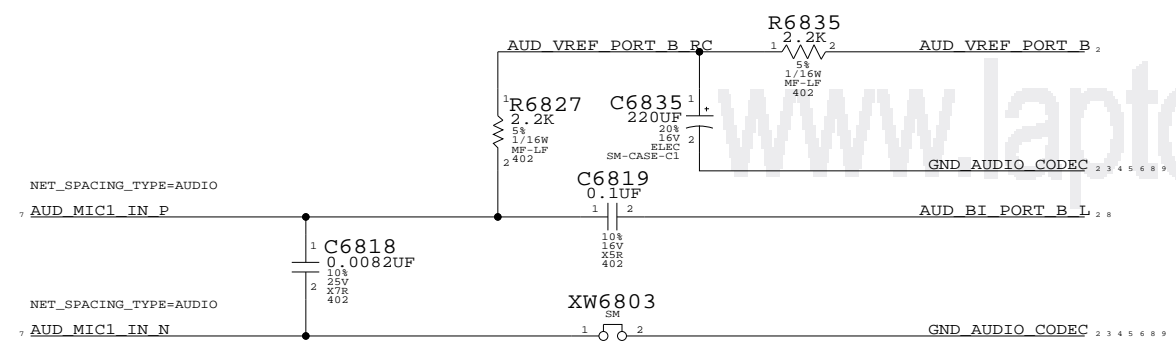
CODEC INPUT SIGNAL PATHS

FUNCTION	ADC	MIXER	PORT	VREF	DET ASSIGNMENT
MIC (BUILT IN)	0X07	0X24(36)	0X18(24)(PORT B)	80%	N/A
MIC (HEADSET)	0X07	0X24(36)	0X19(25)(PORT F)	80%	0X19(25)(PORT F)
LINE INPUT	0X08	0X23(35)	0X1A(26)(PORT C)	50%	0X1A(26)(PORT C)
SPDIFIN	CONVERTER=0X0A(10)		PIN=0X1F(31)		N/A

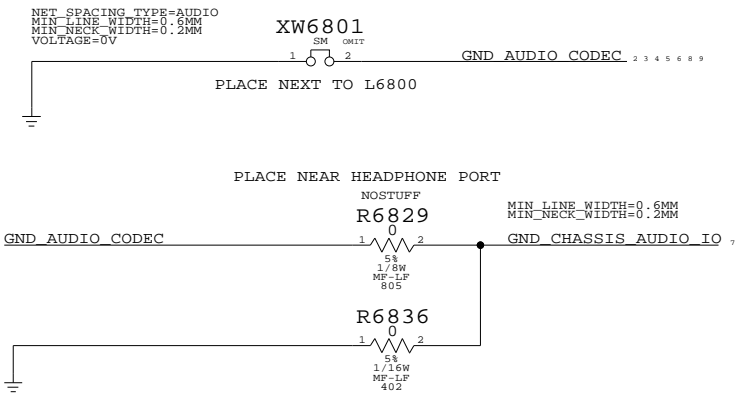
OPTIONAL RESISTOR TO COMBINE L/R SIGNALS FOR MONO MIC



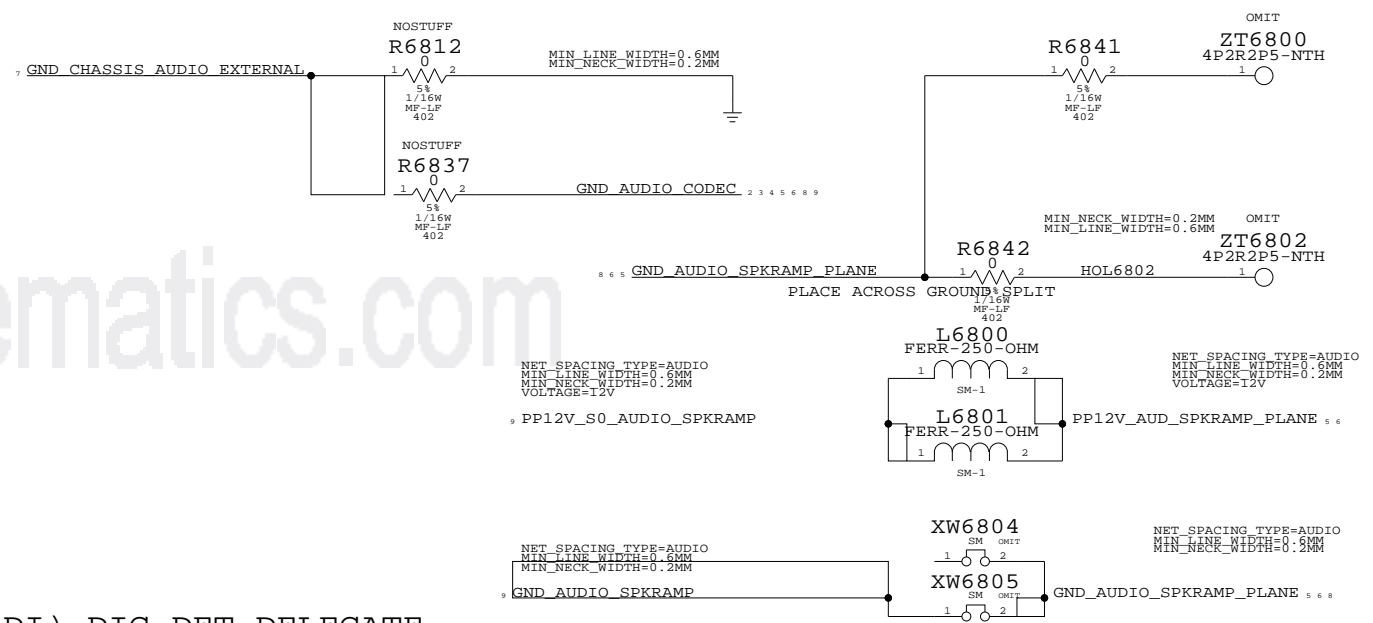
MICROPHONE IMPEDANCE MATCHING CIRCUIT



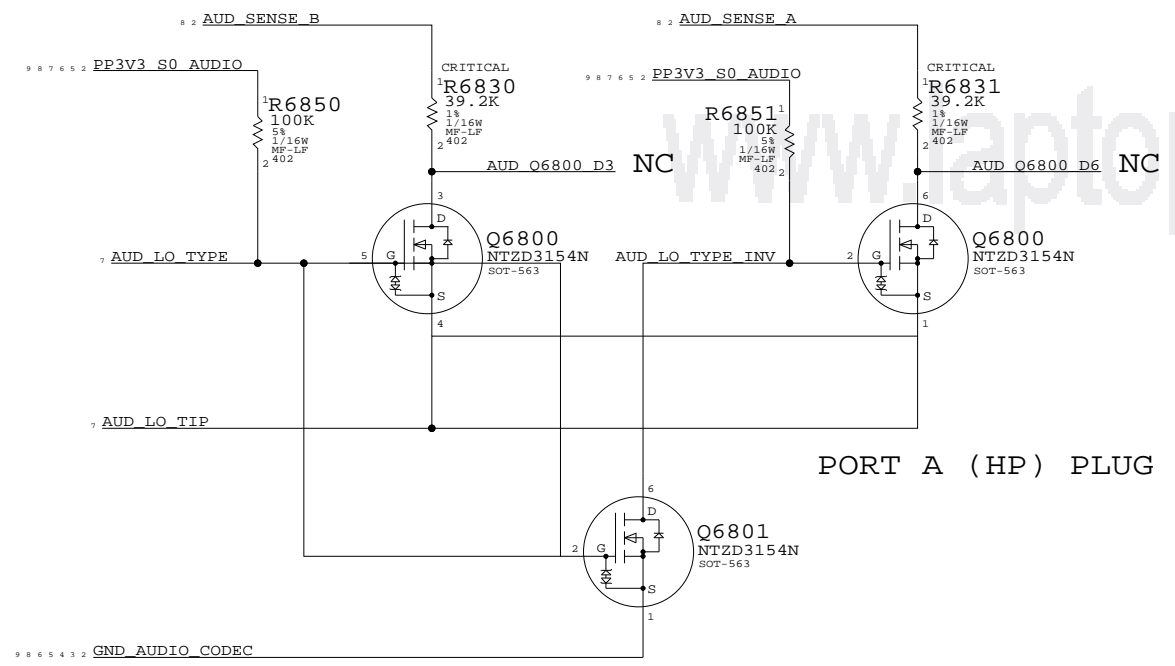
AUDIO GROUND RETURNS



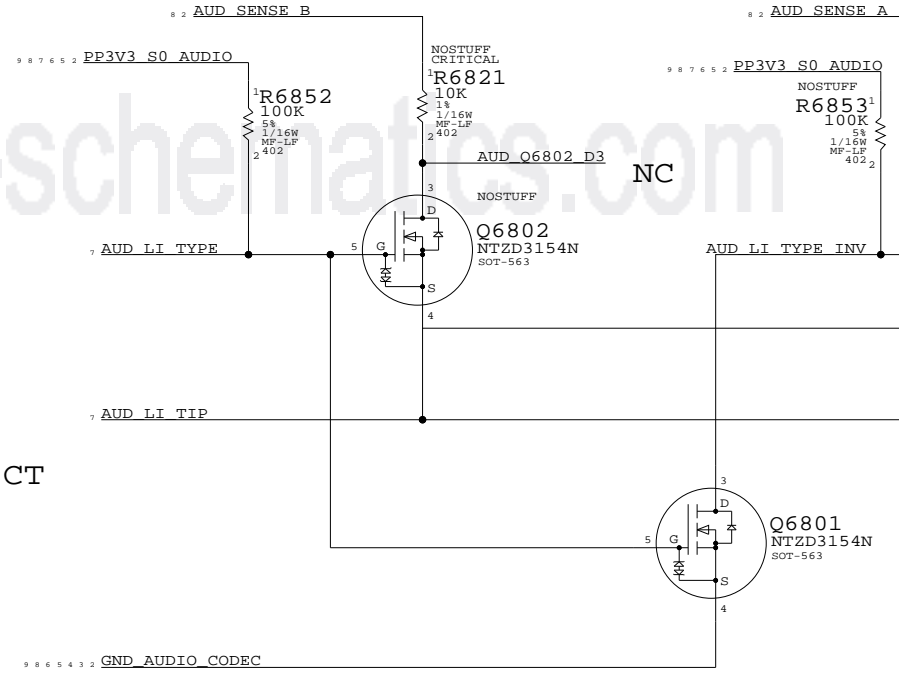
AUDIO MTG HOLES



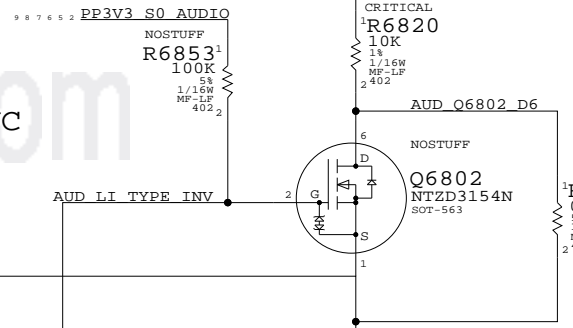
PORT A DIGITAL OUT DETECT DELEGATE



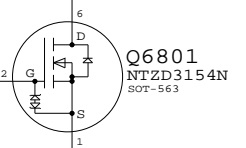
PORT G (DI) DIG DET DELEGATE



PORT C (LI) INSERT DETECT



PORT A (HP) PLUG DETECT



AUDIO: POWER SUPPLIES

SYNC\_MASTER=AUDIO SYNC\_DATE=08/04/2006  
 NOTICE OF PROPRIETARY PROPERTY  
 THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING  
 I TO MAINTAIN THE DOCUMENT IN CONFIDENCE  
 II NOT TO REPRODUCE OR COPY IT  
 III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

APPLE INC. DRAWING NUMBER 051-7487 REV. 0.1.0 SCALE NONE SHT 8 OF 11



8

7

6

5

4

3

2

1

D

D

C

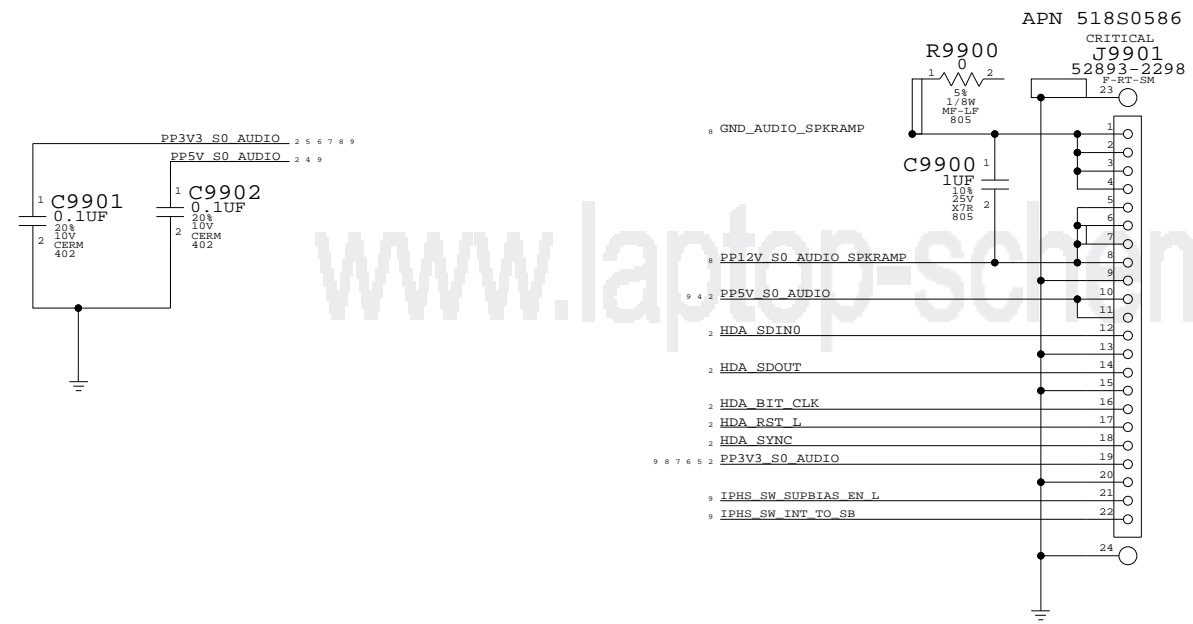
C

B

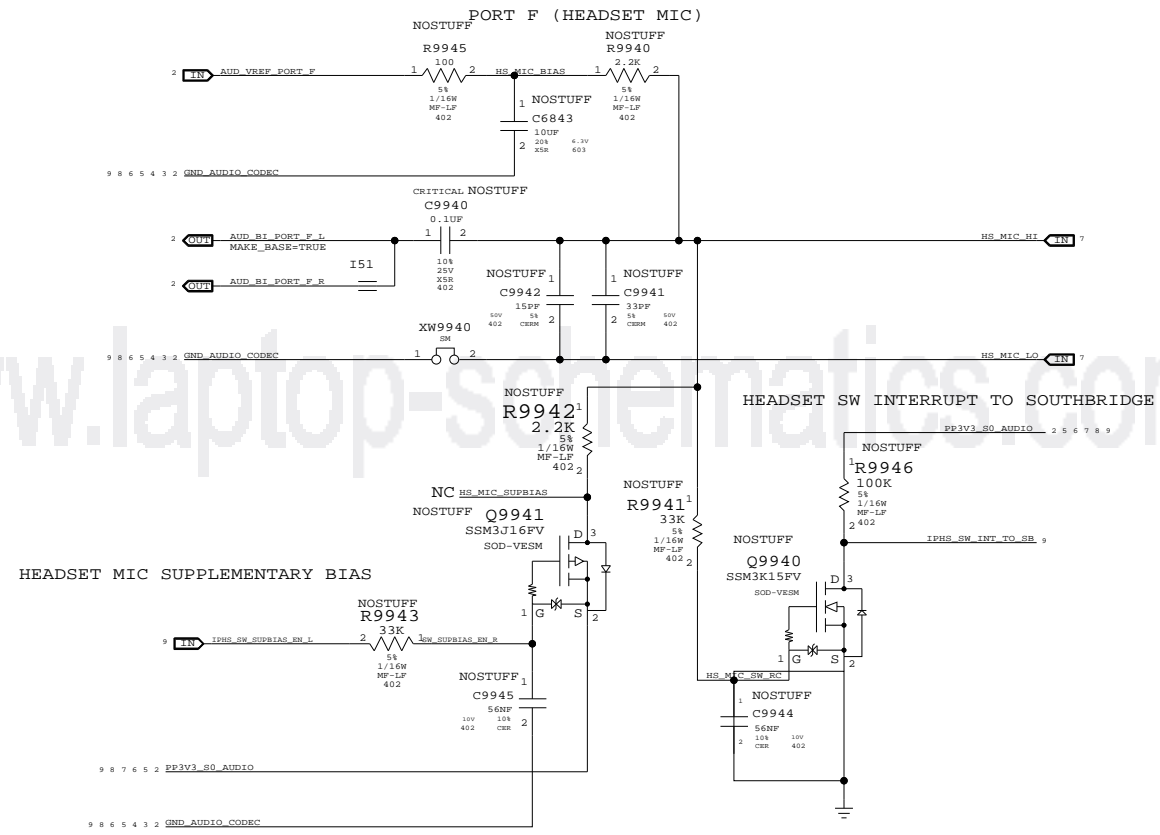
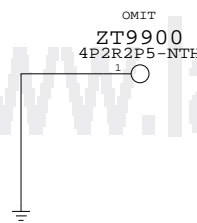
B

A

A



PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
376S0568	376S0422		ALL	SILICONIX DUAL FET
127S0091	127S0050		C6300	CAP,TANT,1UF CASE R



**AUDIO: MLB CONNECTOR**  
 SYNC\_MASTER=DEREK SYNC\_DATE=10/10/2006  
**NOTICE OF PROPRIETARY PROPERTY**  
 THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING  
 I TO MAINTAIN THE DOCUMENT IN CONFIDENCE  
 II NOT TO REPRODUCE OR COPY IT  
 III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

APPLE INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7487	0.1.0
SCALE	SHT	9 OF	11
NONE			

8

7

6

5

4

3

2

1

	8	7	6	5	4	3	2	1
D	Title: Basenet Report	AUD_LI_RE	AUD_LI_RE	7D6	AUD_SAMP_INR_P	AUD_SAMP_INR_P -	5C5	
	Design: polka_audio	AUD_LI_R_JACK	@polka_audio.lib.POLKA_AUDIO	7D7	AUD_SAMP_SHDN_L	@polka_audio.lib.POLKA_AUDIO	5C6	
	Date: Oct 3 16:36:42 2007	AUD_LI_TIP	@polka_audio.lib.POLKA_AUDIO	7D4 8A5	AUD_SENSE_A	@polka_audio.lib.POLKA_AUDIO	2C2 8B3 8B6	
	Base nets and synonyms for polka_audio.lib.POLKA_AUDIO@polka_audio.lib.polka_audio(sch_1)	AUD_LI_TYPE	@polka_audio.lib.POLKA_AUDIO	7D4 8A5	AUD_SENSE_B	@polka_audio.lib.POLKA_AUDIO	2C2 8B4 8B8	
	Base Signal	AUD_LI_TYPE_E	@polka_audio.lib.POLKA_AUDIO	7D6	AUD_SPDIFIN_JACK	@polka_audio.lib.POLKA_AUDIO	7C7	
	ACZ_SDATIN_CHIP	ACZ_SDATIN_CHIP -	2C6	AUD_LI_TYPE_INV	8A3	AUD_SPDIFI_GND	7C7	
	AUDSAMP_CPN	AUDSAMP_CPN -	5C4	AUD_LI_TYPE_JACK	7D7	AUD_SPDIFO_GND	7A3	
	AUDSAMP_CPN1	AUDSAMP_CPN1 -	6C4	AUD_LI_VREFL	3C4	AUD_SPDIF_IN	2C2 7C4	
	AUDSAMP_CPN2	AUDSAMP_CPN2 -	5C4	AUD_LI_VREFR	3B4	AUD_SPDIF_OUT	2C2 7B8	
	AUDSAMP_CPN3	AUDSAMP_CPN3 -	6C4	AUD_LOAMP_INL_M	4B3 4D7	AUD_SPDIF_OUT_CHIP	2C4	
	AUDSAMP_INLN	AUDSAMP_INLN -	5D6	AUD_LOAMP_INR_M	4B3 4D7	AUD_SPDIF_OUT_JACK	7B5	
	AUDSAMP_INLN1	AUDSAMP_INLN1 -	5D6	AUD_LOAMP_MUTE_L	4D6	AUD_SPKRAMP_MUTE	5C8 6B8	
	AUDSAMP_INLN2	AUDSAMP_INLN2 -	5C6	AUD_LOAMP_OUTL_R	4B3 4D2	AUD_SPKRAMP_MUTE_L	5B7	
	AUDSAMP_INLN3	AUDSAMP_INLN3 -	5C6	AUD_LOAMP_OUTR_R	4A3 4C2	AUD_SPKR_OUTDL_N	5C1 7D2	
	AUDSAMP_INLN4	AUDSAMP_INLN4 -	6C6	AUD_LO_DET1E	7B6	AUD_SPKR_OUTDL_P	5C1 7D2	
	AUDSAMP_INLN5	AUDSAMP_INLN5 -	5C6	AUD_LO_DET2E	7A6	AUD_SPKR_OUTDR_N	5C1 7D3	
	AUDSAMP_INLN6	AUDSAMP_INLN6 -	6C6	AUD_LO_GND	4C3 7A8	AUD_SPKR_OUTDR_P	5C1 7D3	
	AUDSAMP_INLN7	AUDSAMP_INLN7 -	6C4	AUD_LO_GNDE	7A7	AUD_SPKR_OUTGL_N	6C1 7D2	
	AUDSAMP_INLN8	AUDSAMP_INLN8 -	5C4	AUD_LO_GND_JACK	7A5	AUD_SPKR_OUTGL_P	6C1 7D2	
	AUDSAMP_INLN9	AUDSAMP_INLN9 -	6C4	AUD_LO_L	4D2 7A8	AUD_SPKR_OUTGR_N	6C1 7D3	
	AUDSAMP_INLN10	AUDSAMP_INLN10 -	5C4	AUD_LO_LE	7A5	AUD_SPKR_OUTGR_P	6C1 7D3	
	AUDSAMP_INLN11	AUDSAMP_INLN11 -	6C4	AUD_LO_L_JACK	7A4	AUD_VREF	2B4	
	AUDSAMP_INLN12	AUDSAMP_INLN12 -	5C4	AUD_LO_R	4D2 7B8	AUD_VREF_A	2C2 4D7	
	AUDSAMP_INLN13	AUDSAMP_INLN13 -	6C4	AUD_LO_RE	7B7	AUD_VREF_PORT_B	2C2 8C5	
	AUDSAMP_INLN14	AUDSAMP_INLN14 -	5C4	AUD_LO_R_JACK	7B5	AUD_VREF_PORT_B_RC	8C7	
AUDSAMP_INLN15	AUDSAMP_INLN15 -	5C4	AUD_LO_TIP	7B8 8A8	AUD_VREF_PORT_F	2C2 9B6		
AUDSAMP_INLN16	AUDSAMP_INLN16 -	2D5	AUD_LO_TIPDET_JACK	7B4	AUD_VREF_PORT_F	2C2 9B6		
AUDSAMP_INLN17	AUDSAMP_INLN17 -	2C6	AUD_LO_TYPE	7A8 8A8	AUD_VREF_A	2C2 4D7		
AUDSAMP_INLN18	AUDSAMP_INLN18 -	3C3	AUD_LO_TYPEDET_JACK	7A5	AUD_VREF_PORT_B	2C2 8C5		
AUDSAMP_INLN19	AUDSAMP_INLN19 -	3B3	AUD_LO_TYPEDET_INV	8A6	AUD_VREF_PORT_B_RC	8C7		
AUDSAMP_INLN20	AUDSAMP_INLN20 -	2C2 4B7	AUD_LO_TIPDET_INV	8A6	AUD_VREF_PORT_F	2C2 9B6		
AUDSAMP_INLN21	AUDSAMP_INLN21 -	2C2 4A7	AUD_MAX9714_HOLD	5C4	AUD_VREF_FB	2A4		
AUDSAMP_INLN22	AUDSAMP_INLN22 -	2C2 8B5 8C7	AUD_MAX9714_CHOLD1	6C4	AUD_VREF_IN	2A6		
AUDSAMP_INLN23	AUDSAMP_INLN23 -	2C2 8C6	AUD_MAX9714_VREG	5C5	GND_AUDIO_CODEC	2A7 2B8 2D2 3A7 3C7 4B7 4C7 5B8 5B8 5C8 6B8 6C8 8A5 8A8 8B5 8B5 8C2 8D1 8D3 9A6 9B6 9B6 4C5		
AUDSAMP_INLN24	AUDSAMP_INLN24 -	2C8 3C2	AUD_MAX9714_VREG1	6C5	GND_AUDIO_LOAMP_PGND	GND_AUDIO_LOAMP_PGND -		
AUDSAMP_INLN25	AUDSAMP_INLN25 -	2C8 3B2	AUD_MIC1_IN_N	7C3 8B8	GND_AUDIO_LOAMP_SGND	GND_AUDIO_LOAMP_SGND -		
AUDSAMP_INLN26	AUDSAMP_INLN26 -	2C8 5C8	AUD_MIC1_IN_P	7C3 8B8	GND_AUDIO_MIC1_CONN	GND_AUDIO_MIC1_CONN -		
AUDSAMP_INLN27	AUDSAMP_INLN27 -	2C8 5D8	AUD_MIC_INI_N_CONN	7C2	GND_AUDIO_SPKRAMP	GND_AUDIO_SPKRAMP -		
AUDSAMP_INLN28	AUDSAMP_INLN28 -	2C2 9B6	AUD_MIC_INI_N_EMI	7C3	GND_AUDIO_SPKRAMP_PL	GND_AUDIO_SPKRAMP_PLANE -		
AUDSAMP_INLN29	AUDSAMP_INLN29 -	2C2 9B6	AUD_MIC_INI_P_CONN	7C2	ANE	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN30	AUDSAMP_INLN30 -	2B2 6C8	AUD_PSEUDO_VREF	2B3 2C2	GND_CHASSIS_AUDIO_EX	GND_CHASSIS_AUDIO_EXTERNAL -		
AUDSAMP_INLN31	AUDSAMP_INLN31 -	4B6	AUD_PSEUDO_VREF_C	2B2 3A7 3C7	TERNAL	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN32	AUDSAMP_INLN32 -	4B5	AUD_Q6800_D3	8A6	GND_CHASSIS_AUDIO_IO	GND_CHASSIS_AUDIO_IO -		
AUDSAMP_INLN33	AUDSAMP_INLN33 -	4A6	AUD_Q6800_D6	8A5	HDA_BIT_CLK	HDA_BIT_CLK -		
AUDSAMP_INLN34	AUDSAMP_INLN34 -	4A5	AUD_Q6802_D3	8B3	HDA_RST_L	HDA_RST_L -		
AUDSAMP_INLN35	AUDSAMP_INLN35 -	2C8 5B8	AUD_Q6802_D6	8B2	HDA_SDIN0	HDA_SDIN0 -		
AUDSAMP_INLN36	AUDSAMP_INLN36 -	2B4	AUD_SAMP1_FS1	6A6 6C5	HDA_SDOUT	HDA_SDOUT -		
AUDSAMP_INLN37	AUDSAMP_INLN37 -	7D6	AUD_SAMP1_FS2	6A6 6C5	HDA_SYNC	HDA_SYNC -		
AUDSAMP_INLN38	AUDSAMP_INLN38 -	7D7	AUD_SAMP1_G1	6A6 6C5	HOL6802	HOL6802 -		
AUDSAMP_INLN39	AUDSAMP_INLN39 -	3B7 3C7 7D4	AUD_SAMP1_G2	6A6 6C5	HS_MIC_BIAS	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN40	AUDSAMP_INLN40 -	7D6	AUD_SAMP1_INL_N	6C5	HS_MIC_HI	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN41	AUDSAMP_INLN41 -	3C5	AUD_SAMP1_INL_P	6C5	HS_MIC_HI_F	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN42	AUDSAMP_INLN42 -	3B5	AUD_SAMP1_INR_N	6C5	HS_MIC_HI_JACK	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN43	AUDSAMP_INLN43 -	7D7	AUD_SAMP1_INR_P	6C5	HS_MIC_LO	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN44	AUDSAMP_INLN44 -	3D7 7D4	AUD_SAMP1_SHDN_L	6C5	HS_MIC_SUPBIAS	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN45	AUDSAMP_INLN45 -	3D5	AUD_SAMP_FS1	5A6 5C5	HS_MIC_SW_RC	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN46	AUDSAMP_INLN46 -	3D4	AUD_SAMP_FS2	5A6 5C5	IPHS_SW_INT_TO_SB	IPHS_SW_INT_TO_SB -		
AUDSAMP_INLN47	AUDSAMP_INLN47 -	7D6	AUD_SAMP_G1	5A6 5C5	IPHS_SW_INR_N	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN48	AUDSAMP_INLN48 -	7D7	AUD_SAMP_G2	5A6 5C5	IPHS_SW_SUPBIAS_EN_L	IPHS_SW_SUPBIAS_EN_L -		
AUDSAMP_INLN49	AUDSAMP_INLN49 -	3B7 7D4	AUD_SAMP_INL_N	5C5	MAX9724_CIN	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN50	AUDSAMP_INLN50 -	3B5	AUD_SAMP_INL_P	5C5	MAX9724_C1P	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN51	AUDSAMP_INLN51 -	3B4	AUD_SAMP_INR_N	5C5	MAX9724_C1P	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN52	AUDSAMP_INLN52 -				MAX9724_PVSS	@polka_audio.lib.POLKA_AUDIO		
AUDSAMP_INLN53	AUDSAMP_INLN53 -				NC_AUD_BI_PORT_E_L	NC_AUD_BI_PORT_E_L -		
AUDSAMP_INLN54	AUDSAMP_INLN54 -				NC_AUD_BI_PORT_E_R	NC_AUD_BI_PORT_E_R -		
AUDSAMP_INLN55	AUDSAMP_INLN55 -				NC_AUD_BI_PORT_H_L	NC_AUD_BI_PORT_H_L -		
AUDSAMP_INLN56	AUDSAMP_INLN56 -				NC_AUD_BI_PORT_H_R	NC_AUD_BI_PORT_H_R -		
AUDSAMP_INLN57	AUDSAMP_INLN57 -				NC_AUD_GPIO_1	NC_AUD_GPIO_1 -		
AUDSAMP_INLN58	AUDSAMP_INLN58 -				NC_AUD_VREF_PORT_B2	NC_AUD_VREF_PORT_B2 -		
AUDSAMP_INLN59	AUDSAMP_INLN59 -							
AUDSAMP_INLN60	AUDSAMP_INLN60 -							
AUDSAMP_INLN61	AUDSAMP_INLN61 -							
AUDSAMP_INLN62	AUDSAMP_INLN62 -							
AUDSAMP_INLN63	AUDSAMP_INLN63 -							
AUDSAMP_INLN64	AUDSAMP_INLN64 -							
AUDSAMP_INLN65	AUDSAMP_INLN65 -							
AUDSAMP_INLN66	AUDSAMP_INLN66 -							
AUDSAMP_INLN67	AUDSAMP_INLN67 -							
AUDSAMP_INLN68	AUDSAMP_INLN68 -							
AUDSAMP_INLN69	AUDSAMP_INLN69 -							
AUDSAMP_INLN70	AUDSAMP_INLN70 -							
AUDSAMP_INLN71	AUDSAMP_INLN71 -							
AUDSAMP_INLN72	AUDSAMP_INLN72 -							
AUDSAMP_INLN73	AUDSAMP_INLN73 -							
AUDSAMP_INLN74	AUDSAMP_INLN74 -							
AUDSAMP_INLN75	AUDSAMP_INLN75 -							
AUDSAMP_INLN76	AUDSAMP_INLN76 -							
AUDSAMP_INLN77	AUDSAMP_INLN77 -							
AUDSAMP_INLN78	AUDSAMP_INLN78 -							
AUDSAMP_INLN79	AUDSAMP_INLN79 -							
AUDSAMP_INLN80	AUDSAMP_INLN80 -							
AUDSAMP_INLN81	AUDSAMP_INLN81 -							
AUDSAMP_INLN82	AUDSAMP_INLN82 -							
AUDSAMP_INLN83	AUDSAMP_INLN83 -							
AUDSAMP_INLN84	AUDSAMP_INLN84 -							
AUDSAMP_INLN85	AUDSAMP_INLN85 -							
AUDSAMP_INLN86	AUDSAMP_INLN86 -							
AUDSAMP_INLN87	AUDSAMP_INLN87 -							
AUDSAMP_INLN88	AUDSAMP_INLN88 -							
AUDSAMP_INLN89	AUDSAMP_INLN89 -							
AUDSAMP_INLN90	AUDSAMP_INLN90 -							
AUDSAMP_INLN91	AUDSAMP_INLN91 -							
AUDSAMP_INLN92	AUDSAMP_INLN92 -							
AUDSAMP_INLN93	AUDSAMP_INLN93 -							
AUDSAMP_INLN94	AUDSAMP_INLN94 -							
AUDSAMP_INLN95	AUDSAMP_INLN95 -							
AUDSAMP_INLN96	AUDSAMP_INLN96 -							
AUDSAMP_INLN97	AUDSAMP_INLN97 -							
AUDSAMP_INLN98	AUDSAMP_INLN98 -							
AUDSAMP_INLN99	AUDSAMP_INLN99 -							
AUDSAMP_INLN100	AUDSAMP_INLN100 -							
A								

	8	7	6	5	4	3	2	1
	Title: Cref Part Report Design: polka_audio Date: Oct 3 16:36:42 2007		J6703 CON_F10ANG_4MT_AUDIO polka_audio[7B3] OUT_TH_F-ANG-TH J6704 CON_M3ST_S2MT_SM_M-S polka_audio[7C1] T-SM J9901 CON_F22RT_S2MT_SM_F- polka_audio[9D4] RT-SM		R6831 RES_402 polka_audio[8B6] R6835 RES_402 polka_audio[8C6] R6836 RES_402 polka_audio[8C2] R6837 RES_402 polka_audio[8C3] R6841 RES_402 polka_audio[8C1] R6842 RES_402 polka_audio[8C2] R6843 RES_402 polka_audio[8A2] R6850 RES_402 polka_audio[8B7] R6851 RES_402 polka_audio[8B6] R6852 RES_402 polka_audio[8B4] R6853 RES_402 polka_audio[8B3] R6854 RES_402 polka_audio[8C6] R9900 RES_805 polka_audio[9D5] R9940 RES_402 polka_audio[9B4] R9941 RES_402 polka_audio[9A4] R9942 RES_402 polka_audio[9A4] R9943 RES_402 polka_audio[9A5] R9945 RES_402 polka_audio[9B5] R9946 RES_402 polka_audio[9A4] RP6500 RPAK4P_SM-LF polka_audio[5A4] RP6500 RPAK4P_SM-LF polka_audio[6A4] U6200 AUDIO_ALC885QVB3_QFN polka_audio[2C6] _QFN U6201 LREG_TPS7950IDRB_SON polka_audio[2A5] U6300 OPAMP_MAX4477_UMAX polka_audio[3B4 3C4] U6400 MAX9724A_TQFN polka_audio[4D5] U6500 MAX9714_QFN-LF polka_audio[5C5] U6600 MAX9714_QFN-LF polka_audio[5C5] XW6400 SHORT_SM polka_audio[4C6] XW6401 SHORT_SM polka_audio[4C6] XW6402 SHORT_SM polka_audio[4C6] XW6801 SHORT_SM polka_audio[8D2] XW6803 SHORT_SM polka_audio[8B7] XW6804 SHORT_SM polka_audio[8B2] XW6805 SHORT_SM polka_audio[8B2] XW9940 SHORT_SM polka_audio[9B5] ZT6900 MTGHOLE polka_audio[8C1] ZT6802 MTGHOLE polka_audio[8C1] ZT9900 MTGHOLE polka_audio[9C6]			
D	C6200 CAP_805 polka_audio[2D6] C6201 CAP_402 polka_audio[2D6] C6202 CAP_P_CASE-R2 polka_audio[2D4] C6203 CAP_P_CASE-R2 polka_audio[2D4] C6204 CAP_402 polka_audio[2D6] C6205 CAP_P_SMA-LF polka_audio[2B4] C6211 CAP_P_SM-CASE-C1 polka_audio[2B2] C6212 CAP_402 polka_audio[2B4] C6217 CAP_P_SM-LF polka_audio[2A6] C6218 CAP_402 polka_audio[2A5] C6219 CAP_402 polka_audio[2A6] C6221 CAP_402 polka_audio[2B6] C6230 CAP_402 polka_audio[2D4] C6236 CAP_402 polka_audio[2D4] C6280 CAP_805 polka_audio[2D6] C6300 CAP_P_CASE-R polka_audio[3D5] C6301 CAP_P_CASE-R polka_audio[3C5] C6302 CAP_402 polka_audio[3C5] C6304 CAP_P_CASE-R polka_audio[3B5] C6305 CAP_P_CASE-R polka_audio[3B5] C6306 CAP_805-1 polka_audio[3C2] C6307 CAP_805-1 polka_audio[3B2] C6400 CAP_402 polka_audio[4D5] C6402 CAP_805 polka_audio[4D5] C6410 CAP_402 polka_audio[4C4] C6412 CAP_402 polka_audio[4C4] C6414 CAP_805 polka_audio[4C4] C6420 CAP_P_SMA-LF polka_audio[4B6] C6421 CAP_402 polka_audio[4B4] C6422 CAP_603 polka_audio[4B4] C6430 CAP_P_SMA-LF polka_audio[4A6] C6431 CAP_402 polka_audio[4A4] C6432 CAP_603 polka_audio[4B4] C6500 CAP_P_SM-CASE-C1 polka_audio[5D5] C6502 CAP_805 polka_audio[5D4] C6503 CAP_1210 polka_audio[5D3] C6504 CAP_805 polka_audio[5D6] C6505 CAP_805 polka_audio[5C6] C6506 CAP_805 polka_audio[5C6] C6507 CAP_805 polka_audio[5C6] C6508 CAP_603-1 polka_audio[5C4] C6509 CAP_805 polka_audio[5B4] C6510 CAP_402 polka_audio[5B3] C6511 CAP_402 polka_audio[5B2] C6512 CAP_402 polka_audio[5B2] C6513 CAP_402 polka_audio[5B2] C6514 CAP_603 polka_audio[5B5] C6515 CAP_402 polka_audio[5D6] C6516 CAP_402 polka_audio[5C6] C6518 CAP_603 polka_audio[5D5] C6519 CAP_603 polka_audio[5D4] C6521 CAP_402 polka_audio[5B7] C6590 CAP_402 polka_audio[5B6] C6600 CAP_P_SM-CASE-C1 polka_audio[6D5] C6602 CAP_805 polka_audio[6D4] C6603 CAP_1210 polka_audio[6D3] C6604 CAP_805 polka_audio[6D6] C6605 CAP_805 polka_audio[6C6] C6606 CAP_805 polka_audio[6C6] C6607 CAP_805 polka_audio[6C6] C6608 CAP_603-1 polka_audio[6C4] C6609 CAP_805 polka_audio[6B4] C6610 CAP_402 polka_audio[6B3] C6611 CAP_402 polka_audio[6B2] C6612 CAP_402 polka_audio[6B2] C6613 CAP_402 polka_audio[6B2] C6614 CAP_603 polka_audio[6B5] C6615 CAP_402 polka_audio[6C6] C6616 CAP_402 polka_audio[6C6] C6618 CAP_603 polka_audio[6D5] C6619 CAP_603 polka_audio[6D4] C6690 CAP_402 polka_audio[6C6] C6717 CAP_402 polka_audio[7B4] C6718 CAP_805 polka_audio[7B4] C6726 CAP_402 polka_audio[7C7] C6818 CAP_402 polka_audio[8B7] C6819 CAP_402 polka_audio[8B7] C6835 CAP_P_SM-CASE-C1 polka_audio[8C6] C6843 CAP_603 polka_audio[9B5] C9900 CAP_805 polka_audio[9D5] C9901 CAP_402 polka_audio[9D7] C9902 CAP_402 polka_audio[9D7] C9940 CAP_402 polka_audio[9B5] C9941 CAP_402 polka_audio[9B4] C9942 CAP_402 polka_audio[9B5] C9944 CAP_402 polka_audio[9A4] C9945 CAP_402 polka_audio[9A5] DZ6700 SUPPR_TRANSIENT1_402 polka_audio[7C6] -1 DZ6701 SUPPR_TRANSIENT1_402 polka_audio[7C5] -1 DZ6702 SUPPR_TRANSIENT1_402 polka_audio[7C6] -1 DZ6703 SUPPR_TRANSIENT1_402 polka_audio[7C6] -1 DZ6704 SUPPR_TRANSIENT1_402 polka_audio[7C3] -1 DZ6705 SUPPR_TRANSIENT1_402 polka_audio[7C2] -1 DZ6706 SUPPR_TRANSIENT1_402 polka_audio[7A7] -1 DZ6708 SUPPR_TRANSIENT1_402 polka_audio[7A6] -1 DZ6709 SUPPR_TRANSIENT1_402 polka_audio[7A6] -1 DZ6710 SUPPR_TRANSIENT1_402 polka_audio[7A5] -1 DZ6711 SUPPR_TRANSIENT1_402 polka_audio[7A5] -1 DZ6712 SUPPR_TRANSIENT1_402 polka_audio[7C5] -1 DZ6714 SUPPR_TRANSIENT1_402 polka_audio[7A6] -1 J6700 CON_F10ANG_4MT_AUDIO polka_audio[7D8] IN_TH_F-ANG-TH J6701 CON_M4ST_S2MT_SM_M-S polka_audio[7D2] T-SM J6702 CON_M5RT_S2MT_SMA_M- polka_audio[7D1] RT-SM		L6200 IND_0402 polka_audio[2A6] L6201 IND_0402 polka_audio[2D7] L6202 IND_0402 polka_audio[2D7] L6280 IND_0402 polka_audio[2D4] L6401 IND_0402 polka_audio[4D6] L6501 IND_0603-LF polka_audio[5C2] L6502 IND_0603-LF polka_audio[5C2] L6503 IND_0603-LF polka_audio[5C3] L6504 IND_0603-LF polka_audio[5C3] L6505 IND_0402 polka_audio[5D6] L6506 IND_0402 polka_audio[5C6] L6507 IND_0402 polka_audio[5C6] L6508 IND_0402 polka_audio[5C6] L6601 IND_0603-LF polka_audio[6C2] L6602 IND_0603-LF polka_audio[6C2] L6603 IND_0603-LF polka_audio[6C3] L6604 IND_0603-LF polka_audio[6C3] L6605 IND_0402 polka_audio[6D6] L6606 IND_0402 polka_audio[6C6] L6607 IND_0402 polka_audio[6C6] L6608 IND_0402 polka_audio[6C6] L6704 IND_0402 polka_audio[7D5] L6705 IND_0402 polka_audio[7D5] L6706 IND_0402 polka_audio[7D5] L6707 IND_0603-LF polka_audio[7D5] L6709 IND_0402 polka_audio[7C3] L6710 IND_0402 polka_audio[7C3] L6712 IND_0402 polka_audio[7C2] L6713 IND_0402 polka_audio[7C2] L6714 IND_0402 polka_audio[7B7] L6715 IND_0402 polka_audio[7B7] L6716 IND_0402 polka_audio[7B7] L6717 IND_0402 polka_audio[7B7] L6718 IND_0402 polka_audio[7A7] L6719 IND_0402 polka_audio[7A7] L6720 IND_0402 polka_audio[7B7] L6721 IND_0402 polka_audio[7A7] L6780 IND_0603-LF polka_audio[7A7] L6781 IND_0402 polka_audio[7D5] L6800 IND_SM-1 polka_audio[8B2] L6801 IND_SM-1 polka_audio[8B2] Q6500 TRA_DUAL_PCH_NTZD315 polka_audio[5B6 5B6] 4N_SOT-563 Q6600 TRA_2N7002_SOT23-LF polka_audio[6B7] Q6800 TRA_DUAL_PCH_NTZD315 polka_audio[8A6 8A7] 4N_SOT-563 Q6801 TRA_DUAL_PCH_NTZD315 polka_audio[8A3 8A6] 4N_SOT-563 Q6802 TRA_DUAL_PCH_NTZD315 polka_audio[8A4 8A2] 4N_SOT-563 Q9940 TRA_SSM315FV_SOD-VE polka_audio[9A4] SM Q9941 TRA_SSM316FV_SOD-VE polka_audio[9A5] SM R6200 RES_402 polka_audio[2C7] R6201 RES_402 polka_audio[2B6] R6202 RES_402 polka_audio[2B6] R6204 RES_402 polka_audio[2B3] R6211 RES_402 polka_audio[2A6] R6212 RES_402 polka_audio[2A4] R6213 RES_402 polka_audio[2A4] R6214 RES_402 polka_audio[2C3] R6216 RES_603 polka_audio[2B4] R6300 RES_402 polka_audio[3C6] R6303 RES_402 polka_audio[3C5] R6304 RES_402 polka_audio[3D4] R6305 RES_402 polka_audio[3C4] R6306 RES_402 polka_audio[3C4] R6307 RES_402 polka_audio[3D3] R6308 RES_402 polka_audio[3B5] R6309 RES_402 polka_audio[3B4] R6310 RES_402 polka_audio[3B4] R6311 RES_402 polka_audio[3A4] R6312 RES_402 polka_audio[3B3] R6400 RES_402 polka_audio[4C5] R6402 RES_402 polka_audio[4D6] R6410 RES_402 polka_audio[4C3] R6411 RES_402 polka_audio[4C3] R6412 RES_402 polka_audio[4D3] R6413 RES_402 polka_audio[4D3] R6420 RES_402 polka_audio[4B5] R6421 RES_402 polka_audio[4B4] R6422 RES_402 polka_audio[4B4] R6430 RES_402 polka_audio[4A5] R6431 RES_402 polka_audio[4A4] R6432 RES_402 polka_audio[4A4] R6508 RES_402 polka_audio[5A4] R6512 RES_402 polka_audio[5B7] R6513 RES_402 polka_audio[5B7] R6514 RES_402 polka_audio[5C6] R6515 RES_402 polka_audio[5C7] R6518 RES_402 polka_audio[5A5] R6519 RES_402 polka_audio[5B4] R6608 RES_402 polka_audio[6A4] R6614 RES_402 polka_audio[6C6] R6618 RES_402 polka_audio[6A5] R6619 RES_402 polka_audio[6B4] R6702 RES_402 polka_audio[7A3] R6705 RES_402 polka_audio[7C7] R6706 RES_402 polka_audio[7C5] R6710 RES_402 polka_audio[7D7] R6711 RES_402 polka_audio[7D6] R6712 RES_402 polka_audio[7D6] R6713 RES_603 polka_audio[7D7] R6714 RES_603 polka_audio[7A5] R6716 RES_402 polka_audio[7B5] R6717 RES_402 polka_audio[7A5] R6718 RES_402 polka_audio[7A5] R6719 RES_402 polka_audio[7B5] R6720 RES_402 polka_audio[7D6] R6728 RES_402 polka_audio[7B5] R6780 RES_402 polka_audio[7C2] R6812 RES_402 polka_audio[8C3] R6820 RES_402 polka_audio[8B2] R6821 RES_402 polka_audio[8B4] R6827 RES_402 polka_audio[8C7] R6829 RES_805 polka_audio[8D2] R6830 RES_402 polka_audio[8B7]					
C								
B								
A								