

Service  
Service  
Service



# Service Manual



## CONTENTS

Wiring diagram .....2-1

Control board  
 circuit diagram .....3-1  
 layout diagram .....3-2

Tuner board  
 circuit diagram .....4-1  
 layout diagram .....4-2

Recording board  
 circuit diagram .....5-1

Audio board (Old) (C/L repair: partlist refer to page8-2)  
 circuit diagram .....6-1..6-2  
 layout diagram .....6-3

Audio board (New) (M/L repair: partlist refer to page8-1)  
 (/98 For set produced with serial number GC010910047068 and afterwards  
 /93 For set produced with serial number GC010902005264 and afterwards)  
 circuit diagram .....6-4..6-8  
 layout diagram .....6-9

Exploded view diagram .....7-1

Service parts list .....8-1..8-2

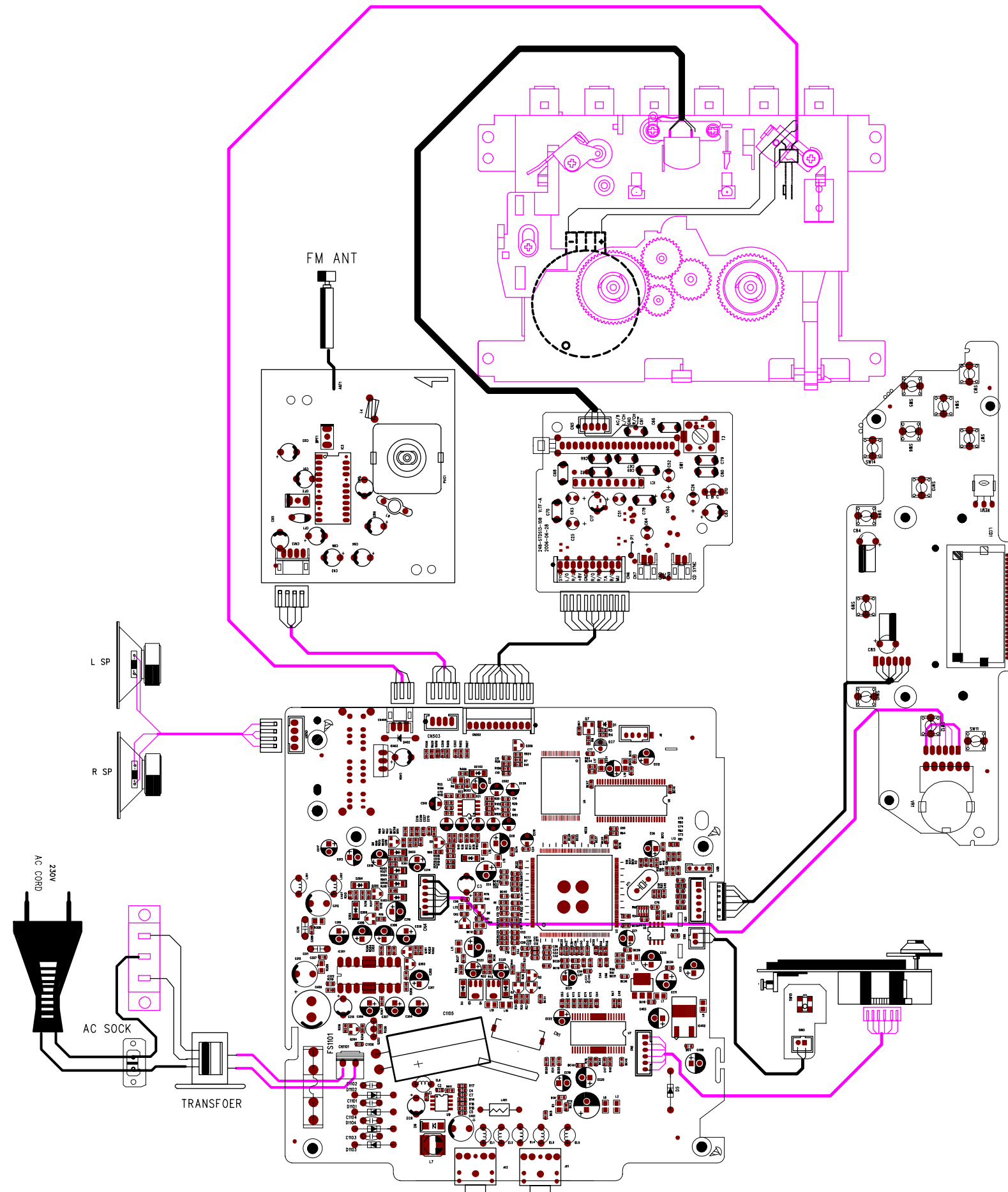
Revision list .....9-1



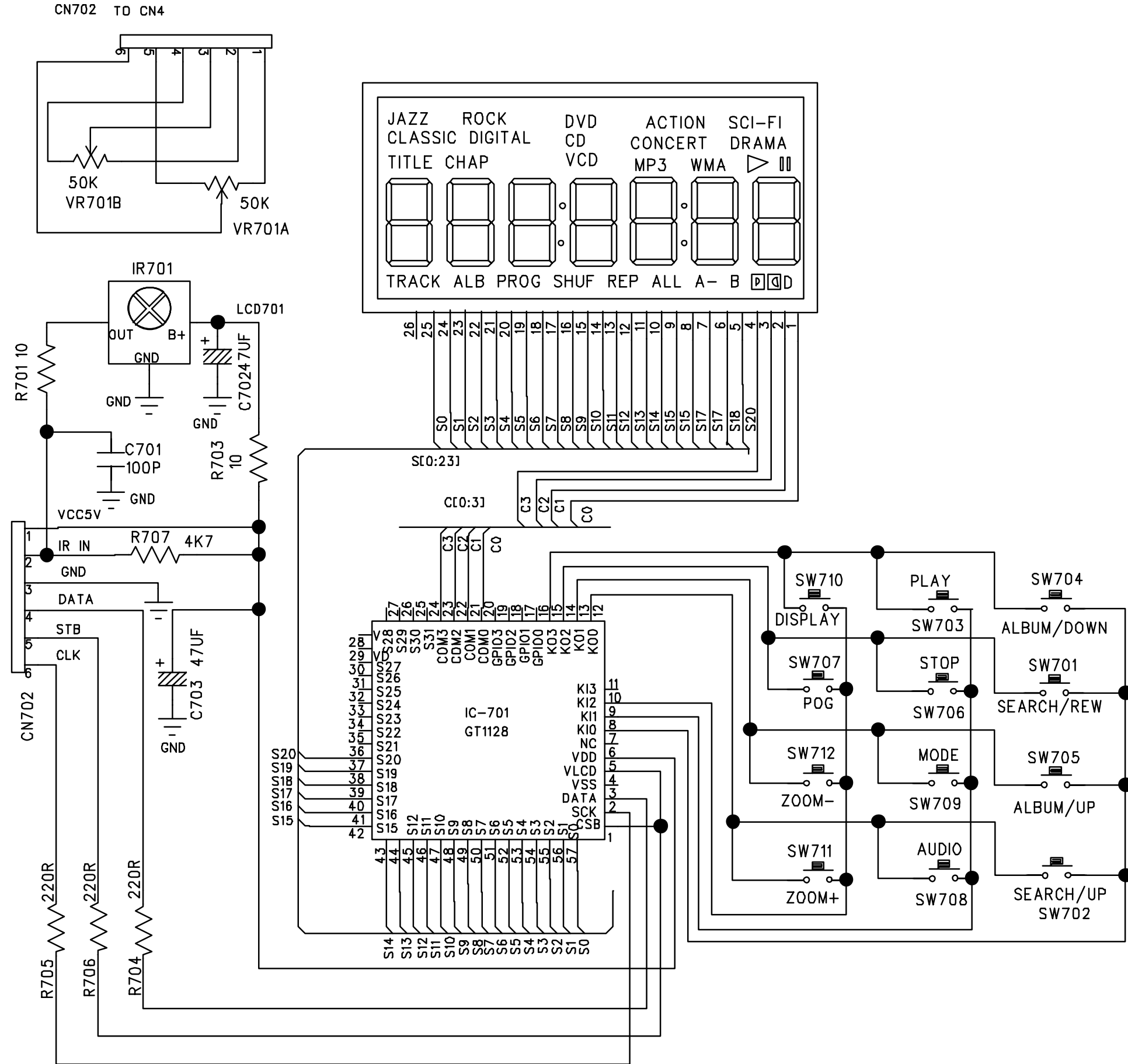
© Copyright 2010 Philips Consumer Electronics B.V. Eindhoven, The Netherlands  
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise without the prior permission of Philips.



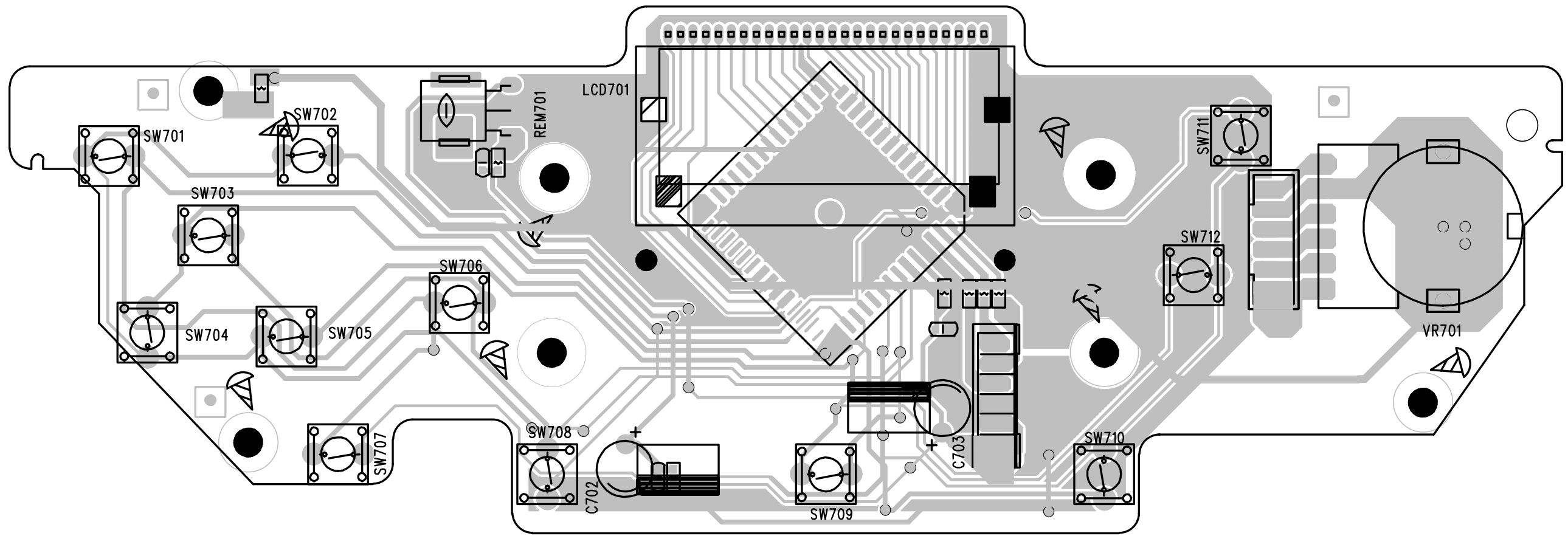
# SET WIRING DIAGRAM



# CIRCUIT DIAGRAM - CONTROL BOARD

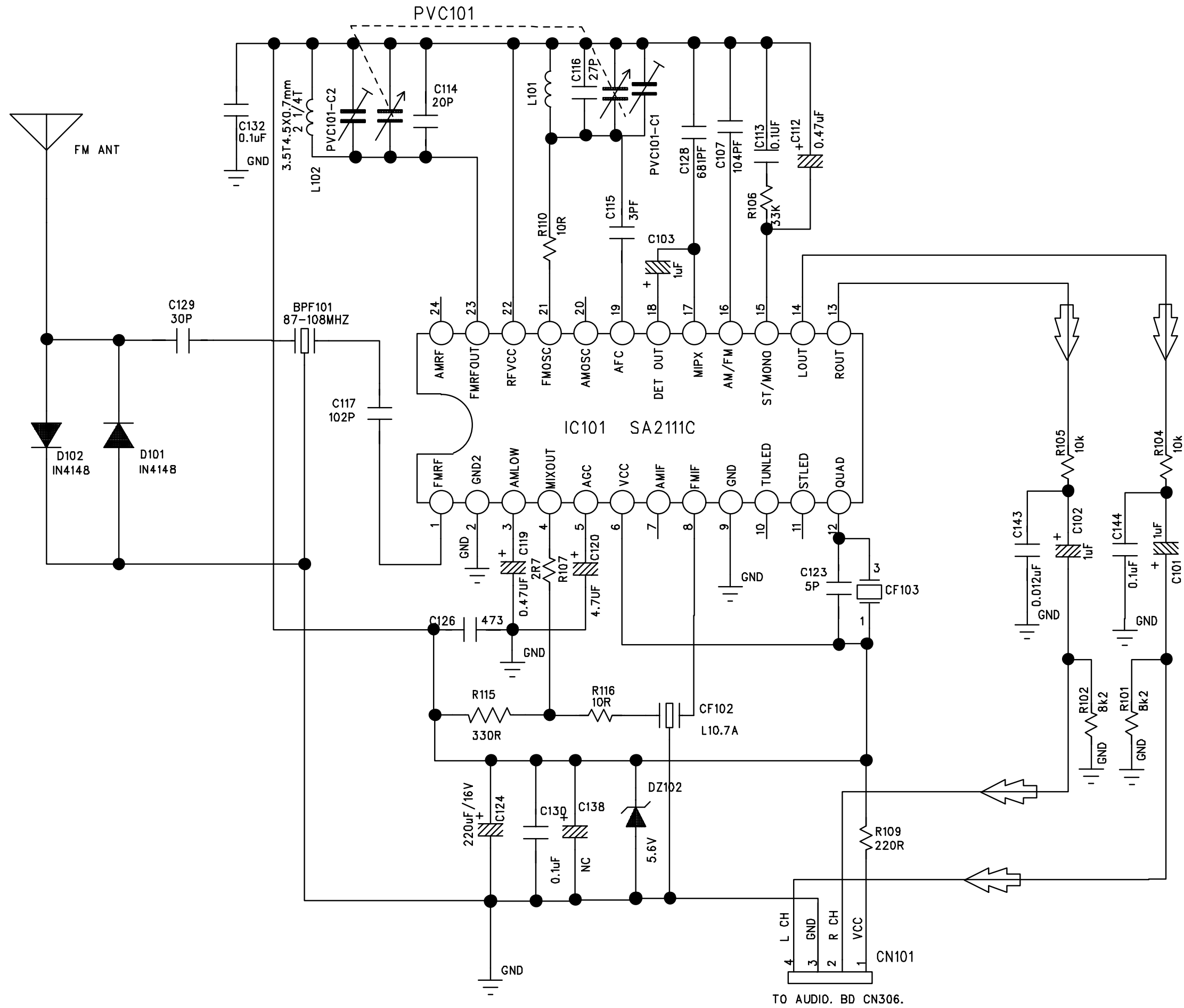


LAYOUT DIAGARM - CONTROL BOARD



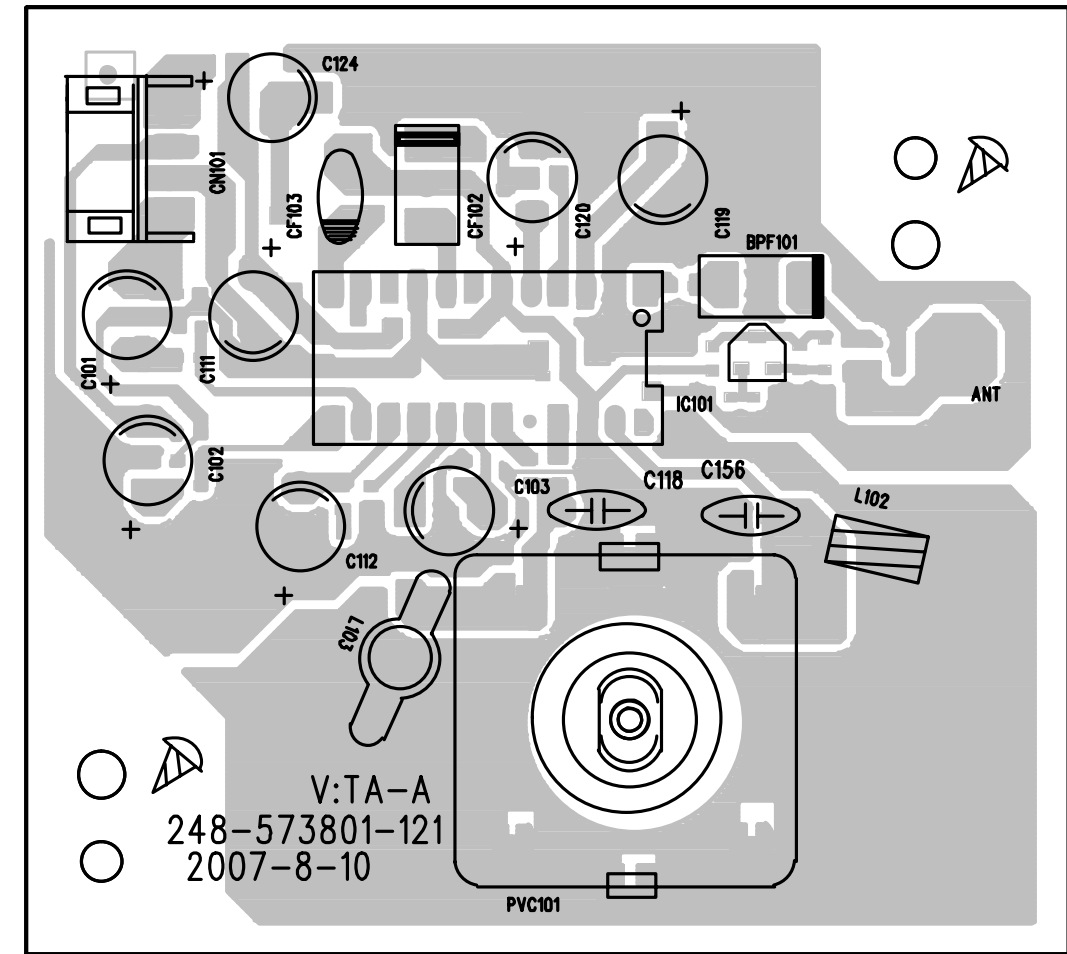
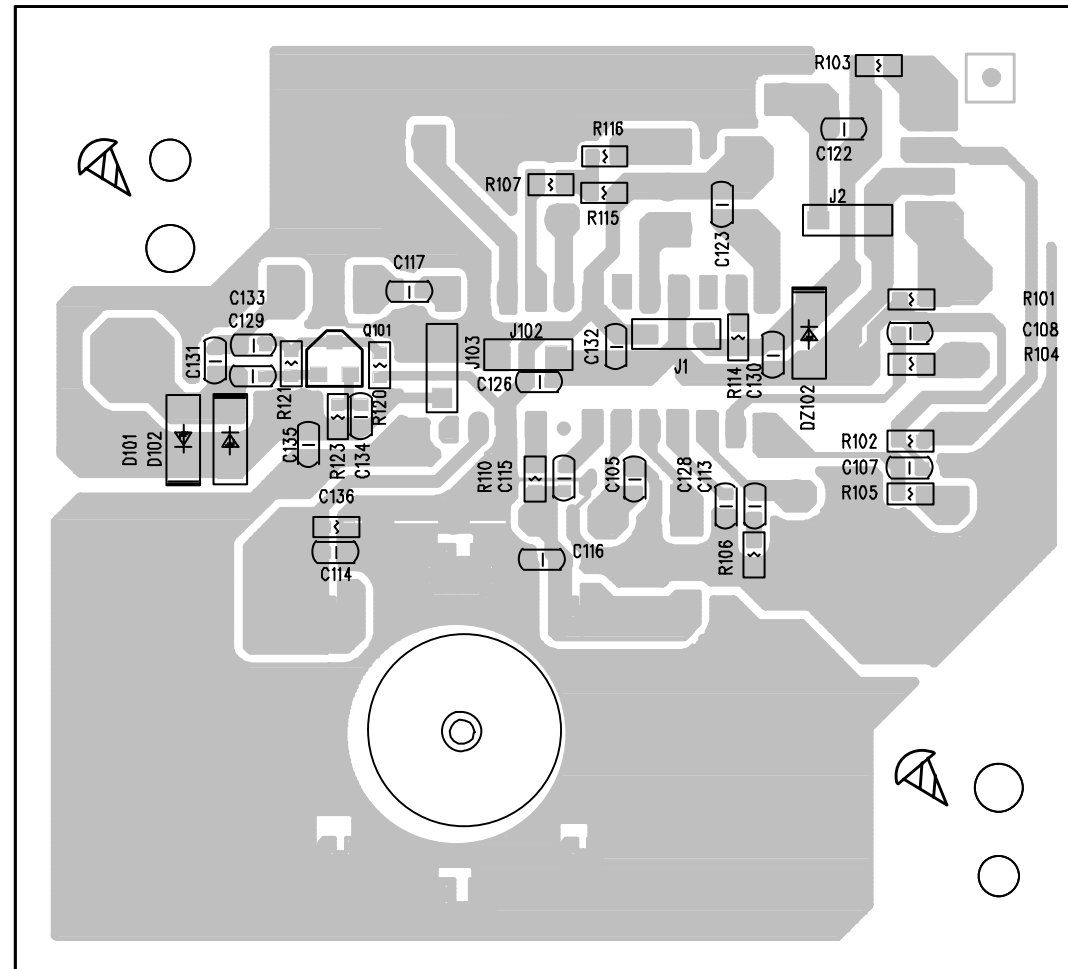


# CIRCUIT DIAGRAM - TUNER BOARD



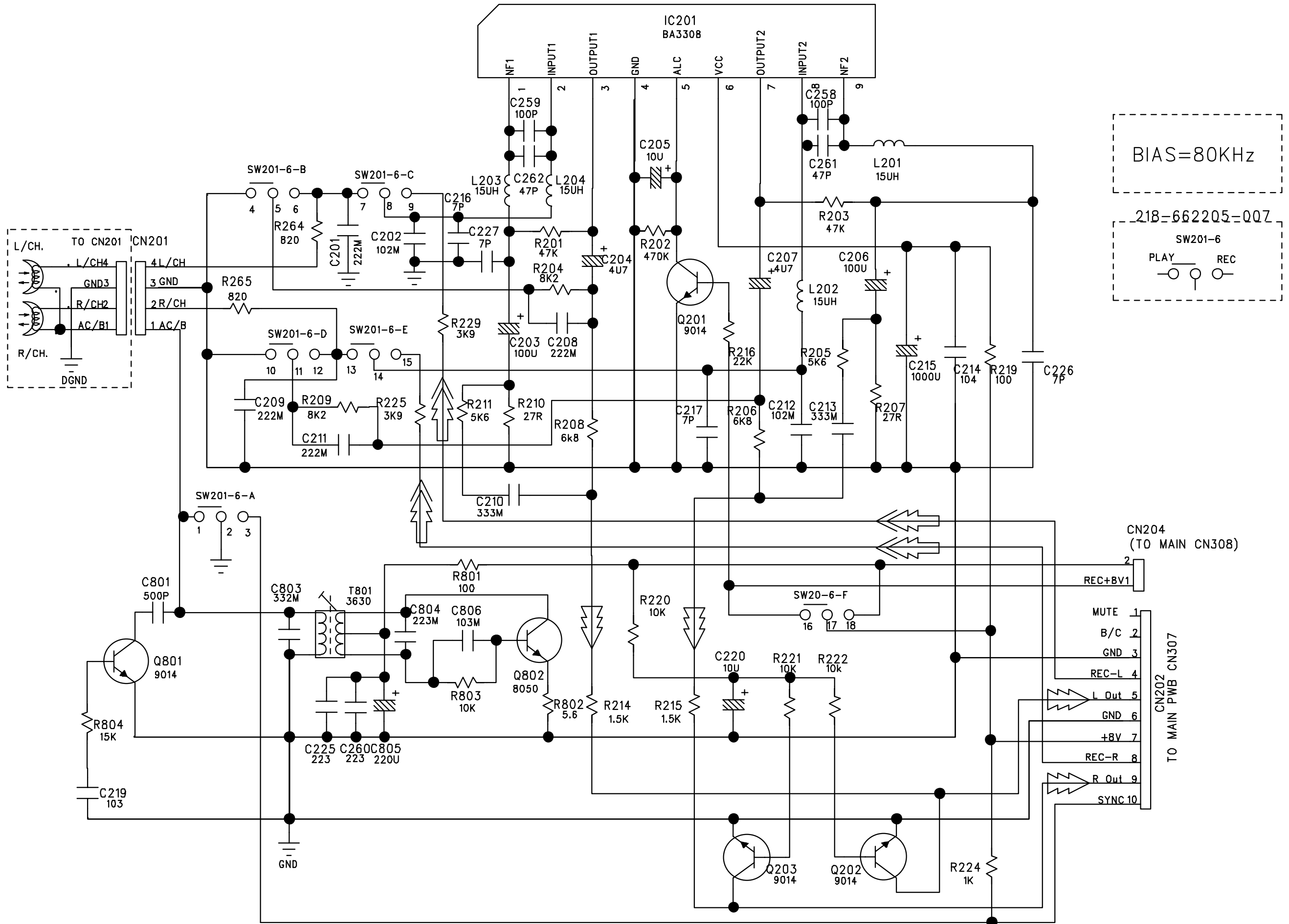
TO AUDIO. BD CN306.

LAYOUT DIAGARM - TUNER BOARD

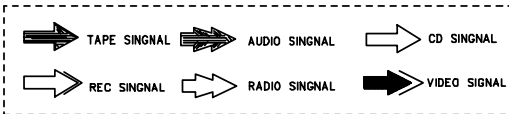
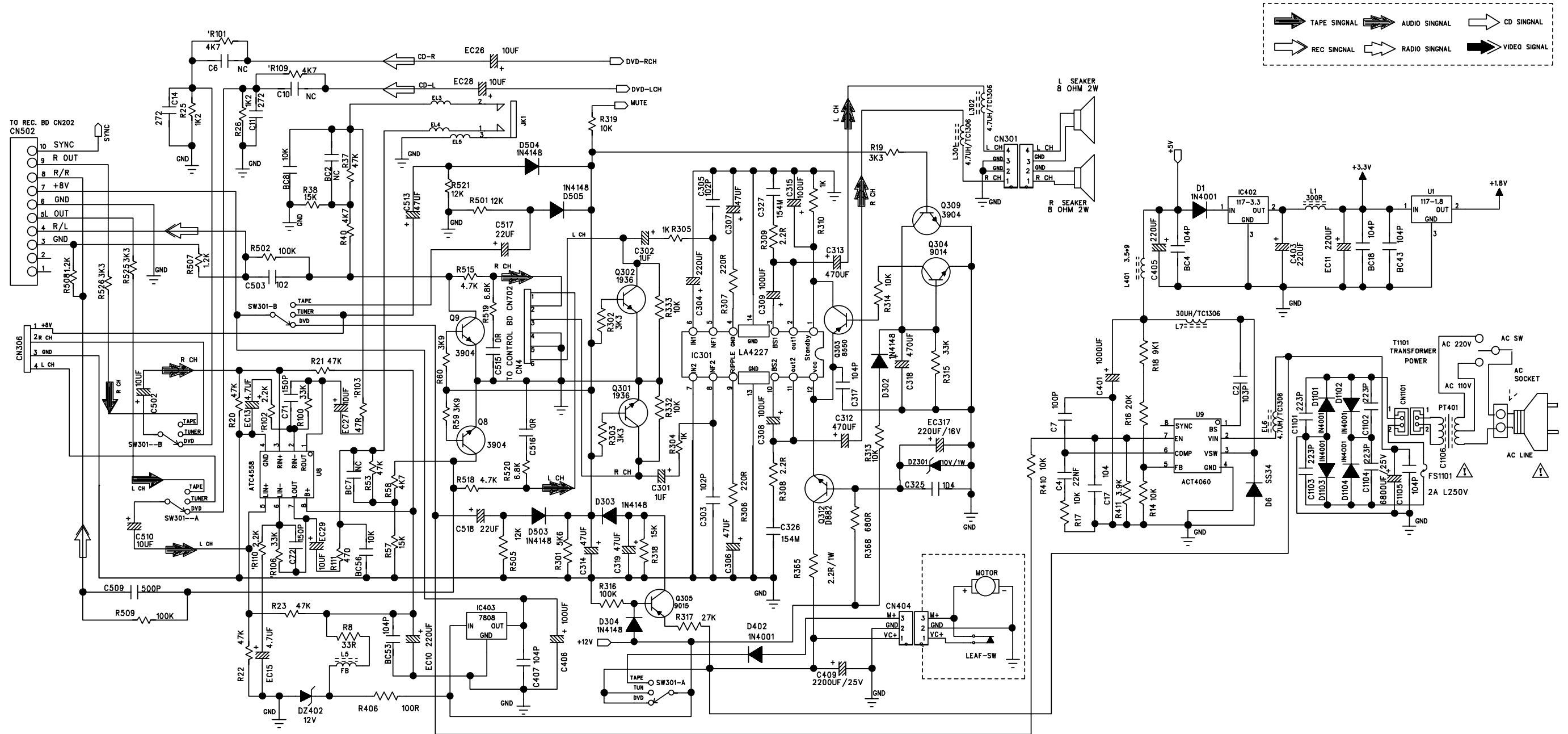


V:TA-A  
 248-573801-121  
 2007-8-10

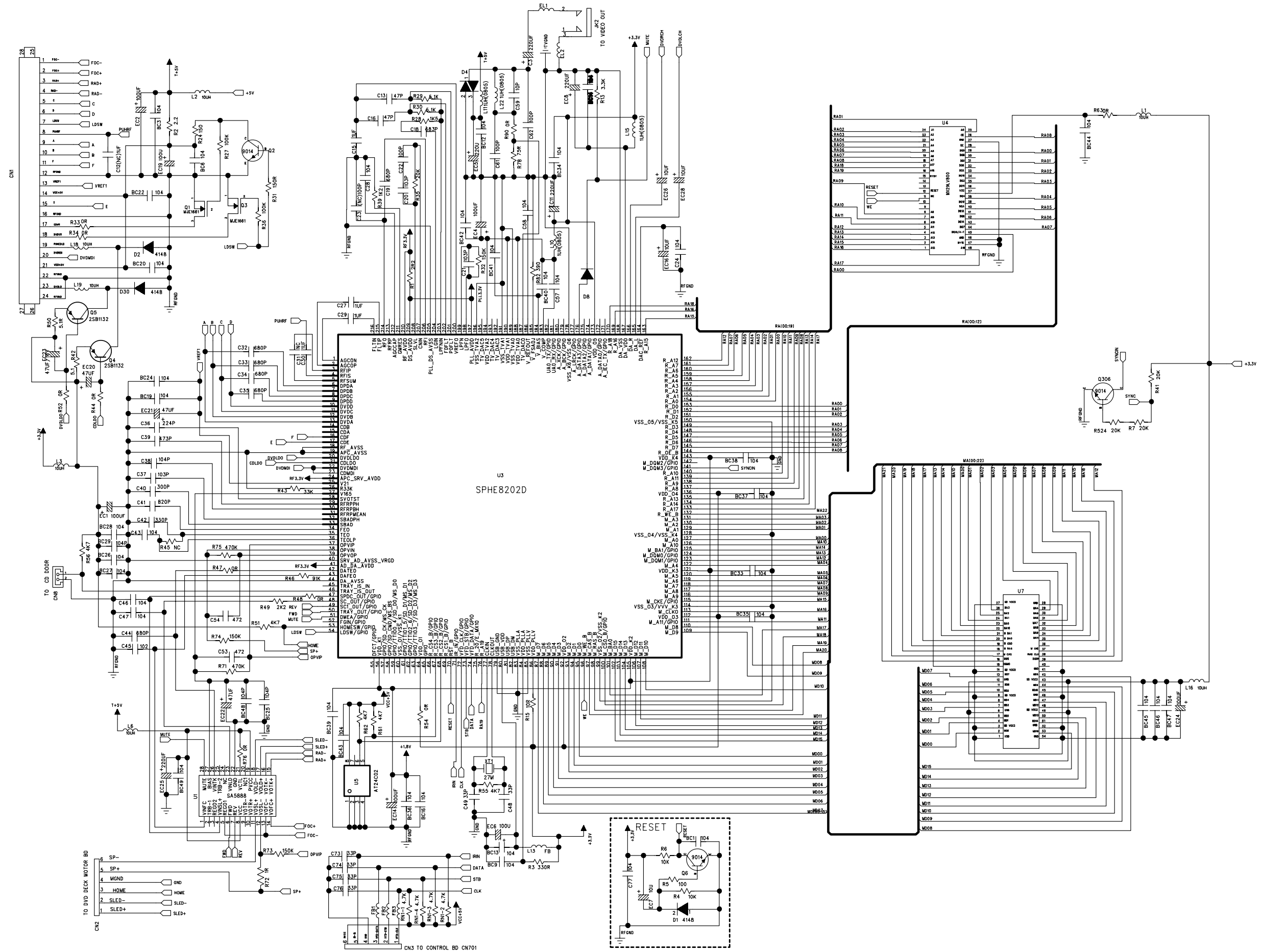
# CIRCUIT DIAGRAM - RECORDING BOARD



# CIRCUIT DIAGRAM - AUDIO BOARD PART 1

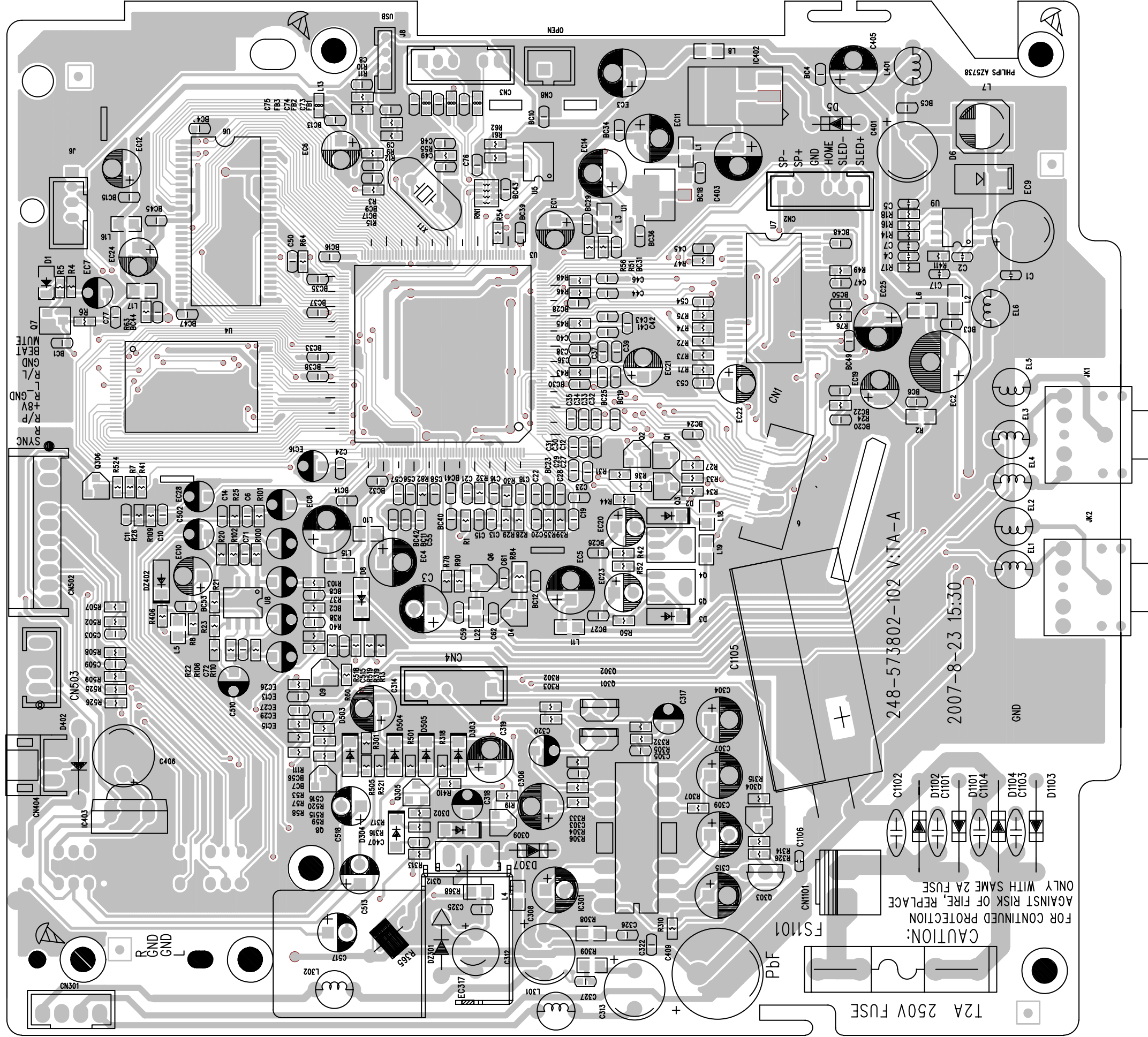


# CIRCUIT DIAGRAM - AUDIOBOARD PART2

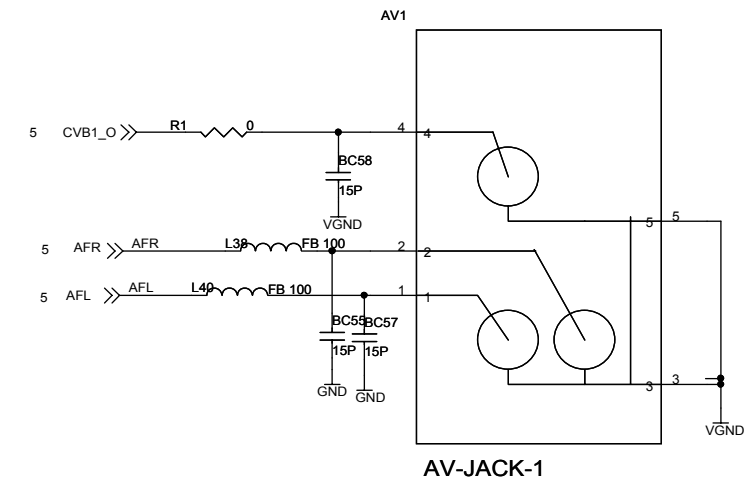
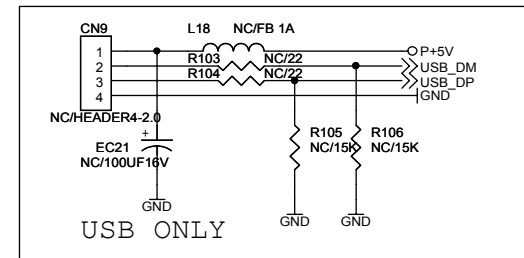
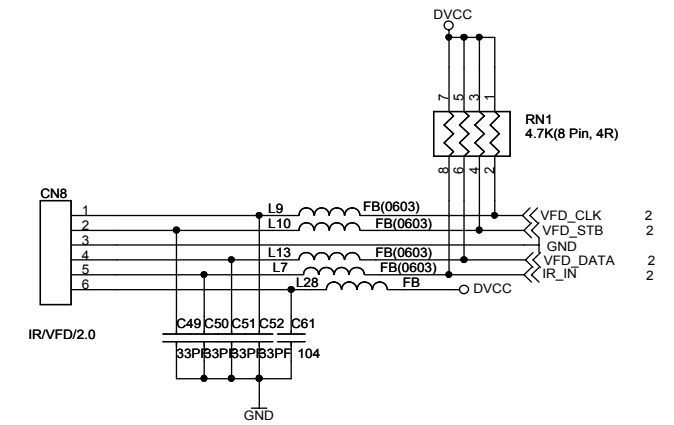
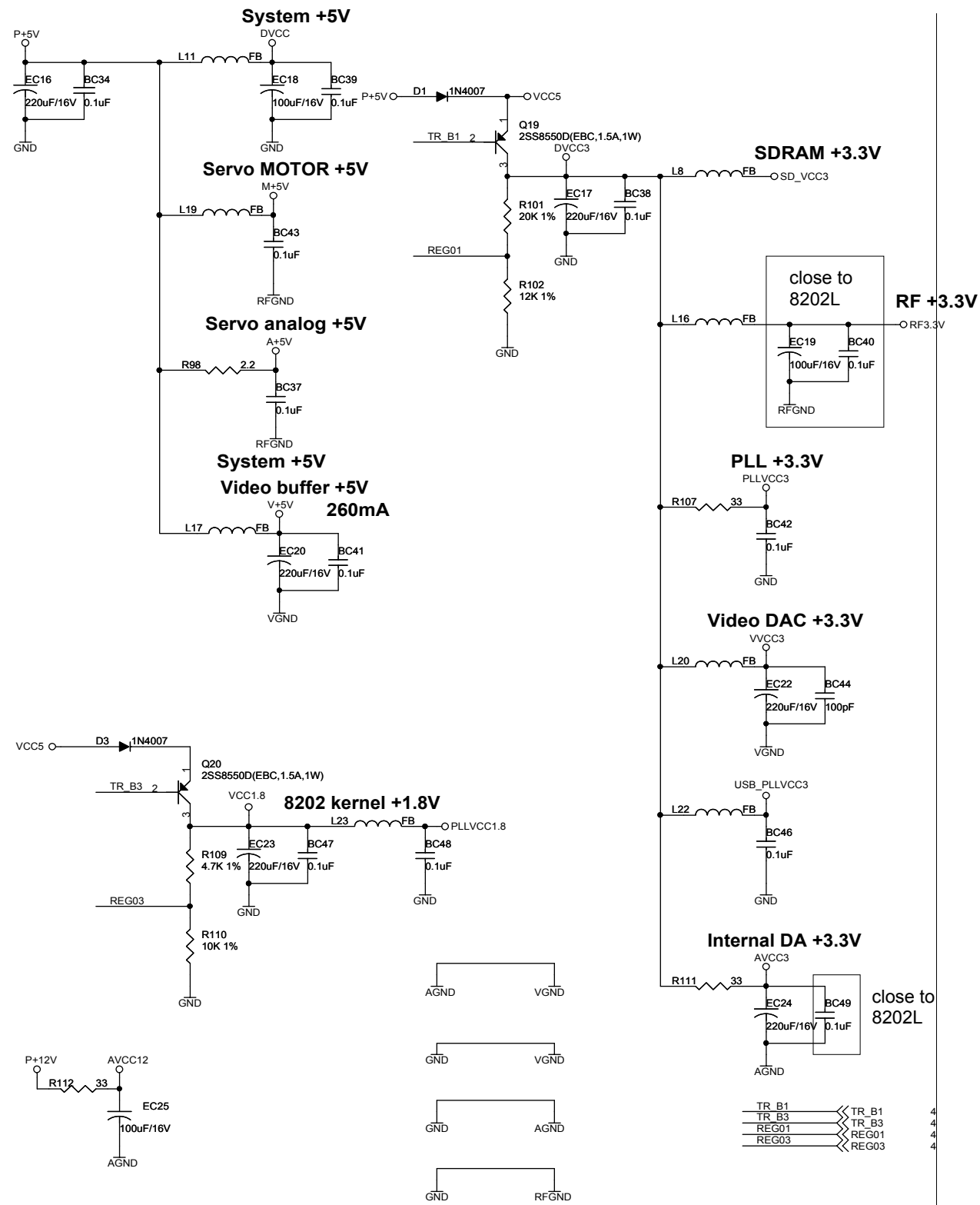




LAYOUT DIAGRAM - AUDIO BOARD

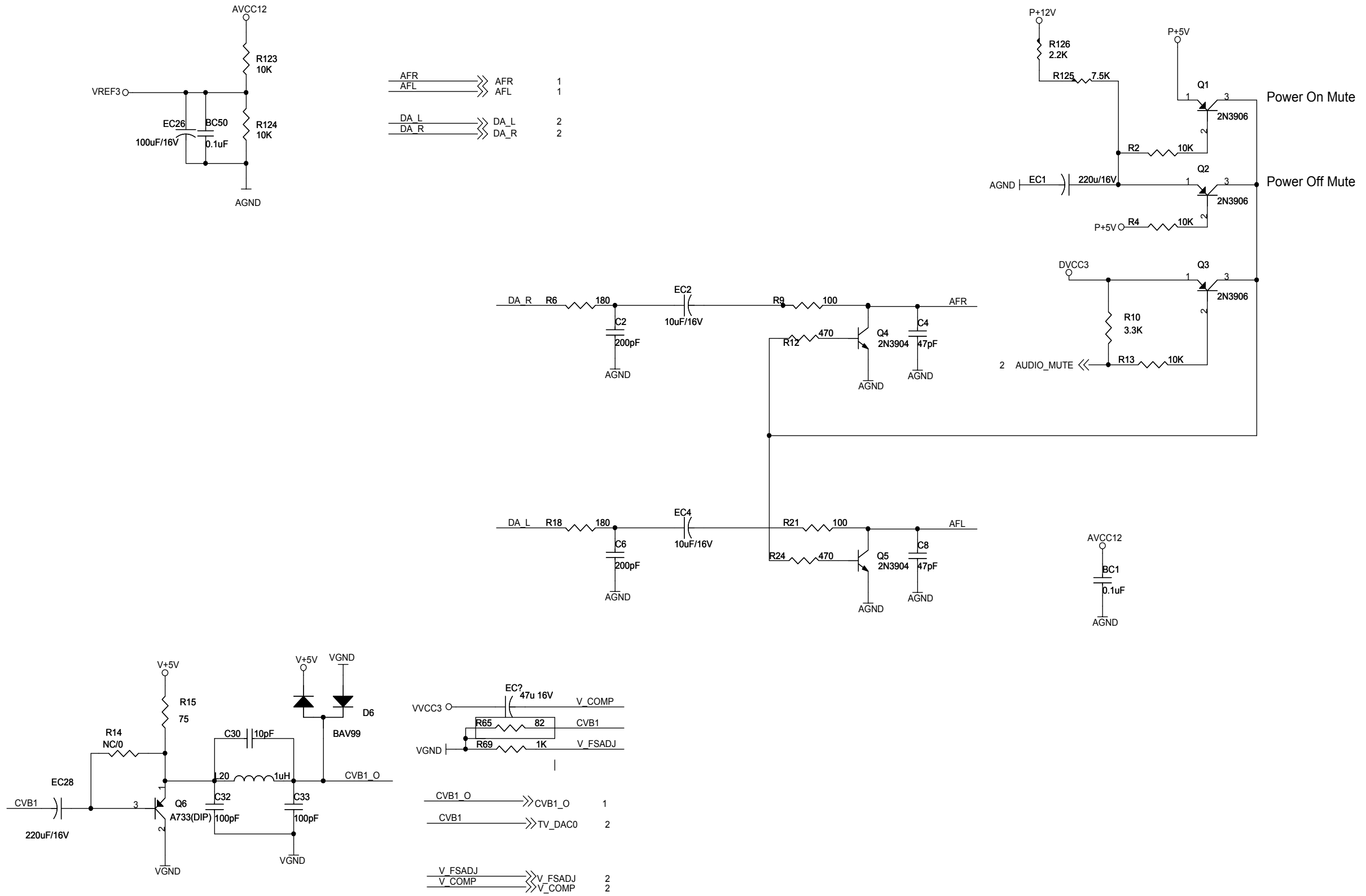


CIRCUIT DIAGARM - AUDIO BOARD (NEW)  
PART 1



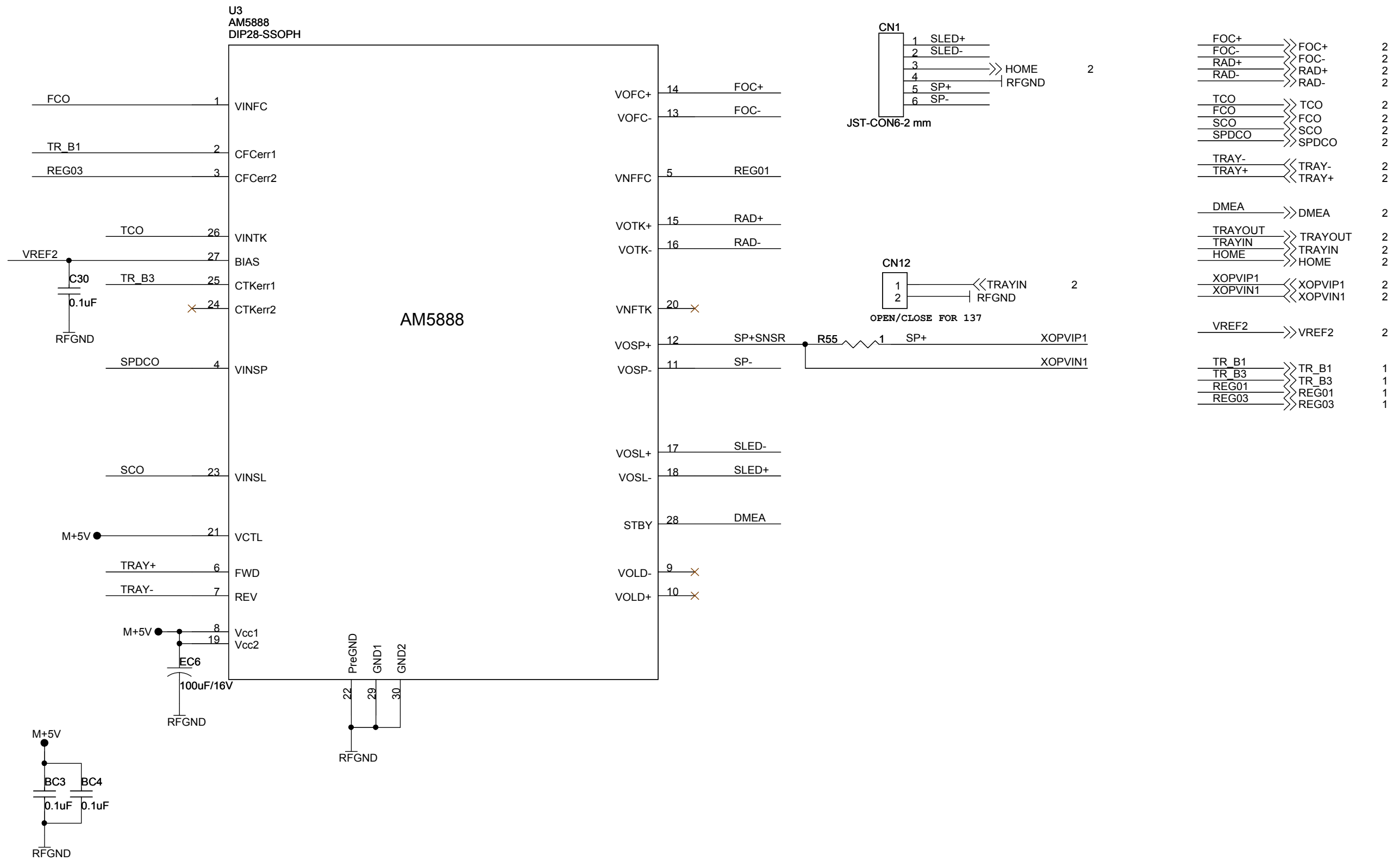
Power Bead > 2A, RAC@100 MHz  
= 70 ohm, RDC(max)= 0.4 ohm

CIRCUIT DIAGRAM - AUDIO BOARD (NEW)  
PART 2

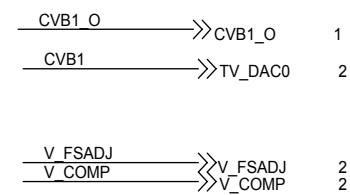
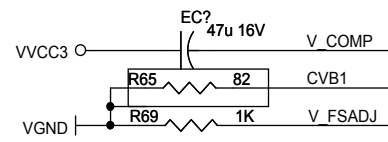
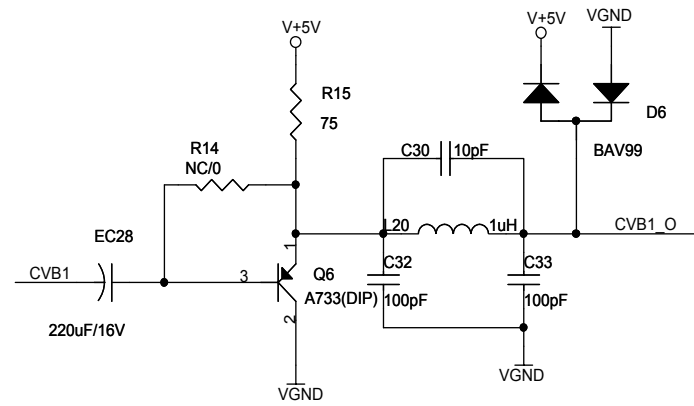
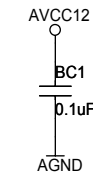
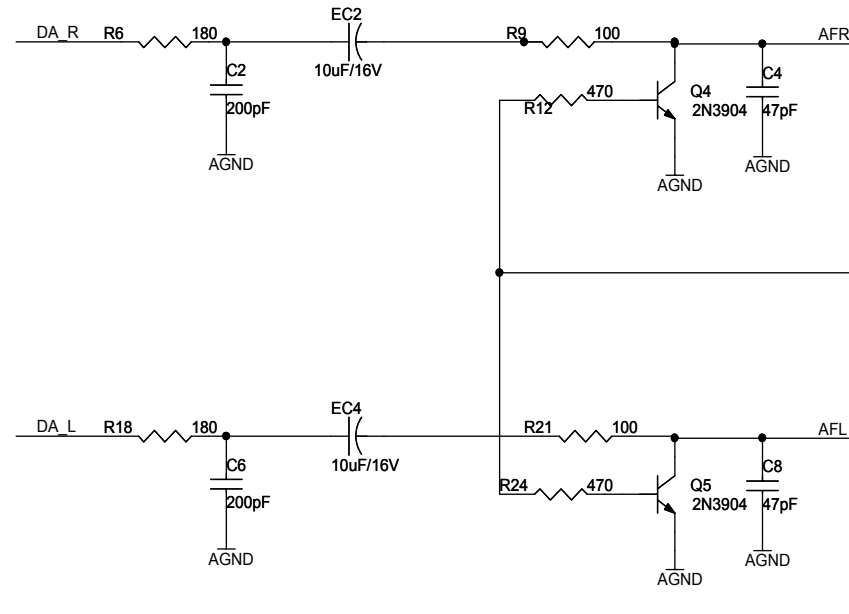
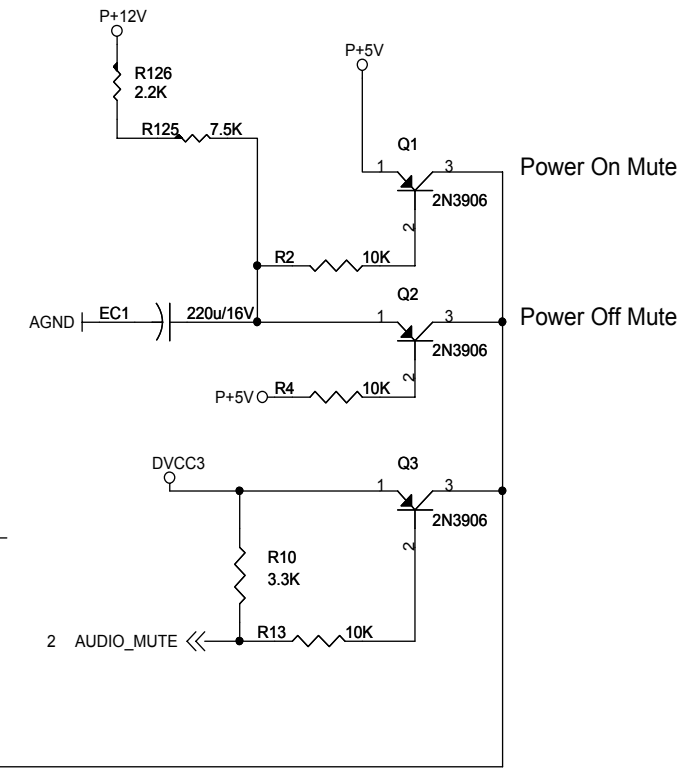
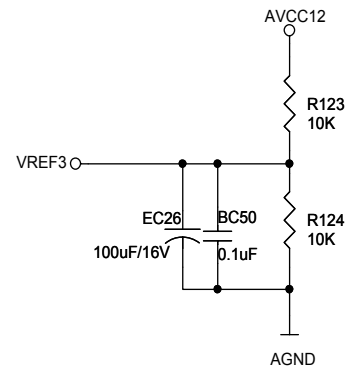




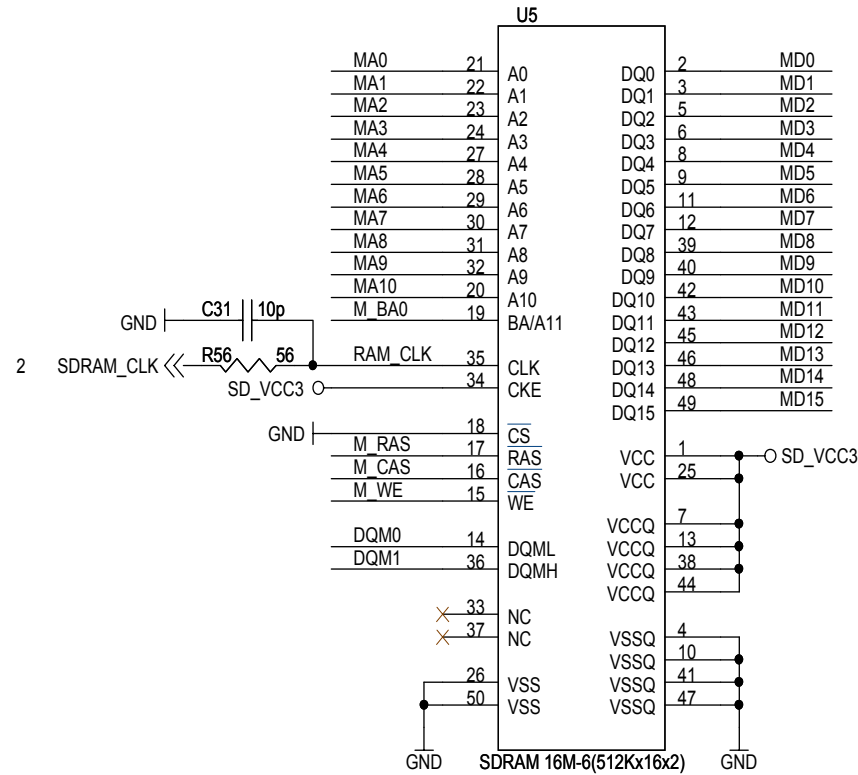
**CIRCUIT DIAGARM - AUDIO BOARD (NEW)  
PART 3**



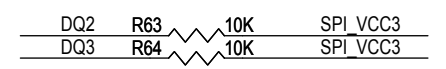
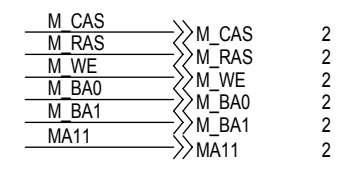
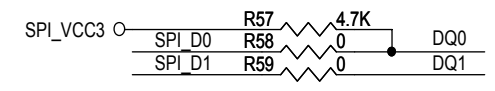
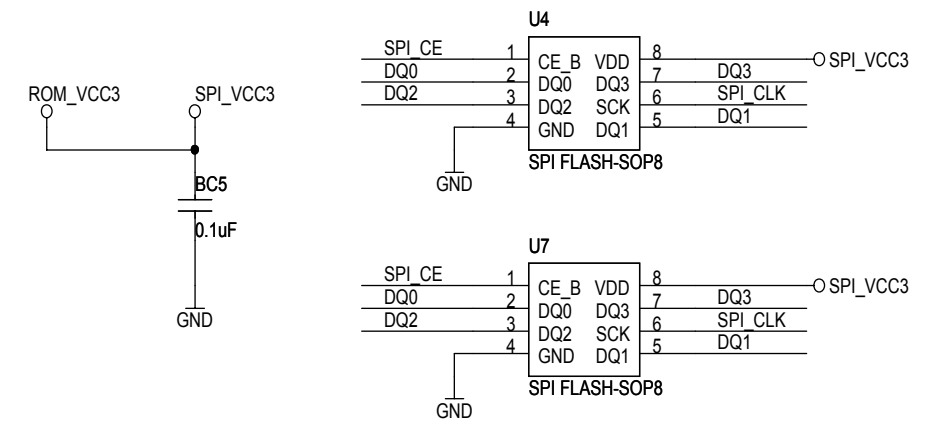
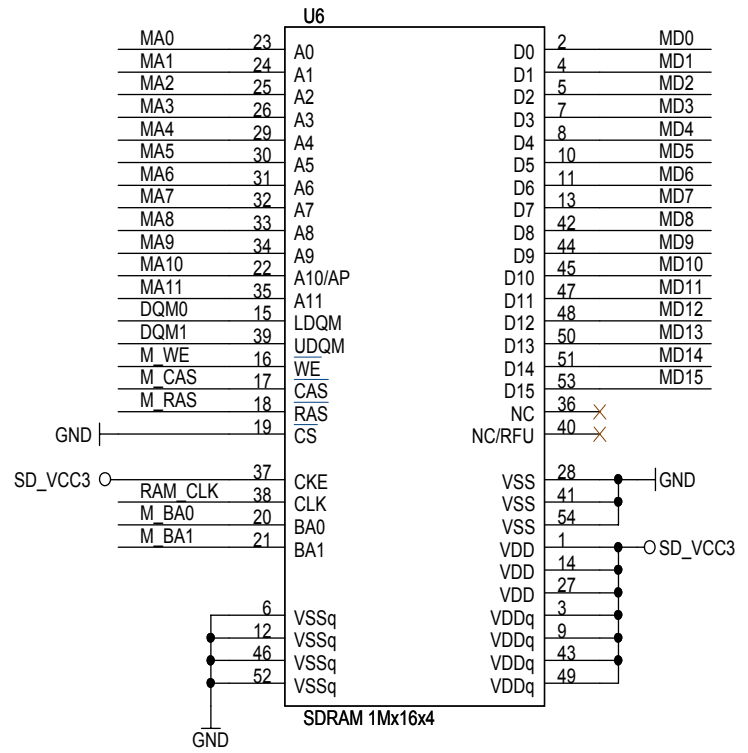
**CIRCUIT DIAGARM - AUDIO BOARD (NEW)  
PART 4**



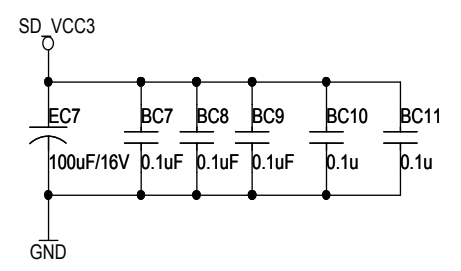
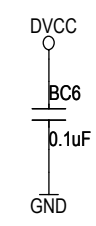
**CIRCUIT DIAGARM - AUDIO BOARD (NEW)  
PART 5**



**Option**

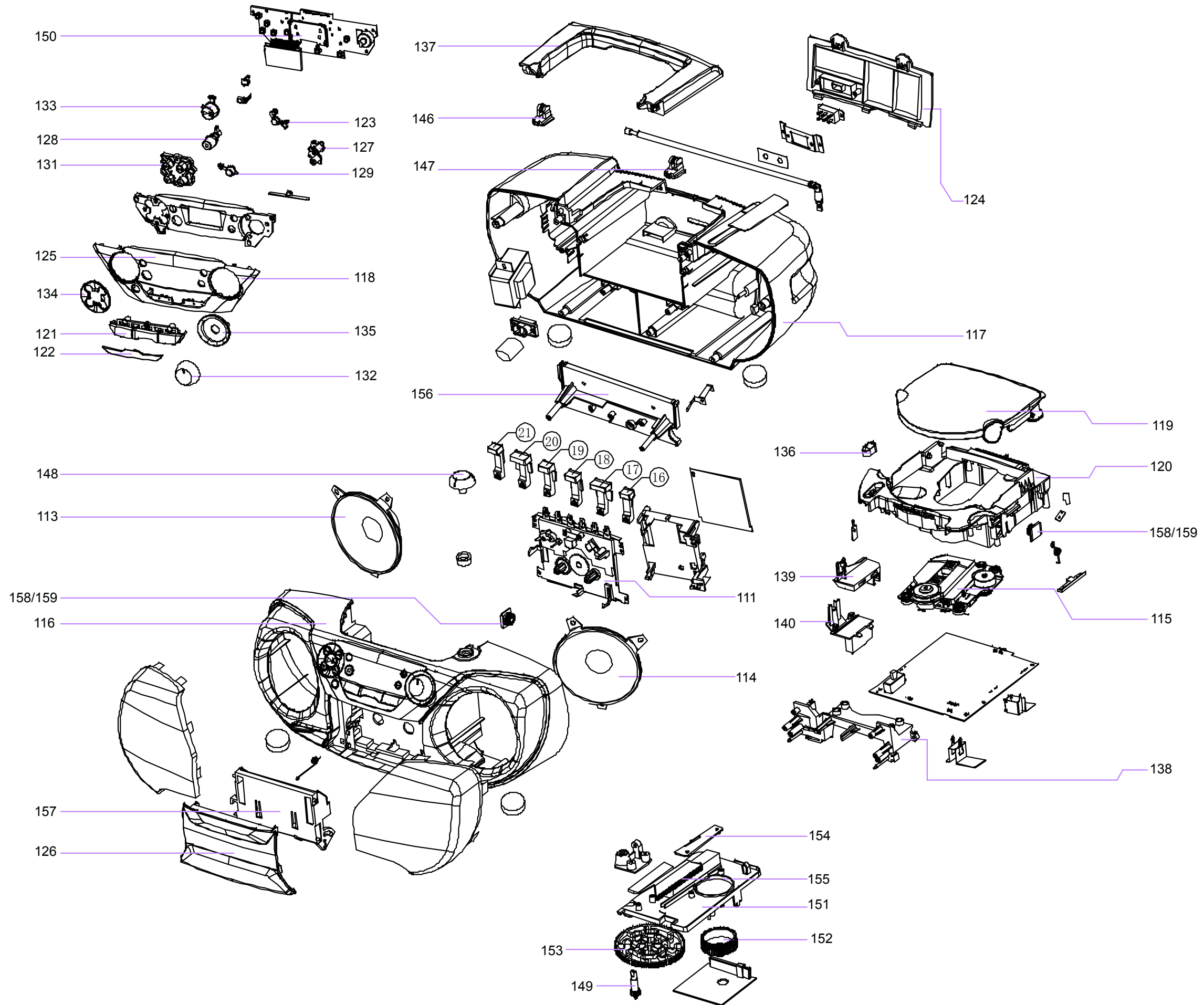


**For SPI Flash Option**





EXPLODED VIEW DIAGRAM



**MECHANICAL PARTSLIST**

111	996510008806	CASS DECK P21VB-A83-2L1F4 AUTO
113	996510008807	SPEAKER
114	996510008808	SPEAKER
115	996510017618	DVD DECK SM-D203 (SANYO850)
116	996510008810	front cab
117	996510008811	REAR COVER
118	996510008812	front panel
119	996510008813	DVD door
120	996510008814	DVD TRAY
121	996510008815	Mode button set
122	996510008817	mini panel
123	996510008818	ir lens
124	996510008819	battery COVER
125	996510008820	display lens
126	996510008821	cass door
127	996510008822	zoom keyset
128	996510008823	Stop key
129	996510008824	key prog
131	996510008825	4 button set
132	996510008826	Volume knob
133	996510008827	cass knob ( play )
134	996510008837	button set ring
135	996510008828	ring volume
136	996510008829	selector knob
137	996510008830	handle
138	996510008831	front bkt
139	996510008832	selector knob bkt
140	996510008833	selector adaptor
141	996510008834	cass knob ( recor )
142	996510008835	cass knob ( rewind )
143	996510008836	cass knob ( f . fwd )
144	996510008838	cass knob ( stop/eject )
145	996510008839	cass knob ( pause )
146	996510008840	handle hinge adaptor ( l )
147	996510008841	handle hinge adaptor ( r )
148	996510008842	tuing knob
149	996510008843	GEAR TUNING KNOB
150	996510008844	LCD BKT
151	996510008845	tuning bkt
152	996510008846	gear pvc
153	996510008847	gear big
154	996510008848	pointer holder
155	996510008849	pointer
156	996510008850	CASS basket
157	996510008851	cass door basket
158	996510008078	CD DOOR GEAR HOLDER
159	996510008079	CD DOOR GEAR
PCBA5	996510032165	Audio BOARD ASSY -/93 NEW (For set produced with serial number GC010902005264 and afterwards)
PCBA5	996510032166	Audio BOARD ASSY -/98 NEW (For set produced with serial number GC010910047068 and afterwards)

**ACCESSORIES**

AC	996510009100	AUDIO CABLE 2P BLACK 2M
RC	996510009101	REMOTE CONTROL
VC	△ 996510009099	VIDEO CABLE 1P YELLOW
112	! 996510008129	POWER CORD SET (BLACK) VDE -/98

**ELETRICAL PARTSLIST****- TUNER BOARD -**

BPF101	996510008100	BAND PASS FILTER GFMB3 75OHM
CF102	996510008794	CERAMIC FILTER 10.7 MA5-A 3PIN
CF103	994000005015	CER. FILTER 10.7 MCI-A 2P
IC101	996510008101	I.C. TOSHIBA TA2111
L102	996510008107	FM COIL 3.5T 4.5 x 0.7 mm
L103	996510008796	FM COIL 3.5T 3.9 x 0.6 mm
PVC101	996510008795	P.V.C AM/FM (DF-443DF02-A04)

**- AUDIO BOARD -**

DSWITH	996510008121	MICRO SWITCH DS-21
FFCC	996510008802	FFC CABLE 24P"B" 0.5mm 90mm
IC301	996510008102	I.C. SANYO LA-4227
IC402	996510008113	SMT I.C APL1117/3.3V
IC403	996510008119	I.C. KA-7808
Q301	996510008098	TRANSISTOR 2SD-1936-S-AC (SANY
Q302	996510008098	TRANSISTOR 2SD-1936-S-AC (SANY
Q305	996510008798	SMT TRANSISTOR 2N3906
Q306	996510008797	SMT TRANSISTOR 9014C
SW2	996510008799	SLIDE SW. SS63D01G9
TFUSE	△ 996510008801	GLASS TUBE FUSE 2A 250V 5T
U1	996510008124	SMT I.C AMS1117/(SMT-223) 1.8V
U3	996510008926	SMT I.C. SPHE8202D
U4	996510008927	SMT IC MBM29LV800BA-PIN
U5	996510008921	SMT I.C AT24C02
U6	996510008925	SMT I.C IS42S16400B-7TL
U7	996510008924	SMT I.C SA5888
U8	996510008923	SMT I.C BA4558F
U9	996510008922	SMT I.C ACT4060
XT1	996510008800	CRYSTAL 27 MHz

**- CONTROL BOARD -**

IC701	996510008928	SMT I.C GT1128
LCD701	996510008803	LCD DISPLAY
SW701	996510008114	TACT SWITCH 2P
SW702	996510008114	TACT SWITCH 2P
SW703	996510008114	TACT SWITCH 2P
SW704	996510008114	TACT SWITCH 2P
SW705	996510008114	TACT SWITCH 2P
SW706	996510008114	TACT SWITCH 2P
SW707	996510008114	TACT SWITCH 2P
VR701	996510008804	VOLUME SWITCH

**- RECORDING BOARD -**

IC201	994000005043	I.C. BA-3308 P/R HWCAT
SW201	996510008805	RECORDING SW.PS-62D01-S
T801	994000005042	I.F.T. AC BIAS 3630 BLACK

**Note: Only these parts mentioned in the list are normal service parts.**

## REVISION LIST

**Version 1.0 (3141 785 32190)**

\* Initial Release

**Version 1.1 (3141 785 32191)**

\* Page 8-1 : CDM 12NC is changed

**Version 1.2 (3141 785 32192)**

\* Page 6-3 : Update audio board layout diagram

**Version 1.3 (3141 785 32193)**

\* Page 6-4 to Page6-9 : Add circuit diagram and layout diagram for new Audio board  
(/98 For set produced with serial number GC010910047068 and afterwards  
/93 For set produced with serial number GC010902005264 and afterwards)