



SERVICE MANUAL

SERVICE MANUAL

MODEL :T585

SERVICE MANUAL

T585

DIGITAL DISC PLAYER

DIGITAL DISC PLAYER

T585



T585

DIGITAL DISC PLAYER

© NAD 2006

NAD ELECTRONICS INTERNATIONAL
TORONTO

CONTENTS

SECTION 1SUMMARY

SECTION 2CABINET & MAIN CHASSIS

SECTION 3ELECTRICAL

SECTION 4MECHANISM

SECTION 5REPLACEMENT PARTS LIST

SECTION 1

SUMMARY

CONTENTS

PRODUCT SAFETY SERVICING GUIDELINES FOR VIDEO PRODUCTS	1-3
SERVICING PRECAUTIONS	1-4
• General Servicing Precautions	
• Insulation Checking Prodedure	
• Electrostatically Sensitive Devices	
SPECIFICATIONS	1-5

PRODUCT SAFETY SERVICING GUIDELINES FOR VIDEO PRODUCTS

CAUTION : DO NOT ATTEMPT TO MODIFY THIS PRODUCT IN ANY WAY. NEVER PERFORM CUSTOMIZED INSTALLATIONS WITHOUT MANUFACTURER'S APPROVAL. UNAUTHORIZED MODIFICATIONS WILL NOT ONLY VOID THE WARRANTY, BUT MAY LEAD TO YOUR BEING LIABLE FOR ANY RESULTING PROPERTY DAMAGE OR USER INJURY.

SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE, INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER.

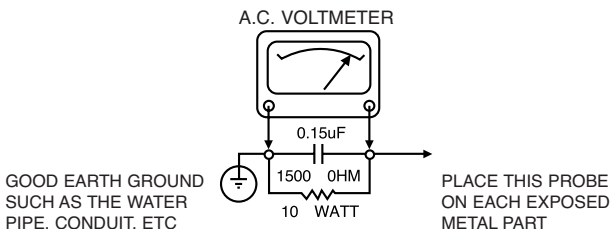
WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM A.C. LINE SHOCK.

SAFETY CHECKS

AFTER THE ORIGINAL SERVICE PROBLEM HAS BEEN CORRECTED, A CHECK SHOULD BE MADE OF THE FOLLOWING.

SUBJECT : FIRE & SHOCK HAZARD

1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WHICH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.
2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, COVERS, SHIELDS, STRAIN RELIEFS, POWER SUPPLY CORDS, AND OTHER HARDWARE HAVE BEEN REINSTALLED PER ORIGINAL DESIGN. BE SURE THAT THE SAFETY PURPOSE OF THE POLARIZED LINE PLUG HAS NOT BEEN DEFEATED.
3. SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OR SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.
4. CHECK FOR PHYSICAL EVIDENCE OF DAMAGE OR DETERIORATION TO PARTS AND COMPONENTS. FOR FRAYED LEADS, DAMAGED INSULATION (INCLUDING A.C. CORD), AND REPLACE IF NECESSARY FOLLOW ORIGINAL LAYOUT, LEAD LENGTH AND DRESS.
5. NO LEAD OR COMPONENT SHOULD TOUCH A RECEIVING TUBE OR A RESISTOR RATED AT 1 WATT OR MORE. LEAD TENSION AROUND PROTRUDING METAL SURFACES MUST BE AVOIDED.
6. ALL CRITICAL COMPONENTS SUCH AS FUSES, FLAMEPROOF RESISTORS, CAPACITORS, ETC. MUST BE REPLACED WITH EXACT FACTORY TYPES. DO NOT USE REPLACEMENT COMPONENTS OTHER THAN THOSE SPECIFIED OR MAKE UNRECOMMENDED CIRCUIT MODIFICATIONS.
7. AFTER RE-ASSEMBLY OF THE SET ALWAYS PERFORM AN A.C. LEAKAGE TEST ON ALL EXPOSED METALLIC PARTS OF THE CABINET, (THE CHANNEL SELECTOR KNOB, ANTENNA TERMINALS. HANDLE AND SCREWS) TO BE SURE THE SET IS SAFE TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN A.C. VOLT-METER, HAVING 5000 OHMS PER VOLT OR MORE SENSITIVITY, IN THE FOLLOWING MANNER; CONNECT A 1500 OHM 10 WATT RESISTOR, PARALLELED BY A .15 MFD. 150.V A.C TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME. MEASURE THE A.C. VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND .15 MFD CAPACITOR. REVERSE THE A.C. PLUG AND REPEAT A.C. VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART. VOLTAGE MEASURED MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMPS A.C ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.



SUBJECT: GRAPHIC SYMBOLS



THE LIGHTNING FLASH WITH APOWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.



THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

SUBJECT : X-RADIATION

1. BE SURE PROCEDURES AND INSTRUCTIONS TO ALL SERVICE PERSONNEL COVER THE SUBJECT OF X-RADIATION. THE ONLY POTENTIAL SOURCE OF X-RAYS IN CURRENT T.V. RECEIVERS IS THE PICTURE TUBE. HOWEVER, THIS TUBE DOES NOT EMIT X-RAYS WHEN THE HIGH VOLTAGE IS AT THE FACTORY SPECIFIED LEVEL. THE PROPER VALUE IS GIVEN IN THE APPLICABLE SCHEMATIC. OPERATION AT HIGHER VOLTAGES MAY CAUSE A FAILURE OF THE PICTURE TUBE OR HIGH VOLTAGE SUPPLY AND, UNDER CERTAIN CIRCUMSTANCES, MAY PRODUCE RADIATION IN EXCESS OF DESIRABLE LEVELS.
2. ONLY FACTORY SPECIFIED C.R.T. ANODE CONNECTORS MUST BE USED. DEGAUSSING SHIELDS ALSO SERVE AS X-RAY SHIELD IN COLOR SETS, ALWAYS RE-INSTALL THEM.
3. IT IS ESSENTIAL THAT SERVICE PERSONNEL HAVE AVAILABLE AN ACCURATE AND RELIABLE HIGH VOLTAGE METER. THE CALIBRATION OF THE METER SHOULD BE CHECKED PERIODICALLY AGAINST A REFERENCE STANDARD, SUCH AS THE ONE AVAILABLE AT YOUR DISTRIBUTOR.
4. WHEN THE HIGH VOLTAGE CIRCUITRY IS OPERATING PROPERLY THERE IS NO POSSIBILITY OF AN X-RADIATION PROBLEM. EVERY TIME A COLOR CHASSIS IS SERVICED, THE BRIGHTNESS SHOULD BE RUN UP AND DOWN WHILE MONITORING THE HIGH VOLTAGE WITH A METER TO BE CERTAIN THAT THE HIGH VOLTAGE DOES NOT EXCEED THE SPECIFIED VALUE AND THAT IT IS REGULATING CORRECTLY. WE SUGGEST THAT YOU AND YOUR SERVICE ORGANIZATION REVIEW TEST PROCEDURES SO THAT VOLTAGE REGULATION IS ALWAYS CHECKED AS A STANDARD SERVICING PROCEDURE. AND THAT THE HIGH VOLTAGE READING BE RECORDER ON EACH CUSTOMER'S INVOICE.
5. WHEN TROUBLESHOOTING AND MAKING TEST MEASUREMENTS IN A PRODUCT WITH A PROBLEM OF EXCESSIVE HIGH VOLTAGE, AVOID BEING UNNECESSARILY CLOSE TO THE PICTURE TUBE AND THE HIGH VOLTAGE SUPPLY. DO NOT OPERATE THE PRODUCT LONGER THAN IS NECESSARY TO LOCATE THE CAUSE OF EXCESSIVE VOLTAGE.
6. REFER TO HV. B+ AND SHUTDOWN ADJUSTMENT PROCEDURES DESCRIBED IN THE APPROPRIATE SCHEMATIC AND DIAGRAMS (WHERE USED).

SUBJECT: IMPLSION

1. ALL DIRECT VIEWED PICTURE TUBES ARE EQUIPPED WITH AN INTEGRAL IMPLSION PROTECTION SYSTEM, BUT CARE SHOULD BE TAKEN TO AVOID DAMAGE DURING INSTALLATION, AVOID SCRATCHING THE TUBE. IF SCRATCHED REPLACE IT.
2. USE ONLY RECOMMENDED FACTORY REPLACEMENT TUBES.

SUBJECT : TIPS ON PROPER INSTALLATION

1. NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS, CUBBY-HOLE OR CLOSELY FITTING SHELF SPACE. OVER OR CLOSE TO HEAT DUCT, OR IN THE PATH OF HEATED AIR FLOW.
2. AVOID CONDITIONS OF HIGH HUMIDITY SUCH AS: OUTDOOR PATIO INSTALLATIONS WHERE DEW IS A FACTOR, NEAR STEAM RADIATORS WHERE STEAM LEAKAGE IS A FACTOR, ETC.
3. AVOID PALCEMENT WHERE DRAPERIES MAY OBSTRUCT REAR VENTING. THE CUSTOMER SHOULD ALSO AVOID THE USE OF DECORATIVE SCARVES OR OTHER COVERINGS WHICH MIGHT OBSTRUCT VENTILATION.
4. WALL AND SHELF MOUNTED INSTALLATIONS USING A COMMERCIAL MOUNTING KIT. MUST FOLLOW THE FACTORY APPROVED MOUNTING INSTRUCTIONS A PRODUCT MOUNTED TO A SHELF OR PLATFORM MUST RETAIN ITS ORIGINAL FEET (OR THE EQUIVALENT THICKNESS IN SPACERS) TO PROVIDE ADEQUATE AIR FLOW ACROSS THE BOTTOM, BOLTS OR SCREWS USED FOR FASTENERS MUST NOT TOUCH ANY PARTS OR WIRING. PERFORM LEAKAGE TEST ON CUSTOMIZED INSTALLATIONS.
5. CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.
6. A PRODUCT ON A ROLL-ABOUT CART SHOULD BE STABLE ON ITS MOUNTING TO THE CART. CAUTION THE CUSTOMER ON THE HAZARDS OF TRYING TO ROLL A CART WITH SMALL CASTERS ACROSS THRESHOLDS OR DEEP PILE CARPETS.
7. CAUTION CUSTOMERS AGAINST THE USE OF A CART OR STAND WHICH HAS NOT BEEN LISTED BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THEIR SPECIFIC MODEL OF TELEVISION RECEIVER OR GENERICALLY APPROVED FOR USE WITH T.V.'S OF THE SAME OR LARGER SCREEN SIZE.
8. CAUTION CUSTOMERS AGAINST THE USE OF EXTENSION CORDS, EXPLAIN THAT A FOREST OF EXTENSIONS SPROUTING FROM A SINGLE OUTLET CAN LEAD TO DISASTROUS CONSEQUENCES TO HOME AND FAMILY.

SERVICING PRECAUTIONS

CAUTION : Before servicing the DVD covered by this service data and its supplements and addends, read and follow the SAFETY PRECAUTIONS. **NOTE :** if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publication, always follow the safety precautions.

Remembers Safety First:

General Servicing Precautions

1. Always unplug the DVD AC power cord from the AC power source before:
 - (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
 - (2) Disconnection or reconnecting any internal electrical plug or other electrical connection.
 - (3) Connecting a test substitute in parallel with an electrolytic capacitor.
Caution : A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
2. Do not spray chemicals on or near this DVD or any of its assemblies.
3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cotton-tipped swab, or comparable soft applicator. Unless specified otherwise in this service data, lubrication of contacts is not required.
4. Do not defeat any plug/socket B+ voltage interlocks with which instruments covered by this service manual might be equipped.
5. Do not apply AC power to this DVD and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
6. Always connect test instrument ground lead to the appropriate ground before connection the test instrument positive lead. Always remove the test instrument ground lead last.

Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an insulation resistance meter(500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1M-ohm.

Note 1 : Accessible Conductive Parts including Metal panels, Input terminals, Earphone jacks, etc.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field effect transistors and semiconductor chip components.

The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified a "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charge sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Normally harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

SPECIFICATIONS

• GENERAL

Power requirements:	AC 100-240 V , 50/60 Hz
Power consumption:	45W
Dimensions (Approx.):	435 x 80 x 286 mm (W x H x D) without foot
Weight (Approx.):	4.5 kg
Operating temperature:	5 °C to 35 °C (41 °F to 95 °F)
Operating humidity:	5 % to 90 %

• OUTPUTS

VIDEO OUT:	1 Vp-p 75 Ω , sync negative, RCA jack x 1/ SCART (TO TV)
AUDIO OUT:	2.0 Vrms (1 KHz, 0 dB), 600 Ω , RCA jack (L, R) x 1/ SCART (TO TV)
DIGITAL OUT (COAXIAL):	0.5 V (p-p), 75 Ω , RCA jack x 1

• System

Laser:	Semiconductor laser, wavelength 650 nm
Signal system:	PAL / NTSC
Frequency response:	DVD (PCM 96 kHz): 8 Hz to 44 kHz DVD (PCM 48 kHz): 8 Hz to 22 kHz CD: 8 Hz to 20 kHz
Signal-to-noise ratio:	More than 100 dB (ANALOG OUT connectors only)
Harmonic distortion:	Less than 0.008%
Dynamic range:	More than 85 dB (DVD/CD)

• Accessories

Video cable (1), Audio cable (1), Remote control (1), Batteries (2)

SECTION 2
CABINET & MAIN CHASSIS

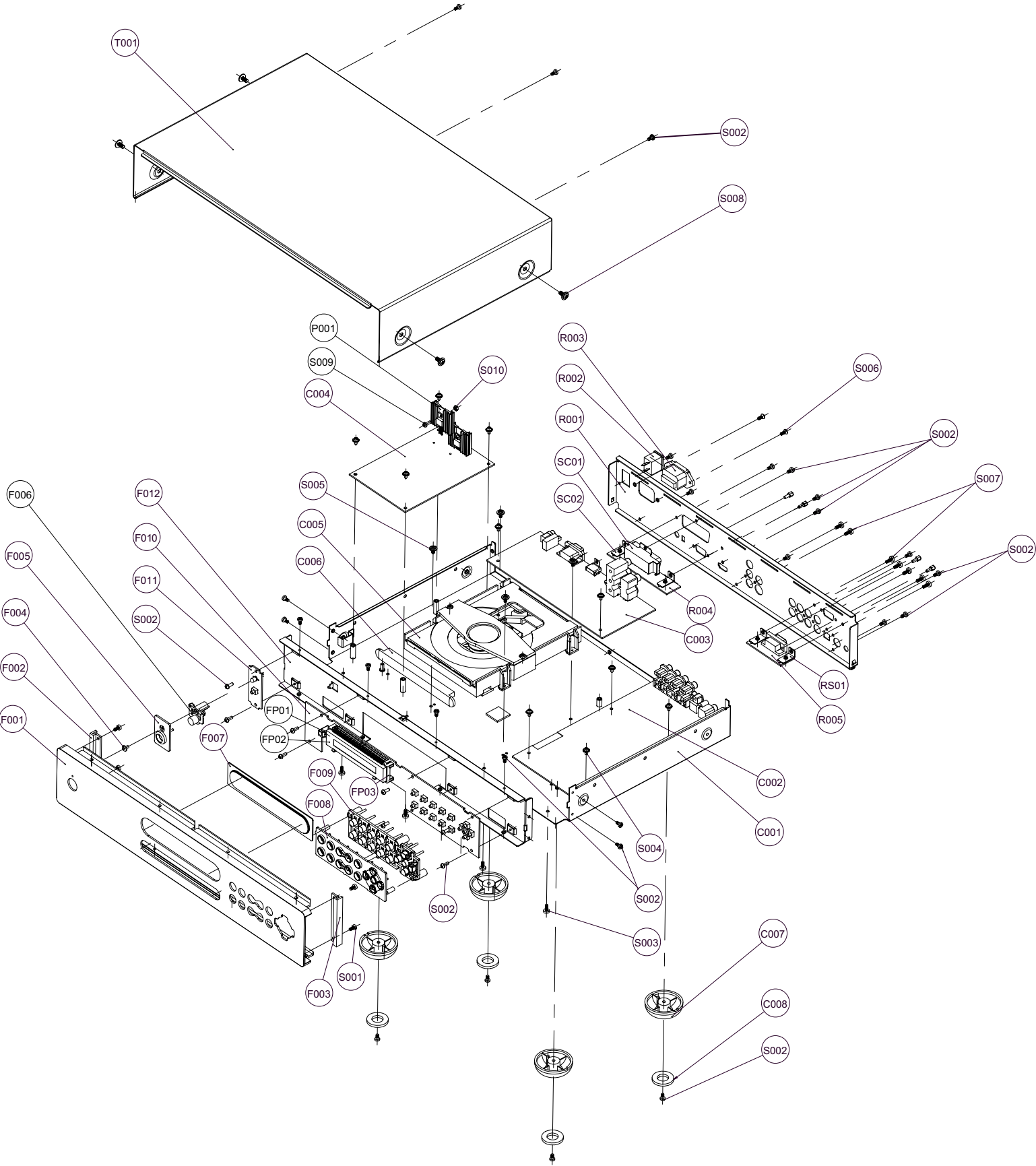
CONTENTS

EXPLODED VIEWS2-2

- 1. Cabinet and Main Frame Section2-2**
- 2. Exploded view parts list.....24**
- 3. Packing accessory section.....2-5**

EXPLODED VIEWS

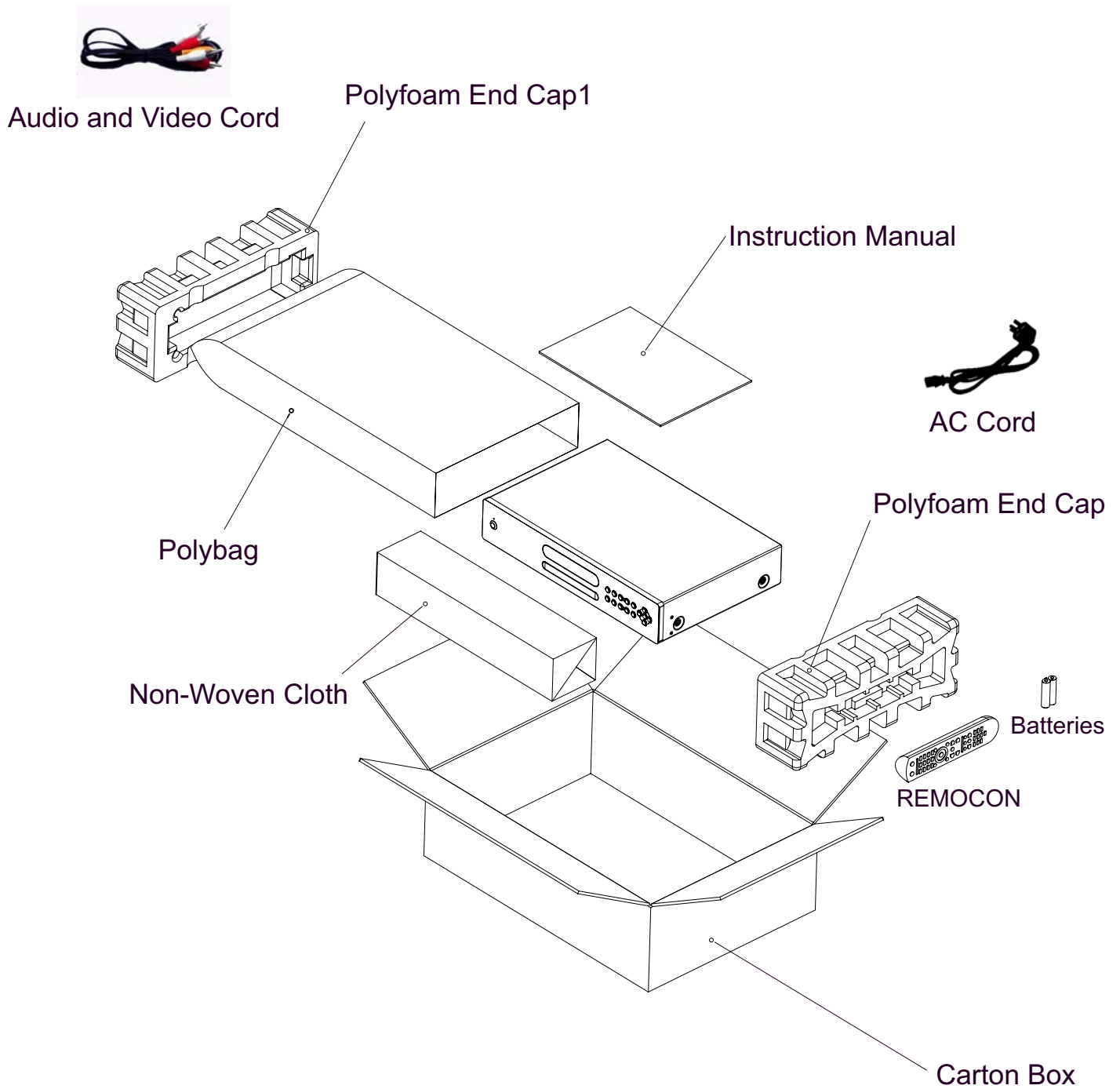
1.Cabinet and main fram section



2.Exploded view parts list

REF.NO.	PART NO.	DESCRIPTION	Qty.	REF.NO.	PART NO.	DESCRIPTION	Qty.
C001	67-042002-1	Chassis	1	P001	70-051005-0	Heatsink	2
C002	01-58501-20	Decode Board(C Version)	1				
	01-58501-10	Decode Board(AH Version)	1				
C003	01-55502-20	Video Board(C Version)	1	FP01	65-051011-0	IR Bracket	1
	01-55502-10	Video Board(AH Version)	1	FP02	23-55559-00	VFD	1
C004	01-55503-00	PSU Board	1	FP03	75-051001-0	Display Bracket	1
C005	36-58513-00	Loader with 313 laser Pick Up	1				
C006	77-042002-0	DVD Door	1				
C007	75-010004-1	Foot	4	S001	61-023206-1	Self Taping Screw (BTB3X6)	4
C008	78-001002-0	Foot Pad	4	S002	61-023106-2	Self Taping Screw (STB3X6)	C:38
					61-023106-2	Self Taping Screw (STB3X6)	AH:33
				S003	61-023108-0	Self Taping Screw (STB3X6)	4
F001	67-042001-0	Fascia	1	S004	61-373506-0	Machine Screw (MB3X6W.S-Ni)	10
F002	67-042002-0	End Cap L	1	S005	61-083106-0	Self Taping Screw (STPW3X6)	4
F003	67-042003-0	End Cap R	1	S006	61-073108-0	Self Taping Screw (STO3X8)	2
F004	76-003001-0	Led Lens	1	S007	61-023208-0	Self Taping Screw (BTB3X8)	7
F005	77-026002-0	Power Button Bezel	1	S008	61-084108-0	Self Taping Screw (STPW4X8)	4
F006	77-026001-0	Power Button	1	S009	61-023508-0	Machine Screw (MB3X8)	2
F007	76-009001-0	VFD Window	1	S010	62-010302-2	Nut(M3)	2
F008	74-042001-0	Button Bezel	1				
F009	77-042001-0	Button	1				
F010	01-58504-00	FPP	1				
F011	01-58507-00	Led Board	1				
F012	66-042001-0	Subfascia	1				
R001	67-042004-0	Rear Panel (C Version)	1				
	67-042005-0	Rear Panel (AH Version)	1				
R002	11-01101-03	Rocker Switch	1				
R003	17-07002-02	AC Inlet	1				
R004	01-55506-20	Scart Board(C Version)	1				
R005	01-55505-00	RS232 Board	1				
T001	67-042016-0	Top Cover (titanium)	1				
	67-042006-0	Top Cover (grey)					
RS01	66-010010-0	Bracket	2				
SC01	66-010010-0	Bracket	2				
SC02	66-051003-0	Scart Bracket	1				

3.Packing accessory section



SECTION 3

ELECTRICAL

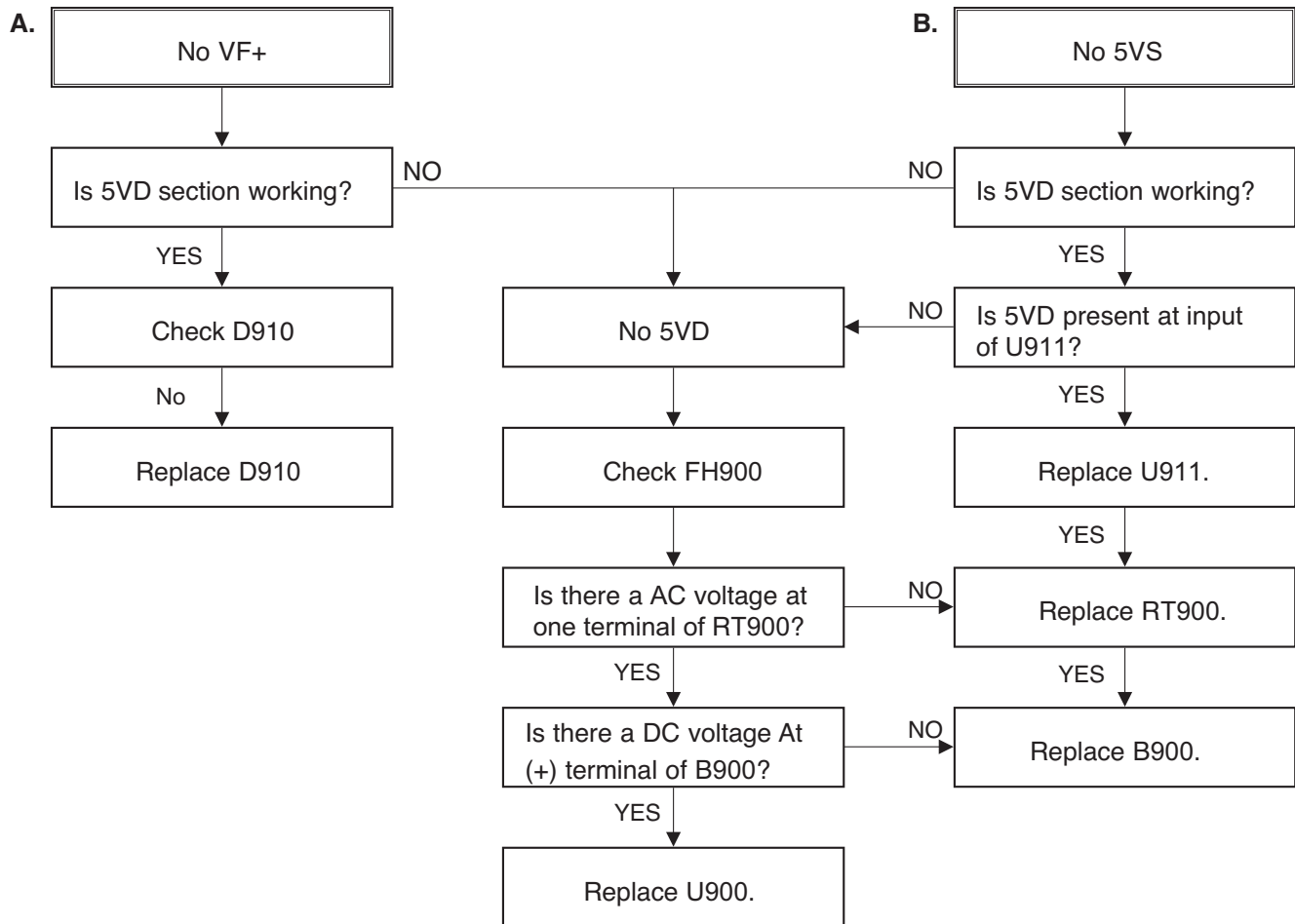
CONTENTS

ELECTRICAL TROUBLESHOOTING GUIDE.....	3-3
1. Power check flow.....	3-3
2. System operation flow.....	3-4
3. Test & debug flow.....	3-5
DETAILS AND WAVEFORMS ON SYSTEM TEST AND DEBUGGING.....	3-11
1. System 27MHz clock,reset,flash R/W signal.....	3-11
2. SDRAM clock.....	3-12
3. TRAY OPEN/CLOSE signal.....	3-12
4. SLED control related signal(NO disc control).....	3-13
5. LENS control related signal(NO disc control).....	3-14
6. FOCUS control related signal(NO disc control).....	3-15
7. SPINDLE control WAVEFORM.....	3-16
8. FOCUS ON WAVEFORM.....	3-17
9. ES6168F Audio optical and coaxialoutput(SPDIF).....	3-18
10. ES6168F Video output to Audio DAC.....	3-18
11. RF WAVEFORM.....	3-20
12. HDMI.....	3-20
13. MT1389 Audio output to Audio DAC.....	3-22
14. Audio output(1KHz odB).....	3-22
BLOCK DIAGRAMS.....	3-23
1. Overall block diagram.....	3-23
2. Power(SMPS) block diagram.....	3-24
3. SERVO block diagram.....	3-25
4. MPEG & MEMORY block diagram.....	3-26
5. Video & Audio block diagram.....	3-27
6. GENESIS.SCART & DVI block diagram.....	3-28
CIRCUIT DIAGRAMS.....	3-29
1. Power(SMPS) circuit diagram.....	3-29
2. SYSTEM circuit diagram.....	3-30
3. DSP circuit diagram.....	3-32
4. H-Power Driver circuit diagram.....	3-34
5. RF circuit diagram.....	3-35
6. DSD circuit diagram.....	3-36
7. Audio circuit diagram.....	3-38
8. Connect circuit diagram.....	3-40
9. Timer circuit diagram.....	3-41
10. RS232 circuit diagram.....	3-42
11. SCART circuit diagram.....	3-43

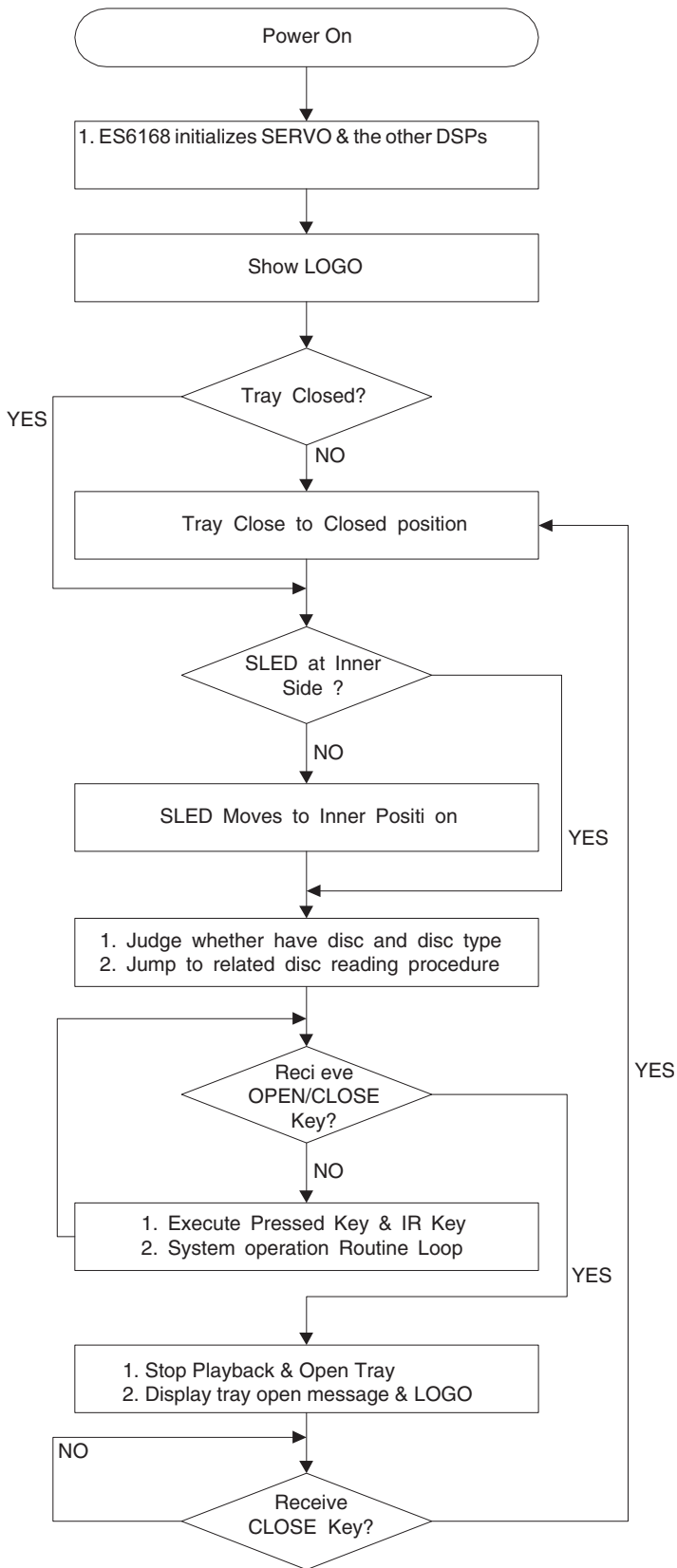
12. FIL2300 circuit diagram.....	3-44
13. K-VIDEO circuit diagram.....	3-46
14. DVI circuit diagram.....	3-48
CIRCUIT VOLTAGE CHARGE.....	3-49
PRINT CIRCUIT BOARD DIAGRAM.....	3-57
1. DECODE P.C.BOARD.....	3-57
2. KEY P.C.BOARD.....	3-59
3. SMPS P.C.BOARD.....	3-61
4. VIDEO P.C.BOARD.....	3-62
5. RS232 P.C.BOARD.....	3-64
6. SCART P.C.BOARD.....	3-65

ELECTRICAL TROUBLESHOOTING GUIDE

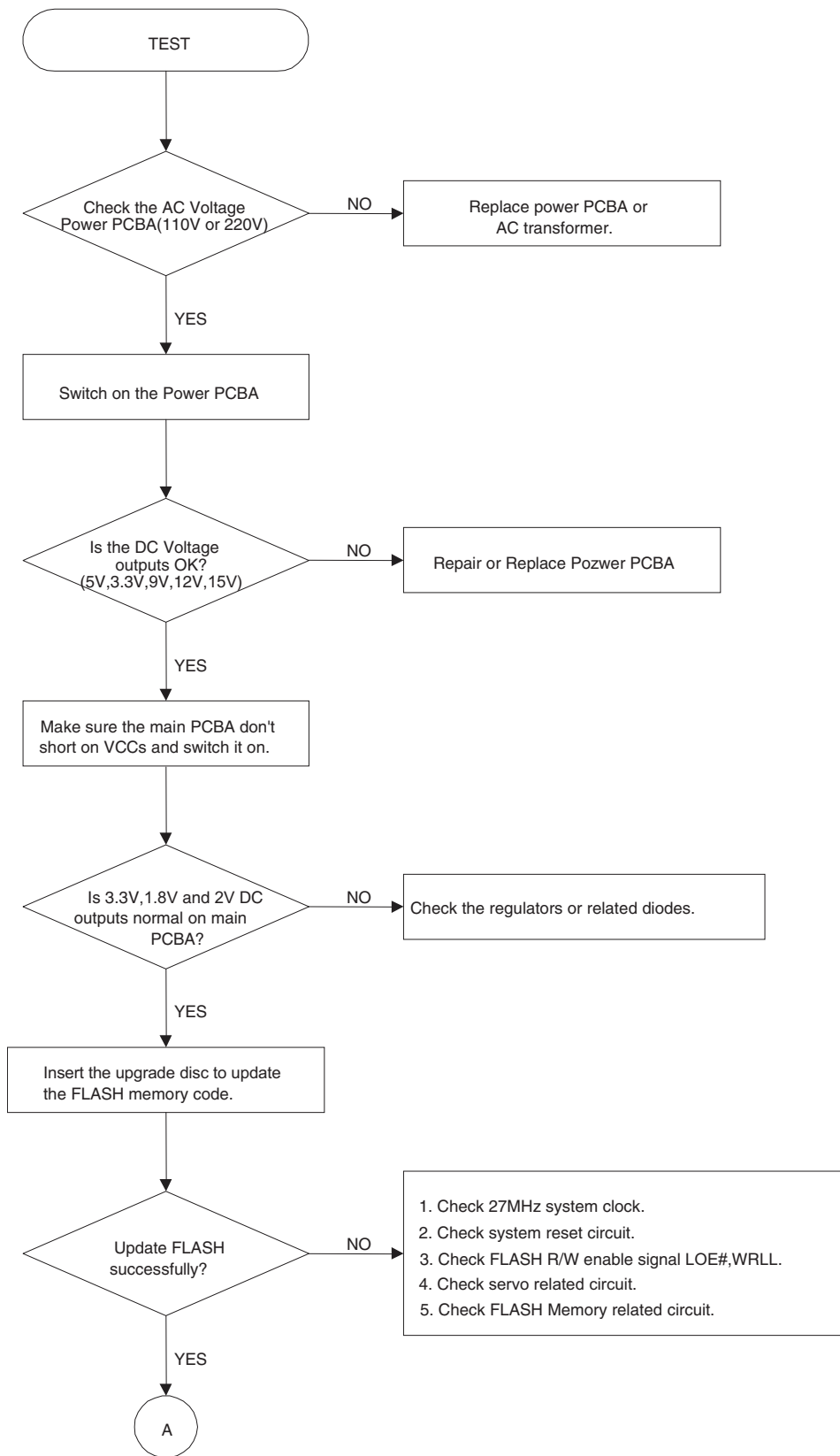
1. Power check flow

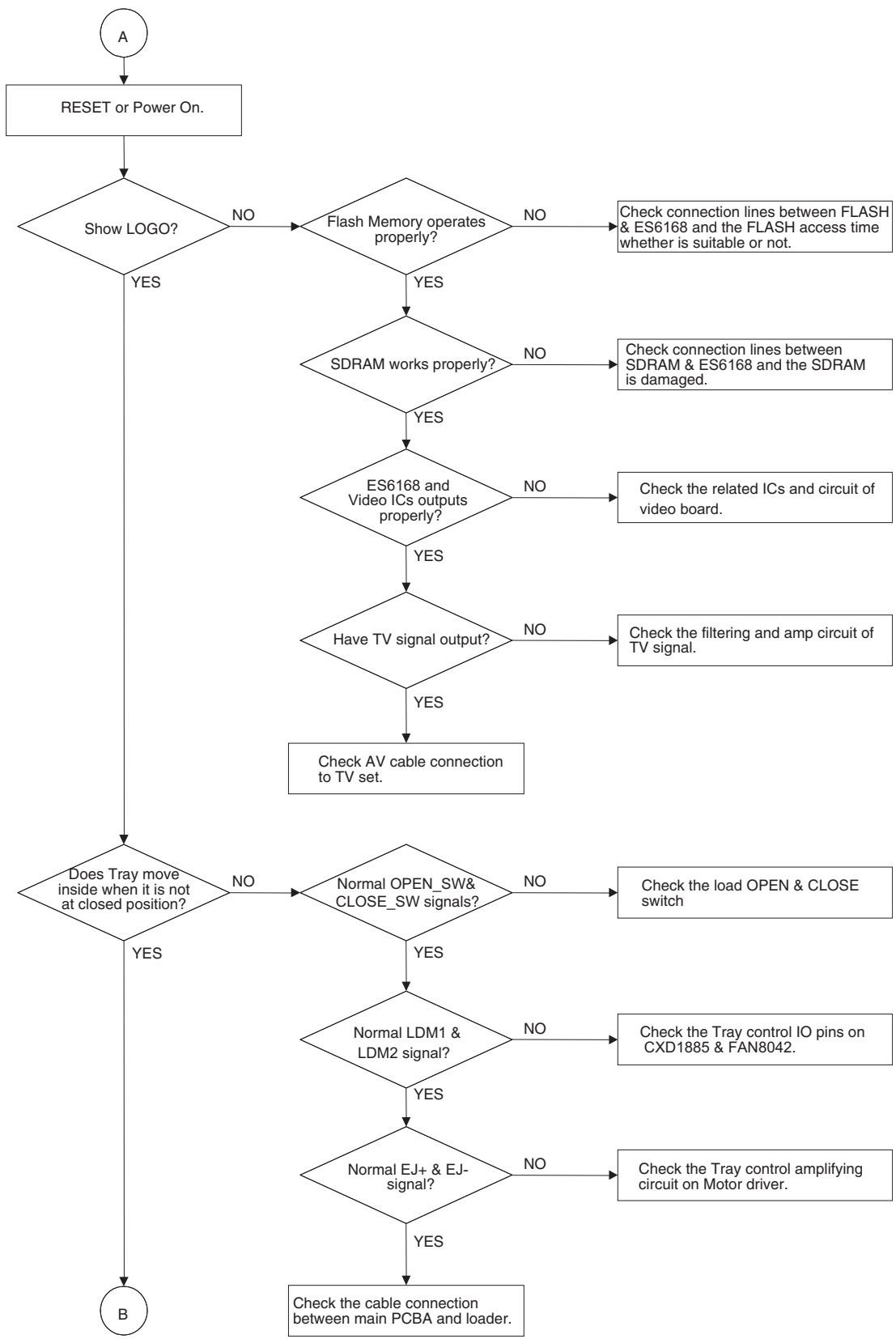


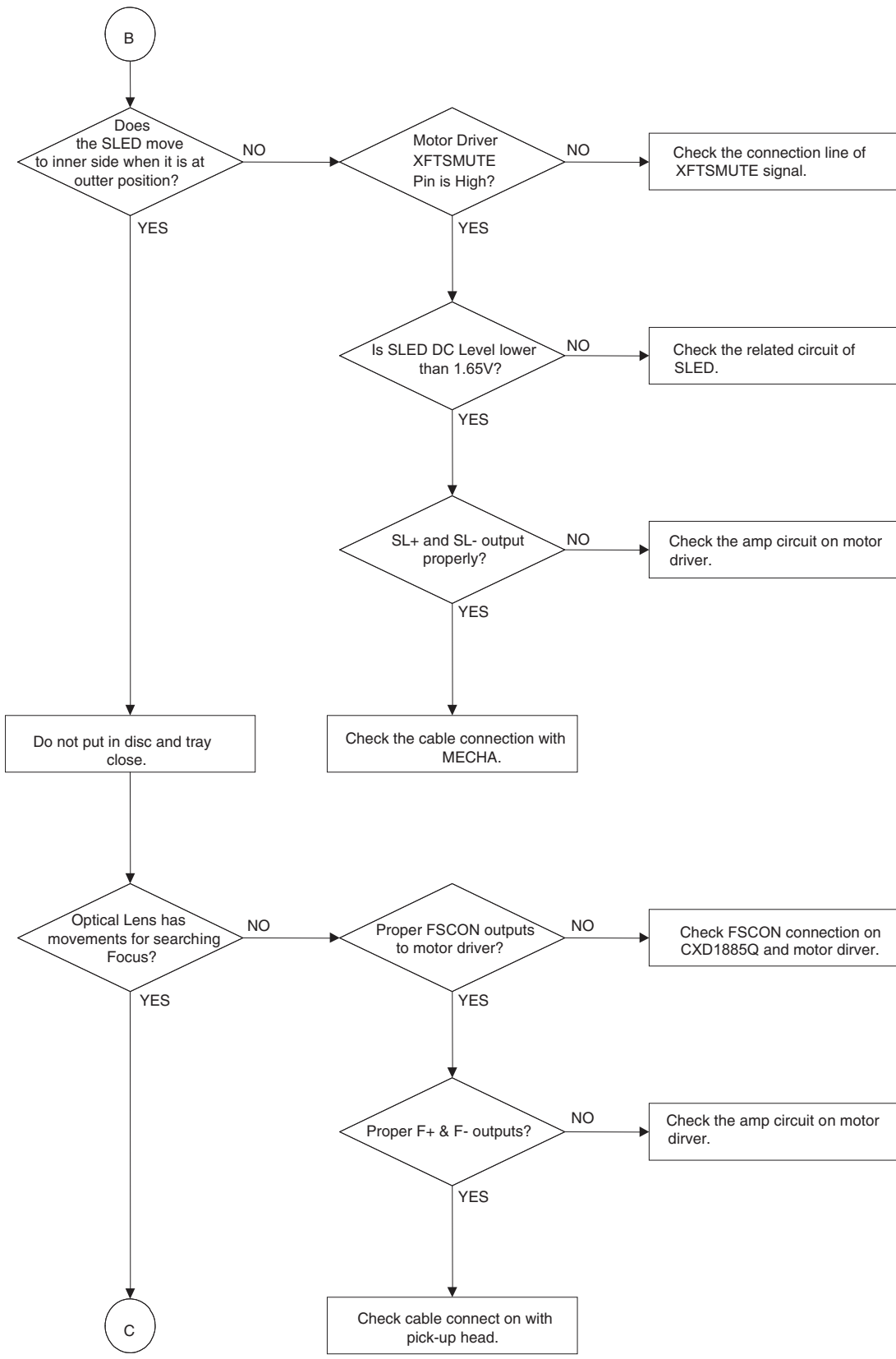
2. System operation flow

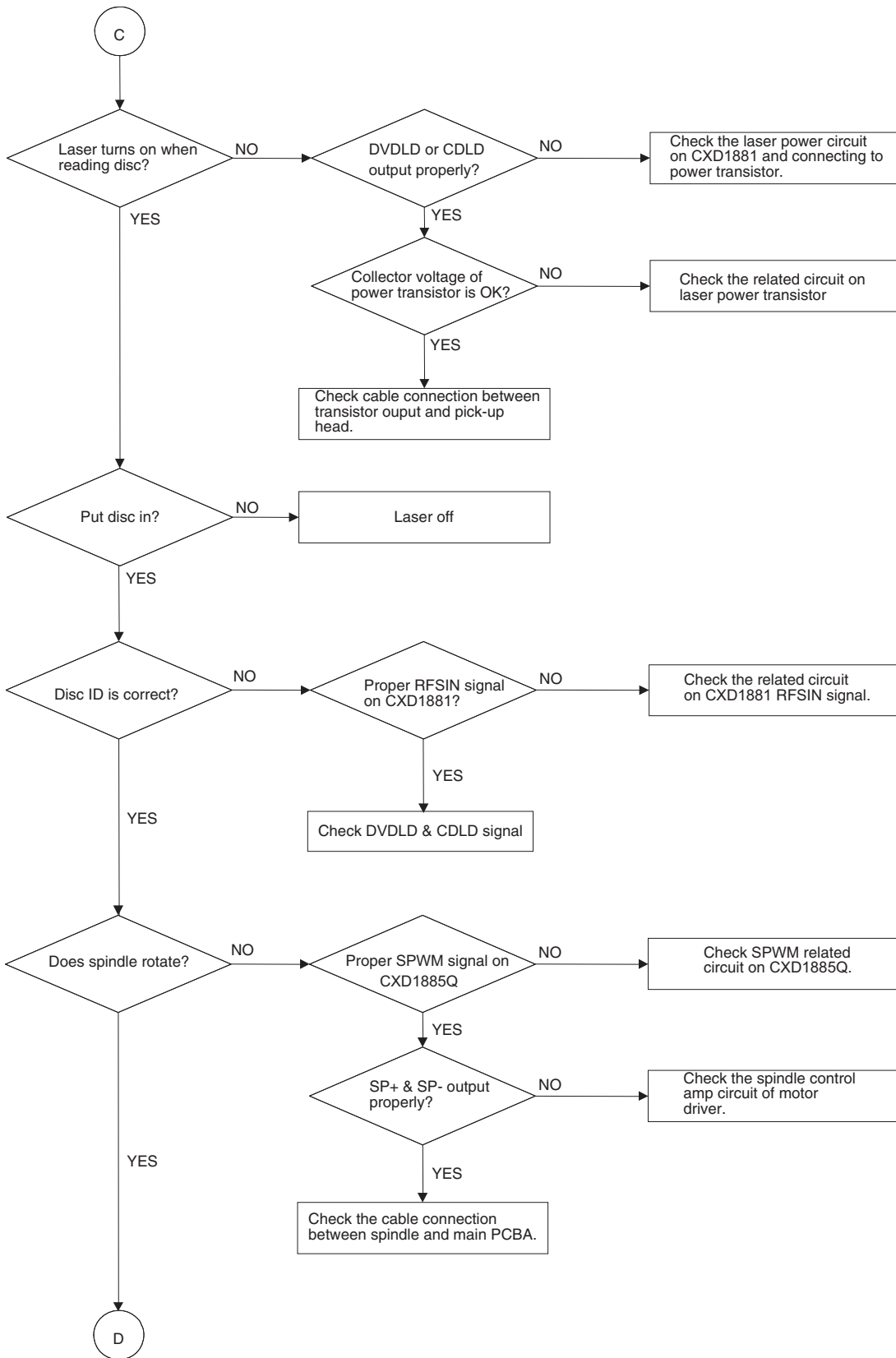


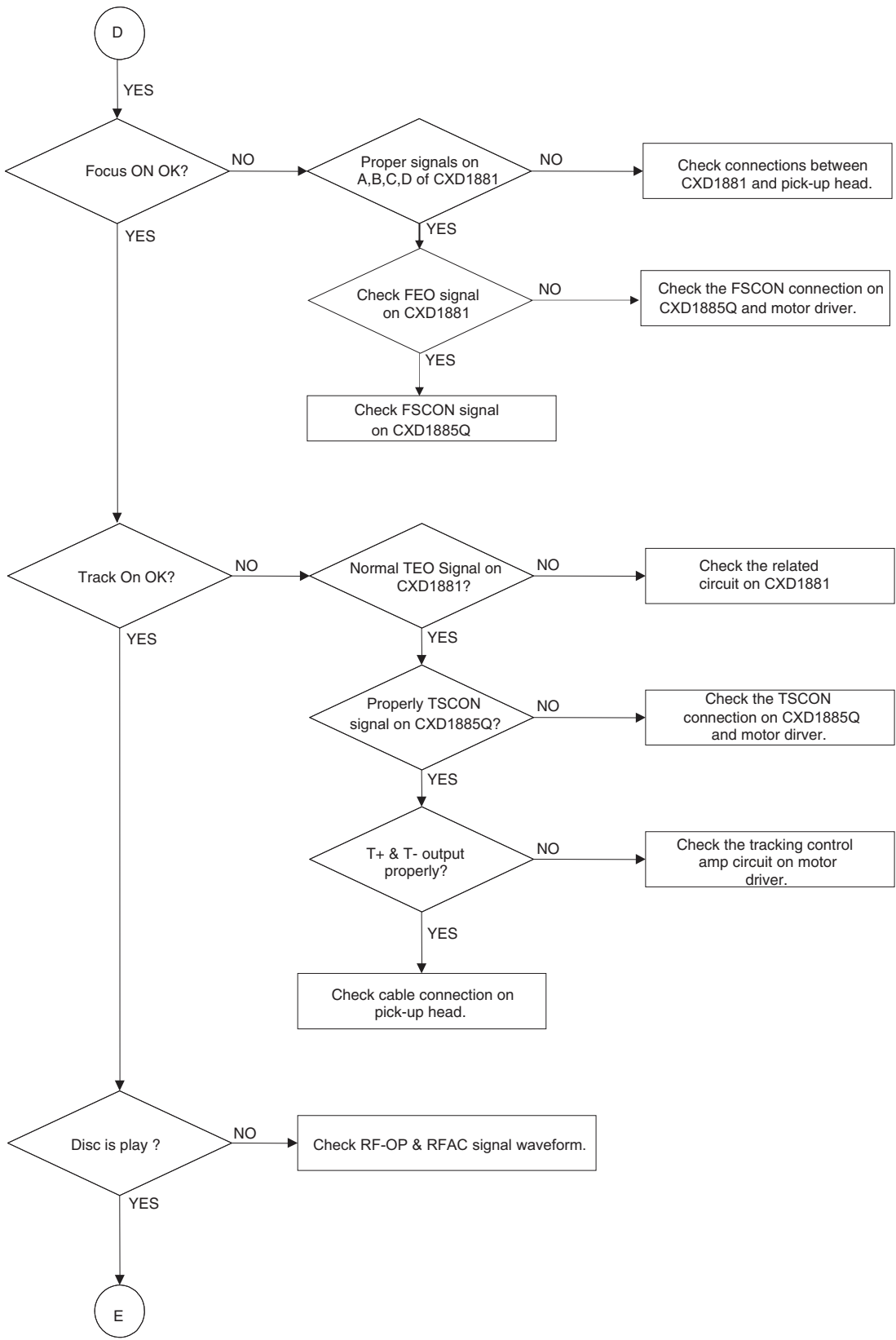
3. Test & debug flow

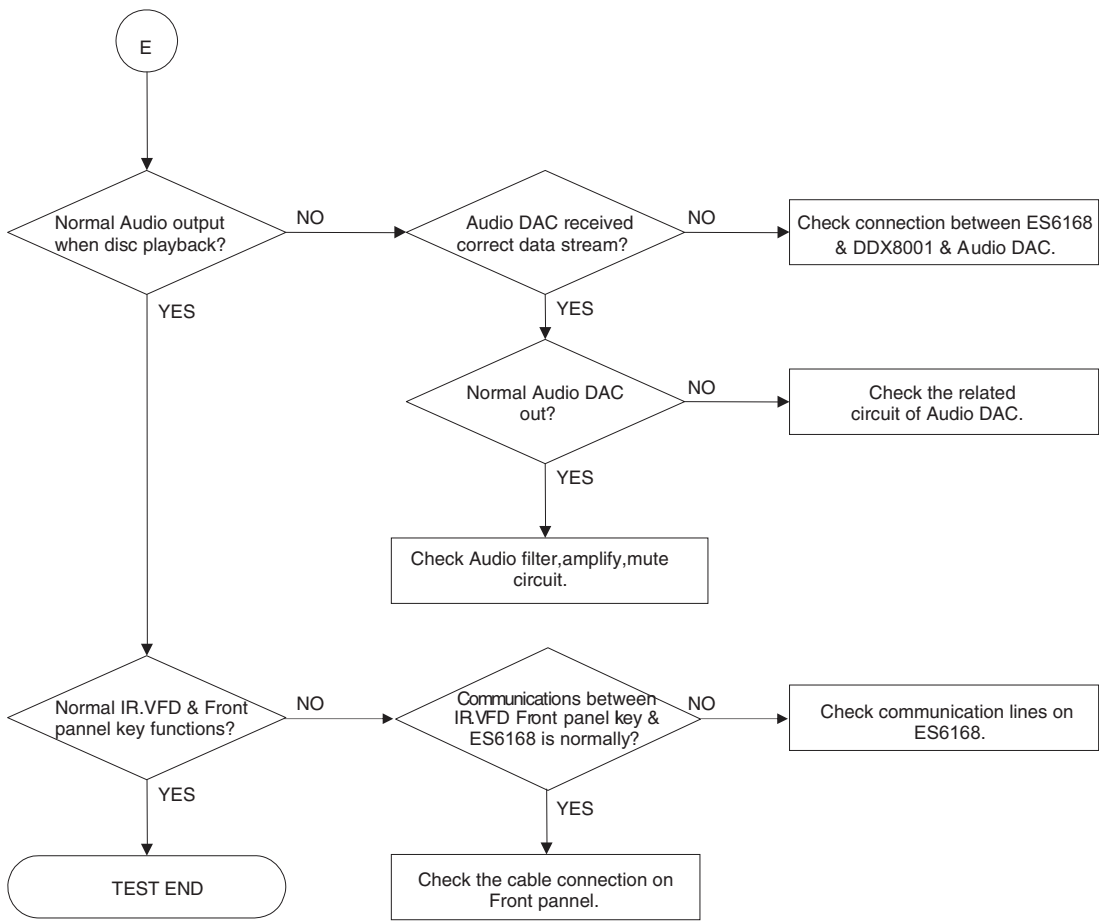












DETAILS AND WAVEFORMS ON SYSTEM TEST AND DEBUGGING

1.SYSTEM 27MHz CLOCK, RESET, FLASH R/W SIGNAL.

1) ES6168F main clock is at 27MHz (pin49)

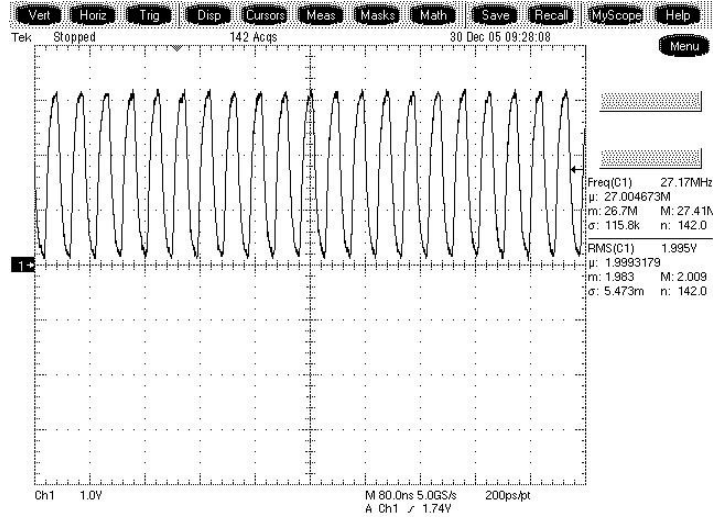
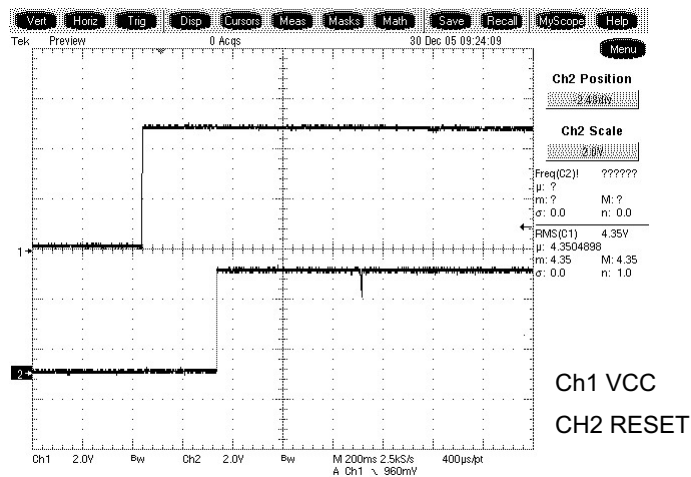


FIG 1-1

2) ES6168F (pin24) reset is low active.



FI1-2

2. SDRAM CLOCK

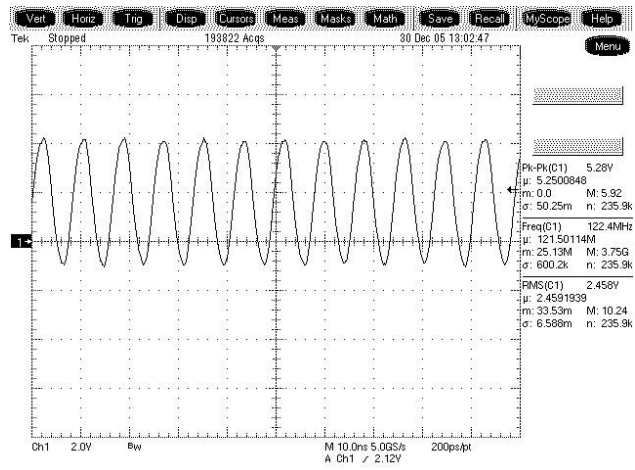


FIG 2-1

3. TRAY OPEN/CLOSE SIGNAL

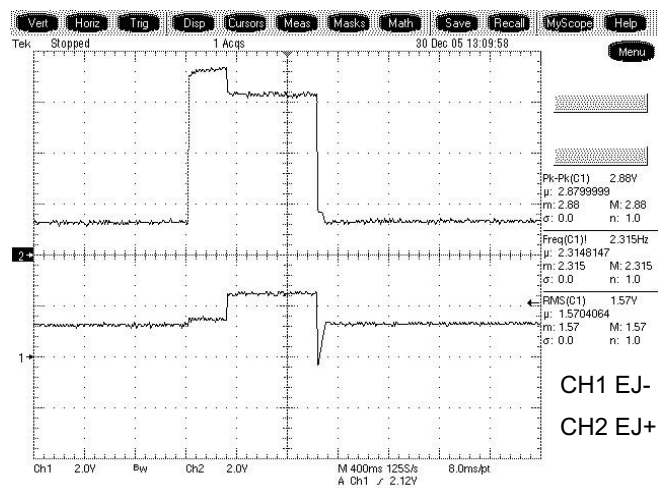


FIG 3-1

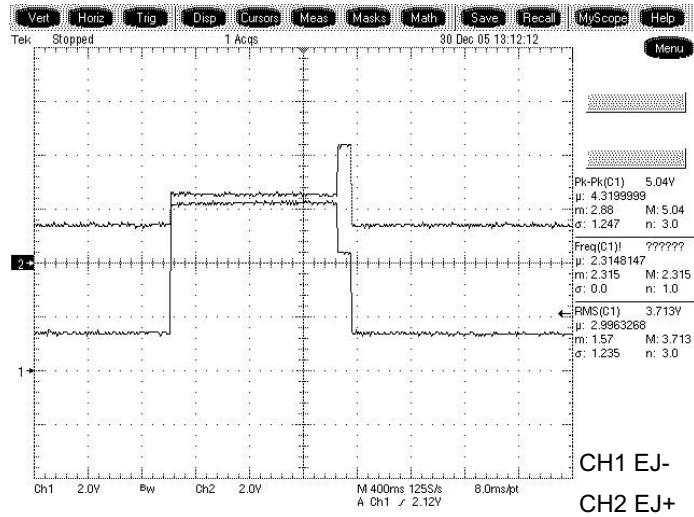


FIG 3-2

4. SLED CONTROL RELATED SIGNAL(NO DISC CONDITION)

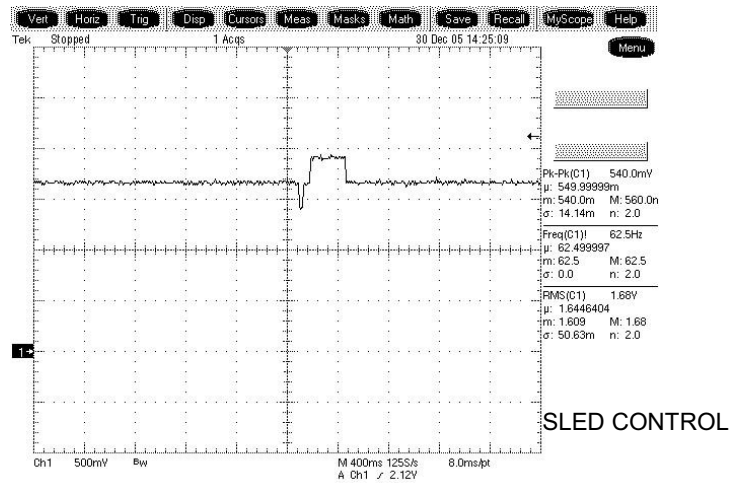


FIG 4-1

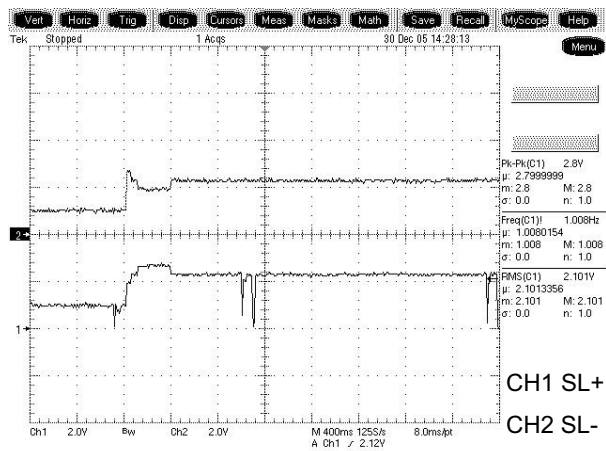


FIG 4-2

5. LENS CONTROL RELATED SIGNAL(NO DISC CONDITION)

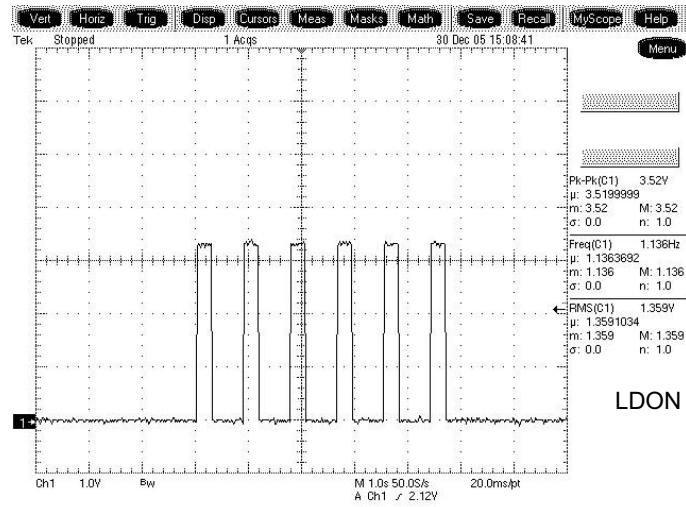


FIG 5-1

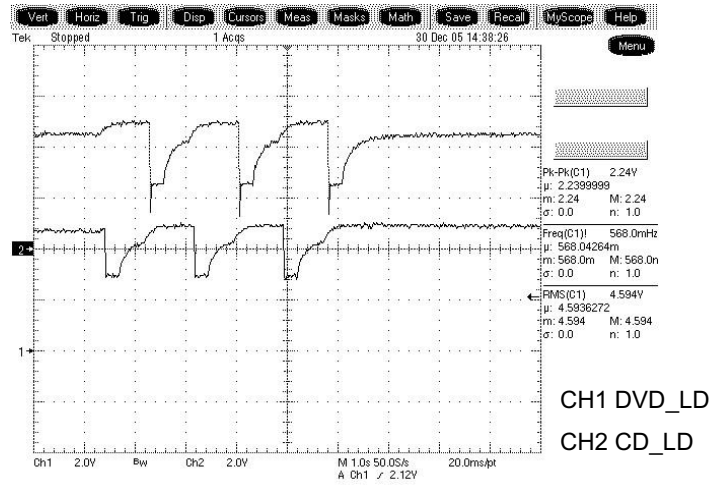


FIG 5-2

6. FOCUSE CONTROL RELATED SIGNAL(NO DISC CONDITION)

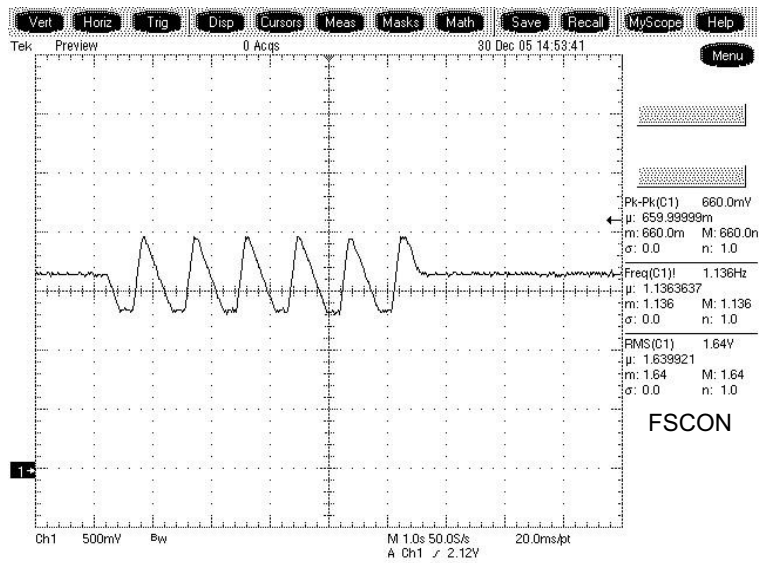


FIG 6-1

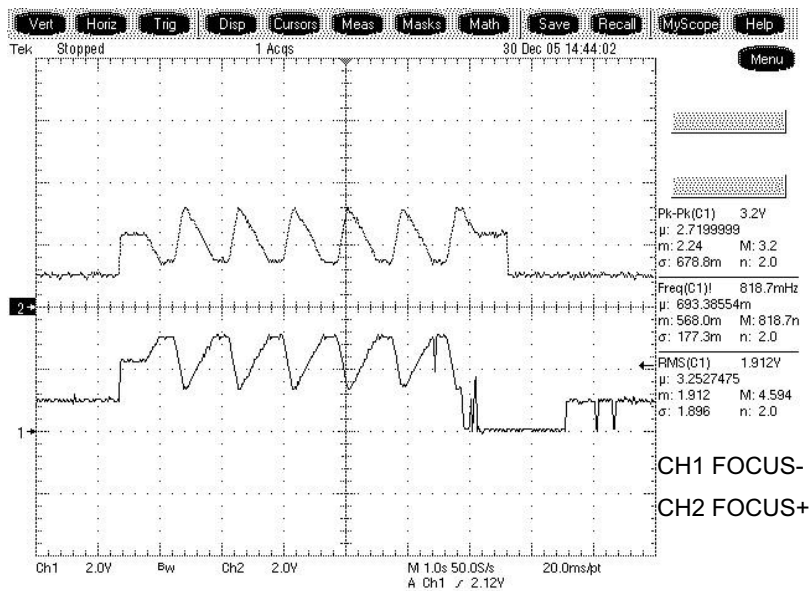


FIG 6-2

7. SPINDLE CONTROL WAVEFORM

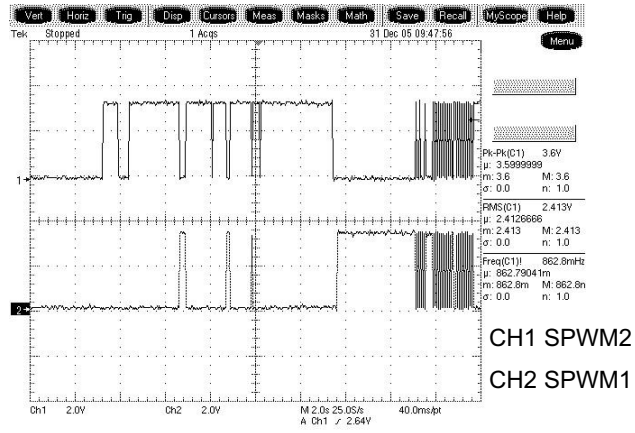


FIG 7-1(DVD)

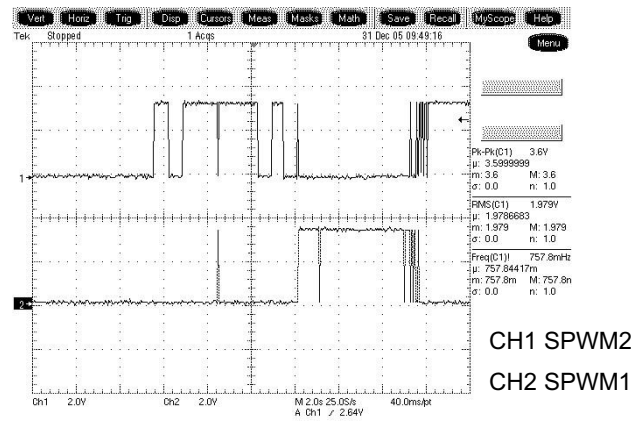


FIG 7-2(CD)

8. FOCUS ON WAVEFORM(FSCON)

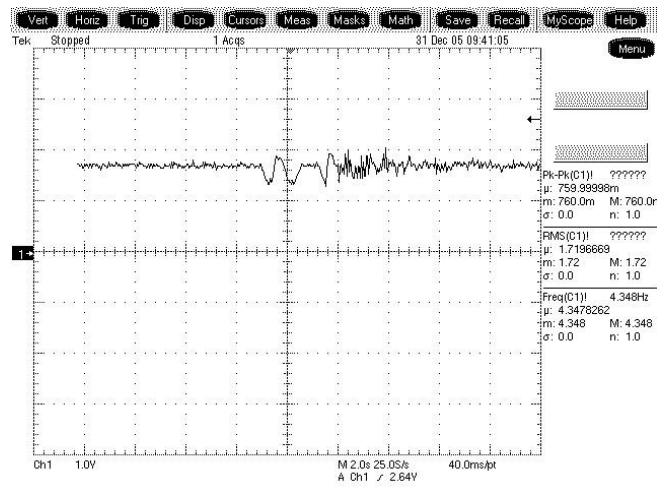


FIG 8-1(CD)

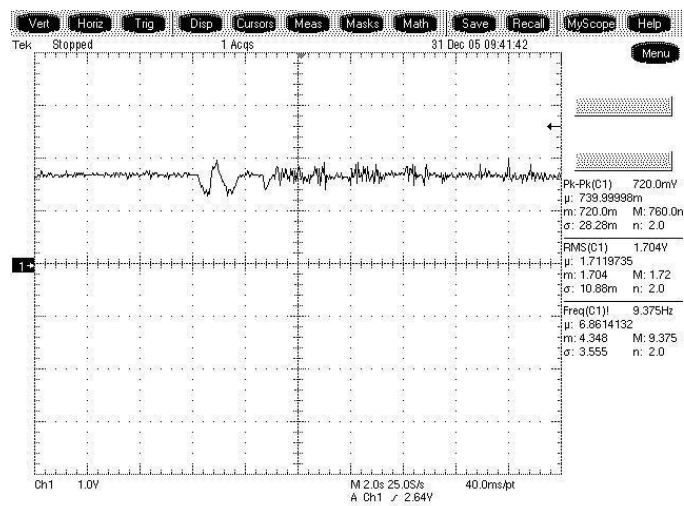


FIG 8-2 (DVD)

9. ES6168F AUDIO OPTICALAND COAXIALOUTPUT (SPDIF)

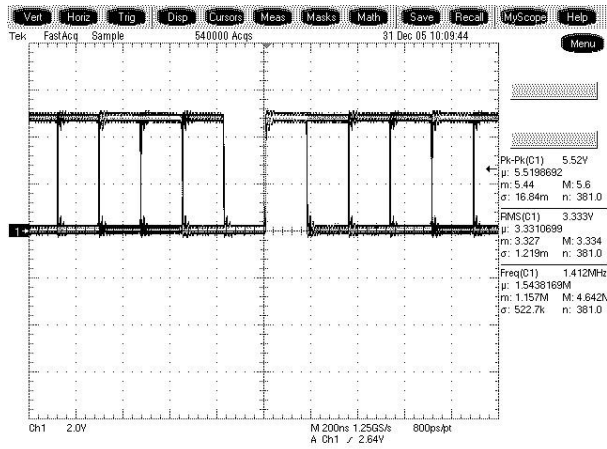


FIG 9-1

10. ES6168F VIDEO OUTPUT WAVEFORM(10 STEP)

1) CVBS

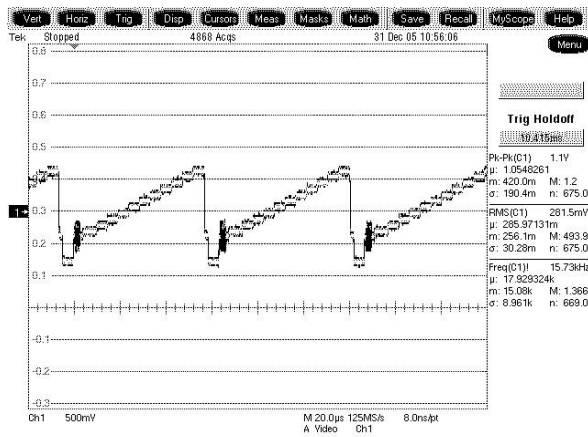


FIG 10-1

2) COMPOSITE Y

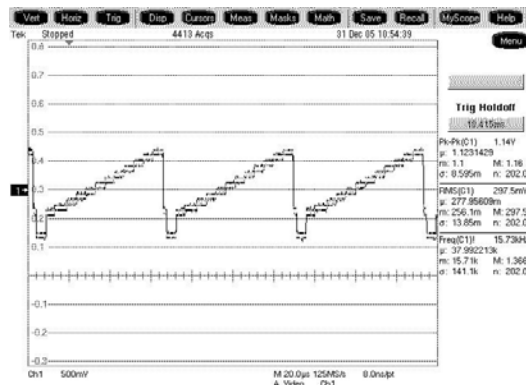


FIG 10-2(480I)

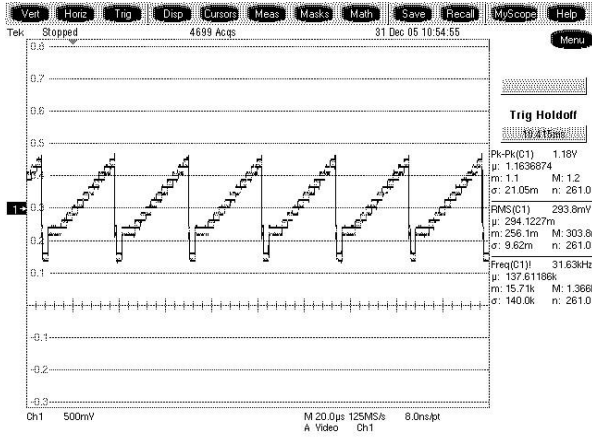


FIG 10-2(480P)

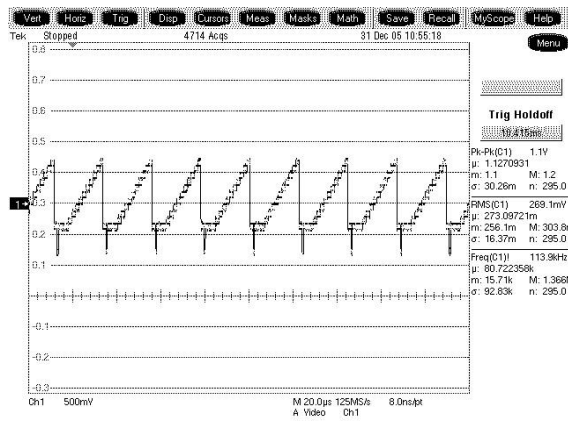


FIG 10-3(720P)

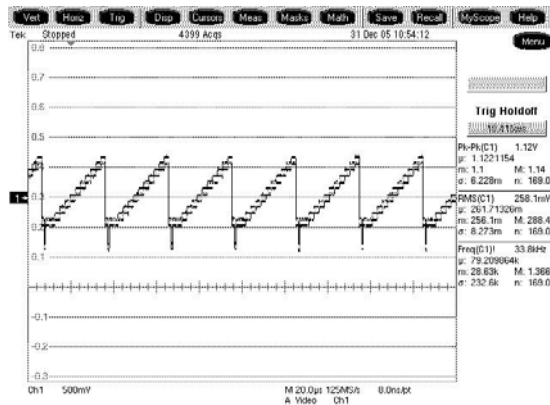


FIG 10-4(1080I)

11.RF WAVEFORM

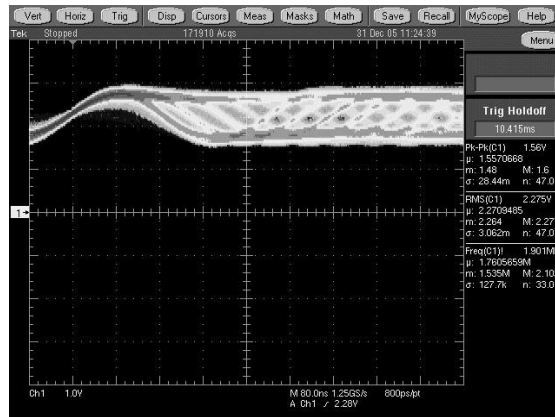


FIG11-1(CD)

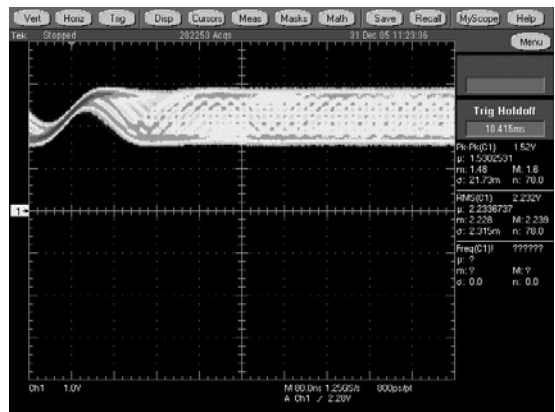


FIG11-1(DVD)

12.HDMI

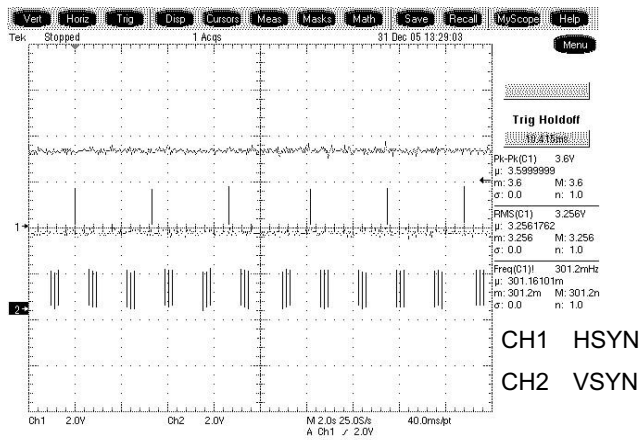


FIG12-1(480I)

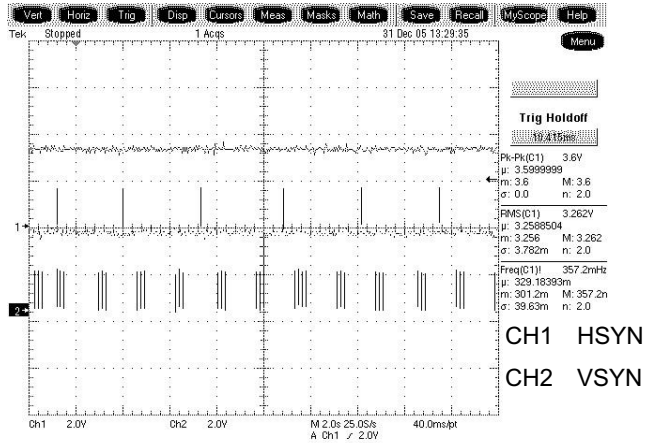


FIG12-1(480P)

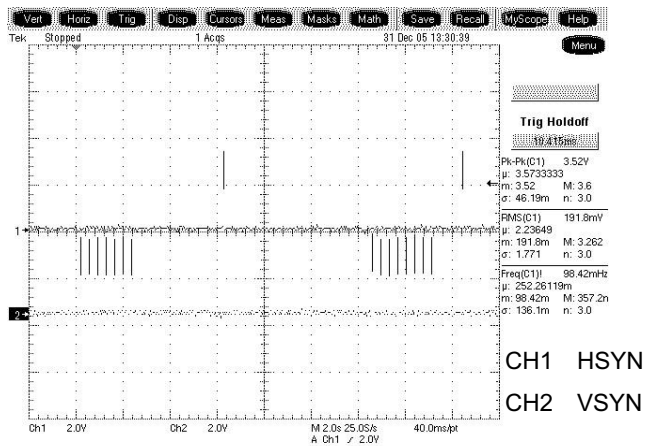


FIG12-1(720P)

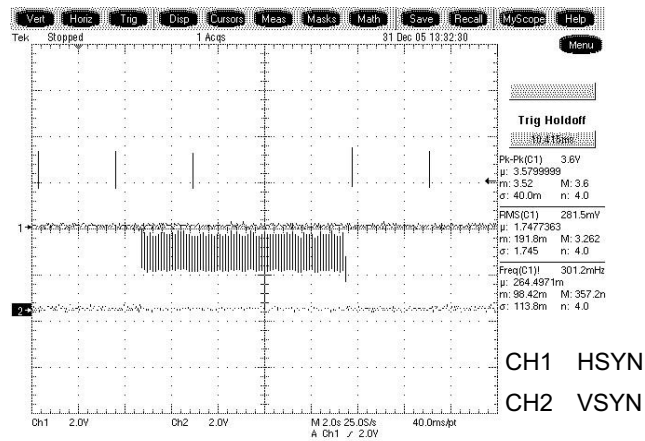


FIG12-2(1080I)

13. ES6168F AUDIO OUTPUT TO AUDIO DAC

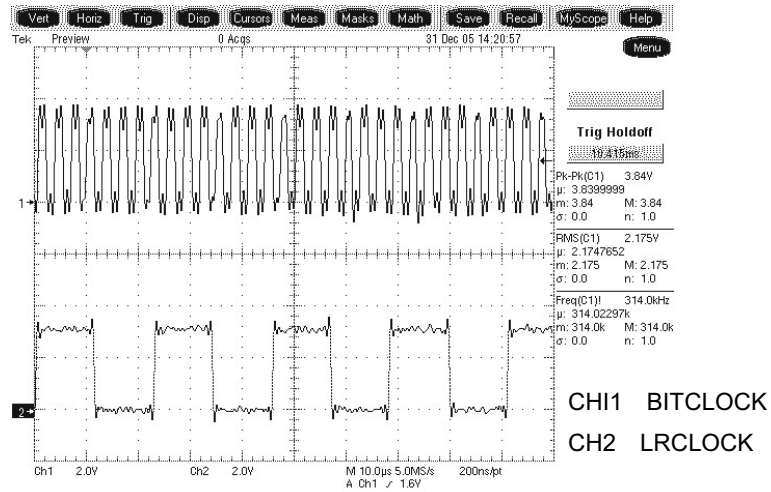


FIG 31-1

14. AUDIO OUTPUT (1KHZ 0DB)

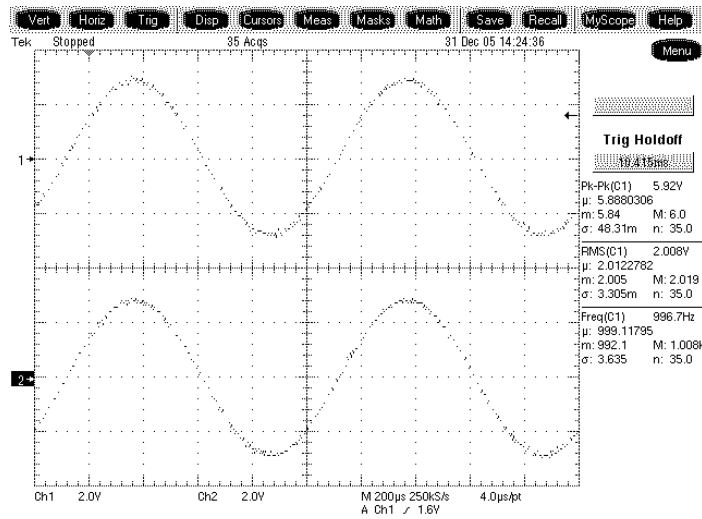
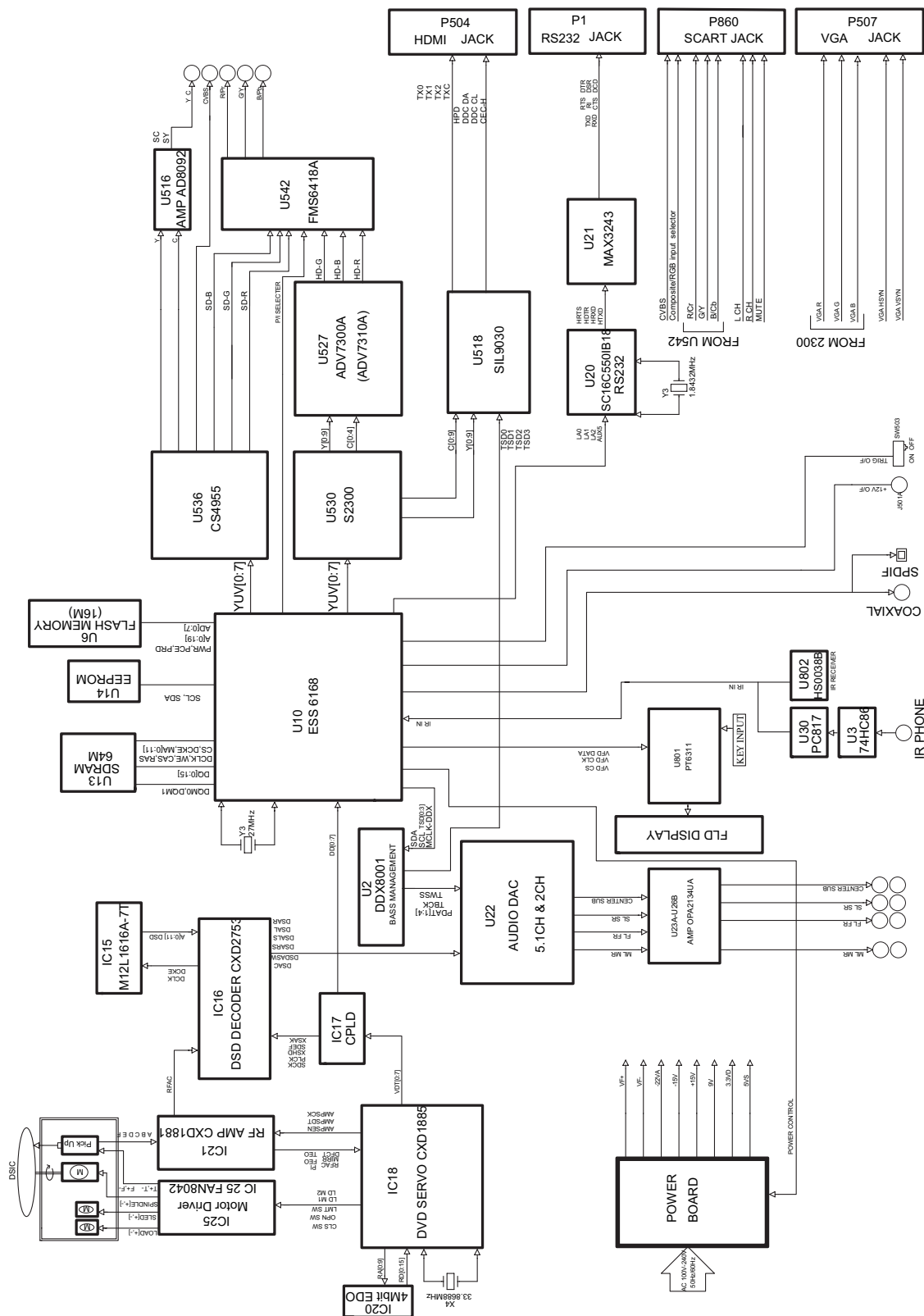


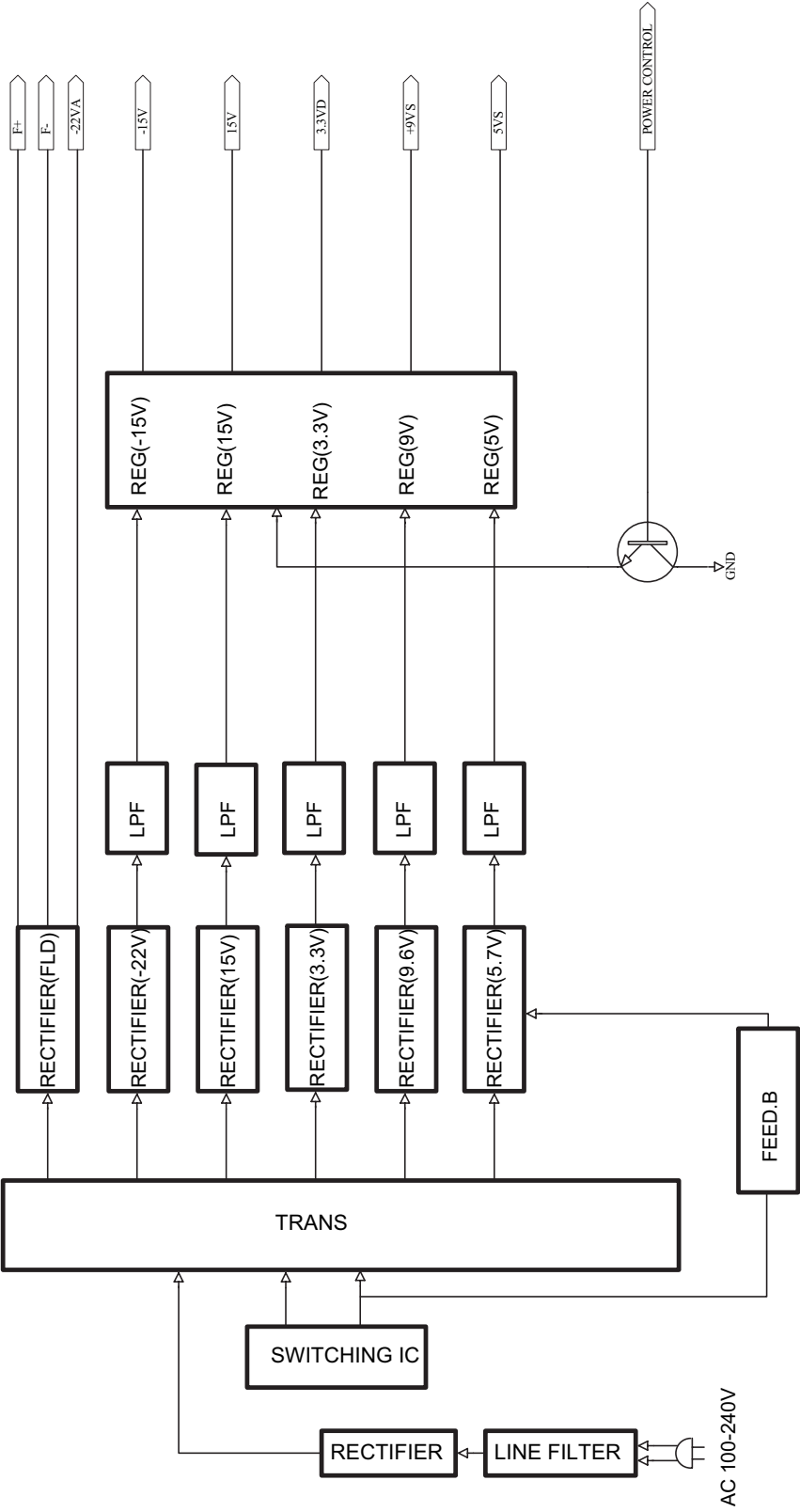
FIG 14-1

Block Diagram

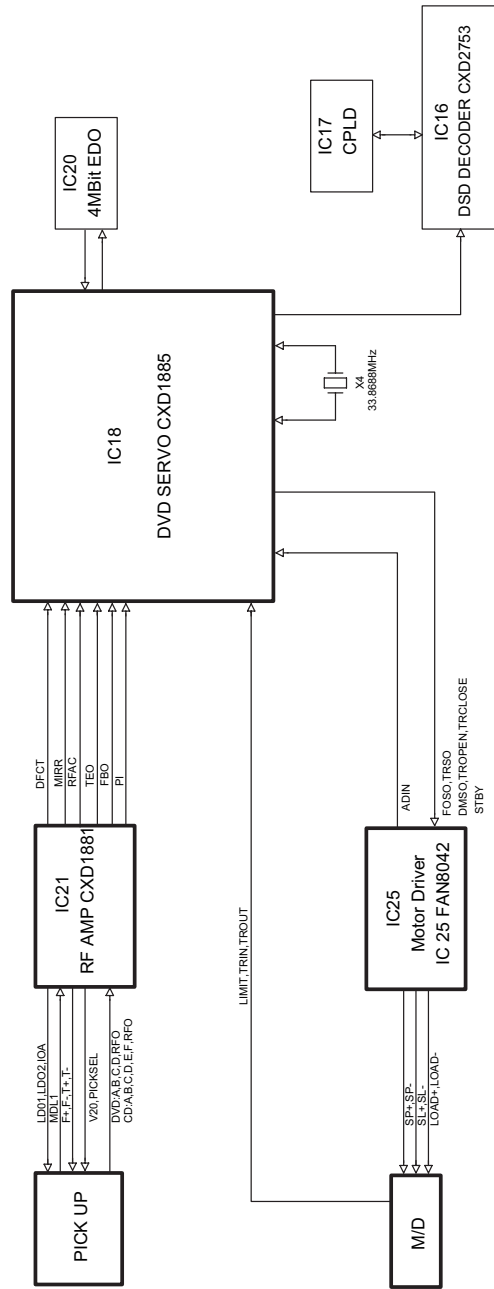
1.OVERALL Block Diagram



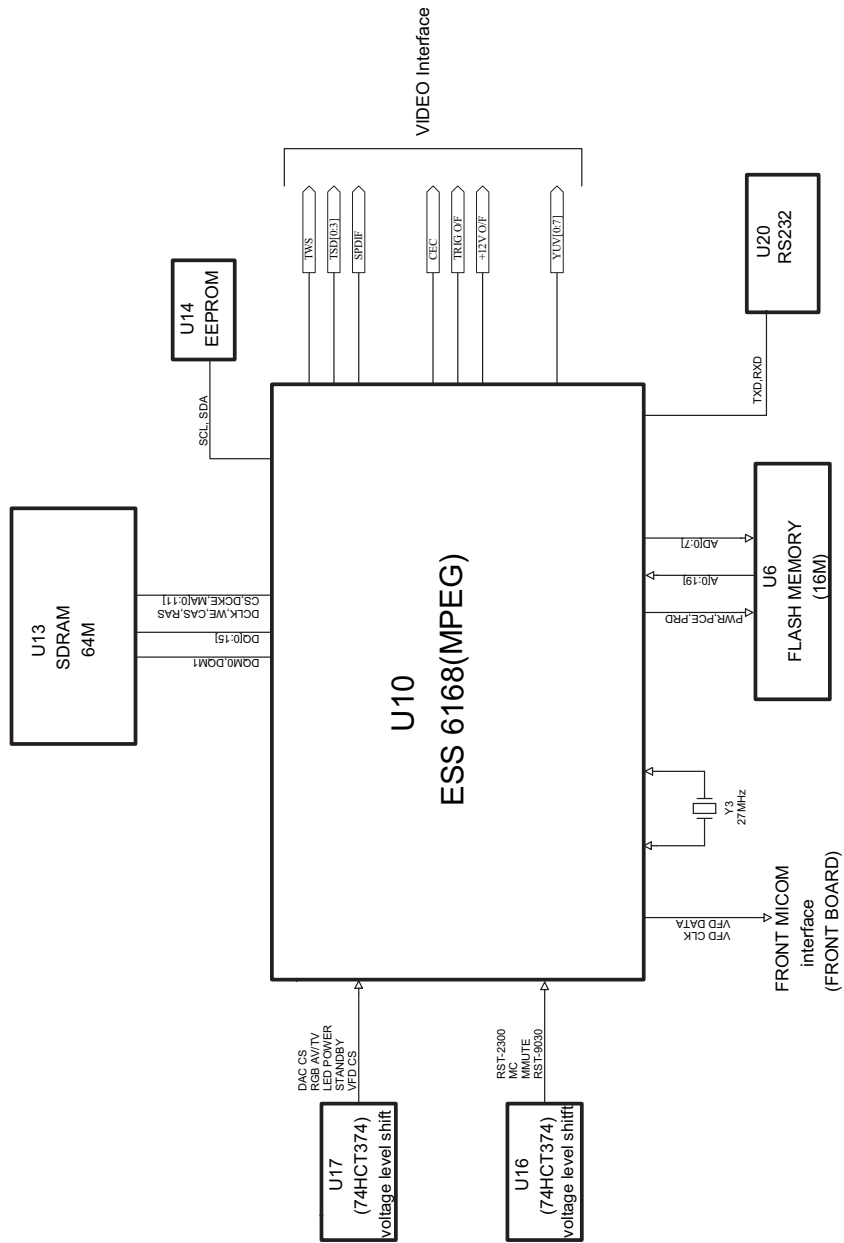
2.POWER(SMPS)BLOCK DIAGRAM



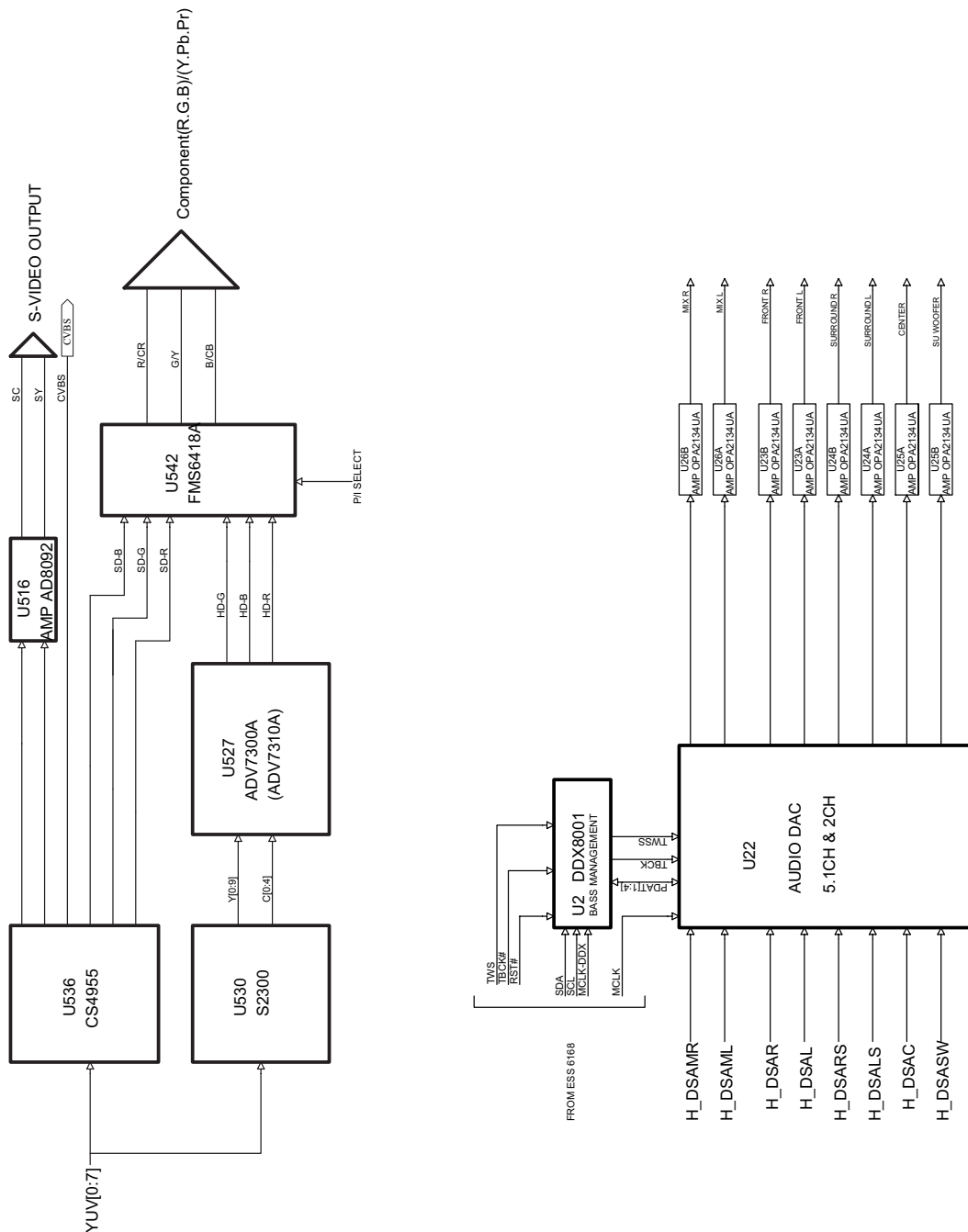
3.SERVO Block Diagram



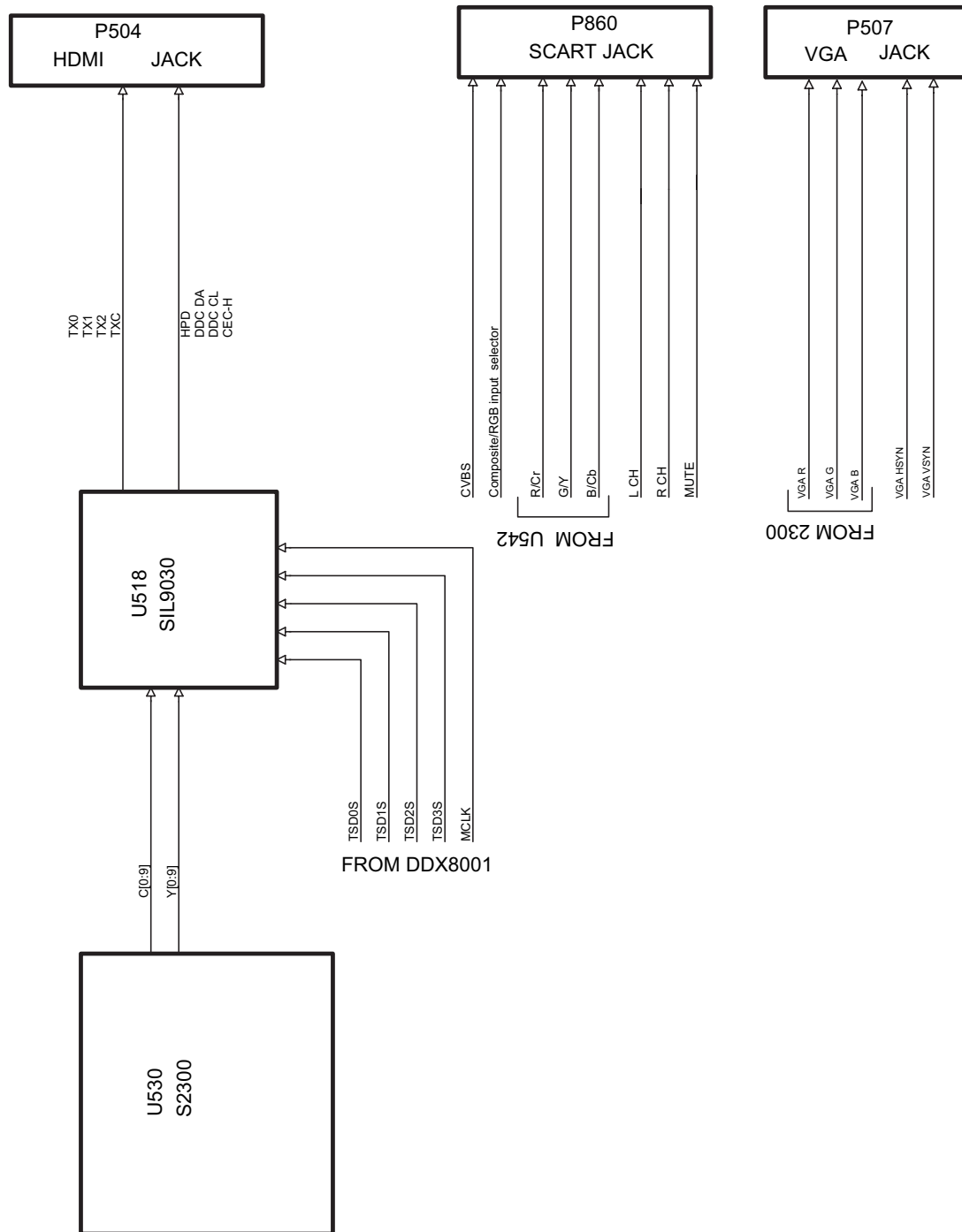
4.MPEG & MEMORY Block Diagram



5.VIDEO & AUDIO Block Diagram

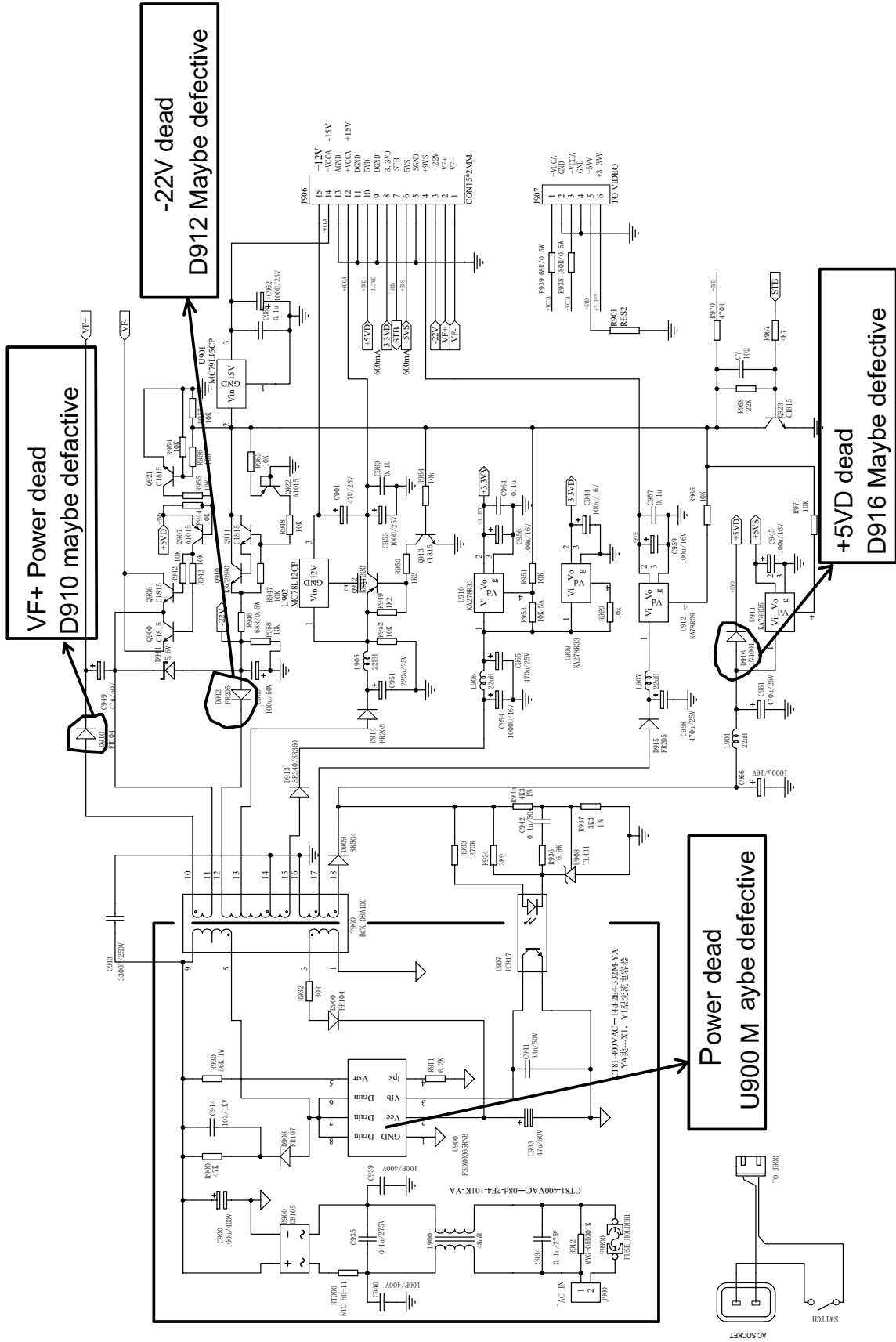


6. GENSIS.SCART & DVI BLOCK DIAGRAM

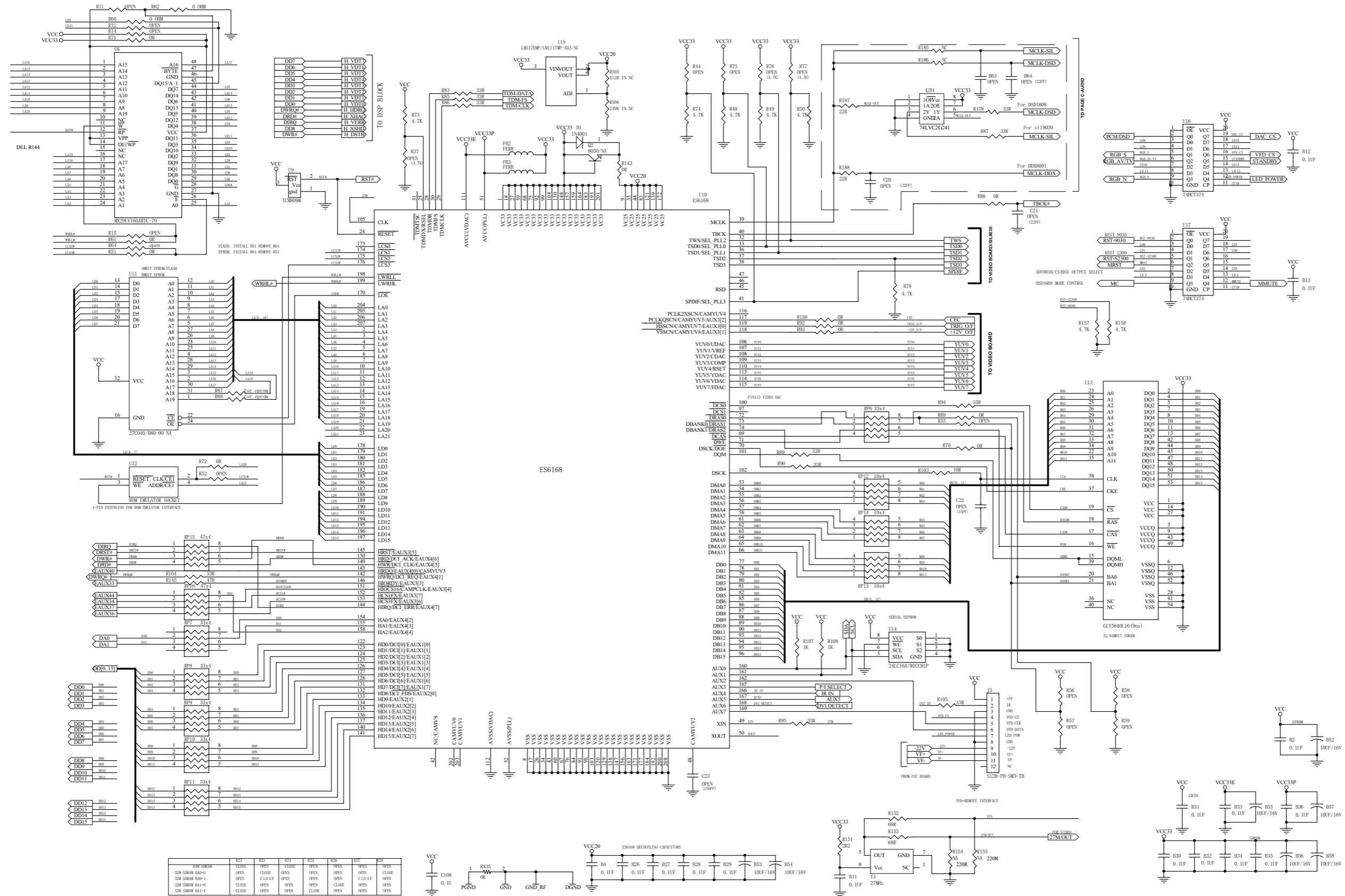


CIRCUIT DIAGRAMS

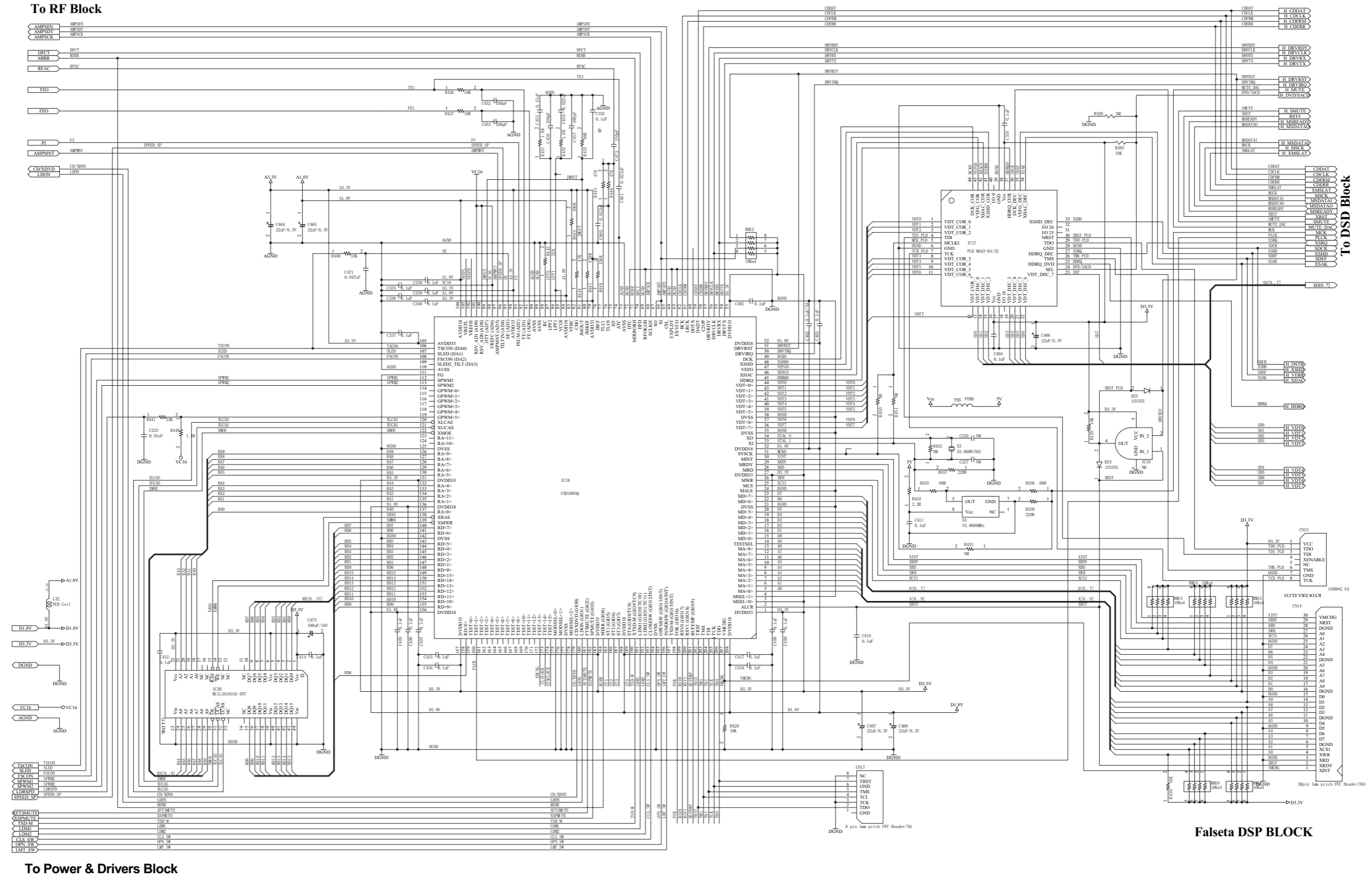
1. POWER(SMPS) CIRCUIT DIAGRAM



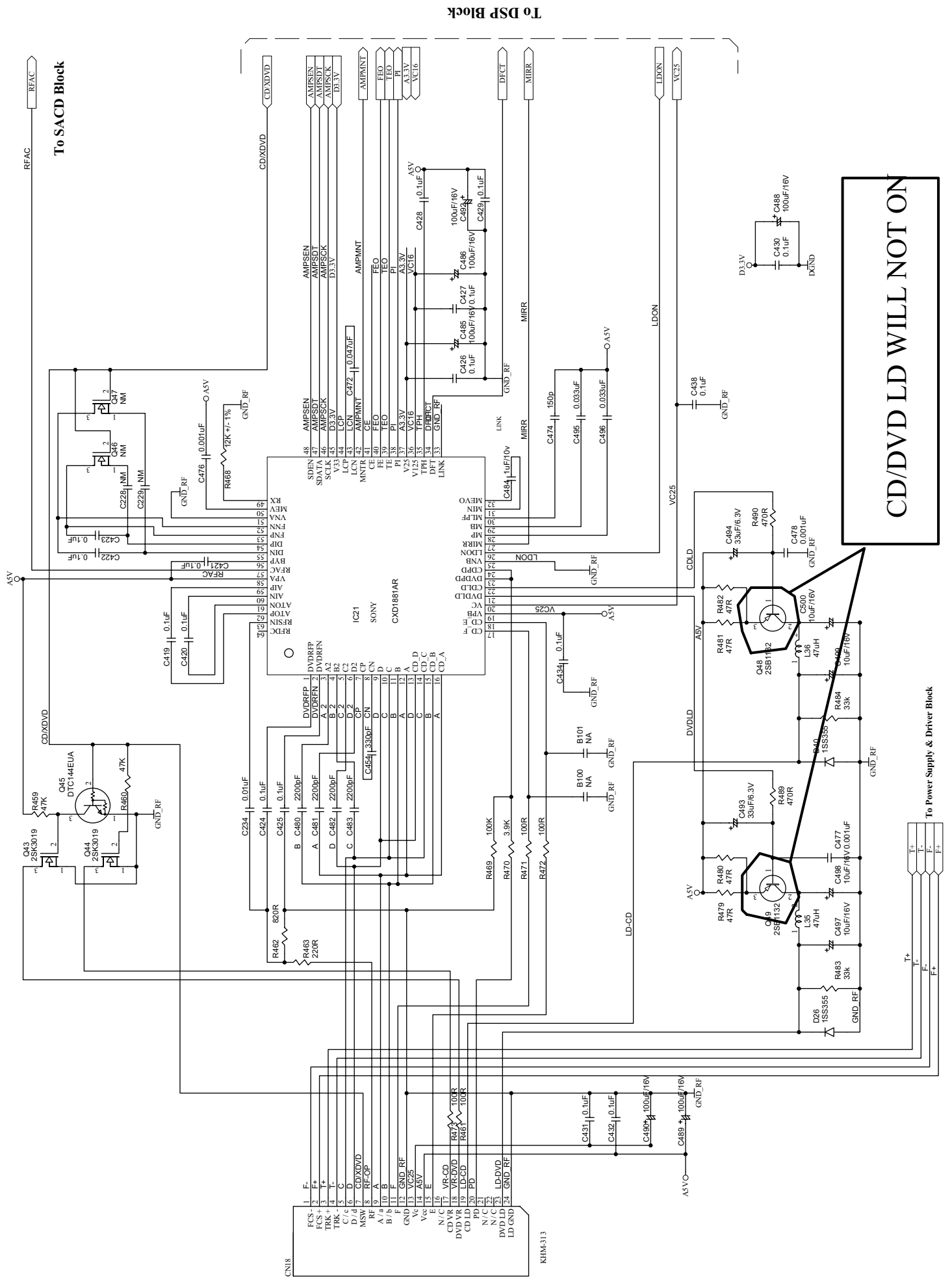
2.SYSTEM CIRCUIT DIAGRAM



3.DSP CIRCUIT DIAGRAM



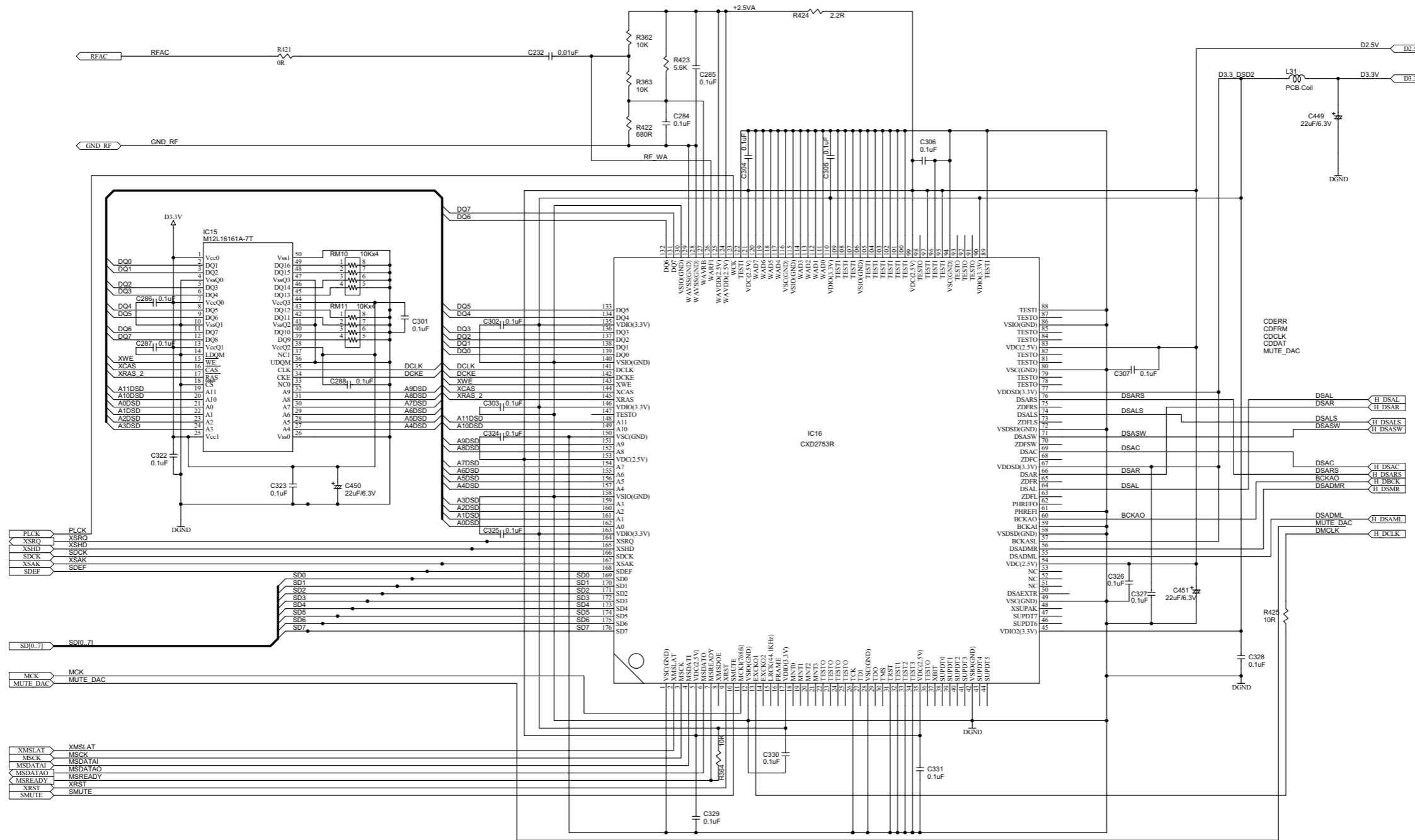
5. RF CIRCUIT DIAGRAM



6.DSD CIRCUIT DIAGRAM

To RF Block

To DSP Block

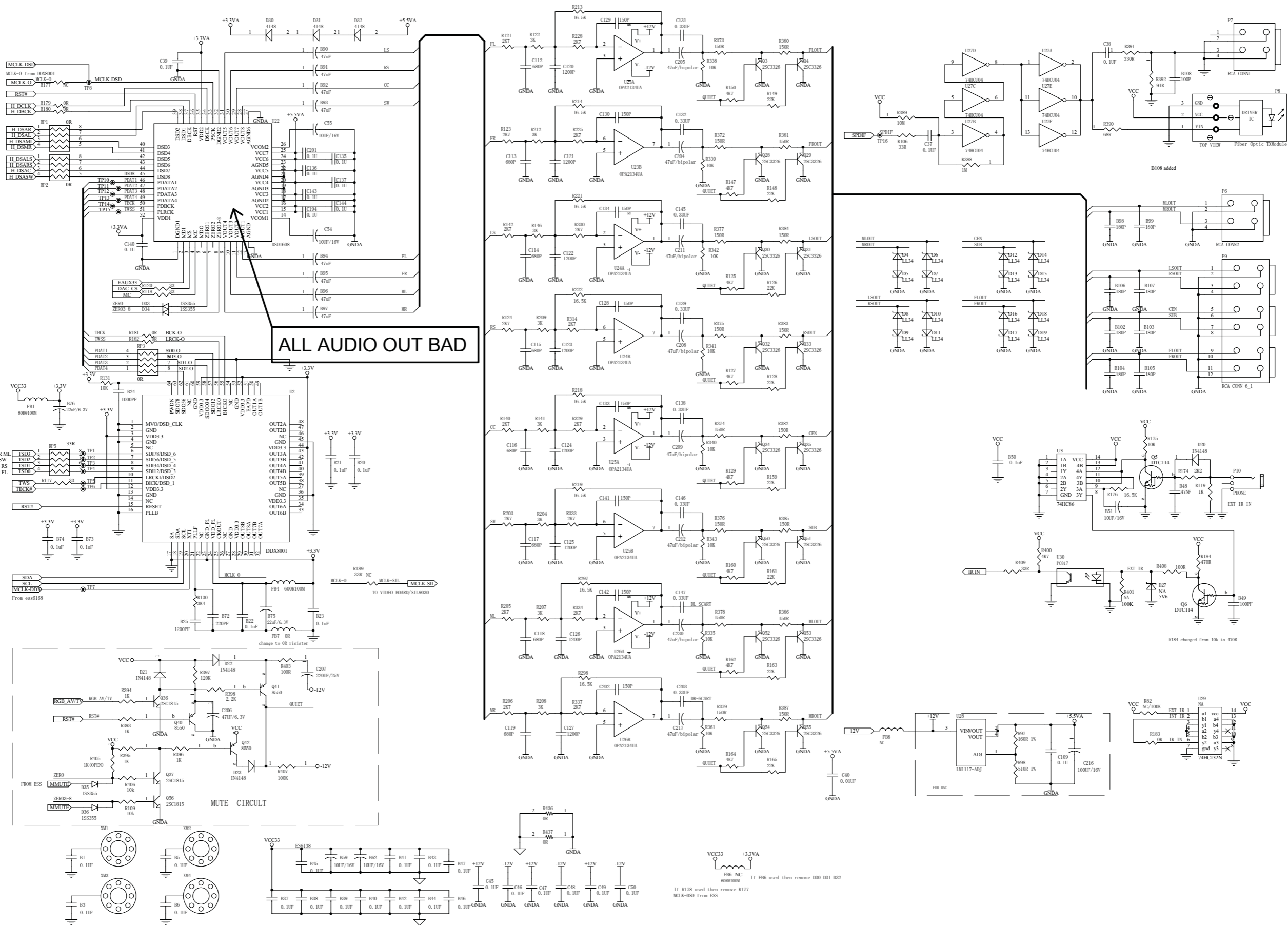


To Power & Drivers Block

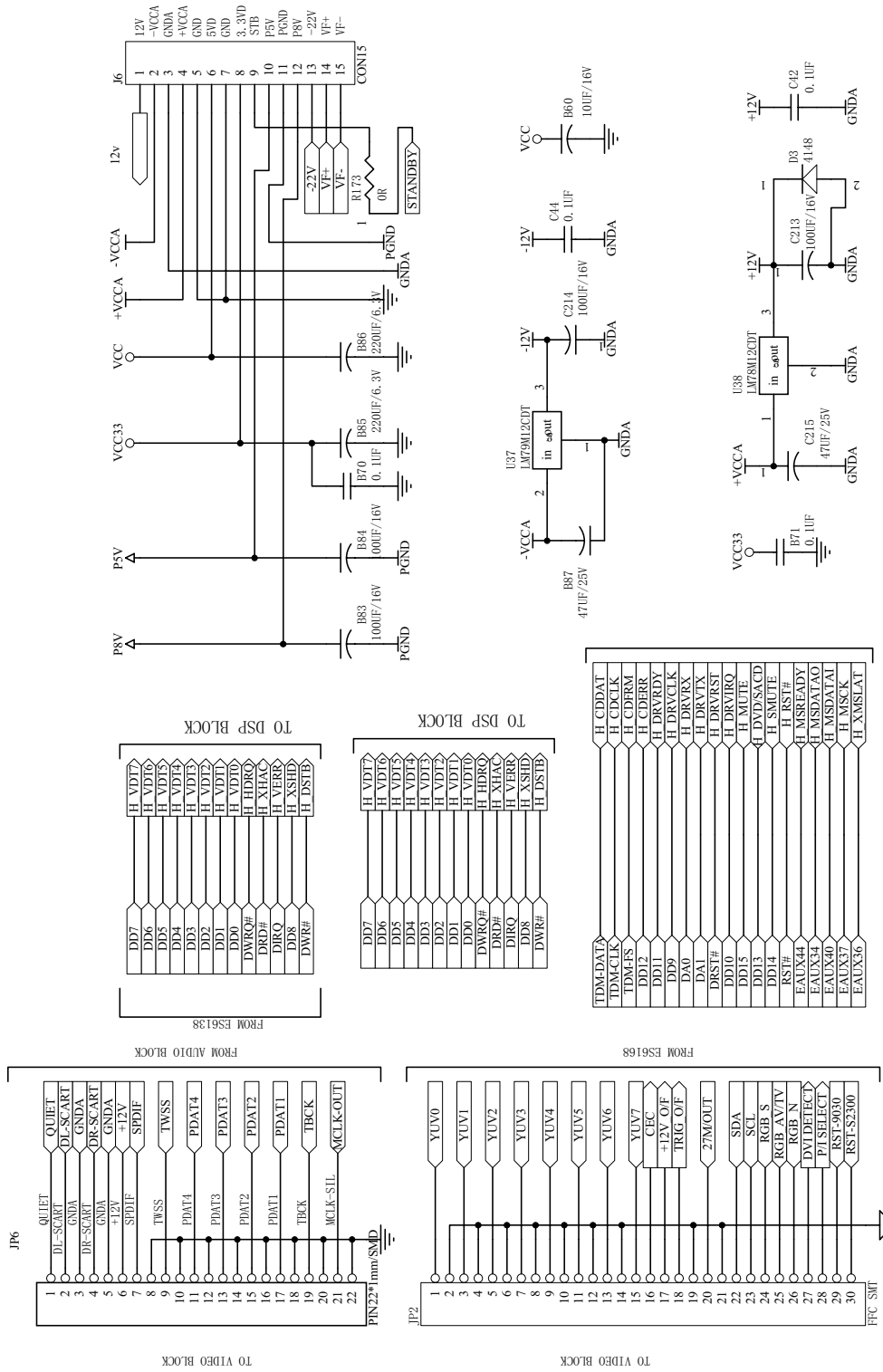
To Audio DAC

Falseta DSD Block

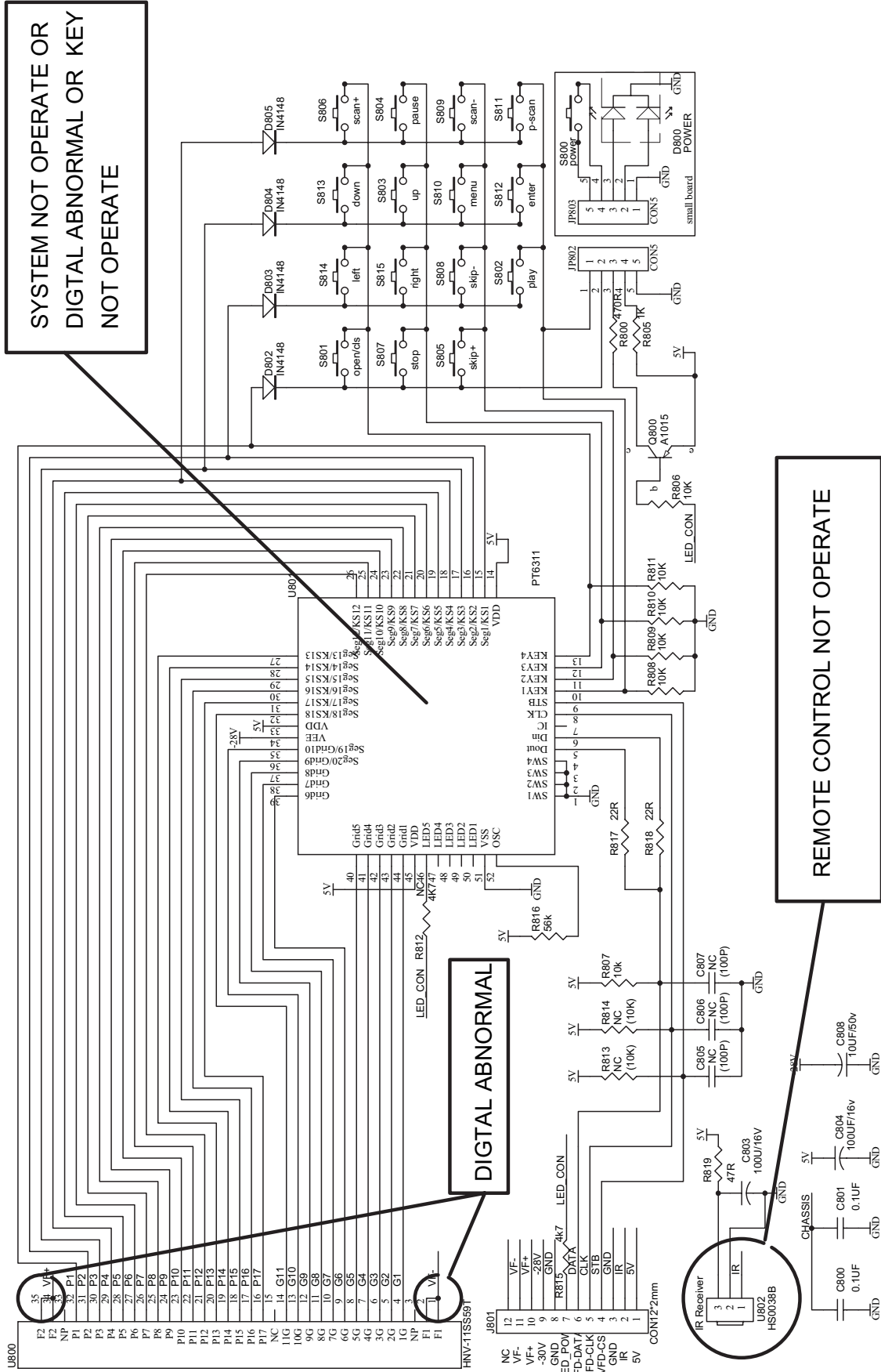
7.AUDIO CIRCUIT DIAGRAM



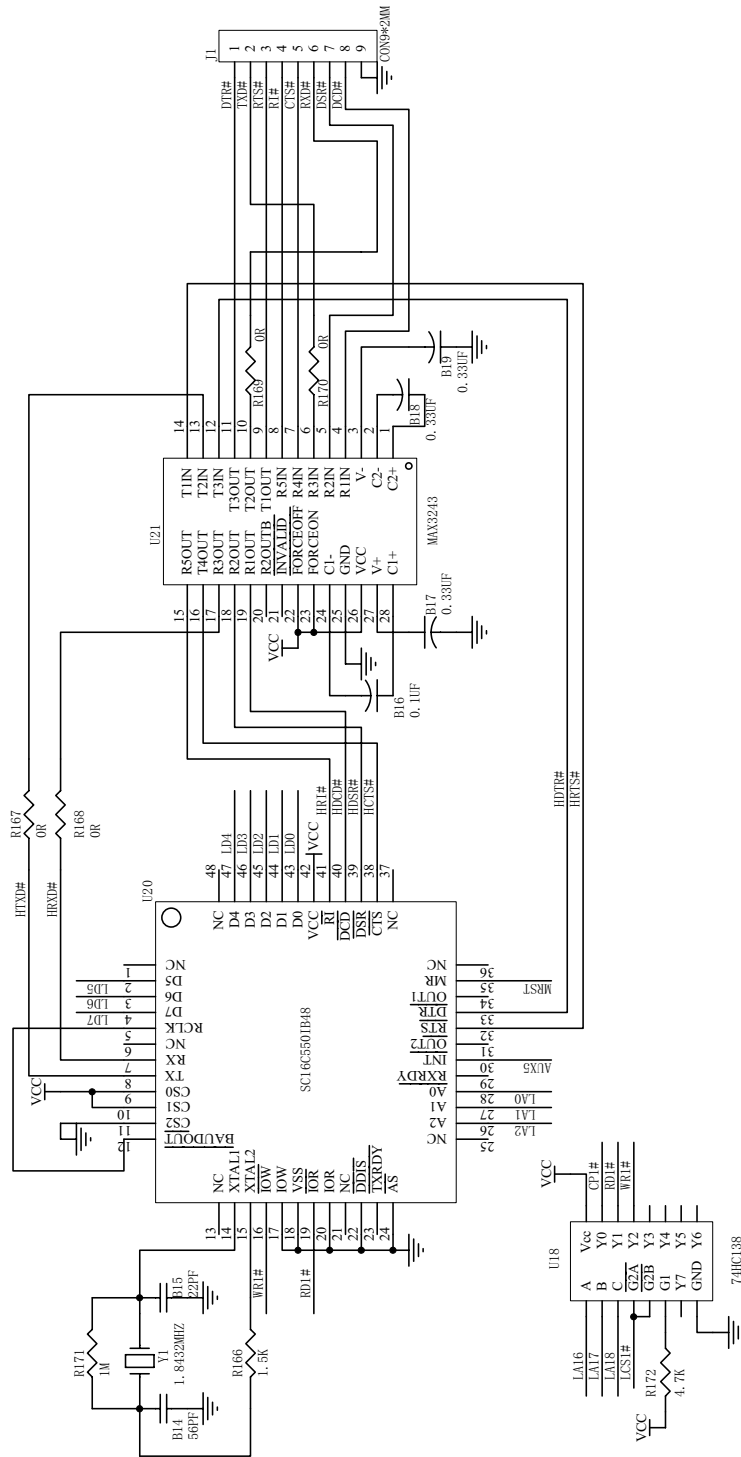
8.CONNECT CIRCUIT DIAGRAM



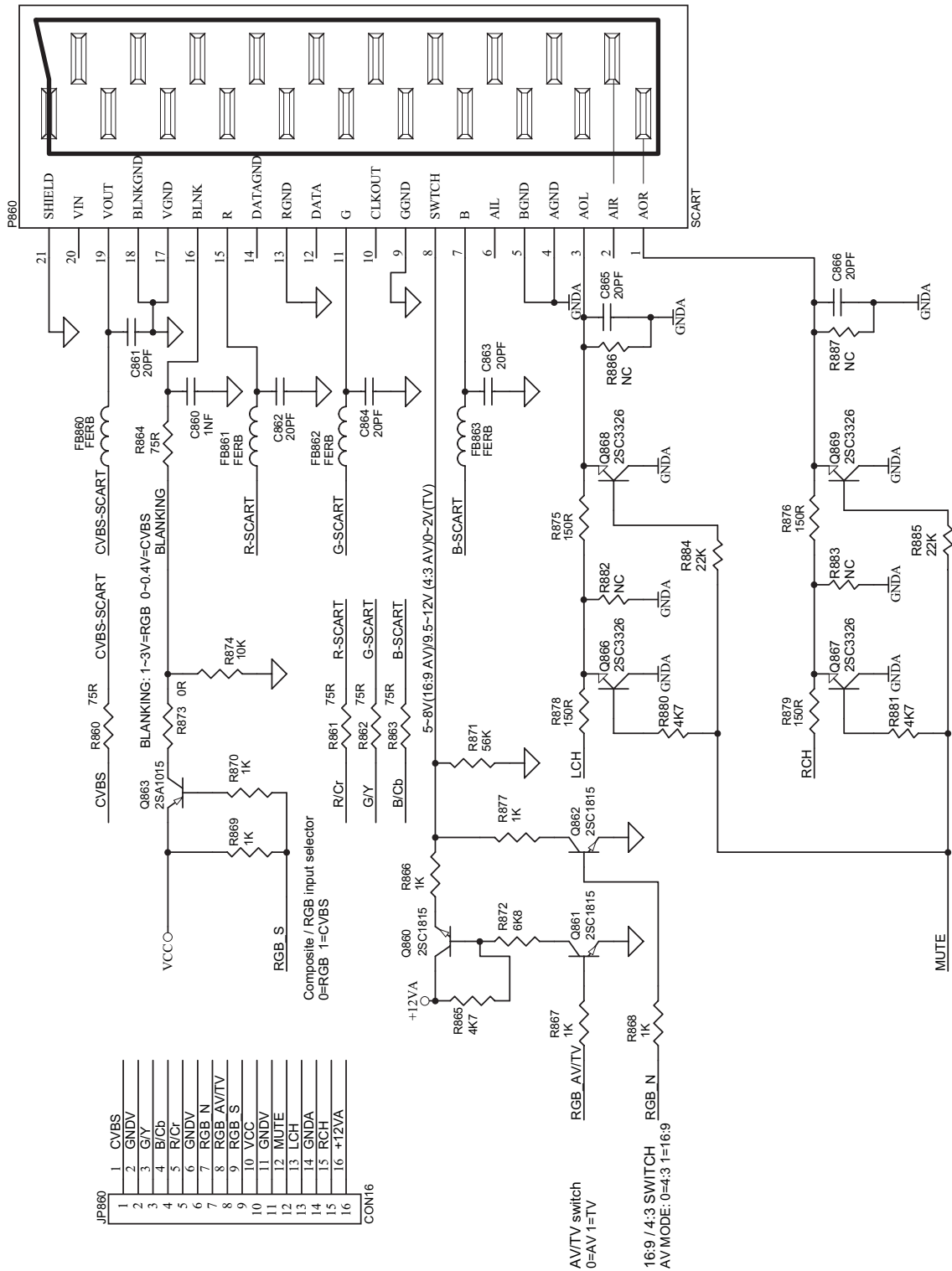
9.TIMER CIRCUIT DIAGRAM



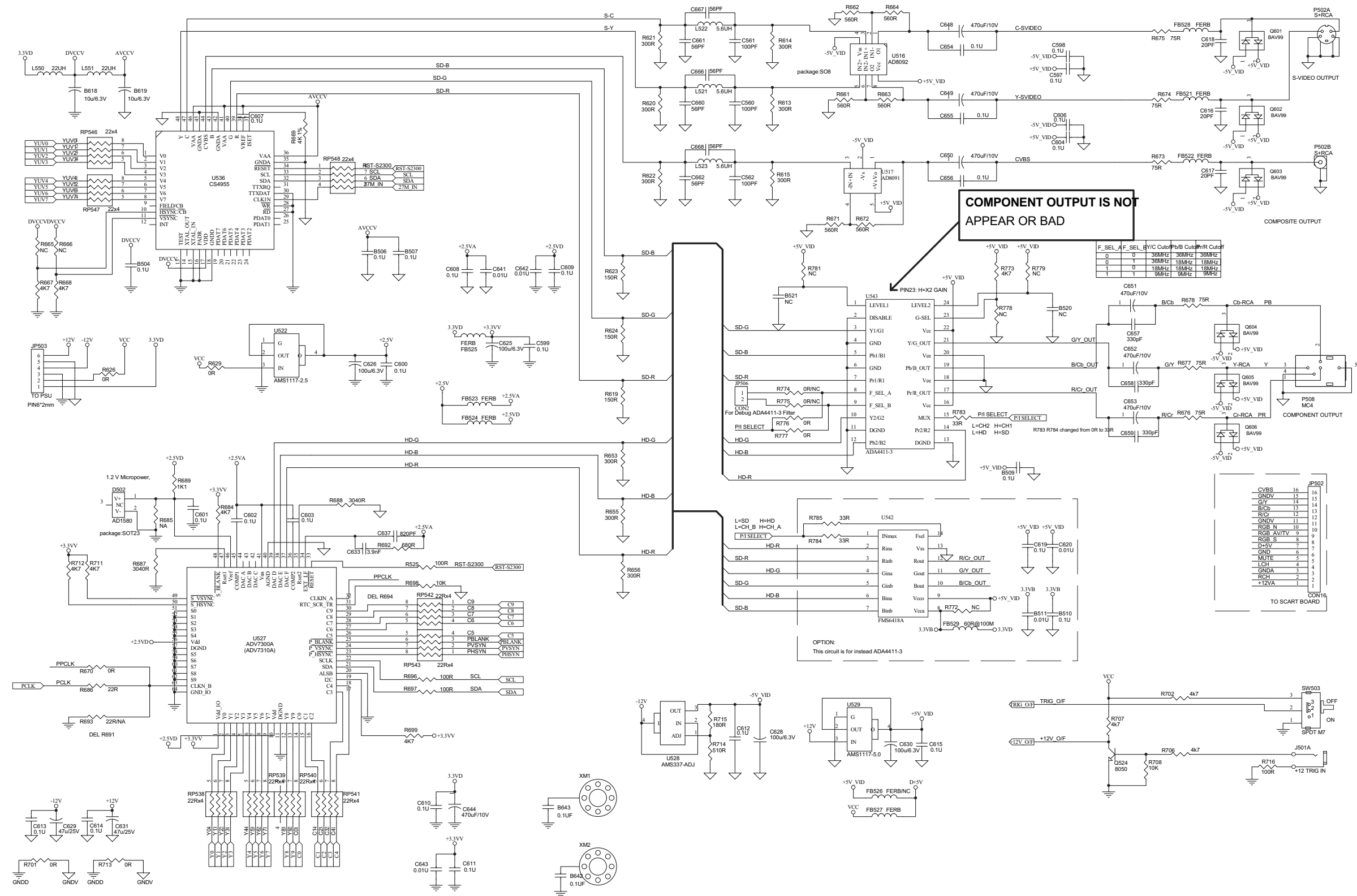
10.RS232 CIRCUIT DIAGRAM



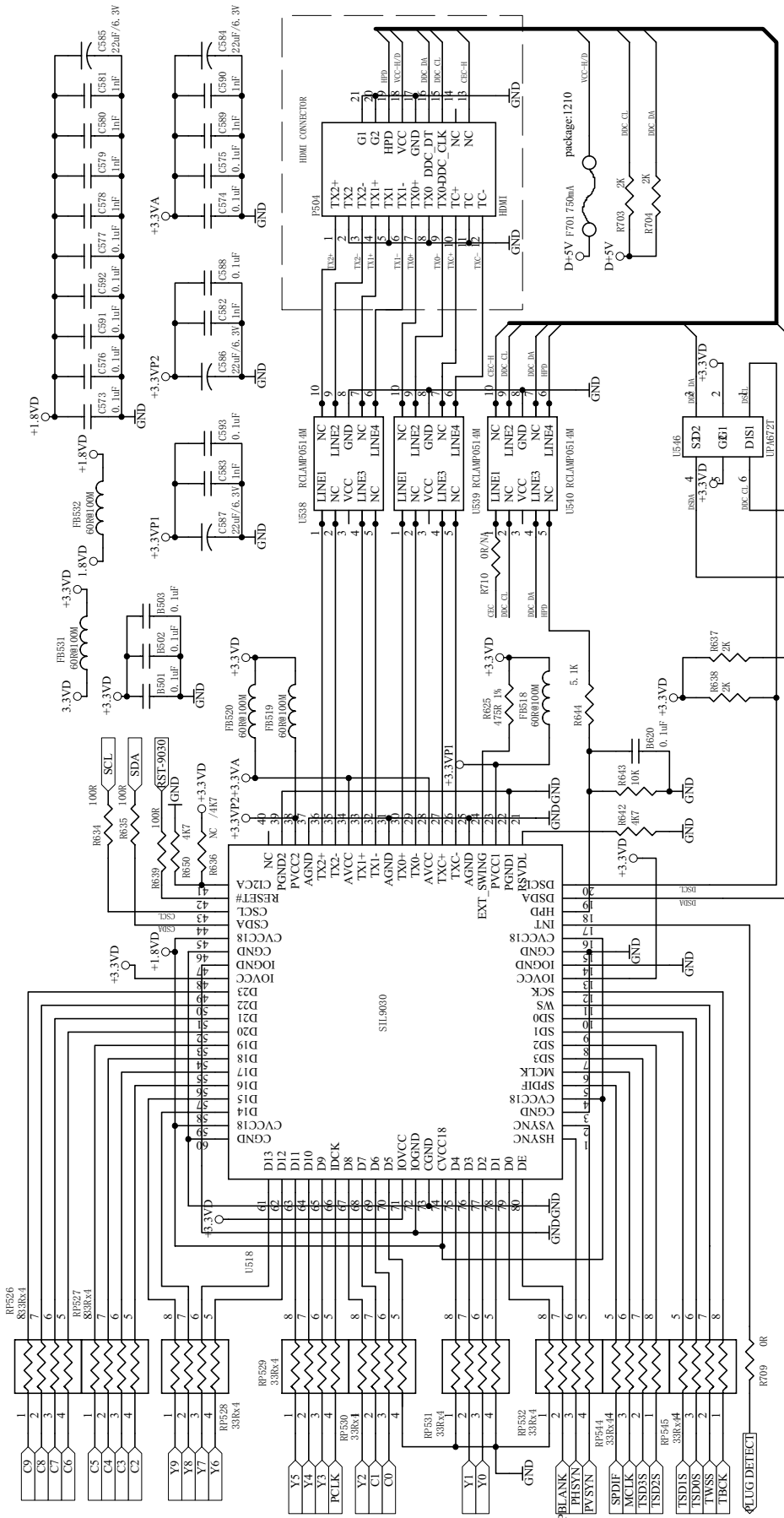
11.SCART CIRCUIT DIAGRAM



13.K-VIDEO CIRCUIT DIAGRAM



14.DVI CIRCUIT DIAGRAM



CIRCUIT VOLTAGE CHART

MODE PIN NO	STOP	PLAY
U10 (ES6168)		
1	3.17	3.16
2	1.38	1.38
3	1.53	1.53
4	1.45	1.45
5	1.53	1.6
6	1.44	1.18
7	1.56	1.5
8	0	0
9	2.33	2.33
10	1.97	1.5
11	1.7	1.3
12	1.6	1.3
13	1.5	1.3
14	1.46	1.43
15	1.9	1.1
16	1.78	1.92
17	0	0
18	3.17	3.16
19	0.6	0.35
20	1.48	0.9
21	0.73	1.8
22	1.6	0.28
23	0	0
24	4.02	4.02
25	0.02	0.02
26	0	0
27	3.17	3.16
28	0	0
29	0	0
30	0	0
31	NC	NC
32	1.55	1.55
33	0	1.15
34	0	0
35	2.33	2.33
36	0	1.16
37	0	1.15
38	0	1.16
39	1.37	1.37
40	1.53	1.53
41	1.52	1.51
42	NC	NC
43	0	0
44	2.33	2.33
45	NC	NC
46	NC	NC
47	NC	NC
48	0.26	0.26
49	1.58	1.58
50	1.66	1.66
51	3.16	3.17
52	0	0

MODE PIN NO	STOP	PLAY
53	0	0
54	1	0.6
55	0.8	0.6
56	1.45	1.3
57	1.49	1.42
58	1.37	1.29
59	3.17	3.16
60	0	0
61	1.3	1.42
62	1.2	1.24
63	1	1.33
64	0	0
65	0.1	0.1
66	0.1	0.1
67	0	0
68	3.17	3.16
69	3.05	3.05
70	3.16	3.15
71	3.05	2.96
72	3	2.95
73	0.13	0.16
74	0	0.18
75	3.17	3.16
76	0	0
77	0.7	1
78	0.68	1
79	0.85	1.06
80	0.84	1.06
81	0.85	1.06
82	0.84	1.06
83	2.33	2.33
84	0	0
85	0.54	1
86	0.8	1.1
87	0.6	0.9
88	0.63	0.95
89	0.68	0.95
90	0.82	0.99
91	0	0
92	3.17	3.16
93	0.48	0.88
94	0.64	0.75
95	0.8	1.19
96	1	1.29
97	NC	NC
98	0	0
99	3.17	3.16
100	2.89	2.75
101	0.02	0.13
102	1.59	1.59
103	0	0
104	3.17	3.16
105	1.58	1.58

MODE PIN NO	STOP	PLAY
106	0.86	0.86
107	0.88	0.88
108	0.77	0.77
109	0.98	0.98
110	1.57	1.57
111	3.17	3.16
112	0	0
113	0.93	0.93
114	1.1	1.1
115	0.99	0.99
116	NC	NC
117	0.71	0.58
118	4.35	4.35
119	0	0
120	0	0
121	2.33	2.33
122	0	1.6
123	3.3	1.6
124	3.3	1.6
125	0	1.6
126	0	1.6
127	0	1.6
128	3.3	1.6
129	0	0
130	3.17	3.16
131	0	1.6
132	3.3	3.3
133	3.14	3.1
134	3.3	3.3
135	0	0
136	3.3	3.3
137	0	0
138	0	0
139	2.33	2.33
140	3.14	3.14
141	0	0
142	3.14	1.6
143	3.13	3.13
144	3.3	3.3
145	3.13	3.13
146	3.1	0.74
147	0	0
148	3.17	3.16
149	3.3	1.6
150	3.1	2
151	0.45	0.6
152	3.13	3.13
153	3.13	3.13
154	3.13	3.13
155	0	0
156	0	0
157	3.17	3.16
158	3.3	3.3

MODE PIN NO	STOP	PLAY
159	3.17	3.16
160	2.8	3.6
161	2.86	3.69
162	3.6	3.1
163	0	0
164	3.17	3.16
165	0	0
166	0	0
167	4.3	4.3
168	3	1.24
169	4.7	3.6
170	3.13	3.13
171	0	0
172	2.33	2.33
173	NC	NC
174	3.12	3.12
175	3.12	3.12
176	3.13	3.13
177	0	0
178	0.4	0.5
179	0.36	0.56
180	0.43	0.55
181	0.55	0.55
182	0.71	0.52
183	3.17	3.16
184	0	0
185	0.58	0.58
186	0.46	0.46
187	0.5	0.5
188	0.3	0.36
189	0.26	0.35
190	0.55	0.55
191	1.2	0.6
192	0	0
193	3.17	3.16
194	0.5	0.5
195	0.47	0.37
196	0.71	0.56
197	0.64	0.4
198	3.11	3.07
199	3.1	3.06
200	0	0
201	3.17	3.16
202	NC	NC
203	NC	NC
204	0	0
205	0	0
206	1.66	1.68
207	1.05	1.1
208	0	0

MODE PIN NO	STOP	PLAY
U6 (MX29LV160ABTC-70)		
1	1.78	1.92
2	1.9	1.1
3	1.46	1.43
4	1.5	1.3
5	1.6	1.3
6	1.7	1.3
7	1.97	1.5
8	1.56	1.5
9	1.6	0.28
10	NC	NC
11	3.11	3.07
12	4.02	4.02
13	3.16	3.15
14	3.16	3.15
15	NC	NC
16	0.73	1.8
17	1.48	0.9
18	1.44	1.18
19	1.53	1.6
20	1.45	1.45
21	1.53	1.53
22	1.38	1.38
23	1.05	1.1
24	1.66	1.68
25	0	0
26	0	0
27	0	0
28	3.13	3.13
29	0.4	0.5
30	0.3	0.36
31	0.36	0.56
32	0.26	0.35
33	0.43	0.55
34	0.55	0.55
35	0.55	0.55
36	1.2	0.6
37	3.16	3.15
38	0.71	0.52
39	0.5	0.5
40	0.58	0.58
41	0.47	0.37
42	0.46	0.46
43	0.71	0.56
44	0.5	0.5
45	0	0
46	0	0
47	0	0
48	0.6	0.35

MODE PIN NO	STOP	PLAY
U20 (SC16C550IB48)		
1	NC	NC
2	0.58	0.58
3	0.46	0.46
4	0.5	0.5
5	2.4	2.4
6	NC	NC
7	4.8	4.8
8	4.84	4.84
9	4.87	4.87
10	4.87	4.87
11	0	0
12	2.4	2.4
13	NC	NC
14	1.55	1.55
15	1.26	1.26
16	4.86	4.86
17	0	0
18	0	0
19	4.86	4.86
20	0	0
21	NC	NC
22	0	0
23	NC	NC
24	0	0
25	NC	NC
26	1.66	1.68
27	0	0
28	0	0
29	NC	NC
30	4.3	4.3
31	NC	NC
32	4.85	4.85
33	4.85	4.85
34	NC	NC
35	0	0
36	NC	NC
37	NC	NC
38	4.88	4.88
39	4.88	4.88
40	4.88	4.88
41	4.88	4.88
42	4.87	4.87
43	0.4	0.5
44	0.36	0.56
45	0.43	0.55
46	0.55	0.55
47	0.71	0.52
48	NC	NC

MODE PIN NO	STOP	PLAY
IC17 (PLD M4A3-64/32)		
1	1.66	1.6
2	0	1.6
3	1.65	1.6
4	2.6	2.6
5	1.79	1.79
6	0	0
7	2.6	2.6
8	1.6	1.6
9	0	1.6
10	0	1.6
11	0	1.6
12	1.65	1.6
13	3.3	1.6
14	0	1.6
15	0	1.6
16	3.3	3.3
17	0	0
18	NC	NC
19	3.3	1.6
20	3.3	1.6
21	0	1.6
22	0	1.6
23	3.3	1.6
24	0	0
25	3.1	1.6
26	2.6	2.6
27	0	0
28	0	0
29	2.6	2.6
30	3.3	3.3
31	NC	NC
32	NC	NC
33	3.3	3.3
34	3.3	1.6
35	3.3	3.3
36	1.6	1.6
37	3.3	1.6
38	3.3	3.3
39	0	0
40	NC	NC
41	3.3	3.3
42	3.3	1.6
43	3.3	3.3
44	1.6	1.6
U38 (LM78M12CDT)		
1	16.2	16.2
2	0	0
3	11.97	11.97

MODE PIN NO	STOP	PLAY
U2 (DDX8001)		
58	0	1.1
59	3.2	3.2
60	0	0
61	NC	NC
62	0	1.1
63	0	1.1
64	3.2	3.2

MODE PIN NO	STOP	PLAY
U23 (OPA2134UA)		
1	0	0
2	0	0
3	0	0
4	-12	-12
5	0	0
6	0	0
7	0	0
8	12	12

MODE PIN NO	STOP	PLAY
U24 (OPA2134UA)		
1	0	0
2	0	0
3	0	0
4	-12	-12
5	0	0
6	0	0
7	0	0
8	12	12

MODE PIN NO	STOP	PLAY
U25 (OPA2134UA)		
1	0	0
2	0	0
3	0	0
4	-12	-12
5	0	0
6	0	0
7	0	0
8	12	12

MODE PIN NO	STOP	PLAY
U26 (OPA2134UA)		
1	0	0
2	0	0
3	0	0
4	-12	-12
5	0	0
6	0	0
7	0	0
8	12	12

MODE PIN NO	STOP	PLAY
U14 (24LC16A)		
1	0	0
2	0	0
3	0	0
4	-12	-12
5	0	0
6	0	0
7	0	0
8	12	12

MODE PIN NO	STOP	PLAY
U18 (74HC138)		
1	1.78	1.92
2	0.6	0.4
3	1.8	0.9
4	3.1	3.1
5	3.1	3.1
6	3.1	3.1
7	NC	NC
8	0	0
9	NC	NC
10	NC	NC
11	NC	NC
12	NC	NC
13	4.86	4.86
14	4.86	4.86
15	4.86	4.86
16	4.86	4.86

MODE PIN NO	STOP	PLAY
U16 (74HC374)		
1	0	0
2	NC	NC
3	0.3	0.36
4	0.26	0.35
5	4.87	4.87
6	0	0
7	0.55	0.55
8	1.2	0.6
9	0	0
10	0	0
11	4.87	4.87
12	0	0
13	0.5	0.5
14	0.47	0.37
15	0	0
16	3.3	3.3
17	0.71	0.56
18	0.64	0.4
19	4.8	4.8
20	4.8	4.8

MODE PIN NO	STOP	PLAY
U31 (74LVC2G241)		
1	0	0
2	1.3	1.3
3	1.4	1.4
4	0	0
5	1.3	1.3
6	1.4	1.4
7	3.1	3.1
8	3.1	3.1

MODE PIN NO	STOP	PLAY
U35 (2SC3326)		
E	0	0
C	0	0
B	0.7	-12

MODE PIN NO	STOP	PLAY
U17 (74HC374)		
1	0	0
2	4.8	4.8
3	0.4	0.5
4	0.36	0.56
5	4.8	4.8
6	4.8	4.8
7	0.43	0.55
8	0.55	0.55
9	4.5	4.5
10	0	0
11	4.87	4.87
12	4.87	0
13	0.55	0.55
14	0.7	0.4
15	NC	NC
16	NC	NC
17	0.5	0.5
18	0.5	0.5
19	NC	NC
20	4.8	4.8

MODE PIN NO	STOP	PLAY
Q36 (2SC3326)		
E	0	0
C	0	0
B	0.7	-12

MODE PIN NO	STOP	PLAY
Q56 (2SC1815)		
E	0	0
C	0	0.3
B	0.7	0

MODE PIN NO	STOP	PLAY
Q3 (2SC3326)		
E	0	0
C	0	0
B	0.7	-12

MODE PIN NO	STOP	PLAY
Q32 (2SC3326)		
E	0	0
C	0	0
B	0.7	-12

MODE PIN NO	STOP	PLAY
Q55 (2SC3326)		
E	0	0
C	0	0
B	0.7	-12

MODE PIN NO	STOP	PLAY
Q33 (2SC3326)		
E	0	0
C	0	0
B	0.7	-12

MODE PIN NO	STOP	PLAY
Q34 (2SC3326)		
E	0	0
C	0	0
B	0.7	-12

MODE PIN NO	STOP	PLAY
Q35 (2SC3326)		
E	0	0
C	0	0
B	0.7	-12

MODE PIN NO	STOP	PLAY
Q44 (2SK3019)		
E	0	0
C	0.16	0.16
B	0	0

MODE PIN NO	STOP	PLAY
Q43 (2SK3019)		
E	0	0
C	0	0
B	4.8	4.8

MODE PIN NO	STOP	PLAY
Q40 (8550)		
E	4.4	4.4
C	0	0
B	4	4

MODE PIN NO	STOP	PLAY
Q54 (2SC3326)		
E	0	0
C	0	0
B	0.7	-12

MODE PIN NO	STOP	PLAY
Q50 (2SC3326)		
E	0	0
C	0	0
B	0.7	-12

MODE PIN NO	STOP	PLAY
Q2 (8050)		
E	2.3	2.3
C	3.16	3.16
B	3.16	3.16

MODE PIN NO	STOP	PLAY
Q40 (8550)		
E	4.4	4.4
C	0	0
B	4	4

MODE PIN NO	STOP	PLAY
Q5 (DTC114)		
E	0	0
C	4.8	4.8
B	0	0

MODE PIN NO	STOP	PLAY
Q6 (DTC114)		
E	0	0
C	0	0
B	4.8	4.8

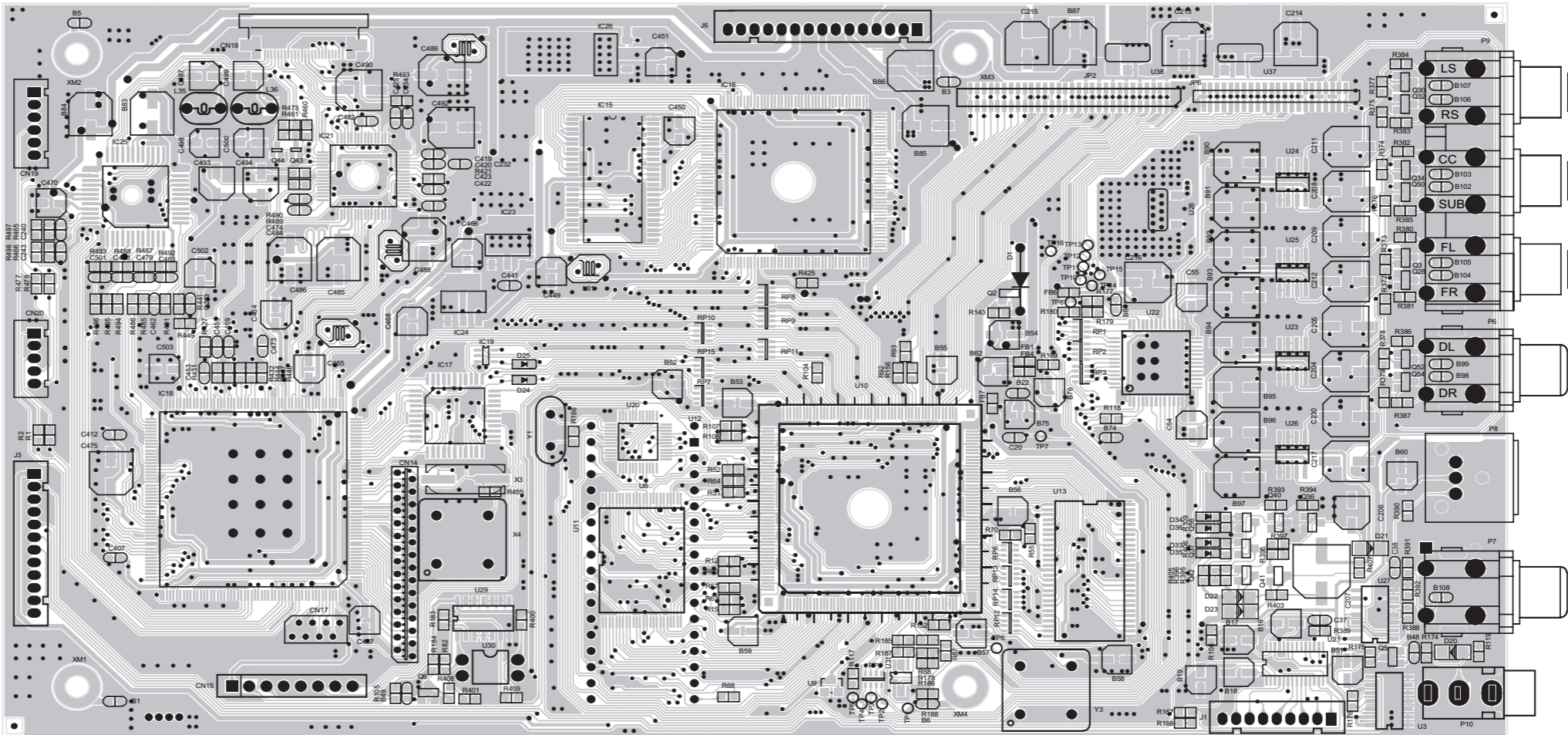
MODE PIN NO	STOP	PLAY
Q45 (DTC114)		
E	0	0
C	4.8	4.8
B	0	0

MODE PIN NO	STOP	PLAY
U28 (LM1117-ADJ)		
1	4	4
2	5.2	5.2
3	11.9	11.9
4	5.2	5.2

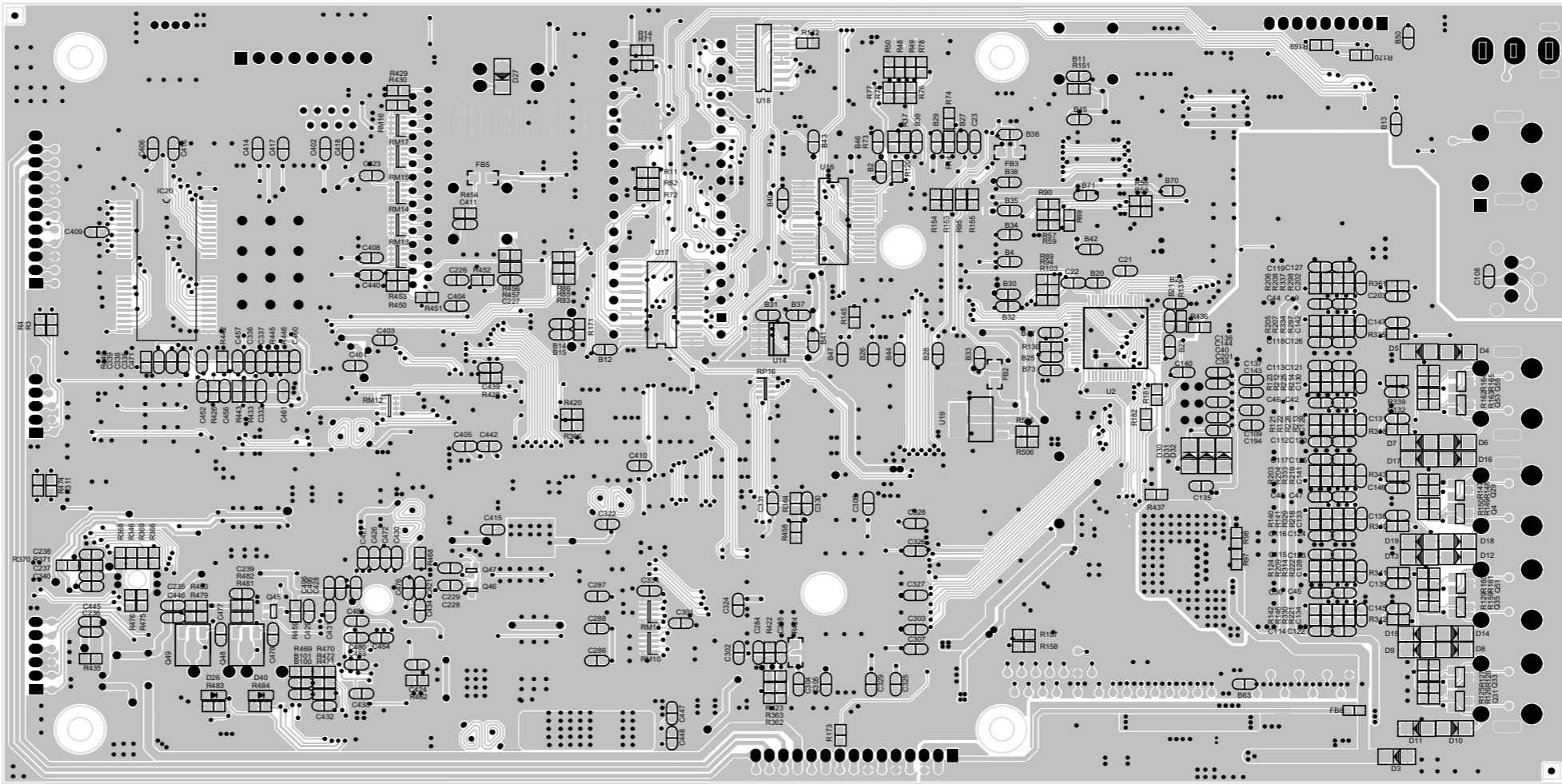
MODE PIN NO	STOP	PLAY
IC24 (LM1117-MP*1.8)		
1	0	0
2	1.78	1.78
3	4.95	4.95
4	1.78	1.78

1.DECODE P.C.BOARD

TOP VIEW

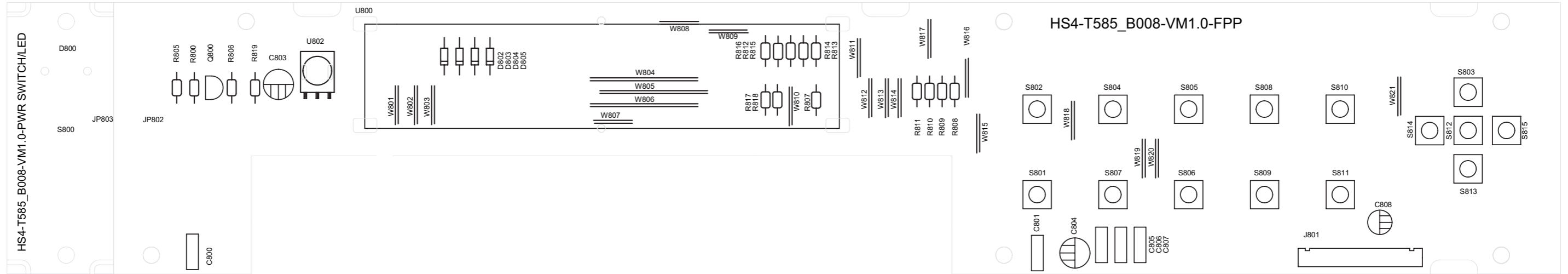


BOTTOM VIEW

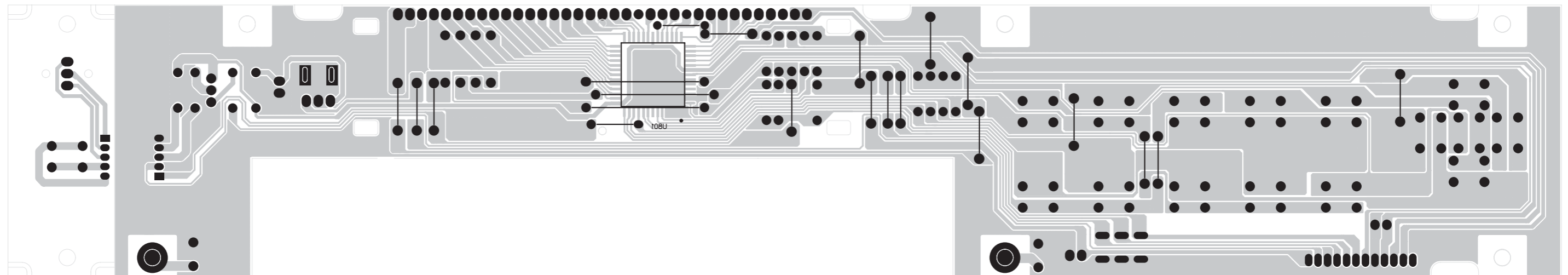


2.KEY P.C.BOARD

TOP VIEW

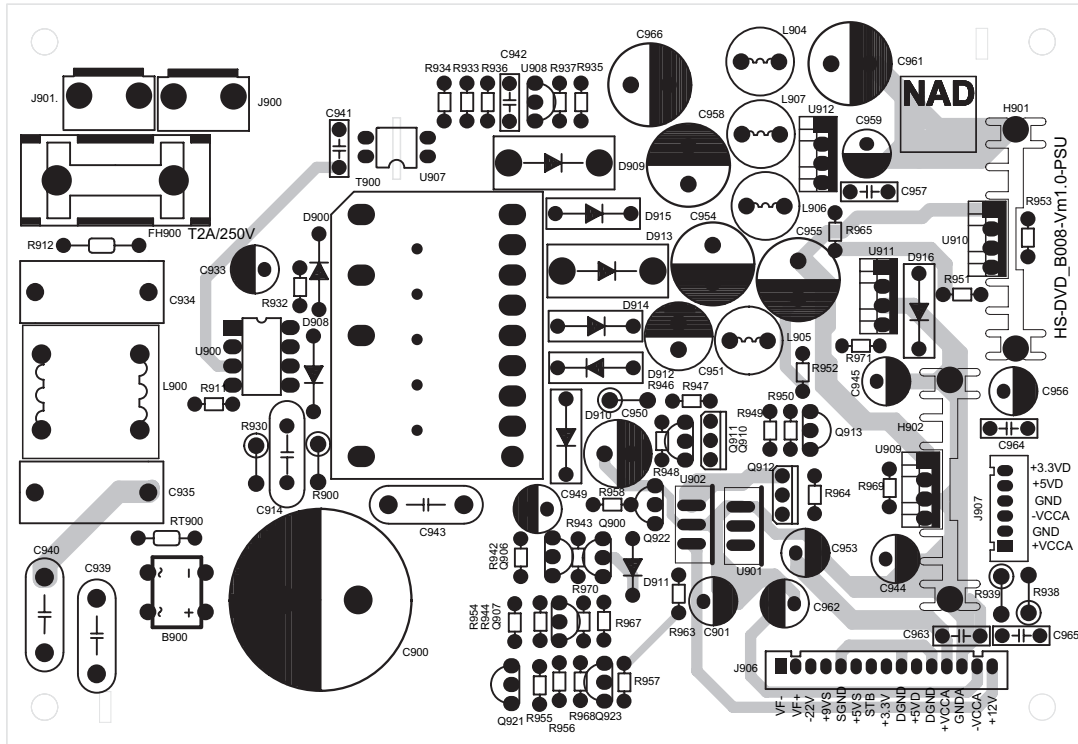


BOTTOM VIEW

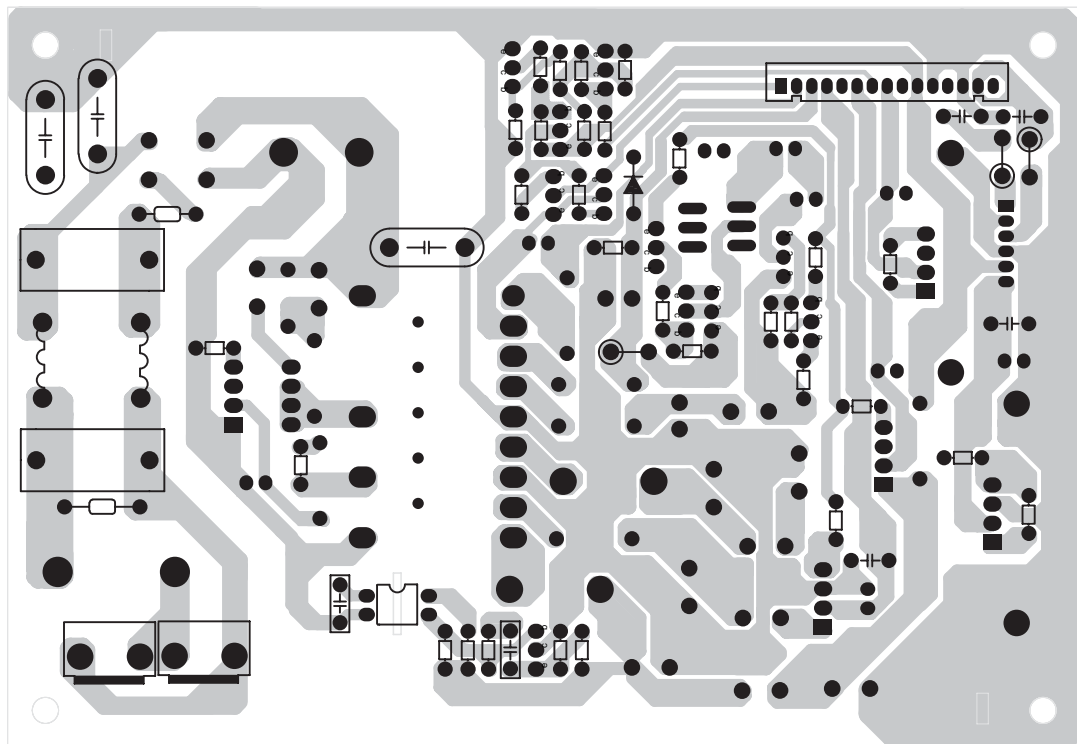


3.SMPS P.C.BOARD

TOP VIEW

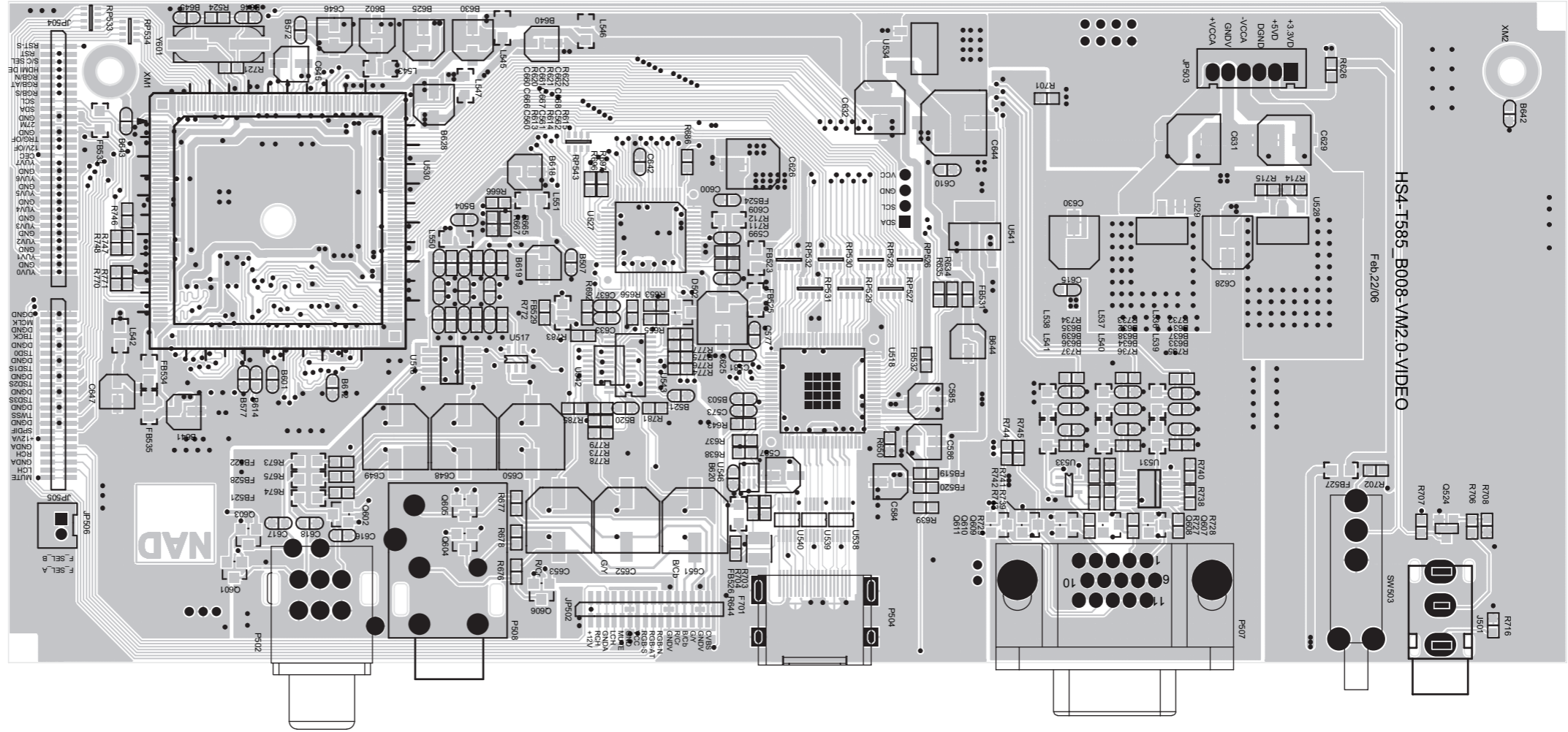


BOTTOM VIEW

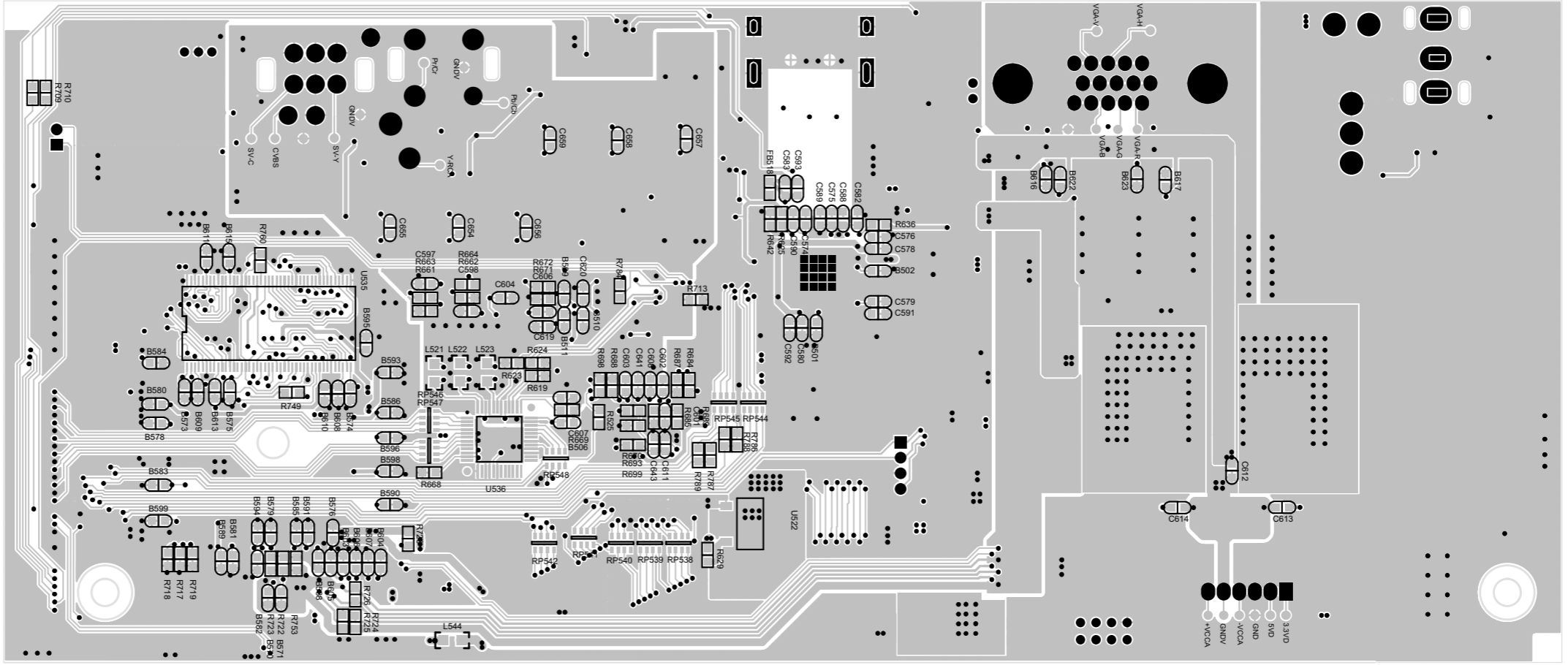


4.VIDEO P.C.BOARD

TOP VIEW

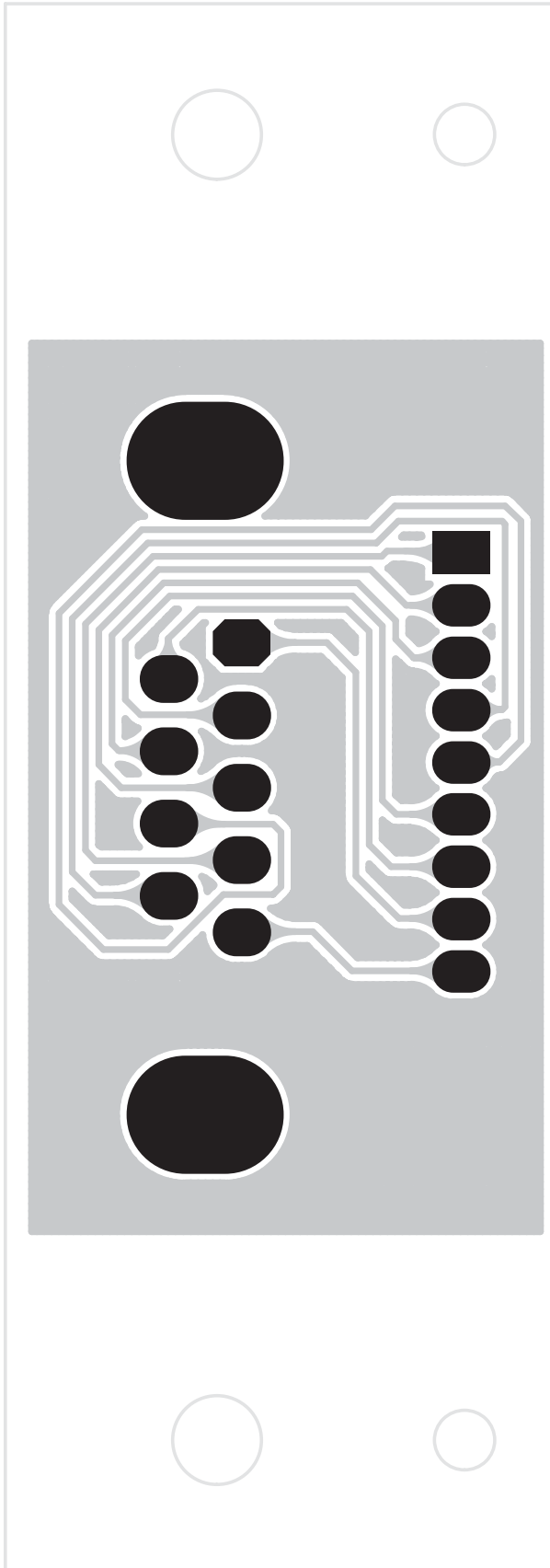


BOTTOM VIEW

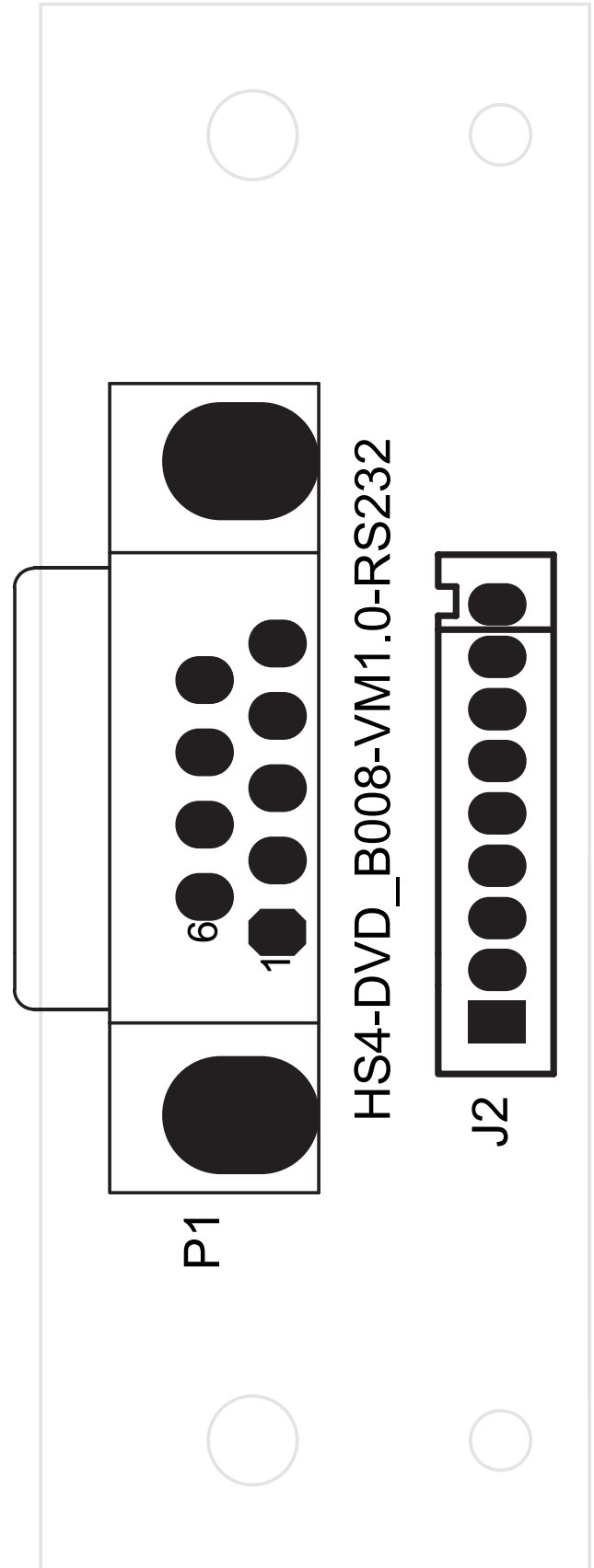


5.RS232 P.C.BOARD

TOP VIEW

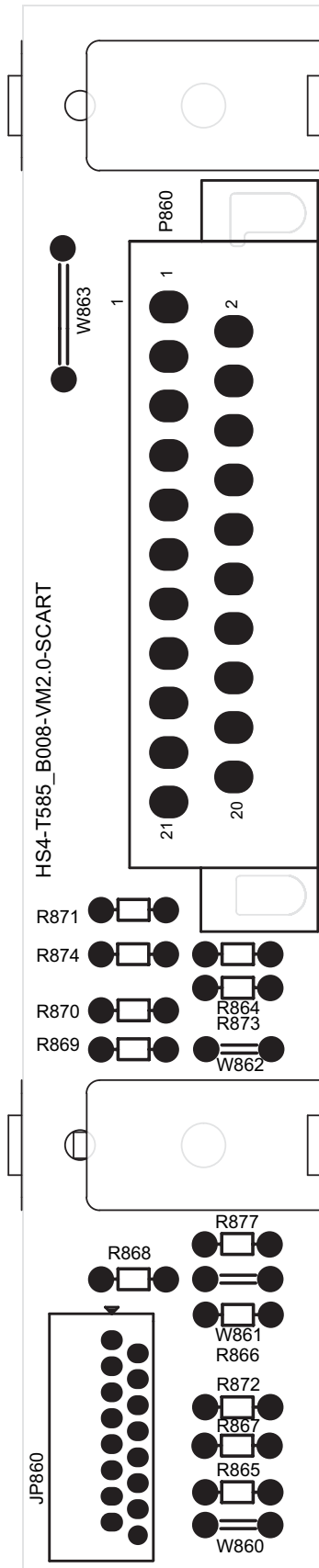


BOTTOM VIEW

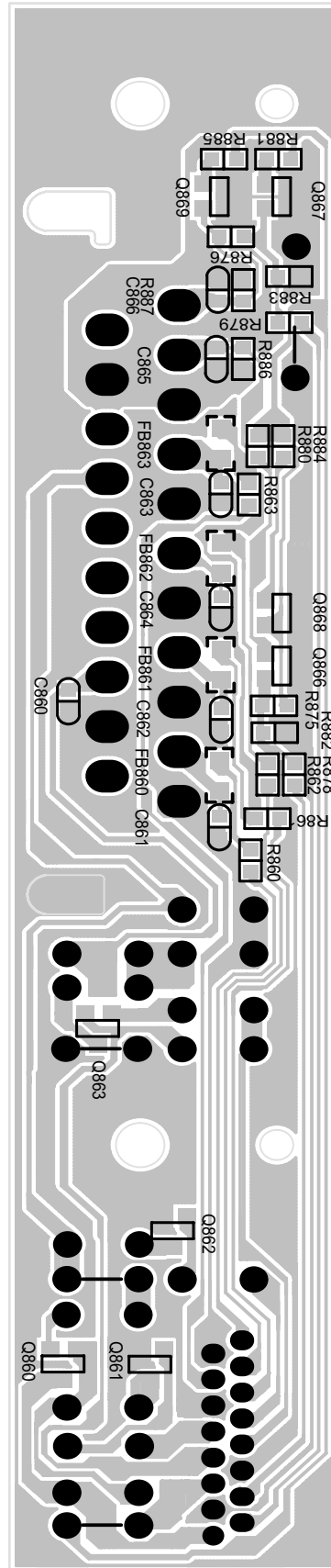


6.SCART P.C.BOARD

TOP VIEW



BOTTOM VIEW



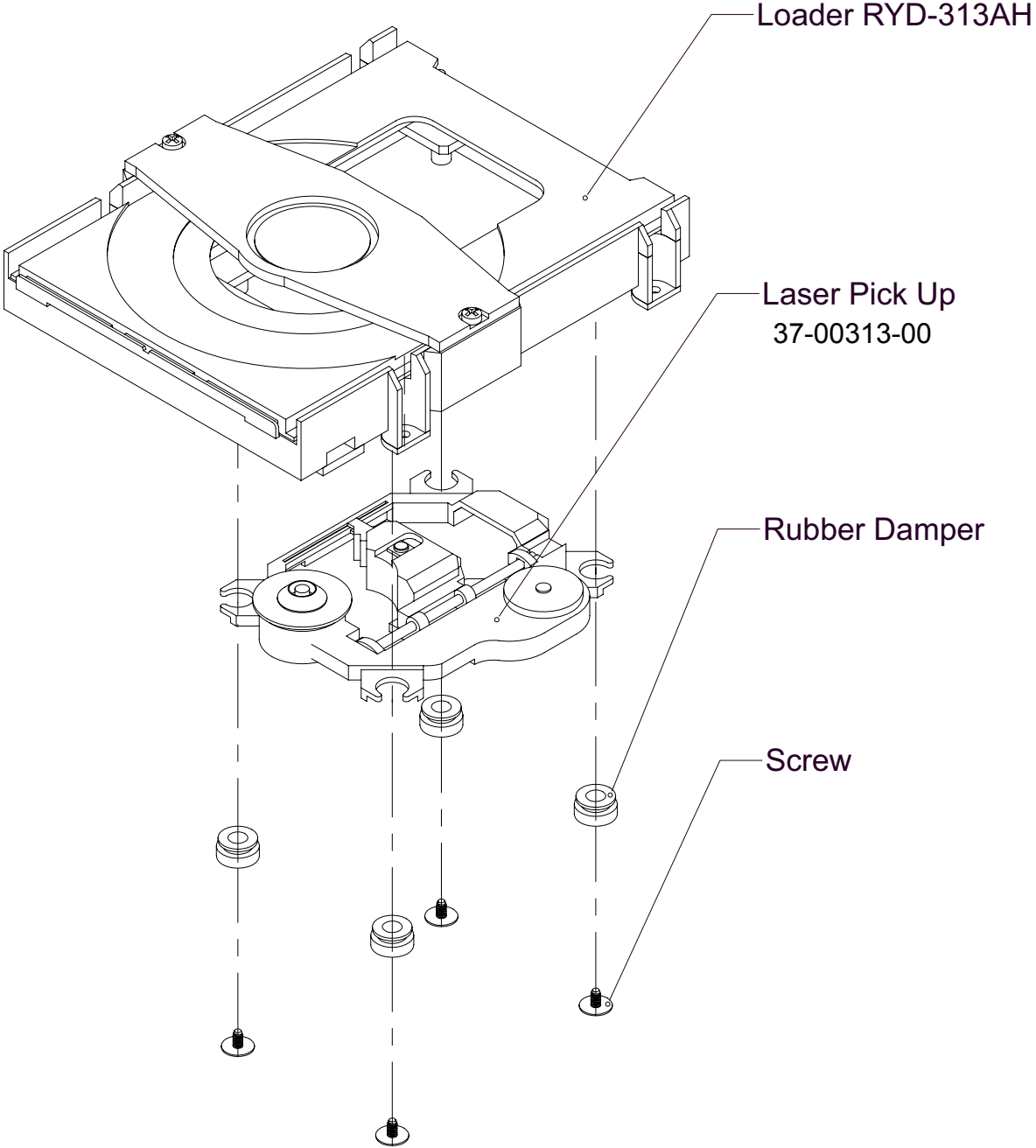
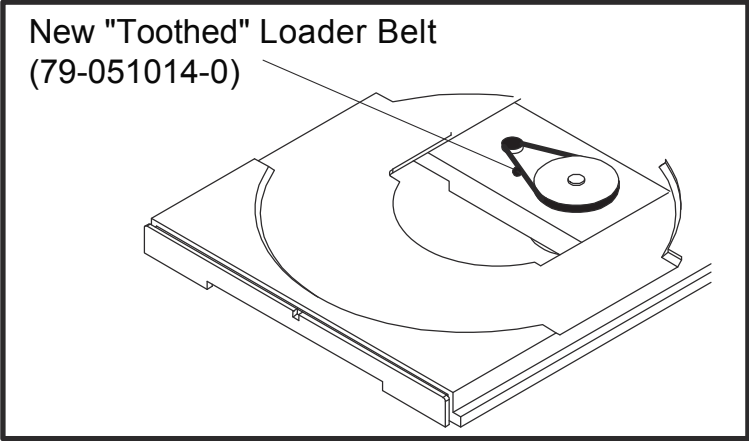
MEMO

A series of 25 horizontal dotted lines for writing.

MEMO

SECTION 4 MECHANISM

Mechanism Assembly 36-58513-00



SECTION 5

REPLACEMENT PARTS LIST

MODEL : T585 (NAD)

	P/N		Part Type	Designator	Footprint	Qty	
P/N:01-58501-00		PCB1 BOARD (DECODE)					
DIODE							
	33-40352-01	Switch Diode	1SS352	D24, D25, D26, D33, D34, D35, D36, D40	D0805	8	
	33-44148-11	Switch Diode	LL4148	D20, D21, D22, D23, D3, D30, D31, D32	DL-35	8	
	33-24001-02	Rectifier Diode	1N4001	D1	Pitch=10mm	1	
	33-24001-00	Rectifier Diode	1N4001		DO-41	1	
	33-11200-11	Zener Diode	12V, 1/2W	D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19	LL34	16	
	33-15609-00	Zener Diode	5V6, 1/2W	D27	Pitch=6mm	1	
TRANSISTOR							
	31-03019-01	Transistor	2SK3019	Q43, Q44	SC-75A	2	
	31-01815-01	Transistor	2SC1815	Q36, Q37, Q56	SC-59	3	
	31-01015-01	Transistor	2SA1015	Q40, Q41, Q42	SC-59	3	
	31-00114-05	Transistor	DTC114EKA	Q5, Q6	SC-59	2	
	31-00144-05	Transistor	DTC144EUA	Q45	SC-70	1	
	31-03326-01	Transistor	2SC3326A	Q3, Q4, Q28, Q29, Q30, Q31, Q32, Q33, Q34, Q35, Q50, Q51, Q52, Q53, Q54, Q55	SC-59	16	
	31-01201-01	Transistor	2SA1201Y/2SB1132Q	Q48, Q49	SC-62	2	
ICS							
	03-01608-01	AUDIO D/A	DSD1608PAH	U22	TQFP52	1	
	03-29160-72	FLASH MEMORY	MX29LV160ABTC-70 MX29LV160CBTC-70 M29W160EB-70N6	U6	TSOP48	1	
	03-29160-70	FLASH MEMORY	MX29LV160ABTC-70 MX29LV160CBTC-70 M29W160EB-70N6		TSOP48	1	
	03-01117-03	Linear Regulator	LM1117DTX-ADJ	U28	TO252	1	
	03-01881-01	RF AMP	CXD1881BR	IC21	QFP64M	1	
	03-01885-01	SERVO DSP	CXD1885Q	IC18	LQFP208	1	
	03-02753-01	SACD DECODE	CXD2753R	IC16	QUAD176	1	
	03-06168-01	MPEG DECODE	ES6168FA	U10	FQFP208	1	
	03-08042-01	MOTO DRIVER	FAN8042	IC25	QFP48	1	
	03-00640-70	SDRAM	GLT5640L16-7TS/ IS42S16400B-7T/ W986416DH-7	U13	TSOP54	1	
	03-16161-45	DRAM	M11L16161SA-45T	IC20	TSOP44 (II)	1	
	03-16161-70	SDRAM	M12L16161A-7T	IC15	TSOP50 (II)	1	
	03-02134-00	AUDIO AMPLIFIER	OPA2134UA	U23, U24, U25, U26	SO8	4	
	03-06432-10	CPLD	M4A3-64/32-10VC	IC17	TQFP44	1	
	03-02416-02	EEPROM	24LC16A	U14	SO8	1	
	03-00809-02	RESET	TCM809MENB	U9	SOT-23B	1	
	03-07812-01	Regulator	LM78M12CDT	U38	TO252	1	
	03-07912-01	Regulator	LM79M12CDT	U37	TO252	1	
	03-01117-18	Regulator	LM1117MPX-1.8/AMS1117-1.8	IC24	SOT223	1	
	03-01117-25	Regulator	LM1117MPX-2.5AMS1117-2.5	IC26	SOT223	1	
	03-01117-33	Regulator	LM1117MPX-3.3/AMS1117-3.3	IC23	SOT223	1	
	03-00004-02	6-Inverter	MM74HCU04M/74HCU04D	U27	SOIC14	1	
	03-00511-00	Fiber Optic Transmitter	GP1FAV31TK0F	P8	DIP6	1	
	03-03243-01	RS232 Transceivers	MAX3243CU/ICL3243ECVZA	U21	TSSOP28	1	
	03-00138-01	3-to-8 Line Decoder	MM74HCT138M	U18	SOIC16	1	
	03-00374-01	D-Type Flip-Flop,	CD74HCT374M	U16, U17	SOIC20	2	
	03-07486-02	Quad 2-Input Exclusive OR Gate	74HC86	U3	SOIC14	1	
	03-74241-01	Dual Buffer/Driver	74LVC2G241	U31	TSSOP8	1	
	03-16550-48	Universal Asynchronous Receiver/Transmitter	SC16C550IB48	U20	LQFP48	1	
	03-00817-00	Photo Coupler	PC817B	U30	DIP4	1	
	03-08001-01	DDX Multi-channel Digital Audio Processor	DDX8001	U2	TQFP64	1	
Capacitor							
	26-22051-00	Ceramic Chip Capacitor	22pF, 50V, ±5%, NPO	B15	0603	1	
	26-56051-00	Ceramic Chip Capacitor	56pF, 50V, ±5%, NPO	B14	0603	1	
	26-10151-00	Ceramic Chip Capacitor	100pF, 50V, ±5%, NPO	C456, C457, C458, C501, B49, B100, B108	0603	7	
	26-15151-00	Ceramic Chip Capacitor	150pF, 50V, ±5%, NPO	C128, C129, C130, C133, C134, C141, C142, C202, C473, C474	0603	10	

	P/N		Part Type	Designator	Footprint	Qty
	26-18151-00	Ceramic Chip Capacitor	180pF, 50V, ±5%, NPO	B98, B99, B102, B103, B104, B105, B106, B107	0603	8
	26-22151-00	Ceramic Chip Capacitor	220pF, 50V, ±5%, NPO	B72	0603	1
	26-33151-00	Ceramic Chip Capacitor	330pF, 50V, ±5%, NPO	C452, C453, C454	0603	3
	26-68151-00	Ceramic Chip Capacitor	680pF, 50V, ±5%, NPO	C112, C113, C114, C115, C116, C117, C118, C119	0603	8
	26-10251-10	Ceramic Chip Capacitor	1nF, 50V, ±5%, NPO	C476, C477, C478, C479, B24	0603	5
	26-12251-10	Ceramic Chip Capacitor	1.2nF, 50V, ±5%, NPO	C120, C121, C122, C123, C124, C125, C126, C127, B25	0603	9
	26-22251-00	Ceramic Chip Capacitor	2.2nF, 50V, ±10%, X7R	C480, C481, C482, C483	0603	4
	26-10351-00	Ceramic Chip Capacitor	0.01uF, 50V, ±10%, X7R	C232, C233, C234, C235, C236, C237, C238, C239, C240, C243, C40	0603	11
	26-15321-00	Ceramic Chip Capacitor	0.015uF, 25V, ±10%, X7R	B101	0603	1
	26-22351-00	Ceramic Chip Capacitor	0.022uF, 50V, ±10%, X7R	C459, C460, C461, C462, C463	0603	5
	26-33351-00	Ceramic Chip Capacitor	0.033uF, 50V, ±10%, X7R	C495, C496	0603	2
	26-47351-00	Ceramic Chip Capacitor	0.047uF, 50V, ±10%, X7R	C471, C472, B48	0603	3
	26-10451-00	Ceramic Chip Capacitor	0.1uF, 50V, +80-20%, Y5V	B1, B2, B3, B4, B5, B6, B11, B12, B13, B20, B21, B22, B23, B26, B27, B28, B29, B30, B31, B32, B33, B34, B35, B36, B37, B38, B39, B40, B41, B42, B43, B44, B45, B46, B47, B50, B70, B71, B73, B74, C37, C38, C39, C42, C44, C45, C46, C47, C48, C49, C50, C108, C109, C135, C136, C137, C140, C143, C144, C194, C201, C284, C285, C286, C287, C288, C301, C302, C303, C304, C305, C306, C307, C322, C323, C324, C325, C326, C327, C328, C329, C330, C331, C332, C334, C335, C336, C337, C338, C339, C340, C401, C403, C404, C405, C406, C407, C408, C409, C410, C411, C412, C414, C415, C416, C417, C418, C419, C420, C421, C422, C423, C424, C425, C426, C427, C428, C429, C430, C431, C432, C434, C438, C439, C440, C441, C442, C445, C446, C447, C448	0603	131
	26-15451-00	Ceramic Chip Capacitor	0.15uF, 50V, +80-20%, Y5V	C455	0603	1
	26-33421-00	Ceramic Chip Capacitor	0.33uF, 25V, +80-20%, Y5V	C131, C132, C138, C139, C145, C146, C147, C203	0603	8
	26-10521-00	Ceramic Chip Capacitor	1UF, 25V, +80-20%, Y5V	C484	0603	1
	06-33851-01	Chip Alu Electrolytic Capacitor	VSS Series, 0.33uF, 50V, ±20%	B17, B18, B19	4×5.4	3
	06-10851-01	Chip Alu Electrolytic Capacitor	VSS Series, 0.1uF, 50V, ±20%	B16	4×5.4	1
	06-10011-09	Chip Alu Electrolytic Capacitor	VSS Series, 10uF, 16V, ±20%	B51, B52, B53, B54, B55, B56, B57, B58, B59, B60, B62, C54, C55, C497, C498, C499, C500, C502, C503	4×5.4	19
	06-22060-01	Chip Alu Electrolytic Capacitor	VSS Series, 22UF, 6.3V, ±20%	C449, C450, C451, C464, C465, C466, C467, C468, C470, B75, B76	4×5.4	11
	06-33060-00	Chip Alu Electrolytic Capacitor	VSS Series, 33uF, 6.3V, ±20%	C493, C494	5×5.4	2
	06-47060-01	Chip Alu Electrolytic Capacitor	VSS Series, 47uF, 6.3V, ±20%	C206	5×5.4	1
	06-47021-07	Chip Alu Electrolytic Capacitor	VSS Series, 47uF, 25V, ±20%	C215, B87, B90, B91, B92, B93, B94, B95, B96, B97	6.3×5.4	10
	06-10111-11	Chip Alu Electrolytic Capacitor	VSS Series, 100uF, 16V, ±20%	C213, C214, C216, C475, C485, C486, C488, C489, C490, C492, B83, B84	6.3×5.4	12
	06-22160-01	Chip Alu Electrolytic Capacitor	VSS Series, 220uF, 6.3V, ±20%	B85, B86	6.3×5.4	2
	06-22121-05	Chip Alu Electrolytic Capacitor	VSS Series, 220uF, 25V, ±20%	C207	8×10.5	1
	06-47011-06	Chip Alu Electrolytic Capacitor(Bipolar)	VNP Series, 47uF, bipolar, 10V, ±20%	C204, C205, C208, C209, C211, C212, C217, C230	6.3×7.7	8
Resistor						
	07-90000-00	Chip Resistor	0Ω, ±5%	R3, R4, R51, R60, R61, R62, R69, R70, R71, R72, R88, R92, R93, R143, R156, R167, R168, R169, R170, R173, R179, R180, R181, R182, R183, R421, R435, R436, R437, R450, R477, R478, FB7	0603	33
	07-90229-00	Chip Resistor	2.2Ω, ±5%	R454, R151	0603	2
	07-90229-01	Chip Resistor	2.2Ω, ±5%	R424	0805	1
	07-90100-00	Chip Resistor	10Ω, ±5%	R103, R425	0603	2
	07-90220-00	Chip Resistor	22Ω, ±5%	R187 R188	0603	2

	P/N		Part Type	Designator	Footprint	Qty
	07-90330-00	Chip Resistor	33Ω, ±5%	R83, R85, R86, R87, R89, R90, R94, R95, R104, R105, R106, R117, R118, R120, R178, R409	0603	16
	07-90470-00	Chip Resistor	47Ω, ±5%	R145, R479, R480, R481, R482	0603	5
	07-90680-00	Chip Resistor	68Ω, ±5%	R390, R455, R456, R152, R153	0603	5
	07-90910-00	Chip Resistor	91Ω, ±5%	R392	0603	1
	07-90101-00	Chip Resistor	100Ω, ±5%	R403, R408, R461, R473	0603	4
	07-90151-00	Chip Resistor	150Ω, ±5%	R372, R373, R374, R375, R376, R377, R378, R379, R380, R381, R382, R383, R384, R385, R386, R387	0603	16
	07-91600-00	Chip Resistor	160Ω, ±1%	R97	0603	1
	07-90221-00	Chip Resistor	220Ω, ±5%	R457, R458, R463	0603	3
	07-90331-00	Chip Resistor	330Ω, ±5%	R391	0603	1
	07-90471-00	Chip Resistor	470Ω, ±5%	R184, R447, R489, R490	0603	4
	07-95100-00	Chip Resistor	510Ω, ±1%	R98	0603	1
	07-90681-00	Chip Resistor	680Ω, ±5%	R422	0603	1
	07-90821-00	Chip Resistor	820Ω, ±5%	R462	0603	1
	07-90102-00	Chip Resistor	1KΩ, ±5%	R107, R108, R119, R393, R394, R395, R396, R471, R472	0603	9
	07-90152-00	Chip Resistor	1.5KΩ, ±5%	R166, R449	0603	2
	07-90182-00	Chip Resistor	1.8KΩ, ±5%	R431, R432	0603	2
	07-90222-00	Chip Resistor	2.2KΩ, ±5%	R174, R398	0603	2
	07-92701-00	Chip Resistor	2.7KΩ, ±1%	R121, R123, R124, R140, R142, R203, R205, R206, R225, R228, R314, R329, R330, R333, R334, R337	0603	16
	07-93001-00	Chip Resistor	3KΩ, ±1%	R122, R141, R146, R204, R207, R208, R209, R212	0603	8
	07-93401-00	Chip Resistor	3.4KΩ, ±1%	R130	0603	1
	07-90392-00	Chip Resistor	3.9KΩ, ±5%	R470	0603	1
	07-90472-00	Chip Resistor	4.7KΩ, ±5%	R48, R49, R50, R73, R74, R78, R82, R125, R127, R129, R147, R150, R157, R158, R160, R162, R164, R172, R400	0603	19
	07-90562-00	Chip Resistor	5.6KΩ, ±5%	R423	0603	1
	07-90752-00	Chip Resistor	7.5KΩ, ±5%	R491, R492	0603	2
	07-90103-00	Chip Resistor	10KΩ, ±5%	R109, R131, R175, R335, R338, R339, R340, R341, R342, R343, R346, R361, R362, R363, R364, R365, R366, R368, R369, R370, R371, R401, R406, R426, R427, R428, R429, R430	0603	28
	07-91202-00	Chip Resistor	12KΩ, ±1%	R468	0603	1
	07-91652-00	Chip Resistor	16.5KΩ, ±1%	R176, R213, R214, R218, R219, R221, R222, R297, R298	0603	9
	07-90223-00	Chip Resistor	22KΩ, ±5%	R126, R128, R148, R149, R159, R161, R163, R165, R442, R475, R476, R487	0603	12
	07-90333-00	Chip Resistor	33KΩ, ±5%	R440, R441, R483, R484, R485, R486, R488	0603	7
	07-90393-00	Chip Resistor	39KΩ, ±5%	R493	0603	1
	07-90473-00	Chip Resistor	47KΩ, ±5%	R444, R445, R446, R459, R460	0603	5
	07-90563-00	Chip Resistor	56KΩ, ±5%	R494, R495, R496, R497, R498	0603	5
	07-90683-00	Chip Resistor	68KΩ, ±5%	R433	0603	1
	07-90104-00	Chip Resistor	100KΩ, ±5%	R407, R443, R465, R466, R469	0603	5
	07-90124-00	Chip Resistor	120KΩ, ±5%	R397	0603	1
	07-90154-00	Chip Resistor	150KΩ, ±5%	R448	0603	1
	07-90105-00	Chip Resistor	1MΩ, ±5%	R171, R388	0603	2
	07-90106-00	Chip Resistor	10MΩ, ±5%	R389	0603	1
	07-90000-10	Chip Resistor Network	0Ω×4, ±5%	RP1, RP2, RP3	0603×4	3
	07-90100-10	Chip Resistor Network	10Ω×4, ±5%	RP12, RP13, RP14	0603×4	3
	07-90330-10	Chip Resistor Network	33Ω×4, ±5%	RP5, RP6, RP7, RP8, RP9, RP10, RP11	0603×4	7
	07-90470-10	Chip Resistor Network	47Ω×4, ±5%	RP15, RP16	0603×4	2
	07-90103-10	Chip Resistor Network	10KΩ×4, ±5%	RM10, RM11, RM12, RM13, RM14, RM15, RM16, RM17	0603×4	8
Inductor						
	08-02470-00	Inductor	47UH, LGB-S0608-470K	L35, L36	Pitch=5mm	2
	08-04119-00	Chip Bead	CBG201209U110	FB2, FB3, FB5	0805-FB	3
	08-04600-00	Chip Bead	CBG160808U600	FB1	0603-FB	2
	08-04601-00	Chip Bead	CBG160808U601	FB4	0603-FB	1
Connector						
	13-22005-00	Connector Socket	PH 2.0A-5A	CN20	DIP	1

	P/N		Part Type	Designator	Footprint	Qty
	13-22006-00	Connector Socket	PH 2.0A-6A	CN19	DIP	1
	13-22009-00	Connector Socket	PH 2.0A-9A	J1	DIP	1
	13-22012-00	Connector Socket	PH 2.0A-12A	J3	DIP	1
	13-22015-00	Connector Socket	PH 2.0A-15A	J6	DIP	1
	13-21022-01	FPC Connector SMD	LDFPC1,0B-SMT-22P	JP6	SMD22*1.0mm	1
	13-21030-00	FPC Connector SMD	LDFPC1,0B-SMT-30P	JP2	SMD30*1.0mm	1
	13-12508-01	Connector	8PIN*2.54mm	CN15	DIP	1
	13-20524-00	FPC Connector SMD	24PIN, 0.5mm,	CN18	SMD24*0.5mm	1
	17-01001-14	RCA	AV-8.4-14PB	P7		1
	17-01002-08	2RCA	AV2-8.4-13	P6		1
	17-01006-03	6RCA	AV6-8.4-13	P9		1
	17-07001-00	TRIG	PY301-030-100	P10		1
Crystal						
	04-11841-00	Crystal	1.8432M, FL=30PPM, CL=15pF, HC-49U	Y1		1
	04-22702-00	Quartz Oscillator	27.000MHZ, FL=50PPM, CL=15pF	Y3	DIP-8	1
	04-23382-00	Quartz Oscillator	33.8688M, FL=50PPM, CL=15pF	X4	DIP-8	1
C VERSION P/N:01-55502-20 AH VERSION P/N:01-55502-10 PCB2 BOARD (VIDEO)						
Capacitor						
	26-20051-00	Ceramic Chip Capacitor	20pF, 50V, ±5%, NPO	C616, C617, C618	0603	3
	26-27051-00	Ceramic Chip Capacitor	27pF, 50V, ±5%, NPO	B645, B646	0603	2
	26-56051-00	Ceramic Chip Capacitor	56pF, 50V, ±5%, NPO	B631, B632, B633, B634, B635, B636, C660, C661, C662, (C666 C667 C668 NC)	0603	9
	26-10151-00	Ceramic Chip Capacitor	100pF, 50V, ±5%, NPO	C560, C561, C562	0603	3
	26-18151-00	Ceramic Chip Capacitor	180pF, 50V, ±5%, NPO	B637, B638, B639	0603	3
	26-33151-00	Ceramic Chip Capacitor	330pF, 50V, ±5%, NPO	C657, C658, C659	0603	3
	26-82151-00	Ceramic Chip Capacitor	820pF, 50V, ±5%, NPO	C637	0603	1
	26-10251-10	Ceramic Chip Capacitor	1nF, 50V, ±5%, NPO	C578, C579, C580, C581, C582, C583, C589, C590	0603	8
	26-39251-00	Ceramic Chip Capacitor	3.9nF, 50V, ±10%, X7R	C633	0603	1
	26-10351-00	Ceramic Chip Capacitor	0.01uF, 50V, ±10%, X7R	C620, C641, C642, C643, B511	0603	5
	26-10451-00	Ceramic Chip Capacitor	0.1uF, 50V, +80-20%, Y5V	C573, C574, C575, C576, C577, C588, C591, C592, C593, C597, C598, C599, C600, C601, C602, C603, C604, C606, C607, C608, C609, C610, C611, C612, C613, C614, C615, C619, C654, C655, C656, B501, B502, B503, B504, B506, B507, B509, B510, B570, B571, B572, B573, B574, B575, B576, B577, B578, B579, B580, B581, B582, B583, B584, B585, B586, B588, B589, B590, B591, B593, B594, B595, B596, B598, B599, B601, B603, B604, B605, B606, B607, B608, B609, B610, B611, B612, B613, B614, B615, B620, B622, B623, B642, B643	0603	85
	06-10060-01	Chip Alu Electrolytic Capacitor	VSS Series, 10uF, 6.3V, ±20%	C645, C646, C647, B602, B618, B619, B640, B641	4×5.4	8
	06-22060-01	Chip Alu Electrolytic Capacitor	VSS Series, 22uF, 6.3V, ±20%	C584, C585, C586, C587	4×5.4	4
	06-47060-01	Chip Alu Electrolytic Capacitor	VSS Series, 47uF, 6.3V, ±20%	B625, B628, B630	5×5.4	3
	06-47021-07	Chip Alu Electrolytic Capacitor	VSS Series, 47uF, 25V, ±20%	C629, C631	6.3×5.4	2
	06-10160-01	Chip Alu Electrolytic Capacitor	VSS Series, 100uF, 6.3V, ±20%	C625, C626, C628, C630, C632	6.3×5.4	5
	06-47111-06	Chip Alu Electrolytic Capacitor	VSS Series, 470uF, 10V, ±20%	C644, C648, C649, C650, C651, C652, C653	8×10.5	7
RESISTOR						
	07-90000-00	Chip Resistor	0Ω, ±5%	R626, R629, R670, R701, R709, R713, R722, R732, R733, R734, R753, R786, R789	0603	13
	07-90220-00	Chip Resistor	22Ω, ±5%	R686, R746, R749	0603	3
	07-90330-00	Chip Resistor	33Ω, ±5%	R717, R718, R784, R785	0603	4
	07-97509-00	Chip Resistor	75Ω, ±1%	R673, R674, R675, R676, R677, R678, R724, R725, R726, R727, R728, R729, R744, R745	0603	14
	07-99109-00	Chip Resistor	91Ω, ±1%	R735, R736, R737	0603	3
	07-90101-00	Chip Resistor	100Ω, ±5%	R525, R639, R696, R697, R634, R635, R716, R747, R748	0603	9

	P/N	Part Type	Designator	Footprint	Qty	
	07-91500-00	Chip Resistor	150Ω, ±1%	R619, R623, R624	0603	3
	07-90181-00	Chip Resistor	180Ω, ±5%	R715	0603	1
	07-91870-00	Chip Resistor	187Ω, ±1%	R723	0603	1
	07-93000-00	Chip Resistor	300Ω, ±1%	R613, R614, R615, R620, R621, R622, R653, R655, R656	0603	9
	07-95100-00	Chip Resistor	510Ω, ±1%	R714	0603	1
	07-95600-00	Chip Resistor	560Ω, ±1%	R661, R662, R663, R664, R671, R672, R738, R739, R740, R741, R742, R743	0603	12
	07-96800-00	Chip Resistor	680Ω, ±1%	R692	0603	1
	07-90112-00	Chip Resistor	1K1Ω, ±5%	R689	0603	1
	07-90202-00	Chip Resistor	2KΩ, ±5%	R637, R638, R703, R704	0603	4
	07-93011-00	Chip Resistor	3.01KΩ, ±1%	R687, R688	0603	2
	07-94021-00	Chip Resistor	4.02KΩ, ±1%	R669	0603	1
	07-90472-00	Chip Resistor	4.7KΩ, ±5%	R642, R650, R667, R668, R684, R699, R702, R706, R707, R711, R712, R719, R720, R770	0603	14
	07-90512-00	Chip Resistor	5.1KΩ, ±5%	R644	0603	1
	07-90103-00	Chip Resistor	10KΩ, ±5%	R643, R698, R708, R760	0603	4
	07-90104-00	Chip Resistor	100KΩ, ±5%	R524	0603	1
	07-94750-00	Chip Resistor	475Ω, ±1%	R625	0603	1
	07-90220-01	Chip Resistor Network	22ΩX4	RP538, RP539, RP540, RP541, RP542, RP543, RP546, RP547, RP548	0603x4	9
	07-90330-10	Chip Resistor Network	33ΩX4	RP526, RP527, RP528, RP529, RP530, RP531, RP532, RP533, RP534, PR544, RP545	0603x4	11
	07-00075-03	Circuit Protector	microSMD075	F701	1210-RES	1
Inductor						
	08-04109-01	INDUCTOR	1uH, ±10%	L536, L537, L538, L539, L540, L541	0805	6
	08-04569-00	INDUCTOR	5.6uH, ±10%	L521, L522, L523, L542, L543, L544, L545	0805	7
	08-04220-01	INDUCTOR	22uH, ±10%	L550, L551	0805	2
	08-04119-00	FILTER BEAD	CBG201209U110T	FB521, FB522, FB523, FB524, FB525, FB527, FB528, FB533, FB534, FB535, L546, L547	0805	12
	08-04609-00	FILTER BEAD	CBW160808U600T	FB518, BP519, FB520, FB529, FB531, FB532	0603	6
ICS						
	03-08091-02	VIDEO AMPLIFIER	AD8091ART	U517, U533	SOT23-5	2
	03-08092-01	VIDEO AMPLIFIER	AD8092AR	U516, U531	SOIC8	2
	03-07310-01	VIDEO ENCODE	ADV7310KST	U527	LQFP64	1
	03-04955-01	VIDEO ENCODE	CS4955-CQZ	U536	TQFP48	1
	03-00337-01	Regulator	LM337IMP	U528	SOT223	1
	03-01117-18	Regulator	LM1117MPX-1.8/AMS1117-1.8	U534	SOT223	1
	03-01117-25	Regulator	LM1117MPX-2.5/AMS1117-2.5	U522	SOT223	1
	03-01117-01	Regulator	LM1117MPX-5.0/AMS1117-5.0	U529	SOT223	1
	33-40099-01	Small Signal Diode	BAV99	Q601, Q604, Q606, Q607, Q608, Q609, Q610, Q611	SOT23	8
	31-00672-01	Transistor	UPA672T	U546	SC70	1
	03-00514-01	ESD Protection	RCLAMP0514M	U538, U539, U540	MSOP-10L	3
	03-02300-01	Digital Video Format Converter	S2300	U530	PQFP208	1
	03-06418-01	Triple Video Driver	FMS6418A	U542	TSSOP14	1
	03-09030-01	HDMI DRIVER	SIL9030	U518	TQFP80	1
	03-86432-60	SDRAM	W986432DH-6/ HY57V653220B-6/ HY57V643220DT-6	U535	TSOP86	1
	03-01580-01	1.2V Micropower	AD1580	D502	SOT23	1
CRYSTAL						
	04-11352-01	Crystal SMD	13.500MHz, FL=50ppm, CL=14pF	Y601	HC-49U/SM	1
TRANSISTOR						
	31-01815-01	TRANSISTOR	2SC1815	Q524	SC-59	1
CONNECTOR						
	17-01003-03	RCA	AV3-8.4-13PB	P508	DIP	1
	17-01001-18	CONNECTOR	HSW-AV1/BP-2	P502	DIP	1
	17-08119-00	HDMI SOCKET	HMR43-AK5200	P504	SMD	1
	11-05102-00	Slide Switch	5M, SERIES, SPDT, M7	SW503	DIP	1
	17-07001-00	TRIG	PY301-030-100	J501	DIP	1

	P/N		Part Type	Designator	Footprint	Qty
	13-21016-05	FPC Connector SMD	LDFPC1,0B-SMT-16P/ 1.0-15-16PB	JP502(C/BC version)	SMD16*1.0mm	C BC:1
	13-21022-01	FPC Connector SMD	LDFPC1,0B-SMT-22P/ 1.0-15-22PB	JP505	SMD22*1.0mm	1
	13-21030-00	FPC Connector SMD	LDFPC1,0B-SMT-30P/ 1.0-15-30PB	JP504	SMD30*1.0mm	1
	13-22006-00	Connector Socket	PH 2.0A-6A	JP503	DIP	1
	17-08015-00	VGA SOCKET	DB15	P507		1
.1 P/N 01-55503-00 PSU BOARD						
DIODE						
	33-20104-00	Fast-Recovery Rectifier Diode	FR104	D900, D910	Pitch=10mm	2
	33-20107-00	Rectifier Diode	FR107	D908, D916	Pitch=10mm	2
	33-20205-00	Fast-Recovery Rectifier Diode	FR205	D912, D914, D915	Pitch=12mm	3
	33-20360-00	Schottky Barrier Rectifier Diode	SR360	D913	Pitch=12mm	1
	33-20540-00	Schottky Barrier Rectifier Diode	SR540	D909	Pitch=12mm	1
	33-15609-02	Zener	5.6V, 0.5W	D911	Pitch=7.5mm	1
	33-15609-00	Zener	5.6V, 0.5W		DO-35	1
	33-30162-00	Rectifier Bridge	DB105	B900	BRIDGE	1
TRANSISTOR						
	31-01815-00	Transistor	2SC1815-GR	Q900, Q906, Q911, Q913, Q921, Q923	TO-92	6
	31-01015-00	Transistor	2SA1015-GR	Q907, Q922	TO-92	2
	31-01220-00	Transistor	KSA1220AYSTU	Q912	TO-126	1
	31-02690-00	Transistor	KSC2690AYASTU	Q910	TO-126	1
ICS						
	03-00431-00	REGULATOR	TL431/AE431/KA431	U908	TO-92	1
	03-00817-00	Photo Coupler	PC817B	U907	DIP4	1
	03-07805-10	REGULATOR	KA78R05	U911	TO-220F-4L	1
	03-27833-00	REGULATOR	KA278R33	U909, U910	TO-220F-4L	2
	03-07809-10	REGULATOR	KA78R09	U912	TO-220F-4L	1
	03-07915-00	REGULATOR	KA7915	U901	TO-220	1
	03-00365-00	Green Mode Fairchild Power Switch	FSDM0365RN	U900	DIP8	1
Capacitor						
	05-82142-00	High Voltage Ceramic Capacitor	820PF, 400V(X1), 250V(Y1), ±20%	C939, C940	Pitch=10mm	2
	05-10313-01	High Voltage Ceramic Capacitor	0.01UF, 1KV, ±20%	C914	Pitch=5mm	1
	05-33242-00	High Voltage Ceramic Capacitor	3300PF, 400V(X1), 250V(Y1), ±20%	C943	Pitch=10mm	1
	05-10422-00	High Voltage Ceramic Capacitor	0.1uF, 275V(X2), ±5%	C934, C935	Pitch=15mm	2
	25-33361-01	Metallized Polyester Film Capacitor	0.033uF, 63V, ±5%	C941	Pitch=5mm	1
	25-10461-07	Metallized Polyester Film Capacitor	0.1uF, 63V, ±5%	C942, C957, C963, C964, C965	Pitch=5mm	5
ALU Electrolytic						
	06-47051-06	Alu Electrolytic Capacitor	47uF, 50V, ±20%	C933, C949	Pitch=2.5mm 6.3×11	2
	06-10211-04	Alu Electrolytic Capacitor	1000uF, 16V, ±20%	C954, C966	Pitch=5mm 10×16	2
	06-10111-12	Alu Electrolytic Capacitor	100uF, 16V, ±20%	C944, C945, C956, C959	Pitch=2.5mm 6.3×11	4
	06-10121-04	Alu Electrolytic Capacitor	100uF, 25V, ±20%	C953, C962	Pitch=2.5mm 6.3×11	2
	06-10151-02	Alu Electrolytic Capacitor	100uF, 50V, ±20%	C950	Pitch=3.5mm 8×11.5	1
	06-22121-01	Alu Electrolytic Capacitor	220uF, 25V, ±20%	C951	Pitch=3.5mm 8×11.5	1
	06-47121-03	Alu Electrolytic Capacitor	470UF, 25V, ±20%	C955, C958, C961	Pitch=5mm 10×16	3
	06-10142-00	Alu Electrolytic Capacitor	100uF, 400V, ±20%	C900	Pitch=10mm 22×30	1
RESISTOR						
	07-10300-00	Carbon Film Resistor	30Ω, 1/6W, ±5%	R932	Pitch=5mm	1
	07-10271-00	Carbon Film Resistor	270Ω, 1/6W, ±5%	R933	Pitch=5mm	1

	P/N	Part Type	Designator	Footprint	Qty
	07-10471-00	Carbon Film Resistor	470Ω, 1/6W, ±5%	R970	Pitch=5mm 1
	07-10122-00	Carbon Film Resistor	1.2KΩ, 1/6W, ±5%	R949, R950	Pitch=5mm 2
	07-10392-00	Carbon Film Resistor	3.9KΩ, 1/6W, ±5%	R934	Pitch=5mm 1
	07-10472-00	Carbon Film Resistor	4.7KΩ, 1/6W, ±5%	R967	Pitch=5mm 1
	07-10622-00	Carbon Film Resistor	6.2KΩ, 1/6W, ±5%	R911	Pitch=5mm 1
	07-10682-00	Carbon Film Resistor	6.8KΩ, 1/6W, ±5%	R936	Pitch=5mm 1
	07-10103-00	Carbon Film Resistor	10KΩ, 1/6W, ±5%	R942, R943, R944, R947, R948, R952, R953, R954, R955, R956, R957, R958, R963, R964, R965, R969, R971(N.I.), R972	Pitch=5mm 17
	07-10223-00	Carbon Film Resistor	22KΩ, 1/6W, ±5%	R968	Pitch=5mm 1
	07-20473-20	Metal Film Resistor	47KΩ, 1W, ±5%	R900	Pitch=5mm 1
	07-20563-20	Metal Film Resistor	56KΩ, 1W, ±5%	R930	Pitch=5mm 1
	07-23301-00	Metal Film Resistor	3.3KΩ, 1/6W, ±1%	R937	Pitch=5mm 1
	07-24421-00	Metal Film Resistor	4.42KΩ, 1/6W, ±1%	R935	Pitch=5mm 1
	07-50680-11	Fusible Resistor	68Ω, 1W, ±5%	R938, R939, R946	Pitch=5mm 3
	07-70050-02	NTC	NTC, 5D-11	RT900	Pitch=7.5mm 1
	07-70471-02		HEL-7D471K	R912	Pitch=5mm 1
INDUCTOR					
	22-00025-10	FILTER INDUCTOR	48mH,LCL-25A	L900	1
	08-02220-01	INDUCTOR	LGB-S0810-220K, 22uH	L904, L905, L906, L907	Pitch=5mm 4
FUSE					
	20-12202-00	Fuse	T2AL/250V		1
	20-20000-01	Fuse Holder	HF-003-1	FH900	1
TRANSFORMER					
	18-55530-00	Transformer	BCK-28-001 / BCK-08A12	T900	1
CONNECTOR					
	14-55515-00	2mm*14pin Wire	LD2.0A-15Y, LD2.0A-15D, UL2468 26AWG, L=285±5mm	J906 (From psu board to decode board)	1
	14-55506-00	2mm*6pin Wire	LD2.0A-6Y, LD2.0A-6D, UL2468 26AWG, L=80±5mm	J907 (From psu board to video board)	1
	13-23903-01	Connector Socket	VH 3.96A-3A	J900	1
METAL PARTS					
	70-051005-1	Heatsink	6063 T5, BLACK		2
	61-023508-0	Machine Screw	MB3*8		2
	62-010302-2	Nut	M3		2
.1	P/N:01-58504-00	PCB1 BOARD (FPP)			
	25-10461-00	Metallized Polyester Film Capacitor	0.1UF,63V,10%.CL23B	C800, C801	Pitch=5mm 2
ALU Electrolytic					
	06-10051-03	Alu Electrolytic Capacitor	CD110, 10uF, 50V, ±20%	C808	Pitch=2.5mm 5x11 1
	06-10111-12	Alu Electrolytic Capacitor	CD263, 100uF, 16V, ±20%	C803, C804	Pitch=2.5mm 6.3x11 2
RESISTOR					
	07-10102-01	Carbon Film Resistor	1K , 1/6W, ±5%	R805	Pitch=7.5mm 1
	07-10103-01	Carbon Film Resistor	10K , 1/6W, ±5%	R806, R807, R808, R809, R810, R811	Pitch=7.5mm 6
	07-10220-01	Carbon Film Resistor	22 , 1/6W, ±5%	R817, R818	Pitch=7.5mm 2
	07-10470-01	Carbon Film Resistor	47 , 1/6W, ±5%	R819	Pitch=7.5mm 1
	07-10472-01	Carbon Film Resistor	4.7K , 1/6W, ±5%	R815	Pitch=7.5mm 1
	07-10563-01	Carbon Film Resistor	56K , 1/6W, ±5%	R816	Pitch=7.5mm 1
	07-10471-01	Carbon Film Resistor	470 , 1/6W, ±5%	R800	Pitch=7.5mm 1
DIODE					
	33-44148-00	DIODE	1N4148	D802, D803, D804, D805	Pitch=7.5mm 4
VFD					
	23-55559-00	VFD	HNV-11SS59T	U800	1
ICS					
	03-00038-00	IR Sensor	HS0038B	U802	1
	03-16311-01	VFD DRIVER	PT6311 or NEC	U801	1
TRANSISTOR					
	31-01015-00	TRANSISTOR	2SA1015-GR	Q800	TO-92 1
TACT SWITCH					
	11-04101-00	tact switch	IT-1102D-1160	S801, S802, S803, S804, S805, S806, S807, S808, S809, S810, S811, S812, S813, S814, S815	15
CONNECTOR					
	14-58512-00	2mm*12pin Wire	LD2.0A-12Y, LD2.0A-12D, UL2468 26AWG, L=130±5mm	J801	1
	13-22005-00	5pin Connector	PH 2.0A-5A	JP802	1
Link					
	21-06101-00	Link	L=10mm	W801, W802, W803, W807, W808, W809, W810, W811, W812, W813, W814, W815, W816, W817, W818, W819, W820, W821	18

	P/N	Part Type	Designator	Footprint	Qty	
	21-06251-00	Link	L=25mm	W804, W805, W806	3	
METAL PARTS						
	66-009011-0	IR Bracket			1	
	65-009011-0	IR Bracket			1	
PLASTIC PARTS						
	75-009003-0	Display Bracket			1	
P/N:01-58507-00 PCB1 BOARD (LED)						
DIODE						
	33-50525-00	LED	519EGW	D800	1	
TACT SWITCH						
	11-04101-00	tact switch	IT-1102D-1160	S800	1	
CONNECTOR						
	13-22005-00	5pin Connector	PH 2.0A-5A	JP803	1	
P/N 01-55505-00 PCB1 BOARD (RS232)						
CONNECTOR						
	14-55509-00	2mm*9pin WIRE	LD2.0A-9Y, LD2.0A-9D, UL2468 26AWG, L=90±5mm	J2	DIP2mm*9pin	1
	17-08009-00	RS232 Socket	RS232 RS232/FS	P1	DB9/F	1
METAL PARTS						
	66-010010-0	BRACKET 6	SECC-N4 T=1.00		2	
	61-023106-0	Self Taping Screw	STB3*6		2	
SCARTS BOARD P/N 01-55506-21 (only used in C/BC version)						
Transistor						
	31-01815-01	TRANSISTOR	2SC1815	Q860, Q861, Q862	SOT23	3
	31-01015-01	TRANSISTOR	2SA1015	Q863	SOT23	1
	31-03326-01	TRANSISTOR	2SC3326A	Q866, Q867, Q868, Q869	SOT23	4
Resistor						
	07-90000-01	RESISTOR	0Ω	FB860, FB861, FB862, FB863	0805	4
	07-97509-00	Chip Resistor	75Ω, ±1%	R860, R861, R862, R863	0603	4
	07-90151-00	Chip Resistor	150Ω, ±5%	R875, R876, R878, R879	0603	4
	07-90472-00	Chip Resistor	4.7KΩ, ±5%	R880, R881	0603	2
	07-90223-00	Chip Resistor	22KΩ, ±5%	R884, R885	0603	2
	07-10102-50	Carbon Film Resistor	1KΩ, 1/6W, ±5%	R866, R867, R868, R869, R870, R877	Pitch=5mm	6
	07-10472-50	Carbon Film Resistor	4K7Ω, 1/6W, ±5%	R865	Pitch=5mm	1
	07-10682-50	Carbon Film Resistor	6K8Ω, 1/6W, ±5%	R872	Pitch=5mm	1
	07-10103-50	Carbon Film Resistor	10KΩ, 1/6W, ±5%	R874	Pitch=5mm	1
	07-10563-50	Carbon Film Resistor	56KΩ, 1/6W, ±5%	R871	Pitch=5mm	1
	07-27509-50	Metal Film Resistor	75Ω, 1/6W, ±1%	R864	Pitch=5mm	1
Connector						
	13-21016-00	Connector	PD05-161 / 1.0-11-16PW	JP860	DIP16	1
	17-10021-00	Scart Connector	D-21-3	P860	DIP21	1
Link						
	21-06000-00	Link	L=5mm	R873, W860, W861, W862	Pitch=5mm	4
	21-06000-00	Link	L=10mm	W863	Pitch=10mm	1
Metal Parts						
	66-010010-0	BRACKET 6	SECC-N4 T=1.00		2	
	66-051003-0	Scart Bracket	TIN PLATE T=0.5mm		1	
	61-023106-0	Self Taping Screw	STB3*6		2	
version Parts						
	14-55501-00	WIRE	250(8), 187(8), UL1672 20AWG , L=90±5mm	from AC inlet to power button	1	
	14-55502-00	2pin WIRE	LD3.96A-3Y, 187(8), UL1672 20AWG , L=230±5mm;250(8), UL1672 20AWG , L=260±5mm	from psu board to AC inlet and power button	1	
	14-55505-00	5pin WIRE	LD2.0A-5Y,UL2468 26AWG L=120±5mm	From Mechanical board to Decode board	1	
	14-58505-00	5pin WIRE	LD2.0A-5Y, UL2468 26AWG L=100±5mm	From FPP board to LED board	1	
	14-55506-11	6pin WIRE	LD2.0A-6Y, UL1007 26AWG L=110±6mm	From Mechanical board to Decode board	1	
	14-55516-00	FFC	16PIN, 1mm, 50±3mm	From Video board to SCART board	C:1	
	14-55522-00	FFC	22PIN, 1mm, 75±3mm	From Video board to Decode board	1	

	P/N	Part Type	Designator	Footprint	Qty
	14-55530-00	FFC	30PIN, 1mm, 75±3mm	From Video board to Decode board	1
	14-58524-00	FFC	, 24PIN, 0.5mm, 185±3mm	From Mechanical loader to Decode board	1
	17-07002-02	AC Inlet	6102-3300		1
	15-10125-00	AC Cord(AH Version)			1
	15-10250-00	AC Cord(C Version)			1
SWITCHES					
	11-01101-03	Rocker Switch	RF-1003-BB2, TV-5		1
Mechanical					
	36-58513-00	Laser PU and Loader	KHM313AAA		1
	37-00313-01	LOADER	RYD-313AH		1
METAL PARTS					
	67-042001-0	Fascia	6063 T5		C AH:1
	67-042011-0	Fascia	6063 T5		CT:1
	67-042002-0	End Cap L	6063 T5		1
	67-042012-0	End Cap L	6063 T5		CT:1
	67-042003-0	End Cap R	6063 T5		1
	67-042013-0	End Cap R	6063 T5		CT:1
	67-042004-1	Rear Panel C	SECC-N4 T=1.0mm		C:1
	80-042004-0	Rear Panel C	SECC-N4 T=1.0mm		C:1
	65-042004-0	Rear Panel C	SECC-N4 T=1.0mm		C:1
	67-042005-1	Rear Panel AH	SECC-N4 T=1.0mm		AH:1
	80-042005-0	Rear Panel AH	SECC-N4 T=1.0mm		AH:1
	65-042005-0	Rear Panel AH	SECC-N4 T=1.0mm		AH:1
	81-009001-0	SECC	SECC-N4 1219×458×1.0		1/12
	67-042006-0	Top Cover	SECC-N4, T=1.0, PPG (Grey)		AH:1
	67-042016-0	Top Cover	SECC-N4, T=1.0, Ti		CT:1
	65-042006-0	Top Cover	SECC-N4, T=1.0		1
	81-009002-0	SECC	SECC-N4 590×605×1.0		1/2
	66-042001-0	Subfascia	SECC-N4 T=1.0mm		1
	81-009001-0	SECC	SECC-N4 1219×458×1.0		1/12
	66-042002-0	Chassis	SECC-N4 T=1.0mm		1
	81-003002-0	SECC	SECC-N4 1219×530×1.0		1/4
PLASTIC PARTS					
	77-042001-0	Button Bezel	ABS BLACK		C AH:1
	77-042011-0	Button Bezel	ABS		CT:1
	74-042001-0	Button	ABS BLACK		C AH:1
	74-042011-0	Button	ABS		CT:1
	77-042002-0	DVD Tray Door			1
	77-042012-0	DVD Tray Door			1
	76-009001-0	VFD window			1
	77-026001-0	Power Button			C AH:1
	77-026011-0	Power Button			CT:1
	77-026002-0	Power Button Bezel			C AH:1
	77-026012-0	Power Button Bezel			CT:1
	87-010004-0	Foot ASSY			4
	75-010004-1	Foot			4
	78-001002-0	Foot Pad			4
	76-003001-0	LED Lens			1
FASTENERS					
	61-373506-0	Machine Screw	MB3×6-W.S-Ni	audio board(4), video board(2), psu board(4)	10
	61-084108-0	Self Taping Screw	STPW4×8	top cover(4)	C AH:4
	61-084108-2	Self Taping Screw	STPW4×8-Ni	top cover(4)	CT:4
	61-073108-0	Self Taping Screw	STO3×8	AC inlet(2)	2
	61-023206-0	Self Taping Screw	BTB3×6	top cover(4)	4
	61-023208-0	Self Taping Screw	BTB3×8	rear panel(7)	7
	61-023106-0	Self Taping Screw	STB3×6	front panel(4), key board(8), foot(4), front bracket(4), real panel (5), top cover(3), SCART bracket(C:1), HDMI(1), SCART Board(C:2), RS232 Board(2)	AH:31 C:34 CT:31 AHT:28
	61-023106-1	Self Taping Screw	STB3×6-Ni	top cover(3)	TI:3
	61-023108-0	Self Taping Screw	STB3×8	front panel(4)	4
	61-083106-0	Self Taping Screw	STPW3×6	mechanical(4)	4
ACCESSORIES					
	86-009003-0	3mm Rubber Pad	10×10×3mm	top cover2	2
	86-018002-1	Expanded Rubber	110×25×0.5mm	front panel 2	2
	86-017010-0	Adhesive Bonded Fabric	8×90, 0.5mm	front bracket1	1
	84-001003-0	Cable Tie	YJ-100		4
PACKING					
	88-042001-0	Carton Box	560×390×173		1
	89-042001-0	Polyfoam End Cap	120g		1
	89-042002-0	Polyfoam End Cap	120g		1

	P/N		Part Type	Designator	Footprint	Qty
	90-001001-0	Polybag	C320BEE			1
	90-009001-1	Manu Polybag	T562 240X370			1
	90-001013-0	AC Cord Polybag	105×280mm			2
	90-009002-1	Non-Woven Cloth	H=80, W=100, L=435			1
	94-042001-0	Serial No. Label	53×10mm			4
	94-042002-0	Barcode Label	C version, 117×155mm			2
	94-042003-0	Barcode Label	AH version, 117×155mm			2
	94-042005-0	Barcode Label	CT version, 117×155mm			2
	94-042006-0	Barcode Label	AHT version, 117×155mm			2
	94-009004-0	FDA Label	30×7mm			AH:1
	94-009005-0	Garentee Card				AH:1
	94-042004-0	Label	53X10mm			1
ACCESSORIES						
	30-45850-01	Instruction Manual 1				1
	30-45850-02	Instruction Manual 2				1
	30-15850-00	Remote Control	DVD-7			1
	30-22100-00	Batteries	AAALR03			2
	30-75600-00	Audio and Video Cord				1
Accessory						
	86-000021-1	Solder Flux	W3			
	86-000019-1	Solder Bar	Sn63A			
	86-000031-0	3M Single-side Adhesive Tape	8mm			
	86-000034-0	3M Double-side Adhesive Tape	5mm width			
	86-000004-0	Yellow Glue	JX-15			
	86-000020-1	Solder	1.0mm Sn63			
	86-000010-0	Single-side Adhesive Tape	12mm			
	86-000008-0	Heat Transfer Compound	705015			
	86-000024-0	PCB Cleaning Water				
	86-000001-1	Binding Tape	PP502 72mm			
	86-000002-0	Tape	12mm			
	86-000009-0	Binding Nale	19×35			
	86-000007-0	Hot Glue				