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Block Diagrams
Schematic Diagrams
Printed Wiring Board Drawings

Model	Chassis No.
LC-XT4U	KF6-XT4U00
LC-XT4E	LF6-XT4E00

These schematic diagrams and printed wiring board drawings are part of the service manual original for chassis No. KF6-XT4U00, LF6-XT4E00 models LC-XT4U, LC-XT4E. File with the service manual No. SM5110785-00.

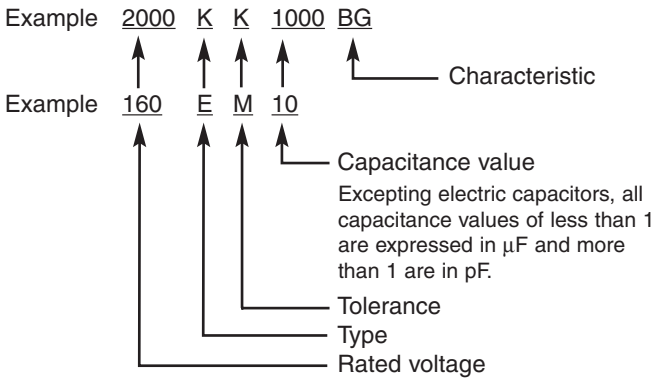
Note:

All the information of part numbers and values indicated on these diagrams are at the beginning of production. To improve the performance, there may be some differences to the actual set. When you order the service parts, use service parts code mentioned on the parts list in this service manual.

Parts description and reading in schematic diagram

- The parts specification of resistors, capacitors and coils are expressed in designated code. Please check the parts description by the following code table.
- Some of transistors and diodes are indicated in mark for the substitution of parts name. Please check the parts name by the following code table.
- Voltages and waveforms were taken with a video color bar signal(1Vp-p at 75 ohms terminated) and controls to normal.
- Voltages were taken with a high-impedance digital voltmeter.

Capacitor Reading



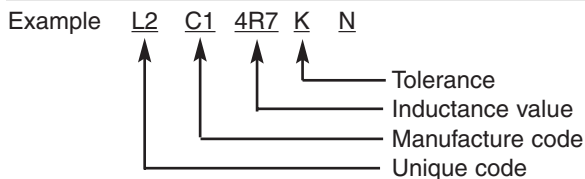
Material table

Mark	Material
E	Electrolytic
P	Electrolytic (non-polarized)
C	Ceramic (temperature compensation)
K	Ceramic
F	Polyester
N	Polypropylene
M	Metallized polypropylene
H	Metallized polypropylar
B	Ceramic (semiconductor)
G	Metallized polyestel
Y	Composite film
S	Styrol
T	Tantalum oxide solid electrolytic
U	Organic semiconductive electrolyte
D	Electric double layer electrolytic

Tolerance table

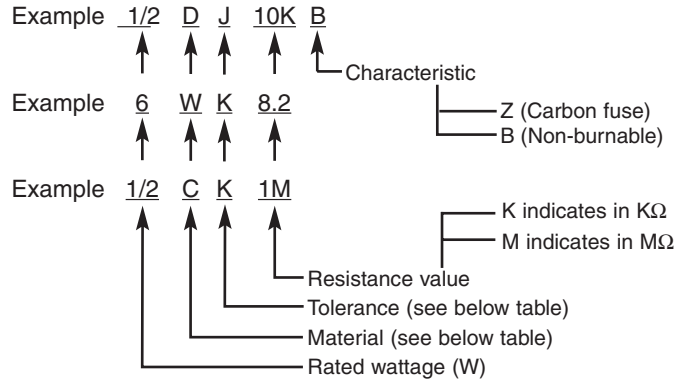
Mark	Tolerance
A	not specified
B	± 0.1
C	± 0.25
D	± 0.5
F	± 1
G	± 2
E	± 2.5
H	± 3
J	± 5
K	± 10
M	± 20
N	± 30
P	+100 -0
Q	+30 -10
T	+50 -10
U	+75 -10
V	+20 -10
W	+100 -10
X	+40 -20
Y	+150 -10
Z	+80 -20

Coil Reading



Mark	Tolerance (nH)	Mark	Tolerance (%)
C	± 0.25	G	± 2
D	± 0.5	J	± 5
S	± 0.3	K	± 10
A	± 0.2	L	± 15
		M	± 20

Resistor Reading



Note: Resistor which is indicated with resistance value only are 1/6W carbon resistor. Resistor which is indicated with material, tolerance and value are 1/4W rated wattage.

Material table

Mark	Material
D	Carbon
N	Metal film
S	Oxide metal film
C	Solid
G	Metal glaze
W	Wire winding or cement
H	Ceramic
F	Fusible

Tolerance table

Mark	Tolerance
A	± 0.05
B	± 0.1
C	± 0.25
D	± 0.5
F	± 1
G	± 2
J	± 5
K	± 10
M	± 20
P	+5 -15
Z	used in 0 ohm

Diode/Transistor Type Reading

Diode

Mark	Type number
R	1S2076A, 1S2473, 1N4148
AA	1S2076A, 1S2473, 1SS133, 1N4148

Transistor

(1) NPN type

Mark	Type number			
--	2SC536	2SC945A	2SC1815	2SC1740S
AD	NF, NG	PA, QA	Y, GR	Q, R, S
AE	NF, NG	PA, QA, RA	O, Y, GR	Q, R, S

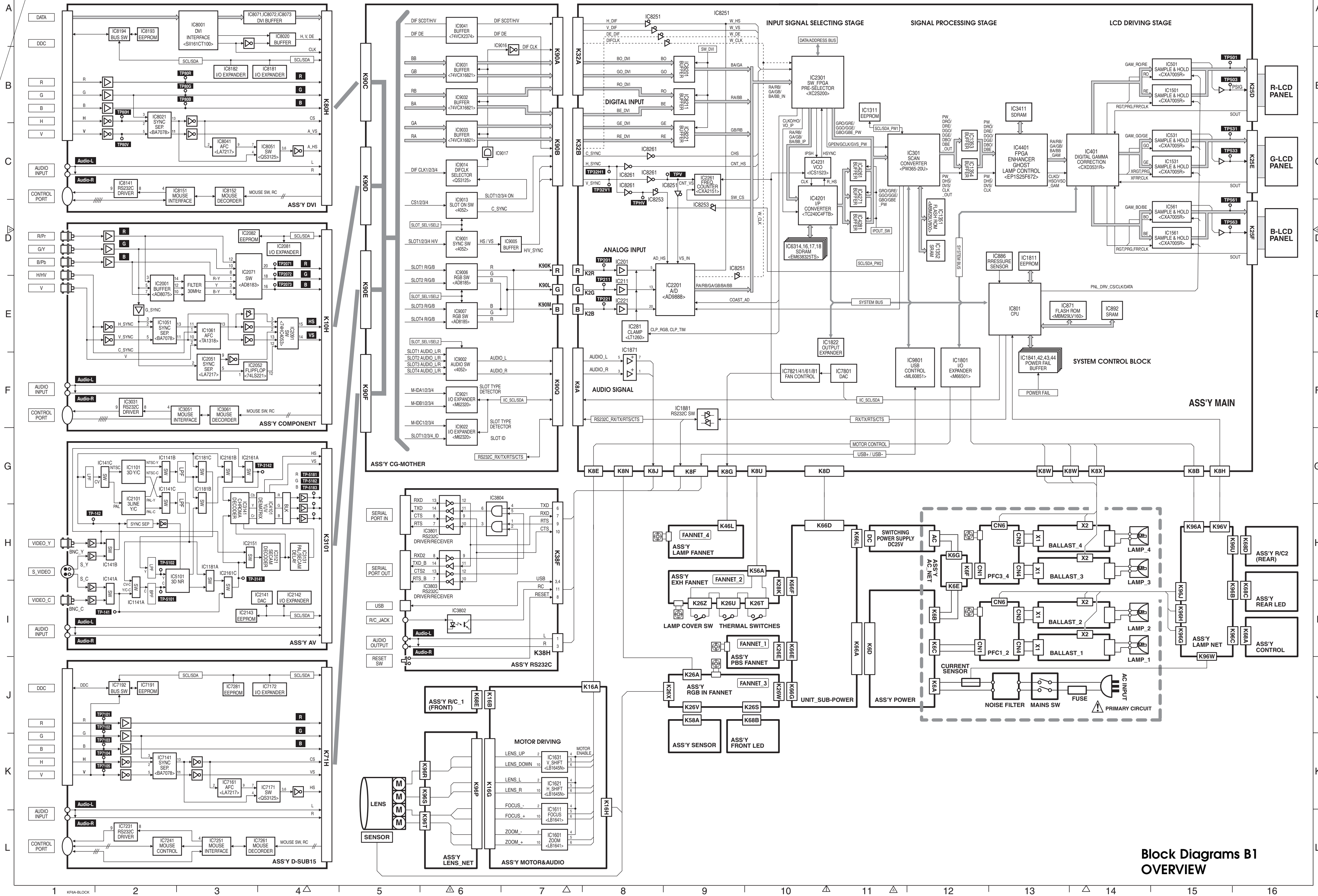
(2) PNP type

Mark	Type number			
--	2SA608	2SA564A	2SA1015	2SA933S
AB	NF	R	Y, GR	R
AC	NF	Q, R	O, Y, GR	Q, R

(3) Chip type

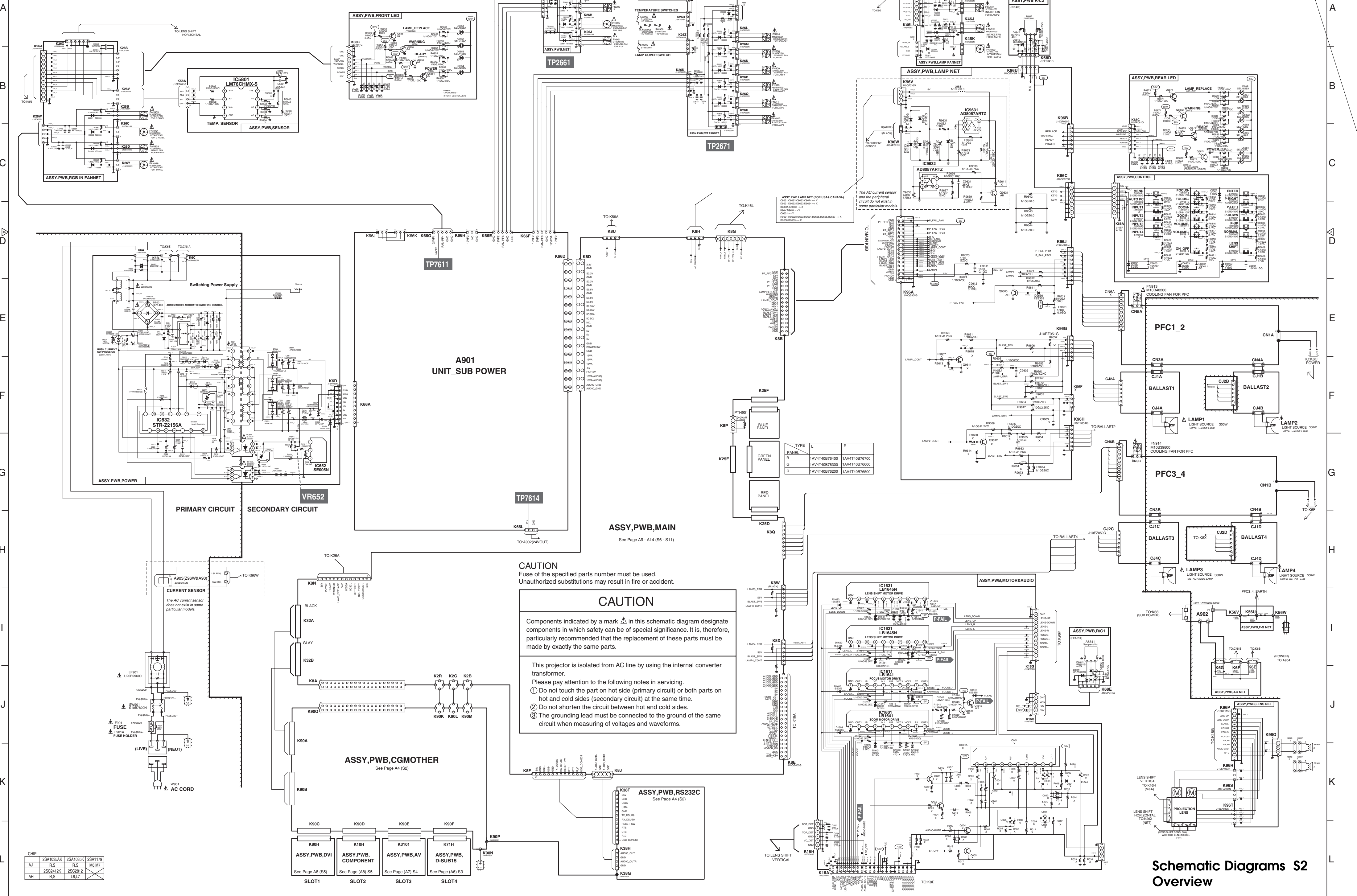
Mark	Type number				
--	2SA1179/N	2SA1037K	2SA1037AK	2SC2812/N	2SC2412K
AJ	M6, M7	R, S	R, S		
AH				L6, L7	R, S

Block Diagrams



Block Diagrams B1 OVERVIEW

Schematic Diagrams



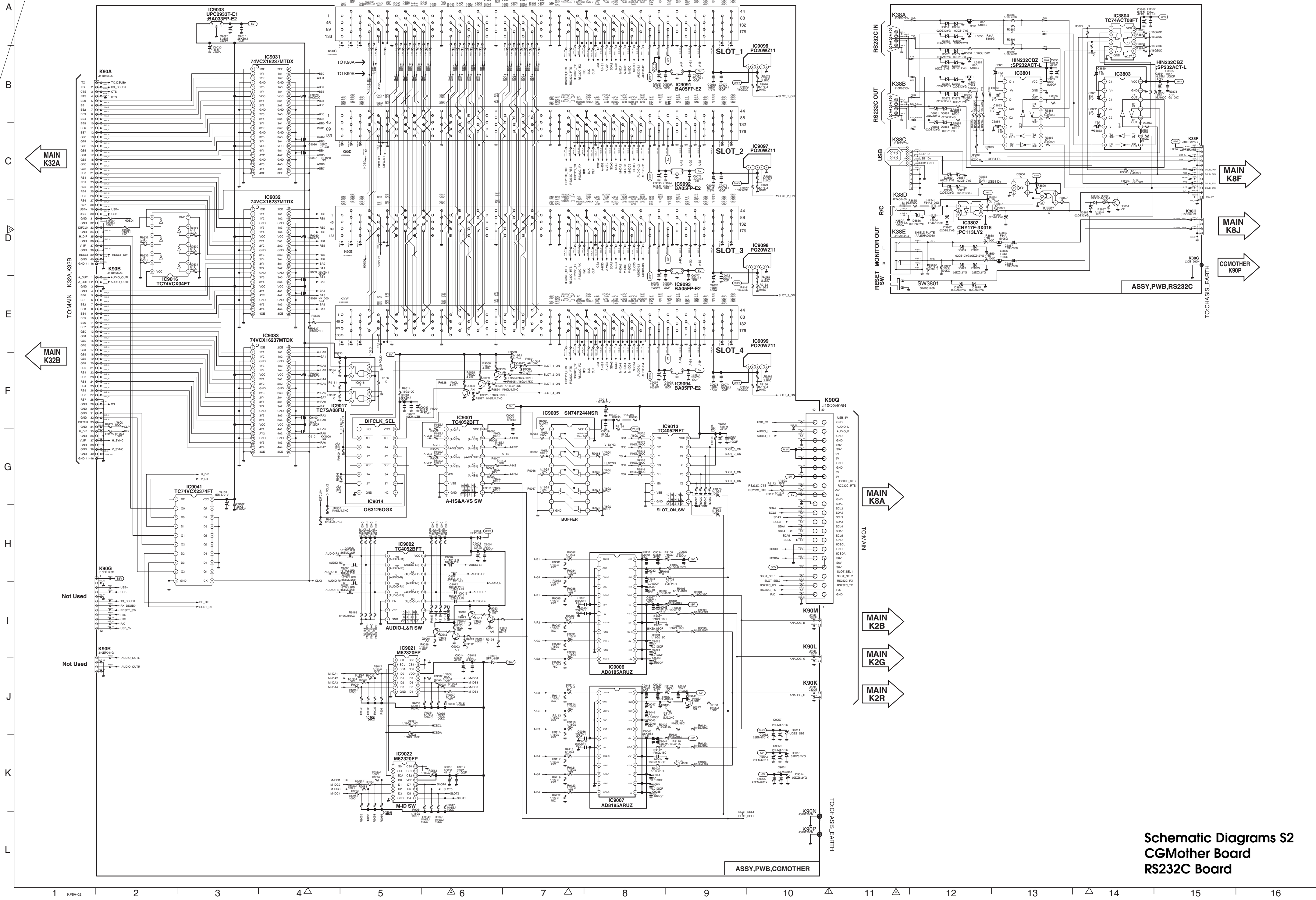
CAUTION
Fuse of the specified parts number must be used. Unauthorized substitutions may result in fire or accident.

CAUTION
Components indicated by a mark Δ in this schematic diagram designate components in which safety can be of special significance. It is, therefore, particularly recommended that the replacement of these parts must be made by exactly the same parts.

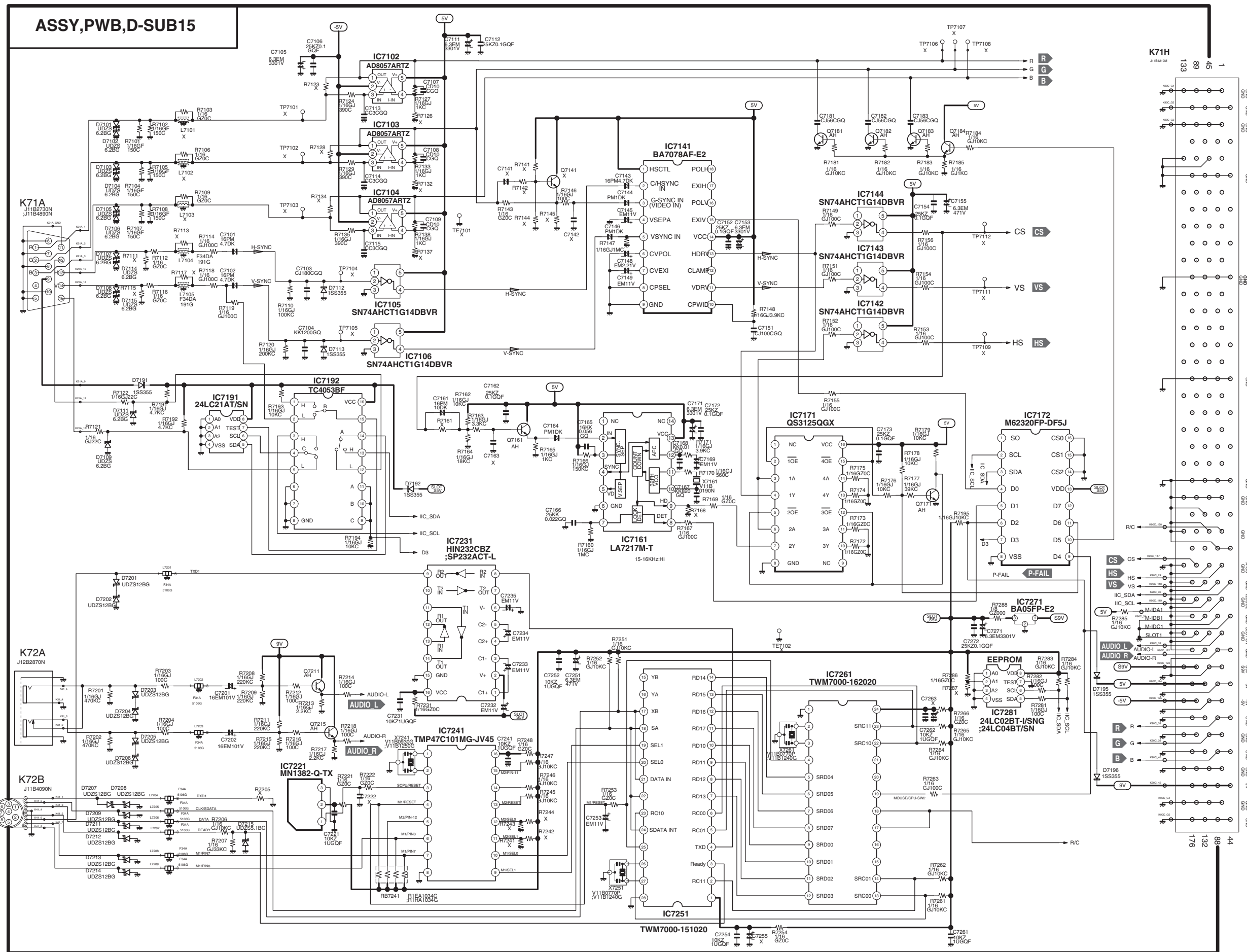
This projector is isolated from AC line by using the internal convert transformer.
Please pay attention to the following notes in servicing.
① Do not touch the part on hot side (primary circuit) or both parts on hot and cold sides (secondary circuit) at the same time.
② Do not shorten the circuit between hot and cold sides.
③ The grounding lead must be connected to the ground of the same circuit when measuring of voltages and waveforms.

CHIP	25A1035AK	25A1039K	25A1179
AJ	RS	RS	M6.M7
25C2412K	25C2812		
AH	RS	L6.L7	

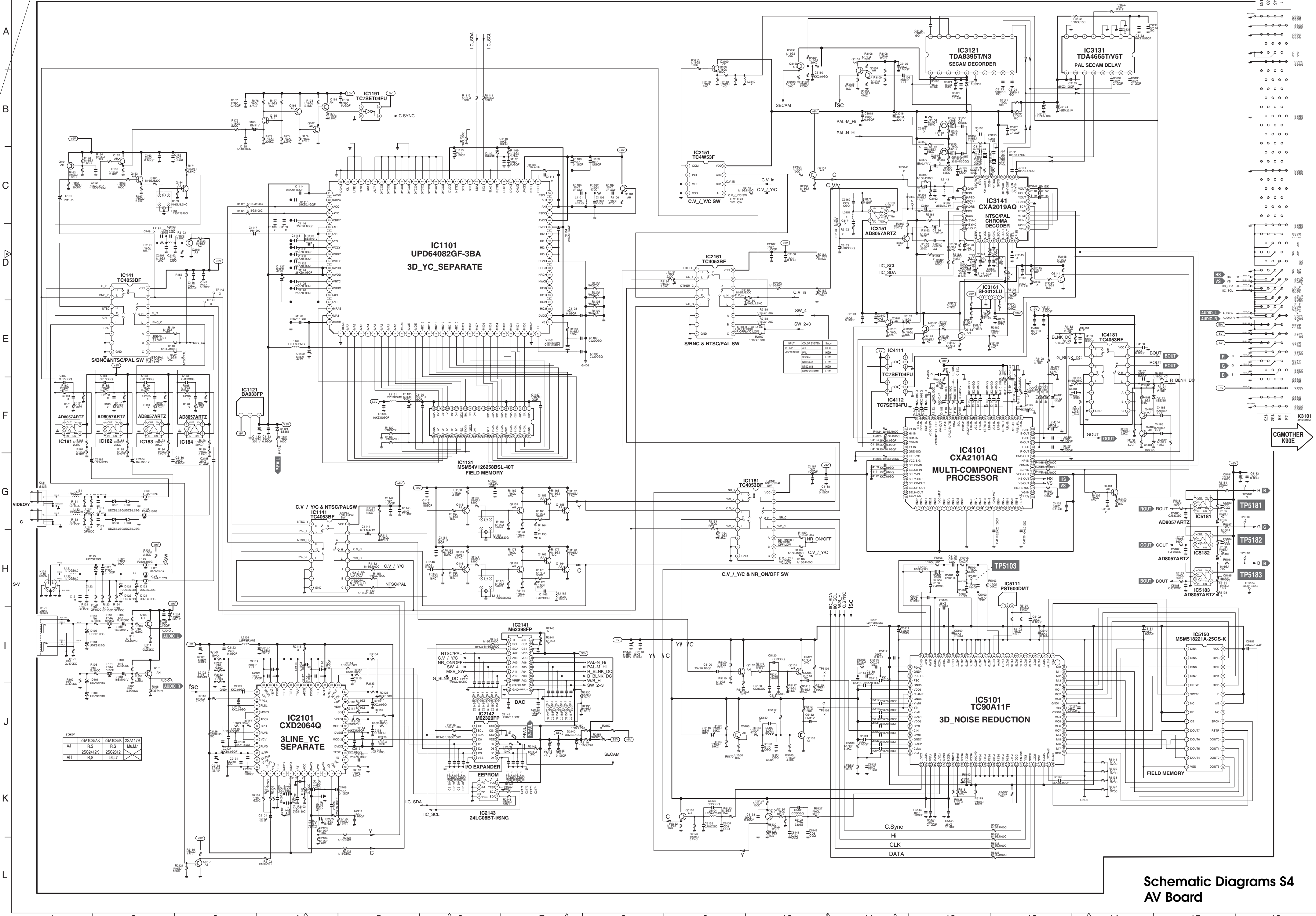
Schematic Diagrams S2 Overview



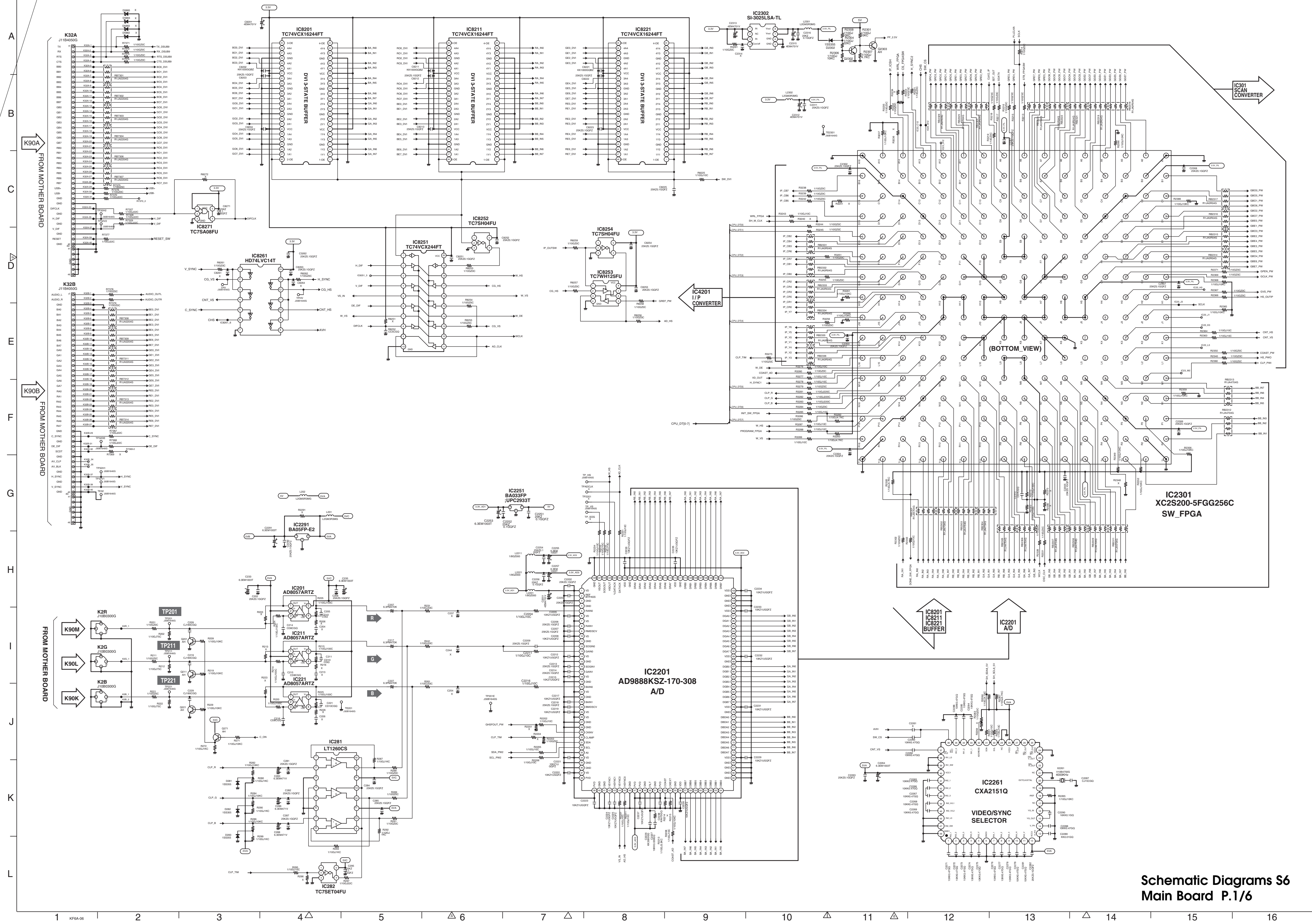
Schematic Diagrams S2
CGMother Board
RS232C Board



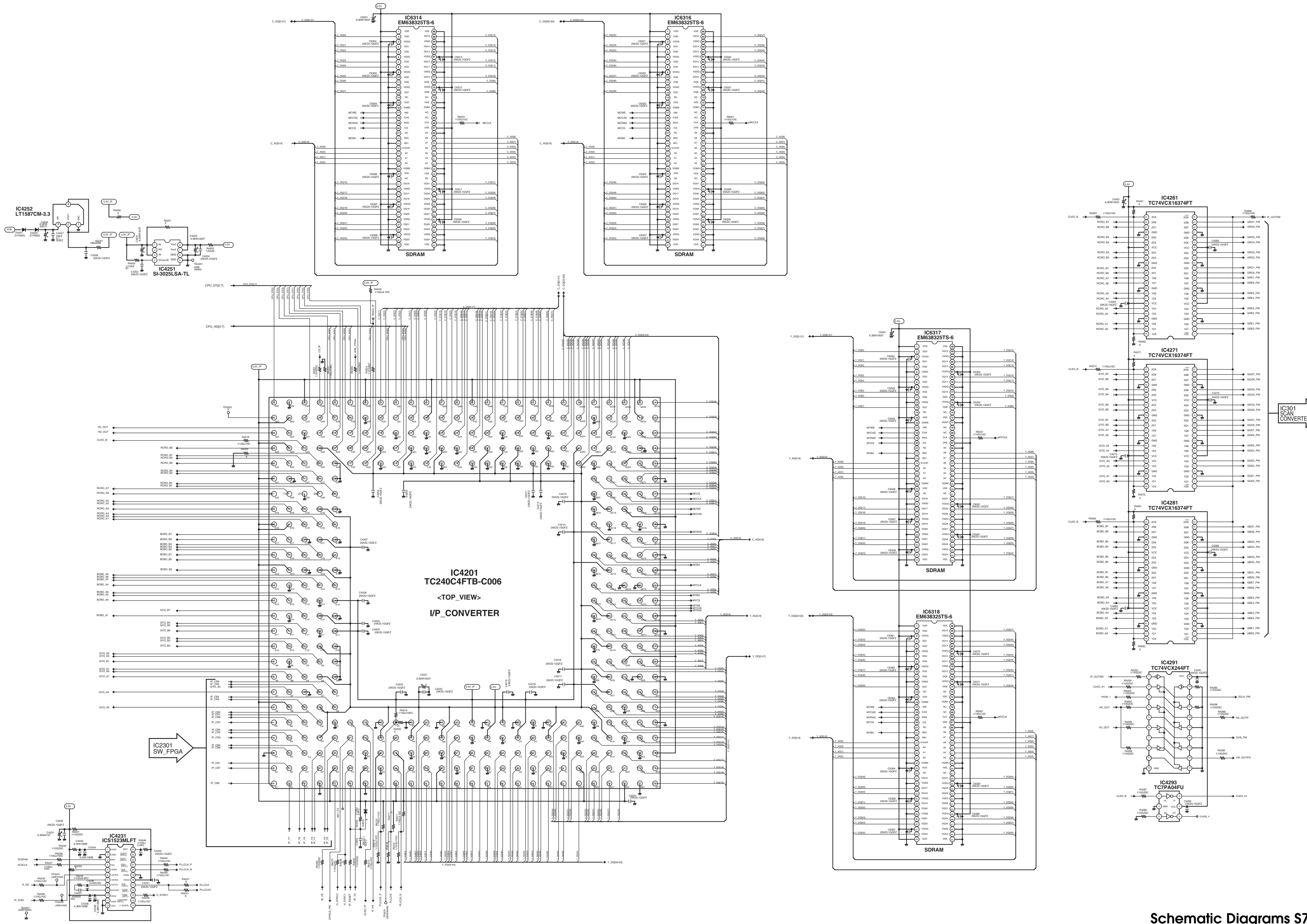
Schematic Diagrams S3
D-sub15 Board



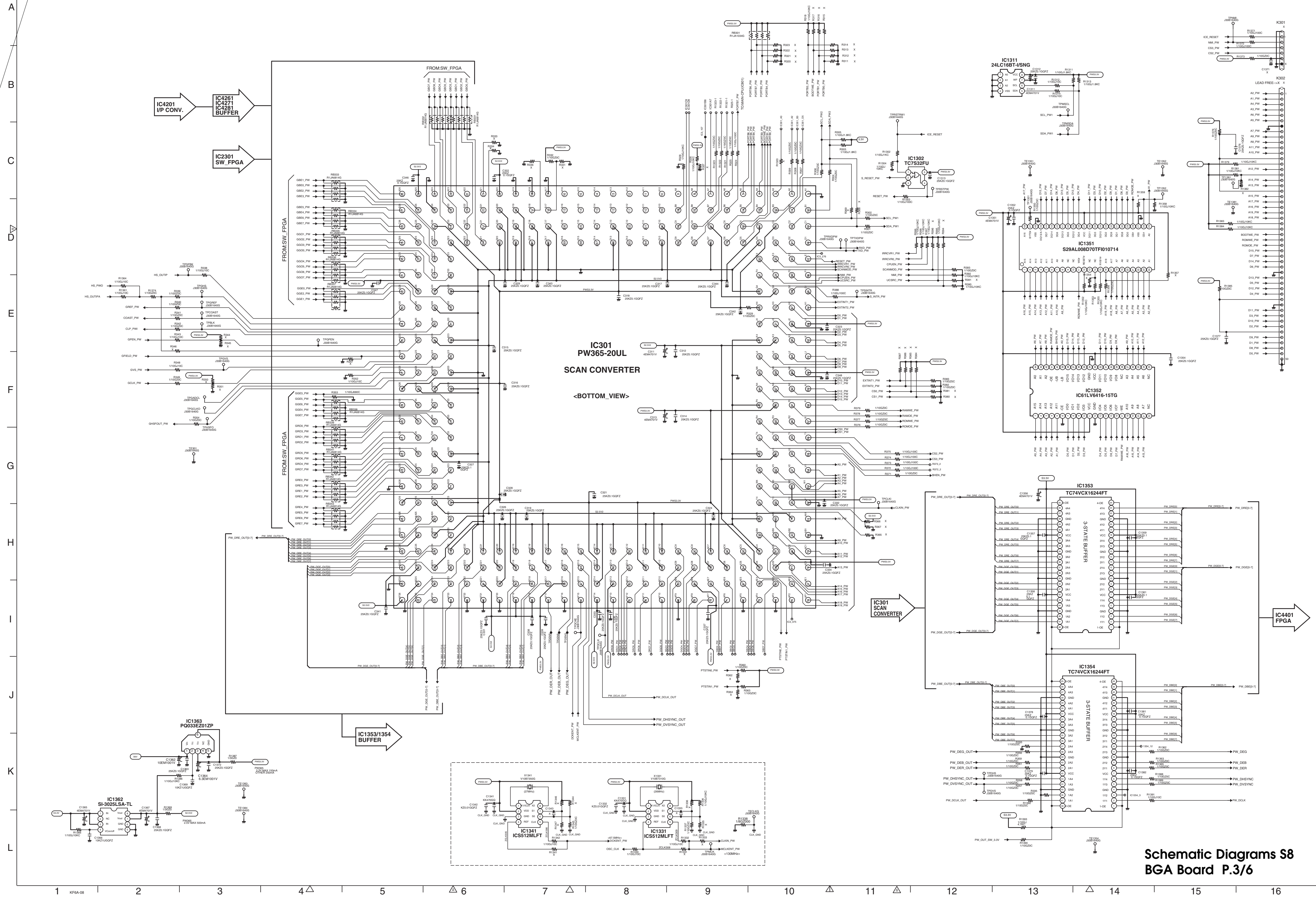
Schematic Diagrams S4
AV Board



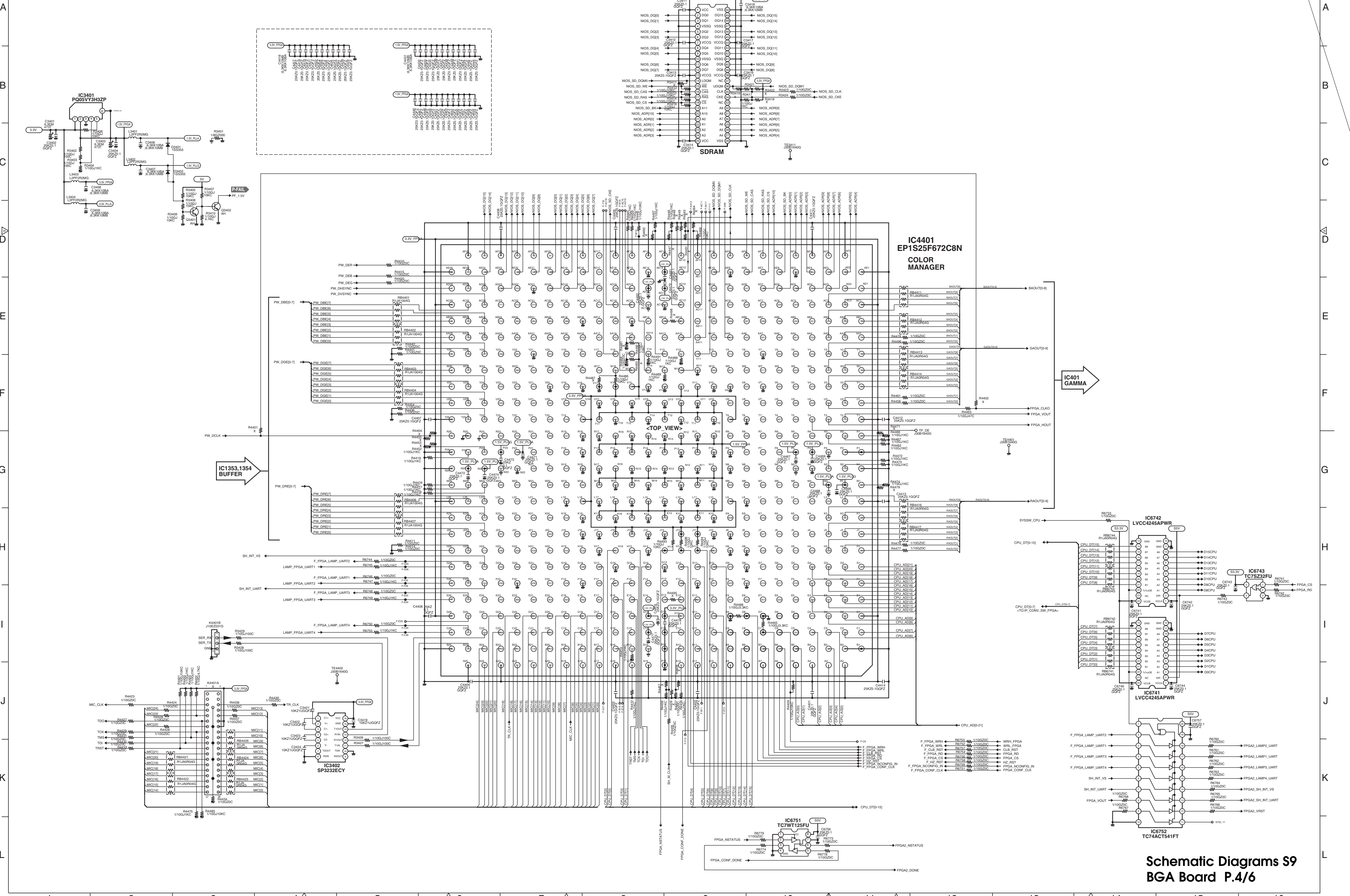
Schematic Diagrams S6
Main Board P.1/6



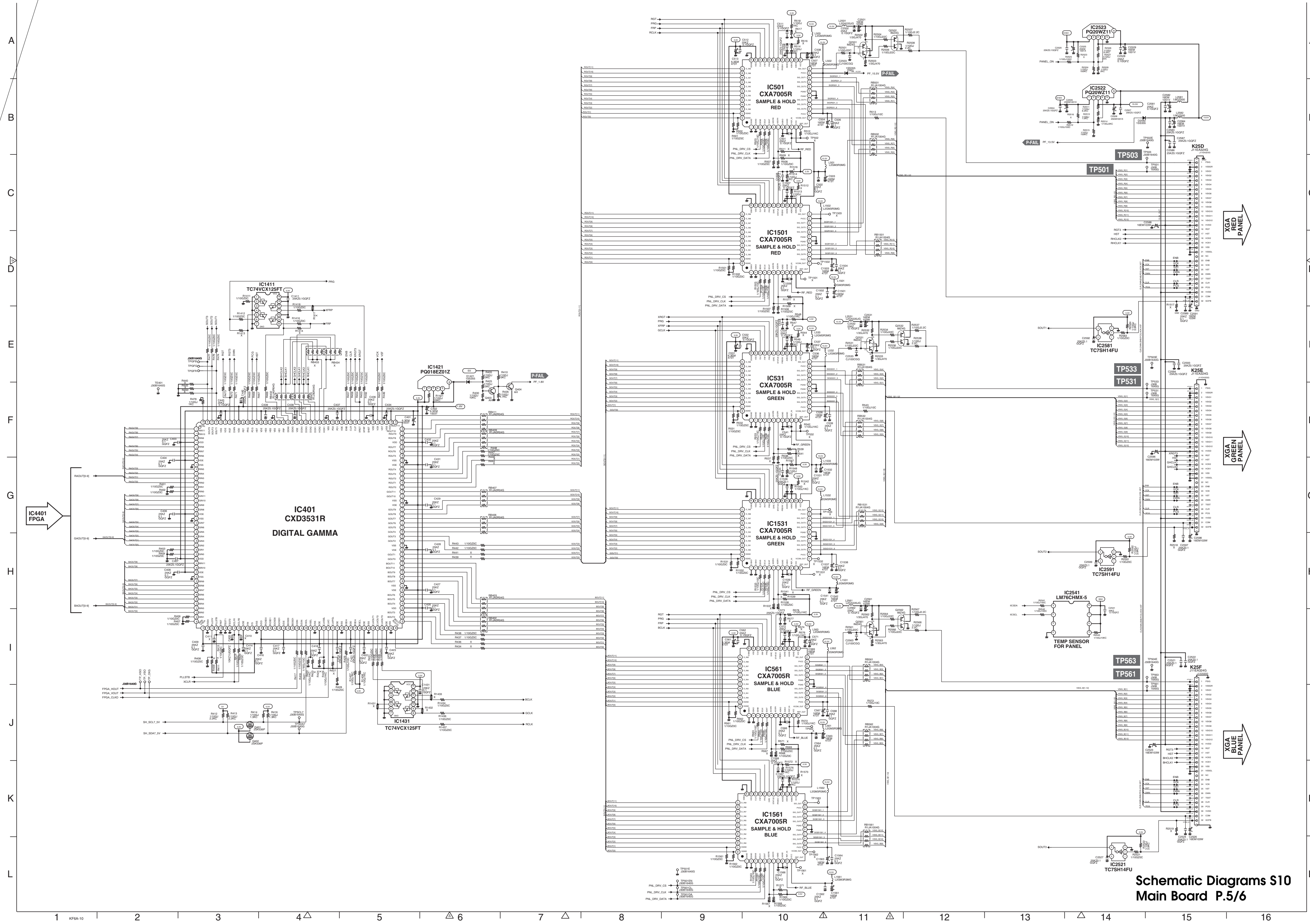
Schematic Diagrams S7
Main Board P.2/6



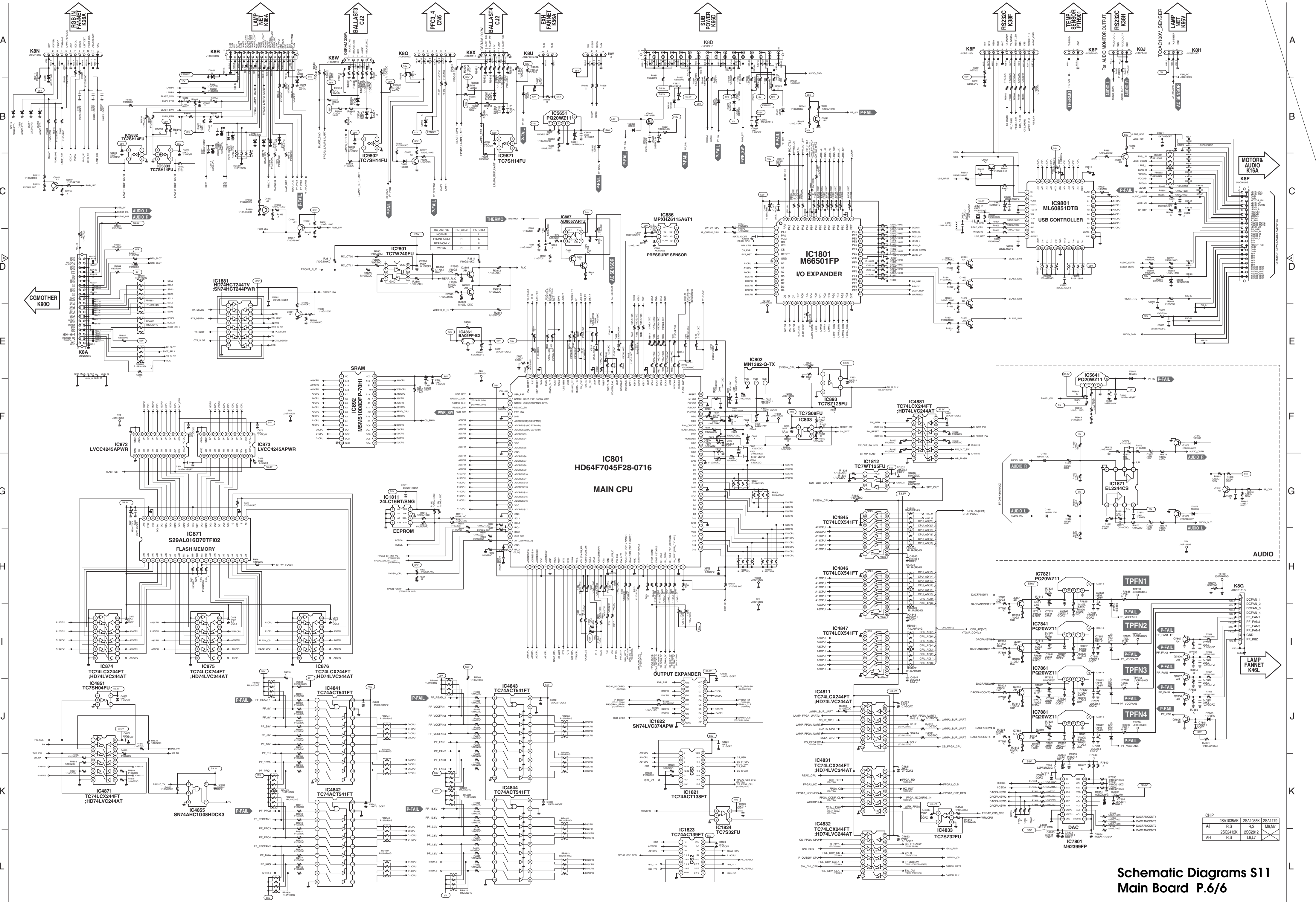
Schematic Diagrams S8
BGA Board P.3/6



Schematic Diagrams S9
BGA Board P.4/6



Schematic Diagrams S10
Main Board P.5/6

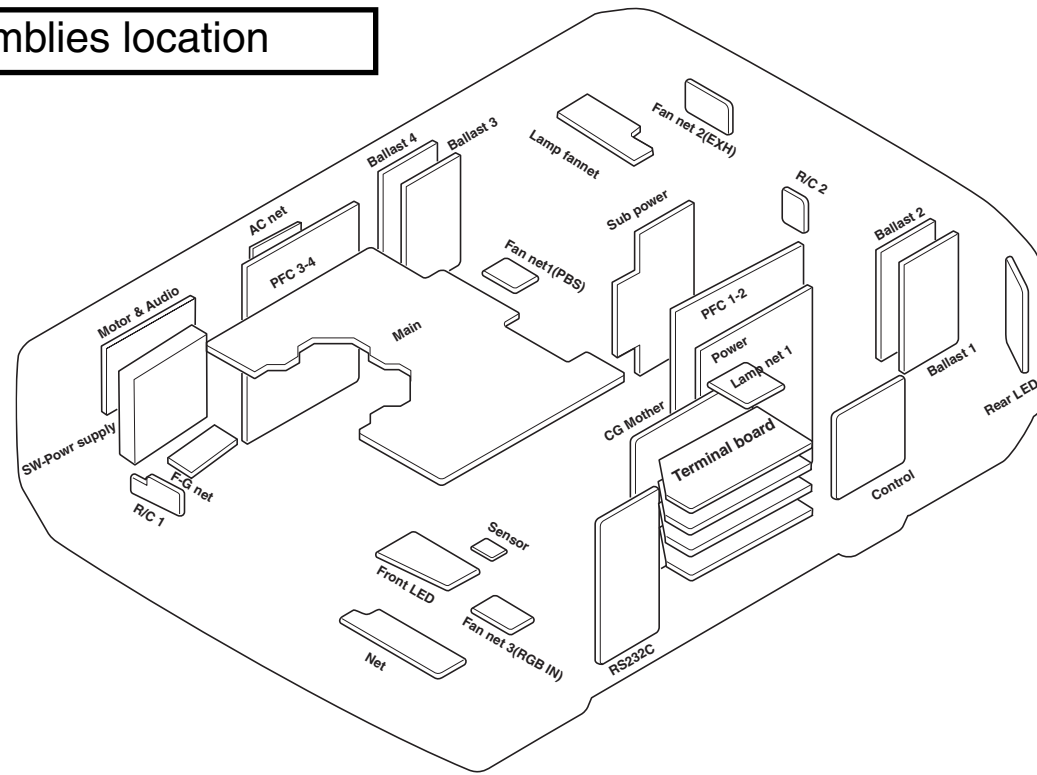


Schematic Diagrams S11
Main Board P.6/6

CHP	25A1035AK	25A1035K	25A1179
AJ	RS	RS	M6M7
	Z5C247K	Z5C2512	
AH	RS	LS17	

Printed Wiring Board Diagrams

PWB assemblies location

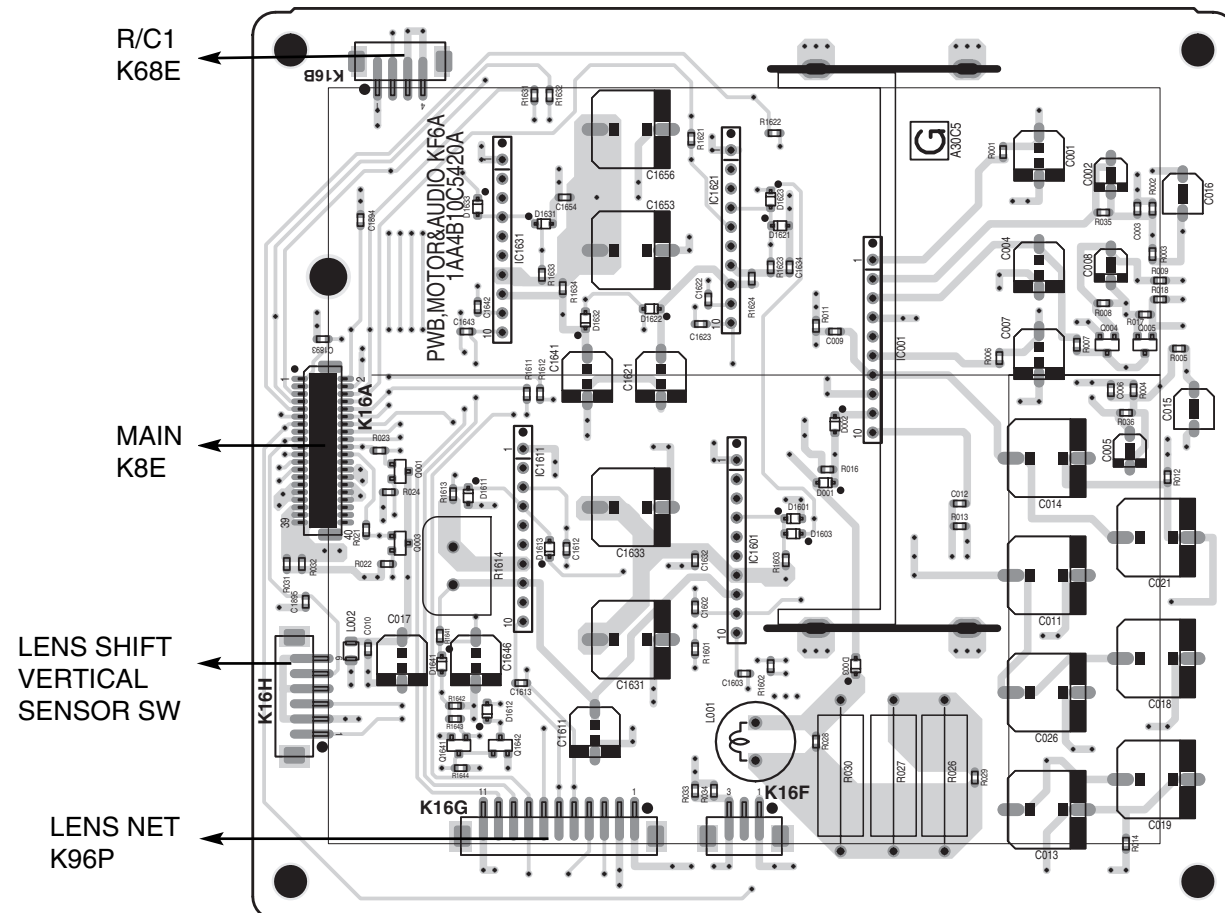


CAUTION

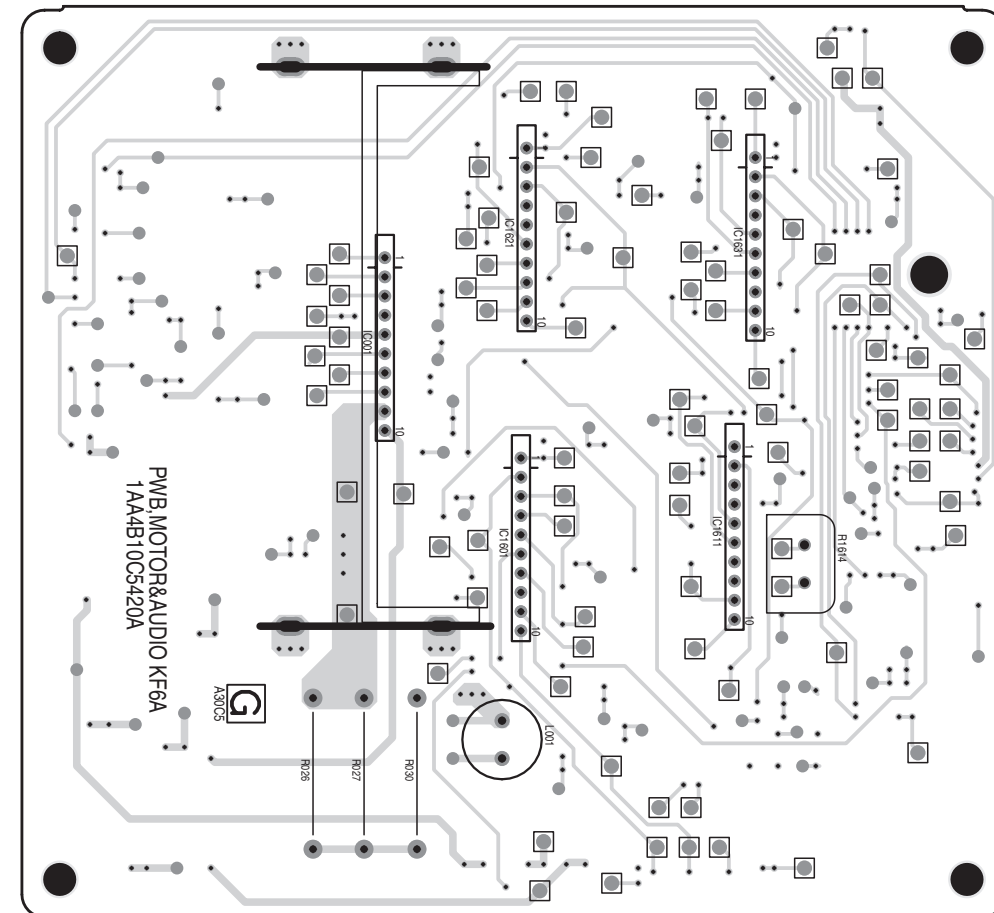
This projector is isolated from AC line by using the internal converter transformer. Please pay attention to the following notes in servicing

1. Do not touch the part on hot side (primary circuit) or both parts on hot and cold sides (secondary circuit) at the same time.
2. Do not shorten the circuit between hot and cold sides.
3. The grounding lead must be connected to the ground of the same circuit when measuring of voltages and waveforms.

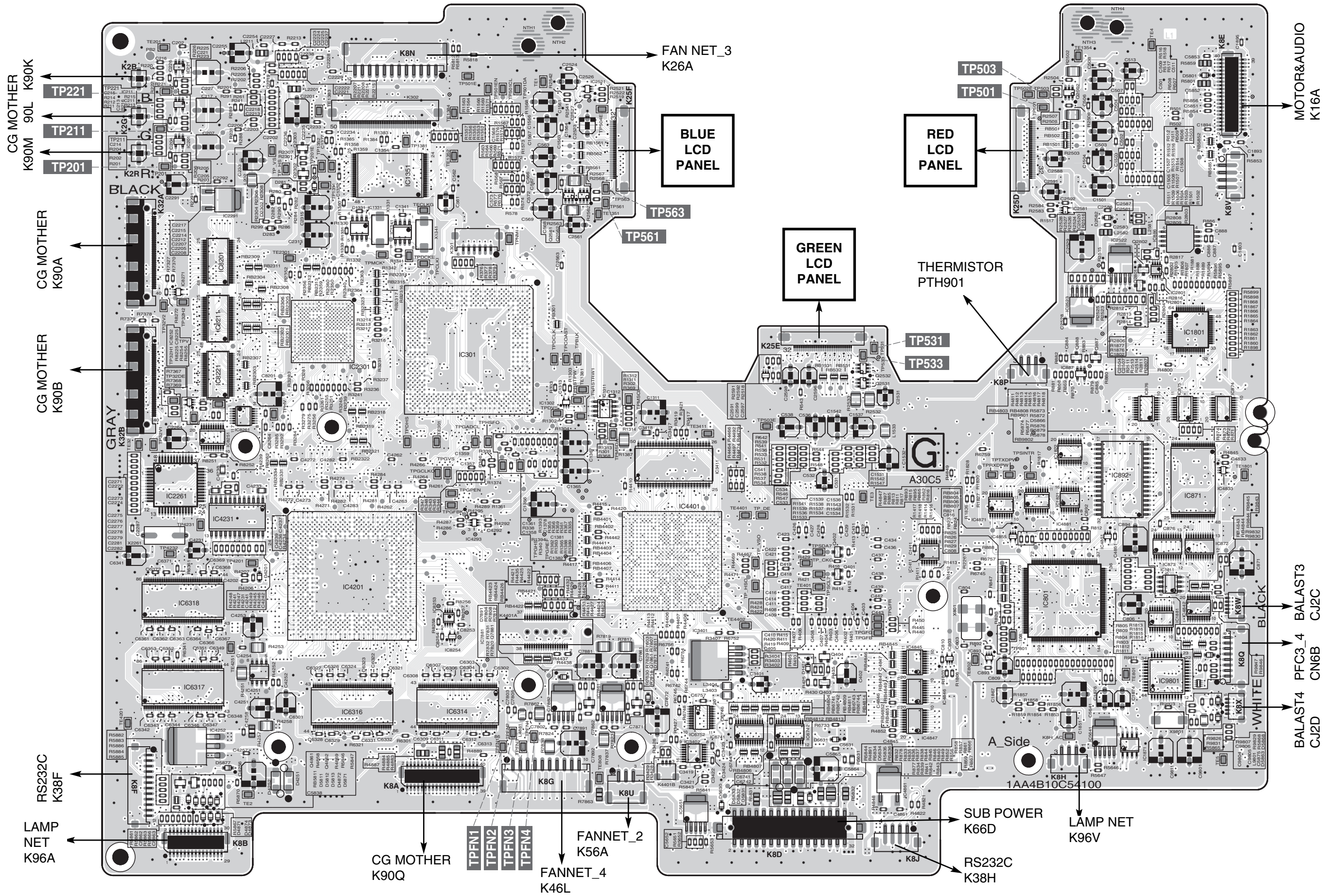
MOTOR&AUDIO (side-A)



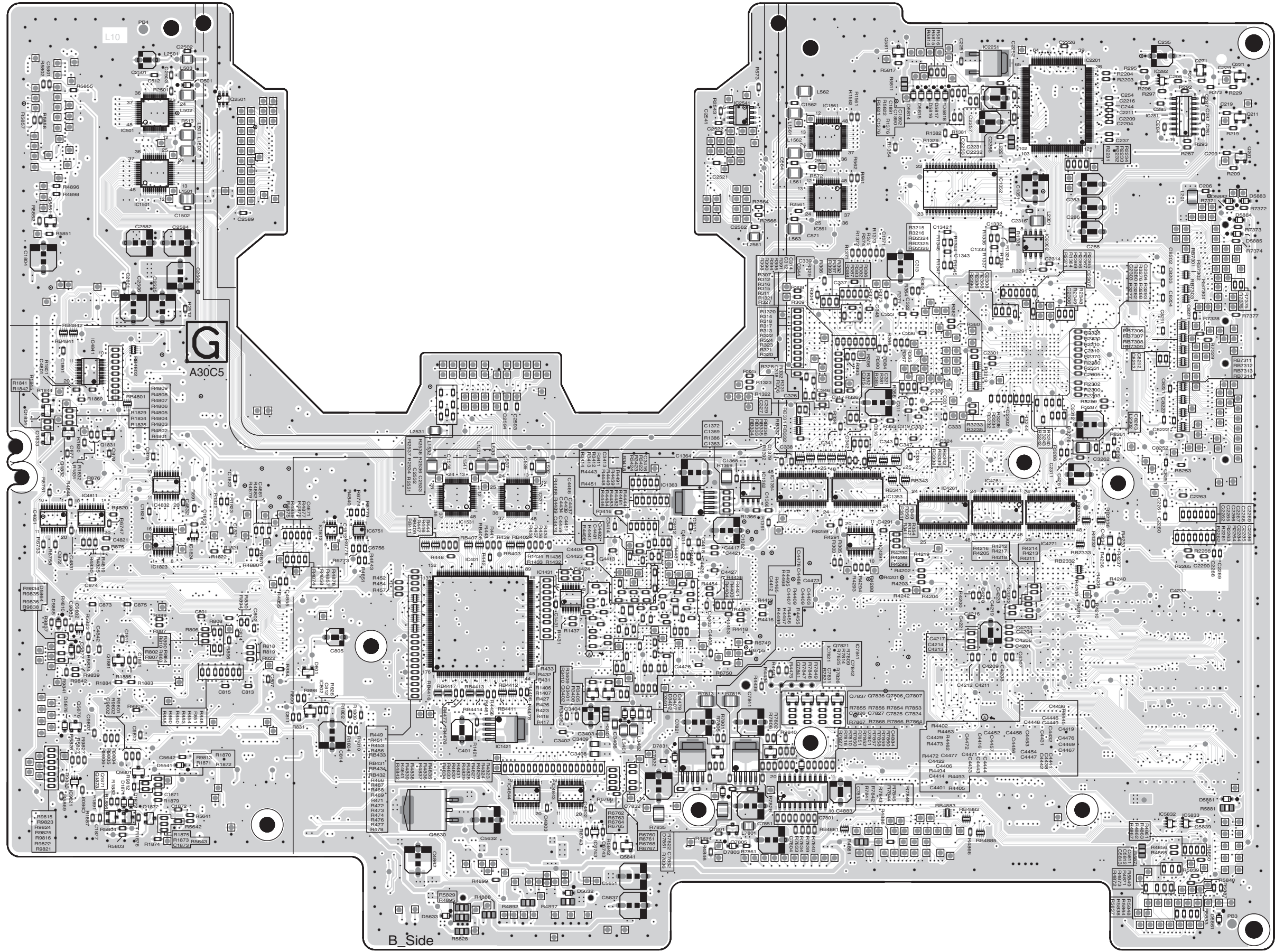
MOTOR&AUDIO (side-B)



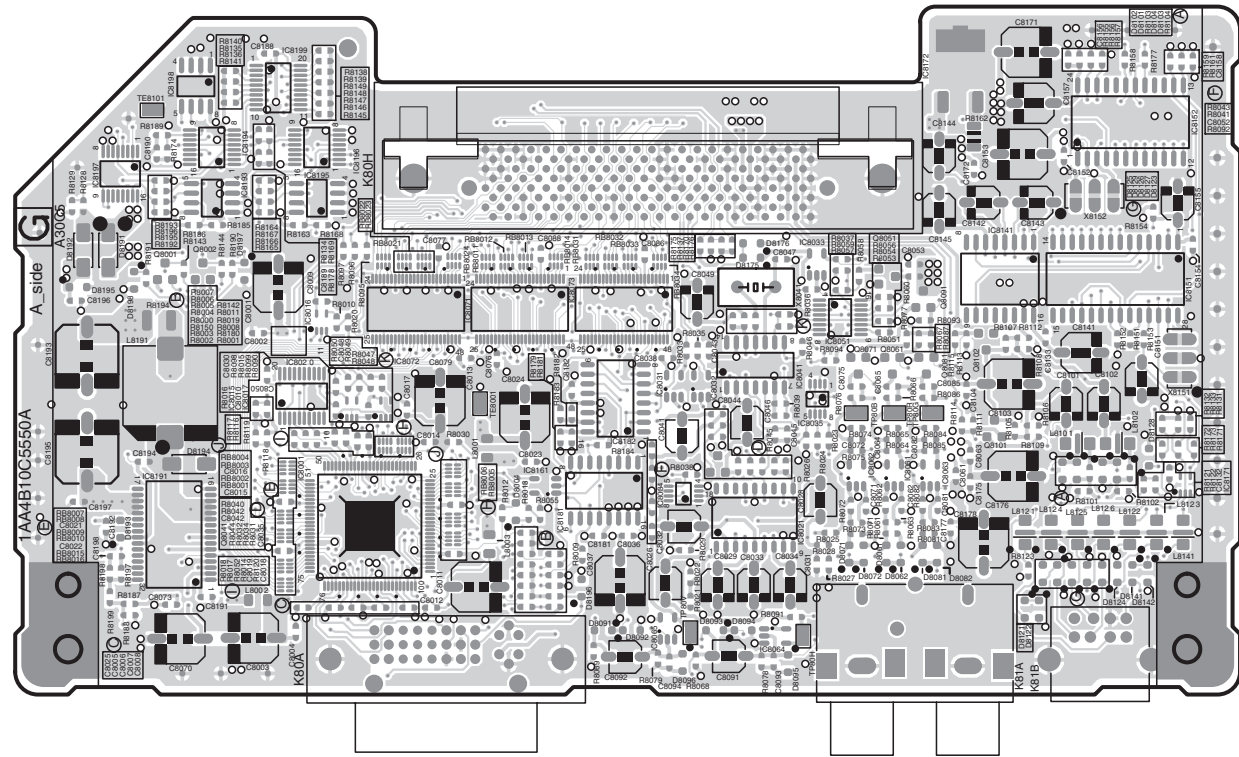
MAIN (side-A)



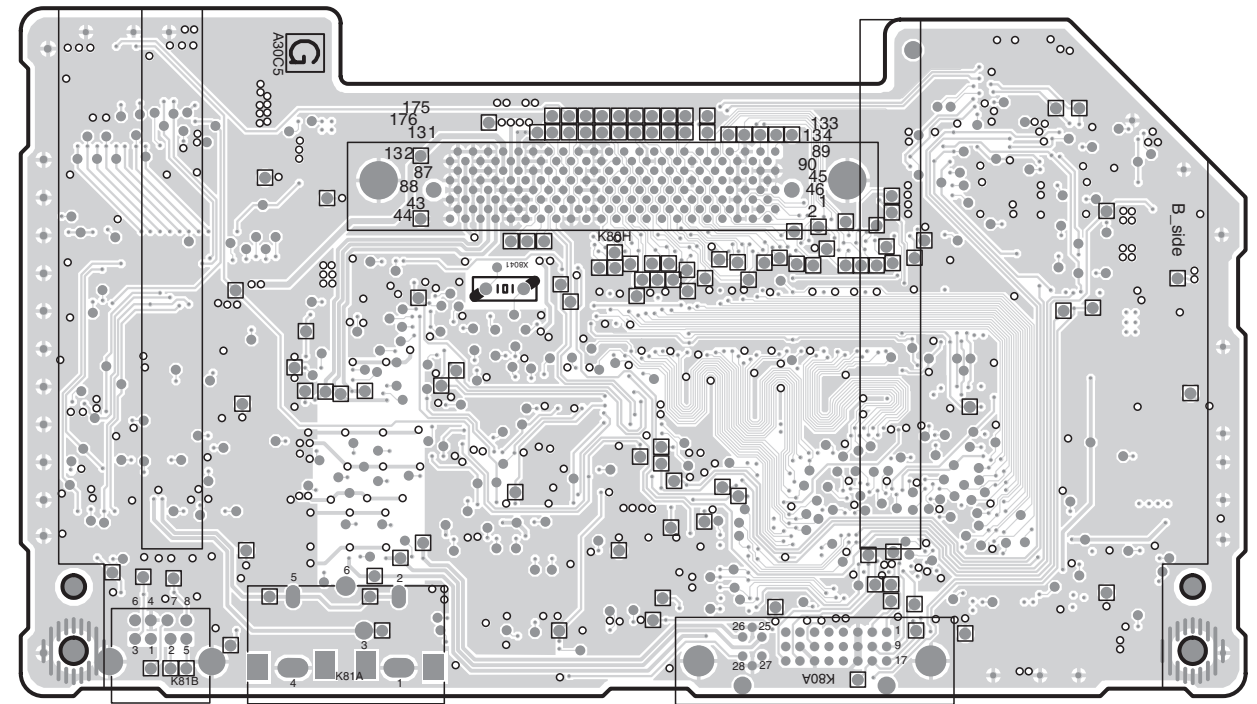
MAIN (side-B)



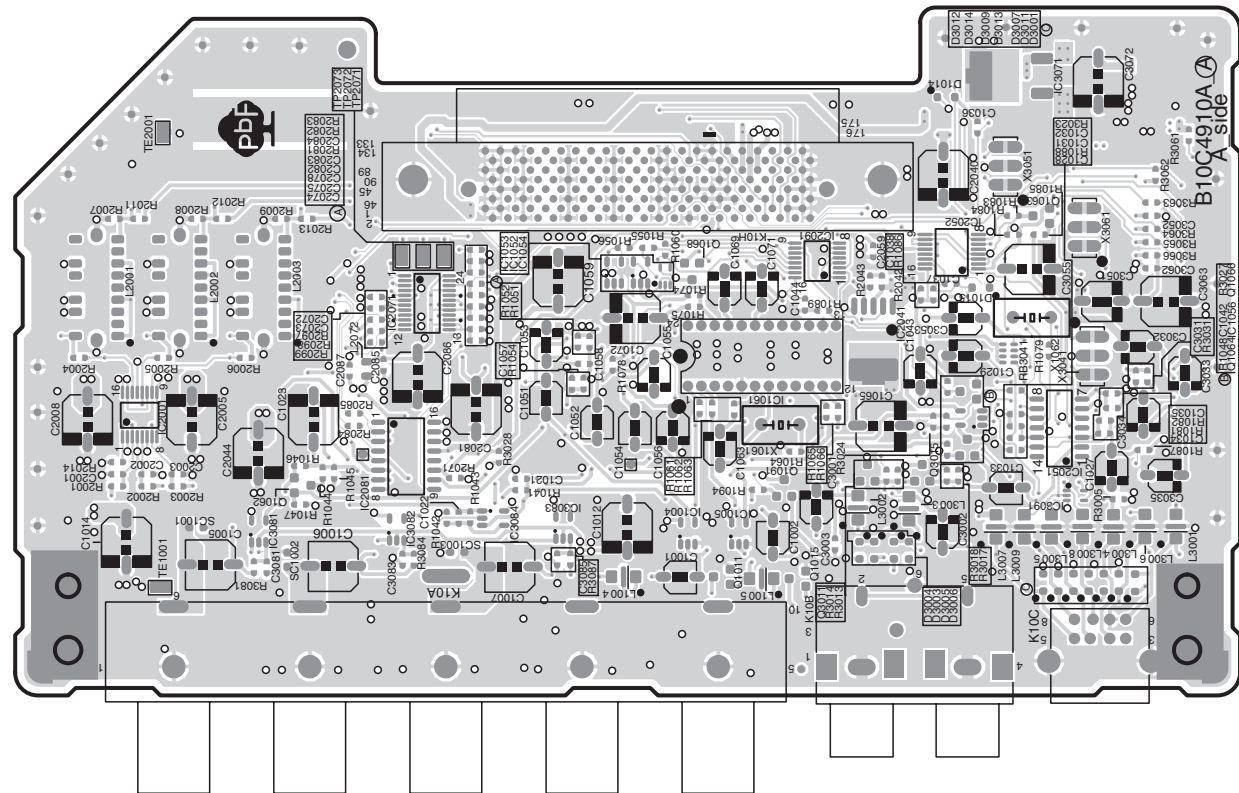
DVI (side-A)



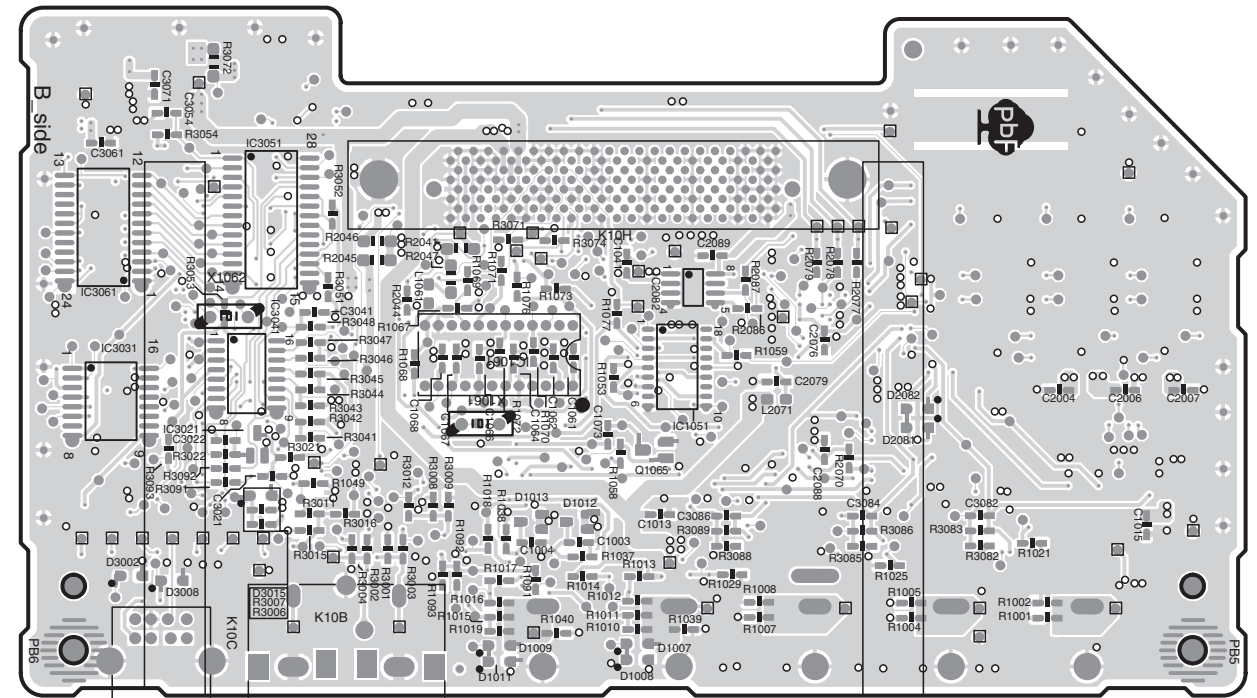
DVI (side-B)



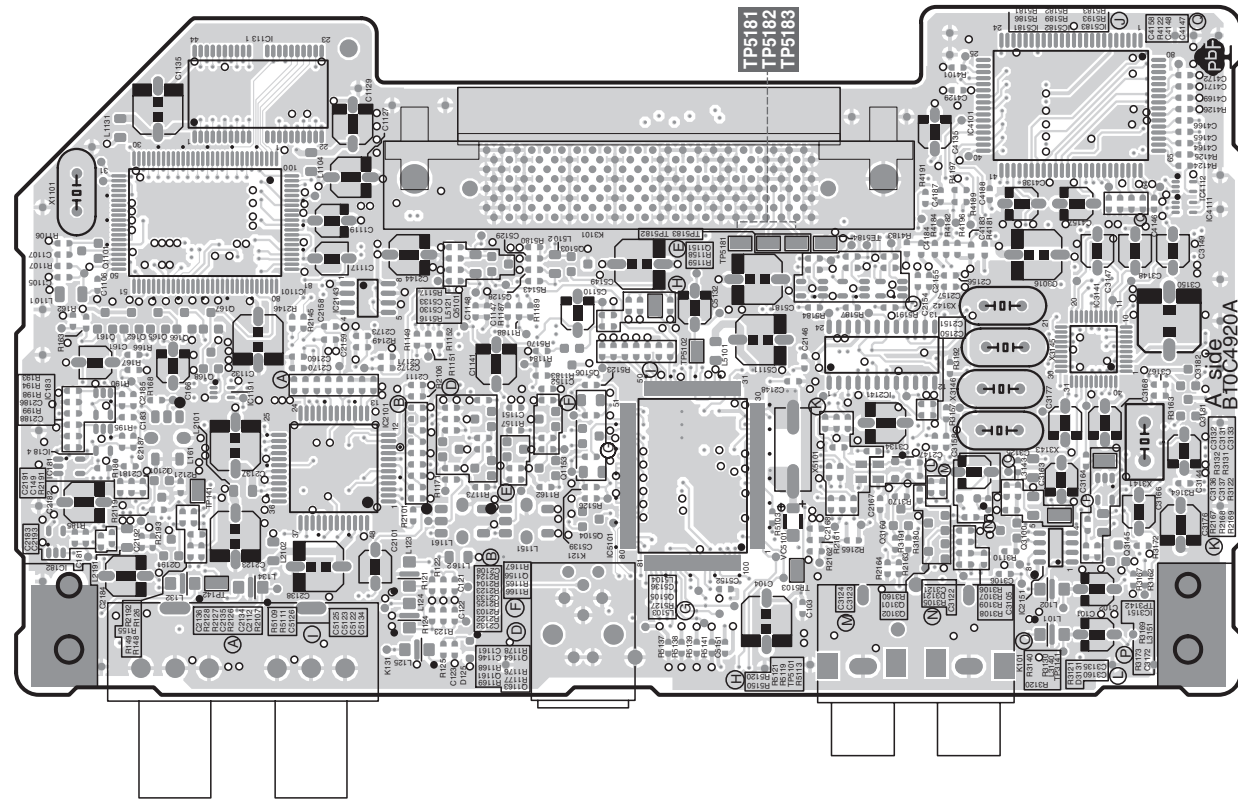
COMPONENT (side-A)



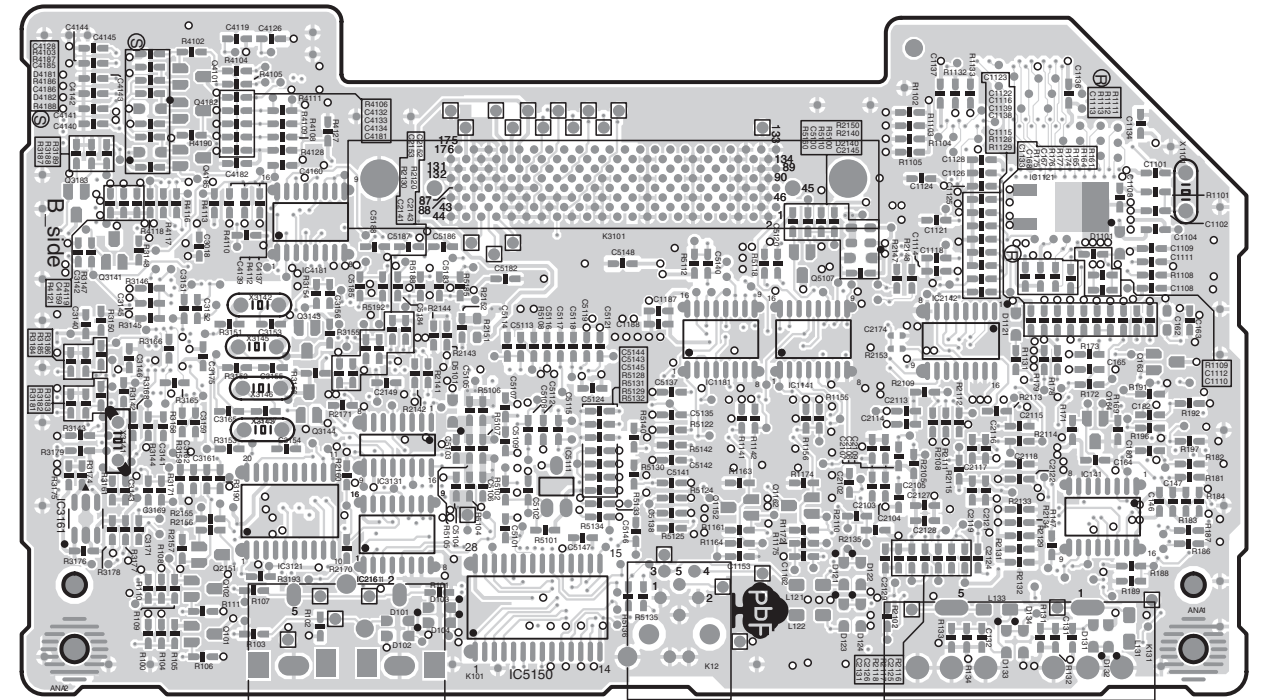
COMPONENT (side-B)



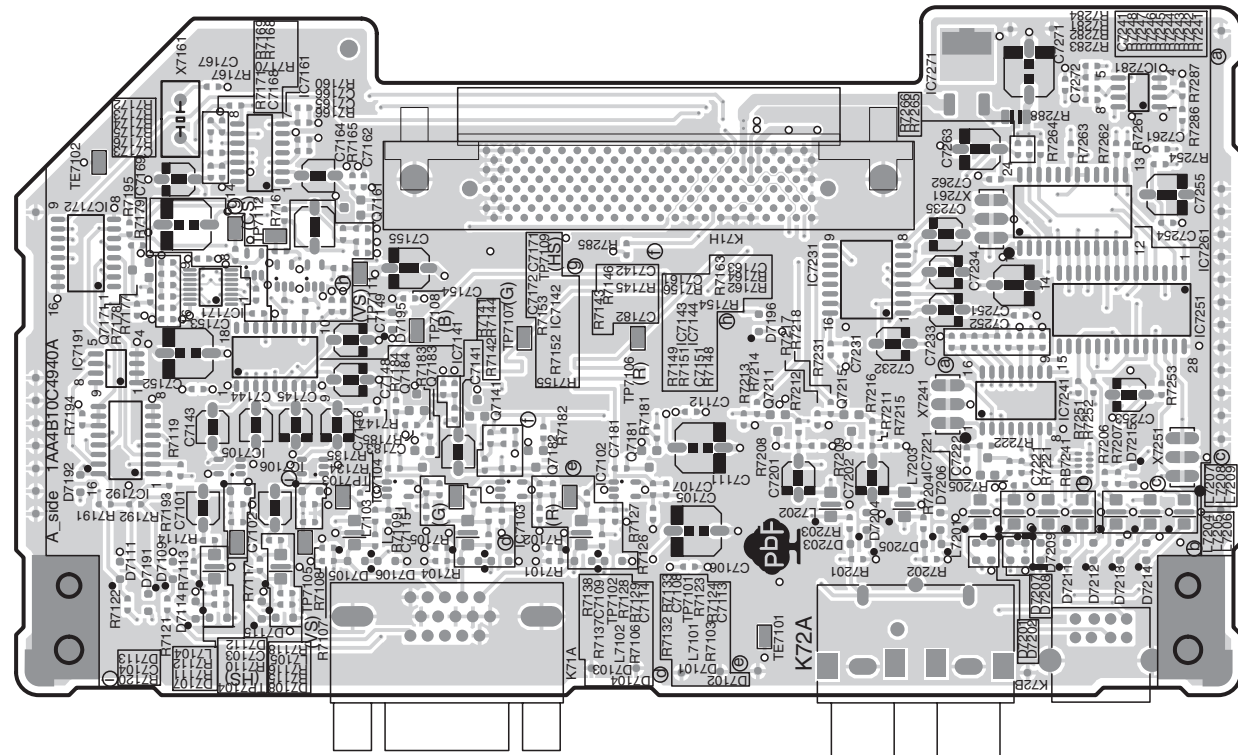
AV (side-A)



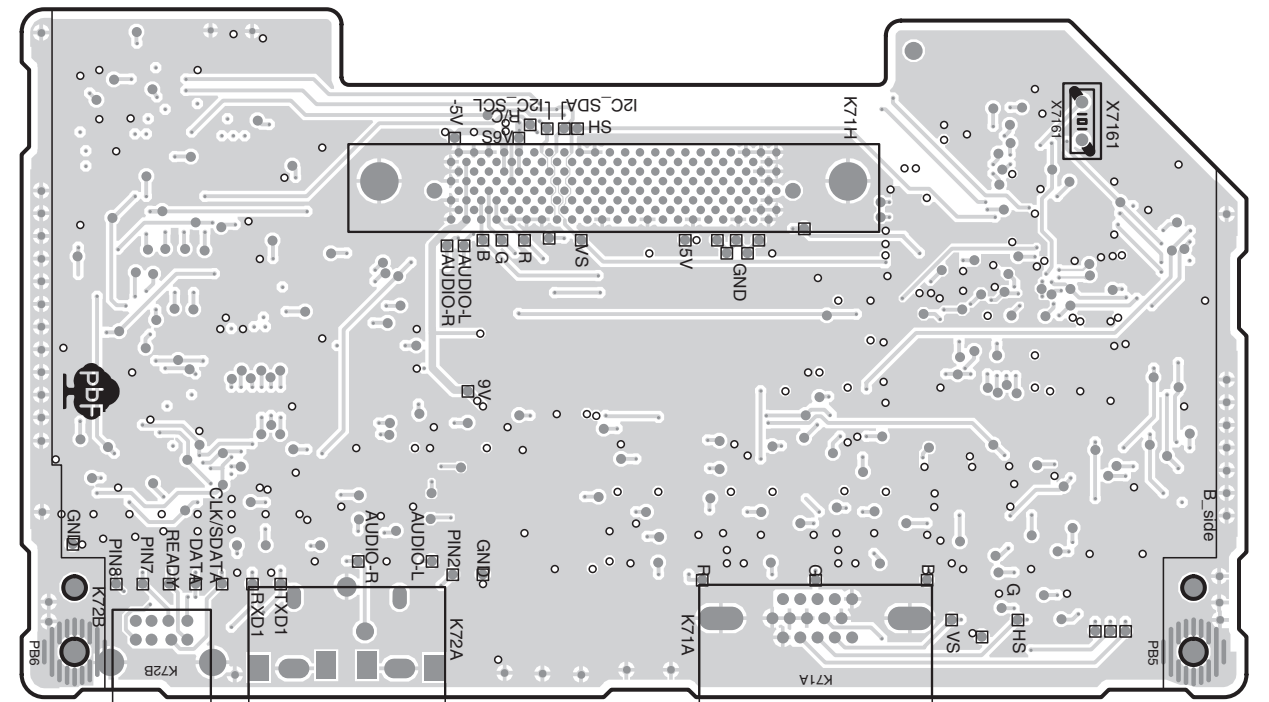
AV (side-B)



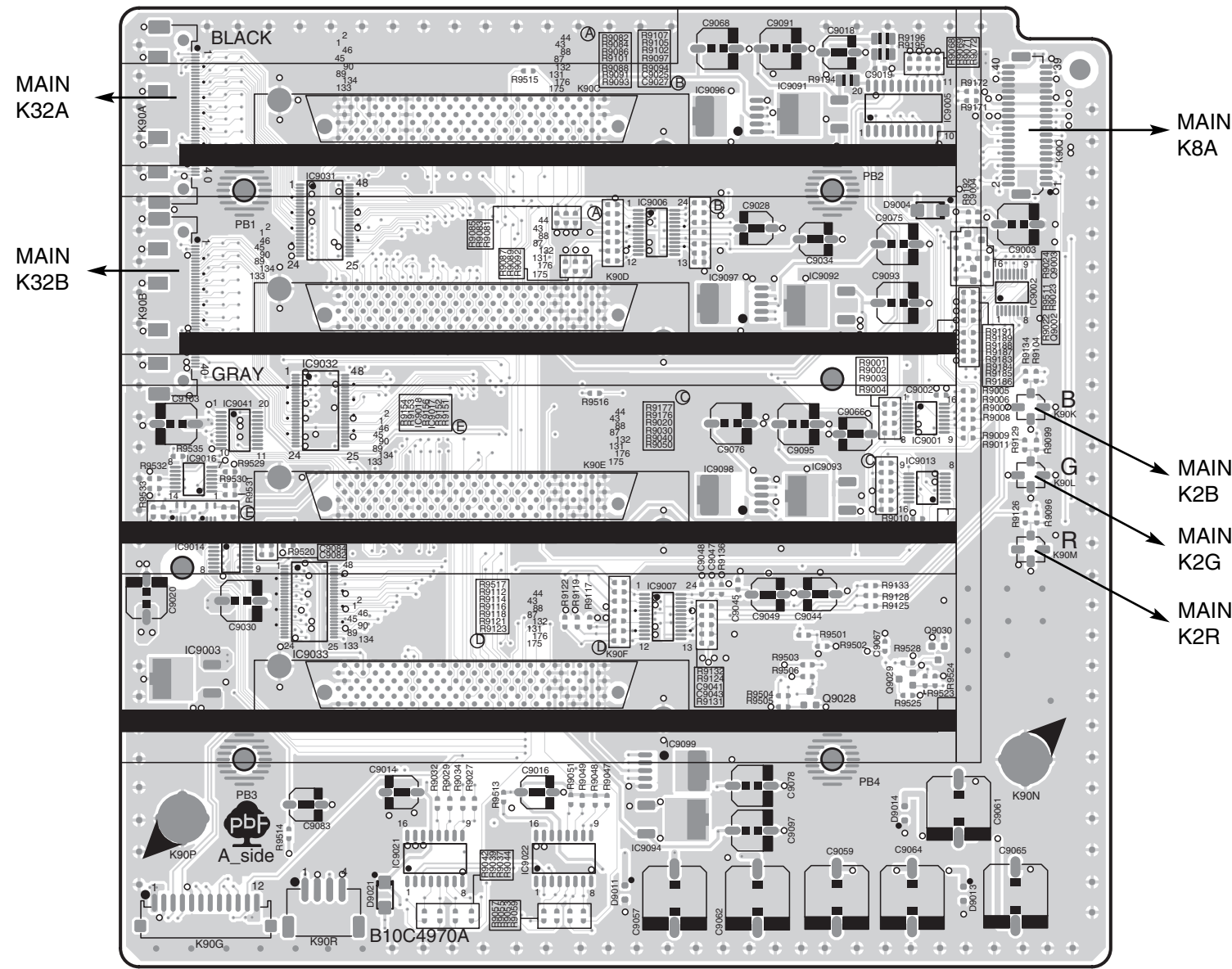
D-SUB (side-A)



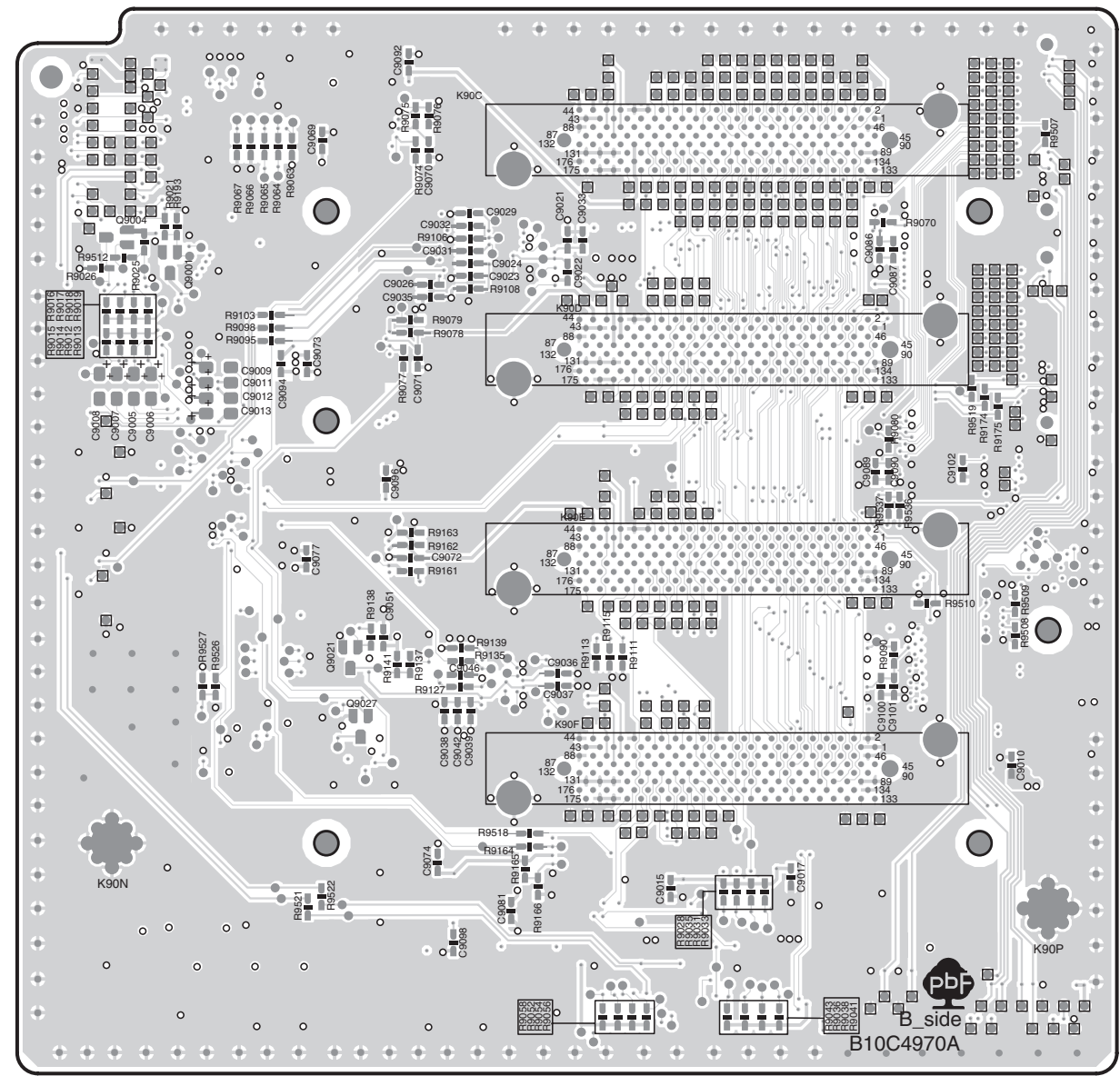
D-SUB (side-B)



CG-MOTHER (side-A)

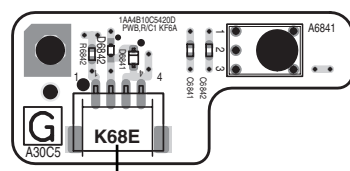


CG-MOTHER (side-B)



R/C1 (side-A)

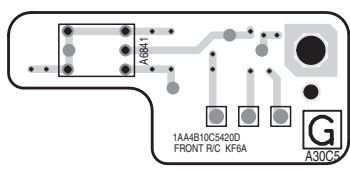
(FRONT)



MOTOR&AUDIO
K16B

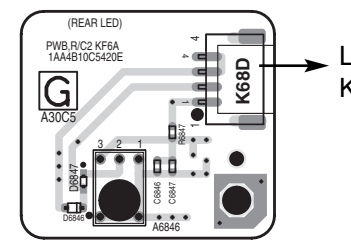
R/C1 (side-B)

(FRONT)



R/C_2 (side-A)

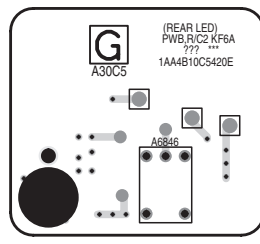
(REAR)



LAMP NET
K96U

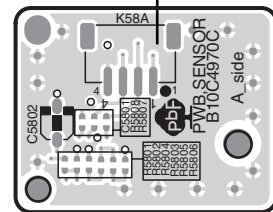
R/C_2 (side-B)

(REAR)

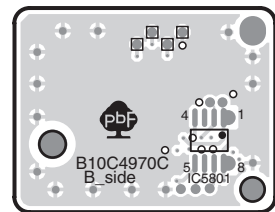


SENSOR (side-A)

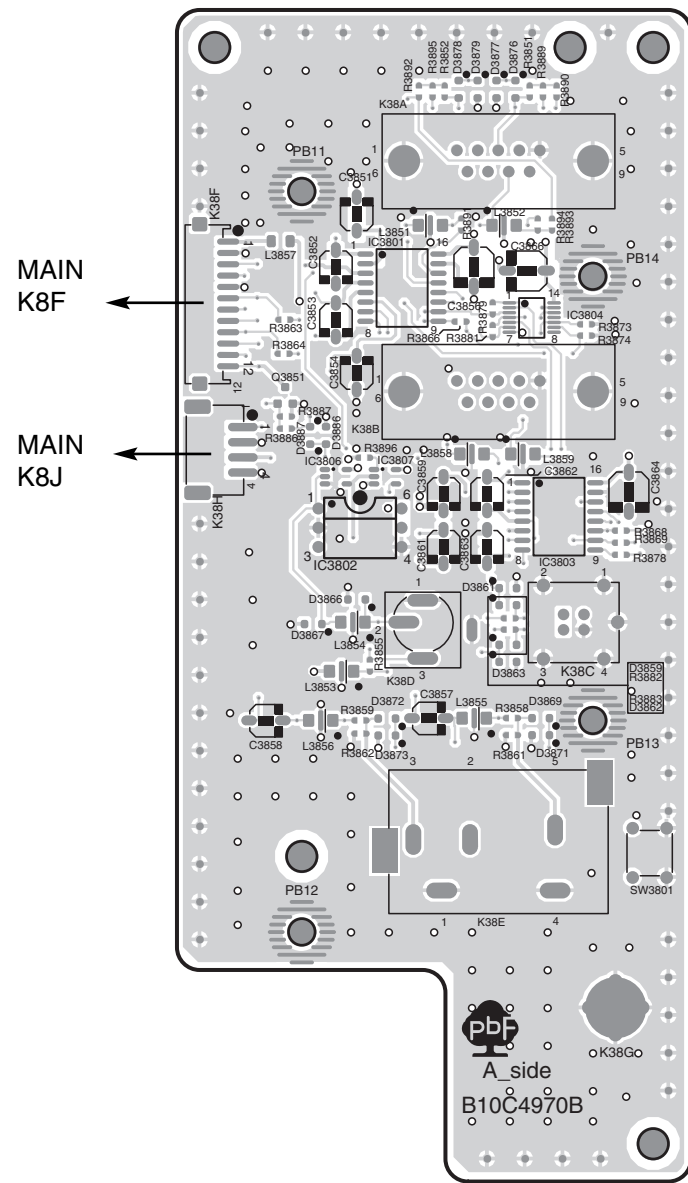
FANNET_3
K26V



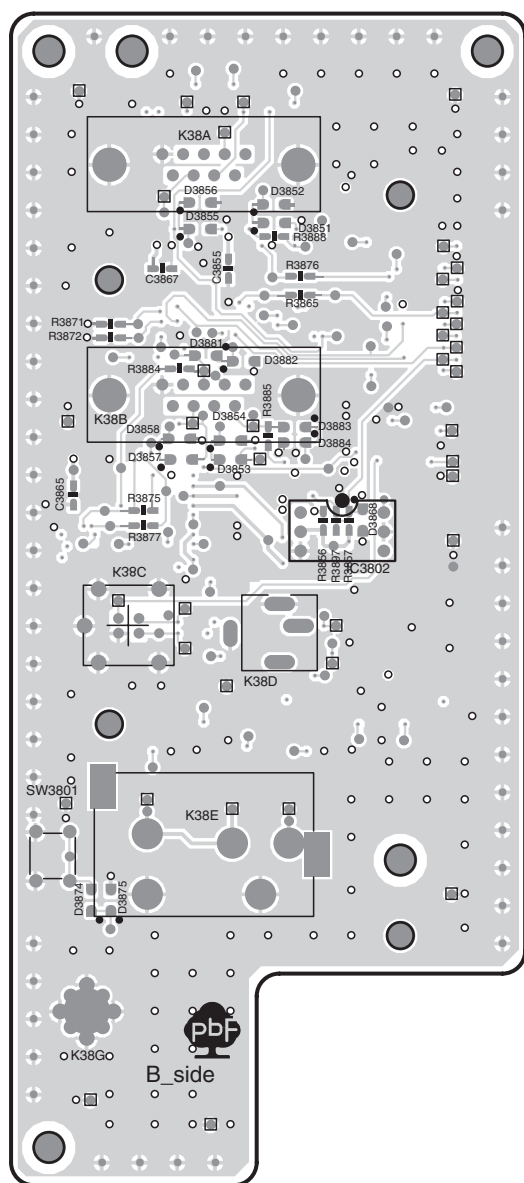
SENSOR (side-B)



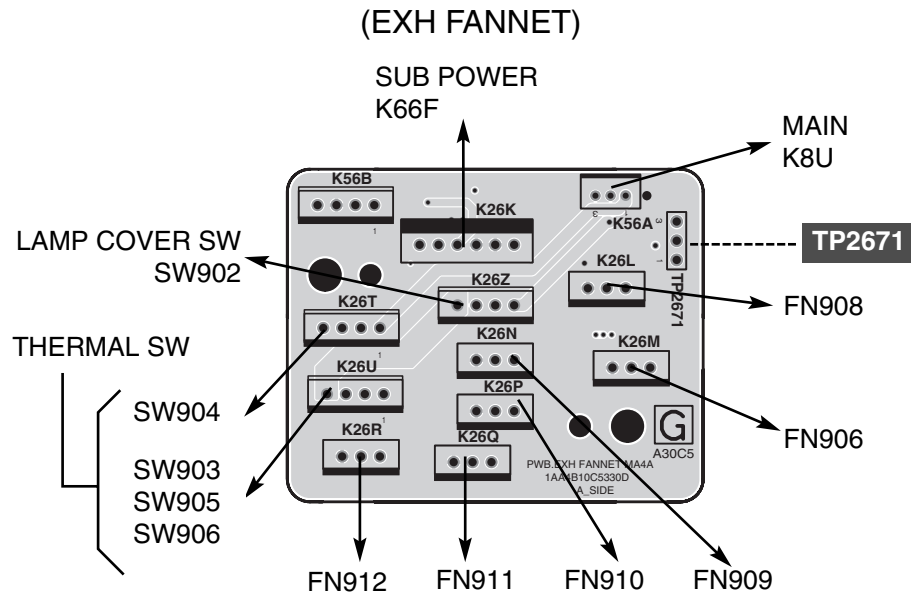
RS232C (side-A)



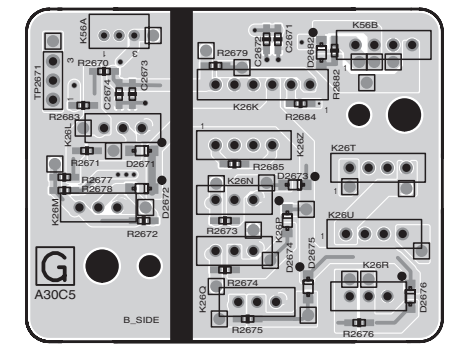
RS232C (side-B)



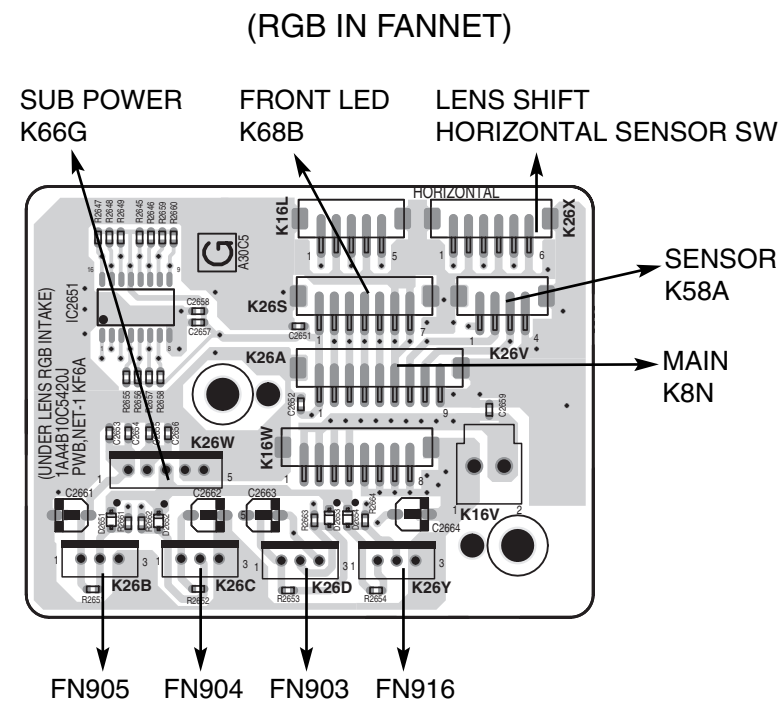
FANNET_2 (side-A)



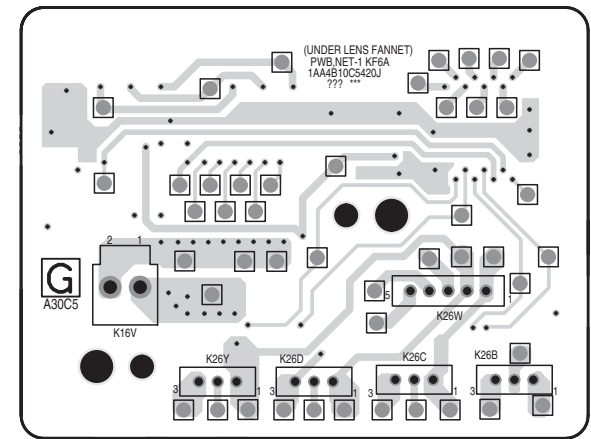
FANNET_2 (side-B)



FANNET_3 (side-A)

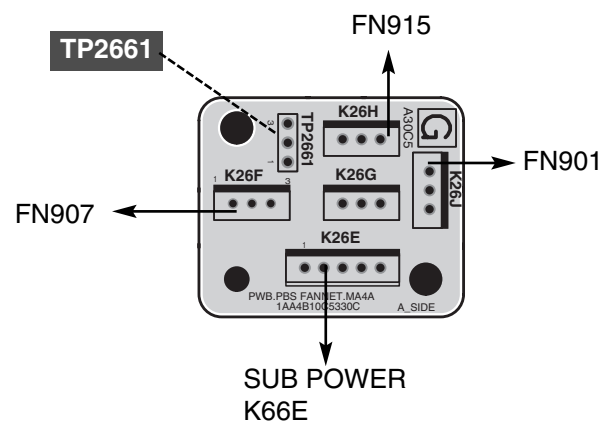


FANNET_3 (side-B)

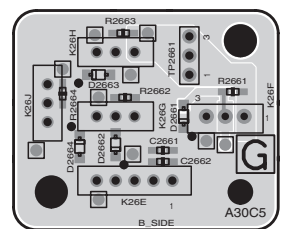


FANNET_1 (side-A)

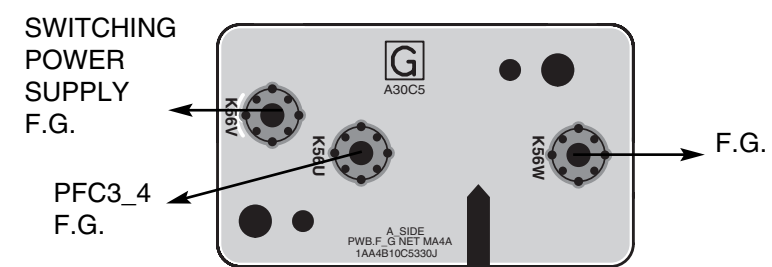
(PBS FANNET)



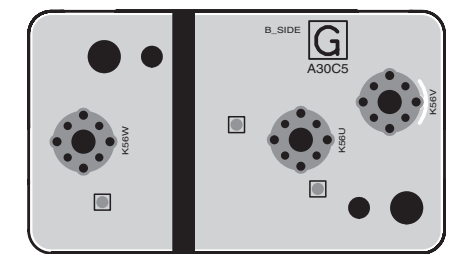
FANNET_1 (side-B)



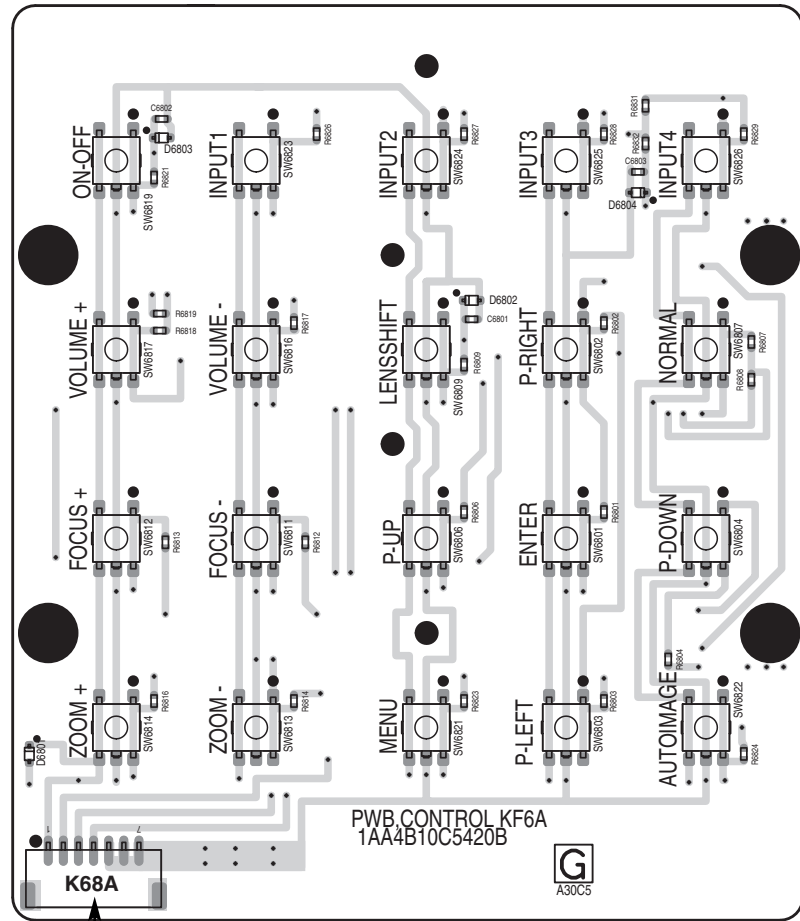
F-G_NET (side-A)



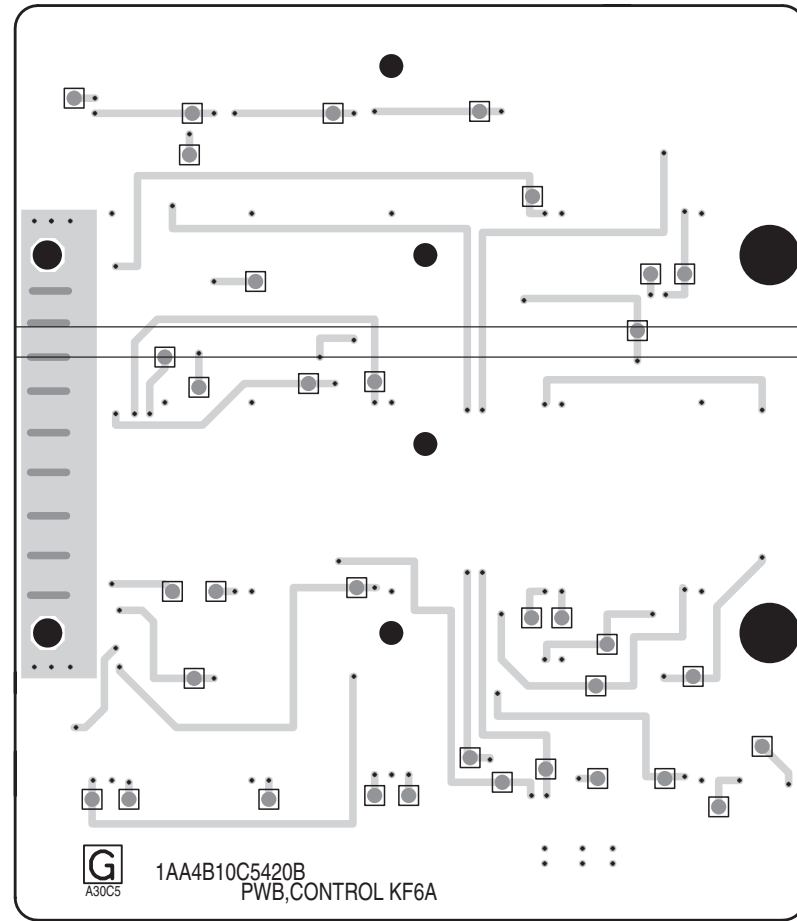
F-G_NET (side-B)



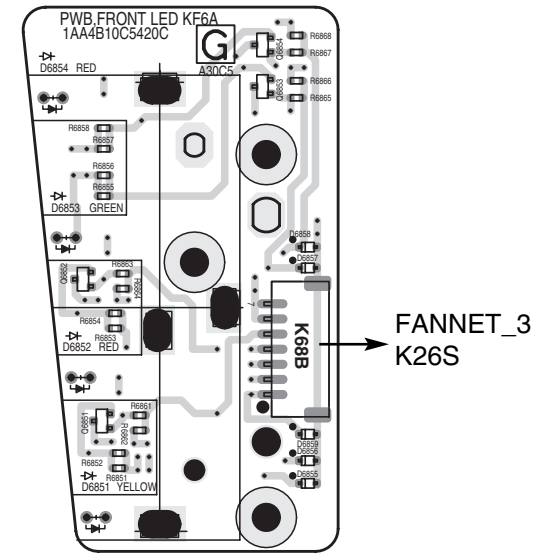
CONTROL (side-A)



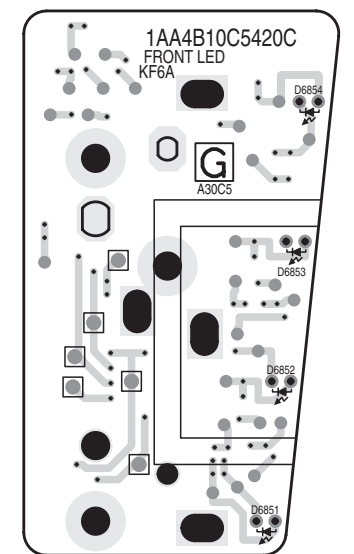
CONTROL (side-B)



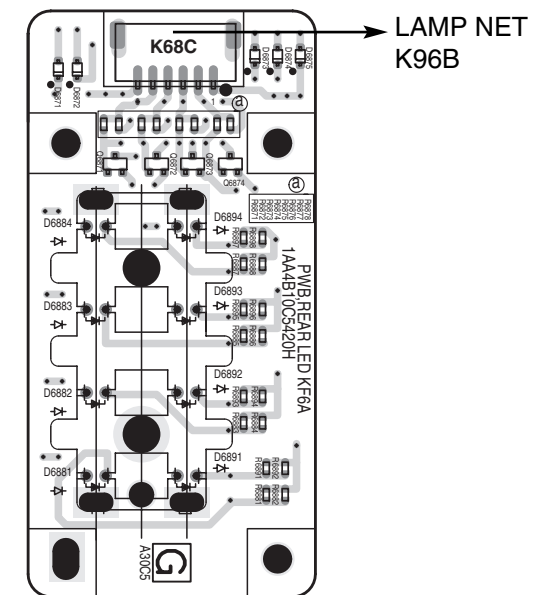
FRONT LED (side-A)



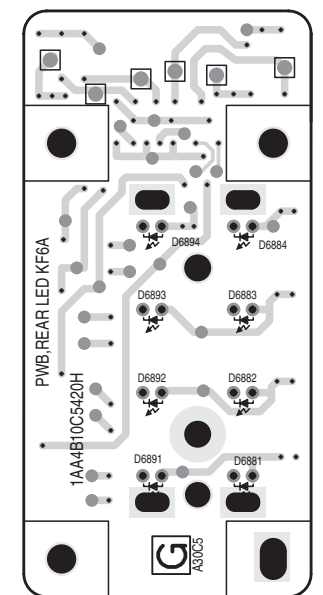
FRONT LED (side-B)



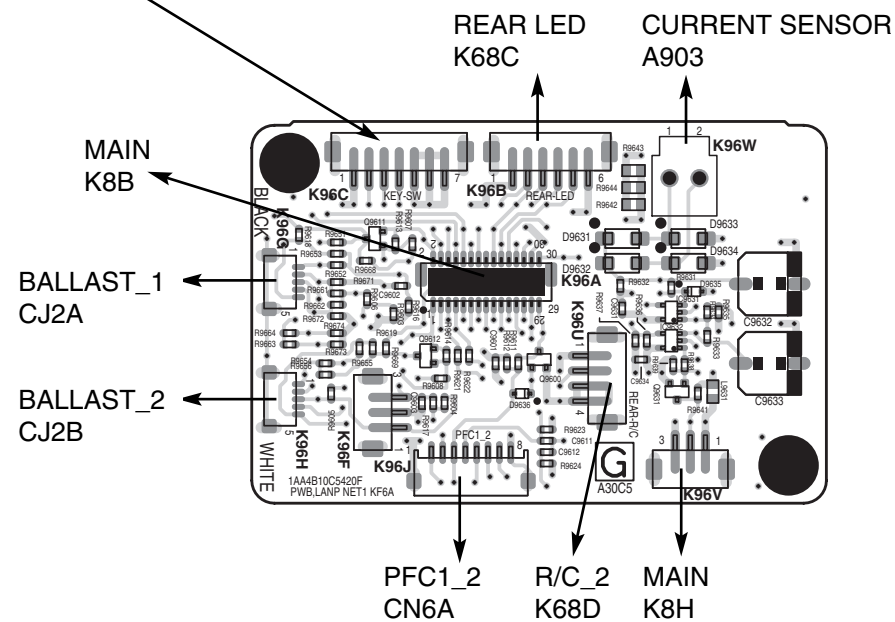
REAR LED (side-A)



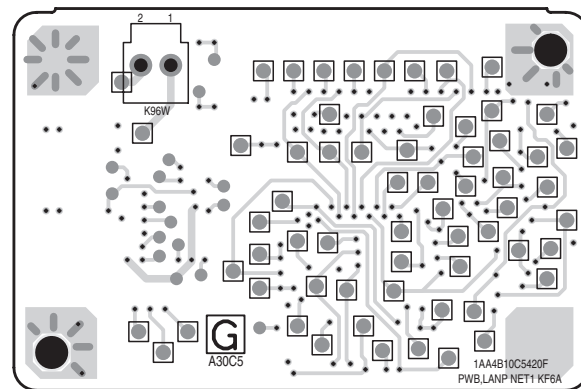
REAR LED (side-B)



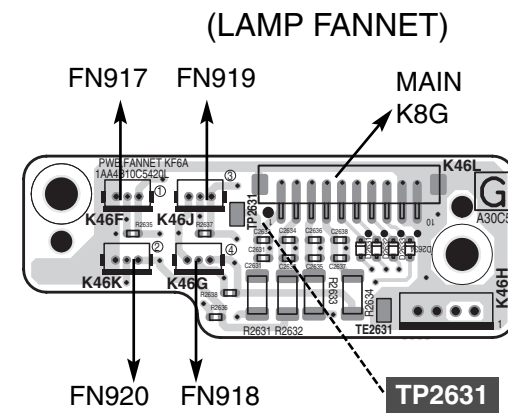
LAMP NET (side-A)



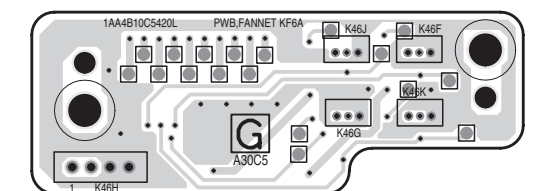
LAMP NET (side-B)



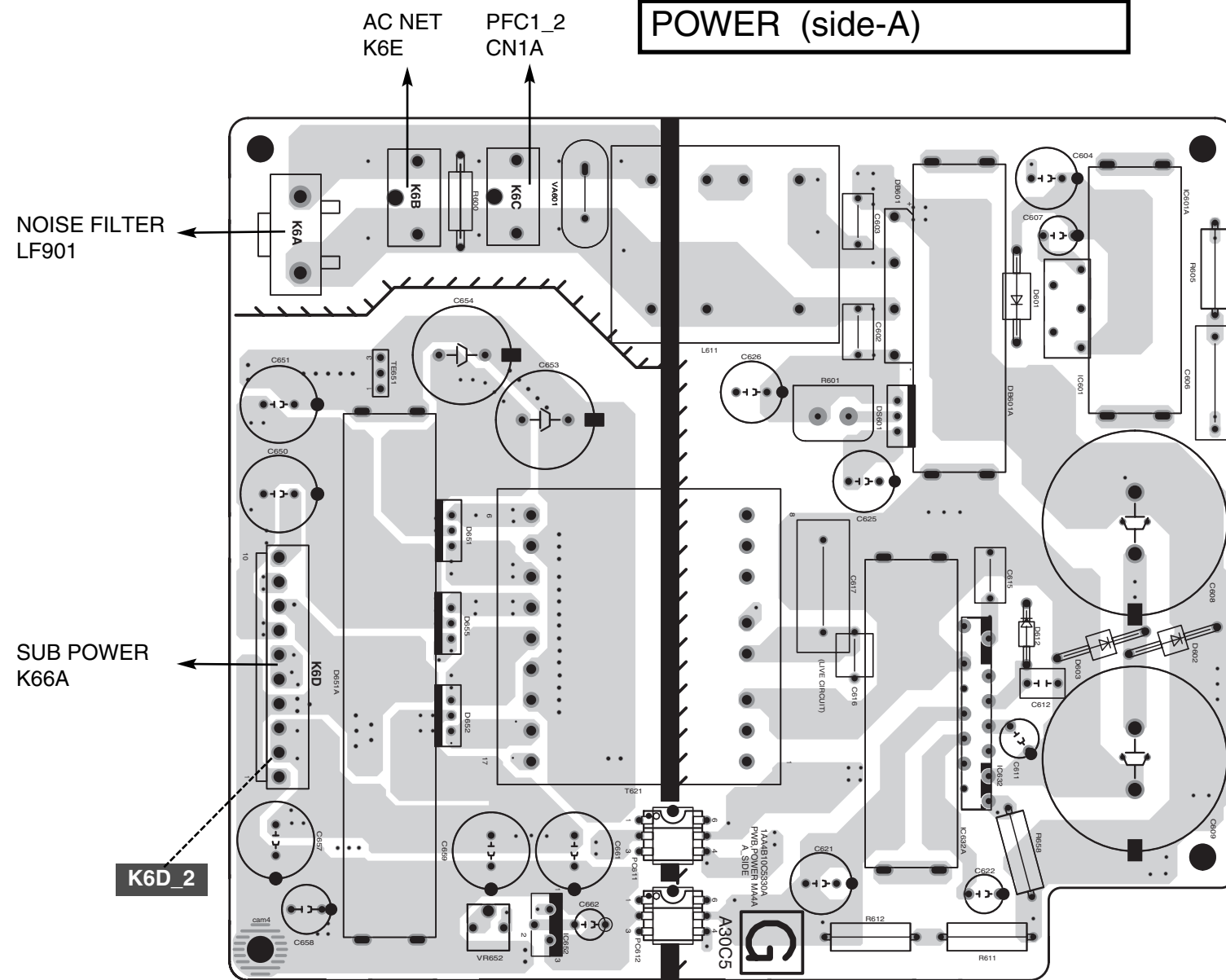
FANNET_4 (side-A)



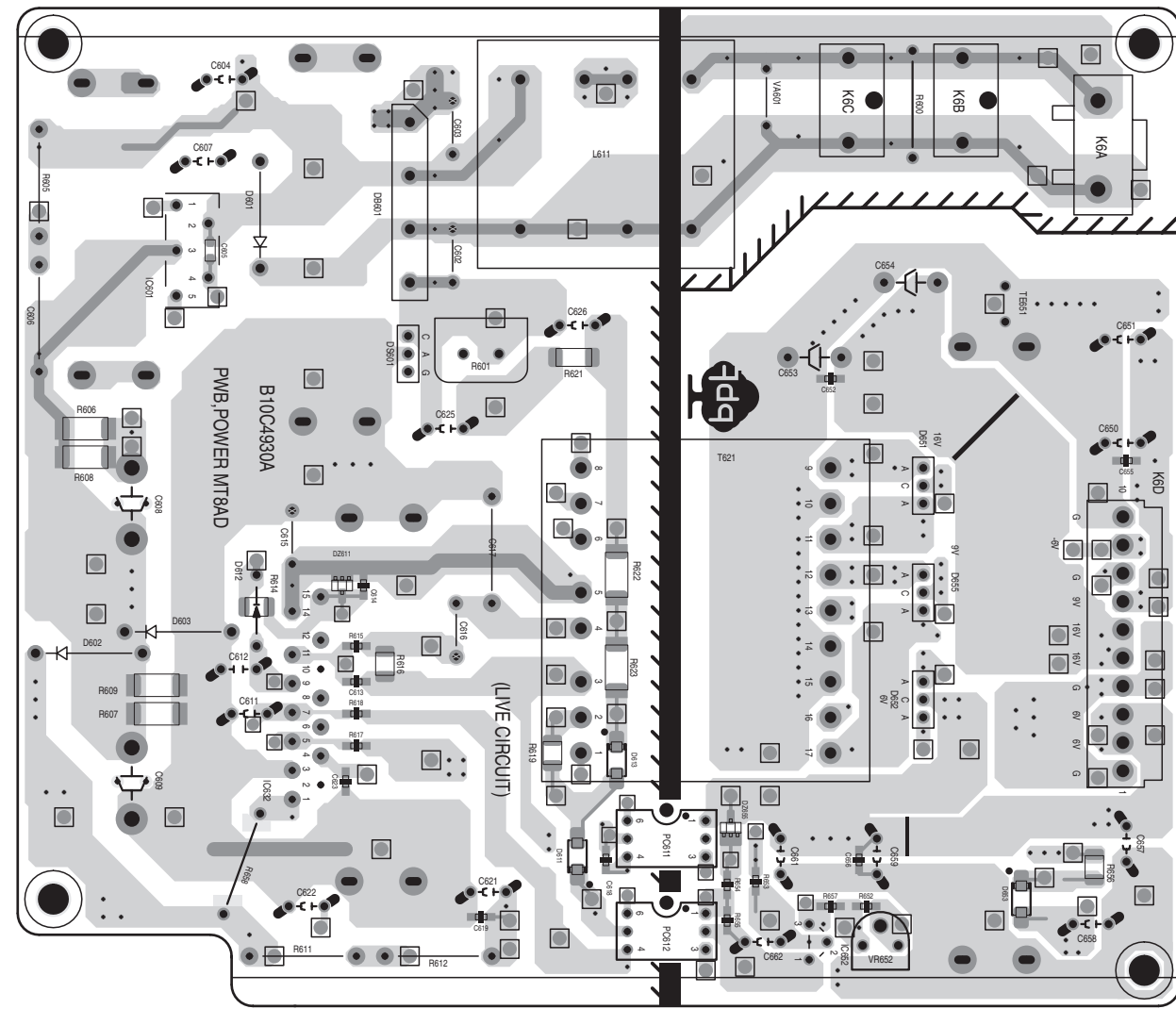
FANNET_4 (side-B)



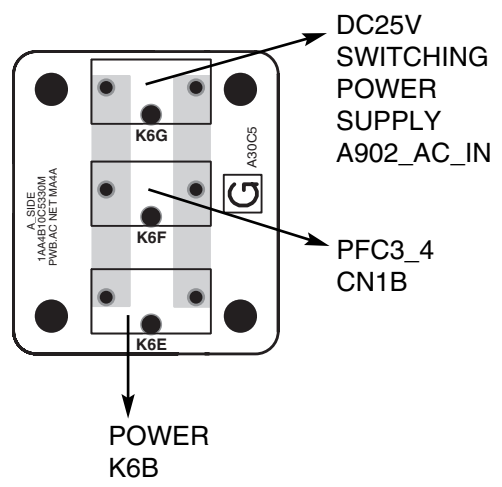
POWER (side-A)



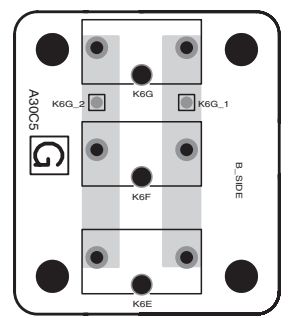
POWER (side-B)



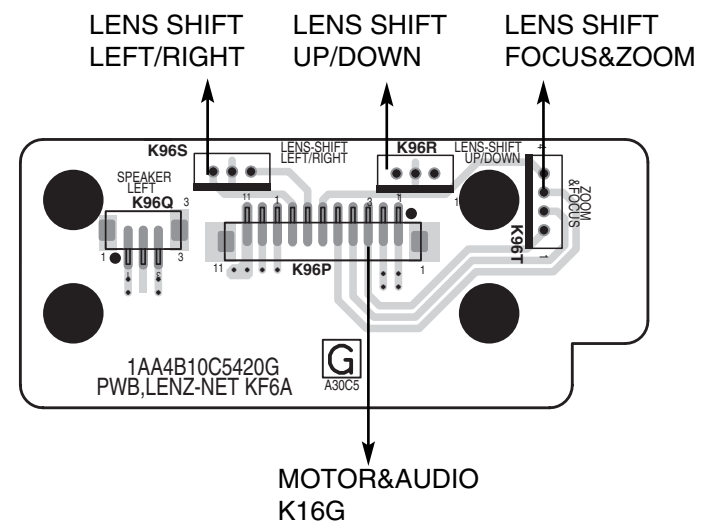
AC NET (side-A)



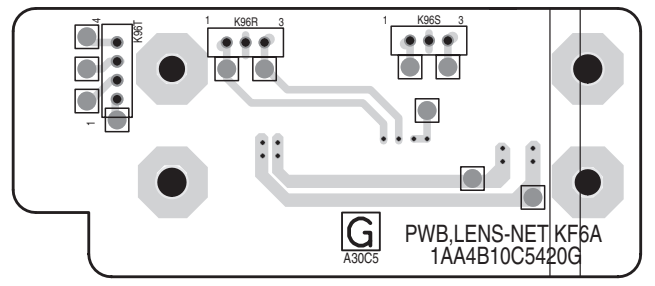
AC NET (side-B)



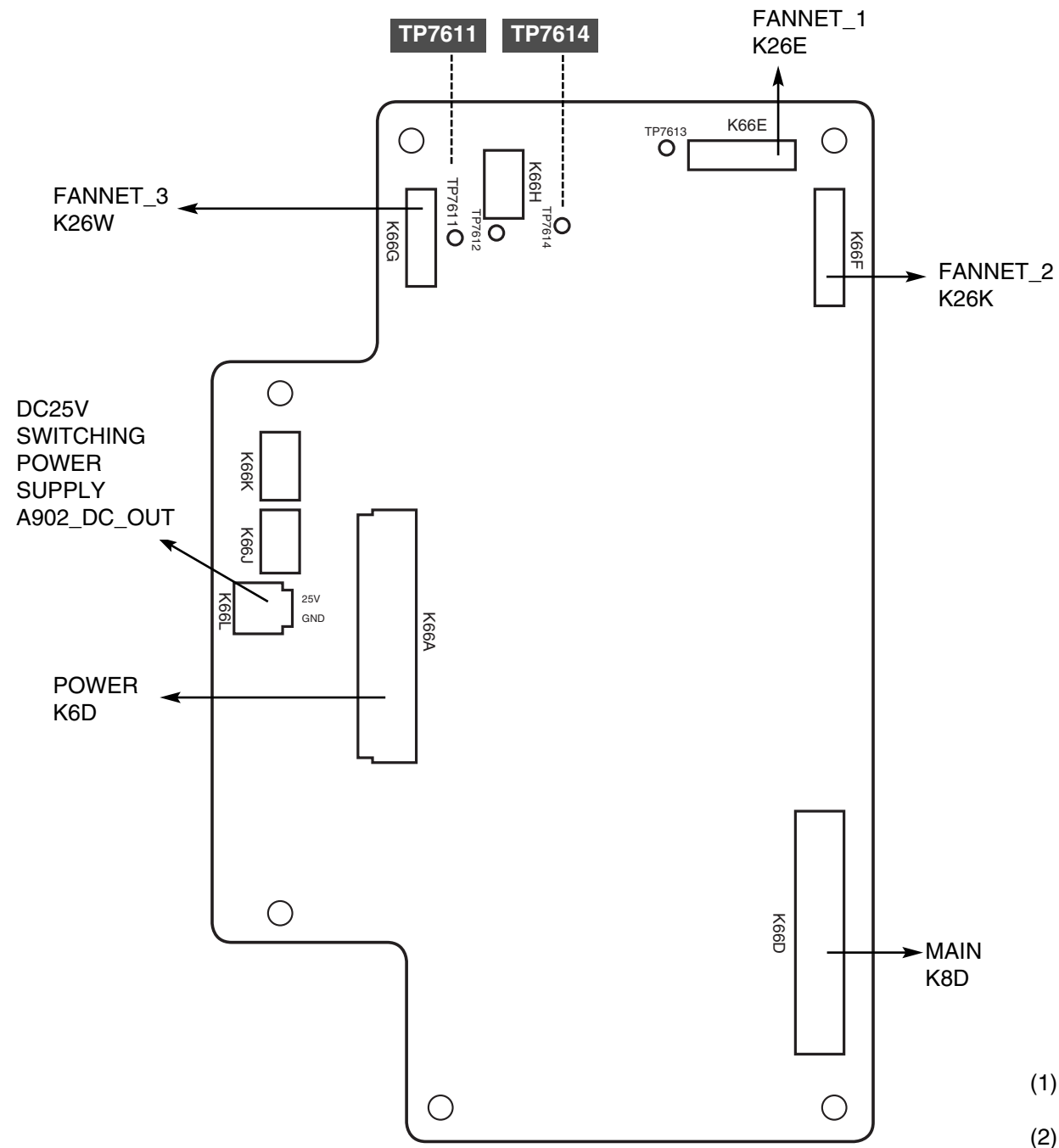
NET (side-A)



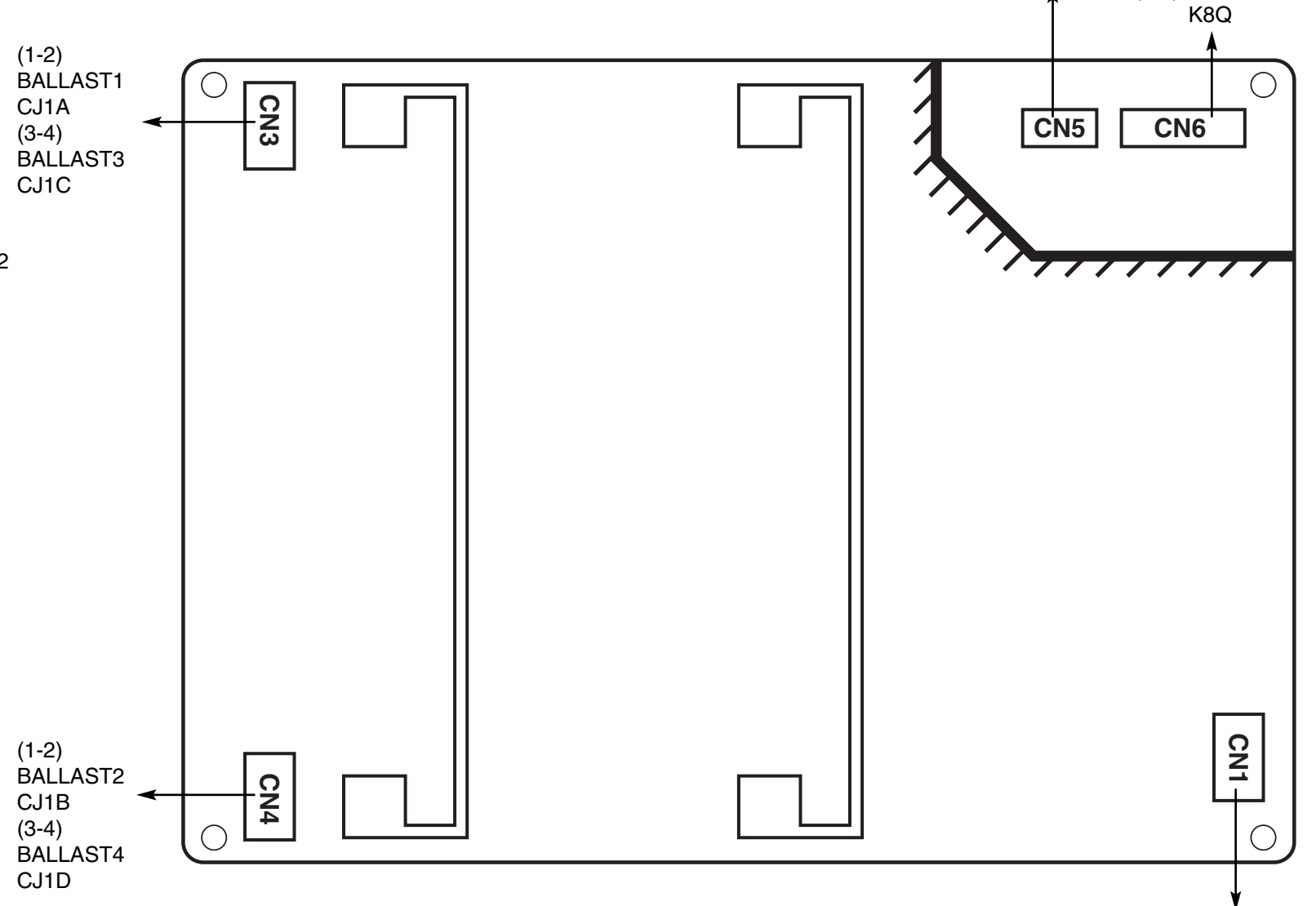
NET (side-B)



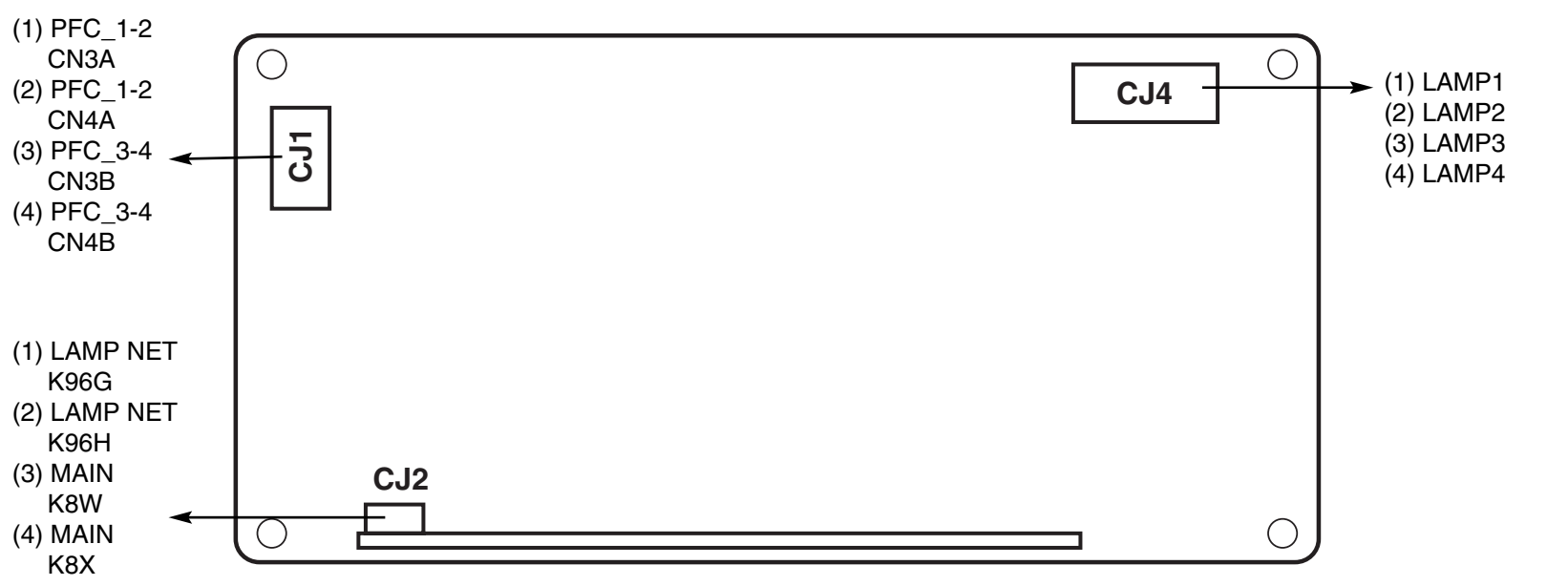
SUB POWER (side-A)



PFC_1-2, PFC_3-4 (side-A)

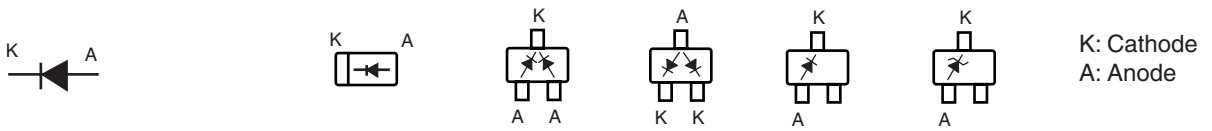


BALLAST_1,2,3,4 (side-A)

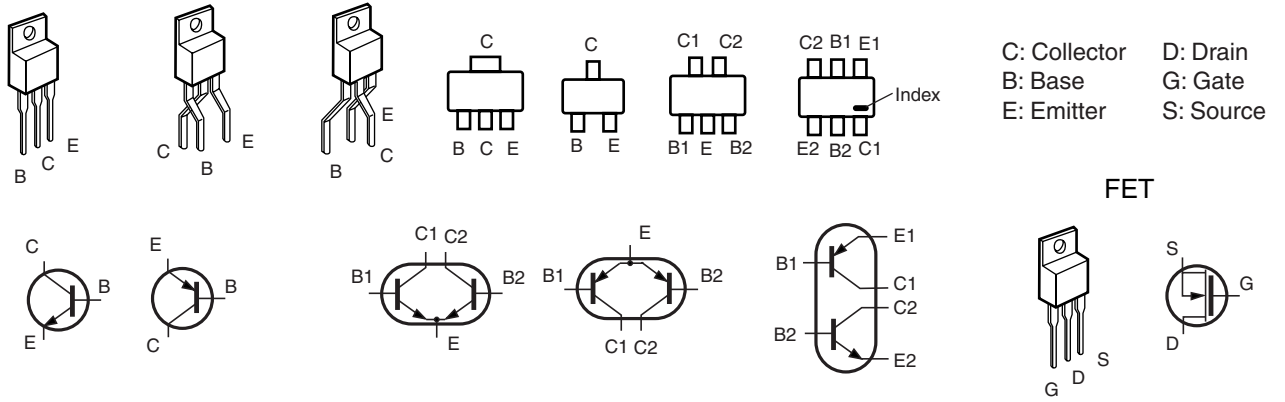


Pin description of diode, transistor and IC

Diode



Transistor/FET



IC

