

Schematic Diagrams Printed Wiring Board Drawings

Model	Chassis No.
PLV-55WHD1	M8L-55WHD100
PLV-65WHD1	M8P-65WHD100

These schematic diagrams and printed wiring board drawings are part of the service manual original for chassis No. M8L-55WHD100 / M8P-65WHD100, models PLV-55WHD1 / PLV-65WHD1.

File with the service manual No. SM5110797-00.

Note:

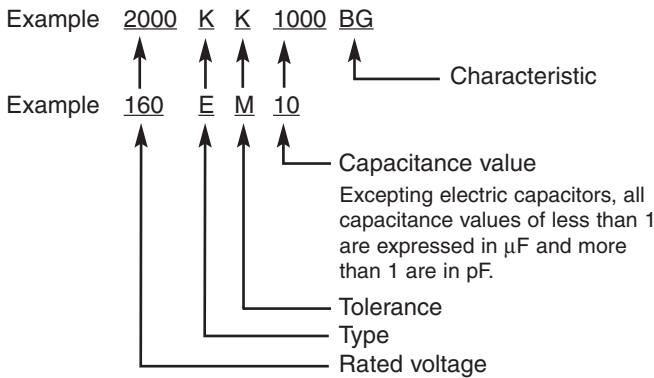
All the information of part numbers and values indicated on these diagrams are at the beginning of production. To improve the performance, there may be some differences to the actual set. When you order the service parts, use service parts code mentioned on the parts list in this service manual.

Parts description and reading in schematic diagram

M8L-55WHD100
M8P-65WHD100

- 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



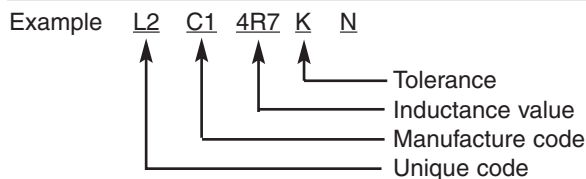
Material table

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 polyester
Y	Composite film
S	Styrol
T	Tantalum oxide solid electrolytic
U	Organic semiconductive electrolyte
D	Electric double layer electrolytic

Tolerance table

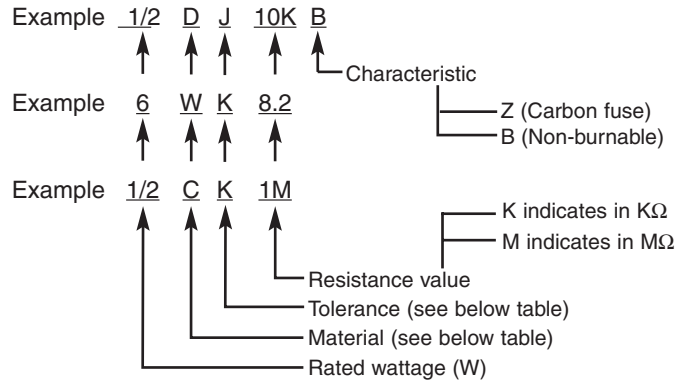
Mark	Tolerance
A	not specified
B	± 0.1
C	± 0.25
D	± 0.5
F	± 1
G	± 2
E	± 2.5
H	± 3
J	± 5
K	± 10
M	± 20
N	± 30
P	+100 -0
Q	+30 -10
T	+50 -10
U	+75 -10
V	+20 -10
W	+100 -10
X	+40 -20
Y	+150 -10
Z	+80 -20

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

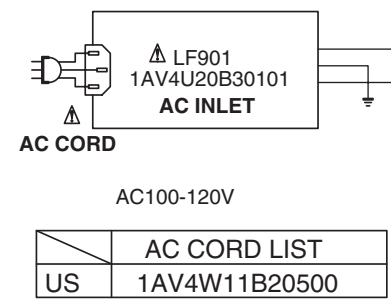
(2) PNP type

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

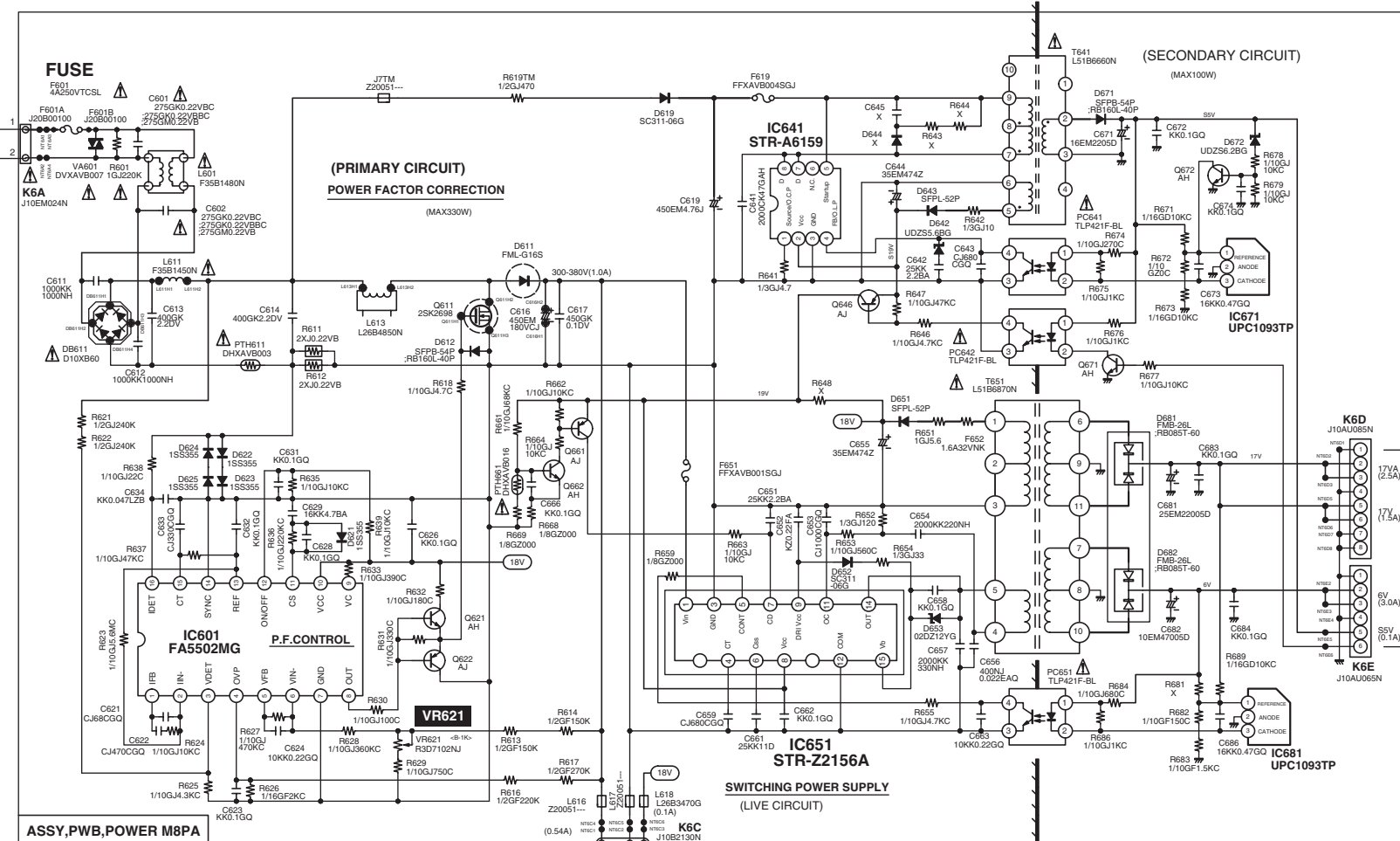
Mark	Type number				
--	2SA1179/N	2SA1037K	2SA1037AK	2SC2812/N	2SC2412K
AJ	M6, M7	R, S	R, S		
AH				L6, L7	R, S

Schematic Diagrams

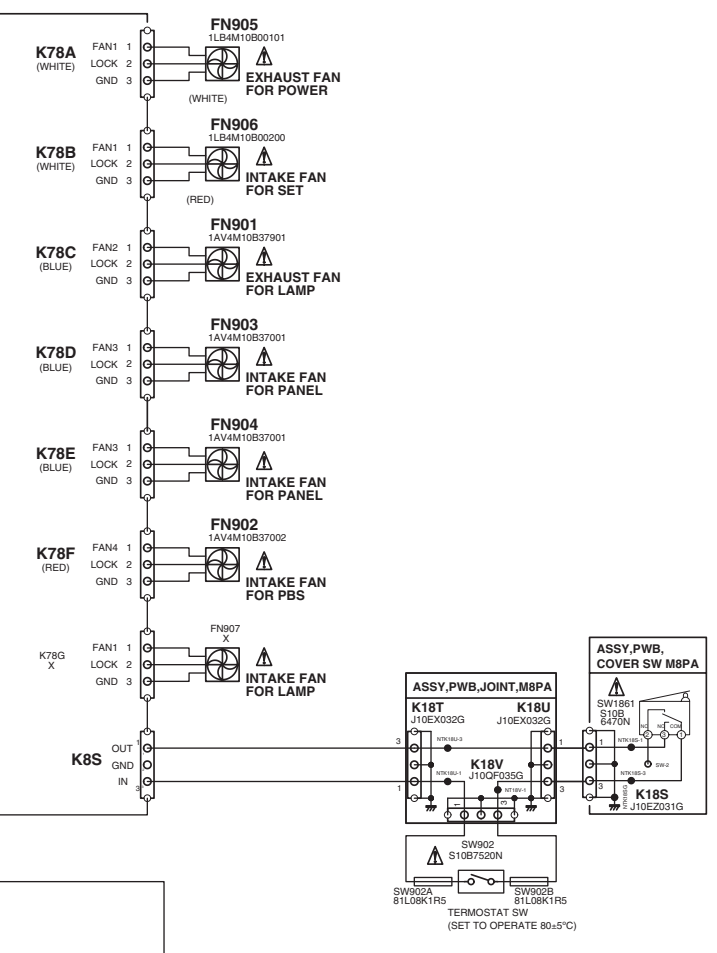
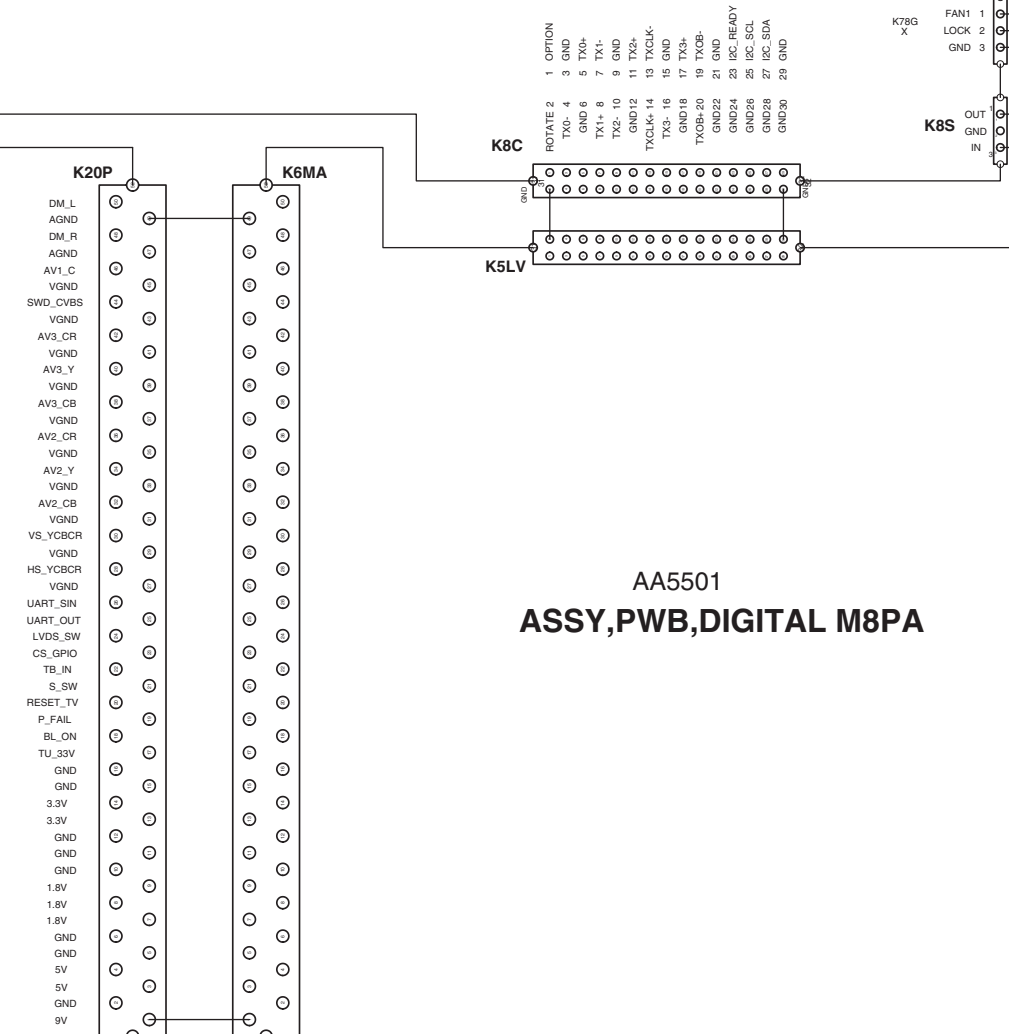
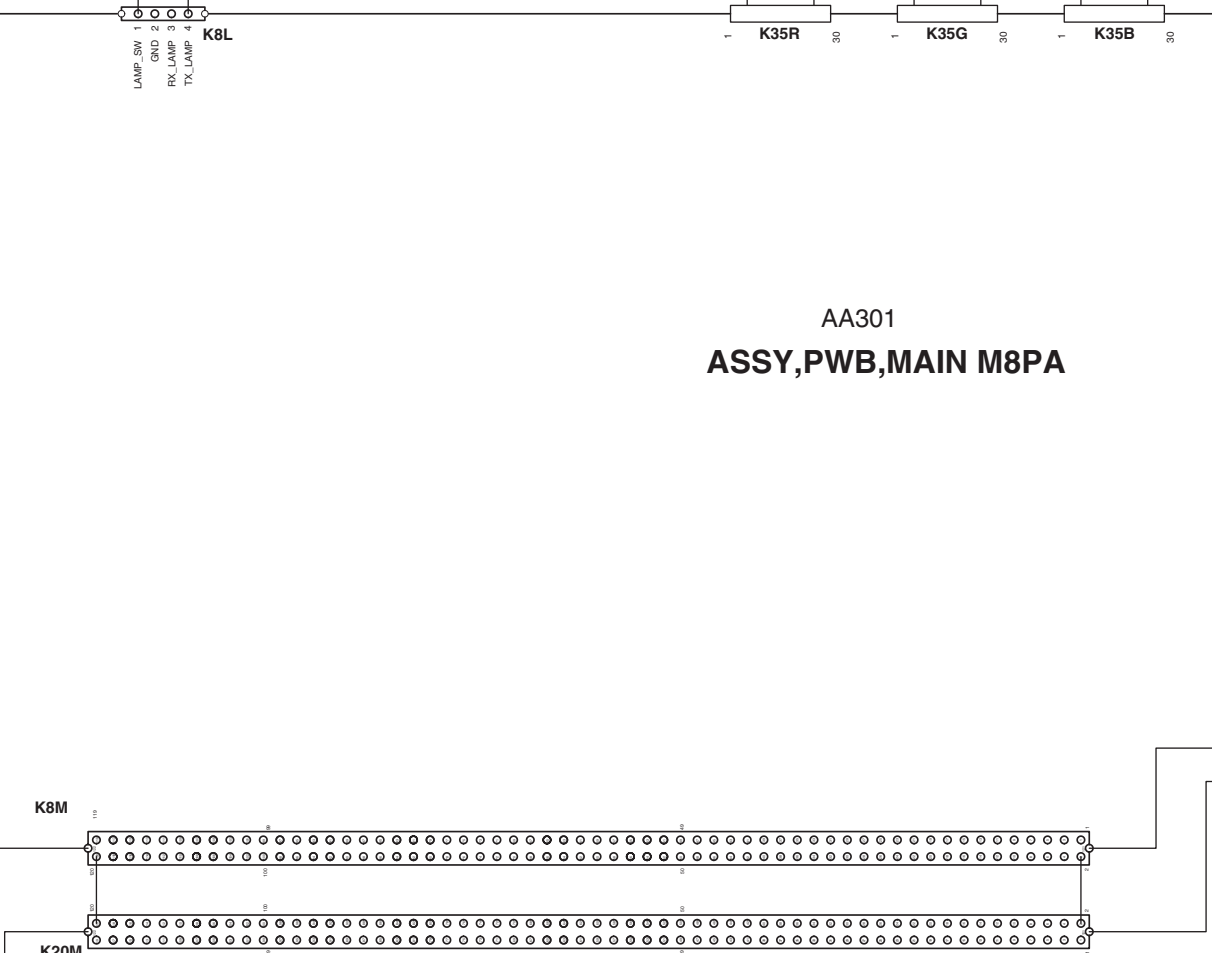
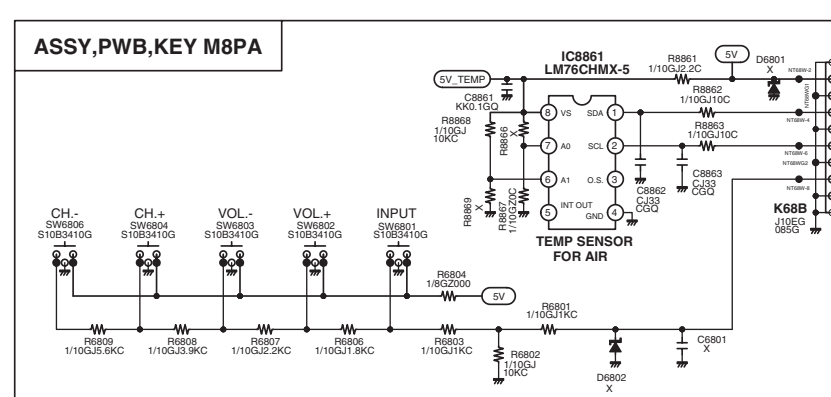
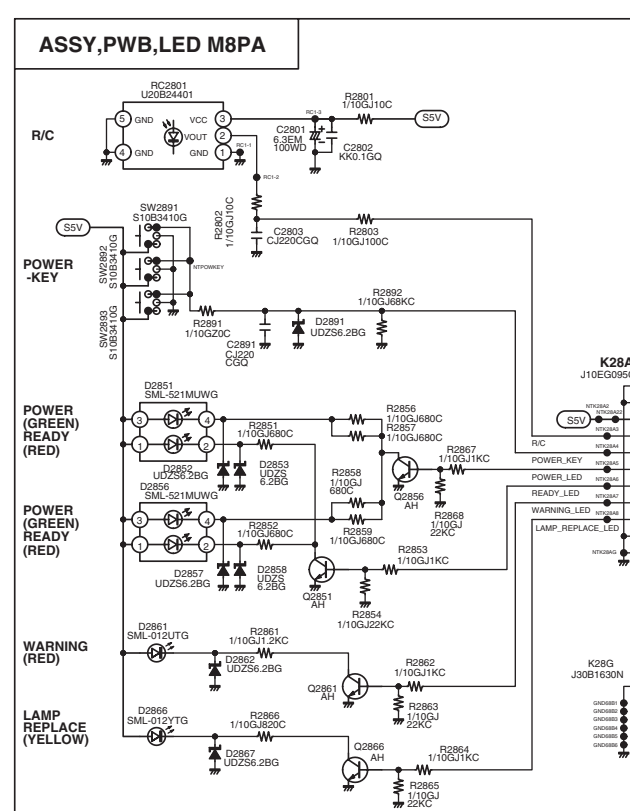
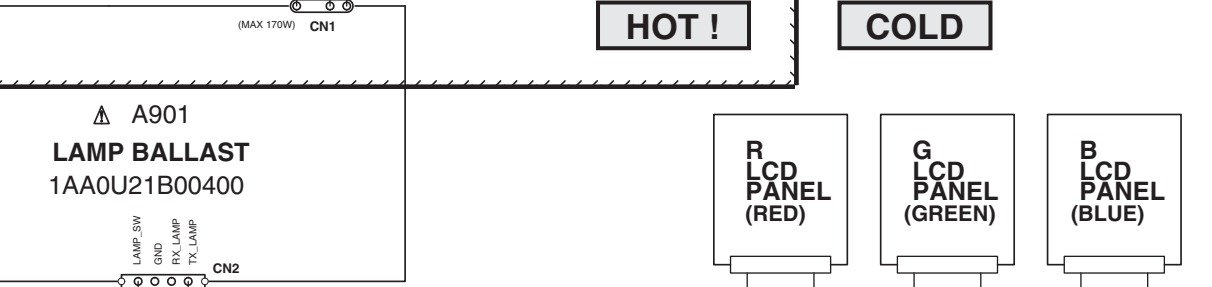


CAUTION

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



HOT! **COLD**



CAUTION

Components indicated by a mark △ in this schematic diagram have the special significance in the safety. It is therefore, particularly recommended that the replacement of those parts must be made by exactly the same parts. Must be used with a specified fuse. Unauthorized substitutions may result in fire or accident. 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 the 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 the voltages and waveform.

Schematic Diagrams Overview

VIDEO1
C-VIDEO_IN

VIDEO1
S-VIDEO_IN

VIDEO1
AUDIO_IN

VIDEO2
COMPONENT_IN

VIDEO2
AUDIO_IN

VIDEO3
COMPONENT_IN

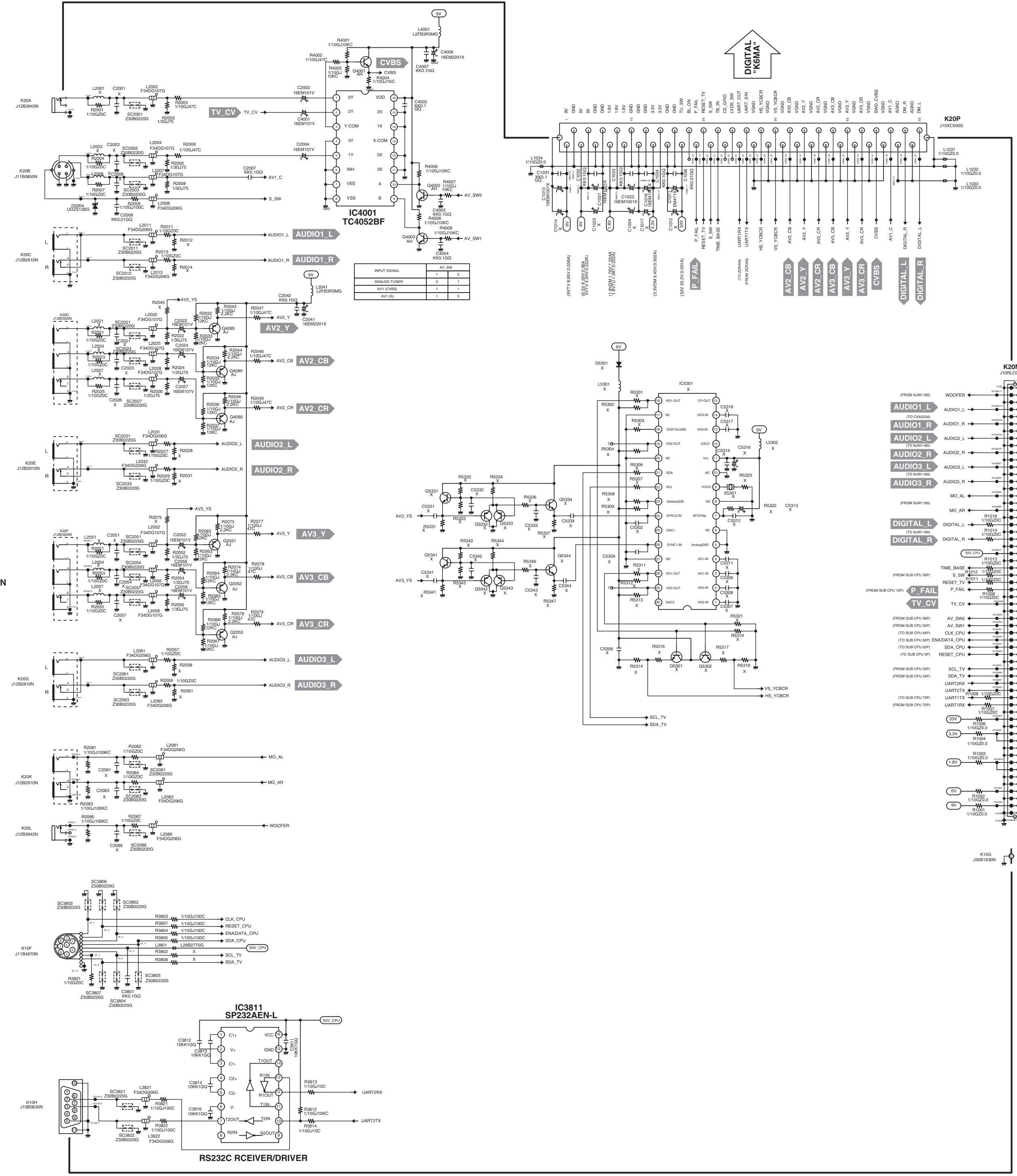
VIDEO3
AUDIO_IN

MONITOR-OUT
AUDIO

MONITOR-OUT
WOOFER

SERVICE PORT
RS-232C

SERVICE PORT
RS-232C

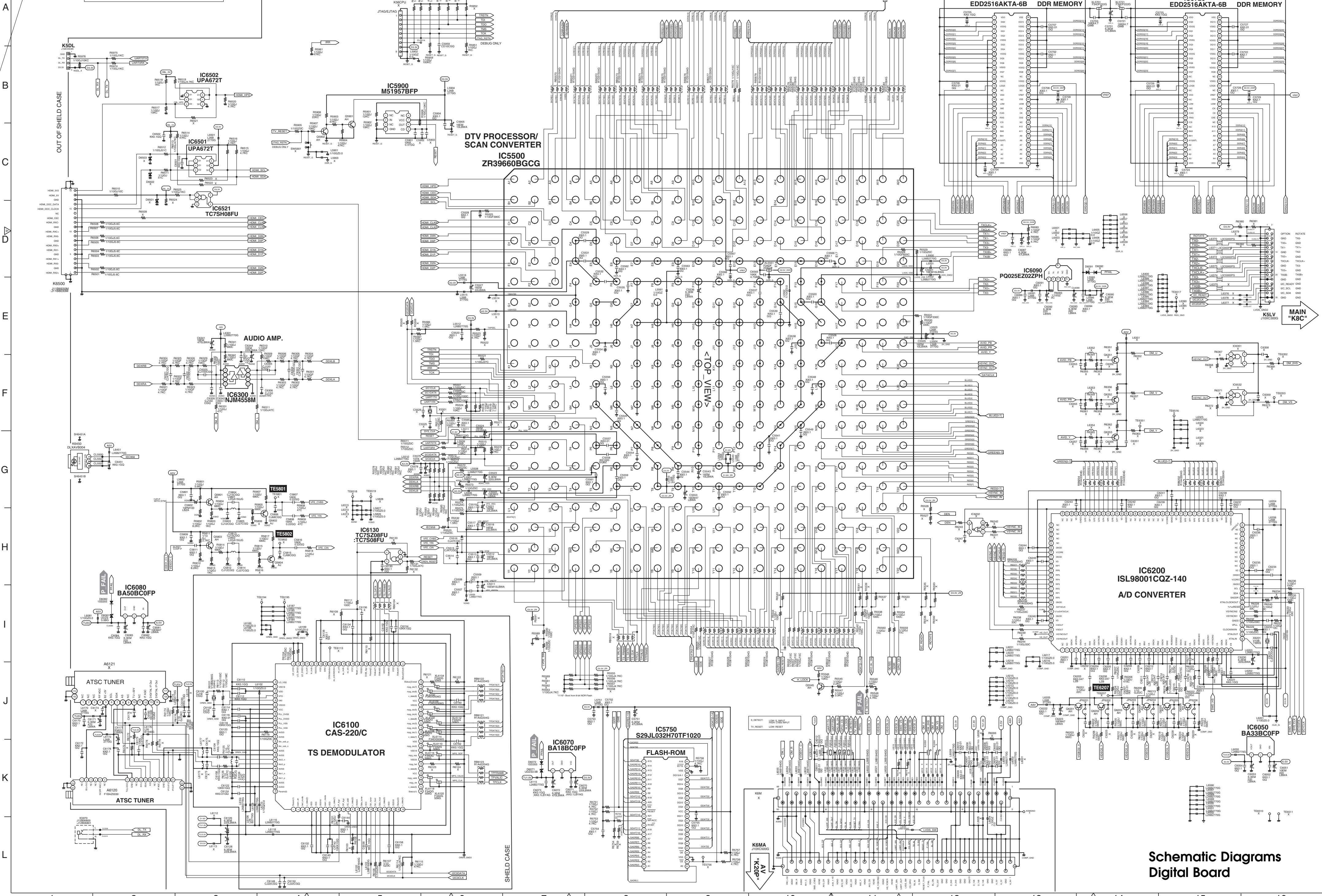


DIGITAL
"K8M"

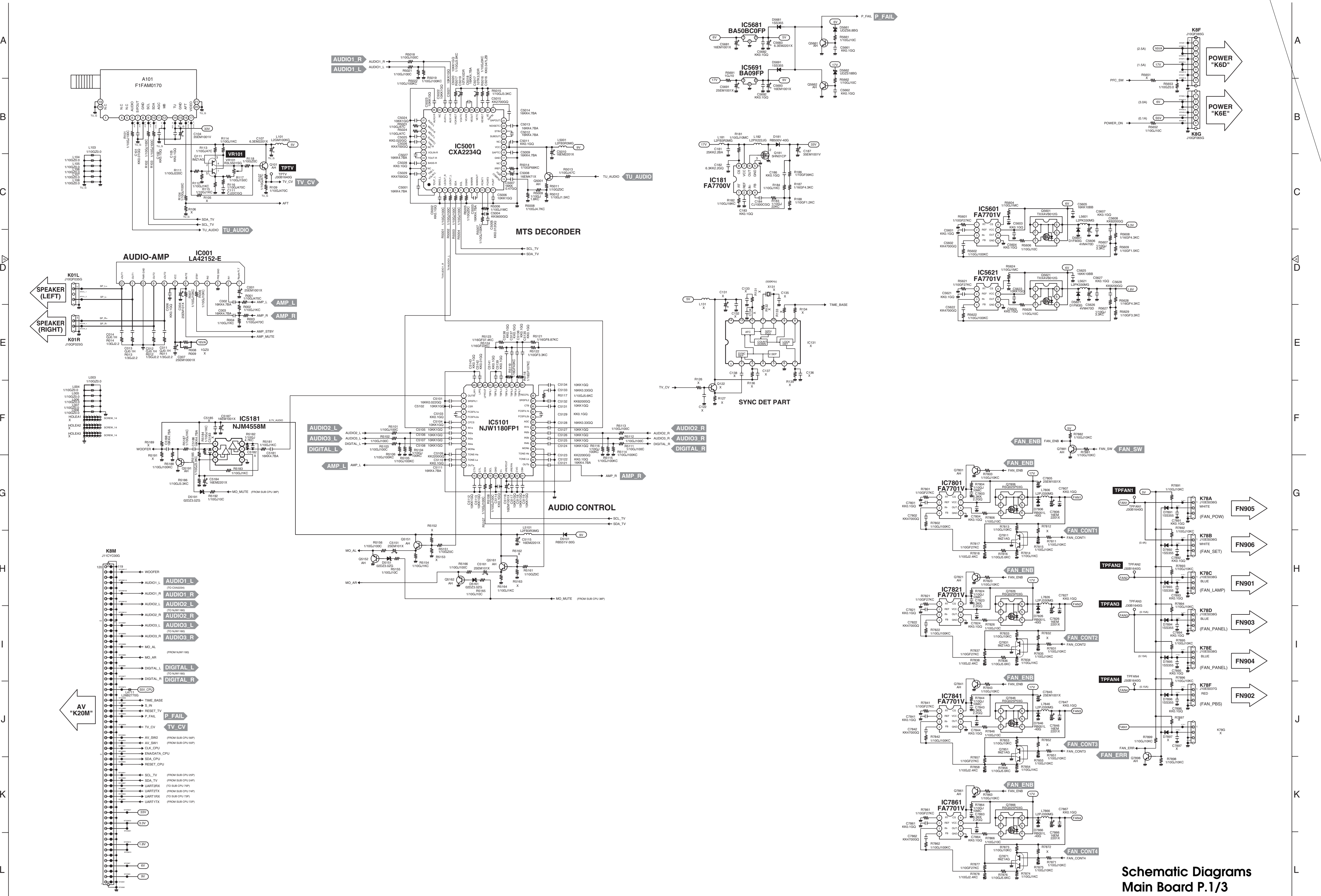
MAIN
"K8M"

Schematic Diagrams
AV Rear Board

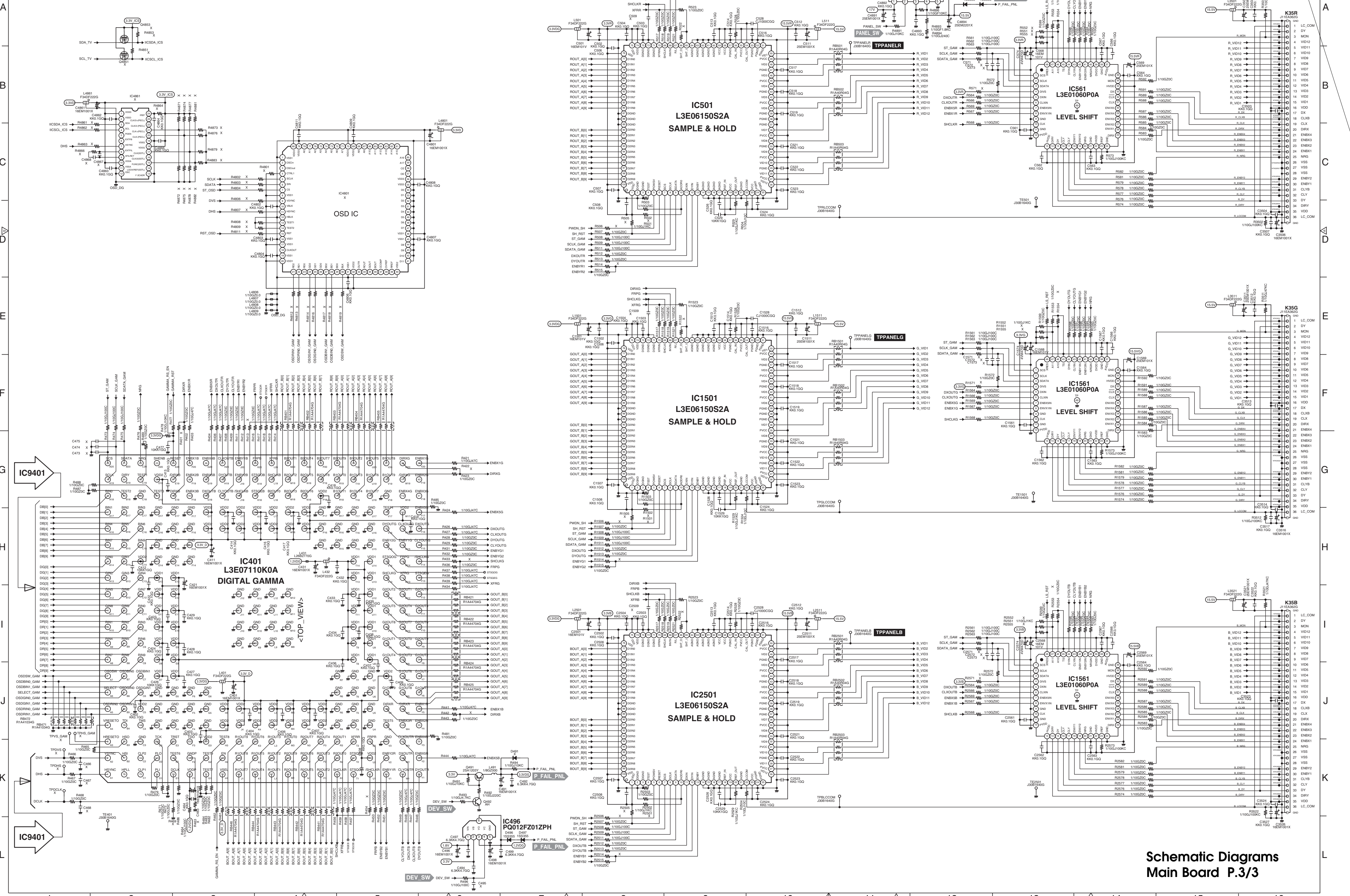
ASSY,PWB,DIGITAL M8PA



Schematic Diagrams Digital Board



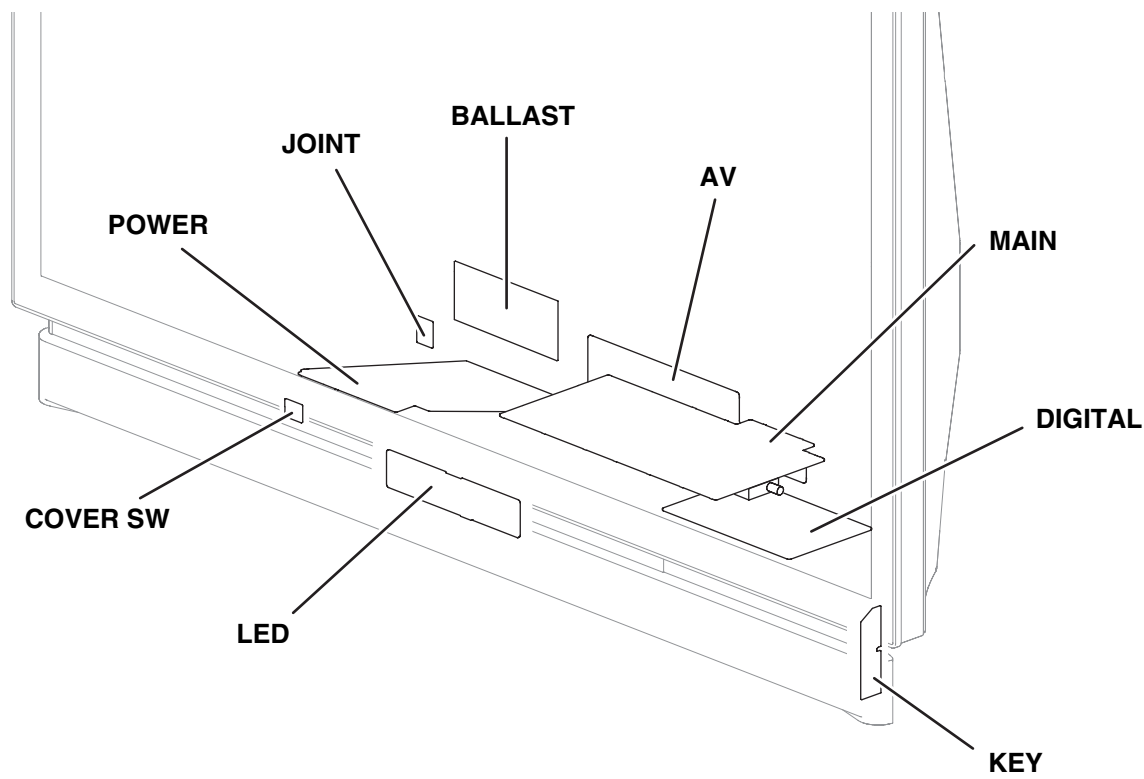
Schematic Diagrams
Main Board P.1/3



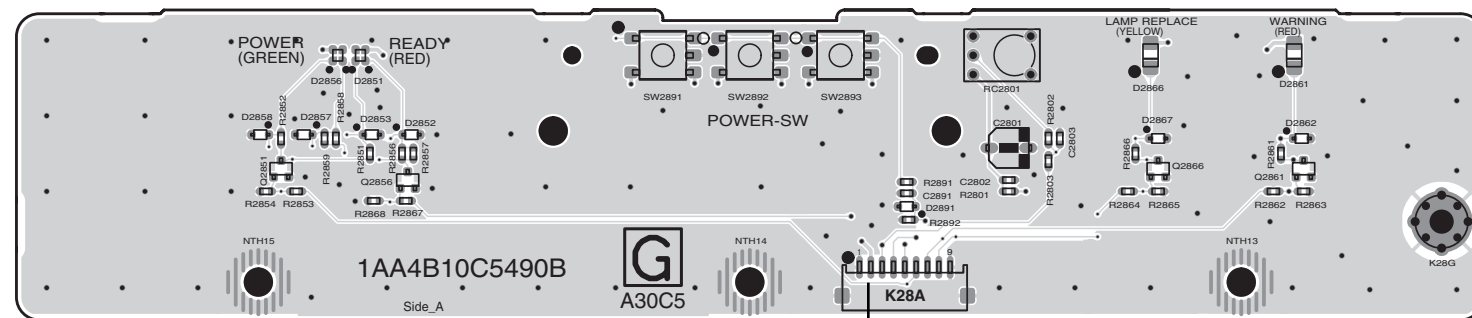
Schematic Diagrams
Main Board P.3/3

Printed Wiring Board Diagrams

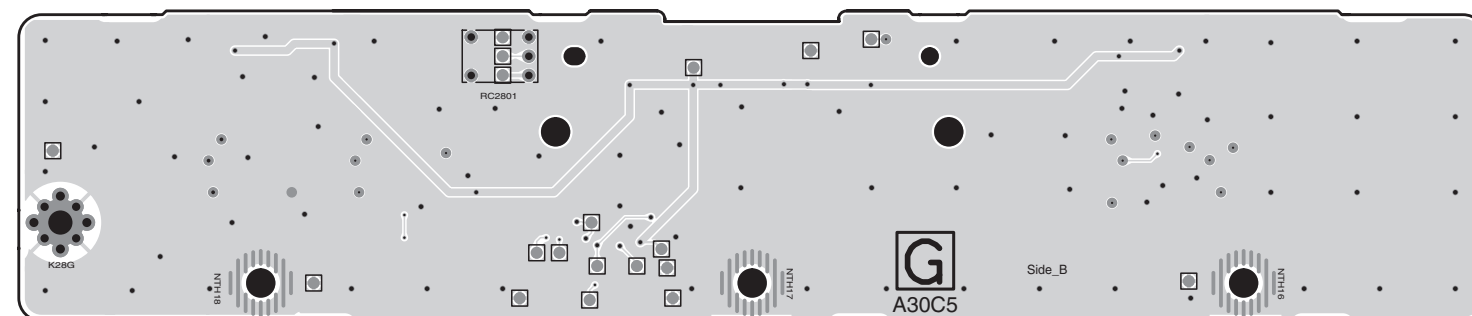
PWB ASSEMBLIES LOCATION



LED (SIDE:A)



LED (SIDE:B)

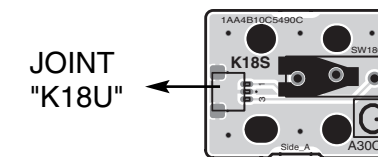


CAUTION

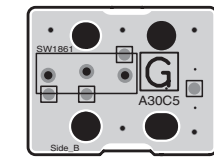
This projector is isolated from AC line by using the internal converter transformer. Please pay attention to the following notes in servicing

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.

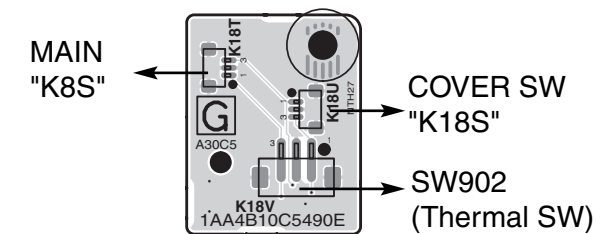
COVER SW (SIDE:A)



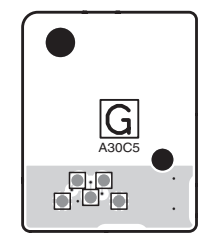
COVER SW (SIDE:B)



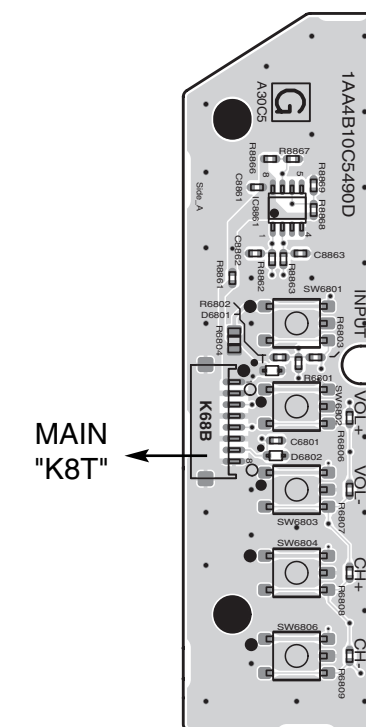
JOINT (SIDE:A)



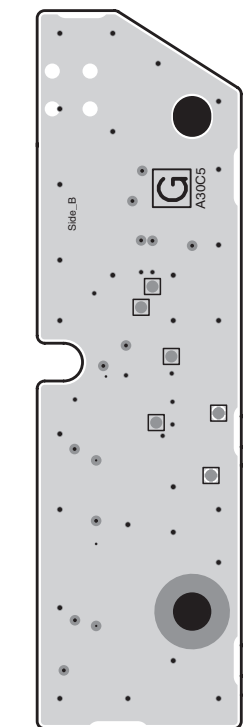
JOINT (SIDE:B)



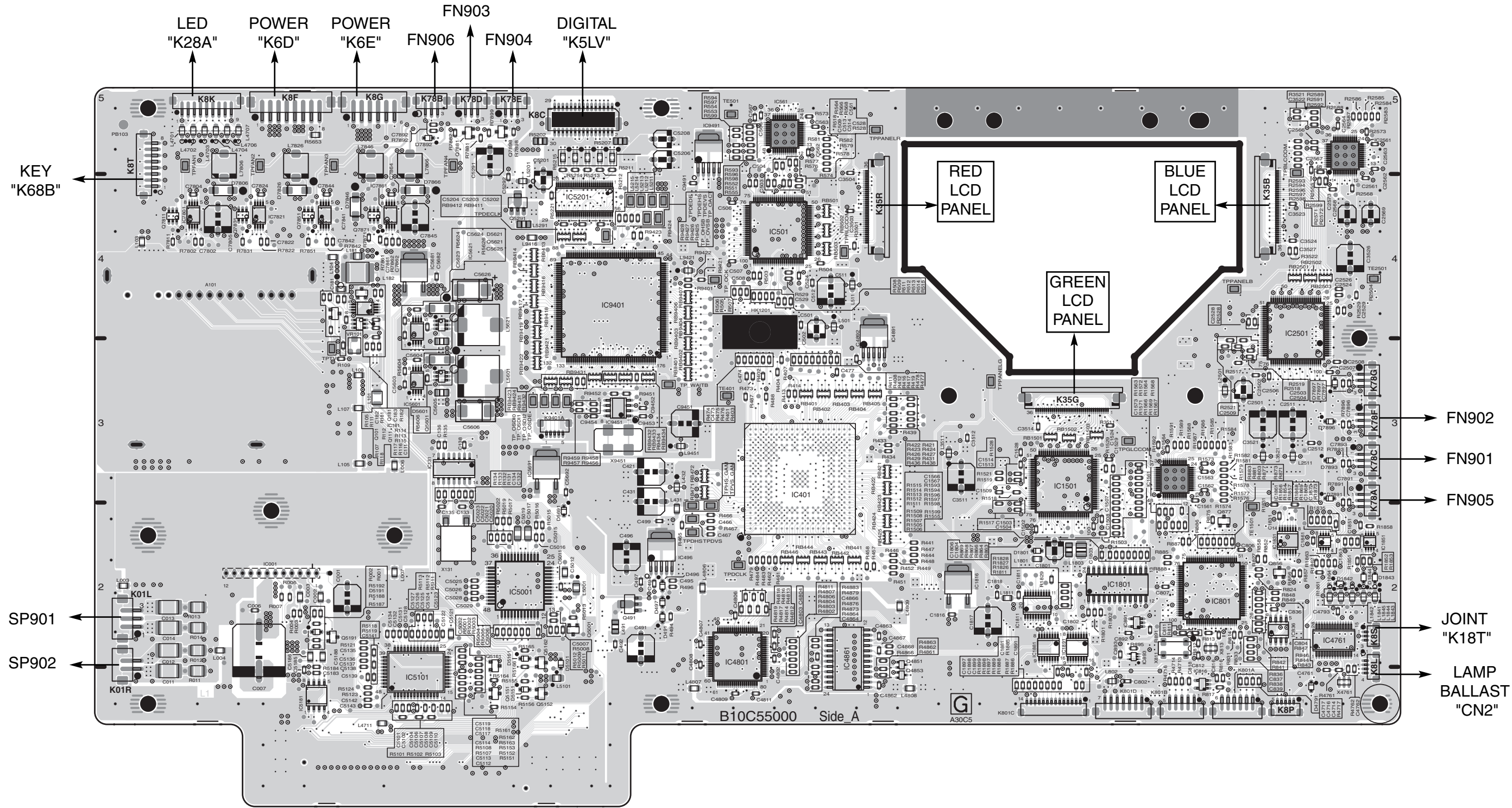
KEY (SIDE:A)



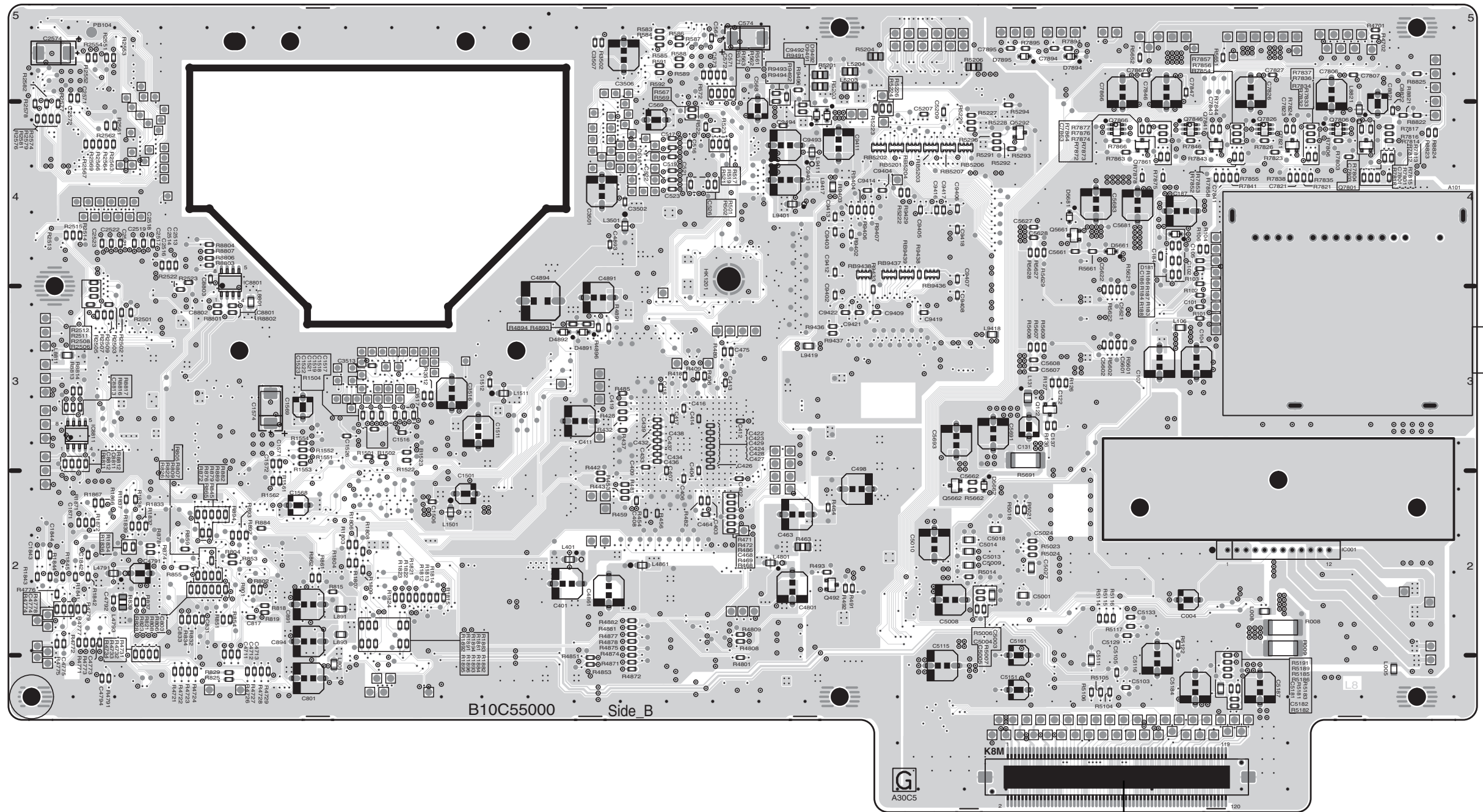
KEY (SIDE:B)



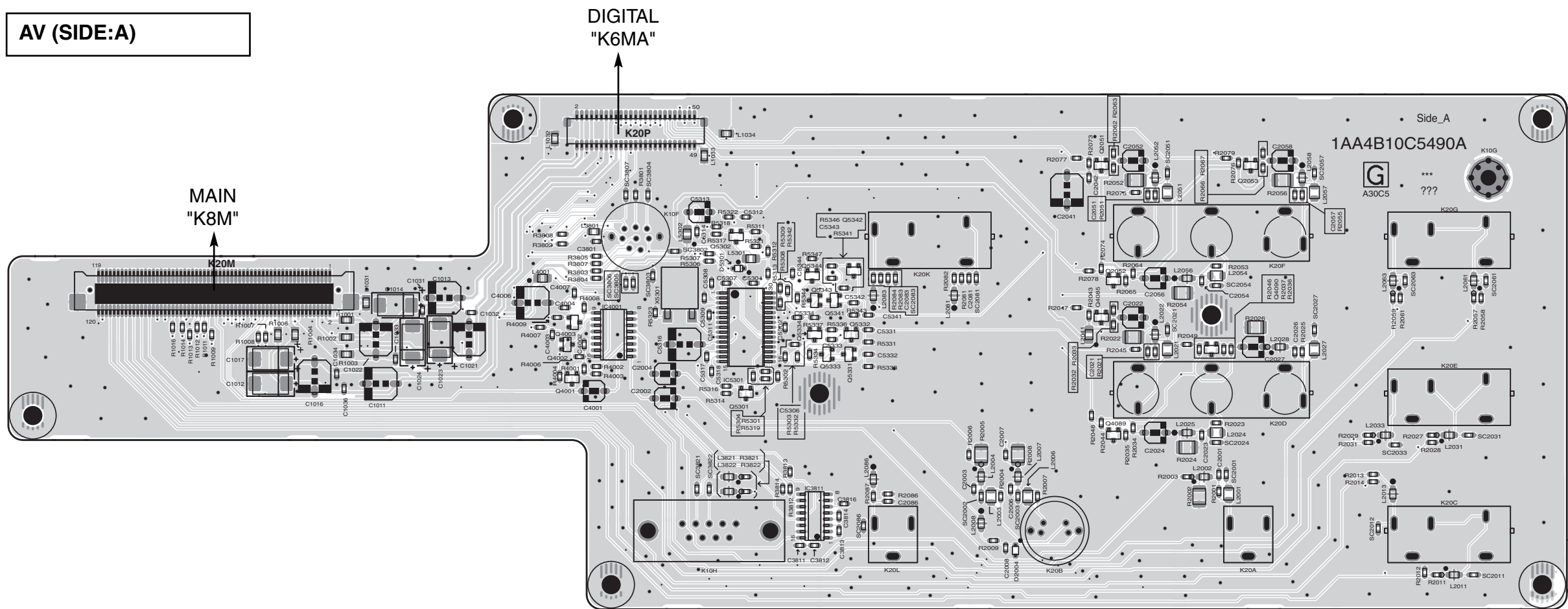
MAIN (SIDE:A)



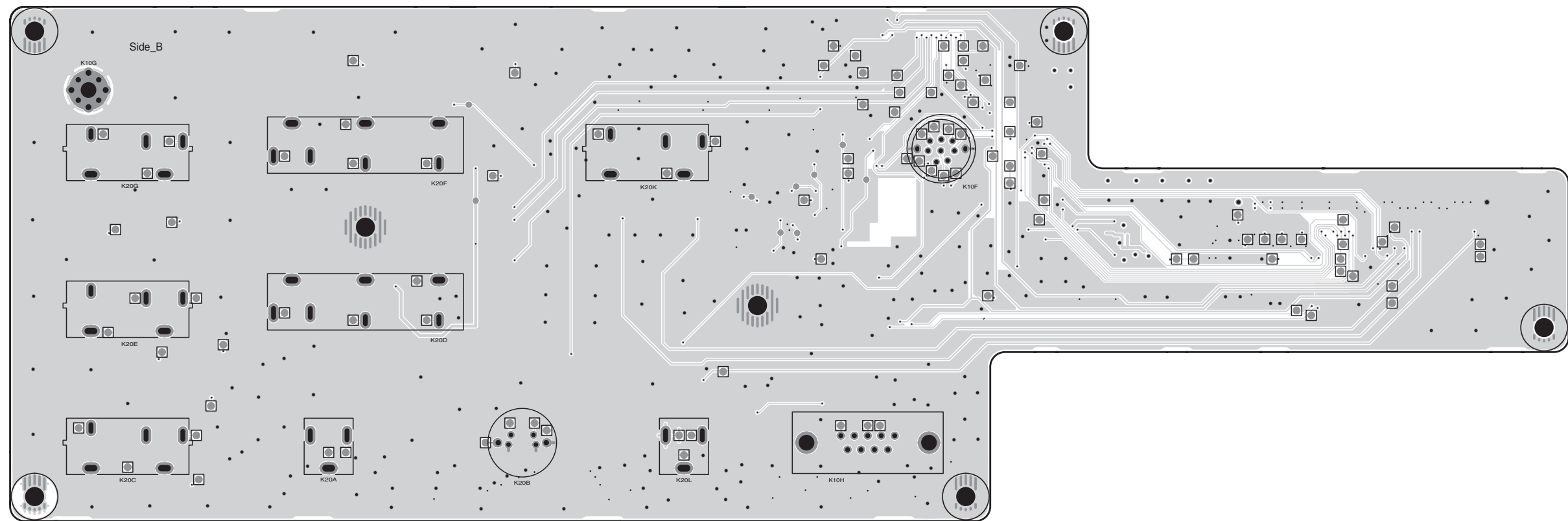
MAIN (SIDE:B)



AV (SIDE:A)



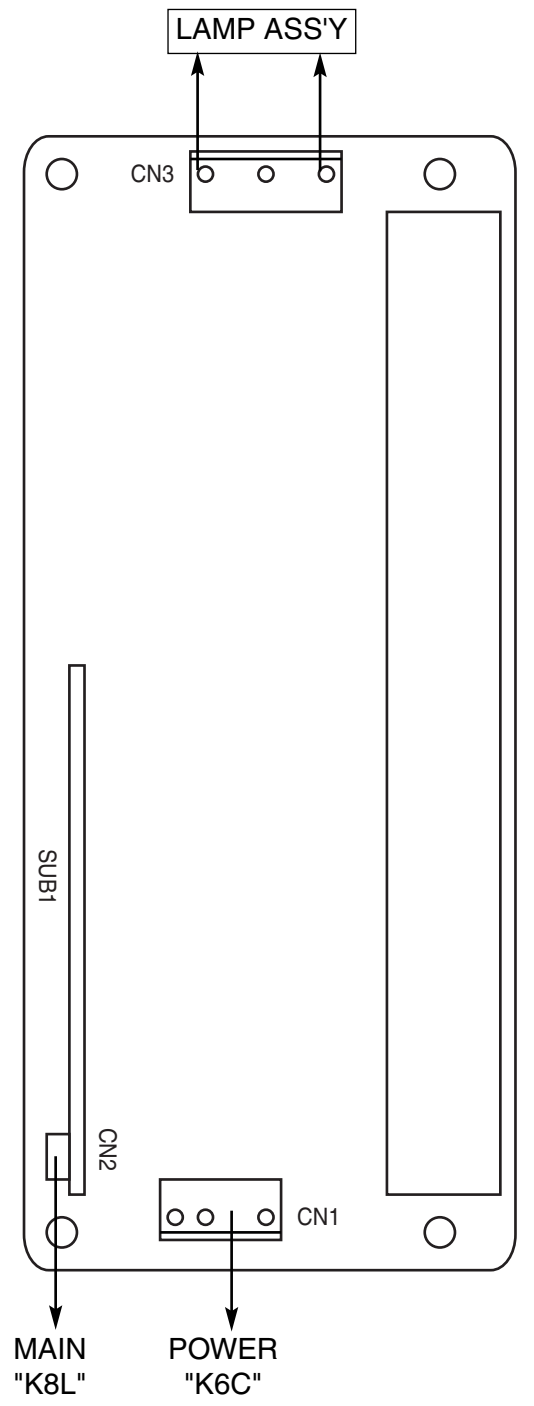
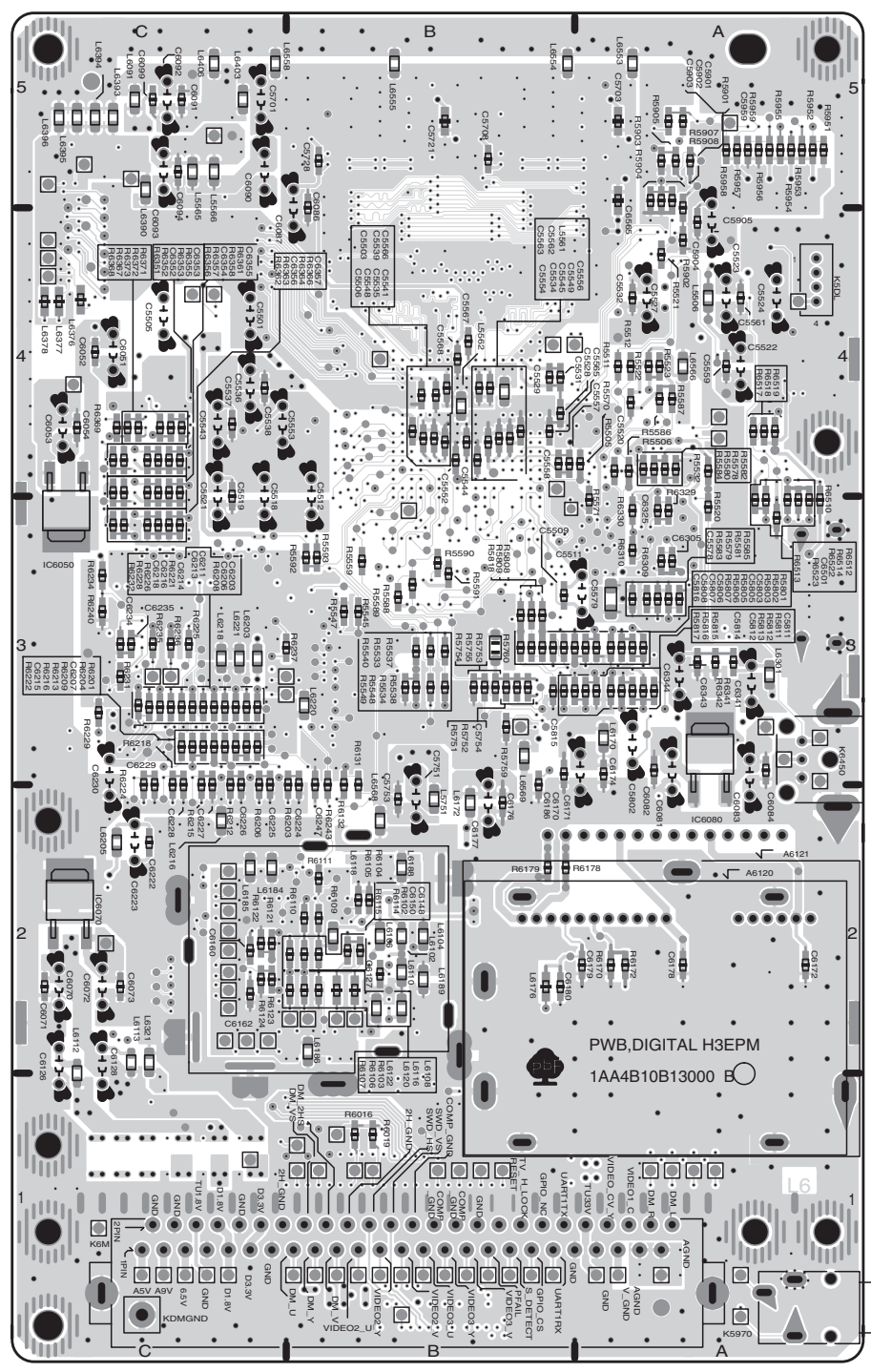
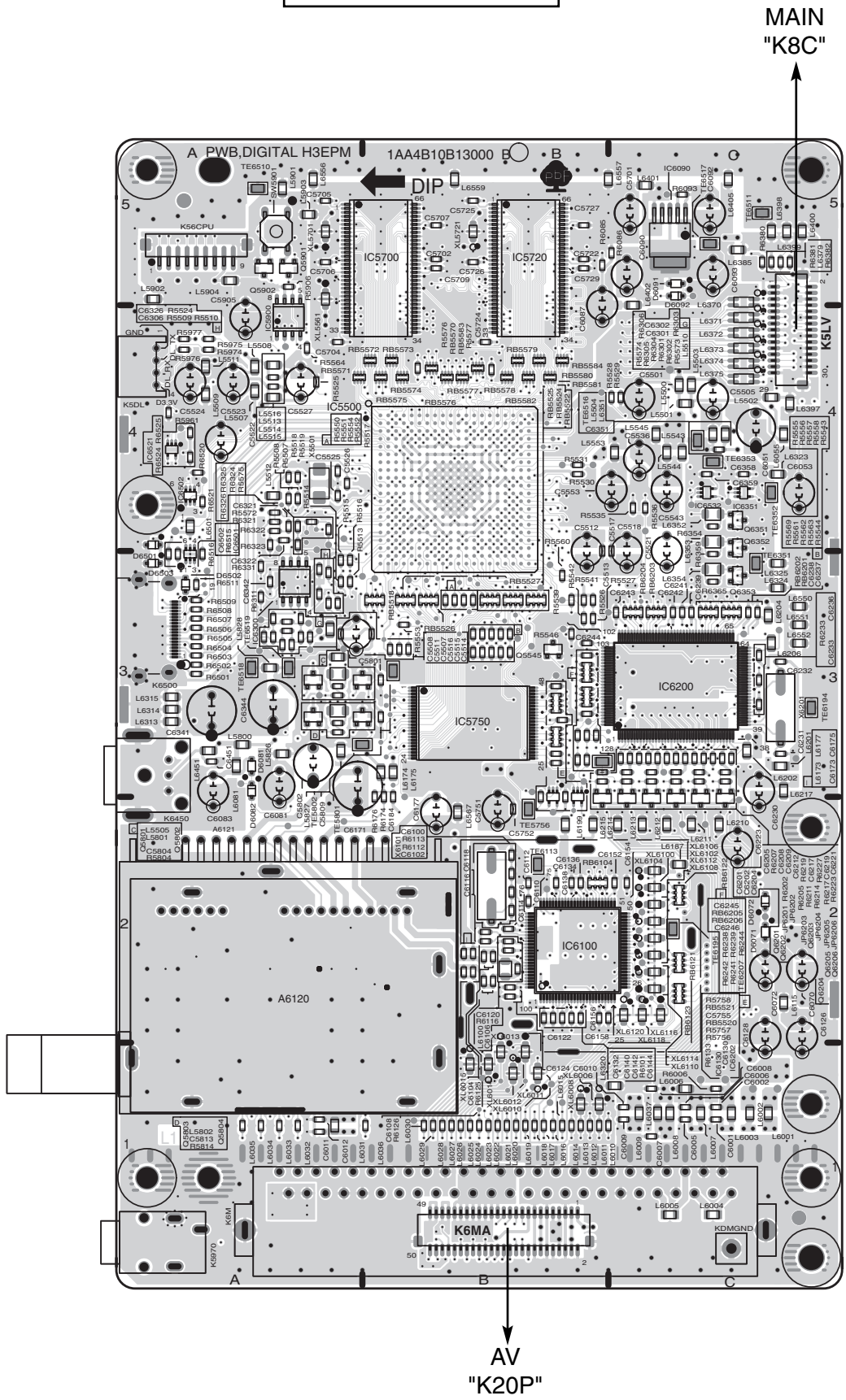
AV (SIDE:B)



DIGITAL (SIDE:A)

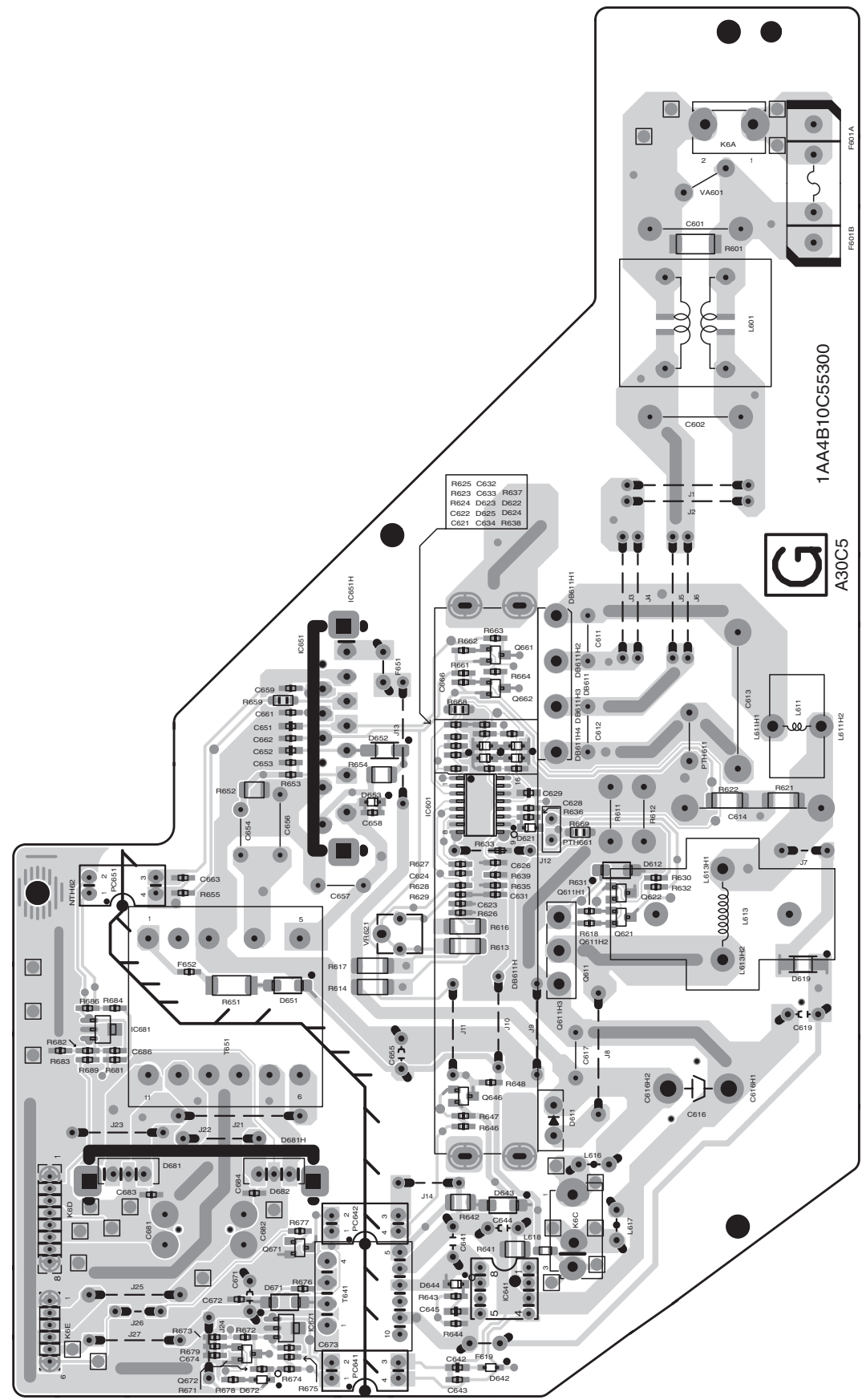
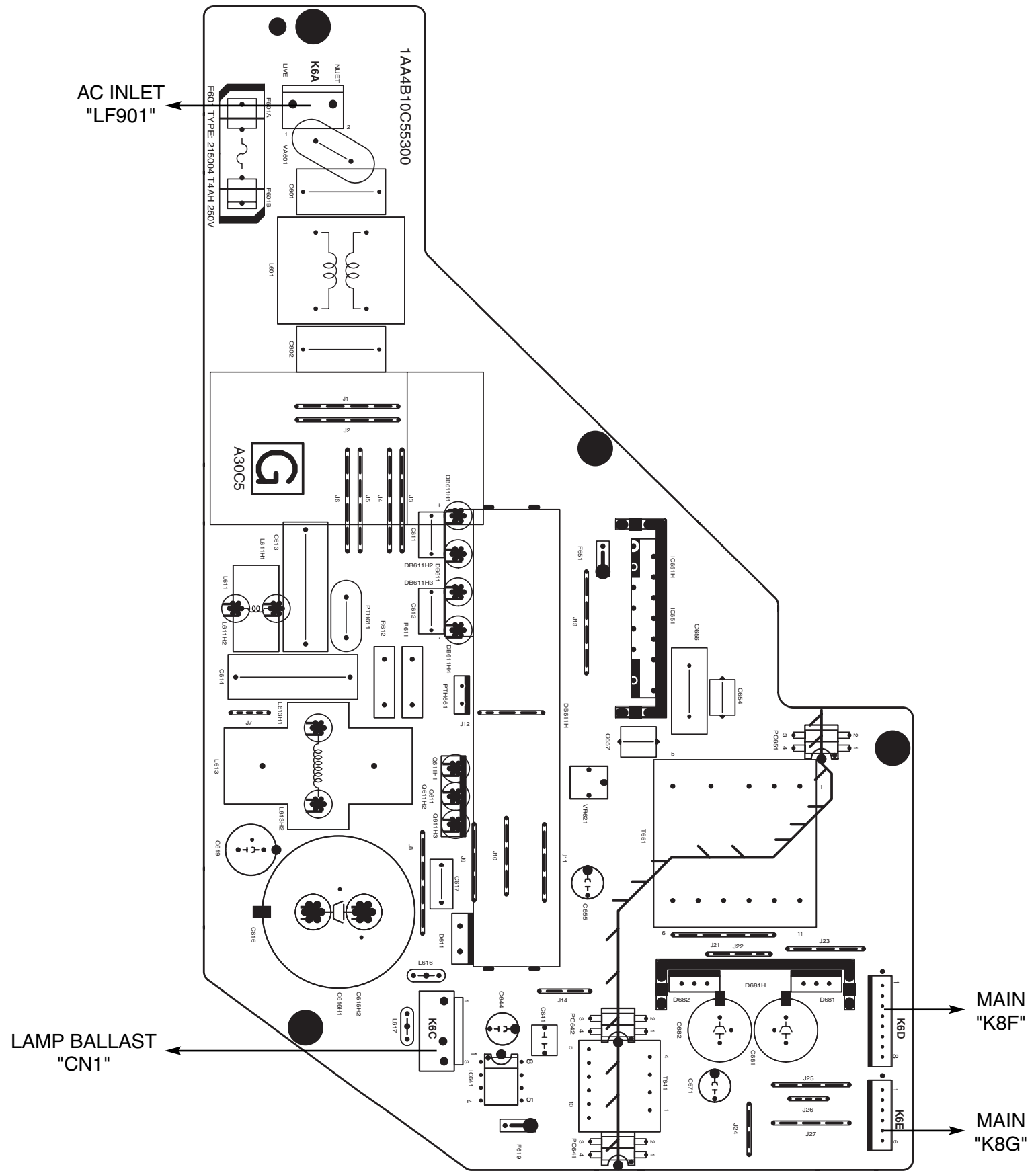
DIGITAL (SIDE:B)

LAMP BALLAST (SIDE:A)



POWER (SIDE:A)

POWER (SIDE:B)



WARNING

Do not use solder containing lead.

This product has been manufactured using lead-free solder in order to help preserve the environment.

Because of this, be sure to use lead-free solder when carrying out repair work, and never use solder containing lead.

Lead-free solder has a melting point that is 30–40 °C (86–104 °F) higher than solder containing lead, and moreover it does not contain lead which attaches easily to other metals. As a result, it does not melt as easily as solder containing lead, and soldering will be more difficult even if the temperature of the soldering iron is increased.

The extra difficulty in soldering means that soldering time will increase and damage to the components or the circuit board may easily occur.

Because of this, you should use a soldering iron and solder that satisfy the following conditions when carrying out repair work. Also, soldering work must be done in a short time.

Soldering iron

Use a soldering iron which is 70 W or equivalent, and which lets you adjust the tip temperature up to 450 °C (842 °F) It should also have as good temperature recovery characteristics as possible.

Solder

Use solder with the metal content and composition ratio by weight given in the table below. Do not use solders which do not meet these conditions.

Metal content	Tin (Sn)	Silver (Ag)	Copper (Cu)
Composition ratio by weight	96.5 %	3.0 %	0.5 %

Note:

If replacing existing solder containing lead with lead-free solder in the soldered parts of products that have been manufactured up until now, remove all of the existing solder at those parts before applying the lead-free solder.