

Service Manual



Colour LCD Television

TX-37LZ8F
TX-37LZ8P

GLP23F Chassis

Specifications

Power Source:	220-240V AC, 50Hz	
Power Consumption	162W	
Stand-by Power Consumption:	0.8W	
Aerial Impedance:	75Ω unbalanced, Coaxial Type	
Receiving System:	PAL-I/H, B/G, D/K, SECAM B/G, D/K, L/L' PAL-525/60 (AV only) M.NTSC (AV only) NTSC (AV input only)	
Receiving Channels:	VHF E2-E12 VHF A-H (ITALY) VHF R3-R5 UHF E21-E69 CATV S1-S10 (M1-M10) CATV S21-S41 (Hyperband)	VHF H1-H2 (ITALY) VHF R1-R2 VHF R6-R12 CATV (S01-S05) CATV S11-S20 (U1-U10)
Operating Conditions:	Temperature: 0°C ÷ 35°C Humidity: 20% – 80% RH (non condensing)	
Scanning format:	480i(60Hz), 480p(60Hz), 576i(50Hz), 576p(50Hz), 720p(60Hz), 720p(50Hz), 1.080i(60Hz), 1.080i(50Hz), 1.080p(60Hz), 1.080p(50Hz), 1.080p(24Hz)	
PC signals:	VGA, WVGA, SVGA, XGA, WXGA (compressed) Horizontal scanning frequency 31 – 69 kHz Vertical scanning frequency 59 – 86 Hz	

Intermediate Frequency:**Video/Audio**

Video	38,9MHz, 33,9MHz
Audio	33,4MHz (B/G), 33,16MHz (A2) 33,05MHz (NICAM B/G, D/K, L) 32,4MHz (D/K), 32,66MHz (CZ STEREO) 40,4MHz (L'), 39,75MHz (L'NICAM)
Colour	34,47MHz (PAL) 34,5MHz, 34,65MHz (SECAM) 38,3MHz, 38,15MHz (SECAM L')

Terminals:

AV1 IN	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 10kΩ RGB (21 pin) 0,7V p-p 75Ω
AV1 OUT	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 1kΩ
AV2 IN	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 10kΩ RGB (21 pin) 0,7V p-p 75Ω S-video IN (21-pin)Y: 1V p-p 75Ω C:0,3V p-p 75Ω
AV2 OUT	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 1kΩ
AV3 IN	S-Video IN (4-pin)Y: 1V p-p 75Ω C:0,286V p-p 75Ω Audio (RCAx2) 500mV rms 10kΩ Video (RCAx1) 1V p-p 75Ω
HDMI1, HDMI2	Type A Connector
COMPONENT	Video (RCAx3) Y:1V p-p 75Ω (including synchronization) Pb, Pr: ±0,35V p-p 75Ω
AUDIO IN	Audio (RCAx2) 500mV rms 10kΩ (for HDMI1, COMPONENT-AUDIO)
AUDIO OUT	Audio (RCAx2) 500mV rms 1kΩ (high impedance)
PC	HIGH-DENSITY D_SUB 15PIN R,G,B: 700mV p-p 75Ω HD,VD/TTL Level 2-5V p-p (high impedance)
LCD screen:	L5EDD9T00008 1920 x 1080 XGA, 16:9 Visible Diagonal 940mm
Audio Output:	20W (2x10W)
Headphones:	3,5mm, 8Ω Impedance
Accessories supplied :	Remote Control 2 x R6 (UM3) Batteries
Dimensions:	
Including TV stand	Height: 645mm Width: 940mm Depth: 290mm
TV set only	605mm 940mm 110mm
Mass:	
Including TV stand	21.0kg
TV set only	17.5kg

Specifications are subject to change without notice.
Mass and dimensions shown are approximate.

Warning

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products deal within this service information by anyone else could result in serious injury or death.

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Safety Precautions

General Guide Lines

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following touch current checks to prevent the customer from being exposed to shock hazards.
4. Always ensure panel TKP0E16001 is correctly replaced before returning to customer (see Fig.1).

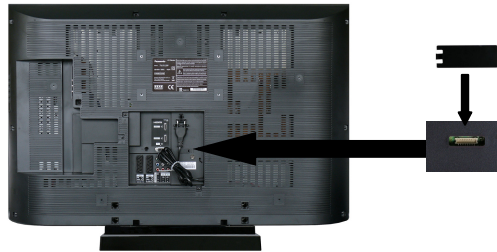


Fig. 1

Touch-Current Check

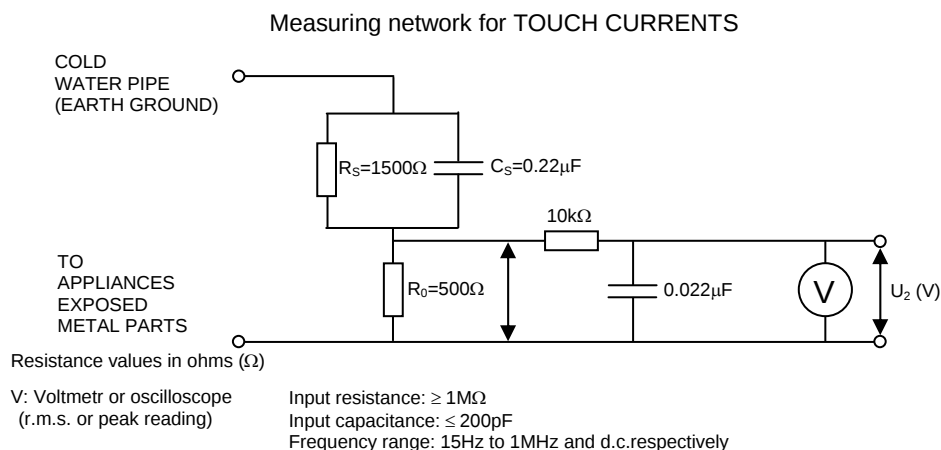
1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a measuring network for touch currents between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Fig. 2.
3. Use Leakage Current Tester (Simpson 228 or equivalent) to measure the potential across the measuring network.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reserve the AC plug in the AC outlet and repeat each of the above measure.
6. The potential at any point (TOUCH CURRENT) expressed as voltage U_1 and U_2 , does not exceed the following values:
For a. c.: $U_1 = 35 \text{ V}$ (peak) and $U_2 = 0.35 \text{ V}$ (peak);
For d. c.: $U_1 = 1.0 \text{ V}$,

Note:

The limit value of $U_2 = 0.35 \text{ V}$ (peak) for a. c. and $U_1 = 1.0 \text{ V}$ for d. c. correspond to the values 0.7 mA (peak) a. c. and 2.0 mA d. c.

The limit value $U_1 = 35 \text{ V}$ (peak) for a. c. correspond to the value 70 mA (peak) a. c. for frequencies greater than 100 kHz .

7. In case a measurement is out of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.



NOTE – Appropriate measures should be taken to obtain the correct value in case of non-sinusoidal waveforms

Fig. 2

Prevention of Electrostatic Discharge (ESD) to 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 electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, 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 build up 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 as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges 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. (Otherwise 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 (ESD) sufficient to damage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by  in schematic diagrams, exploded views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

About lead free solder (PbF)

Note: Lead is listed as (Pb) in the periodic table of elements.

In the information below, Pb will refer to Lead solder, and PbF will refer to Lead Free Solder.

The Lead Free Solder used in our manufacturing process and discussed below is (Sn+Ag+Cu).

That is Tin (Sn), Silver (Ag) and Copper (Cu) although other types are available.

This model uses Pb Free solder in it's manufacture due to environmental conservation issues. For service and repair work, we'd suggest the use of Pb free solder as well, although Pb solder may be used.

PCBs manufactured using lead free solder will have the PbF within a leaf Symbol

 stamped on the back of PCB.

Caution

- Pb free solder has a higher melting point than standard solder. Typically the melting point is 50 ~ 70 °F (30~40°C) higher. Please use a high temperature soldering iron and set it to 700 ± 20 °F (370 ± 10 °C).
- Pb free solder will tend to splash when heated too high (about 1100 °F or 600 °C).
If you must use Pb solder, please completely remove all of the Pb free solder on the pins or solder area before applying Pb solder. If this is not practical, be sure to heat the Pb free solder until it melts, before applying Pb solder.
- After applying PbF solder to double layered boards, please check the component side for excess solder which may flow onto the opposite side. (see Fig.3)

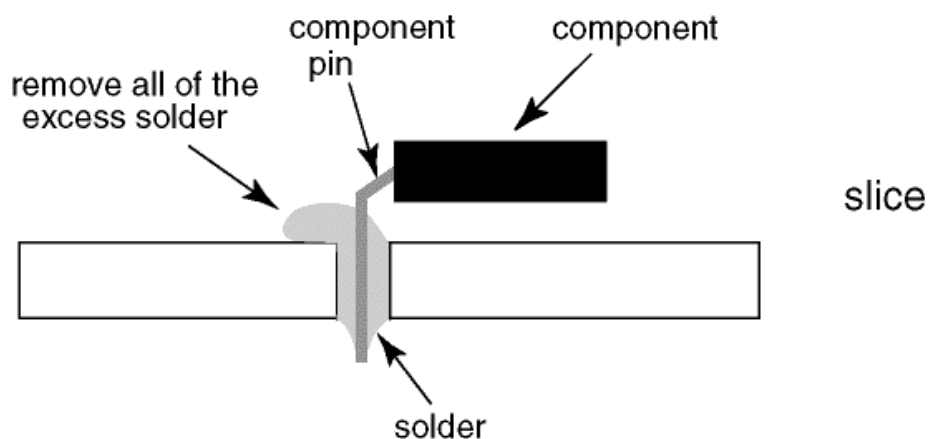


Fig.3

Suggested Pb free solder

There are several kinds of Pb free solder available for purchase. This product uses Sn+Ag+Cu (tin, silver, copper) solder. However, Sn+Cu (tin, copper), Sn+Zn+Bi (tin, zinc, bismuth) solder can also be used. (see Fig.4)

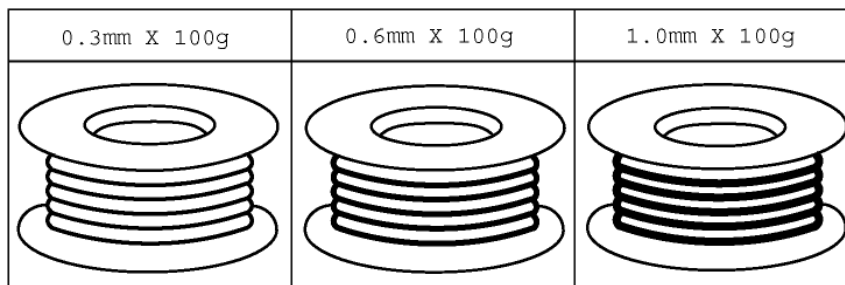


Fig.4

Applicable signals

Component (Y, Pb, Pr), HDMI

Signal name	COMPONENT	HDMI
525 (480) / 60i	*	*
525 (480) / 60p	*	*
625 (576) / 50i	*	*
625 (576) / 50p	*	*
750 (720) / 60p	*	*
750 (720) / 50p	*	*
1,125 (1,080) / 60i	*	*
1,125 (1,080) / 50i	*	*
1,125 (1,080) / 60p	*	*
1,125 (1,080) / 50p	*	*
1,125 (1,080) / 24p	*	*

PC (D-sub 15P)

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
640 × 480 @70 Hz	31.47	70.07
640 × 480 @60 Hz	31.47	59.94
640 × 480 @75 Hz	37.50	75.00
800 × 600 @60 Hz	37.88	60.32
800 × 600 @75 Hz	46.88	75.00
800 × 600 @85 Hz	53.67	85.06
852 × 480 @60Hz	31.44	59.89
1,024 × 768 @60Hz	48.36	60.00
1,024 × 768 @70Hz	56.48	70.07
1,024 × 768 @75Hz	60.02	75.03
1,024 × 768 @85Hz	68.68	85.00
1,280 × 1024 @60Hz	63.98	60.02
1,366 × 768 @60Hz	48.39	60.04
Macintosh13" (640 × 480)	35.00	66.67
Macintosh16" (832 × 624)	49.73	74.55
Macintosh21" (1,152 × 870)	68.68	75.06

Note:

- Signals other than above may not be displayed properly.
- The above signals are reformatted for optimal viewing on your display.
- Applicable input signal for PC is basically compatible to VESA standard timing.
- PC signal is magnified or compressed for display, so that it may not be possible to show fine detail with sufficient clarity.

Service Hints

How to remove the backcover

Remove the 14 fixing screws. (see Fig.5)

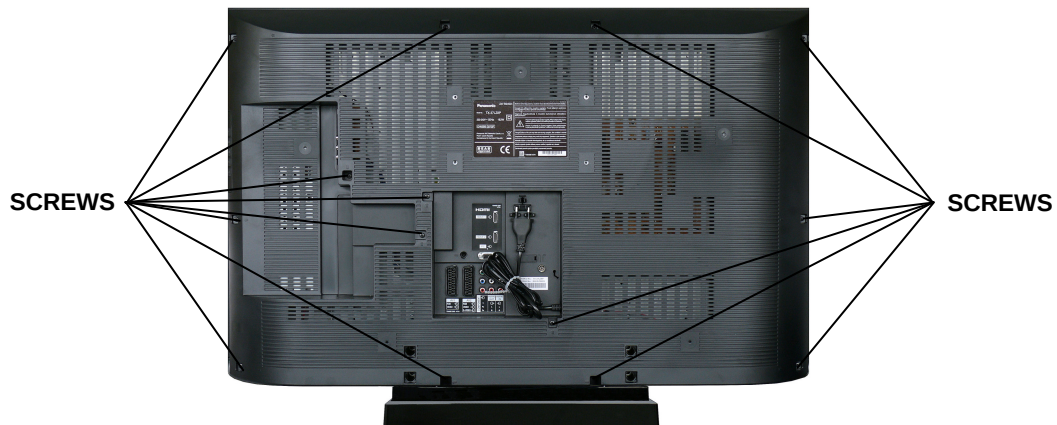


Fig.5

How to remove the Pedestal assembly

Lay the main unit face down. (see Fig.6)



Fig.6

Remove the 4 fixing screws and the pedestal assembly. (see Fig.7)

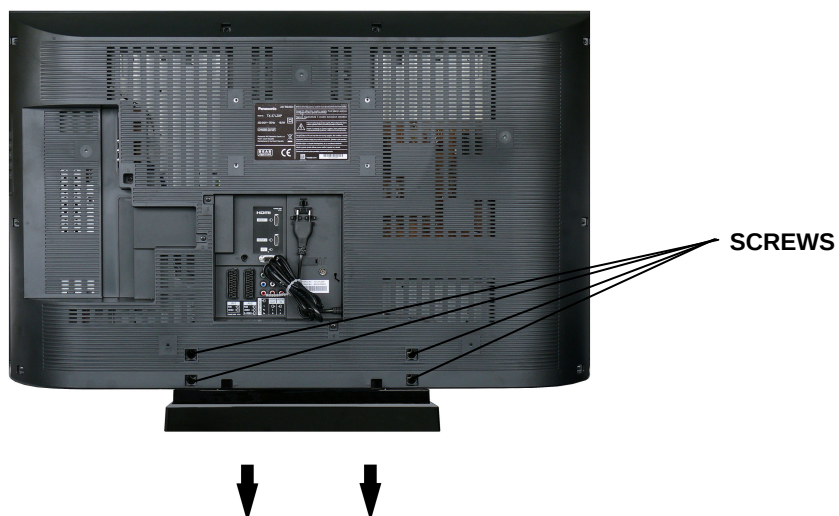
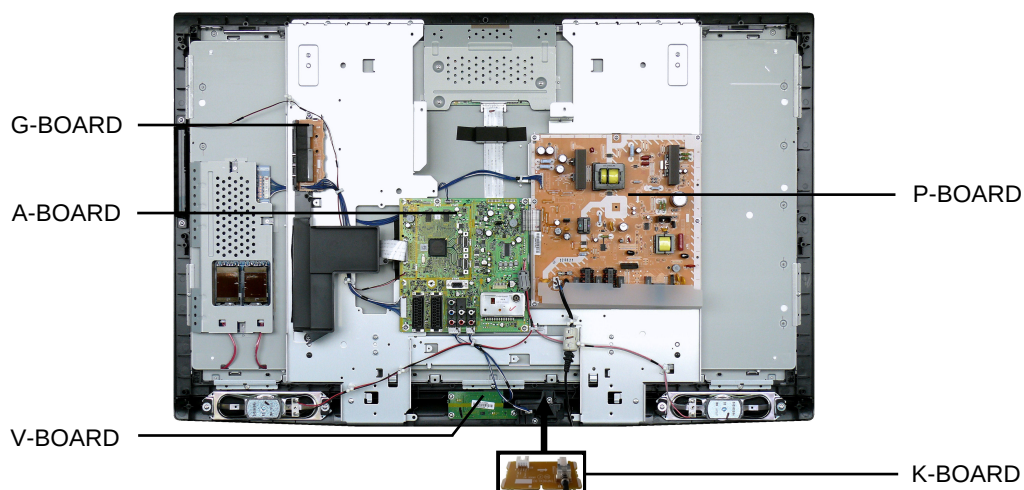


Fig.7

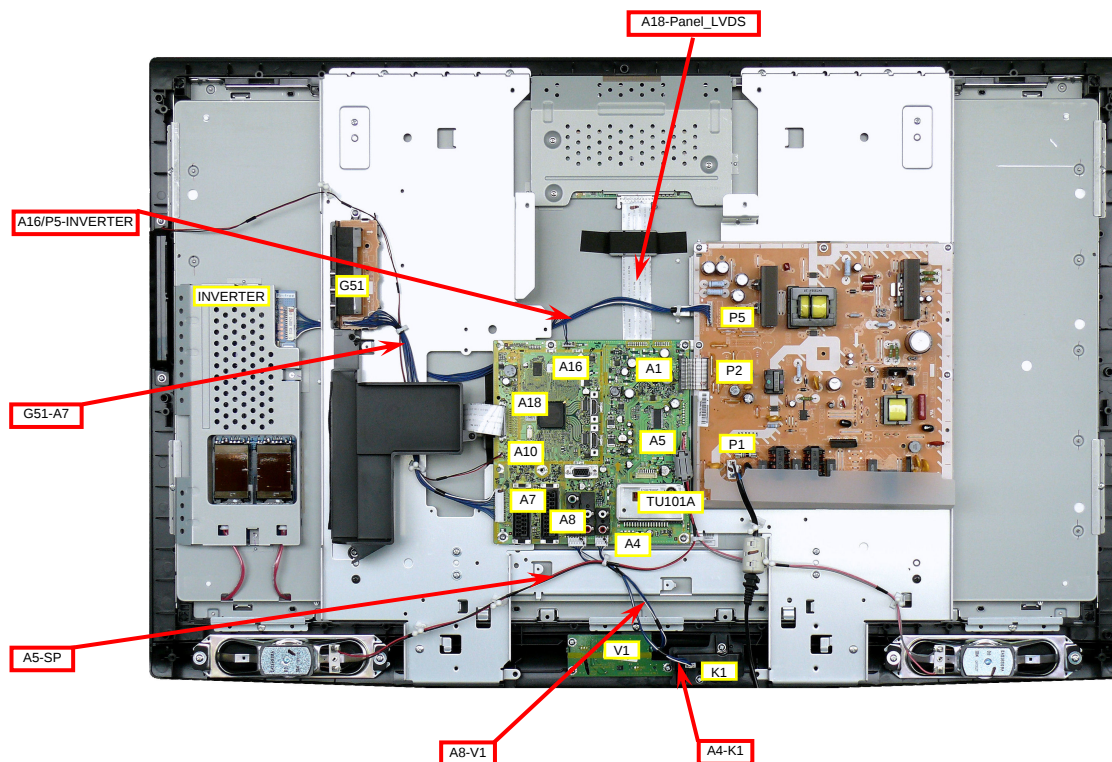
Chassis Board Layout



Board Name	Function
A-Board	AV Terminal, Audio Video Processor, Speaker out, TV tuner, HDMI, HDMI Receiver
G-Board	Side AV Terminal
V-Board	Remote Receiver, R&G LED, C.A.T.S.
K-Board	Main Switch
P-Board	Main Input, Power Supply, Power Supply Regulator

Location of Lead Wiring

To find the Part Number of required wire in Replacement Parts List click on the wire name in red box.



Setting Inspection

Voltage Confirmation

Confirm the following voltages:			
A board			
Description	Test point	Range	
STBY1V	TP1838	1,015-1,05V	
STBY3,3V	TP1840	3,14-3,47V	
MAIN1V	TP3832	1,0-1,05V	
MAIN3,3V	TP3833	3,13-3,47V	
CORE1V	TP1842	1,06-1,1V	
MAIN2,5V	TP1845	2,83-2,63V	
MAIN1,8V	TP1846	1,728-1,9V	
MAIN1,25V	TP1844	1,245-1,275V	
MAIN5V	TP3826	4,775-5,25V	
STBY5V	TP3813	4,9-5,4V	
MAIN8V	TP3823	7,6-8,4V	
PANEL12V	TP3824	11,97-12,81V	
CEC3,8V	TP3814	3,5-4,2V	
TUNER30V	TP3801	28-32V	
TERMINATION	TP3831	0,794-1,02	
P board			
Description	Test point	Normal condition	Stand By
AUDIO VCC	TP865	13,6V+/- 0,8V	0V
STB 5V6	TP853	5.65+/- 0,25V	5.65+/- 0,25V
24V IN	TP856	24V+/- 1.5V	0V

Self Check

Self-check is used to automatically check the bus lines and hexadecimal code of the TV set. To enter Self-Check mode, keep pressing the down **(-V)** button on the TV set and press the **STATUS**  button on the remote control. To exit Self Check, switch off the TV set at the power button.

TX-37LZ8F

Panasonic GLP23F	
SW V1.02	16/09/08

Self Check Complete			
EEPROM	O.K.	OP0	0F
TUNER	O.K.	OP1	00
HDMI1	O.K.	OP2	B9
HDMI2	O.K.	CRC8	92
MAU1	O.K.	CSum	D53C
MAU2	O.K.	Ver	06
FE1	O.K.	ChID	35
FE2	O.K.	Model	01
MSP	O.K.		

TX-37LZ8P

Panasonic GLP23F	
SW V1.02	16/09/08

Self Check Complete			
EEPROM	O.K.	OP0	0F
TUNER	O.K.	OP1	00
HDMI1	O.K.	OP2	B9
HDMI2	O.K.	CRC8	10
MAU1	O.K.	CSum	D53C
MAU2	O.K.	Ver	06
FE1	O.K.	ChID	35
FE2	O.K.	Model	02
MSP	O.K.		

Display	Ref.No.	Description	P.C.B
EEPROM	IC1102	EEPROM	A-Board
TUNER	TU101A	TUNER	A-Board
HDMI1	JK5001	HDMI	A-Board
HDMI2	JK5002	HDMI	A-Board
VCTP	IC4001	AUDIO VIDEO PROCESSOR	A-Board

If the CCU ports have been checked and found to be incorrect or not located then " - - " will appear in place of "O.K..".

Adjustment Method

How to enter Service 1

- Set the Bass to maximum position, set the Treble to minimum position then keep pressing the **INDEX** button on the remote control and press the down button (**-IV**) on the TV set, this will place the TV set into the Service Mode 1.

Key Command

- Press the **RED / GREEN** buttons to step up / down through the functions.
- Press the **YELLOW / BLUE** buttons to alter the function values, to alter White Rasters use +/- buttons
- Press the **OK** button after each adjustment has been made to store the required values.
- To exit the Service Mode, press the "N" button.

Keep adjusting sequence: DVCO, Sub-Contrast, other items.

Item	Setting indication Note: All setting values are approximate	Settings / Special features										
Sub-Contrast	Sub-Contrast 41	Receive a 80% white level Philips Pattern with correct sound system (B/G, D/K) via aerial input. For Sub-Contrast alignment press " Blue " button, wait until the figure colour is changed from red to black colour. Press the OK .										
DVCO	DVCO 1	Receive a 80% white level Philips Pattern via aerial input. For DVCO alignment press " Blue " button, wait until the figure colour is changed from red to black colour. Press the OK .										
Highlight Lowlight	<table><tr><td>High</td><td>12</td><td>0241</td><td>0240</td><td>0252</td></tr><tr><td>Low</td><td>4</td><td>0136</td><td>0130</td><td>0084</td></tr></table>	High	12	0241	0240	0252	Low	4	0136	0130	0084	For correct setting see White Balance Adjustment
High	12	0241	0240	0252								
Low	4	0136	0130	0084								

White Balance Adjustment

Instrument

- Remote Control
- LCD WB meter (Minolta CA-210 or equivalent)

Condition

- Switch on the TV Set. Enter Service1. Step down to Highlight line and keep the aging time more than 20 minutes.

Procedure

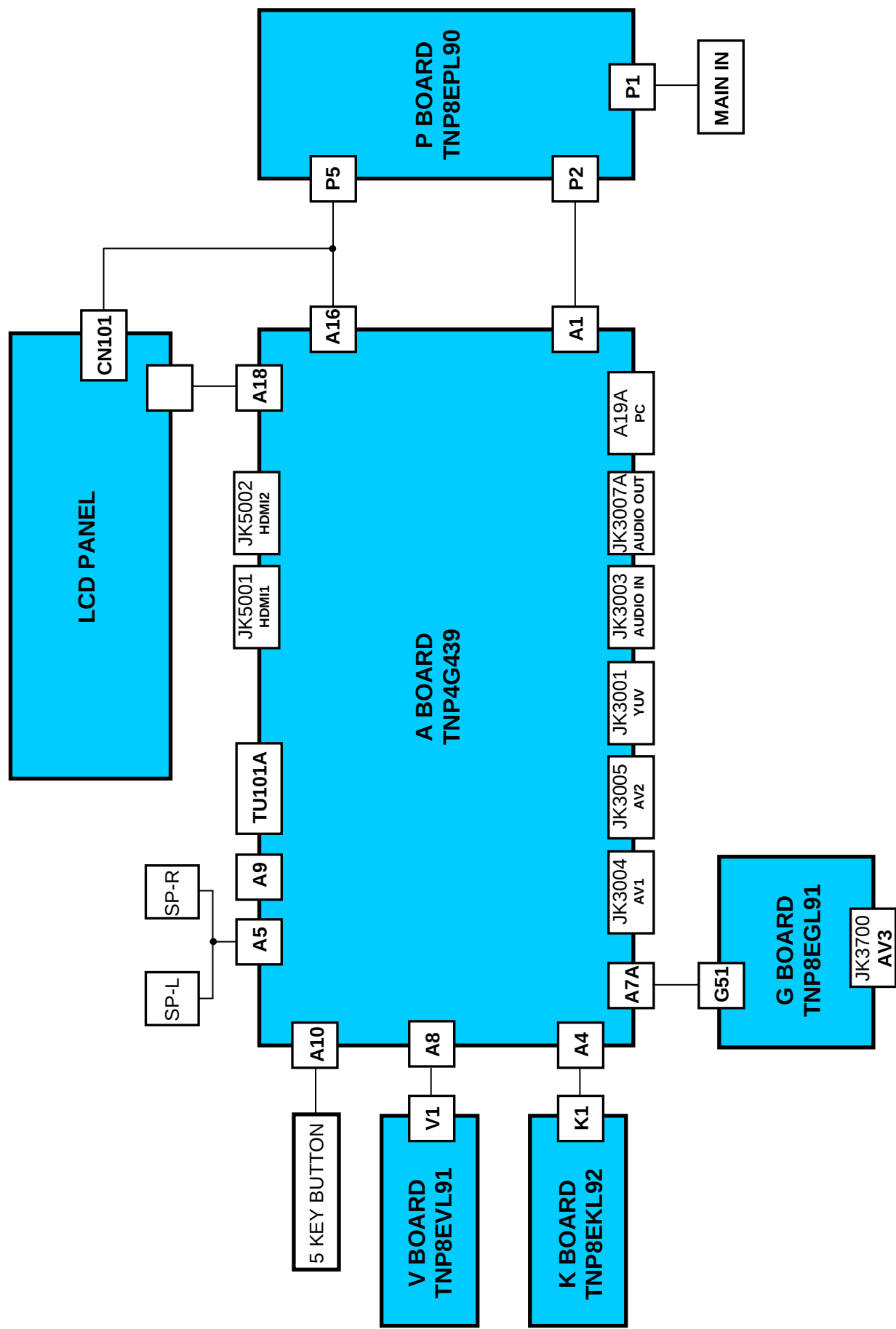
- After aging time above set White Raster No.12 for Highlight and No.4 for Lowlight

High	12
Low	4

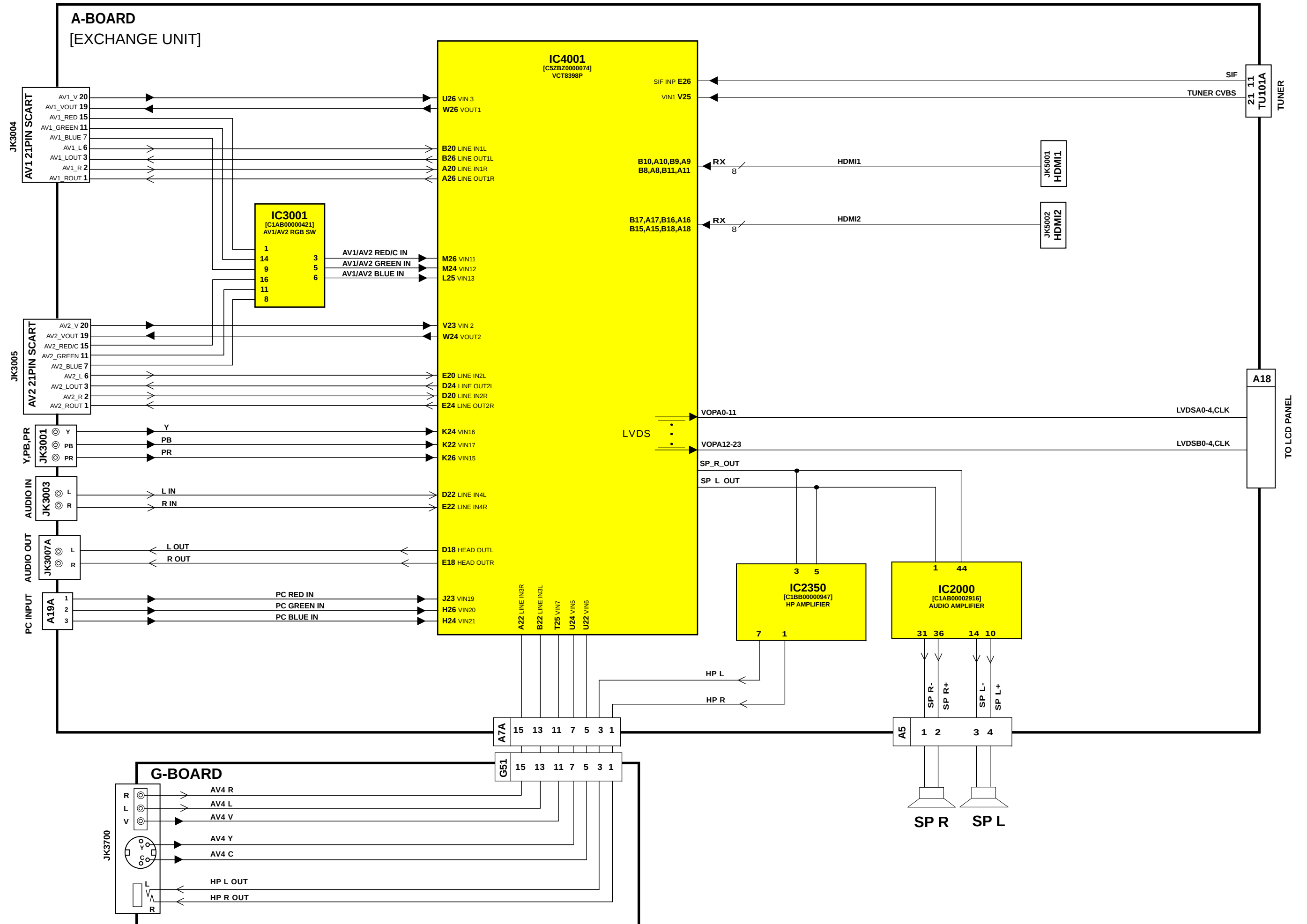
 Press the **OK** button to store.
- Put Minolta Sensor to the center of the LCD Panel with 25mm gap between Minolta Sensor and LCD Panel. Adjust "x" and "y" values by changing Red and Blue values.
- Press **OK** button to store setting.

Item		Value
Highlight	x	2850 ± 150
	y	2920 ± 150
Lowlight	x	2850 ± 150
	y	2930 ± 150

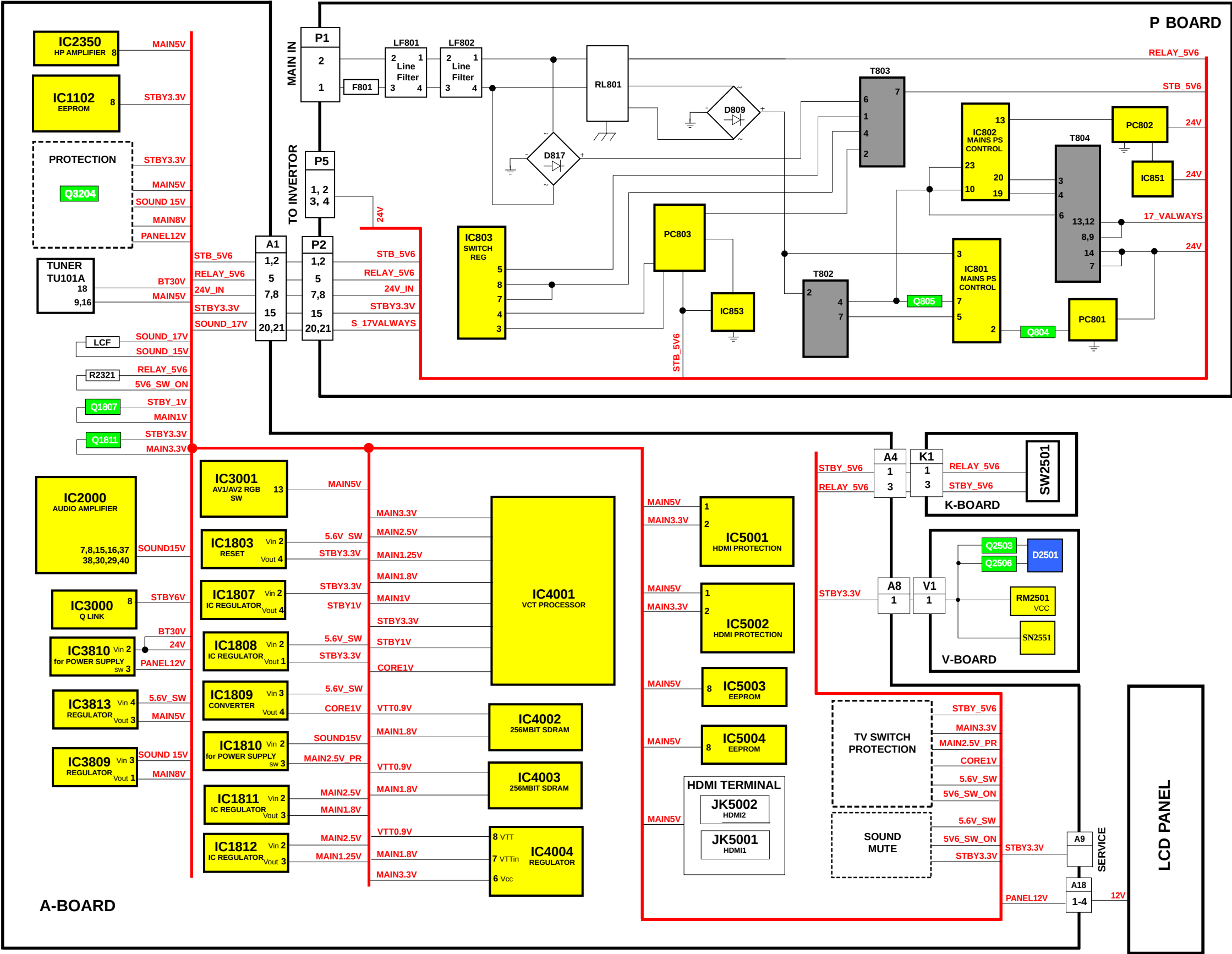
Wiring diagram



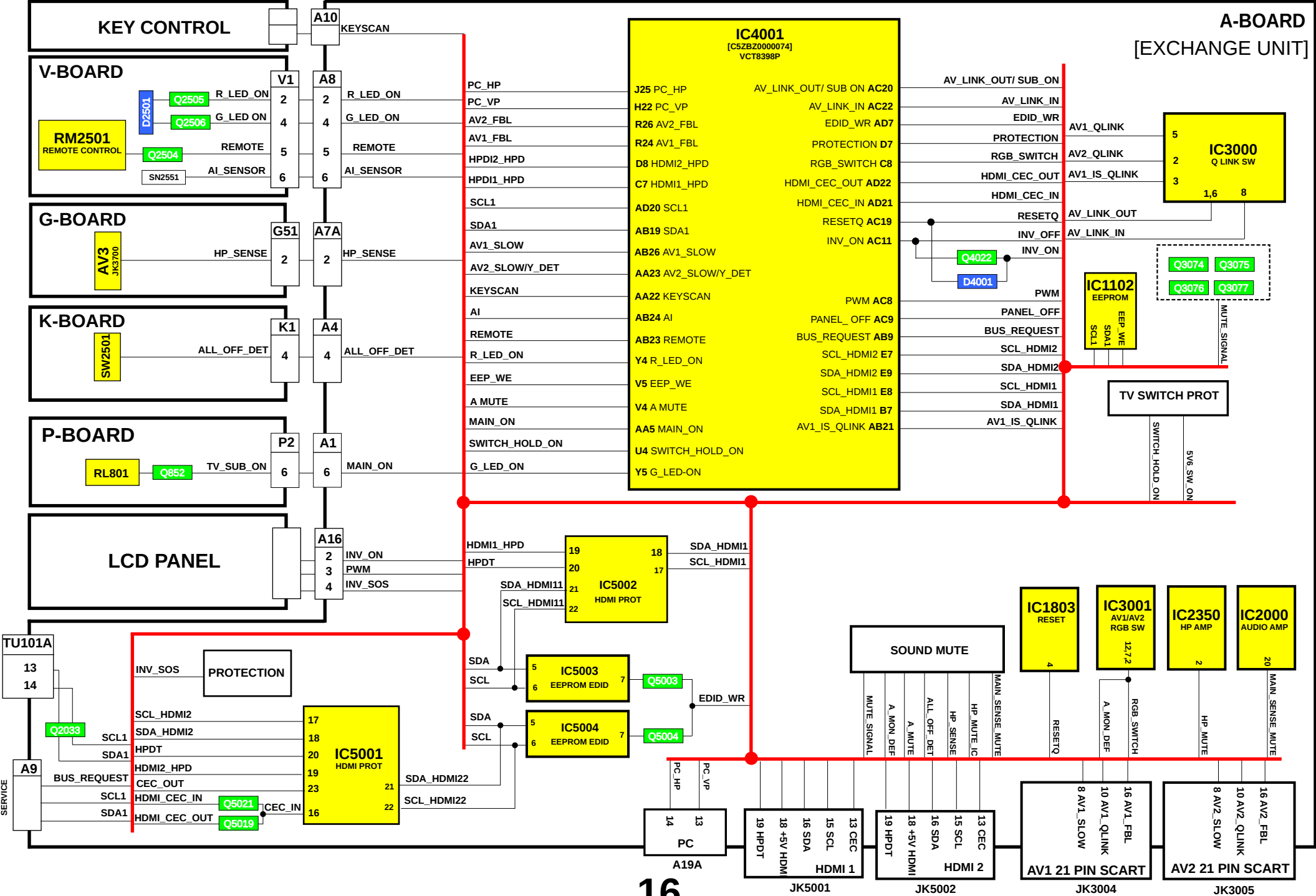
Video & Stereo Audio Block Diagram



Power Supply Block Diagram

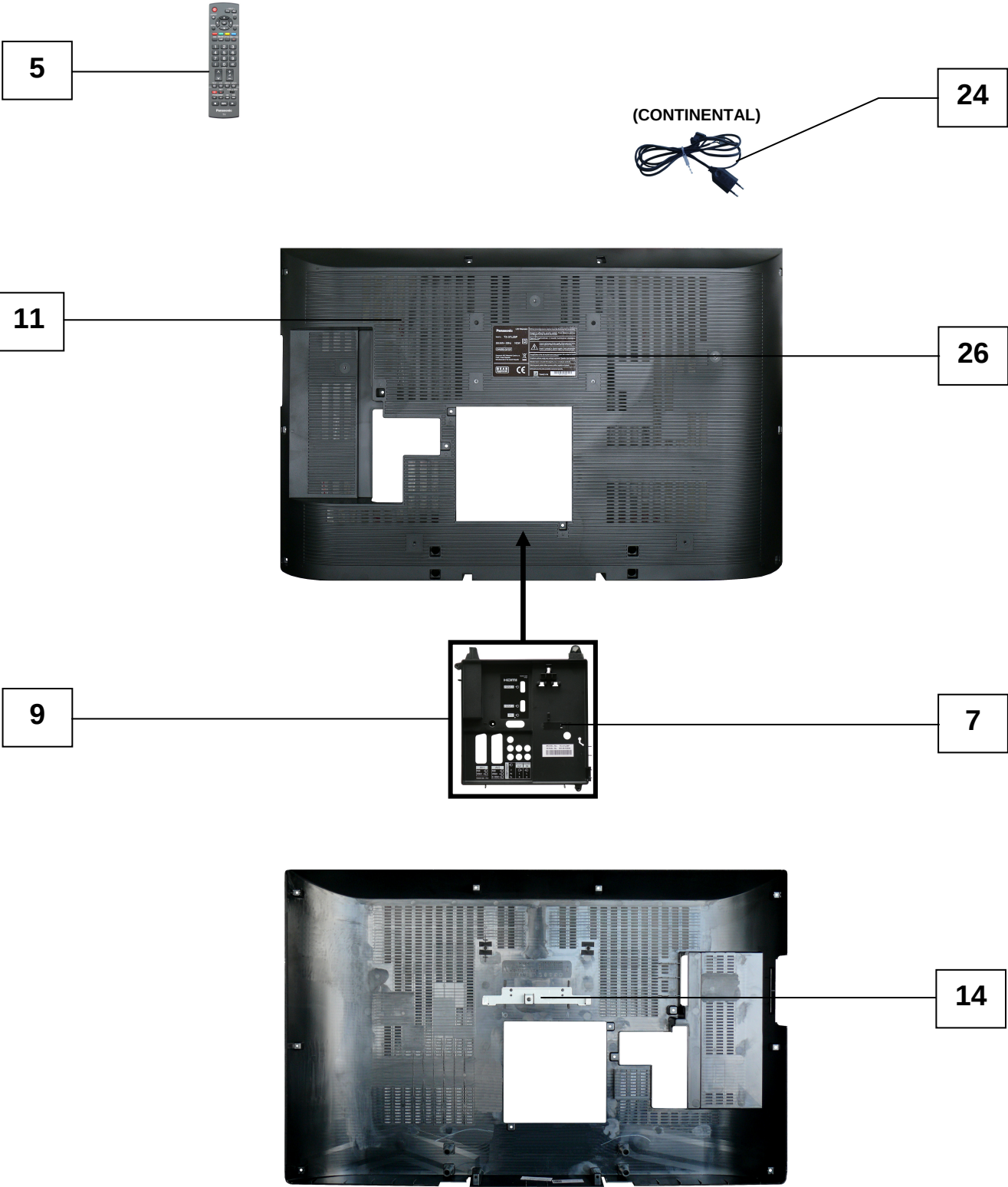


Control Block Diagram



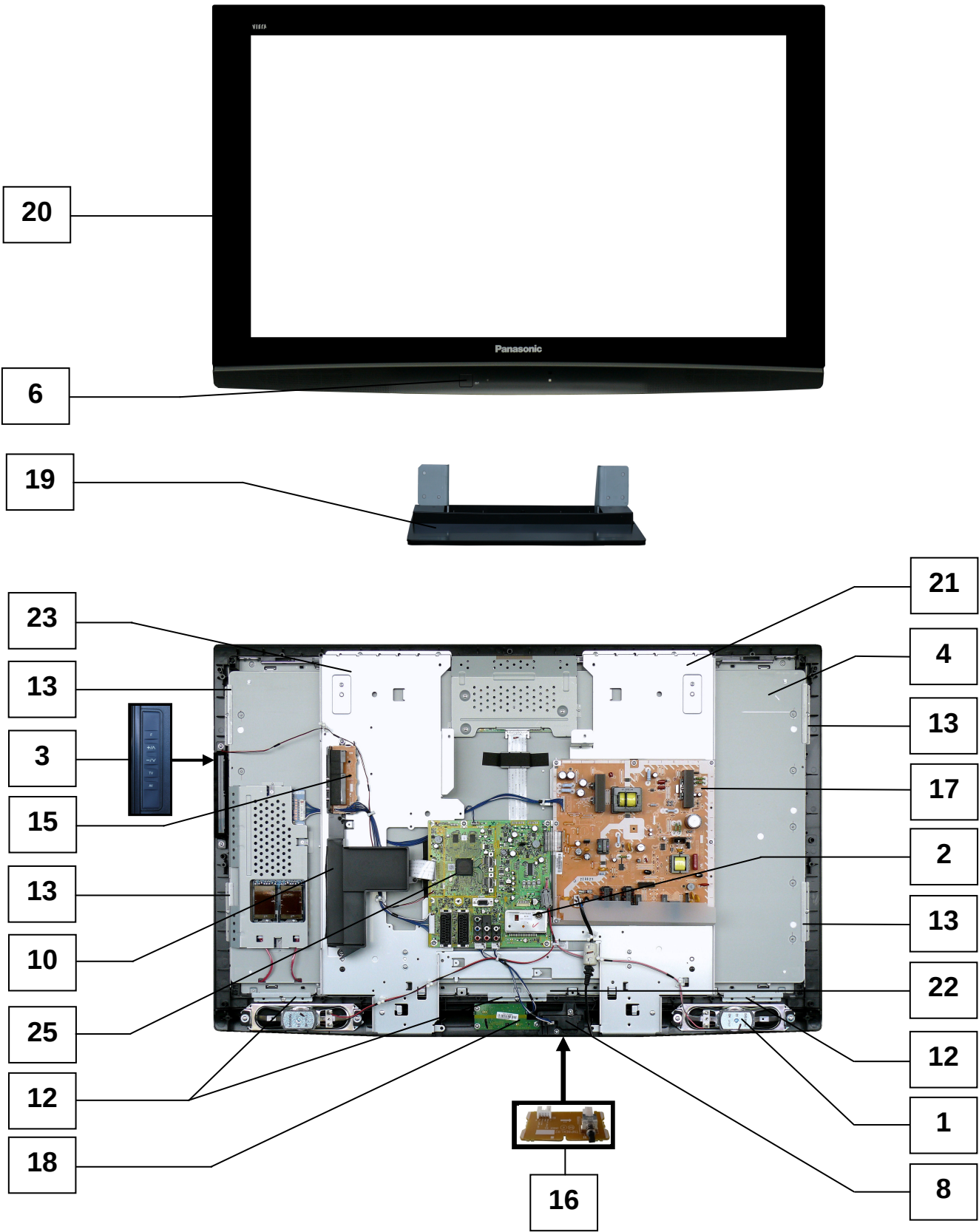
Parts Location

NOTE:
The numbers on the exploded view below refer to the exploded view section of the Replacement Parts List.



Parts Location

NOTE:
The numbers on the exploded view below refer to the exploded view section of the Replacement Parts List.



Replacement Parts List

Important Safety Notice

Components Identified by  mark have special characteristics important for safety.
 * When replacing any of these components, use only manufacturers specified parts.
 In case of ordering these spare parts, please always add the complete Model-Type number to your order.

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

X The marking (X) indicates that board should be exchanged for service.

Cct Ref	Parts Number	Description	
COMMON PARTS			
EXPLODED VIEW			
1	EAS16S09A	SPEAKER	
2	ENG37E08GF	TUNER	
3	K0RB00500033	CONTROL PANEL	
4	L5EDD9T00008	LCD PANEL	
5	N2QAYB000223	REMOTE CONTROL	
6	TBX0E84600	POWER BUTTON	
7	TKP0E16001	CONNECTOR COVER	
8	TKP0E30701	POWER BUTTON BRACKET	
9	TKP0E36701	REAR AV BRACKET	
10	TKP0E91301-1	AV3 BRACKET	
11	TKU0E1801-1	BACK COVER	
12	TKZ0E9165	BOTTOM LCD BRACKET	
13	TKZ0E9166	SIDE LCD BRACKET	
14	TKZ0E9575	VESA METAL	
15	TNP8EGL91AA	G P.C.B.	RTL 
16	TNP8EKL92AA	K P.C.B.	RTL 
17	TNP8EPL90AB	P P.C.B.	RTL 
18	TNP8EVL91AB	V P.C.B.	RTL 
19	TTX0E0017	PEDESTAL ASSY	
20	TTY0E0259	CABINET ASSY	
21	TUA0E3200-2	L CHASSIS FRAME BRACKE	
22	TUA0E3600	BOTTOM LCD BRACKET	
23	TUA0E4900	R CHASSIS FRAME BRACKE	
24	TXASX01NXA-2	AC CORD ASSY	
MISCELLANEOUS COMPONENTS			
.	R6DB/2PP	BATTERY	
.	TBM0E1204	SIDE AV LABEL	
.	TBM0E1588	REAR AV LABEL	
.	TBM0E1589	REAR HDMI LABEL	
.	TES0E105-1	SPRING	
.	THTF012J	SCREW	
.	TKP0E92001	IR/LED PANEL	
.	TMK0E089	FELT	
.	TMK0E090	FELT	
.	TMM8E18048	TAB-RELEASE CABLE	
.	TPEX020	CLEANING CLOTH	
.	XTB4+15JFJK	SCREW	
.	XTS3+8JFJ	SCREW	
.	XTV3+8JFJK	SCREW	
.	XTW3+10TFJ	SCREW	
.	XTWT4+Z15DFJ	SCREW	
.	XYN4+C12FJ	SCREW	

Cct Ref	Parts Number	Description	
.	XYN4+F10FJK	SCREW	
.	XYN4+F6FJ	SCREW	
BOTCUS	TPD0E2021-1	BOTTOM CUSHION	
CARTON	TPC0E48900	CARTON	
FC2	J0KG00000100	FERRITE CORE	
FC3	J0KG00000142	FERRITE CORE	
FC4	J0KG00000142	FERRITE CORE	
TOPCUS	TPD0E1048	TOP CUSHION	
I.C.s			
IC801	C0DABZZ00012	MAIN PS CONTROL	
IC802	C5HAZZZ00012	MAIN PS CONTROL	
IC803	C0DABYY00015	SWITCHING REGULATOR	
IC851	C0DBEMC00044	REGULATOR	
IC853	C0DBEMC00044	REGULATOR	
IC1803	C0EBJ0000329	VOLTAGE DETECTOR	
IC1807	C0DBEGE00002	IC REGULATOR	
IC1808	C0DBAZG00048	IC REGULATOR	
IC1809	C0DBAYY00428	DC/DC CONVERTER	
IC1810	C0DBEYY00084	IC FOR POWER SUPPLY	
IC1811	C0DBEYG00002	IC REGULATOR	
IC1812	C0DBEGE00002	IC REGULATOR	
IC2000	C1AB00002916	AUDIO AMPLIFIER	
IC2350	C1BB00000947	AUDIO AMPLIFIER	
IC3000	C0JBAS000215	LOGIC IC	
IC3001	C1AB00000421	RGB SWITCH	
IC3809	AN78L08M-E1	REGULATOR	
IC3810	C0DBEYY00084	IC FOR POWER SUPPLY	
IC3813	C0DBZYY00284	REGULATOR	
IC4001	C5ZBZ0000074	IC_ VCT	
IC4002	C3ABRY000038	256MBIT SDRAM	
IC4003	C3ABRY000038	256MBIT SDRAM	
IC4004	C0DBEFH00002	IC REGULATOR	
IC5001	C1ZBZ0003846	IC_HDMI PROTECTION	
IC5002	C1ZBZ0003846	IC_HDMI PROTECTION	
IC5003	GLP23FEDID4	EEPROM EDID	
IC5004	GPL23FEDID3	EEPROM EDID	
PC801	B3PAA0000363	PHOTO COUPLER	
PC802	B3PAA0000363	PHOTO COUPLER	
PC803	B3PAA0000363	PHOTO COUPLER	
RM2501	PNA4701M05TV	LED RECEIVER	
SN2551	B3JB00000046	PHOTO IC DIODE	
FUSES			
F801	K5D502BNA007	AC FUSE	
DIODES			
D801	ERZV10V621T2	VARISTOR	
D802	MA22F2000L	DIODE	
D803	MA2J11100L	DIODE	
D804	MA22F2000L	DIODE	

Cct Ref	Parts Number	Description
D805	B0BC022A0007	ZENER DIODE
D806	MA22F2000L	DIODE
D807	MA22F2000L	DIODE
D808	B0JCPE000028	DIODE
D809	B0EBNT000025	DIODE
D810	MAZ82000ML	ZENER DIODE
D811	B0FABR000010	DIODE
D812	B0JCPE000028	DIODE
D813	B0JCPE000028	DIODE
D814	B0HCMM000003	DIODE
D815	B0EJV000004	DIODE
D817	B0EBNT000025	DIODE
D819	MAZY27000L	ZENER DIODE
D820	MAZY27000L	ZENER DIODE
D822	B0HAGV000004	DIODE
D825	B0BA01000070	DIODE
D826	B0BA3R900006	ZENER DIODE
D827	B0HAGV000004	DIODE
D828	B0HCMM000014	DIODE
D829	B0BA075A0420	DIODE
D830	B0BA075A0420	DIODE
D831	MAZ81800ML	DIODE
D832	MAZ81800ML	DIODE
D834	ERZV10V621T2	VARISTOR
D835	ERZV10V621T2	VARISTOR
D851	MA2J11100L	DIODE
D852	B0JBSL000021	DIODE
D853	B0JBSJ000002	DIODE
D854	MA2J11100L	DIODE
D855	B0JBSL000021	DIODE
D1109	MAZ80620ML	DIODE
D1110	MAZ80620ML	DIODE
D1812	MAZ81600HL	ZENER DIODE
D1813	B0ACCK000012	DIODE
D1816	MAZ81300ML	DIODE
D1817	B0ACCK000012	DIODE
D1818	MAZ80820ML	DIODE
D1819	B0ACCK000012	DIODE
D1824	MAZ82700ML	DIODE
D1825	B0ACCK000012	DIODE
D1828	B0ACCK000012	DIODE
D1829	B0ACCK000012	DIODE
D1830	B0ACCK000012	DIODE
D1881	B0JCME000037	DIODE
D1882	B0JCPG000005	DIODE
D1885	MA24D5000B	DIODE
D1911	MA24D5000B	DIODE
D1912	MAZ81400ML	DIODE
D1913	MAZ80430HL	DIODE
D1914	MAZ80560ML	DIODE
D2100	MA22D3900L	DIODE
D2101	MA22D3900L	DIODE
D2301	MA22D3900L	DIODE
D2302	B0ACCK000012	DIODE
D2303	B0ACCK000012	DIODE
D2305	B0ACCK000012	DIODE
D2306	B0ACCK000012	DIODE
D2307	MA22D3900L	DIODE
D2308	MA22D3900L	DIODE
D2501	B3CKE0000007	DIODE
D3204	B0ACCK000012	DIODE
D3205	B0ACCK000012	DIODE
D3207	B0ACCK000012	DIODE
D3208	B0ACCK000012	DIODE
D3210	B0ACCK000012	DIODE
D3211	B0ACCK000012	DIODE
D3216	B0ACCK000012	DIODE
D3217	B0ACCK000012	DIODE

Cct Ref	Parts Number	Description
D3219	MA2J72900L	DIODE
D3247	B0ACCK000005	DIODE
D3248	B0ACCK000005	DIODE
D3249	B0ACCK000005	DIODE
D3250	B0ACCK000005	DIODE
D3813	MAZ80510ML	ZENER DIODE
D3817	MAZ81500ML	DIODE
D3818	MAZ81500ML	DIODE
D3863	B0HCMM000014	DIODE
D3864	B0HCMM000014	DIODE
D3867	MA22D3900L	DIODE
D3869	MA24D5000B	DIODE
D3878	B0ACCK000005	DIODE
D3879	B0ACCK000005	DIODE
D3880	MA22D3900L	DIODE
D3881	B0ACCK000005	DIODE
D3882	B0ACCK000005	DIODE
D3883	MAZ802400L	DIODE
D3884	MAZ80470LL	ZENER DIODE
D3885	MAZ80430HL	DIODE
D3886	MA3X152E0L	DIODE
D3887	B0ACCK000005	DIODE
D3888	MAZ80560HL	ZENER DIODE
D3890	MAZ81400ML	DIODE
D4001	B0ACCK000012	DIODE
D5002	MA22D3900L	DIODE
D5003	MA22D3900L	DIODE
D5004	MA22D3900L	DIODE
D5005	MA22D3900L	DIODE
D5023	MA2J72800L	DIODE
TRANSISTORS		
Q801	2SB0710ARL	TRANSISTOR
Q804	B1CFHD000010	TRANSISTOR
Q805	B1CERR000022	TRANSISTOR
Q806	B1BACG000044	TRANSISTOR
Q809	2SD10300SL	TRANSISTOR
Q810	B1CFND000009	TRANSISTOR
Q811	B1CFHD000010	TRANSISTOR
Q851	2SC584500L	TRANSISTOR
Q852	2SD0601ASL	TRANSISTOR
Q1216	2SA207700L	TRANSISTOR
Q1803	2SC584500L	TRANSISTOR
Q1804	2SA207700L	TRANSISTOR
Q1805	2SA207700L	TRANSISTOR
Q1806	2SC584500L	TRANSISTOR
Q1807	B1DEED000002	TRANSISTOR
Q1809	2SD601ATX	TRANSISTOR
Q1811	B1DHDC000028	TRANSISTOR
Q1812	2SD601ATX	TRANSISTOR
Q1813	2SD601ATX	TRANSISTOR
Q1814	2SD601ATX	TRANSISTOR
Q1815	2SD601ATX	TRANSISTOR
Q1930	2SD601ATX	TRANSISTOR
Q1931	2SD601ATX	TRANSISTOR
Q1932	2SD601ATX	TRANSISTOR
Q1933	2SD601ATX	TRANSISTOR
Q1934	B1DEED000002	TRANSISTOR
Q1935	2SD601ATX	TRANSISTOR
Q2033	B1MBACA00008	TRANSISTOR
Q2300	2SC584500L	TRANSISTOR
Q2301	2SC584500L	TRANSISTOR
Q2302	2SC584500L	TRANSISTOR
Q2303	2SA207700L	TRANSISTOR
Q2304	2SC584500L	TRANSISTOR
Q2310	2SC584500L	TRANSISTOR
Q2311	2SC584500L	TRANSISTOR
Q2504	2SD601ATX	TRANSISTOR

Cct Ref	Parts Number	Description
Q2505	2SB0709ASL	TRANSISTOR
Q2506	2SB0709ASL	TRANSISTOR
Q3002	2SA207700L	TRANSISTOR
Q3003	2SC584500L	TRANSISTOR
Q3004	2SA207700L	TRANSISTOR
Q3011	2SA207700L	TRANSISTOR
Q3012	2SC584500L	TRANSISTOR
Q3013	2SA207700L	TRANSISTOR
Q3040	2SC584500L	TRANSISTOR
Q3041	2SC584500L	TRANSISTOR
Q3042	2SC584500L	TRANSISTOR
Q3043	2SC584500L	TRANSISTOR
Q3044	2SC584500L	TRANSISTOR
Q3045	2SC584500L	TRANSISTOR
Q3046	2SC584500L	TRANSISTOR
Q3047	2SA207700L	TRANSISTOR
Q3048	2SC584500L	TRANSISTOR
Q3049	2SA207700L	TRANSISTOR
Q3050	2SC584500L	TRANSISTOR
Q3051	2SA207700L	TRANSISTOR
Q3060	2SC584500L	TRANSISTOR
Q3061	2SA207700L	TRANSISTOR
Q3062	2SC584500L	TRANSISTOR
Q3063	2SA207700L	TRANSISTOR
Q3064	2SC584500L	TRANSISTOR
Q3065	2SA207700L	TRANSISTOR
Q3066	2SC584500L	TRANSISTOR
Q3067	2SC584500L	TRANSISTOR
Q3068	2SA207700L	TRANSISTOR
Q3069	2SA207700L	TRANSISTOR
Q3070	2SA207700L	TRANSISTOR
Q3071	2SA207700L	TRANSISTOR
Q3072	2SA207700L	TRANSISTOR
Q3073	2SA207700L	TRANSISTOR
Q3074	2SC584500L	TRANSISTOR
Q3075	2SC584500L	TRANSISTOR
Q3076	2SC584500L	TRANSISTOR
Q3077	2SC584500L	TRANSISTOR
Q3204	2SA207700L	TRANSISTOR
Q3205	2SC584500L	TRANSISTOR
Q3807	2SC584500L	TRANSISTOR
Q3818	2SD601ATX	TRANSISTOR
Q3819	B1DEED000002	TRANSISTOR
Q3820	2SD601ATX	TRANSISTOR
Q3826	2SD601ATX	TRANSISTOR
Q3827	B1DHED000013	TRANSISTOR
Q3828	2SD0601ASL	TRANSISTOR
Q3829	2SB0709ASL	TRANSISTOR
Q3832	2SD601ATX	TRANSISTOR
Q4022	2SD601ATX	TRANSISTOR
Q4501	B1CBHD000002	TRANSISTOR
Q5003	2SC584500L	TRANSISTOR
Q5004	2SC584500L	TRANSISTOR
Q5019	2SC584500L	TRANSISTOR
Q5020	2SC584500L	TRANSISTOR
Q5021	2SC584500L	TRANSISTOR
TRANSFORMERS		
T802	ETS27BE1E9AD	TRANSFORMER
T803	ETS19AB276AG	TRANSFORMER
T804	ETS35LZ166AD	TRANSFORMER
COILS		
JSP809	EXCELD35V	COIL
JSP810	EXCELD35V	COIL
L801	EXCELSA35T	COIL
L802	EXCELSA35V	COIL
L804	G0C121KA0186	CHOKE COIL
L806	EXCELD35V	COIL



Cct Ref	Parts Number	Description
L807	EXCELD35V	COIL
L808	EXCELSA35V	COIL
L851	ELC10D6R8E	COIL
L1185	J0JHC0000078	COIL
L1186	J0JHC0000078	COIL
L1187	J0JHC0000078	COIL
L1188	J0JHC0000078	COIL
L1189	J0JHC0000078	COIL
L1811	J0JHC0000075	COIL BLM21PG600SN1D
L1812	G1C100MA0077	COIL
L1813	J0JKC0000007	COIL
L1815	G0A100ZA0041	COIL
L1816	J0JKC0000007	COIL
L1839	J0JHC0000034	COIL
L1840	J0JHC0000034	COIL
L1841	J0JHC0000034	COIL
L1894	J0JHC0000075	COIL BLM21PG600SN1D
L1910	ELLATV6R8N	COIL
L1920	J0JHC0000075	COIL BLM21PG600SN1D
L2000	J0JHC0000078	COIL
L2001	G1C330MA0291	INDUCTOR
L2002	G1C330MA0291	INDUCTOR
L2004	J0JHC0000078	COIL
L2005	G1C330MA0291	INDUCTOR
L2006	J0JJC0000015	COIL
L2007	G1C330MA0291	INDUCTOR
L2008	J0JHC0000034	COIL
L2009	J0JHC0000034	COIL
L2010	J0JHC0000034	COIL
L2011	J0JHC0000034	COIL
L2100	ELJFC2R2KFB	COIL
L2101	ELJFC2R2KFB	COIL
L2102	ELJFC2R2KFB	COIL
L2103	ELJFC2R2KFB	COIL
L2320	J0JHC0000078	COIL
L2321	J0JHC0000078	COIL
L2322	J0JHC0000078	COIL
L2350	TALV35VB100K	COIL
L3700	J0JCC0000100	INDUCTOR
L3701	J0JCC0000100	INDUCTOR
L3702	J0JCC0000364	INDUCTOR
L3703	J0JCC0000364	INDUCTOR
L3800	J0JHC0000078	COIL
L3802	J0JCC0000241	INDUCTOR
L3803	J0JCC0000241	INDUCTOR
L3808	J0JCC0000241	INDUCTOR
L3812	G0A100ZA0041	COIL
L3813	J0JHC0000034	COIL
L3814	J0JJC0000015	COIL
L3815	J0JHC0000078	COIL
L3900	J0JJC0000015	COIL
L3901	J0JJC0000015	COIL
L3902	J0JJC0000015	COIL
L4000	J0JDC0000002	COIL
L4001	J0JDC0000002	COIL
L4002	J0JDC0000002	COIL
L4003	J0JDC0000002	COIL
L4004	J0JHC0000075	COIL BLM21PG600SN1D
L4005	J0JDC0000002	COIL
L4006	J0JHC0000075	COIL BLM21PG600SN1D
L4007	J0JDC0000002	COIL
L4008	J0JDC0000002	COIL
L4009	J0JDC0000002	COIL
L4010	J0JDC0000002	COIL
L4011	J0JHC0000075	COIL BLM21PG600SN1D
L4012	J0JHC0000075	COIL BLM21PG600SN1D
L4013	J0JHC0000075	COIL BLM21PG600SN1D
L4014	J0JDC0000002	COIL

Cct Ref	Parts Number	Description
L4015	J0JDC0000002	COIL
L4019	J0JHC0000075	COIL BLM21PG600SN1D
L4020	J0JHC0000075	COIL BLM21PG600SN1D
L4023	J0JHC0000075	COIL BLM21PG600SN1D
L4024	J0JHC0000075	COIL BLM21PG600SN1D
L4025	J0JDC0000002	COIL
L4026	J0JCC0000268	COIL
L4027	J0JHC0000075	COIL BLM21PG600SN1D
L4028	J0JHC0000075	COIL BLM21PG600SN1D
L4029	J0JCC0000268	COIL
L4030	J0JCC0000268	COIL
L4031	J0JHC0000075	COIL BLM21PG600SN1D
L4440	J0JCC0000268	COIL
L4441	J0JCC0000268	COIL
FILTERS		
FL4000	EXC24CE900U	FILTER
FL4001	EXC24CE900U	FILTER
FL4002	EXC24CE900U	FILTER
FL4003	EXC24CE900U	FILTER
FL4004	EXC24CE900U	FILTER
FL4005	EXC24CE900U	FILTER
FL4006	EXC24CE900U	FILTER
FL4007	EXC24CE900U	FILTER
FL4008	EXC24CE900U	FILTER
FL4009	EXC24CE900U	FILTER
FL4010	EXC24CE900U	FILTER
FL4011	EXC24CE900U	FILTER
LF801	ELF20N010A	LINE FILTER
LF802	ELF20N010A	LINE FILTER
CRYSTALS		
X4001	H0J270500126	CRYSTAL
RESISTORS		
CF801	D4CAY8R0A010	THERMIST - - 8 Ω
CF802	D4CAY220A003	THERMIST - - 22 Ω
JS2502	D0GBR00Z0002	SMD 0.1W - 0 Ω
JSA240	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA241	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA242	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA243	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA250	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA251	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA258	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA259	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA1829	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA1838	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA1840	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA1844	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA1846	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA1848	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA1850	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA1853	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA1854	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA1855	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA1921	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA1922	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA2304	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA4000	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSA4001	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSP827	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
JSP828	ERJ6GEY0R00	S.M.CARB 0.1W - 0 Ω
R801	EROS2THF4703	METAL 0.25W 1% 470K Ω
R802	EROS2THF4703	METAL 0.25W 1% 470K Ω
R803	EROS2THF3303	METAL 0.25W 1% 330K Ω
R804	D1BD1002A044	SMD .125W 1% 10K Ω
R805	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100K Ω
R806	ERD25TJ681	CARBON 0.25W 5% 680 Ω
R807	ERC12ZGK105C	SOLID 0.5W 10% 1M Ω

Cct Ref	Parts Number	Description
R808	ERJ6GEYJ393	S.M.CARB 0.1W 5% 39K Ω
R809	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47K Ω
R810	ERJ6GEYJ221	S.M.CARB 0.1W 5% 220 Ω
R811	ERJ8GEYJ103	S.M.CARB .125W 5% 10K Ω
R812	ERJ6GEYJ220	S.M.CARB 0.1W 5% 22 Ω
R813	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47K Ω
R814	ERJ8GEYJ821V	SMD 0.25W 5% 820 Ω
R815	ERDS2TJ105T	CARBON 0.25W 5% 1M Ω
R816	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10K Ω
R817	D0D2R68KA003	RESISTOR 2W 10% R68 Ω
R818	D0D2R68KA003	RESISTOR 2W 10% R68 Ω
R819	EROS2THD8203	METAL 0.25W 0.5 820K Ω
R820	EROS2THD7503	METAL 0.25W 0.5 750K Ω
R821	EROS2THD7503	METAL 0.25W 0.5 750K Ω
R822	ERJ6RBD153V	SMD 0.1W 0.5 15K Ω
R823	ERDS2TJ753T	FILM 0.25W 5% 75K Ω
R824	ERDS2TJ753T	FILM 0.25W 5% 75K Ω
R825	ERDS2TJ753T	FILM 0.25W 5% 75K Ω
R826	ERX3FJ2R2	METAL 3W 5% 2R2 Ω
R827	ERJ6GEYJ393	S.M.CARB 0.1W 5% 39K Ω
R828	ERX2SJ2R2P	METAL 2W 5% 2R2 Ω
R830	ERJ6GEYJ223	S.M.CARB 0.1W 5% 22K Ω
R832	D0D22R7KA003	FIXED RE 2W 10% 2R7 Ω
R833	ERC12ZGK105C	SOLID 0.5W 10% 1M Ω
R834	ERG1SJ271	METAL 1W 5% 270 Ω
R836	ERJ6GEYJ223	S.M.CARB 0.1W 5% 22K Ω
R837	ERJ6GEYJ223	S.M.CARB 0.1W 5% 22K Ω
R838	ERJ6RBD153V	SMD 0.1W 0.5 15K Ω
R839	ERJ12YJ302U	SMD 0.5W 5% 3K Ω
R840	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100K Ω
R841	D0GD103JA036	SMD .125W 5% 10K Ω
R842	D0XB106J0003	RESISTOR 1W 5% 10M Ω
R843	ERDS1TJ100	CARBON 0.5W 5% 10 Ω
R844	ERG2SJ104P	METAL 2W 5% 100K Ω
R846	ERDS2TJ105T	CARBON 0.25W 5% 1M Ω
R847	ERDS2TJ105T	CARBON 0.25W 5% 1M Ω
R848	ERJ6ENF5602	SMD .125W 1% 56K Ω
R850	ERJ6GEYJ114	S.M.CARB 0.1W 5% 110K Ω
R851	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2 Ω
R852	D0GD103JA036	SMD .125W 5% 10K Ω
R853	ERJ6GEYJ223	S.M.CARB 0.1W 5% 22K Ω
R854	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330 Ω
R855	ERJ6GEYJ562	S.M.CARB 0.1W 5% 5K6 Ω
R856	D0GD103JA036	SMD .125W 5% 10K Ω
R858	ERJ6GEYJ223	S.M.CARB 0.1W 5% 22K Ω
R859	ERJ6ENF5601	SMD .125W 1% 5K6 Ω
R860	ERJ6ENF6801	S.M.CARB 0.1W 1% 6K8 Ω
R861	ERJ6RBD303	SMD 0.1W 0.5 30K Ω
R862	ERJ6RBD752	SMD 0.1W 0.5 7K5 Ω
R864	D0GD103JA036	SMD .125W 5% 10K Ω
R865	ERJ6RBD432	SMD 0.1W 0.5 4K3 Ω
R866	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1K Ω
R867	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47K Ω
R868	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1K Ω
R869	ERJ6GEYJ272	S.M.CARB 0.1W 5% 2K7 Ω
R875	ERG3FJ681H	METAL 3W 5% 680 Ω
R876	ERG3FJ681H	METAL 3W 5% 680 Ω
R878	D0GDR00Z0002	SMD .125W - 0 Ω
R898	ERJ6RBD332V	SMD 0.1W 0.5 3K3 Ω
R1167	D0GB101JA008	SMD .063W 5% 100 Ω
R1171	D0GB220JA008	SMD .063W 5% 22 Ω
R1172	D0GB220JA008	SMD .063W 5% 22 Ω
R1173	D0GB473JA008	SMD .063W 5% 47K Ω
R1176	D0GB101JA008	SMD .063W 5% 100 Ω
R1177	D0GB101JA008	SMD .063W 5% 100 Ω
R1183	D0GB104JA008	SMD .063W 5% 100K Ω
R1234	D0GB101JA041	SMD 0.1W 5% 100 Ω
R1235	ERJ3GEYJ472	SMD 0.1W 5% 4K7 Ω

Cct Ref	Parts Number	Description			
R1244	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R1298	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R1729	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R1813	D0GB472JA008	SMD	.063W	5%	4K7 Ω
R1816	D0GB103JA008	SMD	.063W	5%	10K Ω
R1817	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R1823	D0GB473JA008	SMD	.063W	5%	47K Ω
R1824	D0GB152JA008	SMD	.063W	5%	1K5 Ω
R1825	D0GB103JA008	SMD	.063W	5%	10K Ω
R1826	D0GB153JA008	SMD	.063W	5%	15K Ω
R1827	D0GB472JA008	SMD	.063W	5%	4K7 Ω
R1828	D0GB472JA008	SMD	.063W	5%	4K7 Ω
R1829	D0GB472JA008	SMD	.063W	5%	4K7 Ω
R1830	D0GB472JA008	SMD	.063W	5%	4K7 Ω
R1831	D0GB102JA008	SMD	.063W	5%	1K Ω
R1835	ERJ3RBD122V	SMD	.063W	0.5	1K2 Ω
R1836	ERJ3RBD103V	SMD	.063W	0.5	10K Ω
R1837	ERJ3RBD563V	SMD	.063W	0.5	56K Ω
R1840	ERJ3EKF6801V	SMD	0.1W	1%	6K8 Ω
R1841	ERJ3EKF1802V	SMD	0.1W	1%	18K Ω
R1842	D0GB105JA008	SMD	.063W	5%	1M Ω
R1843	D0GB333JA008	SMD	.063W	5%	33K Ω
R1845	D0GB223JA008	SMD	.063W	5%	22K Ω
R1846	D0GB103JA008	SMD	.063W	5%	10K Ω
R1847	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1848	ERJ3EKF6801V	SMD	0.1W	1%	6K8 Ω
R1849	ERJ3EKF1501V	SMD	0.1W	1%	1K5 Ω
R1850	ERJ6GEYJ203	S.M.CARB	0.1W	5%	20K Ω
R1857	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω
R1859	ERJ3EKF6340V	SMD	0.1W	1%	634 Ω
R1860	ERJ3EKF1001V	SMD	0.1W	1%	1K Ω
R1861	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R1863	D0GB103JA008	SMD	.063W	5%	10K Ω
R1864	D0GB222JA008	SMD	.063W	5%	2K2 Ω
R1865	D0GB471JA008	SMD	.063W	5%	470 Ω
R1885	D0GB101JA008	SMD	.063W	5%	100 Ω
R1886	D0GB101JA008	SMD	.063W	5%	100 Ω
R1887	D0GB103JA008	SMD	.063W	5%	10K Ω
R1888	D0GB472JA008	SMD	.063W	5%	4K7 Ω
R1910	ERJ3GEYJ563V	S.M.CARB	0.1W	5%	56K Ω
R1911	ERJ3RBD162V	SMD	.063W	0.5	1K6 Ω
R1912	ERJ3RBD513V	SMD	.063W	0.5	51K Ω
R1913	ERJ3RBD133V	SMD	.063W	0.5	13K Ω
R1921	ERJ3RBD203V	SMD	.063W	0.5	20K Ω
R1922	ERJ3RBD303V	SMD	.063W	0.5	30K Ω
R1923	ERJ3EKF1600V	SMD	0.1W	1%	160 Ω
R1929	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R1930	D0GB103JA008	SMD	.063W	5%	10K Ω
R1931	D0GB473JA008	SMD	.063W	5%	47K Ω
R1932	D0GB103JA008	SMD	.063W	5%	10K Ω
R1933	D0GB101JA008	SMD	.063W	5%	100 Ω
R1934	D0GB682JA008	SMD	.063W	5%	6K8 Ω
R1935	D0GB103JA008	SMD	.063W	5%	10K Ω
R1937	ERJ3GEYJ121	SMD	0.1W	5%	120 Ω
R1938	ERJ3GEYJ121	SMD	0.1W	5%	120 Ω
R1939	ERJ3GEYJ470	SMD	0.1W	5%	47 Ω
R1941	ERJ3GEYJ470	SMD	0.1W	5%	47 Ω
R1942	ERJ3GEYJ470	SMD	0.1W	5%	47 Ω
R1943	ERJ3GEYJ122V	S.M.CARB	0.1W	5%	1K2 Ω
R1944	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R1946	D0GB103JA008	SMD	.063W	5%	10K Ω
R1947	D0GB472JA008	SMD	.063W	5%	4K7 Ω
R1949	D0GB221JA008	SMD	.063W	5%	220 Ω
R1950	D0GB221JA008	SMD	.063W	5%	220 Ω
R1952	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R1953	ERJ3GEYJ330	SMD	0.1W	5%	33 Ω
R2000	ERJ3GEYJ471	SMD	0.1W	5%	470 Ω
R2001	D0GB104JA008	SMD	.063W	5%	100K Ω

Cct Ref	Parts Number	Description			
R2002	ERJ3EKF6192V	SMD	0.1W	1%	61K9 Ω
R2003	ERJ3EKF2202V	SMD	0.1W	1%	22K Ω
R2004	ERJ3EKF2202V	SMD	0.1W	1%	22K Ω
R2005	D0GB104JA041	SMD	0.1W	5%	100K Ω
R2006	D0GB104JA041	SMD	0.1W	5%	100K Ω
R2007	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 Ω
R2008	D0GB103JA041	SMD	0.1W	5%	10K Ω
R2009	ERJ3GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R2010	ERJ3GEYJ471	SMD	0.1W	5%	470 Ω
R2011	D0GB104JA008	SMD	.063W	5%	100K Ω
R2100	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R2101	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R2103	D0GB123JA008	SMD	.063W	5%	12K Ω
R2104	D0GB104JA008	SMD	.063W	5%	100K Ω
R2105	D0GB101JA008	SMD	.063W	5%	100 Ω
R2106	D0GB682JA008	SMD	.063W	5%	6K8 Ω
R2107	D0GB123JA008	SMD	.063W	5%	12K Ω
R2108	D0GB104JA008	SMD	.063W	5%	100K Ω
R2109	D0GB101JA008	SMD	.063W	5%	100 Ω
R2110	D0GB682JA008	SMD	.063W	5%	6K8 Ω
R2300	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R2301	D0GB102JA041	SMD	0.1W	5%	1K Ω
R2302	ERJ3GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R2303	D0GB103JA041	SMD	0.1W	5%	10K Ω
R2304	D0GB104JA041	SMD	0.1W	5%	100K Ω
R2305	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R2306	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R2307	D0GB333JA008	SMD	.063W	5%	33K Ω
R2308	D0GB102JA008	SMD	.063W	5%	1K Ω
R2309	D0GB104JA008	SMD	.063W	5%	100K Ω
R2310	D0GB103JA008	SMD	.063W	5%	10K Ω
R2311	D0GB153JA008	SMD	.063W	5%	15K Ω
R2313	ERJ3GEYJ223V	S.M.CARB	0.1W	5%	22K Ω
R2315	ERJ3GEYJ102	SMD	0.1W	5%	1K Ω
R2316	ERJ3GEYJ182V	SMD	0.1W	5%	1K8 Ω
R2320	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R2321	D0GBR00Z0002	SMD	0.1W	-	0 Ω
R2322	ERJ3GEYJ331	SMD	0.1W	5%	330 Ω
R2323	ERJ3GEYJ331	SMD	0.1W	5%	330 Ω
R2324	ERJ3GEYJ331	SMD	0.1W	5%	330 Ω
R2325	ERJ3GEYJ331	SMD	0.1W	5%	330 Ω
R2326	ERJ3GEYJ331	SMD	0.1W	5%	330 Ω
R2327	ERJ3GEYJ331	SMD	0.1W	5%	330 Ω
R2328	D0GB103JA041	SMD	0.1W	5%	10K Ω
R2329	ERJ3GEYJ471	SMD	0.1W	5%	470 Ω
R2351	ERJ3GEYJ681V	SMD	0.1W	5%	680 Ω
R2352	ERJ3GEYJ681V	SMD	0.1W	5%	680 Ω
R2353	D0GB101JA041	SMD	0.1W	5%	100 Ω
R2354	D0GB101JA041	SMD	0.1W	5%	100 Ω
R2355	D0GB153JA008	SMD	.063W	5%	15K Ω
R2356	D0GB104JA008	SMD	.063W	5%	100K Ω
R2357	D0GB104JA008	SMD	.063W	5%	100K Ω
R2358	D0GB153JA008	SMD	.063W	5%	15K Ω
R2359	D0GB153JA008	SMD	.063W	5%	15K Ω
R2360	ERJ8GEYJ151V	SMD	0.25W	5%	150 Ω
R2361	ERJ8GEYJ151V	SMD	0.25W	5%	150 Ω
R2503	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820 Ω
R2504	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560 Ω
R2513	ERJ8GEYJ470V	SMD	0.25W	5%	47 Ω
R2514	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R2515	ERJ6GEYJ224	S.M.CARB	0.1W	5%	220K Ω
R2516	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R2517	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K Ω
R2518	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K Ω
R2519	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R2520	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R2523	D0GD103JA036	SMD	.125W	5%	10K Ω
R2525	D0GD103JA036	SMD	.125W	5%	10K Ω

Cct Ref	Parts Number	Description			
R2551	D0GB101JA041	SMD	0.1W	5%	100 Ω
R2552	D0GB104JA041	SMD	0.1W	5%	100K Ω
R2553	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47 Ω
R3001	D0GB184JA008	SMD	.063W	5%	180K Ω
R3002	D0GB184JA008	SMD	.063W	5%	180K Ω
R3005	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3006	D0GB184JA008	SMD	.063W	5%	180K Ω
R3007	D0GB184JA008	SMD	.063W	5%	180K Ω
R3009	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3010	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3011	D0GB184JA008	SMD	.063W	5%	180K Ω
R3012	D0GB184JA008	SMD	.063W	5%	180K Ω
R3013	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3014	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3015	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3016	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R3018	D0GD221JA017	SMD	.01W	5%	220 Ω
R3022	D0GD221JA017	SMD	.01W	5%	220 Ω
R3023	D0GD152JA017	SMD	0.1W	5%	1K5 Ω
R3024	D0GD221JA017	SMD	.01W	5%	220 Ω
R3025	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3026	D0GB123JA008	SMD	.063W	5%	12K Ω
R3030	D0GB331JA008	SMD	.063W	5%	330 Ω
R3031	D0GB331JA008	SMD	.063W	5%	330 Ω
R3034	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3035	D0GB331JA008	SMD	.063W	5%	330 Ω
R3036	D0GB331JA008	SMD	.063W	5%	330 Ω
R3039	D0GB105JA008	SMD	.063W	5%	1M Ω
R3043	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3044	D0GD221JA017	SMD	.01W	5%	220 Ω
R3046	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3047	ERJ3GEYJ474	SMD	0.1W	5%	470K Ω
R3048	ERJ3GEYJ683	SMD	0.1W	5%	68K Ω
R3050	D0GB682JA008	SMD	.063W	5%	6K8 Ω
R3051	ERJ3GEYJ152	SMD	0.1W	5%	1K5 Ω
R3052	D0GB751JA008	SMD	.063W	5%	750 Ω
R3054	ERJ3GEYJ225	SMD	0.1W	5%	2M2 Ω
R3056	ERJ3GEYJ224V	S.M.CARB	0.1W	5%	220K Ω
R3057	ERJ3GEYJ273	SMD	0.1W	5%	27K Ω
R3058	ERJ3GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R3059	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R3060	D0GB682JA008	SMD	.063W	5%	6K8 Ω
R3061	ERJ3GEYJ152	SMD	0.1W	5%	1K5 Ω
R3062	D0GB751JA008	SMD	.063W	5%	750 Ω
R3078	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3080	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3081	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3082	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3083	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3084	D0GB102JA008	SMD	.063W	5%	1K Ω
R3085	D0GB222JA008	SMD	.063W	5%	2K2 Ω
R3086	D0GB102JA008	SMD	.063W	5%	1K Ω
R3087	D0GB222JA008	SMD	.063W	5%	2K2 Ω
R3088	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3089	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3090	ERJ8GEYJ750	SMD	0.25W	5%	75 Ω
R3091	ERJ3GEYJ101	SMD	0.1W	5%	100 Ω
R3092	D0GB222JA008	SMD	.063W	5%	2K2 Ω
R3093	D0GB222JA008	SMD	.063W	5%	2K2 Ω
R3094	D0GB222JA008	SMD	.063W	5%	2K2 Ω
R3096	ERJ3GEYJ101	SMD	0.1W	5%	100 Ω
R3097	D0GB183JA008	SMD	.063W	5%	18K Ω
R3098	D0GB183JA008	SMD	.063W	5%	18K Ω
R3099	D0GB183JA008	SMD	.063W	5%	18K Ω
R3100	D0GB682JA008	SMD	.063W	5%	6K8 Ω
R3101	ERJ3GEYJ152	SMD	0.1W	5%	1K5 Ω
R3102	D0GB751JA008	SMD	.063W	5%	750 Ω
R3104	D0GB682JA008	SMD	.063W	5%	6K8 Ω

Cct Ref	Parts Number	Description			
R3105	ERJ3GEYJ152	SMD	0.1W	5%	1K5 Ω
R3106	D0GB751JA008	SMD	.063W	5%	750 Ω
R3107	ERJ3GEYJ152	SMD	0.1W	5%	1K5 Ω
R3108	D0GB682JA008	SMD	.063W	5%	6K8 Ω
R3110	D0GB102JA008	SMD	.063W	5%	1K Ω
R3111	D0GB682JA008	SMD	.063W	5%	6K8 Ω
R3112	D0GB102JA008	SMD	.063W	5%	1K Ω
R3113	D0GB751JA008	SMD	.063W	5%	750 Ω
R3115	D0GB331JA008	SMD	.063W	5%	330 Ω
R3116	D0GB331JA008	SMD	.063W	5%	330 Ω
R3117	D0GB101JA008	SMD	.063W	5%	100 Ω
R3118	D0GB102JA008	SMD	.063W	5%	1K Ω
R3119	D0GB101JA008	SMD	.063W	5%	100 Ω
R3120	D0GB102JA008	SMD	.063W	5%	1K Ω
R3121	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3122	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3123	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3124	ERJ8GEYJ750	SMD	0.25W	5%	75 Ω
R3125	D0GB183JA008	SMD	.063W	5%	18K Ω
R3126	D0GB183JA008	SMD	.063W	5%	18K Ω
R3128	ERJ3GEYJ334	SMD	0.1W	5%	330K Ω
R3129	D0GB102JA008	SMD	.063W	5%	1K Ω
R3130	D0GB102JA008	SMD	.063W	5%	1K Ω
R3131	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3133	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3134	D0GD152JA017	SMD	0.1W	5%	1K5 Ω
R3135	D0GB123JA008	SMD	.063W	5%	12K Ω
R3137	D0GB183JA008	SMD	.063W	5%	18K Ω
R3138	D0GB751JA008	SMD	.063W	5%	750 Ω
R3139	ERJ3GEYJ152	SMD	0.1W	5%	1K5 Ω
R3140	D0GB101JA008	SMD	.063W	5%	100 Ω
R3141	D0GB101JA008	SMD	.063W	5%	100 Ω
R3142	D0GB101JA008	SMD	.063W	5%	100 Ω
R3143	D0GB101JA008	SMD	.063W	5%	100 Ω
R3215	D0GB103JA008	SMD	.063W	5%	10K Ω
R3218	D0GB103JA008	SMD	.063W	5%	10K Ω
R3221	D0GB103JA008	SMD	.063W	5%	10K Ω
R3222	D0GB103JA008	SMD	.063W	5%	10K Ω
R3223	D0GB101JA008	SMD	.063W	5%	100 Ω
R3224	D0GB123JA008	SMD	.063W	5%	12K Ω
R3225	D0GB103JA008	SMD	.063W	5%	10K Ω
R3226	D0GB473JA008	SMD	.063W	5%	47K Ω
R3227	D0GB103JA008	SMD	.063W	5%	10K Ω
R3232	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R3233	D0GB473JA008	SMD	.063W	5%	47K Ω
R3234	D0GB222JA008	SMD	.063W	5%	2K2 Ω
R3235	D0GB152JA008	SMD	.063W	5%	1K5 Ω
R3236	D0GB223JA008	SMD	.063W	5%	22K Ω
R3237	D0GB473JA008	SMD	.063W	5%	47K Ω
R3240	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3241	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3242	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R3243	D0GB220JA008	SMD	.063W	5%	22 Ω
R3244	D0GB220JA008	SMD	.063W	5%	22 Ω
R3245	D0GB220JA008	SMD	.063W	5%	22 Ω
R3246	D0GB102JA008	SMD	.063W	5%	1K Ω
R3247	D0GB102JA008	SMD	.063W	5%	1K Ω
R3248	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R3249	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R3700	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39K Ω
R3701	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39K Ω
R3702	ERJ6GEYJ184	S.M.CARB	0.1W	5%	180K Ω
R3703	ERJ6GEYJ184	S.M.CARB	0.1W	5%	180K Ω
R3800	D0GB101JA008	SMD	.063W	5%	100 Ω
R3801	ERDS2TJ753T	FILM	0.25W	5%	75K Ω
R3802	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R3804	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R3805	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω

Cct Ref	Parts Number	Description			
R3828	ERJ3GEYJ180	SMD	0.1W	5%	18 Ω
R3858	ERJ3GEYJ180	SMD	0.1W	5%	18 Ω
R3860	ERJ3GEYJ821	SMD	0.1W	5%	820 Ω
R3861	ERJ3GEYJ272	SMD	0.1W	5%	2K7 Ω
R3870	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R3873	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R3881	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R3884	ERJ3RBD472V	SMD	.063W	0.5	4K7 Ω
R3885	ERJ3RBD563V	SMD	.063W	0.5	56K Ω
R3886	ERJ3RBD563V	SMD	.063W	0.5	56K Ω
R3887	ERJ3GEYJ563V	S.M.CARB	0.1W	5%	56K Ω
R3888	D0GD103JA036	SMD	.125W	5%	10K Ω
R3889	ERJ3GEYJ122V	S.M.CARB	0.1W	5%	1K2 Ω
R3890	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R3891	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R3892	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3893	ERJ3GEYJ564V	SMD	0.1W	5%	564K Ω
R3895	ERJ3GEYJ272	SMD	0.1W	5%	2K7 Ω
R3896	ERJ3GEYJ272	SMD	0.1W	5%	2K7 Ω
R3897	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R3898	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R3899	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R3900	D0GB102JA008	SMD	.063W	5%	1K Ω
R3902	ERJ6GEYJ242	S.M.CARB	0.1W	5%	2K4 Ω
R3913	D0GBR00Z0002	SMD	0.1W	-	0 Ω
R3916	D0GB101JA008	SMD	.063W	5%	100 Ω
R3917	D0GB102JA041	SMD	0.1W	5%	1K Ω
R3918	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R3919	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R3920	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R3921	ERJ3GEYJ472	SMD	0.1W	5%	4K7 Ω
R3922	D0GB102JA041	SMD	0.1W	5%	1K Ω
R3923	D0GB102JA041	SMD	0.1W	5%	1K Ω
R3924	ERJ3GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R3925	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R3926	D0GB103JA041	SMD	0.1W	5%	10K Ω
R3929	ERJ3GEYJ273	SMD	0.1W	5%	27K Ω
R3930	ERJ3GEYJ273	SMD	0.1W	5%	27K Ω
R3933	ERJ3GEYJ103	SMD	0.1W	5%	10K Ω
R3937	ERJ3GEYJ912V	SMD	0.1W	5%	9K1 Ω
R3941	ERJ3GEYJ333V	SMD	0.1W	5%	33K Ω
R3944	D0GBR00Z0002	SMD	0.1W	-	0 Ω
R4001	ERJ3GEYJ682	SMD	0.1W	5%	6K8 Ω
R4003	D0GB102JA008	SMD	.063W	5%	1K Ω
R4008	D0GB101JA008	SMD	.063W	5%	100 Ω
R4009	ERJ3GEYJ360V	SMD	0.1W	5%	36 Ω
R4010	ERJ3GEYJ360V	SMD	0.1W	5%	36 Ω
R4011	D0GB102JA008	SMD	.063W	5%	1K Ω
R4014	D0GB101JA008	SMD	.063W	5%	100 Ω
R4023	D0GB105JA008	SMD	.063W	5%	1M Ω
R4024	D0GB105JA008	SMD	.063W	5%	1M Ω
R4025	D0GB105JA008	SMD	.063W	5%	1M Ω
R4026	D0GB105JA008	SMD	.063W	5%	1M Ω
R4027	D0GB105JA008	SMD	.063W	5%	1M Ω
R4028	D0GB105JA008	SMD	.063W	5%	1M Ω
R4029	D0GB105JA008	SMD	.063W	5%	1M Ω
R4030	D0GB105JA008	SMD	.063W	5%	1M Ω
R4031	D0GB105JA008	SMD	.063W	5%	1M Ω
R4032	D0GB105JA008	SMD	.063W	5%	1M Ω
R4033	D0GB105JA008	SMD	.063W	5%	1M Ω
R4034	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R4035	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R4036	ERJ6ENF75R0	SMD	.125W	1%	75 Ω
R4039	D0GB105JA008	SMD	.063W	5%	1M Ω
R4040	D0GB105JA008	SMD	.063W	5%	1M Ω
R4041	D0GB105JA008	SMD	.063W	5%	1M Ω
R4042	D0GB105JA008	SMD	.063W	5%	1M Ω
R4043	D0GB105JA008	SMD	.063W	5%	1M Ω

Cct Ref	Parts Number	Description			
R4044	D0GB105JA008	SMD	.063W	5%	1M Ω
R4045	D0GB105JA008	SMD	.063W	5%	1M Ω
R4046	D0GB105JA008	SMD	.063W	5%	1M Ω
R4047	D0GB101JA008	SMD	.063W	5%	100 Ω
R4048	D0GB101JA008	SMD	.063W	5%	100 Ω
R4049	D0GB101JA008	SMD	.063W	5%	100 Ω
R4050	D0GB101JA008	SMD	.063W	5%	100 Ω
R4051	D0GB562JA008	SMD	.063W	5%	5K6 Ω
R4052	D0GB102JA008	SMD	.063W	5%	1K Ω
R4053	D0GB101JA008	SMD	.063W	5%	100 Ω
R4056	ERJ3GEYJ123	SMD	0.1W	5%	12K Ω
R4057	ERJ3GEYJ123	SMD	0.1W	5%	12K Ω
R4058	D0GB101JA008	SMD	.063W	5%	100 Ω
R4059	D0GB101JA008	SMD	.063W	5%	100 Ω
R4061	D0GB220JA008	SMD	.063W	5%	22 Ω
R4062	D0GB103JA008	SMD	.063W	5%	10K Ω
R4065	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R4066	D0GB105JA008	SMD	.063W	5%	1M Ω
R4067	D0GB105JA008	SMD	.063W	5%	1M Ω
R4068	D0GB105JA008	SMD	.063W	5%	1M Ω
R4069	D0GB105JA008	SMD	.063W	5%	1M Ω
R4070	D0GB105JA008	SMD	.063W	5%	1M Ω
R4071	ERJ3GEYJ103	SMD	0.1W	5%	10K Ω
R4072	D0GB105JA008	SMD	.063W	5%	1M Ω
R4074	D0GB103JA008	SMD	.063W	5%	10K Ω
R4075	ERJ3GEYJ562	SMD	0.1W	5%	5K6 Ω
R4076	ERJ3GEYJ103	SMD	0.1W	5%	10K Ω
R4077	D0GB101JA008	SMD	.063W	5%	100 Ω
R4078	D0GB101JA008	SMD	.063W	5%	100 Ω
R4079	D0GB103JA008	SMD	.063W	5%	10K Ω
R4080	D0GB101JA008	SMD	.063W	5%	100 Ω
R4081	D0GB105JA008	SMD	.063W	5%	1M Ω
R4082	D0GB105JA008	SMD	.063W	5%	1M Ω
R4084	D0GB101JA008	SMD	.063W	5%	100 Ω
R4085	D0GB101JA008	SMD	.063W	5%	100 Ω
R4086	D0GB101JA008	SMD	.063W	5%	100 Ω
R4087	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R4088	D0GB101JA008	SMD	.063W	5%	100 Ω
R4089	D0GB102JA008	SMD	.063W	5%	1K Ω
R4090	D0GB101JA008	SMD	.063W	5%	100 Ω
R4091	ERJ6GEY0R00	S.M.CARB	0.1W	-	0 Ω
R4092	D0GB333JA008	SMD	.063W	5%	33K Ω
R4093	D0GB101JA008	SMD	.063W	5%	100 Ω
R4098	D0GB473JA008	SMD	.063W	5%	47K Ω
R4104	D0GB102JA008	SMD	.063W	5%	1K Ω
R4118	D0GBR00Z0002	SMD	0.1W	-	0 Ω
R4123	D0GB105JA008	SMD	.063W	5%	1M Ω
R4124	D0GB105JA008	SMD	.063W	5%	1M Ω
R4125	D0GB223JA008	SMD	.063W	5%	22K Ω
R4126	D0GB223JA008	SMD	.063W	5%	22K Ω
R4127	D0GB223JA008	SMD	.063W	5%	22K Ω
R4128	D0GB223JA008	SMD	.063W	5%	22K Ω
R4129	D0GB223JA008	SMD	.063W	5%	22K Ω
R4130	D0GB223JA008	SMD	.063W	5%	22K Ω
R4131	D0GB223JA008	SMD	.063W	5%	22K Ω
R4132	D0GB223JA008	SMD	.063W	5%	22K Ω
R4156	ERJ3GEYJ101	SMD	0.1W	5%	100 Ω
R4157	ERJ3GEYJ101	SMD	0.1W	5%	100 Ω
R4160	D0GB105JA008	SMD	.063W	5%	1M Ω
R4161	D0GB105JA008	SMD	.063W	5%	1M Ω
R4162	D0GB105JA008	SMD	.063W	5%	1M Ω
R4163	D0GB105JA008	SMD	.063W	5%	1M Ω
R4164	D0GB105JA008	SMD	.063W	5%	1M Ω
R4165	D0GB105JA008	SMD	.063W	5%	1M Ω
R4166	D0GB105JA008	SMD	.063W	5%	1M Ω
R4167	D0GB105JA008	SMD	.063W	5%	1M Ω
R4168	D0GB105JA008	SMD	.063W	5%	1M Ω
R4169	D0GB105JA008	SMD	.063W	5%	1M Ω

Cct Ref	Parts Number	Description			
R5027	D0GB103JA008	SMD	.063W	5%	10K Ω
R5028	D0GB220JA008	SMD	.063W	5%	22 Ω
R5029	D0GB220JA008	SMD	.063W	5%	22 Ω
R5093	D1BB2702A055	CHIP RES	0.1W	1%	27K Ω
R5094	D0GB221JA008	SMD	.063W	5%	220 Ω
R5095	ERJ3GEYJ224V	S.M.CARB	0.1W	5%	220K Ω
R5096	D0GB104JA008	SMD	.063W	5%	100K Ω
R5097	D0GB473JA008	SMD	.063W	5%	47K Ω
R5098	D0GB104JA008	SMD	.063W	5%	100K Ω
R5099	D0GB472JA008	SMD	.063W	5%	4K7 Ω
R5100	ERJ3GEYJ225	SMD	0.1W	5%	2M2 Ω
R5102	D0GB223JA008	SMD	.063W	5%	22K Ω
R5120	D0GB473JA008	SMD	.063W	5%	47K Ω
R5121	D0GB473JA008	SMD	.063W	5%	47K Ω
R5122	D0GB104JA008	SMD	.063W	5%	100K Ω
R5124	D0GB473JA008	SMD	.063W	5%	47K Ω
R5125	D0GB473JA008	SMD	.063W	5%	47K Ω
R5126	D0GB104JA008	SMD	.063W	5%	100K Ω
R5128	ERJ2GE0R00X	SMD	.063W	-	0 Ω
R5129	D0GB473JA008	SMD	.063W	5%	47K Ω
R5134	D0GB473JA008	SMD	.063W	5%	47K Ω
CAPACITORS					
C801	ECA1HHG010B	ELECT	50V		1μF
C802	ECJ2VB1H182K	S.M.CAP	50V		1.8nF
C803	ECA1HHGR22B	ELECT	50V		0.22μF
C804	F1J1H222A834	S.M.CAP	50V		2.2nF
C805	ECKCNA101MB7	CERAMIC	250V		100pF
C806	ECKCNA101MB7	CERAMIC	250V		100pF
C807	ECJ2VF1H104Z	S.M.CAP	50V		100nF
C808	ECQU2A224BN9	FILM	250V		220nF
C810	ECA1HHG100B	ELECT	50V		10μF
C811	F1J1H102A834	S.M.CAP	50V		1nF
C812	ECKWBE472ZER	CERAMIC	250V		4.7nF
C813	ECKWBE472ZER	CERAMIC	250V		4.7nF
C814	ECQU2A224BN9	FILM	250V		220nF
C815	ECKWBE472ZER	CERAMIC	250V		4.7nF
C816	ECKWBE472ZER	CERAMIC	250V		4.7nF
C818	ECKW3D151KBP	SMD	2KV		150pF
C819	ECA1HHG101B	ELECT	50V		100μF
C820	ECQE6474JFB	FILM	630V		470nF
C822	F2A2W1010008	ELECT	450V		100μF
C823	ECQU2A224BN9	FILM	250V		220nF
C824	F1J1H223A834	S.M.CAP	50V		22nF
C825	ECJ2VB1H821K	S.M.CAP	50V		820pF
C827	ECA1HHG470B	ELECT	50V		47μF
C828	F1J1H223A834	S.M.CAP	50V		22nF
C829	F1J1H104A835	S.M.CAP	50V		100nF
C830	F1J1H103A834	S.M.CAP	50V		10nF
C831	ECA1HHG010B	ELECT	50V		1μF
C832	F1J1H104A717	S.M.CAP	50V		100nF
C833	F2A2W2200012	ELECT	450V		22μF
C834	F1J1C1050030	S.M.CAP	16V		1000nF
C836	ECWF6123HLB	FILM	630V		12nF
C837	F1J1H223A834	S.M.CAP	50V		22nF
C838	ECWF6153HLB	FILM	630V		15nF
C839	ECJ2VB1H331K	S.M.CAP	50V		330pF
C840	ECA1HHG100B	ELECT	50V		10μF
C841	F1J1C104A195	S.M.CAP	16V		100nF
C842	ECJ2VB1H182K	S.M.CAP	50V		1.8nF
C843	ECA1HHG470B	ELECT	50V		47μF
C844	ECKW3A472KBP	CERAMIC	1KV		4.7nF
C846	F1J1H224A839	S.M.CAP	50V		220nF
C847	ECKCNA152ME7	CERAMIC	400V		1.5nF
C848	ECKCNA101MB7	CERAMIC	250V		100pF
C849	ECQU2A224BN9	FILM	250V		220nF
C851	ECKC3A102J	CERAMIC	1KV		1nF
C852	F1J1H103A834	S.M.CAP	50V		10nF

Cct Ref	Parts Number	Description			
C853	F2A1A2220071	ELECT	10V		2200μF
C854	F1J1H104A835	S.M.CAP	50V		100nF
C855	F1J1H104A835	S.M.CAP	50V		100nF
C856	ECQV1H474JZ	FILM	50V		470nF
C862	F2A1A6810030	ELECT	10V		680μF
C863	F2A1V1020093	ELECT	35V		1000μF
C867	F2A1V1020093	ELECT	35V		1000μF
C868	F2A1V1020093	ELECT	35V		1000μF
C869	F1J1H104A835	S.M.CAP	50V		100nF
C870	F2A1V1020093	ELECT	35V		1000μF
C890	F1J1H104A835	S.M.CAP	50V		100nF
C891	F1J1H104A835	S.M.CAP	50V		100nF
C1168	F1H1C104A001	S.M.CAP	16V		100nF
C1181	ECJ1VB1H102	S.M.CAP	50V		1nF
C1183	ECJ1VB1H104	S.M.CAP	50V		100nF
C1185	ECJ1VB1H102	S.M.CAP	50V		1nF
C1186	ECJ1VB1H102	S.M.CAP	50V		1nF
C1590	F1H1E104A129	S.M.CAP	25V		100nF
C1800	ECJ1VB1H104	S.M.CAP	50V		100nF
C1825	ECJ1VB1H102	S.M.CAP	50V		1nF
C1834	ECJ2FB1C474K	S.M.CAP	16V		470nF
C1835	ECJ1VB1C563K	S.M.CAP	16V		56nF
C1836	F1H1C104A001	S.M.CAP	16V		100nF
C1837	ECJ1VC1H331J	S.M.CAP	50V		330pF
C1839	F1H1H103A013	S.M.CAP	50V		10nF
C1841	ECJ1VB1H102	S.M.CAP	50V		1nF
C1845	F1H1E104A129	S.M.CAP	25V		100nF
C1865	ECJ1VF1A105	S.M.CAP	10V		1μF
C1866	ECJ1VF1A105	S.M.CAP	10V		1μF
C1867	ECJ1VF1A105	S.M.CAP	10V		1μF
C1868	ECJ1VF1A105	S.M.CAP	10V		1μF
C1871	ECJ1VB0J225K	S.M.CAP	6.3V		2.2μF
C1872	F1H1H103A970	S.M.CAP	50V		10nF
C1873	ECJ1VB1H562K	S.M.CAP	50V		5.6nF
C1874	ECJ1VB1A105K	S.M.CAP	10V		1000nF
C1875	EEH1B1A221P	ELECT	10V		220μF
C1876	ECJ3YB1E106M	S.M.CAP	25V		10μF
C1879	ECJ1VB1A105K	S.M.CAP	10V		1000nF
C1880	ECJ1VB1H103	S.M.CAP	50V		10nF
C1881	F2A1V331A199	ELECT	35V		330μF
C1882	ECJ1VB1H103	S.M.CAP	50V		10nF
C1883	ECJ1VB1H472K	S.M.CAP	50V		4.7nF
C1884	ECJ1VC1H101J	S.M.CAP	50V		100pF
C1885	F2A1C471A537	ELECT	16V		470μF
C1886	ECJ1VB1H104	S.M.CAP	50V		100nF
C1887	ECJ1VB1H104	S.M.CAP	50V		100nF
C1888	F2A1C331A127	ELECT	16V		330μF
C1889	ECJ1VB1H103	S.M.CAP	50V		10nF
C1890	ECJ1VB1H222K	S.M.CAP	50V		2.2nF
C1893	ECJ1VB1H104	S.M.CAP	50V		100nF
C1903	ECJ3YB1E106M	S.M.CAP	25V		10μF
C1904	EEH1B0G221P	ELECT	4V		220μF
C1905	ECJ1VB1A105K	S.M.CAP	10V		1000nF
C1907	ECJ1VB1A105K	S.M.CAP	10V		1000nF
C1908	F1K0J226A008	S.M.CAP	6.3V		22μF
C1909	F1K0J226A008	S.M.CAP	6.3V		22μF
C1910	F1J1H473A835	S.M.CAP	50V		47nF
C1911	F2A1V331A199	ELECT	35V		330μF
C1912	F1H1H103A970	S.M.CAP	50V		10nF
C1914	F1G1H271A730	S.M.CAP	50V		270pF
C1915	F1H1H222A970	S.M.CAP	50V		2.2nF
C1917	F1K0J226A008	S.M.CAP	6.3V		22μF
C1918	F1K0J226A008	S.M.CAP	6.3V		22μF
C1920	EEH1B0G221P	ELECT	4V		220μF
C1921	ECJ1VB1A105K	S.M.CAP	10V		1000nF
C1923	ECJ1VB1A105K	S.M.CAP	10V		1000nF
C1924	ECJ3YB1E106M	S.M.CAP	25V		10μF
C1925	ECJ1VB1H562K	S.M.CAP	50V		5.6nF

Cct Ref	Parts Number	Description		
C1930	F1H1H103A970	S.M.CAP	50V	10nF
C1934	F1H1H103A970	S.M.CAP	50V	10nF
C1935	ECJ1VB1H102	S.M.CAP	50V	1nF
C1936	F1K0J226A008	S.M.CAP	6.3V	22µF
C1951	ECJ1VB1H104	S.M.CAP	50V	100nF
C1952	ECJ1VB1H104	S.M.CAP	50V	100nF
C1971	ECJ0EB1A104K	S.M.CAP	10V	100nF
C2000	ECJ1VB1C105K	SMD	16V	1000nF
C2002	F1H1E104A129	S.M.CAP	25V	100nF
C2003	ECJ2FB1E105K	S.M.CAP	25V	1µF
C2004	ECJ3YB1E106M	S.M.CAP	25V	10µF
C2005	F1H1E104A129	S.M.CAP	25V	100nF
C2006	F1H1E104A129	S.M.CAP	25V	100nF
C2007	F1J1C474A194	S.M.CAP	16V	470nF
C2008	F1H1E104A129	S.M.CAP	25V	100nF
C2009	ECJ2FB1E105K	S.M.CAP	25V	1µF
C2010	F1H1E104A129	S.M.CAP	25V	100nF
C2011	F1H1E104A129	S.M.CAP	25V	100nF
C2012	ECJ1VB1C105K	SMD	16V	1000nF
C2014	F2A1E100A936	ELECT	25V	10µF
C2015	ECJ1VB1C105K	SMD	16V	1000nF
C2016	F1H1E104A129	S.M.CAP	25V	100nF
C2017	ECJ3YB1E106M	S.M.CAP	25V	10µF
C2018	F2A1E471B372	ELECT	25V	470µF
C2019	ECJ3YB1E106M	S.M.CAP	25V	10µF
C2020	ECJ2FB1E105K	S.M.CAP	25V	1µF
C2021	F1J1C474A194	S.M.CAP	16V	470nF
C2022	F1H1E104A129	S.M.CAP	25V	100nF
C2024	F1H1E104A129	S.M.CAP	25V	100nF
C2025	F1H1E104A129	S.M.CAP	25V	100nF
C2026	ECJ2FB1E105K	S.M.CAP	25V	1µF
C2027	F1H1E104A129	S.M.CAP	25V	100nF
C2028	F2A1H3R3A267	ELECT	50V	3.3µF
C2029	F1H1H223A970	S.M.CAP	50V	22nF
C2301	EEEFK1V331P	ELECT	35V	330µF
C2320	F1H1H103A970	S.M.CAP	50V	10nF
C2321	ECJ1VB1H102	S.M.CAP	50V	1nF
C2322	ECJ1VB1H102	S.M.CAP	50V	1nF
C2350	F2A1C101A180	ELECT	16V	100µF
C2351	F2A1C101A180	ELECT	16V	100µF
C2352	F1H1A1050032	S.M.CAP	10V	1000nF
C2353	F2A1C470A180	ELECT	16V	47µF
C2354	F1H1H103A970	S.M.CAP	50V	10nF
C2355	F2A1C470A180	ELECT	16V	47µF
C2356	F1H1A1050032	S.M.CAP	10V	1000nF
C2357	F1H1H102A219	CERAMIC	50V	1nF
C2358	F1H1H102A219	CERAMIC	50V	1nF
C2359	F1H1A1050032	S.M.CAP	10V	1000nF
C2511	ECJ1VB1H104	S.M.CAP	50V	100nF
C2514	F2G0J470A019	ELECT	6.3V	47µF
C2515	F1J1H103A834	S.M.CAP	50V	10nF
C2551	F1K1C105A023	S.M.CAP	16V	1000nF
C2552	F2G0J220A019	ELECT	6.3V	22µF
C3056	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3057	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3058	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3059	F1H1C104A001	S.M.CAP	16V	100nF
C3060	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3061	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3062	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3063	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3065	F1H1C104A001	S.M.CAP	16V	100nF
C3066	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3068	ECJ1VB1C105K	SMD	16V	1000nF
C3069	F1H1H221A971	S.M.CAP	50V	220pF
C3070	F1H1H221A971	S.M.CAP	50V	220pF
C3071	ECJ1VC1H102J	S.M.CAP	50V	1nF
C3072	ECJ1VC1H102J	S.M.CAP	50V	1nF

Cct Ref	Parts Number	Description		
C3073	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3074	ECJ1VC1H331	S.M.CAP	50V	330pF
C3075	ECJ1VC1H331	S.M.CAP	50V	330pF
C3076	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3078	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3079	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3080	ECJ1VC1H102J	S.M.CAP	50V	1nF
C3081	ECJ1VC1H102J	S.M.CAP	50V	1nF
C3082	ECJ1VC1H102J	S.M.CAP	50V	1nF
C3083	ECJ1VC1H102J	S.M.CAP	50V	1nF
C3084	ECJ1VC1H331	S.M.CAP	50V	330pF
C3085	ECJ1VC1H331	S.M.CAP	50V	330pF
C3086	ECJ1VC1H331	S.M.CAP	50V	330pF
C3087	ECJ1VC1H331	S.M.CAP	50V	330pF
C3090	F1J0J1060004	S.M.CAP	6.3V	10µF
C3091	F1J0J1060004	S.M.CAP	6.3V	10µF
C3092	F1J0J1060004	S.M.CAP	6.3V	10µF
C3093	F1J0J1060004	S.M.CAP	6.3V	10µF
C3094	F1J0J1060004	S.M.CAP	6.3V	10µF
C3095	F1J0J1060004	S.M.CAP	6.3V	10µF
C3096	ECJ3YB1A106M	S.M.CAP	10V	10µF
C3202	EEEBB1C101UP	ELECT	16V	100µF
C3203	ECJ1VB1C224K	SMD	16V	220nF
C3204	F2G1C470A022	ELECT	16V	47µF
C3700	F1J1H561A836	S.M.CAP	50V	560pF
C3702	F1J1H561A836	S.M.CAP	50V	560pF
C3705	ECJ1VF1H104Z	S.M.CAP	50V	100nF
C3707	ECJ1VF1H104Z	S.M.CAP	50V	100nF
C3801	F1H1A1050032	S.M.CAP	10V	1000nF
C3850	F1H1E683A056	S.M.CAP	25V	68nF
C3851	EEUEB1H100SB	ELECT	50V	10µF
C3852	F1J1E224A227	S.M.CAP	25V	220nF
C3853	F1J1E224A227	S.M.CAP	25V	220nF
C3857	F1H1E104A129	S.M.CAP	25V	100nF
C3858	EEEBB1C470P	ELECT	16V	47µF
C3861	ECJ3YB1E106M	S.M.CAP	25V	10µF
C3862	F1J1H473A835	S.M.CAP	50V	47nF
C3863	ECJ1VF1A105	S.M.CAP	10V	1µF
C3864	ECJ3YB1E106M	S.M.CAP	25V	10µF
C3865	F1H1H103A970	S.M.CAP	50V	10nF
C3866	F1G1H271A730	S.M.CAP	50V	270pF
C3867	F1H1H102A971	S.M.CAP	50V	1nF
C3868	F1J1H473A835	S.M.CAP	50V	47nF
C3870	ECJ1VF1H104Z	S.M.CAP	50V	100nF
C3872	F1H1H103A013	S.M.CAP	50V	10nF
C3873	ECJ1VF1A225Z	S.M.CAP	10V	2.2µF
C3876	F1H0J1050013	CERAMIC	6.3V	1µF
C3878	ECJ1VB1A105K	S.M.CAP	10V	1000nF
C3880	F1H1A1050032	S.M.CAP	10V	1000nF
C3881	F1H1A1050032	S.M.CAP	10V	1000nF
C3882	F1H1E104A129	S.M.CAP	25V	100nF
C3883	F1H1A1050032	S.M.CAP	10V	1000nF
C3886	F2A1V331A199	ELECT	35V	330µF
C3887	F1H1H103A970	S.M.CAP	50V	10nF
C3888	ECJ1VB1H102	S.M.CAP	50V	1nF
C3889	F1H1H103A013	S.M.CAP	50V	10nF
C3890	F1J1E224A227	S.M.CAP	25V	220nF
C3891	ECJ1VB1H103	S.M.CAP	50V	10nF
C3902	F2G0J101A019	ELECT	6.3V	100µF
C3903	F1H1C104A001	S.M.CAP	16V	100nF
C3905	F1H1C104A001	S.M.CAP	16V	100nF
C3906	ECJ1VB1H102	S.M.CAP	50V	1nF
C3907	ECJ1VB1H102	S.M.CAP	50V	1nF
C3908	ECJ1VB1H102	S.M.CAP	50V	1nF
C4004	F1H1C104A001	S.M.CAP	16V	100nF
C4005	F1H1C104A001	S.M.CAP	16V	100nF
C4006	F1H1C104A001	S.M.CAP	16V	100nF
C4008	F1H1C104A001	S.M.CAP	16V	100nF

Cct Ref	Parts Number	Description		
C4013	F1H1C104A001	S.M.CAP	16V	100nF
C4014	F1H1C104A001	S.M.CAP	16V	100nF
C4015	F1H1C104A001	S.M.CAP	16V	100nF
C4016	F1H1C104A001	S.M.CAP	16V	100nF
C4017	F1H1C104A001	S.M.CAP	16V	100nF
C4018	F1H1C104A001	S.M.CAP	16V	100nF
C4020	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4021	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4029	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4030	F1H1H102A970	S.M.CAP	50V	1nF
C4031	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4032	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4033	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4034	ECJ1VB0J105K	S.M.CAP	6.3V	1μF
C4035	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4036	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4037	ECJ1VB0J105K	S.M.CAP	6.3V	1μF
C4038	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4039	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4040	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4041	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4043	ECJ1VB0J105K	S.M.CAP	6.3V	1μF
C4046	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4047	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4048	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4049	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4050	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4051	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4052	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4053	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4054	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4055	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4056	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4057	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4058	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4059	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4060	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4061	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4062	ECJ1VB0J105K	S.M.CAP	6.3V	1μF
C4063	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4064	ECJ2FB1C475K	SMD	16V	4700nF
C4070	F1H1C104A001	S.M.CAP	16V	100nF
C4071	ECJ1VC1H220J	S.M.CAP	50V	22pF
C4072	ECJ1VC1H220J	S.M.CAP	50V	22pF
C4073	F1H1C104A001	S.M.CAP	16V	100nF
C4074	F1J0J1060004	S.M.CAP	6.3V	10μF
C4075	F1J0J1060004	S.M.CAP	6.3V	10μF
C4076	F1J0J1060004	S.M.CAP	6.3V	10μF
C4077	F1J0J1060004	S.M.CAP	6.3V	10μF
C4078	F1J0J1060004	S.M.CAP	6.3V	10μF
C4079	F1J0J1060004	S.M.CAP	6.3V	10μF
C4080	F1J0J1060004	S.M.CAP	6.3V	10μF
C4081	F1J0J1060004	S.M.CAP	6.3V	10μF
C4082	ECJ1VC1H560J	S.M.CAP	50V	56pF
C4083	ECJ1VC1H560J	S.M.CAP	50V	56pF
C4090	ECJ1VB0J105K	S.M.CAP	6.3V	1μF
C4091	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4092	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4093	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4094	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4095	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4096	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4097	ECJ1VB0J105K	S.M.CAP	6.3V	1μF
C4098	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4099	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4100	ECJ1VB0J105K	S.M.CAP	6.3V	1μF
C4101	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4102	ECJ1VB1C104K	S.M.CAP	16V	100nF

Cct Ref	Parts Number	Description		
C4103	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4104	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4105	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4106	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4107	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4108	ECJ1VB1H102	S.M.CAP	50V	1nF
C4109	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4111	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4112	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4113	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4114	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4122	ECJ1VF1C104Z	S.M.CAP	16V	100nF
C4130	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4131	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4133	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4134	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4135	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4136	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4137	ECJ2FB0J106M	S.M.CAP	6.3V	10μF
C4139	ECJ1VB0J105K	S.M.CAP	6.3V	1μF
C4141	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4142	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4150	F1H1C104A001	S.M.CAP	16V	100nF
C4151	F1H1C104A001	S.M.CAP	16V	100nF
C4152	F1H1C104A001	S.M.CAP	16V	100nF
C4350	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4351	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4352	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4400	ECJ0EB1A104K	S.M.CAP	10V	100nF
C4401	ECJ0EB1A104K	S.M.CAP	10V	100nF
C4402	ECJ0EB1A104K	S.M.CAP	10V	100nF
C4403	ECJ0EB1A104K	S.M.CAP	10V	100nF
C4404	ECJ0EB1A104K	S.M.CAP	10V	100nF
C4405	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4406	F1H1H101A971	S.M.CAP	50V	100pF
C4407	EEH1B1C100R	ELECT	16V	10μF
C4408	ECJ1VB1H102	S.M.CAP	50V	1nF
C4409	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4410	ECJ1VB1H102	S.M.CAP	50V	1nF
C4411	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4412	ECJ1VB1H102	S.M.CAP	50V	1nF
C4413	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4414	ECJ1VB1H102	S.M.CAP	50V	1nF
C4415	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4416	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4450	ECJ0EB1A104K	S.M.CAP	10V	100nF
C4451	ECJ0EB1A104K	S.M.CAP	10V	100nF
C4452	ECJ0EB1A104K	S.M.CAP	10V	100nF
C4453	ECJ0EB1A104K	S.M.CAP	10V	100nF
C4454	ECJ0EB1A104K	S.M.CAP	10V	100nF
C4455	F1H1H101A971	S.M.CAP	50V	100pF
C4456	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4457	EEH1B1C100R	ELECT	16V	10μF
C4458	ECJ1VB1H102	S.M.CAP	50V	1nF
C4459	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4460	ECJ1VB1H102	S.M.CAP	50V	1nF
C4461	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4462	ECJ1VB1H102	S.M.CAP	50V	1nF
C4463	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4464	ECJ1VB1H102	S.M.CAP	50V	1nF
C4465	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4466	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4500	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4501	F2G0J2210013	ELECT	6.3V	220μF
C4502	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4503	ECJ1VB1C104K	S.M.CAP	16V	100nF
C4504	EEH1B0J470R	ELECT	6.3V	47μF
C4505	ECJ1VB1C104K	S.M.CAP	16V	100nF

Cct Ref	Parts Number	Description		
C4506	ECJ2FB0J106M	S.M.CAP	6.3V	10µF
C4507	ECJ2FB0J106M	S.M.CAP	6.3V	10µF
C5003	F1H1C104A001	S.M.CAP	16V	100nF
C5004	F1H1C104A001	S.M.CAP	16V	100nF
C5052	ECJ1VB1C104K	S.M.CAP	16V	100nF
C5054	F1H1H221A971	S.M.CAP	50V	220pF
C5055	F1H1C104A001	S.M.CAP	16V	100nF
C5056	F1H1C104A001	S.M.CAP	16V	100nF
C5057	F1H1C104A001	S.M.CAP	16V	100nF
C5058	F1H1C104A001	S.M.CAP	16V	100nF
C5059	F1H1C104A001	S.M.CAP	16V	100nF
C5060	F1G1A1040006	SMD	10V	100nF
C5061	F1G1A1040006	SMD	10V	100nF
FL5001	F1J1A1050020	S.M.CAP	16V	2.2µF
FL5002	F1J1A1050020	S.M.CAP	16V	2.2µF
TERMINALS AND LINKS				
A1	K1KY23AA0607	23P CONNECTOR		
A4	K1KA04BA0055	4P CONNECTOR		
A4-K1	TXJ/K80MDQ-1	A4-K1 WIRE		
A5	K1KA05AA0192	5P CONNECTOR		
A5-SP	TXAJTA5NCB	A5-SPK WIRE		
A7A	K1KA15BA0062	15P CONNECTOR		
A7-G51	TXJ/A7NCB	A7-G51 WIRE		
A8	K1KA06BA0055	6P CONNECTOR		
A8-V1	TXJ/A8NEB	A8-V1 WIRE		
A9	K1KA08AA0714	8P CONNECTOR		
A10	K1KA02A00787	2P CONNECTOR		
A16	K1KA04AA0190	4P CONNECTOR		
A16/P5-I	TXJ/A16NCB	A16/P5-INVERTER WIRE		
A18	K1KB51A00001	51P CONNECTOR		
A18-PAN	TXJTA18NCB	LVDS WIRE		
A19A	K1FB315A0006	PC TERMINAL		
G51	K1KA15AA0194	15P CONNECTOR		
JK3001	K4AK07A00002	YUV CONNECTOR		
JK3003	K4AK04A00001	AUDIO RCA TERMINAL		
JK3004	K1FB112A0005	SCART SOCKET		
JK3005	K1FB112A0005	SCART SOCKET		
JK3007	K4AK04A00005	AUDIO RCA TERMINAL		
JK3700	K4AK30B00001	AV3 TERMINAL		
JK5001	K1FY119D0003	HDMI TERMINAL		
JK5002	K1FY119D0003	HDMI TERMINAL		
K1	K1KA04BA0061	4P CONNECTOR		
P1	K1KA02A00720	2P CONNECTOR		
P2	K1KY23AA0606	23P CONNECTOR		
P5	K1KA08AA0192	8P CONNECTOR		
V1	K1KA08B00270	8P CONNECTOR		
ZA851	K9ZZ00000424	EARTH LUG		
ZA852	K9ZZ00000424	EARTH LUG		
SWITCHES				
SW2501	K0F162B00002	SWITCH		
RELAYS				
RL801	K6B2ADA00007	RELAY		△
DIFFERENCES FOR MODEL TX--37LZ8F				
EXPLODED VIEW				
25	A-37LZ8F	A P.C.B.	x	RTL △
26	TBM0E1576	MODEL LABEL		△
INSTRUCTION BOOKS				
.	TQB0E0707A	GERMAN		△
.	TQB0E0707B	DUTCH		△
.	TQB0E0707C	ITALIAN		△
.	TQB0E0707D	FRENCH		△
.	TQB0E0707E	SPANISH		△
.	TQB0E0707F	SWEDISH		△
.	TQB0E0707G	NORWEGIAN		△

Cct Ref	Parts Number	Description	
.	TQB0E0707H	FINNISH	△
.	TQB0E0707I	LITHUANIAN	△
.	TQB0E0707J	PORTUGUESE	△
.	TQB0E0707K	DANISH	△
.	TQB0E0707M	BULGARIAN	△
.	TQB0E0707N	ROMANIAN	△
.	TQB0E0707O	LATVIAN	△
.	TQB0E0707P	POLISH	△
.	TQB0E0707Q	HUNGARIAN	△
.	TQB0E0707R	CZECH	△
.	TQB0E0707S	GREEK	△
.	TQB0E0707T	TURKISH	△
.	TQB0E0707U	ENGLISH	△
.	TQB0E0707V	CROATIAN	△
.	TQB0E0707W	SLOVAKIAN	△
.	TQB0E0707X	CD ROM	△
.	TQB0E0707Z	ESTONIAN	△
I.C.s			
IC1102	X24C37LZ8F	EEPROM	
DIFFERENCES FOR MODEL TX--37LZ8P			
EXPLODED VIEW			
25	A-37LZ8P	A P.C.B.	x RTL △
26	TBM0E1578	MODEL LABEL	△
INSTRUCTION BOOKS			
.	TQB0E0709A	GERMAN	△
.	TQB0E0709B	DUTCH	△
.	TQB0E0709C	ITALIAN	△
.	TQB0E0709D	FRENCH	△
.	TQB0E0709E	SPANISH	△
.	TQB0E0709F	SWEDISH	△
.	TQB0E0709G	NORWEGIAN	△
.	TQB0E0709H	FINNISH	△
.	TQB0E0709I	LITHUANIAN	△
.	TQB0E0709J	PORTUGUESE	△
.	TQB0E0709K	DANISH	△
.	TQB0E0709M	BULGARIAN	△
.	TQB0E0709N	ROMANIAN	△
.	TQB0E0709O	LATVIAN	△
.	TQB0E0709P	POLISH	△
.	TQB0E0709Q	HUNGARIAN	△
.	TQB0E0709R	CZECH	△
.	TQB0E0709S	GREEK	△
.	TQB0E0709T	TURKISH	△
.	TQB0E0709U	ENGLISH	△
.	TQB0E0709V	CROATIAN	△
.	TQB0E0709W	SLOVAKIAN	△
.	TQB0E0709X	CD ROM	△
.	TQB0E0709Z	ESTONIAN	△
I.C.s			
IC1102	X24C37LZ8P	EEPROM	

Schematic Diagrams

IMPORTANT SAFETY NOTICE

Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturers' specified parts.

NOTE

1. RESISTOR
All resistors are carbon ¼W resistor, unless marked otherwise.
Unit of resistance is OHM (Ω) (k=1,000, M=1,000,000)
2. CAPACITORS
All capacitors are ceramic 50V unless marked otherwise.
Unit of capacitance is μ F unless otherwise stated.
3. COIL
Unit of inductance is μ H, unless otherwise stated.

4. TEST POINT
 Test Point Position

5. EARTH SYMBOL
 Chassis Earth (Cold)
 Line Earth (Hot)

6. VOLTAGE MEASUREMENT
Voltage is measured by a D.C. voltmeter.
Measurement conditions are as follows:
Power source 220V-240V AC, 50Hz
Receiving Signal Colour Bar signal (RF)
All customer controls Maximum position

7.
 Indicates the Video signal path
 Indicates the Audio signal path

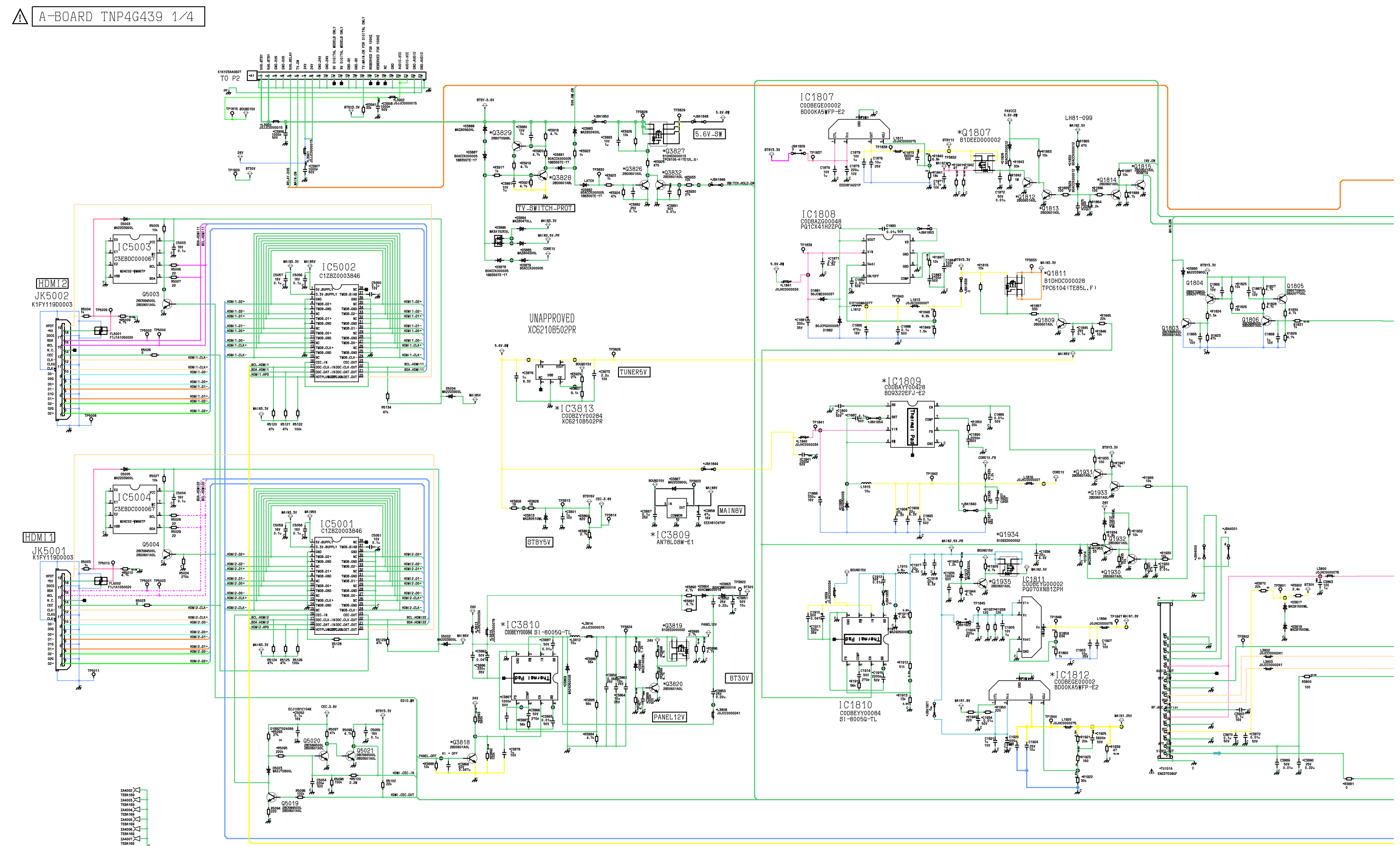
These schematic diagrams are the latest at time of printing and are subject to change without notice.

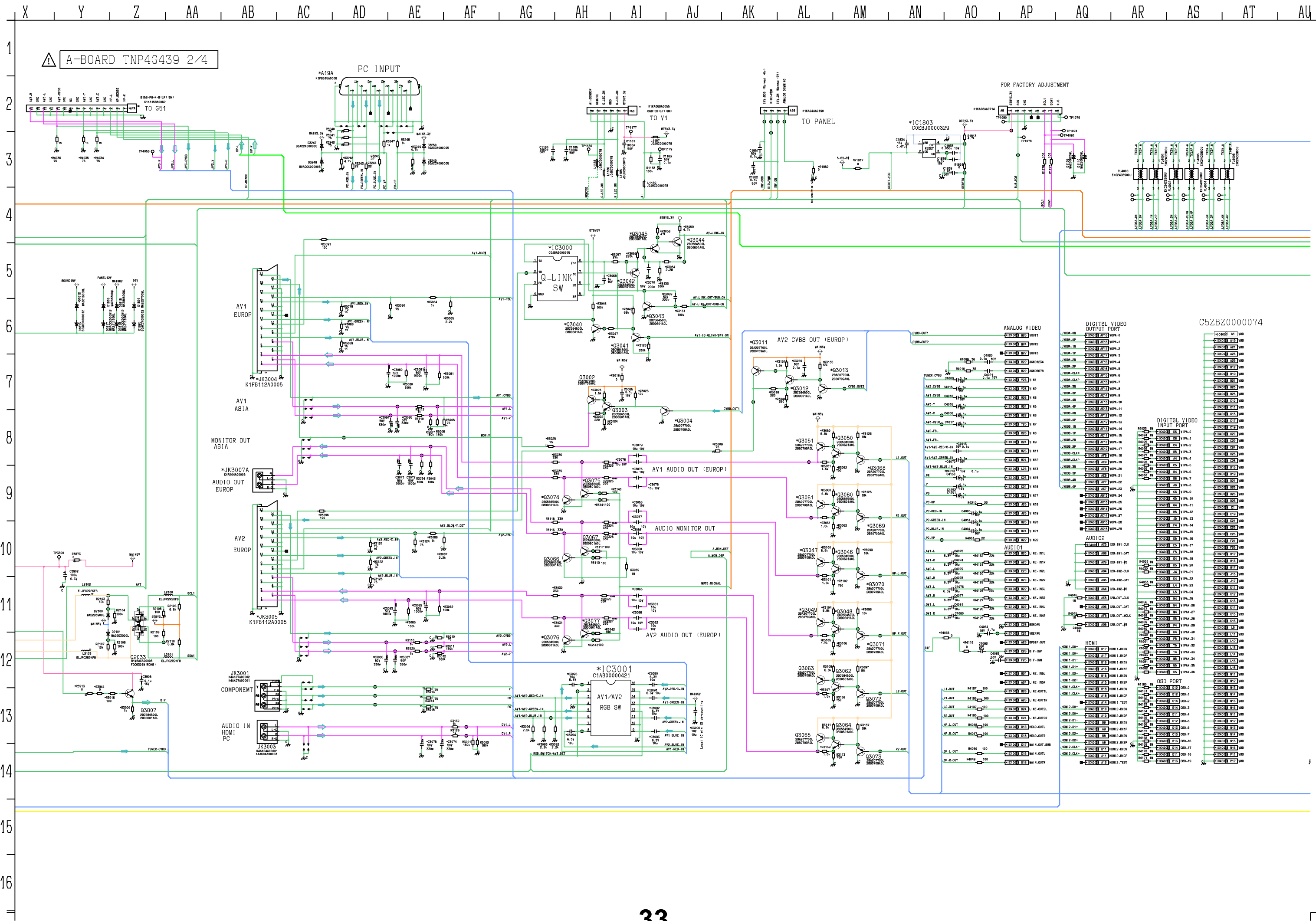
REMARKS

- a. Do not touch the hot part, or the hot and cold parts at the same time, as you are liable to a shock hazard.
- b. Do not short circuit the hot and cold circuits as electrical components may be damaged.
- c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously as this may cause fuse failure. Connect the earth of the instruments to the earth connection of the circuit being measured.
- d. Make sure to disconnect the power plug before removing the chassis.

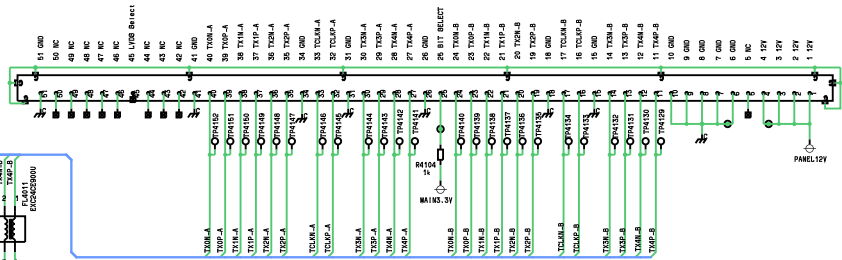
NOTE

1. The Power Supply Circuit contains a circuit area, which uses a separate power supply to isolate the earth connection. The circuit is defined by HOT and COLD indications in the schematic diagram. All circuits, except the Power Circuit, are COLD.

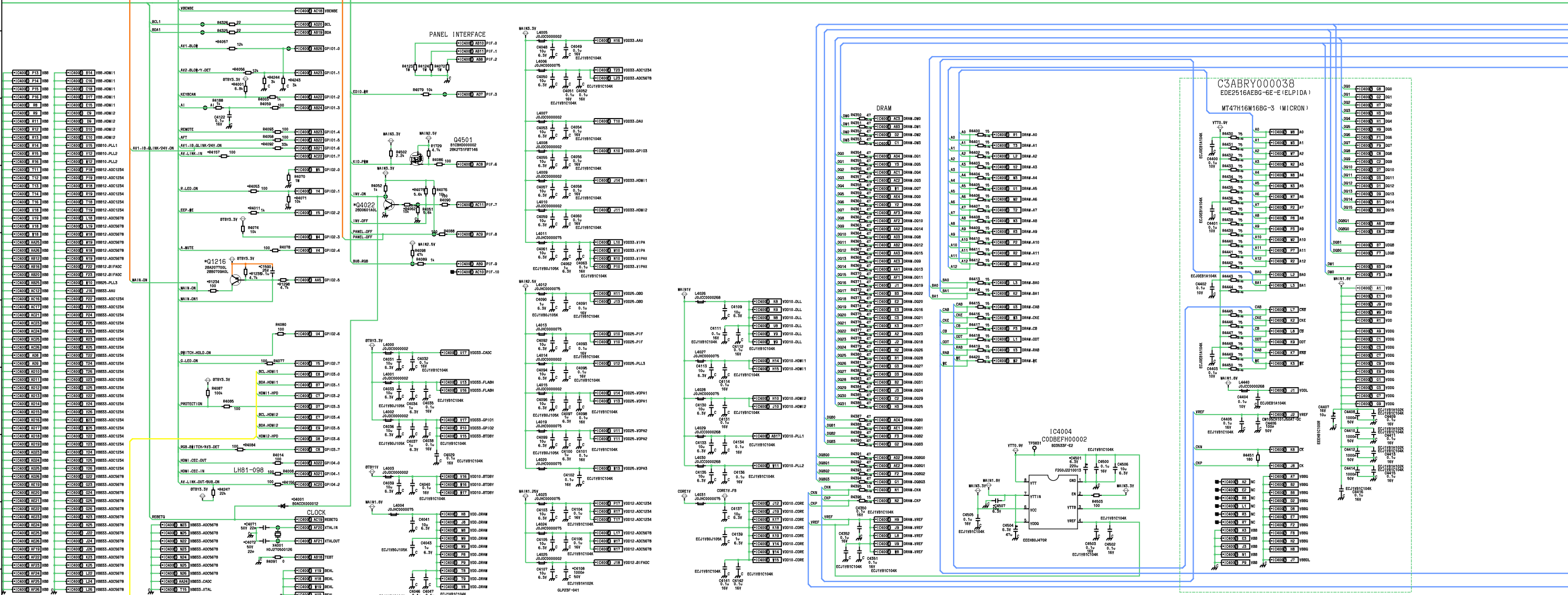




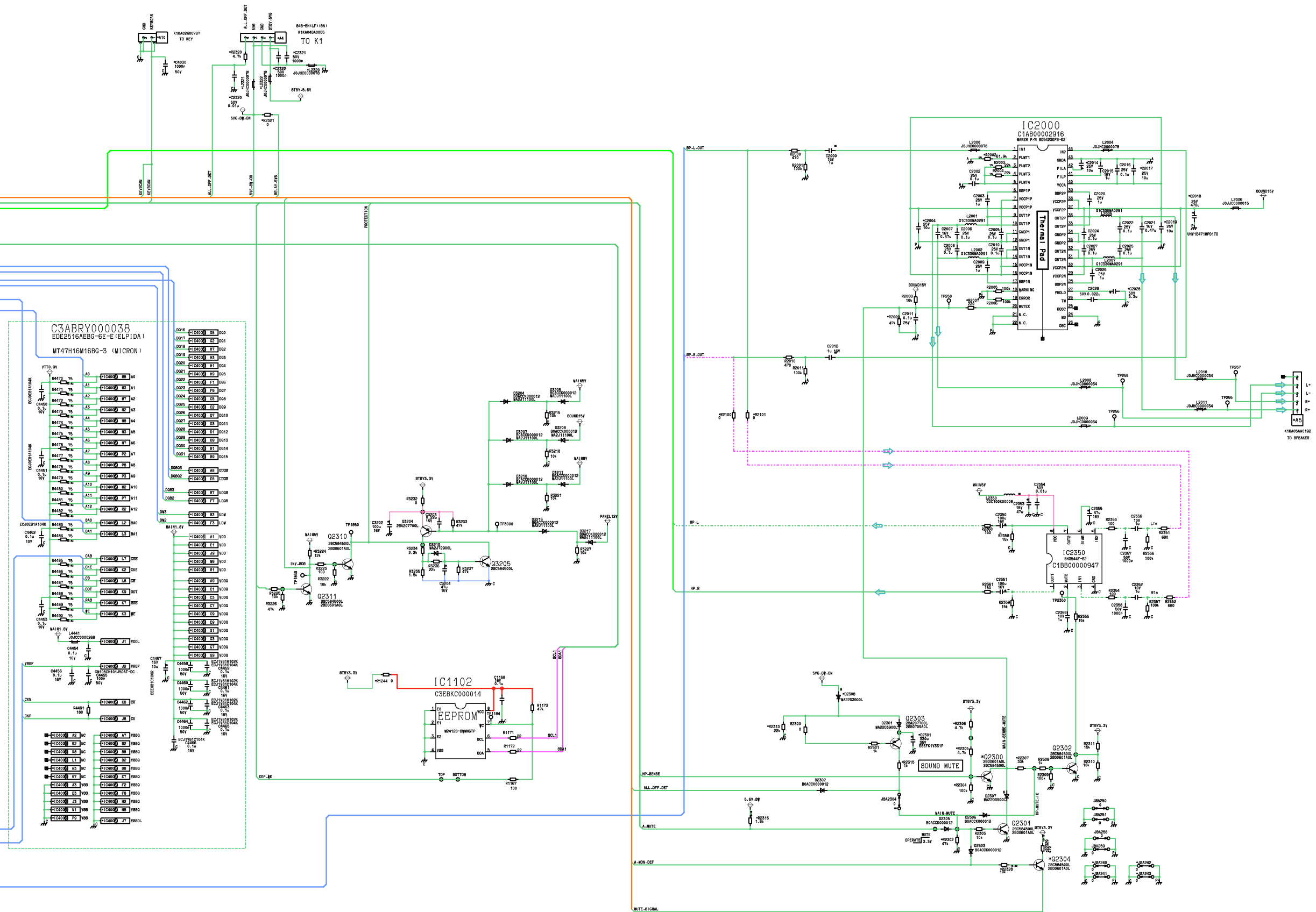
⚠ A-BOARD TNP4G439 3/4



K1KB51A00001
A18
TO PANEL

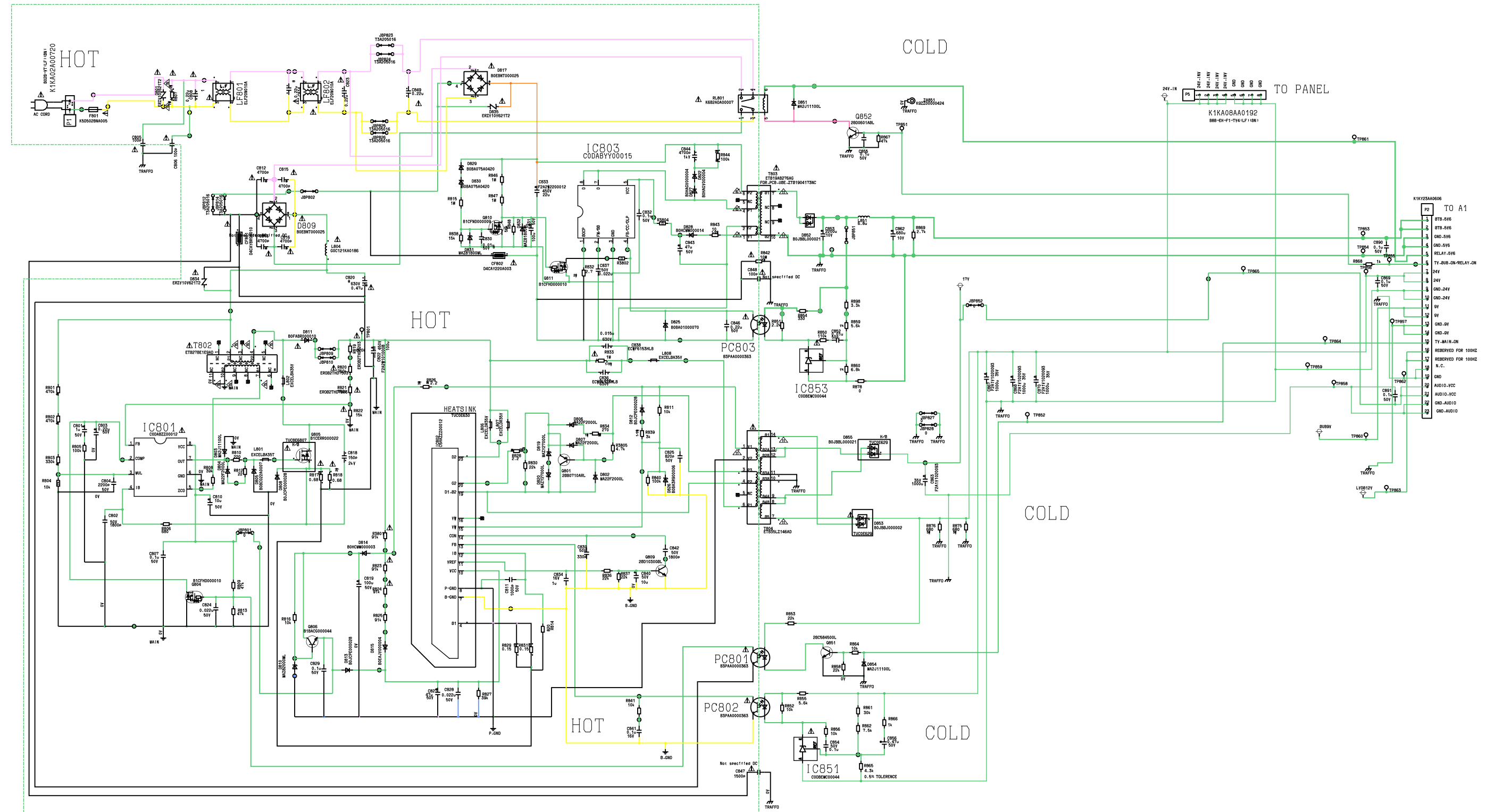


⚠ A-BOARD TNP4G439 4/4

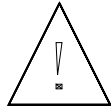


A B C D E F G H I J K L M N O P Q R S T U V

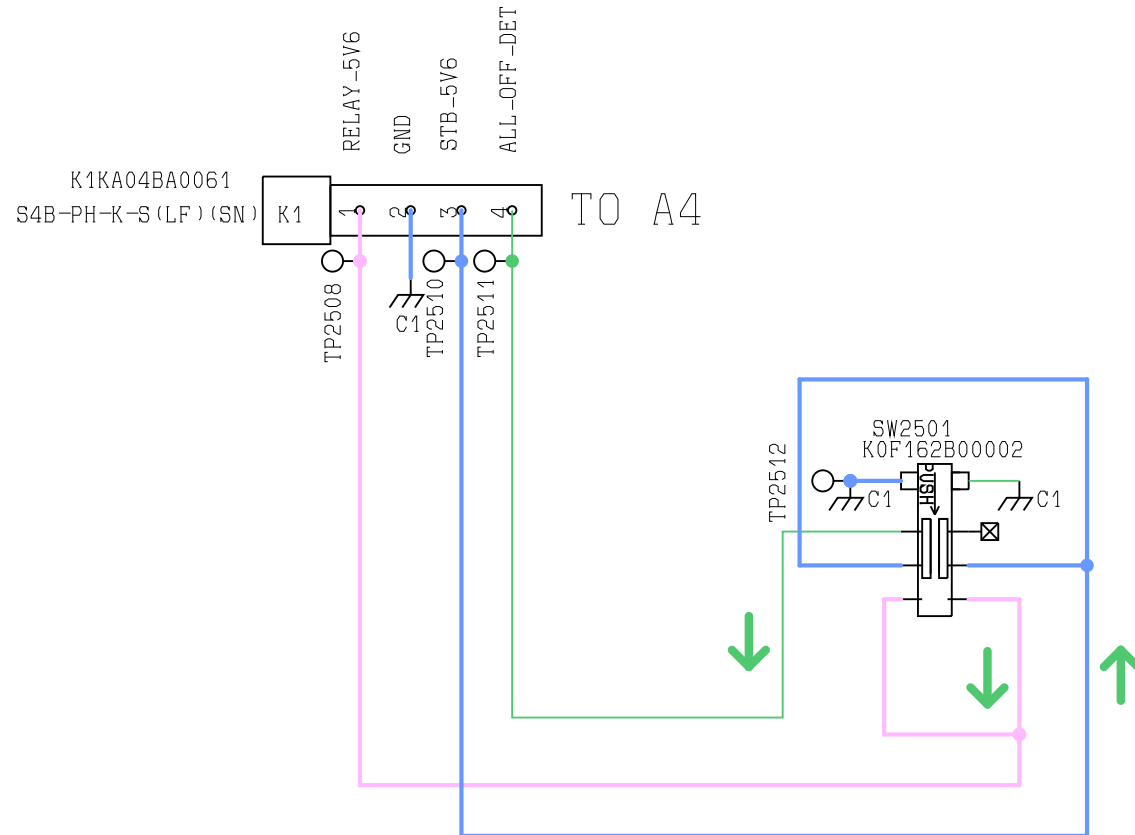
⚠ P-BBOARD TNP8EPL90





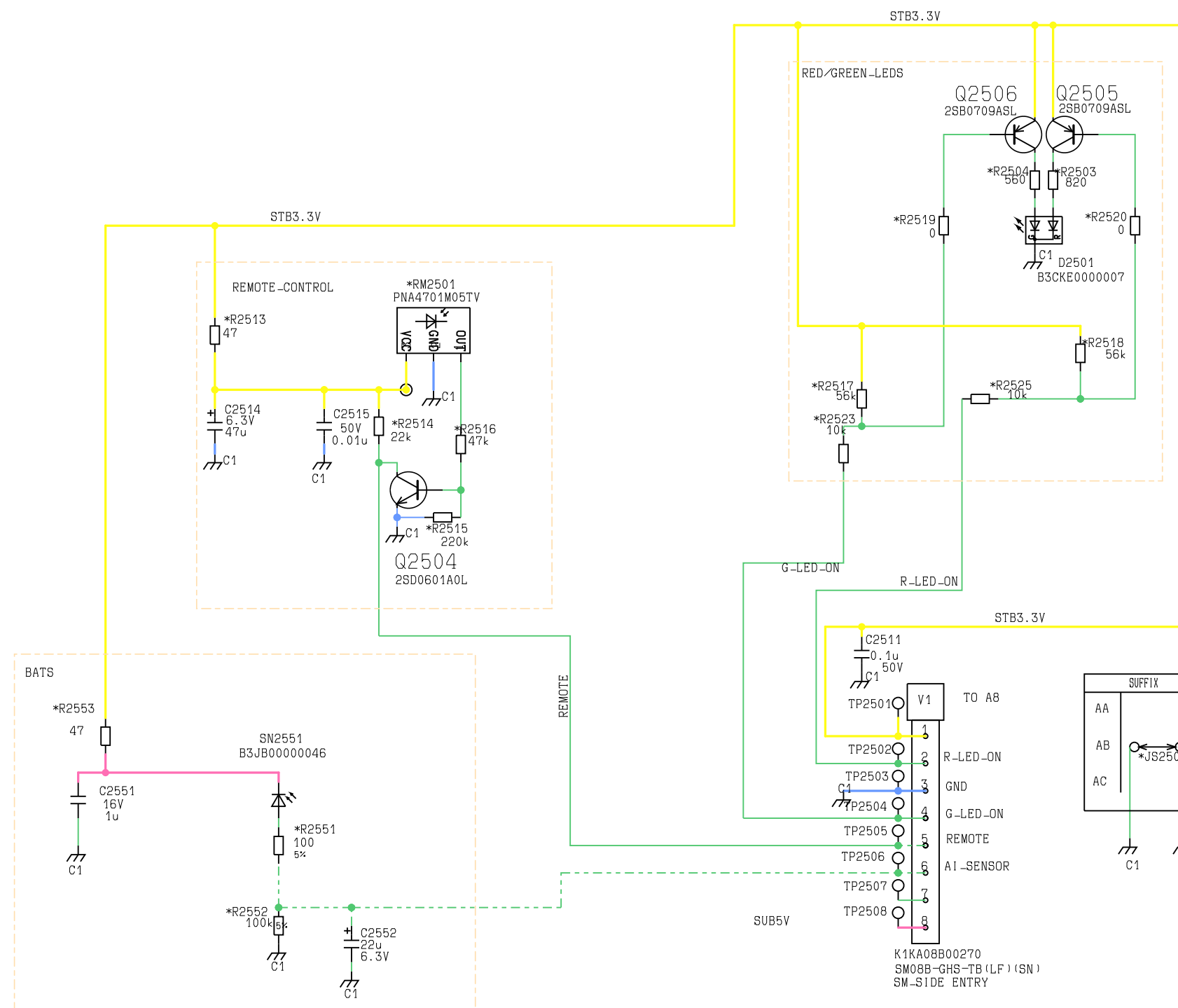


K-BOARD TNP8EKL92





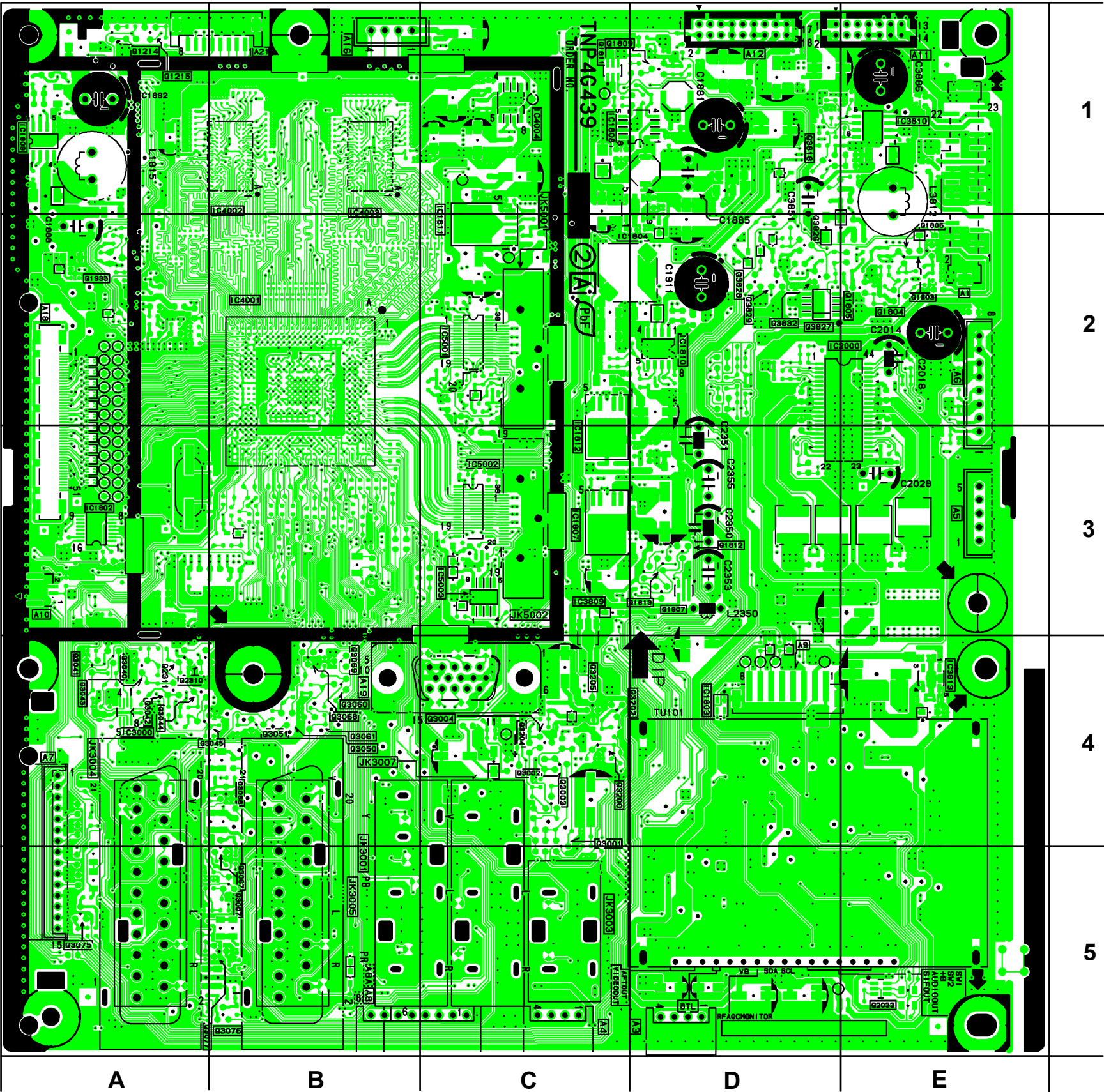
V-BOARD TNP8EVL91



Conductor Views

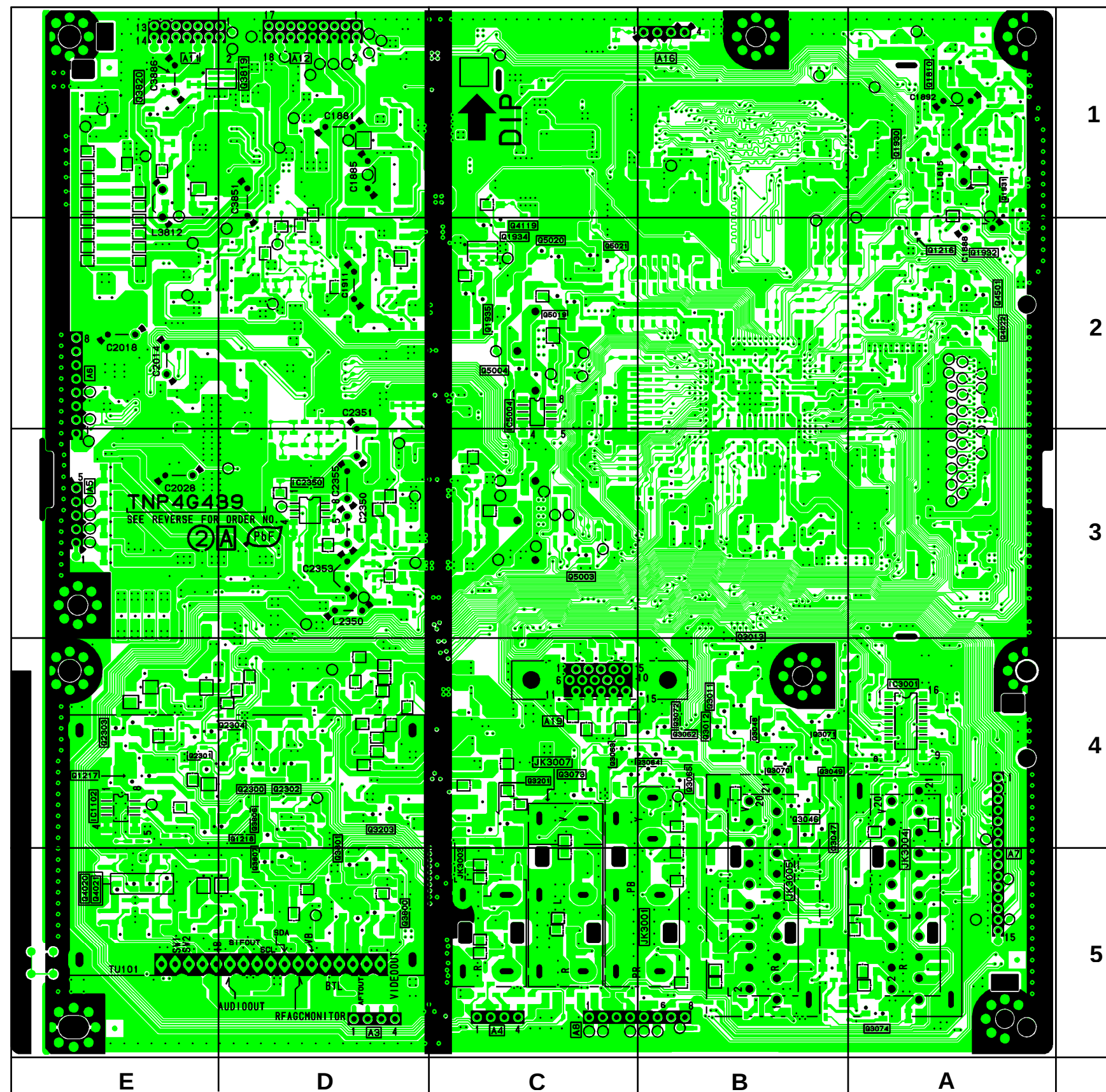
A-BOARD TNP4G439 - top

TRAN'S		Q3076	B5
Q1803	E2	Q3077	A5
Q1804	E2	Q3204	C4
Q1805	D2	Q3205	C4
Q1806	E2	Q3818	D1
Q1807	D3	Q3826	D2
Q1809	D1	Q3827	D2
Q1811	C1	Q3828	D2
Q1812	D3	Q3829	D2
Q1813	D3	Q3832	D2
Q1814	C3		
Q1815	D3	IC'S	
Q1933	A2	IC1803	D4
Q2033	E5	IC1807	C3
Q2310	A4	IC1808	C1
Q2311	A4	IC1809	A1
Q3002	C4	IC1810	D2
Q3003	C4	IC1811	C1
Q3004	C4	IC1812	C2
Q3040	A4	IC2000	D2
Q3041	A4	IC3000	A4
Q3042	A4	IC3809	C3
Q3043	A4	IC3810	E1
Q3044	A4	IC3813	E4
Q3045	A4	IC4001	B2
Q3050	B4	IC4002	B1
Q3051	B4	IC4003	B1
Q3060	B4	IC4004	C1
Q3061	B4	IC5001	C2
Q3066	B4	IC5002	C3
Q3067	B4	IC5003	C3
Q3068	B3		
Q3069	B3		
Q3075	A5		



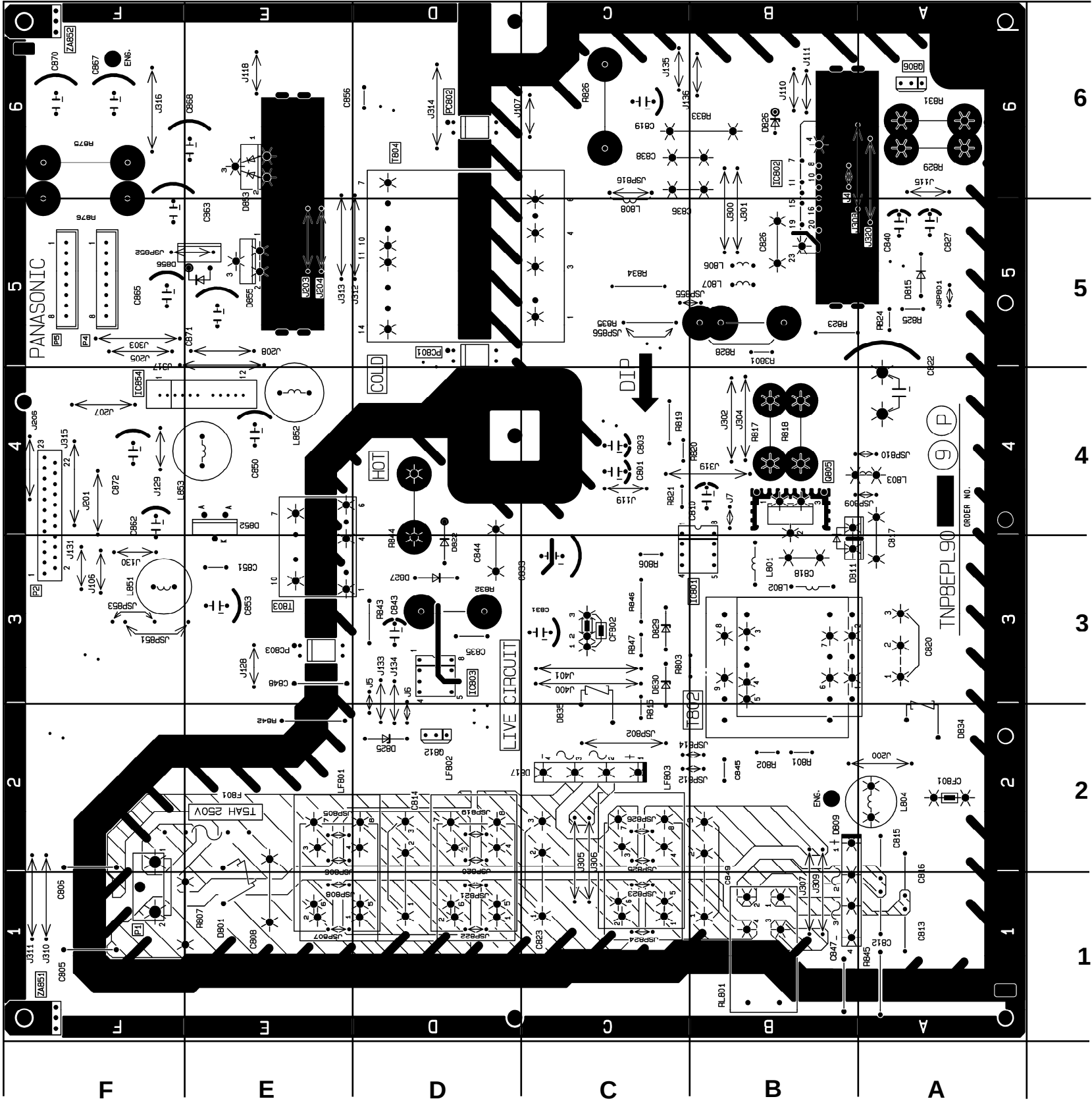
A-BOARD TNP4G439 - bottom

TRAN'S		Q3065	B4
Q1216	A2	Q3070	B4
Q1930	A1	Q3071	B4
Q1931	A1	Q3072	B4
Q1932	A2	Q3073	C4
Q1934	C2	Q3074	A5
Q1935	C2	Q3807	D5
Q2300	D4	Q3819	D1
Q2301	D4	Q3820	E1
Q2302	D4	Q4022	A2
Q2303	E4	Q4501	A2
Q2304	D4	Q5003	C3
Q3011	B4	Q5004	C2
Q3012	B4	Q5019	C2
Q3013	B3	Q5020	C2
Q3046	B4	Q5021	C2
Q3047	B4		
Q3048	B4	IC'S	
Q3049	B4	IC1102	E4
Q3062	B4	IC2350	D3
Q3063	C4	IC3001	A4
Q3064	B4	IC5004	C2



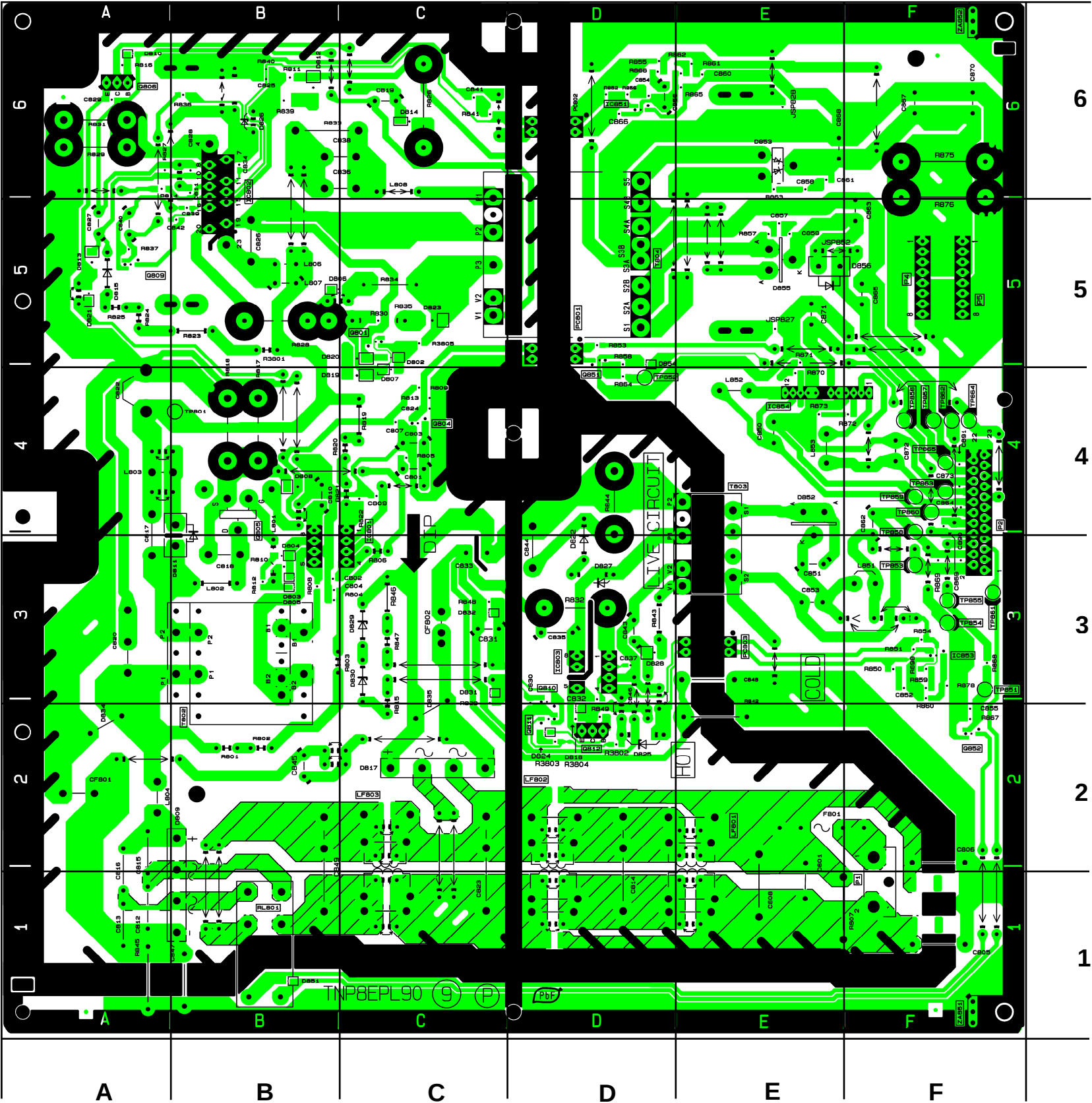
P-BOARD TNP8EPL90 - top

DIODE'S		D834	A2
D801	E1	D835	C2
D809	B1	D852	E4
D811	B3	TRAN'S	
D817	C2	Q805	B4
D822	D3	Q806	A6
D825	D2	IC'S	
D826	B6	IC'S	
D827	D3	IC801	B3
D829	C3	IC802	B6
D830	C3	IC803	D3



P-BOARD TNP8EPL90 - bottom

TRAN'S		IC'S	
Q801	C5	IC851	D6
Q804	C4	IC853	F3
Q809	A5		
Q810	D2	TP'S	
Q811	D2	TP801	B4
Q851	D5	TP851	F3
Q852	F2	TP852	D4
		TP853	F3
DIODE'S		TP'S	
D802	C5	TP855	F3
D803	B3	TP856	F4
D804	B3	TP857	F4
D805	B3	TP858	F3
D806	B5	TP859	F4
D807	C4	TP860	F4
D808	B4	TP861	F3
D810	A6	TP862	F4
D812	B6	TP863	F4
D813	A5	TP864	F4
D814	C6	TP865	F4
D819	C4		
D820	C5		
D828	D3		
D831	C3		
D832	C3		
D851	B1		
D854	D4		
D853	E6		
D855	E5		



V-BOARD TNP8EVL91-top

TRAN'S		TP'S	
Q2504	A1	TP2501	A1
Q2505	A1	TP2502	A1
Q2506	A1	TP2503	A1
		TP2504	A1
DIODE'S		TP2505	A2
D2501	A2	TP2506	A1
		TP2507	A2
IC'S		TP2508	A1
RM2501	A1		
SN2551	A1		

