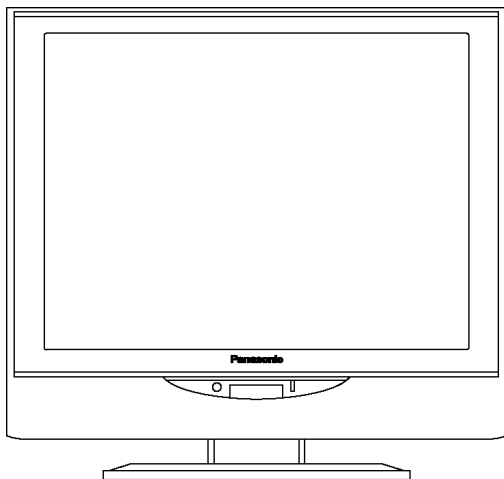


# Service Manual

## LCD TV



**TX-17LA1F**  
**TX-17LA1P**  
**TX-17LA1V**  
**TX-20LA1F**  
**TX-20LA1P**  
**TX-20LA1V**

LH11 Chassis

### Power Source

AC 100~240V, 50/60Hz

### Power Consumption

Average use: 56W (TX-17LA1F/P/V)  
 60W (TX-20LA1F/P/V)

Stand-by condition: 1.8W

TV set DC 15V, 3.2 A max. (TX-17LA1F/P/V)

TV set DC 15V, 3.4 A max. (TX-20LA1F/P/V)

### LCD

17inch (432mm) (TX-17LA1F/P/V)

20inch (510mm) (TX-20LA1F/P/V),

16:9 aspect ratio LCD panel

### Screen Size

343.7mm(W) x 261.6mm(H) (TX-17LA1F/P/V)

408.0mm(W) x 306.0mm(H) (TX-20LA1F/P/V)

### Sound

#### Speaker

Ø4cm, 2pcs, 16Ω

#### Audio Output

6.0W (3.0W+3.0W), 10%THD

#### Headphones

M3(3.5 mm) Jack x 1

### Receiving Systems/ Band name

#### PAL B, G, H, SECAM B, G SECAM L/ L'

VHF E2-E12 VHF H1-H2 (ITALY)

VHF A-H (ITALY) UHF E21-E69

CATV (S01-S05) CATV S1-S10 (M1-M10)

CATV S11-S20 (U1-U10) CATV S21-S41 (Hyperband)

### PAL D, K, SECAM D, K

VHF R1-R2

VHF R6-R12

### PAL 525/60

### M.NTSC

### NTSC (AV input only)

VHF R3-R5

UHF E21-E69

Playback of NTSC tape from some PAL video recorders (VCR)

Playback from NTSC 4.43 MHz Videorecorders (VCR)

Playback from NTSC Videorecorders (VCR)

### Aerial-Rear

UHF/ VHF

### Operating Conditions

Temperature: 5°C-35°C

Humidity: 5%-90% RH (non-condensing)

### Connection Terminals

#### AV1 (Scart Connector)

21Pin socket (Audio/Video in, TV out, RGB in)

#### AV2

S Video in, 1 x RCA Video in, 2 x RCA Audio in

### Dimensions (W x D x H)

#### Including TV Stand

424mm x 415.2mm x 215mm (TX-17LA1F/P/V)

494mm x 461.4mm x 255mm (TX-20LA1F/P/V)

#### TV Set Only

424mm x 381.5mm x 64.1mm (TX-17LA1F/P/V)

494mm x 422.3mm x 81.5mm (TX-20LA1F/P/V)

### Weight (Mass)

# Panasonic®

© 2000 Matsushita Electric Industrial Co., Ltd. All rights reserved. Unauthorized copying and distribution is a violation of law.

5.4kg Net (TX-17LA1F/P/V)

7.4kg Net (TX-20LA1F/P/V)

Design and Specifications are subject to change without notice.  
Weight and Dimensions shown are approximate.

**Note:**

## ⚠ 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 dealt with in this service information by anyone else could result in serious injury or death.

# CONTENTS

	Page		Page
<b>1 Safety Precautions</b> .....	<b>3</b>	10.4. A-Board (1 of 3) Schematic Diagram .....	38
1.1. General Guidelines .....	3	10.5. A-Board (2 of 3) Schematic Diagram .....	39
1.2. Touch-Current Check .....	3	10.6. A-Board (3 of 3) Schematic Diagram .....	40
<b>2 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices</b> .....	<b>4</b>	10.7. DG-Board (1 of 6) Schematic Diagram (For TX-17LA1F/P/V) .....	41
<b>3 About lead free solder (PbF)</b> .....	<b>5</b>	10.8. DG-Board (2 of 6) Schematic Diagram (For TX-17LA1F/P/V) .....	42
<b>4 Self Check</b> .....	<b>6</b>	10.9. DG-Board (3 of 6) Schematic Diagram (For TX-17LA1F/P/V) .....	43
<b>5 Chassis Board Layout</b> .....	<b>7</b>	10.10. DG-Board (4 of 6) Schematic Diagram (For TX-17LA1F/P/V) .....	44
<b>6 Before servicing</b> .....	<b>8</b>	10.11. DG-Board (5 of 6) Schematic Diagram (For TX-17LA1F/P/V) .....	45
6.1. Kind and location of the flexible cable .....	8	10.12. DG-Board (6 of 6) Schematic Diagram (For TX-17LA1F/P/V) .....	46
6.2. How to remove the connector .....	9	10.13. DG-Board (1 of 5) Schematic Diagram (For TX-20LA1F/P/V) .....	47
<b>7 Disassembly for Service</b> .....	<b>10</b>	10.14. DG-Board (2 of 5) Schematic Diagram (For TX-20LA1F/P/V) .....	48
7.1. Hinge cover and AV cable cover .....	10	10.15. DG-Board (3 of 5) Schematic Diagram (For TX-20LA1F/P/V) .....	49
7.2. Rear cover and Tilt base .....	10	10.16. DG-Board (4 of 5) Schematic Diagram (For TX-20LA1F/P/V) .....	50
7.3. AV terminal cover, EP jack cover, and Tuner cover .....	11	10.17. DG-Board (5 of 5) Schematic Diagram (For TX-20LA1F/P/V) .....	51
7.4. Shield plate .....	11	10.18. B-Board, BL-Board, K-Board and V-Board Schematic Diagram .....	52
7.5. Inverter shield and Lock hinge (TX-20LA1F/P/V) .....	12	<b>11 Parts Location &amp; Mechanical Replacement Parts List</b> .....	<b>53</b>
7.6. B-Board and K-Board .....	13	11.1. Parts Location (1) .....	53
7.7. BL-Board, DG-Board and A-Board .....	13	11.2. Parts Location (2) .....	54
7.8. V-Board .....	14	11.3. Parts Location (3) .....	55
7.9. Speaker .....	14	11.4. Mechanical Replacement Parts List .....	56
7.10. LCD panel .....	15	<b>12 Replacement Parts List</b> .....	<b>57</b>
<b>8 Service Mode Function</b> .....	<b>16</b>	12.1. Replacement Parts List Notes .....	57
8.1. How to enter SERVICE 1 .....	16	12.2. Electrical Replacement Parts List .....	58
8.2. How to enter SERVICE 2 .....	16		
8.3. Option Description .....	18		
<b>9 Conductor Views</b> .....	<b>21</b>		
9.1. A-Board .....	21		
9.2. DG-Board (TX-17LA1F/P/V) .....	23		
9.3. DG-Board (TX-20LA1F/P/V) .....	27		
9.4. B, BL, K and V-Board .....	31		
<b>10 Block and Schematic Diagram</b> .....	<b>33</b>		
10.1. Schematic Diagram Notes .....	33		
10.2. Power Block Diagram .....	34		
10.3. Signal Block Diagram .....	36		

# 1 Safety Precautions

## 1.1. General Guidelines

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 leakage current checks to prevent the customer from being exposed to shock hazards.

## 1.2. 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 Figure 1.
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.:  $U_1 = 35$  V (peak) and  $U_2 = 0.35$  V (peak);  
For d. c.:  $U_1 = 1.0$  V,

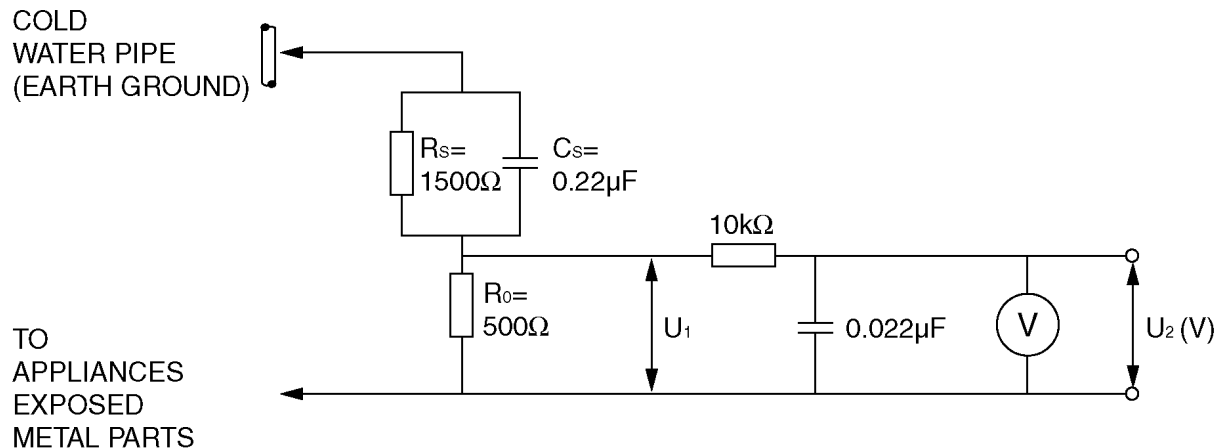
**Note:**

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

The limit value  $U_1 = 35$  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.

### Measuring network for TOUCH CURRENTS



Resistance values in ohms ( $\Omega$ )

V: Voltmeter or oscilloscope  
(r.m.s. or peak reading)

Input resistance:  $\geq 1$  M $\Omega$

Input capacitance:  $\leq 200$  pF

Frequency range: 15 Hz to 1 MHz and d.c. respectively

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

Figure 1

## 2 Prevention of Electro Static 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 electro static 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 buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified 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 the 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.



### 3 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.

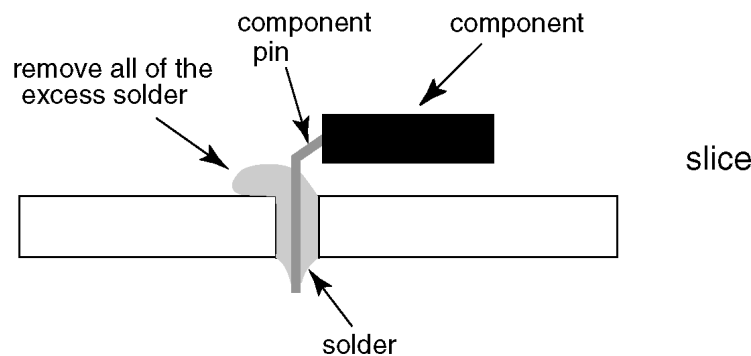
PCBs manufactured using lead free solder will have the PbF within a leaf Symbol  stamped on the back of PCB.

#### 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).

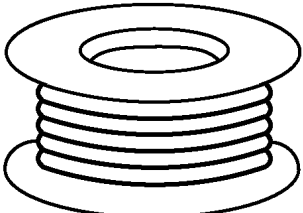
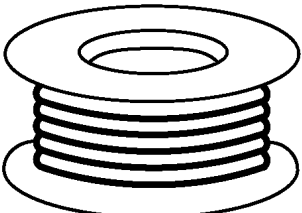
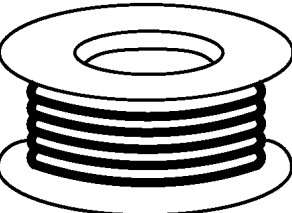
If you must use Pb solder, please completely remove all of the Pb free solder on the pins or solder area before applying Pb solder. If this is not practical, be sure to heat the Pb free solder until it melts, before applying Pb solder.

- After applying PbF solder to double layered boards, please check the component side for excess solder which may flow onto the opposite side. (see figure below)



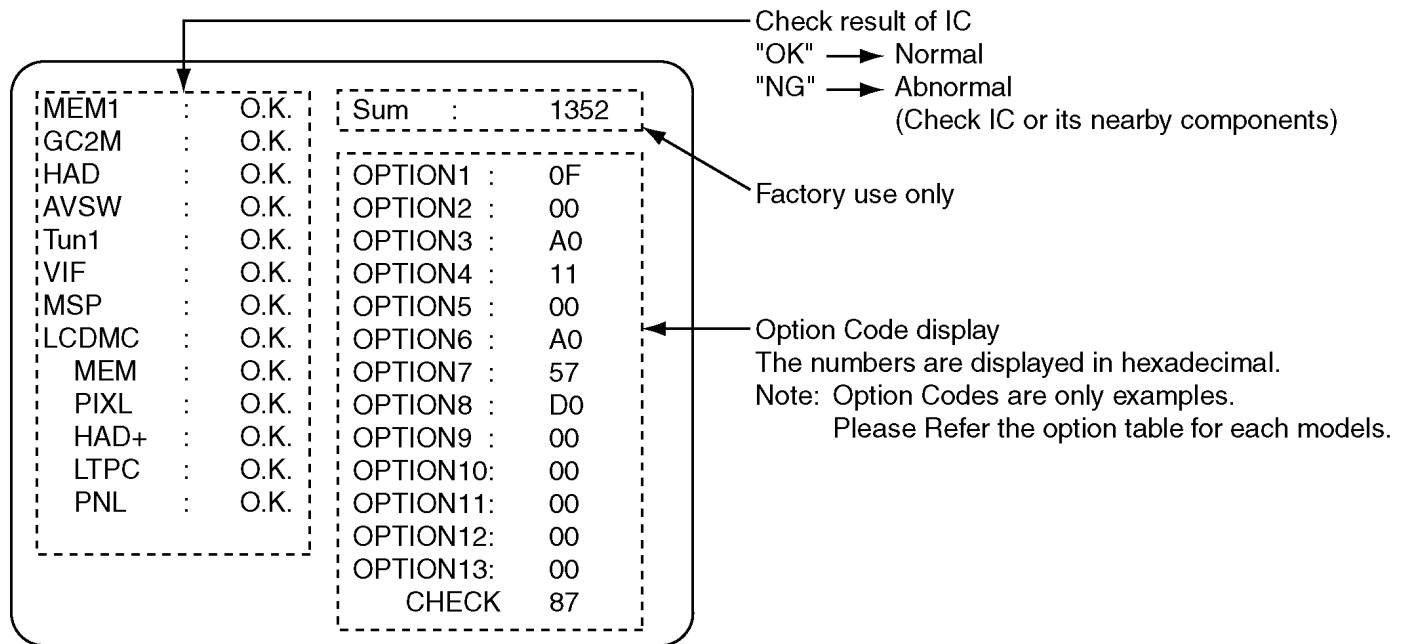
#### Suggested Pb free solder

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.

0.3mm X 100g	0.6mm X 100g	1.0mm X 100g
		

## 4 Self Check

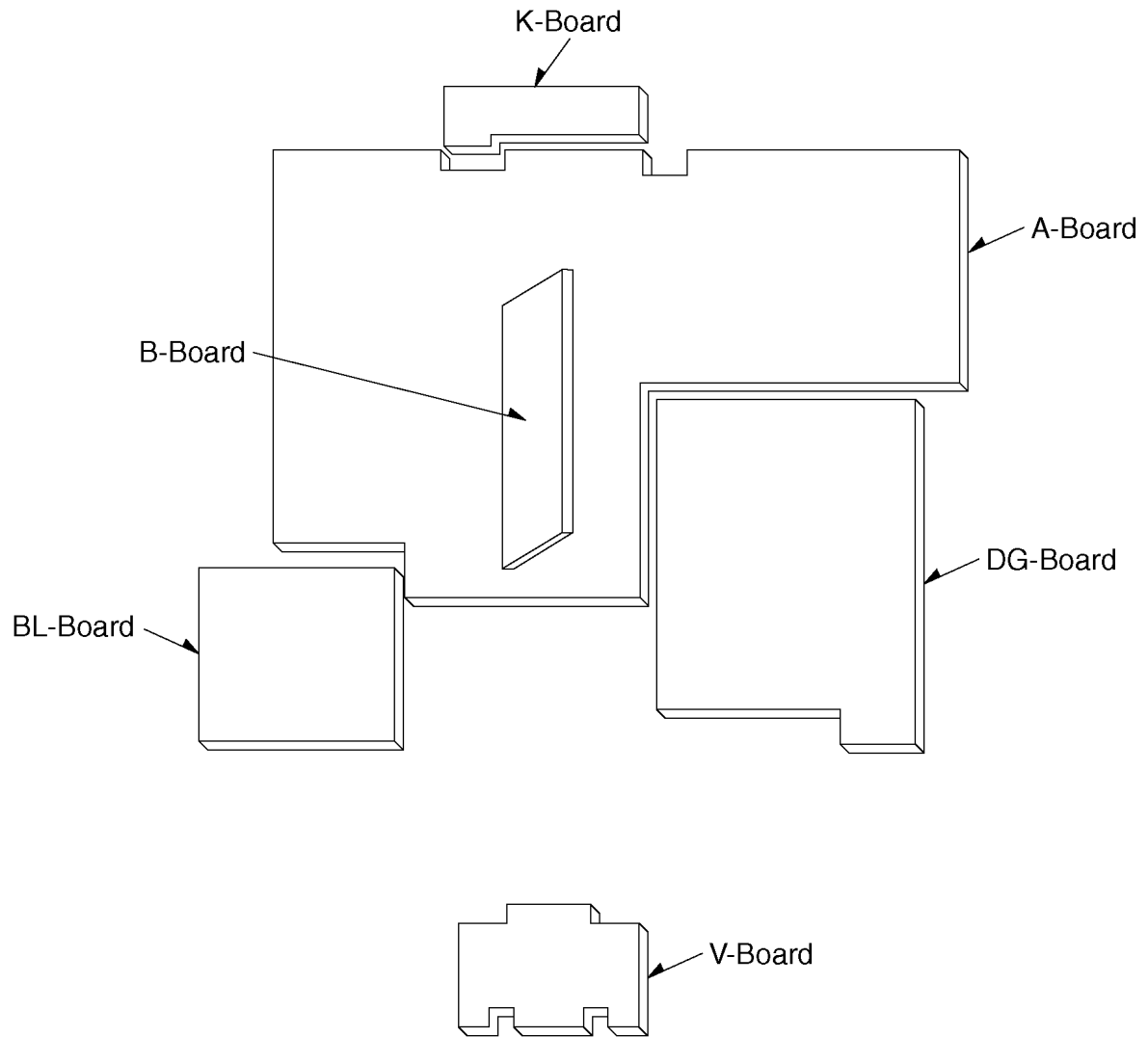
1. Self-Check is used to automatically check the bus lines and hexadecimal code of the TV set.
2. To get into the Self -Check mode press the [Down (-/√)] button on the customer controls at the front of the set, at the same time pressing the [Recall] button on the remote control, and the screen will show :



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

Display	Ref. No.	Description	P.C.B.
MEM1	IC1004	EEPROM	DG
GC2M	IC9001	VIDEO PROCESSOR	DG
HAD	IC9007	RGB A/D	DG
AVSW	IC4001	AV SWITCH	A
Tun1	TNR001	Tuner	B
VIF	---	---	---
MSP	IC2501	Multi Sound Processor	A
LCDMC	IC3002	LCD MCU	DG
MEM	IC3001	EEPROM	DG
PIXL	IC6004	PIXEL CONVERTER	DG
HAD+	IC6003	RGB A/D	DG
LTPC	IC6501	LTP CONTROL	DG
PNL	---	---	---

## 5 Chassis Board Layout



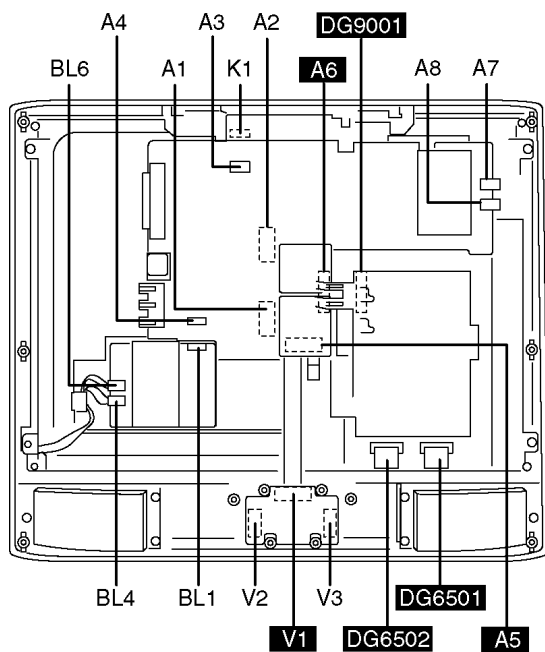
Board Name	Function
A-Board	Audio, Power, Inverter, AV SW
B-Board	Tuner
BL-Board	Inverter
DG-Board	GC2, PCN, MICOM, EEPROM
K-Board	Switch
V-Board	Remote sensor, LED

## 6 Before servicing

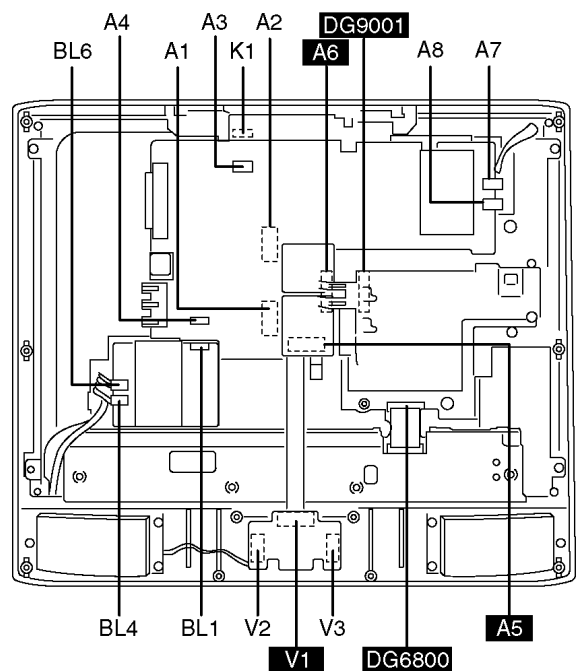
### 6.1. Kind and location of the flexible cable

Ref No.	Flexible cable	Connector type	Pins	Location	Opposite Ref No.
A6	●	type1	50 pin	A-BOARD	DG9001
A1	-	-	15 pin	A-BOARD	B1
A2	-	-	9 pin	A-BOARD	B2
A7	-	-	2 pin	A-BOARD	Back Light (U)
A8	-	-	2 pin	A-BOARD	Back Light (U)
A3	-	-	4 pin	A-BOARD	K1
A5	●	type2	13 pin	A-BOARD	V1
A4	-	-	11 pin	A-BOARD	BL1
B1	-	-	15 pin	B-BOARD	A1
B2	-	-	9 pin	B-BOARD	A2
BL1	-	-	11 pin	BL-BOARD	A4
BL4	-	-	2 pin	BL-BOARD	Back Light (D)
BL6	-	-	2 pin	BL-BOARD	Back Light (D)
DG9001	●	type3	50 pin	DG-BOARD	A6
DG6800	●	type3	50 pin	DG-BOARD (TX-20LA1F/P/V only)	LCD Panel
DG6501	●	type5	40 pin	DG-BOARD (TX-17LA1F/P/V only)	LCD Panel
DG6502	●	type5	40 pin	DG-BOARD (TX-17LA1F/P/V only)	LCD Panel
K1	-	-	4 pin	K-BOARD	A3
V2	-	-	2 pin	V-BOARD	Speaker (R)
V3	-	-	2 pin	V-BOARD	Speaker (L)
V1	●	type4	13 pin	V-BOARD	A5

&lt;TX-17LA1F/P/V&gt;

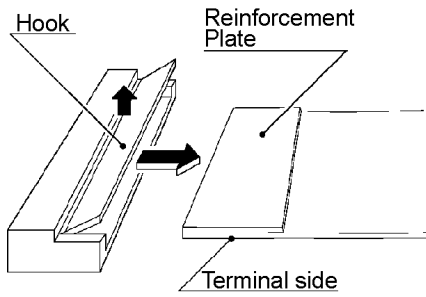


&lt;TX-20LA1F/P/V&gt;

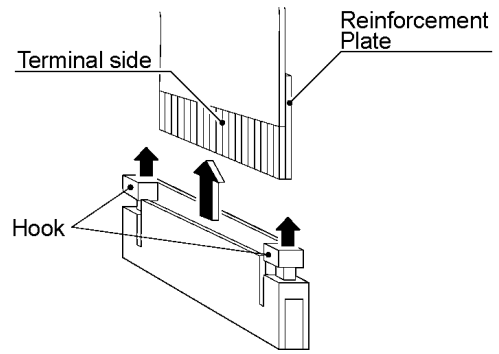


## 6.2. How to remove the connector

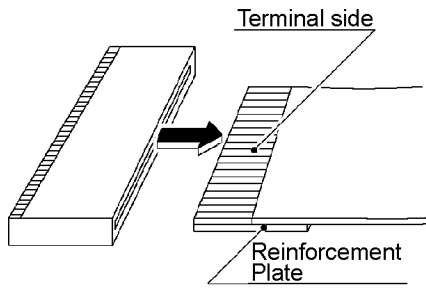
Connector type1



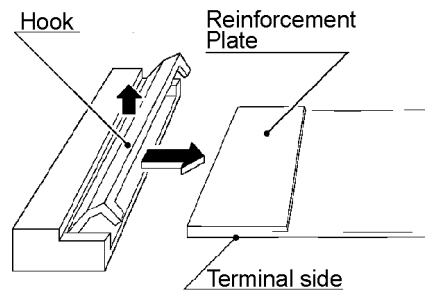
Connector type4



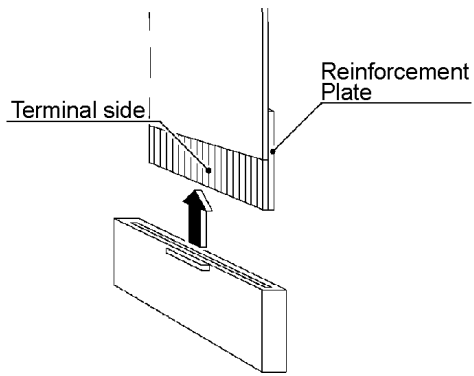
Connector type2



Connector type5



Connector type3

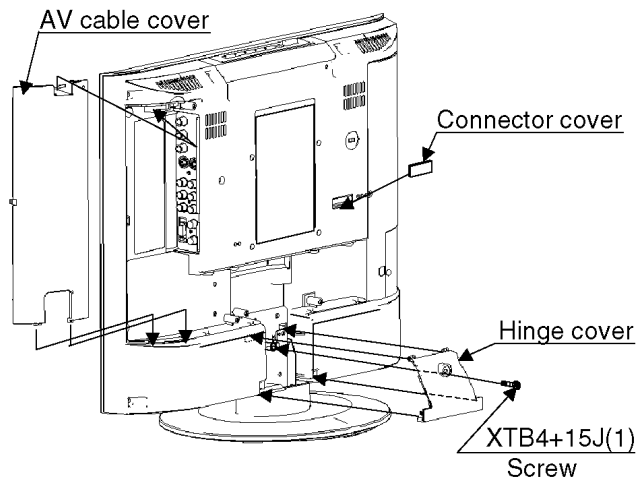


## 7 Disassembly for Service

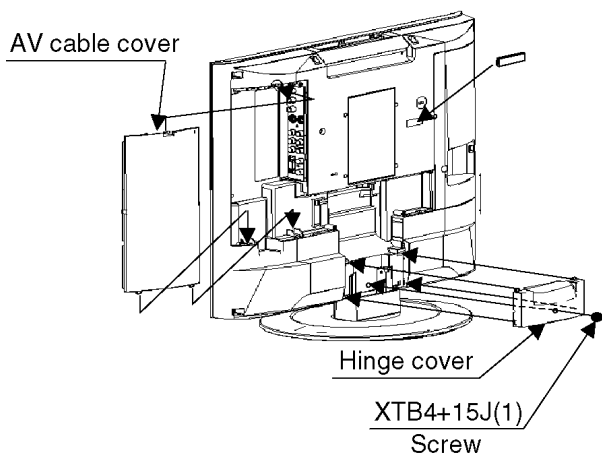
### 7.1. Hinge cover and AV cable cover

1. Thick cloth and so on is down to damage a LCD screen, and the unit is pushed down.
2. Remove the AV cable cover.
3. Remove the screw (1pcs), and detach the hinge cover.

<TX-17LA1F/P/V>



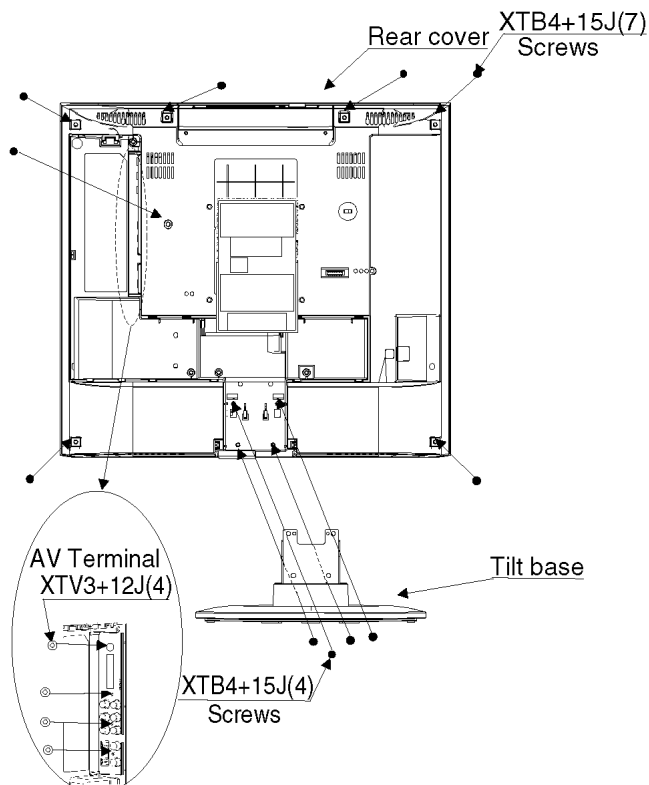
<TX-20LA1F/P/V>



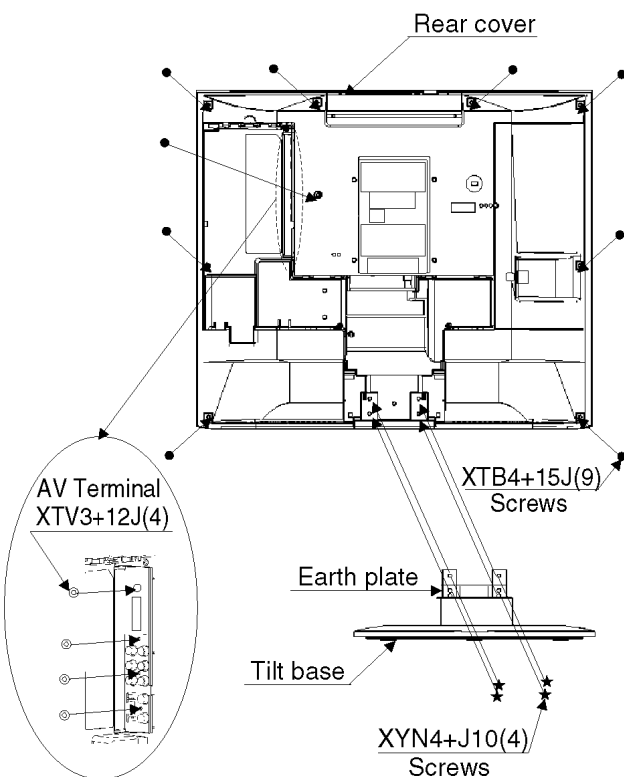
### 7.2. Rear cover and Tilt base

1. Remove the screws (7pcs) (TX-17LA1F/P/V)/(9pcs) (TX-20LA1F/P/V), and detach the rear cover.
2. Remove the screws (4pcs), and detach the tilt base.
3. Remove the screws (3pcs).

<TX-17LA1F/P/V>



<TX-20LA1F/P/V>



#### Caution:

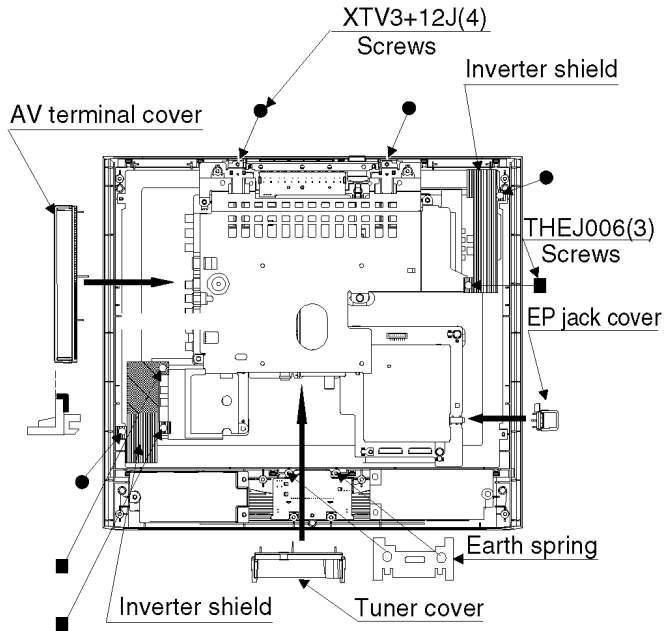
PCB Fixing screws driving torque: 0.2-0.3N · m (2-3kg · mm)

Do not tighten screws so hard.

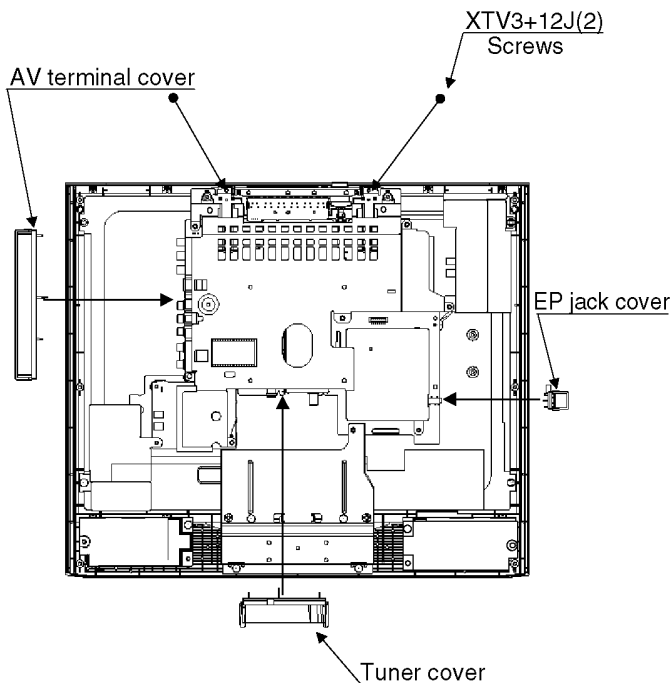
### 7.3. AV terminal cover, EP jack cover, and Tuner cover

1. Remove the AV terminal cover.
2. Remove the EP jack cover.
3. Remove the tuner cover.
4. Remove the screws (4pcs) (TX-17LA1F/P/V)/(2pcs) (TX-20LA1F/P/V).
5. Remove the screws (3pcs) (TX-17LA1F/P/V), and detach the inverter shield (TX-17LA1F/P/V).

<TX-17LA1F/P/V>



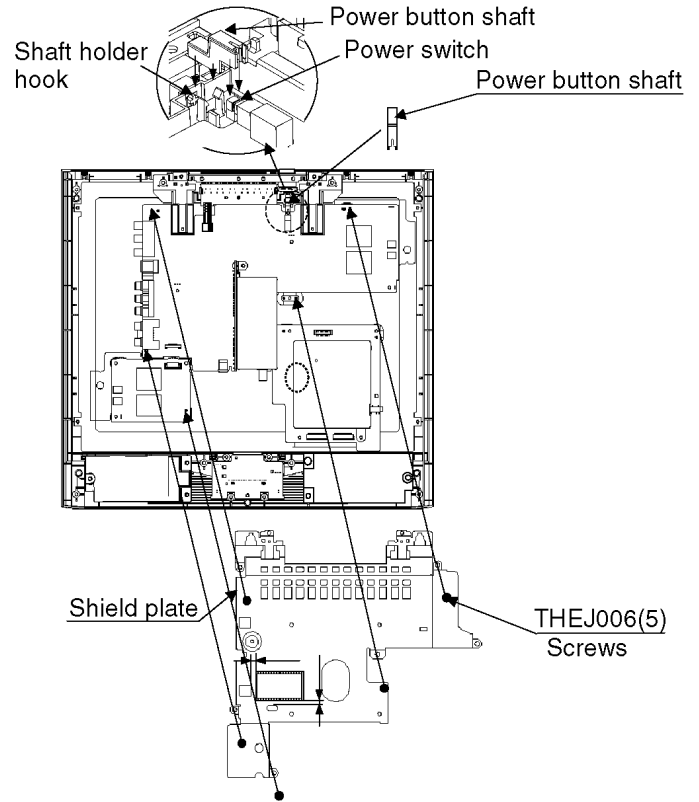
<TX-20LA1F/P/V>



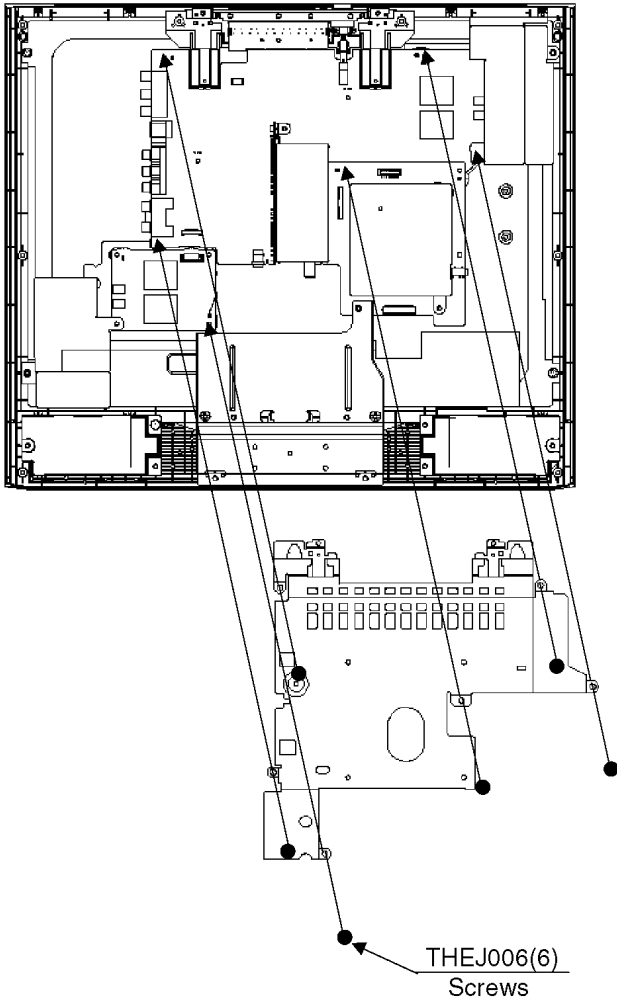
### 7.4. Shield plate

1. Remove the screws (5pcs) (TX-17LA1F/P/V)/(6pcs) (TX-20LA1F/P/V), and detach the shield plate.
2. Disengage the shaft holder hook and detach the power button shaft.
3. Disconnect the coupler (A3).

<TX-17LA1F/P/V>



<TX-20LA1F/P/V>



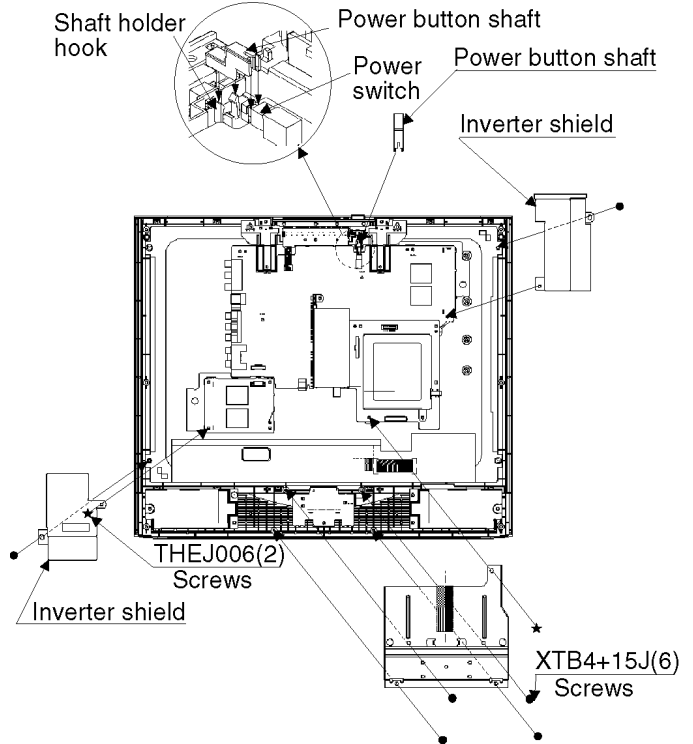
**Caution:**

PCB Fixing screws driving torque: 0.2-0.3N · m (2-3kg · mm)  
Do not tighten screws so hard.

## 7.5. Inverter shield and Lock hinge (TX-20LA1F/P/V)

1. Remove the screws (6pcs) and the screw (1pcs), and detach the lock hinge and the inverter shield.
2. Disengage the shaft holder hook and detach the power button shaft.
3. Disconnect the coupler (A3).

<TX-20LA1F/P/V>



**Caution:**

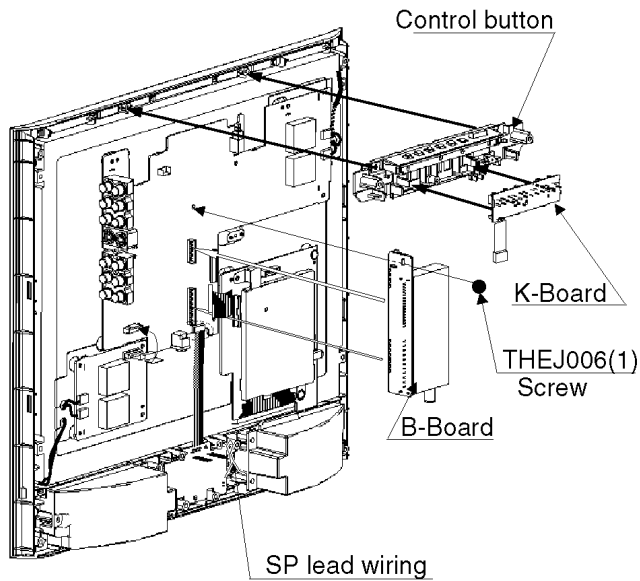
PCB Fixing screws driving torque: 0.2-0.3N · m (2-3kg · mm)  
Do not tighten screws so hard.



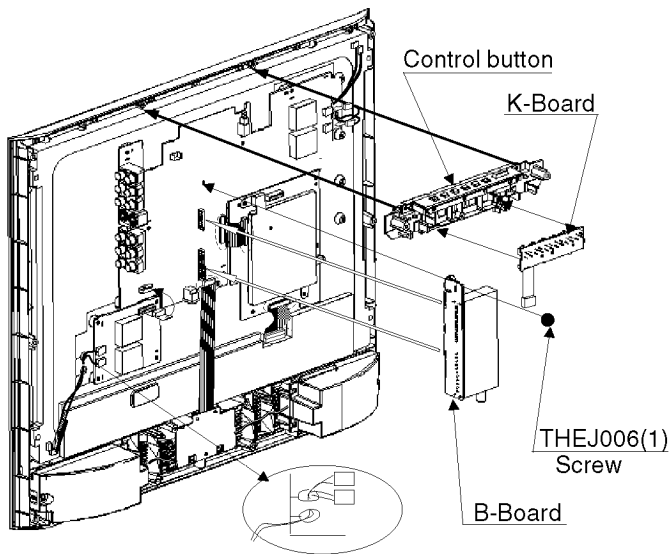
## 7.6. B-Board and K-Board

1. Remove the K-Board
2. Remove the screw (1pcs), and detach the B-Board.

<TX-17LA1F/P/V>



<TX-20LA1F/P/V>



**Caution:**

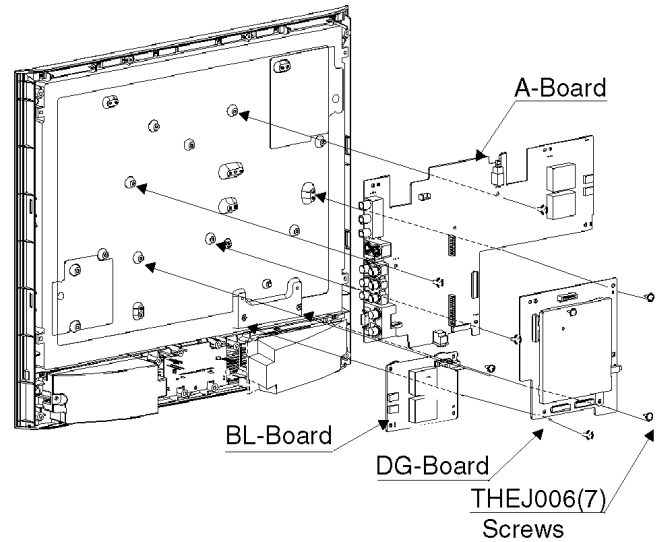
PCB Fixing screws driving torque: 0.2-0.3N · m (2-3kg · mm)

Do not tighten screws so hard.

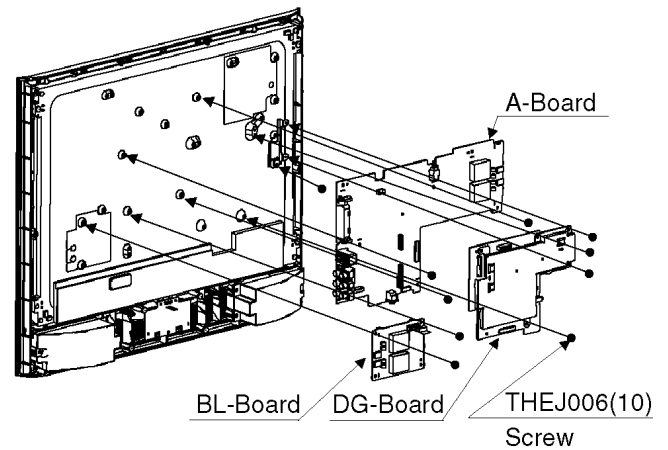
## 7.7. BL-Board, DG-Board and A-Board

1. Remove the screw (1pcs) (TX-17LA1F/P/V)/(2pcs) (TX-20LA1F/P/V), and detach the BL-Board.
2. Remove the screws (3pcs) (TX-17LA1F/P/V)/(5pcs) (TX-20LA1F/P/V), and detach the DG-Board.
3. Remove the screws (3pcs), and detach the A-Board.

<TX-17LA1F/P/V>



<TX-20LA1F/P/V>



**Caution:**

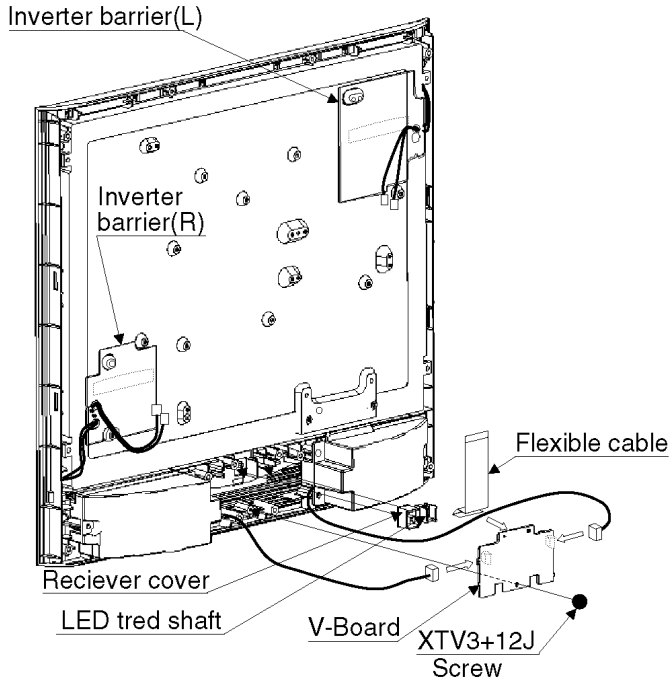
PCB Fixing screws driving torque: 0.2-0.3N · m (2-3kg · mm)

Do not tighten screws so hard.

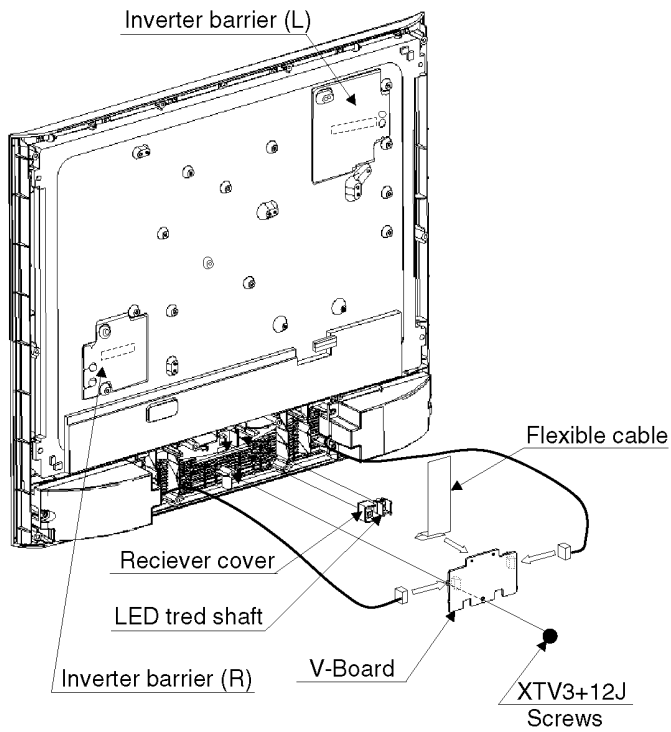
## 7.8. V-Board

1. Remove the screw (1pcs), and detach the V-Board.

<TX-17LA1F/P/V>



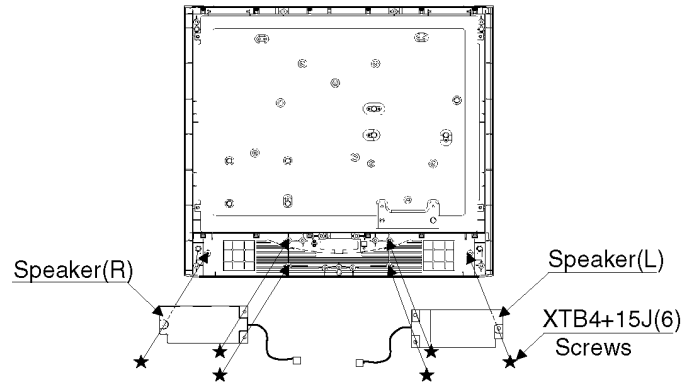
<TX-20LA1F/P/V>



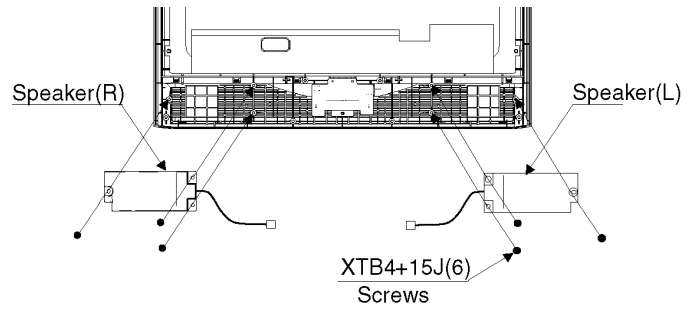
## 7.9. Speaker

1. Remove the screws (3pcs), and detach the speaker (L).
2. Remove the screws (3pcs), and detach the speaker (R).

<TX-17LA1F/P/V>



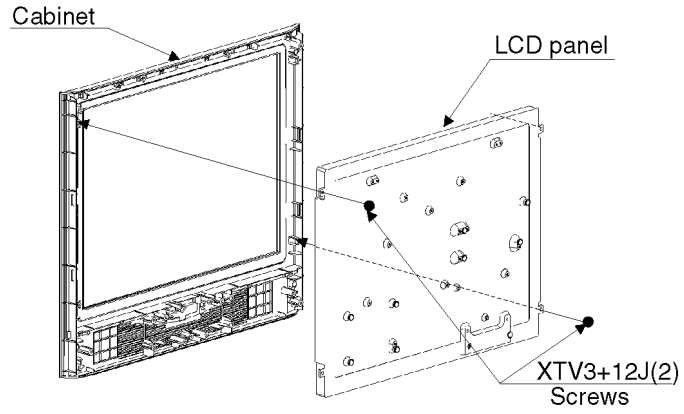
<TX-20LA1F/P/V>



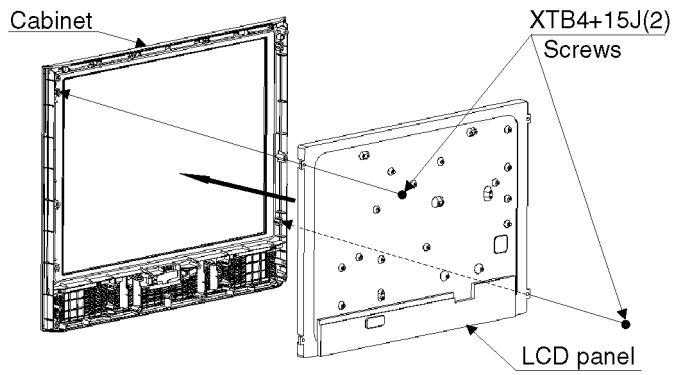
## 7.10. LCD panel

1. Remove the screws (2pcs), and detach the LCD panel.

<TX-17LA1F/P/V>



<TX-20LA1F/P/V>



## 8 Service Mode Function

MPU controls the functions switching for each IICs through IIC bus in this chassis. The following setting and adjustment can be adjusted by remote control in Service Mode.

### 8.1. How to enter SERVICE 1

1. In sound menu, set BASS to MAX/MUM, and set TREBLE to MINIMUM.
2. Simultaneously press **INDEX** button on remote control and **DOWN** button [  $-/\surd$  ] on the TV set.

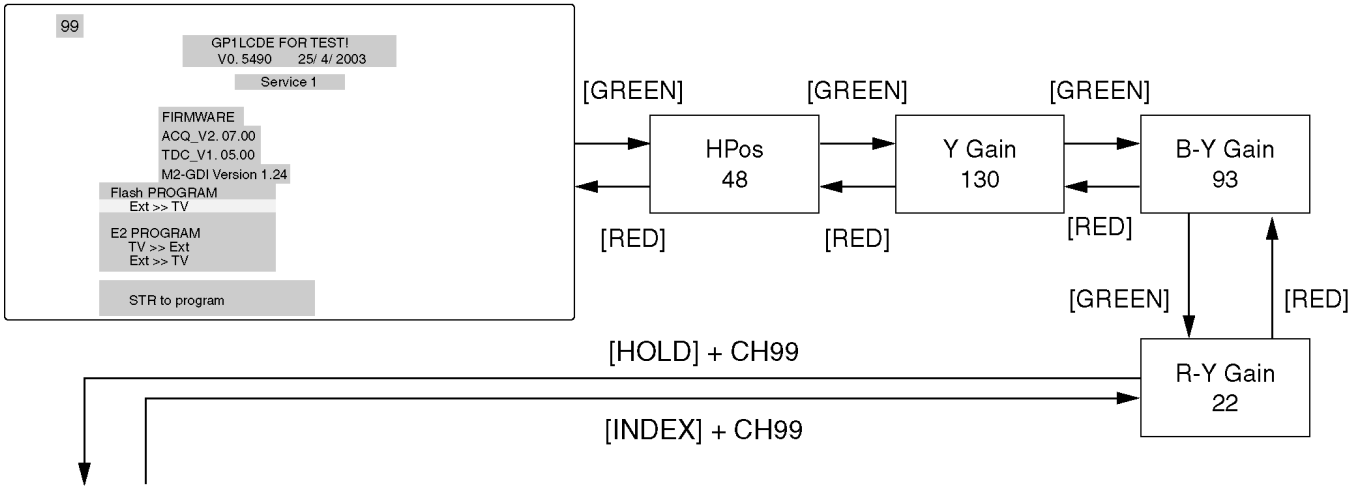
### 8.2. How to enter SERVICE 2

1. Set the channel to CH99.
2. Press HOLD button on remote control.

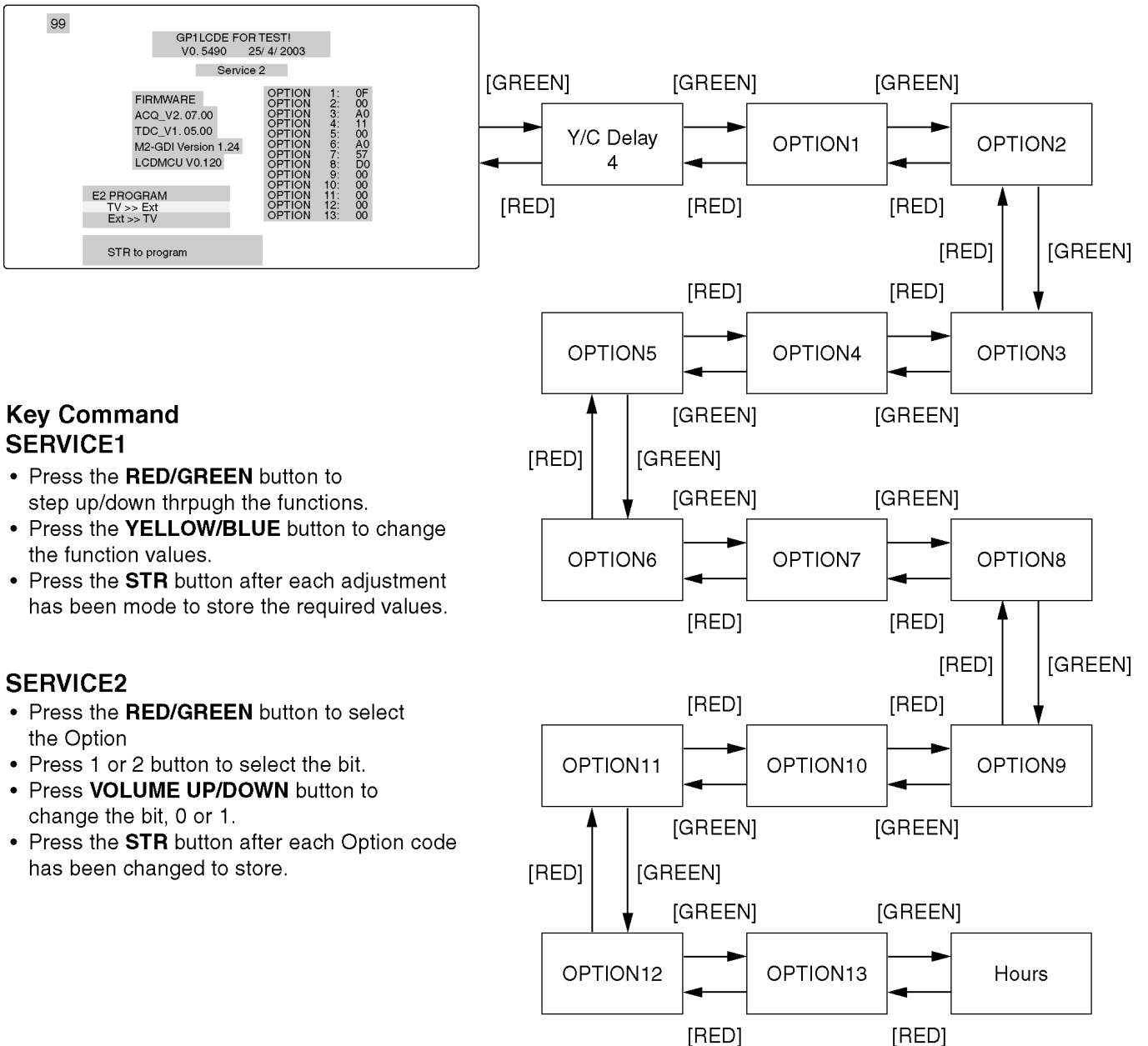
**Note:**

To exit to Service mode, press N or Power button on remote control.

## SERVICE 1



## SERVICE 2



### Key Command

#### SERVICE1

- Press the **RED/GREEN** button to step up/down through the functions.
- Press the **YELLOW/BLUE** button to change the function values.
- Press the **STR** button after each adjustment has been made to store the required values.

#### SERVICE2

- Press the **RED/GREEN** button to select the Option
- Press 1 or 2 button to select the bit.
- Press **VOLUME UP/DOWN** button to change the bit, 0 or 1.
- Press the **STR** button after each Option code has been changed to store.

### 8.3. Option Description

<b>option1</b>	0F		
b0	1	Colour system	Auto(1)
b1	1		SECAM(1)
b2	1		NTSC(1)
b3	1		M.NTSC(1)
b4	0	free	
b5	0	free	
b6	0	free	
b7	0	free	
<b>option2</b>	00		
b0	0	CH Plan	ASIA / M.E. / HK/UK / CHINA(1)
b1	0		NZ/INDNES(1)
b2	0		AUSTRALIA(1)
b3	0		E.EUROPE(1)
b4	0		SPECIAL(1)
b5	0		AMERICA(1)
b6	0		CATV(1)
b7	0		JAPAN(1)
<b>option3</b>	A0		
b0	0	sub picture	without sub-picture(0), with sub-picture(1)
b1	0	2tuner	2tuner(1), 1tuner(0)
b2	0	VGA	enable(1)
b3	0	AV5	enable(1)
b4	0	Wide (16:9)	16:9 (1), 4:3 (0) (change multi window/aspect operation)
b5	1	HYPER	UHF only (0), UHF/VHF (1)
b6	0	SIF	I only(0), BG only(1)
b7	1		I/BG/DK/L(2), BG/DK(3)
<b>option4</b>	11		
b0	1	A2 enable	enable(1)
b1	0		not use
b2	0		not use
b3	0		not use
b4	1	NICAM enable	enable(1)
b5	0		not use
b6	0		not use
b7	0		not use
<b>option5</b>	00		
b0	0	A2 select 6.5MHz	5.742MHz(0) 6.742MHz(1)
b1	0	NICAM priority	ASIA/M.E.(1)
b2	0		HK/UK(1)
b3	0		CHINA(1)
b4	0		NZ/INDN(1)
b5	0		AUSTRALIA(1)
b6	0		E.EURO(1)
b7	0		SPECIAL(1)
<b>option6</b>	A0		
b0	0	Ext. HV input	without HV input(0) / with HV input(1)
b1	0	SASO enable	SASO enable(1)
b2	0	Noise mute	Noise mute enable(0)
b3	0	Monitor out AV1 mute	Monitor out AV1 mute(1)
b4	0	Tuner no refresh	Refresh tuner (0), no refresh (1)
b5	1	Tuner	MACO tuner (1), Others (0)
b6	0	free	
b7	1	IF I2C	I2C controlled Tuner IF module (1)
<b>option7</b>	57		
b0	1	Power up EC-Mode	Power on EC enable (1)
b1	1	CH Blanking	Blanking enable (1)
b2	1	AV Blanking	Blanking enable (1)
b3	0	Auto WIDE	WSS enable only in aspect Auto (0), WSS always enable (1)
b4	1	Volume correction	TV Volume coorrection enable (1)
b5	0	AVLink	Q-Link off selectable in menu (1)
b6	1	MPX/NICAM display	Display NICAM (0), Display MPX (1)
b7	0	Owner ID	not use (0)

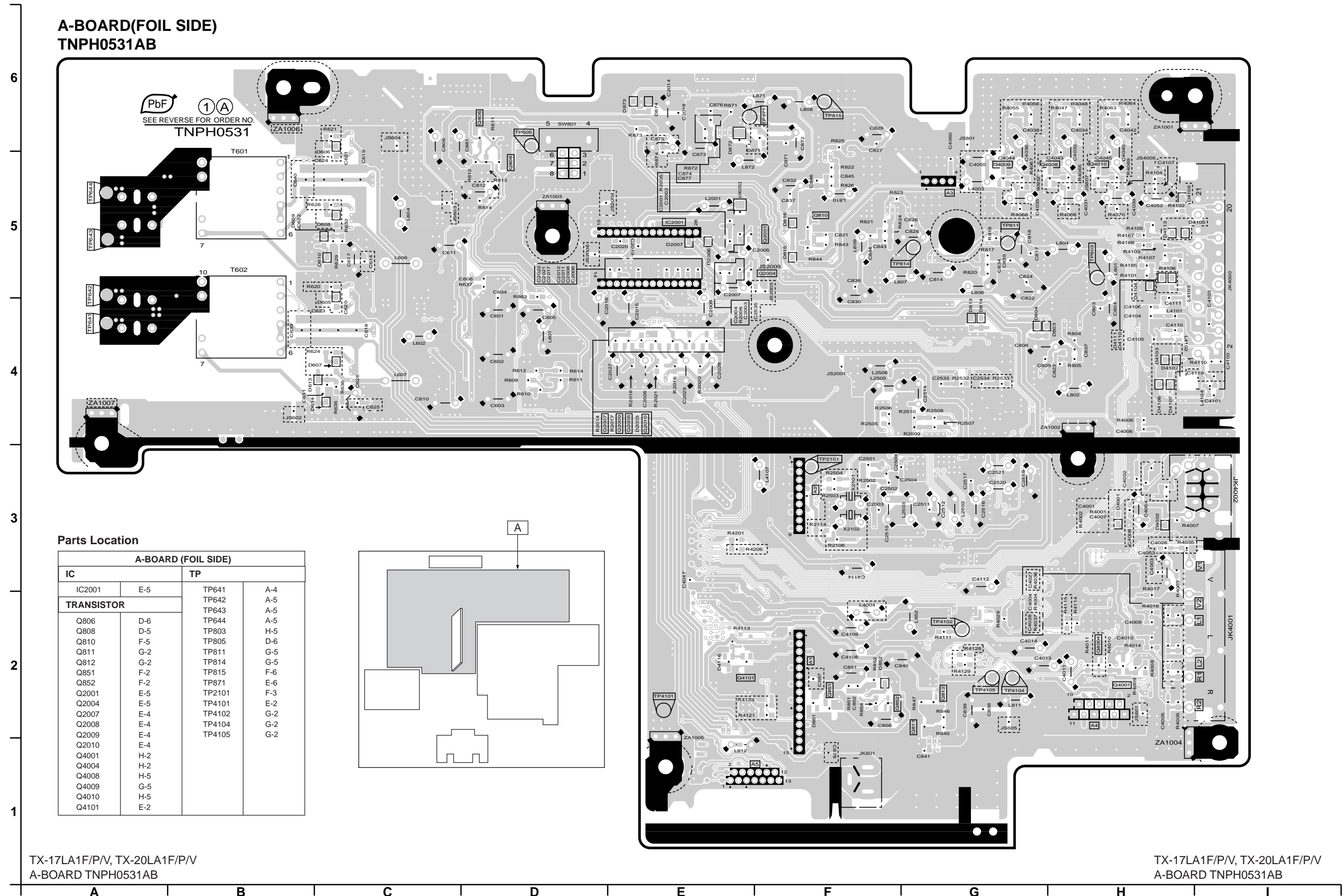
<b>option8</b>	D0		
	b0	0	Teletext CH Refresh not use
	b1	0	Geomagnetic Sensor Geomagnetic sensor enable(1)
	b2	0	Geomagnetic Polarity Geomagnetic polarity +(0), -(1)
	b3	0	RF Attenuation Enable(1)
	b4	1	Fine tuning Enable(1)
	b5	0	Search speed Slow(1) Fast(0)
	b6	1	TEXT Enable(1)
b7	1	TEXT TOP TOP enable (1)	
<b>option9</b>	00		
	b0	0	Dolby Dolby enable (1)
	b1	0	3D Subwoofer Subwoofer enable (1) Dolby model should be 0.
	b2	0	Dolby Virtual Dolby Virtual enable (1)
	b3	0	Amp with Amp(0) / without Amp(1)
	b4	0	SoundExt.DA without SoundExt.DA(0) / with SoundExt.DA(1)
	b5	0	shipping Sound menu MUSIC(0) / CINEMA(1)
	b6	0	Volume curve Volume curve1(0), curve2(1)
b7	0	LIPSYNC LIPSYNC enable (1)	
<b>option10</b>	00		
	b0	0	OSD language not use
	b1	0	ACI all country ACI enable(1), only Netherlands(0)
	b2	0	ACI auto MP ACI auto multi package enable (1)
	b3	0	ACI offset ACI offset for VCR prog. enable(1)
	b4	0	Blue Back not use
	b5	0	BC Safety Reserved
	b6	0	Protect XPR Reserved
b7	0	Protect 5V detect Protection input enable(1)	
<b>option11</b>	00		
	b0	0	Acuity Demo enable(1)
	b1	0	Picture Shift enable(1)
	b2	0	Shop mode enable(1)
	b3	0	User aspect Just enable(1)
	b4	0	User aspect 14:9 enable(1)
	b5	0	NICAM C4 bit enable(1)
	b6	0	ID-1 enable(1)
b7	0	1080i enable(1)	
<b>option12</b>	00/40	<b>Area Option</b>	00 for 17LA1, 40 for 20LA1
	b0	0	Asia Asia(1),europe(0)
	b1	0	Australia not use
	b2	0	Ireland/India Ireland(1)
	b3	0	UK UK(1)
	b4	0	MELCOA not use
	b5	0	28 inch 28 inch (1) when only Large size=0, Wide=1, PTV=0
	b6	0/1	Large size 17 inch (0), 20 inch (1)
b7	0	free	
<b>option13</b>	00	<b>Temporary</b>	
	b0	0	GC2V ES2 ES2(1), ES1(0)
	b1	0	Tuner IF 38.9 38.9MHz(0). 39.5MHz(1) [UK/Ireland]
	b2	0	NewALBD Zoom1 or Zoom3 (0), Zoom1 or 14:9(1)
	b3	0	
	b4	0	
	b5	0	
	b6	0	
b7	0		





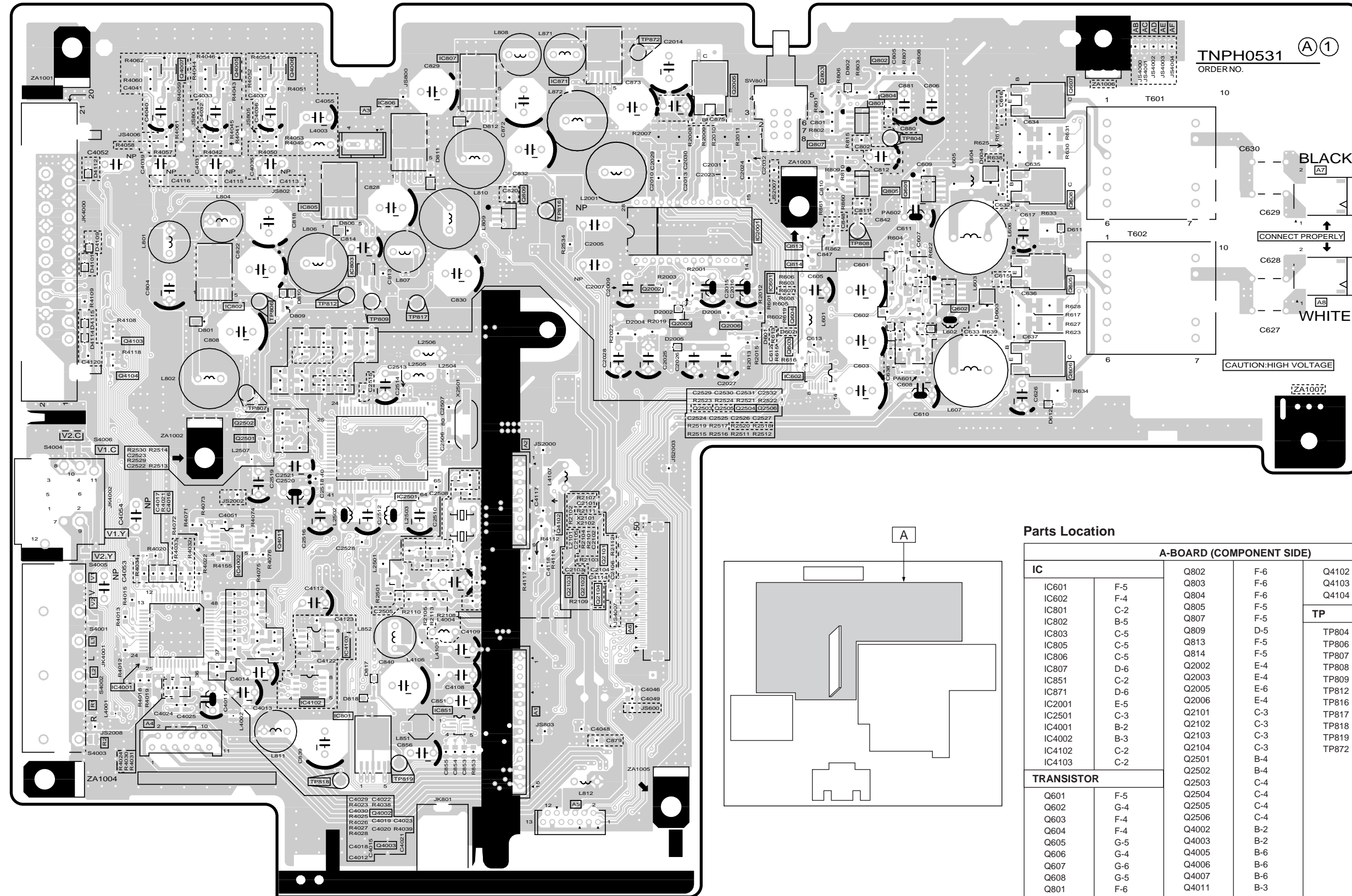
# 9 Conductor Views

## 9.1. A-Board

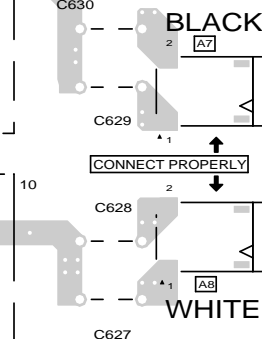


**A-BOARD (COMPONENT SIDE)  
TNP0531AB**

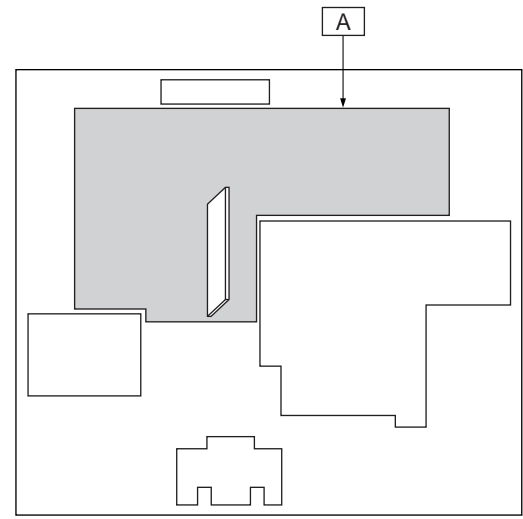
6  
5  
4  
3  
2  
1



TNP0531 (A) ①  
ORDER NO.



CAUTION: HIGH VOLTAGE



**Parts Location**

A-BOARD (COMPONENT SIDE)						
IC	IC601	F-5	Q802	F-6	Q4102	D-3
	IC602	F-4	Q803	F-6	Q4103	A-4
	IC801	C-2	Q804	F-6	Q4104	A-4
	IC802	B-5	Q805	F-5	TP	
	IC803	C-5	Q807	F-5		
	IC805	C-5	Q809	D-5	TP804	F-5
	IC806	C-5	Q813	F-5	TP806	B-4
	IC807	D-6	Q814	F-5	TP807	B-4
	IC851	C-2	Q2002	E-4	TP808	F-5
	IC871	D-6	Q2003	E-4	TP809	C-4
	IC2001	E-5	Q2005	E-6	TP812	C-4
	IC2501	C-3	Q2006	E-4	TP816	D-5
	IC4001	B-2	Q2101	C-3	TP817	C-4
	IC4002	B-3	Q2102	C-3	TP818	C-1
IC4102	C-2	Q2103	C-3	TP819	C-2	
IC4103	C-2	Q2104	C-3	TP822	E-6	
TRANSISTOR		Q2501	B-4			
Q601	F-5	Q2502	B-4			
Q602	G-4	Q2503	C-4			
Q603	F-4	Q2504	C-4			
Q604	F-4	Q2505	C-4			
Q605	G-5	Q2506	C-4			
Q606	G-4	Q4002	B-2			
Q607	G-6	Q4003	B-2			
Q608	G-5	Q4005	B-6			
Q801	F-6	Q4006	B-6			
		Q4007	B-6			
		Q4011	B-3			

TX-17LA1F/P/V, TX-20LA1F/P/V  
A-BOARD TNP0531AB

TX-17LA1F/P/V, TX-20LA1F/P/V  
A-BOARD TNP0531AB

A B C D E F G H I





### DG-BOARD (FOIL SIDE) (FOR TX-17LA1F/P/V)

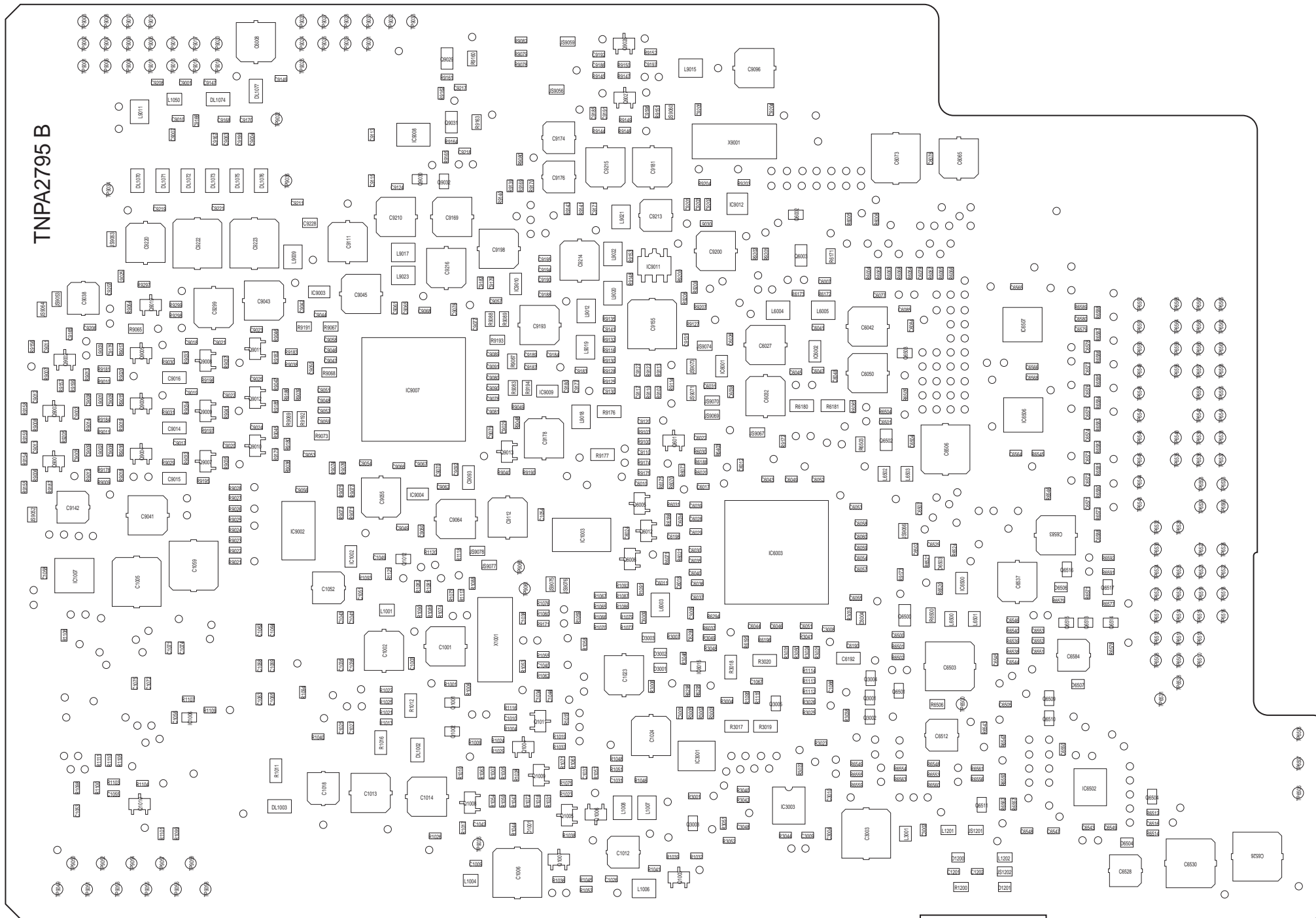
A

B

C

D

E



TX-17LA1F/P/V  
DG-BOARD (TNPA2795)

TX-17LA1F/P/V  
DG-BOARD (TNPA2795)

1

2

3

4

5

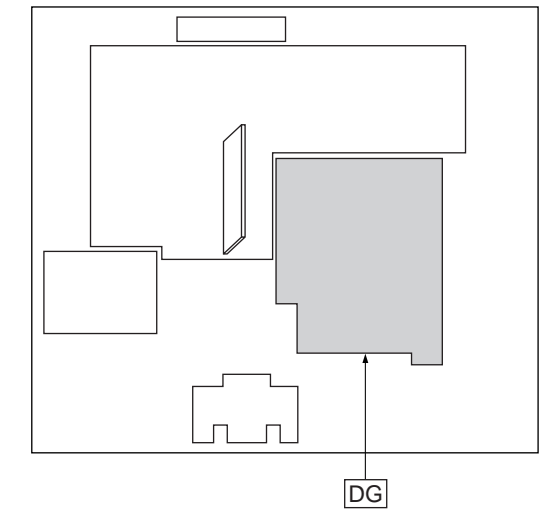
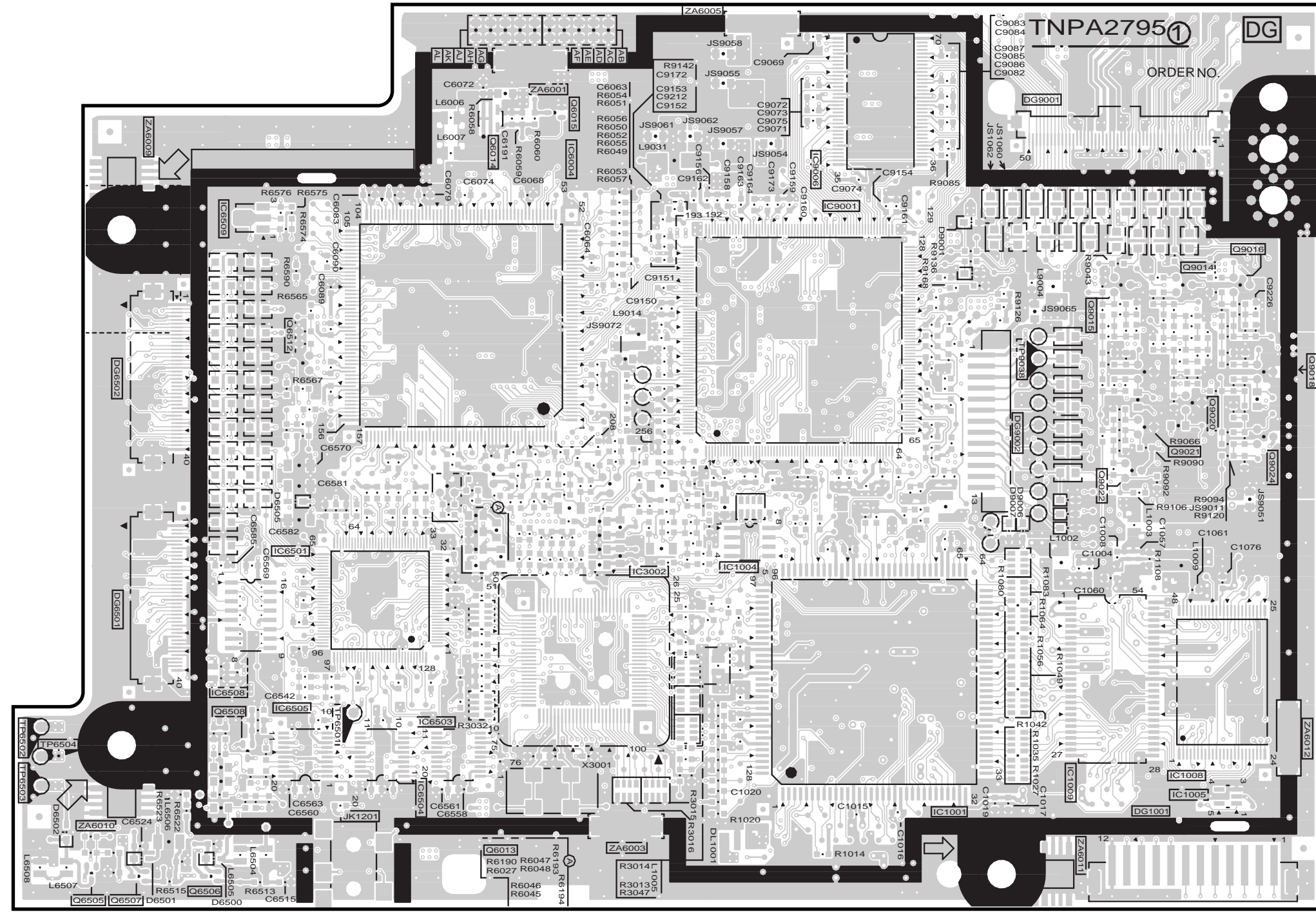
6

7

8

DG-BRD(COMPONENT SIDE)  
TNPA2795

6  
5  
4  
3  
2  
1  
A B C D E F G H I



Parts Location

DG-BRD (COMPONENT SIDE)			
IC		TP	
IC1001	E-2	Q6010	C-3
IC1004	E-3	Q6505	A-1
IC1005	G-1	Q6506	B-1
IC1008	G-2	Q6507	A-1
IC1009	F-2	Q6508	B-2
IC3002	D-2	Q6512	B-4
IC6004	C-4	Q9014	G-4
IC6501	C-2	Q9015	F-4
IC6503	C-2	Q9016	G-4
IC6504	C-2	Q9017	G-3
IC6505	B-2	Q9018	G-4
IC6508	B-2	Q9020	G-3
IC6509	B-4	Q9021	G-3
IC9001	E-4	Q9022	F-3
IC9006	E-5	Q9024	G-3
		Q9026	F-4
TRANSISTOR		TP	
Q6013	C-3	TP6502	A-2
Q6014	C-5	TP6503	A-1
Q6015	D-5	TP6504	A-2
Q6004	D-3	TP9038	F-4

TX-17LA1F/P/V  
DG-BRD TNPA2795

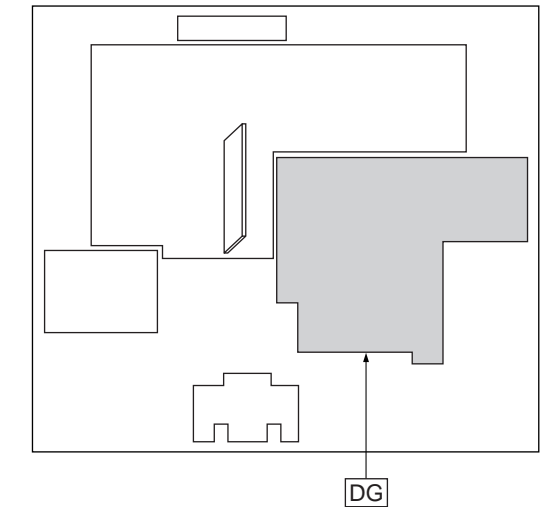
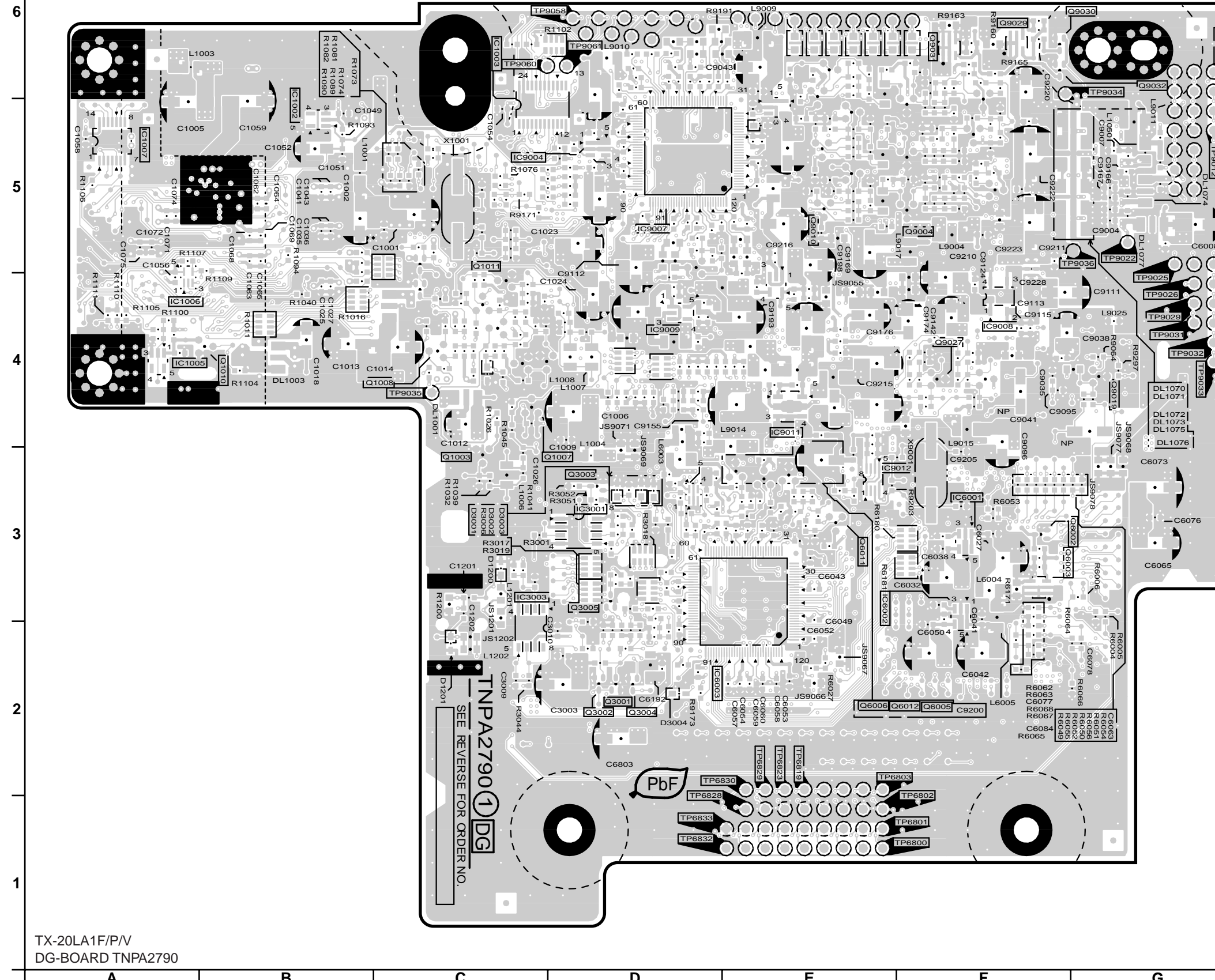
TX-17LA1F/P/V  
DG-BRD TNPA2795





9.3. DG-Board (TX-20LA1F/P/V)

DG-BOARD(FOIL SIDE)  
TNPA2790



Parts Location

DG-BOARD (FOIL SIDE)				
IC	IC1002	B-5	Q9003	F-6
	IC1003	C-5	Q9004	F-5
	IC1005	A-4	Q9005	F-6
	IC1006	A-4	Q9006	F-6
	IC1007	A-5	Q9007	E-5
	IC3001	D-3	Q9008	E-6
	IC3003	C-2	Q9009	E-5
	IC6001	F-3	Q9010	E-5
	IC6002	F-3	Q9011	E-5
	IC6003	E-3	Q9012	E-5
	IC6015	D-3	Q9013	D-4
	IC9003	E-6	Q9019	G-4
	IC9004	D-5	Q9027	F-4
IC9007	D-5	Q9028	F-4	
IC9008	F-4	Q9029	F-6	
IC9009	D-4	Q9030	F-6	
IC9010	E-4	Q9031	F-6	
IC9011	E-4	Q9032	F-6	
IC9012	E-3			
TRANSISTOR	Q1001	C-5	TP6800	E-1
	Q1002	C-5	TP6801	E-1
	Q1003	C-3	TP6802	E-1
	Q1004	C-4	TP6803	E-2
	Q1005	C-4	TP6819	E-2
	Q1006	C-4	TP6823	E-2
	Q1007	C-4	TP6828	E-1
	Q1008	C-4	TP6829	E-2
	Q1009	C-4	TP6830	E-2
	Q1010	B-4	TP6832	E-1
	Q1011	C-4	TP6833	E-1
	Q3001	D-2	TP9003	G-6
	Q3002	D-2	TP9012	G-5
	Q3003	D-3	TP9025	G-5
	Q3004	D-2	TP9026	G-4
	Q3005	D-3	TP9029	G-4
	Q6002	F-3	TP9031	G-4
	Q6003	F-3	TP9032	G-4
Q6005	E-3	TP9033	G-4	
Q6006	E-3	TP9034	F-6	
Q6011	E-3	TP9035	C-4	
Q6012	E-3	TP9036	G-5	
Q9001	F-6	TP9058	D-6	
Q9002	F-6	TP9060	C-6	
		TP9061	D-6	

TX-20LA1F/P/V  
DG-BOARD TNPA2790

TX-20LA1F/P/V  
DG-BOARD TNPA2790

DG-BOARD (FOIL SIDE) (FOR TX-20LA1F/P/V)

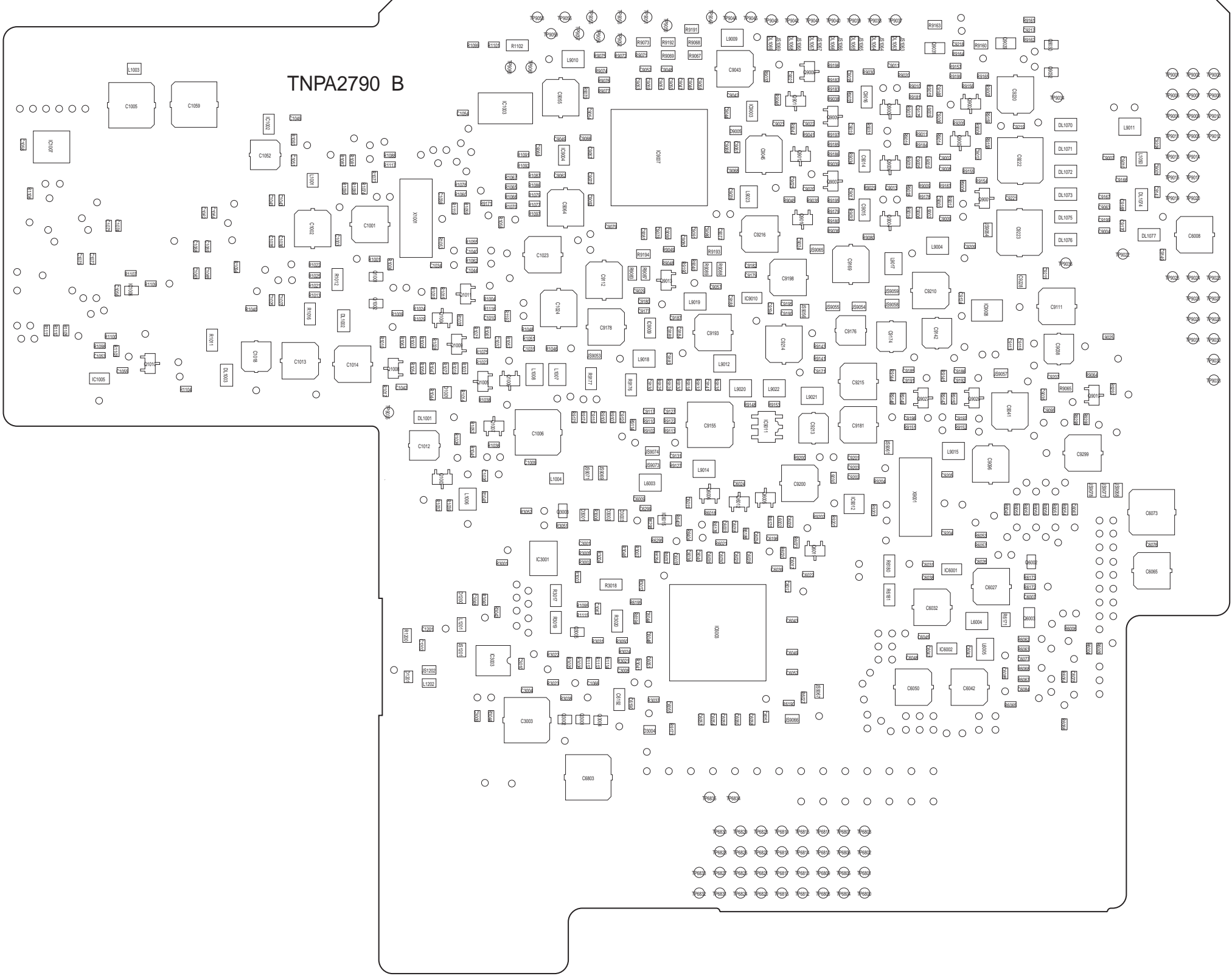
A

B

C

D

E



TNPA2790 B

TX-20LA1F/P/V  
DG-BOARD (TNPA2790)

TX-20LA1F/P/V  
DG-BOARD (TNPA2790)

1

2

3

4

5

6

7

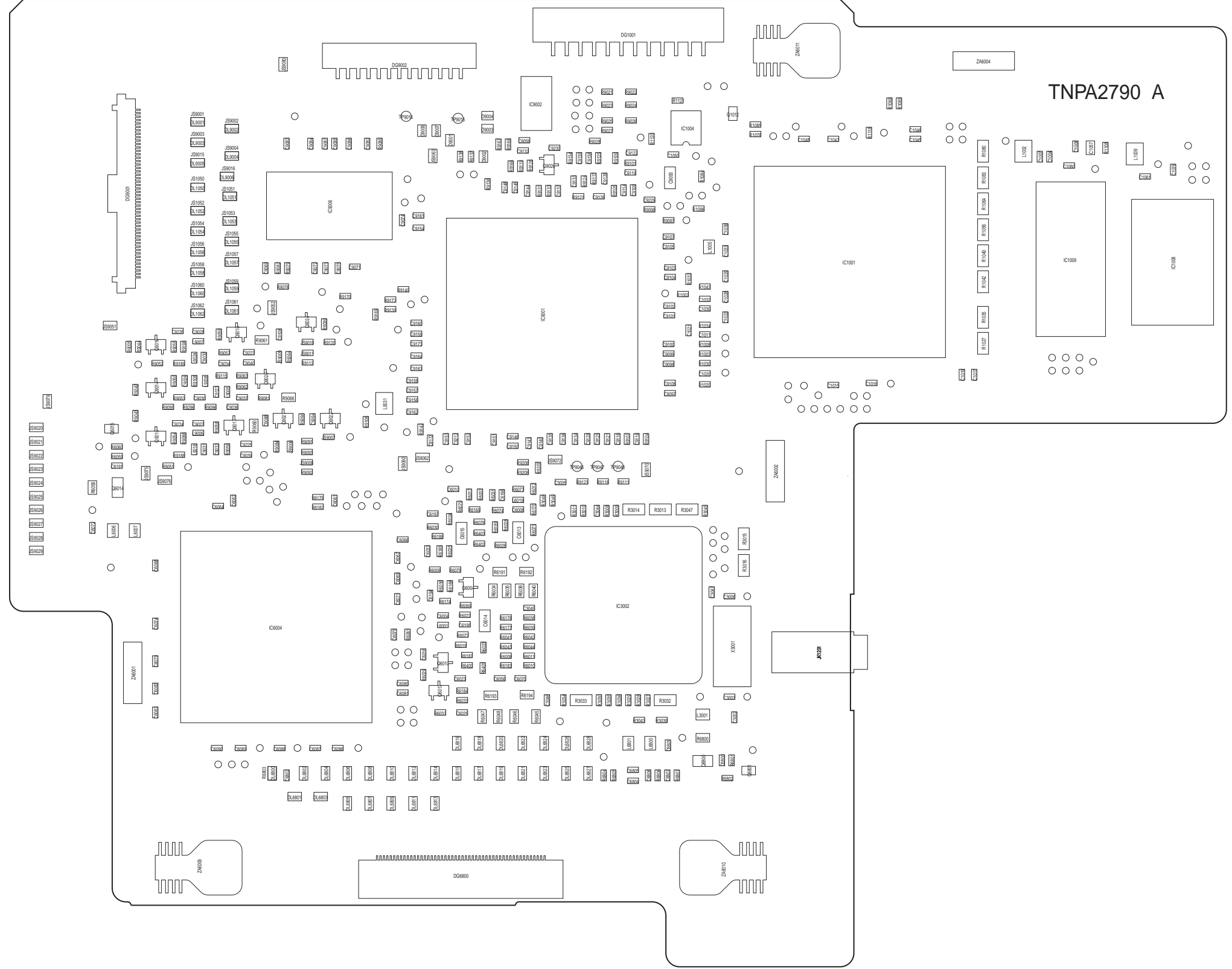
8





### DG-BOARD (COMPONENT SIDE) (FOR TX-20LA1F/P/V)

A  
B  
C  
D  
E



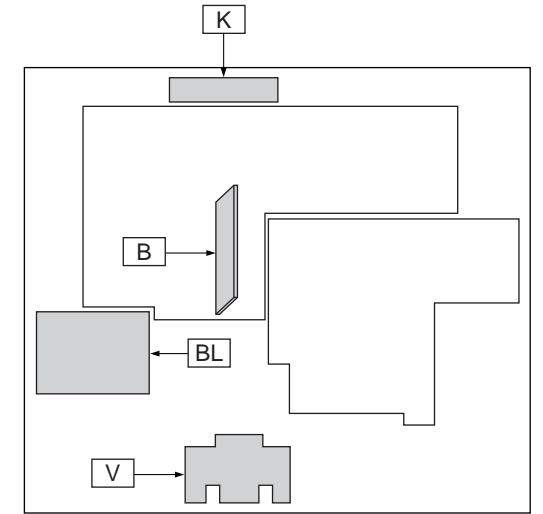
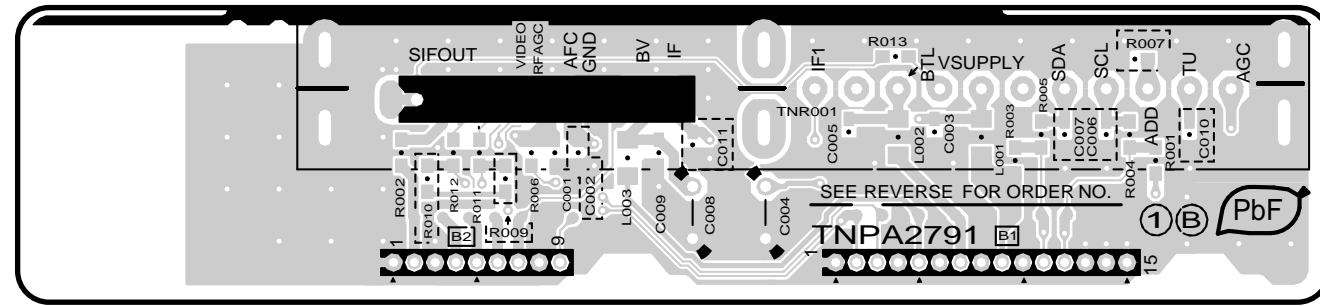
TX-20LA1F/P/V  
DG-BOARD (TNPA2790)

TX-20LA1F/P/V  
DG-BOARD (TNPA2790)

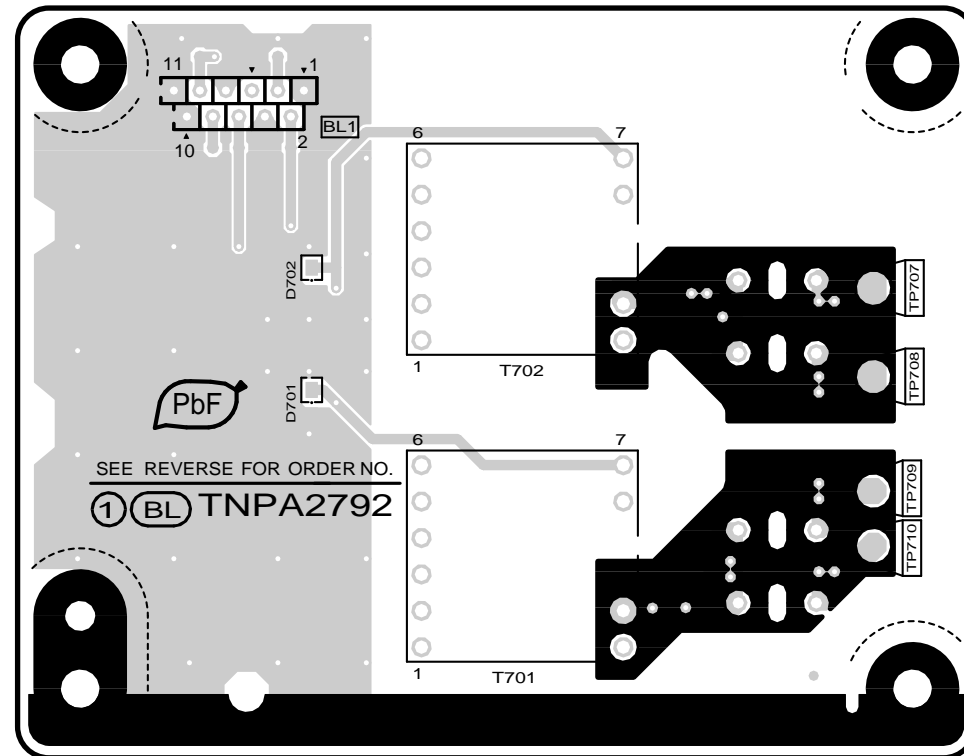
1 2 3 4 5 6 7 8

9.4. B, BL, K and V-Board

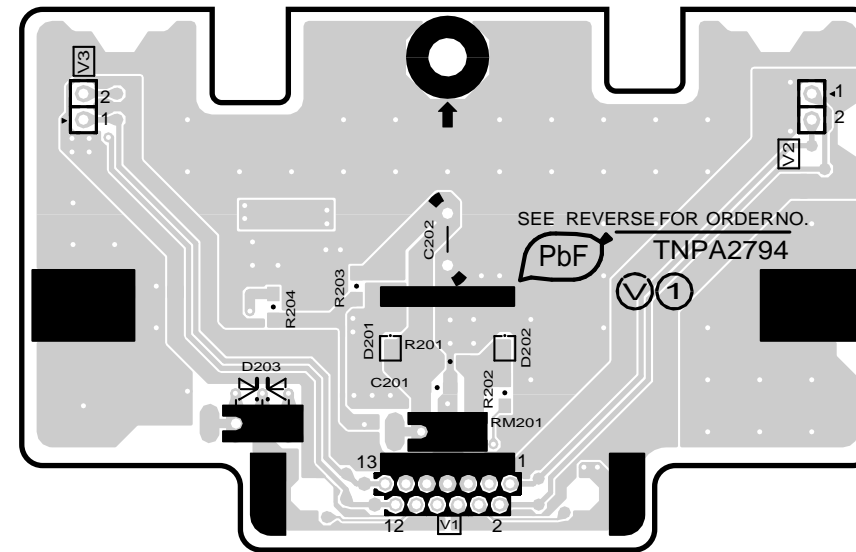
**B-BOARD(FOILSIDE)  
TNPA2791AB**



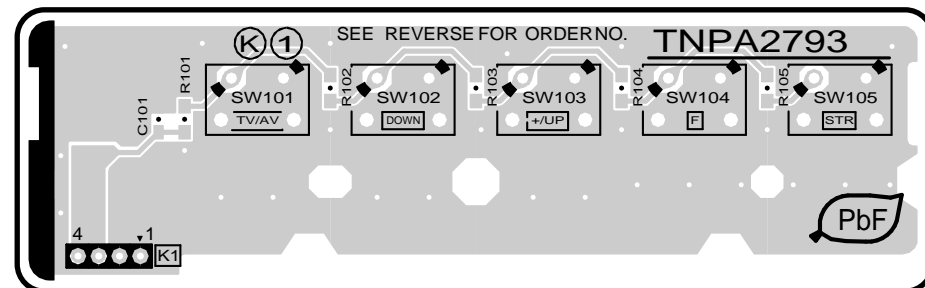
**BL-BOARD(FOIL SIDE)  
TNPA2792**



**V-BOARD(FOIL SIDE)  
TNPA2794**



**K-BOARD(FOIL SIDE)  
TNPA2793**



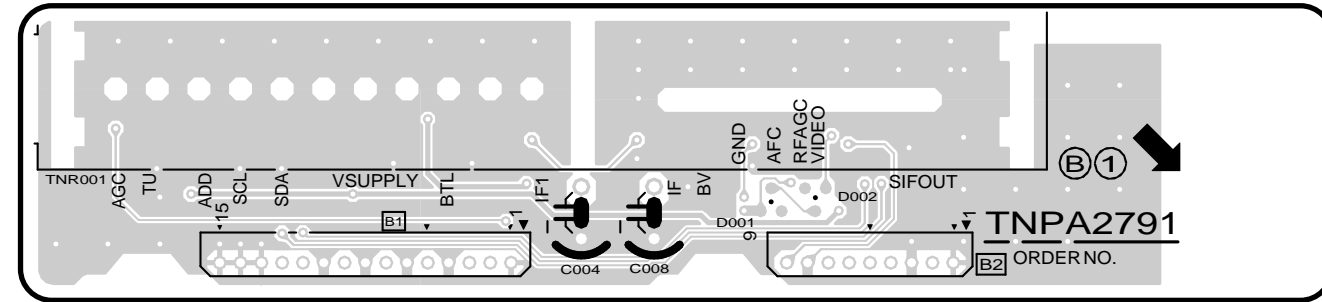
TX-17LA1F/P/V, TX-20LA1F/P/V  
B-BOARD TNPA2791AB K-BOARD TNPA2793  
BL-BOARD TNPA2792 V-BOARD TNPA2794

TX-17LA1F/P/V, TX-20LA1F/P/V  
B-BOARD TNPA2791AB K-BOARD TNPA2793  
BL-BOARD TNPA2792 V-BOARD TNPA2794

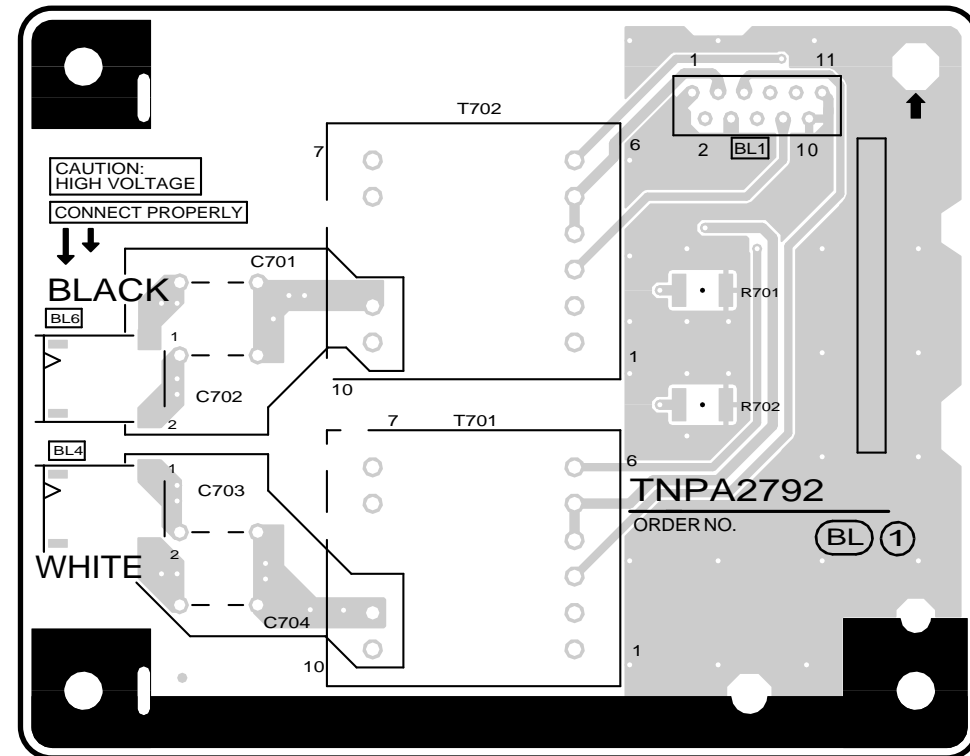
6  
5  
4  
3  
2  
1

A B C D E F G H I

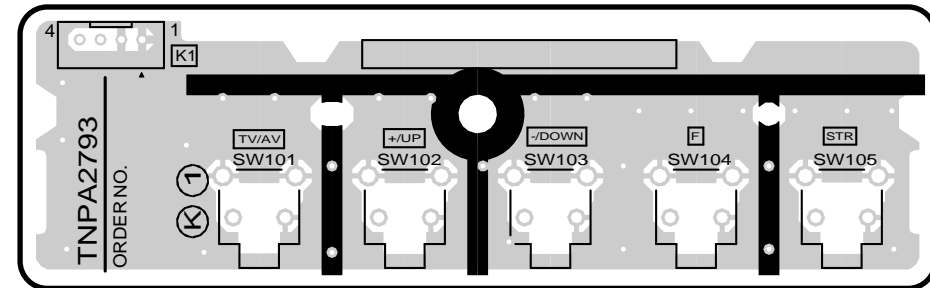
**B-BBOARD(COMPONENT SIDE)  
TNPA2791AB**



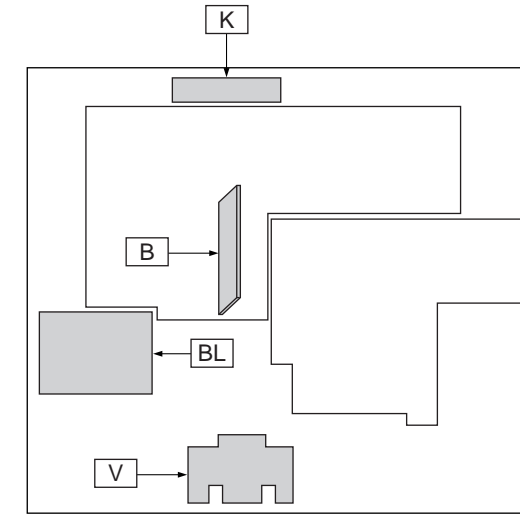
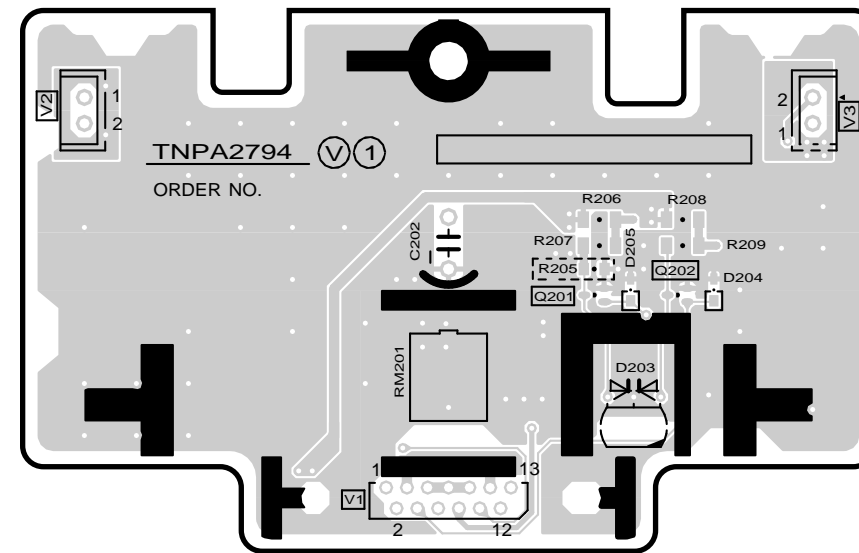
**BL-BBOARD(COMPONENT SIDE)  
TNPA2792**



**K-BBOARD(COMPONENT SIDE)  
TNPA2793**



**V-BBOARD(COMPONENT SIDE)  
TNPA2794**



TX-17LA1F/P/V, TX-20LA1F/P/V  
 B-BBOARD TNPA2791AB K-BBOARD TNPA2793  
 BL-BBOARD TNPA2792 V-BBOARD TNPA2794

TX-17LA1F/P/V, TX-20LA1F/P/V  
 B-BBOARD TNPA2791AB K-BBOARD TNPA2793  
 BL-BBOARD TNPA2792 V-BBOARD TNPA2794

A B C D E F G H I

# 10 Block and Schematic Diagram

## 10.1. Schematic Diagram Notes

### Important Safety Notice

Components identified by  $\triangle$  mark have special characteristics important for safety.  
When replacing any of these components, use only manufacture's specified parts.

#### Notes:

##### 1. Resistor

All resistors are carbon 1/4W resistor, unless marked as follows:

Unit of resistance is OHM [ $\Omega$ ] (K=1,000, M=1,000,000).

$\circ$ : Nonflammable	$\boxtimes$ : Metal Oxide
$\triangle$ : Solid	$\odot$ : Metal Film
$\boxplus$ : Wire Wound	$\otimes$ : Fuse:

##### 2. Capacitor

All capacitors are ceramic 50V capacitor, unless marked as follows:

Unit of capacitance is  $\mu$ F, unless otherwise noted.

$\otimes$ : Temperature Compensation	$\text{---}\overset{+}{\parallel}\text{---}$ : Electrolytic
$\textcircled{M}$ : Polyester	$\text{---}\overset{NP}{\parallel}\text{---}$ : Bipolar
$\textcircled{m}$ : Metalized Polyester	$\textcircled{T}$ : Dipped Tantalum
$\boxtimes$ : Polypropylene	$\textcircled{Z}$ : Z-Type

##### 3. Coil

Unit of inductance is  $\mu$ H, unless otherwise noted.

##### 4. Test Point

$\circ$  : Test Point position

##### 5. Earth Symbol

$\#$  : Chassis Earth (Cold)       $\downarrow$  : Line Earth (Hot)

##### 6. Voltage Measurement

Voltage is measured by a DC voltmeter.

Conditions of the measurement are the following:

Power Source ..... AC 100-240V, 50/60Hz

Receiving Signal ..... Colour Bar signal (RF)

All customer's controls ..... Maximum positions

##### 7. Number in red circle indicates waveform number.

(See waveform pattern table.)

##### 8. When arrow mark ( $\nearrow$ ) is found, connection is easily found from the direction of arrow

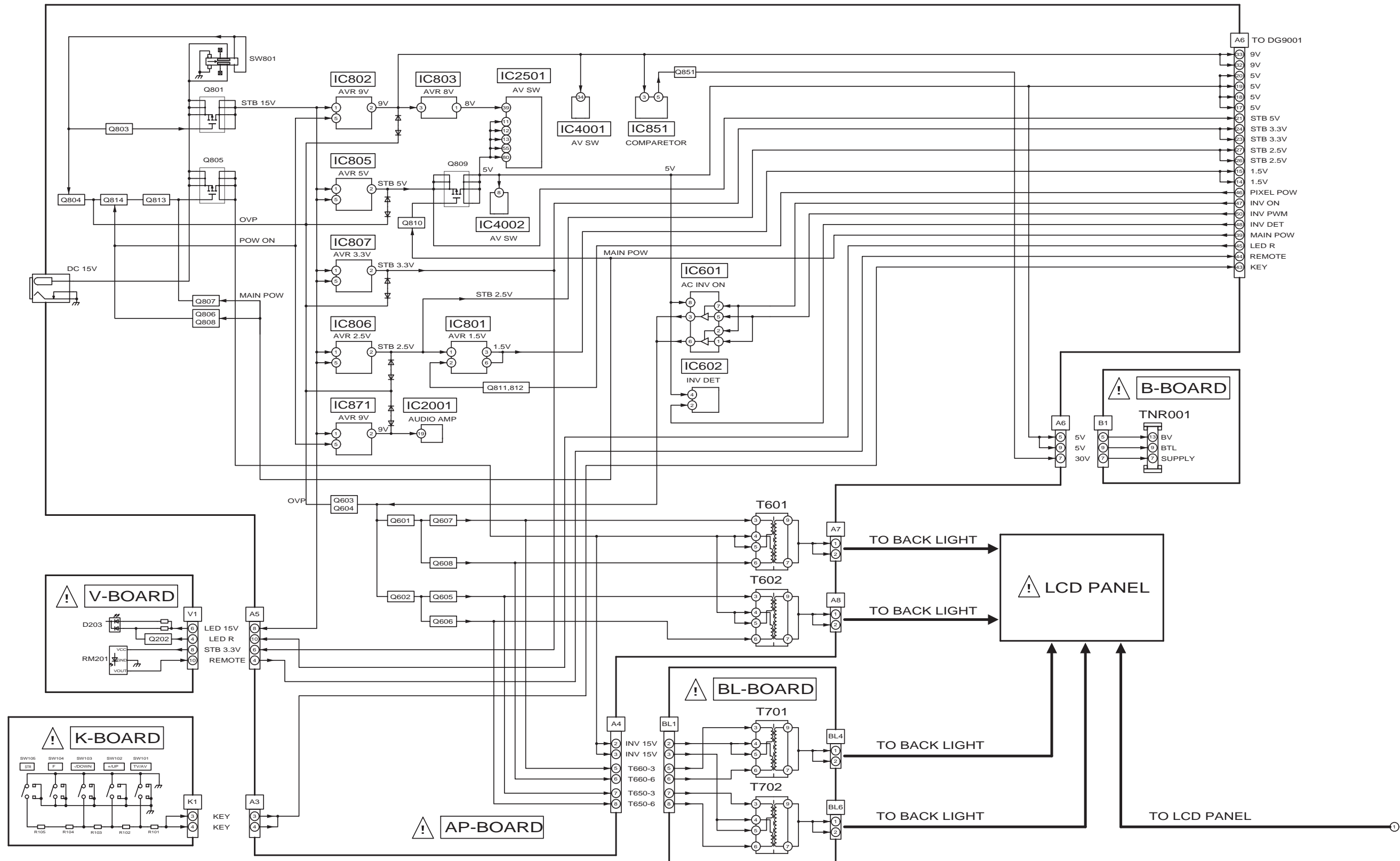
9. Indicates the major signal flow.      : Video  $\Rightarrow$       Audio  $\Leftrightarrow$

10. This schematic diagram is the latest at the time of printing and subject to change without notice.

#### Remarks:

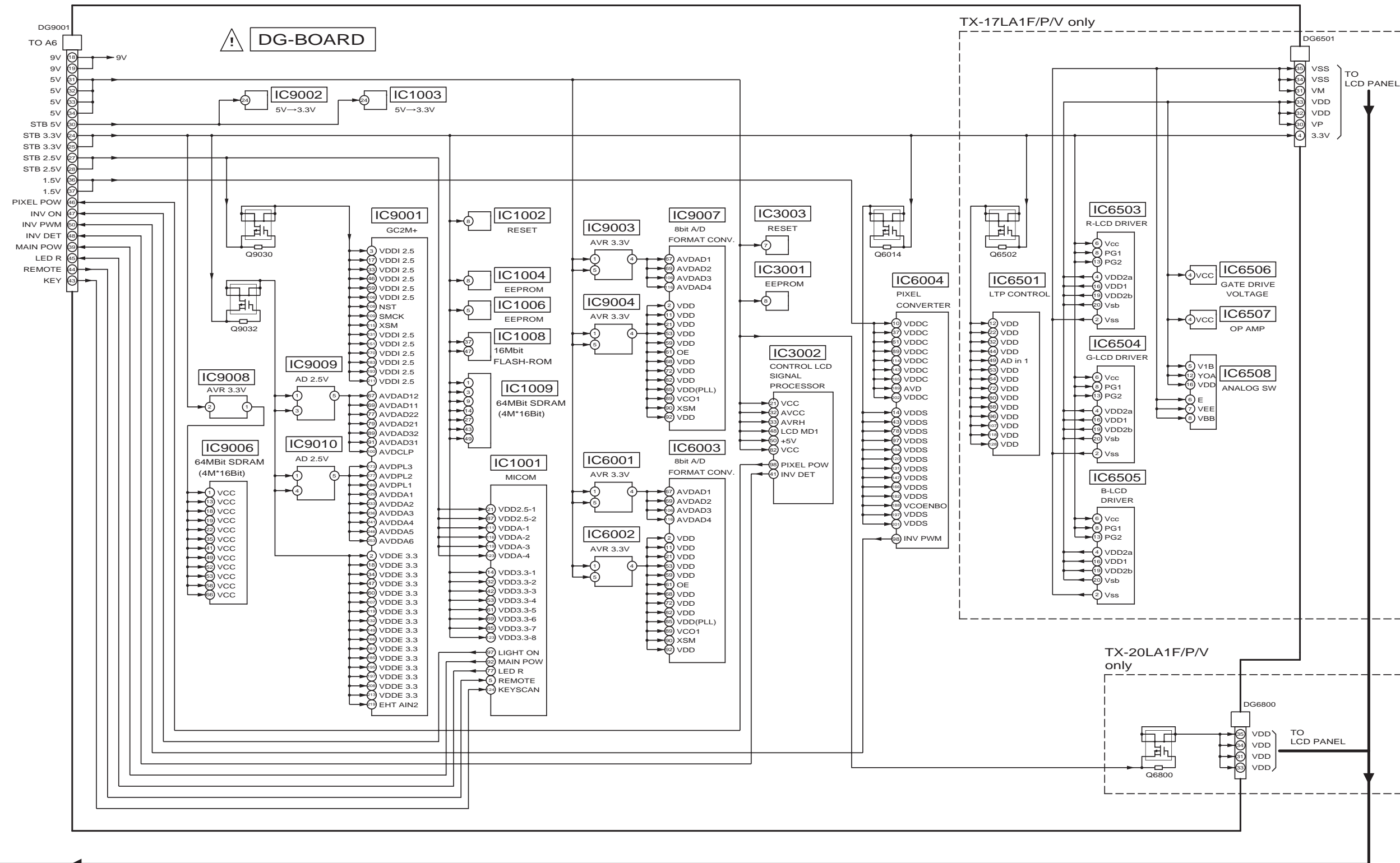
1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.  
The circuit is defined by HOT and COLD indications in the schematic diagram. Take the following precautions.  
All circuits, except the Power Circuit, are cold.  
Precautions
  - a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
  - b. Do not short-circuit the hot and cold circuits or a fuse may blow and parts may break.
  - c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may blow.  
Connect the earth of instruments to the earth connection of the circuit being measured.
  - d. Make sure to disconnect the power plug before removing the chassis.
2. Following diodes are interchangeable.  
MA150- MA162 (Replacement part)

## 10.2. Power Block Diagram



TX-17LA1F/P/V, TX-20LA1F/P/V  
Power Block Diagram

TX-17LA1F/P/V, TX-20LA1F/P/V  
Power Block Diagram

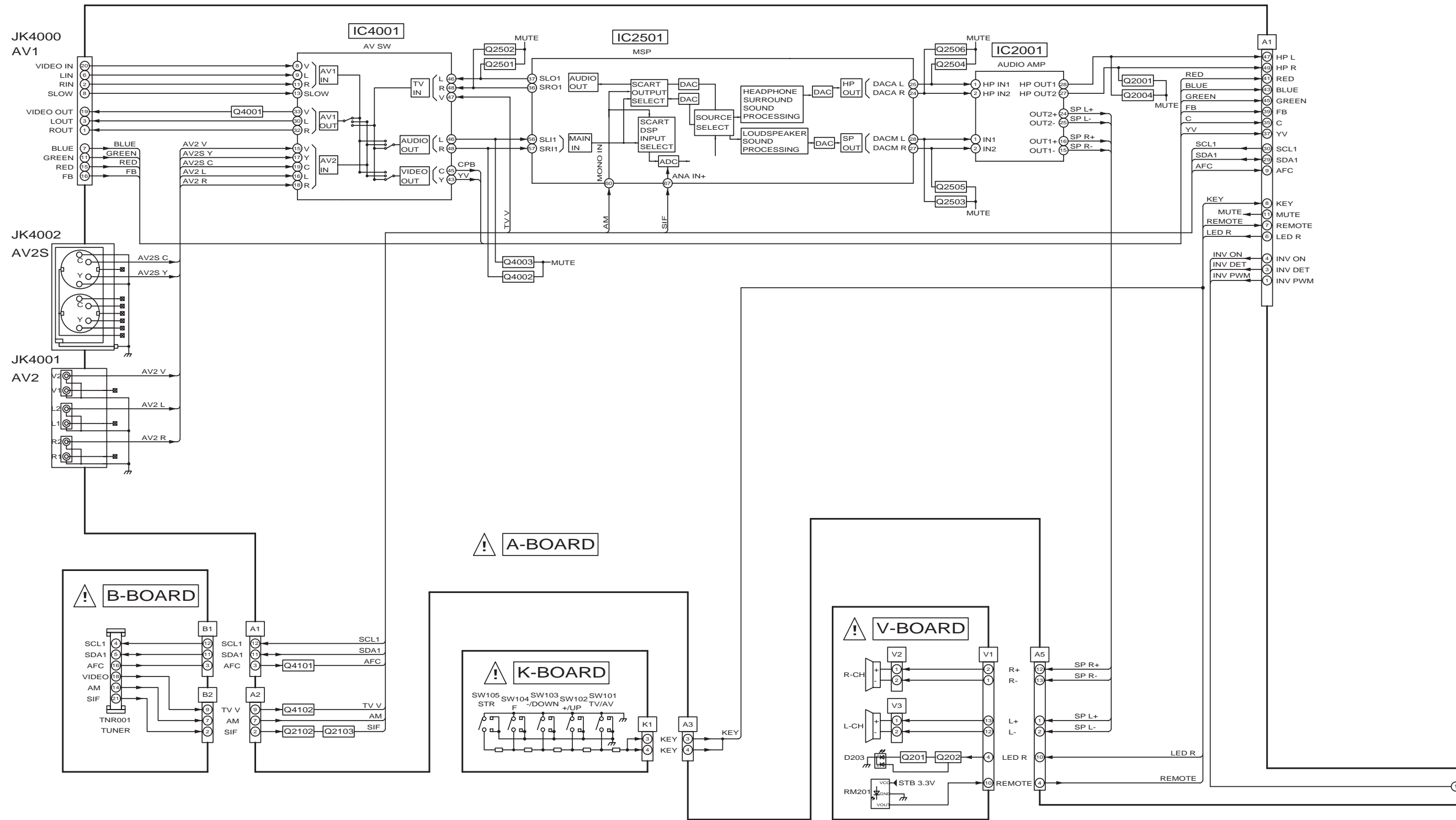


TX-17LA1F/P/V, TX-20LA1F/P/V  
Power Block Diagram

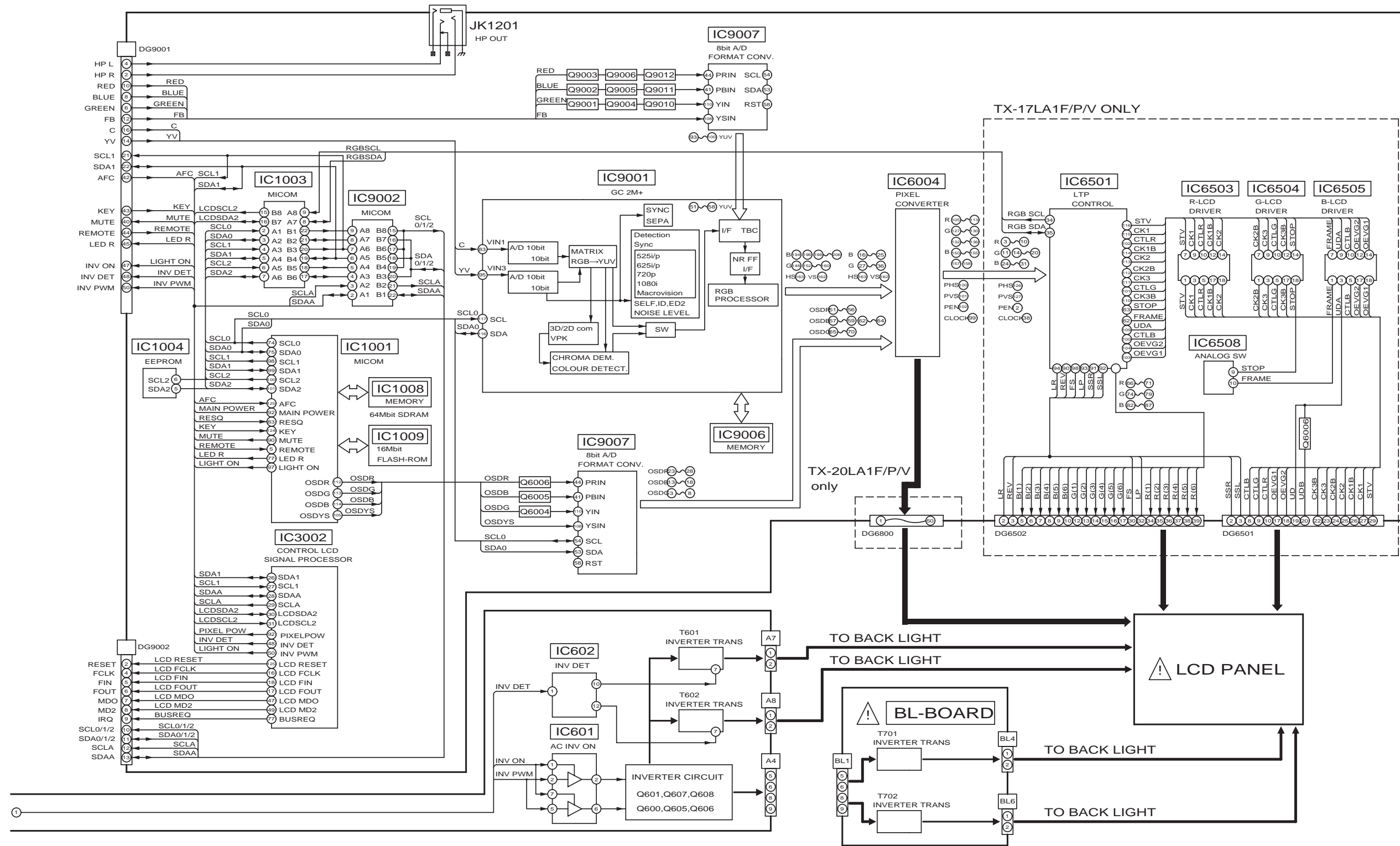
TX-17LA1F/P/V, TX-20LA1F/P/V  
Power Block Diagram



### 10.3. Signal Block Diagram







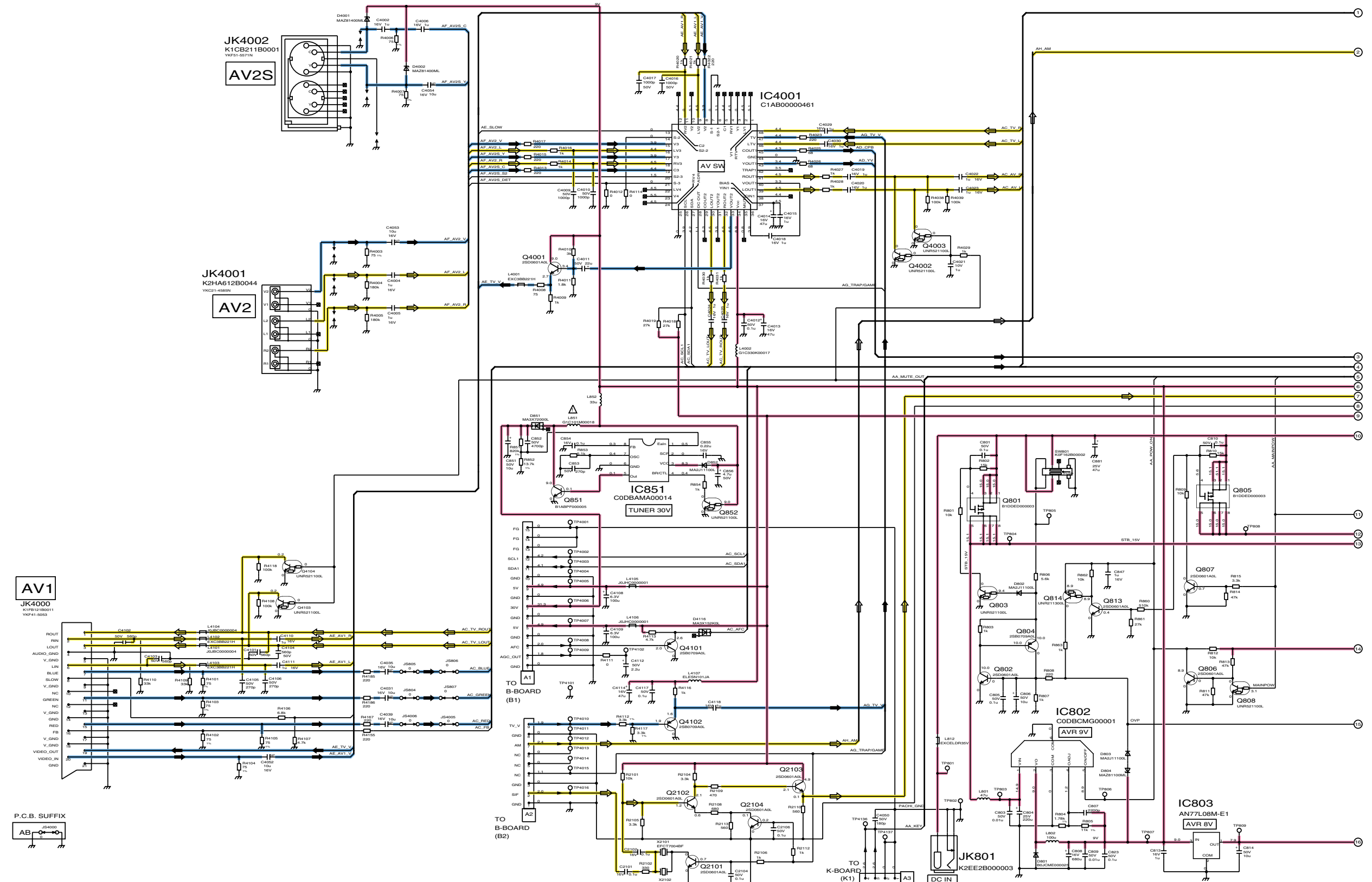
TX-17LA1F/P/V, TX-20LA1F/P/V  
Signal Block Diagram

TX-17LA1F/P/V, TX-20LA1F/P/V  
Signal Block Diagram

# 10.4. A-Board (1 of 3) Schematic Diagram

**A-BOARD TNPH0531AB (1/3)**

A  
B  
C  
D  
E  
F

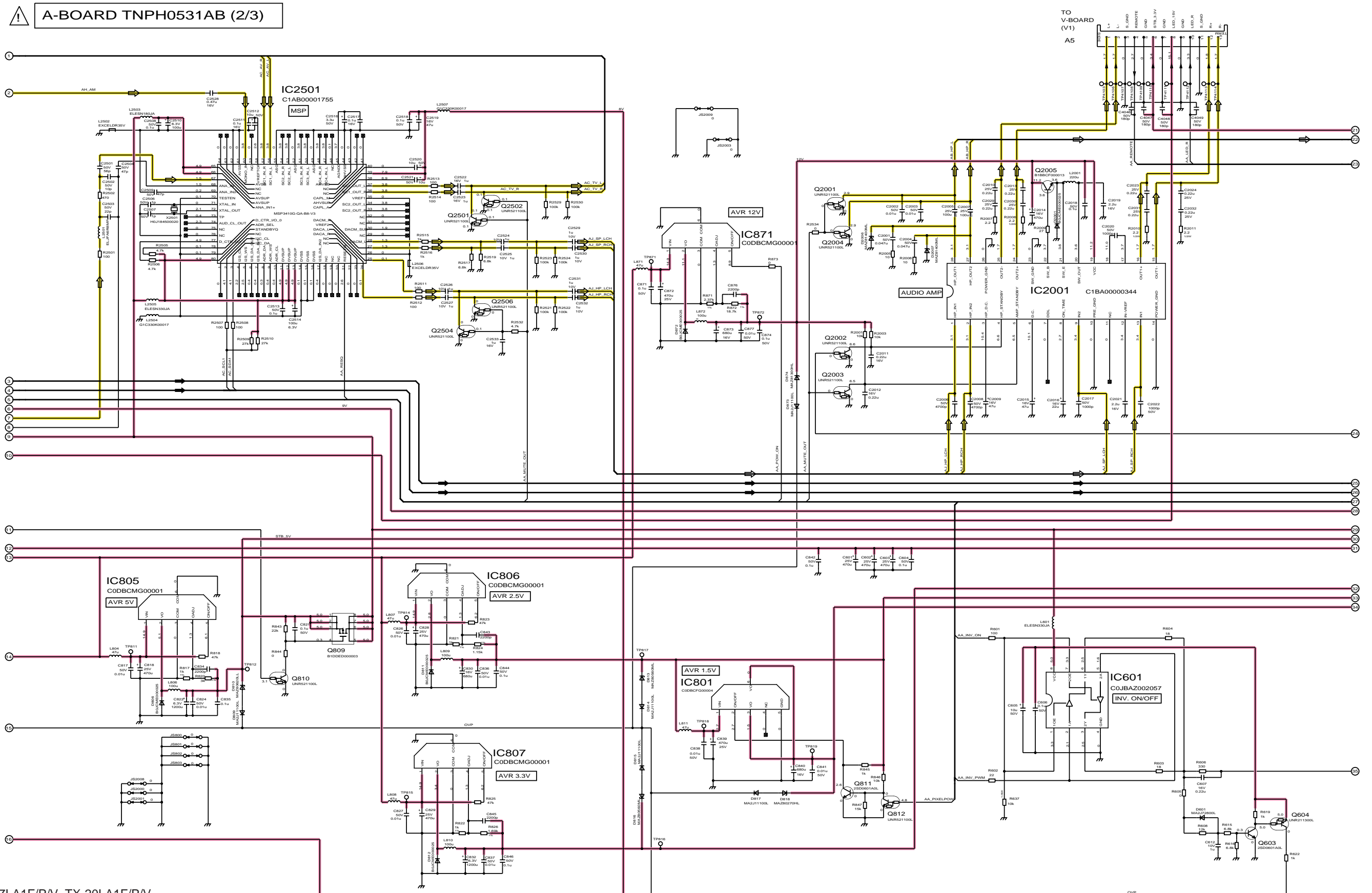


TX-17LA1F/P/V, TX-20LA1F/P/V  
A-BOARD (1 of 3) Schematic Diagram

TX-17LA1F/P/V, TX-20LA1F/P/V  
A-BOARD (1 of 3) Schematic Diagram

1 2 3 4 5 6 7 8 9

# 10.5. A-Board (2 of 3) Schematic Diagram



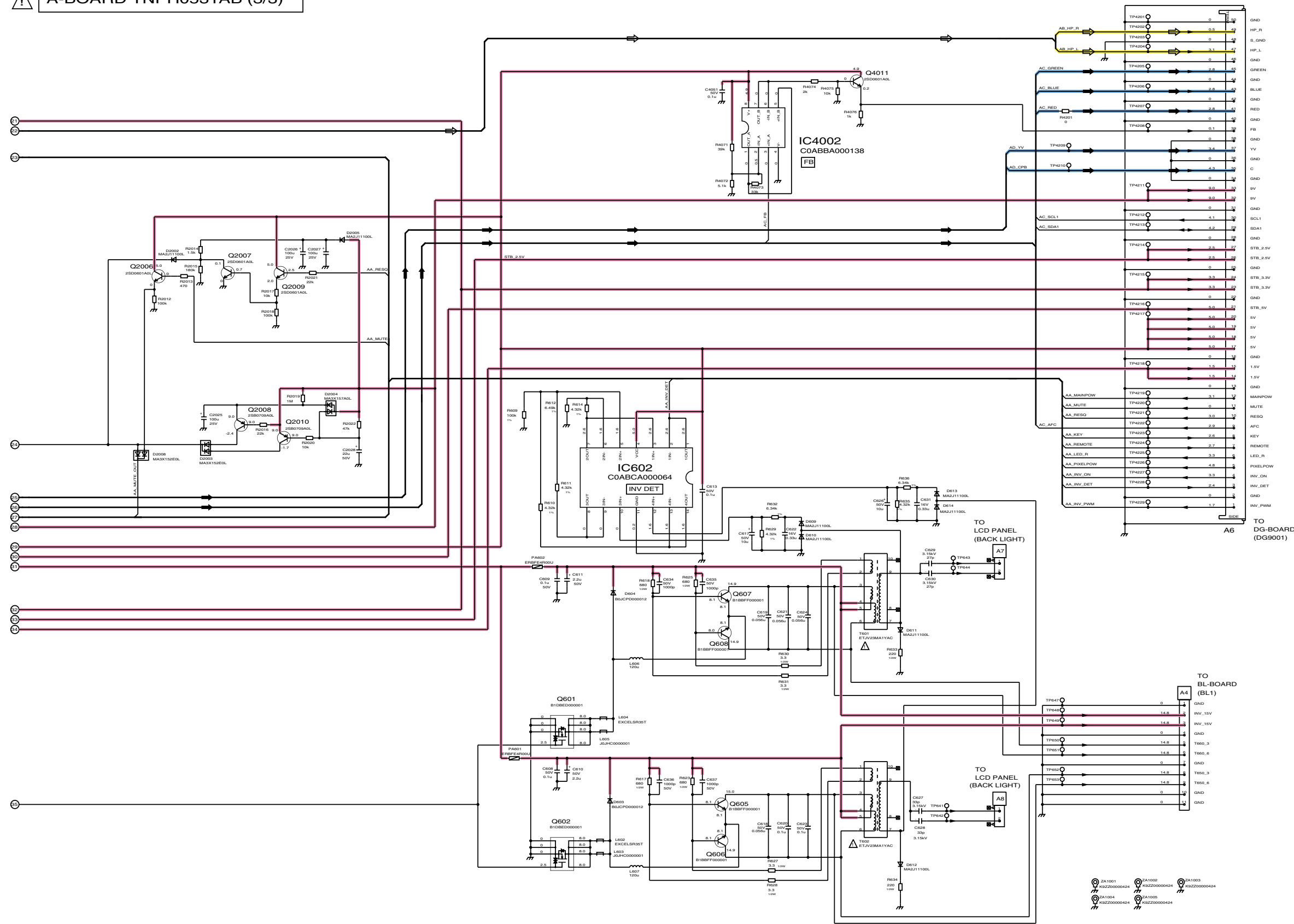
TX-17LA1F/P/V, TX-20LA1F/P/V  
A-BOARD (2 of 3) Schematic Diagram

TX-17LA1F/P/V, TX-20LA1F/P/V  
A-BOARD (2 of 3) Schematic Diagram

10 11 12 13 14 15 16 17 18

# 10.6. A-Board (3 of 3) Schematic Diagram

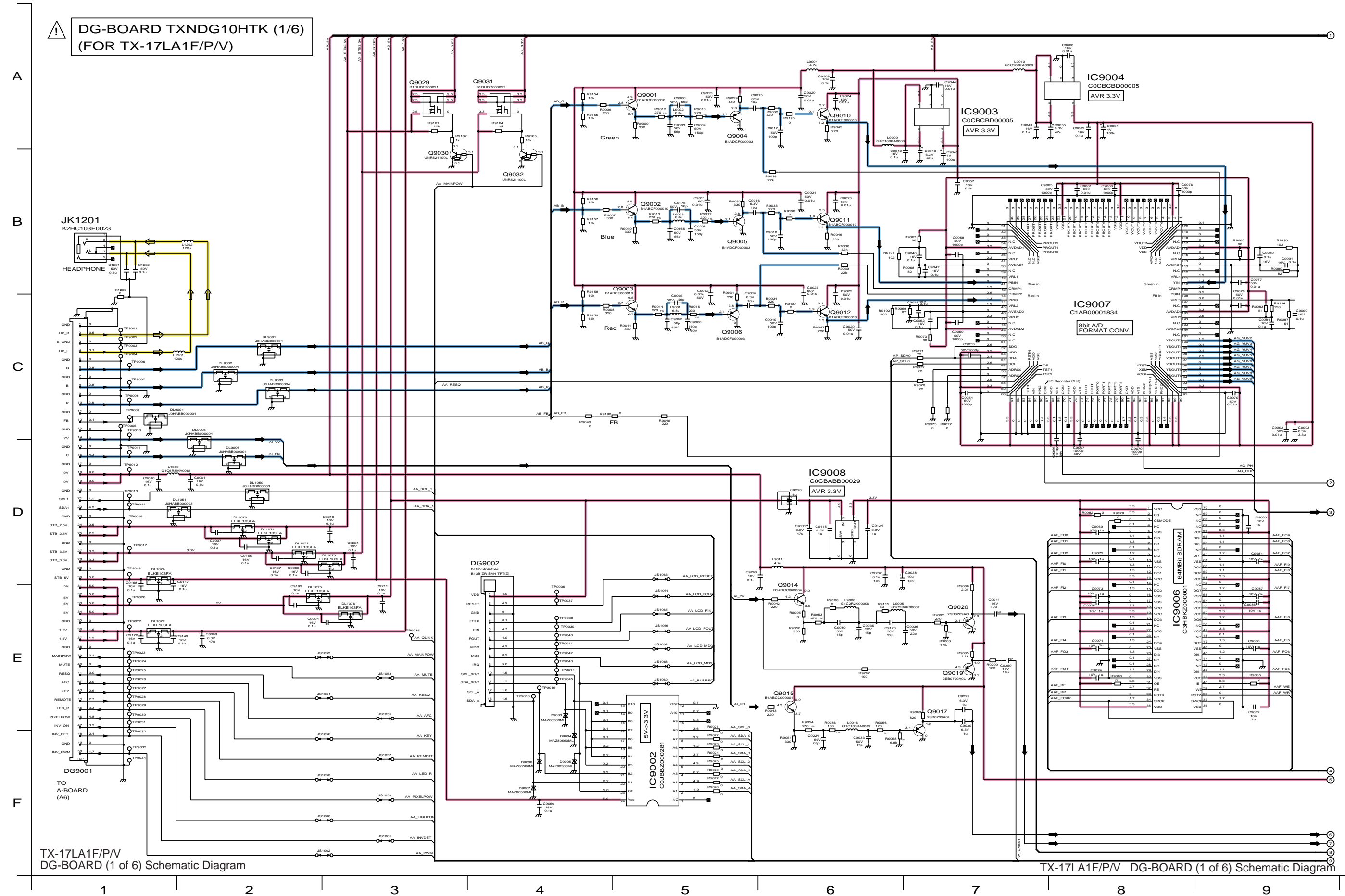
**A-BOARD TNPH0531AB (3/3)**



TX-17LA1F/P/V, TX-20LA1F/P/V  
A-BOARD (2 of 3) Schematic Diagram

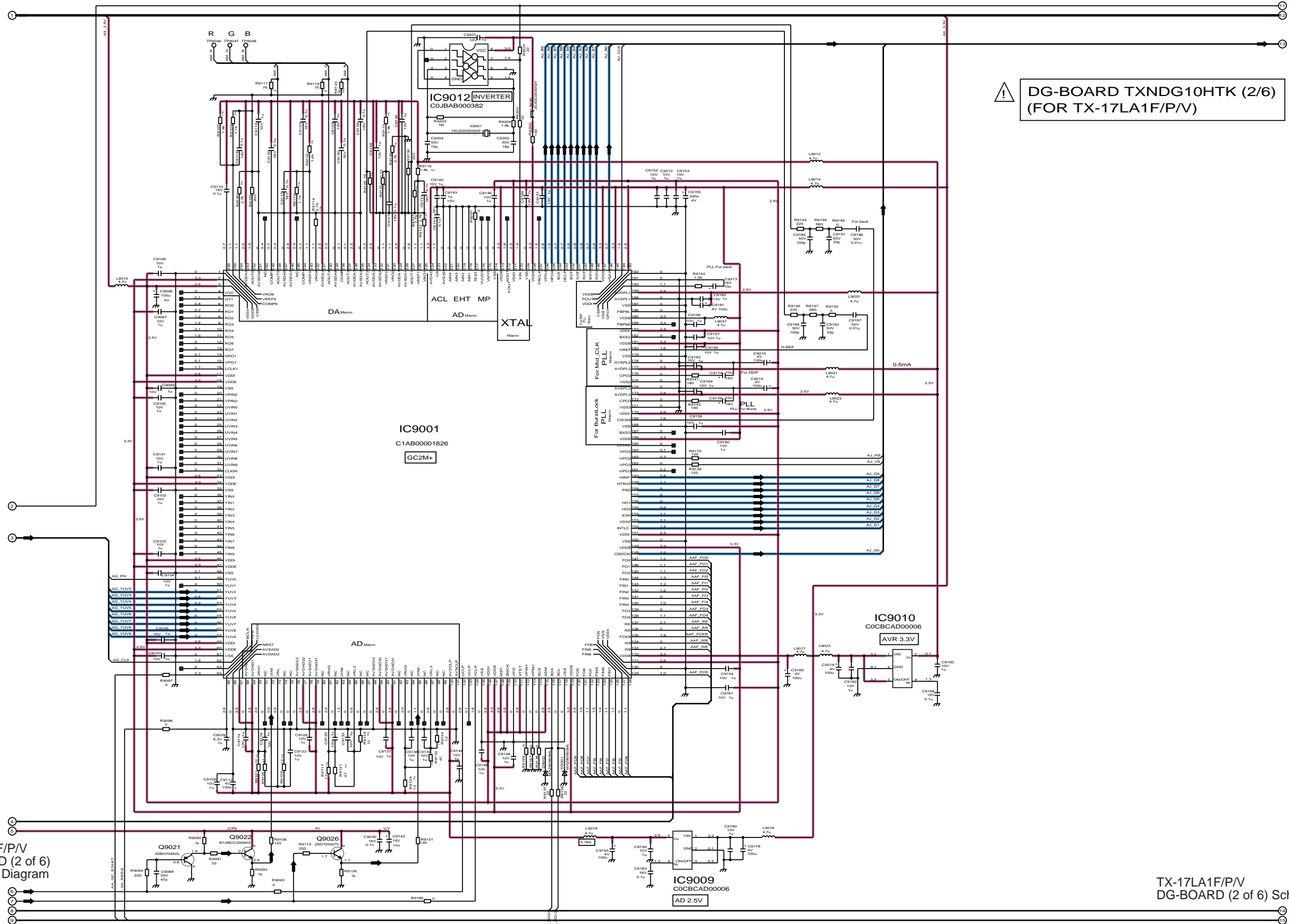
TX-17LA1F/P/V, TX-20LA1F/P/V  
A-BOARD (2 of 3) Schematic Diagram

### 10.7. DG-Board (1 of 6) Schematic Diagram (For TX-17LA1F/P/V)





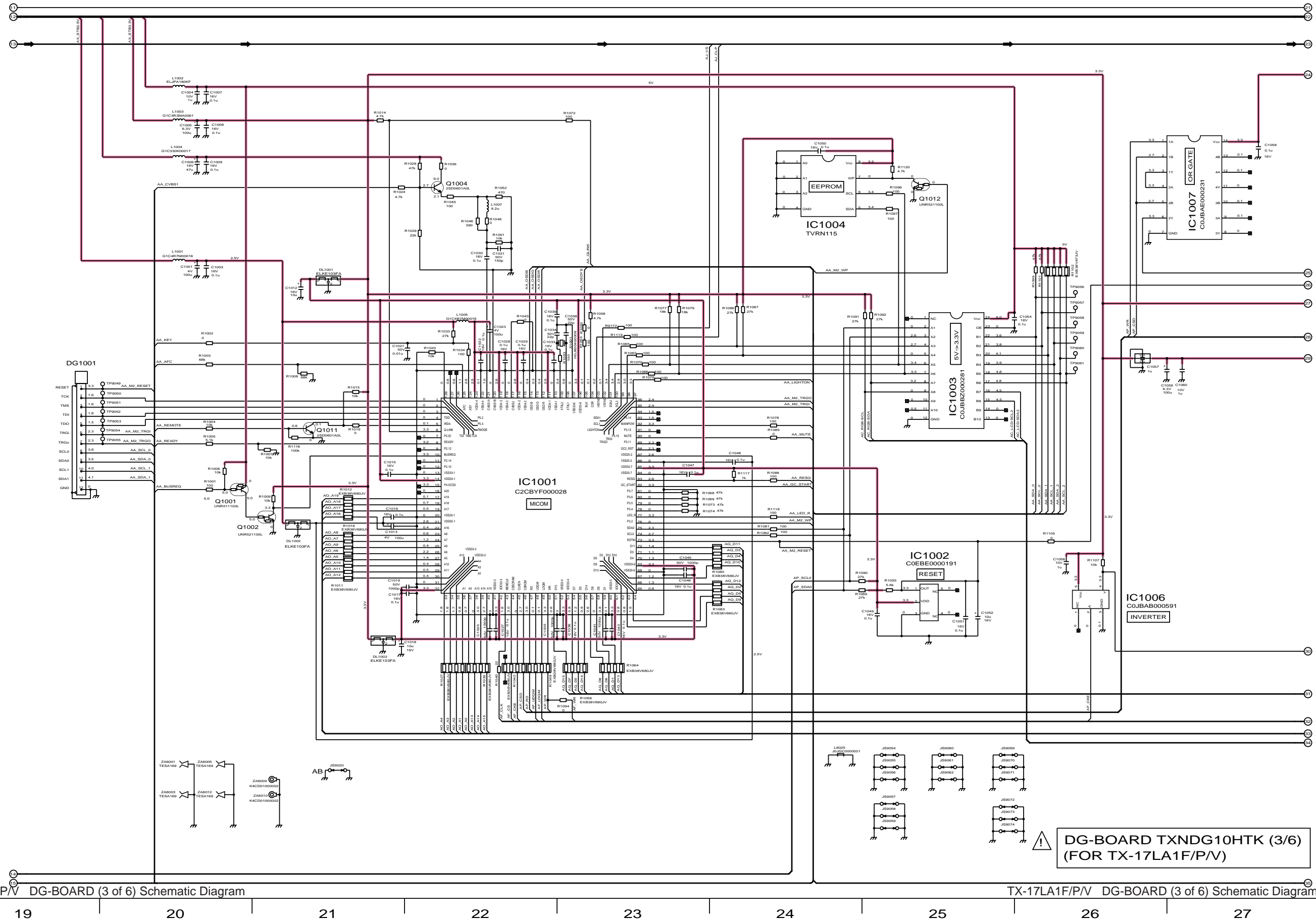
### 10.8. DG-Board (2 of 6) Schematic Diagram (For TX-17LA1F/P/V)



TX-17LA1F/P/V  
DG-BOARD (2 of 6)  
Schematic Diagram

TX-17LA1F/P/V  
DG-BOARD (2 of 6) Schematic Diagram

# 10.9. DG-Board (3 of 6) Schematic Diagram (For TX-17LA1F/P/V)



TX-17LA1F/P/V DG-BOARD (3 of 6) Schematic Diagram

TX-17LA1F/P/V DG-BOARD (3 of 6) Schematic Diagram

19

20

21

22

23

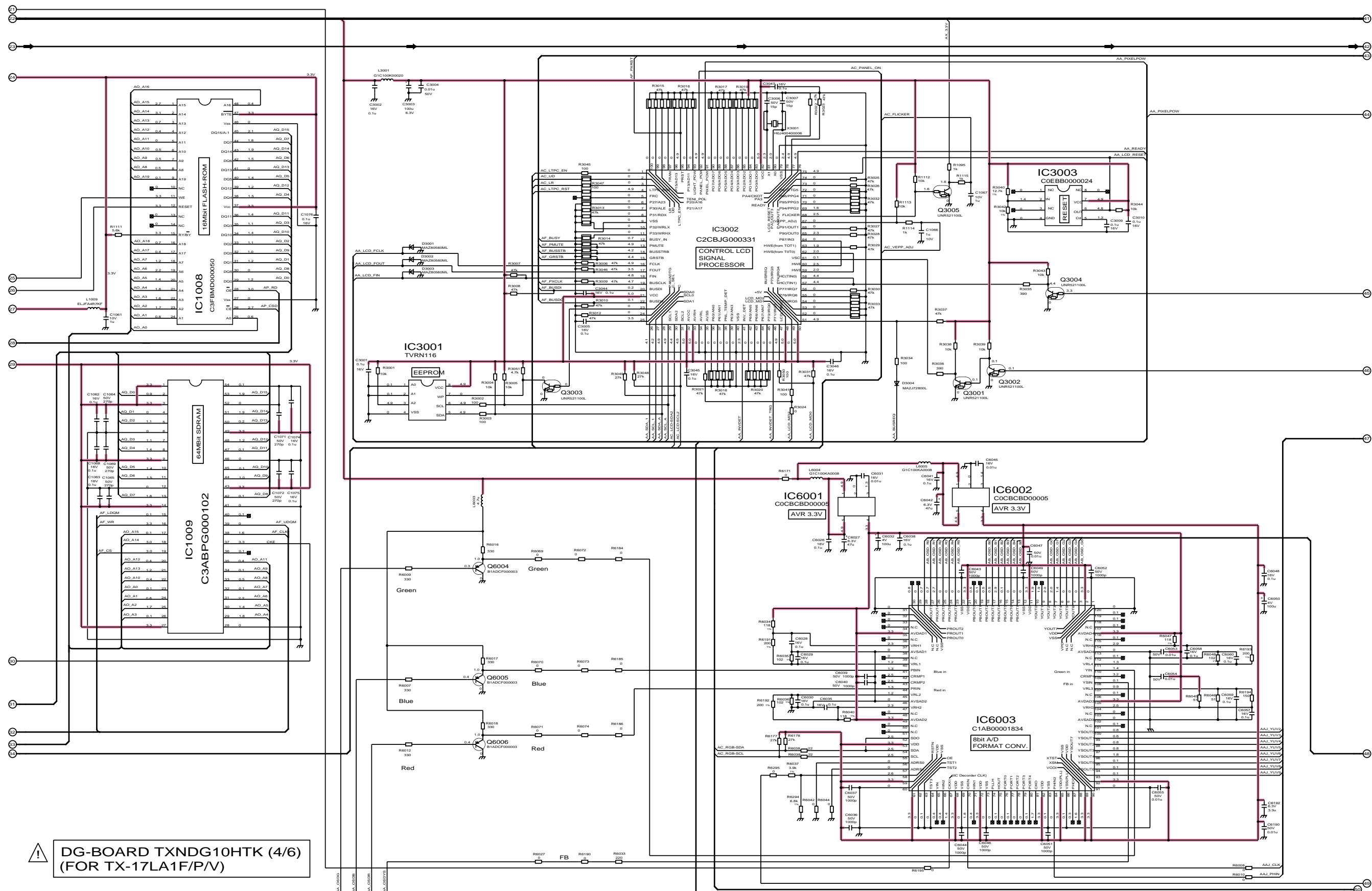
24

25

26

27

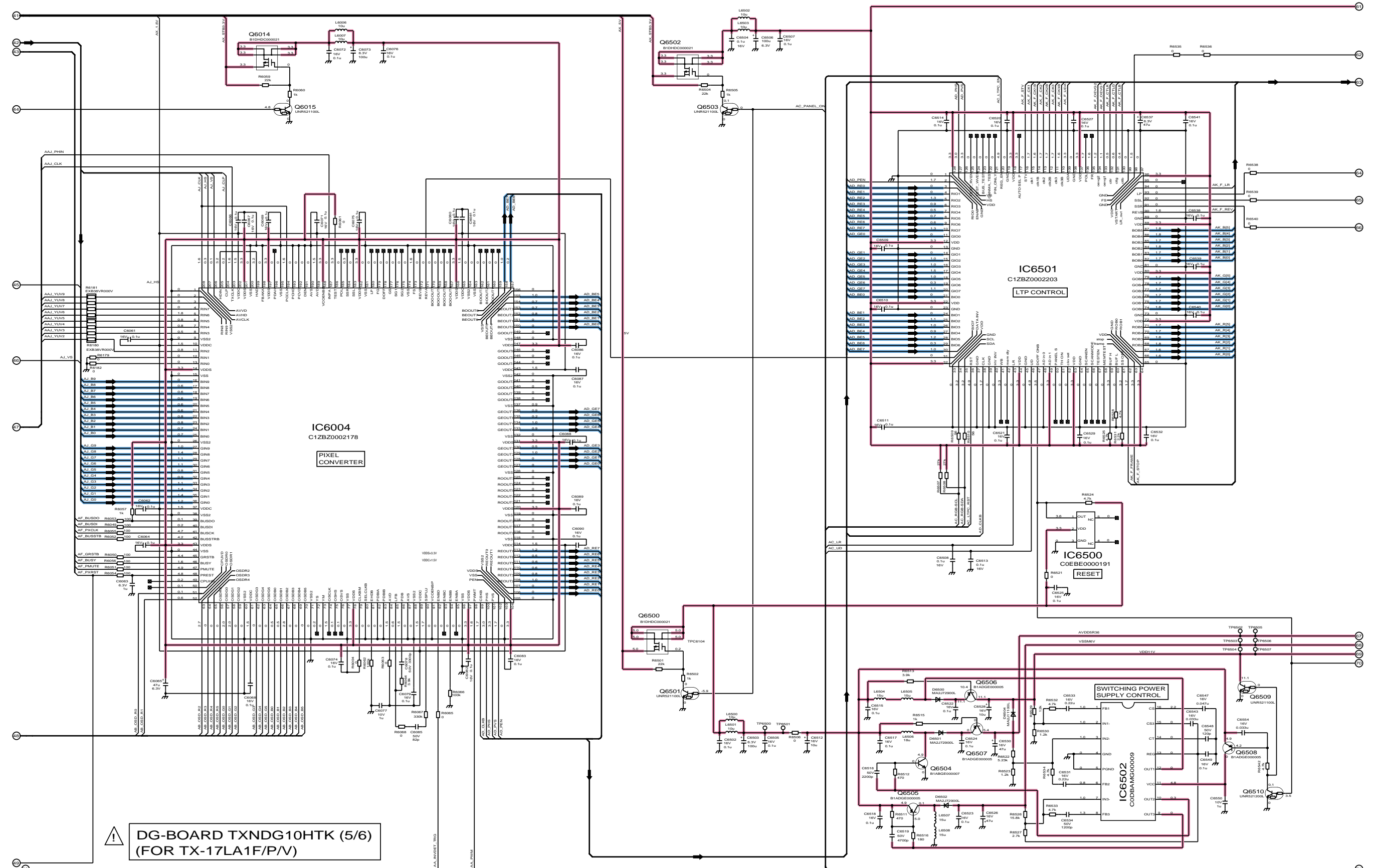
# 10.10. DG-Board (4 of 6) Schematic Diagram (For TX-17LA1F/P/V)



**! DG-BOARD TXNDG10HTK (4/6) (FOR TX-17LA1F/P/V)**



# 10.11. DG-Board (5 of 6) Schematic Diagram (For TX-17LA1F/P/V)



TX-17LA1F/P/V DG-BOARD (5 of 6) Schematic Diagram

TX-17LA1F/P/V DG-BOARD (5 of 6) Schematic Diagram

37

38

39

40

41

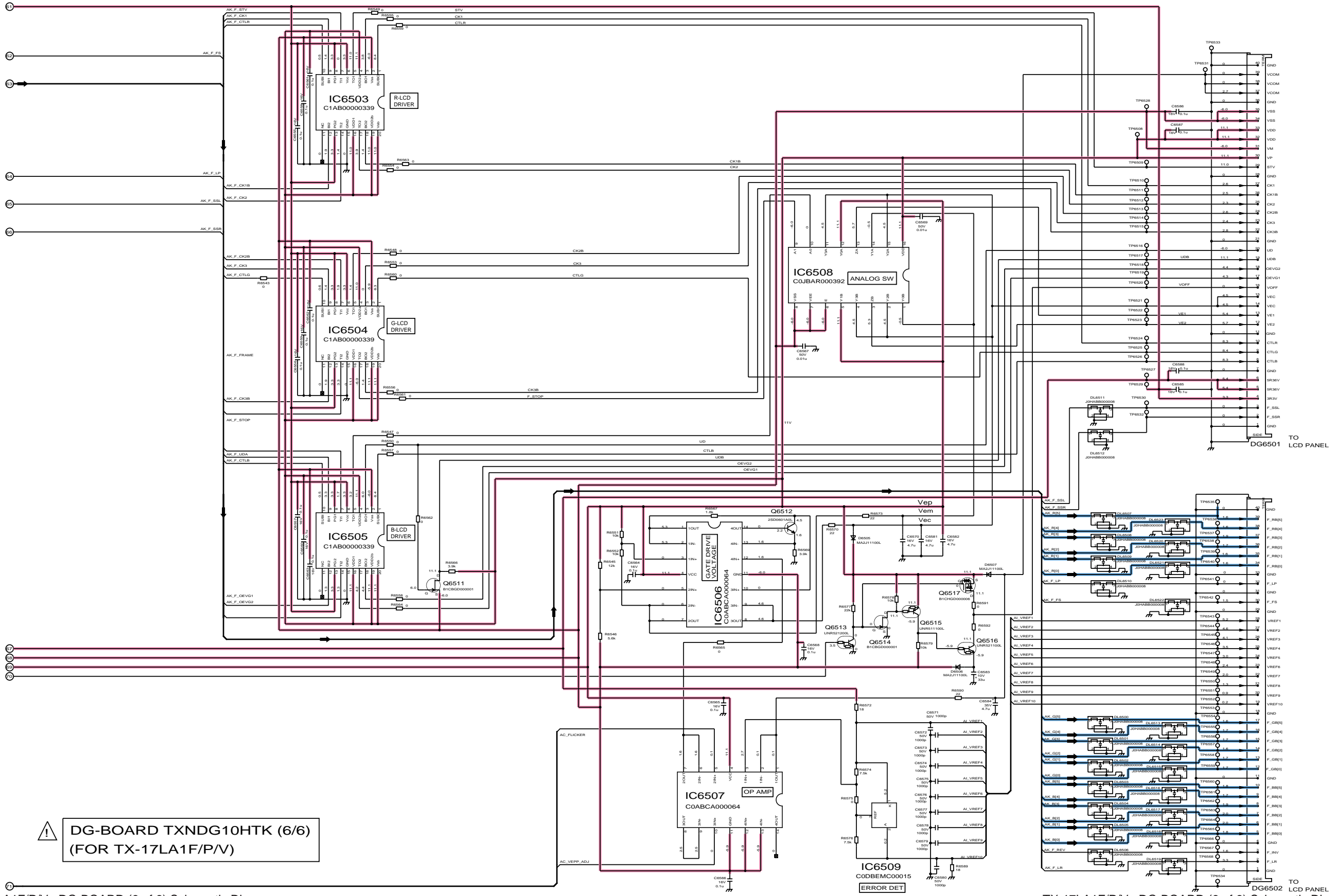
42

43

44

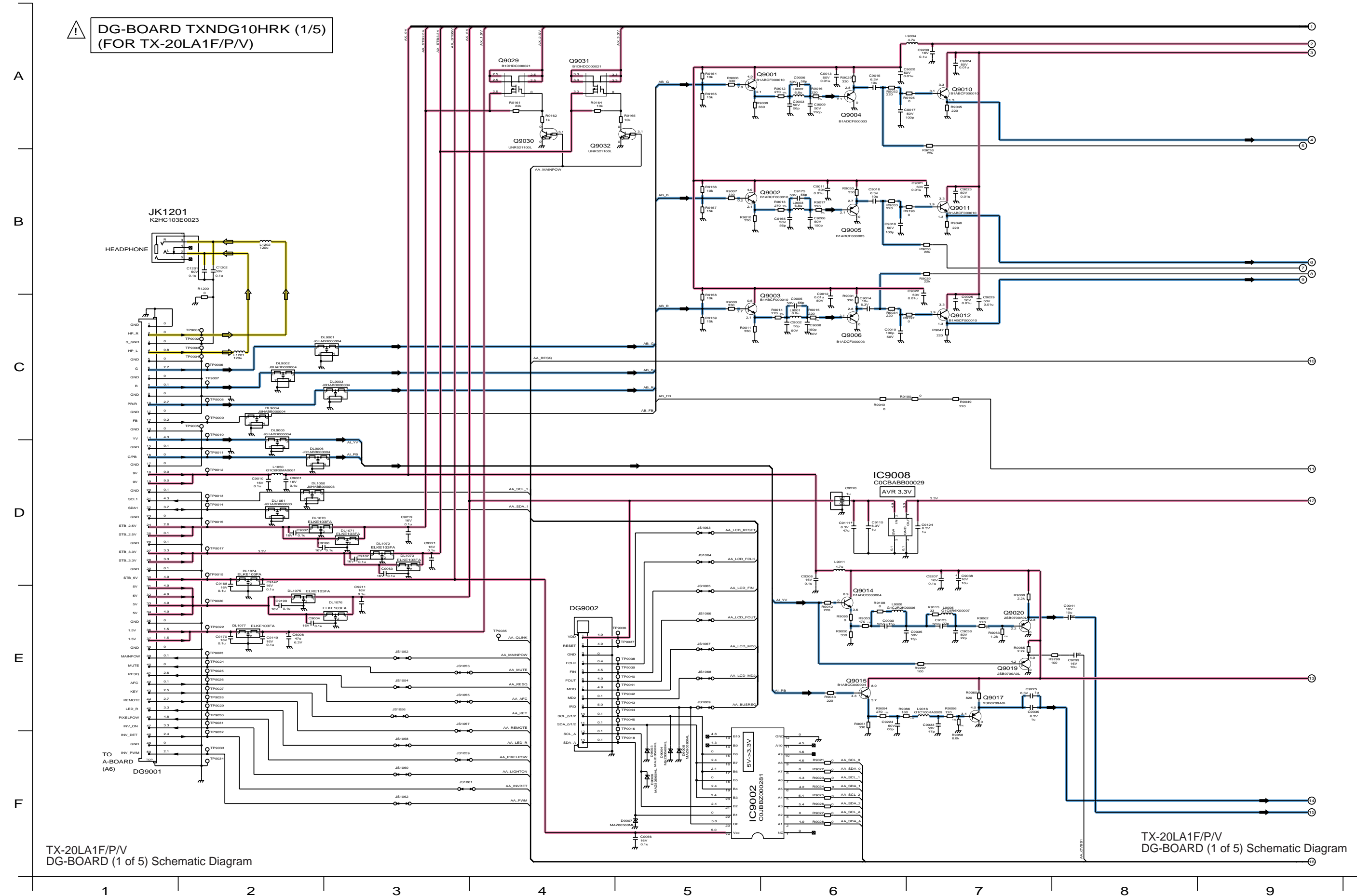
45

# 10.12. DG-Board (6 of 6) Schematic Diagram (For TX-17LA1F/P/V)

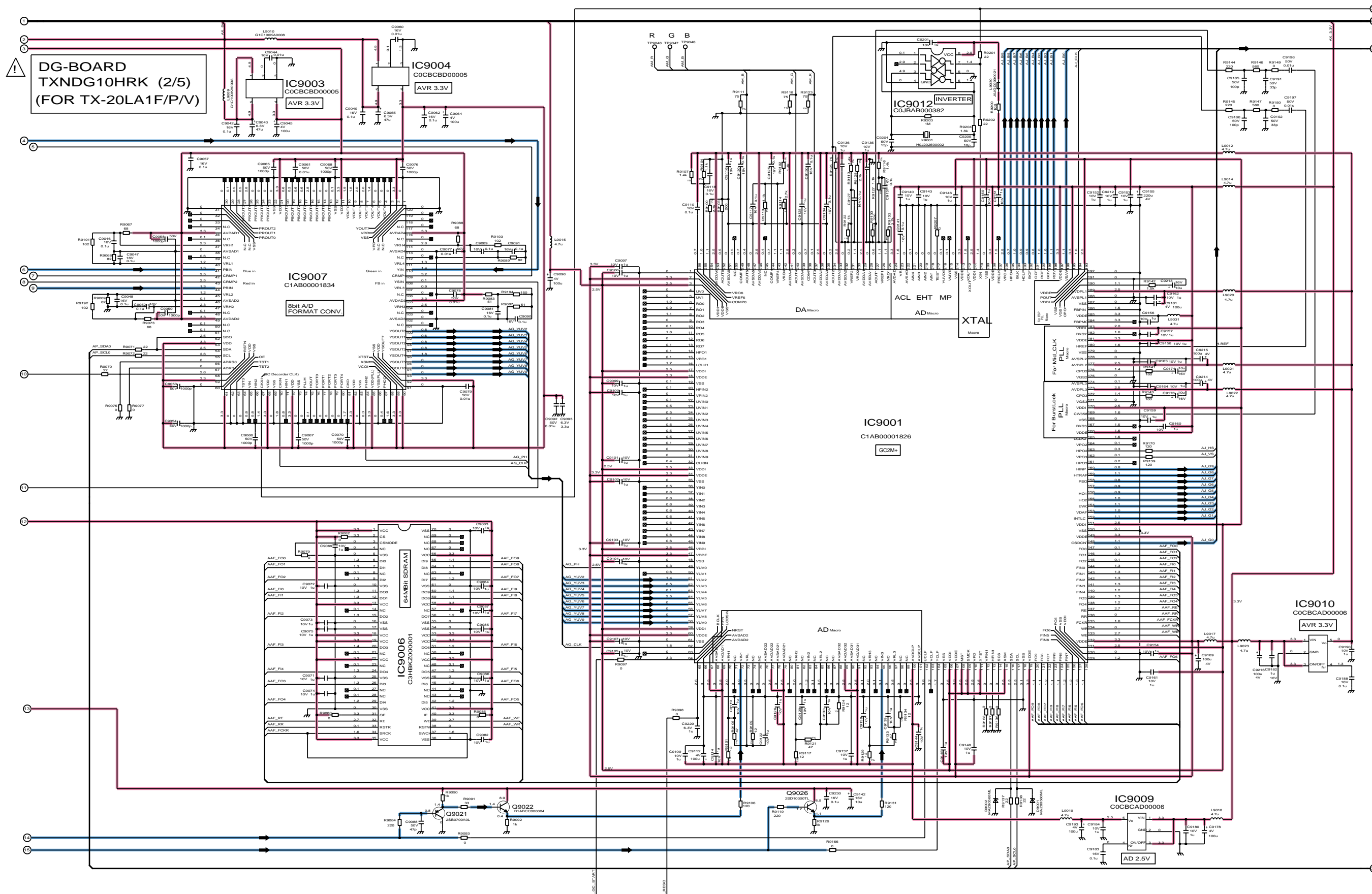


**!** DG-BOARD TXNDG10HTK (6/6)  
(FOR TX-17LA1F/P/V)

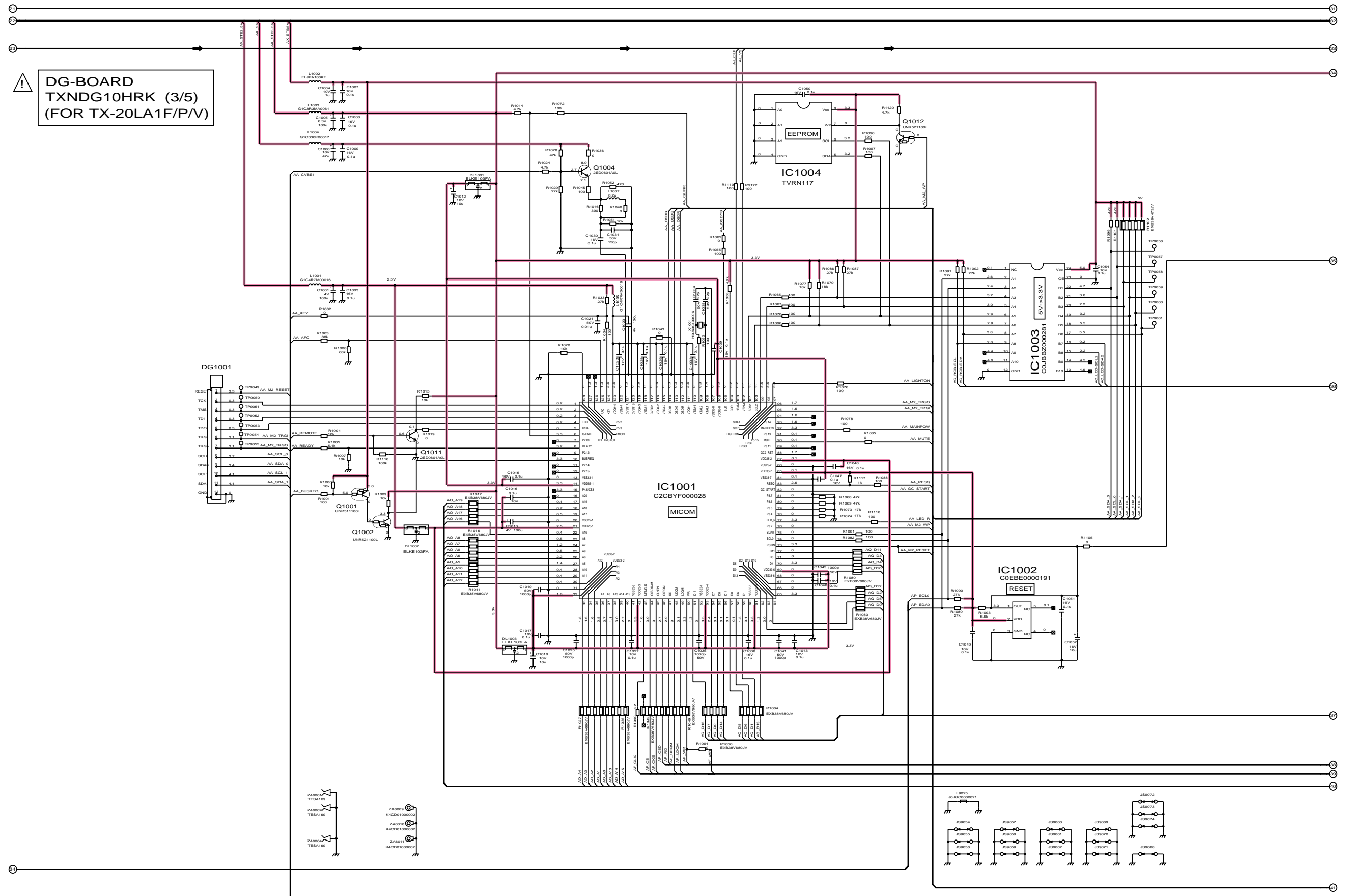
### 10.13. DG-Board (1 of 5) Schematic Diagram (For TX-20LA1F/P/V)



### 10.14. DG-Board (2 of 5) Schematic Diagram (For TX-20LA1F/P/V)



### 10.15. DG-Board (3 of 5) Schematic Diagram (For TX-20LA1F/P/V)

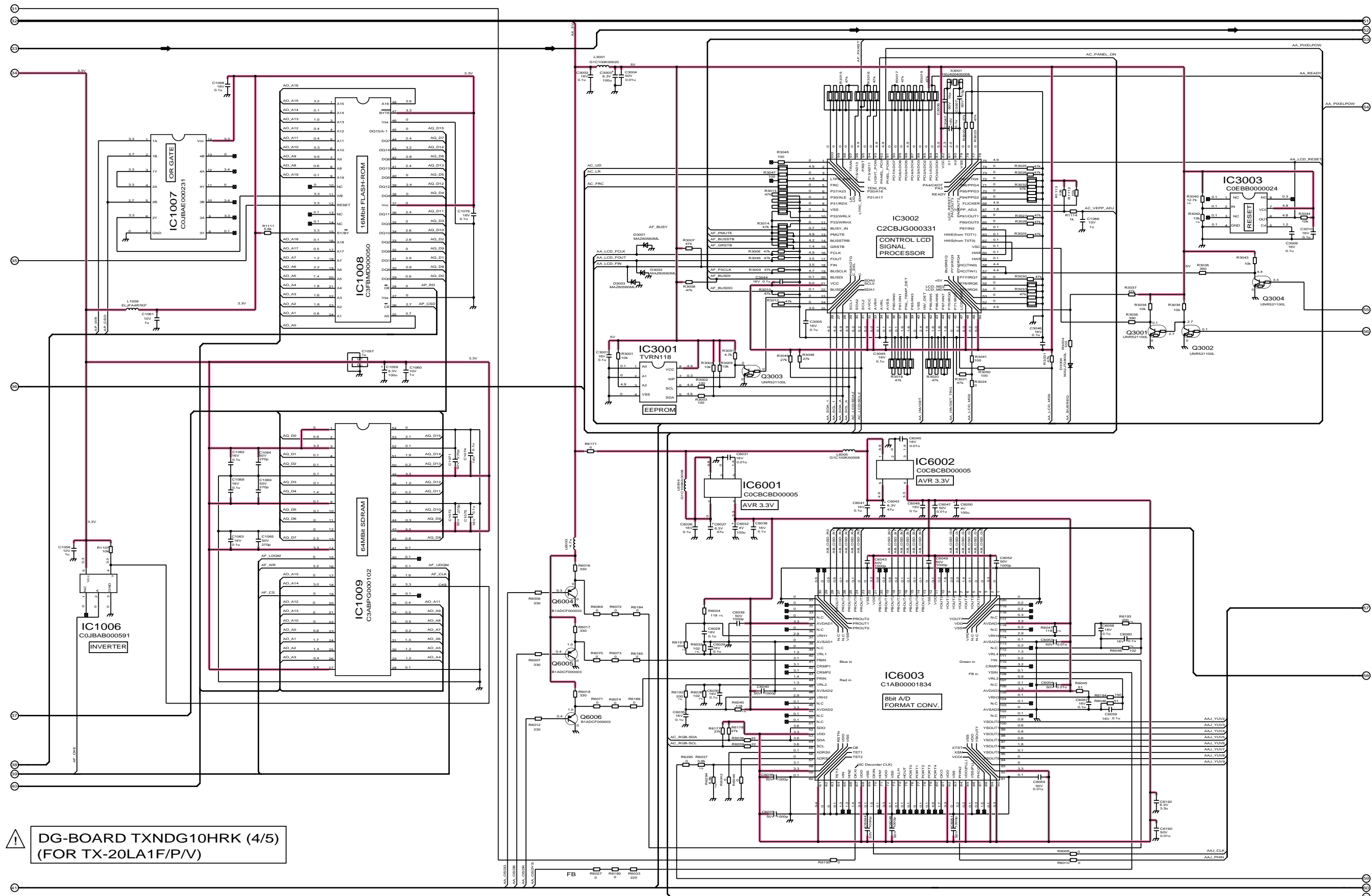


TX-20LA1F/P/V DG-BOARD (3 of 5) Schematic Diagram

TX-20LA1F/P/V DG-BOARD (3 of 5) Schematic Diagram

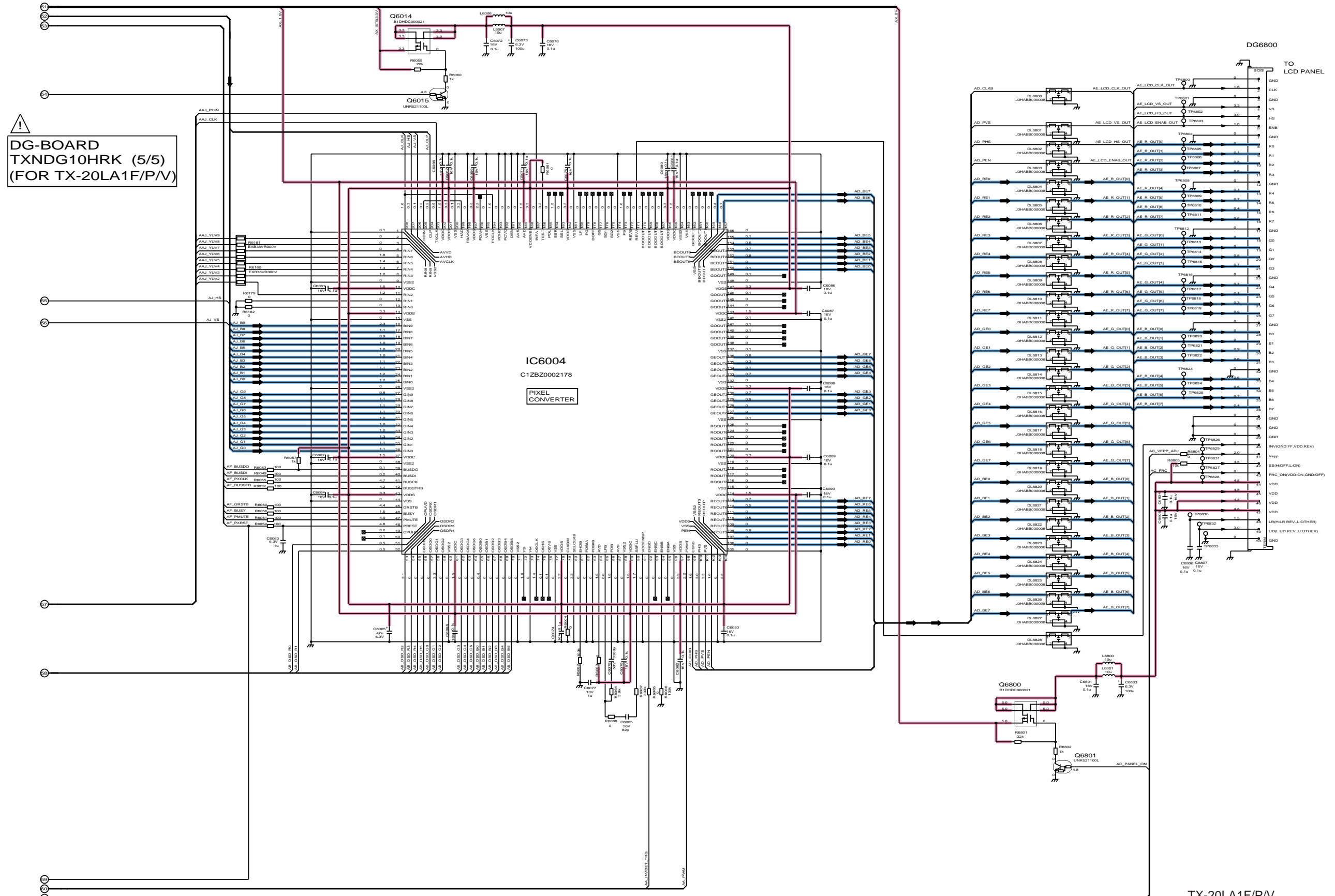


### 10.16. DG-Board (4 of 5) Schematic Diagram (For TX-20LA1F/P/V)



⚠ DG-BOARD TXNDG10HRK (4/5)  
(FOR TX-20LA1F/P/V)

### 10.17. DG-Board (5 of 5) Schematic Diagram (For TX-20LA1F/P/V)

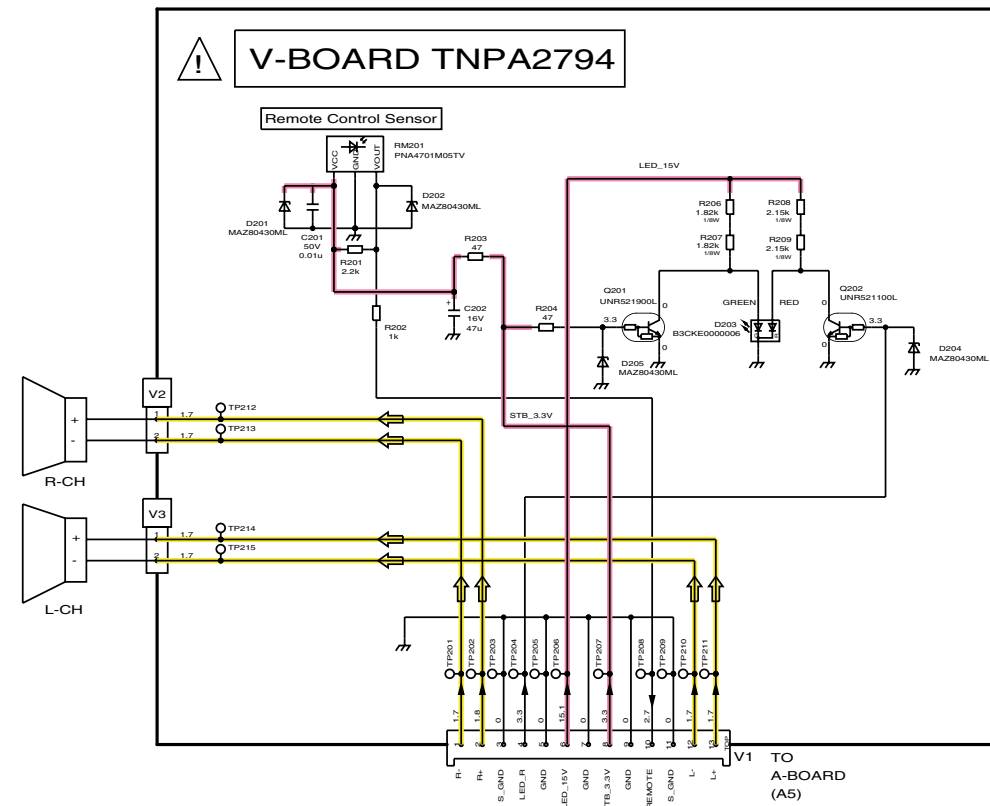
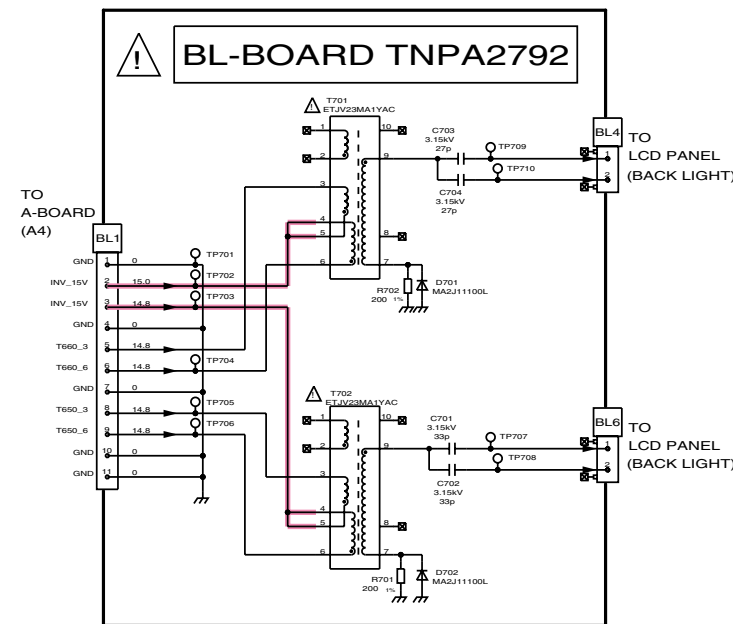
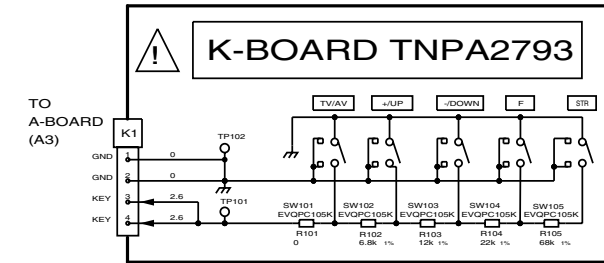
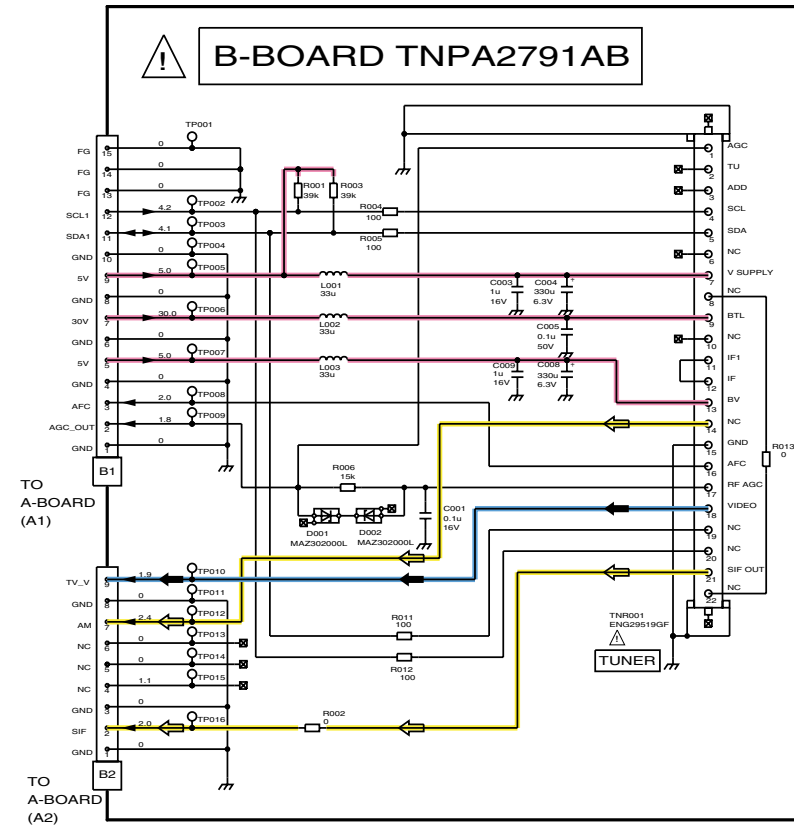


TX-20LA1F/P/V DG-BOARD (5 of 5) Schematic Diagram

TX-20LA1F/P/V DG-BOARD (5 of 5) Schematic Diagram

### 10.18. B-Board, BL-Board, K-Board and V-Board Schematic Diagram

A  
B  
C  
D  
E  
F



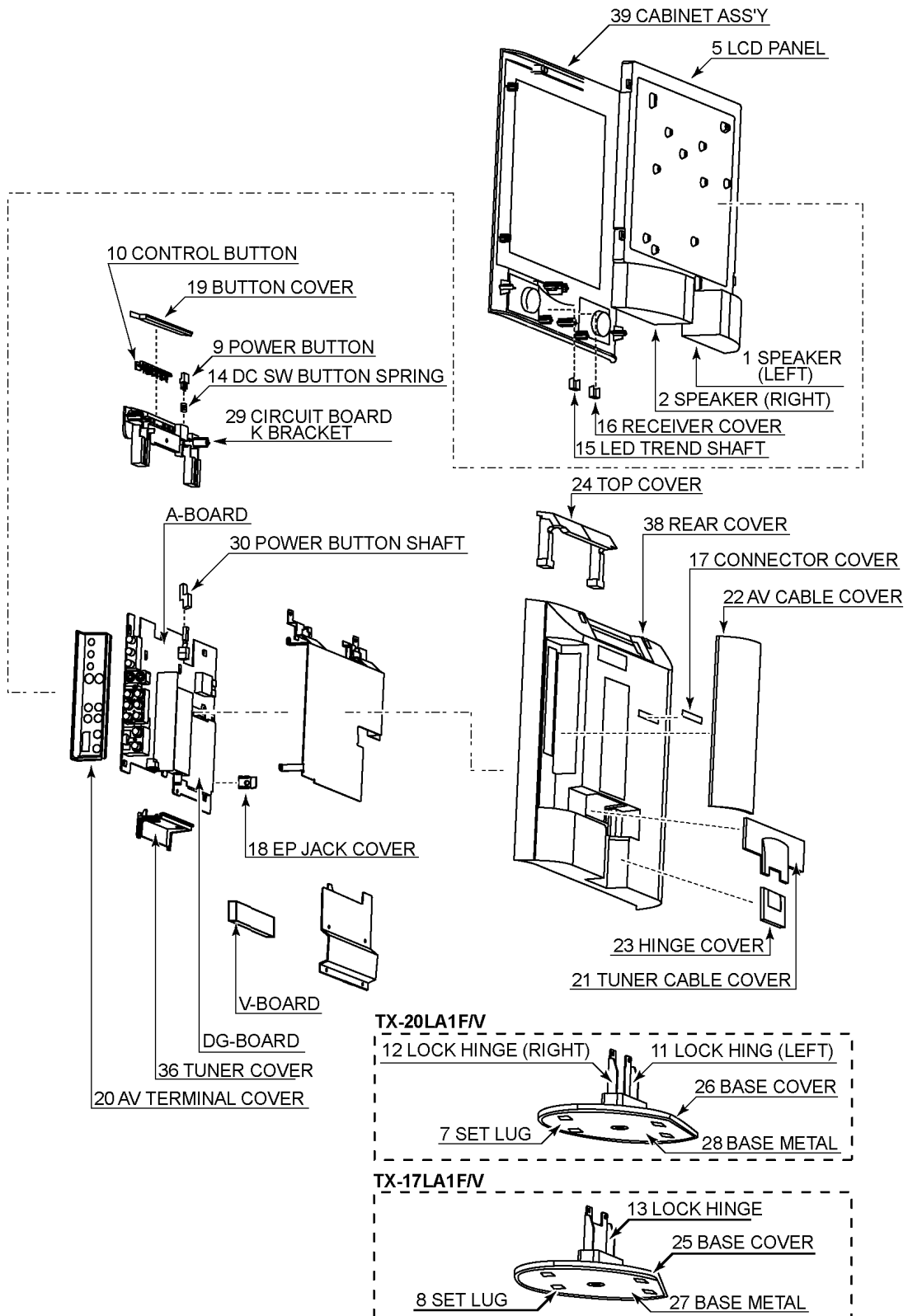
TX-17LA1F/P/V, TX-20LA1F/P/V  
B-BOARD, BL-BOARD, K-BOARD AND V-BOARD Schematic Diagram

TX-17LA1F/P/V, TX-20LA1F/P/V  
B-BOARD, BL-BOARD, K-BOARD AND V-BOARD Schematic Diagram

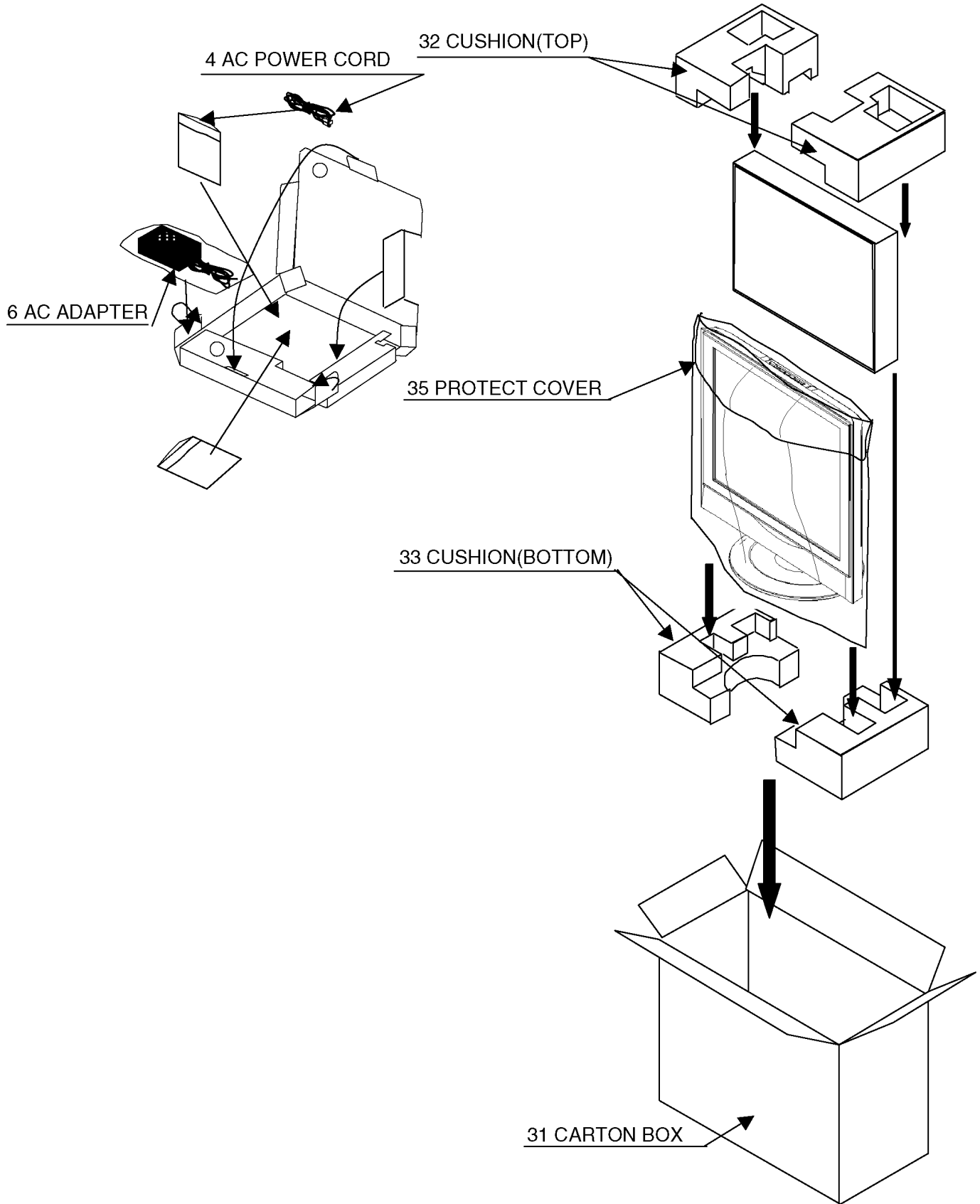


# 11 Parts Location & Mechanical Replacement Parts List

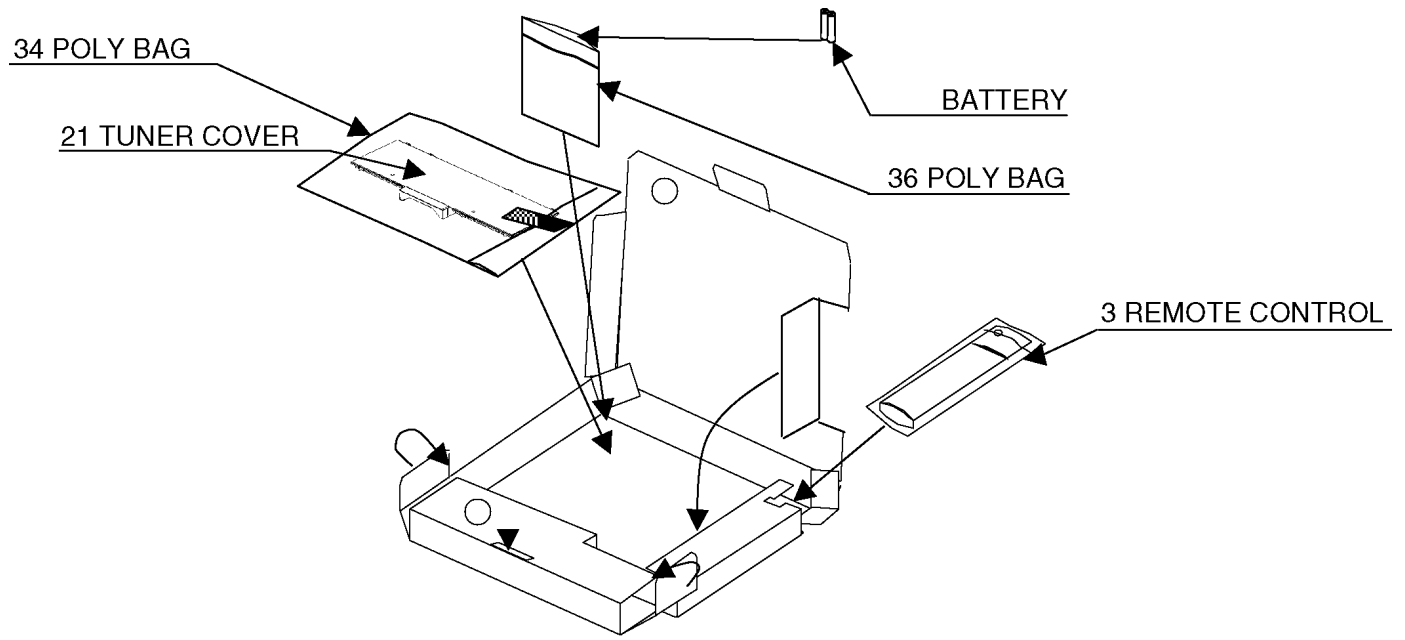
## 11.1. Parts Location (1)



## 11.2. Parts Location (2)



### 11.3. Parts Location (3)



## 11.4. Mechanical Replacement Parts List

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	EAB443AL2	SPEAKER(LEFT)	1	TX-20LA1F/P/V
2	EAB443AR2	SPEAKER(RIGHT)	1	TX-20LA1F/P/V
1	EAB443BL2	SPEAKER(LEFT)	1	TX-17LA1F/P/V
2	EAB443BR2	SPEAKER(RIGHT)	1	TX-17LA1F/P/V
3	EUR511272	REMOTE CONTROL	1	
4	K2CR2DA00007	AC POWER CORD	1	△
5	L5EDD4L00001	LCD PANEL	1	TX-17LA1F/P/V △
5	L5EDD5L00002	LCD PANEL	1	TX-20LA1F/P/V △
6	N0JZHK000011	AC ADAPTER	1	TX-17/20LA1F/V
6	N0JZHK000014	AC ADAPTER	1	TX-17/20LA1P
7	TBLG3037	SET LUG	6	TX-17LA1F/P/V
8	TBLG3051	SET LUG	6	TX-20LA1F/P/V
9	TBXA36601	POWER BUTTON	1	
10	TBXA38603	CONTROL BUTTON	1	
11	TEJA056	LOCK HINGE(LEFT)	1	TX-20LA1F/P/V
12	TEJA057	LOCK HINGE(RIGHT)	1	TX-20LA1F/P/V
13	TEJA068	LOCK HINGE	1	TX-17LA1F/P/V
	TESA209	SPRING	1	
14	TESD052	DC SW BUTTON SPRING	1	
	THEJ006	SCREW	19	TX-20LA1F/P/V
	THEJ006	SCREW	18	TX-17LA1F/P/V
15	TKKC5152	LED TREND SHAFT	1	
16	TKKH5089	RECIEVER COVER	1	
17	TKKL5141-3	CONNECTOR COVER	1	
18	TKPA66401	EP JACK COVER	1	
	TKPA75403	RECIEVER PANEL	1	
19	TKPA75702	BUTTON COVER	1	
20	TKPA76501	AV TERMINAL COVER	1	
21	TKXA12901	TUNER CABLE COVER	1	TX-20LA1F/P/V
22	TKXA13001	AV CABLE COVER	1	TX-20LA1F/P/V
21	TKXA13701	TUNER CABLE COVER	1	TX-17LA1F/P/V
22	TKXA13801	AV CABLE COVER	1	TX-17LA1F/P/V
23	TKXA14101	HINGE COVER	1	
24	TKXA14401	TOP COVER	1	
25	TKXA14701	BASE COVER	1	TX-17LA1F/P/V
26	TKXA14801	BASE COVER	1	TX-20LA1F/P/V
27	TKZG5041	BASE METAL	1	TX-17LA1F/P/V
28	TKZG5042	BASE METAL	1	TX-20LA1F/P/V
29	TMWA039	CIRCUIT BOARD K BRACKET	1	
30	TMXJ023	POWER BUTTON SHAFT	1	
31	TPCB38902	CARTON BOX	1	TX-17LA1F/P/V
31	TPCB39002	CARTON BOX	1	TX-20LA1F/P/V
32	TPDA0664-1	CUSHION(TOP)	1	TX-20LA1F/P/V
33	TPDA0665-2	CUSHION(BOTTOM)	1	TX-20LA1F/P/V
32	TPDA0681	CUSHION(TOP)	1	TX-17LA1F/P/V
33	TPDA0682-1	CUSHION(BOTTOM)	1	TX-17LA1F/P/V
	TPDF1038	ACCESSORY BOX	1	TX-20LA1F/P/V
	TPDF1039	ACCESSORY BOX	1	TX-17LA1F/P/V
	TPDF1064	ACCESSORY BOX B	1	TX-20LA1F/P/V
	TPDF1065	ACCESSORY BOX B	1	TX-17LA1F/P/V
34	TPEH123	POLY BAG	1	
35	TPEH137	PROTECT COVER	1	TX-17LA1F/P/V
35	TPEH211	PROTECT COVER	1	TX-20LA1F/P/V
	TQBC0657	INSTRUCTION BOOK(ENGLISH)	1	
	TQBC0658	INSTRUCTION BOOK(GARMEN)	1	
	TQBC0659	INSTRUCTION BOOK(FRENCH)	1	
	TQBC0660	INSTRUCTION BOOK(ITALIAN)	1	
	TQBC0661	INSTRUCTION BOOK(SPANISH)	1	
	TQBC0662	INSTRUCTION BOOK(DUTCH)	1	
	TQBC0663	INSTRUCTION BOOK(DANISH)	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	TQBC0664	INSTRUCTION BOOK(SWEDISH)	1	
	TQBC0688	INSTRUCTION BOOK(POLSKI)	1	TX-17/20LA1P
	TQBC0689	INSTRUCTION BOOK(BULGARIAN)	1	TX-17/20LA1P
	TQBC0690	INSTRUCTION BOOK(ROMANIAN)	1	TX-17/20LA1P
	TQBC0691	INSTRUCTION BOOK(HUNGARIAN)	1	TX-17/20LA1P
	TQBC0692	INSTRUCTION BOOK(CZECH)	1	TX-17/20LA1P
36	TQE8513-2	POLY BAG	1	
	TSXL254	CABLE(A-DG)	1	
	TSXL265	CABLE(LCD-DG)	1	TX-20LA1F/P/V
	TSXL309	CABLE(A-V)/13P	1	TX-17LA1F/P/V
	TSXL310	CABLE(A-V)/13P	1	TX-20LA1F/P/V
37	TTPA0316	TUNER COVER	1	
38	TTUA0686	REAR COVER	1	TX-20LA1F/V
38	TTUA0687	REAR COVER	1	TX-20LA1P
38	TTUA0688	REAR COVER	1	TX-17LA1F/V
38	TTUA0689	REAR COVER	1	TX-17LA1P
39	TTYA0588	CABINET ASS,Y	1	TX-20LA1F/P/V
39	TTYA0589	CABINET ASS,Y	1	TX-17LA1F/P/V
	XTB4+15J	SCREW	24	TX-20LA1F/P/V
	XTB4+15J	SCREW	18	TX-17LA1F/P/V
	XTV3+12J	SCREW	9	TX-20LA1F/P/V
	XTV3+12J	SCREW	13	TX-17LA1F/P/V
	XYN4+J10	SCREW	8	TX-20LA1F/P/V
	XYN4+J10	SCREW	4	TX-17LA1F/P/V
	XZBT6506	POLY BAG	1	

# 12 Replacement Parts List

## 12.1. Replacement Parts List Notes

### Important Safety Notice

Components identified by  $\triangle$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

#### 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 dependant 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.

Abbreviation of part name and description

#### 1. Resistor

Example:

ERD25TJ104     $\underline{C}$  100KOHM,  $\underline{J}$ , 1/4W  
                   Type            Allowance

#### 2. Capacitor

Example:

ECKF1H103ZF     $\underline{C}$  0.01UF,  $\underline{Z}$ , 50V  
                   Type            Allowance

Type	Allowance
C : Carbon	F : $\pm 1\%$
F : Fuse	G : $\pm 2\%$
M : Metal Oxide Metal Film	J : $\pm 5\%$
S : Solid	K : $\pm 10\%$
W : Wire Wound	M : $\pm 20\%$

Type	Allowance
C : Ceramic	C : $\pm 0.25\text{pF}$
E : Electrolytic	D : $\pm 0.5\text{pF}$
P : Polyester	F : $\pm 1\text{pF}$
Polyprop	G : $\pm 3\text{pF}$
lene	J : $\pm 5\text{pF}$
T : Tantalum	K : $\pm 10\text{pF}$
	L : $\pm 15\text{pF}$
	M : $\pm 20\text{pF}$
	P : +100%, -0%
	Z : +80%, -20%

## 12.2. Electrical Replacement Parts List

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
A1	K1KA15A00064	15P CONNECTOR	1	
A2	K1KA09A00064	9P CONNECTOR	1	
A3	K1KB04Z00002	4P CONNECTOR	1	
A4	K1KB11A00024	11P CONNECTOR	1	
A5	TJSF27613	13P CONNECTOR	1	K1MN13B00071
A6	K1MN50B00016	50P CONNECTOR	1	
A7,A8	K1KA02B00123	2P CONNECTOR	2	
B1	K1KB15B00013	15P CONNECTOR	1	
B2	K1KB09B00019	9P CONNECTOR	1	
BL1	K1KA11A00124	11P CONNECTOR	1	
BL4	K1KA02B00123	2P CONNECTOR	1	
BL6	K1KA02B00123	2P CONNECTOR	1	
C001	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C003	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C004	F2A0J331A137	E 330UF, 6.3V	1	
C005	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C008	F2A0J331A137	E 330UF, 6.3V	1	
C009	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C201	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C202	EEVHB0J470R	E 47UF, 6.3V	1	
C601-03	F2A1E471A102	E 470UF, 25V	3	
C604	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C605	F2A1H100A120	E 10UF, 50V	1	
C606	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C607	ECJ2VB1C224K	C 0.22UF, K, 16V	1	
C608,09	ECJ2VF1H104Z	C 0.1UF, Z, 50V	2	
C610,11	F2A1H2R2A122	E 2.2UF, 50V	2	
C612	ECJ2XB1A105K	C 1UF, K, 10V	1	
C613	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C618,19	ECHU1H563JB9	P 0.056UF. 50V	2	
C620	ECHU1H104JB9	C 0.1PF, 50V	1	
C621	ECHU1H563JB9	P 0.056UF. 50V	1	
C622	ECJ2XF1C334Z	C 0.33UF, Z, 16V	1	
C623	ECHU1H104JB9	C 0.1PF, 50V	1	
C624	ECHU1H563JB9	P 0.056UF. 50V	1	
C627,28	F1A3F3300002	C 0.33PF, J, 3KV	2	
C629,30	F1A3F2700002	C 0.27PF, J, 3KV	2	
C631	ECJ2XF1C334Z	C 0.33UF, Z, 16V	1	
C634-37	ECJ2XB1H102K	C 1000PF, K, 50V	4	
C701,02	F1A3F3300002	C 0.33PF, J, 3KV	2	
C703,04	F1A3F2700002	C 0.27PF, J, 3KV	2	
C801	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C803	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C804	F2A1E221A096	E 220UF, 25V	1	
C805	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C806	F2A1H100A120	E 10UF, 50V	1	
C807	ECJ2XB1H222K	C 2200PF, K, 50V	1	
C808	F2A1C6810005	E 680UF, 16V	1	
C809	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C810	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C813	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C814	F2A1H100A120	E 10UF, 50V	1	
C817	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C818	F2A1E471A096	E 470UF, 25V	1	
C821	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C822	F2A0J122A139	E 12000UF, 6.3V	1	
C823	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C824	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C826,27	ECJ2VF1H103Z	C 0.01UF, Z, 50V	2	
C828,29	F2A1E471A096	E 470UF, 25V	2	
C830	F2A1C6810005	E 680UF, 16V	1	
C832	F2A0J122A139	E 12000UF, 6.3V	1	
C834	ECJ2XB1H222K	C 2200PF, K, 50V	1	
C835	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C836-38	ECJ2VF1H103Z	C 0.01UF, Z, 50V	3	
C839	F2A1E471A094	E 470UF, 25V	1	
C840	F2A1C6810005	E 680UF, 16V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C841	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C842	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C843	ECJ2XB1H222K	C 2200PF, K, 50V	1	
C844	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C845	ECJ2XB1H222K	C 2200PF, K, 50V	1	
C846	ECJ2XB1H104K	C 0.1UF, K, 50V	1	
C847	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C851	F2A1H100A126	E 10UF, 50V	1	
C852	ECJ2XB1H472K	C 4700PF, K, 50V	1	
C853	ECJ2XB1H271K	C 270PF, K, 50V	1	
C854	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C855	ECJ2VB1C224K	C 0.22UF, K, 16V	1	
C856	F2A1H4R7A120	E 4.7UF, 50V	1	
C871	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C872	F2A1E471A096	E 470UF, 25V	1	
C873	F2A1C6810005	E 680UF, 16V	1	
C874	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C876	ECJ2XB1H222K	C 2200PF, K, 50V	1	
C877	ECJ2VF1H103Z	C 0.01UF, Z, 50V	1	
C881	EEUFC1E470	E 47UF, 25V	1	
C1001	EEVHB0G101R	E 100UF 4V	1	
C1003	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C1004	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C1005	EEVHB0J101P	E 100UF, 6.3V	1	
C1006	EEVHB1C470P	E 47UF, 16V	1	
C1007-09	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C1012	EEVHB1C100R	E 10UF, 16V	1	
C1013	EEVHB0G101R	E 100UF 4V	1	
C1015-17	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C1018	EEVHB1C100R	E 10UF, 16V	1	
C1019	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C1021	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C1022	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C1023	EEVHB0G101R	E 100UF 4V	1	
C1025	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C1027-29	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C1030	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C1031	ECJ1XC1H151J	C 150PF, J, 50V	1	
C1033	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C1034	ECJ1XC1H220J	C 22PF, J, 50V	1	
C1035	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C1036	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C1038	ECJ1XC1H220J	C 22PF, J, 50V	1	
C1039	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C1041	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C1043	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C1045	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C1046-51	ECJ1XF1C104Z	C 0.1UF, Z, 16V	6	
C1052	EEVHB1C100R	E 10UF, 16V	1	
C1054	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C1056	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C1057	F1J1A1050020	C 1UF, Z, 50V	1	
C1058	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C1059	EEVHB0J101P	E 100UF, 6.3V	1	
C1060,61	ECJ1VF1A105Z	C 1UF, Z, 10V	2	
C1062,63	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C1064,65	ECJ1XC1H271J	C 270PF, J, 50V	2	
C1066	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C1067	ECJ1VF1A105Z	C 1UF, Z, 10V	1	TX-17LA1F/P/V
C1068	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C1069	ECJ1XC1H271J	C 270PF, J, 50V	1	
C1071,72	ECJ1XC1H271J	C 270PF, J, 50V	2	
C1074-76	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C1201,02	ECJ1VF1H104Z	C 0.1UF, Z, 50V	2	
C2001	ECJ2XB1H473K	C 0.047UF, K, 50V	1	
C2002,03	ECJ2XB1H103K	C 0.01UF, K, 50V	2	
C2004	ECJ2XB1H473K	C 0.047UF, K, 50V	1	
C2005	ECA1EEN101	E 100UF, 25V	1	
C2006	ECJ2XB1H472K	C 4700PF, K, 50V	1	
C2007	ECA1EEN101	E 100UF, 25V	1	
C2008	ECJ2XB1H472K	C 4700PF, K, 50V	1	
C2009	F2A1C470A121	E 47UF, 16V	1	
C2010	ECJ2YB1E224K	C 0.22UF, K, 25V	1	
C2011,12	ECJ2VB1C224K	C 0.22UF, K, 16V	2	
C2013	ECJ2YB1E224K	C 0.22UF, K, 25V	1	
C2014	F2A1E471A096	E 470UF, 25V	1	
C2015	F2A1C470A121	E 47UF, 16V	1	
C2016	F2A1C220A121	E 22UF, 16V	1	
C2017	ECJ2XB1H102K	C 1000PF, K, 50V	1	
C2018	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C2019	ECJ2YF1C225Z	C 22PF, Z, 16V	1	
C2020	ECJ2XC1H102J	C 1000PF, J, 50V	1	
C2021	ECJ2YF1C225Z	C 22PF, Z, 16V	1	
C2022	ECJ2XB1H102K	C 1000PF, K, 50V	1	
C2023,24	ECJ2YB1E224K	C 0.22UF, K, 25V	2	
C2025-27	F2A1E101A094	E 100UF, 25V	3	
C2028	F2A1H220A120	E 22UF, 50V	1	
C2029-32	ECJ2YB1E224K	C 0.22UF, K, 25V	4	
C2101,02	ECJ2VB1C104K	C 0.1UF, K, 16V	2	
C2104	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C2106	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C2501	ECJ2XC1H560J	C 56PF, J, 50V	1	
C2502	ECJ2XC1H100D	C 10PF, D, 50V	1	
C2503	ECJ2XC1H220J	C 22UF, J, 50V	1	
C2504	ECJ2XC1H470J	C 47PF, J, 50V	1	
C2506,07	ECJ2XC1H010C	C 1PF, C, 50V	2	
C2508	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C2509	ECJ2XC1H470J	C 47PF, J, 50V	1	
C2510	F2A0J101A131	E 1000UF, 6.3V	1	
C2511	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C2512	F2A1H100A120	E 10UF, 50V	1	
C2513	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C2514	F2A0J101A131	E 1000UF, 6.3V	1	
C2516	ECA1HM3R3	E 3.3UF, 50V	1	
C2517	ECJ2VB1C104K	C 0.1UF, K, 16V	1	
C2518	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C2519	F2A1C470A121	E 47UF, 16V	1	
C2520,21	F2A1H100A120	E 10UF, 50V	2	
C2522,23	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C2524-27	ECJ2XB1A105K	C 1UF, K, 10V	4	
C2528	ECJ2YB1C474K	C 0.47UF, K, 16V	1	
C2529-32	ECJ2XB1A105K	C 1UF, K, 10V	4	
C3001,02	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C3003	EEVHB0J101P	E 100UF, 6.3V	1	
C3004	ECJ1VB1H103K	C 0.01UF, K, 50V	1	
C3005	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C3006,07	ECJ1XC1H150J	C 15PF, J, 50V	2	
C3009	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C3010	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C3044-47	ECJ1XF1C104Z	C 0.1UF, Z, 16V	4	
C4002	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C4004-06	ECJ2VF1C105Z	C 1UF, Z, 16V	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4009,10	ECJ2XB1H102K	C 1000PF, K, 50V	2	
C4011	F2A1H220A120	E 22UF, 50V	1	
C4012	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C4013,14	F2A1C470A121	E 47UF, 16V	2	
C4015	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C4016,17	ECJ2XB1H102K	C 1000PF, K, 50V	2	
C4018-20	ECJ2VF1C105Z	C 1UF, Z, 16V	3	
C4021	ECJ2XB1A105K	C 1UF, K, 10V	1	
C4022-25	ECJ2VF1C105Z	C 1UF, Z, 16V	4	
C4029,30	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C4031	ECA1CEN100	E 10UF, 16V	1	
C4035	ECA1CEN100	E 10UF, 16V	1	
C4039	ECA1CEN100	E 10UF, 16V	1	
C4046-50	ECJ2XC1H181J	C 180PF, J, 50V	5	
C4051	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C4052-54	ECA1CEN100	E 10UF, 16V	3	
C4101-04	ECJ2XC1H561J	C 560PF, J, 50V	4	
C4105,06	ECJ2XC1H271J	C 270PF, J, 50V	2	
C4108,09	F2A0J101A131	E 1000UF, 6.3V	2	
C4110,11	ECJ2VF1C105Z	C 1UF, Z, 16V	2	
C4112	F2A1H2R2A120	E 2.2UF, 50V	1	
C4114	F2A1C470A121	E 47UF, 16V	1	
C4117	ECJ2VF1H104Z	C 0.1UF, Z, 50V	1	
C4118	ECJ2VF1C105Z	C 1UF, Z, 16V	1	
C6003-06	ECJ1XC1H050C	C 5PF, C, 50V	4	
C6008	EEVHB0J470R	E 47UF, 6.3V	1	
C6013-15	ECJ3XB0J106M	C 10UF, M, 6.3V	3	
C6016-18	ECJ1XC1H101J	C 100PF, J, 50V	3	
C6022-24	ECJ1VF1H103Z	C 0.01UF, Z, 50V	3	
C6026	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C6027	EEVHB0J470R	E 47UF, 6.3V	1	
C6028-30	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C6031	ECJ1VB1C103K	C 0.01UF, K, 16V	1	
C6032	EEVHB0G101R	E 100UF 4V	1	
C6035	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C6036,37	ECJ1XB1H102K	C 1000UF, Z, 50V	2	
C6038	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C6039,40	ECJ1XB1H102K	C 1000UF, Z, 50V	2	
C6041	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C6042	EEVHB0J470R	E 47UF, 6.3V	1	
C6043,44	ECJ1XB1H102K	C 1000UF, Z, 50V	2	
C6045	ECJ1VB1C103K	C 0.01UF, K, 16V	1	
C6046	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C6047	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C6048	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C6049	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C6050	EEVHB0G101R	E 100UF 4V	1	
C6051,52	ECJ1XB1H102K	C 1000UF, Z, 50V	2	
C6053-55	ECJ1VF1H103Z	C 0.01UF, Z, 50V	3	
C6057-62	ECJ1XF1C104Z	C 0.1UF, Z, 16V	6	
C6063	ECJ1XB0J105K	C 1UF, K, 16V	1	
C6064	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C6065	EEVHB0J470R	E 47UF, 6.3V	1	
C6066-69	ECJ1XF1C104Z	C 0.1UF, Z, 16V	4	



Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C6071,7 2	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	
C6073	EEVHB0J101P	E 100UF, 6.3V	1	
C6074- 76	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C6077	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C6078	ECJ1VB1H332K	C 3300PF, K, 50V	1	
C6079- 83	ECJ1XF1C104Z	C 0.1UF, Z, 16V	5	
C6085	ECJ1XC1H820J	C 82PF, J, 50V	1	
C6086- 90	ECJ1XF1C104Z	C 0.1UF, Z, 16V	5	
C6190	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C6192	TCUY0J335MBM	C 3.3UF, 6.3V	1	F1K0J335A003
C6194	ECJ1XC1H050C	C 5PF, C, 50V	1	
C6195	ECJ1VC1H560J	C 56PF, J, 50V	1	
C6196	ECJ1XC1H050C	C 5PF, C, 50V	1	
C6197,9 8	ECJ1VC1H560J	C 56PF, J, 50V	2	
C6502	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	TX-17LA1F/P/V
C6503	EEVHB0J101P	E 100UF, 6.3V	1	TX-17LA1F/P/V
C6504,0 5	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	TX-17LA1F/P/V
C6506	EEVHB0J101P	E 100UF, 6.3V	1	TX-17LA1F/P/V
C6507- 11	ECJ1XF1C104Z	C 0.1UF, Z, 16V	5	TX-17LA1F/P/V
C6512	EEVHB1C100R	E 10UF, 16V	1	TX-17LA1F/P/V
C6513- 15	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	TX-17LA1F/P/V
C6516	ECJ1VB1H222K	C 2200PF, K, 50V	1	TX-17LA1F/P/V
C6517,1 8	ECJ1XF1C104Z	C 0.1UF, Z, 16V	2	TX-17LA1F/P/V
C6519	ECJ1VB1H472K	C 4700PF, K, 50V	1	TX-17LA1F/P/V
C6520- 25	ECJ1XF1C104Z	C 0.1UF, Z, 16V	6	TX-17LA1F/P/V
C6526	EEVHB1C470P	E 10UF, 16V	1	TX-17LA1F/P/V
C6527	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	TX-17LA1F/P/V
C6528	EEVHB1C100R	E 10UF, 16V	1	TX-17LA1F/P/V
C6529	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	TX-17LA1F/P/V
C6530	EEVHB1C470P	E 10UF, 16V	1	TX-17LA1F/P/V
C6531	ECJ2VB1C224K	C 0.22UF, K, 16V	1	TX-17LA1F/P/V
C6532	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	TX-17LA1F/P/V
C6533	ECJ2VB1C224K	C 0.22UF, K, 16V	1	TX-17LA1F/P/V
C6534	ECJ2XC1H122J	C 1200PF, J, 50V	1	TX-17LA1F/P/V
C6537	EEVHB0J470R	E 47UF, 6.3V	1	TX-17LA1F/P/V
C6538- 41	ECJ1XF1C104Z	C 0.1UF, Z, 16V	4	TX-17LA1F/P/V
C6543	ECJ1VB1C333K	C 0.033UF, K, 16V	1	TX-17LA1F/P/V
C6547	ECJ1VB1C473K	C 0.047UF, K, 16V	1	TX-17LA1F/P/V
C6548	ECJ1XC1H121J	C 120PF, J, 50V	1	TX-17LA1F/P/V
C6549	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	TX-17LA1F/P/V
C6550	ECJ1VF1A105Z	C 1UF, Z, 10V	1	TX-17LA1F/P/V
C6554	ECJ1VB1C333K	C 0.033UF, K, 16V	1	TX-17LA1F/P/V
C6555- 66	ECJ1XF1C104Z	C 0.1UF, Z, 16V	12	TX-17LA1F/P/V
C6567	ECJ1VB1H103K	C 0.01UF, K, 50V	1	TX-17LA1F/P/V
C6568	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	TX-17LA1F/P/V
C6569	ECJ1VB1H103K	C 0.01UF, K, 50V	1	TX-17LA1F/P/V
C6570	ECJ3XF1C475Z	C 4.7UF, Z, 16V	1	TX-17LA1F/P/V
C6571- 80	ECJ1XF1H102Z	C 1000PF, Z, 50V	10	TX-17LA1F/P/V
C6581,8 2	ECJ3XF1C475Z	C 4.7UF, Z, 16V	2	TX-17LA1F/P/V
C6583	EEVHB1A330R	E 33UF, 10V	1	TX-17LA1F/P/V
C6584	ECA1VM4R7G	E 4.7UF, 35V	1	TX-17LA1F/P/V
C6585- 88	ECJ1XF1C104Z	C 0.1UF, Z, 16V	4	TX-17LA1F/P/V
C6801	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	TX-20LA1F/P/V
C6803	EEVHB0J101P	E 100UF, 6.3V	1	TX-20LA1F/P/V
C6804- 07	ECJ1XF1C104Z	C 0.1UF, Z, 16V	4	TX-20LA1F/P/V
C9001	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9002,0 3	ECJ1VC1H560J	C 56PF, J, 50V	2	
C9004	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C9005,0 6	ECJ1VC1H560J	C 56PF, J, 50V	2	
C9007	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9008,0 9	ECJ1XC1H151J	C 150PF, J, 50V	2	
C9010	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9011- 13	ECJ1VF1H103Z	C 0.01UF, Z, 50V	3	
C9014- 16	ECJ3XB0J106M	C 10UF, M, 6.3V	3	
C9017- 19	ECJ1XC1H101J	C 100PF, J, 50V	3	
C9020- 25	ECJ1VF1H103Z	C 0.01UF, Z, 50V	6	
C9029	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C9030	ECJ1XC1H150J	C 15PF, J, 50V	1	
C9033	ECJ1XC1H470J	C 47PF, J, 50V	1	
C9035	ECJ1XC1H150J	C 15PF, J, 50V	1	
C9036	ECJ1XC1H220J	C 22PF, J, 50V	1	
C9038	EEVHB1C100R	E 10UF, 16V	1	
C9039	ECJ1XB0J105K	C 1UF, K, 16V	1	
C9041	EEVHP1C100R	E 10UF, 16V	1	
C9042	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9043	EEVHB0J470R	E 47UF, 6.3V	1	
C9044	ECJ1VB1C103K	C 0.01UF, K, 16V	1	
C9045	EEVHB0G101R	E 100UF 4V	1	
C9046- 48	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C9049	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9052	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9053,5 4	ECJ1XB1H102K	C 1000UF, Z, 50V	2	
C9055	EEVHB0J470R	E 47UF, 6.3V	1	
C9056	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9057	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9058,5 9	ECJ1XB1H102K	C 1000UF, Z, 50V	2	
C9060	ECJ1VB1C103K	C 0.01UF, K, 16V	1	
C9061	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C9062	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9063	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9064	EEVHB0G101R	E 100UF 4V	1	
C9065- 68	ECJ1XB1H102K	C 1000UF, Z, 50V	4	
C9069	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9070	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C9071- 75	ECJ1VF1A105Z	C 1UF, Z, 10V	5	
C9076	ECJ1XB1H102K	C 1000UF, Z, 50V	1	
C9077- 79	ECJ1VF1H103Z	C 0.01UF, Z, 50V	3	
C9081	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9082- 87	ECJ1VF1A105Z	C 1UF, Z, 10V	6	
C9088	ECJ1XC1H470J	C 47PF, J, 50V	1	
C9089- 91	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C9092	ECJ1VF1H103Z	C 0.01UF, Z, 50V	1	
C9093	TCUY0J335MBM	C 3.3UF, 6.3V	1	F1K0J335A003
C9096	EEVHB0G101R	E 100UF 4V	1	
C9097	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9099- 07	ECJ1VF1A105Z	C 1UF, Z, 10V	9	
C9109	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9110	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9111	EEVHB0J470R	E 47UF, 6.3V	1	
C9112	EEVHB0G101R	E 100UF 4V	1	
C9114	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9115	ECJ1XB0J105K	C 1UF, K, 16V	1	
C9116	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9117,1 8	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C9119	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9120	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9122	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9123	ECJ1XC1H220J	C 22PF, J, 50V	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C9124	ECJ1XB0J105K	C 1UF, K, 16V	1	
C9125	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9126	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9127	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9128,29	ECJ1VF1A105Z	C 1UF, Z, 10V	2	
C9130,31	ECJ1XB1C104K	C 0.1UF, Z, 16V	2	
C9133	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9134	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9135-40	ECJ1VF1A105Z	C 1UF, Z, 10V	6	
C9141	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9142	EEVHB1C100R	E 10UF, 16V	1	
C9143-46	ECJ1VF1A105Z	C 1UF, Z, 10V	4	
C9147	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9148	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9149	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9150-54	ECJ1VF1A105Z	C 1UF, Z, 10V	5	
C9155	EEVHB0G221P	E 220UF, 4V	1	
C9156-64	ECJ1VF1A105Z	C 1UF, Z, 10V	9	
C9165	ECJ1VC1H560J	C 56PF, J, 50V	1	
C9166-68	ECJ1XF1C104Z	C 0.1UF, Z, 16V	3	
C9169	EEVHB0G101R	E 100UF 4V	1	
C9170	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9174	EEVHB1C100R	E 10UF, 16V	1	
C9175	ECJ1VCLH560J	C 56PF, J, 50V	1	
C9176	EEVHB1C100R	E 10UF, 16V	1	
C9178	EEVHB0G101R	E 100UF 4V	1	
C9180	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9181	EEVHB0G101R	E 100UF 4V	1	
C9182	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9183	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9184	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9185,86	ECJ1XCLH101J	C 100PF, J, 50V	2	
C9188	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9190	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9191,92	ECJ1XC1H330J	C 33PF, J, 50V	2	
C9193	EEVHB0G101R	E 100UF 4V	1	
C9196,97	ECJ1VBLH103K	C 0.01UF, K, 50V	2	
C9199	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9201	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9204	ECJ1XCLH150J	C 15PF, J, 50V	1	
C9205	ECJ1XCLH180J	C 18PF, J, 50V	1	
C9206	ECJ1XC1H151J	C 150PF, J, 50V	1	
C9207-09	ECJ1XB1C104K	C 0.1UF, Z, 16V	3	
C9211	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9212	ECJ1VF1A105Z	C 1UF, Z, 10V	1	
C9213	EEVHB1C100R	E 10UF, 16V	1	
C9214-16	EEVHB0G101R	E 100UF 4V	3	
C9219	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9221	ECJ1XF1C104Z	C 0.1UF, Z, 16V	1	
C9224	ECJ1XCLH680J	C 68PF, J, 50V	1	
C9225	ECJ1XB0J105K	C 1UF, K, 16V	1	
C9228	FLJ1A1050020	C 1UF, Z, 50V	1	
C9229	ECJ1XB0J105K	C 1UF, K, 16V	1	
C9230	ECJ1XB1C104K	C 0.1UF, Z, 16V	1	
C9299	EEVHP1C100R	E 10UF, 16V	1	
D001,02	MA3020	ZENER DIODE	2	
D203	B3CKE0000006	DIODE	1	
D601	MA728	DIODE	1	MA2J728
D603,04	B0JCPD000012	DIODE	2	
D609-14	MA111	DIODE	6	MA2J111
D701,02	MA111	DIODE	2	MA2J111
D801	M1FS4	DIODE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D802,03	MA111	DIODE	2	MA2J111
D804	MA8110M	ZENER DIODE	1	MAZ81100M
D806	M1FS4	DIODE	1	
D809	MA111	DIODE	1	MA2J111
D810	MA8062L	ZENER DIODE	1	MAZ80620L
D811,12	M1FS4	DIODE	2	
D813	MA8056-M	DIODE	1	MAZ80560M
D814,15	MA111	DIODE	2	MA2J111
D816	MA8056-M	DIODE	1	MAZ80560M
D817	MA111	DIODE	1	MA2J111
D818	MA8027H	ZENER DIODE	1	MAZ80270H
D851	MA720	DIODE	1	MA3X720
D852	MA111	DIODE	1	MA2J111
D872	M1FS4	DIODE	1	
D873	MA111	DIODE	1	MA2J111
D874	MA8130H	ZENER DIODE	1	MAZ81300H
D2001	M1FS4	DIODE	1	
D2002	MA111	DIODE	1	MA2J111
D2003	MA152	DIODE	1	
D2004	MA157A	DIODE	1	MA3X157A
D2005	MA111	DIODE	1	MA2J111
D2006,07	MA8140M	ZENER DIODE	2	MAZ81400M
D3001-03	MA8056-M	DIODE	3	MAZ80560M
D3004	MA728	DIODE	1	MA2J728
D4001,02	MA8140M	ZENER DIODE	2	MAZ81400M
D4116	MA152K	DIODE	1	MA3X152K
D6500-02	MA2J72900L	DIODE	3	TX-17LA1F/P/V
D6504-07	MA111	DIODE	4	TX-17LA1F/P/V
D9001-07	MA8056-M	DIODE	7	MAZ80560M
DG1001	K1KA12A00126	12P CONNECTOR	1	
DG6501,02	K1MN40B00003	40P CONNECTOR	2	TX-17LA1F/P/V
DG6800	K1MN50B00016	50P CONNECTOR	1	TX-20LA1F/P/V
DG9001	K1MN50A00005	50P CONNECTOR	1	
DG9002	K1KA13A00122	13P CONNECTOR	1	
DL1001-03	ELKE103FA	NOISE FILTER	3	
DL1050,51	TLK20LFA223M	EMI FILTER	2	JOHABB000003
DL1070-77	ELKE103FA	NOISE FILTER	8	
DL6500-23	JOHABB000008	LC FILTER	24	TX-17LA1F/P/V
DL6800-28	JOHABB000008	LC FILTER	29	TX-20LA1F/P/V
DL9001-06	TLK20LFA224M	EMI FILTER	6	JOHABB000004
IC601	C0JBAZ002057	IC	1	
IC602	C0ABCA000064	IC	1	
IC801	C0DBCFG00004	IC	1	
IC802	PQ1CZ21H2ZP	IC	1	C0DBCMG00001
IC803	AN77L08M	IC	1	
IC805-07	PQ1CZ21H2ZP	IC	3	C0DBCMG00001
IC851	C0DBAMA00014	IC	1	
IC871	PQ1CZ21H2ZP	IC	1	C0DBCMG00001
IC1001	C2CBYF000028	IC	1	
IC1002	C0EBE0000191	IC	1	
IC1003	C0JBBZ000281	IC	1	
IC1004	TVRN115	IC	1	TX-17LA1F/P/V
IC1004	TVRN117	IC	1	TX-20LA1F/P/V
IC1006	C0JBAB000591	IC	1	C0JBAB000589
IC1007	C0JBAE000231	IC	1	
IC1008	TVRJ920-1	IC	1	
IC1009	C3ABPG000102	IC	1	
IC2001	C1BA00000344	AUDIO AMP	1	
IC2501	C1AB00001584	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC3001	TVRN116	IC	1	TX-17LA1F/P/V
IC3001	TVRN118	IC	1	TX-20LA1F/P/V
IC3002	TVRN041	IC	1	
IC3003	M51957BFP	LINEAR IC	1	C0EBB0000024
IC4001	CXA2089Q	LINEAR IC	1	ClAB00000461
IC4002	C0ABBA000138	IC	1	
IC6001,02	C0CBCBD00005	IC	2	
IC6003	C1AB00001834	IC	1	
IC6004	C1ZBZ0002178	IC	1	
IC6500	C0EBE0000191	IC	1	
IC6501	C1ZBZ0002203	IC	1	TX-17LA1F/P/V
IC6502	C0DBAMG00009	IC	1	TX-17LA1F/P/V
IC6503-05	UPD16510GR	IC	3	TX-17LA1F/P/V
IC6506,07	C0ABCA000064	IC	2	TX-17LA1F/P/V
IC6508	C0JBAR000392	IC	1	TX-17LA1F/P/V
IC6509	C0DBBZC00001	IC	1	TX-17LA1F/P/V
IC9001	C1AB00001826	IC	1	
IC9002	C0JBBZ000281	IC	1	
IC9003,04	C0CBCBD00005	IC	2	
IC9006	C3HBKZ000001	IC	1	
IC9007	C1AB00001834	IC	1	
IC9008	MM1065ZMR	LINEAR IC	1	C0CBABB00029
IC9009,10	C0CBCAD00006	IC	2	
IC9012	TC7WU04FU	IC	1	C0JBAB000339
JK801	K2EE2B000003	PLUG	1	
JK1201	K2HC103E0023	JACK	1	
JK4000	K1FB121B0011	CONNECTOR	1	
JK4001	K2HA612B0044	JACK	1	K2HA612B0034
JK4002	K1CB211B0001	CONNECTOR	1	
JS800-07	ERJ6GEY0R00	M 0 OHM, 1/10W	8	
JS1052	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS1054-69	ERJ6GEY0R00	M 0 OHM, 1/10W	16	
JS2000,01	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
JS2003	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS2008,09	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
JS4000	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS4005,06	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
JS9020	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
JS9054-62	ERJ6GEY0R00	M 0 OHM, 1/10W	9	
JS9068-74	ERJ6GEY0R00	M 0 OHM, 1/10W	7	
JS9068-74	ERJ6GEY0R00	M 0 OHM, 1/10W	7	TX-20LA1F/P/V
K1	K1KA04A00383	4P CONNECTOR	1	
L001-03	ELJPA330KF	CHIP INDUCTOR	3	
L601	ELESE330JA	PEAKING COIL	1	
L602	EXCELSR35T	BEAD CHOKE	1	
L603	J0JHC0000001	CHIP INDUCTOR	1	
L604	EXCELSR35T	BEAD CHOKE	1	
L605	J0JHC0000001	CHIP INDUCTOR	1	
L606,07	G0A121ZA0001	CHOKE COIL	2	
L801	TALL08N470KA	INDUCTION COIL	1	G0A470GA0011
L802	TALL08N101KA	INDUCTION COIL	1	G0A101EA0008
L804	TALL08N470KA	INDUCTION COIL	1	G0A470GA0011
L806	TALL08N101KA	INDUCTION COIL	1	G0A101EA0008
L807,08	TALL08N470KA	INDUCTION COIL	2	G0A470GA0011
L809,10	TALL08N101KA	INDUCTION COIL	2	G0A101EA0008
L811	TALL08N470KA	INDUCTION COIL	1	G0A470GA0011
L812	EXCELSR35C	BEAD CHOKE	1	
L851	G1C101M00018	INDUCTION COIL	1	△
L852	TALL08N330KA	INDUCTION COIL	1	G0A330GA0011

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L871	TALL08N470KA	INDUCTION COIL	1	G0A470GA0011
L872	TALL08N101KA	INDUCTION COIL	1	G0A101EA0008
L1001	G1C4R7M00016	INDUCTION COIL	1	
L1002	ELJPA180KB	CHIP INDUCTOR	1	
L1003	G1C3R3MA0061	INDUCTION COIL	1	
L1004	G1C330K00017	INDUCTOR COIL	1	
L1005	G1C4R7M00016	INDUCTION COIL	1	
L1007	ELJFA8R2KB	CHIP INDUCTOR	1	
L1009	ELJFA4R7KF	CHIP INDUCTOR	1	
L1050	G1C6R8MA0061	INDUCTOR COIL	1	
L1201,02	G1C121Z00004	INDUCTOR COIL	2	
L2001	TALL08N221KA	INDUCTION COIL	1	G0A221DA0010
L2501	ELJFA6R8MB	CHIP COIL	1	
L2502	EXCELSR35C	BEAD CHOKE	1	
L2503	ELESE180JA	PEAKING COIL	1	
L2504	G1C330K00017	INDUCTOR COIL	1	
L2505	ELESE330JA	PEAKING COIL	1	
L2506	EXCELSR35C	BEAD CHOKE	1	
L2507	G1C330K00017	INDUCTOR COIL	1	
L3001	G1C100K00020	INDUCTION COIL	1	
L4001	EXC3BB221H	BEAD CHOKE	1	
L4002	G1C330K00017	INDUCTOR COIL	1	
L4101	J0JBC0000004	CHIP INDUCTOR	1	
L4102,03	EXC3BB221H	BEAD CHOKE	2	
L4104	J0JBC0000004	CHIP INDUCTOR	1	
L4105,06	J0JHC0000001	CHIP INDUCTOR	2	
L4107	ELESE101JA	PEAKING COIL	1	
L6001,02	TALC168T3R3K	CHIP INDUCTOR COIL	2	G1C3R3K00007
L6003	TALC325T4R7M	CHIP INDUCTOR COIL	1	G1C4R7MA0063
L6004,05	G1C100KA0008	INDUCTOR COIL	2	
L6006,07	G1C100K00020	INDUCTION COIL	2	
L6019	TALC168T3R3K	CHIP INDUCTOR COIL	1	G1C3R3K00007
L6500-03	G1C100K00020	INDUCTION COIL	4	TX-17LA1F/P/V
L6504,05	G1C150KA0038	INDUCTION COIL	2	TX-17LA1F/P/V
L6506	ELJPA180KB	CHIP INDUCTOR	1	TX-17LA1F/P/V
L6507,08	G1C150KA0038	INDUCTION COIL	2	TX-17LA1F/P/V
L9009,10	G1C100KA0008	INDUCTOR COIL	2	TX-20LA1F/P/V
L9001-03	TALC168T6R8K	CHIP INDUCTOR COIL	3	G1C6R8K00005
L9004	TALC325T4R7M	CHIP INDUCTOR COIL	1	G1C4R7MA0063
L9005	TALC168T5R6K	CHIP INDUCTOR COIL	1	G1C5R6K00007
L9008	TALC168T2R2K	CHIP INDUCTOR COIL	1	G1C2R2K00006
L9009,10	G1C100KA0008	INDUCTOR COIL	2	
L9011,12	TALC325T4R7M	CHIP INDUCTOR COIL	2	G1C4R7MA0063
L9014,15	TALC325T4R7M	CHIP INDUCTOR COIL	2	G1C4R7MA0063
L9016	TALC168T100K	CHIP INDUCTOR COIL	1	G1C100KA0009
L9017-23	TALC325T4R7M	CHIP INDUCTOR COIL	7	G1C4R7MA0063
L9025	J0JGC0000021	CHIP INDUCTOR COIL	1	
L9030	J0JGC0000021	CHIP INDUCTOR COIL	1	
L9031	TALC325T4R7M	CHIP INDUCTOR COIL	1	G1C4R7MA0063
PA601,02	ERBFE4R00U	FUSE	2	
Q201	UN5219	TRANSISTOR	1	
Q202	UN5211	TRANSISTOR	1	UNR5211
Q601,02	B1DBED000001	TRANSISTOR	2	
Q603	2SD601A	TRANSISTOR	1	2SD0601A
Q604	UN2113	TRANSISTOR	1	UNR2113
Q605-08	B1BBFF000003	TRANSISTOR	4	
Q801	B1DDED000003	TRANSISTOR	1	
Q802	2SD601A	TRANSISTOR	1	2SD0601A

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q803	UN5211	TRANSISTOR	1	UNR5211
Q804	2SB709A	TRANSISTOR	1	2SB709A
Q805	B1DDED000003	TRANSISTOR	1	
Q806,07	2SD601A	TRANSISTOR	2	2SD601A
Q808	UN5211	TRANSISTOR	1	UNR5211
Q809	B1DDED000003	TRANSISTOR	1	
Q810	UN5211	TRANSISTOR	1	UNR5211
Q811	2SD601A	TRANSISTOR	1	2SD601A
Q812	UN5211	TRANSISTOR	1	UNR5211
Q813	2SD601A	TRANSISTOR	1	2SD601A
Q814	UN2113	TRANSISTOR	1	UNR2113
Q851	B1ABPF000005	TRANSISTOR	1	
Q852	UN5211	TRANSISTOR	1	UNR5211
Q1001	UN5111TX	TRANSISTOR	1	UNR511100L
Q1002	UN5211	TRANSISTOR	1	UNR5211
Q1004	2SD601A	TRANSISTOR	1	2SD601A
Q1011	2SD601A	TRANSISTOR	1	2SD601A
Q2001-04	UN5211	TRANSISTOR	4	UNR5211
Q2005	2SD1802ST	TRANSISTOR	1	B1BBCF000013
Q2007	2SD601A	TRANSISTOR	1	2SD601A
Q2008	2SB709A	TRANSISTOR	1	2SB709A
Q2009	2SD601A	TRANSISTOR	1	2SD601A
Q2010	2SB709A	TRANSISTOR	1	2SB709A
Q2101-04	2SD601A	TRANSISTOR	4	2SD601A
Q2501-06	UN5211	TRANSISTOR	6	UNR5211
Q3001,02	UN5211	TRANSISTOR	2	UNR5211
Q3004	UN5211	TRANSISTOR	1	UNR5211
Q30005	UN5211	TRANSISTOR	1	TX-17LA1F/P/V
Q4001	2SD601A	TRANSISTOR	1	2SD601A
Q4002,03	UN5211	TRANSISTOR	2	UNR5211
Q4011	2SD601A	TRANSISTOR	1	2SD601A
Q4101,02	2SB709A	TRANSISTOR	2	2SB709A
Q4103,04	UN5211	TRANSISTOR	2	UNR5211
Q6004-06	2SB709A	TRANSISTOR	3	2SB709A
Q6010-12	2SC2412K	TRANSISTOR	3	
Q6014	B1DHDC000021	TRANSISTOR	1	
Q6015	UN5211	TRANSISTOR	1	UNR5211
Q6500	B1DHDC000021	TRANSISTOR	1	TX-17LA1F/P/V
Q6501	UN5211	TRANSISTOR	1	TX-17LA1F/P/V
Q6502	B1DHDC000021	TRANSISTOR	1	TX-17LA1F/P/V
Q6503	UN5211	TRANSISTOR	1	TX-17LA1F/P/V
Q6504	2SD1820A	TRANSISTOR	1	TX-17LA1F/P/V
Q6505-08	2SB1219A	TRANSISTOR	4	TX-17LA1F/P/V
Q6509	UN5211	TRANSISTOR	1	TX-17LA1F/P/V
Q6510	UN5212	TRANSISTOR	1	TX-17LA1F/P/V
Q6511	B1CBGD000001	TRANSISTOR	1	TX-17LA1F/P/V
Q6512	2SD601A	TRANSISTOR	1	TX-17LA1F/P/V
Q6513	UN5212	TRANSISTOR	1	TX-17LA1F/P/V
Q6514	B1CBGD000001	TRANSISTOR	1	TX-17LA1F/P/V
Q6515	UN5111TX	TRANSISTOR	1	TX-17LA1F/P/V
Q6516	UN5211	TRANSISTOR	1	TX-17LA1F/P/V
Q6517	B1CHGD000003	OR 2SJ053600L	1	TX-17LA1F/P/V
Q6801	UN5211	TRANSISTOR	1	TX-20LA1F/P/V
Q9001-03	2SC2412K	TRANSISTOR	3	
Q9004-06	2SB709A	TRANSISTOR	3	2SB709A
Q9010-12	2SC2412K	TRANSISTOR	3	
Q9014,15	2SD601A-R	TRANSISTOR	2	2SD601AR
Q9017	2SB709A	TRANSISTOR	1	2SB709A
Q9019-21	2SB709A	TRANSISTOR	3	2SB709A
Q9022	2SD601A-R	TRANSISTOR	1	2SD601AR
Q9026	2SD1030	TRANSISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q9029	B1DHDC000021	TRANSISTOR	1	
Q9030	UN5211	TRANSISTOR	1	UNR5211
Q9031	B1DHDC000021	TRANSISTOR	1	
Q9032	UN5211	TRANSISTOR	1	UNR5211
R001	ERJ6GEYJ393	M 39KOHM,J,1/10W	1	
R002	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R003	ERJ6GEYJ393	M 39KOHM,J,1/10W	1	
R004,05	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R006	ERJ6GEYJ153	M 15KOHM,J,1/10W	1	
R011,12	ERJ6GEYJ101	M 100 OHM,J,1/10W	2	
R013	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R101	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R102	ERJ6ENF6801	M 6.8KOHM, 1/10W	1	
R103	ERJ6ENF1202	M 12KOHM, 1/10W	1	
R104	ERJ6ENF2202	M 2.2KOHM, 1/10W	1	
R105	ERJ6ENF6802	M 68KOHM, 1/10W	1	
R201	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	1	
R202	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R203,04	ERJ6GEYJ470	M 47 OHM,J,1/10W	2	
R206,07	ERJ8ENF1021	M1.02KOHM, 1/8W	2	
R208,09	ERJ8ENF2151	M2.15KOHM, 1/8W	2	
R601	ERJ6GEYJ101	M 100 OHM,J,1/10W	1	
R602	ERJ6GEYJ220	M 22 OHM,J,1/10W	1	
R603,04	ERJ6GEYJ180	M 18 OHM,J,1/10W	2	
R605	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R606	ERJ6GEYJ331	M 330 OHM,J,1/10W	1	
R608	ERJ6GEYJ123	M 12KOHM,J,1/10W	1	
R610,11	ERJ6ENF4321	M4.32KOHM, 1/10W	2	
R612	ERJ6ENF6491	M6.49KOHM, 1/10W	1	
R614	ERJ6ENF4321	M4.32KOHM, 1/10W	1	
R615,16	ERJ6GEYJ682	M 6.8KOHM,J,1/10W	2	
R617,18	ERJ12YJ681	M 680 OHM,J, 1/2W	2	
R619	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R622	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R623	ERJ12YJ681	M 680 OHM,J, 1/2W	1	
R625	ERJ12YJ681	M 680 OHM,J, 1/2W	1	
R627,28	ERJ12YK3R3	M 3.30HM,J, 1/2W	2	
R629	ERJ6ENF4321	M4.32KOHM, 1/10W	1	
R630,31	ERJ12YK3R3	M 3.30HM,J, 1/2W	2	
R632	ERJ6ENF6341	M6.34KOHM, 1/10W	1	
R633,34	ERJ12NF2200	M 200 OHM, , 1/2W	2	
R635	ERJ6ENF4321	M4.32KOHM, 1/10W	1	
R636	ERJ6ENF6341	M6.34KOHM, 1/10W	1	
R637	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R701,02	ERJ12NF2000	M 20 OHM, , 1/2W	2	
R801	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R802	ERJ6GEYJ153	M 15KOHM,J,1/10W	1	
R803	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R804	ERJ6ENF1781	M1.78KOHM, 1/10W	1	
R805	ERJ6ENF1102	M 11KOHM, 1/10W	1	
R806	ERJ6GEYJ562	M 5.6KOHM,J,1/10W	1	
R807	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R808	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R809	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R810	ERJ6GEYJ153	M 15KOHM,J,1/10W	1	
R811	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R812	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R813,14	ERJ6GEYJ473	M 47KOHM,J,1/10W	2	
R815	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	1	
R817	ERJ6ENF1001	M 1KOHM, 1/10W	1	
R818	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R820	ERJ6ENF3001	M 3KOHM, 1/10W	1	
R821,22	ERJ6ENF1001	M 1KOHM, 1/10W	2	
R823	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R824	ERJ6ENF1151	M1.15KOHM, 1/10W	1	
R825	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R826	ERJ6ENF1691	M1.69KOHM, 1/10W	1	
R843	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R844	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R845	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R846	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R847	ERJ6GEYJ153	M 15KOHM,J,1/10W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R851	ERJ6ENF8203	M 820KOHM, 1/10W	1	
R852	ERJ6ENF1372	M13.7KOHM, 1/10W	1	
R853	ERJ6GEYJ512	M 5.1KOHM,J,1/10W	1	
R854	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R860	ERJ6GEYJ514	M 510KOHM,J,1/10W	1	
R861	ERJ6GEYJ273	M 27KOHM,J,1/10W	1	
R862	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R863	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R871	ERJ6ENF2371	M2.37KOHM, 1/10W	1	
R872	ERJ6ENF1872	M18.7KOHM, 1/10W	1	
R873	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R1001	ERJ3GEYJ101	M 100 OHM, J,1/16W	1	DOGB101JA002
R1002	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R1003	ERJ3GEYJ683	M 68KOHM,J,1/16W	1	
R1004	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R1005	ERJ3GEYJ512	M 5.1KOHM,J,1/16W	1	
R1006,07	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R1008	ERJ3GEYJ683	M 68KOHM,J,1/16W	1	
R1009	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R1011,12	EXB38V680J	RESISTOR ARRAY	2	
R1014	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R1015	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R1016	EXB38V680J	RESISTOR ARRAY	1	
R1019	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R1020	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R1024	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R1027	EXB38V680J	RESISTOR ARRAY	1	
R1028	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R1029	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R1033	ERJ3GEYJ273	M 27KOHM,J,1/16W	1	
R1034	ERJ3GEYJ101	M 100 OHM, J,1/16W	1	DOGB101JA002
R1035	EXB38V680J	RESISTOR ARRAY	1	
R1036	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R1040	ERJ3GEYJ220	M 22 OHM, J,1/16W	1	
R1042	EXB38V680J	RESISTOR ARRAY	1	
R1043	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R1045	ERJ3GEYJ101	M 100 OHM, J,1/16W	1	DOGB101JA002
R1046	ERJ3GEYJ391	M 390 OHM, J,1/16W	1	DOGB391JA002
R1048	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R1049	EXB38V680J	RESISTOR ARRAY	1	
R1051	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R1052	ERJ3GEYJ471	M 470 OHM, J,1/16W	1	
R1053	ERJ3GEYJ101	M 100 OHM, J,1/16W	1	DOGB101JA002
R1055	ERJ3GEYJ101	M 100 OHM, J,1/16W	1	DOGB101JA002
R1056	EXB38V680J	RESISTOR ARRAY	1	
R1058	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R1062	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R1064	EXB38V680J	RESISTOR ARRAY	1	
R1065-67	ERJ3GEYJ101	M 100 OHM, J,1/16W	3	DOGB101JA002
R1068,69	ERJ3GEYJ473	M 47KOHM,J,1/16W	2	
R1070	ERJ3GEYJ101	M 100 OHM, J,1/16W	1	DOGB101JA002
R1072	ERJ3GEYJ101	M 100 OHM, J,1/16W	1	DOGB101JA002
R1073,74	ERJ3GEYJ473	M 47KOHM,J,1/16W	2	
R1076	ERJ3GEYJ101	M 100 OHM, J,1/16W	1	DOGB101JA002
R1077	ERJ3GEYJ183	M 18KOHM,J,1/16W	1	
R1078	ERJ3GEYJ101	M 100 OHM, J,1/16W	1	DOGB101JA002
R1079	ERJ3GEYJ183	M 18KOHM,J,1/16W	1	
R1080	EXB38V680J	RESISTOR ARRAY	1	
R1081,82	ERJ3GEYJ101	M 100 OHM, J,1/16W	2	DOGB101JA002
R1083	EXB38V680J	RESISTOR ARRAY	1	
R1086,87	ERJ3GEYJ273	M 27KOHM,J,1/16W	2	
R1088	ERJ3GEYJ101	M 100 OHM, J,1/16W	1	DOGB101JA002
R1089-92	ERJ3GEYJ273	M 27KOHM,J,1/16W	4	
R1093	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	1	
R1094	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R1095	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	TX-17LA1F/P/V

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R1096,97	ERJ3GEYJ101	M 100 OHM, J,1/16W	2	DOGB101JA002
R1099	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R1101	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R1102	EXB38V473J	RESISTOR ARRAY	1	
R1105	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R1107	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R1111	ERJ3GEYJ562	M 5.6KOHM,J,1/16W	1	
R1112,13	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R1114	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R1115	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	TX-17LA1F/P/V
R1116	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R1117	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R1118,19	ERJ3GEYJ101	M 100 OHM, J,1/16W	2	DOGB101JA002
R1121	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R2001	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2003	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2005,06	ERJ6GEYJ100	M 10 OHM, J,1/10W	2	
R2007,08	ERJ12YJ2R2	M 2.2 OHM, J,1/2W	2	
R2009	ERJ6GEYJ270	M 27 OHM, J,1/10W	1	
R2010,11	ERJ12YJ2R2	M 2.2 OHM, J,1/2W	2	
R2012	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R2014	ERJ6GEYJ152	M 1.5KOHM,J,1/10W	1	
R2015	ERJ6GEYJ184	M 180KOHM,J,1/10W	1	
R2016	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R2017	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2018	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R2019	ERJ6GEYJ105	M 1MOHM,J,1/10W	1	
R2020	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2021	ERJ6GEYJ223	M 22KOHM,J,1/10W	1	
R2022	ERJ6GEYJ473	M 47KOHM,J,1/10W	1	
R2101	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R2102	ERJ6GEYJ331	M 330 OHM, J,1/10W	1	
R2104,05	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	2	
R2106	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R2108	ERJ6GEYJ681	M 680 OHM, J,1/10W	1	
R2109	ERJ6GEYJ471	M 470 OHM, J,1/10W	1	
R2110	ERJ6GEYJ561	M 560 OHM, J,1/10W	1	
R2112	ERJ6GEYJ102	M 1KOHM, J,1/10W	1	
R2113	ERJ6GEYJ561	M 560 OHM, J,1/10W	1	
R2501	ERJ6GEYJ101	M 100 OHM, J,1/10W	1	
R2502	ERJ6GEYJ471	M 470 OHM, J,1/10W	1	
R2505,06	ERJ6GEYJ472	M 4.7KOHM, J,1/10W	2	
R2507,08	ERJ6GEYJ101	M 100 OHM, J,1/10W	2	
R2509,10	ERJ6GEYJ273	M 27KOHM, J,1/10W	2	
R2511-14	ERJ6GEYJ101	M 100 OHM, J,1/10W	4	
R2515,16	ERJ6GEYJ102	M 1KOHM, J,1/10W	2	
R2517	ERJ6GEYJ682	M 6.8KOHM, J,1/10W	1	
R2519	ERJ6GEYJ682	M 6.8KOHM, J,1/10W	1	
R2521-24	ERJ6GEYJ104	M 100KOHM, J,1/10W	4	
R2529,30	ERJ6GEYJ104	M 100KOHM, J,1/10W	2	
R2532-34	ERJ6GEY0R00	M 0 OHM, 1/10W	3	
R3001	ERJ3GEYJ103	M 10KOHM, J,1/16W	1	
R3002,03	ERJ3GEYJ101	M 100 OHM, J,1/16W	2	DOGB101JA002
R3004,05	ERJ3GEYJ103	M 10KOHM, J,1/16W	2	
R3006-12	ERJ3GEYJ473	M 47KOHM, J,1/16W	7	
R3013-20	EXB38V473J	RESISTOR ARRAY	8	
R3021-23	ERJ3GEYJ473	M 47KOHM, J,1/16W	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3024	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3025-31	ERJ3GEYJ473	M 47KOHM,J,1/16W	7	
R3032,33	EXB38V473J	RESISTOR ARRAY	2	
R3034	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	DOGB101JA002
R3035,36	ERJ3GEYJ391	M 390 OHM,J,1/16W	2	DOGB391JA002
R3037	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R3038,39	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R3040	ERJ3EKF2432	M24.3KOHM, 1/16W	1	
R3041	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	DOGB101JA002
R3042	ERJ3EKF1002	M 10KOHM, 1/16W	1	
R3043,44	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R3045	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	DOGB101JA002
R3046	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R3047	EXB38V101J	RESISTOR ARRAY	1	
R3048,49	ERJ3GEYJ273	M 27KOHM,J,1/16W	2	
R3050	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	DOGB101JA002
R3052	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R4003	ERJ6ENF75R0	M 75 OHM, 1/10W	1	
R4004,05	ERJ6GEYJ184	M 180KOHM,J,1/10W	2	
R4006,07	ERJ6ENF75R0	M 75 OHM, 1/10W	2	
R4008	ERJ6GEYJ750	M 75 OHM,J,1/10W	1	
R4009	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4010	ERJ6GEYJ302	M 3KOHM,J,1/10W	1	
R4011	ERJ6GEYJ182	M 1.8KOHM,J,1/10W	1	
R4012	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R4013	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R4014	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4015	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R4016	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4017	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R4018,19	ERJ6GEYJ273	M 27KOHM,J,1/10W	2	
R4020,21	ERJ6GEYJ102	M 1KOHM,J,1/10W	2	
R4022,23	ERJ6GEYJ221	M 220 OHM,J,1/10W	2	
R4025,26	ERJ6GEYJ680	M 68 OHM,J,1/10W	2	
R4027-31	ERJ6GEYJ102	M 1KOHM,J,1/10W	5	
R4038,39	ERJ6GEYJ104	M 100KOHM,J,1/10W	2	
R4071	ERJ6GEYJ393	M 39KOHM,J,1/10W	1	
R4072	ERJ6GEYJ512	M 5.1KOHM,J,1/10W	1	
R4073	ERJ6GEYJ333	M 33KOHM,J,1/10W	1	
R4074	ERJ6GEYJ202	M 2KOHM,J,1/10W	1	
R4075	ERJ6GEYJ103	M 10KOHM,J,1/10W	1	
R4076	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4101-05	ERJ6ENF75R0	M 75 OHM, 1/10W	5	
R4106	ERJ6GEYJ682	M 6.8KOHM,J,1/10W	1	
R4107	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R4108	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R4109,10	ERJ6GEYJ333	M 33KOHM,J,1/10W	2	
R4111	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R4112	ERJ6ENF3301	M 3.3KOHM, 1/10W	1	
R4113	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	1	
R4114	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R4116	ERJ6GEYJ102	M 1KOHM,J,1/10W	1	
R4117	ERJ6ENF3301	M 3.3KOHM, 1/10W	1	
R4118	ERJ6GEYJ104	M 100KOHM,J,1/10W	1	
R4155	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R4167	ERJ6GEYJ221	M 220 OHM,J,1/10W	1	
R4185,86	ERJ6GEYJ221	M 220 OHM,J,1/10W	2	
R4201	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R6004	ERJ3GEY0R00	M 0 OHM, 1/16W	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6007	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R6008	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6009	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R6010	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6012	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R6016-18	ERJ3GEYJ331	M 330 OHM,J,1/16W	3	
R6019-21	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R6022	ERJ3EKF2200	M 220 OHM, 1/16W	1	
R6024	ERJ3EKF2200	M 220 OHM, 1/16W	1	
R6027	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6028	ERJ3EKF2200	M 220 OHM, 1/16W	1	
R6029-31	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R6033	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R6034-36	ERJ6ENF1500	M 150 OHM, 1/10W	3	
R6037	ERJ3EKF3901	M 3.9KOHM, 1/16W	1	
R6038,39	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R6040	ERJ6ENF1500	M 150 OHM, 1/10W	1	
R6042	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6044	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6045,46	ERJ6ENF51R0	M0.51KOHM, 1/10W	2	
R6047,48	ERJ6ENF1500	M 150 OHM, 1/10W	2	
R6049-56	ERJ3GEYJ101	M 100 OHM,J,1/16W	8	DOGB101JA002
R6057	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R6059	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R6060	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R6061	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6062	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R6063	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6064	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	1	
R6065	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6066	ERJ3GEYJ104	M 100KOHM,J,1/16W	1	
R6067	ERJ3GEYJ334	M 330KOHM,J,1/16W	1	DOGB334JA002
R6068	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6171	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R6174-76	ERJ3EKF2700	M 270 OHM, 1/16W	3	
R6177,78	ERJ3GEYJ273	M 27KOHM,J,1/16W	2	
R6179	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6180,81	EXB38VR000	RESISTOR ARRAY	2	
R6182	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6184-86	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R6190	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6191-93	ERJ6ENF4700	M 150 OHM, 1/10W	3	
R6194	ERJ6ENF1500	M 150 OHM, 1/10W	1	
R6195	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6294	ERJ3EKF6801	M 6.8KOHM, 1/16W	1	ERJ3EKF6801V
R6295	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6400	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R6401	ERJ3GEYJ123	M 12KOHM,J,1/16W	1	
R6402	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R6403	ERJ3GEYJ123	M 12KOHM,J,1/16W	1	
R6404	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	
R6405	ERJ3GEYJ123	M 12KOHM,J,1/16W	1	
R6501	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	TX-17LA1F/P/V
R6502	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	TX-17LA1F/P/V
R6504	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	TX-17LA1F/P/V
R6505	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	TX-17LA1F/P/V
R6506	ERJ6GEY0R00	M 0 OHM, 1/10W	1	TX-17LA1F/P/V
R6507,08	ERJ3GEYJ273	M 27KOHM,J,1/16W	2	TX-17LA1F/P/V
R6509,10	ERJ3GEYJ560	M 56 OHM,J,1/16W	2	TX-17LA1F/P/V
R6511,12	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	TX-17LA1F/P/V

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6513	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	1	TX-17LA1F/P/V
R6515	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	TX-17LA1F/P/V
R6516	ERJ3GEYJ181	M 180 OHM,J,1/16W	1	TX-17LA1F/P/V
R6521	ERJ3GEY0R00	M 0 OHM, 1/16W	1	TX-17LA1F/P/V
R6522	ERJ3EKF5231	M52.3KOHM, 1/16W	1	TX-17LA1F/P/V
R6523	ERJ3EKF1201	M 1.2KOHM, 1/16W	1	TX-17LA1F/P/V
R6524,2 5	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	2	TX-17LA1F/P/V
R6526	ERJ3EKF1582	M15.8KOHM, 1/16W	1	TX-17LA1F/P/V
R6527	ERJ3EKF2701	M 2.7KOHM, 1/16W	1	TX-17LA1F/P/V
R6528	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	TX-17LA1F/P/V
R6529	ERJ3EKF1202	M 12KOHM, 1/16W	1	TX-17LA1F/P/V
R6530	ERJ3EKF1201	M 1.2KOHM, 1/16W	1	TX-17LA1F/P/V
R6531	ERJ3GEYJ222	M 2.2KOHM,J,1/16W	1	TX-17LA1F/P/V
R6532- 34	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	3	TX-17LA1F/P/V
R6535,3 6	ERJ3GEY0R00	M 0 OHM, 1/16W	2	TX-17LA1F/P/V
R6538- 40	ERJ3GEY0R00	M 0 OHM, 1/16W	3	TX-17LA1F/P/V
R6542	ERJ3GEYJ472	M 4.7KOHM,J,1/16W	1	TX-17LA1F/P/V
R6543	ERJ3GEY0R00	M 0 OHM, 1/16W	1	TX-17LA1F/P/V
R6545	ERJ3EKF1202	M 12KOHM, 1/16W	1	TX-17LA1F/P/V
R6546	ERJ3EKF5601	M 5.6KOHM, 1/16W	1	TX-17LA1F/P/V
R6547- 50	ERJ3GEY0R00	M 0 OHM, 1/16W	4	TX-17LA1F/P/V
R6551,5 2	ERJ3EKF1002	M 10KOHM, 1/16W	2	TX-17LA1F/P/V
R6553- 65	ERJ3GEY0R00	M 0 OHM, 1/16W	13	TX-17LA1F/P/V
R6566	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	1	TX-17LA1F/P/V
R6567	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	1	TX-17LA1F/P/V
R6569	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	1	TX-17LA1F/P/V
R6570	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	TX-17LA1F/P/V
R6572	ERJ3EKF18R0	M 18 OHM, 1/16W	1	TX-17LA1F/P/V
R6573	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	TX-17LA1F/P/V
R6574	ERJ3EKF7501	M 7.5KOHM, 1/16W	1	TX-17LA1F/P/V
R6575	ERJ3GEY0R00	M 0 OHM, 1/16W	1	TX-17LA1F/P/V
R6576	ERJ3EKF7501	M 7.5KOHM, 1/16W	1	TX-17LA1F/P/V
R6577	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	TX-17LA1F/P/V
R6578,7 9	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	TX-17LA1F/P/V
R6589	ERJ3EKF18R0	M 18 OHM, 1/16W	1	TX-17LA1F/P/V
R6590	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	TX-17LA1F/P/V
R6591,9 2	ERJ3GEY0R00	M 0 OHM, 1/16W	2	TX-17LA1F/P/V
R6801	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	TX-20LA1F/P/V
R6802	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	TX-20LA1F/P/V
R6804	ERJ3GEY0R00	M 0 OHM, 1/16W	1	TX-20LA1F/P/V
R6805	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	TX-20LA1F/P/V
R9006- 11	ERJ3GEYJ331	M 330 OHM,J,1/16W	6	
R9012- 14	ERJ3EKF2700	M 270 OHM, 1/16W	3	
R9015- 17	ERJ3EKF2200	M 220 OHM, 1/16W	3	
R9021- 28	ERJ3GEY0R00	M 0 OHM, 1/16W	8	
R9029- 31	ERJ3GEYJ331	M 330 OHM,J,1/16W	3	
R9032- 34	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R9036	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R9038,3 9	ERJ3GEYJ223	M 22KOHM,J,1/16W	2	
R9040	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9042,4 3	ERJ3GEYJ221	M 220 OHM,J,1/16W	2	
R9045- 47	ERJ3GEYJ221	M 220 OHM,J,1/16W	3	
R9049	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R9050,5 1	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R9053	ERJ3EKF4700	M 470 OHM, 1/16W	1	
R9054	ERJ3EKF2700	M 270 OHM, 1/16W	1	
R9056	ERJ3EKF1200	M 120 OHM, 1/16W	1	
R9058	ERJ3EKF6801	M 6.8KOHM, 1/16W	1	ERJ3EKF6801V

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R9060	ERJ6GEYJ821	M 820 OHM,J,1/10W	1	
R9062	ERJ3EKF2700	M 270 OHM, 1/16W	1	
R9063	ERJ3EKF1201	M 1.2KOHM, 1/16W	1	
R9065,6 6	ERJ6GEYJ222	M 2.2KOHM,J,1/10W	2	
R9067	ERJ6ENF68R0	M 68 OHM, 1/10W	1	
R9068,6 9	ERJ6ENF82R0	M 82 OHM, 1/10W	2	
R9070- 72	ERJ3GEYJ220	M 22 OHM,J,1/16W	3	
R9073	ERJ6ENF68R0	M 68 OHM, 1/10W	1	
R9075	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9077	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9079,8 0	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9082	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9083	ERJ6ENF51R0	M0.51KOHM, 1/10W	1	
R9084	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R9085	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9086	ERJ3EKF1800	M 180 OHM, 1/16W	1	
R9087	ERJ6ENF51R0	M0.51KOHM, 1/10W	1	
R9088	ERJ6ENF68R0	M 68 OHM, 1/10W	1	
R9089	ERJ6ENF82R0	M 82 OHM, 1/10W	1	
R9090	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9091	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R9092	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9093	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9095	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9097,9 8	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9100	ERJ3EKF2701	M 2.7KOHM, 1/16W	1	
R9101	ERJ3EKF12R0	M 12 OHM, 1/16W	1	
R9102	ERJ3EKF1401	M 1.4KOHM, 1/16W	1	
R9103	ERJ3EKF2000	M 200 OHM, 1/16W	1	
R9104	ERJ3EKF1101	M 1.1KOHM, 1/16W	1	
R9105	ERJ3EKF47R0	M 47 OHM, 1/16W	1	
R9106	ERJ3GEYJ121	M 120 OHM,J,1/16W	1	
R9107	ERJ3EKF1401	M 1.4KOHM, 1/16W	1	
R9108	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9109	ERJ3EKF12R0	M 12 OHM, 1/16W	1	
R9110	ERJ3EKF1101	M 1.1KOHM, 1/16W	1	
R9111	ERJ3EKF75R0	M 0.75HM, 1/16W	1	
R9113	ERJ3EKF1401	M 1.4KOHM, 1/16W	1	
R9114	ERJ3EKF2701	M 2.7KOHM, 1/16W	1	
R9115	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R9116	ERJ3EKF1401	M 1.4KOHM, 1/16W	1	
R9117	ERJ3EKF12R0	M 12 OHM, 1/16W	1	
R9118	ERJ3EKF75R0	M 0.75HM, 1/16W	1	
R9119	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R9121	ERJ3EKF47R0	M 47 OHM, 1/16W	1	
R9122	ERJ3EKF1101	M 1.1KOHM, 1/16W	1	
R9123	ERJ3EKF75R0	M 0.75HM, 1/16W	1	
R9124	ERJ3EKF12R0	M 12 OHM, 1/16W	1	
R9125	ERJ3EKF75R0	M 0.75HM, 1/16W	1	
R9126	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9127	ERJ3EKF1101	M 1.1KOHM, 1/16W	1	
R9128	ERJ3EKF2701	M 2.7KOHM, 1/16W	1	
R9129	ERJ3EKF12R0	M 12 OHM, 1/16W	1	
R9130	ERJ3EKF2200	M 220 OHM, 1/16W	1	
R9131	ERJ3GEYJ121	M 120 OHM,J,1/16W	1	
R9132	ERJ3EKF2701	M 2.7KOHM, 1/16W	1	
R9133	ERJ3EKF47R0	M 47 OHM, 1/16W	1	
R9134	ERJ3EKF12R0	M 12 OHM, 1/16W	1	
R9136	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9137,3 8	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R9139	ERJ3GEYJ121	M 120 OHM,J,1/16W	1	
R9141	ERJ3GEYJ181	M 180 OHM,J,1/16W	1	
R9142	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	1	
R9143	ERJ3GEYJ181	M 180 OHM,J,1/16W	1	
R9144,4 5	ERJ3GEYJ221	M 220 OHM,J,1/16W	2	
R9146,4 7	ERJ3GEYJ561	M 560 OHM,J,1/16W	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R9149,50	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R9154	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9155	ERJ3GEYJ153	M 15KOHM,J,1/16W	1	
R9156	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9157	ERJ3GEYJ153	M 15KOHM,J,1/16W	1	
R9158	ERJ3GEYJ103	M 10KOHM,J,1/16W	1	
R9159	ERJ3GEYJ153	M 15KOHM,J,1/16W	1	
R9161	ERJ3GEYJ223	M 22KOHM,J,1/16W	1	
R9162	ERJ3GEYJ102	M 1KOHM,J,1/16W	1	
R9164,65	ERJ3GEYJ103	M 10KOHM,J,1/16W	2	
R9166-68	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R9170	ERJ3GEYJ121	M 120 OHM,J,1/16W	1	
R9172	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	DOGB101JA002
R9190	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9191-93	ERJ6ENF1020	M 105 OHM, 1/10W	3	
R9194	ERJ6ENF1500	M 150 OHM, 1/10W	1	
R9195-97	ERJ3GEY0R00	M 0 OHM, 1/16W	3	
R9200	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	DOGB101JA002
R9201,02	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R9203	ERJ3GEYJ105	M 1MOHM,J,1/16W	1	
R9204	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	1	
R9207	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R9297	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	DOGB101JA002
R9299	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	DOGB101JA002
RM201	PNA4701M05TV	REMOCO RECEIVER	1	
RTL	TNPH0531AB	CIRCUIT BOARD A	1	△
RTL	TNPA2791AB	CIRCUIT BOARD B	1	△
RTL	TNPA2793	CIRCUIT BOARD K	1	△
RTL	TNPA2794	CIRCUIT BOARD V	1	△
RTL	TNPA2792	CIRCUIT BOARD BL	1	△
RTL	TXNDG10HTK	CIRCUIT BOARD DG	1	TX-17LA1F/P/V △
RTL	TXNDG10HRK	CIRCUIT BOARD DG	1	TX-20LA1F/P/V △
SW101-05	EVQPC105K	SWITCH	5	
SW801	TSE4GD0001	POWER SWITCH	1	K0F162B00002
T601,02	ETJV23MA1YAC	TRANS	2	△
T701,02	ETJV23MA1YAC	TRANS	2	△
TNR001	ENG29519GF	TUNER	1	△
V1	TJSF18213	13P CONNECTOR	1	K1MN13A00042
V2,V3	K1KA02A00188	2P MINI	2	
X1001	H0J600400006	CRYSTAL	1	
X2101	EFCS7004BF	CERAMIC FILTER	1	
X2102	EFCS6504BF	CERAMIC FILTER	1	
X2501	H0J184500020	CRYSTAL	1	
X3001	TSSA104	CRYSTAL	1	H0J400400006
X9001	H0J202500002	CRYSTAL	1	
ZA1001-05	K4ZZ01000121	EARTH LUG	5	
ZA6001	TESA169	SHIELD CLIP	1	
ZA6002	TESA169	SHIELD CLIP	1	TX-20LA1F/P/V
ZA6003	TESA169	SHIELD CLIP	1	TX-17LA1F/P/V
ZA6004	TESA169	SHIELD CLIP	1	TX-20LA1F/P/V
ZA6005	TESA169	SHIELD CLIP	1	TX-17LA1F/P/V
ZA6009,10	K4CD01000002	TERMINAL	2	
ZA6011	K4CD01000002	TERMINAL	1	TX-20LA1F/P/V
ZA6012	TESA169	SHIELD CLIP	1	TX-17LA1F/P/V