

SERVICE MANUAL

WAX2 CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>
<i>KLV-26S200A</i>	<i>RM-GA005</i>	<i>E</i>
<i>KLV-26S200A</i>	<i>RM-GA005</i>	<i>Oceania</i>
<i>KLV-26S200A</i>	<i>RM-GA005</i>	<i>Middle East</i>
<i>KLV-32S200A</i>	<i>RM-GA005</i>	<i>E</i>
<i>KLV-32S200A</i>	<i>RM-GA005</i>	<i>Oceania</i>
<i>KLV-32S200A</i>	<i>RM-GA005</i>	<i>Middle East</i>
<i>KLV-40S200A</i>	<i>RM-GA005</i>	<i>E</i>
<i>KLV-40S200A</i>	<i>RM-GA005</i>	<i>Oceania</i>
<i>KLV-40S200A</i>	<i>RM-GA005</i>	<i>Middle East</i>

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>
<i>KLV-46S200A</i>	<i>RM-GA005</i>	<i>E</i>
<i>KLV-46S200A</i>	<i>RM-GA005</i>	<i>Oceania</i>
<i>KLV-46S200A</i>	<i>RM-GA005</i>	<i>Middle East</i>



KLV-26S200A/32S200A



KLV-40S200A/46S200A



RM-GA005

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OPERATING INSTRUCTIONS

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK \triangle ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

USE CAUTION WHEN HANDLING THE LCD PANEL

When installing the LCD panel, be sure you are grounded by using a wrist band.

When installing the LCD panel on the wall, the LCD panel must be secured using the 4 mounting holes on the rear cover.

- 1). do not press on the panel or frame edge to avoid the risk of electric shock.
- 2). do not scratch or press on the panel with any sharp objects.
- 3). do not leave the module in high temperatures or in areas of high humidity for an extended period of time.
- 4). do not expose the LCD panel to direct sunlight.
- 5). avoid contact with water. It may cause a short circuit within the module.
- 6). disconnect the AC adapter when replacing the backlight (CCFL) or inverter circuit.
(High voltage occurs at the inverter circuit at 650Vrms)
- 7). always clean the LCD panel with a soft cloth material.
- 8). use care when handling the wires or connectors of the inverter circuit. Damaging the wires may cause a short.
- 9). protect the panel from ESD to avoid damaging the electronic circuit (C-MOS).

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are “pinched” or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes).

Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson’s 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

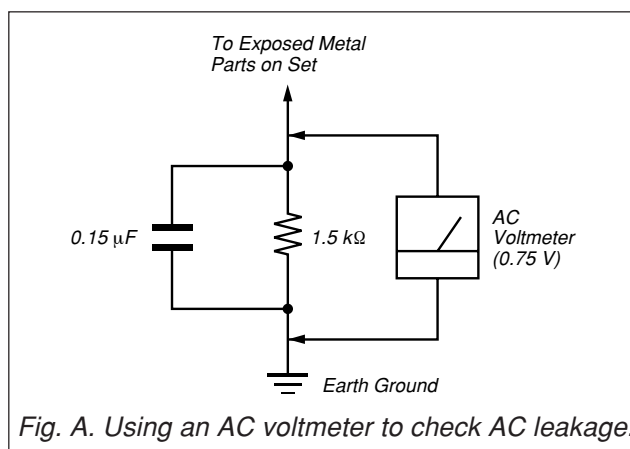


Fig. A. Using an AC voltmeter to check AC leakage.

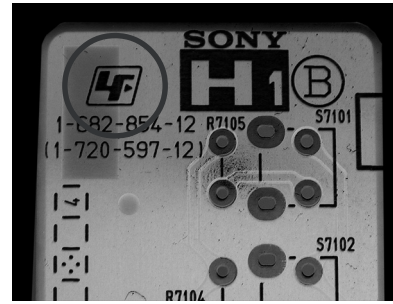
WARNING!!

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK \triangle ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

CAUTION

example 1

The circuit boards used in these models have been processed using Lead Free Solder. The boards are identified by the LF logo located close to the board designation e.g. H1 etc [see example]. The servicing of these boards requires special precautions to be taken as outlined below.



It is strongly recommended to use Lead Free Solder material in order to guarantee optimal quality of new solder joints. Lead Free Solder is available under the following part numbers :

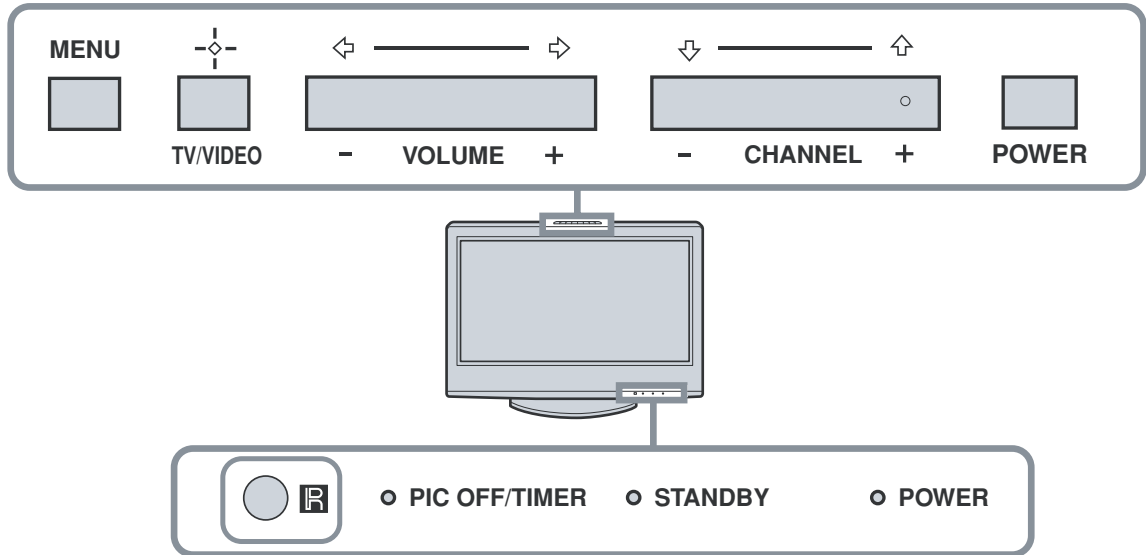
Part number	Diameter	Remarks
7-640-005-19	0.3mm	0.25Kg
7-640-005-20	0.4mm	0.50Kg
7-640-005-21	0.5mm	0.50Kg
7-640-005-22	0.6mm	0.25Kg
7-640-005-23	0.8mm	1.00Kg
7-640-005-24	1.0mm	1.00Kg
7-640-005-25	1.2mm	1.00Kg
7-640-005-26	1.6mm	1.00Kg

Due to the higher melting point of Lead Free Solder the soldering iron tip temperature needs to be set to 370 degrees centigrade. This requires soldering equipment capable of accurate temperature control coupled with a good heat recovery characteristics.

For more information on the use of Lead Free Solder, please refer to <http://www.sony-training.com>

SELF DIAGNOSTIC FUNCTION

Control Buttons



Description of LED Indicators

LED	LED Type	Description
POWER LED	Red/Green LED	* Light is green when the TV set is on * Functions as failure indicator * Blinks green in aging mode
TIMER LED	Red LED	Lights when timer is set
PIC OFF LED	Green LED	Lights when power saving setting is set to picture off (See Instruction Manual)

LED Control

STATUS	POWER LED	TIMER LED/ PICTURE OFF LED	STANDBY LED	REMARKS
Power Off	Off	Off	Off	Power off using the power switch or remote control. NOTE: Standby state does not exist in this model; however, the microcomputer does enter into sleep mode.
Power Off	Lights Green	Off	Off	Microcomputer working normally.
Failure	Blinks Red	Off	Off	Failure causes are classified by the number of time the red light blinks.
Aging	Blinks Green	Off	Off	Aging mode is classified by a blinking green light.
Picture Off	Lights Green	Lights Green	Off	No display (black screen).
SLEEP TIMER	Lights Green	Lights Orange	Off	When SLEEP TIMER is set during power on.
	Lights Green	Lights Green	Off	When SLEEP TIMER is set in Picture Off mode.
ON TIMER	Off	Lights Orange	Off	When ON TIMER is set and power is off.
	Lights Green	Lights Orange	Off	When ON TIMER is set and power is on.
	Lights Green	Lights Green	Off	When ON TIMER is set in Picture Off mode.
PC STANDBY	Off	Off	Lights Red	
PC STANDBY/ TIMER ON	Off	Lights Orange	Lights Red	

The units in this manual contain a self-diagnostic function. If an error occurs, the POWER LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A definition of the POWER LED flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom is difficult to reproduced use the Remote Commander to display the record that is stored at the internal NVM to specify the cause of the failure.

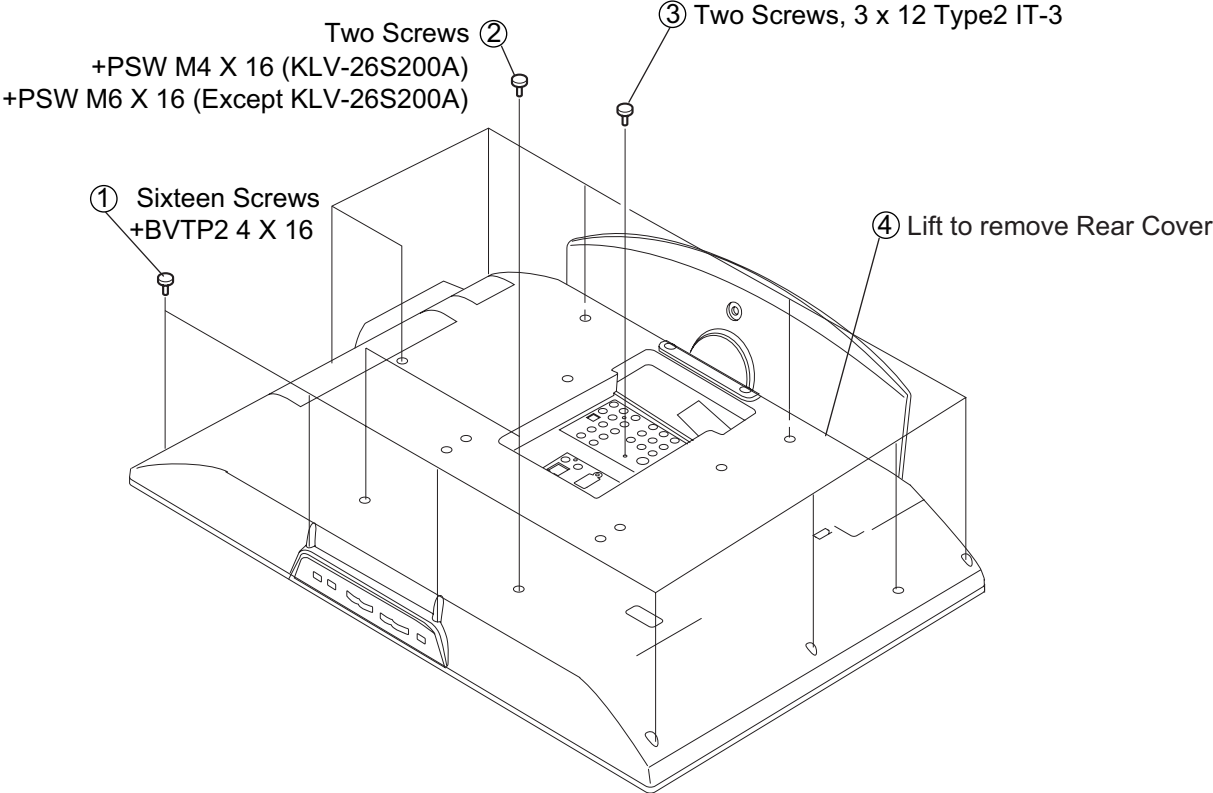
Diagnostic Test Indicators

When an error occurs, the POWER LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas. If the errors occur simultaneously, the one that corresponds to the fewest flashes is identified first. Results for all of the following diagnostic items are displayed on screen. No error has occurred if the screen displays a "0".

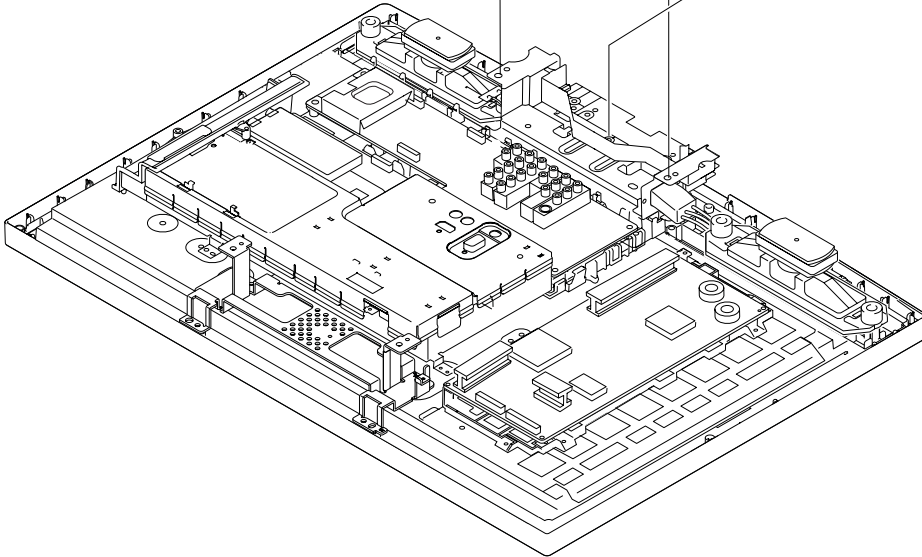
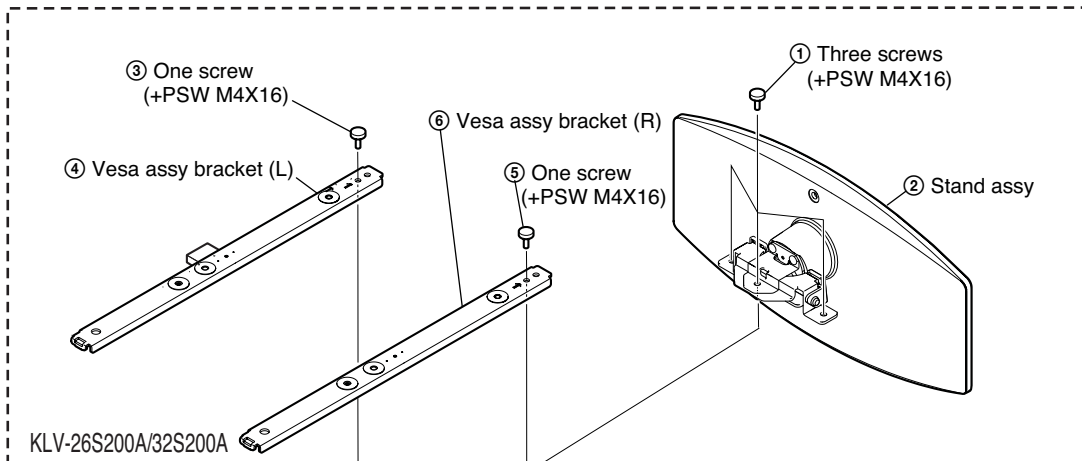
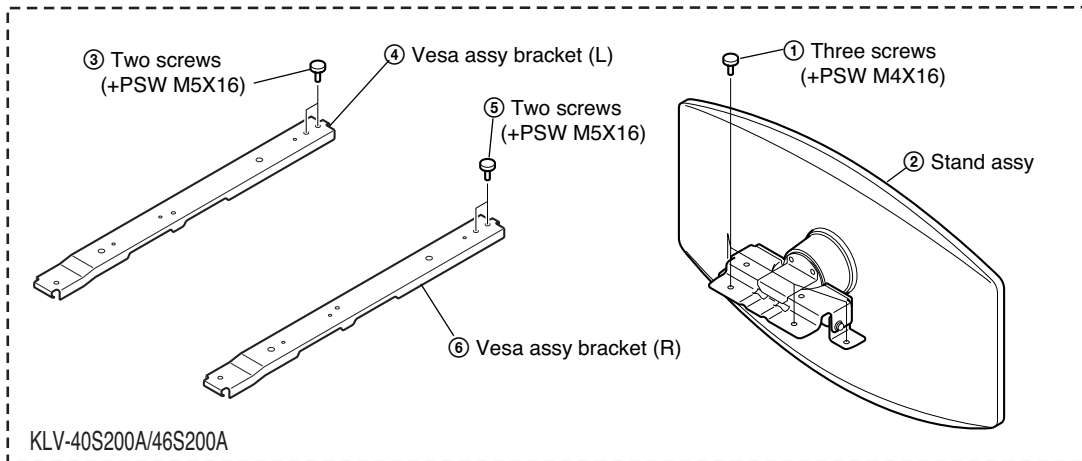
LED ERROR CODE	ERROR DESCRIPTION
1	Supply Voltage Trouble Panel 5V UNReg (10.5V)
2	DE5V Voltage Trouble FE5V (DCALERT2)
3	Voltage Trouble D3.3V/D2.5V/D1.8V. (DCALERT1)
4	Backlight Trouble
5	Main Supply Voltage Trouble (17.5V.DET)
6	Speaker Applied Voltage Trouble
7	Monitor an Increase in Inside-Temperature (esp. on the panel side)
8	Trident IC Trouble

SECTION 1 DISASSEMBLY

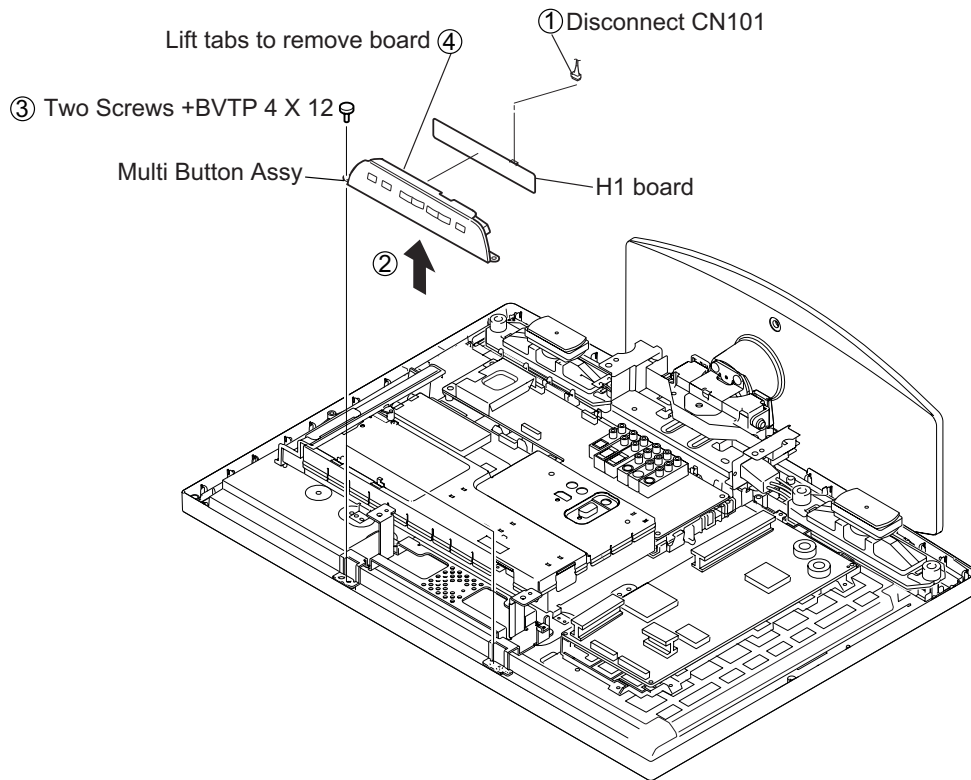
1-1. REAR COVER REMOVAL



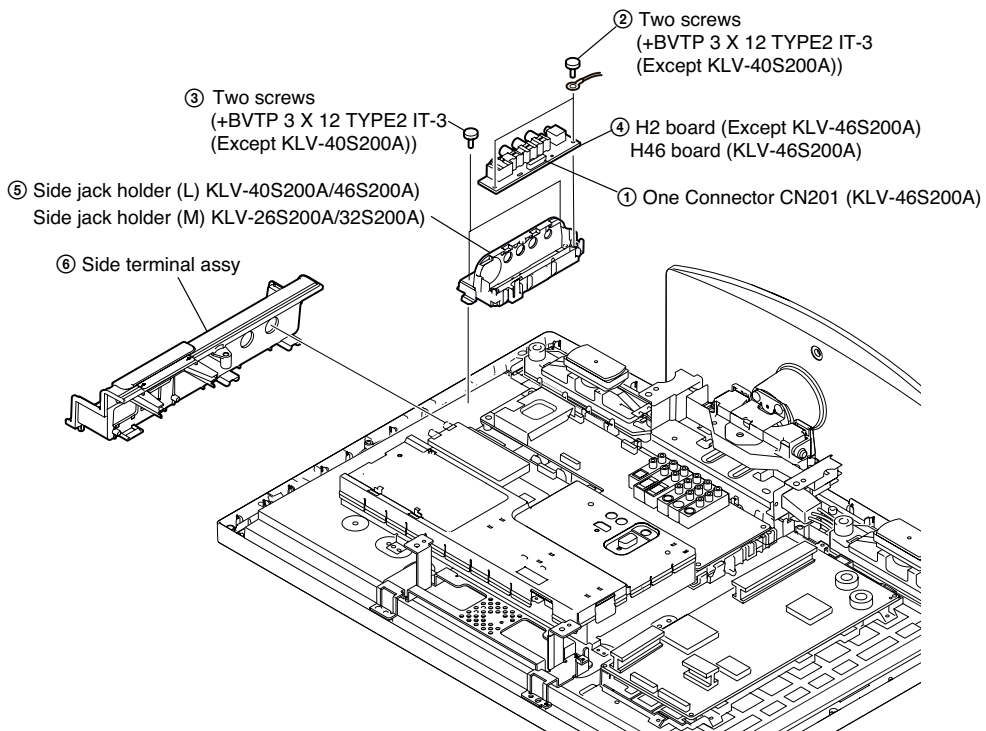
1-2. VESA BRACKET ASSEMBLY REMOVAL



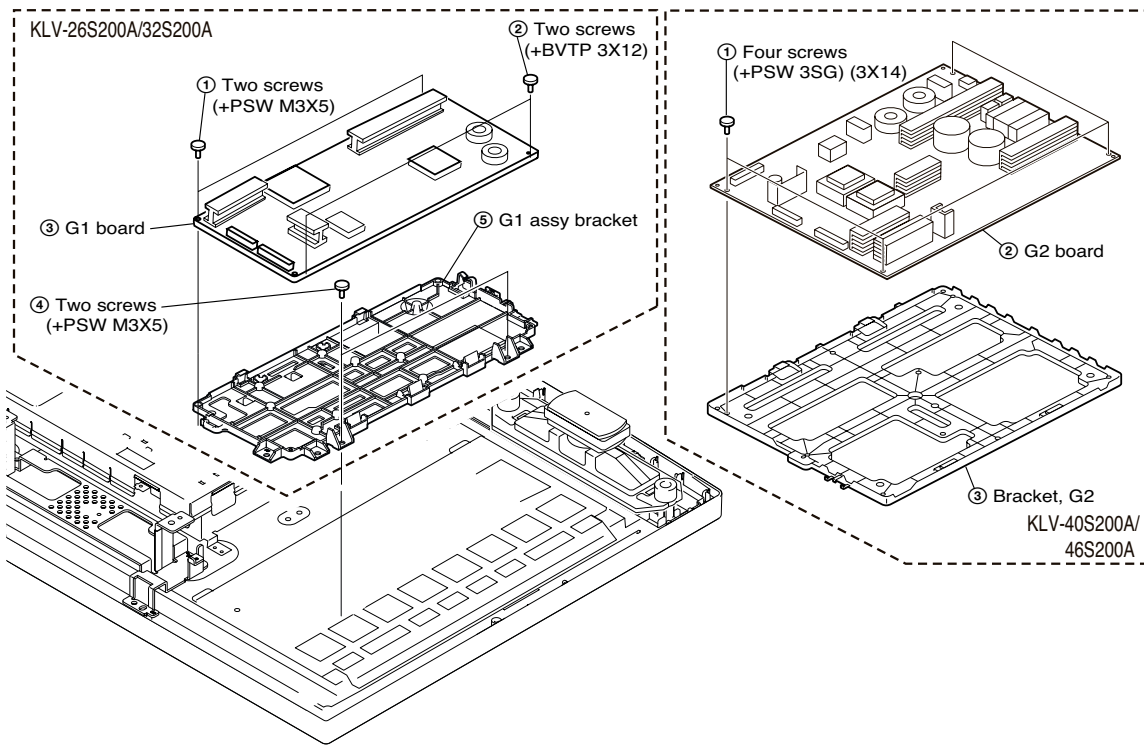
1-3. H1 BOARD REMOVAL



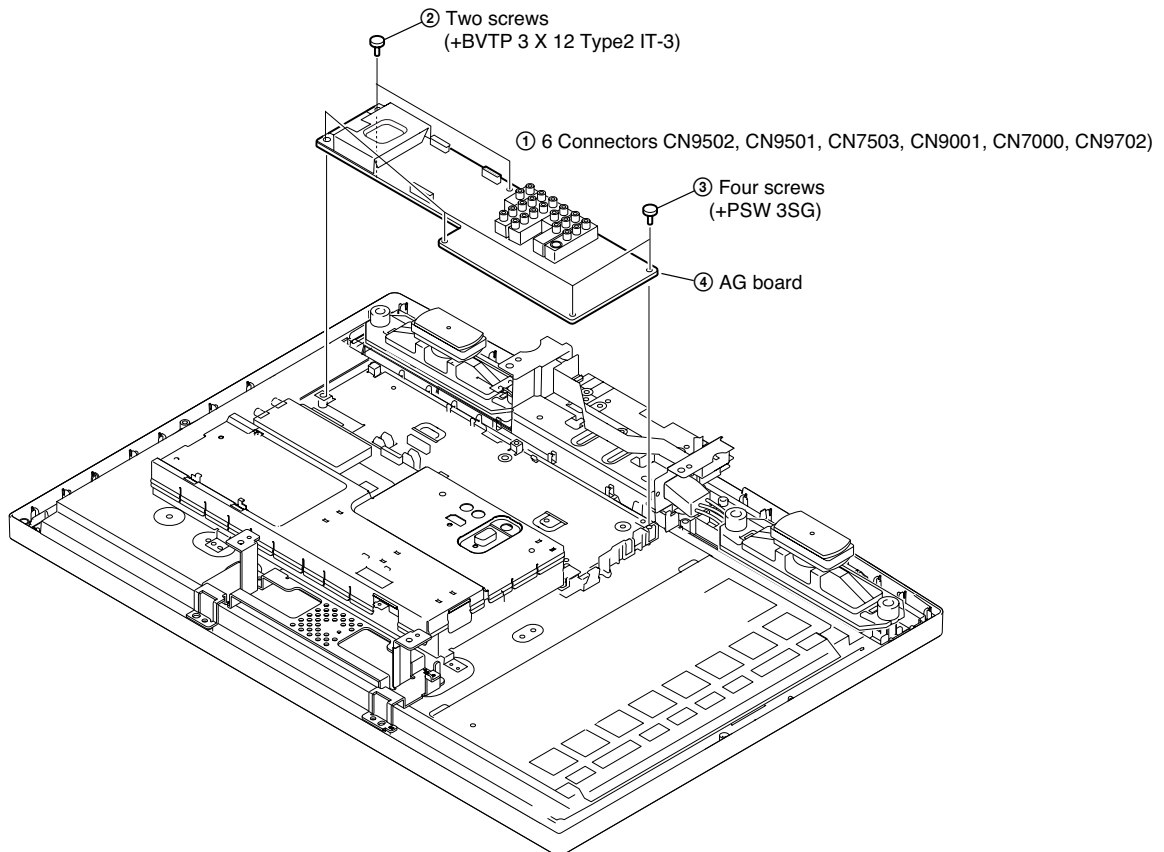
1-4. H2 BOARD (Except KLV-46S200A)/H46 BOARD (KLV-46S200A) REMOVAL



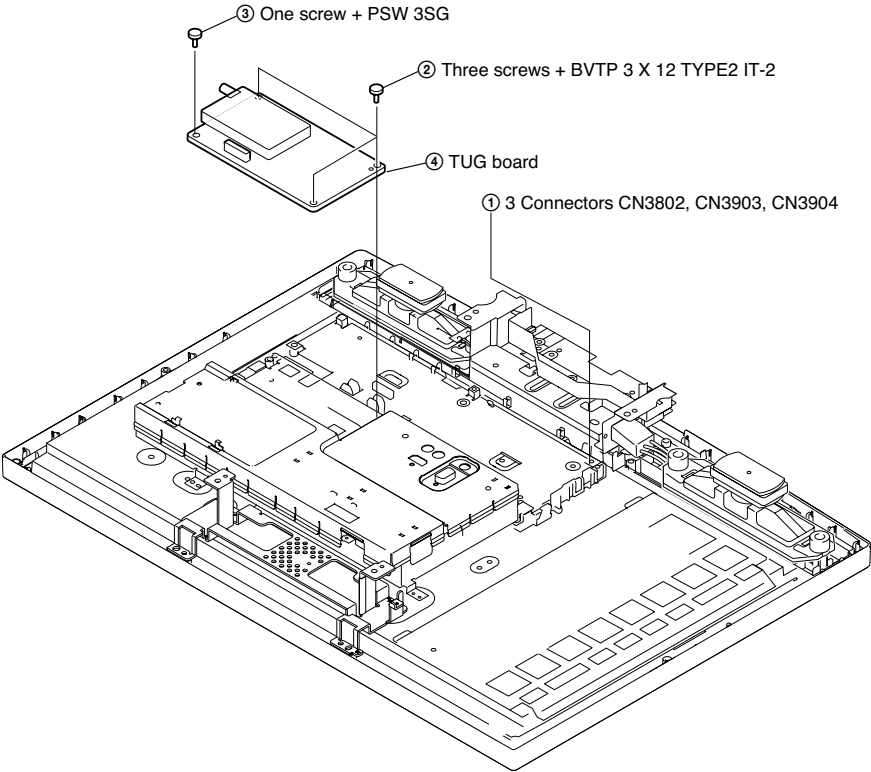
1-5. G1 AND G2 BOARDS REMOVAL



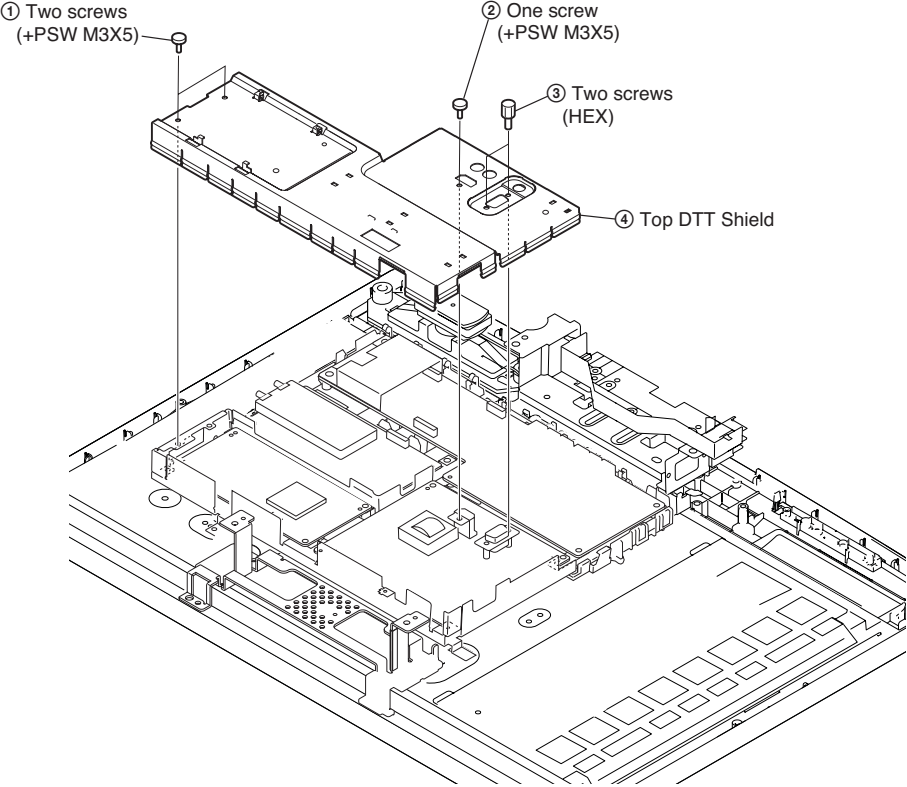
1-6. AG BOARD REMOVAL



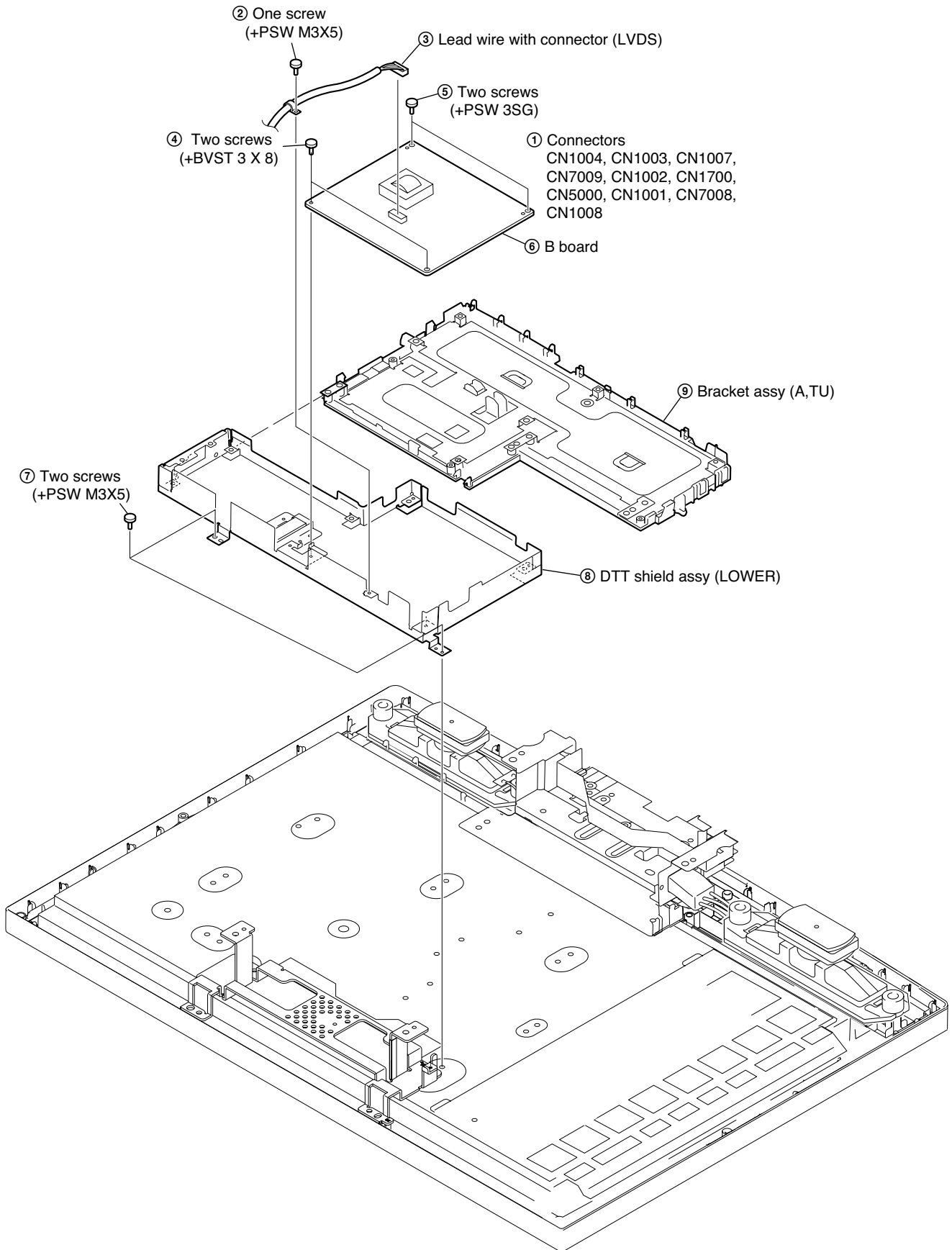
1-7. TUG BOARD REMOVAL



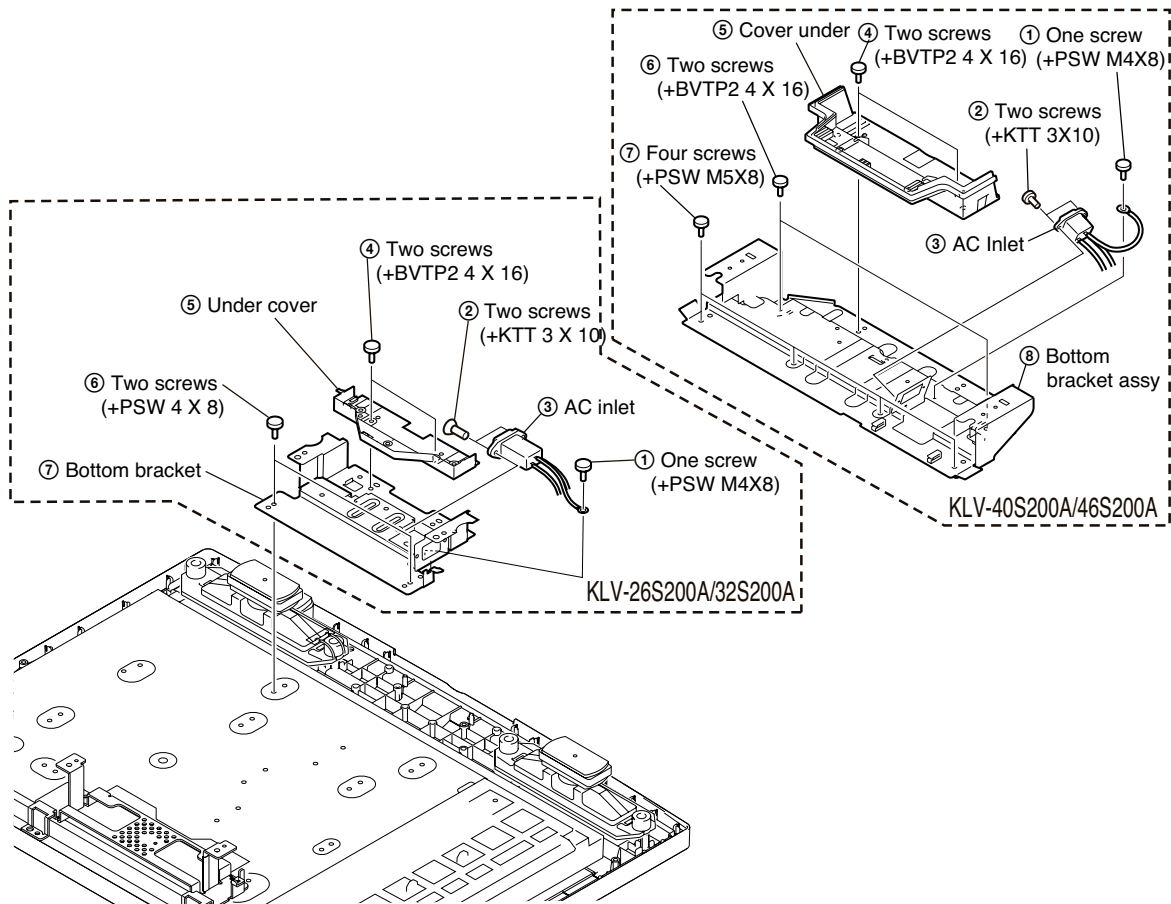
1-8. DTT SHIELD REMOVAL



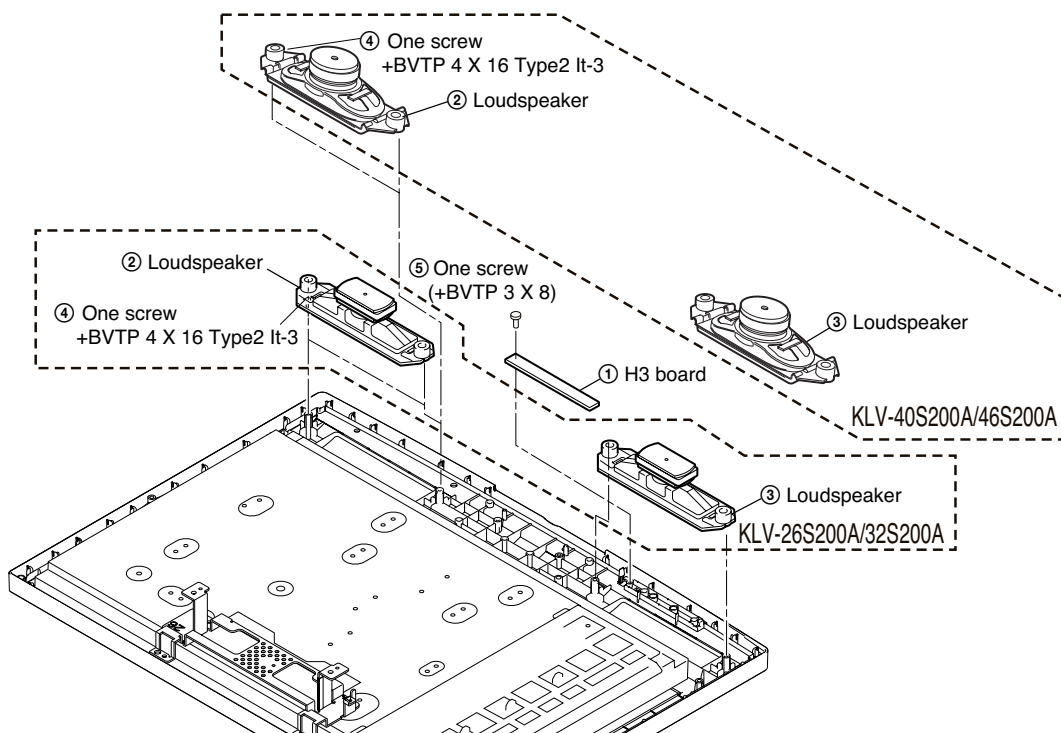
1-9. B BOARD REMOVAL



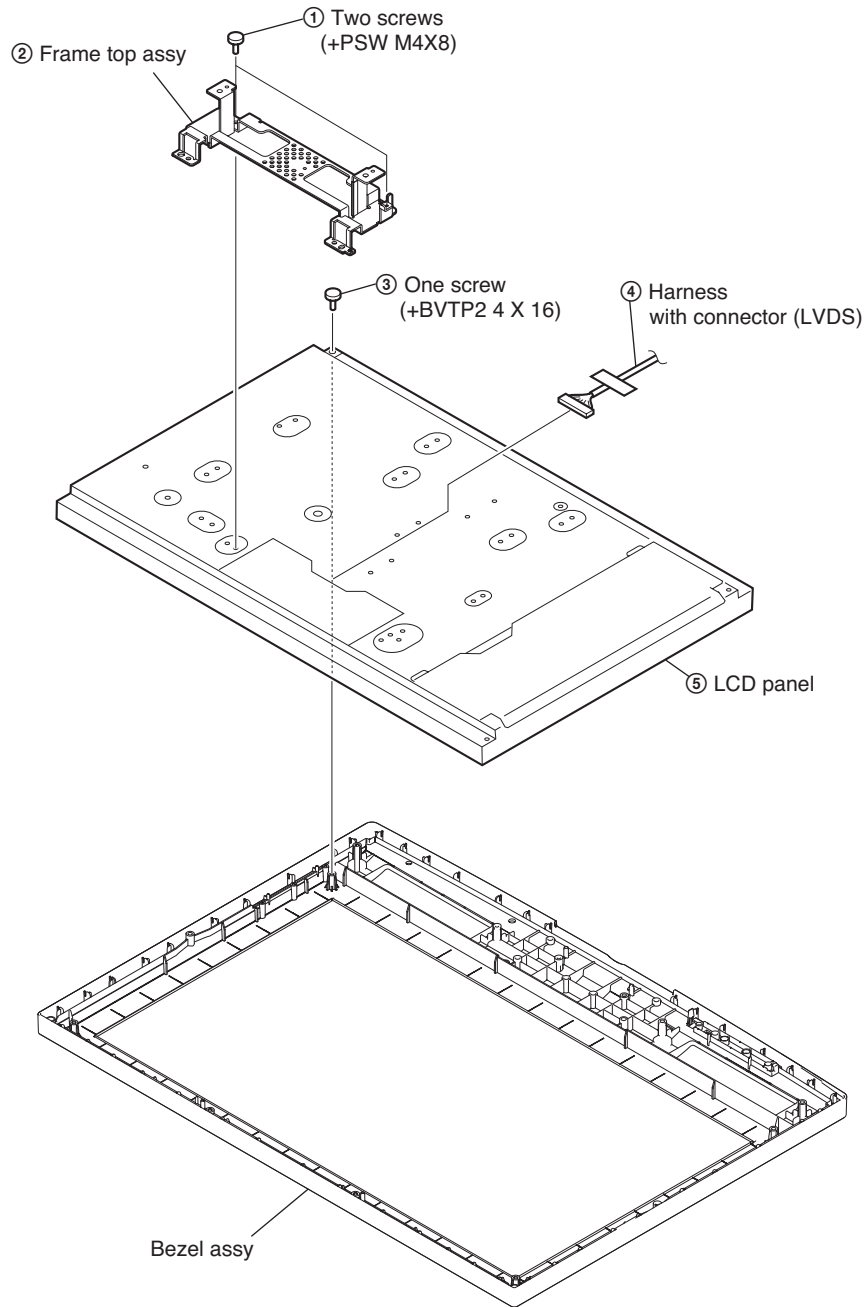
1-10. AC INLET REMOVAL



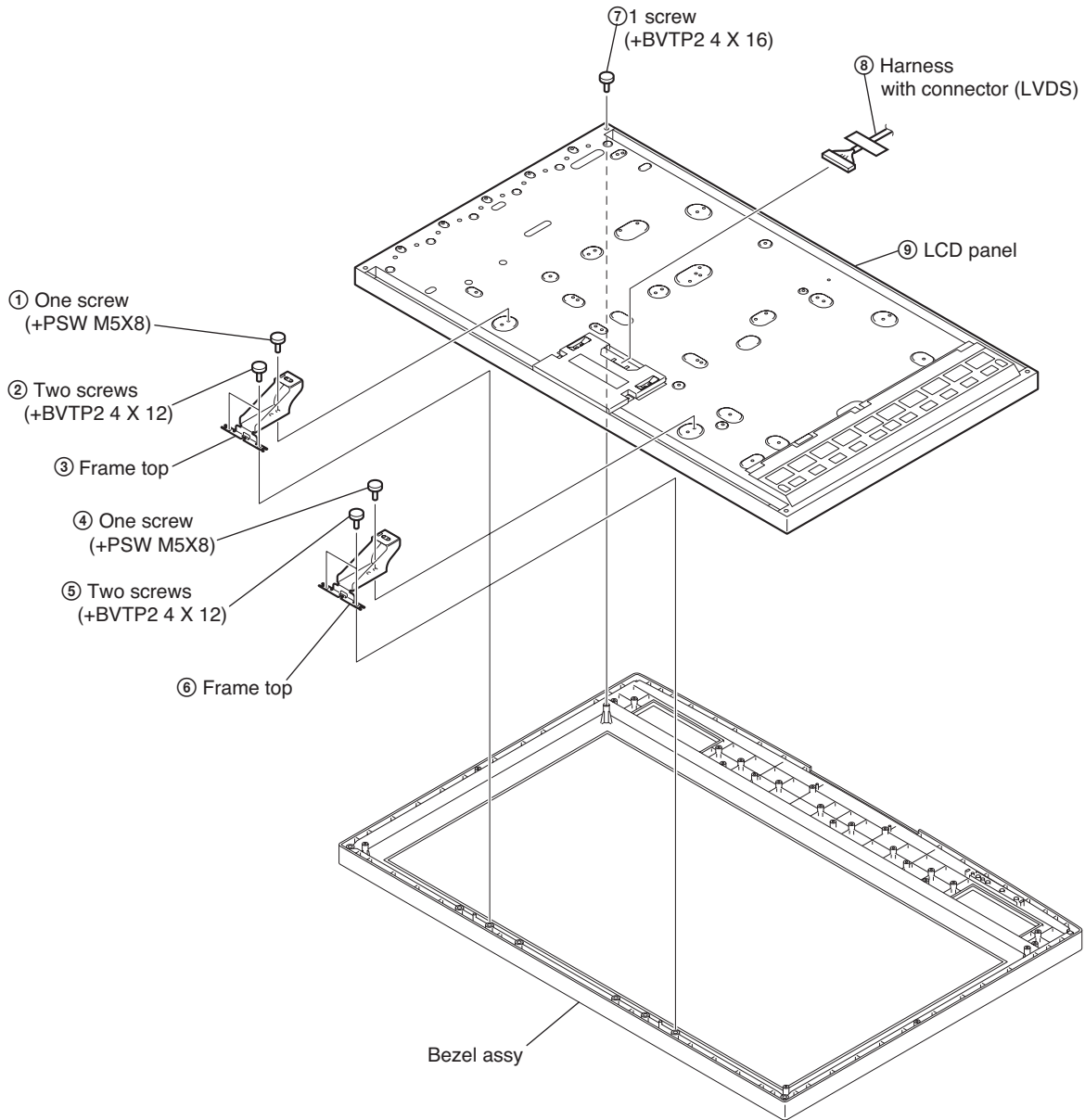
1-11. SPEAKER AND H3 BOARD REMOVAL



1-12-1. LCD PANEL REMOVAL (KLV-26S200A/32S200A)



1-12-2. LCD PANEL REMOVAL (KLV-40S200A/46S200A)

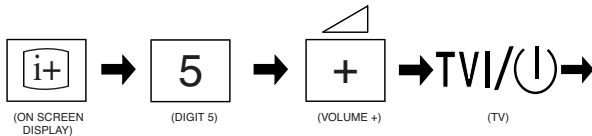


SECTION 2 SERVICE ADJUSTMENTS

2-1. How to enter Service Mode

Service adjustments to this model can be performed using the supplied remote Commander RM-GA005.

1. Turn on the power to the TV set and enter into the stand-by mode.
2. Press the following sequence of buttons on the Remote Commander.



3. The following menu will then appear on the screen.



4. Move to the relevant command using the up or down arrow buttons on the remote commander.
5. Press the right arrow button to enter into the required menu item.
6. Press the 'Menu' button on the remote commander to quit the Service Mode when all adjustments have been completed.

Note :

- After carrying out the service adjustments, to prevent the customer accessing the 'Service Menu' switch the TV set OFF and then ON.

Caution : Aging mode.

- 1) Aging setting
 - a) Set no signal and monitor as aging mode.
- 2) Aging condition
 - a) Aging condition before white balance as follows
Supply volt : Rating
Times : 20 minutes or over (aging Timer register setting)
Ambient time : 22°C ~ 28°C
Brightness : Set by aging mode.
[Led lighting pattern during aging]
Aging Timer > 0
Green (0.5sec) → off (0.5sec) → Green (0.5 sec) → off (0.5sec)
Aging Timer = 0
Green (3.0sec) → off (3.0 sec) → Green (3.0 sec) → off (3.0sec)

Note:

If power off instantaneously between aging and W/B adjustment, do aging 30 seconds or more then adjust W/B.

2-2. Signal Level Adjustment

2-2-1. Set up of AD calibration 1 adjustment for terrestrial analog.

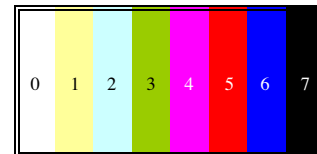
The following adjustments are done via ECS.

1. Send ECS_ADJUST_LEVEL_SETTING_INIT command.
2. Ensure noise reduction NR=3 (HIGH), GAMMA_EN=0, P4_CVD2_85=0.
3. Set the following registration items.

Screen Size	26"	32"	40"	46"
TARGET_Y_RF(PAL)	165	165	165	165
ADJ_COLOR_Y_ATT(PAL)	128	128	128	128
ADJ_COLOR_PAL(PAL)	4	4	4	4

2-2-2. Y signal calibration 1 adjustment for terrestrial analog.

1. Input PAL colour bar 75%Y, 75%C via terrestrial input.



2. Send ECS_ADJUST_TCD3_CONT_RF command.
3. Read the value of S_REG:APL:LUMA via ECS. Confirming that the value is within spec of the table below.

AD-Adjust RF Spec	Spec.
Reference register name	
S-REG: APL_LUMA	TARGET_Y_RF±2

2-2-3. Set up of C signal calibration 1 adjustment for terrestrial analog.

1. Input PAL colour bar 75%Y, 75%C via terrestrial input.
2. Send ECS_ADJUST_LEVEL_SETTING_INIT command.
3. Ensure noise reduction NR=3 (High). GAMMA_EN=0, P4_CVD2_85_0

2-2-4.C signal calibration1 adjustment for terrestrial analog.

1. Send ECS_ADJUST_TCD3_HUE_RF command.
2. Read S-REG: READ_BACK_B00 via ECS. (READ_AREA=0).
3. Read S-REG: READ_BACK_B01 via ECS. (READ_AREA=6).
4. Confirm that 8 bits of MSB of item number 2) and 3) are within spec of the table below.

Reference Item	Spec.
READ_BACK_B0*difference value	±2

5. Switch the TV set OFF and then ON again to retain adjustment values.

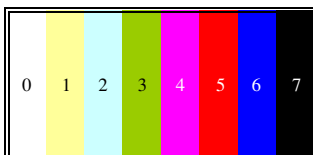
2-2-5.Set up of AD calibration1 adjustment for PAL_video.

1. Send ECS_ADJUST_LEVEL_SETTING_INIT command.
2. Ensure noise reduction NR=1 (Low), GAMMA_EN=0, P4_CVD2_85=0.
3. Set the following registration items.

Screen Size	26"	32"	40"	46"
TARGET_Y_V(PAL)	165	165	165	165
ADJ_COLOR_Y_ATT(PAL)	128	128	128	128
ADJ_COLOR_PAL(PAL)	4	4	4	4

2-2-6.Y signal calibration1 adjustment for video.

1. Input PAL colour bar 75%Y, 75%C via AV1 input.



2. Send ECS_ADJUST_TCD3_CONT_V command.
3. Read the value of S-REG:APL_LUMA via ECS. Confirming that the value is within spec of the table below.

AD-Adjust Video Spec	Spec.
Reference register name	
S-REG: APL_LUMA	TARGET_Y_V±2

2-2-7.Set up of C signal calibration1 adjustment for video.

1. Input PAL colour bar 75%Y, 75%C via AV1 input.
2. Send ECS_ADJUST_LEVEL_SETTING_INIT command.
3. Ensure noise reduction NR=1 (Low), GAMMA_EN=0, P4_CVD2_85=0.
4. Set the following registration items.

Screen Size	26"	32"	40"	46"
ADJ_COLOR_Y_ATT(PAL)	128	128	128	128
ADJ_COLOR_PAL(PAL)	4	4	4	4

2-2-8. C signal calibration1 adjustment for video.

1. Send ECS_ADJUST_TCD3_HUE_V command.
2. Read S-REG: READ_BACK_B00 via ECS. (READ_AREA=0).
3. Read S-REG: READ_BACK_B01 via ECS. (READ_AREA=6).
4. Confirm that 8 bits of MSB of item number 2) and 3) are within spec of the table below.

Reference Item	Spec.
READ_BACK_B0*difference value	±2

5. Read S-REG: TCD3_SATURATION via ECS.
6. Switch the TV set OFF and then ON again to retain adjustment values.

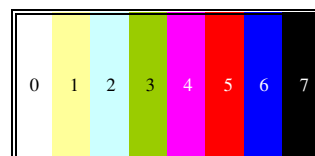
2-2-9.Set up of AD calibration2 adjustment for NTSC_video.

1. Send ECS_ADJUST_LEVEL_SETTING_INIT command.
2. Ensure noise reduction NR=1 (Low), GAMMA_EN=0, P4_CVD2_85=0.
3. Set the following registration items.

Screen Size	26"	32"	40"	46"
TARGET_Y_V(NTSC)	165	165	165	165
ADJ_COLOR_Y_ATT(NTSC)	128	128	128	128
ADJ_COLOR_PAL(NTSC)	1	1	1	1

2-2-10. Y signal calibration2 adjustment for video.

1. Input NTSC colour bar 75%Y, 75%C via AV1 input.



- Send ECS_ADJUST_TCD3_CONT_V command.
- Read the value of S-REG:APL_LUMA via ECS. Confirming that the value is within spec of the table below.

AD-Adjust Video Spec	Spec.
Reference register name	
S-REG: APL_LUMA	TARGET_Y_V±2

2-2-11. Set up of C signal calibration2 adjustment for video.

- Input NTCS colour bar 75%Y , 75%C via AV1 input.
- Send ECS_ADJUST_LEVEL_SETTING_INIT command.
- Ensure noise reduction NR=1 (Low), GAMMA_EN=0, P4_CVD2_85=0.
- Set the following registration items.

Screen Size	26"	32"	40"	46"
ADJ_COLOR_Y_ATT(NTSC)	128	128	128	128
ADJ_COLOR_PAL(NTSC)	1	1	1	1

2-2-12. C signal calibration2 adjustment for video.

- Send ECS_ADJUST_TCD3_HUE_V command.
- Read S-REG: READ_BACK_B00 via ECS. (READ_AREA=0).
- Read S-REG: READ_BACK_B01 via ECS. (READ_AREA=6).
- Confirm that 8 bits of MSB of item number 2) and 3) are within spec of the table below.

Reference Item	Spec.
READ_BACK_B0*difference value	±2

- Read S-REG: TCD3_SATURATION via ECS.
- Switch the TV set OFF and then ON again to retain adjustment values.

2-3. Gamma Adjustment

The following adjustments are done via ECS.

Note: Before Gamma adjustment can begin the set needs 1 hour aging.

2-3-1. Set up mode for Gamma Adjustment

- Send ECS_ADJUST_LEVEL_SETTING_INIT command.
- Ensure COL_MATRIX_INDEX=15.
- Ensure hreg p1_d_p_26=0 and hreg p1_d_p_28=0.
- Ensure G_GAMMA_IDX_OFST=15.
- Ensure DYNAMIC_EN=0.

2-3-2. Set up Trident internal SG and brightness measurement

- Ensure TEST_PATTEN_ON=1.
- Ensure TEST_G_LEVEL=204.
- Ensure TEST_R_LEVEL=0.
- Ensure TEST_B_LEVEL=0.
- Measure brightness A.
- Ensure TEST_G_LEVEL=102.
- Ensure TEST_R_LEVEL=0.
- Ensure TEST_B_LEVEL=0.
- Measure brightness B.
- Set up G_GAMMA_OFST_01=brightness B/brightness A*10000. The result is written to G_GAMMA_OFST_01.
- Send Gamma_Tbl_Search_1 command.
- Ensure TEST_G_LEVEL=153.
- Ensure TEST_R_LEVEL=0.
- Ensure TEST_B_LEVEL=0.
- Measure brightness C.
- Set up G_GAMMA_OFST_02=brightness C/brightness A*10000. The result is written to G_GAMMA_OFST_02.
- Send Gamma_Tbl_Search_2 command.
- Save set up value in NVM in register G_GAM_IDX_OFST.
* Incase of 26V need reduce 2 from original data.

2-4. White Balance Adjustment

2-4-1. Set up mode for White Balance Adjustment

- Send ECS_ADJUST_LEVEL_SETTING_INIT command.
- Ensure COL_MATRIX_INDEX=15.
- Ensure hreg p1_d_p_26=0 and hreg p1_d_p_28=0.
- Ensure DYNAMIC_EN=0.

2-4-2. White Balance of colour temperature "High"

- Set up COLOR_TEMP=0.
- Set up GAMMA_OFF=15.
- R_GAMMA_OFST_01=128
R_GAMMA_OFST_02=128
R_GAMMA_OFST_03=128
R_GAMMA_OFST_04=128
B_GAMMA_OFST_01=128
B_GAMMA_OFST_02=128
B_GAMMA_OFST_03=128
Set up B_GAMMA_OFST_04=128.
- Set up iWaitf.
- Set up the correct values for 20IRE for TEST_R_LEVEL, TEST_G_LEVEL and TEST_B_LEVEL.

	20IRE
TEST_R_LEVEL	51
TEST_G_LEVEL	51
TEST_B_LEVEL	51

6. Adjust R_GAMMA_OFST_01 and B_GAMMA_OFST_01 chroma values so that they are within tolerance in the table below.

		X	Y	TOLERANCE
26"	20IRE	0.2804	0.2838	0.8JND
	40IRE	0.2763	0.2792	0.5JND
	60IRE	0.2772	0.2775	0.5JND
	80IRE	0.2754	0.2789	0.5JND
32"	20IRE	0.713	0.2755	0.8JND
	40IRE	0.761	0.2784	0.5JND
	60IRE	0.2733	0.2766	0.5JND
	80IRE	0.2739	0.2776	0.5JND
40"	20IRE	0.2741	0.2737	0.8JND
	40IRE	0.2738	0.2751	0.5JND
	60IRE	0.2736	0.2756	0.5JND
	80IRE	0.2731	0.2756	0.5JND
46"	20IRE	0.2791	0.2829	0.8JND
	40IRE	0.2772	0.2821	0.5JND
	60IRE	0.2765	0.2821	0.5JND
	80IRE	0.2765	0.2818	0.5JND

(*1) If adjustment results exceed the tolerance please extend the tolerance to 0.6JND.

7. Set up the correct values for 40IRE for TEST_R_LEVEL, TEST_G_LEVEL and TEST_B_LEVEL.

	40IRE
TEST_R_LEVEL	102
TEST_G_LEVEL	102
TEST_B_LEVEL	102

8. Adjust R_GAMMA_OFST_02 and B_GAMMA_OFST_02 chroma values so that they are within tolerance in the table below

		X	Y	TOLERANCE
26"	20IRE	0.2804	0.2838	0.8JND
	40IRE	0.2763	0.2792	0.5JND
	60IRE	0.2772	0.2775	0.5JND
	80IRE	0.2754	0.2789	0.5JND
32"	20IRE	0.713	0.2755	0.8JND
	40IRE	0.761	0.2784	0.5JND
	60IRE	0.2733	0.2766	0.5JND
	80IRE	0.2739	0.2776	0.5JND
40"	20IRE	0.2741	0.2737	0.8JND
	40IRE	0.2738	0.2751	0.5JND
	60IRE	0.2736	0.2756	0.5JND
	80IRE	0.2731	0.2756	0.5JND
46"	20IRE	0.2791	0.2829	0.8JND
	40IRE	0.2772	0.2821	0.5JND
	60IRE	0.2765	0.2821	0.5JND
	80IRE	0.2765	0.2818	0.5JND

(*1) If adjustment results exceed the tolerance please extend the tolerance to 0.6JND.

9. Set up the correct values for 60IRE for TEST_R_LEVEL, TEST_G_LEVEL and TEST_B_LEVEL.

	60IRE
TEST_R_LEVEL	3 15
TEST_G_LEVEL	3 15
TEST_B_LEVEL	3 15

10. Adjust R_GAMMA_OFST_03 and B_GAMMA_OFST_03 chroma values so that they are within tolerance in the table below.

		X	Y	TOLERANCE
26"	20IRE	0.2804	0.2838	0.8JND
	40IRE	0.2763	0.2792	0.5JND
	60IRE	0.2772	0.2775	0.5JND
	80IRE	0.2754	0.2789	0.5JND
32"	20IRE	0.713	0.2755	0.8JND
	40IRE	0.761	0.2784	0.5JND
	60IRE	0.2733	0.2766	0.5JND
	80IRE	0.2739	0.2776	0.5JND
40"	20IRE	0.2741	0.2737	0.8JND
	40IRE	0.2738	0.2751	0.5JND
	60IRE	0.2736	0.2756	0.5JND
	80IRE	0.2731	0.2756	0.5JND
46"	20IRE	0.2791	0.2829	0.8JND
	40IRE	0.2772	0.2821	0.5JND
	60IRE	0.2765	0.2821	0.5JND
	80IRE	0.2765	0.2818	0.5JND

(*1) If adjustment results exceed the tolerance please extend the tolerance to 0.6JND.

11. Set up the correct values for 80IRE for TEST_R_LEVEL, TEST_G_LEVEL and TEST_B_LEVEL.

	80IRE
TEST_R_LEVEL	204
TEST_G_LEVEL	204
TEST_B_LEVEL	204

12. Adjust R_GAMMA_OFST_04 and B_GAMMA_OFST_04 chroma values so that they are within tolerance in the table below.

		X	Y	TOLERANCE
26"	20IRE	0.2804	0.2838	0.8JND
	40IRE	0.2763	0.2792	0.5JND
	60IRE	0.2772	0.2775	0.5JND
	80IRE	0.2754	0.2789	0.5JND
32"	20IRE	0.713	0.2755	0.8JND
	40IRE	0.761	0.2784	0.5JND
	60IRE	0.2733	0.2766	0.5JND
	80IRE	0.2739	0.2776	0.5JND
40"	20IRE	0.2741	0.2737	0.8JND
	40IRE	0.2738	0.2751	0.5JND
	60IRE	0.2736	0.2756	0.5JND
	80IRE	0.2731	0.2756	0.5JND
46"	20IRE	0.2791	0.2829	0.8JND
	40IRE	0.2772	0.2821	0.5JND
	60IRE	0.2765	0.2821	0.5JND
	80IRE	0.2765	0.2818	0.5JND

(*1) If adjustment results exceed the tolerance please extend the tolerance to 0.6JND.

13. Write R_GAMMA_OFST_01~R_GAMMA_OFST_04 and B_GAMMA_OFST_01~B_GAMMA_OFST_04 in the NVM.

14. Write R_GAMMA_OFST_04~R_GAMMA_OFST_05 and B_GAMMA_OFST_04~B_GAMMA_OFST_05 in the NVM.

15. Set up TEST_PATTEN_ON=0.

16. Set up COL_MATRIX_INDEX=30.

17. Set up hreg_p1_d_p_26=3.

18. Set up hreg_p1_d_p_28=3.

19. Set up DYNAMIC_EN=0xffff
20. Set up COLOR_TEMP=1.
21. Write the correct values for R_DRV, B_DRV, R_BKG and B_BKG from the table below.

COLOR_TEMP=1				
	R_DRV	B_DRV	R_BKG	B_BKG
26"	259	240	512	508
32"	262	236	516	510
40"	257	236	517	510
46"	269	233	516	511

22. Send ECS COLOR_SAVE command.
23. Set up COLOR_TEMP=2.
24. Write the correct values for R_DRV, B_DRV, R_BKG and B_BKG from the table below.

COLOR_TEMP=2				
	R_DRV	B_DRV	R_BKG	B_BKG
26"	258	224	513	505
32"	259	224	513	7
40"	254	223	514	505
46"	258	224	514	508

25. Send ECS COLOR_SAVE command.
26. Set up COLOR_TEMP=3.
27. Write the correct values for R_DRV, B_DRV, R_BKG and B_BKG from the table below.

COLOR_TEMP=3				
	R_DRV	B_DRV	R_BKG	B_BKG
26"	253	215	519	505
32"	260	211	509	509
40"	255	209	513	504
46"	257	208	516	505

28. Send ECS COLOR_SAVE command.
29. Switch the TV set OFF and then ON again to retain adjustment values.

2-5. Panel Replacement

When replacing the panel please reset the gamma and white balance before performing W/B (See page 18) for new panel.

2-6. Board Replacement

2-6-1. AG Board Replacement

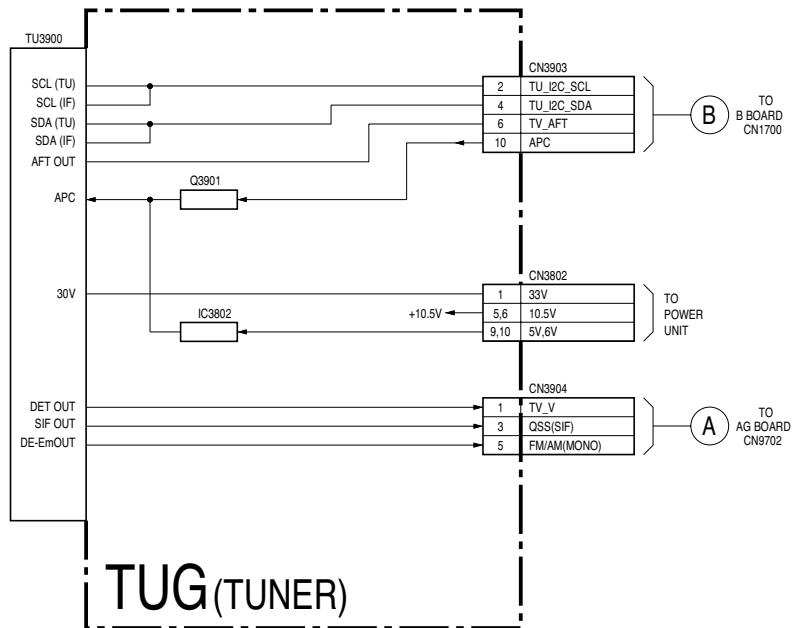
When replacing the AG board please readjust the AD (See page 17) and readjust the W/B (See page 18).

2-6-2. B Board Replacement

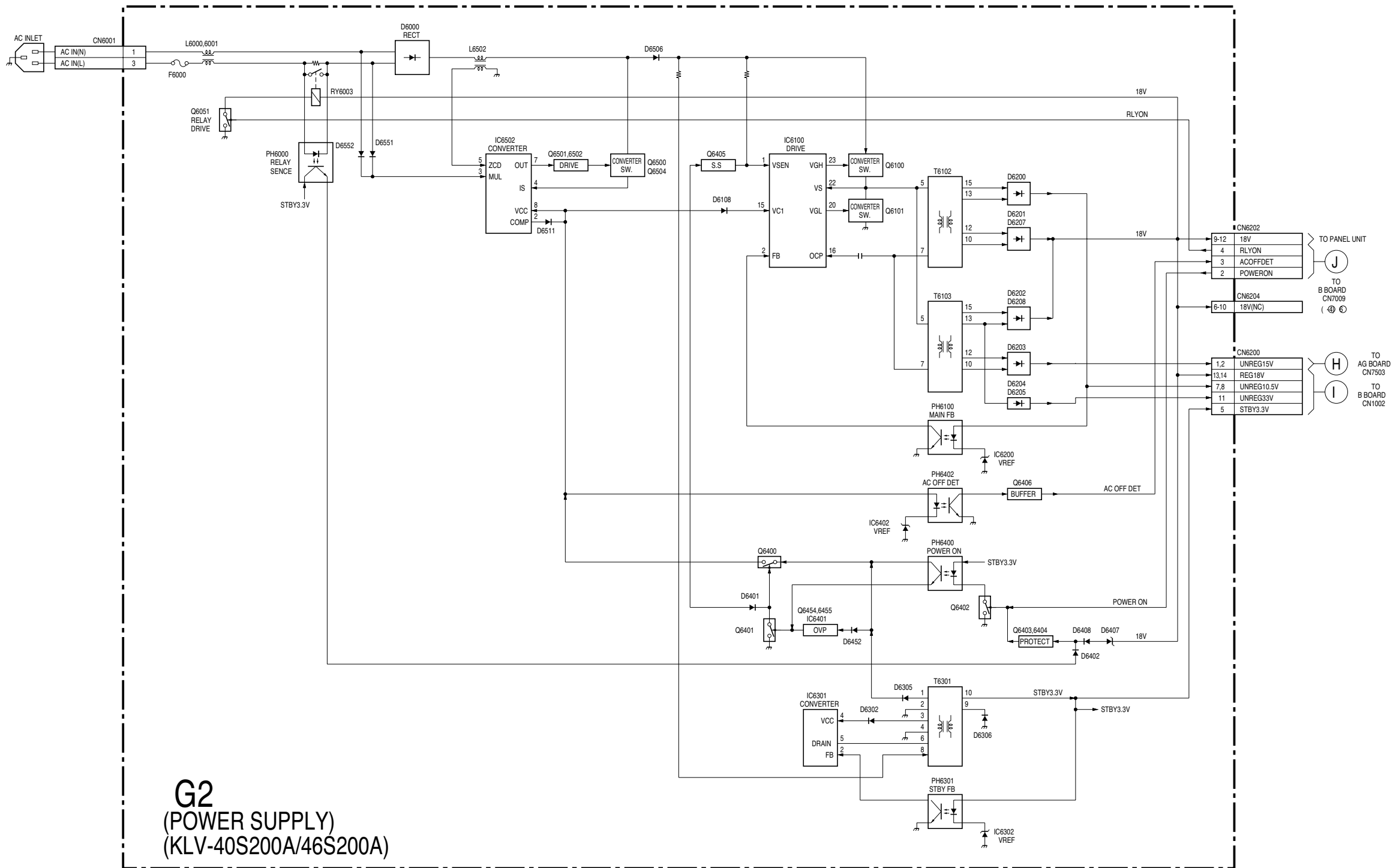
When replacing the B board please readjust the AD (See page 17) and readjust the W/B (See page 18).

SECTION 3 DIAGRAMS

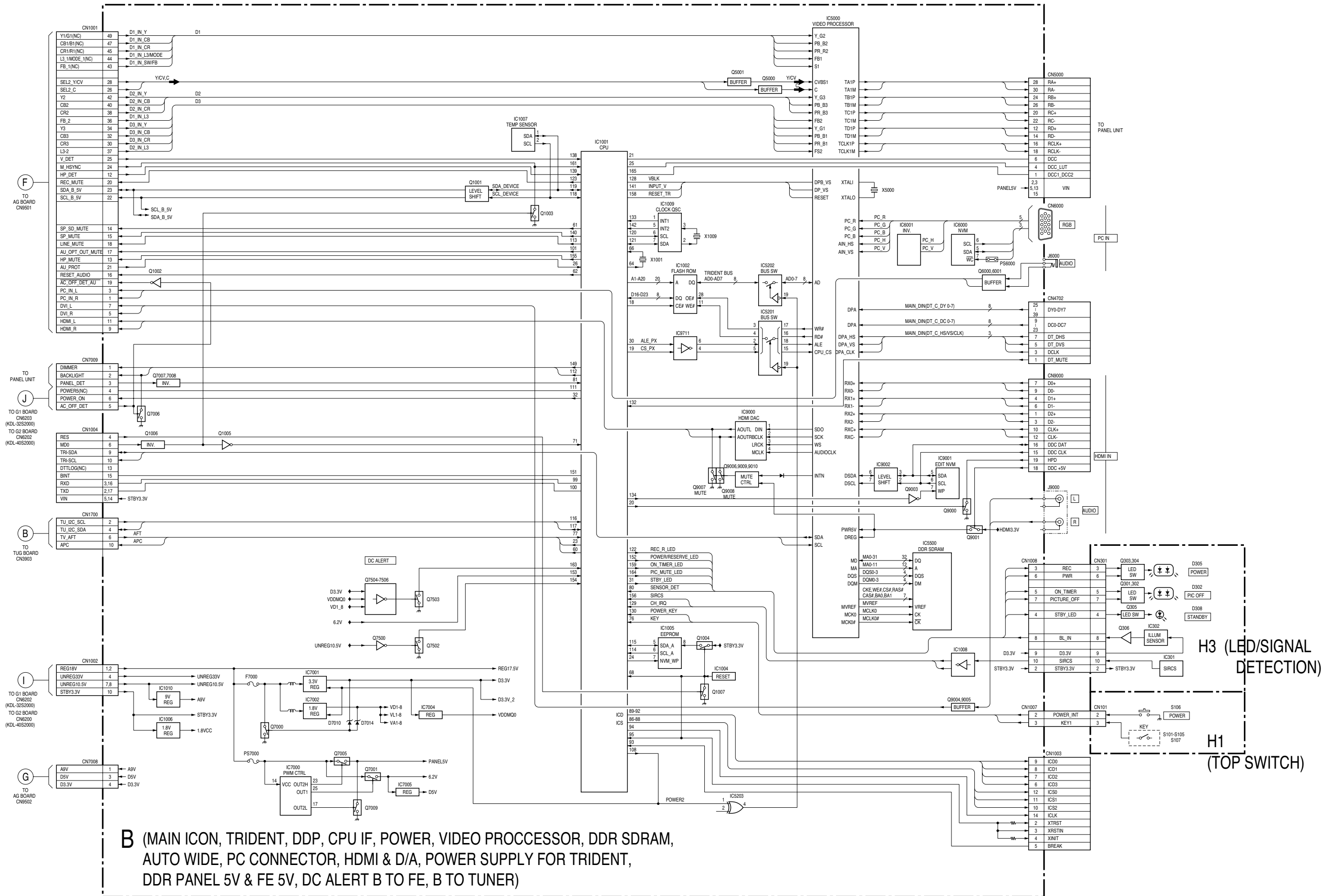
3-1-1. TUG BLOCK DIAGRAM



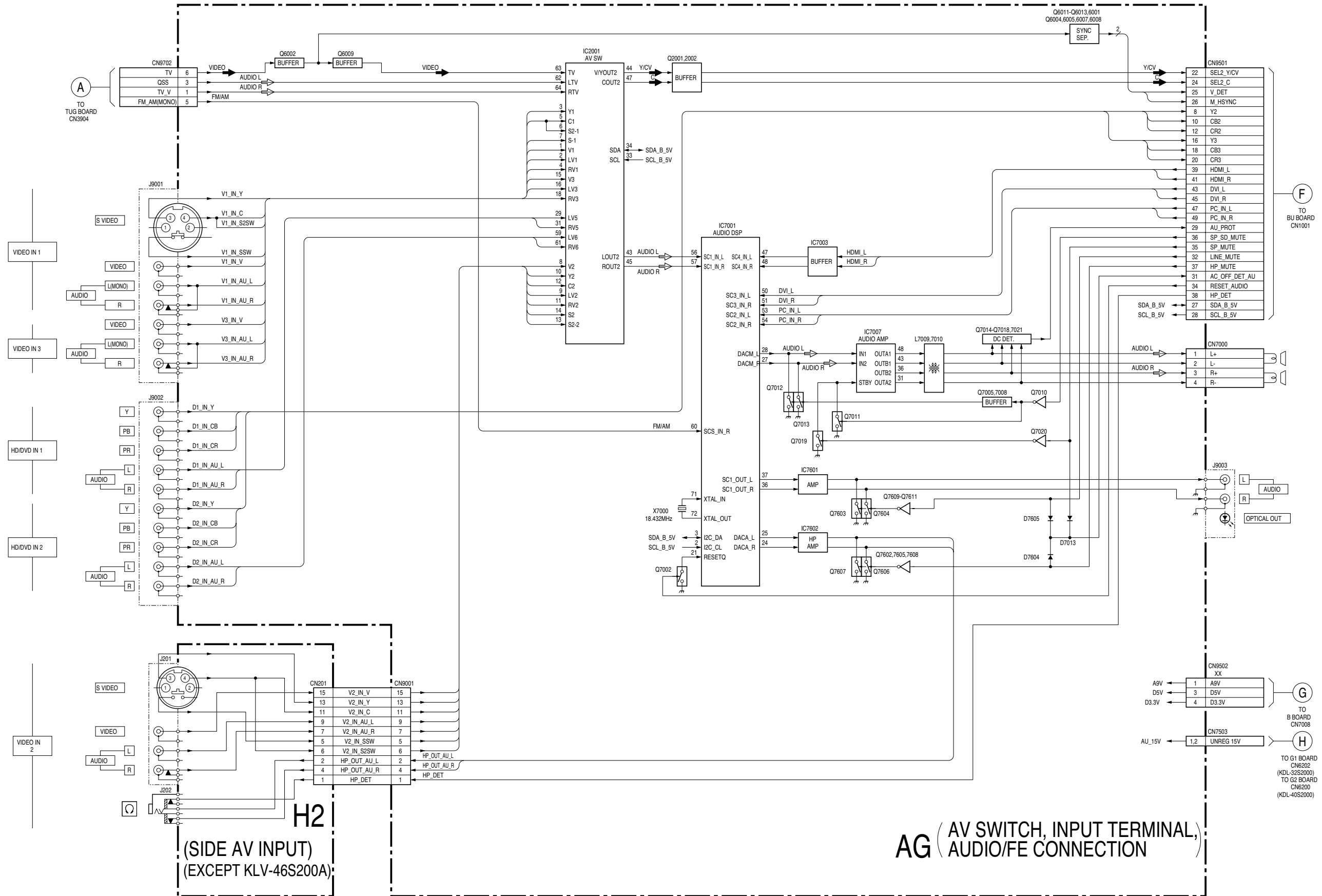
3-1-2. G2 BLOCK DIAGRAM (KLV-40S200A/46S200A)



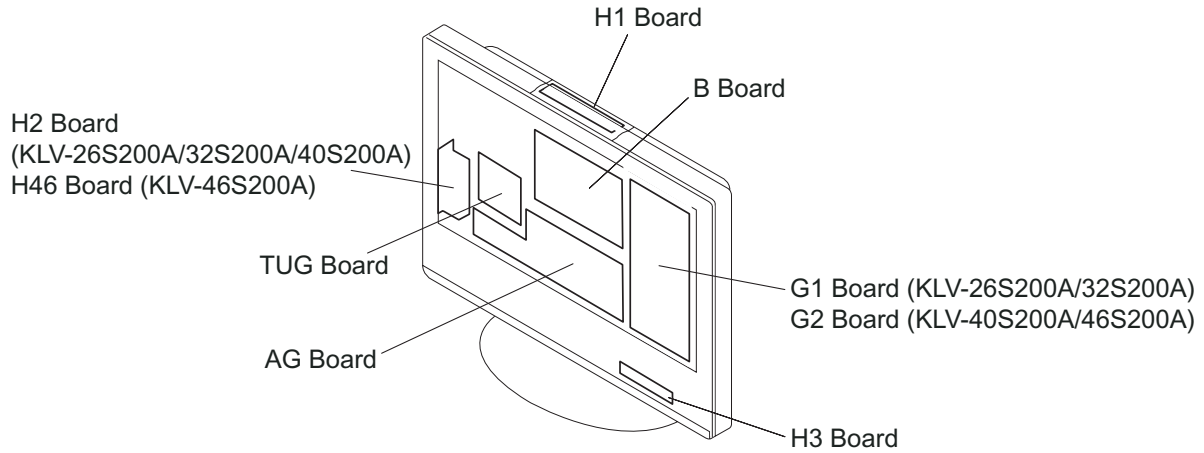
3-1-3. B, H1 AND H3 BLOCK DIAGRAM



3-1-4. AG AND H2 BLOCK DIAGRAMS



3-2. CIRCUIT BOARDS LOCATION



3-3. SCHEMATIC DIAGRAM INFORMATION

Note:

- All capacitors are in μF unless otherwise noted. (pF: $\mu\mu\text{F}$) Capacitors without voltage indication are all 50V.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm
Rating electrical power 1/4W (CHIP: 1/10W)

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor
- Δ : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B unless otherwise noted.
- All voltages are in V.
- \perp : earth-ground
- : earth-chassis
- All voltages are in V.
- Readings are taken with a 10 M Ω digital multimeter.**
- Readings are taken with a color-bar signal input.**
- Voltage variations may be noted due to normal production tolerances.**
- *** : Cannot be measured.
- NO MARK : PAL**
- Circled numbers are waveform references.**
- : B +bus.
- : B -bus.
- : signal path.

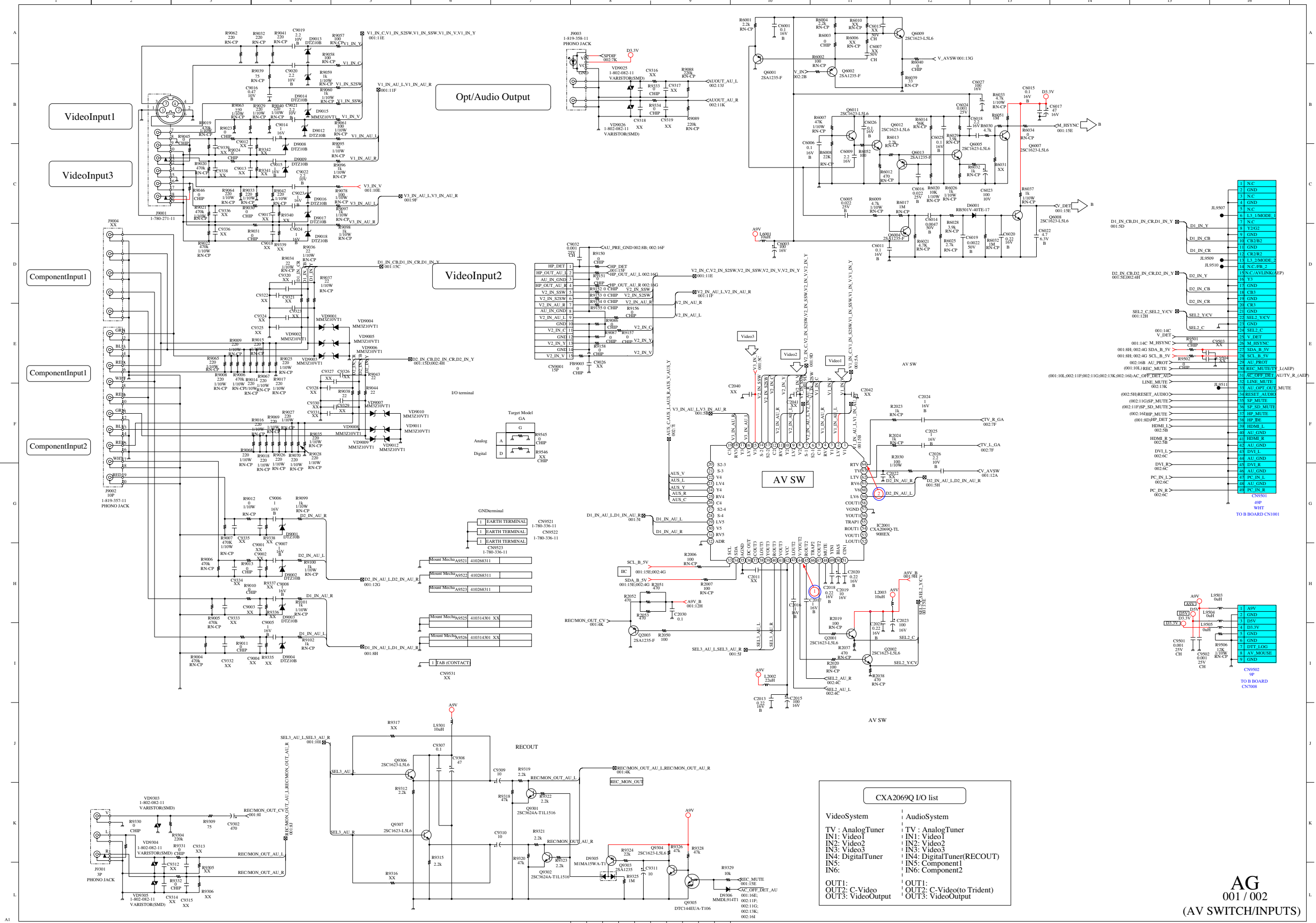
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

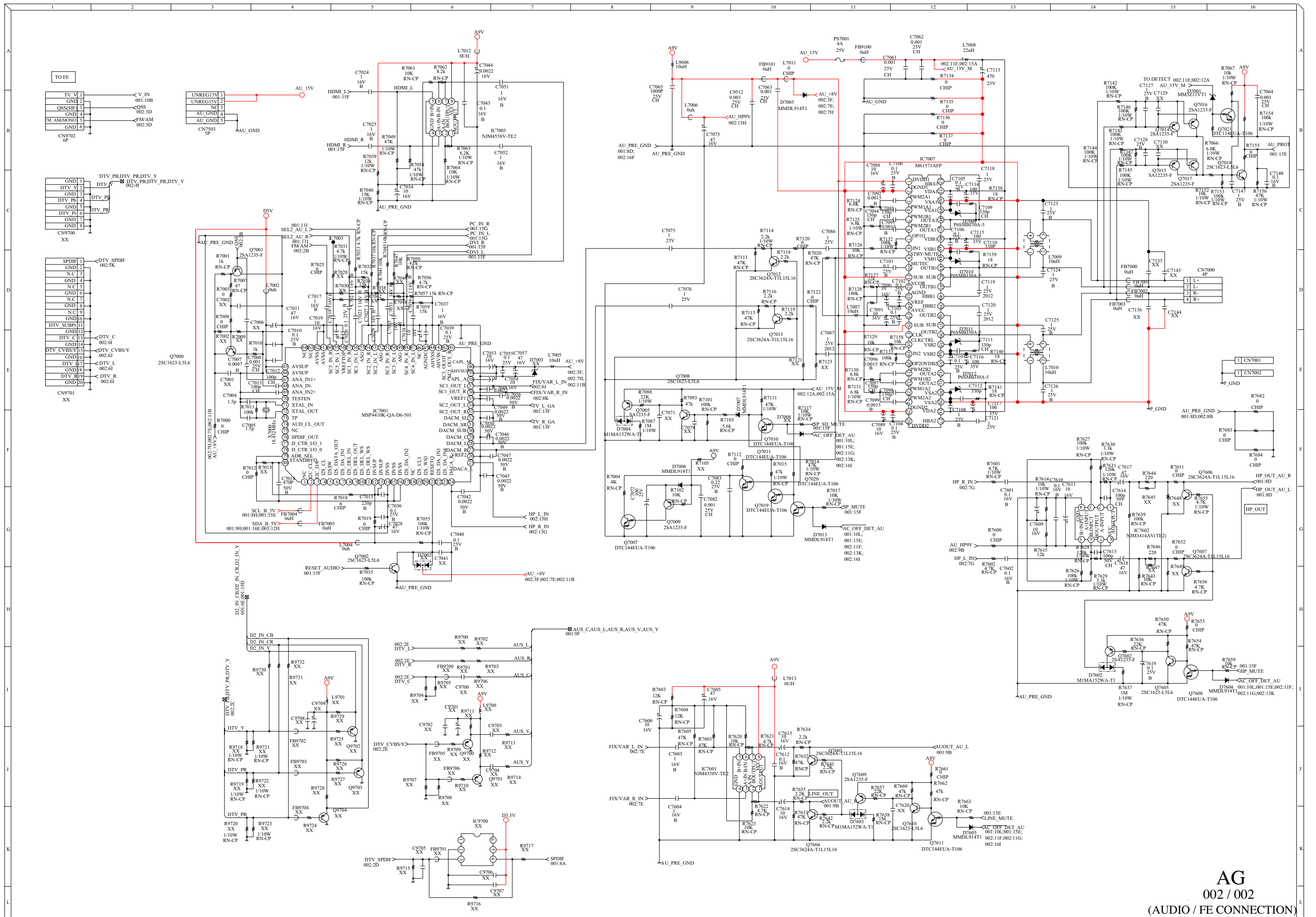
Note: The component identified by shading and mark Δ are critical for safety. Replace only with part number specified.

Device	Printed symbol	Terminal name	Circuit
Transistor		Collector Base Emitter	
Transistor		Collector Base Emitter	
Diode		Cathode Anode	
Diode		Cathode Anode (NC)	
Diode		Cathode Anode (NC)	
Diode		Common Anode Cathode	
Diode		Common Anode Cathode	
Diode		Common Anode Anode	
Diode		Common Anode Anode	
Diode		Common Cathode Cathode	
Diode		Common Cathode Cathode	
Diode		Anode Cathode Anode Cathode	
Transistor (FET)		Drain Source Gate	
Transistor (FET)		Drain Source Gate	
Transistor (FET)		Source Drain Gate	
Transistor		Emitter Collector Base	
Transistor		C2 B1 E1 E2 B2 C1	
Transistor		C1 B2 E2 E1 B1 C2	
Transistor		C1 B2 E2 E1 B1 C2	
Transistor		C1 B2 E2 E1 B1 C2	
Transistor		E2 B1 E1 C2 C1(B2)	
Transistor		(B2) B1 E1 E2 C1 C2	
Transistor		(B2) E2 E1 B1 C2 C1	

3-3-1. AG Board - (001)

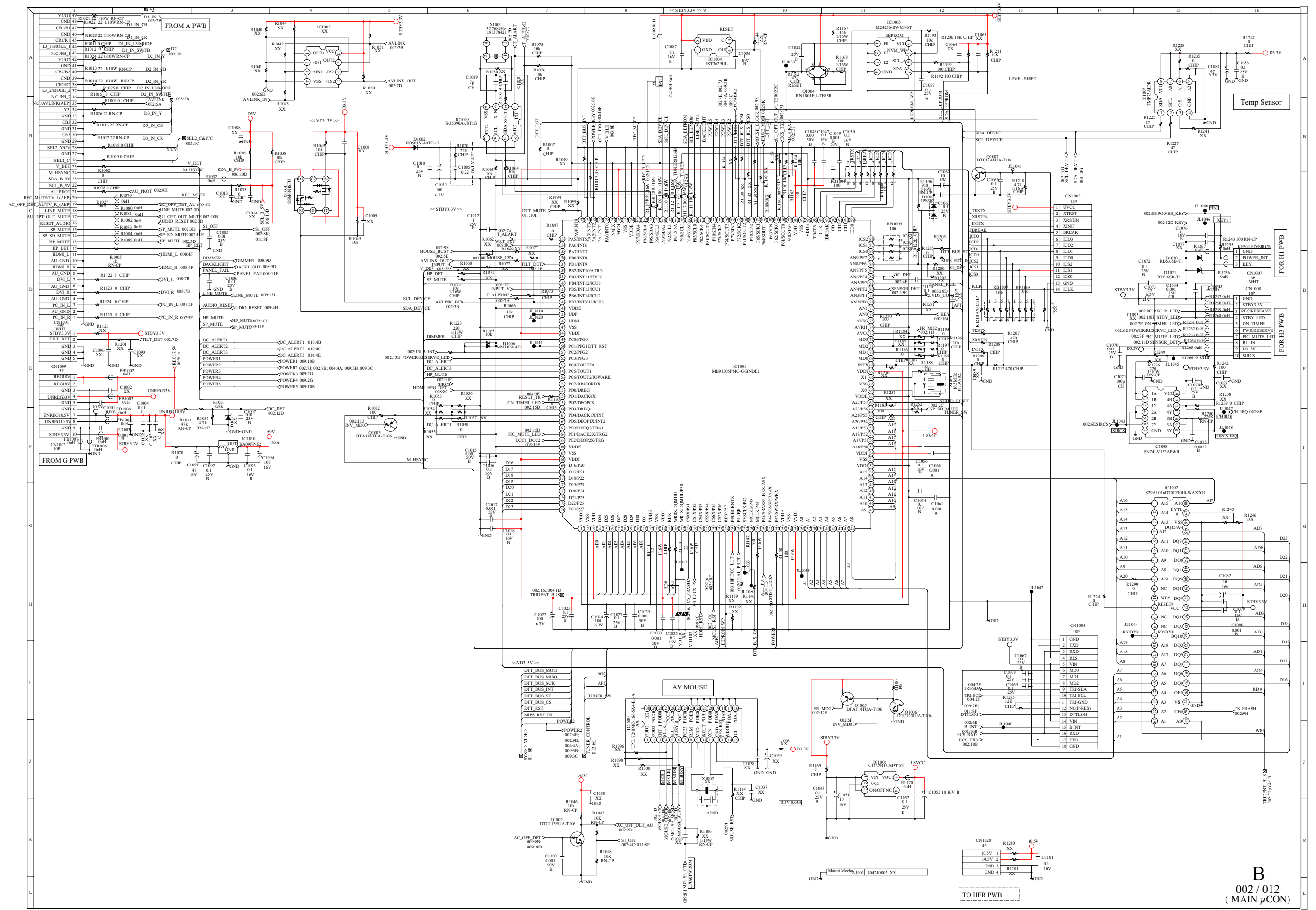


3-3-2. AG Board - (002)



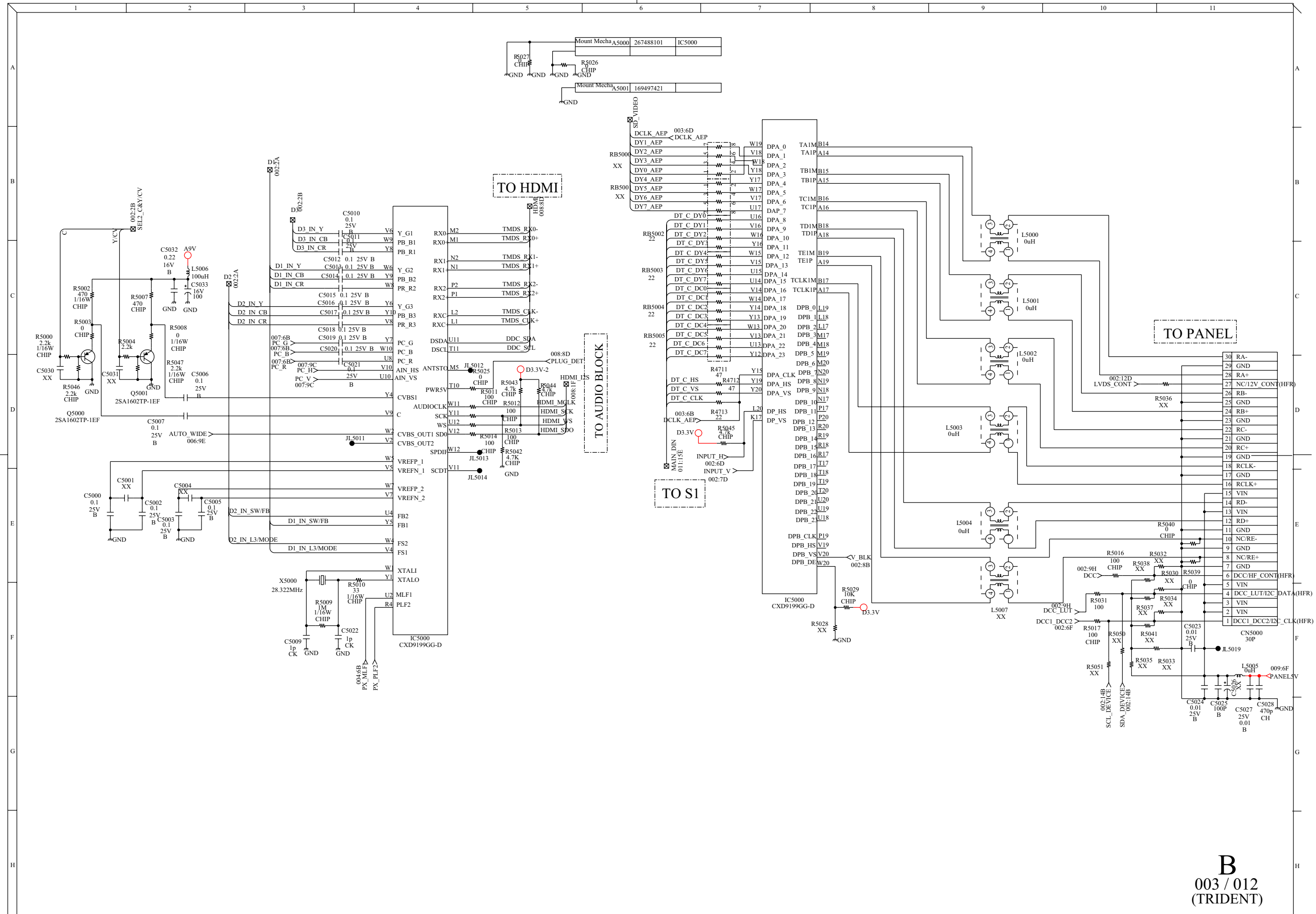
AG
002 / 002
(AUDIO / FE CONNECTION)

3-3-4. B Board — (002)



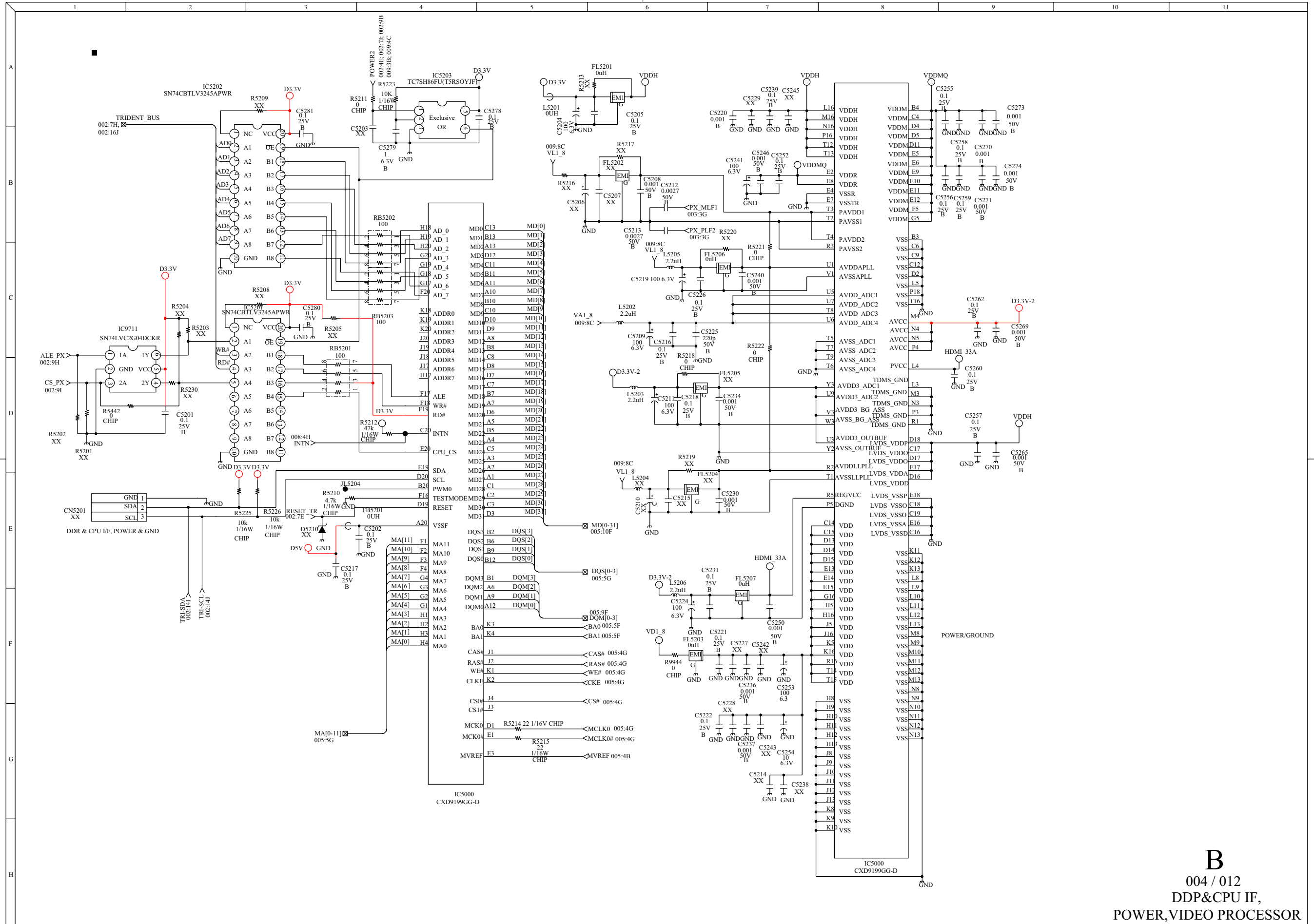
B
002 / 012
(MAIN μCON)

3-3-5. B Board — (003)



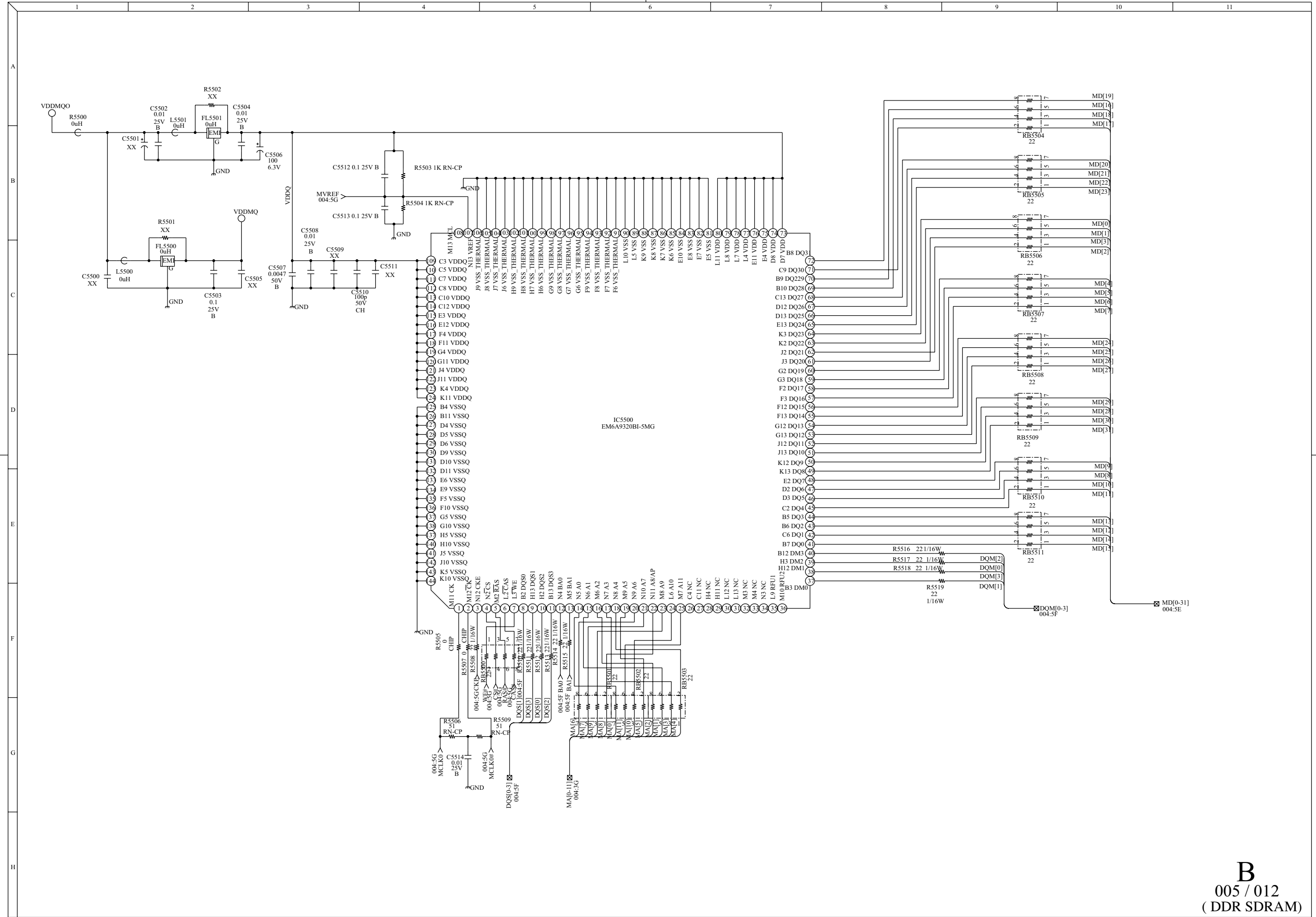
B
003 / 012
(TRIDENT)

3-3-6. B Board — (004)



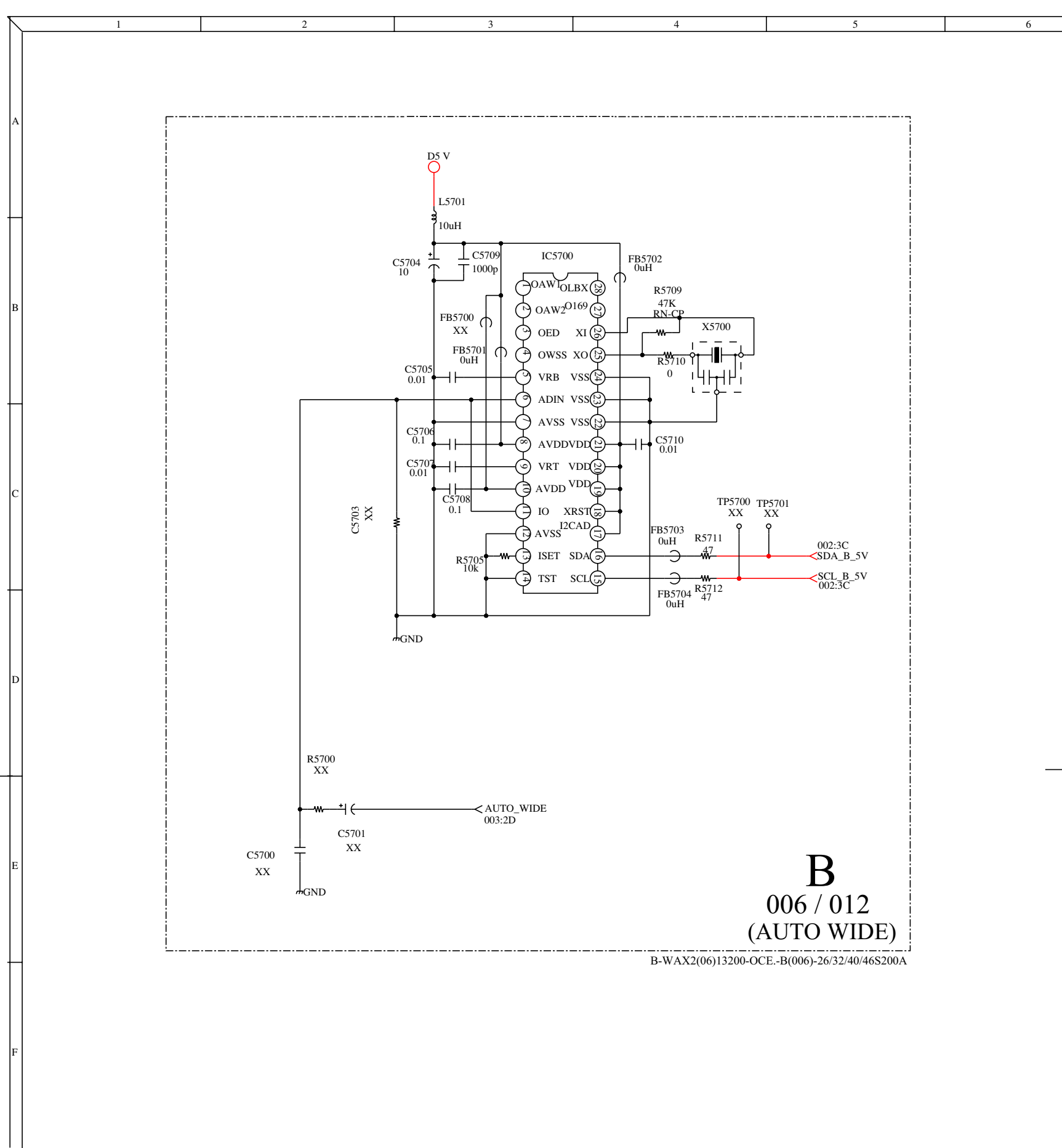
B
004 / 012
DDP&CPU IF,
POWER,VIDEO PROCESSOR
B-WAX2(06)13200-OCE-B(004)-26/32/40/46S200A

3-3-7. B Board — (005)

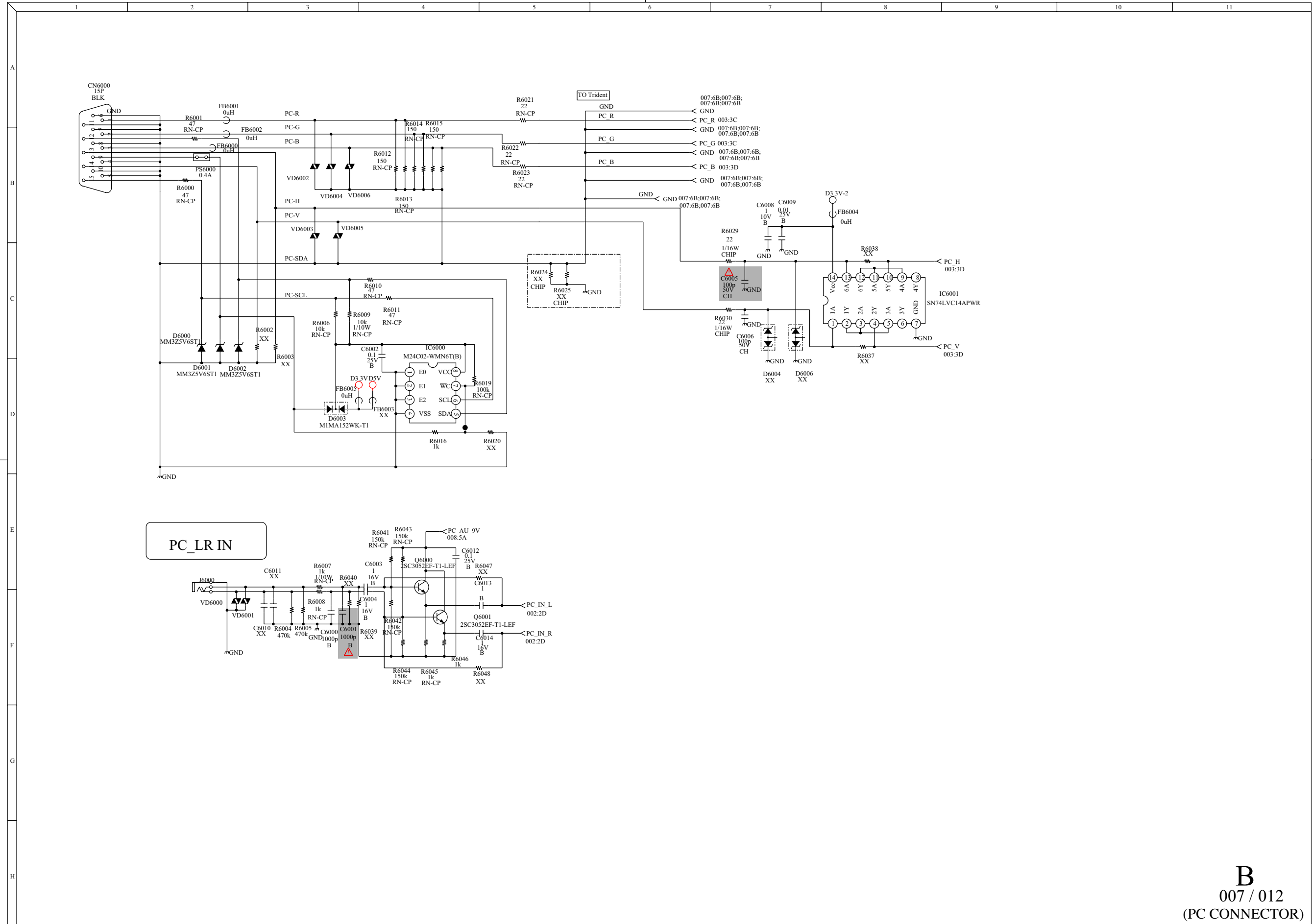


B
005 / 012
(DDR SDRAM)

3-3-8. B Board — (006)

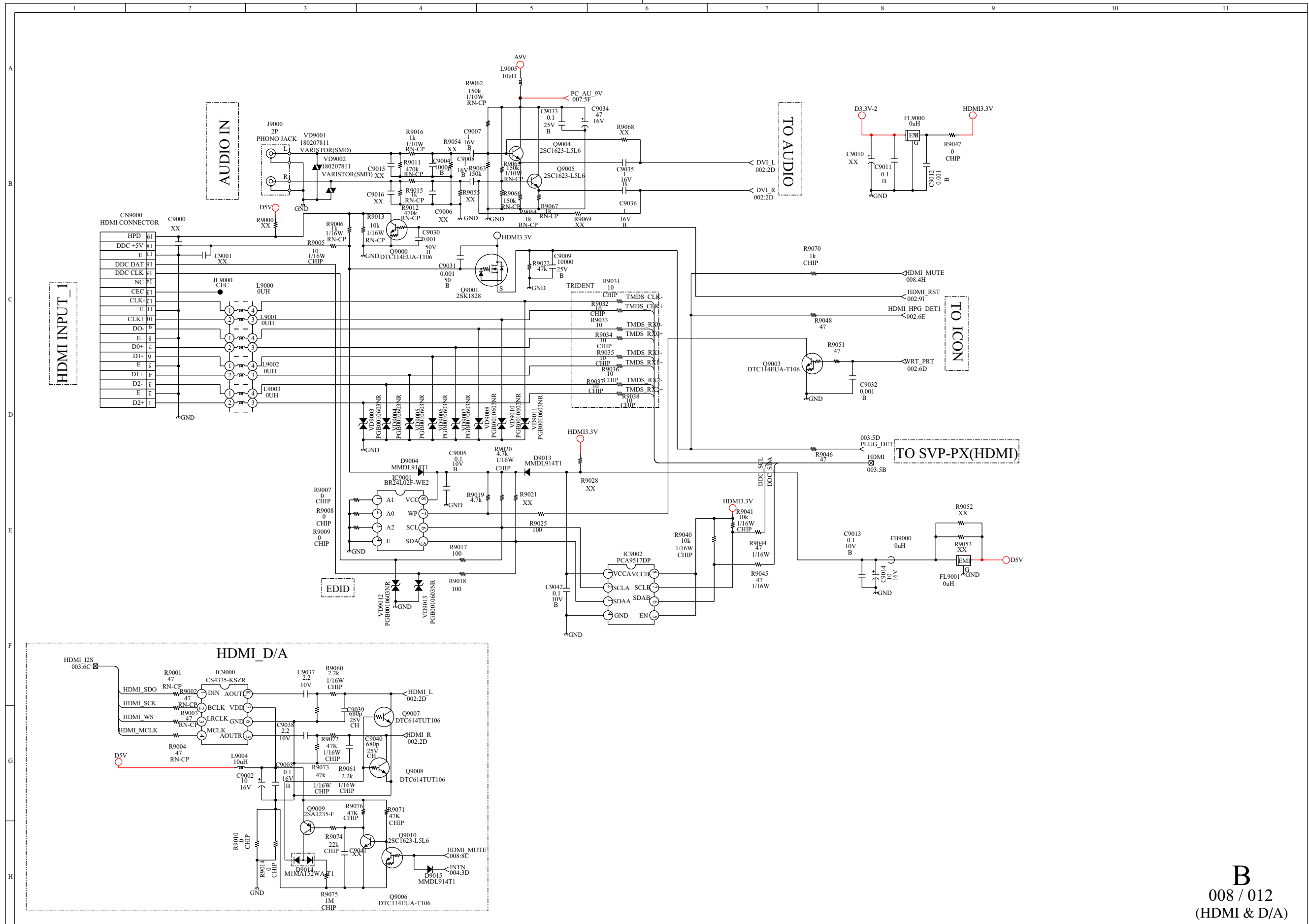


3-3-9. B Board — (007)



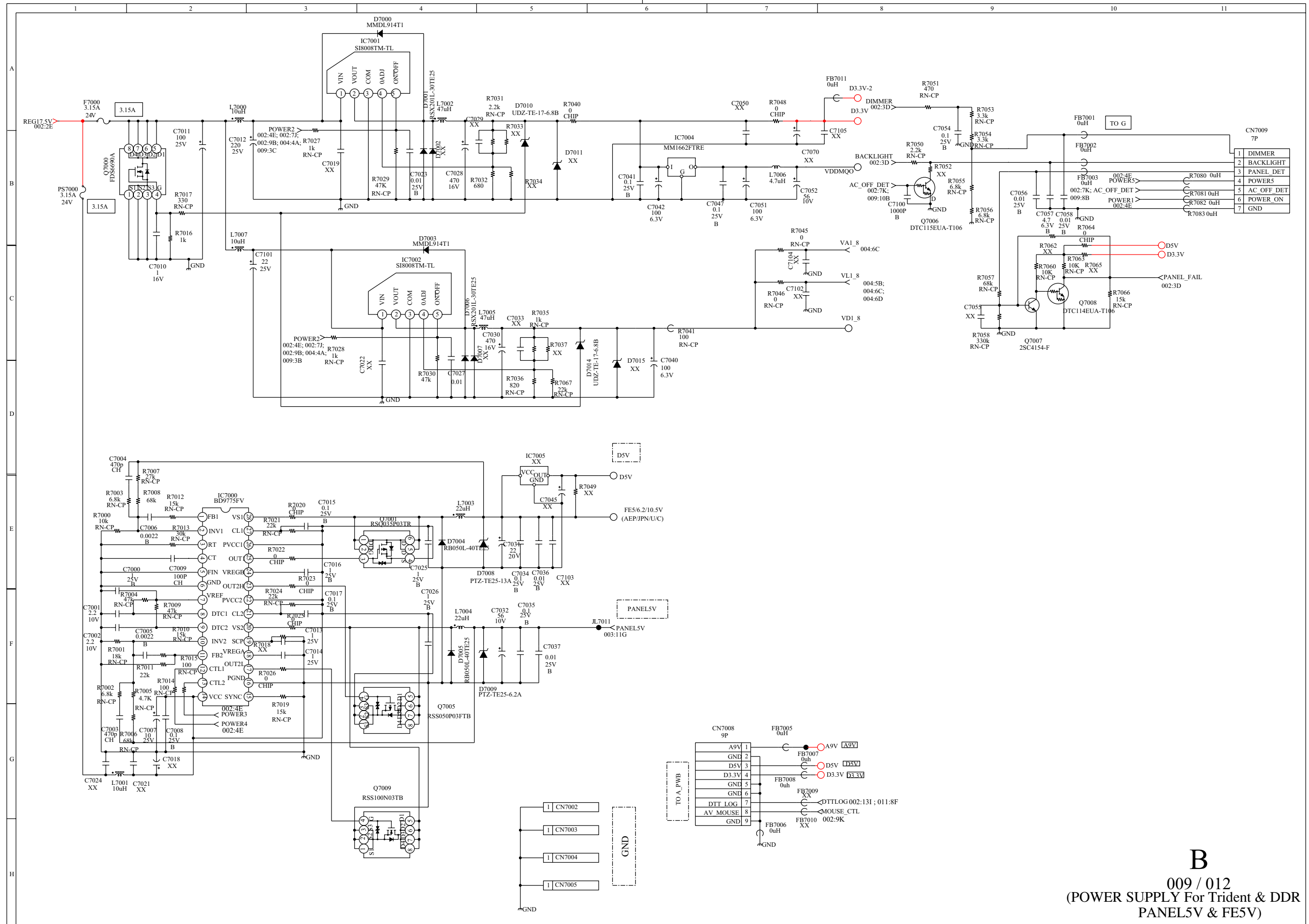
B
007 / 012
(PC CONNECTOR)

3-3-10. B Board — (008)



B
008 / 012
(HDMI & D/A)

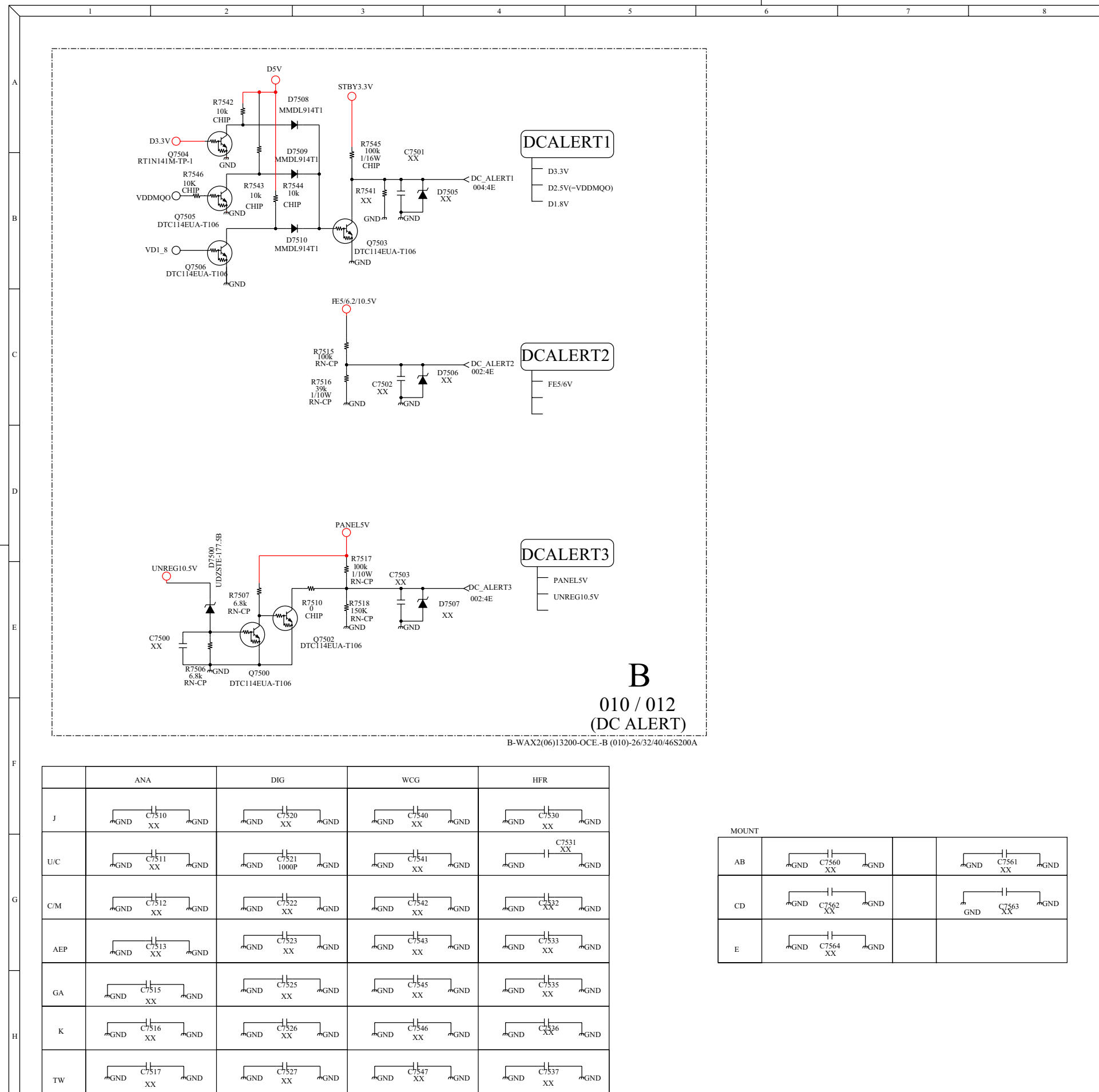
3-3-11. B Board — (009)



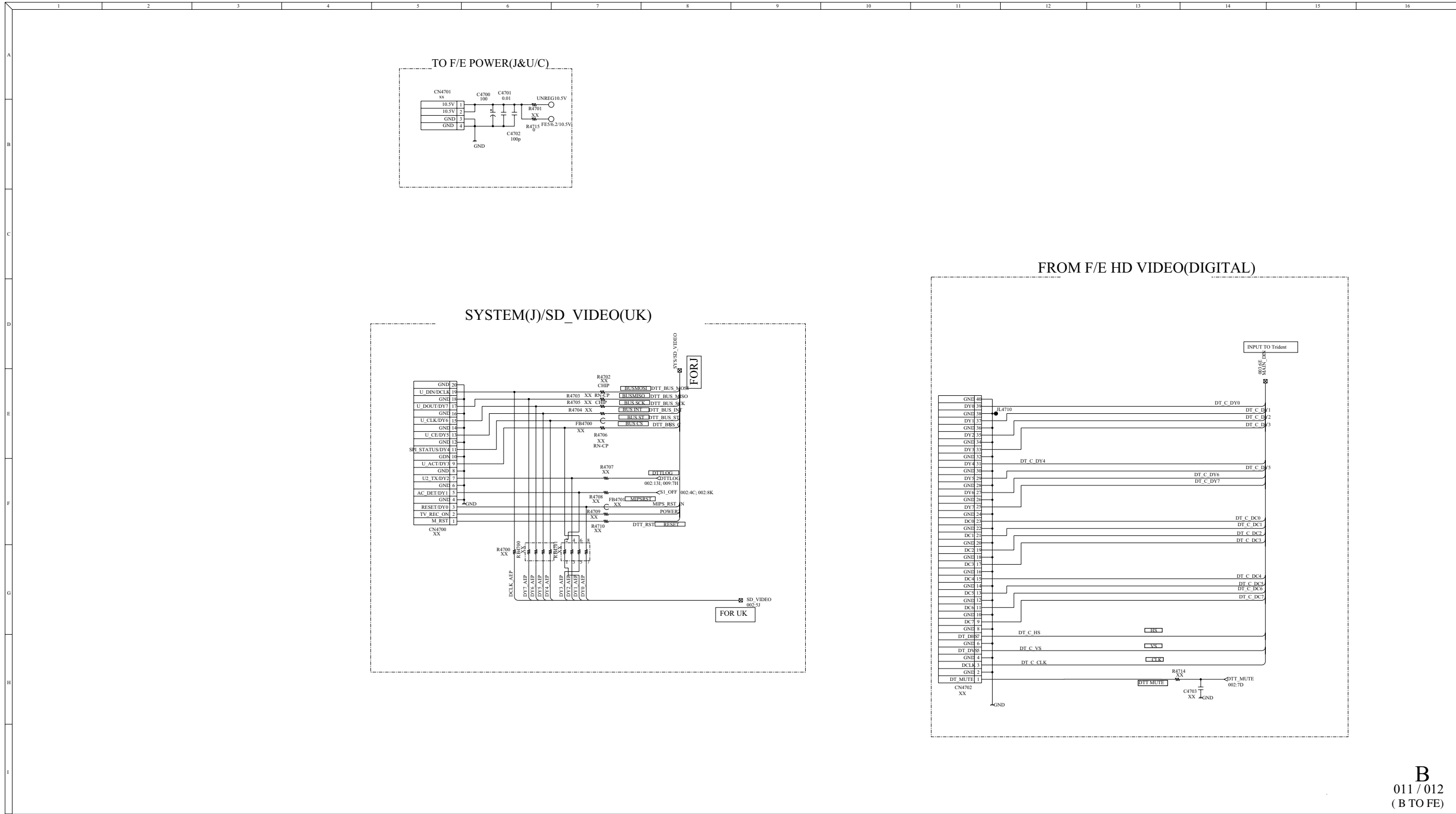
B
009 / 012
(POWER SUPPLY For Trident & DDR
PANEL5V & FE5V)

B-WAX2(06)13200-OC-E.-B(009)-26/32/40/46S200A

3-3-12. B Board — (010)



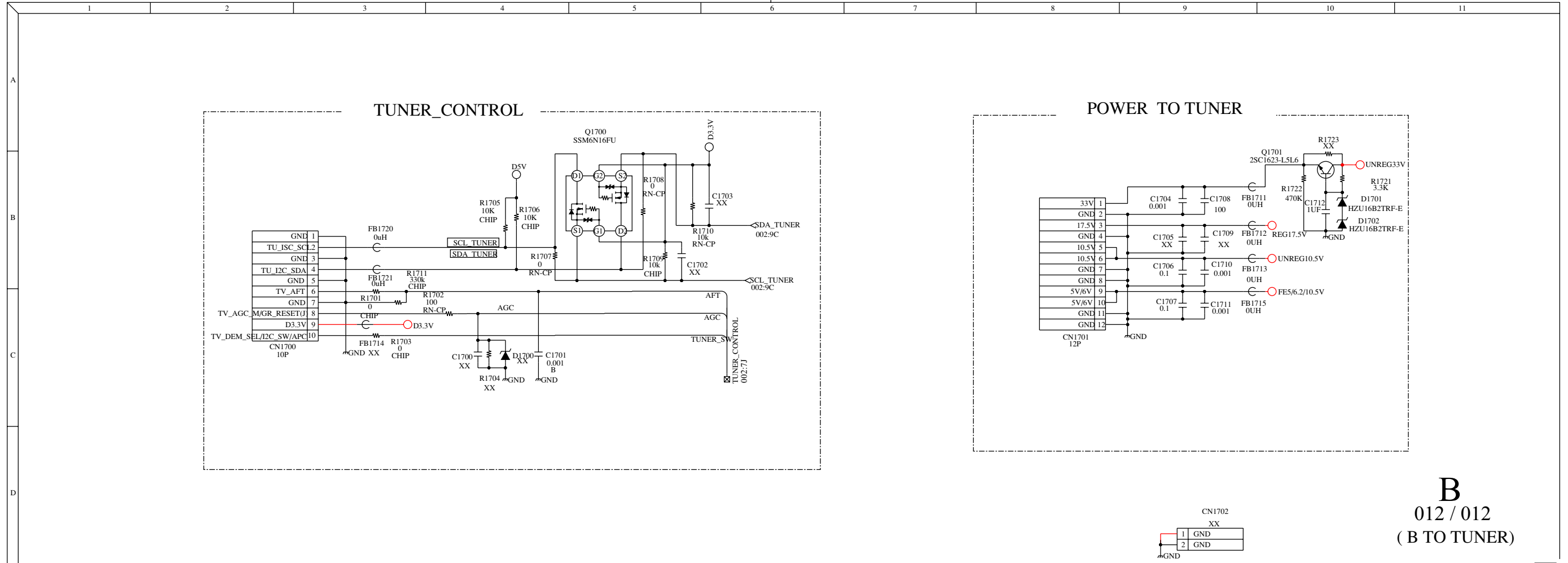
3-3-13. B Board — (011)



B
011 / 012
(B TO FE)

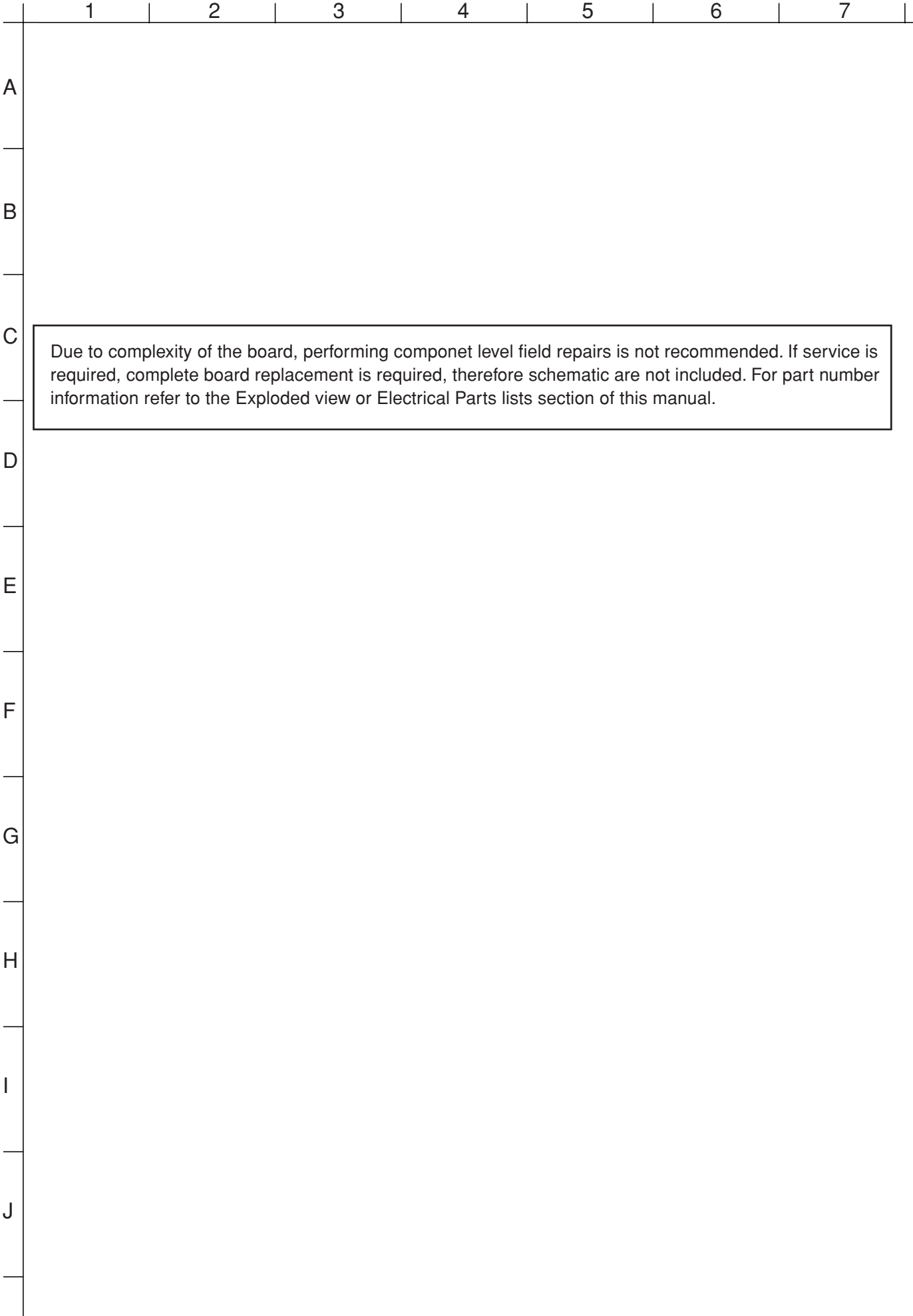
B-WAX2(06)13200-OCE-B(011)-26/32/40/46S200A

3-3-14. B Board — (012)

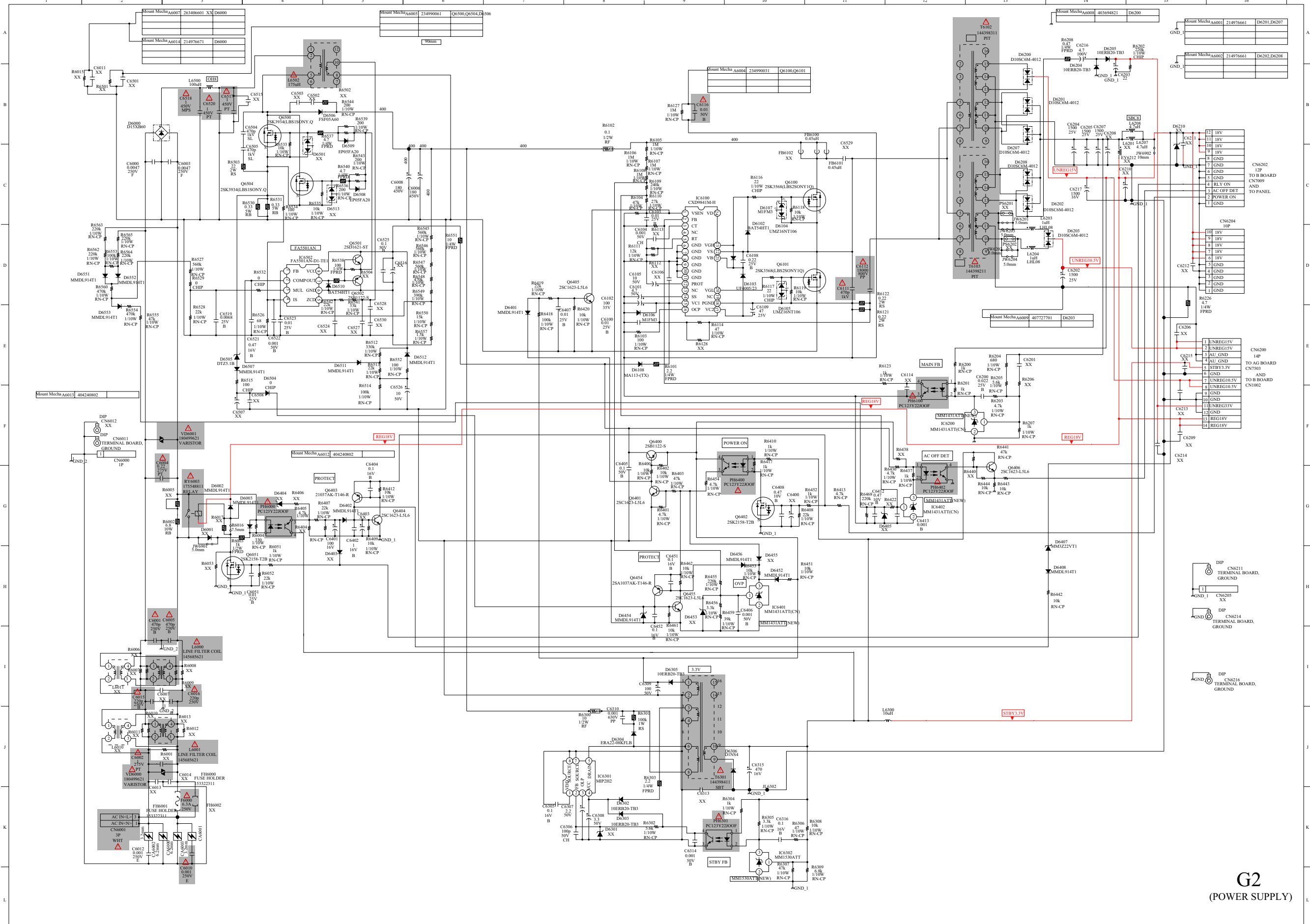


B
012 / 012
(B TO TUNER)

3-3-15. G1 Board Schematic Diagram

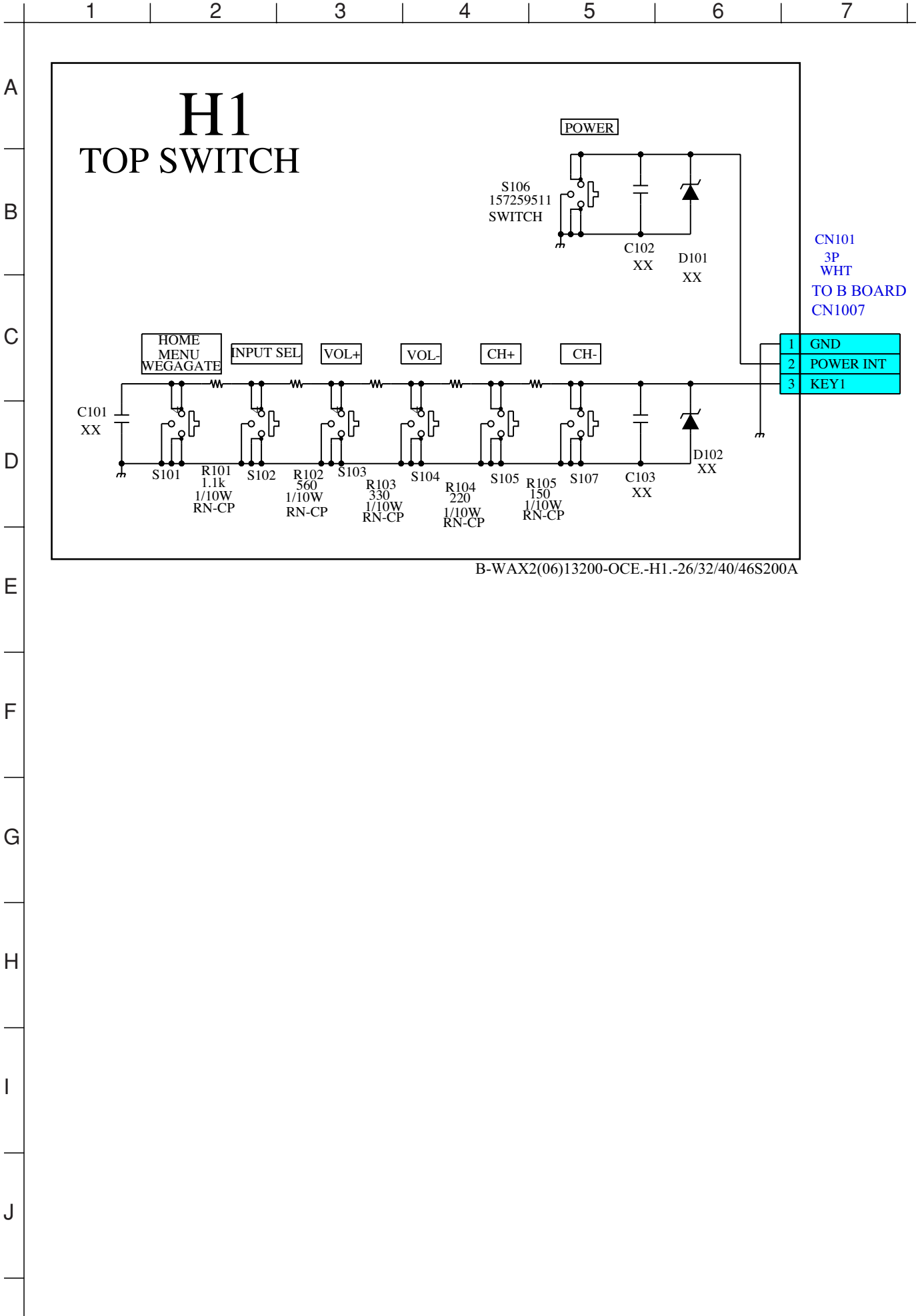


3-3-16. G2 Board Schematic Diagram (KLV-40S200/46S200A)

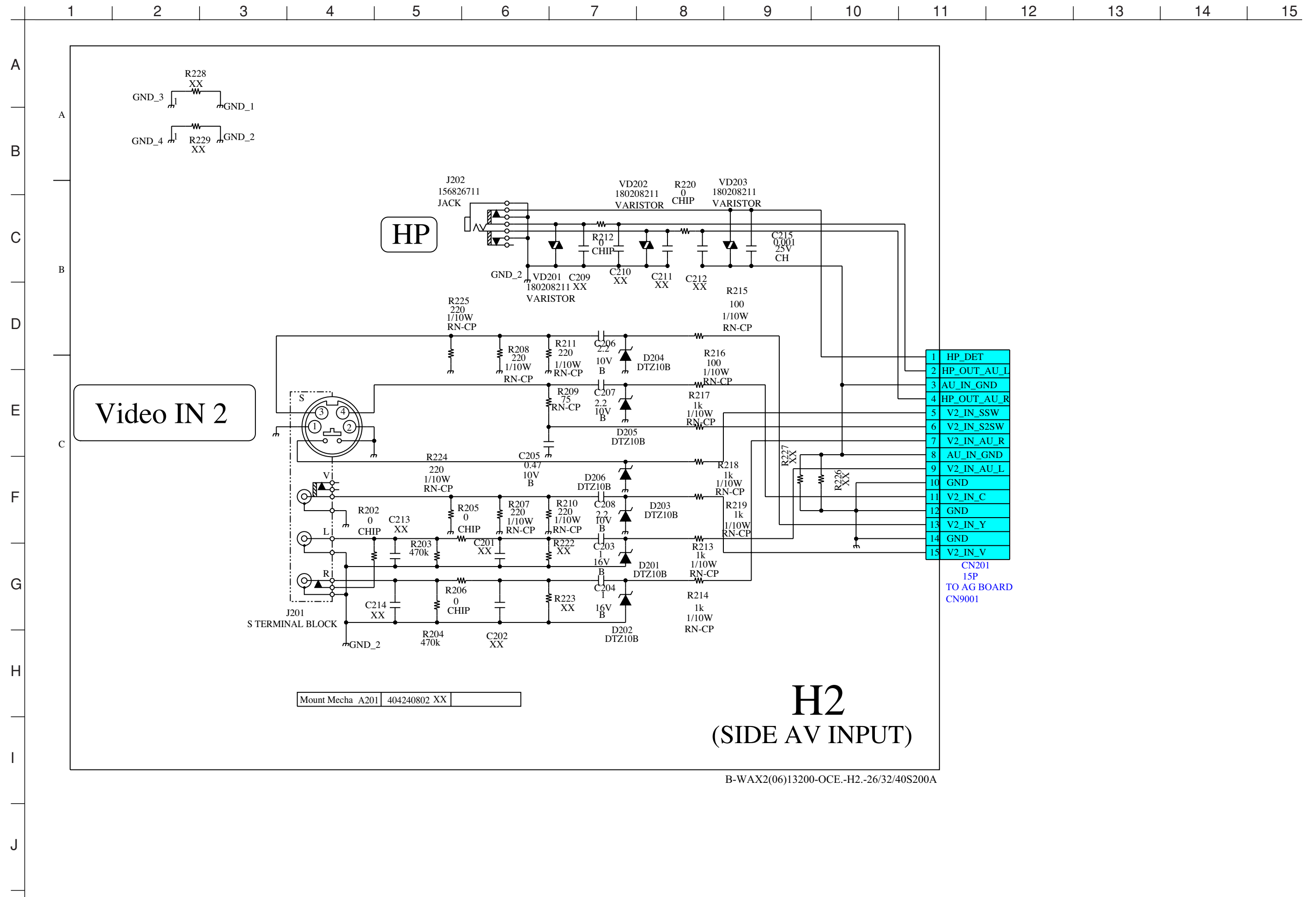


G2
(POWER SUPPLY)

3-3-17. H1 Board Schematic Diagram

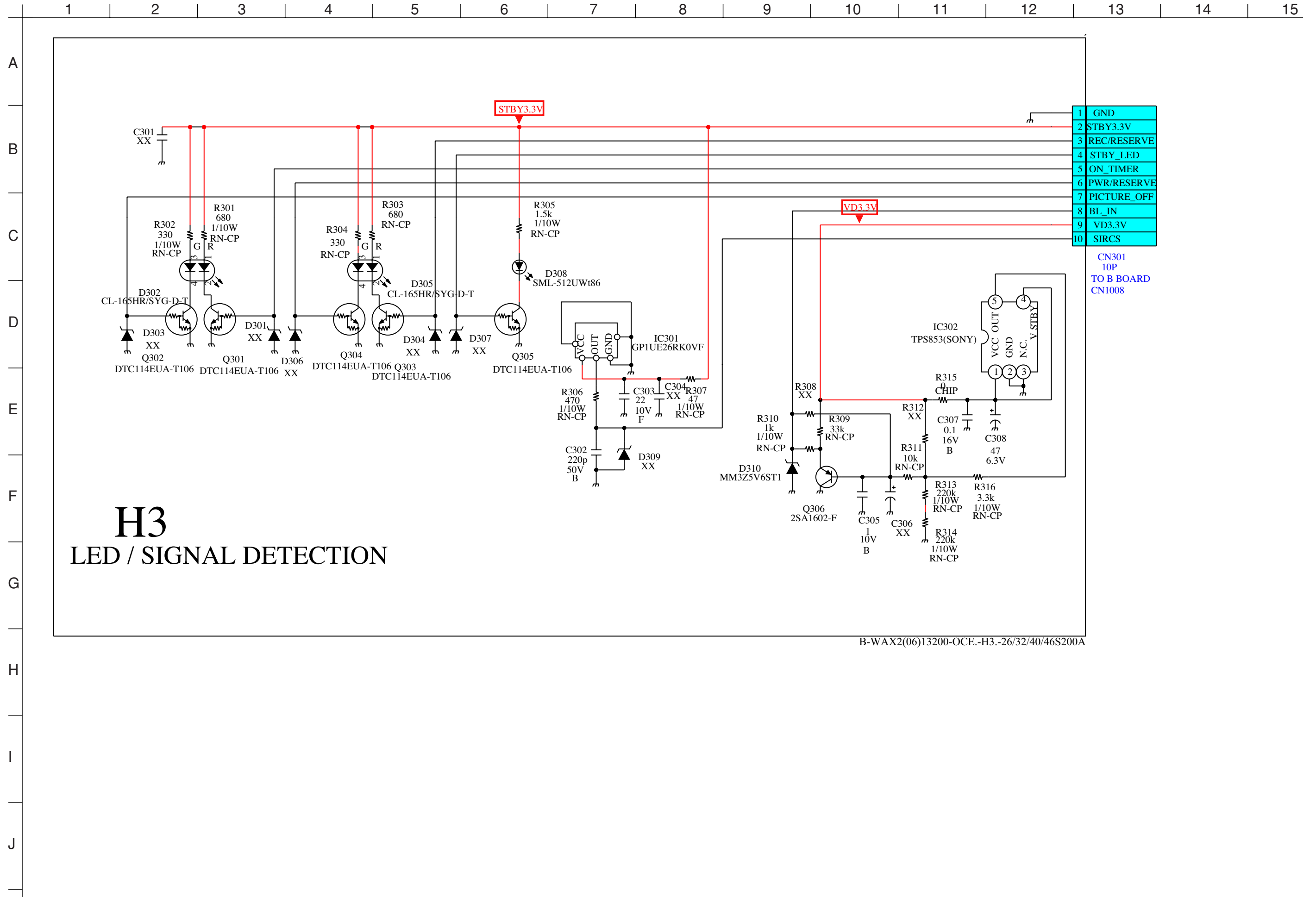


3-3-18. H2 Board Schematic Diagram (Except-KLV-46S200A)

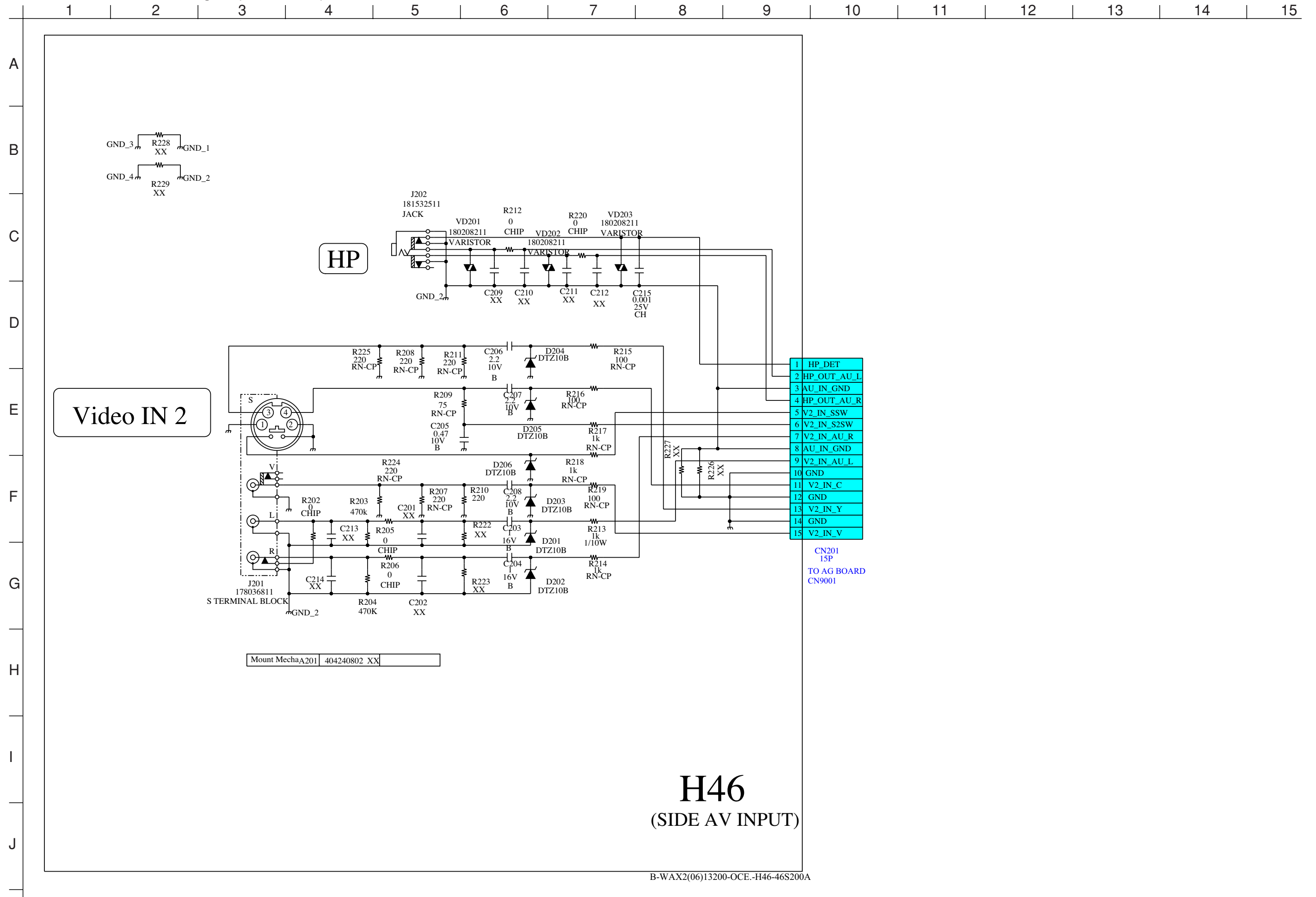


B-WAX2(06)13200-OCE.-H2.-26/32/40S200A

3-3-19. H3 Board Schematic Diagram

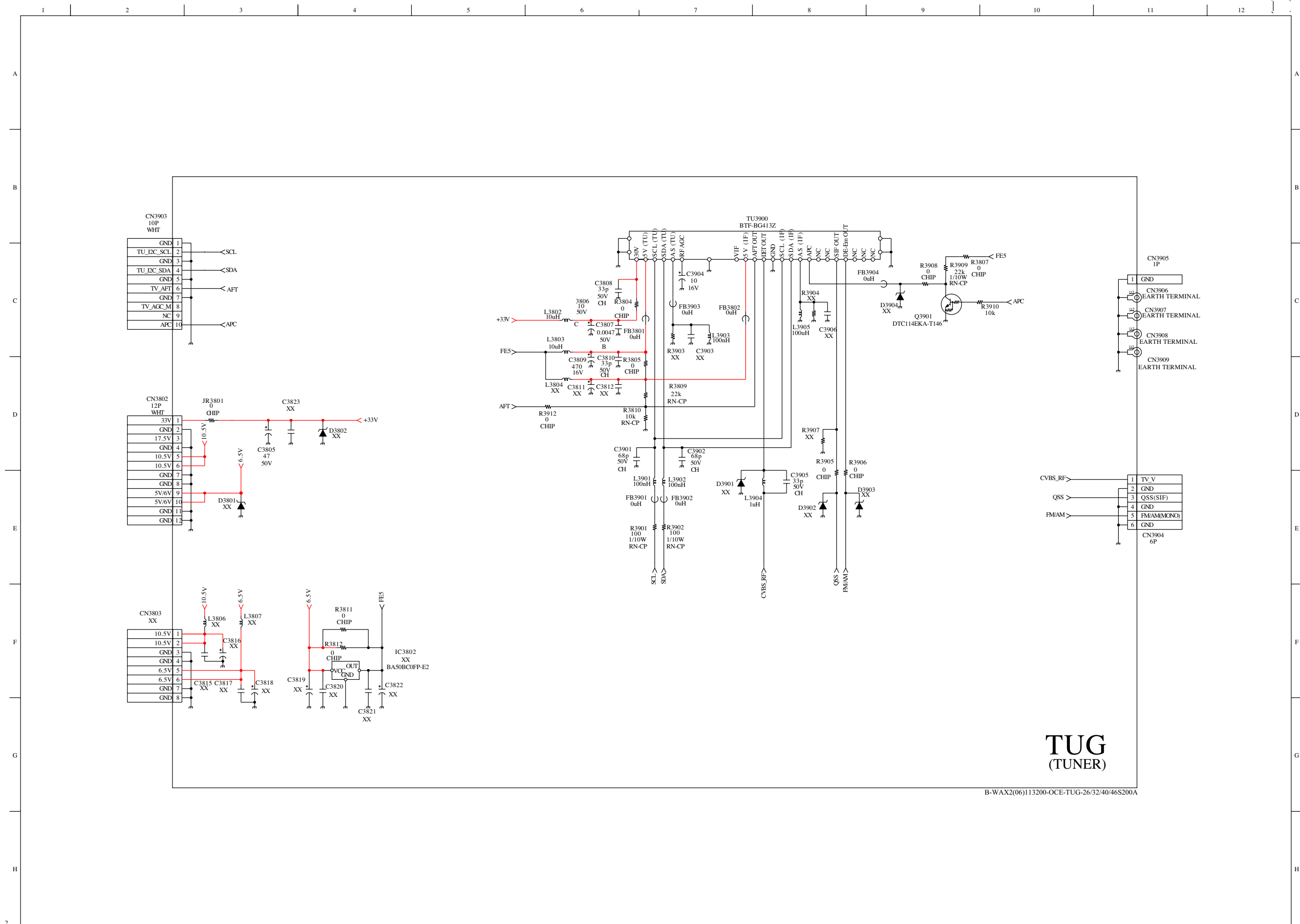


3-3-20. H46 Board Schematic Diagram (KLV-46S200A)



B-WAX2(06)13200-OCE.-H46-46S200A

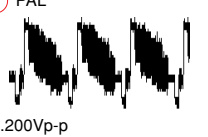
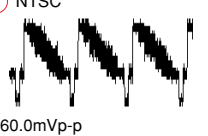
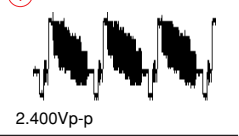
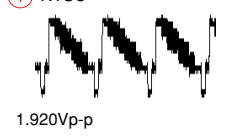
3-3-21. TUG Board Schematic Diagram



B-WAX2(06)113200-OCE-TUG-26/32/40/46S200A

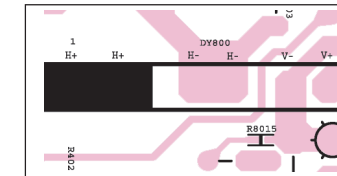
3-4. VOLTAGE MEASUREMENT AND WAVEFORMS

AG BOARD VOLTAGE LIST AND WAVEFORM

Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]	Ref	Pin No.	Voltage[v]
IC2001	1	3.8		45	4.3	IC7001	25	0.1
	2	4.3		47	4.3		27	0.1
	3	3.8		49	3.8		28	0.1
	4	4.3		50	4.4		33	3.7
	5	4.3		51	4.3		34	3.7
	6	0.1		59	4.4		36	3.7
	7	4.8		61	4.3		37	3.7
	8	3.8		62	4.3		38	7.2
	9	3.5		63	4.2		40	7.1
	10	3.8		② PAL  1.200Vp-p			45	3.7
	11	4.3					47	3.7
	12	4.3		② NTSC  960.0mVp-p			48	3.7
	13	0.1					50	3.7
	14	4.8	64	4.4	51		3.7	
	15	3.7			53		3.7	
	16	4.3			54		3.7	
	18	4.4			56		3.7	
	33	4.5			57		3.7	
	34	4.7			58		2.5	
	43	4.3			59		3.7	
	44	4.2			60		3.7	
	① PAL  2.400Vp-p				71		2.2	
					72		2.2	
	① NTSC  1.920Vp-p				79		0	

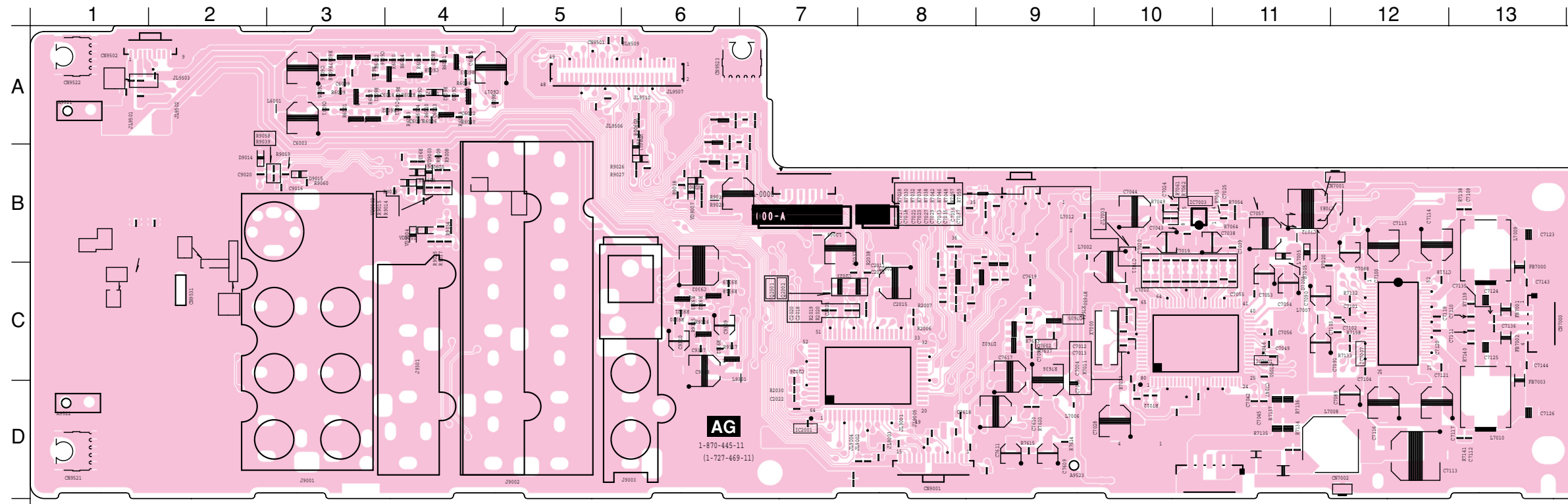
3-5. PRINTED WIRING BOARDS

AG [AV SW/INPUT TERMINAL, AUDIO/FE CONNECTION]

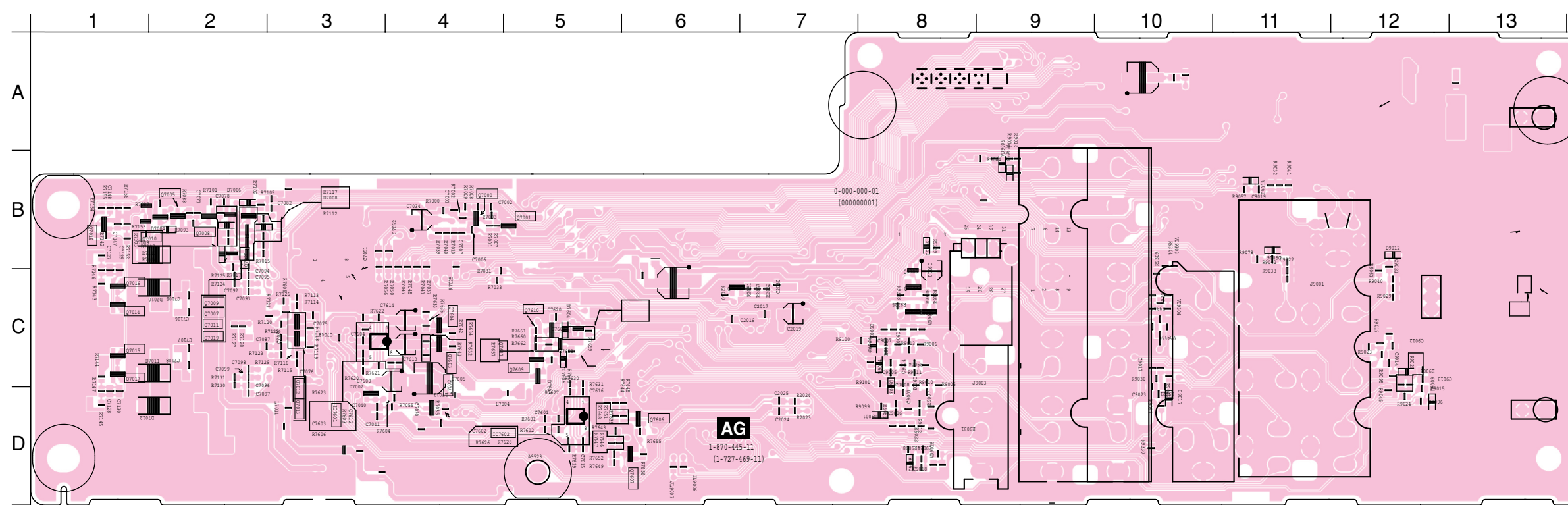


NOTE:
The circuit indicated at left contains high voltage of over 1220 Vp-p. Please pay attention when inspecting or repairing it to prevent an electric shock.

– AG Board – (Component Side)



– AG Board – (Conductor Side)



G1 [POWER UNIT] (KLV-26S200A/32S200A)

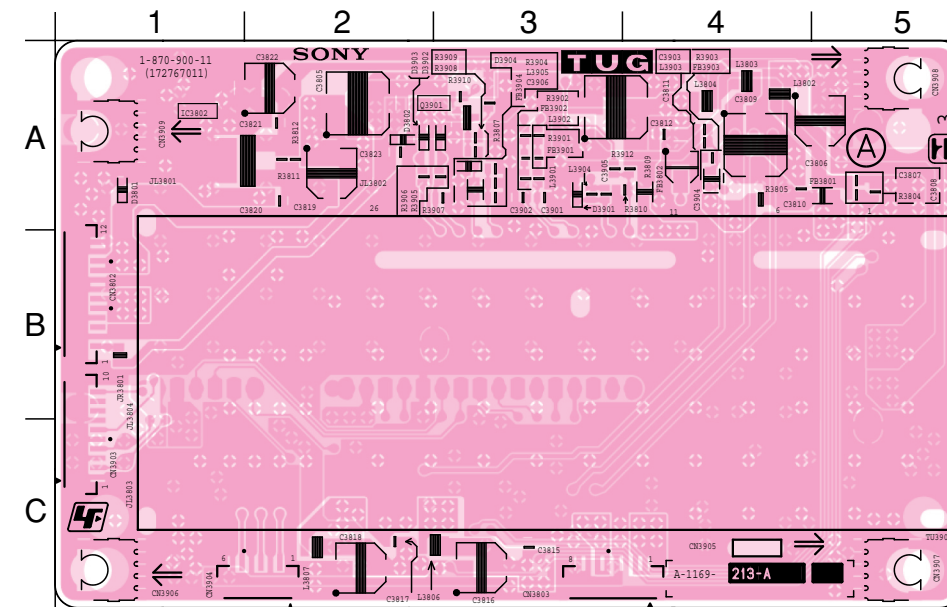
H46 [SIDE AV INPUT] (KLV-46S200A)

TUG [TUNER]

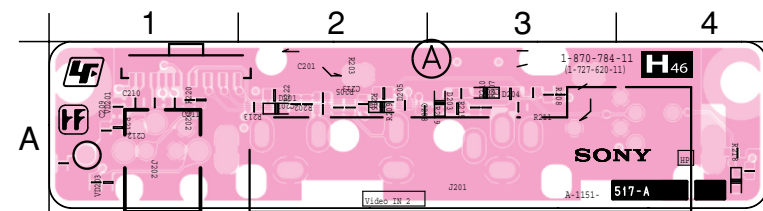
– G1 Board –

Due to complexity of the board, performing component level field repairs is not recommended. If service is required, complete board replacement is required, therefore schematic are not included. for part number information refer to the Exploded view or Electrical Parts lists section of this manual.

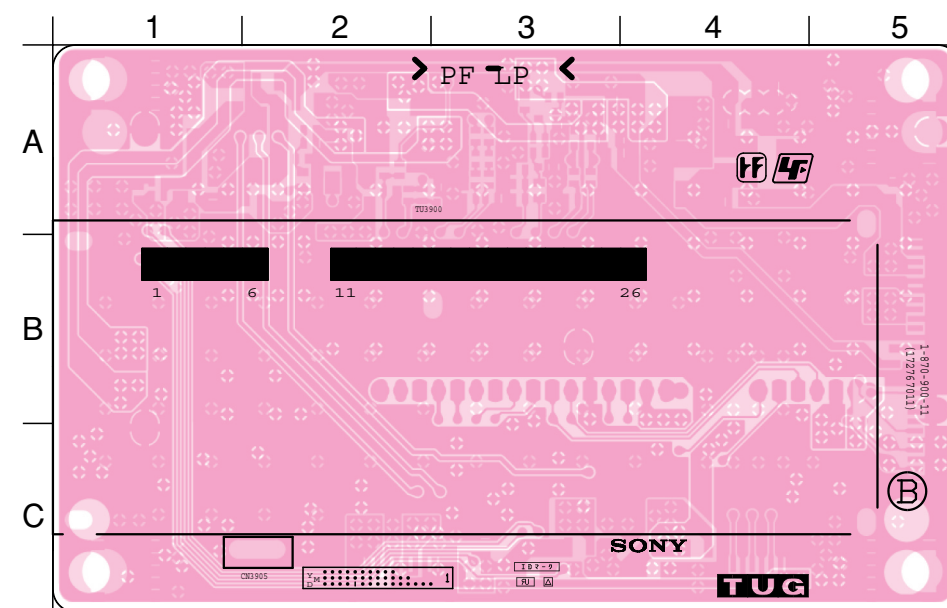
– TUG Board – (Component Side)



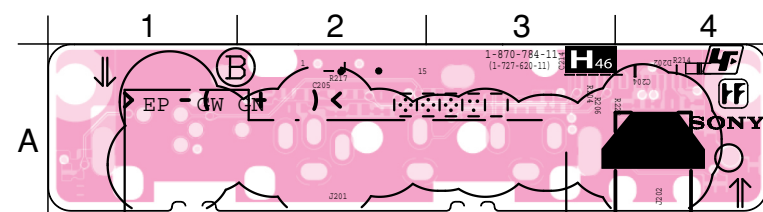
– H46 Board – (KLV-46S200A) (Component Side)

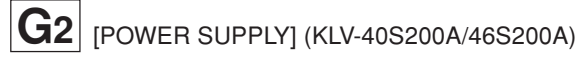


– TUG Board – (Conductor Side)

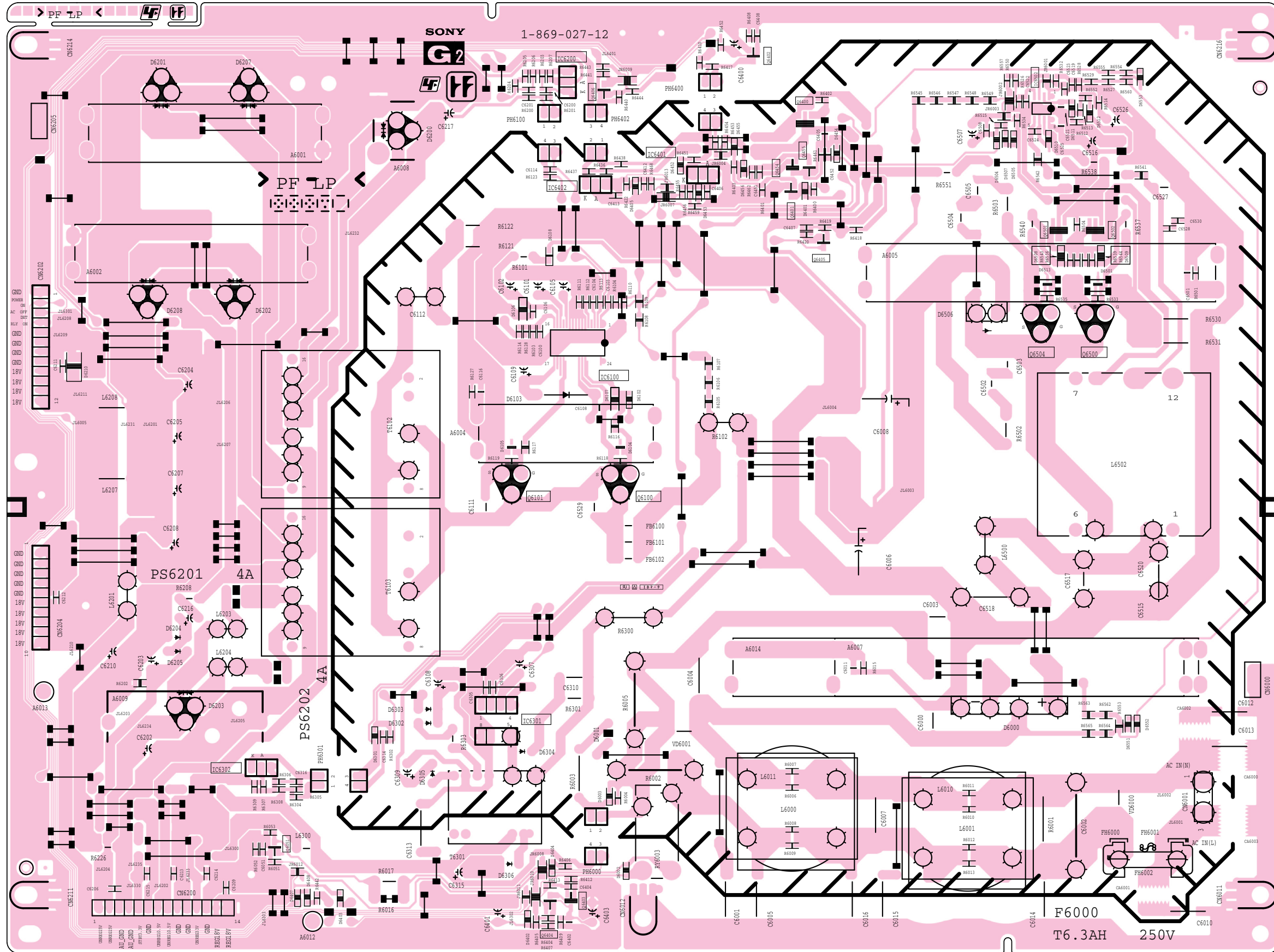


– H46 Board – (KLV-46S200A) (Conductor Side)





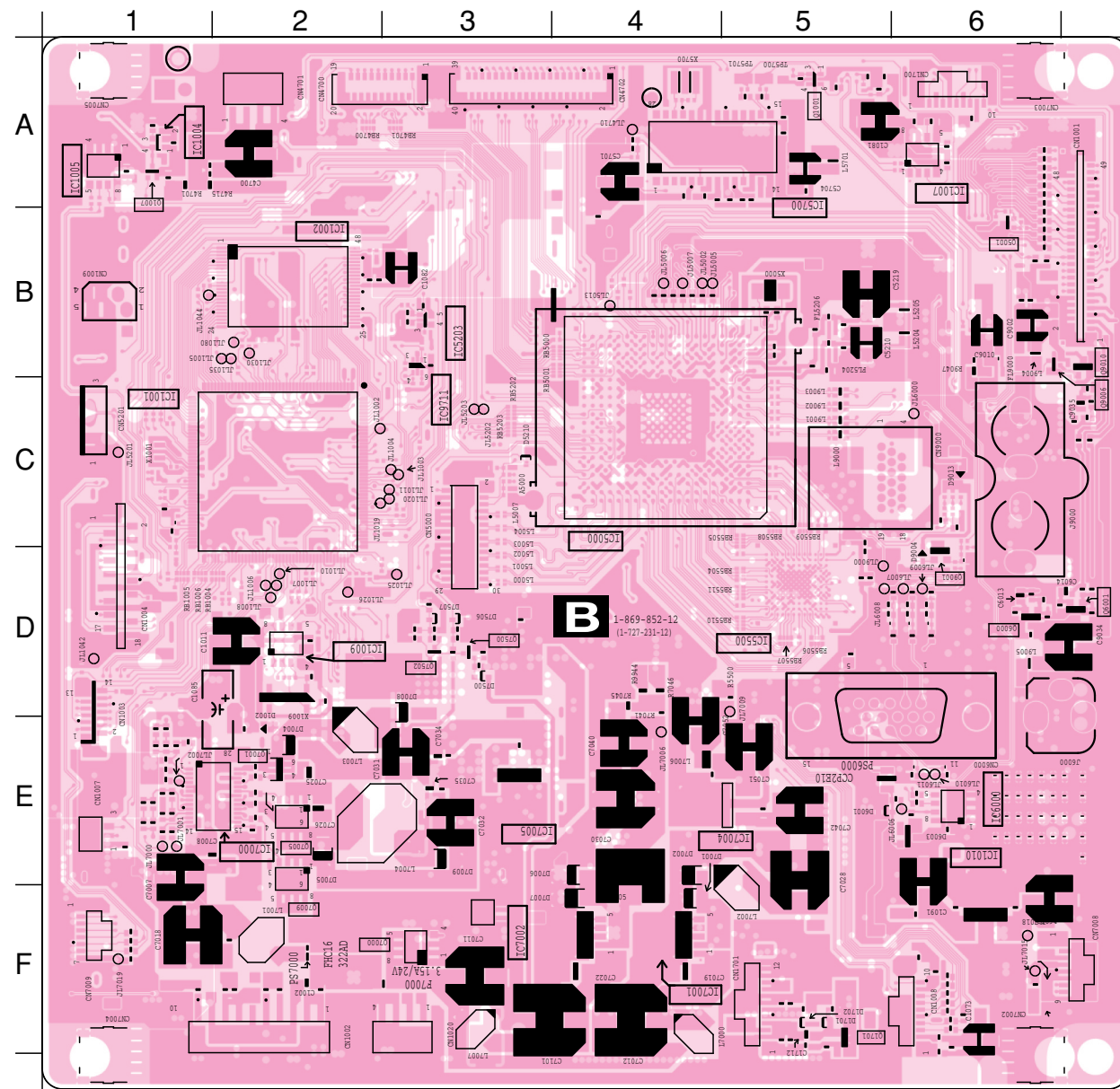
- G2 Board - (KLV-40S200A/46S200A)



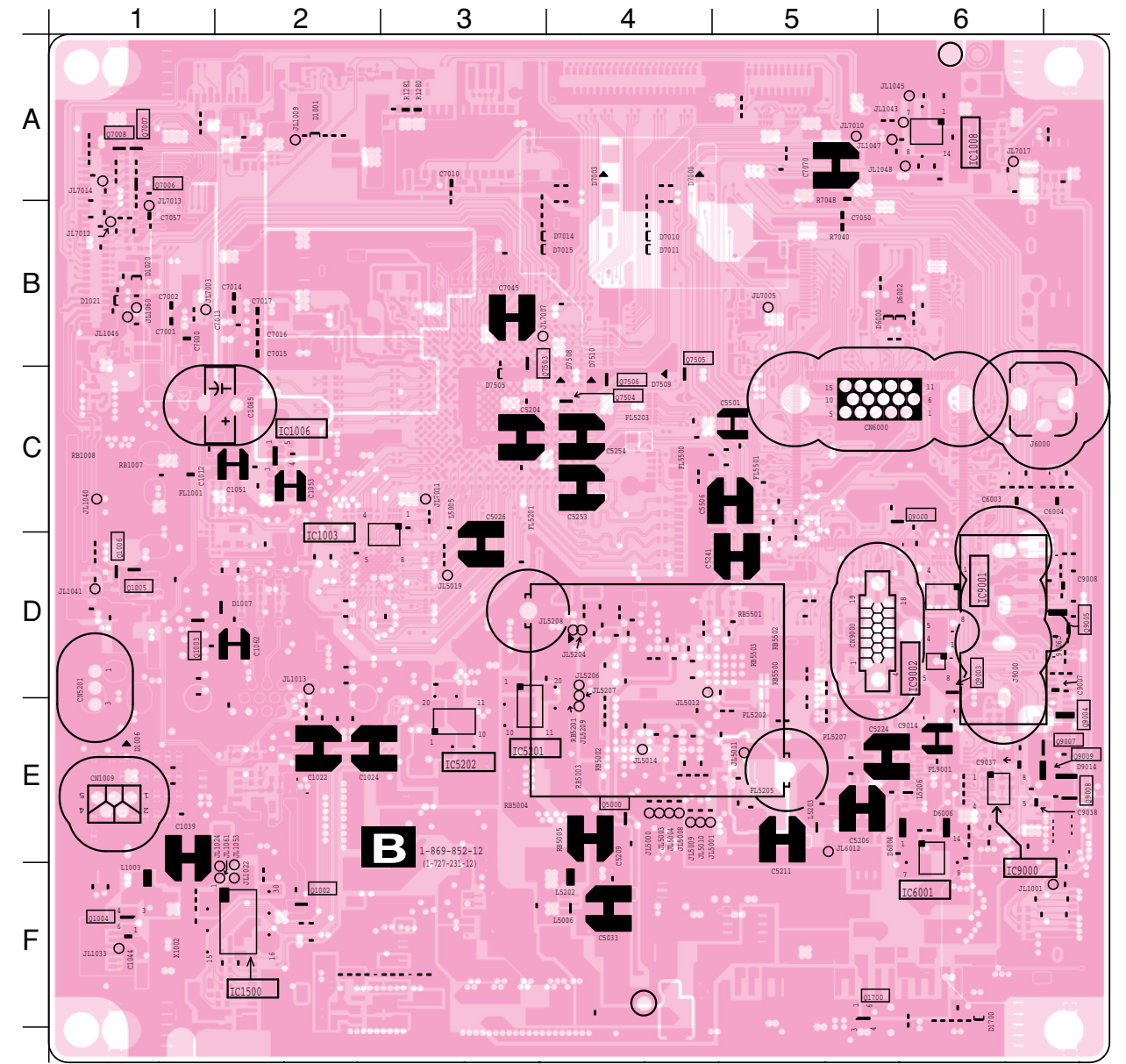
B [MAIN IC, TRIDENT, DDR SDRAM, AUTO WIDE, PC CONNECTON, HDMIP D/A, POWER, DC ALERT, B TO F/E, TUNER]

H1 [TOP SWITCH]

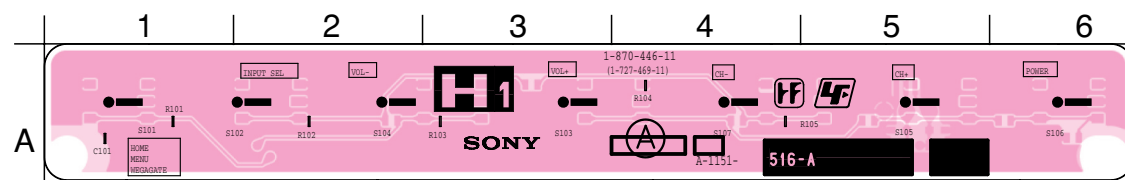
- B Board - (Component Side)



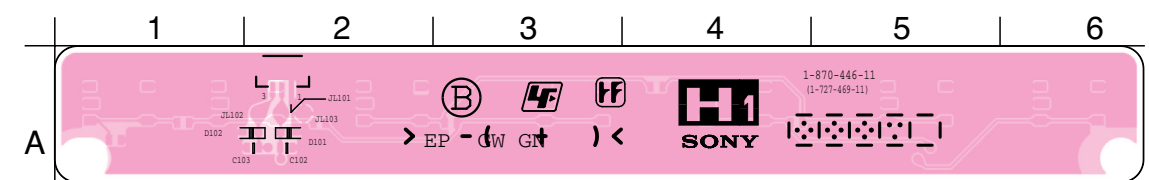
- B Board - (Conductor Side)



- H1 Board - (Component Side)



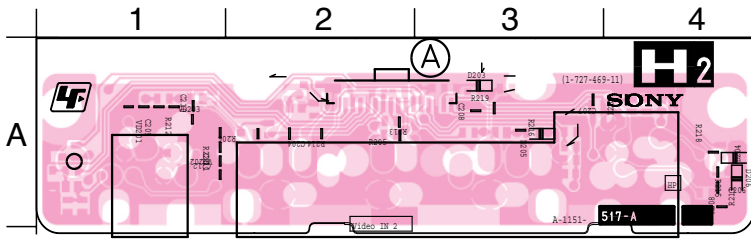
- H1 Board - (Conductor Side)



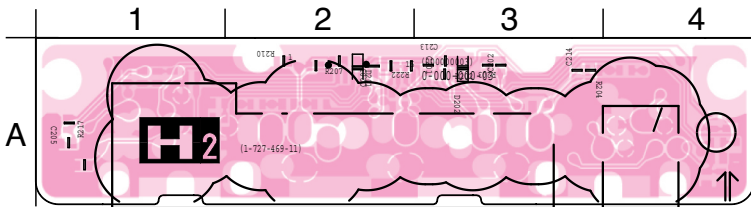
H2 [SIDE AV INPUT] (Except KLV-46S200A)

H3 [LED/SIGNAL DETECTION]

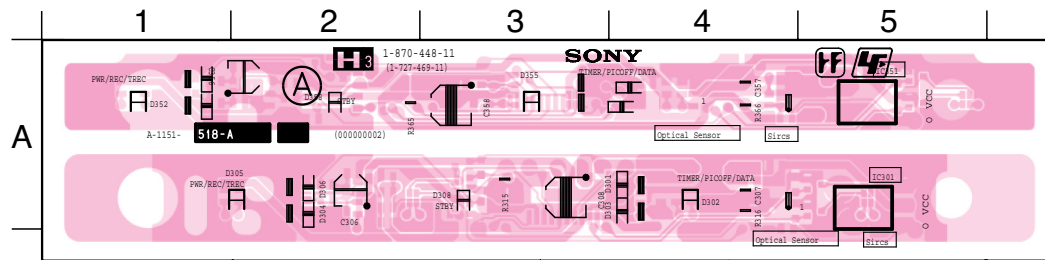
– H2 Board – (Except KLV-46S200A) (Component Side)



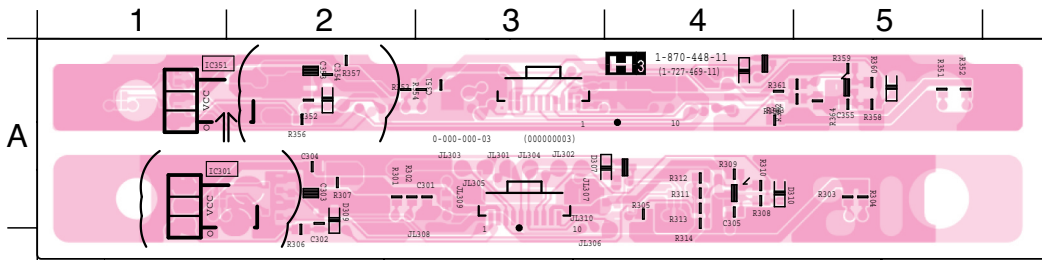
– H2 Board – (Except KLV-46S200A) (Conductor Side)



– H3 Board – (Component Side)

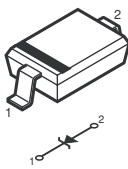
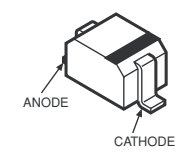
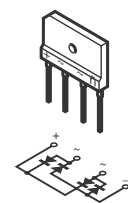
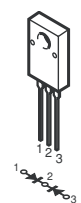
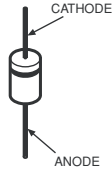


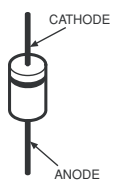
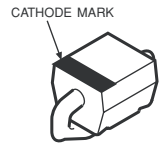
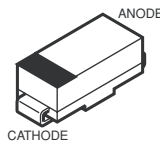
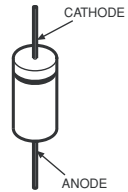
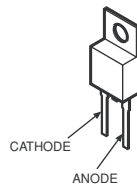
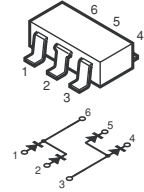
– H3 Board – (Conductor Side)

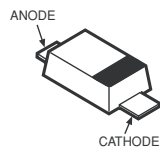
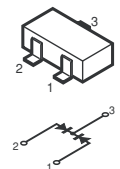
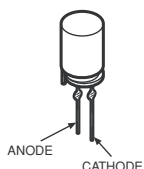
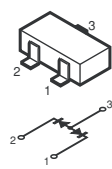
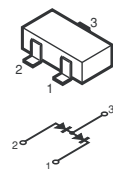
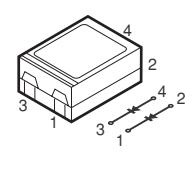


3-6. SEMICONDUCTORS

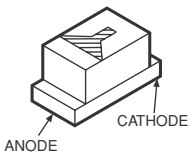
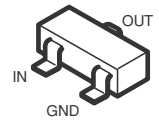
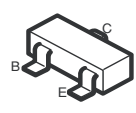
DIODE

					
BAS316-115 EP05FA20 MM3Z10VT1 MM3Z11VT1 MM3Z13VT1 MM3Z18VST1 MM3Z22VT1 MM3Z2V4T1 MM3Z5V6ST1 MM3Z6V2ST1	MM3Z6V8ST1 MM3Z8V2ST1	BAT54HT1 DTZ10B HZU5.6GTRF MA113-(TX) MMDL914T1 RD5.6SB-T1 UDZ-TE-17-18B UDZ-TE-17-6.2B UDZ-TE-17-6.8B	D10SBS4 D10SBS4F D2SB60A-F04 D4SB60L	D10SC6M	D1NL40-TA2 D1NL40-TR2 ERA22-08

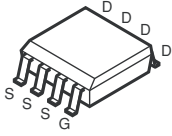
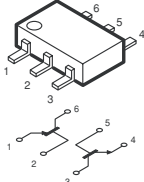
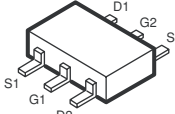
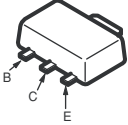
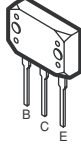
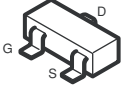
					
D1NS6 D1NS6-TR ERA22-06AVRBT UF4005PKG23 10ERB20-TB3 1N5404TU	EC10QS-04 EC10QS04-TE12L5	EC21QS03L-TE12L P6SMBJ30A-5 PTZ-TE25-3.9B	ERA22-08KFLB	FSF05A60	HN1D03FU-TE85L HN1D03FU-TE85R

					
M1FM3	MA132WK MA132WK-TX MA151WK-TX 1SS184	UDZSTE-1710B	UMZ16NT106	1PS302	SML-020MVT-T86

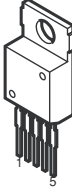
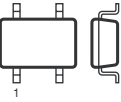
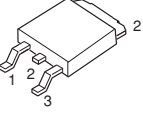
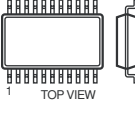
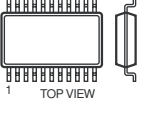
TRANSISTOR

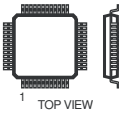
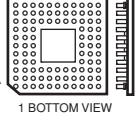
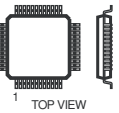
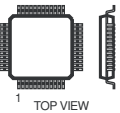
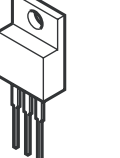
					
SML-310LTT86	DTC114EU DTC114EUAFT106	DTC114EUA-T106 DTC115EUA-T106 DTC144WKA-T146 DTC314TK-T-146 DTC323TK DTC323TKT146 MUN2211T1	MUN2212T1 MUN5213T1 PDTTC114EK-115 UN2211 2PA1576R-115 2PC4081R-115 2PD601AR-115	2SA1037AK-T146-QR 2SA1037AK-T146-R 2SA1576A-T106-QR 2SA1774R 2SA1774TL-QR 2SC1623-L5L6 2SC2412K-T-146-QR	2SC4081-R 2SC4081T106R 2SC4617R 2SC4617TL-QR 2SD2114K 2SD601A-Q-TX


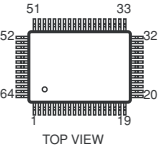
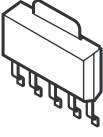
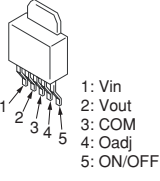
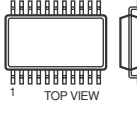
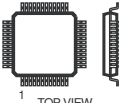
TRANSISTOR

					
FDS6690A	HN1B01FU-TE85R	SSM6N15FU(TE85R)	2SB1122-S 2SB1122-ST-TD-E 2SD1621-ST 2SD1621ST-TD-E	2SD2114KT146	2SK2158-T2B

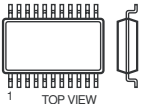

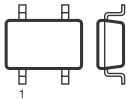
IC

					
	5Pin CHIP		8Pin SOP	16Pin SOP	
BA00AST-V5	BA05FP-E2 BA09FP-E2 S-1111B33MC-NYSTFG TC7SZ125FU(TE85R)	BA18BC0FP-E2 BA25BC0FP-E2	BR24L02F-WE2 CS4335-KSZR FA5501N-TE1 LM75CIMX-3 M24128-BWMN6T(A) M24C02-WMN6T(B) NJM2521V(TE2)	NJM3414AV(TE2) RC4558DR RC4558PWR	CD4052BNSR FMS6418AM16X

					
40Pin QFP	144Pin PGA	48Pin QFP	144Pin QFP	20Pin SOP	
CXA2188Q-T4	EM6A9320BI-5MG	HD6433692A39FXV HD64F369FXV-DA4 TPA3004D2PHPR	HD64F2378-12681-01	L88M05T-FA-TL	M5234FP-TE

					
			1: Vin 2: Vout 3: COM 4: Oadj 5: ON/OFF		100Pin QFP
MM1431ATT	NJW1149AF1	PQ1CY1032ZP	PQ1CZ41H2ZPH	RV5387A-E2-FB	SII9993CTG100

IC

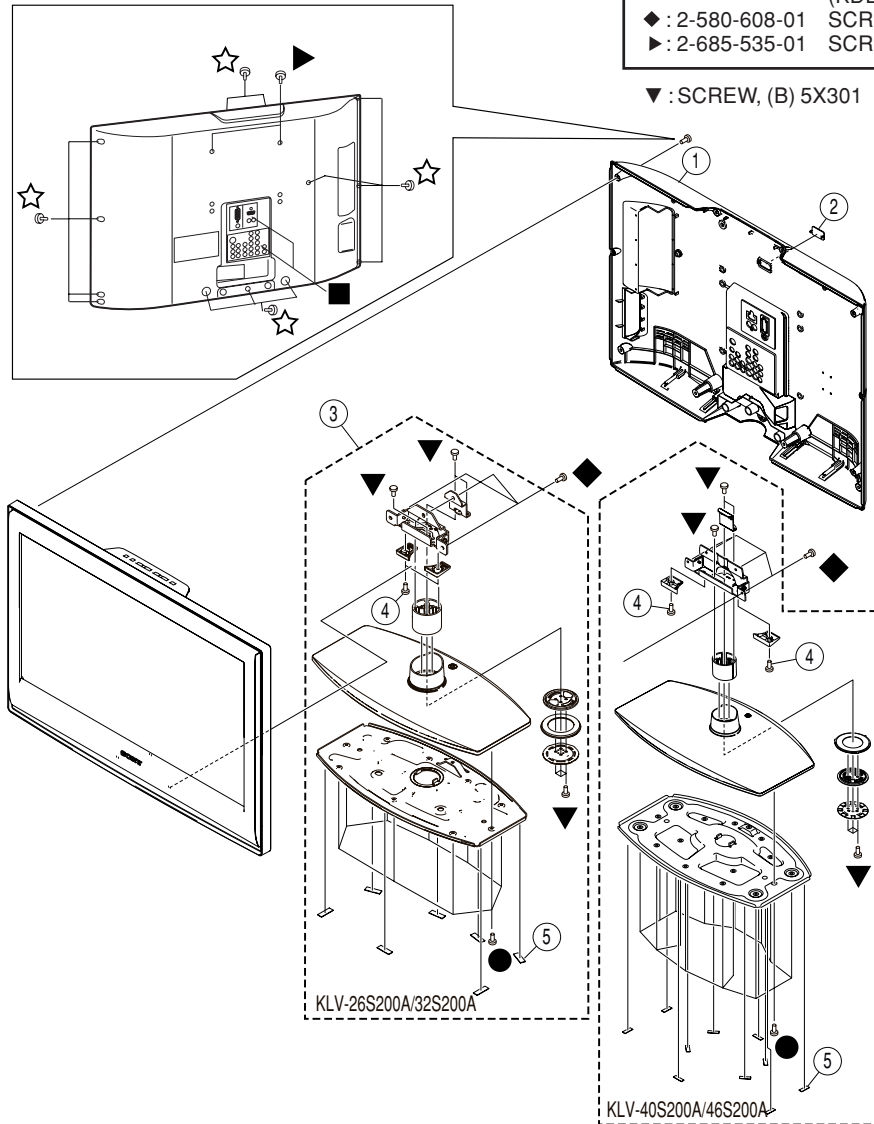
 <p>14Pin SOP</p>	 <p>8Pin DIP</p>	 <p>6Pin CHIP</p>
<p>SN74LV132APWR SN74LV14APWR</p>	<p>STR-A6169</p>	<p>TK11819MTL</p>

SECTION 4 EXPLODED VIEWS

- Components not identified by a part number or description are stocked because they are seldom required for routine service.
- The component parts of an assembly are indicated by the reference numbers in the far right column of the part list and within the dotted lines of the diagram.
- * Items marked with an asterisk are not stocked since they are seldom required for routine service. Except some delay when ordering these components.

NOTE: The components identified by shading and Δ mark are critical for safety. Replace only with part number specified.

4-1. REAR CABINET AND STAND ASSEMBLY



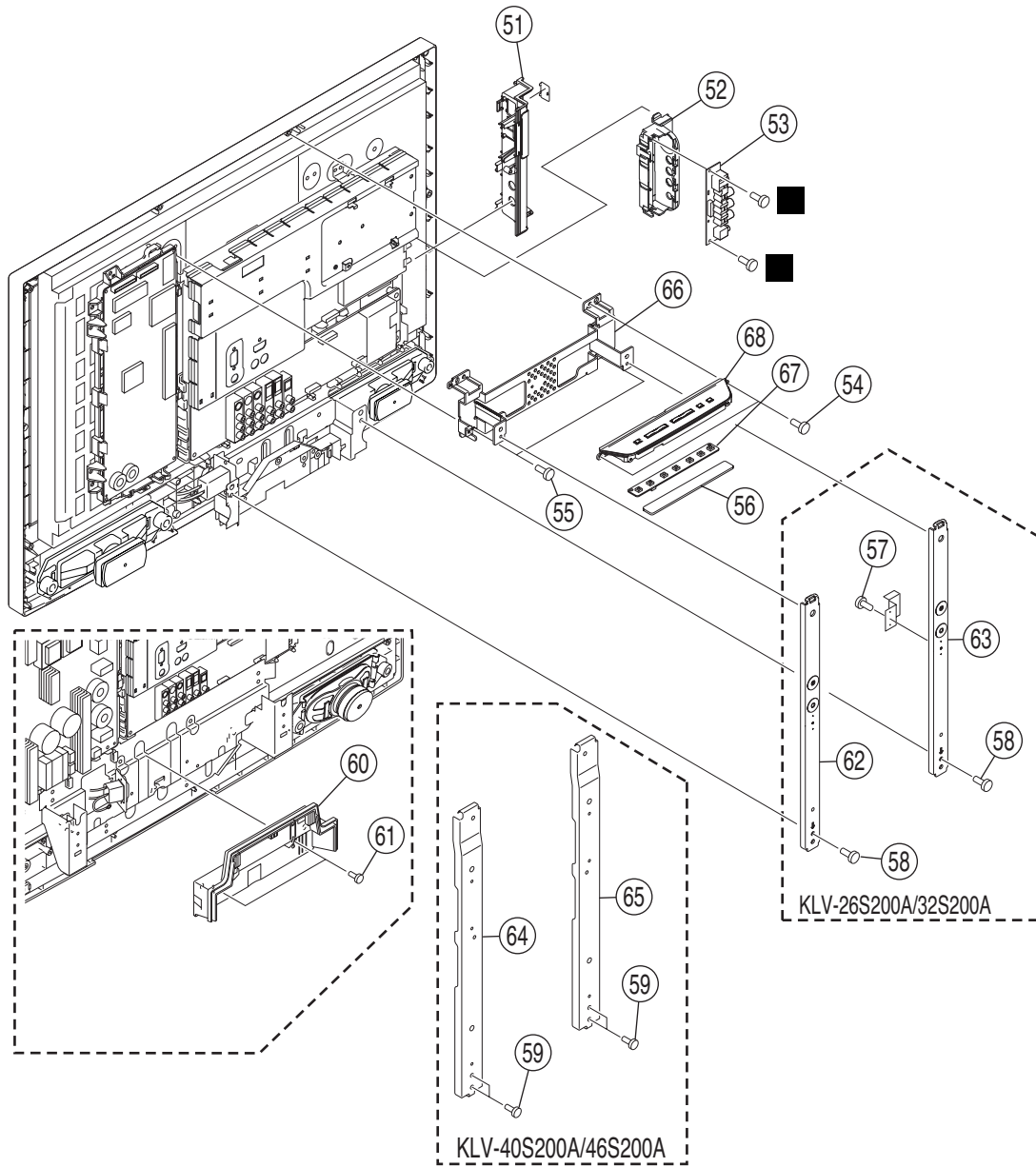
■	: 7-685-648-79	SCREW +BVTP 3 × 12 TYPE2 IT-3
☆	: 2-580-640-01	SCREW, +BVTP2 4 × 16
●	: 2-580-644-01	SCREW, +KTP2 3X8 (KLV-26S2000/32S2000)
●	: 2-580-647-01	SCREW, +KTP2 4X12 (KLV-40S200A/46S200A)
▲	: 2-580-603-01	SCREW, +PSW M4X16 (KLV-26S200A)
▲	: 2-580-611-01	SCREW, +PSW M6X16 (KLV-32S200A/40S200A/46S200A)
▼	: 2-676-024-01	SCREW, WTP 4X30 (KDL-26S2000/32S2000 ONLY)
◆	: 2-580-608-01	SCREW, +PSW M5X16
▶	: 2-685-535-01	SCREW, IT3-C 4X25

▼ : SCREW, (B) 5X301

REF. NO.	PART NO.	DESCRIPTION	MARK	REF. NO.	PART NO.	DESCRIPTION	MARK
1	X-2109-586-2	COVER(26SJ), REAR ASSY (KLV-26S200A)					
	X-2109-791-2	COVER(32SJ), REAR ASSY (KLV-32S200A)					
	X-2109-456-3	COVER(40S); REAR ASSY (KLV-40S200A)					
	X-2148-059-1	COVER(46SJ), REAR ASSY (KLV-46S200A)					
2	2-682-212-01	COVER, ECS					
3	X-2103-365-3	ASSY, STAND(M) (KLV-26S200A/32S200A)					
	X-2103-366-2	STAND ASSY(L) (KLV-40S200A/46S200A)					
4	2-580-602-01	SCREW, +PSW M4X12					
5	2-675-191-02	FOOT					

4-2. FRAME AND COVER

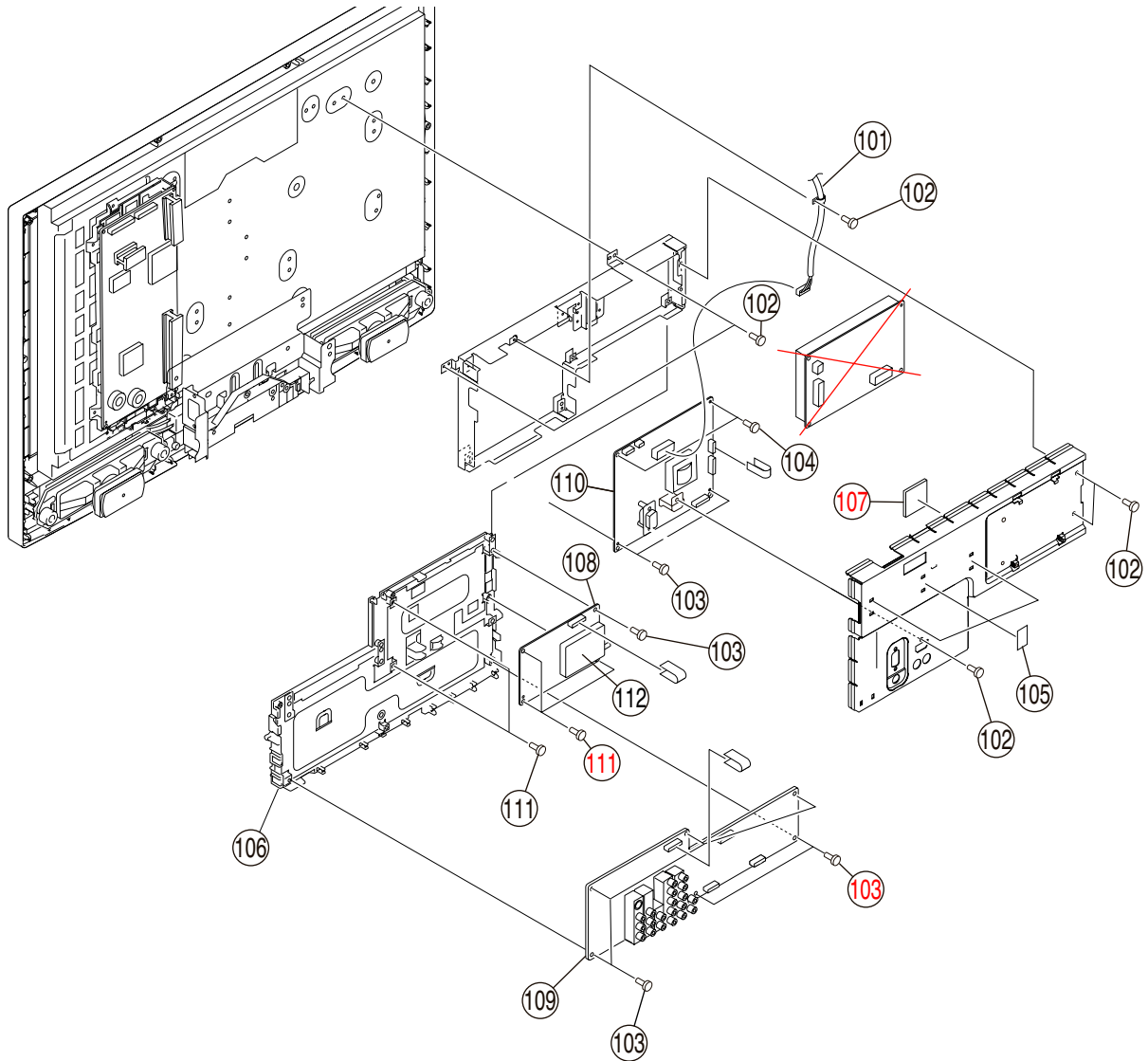
■ : 7-685-648-79 SCREW +BVTP 3 × 12 TYPE2 IT-3



REF. NO.	PART NO.	DESCRIPTION	MARK	REF. NO.	PART NO.	DESCRIPTION	MARK
51	X-2148-005-1	SIDE, TERMINAL (M) ASSY (Except KLV-26S200A)		60	2-660-802-01	COVER, UNDER (M) (KLV-26S200A/32S200A)	
	X-2148-002-1	SIDE, TERMINAL(S) ASSY (KLV-26S200A)			2-660-801-02	COVER, UNDER (L) (KLV-40S200A/46S200A)	
52	2-663-985-11	HOLDER, SIDE JACK (M) (KLV-26S200A/32S200A)		61	2-580-640-01	SCREW, +BVTP2 4X16	
	2-663-986-11	HOLDER, SIDE JACK (L) (KLV-40S200A/46S200A)		62	X-2109-235-1	BRACKET VESA(26) ASSY (KLV-26S200A)	
53	A-1183-738-A	H2 MOUNT (Except KLV-46S200A)			X-2109-236-1	BRACKET, VESA(32) ASSY (KLV-32S200A)	
	A-1202-957-A	H46 MOUNT (KLV-46S200A)		63	X-2109-595-1	BRACKET, VESA(26R) ASSY (KLV-26S200A)	
54	2-580-639-01	SCREW, +BVTP2 4X12			X-2109-551-1	BRACKET, VESA(32R) ASSY (KLV-32S200A)	
55	2-580-600-01	SCREW, +PSW M4X8		64	X-2109-058-3	VESA BRACKET(40)L ASSY (KLV-40S200A)	
					X-2109-258-3	ARM, VESA(46)L ASSY (KLV-40S200A)	
56	A-1883-737-A	HI MOUNT		65	X-2109-251-3	ARM, VESA(46R) ASSY (KLV-46S200A)	
57	2-580-591-01	SCREW, +PSW M3X5			X-2109-059-3	VESA BRACKET(40)R ASSY (KLV-40S200A)	
58	2-580-603-01	SCREW, +PSW M4X16 (KLV-26S200A/32S200A)		66	X-2109-261-1	FRAME, TOP(26) ASSY (KLV-26S200A)	
59	2-580-608-01	SCREW, +PSW M5X16 (KLV-40S200A/46S200A)		67	2-663-977-01	BUTTON, MULTI	
				68	2-663-978-01	COVER, BUTTON	

4-3. CHASSIS-1

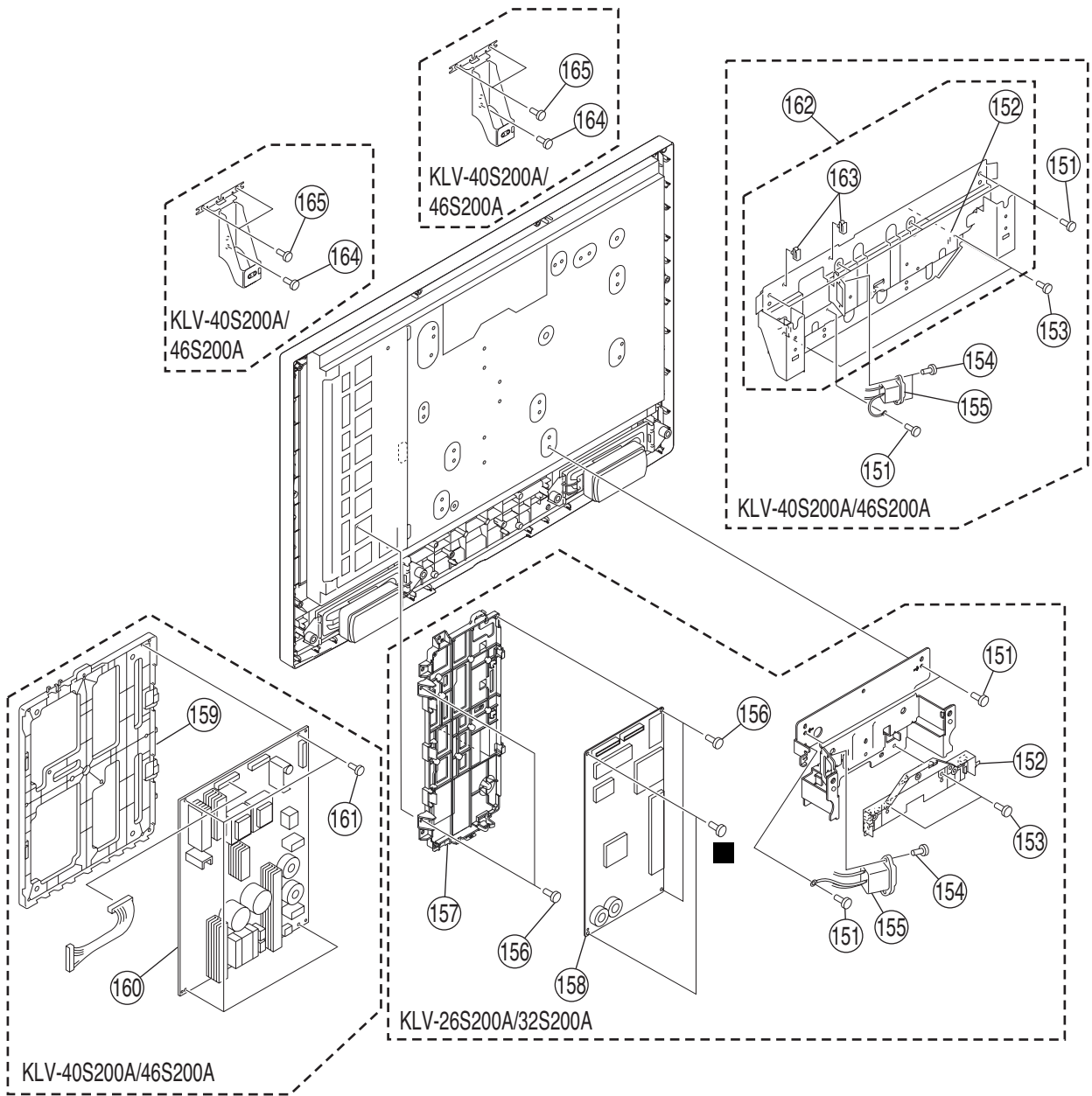
■ : 7-685-648-79 SCREW +BVTP 3 × 12 TYPE2 IT-3



REF. NO.	PART NO.	DESCRIPTION	MARK	REF. NO.	PART NO.	DESCRIPTION	MARK
101	1-832-468-12	HARNESS WITH CONNECTOR (LVDS) (KLV-26S200A)		106	X-2109-045-2	BRACKET, (A,TU) (A) ASSY	
	1-832-469-12	HARNESS WITH CONNECTOR (LVDS) (KLV-32S200A/46S200A)		107 *	4-092-814-02	CUSHION D	
	1-832-470-11	HARNESS WITH CONNECTOR (LVDS) (KLV-40S200A)		108	A-1169-213-A	TUG MOUNT	
102	2-580-591-01	SCREW, +PSW M3X5		109	A-1182-675-A	AG MOUNT	
103	2-674-965-21	SCREW, +PSW 3SG		110	A-1203-526-B	B MOUNT (SERVICE) (KLV-26S200A)	
104	2-580-629-01	SCREW, +BVST 3X8			A-1203-525-B	B MOUNT (SERVICE) (KLV-32S200A)	
105	4-660-752-01	TAPE (LCD)			A-1189-884-B	B MOUNT (SERVICE) (KLV-40S200A)	
					A-1203-524-B	B MOUNT (SERVICE) (KLV-46S200A)	
				111	2-674-965-11	SCREW, +PSW 3SG	
				112	8-597-536-00	TUNER, FSS BTF-BG413	

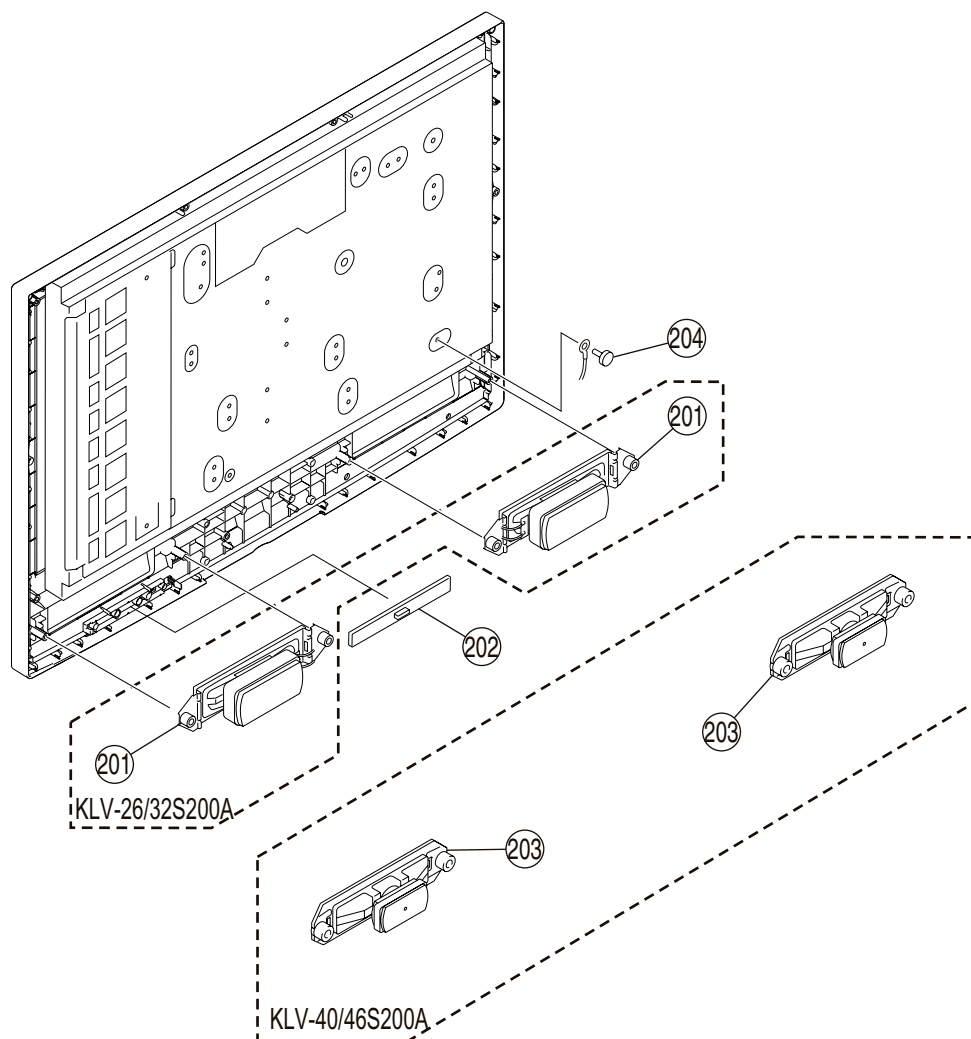
4-4. CHASSIS-2

■ : 7-685-648-79 SCREW +BVTP 3 × 12 TYPE2 IT-3



REF. NO.	PART NO.	DESCRIPTION	MARK	REF. NO.	PART NO.	DESCRIPTION	MARK
151	2-580-600-01	SCREW, +PSW M4X8		158	1-468-980-12	POWER UNIT (KLV-26S200A/32S200A)	
152	2-660-802-01	COVER, UNDER(M) (KLV-26S200A/32S200A)		159	2-664-617-01	BRACKET, G2 (KLV-40S200A/46S200A)	
	2-660-801-02	COVER, UNDER(L) (KLV-40S200A/46S200A)		160	A-1144-543-E	G2 MOUNT (KLV-40S200A/46S200A)	
153	2-580-640-01	SCREW, +BVTP2 4X16		161	2-674-965-31	SCREW, +PSW 3SG (KLV-40S200A/46S200A)	
154	2-596-649-01	+KTT 3X10 (S TYPE)		162	X-2109-168-3	FRAME, BOTTOM(L) ASSY (KLV-40S200A/46S200A)	163
155	▲ 1-819-729-13	INLET, AC(WITH NOISE FILTER)		163	2-650-770-21	SLIDE, CLAMP (KLV-40S200A/46S200A)	
156	2-580-591-01	SCREW, +PSW M3X5		164	2-580-606-01	SCREW, +PSW M5X8 (KLV-40S200A/46S200A)	
157	X-2109-589-1	BRACKET, G1 ASSY(A) (KLV-26S200A/32S200A)		165	2-580-639-01	SCREW, +BVTP2 4X12 (Except KLV-46S200A)	

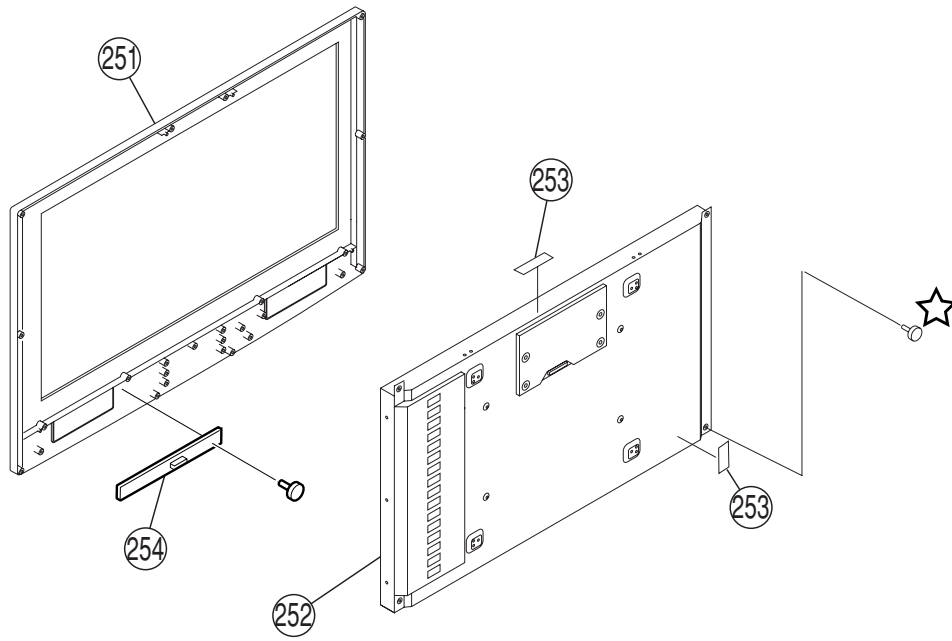
4-5. H3 BOARD AND SPEAKER



REF. No.	PART No.	DESCRIPTION	MARK	REF. No.	PART No.	DESCRIPTION	MARK
201	1-826-363-11	LOUDSPEAKER (4.2X15CM) (KLV-26200A/32S200A)		204	2-580-591-01	SCREW, +PWS M3X5	
202	A-1183-739-A	H3 MOUNT					
203	1-826-362-11	LOUDSPEAKER (5.5X15.5CM) (KLV-40S200A)					
	1-826-435-11	LOUDSPEAKER(13X7CM) (KLV-46S200A)					

4-6. BEZEL ASSY AND LCD PANEL

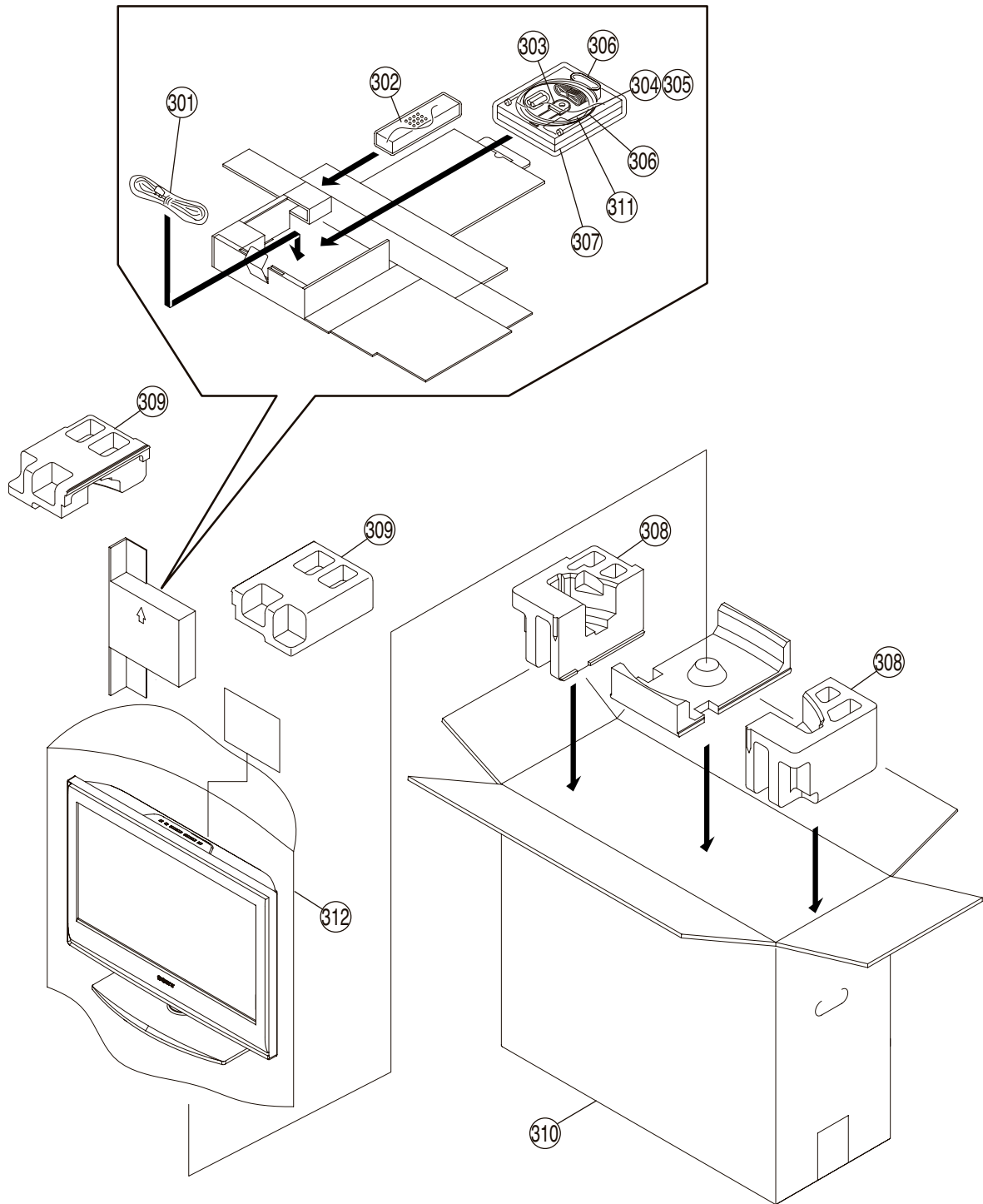
☆ : 2-580-640-01 SCREW, +BVTP2 4 × 16



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
251	X-2148-000-1	BEZEL(26SG) ASSY (KLV-26S200A)	
	X-2148-003-1	BEZEL(32SG) ASSY (KLV-32S200A)	
	X-2148-006-1	BEZEL(40SG) ASSY (KLV-40S200A)	
	X-2148-009-1	BEZEL(46SG) ASSY (KLV-46S200A)	
252	1-802-061-13	LCD PANEL (26WXGA+TFT)	(KLV-26S200A)

REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
	1-802-060-13	LCD PANEL (32WXGA+TFT)	(KLV-32S200A)
	1-802-059-11	LCD PANEL (40WXGA+TFT)	(KLV-40S200A)
	1-802-100-12	LCD PANEL(46 INCH WXGA+TFT)	(KLV-46S200A)
253	4-660-752-01	TAPE (LCD)	
* 254	2-664-630-01	GUIDE, LIGHT	

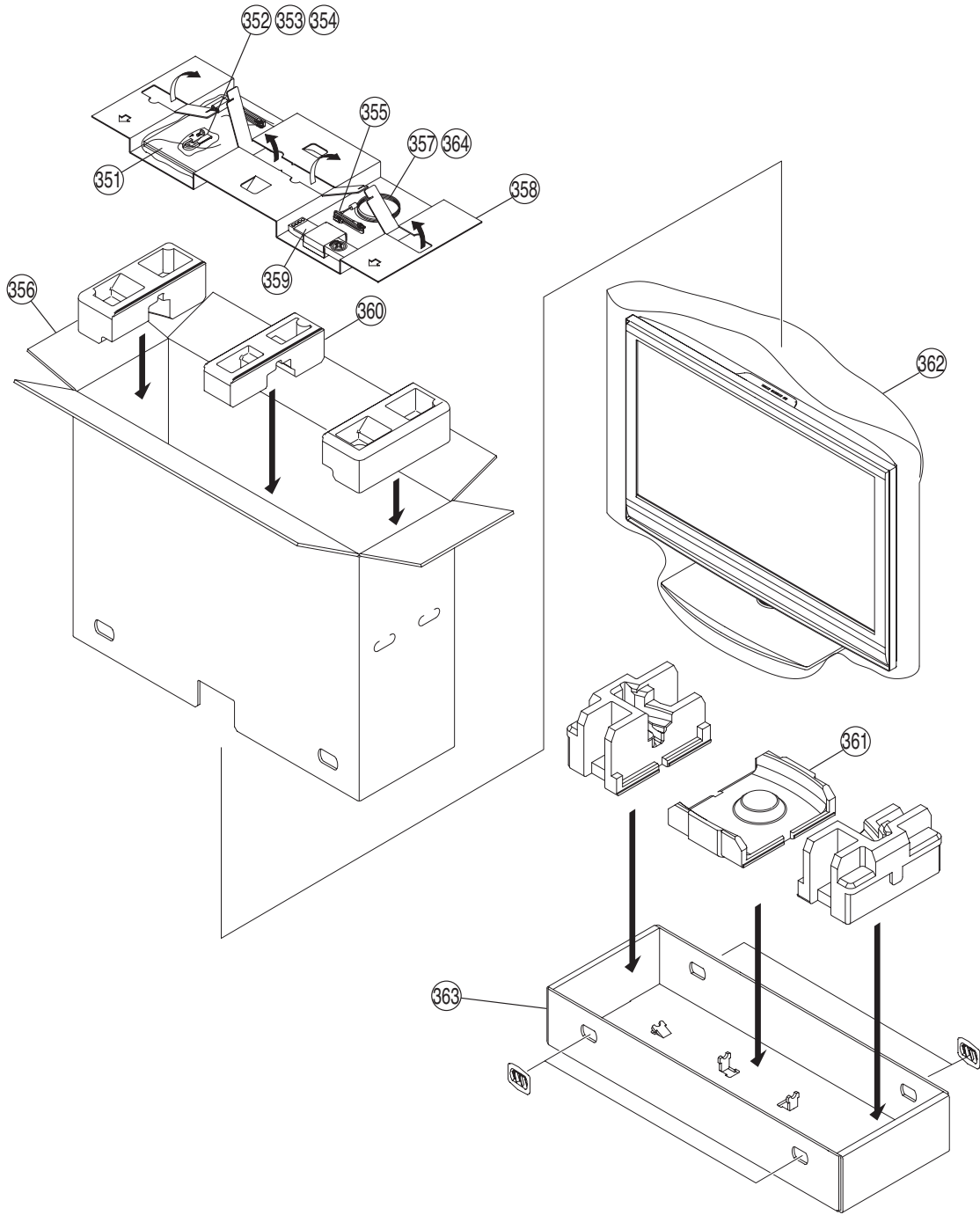
4-7. ACCESSORIES AND PACKING MATERIALS (KLV-26S200A/32S200A)



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
301	1-833-117-11	POWER SUPPLY CORD SET (KLV-26S200A/32S200A(OCE))	
	1-833-118-11	POWER SUPPLY CORD SET (Except KLV-26S200A/32S200A(OCE))	
302	1-479-841-11	REMOTE COMMANDER (RM-GA005)	
	9-885-099-05	REMOTE COMMANDER BATTERY COVER	
303	X-2102-511-1	BAG ASSY, RUDDER LOCK	
304	2-580-663-01	SCREW, WOOD 3.8X20	
305	2-593-320-02	SCREW, CION (M6X8)	
306	1-831-554-11	CABLE ASSY (15P DSUB CONNECTOR)	
307	2-685-864-13	MANUAL, INSTRUCTION	

REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
308	* 2-676-368-01	CUSHION (UPPER) (KLV-26S200A)	
	* 2-676-371-01	CUSHION (UPPER) (KLV-32S200A)	
309	* 2-676-367-01	CUSHION (LOWER) (KLV-26S200A)	
	* 2-676-370-01	CUSHION (LOWER) (KLV-32S200A)	
310	* 2-676-369-01	INDIVIDUAL CARTON (KLV-26S200A)	
	* 2-676-372-01	INDIVIDUAL CARTON (KLV-32S200A)	
311	* 1-769-175-21	ANTENNA CABLE	
312	* 2-680-542-11	BAG PROTECTION (KLV-26S200A)	
	* 2-680-544-01	BAG PROTECTION (KLV-32S200A)	

4-8. ACCESSORIES AND PACKING MATERIALS (KLV-40S200A/46S200A)



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
351	2-685-864-13	MANUAL, INSTRUCTION	
352	X-2102-511-1	BAG ASSY, RUDDER LOCK	
353	2-580-663-01	SCREW, WOOD 3.8X20	
354	2-593-320-02	SCREW, CION (M6X18)	
355	1-833-118-11	POWER-SUPPLY CORD SET	
		(Except KLV-40S200A(OCE))	
	1-833-117-11	POWER-SUPPLY CORD SET (KLV-40S200A(OCE))	
356	* 2-680-548-01	INDIVIDUAL CARTON (KLV-40S200A)	
	* 2-682-388-01	INDIVIDUAL CARTON (KLV-46S200A)	
357	1-831-554-11	CABLE ASSY (15P DSUB CONNECTOR)	
358	* 2-680-545-01	BOARD, TOP (KLV-40S200A)	
	* 2-682-390-01	BOARD, TOP (KLV-46S200A)	

REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
359	1-479-841-11	REMOTE COMMANDER (RM-GA005)	
	9-885-099-05	REMOTE COMMANDER BATTERY COVER	
360	* 2-676-374-01	CUSHION (UPPER) (KLV-40S200A)	
	* 2-682-210-01	CUSHION (UPPER) (KLV-46S200A)	
361	* 2-676-373-01	CUSHION (LOWER) (KLV-40S200A)	
	* 2-682-211-01	CUSHION (LOWER) (KLV-46S200A)	
362	2-680-547-11	BAG PROTECTION	
363	* 2-680-546-01	TRAY (KLV-40S200A)	
	* 2-680-389-01	TRAY (KLV-46S200A)	
364	1-769-175-21	ANTENNA CABLE	

SECTION 5 ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

- All resistors are in ohms
- F : nonflammable

CAPACITORS

- MF : μ F, PF : μ μ F

COILS

- MMH : mH, UH : μ H

REF NO.	PART NO.	DESCRIPTION	REMARK	REF NO.	PART NO.	DESCRIPTION	REMARK
	* A-1182-675-A	AG BOARD, MOUNTED *****		C7024	1-127-573-11	CERAMIC CHIP	1UF 10% 16V
		<CAPACITOR>		C7025	1-127-573-11	CERAMIC CHIP	1UF 10% 16V
C2013	1-127-715-91	CERAMIC CHIP	0.22UF 10% 16V	C7027	1-127-573-11	CERAMIC CHIP	1UF 10% 16V
C2015	1-117-681-11	ELECT CHIP	100UF 20.00% 16V	C7028	1-126-396-11	ELECT CHIP	47UF 20.00% 16V
C2016	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	C7029	1-127-573-11	CERAMIC CHIP	1UF 10% 16V
C2017	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	C7030	1-100-566-91	CERAMIC CHIP	0.1UF 10.00% 25V
C2018	1-127-715-91	CERAMIC CHIP	0.22UF 10% 16V	C7033	1-127-573-11	CERAMIC CHIP	1UF 10% 16V
C2019	1-124-779-00	ELECT CHIP	10UF 20.00% 16V	C7034	1-124-779-00	ELECT CHIP	10UF 20.00% 16V
C2020	1-127-715-91	CERAMIC CHIP	0.22UF 10% 16V	C7035	1-127-573-11	CERAMIC CHIP	1UF 10% 16V
C2021	1-127-715-91	CERAMIC CHIP	0.22UF 10% 16V	C7036	1-127-573-11	CERAMIC CHIP	1UF 10% 16V
C2023	1-117-681-11	ELECT CHIP	100UF 20.00% 16V	C7037	1-127-573-11	CERAMIC CHIP	1UF 10% 16V
C2024	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	C7038	1-126-394-11	ELECT CHIP	10UF 20.00% 16V
C2025	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	C7039	1-100-566-91	CERAMIC CHIP	0.1UF 10.00% 25V
C2026	1-125-889-91	CERAMIC CHIP	2.2UF 10% 10V	C7040	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V
C2030	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V	C7042	1-162-966-11	CERAMIC CHIP	0.0022UF 10.00% 50V
C6001 Δ	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V	C7043	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V
C6003	1-117-681-11	ELECT CHIP	100UF 20.00% 16V	C7044	1-126-204-11	ELECT CHIP	47UF 20.00% 16V
C6005 Δ	1-164-227-11	CERAMIC CHIP	0.022UF 10.00% 25V	C7045	1-162-966-11	CERAMIC CHIP	0.0022UF 10.00% 50V
C6006	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V	C7046	1-162-966-11	CERAMIC CHIP	0.0022UF 10.00% 50V
C6009	1-100-743-91	CERAMIC CHIP	2.2UF 20% 16V	C7047	1-162-966-11	CERAMIC CHIP	0.0022UF 10.00% 50V
C6011	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V	C7048	1-162-966-11	CERAMIC CHIP	0.0022UF 10.00% 50V
C6014	1-162-968-11	CERAMIC CHIP	0.0047UF 10.00% 50V	C7049	1-162-966-11	CERAMIC CHIP	0.0022UF 10.00% 50V
C6015	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V	C7050	1-162-966-11	CERAMIC CHIP	0.0022UF 10.00% 50V
C6016	1-164-227-11	CERAMIC CHIP	0.022UF 10.00% 25V	C7051	1-127-573-11	CERAMIC CHIP	1UF 10% 16V
C6017	1-126-204-11	ELECT CHIP	47UF 20.00% 16V	C7052	1-127-573-11	CERAMIC CHIP	1UF 10% 16V
C6018	1-100-743-91	CERAMIC CHIP	2.2UF 20% 16V	C7053	1-126-394-11	ELECT CHIP	10UF 20.00% 16V
C6019	1-162-966-11	CERAMIC CHIP	0.0022UF 10.00% 50V	C7054	1-126-394-11	ELECT CHIP	10UF 20.00% 16V
C6020	1-127-715-91	CERAMIC CHIP	0.22UF 10% 16V	C7055	1-100-566-91	CERAMIC CHIP	0.1UF 10.00% 25V
C6022	1-127-760-11	CERAMIC CHIP	4.7UF 10% 6.3V	C7056	1-162-966-11	CERAMIC CHIP	0.0022UF 10.00% 50V
C6023	1-128-995-21	ELECT CHIP	100UF 20% 10V	C7057	1-126-396-11	ELECT CHIP	47UF 20.00% 16V
C6024	1-115-416-11	CERAMIC CHIP	0.001UF 5.00% 25V	C7060	1-115-416-11	CERAMIC CHIP	0.001UF 5.00% 25V
C6025	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V	C7061	1-115-416-11	CERAMIC CHIP	0.001UF 5.00% 25V
C6026	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V	C7062	1-115-416-11	CERAMIC CHIP	0.001UF 5.00% 25V
C6027	1-117-681-11	ELECT CHIP	100UF 20.00% 16V	C7063	1-115-416-11	CERAMIC CHIP	0.001UF 5.00% 25V
C7004	1-162-906-11	CERAMIC CHIP	1.5PF 0.25PF 50V	C7064	1-115-416-11	CERAMIC CHIP	0.001UF 5.00% 25V
C7005	1-162-906-11	CERAMIC CHIP	1.5PF 0.25PF 50V	C7065	1-115-416-11	CERAMIC CHIP	0.001UF 5.00% 25V
C7007	1-162-968-11	CERAMIC CHIP	0.0047UF 10.00% 50V	C7072	1-128-536-11	ELECT CHIP	100UF 20.00% 25V
C7010	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	C7073	1-126-396-11	ELECT CHIP	47UF 20.00% 16V
C7011	1-126-396-11	ELECT CHIP	47UF 20.00% 16V	C7075	1-100-912-11	CERAMIC CHIP	1UF 10% 25V
C7012	1-162-927-11	CERAMIC CHIP	100PF 5.00% 50V	C7076	1-100-912-11	CERAMIC CHIP	1UF 10% 25V
C7013	1-162-927-11	CERAMIC CHIP	100PF 5.00% 50V	C7082	1-115-416-11	CERAMIC CHIP	0.001UF 5.00% 25V
C7014	1-162-962-11	CERAMIC CHIP	470PF 10.00% 50V	C7083	1-115-340-11	CERAMIC CHIP	0.22UF 10.00% 25V
C7015	1-162-960-11	CERAMIC CHIP	220PF 10.00% 50V	C7086	1-100-912-11	CERAMIC CHIP	1UF 10% 25V
C7017	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	C7087	1-100-912-11	CERAMIC CHIP	1UF 10% 25V
C7018	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	C7088	1-126-394-11	ELECT CHIP	10UF 20.00% 16V
C7019	1-126-394-11	ELECT CHIP	10UF 20.00% 16V	C7089	1-126-394-11	ELECT CHIP	10UF 20.00% 16V
C7020	1-100-566-91	CERAMIC CHIP	0.1UF 10.00% 25V	C7090	1-126-394-11	ELECT CHIP	10UF 20.00% 16V
C7021	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	C7091	1-126-394-11	ELECT CHIP	10UF 20.00% 16V
C7023	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	C7092	1-162-965-11	CERAMIC CHIP	0.0015UF 10.00% 50V
				C7093	1-164-217-11	CERAMIC CHIP	150PF 5.00% 50V
				C7094	1-164-217-11	CERAMIC CHIP	150PF 5.00% 50V



REF NO.	PART NO.	DESCRIPTION	REMARK			REF NO.	PART NO.	DESCRIPTION	REMARK		
C7095	1-162-965-11	CERAMIC CHIP	0.0015UF	10.00%	50V	C9022	1-125-889-91	CERAMIC CHIP	2.2UF	10%	10V
C7096	1-162-965-11	CERAMIC CHIP	0.0015UF	10.00%	50V	C9023	1-127-573-11	CERAMIC CHIP	1UF	10%	16V
C7097	1-164-217-11	CERAMIC CHIP	150PF	5.00%	50V	C9024	1-127-573-11	CERAMIC CHIP	1UF	10%	16V
C7098	1-164-217-11	CERAMIC CHIP	150PF	5.00%	50V	C9032	1-115-416-11	CERAMIC CHIP	0.001UF	5.00%	25V
C7099	1-162-965-11	CERAMIC CHIP	0.0015UF	10.00%	50V	C9302	1-128-396-11	ELECT CHIP	470UF	20%	10V
C7100	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V	C9307	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C7101	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V	C9308	1-126-204-11	ELECT CHIP	47UF	20.00%	16V
C7102	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V	C9309	1-124-779-00	ELECT CHIP	10UF	20.00%	16V
C7103	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V	C9310	1-124-779-00	ELECT CHIP	10UF	20.00%	16V
C7104	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V	C9311	1-124-779-00	ELECT CHIP	10UF	20.00%	16V
C7105	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V	C9501	1-115-416-11	CERAMIC CHIP	0.001UF	5.00%	25V
C7106	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V	C9502	1-115-416-11	CERAMIC CHIP	0.001UF	5.00%	25V
C7107	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V	C9512	1-115-416-11	CERAMIC CHIP	0.001UF	5.00%	25V
C7108	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V			<CONNECTOR>			
C7109	1-162-959-11	CERAMIC CHIP	330PF	5.00%	50V	CN7001	1-780-148-11	CLIP, SHIELD			
C7110	1-162-959-11	CERAMIC CHIP	330PF	5.00%	50V	CN7002	1-780-148-11	CLIP, SHIELD			
C7111	1-162-959-11	CERAMIC CHIP	330PF	5.00%	50V	CN7503	1-820-211-11	HEADER ASSEMBLY FOR PWB			
C7112	1-162-959-11	CERAMIC CHIP	330PF	5.00%	50V	CN9001	1-820-192-11	HEADER ASSEMBLY (PRINT PWB)15P			
C7113	1-112-797-11	ELECT CHIP	470UF	20%	25V	CN9501	1-819-390-51	FFC/FPC CONNECTOR (ZIF) 49P			
C7114	1-112-800-11	ELECT CHIP	100UF	20%	35V	CN9502	1-820-186-11	HEADER ASSEMBLY (PRINT PWB)			
C7115	1-112-800-11	ELECT CHIP	100UF	20%	35V	CN9521	1-780-336-11	EARTH TERMINAL			
C7116	1-112-800-11	ELECT CHIP	100UF	20%	35V	CN9522	1-780-336-11	EARTH TERMINAL			
C7117	1-112-800-11	ELECT CHIP	100UF	20%	35V	CN9523	1-780-336-11	EARTH TERMINAL			
C7118	1-100-912-11	CERAMIC CHIP	1UF	10%	25V	CN9702	1-820-183-11	HEADER ASSEMBLY (PRINT PWB)			
C7119	1-100-912-11	CERAMIC CHIP	1UF	10%	25V			<DIODE>			
C7120	1-100-912-11	CERAMIC CHIP	1UF	10%	25V	D6001	8-719-058-24	DIODE RB501V-40TE-17			
C7121	1-100-912-11	CERAMIC CHIP	1UF	10%	25V	D7001	6-500-551-01	DIODE MM3Z11VT1			
C7122	1-125-827-91	CERAMIC CHIP	1UF	10.00%	25V	D7004	8-719-050-37	DIODE M1MA152WA-T1			
C7123	1-125-827-91	CERAMIC CHIP	1UF	10.00%	25V	D7005	8-719-081-97	DIODE MMDL914T1			
C7124	1-125-827-91	CERAMIC CHIP	1UF	10.00%	25V	D7006	8-719-081-97	DIODE MMDL914T1			
C7125	1-125-827-91	CERAMIC CHIP	1UF	10.00%	25V	D7007	8-719-081-97	DIODE MMDL914T1			
C7126	1-125-827-91	CERAMIC CHIP	1UF	10.00%	25V	D7009	6-500-884-01	DIODE P6SMBJ30A-5			
C7127	1-100-591-91	CERAMIC CHIP	1UF	10%	25V	D7010	6-500-884-01	DIODE P6SMBJ30A-5			
C7128	1-100-591-91	CERAMIC CHIP	1UF	10%	25V	D7011	6-500-884-01	DIODE P6SMBJ30A-5			
C7147	1-100-591-91	CERAMIC CHIP	1UF	10%	25V	D7012	6-500-884-01	DIODE P6SMBJ30A-5			
C7148	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V	D7013	8-719-081-97	DIODE MMDL914T1			
C7600	1-124-779-00	ELECT CHIP	10UF	20.00%	16V	D7602	8-719-050-37	DIODE M1MA152WA-T1			
C7601	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V	D7603	8-719-050-37	DIODE M1MA152WA-T1			
C7602	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V	D7604	8-719-081-97	DIODE MMDL914T1			
C7603	1-127-573-11	CERAMIC CHIP	1UF	10%	16V	D7605	8-719-081-97	DIODE MMDL914T1			
C7604	1-127-573-11	CERAMIC CHIP	1UF	10%	16V	D9001	8-719-977-28	DIODE DTZ10B			
C7605	1-126-204-11	ELECT CHIP	47UF	20.00%	16V	D9002	8-719-977-28	DIODE DTZ10B			
C7609	1-126-394-11	ELECT CHIP	10UF	20.00%	16V	D9003	8-719-977-28	DIODE DTZ10B			
C7610	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V	D9004	8-719-977-28	DIODE DTZ10B			
C7611	1-124-779-00	ELECT CHIP	10UF	20.00%	16V	D9008	8-719-977-28	DIODE DTZ10B			
C7612	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V	D9009	8-719-977-28	DIODE DTZ10B			
C7613	1-124-779-00	ELECT CHIP	10UF	20.00%	16V	D9012	8-719-977-28	DIODE DTZ10B			
C7614	1-124-779-00	ELECT CHIP	10UF	20.00%	16V	D9013	8-719-977-28	DIODE DTZ10B			
C7615	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V	D9014	8-719-977-28	DIODE DTZ10B			
C7616	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V	D9015	8-719-977-28	DIODE DTZ10B			
C7617	1-126-396-11	ELECT CHIP	47UF	20.00%	16V	D9016	8-719-977-28	DIODE DTZ10B			
C7618	1-126-396-11	ELECT CHIP	47UF	20.00%	16V	D9017	8-719-977-28	DIODE DTZ10B			
C7619	1-100-597-91	CERAMIC CHIP	0.1UF	10%	25V	D9018	8-719-977-28	DIODE DTZ10B			
C9005	1-127-573-11	CERAMIC CHIP	1UF	10%	16V	D9305	8-719-050-37	DIODE M1MA152WA-T1			
C9006	1-127-573-11	CERAMIC CHIP	1UF	10%	16V	D9306	8-719-081-97	DIODE MMDL914T1			
C9007	1-127-573-11	CERAMIC CHIP	1UF	10%	16V						
C9008	1-127-573-11	CERAMIC CHIP	1UF	10%	16V						
C9014	1-127-573-11	CERAMIC CHIP	1UF	10%	16V						
C9015	1-127-573-11	CERAMIC CHIP	1UF	10%	16V						
C9016	1-125-891-11	CERAMIC CHIP	0.47UF	10.00%	10V						
C9019	1-125-889-91	CERAMIC CHIP	2.2UF	10%	10V						
C9020	1-125-889-91	CERAMIC CHIP	2.2UF	10%	10V						
C9021	1-125-889-91	CERAMIC CHIP	2.2UF	10%	10V						



REF NO.	PART NO.	DESCRIPTION	REMARK
		<FERRITE BEAD>	
FB7000	1-400-089-21	FERRITE	0UH
FB7001	1-400-089-21	FERRITE	0UH
FB7002	1-400-089-21	FERRITE	0UH
FB7003	1-400-089-21	FERRITE	0UH
FB7004	1-400-040-22	FERRITE	0UH
FB7005	1-400-040-22	FERRITE	0UH
FB9003	1-216-864-11	SHORT CHIP	0
FB9100	1-400-089-21	FERRITE	0UH
FB9101	1-400-089-21	FERRITE	0UH
		<IC>	
IC2001	8-752-089-33	IC CXA2069Q-TL	
IC7001	6-709-191-01	IC MSP4410K-QA-D6-501	
IC7003	8-759-278-58	IC NJM4558V-TE2	
IC7007	6-709-285-01	IC M61571AFP-DF0T	
IC7601	8-759-278-58	IC NJM4558V-TE2	
IC7602	8-759-359-49	IC NJM3414AV(TE2)	
		<JACK>	
J9001	1-780-271-11	S CONNECTOR BLOCK	
J9002	1-819-357-11	PHONO JACK 10P	
* J9003	1-819-358-11	PHONO JACK	
J9301	1-819-387-11	PHONO JACK 3P	
		<COIL>	
L2002	1-469-557-21	INDUCTOR	22UH
L2003	1-469-555-21	INDUCTOR	10UH
L6001	1-469-555-21	INDUCTOR	10UH
L7002	1-400-794-21	FERRITE	0UH
L7004	1-400-794-21	FERRITE	0UH
L7005	1-469-555-21	INDUCTOR	10UH
L7006	1-400-794-21	FERRITE	0UH
L7007	1-469-555-21	INDUCTOR	10UH
L7008	1-481-083-11	INDUCTOR	22UH
L7009	1-457-106-11	INDUCTOR	10UH
L7010	1-457-106-11	INDUCTOR	10UH
L7011	1-216-864-11	SHORT CHIP	0
L7012	1-400-794-21	FERRITE	0UH
L7013	1-400-794-21	FERRITE	0UH
L9301	1-469-555-21	INDUCTOR	10UH
L9503	1-400-178-21	INDUCTOR	0UH
L9504	1-400-178-21	INDUCTOR	0UH
L9505	1-400-178-21	INDUCTOR	0UH
L9606	1-469-555-21	INDUCTOR	10UH
		<IC LINK>	
PS7001	1-576-958-21	FUSE	4A 24V
		<TRANSISTOR>	
Q2001	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q2002	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q2003	8-729-600-22	TRANSISTOR 2SA1235-F	
Q6001	8-729-600-22	TRANSISTOR 2SA1235-F	
Q6002	8-729-600-22	TRANSISTOR 2SA1235-F	
Q6004	8-729-600-22	TRANSISTOR 2SA1235-F	
Q6005	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

REF NO.	PART NO.	DESCRIPTION	REMARK
Q6007	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6008	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6009	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6011	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6012	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6013	8-729-600-22	TRANSISTOR 2SA1235-F	
Q7000	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q7001	8-729-600-22	TRANSISTOR 2SA1235-F	
Q7002	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q7005	8-729-600-22	TRANSISTOR 2SA1235-F	
Q7007	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q7008	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q7009	8-729-600-22	TRANSISTOR 2SA1235-F	
Q7010	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q7011	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q7012	8-729-141-73	TRANSISTOR 2SC3624A-T1L15L16	
Q7013	8-729-141-73	TRANSISTOR 2SC3624A-T1L15L16	
Q7014	8-729-600-22	TRANSISTOR 2SA1235-F	
Q7015	8-729-600-22	TRANSISTOR 2SA1235-F	
Q7016	8-729-600-22	TRANSISTOR 2SA1235-F	
Q7017	8-729-600-22	TRANSISTOR 2SA1235-F	
Q7018	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q7019	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q7020	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q7021	8-729-028-96	TRANSISTOR DTC114EUA-T106	
Q7602	8-729-600-22	TRANSISTOR 2SA1235-F	
Q7603	8-729-141-73	TRANSISTOR 2SC3624A-T1L15L16	
Q7604	8-729-141-73	TRANSISTOR 2SC3624A-T1L15L16	
Q7605	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q7606	8-729-141-73	TRANSISTOR 2SC3624A-T1L15L16	
Q7607	8-729-141-73	TRANSISTOR 2SC3624A-T1L15L16	
Q7608	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q7609	8-729-600-22	TRANSISTOR 2SA1235-F	
Q7610	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q7611	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q9301	8-729-141-73	TRANSISTOR 2SC3624A-T1L15L16	
Q9302	8-729-141-73	TRANSISTOR 2SC3624A-T1L15L16	
Q9303	8-729-600-22	TRANSISTOR 2SA1235-F	
Q9304	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q9305	8-729-029-14	TRANSISTOR DTC144EUA-T106	
Q9306	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q9307	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		<RESISTOR>	
R2006	1-216-809-11	METAL CHIP	100 5% 1/10W
R2007	1-216-809-11	METAL CHIP	100 5% 1/10W
R2019	1-216-809-11	METAL CHIP	100 5% 1/10W
R2020	1-216-809-11	METAL CHIP	100 5% 1/10W
R2023	1-216-821-11	METAL CHIP	1K 5% 1/10W
R2024	1-216-821-11	METAL CHIP	1K 5% 1/10W
R2030	1-216-809-11	METAL CHIP	100 5% 1/10W
R2037	1-216-817-11	METAL CHIP	470 5% 1/10W
R2038	1-216-817-11	METAL CHIP	470 5% 1/10W
R2050	1-216-809-11	METAL CHIP	100 5% 1/10W
R2051	1-216-817-11	METAL CHIP	470 5% 1/10W
R2052	1-216-817-11	METAL CHIP	470 5% 1/10W
R2053	1-216-817-11	METAL CHIP	470 5% 1/10W
R6001	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R6002	1-216-809-11	METAL CHIP	100 5% 1/10W
R6003	1-216-864-11	SHORT CHIP	0
R6004	1-218-855-11	METAL CHIP	2.2K 0.50% 1/10W



REF NO.	PART NO.	DESCRIPTION	REMARK			REF NO.	PART NO.	DESCRIPTION	REMARK		
R6007	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R7066	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W
R6008	1-218-879-11	METAL CHIP	22K	0.50%	1/10W	R7067	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6009	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R7087	1-216-857-11	METAL CHIP	1M	5%	1/10W
R6012	1-216-817-11	METAL CHIP	470	5%	1/10W	R7088	1-216-837-11	METAL CHIP	22K	5%	1/10W
R6013	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R7093	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6014	1-218-889-11	METAL CHIP	56K	0.50%	1/10W	R7101	1-216-845-11	METAL CHIP	100K	5%	1/10W
R6017	1-216-857-11	METAL CHIP	1M	5%	1/10W	R7102	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6020	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R7103	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W
R6021	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R7111	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6023	1-216-821-11	METAL CHIP	1K	5%	1/10W	R7112	1-216-864-11	SHORT CHIP	0		
R6025	1-218-857-11	METAL CHIP	2.7K	0.50%	1/10W	R7113	1-218-887-11	METAL CHIP	47K	0.50%	1/10W
R6026	1-216-821-11	METAL CHIP	1K	5%	1/10W	R7114	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R6028	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W	R7115	1-218-887-11	METAL CHIP	47K	0.50%	1/10W
R6029	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W	R7116	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R6030	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R7117	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6032	1-216-857-11	METAL CHIP	1M	5%	1/10W	R7118	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R6033	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R7119	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R6034	1-216-864-11	SHORT CHIP	0			R7120	1-216-864-11	SHORT CHIP	0		
R6037	1-216-821-11	METAL CHIP	1K	5%	1/10W	R7122	1-216-864-11	SHORT CHIP	0		
R6039	1-216-815-11	METAL CHIP	330	5%	1/10W	R7124	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W
R6040	1-216-864-11	SHORT CHIP	0			R7125	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W
R6051	1-216-857-11	METAL CHIP	1M	5%	1/10W	R7126	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R6052	1-216-809-11	METAL CHIP	100	5%	1/10W	R7127	1-218-879-11	METAL CHIP	22K	0.50%	1/10W
R7000	1-216-864-11	SHORT CHIP	0			R7128	1-218-901-11	METAL CHIP	180K	0.50%	1/10W
R7001	1-216-821-11	METAL CHIP	1K	5%	1/10W	R7129	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R7003	1-216-864-11	SHORT CHIP	0			R7130	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W
R7004	1-216-841-11	METAL CHIP	47K	5%	1/10W	R7131	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W
R7007	1-216-805-11	METAL CHIP	47	5%	1/10W	R7132	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R7008	1-216-864-11	SHORT CHIP	0			R7133	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R7010	1-216-821-11	METAL CHIP	1K	5%	1/10W	R7134	1-216-296-11	SHORT CHIP	0		
R7011	1-216-845-11	METAL CHIP	100K	5%	1/10W	R7135	1-216-296-11	SHORT CHIP	0		
R7012	1-216-864-11	SHORT CHIP	0			R7136	1-216-296-11	SHORT CHIP	0		
R7014	1-216-841-11	METAL CHIP	47K	5%	1/10W	R7137	1-216-296-11	SHORT CHIP	0		
R7015	1-216-841-11	METAL CHIP	47K	5%	1/10W	R7138	1-216-800-11	METAL CHIP	18	5%	1/10W
R7017	1-216-833-11	METAL CHIP	10K	5%	1/10W	R7139	1-216-800-11	METAL CHIP	18	5%	1/10W
R7018	1-216-864-11	SHORT CHIP	0			R7140	1-216-800-11	METAL CHIP	18	5%	1/10W
R7019	1-216-864-11	SHORT CHIP	0			R7141	1-216-800-11	METAL CHIP	18	5%	1/10W
R7020	1-216-841-11	METAL CHIP	47K	5%	1/10W	R7142	1-216-845-11	METAL CHIP	100K	5%	1/10W
R7025	1-216-864-11	SHORT CHIP	0			R7143	1-216-845-11	METAL CHIP	100K	5%	1/10W
R7031	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W	R7144	1-216-845-11	METAL CHIP	100K	5%	1/10W
R7032	1-218-875-11	METAL CHIP	15K	0.50%	1/10W	R7145	1-216-845-11	METAL CHIP	100K	5%	1/10W
R7033	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W	R7146	1-216-845-11	METAL CHIP	100K	5%	1/10W
R7034	1-218-875-11	METAL CHIP	15K	0.50%	1/10W	R7147	1-216-845-11	METAL CHIP	100K	5%	1/10W
R7035	1-216-845-11	METAL CHIP	100K	5%	1/10W	R7152	1-216-833-11	METAL CHIP	10K	5%	1/10W
R7037	1-216-833-11	METAL CHIP	10K	5%	1/10W	R7153	1-216-845-11	METAL CHIP	100K	5%	1/10W
R7039	1-218-873-11	METAL CHIP	12K	0.50%	1/10W	R7154	1-216-845-11	METAL CHIP	100K	5%	1/10W
R7040	1-218-875-11	METAL CHIP	15K	0.50%	1/10W	R7155	1-216-864-11	SHORT CHIP	0		
R7041	1-216-833-11	METAL CHIP	10K	5%	1/10W	R7156	1-216-841-11	METAL CHIP	47K	5%	1/10W
R7045	1-216-833-11	METAL CHIP	10K	5%	1/10W	R7158	1-216-833-11	METAL CHIP	10K	5%	1/10W
R7047	1-216-833-11	METAL CHIP	10K	5%	1/10W	R7600	1-216-864-11	SHORT CHIP	0		
R7049	1-216-841-11	METAL CHIP	47K	5%	1/10W	R7601	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R7050	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W	R7602	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R7054	1-216-841-11	METAL CHIP	47K	5%	1/10W	R7603	1-218-873-11	METAL CHIP	12K	0.50%	1/10W
R7055	1-216-845-11	METAL CHIP	100K	5%	1/10W	R7604	1-218-875-11	METAL CHIP	15K	0.50%	1/10W
R7056	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W	R7605	1-216-841-11	METAL CHIP	47K	5%	1/10W
R7057	1-218-875-11	METAL CHIP	15K	0.50%	1/10W	R7606	1-216-841-11	METAL CHIP	47K	5%	1/10W
R7059	1-218-875-11	METAL CHIP	15K	0.50%	1/10W	R7614	1-216-833-11	METAL CHIP	10K	5%	1/10W
R7061	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R7615	1-218-873-11	METAL CHIP	12K	0.50%	1/10W
R7062	1-218-869-11	METAL CHIP	8.2K	0.50%	1/10W	R7620	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R7063	1-218-869-11	METAL CHIP	8.2K	0.50%	1/10W	R7621	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R7064	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R7622	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
						R7623	1-218-871-11	METAL CHIP	10K	0.50%	1/10W



REF NO.	PART NO.	DESCRIPTION	REMARK	REF NO.	PART NO.	DESCRIPTION	REMARK
R7626	1-216-845-11	METAL CHIP	100K 5% 1/10W	R9031	1-216-864-11	SHORT CHIP	0
R7627	1-216-845-11	METAL CHIP	100K 5% 1/10W	R9032	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7628	1-216-846-11	METAL CHIP	120K 5% 1/10W	R9033	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7629	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R9034	1-216-801-11	METAL CHIP	22 5% 1/10W
R7630	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R9035	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7631	1-216-846-11	METAL CHIP	120K 5% 1/10W	R9036	1-216-801-11	METAL CHIP	22 5% 1/10W
R7632	1-218-887-11	METAL CHIP	47K 0.50% 1/10W	R9037	1-216-801-11	METAL CHIP	22 5% 1/10W
R7633	1-218-887-11	METAL CHIP	47K 0.50% 1/10W	R9038	1-216-801-11	METAL CHIP	22 5% 1/10W
R7634	1-218-855-11	METAL CHIP	2.2K 0.50% 1/10W	R9039	1-218-285-11	METAL CHIP	75 5% 1/10W
R7635	1-218-855-11	METAL CHIP	2.2K 0.50% 1/10W	R9040	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7636	1-216-837-11	METAL CHIP	22K 5% 1/10W	R9041	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7637	1-216-857-11	METAL CHIP	1M 5% 1/10W	R9042	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7639	1-216-845-11	METAL CHIP	100K 5% 1/10W	R9043	1-216-801-11	METAL CHIP	22 5% 1/10W
R7641	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R9044	1-216-801-11	METAL CHIP	22 5% 1/10W
R7642	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R9045	1-216-864-11	SHORT CHIP	0
R7643	1-216-845-11	METAL CHIP	100K 5% 1/10W	R9046	1-216-864-11	SHORT CHIP	0
R7644	1-216-813-11	METAL CHIP	220 5% 1/10W	R9057	1-216-809-11	METAL CHIP	100 5% 1/10W
R7646	1-216-813-11	METAL CHIP	220 5% 1/10W	R9058	1-216-809-11	METAL CHIP	100 5% 1/10W
R7650	1-216-841-11	METAL CHIP	47K 5% 1/10W	R9059	1-216-821-11	METAL CHIP	1K 5% 1/10W
R7651	1-216-864-11	SHORT CHIP	0	R9060	1-216-821-11	METAL CHIP	1K 5% 1/10W
R7652	1-216-864-11	SHORT CHIP	0	R9061	1-216-809-11	METAL CHIP	100 5% 1/10W
R7653	1-216-864-11	SHORT CHIP	0	R9062	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7654	1-216-841-11	METAL CHIP	47K 5% 1/10W	R9063	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7655	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R9064	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7656	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R9065	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7657	1-216-837-11	METAL CHIP	22K 5% 1/10W	R9066	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7658	1-216-857-11	METAL CHIP	1M 5% 1/10W	R9067	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7659	1-216-833-11	METAL CHIP	10K 5% 1/10W	R9068	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7660	1-216-841-11	METAL CHIP	47K 5% 1/10W	R9069	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7661	1-216-864-11	SHORT CHIP	0	R9070	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R7662	1-216-841-11	METAL CHIP	47K 5% 1/10W	R9078	1-216-809-11	METAL CHIP	100 5% 1/10W
R7663	1-216-833-11	METAL CHIP	10K 5% 1/10W	R9086	1-216-864-11	SHORT CHIP	0
R7682	1-216-864-11	SHORT CHIP	0	R9087	1-216-864-11	SHORT CHIP	0
R7683	1-216-864-11	SHORT CHIP	0	R9088	1-216-849-11	METAL CHIP	220K 5% 1/10W
R7684	1-216-864-11	SHORT CHIP	0	R9089	1-216-849-11	METAL CHIP	220K 5% 1/10W
R9004	1-216-853-11	METAL CHIP	470K 5% 1/10W	R9095	1-216-821-11	METAL CHIP	1K 5% 1/10W
R9005	1-216-853-11	METAL CHIP	470K 5% 1/10W	R9096	1-216-821-11	METAL CHIP	1K 5% 1/10W
R9006	1-216-853-11	METAL CHIP	470K 5% 1/10W	R9097	1-216-821-11	METAL CHIP	1K 5% 1/10W
R9007	1-216-853-11	METAL CHIP	470K 5% 1/10W	R9098	1-216-821-11	METAL CHIP	1K 5% 1/10W
R9008	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R9099	1-216-821-11	METAL CHIP	1K 5% 1/10W
R9009	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R9100	1-216-821-11	METAL CHIP	1K 5% 1/10W
R9010	1-216-864-11	SHORT CHIP	0	R9101	1-216-821-11	METAL CHIP	1K 5% 1/10W
R9011	1-216-864-11	SHORT CHIP	0	R9102	1-216-821-11	METAL CHIP	1K 5% 1/10W
R9012	1-216-864-11	SHORT CHIP	0	R9150	1-216-864-11	SHORT CHIP	0
R9013	1-216-864-11	SHORT CHIP	0	R9151	1-216-864-11	SHORT CHIP	0
R9014	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R9152	1-216-864-11	SHORT CHIP	0
R9015	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R9153	1-216-864-11	SHORT CHIP	0
R9016	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R9154	1-216-864-11	SHORT CHIP	0
R9017	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R9155	1-216-864-11	SHORT CHIP	0
R9018	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R9156	1-216-864-11	SHORT CHIP	0
R9019	1-216-853-11	METAL CHIP	470K 5% 1/10W	R9157	1-216-864-11	SHORT CHIP	0
R9020	1-216-853-11	METAL CHIP	470K 5% 1/10W	R9158	1-216-864-11	SHORT CHIP	0
R9021	1-216-853-11	METAL CHIP	470K 5% 1/10W	R9304	1-216-849-11	METAL CHIP	220K 5% 1/10W
R9022	1-216-853-11	METAL CHIP	470K 5% 1/10W	R9309	1-218-285-11	METAL CHIP	75 5% 1/10W
R9023	1-216-864-11	SHORT CHIP	0	R9312	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R9024	1-216-864-11	SHORT CHIP	0	R9315	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R9025	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R9318	1-218-887-11	METAL CHIP	47K 0.50% 1/10W
R9026	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R9319	1-218-855-11	METAL CHIP	2.2K 0.50% 1/10W
R9027	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R9320	1-218-887-11	METAL CHIP	47K 0.50% 1/10W
R9028	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R9321	1-218-855-11	METAL CHIP	2.2K 0.50% 1/10W
R9029	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R9322	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R9030	1-216-864-11	SHORT CHIP	0				



REF NO.	PART NO.	DESCRIPTION	REMARK			REF NO.	PART NO.	DESCRIPTION	REMARK		
R9323	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	C1011	1-126-206-11	ELECT CHIP	100UF	20.00%	6.3V
R9324	1-216-837-11	METAL CHIP	22K	5%	1/10W	C1012	1-100-591-91	CERAMIC CHIP	1UF	10%	25V
R9325	1-216-857-11	METAL CHIP	1M	5%	1/10W	C1015	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
R9326	1-216-841-11	METAL CHIP	47K	5%	1/10W	C1016	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
R9328	1-216-841-11	METAL CHIP	47K	5%	1/10W	C1017	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
R9329	1-216-833-11	METAL CHIP	10K	5%	1/10W	C1018	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
R9330	1-216-864-11	SHORT CHIP	0			C1019	1-162-912-11	CERAMIC CHIP	7PF	0.50PF	50V
R9331	1-216-864-11	SHORT CHIP	0			C1022	1-126-392-11	ELECT CHIP	100UF	20.00%	6.3V
R9332	1-216-864-11	SHORT CHIP	0			C1023	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
R9333	1-216-864-11	SHORT CHIP	0			C1024	1-126-392-11	ELECT CHIP	100UF	20.00%	6.3V
R9334	1-216-864-11	SHORT CHIP	0			C1027	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
R9501	1-216-864-11	SHORT CHIP	0			C1029	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
R9502	1-216-864-11	SHORT CHIP	0			C1033	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
R9506	1-218-873-11	METAL CHIP	12K	0.50%	1/10W	C1035	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
R9545	1-216-864-11	SHORT CHIP	0			C1036	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
		<VARISTOR>				C1044	1-100-591-91	CERAMIC CHIP	1UF	10%	25V
VD9001	8-719-977-28	DIODE DTZ10B				C1046	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
VD9002	8-719-977-28	DIODE DTZ10B				C1047	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
VD9003	8-719-977-28	DIODE DTZ10B				C1048	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
VD9004	8-719-977-28	DIODE DTZ10B				C1049	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
VD9005	8-719-977-28	DIODE DTZ10B				C1050	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
VD9006	8-719-977-28	DIODE DTZ10B				C1051	1-126-394-11	ELECT CHIP	10UF	20.00%	16V
VD9007	8-719-977-28	DIODE DTZ10B				C1052	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
VD9008	8-719-977-28	DIODE DTZ10B				C1053	1-126-394-11	ELECT CHIP	10UF	20.00%	16V
VD9009	8-719-977-28	DIODE DTZ10B				C1054	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
VD9010	8-719-977-28	DIODE DTZ10B				C1056	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
VD9011	8-719-977-28	DIODE DTZ10B				C1057	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
VD9012	8-719-977-28	DIODE DTZ10B				C1060	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
VD9025	1-802-082-11	VARISTOR (SMD)				C1061	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
VD9026	1-802-082-11	VARISTOR (SMD)				C1062	1-126-394-11	ELECT CHIP	10UF	20.00%	16V
VD9303	1-802-082-11	VARISTOR (SMD)				C1063	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
VD9304	1-802-082-11	VARISTOR (SMD)				C1066	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
VD9305	1-802-082-11	VARISTOR (SMD)				C1067	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
		<CRYSTAL>				C1068	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
X7000	1-795-612-11	VIBRATOR, CRYSTAL				C1069	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
						C1070	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
						C1071	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
						C1072	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
						C1073	1-126-390-11	ELECT CHIP	22UF	20.00%	6.3V
						C1074	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
						C1075	1-162-966-11	CERAMIC CHIP	0.0022UF	10.00%	50V
						C1076	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
						C1079	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
						C1080	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
						C1081	1-126-391-11	ELECT CHIP	47UF	20.00%	6.3V
						C1082	1-126-394-11	ELECT CHIP	10UF	20.00%	16V
						C1083	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
						C1084	1-115-416-11	CERAMIC CHIP	0.001UF	5.00%	25V
						C1085	1-115-456-21	DOUBLE LAYER	0.22F		5.5V
						C1087	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
						C1091	1-126-396-11	ELECT CHIP	47UF	20.00%	16V
						C1092	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
						C1093	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
						C1094	1-117-681-11	ELECT CHIP	100UF	20.00%	16V
						C1100	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
						C1110	1-125-777-11	CERAMIC CHIP	0.1UF	10.00%	10V
						C1701	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
						C1704	1-100-831-91	CERAMIC CHIP	0.001UF	2%	50V
						C1706	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
						C1707	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
						C1708	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C1001	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V						
C1003	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V						
C1004	1-162-974-11	CERAMIC CHIP	0.01UF		50V						
C1005	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V						
C1006	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V						
C1007	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V						
C1010	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V						

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REF NO.	PART NO.	DESCRIPTION	REMARK			REF NO.	PART NO.	DESCRIPTION	REMARK		
C1710	1-100-831-91	CERAMIC CHIP	0.001UF	2%	50V	C5255	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C1711	1-100-831-91	CERAMIC CHIP	0.001UF	2%	50V	C5256	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C1712	1-100-162-91	CERAMIC CHIP	1UF		50V	C5257	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5000	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5258	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5002	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5259	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5003	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5260	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5005	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5262	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5006	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5265	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C5007	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5269	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C5009	1-162-905-11	CERAMIC CHIP	1PF	0.25PF	50V	C5270	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C5010	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5271	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C5011	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5273	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C5012	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5274	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C5013	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5278	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5014	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5279	1-125-837-91	CERAMIC CHIP	1UF	10%	6.3V
C5015	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5280	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5016	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5281	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5017	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5502	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C5018	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5503	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5019	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5504	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C5020	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5506	1-126-392-11	ELECT CHIP	100UF	20.00%	6.3V
C5021	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C5507	1-162-968-11	CERAMIC CHIP	0.0047UF	10.00%	50V
C5022	1-162-905-11	CERAMIC CHIP	1PF	0.25PF	50V	C5508	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C5023	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V	C5510	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C5024	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V	C5512	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5025	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V	C5513	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5027	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V	C5514	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C5028	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V	C6002	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5032	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V	C6003	1-127-573-11	CERAMIC CHIP	1UF	10%	16V
C5033	1-117-681-11	ELECT CHIP	100UF	20.00%	16V	C6004	1-127-573-11	CERAMIC CHIP	1UF	10%	16V
C5201	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C6005	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C5202	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C6006	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C5204	1-126-392-11	ELECT CHIP	100UF	20.00%	6.3V	C6008	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
C5205	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C6009	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C5208	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V	C6012	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
C5209	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V	C6013	1-127-573-11	CERAMIC CHIP	1UF	10%	16V
C5210	1-126-392-11	ELECT CHIP	100UF	20.00%	6.3V	C6014	1-127-573-11	CERAMIC CHIP	1UF	10%	16V
C5211	1-126-392-11	ELECT CHIP	100UF	20.00%	6.3V	C7000	1-100-591-91	CERAMIC CHIP	1UF	10%	25V
C5212	1-162-979-11	CERAMIC CHIP	0.0027UF	10.00%	50V	C7001	1-112-064-11	CERAMIC CHIP	2.2UF	10%	10V
C5213	1-162-979-11	CERAMIC CHIP	0.0027UF	10.00%	50V	C7002	1-112-064-11	CERAMIC CHIP	2.2UF	10%	10V
C5216	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C7003	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V
C5217	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C7004	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V
C5218	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C7005	1-162-966-11	CERAMIC CHIP	0.0022UF	10.00%	50V
C5219	1-126-392-11	ELECT CHIP	100UF	20.00%	6.3V	C7006	1-162-966-11	CERAMIC CHIP	0.0022UF	10.00%	50V
C5220	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V	C7007	1-100-552-21	ELECT CHIP	10UF	20%	25V
C5221	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C7008	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C5222	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C7009	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V
C5224	1-126-392-11	ELECT CHIP	100UF	20.00%	6.3V	C7010	1-127-573-11	CERAMIC CHIP	1UF	10%	16V
C5225	1-162-960-11	CERAMIC CHIP	220PF	10.00%	50V	C7011	1-128-536-11	ELECT CHIP	100UF	20.00%	25V
C5226	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C7012	1-110-648-11	ELECT CHIP	220UF	20.00%	25V
C5230	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V	C7013	1-100-591-91	CERAMIC CHIP	1UF	10%	25V
C5231	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C7014	1-100-591-91	CERAMIC CHIP	1UF	10%	25V
C5234	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V	C7015	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C5236	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V	C7016	1-100-591-91	CERAMIC CHIP	1UF	10%	25V
C5237	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V	C7017	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C5239	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C7023	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C5240	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V	C7025	1-125-827-91	CERAMIC CHIP	1UF	10.00%	25V
C5241	1-126-392-11	ELECT CHIP	100UF	20.00%	6.3V	C7026	1-125-827-91	CERAMIC CHIP	1UF	10.00%	25V
C5246	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V	C7027	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C5250	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V	C7028	1-112-794-11	ELECT CHIP	470UF	20%	16V
C5252	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V	C7030	1-112-794-11	ELECT CHIP	470UF	20%	16V
C5253	1-126-392-11	ELECT CHIP	100UF	20.00%	6.3V	C7031	1-165-673-21	ELECT CHIP	56UF	20%	10V
C5254	1-126-392-11	ELECT CHIP	100UF	20.00%	6.3V						



REF NO.	PART NO.	DESCRIPTION	REMARK	REF NO.	PART NO.	DESCRIPTION	REMARK
C7032	1-165-673-21	ELECT CHIP	56UF 20% 10V	D1007	8-719-077-59	DIODE 1PS302	
C7034	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	D1020	8-719-036-94	DIODE RD5.6SB-T1	
C7035	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	D1021	8-719-036-94	DIODE RD5.6SB-T1	
C7036	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V	D1701	8-719-064-03	DIODE HZU16B2TRF-E	
C7037	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V	D1702	8-719-064-03	DIODE HZU16B2TRF-E	
C7040	1-126-392-11	ELECT CHIP	100UF 20.00% 6.3V	D6000	8-719-036-94	DIODE RD5.6SB-T1	
C7041	1-100-566-91	CERAMIC CHIP	0.1UF 10.00% 25V	D6001	8-719-036-94	DIODE RD5.6SB-T1	
C7042	1-126-392-11	ELECT CHIP	100UF 20.00% 6.3V	D6002	8-719-036-94	DIODE RD5.6SB-T1	
C7047	1-100-566-91	CERAMIC CHIP	0.1UF 10.00% 25V	D6003	8-719-050-38	DIODE M1MA152WK-T1	
C7051	1-135-595-11	ELECT	100UF 20% 6.3V	D7000	8-719-081-97	DIODE MMDL914T1	
C7052	1-165-673-21	ELECT CHIP	56UF 20% 10V	D7001	6-501-336-01	DIODE RSX201L-30TE25	
C7054	1-100-597-91	CERAMIC CHIP	0.1UF 10% 25V	D7003	8-719-081-97	DIODE MMDL914T1	
C7056	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V	D7004	8-719-072-43	DIODE RB050L-40TE25	
C7057	1-127-760-11	CERAMIC CHIP	4.7UF 10% 6.3V	D7005	8-719-072-43	DIODE RB050L-40TE25	
C7058	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V	D7006	6-501-336-01	DIODE RSX201L-30TE25	
C7100	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V	D7008	6-500-579-01	DIODE PTZ-TE25-6.8B	
C7101	1-110-648-11	ELECT CHIP	220UF 20.00% 25V	D7009	8-719-073-69	DIODE PTZ-TE25-6.2A	
C7515	1-164-937-11	CERAMIC CHIP	0.001UF 10.00% 50V	D7010	8-719-056-83	DIODE UDZ-TE-17-6.8B	
C7525	1-164-937-11	CERAMIC CHIP	0.001UF 10.00% 50V	D7014	8-719-056-83	DIODE UDZ-TE-17-6.8B	
C9002	1-124-779-00	ELECT CHIP	10UF 20.00% 16V	D7500	8-719-056-84	DIODE UDZ-TE-17-7.5B	
C9003	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V	D7508	8-719-081-97	DIODE MMDL914T1	
C9005	1-125-777-11	CERAMIC CHIP	0.1UF 10.00% 10V	D7509	8-719-081-97	DIODE MMDL914T1	
C9007	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	D7510	8-719-081-97	DIODE MMDL914T1	
C9008	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	D9004	8-719-081-97	DIODE MMDL914T1	
C9009	1-100-567-81	CERAMIC CHIP	10000PF 10% 25V	D9013	8-719-081-97	DIODE MMDL914T1	
C9011	1-125-777-11	CERAMIC CHIP	0.1UF 10.00% 10V	D9014	8-719-050-37	DIODE M1MA152WA-T1	
C9012	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V	D9015	8-719-081-97	DIODE MMDL914T1	
C9013	1-125-777-11	CERAMIC CHIP	0.1UF 10.00% 10V				
C9014	1-124-779-00	ELECT CHIP	10UF 20.00% 16V			<FUSE>	
C9030	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V	F7000	1-576-603-21	FUSE	3.15A 24V
C9031	1-164-937-11	CERAMIC CHIP	0.001UF 10.00% 50V				
C9032	1-164-937-11	CERAMIC CHIP	0.001UF 10.00% 50V				
C9033	1-100-566-91	CERAMIC CHIP	0.1UF 10.00% 25V			<FERRITE BEAD>	
C9034	1-126-396-11	ELECT CHIP	47UF 20.00% 16V	FB1001	1-414-227-11	FERRITE	0UH
C9035	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	FB1002	1-400-110-21	FERRITE	0UH
C9036	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	FB1003	1-414-227-11	FERRITE	0UH
C9037	1-112-064-11	CERAMIC CHIP	2.2UF 10% 10V	FB1004	1-400-110-21	FERRITE	0UH
C9038	1-112-064-11	CERAMIC CHIP	2.2UF 10% 10V	FB1005	1-400-110-21	FERRITE	0UH
C9039	1-115-412-11	CERAMIC CHIP	680PF 5.00% 25V	FB1006	1-400-110-21	FERRITE	0UH
C9040	1-115-412-11	CERAMIC CHIP	680PF 5.00% 25V	FB1007	1-400-110-21	FERRITE	0UH
C9042	1-125-777-11	CERAMIC CHIP	0.1UF 10.00% 10V	FB1711	1-500-113-22	FERRITE	0UH
		<CONNECTOR>		FB1712	1-400-110-21	FERRITE	0UH
CN1001	1-819-390-51	FFC/FPC CONNECTOR (ZIF) 49P		FB1713	1-400-110-21	FERRITE	0UH
CN1003	1-779-331-51	CONNECTOR, FFC/FPC 14P		FB1715	1-400-110-21	FERRITE	0UH
CN1004	1-779-936-51	CONNECTOR, FFC/FPC 18P		FB1720	1-400-141-22	FERRITE	0UH
CN1008	1-820-187-11	HEADER ASSEMBLY (PRINT PWB)10P		FB1721	1-400-141-22	FERRITE	0UH
CN1700	1-820-187-11	HEADER ASSEMBLY (PRINT PWB)10P		FB5201	1-400-794-21	FERRITE	0UH
				FB6000	1-469-100-21	FERRITE	0UH
CN7002	1-780-336-11	EARTH TERMINAL		FB6001	1-469-100-21	FERRITE	0UH
CN7003	1-780-336-11	EARTH TERMINAL		FB6002	1-469-100-21	FERRITE	0UH
CN7004	1-780-336-11	EARTH TERMINAL		FB6004	1-469-100-21	FERRITE	0UH
CN7005	1-780-336-11	EARTH TERMINAL		FB6005	1-400-141-22	FERRITE	0UH
CN7008	1-820-186-11	HEADER ASSEMBLY (PRINT PWB)		FB7001	1-414-445-11	FERRITE	0UH
CN7009	1-820-184-11	HEADER ASSEMBLY (PRINT PWB)		FB7002	1-414-445-11	FERRITE	0UH
CN9000	1-818-737-11	HDMI CONNECTOR		FB7003	1-414-445-11	FERRITE	0UH
		<DIODE>		FB7005	1-400-110-21	FERRITE	0UH
D1002	8-719-058-24	DIODE RB501V-40TE-17		FB7006	1-400-110-21	FERRITE	0UH
D1006	8-719-081-97	DIODE MMDL914T1		FB7007	1-400-110-21	FERRITE	0UH
				FB7008	1-400-110-21	FERRITE	0UH
				FB7011	1-400-794-21	FERRITE	0UH
				FB9000	1-469-094-21	FERRITE	0UH

B

REF NO.	PART NO.	DESCRIPTION	REMARK	REF NO.	PART NO.	DESCRIPTION	REMARK
		<FILTER>					
FL1001	1-234-177-21	FERRITE	0UH	L7002	1-481-081-11	INDUCTOR	47UH
FL5201	1-234-177-21	FERRITE	0UH	L7003	1-481-080-11	INDUCTOR	22UH
FL5203	1-234-177-21	FERRITE	0UH	L7004	1-481-083-11	INDUCTOR	22UH
FL5206	1-234-177-21	FERRITE	0UH	L7005	1-456-786-21	INDUCTOR	47UH
FL5207	1-234-177-21	FERRITE	0UH	L7006	1-412-056-11	INDUCTOR	4.7UH
FL5500	1-234-177-21	FERRITE	0UH	L7007	1-416-740-11	INDUCTOR	10UH
FL5501	1-234-177-21	FERRITE	0UH	* L9000	1-813-308-11	INDUCTOR	0UH
FL9000	1-234-177-21	FERRITE	0UH	* L9001	1-813-308-11	INDUCTOR	0UH
FL9001	1-234-177-21	FERRITE	0UH	* L9002	1-813-308-11	INDUCTOR	0UH
		<IC>		* L9003	1-813-308-11	INDUCTOR	0UH
IC1001	6-708-219-01	IC MB91305PMC-G-BNDE1		L9004	1-469-555-21	INDUCTOR	10UH
IC1002	6-708-050-01	IC S29AL016D70TFI010		L9005	1-469-555-21	INDUCTOR	10UH
IC1004	6-703-175-01	IC PST3629UL				<IC LINK>	
IC1005	6-702-985-01	IC M24256-BWMN6T		PS6000	1-576-122-21	IC LINK	0.4A
IC1006	6-709-512-01	IC S-1132B18-M5T1G		PS7000	1-576-603-21	FUSE	3.15A
IC1007	6-706-815-01	IC TMP75AIDR				<TRANSISTOR>	
IC1008	8-759-549-03	IC SN74LV132APWR		Q1001	6-551-387-01	TRANSISTOR SSM6N16FU	
IC1009	6-709-517-01	IC S-35390A-J8T1G		Q1002	8-729-029-00	TRANSISTOR DTC115EUA-T106	
IC1010	8-759-460-79	IC BA09FP-E2		Q1003	8-729-028-74	TRANSISTOR DTA114TUA-T106	
IC5000	6-709-582-01	IC CXD9199GG-D		Q1004	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
IC5201	8-759-651-59	IC SN74CBTLV3245APWR		Q1005	8-729-028-74	TRANSISTOR DTA114TUA-T106	
IC5202	8-759-651-59	IC SN74CBTLV3245APWR		Q1006	8-729-029-04	TRANSISTOR DTC123JUA-T106	
IC5203	6-706-491-01	IC TC7SH86FU(T5RSOYJF)		Q1007	8-729-028-96	TRANSISTOR DTC114EUA-T106	
IC5500	6-707-822-01	IC EM6A9320BI-5MG		Q1700	6-551-387-01	TRANSISTOR SSM6N16FU	
IC6000	6-704-600-01	IC M24C02-WMN6T(B)		Q1701	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC6001	8-759-679-54	IC SN74LVC14APWR		Q5000	8-729-602-36	TRANSISTOR 2SA1602-F	
IC7000	6-707-927-01	IC BD9775FV		Q5001	8-729-602-36	TRANSISTOR 2SA1602-F	
IC7001	6-709-441-01	IC SI8008TM-TL		Q6000	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC7002	6-709-441-01	IC SI8008TM-TL		Q6001	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC7004	6-708-862-01	IC MM1662FTRE		Q7000	8-729-046-04	TRANSISTOR FDS6690A	
IC9000	6-704-819-01	IC CS4335-KSZR		Q7001	6-550-828-01	TRANSISTOR RSQ035P03TR	
IC9001	6-704-001-01	IC BR24L02F-WE2		Q7005	6-550-851-01	TRANSISTOR RSS050P03FTB	
IC9002	6-708-758-01	IC PCA9517DP.118		Q7006	8-729-029-00	TRANSISTOR DTC115EUA-T106	
*IC9711	6-703-108-01	IC SN74LVC2G04DCKR		Q7007	8-729-602-21	TRANSISTOR 2SC4154-F	
		< JACK >		Q7008	8-729-028-96	TRANSISTOR DTC114EUA-T106	
J6000	1-750-925-11	JACK (SMALL TYPE)		* Q7009	6-550-663-01	TRANSISTOR RSS100N03TB	
J9000	1-820-304-11	PHONE JACK 2P		Q7500	8-729-028-96	TRANSISTOR DTC114EUA-T106	
		< COIL >		Q7502	8-729-028-96	TRANSISTOR DTC114EUA-T106	
L1002	1-400-794-21	FERRITE	0UH	Q7503	8-729-028-96	TRANSISTOR DTC114EUA-T106	
L5000	1-456-984-11	INDUCTOR	0UH	Q7504	8-729-028-96	TRANSISTOR DTC114EUA-T106	
L5001	1-456-984-11	INDUCTOR	0UH	Q7505	8-729-028-96	TRANSISTOR DTC114EUA-T106	
L5002	1-456-984-11	INDUCTOR	0UH	Q7506	8-729-028-96	TRANSISTOR DTC114EUA-T106	
L5003	1-456-984-11	INDUCTOR	0UH	Q9000	8-729-028-96	TRANSISTOR DTC114EUA-T106	
L5004	1-456-984-11	INDUCTOR	0UH	Q9001	8-729-025-28	TRANSISTOR 2SK1828	
L5005	1-400-177-21	INDUCTOR	0UH	Q9003	8-729-028-96	TRANSISTOR DTC114EUA-T106	
L5006	1-469-561-21	INDUCTOR	100UH	Q9004	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L5201	1-400-794-21	FERRITE	0UH	Q9005	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L5202	1-412-054-21	INDUCTOR	2.2UH	Q9006	8-729-028-96	TRANSISTOR DTC114EUA-T106	
L5203	1-469-551-21	INDUCTOR	2.2UH	Q9007	6-551-364-01	TRANSISTOR DTC614TUT106	
L5205	1-469-551-21	INDUCTOR	2.2UH	Q9008	6-551-364-01	TRANSISTOR DTC614TUT106	
L5206	1-469-551-21	INDUCTOR	2.2UH	Q9009	8-729-600-22	TRANSISTOR 2SA1235-F	
L5500	1-400-794-21	FERRITE	0UH	Q9010	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L5501	1-400-794-21	FERRITE	0UH			<RESISTOR>	
L7000	1-416-740-11	INDUCTOR	10UH	R1001	1-216-864-11	SHORT CHIP	0
L7001	1-457-041-21	INDUCTOR	10UH	R1002	1-218-990-81	SHORT CHIP	0
				R1005	1-208-683-11	METAL CHIP	1K 0.50% 1/16W

B

REF NO.	PART NO.	DESCRIPTION	REMARK			REF NO.	PART NO.	DESCRIPTION	REMARK		
R1007	1-216-864-11	SHORT CHIP	0			R1119	1-218-941-81	RES-CHIP	100	5%	1/16W
R1010	1-218-990-81	SHORT CHIP	0			R1122	1-216-864-11	SHORT CHIP	0		
R1011	1-216-864-11	SHORT CHIP	0			R1123	1-216-864-11	SHORT CHIP	0		
R1012	1-216-864-11	SHORT CHIP	0			R1124	1-216-864-11	SHORT CHIP	0		
R1013	1-216-801-11	METAL CHIP	22	5%	1/10W	R1125	1-216-864-11	SHORT CHIP	0		
R1014	1-216-801-11	METAL CHIP	22	5%	1/10W	R1144	1-208-691-11	METAL CHIP	2.2K	0.50%	1/16W
R1015	1-216-864-11	SHORT CHIP	0			R1147	1-218-941-81	RES-CHIP	100	5%	1/16W
R1016	1-216-801-11	METAL CHIP	22	5%	1/10W	R1158	1-218-941-81	RES-CHIP	100	5%	1/16W
R1017	1-216-801-11	METAL CHIP	22	5%	1/10W	R1160	1-218-941-81	RES-CHIP	100	5%	1/16W
R1018	1-216-864-11	SHORT CHIP	0			R1161	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1019	1-216-864-11	SHORT CHIP	0			R1162	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1020	1-216-813-11	METAL CHIP	220	5%	1/10W	R1163	1-218-941-81	RES-CHIP	100	5%	1/16W
R1021	1-216-801-11	METAL CHIP	22	5%	1/10W	R1164	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1022	1-216-801-11	METAL CHIP	22	5%	1/10W	R1165	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1023	1-216-801-11	METAL CHIP	22	5%	1/10W	R1167	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1024	1-216-801-11	METAL CHIP	22	5%	1/10W	R1168	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1025	1-216-864-11	SHORT CHIP	0			R1169	1-216-864-11	SHORT CHIP	0		
R1026	1-216-801-11	METAL CHIP	22	5%	1/10W	R1170	1-400-794-21	FERRITE	0UH		
R1027	1-400-591-22	FERRITE	0UH			R1180	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1031	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R1183	1-218-941-81	RES-CHIP	100	5%	1/16W
R1032	1-400-807-21	FERRITE	0UH			R1186	1-218-990-81	SHORT CHIP	0		
R1034	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W	R1188	1-218-990-81	SHORT CHIP	0		
R1035	1-216-864-11	SHORT CHIP	0			R1190	1-208-886-81	METAL CHIP	910	0.50%	1/16W
R1036	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1191	1-218-969-11	RES-CHIP	22K	5%	1/16W
R1037	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W	R1192	1-218-941-81	RES-CHIP	100	5%	1/16W
R1038	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1193	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1045	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1195	1-218-990-81	SHORT CHIP	0		
R1046	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R1196	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1047	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R1198	1-218-990-81	SHORT CHIP	0		
R1048	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R1199	1-218-941-81	RES-CHIP	100	5%	1/16W
R1049	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1205	1-218-990-81	SHORT CHIP	0		
R1052	1-218-941-81	RES-CHIP	100	5%	1/16W	R1206	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1053	1-218-990-81	SHORT CHIP	0			R1207	1-218-949-11	RES-CHIP	470	5%	1/16W
R1058	1-218-990-81	SHORT CHIP	0			R1208	1-218-990-81	SHORT CHIP	0		
R1061	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1209	1-218-990-81	SHORT CHIP	0		
R1064	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1210	1-218-949-11	RES-CHIP	470	5%	1/16W
R1065	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1211	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1066	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1212	1-218-949-11	RES-CHIP	470	5%	1/16W
R1070	1-216-864-11	SHORT CHIP	0			R1218	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R1073	1-218-990-81	SHORT CHIP	0			R1223	1-218-945-11	RES-CHIP	220	5%	1/16W
R1075	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1224	1-218-990-81	SHORT CHIP	0		
R1076	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1225	1-218-937-11	RES-CHIP	47	5%	1/16W
R1078	1-218-990-81	SHORT CHIP	0			R1226	1-216-813-11	METAL CHIP	220	5%	1/10W
R1079	1-400-807-21	FERRITE	0UH			R1227	1-218-937-11	RES-CHIP	47	5%	1/16W
R1080	1-400-807-21	FERRITE	0UH			R1235	1-216-864-11	SHORT CHIP	0		
R1081	1-400-807-21	FERRITE	0UH			R1239	1-216-864-11	SHORT CHIP	0		
R1082	1-400-807-21	FERRITE	0UH			R1240	1-216-849-11	METAL CHIP	220K	5%	1/10W
R1083	1-400-807-21	FERRITE	0UH			R1242	1-218-941-81	RES-CHIP	100	5%	1/16W
R1084	1-400-807-21	FERRITE	0UH			R1243	1-216-809-11	METAL CHIP	100	5%	1/10W
R1085	1-400-807-21	FERRITE	0UH			R1246	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1087	1-216-864-11	SHORT CHIP	0			R1247	1-216-864-11	SHORT CHIP	0		
R1101	1-218-959-11	RES-CHIP	3.3K	5%	1/16W	R1255	1-400-591-22	FERRITE	0UH		
R1107	1-218-941-81	RES-CHIP	100	5%	1/16W	R1256	1-400-591-22	FERRITE	0UH		
R1108	1-218-941-81	RES-CHIP	100	5%	1/16W	R1257	1-400-591-22	FERRITE	0UH		
R1109	1-218-941-81	RES-CHIP	100	5%	1/16W	R1258	1-400-591-22	FERRITE	0UH		
R1110	1-218-941-81	RES-CHIP	100	5%	1/16W	R1259	1-400-591-22	FERRITE	0UH		
R1111	1-218-933-11	RES-CHIP	22	5%	1/16W	R1260	1-400-591-22	FERRITE	0UH		
R1112	1-218-941-81	RES-CHIP	100	5%	1/16W	R1261	1-400-591-22	FERRITE	0UH		
R1113	1-218-933-11	RES-CHIP	22	5%	1/16W	R1262	1-400-591-22	FERRITE	0UH		
R1115	1-218-941-81	RES-CHIP	100	5%	1/16W	R1263	1-400-591-22	FERRITE	0UH		
R1116	1-218-990-81	SHORT CHIP	0			R1264	1-400-591-22	FERRITE	0UH		
R1117	1-218-941-81	RES-CHIP	100	5%	1/16W	R1265	1-400-591-22	FERRITE	0UH		

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REF NO.	PART NO.	DESCRIPTION	REMARK	REF NO.	PART NO.	DESCRIPTION	REMARK
R1266	1-216-864-11	SHORT CHIP	0	R5510	1-218-933-11	RES-CHIP	22 5% 1/16W
R1267	1-400-591-22	FERRITE	0UH	R5511	1-218-933-11	RES-CHIP	22 5% 1/16W
R1270	1-218-941-81	RES-CHIP	100 5% 1/16W	R5512	1-218-933-11	RES-CHIP	22 5% 1/16W
R1290	1-218-990-81	SHORT CHIP	0	R5513	1-218-933-11	RES-CHIP	22 5% 1/16W
R1295	1-208-709-11	METAL CHIP	12K 0.50% 1/16W	R5514	1-218-933-11	RES-CHIP	22 5% 1/16W
R1701	1-216-864-11	SHORT CHIP	0	R5515	1-218-933-11	RES-CHIP	22 5% 1/16W
R1702	1-216-809-11	METAL CHIP	100 5% 1/10W	R5516	1-218-933-11	RES-CHIP	22 5% 1/16W
R1703	1-216-864-11	SHORT CHIP	0	R5517	1-218-933-11	RES-CHIP	22 5% 1/16W
R1705	1-218-965-11	RES-CHIP	10K 5% 1/16W	R5518	1-218-933-11	RES-CHIP	22 5% 1/16W
R1706	1-218-965-11	RES-CHIP	10K 5% 1/16W	R5519	1-218-933-11	RES-CHIP	22 5% 1/16W
R1709	1-218-965-11	RES-CHIP	10K 5% 1/16W	R6000	1-216-805-11	METAL CHIP	47 5% 1/10W
R1710	1-218-965-11	RES-CHIP	10K 5% 1/16W	R6001	1-216-805-11	METAL CHIP	47 5% 1/10W
R1721	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R6004	1-216-853-11	METAL CHIP	470K 5% 1/10W
R1722	1-216-853-11	METAL CHIP	470K 5% 1/10W	R6005	1-216-853-11	METAL CHIP	470K 5% 1/10W
R5000	1-218-957-11	RES-CHIP	2.2K 5% 1/16W	R6006	1-216-833-11	METAL CHIP	10K 5% 1/10W
R5002	1-218-949-11	RES-CHIP	470 5% 1/16W	R6007	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5003	1-218-990-81	SHORT CHIP	0	R6008	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5004	1-218-957-11	RES-CHIP	2.2K 5% 1/16W	R6009	1-216-833-11	METAL CHIP	10K 5% 1/10W
R5007	1-218-949-11	RES-CHIP	470 5% 1/16W	R6010	1-216-805-11	METAL CHIP	47 5% 1/10W
R5008	1-218-990-81	SHORT CHIP	0	R6011	1-216-805-11	METAL CHIP	47 5% 1/10W
R5009	1-218-989-11	RES-CHIP	1M 5% 1/16W	R6012	1-218-827-11	METAL CHIP	150 0.50% 1/10W
R5010	1-218-935-11	RES-CHIP	33 5% 1/16W	R6013	1-218-827-11	METAL CHIP	150 0.50% 1/10W
R5011	1-218-941-81	RES-CHIP	100 5% 1/16W	R6014	1-218-827-11	METAL CHIP	150 0.50% 1/10W
R5012	1-218-941-81	RES-CHIP	100 5% 1/16W	R6015	1-218-827-11	METAL CHIP	150 0.50% 1/10W
R5013	1-218-941-81	RES-CHIP	100 5% 1/16W	R6016	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5014	1-218-941-81	RES-CHIP	100 5% 1/16W	R6017	1-218-827-11	METAL CHIP	150 0.50% 1/10W
R5016	1-218-941-81	RES-CHIP	100 5% 1/16W	R6018	1-218-827-11	METAL CHIP	150 0.50% 1/10W
R5017	1-218-941-81	RES-CHIP	100 5% 1/16W	R6019	1-216-845-11	METAL CHIP	100K 5% 1/10W
R5025	1-218-990-81	SHORT CHIP	0	R6021	1-216-801-11	METAL CHIP	22 5% 1/10W
R5026	1-216-864-11	SHORT CHIP	0	R6022	1-216-801-11	METAL CHIP	22 5% 1/10W
R5027	1-216-864-11	SHORT CHIP	0	R6023	1-216-801-11	METAL CHIP	22 5% 1/10W
R5029	1-218-965-11	RES-CHIP	10K 5% 1/16W	R6029	1-218-933-11	RES-CHIP	22 5% 1/16W
R5031	1-218-941-81	RES-CHIP	100 5% 1/16W	R6030	1-218-933-11	RES-CHIP	22 5% 1/16W
R5039	1-218-990-81	SHORT CHIP	0	R6041	1-216-847-11	METAL CHIP	150K 5% 1/10W
R5040	1-218-990-81	SHORT CHIP	0	R6042	1-216-847-11	METAL CHIP	150K 5% 1/10W
R5042	1-218-961-11	RES-CHIP	4.7K 5% 1/16W	R6043	1-216-847-11	METAL CHIP	150K 5% 1/10W
R5043	1-218-961-11	RES-CHIP	4.7K 5% 1/16W	R6044	1-216-847-11	METAL CHIP	150K 5% 1/10W
R5044	1-218-961-11	RES-CHIP	4.7K 5% 1/16W	R6045	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5045	1-218-961-11	RES-CHIP	4.7K 5% 1/16W	R6046	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5046	1-218-957-11	RES-CHIP	2.2K 5% 1/16W	R7000	1-218-877-11	METAL CHIP	18K 0.50% 1/10W
R5047	1-218-957-11	RES-CHIP	2.2K 5% 1/16W	R7001	1-218-877-11	METAL CHIP	18K 0.50% 1/10W
R5210	1-218-961-11	RES-CHIP	4.7K 5% 1/16W	R7002	1-218-867-11	METAL CHIP	6.8K 0.50% 1/10W
R5211	1-218-990-81	SHORT CHIP	0	R7003	1-218-867-11	METAL CHIP	6.8K 0.50% 1/10W
R5212	1-218-973-11	RES-CHIP	47K 5% 1/16W	R7004	1-216-841-11	METAL CHIP	47K 5% 1/10W
R5214	1-218-933-11	RES-CHIP	22 5% 1/16W	R7005	1-218-863-11	METAL CHIP	4.7K 0.50% 1/10W
R5215	1-218-933-11	RES-CHIP	22 5% 1/16W	R7006	1-218-891-11	METAL CHIP	68K 0.50% 1/10W
R5218	1-216-864-11	SHORT CHIP	0	R7007	1-218-863-11	METAL CHIP	4.7K 0.50% 1/10W
R5221	1-216-864-11	SHORT CHIP	0	R7008	1-216-843-11	METAL CHIP	68K 5% 1/10W
R5222	1-216-864-11	SHORT CHIP	0	R7009	1-216-841-11	METAL CHIP	47K 5% 1/10W
R5223	1-218-965-11	RES-CHIP	10K 5% 1/16W	R7010	1-218-875-11	METAL CHIP	15K 0.50% 1/10W
R5224	1-218-990-81	SHORT CHIP	0	R7011	1-218-879-11	METAL CHIP	22K 0.50% 1/10W
R5225	1-218-965-11	RES-CHIP	10K 5% 1/16W	R7012	1-216-835-11	METAL CHIP	15K 5% 1/10W
R5226	1-218-965-11	RES-CHIP	10K 5% 1/16W	R7013	1-218-882-11	METAL CHIP	30K 0.50% 1/10W
R5500	1-400-794-21	FERRITE	0UH	R7014	1-216-809-11	METAL CHIP	100 5% 1/10W
R5503	1-218-847-11	METAL CHIP	1K 0.50% 1/10W	R7015	1-216-809-11	METAL CHIP	100 5% 1/10W
R5504	1-218-847-11	METAL CHIP	1K 0.50% 1/10W	R7016	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5505	1-218-990-81	SHORT CHIP	0	R7017	1-216-815-11	METAL CHIP	330 5% 1/10W
R5506	1-211-986-11	METAL CHIP	51 0.50% 1/10W	R7019	1-216-835-11	METAL CHIP	15K 5% 1/10W
R5507	1-218-990-81	SHORT CHIP	0	R7020	1-216-864-11	SHORT CHIP	0
R5508	1-218-933-11	RES-CHIP	22 5% 1/16W	R7021	1-216-837-11	METAL CHIP	22K 5% 1/10W
R5509	1-211-986-11	METAL CHIP	51 0.50% 1/10W	R7022	1-216-864-11	SHORT CHIP	0
				R7023	1-216-864-11	SHORT CHIP	0

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REF NO.	PART NO.	DESCRIPTION	REMARK	REF NO.	PART NO.	DESCRIPTION	REMARK
R7024	1-216-837-11	METAL CHIP	22K 5%	R9017	1-218-941-81	RES-CHIP	100 5%
R7025	1-216-864-11	SHORT CHIP	0	R9018	1-218-941-81	RES-CHIP	100 5%
R7026	1-216-864-11	SHORT CHIP	0	R9019	1-218-961-11	RES-CHIP	4.7K 5%
R7027	1-216-821-11	METAL CHIP	1K 5%	R9020	1-218-961-11	RES-CHIP	4.7K 5%
R7028	1-216-821-11	METAL CHIP	1K 5%	R9022	1-218-973-11	RES-CHIP	47K 5%
R7029	1-216-841-11	METAL CHIP	47K 5%	R9025	1-218-941-81	RES-CHIP	100 5%
R7030	1-216-841-11	METAL CHIP	47K 5%	R9031	1-218-929-11	RES-CHIP	10 5%
R7031	1-218-855-11	METAL CHIP	2.2K 0.50%	R9032	1-218-929-11	RES-CHIP	10 5%
R7032	1-218-843-11	METAL CHIP	680 0.50%	R9033	1-218-929-11	RES-CHIP	10 5%
R7035	1-218-847-11	METAL CHIP	1K 0.50%	R9034	1-218-929-11	RES-CHIP	10 5%
R7036	1-218-845-11	METAL CHIP	820 0.50%	R9035	1-218-929-11	RES-CHIP	10 5%
R7040	1-216-295-91	SHORT CHIP	0	R9036	1-218-929-11	RES-CHIP	10 5%
R7041	1-400-794-21	FERRITE	0UH	R9037	1-218-929-11	RES-CHIP	10 5%
R7045	1-216-295-91	SHORT CHIP	0	R9038	1-218-929-11	RES-CHIP	10 5%
R7046	1-216-295-91	SHORT CHIP	0	R9040	1-218-965-11	RES-CHIP	10K 5%
R7048	1-216-295-91	SHORT CHIP	0	R9041	1-218-965-11	RES-CHIP	10K 5%
R7049	1-216-864-11	SHORT CHIP	0	R9044	1-218-937-11	RES-CHIP	47 5%
R7050	1-216-825-11	METAL CHIP	2.2K 5%	R9045	1-218-937-11	RES-CHIP	47 5%
R7051	1-218-839-11	METAL CHIP	470 0.50%	R9046	1-218-937-11	RES-CHIP	47 5%
R7053	1-218-859-11	METAL CHIP	3.3K 0.50%	R9047	1-216-295-91	SHORT CHIP	0
R7054	1-218-859-11	METAL CHIP	3.3K 0.50%	R9048	1-218-937-11	RES-CHIP	47 5%
R7055	1-218-867-11	METAL CHIP	6.8K 0.50%	R9051	1-218-937-11	RES-CHIP	47 5%
R7056	1-218-867-11	METAL CHIP	6.8K 0.50%	R9060	1-218-957-11	RES-CHIP	2.2K 5%
R7057	1-216-843-11	METAL CHIP	68K 5%	R9061	1-218-957-11	RES-CHIP	2.2K 5%
R7058	1-216-851-11	METAL CHIP	330K 5%	R9062	1-216-847-11	METAL CHIP	150K 5%
R7060	1-216-833-11	METAL CHIP	10K 5%	R9063	1-216-847-11	METAL CHIP	150K 5%
R7063	1-216-833-11	METAL CHIP	10K 5%	R9064	1-216-821-11	METAL CHIP	1K 5%
R7064	1-216-864-11	SHORT CHIP	0	R9065	1-216-847-11	METAL CHIP	150K 5%
R7066	1-216-835-11	METAL CHIP	15K 5%	R9066	1-216-847-11	METAL CHIP	150K 5%
R7067	1-218-879-11	METAL CHIP	22K 0.50%	R9067	1-216-821-11	METAL CHIP	1K 5%
R7080	1-400-591-22	FERRITE	0UH	R9070	1-218-953-11	RES-CHIP	1K 5%
R7081	1-400-591-22	FERRITE	0UH	R9071	1-218-973-11	RES-CHIP	47K 5%
R7082	1-400-591-22	FERRITE	0UH	R9072	1-218-973-11	RES-CHIP	47K 5%
R7083	1-400-591-22	FERRITE	0UH	R9073	1-218-973-11	RES-CHIP	47K 5%
R7506	1-218-867-11	METAL CHIP	6.8K 0.50%	R9074	1-218-969-11	RES-CHIP	22K 5%
R7507	1-218-867-11	METAL CHIP	6.8K 0.50%	R9075	1-218-989-11	RES-CHIP	1M 5%
R7510	1-216-864-11	SHORT CHIP	0	R9076	1-218-973-11	RES-CHIP	47K 5%
R7515	1-216-845-11	METAL CHIP	100K 5%	R9944	1-216-295-91	SHORT CHIP	0
R7516	1-216-846-11	METAL CHIP	120K 5%			<RESISTOR BRIDGE>	
R7517	1-216-845-11	METAL CHIP	100K 5%	RB1004	1-234-372-11	RES, NETWORK 100 (1005X4)	
R7518	1-216-847-11	METAL CHIP	150K 5%	RB1005	1-234-372-11	RES, NETWORK 100 (1005X4)	
R7542	1-218-965-11	RES-CHIP	10K 5%	RB1006	1-234-372-11	RES, NETWORK 100 (1005X4)	
R7543	1-218-965-11	RES-CHIP	10K 5%	RB1007	1-234-378-21	RES, NETWORK 10K (1005X4)	
R7544	1-218-965-11	RES-CHIP	10K 5%	RB1008	1-234-378-21	RES, NETWORK 10K (1005X4)	
R7545	1-218-977-11	RES-CHIP	100K 5%	RB5201	1-234-372-11	RES, NETWORK 100 (1005X4)	
R7546	1-218-965-11	RES-CHIP	10K 5%	RB5202	1-234-372-11	RES, NETWORK 100 (1005X4)	
R9001	1-216-805-11	METAL CHIP	47 5%	RB5203	1-234-372-11	RES, NETWORK 100 (1005X4)	
R9002	1-216-805-11	METAL CHIP	47 5%	RB5500	1-234-370-21	RES, NETWORK 22 (1005X4)	
R9003	1-216-805-11	METAL CHIP	47 5%	RB5501	1-234-370-21	RES, NETWORK 22 (1005X4)	
R9004	1-216-805-11	METAL CHIP	47 5%	RB5502	1-234-370-21	RES, NETWORK 22 (1005X4)	
R9005	1-218-929-11	RES-CHIP	10 5%	RB5503	1-234-370-21	RES, NETWORK 22 (1005X4)	
R9006	1-208-683-11	METAL CHIP	1K 0.50%	RB5504	1-234-370-21	RES, NETWORK 22 (1005X4)	
R9007	1-218-990-81	SHORT CHIP	0	RB5505	1-234-370-21	RES, NETWORK 22 (1005X4)	
R9008	1-218-990-81	SHORT CHIP	0	RB5506	1-234-370-21	RES, NETWORK 22 (1005X4)	
R9009	1-218-990-81	SHORT CHIP	0	RB5507	1-234-370-21	RES, NETWORK 22 (1005X4)	
R9010	1-216-864-11	SHORT CHIP	0	RB5508	1-234-370-21	RES, NETWORK 22 (1005X4)	
R9011	1-216-853-11	METAL CHIP	470K 5%	RB5509	1-234-370-21	RES, NETWORK 22 (1005X4)	
R9012	1-216-853-11	METAL CHIP	470K 5%	RB5510	1-234-370-21	RES, NETWORK 22 (1005X4)	
R9013	1-208-911-11	METAL CHIP	10K 0.50%	RB5511	1-234-370-21	RES, NETWORK 22 (1005X4)	
R9014	1-216-864-11	SHORT CHIP	0				
R9015	1-216-821-11	METAL CHIP	1K 5%				
R9016	1-216-821-11	METAL CHIP	1K 5%				

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

B **G1** **G2**

REF NO.	PART NO.	DESCRIPTION	REMARK
		<VARISTOR>	
VD6000	1-802-078-11	VARISTOR (SMD)	
VD6001	1-802-078-11	VARISTOR (SMD)	
VD6002	1-802-078-11	VARISTOR (SMD)	
VD6003	1-802-078-11	VARISTOR (SMD)	
VD6004	1-802-078-11	VARISTOR (SMD)	
VD6005	1-802-078-11	VARISTOR (SMD)	
VD6006	1-802-078-11	VARISTOR (SMD)	
VD9001	1-802-078-11	VARISTOR (SMD)	
VD9002	1-802-078-11	VARISTOR (SMD)	
VD9003	6-500-701-01	DIODE PGB1010603NR	
VD9004	6-500-701-01	DIODE PGB1010603NR	
VD9005	6-500-701-01	DIODE PGB1010603NR	
VD9006	6-500-701-01	DIODE PGB1010603NR	
VD9007	6-500-701-01	DIODE PGB1010603NR	
VD9008	6-500-701-01	DIODE PGB1010603NR	
VD9010	6-500-701-01	DIODE PGB1010603NR	
VD9011	6-500-701-01	DIODE PGB1010603NR	
VD9012	6-500-701-01	DIODE PGB1010603NR	
VD9013	6-500-701-01	DIODE PGB1010603NR	
		<CRYSTAL>	
X1001	1-813-070-21	PIEZOELECTRIC OSCILLATOR	
X1009	1-813-784-21	VIBRATOR, CRYSTAL	
X5000	1-813-773-11	VIBRATOR, CRYSTAL	

	Δ 1-468-980-11	G1 BOARD, MOUNTED POWER UNIT (KLV-26S200A/32S200A)	*****
Due to the complexity of this board, performing componet level field repairs is not recommended. If service is required, complete board replacement is required.			

	* A-1144-543-D	G2 BOARD, MOUNTED (KLV-40S200A/46S200A)	*****
	4-382-854-11	SCREW (M3X10), P, SW (+)	
* A6012	4-042-408-02	PIN(45), WIRE	
* A6013	4-042-408-02	PIN(45), WIRE	
		<CAPACITOR>	
C6000	1-161-964-91	CERAMIC	0.0047UF 250V
C6001	Δ 1-119-892-51	CERAMIC	470PF 10.00% 250V
C6002	Δ 1-165-531-11	MYLAR	1UF 10 275V
C6003	1-161-964-91	CERAMIC	0.0047UF 250V
C6004	Δ 1-165-529-11	MYLAR	0.22UF 10 275V
C6005	Δ 1-119-892-51	CERAMIC	470PF 10.00% 250V
C6006	1-135-361-11	ELECT(BLOCK)	180UF 20% 450V
C6008	1-135-361-11	ELECT(BLOCK)	180UF 20% 450V
C6010	Δ 1-119-893-51	CERAMIC	1000PF 20.00% 250V
C6012	1-113-889-11	CERAMIC	0.001UF 20.00% 250V
C6015	Δ 1-119-891-51	CERAMIC	220PF 10.00% 250V
C6016	Δ 1-119-891-51	CERAMIC	220PF 10.00% 250V
C6051	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V
C6100	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V
C6101	1-107-905-11	ELECT	4.7UF 20% 50V

REF NO.	PART NO.	DESCRIPTION	REMARK
C6102	1-107-910-11	ELECT	100UF 20% 50V
C6103	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V
C6104	1-100-831-91	CERAMIC CHIP	0.001UF 2% 50V
C6105	1-107-906-11	ELECT	10UF 20% 50V
C6108	1-115-340-11	CERAMIC CHIP	0.22UF 10.00% 25V
C6109	1-107-888-11	ELECT	47UF 20% 25V
C6111	Δ 1-100-613-81	CERAMIC	470PF 5% 1KV
C6112	Δ 1-100-310-11	FILM	18000PF 3% 800V
C6116	Δ 1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V
C6200	1-164-227-11	CERAMIC CHIP	0.022UF 10.00% 25V
C6202	1-112-242-21	ELECT	1500UF 20% 25V
C6203	1-107-907-11	ELECT	22UF 20% 50V
C6204	1-112-242-21	ELECT	1500UF 20% 25V
C6205	1-112-242-21	ELECT	1500UF 20% 25V
C6207	1-112-242-21	ELECT	1500UF 20% 25V
C6216	1-107-928-11	ELECT	4.7UF 20% 100V
C6217	1-112-229-21	ELECT	1500UF 20% 16V
C6305	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V
C6306	1-162-927-11	CERAMIC CHIP	100PF 5.00% 50V
C6307	1-107-903-11	ELECT	2.2UF 20% 50V
C6308	1-107-904-11	ELECT	3.3UF 20% 50V
C6309	1-107-910-11	ELECT	100UF 20% 50V
C6310	1-100-139-31	FILM	0.001UF 5% 630V
C6314	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V
C6315	1-165-729-31	ELECT	470UF 20% 16V
C6316	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V
C6401	1-107-882-91	ELECT	100UF 20% 16V
C6402	1-127-573-11	CERAMIC CHIP	1UF 10% 16V
C6404	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V
C6405	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
C6406	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V
C6407	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V
C6408	1-125-891-11	CERAMIC CHIP	0.47UF 10.00% 10V
C6412	1-125-891-11	CERAMIC CHIP	0.47UF 10.00% 10V
C6413	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V
C6451	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V
C6504	1-100-613-81	CERAMIC	470PF 5% 1KV
C6505	1-100-613-81	CERAMIC	470PF 5% 1KV
C6517	Δ 1-117-227-11	MYLAR	1UF 10.00% 450V
C6518	Δ 1-112-744-52	MYLAR	1UF 10% 450V
C6519	1-162-969-11	CERAMIC CHIP	0.0068UF 10.00% 25V
C6520	Δ 1-117-227-11	MYLAR	1UF 10.00% 450V
C6521	1-107-823-11	CERAMIC CHIP	0.47UF 10.00% 16V
C6522	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V
C6523	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V
C6525	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
C6526	1-107-906-11	ELECT	10UF 20% 50V
		<CONNECTOR>	
CN6000	1-695-915-11	TAB (CONTACT)	
*CN6001	Δ 1-793-660-11	PIN, CONNECTOR (PC BOARD) 3P	
CN6011	1-537-770-21	TERMINAL BOARD, GROUND	
CN6211	1-537-770-21	TERMINAL BOARD, GROUND	
CN6214	1-537-770-21	TERMINAL BOARD, GROUND	
CN6216	1-537-770-21	TERMINAL BOARD, GROUND	
		<DIODE>	
D6000	8-719-054-89	DIODE D15XB60	
D6002	8-719-081-97	DIODE MMDL914T1	

The components identified by shading
and mark Δ are critical for safety.
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REF NO.	PART NO.	DESCRIPTION	REMARK			
D6003	8-719-081-97	DIODE MMDL914T1				
D6102	6-500-137-01	DIODE BAT54HT1				
D6103	8-719-979-64	DIODE UF4005/23				
D6104	6-501-043-01	DIODE UMZ16NT106				
D6105	6-501-043-01	DIODE UMZ16NT106				
D6106	8-719-081-67	DIODE M1FM3				
D6107	8-719-081-67	DIODE M1FM3				
D6108	8-719-041-97	DIODE MA113-(TX)				
D6200	8-719-057-96	DIODE D10SC6M-4012				
D6201	8-719-057-96	DIODE D10SC6M-4012				
D6202	8-719-057-96	DIODE D10SC6M-4012				
D6203	8-719-057-96	DIODE D10SC6M-4012				
D6204	6-500-567-31	DIODE 10ERB20-TB3				
D6205	6-500-567-31	DIODE 10ERB20-TB3				
D6207	8-719-057-96	DIODE D10SC6M-4012				
D6208	8-719-057-96	DIODE D10SC6M-4012				
D6302	6-500-567-31	DIODE 10ERB20-TB3				
D6303	6-500-567-31	DIODE 10ERB20-TB3				
D6304	6-500-849-01	DIODE ERA22-08KFLB				
D6305	6-500-567-31	DIODE 10ERB20-TB3				
D6306	8-719-510-02	DIODE D1NS4				
D6401	8-719-081-97	DIODE MMDL914T1				
D6402	8-719-081-97	DIODE MMDL914T1				
D6407	8-719-082-04	DIODE MM3Z22VT1				
D6408	8-719-081-97	DIODE MMDL914T1				
D6452	8-719-081-97	DIODE MMDL914T1				
D6454	1-125-889-91	CERAMIC CHIP	2.2UF	10%	10V	
D6456	8-719-081-97	DIODE MMDL914T1				
D6504	1-216-295-91	SHORT CHIP	0			
D6505	8-719-976-99	DIODE DTZ5.1B				
D6506	8-719-054-59	DIODE FSF05A60				
D6507	8-719-081-97	DIODE MMDL914T1				
D6508	6-500-108-01	DIODE EP05FA20				
D6509	6-500-108-01	DIODE EP05FA20				
D6510	6-500-137-01	DIODE BAT54HT1				
D6511	8-719-081-97	DIODE MMDL914T1				
D6512	8-719-081-97	DIODE MMDL914T1				
D6551	8-719-081-97	DIODE MMDL914T1				
D6552	8-719-081-97	DIODE MMDL914T1				
D6553	8-719-081-97	DIODE MMDL914T1				
		<FUSE>				
F6000	Δ 1-576-233-51	FUSE	6.3A		250V	
		<FERRITE BEAD>				
FB6100	1-410-396-41	FERRITE	0.45UH			
FB6101	1-410-396-41	FERRITE	0.45UH			
		<FUSE HOLDER>				
FH6000	1-533-223-11	FUSE HOLDER	0A		0V	
FH6001	1-533-223-11	FUSE HOLDER	0A		0V	
		<IC>				
IC6100	6-709-581-01	IC CXD9841M-H				
IC6200	6-709-368-01	IC MM1431ATT (CN)				
IC6301	6-708-801-01	IC MIP2H2				
IC6302	6-709-442-01	IC MM1530ATT				
IC6401	6-709-368-01	IC MM1431ATT (CN)				

REF NO.	PART NO.	DESCRIPTION	REMARK			
IC6402	6-709-368-01	IC MM1431ATT (CN)				
IC6502	6-709-192-01	IC FA5501AN-D1-TE1				
		<CHIP CONDUCTOR>				
JR6001	1-216-295-91	SHORT CHIP	0			
JR6002	1-216-296-11	SHORT CHIP	0			
JR6003	1-216-295-91	SHORT CHIP	0			
JR6004	1-216-295-91	SHORT CHIP	0			
JR6007	1-216-296-11	SHORT CHIP	0			
JR6008	1-216-296-11	SHORT CHIP	0			
JR6009	1-216-296-11	SHORT CHIP	0			
JR6010	1-216-296-11	SHORT CHIP	0			
JR6011	1-216-295-91	SHORT CHIP	0			
JR6012	1-216-295-91	SHORT CHIP	0			
JR6013	1-216-295-91	SHORT CHIP	0			
		<COIL>				
L6000	Δ 1-456-856-21	LINE FILTER COIL				
L6001	Δ 1-456-856-21	LINE FILTER COIL				
L6203	1-414-487-41	INDUCTOR	1UH			
L6204	1-414-487-41	INDUCTOR	1UH			
L6207	1-457-239-11	INDUCTOR	4.7UH			
L6208	1-457-239-11	INDUCTOR	4.7UH			
L6300	1-414-934-21	INDUCTOR	10UH			
L6500	1-457-218-11	INDUCTOR	100UH			
L6502	Δ 1-457-141-11	INDUCTOR	175UH			
		<PHOTO COUPLER>				
PH6000	Δ 6-600-187-01	PHOTO COUPLER PC123Y22JOOF				
PH6100	Δ 6-600-187-01	PHOTO COUPLER PC123Y22JOOF				
PH6301	Δ 6-600-187-01	PHOTO COUPLER PC123Y22JOOF				
PH6400	Δ 6-600-187-01	PHOTO COUPLER PC123Y22JOOF				
PH6402	Δ 6-600-187-01	PHOTO COUPLER PC123Y22JOOF				
		<TRANSISTOR>				
Q6051	8-729-045-62	TRANSISTOR 2SK2158-T2B				
Q6100	6-551-297-01	TRANSISTOR 2SK3568(LBS1SONY.Q				
Q6101	6-551-297-01	TRANSISTOR 2SK3568(LBS1SONY.Q				
Q6400	8-729-804-41	TRANSISTOR 2SB1122-S				
Q6401	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q6402	8-729-045-62	TRANSISTOR 2SK2158-T2B				
Q6403	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R				
Q6404	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q6405	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q6406	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q6454	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R				
Q6455	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
Q6500	6-551-403-01	TRANSISTOR 2SK3797(LBS1SONY.				
Q6501	8-729-820-90	TRANSISTOR 2SD1621-ST				
Q6502	8-729-804-41	TRANSISTOR 2SB1122-S				
Q6504	6-551-403-01	TRANSISTOR 2SK3797(LBS1SONY.				
		<RESISTOR>				
R6002	1-240-251-11	METAL	6.8	5%	10W	
R6003	1-247-752-11	CARBON	1K	5%	1/2W	
R6004	1-218-835-11	METAL CHIP	330	0.50%	1/10W	

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REF NO.	PART NO.	DESCRIPTION	REMARK	REF NO.	PART NO.	DESCRIPTION	REMARK
<VARISTOR>				<RESISTOR>			
VD6000 Δ	1-804-996-21	VARISTOR		R202	1-216-864-11	SHORT CHIP	0
VD6001 Δ	1-804-996-21	VARISTOR		R203	1-216-853-11	METAL CHIP	470K 5% 1/10W
*****				R204	1-216-853-11	METAL CHIP	470K 5% 1/10W
* A-1183-737-A H1 BOARD, MOUNTED				R205	1-216-864-11	SHORT CHIP	0
*****				R206	1-216-864-11	SHORT CHIP	0
<RESISTOR>				R207	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R101	1-218-848-11	METAL CHIP	1.1K 0.50% 1/10W	R208	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R102	1-218-841-11	METAL CHIP	560 0.50% 1/10W	R209	1-218-285-11	METAL CHIP	75 5% 1/10W
R103	1-218-835-11	METAL CHIP	330 0.50% 1/10W	R210	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R104	1-218-831-11	METAL CHIP	220 0.50% 1/10W	R211	1-218-831-11	METAL CHIP	220 0.50% 1/10W
R105	1-218-827-11	METAL CHIP	150 0.50% 1/10W	R212	1-216-864-11	SHORT CHIP	0
<SWITCH>				R213	1-216-821-11	METAL CHIP	1K 5% 1/10W
S101	1-572-595-11	SWITCH, TACTIL (REFLOW TYPE)		R214	1-216-821-11	METAL CHIP	1K 5% 1/10W
S102	1-572-595-11	SWITCH, TACTIL (REFLOW TYPE)		R215	1-216-809-11	METAL CHIP	100 5% 1/10W
S103	1-572-595-11	SWITCH, TACTIL (REFLOW TYPE)		R216	1-216-809-11	METAL CHIP	100 5% 1/10W
S104	1-572-595-11	SWITCH, TACTIL (REFLOW TYPE)		R217	1-216-821-11	METAL CHIP	1K 5% 1/10W
S105	1-572-595-11	SWITCH, TACTIL (REFLOW TYPE)		R218	1-216-821-11	METAL CHIP	1K 5% 1/10W
S106	1-572-595-11	SWITCH, TACTIL (REFLOW TYPE)		R219	1-216-809-11	METAL CHIP	100 5% 1/10W
S107	1-572-595-11	SWITCH, TACTIL (REFLOW TYPE)		R220	1-216-864-11	SHORT CHIP	0
*****				R224	1-218-831-11	METAL CHIP	220 0.50% 1/10W
* A-1183-738-A H2 BOARD, MOUNTED (EXCEPT KLV-46S200A)				R225	1-218-831-11	METAL CHIP	220 0.50% 1/10W
*****				<VARISTOR>			
<CAPACITOR>				VD201	1-802-082-11	VARISTOR (SMD)	
C203	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	VD202	1-802-082-11	VARISTOR (SMD)	
C204	1-127-573-11	CERAMIC CHIP	1UF 10% 16V	VD203	1-802-082-11	VARISTOR (SMD)	
C205	1-125-891-11	CERAMIC CHIP	0.47UF 10.00% 10V	*****			
C206	1-125-889-91	CERAMIC CHIP	2.2UF 10% 10V	* A-1183-739-A H3 BOARD, MOUNTED			
C207	1-125-889-91	CERAMIC CHIP	2.2UF 10% 10V	*****			
C208	1-125-889-91	CERAMIC CHIP	2.2UF 10% 10V	<CAPACITOR>			
C215	1-115-416-11	CERAMIC CHIP	0.001UF 5.00% 25V	C302	1-162-960-11	CERAMIC CHIP	220PF 10.00% 50V
<CONNECTOR>				C303	1-119-667-11	CERAMIC CHIP	22UF 10V
CN201	1-820-192-11	HEADER ASSEMBLY (PRINT PWB)15P		C305	1-165-908-11	CERAMIC CHIP	1UF 10% 10V
<DIODE>				C307	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V
D201	8-719-977-28	DIODE DTZ10B		C308	1-126-205-11	ELECT CHIP	47UF 20.00% 6.3V
D202	8-719-977-28	DIODE DTZ10B		<CONNECTOR>			
D203	8-719-977-28	DIODE DTZ10B		CN301	1-820-187-11	HEADER ASSEMBLY (PRINT PWB)10P	
D204	8-719-977-28	DIODE DTZ10B		<DIODE>			
D205	8-719-977-28	DIODE DTZ10B		D302	8-719-085-26	DIODE CL-165HR/SYG-D-T	
D206	8-719-977-28	DIODE DTZ10B		D305	8-719-085-26	DIODE CL-165HR/SYG-D-T	
<JACK>				D308	6-500-817-01	DIODE (LED) SML-512UWT86	
J201	1-780-368-11	S TERMINAL BLOCK (RIGHT)		<IC>			
J202	1-568-267-11	JACK		IC301	6-600-502-01	HIC GP1UE26RK0VF	
<TRANSISTOR>				IC302	6-600-447-01	IC TPS853(SONY)	
Q301	8-729-028-96	TRANSISTOR DTC114EUA-T106		<TRANSISTOR>			
Q302	8-729-028-96	TRANSISTOR DTC114EUA-T106		<TRANSISTOR>			

H3 **H46** **TUG**

REF NO.	PART NO.	DESCRIPTION	REMARK		
Q303	8-729-028-96	TRANSISTOR DTC114EUA-T106			
Q304	8-729-028-96	TRANSISTOR DTC114EUA-T106			
Q305	8-729-028-96	TRANSISTOR DTC114EUA-T106			
Q306	8-729-602-36	TRANSISTOR 2SA1602-F			
		<RESISTOR>			
R301	1-216-819-11	METAL CHIP	680	5%	1/10W
R302	1-216-815-11	METAL CHIP	330	5%	1/10W
R303	1-216-819-11	METAL CHIP	680	5%	1/10W
R304	1-216-815-11	METAL CHIP	330	5%	1/10W
R305	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R306	1-216-817-11	METAL CHIP	470	5%	1/10W
R307	1-216-805-11	METAL CHIP	47	5%	1/10W
R309	1-216-839-11	METAL CHIP	33K	5%	1/10W
R310	1-216-821-11	METAL CHIP	1K	5%	1/10W
R311	1-216-833-11	METAL CHIP	10K	5%	1/10W
R313	1-216-849-11	METAL CHIP	220K	5%	1/10W
R314	1-216-849-11	METAL CHIP	220K	5%	1/10W
R315	1-216-864-11	SHORT CHIP	0		
R316	1-216-827-11	METAL CHIP	3.3K	5%	1/10W

	* A-1194-048-A	H46 BOARD, MOUNTED (KLV-46S200A)	*****		
	2-685-344-01	H2 SHIELD			
* A201	4-042-408-02	PIN(45), WIRE			
		<CAPACITOR>			
C203	1-127-573-11	CERAMIC CHIP	1UF	10%	16V
C204	1-127-573-11	CERAMIC CHIP	1UF	10%	16V
C205	1-125-891-11	CERAMIC CHIP	0.47UF	10.00%	10V
C206	1-125-889-91	CERAMIC CHIP	2.2UF	10%	10V
C207	1-125-889-91	CERAMIC CHIP	2.2UF	10%	10V
C208	1-125-889-91	CERAMIC CHIP	2.2UF	10%	10V
C215	1-115-416-11	CERAMIC CHIP	0.001UF	5.00%	25V
		<CONNECTOR>			
CN201	1-820-192-11	HEADER ASSEMBLY (PRINT PWB)15P			
		<DIODE>			
D201	8-719-977-28	DIODE DTZ10B			
D202	8-719-977-28	DIODE DTZ10B			
D203	8-719-977-28	DIODE DTZ10B			
D204	8-719-977-28	DIODE DTZ10B			
D205	8-719-977-28	DIODE DTZ10B			
D206	8-719-977-28	DIODE DTZ10B			
		<JACK>			
J201	1-780-368-11	S TERMINAL BLOCK (RIGHT			
J202	1-568-267-11	JACK			

REF NO.	PART NO.	DESCRIPTION	REMARK		
		<RESISTOR>			
R202	1-216-864-11	SHORT CHIP	0		
R203	1-216-853-11	METAL CHIP	470K	5%	1/10W
R204	1-216-853-11	METAL CHIP	470K	5%	1/10W
R205	1-216-864-11	SHORT CHIP	0		
R206	1-216-864-11	SHORT CHIP	0		
R207	1-218-831-11	METAL CHIP	220	0.50%	1/10W
R208	1-218-831-11	METAL CHIP	220	0.50%	1/10W
R209	1-218-285-11	METAL CHIP	75	5%	1/10W
R210	1-218-831-11	METAL CHIP	220	0.50%	1/10W
R211	1-218-831-11	METAL CHIP	220	0.50%	1/10W
R212	1-216-864-11	SHORT CHIP	0		
R213	1-216-821-11	METAL CHIP	1K	5%	1/10W
R214	1-216-821-11	METAL CHIP	1K	5%	1/10W
R215	1-216-809-11	METAL CHIP	100	5%	1/10W
R216	1-216-809-11	METAL CHIP	100	5%	1/10W
R217	1-216-821-11	METAL CHIP	1K	5%	1/10W
R218	1-216-821-11	METAL CHIP	1K	5%	1/10W
R219	1-216-809-11	METAL CHIP	100	5%	1/10W
R220	1-216-864-11	SHORT CHIP	0		
R224	1-218-831-11	METAL CHIP	220	0.50%	1/10W
R225	1-218-831-11	METAL CHIP	220	0.50%	1/10W
		<VARISTOR>			
VD201	1-802-082-11	VARISTOR (SMD)			
VD202	1-802-082-11	VARISTOR (SMD)			
VD203	1-802-082-11	VARISTOR (SMD)			

	* A-1169-213-A	TUG BOARD, MOUNTED	*****		
		<CAPACITOR>			
C3805	1-128-407-11	ELECT CHIP	47UF	20%	50V
C3806	1-126-197-11	ELECT CHIP	10UF	20.00%	50V
C3807	1-162-968-11	CERAMIC CHIP	0.0047UF	10.00%	50V
C3808	1-162-921-11	CERAMIC CHIP	33PF	5.00%	50V
C3809	1-127-931-21	ELECT CHIP	470UF	20%	16V
C3810	1-162-921-11	CERAMIC CHIP	33PF	5.00%	50V
C3901	1-162-925-11	CERAMIC CHIP	68PF	5.00%	50V
C3902	1-162-925-11	CERAMIC CHIP	68PF	5.00%	50V
C3904	1-124-779-00	ELECT CHIP	10UF	20.00%	16V
C3905	1-162-921-11	CERAMIC CHIP	33PF	5.00%	50V
		<CONNECTOR>			
CN3802	1-819-339-11	HEADER ASSEMBLY FOR PWB			
CN3903	1-819-337-11	HEADER ASSEMBLY FOR PWB			
CN3905	1-695-915-11	TAB (CONTACT)			
CN3906	1-780-336-11	EARTH TERMINAL			
CN3907	1-780-336-11	EARTH TERMINAL			
CN3908	1-780-336-11	EARTH TERMINAL			
CN3909	1-780-336-11	EARTH TERMINAL			
		<FERRITE BEAD>			
FB3801	1-469-775-21	FERRITE	0UH		
FB3802	1-469-775-21	FERRITE	0UH		



REF NO.	PART NO.	DESCRIPTION	REMARK
FB3901	1-414-760-21	FERRITE	0UH
FB3902	1-414-760-21	FERRITE	0UH
FB3903	1-469-324-21	FERRITE	0UH
FB3904	1-469-324-21	FERRITE	0UH
<CHIP CONDUCTOR>			
JR3801	1-216-295-91	SHORT CHIP	0
<COIL>			
L3802	1-412-058-11	INDUCTOR	10UH
L3803	1-412-058-11	INDUCTOR	10UH
L3901	1-414-580-21	INDUCTOR	100NH
L3902	1-414-580-21	INDUCTOR	100NH
L3903	1-414-580-21	INDUCTOR	100NH
L3904	1-412-979-21	INDUCTOR	1UH
L3905	1-414-580-21	INDUCTOR	100NH
<TRANSISTOR>			
Q3901	8-729-027-43	TRANSISTOR DTC114EKA-T146	
<RESISTOR>			
R3804	1-216-864-11	SHORT CHIP	0
R3805	1-216-295-91	SHORT CHIP	0
R3807	1-216-864-11	SHORT CHIP	0
R3809	1-218-879-11	METAL CHIP	22K 0.50% 1/10W
R3810	1-218-871-11	METAL CHIP	10K 0.50% 1/10W
R3811	1-216-864-11	SHORT CHIP	0
R3812	1-216-864-11	SHORT CHIP	0
R3901	1-216-809-11	METAL CHIP	100 5% 1/10W
R3902	1-216-809-11	METAL CHIP	100 5% 1/10W
R3905	1-216-864-11	SHORT CHIP	0
R3906	1-216-864-11	SHORT CHIP	0
R3908	1-216-864-11	SHORT CHIP	0
R3909	1-216-837-11	METAL CHIP	22K 5% 1/10W
R3910	1-216-833-11	METAL CHIP	10K 5% 1/10W
R3912	1-216-864-11	SHORT CHIP	0
<TUNER>			
TU3900	8-597-536-00	TUNER, FSS BTF-BG413	

REF NO. PART NO. DESCRIPTION REMARK

SUPPLEMENT-1

WAX2 CHASSIS

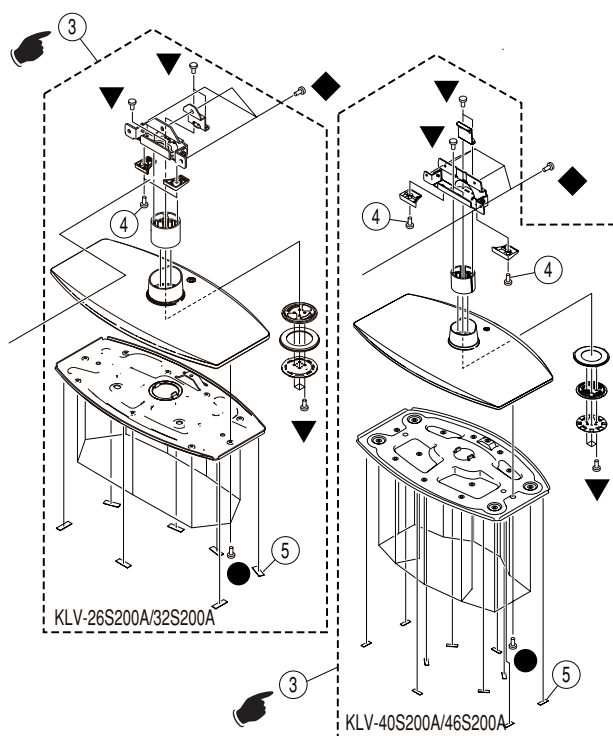
<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>
<i>KLV-26S200A</i>	<i>RM-GA005</i>	<i>E</i>
<i>KLV-26S200A</i>	<i>RM-GA005</i>	<i>Oceania</i>
<i>KLV-26S200A</i>	<i>RM-GA005</i>	<i>Middle East</i>
<i>KLV-32S200A</i>	<i>RM-GA005</i>	<i>E</i>
<i>KLV-32S200A</i>	<i>RM-GA005</i>	<i>Oceania</i>
<i>KLV-32S200A</i>	<i>RM-GA005</i>	<i>Middle East</i>
<i>KLV-40S200A</i>	<i>RM-GA005</i>	<i>E</i>
<i>KLV-40S200A</i>	<i>RM-GA005</i>	<i>Oceania</i>
<i>KLV-40S200A</i>	<i>RM-GA005</i>	<i>Middle East</i>

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>
<i>KLV-46S200A</i>	<i>RM-GA005</i>	<i>E</i>
<i>KLV-46S200A</i>	<i>RM-GA005</i>	<i>Oceania</i>
<i>KLV-46S200A</i>	<i>RM-GA005</i>	<i>Middle East</i>

SUBJECT : Stand and Bezel Assy new and different color information

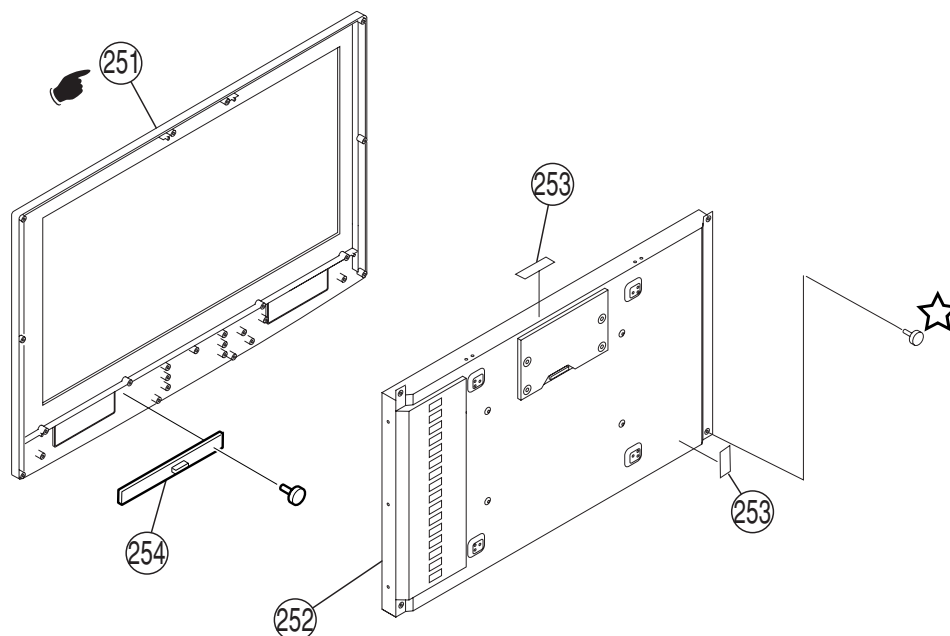
SECTION 4: EXPLODED VIEWS

4-1: Rear Cabinet and Stand Assembly



<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>MARK</u>
3	X-2148-630-1	ASSY, STAND(M) (KLV-26S200A/32S200A) (SILVER)	
	X-2148-637-1	ASSY,STAND (L) (KLV-40S200A/46S200A) (SILVER)	
	X-2149-442-1	ASSY, STAND(M)(B) (KLV-26S200A/32S200A) (BLACK)	
	X-2149-470-1	ASSY, STAND(L)(B) (KLV-40S200A/46S200A) (BLACK)	

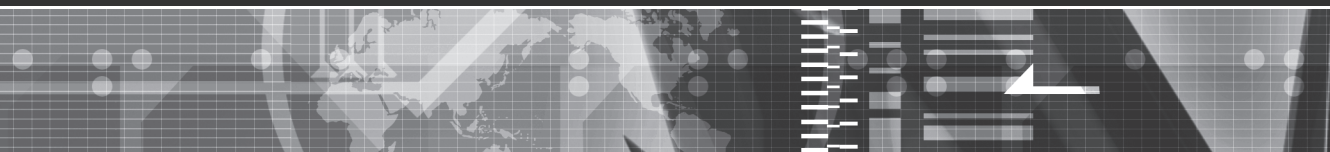
4-6. BEZEL ASSY AND LCD PANEL



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
251	X-2148-000-1	BEZEL(26SG) ASSY (KLV-26S200A) (SILVER)	
	X-2148-646-2	BEZEL(32SG) ASSY (KLV-32S200A) (SILVER)	
	X-2148-640-2	BEZEL(40SG) ASSY (KLV-40S200A) (SILVER)	
	X-2148-009-4	BEZEL(46SG) ASSY (KLV-46S200A) (SILVER)	
	X-2176-007-1	BEZEL(26SG) ASSY (KLV-26S200A) (BLACK)	
	X-2176-008-1	BEZEL(32SG) ASSY (KLV-32S200A) (BLACK)	
	X-2176-009-1	BEZEL(40SG) ASSY (KLV-40S200A) (BLACK)	
	X-2176-010-1	BEZEL(46SG) ASSY (KLV-46S200A) (BLACK)	

REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
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LCD Color TV



Operating Instructions _____

GB

- ⚠ Before operating the TV, please read the “Safety information” section of this manual.
Retain this manual for future reference.

**KLV-46S200A
KLV-40S200A
KLV-32S200A
KLV-26S200A**

BRAVIA


WARNING

- To prevent the risk of electric shock, if the AC power cord or plug is damaged, do not insert the plug into the AC power outlet. This plug cannot be used and should be destroyed.
- To prevent the risk of fire or electric shock, do not expose the TV set to rain or moisture.
- Dangerously high voltages are present inside the TV set. Do not open the cabinet. Refer servicing to qualified personnel only.

Introduction

Thank you for choosing this Sony product. Before operating the TV, please read this manual thoroughly and retain it for future reference.

Trademark information

- Manufactured under license from BBE Sound, Inc. Licensed by BBE Sound, Inc. under one or more of the following US patents: 5510752, 5736897. BBE and BBE symbol are registered trademarks of BBE Sound, Inc.
- TruSurround XT, SRS and  symbol are trademarks of SRS Labs, Inc. TruSurround XT technology is incorporated under license from SRS Labs, Inc.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC.

- The illustrations used in this manual are of the KLV-32S200A unless otherwise stated.

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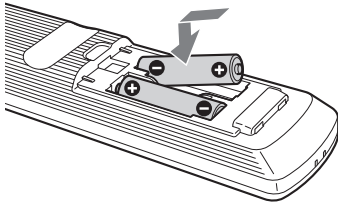
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Start-up Guide

1: Inserting batteries into the remote

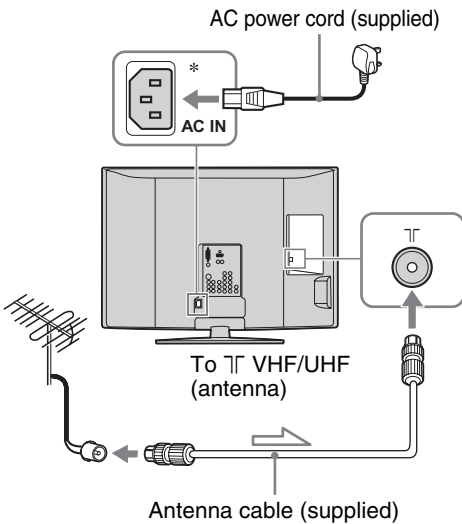


Notes

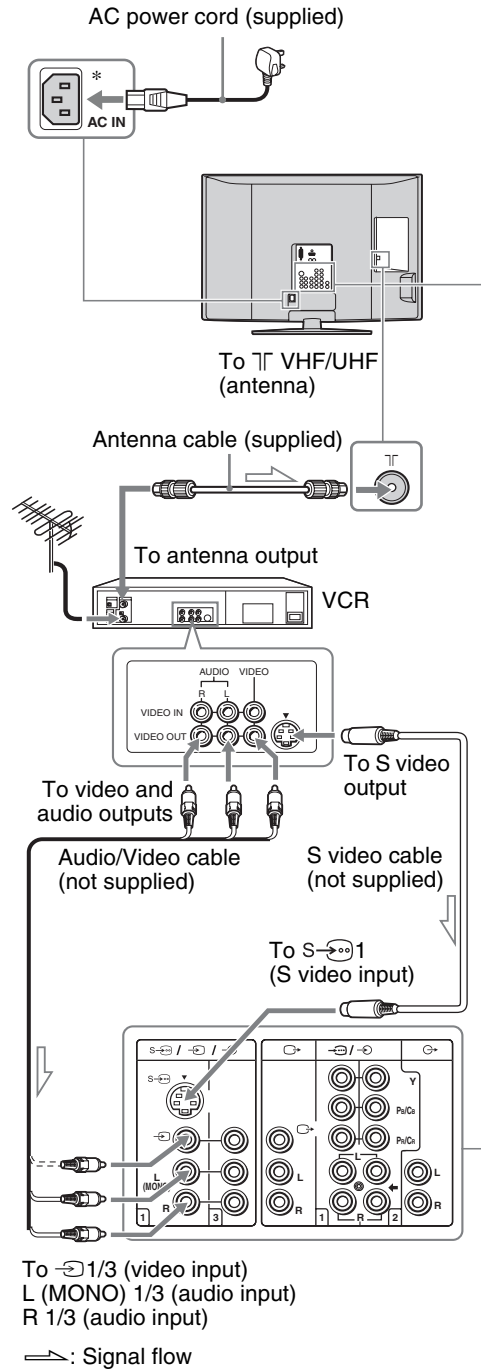
- Observe the correct polarity when inserting batteries.
- Dispose of batteries in an environmentally friendly way. Certain regions may regulate disposal of the battery. Please consult your local authority.
- Do not use different types of batteries together or mix old and new batteries.
- Handle the remote with care. Do not drop or step on it, or spill liquid of any kind onto it.
- Do not place the remote in a location near a heat source, or in a place subject to direct sunlight, or in a damp room.

2: Connecting an antenna/VCR

Connecting an antenna only

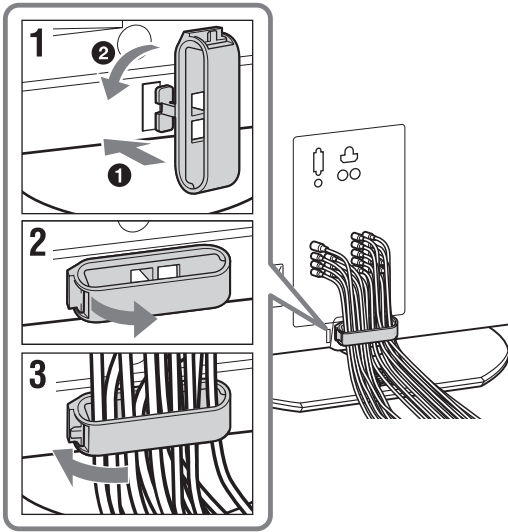


Connecting an antenna and VCR

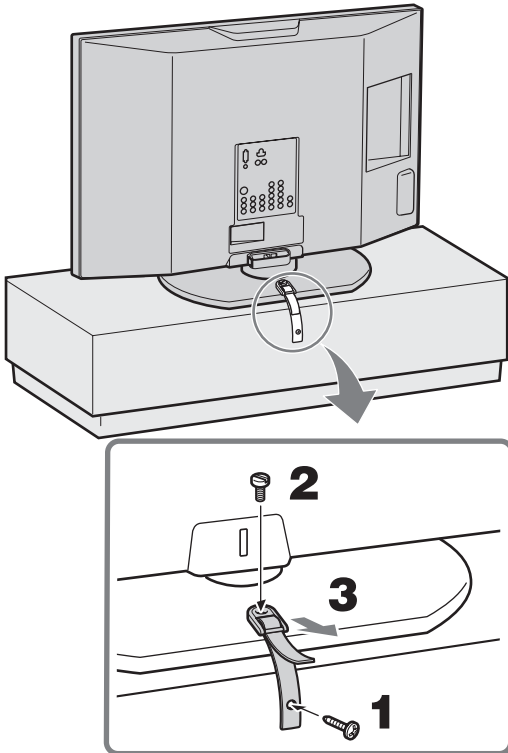


* The position of AC IN jack varies, depending on the TV size.

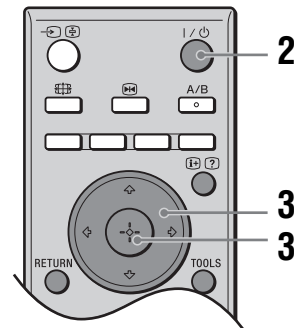
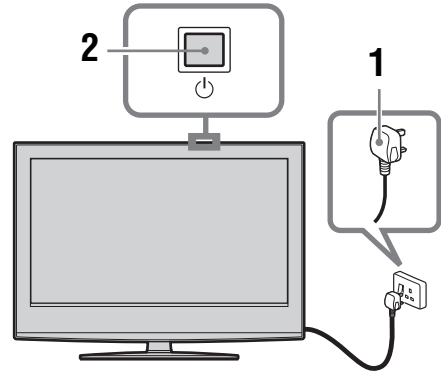
3: Bundling the cables



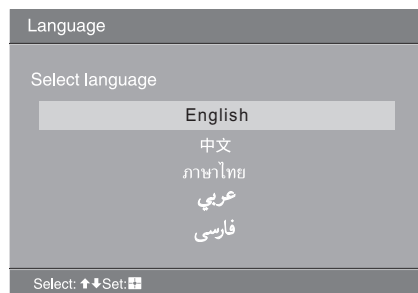
4: Preventing the TV from toppling over



5: Selecting the language



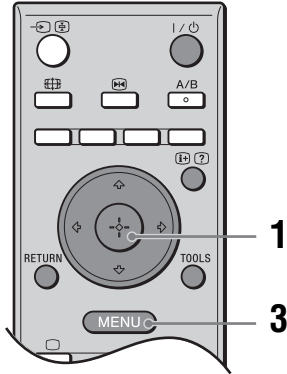
- 1** Connect the TV to the AC power outlet (110-240V AC, 50/60Hz).
- 2** Press on the TV (top side).
When you switch on the TV for the first time, the Language menu appears on the screen.
When the TV is in standby mode (the (standby) indicator on the TV (front) is red), press on the remote to switch on the TV.
- 3** Press to select the language displayed on the menu screens, then press .



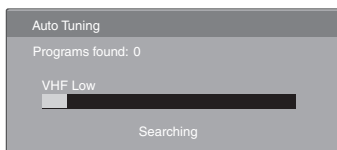
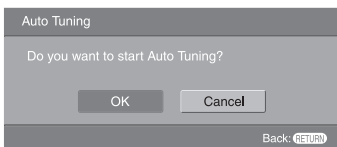
The message confirming the TV start Auto Tuning appears on the screen, then go to “6: Auto Tuning the TV”.

6: Auto Tuning the TV

After selecting the language, a message confirming the TV start Auto Tuning appears on the screen. You must tune the TV to receive channels (TV broadcasts). Do the following to search and store all available channels.



- 1 Select "OK" and press \oplus .



The TV starts searching for all available channels. This may take some time, please be patient and do not press any buttons on the TV or remote. Once all available channels have been stored, the TV returns to normal operation, displaying the channel stored on channel number 1.

When a message appears for you to confirm the antenna connections

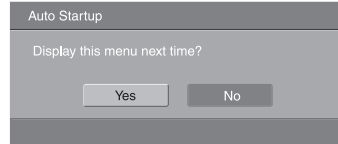
No programs are found. Check all the antenna connections and press \oplus to start Auto Tuning again.

- 2 The Program Sorting menu appears on the screen.
- 3 Press MENU to exit.
The TV has now tuned in all the available channels.

To change the order in which the channels are stored on the TV

See page 26.

- 4 To allow this menu to appear again when you turn on the TV, press \oplus to select "Yes".



Safety information

For Safety

AC power cord

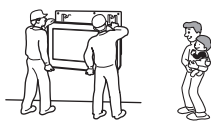
Be sure to connect only the appropriate supplied AC power cord with the plug that fits into the AC power outlet.

Unplug the AC power cord when moving the LCD TV. Do not move the LCD TV with the AC power cord plugged in. It may damage the AC power cord and result in fire or electric shock. If the LCD TV has been dropped or damaged, have it checked immediately by qualified service personnel.



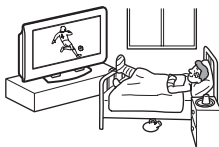
Installation

Installation of the LCD TV on the wall should be carried out by qualified service personnel. Improper installation may render the LCD TV unsafe. The LCD TV should be installed near an easily accessible AC power jack.



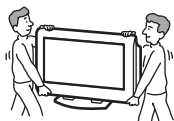
Medical institution

Do not place this LCD TV in a place where medical equipment is in use. It may cause malfunction of medical instruments.



Carrying

Carrying the LCD TV requires two or more people. If you carry the LCD TV in a manner other than that specified, it may drop and a serious injury may be caused. Be sure two or more people carry the LCD TV. When transporting, do not subject the LCD TV to shocks or excessive vibration. The LCD TV may fall and be damaged or cause serious injury.



When lifting the LCD TV or moving the LCD panel of the TV, hold it firmly by the bottom.



Installation and moving

Ventilation

Never cover the ventilation holes in the cabinet. It may cause overheating and result in fire. Unless proper ventilation is provided, the LCD TV may gather dust and get dirty. For proper ventilation, observe the following:

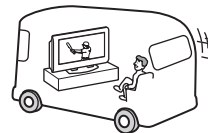
- Do not install the LCD TV turned backward or sideways.
- Do not install the LCD TV turned over or upside down.



- Do not install the LCD TV on a shelf or in a closet.
- Do not place the LCD TV on a rug or bed.
- Do not cover the LCD TV with cloth, such as curtains, or items such as newspapers, etc.

Vehicle and ceiling

Do not install this LCD TV in a vehicle or hang it from the ceiling. Bumping of the vehicle may cause the LCD TV to fall down and cause injury.



Water and moisture

Do not use this LCD TV near water - for example, near a bathtub or shower room. Also do not expose the LCD TV to rain. It may result in fire or electric shock.

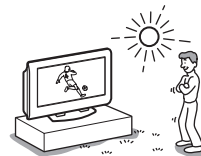
Optional accessories

When installing the LCD TV, use the supplied stand or wall-mount bracket (not supplied). Be sure to attach the brackets supplied with your stand. If not, the LCD TV may fall and cause serious injury.



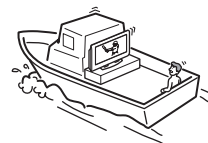
Outdoor use

Do not install this LCD TV outdoors. If the LCD TV is exposed to rain, it may result in fire or electric shock. If the LCD TV is exposed to direct sunlight, the LCD TV may heat up and it may damage the LCD TV.



Ship and vessel

Do not install this LCD TV in a ship or vessel. If the LCD TV is exposed to seawater, it may cause fire or damage the LCD TV.



Cord arrangement

Arrange the power cords or connecting cords in a safe place to avoid tripping on them.

Fall

Place the LCD TV on a secure, stable stand. Do not hang anything on the LCD TV. The LCD TV may fall from the stand or wall-mount bracket (not supplied), causing damage or serious injury.



Recommended place for the LCD TV

Place the LCD TV on a stable, level surface. Otherwise, it may fall and cause injury.

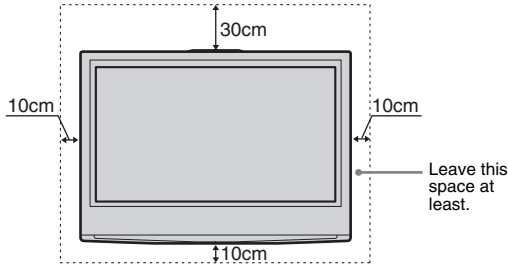


Continued

Ventilation

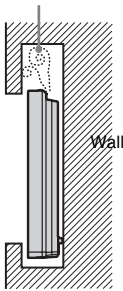
Leave space around the LCD TV. Otherwise, adequate air-circulation may be blocked causing overheating and cause fire or damage the LCD TV.

When installing the LCD TV on the wall

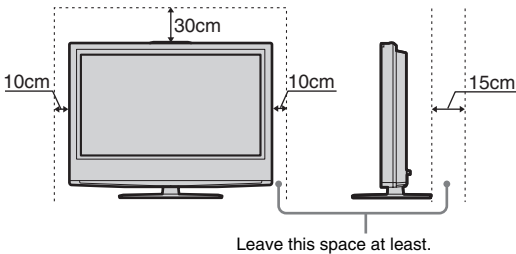


Never install the LCD TV as follows:

Air circulation is blocked.

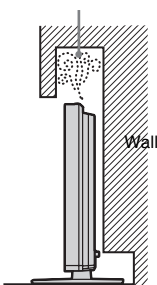


When installing the LCD TV using a stand



Never install the LCD TV as follows:

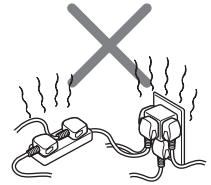
Air circulation is blocked.



Power Sources

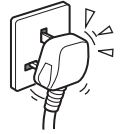
Overloading

This LCD TV is designed to operate on a 110-240V AC supply for the LCD TV. Take care not to connect too many appliances to the same AC power outlet as this could result in fire or electric shock.



AC power outlet

Do not use a poor fitting AC power plug. Insert the plug fully into the AC power outlet. If it is loose, it may cause arcing and result in fire. Contact your electrician to have the AC power plug changed. When you disconnect the AC power cord, disconnect it from the AC outlet first.



For the TV set with a three-wire grounding type AC mains plug



This TV set with CLASS 1 construction must be connected to an AC mains socket outlet with a protective earthing connection.

Moisture

Do not touch the AC power cord with a wet hand. If you plug/unplug the AC power cord with a wet hand, it may cause electric shock.



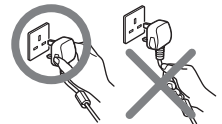
Lightning storms

For your own safety, do not touch any part of the LCD TV, AC power cord or antenna lead during lightning storms.



AC power cord protection

Pull out the AC power cord by the plug. Do not pull on the AC power cord itself.



Wiring

Unplug the AC power cord when wiring cables. Be sure to unplug the AC power cord for your safety, when hooking up.

Cleaning

Clean the AC power plug regularly. If the plug is covered with dust and it picks up moisture, its insulation may deteriorate and result in fire. Unplug the AC power plug and clean it regularly.



Grounding

To avoid electric shock, be sure to connect the supplied AC power cord to a grounded power outlet. If the plug fails to fit, contact your electrician to have the outlet changed.

Use

Damage requiring service

If the surface of the LCD TV cracks, do not touch it until you unplug the AC power cord. Otherwise electric shock may result.

Servicing

Do not open the cabinet and the rear cover of the LCD TV. Refer to qualified service personnel only.



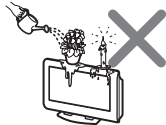
Ventilation holes

Do not insert anything in the ventilation holes. If metal or something flammable enters, it may result in fire or electric shock.



Moisture and flammable

- Do not let this LCD TV get wet. Never spill liquid of any kind on the set. If any liquid or solid object does fall through, do not operate the LCD TV. It may result in electric shock or damage to the LCD TV. Have it checked immediately by qualified personnel.
- Do not place any objects on the LCD TV. The LCD TV shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the LCD TV.
- To prevent fire, keep inflammable objects or naked lights (e.g. candles) away from the LCD TV.



Additional Safety Information

Electric shock

Do not touch the LCD TV with a wet hand. Doing so may cause electric shock or damage the LCD TV.

Protruding location

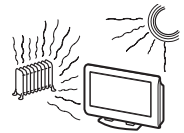
Do not install the LCD TV in protruding locations. If you install the unit in the following locations, injury may result.

- Do not install the LCD TV in a location where the LCD TV protrudes, such as pillars.
- Do not install the LCD TV in a location where your face may bump.

To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

Placement

Never place the LCD TV in hot, humid or excessively dusty places. Do not install the LCD TV where it may be exposed to mechanical vibrations. Do not use the LCD TV where insects may enter.



Oils

Do not install this LCD TV in restaurants that use oil. Dust absorbing oil may enter into the LCD TV and damage the LCD TV.

Accessories

Secure the LCD TV from falling down.

If the LCD TV is not secured properly, it may fall and cause injury. Take measures against it using the supplied stand or a wall-mount bracket (not supplied).

Broken pieces

Do not throw anything at the LCD TV. The screen glass may break by the impact and cause serious injury.



Corrosion

If you use this LCD TV near the seashore, salt may corrode metal parts of the LCD TV and cause internal damage or fire. It may also shorten the life of the LCD TV. If the LCD TV will be subjected to any of these conditions, steps should be taken to reduce the humidity and temperature of the area where the LCD TV is located.

Cleaning

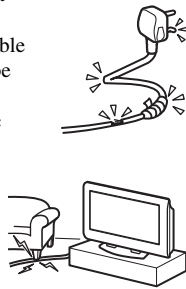
Unplug the AC power cord when cleaning this LCD TV. If not, it may result in electric shock.

Continued

AC power cord

If you damage the AC power cord, it may result in fire or electric shock.

- Do not pinch, bend, or twist the cable excessively. The core lines may be bared and cut, and cause short-circuit, resulting in fire or electric shock.
- Do not convert or damage the AC power cord.
- Do not put anything heavy on the AC power cord. Do not pull the AC power cord.
- Keep the AC power cord away from heat sources.
- Be sure to grasp the plug when disconnecting the AC power cord.



If the AC power cord is damaged, stop using it and ask your dealer or Sony service center to exchange it.

Not in use

For environmental and safety reasons, it is recommended that the LCD TV is not left in standby mode when not in use. Disconnect it from the AC power outlet.

Cable wiring

Take care not to catch your feet on the cables. It may damage the LCD TV.

Installation

Do not install optional components too close to the LCD TV. Keep optional components at least 30 cm away from the LCD TV. If a VCR is installed in front or beside the LCD TV, the picture may distort.

Heat


Do not touch the surface of the LCD TV. It remains hot, even for some time after the LCD TV is turned off.

Precautions

On viewing the LCD TV comfortably

- To view the LCD TV comfortably, the recommended viewing position is from four to seven times of the screen's vertical length away from the LCD TV.
- View the LCD TV in a moderate light room, as viewing the LCD TV in poor light taxes your eyes. And watching the screen continuously long times taxes your eyes, too.

On installing the LCD TV

- Use the specified wall-mount bracket or stands.
- Do not install the display unit in places subject to extreme temperature, for example in direct sunlight, or near a radiator, or heating vent. If the display unit is exposed to extreme temperature, the display unit may heat up and it may cause deformations of the casing or malfunctions.
- Do not install the display unit in a place exposed to direct air conditioning. If the display unit is installed in such a location, moisture may condense on the panel inside the display unit. It may cause a malfunction.
- After transporting the display unit directly from a cold to a warm location, or if the room temperature has changed suddenly, pictures may be blurred or show poor color over portions of the picture. This is because moisture has condensed on the panel inside the display unit. Let the moisture evaporate before using the display unit.
- To obtain a clear picture, prevent the lighting or sun light from illuminating the screen directly. If possible, install a lighting on the ceiling right above the LCD TV so that reflection of the lighting is minimized.
- The LCD TV is not disconnected from AC power outlet when the switch is in off position. To disconnect the LCD TV completely, pull the plug from AC power outlet.
- Make sure the LCD TV is completely switched off by pressing  on the TV (top side) before unplugging the AC power cord. Unplugging the AC power cord while LCD TV is switched on or at standby mode may cause the power and standby indicators to remain lit. This does not indicate a malfunction.

On adjustment volume

- Adjust the volume so as not to trouble neighbors. Sound carries very easily at night time. Therefore, closing the windows or using headphones is suggested.
- When using headphones, adjust the volume so as to avoid excessive levels, as hearing damage may result.

On handling the remote control

- Handle the remote control with care. Do not drop or step on it, or spill liquid of any kind.
- Do not place the remote control in a location near heat source, or in a place subject to direct sunlight, or in a damp room.

On cleaning the screen surface/cabinet

- Be sure to unplug the AC power cord connected to the LCD TV from the AC power outlet before cleaning.
- To remove dust from the screen surface/cabinet, wipe gently with a soft cloth. If dust is persistent, wipe with a soft cloth slightly moistened with a diluted mild detergent solution.
- Note that material deterioration or screen coating degradation may occur if the display unit is exposed to a volatile solvent, such as alcohol, thinner, benzine or insecticide, or if prolonged contact is maintained with rubber or vinyl materials.
- The ventilation holes can accumulate dust over time. To ensure proper ventilation, we recommend removing the dust periodically (once a month) using a vacuum cleaner.

On the screen

- Although the LCD screen is made with high-precision technology and has effective pixels of 99.99% or more, black dots may appear or bright points of light (red, blue or green) may appear constantly on the LCD screen. This is a structural property of the LCD panel and is not a malfunction.
- Do not expose the LCD screen surface to the sun. Doing so may damage the screen surface.
- Do not push or scratch the front filter, or place objects on top of this unit. The image may be uneven or the LCD panel may be damaged.
- If the unit is used in a cold place, a smear may occur in the picture or the picture may become dark. This does not indicate a failure. These phenomena improve as the temperature rises.
- Ghosting may occur when still pictures are displayed continuously. It may disappear after a few moments.
- The screen and cabinet get warm when this unit is in use. This is not a malfunction.

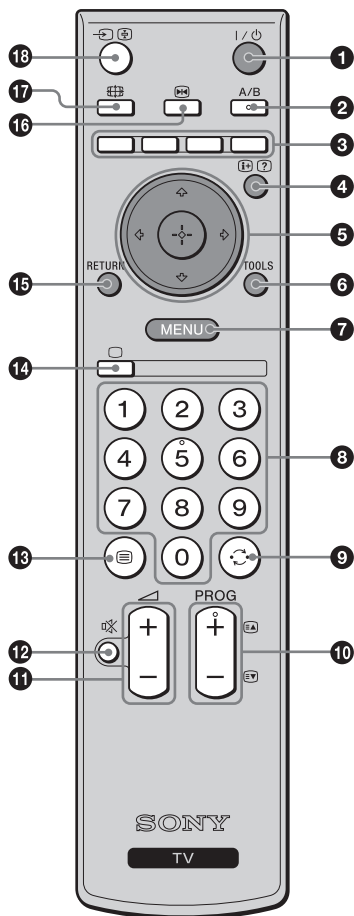
Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)














This symbol is on the remote control.



Overview of the remote

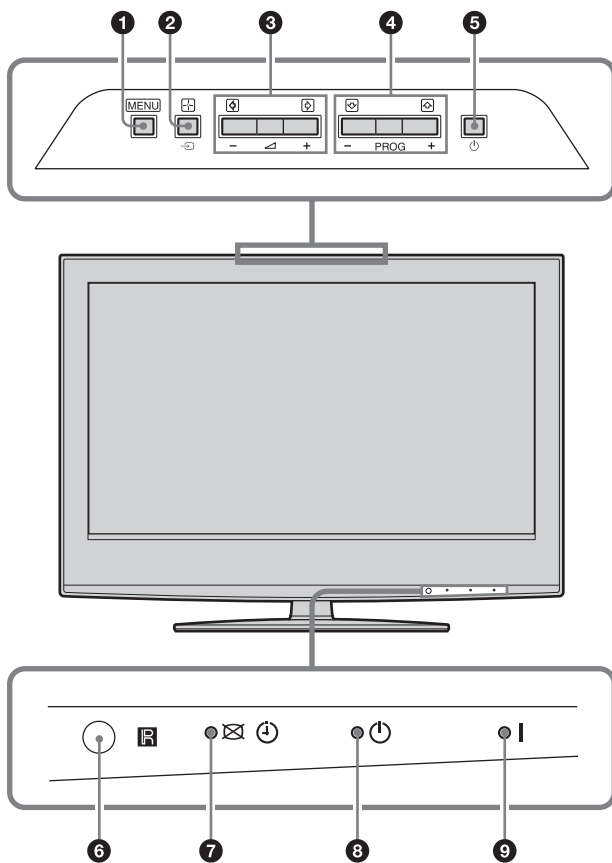


- 1 I/O – TV standby**
Switches off the TV temporarily. The  (standby) indicator on the front of the TV lights up. Press again to switch on the TV from the standby mode.
- 2 A/B – Dual Sound (page 21)**
- 3 Colored buttons**
In Text mode (page 14): Used for Fastext.
- 4  – Info / Text reveal**
 - In TV mode: Displays information such as current channel number and screen mode.
 - In Text mode (page 14): Reveals hidden information (e.g., answers to a quiz).
- 5  (page 14, 17)**
- 6 TOOLS (page 15, 16, 29)**
Enables you to access various viewing options and change/make adjustments according to the source and screen mode.
- 7 MENU (page 17)**
- 8 Number buttons**
 - In TV mode: Selects channels. For channel numbers 10 and above, enter the second digit within two seconds (available only if “1 Digit Direct” is set to “Off”).
 - In Text mode: Enters the three digits page number to select the page.
- 9  – Previous channel**
Returns to the previous channel watched (for more than five seconds).
- 10 PROG +/- (page 14)**
 - In TV mode: Selects the next (+) or previous (-) channel.
 - In Text mode: Selects the next (+) or previous (-) page.
- 11  – Volume**
- 12  – Mute (page 14)**
- 13  – Text (page 14)**
- 14  – TV mode (page 16)**
Switches to a TV display when displaying external input.
- 15 RETURN**
Returns to the previous screen of any displayed menu.
- 16  – Picture freeze (page 15)**
Freezes the TV picture.
- 17  – Wide mode (page 15)**
- 18  – Input select / Text hold**
 - In TV mode (page 16): Selects the input source from equipment connected to the TV jacks.
 - In Text mode (page 14): Holds the current page.

Tip

The A/B, PROG + and number 5 buttons have tactile dots. Use the tactile dots as references when operating the TV.

Overview of the TV buttons and indicators





1 MENU (page 17)



2 – Input select/OK

- In TV mode (page 16): Selects the input source from equipment connected to the TV jacks.
- In TV menu: Selects the menu or option, and confirm the setting.

3

- Increases (+) or decreases (-) the volume.
- In TV menu: Moves through the options left () or right ()

4

- In TV mode: Selects the next (+) or previous (-) channel.
- In TV menu: Moves through the options up () or down ()

5 – Power

Switches the TV on or off.

6 – Remote control sensor

7 – Picture Off/Timer indicator

- Lights up in green when the picture is switched off (page 24).
- Lights up in amber when the timer is set. (page 24)

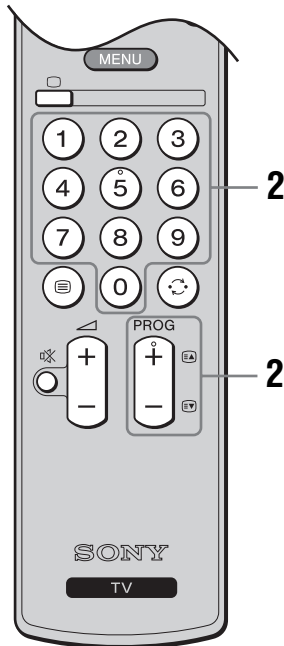
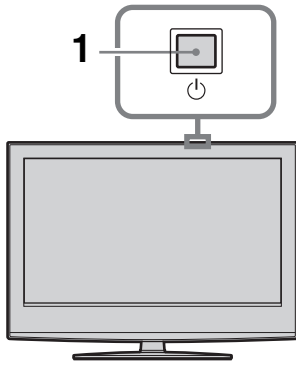
8 – Standby indicator

Lights up in red when the TV is in standby mode.

9 – Power indicator

- Lights up in green when the TV is switched on.
- Blinks when remote control is operating.

Watching TV



1 Press on the TV (top side) to switch on the TV.

When the TV is in standby mode (the (standby) indicator on the TV (front) is red), press on the remote to switch on the TV.

2 Press the number buttons or PROG +/- to select a TV channel.

To select channel numbers 10 and above using the number buttons, enter the second digit within two seconds (available only if “1 Digit Direct” is set to “Off”).

Additional operations

To	Do this
Turn off the TV temporarily (Standby mode)	Press .
Turn on the TV from Standby mode without sound	Press . Press +/- to set the volume level.
Turn off the TV completely	Press on the TV (top side).
Adjust the volume	Press +/- (increase)/ - (decrease).
Mute the sound	Press . Press again to restore.
Return to the previous channel watched (for more than five seconds)	Press .
Access the Program index table	Press MENU, select Program List by pressing , then press . Next, select the desired channel by pressing , then press .

Note

Even if you press the on the TV (top side) to turn it off, a small amount of current continues to flow. Pull the AC plug out of the wall jack to turn the TV off completely.

To access Text

Press . Each time you press , the display changes cyclically as follows:

Text → Text over the TV picture (mix mode) → No Text (exit the Text service)

To select a page, press the number buttons or PROG +/-.

To hold a page, press .

To reveal hidden information, press .

Tips

- Ensure that the TV is receiving a good signal, or some text errors may occur.
- Some TV channels broadcast a Text service. For information on the use of the service, select the index page (usually Text page 100).
- When four colored items appear at the bottom of the Text page, Fasttext is available. Fasttext allows you to access pages quickly and easily. Press the corresponding colored button to access the page.

Picture Freeze

Freezes the TV picture (e.g. to make a note of a telephone number or recipe).

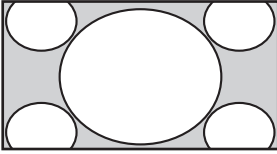
- 1 Press on the remote control.
- 2 Press /// to adjust the position of the window.
- 3 Press to remove the window.
- 4 Press again to return to normal TV mode.

To change the wide mode manually

Press repeatedly to select wide mode.

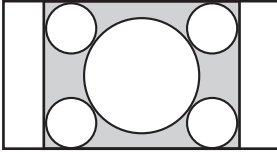
For TV, Video, HD/DVD or HDMI (other than PC Input)

Wide Zoom*



Enlarges the center portion of the picture. The left and right edges of the picture are stretched to fill the 16:9 screen.

Normal

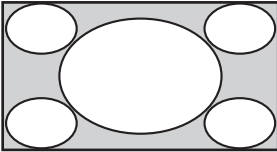


Displays the 4:3 picture in its original size. Side bars are shown to fill the 16:9 screen.

Note

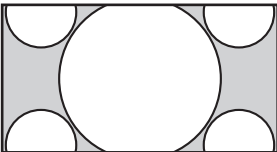
You can only select "Full" when input signals are 720p/1080i.

Full



Stretches the 4:3 picture horizontally, to fill the 16:9 screen.

Zoom*



Displays cinemascope (letter box format) broadcasts in the correct proportions.

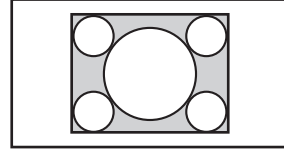
* Parts of the top and bottom of the picture may be cut off.

Tip

- Alternatively, you can set "Auto Wide" to "On". The TV will automatically select the best mode to suit the broadcast (page 22).

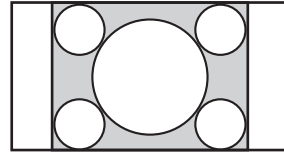
For PC Input

Normal



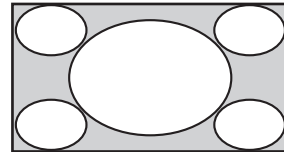
Displays the picture in its original pixel size. Bars are shown at the top, bottom, and both sides for small picture.

Full 1



Stretches the original picture to fill the screen vertically.

Full 2



Stretches the Full 1 picture horizontally to fill the 16:9 screen.

Using the Tools menu

Press TOOLS to display the following options when viewing the TV program.

Options	Description
Close	Close the Tools Menu.
Power Saving	See page 24.
Picture Mode	See page 18.
Sound Mode	See page 20.
Vertical Shift	See page 22.
Vertical Size	See page 22.
Sleep Timer	See page 24.

Viewing pictures from connected equipment

Switch on the connected equipment, then press repeatedly until the correct input symbol (see below) appears on the screen.

On Screen Display	Input jacks
Video 1 or Video 1	Video : (Rear) or Audio : (Rear) L(MONO)/R
Video 2 or Video 2	Video : (Side) or Audio : (Side) L(MONO)/R
Video 3	Video : (Rear) Audio : (Rear) L(MONO)/R
HD/DVD 1	Video : (Rear) Y, Pb/Cb, Pr/Cr Audio : (Rear) L/R
HD/DVD 2	Video : (Rear) Y, Pb/Cb, Pr/Cr Audio : (Rear) L/R
HDMI	Video/Audio : (Rear) HDMI IN Audio : (Rear) L/R
PC	Video : (Rear Left Side) PC (RGB) Audio : (Rear) PC

To return to normal TV operation, press .

Using the Tools menu

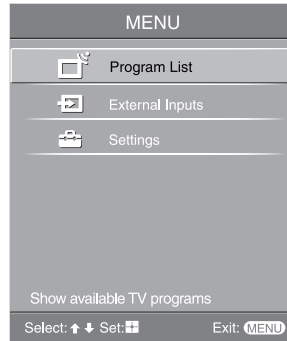
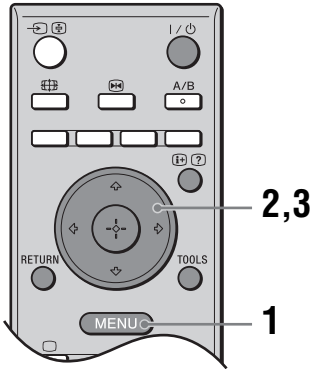
Press TOOLS to display the following options when viewing pictures from connected equipment other than PC.

Options	Description
Close	Close the Tools Menu.
Power Saving	See page 24.
Picture Mode	See page 18.
Sound Mode	See page 20.
Vertical Shift	See page 22.
Vertical Size	See page 22.
Sleep Timer	See page 24.

Navigating through menus

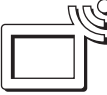


“MENU” allows you to enjoy various convenient features of this TV. You can easily select channels or external inputs with the remote. Also, settings for your TV can be changed easily using “MENU”.

1 Press MENU to display the menu.

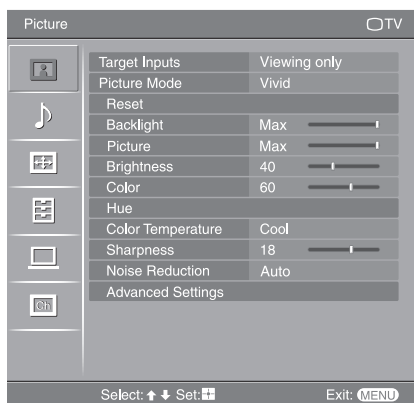


2 Press \uparrow/\downarrow to select an option.

3 Press \oplus to confirm a selected option.
To exit the menu, press MENU.

Menu	Description
 Program List	Allows you to select TV programs from a list of channel labels. <ul style="list-style-type: none"> To watch the desired channel, select the channel, then press \oplus. To assign a label to a program, see page 26.
 External Inputs	Selects equipment connected to your TV. <ul style="list-style-type: none"> To watch the desired external input, select the input source, then press \oplus. To assign a label to an external input, see page 23.
 Settings	Opens the Settings menu screen where most of advanced settings and adjustments are performed. Select a menu icon, select an option and make the desired change or adjustment using $\uparrow/\downarrow/\leftarrow/\rightarrow$. For details about settings, see page 18 to 27.

Picture menu



You can select the options listed below on the Picture menu. To select options in “Settings”, see “Navigating through menus” (page 17).

Target Inputs

Selects whether to apply settings made in the Picture menu to all inputs, or only to the input currently being watched.

“All”: Applies settings to all inputs.

“Viewing Only”: Applies settings only to the current input.

Picture Mode

Selects the picture mode.

“Vivid”: For enhanced picture contrast and sharpness.

“Standard”: For standard picture. Recommended for home entertainment.

“Custom”: Allows you to store your preferred settings.

Reset

Resets all picture settings except “Target Inputs” and “Picture Mode” to the factory settings.

Backlight

Adjusts the brightness of the backlight.

Picture

Increases or decreases picture contrast.

Brightness

Brightens or darkens the picture.

Color

Increases or decreases color intensity.

Hue

Increases or decreases the green tones.

Tip

“Hue” can only be adjusted for a NTSC color system (e.g., U.S.A. video tapes).

Color Temperature

Adjusts the whiteness of the picture.

“Cool”: Gives the white color a blue tint.

“Neutral”: Gives the white color a neutral tint.

“Warm1”/“Warm2”: Gives the white color a red tint. “Warm2” gives a redder tint than “Warm1”.

Tip

“Warm1” and “Warm2” can only be selected when you set “Picture Mode” to “Custom”.

Sharpness

Sharpens or softens the picture.

Noise Reduction

Reduces the picture noise (snowy picture) in a weak broadcast signal.

“Auto”: Automatically reduces the picture noise.

“High”/“Medium”/“Low”: Modifies the effect of the noise reduction.

“Off”: Turns off the Noise Reduction feature.

Advanced Settings

Customizes the Picture function in more detail. When you set “Picture Mode” to “Custom”, you can set/change these settings.

“Reset”: Resets all the advanced video settings to the factory settings.

“Black Corrector”: Enhances black areas of the picture for stronger contrast.

“Contrast Enhancer”: Automatically adjusts “Picture” to the most suitable settings judging from the brightness of the screen. This setting is especially effective for dark images, increasing vibrancy in the picture.

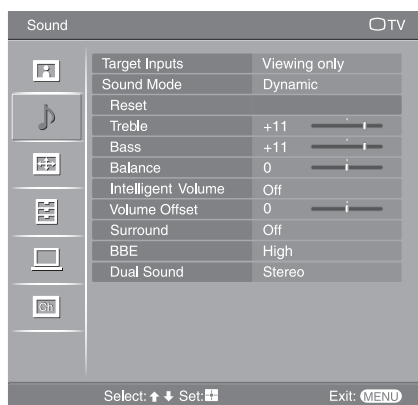
“Gamma”: Adjusts the balance between bright and dark areas of the picture.

“Clear White”: Emphasizes white colors.

“Live Color”: Makes colors more vivid and reproduces clear skin tones.

“MPEG Noise Reduction”: Reduces the picture noise in MPEG-compressed video.

Sound menu



You can select the options listed below on the Sound menu. To select options in “Settings”, see “Navigating through menus” (page 17).

Target Inputs

Selects whether to apply settings made in the Sound menu to all inputs, or only to the input currently being watched.

“All”: Applies settings to all inputs.

“Viewing Only”: Applies settings only to the current input.

Sound Mode

Selects the sound mode.

“Dynamic”: Enhances treble and bass.

“Standard”: For standard sound. Recommended for home entertainment.

“Custom”: Flat response. Also allows you to store your preferred settings.

Reset

Resets all the sound settings except “Target Inputs”, “Sound Mode” and “Dual Sound” to the factory settings.

Treble

Adjusts higher-pitched sounds.

Bass

Adjusts lower-pitched sounds.

Balance

Emphasizes left or right speaker balance.

Intelligent Volume

Keeps a constant volume level even when volume level gaps occur (e.g., adverts tend to be louder than programs).

Volume Offset

Increases or decreases the sound level.

Surround

Selects the surround mode.

“TruSurround XT”: For surround sound (for stereo program only).

“Simulated Stereo”: Adds a surround-like effect to mono programs.

“Off”: For normal stereo or mono reception.

BBE

Gives sound more impact by compensating for phase effects in speakers using the “BBE High Definition Sound System”.

“High”: The sound is reproduced with more impact.

“Low”: The sound is reproduced with impact.

“Off”: For normal stereo or mono reception.

Dual Sound

Selects the sound from the speaker for a stereo or bilingual broadcast. The selection varies, depending on the Broadcasting.

Broadcasting	Selection
NICAM stereo	NICAM (stereo sound) Mono (regular sound)
NICAM bilingual	NICAM Main (main sound) NICAM Sub (sub sound) Mono (regular sound)
NICAM monaural	NICAM Main (main sound) Mono (regular sound)
A2 (German) stereo	Mono (regular sound) Stereo (stereo sound)
A2 (German) bilingual	Main (main sound) Sub (sub sound)

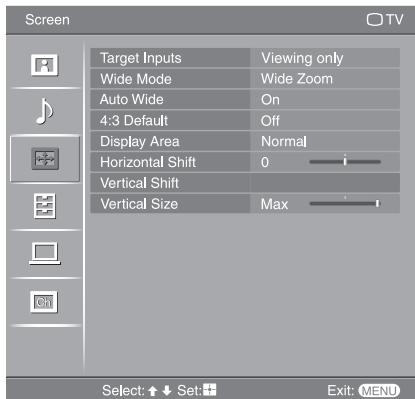
Notes

- If the signal is very weak, the sound becomes monaural automatically.
- If the stereo sound is noisy when receiving a NICAM program, select “Mono”. The sound becomes monaural, but the noise is reduced.
- The “Mono” setting is memorized for each program position.
- You cannot receive a stereo broadcast signal when “Mono” is selected for the program position.
- You cannot receive stereo or dual sound when “Low” or “High” is selected in “Audio Filter” (page 27).

Tips

- NICAM is receivable in following countries/regions. Hong Kong, Singapore, New Zealand, Malaysia, Thailand, etc.
- A2 (German) is receivable in following countries/regions. Australia, Malaysia, Thailand, etc.
- If you select other equipment connected to the TV, set “Dual Sound” to “Stereo”, “Main” or “Sub”.

Screen menu



You can select the options listed below on the Screen menu. To select options in “Settings”, see “Navigating through menus” (page 17).

Target Inputs

Selects whether to apply settings made in the Screen menu to all inputs, or only to the input currently being watched.

“All”: Applies settings to all inputs.

“Viewing Only”: Applies settings only to the current input.

Wide Mode

For details about the wide mode, see page 15.

Auto Wide

Automatically changes the screen format according to the broadcast signal. To keep your setting, select “Off”.

Tips

- Even if you have selected “On” or “Off” in “Auto Wide”, you can always modify the format of the screen by pressing **[F4]** repeatedly.
- “Auto Wide” is available for PAL, SECAM and NTSC signals only.

4:3 Default

Selects the default screen mode for use with 4:3 broadcasts.

“Wide Zoom”: Displays conventional 4:3 broadcasts with an imitation wide screen effect.

“Normal”: Displays conventional 4:3 broadcasts in the correct proportions.

“Off”: Keeps the current “Wide Mode” setting when the channel or input is changed.

Tip

This option is available only if “Auto Wide” is set to “On”.

Display Area

Adjusts the screen area displaying the picture.

“Normal”: Displays the picture in the original size.

“-1”/“-2”: Enlarges the picture to hide the edge of the picture.

Horizontal Shift

Adjusts the horizontal position of the picture for each screen format.

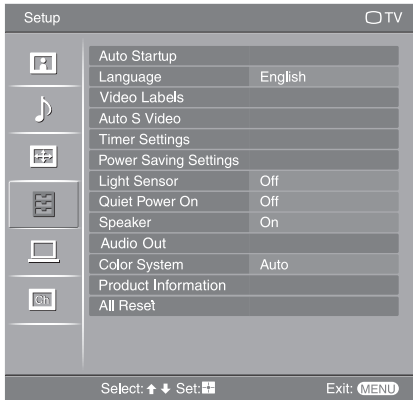
Vertical Shift

Adjusts the vertical position of the picture when the screen format is set to “Zoom”.

Vertical Size

Adjusts the vertical size of the picture when the screen format is set to “Zoom” or “Wide Zoom”.

Setup menu



You can select the options listed below on the Setup menu. To select options in “Settings”, see “Navigating through menus” (page 17).

Auto Startup

Starts the “first time operation menu” to tune in all the available channels. Usually you do not need to do this operation because the channels are already tuned when the TV was first installed (page 5, 6). However, this option allows you to repeat the process (e.g., to retune the TV after moving house, or to search for new channels that have been launched by broadcasters).

Language

Selects the language in which the menus are displayed.

Video Labels

Assigns a name to any equipment connected to the side and rear jacks. The name will be displayed briefly on the screen when the equipment is selected. You can skip an input source that is not connected to any equipment.

- 1 Press \uparrow/\downarrow to select the desired input source, then press \oplus .
- 2 Press \uparrow/\downarrow to select the desired option below, then press \oplus .

Equipment labels: Uses one of the preset labels to assign a name to connected equipment.

“Edit”: Creates your own label. Follow steps 2 to 4 of “Program Labels” (page 26).

“Skip”: Skips an input source that is not connected to any equipment when you press \uparrow/\downarrow to select the input source.

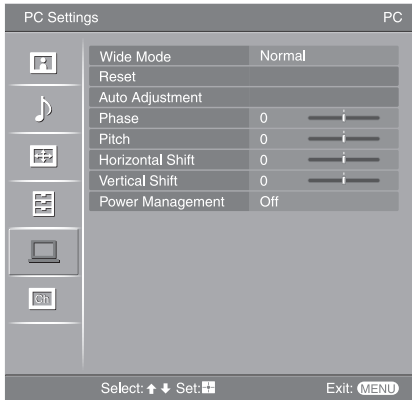
Auto S Video

Selects the input signal from S video sockets S- \odot when S- \odot / \rightarrow 1/2 sockets are both connected.

Continued

Timer Settings	Sets the timer to turn on/off the TV.
	Sleep Timer
	Sets a period of time after which the TV automatically switches itself into standby mode.
	When the “Sleep Timer” is activated, the ⏰ (Timer) indicator on the TV (front) lights up in amber.
	Tips
	<ul style="list-style-type: none"> • If you switch off the TV and switch it on again, “Sleep Timer” is reset to “Off”. • “TV will soon turn off by Sleep Timer” appears on the screen one minute before the TV switches to standby mode.
	On Timer
	Sets the timer to turn on the TV.
	“Day”: Selects the day on which you want to activate the On Timer.
	“Time”: Sets the time to turn on the TV.
	“Duration”: Selects the time period after which the TV automatically switches to standby mode again.
	“Volume Setup”: Sets the volume when the timer turns on the TV.
	Clock Set
	Allows you to adjust the clock manually.
Power Saving Settings	Power Saving
	Selects the power saving mode to reduce the power consumption of the TV.
	When “Picture Off” is selected, the picture is switched off and the ⏻ (Picture Off) indicator on the TV (front) lights up in green. The sound remains unchanged.
	Power Consumption
	Displays the power consumption level of the selected power saving mode.
	When “Display” is selected, power consumption level will be displayed on the screen when you press ⏻ (?) or turn on the TV.
Light Sensor	Automatically optimizes the picture settings according to the ambient light in the room.
Quiet Power On	Sets the volume control at a low level when the TV is first turned on, gradually increasing the sound to a preset level.
Speaker	Switches on/off the TV’s internal speakers.
	“On”: The TV speakers are turned on in order to listen to the TV’s sound through TV’s speakers.
	“Off”: The TV speakers are turned off in order to listen to the TV’s sound only through your external audio equipment connected to the audio output jacks.
Audio Out	Sets the method used to adjust the volume from the connected audio system. This option can be selected only when “Speaker” is set to “Off”.
	“Variable”: The audio output level from the connected audio system can be controlled by the TV’s remote.
	“Fixed”: The audio volume is fixed on the TV. Adjust the volume (and the audio settings) on the audio system.
Color System	Selects the color system (“Auto”, “PAL”, “SECAM”, “NTSC3.58”, “NTSC4.43”, or “PAL60”) according to the input signal from the input source.
Product Information	Displays the serial number and model name of your TV.
All Reset	Resets all the Setup settings to the factory settings and then launches the Auto Startup screen.

PC Settings menu



You can select the options listed below on the PC Settings menu. To select options in “Settings”, see “Navigating through menus” (page 17).

Wide Mode

Selects a screen mode for displaying input from your PC.

“Normal”: Displays the picture in its original size.

“Full1”: Enlarges the picture to fill the display area, keeping its original horizontal-to-vertical aspect ratio.

“Full2”: Enlarges the picture to fill the display area.

Reset

Resets all the PC settings to the factory settings.

Auto Adjustment

Automatically adjusts the display position and phase of the picture when the TV receives an input signal from the connected PC.

Tip

Auto Adjustment may not work well with certain input signals. In such cases, manually adjust “Phase”, “Pitch”, “Horizontal Shift” and “Vertical Shift”.

Phase

Adjusts the phase when the screen flickers.

Pitch

Adjusts the pitch when the picture has unwanted vertical stripes.

Horizontal Shift

Adjusts the horizontal position of the picture for each screen format.

Vertical Shift

Adjusts the vertical position of the picture for each screen format.

Power Management

Switches the TV to standby mode if no signal is received for 30 seconds.

Channel Setup menu



You can change/set the Channel settings using the Channel Setup menu. To select options in “Settings”, see “Navigating through menus” (page 17).

1 Digit Direct

When “1 Digit Direct” is set to “On”, you can select a channel using one preset number button (0 - 9) on the remote.

Note

When “1 Digit Direct” is set to “On”, you cannot select channel numbers 10 and above entering two digits using the remote.

Auto Tuning

Tunes in all the available channels.

Usually you do not need to do this operation because the channels are already tuned when the TV was first installed (page 5, 6). However, this option allows you to repeat the process (e.g., to retune the TV after moving house, or to search for new channels that have been launched by broadcasters).

Program Sorting

Changes the order in which the channels are stored on the TV.

- 1 Press \uparrow/\downarrow to select the channel you want to move to a new position, then press \oplus .
- 2 Press \uparrow/\downarrow to select the new position for the channel, then press \oplus .

Program Labels

Assigns a channel name of your choice up to five letters or numbers. The name will be displayed briefly on the screen when the channel is selected.

- 1 Press \uparrow/\downarrow to select the channel you want to name, then press \oplus .
- 2 Press \uparrow/\downarrow to select the desired letter or number (“_” for a blank space), then press \leftrightarrow .

If you input a wrong character

Press \leftrightarrow to select the wrong character. Then, press \uparrow/\downarrow to select the correct character.

To delete all the characters

Select “Reset”, then press \oplus .

- 3 Repeat the procedure in step 2 until the name is complete.
- 4 Select “OK”, then press \oplus .

Program Block

Blocks an individual channel from being watched.

- 1 Press \uparrow/\downarrow to select the channel you want to block, then press \oplus .
- 2 Press \uparrow/\downarrow to select “Block”, then press \oplus .
To watch the channel, select “Allow”.

Manual Program Preset

Before selecting “Label”/“AFT”/“Audio Filter”/“Skip”, press PROG +/- to select the program number with the channel. You cannot select a program number that is set to skip.

Program/TV System/VHF or UHF

Presets program channels manually.

- 1 Select “Program”, then press \oplus .
- 2 Press \uparrow/\downarrow to select the program number you want to manually tune (if tuning a VCR, select channel 00), then press RETURN.
- 3 Press \uparrow/\downarrow to select “TV System”, then press \oplus .
- 4 Press \uparrow/\downarrow to select the best received TV broadcast systems, then press \oplus .
- 5 Select “VHF” or “UHF”, then press \oplus .
- 6 Tune the channels as follows:
Press \leftarrow/\rightarrow to search for the next available channel. When a channel has been found, the search will stop. To continue searching, press \leftarrow/\rightarrow .

Repeat the procedure above to preset other channels manually.

Label

Assigns a name of your choice, up to five letters or numbers, to the selected channel. This name will be displayed briefly on the screen when the channel is selected. To input characters, follow steps 2 to 4 of “Program Labels” (page 26).

AFT

Allows you to fine-tune the selected program number manually if you feel that a slight tuning adjustment will improve the picture quality. You can adjust the fine tuning over a range of -15 to +15. When “On” is selected, the fine tuning is performed automatically.

Audio Filter

Improves the sound for individual channels in the case of distortion in mono broadcasts. Sometimes a non-standard broadcast signal can cause sound distortion or intermittent sound muting when watching mono program.

If you do not experience any sound distortion, we recommend that you leave this option set to the factory setting “Off”.

Note

You cannot receive stereo or dual sound when “Low” or “High” is selected.

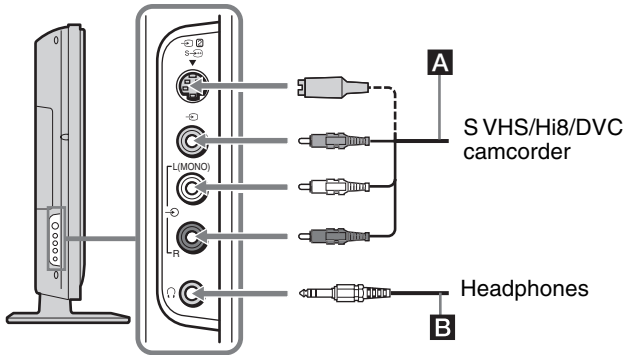
Skip

Skips unused channels when you press PROG +/- to select channels (you can still select a skipped channel using the number buttons).

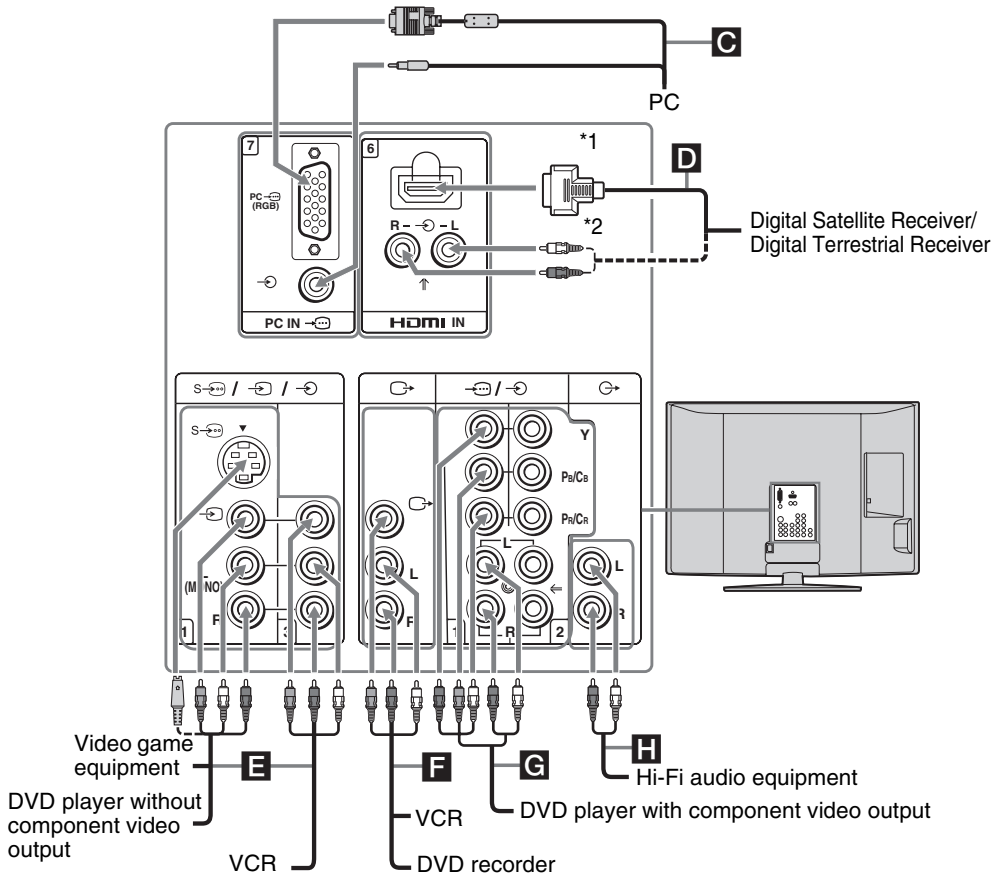
Connecting optional equipment

You can connect a wide range of optional equipment to your TV. Connecting cables are not supplied.

Connecting to the TV (side)























Connecting to the TV (rear)



*1 Use an HDMI cable (recommended Sony HDMI cable), HDMI-to-DVI cable, or adaptor (not supplied).

*2 When using an HDMI cable, it is not necessary to connect the audio cable. When using an HDMI-to-DVI cable or an adaptor, it is necessary to connect the audio cable.

To connect	Do this
S VHS/Hi8/DVC camcorder or video game equipment A	Connect to the S video jack  2 or the video jack  2, and the audio jacks  2. To avoid picture noise, do not connect the camcorder to the video jack  2 and the S video jack  2 at the same time. If you connect mono equipment, connect to the L (MONO) jack  2.
Headphones B	Connect to the  jack to listen to sound from the TV on headphones.
PC C	Connect to the PC  (RGB) jack and the audio jack  . It is recommended to use a PC cable with ferrites.
Digital satellite receiver or digital terrestrial receiver D	<p>Connect only to the HDMI IN jack. The digital video and audio signals are input from the digital satellite receiver.</p> <p>Tip If the digital satellite receiver has an HDMI jack, connecting via an HDMI cable will provide the best results.</p> <p>Note When using an HDMI-to-DVI cable or an adaptor, be sure to connect the DVI output connector first; then connect to the HDMI jack on the TV.</p>
Video game equipment, DVD player without component video output, or VCR E	Connect to the S video jack  1 or the video jack  1 or 3, and the audio jacks  1 or 3. To avoid picture noise, do not connect the camcorder to the video jack  1 and the S video jack  1 at the same time. If you connect mono equipment, connect to the L (MONO) jack  1 or 3.
DVD recorder or VCR F	Connect to the video output jacks  to record the image from the TV. Connect to the audio output jacks  to record the sound from the TV on the DVD recorder or VCR. To turn off the sound of the TV speakers, set "Speaker" to "Off" (page 24).
DVD player with component video output G	Connect to the component jacks  1, 2 and the audio jacks  1, 2. For better picture quality, component connection is recommended if your DVD player has a component video output.

To connect	Do this
Hi-Fi audio equipment H	Connect to the audio output jacks  to listen to the sound from the TV on the Hi-Fi audio equipment. To turn off the sound of the TV speakers, set "Speaker" to "Off" (page 24).

Using the Tools menu in PC input mode

Press TOOLS to display the following options when viewing pictures input from the connected PC.

Options	Description
Close	Close the Tools Menu.
Power Saving	See page 24.
Picture Mode	See page 18.
Sound Mode	See page 20.
Auto Adjustment	See page 25.
Horizontal Shift	See page 25.
Vertical Shift	See page 25.

Specifications

Display Unit

Power Requirements:

110–240 V AC, 50/60 Hz

Screen Size:

KLV-46S200A: 46 inches

KLV-40S200A: 40 inches

KLV-32S200A: 32 inches

KLV-26S200A: 26 inches

Display Resolution:

1,366 pixels (horizontal) × 768 lines (vertical)

Power Consumption:

Indicated on the rear of the TV.

Dimensions (w × h × d):

KLV-46S200A:

Approx. 1120 × 805 × 334 mm (with stand)

Approx. 1120 × 755 × 116 mm (without stand)

KLV-40S200A:

Approx. 988 × 716 × 334 mm (with stand)

Approx. 988 × 664 × 103 mm (without stand)

KLV-32S200A:

Approx. 792 × 593 × 219 mm (with stand)

Approx. 792 × 546 × 99 mm (without stand)

KLV-26S200A:

Approx. 658 × 516 × 219 mm (with stand)

Approx. 658 × 470 × 94 mm (without stand)

Weight:

KLV-46S200A:

Approx. 35 kg (with stand)

Approx. 29 kg (without stand)

KLV-40S200A:

Approx. 28 kg (with stand)

Approx. 22 kg (without stand)

KLV-32S200A:

Approx. 18 kg (with stand)

Approx. 16 kg (without stand)

KLV-26S200A:

Approx. 14 kg (with stand)

Approx. 12 kg (without stand)

Panel System

LCD (Liquid Crystal Display) Panel

TV System

I, D/K, B/G, M

Color System

PAL, PAL60, SECAM, NTSC 4.43, NTSC 3.58

Antenna

75 ohm external terminal

Channel Coverage

B/G

VHF: E2 to E12 / UHF: E21 to E69 /

CATV: S01 to S03, S1 to S41

VHF: 0 to 12, 5A, 9A / UHF: 28 to 69 /

CATV: S01 to S03, S1 to S41 (Australia only)

VHF: 1 to 11 / UHF: 21 to 69 /

CATV: S01 to S03, S1 to S41 (New Zealand only)

I

UHF: B21 to B68 / CATV: S01 to S03, S1 to S41

D/K

VHF: C1 to C12, R1 to R12 / UHF: C13 to C57, R21 to R60 /


CATV: S01 to S03, S1 to S41, Z1 to Z39


M

VHF: A2 to A13 / UHF: A14 to A79 /

CATV: A-8 to A-2, A to W+4, W+6 to W+84


Terminals

S VIDEO 1/2: 

S VIDEO (4-pin mini DIN): 


Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative

C: 0.286 Vp-p (Burst signal), 75 ohms

VIDEO IN 1/2/3/: 


VIDEO: 

1 Vp-p, 75 ohms unbalanced, sync negative

AUDIO: 

500 mVrms

Impedance: 47 kilohms

HD/DVD IN 1/2: 


Y, Pb/Cb, Pr/Cr (Component Video) :

Y : 1.0 Vp-p, 75 ohms unbalanced, sync negative

Pb/Cb : 0.7 Vp-p, 75 ohms


Pr/Cr : 0.7 Vp-p, 75 ohms

Signal format : 480i, 576i, 480p, 576p, 720p, 1080i

AUDIO: 


500 mVrms

Impedance: 47 kilohms

VIDEO OUT: 

VIDEO: 

1 Vp-p, 75 ohms unbalanced, sync negative

AUDIO: 

More than 1 Vrms at the maximum volume setting (Variable)

More than 500 mVrms (Fixed)

HDMI IN

Video: 1080i, 720p, 576p, 576i, 480p, 480i

Audio: Two channel linear PCM

32, 44.1 and 48 kHz, 16, 20 and 24 bits,

PC : 


D-sub 15-pin, analogue RGB, 0.7 Vp-p,

75 ohms, positive

See the PC input signal Reference chart on page 31

AUDIO : 

Stereo minijack, 0.5 Vrms, 1 kilohm

Headphones 

Stereo minijack

Sound Output

10 W + 10 W

Optional Accessories

Wall-Mount bracket

SU-WL51 (for KLV-46S200A/KLV-40S200A)

SU-WL31 (for KLV-32S200A/KLV-26S200A)

Design and specifications are subject to change without notice.

PC input signal Reference chart

Signals	Horizontal (Pixel)	Vertical (Line)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Standard
VGA	640	480	31.5	60	VGA
	640	480	37.5	75	VESA
	720	400	31.5	70	VGA-T
SVGA	800	600	37.9	60	VESA Guidelines
	800	600	46.9	75	VESA
XGA	1024	768	48.4	60	VESA Guidelines
	1024	768	56.5	70	VESA
	1024	768	60	75	VESA
WXGA	1280	768	47.4	60	VESA
	1280	768	47.8	60	VESA
	1360	768	47.7	60	VESA



- This TV's PC input does not support Sync on Green or Composite Sync.
- This TV's PC input does not support interlaced signals.
- For the best picture quality, it is recommended to use the signals (boldfaced) in the above chart with a 60Hz vertical frequency from a personal computer. In plug and play, signals with a 60Hz vertical frequency will be selected automatically.

Troubleshooting

Check whether the  (standby) indicator is flashing in red.

When it is flashing











The self-diagnosis function is activated.







- 1 Measure how many times the  (standby) indicator blinks.
For example, the indicator blinks six times, and stops blinking for three seconds.
- 2 Press  on the TV (top side) to switch it off, disconnect the AC power cord and inform your dealer or Sony service center of how the indicator flashes (duration and interval).

When it is not flashing

- 1 Check the items in the tables below.
- 2 If the problem still persists, have your TV serviced by qualified service personnel.

Picture

Problem	Cause/Remedy
No picture (screen is dark) and no sound	<ul style="list-style-type: none">• Check the power cord, antenna, and VCR connection.• The TV is not turned on. Press  on the TV (top side).• If the  (standby) indicator lights up in red, press .
No picture	<ul style="list-style-type: none">• The picture off feature is activated. (The  (Picture Off/Sleep Timer) indicator lights up in green.) Press any button except for , , , or  to cancel the picture off feature.
No picture or no menu information from equipment connected to the video input jack	<ul style="list-style-type: none">• Check that the optional equipment is on and press   repeatedly until the correct input symbol is displayed on the screen.• Check the connection between the optional equipment and the TV.
Distorted picture	<ul style="list-style-type: none">• Check if any connected optional equipment is installed in front of the TV or beside the TV. When installing optional equipment, leave some space between the optional equipment and the TV.• When changing programs or selecting Text, turn off any equipment connected to the video input jack on the rear of the TV.• Broadcast signals are too strong. Turn off or disconnect the booster if it is in use.
Double images or ghosting	<ul style="list-style-type: none">• Check antenna/cable connections.• Check the antenna location and direction. Contact a Sony dealer for advice.• Broadcast signals are reflected by nearby mountains or building. Use the fine tuning ("AFT") function (page 27). Otherwise, use a highly direction antenna.• Use of a booster is inappropriate. Turn off or disconnect the booster if it is in use.
Snowy picture and noisy sound	<ul style="list-style-type: none">• The antenna connection is loose or the antenna cable is damaged. Check the cable and connection on the TV, VCR, and on the wall (page 4).• Channel presetting is inappropriate or incomplete. Perform "Manual Program Preset" in the "Channel Setup" menu to preset the channel again (page 27).• The antenna type is inappropriate. Check the antenna type (VHF/UHF). Contact a Sony dealer for advice.• Adjust the antenna direction. Contact a Sony dealer for advice.• Signal transmission is low. Try using a booster.

Problem	Cause/Remedy
Only snow and noise appear on the screen	<ul style="list-style-type: none"> • Check if the antenna is broken or bent. • Check if the antenna has reached the end of its serviceable life (three to five years in normal use, one to two years at the seaside).
Picture (dotted lines or stripes) noise	<ul style="list-style-type: none"> • Keep the TV away from electrical noise sources such as cars, motorcycles, or hair-dryers, etc. • Make sure that the antenna is connected using the antenna cable (supplied). • Keep the antenna cable away from other connecting cables. • Do not use a 300-ohm twin lead cable as interference may occur. • Adjust the antenna direction for the minimum interference. Contact a Sony dealer for advice.
Picture noise when viewing a TV channel	<ul style="list-style-type: none"> • Select “Manual Program Preset” in the “Channel Setup” menu and adjust “AFT” to obtain better picture reception (page 27). • Select “Noise Reduction” in the “Picture” menu to reduce the noise in the picture (page 19).
Stripe noise during playback/recording of a VCR	<ul style="list-style-type: none"> • Video head interference. Keep your VCR away from the TV. • Leave a space of 30 cm between your VCR and the TV to avoid noise. • Avoid installing your VCR in front of the TV or beside the TV.
Good picture, but noisy sound	<ul style="list-style-type: none"> • The TV system setting is inappropriate. If the sound of all the channels are noisy, perform “Auto Tuning” in the “Channel Setup” menu to preset the channel again (page 26). If the sound of some channels is noisy, select the channel, then perform “Manual Program Preset” in the “Channel Setup” menu, and select the appropriate TV system (“TV System”) (page 27).
Good picture, but no sound	<ul style="list-style-type: none"> • The volume level is too low. Press \triangleleft + to increase the volume level. • The sound is muted. Press \boxtimes, or \triangleleft + to cancel the muting.
Some tiny black points and/or bright points on the screen	<ul style="list-style-type: none"> • The picture of a display unit is composed of pixels. Tiny black points and/or bright points (pixels) on the screen do not indicate a malfunction.
No color on programs	<ul style="list-style-type: none"> • Select “Reset” in the “Picture” menu to return to the factory settings (page 18).
No color	<ul style="list-style-type: none"> • The color intensity setting is too low. Select “Color” in the “Picture” menu to adjust the color intensity (page 18). • Adjust the antenna direction. Contact a Sony dealer for advice.
Lines moving across the TV screen	<ul style="list-style-type: none"> • There is interference from external sources, e.g., heavy machineries, broadcast station nearby. Use the fine tuning (“AFT”) function (page 27).
No color or irregular color when viewing a signal from the Y, Pb/Cb, Pr/Cr jacks of  / 	<ul style="list-style-type: none"> • Check the connection of the Y, Pb/Cb, Pr/Cr jacks of / . • Make sure that the Y, Pb/Cb, Pr/Cr jacks of /  are firmly seated in their respective jacks.
Picture flashes initially when changing to HDMI mode or switching on the TV with HDMI mode	<ul style="list-style-type: none"> • It might due to authentication process between HDMI equipment and TV. This does not indicate a malfunction.

Continued

Sound

Problem	Cause/Remedy
No sound, but good picture	<ul style="list-style-type: none">• Press \triangleleft +/- or \times (Mute).• Check that “Speaker” is set to “On” in the “Setup” menu (page 24).
Noisy sound	<ul style="list-style-type: none">• See the “Picture (dotted lines or stripes) noise” cause/remedy on page 33.
“High” is selected in “Audio Filter” when you use “Mono”.	<ul style="list-style-type: none">• Set to “Low”.
Stereo broadcast sound switches on and off, or is distorted; The sound switches between stereo and monaural frequently	<ul style="list-style-type: none">• The antenna connection is loose or the antenna cable is damaged. Check the cable and connection on the TV, VCR, and on the wall (page 4).• Adjust the antenna direction for the minimum interference. Contact a Sony dealer for advice.• Signal transmission is low. Try using a booster. Otherwise, use the fine tuning (“AFT”) function (page 27).
No sound from the computer	<ul style="list-style-type: none">• Check the connection of the audio cable (page 28).

General

Problem	Cause/Remedy
The TV turns off automatically (the TV enters standby mode)	<ul style="list-style-type: none">• Check if the Sleep function is activated (page 24).• “Power Management” is set to “On” when a PC is connected.
Some input sources cannot be selected	<ul style="list-style-type: none">• Select “Video Labels” in the “Setup” menu and cancel “Skip” of the input source (page 23).
The remote does not function	<ul style="list-style-type: none">• Replace the batteries.
The wide screen mode changes spontaneously when “Auto Wide” is “On”	<ul style="list-style-type: none">• During a transition between two programs, the TV detects the optimum wide screen mode. During this period, an irregular wide screen mode may appear.• The wide mode is switched automatically according to the revised signal with a Wide ID signal.• The Auto Wide feature stops working temporarily when you press $\text{[[[$], and resumes after a while. To fix in the manually selected wide screen mode, set “Auto Wide” to “Off” in the “Screen” menu (page 22).
Text display is incomplete or garbled	<ul style="list-style-type: none">• Your area may not be able to receive Text. Text is displayed only in the area that is covered by Text services.• The antenna connection is loose or the antenna cable is damaged. Check the cable and connection on the TV, VCR, and on the wall (page 4).• Adjust the antenna direction. Contact a Sony dealer for advice.• Signal transmission is too low. Try using a booster.• Using the fine tuning (“AFT”) function may improve the picture (page 27).
Cannot play shooting games	<ul style="list-style-type: none">• Some shooting games which involve pointing a light beam at the TV screen with an electronic gun or rifle cannot be used with your TV. For details, see the instruction manual supplied with the video game software.
The TV cabinet creaks	<ul style="list-style-type: none">• Changes in room temperature sometimes make the TV cabinet expand or contract, causing a noise. This does not indicate a malfunction.
Static discharge is felt when touching the TV cabinet	<ul style="list-style-type: none">• This is the same static discharge that is felt when touching metal door handles or car doors especially when the air is dry, for example in winter. This does not indicate a malfunction.

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
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
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
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