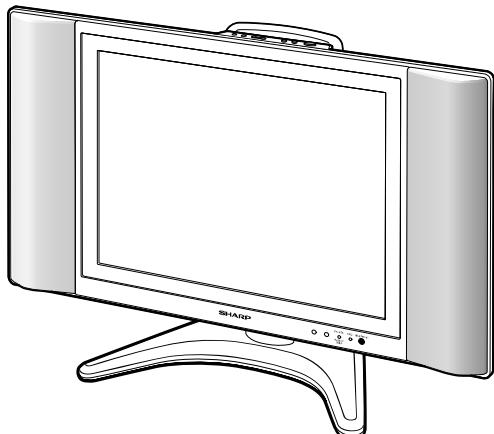


SHARP**SERVICE MANUAL**

S64T8LC20B6US

**LCD COLOR TELEVISION****MODEL****LC-20B6U-S**

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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SHARP CORPORATION

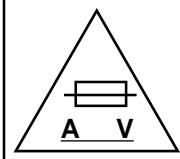
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after sales service only.
The contents are subject to change without notice.

IMPORTANT SERVICE SAFETY PRECAUTION

- Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.



CAUTION: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE REPLACE ONLY WITH SAME TYPE F3701 (2.0A, 250V), F3702 (1.25A, 250V), AND F6701 (6.3A, 250V) FUSE.

BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

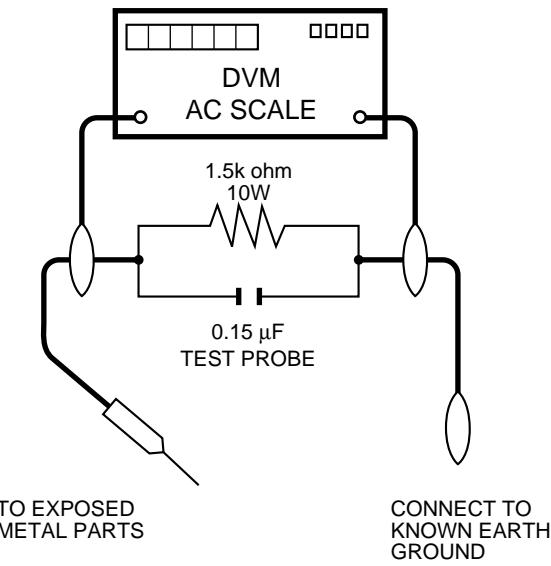
Before returning the receiver to the user, perform the following safety checks:

1. Inspect all lead dress to make certain that leads are not pinched, and check that hardware is not lodged between the chassis and other metal parts in the receiver.
 2. Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
 3. To be sure that no shock hazard exists, check for leakage current in the following manner.
- Plug the AC cord directly into a 110~240 volt AC outlet, and connect the DC power cable into the receiver's DC jack. (Do not use an isolation transformer for this test).
 - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to an earth ground.

- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

All checks must be repeated with the AC cord plug connection reversed. (If necessary, a nonpolarized adaptor plug must be used only for the purpose of completing these checks.)

Any reading of 0.75V peak (this corresponds to 0.5 mA. peak AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the monitor to the owner.



SAFETY NOTICE

Many electrical and mechanical parts in LCD television have special safety-related characteristics.

These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠"

and shaded areas in the **Replacement Parts Lists** and **Schematic Diagrams**.

For continued protection, replacement parts must be identical to those used in the original circuit.

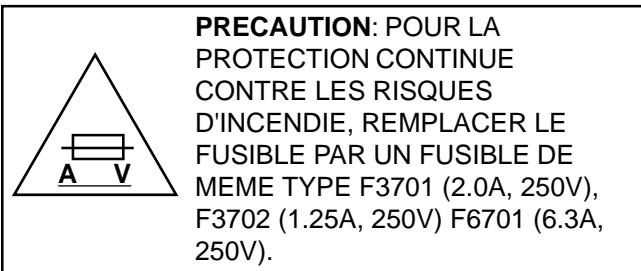
The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

PRECAUTIONS A PRENDRE LORS DE LA REPARATION

- Ne peut effectuer la réparation qu' un technicien spécialisé qui s'est parfaitement accoutumé à toute vérification de sécurité et aux conseils suivants.

AVERTISSEMENT

1. N'entreprendre aucune modification de tout circuit. C'est dangereux.
2. Débrancher le récepteur avant toute réparation.



VERIFICATIONS CONTRE L'INCEN-DIE ET LE CHOC ELECTRIQUE

Avant de rendre le récepteur à l'utilisateur, effectuer les vérifications suivantes.

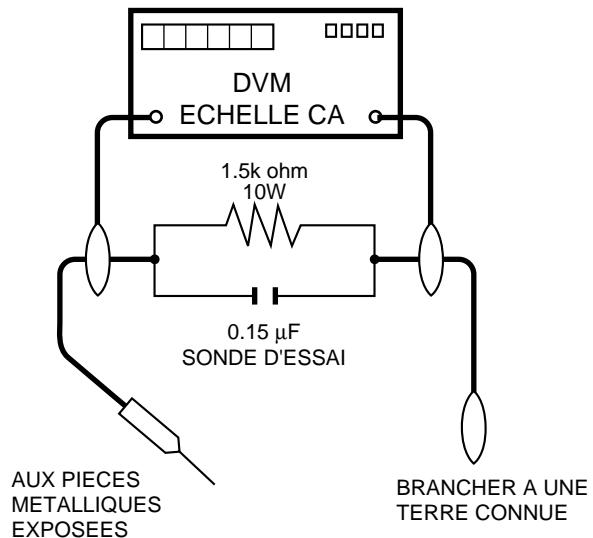
1. Inspecter tous les faisceaux de câbles pour s'assurer que les fils ne soient pas pincés ou qu'un outil ne soit pas placé entre le châssis et les autres pièces métalliques du récepteur.
2. Inspecter tous les dispositifs de protection comme les boutons de commande non-métalliques, les isolants, le dos du coffret, les couvercles ou blindages de réglage et de compartiment, les réseaux de résistance-capacité, les isolateurs mécaniques, etc.
3. S'assurer qu'il n'y ait pas de danger d'électrocution en vérifiant la fuite de courant, de la façon suivante:
 - Brancher le cordon d'alimentation directement à une prise de courant de 110-240V. (Ne pas utiliser de transformateur d'isolation pour cet essai).
 - A l'aide de deux fils à pinces, brancher une résistance de $1.5k\Omega$ 10 watts en parallèle avec un condensateur de $0.15\mu F$ en série avec toutes les pièces métalliques exposées du coffret et une terre connue comme une

conduite électrique ou une prise de terre branchée à la terre.

- Utiliser un voltmètre CA d'une sensibilité d'au moins $5000\Omega/V$ pour mesurer la chute de tension en travers de la résistance.
- Toucher avec la sonde d'essai les pièces métalliques exposées qui présentent une voie de retour au châssis (antenne, coffret métallique, tête des vis, arbres de commande et des boutons, écusson, etc.) et mesurer la chute de tension CA en-travers de la résistance. Toutes les vérifications doivent être refaites après avoir inversé la fiche du cordon d'alimentation. (Si nécessaire, une prise d'adapatation non polarisée peut être utilisée dans le but de terminer ces vérifications.)

Tous les courants mesurés ne doivent pas dépasser 0,5 mA.

Dans le cas contraire, il y a une possibilité de choc électrique qui doit être supprimée avant de rendre le récepteur au client.



AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les téléviseurs présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue. Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.

Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont

identifiées par la marque " Δ " et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques.

Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies, radiations X ou autres accidents.

Precautions for using lead-free solder

1 Employing lead-free solder

"All PWBs" of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.

Example:

LFa

Sn-Ag-Cu

Indicates lead-free solder of tin, silver and copper.

2 Using lead-free wire solder

When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40°C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

3 Soldering

As the melting point of lead-free solder (Sn-Ag-Cu) is about 220°C which is higher than the conventional lead solder by 40°C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.

Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to turn on and off the power of the bit as required.

If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

Part No,	★	Description	Code
ZHNDAi123250E	J	φ0.3mm 250g(1roll)	BL
ZHNDAi126500E	J	φ0.6mm 500g(1roll)	BK
ZHNDAi12801KE	J	φ1.0mm 1kg(1roll)	BM

SPECIFICATIONS

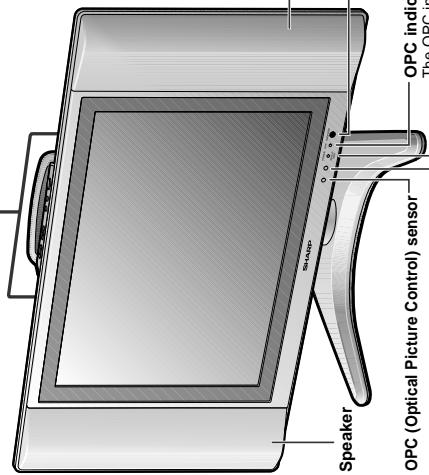
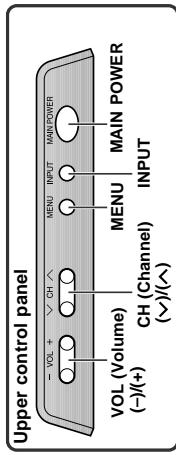
Items	Model	LC-20B6U
LCD panel	20.1" Advanced Super View & BLACK TFT LCD	
Number of dots	2,359,296 dots XGA	
Video color systems	N358, N443, PAL, PAL-M, PAL-N, SECAM, PAL-60	
TV function	TV Standard (CCIR)	NTSC/PAL-M/PAL-N
	TV Tuning System	PLL 181 ch.
	STEREO	MTS+SAP
	CATV	125 ch.
Y/C FILTER	3D Y/C FILTER	
Brightness	430 cd/m ²	
Viewing angles	H: 170° V: 170°	
Audio amplifier	2.1 W × 2	
Speakers	ø2.1 in. (ø5.7 cm), 2 pcs.	
Terminals	COMPONENT1	COMPONENT1-IN, AUDIO-IN
	COMPONENT2/AV1	COMPONENT2/AV1-IN, AUDIO-IN, S-VIDEO-IN
	AV-IN2	AV-IN2/AV-OUT
	PC-IN	PC Connector: 15-pin mini D-sub PC AUDIO: Mini-jack for stereo (ø3.5 mm)
	Antenna	F-Type
	Headphone	Mini-jack for stereo (ø3.5 mm)
OSD language	English/Spanish/French	
Power supply	DC 12V, AC 110-240V, 50/60Hz (AC adapter), AC 110-125V (AC cord)	
Power consumption	81 W (0.5 W standby) :AC 120V	
	71 W: DC 12V	
Weight	19.0 lbs. (8.6 kg), w/o accessories	
Accessories	Remote control, Battery (× 2), Antenna cable, AC adapter, RGB cable, AC cord, Cable holder, Cable clamp, Operation manual, Registration card	

■ As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

OPERATION MANUAL

Part Names of Main Unit

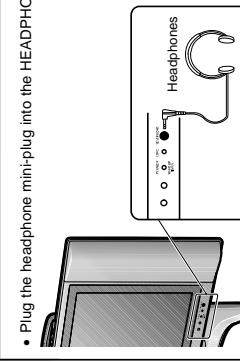
Controls



NOTE

- INPUT, CH (↔), VOL (+/-), and MENU on the main unit have the same functions as the same buttons on the remote control. Fundamentally, this operation manual provides a description based on operation using the remote control.

Listening with Headphones



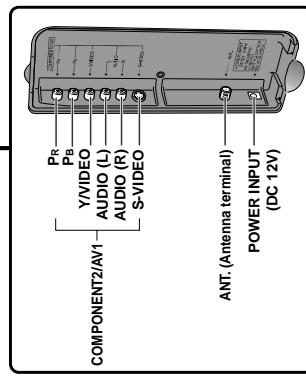
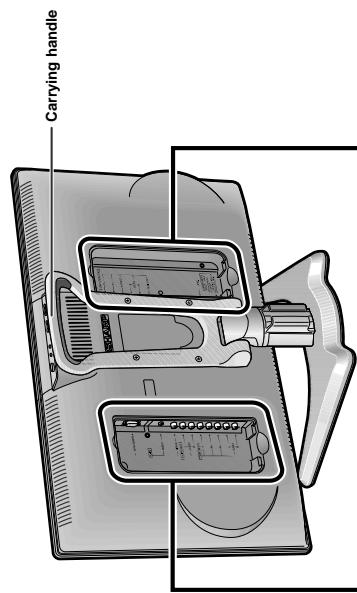
NOTE

- Plug the headphone mini-plug into the HEADPHONE jack located on the rear of the main unit.
- ▼ On-screen display
 - Adjust the sound volume using VOL (+/-) on the remote control.

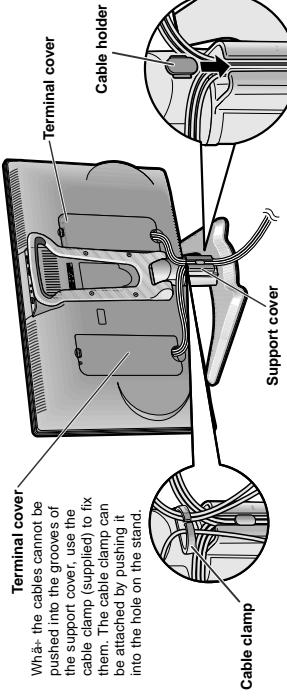
NOTE

- Headphones are not included in the supplied accessories.
- No sound is heard from the main unit speakers when a headphone mini-plug is connected into the HEADPHONE jack.

Rear View



How to Fix the Cables



- Pull the cables connected to each terminal through the holes and close the left and right terminal covers. Push the cables into the grooves of the support cover. Insert the cable holder (supplied) from above the support cover and fix the cables.

Terminal cover

Cable holder

Support cover

Terminal cover

Cable clamp

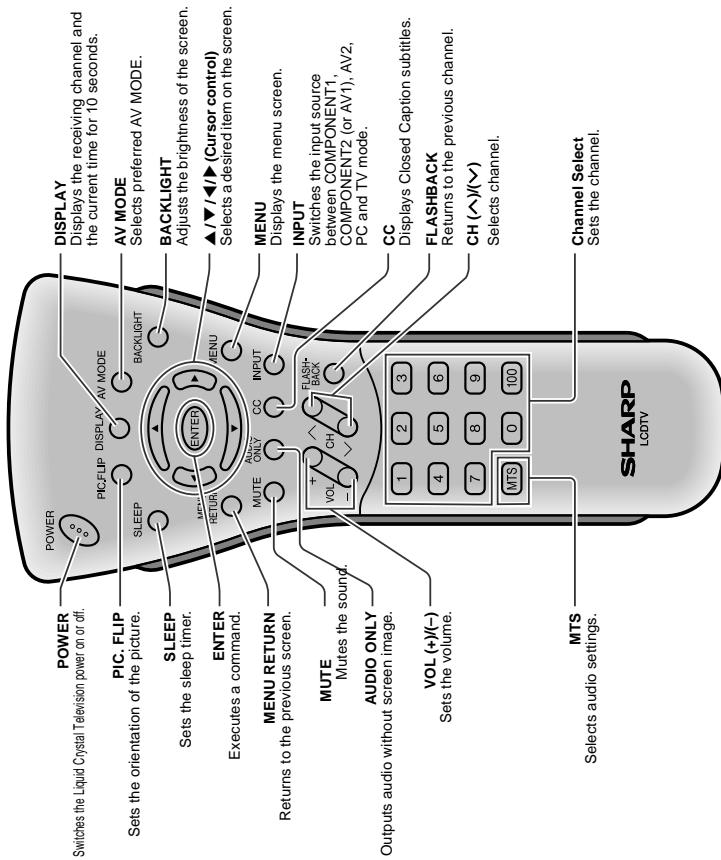
Support cover

Part Names of Remote Control

Preparation

Installing Batteries in the Remote Control

Before using the LCD TV set for the first time, install the two "AAA" size batteries supplied in the remote control. When the batteries become depleted and the remote control fails to operate, replace the batteries with new "AAA" size batteries.



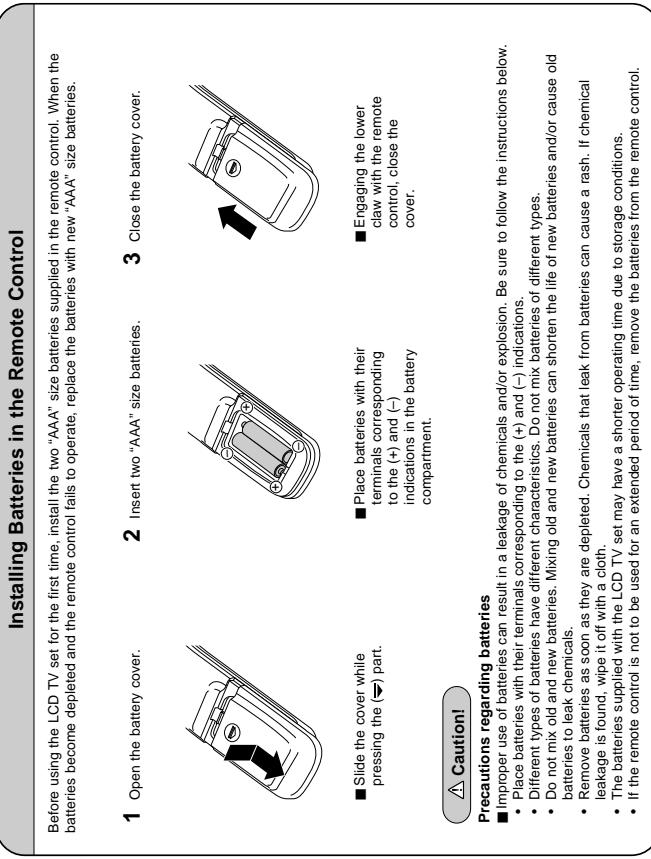
TV Signals in Your Region

This product is factory set to comply with the TV broadcasting system in the United States. For Brazil, Argentina and Uruguay,

Set the color system according to the country before using this product by following the table below.					
Country	TV broadcasting system	Factory setting of color system	User setting		
		TV	Video	TV	Video
U.S.A., Canada, Mexico, Latin America	Color: NTSC TV ch: US ch	NTSC (NTSC) US ch	NTSC (NTSC) US ch	Not required or N/A	
	Color: NTSC TV ch: US ch	NTSC (NTSC) US ch	NTSC (NTSC) US ch	Not required or N/A	
Brazil	Color: PAL-M TV ch: US ch	NTSC (NTSC) US ch	NTSC (NTSC) US ch	Set color system to PAL-N	Set color system to PAL-N
Argentina, Uruguay	Color: PAL-N TV ch: 1-15, ch 100-108	NTSC (NTSC) US ch	NTSC (NTSC) US ch	PAI-N	PAI-N

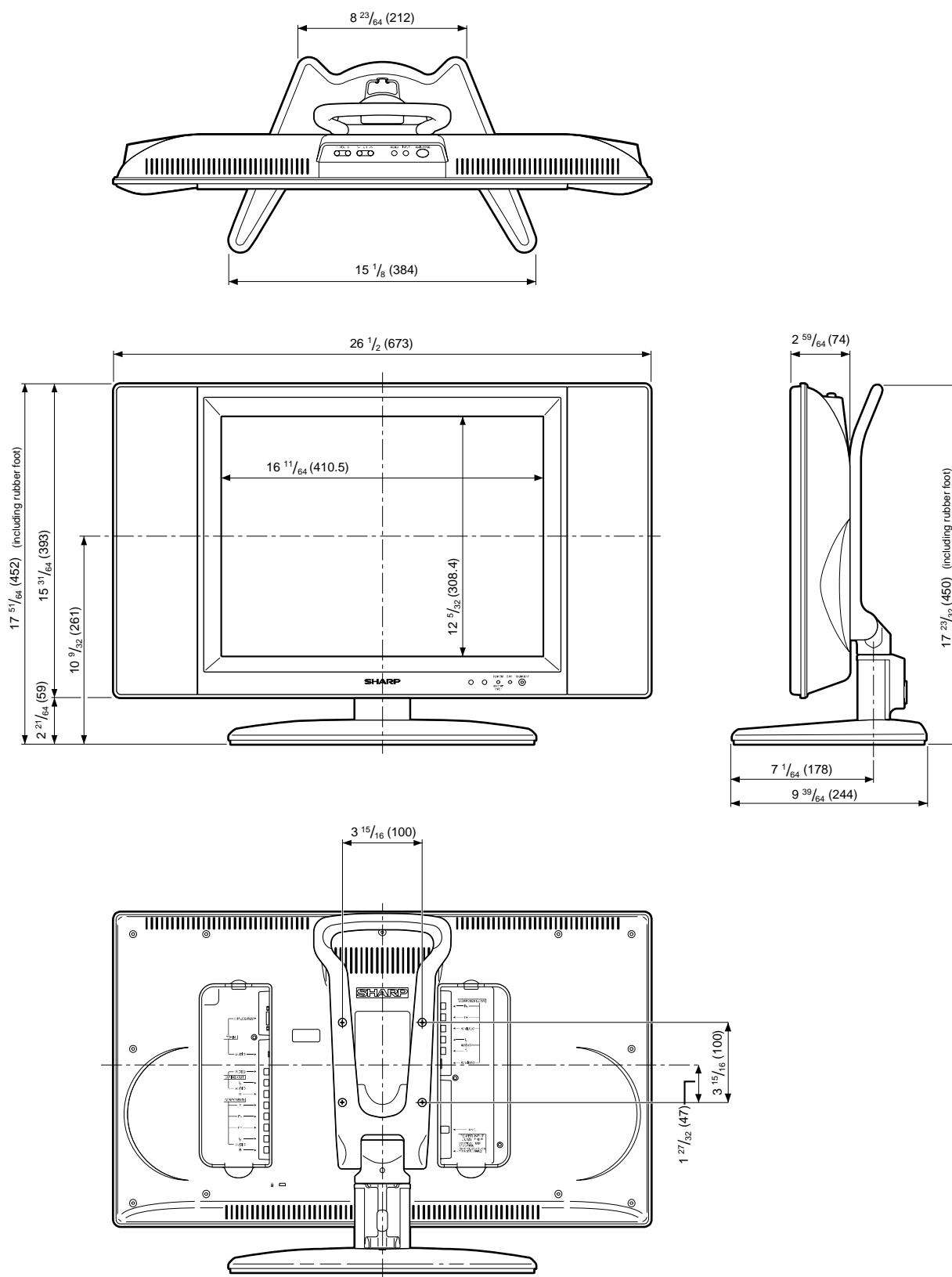
NOTE

- The 3 Dimensional Y/C separation circuit* only works when the color system is set to NTSC in TV mode and /video mode.
 - *The 3 Dimensional Y/C separation circuit is used to remove flickering and color bleeding.
 - *The 3 Dimensional Y/C separation circuit does not function when S-VIDEO or COMPONENT signals are played.



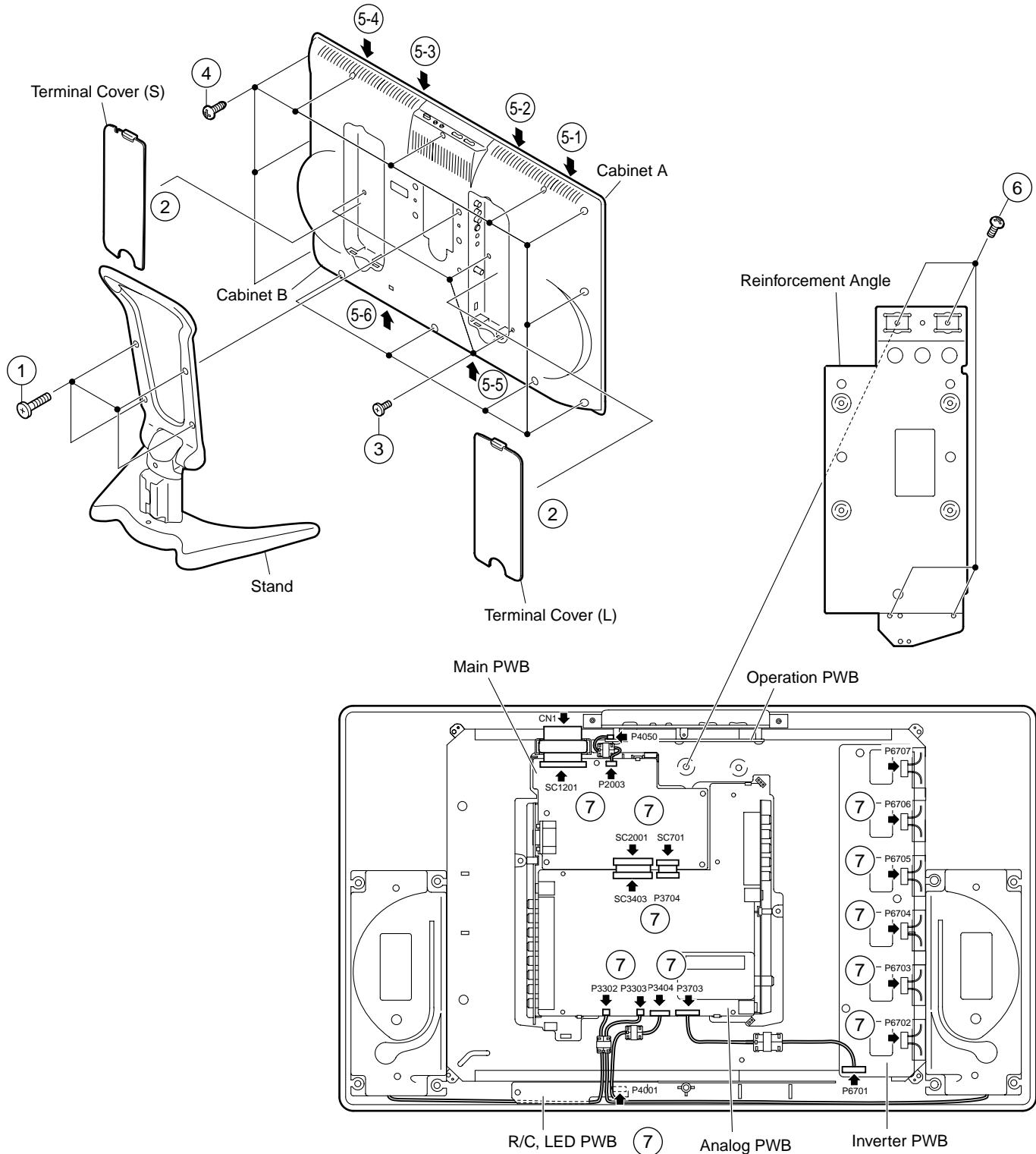
DIMENSIONS

Unit: inch (mm)

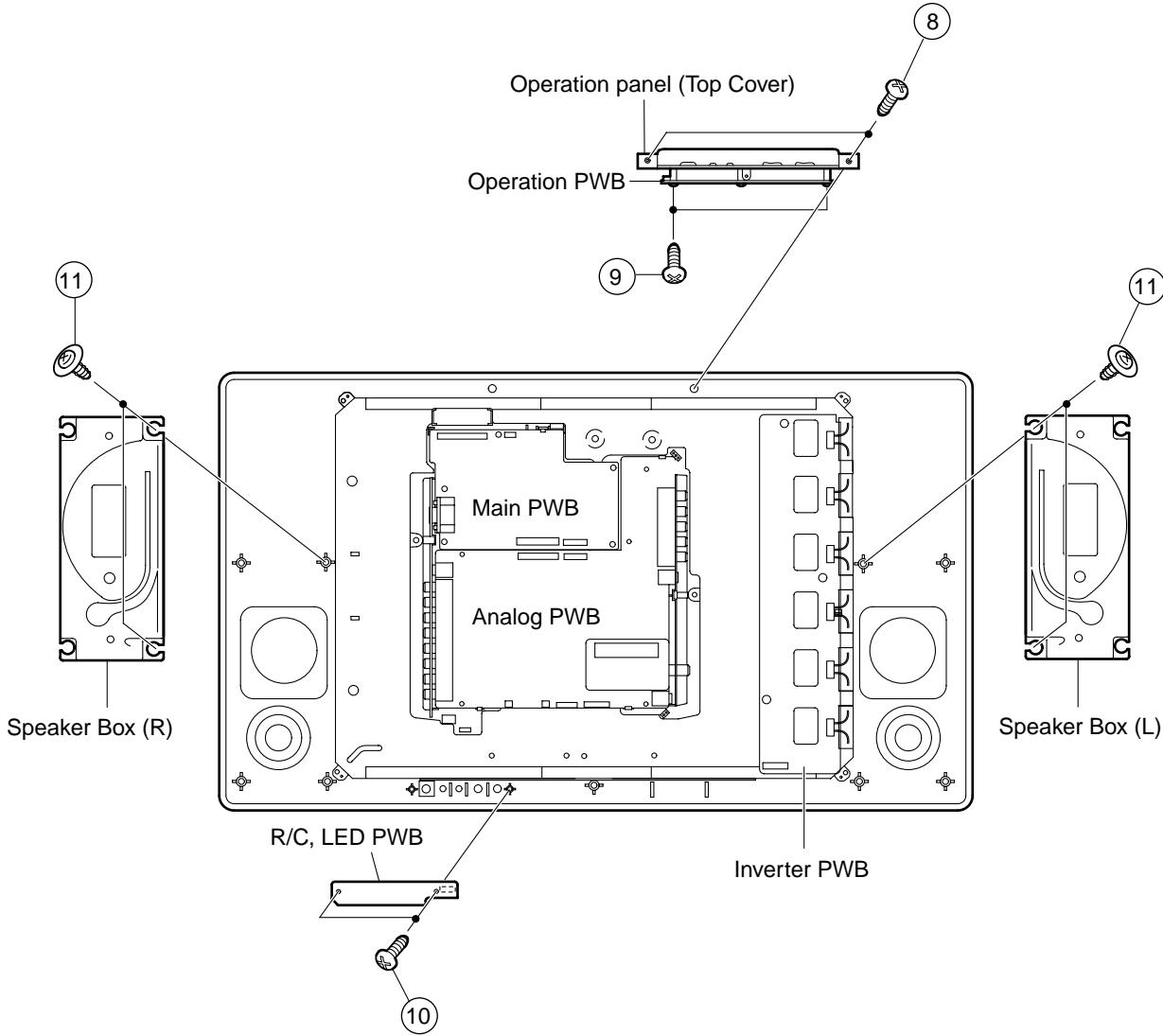


REMOVING OF MAJOR PARTS

1. Remove the four lock screws from the stand, and detach the stand.
2. Remove the terminal covers (left and right).
3. Remove the three terminal screws.
4. Remove the twelve lock screws from the cabinet B.
5. Cabinet A is order of 5-1 thru 5-6, and detach the cabinet B.
6. Remove the four lock screws from the stand angle, and detach the reinforcement angle.
7. Disconnect all the connectors from all the PWBs.

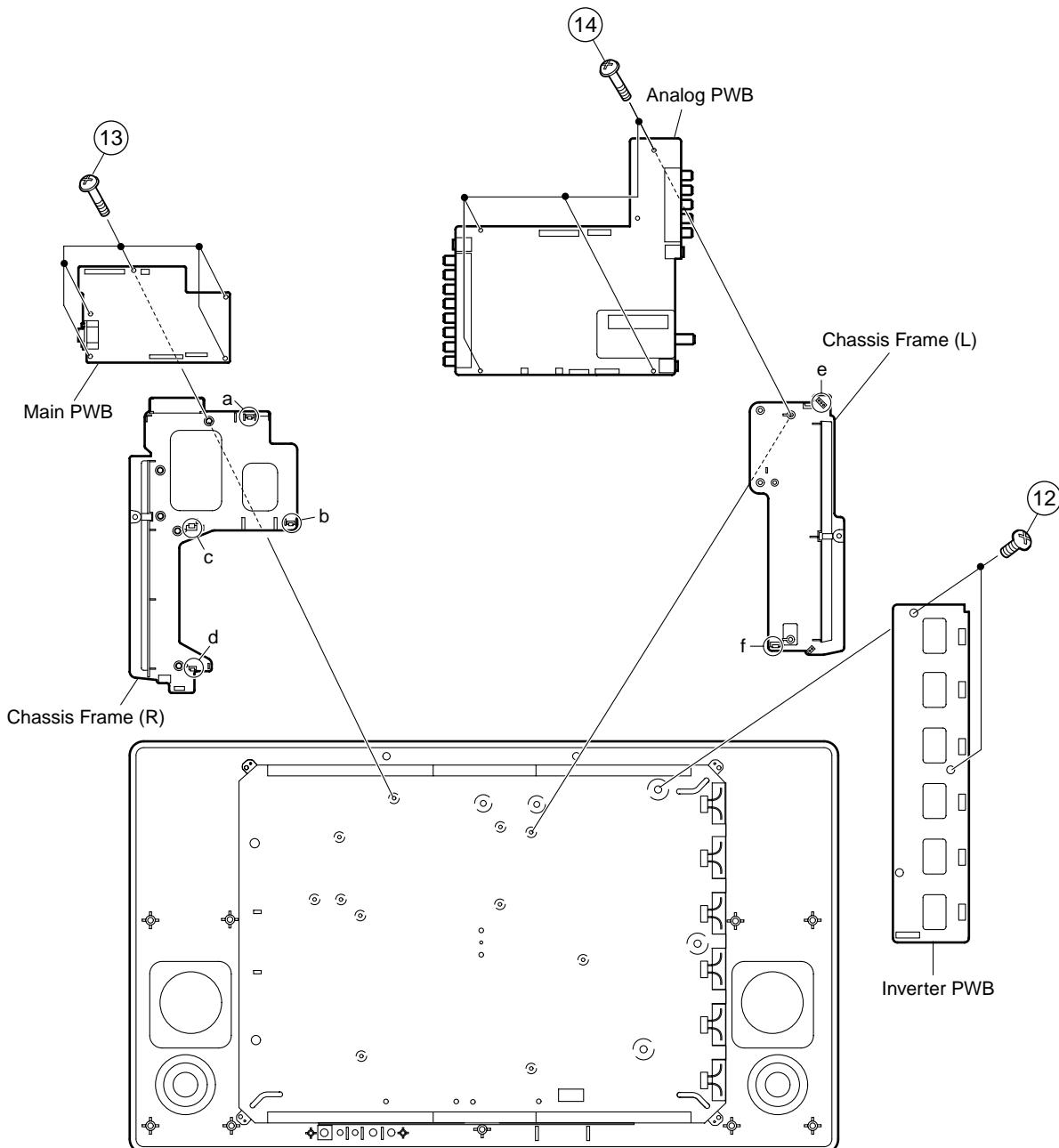


8. Remove the two lock screws from the operation panel (top cover), and detach the operation panel (top cover).
9. Remove the two lock screws from the operation PWB, and detach the operation PWB.
10. Remove the two lock screws from the R/C, LED PWB, and detach the R/C, LED PWB.
11. Remove the two lock screws each from the speaker boxes (left and right), and detach both the speaker boxes.

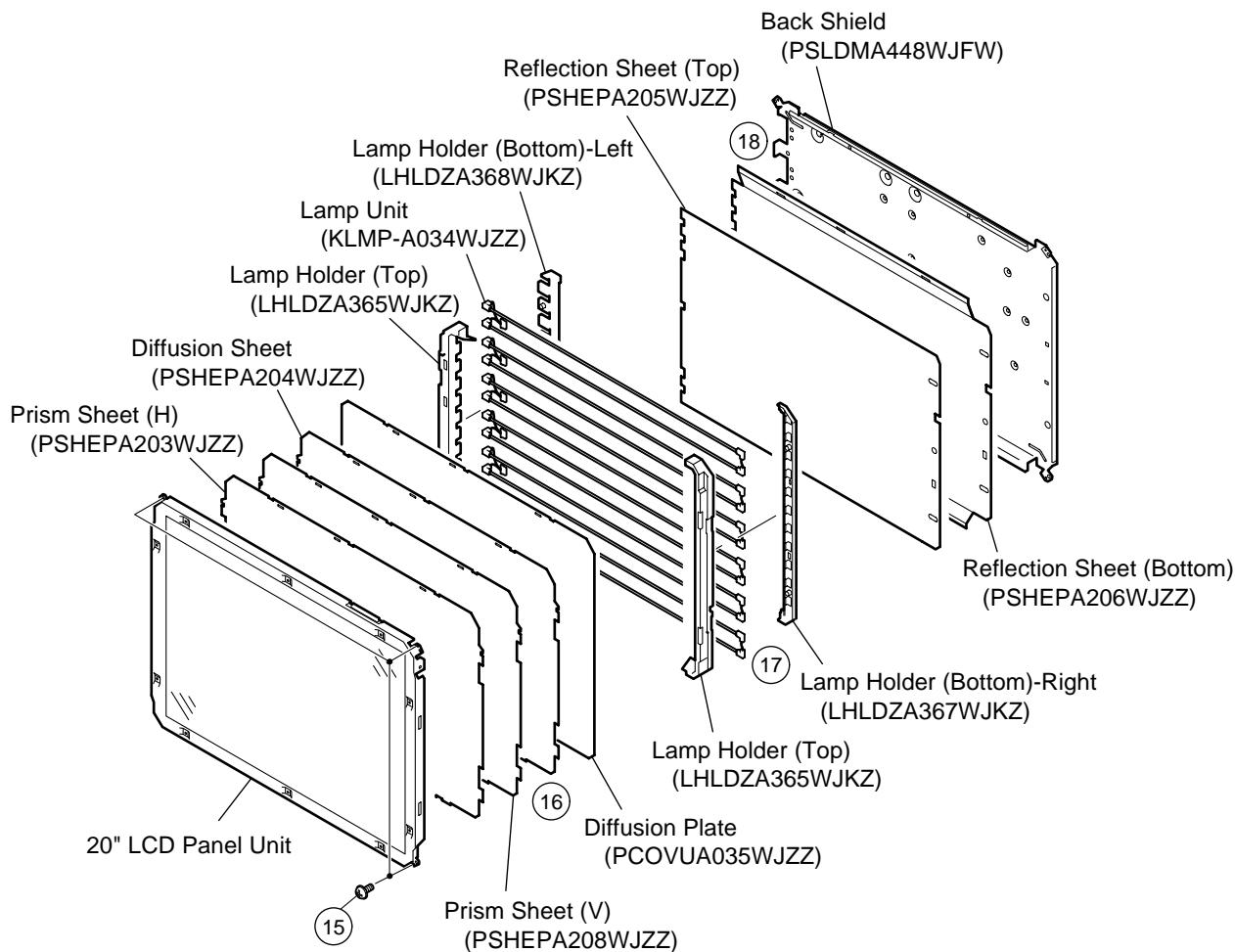


12. Remove the two lock screws from the inverter PWB, and detach the inverter PWB.
13. Remove the five lock screws from the main PWB, and undo the claws a and b. Detach the main PWB by lifting the area around the claws and pulling the PWB out.
14. Remove the four lock screws from the analog PWB, and undo the claws c and d. Detach the chassis frame (right) from the analog PWB by pulling out the terminals. In the same way, undo the claws e and f, and detach the chassis frame (left) from the analog PWB by pulling out the terminals.

Note: When detaching the main PWB and analog PWB, be careful not to break the PWB-fixing claws.

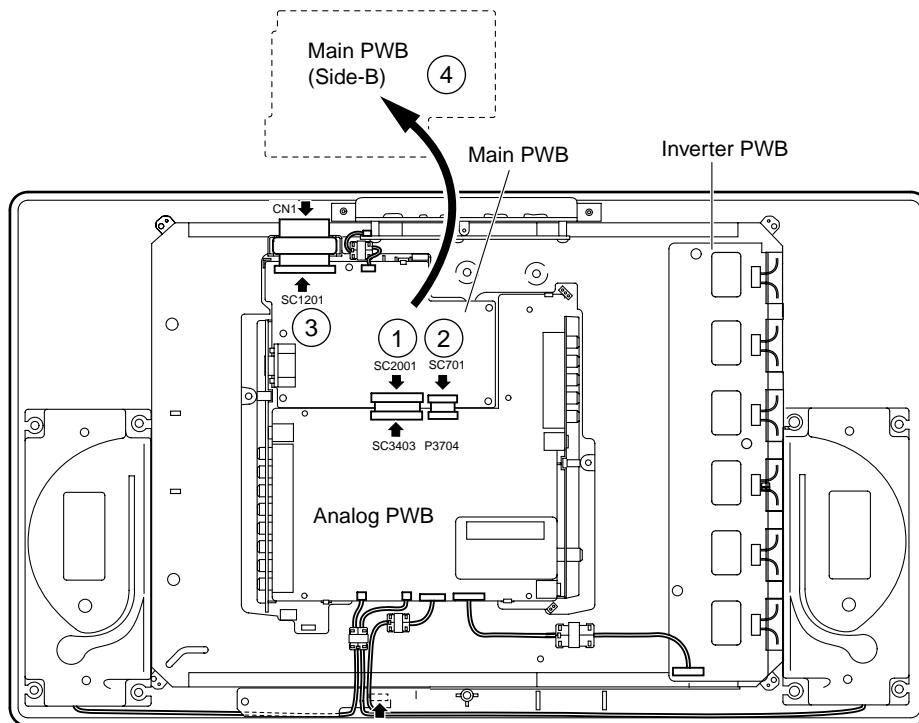


- Precautions in handling the liquid crystal panel
 - Handle it in a clean room. (above 50% humidity)
 - The worker must wear an earth band.
 - Be careful not to drop, vibrate and shock the panel.
 - Use an ionizer. (within 30 cm)
15. Remove the three lock screws from the liquid crystal panel, and detach the liquid crystal panel unit.
 16. Remove the prism sheet (H), (V), diffusion sheet and diffusion plate.
 17. Remove the lamp unit from the lamp holder (top). Then detach the (bottom)-left and (bottom)-right lamp holders.
 18. Remove the upper and lower reflection sheets from the back shield.



●Precautions in servicing the B side (backside) of the main PWB unit

1. Disconnect the FFC from between the main PWB (SC2001) and the analog PWB (SC3403), and then connect the service-specific extension FFC (flat cable) (QCNW-C459WJQZ).
2. Disconnect the SC701 side of the lead from between the main PWB (SC701) and the analog PWB (P3704), and then connect the service-specific extension cord (QCNW-B461WJQZ).
3. Disconnect the FFC for connection between the main PWB (SC1201) and LCD panel unit, and then connect the service-specific extension FFC (flat cable) (QCNW-C458WJQZ).
4. Remove the lock screws from the main PWB, detach the PWB from the chassis frame, and then turn it over to service.



Step	Part No.	Description
1	QCNW-C459WJQZ	Extension Cable 60-pin Main (SC2001)-Analog (SC3403)
2	QCNW-C461WJQZ	Extension Cable 15-pin Main (SC701)-Analog (P3704)
3	QCNW-C458WJQZ	Extension Cable 80-pin Main (SC1201)-LCD Panel

ADJUSTING PROCEDURE OF EACH SECTION

1. Pre-adjustment preparations

Use the specific AC adaptor or a stable DC power supply as power source.

LC-20B6U AC adapter: UADP-A065WJPZ

DC power supply: 12 (V), 6.6 (A) or more

(1) How to enter the adjustment process mode

The following two methods are available.

- While holding down the "INPUT" and "VOLUME (-)" keys on the set, turn ON the power and press the "CH (✓)" and "VOLUME (-)" keys at once.
- Turn ON the power with either of KEY4 (pin (81) of microprocessor) and KEY5 (pin (82) of microprocessor) staying at "L".

(2) Key operation in adjustment process

■ Basic operation

- Select a station with the station-selection UP/DOWN key.
- Switch the input with the input selector key.
- Using the cursor UP/DOWN key, select an item to be adjusted. (When the cursor DOWN key is pressed with the cursor placed on the bottom item, the cursor will move to the top item on the next page. When the cursor UP key is pressed with the cursor placed on the top item, the cursor will move to the bottom item on the previous page.)
- Adjust the selected item with the volume UP/DOWN key or the cursor RIGHT/LEFT key
- Pressing the menu key will move the cursor to the next item. (When the menu key is pressed with the cursor placed on the bottom item, the cursor will move to the top item on the next page.)
- Pressing the manual memory key will return the cursor to the top item. (When the manual memory key is pressed with the cursor placed on the top item, the cursor will move to the top item on the previous page.)
- Pressing the auto preset key will move the cursor to the top item on the next page.

■ Hierarchical structure

- When the ENTER key is pressed with the cursor placed on an item other than I²C DATA on page 9, the setting page corresponding to the selected item will appear.
- To exit each setting page, press the "Previous Screen" key.

Initialization

1. Set both pins (81) and (82) of IC2001 (microprocessor) to GND and turn ON the power

2. Check the model name (A625). *Note: MODEL cannot be changed.

3. Inch size selection

Check INCH SIZE (20) * Note: INCH SIZE cannot be changed.

2. Adjusting procedure

(1) AD converter level adjustment

① D3 input

1) D3 75% color bar signal input

Device name: LEADER LT446

Signal name: COLOR BAR 75%

Setting: 01: 1920 x 1080 / 60i

H: 33.72kHz, V: 29.97Hz

2) Set AUTO GAIN-OFFSET1 on page 7 of the adjustment process menu to ON.

② PC input

1) VGA 75% color bar signal input

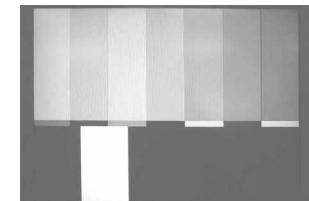
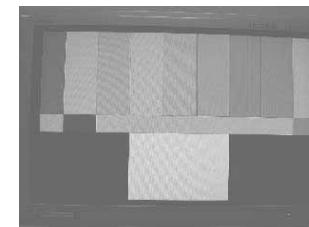
Device name: LEADER LT446

Signal name: COLOR BAR 75%

Setting: 07: 640 x 480 / 60P

H: 31.47kHz, V: 59.94Hz

2) Set AUTO GAIN-OFFSET2 on page 8 of the adjustment process menu to ON.



(2) Adjustment of TAMP

- 1) 75% standard color bar signal reception
- 2) If the reading of "YDATA" on page 2 of the adjustment process menu falls outside the range shown in the table below, adjust "NTSC TAMP" on this page so that the reading of "YDATA" falls within this range.
* Note that settings may vary with models.
- 3) Set "PAL-M TAMP" and "PAL-N TAMP" to the same value to which "NTSC TAMP" is set.

Model	LC-20B6U-S
Setting	157-160

Reference

(Page 2 of adjustment process menu)

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
0	2																										
1		►	C	O	M		B	I	A	S											4	2	7				
2			T	A	M	P		L														1	5	7			
3			Y	D	A	T	A															1	5	9			
4			T	A	M	P	H															1	6	0			
5			N	T	S	C		T	A	M												9	5				
6			P	A	L	-	M		T	A	P											9	5				
7			P	A	L	-	N		T	A	P											9	5				
8																											

Y Data
(White 75%)

(3) Adjustment of white balance

1) How to adjust the white balance

- ① Select the component -480i input.
- ② Adjust "R CUTOFF2" and "B CUTOFF2" so that "White 20%" takes on the following WB target values.
Caution: "G CUTOFF2" should be fixed.
- ③ Adjust two strong colors of "R/G/B-GAIN" downward so that "White 80%" takes on the WB target values.
Caution: Any one of "R/G/B-GAIN" should be fixed at 64.
- ④ Repeat steps ② and ③ so that "White 20%" and "White 80%" takes on the target values.
- ⑤ Enter the values of "R/B_CUTOFF2" and "R/G/B-GAIN" set in steps ② to ④ in the corresponding items of "Composite adjustment", "Component -1080i adjustment" and "PC-VGA adjustment" shown below.
- ⑥ Select the composite input and check that "White 20%" and "White 80%" are within the inspection specifications on the next page.
Caution: The component Ys output signal of the automatic regulator should be used also when the composite input is selected. In the case of the CVBS output, the signal level is different.
- ⑦ If "White 20%" and "White 80%" are not within the inspection specifications, make the adjustment described in steps ② to ④.
- ⑧ Select the component -1080i input and check that "White 20%" and "White 80%" are within the inspection specifications on the next page.
- ⑨ If "White 20%" and "White 80%" are not within the inspection specifications, make the adjustment described in steps ② to ④.
- ⑩ Select the PC-VGA input and check that "White 20%" and "White 80%" are within the inspection specifications on the next page.
- ⑪ If "White 20%" and "White 80%" are not within the inspection specifications, make the adjustment described in steps ② to ④.

2) Adjustment value

- Composite adjustment...RGB CUTOFF2 and RGB-GAIN on page 3 of adjustment process menu
- Component -480i adjustment...A RGB CUTOFF2 and A RGB-GAIN on page 4 of adjustment process menu
- Component -1080i adjustment...D RGB CUTOFF2 and D RGB-GAIN on page 5 of adjustment process menu
- PC-VGA adjustment...PC RGB CUTOFF2 and PC RGB-GAIN on page 5 of adjustment process menu

3) WB target value (numeric values for MINOLTA CA-210)

	Adjustment value	Adjustment specifications
White 80%	x=0.295	±0.006
	y=0.305	±0.006
White 20%	x=0.292	±0.006
	y=0.301	±0.006
Remarks	The numeric values shown above are for MINOLTA CA-210.	

(Reference) White 80%...luminance: 220 cd/m², About 8000K
 White 20%...luminance: 9 cd/m², About 8400K

4) WB adjustment range

R/G/B CUTOFF2: -20 to +20 (G CUTOFF2 fixed at 0)
 R/G/B GAIN: 36 to 64 (One of the colors fixed at 64)

3. Factory setting

(1) Factory adjustment procedure

While holding down the "INPUT" and "VOLUME (-)" keys on the set, turn ON the power and press the "CH (\wedge)" and "VOLUME (+)" keys at once.

(2) DESCRIPTION OF FACTORY SETTINGS

ITEM	SETTING
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OTHER THAN MENU	
STARTUP OF EZ SETUP AT POWER-ON	ON
SELECT LANGUAGE	ENGLISH
CH-SETTING	ON
AUTO CLOCK	ON
LAST CHANNEL	2ch
LAST TV/INPUT	TV
FLASH BACK	2ch
VOLUME	20

MENU-PICTURE	
AV MODE	DYNAMIC
OPC	OFF
BACKLIGHT	BRIGHT (17)
CONTRAST	56
BRIGHTNESS	0
COLOR	+2
TINT	0
SHARPNESS	+4
ADVANCED	COLOR TEMP.
	MIDDLE
	RED
	0
	GREEN
	0
	BLUE
	0
	I/P SETTING
	PROGRESSIVE
	NOISE CLEAN
	OFF
	FILM MODE
	OFF
	QUICK SHOOT
	ON

FOR STANDARD	FOR MOVIE	FOR GAME
OFF	OFF	OFF
BRIGHT (17)	BRIGHT (17)	NORMAL(9)
50	50	50
0	0	0
0	+2	0
0	0	0
0	0	0

MENU-AUDIO	
TREBLE	0
BASS	0
BALANCE	0
WIDE SOUND	OFF
SPEECH EMPHASIS	OFF
PC SOUND SELECT	PC

MENU-SETUP				
CH-SETTING	AIR/CABLE CH MEMORY	SKIP		AIR ALL CH ON
MTS				STEREO
CLOCK	SET	AUTO MENU	EDS CH DST TIME	AUTO OFF 12:00AM
	TIME DISPLAY			ON
COMP. 2/AV1 SELECT				COMPONENT2
AV2 IN/OUT				IN
V-CHIP BLOCK	INPUT SECRET NO.			CLEAR
	MPAA	G, PG, PG-13, R, NC-17, X		ALL CLEAR
	TV GUIDELINES	TV-Y, TV-Y7, TV-G, TV-PG, TV-14, TV-MA		ALL CLEAR
	BLOCK CONTENT	D, L, S, V, FV		ALL CLEAR
	CAN. ENGLISH RATINGS	C, C8+, G, PG, 14+, 18+		ALL CLEAR
	CAN. FRENCH RATINGS	G, 8 ans+, 13 ans+, 16 ans+, 18 ans+		ALL CLEAR
	STATUS			OFF
CLOSED CAPTION				OFF
COLOR SYSTEM (FOR TV)				N358
COLOR SYSTEM (FOR AV 1 AND 2)				AUTO
PC SETTING	INPUT SIGNAL			1024 x 768
	FINE SYNC.	H. POS. V. POS. CLOCK PHASE		0 0 0 0
LANGUAGE				ENGLISH

MENU-OPTION			
VIEW MODE			4 : 3
AUDIO ONLY			OFF
SLEEP TIMER			OFF
WAKEUP TIMER	TIMER		OFF
	TIME		12:00AM
	CHANNEL		2
	VOLUME		20
NO SIGNAL OFF			DISABLE
NO OPERATION OFF			DISABLE
POWER MANAGEMENT			OFF
PICTURE FLIP			NORMAL

ADJUSTMENT PROCESS 1st LEVEL ITEM DEFAULT TABLE

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
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BASIC SETTING

1	MODEL	A625	MODEL NAME SELECTION	CANNOT BE CHANGED.
	INCH SIZE	20	INCH SIZE SELECTION	USED FOR INITIALIZATION. MUST NOT BE CHANGED IN OTHER CASES. IF CHANGED, IT IS NECESSARY TO PERFORM DATA REWRITING AND READJUSTING
	ERROR NO RESET	0	LAMP ERROR COUNT & RESET	REFER TO LAMP ERROR DETECTION.
	PUBLIC MODE	OFF	HOTEL MODE SETTING	NOT USED
	V-CHIP	1	VCHIP LINE MUTE SETTING	NOT USED
	CANADIAN VCHIP	ON	CANADIAN VCHIP SETTING	NOT USED
	EXT CONTROL	OFF	BUS UART OPEN	NOT USED
	BLUE BACK	0	BLUE BACKGROUND ON-OFF SETTING	NOT USED

ROM AND GAIBU VERSION NUMBERS SHOULD BE DISPLAYED AT THE BOTTOM.

VIDEO ADJUSTMENT

2	COM BIAS	427	COMMON BIAS ADJUSTMENT	NOT USED
	TAMP L	157	Y LOWER LIMIT SETTING FOR TAMP ADJUSTMENT	NOT USED
	YDATA	—	Y UPPER LIMIT SETTING FOR TAMP ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	TAMP H	160	Y UPPER LIMIT SETTING FOR TAMP ADJUSTMENT	NOT USED
	NTSC TAMP	70	TAMP ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PAL-M TAMP	70	TAMP ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PAL-N TAMP	70	TAMP ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.

BACKGROUND ADJUSTMENT

3	R CUTOFF	0	RED CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	G CUTOFF	0	GREEN CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	B CUTOFF	0	BLUE CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	GAIN1	64	WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	GAIN2	64	WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	REF	0	REFERENCE SETTING	REFER TO METHOD OF ADJUSTMENT.
	R CUTOFF2	0	RED CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	G CUTOFF2	0	GREEN CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	B CUTOFF2	0	BLUE CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	R-GAIN	64	WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	G-GAIN	64	WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	B-GAIN	64	WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.

525I/625I/525P/625P BACKGROUND ADJUSTMENT

4	A R CUTOFF	0	525I/625I/525P/625P RED CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	A G CUTOFF	0	525I/625I/525P/625P GREEN CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	A B CUTOFF	0	525I/625I/525P/625P BLUE CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	A GAIN1	64	525I/625I/525P/625P WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	A GAIN2	64	525I/625I/525P/625P WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	A REF	0	525I/625I/525P/625P REFERENCE SETTING	REFER TO METHOD OF ADJUSTMENT.
	A R CUTOFF2	0	525I/625I/525P/625P RED CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	A G CUTOFF2	0	525I/625I/525P/625P GREEN CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	A B CUTOFF2	0	525I/625I/525P/625P BLUE CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	A R-GAIN	64	525I/625I/525P/625P WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	A G-GAIN	64	525I/625I/525P/625P WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	A B-GAIN	64	525I/625I/525P/625P WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
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1125I/750P BACKGROUND ADJUSTMENT

5	D R CUTOFF	0	1125I/750P RED CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	D G CUTOFF	0	1125I/750P GREEN CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	D B CUTOFF	0	1125I/750P BLUE CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	D GAIN1	64	1125I/750P WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	D GAIN2	64	1125I/750P WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	D REF	0	1125I/750P PREFERENCE SETTING	REFER TO METHOD OF ADJUSTMENT.
	D R CUTOFF2	0	1125I/750P RED CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	D G CUTOFF2	0	1125I/750P GREEN CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	D B CUTOFF2	0	1125I/750P BLUE CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	D R-GAIN	64	1125I/750P WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	D G-GAIN	64	1125I/750P WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	D B-GAIN	64	1125I/750P WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.

PC BACKGROUND ADJUSTMENT

6	PC R CUTOFF	0	PC RED CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PC G CUTOFF	0	PC GREEN CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PC B CUTOFF	0	PC BLUE CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PC GAIN1	64	PC WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PC GAIN2	64	PC WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PC REF	0	PC PREFERENCE SETTING	REFER TO METHOD OF ADJUSTMENT.
	PC R CUTOFF2	0	PC RED CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PC G CUTOFF2	0	PC GREEN CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PC B CUTOFF2	0	PC BLUE CUTOFF ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PC R-GAIN	64	PC WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PC G-GAIN	64	PC WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PC B-GAIN	64	PC WHITE BALANCE ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.

1125I/750P AD ADJUSTMENT

7	AD9883 DATA	0	AD9883 DATA WRITE AND READ	NOT USED
	AD9883 DATA	WAIT	WRITE AND READ EXECUTION	NOT USED
	AUTO GAIN-OFFSET1	OFF	AD9883 GAIN AND OFFSET AUTO ADJUSTMENT OFF/RUN	REFER TO METHOD OF ADJUSTMENT.
	AD R GAIN	30	1125I/750P INPUT RED GAIN ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	AD G GAIN	125	1125I/750P INPUT GREEN GAIN ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	AD B GAIN	30	1125I/750P INPUT BLUE GAIN ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	AD R OFFSET	64	1125I/750P INPUT RED OFFSET ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	AD G OFFSET	50	1125I/750P INPUT GREEN OFFSET ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	AD B OFFSET	64	1125I/750P INPUT BLUE OFFSET ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	RGTAR	E0	1125I/750P INPUT RED OFFSET ADJUSTMENT	NOT USED
	GGTAR	98	1125I/750P INPUT GREEN OFFSET ADJUSTMENT	NOT USED
	BGTAR	E0	1125I/750P INPUT BLUE OFFSET ADJUSTMENT	NOT USED
	RGCAL	—	DISPLAY OF Y LEVEL CHROMA CALCULATED VALUE	NOT USED
	GGCAL	—	DISPLAY OF Y LEVEL CHROMA CALCULATED VALUE	NOT USED
	BGCAL	—	DISPLAY OF Y LEVEL CHROMA CALCULATED VALUE	NOT USED
	ROCAL	—	DISPLAY OF Y LEVEL WHITE LEVEL CALCULATED VALUE OF CLAMP AREA	NOT USED
	GOCAL	—	DISPLAY OF Y LEVEL WHITE LEVEL CALCULATED VALUE OF CLAMP AREA	NOT USED
	BOCAL	—	DISPLAY OF Y LEVEL WHITE LEVEL CALCULATED VALUE OF CLAMP AREA	NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
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PC AD ADJUSTMENT

8	AUTO GAIN-OFFSET2	OFF	AD9883 GAIN AND OFFSET AUTO ADJUSTMENT OFF/RUN	REFER TO METHOD OF ADJUSTMENT.
	PCAD R GAIN	130	PC INPUT RED GAIN ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PCAD G GAIN	130	PC INPUT GREEN GAIN ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PCAD B GAIN	130	PC INPUT BLUE GAIN ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PCAD R OFFSET	56	PC INPUT RED OFFSET ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PCAD G OFFSET	56	PC INPUT GREEN OFFSET ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PCAD B OFFSET	56	PC INPUT BLUE OFFSET ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	RGTAR	AC	TARGET VALUE FOR PC INPUT RED GAIN ADJUSTMENT	NOT USED
	GGTAR	AC	TARGET VALUE FOR PC INPUT GREEN GAIN ADJUSTMENT	NOT USED
	BGTAR	AC	TARGET VALUE FOR PC INPUT BLUE GAIN ADJUSTMENT	NOT USED
	RGCAL	—	DISPLAY OF Y LEVEL CHROMA CALCULATED VALUE	NOT USED
	GGCAL	—	DISPLAY OF Y LEVEL CHROMA CALCULATED VALUE	NOT USED
	BGCAL	—	DISPLAY OF Y LEVEL CHROMA CALCULATED VALUE	NOT USED
	ROCAL	—	DISPLAY OF Y LEVEL WHITE LEVEL CALCULATED VALUE OF CLAMP AREA	NOT USED
	GOCAL	—	DISPLAY OF Y LEVEL WHITE LEVEL CALCULATED VALUE OF CLAMP AREA	NOT USED
	BOCAL	—	DISPLAY OF Y LEVEL WHITE LEVEL CALCULATED VALUE OF CLAMP AREA	NOT USED

TABLE OF CONTENTS FOR SETTINGS

9	I2C DATA	0000000000	I2C BUS CONTROL C DATA WRITE AND READ	NOT USED
	I2C DATA	WAIT	WRITE AND READ EXECUTION	NOT USED
	SOUND	—	SHIFTING TO SOUND ADJUSTMENT PAGE	SHIFTING TO SOUND ADJUSTMENT PAGE WITH ENTER KEY
	TC	—	SHIFTING TO TC ADJUSTMENT PAGE	SHIFTING TO TC ADJUSTMENT PAGE WITH ENTER KEY
	G/A	—	SHIFTING TO G/A ADJUSTMENT PAGE	SHIFTING TO G/A ADJUSTMENT PAGE WITH ENTER KEY
	TUNER	—	SHIFTING TO TUNER ADJUSTMENT PAGE	SHIFTING TO TUNER ADJUSTMENT PAGE WITH ENTER KEY
	OTHERS	—	SHIFTING TO OTHERS ADJUSTMENT PAGE	SHIFTING TO OTHERS ADJUSTMENT PAGE WITH ENTER KEY

AUDIO ADJUSTMENT PROCESS SPECIFICATIONS

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
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AUDIO ADJUSTMENT

SOUND1	VOLUME	20	USER VOLUME SETTING	NOT USED
	AVC	OFF	AVC SETTING	NOT USED
	MSP DATA	000000000	AUDIO IC MSP DATA WRITE AND READ	NOT USED
	MSP DATA	WAIT	WRITE AND READ EXECUTION	NOT USED
	CARRIER MUTE	ON	AUDIO OUTPUT SETTING WITHOUT TV SYNCHRONIZATION	NOT USED
	IGR THR	012D	IGR THRESH LEVEL	NOT USED
	SP TEST	OFF	FOR AUDIO TEST	NOT USED

AUDIO ADJUSTMENT

SOUND2	PRESCALE SCART	27	PRESCALE SETTING (EXTERNAL INPUT)	NOT USED
	PRESCALE FM/AM-M	31	PRESCALE SETTING (TV)	NOT USED
	VOICE TEST	OFF	TREBLE EMPHASIS TEST (VOICE USED)	NOT USED
	VOICE LEVEL	6	TREBLE EMPHASIS LEVEL SETTING (VOICE USED)	NOT USED
	S. WIDE TEST	OFF	SOUND WIDE TEST (SOUND WIDE USED)	NOT USED
	S. WIDE LEVEL	3F	SOUND WIDE LEVEL SETTING (SOUND WIDE USED)	NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
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AUDIO ADJUSTMENT

SOUND3	BASS EQ SET	0	USER AUDIO ADJUSTMENT TREBLE VALUE	NOT USED
	TREB EQ SET	0	USER AUDIO ADJUSTMENT BASS VALUE	NOT USED
	EQ LIMIT 00	0	EQUALIZER LIMIT TABLE 00: VOLUME SETTING	NOT USED
	EQ LIMIT 00	+12.0	EQUALIZER LIMIT TABLE 00: LIMIT SETTING	NOT USED
	EQ LIMIT 01	10	EQUALIZER LIMIT TABLE 01: VOLUME SETTING	NOT USED
	EQ LIMIT 01	+12.0	EQUALIZER LIMIT TABLE 01: LIMIT SETTING	NOT USED
	EQ LIMIT 02	20	EQUALIZER LIMIT TABLE 02: VOLUME SETTING	NOT USED
	EQ LIMIT 02	+12.0	EQUALIZER LIMIT TABLE 02: LIMIT SETTING	NOT USED
	EQ LIMIT 03	25	EQUALIZER LIMIT TABLE 03: VOLUME SETTING	NOT USED
	EQ LIMIT 03	+12.0	EQUALIZER LIMIT TABLE 03: LIMIT SETTING	NOT USED
	EQ LIMIT 04	30	EQUALIZER LIMIT TABLE 04: VOLUME SETTING	NOT USED
	EQ LIMIT 04	+12.0	EQUALIZER LIMIT TABLE 04: LIMIT SETTING	NOT USED
	EQ LIMIT 05	35	EQUALIZER LIMIT TABLE 05: VOLUME SETTING	NOT USED
	EQ LIMIT 05	+12.0	EQUALIZER LIMIT TABLE 05: LIMIT SETTING	NOT USED
	EQ LIMIT 06	40	EQUALIZER LIMIT TABLE 06: VOLUME SETTING	NOT USED
	EQ LIMIT 06	+12.0	EQUALIZER LIMIT TABLE 06: LIMIT SETTING	NOT USED
	EQ LIMIT 07	42	EQUALIZER LIMIT TABLE 07: VOLUME SETTING	NOT USED
	EQ LIMIT 07	+12.0	EQUALIZER LIMIT TABLE 07: LIMIT SETTING	NOT USED
	EQ LIMIT 08	44	EQUALIZER LIMIT TABLE 08: VOLUME SETTING	NOT USED
	EQ LIMIT 08	+12.0	EQUALIZER LIMIT TABLE 08: LIMIT SETTING	NOT USED
	EQ LIMIT 09	46	EQUALIZER LIMIT TABLE 09: VOLUME SETTING	NOT USED
	EQ LIMIT 09	+12.0	EQUALIZER LIMIT TABLE 09: LIMIT SETTING	NOT USED
	EQ LIMIT 10	48	EQUALIZER LIMIT TABLE 10: VOLUME SETTING	NOT USED
	EQ LIMIT 10	+12.0	EQUALIZER LIMIT TABLE 10: LIMIT SETTING	NOT USED
	EQ LIMIT 11	50	EQUALIZER LIMIT TABLE 11: VOLUME SETTING	NOT USED
	EQ LIMIT 11	+12.0	EQUALIZER LIMIT TABLE 11: LIMIT SETTING	NOT USED
	EQ LIMIT 12	52	EQUALIZER LIMIT TABLE 12: VOLUME SETTING	NOT USED
	EQ LIMIT 12	+12.0	EQUALIZER LIMIT TABLE 12: LIMIT SETTING	NOT USED
	EQ LIMIT 13	54	EQUALIZER LIMIT TABLE 13: VOLUME SETTING	NOT USED
	EQ LIMIT 13	+12.0	EQUALIZER LIMIT TABLE 13: LIMIT SETTING	NOT USED
	EQ LIMIT 14	56	EQUALIZER LIMIT TABLE 14: VOLUME SETTING	NOT USED
	EQ LIMIT 14	+12.0	EQUALIZER LIMIT TABLE 14: LIMIT SETTING	NOT USED
	EQ LIMIT 15	58	EQUALIZER LIMIT TABLE 15: VOLUME SETTING	NOT USED
	EQ LIMIT 15	+12.0	EQUALIZER LIMIT TABLE 15: LIMIT SETTING	NOT USED

AUDIO ADJUSTMENT

SOUND4	HPF VDS OFF	60	BYPASS FILTER SETTING FOR DOLBY VIRTUAL OFF	NOT USED
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AUDIO ADJUSTMENT

SOUND8	BAND1 MIN	TV	-0400	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	-0400	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED
	BAND1 CNT	TV	+0400	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	+0400	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED
	BAND1 MAX	TV	+1200	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	+1200	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED
	BAND2 MIN	TV	-0200	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	-0200	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED
	BAND2 CNT	TV	+0150	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	+0150	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED
	BAND2 MAX	TV	+0500	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	+0500	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED
	BAND3 MIN	TV	-0025	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	-0025	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
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AUDIO ADJUSTMENT

SOUND9	BAND4 MIN	TV	-0400	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	-0400	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED
	BAND4 CNT	TV	+0050	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	+0050	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED
	BAND4 MAX	TV	+0500	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	+0500	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED
	BAND5 MIN	TV	-1150	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	-1150	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED
	BAND5 CNT	TV	-0050	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	-0050	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED
	BAND5 MAX	TV	+1050	EQUALIZER SETTING (TV INPUT)	NOT USED
		OTHER	+1050	EQUALIZER SETTING (OTHER THAN TV INPUT)	NOT USED

TC90203 ADJUSTMENT PROCESS ITEM

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
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TC1	TC DATA	000 00	—	GENERAL-PURPOSE VARIABLE ADJUSTMENT ITEM FOR TC90203 REVIEW	NOT USED
	TC TEST PATTERN	OFF	TEST PATTERN SELECT		NOT USED
TC2	OSD VS	0020	OSD VD START TIMING CORRECTION		NOT USED
	OSD HS	0030	OSD HD START TIMING CORRECTION		NOT USED
	OSD VE	0021	OSD VD END TIMING CORRECTION		NOT USED
	OSD HE	009F	OSD HD END TIMING CORRECTION		NOT USED
	XGA OSD VS	001A	OSD VD START TIMING CORRECTION FOR PC XGA		NOT USED
	XGA OSD HS	0030	OSD HD START TIMING CORRECTION FOR PC XGA		NOT USED
	XGA OSD VE	001B	OSD VD END TIMING CORRECTION FOR PC XGA		NOT USED
	XGA OSD HE	00B8	OSD HD END TIMING CORRECTION FOR PC XGA		NOT USED
	VGA OSD VS	001E	OSD VD START TIMING CORRECTION FOR PC VGA		NOT USED
	VGA OSD HS	0030	OSD HD START TIMING CORRECTION FOR PC VGA		NOT USED
	VGA OSD VE	001F	OSD VD END TIMING CORRECTION FOR PC VGA		NOT USED
	VGA OSD HE	0060	OSD HD END TIMING CORRECTION FOR PC VGA		NOT USED
TC3	N358 TV CONT	96	N358 VIDEO SETTING (TV)		NOT USED
	N358 AV CONT	96	N358 VIDEO SETTING (COMPOSITE, S VIDEO)		NOT USED
	N358 TV SUBCONT	+5	N358 SUB-CONTRAST SETTING (TV)		NOT USED
	N358 AV SUBCONT	+11	N358 SUB-CONTRAST SETTING (COMPOSITE, S VIDEO)		NOT USED
	N358 TV BRIGHT	-7	N358 BRIGHTNESS SETTING (TV)		NOT USED
	N358 AV BRIGHT	-7	N358 BRIGHTNESS SETTING (COMPOSITE, S VIDEO)		NOT USED
	N358 TV COLOR	188	N358 COLOR STRENGTH SETTING (TV)		NOT USED
	N358 AV COLOR	174	N358 COLOR STRENGTH SETTING (COMPOSITE, S VIDEO)		NOT USED
	N358 TV TINT	52	N358 TINT SETTING (TV)		NOT USED
	N358 AV TINT	44	N358 TINT SETTING (COMPOSITE, S VIDEO)		NOT USED
	N358 TV SHARP	45	N358 SHARPNESS SETTING (TV)		NOT USED
	N358 AV SHARP	45	N358 SHARPNESS (COMPOSITE, S VIDEO)		NOT USED
TC4	N443 AV CONT	96	N443 VIDEO SETTING (COMPOSITE, S VIDEO)		NOT USED
	N443 AV SUBCONT	+11	N443 SUB-CONTRAST SETTING (COMPOSITE, S VIDEO)		NOT USED
	N443 AV BRIGHT	-7	N443 BRIGHTNESS SETTING (COMPOSITE, S VIDEO)		NOT USED
	N443 AV COLOR	174	N443 COLOR STRENGTH SETTING (COMPOSITE, S VIDEO)		NOT USED
	N443 AV TINT	44	N443 TINT SETTING (COMPOSITE, S VIDEO)		NOT USED
	N443 AV SHARP	45	N443 SHARPNESS (COMPOSITE, S VIDEO)		NOT USED
TC5	PAL AV CONT	96	PAL VIDEO SETTING (COMPOSITE, S VIDEO)		NOT USED
	PAL AV SUBCONT	+11	PAL SUB-CONTRAST SETTING (COMPOSITE, S VIDEO)		NOT USED
	PAL AV BRIGHT	-7	PAL BRIGHTNESS SETTING (COMPOSITE, S VIDEO)		NOT USED
	PAL AV COLOR	168	PAL COLOR STRENGTH SETTING (COMPOSITE, S VIDEO)		NOT USED
	PAL AV TINT	44	PAL TINT SETTING (COMPOSITE, S VIDEO)		NOT USED
	PAL AV SHARP	26	PAL SHARPNESS (COMPOSITE, S VIDEO)		NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
TC6	SECAM AV CONT	96	SECAM VIDEO SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV SUBCONT	+11	SECAM SUB-CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV BRIGHT	-7	SECAM BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV COLOR	168	SECAM COLOR STRENGTH SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV TINT	44	SECAM TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV SHARP	26	SECAM SHARPNESS (COMPOSITE, S VIDEO)	NOT USED
TC7	PAL60 AV CONT	96	PAL60 VIDEO SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV SUBCONT	+11	PAL60 SUB-CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV BRIGHT	-7	PAL60 BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV COLOR	168	PAL60 COLOR STRENGTH SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV TINT	44	PAL60 TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV SHARP	45	PAL60 SHARPNESS (COMPOSITE, S VIDEO)	NOT USED
TC8	PAL-M TV CONT	96	PAL-M VIDEO SETTING (TV)	NOT USED
	PAL-M AV CONT	96	PAL-M VIDEO SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV SUBCONT	+5	PAL-M SUB-CONTRAST SETTING (TV)	NOT USED
	PAL-M AV SUBCONT	+11	PAL-M SUB-CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV BRIGHT	-7	PAL-M BRIGHTNESS SETTING (TV)	NOT USED
	PAL-M AV BRIGHT	-7	PAL-M BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV COLOR	168	PAL-M COLOR STRENGTH SETTING (TV)	NOT USED
	PAL-M AV COLOR	168	PAL-M COLOR STRENGTH SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV TINT	44	PAL-M TINT SETTING (TV)	NOT USED
	PAL-M AV TINT	44	PAL-M TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV SHARP	45	PAL-M SHARPNESS SETTING (TV)	NOT USED
	PAL-M AV SHARP	45	PAL-M SHARPNESS (COMPOSITE, S VIDEO)	NOT USED
TC9	PAL-N TV CONT	96	PAL-N VIDEO SETTING (TV)	NOT USED
	PAL-N AV CONT	96	PAL-N VIDEO SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV SUBCONT	+5	PAL-N SUB-CONTRAST SETTING (TV)	NOT USED
	PAL-N AV SUBCONT	+11	PAL-N SUB-CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV BRIGHT	-7	PAL-N BRIGHTNESS SETTING (TV)	NOT USED
	PAL-N AV BRIGHT	-7	PAL-N BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV COLOR	168	PAL-N COLOR STRENGTH SETTING (TV)	NOT USED
	PAL-N AV COLOR	168	PAL-N COLOR STRENGTH SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV TINT	44	PAL-N TINT SETTING (TV)	NOT USED
	PAL-N AV TINT	44	PAL-N TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV SHARP	26	PAL-N SHARPNESS SETTING (TV)	NOT USED
	PAL-N AV SHARP	26	PAL-N SHARPNESS (COMPOSITE, S VIDEO)	NOT USED
TC10	525I CONT	90	525I VIDEO SETTING (COMPONENT)	NOT USED
	525I SUBCONT	+5	525I SUB-CONTRAST SETTING(COMPONENT)	NOT USED
	525I BRIGHT	-7	525I BRIGHTNESS SETTING (COMPONENT)	NOT USED
	525I COLOR	142	525I COLOR STRENGTH SETTING(COMPONENT)	NOT USED
	525I TINT	50	525I TINT SETTING (COMPONENT)	NOT USED
	525I SHARP	26	525I SHARPNESS SETTING(COMPONENT)	NOT USED
	525P CONT	92	525P VIDEO SETTING(COMPONENT)	NOT USED
	525P SUBCONT	+5	525P SUB-CONTRAST SETTING(COMPONENT)	NOT USED
	525P BRIGHT	-7	525P BRIGHTNESS SETTING(COMPONENT)	NOT USED
	525P COLOR	142	525P COLOR STRENGTH SETTING(COMPONENT)	NOT USED
	525P TINT	50	525P TINT SETTING(COMPONENT)	NOT USED
	525P SHARP	26	525P SHARPNESS(COMPONENT)	NOT USED
TC11	625I CONT	90	625I VIDEO SETTING (COMPONENT)	NOT USED
	625I SUBCONT	+5	625I SUB-CONTRAST SETTING (COMPONENT)	NOT USED
	625I BRIGHT	-7	625I BRIGHTNESS SETTING (COMPONENT)	NOT USED
	625I COLOR	142	625I COLOR STRENGTH SETTING (COMPONENT)	NOT USED
	625I TINT	50	625I TINT SETTING (COMPONENT)	NOT USED
	625I SHARP	26	625I SHARPNESS SETTING (COMPONENT)	NOT USED
	625P CONT	92	625P VIDEO SETTING (COMPONENT)	NOT USED
	625P SUBCONT	+5	625P SUB-CONTRAST SETTING (COMPONENT)	NOT USED
	625P BRIGHT	-7	625P BRIGHTNESS SETTING (COMPONENT)	NOT USED
	625P COLOR	142	625P COLOR STRENGTH SETTING (COMPONENT)	NOT USED
	625P TINT	50	625P TINT SETTING (COMPONENT)	NOT USED
	625P SHARP	26	625P SHARPNESS (COMPONENT)	NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
TC12	1125I CONT	96	1125I VIDEO SETTING (COMPONENT)	NOT USED
	1125I SUBCONT	+6	1125I SUB-CONTRAST SETTING (COMPONENT)	NOT USED
	1125I BRIGHT	-7	1125I BRIGHTNESS SETTING (COMPONENT)	NOT USED
	1125I COLOR	142	1125I COLOR STRENGTH SETTING (COMPONENT)	NOT USED
	1125I TINT	50	1125I TINT SETTING (COMPONENT)	NOT USED
	1125I SHARP	16	1125I SHARPNESS SETTING (COMPONENT)	NOT USED
	750P CONT	96	750P VIDEO SETTING (COMPONENT)	NOT USED
	750P SUBCONT	+6	750P SUB-CONTRAST SETTING (COMPONENT)	NOT USED
	750P BRIGHT	-7	750P BRIGHTNESS SETTING (COMPONENT)	NOT USED
	750P COLOR	142	750P COLOR STRENGTH SETTING (COMPONENT)	NOT USED
	750P TINT	50	750P TINT SETTING (COMPONENT)	NOT USED
	750P SHARP	16	750P SHARPNESS (COMPONENT)	NOT USED

G/A ADJUSTMENT PROCESS ITEM

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
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LIQUID CRYSTAL COMMON SETTING

G/A 1	G/A TEST PATTERN	OFF	GRAY SCALE TEST PATTERN DISPLAY	REFER TO TEST PATTERN OF ADJUSTMENT PROCESS MODE.
	G/A DATA	00	—	GENERAL-PURPOSE VARIABLE ADJUSTMENT ITEM FOR GA REVIEW

QS DRIVING TEMPERATURE THRESHOLD SETTING

G/A 2	QS TABLE TEST	OFF	FOR QS TEST	NOT USED
	TABLE SELECT	6	SELECTION TABLE SETTING FOR QS TEST	NOT USED
	MCU PALA	2	QS TEMPERATURE TABLE AUTO SETTING	NOT USED
	TABLE0-1	-5°C	TEMPERATURE THRESHOLD SETTING BETWEEN QS SELECTION TABLES 0 AND 1	NOT USED
	TABLE1-2	0°C	TEMPERATURE THRESHOLD SETTING BETWEEN QS SELECTION TABLES 1 AND 2	NOT USED
	TABLE2-3	+5°C	TEMPERATURE THRESHOLD SETTING BETWEEN QS SELECTION TABLES 2 AND 3	NOT USED
	TABLE3-4	+10°C	TEMPERATURE THRESHOLD SETTING BETWEEN QS SELECTION TABLES 3 AND 4	NOT USED
	TABLE4-5	+15°C	TEMPERATURE THRESHOLD SETTING BETWEEN QS SELECTION TABLES 4 AND 5	NOT USED
	TABLE5-6	+20°C	TEMPERATURE THRESHOLD SETTING BETWEEN QS SELECTION TABLES 5 AND 6	NOT USED
	TABLE6-7	+25°C	TEMPERATURE THRESHOLD SETTING BETWEEN QS SELECTION TABLES 6 AND 7	NOT USED
	READ TEMP	—	DISPLAYING THE TEMPERATURE SENSOR READING	NOT USED

ADJUSTMENT PROCESS TUNER ITEM DEFAULT TABLE

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
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BASIC SETTING

TUNER1	AFT UP	1.80	AFT VOLTAGE REFERENCE VALUE (ALL BANDS)	NOT USED
	AFT DOWN	1.20	AFT VOLTAGE REFERENCE VALUE (ALL BANDS)	NOT USED
	LSYNC	1000	SYNC DETERMINATION THRESHOLD (TV)	NOT USED
	H SYNC	1048	SYNC DETERMINATION THRESHOLD (TV)	NOT USED
	AVSYNC	5000	SYNC DETERMINATION THRESHOLD (EXTERNAL INPUT)	NOT USED
TUNER2	AIR SERCH	1.600	LAST SYNC DETERMINATION FREQUENCY FOR AIR CH SEARCH	NOT USED
	EDS TEST	10	TIME (SECOND) FOR DETERMINATION OF ABSENCE OF EDS TIME DATA	NOT USED
	AFT FARTIME	50	CHANNEL PRESET TIME ADJUSTMENT 1	NOT USED
	AFT NEARTIME	30	CHANNEL PRESET TIME ADJUSTMENT 2	NOT USED
	AFT NEARMTIME	10	CHANNEL PRESET TIME ADJUSTMENT 3	NOT USED
	AFT 1STEPTIME	10	CHANNEL PRESET TIME ADJUSTMENT 4	NOT USED
	AFT CSYNCTIME	50	CHANNEL PRESET TIME ADJUSTMENT 5	NOT USED

ADJUSTMENT PROCESS OTHERS ITEM DEFAULT TABLE

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
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TADJUSTMENT PROCESS OTHERS ITEM DEFAULT TABLE

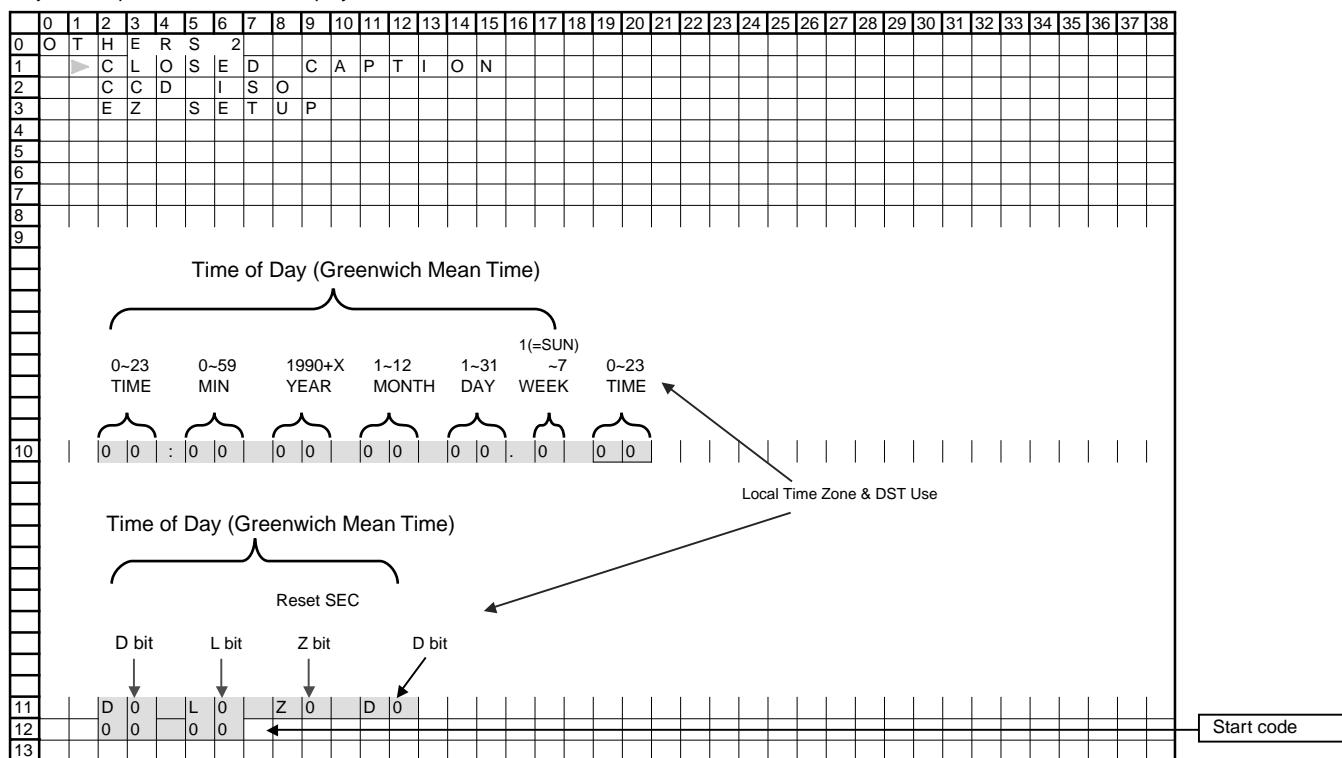
OTHERS1	DAC DATA	—	GENERAL-PURPOSE VARIABLE ADJUSTMENT ITEM FOR DAC REVIEW	NOT USED
	L ERROR WAIT	15s	LAMP ERROR DETECTION WAIT TIME	NOT USED
	L ERROR H TIME	1.0s	LAMP ERROR DETECTION TIME	NOT USED
	AV AUTO GAIN	OFF	AUTO GAIN SETTING FOR TV	NOT USED
	TV OSD	0	DISPLAY POSITION SETTING FOR OTHER THAN CARD	NOT USED
	NTSC PWM FREQ	0293	LIGHT CONTROL FREQUENCY SETTING	NOT USED
	NTSC PWM DUTY	0	LIGHT CONTROL DUTY SETTING	NOT USED
	PAL PWM FREQ	0258	LIGHT CONTROL FREQUENCY SETTING (50Hz)	NOT USED
	PAL PWM DUTY	0	LIGHT CONTROL DUTY SETTING (50Hz)	NOT USED
	OPC THRESHOLD	24	INPUT LEVEL THRESHOLD FOR SHIFTING FROM BRIGHTNESS SENSOR STOP MODE TO OPERATION MODE	NOT USED
	HOTEL POWERFIX	OFF	SETTING FOR HOTEL MODE POWER SUPPLY ON FIXED	NOT USED
	COMP SYSTEM	AUTO	COMPONENT SIGNAL SELECTION IN ADJUSTMENT PROCESS	NOT USED

REMOCON CODE SHOULD BE DISPLAYED AT THE BOTTOM.

OTHERS2	CLOSED CAPTION	15	CLOSED CAPTION THRESHLEVEL	NOT USED
	CCD ISO	16	CLOSED CAPTION PHASE SETTING	NOT USED
	EZ SETUP	ON	PRESENCE OR ABSENCE OF DISPLAY OF EZ SET UP	NOT USED

EDS DATA SHOULD DISPLAYED AT THE BOTTOM

Adjustment process auto clock display



- * In the adjustment process, the local time can be freely obtained. Each time the local time is known, the colors of the following items change accordingly.
 - Time of Day (Greenwich Mean Time)
 - Local Time Zone & DST Use
 - Start code

Test pattern in the adjustment process mode

IC1201 (LCD controller) test pattern

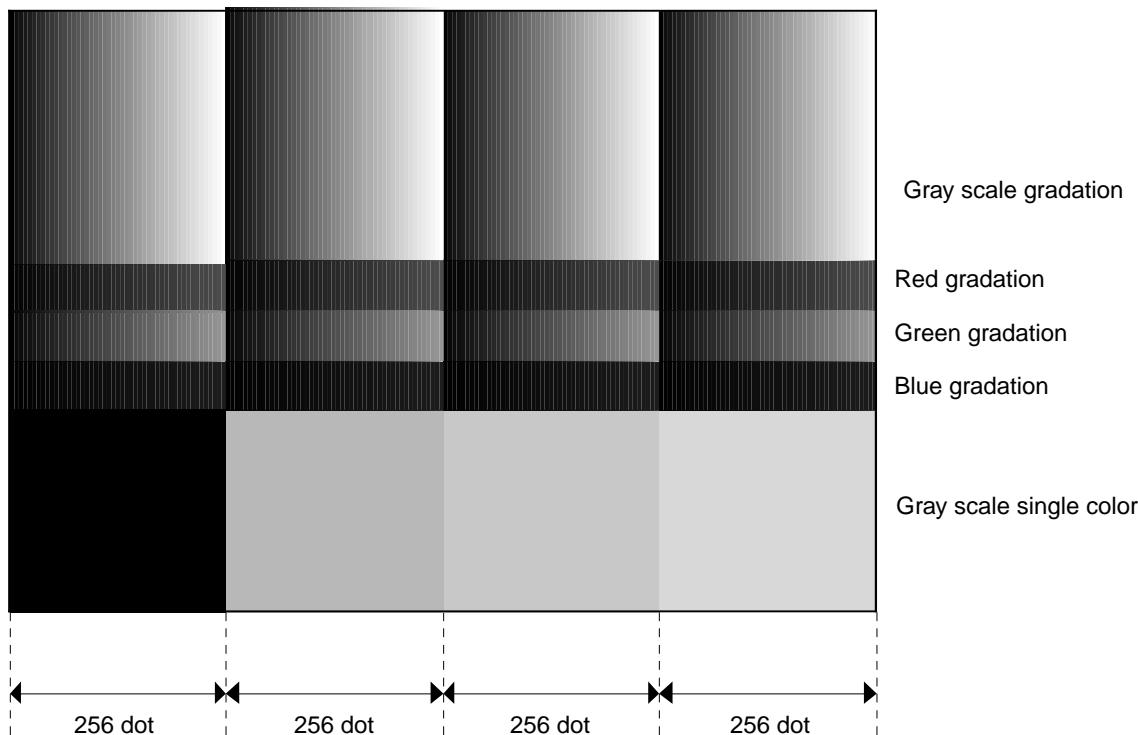
1) Getting the test pattern displayed

Call the adjustment process mode, select "G/A" on page 4, and press the ENTER button. Next select "G/A TEST PATTERN" in line 1 on page 1. (The "G/A TEST PATTERN" turns yellow.) Now use the cursor RIGHT/LEFT keys to get the test pattern displayed.

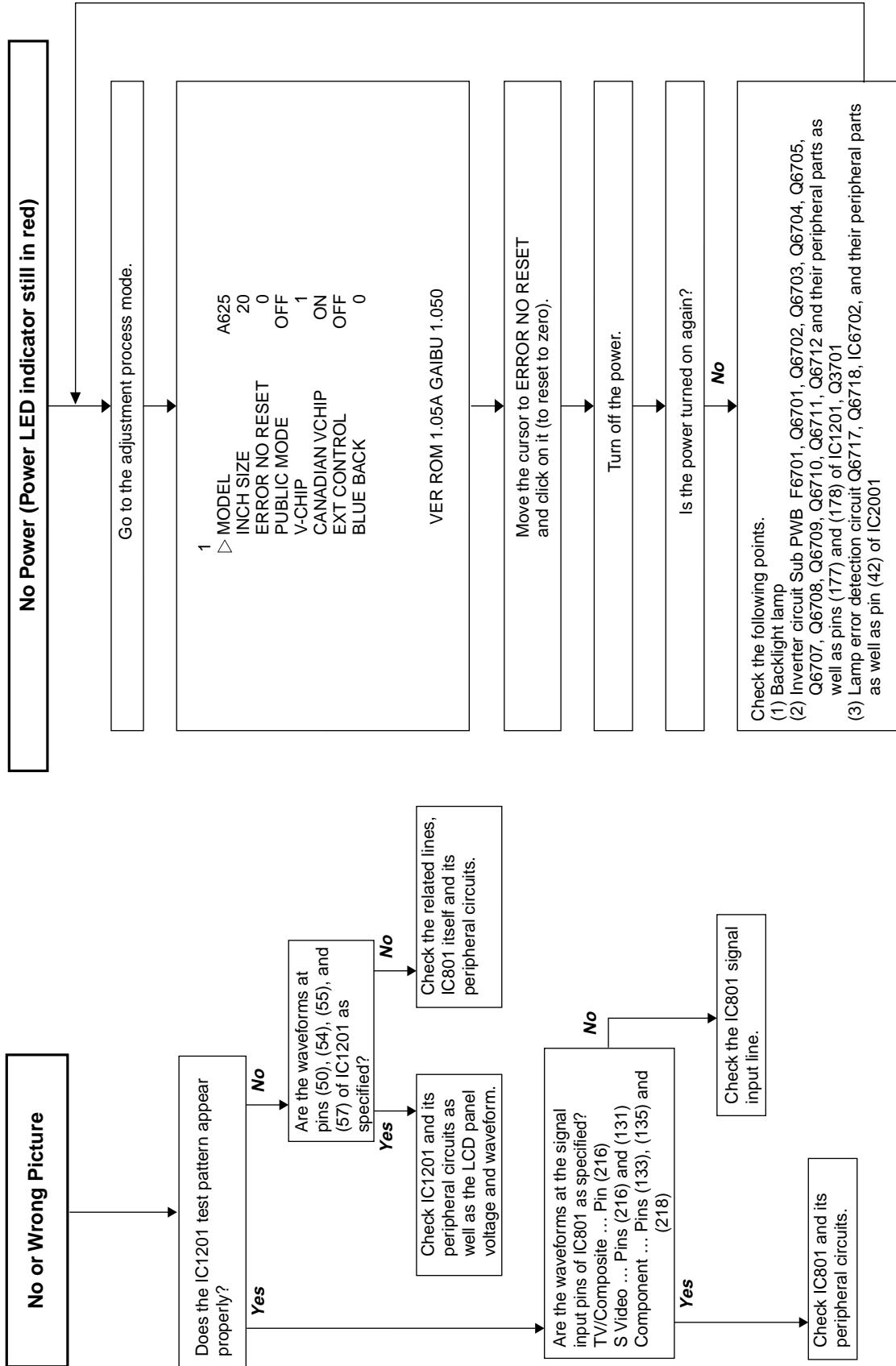
To turn off the test pattern, use the cursor RIGHT/LEFT keys again. If the cursor UP/DOWN keys are wrongly pressed and the cursor RIGHT/LEFT keys become ineffective, just turn OFF the power.

2) Test pattern displayed

The following test pattern appears onscreen.



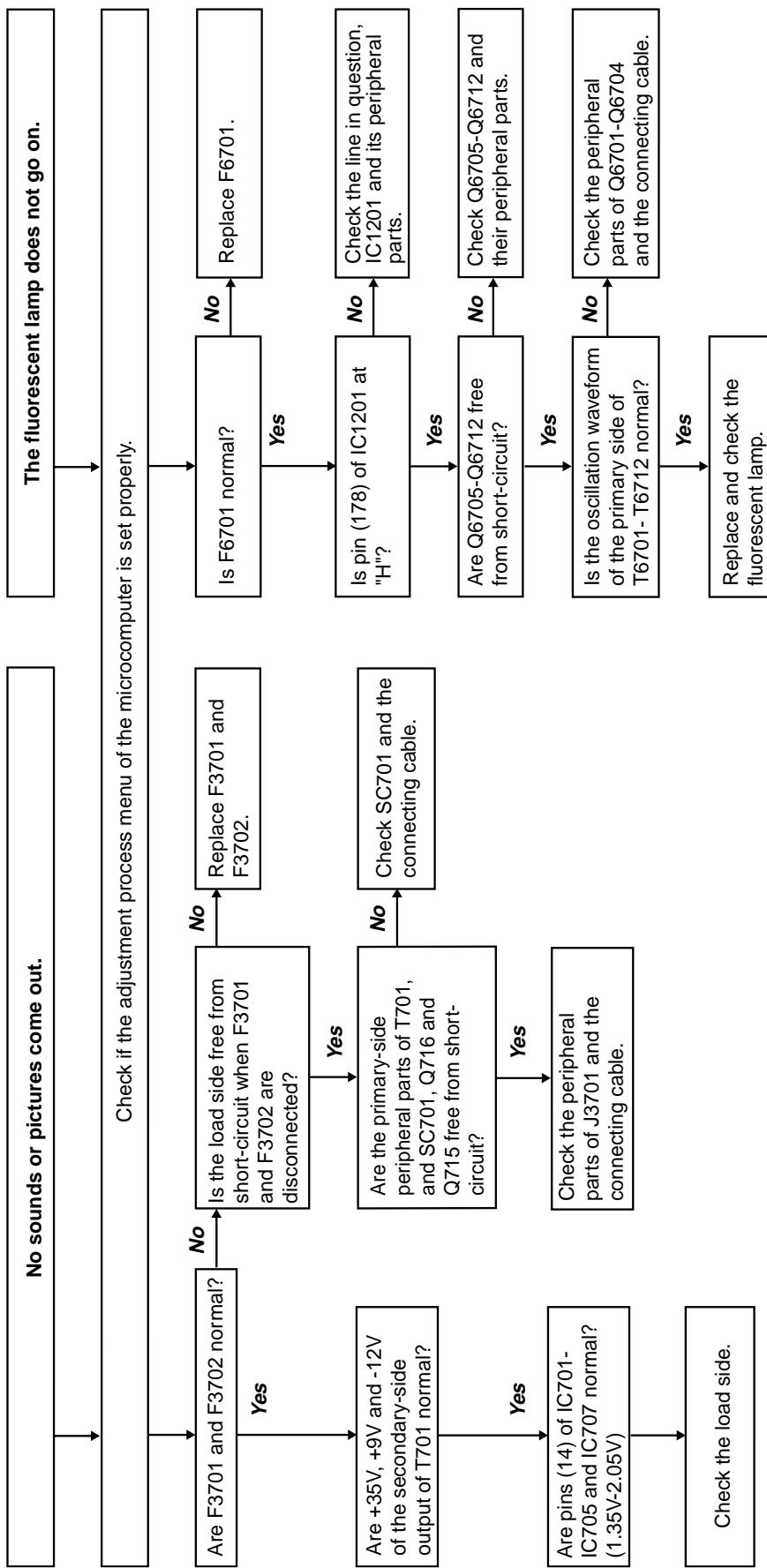
TROUBLE SHOOTING TABLE



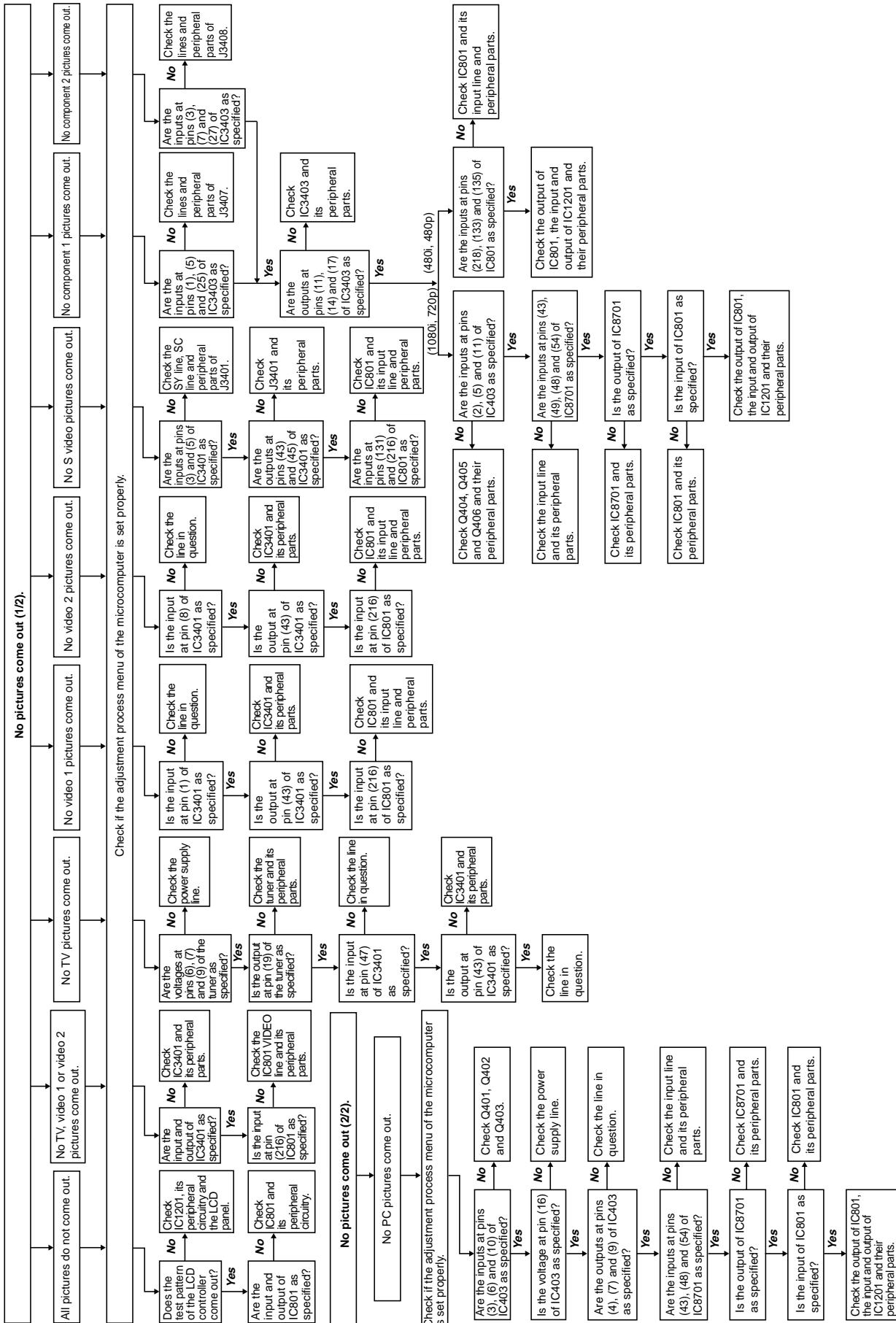
Note:

This model is equipped with the lamp error detection function that detects the current flowing into the fluorescent lamp and protects the backlight lamp drive circuit. If a lamp error is detected, the microprocessor interrupts the unit and the ERROR NO RESET setting will go up. When the ERROR NO RESET setting has reached "5", the microprocessor turns and keeps off the unit's power. To resume the power, take the above procedure to clear the ERROR NO RESET setting.

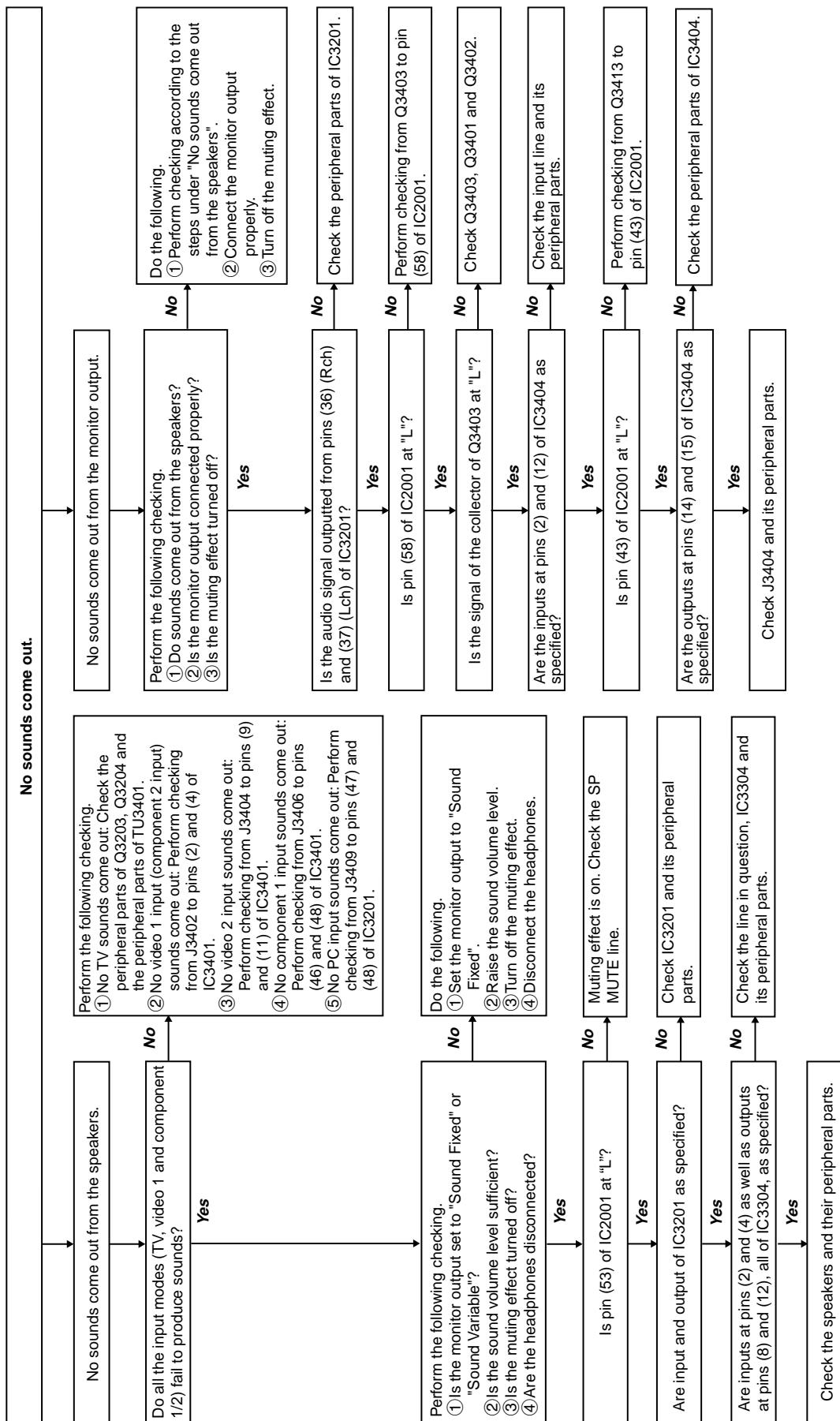
TROUBLE SHOOTING TABLE (Continued)



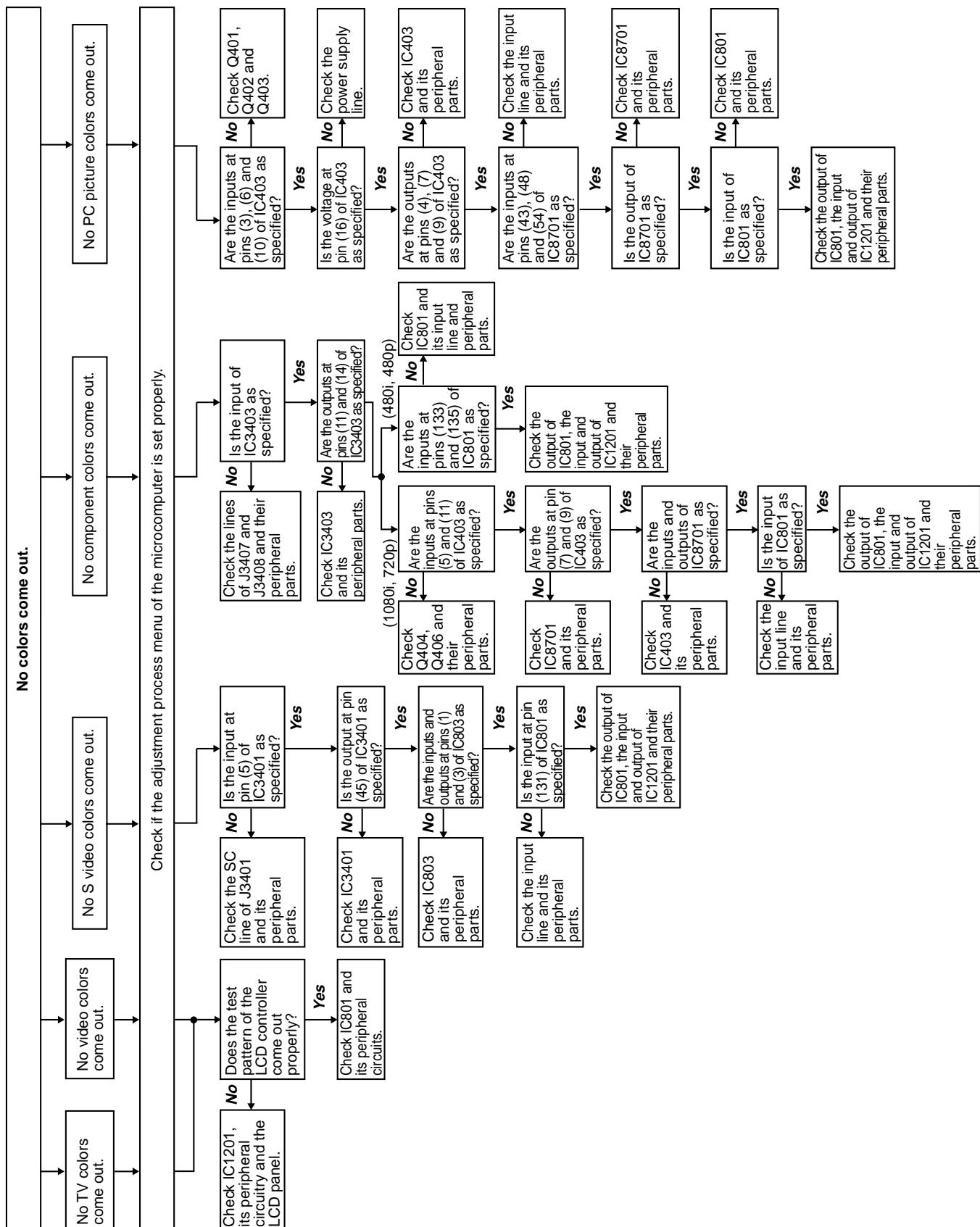
TROUBLE SHOOTING TABLE (Continued)



TROUBLE SHOOTING TABLE (Continued)

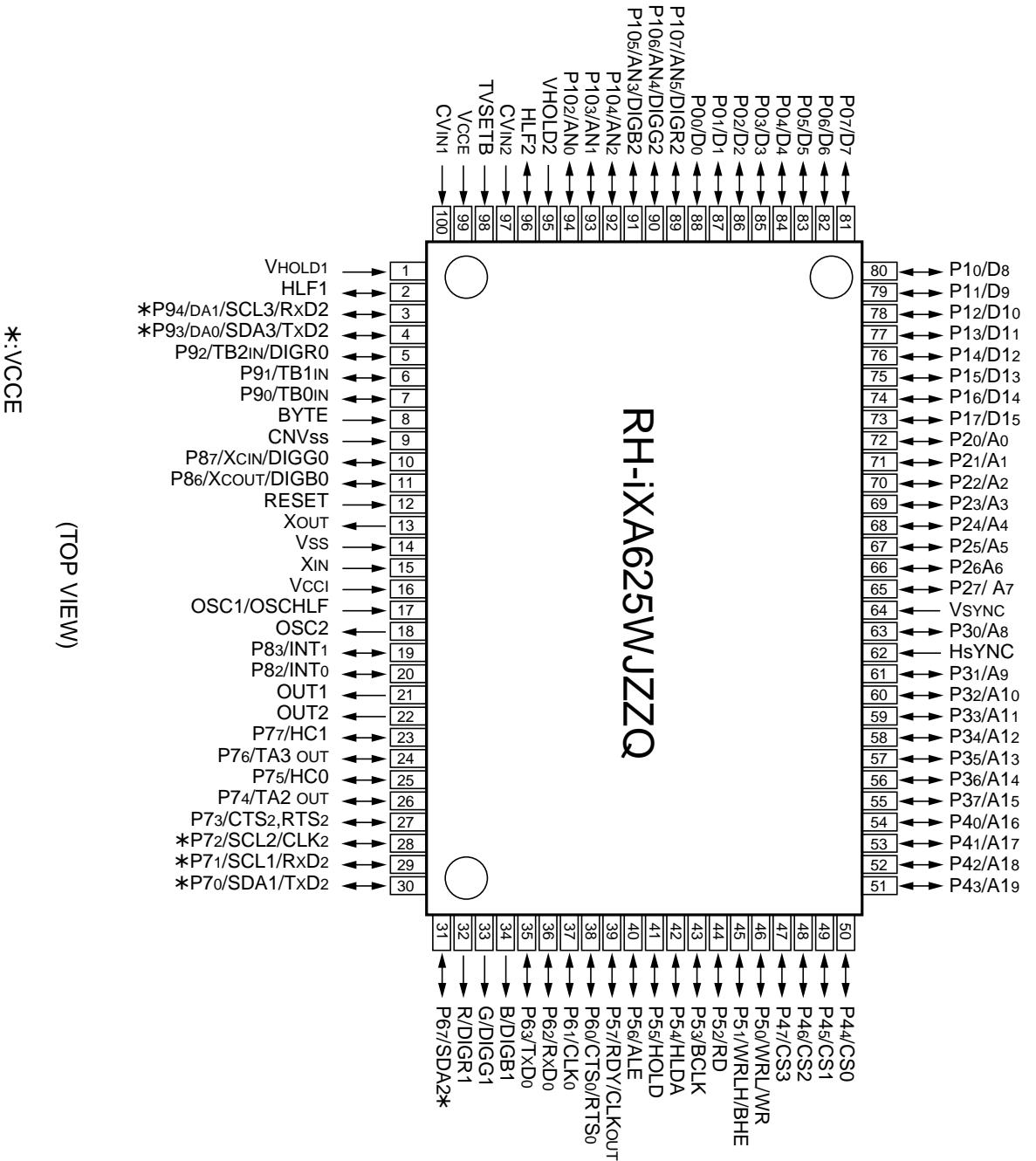


TROUBLE SHOOTING TABLE (Continued)



MAJOR IC INFORMATIONS

1. IC2001 (RH-iXA625WJZZQ) 1-1.Pin Assignment



1-2. Description of Pins of IC2001 (RH-iXA625WJZZQ)

Pin No.	Pin Name	I/O	Pin Name	Function
1	VHOL1	I	Vhold	FOR CLOSED CAPTION
2	HLF1	I/O	HLF	FOR CLOSED CAPTION
3	P94/DA1/SCL3/RXD2	O	SUBDin2	N.C
4	P93/DA0/SDA3/TXD2	O	SUBDout2	N.C
5	P92/TB2IN/DIGR0	I	CSYNC2	FOR JUDGEMENT OF PC FREQUENCY
6	P91/TB1IN	I	CSYNC	COMPOSITE SYNCHRONIZING SIGNAL
7	P90/TB0IN	I	IREM1	REMOTE CONTROL
8	BYTE	I	BYTE	GND
9	CNVSS	I	CNVss	GND
10	P87/XCIN/DIGG0	I	Xcin	32kHz OSCILLATION INPUT
11	P86/XCOUTDIGB0	O	Xout	32kHz OSCILLATION OUTPUT
12	RESET	I	RESET	L: MICROPROCESSOR RESET
13	XOUT	O	Xcout	MICROPROCESSOR SECTION OSCILLATOR CONNECTION
14	VSS	I	Vss	GND
15	XIN	I	Xin	MICROPROCESSOR SECTION OSCILLATOR CONNECTION
16	VCCI	I	Vccl	POWER SUPPLY (3.3V)
17	OSC1/OSCHLF	I	OSCin	CLOCK INPUT FOR OSD
18	OSC2	O	OSCout	N.C
19	P83/INT1	I	PSWin	MAIN POWER SUPPLY MONITORING
20	P82/INT0	I	MONITOR	TC90203 INTERRUPT PIN INPUT
21	OUT1	O	BLK	OSD BLANKING OUTPUT
22	OUT2	O	OSD_I	EMPHASIZED SIGNAL OUTPUT OF OSD
23	P77/HC1	O	DACICS	GRAY SCALE CONTROL IC CHIP SELECT
24	P76/TA3OUT	O		N.C
25	P75/HC0	I	PCHC	PC HORIZONTAL SYNCHRONIZING SIGNAL INPUT COUNT
26	P74/TA2OUT	O	D_L3	N.C
27	P73/CTS2.RTS2	I	INCH2	INCH DISCRIMINATION PORT 2 ("H": 13 INCH)
28	P72/SCL2/CLK2	I/O	SCL2	SERIAL CLOCK LINE 2 FOR I ² C BUS 2 SYSTEM (EEPROM, AV, SW, BS TUNER)
29	P71/SCL1/RXD2	I/O	SCL1	SERIAL CLOCK LINE 1 FOR I ² C BUS 2 SYSTEM (OTHERS)
30	P70/SDA1/SXD2	I/O	SCA1	SERIAL DATA LINE 1 FOR I ² C BUS 2 SYSTEM
31	P67/SDA2	I/O	SCA2	SERIAL DATA LINE 2 FOR I ² C BUS 2 SYSTEM
32	R/DIGR1	O	OSD_R	R SIGNAL OUTPUT OF OSD
33	G/DIGR1	O	OSD_G	G SIGNAL OUTPUT OF OSD
34	B/DIGR1	O	OSD_B	B SIGNAL OUTPUT OF OSD
35	P63/TXD0	O	SUBDout	N.C
36	P62/RXD0	I	SUBDin	N.C
37	P61/CLK0	I	SCLK	N.C
38	P60/CTS0/RTS0	O	BUSY	N.C
39	P57/RDY/CLKOUT	O	MAIN SW	LED SECTION POWER SUPPLY CONTROL
40	P56/ALE	O	MON SW	N.C
41	P55/HOLD	I	POWIn(EPM)	DC/DC STARTUP DETECTION
42	P54/HLDA	I	L_ERR	FLUORESCENT LAMP ERROR DETECTION
43	P53/BCLK	O	S IN/OUT	AUDIO I/O SWITCHING
44	P52/RD	O	JUST CLOCK	N.C
45	P51/WRH/BHE	O	TIMER(RLED)	ON-TIMER LED CONTROL (USED FOR POWER SUPPLY RLED CONTROL ABROAD)
46	P50/WRL/WR	I	MRDY(CE)	I ² C BUS OPEN CONNECTION SWITCHING DETECTION
47	P47/CS3	O	LEDPOW(GLED)	POWER SUPPLY LED CONTROL (ALSO USED FOR SUB- POWER SUPPLY CONTROL IN JAPAN) (USED FOR POWER SUPPLY GLED CONTROL ABROAD)
48	P46/CS2	O	PC/COMP	SWITCHING BETWEEN PC AND COMPONENT
49	P45/CS1	O	PXOE	N.C
50	P44/CS0	O	VSHOUT	PANEL GATE DRIVER VOLTAGE CONTROL

Pin No.	Pin Name	I/O	Pin Name	Function
51	P43/A19	O	P_MUTE	RESET FOR LIQUID CRYSTAL CONTROLLER (20 INCH ONLY)
52	P42/A18	O	HPMUTE	HEADPHONE MUTE
53	P41/A17	O	SP MUTE1	MAIN SPEAKER MUTE
54	P40/A16	O		N.C
55	P37/A15	I	HP DET	HEADPHONE DETECTION
56	P36/A14	O	SSTBY	AMP POWER SUPPLY CONTROL (MODEL WITHOUT 1 BIT)
57	P35/A13	I	VSH IN	PANEL GATE DRIVER VOLTAGE CHECK
58	P34/A12	O	LMUTE	LINEOUT AUDIO MUTE
59	P33/A11	O	V IN/OUT	VIDEO I/O SWITCHING
60	P32/A10	O	SRESET	AUDIO-RELATED IC RESET OUTPUT
61	P31/A9	O	BS_POW	N.C
62	HSYNC	I	HSYNC	HORIZONTAL SYNCHRONIZING SIGNAL FOR OSD
63	P30/A8	O	LCDPOW_EN	LCD POWER SIGNAL CONTROL
64	VSYNC	I	VSYNC	VERTICAL SYNCHRONIZING SIGNAL FOR OSD
65	P27/A7	O	PROMRESET	RESET FOR FPGA DOWNLOAD (20 INCH ONLY)
66	P26/A6	O	UP0	N.C
67	P25/A5	O	EXT	N.C
68	P24/A4	O	I ² /UA	N.C
69	P23/A3	O	OPCLED	LED FOR OPC
70	P22/A2	O	INV_POW	SEPARATELY-EXCITED INVERTER POWER SUPPLY CONTROL (20 INCH ONLY)
71	P21/A1	O	VGH	PANEL POWER SUPPLY CONTROL
72	P20/A0	O	POWout	DC/DC CONTROL OUTPUT
73	P17/D15	I	ADPPOW	ADAPTER ON/OFF INPUT
74	P01/D1	O	DACOUTCON	GRAY SCALE CONTROL IC FOR OUTPUT CONTROL (13 AND 15 INCH ONLY)
75	P15/D13	O	MP_RCS	TEMPERATURE SENSOR CHIP SELECT
76	P14/D12	I	MP_RDA	TEMPERATURE SENSOR DATA INPUT
77	P13/D11	O	MP_CS	CHIP SELECT FOR QS-READY CONTROLLER
78	P12/D10	O	MP_DA	QS-READY CONTROLLER OR GRAY SCALE CONTROL IC DATA OUTPUT
79	P11/D9	O	MP_CLK	QS-READY CONTROLLER, TEMPERATURE SENSOR OR GRAY SCALE CONTROL IC CLOCK OUTPUT
80	P10/D8	O	DDC_RESET	VIDEO-RELATED IC RESET OUTPUT
81	P07/D7	I	KEY4	KEY INPUT 4
82	P06/D6	I	KEY5	KEY INPUT 5
83	P05/D5	O	VLS	PANEL & GRAY SCALE IC POWER SUPPLY CONTROL (20 INCH ONLY)
84	P04/D4	O	BSERR	N.C
85	P03/D3	O	GRRESET	N.C
86	P02/D2	O	1BIT_PROTECT	N.C
87	P01/D1	I	CON_CE	FPGA DOWNLOAD COMPLETION DETECTION (20 INCH ONLY)
88	P00/D0	I	INCH	INCH DISCRIMINATION PORT ("H": 20-INCH XGA MODEL)
89	P107/AN5/DIGR2	I	AFT	AFT VOLTAGE INPUT
90	P106/AN4/DIGG2	I	AGC	AGC INPUT VOLTAGE
91	P105/AN3/DIGB2	I	KEY1	KEY INPUT 1
92	P104/AN2	I	KEY2	KEY INPUT 2
93	P103/AN1	O	C/N	N.C
94	P102/AN0	I	OPC_IN	OPC SENSOR LEVEL INPUT
95	VHOLD2	I	V HOLD2	FOR CLOSED CAPTION
96	HLF2	I/O	HLF2	FOR CLOSED CAPTION
97	CVIN2	I	CVin2	FOR CLOSED CAPTION
98	TVSETB	I	TVSETB	TEST INPUT PIN (L-FIXED)
99	VCCE	I	VccE	POWER SUPPLY (5V)
100	CVIN1	I	CVin1	FOR CLOSED CAPTION

2. IC801(VHiTC90203X-1Q)

2-1. Pin Configuration

	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	T	U	V	W	Y	A	A	A	A	A	A				
	AA	AB	AC	AD	AE	AF															AA	AB	AC	AD	AE	AF				
27																														
26	GND	GND				281				254	244	241	234	GND	231	225	217	212	204		192	188		182	GND	GND	27			
26	VSS12	VSS12				DRAM2				BL0_CLK_OUT	BLUE2[0]	BLUE2[1]	GREEN2[0]	VSS12	GREEN2[2]	GREEN2[7]	RED2[3]	RED2[7]	BLUE1[4]		GREEN1[3]	GREEN1[6]		RED1[0]	VSS12	VSS12	26			
25	GND	GND				278	271	264	258	249	242	235	GND	231	220	214	207	200	198		187			180	GND	GND	25			
25	VSS12	VSS12				DRAM2[GND]	RESET	LCD_VD	LC0_NCK_OUT	BLUE2[1]	BLUE2[2]	GREEN2[1]	VSS12	GREEN2[3]	RED2[0]	RED2[4]	BLUE1[1]	BLUE1[5]	BLUE1[7]		GREEN1[7]			RED1[1]	VSS12	VSS12	25			
24		GND				280	277	266	262	250	243	239	GND	229	219	213	205	199	193	190		186	GND	179	176	24				
24		VSS12				DRAM2[VDD]	GND2	SCL	DRAM2[VDD]	BLUE2[2]	BLUE2[5]	DRAM2[VDD]	VSS12	GREEN2[4]	RED2[1]	RED2[5]	BLUE1[2]	BLUE1[6]	GREEN1[1]	GREEN1[4]		BUSSEL	VSS12	RED1[3]	RED1[2]	24				
23		GND				282	279	267	263	261	247	240	GND	226	218	211	201	194	191	189		GND	181	178	175	23				
23		VSS12				DRAM2[VDD]	DRAM2[GND]	SDA	LCD_HD	RAM2GND	BLUE2[6]	DRAM2[GND]	VSS12	GREEN2[5]	RED2[2]	RED2[6]	BLUE1[3]	GREEN1[0]	GREEN1[2]	GREEN1[5]		VSS12	RED1[6]	RED1[5]	RED1[4]	23				
22		285	286	GND	GND	PWR1		PWR2	265	PWR1	248	GND	GND	224	PWR1	206	PWR2		PWR1	GND	GND		177	172	170	22				
22		TSTD_IN[4]	TSTD_IN[5]	VSS12	VSS12	VDDC		VDDS	ENAB	VDDC	BLUE2[7]	VSS12	VSS12	GREEN2[6]	VDDC	BLUE1[0]	VDDC	VSS12	VSS12	VSS12	VSS12	VSS12	VSS12	VSS12	VSS12	VSS12	VSS12			
21	290	289	287	288	GND																GND	174		168	166	21				
21	TSTD_IN[10]	TSTD_IN[11]	TSTD_IN[12]	TSTD_IN[13]	VSS12																VSS12	SMODE		OSDA_D4A_IN	OSDB_D4A_IN	21				
20	297	296	292	291	PWR1																PWR1		167	165	159	20				
20	TSTD_IN[6]	TSTD_IN[7]	TSTD_IN[8]	TSTD_IN[9]	VDDC																VDDC	OSGA_D2A_IN	OSRA_D2A_IN	OSDYSA_IN2		20				
19	302	301	300	298	299																154		161	160	157	19				
19	TSTD_IN[1]	TSTD_IN[2]	TSTD_IN[3]	TSTD_IN[4]	TSTD_IN[5]																OSD_VD_OUT	OSD_HD_OUT	OSDIB_D4B_IN	OSDGB_D3B_IN	19					
18	308	307	306	303	PWR2																PWR2		158	156	155	18				
18	TSTMODE[2]	TSTMODE[1]	TSTMODE[0]	TSTD_IN[0]	VDDS																VDDS	OSDGB_D2B_IN	OSDRB_D1B_IN	OSDYSB_IN		18				
17	313	312	311	310	309																GND	GND	GND	GND	GND	17				
17	TSTOE_IN	TST_HD_IN	TST_VD_IN	TSTMODE[4]	TSTMODE[3]																VSS12	VSS12	VSS12	VSS12	VSS12	17				
16	320	315	319	318	PWR1																146		147	148		16				
16	ST2_IN[2]	TTSTCK108	TST2_IN[1]	TST2_IN[0]	VDDC																PLL2AVDD		FIL2	PLL2AVSS		16				
15	326	324	322	321																	143	142	141	140	139	15				
15	MBIST	TSTCKDSP	TST2_IN[4]	TST2_IN[3]																	DA_DVSS2	DA_DVDD2	DAVREF2	DABIAS22	DABIAS21	15				
14	330	329	327	328	GND																136	137	133		138	14				
14	TMS	TCK	TMODE	MONITOR	VSS12																DAVDD2	DAOUT2	C3VREFB		DAGND2	14				
13	GND	GND	GND	GND	GND																131	132		130	129	13				
13	VSS12	VSS12	VSS12	VSS12	VSS12																C3AD_VDD	REDIN		CRIN	C3AD_VSS13	13				
12	331	332	336	338	339																127	C3_BIASAD		128		12				
12	TDI	TDO	DRAM2GND4	DIG_FELD_OUT	DIG_VD_OUT																C3VREFT2					12				
11	333	337	342	346	PWR1																124	125	126	123		11				
11	TRST	DRAM2[VDD4]	DIG_CLK_OUT	DIG_OUT[7]	VDDC																C2AD_VDD	BLUEIN	C2VREFB	CBIN		11				
10	340	345	348	351	352																120	C2_BIASAD		121		122				
10	DIG_HD_OUT	DIG_OUT[3]	DIG_OUT[4]	DIG_OUT[5]	DIG_OUT[6]																C2VREFT			C2AD_VSS		10				
9	347	349	356	358	PWR2																117	118	119	116	115	9				
9	DIG_OUT[1]	DIG_OUT[2]	DIG_Y_IN[6]	DIG_Y_IN[7]	VDDS																CAD_VDD	GREENIN	CVREFB	CIN	CAD_VSS	9				
8	350	357	359	361	367																113	C_BIASAD		CVREFT		8				
8	DIG_OUT[0]	DIG_Y_IN[3]	DIG_Y_IN[4]	DIG_Y_IN[5]	DIG_C_IN[7]																109		108		110	7				
7		360	362	368	PWR1																YVREFM		CVBS2IN7		YVREFB	7				
7		DIG_Y_IN[1]	DIG_Y_IN[2]	DIG_C_IN[6]	VDDC																107				105	6				
6		363	369	371	GND																DYAD_VDD					6				
6		DIG_Y_IN[0]	DIG_C_IN[4]	DIG_C_IN[5]	VSS12																					5				
5	373	372	370	GND	GND	PWR1	10	PWR2		PWR1		GND	GND	66	PWR1	74	PWR2	GND	79	GND	90		106			104		5		
5	DIG_C_IN[1]	DIG_C_IN[2]	DIG_C_IN[3]	VSS12	VSS12	VDDC	PCH_IN	VDDC		VSS12		VSS12	PCB_IN[6]	VDDC	I_IN	VDDS	VSS12	BIREAD	VSS12		PLLI1AVDD		CVBS1IN		YVREFT		5			
4	374		GND	1	3	11			12	24	37	42	51	GND	65	70				GND	80				101	103	4			
4	DIG_C_IN[0]	VSS12	DRAM2[VDD]	DRAM1[VDD]	SYNC_IN				PCV_IN	PCR_IN[4]	PCR_IN[5]	PCR_IN[6]	PCR_IN[7]	VSS12	PCB_IN[7]	PCB_IN[3]				VSS12	YCLAMP1						4			
3		GND	2	4	13	17	19			38	45			55	GND		68	73		GND	81				100	99	3			
3		VSS12	DRAM1[GND]	DRAM1[GND2]	SYNC_OUT	DIG_HD_IN	DRAM1[VDD2]			PCR_IN[5]	PCR_IN[6]	PCR_IN[7]	PCR_IN[8]	VSS12	PCG_IN[2]	PCG_IN[1]	PCB_IN[4]	PCB_IN[0]	PCB_IN[5]	PCB_IN[1]	VSS12	YCLAMP2				DABIAS11		3		
2	GND	GND		16	18	20	22	34	41	46	50	56	GND	60	67	72	75	GND	84				91	95	97	98		2		
1	VSS12	VSS12		DIG_FIELD_IN	DIG_VD_IN	DRAM1[GND]	DIG_CLK_IN	DTMB	PCR_IN[5]	PCR_IN[6]	PCR_IN[7]	PCR_IN[8]	VSS12	PCG_IN[3]	VSS12	PCG_IN[0]	PCB_IN[5]	PCB_IN[1]	YS_IN	VSS12	XO_VDD				CKIN1	DA_DVDD	DA_OUT1	DA_GND1		1
1	GND	GND						30		27	49	54	59	GND	62		71		GND	85	86	87	92	93	96			1		
1	VSS12	VSS12						DTCLK		PCR_IN[7]	PCR_IN[8]	PCR_IN[9]	VSS12	PCG_IN[4]	VSS12	PCG_IN[0]	PCK_IN[5]	PCB_IN[2]		VSS12	XO_V_IN	XO_V_OUT	XO_VSS	FIL1	PLL1AVSS	DA_VDD			1	

(TOP VIEW)

2-2. Description Of Pins

A1	VSS12	C1	NC_C1	E1	NC_E1	H1	DTCLK
A2	VSS12	C2	NC_C2	E2	DIG_FIELD_IN	H2	DIG_CLK_IN
A3	NC_A3	C3	VSS12	E3	DRAM1GND1	H3	DRAM11VDD2
A4	DIG_C_IN[0]	C4	NC_C4	E4	DRAM12VDD1	H4	NC_H4
A5	DIG_C_IN[1]	C5	DIG_C_IN[3]	E5	VSS12	H5	PCH_IN
A6	NC_A6	C6	DIG_C_IN[4]	E6	VSS12	H22	NC_H22
A7	NC_A7	C7	DIG_Y_IN[2]	E7	VDDC	H23	DRAM21VDD2
A8	DIG_OUT[0]	C8	DIG_Y_IN[4]	E8	DIG_C_IN[7]	H24	DRAM2GND2
A9	DIG_OUT[1]	C9	DIG_Y_IN[6]	E9	VDDS	H25	RESET
A10	DIG_HD_OUT	C10	DIG_OUT[4]	E10	DIG_OUT[6]	H26	NC_H26
A11	TRST	C11	DIG_CLK_OUT	E11	VDDC	J1	NC_J1
A12	TDI	C12	DRAM2GND4	E12	DIG_VD_OUT	J2	DTMB
A13	VSS12	C13	VSS12	E13	VSS12	J3	NC_J3
A14	TMS	C14	TMODE	E14	VSS12	J4	PCV_IN
A15	MBIST	C15	TST2_IN[4]	E15	NC_E15	J5	VDDS
A16	TST2_IN[2]	C16	TST2_IN[1]	E16	VDDC	J22	VDDS
A17	TSTOE_IN	C17	TST_VD_IN	E17	TSTMODE[3]	J23	SDA
A18	TSTMODE[2]	C18	TSTMODE[0]	E18	VDDS	J24	SCL
A19	TSTD_IN[1]	C19	TSTD_IN[3]	E19	TSTD_IN[5]	J25	LCD_VD
A20	TSTD_IN[6]	C20	TSTD_IN[8]	E20	VDDC	J26	NC_J26
A21	TSTD_IN[10]	C21	TSTD_IN[12]	E21	VSS12	K1	PCR_IN[7]
A22	NC_A22	C22	TSTD_IN[14]	E22	VSS12	K2	PCR_IN[6]
A23	NC_A23	C23	NC_C23	E23	NC_E23	K3	PCR_IN[5]
A24	NC_A24	C24	VSS12	E24	NC_E24	K4	PCR_IN[4]
A25	VSS12	C25	NC_C25	E25	NC_E25	K5	NC_K5
A26	VSS12	C26	NC_C26	E26	NC_E26	K22	ENAB
B1	VSS12	D1	NC_D1	F1	NC_F1	K23	LCD_HD
B2	VSS12	D2	NC_D2	F2	DIG_VD_IN	K24	DRAM21VDD5
B3	NC_B3	D3	DRAM1GND3	F3	SYNC_OUT	K25	LCD_NCLK_OUT
B4	NC_B4	D4	VSS12	F4	DRAM11VDD1	K26	LCD_CLK_OUT
B5	DIG_C_IN[2]	D5	NC_D5	F5	VSS12	L1	PCG_IN[7]
B6	DIG_Y_IN[0]	D6	DIG_C_IN[5]	F22	VSS12	L2	PCR_IN[3]
B7	DIG_Y_IN[1]	D7	DIG_C_IN[6]	F23	NC_F23	L3	PCR_IN[2]
B8	DIG_Y_IN[3]	D8	DIG_Y_IN[5]	F24	NC_F24	L4	PCR_IN[1]
B9	DIG_OUT[2]	D9	DIG_Y_IN[7]	F25	NC_F25	L5	PCR_IN[2]
B10	DIG_OUT[3]	D10	DIG_OUT[5]	F26	DRAM2GND5	L11	VSS12
B11	DRAM21VDD4	D11	DIG_OUT[7]	G1	NC_G1	L12	VSS12
B12	TDO	D12	DIG_FIELD_OUT	G2	DRAM1GND2	L13	VSS12
B13	VSS12	D13	VSS12	G3	DIG_HD_IN	L14	VSS12
B14	TCK	D14	MONITOR	G4	CSYNC_IN	L15	VSS12
B15	TSTCKDSP	D15	TST2_IN[3]	G5	VDDC	L16	VSS12
B16	TSTCK108	D16	TST2_IN[0]	G22	VDDC	L22	VDDC
B17	TST_HD_IN	D17	TSTMODE[4]	G23	DRAM22VDD1	L23	DRAM2GND1
B18	TSTMODE[1]	D18	TSTD_IN[0]	G24	DRAM21VDD1	L24	BLUE2[2]
B19	TSTD_IN[2]	D19	TSTD_IN[4]	G25	DRAM2GND6	L25	BLUE2[1]
B20	TSTD_IN[7]	D20	TSTD_IN[9]	G26	NC_G26	L26	BLUE2[0]
B21	TSTD_IN[11]	D21	TSTD_IN[13]				
B22	NC_B22	D22	TSTD_IN[15]				
B23	NC_B23	D23	VSS12				
B24	NC_B24	D24	NC_D24				
B25	VSS12	D25	NC_D25				
B26	VSS12	D26	NC_D26				

M1	PCG_IN[6]
M2	PCG_IN[5]
M3	NC_M3
M4	PCR_IN[0]
M5	NC_M5
M11	VSS12
M12	VSS12
M13	VSS12
M14	VSS12
M15	VSS12
M16	VSS12
M22	BLUE2[7]
M23	BLUE2[6]
M24	BLUE2[5]
M25	BLUE2[4]
M26	BLUE2[3]
N1	PCG_IN[4]
N2	PCG_IN[3]
N3	PCG_IN[2]
N4	PCG_IN[1]
N5	VSS12
N11	VSS12
N12	VSS12
N13	VSS12
N14	VSS12
N15	VSS12
N16	VSS12
N22	VSS12
N23	DRAM2GND3
N24	DRAM21VDD3
N25	GREEN2[1]
N26	GREEN2[0]
P1	VSS12
P2	VSS12
P3	VSS12
P4	VSS12
P5	VSS12
P11	VSS12
P12	VSS12
P13	VSS12
P14	VSS12
P15	VSS12
P16	VSS12
P22	VSS12
P23	VSS12
P24	VSS12
P25	VSS12
P26	VSS12

R1	PCCK_IN
R2	PCG_IN[0]
R3	NC_R3
R4	PCB_IN[7]
R5	PCB_IN[6]
R11	VSS12
R12	VSS12
R13	VSS12
R14	VSS12
R15	VSS12
R16	VSS12
R22	GREEN2[6]
R23	GREEN2[5]
R24	GREEN2[4]
R25	GREEN2[3]
R26	GREEN2[2]
T1	NC_T1
T2	PCB_IN[5]
T3	PCB_IN[4]
T4	PCB_IN[3]
T5	VDDC
T11	VSS12
T12	VSS12
T13	VSS12
T14	VSS12
T15	VSS12
T16	VSS12
T22	VDDC
T23	RED2[2]
T24	RED2[1]
T25	RED2[0]
T26	GREEN2[7]
U1	PCB_IN[2]
U2	PCB_IN[1]
U3	PCB_IN[0]
U4	NC_U4
U5	I_IN
U22	BLUE1[0]
U23	RED2[6]
U24	RED2[5]
U25	RED2[4]
U26	RED2[3]

V1	NC_V1
V2	YS_IN
V3	NC_V3
V4	NC_V4
V5	VDDS
V22	VDDS
V23	BLUE1[3]
V24	BLUE1[2]
V25	BLUE1[1]
V26	RED2[7]
W1	VSS12
W2	VSS12
W3	VSS12
W4	VSS12
W5	VSS12
W22	NC_W22
W23	GREEN1[0]
W24	BLUE1[6]
W25	BLUE1[5]
W26	BLUE1[4]
Y1	XO_V_IN
Y2	XO_VDD
Y3	YCLAMP2
Y4	YCLAMP1
Y5	VBIREADY
Y22	VDDC
Y23	GREEN1[2]
Y24	GREEN1[1]
Y25	BLUE1[7]
Y26	NC_Y26
AA1	XO_V_OUT
AA2	NC_AA2
AA3	NC_AA3
AA4	NC_AA4
AA5	VSS12
AA22	VSS12
AA23	GREEN1[5]
AA24	GREEN1[4]
AA25	NC_AA25
AA26	GREEN1[3]

AB1	XO_VSS
AB2	NC_AB2
AB3	NC_AB3
AB4	NC_AB4
AB5	PLL1AVDD
AB6	YAD_VDD
AB7	YVREFM
AB8	C_BIASAD
AB9	CAD_VDD
AB10	C2_BIASAD
AB11	C2AD_VDD
AB12	C3_BIASAD
AB13	C3AD_VDD
AB14	DAVDD2
AB15	DA_DVSS2
AB16	PLL2AVDD
AB17	VSS12
AB18	VDDS
AB19	OSD_VD_OUT
AB20	VDDC
AB21	VSS12
AB22	VSS12
AB23	NC_AB23
AB24	NC_AB24
AB25	GREEN1[7]
AB26	GREEN1[6]
AC1	FIL1
AC2	CKIN1
AC3	NC_AC3
AC4	NC_AC4
AC5	NC_AC5
AC6	NC_AC6
AC7	NC_AC7
AC8	NC_AC8
AC9	GREENIN
AC10	NC_AC10
AC11	BLUEIN
AC12	NC_AC12
AC13	REDIN
AC14	DAOUT2
AC15	DA_DVDD2
AC16	NC_AC16
AC17	VSS12
AC18	NC_AC18
AC19	NC_AC19
AC20	NC_AC20
AC21	SMODE
AC22	NC_AC22
AC23	VSS12
AC24	BUSSEL
AC25	NC_AC25
AC26	NC_AC26

AD1	PLL1AVSS
AD2	DA_DVDD1
AD3	NC_AD3
AD4	NC_AD4
AD5	CVBS1IN
AD6	NC_AD6
AD7	CVBS2IN
AD8	CVREFT
AD9	CVREFB
AD10	C2VREFT
AD11	C2VREFB
AD12	C3VREFT
AD13	NC_AD13
AD14	C3VREFB
AD15	DAVREF2
AD16	NC-AD16
AD17	VSS12
AD18	OSDGB_D2B_IN
AD19	OSD_HD_OUT
AD20	OSDG_A_D2A_IN
AD21	NC_AD21
AD22	RED1[7]
AD23	RED1[6]
AD24	VSS12
AD25	RED1[1]
AD26	RED1[0]
AE1	DAVDD1
AE2	DAOUT1
AE3	DAVREF1
AE4	DA_DVSS1
AE5	NC_AE5
AE6	NC_AE6
AE7	NC_AE7
AE8	NC_AE8
AE9	CIN
AE10	NC_AE10
AE11	CBIN
AE12	NC_AE12
AE13	CRIN
AE14	NC_AE14
AE15	DABIAS22
AE16	FIL2
AE17	VSS12
AE18	OSDRB_D1B_IN
AE19	OSDIB_D4B_IN
AE20	OSDRA_D1A_IN
AE21	OSDIA_D4A_IN
AE22	OSD_N_CLK
AE23	RED1[5]
AE24	RED1[3]
AE25	VSS12
AE26	VSS12

AF1	NC_AF1
AF2	DAGND1
AF3	DABIAS11
AF4	Y_BIASAD
AF5	YVREFT
AF6	YAD_VSS
AF7	YVREFB
AF8	NC_AF8
AF9	CAD_VSS
AF10	C2AD_VSS
AF11	NC_AF11
AF12	NC_AF12
AF13	C3AD_VSS
AF14	DAGND2
AF15	DABIAS21
AF16	PLL2AVSS
AF17	VSS12
AF18	OSDYSB_IN
AF19	OSDBB_D3B_IN
AF20	OSDYSA_IN
AF21	OSDBA_D3A_IN
AF22	OSD_CLK
AF23	RED1[4]
AF24	RED1[2]
AF25	VSS12
AF26	VSS12

2-3. Functions Of Pins

BLOCK	NUMBER OF PINS	PIN NAME	PIN TYPE		FUNCTION
			I/O	TYPE	
F/E	X' tal	4	XO VDD	VDD	CRYSTAL-OSCILLATOR CIRCUIT BLOCK POWER SUPPLY PIN
			XO V in	I	CRYSTAL-OSCILLATOR CIRCUIT INPUT PIN
			XO V out	O	CRYSTAL-OSCILLATOR CIRCUIT OUTPUT PIN
			XO GND	GND	CRYSTAL-OSCILLATOR CIRCUIT BLOCK GND
10bit A/D	8	Y_BIASAD	A	BIAS VOLTAGE PIN FOR 10-bit A/D	
		YVREFT	A	10-bit A/D REFERENCE TOP VOLTAGE PIN	
		CVBS1in	I	CVBS-1/Y-1 ANALOG VIDEO SIGNAL INPUT PIN	
		YVREFM	A	10-bit A/D REFERENCE MIDDLE VOLTAGE PIN	
		YAD GND	GND	10-bit A/D REFERENCE TOP VOLTAGE PIN	
		CVBS2 in	I	CVBS-2/Y-2 ANALOG VIDEO SIGNAL INPUT PIN	
		YAD VDD	VDD	10-bit A/D BLOCK POWER SUPPLY PIN	
		YVREFB	A	10-bit A/D REFERENCE BOTTOM VOLTAGE PIN	
3ch. 8bit A/D	21	C_BIASAD	A	BIAS VOLTAGE PIN FOR 8-bit A/D (1)	
		CVREFT	A	8-bit A/D (1) REFERENCE TOP VOLTAGE PIN	
		C in I	A	C INPUT	
		CAD VDD	VDD	8-bit A/D (1) CORE POWER SUPPLY PIN	
		Green in	I	G INPUT	
		CVREFB	A	8-bit A/D (1) REFERENCE BOTTOM VOLTAGE PIN	
		CAD GND	GND	8-bit A/D (1) CORE GND	
		C2_BIASAD	A	BIAS VOLTAGE PIN FOR 8-bit A/D (2)	
		C2VREFT	A	8-bit A/D (2) REFERENCE TOP VOLTAGE PIN	
		Cb in	I	Cb INPUT	
		C2AD VDD	VDD	8-bit A/D (2) CORE POWER SUPPLY PIN	
		Blue in	I	B INPUT	
		C2VREFB	A	8-bit A/D (2) REFERENCE BOTTOM VOLTAGE PIN	
		C2AD GND	GND	8-bit A/D (2) CORE GND	
		C3_BIASAD	A	BIAS VOLTAGE PIN FOR 8-bit A/D (3)	
		C3VREFT	A	8-bit A/D (3) REFERENCE TOP VOLTAGE PIN	
		Cr in	I	Cr INPUT	
		C3AD VDD	VDD	8-bit A/D (3) CORE POWER SUPPLY PIN	
		Red in	I	R INPUT	
		C3VREFB	A	8-bit A/D (3) REFERENCE BOTTOM VOLTAGE PIN	
		C3AD GND	GND	8-bit A/D (3) CORE GND	
10bit D/A	8	DA VDD 1	VDD	10-bit D/A BLOCK POWER SUPPLY PIN	
		DA out 1	O	Y, Cb & Cr OUTPUT	
		DA GND 1	GND	10-bit D/A BLOCK GND	
		DABIAS 11	A	BIAS VOLTAGE PIN FOR 10-bit D/A	
		DABIAS 1 2	A	BIAS VOLTAGE PIN FOR 10-bit D/A	
		DAVREF 1	A	10-bit D/A REFERENCE VOLTAGE PIN	
		DA DVDD 1	VDD	10-bit D/A BLOCK DIGITAL POWER SUPPLY PIN	
		DA DVSS 1	GND	0-bit D/A BLOCK DIGITAL GND PIN	
8bit D/A	7	DA VDD2	VDD	8-bit D/A BLOCK POWER SUPPLY PIN	
		DA out2	O	6.75MHz Æ 27MHz	
		DA GND2	GND	8-bit D/A BLOCK GND	
		DABIAS21	A	BIAS VOLTAGE PIN FOR 8-bit D/A	
		DAVREF2	A	8-bit D/A REFERENCE VOLTAGE PIN	
		DA DVDD2	VDD	8-bit D/A BLOCK DIGITAL POWER SUPPLY PIN	
		DA DVSS2	GND	8-bit D/A BLOCK DIGITAL GND PIN	
PLL(F/E)	4	4TPLL in	I	6.75MHz INPUT	
		AVDDPLL	VDD	POWER SUPPLY FOR PLL (F/E)	

			FIL	A	FILTER PIN
			AGNDPLL	GND	GND FOR PLL (F/E)
PLL (B/E)	3		AVDDPLL	VDD	POWER SUPPLY FOR PLL (B/E)
			FIL	A	FILTER PIN
			AGNDPLL	GND	GND FOR PLL (B/E)
			Ys in	I	Scart/TeleTEXT Ys INPUT
TeleTEXT	2		I in	I	TeleTEXT I INPUT
F/E	5		YCLMPP 1	O	CLAMP PULSE OUTPUT FOR CVBS1 CLAMP INPUT
			YCLMPP2	O	CLAMP PULSE OUTPUT FOR CVBS2 CLAMP INPUT
			Sync out	O	Sync OUTPUT
			Csync in	I	COMPOSITE Sync INPUT
			VBIREADY	O	VBIREADY OUTPUT
Digital in	PC in	27	PCR in [7]	I	D
			PCR in [6]	I	D
			PCR in [5]	I	D
			PCR in [4]	I	D
			PCR in [3]	I	D
			PCR in [2]	I	D
			PCR in [1]	I	D
			PCR in [0]	I	D
			PCG in [7]	I	D
			PCG in [6]	I	D
			PCG in [5]	I	D
			PCG in [4]	I	D
			PCG in [3]	I	D
			PCG in [2]	I	D
			PCG in [1]	I	D
			PCG in [0]	I	D
			PCB in [7]	I	D
			PCB in [6]	I	D
			PCB in [5]	I	D
			PCB in [4]	I	D
			PCB in [3]	I	D
			PCB in [2]	I	D
			PCB in [1]	I	D
			PCB in [0]	I	D
			PCH in	I	D
			PCV in	I	D
			PCCK in	I	D
R656 in YCbCr 8bit in YCbCr 16bit in	20		Dig Y in [7]	I	D
			Dig Y in [6]	I	D
			Dig Y in [5]	I	D
			Dig Y in [4]	I	D
			Dig Y in [3]	I	D
			Dig Y in [2]	I	D
			Dig Y in [1]	I	D
			Dig Y in [0]	I	D
			Dig C in [7]	I	D
			Dig C in [6]	I	D
			Dig C in [5]	I	D
			Dig C in [4]	I	D
			Dig C in [3]	I	D
			Dig C in [2]	I	D
			Dig C in [1]	I	D

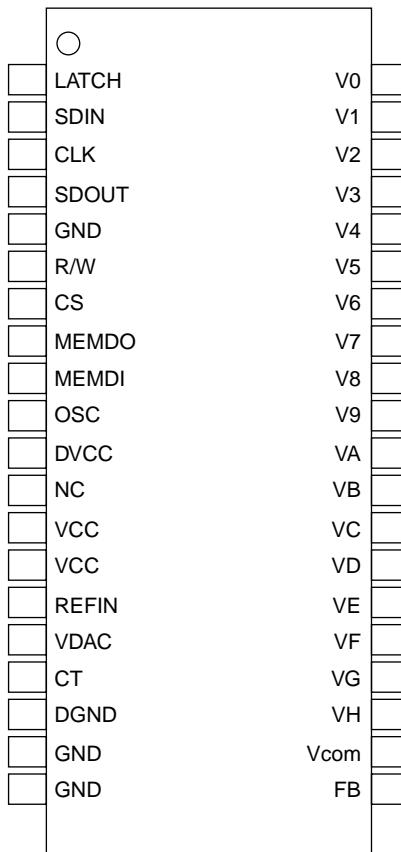
			Dig C in [0]	I	D	
			Dig CLK in	I	D	
			Dig HD in	I	D	
			Dig VD in	I	D	
			Dig Field in	I	D	
Digital out	R656 out YCbCr 8bit out	12	Dig out [7]	O	D	ITU-R656 OUTPUT PIN
			Dig out [6]	O	D	Digital YCbCr 8-bit OUTPUT PIN
			Dig out [5]	O	D	
			Dig out [4]	O	D	
			Dig out [3]	O	D	
			Dig out [2]	O	D	
			Dig out [1]	O	D	
			Dig out [0]	O	D	
			Dig CLK out	O	D	
			Dig HD out	O	D	
			Dig VD out	O	D	
			Dig Field out	O	D	
OSD	OSD I/F	14	OSDRA(d1a) in	I	D	OSD-R (data-1a) SIGNAL INPUT PIN
			OSDGa(d2a) in	I	D	OSD-G (data-2a) SIGNAL INPUT PIN
			OSDBa(d3a) in	I	D	OSD-B (data-3a) SIGNAL INPUT PIN
			OSDIA(d4a) in	I	D	OSD-I (data-4a) SIGNAL INPUT PIN
			OSDYsA in	I	D	OSD-Ys SIGNAL INPUT PIN
			OSDRB(d1b) in	I	D	OSD-R (data-1b) SIGNAL INPUT PIN
			OSDGB(d2b) in	I	D	OSD-G (data-2b) SIGNAL INPUT PIN
			OSDBB(d3b) in	I	D	OSD-B (data-3b) SIGNAL INPUT PIN
			OSDIB(d4b) in	I	D	OSD-I (data-4b) SIGNAL INPUT PIN
			OSDYsB in	I	D	OSD-Ys SIGNAL INPUT PIN
			OSD VD out	O	D	VD OUTPUT FOR OSD µ COM
			OSD HD out	O	D	HD OUTPUT FOR OSD µ COM
			OSD CLK	I/O	D	CLOCK I/O FOR OSD µ COM (POSITIVE POLARITY)
			OSD n-CLK	I/O	D	CLOCK I/O FOR OSD µ COM (NEGATIVE POLARITY)
DRAM	DRAM	20	DTMB	I	D	DRAM TEST MODE INPUT
			DTCLK	I	D	DRAM TEST CLOCK INPUT
			DRAM 1 VDD 1	VDD		1.5V VDD FOR 4M DRAM
			DRAM 1 GND 1	GND		1.5V GND FOR 4M DRAM
			DRAM 1 VDD2	VDD		1.5V VDD FOR 4M DRAM
			DRAM 1 GND2	GND		1.5V GND FOR 4M DRAM
			DRAM 1 VDD3	VDD		1.5V VDD FOR 4M DRAM
			DRAM 1 GND3	GND		1.5V GND FOR 4M DRAM
			DRAM2 VDD 1	VDD		1.5V VDD FOR 20M DRAM
			DRAM2 GND 1	GND		1.5V GND FOR 20M DRAM
			DRAM2 VDD2	VDD		1.5V VDD FOR 20M DRAM
			DRAM2 GND2	GND		1.5V GND FOR 20M DRAM
			DRAM2 VDD3	VDD		1.5V VDD FOR 20M DRAM
			DRAM2 GND3	GND		1.5V GND FOR 20M DRAM
			DRAM2 VDD4	VDD		1.5V VDD FOR 20M DRAM
			DRAM2 GND4	GND		1.5V GND FOR 20M DRAM
			DRAM2 VDD5	VDD		1.5V VDD FOR 20M DRAM
			DRAM2 GND5	GND		1.5V GND FOR 20M DRAM
			DRAM2 VDD6	VDD		2.5V VDD FOR 20M DRAM
			DRAM2 GND6	GND		2.5V GND FOR 20M DRAM
B/E	LCD I/F	53	RED 1 [7]	O	D	R SIGNAL OUTPUT PIN 1 (8bit)
			RED 1 [6]	O	D	
			RED 1 [5]	O	D	

			RED 1 [4]	O	D	
			RED 1 [3]	O	D	
			RED 1 [2]	O	D	
			RED 1 [1]	O	D	
			RED 1 [0]	O	D	
			GREEN 1 [7]	O	D	G SIGNAL OUTPUT PIN 1 (8bit)
			GREEN 1 [6]	O	D	
			GREEN 1 [5]	O	D	
			GREEN 1 [4]	O	D	
			GREEN 1 [3]	O	D	
			GREEN 1 [2]	O	D	
			GREEN 1 [1]	O	D	
			GREEN 1 [0]	O	D	
			BLUE 1 [7]	O	D	B SIGNAL OUTPUT PIN 1 (8bit)
			BLUE 1 [6]	O	D	
			BLUE 1 [5]	O	D	
			BLUE 1 [4]	O	D	
			BLUE 1 [3]	O	D	
			BLUE 1 [2]	O	D	
			BLUE 1 [1]	O	D	
			BLUE 1 [0]	O	D	
			RED2 [7]	O	D	R SIGNAL OUTPUT PIN 2 (8bit)
			RED2 [6]	O	D	
			RED2 [5]	O	D	
			RED2 [4]	O	D	
			RED2 [3]	O	D	
			RED2 [2]	O	D	
			RED2 [1]	O	D	
			RED2 [0]	O	D	
			GREEN2 [7]	O	D	G SIGNAL OUTPUT PIN 2 (8bit)
			GREEN2 [6]	O	D	
			GREEN2 [5]	O	D	
			GREEN2 [4]	O	D	
			GREEN2 [3]	O	D	
			GREEN2 [2]	O	D	
			GREEN2 [1]	O	D	
			GREEN2 [0]	O	D	
			BLUE2 [7]	O	D	B SIGNAL OUTPUT PIN 2 (8bit)
			BLUE2 [6]	O	D	
			BLUE2 [5]	O	D	
			BLUE2 [4]	O	D	
			BLUE2 [3]	O	D	
			BLUE2 [2]	O	D	
			BLUE2 [1]	O	D	
			BLUE2 [0]	O	D	
			LCD HD	O	D	HD SIGNAL OUTPUT PIN FOR DISPLAY TIMING
			LCD VD	O	D	VD SIGNAL OUTPUT PIN FOR DISPLAY TIMING
			ENAB	O	D	ENABLE
			LCD CLK out	O	D	CLOCK OUTPUT (POSITIVE POLARITY)
			LCD nCLK out	O	D	CLOCK OUTPUT (NEGATIVE POLARITY)
OTHERS	IIC	3	BUSSEL	I	D	SLAVE ADDRESS SWITCHING SETTING
			SCL	I	D	IIC CLOCK INPUT
			SDA	I/O	O/D	IIC DATA INPUT

	System Reset	2	RESET MONITOR	I O	D	SYSTEM RESET INPUT SYSTEM MONITOR OUTPUT (FLAG OUTPUT FOR INTERRUPT/F/E)
J-TAG BOUNDARY SCAN	5	TCK TMS TDI TDO TRST	TCK	I	D	TEST INPUT CLOCK
			TMS	I	D	TEST MODE SELECT INPUT
			TDI	I	D	TEST MODE SELECT INPUT
			TDO	O	D	TEST RESET OUTPUT
			TRST	I	D	TEST RESET INPUT
MODE CONTROL	7	TSTMODE [0] TSTMODE [1] TSTMODE [2] TSTMODE [3] TSTMODE [4] MBIST SCAN	TSTMODE [0]	I	D	TEST MODE PIN
			TSTMODE [1]	I	D	TEST MODE PIN
			TSTMODE [2]	I	D	TEST MODE PIN
			TSTMODE [3]	I	D	TEST MODE PIN
			TSTMODE [4]	I	D	TEST MODE PIN
			MBIST	I	D	MEMORY BIST MODE PIN
			SCAN	I	D	SCAN TEST MODE PIN
TEST INPUT	26	TSTD2 in [4] TSTD2 in [3] TSTD2 in [2] TSTD2 in [1] TSTD2 in [0] TSTD in [15] TSTD in [14] TSTD in [13] TSTD in [12] TSTD in [11] TSTD in [10] TSTD in [9] TSTD in [8] TSTD in [7] TSTD in [6] TSTD in [5] TSTD in [4] TSTD in [3] TSTD in [2] TSTD in [1] TSTD in [0] TST CK 1 in TST CK2 in TST VD in TST HD in TSTOE in	TSTD2 in [4]	I	D	TEST-ONLY INPUT PIN
			TSTD2 in [3]	I	D	
			TSTD2 in [2]	I	D	
			TSTD2 in [1]	I	D	
			TSTD2 in [0]	I	D	
			TSTD in [15]	I	D	
			TSTD in [14]	I	D	
			TSTD in [13]	I	D	
			TSTD in [12]	I	D	
			TSTD in [11]	I	D	
			TSTD in [10]	I	D	
			TSTD in [9]	I	D	
			TSTD in [8]	I	D	
			TSTD in [7]	I	D	
			TSTD in [6]	I	D	
			TSTD in [5]	I	D	
			TSTD in [4]	I	D	
			TSTD in [3]	I	D	
			TSTD in [2]	I	D	
			TSTD in [1]	I	D	
			TSTD in [0]	I	D	
			TST CK 1 in	I	D	
			TST CK2 in	I	D	
			TST VD in	I	D	
			TST HD in	I	D	
			TSTOE in	I	D	
POWER SUPPLY	α	3.3V VDD 3.3V GND 2.5V VDD 2.5V GND	3.3V VDD			
			3.3V GND			
			2.5V VDD			
			2.5V GND			
Total	251					
	+ α					

3. IC1101 (VHiBD8132FV-1Y)

3-1. Pin Configuration



3-2. Functions Of Pins

PIN No	PIN NAME	FUNCTION	PIN No	PIN NAME	FUNCTION
1	LATCH	SERIAL LATCH INPUT	21	FB	Vcc AMP NEGATIVE FEEDBACK INPUT
2	SDIN	SERIAL DATA INPUT	22	Vcom	Vcom OUTPUT PIN
3	CLK	SERIAL CLOCK INPUT	23	VH	GRAY SCALE OUTPUT PIN
4	SDOUT	SERIAL DATA OUTPUT	24	VG	GRAY SCALE OUTPUT PIN
5	GND	GND INPUT	25	VF	GRAY SCALE OUTPUT PIN
6	R/W	AUTO READ ON/OFF INPUT (ON=L, OFF=H)	26	VE	GRAY SCALE OUTPUT PIN
7	CS	EXTERNAL MEMORY SELECTION OUTPUT	27	VD	GRAY SCALE OUTPUT PIN
8	MEMDO	EXTERNAL MEMORY OUTPUT DATA SIGNAL	28	VC	GRAY SCALE OUTPUT PIN
9	MEMDI	EXTERNAL MEMORY INPUT DATA SIGNAL	29	VB	GRAY SCALE OUTPUT PIN
10	OSC	TUNING CLOCK INPUT/OUTPUT	30	VA	GRAY SCALE OUTPUT PIN
11	DVCC	LOGIC POWER SUPPLY INPUT	31	V9	GRAY SCALE OUTPUT PIN
12	NC	—	32	V8	GRAY SCALE OUTPUT PIN
13	VCC	BUFFER AMP POWER SUPPLY INPUT	33	V7	GRAY SCALE OUTPUT PIN
14	VCC	BUFFER AMP POWER SUPPLY INPUT	34	V6	GRAY SCALE OUTPUT PIN
15	REFIN	DAC REFERENCE INPUT	35	V5	GRAY SCALE OUTPUT PIN
16	VDAC	DAC POWER SUPPLY OUTPUT	36	V4	GRAY SCALE OUTPUT PIN
17	CT	CAPACITY CONNECTING PIN FOR POWER-ON RESET	37	V3	GRAY SCALE OUTPUT PIN
18	DGND	GND INPUT FOR DAC	38	V2	GRAY SCALE OUTPUT PIN
19	GND	GND INPUT	39	V1	GRAY SCALE OUTPUT PIN
20	GND	GND INPUT	40	V0	GRAY SCALE OUTPUT PIN

4. IC1201 (RH-iXA990WJZZQ)

4-1. Pin Configuration

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
A	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16		
	GND	TDI	MDO0	IB0	HS	+2.5V	V _S	CLK1	RST	IG6	+2.5V	DE	TP1	TP2	TDO	GND		
B	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B	
	MDO1	GND	PROG_B	IB1	IB2	IB4	IG0	CLK2	GND	IG7	IR2	IR6	TP3	TP4	GND	RCLKN		
C	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C	
	MDO2	MDO3	MDO4	HSWAP_EN	IB3	IB5	IG1	IG4	FREE1	PQ_OFF	IR3	IR7	TMS	TCK	R0N	RCLKP		
D	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D	
	MDO5	MDO6	MDO7	+1.2V	MDO8	IB6	IG2	IG5	FREE2	IR0	IR4	RST	+1.2V	R0P	R1N	R1P		
E	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E	
	MDO9	MDO10	MDO11	MDO12	+11.2V	IB7	IG3	+3.3V	+3.3V	IR1	IR5	+1.2V	NC	NC	R2N	R2P		
F	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F	
	+2.5V	MDO13	MDO14	MDO15	MDO16	GND	+3.3V	+3.3V	+3.3V	GND	NC	NC	R3N	R3P	+2.5V			
G	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14	G15	G16	G	
	MDO17	MDO18	MDO19	MDO20	MDO23	+3.3V	GND	GND	GND	+2.5V	NC	NC	G0N	G0P	NC			
H	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15	H16	H	
	MA8	GND	MDO21	MDO22	+3.3V	GND	GND	GND	GND	+2.5V	+2.5V	NC	NC	G1N	G1P			
J	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14	J15	J16	J	
	MA4	MA3	MA7	MA6	+3.3V	+3.3V	GND	GND	GND	+2.5V	+2.5V	NC	NC	GND	G2N			
K	K1	K2	K3	K4	K5	K6	K7	K8	K9	K10	K11	K12	K13	K14	K15	K16	K	
	MA0	BA1	MA5	MA2	MA9	+3.3V	GND	GND	GND	+2.5V	NC	OFL1	OFL2	NC	G2P			
L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L	
	+2.5V	BA0	MA1	MA10	MDE11	GND	+3.3V	+3.3V	+3.3V	GND	NC	INV_OSC	G3P	G3N	+2.5V			
M	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M	
	CS	RAS	MDE3	MDE6	+11.2V	MDE15	MDE20	+3.3V	+3.3V	NC	+1.2V	NC	NC	NC	B0P	B0N		
N	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	N13	N14	N15	N16	N	
	CAS	WE	MDE2	+1.2V	MDE10	MDE14	MDE19	MDE23	INIT_B	POW_EN	LBR	REV	+1.2V	NC	B1P	B1N		
P	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P	
	DQM	MEM_CLKE	M0	M2	MDE9	MDE13	MDE18	MDE22	MP_DA	NC	LS	GSP1	GLBR	B2P	B3N			
R	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15	R16	R	
	MEM_CLK	GND	MDE1	MDE5	MDE8	MDE12	MDE17	GND	MP_CS	NC	SPI	GSP2	OEM_INV	DONE	GND	B3P		
T	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15	T16	S	
	GND	M1	MDE0	MDE4	MDE7	+2.5V	MDE16	MDE21	MP_CK	POWER	+2.5V	SPOI	GCK	OEM	CCLK	GND		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		

BANK4(3.3V)

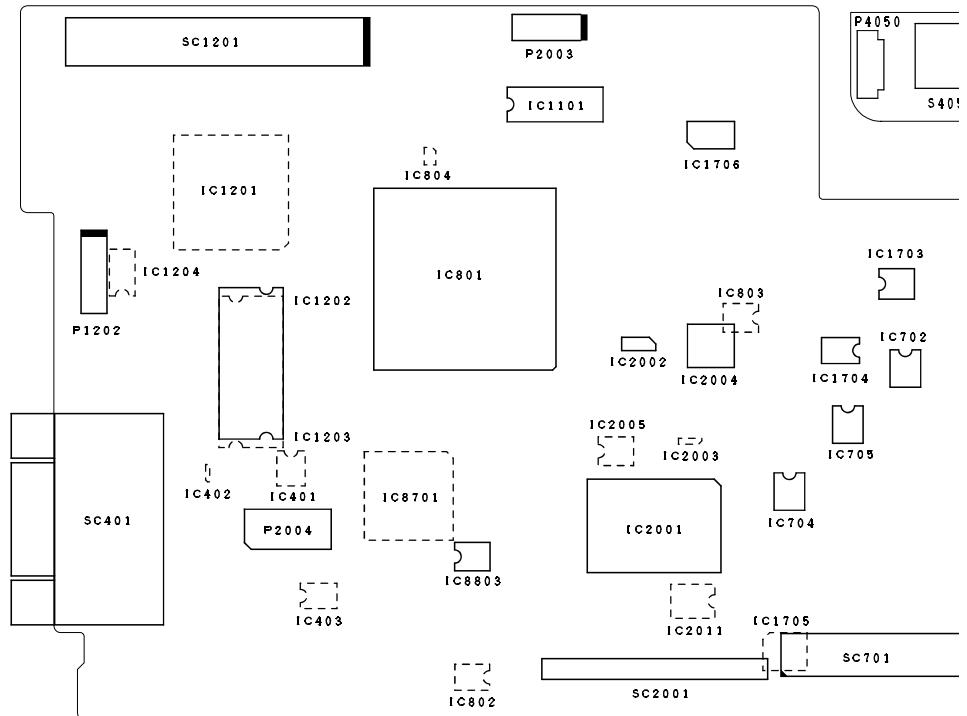
BANK5(3.3V)

4-2. Description Of Pins

Location	Name	Location	Name	Location	Name	Location	Name	
1	A1	GND	65	E1	MDO09	129	J1	MA4
2	A2	TDI	66	E2	MDO10	130	J2	MA3
3	A3	MDO0	67	E3	MDO11	131	J3	MA7
4	A4	IB0	68	E4	MDO12	132	J4	MA6
5	A5	HS	69	E5	VCCINT	133	J5	VCCO33
6	A6	VCCAUX	70	E6	IB7	134	J6	VCCO33
7	A7	VS	71	E7	IG3	135	J7	GND
8	A8	CLK1	72	E8	VCCO33	136	J8	GND
9	A9	PMUTE	73	E9	VCCO33	137	J9	GND
10	A10	IG6	74	E10	IR1	138	J10	GND
11	A11	VCCAUX	75	E11	IR5	139	J11	VCCO25
12	A12	DE	76	E12	VCCINT	140	J12	VCCO25
13	A13	TP1*	77	E13	NC	141	J13	NC
14	A14	TP2*	78	E14	NC	142	J14	NC
15	A15	TDO	79	E15	R2N	143	J15	GND
16	A16	GND	80	E16	R2P	144	J16	G2N
17	B1	MDO1	81	F1	VCCAUX	145	K1	MA0
18	B2	GND	82	F2	MDO13	146	K2	BA1
19	B3	PROG_B	83	F3	MDO14	147	K3	MA5
20	B4	IB1	84	F4	MDO15	148	K4	MA2
21	B5	IB2	85	F5	MDO16	149	K5	MA9
22	B6	IB4	86	F6	GND	150	K6	VCCO33
23	B7	IG0	87	F7	VCCO33	151	K7	GND
24	B8	CLK2*	88	F8	VCCO33	152	K8	GND
25	B9	GND	89	F9	VCCO33	153	K9	GND
26	B10	IG7	90	F10	VCCO33	154	K10	GND
27	B11	IR2	91	F11	GND	155	K11	VCCO25
28	B12	IR6	92	F12	NC	156	K12	NC
29	B13	TP3*	93	F13	NC	157	K13	OFL1
30	B14	TP4*	94	F14	R3N	158	K14	OFL2
31	B15	GND	95	F15	R3P	159	K15	NC
32	B16	RCLKN	96	F16	VCCAUX	160	K16	G2P
33	C1	MDO2	97	G1	MDO17	161	L1	VCCAUX
34	C2	MDO3	98	G2	MDO18	162	L2	BA0
35	C3	MDO4	99	G3	MDO19	163	L3	MA1
36	C4	HSWAP_EN	100	G4	MDO20	164	L4	MA10
37	C5	IB3	101	G5	MDO23	165	L5	MDE11
38	C6	IB5	102	G6	VCCO33	166	L6	GND
39	C7	IG1	103	G7	GND	167	L7	VCCO33
40	C8	IG4	104	G8	GND	168	L8	VCCO33
41	C9	FREE1*	105	G9	GND	169	L9	VCCO33
42	C10	PQ_OFF*	106	G10	GND	170	L10	VCCO33
43	C11	IR3	107	G11	VCCO25	171	L11	GND
44	C12	IR7	108	G12	NC	172	L12	NC
45	C13	TMS	109	G13	NC	173	L13	INV_OSC
46	C14	TCK	110	G14	G0N	174	L14	G3P
47	C15	R0N	111	G15	G0P	175	L15	G3N
48	C16	RCLKP	112	G16	NC	176	L16	VCCAUX
49	D1	MDO5	113	H1	MA8	177	M1	CS
50	D2	MDO6	114	H2	GND	178	M2	RAS
51	D3	MDO7	115	H3	MDO21	179	M3	MDE3
52	D4	VCCINT	116	H4	MDO22	180	M4	MDE6
53	D5	MDO8	117	H5	VCCO33	181	M5	VCCINT
54	D6	IB6	118	H6	VCCO33	182	M6	MDE15
55	D7	IG2	119	H7	GND	183	M7	MDE20
56	D8	IG5	120	H8	GND	184	M8	VCCO33
57	D9	FREE2*	121	H9	GND	185	M9	VCCO33
58	D10	IR0	122	H10	GND	186	M10	NC
59	D11	IR4	123	H11	VCCO25	187	M11	DIN
60	D12	RST	124	H12	VCCO25	188	M12	VCCINT
61	D13	VCCINT	125	H13	NC	189	M13	NC
62	D14	R0P	126	H14	NC	190	M14	NC
63	D15	R1N	127	H15	G1N	191	M15	B0P
64	D16	R1P	128	H16	G1P	192	M16	B0N

CHASSIS LAYOUT

MAIN Unit



H

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F

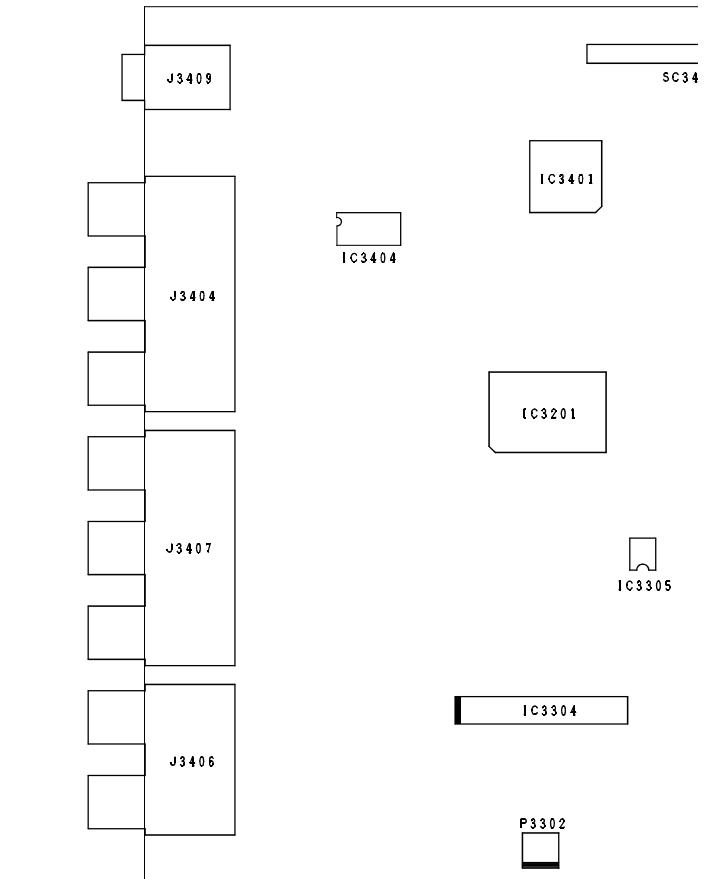
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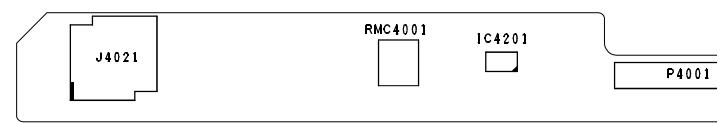
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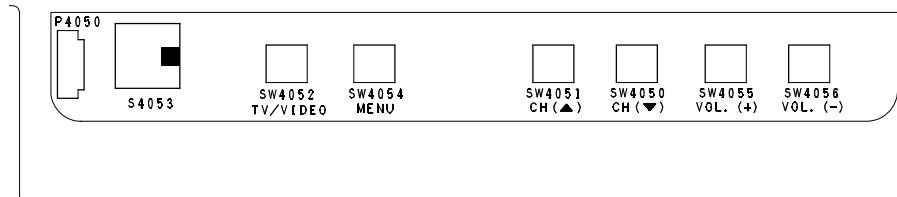


R/C, LED Unit

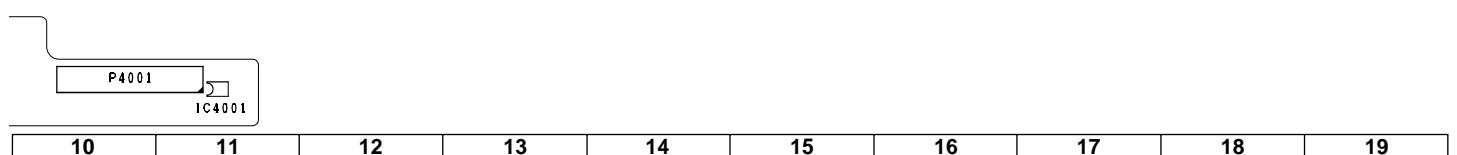
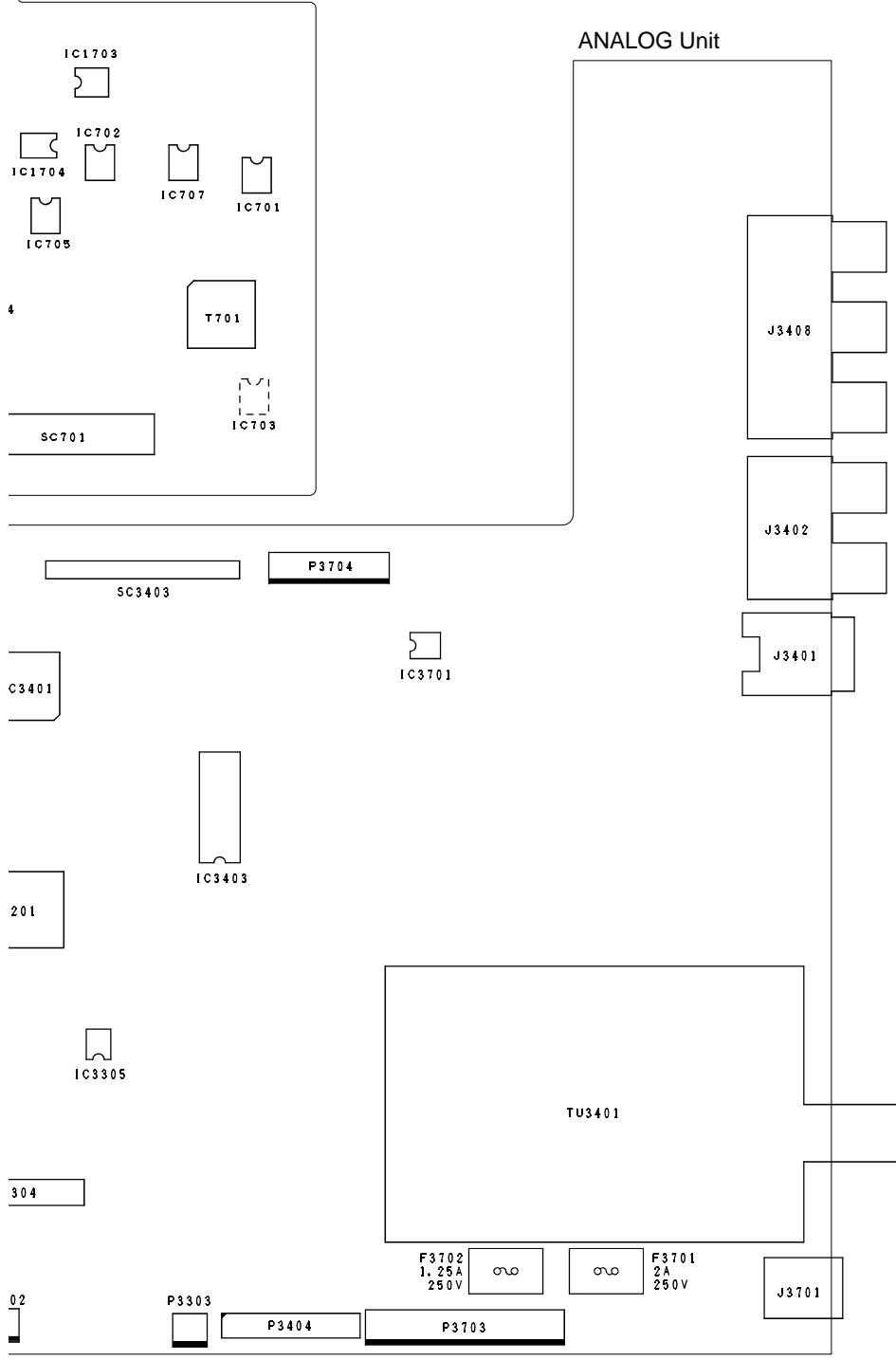


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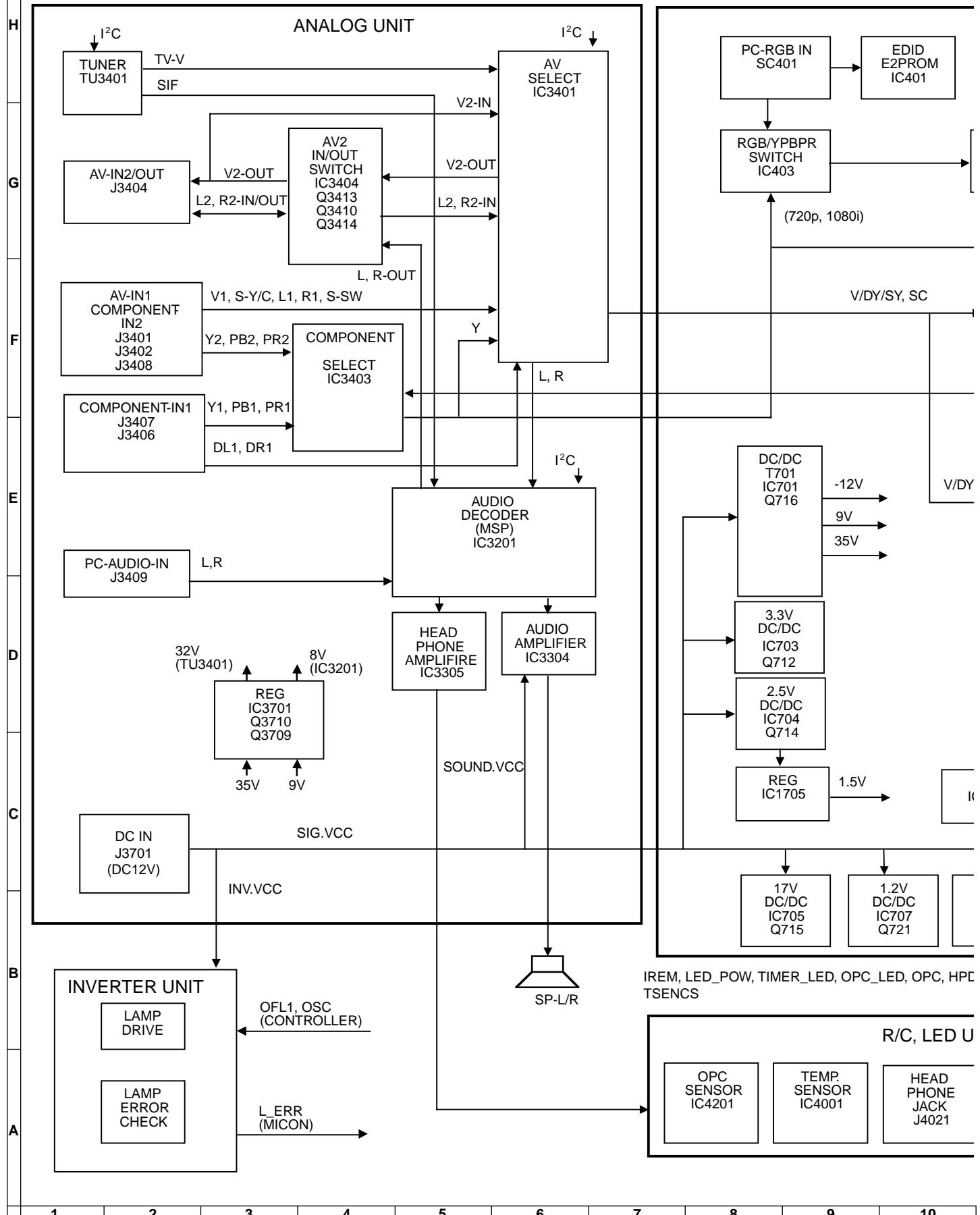
OPERATION Unit

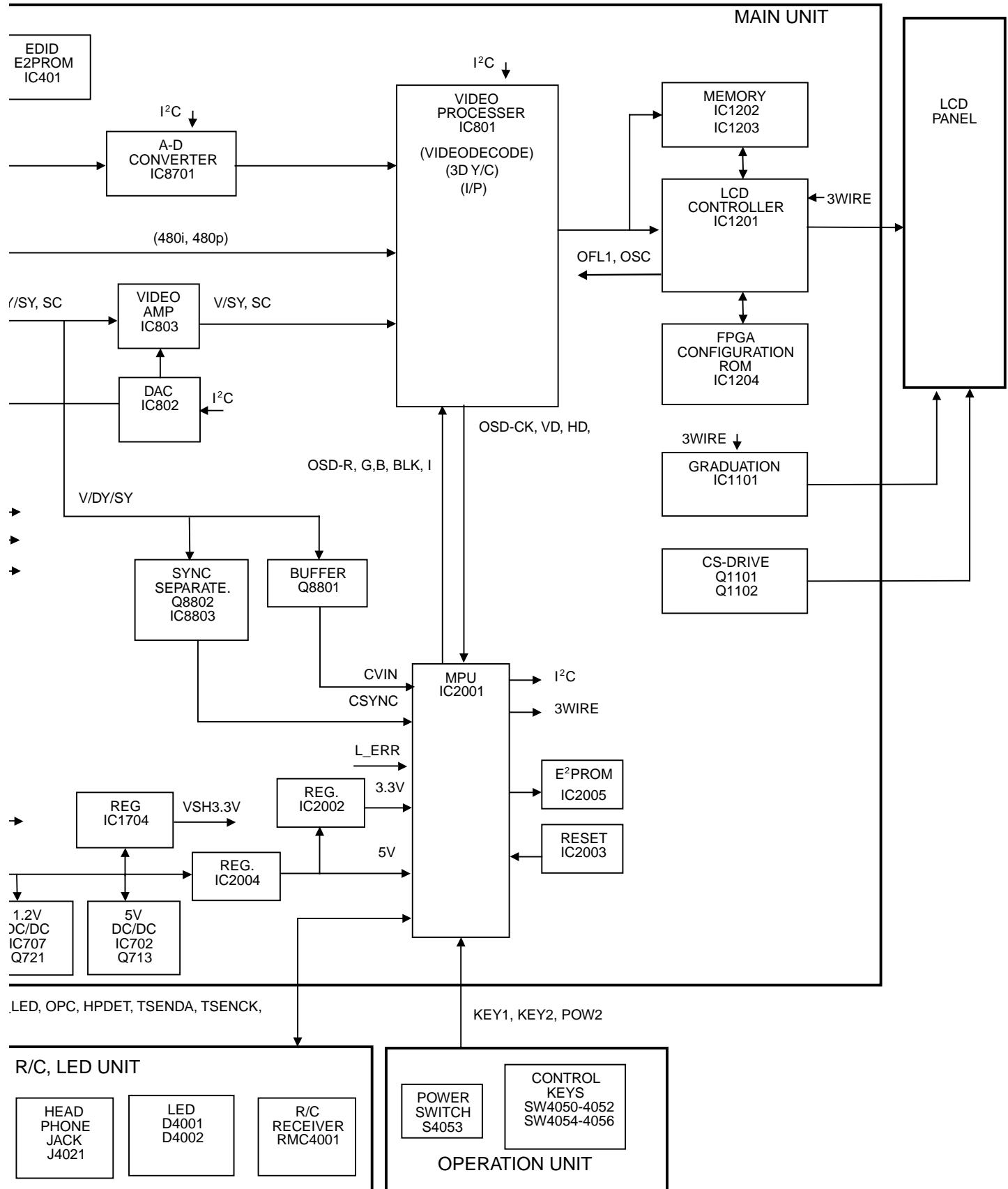


ANALOG Unit

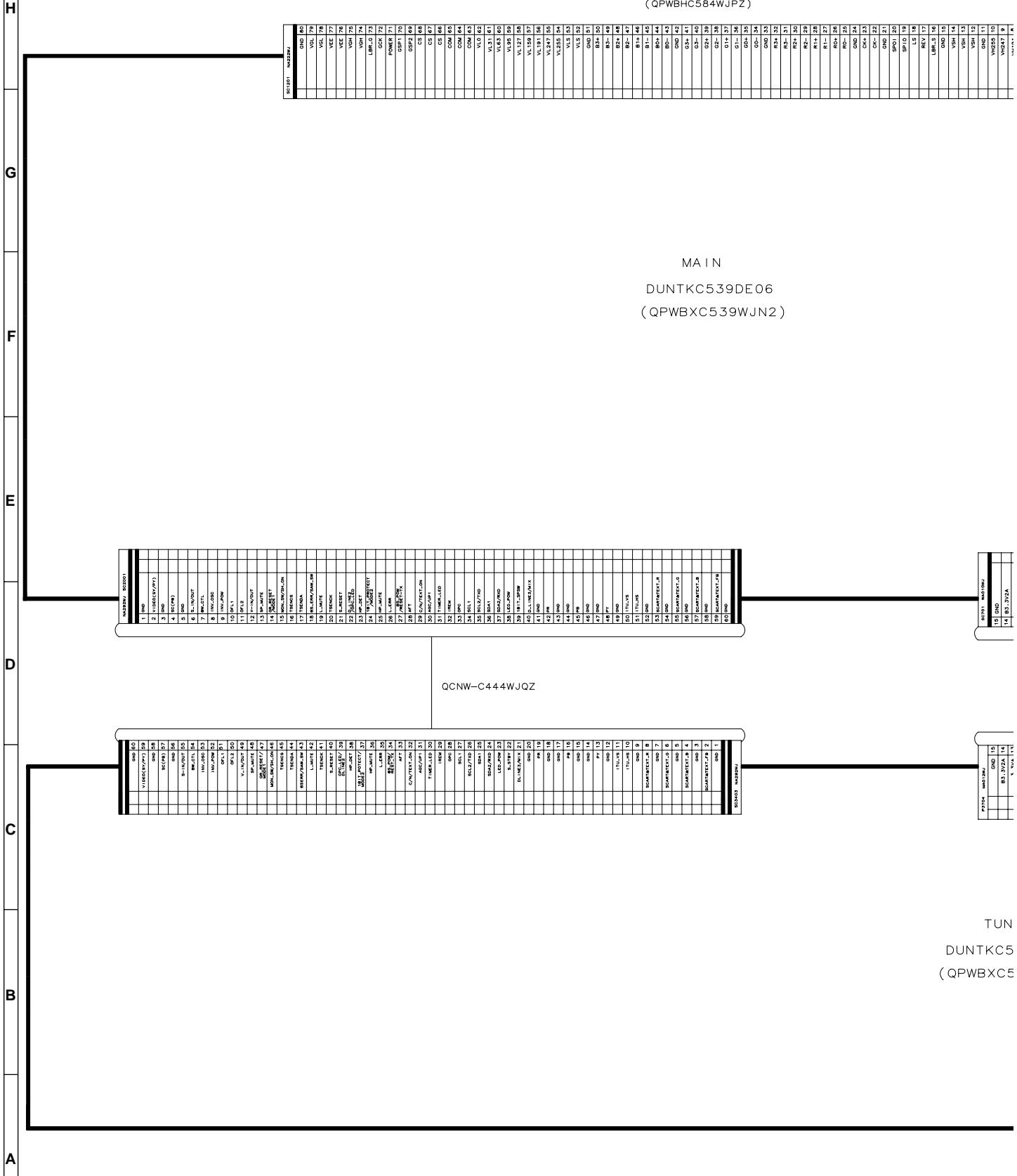


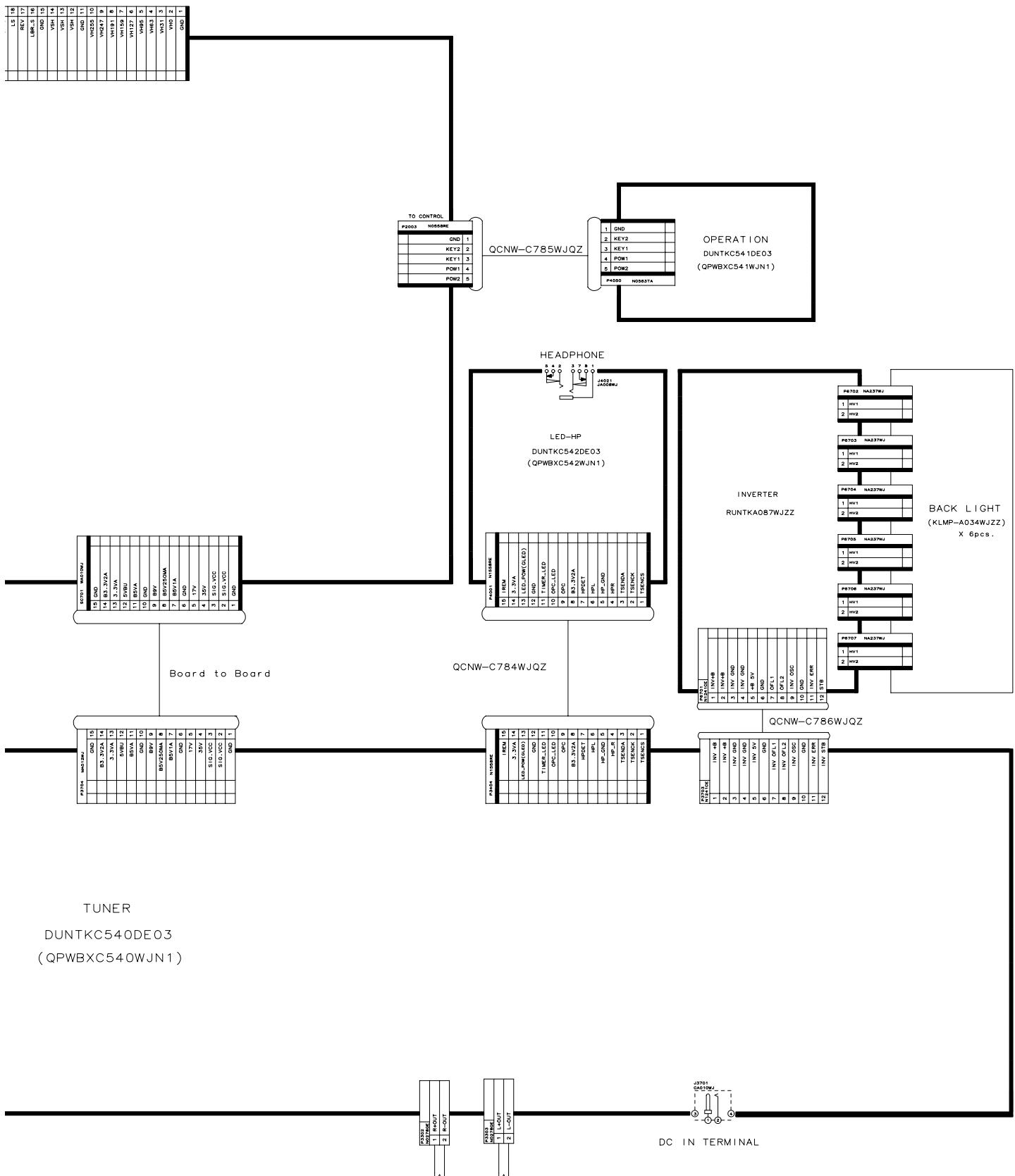
BLOCK DIAGRAM





OVERALL WIRING DIAGRAM





DESCRIPTION OF SCHEMATIC DIAGRAM

VOLTAGE MEASUREMENT CONDITION:

1. The voltages at test points are measured on exclusive AC adaptor and the stable supply voltage of AC 120V. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1. The unit of resistance “Ω” is omitted.
(K=kΩ=1000 Ω, M=MΩ).
2. All resistors are ± 5%, unless otherwise noted.
(J= ± 5%, F= ± 1%, D= ± 0.5%)
3. All resistors are 1/16W, unless otherwise noted.
4. All resistors are Carbon type, unless otherwise noted.

Ⓐ: Solid Ⓣ: Cement

Ⓑ: Oxide Film Ⓤ: Special

Ⓒ: Metal Coating

CAPACITOR

1. All capacitors are μF, unless otherwise noted.
(P=pF=μμF).
2. All capacitors are 50V, unless otherwise noted.
3. All capacitors are Ceramic type, unless otherwise noted.

(ML): Mylar (TA): Tantalum
(PF): Polypro Film (ST): Styrol

CAUTION:

This circuit diagram is original one, therefore there may be a slight difference from yours.

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH “⚠” ([]) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

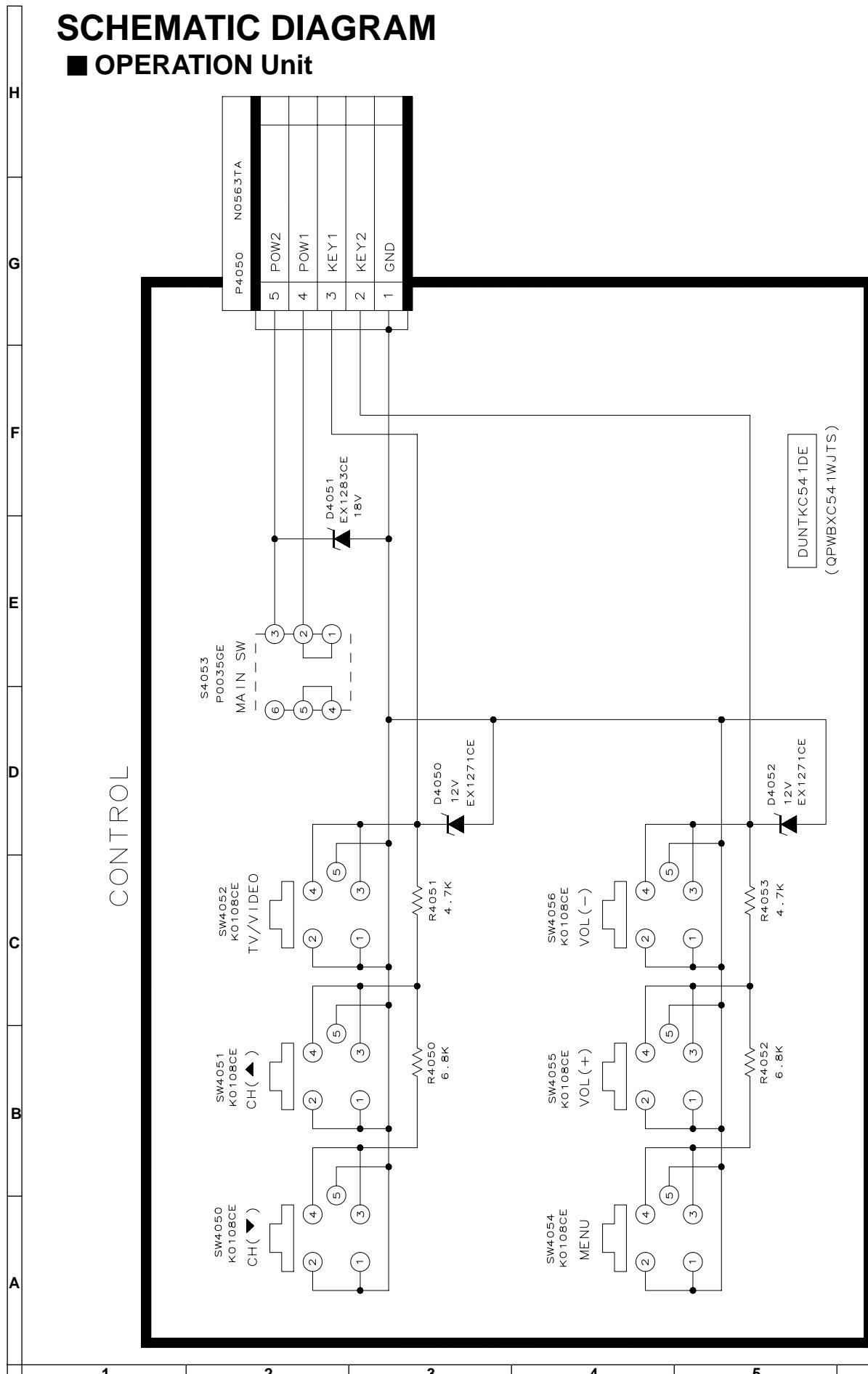
AVIS DE SECURITE IMPORTANT:

LES PIECES MARQUEES “⚠” ([]) SONT IMPORTANTES POUR MAINTENIR LA SECURITE DE L'APPAREIL.

NE REMPLACER CES PIECES QUE PAR DES PIECES DONT LE NUMERO EST SPECIFIE POUR MAINTENIR LA SECURITE ET PROTEGER LE BON FONCTIONNEMENT DE L'APPAREIL.

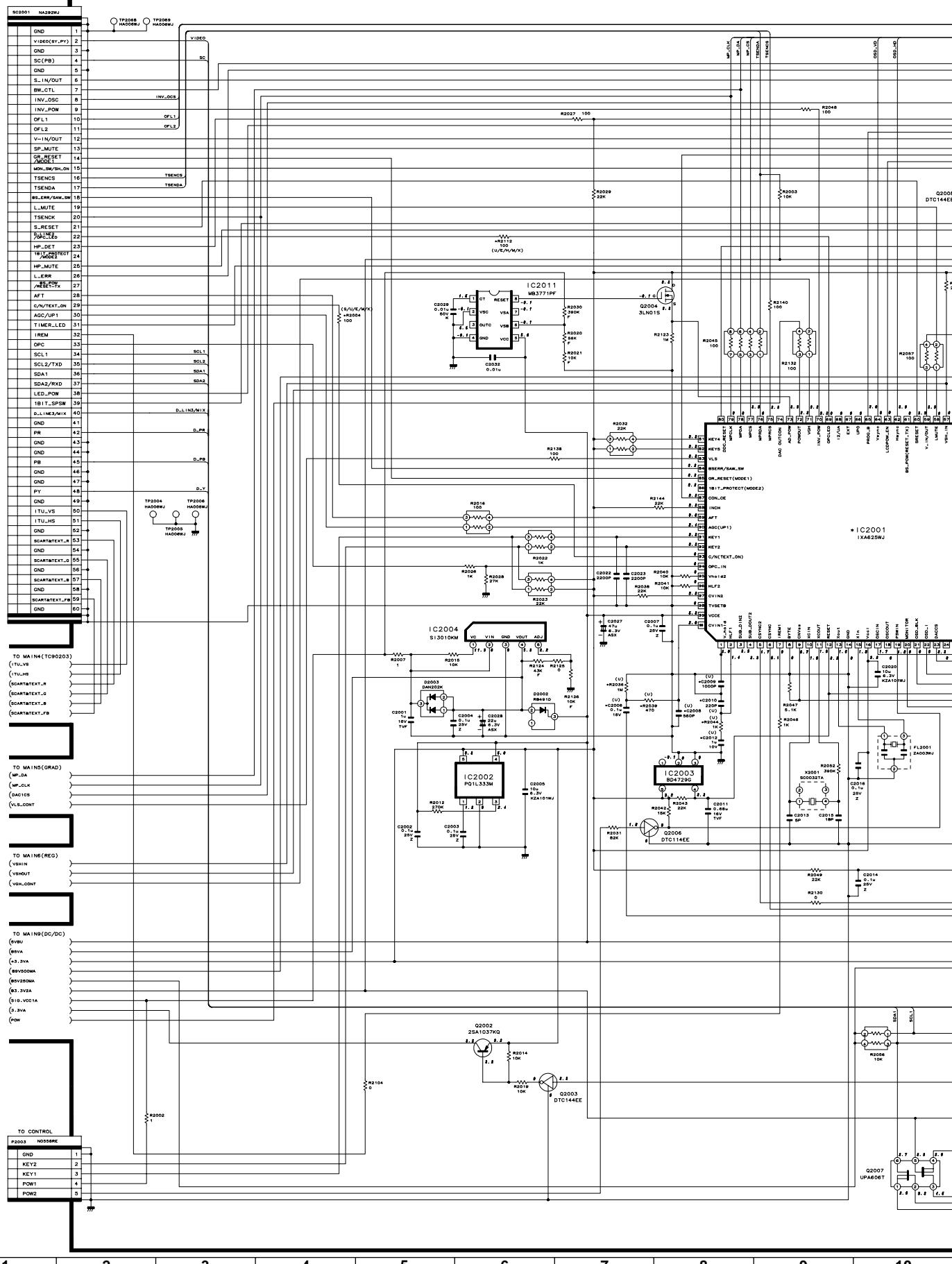
SCHEMATIC DIAGRAM

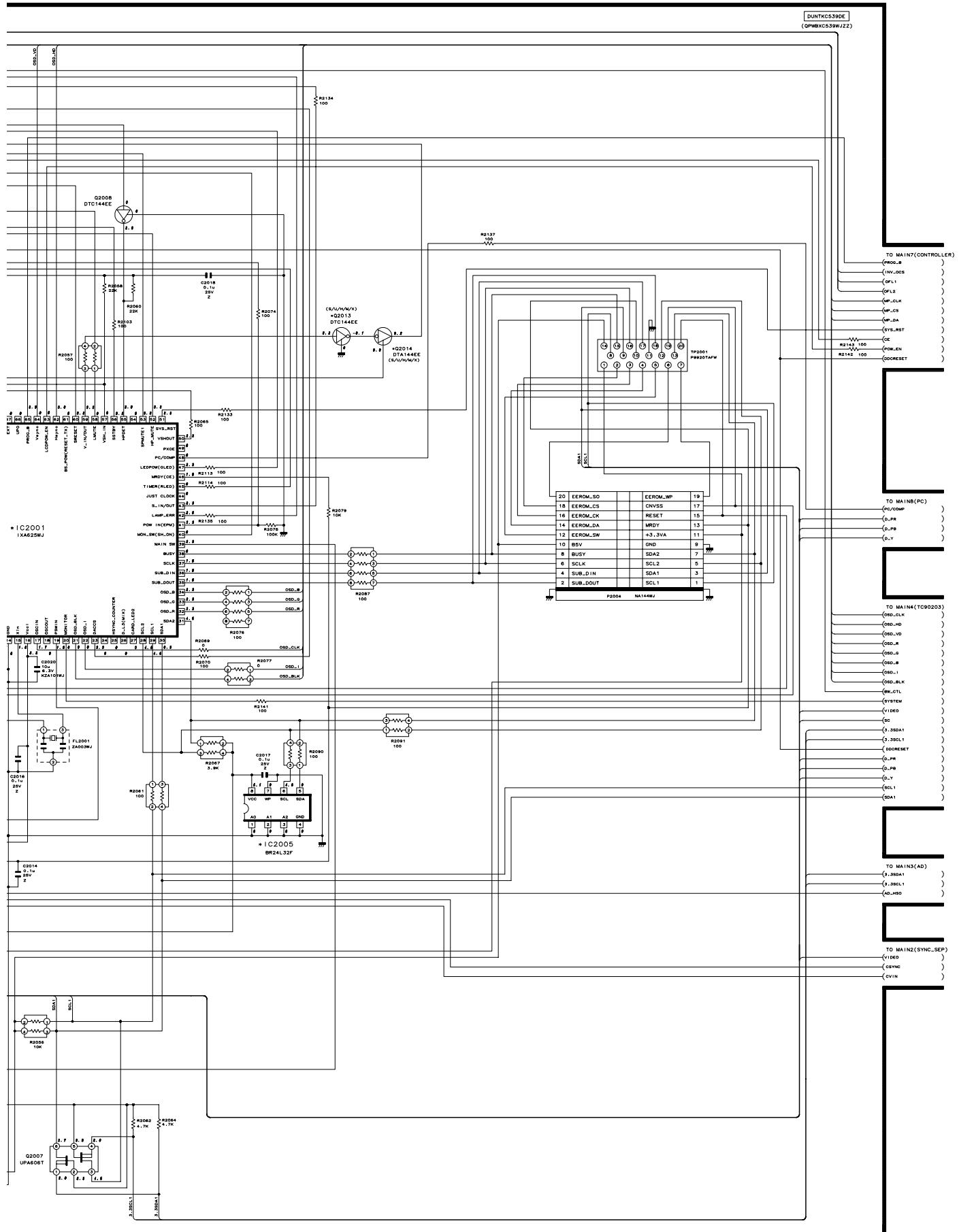
■ OPERATION Unit



■ MAIN Unit-1/9

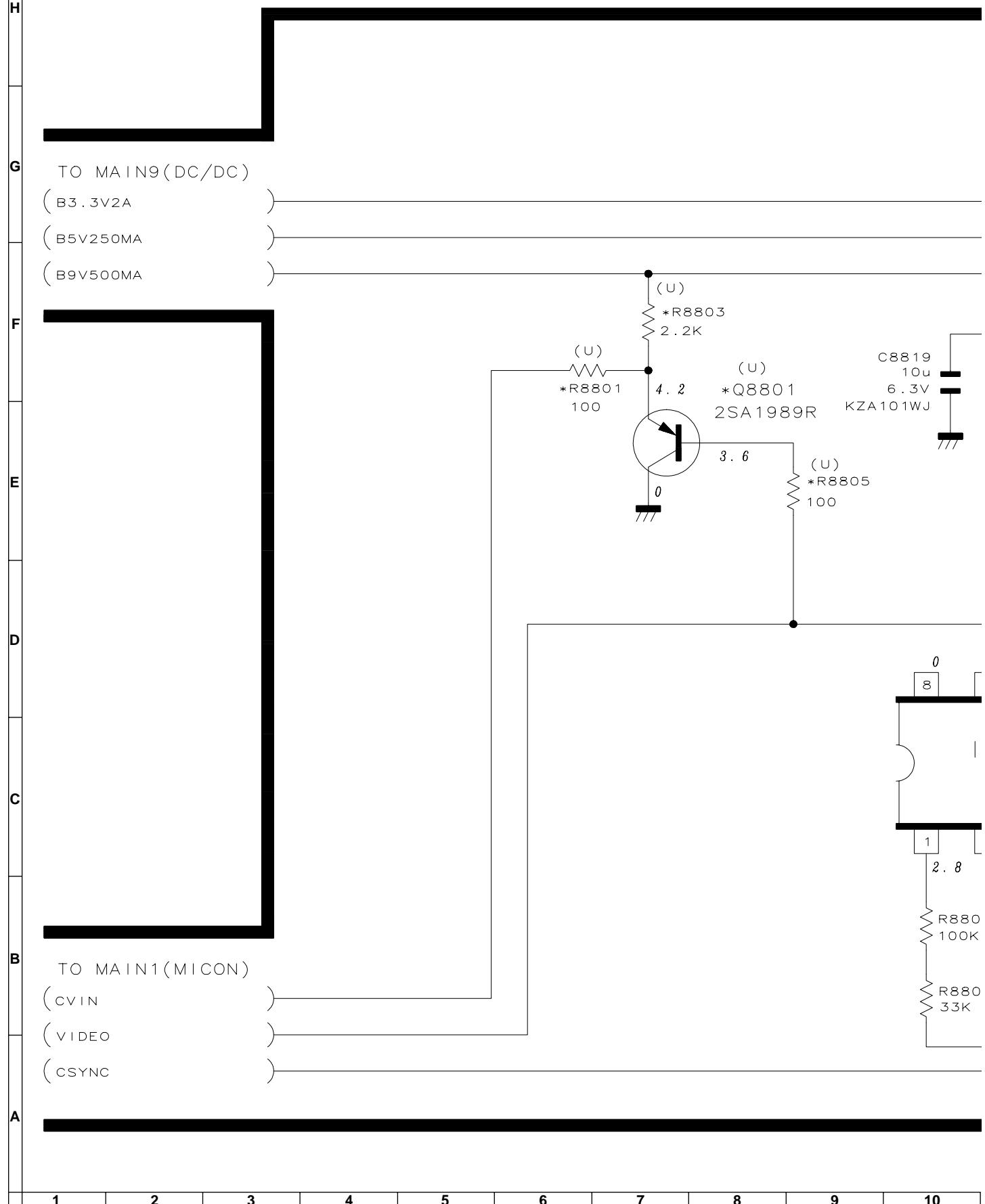
MAIN1 (MICON)



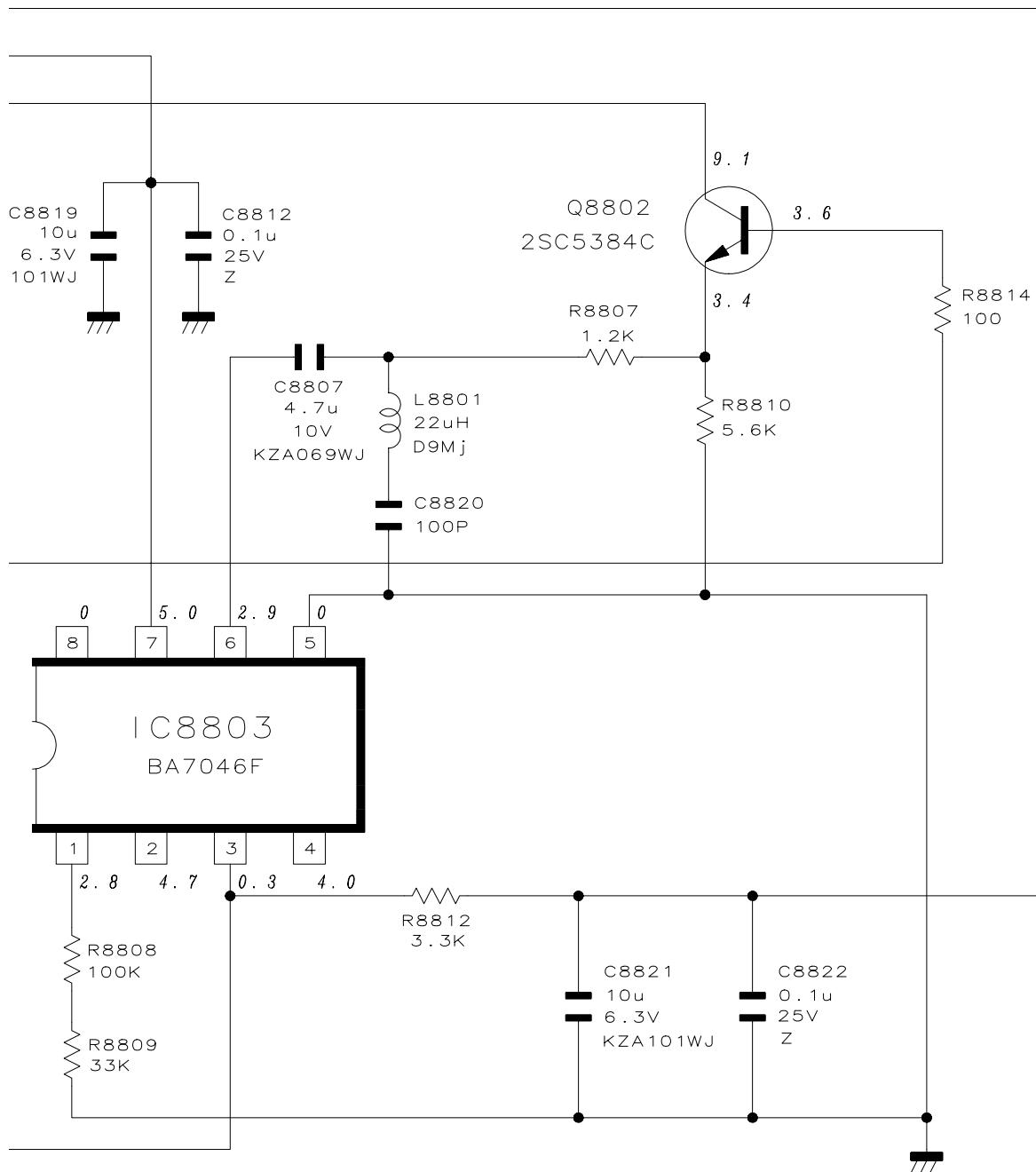


■MAIN Unit-2/9

MAIN2 (SYNC SEP)



DUNTKC539DE
(QPWBX539WJ)



■MAIN Unit-3/9

MAIN3 (AD)

H

G

F

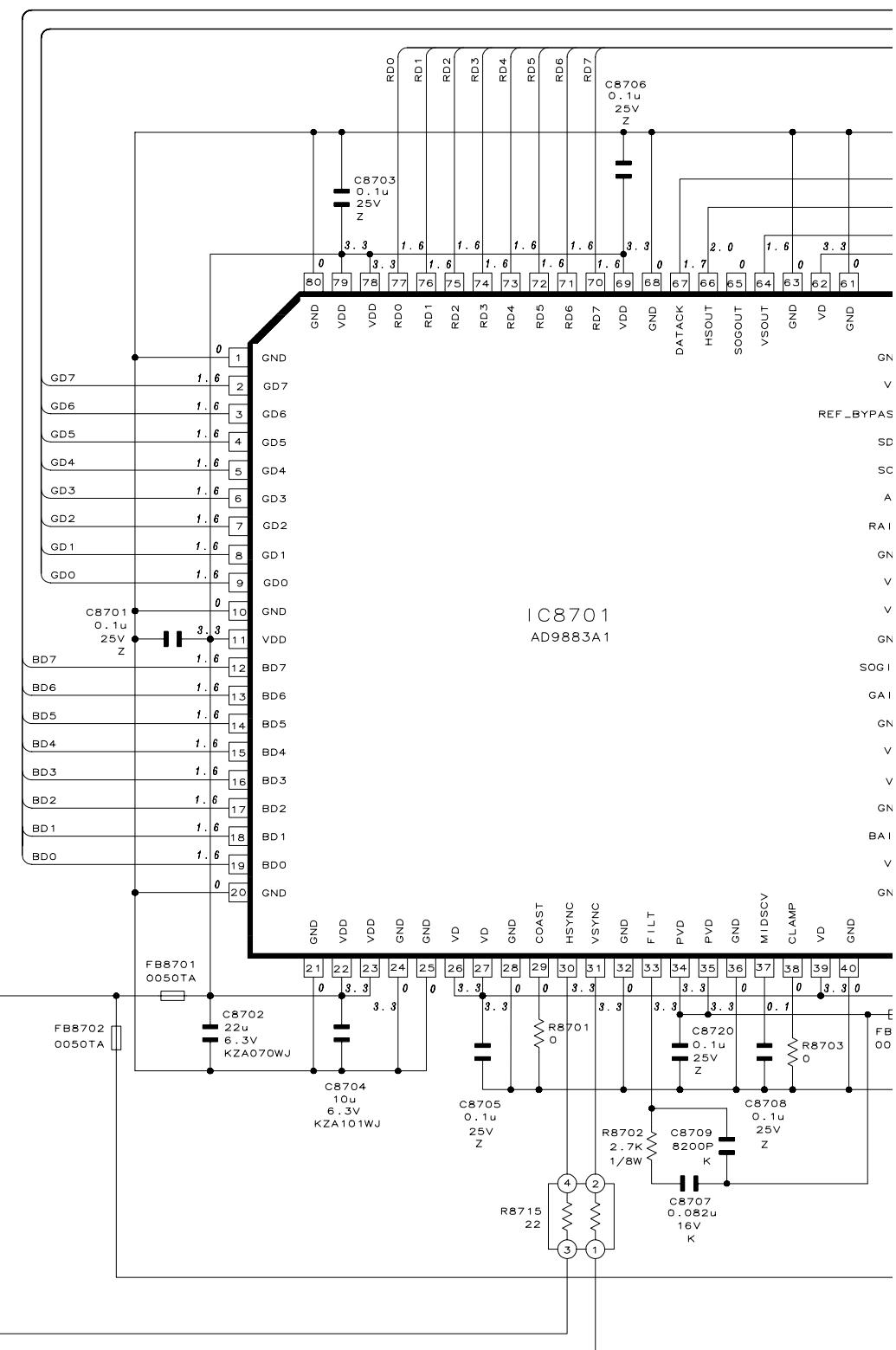
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D

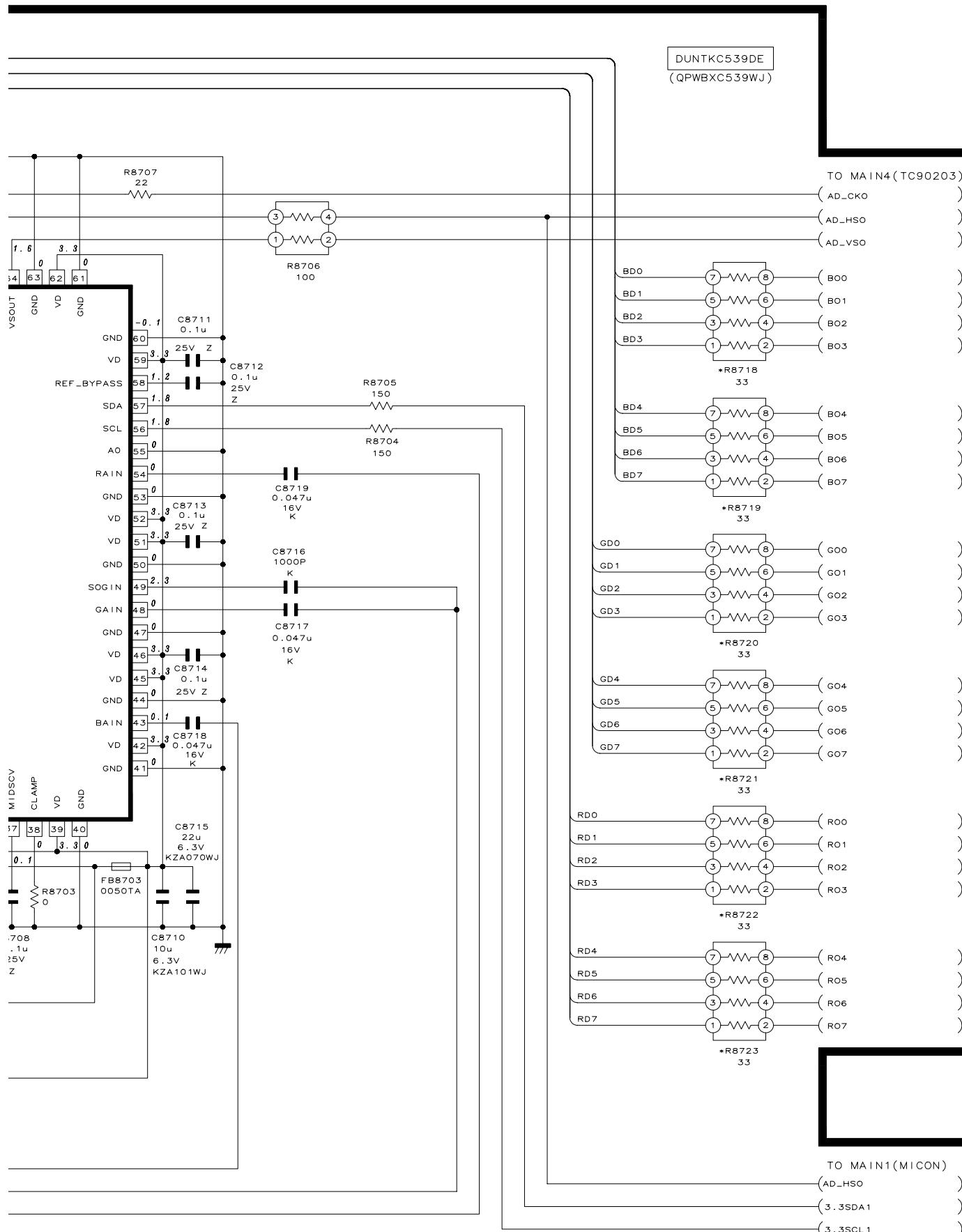
C

B

A

TO MAIN9 (DC/DC)
(B3.3V2A)FB8701
0050TAFB8702
0050TATO MAIN8 (PC)
(PC_H)
(PC_V)
(D_PB/PC_B)
(D_Y/PC_G)
(D_PR/PC_R)

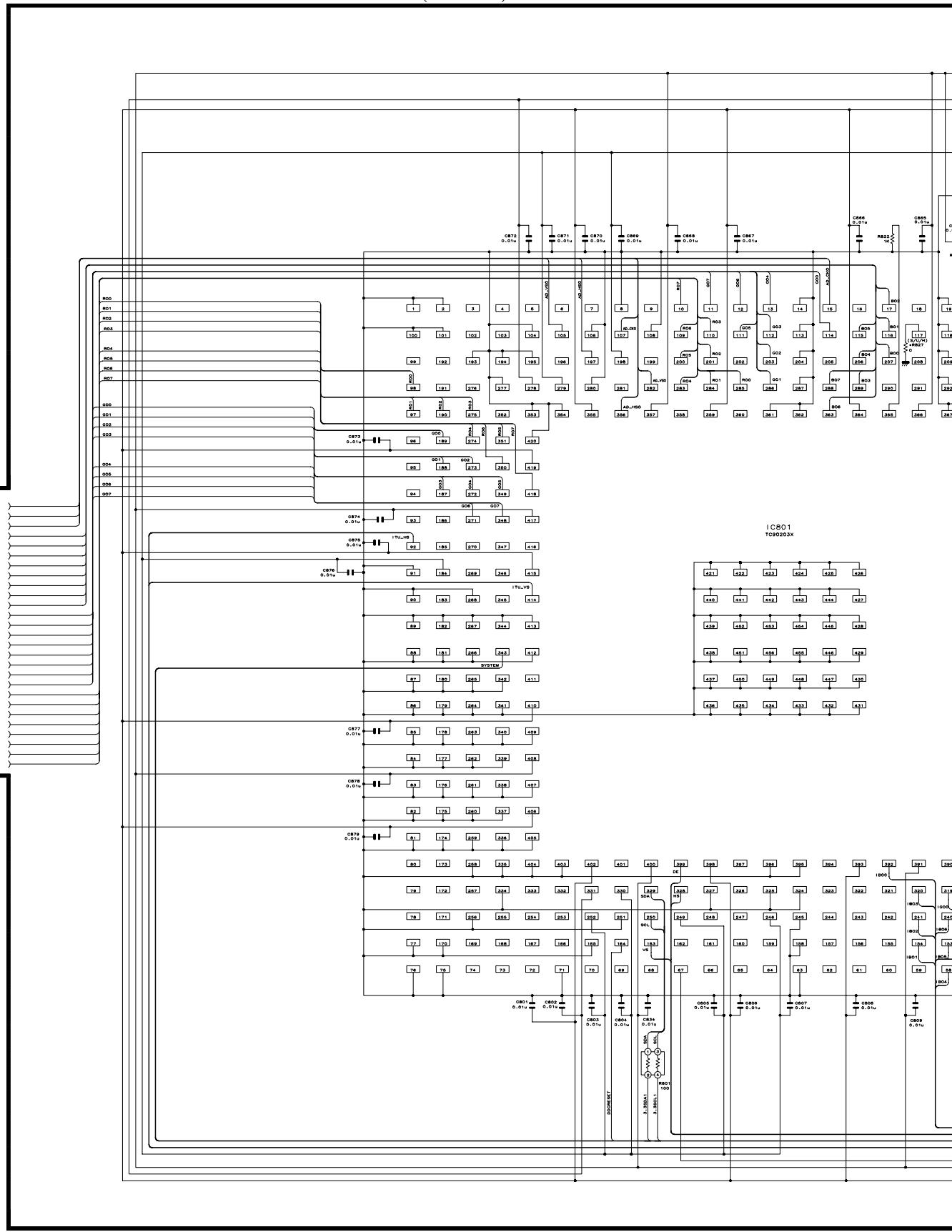
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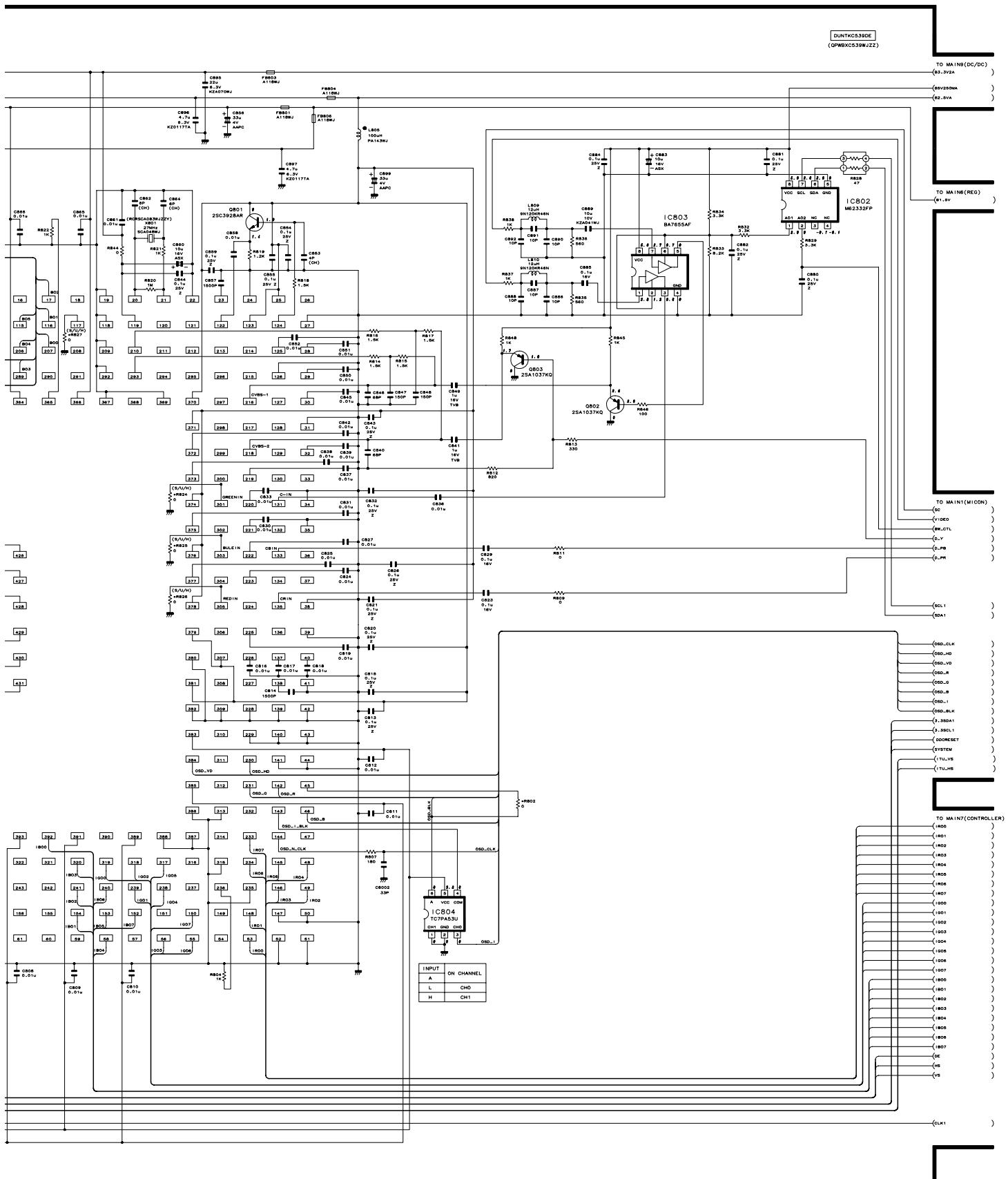


10	11	12	13	14	15	16	17	18	19
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■ MAIN Unit-4/9

MAIN4 (TC90203)





■MAIN Unit-5/9

MAIN5 (GRAD)

H

G

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E

D

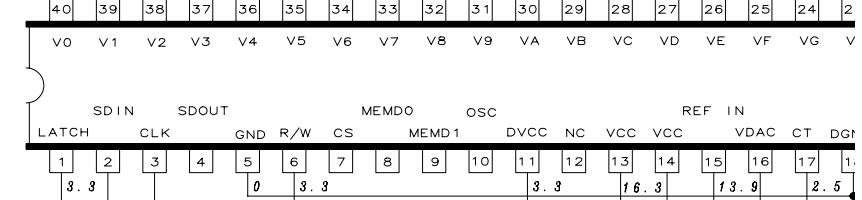
C

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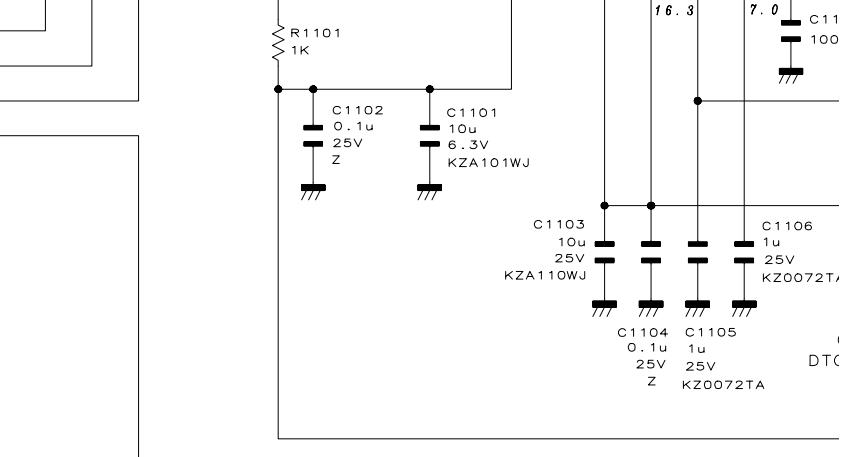
TO MAIN7 (CONTROLLER)

(CS)
(VLO)
(VL31)
(VL63)
(VL95)
(VL127)
(VL159)
(VL191)
(VL247)
(VL255)
(VHO)
(VH31)
(VH63)
(VH95)
(VH127)
(VH159)
(VH191)
(VH247)
(VH255)



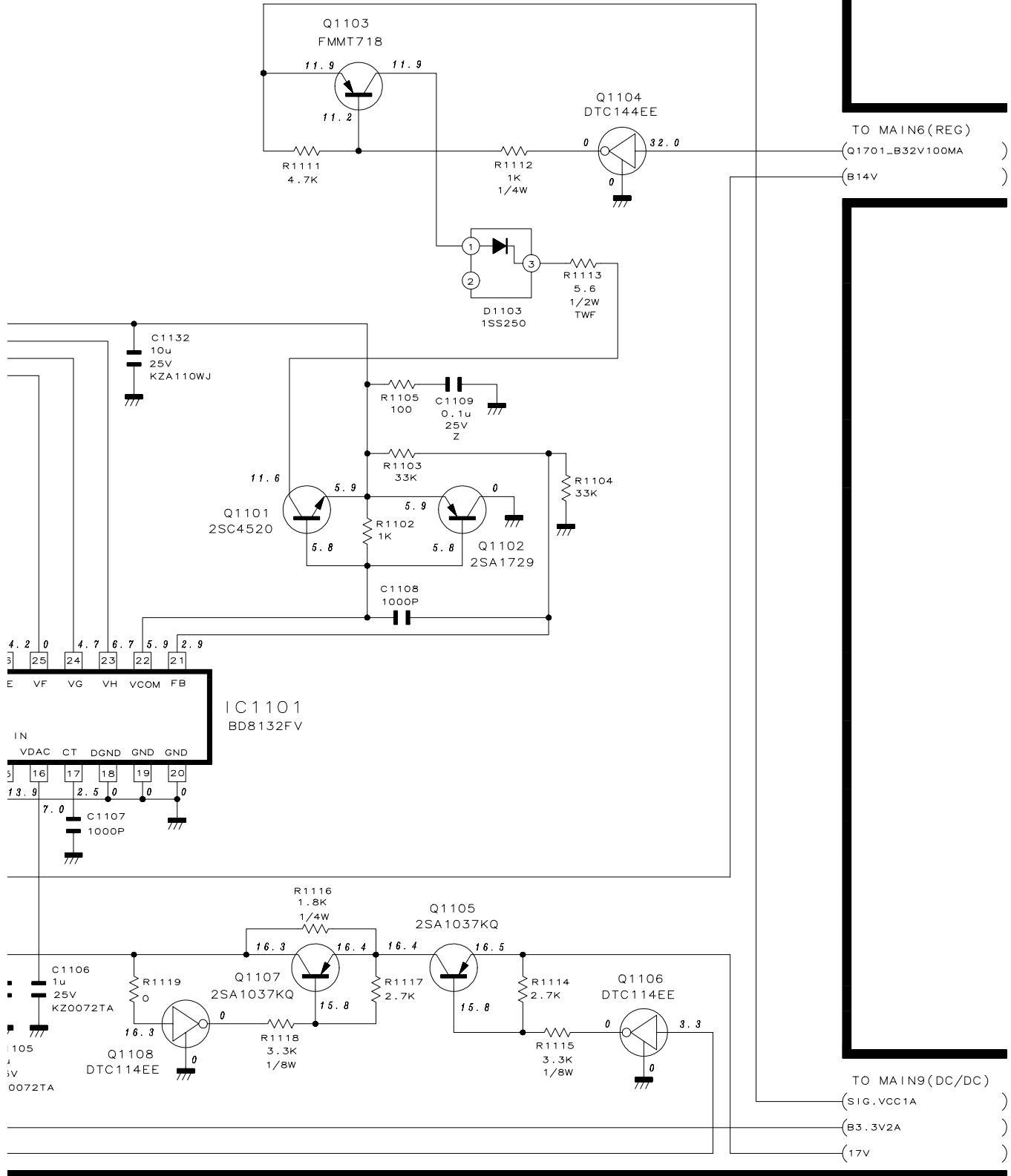
TO MAIN1 (MICON)

(DAC1CS)
(MP_DA)
(MP_CLK)
(VLS_CONT)



1	2	3	4	5	6	7	8	9	10
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DUNTKC539DE
(QPWBC539WJ)



10	11	12	13	14	15	16	17	18	19
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■MAIN Unit-6/9

MAIN6 (REG)

H

G

F

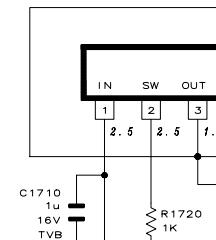
E

D

C

B

A

TO MAIN1(MICON)
(VSHIN)
(VGH_CONT)
(VSHOUT)TO MAIN5(GRAD)
(Q1701-B32V100MA)
(B14V)TO MAIN7(CONTROLLER)
(VGH_PROTECT)
(B14V2)Q1701
2SA1037KQR1702
2.7K

32.1

32.0

31.4

R1704
12K
1/4W

3.2

Q1702
DTC144EER1736
10KIC 1704
MM1563DF

4.7

5.6

0

5

VIN

SUB

CONT

1.6

3.3

6

7

C1707
22u 6.3VC1708
1u 16VC1706
47OPC1723
10u 50V ASXL1701
1.2uH CKM

14.1

12.9

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16.5

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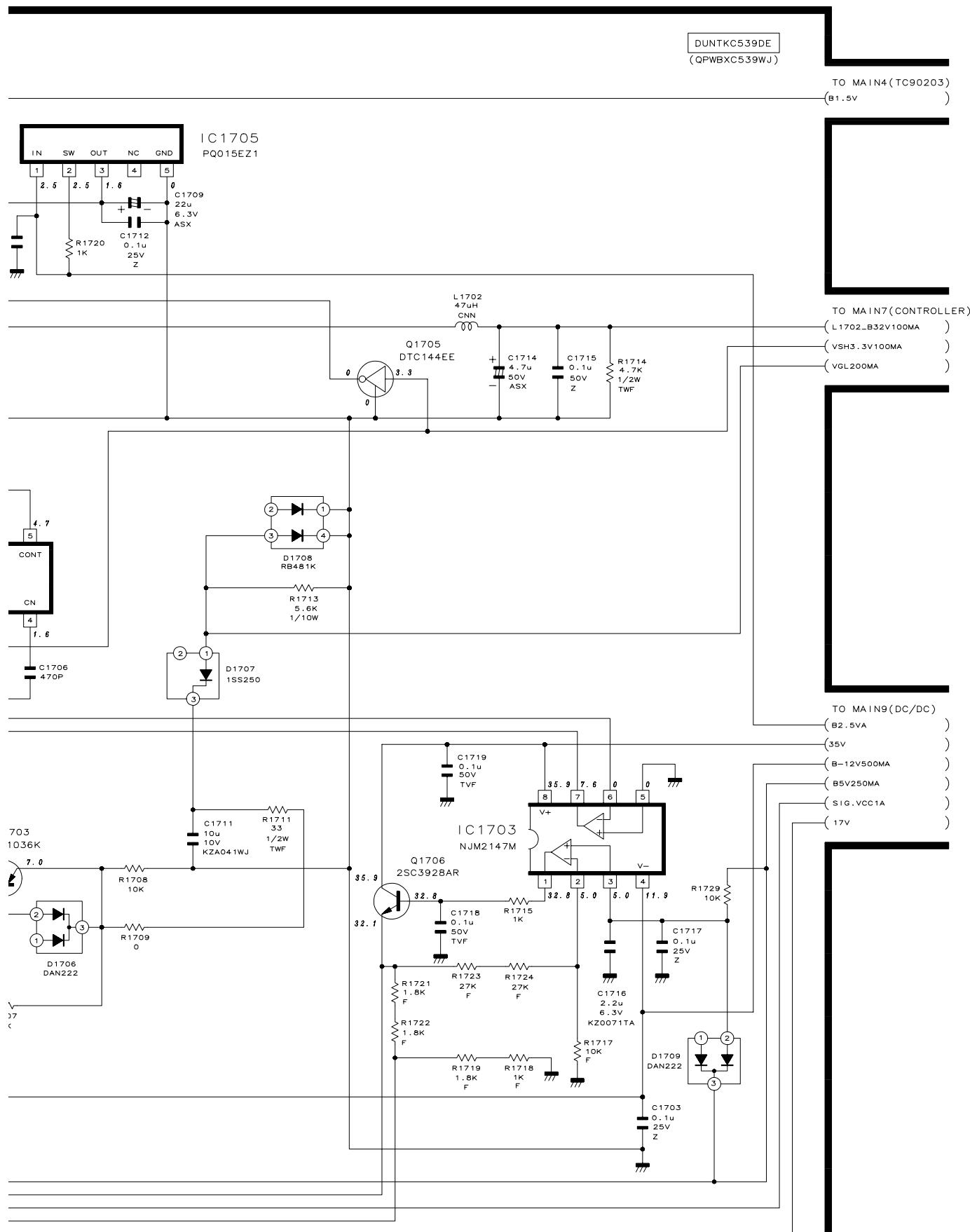
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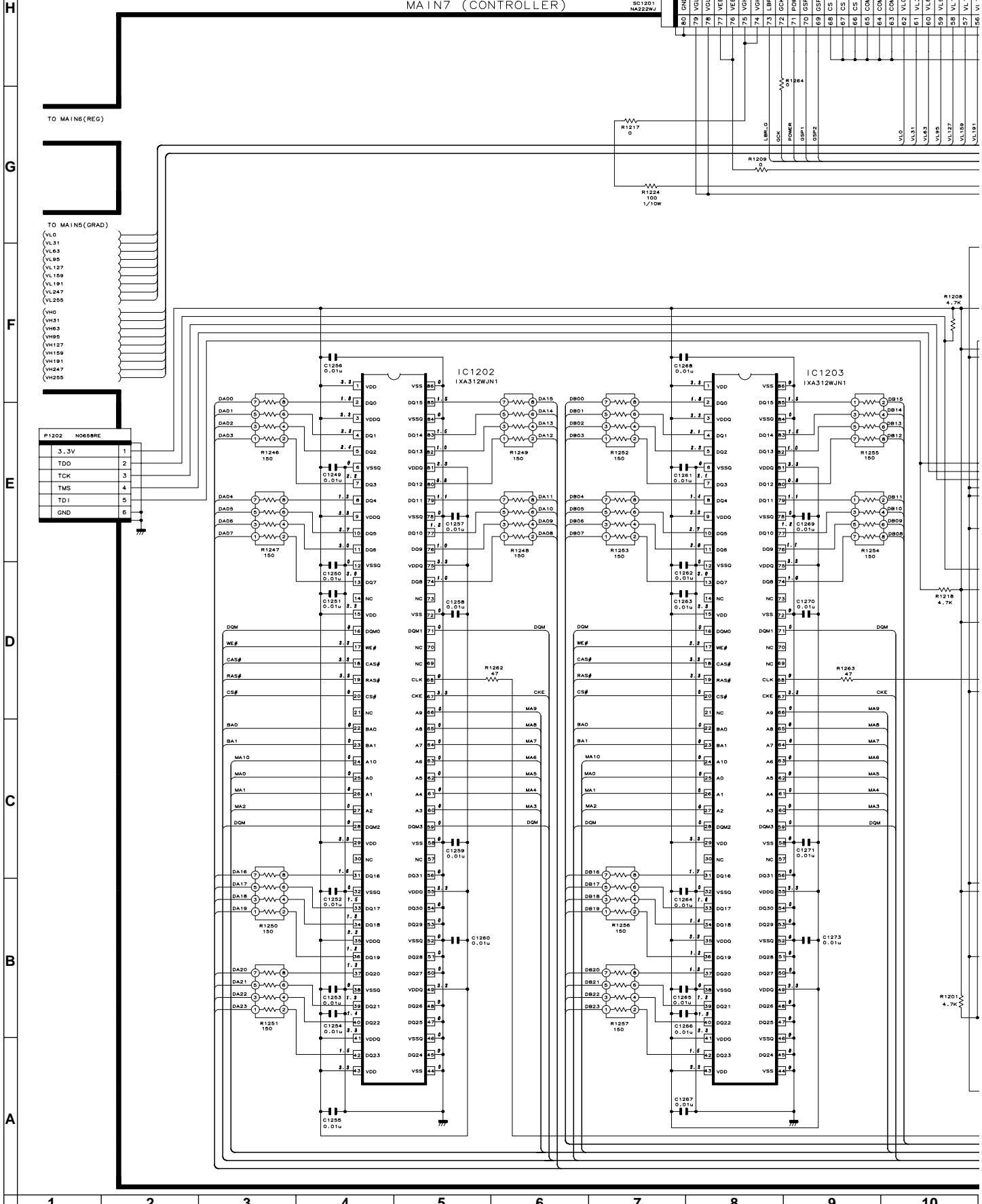
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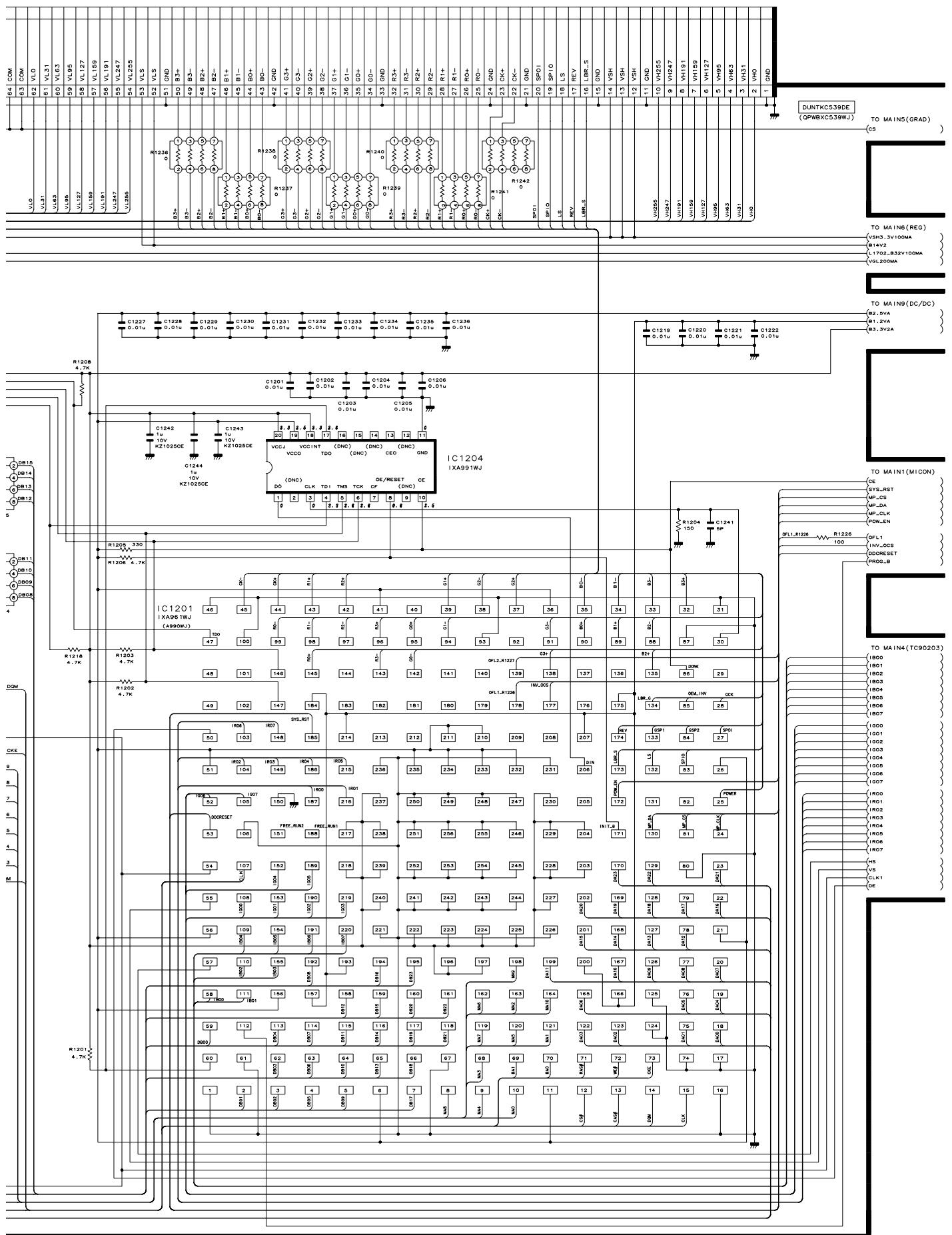
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10	11	12	13	14	15	16	17	18	19
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■ MAIN Unit-7/9





10	11	12	13	14	15	16	17	18	19
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■MAIN Unit-8/9

MAIN8 (PC)

H

G

F

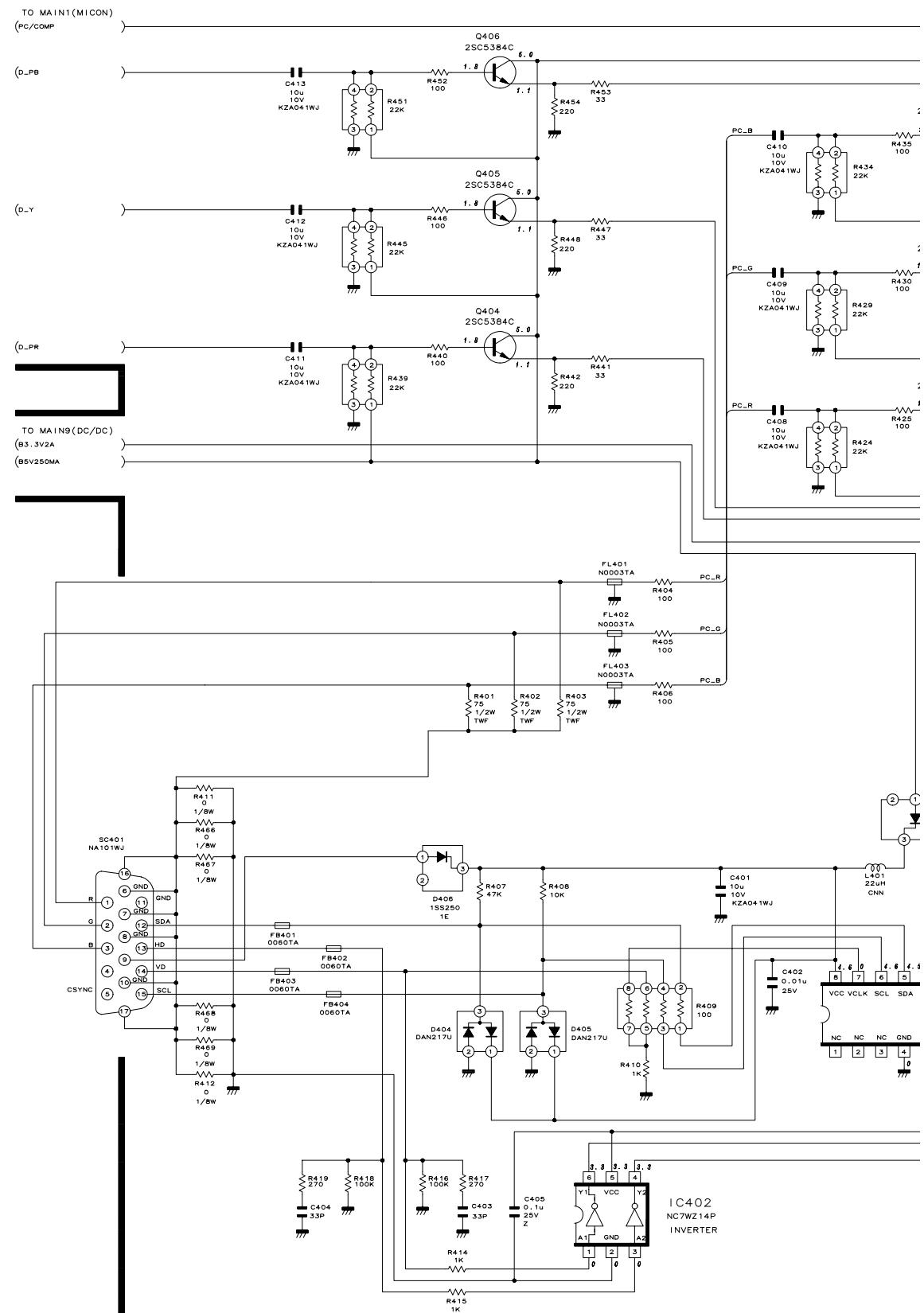
E

D

C

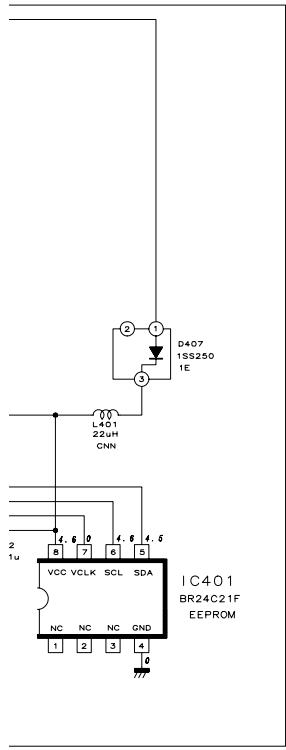
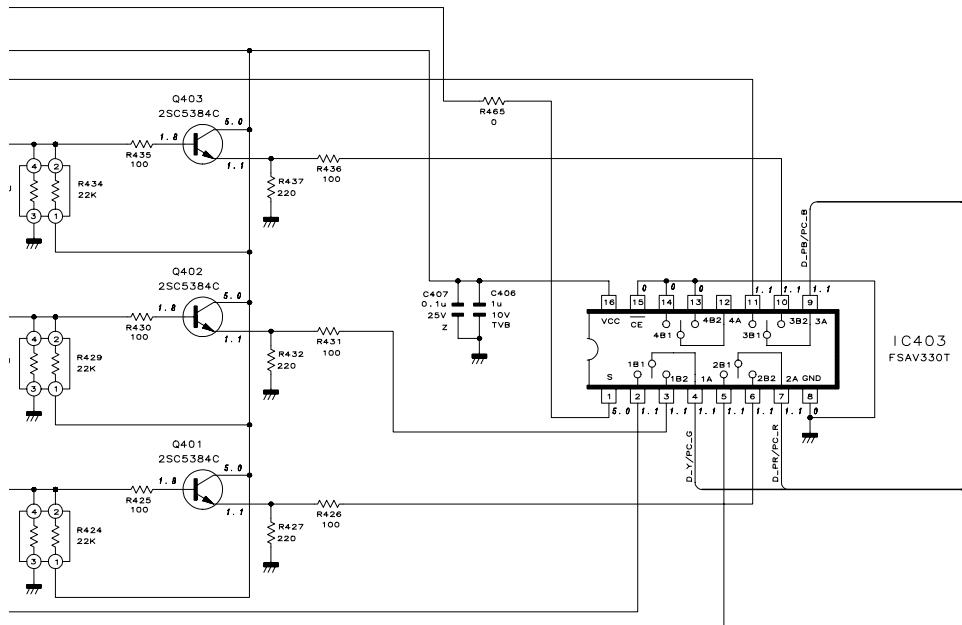
B

A



1 2 3 4 5 6 7 8 9 10

DUNTKC539DE
(QPWBXC539WJ)



TO MAIN3(AD)
(D_PR/PC_R)
(D_Y/PC_G)
(D_PB/PC_B)
(PC_V)
(PC_H)

■MAIN Unit-9/9

MAIN9 (DC/DC CONVERTER)

H

G

F

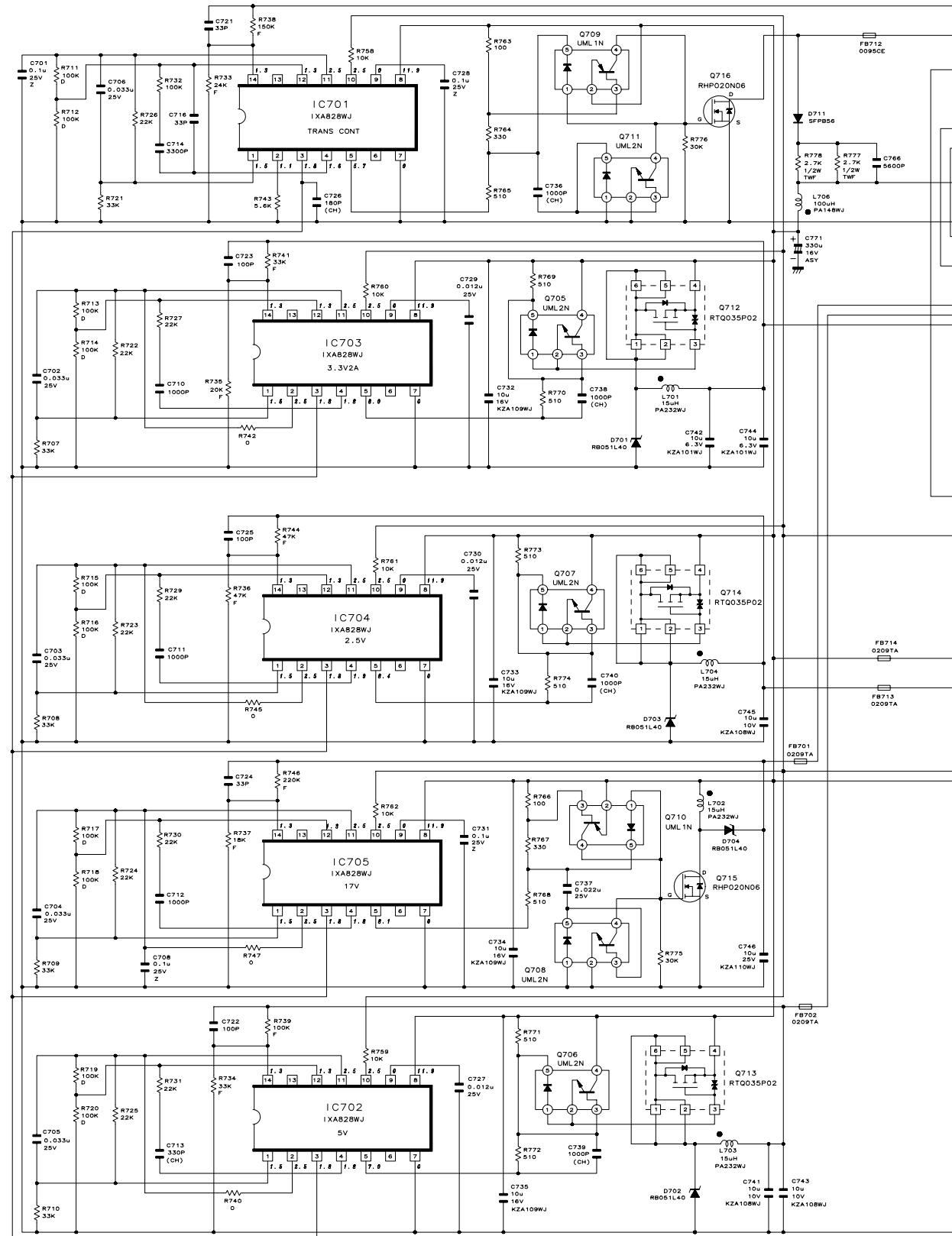
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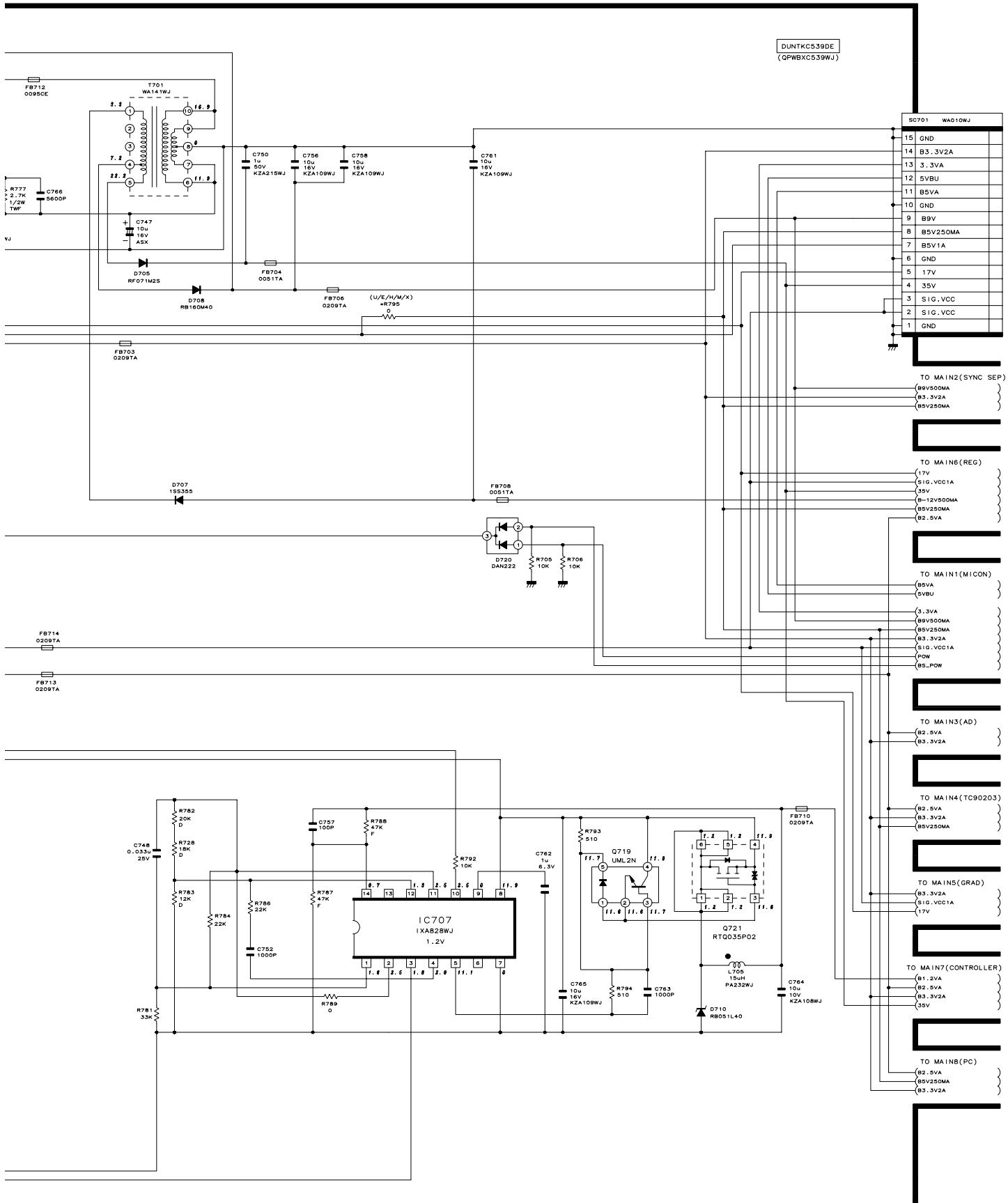
D

C

B

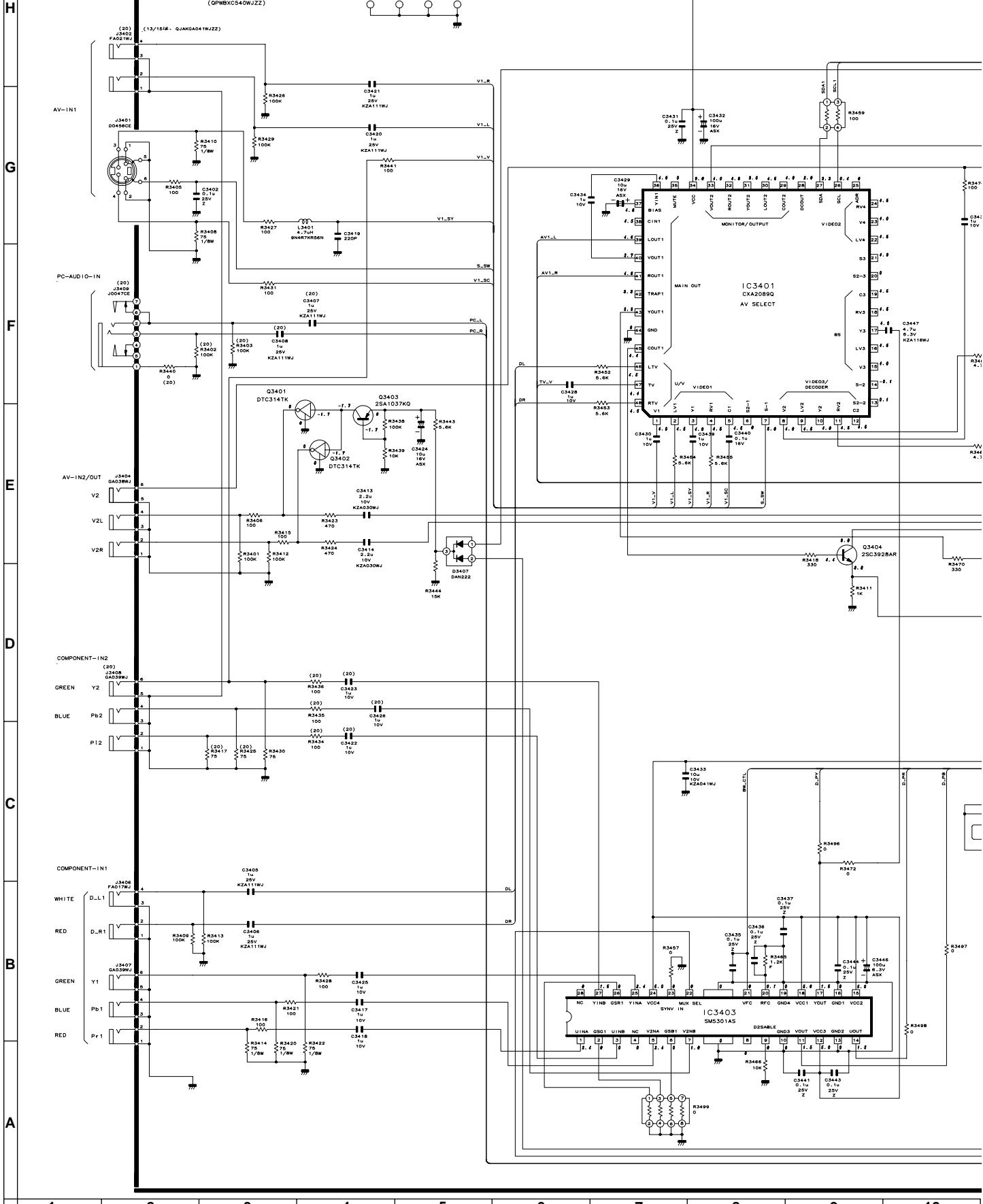
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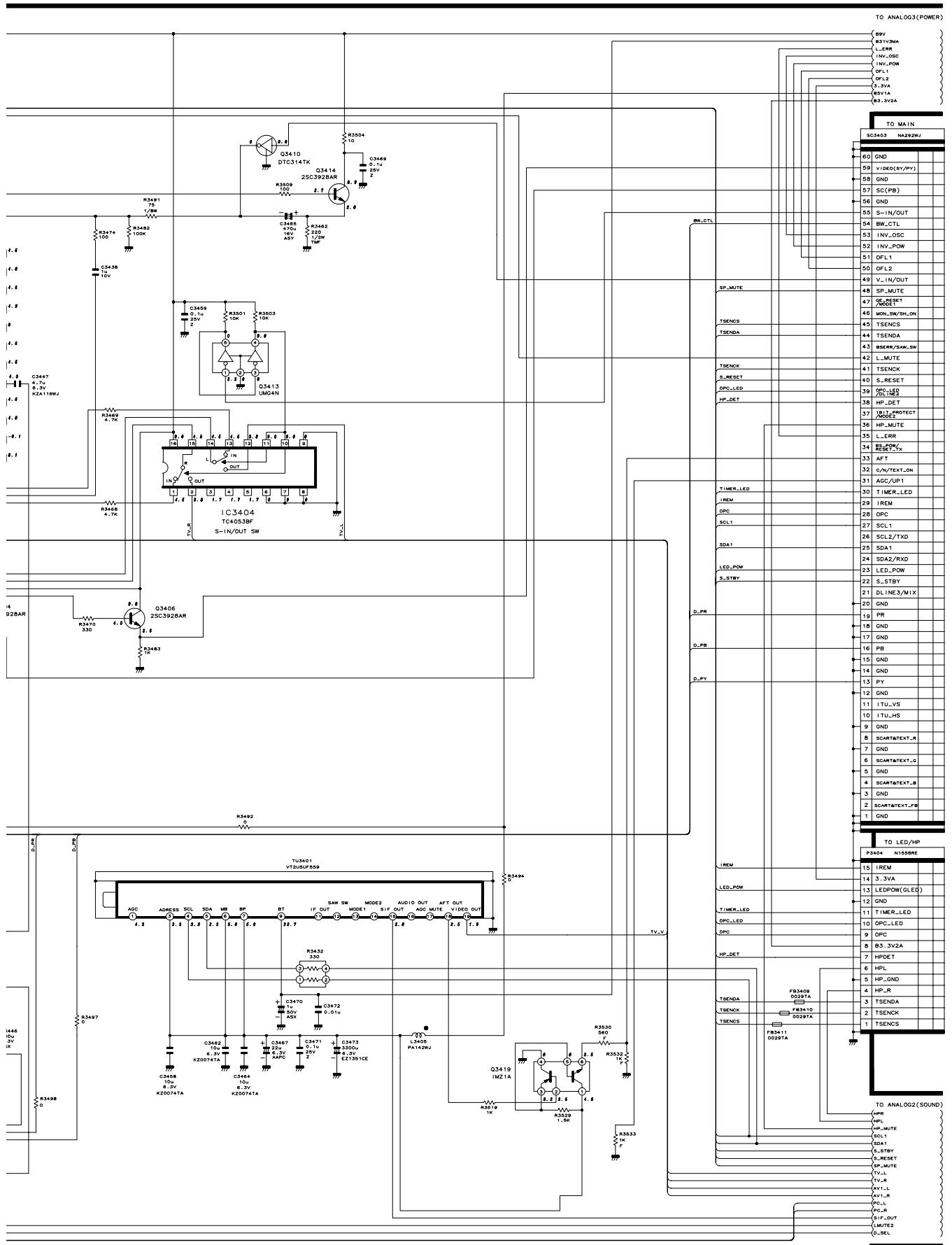




■ANALOG Unit-1/3

ANALOG 1 (TUNER/INPUT)





10	11	12	13	14	15	16	17	18	19
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■ANALOG Unit-2/3

ANALOG2 (SOUND)

H

G

F

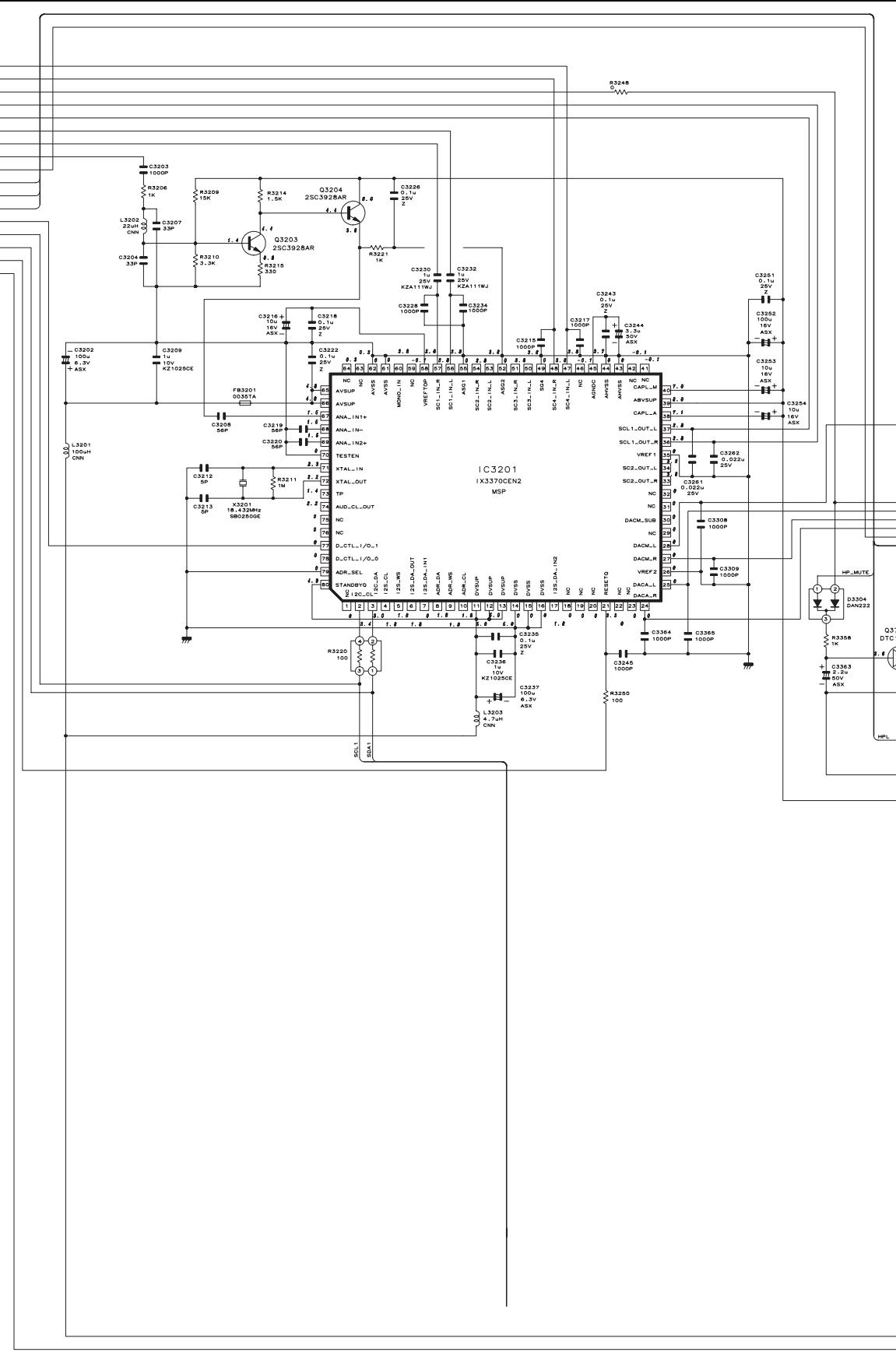
E

D

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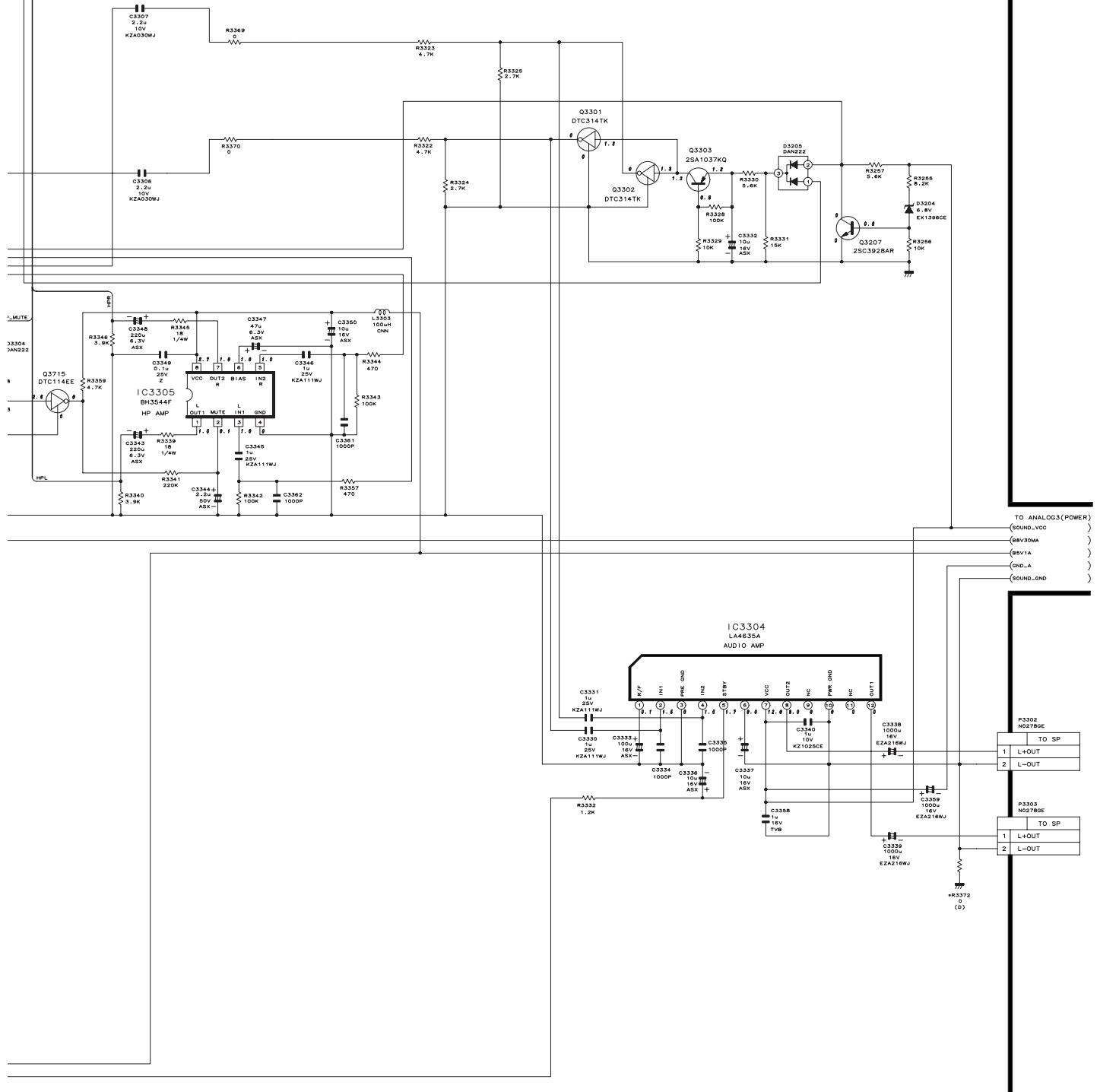
B

A



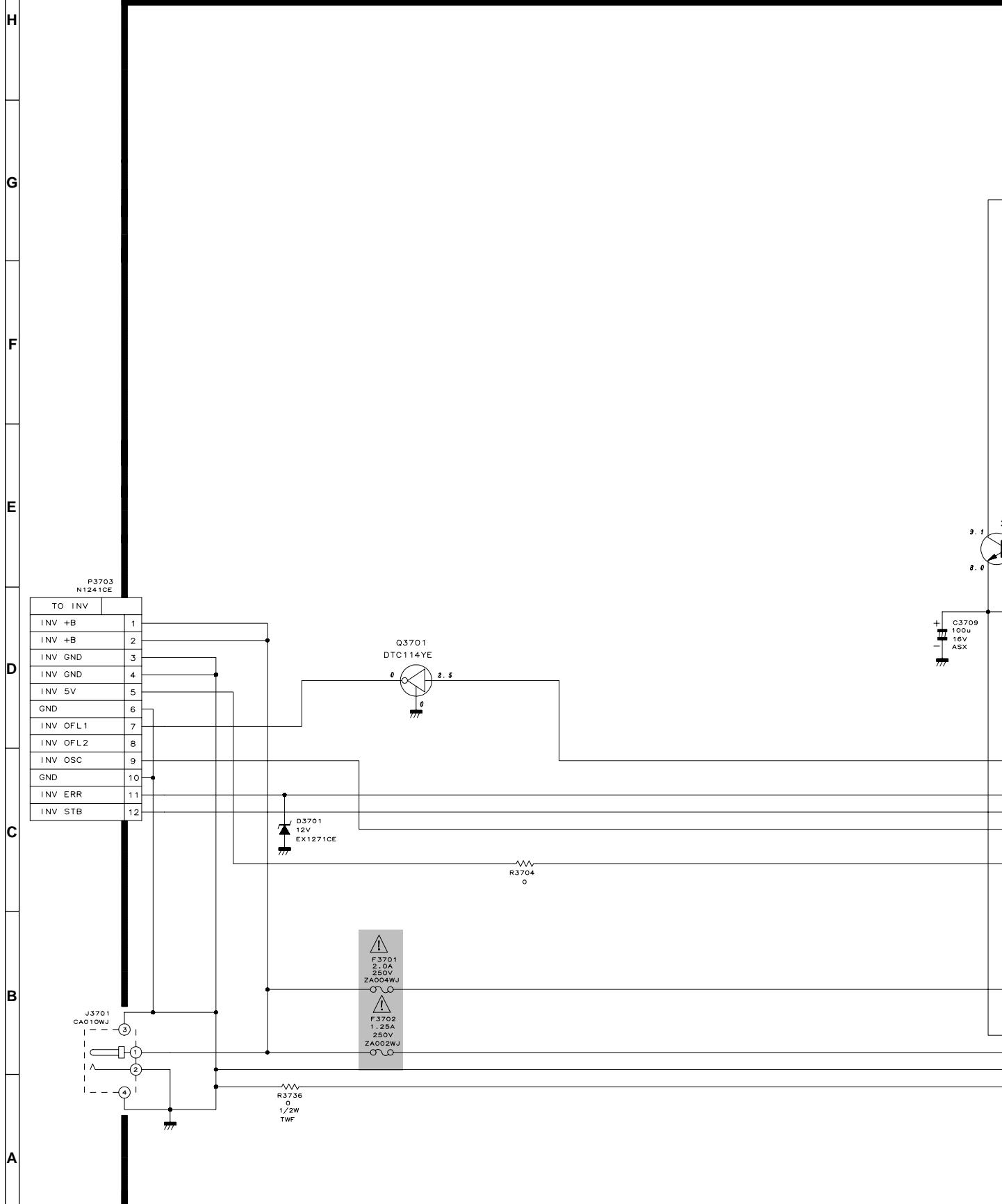
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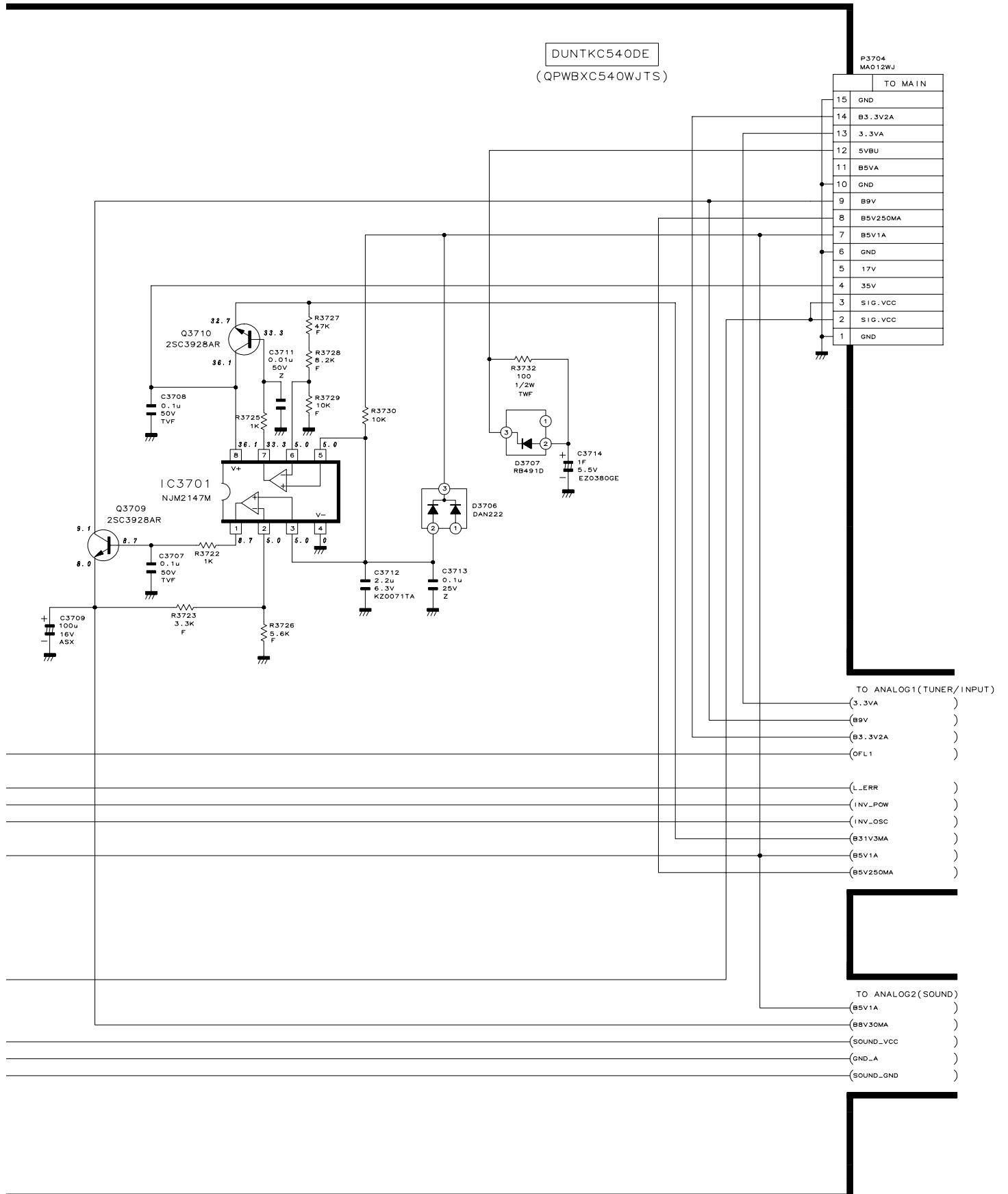
DUNTKC54ODE
(QPWBXC54DWJZZ)



■ ANALOG Unit-3/3

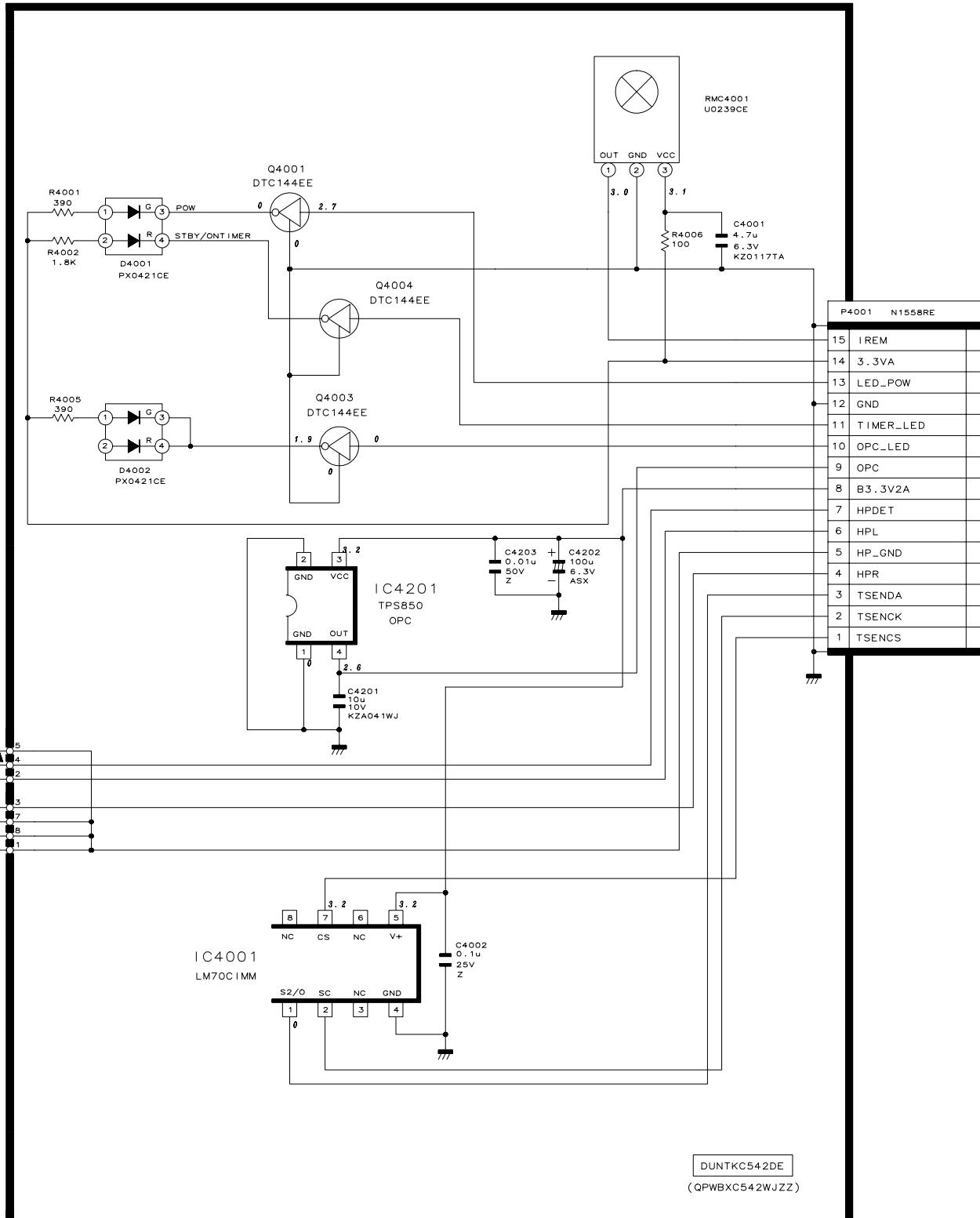
ANALOG3 (POWER)



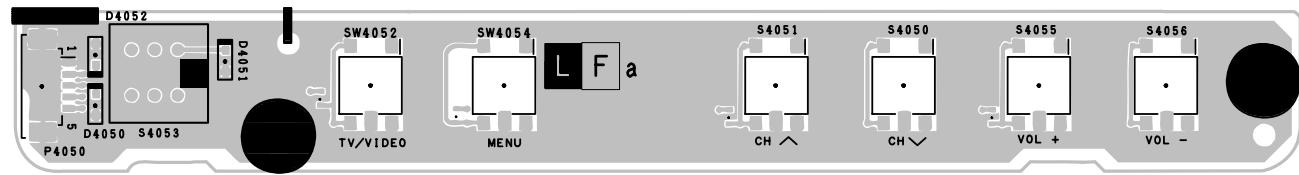


■R/C, LED Unit

LED-HP



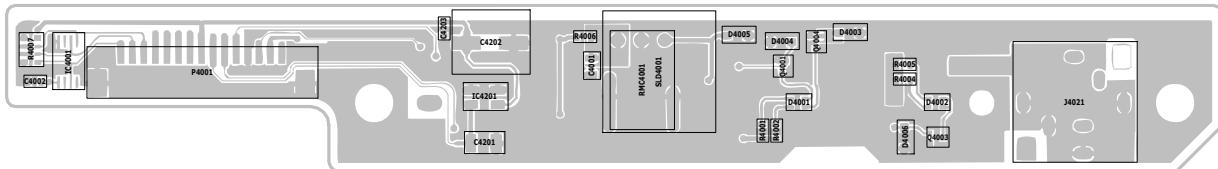
PRINTED WIRING BOARD ASSEMBLIES



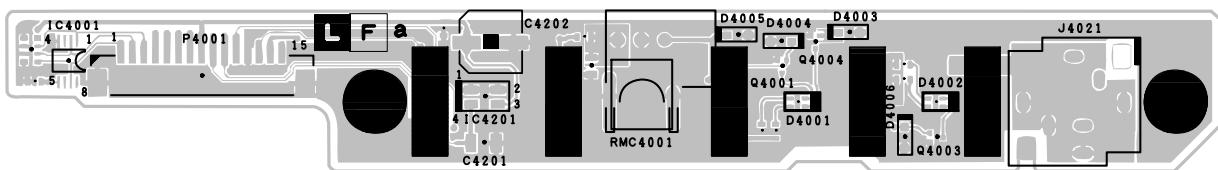
**OPERATION Unit (Side-A)
(QPWBXC541WJN1)**



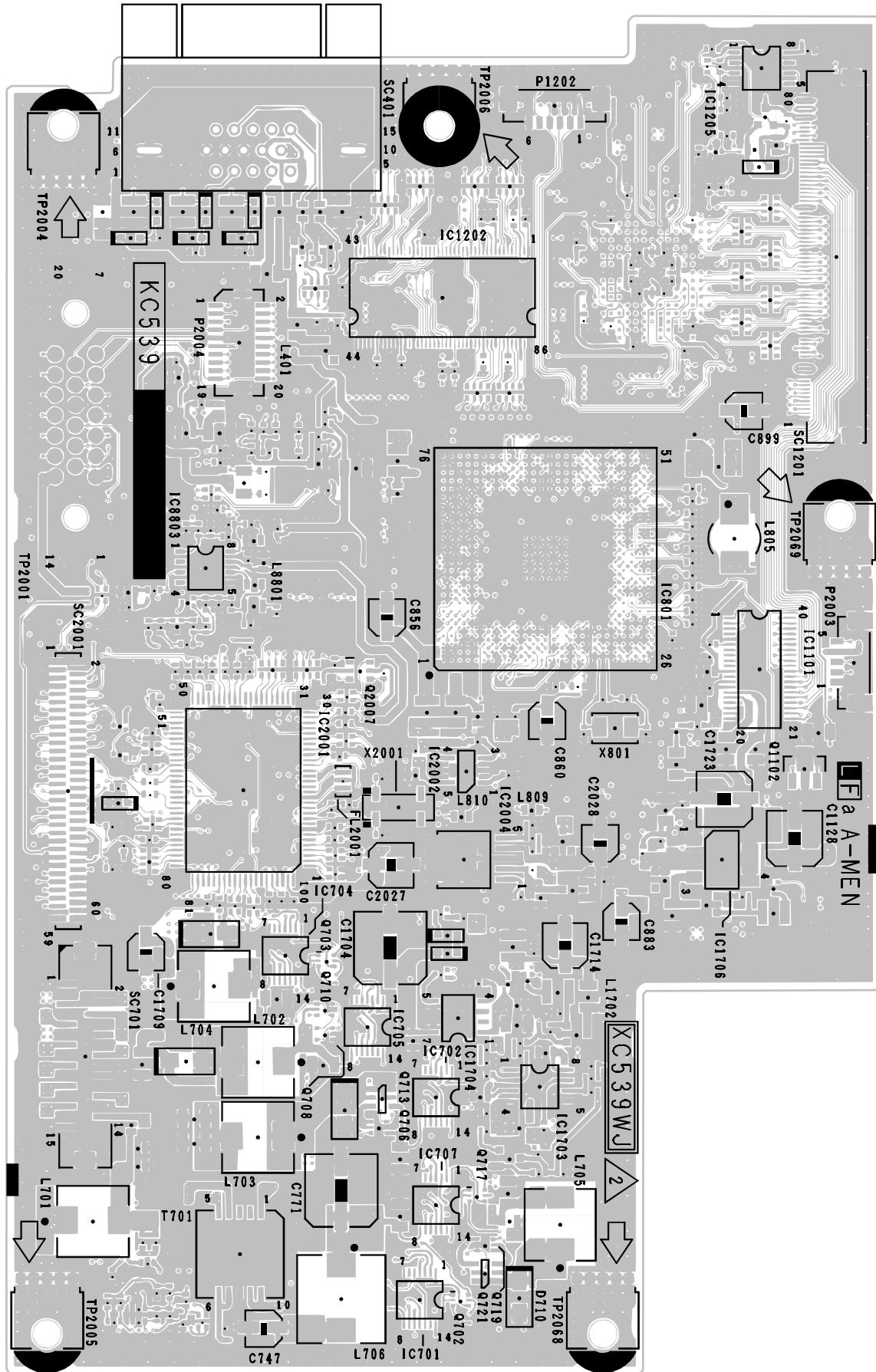
**OPERATION Unit (Chip Parts Side-A)
(QPWBXC541WJN1)**



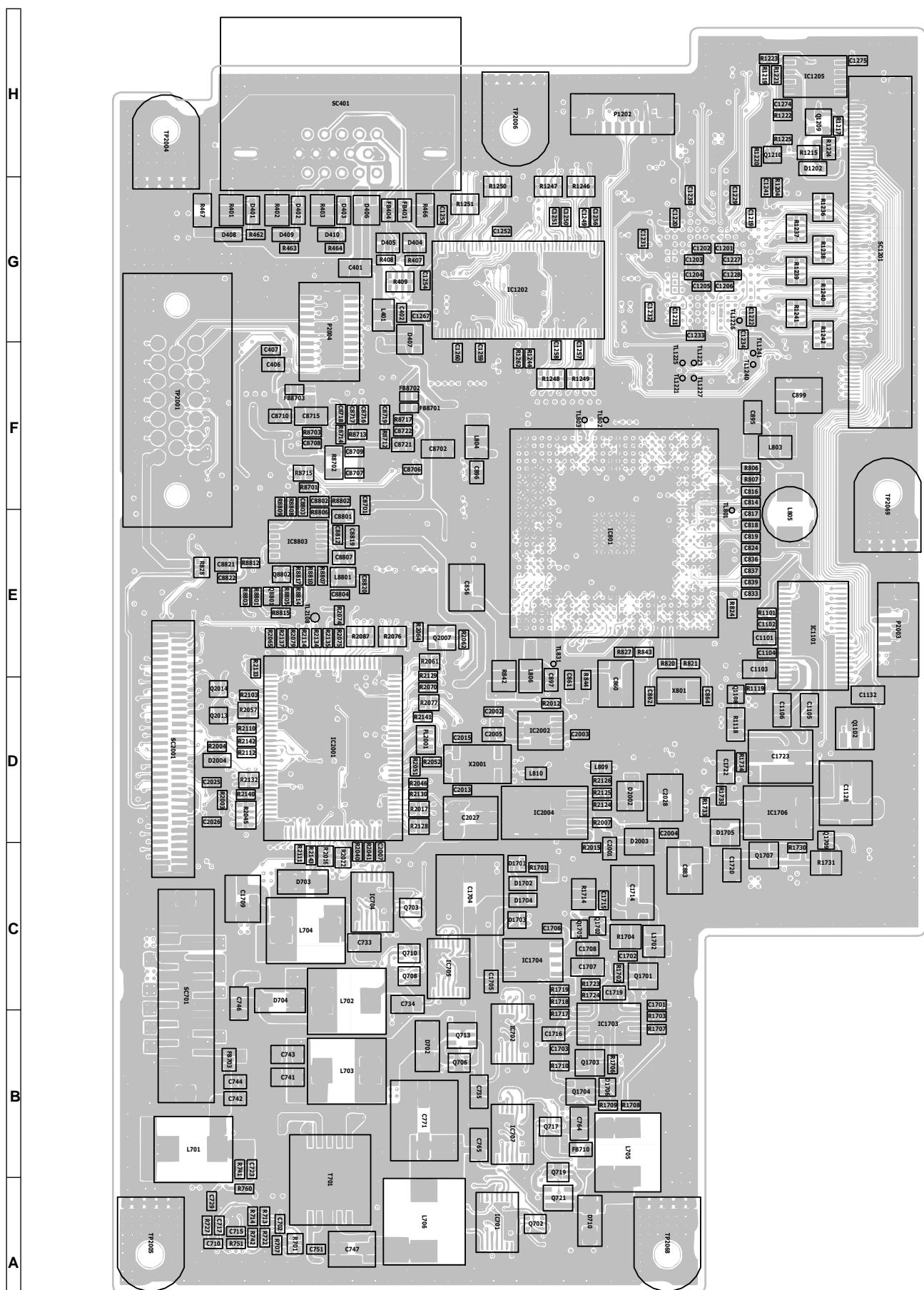
**R/C, LED Unit (Side-A)
(QPWBXC542WJN1)**



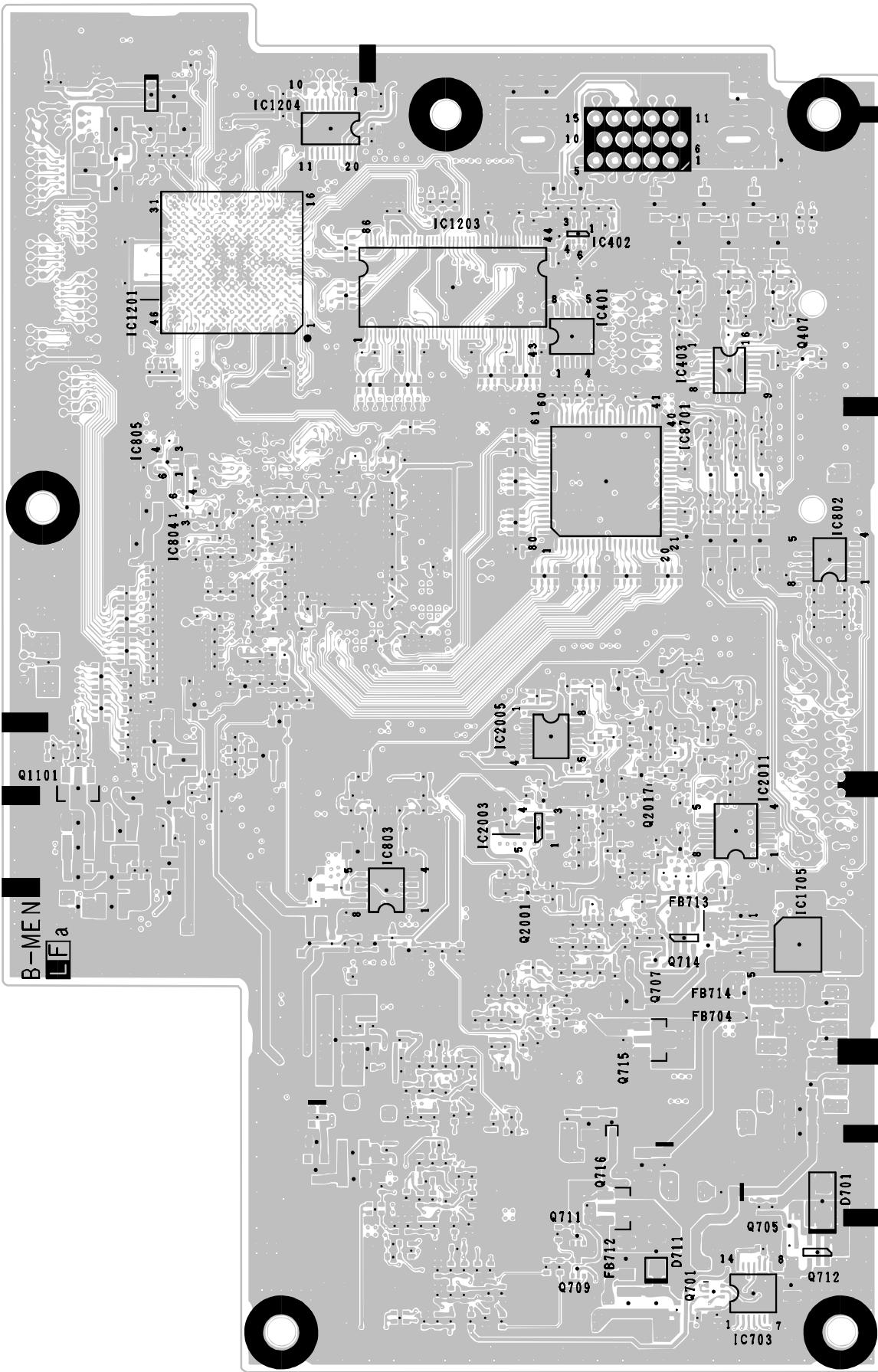
**R/C, LED Unit (Chip Parts Side-A)
(QPWBXC542WJN1)**

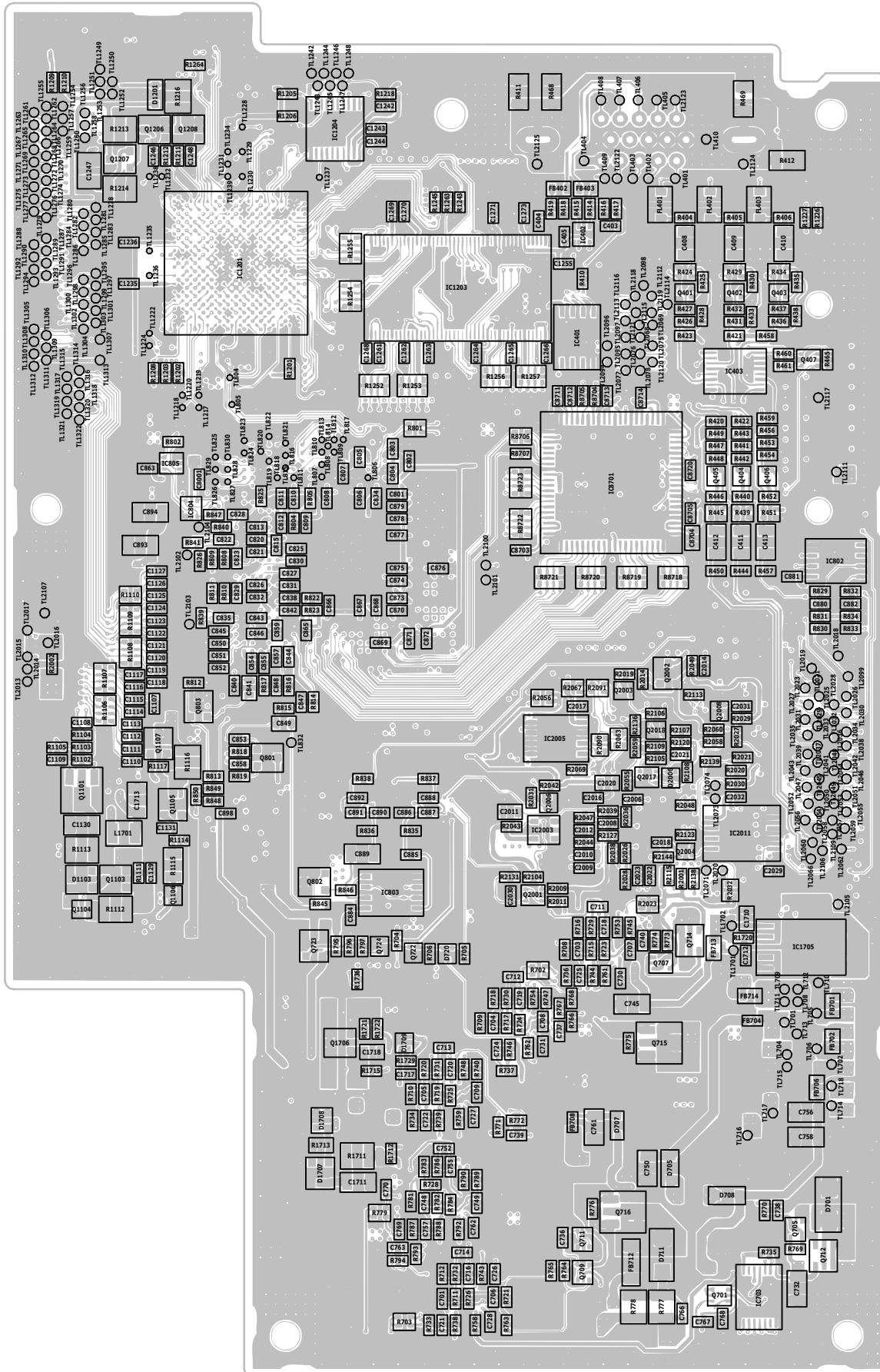


MAIN Unit (Side-A)



MAIN Unit (Chip Parts Side-A)





MAIN Unit (Chip Parts Side-B)

H

G

F

E

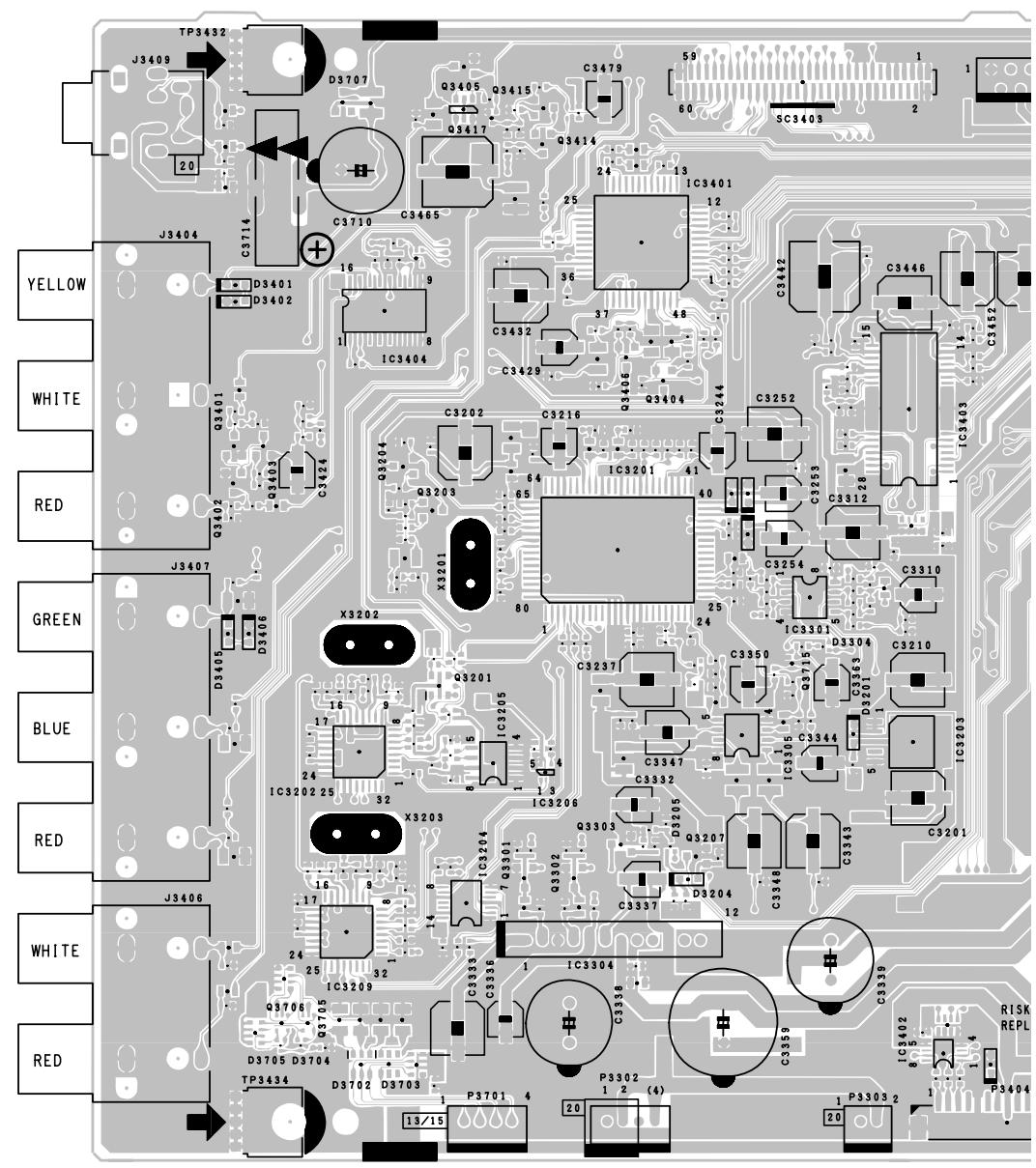
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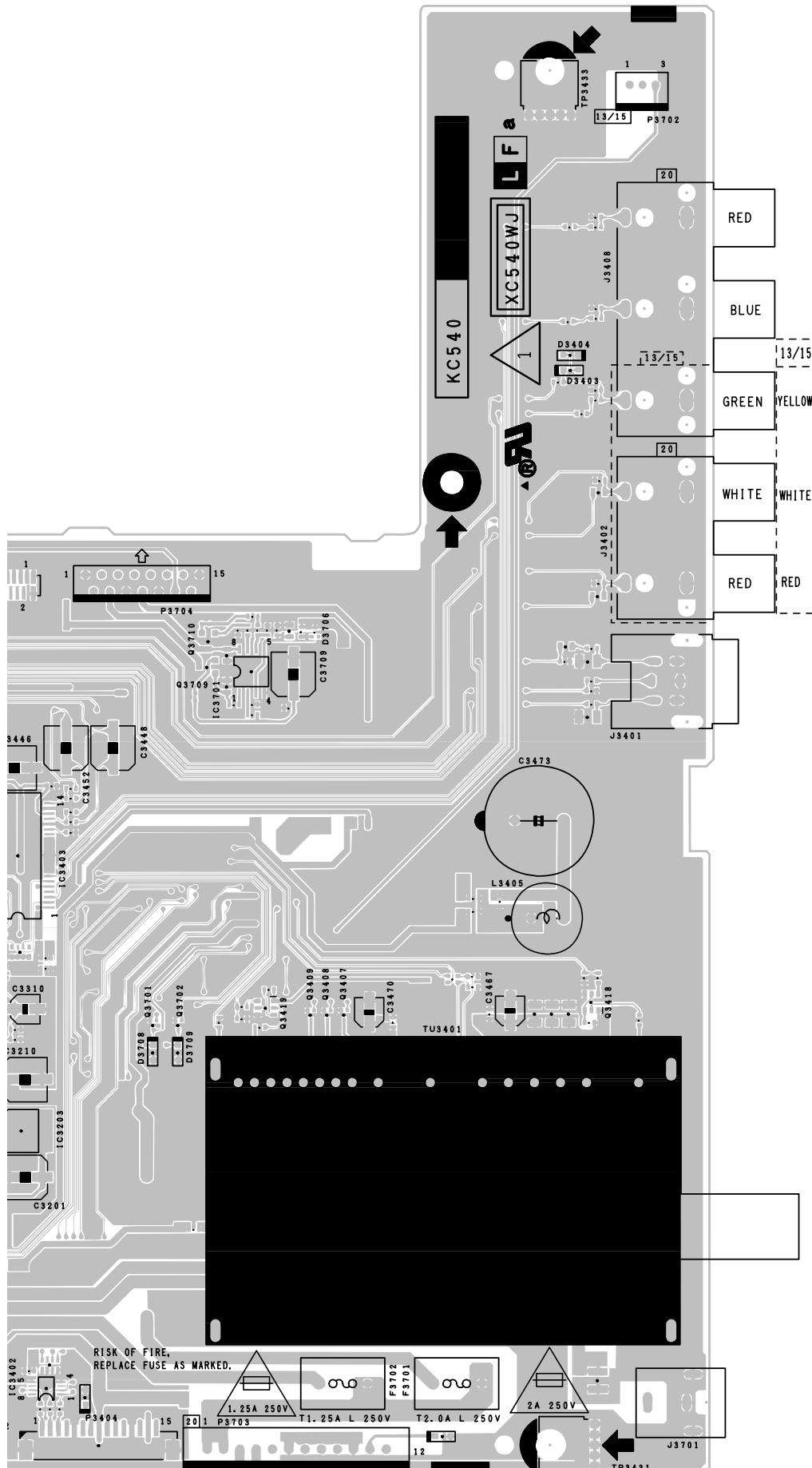
C

B

A

ANALOG Unit (Side-A)





10	11	12	13	14	15	16	17	18	19
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H

G

F

E

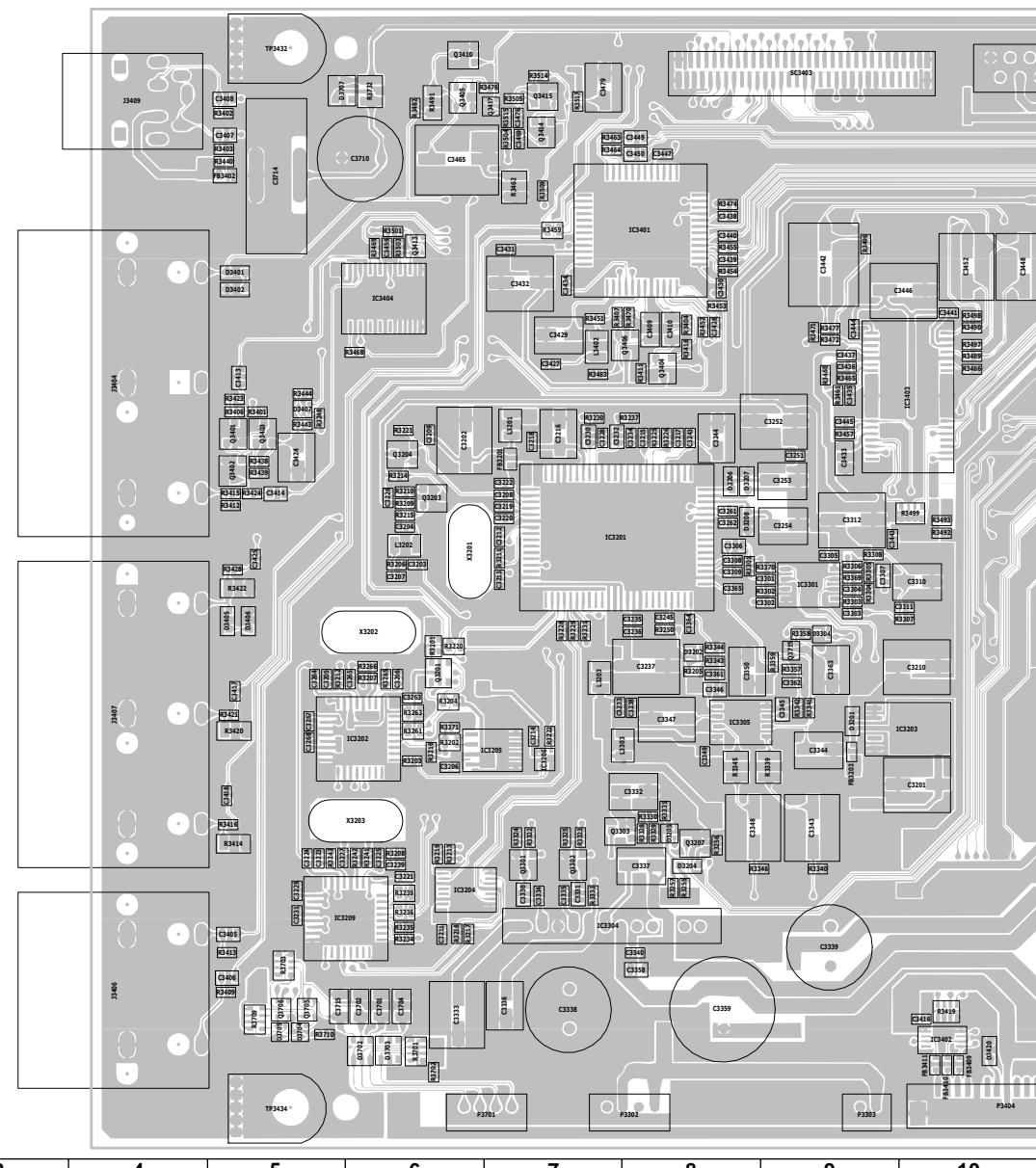
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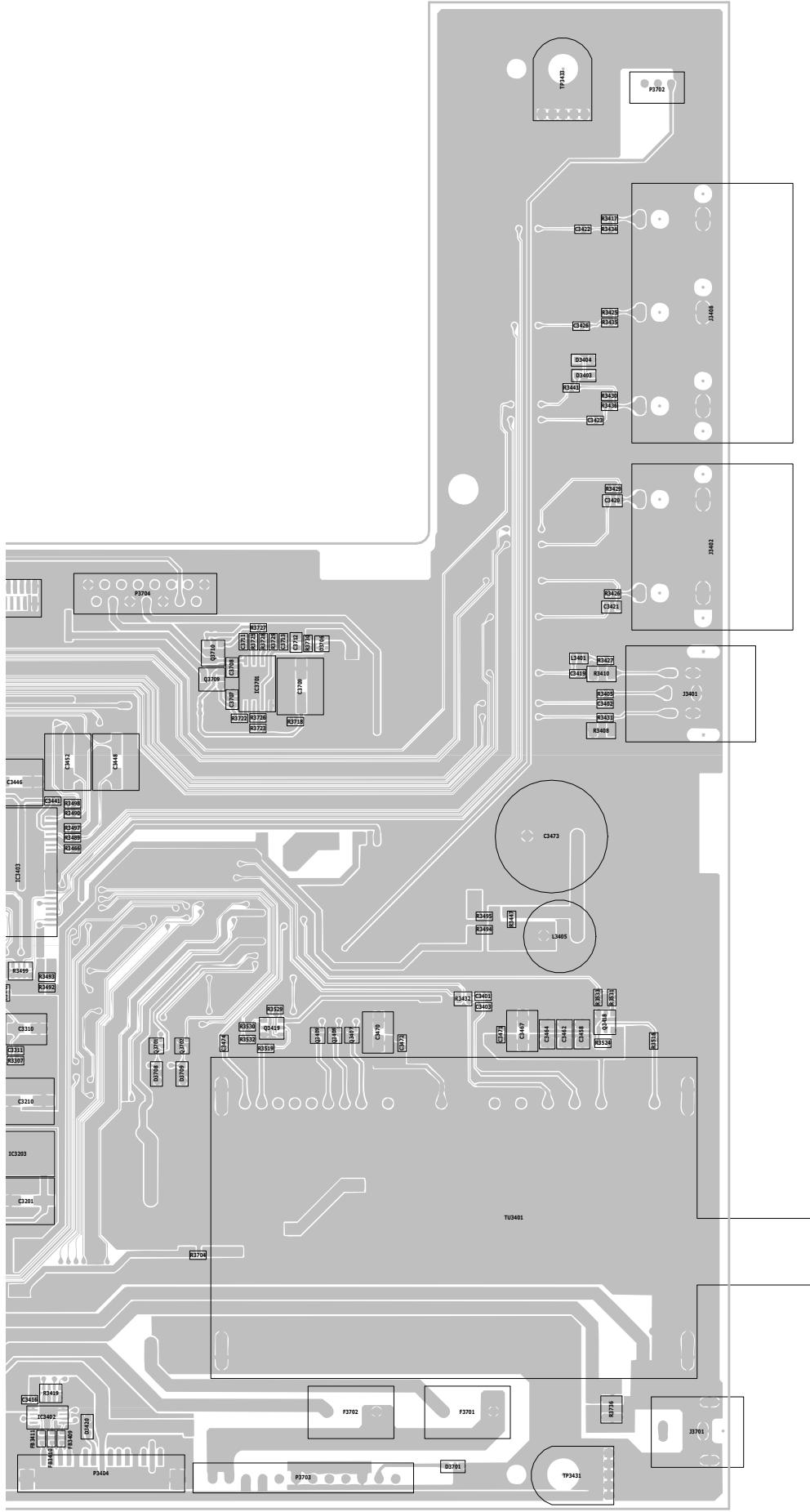
C

B

A

ANALOG Unit (Chip Parts Side-A)





PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual ; electrical components having such features are identified by  and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does not have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER	2. REF. NO.
3. PART NO.	4. DESCRIPTION

in **USA**: Contact your nearest SHARP Parts Distributor to order. For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

★ MARK: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code
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PRINTED WIRING BOARD ASSEMBLYS (NOT REPLACEMENT ITEM)

U.S.A/CANADA

DUNTKC539FE06	- MAIN Unit	—
DUNTKC540DE03	- ANALOG Unit	—
DUNTKC541DE03	- OPERATION Unit	—
DUNTKC542DE03	- R/C, LED Unit	—
RUNTKA087WJZZ	J INVERTER Unit	BP

KOREA

DUNTKC539FE06	- MAIN Unit	—
DUNTKC540DE06	- ANALOG Unit	—
DUNTKC541DE06	- OPERATION Unit	—
DUNTKC542DE06	- R/C, LED Unit	—
RUNTKA087WJZZ	J INVERTER Unit	BP

LCD PANEL

NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

RLCDTA031WJZZ	J 20" LCD Panel Unit	DC
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LISTE DES PIECES

CHANGE DES PIECES

Les pièces de rechange qui présentent ces caractéristiques spéciales de sécurité identifiées dans ce manuel : les pièces électriques qui présentent ces caractéristiques particulières, sont repérées par la marque  et sont hachurées dans les listes de pièces et dans les schémas électroniques.

La substitution d'une pièce de rechange par une autre qui ne présente pas les mêmes caractéristiques de sécurité que la pièce recommandée par l'usine et dans ce manuel de service, peut provoquer une électrocution, un incendie ou tout autre sinistre.

"COMMENT COMMANDER LES PIÈCES DE RECHANGE"

Pour que votre commande soit rapidement et correctement remplie, veuillez fournir les renseignements suivants.

1. NUMERO DU MODELE	2. NO. DE REF
3. NO. DE PIECE	4. DESCRIPTION

in **CANADA**: Contact SHARP Electronics of Canada Limited
Phone (416) 890-2100

★ MARQUE: SECTION LIVRAISON DES PIÈCES DÉCHANGE

Ref. No.	Part No.	★	Description	Code
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DUNTKC539FE06 MAIN Unit

INTEGRATED CIRCUITS

IC401	VHiBR24C21F-1Y	J	BR24C21F-E2	AG
IC402	VHiNC7WZ14P-1Y	J	NC7WZ14P6X	AD
IC403	VHiFSAV330T-1Y	J	FSAV330MTCX	AN
IC701	RH-iXA828WJZZY	J	BD9300FV-FE2	AH
IC702	RH-iXA828WJZZY	J	BD9300FV-FE2	AH
IC703	RH-iXA828WJZZY	J	BD9300FV-FE2	AH
IC704	RH-iXA828WJZZY	J	BD9300FV-FE2	AH
IC705	RH-iXA828WJZZY	J	BD9300FV-FE2	AH
IC707	RH-iXA828WJZZY	J	BD9300FV-FE2	AH
IC801	VHiTC90203X-1Q	J	I.C.	BM
IC802	VHiM62332FP-1Y	J	M62332FP	AL
IC803	VHiBA7655AF-1Y	J	BA7655AF	AG
IC804	VHiTC7PA53U-1Y	J	TC7PA53FU	AB
IC1101	VHiBD8132FV-1Y	J	I.C.	AX
IC1201	RH-iXA990WJZZQ	J	I.C.	BH
IC1202	RH-iXA312WJN1Q	J	MT48LC2M32B2TG	AX
IC1203	RH-iXA312WJN1Q	J	MT48LC2M32B2TG	AX
IC1204	RH-iXA991WJN2Y	J	I.C.	AS
IC1703	VHiNJM2147M-1Y	J	NJM2147M-TE1	AF
IC1704	VHiMM1563DF-1Y	J	MM1563DFBE	AE
IC1705	VHiPQ015EZ1-1Y	J	PQ015EZ01ZP	AG
IC1706	VHiLM1117MJ-1Y	J	LM1117MPX-ADJ	AF
IC2001	RH-iXA625WJN1Q	J	M306V7FHFP	BK
IC2002	VHiPQ1L333M-1Y	J	PQ1L333M2SP	AD
IC2003	VHiBD4729G+-1Y	J	BD4729G-TR	AD
IC2004	VHiSi3010KM-1Y	J	SI-3010KM-TI	AF
IC2005	VHiBR24L32F-1Y	J	I.C.	AG
IC2011	VHiMB3771PF-1Y	J	MB3771PF-G-BND	AG
IC8701	VHiAD9883A1-1Q	J	AD9883AKST-110	BD
IC8803	VHiBA7046F-1Y	J	BA7046F	AF

TRANSISTORS

Q401	VS2SC5384C/-1Y	J	2SC5384C	AB
Q402	VS2SC5384C/-1Y	J	2SC5384C	AB
Q403	VS2SC5384C/-1Y	J	2SC5384C	AB
Q404	VS2SC5384C/-1Y	J	2SC5384C	AB
Q405	VS2SC5384C/-1Y	J	2SC5384C	AB
Q406	VS2SC5384C/-1Y	J	2SC5384C	AB
Q705	VSUML2N++++-1Y	J	UML2N	AC
Q706	VSUML2N++++-1Y	J	UML2N	AC
Q707	VSUML2N++++-1Y	J	UML2N	AC
Q708	VSUML2N++++-1Y	J	UML2N	AC

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTKC539FE06 MAIN Unit (Continued)									
Q709	VSUML1N++++-1Y	J	UML1N	AC	FL401	RFILN0003TAZZY	J	Filter	AD
Q710	VSUML1N++++-1Y	J	UML1N	AC	FL402	RFILN0003TAZZY	J	Filter	AD
Q711	VSUML2N++++-1Y	J	UML2N	AC	FL403	RFILN0003TAZZY	J	Filter	AD
Q712	VSRTQ035P02-1Y	J	RTQ035P02	AD	FL2001	RFILZA003WJPZY	J	Filter	AD
Q713	VSRTQ035P02-1Y	J	RTQ035P02	AD	L401	VPCNN220J2R9NY	J	Peaking 22μH	AB
Q714	VSRTQ035P02-1Y	J	RTQ035P02	AD	L701	RCILPA232WJZZY	J	Coil	AE
Q715	VSRHP020N06-1Y	J	RHP020N06	AD	L702	RCILPA232WJZZY	J	Coil	AE
Q716	VSRHP020N06-1Y	J	RHP020N06	AD	L703	RCILPA232WJZZY	J	Coil	AE
Q719	VSUML2N++++-1Y	J	UML2N	AC	L704	RCILPA232WJZZY	J	Coil	AE
Q721	VSRTQ035P02-1Y	J	RTQ035P02	AD	L705	RCILPA232WJZZY	J	Coil	AE
Q801	VS2SC3928AR-1Y	J	2SC3928AR	AB	L706	RCILPA148WJZZY	J	Coil	AE
Q802	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	L805	RCILPA143WJZZY	J	Coil	AD
Q803	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	L809	VP-9N120KR46NY	J	Peaking 12μH	AB
Q1101	VS2SC4520//1Y	J	2SC4520	AE	L810	VP-9N120KR46NY	J	Peaking 12μH	AB
Q1102	VS2SA1729//1Y	J	2SA1729	AF	L1701	VPCKM1R2JR44NY	J	Peaking 1.2μH	AB
Q1103	VSFMMT718//1Y	J	FMMT718	AE	L1702	VPCNN470J5R4NY	J	Peaking 47μH	AB
Q1104	VS DTC144EE/-1Y	J	DTC144EE	AA	L8801	VPD9M220J2R7NY	J	Peaking 22μH	AC
Q1105	VS2SA1037KQ-1Y	J	2SA1037KQ	AA					
Q1106	VS DTC114EE/-1Y	J	DTC114EE	AB					
Q1107	VS2SA1037KQ-1Y	J	2SA1037KQ	AA					
Q1108	VS DTC114EE/-1Y	J	DTC114EE	AB					
Q1701	VS2SA1037KQ-1Y	J	2SA1037KQ	AA					
Q1702	VS DTC144EE/-1Y	J	DTC144EE	AA					
Q1703	VS2SA1036K/-1Y	J	2SA1036K	AC					
Q1705	VS DTC144EE/-1Y	J	DTC144EE	AA					
Q1706	VS2SC3928AR-1Y	J	2SC3928AR	AB					
Q1707	VSFMMT718//1Y	J	FMMT718	AE					
Q1709	VS DTC144EE/-1Y	J	DTC144EE	AA					
Q2002	VS2SA1037KQ-1Y	J	2SA1037KQ	AA					
Q2003	VS DTC144EE/-1Y	J	DTC144EE	AA					
Q2004	VS3LN01S//1Y	J	3LN01S	AC					
Q2006	VS DTC114EE/-1Y	J	DTC114EE	AB					
Q2007	VS UPA606T//1Y	J	UPA606T	AD					
Q2008	VS DTC144EE/-1Y	J	DTC144EE	AA					
Q2013	VS DTC144EE/-1Y	J	DTC144EE	AA					
Q2014	VS DTA144EE/-1Y	J	DTA144EE	AA					
Q8801	VS2SA1989R/-1Y	J	2SA1989R	AB					
Q8802	VS2SC5384C/-1Y	J	2SC5384C	AB					
DIODES									
D404	VHDDAN217U+-1Y	J	Diode	AB	C401	RC-KZA041WJZZY	J	10V	Ceramic
D405	VHDDAN217U+-1Y	J	Diode	AB	C402	VCKYCY1EB103KY	J	0.01	25V
D406	VHD1SS250//1EY	J	Diode	AB	C403	VCCCCY1HH330JY	J	33p	Ceramic
D407	VHD1SS250//1EY	J	Diode	AB	C404	VCCCCY1HH330JY	J	33p	AA
D701	VHDRB051L40-1Y	J	Diode	AD	C405	VCKYCY1EF104ZY	J	0.1	25V
D702	VHDRB051L40-1Y	J	Diode	AD	C406	VCKYTV1AB105KY	J	1	Ceramic
D703	VHDRB051L40-1Y	J	Diode	AD	C407	VCKYCY1EF104ZY	J	0.1	AC
D704	VHDRB051L40-1Y	J	Diode	AD	C408	RC-KZA041WJZZY	J	10	10V
D705	VHDRV071M2S-1Y	J	Diode	AD	C409	RC-KZA041WJZZY	J	10	Ceramic
D707	VHD1SS355//1Y	J	Diode	AB	C410	RC-KZA041WJZZY	J	10	10V
D708	VHDRB160M40-1Y	J	Diode	AC	C411	RC-KZA041WJZZY	J	10	Ceramic
D710	VHDRB051L40-1Y	J	Diode	AD	C412	RC-KZA041WJZZY	J	10	10V
D711	VHDSFPB56//2EY	J	Diode	AC	C413	RC-KZA041WJZZY	J	10	Ceramic
D720	VHDDAN222//1Y	J	Diode	AA	C701	VCKYCY1EF104ZY	J	0.1	25V
D1103	VHD1SS250//1EY	J	Diode	AB	C702	VCKYCY1EB333KY	J	0.033	Ceramic
D1701	VHDDAN222//1Y	J	Diode	AA	C703	VCKYCY1EB333KY	J	0.033	AA
D1702	RH-EX1224CEZZY	J	Zener Diode, 2V	AB	C704	VCKYCY1EB333KY	J	0.033	25V
D1703	VHDDAN222//1Y	J	Diode	AA	C705	VCKYCY1EB333KY	J	0.033	Ceramic
D1704	RH-EX1224CEZZY	J	Zener Diode, 2V	AB	C706	VCKYCY1EB333KY	J	0.033	AA
D1705	VHDDAN202K/-1Y	J	Diode	AB	C708	VCKYCY1EF104ZY	J	0.1	25V
D1706	VHDDAN222//1Y	J	Diode	AA	C710	VCCCCY1HH102JY	J	1000p	50V
D1707	VHD1SS250//1EY	J	Diode	AB	C711	VCCCCY1HH102JY	J	1000p	Ceramic
D1708	VHDRB481K++-1Y	J	Diode	AD	C712	VCCCCY1HH102JY	J	1000p	AB
D1709	VHDDAN222//1Y	J	Diode	AA	C713	VCCCCY1HH331JY	J	330p	50V
D2002	VHDRB491D++-1Y	J	Diode	AD	C714	VCKYCY1HB332KY	J	3300p	Ceramic
D2003	VHDDAN202K/-1Y	J	Diode	AB	C716	VCCCCY1HH330JY	J	33p	AA
PACKAGED CIRCUITS									
X801	RCRSCA083WJZZY	J	Crystal	AG	C721	VCCCCY1HH330JY	J	33p	50V
X2001	RCRSC0032TAZZY	J	Crystal, 27MHz	AG	C722	VCCCCY1HH330JY	J	33p	Ceramic
					C723	VCCCCY1HH101JY	J	100p	50V
					C724	VCCCCY1HH330JY	J	33p	Ceramic
					C725	VCCCCY1HH101JY	J	100p	25V
					C726	VCCCCY1HH181JY	J	180p	50V
					C727	VCKYCY1EB123KY	J	0.012	Ceramic
					C728	VCKYCY1EF104ZY	J	0.1	25V
					C729	VCKYCY1EB123KY	J	0.012	Ceramic
					C730	VCKYCY1EB123KY	J	0.012	AA
					C731	VCKYCY1EF104ZY	J	0.1	25V
					C732	RC-KZA109WJZZY	J	10	16V
					C733	RC-KZA109WJZZY	J	10	Ceramic
					C734	RC-KZA109WJZZY	J	10	16V
					C735	RC-KZA109WJZZY	J	10	Ceramic
					C736	VCCCCY1HH102JY	J	1000p	50V
					C737	VCKYCY1EB223KY	J	0.022	Ceramic
					C738	VCCCCY1HH102JY	J	1000p	50V
					C739	VCCCCY1HH102JY	J	1000p	Ceramic
					C740	VCCCCY1HH102JY	J	1000p	AB
					C741	RC-KZA108WJZZY	J	10	10V
					C742	RC-KZA101WJZZY	J	10	6.3V
					C743	RC-KZA108WJZZY	J	10	Ceramic
					C744	RC-KZA101WJZZY	J	10	6.3V
					C745	RC-KZA108WJZZY	J	10	Ceramic
					C746	RC-KZA110WJZZY	J	10	25V

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code				
DUNTKC539FE06 MAIN Unit (Continued)													
C747	VCEASX1CN106MY	J	10	16V	Electrolytic	AC	C861	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C748	VCKYCY1EB33KY	J	0.033	25V	Ceramic	AA	C862	VCCCCY1HH6R0DY	J	6p	50V	Ceramic	AA
C750	RC-KZA215WJZZY	J	1	50V	Ceramic	AA	C864	VCCCCY1HH6R0DY	J	6p	50V	Ceramic	AA
C752	VCCCCY1HH102JY	J	1000p	50V	Ceramic	AB	C865	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C756	RC-KZA109WJZZY	J	10	16V	Ceramic	AC	C866	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C757	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA	C867	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C758	RC-KZA109WJZZY	J	10	16V	Ceramic	AC	C868	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C761	RC-KZA109WJZZY	J	10	16V	Ceramic	AC	C869	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C762	VCKYCY0JB105KY	J	1	6.3V	Ceramic	AC	C870	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C763	VCCCCY1HH102JY	J	1000p	50V	Ceramic	AB	C871	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C764	RC-KZA108WJZZY	J	10	10V	Ceramic	AC	C872	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C765	RC-KZA109WJZZY	J	10	16V	Ceramic	AC	C873	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C766	VCKYCY1HB562KY	J	5600p	50V	Ceramic	AA	C874	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C771	VCEASX1CN337MY	J	330	16V	Electrolytic	AD	C875	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C801	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C876	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C802	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C877	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C803	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C878	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C804	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C879	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C805	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C880	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C806	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C881	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C807	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C882	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C808	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C883	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C809	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C884	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C810	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C885	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C811	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C886	VCCCCY1HH100DY	J	10p	50V	Ceramic	AA
C812	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C887	VCCCCY1HH100DY	J	10p	50V	Ceramic	AA
C813	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	C888	VCCCCY1HH100DY	J	10p	50V	Ceramic	AA
C814	VCKYCY1HB152KY	J	1500p	50V	Ceramic	AA	C889	RC-KZA041WJZZY	J	10	10V	Ceramic	AC
C815	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	C890	VCCCCY1HH100DY	J	10p	50V	Ceramic	AA
C816	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C891	VCCCCY1HH100DY	J	10p	50V	Ceramic	AA
C817	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C892	VCCCCY1HH100DY	J	10p	50V	Ceramic	AA
C818	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C895	RC-KZA070WJZZY	J	22	6.3V	Ceramic	AD
C819	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C896	RC-KZ0117TAZZY	J	4.7	6.3V	Ceramic	AD
C820	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	C897	RC-KZ0117TAZZY	J	4.7	6.3V	Ceramic	AD
C821	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	C899	VCAAPC0GJ336MY	J	33	4V	Electrolytic	AE
C823	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB	C1101	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C824	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1102	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C825	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1103	RC-KZA110WJZZY	J	10	25V	Ceramic	AD
C826	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	C1104	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C827	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1105	RC-KZ0072TAZZY	J	1	25V	Ceramic	AC
C829	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB	C1106	RC-KZ0072TAZZY	J	1	25V	Ceramic	AC
C830	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1107	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C831	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1108	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C832	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	C1109	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C833	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1132	RC-KZA110WJZZY	J	10	25V	Ceramic	AD
C834	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1201	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C836	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1202	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C837	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1203	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C838	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1204	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C839	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1205	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C840	VCCCCY1HH680JY	J	68p	50V	Ceramic	AA	C1206	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C841	VCKYTV1CB105KY	J	1	16V	Ceramic	AC	C1219	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C842	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1220	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C843	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	C1221	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C844	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	C1222	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C845	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1227	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C846	VCCCCY1HH680JY	J	68p	50V	Ceramic	AA	C1228	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C847	VCCCCY1HH151JY	J	150p	50V	Ceramic	AA	C1229	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C848	VCCCCY1HH151JY	J	150p	50V	Ceramic	AA	C1230	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C849	VCKYTV1CB105KY	J	1	16V	Ceramic	AC	C1231	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C850	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1232	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C851	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1233	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C852	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1234	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C853	VCCCCY1HH4R0CY	J	4p	50V	Ceramic	AA	C1235	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C854	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	C1236	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C855	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	C1241	VCCCCY1HH5R0CY	J	5p	50V	Ceramic	AA
C856	VCAAPC0GJ336MY	J	33	4V	Electrolytic	AE	C1242	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C857	VCKYCY1HB152KY	J	1500p	50V	Ceramic	AA	C1243	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C858	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA	C1244	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C859	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA	C1249	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C860	VCEASX1CN106MY	J	10	16V	Electrolytic	AC	C1250	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
							C1251	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
							C1252	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
							C1253	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
							C1254	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA

Ref. No.	Part No.	★	Description	Code
DUNTKC539FE06 MAIN Unit (Continued)				
C1255	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1256	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1257	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1258	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1259	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1260	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1261	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1262	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1263	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1264	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1265	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1266	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1267	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1268	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1269	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1270	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1271	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1273	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C1701	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1703	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1704	VCEASY1CN337MY	J 330	16V Electrolytic	AD
C1705	VCKYTV1CB105KY	J 1	16V Ceramic	AC
C1706	VCCCCY1HH471JY	J 470p	50V Ceramic	AA
C1707	RC-KZA070WJZZY	J 22	6.3V Ceramic	AD
C1708	VCKYTV1CB105KY	J 1	16V Ceramic	AC
C1709	VCEASX0JN226MY	J 22	6.3V Electrolytic	AB
C1710	VCKYTV1CB105KY	J 1	16V Ceramic	AC
C1711	RC-KZA041WJZZY	J 10	10V Ceramic	AC
C1712	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1713	RC-KZA110WJZZY	J 10	25V Ceramic	AD
C1714	VCEASX1HN475MY	J 4.7	50V Electrolytic	AC
C1715	VCKYCY1HF104ZY	J 0.1	50V Ceramic	AA
C1716	RC-KZ0071TAZZY	J 2.2	6.3V Ceramic	AD
C1717	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1718	VCKYTV1HF104ZY	J 0.1	50V Ceramic	AB
C1719	VCKYTV1HF104ZY	J 0.1	50V Ceramic	AB
C1720	RC-KZA110WJZZY	J 10	25V Ceramic	AD
C1722	RC-KZA109WJZZY	J 10	16V Ceramic	AC
C1723	VCEASX1HN106MY	J 10	50V Electrolytic	AC
C2001	VCKYTV1CF105ZY	J 1	16V Ceramic	AB
C2002	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2003	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2004	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2005	RC-KZA101WJZZY	J 10	6.3V Ceramic	AC
C2006	VCKYCY1CB104KY	J 0.1	16V Ceramic	AB
C2007	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2008	VCCCCY1EH561JY	J 560p	25V Ceramic	AB
C2009	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA
C2010	VCCCCY1HH221JY	J 220p	50V Ceramic	AA
C2011	VCKYTV1CF684ZY	J 0.68	16V Ceramic	AB
C2012	VCKYCY1AB105KY	J 1	10V Ceramic	AB
C2013	VCCCCY1HH5R0CY	J 5p	50V Ceramic	AA
C2014	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2015	VCCCCY1HH180JY	J 18p	50V Ceramic	AA
C2016	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2017	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2018	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2020	RC-KZA101WJZZY	J 10	6.3V Ceramic	AC
C2022	VCKYCY1HB222KY	J 2200p	50V Ceramic	AA
C2023	VCKYCY1HB222KY	J 2200p	50V Ceramic	AA
C2027	VCEASX0JN476MY	J 47	6.3V Electrolytic	AC
C2028	VCEASX0JN226MY	J 22	6.3V Electrolytic	AB
C2029	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C2032	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C8002	VCCCCY1HH330JY	J 33p	50V Ceramic	AA
C8701	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C8702	RC-KZA070WJZZY	J 22	6.3V Ceramic	AD
C8703	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C8704	RC-KZA101WJZZY	J 10	6.3V Ceramic	AC
C8705	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C8706	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA

Ref. No.	Part No.	★	Description	Code
RESISTORS				
C8707	VCKYCY1CB823KY	J 0.082	16V Ceramic	AH
C8708	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C8709	VCKYCY1HB822KY	J 8200p	50V Ceramic	AB
C8710	RC-KZA101WJZZY	J 10	6.3V Ceramic	AC
C8711	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C8712	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C8713	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C8714	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C8715	RC-KZA070WJZZY	J 22	6.3V Ceramic	AD
C8716	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA
C8717	VCKYCY1CB473KY	J 0.047	16V Ceramic	AA
C8718	VCKYCY1CB473KY	J 0.047	16V Ceramic	AA
C8719	VCKYCY1CB473KY	J 0.047	16V Ceramic	AA
C8720	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C8807	RC-KZA069WJZZY	J 1	10V Ceramic	AB
C8812	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C8819	RC-KZA101WJZZY	J 10	6.3V Ceramic	AC
C8820	VCCCCY1HH101JY	J 100p	50V Ceramic	AA
C8821	RC-KZA101WJZZY	J 10	6.3V Ceramic	AC
C8822	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
R401	VRS-TW2HF750JY	J 75	1/2W Metal Oxide	AA
R402	VRS-TW2HF750JY	J 75	1/2W Metal Oxide	AA
R403	VRS-TW2HF750JY	J 75	1/2W Metal Oxide	AA
R404	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R405	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R406	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R407	VRS-CY1JF473JY	J 47k	1/16W Metal Oxide	AA
R408	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R409	VRS-CH1JF101JY	J 100	1/16W Metal Oxide	AA
R410	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R411	VRS-TQ2BD000JY	J 0	1/8W Metal Oxide	AA
R412	VRS-TQ2BD000JY	J 0	1/8W Metal Oxide	AA
R414	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R415	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R416	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA
R417	VRS-CY1JF271JY	J 270	1/16W Metal Oxide	AA
R418	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA
R419	VRS-CY1JF271JY	J 270	1/16W Metal Oxide	AA
R424	VRS-CJ1JF223JY	J 22k	1/16W Metal Oxide	AA
R425	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R426	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R427	VRS-CY1JF221JY	J 220	1/16W Metal Oxide	AA
R429	VRS-CJ1JF223JY	J 22k	1/16W Metal Oxide	AA
R430	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R431	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R432	VRS-CY1JF221JY	J 220	1/16W Metal Oxide	AA
R434	VRS-CJ1JF223JY	J 22k	1/16W Metal Oxide	AA
R435	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R436	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R437	VRS-CY1JF221JY	J 220	1/16W Metal Oxide	AA
R439	VRS-CJ1JF223JY	J 22k	1/16W Metal Oxide	AA
R440	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R441	VRS-CY1JF330JY	J 33	1/16W Metal Oxide	AA
R442	VRS-CY1JF221JY	J 220	1/16W Metal Oxide	AA
R445	VRS-CJ1JF223JY	J 22k	1/16W Metal Oxide	AA
R446	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R447	VRS-CY1JF330JY	J 33	1/16W Metal Oxide	AA
R448	VRS-CY1JF221JY	J 220	1/16W Metal Oxide	AA
R451	VRS-CJ1JF223JY	J 22k	1/16W Metal Oxide	AA
R452	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R453	VRS-CY1JF330JY	J 33	1/16W Metal Oxide	AA
R454	VRS-CY1JF221JY	J 220	1/16W Metal Oxide	AA
R465	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R466	VRS-TQ2BD000JY	J 0	1/8W Metal Oxide	AA
R467	VRS-TQ2BD000JY	J 0	1/8W Metal Oxide	AA
R468	VRS-TQ2BD000JY	J 0	1/8W Metal Oxide	AA
R469	VRS-TQ2BD000JY	J 0	1/8W Metal Oxide	AA
R705	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R706	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R707	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
R708	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
R709	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
R710	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTKC539FE06 MAIN Unit (Continued)									
R711	VRS-CY1JF104DY	J	100k 1/16W	Metal Oxide AA	R802	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R712	VRS-CY1JF104DY	J	100k 1/16W	Metal Oxide AA	R804	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA
R713	VRS-CY1JF104DY	J	100k 1/16W	Metal Oxide AA	R807	VRS-CY1JF181JY	J	180 1/16W	Metal Oxide AA
R714	VRS-CY1JF104DY	J	100k 1/16W	Metal Oxide AA	R809	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R715	VRS-CY1JF104DY	J	100k 1/16W	Metal Oxide AA	R811	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R716	VRS-CY1JF104DY	J	100k 1/16W	Metal Oxide AA	R812	VRS-CY1JF821JY	J	820 1/16W	Metal Oxide AA
R717	VRS-CY1JF104DY	J	100k 1/16W	Metal Oxide AA	R813	VRS-CY1JF331JY	J	330 1/16W	Metal Oxide AA
R718	VRS-CY1JF104DY	J	100k 1/16W	Metal Oxide AA	R814	VRS-CY1JF152JY	J	1.5k 1/16W	Metal Oxide AA
R719	VRS-CY1JF104DY	J	100k 1/16W	Metal Oxide AA	R815	VRS-CY1JF152JY	J	1.5k 1/16W	Metal Oxide AA
R720	VRS-CY1JF104DY	J	100k 1/16W	Metal Oxide AA	R816	VRS-CY1JF152JY	J	1.5k 1/16W	Metal Oxide AA
R721	VRS-CY1JF333JY	J	33k 1/16W	Metal Oxide AA	R817	VRS-CY1JF152JY	J	1.5k 1/16W	Metal Oxide AA
R722	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R818	VRS-CY1JF152JY	J	1.5k 1/16W	Metal Oxide AA
R723	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R819	VRS-CY1JF122JY	J	1.2k 1/16W	Metal Oxide AA
R724	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R820	VRS-CY1JF105JY	J	1M 1/16W	Metal Oxide AA
R725	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R821	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA
R726	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R822	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA
R727	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R824	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R728	VRS-CY1JF183DY	J	18k 1/16W	Metal Oxide AA	R825	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R729	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R826	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R730	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R827	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R731	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R828	VRS-CJ1JF470JY	J	47 1/16W	Metal Oxide AA
R732	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA	R829	VRS-CY1JF332JY	J	3.3k 1/16W	Metal Oxide AA
R733	VRS-CY1JF243FY	J	24k 1/16W	Metal Oxide AA	R832	VRS-CY1JF332JY	J	3.3k 1/16W	Metal Oxide AA
R734	VRS-CY1JF333FY	J	33k 1/16W	Metal Oxide AA	R833	VRS-CY1JF822JY	J	8.2k 1/16W	Metal Oxide AA
R735	VRS-CY1JF203FY	J	20k 1/16W	Metal Oxide AA	R834	VRS-CY1JF332JY	J	3.3k 1/16W	Metal Oxide AA
R736	VRS-CY1JF473FY	J	47k 1/16W	Metal Oxide AA	R835	VRS-CY1JF561JY	J	560 1/16W	Metal Oxide AA
R737	VRS-CY1JF183FY	J	18k 1/16W	Metal Oxide AA	R836	VRS-CY1JF561JY	J	560 1/16W	Metal Oxide AA
R738	VRS-CY1JF154FY	J	150k 1/16W	Metal Oxide AA	R837	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA
R739	VRS-CY1JF104FY	J	100k 1/16W	Metal Oxide AA	R838	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA
R740	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R844	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R741	VRS-CY1JF333FY	J	33k 1/16W	Metal Oxide AA	R845	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA
R742	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R846	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA
R743	VRS-CY1JF562JY	J	5.6k 1/16W	Metal Oxide AA	R848	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA
R744	VRS-CY1JF473FY	J	47k 1/16W	Metal Oxide AA	R1101	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA
R745	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R1102	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA
R746	VRS-CY1JF224FY	J	220k 1/16W	Metal Oxide AA	R1103	VRS-CY1JF333JY	J	33k 1/16W	Metal Oxide AA
R747	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R1104	VRS-CY1JF333JY	J	33k 1/16W	Metal Oxide AA
R758	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA	R1105	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA
R759	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA	R1111	VRS-CY1JF472JY	J	4.7k 1/16W	Metal Oxide AA
R760	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA	R1112	VRS-TW2ED102JY	J	1k 1/4W	Metal Oxide AA
R761	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA	R1113	VRS-TW2HF5R6JY	J	5.6 1/2W	Metal Oxide AA
R762	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA	R1114	VRS-CY1JF272JY	J	2.7k 1/16W	Metal Oxide AA
R763	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	R1115	VRS-TQ2BD332JY	J	3.3k 1/8W	Metal Oxide AB
R764	VRS-CY1JF331JY	J	330 1/16W	Metal Oxide AA	R1116	VRS-TW2ED182JY	J	1.8k 1/4W	Metal Oxide AA
R765	VRS-CY1JF511JY	J	510 1/16W	Metal Oxide AA	R1117	VRS-CY1JF272JY	J	2.7k 1/16W	Metal Oxide AA
R766	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	R1118	VRS-TQ2BD332JY	J	3.3k 1/8W	Metal Oxide AB
R767	VRS-CY1JF331JY	J	330 1/16W	Metal Oxide AA	R1119	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R768	VRS-CY1JF511JY	J	510 1/16W	Metal Oxide AA	R1201	VRS-CY1JF472JY	J	4.7k 1/16W	Metal Oxide AA
R769	VRS-CY1JF511JY	J	510 1/16W	Metal Oxide AA	R1202	VRS-CY1JF472JY	J	4.7k 1/16W	Metal Oxide AA
R770	VRS-CY1JF511JY	J	510 1/16W	Metal Oxide AA	R1203	VRS-CY1JF472JY	J	4.7k 1/16W	Metal Oxide AA
R771	VRS-CY1JF511JY	J	510 1/16W	Metal Oxide AA	R1204	VRS-CY1JF151JY	J	150 1/16W	Metal Oxide AA
R772	VRS-CY1JF511JY	J	510 1/16W	Metal Oxide AA	R1205	VRS-CY1JF331JY	J	330 1/16W	Metal Oxide AA
R773	VRS-CY1JF511JY	J	510 1/16W	Metal Oxide AA	R1206	VRS-CY1JF472JY	J	4.7k 1/16W	Metal Oxide AA
R774	VRS-CY1JF511JY	J	510 1/16W	Metal Oxide AA	R1208	VRS-CY1JF472JY	J	4.7k 1/16W	Metal Oxide AA
R775	VRS-CY1JF303JY	J	30k 1/16W	Metal Oxide AA	R1209	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R776	VRS-CY1JF303JY	J	30k 1/16W	Metal Oxide AA	R1217	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R777	VRS-TW2HF272JY	J	2.7k 1/2W	Metal Oxide AA	R1218	VRS-CY1JF472JY	J	4.7k 1/16W	Metal Oxide AA
R778	VRS-TW2HF272JY	J	2.7k 1/2W	Metal Oxide AA	R1224	VRS-TV1JD101JY	J	100 1/10W	Metal Oxide AA
R781	VRS-CY1JF333JY	J	33k 1/16W	Metal Oxide AA	R1226	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA
R782	VRS-CY1JF203DY	J	20k 1/16W	Metal Oxide AA	R1236	VRS-CH1JF000JY	J	0 1/16W	Metal Oxide AA
R783	VRS-CY1JF123DY	J	12k 1/16W	Metal Oxide AA	R1237	VRS-CH1JF000JY	J	0 1/16W	Metal Oxide AA
R784	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R1238	VRS-CH1JF000JY	J	0 1/16W	Metal Oxide AA
R786	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R1239	VRS-CH1JF000JY	J	0 1/16W	Metal Oxide AA
R787	VRS-CY1JF473FY	J	47k 1/16W	Metal Oxide AA	R1240	VRS-CH1JF000JY	J	0 1/16W	Metal Oxide AA
R788	VRS-CY1JF473FY	J	47k 1/16W	Metal Oxide AA	R1241	VRS-CH1JF000JY	J	0 1/16W	Metal Oxide AA
R789	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R1242	VRS-CH1JF000JY	J	0 1/16W	Metal Oxide AA
R792	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA	R1246	VRS-CH1JF151JY	J	150 1/16W	Metal Oxide AA
R793	VRS-CY1JF511JY	J	510 1/16W	Metal Oxide AA	R1247	VRS-CH1JF151JY	J	150 1/16W	Metal Oxide AA
R794	VRS-CY1JF511JY	J	510 1/16W	Metal Oxide AA	R1248	VRS-CH1JF151JY	J	150 1/16W	Metal Oxide AA
R795	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R1249	VRS-CH1JF151JY	J	150 1/16W	Metal Oxide AA
R801	VRS-CJ1JF101JY	J	100 1/16W	Metal Oxide AA	R1250	VRS-CH1JF151JY	J	150 1/16W	Metal Oxide AA
					R1251	VRS-CH1JF151JY	J	150 1/16W	Metal Oxide AA
					R1252	VRS-CH1JF151JY	J	150 1/16W	Metal Oxide AA
					R1253	VRS-CH1JF151JY	J	150 1/16W	Metal Oxide AA
					R1254	VRS-CH1JF151JY	J	150 1/16W	Metal Oxide AA

Ref. No.	Part No.	★	Description	Code
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DUNTKC539FE06
MAIN Unit (Continued)

R1255	VRS-CH1JF151JY	J	150	1/16W	Metal Oxide	AA
R1256	VRS-CH1JF151JY	J	150	1/16W	Metal Oxide	AA
R1257	VRS-CH1JF151JY	J	150	1/16W	Metal Oxide	AA
R1262	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
R1263	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
R1264	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R1701	VRS-CY1JF1R0JY	J	1	1/16W	Metal Oxide	AA
R1702	VRS-CY1JF272JY	J	2.7k	1/16W	Metal Oxide	AA
R1703	VRS-CY1JF333FY	J	33k	1/16W	Metal Oxide	AA
R1704	VRS-TW2ED123JY	J	12k	1/4W	Metal Oxide	AA
R1706	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R1707	VRS-CY1JF473FY	J	47k	1/16W	Metal Oxide	AA
R1708	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R1709	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R1711	VRS-TW2HF330JY	J	33	1/2W	Metal Oxide	AA
R1713	VRS-TV1JD562JY	J	5.6k	1/10W	Metal Oxide	AA
R1714	VRS-TW2HF472JY	J	4.7k	1/2W	Metal Oxide	AA
R1715	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R1717	VRS-CY1JF103FY	J	10k	1/16W	Metal Oxide	AA
R1718	VRS-CY1JF102FY	J	1k	1/16W	Metal Oxide	AA
R1719	VRS-CY1JF182FY	J	1.8k	1/16W	Metal Oxide	AA
R1720	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R1721	VRS-CY1JF182FY	J	1.8k	1/16W	Metal Oxide	AA
R1722	VRS-CY1JF182FY	J	1.8k	1/16W	Metal Oxide	AA
R1723	VRS-CY1JF273FY	J	27k	1/16W	Metal Oxide	AA
R1724	VRS-CY1JF273FY	J	27k	1/16W	Metal Oxide	AA
R1729	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R1730	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R1731	VRS-TW2HF102JY	J	1k	1/2W	Metal Oxide	AA
R1733	VRS-CY1JF121JY	J	120	1/16W	Metal Oxide	AA
R1734	VRS-CY1JF182JY	J	1.8k	1/16W	Metal Oxide	AA
R1735	VRS-CY1JF392JY	J	3.9k	1/16W	Metal Oxide	AA
R1736	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2002	VRS-CY1JF1R0JY	J	1	1/16W	Metal Oxide	AA
R2003	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2004	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2007	VRS-CY1JF1R0JY	J	1	1/16W	Metal Oxide	AA
R2012	VRS-CY1JF274JY	J	270k	1/16W	Metal Oxide	AA
R2014	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2015	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2016	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R2019	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2020	VRS-CY1JF563FY	J	56k	1/16W	Metal Oxide	AA
R2021	VRS-CY1JF103FY	J	10k	1/16W	Metal Oxide	AA
R2022	VRS-CJ1JF102JY	J	1k	1/16W	Metal Oxide	AA
R2023	VRS-CJ1JF223JY	J	22k	1/16W	Metal Oxide	AA
R2026	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R2027	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2028	VRS-CY1JF273JY	J	27k	1/16W	Metal Oxide	AA
R2029	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R2030	VRS-CY1JF394FY	J	390k	1/16W	Metal Oxide	AA
R2031	VRS-CY1JF823JY	J	82k	1/16W	Metal Oxide	AA
R2032	VRS-CJ1JF223JY	J	22k	1/16W	Metal Oxide	AA
R2036	VRS-CY1JF105JY	J	1M	1/16W	Metal Oxide	AA
R2038	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R2039	VRS-CY1JF471JY	J	470	1/16W	Metal Oxide	AA
R2040	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2041	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2042	VRS-CY1JF153JY	J	15k	1/16W	Metal Oxide	AA
R2043	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R2044	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R2045	VRS-CH1JF101JY	J	100	1/16W	Metal Oxide	AA
R2046	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R2047	VRS-CY1JF512JY	J	5.1k	1/16W	Metal Oxide	AA
R2048	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2049	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R2052	VRS-CY1JF394JY	J	390k	1/16W	Metal Oxide	AA
R2056	VRS-CJ1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2057	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R2058	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R2060	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
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R2061	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R2062	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R2064	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R2065	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2067	VRS-CJ1JF392JY	J	3.9k	1/16W	Metal Oxide	AA
R2069	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R2070	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2074	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2075	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R2076	VRS-CH1JF101JY	J	100	1/16W	Metal Oxide	AA
R2077	VRS-CJ1JF000JY	J	0	1/16W	Metal Oxide	AA
R2079	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2087	VRS-CH1JF101JY	J	100	1/16W	Metal Oxide	AA
R2090	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R2091	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R2103	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2104	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R2112	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2113	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2114	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2123	VRS-CY1JF105JY	J	1M	1/16W	Metal Oxide	AA
R2124	VRS-CY1JF433FY	J	43k	1/16W	Metal Oxide	AA
R2125	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R2126	VRS-CY1JF103FY	J	10k	1/16W	Metal Oxide	AA
R2130	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R2132	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R2133	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2134	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2135	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2137	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2138	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2140	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2141	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2142	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2143	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2144	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R8701	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R8702	VRS-TQ2BD272JY	J	2.7k	1/8W	Metal Oxide	AB
R8703	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R8704	VRS-CY1JF151JY	J	150	1/16W	Metal Oxide	AA
R8705	VRS-CY1JF151JY	J	150	1/16W	Metal Oxide	AA
R8706	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R8707	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R8715	VRS-CJ1JF220JY	J	22	1/16W	Metal Oxide	AA
R8718	VRS-CH1JF330JY	J	33	1/16W	Metal Oxide	AA
R8719	VRS-CH1JF330JY	J	33	1/16W	Metal Oxide	AA
R8720	VRS-CH1JF330JY	J	33	1/16W	Metal Oxide	AA
R8721	VRS-CH1JF330JY	J	33	1/16W	Metal Oxide	AA
R8722	VRS-CH1JF330JY	J	33	1/16W	Metal Oxide	AA
R8723	VRS-CH1JF330JY	J	33	1/16W	Metal Oxide	AA
R8801	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R8803	VRS-CY1JF222JY	J	2.2k	1/16W	Metal Oxide	AA
R8805	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R8807	VRS-CY1JF122JY	J	1.2k	1/16W	Metal Oxide	AA
R8808	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R8809	VRS-CY1JF333JY	J	33k	1/16W	Metal Oxide	AA
R8810	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R8812	VRS-CY1JF332JY	J	3.3k	1/16W	Metal Oxide	AA
R8814	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

FB401	RBLN-0060TAZZY	J	Ferrite Bead	AB
FB402	RBLN-0060TAZZY	J	Ferrite Bead	AB
FB403	RBLN-0060TAZZY	J	Ferrite Bead	AB
FB404	RBLN-0060TAZZY	J	Ferrite Bead	AB
FB701	RBLN-0209TAZZY	J	Ferrite Bead	AB
FB702	RBLN-0209TAZZY	J	Ferrite Bead	AB
FB703	RBLN-0209TAZZY	J	Ferrite Bead	AB
FB704	RBLN-0051TAZZY	J	Ferrite Bead	AC
FB706	RBLN-0209TAZZY	J	Ferrite Bead	AB
FB708	RBLN-0051TAZZY	J	Ferrite Bead	AC
FB710	RBLN-0209TAZZY	J	Ferrite Bead	AB
FB712	RBLN-0095CEZZY	J	Ferrite Bead	AD
FB713	RBLN-0209TAZZY	J	Ferrite Bead	AB
FB714	RBLN-0209TAZZY	J	Ferrite Bead	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code					
DUNTKC539FE06 MAIN Unit (Continued)														
DUNTKC540DE03 (U.S.A/CANADA) DUNTKC540DE06 (KOREA) ANALOG Unit														
FB801	RBLN-A118WJZZY	J	Ferrite Bead	AC	TUNER									
FB803	RBLN-A118WJZZY	J	Ferrite Bead	AC	<i>NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.</i>									
FB804	RBLN-A118WJZZY	J	Ferrite Bead	AC	TU3401	VTUVT2U5UF559	J	Tuner	BB					
FB806	RBLN-A118WJZZY	J	Ferrite Bead	AC	INTEGRATED CIRCUITS									
FB8701	RBLN-0050TAZZY	J	Ferrite Bead	AA	IC3201	RH-iX3370CEN2Q	J	MSP3440G-QA-C1	AX					
FB8702	RBLN-0050TAZZY	J	Ferrite Bead	AA	IC3304	VHiLA4635A+-1S	J	LA4635A	AM					
FB8703	RBLN-0050TAZZY	J	Ferrite Bead	AA	IC3305	VHiBH3544F+-1Y	J	BH3544F-E2	AE					
P1202	QPLGN0658REZZY	J	Plug, 6-pin	AD	IC3401	VHiCXA2089Q-1S	J	CXA2089Q	AN					
P2003	QPLGN0558REZZY	J	Plug, 5-pin	AE	IC3403	VHiSM5301AS-1Y	J	SM5301AS-G-ET	AR					
P2004	QPLGNA144WJZZY	J	Plug, 20-pin	AF	IC3404	VHiTC4053BF1EY	J	TC4053BF	AF					
SC401	QSOCNA101WJZZ	J	ANALOG RGB(PC-IN)	AF	IC3701	VHiNJM2147M-1Y	J	NJM2147M-TE1	AF					
SC701	QCNCWA010WJZZYJ	Connector, 15-pin	AE	TRANSISTORS										
SC1201	QSOCNA222WJZZYJ	Socket, 80-pin	AH	Q3203	VS2SC3928AR-1Y	J	2SC3928AR	AB						
SC2001	QSOCNA292WJZZYJ	Socket, 60-pin	AF	Q3204	VS2SC3928AR-1Y	J	2SC3928AR	AB						
TP2004	QLUGHA006WJZZY	Jug	AC	Q3207	VS2SC3928AR-1Y	J	2SC3928AR	AB						
TP2005	QLUGHA006WJZZY	Jug	AC	Q3301	VSDTC314TK/-1Y	J	DTC314TK	AC						
TP2006	QLUGHA006WJZZY	Jug	AC	Q3302	VSDTC314TK/-1Y	J	DTC314TK	AC						
TP2068	QLUGHA006WJZZY	Jug	AC	Q3303	VS2SA1037KQ-1Y	J	2SA1037KQ	AA						
TP2069	QLUGHA006WJZZY	Jug	AC	Q3401	VSDTC314TK/-1Y	J	DTC314TK	AC						
DIODES														
D3204	RH-EX1396CEZZY	J	Zener Diode, 6.8V	AB										
D3205	VHDDAN222//1Y	J	Diode	AA										
D3304	VHDDAN222//1Y	J	Diode	AA										
D3407	VHDDAN222//1Y	J	Diode	AA										
D3701	RH-EX1271CEZZY	J	Zener Diode, 12V	AB										
D3706	VHDDAN222//1Y	J	Diode	AA										
D3707	VHDRB491D++1Y	J	Diode	AD										
PACKAGED CIRCUITS														
X3201	RCRSB0250GEZZ	J	Crystal, 18.432MHz	AG										
COILS														
L3201	VPCNN101J7R7NY	J	Peaking 100µH	AB										
L3202	VPCNN220J2R9NY	J	Peaking 22µH	AB										
L3203	VPCNN4R7J1R2NY	J	Peaking 4.7µH	AB										
L3303	VPCNN101J7R7NY	J	Peaking 100µH	AB										
L3401	VP-9N4R7KR56NY	J	Peaking 4.7µH	AC										
L3405	RCILPA142WJZZ	J	Coil	AD										
CAPACITORS														
C3202	VCEASX0JN107MY	J	100 6.3V Electrolytic	AC										
C3203	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA										
C3204	VCCCCY1HH330JY	J	33p 50V Ceramic	AA										
C3207	VCCCCY1HH330JY	J	33p 50V Ceramic	AA										
C3208	VCCCCY1HH560JY	J	56p 50V Ceramic	AB										
C3209	RC-KZ1025CEZZY	J	1 10V Ceramic	AB										
C3212	VCCCCY1HH5R0CY	J	5p 50V Ceramic	AA										
C3213	VCCCCY1HH5R0CY	J	5p 50V Ceramic	AA										
C3215	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA										
C3216	VCEASX1CN106MY	J	10 16V Electrolytic	AC										
C3217	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA										
C3218	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA										
C3219	VCCCCY1HH560JY	J	56p 50V Ceramic	AB										
C3220	VCCCCY1HH560JY	J	56p 50V Ceramic	AB										

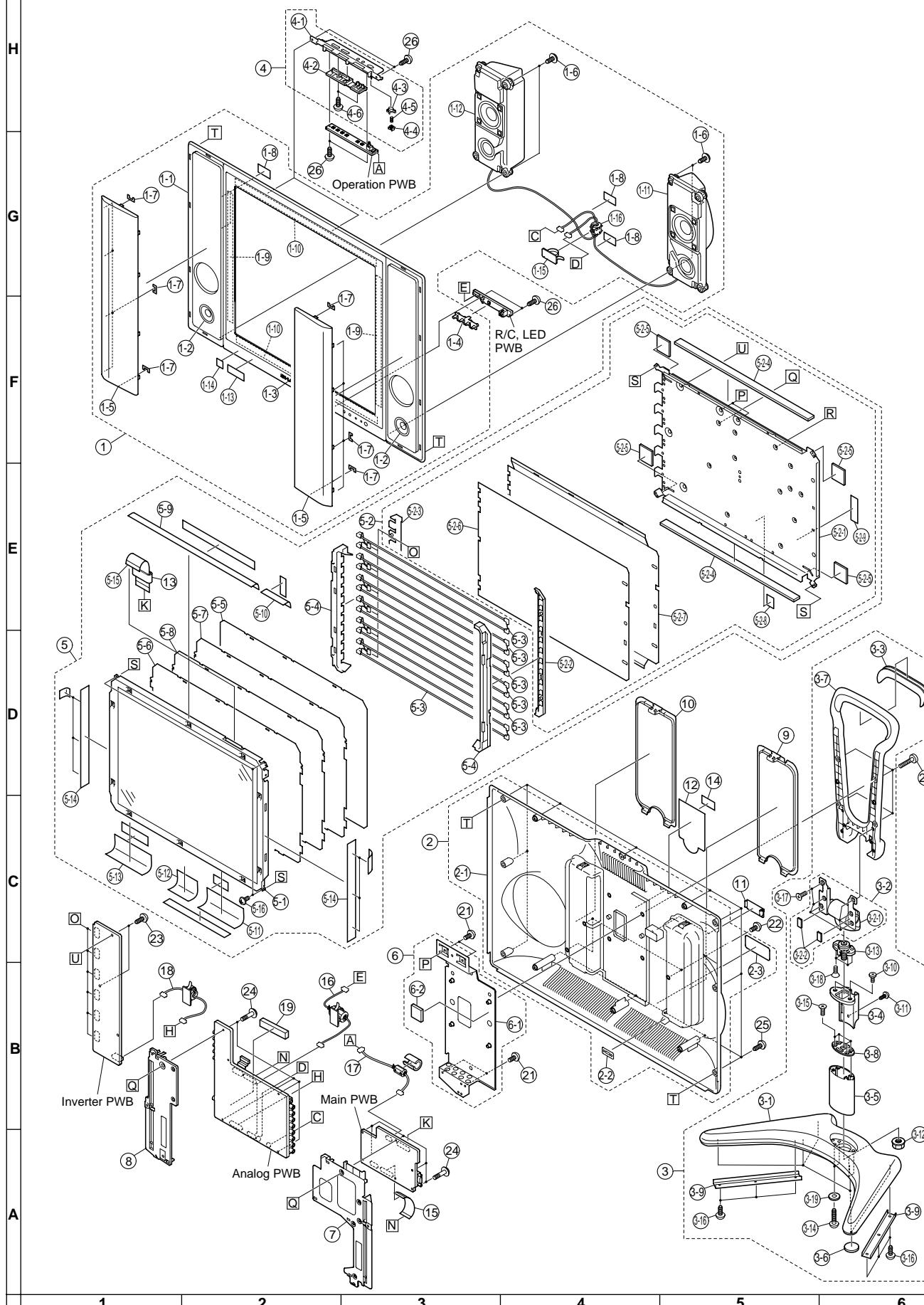
Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code					
DUNTKC540DE03 (U.S.A/CANADA)														
DUNTKC540DE06 (KOREA)														
ANALOG Unit (Continued)														
C3222	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA	C3434	VCKYCY1AB105KY	J 1	10V Ceramic	AB					
C3226	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA	C3435	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA					
C3228	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA	C3436	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA					
C3230	RC-KZA111WJZZY	J 1	25V Ceramic	AC	C3437	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA					
C3232	RC-KZA111WJZZY	J 1	25V Ceramic	AC	C3438	VCKYCY1AB105KY	J 1	10V Ceramic	AB					
C3234	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA	C3439	VCKYCY1AB105KY	J 1	10V Ceramic	AB					
C3235	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA	C3440	VCKYCY1CB104KY	J 0.1	16V Ceramic	AB					
C3236	RC-KZ0125CEZZY	J 1	10V Ceramic	AB	C3441	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA					
C3237	VCEASX0JN107MY	J 100	6.3V Electrolytic	AC	C3443	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA					
C3243	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA	C3444	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA					
C3244	VCEASX1HN335MY	J 3.3	50V Electrolytic	AB	C3446	VCEASX0JN107MY	J 100	6.3V Electrolytic	AC					
C3245	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA	C3447	RC-KZA116WJZZY	J 1	10V Ceramic	AC					
C3251	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA	C3458	RC-KZ0074TAZZY	J 10	6.3V Ceramic	AF					
C3252	VCEASX1CN107MY	J 100	16V Electrolytic	AC	C3459	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA					
C3253	VCEASX1CN106MY	J 10	16V Electrolytic	AC	C3462	RC-KZ0074TAZZY	J 10	6.3V Ceramic	AF					
C3254	VCEASX1CN106MY	J 10	16V Electrolytic	AC	C3464	RC-KZ0074TAZZY	J 10	6.3V Ceramic	AF					
C3261	VCKYCY1EB223KY	J 0.022	25V Ceramic	AA	C3465	VCEASY1CN477MY	J 470	16V Electrolytic	AD					
C3262	VCKYCY1EB223KY	J 0.022	25V Ceramic	AA	C3467	VCAAPC0JJ226MY	J 22	6.3V Electrolytic	AE					
C3306	RC-KZA030WJZZY	J 2.2	10V Ceramic	AB	C3469	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA					
C3307	RC-KZA030WJZZY	J 2.2	10V Ceramic	AB	C3470	VCEASX1HN105MY	J 1	50V Electrolytic	AB					
C3308	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA	C3471	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA					
C3309	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA	C3472	VCKYCY1HF103ZY	J 0.01	50V Ceramic	AA					
C3330	RC-KZA111WJZZY	J 1	25V Ceramic	AC	C3473	RC-EZ1351CEZZ	J 3300	6.3V Electrolytic	AF					
C3331	RC-KZA111WJZZY	J 1	25V Ceramic	AC	C3707	VCKYTV1HF104ZY	J 0.1	50V Ceramic	AB					
C3332	VCEASX1CN106MY	J 10	16V Electrolytic	AC	C3708	VCKYTV1HF104ZY	J 0.1	50V Ceramic	AB					
C3333	VCEASX1CN107MY	J 100	16V Electrolytic	AC	C3709	VCEASX1CN107MY	J 100	16V Electrolytic	AC					
C3334	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA	C3711	VCKYCY1HF103ZY	J 0.01	50V Ceramic	AA					
C3335	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA	C3712	RC-KZ0071TAZZY	J 2.2	6.3V Ceramic	AD					
C3336	VCEASX1CN106MY	J 10	16V Electrolytic	AC	C3713	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA					
C3337	VCEASX1CN106MY	J 10	16V Electrolytic	AC	C3714	RC-EZ0380GEZZ	J 1F	5.5V Electrolytic	AM					
C3338	RC-EZA216WJZZ	J 1000	16V Electrolytic	AD	RESISTORS									
C3339	RC-EZA216WJZZ	J 1000	16V Electrolytic	AD	R3206	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA					
C3340	RC-KZ0125CEZZY	J 1	10V Ceramic	AB	R3209	VRS-CY1JF153JY	J 15k	1/16W Metal Oxide	AA					
C3343	VCEASX0JN227MY	J 220	6.3V Electrolytic	AC	R3210	VRS-CY1JF332JY	J 3.3k	1/16W Metal Oxide	AA					
C3344	VCEASX1HN225MY	J 2.2	50V Electrolytic	AB	R3211	VRS-CY1JF105JY	J 1M	1/16W Metal Oxide	AA					
C3345	RC-KZA111WJZZY	J 1	25V Ceramic	AC	R3214	VRS-CY1JF152JY	J 1.5k	1/16W Metal Oxide	AA					
C3346	RC-KZA111WJZZY	J 1	25V Ceramic	AC	R3215	VRS-CY1JF331JY	J 330	1/16W Metal Oxide	AA					
C3347	VCEASX0JN476MY	J 47	6.3V Electrolytic	AC	R3220	VRS-CJ1JF101JY	J 100	1/16W Metal Oxide	AA					
C3348	VCEASX0JN227MY	J 220	6.3V Electrolytic	AC	R3221	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA					
C3349	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA	R3248	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA					
C3350	VCEASX1CN106MY	J 10	16V Electrolytic	AC	R3250	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA					
C3358	VCKYTV1CB105KY	J 1	16V Ceramic	AC	R3255	VRS-CY1JF822JY	J 8.2k	1/16W Metal Oxide	AA					
C3359	RC-EZA216WJZZ	J 1000	16V Electrolytic	AD	R3256	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA					
C3361	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA	R3257	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA					
C3362	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA	R3322	VRS-CY1JF472JY	J 4.7k	1/16W Metal Oxide	AA					
C3363	VCEASX1HN225MY	J 2.2	50V Electrolytic	AB	R3323	VRS-CY1JF472JY	J 4.7k	1/16W Metal Oxide	AA					
C3364	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA	R3324	VRS-CY1JF272JY	J 2.7k	1/16W Metal Oxide	AA					
C3365	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA	R3325	VRS-CY1JF272JY	J 2.7k	1/16W Metal Oxide	AA					
C3402	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA	R3328	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA					
C3405	RC-KZA111WJZZY	J 1	25V Ceramic	AC	R3329	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA					
C3406	RC-KZA111WJZZY	J 1	25V Ceramic	AC	R3330	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA					
C3407	RC-KZA111WJZZY	J 1	25V Ceramic	AC	R3331	VRS-CY1JF153JY	J 15k	1/16W Metal Oxide	AA					
C3408	RC-KZA111WJZZY	J 1	25V Ceramic	AC	R3332	VRS-CY1JF122JY	J 1.2k	1/16W Metal Oxide	AA					
C3413	RC-KZA030WJZZY	J 2.2	10V Ceramic	AB	R3339	VRS-TW2ED180JY	J 18	1/4W Metal Oxide	AA					
C3414	RC-KZA030WJZZY	J 2.2	10V Ceramic	AB	R3340	VRS-CY1JF392JY	J 3.9k	1/16W Metal Oxide	AA					
C3417	VCKYCY1AB105KY	J 1	10V Ceramic	AB	R3341	VRS-CY1JF224JY	J 220k	1/16W Metal Oxide	AA					
C3418	VCKYCY1AB105KY	J 1	10V Ceramic	AB	R3342	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA					
C3419	VCCCCY1HH221JY	J 220p	50V Ceramic	AA	R3343	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA					
C3420	RC-KZA111WJZZY	J 1	25V Ceramic	AC	R3344	VRS-CY1JF471JY	J 470	1/16W Metal Oxide	AA					
C3421	RC-KZA111WJZZY	J 1	25V Ceramic	AC	R3345	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA					
C3422	VCKYCY1AB105KY	J 1	10V Ceramic	AB	R3358	VRS-CY1JF472JY	J 4.7k	1/16W Metal Oxide	AA					
C3423	VCKYCY1AB105KY	J 1	10V Ceramic	AB	R3359	VRS-CY1JF472JY	J 4.7k	1/16W Metal Oxide	AA					
C3424	VCEASX1CN106MY	J 10	16V Electrolytic	AC	R3369	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA					
C3425	VCKYCY1AB105KY	J 1	10V Ceramic	AB	R3370	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA					
C3426	VCKYCY1AB105KY	J 1	10V Ceramic	AB	R3372	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA					
C3428	VCKYCY1AB105KY	J 1	10V Ceramic	AB	R3401	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA					
C3429	VCEASX1CN106MY	J 10	16V Electrolytic	AC	R3402	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA					
C3430	VCKYCY1AB105KY	J 1	10V Ceramic	AB	R3403	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA					
C3431	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA	R3405	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA					
C3432	VCEASX1CN107MY	J 100	16V Electrolytic	AC	R3406	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA					
C3433	RC-KZA041WJZZY	J 10	10V Ceramic	AC	R3408	VRS-TQ2BD750JY	J 75	1/8W Metal Oxide	AA					
					R3409	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA					

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code					
DUNTKC540DE03 (U.S.A/CANADA) DUNTKC540DE06 (KOREA) ANALOG Unit (Continued)														
R3410	VRS-TQ2BD750JY	J	75 1/8W	Metal Oxide AA	R3730	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA					
R3411	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA	R3732	VRS-TW2HF101JY	J	100 1/2W	Metal Oxide AA					
R3412	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA	R3736	VRS-TW2HF000JY	J	0 1/2W	Metal Oxide AA					
R3413	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA	MISCELLANEOUS PARTS									
R3414	VRS-TQ2BD750JY	J	75 1/8W	Metal Oxide AA	△ F3701	QFS-ZA004WJZZ	J	Fuse, 2.0A/250V		AD				
R3415	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	△ F3702	QFS-ZA002WJZZ	J	Fuse, 1.25A/250V		AD				
R3416	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	FB3201	RBLN-0035TAZZY	J	Ferrite Bead		AB				
R3417	VRS-CY1JF750JY	J	75 1/16W	Metal Oxide AA	FB3409	RBLN-0029TAZZY	J	Ferrite Bead		AB				
R3418	VRS-CY1JF331JY	J	330 1/16W	Metal Oxide AA	FB3410	RBLN-0029TAZZY	J	Ferrite Bead		AB				
R3420	VRS-TQ2BD750JY	J	75 1/8W	Metal Oxide AA	FB3411	RBLN-0029TAZZY	J	Ferrite Bead		AB				
R3421	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	J3401	QSOCD0456CEZZ	J	S-VIDEO (COMPONENT2/AV1)		AE				
R3422	VRS-TQ2BD750JY	J	75 1/8W	Metal Oxide AA	J3402	QJAKFA021WJZZ	J	AUDIO(L/R) (COMPONENT2/AV1)		AD				
R3423	VRS-CY1JF471JY	J	470 1/16W	Metal Oxide AA	J3404	QJAKGA038WJZZ	J	AV-IN2/OUT Terminal		AE				
R3424	VRS-CY1JF471JY	J	470 1/16W	Metal Oxide AA	J3406	QJAKFA017WJZZ	J	AUDIO(L/R) (COMPONENT)		AD				
R3425	VRS-CY1JF750JY	J	75 1/16W	Metal Oxide AA	J3407	QJAKGA039WJZZ	J	Y/PB/PR(COMPONENT)		AE				
R3426	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA	J3408	QJAKGA039WJZZ	J	Y/PB/PR/VIDEO (COMPONENT2/AV1)		AE				
R3427	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	J3409	QJAKJ0047CEZZ	J	AUDIO(PC-IN)		AD				
R3428	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	J3701	QJAKCA010WJZZ	J	POWER INPUT(DC12V)		AF				
R3429	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA	P3302	QPLGN0278GEZZ	J	Plug, 4-pin		AA				
R3430	VRS-CY1JF750JY	J	75 1/16W	Metal Oxide AA	P3303	QPLGN0278GEZZ	J	Plug, 2-pin		AA				
R3431	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	P3404	QPLGN1558REZZY	J	Plug, 15-pin		AD				
R3432	VRS-CJ1JF331JY	J	330 1/16W	Metal Oxide AA	P3703	QPLGN1241CEZZ	J	Plug, 12-pin		AB				
R3434	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	P3704	QCNCMA012WJZZ	J	Connector, 15-pin		AD				
R3435	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	SC3403	QSOCNA292WJZZY	J	Socket, 60-pin		AF				
R3436	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	TP3431	QLUGHA006WJZZY	J	Lug		AC				
R3438	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA	TP3432	QLUGHA006WJZZY	J	Lug		AC				
R3439	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA	TP3433	QLUGHA006WJZZY	J	Lug		AC				
R3440	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	TP3434	QLUGHA006WJZZY	J	Lug		AC				
R3441	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA										
R3443	VRS-CY1JF562JY	J	5.6k 1/16W	Metal Oxide AA										
R3444	VRS-CY1JF153JY	J	15k 1/16W	Metal Oxide AA										
R3452	VRS-CY1JF562JY	J	5.6k 1/16W	Metal Oxide AA										
R3453	VRS-CY1JF562JY	J	5.6k 1/16W	Metal Oxide AA										
R3454	VRS-CY1JF562JY	J	5.6k 1/16W	Metal Oxide AA										
R3455	VRS-CY1JF562JY	J	5.6k 1/16W	Metal Oxide AA										
R3457	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA										
R3459	VRS-CJ1JF101JY	J	100 1/16W	Metal Oxide AA										
R3462	VRS-TW2HF221JY	J	220 1/2W	Metal Oxide AA										
R3465	VRS-CY1JF122FY	J	1.2k 1/16W	Metal Oxide AA										
R3466	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA										
R3468	VRS-CY1JF472JY	J	4.7k 1/16W	Metal Oxide AA										
R3469	VRS-CY1JF472JY	J	4.7k 1/16W	Metal Oxide AA										
R3470	VRS-CY1JF331JY	J	330 1/16W	Metal Oxide AA										
R3472	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA										
R3474	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA										
R3482	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA										
R3483	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA										
R3491	VRS-TQ2BD750JY	J	75 1/8W	Metal Oxide AA										
R3492	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA										
R3494	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA										
R3496	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA										
R3497	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA										
R3498	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA										
R3499	VRS-CH1JF000JY	J	0 1/16W	Metal Oxide AA										
R3501	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA										
R3503	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA										
R3504	VRS-CY1JF100JY	J	10 1/16W	Metal Oxide AA										
R3509	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA										
R3519	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA										
R3529	VRS-CY1JF152JY	J	1.5k 1/16W	Metal Oxide AA										
R3530	VRS-CY1JF561FY	J	560 1/16W	Metal Oxide AA										
R3532	VRS-CY1JF102FY	J	1k 1/16W	Metal Oxide AA										
R3533	VRS-CY1JF102FY	J	1k 1/16W	Metal Oxide AA										
R3704	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA										
R3722	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA										
R3723	VRS-CY1JF332FY	J	3.3k 1/16W	Metal Oxide AA										
R3725	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA										
R3726	VRS-CY1JF562FY	J	5.6k 1/16W	Metal Oxide AA										
R3727	VRS-CY1JF473FY	J	47k 1/16W	Metal Oxide AA										
R3728	VRS-CY1JF822FY	J	8.2k 1/16W	Metal Oxide AA										
R3729	VRS-CY1JF103FY	J	10k 1/16W	Metal Oxide AA										

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code					
DUNTKC541DE03 (U.S.A/CANADA) DUNTKC541DE06 (KOREA) OPERATION Unit														
DIODES														
D4050	RH-EX1271CEZZY	J	Zener Diode, 12V	AB	IC4001	VHILM70CIMM-1Y	J	LM70CIMMMX-3	AH					
D4051	RH-EX1283CEZZY	J	Zener Diode, 12V	AB	IC4201	VHITPS850++-1Y	J	TPS850	AG					
D4052	RH-EX1271CEZZY	J	Zener Diode, 18V	AB	INTEGRATED CIRCUITS									
RESISTORS														
R4050	VRS-CY1JF682JY	J	6.8k 1/16W Metal Oxide	AA	Q4001	VSDTC144EE/-1Y	J	DTC144EE	AA					
R4051	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA	Q4003	VSDTC144EE/-1Y	J	DTC144EE	AA					
R4052	VRS-CY1JF682JY	J	6.8k 1/16W Metal Oxide	AA	Q4004	VSDTC144EE/-1Y	J	DTC144EE	AA					
R4053	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA	TRANSISTORS									
SWITCH														
S4053	QSW-P0035GEZZ	J	MAIN POWER	AF	Q4001	RH-PX0421CEZZY	J	POWER/WAKE UP Indicator	AD					
SW4050QSW-K0108CEZZY	J	CH(Channel)(\)	AD	D4002	RH-PX0421CEZZY	J	OPC Indicator	AD						
SW4051QSW-K0108CEZZY	J	CH(Channel)(^)	AD	CAPACITORS										
SW4052QSW-K0108CEZZY	J	TV/VIDEO	AD	C4001	RC-KZ0117TAZZY	J	4.7 6.3V Ceramic	AD						
SW4054QSW-K0108CEZZY	J	MENU	AD	C4002	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA						
SW4055QSW-K0108CEZZY	J	VOL(Volume)(+)	AD	C4201	RC-KZA041WJZZY	J	10 10V Ceramic	AC						
SW4056QSW-K0108CEZZY	J	VOL(Volume)(-)	AD	C4202	VCEASX0JN107MY	J	100 6.3V Electrolytic	AC						
MISCELLANEOUS PARTS														
P4050	QPLGN0563TAZZY	J	Plug, 5-pin	AC	C4203	VCKYCY1HF103ZY	J	0.01 50V Ceramic	AA					
RESISTORS														
R4001	VRS-CY1JF391JY	J	390 1/16W Metal OXlde	AA	MISCELLANEOUS PARTS									
R4002	VRS-CY1JF182JY	J	1.8k 1/16W Metal OXlde	AA	J4021	QJAKJA008WJSA	J	HEADPHONE Jack	AE					
R4005	VRS-CY1JF391JY	J	390 1/16W Metal OXlde	AA	P4001	QPLGN1558REZZY	J	Plug, 15-pin	AD					
R4006	VRS-CY1JF101JY	J	100 1/16W Metal OXlde	AA	RMC4001	RRMCU0239CEZZ	J	ReMote Reciever	AG					

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
CABINET AND MECHANICAL PARTS									
1	CCABAA607WJ01	J	Cabinet A Ass'y	BS	5-8	PSHEPA208WJZZ	J	Prism Sheet(V)	BB
1-1	<i>Not Available</i>	—	Cabinet A	—	5-9	PSLDMA484WJZZ	J	Shield Spacer, x1	AK
1-2	GCOVAA704WJK	J	Speaker Cover, x2	AH	5-10	PSLDMA485WJZZ	J	Shield Spacer, x1	AD
1-3	<i>Not Available</i>	—	"SHARP" Badge	—	5-11	PSLDMA486WJZZ	J	Shield Spacer, x1	AE
1-4	HDECQA346WJSA	J	R/C, LED Cover	AE	5-12	PSLDMA487WJZZ	J	Shield Spacer, x1	AD
1-5	HPNC-A055WJSA	J	Speaker Punching, x2	AW	5-13	PSLDMA488WJZZ	J	Shield Spacer, x1	AF
1-6	LX-HZA003WJFN	J	Screw, x4	AC	5-14	PSLDMA489WJZZ	J	Shield Spacer, x2	AE
1-7	PSPAHA320WJZZ	J	Spacer, x12	AA	5-15	QPWBHC584WJPZ	J	Connecting Cord(FPC)	AQ
1-8	PSPAHA347WJZZ	J	Light Shielding Spacer, x4	AB	5-16	XBPS726P05J00	J	Screw, x3	AA
1-9	PSPAHA391WJZZ	J	Spacer(R/L), x2	AC	6	<i>Not Available</i>	—	Reinforcement Angle Ass'y	—
1-10	PSPAHA392WJZZ	J	Spacer(T/B), x2	AC	6-1	LANGTA138WJFW	J	Reinforcement Angle	AM
1-11	RSP-ZA063WJZZ	J	Speaker Box(R)	AZ	6-2	PSPAGA219WJZZ	J	Spacer, x1	AC
1-12	RSP-ZA064WJZZ	J	Speaker Box(L)	AZ	7	LCHSMA115WJK	J	Chassis Frame(R)	AL
1-13	TLABZA464WJZZ	J	"POP" Label	AD	8	LCHSMA119WJK	J	Chassis Frame(L)	AK
1-14	TLABZA635WJZZ	J	"Energy Star" Label	AC	9	GCOVAA813WJK	J	Terminal Cover(R)	AL
1-15	LHLDWA045WJZZ	J	Holder	AD	10	GCOVAA653WJK	J	Terminal Cover(L)	AM
1-16	RCORFA038WJZZ	J	Core, x1	AH	11	GCOVAA659WJK	J	Jack Cover	AE
2	CCABBA402WJ01	J	Cabinet B Ass'y	BB	12	HiNDPA912WJSA	J	Model Label	AF
2-1	<i>Not Available</i>	—	Cabinet B	—	13	RCORFA045WJZZ	J	Core	AG
2-2	LANGFA085WJFW	J	Round Lock	AC	14	<i>Not Available</i>	—	Serial No. Label	—
2-3	TCAUHA044WJSC	J	Caution Label	AE	15	QCNW-C444WJQZ	J	Connecting Cord	AD
3	CDAi-A098WJ01	J	Stand Ass'y	BR	16	QCNW-C784WJQZ	J	Connecting Cord	AT
3-1	GDAi-A098WJSA	J	Stand, Base	BA	17	QCNW-C785WJQZ	J	Connecting Cord	AQ
3-2	CDAi-A097WJ01	J	Stand Joint Ass'y	BC	18	QCNW-C786WJQZ	J	Connecting Cord	AR
3-2-1	<i>Not Available</i>	—	Stand Joint	—	19	QEARZA069WJZZ	J	Grounding Part	AH
3-2-2	PSPAZA083WJZZ	J	Cushion Spacer, x2	AB	20	LX-BZ3442CEF9	J	Screw, x4	AB
3-3	GCOVAA662WJSA	J	Stand Grip	AK	21	XBBS740P06000	J	Screw, x4	AA
3-4	GCOVAA663WJSA	J	Support Cover	AP	22	XBBS930P05000	J	Screw, x3	AA
3-5	GDAI-A101WJSA	J	Support	AS	23	XBPS730P06JS0	J	Screw, x2	AA
3-6	GLEGGA010WJZZ	J	Rubber Leg, x6	AC	24	XBPS730P12JS0	J	Screw, x9	AA
3-7	JHNDPA008WJSA	J	Stand Handle	AX	25	XEBS940P16000	J	Screw, x12	AB
3-8	LANGGA016WJF7	J	Swivel Base	AP	26	XEBSN30P08000	J	Screw, x6	AA
3-9	LANGHA004WJFW	J	Base Angle, x2	AE					
3-10	LX-BZA019WJFN	J	Screw, x2	AB					
3-11	LX-EZA008WJFN	J	Screw, x1	AB					
3-12	LX-NZA001WJFN	J	Nut, x1	AD					
3-13	MHNG-A048WJFW	J	Swivel Hinge	AS					
3-14	XCBS950P25000	J	Screw, x4	AC					
3-15	XCSSN50P20000	J	Screw, x4	AB					
3-16	XEBS940P10000	J	Screw, x6	AB					
3-17	XESEN40P10000	J	Screw, x6	AB					
3-18	XUSSN40P20000	J	Screw, x4	AA					
3-19	XWHS950-16120	J	Washer, x4	AB					
4	CCOVAA819WJ01	J	Top Cover Ass'y	AS					
4-1	<i>Not Available</i>	—	Top Cover	—					
4-2	JBTN-A087WJKC	J	Operation Button	AH					
4-3	JBTN-A088WJKC	J	Power Button	AG					
4-4	LHLDZA027WJKZ	J	Power Button Holder	AE					
4-5	MSPRCA014WJFW	J	Spring, for Power Button	AB					
4-6	XEBSN30P08000	J	Screw, x2	AA					
5	<i>Not Available</i>	—	20" LCD Panel Unit Ass'y	—					
5-1	RLCDTA031WJZZ	J	20" LCD Panel Unit	CZ					
5-2	<i>Not Available</i>	—	Back Shield Ass'y	—					
5-2-1	PSLDMA448WJFW	J	Back Shield	AW					
5-2-2	LHLDZA367WJKZ	J	Lamp Holder(Bottom)-Right	AH					
5-2-3	LHLDZA368WJKZ	J	Lamp Holder(Bottom)-Left	AH					
5-2-4	PMLT-A078WJZZ	J	Light Shielding Spacer, x2	AE					
5-2-5	PMLT-A098WJZZ	J	Light Shielding Spacer, x4	AC					
5-2-6	PSHEPA205WJZZ	J	Reflection Sheet(Top)	AH					
5-2-7	PSHEPA206WJZZ	J	Reflection Sheet(Bottom)	AK					
5-2-8	PSPAGA196WJZZ	J	Spacer, x1	AC					
5-2-9	TCAUZA031WJZZ	J	Caution Label	AB					
△ 5-3	KLMP-A034WJZZ	J	Lamp Unit, x6	AX					
5-4	LHLDZA365WJKZ	J	Lamp Holder(Top), x2	AL					
5-5	PCOVUA035WJZZ	J	Diffusion Plate	AY					
5-6	PSHEPA203WJZZ	J	Prism Sheet(H)	BB					
5-7	PSHEPA204WJZZ	J	Diffusion Sheet	AM					

CABINET AND MECHANICAL PARTS



Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
SUPPLIED ACCESORIES									
▲	LHLDWA002WJSA	J	Cable Clamp, x1	AD		SPAKCB332WJZZ	—	Packing Case	—
	LHLDWA037WJSA	J	Cable Holder, x1	AE		SPAKFA532WJZZ	—	Packing Material (Accessories)	—
	QACCDA037WJPA	J	AC Cord	AV		SPAKPA416WJZZ	—	Wrapping Paper	—
	QCNWG0003CEPA	J	Antenna Cable	AM		SPAKXA638WJZZ	—	Buffer Material	—
	QCNWGA050WJPZ	J	RGB Cable	AR		SSAKA0170CEZZ	—	Polyethylene Bag	—
	RRMCGA293WJSA	J	Infrared R/C Unit	AT		SSAKA0219CEZZ	—	Polyethylene Bag	—
	TCADEA028WJN1	J	Registration Card	AD		TLABK0001TAZZ	—	No. Label	—
▲	TINS-B253WJZZ	J	Operation Manual	AS					
	UADP-A065WJPZ	J	AC Adapter	BR					

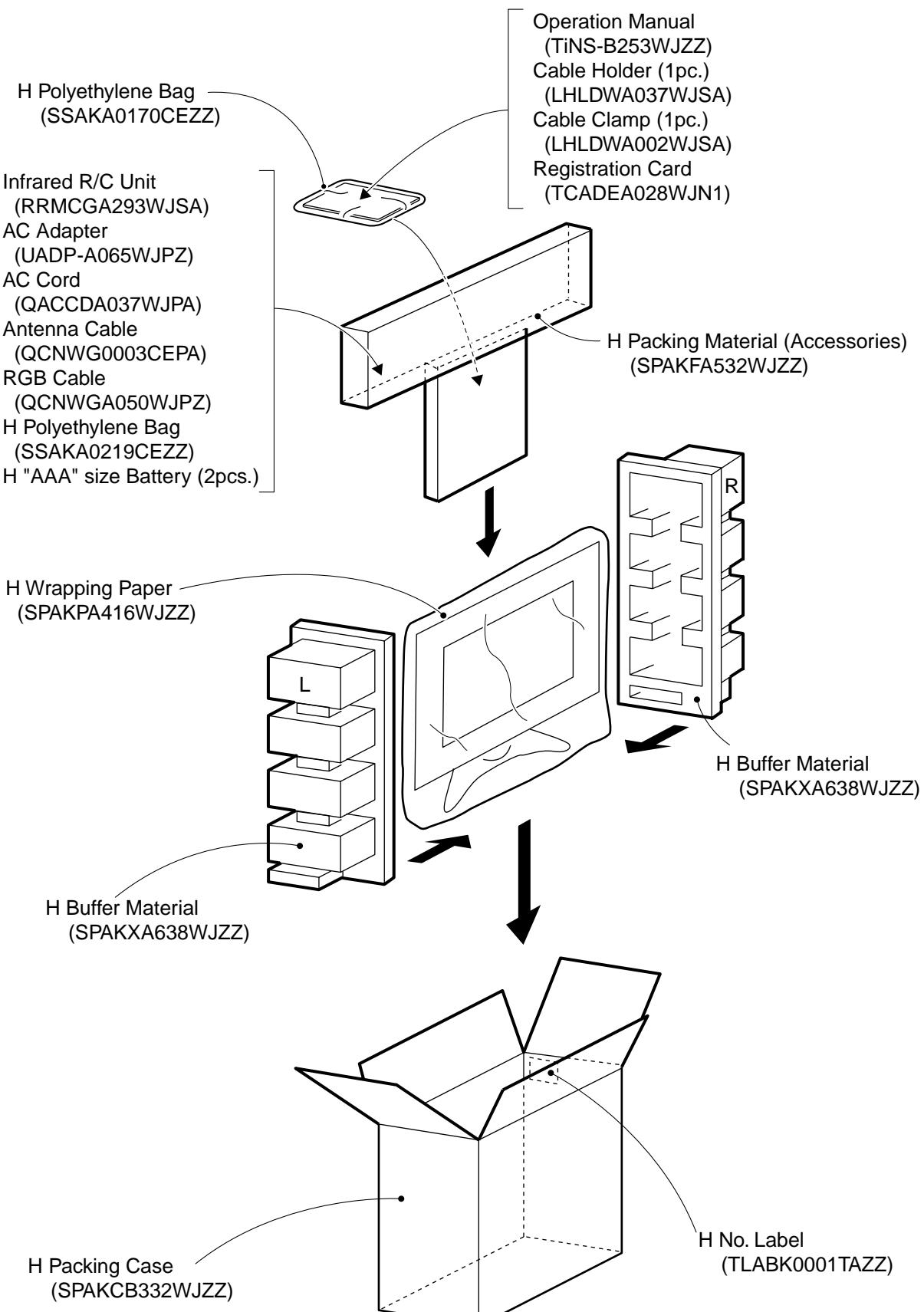
SERVICE JIGS (USE FOR SERVICING)

QCNW-C458WJQZ	J	Extension Cable 80-pin (SC1201-LCD)	AM
QCNW-C459WJQZ	J	Extension Cable 60-pin (SC2001-SC3403)	AM
QCNW-C461WJQZ	J	Extension Cable 15-pin (SC701-P3704)	CD

PACKING PARTS (NOT REPLACEMENT ITEM)

SPAKCB332WJZZ	—	Packing Case	—
SPAKFA532WJZZ	—	Packing Material (Accessories)	—
SPAKPA416WJZZ	—	Wrapping Paper	—
SPAKXA638WJZZ	—	Buffer Material	—
SSAKA0170CEZZ	—	Polyethylene Bag	—
SSAKA0219CEZZ	—	Polyethylene Bag	—
TLABK0001TAZZ	—	No. Label	—

PACKING OF THE SET



H Not Replacement Item

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