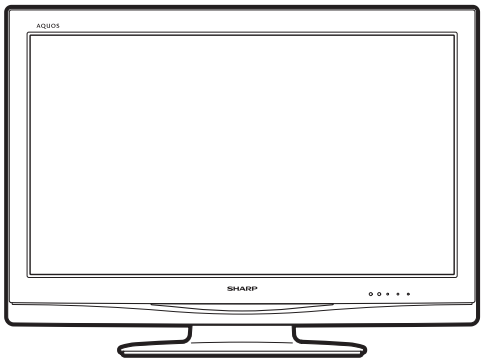
SHARP SERVICE MANUAL

No. SY7C1LC32D44U



LCD COLOR TELEVISION

MODEL LC-32D44U

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.

CONTENTS

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.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

SAFETY PRECAUTION

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 FUSE.

F7101 (250V 6.3A)
F7102 (250V 1A)

■BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

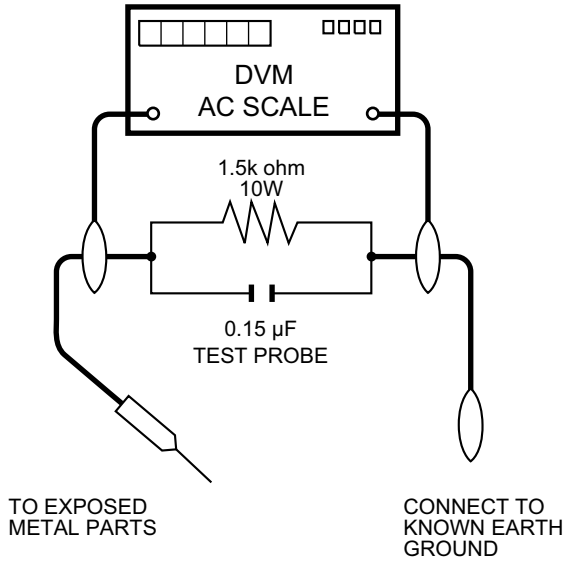
Before returning the receiver to the user, perform the following safety checks:

3. 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.
4. 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.
5. To be sure that no shock hazard exists, check for leakage current in the following manner.

- Plug the AC cord directly into a 120 volt AC outlet.
- 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 0.75 Vrms (this corresponds to 0.5 mA rms 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 color 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 List 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.

PRECAUTION: POUR LA PROTECTION CONTINUE CONTRE LES RISQUES D'INCENDIE, REMPLACER LE FUSIBLE

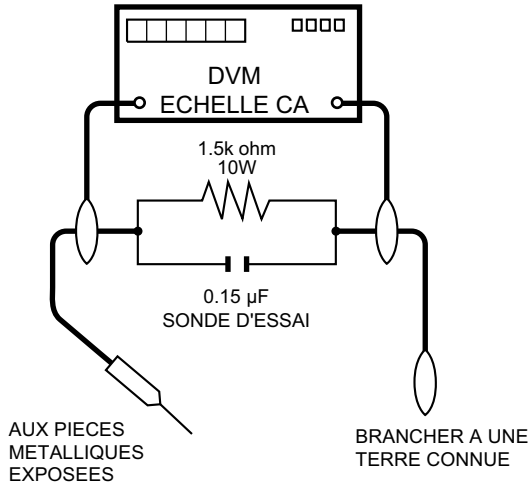
F7101 (250V 6.3A)
F7102 (250V 1A)

■ VERIFICATIONS CONTRE L'INCEN-DIE ET LE CHOC ELECTRIQUE

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

3. 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.
4. 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 résistancecapacité, les isolateurs mécaniques, etc.
5. S'assurer qu'il n'y ait pas de danger d'électrocution en vérifiant la fuite de courant, de la facon suivante:

- Brancher le cordon d'alimentation directem-ent à une prise de courant de 120V. (Ne pas utiliser de transformateur d'isolation pour cet essai).
- A l'aide de deux fils à pinces, brancher une résistance de 1.5 kΩ 10 watts en parallèle avec un condensateur de 0.15μF 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 5000Ω/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'adpatation non polarisée peut être utilisée dans le but de terminer ces vérifications.)
  La tension de pointe mesurèe ne doit pas dépasser 0.75V (correspondante au courant CA de pointe de 0.5mA).
  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 téléviseur ACL 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 "⚠" 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.

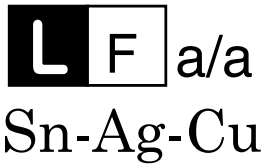
PRECAUTIONS FOR USING LEAD-FREE SOLDER

■Employing lead-free solder

- "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:

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



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

■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.

■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

PARTS CODE	PRICE RANK	PART DELIVERY	DESCRIPTION
ZHNDAi123250E	BL	J	ϕ0.3mm 250g (1roll)
ZHNDAi126500E	BK	J	ϕ0.6mm 500g (1roll)
ZHNDAi12801KE	BM	J	ϕ1.0mm 1kg (1roll)

PRECAUTIONS IN SERVICING THE HDCP-KEY ROM

Applied part: HDCP-KEY ROM
IC8451 RH-IXC373WJQZY (updated ROM)

The HDCP-KEY ROM shall be protected and managed for its information inside. In servicing this ROM, therefore, take the following information protection/management measures.

1) When disposing of the component parts and PWBs, destruct the IC itself in a proper way.
   (For repairing or replacing the component parts and PWBs as well as clearing those in stock)
2) In storing the component parts, protect and manage them against theft and disclosure.
   (For storing the service parts, service units, etc.)

CHAPTER 1. SPECIFICATIONS

[1] SPECIFICATIONS

Item			Model: LC-32D44U
LCD panel			32" screen size class Advanced Super View & BLACK TFT LCD (Diagonal Measurement : $31\frac{1}{2}$")
Resolution			1,049,088 pixels (1,366 × 768)
TV Function	TV-standard (CCIR)		American TV Standard ATSC/NTSC System
	Receiving Channel	VHF/UHF	VHF 2-13ch, UHF 14-69ch
		CATV	1-135ch (non-scrambled channel only)
		Digital Terrestrial Broadcast (8VSB)	2-69ch
		Digital cable[*1] (64/256 QAM)	1-135ch (non-scrambled channel only)
	Audio multiplex		BTSC System
Audio out			10W × 2
Terminals	Rear	INPUT 1	AV in, COMPONENT in
		INPUT 2	AV in, S-VIDEO in
		INPUT 3	COMPONENT in
		INPUT 4	HDMI in with HDCP
		INPUT 5	Audio in, HDMI in with HDCP
		INPUT 6	15-pin mini D-sub female connector, Audio in (Ø 3.5 mm jack)
		ANT/CABLE	75 Ω Unbalance, F Type ×1 for Analog (VHF/UHF/CATV) and Digital (AIR/CABLE)
		DIGITAL AUDIO OUTPUT	Optical Digital audio output ×1 (PCM/Dolby Digital)
		OUTPUT	Audio out
		SERVICE	Software update
OSD language			English/French/Spanish
Power Requirement			AC 120 V, 60 Hz
Power Consumption			135 W (0.3 W Standby with AC 120V)
Weight		TV + stand	29.8 lbs./13.5 kg
		TV only	25.4 lbs./11.5 kg
Dimension[*2] (W × H × D)		TV + stand	$30\frac{9}{16}$ × $22\frac{41}{64}$ × $9\frac{1}{16}$ inch
		TV only	$30\frac{9}{16}$ × $20\frac{19}{32}$ × $3\frac{45}{64}$ inch
Operating temperature			+ 32°F to + 104°F (0°C to + 40°C)

[*1] Emergency alert messages via Cable are unreceivable.
[*2] The dimensional drawings are shown on the Spanish operation manual.

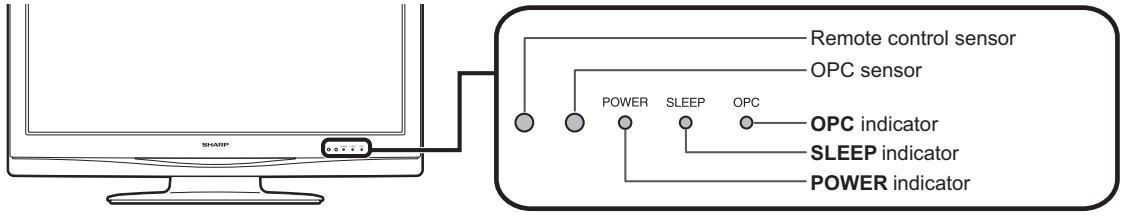
- As part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual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

CHAPTER 2. OPERATION MANUAL

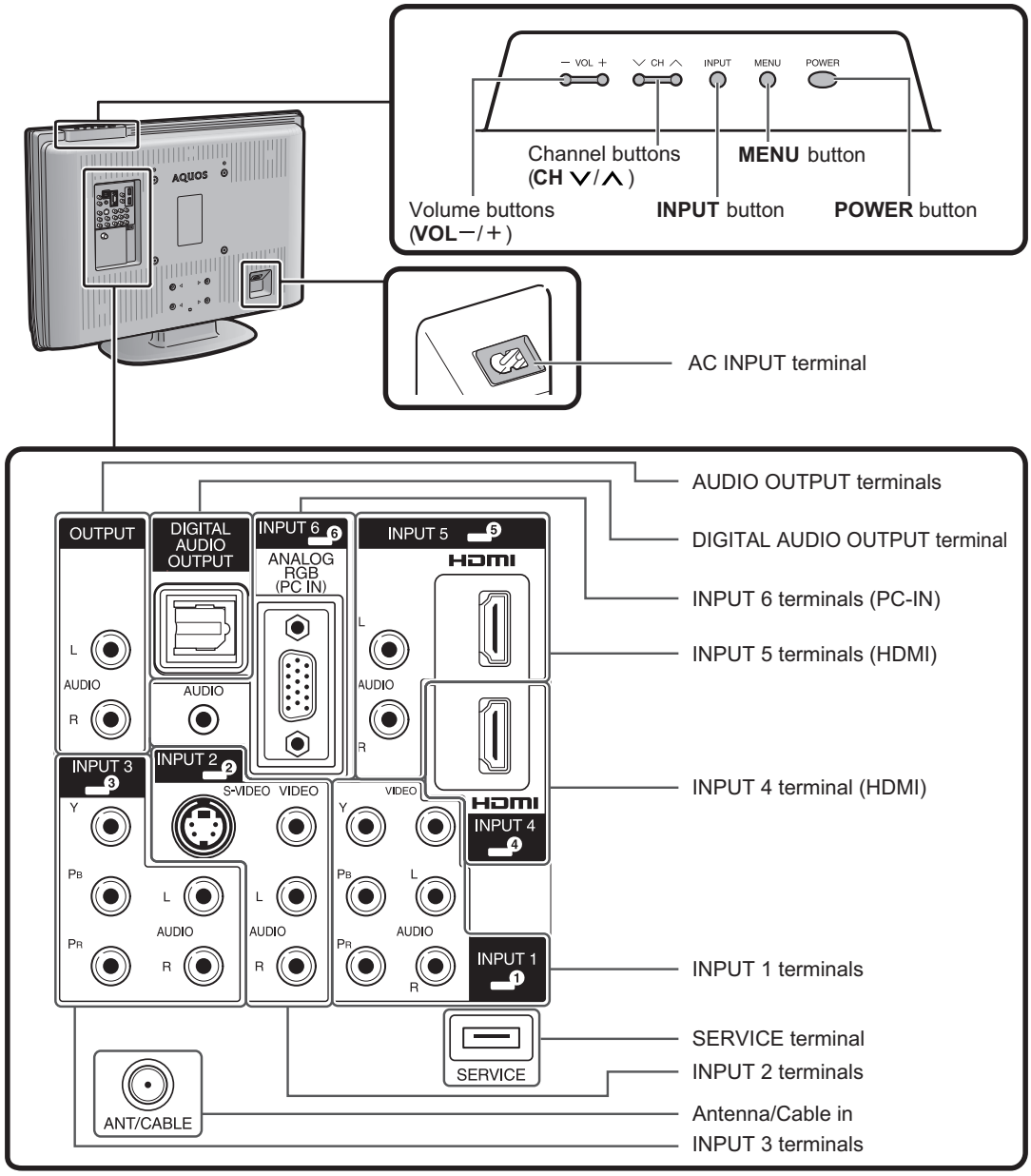
[1] OPERATION MANUAL

Part Names

TV (Front)

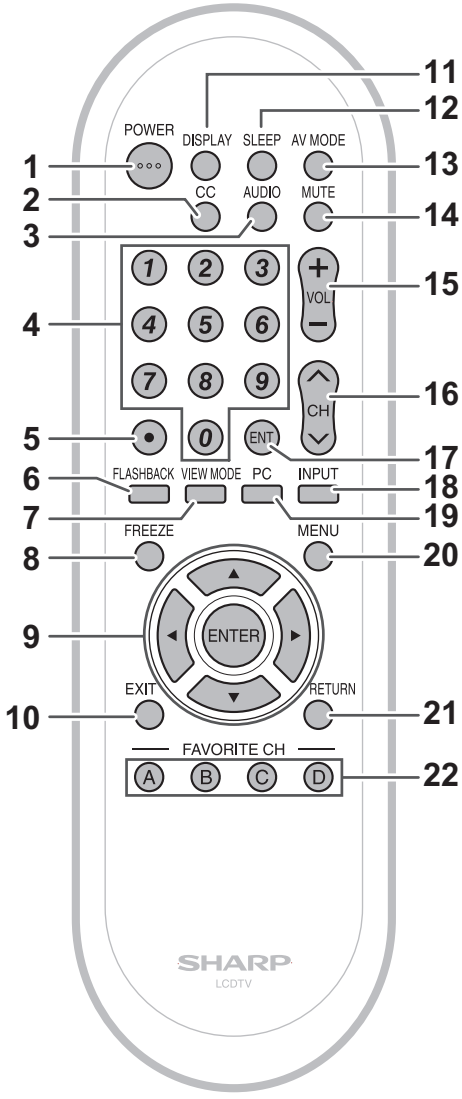


TV (Top/Rear)



Part Names

Remote Control Unit



1 **POWER:** Switch the TV power on or enters standby.

2 **CC:** Display captions from a closed-caption source.

3 **AUDIO:** Selects the MTS/SAP or the audio mode during multi-channel audio broadcasts.

4 **0–9:** Set the channel.

5 **• (DOT):**

6 **FLASHBACK:** Return to the previous channel or external input mode.

7 **VIEW MODE:** Select the screen size.

8 **FREEZE:** Set the still image. Press again to return to normal screen.

9 **▲/▼/◀/▶, ENTER:** Select a desired item on the screen.

10 **EXIT:** Turn off the menu screen.

11 **DISPLAY:** Display the channel information.

12 **SLEEP:** Set the sleep timer.

13 **AV MODE:** Select an audio or video setting. (When the input source is TV, INPUT 1, 2 or 3: STANDARD, MOVIE, GAME, USER, DYNAMIC (Fixed), DYNAMIC. When the input source is INPUT 4, 5 or 6: STANDARD, MOVIE, GAME, PC, USER, DYNAMIC (Fixed), DYNAMIC)

14 **MUTE:** Mute the sound.

15 **VOL+/−:** Set the volume.

16 **CH ∧/∨ :** Select the channel.

17 **ENT:** Jumps to a channel after selecting with the **0–9** buttons.

18 **INPUT:** Select a TV input source. (TV, INPUT 1, INPUT 2, INPUT 3, INPUT 4, INPUT 5, INPUT 6)

19 **PC:** Quickly access to PC mode.

20 **MENU:** Display the menu screen.

21 **RETURN:** Return to the previous menu screen.

22 **FAVORITE CH**

A, **B**, **C**, **D:** Select 4 preset favorite channels in 4 different categories.

While watching, you can toggle the selected channels by pressing A, B, C and D.

NOTE

• When using the remote control unit, point it at the TV.

QUICK REFERENCE

Attaching/Detaching the Stand

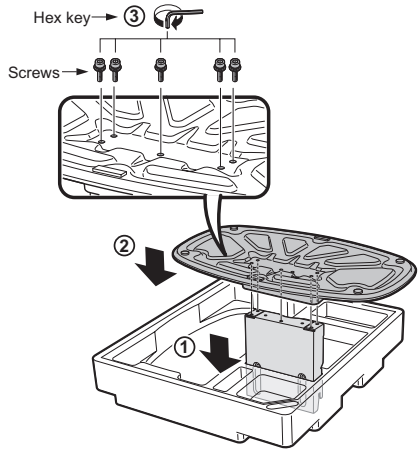
- Before attaching (or detaching) the stand, unplug the AC cord from the AC INPUT terminal.
- Before performing work spread cushioning over the base area to lay the TV on. This will prevent it from being damaged.

CAUTION

- **Attach the stand in the correct direction.**
- **Do not remove the stand from the TV unless using an optional wall mount bracket to mount it.**
- **Be sure to follow the instructions. Incorrect installation of the stand may result in the TV falling over.**

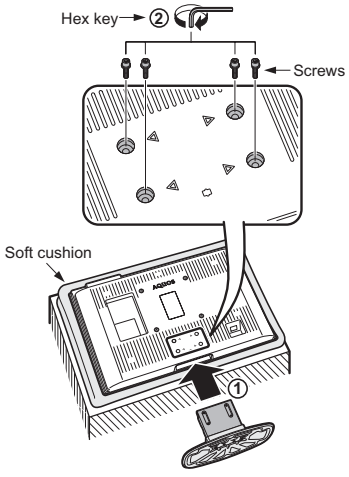
1 Confirm that there are 9 screws and a hex key supplied with the stand unit.

2 Attach the supporting post for the stand unit onto the base using the box for the stand unit as shown below.



3 ① Insert the stand into the openings on the bottom of the TV.

② Insert and tighten the 4 screws into the 4 holes on the rear of the TV.



NOTE

- To detach the stand, perform the steps in reverse order.

Setting the TV on the Wall

CAUTION

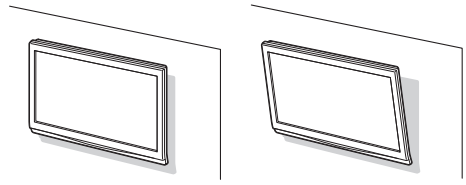
- **This TV should be mounted on the wall only with the AN-37AG5 (SHARP) wall mount bracket. The use of other wall mount brackets may result in an unstable installation and may cause serious injuries.**
- **Installing the TV requires special skill that should only be performed by qualified service personnel. Customers should not attempt to do the work themselves. SHARP bears no responsibility for improper mounting or mounting that results in accident or injury.**

Using an optional bracket to mount the TV

- You can ask a qualified service professional about using an optional AN-37AG5 bracket to mount the TV to the wall.
- Carefully read the instructions that come with the bracket before beginning work.

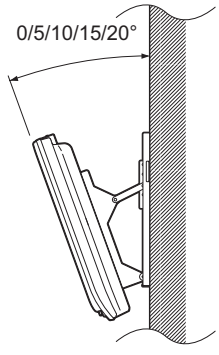
Hanging on the wall

AN-37AG5 wall mount bracket.
(See the bracket instructions for details.)



Vertical mounting Angular mounting

About setting the TV angle



LC-32D44U

- The center of the display: $^{11}/_{64}$ inch (4.0 mm) under the "A" position.
- Refer to the operation manual of AN-37AG5 for details.

NOTE

- Detach the cable clamp on the rear of the TV when using the optional mount bracket.
- Due to the terminal configuration on this TV, when you wall-mount this model, make sure there is enough space between the wall and the TV for the cables.
- To use this TV mounted on a wall, first remove the adhesive tape at the 4 locations on the rear of the TV, and then use the screws supplied with the wall mount bracket to secure the bracket to the rear of the TV.

Appendix

Troubleshooting

Problem	Possible Solution
• No power	• Check if you pressed **POWER** on the remote control unit. If the indicator on the TV does not light up, press **POWER** on the TV. • Is the AC cord disconnected? • Has the power been turned on?
• Unit cannot be operated.	• External influences such as lightning, static electricity, may cause improper operation. In this case, operate the unit after first turning off the power of the TV or unplugging the AC cord and replugging it in after 1 or 2 minutes.
• Remote control unit does not operate.	• Are batteries inserted with polarity (+,—) aligned? • Are batteries worn out? (Replace with new batteries.) • Are you using it under strong or fluorescent lighting? • Is a fluorescent light illuminated near the remote control sensor?
• Picture is cut off/with sidebar screen.	• Is the image position correct? • Are screen mode adjustments such as picture size made correctly?
• Strange color, light color, or color misalignment	• Adjust the picture tone. • Is the room too bright? The picture may look dark in a room that is too bright. • Check the input signal setting.
• Power is suddenly turned off.	• Is the sleep timer set? • Check the power control settings. • The unit's internal temperature has increased. Remove any objects blocking vent or clean.
• No picture	• Is connection to other components correct? • Is correct input signal source selected after connection? • Is the correct input selected? • Is picture adjustment correct? • Is "On" selected in "Audio Only"? • Is a non-compatible signal being input?
• No sound	• Is the volume too low? • Is "Variable" selected in "Output Select"? • Have you pressed **MUTE** on the remote control unit?
• The TV sometimes makes a cracking sound.	• This is not a malfunction. This happens when the cabinet slightly expands and contracts according to change in temperature. This does not affect the TV's performance.

Troubleshooting-Digital Broadcasting

The error message about reception of broadcast

The example of an error message displayed on a screen	Error code	Possible Solution
• Failed to receive broadcast.	**E202**	• Check the antenna cable. Check that the antenna is correctly setup.
• No broadcast now.	**E203**	• Check the broadcast time in the program guide.

Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the Liquid Crystal panel to malfunction.
  Storage temperature: −4°F to +140°F (−20°C to +60°C)

PC Compatibility Chart

It is necessary to set the PC correctly to display XGA and WXGA signal.

PC	Resolution		Horizontal Frequency	Vertical Frequency	VESA Standard	
PC	VGA	720 x 400	31.5 kHz	70 Hz	——	*
		640 x 480	31.5 kHz	60 Hz	O	
			37.9 kHz	72 Hz	O	
			37.5 kHz	75 Hz	O	
	SVGA	800 x 600	35.1 kHz	56 Hz	O	*
			37.9 kHz	60 Hz	O	
			48.1 kHz	72 Hz	O	
			46.9 kHz	75 Hz	O	*
	XGA	1024 x 768	48.4 kHz	60 Hz	O	
			56.5 kHz	70 Hz	O	
			60.0 kHz	75 Hz	O	
	WXGA	1360 x 768	47.7 kHz	60 Hz	O	

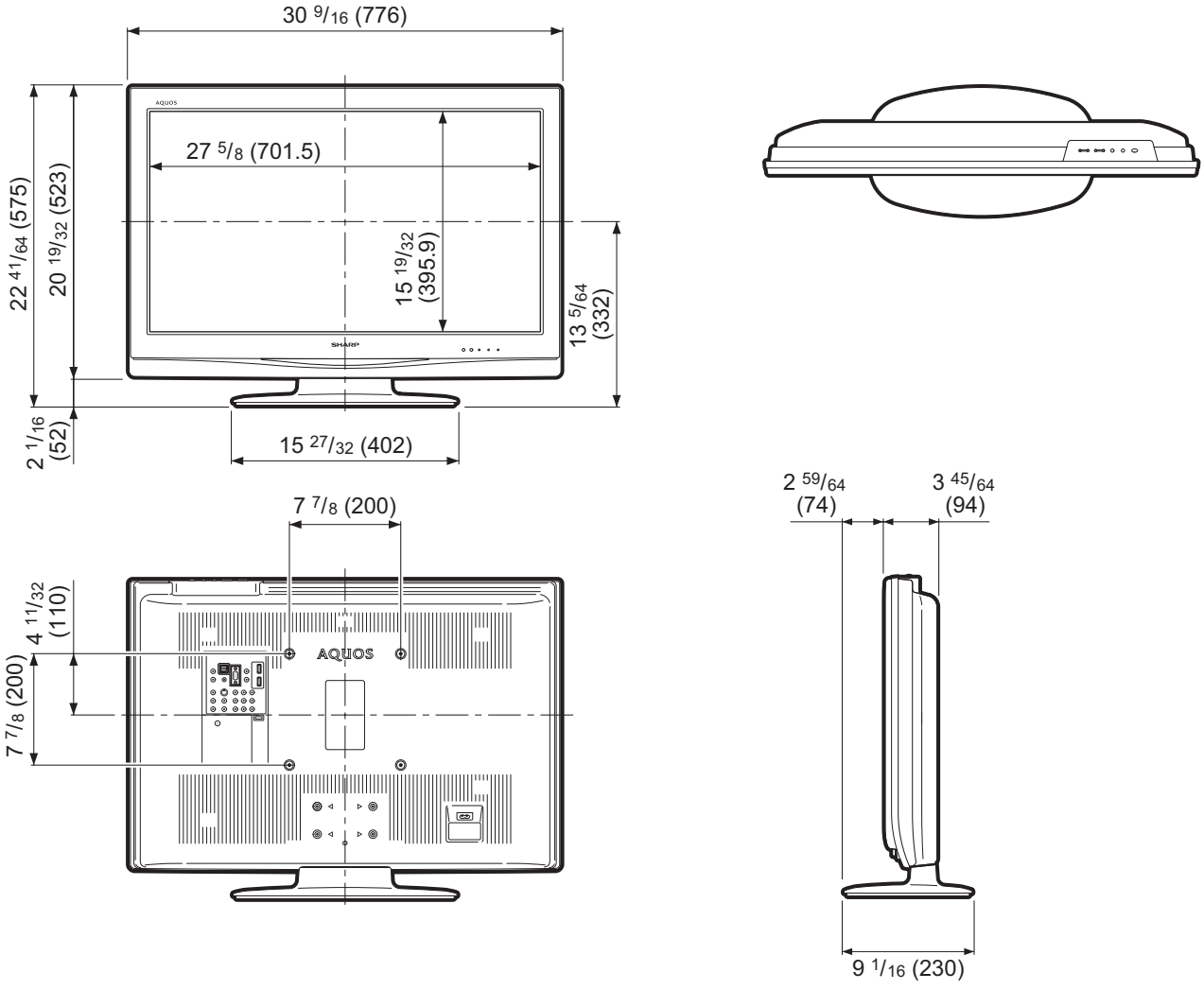
*These 3 formats are not supported by the analog RGB terminal.

CHAPTER 3. DIMENSIONS

[1] DIMENSIONS

LC-32D44U

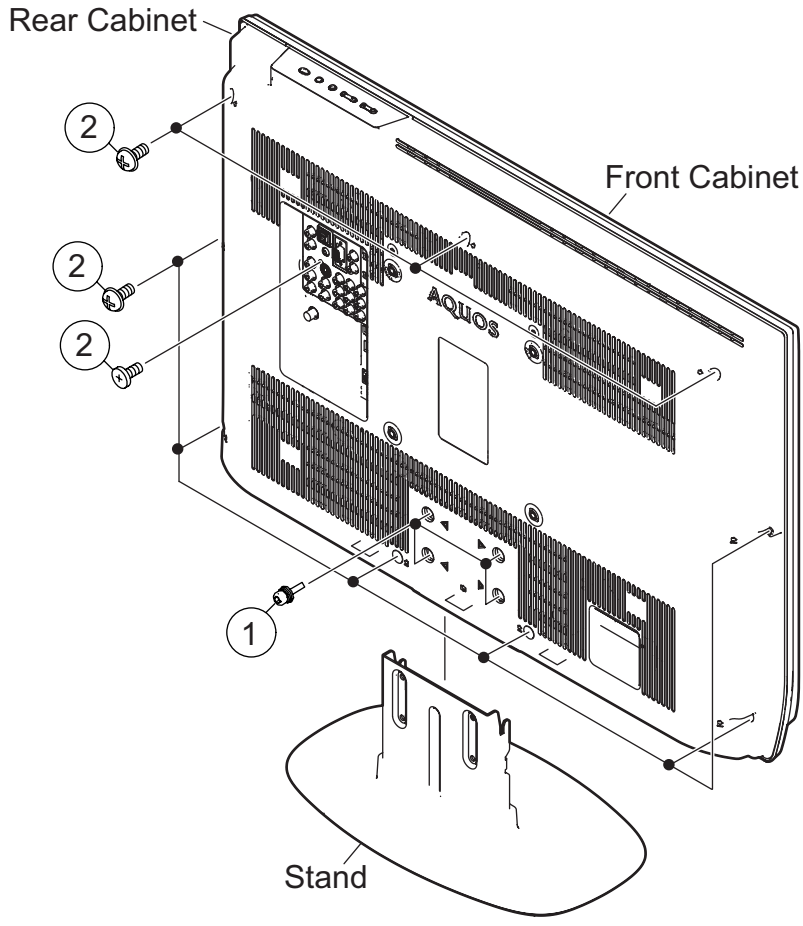
Unit: inch (mm)



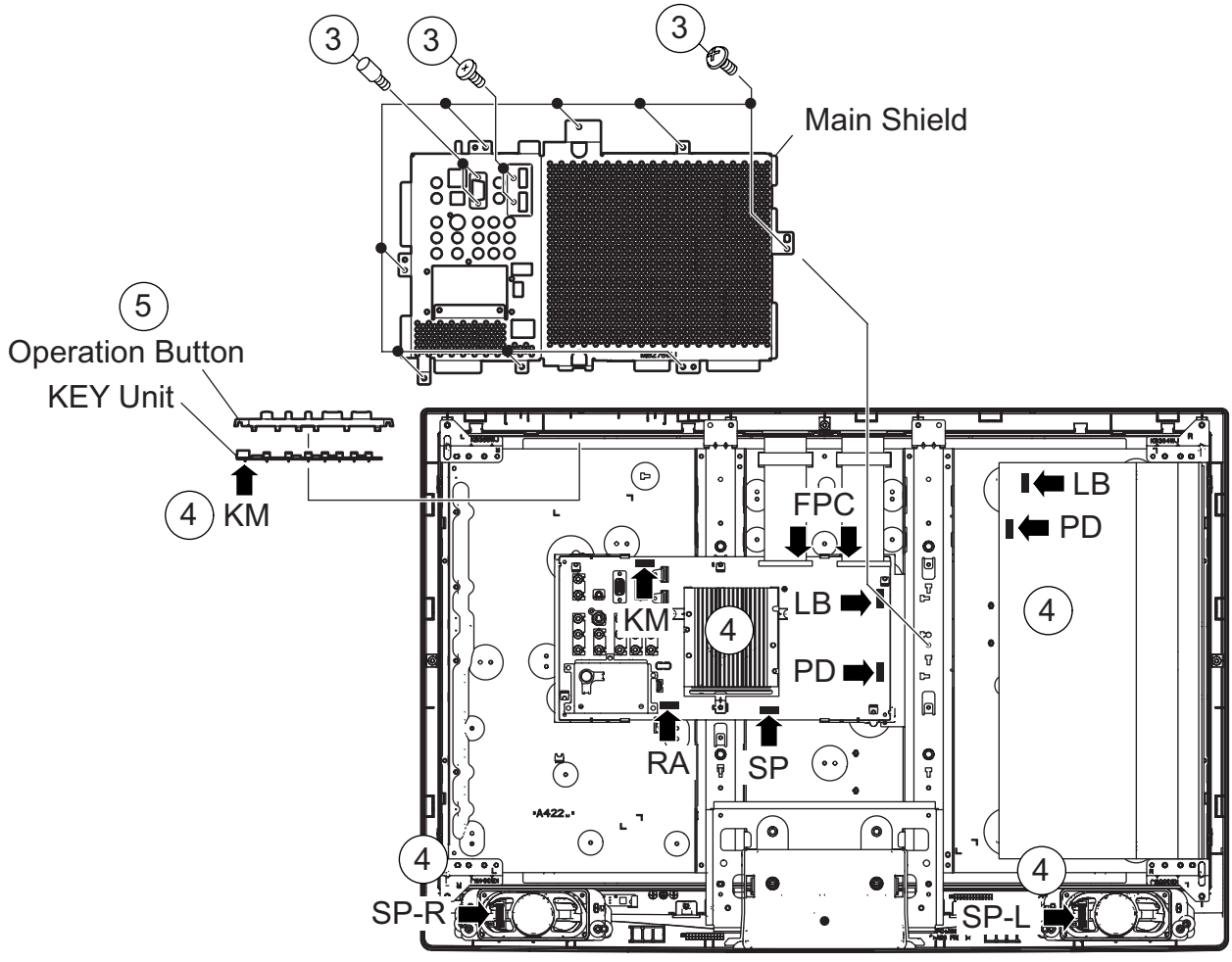
CHAPTER 4. REMOVING OF MAJOR PARTS

[1] REMOVING OF MAJOR PARTS

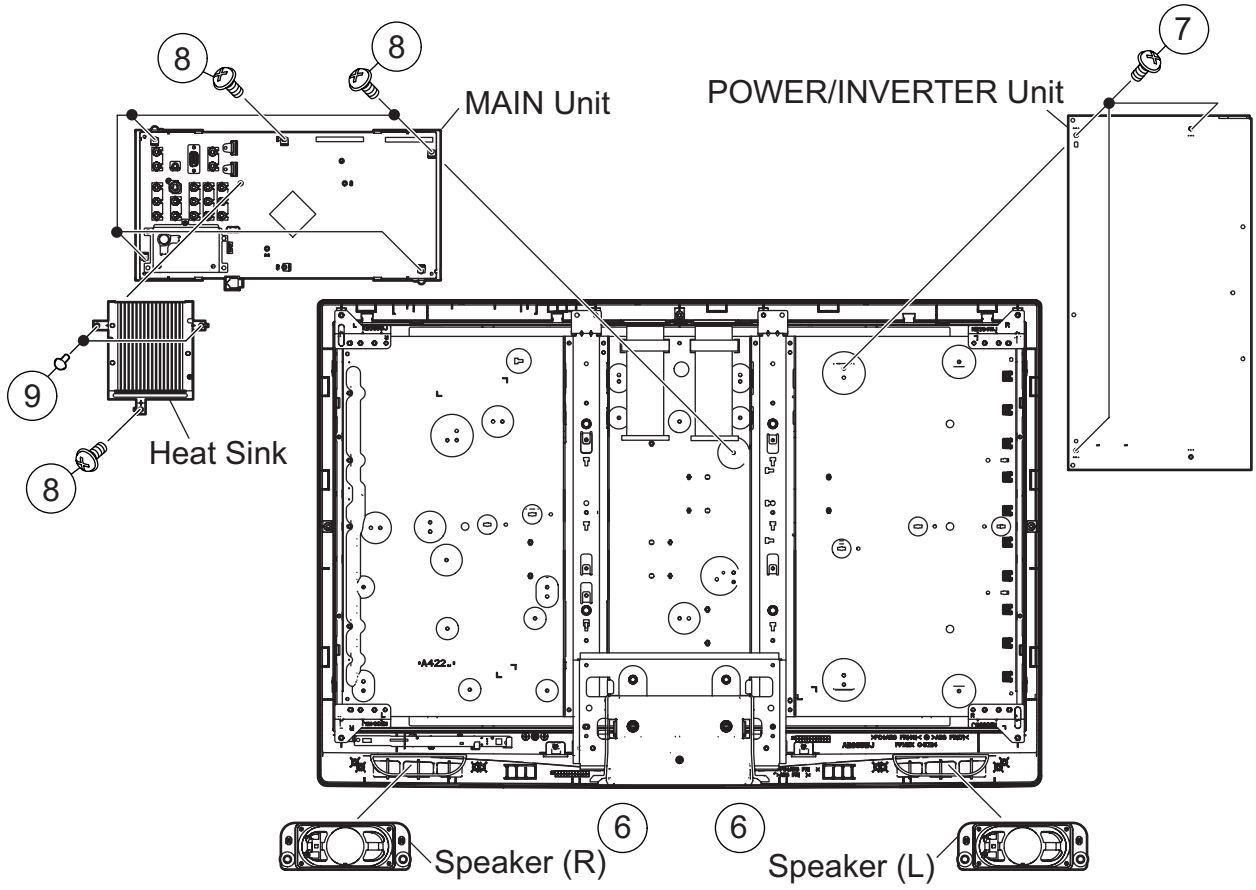
1. Remove the 4 lock screws and detach the Stand.
2. Remove the 3 lock screws, 6 lock screws, 1 lock screw and detach the Rear Cabinet.



3. Remove the 8 lock screws, 2 lock screws, 2 lock shafts and detach the Main Shield.
4. Disconnect all the connectors from all the PWBs.
5. Remove the KEY Unit Ass'y.



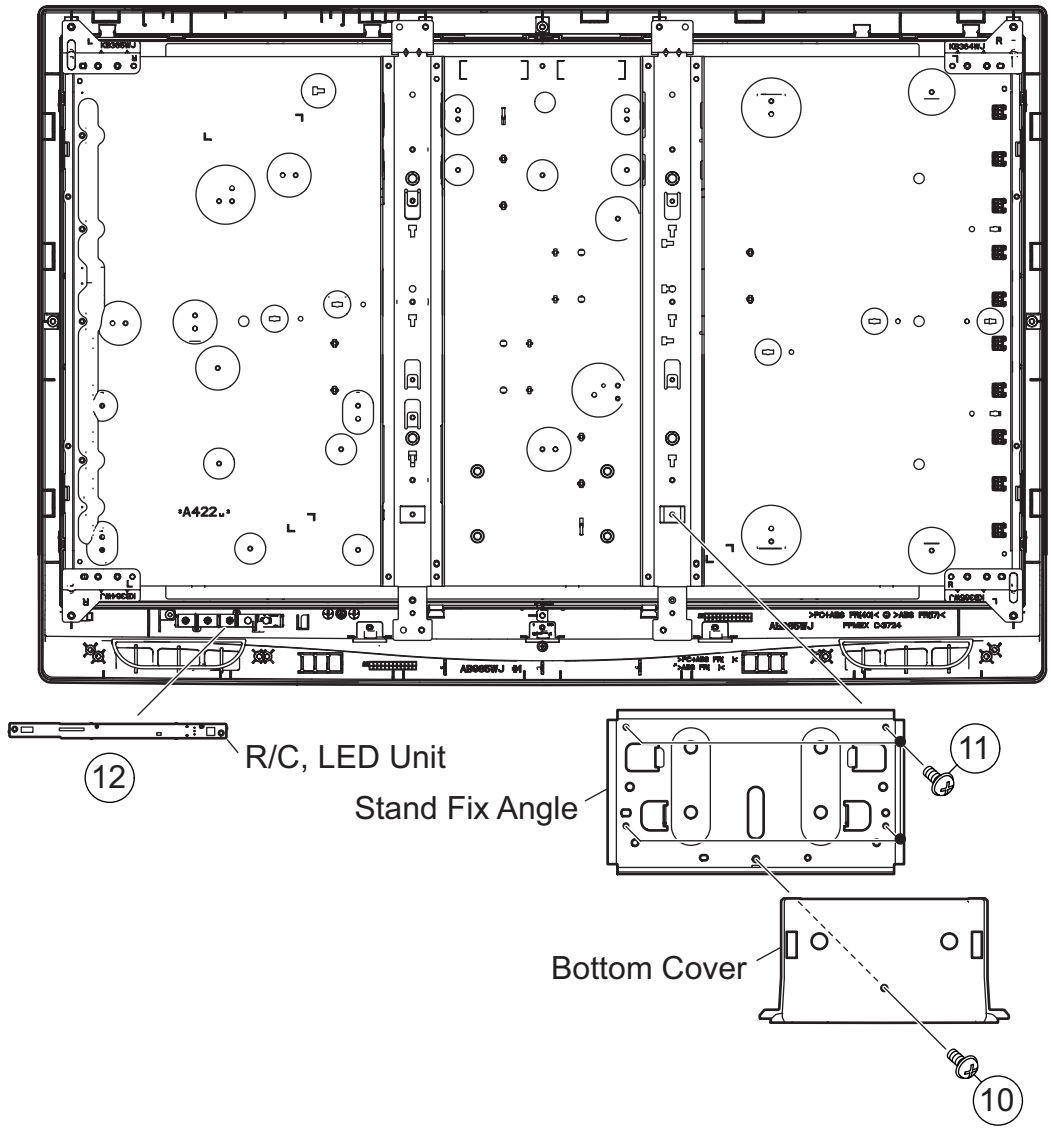
6. Remove the Speaker (L) (R).
7. Remove the 3 lock screws and detach the POWER/INVERTER Unit.
8. Remove the 4 lock screws, 2 lock screws and detach the MAIN Unit.
9. Remove the 2 lock rivets and detach the Heat Sink.



10.Remove the 1 lock screw and detach the Bottom Cover.

11.Remove the 4 lock screws and detach the Stand Fix Angle.

12.Remove the R/C, LED Unit.

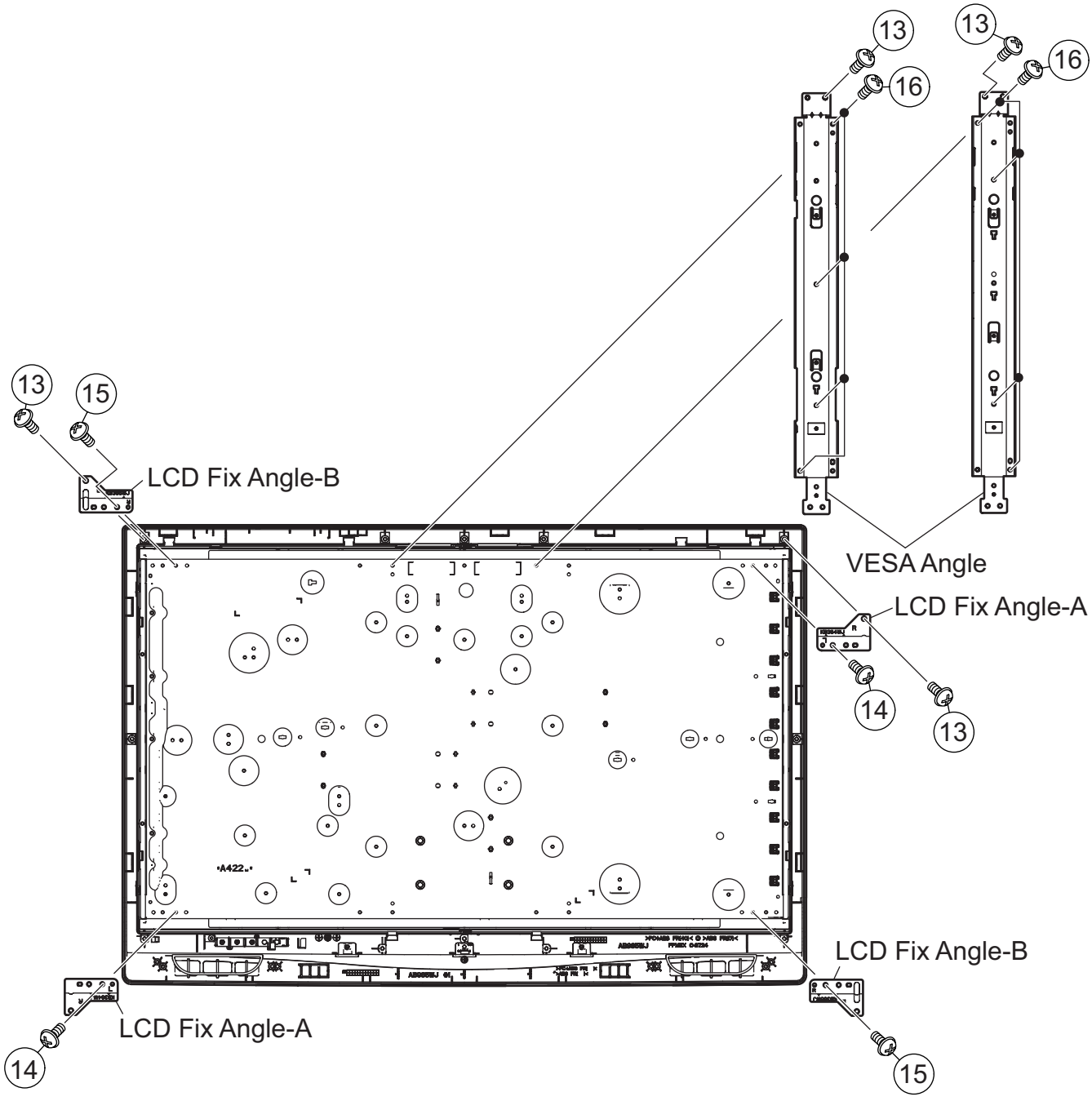


13.Remove the 4 lock screws and detach the LCD Panel Module.

14.Remove the 2 lock screws and detach the LCD Fix Angle-A.

15.Remove the 2 lock screws and detach the LCD Fix Angle-B.

16.Remove the 8 lock screws and detach the VESA Angle.



CHAPTER 5. ADJUSTMENT

[1] ADJUSTMENT PROCEDURE

The adjustment values are set to the optimum conditions at the factory before shipping. If a value should become improper or an adjustment is required due to part replacement, make an adjustment according to the following procedure.

1. After replacement of any PWB unit and/or IC for repair, please note the following.

• When replacing the following units, make sure to prepare the new units loaded with updated software.

MAIN Unit: DUNTKE450FM01

2. Upgrading of each microprocessor software

CAUTION: Never “POWER OFF” the unit when software upgrade is ongoing.

Otherwise the system may be damaged beyond recovery.

2.1. Software version upgrade

The model employs the following software.

- Main software
- Monitor microprocessor software.
- Panel timing controller software.

The main software, monitor microprocessor software, and Panel timing controller software can be upgraded by using a general-purpose USB Memory.

The followings are the procedures for upgrading, explained separately for the main software, monitor microprocessor software, and Panel timing controller software.

2.2. Main software version upgrade

2.2.1 Get ready before you start

- USB Memory of 128MB or higher capacity.
- PC running on Windows 98/98SE/ME/2000/XP operating system.
- USB Memory reader/writer or PC with a USB port.
- The file system of a USB memory is FAT. (FAT32 is not applied)
- Use the USB memory without other functions. (lock and memory reader...etc)

2.2.2 Preparations

To upgrade the main software, it is necessary to get ready the USB Memory for version upgrade before you start.

Follow the steps below and create the USB Memory for version upgrade.

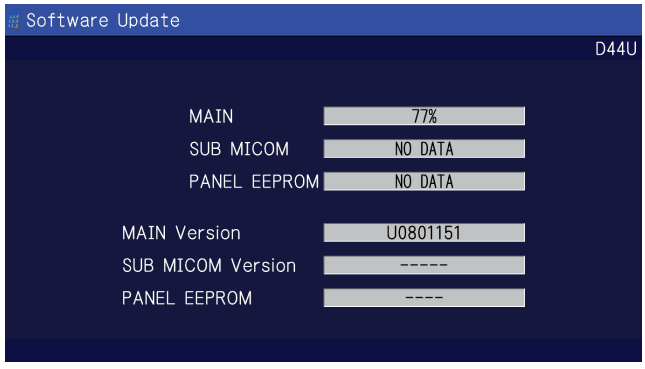
1. Copy the file D44UAxxx.USB (named temporarily) for version upgrade to the root directory (folder) of the USB Memory.

NOTE: In the USB Memory drive, do not store other folders or unrelated files, or more than one file for version upgrade.

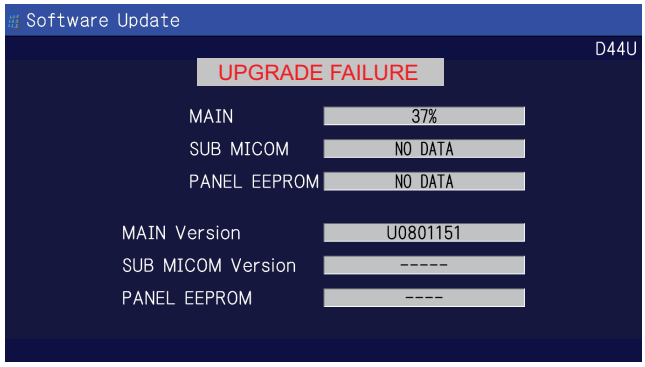
Now the USB Memory for version upgrade is ready.

2.2.3 How to upgrade the software

1. Unplug the AC cord.
2. Insert the USB Memory for version upgrade (prepared as above) into the service socket located Right side from center at terminals, above HDMI4 terminal in the rear of the unit.
3. Plug in the AC cord with power button pressed down after 5 seconds, unpress the power button.
4. After the unit startup, the system upgrade screen as shown below appears within 20-40 seconds.

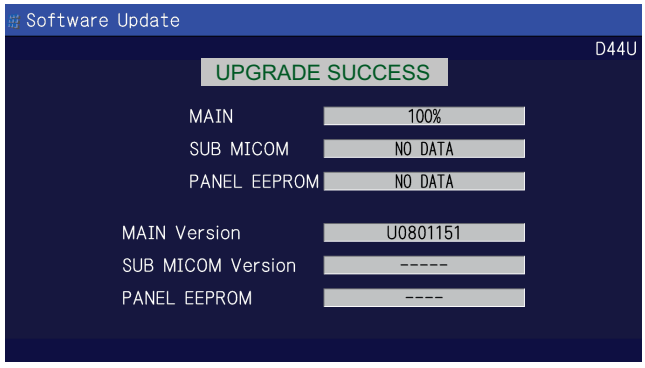


5. Even a single failure in the process will trigger the upgrade failure screen.



NOTE: In the event of a failure, repeat the upgrade process. If the process repeatedly fails, it is likely that the hardware need fixing.

6. Upon completion of the whole process, the upgrade success screen as shown below appears. You can check the new software version on this screen. The version information appears after the upgrade is complete.



7. Unplug the AC cord and remove the USB Memory for version upgrade.
8. Now the software version upgrade is complete.

NOTE: When you are done with the software version upgrade, start the set, go to the top page of the adjustment process screen and check the main software version information.

2.3. Monitor microprocessor software version upgrade

Create the USB memory for monitor microprocessor software version upgrade in the same manner as explained in the “Main software version upgrade”.

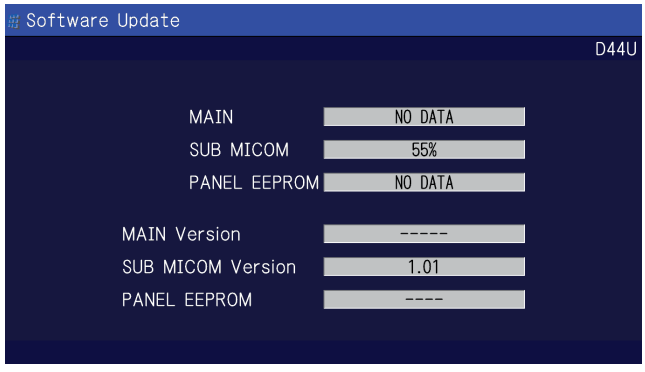
Copy the file D44UVAxxx.USB and D44UMxxx.BIN (named temporarily) for monitor microprocessor software version upgrade to the USB memory.

2.3.1 How to upgrade the software

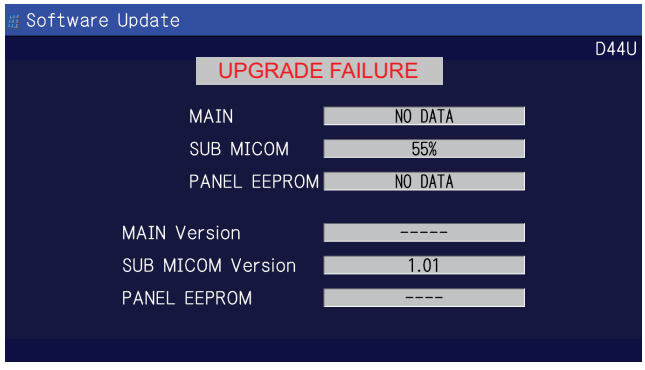
1. Unplug the AC cord.
2. Insert the USB memory for version upgrade (prepared as above) into the service socket located Right side from center at terminals, above HDMI4 terminal in the rear of the unit.
3. Plug in the AC cord with power button pressed down.
4. After 5 seconds, unpress the power button.

CAUTION:
- The moment this operation is done, the upgrading of the monitor microprocessor software starts. While the upgrade is ongoing, never power off the unit. Otherwise the upgrade will fail and the system may be serious damaged beyond recovery (inability to start).
- After the monitor microprocessor software is upgraded, also perform the 'Industry Init'.

5. After the unit startup, the upgrade starts. The power led will blink continuously. Also, an upgrade screen will be shown during a minor upgrade.

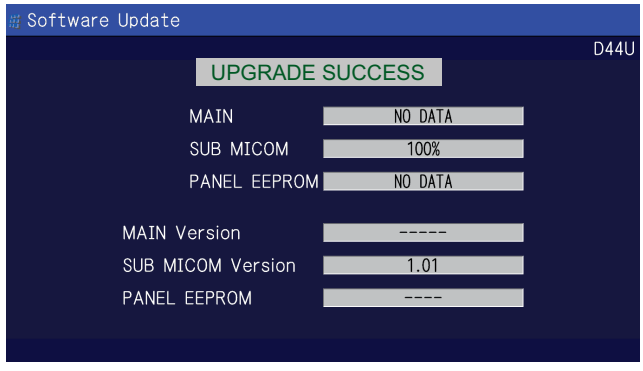


6. If the upgrade fails, power led will stop blinking. Also, the upgrade failure screen will be shown if upgrade screen was shown at 5.



NOTE: In the event of a transient failure, upgrade will be automatically retried up to three times. If the process repeatedly fails, hardware may be the cause.

7. Up on completion of the whole process, power and OPC LED will blink alternately. Also, the upgrade success screen will be shown if upgrade screen was shown at 5.



8. Unplug the AC cord and remove the USB Memory for version upgrade.
9. Now the software version upgrade is complete.

NOTE: When you are done with the software version upgrade, start the set, go to the top page of the adjustment process screen and check the monitor microprocessor software version information and panel size information.

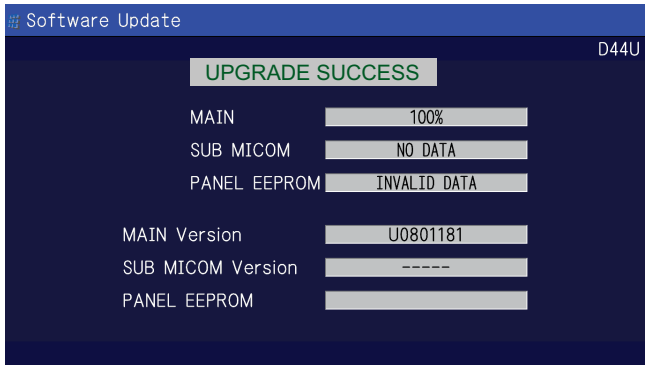
2.4. Upgrading Panel timing controller software

Create the USB memory for Panel timing controller software version upgrade in the same manner as explained in the “Main software version upgrade.”

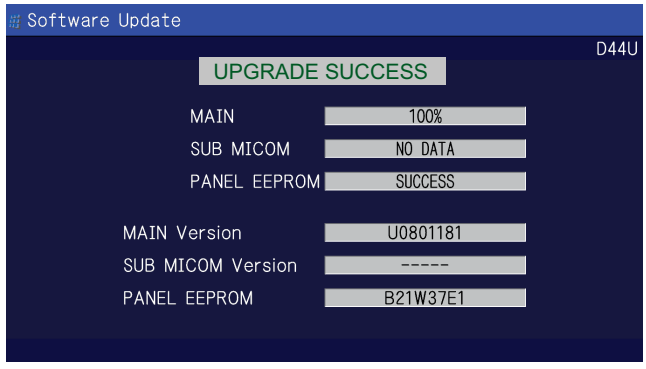
Copy the file D44UAxxx.USB and D44UAxxx.TCN to USB memory.

2.4.1 How to upgrade the software

1. Unplug the AC cord.
2. Insert the USB Memory for version upgrade (prepared as above) into the service socket located Right side from center at terminals, above HDMI4 terminal in the rear of the unit.
3. Plug in the AC cord with power button pressed down after 5 seconds, unpress the power button.
4. After the unit startup, the upgrade starts. The screen is not shown. This take about a minute.
5. When there is an error, ‘PANEL EEPROM’ field display the type. Ignore ‘UPGRADE SUCCESS’ that is displayed at the top.



6. Upon completion of the whole process, the upgrade success screen as shown below appears. You can check the new software version on this screen. The version information appears after the upgrade is complete.



7. Unplug the AC cord and remove the USB Memory for version upgrade.
8. Now the software version upgrade is complete.

3. Entering and exiting the adjustment process mode

1) Before entering the adjustment process mode, the AV position RESET in the video adjustment menu.
2) While holding down the “VOL (–)” and “INPUT” keys at a time, plug in the AC cord of the main unit to turn on the power.

   The letter “<K>” appears on the screen.
3) Next, hold down the “VOL (–)” and “CH (∨)” keys at a time.

   (The “VOL (–)” and “CH (∨)” keys should be pressed and held until the display appears.)

   Multiple lines of blue characters appearing on the display indicate that the unit is now in the adjustment process mode.

   When you fail to enter the adjustment process mode (the display is the same as normal startup), retry the procedure.
4) To exit the adjustment process mode after the adjustment is done, unplug the AC cord from the outlet to make a forced shutdown. (When the power was turned off with the remote controller, once unplug the AC cord and plug it again. In this case, wait 10 seconds or so before plugging.)

CAUTION: Use due care in handling the information described here lest your users should know how to enter the adjustment process mode. If the settings are tampered in this mode, unrecoverable system damage may result.

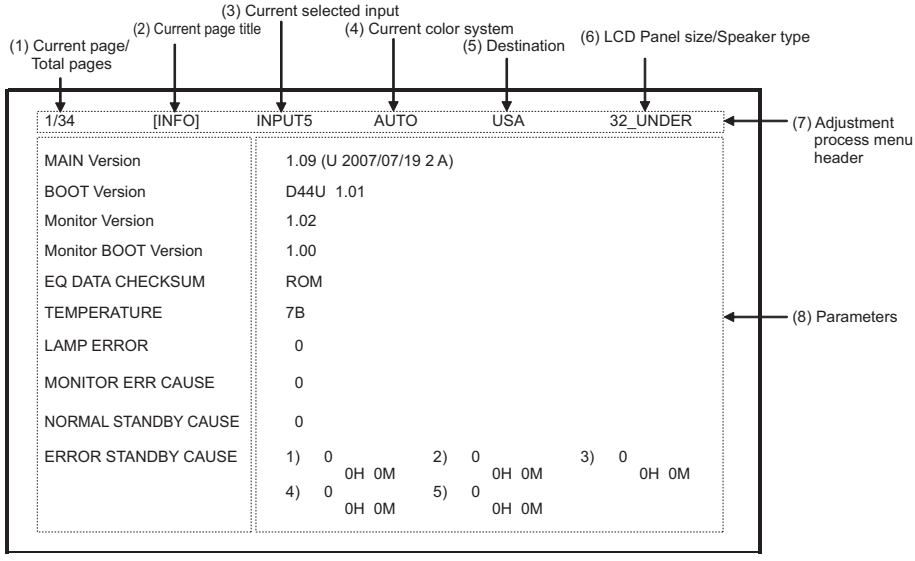
4. Remote controller key operation and description of display in adjustment process mode

1) Key operation

Remote controller key	Main unit key	Function
CH (∨ / ∧)	CH (∨ / ∧)	Moving an item (line) by one (UP/DOWN)
VOL (+/–)	VOL (+/–)	Changing a selected item setting (+1/ –1)
Cursor (UP/DOWN)	————	Turing a page (PREVIOUS/NEXT)
Cursor (LEFT/RIGHT)	————	Changing a selected line setting (+10/ –10)
INPUT	————	Input switching (toggle switching) (TUNER→INPUT1→INPUT2→INPUT3→INPUT4→INPUT5→INPUT6)
ENTER	————	Executing a function

*Input mode is switched automatically when relevant adjustment is started so far as the necessary input signal is available.

2) Description of display



5. List of adjustment process mode menu

The character string in brackets [ ] will appear as a page title in the adjustment process menu header.

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
1		[INFO]		
	1	MAIN Version	Main software version	
	2	BOOT Version		
	3	Monitor Version	Monitor software version	
	4	Monitor BOOT Version		
	5	EQ DATA CHECKSUM	Audio data checksum	
	6	TEMPERATURE	Panel temperature	
	7	LAMP ERROR	Number of termination due to lamp error	
	8	MONITOR ERR CAUSE		
	9	NORMAL STANDBY CAUSE		Refer to *1 under the list for details
	10	ERROR STANDBY CAUSE		Refer to *2 under the list for details
2		[INIT]		
	1	INDUSTRY INIT (+Cause)	Initialization to factory settings	
	2	INDUSTRY INIT		
	3	HOTEL MODE	Hotel Mode	
	4	Center Acutime	Accumulated main operation time	
	5	RESET	Reset	
	6	Backlight Acutime	Accumulated monitor operation time	
	7	RESET	Reset	
	8	LAMP ERROR RESET	Reset LAMP ERROR	
	9	VIC XPOS	X-coordinate setting for VIC READ	
	10	VIC YPOS	Y-coordinate setting for VIC READ	
	11	VIC COLOR	Collected color data setting for VIC READ	
	12	VIC SIGNAL TYPE	Signal type setting for VIC READ	
	13	VIC READ	Picture level acquisition function	Level appears in green on the upper right
3		[N358MAIN]		
	1	N358 ALL ADJ (INPUT1)	CVBS and TUNER signal level adjustment	
	2	N358 ALL ADJ (INPUT2)		
	3	N358 MAIN ADJ (INPUT1)	CVBS signal level adjustment	
	4	N358 MAIN ADJ (INPUT2)		
	5	TUNER DAC ADJ	TUNER signal level adjustment	
	6	VCOM ADJ		
	7	N358 CONTRAST A_GAIN		
	8	N358 CONTRAST D_GAIN		
	9	N358 CONTRAST OFFSET		
	10	TUNER CONTRAST A_GAIN		
	11	TUNER CONTRAST D_GAIN		
4		[TUNER TEST]		
	1	TUNER VCHIP TEST (69ch)	Tuning test and VCHIP test (69 ch)	
	2	TUNER VCHIP TEST (7ch)	Tuning test and VCHIP test (7 ch)	
	3	TUNER VCHIP TEST (10ch)	Tuning test and VCHIP test (10 ch)	
	4	TUNER VCHIP TEST (15ch)	Tuning test and VCHIP test (15 ch)	
	5	INSPECT USB TERM		
	6	HDMI CEC TEST		
5		[COMP15KMAIN]		
	1	COMP15K ADJ (INPUT1)	Component 15K picture level adjustment (main)	
	2	COMP15K ADJ (INPUT3)		
	3	COMP15K Y A_GAIN		
	4	COMP15K Cb A_GAIN		
	5	COMP15K Cr A_GAIN		
	6	COMP15K Y D_GAIN		
	7	COMP15K Cb D_GAIN		
	8	COMP15K Cr D_GAIN		
	9	COMP15K Y OFFSET	Y OFFSET adjustment value	
	10	COMP15K Cb OFFSET	Cb OFFSET adjustment value	
	11	COMP15K Cr OFFSET	Cr OFFSET adjustment value	

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
6		[HDTV]		
	1	COMP33K ADJ (INPUT1)	Component 33K picture level adjustment (main)	
	2	COMP33K ADJ (INPUT3)		
	3	COMP33K Y A_GAIN		
	4	COMP33K Cb A_GAIN		
	5	COMP33K Cr A_GAIN		
	6	COMP33K Y D_GAIN		
	7	COMP33K Cb D_GAIN		
	8	COMP33K Cr D_GAIN		
	9	COMP33K Y OFFSET	Y OFFSET adjustment value	
	10	COMP33K Cb OFFSET	Cb OFFSET adjustment value	
	11	COMP33K Cr OFFSET	Cr OFFSET adjustment value	
7		[ANALOG RGB]		
	1	ANALOG RGB ADJ	Analog RGB picture level adjustment	
	2	R A-GAIN		
	3	G A-GAIN		
	4	B A-GAIN		
	5	R D-GAIN		
	6	G D-GAIN		
	7	B D-GAIN		
	8	R OFFSET		
	9	G OFFSET		
	10	B OFFSET		
8		[M GAMMA IN]		
	1	LEV1	Standard value 1	Adjustment gradation setting.
	2	LEV2	Standard value 2	
	3	LEV3	Standard value 3	
	4	LEV4	Standard value 4	
	5	LEV5	Standard value 5	
	6	LEV6	Standard value 6	
9		[M GAMMA R1]		
	1	MG1R	WB adjustment Point 1, R adjustment value	Parameter for six-point adjustment
	2	MG1G	WB adjustment Point 1, G adjustment value	
	3	MG1B	WB adjustment Point 1, B adjustment value	
	4	MG2R	WB adjustment Point 2, R adjustment value	
	5	MG2G	WB adjustment Point 2, G adjustment value	
	6	MG2B	WB adjustment Point 2, B adjustment value	
	7	MG3R	WB adjustment Point 3, R adjustment value	
	8	MG3G	WB adjustment Point 3, G adjustment value	
	9	MG3B	WB adjustment Point 3, B adjustment value	
10		[M GAMMA R4]		
	1	MG4R	WB adjustment Point 4, R adjustment value	Parameter for six-point adjustment
	2	MG4G	WB adjustment Point 4, G adjustment value	
	3	MG4B	WB adjustment Point 4, B adjustment value	
	4	MG5R	WB adjustment Point 5, R adjustment value	
	5	MG5G	WB adjustment Point 5, G adjustment value	
	6	MG5B	WB adjustment Point 5, B adjustment value	
	7	MG6R	WB adjustment Point 6, R adjustment value	
	8	MG6G	WB adjustment Point 6, G adjustment value	
	9	MG6B	WB adjustment Point 6, B adjustment value	
11		[SOUND 1]		
	1	Audio Switch		
	2	Flat Mode		
	3	ADC Volume 1		
	4	ADC Volume 2		
	5	ADC Volume 3		
	6	ADC Volume 4		
	7	ADC Volume 5		
	8	ADC Volume 6		

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
12		[SOUND 2]		
	1	Lip Sync LR		
	2	Lip Sync Monitor		
	3	Lip Sync SW		
	4	LR Func Vol AIN (2ch)		
	5	LR Func Vol HDMI (2ch)		
	6	LR Func Vol ATV (2ch)		
	7	LR Func Vol DTV (2ch)		
	8	Input Trim (2ch)		
13		[SOUND 3]		
	1	PEQ1 F0		
	2	PEQ1 Q		
	3	PEQ1 Gain		
	4	PEQ1 Gain Limit		
	5	PEQ1 Fade Time		
	6	PEQ2 F0		
	7	PEQ2 Q		
	8	PEQ2 Gain		
	9	PEQ2 Gain Limit		
	10	PEQ2 Fade Time		
14		[SOUND 4]		
	1	PEQ3 F0		
	2	PEQ3 Q		
	3	PEQ3 Gain		
	4	PEQ3 Gain Limit		
	5	PEQ3 Fade Time		
	6	PEQ4 F0		
	7	PEQ4 Q		
	8	PEQ4 Gain		
	9	PEQ4 Gain Limit		
	10	PEQ4 Fade Time		
15		[SOUND 5]		
	1	PEQ5 F0		
	2	PEQ5 Q		
	3	PEQ5 Gain		
	4	PEQ5 Gain Limit		
	5	PEQ5 Fade Time		
	6	PEQ6 F0		
	7	PEQ6 Q		
	8	PEQ6 Gain		
	9	PEQ6 Gain Limit		
	10	PEQ6 Fade Time		
16		[SOUND 6]		
	1	PEQ7 F0		
	2	PEQ7 Q		
	3	PEQ7 Gain		
	4	PEQ7 Gain Limit		
	5	PEQ7 Fade Time		
	6	Subsonic Filter		
17		[SOUND 7]		
	1	Output Trim		
	2	Clipper		
	3	Sub Volume Default		
	4	Sub Volume SH Bass		
	5	Mon Func Vol AIN		
	6	Mon Func Vol HDMI		
	7	Mon Func Vol ATV		
	8	Mon Func Vol DTV		
	9	SW Func Vol AIN		
	10	SW Func Vol HDMI		
	11	SW Func Vol ATV		
	12	SW Func Vol DTV		

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
18		[SOUND 8]		
	1	BE ATT		
	2	BE G Limit		
	3	Bass Center ATT		
	4	Bass Vol 0 MIN		
	5	Bass Vol 60 MIN		
	6	Bass Vol 60 Center		
	7	Bass Vol 0 MAX		
	8	Bass Vol 60 MAX		
19		[SOUND 9]		
	1	Treble Center ATT		
	2	Treble Vol 0 MIN		
	3	Treble Vol 60 MIN		
	4	Treble Vol 60 Center		
	5	Treble Vol 0 MAX		
	6	Treble Vol 60 MAX		
	7	VS Path		
	8	VS Option		
	9	VS SP Interval		
	10	VS Width		
	11	VS Input Gain (2ch)		
20		[SOUND 10]		
	1	Bass AGC		
	2	Bass Harmonics		
	3	Bass LPF Fc		
	4	Bass HPF Fc		
	5	Bass AGC Max		
	6	Bass AGC Min		
	7	Bass AGC Attack Time		
	8	Bass AGC Release Time		
	9	Bass AGC Threshold		
	10	Bass AGC HPF F0		
	11	Bass Harmonics Level		
	12	Bass Harmonics LPF F		
	13	Bass Harmonics HPF F		
21		[M PWM]		
	1	PANNEL SELECT		
	2	PWM		
	3	PWN FREQ		
	4	PWM DUTY		
	5	OSC FREQ		
	6	OSC DUTY		
22		[M BRI DA1]		
	1	BRIGHTNESS DA0		
	2	BRIGHTNESS DA1		
	3	BRIGHTNESS DA2		
	4	BRIGHTNESS DA3		
	5	BRIGHTNESS DA4		
	6	BRIGHTNESS DA5		
	7	BRIGHTNESS DA6		
	8	BRIGHTNESS DA7		
	9	BRIGHTNESS DA8		
	10	BRIGHTNESS DA9		
	11	BRIGHTNESS DA10		
	12	BRIGHTNESS DA11		

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
23		[M BRI DA2]		
	1	BRIGHTNESS DA12		
	2	BRIGHTNESS DA13		
	3	BRIGHTNESS DA14		
	4	BRIGHTNESS DA15		
	5	BRIGHTNESS DA16		
	6	BRIGHTNESS DA17		
	7	BRIGHTNESS DA18		
	8	BRIGHTNESS DA19		
	9	BRIGHTNESS DA20		
	10	BRIGHTNESS DA21		
	11	BRIGHTNESS DA22		
24		[M BRI DA3]		
	1	BRIGHTNESS DA23		
	2	BRIGHTNESS DA24		
	3	BRIGHTNESS DA25		
	4	BRIGHTNESS DA26		
	5	BRIGHTNESS DA27		
	6	BRIGHTNESS DA28		
	7	BRIGHTNESS DA29		
	8	BRIGHTNESS DA30		
	9	BRIGHTNESS DA31		
	10	BRIGHTNESS DA32		
25		[M ADL1]		
	1	OPC33 ADLEVEL 0		
	2	OPC33 ADLEVEL 1		
	3	OPC33 ADLEVEL 2		
	4	OPC33 ADLEVEL 3		
	5	OPC33 ADLEVEL 4		
	6	OPC33 ADLEVEL 5		
	7	OPC33 ADLEVEL 6		
	8	OPC33 ADLEVEL 7		
	9	OPC33 ADLEVEL 8		
	10	OPC33 ADLEVEL 9		
	11	OPC33 ADLEVEL 10		
	12	OPC33 ADLEVEL 11		
26		[M ADL2]		
	1	OPC33 ADLEVEL 12		
	2	OPC33 ADLEVEL 13		
	3	OPC33 ADLEVEL 14		
	4	OPC33 ADLEVEL 15		
	5	OPC33 ADLEVEL 16		
	6	OPC33 ADLEVEL 17		
	7	OPC33 ADLEVEL 18		
	8	OPC33 ADLEVEL 19		
	9	OPC33 ADLEVEL 20		
	10	OPC33 ADLEVEL 21		
	11	OPC33 ADLEVEL 22		
27		[M ADL3]		
	1	OPC33 ADLEVEL 23		
	2	OPC33 ADLEVEL 24		
	3	OPC33 ADLEVEL 25		
	4	OPC33 ADLEVEL 26		
	5	OPC33 ADLEVEL 27		
	6	OPC33 ADLEVEL 28		
	7	OPC33 ADLEVEL 29		
	8	OPC33 ADLEVEL 30		
	9	OPC33 ADLEVEL 31		

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
28		[M V6THE]		
	1	V6 OS THERMO 1		
	2	V6 OS THERMO 2		
	3	V6 OS THERMO 3		
	4	V6 OS THERMO 4		
	5	V6 OS THERMO 5		
	6	V6 OS THERMO 6		
	7	V6 OS THERMO 7		
29		[M V5THE]		
	1	V5 OS THERMO 1		
	2	V5 OS THERMO 2		
	3	V5 OS THERMO 3		
	4	V5 OS THERMO 4		
	5	V5 OS THERMO 5		
	6	V5 OS THERMO 6		
	7	V5 OS THERMO 7		
30		[M TEMP]		
	1	BL TEMP1		
	2	BL TEMP2		
	3	BL TDUTY		
31		[M EEP SET]		
	1	MONITOR TIME OUT		
	2	MONITOR MAX TEMP		
	3	MONITOR ERROR CAUSE RESET		
32		[M TESTPTRN]		
	1	LCD TEST PATTERN		
	2	TV TEST PATTERN 1		
	3	TV TEST PATTERN 2		
33		[MEMORY CLR]		
	1	KEY LOCK (1217)		
	2	KOUTEI AREA ALL CLEAR		
	3	A MODE AREA CLEAR		
	4	BACKUP AREA CLEAR		
	5	B MODE AREA CLEAR		
	6	EXECUTION		
34		[ETC]		
	1	EEP SAVE	Writing setting values to EEPROM.	
	2	EEP RECOVER	Reading setting values from EEPROM.	
	3	STANDBY CAUSE RESET	Reset stand by cause.	
	4	SETTING FOR ADJ		
	5	PANEL SIZE		

6. Special features

* STANDBY CAUSE (Page 1/34)

  Display of a cause (code) of the last standby

  The cause of the last standby is recorded in EEPROM whenever possible.

  Checking this code will be useful in finding a problem when you repair the troubled set.

* EEP SAVE (Page 34/34)

  Storage of EEP adjustment value

* EEP RECOVER (Page 34/34)

  Retrieval of EEP adjustment value from storage area

7. Code list for Standby Cause

Code	Indication	Description
1	RC_STNBY	/* Standby set by remote control */
2	NO_OPERT	/* Off caused by no operation */
3	NO_SIGNA	/* Off caused by no signal */
4	PC_MODE1	/* Set by the PC power management mode 1 */
5	PC_MODE2	/* Set by the PC power management mode 2 */
6	SLEEP_TM	/* Set by off timer */
8	OFF_232C	/* Set by the command from RS232C */
9	AVC_TACT	/* Set by the front switch at the AVC center */
A	BSBOOKED	/* The pre-set time has passed since TV was turned on from standby by the BS timer. */
B	E_MONIPW	/* Monitor main power failure detected */
10	E_CCKMVT	/* Abnormal voltage of CCKM line detected */
11	OUT_OF_R	"/* While a PC display is on, unspecified input continued long time. */"
12	E_NOMONI	/* Incompatible monitor is connected to the AVC center. */
14	E_AVCFAN	/* Fan failure at the AVC center */
15	E_BSSUBM	/* Communication failure with the BS sub microcomputer (Not used) */
16	E_CVICIC	/* CVIC failure */
17	E_AVCTMP	/* Abnormal temperature at the AVC center */
18	E_1BITAU	/* 1Bit-AMP failure */
1A	E_MONITR	/* Monitor problem detected */
1B	E_FNLOCK	/* Fan lock for North America */
40	E_DSDEV	/* Failure in Digital Standby */

8. Signal adjustment

8.1. Checking the Device

■Before starting the adjustment, make sure the adjustment tool and signal generator are set for Sharp LCD US.

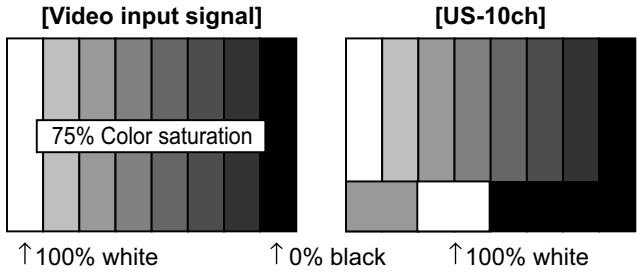
■Checking the signal generator level adjustment (Set to the standard level.)

- Composite signal : 0.714Vp-p ± 0.02Vp-p (from pedestal to white)
- 15K component signal : Y level : 0.714Vp-p ± 0.02Vp-p (from pedestal to white)
  PB, PR level : 0.7Vp-p ± 0.02Vp-p
- 33K component signal : Y level : 0.7Vp-p ± 0.02Vp-p (from pedestal to white)
  PB, PR level : 0.7Vp-p ± 0.02Vp-p
- Analog RGB signal : RGB level : 0.7Vp-p ± 0.02Vp-p (from pedestal to white)

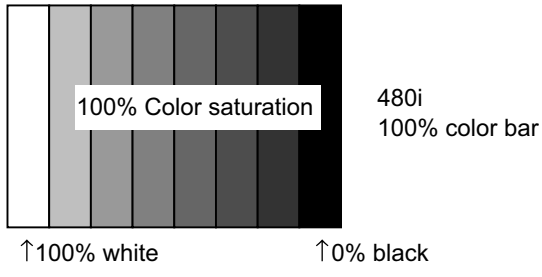
8.2. Process mode

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Process mode		Enter the process adjustment mode using the process adjustment remote controller.

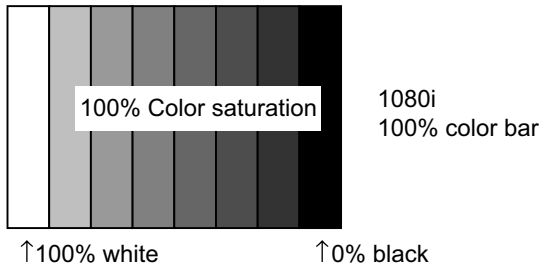
8.3. Composite N358 signal/tuner adjustment

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Setting	N358 signal US-10ch	Feed the N358 color bar signal (75% color saturation) to VIDEO 1 input. Feed the RF signal (by use of US-10ch) to TUNER. 
2	Automatic adjust-ment execution		Move the cursor to [■ N358 ALL ADJ] and press the [ENTER] key. When [■ N358 ALL ADJ OK] appears, the adjustment is complete.

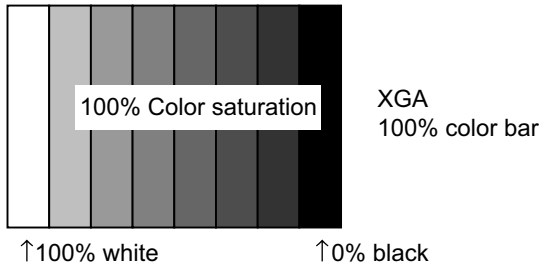
8.4. Component 15K signal adjustment

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Setting	480i signal	Feed the 100% color bar signal to VIDEO 1 COMPONENT input. 
2	Automatic adjust-ment execution		Move the cursor to [■ COMP 15K ADJ] and press the [ENTER] key. When [■ COMP 15K ADJ OK] appears, the adjustment is complete.

8.5. Component 33K signal adjustment

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Setting	1080i signal	Feed the 100% color bar signal to VIDEO 1 COMPONENT input. 
2	Automatic adjustment execution		Move the cursor to [■ COMP 33K ADJ] and press the [ENTER] key. When [■ COMP 33K ADJ OK] appears, the adjustment is complete.

8.6. Analog RGB signal adjustment

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Setting	Analog RGB signal: XGA (1024x768) 60Hz SYNC: HV separate	Feed the XGA 100% color bar signal to ANALOG RGB input. 
2	Automatic adjustment execution		Move the cursor to [■ ANALOG RGB ADJ] and press the [ENTER] key. When [■ ANALOG RGB ADJ OK] appears, the adjustment is complete.

8.7. Tuner/V-Chip test

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Setting	NTSC RF signal US-7(AIR)ch	Feed the NTSC signal to RF ANTENNA input.
2	Automatic adjustment execution		Move the cursor to [■ TUNER VCHIP TEST (*07ch)] and press the [ENTER] key. (* Select the channel according to the RF signal.) When [■ A-OK(***.**)/VM-OK] appears in blue, the test is complete. (If [A-NG/VM-NG] appears in yellow or red, the test is incomplete.) Make sure a displacement of ± 0.0625 MHz from the center frequency is acceptable.

9. White balance adjustment

9.1. White balance adjustment

<table>
<tr><th></th><th>Adjustment item</th><th>Adjustment conditions</th><th>Adjustment procedure</th></tr>
<tr><td>1</td><td>Setting</td><td></td><td>For detailed adjustment procedure, refer to “Kameyama Model Integral Monitor WB Adjustment Specifications V1.4”.
1) Make the following settings for the set.
AV MODE: [DYNAMIC]
Backlight: +16
Aging time: Min. 60 minutes
2) Connect the white balance adjustment tool to the set.</td></tr>
<tr><td>2</td><td>Automatic adjustment execution</td><td>[Command]
Process mode
KRSW0001
KKT10037

Setting
KYOF0000
OSDS0001
SBSL0016

Multi-point adjustment mode
MSET0001

Adjustment value initialization
MSET0004

Point 6
WBI60928
MG6G****
MG6B****
MG6R****

Point 5
WBI50832
MG5G****
MG5B****
MG5R****

Point 4
WBI40752
MG4G****
MG4B****
MG4R****

Point 3
WBI30528
MG3G****
MG3B****
MG3R****

Point 2
WBI20320
MG2G****
MG2B****
MG2R****

Point 1
WBI10176
MG1G****
MG1B****
MG1R****

Writing
MSET0003</td><td>[Adjustment procedure]
1) Using the remote controller, transmit the “monitor adjustment process” code.
2) Set the 6th point to the specified gradation level. With the strongest color being fixed, turn down the R, G and B settings to their reference levels.
3) Set the 5th point to the specified gradation level. Correct the G setting (800 x 6th-point G setting / 928) (rounded off), and make the R and B settings to their reference levels.
4) Set the 4th point to the specified gradation level. Correct the G setting (680 x 6th-point G setting / 928) (rounded off), and make the R and B settings to their reference levels.
5) Set the 3rd point to the specified gradation level. Correct the G setting (480 x 6th-point G setting / 928) (rounded off), and make the R and B settings to their reference levels.
6) Set the 2nd point to the specified gradation level. Correct the G setting (232 x 6th-point G setting / 928) (rounded off), and make the R and B settings to their reference levels.
7) Set the 1st point to the specified gradation level. Correct the G setting (184 x 6th-point G setting / 928) (rounded off), and make the R and B settings to their reference levels.
8) With the MSET0003 command, write the adjustment values and turn off the AC power.
* Initial R, G and B settings at point 6: Gradation level set at 928
* Initial R, G and B settings at points 1 thru 5: Corrected G setting at each point
(This is because the adjustment is made to achieve the same remainder of RGB setting / 4 at each point.)
[Adjustment value]
•As per the “standard set” submitted by Engineering Department
“LC-32D44U” Teaching set
[Adjustment reference] Instrument: Minolta CA-210 Engineering instrument

<table>
<tr><th></th><th>Level</th><th>Reference</th><th>Adj. spec</th><th>Ins. spec</th></tr>
<tr><td>Point 6</td><td>928</td><td>X=0.272
y=0.277</td><td>±0.0010</td><td>±0.0020</td></tr>
<tr><td>Point 5</td><td>832</td><td>X=0.272
y=0.277</td><td>±0.0010</td><td>±0.0020</td></tr>
<tr><td>Point 4</td><td>752</td><td>X=0.272
y=0.277</td><td>±0.0010</td><td>±0.0020</td></tr>
<tr><td>Point 3</td><td>528</td><td>X=0.272
y=0.277</td><td>±0.0010</td><td>±0.0020</td></tr>
<tr><td>Point 2</td><td>320</td><td>X=0.272
y=0.277</td><td>±0.0020</td><td>±0.0030</td></tr>
<tr><td>Point 1</td><td>176</td><td>X=0.272
y=0.277</td><td>±0.0020</td><td>±0.0030</td></tr>
<tr><td>Note</td><td></td><td colspan="3">Set conditions for inspection
AV MODE: [DYNAMIC] (Reset)
Monochro: ON
Black: OFF
Color Temp: High
Back Light: +16
Aging Time: Min. 60 minutes</td></tr>
</table>
</td></tr>
</table>

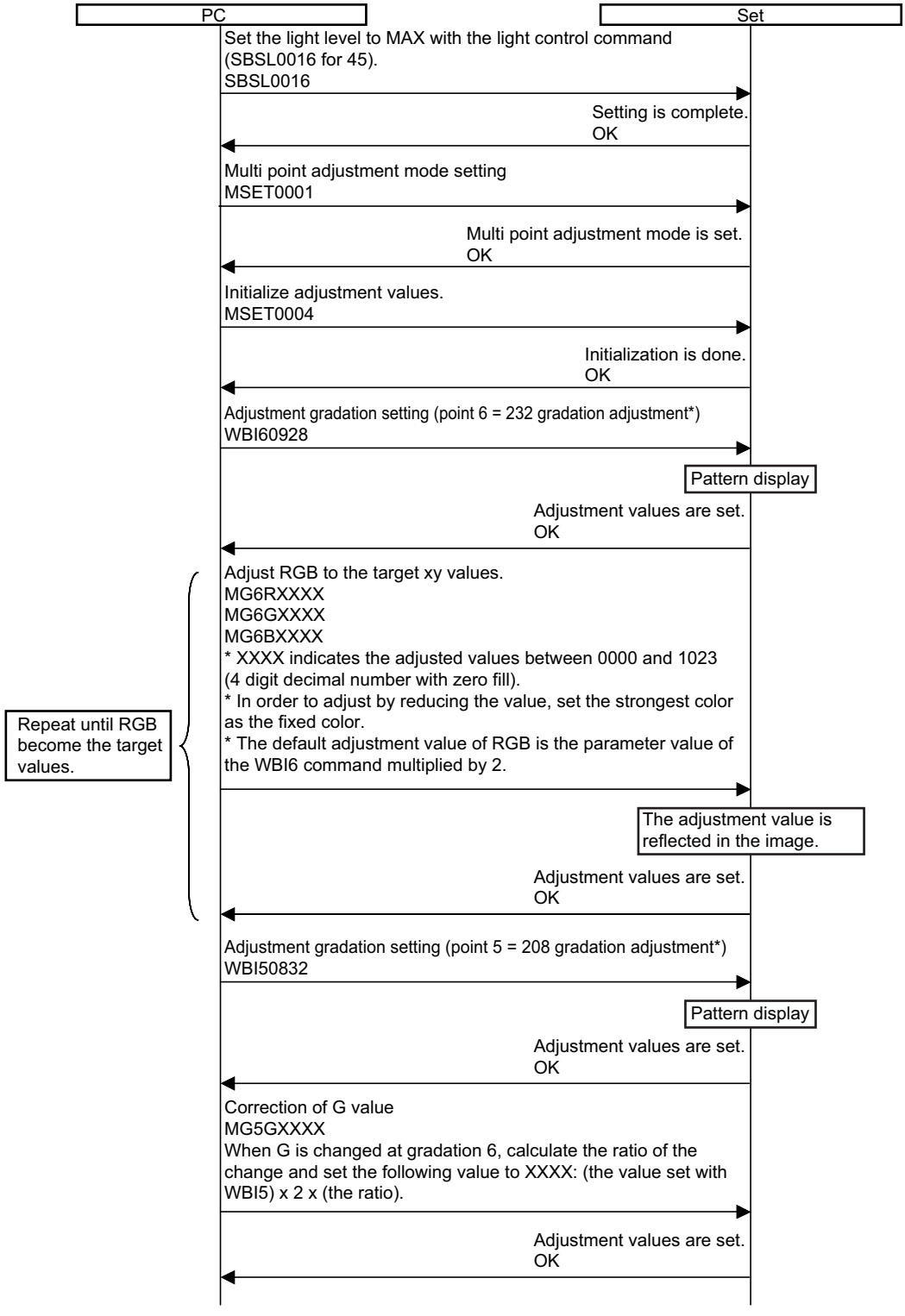
9.2. Key writing

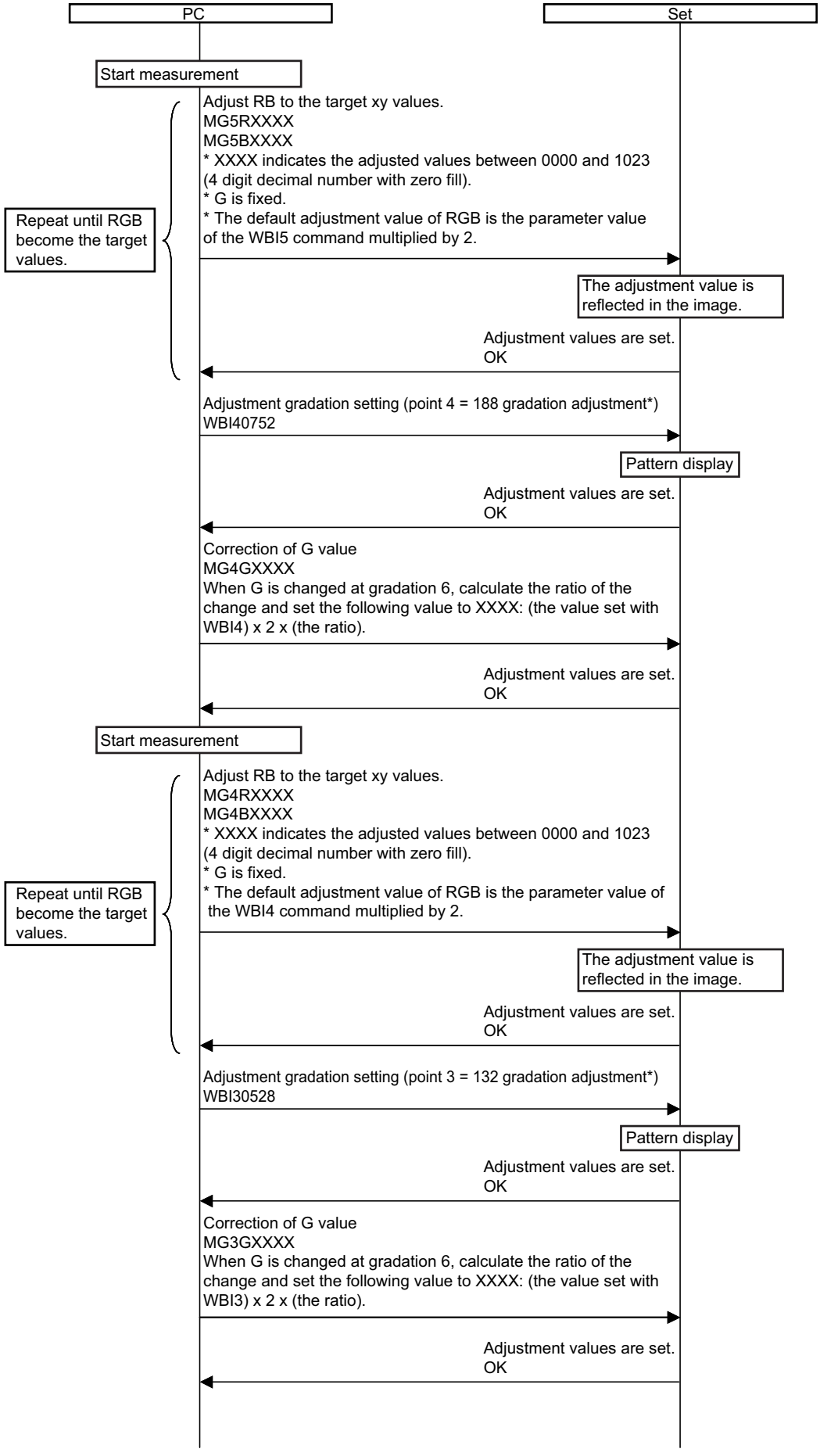
EDID writing (Main PWB: QPWBXE450WJZZ, analog RGB input terminal / HDMI input terminal)

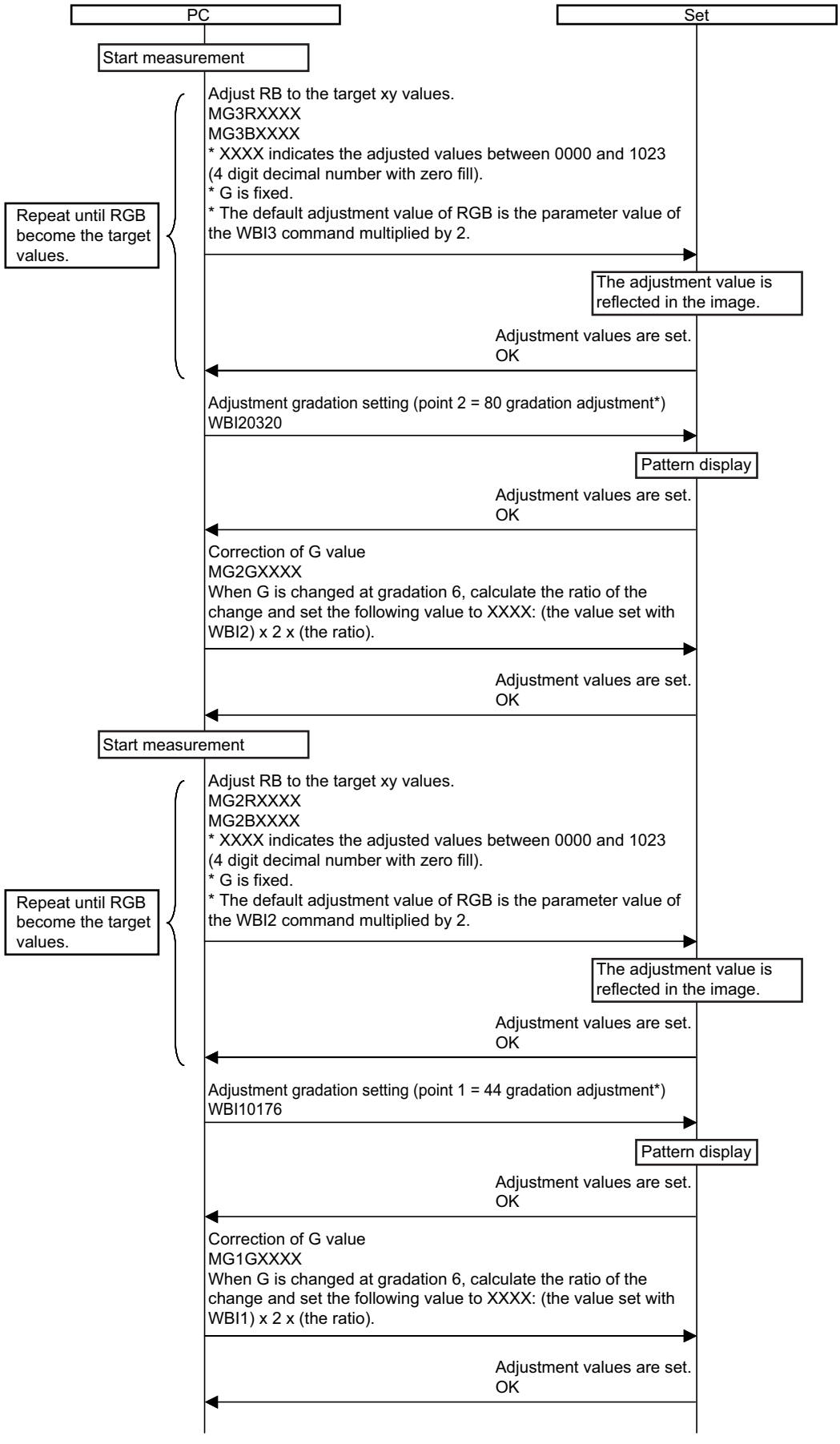
	Adjustment item	Adjustment conditions	Adjustment procedure
1	Analog RGB EDID writing	File version checking	1) Using the checker, write the EDID data for Analog RGB to IC2202 that is mounted on the main PWB. TL2293: I2C clock, TL2295: I2C data TL2296: 5V, TL2294: GND TL2297: VCLK (Write: H, Read: V pulse) 2) In the analog RGB inspection, use a DDC-compatible device. If the EDID has not been written, the analog RGB input does not function normally.
2	HDMI EDID writing	Inspection mode File version checking	1) Using the checker, write the HDMI EDID data to IC1601 and IC1603 that are mounted on the main PWB. TL1606/1613: I2C clock, TL1604/1614: I2C data TL1611/1615: 5V, TL1604/1607: GND TL1616/1618: Write protection (H: Write, L: Write enable) 2) Write the data before the HDMI inspection with the checker. In the HDMI inspection, use a DDC-compatible device. If the EDID has not been written, the HDMI does not function normally.

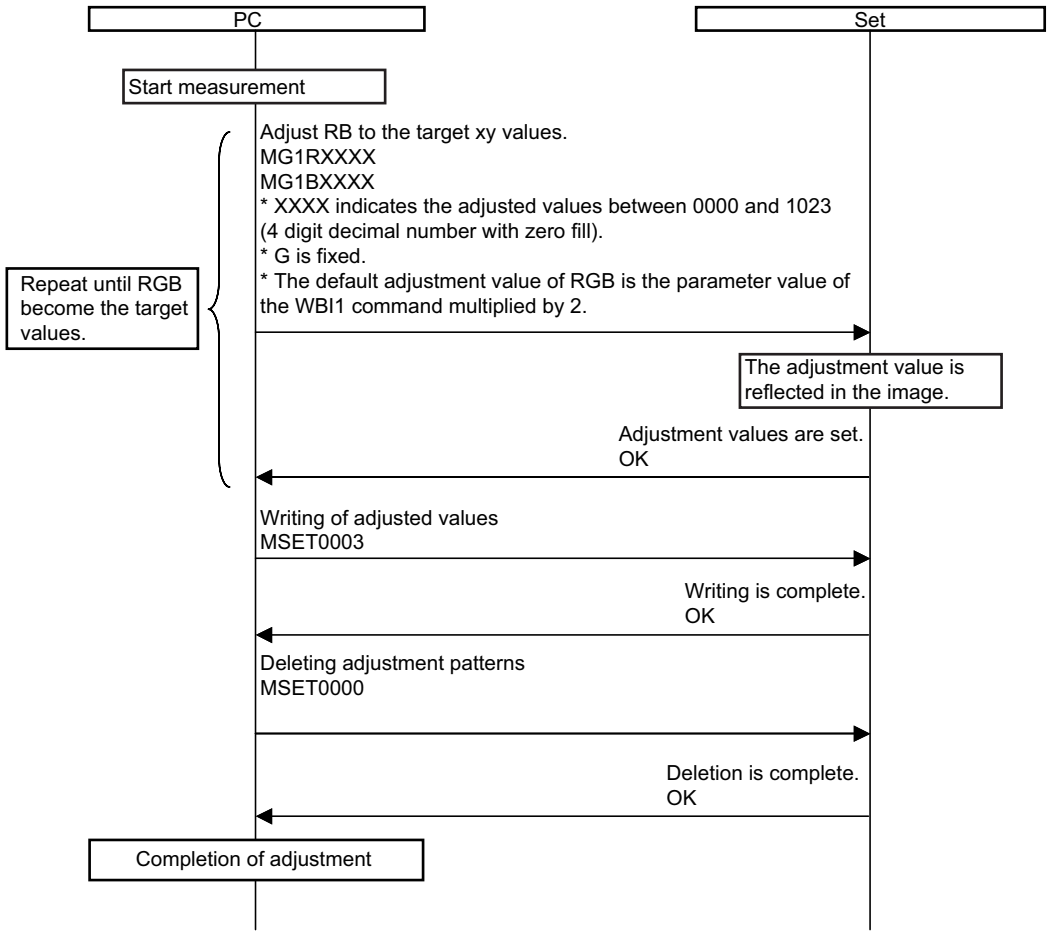
9.3. Adjustment sequence (adjustment according to the G adjustment value of gradation 6)

* Make sure the adjusting point gradations are correct since they are different for each model.




PC
Set
Start measurement
Adjust RB to the target xy values.
MG5RXXXX
MG5BXXXX
* XXXX indicates the adjusted values between 0000 and 1023 (4 digit decimal number with zero fill).
* G is fixed.
* The default adjustment value of RGB is the parameter value of the WBI5 command multiplied by 2.
Repeat until RGB become the target values.
The adjustment value is reflected in the image.
Adjustment values are set.
OK
Adjustment gradation setting (point 4 = 188 gradation adjustment*)
WBI40752
Pattern display
Adjustment values are set.
OK
Correction of G value
MG4GXXXX
When G is changed at gradation 6, calculate the ratio of the change and set the following value to XXXX: (the value set with WBI4) x 2 x (the ratio).
Adjustment values are set.
OK
Start measurement
Adjust RB to the target xy values.
MG4RXXXX
MG4BXXXX
* XXXX indicates the adjusted values between 0000 and 1023 (4 digit decimal number with zero fill).
* G is fixed.
* The default adjustment value of RGB is the parameter value of the WBI4 command multiplied by 2.
Repeat until RGB become the target values.
The adjustment value is reflected in the image.
Adjustment values are set.
OK
Adjustment gradation setting (point 3 = 132 gradation adjustment*)
WBI30528
Pattern display
Adjustment values are set.
OK
Correction of G value
MG3GXXXX
When G is changed at gradation 6, calculate the ratio of the change and set the following value to XXXX: (the value set with WBI3) x 2 x (the ratio).
Adjustment values are set.
OK


PC
Set
Start measurement
Adjust RB to the target xy values.
MG3RXXXX
MG3BXXXX
* XXXX indicates the adjusted values between 0000 and 1023
(4 digit decimal number with zero fill).
* G is fixed.
* The default adjustment value of RGB is the parameter value of
the WBI3 command multiplied by 2.
Repeat until RGB become the target values.
The adjustment value is reflected in the image.
Adjustment values are set.
OK
Adjustment gradation setting (point 2 = 80 gradation adjustment*)
WBI20320
Pattern display
Adjustment values are set.
OK
Correction of G value
MG2GXXXX
When G is changed at gradation 6, calculate the ratio of the change and set the following value to XXXX: (the value set with WBI2) x 2 x (the ratio).
Adjustment values are set.
OK
Start measurement
Adjust RB to the target xy values.
MG2RXXXX
MG2BXXXX
* XXXX indicates the adjusted values between 0000 and 1023
(4 digit decimal number with zero fill).
* G is fixed.
* The default adjustment value of RGB is the parameter value of
the WBI2 command multiplied by 2.
Repeat until RGB become the target values.
The adjustment value is reflected in the image.
Adjustment values are set.
OK
Adjustment gradation setting (point 1 = 44 gradation adjustment*)
WBI10176
Pattern display
Adjustment values are set.
OK
Correction of G value
MG1GXXXX
When G is changed at gradation 6, calculate the ratio of the change and set the following value to XXXX: (the value set with WBI1) x 2 x (the ratio).
Adjustment values are set.
OK


PC
Set
Start measurement
Adjust RB to the target xy values.
MG1RXXXX
MG1BXXXX
* XXXX indicates the adjusted values between 0000 and 1023
(4 digit decimal number with zero fill).
* G is fixed.
* The default adjustment value of RGB is the parameter value of
the WBI1 command multiplied by 2.
Repeat until RGB become the target values.
The adjustment value is reflected in the image.
Adjustment values are set.
OK
Writing of adjusted values
MSET0003
Writing is complete.
OK
Deleting adjustment patterns
MSET0000
Deletion is complete.
OK
Completion of adjustment

10. Factory settings

After making the factory settings, pull off the AC cord.

NOTE: Do not turn on the power once the factory settings have been made. Otherwise the factory settings must be made again.

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Factory settings	Finally pull off the AC cord.	• Move the cursor to the [INDUSTRY INIT (+Cause)] line. Using the [VOL+/-] keys, set this item ON and press the [ENT] key. The version confirm window appears on the green screen. When [SUCCESS] appears at the top, the factory settings are complete. (If an error occurs. [ERROR] appears on the red screen.) • Finally turn off the AC power.
			The following settings are returned to the factory ones. 1) User settings 2) Channel data (broadcast frequencies, etc.) 3) Password setting 4) Operation time 5) Automatic installation flag 6) V-CHIP block setting

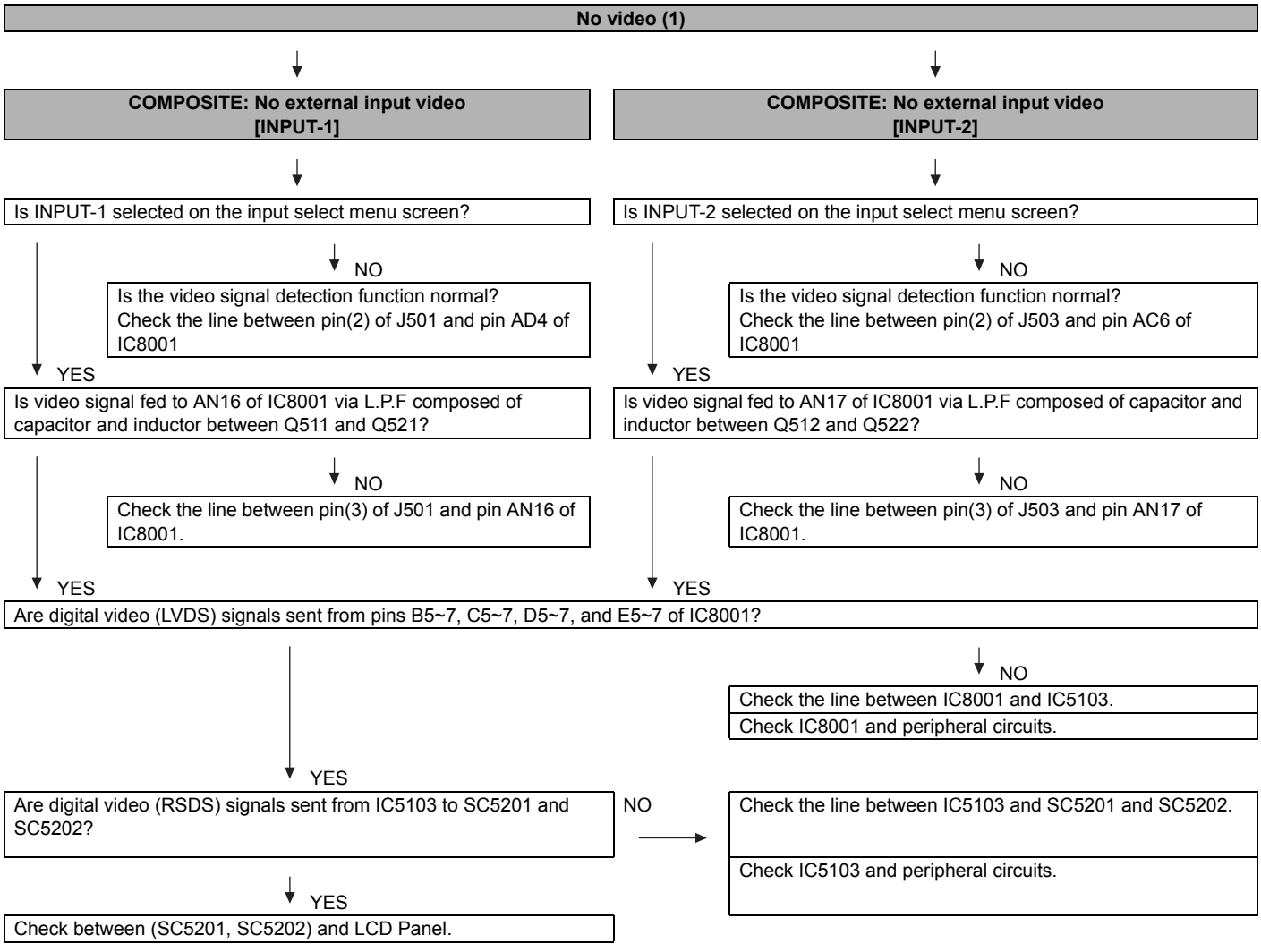
11. Software version

Change of software version is notified at a technical report.

* Main microprocessor
* Monitor microprocessor
* EDID data (HDMI/analog RGB)

CHAPTER 6. TROUBLE SHOOTING TABLE

[1] TROUBLE SHOOTING TABLE



No video (1)

COMPONENT: No external input video [INPUT-1]

Is INPUT-1 selected on the input select menu screen?

NO

Is the video signal detection function normal? Check the line between pin(2) of J502 and pin AC7 of IC8001

YES

Are component video signals fed to pins AM21, AN21 and AL21(Y,PB,PR) of IC8001 via each L.P.F composed of capacitor and inductor between (Q501,Q506,Q504) and (Q515,Q516,Q517) respectively?

NO

Check the line between each pin of J502 and each input pin of IC8001.

YES

COMPONENT: No external input video [INPUT-3]

Is INPUT-3 selected on the input select menu screen?

NO

Is the video signal detection function normal? Check the line between pin(2) of J509 and pin AE1 of IC8001

YES

Are component video signals fed to pins AN22, AP22 and AL22(Y,PB,PR) of IC8001 via each L.P.F composed of capacitor and inductor between (Q502,Q503,Q505) and (Q518,Q519,Q520) respectively?

NO

Check the line between each pin of J509 and each input pin of IC8001.

YES

Are digital video (LVDS) signals sent from pins B5~7, C5~7, D5~7, and E5~7 of IC8001?

NO

Check the line between IC8001 and IC5103.

Check IC8001 and peripheral circuits.

YES

Are digital video (RSDS) signals sent from IC5103 to SC5201 and SC5202?

NO

Check the line between IC5103 and SC5201 and SC5202.

Check IC5103 and peripheral circuits.

YES

Check between (SC5201, SC5202) and LCD Panel.

No video (3)

↓

S-VIDEO: No external input video [INPUT-2]

↓

Is INPUT-2 selected on the input select menu screen?

↓ NO

Is the video signal detection function normal?
Check the line between pin(6) of J504 and pin AE2 of IC8001

↓ YES

Are Y and C signals fed to pins AL17 and AL16 of IC8001 via L.P.F composed of capacitor and inductor between (Q513,Q514) and (Q523,Q524) respectively?

↓ NO

Check the line between J504 and IC8001.
(Q513,Q524,etc)/(Q514,Q524,etc)

↓ YES

Are digital video (LVDS) signals sent from pins B5~7, C5~7, D5~7, and E5~7 of IC8001?

NO → Check the line between IC8001 and IC5103.
Check IC8001 and peripheral circuits.

↓ YES

Are digital video (RSDS) signals sent from IC5103 to SC5201 and SC5202?

NO → Check the line between IC5103 and SC5201 and SC5202.
Check IC5103 and peripheral circuits.

↓ YES

Check between (SC5201, SC5202) and LCD Panel.

No video (4)

No video at UHF/VHF broadcast signal reception

No video at digital broadcast signal reception

Is the specified TV signal selected on the input select menu screen?

Is video signal fed to AM19 of IC8001 via a buffer amplifier?

NO

- Check TU1101 and its peripheral circuits(SDA3/SCL3, etc.).
- Check the line between AM19 of IC8001 and pin 13 of TU1101 (Q510, etc.).

YES

Are there the video signal outputs (IF_OUT_P/N) at the pins(19) and (20) of tuner(TU1101)?

NO

- Check TU1101 and its peripheral circuits (SDA/SCL3, etc.).
- Check the line between (AM33, AM34) of IC8001 and (pin(19), pin(20)) of TU1101.

YES

Are digital video (LVDS) signals sent from pins B5~7, C5~7, D5~7, and E5~7 of IC8001?

NO

- Check the line between IC8001 and IC5103.
- Check IC8001 and peripheral circuits.

YES

Are digital video (RSDS) signals sent from IC5103 to SC5201 and SC5202?

NO

- Check the line between IC5103 and SC5201 and SC5202.
- Check IC5103 and peripheral circuits.

YES

Check between (SC5201, SC5202) and LCD Panel.

[HDMI signal input] No video (5)

HDMI: No external input video [INPUT-4]

Is INPUT-4 selected on the input select menu screen?

NO → Select INPUT-4 on the input select menu screen for the right input signal.

Does the HOT PLUG detection function?
Does the DDC5V signal come from pin(18) of SC1601 to pin(72) of IC1604(HDMI-SW)?

NO → Check the line between the input terminals of SC1601 and IC1604.

YES

Does the HPD signal come from pin(56) of IC1604 to pin(19) of SC1601?

NO → Check the line between IC1604 and SC1601.
① IC1604 pin(56)
② IC1607 pin(4)
③ SC1601 pin(19)

YES

Are there the TMDS signal inputs at pins(58/59)(CLK-/+), (61/62)(D0-/+), (64/65)(D1-/+), (67/68)(D2-/+), all of IC1604?

NO → Is IC1601(EEPROM) accessed by I2C, with HDMI connected, to read the DDC_I2C SCL/SDA data?

NO → Check the DDC line and its peripheral circuits.(IC1601 and its peripherals).

YES

HDMI: No external input video [INPUT-5]

Is INPUT-5 selected on the input select menu screen?

NO → Select INPUT-5 on the input select menu screen for the right input signal.

Does the HOT PLUG detection function?
Does the DDC5V signal come from pin(18) of SC1602 to pin(52) of IC1604(HDMI-SW)?

NO → Check the line between the input terminals of SC1602 and IC1604.

YES

Does the HPD signal come from pin(36) of IC1604 to pin(19) of SC1602?

NO → Check the line between IC1604 and SC1602.
① IC1604 pin(36)
② IC1608 pin(4)
③ SC1602 pin(19)

YES

Are there the TMDS signal inputs at pins(38/39)(CLK-/+), (41/42)(D0-/+), (44/45)(D1-/+), (47/48)(D2-/+), all of IC1604?

NO → Is IC1603(EEPROM) accessed by I2C, with HDMI connected, to read the DDC_I2C SCL/SDA data?

NO → Check the DDC line and its peripheral circuits.(IC1603 and its peripherals).

YES

Are there the TMDS signal inputs at pins(AM1/AM2)(CLK-/+), (AN1/AN2)(D0-/+), (AM3/AM4)(D1-/+), (AP2/AN3)(D2-/+), all of IC8001(CPU)?

NO → Check IC1604, IC8001 and their peripheral circuits.

YES

Are digital video (LVDS) signals sent from pins B5~7, C5~7, D5~7, and E5~7 of IC8001?

NO → Check the line between IC8001 and IC5103.
Check IC8001 and peripheral circuits.

YES

Are digital video (RSDS) signals sent from IC5103 to SC5201 and SC5202?

NO → Check the line between IC5103 and SC5201 and SC5202.
Check IC5103 and peripheral circuits.

YES

Check between (SC5201, SC5202) and LCD Panel.

No video (6)

PC: No external input video [INPUT-6]

Is INPUT-6 selected on the input select menu screen?

NO

Select INPUT-6 on the input select menu screen for the right input signal.

Is IC2202(EEPROM) accessed by I2C, with PC connected, to read the DDC_I2C SCL/SDA data?

Check the DDC line and its peripheral circuits.(IC2202 and its peripherals).

YES

Are there the video signal inputs at pins(AN15)(G), (AM15)(B) and (AK16)(R) of IC8001(CPU)?
Are there the VSYNC/HSYNC signal inputs at pins(AJ16) and (AH16) of IC8001?

NO → Check the line between SC2201 and IC8001 (Q2211, IC2201, etc.).

YES

Are digital video (LVDS) signals sent from pins B5~7, C5~7, D5~7, and E5~7 of IC8001?

NO → Check the line between IC8001 and IC5103.

Check IC8001 and peripheral circuits.

YES

Are digital video (RSDS) signals sent from IC5103 to SC5201 and SC5202?

NO → Check the line between IC5103 and SC5201 and SC5202.

Check IC5103 and peripheral circuits.

YES

Check between (SC5201, SC5202) and LCD Panel.

No audio (1)

INPUT-1 No audio

Is INPUT-1 selected on the input select menu screen?

NO

Is the audio output selected for “VARIABLE” on the menu screen?

Set the audio output to “FIXED”.

YES

Does the audio signal come from pins(5)(L) and (7)(R) of input terminal(J501) to pins(35)(L) and (36)(R) of IC1403(CODEC)?

NO

Check the line between J501 and IC1403.

YES

INPUT-2 No audio

Is INPUT-2 selected on the input select menu screen?

NO

Is the audio output selected for “VARIABLE” on the menu screen?

Set the audio output to “FIXED”.

YES

Does the audio signal come from pins(5)(L) and (7)(R) of input terminal(J503) to pins(37)(L) and (38)(R) of IC1403(CODEC)?

NO

Check the line between J503 and IC1403.

YES

Does the audio signal come from pins(4)(COD_LRCK), (5)(COD_BCK) and (6)(COD_SDOUT) of IC1403 to pins(AK24), (AH24) and (AJ24) of IC8001(CPU)?

NO

Check the line between IC1403 and IC8001.

YES

Does the audio signal come from pins(AN28)(SPOUT_LP), (AN29)(SPOUT_RN), (AP28)(SPOUT_LN), and(AP29)(SPOUT_RP) of IC8001 to pins(5)(SP_LP),(6)(SP_LN), (8)(SP_RN), and (9)(SP_RP) of IC2701(AMP)?

NO

Check the line between IC8001 and IC2701, and their peripheral circuits. (AMP_MUTE line, etc.)

YES

Is the audio output from IC2701 as specified?

NO

Check IC2701 and its peripheral circuits.

YES

Check the connector(P2701), speakers and their peripheral circuits.

No audio (1)

INPUT-3 No audio

Is INPUT-3 selected on the input select menu screen?

NO

Is the audio output selected for “VARIABLE” on the menu screen?

Set the audio output to “FIXED”.

YES

Does the audio signal come from pins(2)(R) and (4)(L) of input terminal(J506) to pins(40)(L) and (41)(R) of IC1403(CODEC)?

NO

Check the line between J506 and IC1403, and their peripheral circuits.

YES

Does the audio signal come from pins(4)(COD_LRCK), (5)(COD_BCK) and (6)(COD_SDOUT) of IC1403 to pins(AK24), (AH24) and (AJ24) of IC8001(CPU)?

NO → Check the line between IC1403 and IC8001.

YES

Does the audio signal come from pins(AN28)(SPOUT_LP), (AN29)(SPOUT_RN), (AP28)(SPOUT_LN), and(AP29)(SPOUT_RP) of IC8001 to pins(5)(SP_LP),(6)(SP_LN), (8)(SP_RN), and (9)(SP_RP) of IC2701(AMP)?

NO → Check the line between IC8001 and IC2701, and their peripheral circuits. (AMP_MUTE line, etc.)

YES

Is the audio output from IC2701 as specified?

NO → Check IC2701 and its peripheral circuits.

YES

Check the connector(P2701), speakers and their peripheral circuits.

No audio (2)

[HDMI analog audio input] INPUT-5 No audio

Is INPUT-5 selected on the input select menu screen?

NO

Is the audio output selected for “VARIABLE” on the menu screen?

Set the audio output to “FIXED”.

Is the HDMI audio output selected for “Digital” on the menu screen?

Set the HDMI audio output to “Analog”.

YES

Does the audio signal come from pins(2)(R) and (4)(L) of input terminal(J507) to pins(43)(L) and (44)(R) of IC1403(CODEC)?

NO

Check the line between J507 and IC1403, and their peripheral circuits.

YES

[PC analog audio input] INPUT-6 No audio

Is INPUT-6 selected on the input select menu screen?

NO

Is the audio output selected for “VARIABLE” on the menu screen?

Set the audio output to “FIXED”.

YES

Does the audio signal come from pins(2)(L) and (3)(R) of input terminal(J508) to pins(46)(L) and (47)(R) of IC1403(CODEC)?

NO

Check the line between J508 and IC1403, and their peripheral circuits.

YES

Does the audio signal come from pins(4)(COD_LRCK), (5)(COD_BCK) and (6)(COD_SDOUT) of IC1403 to pins(AK24), (AH24) and (AJ24) of IC8001(CPU)?

NO

Check the line between IC1403 and IC8001.

YES

Does the audio signal come from pins(AN28)(SPOUT_LP), (AN29)(SPOUT_RN), (AP28)(SPOUT_LN), and (AP29)(SPOUT_RP) of IC8001 to pins(5)(SP_LP),(6)(SP_LN), (8)(SP_RN), and (9)(SP_RP) of IC2701(AMP)?

NO

Check the line between IC8001 and IC2701, and their peripheral circuits. (AMP_MUTE line, etc.)

YES

Is the audio output from IC2701 as specified?

NO

Check IC2701 and its peripheral circuits.

YES

Check the connector(P2701), speakers and their peripheral circuits.

No audio (3)

No audio at UHF/VHF broadcast signal reception

Is TV selected on the input select menu screen?

NO → Is the audio output selected for “VARIABLE” on the menu screen?

NO → Set the audio output to “FIXED”.

YES

Is there the SIF signal output at pin(15) of tuner(TU1101)?

NO → Check the tuner(TU1101) and its peripheral circuits.

YES

Does the SIF signal come from pin(15) of tuner(TU1101) to pin(AN23) of IC8001?

NO → Check the line between TU1101 and IC8001. (Q1101,Q1102, etc.)

YES

No audio at digital broadcast signal reception

Is TV selected on the input select menu screen?

NO → Is the audio output selected for “VARIABLE” on the menu screen?

NO → Set the audio output to “FIXED”.

YES

Are there the video signal outputs (IF_OUT_P/N) at the pins(19) and (20) of tuner(TU1101)?

NO → Check the tuner(TU1101) and its peripheral circuits.

YES

Does the video signal outputs come from pins(19) and (20) of tuner(TU1101) to AM33 and AM34 of IC8001?

NO → Check the line between TU1101 and IC8001.

YES

Does the audio signal come from pins(AN28)(SPOUT_LP), (AN29)(SPOUT_RN), (AP28)(SPOUT_LN), and (AP29)(SPOUT_RP) of IC8001 to pins(5)(SP_LP),(6)(SP_LN), (8)(SP_RN), and (9)(SP_RP) of IC2701(AMP)?

NO → Check the line between IC8001 and IC2701, and their peripheral circuits. (AMP_MUTE line, etc.)

YES

Is the audio output from IC2701 as specified?

NO → Check IC2701 and its peripheral circuits.

YES

Check the connector(P2701), speakers and their peripheral circuits.

No audio signal at Digital Audio Output terminal (Analog sound heard)

No INPUT-4/5(HDMI) audio

If no video appears, refer to “No external input video (HDMI) [INPUT-4/5]”.

Is the HDMI_MUTE line as specified?

NO → Check Q1301, IC1302 and their peripheral circuits.

YES

No audio at digital broadcast signal reception

Are there the video signal outputs (IF_OUT_P/N) at the pins(19) and (20) of tuner(TU1101)?

NO → Check the tuner(TU1101) and its peripheral circuits.

YES

Does the video signal outputs come from pins(19) and (20) of tuner(TU1101) to AM33 and AM34 of IC8001?

NO → Check the line between TU1101 and IC8001.

YES

Is there the SPDIF signal (OPT_OUT) output at pin(AP11) of IC8001(CPU)?

NO → Check the IC8001 and its peripheral circuits.

YES

Is there the SPDIF signal (OPT_OUT) input at pin(2) of IC1304 (SPDIF_BUFF & MUTE)?

NO → Check the line between IC8001 and IC1304.

YES

Is there the MUTE signal input at pin(1) of IC1304?

NO → Check the MUTE_A_ALL and ACDET signals, and their peripheral circuits. (Q1304, Q1312, D1310, etc.)

YES

Is there the SPDIF signal input at pin(1) of D1306(OPTICAL OUTPUT)?

NO → Check D1306 and its peripheral circuits.

No optical output under the following conditions as per HDMI requirements.
*Audio contents protected.
*Audio frequency beyond 48kHz.
*Audio bit length beyond 16bits.

YES

Check the speakers and their peripheral circuits.

No audio (4)

↓

INPUT-4 No audio (HDMI connected)
INPUT-5 No audio (HDMI connected)

↓

[INPUT-4 input]
Is INPUT-4 selected on the input select menu screen?
[INPUT-5 input]
Is INPUT-5 selected on the input select menu screen?

↓ NO

Is the audio output selected for “VARIABLE” on the menu screen?
Set the audio output to “FIXED”.

↓ YES

[INPUT-4 input] If no video appears, refer to “No external input video (HDMI) [INPUT-4]”.
[INPUT-5 input] If no video appears, refer to “No external input video (HDMI) [INPUT-5]”.

↓ YES

Is the HDMI_MUTE line as specified?

↓ NO

Check Q1301, IC1302 and their peripheral circuits.

↓ YES

Does the audio signal come from pins(AN28)(SPOUT_LP), (AN29)(SPOUT_RN), (AP28)(SPOUT_LN), and (AP29)(SPOUT_RP) of IC8001 to pins(5)(SP_LP),(6)(SP_LN), (8)(SP_RN), and (9)(SP_RP) of IC2701(AMP)?

NO → Check the line between IC8001 and IC2701, and their peripheral circuits. (AMP_MUTE line, etc.)

↓ YES

Is the audio output from IC2701 as specified?

NO → Check IC2701 and its peripheral circuits.

↓ YES

Check the connector(P2701), speakers and their peripheral circuits.

No monitor audio output

Is the audio output from the monitor set at “VARIABLE” or “FIXED” on the menu screen?

NO → Check the bus line(SCL0/SDA0) and IC1403.

YES

Are there the audio signal outputs at pins(24)(LINE_L) and (25)(LINE_R) of IC1403(CODEC)?

NO → Check IC1403 and its peripheral circuits.

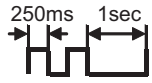
YES

Does the audio signal come from pins(24)(LINE_L) and (25)(LINE_R) of IC1403 to pins(2)(R) and (4)(L) of J505?

NO → Check the line between IC1403 and J505. and their peripheral circuits.

Check the LINE_MUTE line and its peripheral circuits. (Q507 thru Q509, etc.)

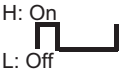
LED flashing timing chart for error notification.



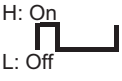
1)Green power LED

Error type	Power green LED operation (1 cycle)	Pins are monitor microprocessor pins.
Lamp failure Flashes once: Fast	H: On L: Off	ERR_PNL (pin 40): Abnormal L. Confirmed after 5 consecutive detections at 1 second intervals (detected only when the backlight is on). Note that after five detection counts, the lamp cannot be activated except in the monitoring process. (For the first time, only the inverter is reset, and error OFF is not activated) Accumulated counts are cleared to 0 when the corresponding setting in the process A is made, when the power is turned on with [CH_DOWN] and [VOL_UP] on the unit down or after continuous illumination for 3 minutes.
Power failure Flashes twice	H: On L: Off	Refer to “Power failure details”.
communication failure with main CPU Flashes 3 times	H: On L: Off	Refer to “Communication failure details”. Communication line failure or main CPU communication failure → Check debug statements for the main CPU.
Monitor temperature failure Flashes 5 times	H: On L: Off	If the panel temperature is 60°C or more for 15 seconds or more in a row, CAUTION appears on the OSD of AVC (flashes in red in the lower right screen). If the panel temperature is 60°C or more for 25 seconds or more in a row, error standby is activated. (MONITOR MAX TEMP on process A mode: Change of temperature failure AD value): Thermistor
Illegal Flash ROM Data Flashes 8 times	H: On L: Off	Flash ROM of Monitor Microprocessor is illegal. Update Monitor Microprocessor Software again.

2)Power failure details (Power LED flashes twice and OPC LED flashes)

Error type	OPC green LED operation (1 cycle)	Pins are monitor microprocessor pins unless otherwise specified.
PS_ON 13V/UR10V failure Flashes once		DET_POW1 (pin 34). Main converter 13V/UR10V is not applied. If error is detected during operation, the power is turned on again by interrupt handling (instantaneous blackout processing).
EU_POW Main 3.3V failure Flashes twice		DET_POW3 (pin 36): Abnormal (L). Main power 3.3V is not applied. If error is detected during operation, error standby is activated by polling.
D_POW UR6V failure Flashes 3 times		DET_POW0 (pin 33): Abnormal (L). UR6V is not applied. If error is detected during operation, error standby is activated by polling.
PANEL_POW Panel 5V failure Flashes 5 times		DET_POW2 (pin 35): Abnormal (L). Panel power is not applied. If error is detected during operation, error standby is activated by polling.
Main failure Flashes 7 times		Main microprocessor detection error (FAN error, 1bitAMP error, etc.) The details are displayed in “ERROR STANDBY CAUSE” on page 1 of process A mode for the main microprocessor.

3)Communication failure details (Power LED flashes 3 times and OPC LED flash

Error type	OPC green LED operation (1 cycle)	Basically, communication logs are analyzed by a bus monitor or debug print logs are analyzed.
Initial communication reception failure Flashes once		Initial communication from the main CPU is not received. (After canceling the reset, request for the monitor model No. is not received.) → Communication line failure or main CPU start-up failure
Time-out setting reception failure Start-up confirmation reception failure Flashes twice		Time-out setting and start-up mode change cannot be received from the main CPU. (Start-up communication until time-out setting and start-up mode change is not received.) → Main CPU start-up failure or monitor microprocessor's reception failure
Regular communication failure Flashes 3 times		Regular communication that is performed at 1 second intervals in the normal operation is interrupted. → Main CPU operation failure or monitor microprocessor's reception failure

CHAPTER 7. MAJOR IC INFORMATIONS

[1] MAJOR IC INFORMATIONS

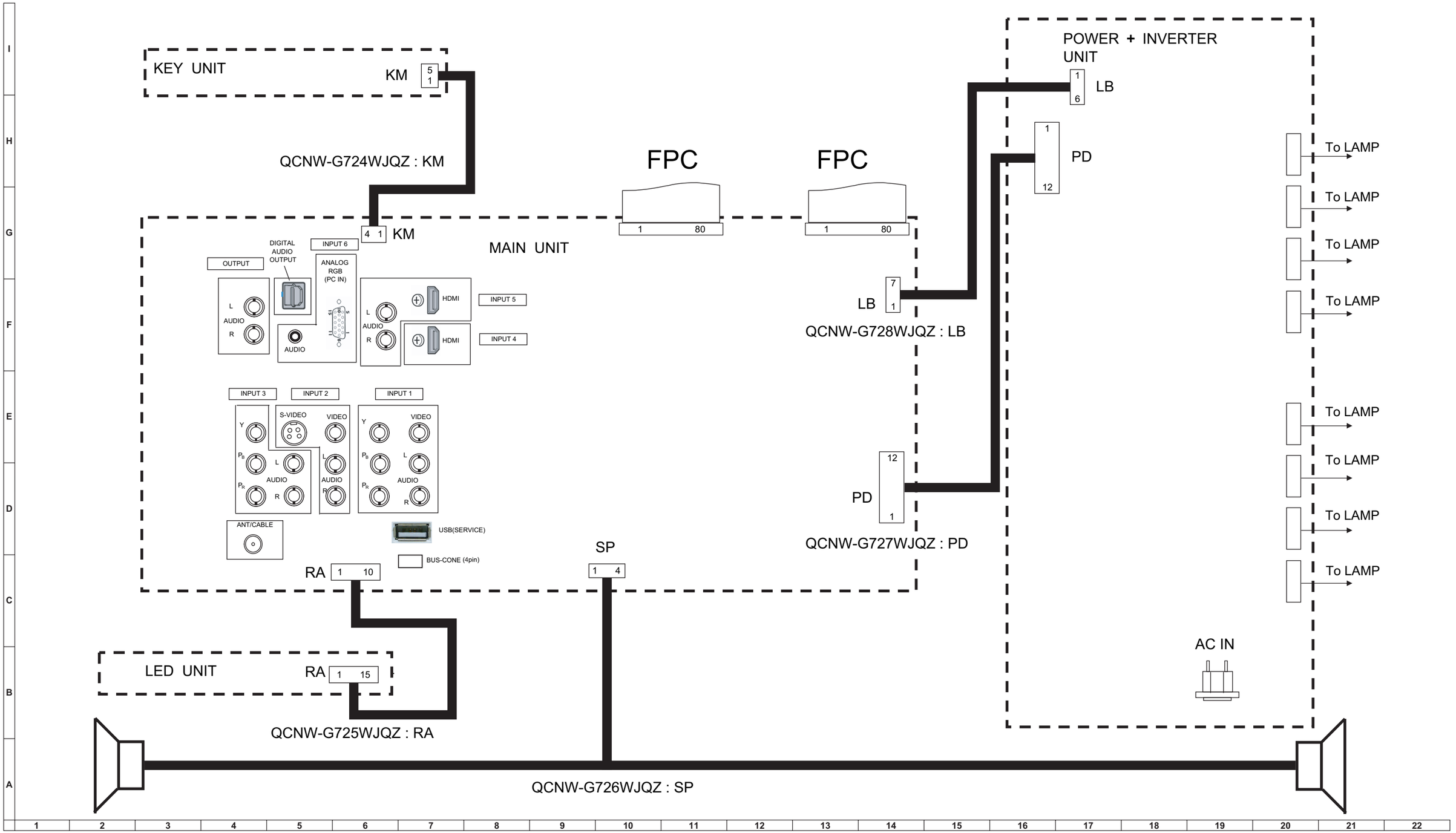
- IC8001 (RH-iXC308WJQZQ)

  This IC is a system LSI with the following function.

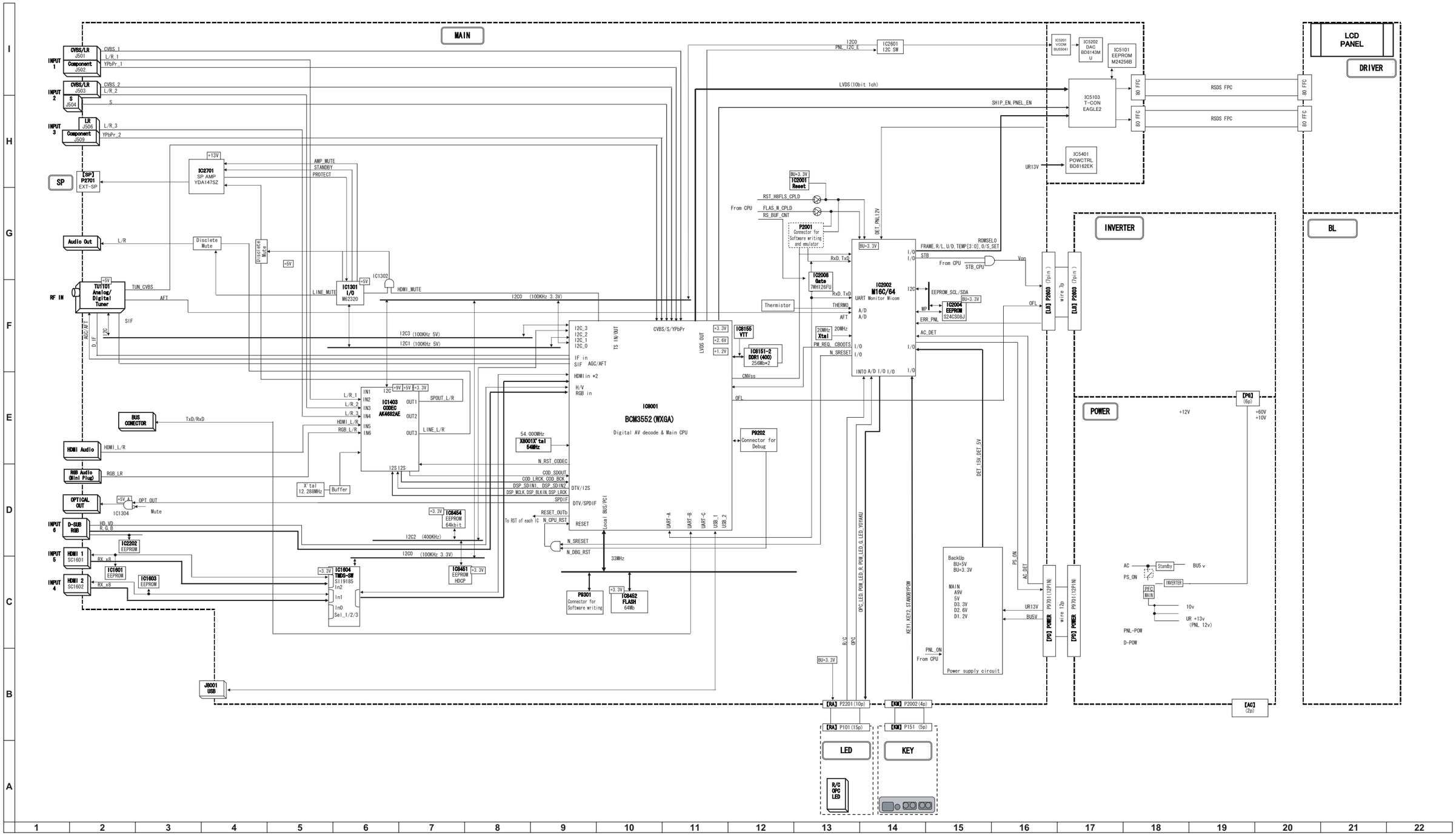
  A cable, ground wave receiver, NTSC decoder, HDMI receiver, transport processor, MPEG video processor, digital audio decoder, analog video processor, graphics processor, MLPS processor, and Peripheral controller.

CHAPTER 8. OVERALL WIRING/BLOCK DIAGRAM

[1] OVERALL WIRING DIAGRAM



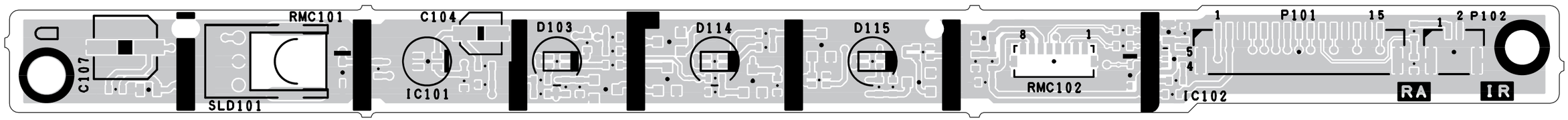
[2] SYSTEM BLOCK DIAGRAM



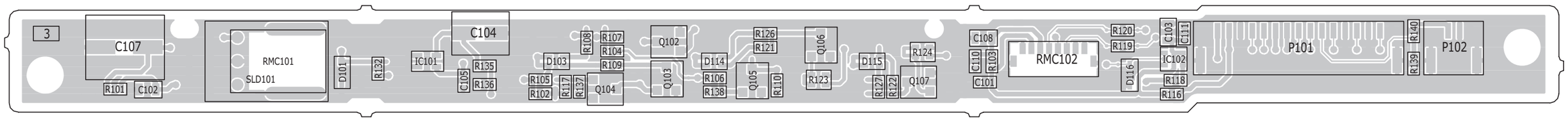
CHAPTER 9. PRINTED WIRING BOARD ASSEMBLIES

[1] R/C, LED Unit

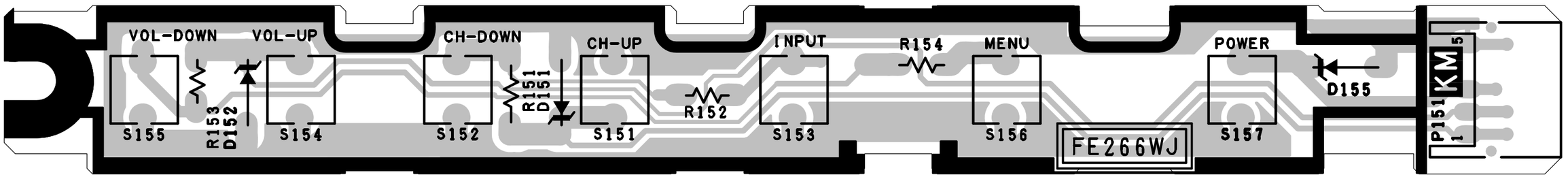
R/C, LED Unit (Side-A)



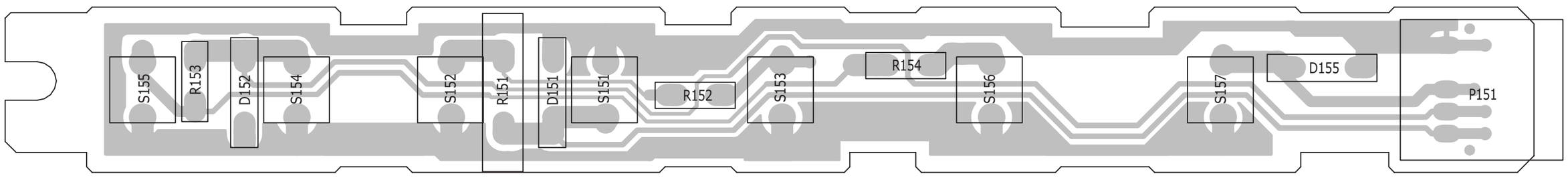
R/C, LED Unit (Side-A Chip)



KEY Unit (Side-A)

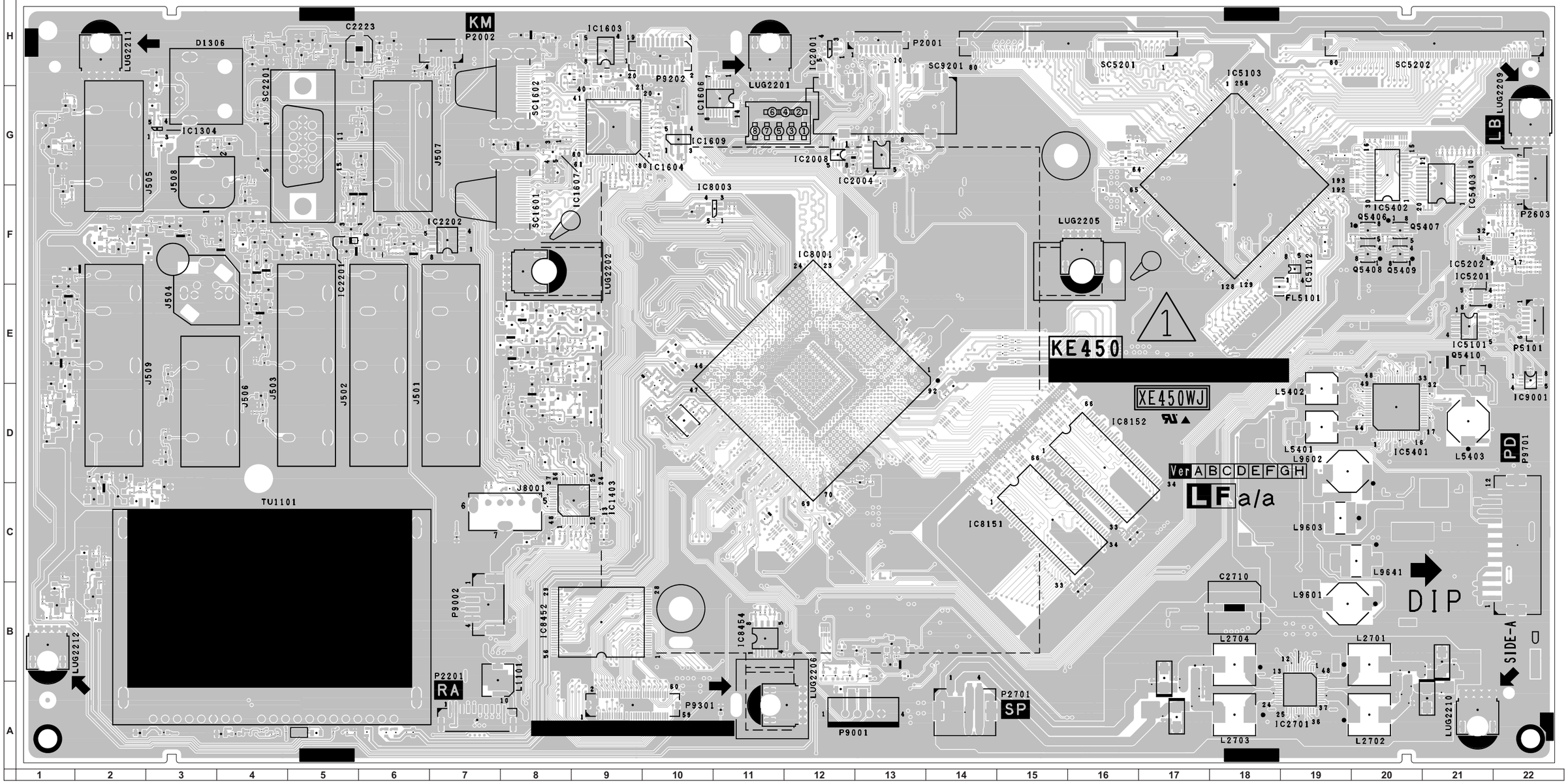


KEY Unit (Side-A Chip)

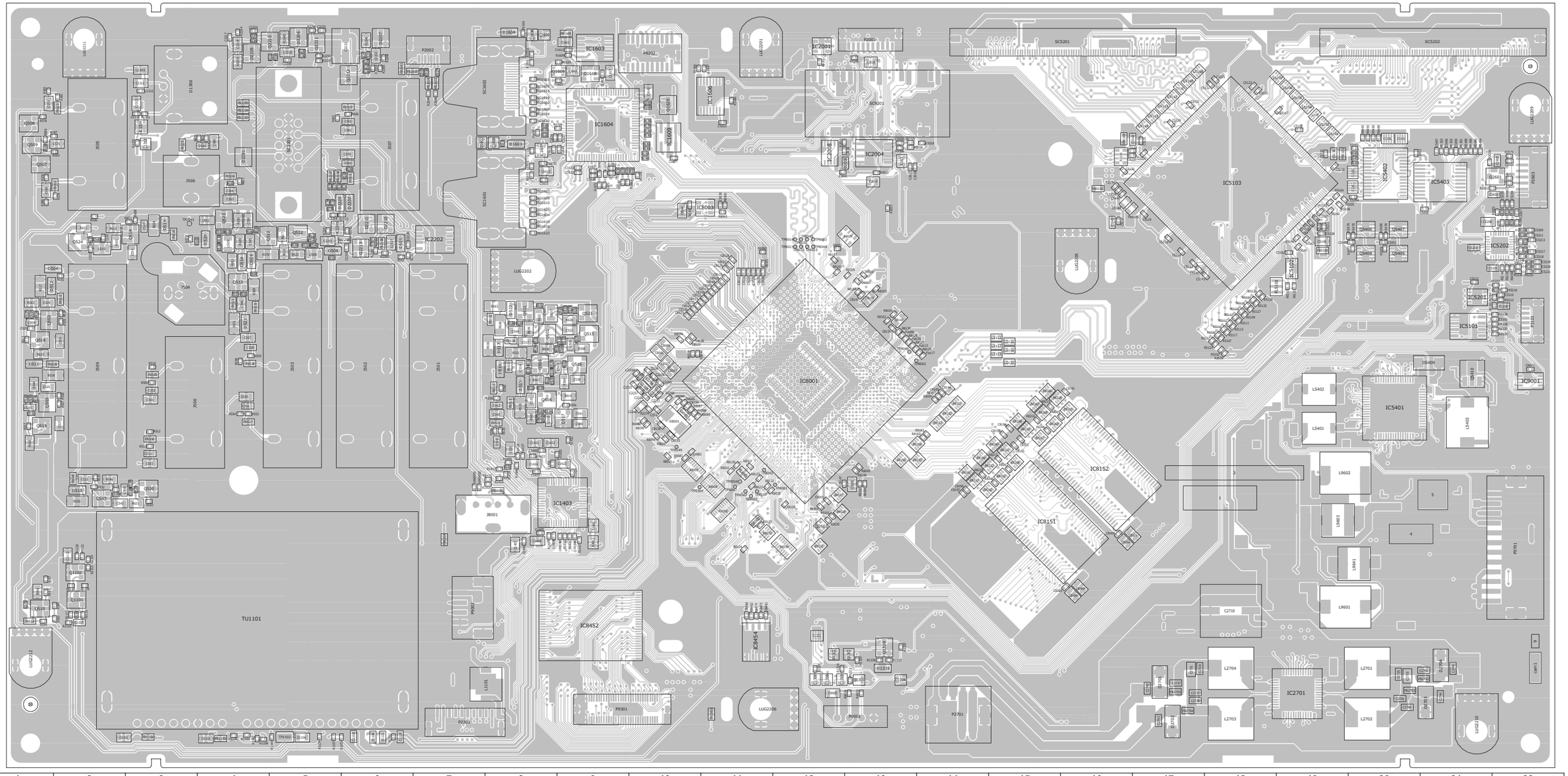


[3] MAIN Unit

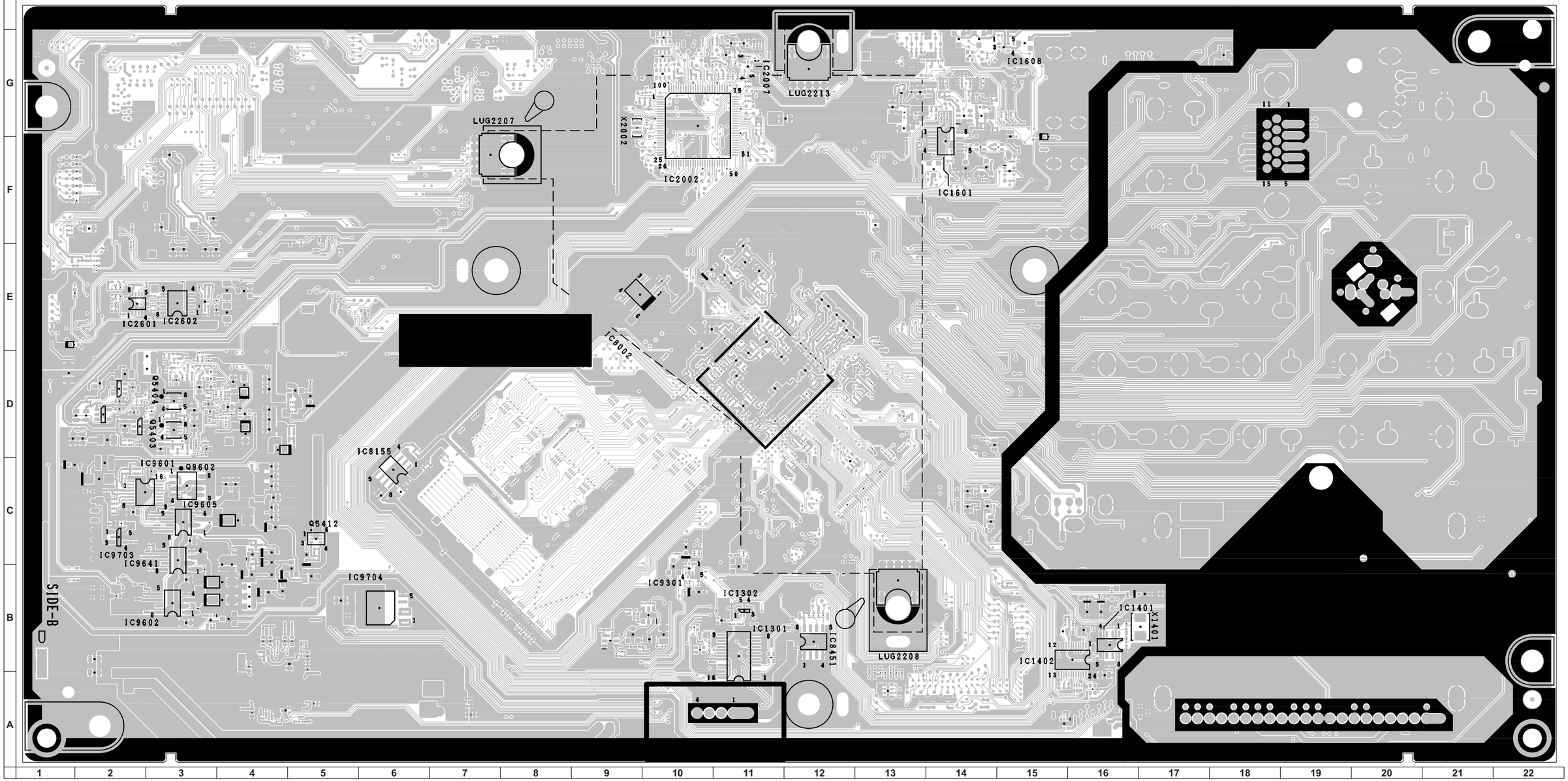
MAIN Unit (Side-A)



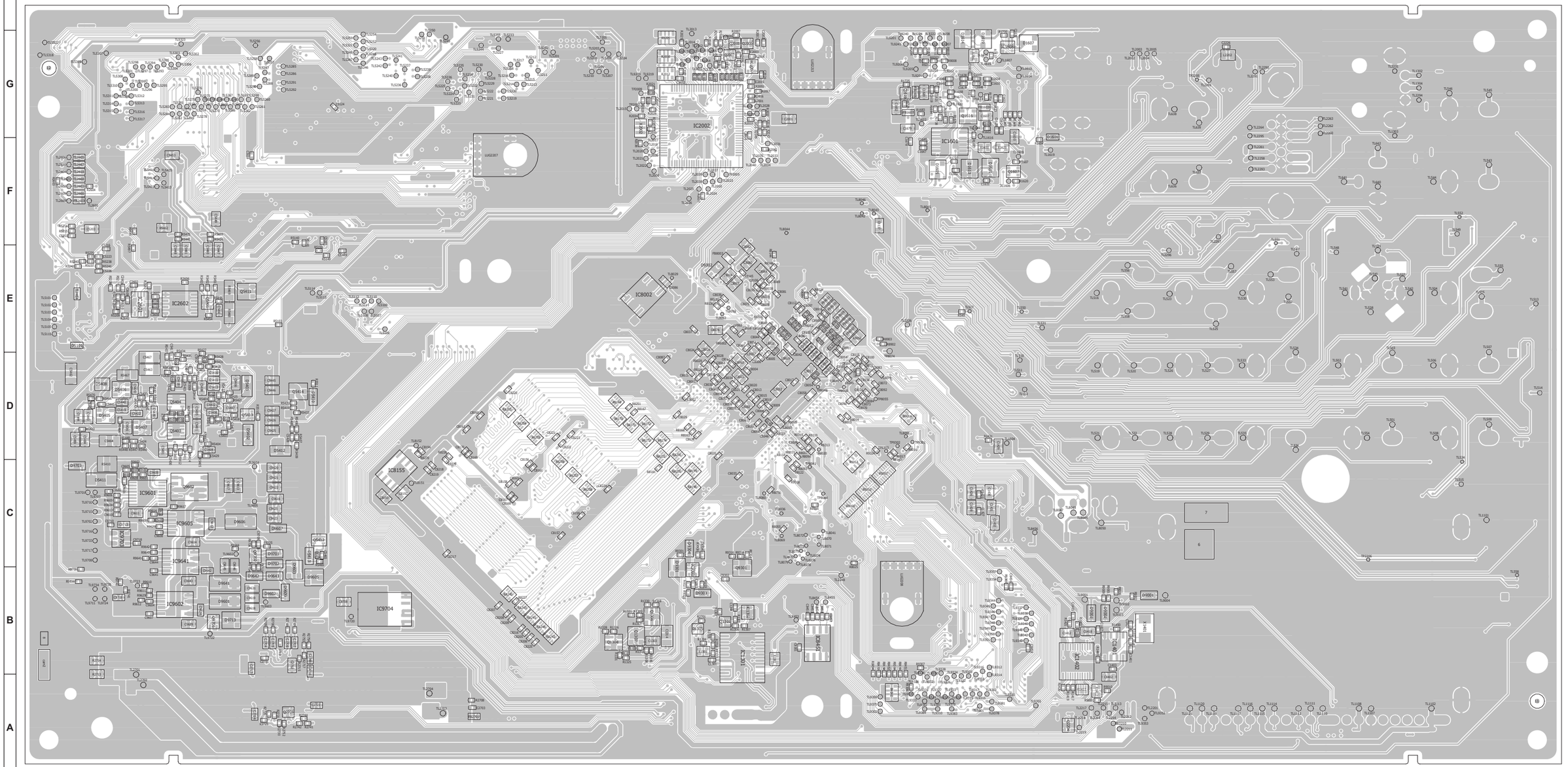
MAIN Unit (Side-A Chip)



MAIN Unit (Side-B)



MAIN Unit (Side-B Chip)



CHAPTER 10. SCHEMATIC DIAGRAM

[1] DESCRIPTION OF SCHEMATIC DIAGRAM

1. 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.

2. INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1) The unit of resistance "Ω" is omitted.
   (K=kΩ=1000Ω, M=MΩ).
2) All resistors are ± 5%, unless otherwise noted.
   (K= ± 10%, F= ± 1%, D= ± 0.5%)
3) All resistors are 1/16W, unless otherwise noted.

CAPACITOR

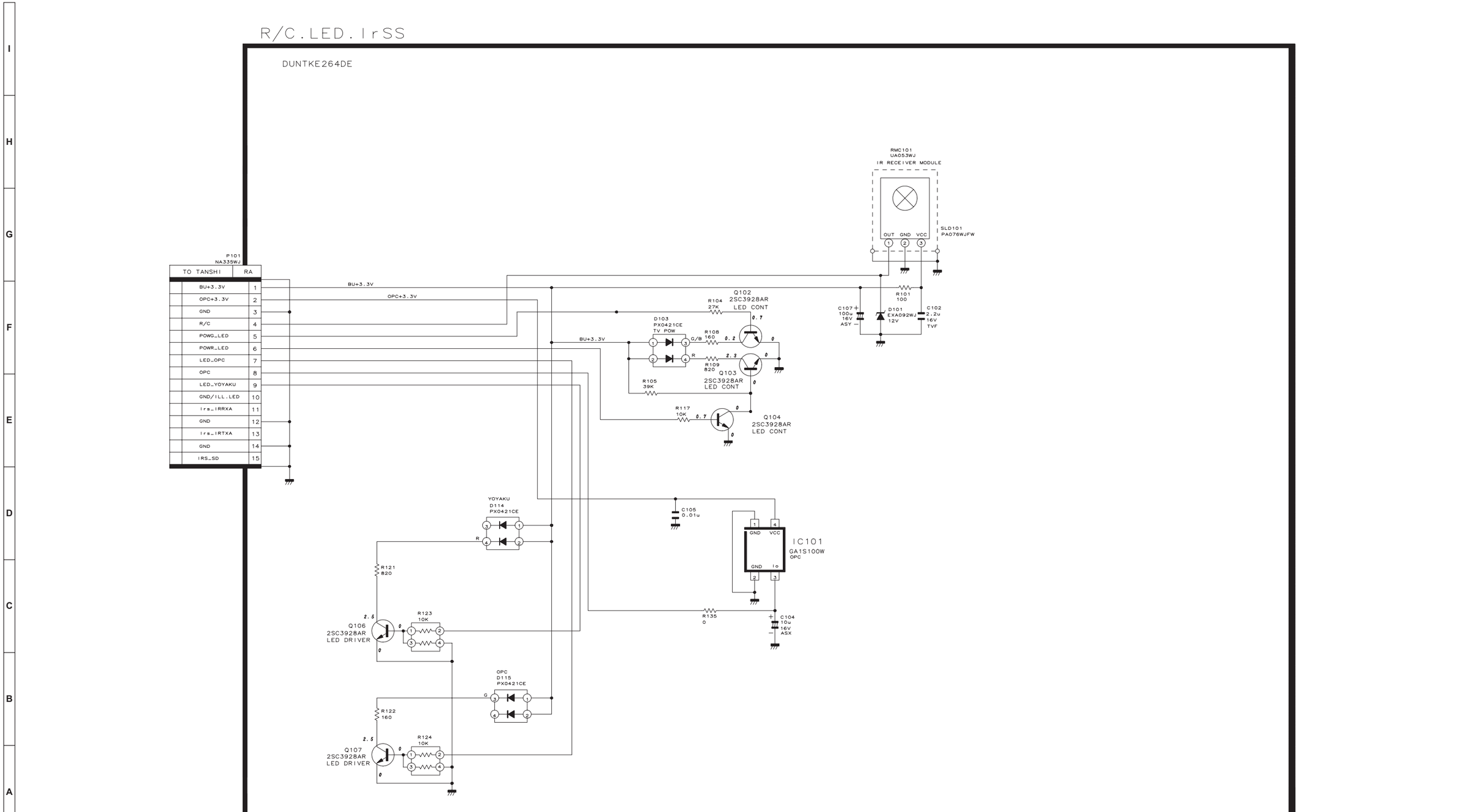
1) All capacitors are μF, unless otherwise noted.
   (P=pF=μμF).
2) All capacitors are 50V, unless otherwise noted.

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

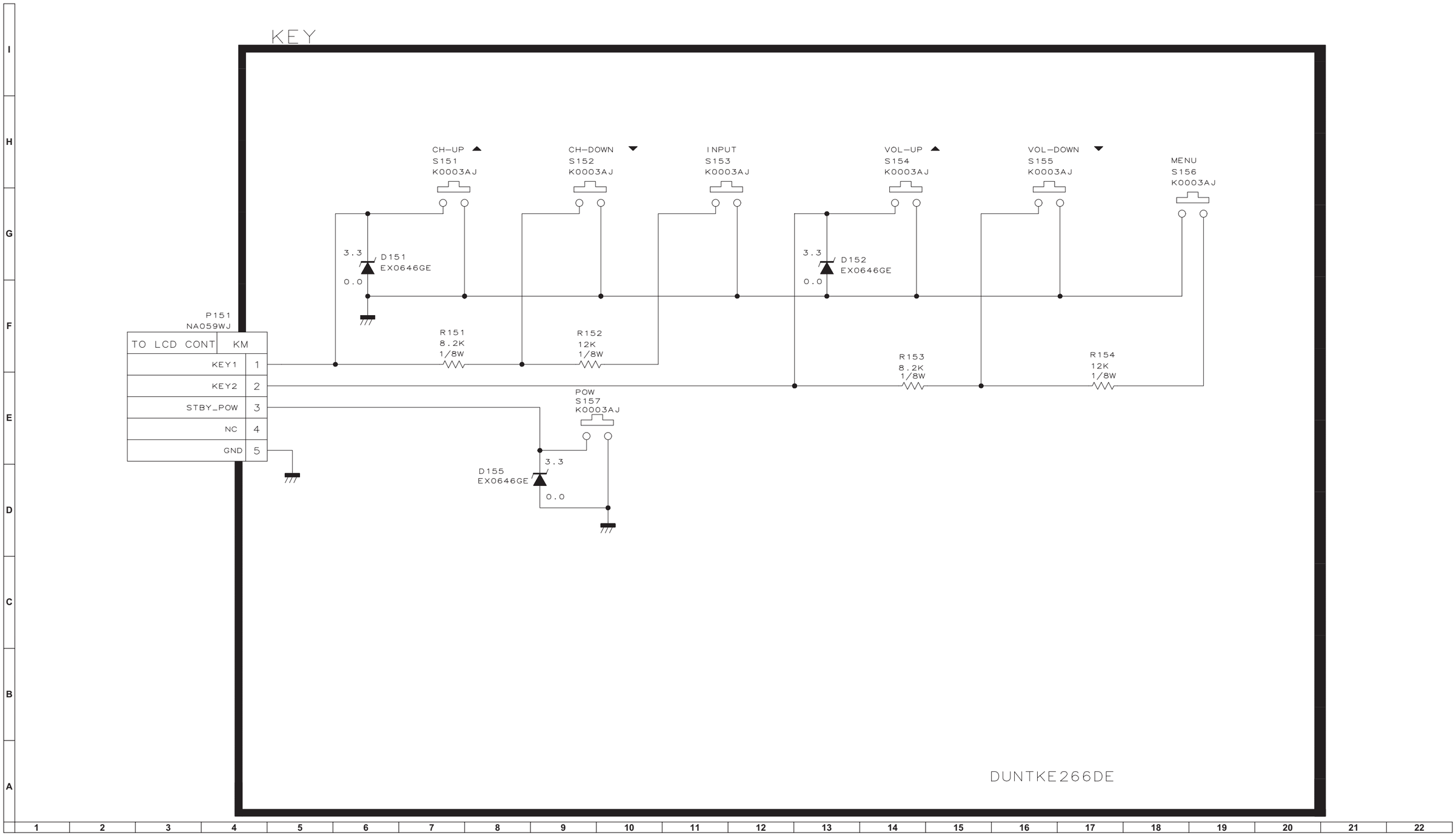
SAFETY NOTES:
1) DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2) SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

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

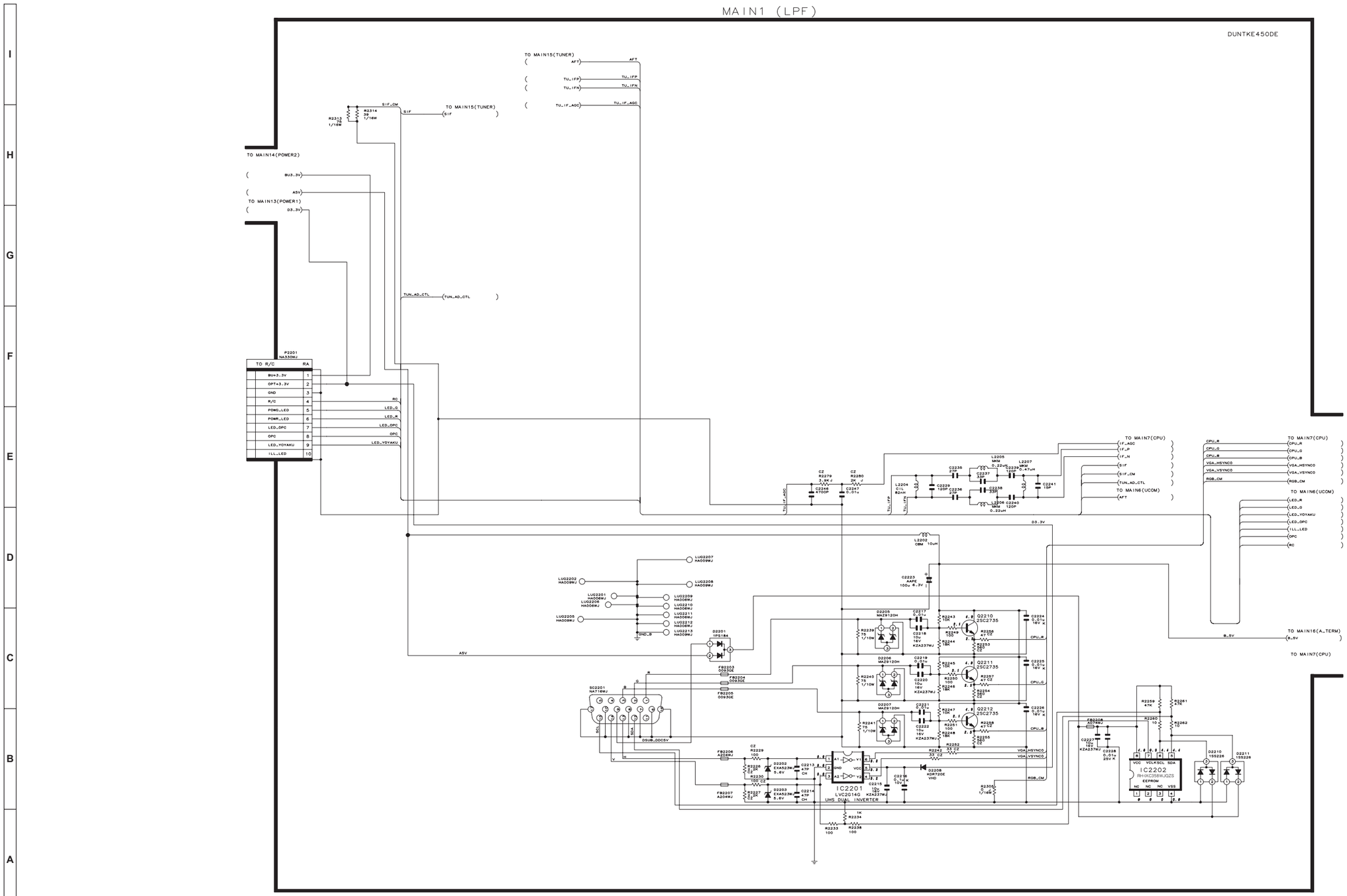

R/C.LED.IrSS
DUNTKE264DE
P101
NA335WJ
TO TANSHI
RA
BU+3.3V 1
OPC+3.3V 2
GND 3
R/C 4
POWG_LED 5
POWR_LED 6
LED_OPC 7
OPC 8
LED_YOYAKU 9
GND/ILL.LED 10
Irs_IRRXA 11
GND 12
Irs_IRTXA 13
GND 14
IRS_SD 15
RMC101
UA053WJ
IR RECEIVER MODULE
OUT GND VCC
SLD101
PA076WJFW
R101
100
C107
100u
16V
ASY
D101
EXA092WJ
12V
C102
2.2u
16V
TVF
Q102
2SC3928AR
LED CONT
R104
27K
D103
PX0421CE
TV POW
G/B
R
R108
160
R109
820
Q103
2SC3928AR
LED CONT
R105
39K
R117
10K
Q104
2SC3928AR
LED CONT
YOYAKU
D114
PX0421CE
C105
0.01u
IC101
GA1S100W
OPC
GND VCC
GND Io
R135
0
C104
10u
16V
ASX
R121
820
Q106
2SC3928AR
LED DRIVER
R123
10K
OPC
D115
PX0421CE
R122
160
Q107
2SC3928AR
LED DRIVER
R124
10K

[3] KEY Unit

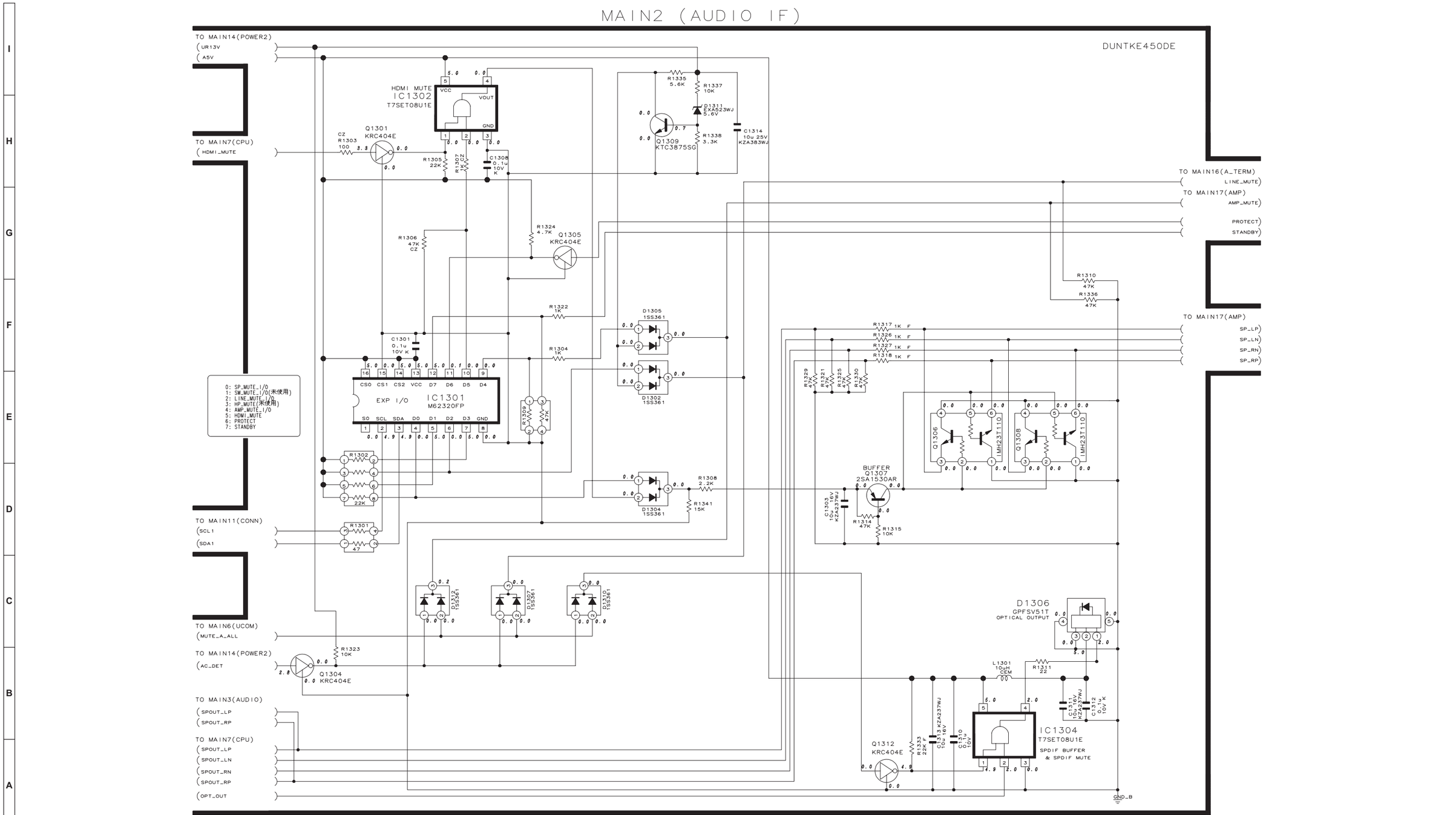

KEY
CH–UP
S151
K0003AJ
CH–DOWN
S152
K0003AJ
INPUT
S153
K0003AJ
VOL–UP
S154
K0003AJ
VOL–DOWN
S155
K0003AJ
MENU
S156
K0003AJ
3.3
D151
EX0646GE
0.0
3.3
D152
EX0646GE
0.0
P151
NA059WJ
TO LCD CONT
KM
KEY1 1
KEY2 2
STBY_POW 3
NC 4
GND 5
R151
8.2K
1/8W
R152
12K
1/8W
R153
8.2K
1/8W
R154
12K
1/8W
POW
S157
K0003AJ
D155
EX0646GE
3.3
0.0
DUNTKE266DE

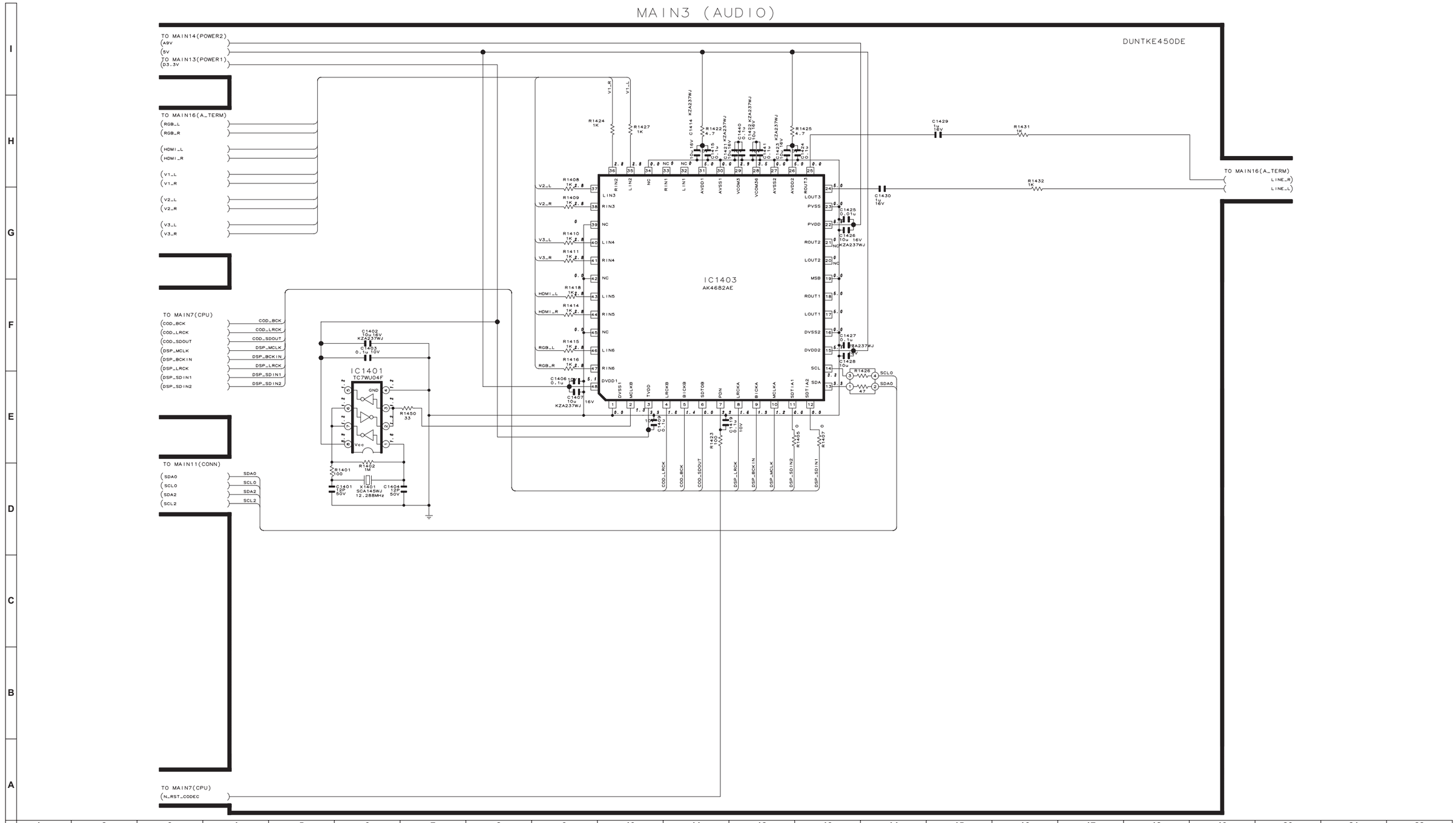
[4] MAIN Unit

- MAIN Unit-1/20

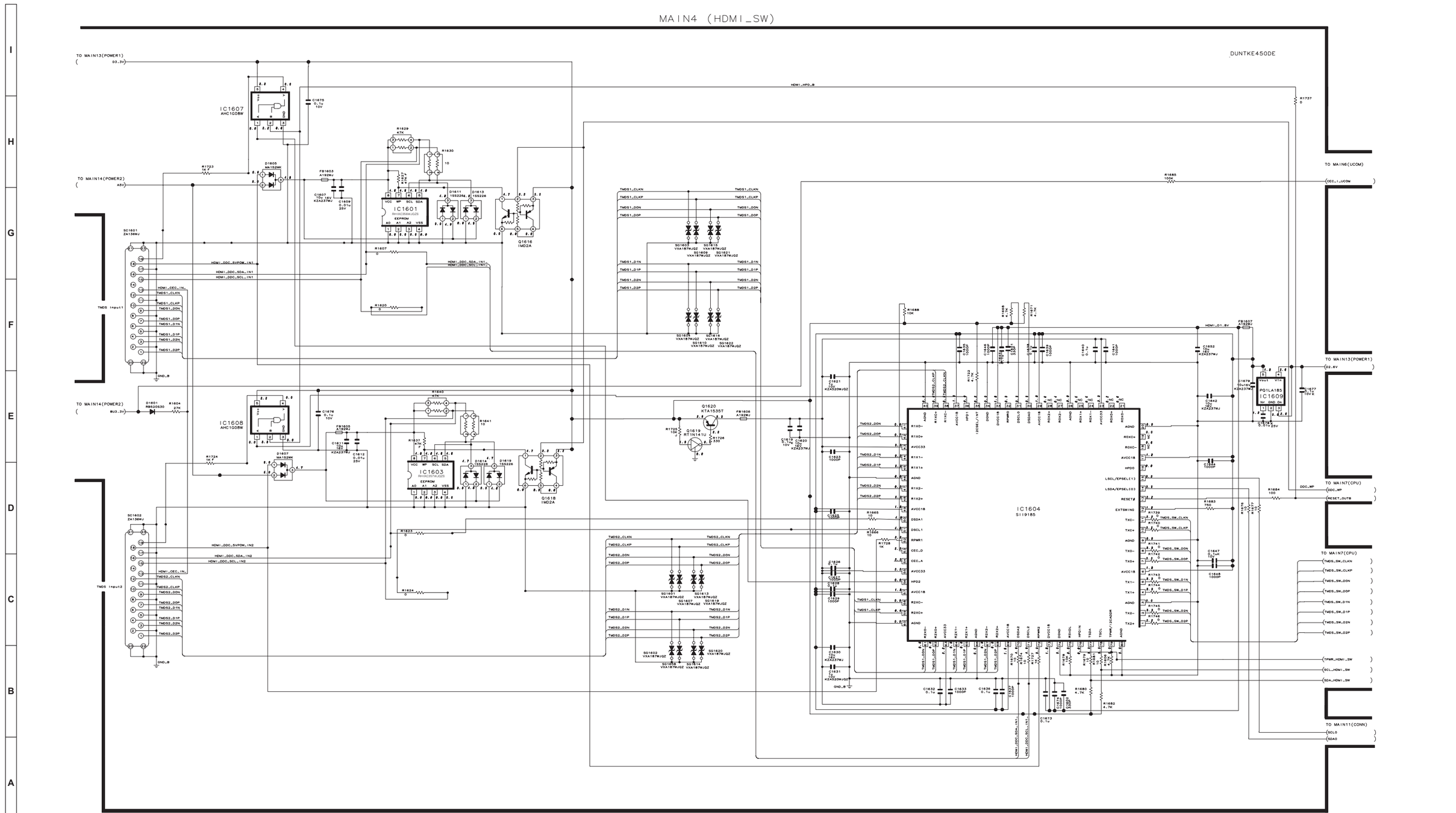


- MAIN Unit-2/20




MAIN3 (AUDIO)
DUNTKE450DE
TO MAIN14(POWER2)
A9V
5V
TO MAIN13(POWER1)
D3.3V
TO MAIN16(A_TERM)
RGB_L
RGB_R
HDMI_L
HDMI_R
V1_L
V1_R
V2_L
V2_R
V3_L
V3_R
TO MAIN7(CPU)
COD_BCK
COD_LRCK
COD_SDOUT
DSP_MCLK
DSP_BCKIN
DSP_LRCK
DSP_SDIN1
DSP_SDIN2
IC1401
TC7WU04F
GND
Vcc
IC1403
AK4682AE
TO MAIN11(CONN)
SDA0
SCL0
SDA2
SCL2
TO MAIN7(CPU)
N_RST_CODEC
TO MAIN16(A_TERM)
LINE_R
LINE_L

- MAIN Unit-4/20



MAIN5 (PANEL)

DUNTKE450DE

TO_MAIN13(POWER1)
D3.3V

TO_MAIN7(CPU)

TO_MAIN6(UCOM)
DET_PNL12V

VON

ERR_PNL

TO_MAIN7(CPU)
PNL_WP
PNL_I2C_EN
CPU_PWM0
ADIM

R2604
22 CZ

TO_MAIN11(CONN)
SCL0
SDA0

*IC2601
HC2G66DP
I2C Bus SW
VCC
GND
*C2602
0.1u
CZB

TO_MAIN18(T-CON1)
DET_PNL12V

TO_MAIN19(T-CON2)
PNL_WP
VCOM_SDA
VCOM_SCL

*R2603
10K

FB2603
A206WJ

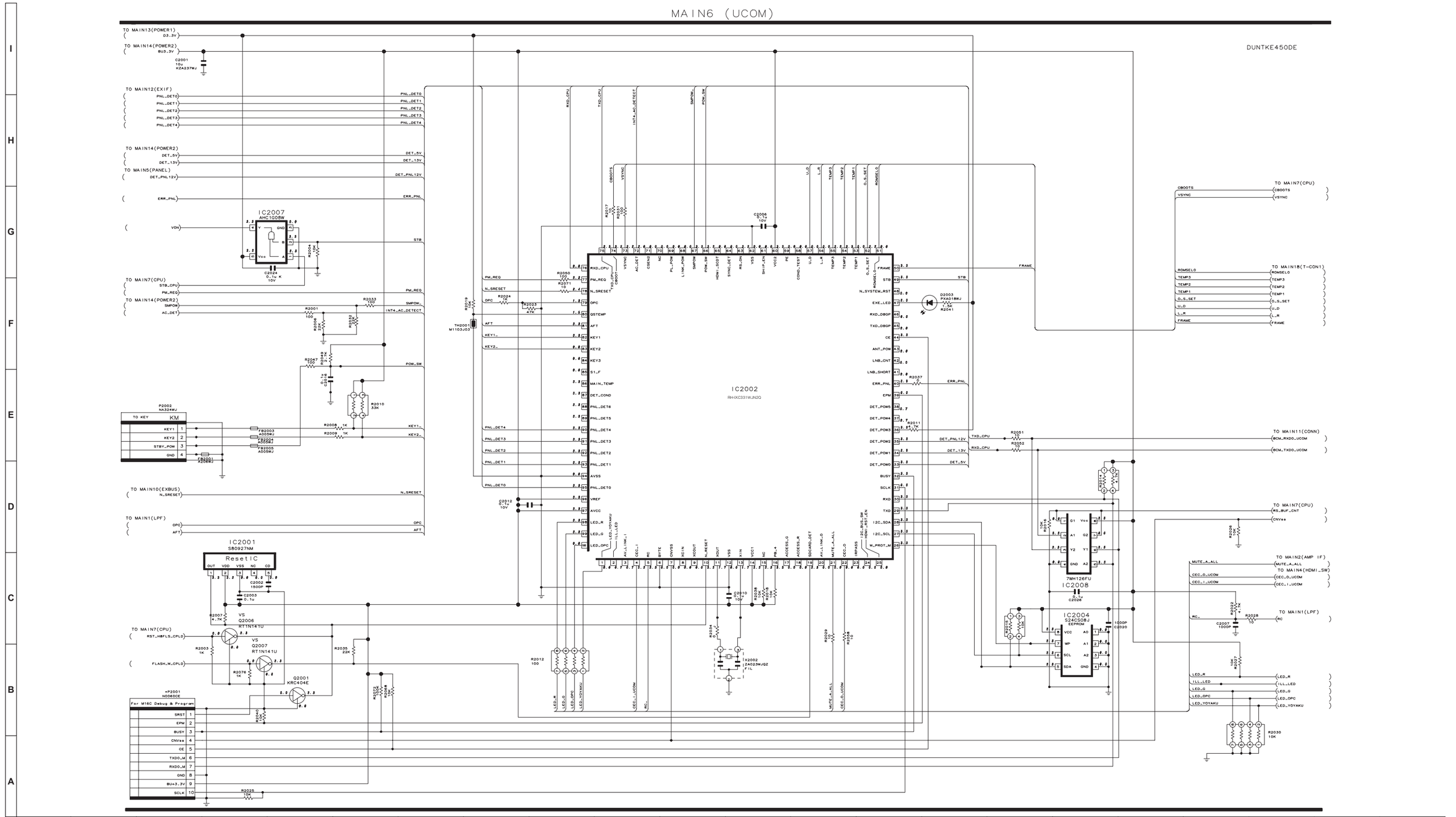
P2603
NA327WJ

LB	TO INV
1	GND
2	STB(VON)
3	OFL1(PWM)
4	ERR
5	REG2(DET)
6	BRT(VBRT)
7	ADIM

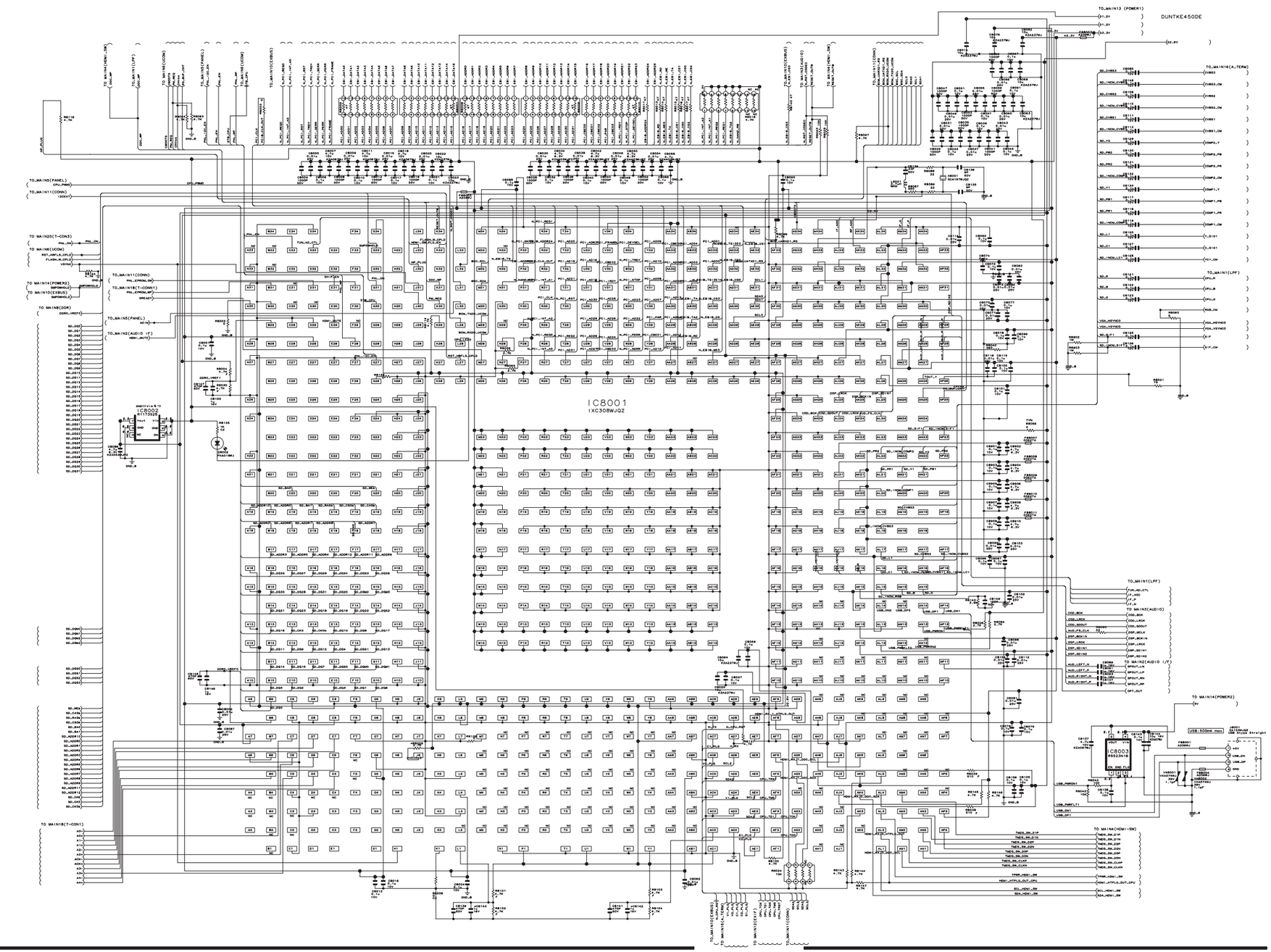
*C2606
0.1u
CZB

R2623
1M

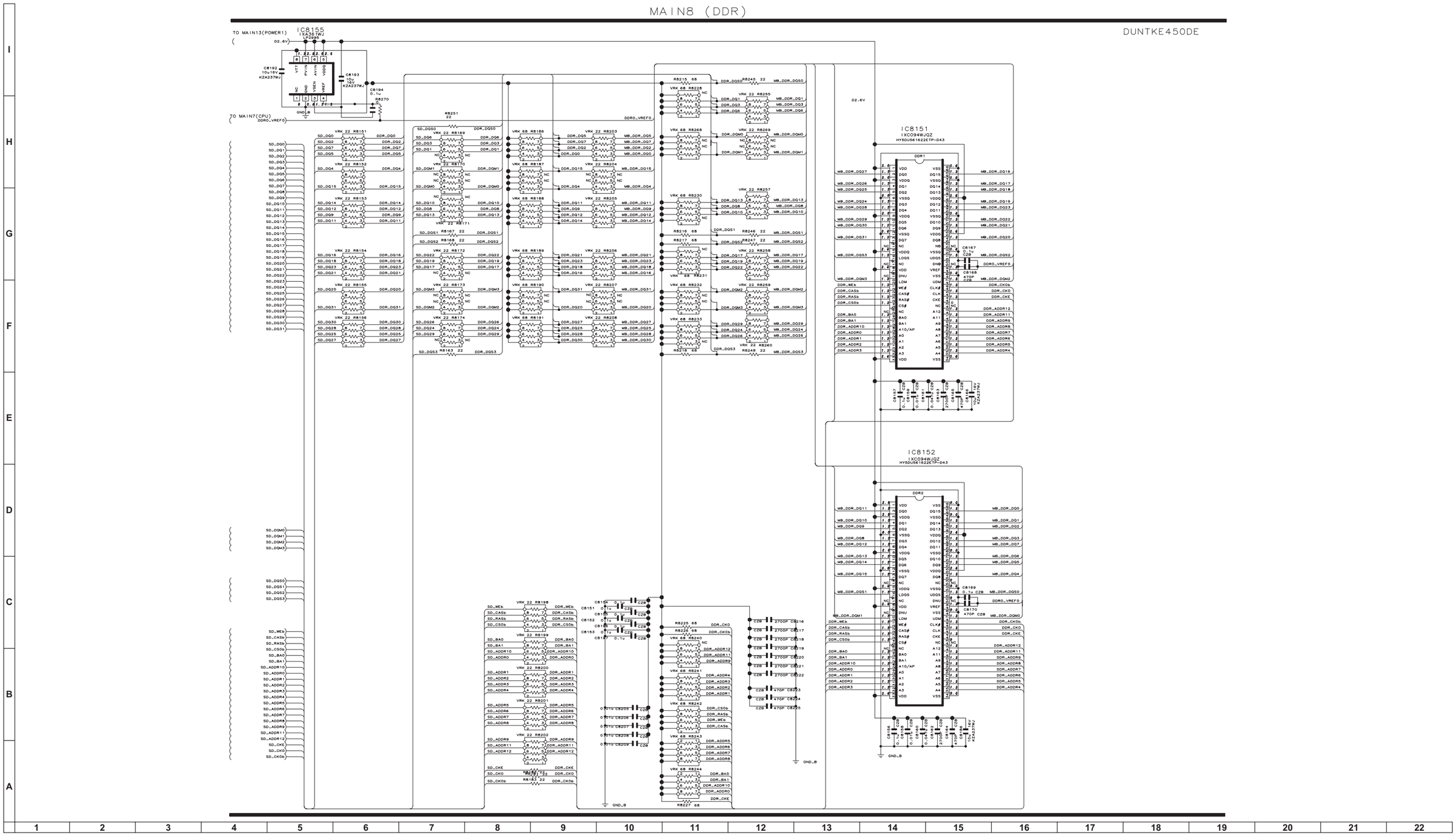
- MAIN Unit-6/20



MAIN7 (CPU)

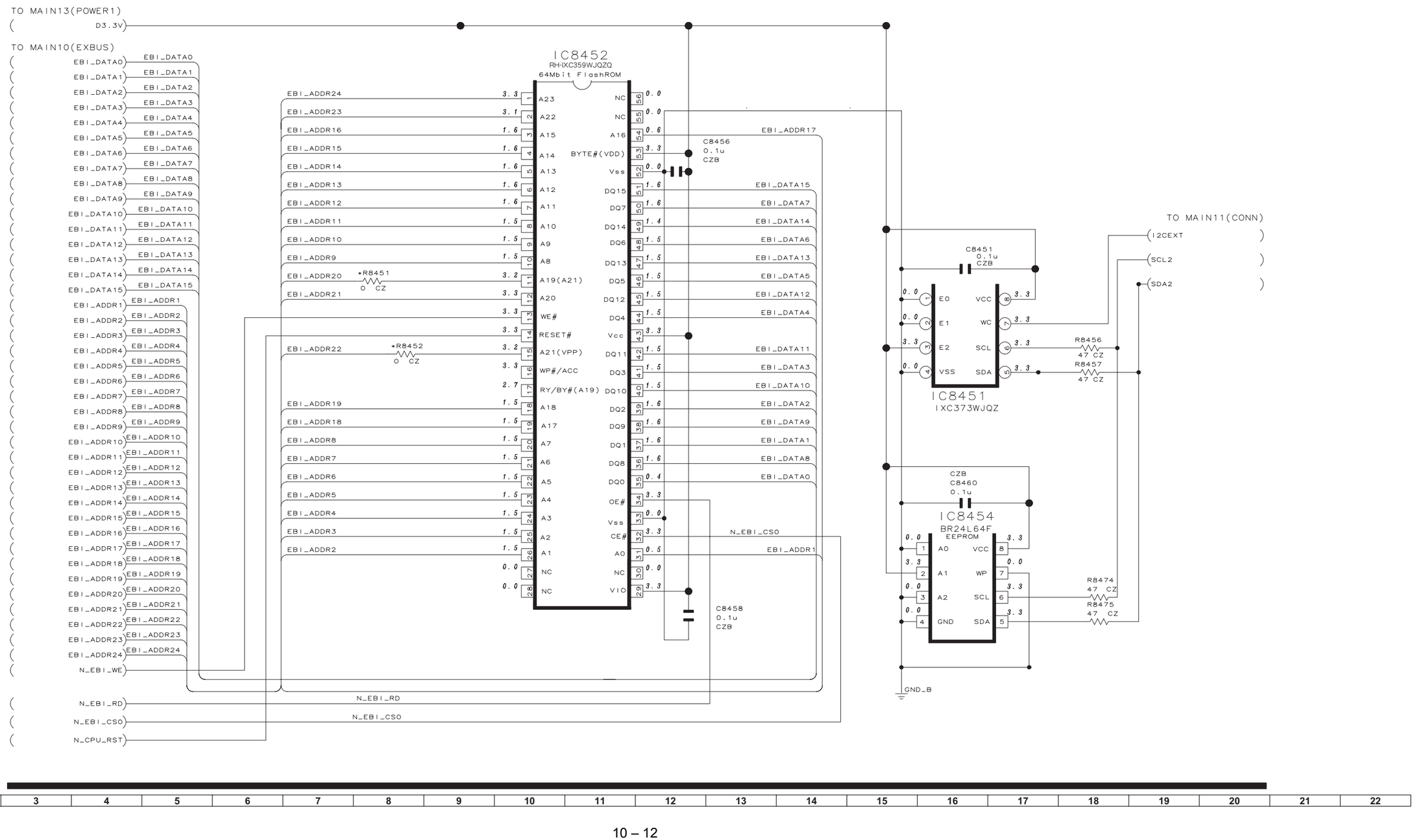

IC8001
IXC308WJQZ
IC8002
S1T73022
IC8003
RS5321N18
DUNTKE450DE
TO_MAIN13 (POWER1)
TO_MAIN16(A_TERM)
TO_MAIN1(LPF)
TO_MAIN3(AUDIO)
TO_MAIN2(AUDIO I/F)
TO_MAIN14(POWER2)
TO_MAIN4(HDMI-SW)
TO_MAIN5(PANEL)
TO_MAIN11(CONN)
TO_MAIN20(T-CON3)
TO_MAIN8(UCOM)
TO_MAIN14(POWER2)
TO_MAIN10(EXBUS)
TO_MAIN8(T-CON1)
TO_MAIN1(CONN)
TO_MAIN8(T-CON1)
TO_MAIN5(PANEL)
TO_MAIN2(AUDIO I/F)
TO_MAIN8(UCOM)
TO_MAIN5(PANEL)
TO_MAIN10(EXBUS)
TO_MAIN8(T-CON1)
TO_MAIN1(CONN)
TO_MAIN4(HDMI-SW)
TO_MAIN1(CONN)
TO_MAIN3(AUDIO)
TO_MAIN2(AUDIO I/F)
TO_MAIN14(POWER2)
TO_MAIN1(LPF)
TO_MAIN16(A_TERM)
TO_MAIN13 (POWER1)

- MAIN Unit-8/20



MAIN9 (EPROM)

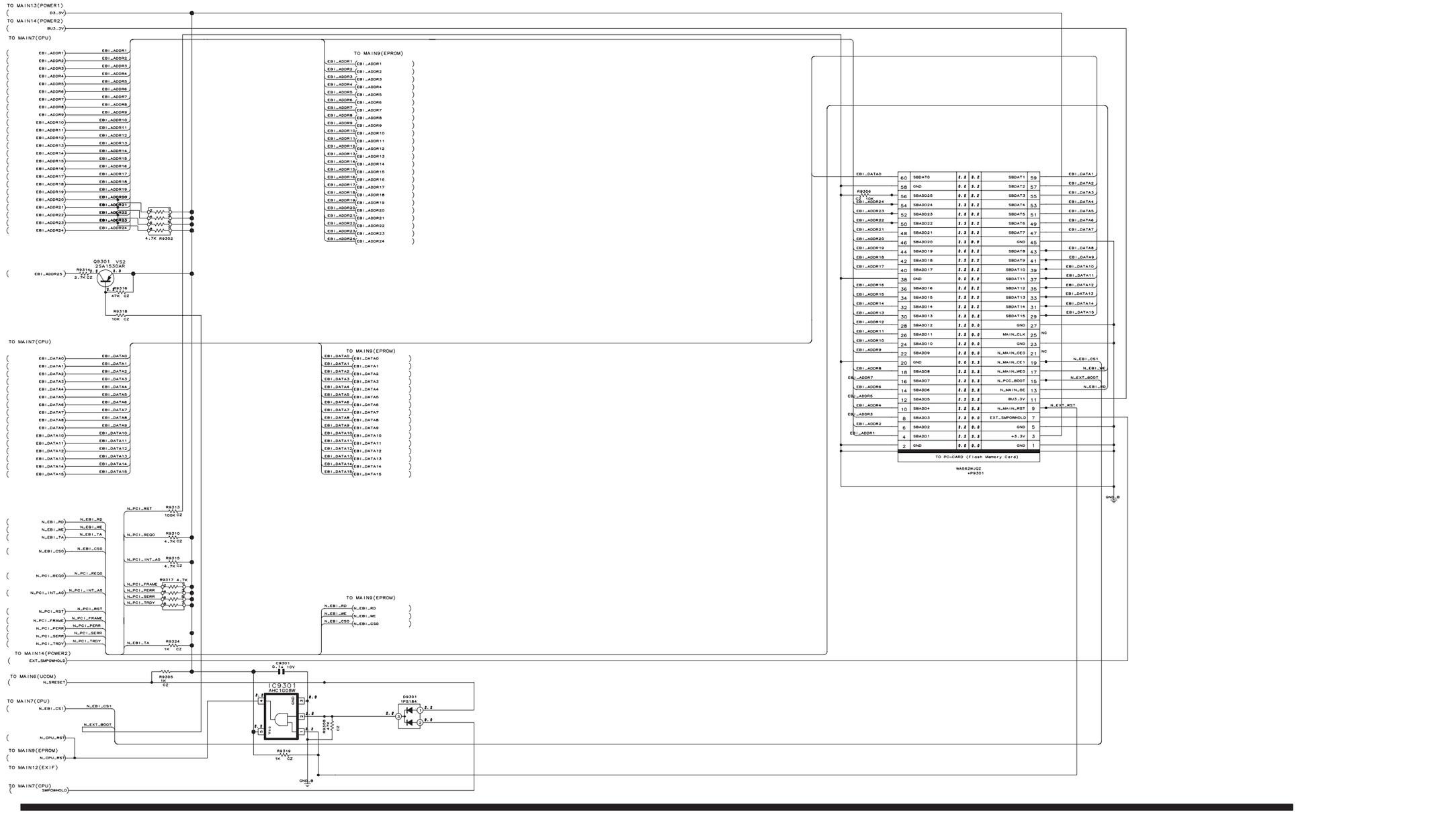
DUNTKE450DE

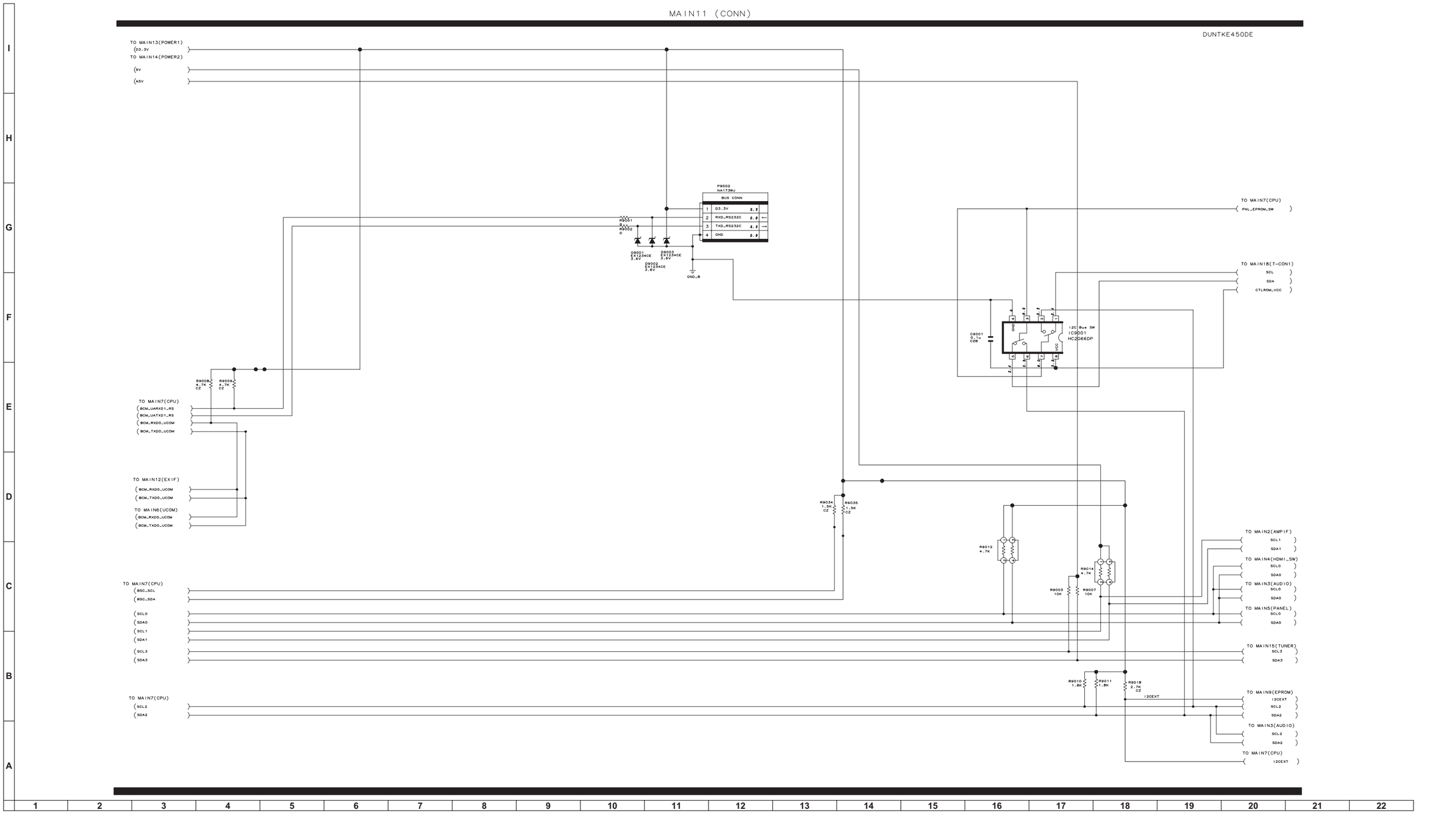


- MAIN Unit-10/20

MAIN10 (EXBUS)

DUNTKE450DE

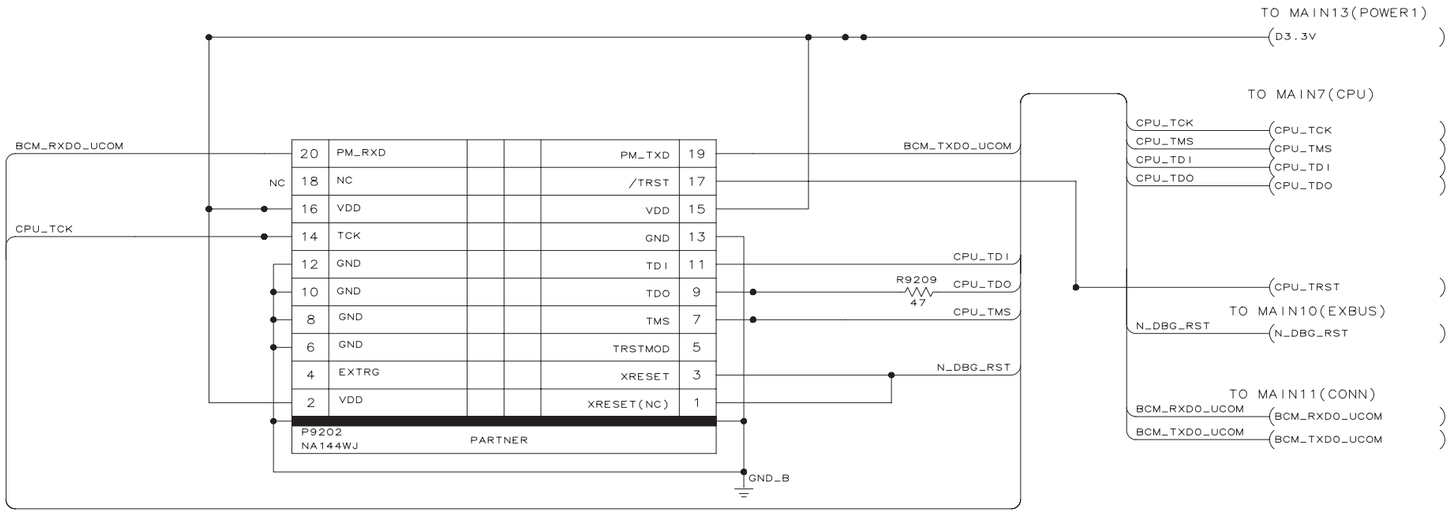


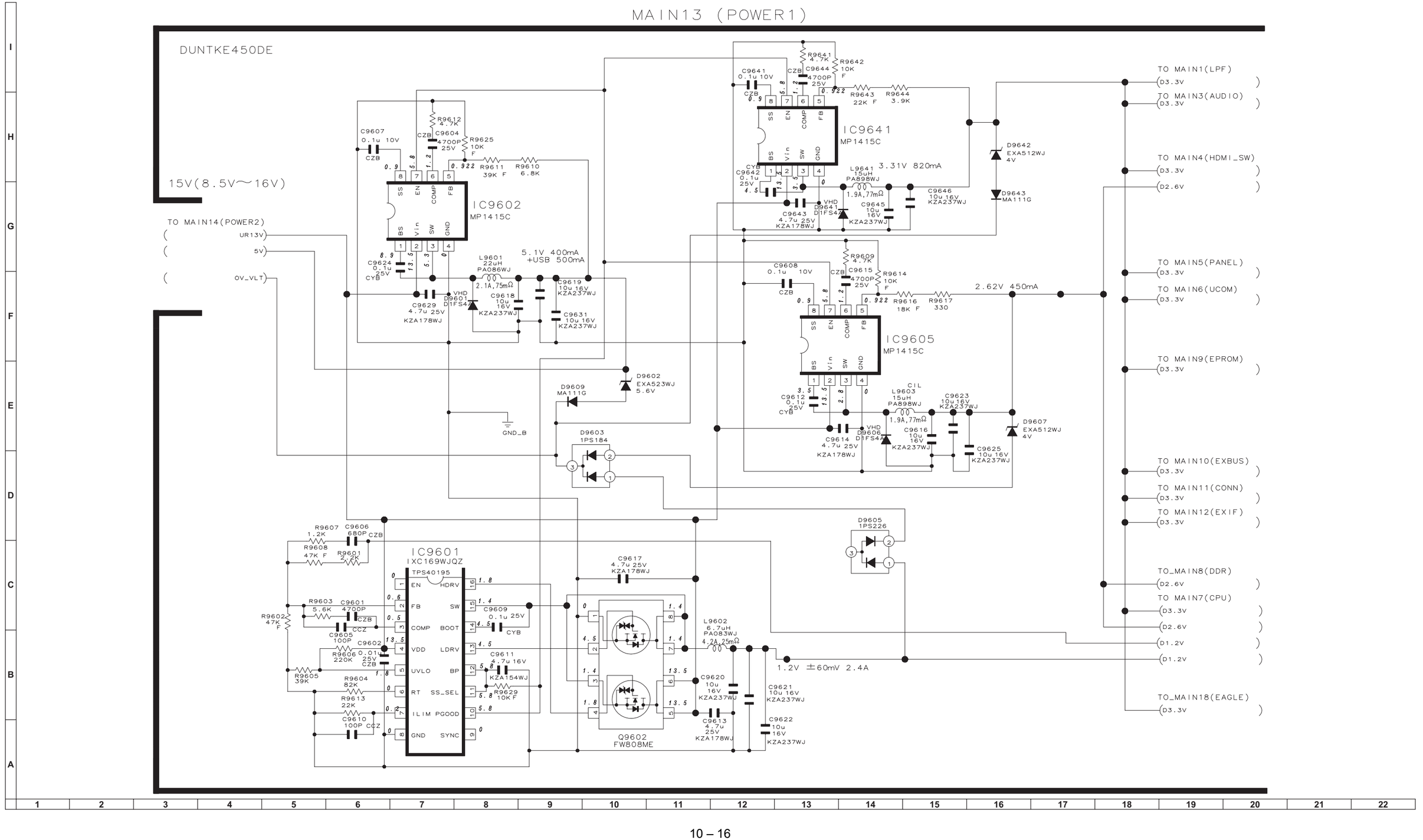

MAIN11 (CONN)
DUNTKE450DE
TO MAIN13(POWER1)
D3.3V
TO MAIN14(POWER2)
5V
A5V
P9002
NA173WJ
BUS CONN
1 D3.3V 3.3
2 RXD_RS232C 0.0 ←
3 TXD_RS232C 3.3 →
4 GND 0.0
R9001
R9002
0
D9001 EX1234CE 3.6V
D9002 EX1234CE 3.6V
D9003 EX1234CE 3.6V
GND_B
R9008 4.7K CZ
R9009 4.7K CZ
TO MAIN7(CPU)
BCM_UARXD1_RS
BCM_UATXD1_RS
BCM_RXD0_UCOM
BCM_TXD0_UCOM
TO MAIN12(EXIF)
BCM_RXD0_UCOM
BCM_TXD0_UCOM
TO MAIN6(UCOM)
BCM_RXD0_UCOM
BCM_TXD0_UCOM
TO MAIN7(CPU)
BSC_SCL
BSC_SDA
SCL0
SDA0
SCL1
SDA1
SCL3
SDA3
TO MAIN7(CPU)
SCL2
SDA2
C9001 0.1u CZB
I2C Bus SW IC9001 HC2G66DP
GND
VCC
TO MAIN7(CPU)
PNL_EPROM_SW
TO MAIN18(T-CON1)
SCL
SDA
CTLROM_VCC
R9034 1.5K CZ
R9035 1.5K CZ
R9012 4.7K
R9014 4.7K
R9003 10K
R9007 10K
R9010 1.8K
R9011 1.8K
R9018 2.7K CZ
I2CEXT
TO MAIN2(AMP1F)
SCL1
SDA1
TO MAIN4(HDMI_SW)
SCL0
SDA0
TO MAIN3(AUDIO)
SCL0
SDA0
TO MAIN5(PANEL)
SCL0
SDA0
TO MAIN15(TUNER)
SCL3
SDA3
TO MAIN9(EPROM)
I2CEXT
SCL2
SDA2
TO MAIN3(AUDIO)
SCL2
SDA2
TO MAIN7(CPU)
I2CEXT

- MAIN Unit-12/20

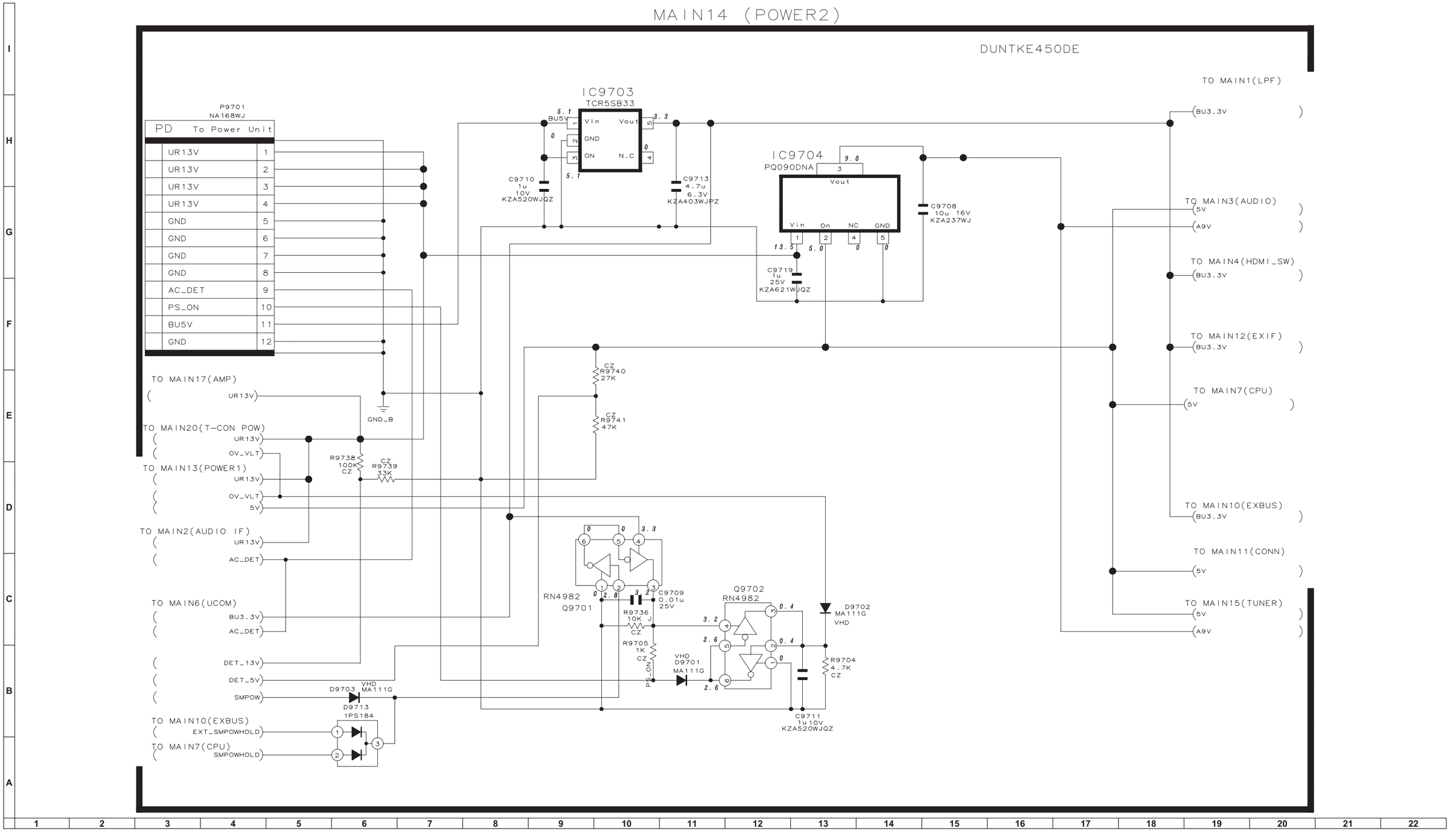
MAIN12 (EXIF)

DUNTKE450DE




MAIN13 (POWER1)
DUNTKE450DE
15V(8.5V～16V)
TO MAIN14(POWER2)
UR13V)
5V)
OV_VLT)
IC9602
MP1415C
IC9641
MP1415C
IC9605
MP1415C
IC9601
IXC169WJQZ
TPS40195
Q9602
FW808ME
5.1V 400mA
+USB 500mA
3.31V 820mA
2.62V 450mA
1.2V ±60mV 2.4A
D9602
EXA523WJ
5.6V
D9603
1PS184
D9609
MA111G
D9642
EXA512WJ
4V
D9643
MA111G
D9607
EXA512WJ
4V
D9605
1PS226
GND_B
TO MAIN1(LPF)
TO MAIN3(AUDIO)
TO MAIN4(HDMI_SW)
TO MAIN5(PANEL)
TO MAIN6(UCOM)
TO MAIN9(EPROM)
TO MAIN10(EXBUS)
TO MAIN11(CONN)
TO MAIN12(EXIF)
TO_MAIN8(DDR)
TO MAIN7(CPU)
TO_MAIN18(EAGLE)
D3.3V
D2.6V
D1.2V

- MAIN Unit-14/20



MAIN15(TUNER)

DUNTKE450DE

TU1101
AA016WJQZ

20mAmax | 140mAmax | 60mAmax

	BB	NC	NC	NC	BT	GND	MB	RF−AGC	SDA	SCL	AFT	NC	VIDEO	B1	SIF	B2	NC	IF−AGC	IF(+)	IF(−)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	5.0	0	0	0	12.4	0.0	5.0	4.0	4.7	4.7	1.5	0	1.6	5.0	0.0	3.2	0	0.0	0.0	0.0

C1101 10u 16V KZA237WJ
C1102 10u 16V KZA237WJ
FB1101 A206WJ
FB1102 A206WJ
R1101 47
R1102 47
R1103 68K
C1104 10u 16V KZA237WJ
R1107 100
C1109 0.01u CYB
C1111 0.01u CYB
IF_OUT_NT
IF_OUT_PT
SDA3
SCL3
AFT
TUN_CVBS
TUN_AD_CTL
TU_IF_AGC
TU_IFP
TU_IFN

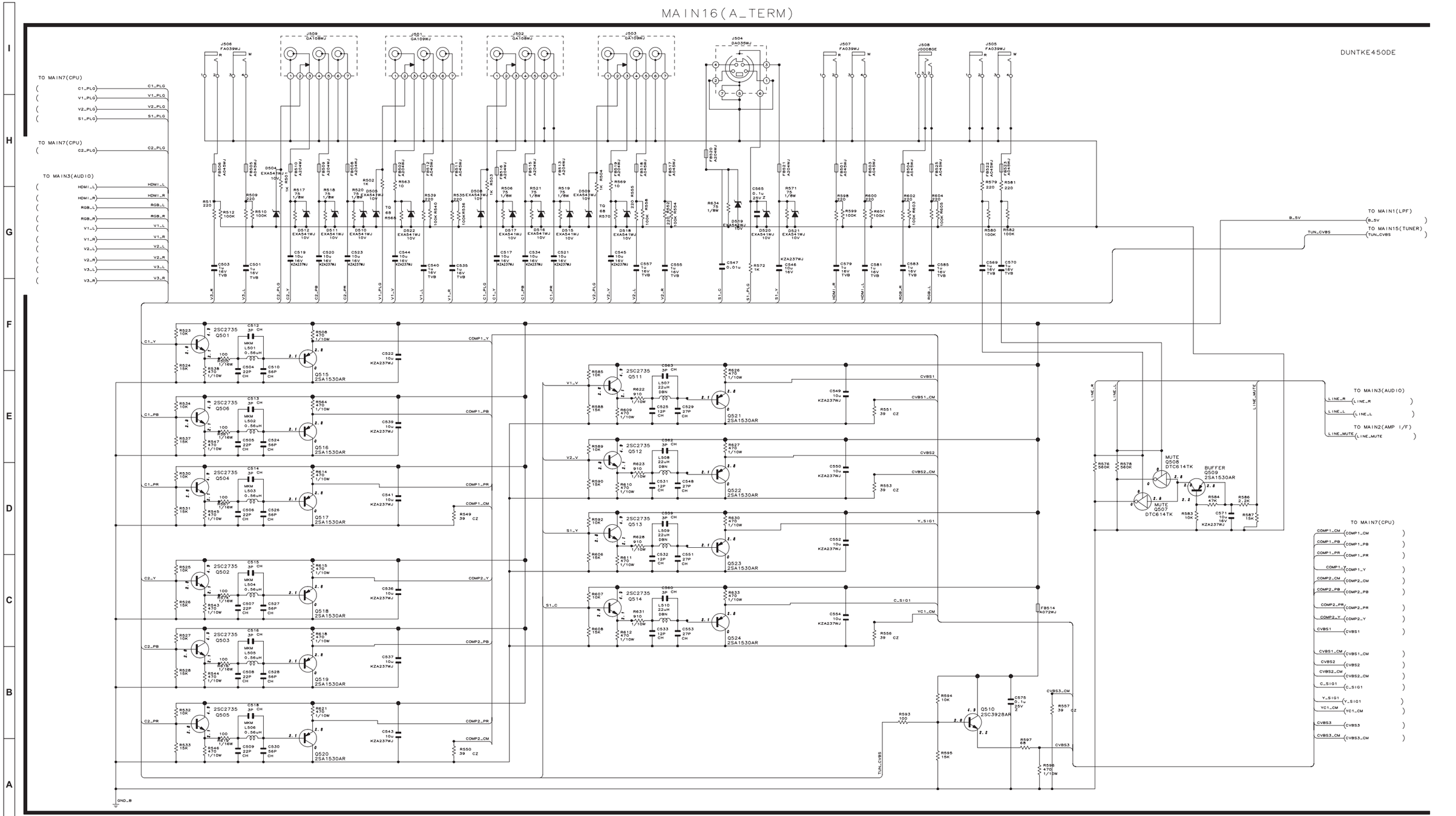
R1113 12K
R1118 2.7K
Q1102 2SC3928AR (8.9 / 6.5)
R1109 330
C1107 1000P CYB
R1115 100
Q1101 2SC3928AR (2.2 / 6.5 / 5.9 / 1.6)
C1112 10u 16V KZA237WJ
R1121 100
R1114 3.9K
R1119 1.8K
R1120 2.2K
SIF

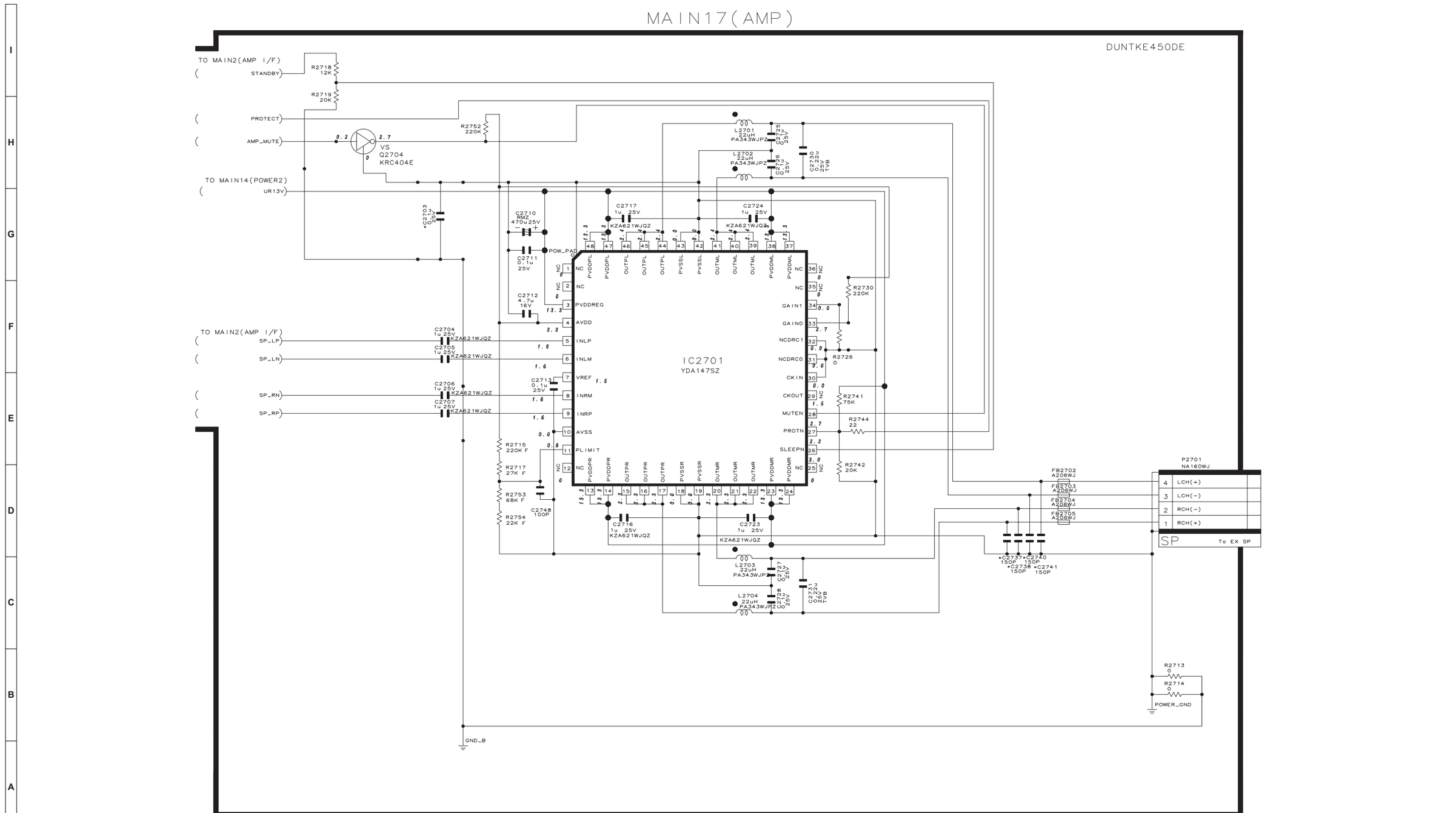
TO MAIN11(CONN)
SDA3 (SDA3)
SCL3 (SCL3)
TO MAIN1(LPF)
TU_IFP (TU_IFP)
TU_IFN (TU_IFN)
TU_IF_AGC (TU_IF_AGC)
AFT (AFT)
TUN_AD_CTL (TUN_AD_CTL)
SIF (SIF)
TO MAIN16(A_TERM)
TUN_CVBS (TUN_CVBS)
L1101 100uH
TO MAIN14(POWER2)
5V
A9V
A5V
A5V
A5V
A5V

- MAIN Unit-16/20

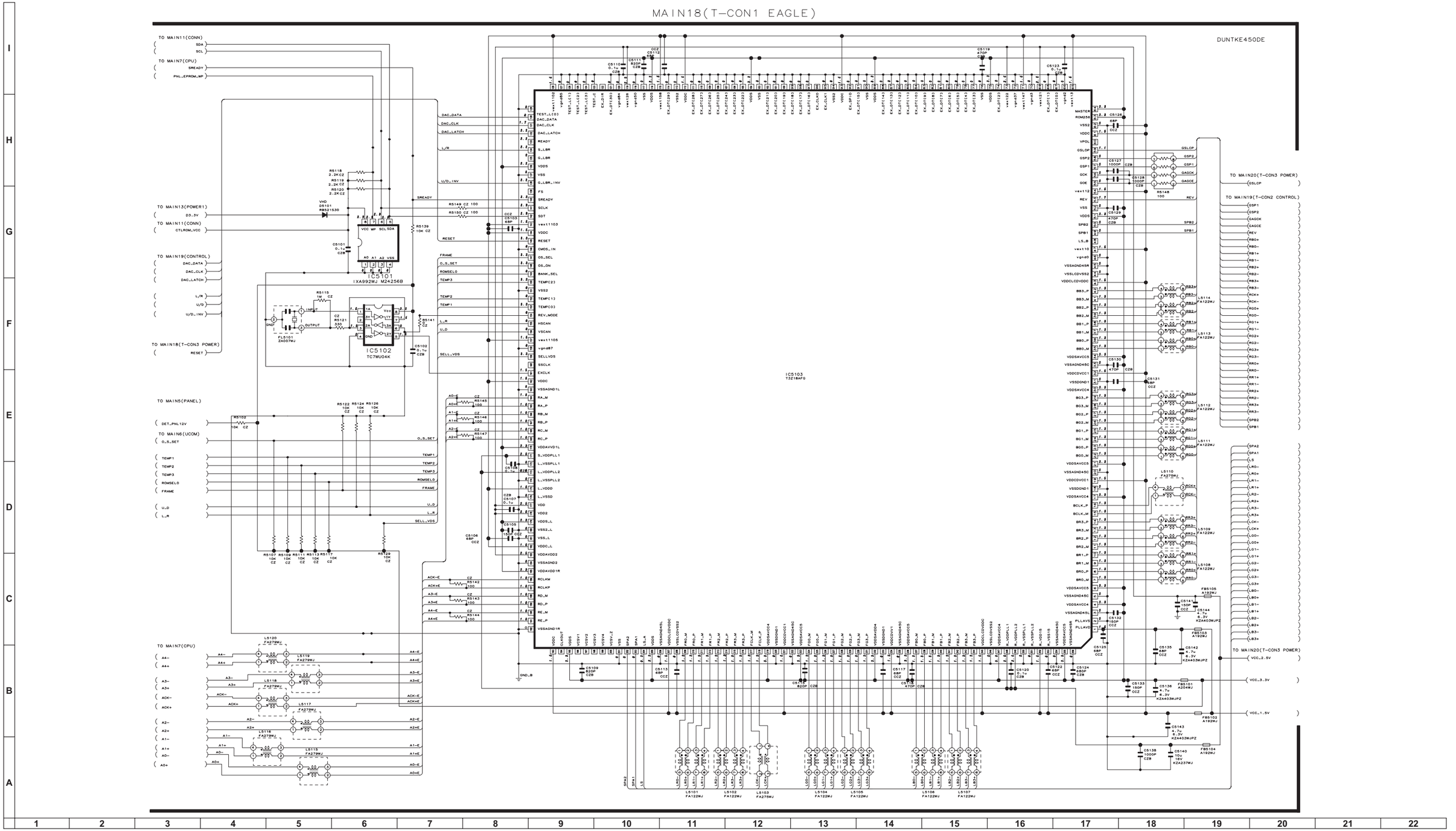
MAIN16(A_TERM)

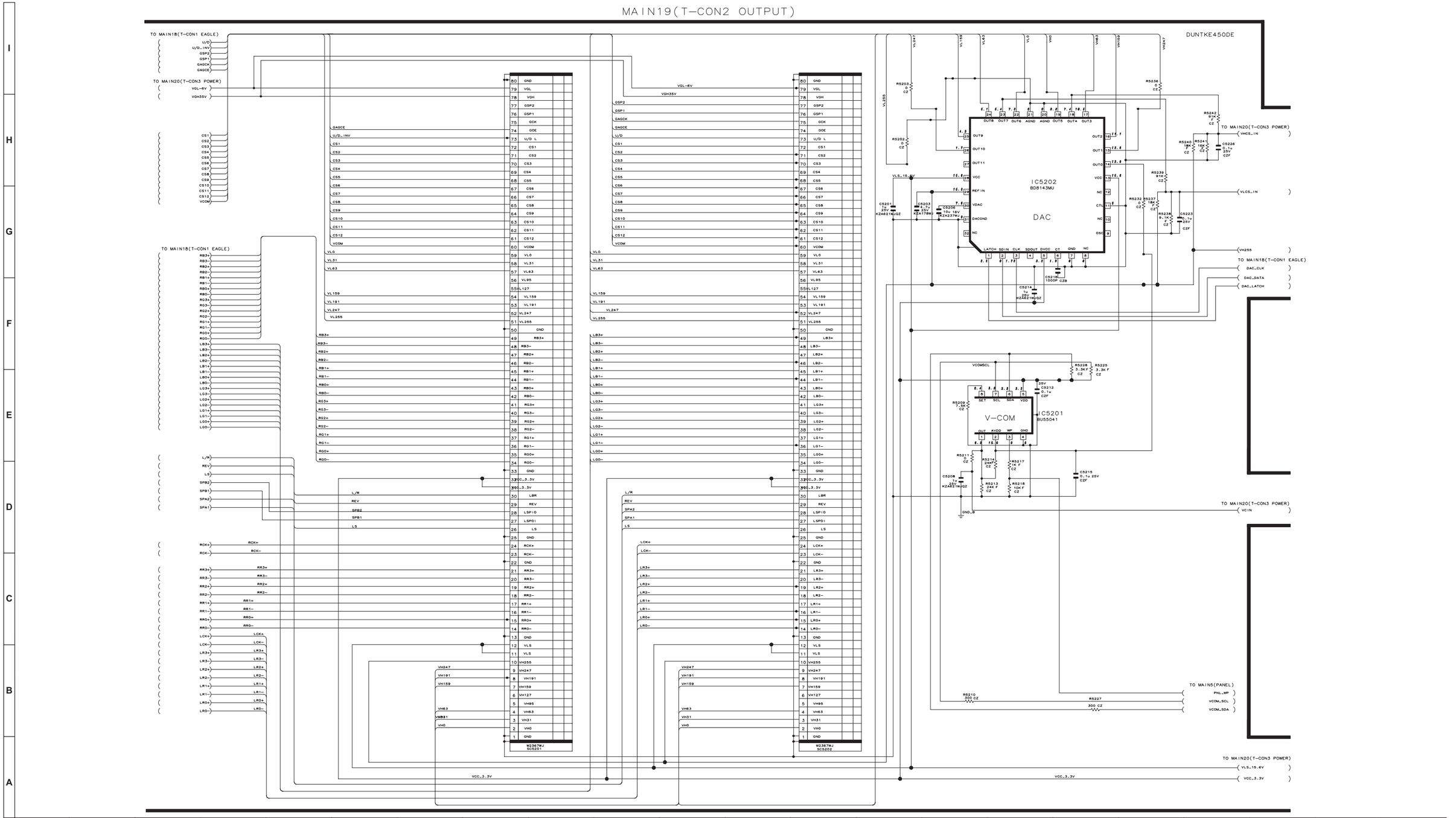
DUNTKE450DE



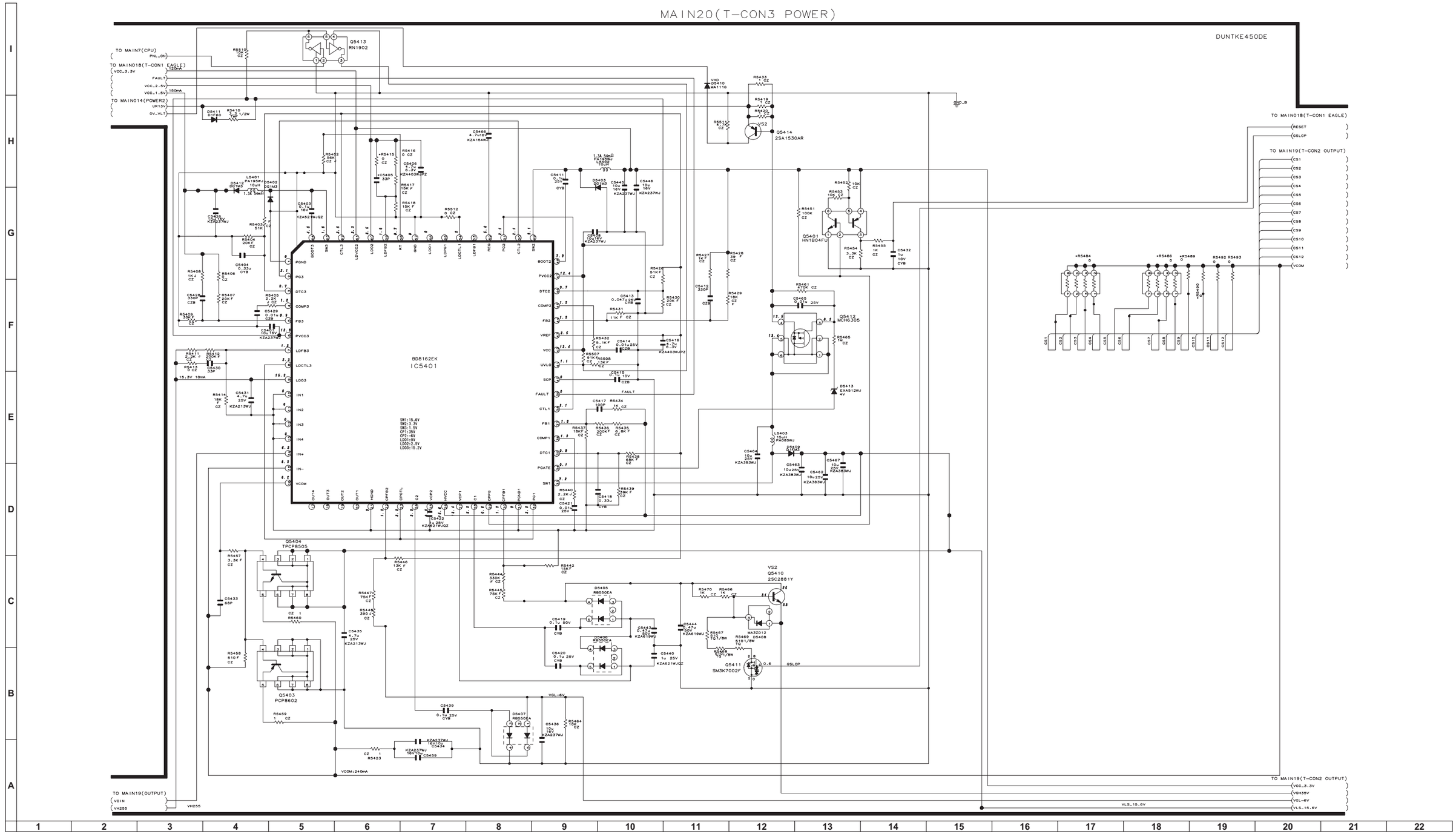

MAIN17(AMP)
DUNTKE450DE
TO MAIN2(AMP I/F)
STANDBY
R2718 12K
R2719 20K
PROTECT
AMP_MUTE
R2752 220K
VS Q2704 KRC404E
TO MAIN14(POWER2)
UR13V
C2703 47u 25V
C2710 RMZ 470u 25V
C2711 0.1u 25V
POW_PAC
C2717 1u 25V KZA621WJQZ
C2724 1u 25V KZA621WJQZ
L2701 22uH PA343WJPZ
L2702 22uH PA343WJPZ
C2725 25V
C2726 1u 25V
C2230 0.1u 25V TVB
C2712 4.7u 16V
TO MAIN2(AMP I/F)
SP_LP
SP_LN
SP_RN
SP_RP
C2704 1u 25V KZA621WJQZ
C2705 1u 25V KZA621WJQZ
C2706 1u 25V KZA621WJQZ
C2707 1u 25V KZA621WJQZ
C2713 0.1u 25V
IC2701
YDA147SZ
NC
PVDDPL
OUTPL
PVSSL
OUTML
PVDDML
PVDDREG
AVDD
INLP
INLM
VREF
INRM
INRP
AVSS
PLIMIT
PVDDPR
OUTPR
PVSSR
OUTMR
PVDDMR
GAIN1
GAIN0
NCDRC1
NCDRC0
CKIN
CKOUT
MUTEN
PROTN
SLEEPN
R2730 220K
R2726 0
R2741 75K
R2744 22
R2742 20K
R2715 220K F
R2717 27K F
R2753 68K F
R2754 22K F
C2748 100P
C2716 1u 25V KZA621WJQZ
C2723 1u 25V KZA621WJQZ
L2703 22uH PA343WJPZ
L2704 22uH PA343WJPZ
C2727 25V
C2728 25V
C2231 0.1u 25V TVB
FB2702 A206WJ
FB2703 A206WJ
FB2704 A206WJ
FB2705 A206WJ
C2737 150P
C2740 150P
C2738 150P
C2741 150P
P2701 NA160WJ
4 LCH(+)
3 LCH(−)
2 RCH(−)
1 RCH(+)
SP
To EX SP
R2713 0
R2714 0
POWER_GND
GND_B

- MAIN Unit-18/20




MAIN19(T-CON2 OUTPUT)
TO MAIN18(T-CON1 EAGLE)
U/D
U/D_INV
GSP2
GSP1
GAGCK
GAGCE
TO MAIN20(T-CON3 POWER)
VGL-6V
VGH35V
CS1
CS2
CS3
CS4
CS5
CS6
CS7
CS8
CS9
CS10
CS11
CS12
VCOM
RB3+
RB3-
RB2+
RB2-
RB1+
RB1-
RB0+
RB0-
RG3+
RG3-
RG2+
RG2-
RG1+
RG1-
RG0+
RG0-
LB3+
LB3-
LB2+
LB2-
LB1+
LB1-
LB0+
LB0-
LG3+
LG3-
LG2+
LG2-
LG1+
LG1-
LG0+
LG0-
L/R
REV
LS
SPB2
SPB1
SPA2
SPA1
RCK+
RCK-
RR3+
RR3-
RR2+
RR2-
RR1+
RR1-
RR0+
RR0-
LCK+
LCK-
LR3+
LR3-
LR2+
LR2-
LR1+
LR1-
LR0+
LR0-
VL0
VL31
VL63
VL95
VL127
VL159
VL191
VL247
VL255
VH0
VH31
VH63
VH95
VH127
VH159
VH191
VH247
VH255
VLS
VCC_3.3V
GND
W2367WJ
SC5201
SC5202
DUNTKE450DE
IC5202
BD8143MU
DAC
OUT9
OUT10
OUT11
OUT8
OUT7
OUT6
AGND
OUT5
OUT4
OUT3
OUT2
OUT1
OUT0
VCC
REFIN
VDAC
DACGND
NC
CTL1
CTL2
OSC
LATCH
SDIN
CLK
SDOUT
DVCC
CT
R5203 0 CZ
R5202 0 CZ
R5236 0 CZ
R5242 91K F CZ
R5240 18K F CZ
R5241 16K F CZ
C5226 0.1u 25V CZF
R5239 91K CZ
R5232 0 CZ
R5237 18K F CZ
R5238 9.1K F CZ
C5223 2.7u 25V CZF
C5201 1u 25V KZA621WJQZ
C5203 4.7u 25V KZA178WJ
C5206 10u 16V KZA237WJ
C5216 1000P CZB
C5214 1u 25V KZA621WJQZ
VLS_15.6V
VCOMSCL
R5228 3.3K F CZ
R5225 3.3K F CZ
C5212 0.1u 25V CZF
R5209 1.5K CZ
V-COM
IC5201
BU55041
OUT
AVDD
WP
GND
SET
SCL
SDA
VDD
R5211 0 CZ
R5214 24K F CZ
R5217 1K F CZ
R5213 24K F CZ
R5218 10K F CZ
C5208 1u 25V KZA621WJQZ
C5215 0.1u 25V CZF
GND_B
R5210 300 CZ
R5227 300 CZ
TO MAIN5(PANEL)
PNL_WP
VCOM_SCL
VCOM_SDA
TO MAIN20(T-CON3 POWER)
VCIN
VLS_15.6V
VCC_3.3V
VHCS_IN
VLCS_IN
VH255
TO MAIN18(T-CON1 EAGLE)
DAC_CLK
DAC_DATA
DAC_LATCH

- MAIN Unit-20/20



SHARP PARTS GUIDE

No. SY7C1LC32D44U

Note:
The reference numbers on the PWB are arranged in alphabetical order.

MODEL LC-32D44U

CONTENTS

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.

SHARP CORPORATION

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[1] PRINTED WIRING BOARD ASSEMBLIES					
N	DUNTKE264FM02	AP		X	R/C, LED Unit
N	DUNTKE266FM02	AG		X	KEY Unit
N	DUNTKE450FM01	CF	N	R	MAIN Unit
N	RUNTKA397WJQZ	BT	N	X	POWER/INVERTER Unit
[2] LCD PANEL (NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.)					
N	R1LK315T3GW20Z	DC	N	J	32" Wide LCD Panel Module Unit
[3] DUNTKE264FM02 (R/C, LED Unit)					
C102	VCKYTV1CF225ZY	AB		J	Capacitor, 2.2 16V Ceramic
C104	VCEASX1CN106MY	AC		J	Capacitor, 10 16V Electrolytic
C105	VCKYCY1HF103ZY	AA		J	Capacitor, 0.01 50V Ceramic
C107	VCEASY1CN107MY	AC		J	Capacitor, 100 16V Electrolytic
D101	RH-EXA092WJZZY	AB		J	Zener Diode, UDZSNPTE-1712B
D103	RH-PX0421CEZZY	AD		J	Diode, CL-165HR/YG-D-T
D114	RH-PX0421CEZZY	AD		J	Diode, CL-165HR/YG-D-T
D115	RH-PX0421CEZZY	AD		J	Diode, CL-165HR/YG-D-T
IC101	VHiGA1S100W-1Y	AE		J	IC, GA1A1S100WP
P101	QPLGNA335WJZZY	AD		J	Plug, 15pin (RA)
Q102	VS2SC3928AR-1Y	AB		J	Transistor, 2SC3928A-T112-1R
Q103	VS2SC3928AR-1Y	AB		J	Transistor, 2SC3928A-T112-1R
Q104	VS2SC3928AR-1Y	AB		J	Transistor, 2SC3928A-T112-1R
Q106	VS2SC3928AR-1Y	AB		J	Transistor, 2SC3928A-T112-1R
Q107	VS2SC3928AR-1Y	AB		J	Transistor, 2SC3928A-T112-1R
R101	VRS-CY1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R104	VRS-CY1JF273JY	AA		J	Resistor, 27k 1/16W Metal Oxide
R105	VRS-CY1JF393JY	AA		J	Resistor, 39k 1/16W Metal Oxide
R108	VRS-CY1JF161JY	AA		J	Resistor, 160 1/16W Metal Oxide
R109	VRS-CY1JF821JY	AA		J	Resistor, 820 1/16W Metal Oxide
R117	VRS-CY1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R121	VRS-CY1JF821JY	AA		J	Resistor, 820 1/16W Metal Oxide
R122	VRS-CY1JF161JY	AA		J	Resistor, 160 1/16W Metal Oxide
R123	VRS-CJ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R124	VRS-CJ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R135	VRS-CY1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
RMC101	RRMCUA053WJZZ	AE		J	Remote Control
SLD101	PSLDPA076WJFW	AD		J	Shield Case
[4] DUNTKE266FM02 (KEY Unit)					
D151	RH-EX0646GEZZY	AA		J	Zener Diode, MTZJT-7215B
D152	RH-EX0646GEZZY	AA		J	Zener Diode, MTZJT-7215B
D155	RH-EX0646GEZZY	AA		J	Zener Diode, MTZJT-7215B
P151	QPLGNA059WJZZ	AC		J	Plug, 5pin (KM)
R151	VRD-RA2BE822JY	AA		J	Resistor, 8.2k 1/8W Carbon
R152	VRD-RA2BE123JY	AA		J	Resistor, 12k 1/8W Carbon
R153	VRD-RA2BE822JY	AA		J	Resistor, 8.2k 1/8W Carbon
R154	VRD-RA2BE123JY	AA		J	Resistor, 12k 1/8W Carbon
S151	QSW-K0003AJZZ+	AB		J	Switch, CH-UP
S152	QSW-K0003AJZZ+	AB		J	Switch, CH-DOWN
S153	QSW-K0003AJZZ+	AB		J	Switch, INPUT
S154	QSW-K0003AJZZ+	AB		J	Switch, VOL-UP
S155	QSW-K0003AJZZ+	AB		J	Switch, VOL-DOWN
S156	QSW-K0003AJZZ+	AB		J	Switch, MENU
S157	QSW-K0003AJZZ+	AB		J	Switch, POWER
[5] DUNTKE450FM01 (MAIN Unit)					
C501	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C503	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C504	VCCCCZ1HH220JY	AB		J	Capacitor, 22p 50V Ceramic
C505	VCCCCZ1HH220JY	AB		J	Capacitor, 22p 50V Ceramic
C506	VCCCCZ1HH220JY	AB		J	Capacitor, 22p 50V Ceramic
C507	VCCCCZ1HH220JY	AB		J	Capacitor, 22p 50V Ceramic
C508	VCCCCZ1HH220JY	AB		J	Capacitor, 22p 50V Ceramic
C509	VCCCCZ1HH220JY	AB		J	Capacitor, 22p 50V Ceramic
C510	VCCCCZ1HH560JY	AB		J	Capacitor, 56p 50V Ceramic
C512	VCCCCZ1HH3R0CY	AA		J	Capacitor, 3p 50V Ceramic
C513	VCCCCZ1HH3R0CY	AA		J	Capacitor, 3p 50V Ceramic
C514	VCCCCZ1HH3R0CY	AA		J	Capacitor, 3p 50V Ceramic
C515	VCCCCZ1HH3R0CY	AA		J	Capacitor, 3p 50V Ceramic
C516	VCCCCZ1HH3R0CY	AA		J	Capacitor, 3p 50V Ceramic
C517	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C518	VCCCCZ1HH3R0CY	AA		J	Capacitor, 3p 50V Ceramic
C519	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C520	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C521	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C522	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C523	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C524	VCCCCZ1HH560JY	AB		J	Capacitor, 56p 50V Ceramic
C525	VCCCCZ1HH120JY	AB		J	Capacitor, 12p 50V Ceramic
C526	VCCCCZ1HH560JY	AB		J	Capacitor, 56p 50V Ceramic
C527	VCCCCZ1HH560JY	AB		J	Capacitor, 56p 50V Ceramic
C528	VCCCCZ1HH560JY	AB		J	Capacitor, 56p 50V Ceramic
C529	VCCCCZ1HH270JY	AB		J	Capacitor, 27p 50V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
C530	VCCCCZ1HH560JY	AB		J	Capacitor, 56p 50V Ceramic
C531	VCCCCZ1HH120JY	AB		J	Capacitor, 12p 50V Ceramic
C532	VCCCCZ1HH120JY	AB		J	Capacitor, 12p 50V Ceramic
C533	VCCCCZ1HH120JY	AB		J	Capacitor, 12p 50V Ceramic
C534	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C535	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C536	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C537	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C539	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C540	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C541	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C543	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C544	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C545	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C546	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C547	VCKYCY1HB103KY	AA		J	Capacitor, 0.01 50V Ceramic
C548	VCCCCZ1HH270JY	AB		J	Capacitor, 27p 50V Ceramic
C549	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C550	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C551	VCCCCZ1HH270JY	AB		J	Capacitor, 27p 50V Ceramic
C552	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C553	VCCCCZ1HH270JY	AB		J	Capacitor, 27p 50V Ceramic
C554	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C555	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C557	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C559	VCCCCZ1HH3R0CY	AA		J	Capacitor, 3p 50V Ceramic
C560	VCCCCZ1HH3R0CY	AA		J	Capacitor, 3p 50V Ceramic
C562	VCCCCZ1HH3R0CY	AA		J	Capacitor, 3p 50V Ceramic
C563	VCCCCZ1HH3R0CY	AA		J	Capacitor, 3p 50V Ceramic
C565	VCKYCZ1EF104ZY	AA		J	Capacitor, 0.1 25V Ceramic
C569	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C570	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C571	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C575	VCKYCZ1EF104ZY	AA		J	Capacitor, 0.1 25V Ceramic
C579	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C581	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C583	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C585	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C1101	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1102	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1104	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1107	VCKYCY1HB102KY	AA		J	Capacitor, 1000p 50V Ceramic
C1109	VCKYCY1HB103KY	AA		J	Capacitor, 0.01 50V Ceramic
C1111	VCKYCY1HB103KY	AA		J	Capacitor, 0.01 50V Ceramic
C1112	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1301	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1303	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1308	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1310	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1311	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1312	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1313	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1314	RC-KZA383WJZZY	AC		J	Capacitor, 10 25V Ceramic
C1401	VCCCCZ1HH120JY	AB		J	Capacitor, 12p 50V Ceramic
C1402	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1403	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1404	VCCCCZ1HH120JY	AB		J	Capacitor, 12p 50V Ceramic
C1406	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1407	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1409	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1414	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1415	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1419	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1421	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1422	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1423	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1424	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1425	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C1426	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1427	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1428	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1429	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C1430	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C1440	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1441	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1601	VCKYCZ1HB331KY	AA		J	Capacitor, 330p 50V Ceramic
C1602	VCKYCZ1HB331KY	AA		J	Capacitor, 330p 50V Ceramic
C1607	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1609	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C1611	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1612	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C1619	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1620	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1621	RC-KZA520WJQZY	AA		J	Capacitor, 1 10V Ceramic
C1623	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
C1625	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C1626	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1627	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C1628	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1629	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C1630	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1631	RC-KZA520WJQZY	AA		J	Capacitor, 1 10V Ceramic
C1632	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1633	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C1635	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C1636	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1637	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C1638	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1639	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C1640	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1641	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C1642	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1644	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C1645	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1646	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C1647	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1648	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C1652	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C1673	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1674	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C1675	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1676	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1677	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C1678	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C1679	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C2001	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C2002	VCKYCZ1HB152KY	AB		J	Capacitor, 1500p 50V Ceramic
C2003	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C2006	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C2007	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C2010	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C2012	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C2016	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C2020	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C2024	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C2026	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C2213	VCCCCZ1HH470JY	AB		J	Capacitor, 47p 50V Ceramic
C2214	VCCCCZ1HH470JY	AB		J	Capacitor, 47p 50V Ceramic
C2215	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C2216	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C2217	VCKYCZ1CB103KY	AB		J	Capacitor, 0.01 16V Ceramic
C2218	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C2219	VCKYCZ1CB103KY	AB		J	Capacitor, 0.01 16V Ceramic
C2220	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C2221	VCKYCZ1CB103KY	AB		J	Capacitor, 0.01 16V Ceramic
C2222	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C2223	VCAAPE0JJ107MY	AE		J	Capacitor, 100 6.3V Electrolytic
C2224	VCKYCZ1CB103KY	AB		J	Capacitor, 0.01 16V Ceramic
C2225	VCKYCZ1CB103KY	AB		J	Capacitor, 0.01 16V Ceramic
C2226	VCKYCZ1CB103KY	AB		J	Capacitor, 0.01 16V Ceramic
C2227	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C2228	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C2229	VCCCCZ1HH121JY	AB		J	Capacitor, 120p 50V Ceramic
C2235	VCCCCZ1HH270JY	AB		J	Capacitor, 27p 50V Ceramic
C2236	VCCCCZ1HH270JY	AB		J	Capacitor, 27p 50V Ceramic
C2237	VCCCCZ1HH330JY	AB		J	Capacitor, 33p 50V Ceramic
C2238	VCCCCZ1HH330JY	AB		J	Capacitor, 33p 50V Ceramic
C2239	VCCCCZ1HH121JY	AB		J	Capacitor, 120p 50V Ceramic
C2240	VCCCCZ1HH121JY	AB		J	Capacitor, 120p 50V Ceramic
C2241	VCCCCZ1HH150JY	AB		J	Capacitor, 15p 50V Ceramic
C2246	VCKYCY1HB472KY	AA		J	Capacitor, 4700p 50V Ceramic
C2247	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C2602	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C2606	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C2703	VCKYCZ1EF104ZY	AA		J	Capacitor, 0.1 25V Ceramic
C2704	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
C2705	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
C2706	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
C2707	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
C2710	VCERMZ1EN477MY	AE		J	Capacitor, 470 25V Electrolytic
C2711	VCKYCZ1EF104ZY	AA		J	Capacitor, 0.1 25V Ceramic
C2712	RC-KZA154WJZZY	AB		J	Capacitor, 4.7 16V Ceramic
C2713	VCKYCZ1EF104ZY	AA		J	Capacitor, 0.1 25V Ceramic
C2716	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
C2717	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
C2723	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
C2724	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
C2725	VCKYCY1EB104KY	AB		J	Capacitor, 0.1 25V Ceramic
C2726	VCKYCY1EB104KY	AB		J	Capacitor, 0.1 25V Ceramic
C2727	VCKYCY1EB104KY	AB		J	Capacitor, 0.1 25V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
C2728	VCKYCY1EB104KY	AB		J	Capacitor, 0.1 25V Ceramic
C2730	VCKYTV1EB224KY	AA		J	Capacitor, 0.22 25V Ceramic
C2731	VCKYTV1EB224KY	AA		J	Capacitor, 0.22 25V Ceramic
C2737	VCCCCY1HH151JY	AA		J	Capacitor, 150p 50V Ceramic
C2738	VCCCCY1HH151JY	AA		J	Capacitor, 150p 50V Ceramic
C2740	VCCCCY1HH151JY	AA		J	Capacitor, 150p 50V Ceramic
C2741	VCCCCY1HH151JY	AA		J	Capacitor, 150p 50V Ceramic
C2748	VCCCCY1HH101JY	AA		J	Capacitor, 100p 50V Ceramic
C5101	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C5102	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C5103	VCCCCZ1HH680JY	AB		J	Capacitor, 68p 50V Ceramic
C5105	VCCCCZ1HH151JY	AB		J	Capacitor, 150p 50V Ceramic
C5106	VCCCCZ1HH680JY	AB		J	Capacitor, 68p 50V Ceramic
C5107	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C5108	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C5109	VCKYCZ1HB821KY	AA		J	Capacitor, 820p 50V Ceramic
C5110	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C5111	VCKYCZ1HB821KY	AA		J	Capacitor, 820p 50V Ceramic
C5112	VCCCCZ1HH680JY	AB		J	Capacitor, 68p 50V Ceramic
C5113	VCCCCZ1HH680JY	AB		J	Capacitor, 68p 50V Ceramic
C5115	VCKYCZ1HB821KY	AA		J	Capacitor, 820p 50V Ceramic
C5117	VCCCCZ1HH680JY	AB		J	Capacitor, 68p 50V Ceramic
C5118	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C5119	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C5120	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C5122	VCCCCZ1HH680JY	AB		J	Capacitor, 68p 50V Ceramic
C5123	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C5124	VCKYCZ1HB681KY	AB		J	Capacitor, 680p 50V Ceramic
C5125	VCCCCZ1HH680JY	AB		J	Capacitor, 68p 50V Ceramic
C5126	VCCCCZ1HH680JY	AB		J	Capacitor, 68p 50V Ceramic
C5127	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C5128	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C5129	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C5130	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C5131	VCCCCZ1HH680JY	AB		J	Capacitor, 68p 50V Ceramic
C5132	VCCCCZ1HH151JY	AB		J	Capacitor, 150p 50V Ceramic
C5133	VCCCCZ1HH151JY	AB		J	Capacitor, 150p 50V Ceramic
C5135	VCCCCZ1HH680JY	AB		J	Capacitor, 68p 50V Ceramic
C5136	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C5138	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C5140	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C5141	VCCCCZ1HH151JY	AB		J	Capacitor, 150p 50V Ceramic
C5142	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C5143	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C5144	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C5201	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
C5203	RC-KZA178WJZZY	AC		J	Capacitor, 4.7 25V Ceramic
C5206	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C5208	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
C5212	VCKYCZ1EF104ZY	AA		J	Capacitor, 0.1 25V Ceramic
C5214	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
C5215	VCKYCZ1EF104ZY	AA		J	Capacitor, 0.1 25V Ceramic
C5216	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C5223	VCKYCZ1EF104ZY	AA		J	Capacitor, 0.1 25V Ceramic
C5226	VCKYCZ1EF104ZY	AA		J	Capacitor, 0.1 25V Ceramic
C5401	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C5403	RC-KZA521WJQZY	AA		J	Capacitor, 0.1 16V Ceramic
C5404	VCKYCY1EB334KY	AB		J	Capacitor, 0.33 25V Ceramic
C5405	VCCCCZ1HH330JY	AB		J	Capacitor, 33p 50V Ceramic
C5406	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C5408	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C5411	VCKYCY1EB104KY	AB		J	Capacitor, 0.1 25V Ceramic
C5412	VCKYCZ1HB331KY	AA		J	Capacitor, 330p 50V Ceramic
C5413	VCKYCY1EB473KY	AA		J	Capacitor, 0.047 25V Ceramic
C5414	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C5415	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C5416	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C5417	VCCCCZ1HH101JY	AB		J	Capacitor, 100p 50V Ceramic
C5418	VCKYCY1EB334KY	AB		J	Capacitor, 0.33 25V Ceramic
C5419	VCKYCY1HB104KY	AA		J	Capacitor, 0.1 50V Ceramic
C5420	VCKYCY1EB104KY	AB		J	Capacitor, 0.1 25V Ceramic
C5421	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C5422	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
C5426	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C5428	VCKYCZ1HB331KY	AA		J	Capacitor, 330p 50V Ceramic
C5429	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C5430	VCCCCZ1HH330JY	AB		J	Capacitor, 33p 50V Ceramic
C5431	RC-KZA213WJZZY	AC		J	Capacitor, 4.7 25V Ceramic
C5432	VCKYCY1AB105KY	AB		J	Capacitor, 1 10V Ceramic
C5433	VCCCCZ1HH680JY	AB		J	Capacitor, 68p 50V Ceramic
C5434	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C5435	RC-KZA213WJZZY	AC		J	Capacitor, 4.7 25V Ceramic
C5436	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C5439	VCKYCY1EB104KY	AB		J	Capacitor, 0.1 25V Ceramic
C5440	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
C5443	RC-KZA619WJZZY	AB		R	Capacitor, 0.47 50V Ceramic
C5444	RC-KZA619WJZZY	AB		R	Capacitor, 0.47 50V Ceramic
C5445	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C5446	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C5459	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C5462	RC-KZA383WJZZY	AC		J	Capacitor, 10 25V Ceramic
C5463	RC-KZA383WJZZY	AC		J	Capacitor, 10 25V Ceramic
C5464	RC-KZA383WJZZY	AC		J	Capacitor, 10 25V Ceramic
C5465	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C5466	RC-KZA154WJZZY	AB		J	Capacitor, 4.7 16V Ceramic
C5467	RC-KZA383WJZZY	AC		J	Capacitor, 10 25V Ceramic
C8001	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8002	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8004	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8005	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8006	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8007	RC-KZA067WJZZY	AB		J	Capacitor, 4.7 10V Ceramic
C8008	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8009	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8010	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8011	RC-KZA067WJZZY	AB		J	Capacitor, 4.7 10V Ceramic
C8012	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8013	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8014	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8015	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8016	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8017	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8018	RC-KZA067WJZZY	AB		J	Capacitor, 4.7 10V Ceramic
C8019	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8020	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8021	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8022	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8023	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8024	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8025	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8027	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8028	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8029	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8030	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8031	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8032	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8033	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8034	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C8035	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8036	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8037	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8038	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8039	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8040	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8041	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8042	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C8043	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8044	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8045	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8046	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8047	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8048	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8049	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8050	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C8051	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8052	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8053	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8054	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8055	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8056	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8057	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8058	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C8059	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8060	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8061	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8062	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8063	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8064	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8065	VCKYCZ1HB102KY	AB		J	Capacitor, 1000p 50V Ceramic
C8066	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8067	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8068	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8069	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8070	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8071	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8072	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8073	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8074	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8075	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8076	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
C8077	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8078	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8079	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8081	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8082	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8083	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8084	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8085	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8086	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C8087	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8088	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8089	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C8090	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8091	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C8092	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8093	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C8095	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8096	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8097	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8098	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8099	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8100	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8101	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8103	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8104	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8105	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8106	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8107	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C8108	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8109	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8110	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8111	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8112	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8113	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8114	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8115	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8116	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8117	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8118	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8119	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8120	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8121	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8122	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8123	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8125	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8126	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8127	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8128	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8129	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8130	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8131	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8132	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8133	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8134	VCCCCZ1HH330JY	AB		J	Capacitor, 33p 50V Ceramic
C8135	VCCCCZ1HH9R0DY	AA		J	Capacitor, 9p 50V Ceramic
C8136	VCCCCZ1HH9R0DY	AA		J	Capacitor, 9p 50V Ceramic
C8137	RC-KZA067WJZZY	AB		J	Capacitor, 4.7 10V Ceramic
C8138	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8139	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C8140	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C8141	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C8142	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C8143	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8144	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8145	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C8146	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C8147	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C8148	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8149	VCCCCZ1HH101JY	AB		J	Capacitor, 100p 50V Ceramic
C8150	VCKYTV1CB105KY	AC		J	Capacitor, 1 16V Ceramic
C8151	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8152	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8153	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8154	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8155	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8156	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8157	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8158	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8159	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8160	VCKYCZ1AB473KY	AB		J	Capacitor, 0.047 10V Ceramic
C8161	VCKYCZ1AB473KY	AB		J	Capacitor, 0.047 10V Ceramic
C8162	VCKYCZ1HB272KY	AA		J	Capacitor, 2700p 50V Ceramic
C8163	VCKYCZ1HB272KY	AA		J	Capacitor, 2700p 50V Ceramic
C8164	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C8165	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
C8166	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8167	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8168	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C8169	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8170	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C8186	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8192	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8193	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C8194	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8196	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8197	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8205	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8206	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8207	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8208	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8209	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C8216	VCKYCZ1HB272KY	AA		J	Capacitor, 2700p 50V Ceramic
C8217	VCKYCZ1HB272KY	AA		J	Capacitor, 2700p 50V Ceramic
C8218	VCKYCZ1HB272KY	AA		J	Capacitor, 2700p 50V Ceramic
C8219	VCKYCZ1HB272KY	AA		J	Capacitor, 2700p 50V Ceramic
C8220	VCKYCZ1HB272KY	AA		J	Capacitor, 2700p 50V Ceramic
C8221	VCKYCZ1HB272KY	AA		J	Capacitor, 2700p 50V Ceramic
C8222	VCKYCZ1HB272KY	AA		J	Capacitor, 2700p 50V Ceramic
C8223	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C8224	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C8225	VCKYCZ1HB471KY	AB		J	Capacitor, 470p 50V Ceramic
C8451	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8456	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8458	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8460	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8901	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8902	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C8903	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8904	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C8905	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8906	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C8907	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8908	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C8909	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C8910	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C9001	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C9301	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C9601	VCKYCZ1EB472KY	AB		J	Capacitor, 4700p 25V Ceramic
C9602	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C9604	VCKYCZ1EB472KY	AB		J	Capacitor, 4700p 25V Ceramic
C9605	VCCCCZ1HH101JY	AB		J	Capacitor, 100p 50V Ceramic
C9606	VCKYCZ1HB681KY	AB		J	Capacitor, 680p 50V Ceramic
C9607	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C9608	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C9609	VCKYCY1EB104KY	AB		J	Capacitor, 0.1 25V Ceramic
C9610	VCCCCZ1HH101JY	AB		J	Capacitor, 100p 50V Ceramic
C9611	RC-KZA154WJZZY	AB		J	Capacitor, 4.7 16V Ceramic
C9612	VCKYCY1EB104KY	AB		J	Capacitor, 0.1 25V Ceramic
C9613	RC-KZA178WJZZY	AC		J	Capacitor, 4.7 25V Ceramic
C9614	RC-KZA178WJZZY	AC		J	Capacitor, 4.7 25V Ceramic
C9615	VCKYCZ1EB472KY	AB		J	Capacitor, 4700p 25V Ceramic
C9616	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C9617	RC-KZA178WJZZY	AC		J	Capacitor, 4.7 25V Ceramic
C9618	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C9619	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C9620	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C9621	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C9622	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C9623	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C9624	VCKYCY1EB104KY	AB		J	Capacitor, 0.1 25V Ceramic
C9625	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C9629	RC-KZA178WJZZY	AC		J	Capacitor, 4.7 25V Ceramic
C9631	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C9641	VCKYCZ1AB104KY	AB		J	Capacitor, 0.1 10V Ceramic
C9642	VCKYCY1EB104KY	AB		J	Capacitor, 0.1 25V Ceramic
C9643	RC-KZA178WJZZY	AC		J	Capacitor, 4.7 25V Ceramic
C9644	VCKYCZ1EB472KY	AB		J	Capacitor, 4700p 25V Ceramic
C9645	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C9646	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C9708	RC-KZA237WJZZY	AB		J	Capacitor, 10 16V Ceramic
C9709	VCKYCZ1EB103KY	AA		J	Capacitor, 0.01 25V Ceramic
C9710	RC-KZA520WJQZY	AA		J	Capacitor, 1 10V Ceramic
C9711	RC-KZA520WJQZY	AA		J	Capacitor, 1 10V Ceramic
C9713	RC-KZA403WJPZY	AB	N	R	Capacitor, 4.7 6.3V Ceramic
C9719	RC-KZA621WJQZY	AA	N	R	Capacitor, 1 25V Ceramic
D504	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D505	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D508	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D509	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D510	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
D511	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D512	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D515	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D516	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D517	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D518	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D519	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D520	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D521	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D522	RH-EXA541WJZZY	AB		R	Zener Diode, MAZ8100GML
D1302	VHD1SS361//-1Y	AB		R	Diode, 1SS361(T5L,F,T)
D1304	VHD1SS361//-1Y	AB		R	Diode, 1SS361(T5L,F,T)
D1305	VHD1SS361//-1Y	AB		R	Diode, 1SS361(T5L,F,T)
D1306	VHPGPFSV51T-1	AF		J	Photo Diode
D1307	VHD1SS361//-1Y	AB		R	Diode, 1SS361(T5L,F,T)
D1310	VHD1SS361//-1Y	AB		R	Diode, 1SS361(T5L,F,T)
D1311	RH-EXA523WJZZY	AB		J	Zener Diode, MAZ8056GML
D1312	VHD1SS361//-1Y	AB		R	Diode, 1SS361(T5L,F,T)
D1601	VHDRB520S30-1Y	AC		J	Diode, RB520S-30TE61
D1605	VHDMA152WK/-1Y	AB		J	Diode, MA152WK-(TX)
D1607	VHDMA152WK/-1Y	AB		J	Diode, MA152WK-(TX)
D1611	VHD1SS226//-1Y	AC		J	Diode, 1SS226(T5L,F,T)
D1613	VHD1SS226//-1Y	AC		J	Diode, 1SS226(T5L,F,T)
D1614	VHD1SS226//-1Y	AC		J	Diode, 1SS226(T5L,F,T)
D1619	VHD1SS226//-1Y	AC		J	Diode, 1SS226(T5L,F,T)
D2003	RH-PXA018WJZZY	AC		J	Diode, GM1HD55200A
D2201	VHD1PS184++-1Y	AB		J	Diode, 1PS184,115
D2202	RH-EXA523WJZZY	AB		J	Zener Diode, MAZ8056GML
D2203	RH-EXA523WJZZY	AB		J	Zener Diode, MAZ8056GML
D2205	VHDMAZ9120H-1Y	AC		J	Diode, MAZ91200H0L
D2206	VHDMAZ9120H-1Y	AC		J	Diode, MAZ91200H0L
D2207	VHDMAZ9120H-1Y	AC		J	Diode, MAZ91200H0L
D2208	VHDKDR720E/-1Y	AB		R	Diode, KDR720E-RTK/P
D2210	VHD1SS226//-1Y	AC		J	Diode, 1SS226(T5L,F,T)
D2211	VHD1SS226//-1Y	AC		J	Diode, 1SS226(T5L,F,T)
D5101	VHDRB521S30-1Y	AC		J	Diode, RB521S-30FJTE61
D5402	VHDDG1M3+++-1Y	AC		J	Diode, DG1M3-5063R
D5403	VHDDG1M3+++-1Y	AC		J	Diode, DG1M3-5063R
D5405	VHDRB550EA+-1Y	AC		R	Diode, RB550EATR
D5406	VHDRB550EA+-1Y	AC		R	Diode, RB550EATR
D5407	VHDRB550EA+-1Y	AC		R	Diode, RB550EATR
D5408	VHDMA3ZD12+-1Y	AC		R	Diode, MA3ZD1200L
D5409	VHDD1FM3+++-1Y	AD		J	Diode, D1FM3
D5410	VHDMA111G++-1Y	AA		J	Diode, MA2J1110GL
D5411	VHDD1F60///-1Y	AC		R	Diode
D5412	VHDDG1M3+++-1Y	AC		J	Diode, DG1M3-5063R
D5413	RH-EXA512WJZZY	AB		J	Zener Diode, MAZ8039GHL
D8002	RH-PXA018WJZZY	AC		J	Diode, GM1HD55200A
D9001	RH-EX1234CEZZY	AE		J	Zener Diode, HZU3.6B2TRF
D9002	RH-EX1234CEZZY	AE		J	Zener Diode, HZU3.6B2TRF
D9003	RH-EX1234CEZZY	AE		J	Zener Diode, HZU3.6B2TRF
D9301	VHD1PS184++-1Y	AB		J	Diode, 1PS184,115
D9601	VHDD1FS4A++-1Y	AC		J	Diode, D1FS4A-5063
D9602	RH-EXA523WJZZY	AB		J	Zener Diode, MAZ8056GML
D9603	VHD1PS184++-1Y	AB		J	Diode, 1PS184,115
D9605	VHD1PS226++-1Y	AB		J	Diode, 1PS226,115
D9606	VHDD1FS4A++-1Y	AC		J	Diode, D1FS4A-5063
D9607	RH-EXA512WJZZY	AB		J	Zener Diode, MAZ8039GHL
D9609	VHDMA111G++-1Y	AA		J	Diode, MA2J1110GL
D9641	VHDD1FS4A++-1Y	AC		J	Diode, D1FS4A-5063
D9642	RH-EXA512WJZZY	AB		J	Zener Diode, MAZ8039GHL
D9643	VHDMA111G++-1Y	AA		J	Diode, MA2J1110GL
D9701	VHDMA111G++-1Y	AA		J	Diode, MA2J1110GL
D9702	VHDMA111G++-1Y	AA		J	Diode, MA2J1110GL
D9703	VHDMA111G++-1Y	AA		J	Diode, MA2J1110GL
D9713	VHD1PS184++-1Y	AB		J	Diode, 1PS184,115
FB501	RBLN-A045WJZZY	AB		J	Ferrite Core
FB502	RBLN-A204WJZZY	AA		J	Ferrite Core
FB503	RBLN-A045WJZZY	AB		J	Ferrite Core
FB504	RBLN-A045WJZZY	AB		J	Ferrite Core
FB505	RBLN-A045WJZZY	AB		J	Ferrite Core
FB506	RBLN-A045WJZZY	AB		J	Ferrite Core
FB508	RBLN-A204WJZZY	AA		J	Ferrite Core
FB509	RBLN-A204WJZZY	AA		J	Ferrite Core
FB510	RBLN-A204WJZZY	AA		J	Ferrite Core
FB511	RBLN-A045WJZZY	AB		J	Ferrite Core
FB512	RBLN-A045WJZZY	AB		J	Ferrite Core
FB513	RBLN-A204WJZZY	AA		J	Ferrite Core
FB514	RBLN-A072WJZZY	AA		R	Ferrite Core
FB515	RBLN-A204WJZZY	AA		J	Ferrite Core
FB516	RBLN-A204WJZZY	AA		J	Ferrite Core
FB517	RBLN-A045WJZZY	AB		J	Ferrite Core
FB518	RBLN-A045WJZZY	AB		J	Ferrite Core
FB519	RBLN-A204WJZZY	AA		J	Ferrite Core
FB520	RBLN-A204WJZZY	AA		J	Ferrite Core

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
FB521	RBLN-A204WJZZY	AA		J	Ferrite Core
FB522	RBLN-A045WJZZY	AB		J	Ferrite Core
FB523	RBLN-A045WJZZY	AB		J	Ferrite Core
FB525	RBLN-A045WJZZY	AB		J	Ferrite Core
FB1101	RBLN-A206WJZZY	AA		J	Ferrite Core
FB1102	RBLN-A206WJZZY	AA		J	Ferrite Core
FB1603	RBLN-A192WJZZY	AA		J	Ferrite Core
FB1605	RBLN-A192WJZZY	AA		J	Ferrite Core
FB1606	RBLN-A192WJZZY	AA		J	Ferrite Core
FB1607	RBLN-A192WJZZY	AA		J	Ferrite Core
FB2001	RBLN-A206WJZZY	AA		J	Ferrite Core
FB2003	RBLN-A005WJZZY	AA		J	Ferrite Core
FB2004	RBLN-A005WJZZY	AA		J	Ferrite Core
FB2005	RBLN-A005WJZZY	AA		J	Ferrite Core
FB2203	RBLN-0093GEZZY	AB		J	Ferrite Core
FB2204	RBLN-0093GEZZY	AB		J	Ferrite Core
FB2205	RBLN-0093GEZZY	AB		J	Ferrite Core
FB2206	RBLN-A204WJZZY	AA		J	Ferrite Core
FB2207	RBLN-A204WJZZY	AA		J	Ferrite Core
FB2208	RBLN-A074WJZZY	AA		J	Ferrite Core
FB2603	RBLN-A206WJZZY	AA		J	Ferrite Core
FB2702	RBLN-A206WJZZY	AA		J	Ferrite Core
FB2703	RBLN-A206WJZZY	AA		J	Ferrite Core
FB2704	RBLN-A206WJZZY	AA		J	Ferrite Core
FB2705	RBLN-A206WJZZY	AA		J	Ferrite Core
FB5101	RBLN-A204WJZZY	AA		J	Ferrite Core
FB5102	RBLN-A192WJZZY	AA		J	Ferrite Core
FB5103	RBLN-A192WJZZY	AA		J	Ferrite Core
FB5104	RBLN-A192WJZZY	AA		J	Ferrite Core
FB5105	RBLN-A192WJZZY	AA		J	Ferrite Core
FB8001	RBLN-A206WJZZY	AA		J	Ferrite Core
FB8002	RBLN-A206WJZZY	AA		J	Ferrite Core
FB8003	RBLN-A206WJZZY	AA		J	Ferrite Core
FB8004	RBLN-A206WJZZY	AA		J	Ferrite Core
FB8007	RBLN-0062TAZZY	AB		J	Ferrite Core
FB8008	RBLN-0062TAZZY	AB		J	Ferrite Core
FB8009	RBLN-0062TAZZY	AB		J	Ferrite Core
FB8010	RBLN-0062TAZZY	AB		J	Ferrite Core
FB8011	RBLN-0062TAZZY	AB		J	Ferrite Core
FL5101	RFiLZA007WJZZY	AD		J	Filter
IC1301	VHiM62320FP-1Y	AH		J	IC, M62320FPDF5J
IC1302	VHiT7SET08U1EY	AC		J	IC, TC7SET08FU(T5L,JF)
IC1304	VHiT7SET08U1EY	AC		J	IC, TC7SET08FU(T5L,JF)
IC1401	VHiTC7WU04F-1Y	AD		J	IC, TC7WU04F(TE12L,F)
IC1403	VHiAK4682AE-1Y	AP	N	R	IC, AK4682AEQ
IC1601	RH-iXC356WJQZS	AL	N	R	IC, BQC (HDMI EDID)
IC1603	RH-iXC357WJQZS	AL	N	R	IC, BQC (HDMI EDID)
IC1604	VHiSii9185+-1Q	AP		J	IC, SII9185CTU
IC1607	VHiAHC1G08W-1Y	AD		J	IC, 74AHC1G08GW/G,125
IC1608	VHiAHC1G08W-1Y	AD		J	IC, 74AHC1G08GW/G,125
IC1609	VHiPQ1LA185-1Y	AD		J	IC, PQ1LA185MSPQ
IC2001	VHiS80927NM-1Y	AC		J	IC, S-80927CNMC-G8XT2G
IC2002	RH-iXC331WJN2Q	AT	N	R	IC, BQC (MONITOR MICON)
IC2004	VHiS24CS08J-1Y	AE		J	IC, S-24CS08AFJ-TB-1G
IC2007	VHiAHC1G08W-1Y	AD		J	IC, 74AHC1G08GW/G,125
IC2008	VHi7WH126FU-1Y	AE		J	IC, TC7WH126FU(TE12L,F)
IC2201	VHiLVC2G14G-1Y	AD		J	IC, 74LVC2G14GW,125
IC2202	RH-iXC358WJQZS	AH	N	R	IC, BQC (RGB EDID)
IC2601	VHiHC2G66DP-1Y	AD		J	IC, 74HC2G66DP,125
IC2701	VHiYDA147SZ-1Y	AM		J	IC, YDA147-SZE2
IC5101	RH-iXA992WJZZY	AM		J	IC, M24256-BWMN6TP
IC5102	VHiTC7WU04K-1Y	AC		J	IC, TC7WU04FK(TE85L,F)
IC5103	VHiT3Z18AFG-1Q	BA		J	IC, T3Z18AFG-0003(O2)
IC5201	VHiBU55041+-1Y	AF		R	IC, BU55041HFN-TR-TR
IC5202	VHiBD8143MU-1Y	AM		R	IC, BD8143MUV-E2
IC5401	VHiBD8162EK-1Q	AQ		R	IC, BD8162EKV
IC8001	RH-iXC308WJQZQ	BM	N	R	IC
IC8002	VHiR1173S25-1Y	AE		J	IC, R1173S251B-E2-F
IC8003	VHiR5523N1B-1Y	AE		J	IC, R5523N001B-TR-F
IC8151	RH-iXC094WJQZQ	AS		R	IC, HY5DU561622ETP-D43-C
IC8152	RH-iXC094WJQZQ	AS		R	IC, HY5DU561622ETP-D43-C
IC8155	RH-iXA361WJZZY	AM		J	IC, LP2995MX/NOPB
IC8451	RH-iXC373WJQZY	AM	N	R	IC, IS24CO8A-2GLI-372
IC8452	RH-iXC359WJQZQ	AV	N	R	IC, BQC (PROGRAM)
IC8454	VHiBR24L64F-1Y	AK		J	IC, BR24L64F-WE2
IC9001	VHiHC2G66DP-1Y	AD		J	IC, 74HC2G66DP,125
IC9301	VHiAHC1G08W-1Y	AD		J	IC, 74AHC1G08GW/G,125
IC9601	RH-iXC169WJQZY	AK		J	IC, SN0702077PWR
IC9602	VHiMP1415C+-1Y	AK		J	IC, MP1415DSE-C100-LF-Z
IC9605	VHiMP1415C+-1Y	AK		J	IC, MP1415DSE-C100-LF-Z
IC9641	VHiMP1415C+-1Y	AK		J	IC, MP1415DSE-C100-LF-Z
IC9703	VHiTCR5SB33-1Y	AC	N	R	IC, TCR5SB33(TE85L,F)
IC9704	VHiPQ090DNA-1Y	AE		J	IC, PQ090DNA1ZPH
J501	QJAKGA109WJZZ	AE		R	Jack
J502	QJAKGA108WJZZ	AE		R	Jack

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
J503	QJAKGA109WJZZ	AE		R	Jack
J504	QSOCDA035WJZZ	AD		J	Socket
J505	QJAKFA039WJZZ	AD		J	Jack
J506	QJAKFA039WJZZ	AD		J	Jack
J507	QJAKFA039WJZZ	AD		J	Jack
J508	QJAKJ0008GEZZ	AD		J	Jack
J509	QJAKGA108WJZZ	AE		R	Jack
J8001	QSOCZA153WJQZ	AG		J	Socket
L501	VPMKMR56JR70VY	AB		J	Coil, Peaking 0.56μH
L502	VPMKMR56JR70VY	AB		J	Coil, Peaking 0.56μH
L503	VPMKMR56JR70VY	AB		J	Coil, Peaking 0.56μH
L504	VPMKMR56JR70VY	AB		J	Coil, Peaking 0.56μH
L505	VPMKMR56JR70VY	AB		J	Coil, Peaking 0.56μH
L506	VPMKMR56JR70VY	AB		J	Coil, Peaking 0.56μH
L507	VPDBN220J4R1NY	AB	N	R	Coil, Peaking 22μH
L508	VPDBN220J4R1NY	AB	N	R	Coil, Peaking 22μH
L509	VPDBN220J4R1NY	AB	N	R	Coil, Peaking 22μH
L510	VPDBN220J4R1NY	AB	N	R	Coil, Peaking 22μH
L1101	RCiLPA207WJZZY	AD	N	R	Coil
L1301	VPCEM100MR70NY	AC		J	Coil, Peaking 10μH
L2202	VPCBM100KR50NY	AC		J	Coil, Peaking 10μH
L2204	RCiLQA006WJQZY	AA		J	Coil
L2205	VPMKMR22JR37VY	AB		J	Coil, Peaking 0.22μH
L2206	VPMKMR22JR37VY	AB		J	Coil, Peaking 0.22μH
L2207	VPMKMR47JR64VY	AB		J	Coil, Peaking 0.47μH
L2701	RCiLPA343WJPZY	AD		J	Coil
L2702	RCiLPA343WJPZY	AD		J	Coil
L2703	RCiLPA343WJPZY	AD		J	Coil
L2704	RCiLPA343WJPZY	AD		J	Coil
L5101	RCiLFA122WJZZY	AD		J	Coil
L5102	RCiLFA122WJZZY	AD		J	Coil
L5103	RCiLFA275WJZZY	AC		R	Coil
L5104	RCiLFA122WJZZY	AD		J	Coil
L5105	RCiLFA122WJZZY	AD		J	Coil
L5106	RCiLFA122WJZZY	AD		J	Coil
L5107	RCiLFA122WJZZY	AD		J	Coil
L5108	RCiLFA122WJZZY	AD		J	Coil
L5109	RCiLFA122WJZZY	AD		J	Coil
L5110	RCiLFA275WJZZY	AC		R	Coil
L5111	RCiLFA122WJZZY	AD		J	Coil
L5112	RCiLFA122WJZZY	AD		J	Coil
L5113	RCiLFA122WJZZY	AD		J	Coil
L5114	RCiLFA122WJZZY	AD		J	Coil
L5115	RCiLFA279WJZZY	AC		R	Coil
L5116	RCiLFA279WJZZY	AC		R	Coil
L5117	RCiLFA279WJZZY	AC		R	Coil
L5118	RCiLFA279WJZZY	AC		R	Coil
L5119	RCiLFA279WJZZY	AC		R	Coil
L5120	RCiLFA279WJZZY	AC		R	Coil
L5401	RCiLPA195WJZZY	AD		J	Coil
L5402	RCiLPA195WJZZY	AD		J	Coil
L5403	RCiLPA085WJZZY	AD		J	Coil
L8001	VPMKM2R7JR77VY	AB		J	Coil, Peaking 2.7μH
L9601	RCiLPA086WJZZY	AE		J	Coil
L9602	RCiLPA083WJZZY	AD		J	Coil
L9603	RCiLPA898WJZZY	AC		R	Coil
L9641	RCiLPA898WJZZY	AC		R	Coil
LUG2201	QLUGHA006WJZZY	AC		J	Lug
LUG2202	QLUGHA009WJZZY	AC		J	Lug
LUG2205	QLUGHA009WJZZY	AC		J	Lug
LUG2206	QLUGHA006WJZZY	AC		J	Lug
LUG2207	QLUGHA009WJZZY	AC		J	Lug
LUG2208	QLUGHA009WJZZY	AC		J	Lug
LUG2209	QLUGHA006WJZZY	AC		J	Lug
LUG2210	QLUGHA006WJZZY	AC		J	Lug
LUG2211	QLUGHA006WJZZY	AC		J	Lug
LUG2212	QLUGHA006WJZZY	AC		J	Lug
LUG2213	QLUGHA009WJZZY	AC		J	Lug
P2001	QPLGN0060CEZZY	AE		J	Plug, 10pin
P2002	QPLGNA324WJZZY	AC		J	Plug, 4pin (KM)
P2201	QPLGNA330WJZZY	AD		J	Plug, 10pin (RA)
P2603	QPLGNA327WJZZY	AC		J	Plug, 7pin (LB)
P2701	QPLGNA160WJZZY	AD		J	Plug, 4pin (SP)
P9002	QPLGNA173WJZZY	AD		J	Plug, 4pin
P9202	QPLGNA144WJZZY	AF		J	Plug, 20pin
P9301	QCNCWA562WJQZY	AF		J	Connector, 60pin
P9701	QPLGNA168WJZZY	AF		J	Plug, 12pin (PD)
Q501	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q502	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q503	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q504	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q505	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q506	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q507	VSDTC614TK+-1Y	AB		J	Transistor, DTC614TKT146
Q508	VSDTC614TK+-1Y	AB		J	Transistor, DTC614TKT146

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
Q509	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q510	VS2SC3928AR-1Y	AB		J	Transistor, 2SC3928A-T112-1R
Q511	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q512	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q513	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q514	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q515	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q516	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q517	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q518	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q519	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q520	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q521	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q522	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q523	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q524	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q1101	VS2SC3928AR-1Y	AB		J	Transistor, 2SC3928A-T112-1R
Q1102	VS2SC3928AR-1Y	AB		J	Transistor, 2SC3928A-T112-1R
Q1301	VSKRC404E++-1Y	AB		J	Transistor
Q1304	VSKRC404E++-1Y	AB		J	Transistor
Q1305	VSKRC404E++-1Y	AB		J	Transistor
Q1306	VSiMH23T110-1Y	AC		J	Transistor, IMH23T110
Q1307	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q1308	VSiMH23T110-1Y	AC		J	Transistor, IMH23T110
Q1309	VSKTC3875SG-1Y	AB		J	Transistor
Q1312	VSKRC404E++-1Y	AB		J	Transistor
Q1616	VSiMD2A////-1Y	AC		J	Transistor, IMD2AT108
Q1618	VSiMD2A////-1Y	AC		J	Transistor, IMD2AT108
Q1619	VSRT1N141U/-1Y	AB		J	Transistor, RT1N141U-T111-1
Q1620	VSKTA1535T+-1Y	AC		J	Transistor, KTA1535T-RTK/P
Q2001	VSKRC404E++-1Y	AB		J	Transistor
Q2006	VSRT1N141U/-1Y	AB		J	Transistor, RT1N141U-T111-1
Q2007	VSRT1N141U/-1Y	AB		J	Transistor, RT1N141U-T111-1
Q2210	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q2211	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q2212	VS2SC2735//-1Y	AB		J	Transistor, 2SC2735JC21TL
Q2704	VSKRC404E++-1Y	AB		J	Transistor
Q5401	VSHN1B04FU/-1Y	AC		J	Transistor, HN1B04FU(TE85L,F
Q5403	VSTPCP8602+-1Y	AD		R	Transistor, VSTPCP8602+-1Y
Q5404	VSTPCP8505+-1Y	AD		R	Transistor, VSTPCP8505+-1Y
Q5410	VS2SC2881Y+-1Y	AD	N	R	Transistor, 2SC2881-1Y(TE12L,CF
Q5411	VSSM3K7002F-1Y	AC		J	Transistor, SSM3K7002F(5LTST,F
Q5412	VSMCH6305++-1Y	AE		J	Transistor, MCH6305-TL-E
Q5413	VSRN1902///-1Y	AC		J	Transistor, RN1902(TE85L,F)/(T5L,F,T)
Q5414	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q9301	VS2SA1530AR-1Y	AB		J	Transistor, 2SA1530A-T112-1R
Q9602	VSFW808ME++-1Y	AE		R	Transistor, FW808-M-TL-E
Q9701	VSRN4982///-1Y	AB		J	Transistor, RN4982(TE85L,F)
Q9702	VSRN4982///-1Y	AB		J	Transistor, RN4982(TE85L,F)
R501	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R502	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R503	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R504	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R505	VRS-CZ1JF101FY	AA		J	Resistor, 100 1/16W Metal Oxide
R506	VRS-TQ2BD750JY	AA		J	Resistor, 75 1/8W Metal Oxide
R508	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R509	VRS-CZ1JF221JY	AA		J	Resistor, 220 1/16W Metal Oxide
R510	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R511	VRS-CZ1JF221JY	AA		J	Resistor, 220 1/16W Metal Oxide
R512	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R517	VRS-TQ2BD750JY	AA		J	Resistor, 75 1/8W Metal Oxide
R518	VRS-TQ2BD750JY	AA		J	Resistor, 75 1/8W Metal Oxide
R519	VRS-TQ2BD750JY	AA		J	Resistor, 75 1/8W Metal Oxide
R520	VRS-TQ2BD750JY	AA		J	Resistor, 75 1/8W Metal Oxide
R521	VRS-TQ2BD750JY	AA		J	Resistor, 75 1/8W Metal Oxide
R523	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R524	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R525	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R526	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R527	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R528	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R530	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R531	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R532	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R533	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R534	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R535	VRS-CZ1JF221JY	AA		J	Resistor, 220 1/16W Metal Oxide
R536	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R537	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R538	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R539	VRS-CZ1JF221JY	AA		J	Resistor, 220 1/16W Metal Oxide
R540	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R543	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R544	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R545	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
R546	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R547	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R549	VRS-CZ1JF390JY	AA		J	Resistor, 39 1/16W Metal Oxide
R550	VRS-CZ1JF390JY	AA		J	Resistor, 39 1/16W Metal Oxide
R551	VRS-CZ1JF390JY	AA		J	Resistor, 39 1/16W Metal Oxide
R552	VRS-CZ1JF221JY	AA		J	Resistor, 220 1/16W Metal Oxide
R553	VRS-CZ1JF390JY	AA		J	Resistor, 39 1/16W Metal Oxide
R554	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R555	VRS-CZ1JF221JY	AA		J	Resistor, 220 1/16W Metal Oxide
R556	VRS-CZ1JF390JY	AA		J	Resistor, 39 1/16W Metal Oxide
R557	VRS-CZ1JF390JY	AA		J	Resistor, 39 1/16W Metal Oxide
R558	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R561	VRS-CZ1JF101FY	AA		J	Resistor, 100 1/16W Metal Oxide
R563	VRS-TQ2BD100JY	AA		J	Resistor, 10 1/8W Metal Oxide
R564	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R567	VRS-CZ1JF101FY	AA		J	Resistor, 100 1/16W Metal Oxide
R568	VRS-TQ2BD680JY	AA		J	Resistor, 68 1/8W Metal Oxide
R569	VRS-TQ2BD100JY	AA		J	Resistor, 10 1/8W Metal Oxide
R570	VRS-TQ2BD680JY	AA		J	Resistor, 68 1/8W Metal Oxide
R571	VRS-TQ2BD750JY	AA		J	Resistor, 75 1/8W Metal Oxide
R572	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R574	VRS-CZ1JF101FY	AA		J	Resistor, 100 1/16W Metal Oxide
R576	VRS-CZ1JF564JY	AB		J	Resistor, 560k 1/16W Metal Oxide
R578	VRS-CZ1JF564JY	AB		J	Resistor, 560k 1/16W Metal Oxide
R579	VRS-CZ1JF221JY	AA		J	Resistor, 220 1/16W Metal Oxide
R580	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R581	VRS-CZ1JF221JY	AA		J	Resistor, 220 1/16W Metal Oxide
R582	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R583	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R584	VRS-CZ1JF473JY	AA		J	Resistor, 47k 1/16W Metal Oxide
R585	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R586	VRS-CZ1JF222JY	AA		J	Resistor, 2.2k 1/16W Metal Oxide
R587	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R588	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R589	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R590	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R592	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R593	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R594	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R595	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R596	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R597	VRS-CZ1JF680FY	AA		J	Resistor, 68 1/16W Metal Oxide
R598	VRS-CZ1JF221JY	AA		J	Resistor, 220 1/16W Metal Oxide
R599	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R600	VRS-CZ1JF221JY	AA		J	Resistor, 220 1/16W Metal Oxide
R601	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R602	VRS-CZ1JF221JY	AA		J	Resistor, 220 1/16W Metal Oxide
R603	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R604	VRS-CZ1JF221JY	AA		J	Resistor, 220 1/16W Metal Oxide
R605	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R606	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R607	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R608	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R609	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R610	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R611	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R612	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R614	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R615	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R616	VRS-CZ1JF101FY	AA		J	Resistor, 100 1/16W Metal Oxide
R618	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R619	VRS-CZ1JF101FY	AA		J	Resistor, 100 1/16W Metal Oxide
R621	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R622	VRS-TV1JD911FY	AA		J	Resistor, 910 1/10W Metal Oxide
R623	VRS-TV1JD911FY	AA		J	Resistor, 910 1/10W Metal Oxide
R626	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R627	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R628	VRS-TV1JD911FY	AA		J	Resistor, 910 1/10W Metal Oxide
R630	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R631	VRS-TV1JD911FY	AA		J	Resistor, 910 1/10W Metal Oxide
R633	VRS-TV1JD471JY	AA		J	Resistor, 470 1/10W Metal Oxide
R634	VRS-TQ2BD750JY	AA		J	Resistor, 75 1/8W Metal Oxide
R1101	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R1102	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R1103	VRS-CZ1JF683JY	AA		J	Resistor, 68k 1/16W Metal Oxide
R1107	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R1109	VRS-CZ1JF331JY	AA		J	Resistor, 330 1/16W Metal Oxide
R1113	VRS-CZ1JF123JY	AA		J	Resistor, 12k 1/16W Metal Oxide
R1114	VRS-CZ1JF392JY	AA		J	Resistor, 3.9k 1/16W Metal Oxide
R1115	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R1118	VRS-CZ1JF272JY	AA		J	Resistor, 2.7k 1/16W Metal Oxide
R1119	VRS-CZ1JF182JY	AA		J	Resistor, 1.8k 1/16W Metal Oxide
R1120	VRS-CZ1JF222JY	AA		J	Resistor, 2.2k 1/16W Metal Oxide
R1121	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R1301	VRS-CJ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
R1302	VRK-SB1FF223JY	AA		J	Resistor, 22k 1/32W Metal Composition
R1303	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R1304	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1305	VRS-CZ1JF223JY	AA		J	Resistor, 22k 1/16W Metal Oxide
R1306	VRS-CZ1JF473FY	AA		J	Resistor, 47k 1/16W Metal Oxide
R1307	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1308	VRS-CZ1JF222JY	AA		J	Resistor, 2.2k 1/16W Metal Oxide
R1309	VRS-CJ1JF473JY	AB		J	Resistor, 47k 1/16W Metal Oxide
R1310	VRS-CZ1JF473JY	AA		J	Resistor, 47k 1/16W Metal Oxide
R1311	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R1314	VRS-CZ1JF473FY	AA		J	Resistor, 47k 1/16W Metal Oxide
R1315	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R1317	VRS-CZ1JF102FY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1318	VRS-CZ1JF102FY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1321	VRS-CZ1JF473JY	AA		J	Resistor, 47k 1/16W Metal Oxide
R1322	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1323	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R1324	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R1325	VRS-CZ1JF473JY	AA		J	Resistor, 47k 1/16W Metal Oxide
R1326	VRS-CZ1JF102FY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1327	VRS-CZ1JF102FY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1329	VRS-CZ1JF473JY	AA		J	Resistor, 47k 1/16W Metal Oxide
R1330	VRS-CZ1JF473JY	AA		J	Resistor, 47k 1/16W Metal Oxide
R1333	VRS-CZ1JF223FY	AA		J	Resistor, 22k 1/16W Metal Oxide
R1335	VRS-CZ1JF562JY	AA		J	Resistor, 5.6k 1/16W Metal Oxide
R1336	VRS-CZ1JF473JY	AA		J	Resistor, 47k 1/16W Metal Oxide
R1337	VRS-CZ1JF103FY	AB		J	Resistor, 10k 1/16W Metal Oxide
R1338	VRS-CZ1JF332FY	AA		J	Resistor, 3.3k 1/16W Metal Oxide
R1341	VRS-CZ1JF153JY	AA		J	Resistor, 15k 1/16W Metal Oxide
R1401	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R1402	VRS-CZ1JF105JY	AA		J	Resistor, 1M 1/16W Metal Oxide
R1405	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1407	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1408	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1409	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1410	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1411	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1414	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1415	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1416	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1418	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1422	VRS-CZ1JF4R7JY	AA		J	Resistor, 4.7 1/16W Metal Oxide
R1423	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R1424	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1425	VRS-CZ1JF4R7JY	AA		J	Resistor, 4.7 1/16W Metal Oxide
R1426	VRS-CJ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R1427	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1431	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1432	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1450	VRS-CZ1JF330JY	AA		J	Resistor, 33 1/16W Metal Oxide
R1604	VRS-CZ1JF273JY	AA		J	Resistor, 27k 1/16W Metal Oxide
R1606	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R1607	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1620	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1623	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1624	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1627	VRS-CZ1JF473FY	AA		J	Resistor, 47k 1/16W Metal Oxide
R1629	VRS-CJ1JF473JY	AB		J	Resistor, 47k 1/16W Metal Oxide
R1630	VRS-CJ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R1637	VRS-CZ1JF473FY	AA		J	Resistor, 47k 1/16W Metal Oxide
R1640	VRS-CJ1JF473JY	AB		J	Resistor, 47k 1/16W Metal Oxide
R1641	VRS-CJ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R1665	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R1666	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R1668	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R1670	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R1671	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R1674	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R1676	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R1677	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R1678	VRS-CZ1JF103FY	AB		J	Resistor, 10k 1/16W Metal Oxide
R1679	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R1680	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R1681	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R1682	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R1683	VRS-CZ1JF751JY	AA		J	Resistor, 750 1/16W Metal Oxide
R1684	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R1685	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R1688	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R1722	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R1723	VRS-CZ1JF102FY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1724	VRS-CZ1JF102FY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1725	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R1726	VRS-CZ1JF331JY	AA		J	Resistor, 330 1/16W Metal Oxide
R1727	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
R1728	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R1737	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1739	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1740	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1741	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1742	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1743	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1744	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1745	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R1746	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R2001	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2003	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R2004	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2006	VRS-CZ1JF223JY	AA		J	Resistor, 22k 1/16W Metal Oxide
R2007	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R2008	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R2009	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R2010	VRS-CJ1JF333JY	AA		J	Resistor, 33k 1/16W Metal Oxide
R2011	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R2012	VRS-CH1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2014	VRS-CJ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R2015	VRS-CJ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2016	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2017	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R2018	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2019	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2022	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R2023	VRS-CZ1JF473FY	AA		J	Resistor, 47k 1/16W Metal Oxide
R2024	VRS-CZ1JF102FY	AA		J	Resistor, 1k 1/16W Metal Oxide
R2025	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2026	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2027	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2028	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R2029	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R2030	VRS-CH1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2031	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2032	VRS-CZ1JF223JY	AA		J	Resistor, 22k 1/16W Metal Oxide
R2033	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2034	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R2035	VRS-CZ1JF223JY	AA		J	Resistor, 22k 1/16W Metal Oxide
R2037	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R2038	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2040	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2041	VRS-CZ1JF152JY	AA		J	Resistor, 1.5k 1/16W Metal Oxide
R2047	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2049	VRS-CZ1JF272FY	AA		J	Resistor, 2.7k 1/16W Metal Oxide
R2050	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2051	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R2052	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R2058	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R2068	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2071	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R2072	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R2076	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R2226	VRS-CZ1JF222JY	AA		J	Resistor, 2.2k 1/16W Metal Oxide
R2227	VRS-CZ1JF222JY	AA		J	Resistor, 2.2k 1/16W Metal Oxide
R2229	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2230	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2233	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2234	VRS-CZ1JF102FY	AA		J	Resistor, 1k 1/16W Metal Oxide
R2238	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2239	VRS-TV1JD750JY	AA		J	Resistor, 75 1/10W Metal Oxide
R2240	VRS-TV1JD750JY	AA		J	Resistor, 75 1/10W Metal Oxide
R2241	VRS-TV1JD750JY	AA		J	Resistor, 75 1/10W Metal Oxide
R2242	VRS-CZ1JF330JY	AA		J	Resistor, 33 1/16W Metal Oxide
R2243	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2244	VRS-CZ1JF183JY	AA		J	Resistor, 18k 1/16W Metal Oxide
R2245	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2246	VRS-CZ1JF183JY	AA		J	Resistor, 18k 1/16W Metal Oxide
R2247	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2248	VRS-CZ1JF183JY	AA		J	Resistor, 18k 1/16W Metal Oxide
R2249	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2250	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2251	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R2252	VRS-CZ1JF330JY	AA		J	Resistor, 33 1/16W Metal Oxide
R2253	VRS-CZ1JF561JY	AA		J	Resistor, 560 1/16W Metal Oxide
R2254	VRS-CZ1JF561JY	AA		J	Resistor, 560 1/16W Metal Oxide
R2255	VRS-CZ1JF561JY	AA		J	Resistor, 560 1/16W Metal Oxide
R2256	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R2257	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R2258	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R2259	VRS-CZ1JF473JY	AA		J	Resistor, 47k 1/16W Metal Oxide
R2260	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide
R2261	VRS-CZ1JF473JY	AA		J	Resistor, 47k 1/16W Metal Oxide
R2262	VRS-CZ1JF100JY	AA		J	Resistor, 10 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
R2279	VRS-CZ1JF392JY	AA		J	Resistor, 3.9k 1/16W Metal Oxide
R2280	VRS-CZ1JF202JY	AA		J	Resistor, 2k 1/16W Metal Oxide
R2305	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R2313	VRS-CZ1JF750JY	AA		J	Resistor, 75 1/16W Metal Oxide
R2314	VRS-CZ1JF390JY	AA		J	Resistor, 39 1/16W Metal Oxide
R2603	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R2604	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R2623	VRS-CZ1JF105JY	AA		J	Resistor, 1M 1/16W Metal Oxide
R2713	VRS-TV1JD000JY	AA		J	Resistor, 0 1/10W Metal Oxide
R2714	VRS-TV1JD000JY	AA		J	Resistor, 0 1/10W Metal Oxide
R2715	VRS-CZ1JF224FY	AA		J	Resistor, 220k 1/16W Metal Oxide
R2717	VRS-CZ1JF273FY	AA		J	Resistor, 27k 1/16W Metal Oxide
R2718	VRS-CZ1JF123JY	AA		J	Resistor, 12k 1/16W Metal Oxide
R2719	VRS-CZ1JF203JY	AA		J	Resistor, 20k 1/16W Metal Oxide
R2726	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R2730	VRS-CZ1JF224JY	AA		J	Resistor, 220k 1/16W Metal Oxide
R2741	VRS-CZ1JF753JY	AA		J	Resistor, 75k 1/16W Metal Oxide
R2742	VRS-CZ1JF203JY	AA		J	Resistor, 20k 1/16W Metal Oxide
R2744	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R2752	VRS-CZ1JF224JY	AA		J	Resistor, 220k 1/16W Metal Oxide
R2753	VRS-CZ1JF683FY	AA		J	Resistor, 68k 1/16W Metal Oxide
R2754	VRS-CZ1JF223FY	AA		J	Resistor, 22k 1/16W Metal Oxide
R5102	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5107	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5109	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5111	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5113	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5115	VRS-CZ1JF105JY	AA		J	Resistor, 1M 1/16W Metal Oxide
R5117	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5118	VRS-CZ1JF222JY	AA		J	Resistor, 2.2k 1/16W Metal Oxide
R5119	VRS-CZ1JF222JY	AA		J	Resistor, 2.2k 1/16W Metal Oxide
R5120	VRS-CZ1JF222JY	AA		J	Resistor, 2.2k 1/16W Metal Oxide
R5121	VRS-CZ1JF331JY	AA		J	Resistor, 330 1/16W Metal Oxide
R5122	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5124	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5126	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5129	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5139	VRS-CZ1JF103FY	AB		J	Resistor, 10k 1/16W Metal Oxide
R5141	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5142	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R5143	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R5144	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R5145	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R5146	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R5147	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R5148	VRS-CH1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R5149	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R5150	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R5202	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5203	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5209	VRS-CZ1JF752FY	AA		J	Resistor, 7.5k 1/16W Metal Oxide
R5210	VRS-CZ1JF301JY	AA		J	Resistor, 300 1/16W Metal Oxide
R5211	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5213	VRS-CZ1JF243FY	AA		J	Resistor, 24k 1/16W Metal Oxide
R5214	VRS-CZ1JF243FY	AA		J	Resistor, 24k 1/16W Metal Oxide
R5217	VRS-CZ1JF102FY	AA		J	Resistor, 1k 1/16W Metal Oxide
R5218	VRS-CZ1JF103FY	AB		J	Resistor, 10k 1/16W Metal Oxide
R5225	VRS-CZ1JF332FY	AA		J	Resistor, 3.3k 1/16W Metal Oxide
R5227	VRS-CZ1JF301JY	AA		J	Resistor, 300 1/16W Metal Oxide
R5228	VRS-CZ1JF332FY	AA		J	Resistor, 3.3k 1/16W Metal Oxide
R5232	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5236	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5237	VRS-CZ1JF183FY	AA		J	Resistor, 18k 1/16W Metal Oxide
R5238	VRS-CZ1JF912FY	AA		J	Resistor, 9.1k 1/16W Metal Oxide
R5239	VRS-CZ1JF913JY	AA		J	Resistor, 91k 1/16W Metal Oxide
R5240	VRS-CZ1JF183FY	AA		J	Resistor, 18k 1/16W Metal Oxide
R5241	VRS-CZ1JF163FY	AB		J	Resistor, 16k 1/16W Metal Oxide
R5242	VRS-CZ1JF913FY	AA		R	Resistor, 91k 1/16W Metal Oxide
R5402	VRS-CZ1JF563JY	AA		J	Resistor, 56k 1/16W Metal Oxide
R5403	VRS-CZ1JF513FY	AA		R	Resistor, 51k 1/16W Metal Oxide
R5404	VRS-CZ1JF203FY	AA		R	Resistor, 20k 1/16W Metal Oxide
R5405	VRS-CZ1JF222JY	AA		J	Resistor, 2.2k 1/16W Metal Oxide
R5406	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5407	VRS-CZ1JF203FY	AA		R	Resistor, 20k 1/16W Metal Oxide
R5408	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R5409	VRS-CZ1JF303FY	AA		J	Resistor, 30k 1/16W Metal Oxide
R5410	VRS-TW2HF3R3JY	AA		J	Resistor, 3.3 1/2W Metal Oxide
R5411	VRS-CZ1JF222JY	AA		J	Resistor, 2.2k 1/16W Metal Oxide
R5412	VRS-CZ1JF204FY	AA		J	Resistor, 200k 1/16W Metal Oxide
R5413	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5414	VRS-CZ1JF183FY	AA		J	Resistor, 18k 1/16W Metal Oxide
R5415	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5416	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5417	VRS-CZ1JF153FY	AA		J	Resistor, 15k 1/16W Metal Oxide
R5418	VRS-CZ1JF153FY	AA		J	Resistor, 15k 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
R5419	VRS-CZ1JF1R0JY	AA		J	Resistor, 1 1/16W Metal Oxide
R5420	VRS-CZ1JF1R0JY	AA		J	Resistor, 1 1/16W Metal Oxide
R5423	VRS-CZ1JF1R0JY	AA		J	Resistor, 1 1/16W Metal Oxide
R5426	VRS-CZ1JF513FY	AA		R	Resistor, 51k 1/16W Metal Oxide
R5427	VRS-CZ1JF102FY	AA		J	Resistor, 1k 1/16W Metal Oxide
R5428	VRS-CZ1JF390FY	AA		J	Resistor, 39 1/16W Metal Oxide
R5429	VRS-CZ1JF183FY	AA		J	Resistor, 18k 1/16W Metal Oxide
R5430	VRS-CZ1JF203FY	AA		R	Resistor, 20k 1/16W Metal Oxide
R5431	VRS-CZ1JF113FY	AA		J	Resistor, 11k 1/16W Metal Oxide
R5432	VRS-CZ1JF512FY	AA		J	Resistor, 5.1k 1/16W Metal Oxide
R5433	VRS-CZ1JF1R0JY	AA		J	Resistor, 1 1/16W Metal Oxide
R5434	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R5435	VRS-CZ1JF682FY	AA		J	Resistor, 6.8k 1/16W Metal Oxide
R5436	VRS-CZ1JF204FY	AA		J	Resistor, 200k 1/16W Metal Oxide
R5437	VRS-CZ1JF183FY	AA		J	Resistor, 18k 1/16W Metal Oxide
R5438	VRS-CZ1JF683FY	AA		J	Resistor, 68k 1/16W Metal Oxide
R5439	VRS-CZ1JF393FY	AA		J	Resistor, 39k 1/16W Metal Oxide
R5440	VRS-CZ1JF222JY	AA		J	Resistor, 2.2k 1/16W Metal Oxide
R5442	VRS-CZ1JF153FY	AA		J	Resistor, 15k 1/16W Metal Oxide
R5444	VRS-CZ1JF334FY	AA		J	Resistor, 330k 1/16W Metal Oxide
R5445	VRS-CZ1JF753FY	AA		R	Resistor, 75k 1/16W Metal Oxide
R5446	VRS-CZ1JF133FY	AA		J	Resistor, 13k 1/16W Metal Oxide
R5447	VRS-CZ1JF753FY	AA		R	Resistor, 75k 1/16W Metal Oxide
R5448	VRS-CZ1JF391JY	AA		J	Resistor, 390 1/16W Metal Oxide
R5451	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R5452	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5453	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5454	VRS-CZ1JF332JY	AA		J	Resistor, 3.3k 1/16W Metal Oxide
R5455	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R5457	VRS-CZ1JF332FY	AA		J	Resistor, 3.3k 1/16W Metal Oxide
R5458	VRS-CZ1JF511FY	AA		J	Resistor, 510 1/16W Metal Oxide
R5459	VRS-CZ1JF1R0JY	AA		J	Resistor, 1 1/16W Metal Oxide
R5460	VRS-CZ1JF1R0JY	AA		J	Resistor, 1 1/16W Metal Oxide
R5461	VRS-CZ1JF474JY	AA		J	Resistor, 470k 1/16W Metal Oxide
R5464	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5465	VRS-CZ1JF105JY	AA		J	Resistor, 1M 1/16W Metal Oxide
R5466	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R5467	VRS-TQ2BD511JY	AA		J	Resistor, 510 1/8W Metal Oxide
R5468	VRS-TQ2BD511JY	AA		J	Resistor, 510 1/8W Metal Oxide
R5469	VRS-TQ2BD511JY	AA		J	Resistor, 510 1/8W Metal Oxide
R5470	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R5484	VRK-SB1FF000JY	AA		J	Resistor, 0 1/32W Metal Composition
R5486	VRK-SB1FF000JY	AA		J	Resistor, 0 1/32W Metal Composition
R5489	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5490	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5492	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5493	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R5507	VRS-CZ1JF913FY	AA		R	Resistor, 91k 1/16W Metal Oxide
R5508	VRS-CZ1JF133FY	AA		J	Resistor, 13k 1/16W Metal Oxide
R5510	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R5511	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R5512	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R8002	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R8003	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R8004	VRS-CZ1JF472FY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8005	VRS-CK1JF470JY	AB		J	Resistor, 47 1/16W Metal Oxide
R8006	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R8007	VRS-CK1JF470JY	AB		J	Resistor, 47 1/16W Metal Oxide
R8008	VRS-CK1JF470JY	AB		J	Resistor, 47 1/16W Metal Oxide
R8009	VRS-CK1JF470JY	AB		J	Resistor, 47 1/16W Metal Oxide
R8010	VRS-CK1JF470JY	AB		J	Resistor, 47 1/16W Metal Oxide
R8011	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R8013	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R8014	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R8015	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R8016	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R8017	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R8018	VRS-CK1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8021	VRS-CZ1JF750JY	AA		J	Resistor, 75 1/16W Metal Oxide
R8023	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R8024	VRS-CH1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R8025	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R8026	VRS-CZ1JF272JY	AA		J	Resistor, 2.7k 1/16W Metal Oxide
R8029	VRS-CZ1JF272JY	AA		J	Resistor, 2.7k 1/16W Metal Oxide
R8030	VRS-CZ1JF472FY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8038	VRS-CZ1JF511FY	AA		J	Resistor, 510 1/16W Metal Oxide
R8039	VRS-CZ1JF511FY	AA		J	Resistor, 510 1/16W Metal Oxide
R8040	VRS-CZ1JF561JY	AA		J	Resistor, 560 1/16W Metal Oxide
R8042	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R8043	VRS-CZ1JF101JY	AA		J	Resistor, 100 1/16W Metal Oxide
R8056	VRS-TV1JD000JY	AA		J	Resistor, 0 1/10W Metal Oxide
R8059	VRS-CZ1JF272JY	AA		J	Resistor, 2.7k 1/16W Metal Oxide
R8060	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R8065	VRS-CZ1JF272JY	AA		J	Resistor, 2.7k 1/16W Metal Oxide
R8084	VRS-CZ1JF272JY	AA		J	Resistor, 2.7k 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
R8087	VRS-CZ1JF561FY	AA		J	Resistor, 560 1/16W Metal Oxide
R8088	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8089	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8090	VRS-CZ1JF330JY	AA		J	Resistor, 33 1/16W Metal Oxide
R8093	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8094	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8097	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8099	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8100	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8101	VRS-CZ1JF472FY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8102	VRS-CZ1JF472FY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8103	VRS-CZ1JF472FY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8104	VRS-CZ1JF472FY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8114	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8116	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8124	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8135	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R8137	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8138	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R8139	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R8140	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R8142	VRS-CZ1JF392JY	AA		J	Resistor, 3.9k 1/16W Metal Oxide
R8143	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8144	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8145	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8146	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8147	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R8151	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8152	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8153	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8154	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8155	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8156	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8163	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8167	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8168	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8169	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8170	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8171	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8172	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8173	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8174	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8181	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8182	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8183	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8186	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8187	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8188	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8189	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8190	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8191	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8198	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8199	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8200	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8201	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8202	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8203	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8204	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8205	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8206	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8207	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8208	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8215	VRS-CZ1JF680JY	AB		J	Resistor, 68 1/16W Metal Oxide
R8216	VRS-CZ1JF680JY	AB		J	Resistor, 68 1/16W Metal Oxide
R8217	VRS-CZ1JF680JY	AB		J	Resistor, 68 1/16W Metal Oxide
R8218	VRS-CZ1JF680JY	AB		J	Resistor, 68 1/16W Metal Oxide
R8225	VRS-CZ1JF680JY	AB		J	Resistor, 68 1/16W Metal Oxide
R8226	VRS-CZ1JF680JY	AB		J	Resistor, 68 1/16W Metal Oxide
R8227	VRS-CZ1JF680JY	AB		J	Resistor, 68 1/16W Metal Oxide
R8228	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8230	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8231	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8232	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8233	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8240	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8241	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8242	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8243	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8244	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8245	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8246	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8247	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8248	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8251	VRS-CZ1JF220JY	AA		J	Resistor, 22 1/16W Metal Oxide
R8255	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
R8257	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8258	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8259	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8260	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8268	VRK-SB1FF680JY	AA		J	Resistor, 68 1/32W Metal Composition
R8269	VRK-SB1FF220JY	AA		J	Resistor, 22 1/32W Metal Composition
R8270	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R8451	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R8452	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R8456	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R8457	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R8474	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R8475	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R8902	VRS-CZ1JF105JY	AA		J	Resistor, 1M 1/16W Metal Oxide
R8903	VRS-CZ1JF105JY	AA		J	Resistor, 1M 1/16W Metal Oxide
R9001	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R9002	VRS-CZ1JF000JY	AA		J	Resistor, 0 1/16W Metal Oxide
R9003	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R9007	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R9008	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R9009	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R9010	VRS-CZ1JF182JY	AA		J	Resistor, 1.8k 1/16W Metal Oxide
R9011	VRS-CZ1JF182JY	AA		J	Resistor, 1.8k 1/16W Metal Oxide
R9012	VRS-CJ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R9014	VRS-CJ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R9018	VRS-CZ1JF272JY	AA		J	Resistor, 2.7k 1/16W Metal Oxide
R9034	VRS-CZ1JF152JY	AA		J	Resistor, 1.5k 1/16W Metal Oxide
R9035	VRS-CZ1JF152JY	AA		J	Resistor, 1.5k 1/16W Metal Oxide
R9209	VRS-CZ1JF470JY	AA		J	Resistor, 47 1/16W Metal Oxide
R9302	VRS-CH1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R9305	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R9306	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R9308	VRS-CZ1JF473JY	AA		J	Resistor, 47k 1/16W Metal Oxide
R9310	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R9313	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R9314	VRS-CZ1JF272JY	AA		J	Resistor, 2.7k 1/16W Metal Oxide
R9315	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R9316	VRS-CZ1JF473JY	AA		J	Resistor, 47k 1/16W Metal Oxide
R9317	VRS-CH1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R9318	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R9319	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R9324	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R9601	VRS-CZ1JF222JY	AA		J	Resistor, 2.2k 1/16W Metal Oxide
R9602	VRS-CZ1JF473FY	AA		J	Resistor, 47k 1/16W Metal Oxide
R9603	VRS-CZ1JF562JY	AA		J	Resistor, 5.6k 1/16W Metal Oxide
R9604	VRS-CZ1JF823JY	AA		J	Resistor, 82k 1/16W Metal Oxide
R9605	VRS-CZ1JF393JY	AA		J	Resistor, 39k 1/16W Metal Oxide
R9606	VRS-CZ1JF224JY	AA		J	Resistor, 220k 1/16W Metal Oxide
R9607	VRS-CZ1JF122JY	AA		J	Resistor, 1.2k 1/16W Metal Oxide
R9608	VRS-CZ1JF473FY	AA		J	Resistor, 47k 1/16W Metal Oxide
R9609	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R9610	VRS-CZ1JF682JY	AA		J	Resistor, 6.8k 1/16W Metal Oxide
R9611	VRS-CZ1JF393FY	AA		J	Resistor, 39k 1/16W Metal Oxide
R9612	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R9613	VRS-CZ1JF223JY	AA		J	Resistor, 22k 1/16W Metal Oxide
R9614	VRS-CZ1JF103FY	AB		J	Resistor, 10k 1/16W Metal Oxide
R9616	VRS-CZ1JF183FY	AA		J	Resistor, 18k 1/16W Metal Oxide
R9617	VRS-CZ1JF331JY	AA		J	Resistor, 330 1/16W Metal Oxide
R9625	VRS-CZ1JF103FY	AB		J	Resistor, 10k 1/16W Metal Oxide
R9629	VRS-CZ1JF103FY	AB		J	Resistor, 10k 1/16W Metal Oxide
R9641	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R9642	VRS-CZ1JF103FY	AB		J	Resistor, 10k 1/16W Metal Oxide
R9643	VRS-CZ1JF223FY	AA		J	Resistor, 22k 1/16W Metal Oxide
R9644	VRS-CZ1JF392JY	AA		J	Resistor, 3.9k 1/16W Metal Oxide
R9704	VRS-CZ1JF472JY	AA		J	Resistor, 4.7k 1/16W Metal Oxide
R9705	VRS-CZ1JF102JY	AA		J	Resistor, 1k 1/16W Metal Oxide
R9736	VRS-CZ1JF103JY	AA		J	Resistor, 10k 1/16W Metal Oxide
R9738	VRS-CZ1JF104JY	AA		J	Resistor, 100k 1/16W Metal Oxide
R9739	VRS-CZ1JF333FY	AA		J	Resistor, 33k 1/16W Metal Oxide
R9740	VRS-CZ1JF273JY	AA		J	Resistor, 27k 1/16W Metal Oxide
R9741	VRS-CZ1JF473FY	AA		J	Resistor, 47k 1/16W Metal Oxide
SC1601	QSOCZA136WJZZQ	AG		J	Socket, 23pin
SC1602	QSOCZA136WJZZQ	AG		J	Socket, 23pin
SC2201	QSOCNA716WJZZ	AM		J	Socket, 17pin
SC5201	QCNCW2367WJZZY	AG		J	Connector, 80pin
SC5202	QCNCW2367WJZZY	AG		J	Connector, 80pin
SG1601	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1602	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1603	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1604	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1607	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1608	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1609	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1610	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1613	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] DUNTKE450FM01 (MAIN Unit)					
SG1614	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1615	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1616	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1619	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1620	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1621	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
SG1622	RH-VXA187WJQZY	AB		J	Discharge Gap, EZAEG2A50AX
TH2001	VHHM1103J03-1Y	AC		J	Thermistor
TU1101	RTUDAA016WJQZ	BD		J	Tuner
VA8001	RH-VXA074WJZZY	AB		J	Varistor, AVRL101A1R1NTB
VA8002	RH-VXA074WJZZY	AB		J	Varistor, AVRL101A1R1NTB
X1401	RCRSCA145WJZZY	AE		J	Crystal, 12.288MHz
X2002	RFiLZA023WJQZY	AD		J	Filter
X8001	RCRSCA167WJQZY	AG		J	Crystal

[6] NOTE (Conductive cloth tape/Gasket)

Added parts

Conductive Cloth Tape

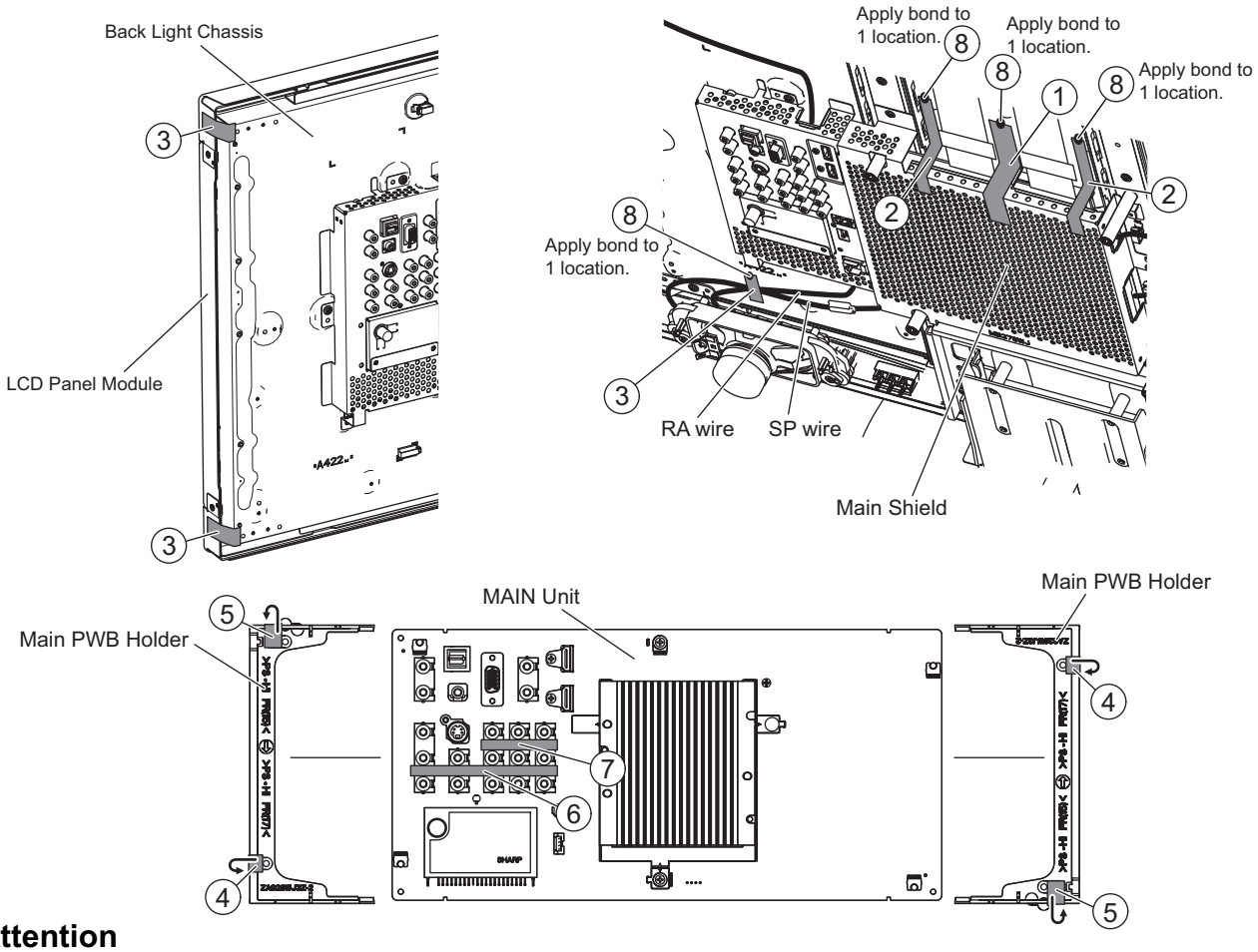
Parts code: ①PSLDMB359WJZZ Q'ty 1 ②PSLDMB360WJZZ Q'ty 2
③QEARZA123WJZZ Q'ty 3 ④PSLDMB361WJZZ Q'ty 2
⑤PSLDMB362WJZZ Q'ty 2

Gasket

Parts code: ⑥PMLT-A533WJZZ Q'ty 1 ⑦PMLT-A534WJZZ Q'ty 1

Bond

Parts code: ⑧ZSLCN-098P2KE (One 150g tube)

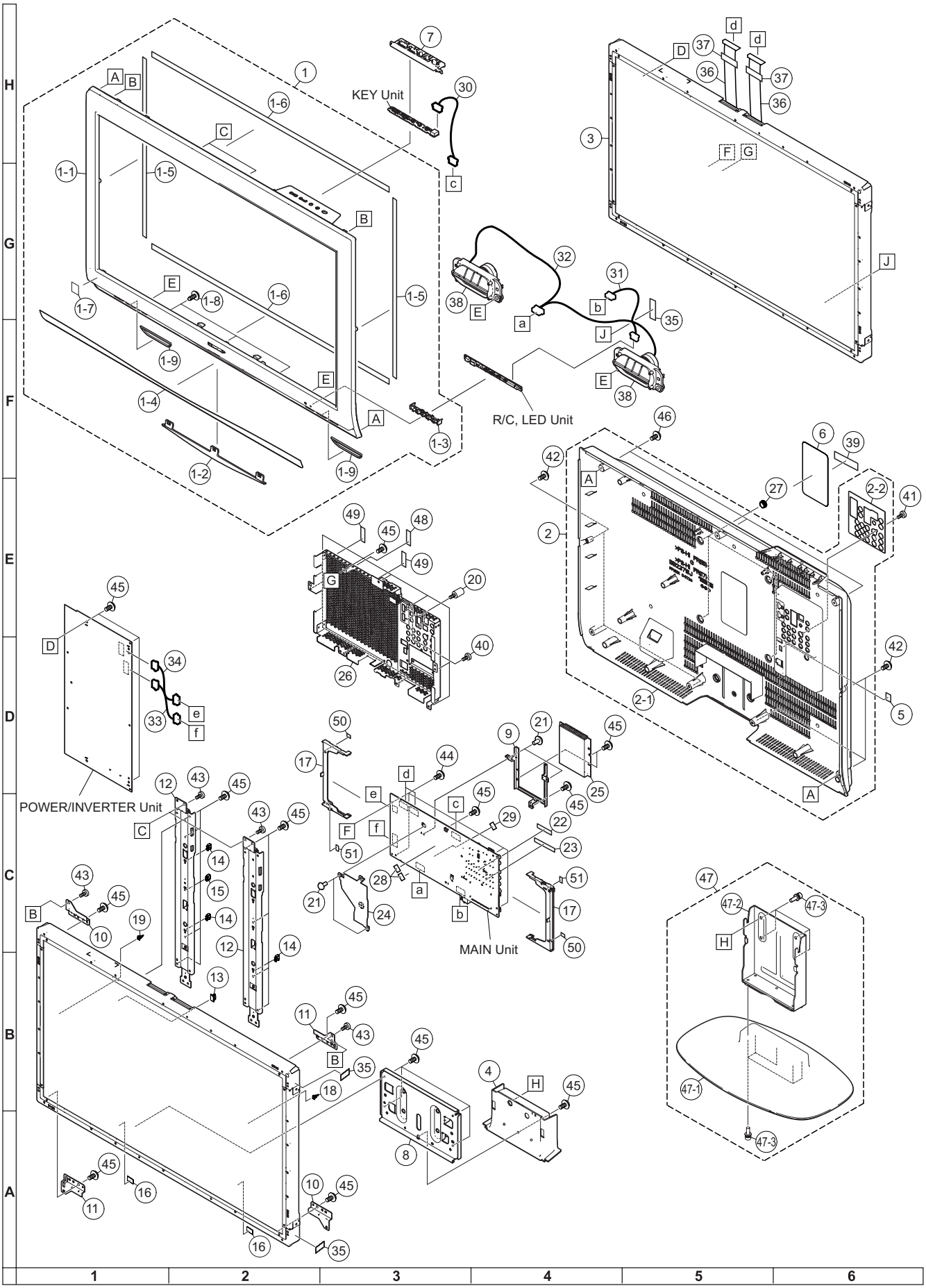


Attention

When peeling off the conductive cloth tape/gasket for repair, please use the NEW conductive cloth tape/gasket. (When using the conductive cloth tape/gasket again, keep in mind the decrease in the adhesive power of the conductive cloth tape/gasket. The purpose of using the NEW conductive cloth tape/gasket is to prevent the conductive cloth tape/gasket from peeling off.)

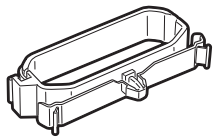
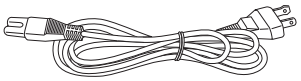
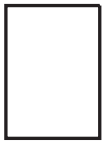
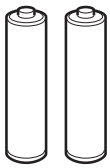
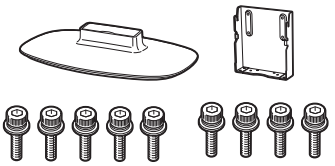
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[6] NOTE (Conductive cloth tape/Gasket)					
1	PSLDMB359WJZZ	AG	N	X	Conductive Cloth Tape
2	PSLDMB360WJZZ	AE	N	X	Conductive Cloth Tape, x2
3	QEARZA123WJZZ	AD		X	Conductive Cloth Tape, x3
4	PSLDMB361WJZZ	AC	N	X	Conductive Cloth Tape, x2
5	PSLDMB362WJZZ	AC	N	X	Conductive Cloth Tape, x2
6	PMLT-A533WJZZ	AD	N	X	Gasket
7	PMLT-A534WJZZ	AC	N	X	Gasket
8	ZSLCN-098P2KE	BH		J	One 150g tube

[7] CABINET AND MECHANICAL PARTS



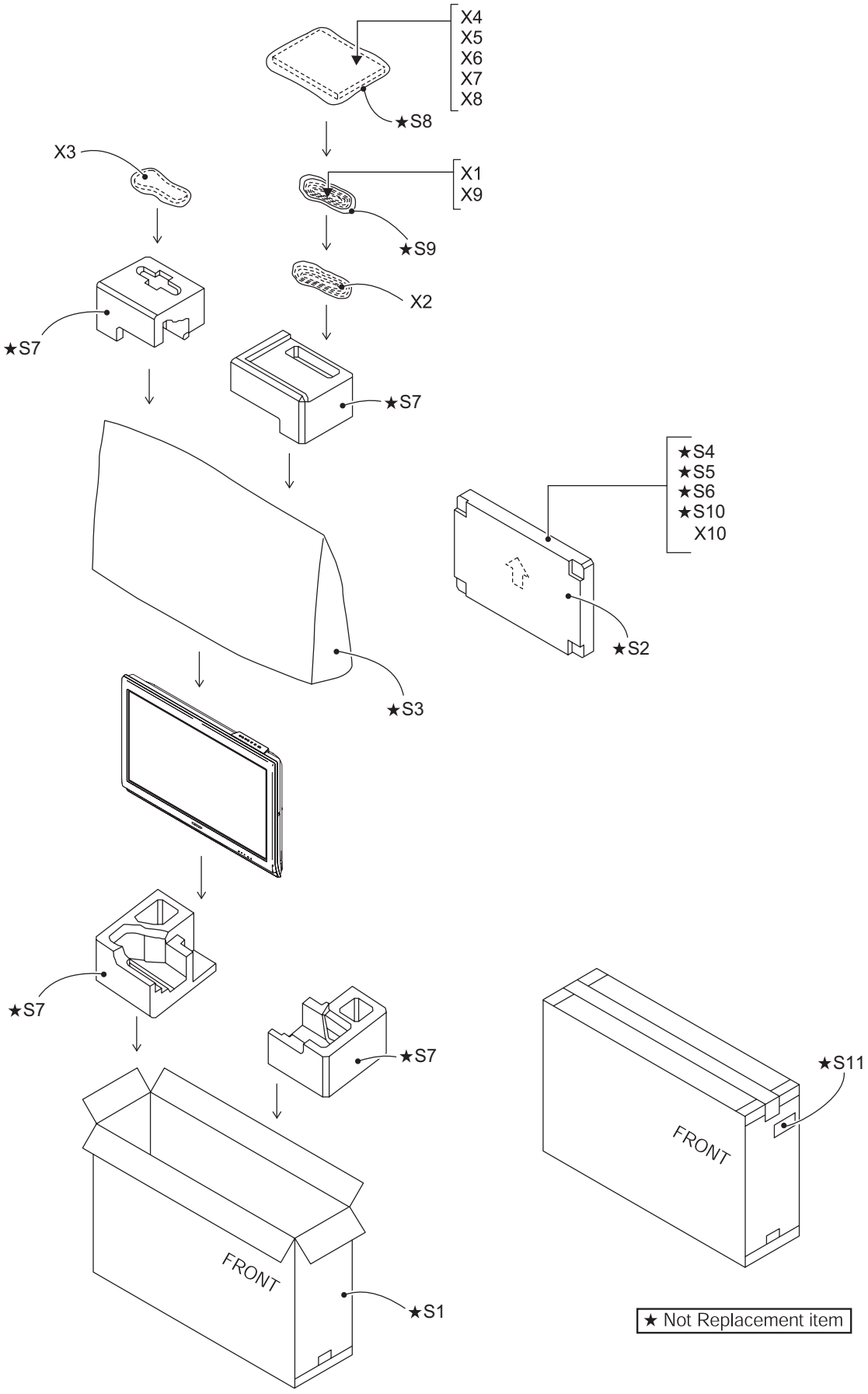
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[7] CABINET AND MECHANICAL PARTS					
1	CCABAB985WJ31	BR	N	X	Front Cabinet Ass'y
1-1	Not Available	−	N	−	Front Cabinet
1-2	Not Available	−	N	−	Decoration Plate (Center)
1-3	Not Available	−	N	−	LED Decoration
1-4	Not Available	−	N	−	Speaker Net
1-5	PSPAHB406WJZZ	AC	N	X	Spacer, x2
1-6	PSPAHB407WJZZ	AC	N	X	Spacer, x2
1-7	TLABZA635WJZZ	AC		J	E-Star Label
1-8	XEBS930P10000	AA		J	Screw, x3
1-9	Not Available	−	N	−	SP Spacer, x2
2	CCABBB237WJK1	BH	N	X	Rear Cabinet Ass'y
2-1	Not Available	−	N	−	Rear Cabinet
2-2	HiNDPC686WJSA	AG	N	X	Terminal Label
3	R1LK315T3GW20Z	DC	N	J	32" Wide LCD Panel Module Unit
4	GCOVAC612WJ3A	AK	N	X	Bottom Cover
5	HiNDPB715WJSA	AF		X	Terminal Label
6	HiNDPC687WJZZ	AE	N	X	Model Label
7	JBTN-A718WJ3A	AF	N	X	Operation Button
8	LANGKB343WJZZ	AR	N	X	Stand Fix Angle
9	LANGKB346WJFW	AH	N	X	Heat Sink Fix Angle
10	LANGKB364WJFW	AC	N	X	LCD Fix Angle-A, x2
11	LANGKB365WJFW	AC	N	X	LCD Fix Angle-B, x2
12	LANGTA476WJZZ	AQ	N	X	VESA Angle, x2
13	LHLDWA133WJKZ	AC		J	Wire Holder
14	LHLDWA143WJKZ	AC		J	Wire Holder, x3
15	LHLDWA151WJKZ	AB		J	Wire Holder
16	LHLDWA175WJUZ	AC		J	Wire Holder, x2
17	LHLDZA928WJ3Z	AG	N	X	Main PWB Holder, x2
18	LHLDZA933WJKZ	AB	N	X	Wire Holder
19	LHLDZA934WJKZ	AB	N	X	Wire Holder
20	NSFTZ0134CEFW	AD		J	Shaft, x2
21	PCLiCA004WJKZ	AC		J	Rivet, x4
22	PMLT-A534WJZZ	AC	N	X	Gasket
23	PMLT-A533WJZZ	AD	N	X	Gasket
24	PRDARA495WJFW	AH		X	Heat Sink
25	PRDARA510WJFW	AR		X	Heat Sink
26	PSLDMB275WJZZ	AQ	N	X	Main Shield
27	PSPAKA237WJ00	AA		X	Spacer, x4
28	PSPAZB086WJKZ	AD		J	Spacer, x2
29	PSPAZB313WJKZ	AC		J	Cool Sheet
30	QCNW-G724WJQZ	AF	N	X	Connecting Cord (KEY - MAIN)
31	QCNW-G725WJQZ	AK	N	X	Connecting Cord (LED - MAIN)
32	QCNW-G726WJQZ	AH	N	X	Connecting Cord (SP - MAIN)
33	QCNW-G727WJQZ	AK	N	X	Connecting Cord (POWER - MAIN)
34	QCNW-G728WJQZ	AG	N	X	Connecting Cord (INV - MAIN)
35	QEARZA123WJZZ	AD		X	Conductive Cloth Tape, x3
36	QPWBME512WJPZ	AN	N	X	Connecting Cord (LCD-FPC-MAIN), x2
37	RCORFA061WJZZ	AG		J	Core, x2
38	RSP-ZA310WJZZ	AQ	N	X	Speaker (L/R), x2
39	Not Available	−		−	No. Label
40	XBPS830P06000	AA		J	Screw (for HDMI), x2
41	XEBS930P10000	AA		J	Screw (for S-Terminal)
42	XEBS940P16000	AB		J	Screw (for CAB A B), x6
43	XEBSN40P10000	AB		J	Screw (for CAB A PNL), x4
44	XHPS730P16WS0	AB	N	X	Screw (for MAIN PWB2), x4
45	XHPS830P06WS0	AB	N	X	Screw (for MAIN PWB), x32
46	XHPS830P10WS0	AB	N	X	Screw (for CAB B CHS), x3
47	CDAi-A441WJ03	BF	N	X	Stand Unit
47-1	Not Available	−	N	−	Stand Base Ass'y
47-2	Not Available	−	N	−	Stand Support Ass'y
47-3	Not Available	−	N	−	Screw (for Stand), x9
48	PSLDMB359WJZZ	AG	N	X	Conductive Cloth Tape
49	PSLDMB360WJZZ	AE	N	X	Conductive Cloth Tape, x2
50	PSLDMB361WJZZ	AC	N	X	Conductive Cloth Tape, x2
51	PSLDMB362WJZZ	AC	N	X	Conductive Cloth Tape, x2
52	ZSLCN-098P2KE	BH		J	One 150g tube

[8] SUPPLIED ACCESSORIES

X1 Cable Clamp	X2 AC Cord	X3 Remote Control Unit	Operation Manual
			X6 X7 X8 
X9 "AAA" Size Battery	X10 Stand Unit		
	 		

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[8] SUPPLIED ACCESSORIES					
X1	LHLDWA173WJKZ	AE		J	Cable Clamp
⚠ X2	QACCDA038WJPZ	AL		J	AC Cord
X3	RRMCGA667WJSA	AP	N	X	Remote Control Unit
X4	TCADEA208WJZZ	AD		X	Enquete Card
X5	TGAN-A768WJZZ	AD		X	Extend Warranty
X6	TiNS-D487WJZZ	AE	N	X	Operation Manual (English)
X7	TiNS-D488WJZZ	AE	N	X	Operation Manual (French)
X8	TiNS-D489WJZZ	AE	N	X	Operation Manual (Spanish)
X9	Not Available	–		–	"AAA" Size Battery
X10	CDAi-A441WJ03	BF	N	X	Stand Unit

[9] PACKING PARTS (NOT REPLACEMENT ITEM)



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[9] PACKING PARTS (NOT REPLACEMENT ITEM)					
S1	SPAKCD944WJZZ	–	N	–	Packing Case
S2	SPAKCE206WJZZ	–	N	–	Stand Case
S3	SPAKPB045WJZZ	–		–	Wrapping Paper
S4	SPAKPB053WJZZ	–	N	–	Mirror Mat Sup
S5	SPAKPB054WJZZ	–	N	–	Mirror Mat Base
S6	SPAKAA373WJZZ	–	N	–	Cover Sheet
S7	SPAKXB803WJZZ	–	N	–	Packing Add.
S8	SSAKA0101GJZZ	–		–	Polyethylene Bag
S9	SSAKAA032WJZZ	–		–	Polyethylene Bag
S10	SSAKHA042WJZZ	–	N	–	Polyethylene Bag for Screw
S11	TLABKA009WJZZ	–		–	No. Label
[10] SERVICE JIG (USE FOR SERVICING)					
N N	QCNW-C222WJQZ	AW		J	Connecting Cord (80pin FFC L=1000mm), x2 MAIN to LCD Panel Unit
N N	QCNW-G906WJQZ	BA	N	J	Connecting Cord (12pin L=1000mm) MAIN to POWER Unit (PD)
N N	QCNW-G907WJQZ	AW	N	J	Connecting Cord (7pin L=1000mm) MAIN to INVERTER Unit (LB)

MEMO

SHARP

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