

HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL

AZ1-H Chassis

ORIGINAL MANUAL ISSUE DATE: 8/2010

Version	Date	Subject
1.0	8/3/2010	No revisions or updates are applicable at this time.
2.0	8/11/2010	Updated Special Handling Instructions when Replacing the LCD Panel Assembly. Added Wire Dressing Diagrams. Added White Balance Adjustments. Reissue entire manual.
3.0	9/30/2010	Corrected Support Belt Kit PN. Replaced page 20.
4.0	2/8/2011	Corrected disassembly instructions for LCD Panel removal. Replaced page 16.

LCD Digital Color TV

SONY®

SERVICE MANUAL

AZ1-H Chassis

LCD Digital Color TV

SONY®

MODEL LIST

<i>MODEL</i>	<i>COMMANDER</i>	<i>DESTINATION</i>
KDL-46NX810	<i>RM-YD036</i>	<i>US</i>
KDL-46NX810	<i>RM-YD051</i>	<i>CND</i>
KDL-55NX810	<i>RM-YD036</i>	<i>US</i>
KDL-55NX810	<i>RM-YD051</i>	<i>CND</i>
KDL-55NX811	<i>RM-YD051</i>	<i>MX</i>

<i>MODEL</i>	<i>COMMANDER</i>	<i>DESTINATION</i>
KDL-60NX810	<i>RM-YD036</i>	<i>US</i>
KDL-60NX810	<i>RM-YD051</i>	<i>CND</i>

TABLE OF CONTENT

Specifications.....	1
Warnings and Cautions.....	3
Safety-Related Warning.....	7
Safety Check-Out.....	8
Self Diagnosis Functions	10
SEC 1. Disassembly/Part Number Information	14
1-1. Table-Top Stand Assembly Removal	14
1-2. Rear Cover, Bezel Bottom, Speakers and Switch Unit Removal.....	15
1-3. G9B/G10/G11 (Power) Boards, BUHT Board, HLT Board, Wireless LAN Card and LCD Panel Assembly Removal	16
1-3-1. KDL-46NX810/55NX810/55NX811 Only.....	16
1-3-2. KDL-60NX810 Only	17
1-4. Cleaning the LCD Panel Assembly	18
1-5. Screw Legend.....	18
1-6. Connectors	19
1-6-1. KDL-46NX810/55NX810/55NX811 Only.....	19
1-6-2. KDL-60NX810 Only	19
1-7. Accessories and Packing	20
1-8. Miscellaneous.....	20
1-9. Remote Commander	20
1-10. Wire Dressing Diagrams.....	21
1-10-1.KDL-46NX810 Only	21
1-10-2.KDL-55NX810/55NX811 Only.....	22
1-10-3.KDL-60NX810 Only	23

TABLE OF CONTENTS

SEC 2. Service Adjustments	24
2-1. Accessing Service Adjustment Mode	24
2-1-1. Viewing the Service Menus.....	25
2-1-2. Using the Remote Commander to View or Change Service Data	26
2-2. Adjustments After Replacing the BUHT Board or LCD Panel Assembly	26
2-2-1. Updating the Software	26
2-2-2. Selecting the Model	27
2-2-3. Setting the Destination.....	28
2-2-4. Resetting the Data Value in the Panel Engine Micro	29
2-2-5. Verifying the Emitter Output Level	32
2-2-6. Verifying the Model and Panel Information	33
2-2-7. Reconnecting All Cables	33
2-3. White Balance Adjustments.....	34
2-4. Resetting the TV to Factory Condition.....	35
2-4-1. Resetting the TV to Factory Condition Using Service Mode.....	35
SEC 3. Diagrams	36
3-1. Circuit Boards Location	36
3-2. Block Diagram	37

SPECIFICATIONS

Model name KDL-	60NX810	55NX811/ 55NX810	46NX810
System			
Television system	NTSC: American TV standard ATSC (8VSB terrestrial): ATSC compliant 8VSB QAM on cable: ANSI/SCTE 07 2000 (Does not include CableCARD functionality)		
Channel coverage	Analog terrestrial: 2 - 69 / Digital terrestrial: 2 - 69 Analog Cable: 1 - 135 / Digital Cable: 1 - 135		
Panel system	LCD (Liquid Crystal Display) Panel		
Speaker output	8 W + 8 W + 10 W		
Input/Output jacks			
CABLE/ANTENNA	75-ohm external terminal for RF inputs		
VIDEO IN 1/2	VIDEO / AUDIO		
COMPONENT IN	YPBPR (Component Video) / Signal format: 480i, 480p, 720p, 1080i, 1080p AUDIO		
HDMI IN 1/2/3/4	HDMI: Video: 480i, 480p, 720p, 720/24p, 1080i, 1080p, 1080/24p Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16, 20 and 24 bits, Dolby Digital AUDIO (HDMI IN 2)		
AUDIO OUT	500 mVrms (typical)		
DIGITAL AUDIO OUT (OPTICAL)	PCM/Dolby Digital optical signal		
PC IN	D-sub 15-pin, analog RGB		
PC/HDMI 2 AUDIO IN	Stereo mini jack		
LAN	10BASE-T/100BASE-TX connector (Connection speed may differ depending on the network environment. 10BASE-T/100BASE-TX communication rate and communication quality are not guaranteed for this TV.)* ¹		
USB/DLNA	Refer to the i-Manual for supported format.		
3D SYNC	3D Sync terminal for optional transmitter		

*1 For LAN connections, use a Category 7 10BASE-T/100BASE-TX cable (not supplied).

Licensing Information

Macintosh is a trademark of Apple Inc., registered in the U.S. and other countries.

HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

Ferguson Patent Properties, LLC:
U.S. Patent No. 5,717,422
U.S. Patent No. 6,816,141

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

In the United States, TV Guide and TV Guide On Screen are registered trademarks of TV Guide Entertainment Group, Inc. and/or its subsidiaries or affiliates, and are used under a license by Gemstar-TV Guide International, Inc. and/or its subsidiaries. In Canada, TV Guide is a registered mark of Transcontinental Inc., and is used under a license by Gemstar-TV Guide International, Inc. and/or its subsidiaries.


The TV Guide On Screen system is manufactured under license from Gemstar-TV Guide International, Inc. and/or its subsidiaries.

The TV Guide On Screen system is protected by one or more of the following United States patents 6,498,895; 6,850,693; 6,396,546; 5,940,073; 6,239,794 to Gemstar-TV Guide International, Inc. and/or its subsidiaries.

Gemstar-TV Guide International, Inc. and/or its related affiliates are not in any way liable for the accuracy or availability of the program schedule information or other data in the TV Guide On Screen system and cannot guarantee service availability in your area. In no event shall Gemstar-TV Guide International, Inc. and/or its related affiliates be liable for any damages in connection with the accuracy

or availability of the program schedule information or other data in the TV Guide On Screen system.

Blu-ray Disc is a trademark.

“BRAVIA” and BRAVIA, S-Force, Motionflow, BRAVIA Sync, and  are trademarks or registered marks of Sony Corporation.

“XMB” and “cross media bar” are trademarks of Sony Corporation and Sony Computer Entertainment Inc.

“PlayStation” is a registered trademark and “PS3” is a trademark of Sony Computer Entertainment Inc.

DLNA[®], the DLNA Logo and DLNA CERTIFIED[®] are trademarks, service marks, or certification marks of the Digital Living Network Alliance.



Your BRAVIA TV is ENERGY STAR[®] qualified in the “Home” mode.

It meets strict energy efficiency guidelines set by the U.S.

Environmental Protection Agency and Department of Energy. ENERGY STAR is a joint program of these government agencies, designed to promote energy efficient products and practices.

Changes to certain features, settings, and functionalities of this TV (i.e. TV Guide, Picture/Sound, Light Sensor, Power Savings) can increase or change the power consumption.

Depending upon such changed settings, the power consumption may exceed the limits required for the ENERGY STAR qualification in the “Home” mode.

The 55 class has a 54.6 inch viewable image size (measured diagonally).

SPECIFICATIONS

Model name KDL-	60NX810	55NX811/ 55NX810	46NX810
Power and others			
Power requirement	110-240 V AC, 50/60 Hz (U.S.A./Canada 120 V AC, 60 Hz)		
Power consumption in use	215 W	175 W	156 W
in DAM*2	18 W	22 W	
	(You may hear a clicking noise during the download but this is normal.)		
in standby	Less than 0.12 W with 120 V AC and less than 0.2 W with 240 V AC		
Screen size (inches measured diagonally)	60 inches	54.6 inches (55 class)	46 inches
Display resolution	1,920 dots (horizontal) × 1,080 lines (vertical)		
Speaker Full range	(mm) (inches)	20 × 70 (4) 1 ³ / ₁₆ × 2 ⁷ / ₈ (4)	
Woofer	(mm) (inches)	Φ 60 (1) Φ 2 ³ / ₈ (1)	
Dimensions with stand	(mm)	1,400 × 865 × 303	1,276 × 800 × 323
	(inches)	55 ¹ / ₈ × 34 ¹ / ₈ × 12	50 ¹ / ₄ × 31 ¹ / ₂ × 12 ³ / ₄
without stand	(mm)	1,400 × 836 × 45	1,276 × 770 × 32
	(inches)	55 ¹ / ₈ × 33 × 1 ⁷ / ₈	50 ¹ / ₄ × 30 ³ / ₈ × 1 ³ / ₈
wall-mount hole pattern (mm)	400 × 300	300 × 300	
wall-mount screw size (mm)	M6 (length: 8-12 mm)		
Mass	with stand (kg)/(lb.)	43.0/ 94.8	32.2/71
	without stand (kg)/(lb.)	36.6/ 80.7	26.9/59.3
Supplied accessories	See “Checking the accessories”		
Optional accessories	Connecting cables / Support Belt Kit / Wall-Mount Bracket / Wall-Hanging Bracket / 3D Glasses / 3D Sync Transmitter (KDL-55NX811 Only)		

*2 Download Acquisition Mode (DAM) is used for software updates and/or collecting data for TV Guide On Screen.

- Optional accessories availability depends on its stock.
- Design and specifications are subject to change without notice.

Checking the accessories

Table-Top Stand (1)*1

Remote control (1)*2

Size AAA batteries (2)

Hexagon wrench (1)

Assembling screws for Table-Top Stand (4)

3D Glasses (battery included) (2)

(KDL-55NX811 only)

Pouch for 3D Glasses (2)

(KDL-55NX811 only)

3D Sync Transmitter (1)

(KDL-55NX811 only)

Double-sided tape (2)

(KDL-55NX811 only)

*1 Assembly required. Refer to other leaflet to assemble the Table-Top Stand.

*2 Please refer to the model name printed on the remote control.

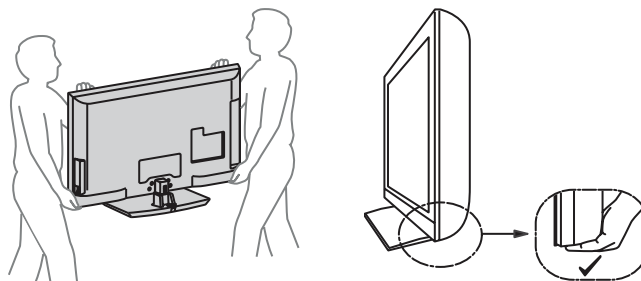
WARNINGS AND CAUTIONS

CAUTION

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

CARRYING THE TV


- Carry the TV with the adequate number of people; larger size TVs require two or more people.
- Correct hand placement while carrying the TV is very important for safety and to avoid damage.



WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the AC power line.

SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and  mark on the exploded views are critical for safe operation. Replace all components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. It is essential that all critical parts be replaced only with the part number specified in this manual to prevent electric shock, fire, or other hazard. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.

NOTE: Do not modify the original design without obtaining written permission from the manufacturer or you will void the original parts and labor guarantee.

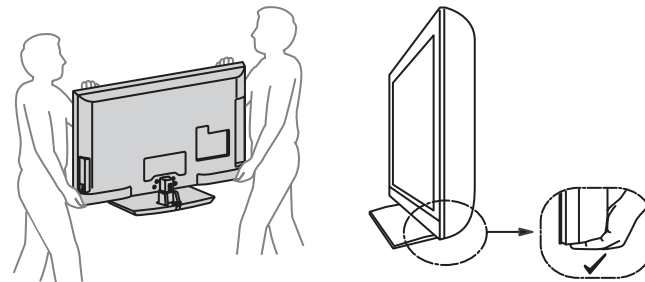
WARNING AND CAUTIONS

ATTENTION!!

Ces instructions de service sont à l'usage du personnel de service qualifié seulement. Pour prévenir le risque de choc électrique, ne pas faire l'entretien autre que celui contenu dans le Mode d'emploi à moins que vous soyez qualifié pour faire ainsi.

POUR TRANSPORTER LE TÉLÉVISEUR

- Transportez le téléviseur avec le nombre de personnes approprié ; un téléviseur de grande taille doit être transporté par au moins deux personnes.
- Lors du transport du téléviseur, l'emplacement des mains est très important pour votre sécurité, ainsi que pour éviter de causer des dommages.



ALERTE!!

Afin d'éviter tout risque d'électrocution provenant d'un châssis sous tension, un transformateur d'isolement doit être utilisé lors de tout dépannage. Le châssis de ce récepteur est directement raccordé à l'alimentation du secteur.



ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifiés par une trame et par une marque ⚠ sur les schémas de principe, les vues explosées et les listes de pièces sont d'une importance critique pour la sécurité du fonctionnement. Ne les remplacer que par des composants Sony dont le numéro de pièce est indiqué dans le présent manuel ou dans des suppléments publiés par Sony. Les réglages de circuit dont l'importance est critique pour la sécurité du fonctionnement sont identifiés dans le présent manuel. Suivre ces procédures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecte.

WARNING AND CAUTIONS

HANDLING THE GLASS ASSEMBLY

Use the following precautionary guidelines when replacing the Glass Assembly to avoid material degradation or screen coating degradation, and ensure that dust, dirt, or fingerprints are not left between the glass and the LCD panel.

- ☑ Replace the Glass Assembly in a brightly lit and clean room.
- ☑ Place the replacement Glass Assembly on a dark cloth to make it easier to see dust and dirt particles.
- ☑ Wear anti static gloves to avoid leaving finger prints on the glass.
- ☑ Use a dry, soft MicroFiber cloth, such as a lint free polishing cloth, to gently wipe the glass to remove any dust or dirt particles.
- ☑ If the glass needs additional cleaning, slightly moisten the cloth with a diluted mild soap or mild detergent solution, or use a compressed air duster (spray can type).
- ☑ After replacing the Glass Assembly, verify there are no dark spots or finger prints visible on the screen.

CAUTION

- ⊗ **Do Not** use paper towels, any type of abrasive pad, rags, rubber or vinyl materials to clean the screen. Using these materials could easily scratch the screen which may result in permanent damage.
- ⊗ **Do Not** use any cleaning product containing alkaline/acid cleaner, scouring powder, or volatile solvent, such as alcohol, ammonia, benzene, thinner or insecticide. Using any of these harsh cleaners may result in permanent damage to the screen.
- ⊗ **Do Not** spray water or detergent directly onto the TV screen . If liquid drips into the bottom of the screen it may cause a failure.

WARNING AND CAUTIONS

SPECIAL HANDLING INSTRUCTIONS WHEN REPLACING THE LCD PANEL ASSEMBLY

Use the following precautionary guidelines when handling the LCD Panel Assembly to avoid material degradation or screen coating degradation, and ensure that dust, dirt, or fingerprints are not left between the glass and the LCD Panel Assembly.

1. After removing the boards and connectors, note where the frame is on the panel. (See Figure 1)
2. Lift the LCD Panel Assembly by holding the top and bottom of the panel approximately 200mm from the edge with your palms on the back of the panel. (See Figure 2)

CAUTION: Lifting or holding the panel at the corners may damage the panel.

3. Use the same method when taking the replacement panel out of the carton. (See Figure 3)

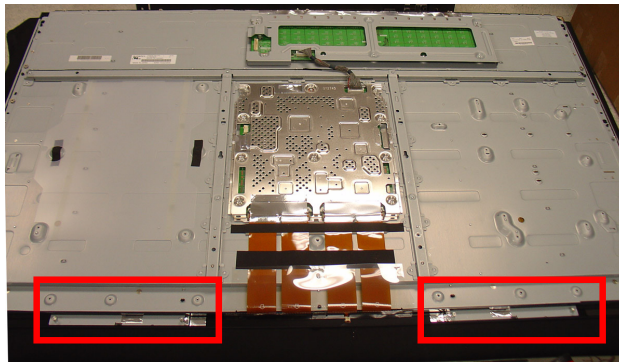


Figure 1



Figure 2



Figure 3

CAUTION: DO NOT lift the LCD Panel by holding the short side of the panel or by placing your palms on the front glass. (See Figures 4 & 5)



Figure 4



Figure 5

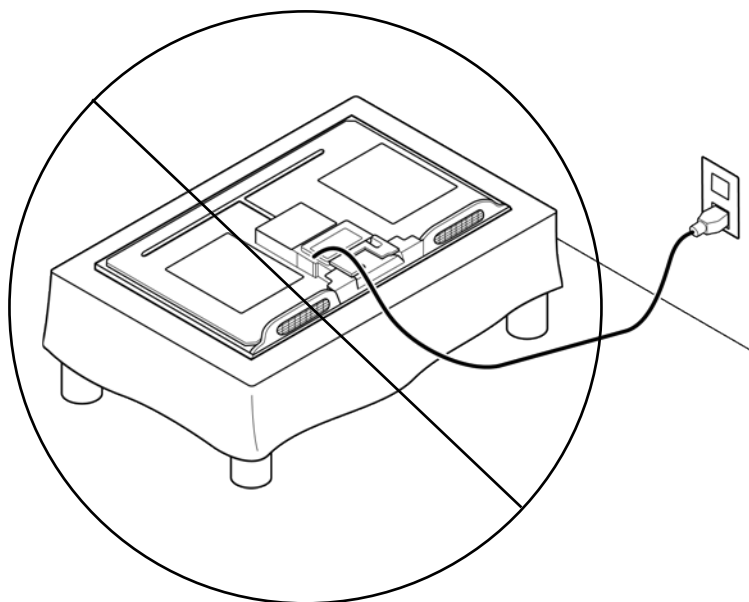
SAFETY-RELATED WARNING

USE CAUTION WHEN HANDLING THE LCD PANEL ASEMBLY

When repairing the LCD Panel Asembly, be sure you are grounded by using a wrist band.

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

- 1) Do not press on the panel or frame edge to avoid the risk of electric shock.
- 2) Do not scratch or press on the panel with any sharp objects.
- 3) Do not leave the module in high temperatures or in areas of high humidity for an extended period of time.
- 4) Do not expose the LCD Panel Asembly to direct sunlight.
- 5) Avoid contact with water. It may cause a short circuit within the module.
- 6) Disconnect the AC power when replacing the backlight or inverter circuit.
(High voltage occurs at the inverter circuit at 650Vrms.)
- 7) Always clean the LCD Panel Asembly with a soft cloth material.
- 8) Use care when handling the wires or connectors of the inverter circuit. Damaging the wires may cause a short.
- 9) Protect the panel from ESD to avoid damaging the electronic circuit (C-MOS).
- 10) During the repair, DO NOT leave the Power On for more than 1 hour while the TV is face down on a cloth.



SAFETY CHECK-OUT

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

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

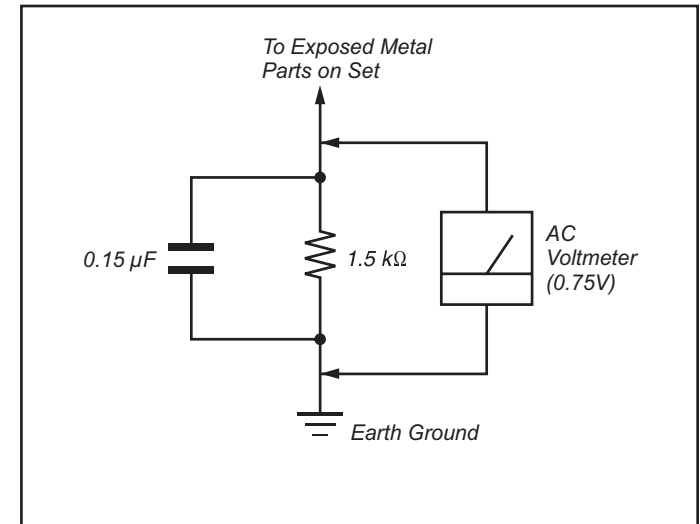


Figure A. Using an AC voltmeter to check AC leakage.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low voltage scale.

The Simpson's 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground.

If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60-to 100-watt trouble-light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

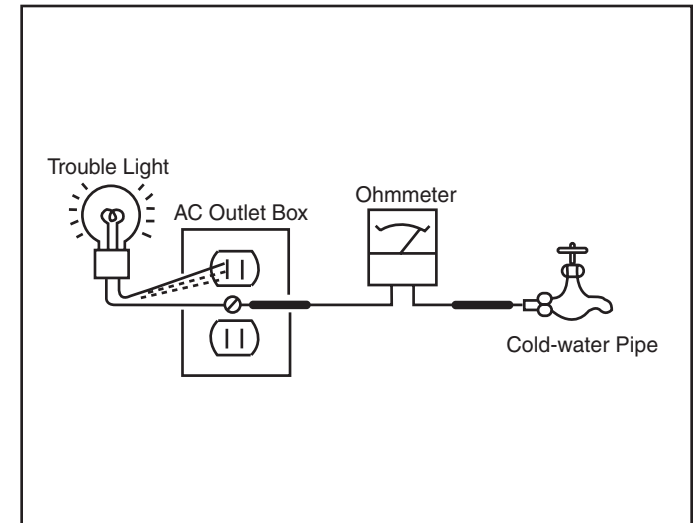


Figure B. Checking for earth ground.

SELF DIAGNOSIS FUNCTIONS



SELF DIAGNOSIS FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A definition of the STANDBY LED flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

DIAGNOSTIC TEST INDICATORS

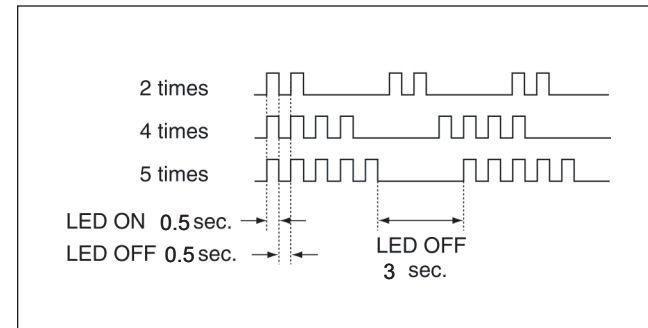
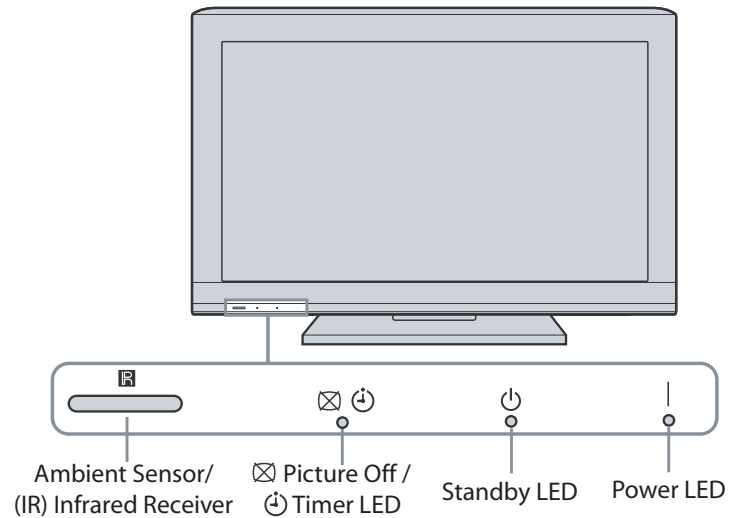
When an error occurs, the STANDBY LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas.
Result for all of the following diagnostic items are displayed on screen.

If the screen displays a "0", no error has occurred .

Diagnostic Item	Diagnostic Item Description	Number of times Standby LED blinks	Possible Location
RGB_SEN	RGB Sensor ACK Error	NA	NA
MAIN_POWER	Main Power Over Voltage Protection	2	G9B (Power) Board (KDL-46NX810/55NX810/55NX811 Only) G10 (Power) Board (KDL-60NX810 Only) G11 (Power) Board (KDL-60NX810 Only) BUHT Board
DC_ALERT	DC Alert	3	BUHT Board
DTT-WDT	DTT Error		G9B (Power) Board (KDL-46NX810/55NX810/55NX811 Only) G10 (Power) Board (KDL-60NX810 Only) G11 (Power) Board (KDL-60NX810 Only)
AUD_PROT	Audio Error Detection		
BALANCER	Panel Balancer Error	4	BUHT Board
TCON_ERR	TCON Error	5	LCD Panel
HFR_ERR	HFR Error		TCON Control MT Board
P_ID_ERR	Panel ID NVM Error		BUHT Board
BACKLITE	Backlight Error	6	BUHT Board
TEMP_ERR	Temperature Error	7	BUHT Board
FAN_ERR	Fan Error (Not Detected; Display Only)	NA	NA

SELF DIAGNOSIS FUNCTIONS

STANDBY LED FLASH COUNT



SELF DIAGNOSIS FUNCTIONS

CLEARING THE SELF CHECK DIAGNOSTIC LIST

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen after you have completed the repairs to be sure you have cleared the result display to "0".

1. To clear the Error history and Error count: Press the Channel **8** ➡ Channel **0**.
2. To clear the Panel operation time: Press the Channel **7** ➡ Channel **0**.

EXITING THE SELF CHECK DIAGNOSTIC SCREEN

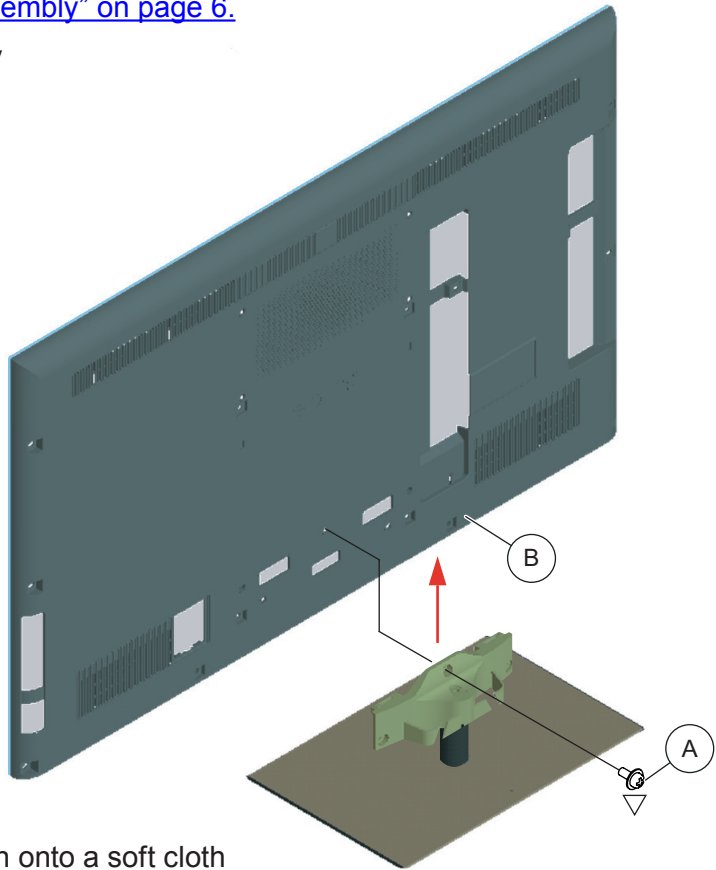
1. To exit the Self Diagnostic screen, turn off the power to the TV by pressing the POWER button on the remote or the POWER button on the TV.

SEC 1. DISASSEMBLY/PART NUMBER INFORMATION

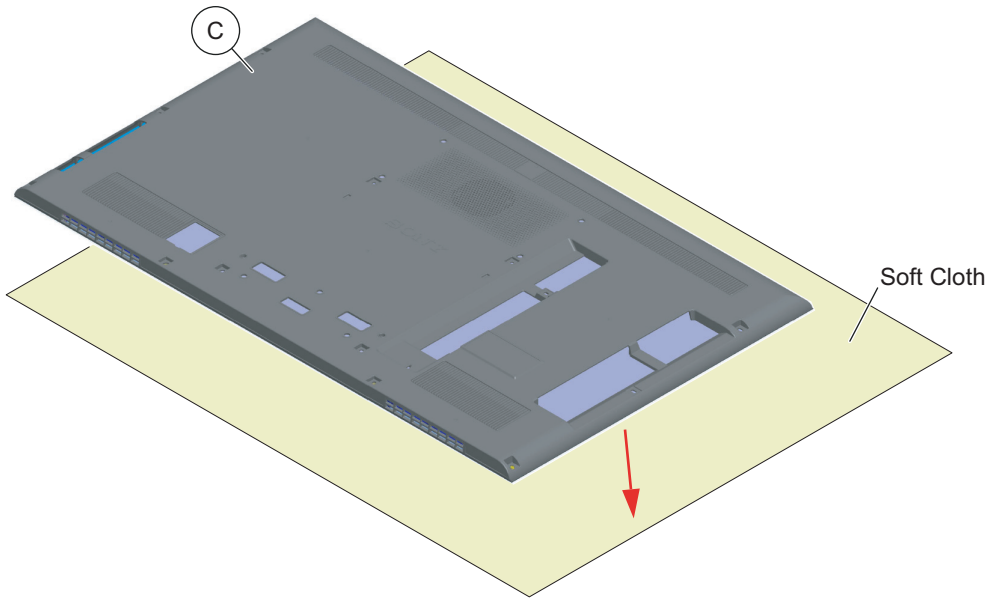
1-1. TABLE-TOP STAND ASSEMBLY REMOVAL

CAUTION: Use care when handling the TV. Correct hand placement while carrying the TV is very important for safety and to avoid damaging the panel. For more information Refer to ["Special Handling Instructions When Replacing the LCD Panel Assembly" on page 6.](#)


- Ⓐ Remove screws from Table-Top Stand Assembly
3 from KDL-46NX810/55NX810/55NX811 Only
5 from KDL-60NX810 Only
- Ⓑ Lift up TV set to detach from Table-Top Stand Assembly




- Ⓒ Gently place the LCD Panel Assembly face down onto a soft cloth
CAUTION: Refer to ["Special Handling Instructions When Replacing the LCD Panel Assembly" on page 6.](#)




Components not identified by a part number or description are not stocked because they are seldom required for routine service.

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

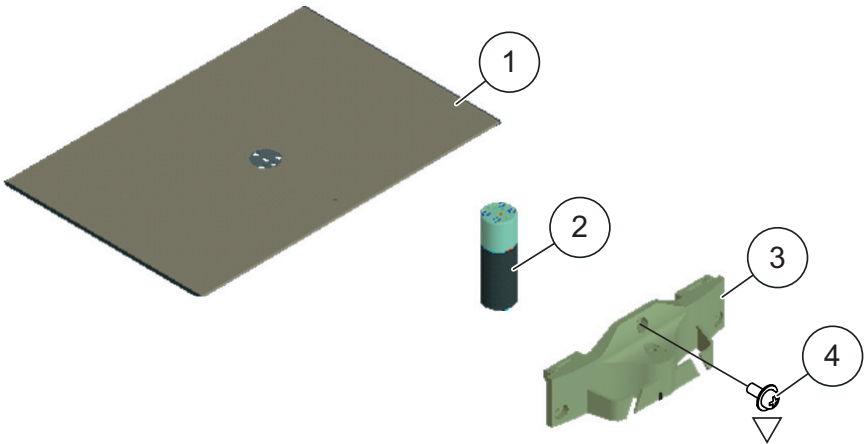
The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.


NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.

NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. See Appendix A: Encryption Key Components in the back of this manual.

Check the [Sony Electronics Service Information](#) website for any additional service related issues for this model.

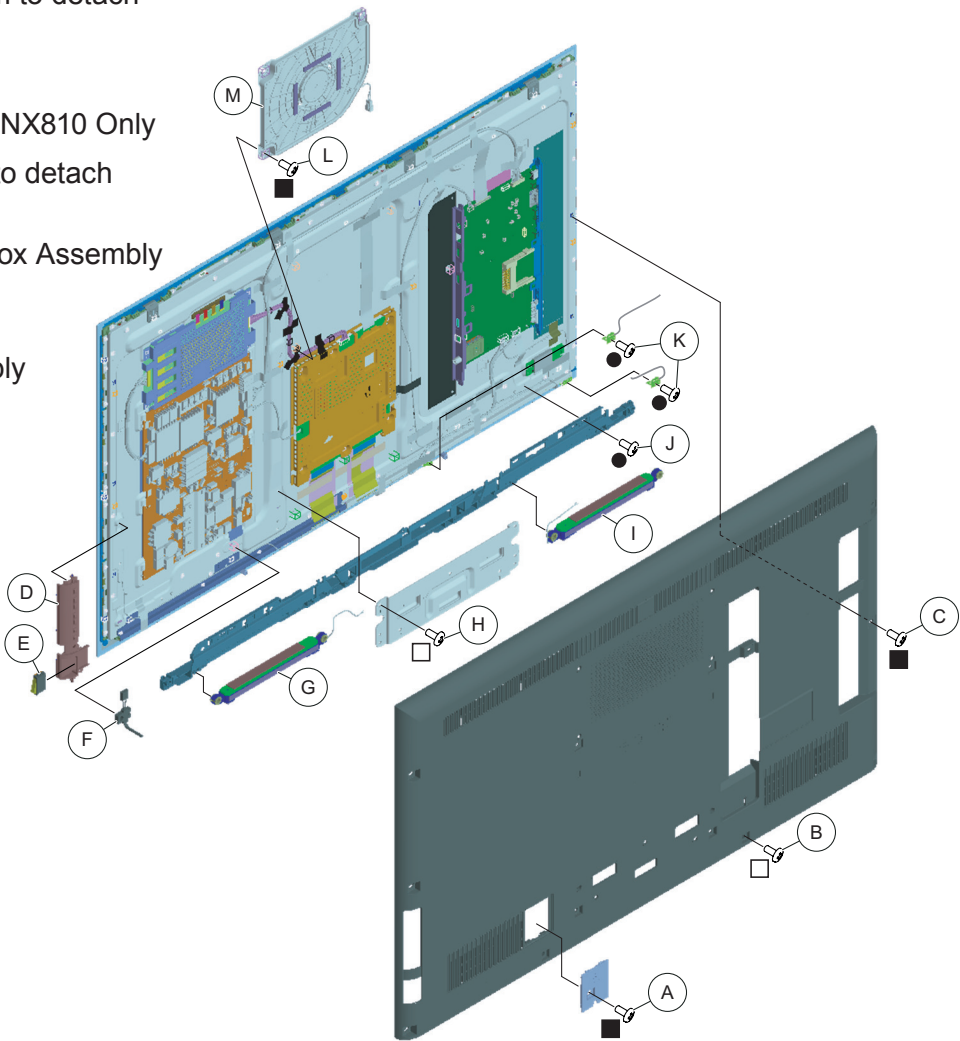



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
1	X-2548-373-1	BASE,STAND ASSEMBLY S(2L) (KDL-55NX810/55NX811 ONLY)		3	4-188-291-01	HEAD, STAND (3L) (KDL-60NX810 ONLY)	
1	X-2548-374-1	BASE,STAND ASSEMBLY S(3L) (KDL-60NX810 ONLY)		3	4-256-168-01	HEAD, STAND (ML) (KDL-46NX810/55NX810/55NX811 ONLY)	
1	X-2548-372-1	BASE,STAND ASSEMBLY S(L) (KDL-46NX810 ONLY)		4	3-452-815-01	SCREW, +PSW M5X20 (SCREWS TO ATTACH TABLE-TOP STAND TO LCD TV) For product protection and safety reasons, Sony strongly recommends that you use the screws provided with the TV CAUTION: These screws cannot be used to secure the TV to the Wall Mount Brackets	
2	X-2549-351-1	NECK (2L) ASSEMBLY (KDL-55NX810/55NX811 ONLY)			3-452-815-01	SCREW, +PSW M5X20	
2	X-2549-352-1	NECK (L) ASSEMBLY (KDL-46NX810 ONLY)					
2	X-2548-505-1	NECK(3L) ASSEMBLY (KDL-60NX810 ONLY)					


DISASSEMBLY/PART NUMBER INFORMATION


1-2. REAR COVER, BEZEL BOTTOM, SPEAKERS AND SWITCH UNIT REMOVAL

- Ⓐ Remove 1 screw from AC Cover to detach from Rear Cover
- Ⓑ Remove 2 screws from Rear Cover to detach from Bottom Frame
- Ⓒ Remove screws from Rear Cover to detach from LCD Panel Assembly
 - 11 from KDL-46NX810 Only
 - 13 from KDL-55NX810/55NX811/60NX810 Only
- Ⓓ Lift up Switch Unit and disconnect 1 connector to remove from LCD Panel Assembly
- Ⓔ Slide out Power Switch and disconnect 1 connector to remove from Switch unit
- Ⓕ Disconnect 1 connector to detach Power Cord from G9B/G10 (Power) Boards
- Ⓖ Disconnect 1 connector and lift up right-side Speaker to detach from Bezel Bottom
- Ⓗ Remove 2 screws to detach Bottom Frame from LCD Panel Assembly
- Ⓘ Disconnect 1 connector and lift up left-side Speaker to detach from Bezel Bottom
- Ⓙ Remove screws from Bezel Bottom to detach from LCD Panel Assembly
 - 3 from KDL-46NX810 Only
 - 5 from KDL-55NX810/55NX811/60NX810 Only
- Ⓚ Remove 2 screws from Antennas to detach from LCD Panel Assembly
- Ⓛ Remove 3 screws from Speaker Box Assembly (KDL-46NX810 Only)
- Ⓜ Lift-up Speaker Box Assembly to detach from LCD Panel Assembly

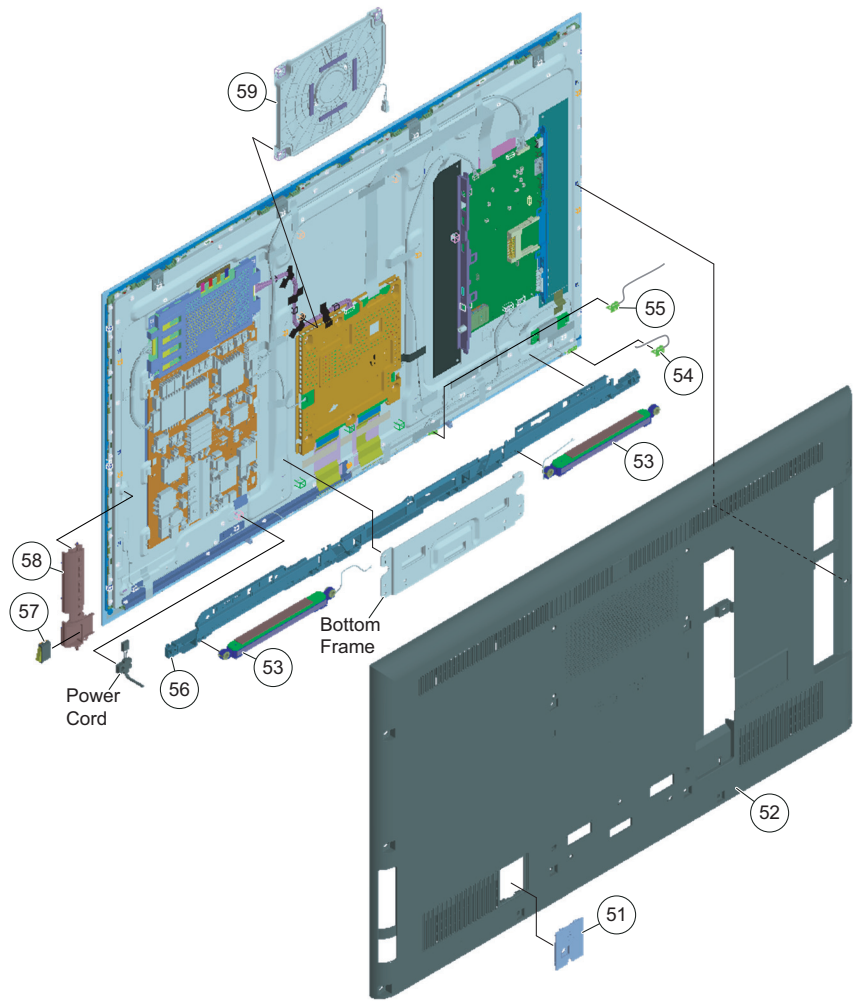





NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. See Appendix A: Encryption Key Components in the back of this manual.

Check the [Sony Electronics Service Information](#) website for any additional service related issues for this model.



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
51	4-188-688-01	COVER, AC		56	X-2548-180-1	BEZEL BOTTOM (46) ASSEMBLY (KDL-46NX810 ONLY)	
52	4-188-115-01	REAR COVER (46) (KDL-46NX810 ONLY)		56	X-2548-181-1	BEZEL BOTTOM (55) ASSEMBLY (KDL-55NX810/55NX811 ONLY)	
52	4-199-568-01	REAR COVER (55) (KDL-55NX810/55NX811 ONLY)		56	X-2548-182-1	BEZEL BOTTOM (60) ASSEMBLY (KDL-60NX810 ONLY)	
52	X-2549-892-1	REAR COVER ASSEMBLY(60) (KDL-60NX810 ONLY)					
53	1-858-469-11	SPEAKER BOX ASSEMBLY (8X2CM)		57	1-798-348-11	POWER SWITCH	
54	1-754-692-11	ANTENNA		58	1-489-238-11	SWITCH UNIT	
55	1-754-692-21	ANTENNA		59	1-858-471-11	SPEAKER BOX ASSEMBLY (24.0X18.5CM)	
					4-167-019-11	SCREW, +PSW M3X8	
					4-159-298-01	SCREW, +PSW M4X10	
					2-990-421-41	SCREW (+PSW) (M3X6)	

DISASSEMBLY/PART NUMBER INFORMATION

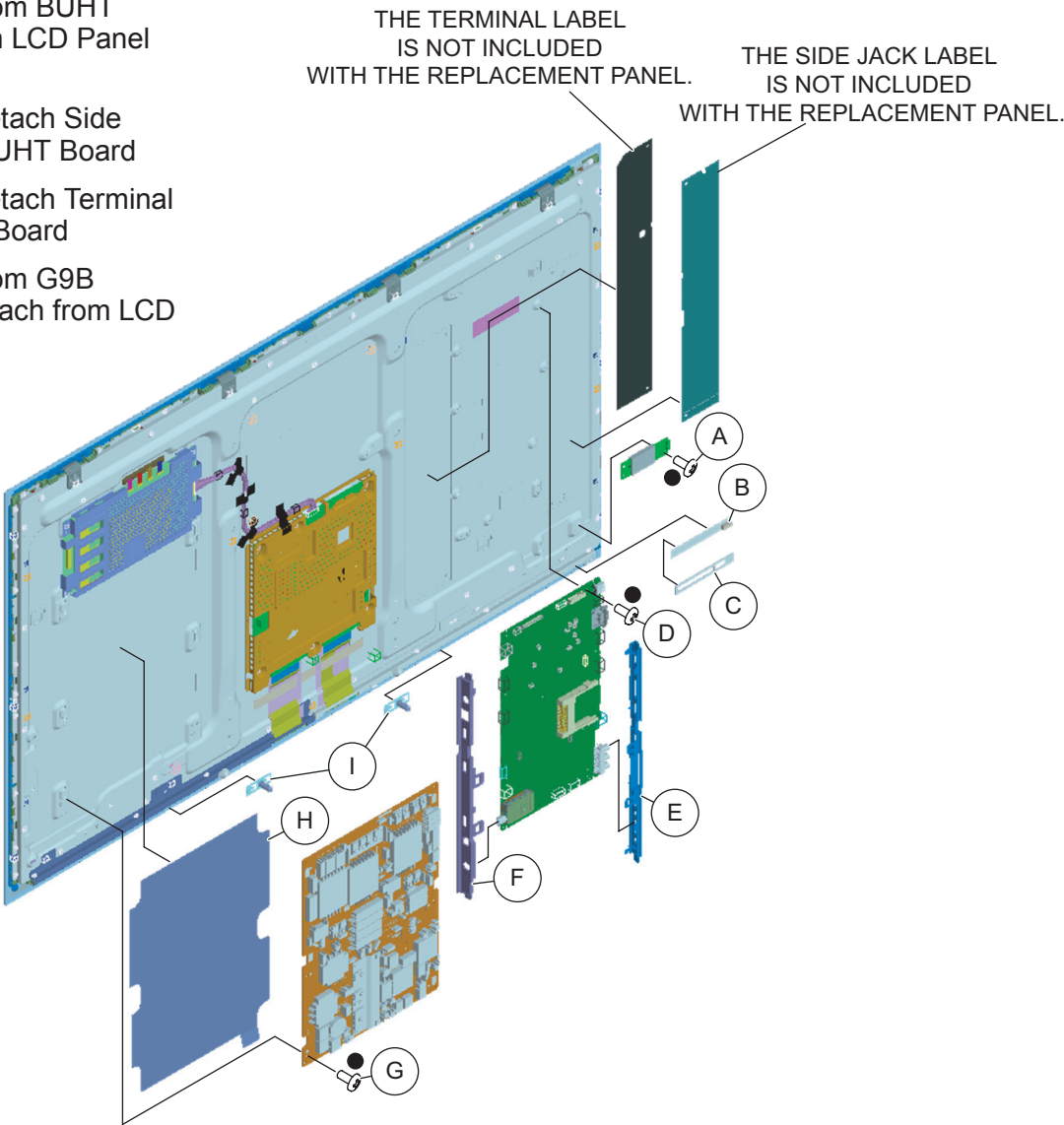
1-3. G9B/G10/G11 (POWER) BOARDS, BUHT BOARD, HLT BOARD, WIRELESS LAN CARD AND LCD PANEL ASSEMBLY REMOVAL

1-3-1. KDL-46NX810/55NX810/55NX811 ONLY

CAUTION: Refer to "[Special Handling Instructions When Replacing the LCD Panel Assembly](#)" on page 6.

Note: The Tape PWB (H), Side Jack Label, Terminal Label, Insulation Sheet (G) and Attachment GL pieces are not included with the LCD Panel Assembly and must be replaced when replacing the LCD Panel Assembly.

- Ⓐ Remove 2 screws from Wireless LAN Card to detach from LCD Panel Assembly
- Ⓑ Gently peel-off HLT Board and Disconnect 1 connector to detach from LCD Panel Assembly
- Ⓒ Gently peel-off Tape PWB (H) to detach from HLT Board
- Ⓓ Remove 9 screws from BUHT Board to detach from LCD Panel Assembly
- Ⓔ Release 2 clips to detach Side Jack Bracket from BUHT Board
- Ⓕ Release 2 clips to detach Terminal Bracket from BUHT Board
- Ⓖ Remove 3 screws from G9B (Power) Board to detach from LCD Panel Assembly
- Ⓗ Gently peel-off Insulation Sheet (G) to detach from LCD Panel Assembly
- Ⓘ Slide-out 2 Attachment GL pieces to detach from LCD Panel Assembly

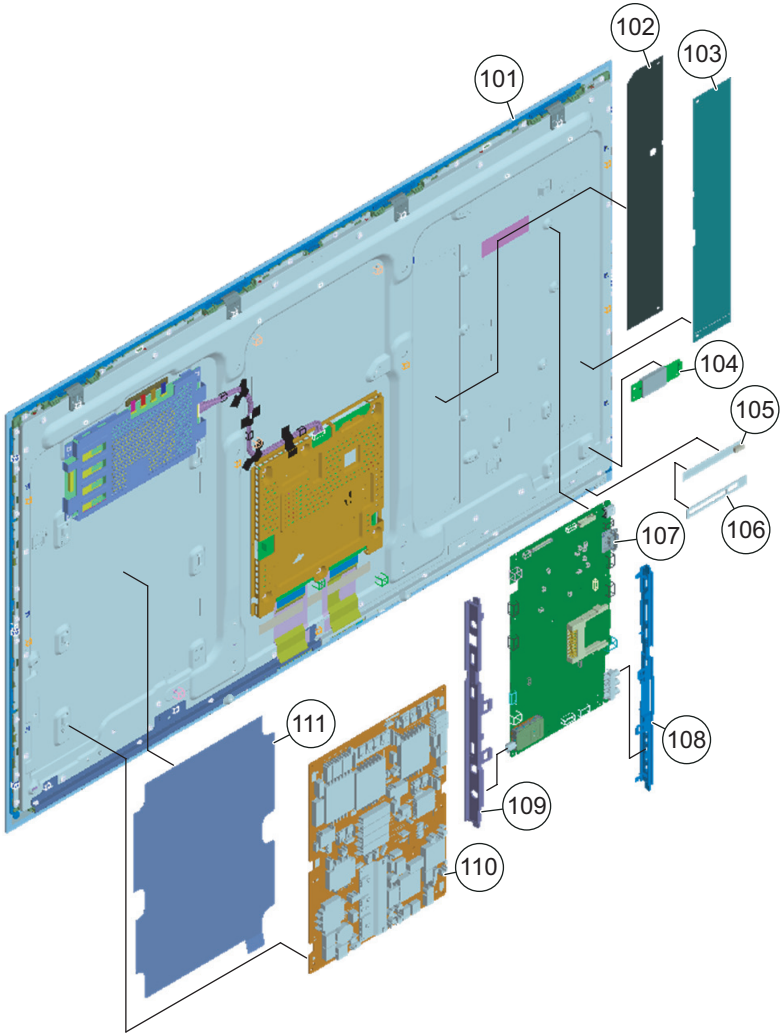


NOTE: The components identified by shading and mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

NOTE: The components identified by a red outline and a mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. See Appendix A: Encryption Key Components in the back of this manual.

Check the [Sony Electronics Service Information](#) website for any additional service related issues for this model.



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
101	NA	P-MOD/T-MOD (LCD PANEL ASSEMBLY) FOR ALL P-MOD/T-MOD (LCD PANEL ASSEMBLY) PART NUMBER INFORMATION REFER TO THE LCD PANELS SERVICE MANUAL		107	A-1788-127-A	BUHT BOARD, COMPLETE	
						NOTE: For BUHT Board replacement, please refer to section 2-2. Adjustments after Replacing the BUHT Board or LCD Panel.	
						NOTE: Final software is not installed on this BUHT Board.	
						Install the update after replacing this board using the instructions provided with the software.	
102	4-199-302-01	LABEL, TERMINAL (FOR US) (KDL-46NX810/55NX810/60NX810 ONLY)		108	4-188-665-11	BRACKET, SIDE JACK	
102	4-199-303-01	LABEL, TERMINAL (FOR LA/MX) (KDL-55NX811 ONLY)		109	4-188-666-11	BRACKET, TERMINAL	
103	4-199-290-01	LABEL, SIDE JACK (L)		110	1-474-257-11	G9B (POWER) BOARD, COMPLETE (KDL-46NX810/55NX810/55NX811 ONLY)	
104	1-487-819-11	CARD, WIRELESS LAN		111	4-188-690-01	SHEET, INSULATION (G) (KDL-46NX810/55NX810/55NX811 ONLY)	
105	A-1782-538-A	HLT(STD), BOARD MOUNTED					
106	4-195-059-01	TAPE, PWB (H)			2-990-421-41	SCREW (+PSW) (M3X6)	

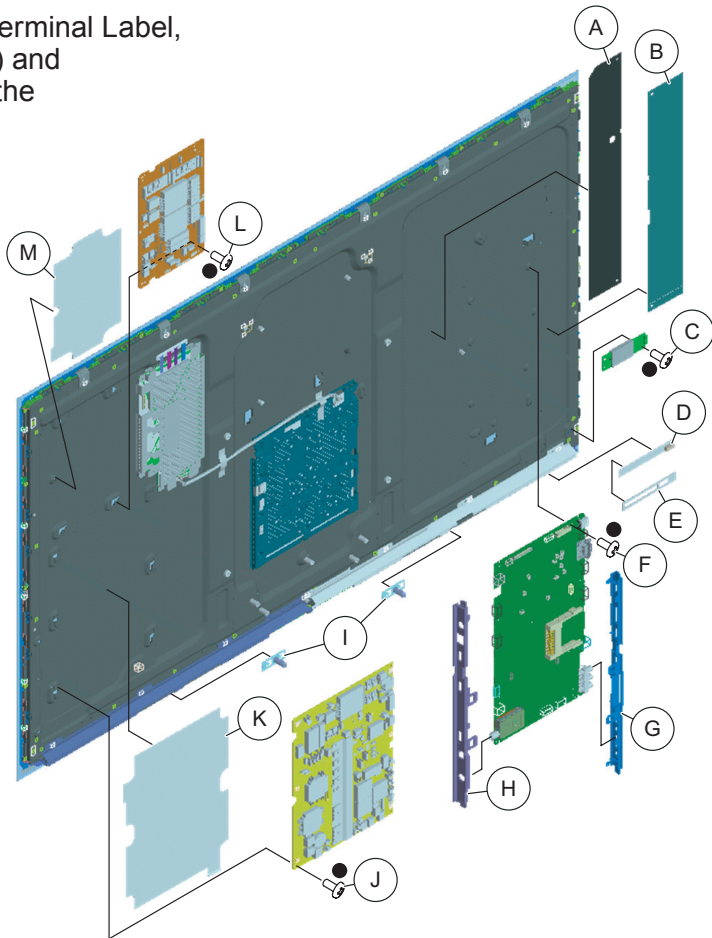
DISASSEMBLY/PART NUMBER INFORMATION


1-3-2. KDL-60NX810 ONLY


CAUTION: Refer to "Special Handling Instructions When Replacing the LCD Panel Assembly" on page 6.


- (A) Gently peel-off Terminal Label to detach from LCD Panel Assembly
- (B) Gently peel-off Side Jack Label to detach from LCD Panel Assembly
- (C) Remove 2 screws from Wireless LAN Card to detach from LCD Panel Assembly
- (D) Gently peel-off HLT Board and Disconnect 1 connector to detach from LCD Panel Assembly
- (E) Gently peel-off Tape PWB (H) to detach from HLT Board
- (F) Remove 9 screws from BUHT Board to detach from LCD Panel Assembly
- (G) Release 2 clips to detach Side Jack Bracket from BUHT Board
- (H) Release 2 clips to detach Terminal Bracket from BUHT Board
- (I) Slide-out 2 Attachment GL pieces to detach from LCD Panel Assembly
- (J) Remove 3 screws from G10 (Power) Board to detach from LCD Panel Assembly
- (K) Gently peel-off Insulation Sheet (G60) to detach from LCD Panel Assembly
- (L) Remove 1 screw from G11 (Power) Board to detach from LCD Panel Assembly
- (M) Gently peel-off Insulation Sheet (GS) to detach from LCD Panel Assembly

Note: The Tape PWB (H), Side Jack Label, Terminal Label, Insulation Sheet (G60), Insulation Sheet (GS) and Attachment GL pieces are not included with the LCD Panel Assembly and must be replaced when replacing the LCD Panel Assembly.

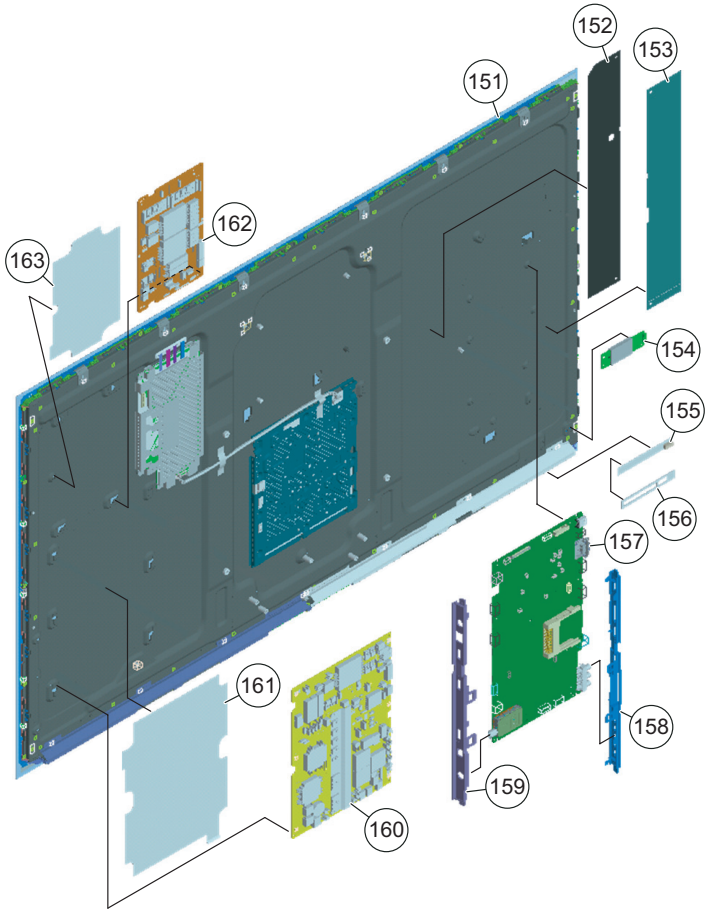




NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. See Appendix A: Encryption Key Components in the back of this manual.

Check the [Sony Electronics Service Information](#) website for any additional service related issues for this model.



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
151	NA	P-MOD/T-MOD (LCD PANEL ASSEMBLY) FOR ALL P-MOD/T-MOD (LCD PANEL ASSEMBLY) PART NUMBER INFORMATION REFER TO THE LCD PANELS SERVICE MANUAL		 157	A-1788-127-A	BUHT BOARD, COMPLETE	
152	4-199-302-01	LABEL, TERMINAL (FOR US)		NOTE: For BUHT Board replacement, please refer to section 2-2. Adjustments after Replacing the BUHT Board or LCD Panel. NOTE: Final software is not installed on this BUHT Board. Install the update after replacing this board using the instructions provided with the software.			
153	4-199-290-01	LABEL, SIDE JACK (L)		158	4-188-665-11	BRACKET, SIDE JACK	
154	1-487-819-11	CARD, WIRELESS LAN		159	4-188-666-11	BRACKET, TERMINAL	
155	A-1782-538-A	HLT(STD), BOARD MOUNTED		160	1-474-254-11	G10 (POWER) BOARD, COMPLETE	
156	4-195-059-01	TAPE, PWB (H)		161	4-193-111-01	SHEET, INSULATION (G60)	
				162	1-474-255-11	G11 (POWER) BOARD, COMPLETE	
				163	4-188-691-01	SHEET, INSULATION (GS)	
					2-990-421-41	SCREW (+PSW) (M3X6)	

1-4. CLEANING THE LCD PANEL ASSEMBLY

CAUTION: When cleaning the TV, be sure to unplug the power cord to avoid any chance of electric shock.

Clean the cabinet of the TV with a dry soft cloth.

Wipe the LCD screen gently with a soft cloth.

- ◆ Stubborn stains may be removed with a cloth slightly moistened with a solution of mild soap and warm water.
- ◆ If using a chemically pretreated cloth, please follow the instruction provided on the package.
- ◆ Never use strong solvents such as a thinner, alcohol or benzine for cleaning.
- ◆ Periodic vacuuming of the ventilation openings is recommended to ensure the proper ventilation.

1-5. SCREW LEGEND

KDL-46NX810

P/N	DESCRIPTION	REMARKS	TOTAL
■ 4-167-019-11	SCREW, +PSW M3X8	RC(11), AC CVR(1), SP BOX to PNL(3)	15
□ 4-159-298-01	SCREW, +PSW M4X10	RC to BTM FRM(2), BTM FRM to PNL(2)	4
▽ 3-452-815-01	SCREW, +PSW M5X20	TABLE-TOP STAND(3)	3
● 2-990-421-41	SCREW (+PSW) (M3X6)	BUHT(9), G9B(3), WIFI(2), ANTENNAS(2), BEZ BTM(3)	19

KDL-55NX810/55NX811

P/N	DESCRIPTION	REMARKS	TOTAL
■ 4-167-019-11	SCREW, +PSW M3X8	RC(13), AC CVR(1)	14
□ 4-159-298-01	SCREW, +PSW M4X10	RC to BTM FRM(2), BTM FRM to PNL(2)	4
▽ 3-452-815-01	SCREW, +PSW M5X20	TABLE-TOP STAND(3)	3
● 2-990-421-41	SCREW (+PSW) (M3X6)	BUHT(9), G9B(3), WIFI(2), ANTENNAS(2), BEZ BTM(5)	21

KDL-60NX810

P/N	DESCRIPTION	REMARKS	TOTAL
■ 4-167-019-11	SCREW, +PSW M3X8	RC(13), AC CVR(1)	14
□ 4-159-298-01	SCREW, +PSW M4X10	RC to BTM FRM(2), BTM FRM to PNL(2)	4
▽ 3-452-815-01	SCREW, +PSW M5X20	TABLE-TOP STAND(5)	5
● 2-990-421-41	SCREW (+PSW) (M3X6)	BUHT(9), G10(3), G11(1), WIFI(2), ANTENNAS(2), BEZ BTM(5)	22


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


NOTE: Les composants identifiés par un trame et une marque △ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.


NOTE: The components identified by a red outline and a 🔒 mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. See Appendix A: Encryption Key Components in the back of this manual.

Check the [Sony Electronics Service Information](#) website for any additional service related issues for this model.

DISASSEMBLY/PART NUMBER INFORMATION

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

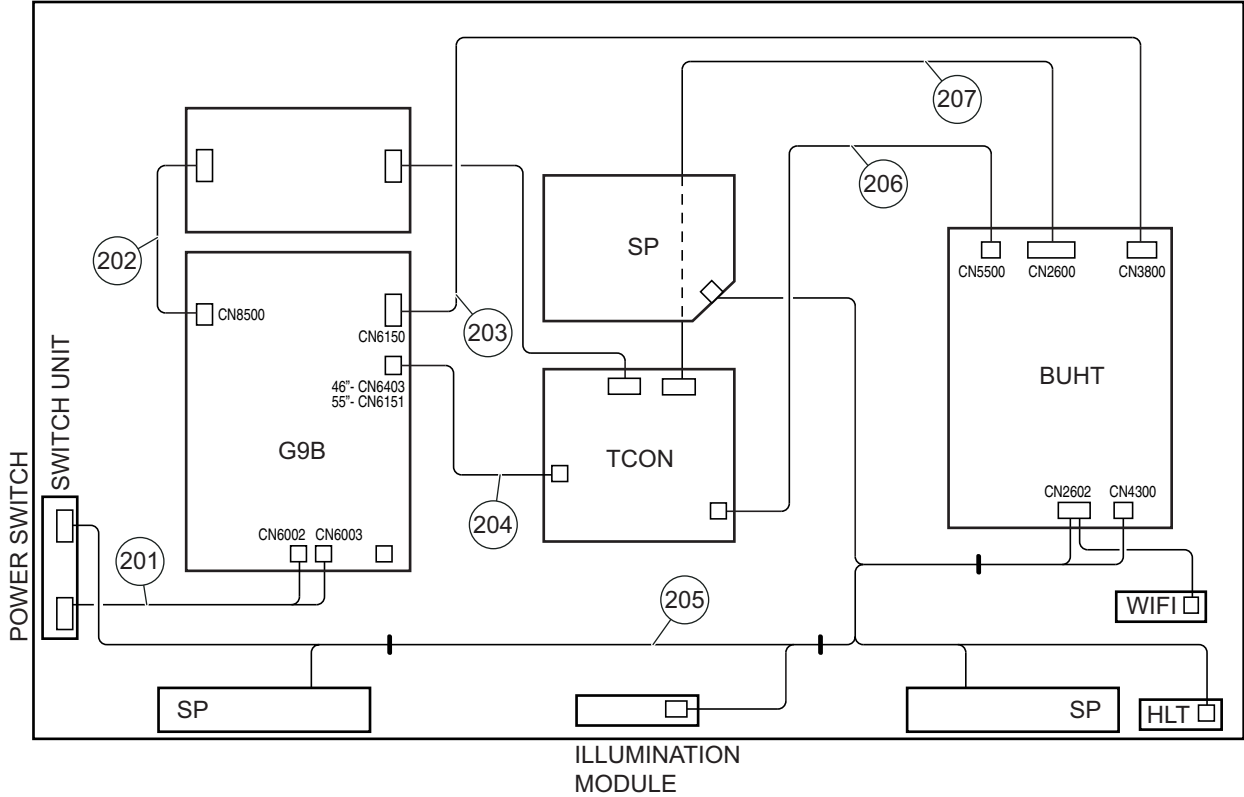
NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. See Appendix A: Encryption Key Components in the back of this manual.

Check the [Sony Electronics Service Information](#) website for any additional service related issues for this model.

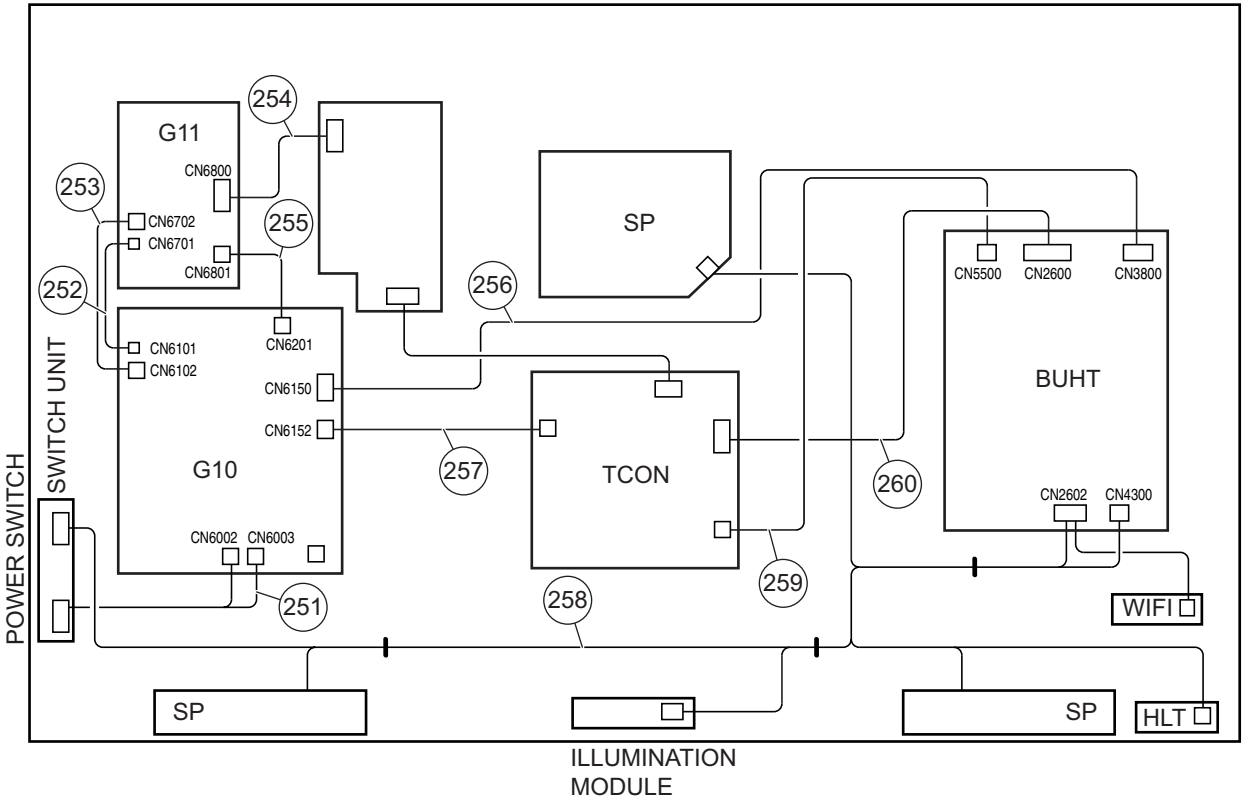
1-6. CONNECTORS

1-6-1. KDL-46NX810/55NX810/55NX811 ONLY



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
201	1-838-371-11	CONNECTOR ASSEMBLY (KDL-46NX810 ONLY)		205	1-910-101-74	HARNESS ASSEMBLY (KDL-46NX810 ONLY)	
201	1-838-372-11	CONNECTOR ASSEMBLY (KDL-55NX810/55NX811 ONLY)		205	1-910-101-79	HARNESS ASSEMBLY (KDL-55NX810/55NX811 ONLY)	
202	1-910-101-78	CONNECTOR ASSEMBLY 14P (KDL-46NX810/55NX810/55NX811 ONLY)		206	1-910-101-76	CONNECTOR ASSEMBLY 8P (KDL-46NX810 ONLY)	
203	1-910-101-75	CONNECTOR ASSEMBLY 12P (KDL-46NX810 ONLY)		206	1-910-101-81	CONNECTOR ASSEMBLY 8P (KDL-55NX810/55NX811 ONLY)	
203	1-910-101-80	CONNECTOR ASSEMBLY 12P (KDL-55NX810/55NX811 ONLY)		207	1-838-262-11	(LVDS) FLEXIBLE FLAT CABLE 51P (KDL-46NX810 ONLY)	
*	204	CONNECTOR ASSEMBLY 6P (KDL-46NX810 ONLY)		207	1-838-263-11	(LVDS) FLEXIBLE FLAT CABLE 51P (KDL-55NX810/55NX811 ONLY)	
*	204	CONNECTOR ASSEMBLY 6P (KDL-55NX810/55NX811 ONLY)					

1-6-2. KDL-60NX810 ONLY



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
251	1-838-371-11	CONNECTOR ASSEMBLY		256	1-910-101-84	CONNECTOR ASSEMBLY 12P	
252	1-838-300-11	CONNECTOR ASSEMBLY		257	1-910-101-85	CONNECTOR ASSEMBLY 6P	
253	1-910-101-88	CONNECTOR ASSEMBLY 3P		258	1-910-101-83	HARNESS ASSEMBLY	
254	1-910-101-87	CONNECTOR ASSEMBLY 14P		259	1-910-101-86	CONNECTOR ASSEMBLY 8P	
255	1-910-101-89	CONNECTOR ASSEMBLY 5P		260	1-838-264-11	(LVDS) FLEXIBLE FLAT CABLE 51P)	

DISASSEMBLY/PART NUMBER INFORMATION

1-7. ACCESSORIES AND PACKING

4-261-922-01	FLYER, BIV (KDL-46NX810/55NX810/60NX810 ONLY)
3-299-071-04	FLYER, SAFETY
4-178-676-41	MANUAL, INSTRUCTION (ENGLISH VERSION) (KDL-46NX810/55NX810/60NX810 ONLY)
4-178-676-51	MANUAL, INSTRUCTION (FRENCH VERSION) (KDL-46NX810/55NX810/60NX810 ONLY)
4-178-676-61	MANUAL, INSTRUCTION (SPANISH VERSION) (KDL-55NX811 ONLY)
4-180-471-51	MANUAL, INSTRUCTION (KDL-55NX811 ONLY)
4-198-235-51	MANUAL, INSTRUCTION (KDL-55NX811 ONLY)

	1-838-333-11	POWER-SUPPLY CORD (WITH CONN.)
*	4-208-536-21	SUPPLEMENT(STAND INSTALLATION)

1-8. MISCELLANEOUS

	X-2548-310-1	BAG,SCREW ASSEMBLY (E)
*	4-259-974-01	POST, PWB MINI
	4-100-136-01	SHEET (CORE), C (KDL-46NX810/55NX810/55NX811 ONLY)
*	4-188-689-01	SHEET, THERMAL (B2)
*	4-259-997-01	SHEET, THERMAL B SMALL
	X-2549-230-1	SUPPORT BELT KIT
	7-600-031-96	TAPE (3M 1350FW-1)15MMX66M WHT
	7-632-452-24	TAPE (NO.303) 18MMX35M YEL

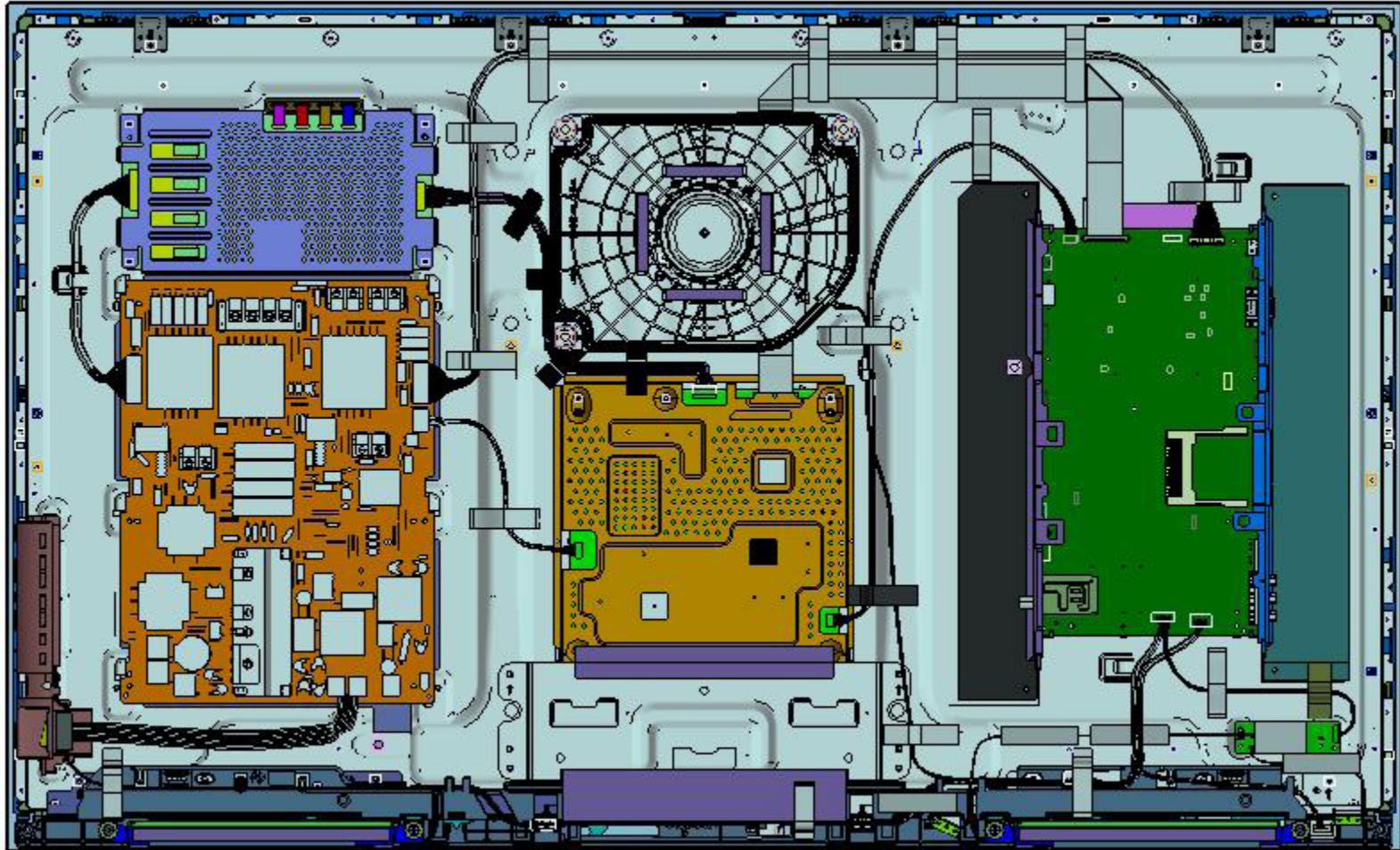
1-9. REMOTE COMMANDER

1-487-710-12	REMOTE COMMANDER (RM-YD036) (FOR US) (KDL-46NX810/55NX810/60NX810 ONLY)
1-487-820-12	REMOTE COMMANDER (RM-YD051) (FOR CND/MX ONLY)

DISASSEMBLY/PART NUMBER INFORMATION

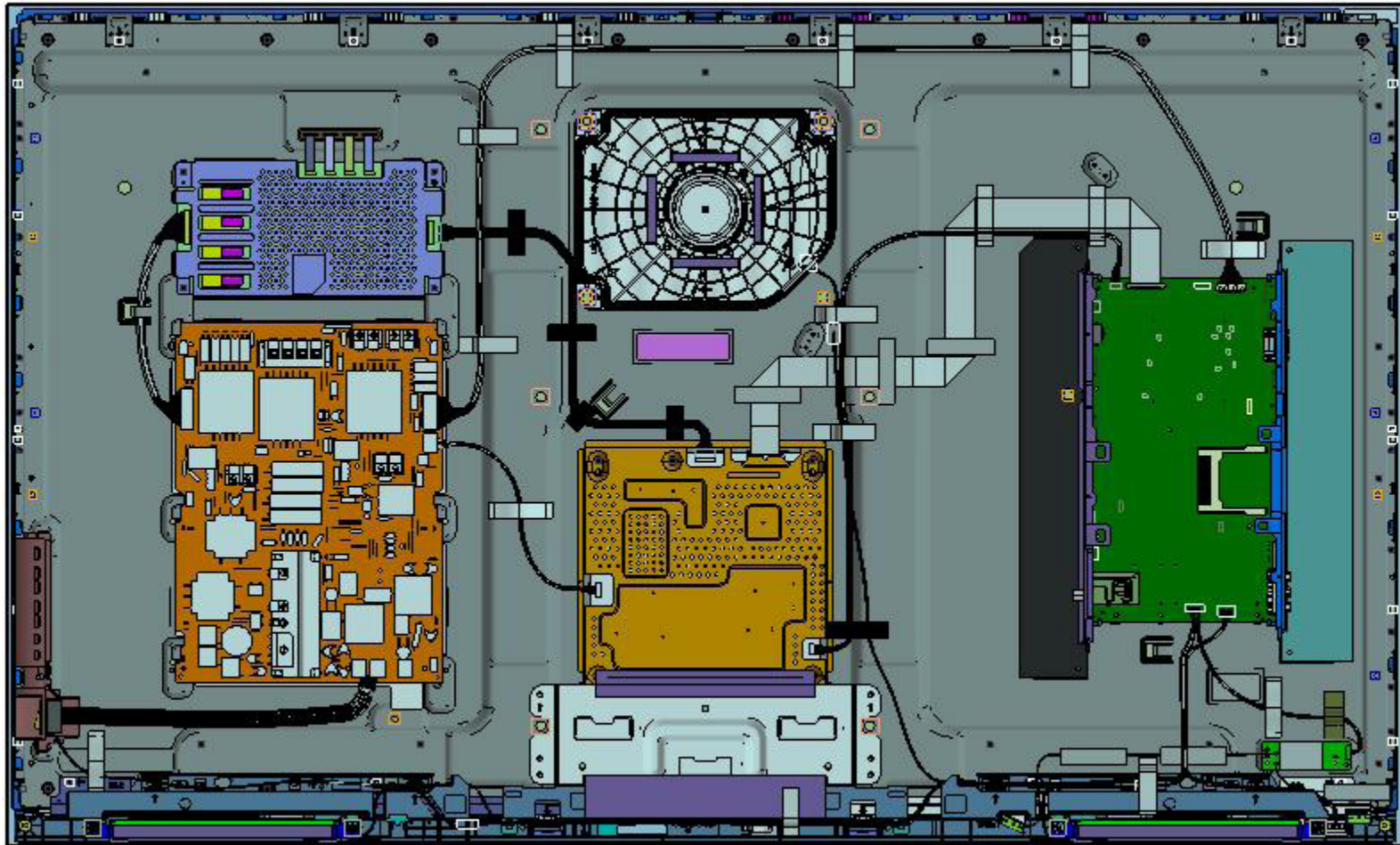
1-10. WIRE DRESSING DIAGRAMS

1-10-1.KDL-46NX810 ONLY



DISASSEMBLY/PART NUMBER INFORMATION

1-10-2.KDL-55NX810/55NX811 ONLY



DISASSEMBLY/PART NUMBER INFORMATION

1-10-3.KDL-60NX810 ONLY

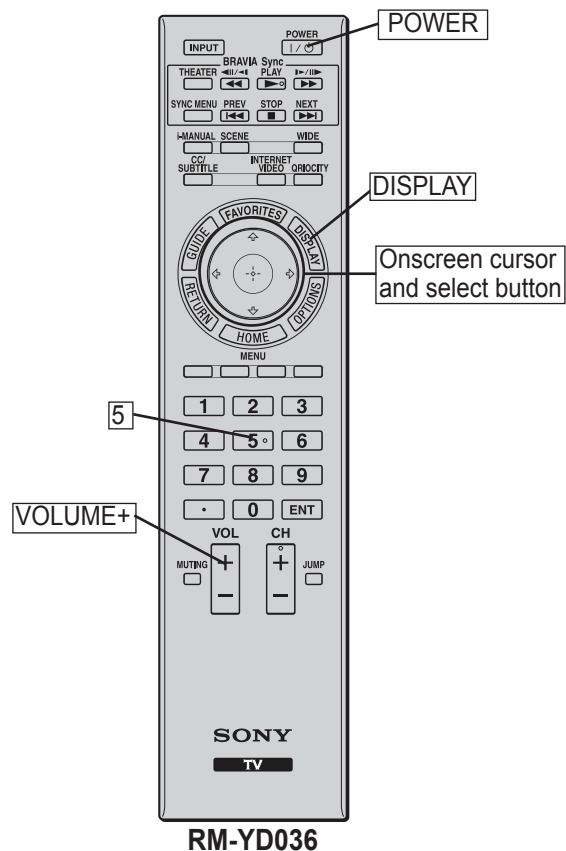


SEC 2. SERVICE ADJUSTMENTS

2-1. ACCESSING SERVICE ADJUSTMENT MODE

1. TV must be in Standby Mode. (POWER off).
2. Press the following buttons on the Remote Commander within a second of each other:

DISPLAY → Channel 5 → Volume + → POWER



DIGITAL	SERVICE
001 OP	---
000 VERS	---
<MAIN>	<SUB>
DM1.301J00AA	SM1.010W00AA
M2.105C	SB1.000W00AA
DD1.016J00AA	SD1.010W00AA
(DM13 01J00AA)	RF01.05
WP00.521J00AA	ID1C117081
ID1C117081	LTY320AB01
PID04020000	
WF:2.0.0.99	<BEM>
WF:0B	BM1.012W00LU
Camera FW	BB1.000W00LU
Camera FW	BD1.011J46LUX

Sample Service Menu

SERVICE ADJUSTMENTS

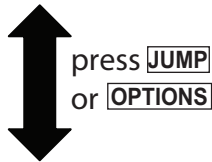
2-1-1. VIEWING THE SERVICE MENUS

Use the Remote Commander to view the **Digital**, **Chassis** and **Sub** Service Menus and their options.

3. To display the **Service Menu** that contains the Category you want to adjust, press **JUMP** or **OPTIONS** on the Remote Commander.

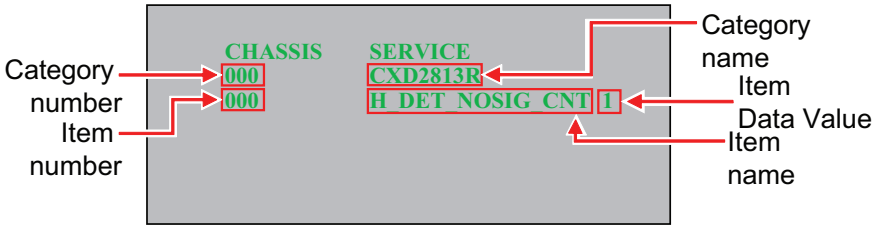
DIGITAL	SERVICE
001 OP	
000 VERS	---
<MAIN>	<SUB>
DM1.301J00AA	SM1.010W00AA
M2.105C	SB1.000W00AA
DD1.016J00AA	SD1.010 W00AA
(DM13 01J00AA)	RF01.05
WP00.521J00AA	ID1C117081
ID1C117081	LTY320AB01
PID04020000	
WF:2.0.0.99	<BEM>
WF:0B	BM1.012W00LU
Camera FW	BB1.000W00LU
Camera FW	BD1.011J46LUX

Sample Digital Service Menu



CHASSIS	
000	CXD2813R
000	H_DET_NOSIG_CNT 1

Within each Service Menu are Categories and data information.



Sample Chassis Service Menu

SERVICE ADJUSTMENTS

2-1-2. USING THE REMOTE COMMANDER TO VIEW OR CHANGE SERVICE DATA

Use the buttons on the Remote Commander to access the Service Menu items and adjust the Data Values.

DISPLAY → Channel 5 → Volume + → POWER

4. To change the **Category**, press 2 to move to the Next Category or press 5 to go back to the Previous Category.
Note: Pressing 2 or 5 only changes the Categories within the Service Menu displayed.
5. To change the **adjustment item**, press 1 to move to the Next Item or 4 to go back to the Previous Item.
6. To change the **Data Value**, press 3 to increase the Data Value or 6 to decrease the Data Value.
7. Press **MUTING** then press 0 to WRITE (Save) the changes.
8. To exit service mode, press **HOME** or turn the TV power off.

2-2. ADJUSTMENTS AFTER REPLACING THE BUHT BOARD OR LCD PANEL ASSEMBLY

The following procedures must be completed after replacing the BUHT Board or the LCD Panel Assembly

- ☒ Update the TV to the latest software version
- ☒ Select the Model
- ☒ Select the Destination
- ☒ Reset the Data Value in the Panel Engine Micro
- ☒ Verify the Emitter Output Level
- ☒ Verify model and panel information are correct
- ☒ Reconnect all cables

2-2-1. UPDATING THE SOFTWARE

After replacing the BUHT Board or the LCD Panel Assembly, you must update the software to the latest version.

Before you begin

- ☒ Disconnect all cables (RF, External input, Ethernet, etc.) from the TV

Instructions for updating the software are included with the software package. After completing the software update, proceed to "Selecting the Model".

SERVICE ADJUSTMENTS

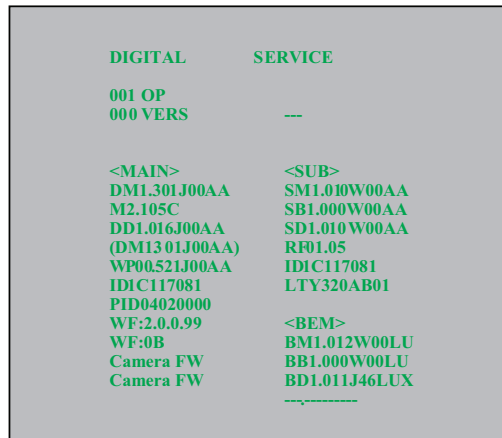
2-2-2. SELECTING THE MODEL

After replacing the BUHT Board or LCD Panel Assembly, go into Service Mode to set the Model data value.

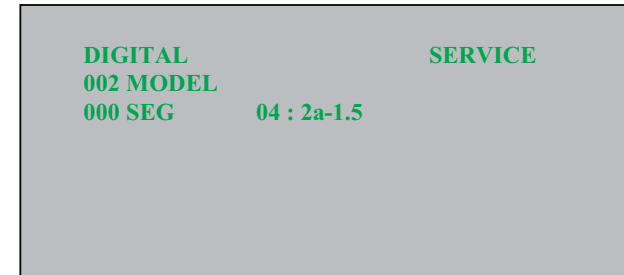
1. TV must be in standby mode. (Power off).
2. Access Service Mode.
Press the following buttons on the Remote Commander within a second of each other:

DISPLAY → Channel **5** → Volume **+** → **POWER**

3. Display the **DIGITAL Service Menu**.
NOTE: There are 4 Service Menus for this model, DIGITAL, CHASSIS, SUB, and PEM. If the DIGITAL Service Menu is not displayed, press **JUMP** or **OPTIONS** on the Remote Commander.

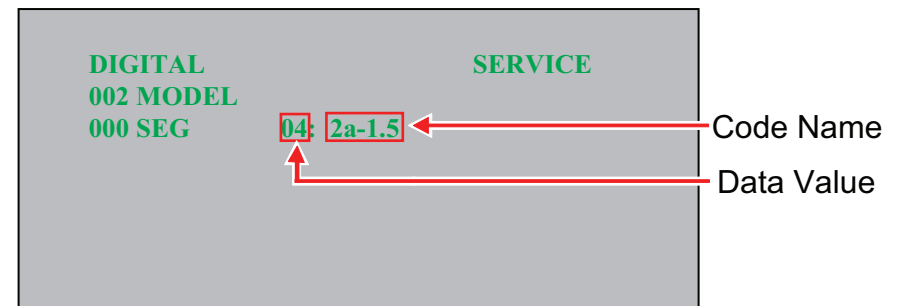


4. Press **2** to move to the **002 MODEL** (Next) category.



5. Using the table, press **3** to increase the data value or **6** to decrease the data value, to match the model of the TV.

Chassis	Model Name	Data Value	Code Name
AZ1-H	KDL-46NX810	04	2a-1.5
AZ1-H	KDL-55NX810	04	2a-1.5
AZ1-H	KDL-55NX811	04	2a-1.5
AZ1-H	KDL-60NX810	04	2a-1.5



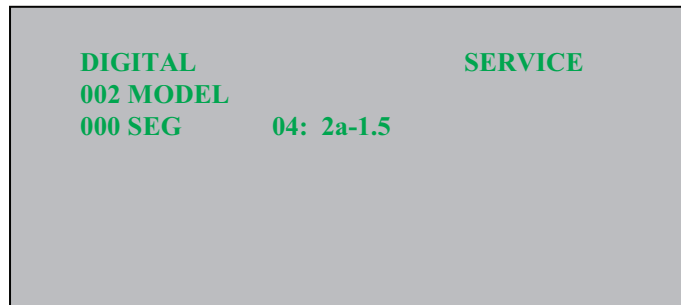
6. Proceed to "Selecting the Destination".

SERVICE ADJUSTMENTS

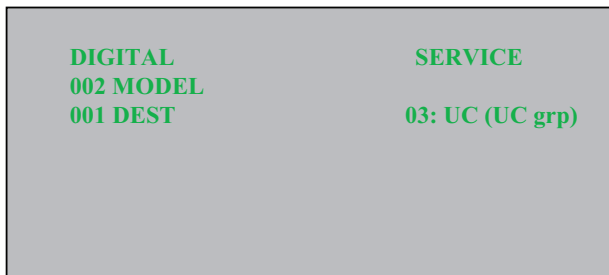
2-2-3. SETTING THE DESTINATION

After replacing the BUHT Board or the LCD Panel Assembly, the destination location must be set.

CAUTION: Selecting the incorrect destination may require replacing the BUHT Board.

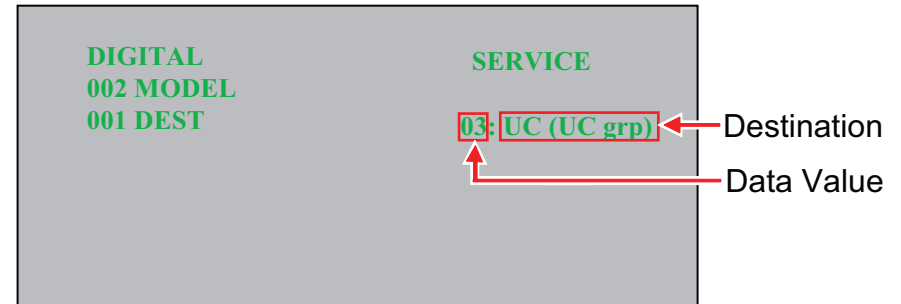


7. Press **1** to move to "001 DEST" sub Category.



8. Using the table, press **3** to increase the data value or **6** to decrease the data value, to select the destination of the TV.

GROUP	DESTINATION CODE	DATA VALUE	DESTINATION
UC grp	UC	3	US/CND
	LTN-D	16	MX/ LATIN AMERICA



CAUTION: Verify the DESTINATION is set correctly before proceeding to the next step. If another destination Data Value is selected, it may possibly corrupt the software which would require a BUHT Board replacement.

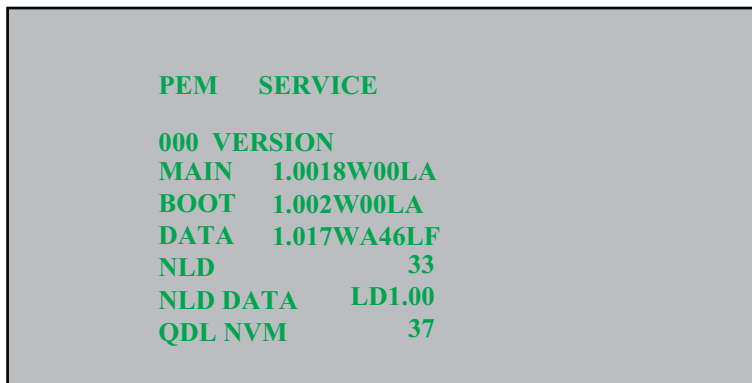
9. After verifying the destination data value displays, press **0** to WRITE (Save) the changes.
10. Proceed to "Resetting the Data Value in the Panel Engine Micro".

SERVICE ADJUSTMENTS

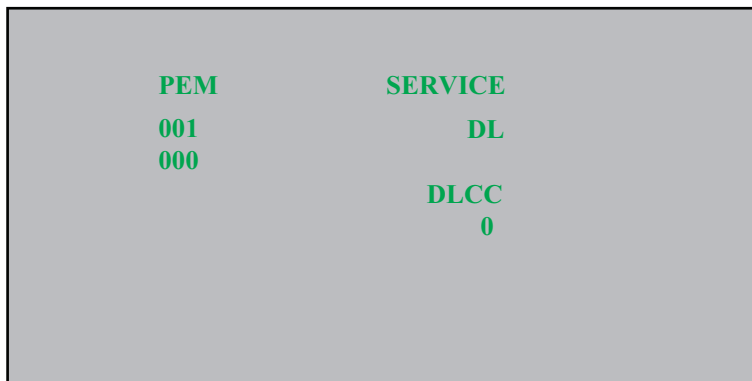
2-2-4. RESETTING THE DATA VALUE IN THE PANEL ENGINE MICRO

For the models listed in this manual, the Panel Engine Micro must be reset whenever the BUHT Board, the LCD Panel, the TCON board, or the driver board is replaced.

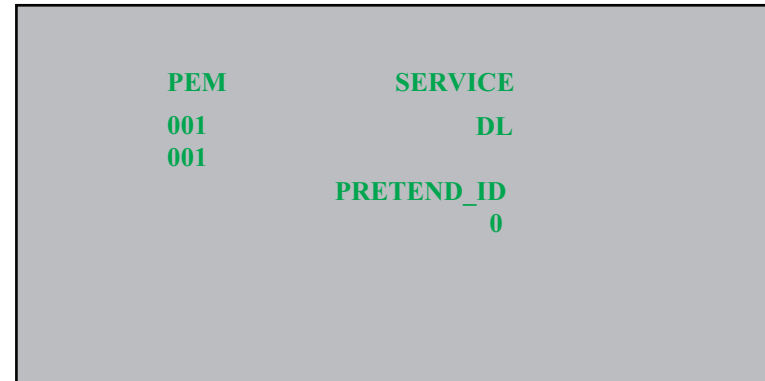
11. Press **JUMP** or **OPTIONS** on the Remote Commander until the **PEM Service Menu** displays.



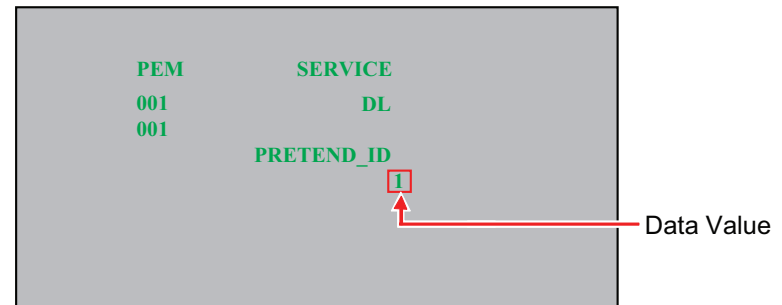
12. Press **2** to move to the **001 DL** category.



13. Press **1** to move to the **001 PRETEND_ID** item.



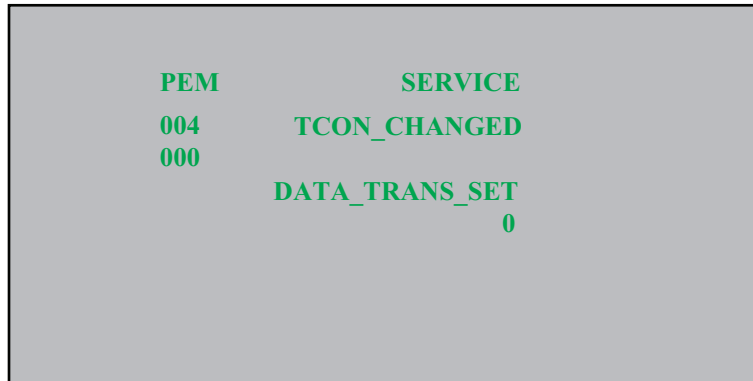
14. Press **3** to increase the data value to 1.



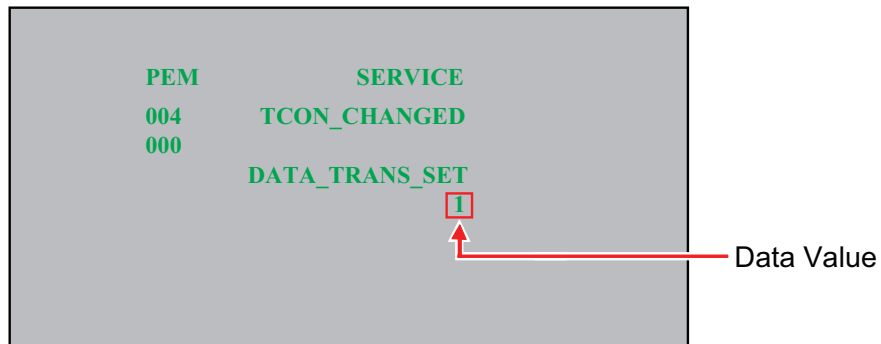
15. After verifying the data value displays, press **MUTING** to WRITE (Save) the changes.

SERVICE ADJUSTMENTS

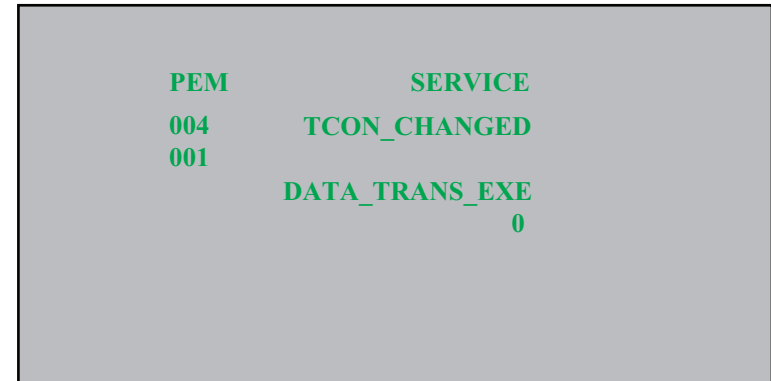
16. Press **2** until the **004 TCON_CHANGED** category displays.



17. For the **DATA_TRANS_SET** item, press **3** to increase the data value to 1.



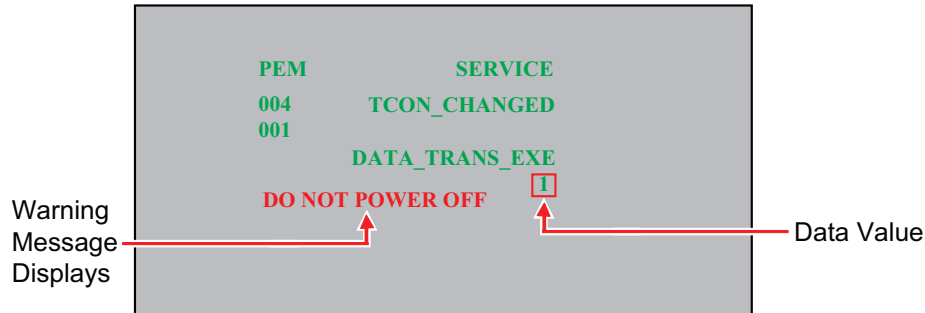
18. Press **1** until the **001 DATA_TRANS_EXE** item displays.



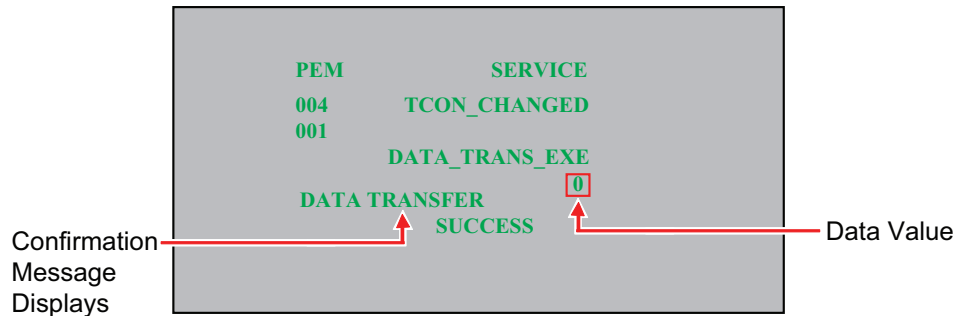
SERVICE ADJUSTMENTS

19. For the **DATA_TRANS_EXE** item, press **3** to increase the data value to 1 to execute the update.

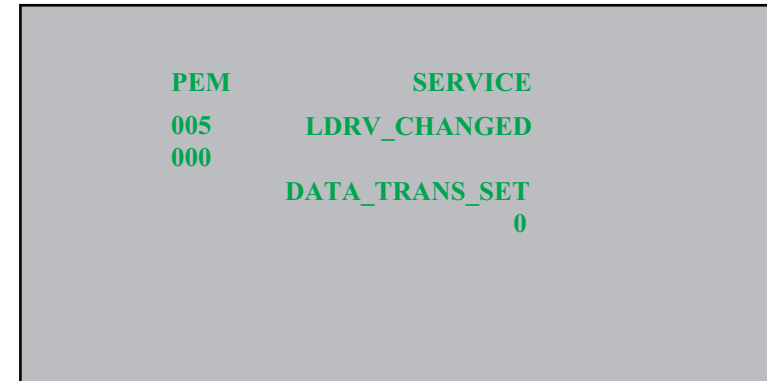
NOTE: A warning message indicating the TV cannot be turned off displays.



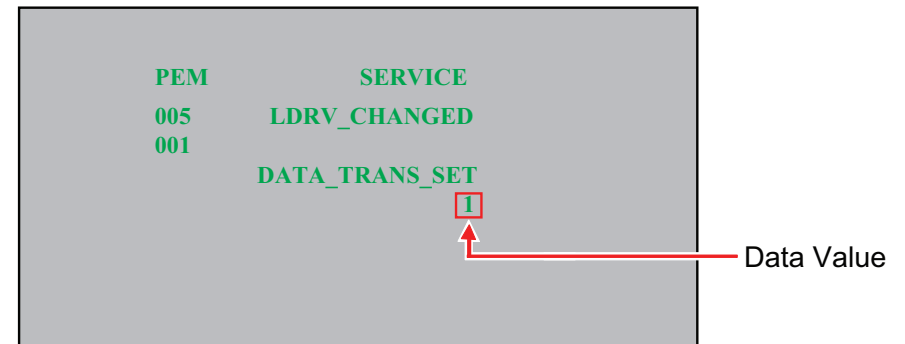
After the update is complete, the data value changes back to 0 and a message indicating the data transfer was successful displays.



20. Press **2** until the **005 LDRV_CHANGED** item displays.

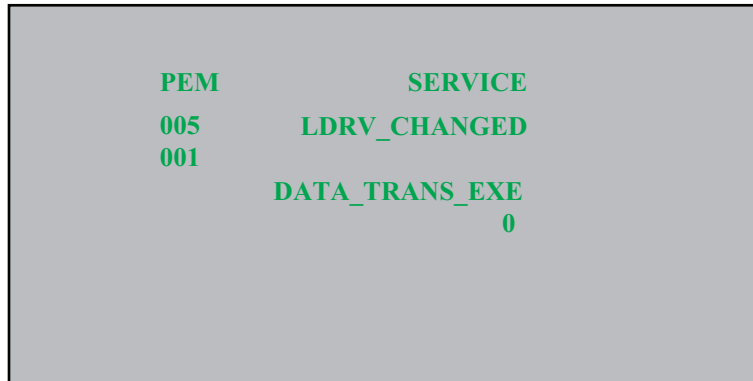


21. For the **DATA_TRANS_SET** item, press **3** to increase the data value to 1.

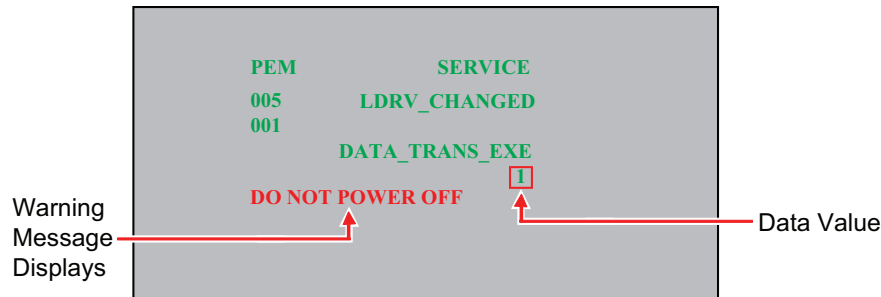


SERVICE ADJUSTMENTS

22. Press **1** until the **001 DATA_TRANS_EXE** item displays.



23. For the **DATA_TRANS_EXE** item, press **3** to increase the data value to 1 to execute the update.
NOTE: A warning message indicating the TV cannot be turned off displays.



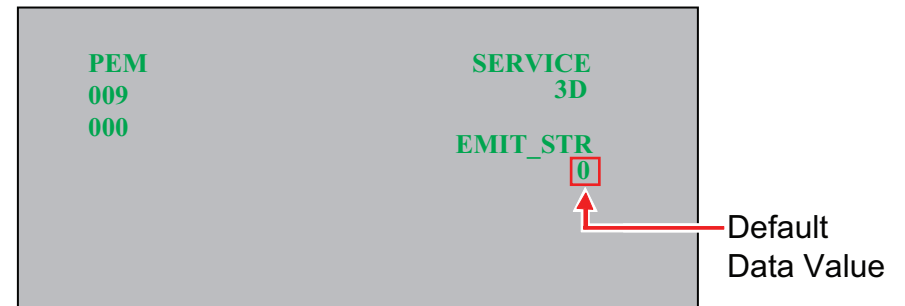
After the update is complete, the data value changes back to 0 and a message indicating the data transfer was successful displays.

24. Proceed to "Verifying the Emitter Output Level".

2-2-5. VERIFYING THE EMITTER OUTPUT LEVEL

If necessary, the emitter LED output level can be increased or decreased.

25. Press **2** until the **009 3D** category displays.



26. Using the table below, press **3** to increase or press **6** to decrease the data value.

DATA VALUE	SETTING
0	Strong (Default)
1	Weak

27. Press **MUTING** then press **0** to WRITE (Save) the changes.
28. Exit Service Mode by turning the TV Power Off.
29. Proceed to "Verifying the Model and Panel Information".

SERVICE ADJUSTMENTS

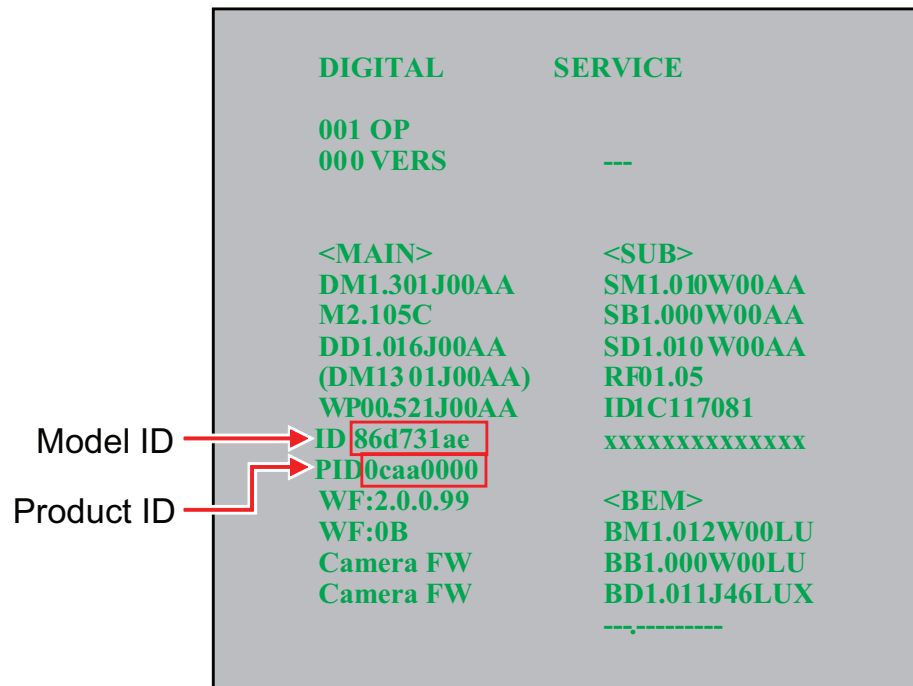
2-2-6. VERIFYING THE MODEL AND PANEL INFORMATION

After saving the changes to the service data, verify the information.

1. TV must be in standby mode. (Power off).
2. Access Service Mode.
Press the following buttons on the Remote Commander within a second of each other:

DISPLAY → Channel **5** → Volume **+** → **POWER**

3. Display the **DIGITAL Service Menu**.
NOTE: There are 3 Service Menus for this model, DIGITAL, CHASSIS, and SUB. If the DIGITAL Service Menu is not displayed, press **JUMP** or **OPTIONS** on the Remote Commander.



4. Using the table, verify the Model ID and the Product ID match the information in the Service Menu.

Model Name	Model ID	Product ID
KDL-46NX810	86d731ae	0caa0000
KDL-46NX810	86d731c2	0caa0000
KDL-55NX810	86d731af	0caa0000
KDL-55NX810	86d731c3	0caa0000
KDL-55NX811	86d731af	0caa0000
KDL-55NX811	86d731af	40aa0000
KDL-55NX811	86d731c3	0caa0000
KDL-55NX811	86d731c3	40aa0000
KDL-60NX810	86d731b0	0caa0000
KDL-60NX810	86d731b0	0caa0000
KDL-60NX810	86d731c4	0caa0000

5. Exit Service Mode by pressing **HOME** or turn the TV power off.
6. Proceed to "Reconnecting All Cables".

2-2-7. RECONNECTING ALL CABLES

After completing the changes to service mode, reconnect all the cables (RF, External input, Ethernet, etc.) to the TV then verify the TV set picture.

SERVICE ADJUSTMENTS

2-3. WHITE BALANCE ADJUSTMENTS

By default the White Balance Adjustments are set for optimal viewing. If White Balance Adjustments are requested, the data is located on the Panel Engine Micro (PEM) Service Menu.

1. TV must be in Standby Mode. (POWER Off).
2. Press the following buttons on the Remote Commander within a second of each other:

DISPLAY ➡ Channel **5** ➡ Volume **+** ➡ **POWER**.

3. The **DIGITAL Service Menu** displays.
NOTE: There are 4 Service Menus for these models, DIGITAL, CHASSIS, SUB, and PEM.

DIGITAL	SERVICE
001 OP	
000 VERS	---
<MAIN>	<SUB>
DM1.301J00AA	SM1.010W00AA
M2.105C	SB1.000W00AA
DD1.016J00AA	SD1.010W00AA
(DM13 01J00AA)	RF01.05
WP00.521J00AA	ID1C117081
ID1C117081	LTY320AB01
PID04020000	
WF:2.0.0.99	<BEM>
WF:0B	BM1.012W00LU
Camera FW	BB1.000W00LU
Camera FW	BD1.011J46LUX

4. Press **JUMP** or **OPTIONS** on the Remote Commander until the **PEM Service Menu** displays.

PEM	SERVICE
000 VERSION	
MAIN	1.0018W00LA
BOOT	1.002W00LA
DATA	1.017WA46LF
NLD	33
NLD DATA	LD1.00
QDL NVM	37

5. Press **2** until the **010 WB_GAIN2_A** category displays.

PEM	SERVICE
010	WB_GAIN2_A
000	
	R_DRV
	128

SERVICE ADJUSTMENTS

- Using the table below, press **[1]** to select the White Balance Adjustment item, then press **[3]** to increase or press **[6]** to decrease the data value.

NOTE: The data value for all White Balance Adjustments must be set between 0~255.

ITEM NUMBER	ITEM NAME	DEFAULT DATA VALUE SETTING
000	R_DRV	128
001	G_DRV	128
002	B_DRV	128
003	R_BKG	128
004	G_BKG	128
005	B_BKG	128

- After completing all White Balance Adjustments, press **[MUTING]** then press **[0]** to WRITE (Save) the changes.

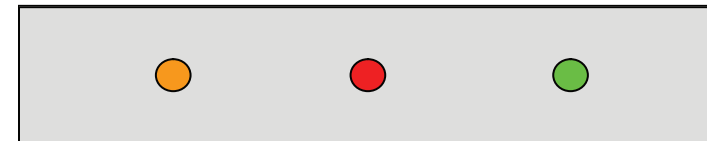
2-4. RESETTING THE TV TO FACTORY CONDITION

Use the following instructions to restore the User Adjustments and Channel Memory settings to the preset factory conditions.

- While holding down the **[HOLD]** on the Remote Commander, press the POWER button on the TV Switch Unit of the set. The set restarts and displays the Initial Setup screen. This may take several minutes.

2-4-1. RESETTING THE TV TO FACTORY CONDITION USING SERVICE MODE

- TV must be in Standby Mode. (POWER off).
- Press the following buttons on the Remote Commander within a second of each other:
[DISPLAY] → Channel **[5]** → Volume **[+]** → **[POWER]**.
- If necessary, press **[JUMP]** or **[OPTIONS]** to go to DIGITAL mode.
- Press **[8]**.
"SERVICE" changes to green RST.
- Press **[MUTING]**.
RST executes the command and displays EXE.
- Press **[0]**.
EXE-RST displays green, then red indicating the TV is writing the data.
- When the process is complete the green SERVICE text displays and the LED display as shown below:



TIMER

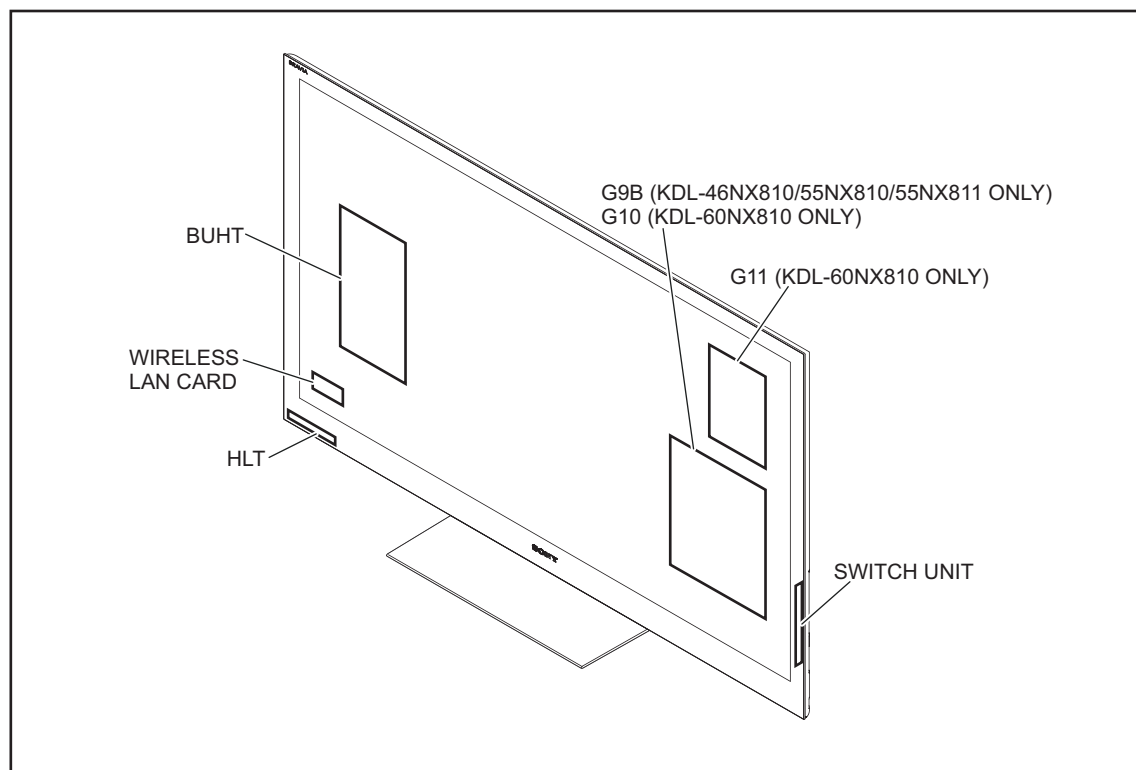
Standby

POWER

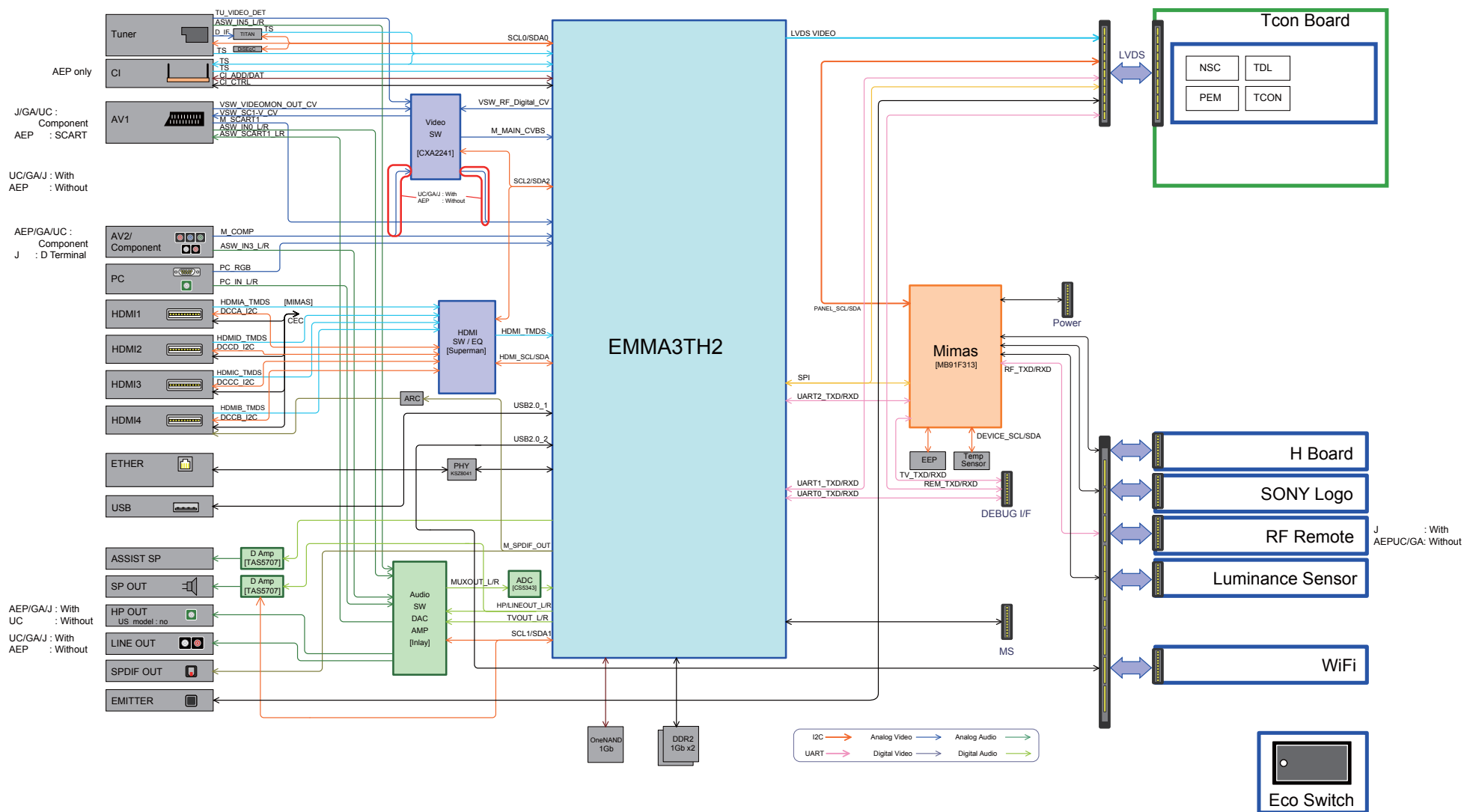
- Cycle AC Power (Unplug and Plug AC Cord from the AC Outlet).
- The set restarts and displays the Initial Setup screen. This may take several minutes.


SEC 3. DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION



3-2. BLOCK DIAGRAM





SONY® is a trademark of Sony Electronics

Reproduction in whole or part without written permission is prohibited. All rights reserved

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

English
2010HJ74WEB-1
Printed in USA
© 2010.8

9-888-349-04

KDL-46NX810/55NX810/55NX811/60NX810

38

SERVICE MANUAL

AZ1-H CHASSIS

<u>MODEL NAME</u>	<u>REMOTE COMMANDER</u>	<u>DESTINATION</u>	LEVEL 3 CONFIDENTIAL
KDL-46NX810	RM-YD036	US	
KDL-46NX810	RM-YD051	CND	
KDL-55NX810	RM-YD036	US	
KDL-55NX810	RM-YD051	CND	
KDL-55NX811	RM-YD051	MX	
KDL-60NX810	RM-YD036	US	
KDL-60NX810	RM-YD051	CND	

CONFIDENTIAL
ELECTRICAL SERVICE MANUAL
INTERNAL ONLY

ORIGINAL MANUAL ISSUE DATE: 8/2010

<u>REVISION DATE</u>	<u>SUBJECT</u>
8/2010	No revisions or updates are applicable at this time.
8/11/2010	Revised instructions for "Special Handling Instructions When Replacing the LCD Panel Assembly". Replaced page 5.

TABLE OF CONTENTS

SECTION TITLE	PAGE
Warnings and Cautions - English	3
Warnings and Cautions - French	6
Safety-Related Component Warning	7
Safety Check-Out	9
SECTION 1: DIAGRAMS	10
1-1. Circuit Boards Location	10
1-2. Printed Wiring Boards and Schematic Diagrams Information	10
1-3. Block Diagram	12
1-4. Schematics and Supporting Information	13
BUHT Board Schematic Diagram (1 of 18)	13
BUHT Board Schematic Diagram (2 of 18)	14
BUHT Board Schematic Diagram (3 of 18)	15
BUHT Board Schematic Diagram (4 of 18)	16
BUHT Board Schematic Diagram (5 of 18)	17
BUHT Board Schematic Diagram (6 of 18)	18
BUHT Board Schematic Diagram (7 of 18)	19
BUHT Board Schematic Diagram (8 of 18)	20
BUHT Board Schematic Diagram (9 of 18)	21
BUHT Board Schematic Diagram (10 of 18)	22
BUHT Board Schematic Diagram (11 of 18)	23
BUHT Board Schematic Diagram (12 of 18)	24
BUHT Board Schematic Diagram (13 of 18)	25
BUHT Board Schematic Diagram (14 of 18)	26
BUHT Board Schematic Diagram (15 of 18)	27
BUHT Board Schematic Diagram (16 of 18)	28
BUHT Board Schematic Diagram (17 of 18)	29
BUHT Board Schematic Diagram (18 of 18)	30
G9B Board Schematic Diagram (1 of 2) (KDL-46NX810/55NX810/55NX811 ONLY)	32
G9B Board Schematic Diagram (2 of 2) (KDL-46NX810/55NX810/55NX811 ONLY)	33
G10 Board Schematic Diagram (KDL-60NX810 ONLY)	35
G11 Board Schematic Diagram (KDL-60NX810 ONLY)	37
HLT Board Schematic Diagram	39
SECTION 2: ELECTRICAL PARTS LIST	41
APPENDIX A: ENCRYPTION KEY COMPONENTS	A-1

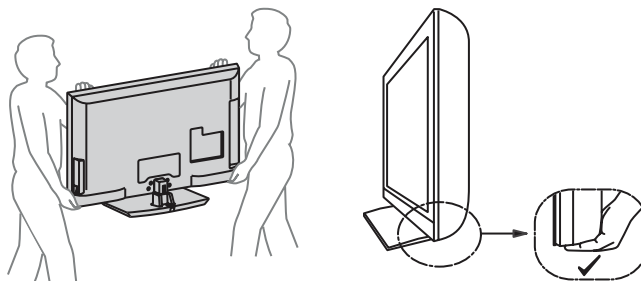
WARNINGS AND CAUTIONS - ENGLISH

CAUTION

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

CARRYING THE TV

- Carry the TV with the adequate number of people; larger size TVs require two or more people.
- Correct hand placement while carrying the TV is very important for safety and to avoid damage.



WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the ac power line.



SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and ⚠ mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.

HANDLING THE GLASS ASSEMBLY

Use the following precautionary guidelines when replacing the Glass Assembly to avoid material degradation or screen coating degradation, and ensure that dust, dirt, or fingerprints are not left between the glass and the LCD panel.

- ☑ Replace the Glass Assembly in a brightly lit and clean room.
- ☑ Place the replacement Glass Assembly on a dark cloth to make it easier to see dust and dirt particles.
- ☑ Wear anti static gloves to avoid leaving finger prints on the glass.
- ☑ Use a dry, soft MicroFiber cloth, such as a lint free polishing cloth, to gently wipe the glass to remove any dust or dirt particles.
- ☑ If the glass needs additional cleaning, slightly moisten the cloth with a diluted mild soap or mild detergent solution, or use a compressed air duster (spray can type).
- ☑ After replacing the Glass Assembly, verify there are no dark spots or finger prints visible on the screen.

CAUTION

- ⊘ **Do Not** use paper towels, any type of abrasive pad, rags, rubber or vinyl materials to clean the screen. Using these materials could easily scratch the screen which may result in permanent damage.
- ⊘ **Do Not** use any cleaning product containing alkaline/acid cleaner, scouring powder, or volatile solvent, such as alcohol, ammonia, benzene, thinner or insecticide. Using any of these harsh cleaners may result in permanent damage to the screen.
- ⊘ **Do Not** spray water or detergent directly onto the TV screen . If liquid drips into the bottom of the screen it may cause a failure.

SPECIAL HANDLING INSTRUCTIONS WHEN REPLACING THE LCD PANEL ASSEMBLY

Use the following precautionary guidelines when handling the LCD Panel Assembly to avoid material degradation or screen coating degradation, and ensure that dust, dirt, or fingerprints are not left between the glass and the LCD Panel Assembly.

1. After removing the boards and connectors, note where the frame is on the panel. (See Figure 1)
2. Lift the LCD Panel Assembly by holding the top and bottom of the panel approximately 200mm from the edge with your palms on the back of the panel. (See Figure 2)

CAUTION: Lifting or holding the panel at the corners may damage the panel.

3. Use the same method when taking the replacement panel out of the carton. (See Figure 3)

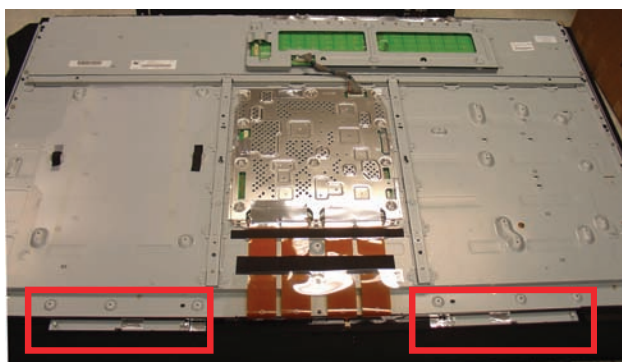


Figure 1

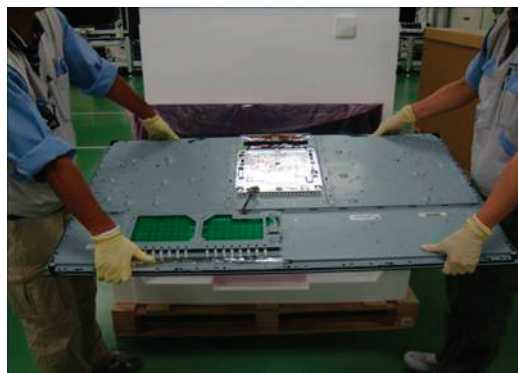


Figure 2



Figure 3

CAUTION: DO NOT lift the LCD Panel by holding the short side of the panel or by placing your palms on the front glass. (See Figures 4 & 5)

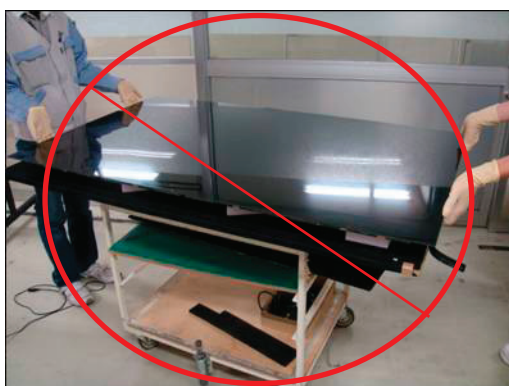


Figure 4



Figure 5

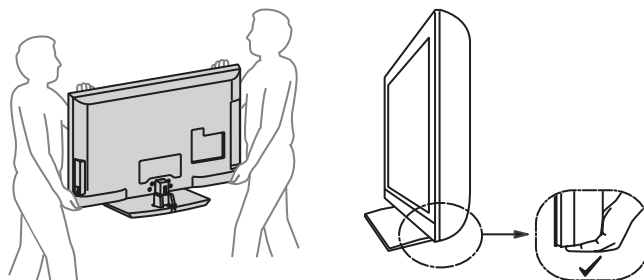
WARNINGS AND CAUTIONS - FRENCH

ATTENTION!!

Ces instructions de service sont à l'usage du personnel de service qualifié seulement. Pour prévenir le risque de choc électrique, ne pas faire l'entretien autre que celui contenu dans le Mode d'emploi à moins que vous soyez qualifié faire ainsi.

POUR TRANSPORTER LE TÉLÉVISEUR

- Transportez le téléviseur avec le nombre de personnes approprié ; un téléviseur de grande taille doit être transporté par au moins deux personnes.
- Lors du transport du téléviseur, l'emplacement des mains est très important pour votre sécurité, ainsi que pour éviter de causer des dommages.



ALERTE!!

Afin d'éviter tout risque d'électrocution provenant d'un châssis sous tension, un transformateur d'isolement doit être utilisé lors de tout dépannage. Le châssis de ce récepteur est directement raccordé à l'alimentation du secteur.



ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifiés par une trame et par une marque ⚠ sur les schémas de principe, les vues explosées et les listes de pièces sont d'une importance critique pour la sécurité du fonctionnement. Ne les remplacer que par des composants Sony dont le numéro de pièce est indiqué dans le présent manuel ou dans des suppléments publiés par Sony. Les réglages de circuit dont l'importance est critique pour la sécurité du fonctionnement sont identifiés dans le présent manuel. Suivre ces procédures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecte.

SAFETY-RELATED COMPONENT WARNING

There are critical components used in LCD color TVs that are important for safety. These components are identified with shading and \triangle mark on the schematic diagrams and the electrical parts list. It is essential that these critical parts be replaced only with the part number specified in the electrical parts list to prevent electric shock, fire, or other hazard.

NOTE: Do not modify the original design without obtaining written permission from the manufacturer or you will void the original parts and labor guarantee.

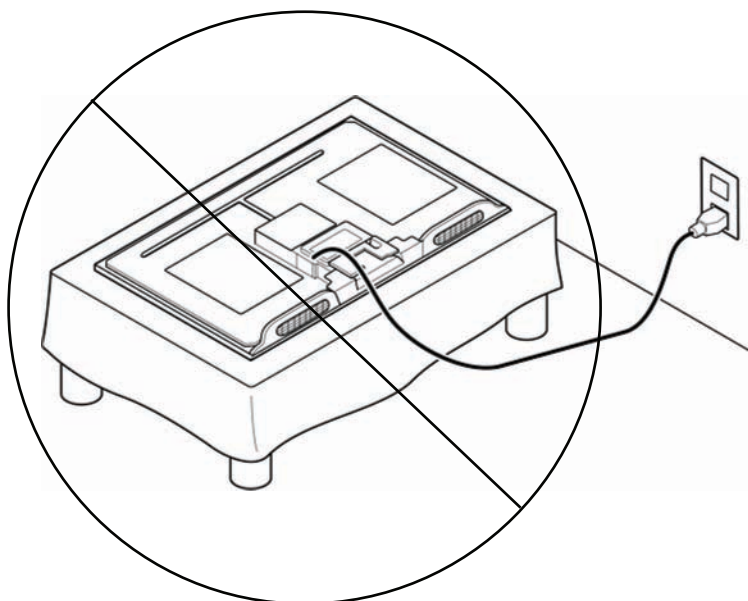
USE CAUTION WHEN HANDLING THE LCD ASSEMBLY PANEL

When repairing the LCD Assembly Panel, be sure you are grounded by using a wrist band.

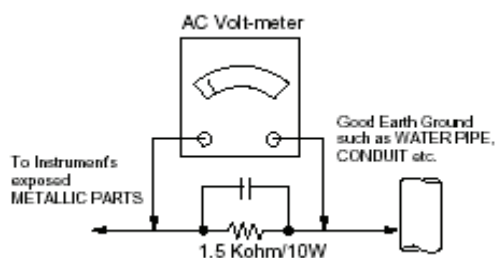
When installing the LCD Assembly Panel on a wall, the LCD Assembly Panel must be secured using the 4 mounting holes on the rear cover.

To avoid damaging the LCD Assembly Panel:

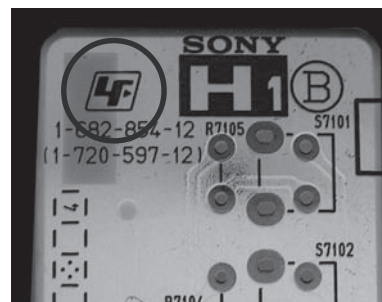
- do not press on the panel or frame edge to avoid the risk of electric shock.
- do not scratch or press on the panel with any sharp objects.
- do not leave the module in high temperatures or in areas of high humidity for an extended period of time.
- do not expose the LCD Panel Assembly to direct sunlight.
- avoid contact with water. It may cause a short circuit within the module.
- disconnect the AC adapter when replacing the backlight (CCFL) or inverter circuit.
(High voltage occurs at the inverter circuit at 650Vrms.)
- always clean the LCD Assembly Panel with a soft cloth material.
- use care when handling the wires or connectors of the inverter circuit. Damaging the wires may cause a short.
- protect the panel from ESD to avoid damaging the electronic circuit (C-MOS).
- during the repair, DO NOT leave the Power On for more than 1 hour while the TV is face down on a cloth.



LEAKAGE CURRENT HOT CHECK CIRCUIT



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



example

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

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

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

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

SAFETY CHECK-OUT

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

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

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

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

How to Find a Good Earth Ground

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble- light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

Leakage Test

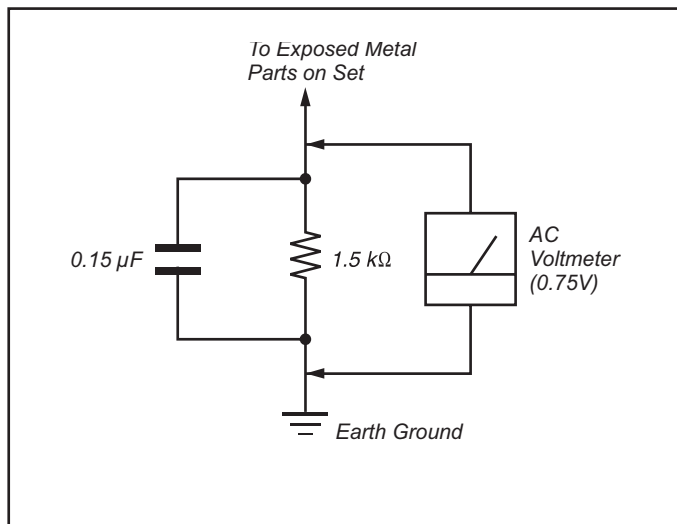


Figure A. Using an AC voltmeter to check AC leakage.

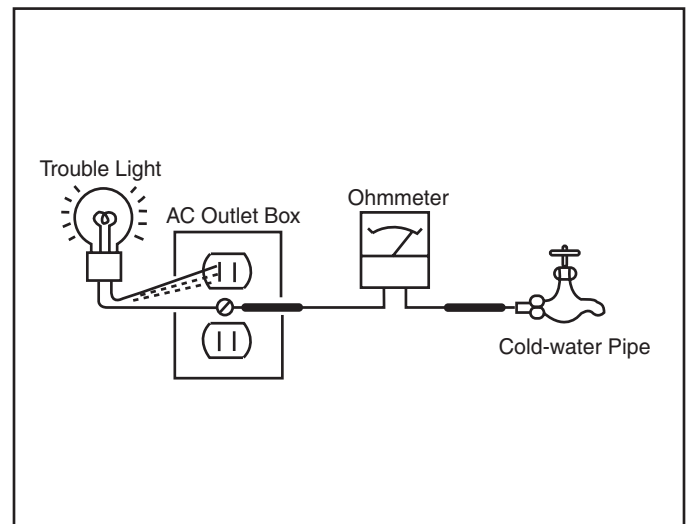
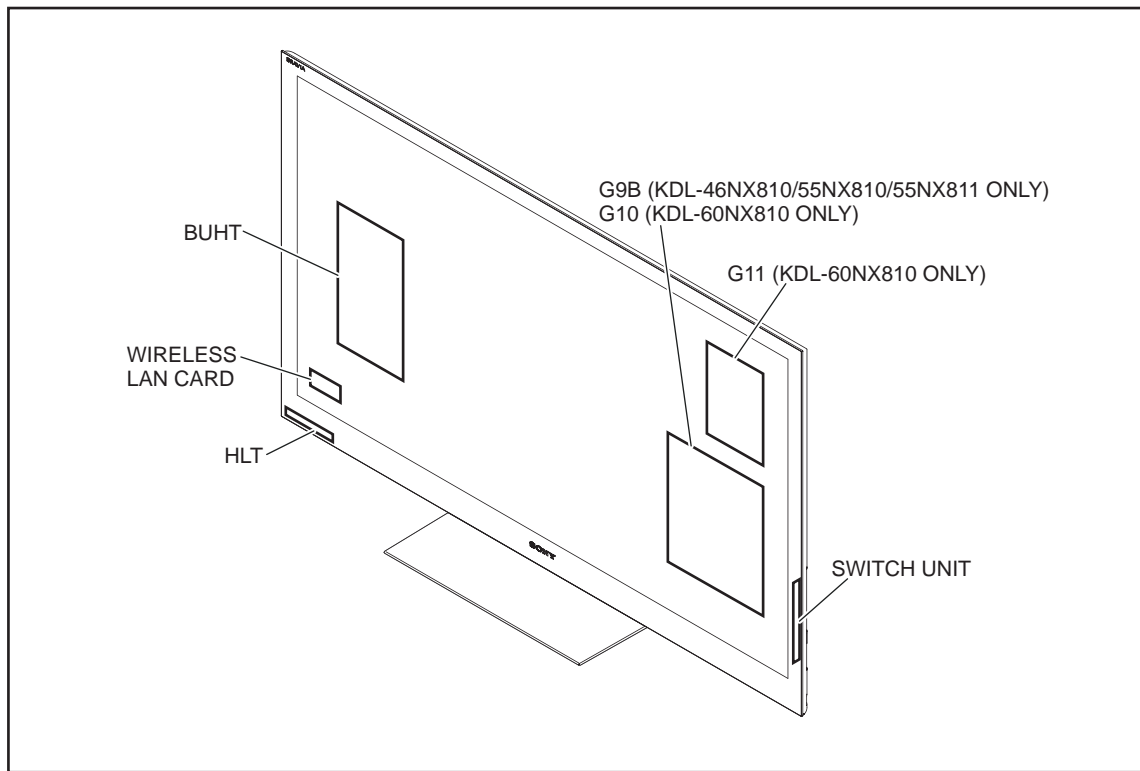


Figure B. Checking for earth ground.

SECTION 1: DIAGRAMS

1-1. CIRCUIT BOARDS LOCATION



1-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS INFORMATION

All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. $\text{k}\Omega=1000\Omega$, $\text{M}\Omega=1000\text{k}\Omega$

Indication of resistance, which does not have one for rating electrical power, is as follows: Pitch : 5mm

Rating electrical power : $\frac{1}{4}\text{W}$

$\frac{1}{4}\text{W}$ in resistance, $\frac{1}{10}\text{W}$ and $\frac{1}{16}\text{W}$ in chip resistance.

: nonflammable resistor

: fusible resistor

: internal component

: panel designation and adjustment for repair

: earth ground

: earth-chassis

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

Readings are taken with a color-bar signal input.

Readings are taken with a $10\text{M}\Omega$ digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibility.

: B+line.

: B-line. (Actual measured value may be different).

: signal path. (RF)

Circled numbers are waveform references.

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

The symbol indicates a fast operating fuse and is displayed on the component side of the board. Replace only with fuse of the same rating as marked.

Les composants identifiés par un trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Le symbole indique une fusible à action rapide. Doit être remplacé par une fusible de même valeur, comme marqué.

NOTE: The components identified by a red outline and a mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced.
See Appendix A: Encryption Key Components in the back of this manual.

REFERENCE INFORMATION

RESISTOR

: RN METAL FILM

: RC SOLID

: FPRD NONFLAMMABLE CARBON

: FUSE NONFLAMMABLE FUSIBLE

: RW NONFLAMMABLE WIREWOUND : MPS METALIZED POLYESTER

: RS NONFLAMMABLE METAL OXIDE : MPP METALIZED POLYPROPYLENE

: RB NONFLAMMABLE CEMENT : ALB BIPOLAR

: ※ ADJUSTMENT RESISTOR : ALT HIGH TEMPERATURE

CAPACITOR

: TA TANTALUM

: PS STYROL

: PP POLYPROPYLENE

: PT MYLAR

: MPS METALIZED POLYESTER

: MPP METALIZED POLYPROPYLENE

: ALB BIPOLAR

: ALT HIGH TEMPERATURE

: ALR HIGH RIPPLE

COIL

: LF-8L MICRO INDUCTOR

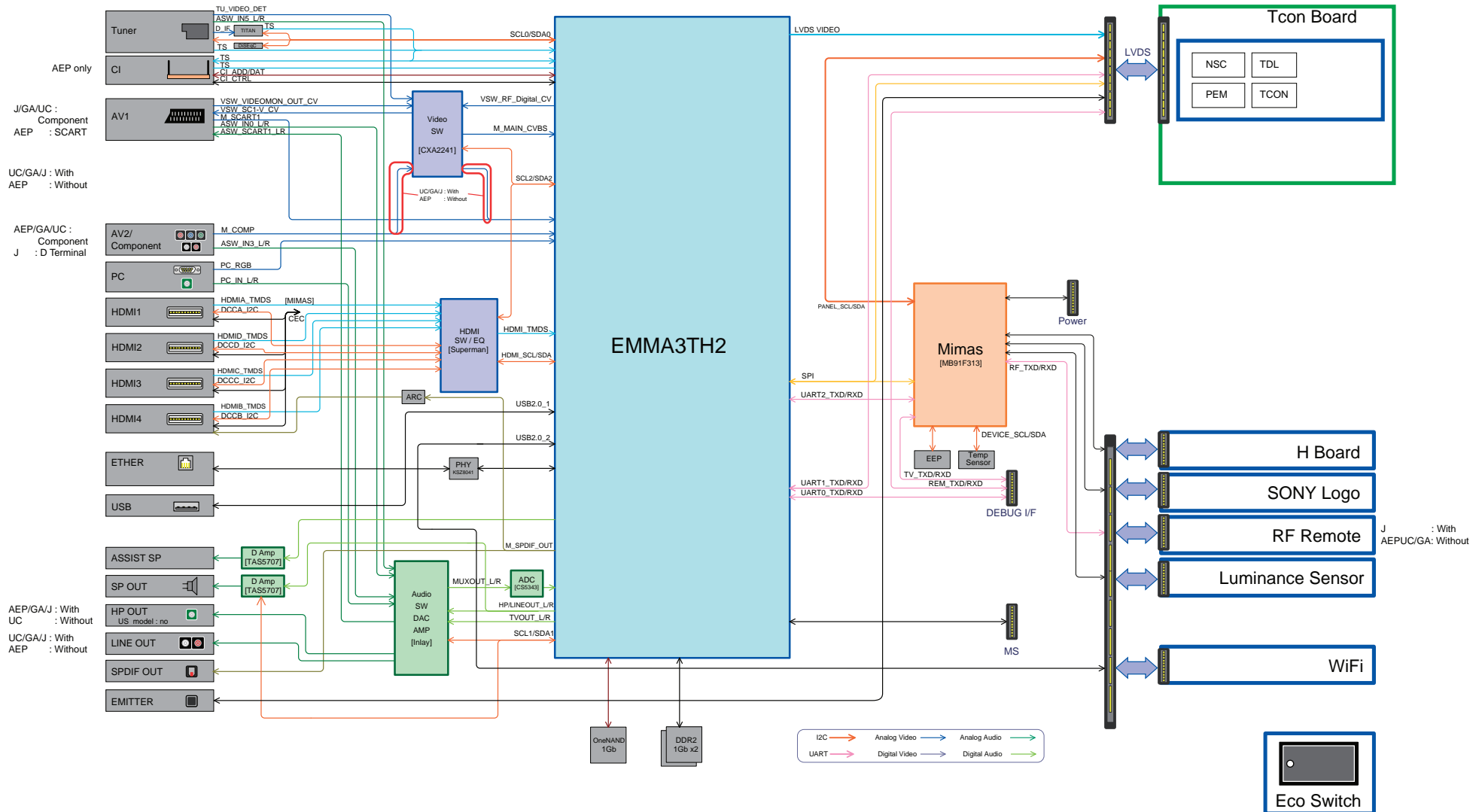
Terminal name of semiconductors in silk screen
printed circuit (※)

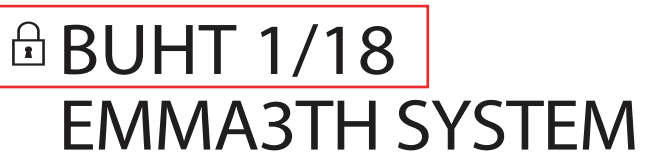
	Device	Printed symbol	Terminal name	Circuit
1	Transistor		Collector Base Emitter	
2	Transistor		Collector Base Emitter	
3	Diode		Cathode Anode	
4	Diode		Cathode Anode (NC)	
5	Diode		Cathode Anode (NC)	
6	Diode		Common Anode Cathode	
7	Diode		Common Anode Cathode	
8	Diode		Common Anode Anode	
9	Diode		Common Anode Anode	
10	Diode		Common Cathode Cathode	
11	Diode		Common Cathode Cathode	
12	Diode		Anode Cathode Anode Anode	
13	Transistor (FET)		Drain Source Gate	
14	Transistor (FET)		Drain Source Gate	
15	Transistor (FET)		Source Drain Gate	
16	Transistor		Emitter Collector Base	
17	Transistor		C2(B1)E1 E2(B2)C1	
18	Transistor		C1(B2)E2 E1(B1)C2	
19	Transistor		C1 B2 E2 E1 B1 C2	
20	Transistor		C1 B2 E2 E1 B1 C2	
21	Transistor		E2 B1 E1 C2 C1(B2)	
22	Transistor		(B2) B1 E1 E2 C1 C2	
23	Transistor		(B2) E2 E1 B1 C2 C1	
—	Discrete semiconductor			

(Chip semiconductors that are not actually used are included.)

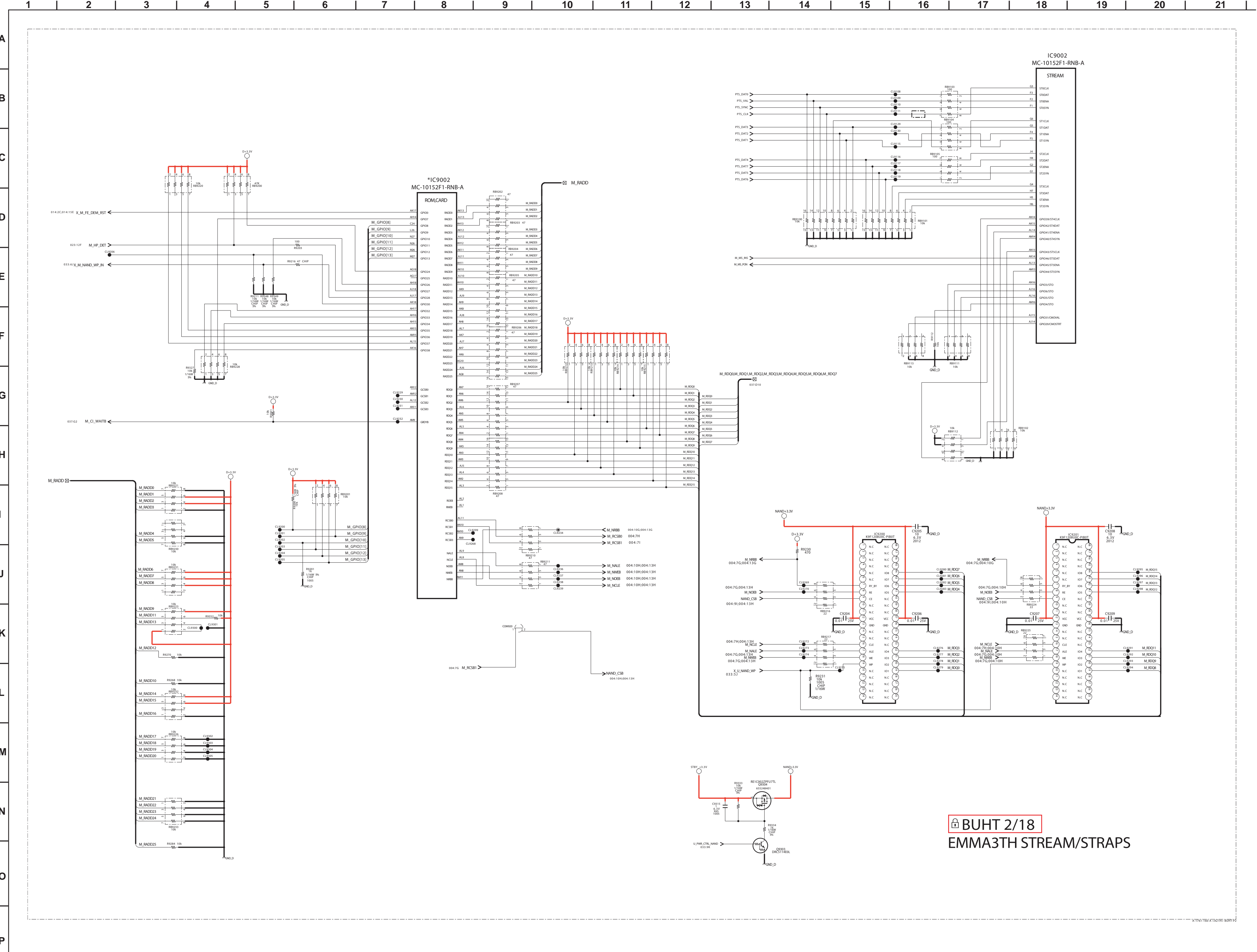
Ver.1.6

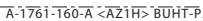
1-3. BLOCK DIAGRAM



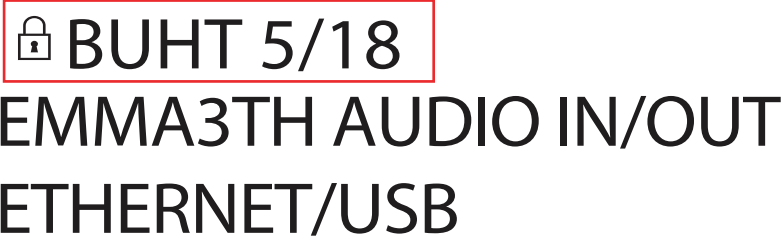


BUHT BOARD SCHEMATIC DIAGRAM (2 OF 18)

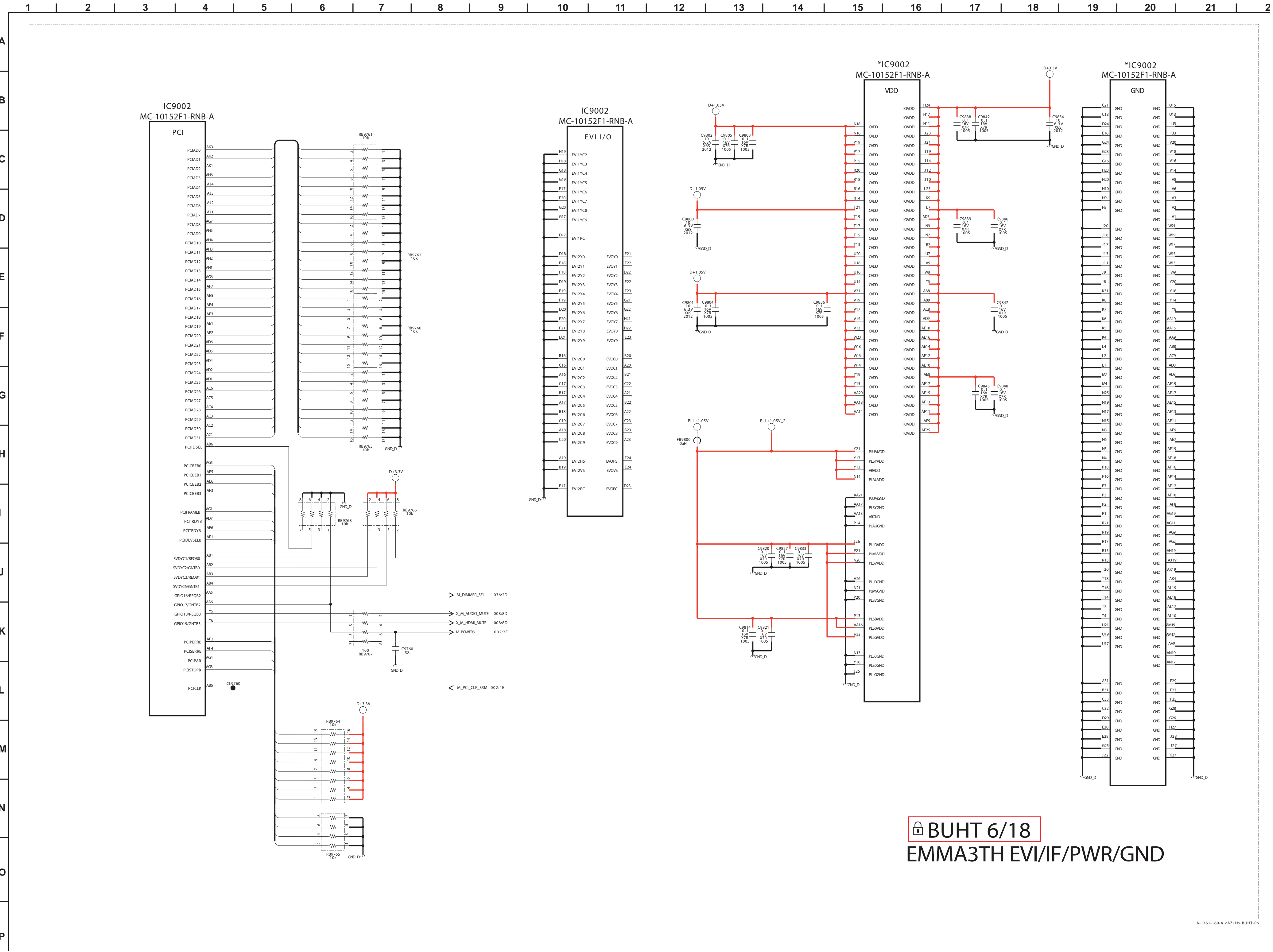






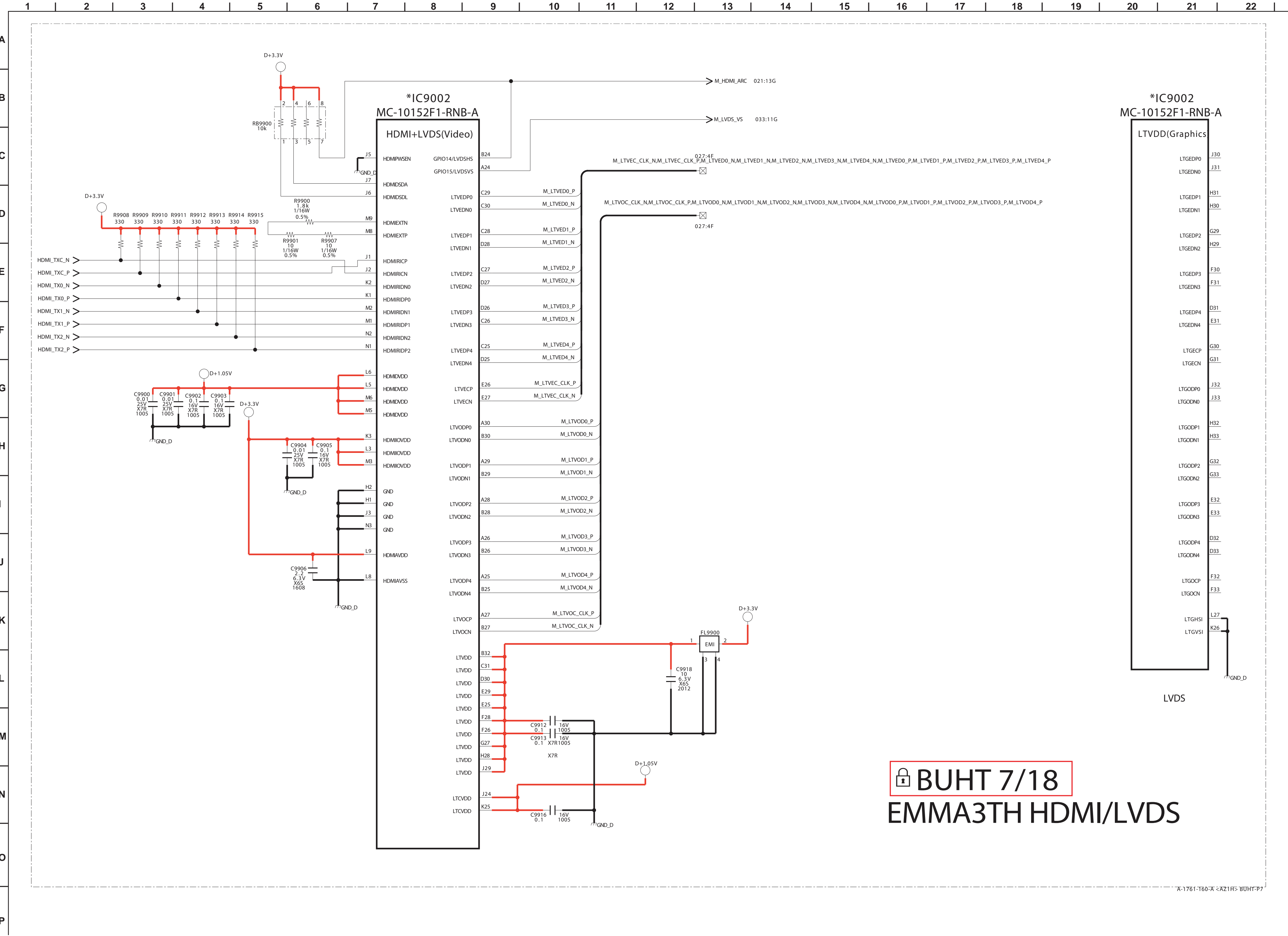


BUHT BOARD SCHEMATIC DIAGRAM (6 OF 18)



A-1761-160-A <AZ1H> BUHT-P6

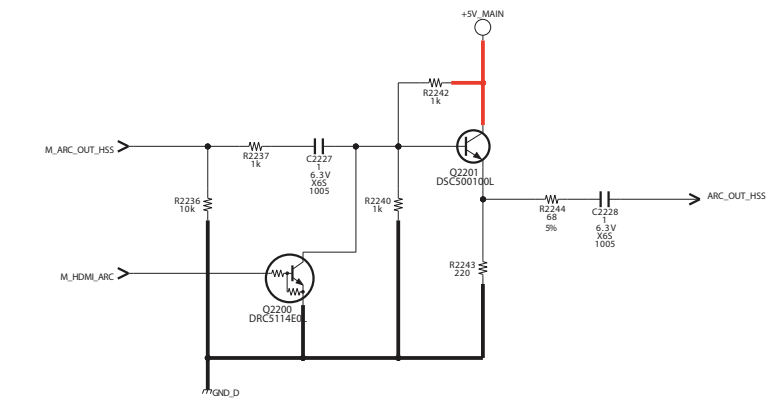
BUHT BOARD SCHEMATIC DIAGRAM (7 OF 18)



 **BUHT 7/18**
EMMA3TH HDMI/LVDS







A-1761-160-A <AZTH> BUHS-P10





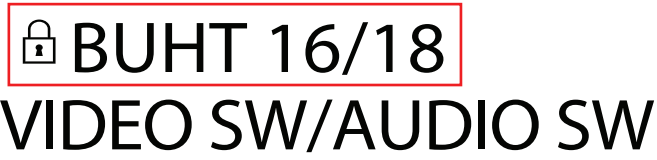




BUHT 15/18
PANEL CONN

 BUHT 15/18

PANEL CONN

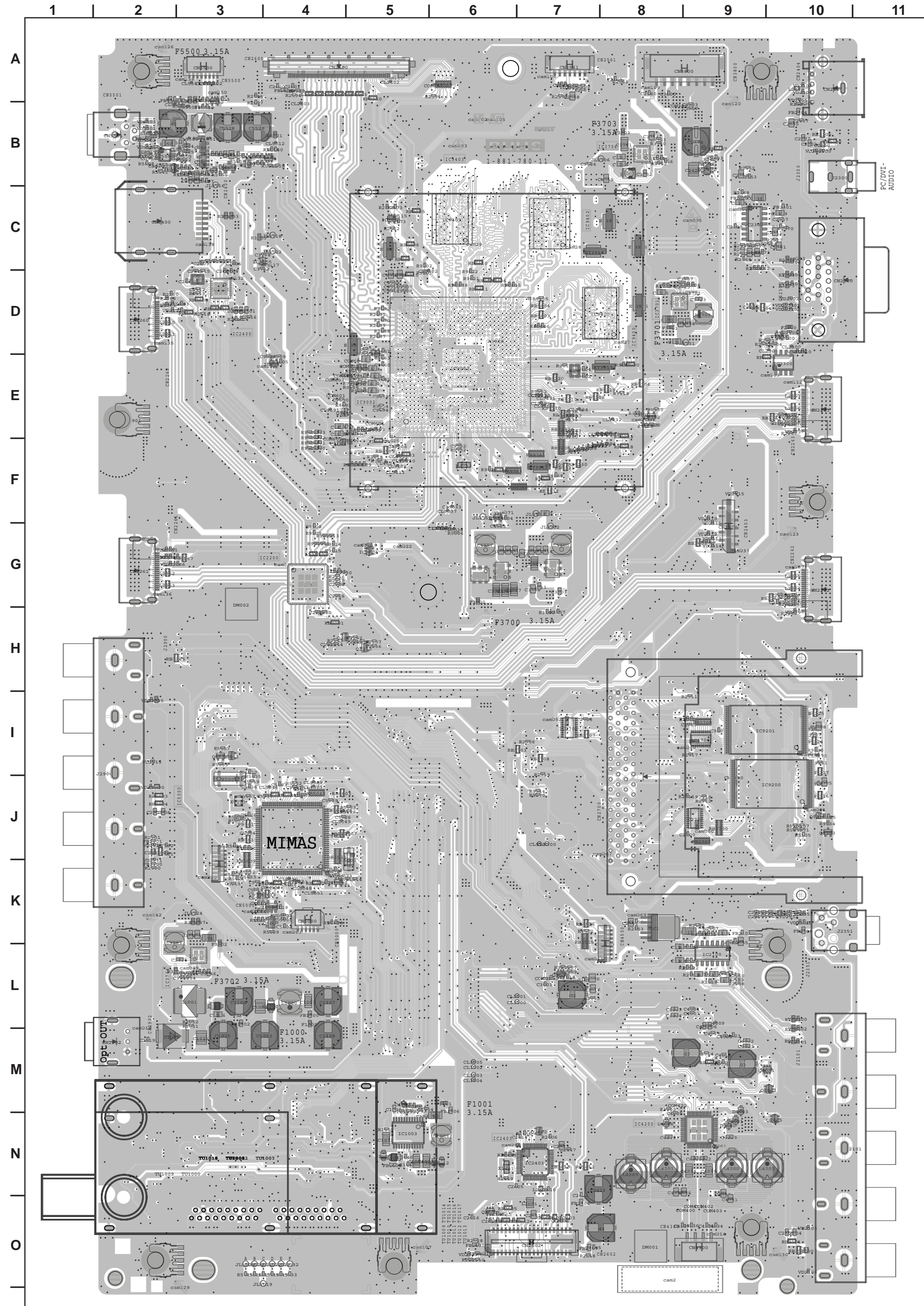




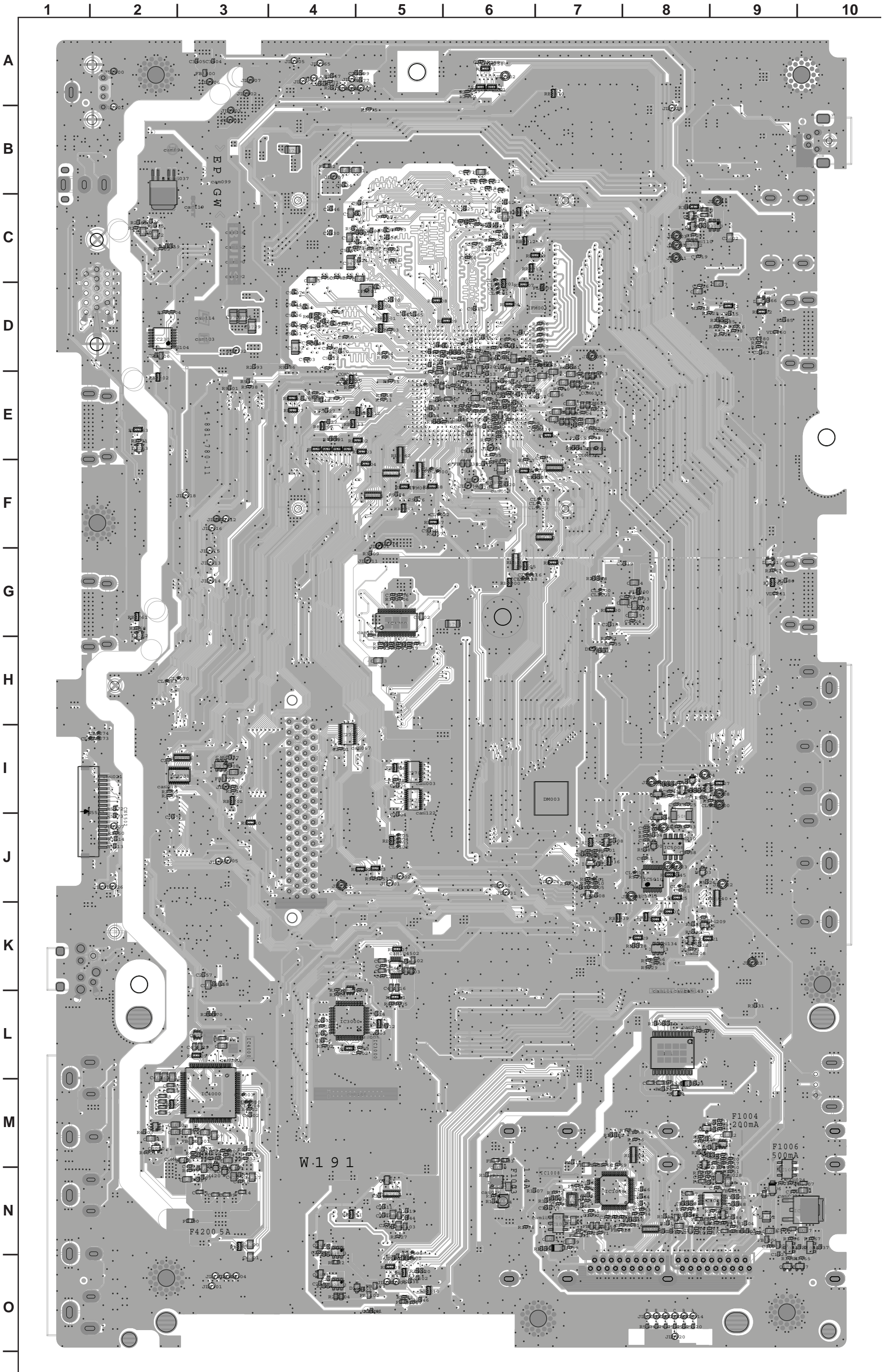




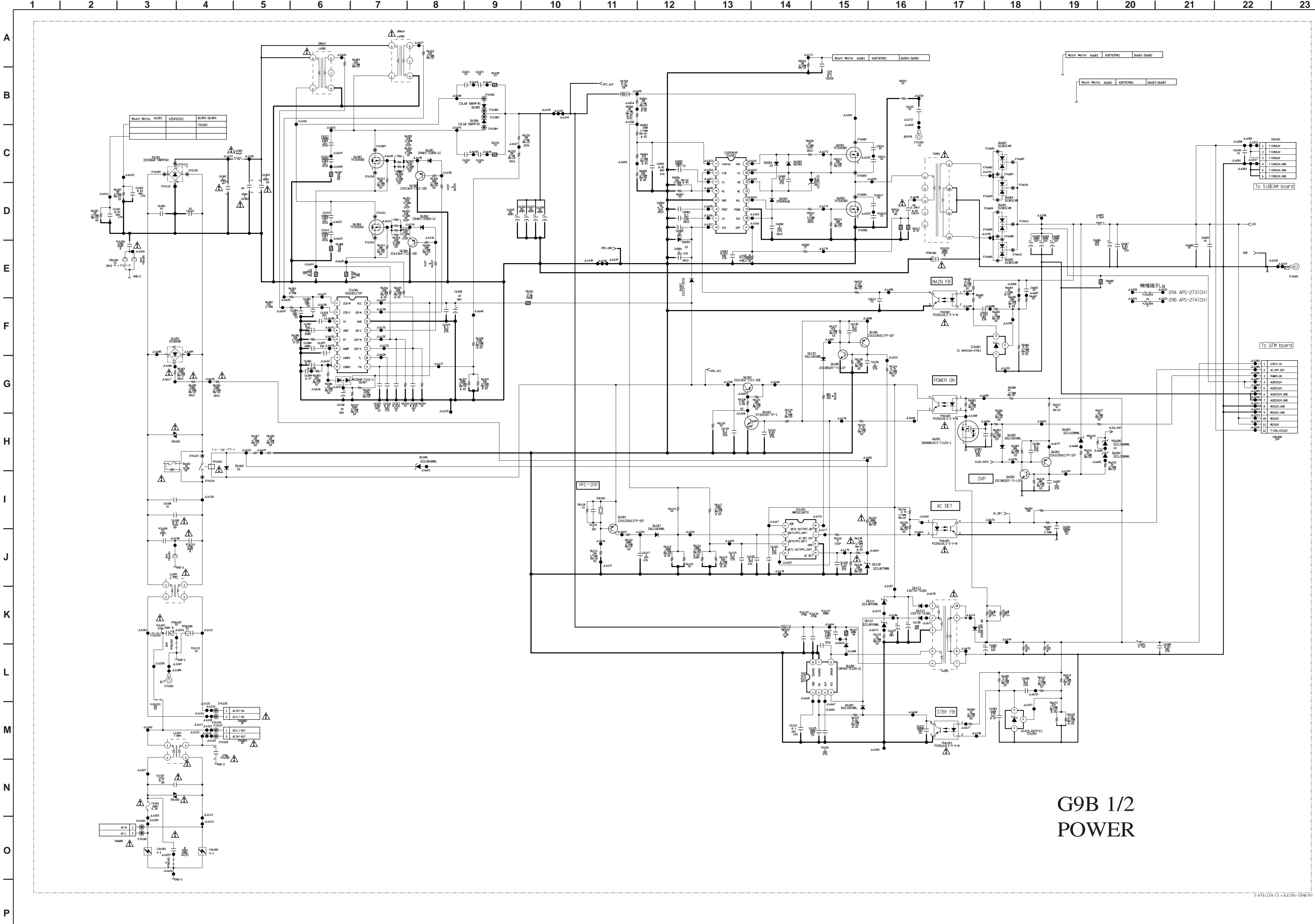
[EMMA3TH SYSTEM/STREAM/STRAPS/DDR2/VIDEO IN/OUT/AUDIO IN/OUT/ETHERNET/USB/EV-IF/PC/POWER/GND/HDMI/LVDS/TUNER MAIN UFE/DPL/COMPONENT IN/HDMI EQ SW S/HDMI CONNECTOR/PC/EHTERNET/USB/PANEL/VIDEO SW/AUDIO IN/OUT/MIMAS/POWER]
COMPONENT SIDE



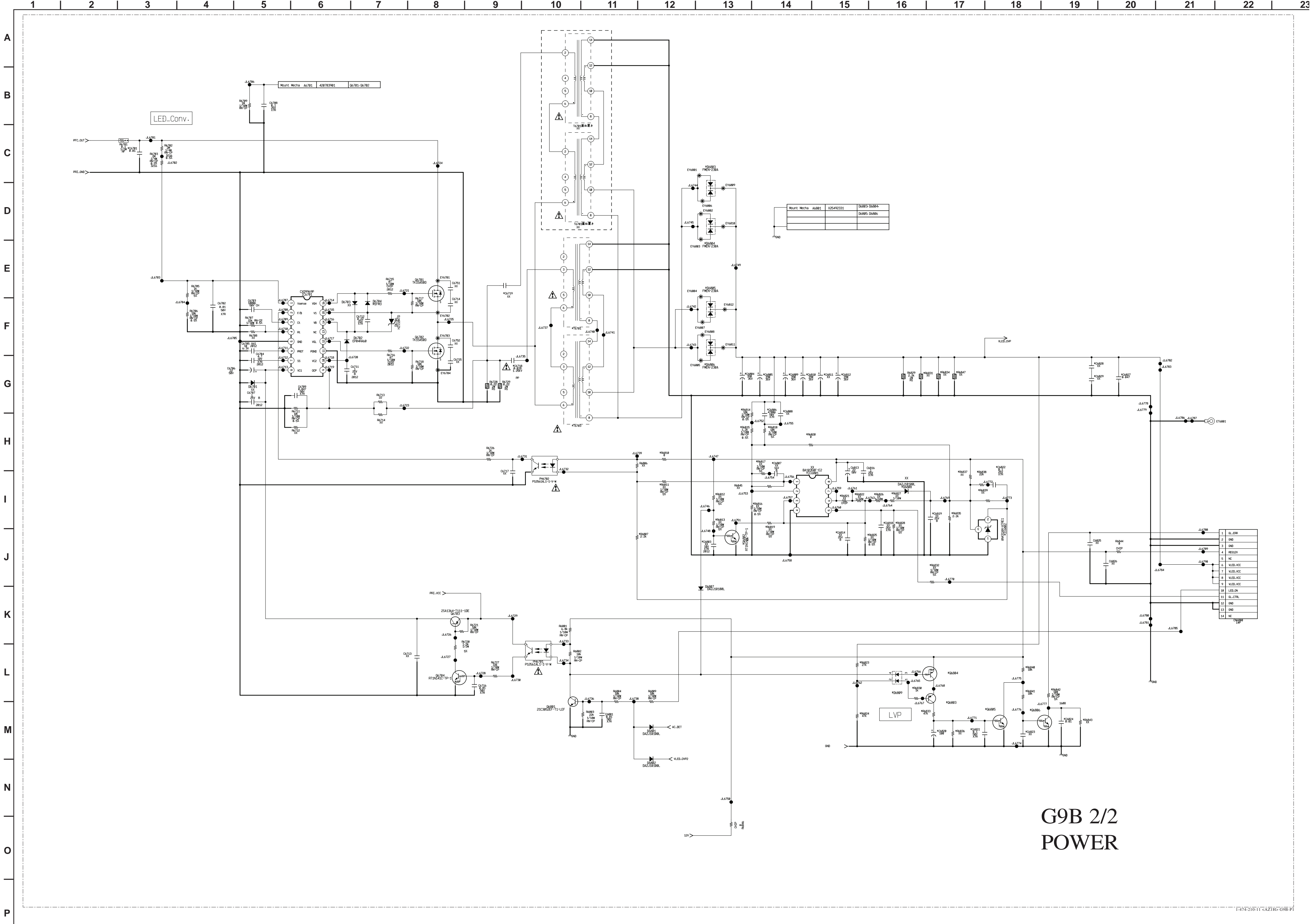
CONDUCTOR SIDE

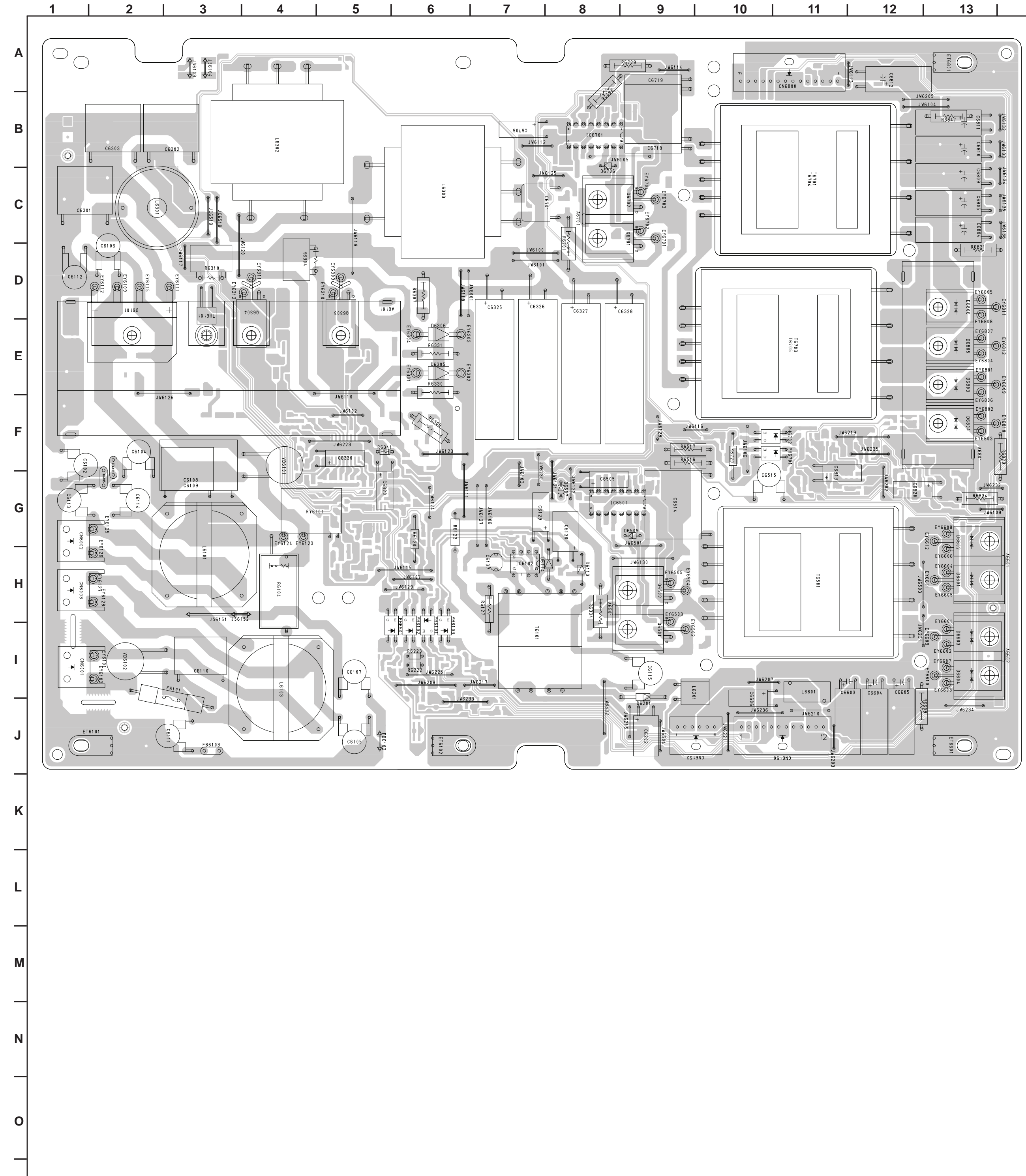


G9B BOARD SCHEMATIC DIAGRAM (1 OF 2) (KDL-46NX810/55NX810/55NX811 ONLY)

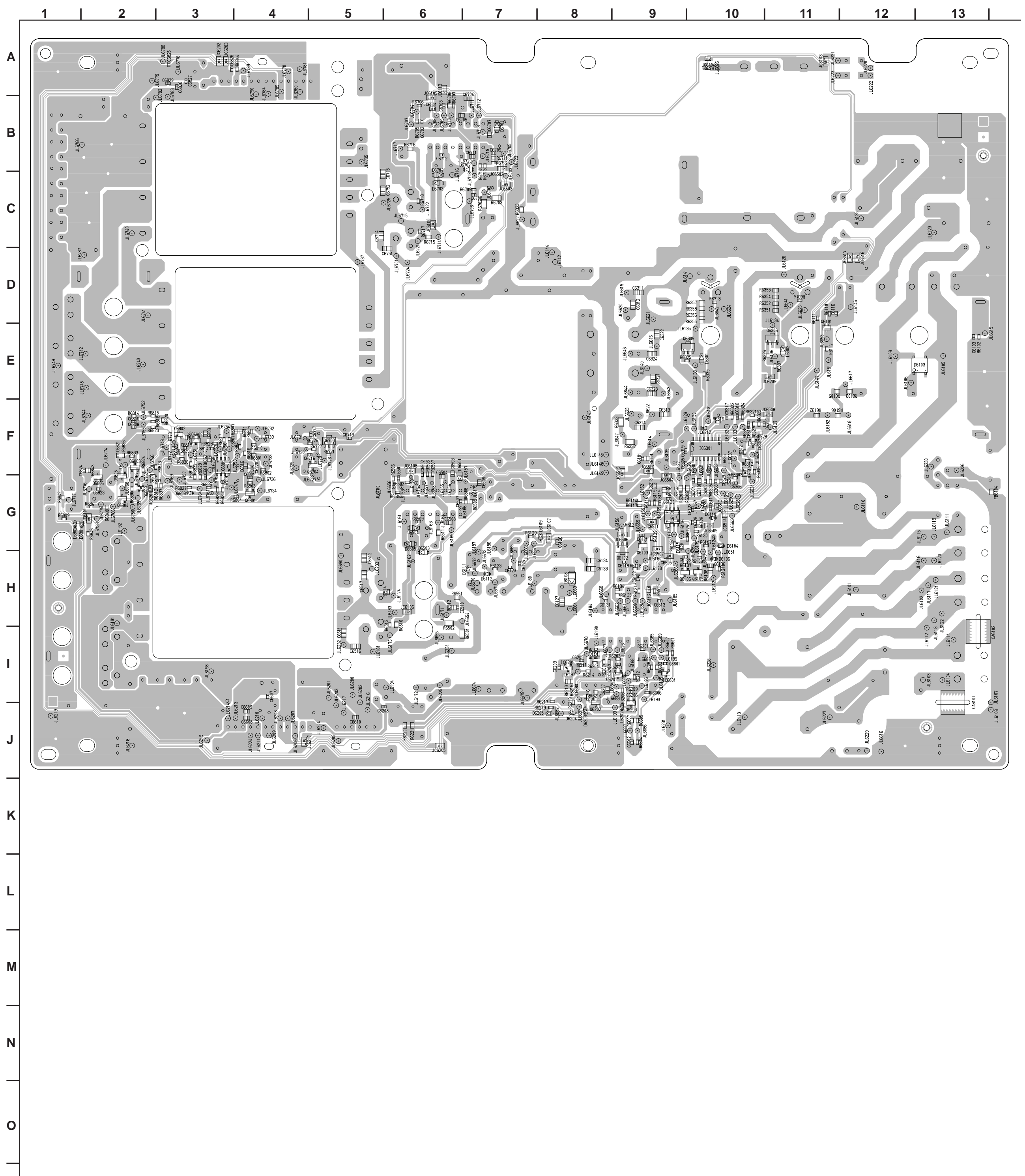


G9B BOARD SCHEMATIC DIAGRAM (2 OF 2) (KDL-46NX810/55NX810/55NX811 ONLY)





G9B







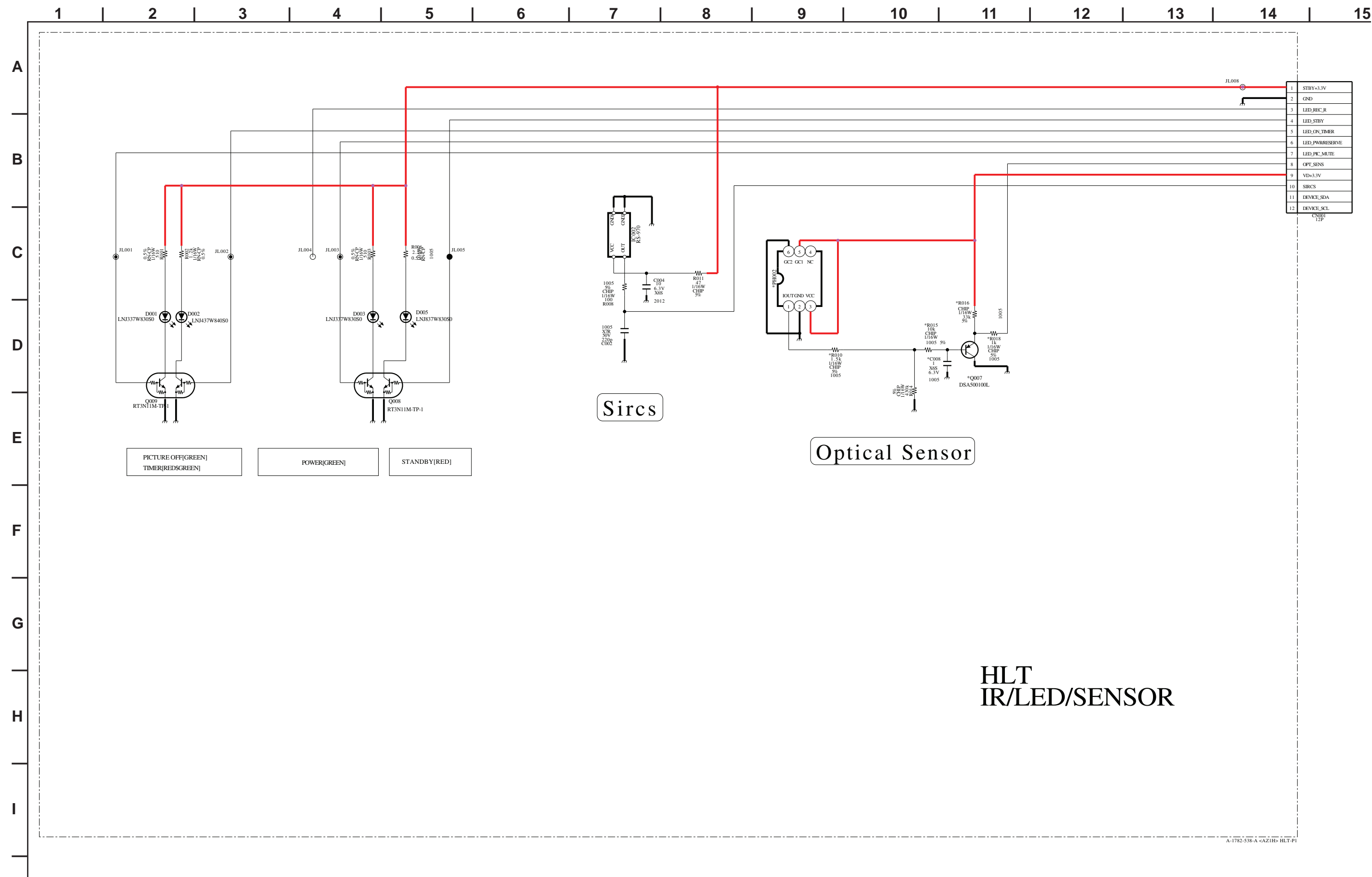
36





38

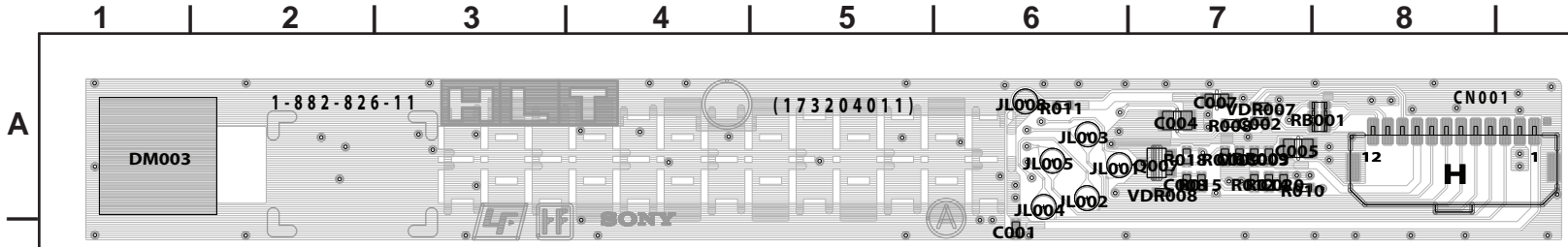
HLT BOARD SCHEMATIC DIAGRAM



A-1782-538-A <AZ1H> HLT-P1

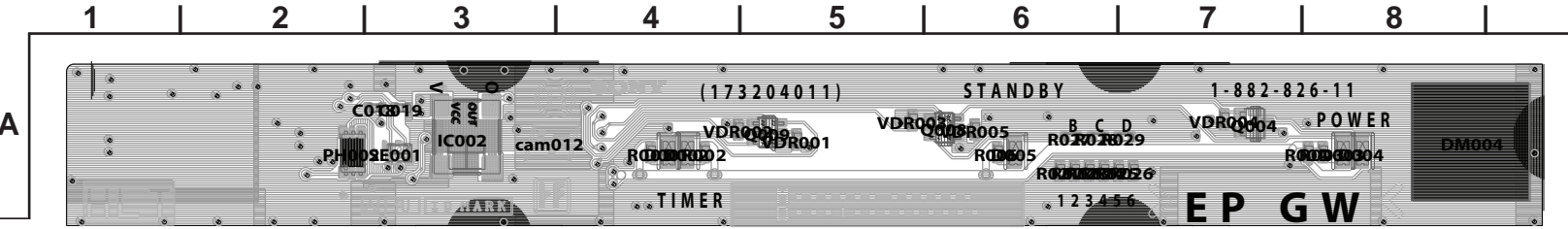
HLT

[IR/LED/SENSOR]
COMPONENT SIDE





HLT

[IR/LED/SENSOR]
CONDUCTOR SIDE




SECTION 2: ELECTRICAL PARTS LIST

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

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.



NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced.
See Appendix A: Encryption Key Components in the back of this manual.

BUHT

RESISTORS

- All resistors are in ohms
- F : nonflammable
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

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

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
<div>  <div>  A-1788-127-A BUHT BOARD, COMPLETE </div> </div> <p>NOTE: For BUHT Board replacement, please refer to section 2-2. Setting the Destination after Replacing the BUHT Board or LCD Panel Assembly in the Service Manual for these models.</p> <p>NOTE: Final software is not installed on this BUHT Board. Install the update after replacing this board using the instructions provided with the software.</p>							
CAPACITOR							
C1002	1-114-130-11	CERAMIC CHIP	1μF 10% 6.3V	C1099	1-114-813-11	CERAMIC CHIP	1μF 10% 16V
C1007	1-112-778-11	CERAMIC CHIP	0.022μF 10% 25V	C1100	1-100-905-11	CERAMIC CHIP	0.001μF 10% 50V
C1011	1-112-776-11	CERAMIC CHIP	0.0047μF 10% 50V	C1101	1-114-813-11	CERAMIC CHIP	1μF 10% 16V
C1017	1-112-775-11	CERAMIC CHIP	0.0022μF 10% 50V	C1102	1-164-866-11	CERAMIC CHIP	47pF 5% 50V
C1019	1-114-326-11	CERAMIC CHIP	0.22μF 10% 25V	C1110	1-100-905-11	CERAMIC CHIP	0.001μF 10% 50V
C1022	1-114-870-11	CERAMIC CHIP	4.7μF 10% 16V	C1111	1-100-905-11	CERAMIC CHIP	0.001μF 10% 50V
C1024	1-114-130-11	CERAMIC CHIP	1μF 10% 6.3V	C1112	1-100-905-11	CERAMIC CHIP	0.001μF 10% 50V
C1025	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V	C2100	1-114-365-11	CAP, CERAMIC	1000PF X7R (1410)
C1026	1-100-909-11	CERAMIC CHIP	10μF 10% 6.3V	C2104	1-112-781-11	CERAMIC CHIP	1μF 10% 10V
C1027	1-114-870-11	CERAMIC CHIP	4.7μF 10% 16V	C2105	1-112-781-11	CERAMIC CHIP	1μF 10% 10V
C1028	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V	C2200	1-100-909-11	CERAMIC CHIP	10μF 10% 6.3V
C1030	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V	C2201	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V
C1031	1-114-332-11	CERAMIC CHIP	22μF 10% 6.3V	C2208	1-114-130-11	CERAMIC CHIP	1μF 10% 6.3V
C1038	1-100-909-11	CERAMIC CHIP	10μF 10% 6.3V	C2210	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V
C1039	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V	C2211	1-114-130-11	CERAMIC CHIP	1μF 10% 6.3V
C1040	1-100-909-11	CERAMIC CHIP	10μF 10% 6.3V	C2216	1-114-130-11	CERAMIC CHIP	1μF 10% 6.3V
C1046	1-114-332-11	CERAMIC CHIP	22μF 10% 6.3V	C2217	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V
C1047	1-114-130-11	CERAMIC CHIP	1μF 10% 6.3V	C2218	1-114-130-11	CERAMIC CHIP	1μF 10% 6.3V
C1048	1-100-909-11	CERAMIC CHIP	10μF 10% 6.3V	C2220	1-114-130-11	CERAMIC CHIP	1μF 10% 6.3V
C1070	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V	C2224	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V
C1071	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V	C2226	1-114-130-11	CERAMIC CHIP	1μF 10% 6.3V
C1093	1-100-905-11	CERAMIC CHIP	0.001μF 10% 50V	C2227	1-114-130-11	CERAMIC CHIP	1μF 10% 6.3V
C1094	1-114-813-11	CERAMIC CHIP	1μF 10% 16V	C2228	1-114-130-11	CERAMIC CHIP	1μF 10% 6.3V
C1095	1-164-866-11	CERAMIC CHIP	47pF 5% 50V	C2300	1-114-365-11	CAP, CERAMIC	1000PF X7R (1410)
C1097	1-112-781-11	CERAMIC CHIP	1μF 10% 10V	C2302	1-112-781-11	CERAMIC CHIP	1μF 10% 10V
				C2303	1-112-781-11	CERAMIC CHIP	1μF 10% 10V
				C2304	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V
				C2307	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V
				C2406	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V
				C2407	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V
				C2408	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V
				C2409	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V
				C2412	1-164-874-11	CERAMIC CHIP	100pF 5% 50V
				C2415	1-100-916-11	CERAMIC CHIP	0.1μF 10% 16V
				C2417	1-100-909-11	CERAMIC CHIP	10μF 10% 6.3V

BUHT

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C2426	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V	C3722	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C2435	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V	C3723	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V
C2437	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C3725	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C2441	1-164-850-11	CERAMIC CHIP	10pF	0.50pF	50V	C3726	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V
C2442	1-164-850-11	CERAMIC CHIP	10pF	0.50pF	50V	C3728	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V
C2445	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C3729	1-114-553-11	CERAMIC CHIP	10μF	10%	16V
C2446	1-114-472-91	CERAMIC CHIP	0.001μF	10%	2KV	C3731	1-114-553-11	CERAMIC CHIP	10μF	10%	16V
C2447	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C3733	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V
C2560	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V	C3735	1-112-064-11	CERAMIC CHIP	2.2μF	10%	10V
C2561	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	C3738	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V
C2572	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	C3739	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V
C2573	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C3751	1-114-553-11	CERAMIC CHIP	10μF	10%	16V
C2617	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V	C3752	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V
C2618	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V	C3754	1-112-064-11	CERAMIC CHIP	2.2μF	10%	10V
C2620	1-164-874-11	CERAMIC CHIP	100pF	5%	50V	C3757	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V
C2622	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C3758	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V
C2900	1-114-365-11	CAP, CERAMIC	1000PF	X7R (1410)		C3760	1-114-553-11	CERAMIC CHIP	10μF	10%	16V
C2902	1-114-365-11	CAP, CERAMIC	1000PF	X7R (1410)		C3761	1-114-553-11	CERAMIC CHIP	10μF	10%	16V
C2906	1-114-813-11	CERAMIC CHIP	1μF	10%	16V	C3800	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C2907	1-114-813-11	CERAMIC CHIP	1μF	10%	16V	C3804	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C2919	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C3807	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C3002	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V	C3808	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C3009	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V	C3901	1-164-850-11	CERAMIC CHIP	10pF	0.50pF	50V
C3012	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V	C3902	1-164-850-11	CERAMIC CHIP	10pF	0.50pF	50V
C3016	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C4000	1-116-079-11	CERAMIC CHIP	10μF	10%	10V
C3017	1-114-331-11	CERAMIC CHIP	4.7μF	10%	10V	C4001	1-116-079-11	CERAMIC CHIP	10μF	10%	10V
C3700	1-116-400-11	CERAMIC CHIP	680pF	10%	50V	C4002	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V
C3701	1-116-400-11	CERAMIC CHIP	680pF	10%	50V	C4007	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V
C3702	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C4008	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V
C3703	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C4010	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V
C3704	1-114-870-11	CERAMIC CHIP	4.7μF	10%	16V	C4011	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V
C3707	1-114-553-11	CERAMIC CHIP	10μF	10%	16V	C4012	1-116-079-11	CERAMIC CHIP	10μF	10%	10V
C3708	1-114-553-11	CERAMIC CHIP	10μF	10%	16V	C4013	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C3709	1-114-553-11	CERAMIC CHIP	10μF	10%	16V	C4014	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V
C3711	1-114-869-11	CERAMIC CHIP	2.2μF	10%	6.3V	C4015	1-116-079-11	CERAMIC CHIP	10μF	10%	10V
C3712	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V	C4016	1-116-079-11	CERAMIC CHIP	10μF	10%	10V
C3713	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V	C4017	1-114-870-11	CERAMIC CHIP	4.7μF	10%	16V
C3714	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V	C4018	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C3715	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V	C4019	1-112-781-11	CERAMIC CHIP	1μF	10%	10V
C3716	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V	C4020	1-112-781-11	CERAMIC CHIP	1μF	10%	10V
C3717	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V	C4021	1-112-781-11	CERAMIC CHIP	1μF	10%	10V
C3718	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V	C4022	1-112-781-11	CERAMIC CHIP	1μF	10%	10V
C3719	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C4023	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C3720	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V	C4027	1-112-781-11	CERAMIC CHIP	1μF	10%	10V
C3721	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V	C4028	1-112-781-11	CERAMIC CHIP	1μF	10%	10V



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C4033	1-112-781-11	CERAMIC CHIP	1μF	10%	10V	C4318	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V
C4034	1-112-781-11	CERAMIC CHIP	1μF	10%	10V	C4323	1-114-329-11	CERAMIC CHIP	0.47μF	10%	50V
C4200	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V	C4324	1-114-329-11	CERAMIC CHIP	0.47μF	10%	50V
C4201	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C4325	1-112-776-11	CERAMIC CHIP	0.0047μF	10%	50V
C4203	1-114-870-11	CERAMIC CHIP	4.7μF	10%	16V	C4326	1-112-776-11	CERAMIC CHIP	0.0047μF	10%	50V
C4204	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C4327	1-112-775-11	CERAMIC CHIP	0.0022μF	10%	50V
C4205	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V	C4330	1-112-779-11	CERAMIC CHIP	0.047μF	10%	25V
C4207	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C4331	1-112-779-11	CERAMIC CHIP	0.047μF	10%	25V
C4208	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C4336	1-112-776-11	CERAMIC CHIP	0.0047μF	10%	50V
C4209	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C4337	1-112-776-11	CERAMIC CHIP	0.0047μF	10%	50V
C4211	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C4338	1-114-553-11	CERAMIC CHIP	10μF	10%	16V
C4212	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C4506	1-112-781-11	CERAMIC CHIP	1μF	10%	10V
C4213	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C4508	1-112-781-11	CERAMIC CHIP	1μF	10%	10V
C4214	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C4510	1-112-781-11	CERAMIC CHIP	1μF	10%	10V
C4216	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C4516	1-112-781-11	CERAMIC CHIP	1μF	10%	10V
C4217	1-114-813-11	CERAMIC CHIP	1μF	10%	16V	C4517	1-112-781-11	CERAMIC CHIP	1μF	10%	10V
C4218	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C4523	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4220	1-114-329-11	CERAMIC CHIP	0.47μF	10%	50V	C5004	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C4221	1-114-329-11	CERAMIC CHIP	0.47μF	10%	50V	C5009	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V
C4223	1-114-329-11	CERAMIC CHIP	0.47μF	10%	50V	C5011	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V
C4224	1-114-329-11	CERAMIC CHIP	0.47μF	10%	50V	C5013	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4225	1-112-776-11	CERAMIC CHIP	0.0047μF	10%	50V	C5014	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4226	1-112-776-11	CERAMIC CHIP	0.0047μF	10%	50V	C5015	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4227	1-112-775-11	CERAMIC CHIP	0.0022μF	10%	50V	C5018	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4228	1-114-813-11	CERAMIC CHIP	1μF	10%	16V	C5020	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4229	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C5023	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4230	1-112-779-11	CERAMIC CHIP	0.047μF	10%	25V	C5024	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4231	1-112-779-11	CERAMIC CHIP	0.047μF	10%	25V	C5029	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4234	1-112-776-11	CERAMIC CHIP	0.0047μF	10%	50V	C5030	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4235	1-112-776-11	CERAMIC CHIP	0.0047μF	10%	50V	C5032	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4236	1-112-776-11	CERAMIC CHIP	0.0047μF	10%	50V	C5036	1-164-850-11	CERAMIC CHIP	10pF	0.50pF	50V
C4237	1-112-776-11	CERAMIC CHIP	0.0047μF	10%	50V	C5037	1-164-852-11	CERAMIC CHIP	12pF	5%	50V
C4238	1-114-553-11	CERAMIC CHIP	10μF	10%	16V	C5038	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4239	1-114-553-11	CERAMIC CHIP	10μF	10%	16V	C5041	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V
C4300	1-114-332-11	CERAMIC CHIP	22μF	10%	6.3V	C5042	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C4301	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C5047	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C4303	1-114-870-11	CERAMIC CHIP	4.7μF	10%	16V	C5048	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V
C4304	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C5051	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4305	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V	C5056	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C4307	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C5061	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C4309	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C5504	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C4313	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C5527	1-135-366-11	ELECT CHIP	100μF	20%	16V
C4314	1-114-868-11	CERAMIC CHIP	0.1μF	10%	50V	C5528	1-135-366-11	ELECT CHIP	100μF	20%	16V
C4316	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C5529	1-135-366-11	ELECT CHIP	100μF	20%	16V
C4317	1-114-813-11	CERAMIC CHIP	1μF	10%	16V	C5530	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V

BUHT

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C5532	1-114-813-11	CERAMIC CHIP	1μF	10%	16V	C9457	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9002	1-164-845-11	CERAMIC CHIP	5pF	0.25pF	50V	C9458	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9004	1-164-845-11	CERAMIC CHIP	5pF	0.25pF	50V	C9459	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9010	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C9460	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9204	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	C9461	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C9205	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9462	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9206	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	C9463	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9207	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	C9464	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9208	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9465	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V
C9209	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	C9468	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9315	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V	C9469	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9400	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9471	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V
C9401	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9472	1-112-064-11	CERAMIC CHIP	2.2μF	10%	10V
C9403	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9474	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9404	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	C9475	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V
C9406	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9476	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C9407	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9478	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9408	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9479	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V
C9409	1-112-781-11	CERAMIC CHIP	1μF	10%	10V	C9480	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9410	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C9481	1-112-781-11	CERAMIC CHIP	1μF	10%	10V
C9411	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	C9483	1-112-781-11	CERAMIC CHIP	1μF	10%	10V
C9412	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9484	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V
C9413	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V	C9485	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9414	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	C9486	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V
C9415	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	C9502	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V
C9416	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V	C9503	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V
C9418	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9504	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9421	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9505	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9422	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9506	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9425	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9507	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C9426	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9508	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9429	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9509	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C9430	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9510	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C9433	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9511	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C9434	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V	C9512	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9437	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9513	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9440	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9514	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9442	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9515	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9444	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9516	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C9446	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9517	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C9448	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9518	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C9450	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9519	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9454	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C9520	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9455	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9521	1-164-862-11	CERAMIC CHIP	33pF	5%	50V
C9456	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V	C9522	1-164-862-11	CERAMIC CHIP	33pF	5%	50V

BUHT


REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C9523	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9814	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9524	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	C9820	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9525	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	C9821	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9526	1-164-862-11	CERAMIC CHIP	33pF	5%	50V	C9827	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9600	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9833	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9601	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9836	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9602	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9838	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9603	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9839	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9604	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9842	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9605	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9845	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9606	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9846	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9610	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9847	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9651	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C9848	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9653	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V	C9854	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V
C9657	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C9900	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C9659	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C9901	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C9660	1-112-779-11	CERAMIC CHIP	0.047μF	10%	25V	C9902	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9662	1-164-874-11	CERAMIC CHIP	100pF	5%	50V	C9903	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9663	1-164-878-11	CERAMIC CHIP	150pF	5%	50V	C9904	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V
C9664	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C9905	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9665	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9906	1-114-869-11	CERAMIC CHIP	2.2μF	10%	6.3V
C9666	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C9912	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9667	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	C9913	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9668	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C9916	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V
C9670	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	C9918	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V
C9671	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	CONNECTOR					
C9672	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	* CN2260	1-822-484-11	HDMI CONNECTOR			
C9673	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	* CN2261	1-822-484-11	HDMI CONNECTOR			
C9675	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	* CN2262	1-822-484-11	HDMI CONNECTOR			
C9676	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	* CN2263	1-822-484-11	HDMI CONNECTOR			
C9678	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	CN2300	1-842-372-11	D SUB CONNECTER			
C9679	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	CN2400	1-842-386-11	ETHERNET CONNECTOR (8P)			
C9681	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	CN2404	1-822-423-11	CONNECTOR, USB (A)			
C9683	1-114-130-11	CERAMIC CHIP	1μF	10%	6.3V	CN2600	1-822-583-11	HEADER ASSEMBLY FOR PWB			
C9693	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	CN2602	1-820-162-11	HEADER ASSEMBLY		30P	
C9694	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	CN2902	1-842-393-11	OPTICAL OUT CONNECTOR			
C9695	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V	CN3800	1-821-622-11	HEADER ASSEMBLY FOR PWB			
C9732	1-100-905-11	CERAMIC CHIP	0.001μF	10%	50V	* CN4300	1-819-462-11	HEADER ASSEMBLY FOR PWB			
C9733	1-112-777-11	CERAMIC CHIP	0.01μF	10%	25V	CN5501	1-842-325-11	CONNECTOR		4P	
C9800	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V	* CN5502	1-774-667-51	CONNECTOR, FFC/FPC		18P	
C9801	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V						
C9802	1-100-909-11	CERAMIC CHIP	10μF	10%	6.3V						
C9804	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V						
C9805	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V						
C9808	1-100-916-11	CERAMIC CHIP	0.1μF	10%	16V						


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

NOTE: Les composants identifiés par un trame et une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.


BUHT

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
DIODE				FILTER			
D1002	8-719-056-48	DIODE	1SS388(TPL3)	FL2200	1-234-939-21	FILTER, EMI REMOVAL (SMD)	
D1006	6-501-119-01	DIODE	RR264M-400	FL9651	1-234-939-21	FILTER, EMI REMOVAL (SMD)	
D2200	6-502-150-01	DIODE	MA2SD320G8S0	FL9658	1-234-939-21	FILTER, EMI REMOVAL (SMD)	
D2303	6-502-979-01	DIODE	DA4J104K0L	FL9900	1-234-939-21	FILTER, EMI REMOVAL (SMD)	
D5005	8-719-027-76	DIODE	1SS357-TPH3	IC			
FUSE				IC1002	6-710-880-01	IC	S-1132B33-U5T1G
F1003	1-576-406-31	FUSE	1.4A 32V	IC1006	6-709-510-01	IC	BH76106SHFV-TR
F1006	1-576-646-31	FUSE	0.5A 50V	IC1009	8-759-278-58	IC	NJM4558V-TE2
\triangle F4200	1-576-933-31	FUSE	5A 24V	IC1011	6-711-947-01	IC	MM1431CURE
F4300	1-576-933-31	FUSE	5A 24V	IC2300	6-710-820-01	IC	S-24CS02AFJ-TB-G
FERRITE BEAD				IC2301	6-708-132-01	IC	74LVC14APW
FB1001	1-481-199-21	FERRITE	0 μ H	IC2400	6-715-016-01	IC	KSZ8041RNLTR
FB1005	1-481-199-21	FERRITE	0 μ H	IC3000	8-753-289-76	IC	CXA2241Q-T4
FB1007	1-481-199-21	FERRITE	0 μ H	\triangle IC3700	6-713-863-01	IC	BD9540EFV-SE2
FB1010	1-481-199-21	FERRITE	0 μ H	\triangle IC3702	6-709-512-01	IC	S-1132B18-M5T1G
FB1011	1-481-517-11	FERRITE	0 μ H	IC3705	6-711-237-01	IC	NJM2878F3-33 (TE2)
FB1012	1-481-199-21	FERRITE	0 μ H	IC4502	6-715-214-01	IC	CS5343-CZZR
FB1013	1-400-693-21	FERRITE	0 μ H	IC4503	6-712-397-01	IC	74AHC1G08GW-125
FB1017	1-481-199-21	FERRITE	0 μ H	IC5000	6-713-820-11	IC	MB91F313APMC-G-ERE1
FB1018	1-481-199-21	FERRITE	0 μ H	IC5002	6-712-402-01	IC	74AHC1G32GW-125
FB2401	1-481-517-11	FERRITE	0 μ H	IC5003	6-709-512-01	IC	S-1132B18-M5T1G
FB2404	1-481-517-11	FERRITE	0 μ H	IC5008	6-704-573-01	IC	M24C32-WMN6T(B)
FB2407	1-481-517-11	FERRITE	0 μ H	IC5013	6-713-291-01	IC	MM3285CNRE
FB2602	1-481-517-11	FERRITE	0 μ H	IC9004	6-712-397-01	IC	74AHC1G08GW-125
FB4000	1-400-179-21	FERRITE	0 μ H	IC9200	6-713-835-01	IC	K9F1208U0C-PIB0T
FB4001	1-400-179-21	FERRITE	0 μ H	IC9201	6-713-835-01	IC	K9F1208U0C-PIB0T
FB4002	1-400-179-21	FERRITE	0 μ H	IC9400	6-713-838-01	IC	EDE1116AEBG-8E-F-TR
FB4200	1-400-834-21	FERRITE	0 μ H	IC9402	6-713-838-01	IC	EDE1116AEBG-8E-F-TR
\triangle FB4201	1-400-834-21	FERRITE	0 μ H	IC9403	6-713-838-01	IC	EDE1116AEBG-8E-F-TR
FB4202	1-400-834-21	FERRITE	0 μ H	JACK			
FB4300	1-400-834-21	FERRITE	0 μ H	J2100	1-842-370-11	PHONO JACK	5P
FB4301	1-400-834-21	FERRITE	0 μ H	J2300	1-842-392-11	JACK, MINIATURE (DIA. 3.5)	
FB4302	1-400-834-21	FERRITE	0 μ H	J2900	1-842-371-11	PHONO JACK	5P
FB4502	1-400-179-21	FERRITE	0 μ H	COIL			
FB9652	1-400-331-11	FERRITE	0 μ H	L1002	1-481-524-11	INDUCTOR	10 μ H
FB9653	1-400-331-11	FERRITE	0 μ H	L1004	1-457-725-21	INDUCTOR	4.7 μ H
FB9655	1-400-331-11	FERRITE	0 μ H	L2200	1-457-539-11	INDUCTOR	0 μ H
FB9656	1-400-331-11	FERRITE	0 μ H	L2201	1-457-539-11	INDUCTOR	0 μ H
FB9657	1-400-331-11	FERRITE	0 μ H	L2260	1-457-539-11	INDUCTOR	0 μ H
FB9800	1-481-466-11	FERRITE	0 μ H				

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

NOTE: Les composants identifiés par un trame et une  marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

BUHT

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
L2261	1-457-539-11	INDUCTOR	0μH	Q5011	6-552-436-01	TRANSISTOR	DRC5123J0L
L2262	1-457-539-11	INDUCTOR	0μH	Q5502	6-552-408-01	TRANSISTOR	DSC500100L
L2263	1-457-539-11	INDUCTOR	0μH	Q5504	6-551-551-01	TRANSISTOR	RT3N77M-TP-1
L2264	1-457-539-11	INDUCTOR	0μH	* Q5508	6-552-077-01	TRANSISTOR	RUE003N02TL
L2265	1-457-539-11	INDUCTOR	0μH	Q9303	6-552-430-01	TRANSISTOR	DRC5114E0L
L2266	1-457-539-11	INDUCTOR	0μH	Q9304	6-552-484-01	TRANSISTOR	RE1C002ZPFU7TL
L2267	1-457-539-11	INDUCTOR	0μH	Q9651	6-552-407-01	TRANSISTOR	DSA500100L
L2400	1-457-223-11	INDUCTOR	0μH	RESISTOR			
L2403	1-457-223-11	INDUCTOR	0μH	R1003	1-218-941-81	METAL CHIP	100 5% 1/16W
* L2560	1-457-685-11	INDUCTOR	0μH	R1004	1-218-937-11	METAL CHIP	47 5% 1/16W
* L2561	1-457-685-11	INDUCTOR	0μH	R1005	1-218-937-11	METAL CHIP	47 5% 1/16W
* L2562	1-457-685-11	INDUCTOR	0μH	R1006	1-218-965-11	METAL CHIP	10K 5% 1/16W
* L2563	1-457-685-11	INDUCTOR	0μH	R1012	1-218-941-81	METAL CHIP	100 5% 1/16W
* L2564	1-457-685-11	INDUCTOR	0μH	R1013	1-218-937-11	METAL CHIP	47 5% 1/16W
* L2565	1-457-685-11	INDUCTOR	0μH	R1014	1-218-937-11	METAL CHIP	47 5% 1/16W
L3000	1-469-557-21	INDUCTOR	22μH	R1015	1-218-937-11	METAL CHIP	47 5% 1/16W
L3700	1-457-730-11	INDUCTOR	2.2μH	R1017	1-218-961-11	METAL CHIP	4.7K 5% 1/16W
L3701	1-457-864-11	INDUCTOR	1μH	R1020	1-218-989-11	METAL CHIP	1M 5% 1/16W
L3702	1-457-873-11	INDUCTOR	4.7μH	R1022	1-218-959-11	METAL CHIP	3.3K 5% 1/16W
L3704	1-457-866-21	INDUCTOR	2.2μH	R1026	1-218-959-11	METAL CHIP	3.3K 5% 1/16W
L4200	1-457-899-11	INDUCTOR	15μH	R1027	1-218-959-11	METAL CHIP	3.3K 5% 1/16W
L4201	1-457-899-11	INDUCTOR	15μH	R1029	1-218-965-11	METAL CHIP	10K 5% 1/16W
L4202	1-457-899-11	INDUCTOR	15μH	R1030	1-218-989-11	METAL CHIP	1M 5% 1/16W
L4203	1-457-899-11	INDUCTOR	15μH	R1033	1-218-959-11	METAL CHIP	3.3K 5% 1/16W
L4301	1-457-899-11	INDUCTOR	15μH	R1041	1-218-958-11	METAL CHIP	2.7K 5% 1/16W
L4303	1-457-899-11	INDUCTOR	15μH	R1042	1-208-687-11	METAL CHIP	1.5K 0.50% 1/16W
L5501	1-457-875-11	INDUCTOR	22μH	R1048	1-218-977-11	METAL CHIP	100K 5% 1/16W
L9654	1-469-556-21	INDUCTOR	15μH	R1049	1-218-941-11	METAL CHIP	100 5% 1/16W
TRANSISTOR				R1050	1-218-935-11	METAL CHIP	33 5% 1/16W
Q1001	6-551-321-01	TRANSISTOR	RT3WLMM-TP-1F	R1051	1-208-675-11	METAL CHIP	470 0.50% 1/16W
Q2200	6-552-430-01	TRANSISTOR	DRC5114E0L	R1066	1-218-990-81	SHORT CHIP	
Q2201	6-552-408-01	TRANSISTOR	DSC500100L	R1067	1-218-990-81	SHORT CHIP	
Q3000	6-551-903-01	TRANSISTOR	RT3S02M-T111-1	R1084	1-218-941-81	METAL CHIP	100 5% 1/16W
Q3001	6-551-903-01	TRANSISTOR	RT3S02M-T111-1	R1085	1-218-961-11	METAL CHIP	4.7K 5% 1/16W
 Q3700	6-552-212-01	TRANSISTOR	MP6K61FPFTR	R1086	1-208-911-11	METAL CHIP	10K 0.50% 1/16W
Q3701	6-552-457-01	TRANSISTOR	RP1E100RNFPFTR	R1087	1-218-959-11	METAL CHIP	3.3K 5% 1/16W
Q3702	6-552-457-01	TRANSISTOR	RP1E100RNFPFTR	R1088	1-218-965-11	METAL CHIP	10K 5% 1/16W
Q3703	6-550-354-01	TRANSISTOR	RTQ035P02TR	R1089	1-218-961-11	METAL CHIP	4.7K 5% 1/16W
Q3704	6-552-430-01	TRANSISTOR	DRC5114E0L	R1091	1-218-977-11	METAL CHIP	100K 5% 1/16W
Q3800	6-551-690-01	TRANSISTOR	RT3N11M-TP-1	R1092	1-218-941-81	METAL CHIP	100 5% 1/16W
Q5003	6-552-431-01	TRANSISTOR	DRC5114T0L	R1096	1-218-990-81	SHORT CHIP	
Q5004	6-551-321-01	TRANSISTOR	RT3WLMM-TP-1F	R1110	1-218-957-11	METAL CHIP	2.2K 5% 1/16W
Q5005	6-552-430-01	TRANSISTOR	DRC5114E0L	R1112	1-218-965-11	METAL CHIP	10K 5% 1/16W
Q5008	6-552-411-01	TRANSISTOR	DRA5114T0L				

BUHT

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R1113	1-218-990-81	SHORT CHIP				R2594	1-218-990-81	SHORT CHIP			
R1114	1-218-990-81	SHORT CHIP				R2596	1-208-935-11	METAL CHIP	100K	0.50%	1/16W
R1118	1-208-711-11	METAL CHIP	15K	0.50%	1/16W	R2597	1-208-923-11	METAL CHIP	33K	0.50%	1/16W
R1119	1-218-965-11	METAL CHIP	10K	5%	1/16W	R2628	1-218-990-81	SHORT CHIP			
R2221	1-218-970-11	METAL CHIP	27K	5%	1/16W	R2631	1-218-945-11	METAL CHIP	220	5%	1/16W
R2230	1-218-929-11	METAL CHIP	10	5%	1/16W	R2635	1-218-965-11	METAL CHIP	10K	5%	1/16W
R2236	1-218-965-11	METAL CHIP	10K	5%	1/16W	R2900	1-218-990-81	SHORT CHIP			
R2243	1-218-945-11	METAL CHIP	220	5%	1/16W	R2901	1-218-990-81	SHORT CHIP			
R2244	1-208-859-81	METAL CHIP	68	0.50%	1/16W	R2915	1-211-990-11	METAL CHIP	75	0.50%	1/10W
R2260	1-218-929-11	METAL CHIP	10	5%	1/16W	R3005	1-218-941-81	METAL CHIP	100	5%	1/16W
R2261	1-218-929-11	METAL CHIP	10	5%	1/16W	R3007	1-208-905-11	METAL CHIP	5.6K	0.50%	1/16W
R2262	1-218-929-11	METAL CHIP	10	5%	1/16W	R3008	1-208-905-11	METAL CHIP	5.6K	0.50%	1/16W
R2269	1-218-929-11	METAL CHIP	10	5%	1/16W	R3009	1-208-711-11	METAL CHIP	15K	0.50%	1/16W
R2285	1-218-941-81	METAL CHIP	100	5%	1/16W	R3010	1-208-911-11	METAL CHIP	10K	0.50%	1/16W
R2286	1-218-941-81	METAL CHIP	100	5%	1/16W	R3700	1-218-965-11	METAL CHIP	10K	5%	1/16W
R2287	1-218-941-81	METAL CHIP	100	5%	1/16W	R3701	1-208-943-11	METAL CHIP	220K	0.50%	1/16W
R2288	1-218-941-81	METAL CHIP	100	5%	1/16W	R3702	1-208-709-11	METAL CHIP	12K	0.50%	1/16W
R2300	1-218-953-11	METAL CHIP	1K	5%	1/16W	R3703	1-208-695-11	METAL CHIP	3.3K	0.50%	1/16W
R2301	1-218-977-11	METAL CHIP	100K	5%	1/16W	R3704	1-208-699-11	METAL CHIP	4.7K	0.50%	1/16W
R2405	1-245-567-81	METAL CHIP	49.9	0.50%	1/16W	R3705	1-208-911-11	METAL CHIP	10K	0.50%	1/16W
R2407	1-245-567-81	METAL CHIP	49.9	0.50%	1/16W	R3706	1-218-977-11	METAL CHIP	100K	5%	1/16W
R2410	1-218-953-11	METAL CHIP	1K	5%	1/16W	R3707	1-218-973-11	METAL CHIP	47K	5%	1/16W
R2411	1-218-937-11	METAL CHIP	47	5%	1/16W	R3713	1-218-961-11	METAL CHIP	4.7K	5%	1/16W
R2413	1-250-271-81	METAL CHIP	6.49K	0.50%	1/16W	R3714	1-218-953-11	METAL CHIP	1K	5%	1/16W
R2415	1-218-947-11	METAL CHIP	330	5%	1/16W	R3719	1-208-715-11	METAL CHIP	22K	0.50%	1/16W
R2418	1-218-961-11	METAL CHIP	4.7K	5%	1/16W	R3721	1-208-871-81	METAL CHIP	220	0.50%	1/16W
R2419	1-245-567-81	METAL CHIP	49.9	0.50%	1/16W	R3722	1-208-931-11	METAL CHIP	68K	0.50%	1/16W
R2420	1-216-864-11	SHORT CHIP				R3723	1-208-905-11	METAL CHIP	5.6K	0.50%	1/16W
R2421	1-245-567-81	METAL CHIP	49.9	0.50%	1/16W	R3727	1-208-923-11	METAL CHIP	33K	0.50%	1/16W
R2423	1-218-970-11	METAL CHIP	27K	5%	1/16W	R3728	1-208-683-11	METAL CHIP	1K	0.50%	1/16W
R2425	1-218-961-11	METAL CHIP	4.7K	5%	1/16W	R3740	1-218-973-11	METAL CHIP	47K	5%	1/16W
R2431	1-218-967-11	METAL CHIP	15K	5%	1/16W	R3741	1-208-695-11	METAL CHIP	3.3K	0.50%	1/16W
R2432	1-218-967-11	METAL CHIP	15K	5%	1/16W	R3742	1-208-699-11	METAL CHIP	4.7K	0.50%	1/16W
R2439	1-218-967-11	METAL CHIP	15K	5%	1/16W	R3808	1-218-977-11	METAL CHIP	100K	5%	1/16W
R2440	1-218-967-11	METAL CHIP	15K	5%	1/16W	R3902	1-218-990-81	SHORT CHIP			
R2504	1-218-973-11	METAL CHIP	47K	5%	1/16W	R4002	1-218-969-11	METAL CHIP	22K	5%	1/16W
R2505	1-218-953-11	METAL CHIP	1K	5%	1/16W	R4201	1-208-713-11	METAL CHIP	18K	0.50%	1/16W
R2507	1-218-965-11	METAL CHIP	10K	5%	1/16W	R4202	1-218-953-11	METAL CHIP	1K	5%	1/16W
R2508	1-218-965-11	METAL CHIP	10K	5%	1/16W	R4205	1-218-949-11	METAL CHIP	470	5%	1/16W
R2560	1-218-965-11	METAL CHIP	10K	5%	1/16W	R4206	1-218-949-11	METAL CHIP	470	5%	1/16W
R2561	1-218-973-11	METAL CHIP	47K	5%	1/16W	R4207	1-218-969-11	METAL CHIP	22K	5%	1/16W
R2567	1-218-965-11	METAL CHIP	10K	5%	1/16W	R4212	1-218-965-11	METAL CHIP	10K	5%	1/16W
R2568	1-218-965-11	METAL CHIP	10K	5%	1/16W	R4301	1-208-713-11	METAL CHIP	18K	0.50%	1/16W
R2573	1-218-990-81	SHORT CHIP				R4302	1-218-953-11	METAL CHIP	1K	5%	1/16W
R2574	1-218-965-11	METAL CHIP	10K	5%	1/16W	R4305	1-218-949-11	METAL CHIP	470	5%	1/16W

BUHT

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R4306	1-218-949-11	METAL CHIP	470	5%	1/16W	R5507	1-208-911-11	METAL CHIP	10K	0.50%	1/16W
R4307	1-218-969-11	METAL CHIP	22K	5%	1/16W	R5508	1-208-699-11	METAL CHIP	4.7K	0.50%	1/16W
R4312	1-218-965-11	METAL CHIP	10K	5%	1/16W	R5512	1-218-941-81	METAL CHIP	100	5%	1/16W
R4500	1-218-965-11	METAL CHIP	10K	5%	1/16W	R5513	1-218-941-81	METAL CHIP	100	5%	1/16W
R4505	1-208-923-11	METAL CHIP	33K	0.50%	1/16W	R5524	1-218-983-11	METAL CHIP	330K	5%	1/16W
R4506	1-208-923-11	METAL CHIP	33K	0.50%	1/16W	R5532	1-218-941-81	METAL CHIP	100	5%	1/16W
R5003	1-208-931-11	METAL CHIP	68K	0.50%	1/16W	R5543	1-218-963-11	METAL CHIP	6.8K	5%	1/16W
R5004	1-208-703-11	METAL CHIP	6.8K	0.50%	1/16W	R5544	1-218-959-11	METAL CHIP	3.3K	5%	1/16W
R5007	1-208-711-11	METAL CHIP	15K	0.50%	1/16W	R5545	1-218-979-11	METAL CHIP	150K	5%	1/16W
R5009	1-218-977-11	METAL CHIP	100K	5%	1/16W	R5550	1-218-971-11	METAL CHIP	33K	5%	1/16W
R5010	1-218-973-11	METAL CHIP	47K	5%	1/16W	R5552	1-218-979-11	METAL CHIP	150K	5%	1/16W
R5016	1-218-965-11	METAL CHIP	10K	5%	1/16W	R5554	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5019	1-218-965-11	METAL CHIP	10K	5%	1/16W	R5556	1-218-983-11	METAL CHIP	330K	5%	1/16W
R5020	1-218-941-81	METAL CHIP	100	5%	1/16W	R5557	1-218-935-11	METAL CHIP	33	5%	1/16W
R5021	1-218-949-11	METAL CHIP	470	5%	1/16W	R5559	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5025	1-218-937-11	METAL CHIP	47	5%	1/16W	R9005	1-218-941-81	METAL CHIP	100	5%	1/16W
R5030	1-218-965-11	METAL CHIP	10K	5%	1/16W	R9008	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5031	1-218-953-11	METAL CHIP	1K	5%	1/16W	R9014	1-218-945-11	METAL CHIP	220	5%	1/16W
R5033	1-208-923-11	METAL CHIP	33K	0.50%	1/16W	R9016	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5035	1-245-604-11	METAL CHIP	10M	5%	1/16W	R9017	1-218-937-11	METAL CHIP	47	5%	1/16W
R5037	1-218-953-11	METAL CHIP	1K	5%	1/16W	R9020	1-208-859-81	METAL CHIP	68	0.50%	1/16W
R5039	1-208-943-11	METAL CHIP	220K	0.50%	1/16W	R9026	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5050	1-208-927-11	METAL CHIP	47K	0.50%	1/16W	R9035	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5052	1-208-691-11	METAL CHIP	2.2K	0.50%	1/16W	R9053	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5054	1-218-965-11	METAL CHIP	10K	5%	1/16W	R9054	1-218-937-11	METAL CHIP	47	5%	1/16W
R5058	1-218-953-11	METAL CHIP	1K	5%	1/16W	R9055	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5063	1-218-965-11	METAL CHIP	10K	5%	1/16W	R9112	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5067	1-218-953-11	METAL CHIP	1K	5%	1/16W	R9200	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5072	1-218-990-81	SHORT CHIP				R9201	1-218-953-11	METAL CHIP	1K	5%	1/16W
R5073	1-218-990-81	SHORT CHIP				R9203	1-218-941-81	METAL CHIP	100	5%	1/16W
R5079	1-218-965-11	METAL CHIP	10K	5%	1/16W	R9211	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5080	1-218-969-11	METAL CHIP	22K	5%	1/16W	R9216	1-218-937-11	METAL CHIP	47	5%	1/16W
R5115	1-208-699-11	METAL CHIP	4.7K	0.50%	1/16W	R9230	1-218-949-11	METAL CHIP	470	5%	1/16W
R5118	1-208-663-11	METAL CHIP	150	0.50%	1/16W	R9231	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5119	1-208-663-11	METAL CHIP	150	0.50%	1/16W	R9270	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5120	1-208-905-11	METAL CHIP	5.6K	0.50%	1/16W	R9284	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5123	1-208-663-11	METAL CHIP	150	0.50%	1/16W	R9286	1-218-937-11	METAL CHIP	47	5%	1/16W
R5124	1-208-663-11	METAL CHIP	150	0.50%	1/16W	R9301	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5126	1-218-965-11	METAL CHIP	10K	5%	1/16W	R9327	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5131	1-218-941-81	METAL CHIP	100	5%	1/16W	R9333	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5133	1-208-663-11	METAL CHIP	150	0.50%	1/16W	R9334	1-218-953-11	METAL CHIP	1K	5%	1/16W
R5134	1-208-663-11	METAL CHIP	150	0.50%	1/16W	R9341	1-218-990-81	SHORT CHIP			
R5500	1-216-864-11	SHORT CHIP			NX810/NX811	R9348	1-218-965-11	METAL CHIP	10K	5%	1/16W
R5501	1-218-959-11	METAL CHIP	3.3K	5%	1/16W	R9349	1-218-965-11	METAL CHIP	10K	5%	1/16W
* R5503	1-248-336-11	RES-CHIP	0.1	1%	1/3W	R9352	1-218-965-11	METAL CHIP	10K	5%	1/16W

BUHT

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9353	1-218-973-11	METAL CHIP	47K	5%	1/16W	R9630	1-218-990-81	SHORT CHIP			
R9400	1-208-911-11	METAL CHIP	10K	0.50%	1/16W	R9651	1-218-941-81	METAL CHIP	100	5%	1/16W
R9401	1-208-911-11	METAL CHIP	10K	0.50%	1/16W	R9652	1-218-945-11	METAL CHIP	220	5%	1/16W
R9403	1-208-663-11	METAL CHIP	150	0.50%	1/16W	R9653	1-218-947-11	METAL CHIP	330	5%	1/16W
R9404	1-208-663-11	METAL CHIP	150	0.50%	1/16W	R9654	1-208-883-81	METAL CHIP	680	0.50%	1/16W
R9405	1-218-935-11	METAL CHIP	33	5%	1/16W	R9655	1-208-683-11	METAL CHIP	1K	0.50%	1/16W
R9406	1-218-935-11	METAL CHIP	33	5%	1/16W	R9656	1-208-687-11	METAL CHIP	1.5K	0.50%	1/16W
R9407	1-218-943-11	METAL CHIP	150	5%	1/16W	R9730	1-220-884-11	METAL CHIP	39	0.50%	1/16W
R9408	1-208-911-11	METAL CHIP	10K	0.50%	1/16W	R9731	1-220-884-11	METAL CHIP	39	0.50%	1/16W
R9409	1-208-911-11	METAL CHIP	10K	0.50%	1/16W	R9732	1-208-688-11	METAL CHIP	1.6K	0.50%	1/16W
R9410	1-208-911-11	METAL CHIP	10K	0.50%	1/16W	R9733	1-220-884-11	METAL CHIP	39	0.50%	1/16W
R9411	1-208-911-11	METAL CHIP	10K	0.50%	1/16W	R9734	1-220-884-11	METAL CHIP	39	0.50%	1/16W
R9421	1-218-935-11	METAL CHIP	33	5%	1/16W	R9736	1-216-864-11	SHORT CHIP			
R9422	1-218-929-11	METAL CHIP	10	5%	1/16W	R9737	1-216-864-11	SHORT CHIP			
R9427	1-208-663-11	METAL CHIP	150	0.50%	1/16W	R9900	1-208-893-11	METAL CHIP	1.8K	0.50%	1/16W
R9428	1-208-663-11	METAL CHIP	150	0.50%	1/16W	R9901	1-208-635-11	METAL CHIP	10	0.50%	1/16W
R9429	1-208-911-11	METAL CHIP	10K	0.50%	1/16W	R9907	1-208-635-11	METAL CHIP	10	0.50%	1/16W
R9430	1-208-911-11	METAL CHIP	10K	0.50%	1/16W	R9908	1-208-671-11	METAL CHIP	330	0.50%	1/16W
R9431	1-208-911-11	METAL CHIP	10K	0.50%	1/16W	R9909	1-208-671-11	METAL CHIP	330	0.50%	1/16W
R9432	1-208-911-11	METAL CHIP	10K	0.50%	1/16W	R9910	1-208-671-11	METAL CHIP	330	0.50%	1/16W
R9433	1-218-933-11	METAL CHIP	22	5%	1/16W	R9911	1-208-671-11	METAL CHIP	330	0.50%	1/16W
R9434	1-218-933-11	METAL CHIP	22	5%	1/16W	R9912	1-208-671-11	METAL CHIP	330	0.50%	1/16W
R9435	1-218-933-11	METAL CHIP	22	5%	1/16W	R9913	1-208-671-11	METAL CHIP	330	0.50%	1/16W
R9436	1-218-933-11	METAL CHIP	22	5%	1/16W	R9914	1-208-671-11	METAL CHIP	330	0.50%	1/16W
R9437	1-218-933-11	METAL CHIP	22	5%	1/16W	R9915	1-208-671-11	METAL CHIP	330	0.50%	1/16W
R9438	1-218-933-11	METAL CHIP	22	5%	1/16W	RESISTOR BRIDGE					
R9601	1-208-635-11	METAL CHIP	10	0.50%	1/16W	RB1000	1-234-710-21	RES, CHIP NETWORK 47X8 (3816)			
R9602	1-218-823-11	METAL CHIP	100	0.50%	1/10W	RB2100	1-234-384-11	RES, NETWORK 1M (1005X4)			
R9603	1-218-829-11	METAL CHIP	180	0.50%	1/10W	RB2101	1-234-375-21	RES, NETWORK 1K (1005X4)			
R9604	1-208-635-11	METAL CHIP	10	0.50%	1/16W	RB2200	1-234-377-21	RES, NETWORK 4.7K (1005X4)			
R9605	1-218-823-11	METAL CHIP	100	0.50%	1/10W	RB2201	1-234-381-11	RES, NETWORK 100K (1005X4)			
R9606	1-218-829-11	METAL CHIP	180	0.50%	1/10W	RB2202	1-234-375-21	RES, NETWORK 1K (1005X4)			
R9607	1-208-635-11	METAL CHIP	10	0.50%	1/16W	RB2260	1-234-380-21	RES, NETWORK 47K (1005X4)			
R9608	1-218-823-11	METAL CHIP	100	0.50%	1/10W	RB2261	1-234-380-21	RES, NETWORK 47K (1005X4)			
R9609	1-218-829-11	METAL CHIP	180	0.50%	1/10W	RB2262	1-234-380-21	RES, NETWORK 47K (1005X4)			
R9610	1-208-643-11	METAL CHIP	22	0.50%	1/16W	RB2263	1-234-380-21	RES, NETWORK 47K (1005X4)			
R9611	1-211-990-11	METAL CHIP	75	0.50%	1/10W	RB2265	1-234-378-21	RES, NETWORK 10K (1005X4)			
R9612	1-218-829-11	METAL CHIP	180	0.50%	1/10W	RB2300	1-234-384-11	RES, NETWORK 1M (1005X4)			
R9613	1-208-635-11	METAL CHIP	10	0.50%	1/16W	RB2302	1-234-376-11	RES, NETWORK 2.2K (1005X4)			
R9614	1-218-823-11	METAL CHIP	100	0.50%	1/10W	RB2303	1-234-371-21	RES, NETWORK 47 (1005X4)			
R9615	1-218-829-11	METAL CHIP	180	0.50%	1/10W	RB2304	1-234-370-21	RES, NETWORK 22 (1005X4)			
R9616	1-208-635-11	METAL CHIP	10	0.50%	1/16W						
R9617	1-218-823-11	METAL CHIP	100	0.50%	1/10W						
R9618	1-218-829-11	METAL CHIP	180	0.50%	1/10W						
R9628	1-218-990-81	SHORT CHIP									

BUHT

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
RB2305	1-234-375-21	RES, NETWORK 1K	(1005X4)	RB5043	1-234-785-21	RES, CHIP NETWORK 100X8(3816)	
RB2306	1-234-371-21	RES, NETWORK 47	(1005X4)	RB5044	1-234-372-11	RES, NETWORK 100	(1005X4)
RB2400	1-234-371-21	RES, NETWORK 47	(1005X4)	RB5045	1-234-372-11	RES, NETWORK 100	(1005X4)
RB2402	1-234-375-21	RES, NETWORK 1K	(1005X4)	RB9004	1-234-376-11	RES, NETWORK 2.2K	(1005X4)
RB2403	1-234-372-11	RES, NETWORK 100	(1005X4)	RB9005	1-234-376-11	RES, NETWORK 2.2K	(1005X4)
RB2404	1-234-375-21	RES, NETWORK 1K	(1005X4)	RB9006	1-234-371-21	RES, NETWORK 47	(1005X4)
RB2405	1-234-373-21	RES, NETWORK 220	(1005X4)	RB9007	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB2406	1-234-373-21	RES, NETWORK 220	(1005X4)	RB9008	1-234-371-21	RES, NETWORK 47	(1005X4)
RB2407	1-234-378-21	RES, NETWORK 10K	(1005X4)	RB9009	1-234-378-21	RES, NETWORK 10K	(1005X4)
* RB2408	1-234-723-21	RES, NETWORK 75	(1005X4)	RB9011	1-234-371-21	RES, NETWORK 47	(1005X4)
RB2569	1-234-710-21	RES, CHIP NETWORK 47X8 (3816)		RB9012	1-234-376-11	RES, NETWORK 2.2K	(1005X4)
RB2570	1-234-371-21	RES, NETWORK 47	(1005X4)	RB9013	1-234-371-21	RES, NETWORK 47	(1005X4)
RB2605	1-234-378-21	RES, NETWORK 10K	(1005X4)	RB9014	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB2614	1-234-378-21	RES, NETWORK 10K	(1005X4)	RB9015	1-234-378-21	RES, NETWORK 10K	(1005X4)
* RB2902	1-234-384-11	RES, NETWORK 1M	(1005X4)	RB9016	1-234-371-21	RES, NETWORK 47	(1005X4)
* RB2903	1-234-384-11	RES, NETWORK 1M	(1005X4)	RB9100	1-234-799-21	RES, CHIP NETWORK 10KX8 (3816)	
RB2904	1-234-375-21	RES, NETWORK 1K	(1005X4)	RB9101	1-234-799-21	RES, CHIP NETWORK 10KX8 (3816)	
RB3001	1-234-372-11	RES, NETWORK 100	(1005X4)	RB9102	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB3003	1-234-372-11	RES, NETWORK 100	(1005X4)	RB9103	1-234-372-11	RES, NETWORK 100	(1005X4)
RB3800	1-234-378-21	RES, NETWORK 10K	(1005X4)	RB9104	1-234-372-11	RES, NETWORK 100	(1005X4)
RB3900	1-234-378-21	RES, NETWORK 10K	(1005X4)	RB9105	1-234-372-11	RES, NETWORK 100	(1005X4)
RB4001	1-234-381-11	RES, NETWORK 100K	(1005X4)	RB9111	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB4002	1-234-381-11	RES, NETWORK 100K	(1005X4)	RB9112	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB4008	1-234-374-21	RES, NETWORK 470	(1005X4)	RB9113	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB4507	1-234-371-21	RES, NETWORK 47	(1005X4)	RB9201	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB4509	1-234-371-21	RES, NETWORK 47	(1005X4)	RB9202	1-234-371-21	RES, NETWORK 47	(1005X4)
RB4510	1-234-710-21	RES, CHIP NETWORK 47X8 (3816)		RB9203	1-234-371-21	RES, NETWORK 47	(1005X4)
RB4511	1-234-378-21	RES, NETWORK 10K	(1005X4)	RB9204	1-234-371-21	RES, NETWORK 47	(1005X4)
RB4517	1-234-371-21	RES, NETWORK 47	(1005X4)	RB9205	1-234-710-21	RES, CHIP NETWORK 47X8 (3816)	
RB5000	1-234-378-21	RES, NETWORK 10K	(1005X4)	RB9206	1-234-710-21	RES, CHIP NETWORK 47X8 (3816)	
RB5001	1-234-376-11	RES, NETWORK 2.2K	(1005X4)	RB9207	1-234-710-21	RES, CHIP NETWORK 47X8 (3816)	
RB5002	1-234-376-11	RES, NETWORK 2.2K	(1005X4)	RB9208	1-234-710-21	RES, CHIP NETWORK 47X8 (3816)	
RB5007	1-234-372-11	RES, NETWORK 100	(1005X4)	RB9210	1-234-371-21	RES, NETWORK 47	(1005X4)
RB5009	1-234-710-21	RES, CHIP NETWORK 47X8 (3816)		RB9211	1-234-371-21	RES, NETWORK 47	(1005X4)
RB5013	1-234-372-11	RES, NETWORK 100	(1005X4)	RB9212	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB5017	1-234-372-11	RES, NETWORK 100	(1005X4)	RB9213	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB5021	1-234-372-11	RES, NETWORK 100	(1005X4)	RB9214	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB5024	1-234-372-11	RES, NETWORK 100	(1005X4)	RB9215	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB5025	1-234-375-21	RES, NETWORK 1K	(1005X4)	RB9216	1-234-370-21	RES, NETWORK 22	(1005X4)
RB5027	1-234-378-21	RES, NETWORK 10K	(1005X4)	RB9217	1-234-370-21	RES, NETWORK 22	(1005X4)
RB5029	1-234-400-21	CONDUCTOR, NETWORK	(1005X4)	RB9220	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB5036	1-234-378-21	RES, NETWORK 10K	(1005X4)	RB9221	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB5039	1-234-378-21	RES, NETWORK 10K	(1005X4)	RB9223	1-234-378-21	RES, NETWORK 10K	(1005X4)
RB5041	1-234-785-21	RES, CHIP NETWORK 100X8(3816)		RB9224	1-234-370-21	RES, NETWORK 22	(1005X4)
RB5042	1-234-372-11	RES, NETWORK 100	(1005X4)	RB9225	1-234-370-21	RES, NETWORK 22	(1005X4)

KDL-46NX810/55NX810/55NX811/60NX810




G9B G10 G11 HLT

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
G9B				RESISTOR			
	1-474-257-11	G9B (POWER) BOARD, COMPLETE (KDL-46NX810/55NX810/55NX811 ONLY)		R001	1-220-179-11	METAL CHIP	510 5% 1/16W
		Component level repair information is not available.		R002	1-208-889-11	METAL CHIP	1.2K 0.50% 1/16W
G10				R003	1-220-179-11	METAL CHIP	510 5% 1/16W
	1-474-254-11	G10 (POWER) BOARD, COMPLETE (KDL-60NX810 ONLY)		R006	1-208-691-11	METAL CHIP	2.2K 0.50% 1/16W
		Component level repair information is not available.		R008	1-218-941-81	METAL CHIP	100 5% 1/16W
G11				R010	1-218-955-11	METAL CHIP	1.5K 5% 1/16W
	1-474-255-11	G11 (POWER) BOARD, COMPLETE (KDL-60NX810 ONLY)		R011	1-218-937-11	METAL CHIP	47 5% 1/16W
		Component level repair information is not available.		R014	1-220-214-11	METAL CHIP	430K 5% 1/16W
HLT				R015	1-218-965-11	METAL CHIP	10K 5% 1/16W
	A-1782-538-A	HLT(STD) BOARD, MOUNTED		R016	1-218-971-11	METAL CHIP	33K 5% 1/16W
				R018	1-218-953-11	METAL CHIP	1K 5% 1/16W
		CAPACITOR					
C002	1-112-068-11	CERAMIC CHIP	220pF 10% 50V				
C004	1-100-909-11	CERAMIC CHIP	10μF 10% 6.3V				
C008	1-114-130-11	CERAMIC CHIP	1μF 10% 6.3V				
		CONNECTOR					
CN001	1-821-139-11	HEADER ASSEMBLY FOR PWB					
		DIODE					
D001	6-503-064-01	DIODE	LNJ337W830S0				
D002	6-503-082-01	DIODE	LNJ437W840S0				
D003	6-503-064-01	DIODE	LNJ337W830S0				
D005	6-503-068-01	DIODE	LNJ837W830S0				
		PHOTO COUPLER					
PH002	6-600-680-01	PHOTO DIODE	BH1690FVC-TR				
		TRANSISTOR					
Q007	6-552-407-01	TRANSISTOR	DSA500100L				
Q008	6-551-690-01	TRANSISTOR	RT3N11M-TP-1				
Q009	6-551-690-01	TRANSISTOR	RT3N11M-TP-1				

APPENDIX A: ENCRYPTION KEY COMPONENTS

Encryption key components developed by Sony Corporation contain confidential information, and shall be handled under the non-disclosure obligations provided in the applicable agreement with Sony Corporation (and/or its subsidiary).

As part of this agreement specific instructions must be adhered to whenever a Circuit Board containing encryption key components is repaired and/or replaced pursuant to the following:

- 1) In the service manual the Circuit Board(s) containing encryption key components shall be identified with a **red outline and a .**
- 2) Only repair boards or components listed in the service manual shall be utilized for replacement and/or repair.
- 3) Disassembly, decryption, or reverse-engineering component(s) is strictly prohibited.
- 4) Any board in which the Servicer replaces an encryption key component must be placed back into the set it originally came from and the replaced defective component **MUST BE DESTROYED**. Boards cannot be swapped.
- 5) If a Circuit Board identified with a **red outline and a .** in the service manual is deemed to be defective:
 - a) and if a core charge is imposed and is covered under the product warranty, the defective un-repaired or modified board **MUST BE RETURNED** to Sony.
 - b) and if the core charge is **NOT** covered under the product warranty, the defective un-repaired or modified board **MUST BE DESTROYED**.
- 6) If a unit is destroyed (such as field scrap), the Circuit Board identified with a **red outline and a .** in the service manual **MUST BE DESTROYED**.

SONY® is a trademark of Sony Electronics

Reproduction in whole or part without written permission is prohibited. All rights reserved

Sony Corporation
 Sony Technology Center
 Technical Services
 Service Publication Department

English
 2010HJ74WEB-1
 Printed in USA
 © 2010.8

PRINTING THE ELECTRONIC DOCUMENT

The PDF of this service manual is not designed to be printed from cover to cover. The pages vary in size, and must therefore be printed in sections based on page dimensions.

NON-SCHEMATIC PAGES

Data that does NOT INCLUDE schematic diagrams are formatted to 8.5 x 11 inches and can be printed on standard letter-size and/or A4-sized paper.

SCHEMATIC DIAGRAMS

The schematic diagram pages are provided in two ways, full size and tiled. The full-sized schematic diagrams are formatted on paper sizes between 8.5" x 11" and 18" x 30" depending upon each individual diagram size. Those diagrams that are LARGER than 11" x 17" in full-size mode have been tiled for your convenience and can be printed on standard 11" x 17" (tabloid-size) paper, and reassembled.

TO PRINT FULL SIZE SCHEMATIC DIAGRAMS


If you have access to a large paper plotter or printer capable of outputting the full-sized diagrams, output as follows:

- 1) Note the page size(s) of the schematics you want to output as indicated in the middle window at the bottom of the viewing screen.
- 2) Go to the File menu and select Print Set-up. Choose the printer name and driver for your large format printer. Confirm that the printer settings are set to output the indicated page size or larger.
- 3) Close the Print Set Up screen and return to the File menu. Select "Print..." Input the page number of the schematic(s) you want to print in the print range window. Choose OK.

TO PRINT TILED VERSION OF SCHEMATICS



Schematic pages that are larger than 11" x 17" full-size are provided in a 11" x 17" printable tiled format near the end of the document. These can be printed to tabloid-sized paper and assembled to full-size for easy viewing.


If you have access to a printer capable of outputting the tabloid size (11" x 17") paper, then output the tiled version of the diagram as follows:


- 1) Note the page number(s) of the schematics you want to output as indicated in the middle window at the bottom of the viewing screen.
- 2) Go to the File menu and select Print Set-up. Choose the printer name and driver for your printer. Confirm that the plotter settings are set to output 11" x 17", or tabloid size paper in landscape () mode.
- 3) Close the Print Set Up screen and return to the File menu. Select "Print..." Input the page number of the schematic(s) you want to print in the print range window. Choose OK.


TO PRINT SPECIFIC SECTIONS OF A SCHEMATIC


To print just a particular section of a PDF, rather than a full page, access the Graphics Select tool in the Acrobat Reader tool bar.

- 1) To view the Graphics Select Tool, press and HOLD the mouse button over the Text Select Tool which looks like: . This tool will expand to reveal to additional tools. Choose the Graphics Select tool by placing the cursor over the button on of the far right that looks like: .
- 2) After selecting the Graphics Select Tool, place your cursor in the document window and the cursor will change to a plus (+) symbol. Click and drag the cursor over the area you want to print. When you release the mouse button, a marquee (or dotted lined box) will be displayed outlining the area you selected.
- 3) With the marquee in place, go to the file menu and select the "Print..." option. When the print window appears, choose the option under the section called "Print Range" which says "Selected Graphic".

Select OK and the output will print only the area that you outlined with the marquee. 

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

NOTE: Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

NOTE: The components identified by a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. See information on the last page of this manual.

If the replacement LCD panel for a specified serial number range is No Longer Available (NLA), the panel from another serial number range may be used as a replacement provided the additional parts listed in this document are also replaced.

AZ1H - Chassis

KDL46NX810

<u>Starting Serial #</u>	<u>Ending Serial #</u>	<u>Destination</u>
5,000,001	5,500,000	CND
5,500,001	5,600,000	US

REF #	Part Number	Description
103	419929001	* LABEL, SIDE JACK (L)
102	419930201	* LABEL, TERMINAL (FOR US)
101-A	A1788402A	LCD PANEL ASSY (S46TQL-S) (1st Production Run) - T-MOD (S46TQL-S)
101-B	A1803085A	LCD PANEL ASSY (S46TQL-S) (2nd Production Run) - T-MOD (S46TQL-S)
ADJ	NA	* SERVICE ADJUSTMENTS REQUIRED
SFT	NA	* SOFTWARE UPDATE REQUIRED

Ref # 101-A assembly includes

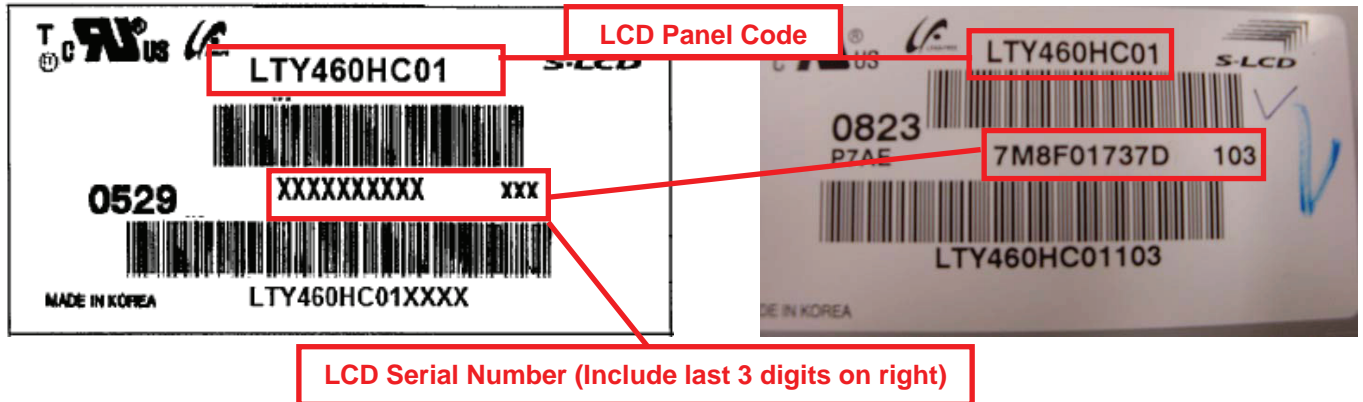
REF #	Part Number	Description
CONV	185784711	(CONVERTER) LED DRIVER BOARD
TCON	CrossRef	TCON - Order using Panel Cross Reference

Ref # 101-B assembly includes

REF #	Part Number	Description
CONV	185784711	(CONVERTER) LED DRIVER BOARD
TCON	CrossRef	TCON - Order using Panel Cross Reference

Sample LCD Panel Labels

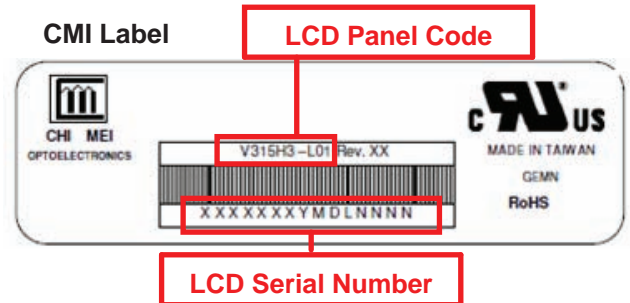
S-LCD Labels



AUO Label



CMI Label



Sharp Labels



NOTE: For AUO and Sharp Panel serial numbers enter as many digits as the text box will allow.

Sample Service Bench Form

Service Performed*		Service Agreement Number	
REPLACED DEFECTIVE PANEL		PTCL	
3rd Party Authorization		Repair Category*	
		Home	
		Orig. Lamp Hrs. or LCD Panel Serial #	
		Enter LCD Serial Number	

Qty	Part Number	Invoice Number	Location Code	Unit Cost	Extended Cost	Approved	Requested Amount	Approved Amount
1	I-802-490-33	0013CD-40		\$1,991.45	\$1,991.45		\$1,991.45	\$1,991.45
Description: LCD PANEL G8 (52IN FHD HFR)								
Part requires return								
Total Parts Amount							\$1,991.45	\$2,016.45
Labor Amount							148.00	148.00

Enter LCD Panel Code