

HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE / TRAINING MANUAL

AZ3FK Chassis

Segment: P-2F

ORIGINAL MANUAL ISSUE DATE: 3/2012

Version	Date	Subject
1.0	2/24/2012	Original Manual Release Date.
2.0	3/5/2012	Insulation Sheets added to Disassembly Section. Replaced page 18.
3.0	3/8/2012	P/N's for Vesa Bracket removed from Disassembly Section. Replaced page 15.
4.0	7/27/2012	New caution added on page ii. Updated Service Adjustments section. Replaced pages 24 - 27.
5.0	8/14/2012	Updated P/N's list from Disassembly Section. Replaced pages 17 - 20.

LCD Digital Color TV

SONY®

SERVICE / TRAINING MANUAL

AZ3FK Chassis
Segment: P-2F



KDL-40BX450

LCD Digital Color TV

SONY®

MODEL LIST

<i>MODEL</i>	<i>COMMANDER</i>	<i>DESTINATION</i>
KDL-40BX450	<i>RM-YD080</i>	<i>US/CND</i>
KDL-40BX450	<i>RM-YD080</i>	<i>LA/MX</i>
KDL-40BX451	<i>RM-YD080</i>	<i>CND</i>
KDL-40BX451	<i>RM-YD080</i>	<i>MX</i>

<i>MODEL</i>	<i>COMMANDER</i>	<i>DESTINATION</i>
KDL-46BX450	<i>RM-YD080</i>	<i>US/CND</i>
KDL-46BX450	<i>RM-YD080</i>	<i>LA/MX</i>
KDL-46BX451	<i>RM-YD080</i>	<i>MX</i>

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CAUTIONS AND WARNINGS


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.

WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, in case of live chassis.

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  mark on the schematic diagrams and the parts list. It is essential that these critical parts be replaced only with the part number specified in the 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 warranty.

ATTENTION!!

For safety reasons, component level repair of the Power Supply Boards and/or the Inverter Boards is prohibited.


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.

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.

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.

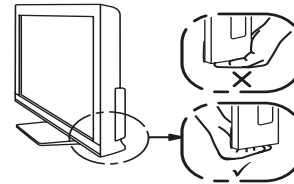
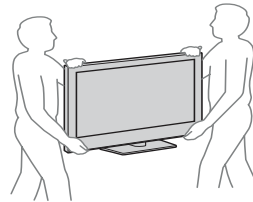
ATTENTION!!

Pour des raisons de sécurité, Interdire de réparer ou remplacer les composants dans les blocs d'alimentation et/ou sur les modules d'inverseur.

CAUTIONS AND WARNINGS

SETTING UP AND CARRYING THE TV

- Disconnect all cables when 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.

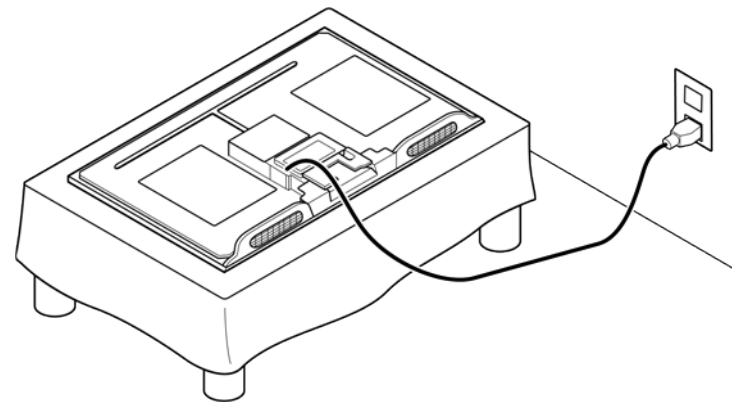


USE CAUTION WHEN HANDLING THE LCD PANEL

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

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

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



CLEANING THE LCD PANEL

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 proper ventilation.

- ⊘ **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, benzine, 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.

CAUTIONS AND WARNINGS

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 in “Leakage Test”.

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.
Follow the manufacturers’ instructions provided with the tester.
2. A battery-operated AC milliammeter.

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. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable. (see Figure A)

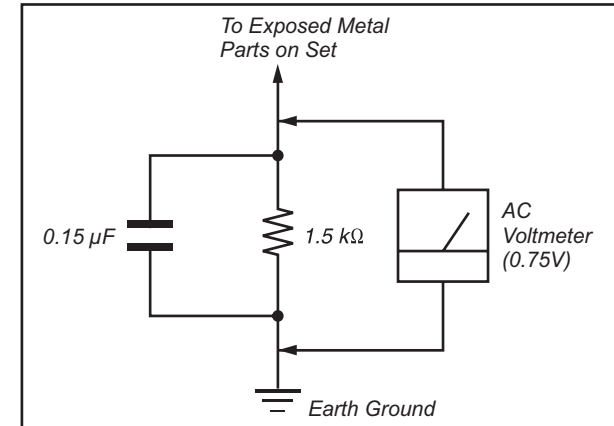


Figure A. Use an AC voltmeter to check AC leakage.

HOW TO FIND A GOOD EARTH GROUND

The cover-plate retaining screw on most AC outlet boxes is at earth ground. Verify the AC outlet box retaining screw ground by connecting a 60W to 100W incandescent (not a neon or fluorescent 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)

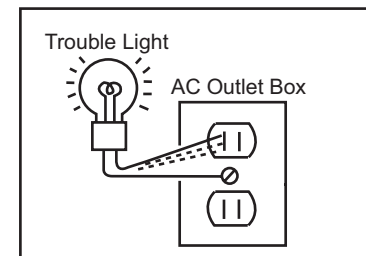


Figure B. Checking for earth ground.

SECTION 1 - FEATURES AND OVERVIEW

FEATURES

The AZ3FK chassis is one of several designs for the 2012 model line of Sony Bravia® LCD televisions. This manual covers the following models:

KDL-40BX450
 KDL-40BX451
 KDL-46BX450
 KDL-46BX451

The BRAVIA® Sync™ BX45x series LED LCD HDTV

- Brilliant Full HD (1080p) picture quality
- Four HD inputs for a cable box, PS3™ and more¹
- Share your pictures on the big screen via USB input
- Crisp detail & contrast w/ Clear Resolution Enhancer
- Optimized picture based on what you're watching
- Less grain & a clear picture w/ Digital Noise Reduction
- Theater-like movie viewing with 24p True Cinema
- One remote for multiple devices with BRAVIA® Sync™²

SPECIFICATIONS

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	KDL-46/40BX450: 6 W + 6 W KDL-46/40BX451: 8 W + 8 W
Input/Output jacks	
CABLE/ANTENNA	75-ohm external terminal for RF inputs
VIDEO IN 1	VIDEO: 1 Vp-p, 75 ohms unbalanced, sync negative AUDIO: 500 mVrms (Typical) / Impedance: 47 kilohms
COMPONENT IN	YPbPr (Component Video): Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative / Pb: 0.7 Vp-p, 75 ohms PR: 0.7 Vp-p, 75 ohms / Signal format: 480i, 480p, 720p, 1080i, 1080p AUDIO: 500 mVrms (Typical) / Impedance: 47 kilohms
HDMI IN 1/2	HDMI: Video: 480i, 480p, 720p, 1080i, 1080p, 1080/24p Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16, 20 and 24bits, Dolby Digital PC Input (see Operating Instructions)
AUDIO OUT	500 mVrms (typical)
DIGITAL AUDIO OUT (OPTICAL)	PCM/Dolby Digital optical signal
PC IN	D-sub 15-pin, analog RGB, 0.7 Vp-p, 75 ohms, positive See the PC Input Signal Reference Chart for PC and HDMI IN
PC/HDMI IN 1 AUDIO IN	Stereo mini jack, 500 mVrms, (Typical) / Impedance: 47 kilohms
USB	KDL-46/40BX450: Photo, Music and Video KDL-46/40BX451: Photo and Video

1. Cables sold separately.

2. Syncs with BRAVIA® Sync or Theatre Sync™ products.

SECTION 1 - FEATURES AND OVERVIEW

Model name	KDL-46BX450 KDL-46BX451	KDL-40BX450 KDL-40BX451
Power and others		
Power requirement	110-240 V AC, 50/60 Hz (U.S.A./Canada/Mexico 120 V AC, 60 Hz)	
Power consumption in use	188 W	158 W
in standby	Less than 0.2 W with 120 V AC and with 240 V AC less than 0.3 W	
Screen size* (inches measured diagonally)	46	40
Display resolution	1,920 dots (horizontal) × 1,080 lines (vertical)	
Speaker/Full range (2) (mm) (inches)	40 × 100 (1 5/8 × 4)	
Dimensions* with stand (mm) (inches)	1,112 × 713 × 279 43 7/8 × 28 1/8 × 11	980 × 639 × 231 38 5/8 × 25 1/4 × 9 1/8
without stand (mm) (inches)	1,112 × 675 × 97 43 7/8 × 26 5/8 × 3 7/8	980 × 601 × 94 38 5/8 × 23 3/4 × 3 3/4
wall-mount hole pattern (mm)	300 × 300	
wall-mount screw size (mm)	M6 (length: 8-12mm)	
Mass* with stand (kg) (lb)	17.2 37.9	13.8 30.4
without stand (kg) (lb)	16.0 35.3	12.8 28.2
Supplied accessories common to all models	Remote Control RM-YD080 (1)/Size AA batteries (2)/Operating Instructions (1)/Quick Setup Guide (1)/Warranty Card (1)/Safety and Regulatory Booklet (1)/Software License (1)/Stand installation guide (1)/Table-Top Stand (1 set)/Screw (3)	
Optional accessories	Connecting cables / Support Belt Kit / Wall-Mount Bracket: SU-WL500	

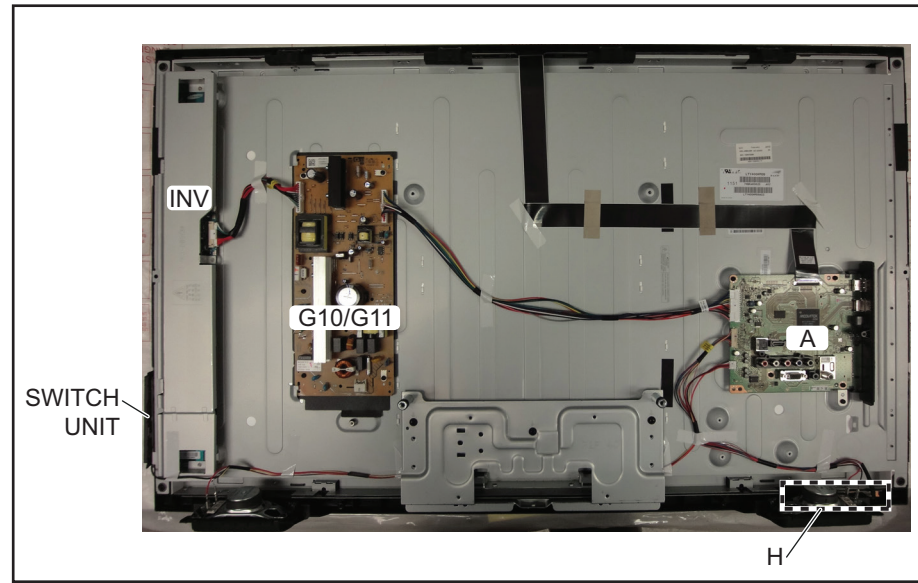
- Optional accessories availability depends on its stock.
- Design and specifications are subject to change without notice.
- * Dimensions and mass are approximate values.

SECTION 1 - FEATURES AND OVERVIEW

CHASSIS OVERVIEW

The primary circuits in the AZ3FK chassis consist of a Main Board (A Board), Power Supply Board (G10 Board for the 40" models and G11 Board for the 46" models), the IR Board (H Board), the Switch Unit and the LCD Panel Assembly which includes the TCON Board and the Inverter MT Board.

NOTE: For connector part number information, refer to ["Connectors" on page 18](#). For Wire Dressing information, refer to ["Wire Dressing" on page 20](#).



BOARD LAYOUT EXAMPLE FOR ALL MODELS

SECTION 1 - FEATURES AND OVERVIEW

OVERALL CIRCUIT DESCRIPTION

The [“Block Diagram” on page 9](#) provides an overview of the AZ3FK chassis. The following are descriptions of the boards and their functions.

MAIN BOARD

Common to all models utilizing the AZ3FK chassis, the Main Board (A Board) contains most of the video processing circuitry along with all audio processing. Control of the television is accomplished via a CPU embedded within the MT5389 processor. Below is a list of the key components located on the Main Board.

TUNER

The tuner is a combination ATSC/NTSC unit. It can receive traditional analog NTSC signals via cable or terrestrial along with ATSC digital signals via terrestrial (8VSB) or cable (64 or 256 QAM).

MT5389PROCESSOR

This IC performs the majority of the necessary audio and video processing on the Main Board.

Analog Video Input Switch: All analog video sources are selected and A/D converted and scaled (if necessary) to 1920 X 1080p 60HZ resolution.

Digital Audio and Video Decoder: The MPEG2 and Digital Dolby audio streams are received from the tuner for decompression. All video sources which are not native 1920 X 1080p 60HZ are scaled to this resolution. Digital audio content is output to the class D amplifier for processing and amplification.

Audio Processing: Analog audio sources are selected and A/D converted directly by the MT5389. The audio information is then processed digitally. Digital audio from the tuner and HDMI sources is also input and processed. Class D amplifier provides the drive for the speakers.

HDMI Input and Switching: The customer can select the HDMI1 through HDMI2 input. Each HDMI input contains a dedicated EDI NVM (not shown) to provide display information data to any device connected via the HDMI inputs.

CPU: The CPU internal to the MT5389 processor controls all aspects of the television functions. Input from the user along with monitoring of critical circuits is also performed by this CPU.

LVDS Transmitter: Integrated into the MT5389 is a Low Voltage Differential Signaling (LVDS) transmitter. This circuit converts the 8-bit parallel RGB video information into a set of high speed serial lines for noise-free transmission to the TCON circuits located internally to the LCD panel.

POWER SUPPLY BOARD

There are 2 different Power Supply boards used in the models in this manual. The type of board depends on the size of LCD panel. They are:

- G10 for the 40” models
- G11 for the 46” models

There are 2 distinct sections on the power supply:

Standby Supply: Continuously operational as long as AC power is applied, the standby supply generates 3.3VDC for the circuits requiring power while the unit is turned off. An unregulated 15-volt line is present to provide power to the main relay, PFC and main power supply at turn-on.

Main Supply: Once the power supply receives a power-on command from the CPU on the A board, the main switching supply is turned on to provide a regulated 12V source, a dedicated un-regulated 15V for the audio circuits and an unregulated 24V source for the inverter circuit.

IR BOARD

Designated as the H Board, the IR Board contains the power, standby and timer LED's that is located on this board along with the IR remote receiver and light level sensor.

SWITCH UNIT

This board contains the power, channel and volume up/down and menu buttons.

SECTION 1 - FEATURES AND OVERVIEW

LCD PANEL ASSEMBLY

The LCD Panel Assembly includes the LCD Panel, TCON Board and Backlight system.

The LCD Panel contains the actual liquid crystals, color filters and polarizers. The liquid crystals are manipulated by the applied voltage to pass a specific amount of light - from the backlight - depending on the level of voltage applied.

The TCON performs all the control, timing, charge and discharge functions driving the operation of the LCD Panel.

A new LCD Panel Assembly from parts will include the following items:

- LCD Panel
- TCON Board
- Inverter MT Board

TCON BOARD

The TCON Board communicates between the LCD Panel and the microprocessor on the Main Board.

NOTE: The TCON Board is not available as a replacement part for all models. To determine if the TCON Board is available as a replacement part, refer to the LCD Panels Manual.

INVERTER MT BOARD

The inverter receives the unregulated 24V from the Power Supply Board and generates the required high voltage AC to power the backlight lamps. A control line to turn on the inverter (backlights on) is used in conjunction with a dimmer control to vary the light level of the CCFL lamps.

SECTION 2 - TROUBLESHOOTING

OVERVIEW

This chapter provides information regarding the Self Diagnosis feature in our TVs.

UPDATING THE SOFTWARE

The Self Diagnosis function is designed to provide information regarding the problem with the TV, however, there are several issues that may be resolved by updating the TV software to the latest version. Always check the Sony Authorized Servicer Portal at <http://www.sony.com/asp> for any issues that are software related. Most symptoms that are correctable by software updates involve communications issues with other devices or minor glitches in the operation of a specific function. Below is a list of some of the symptoms that may be corrected with a software update:

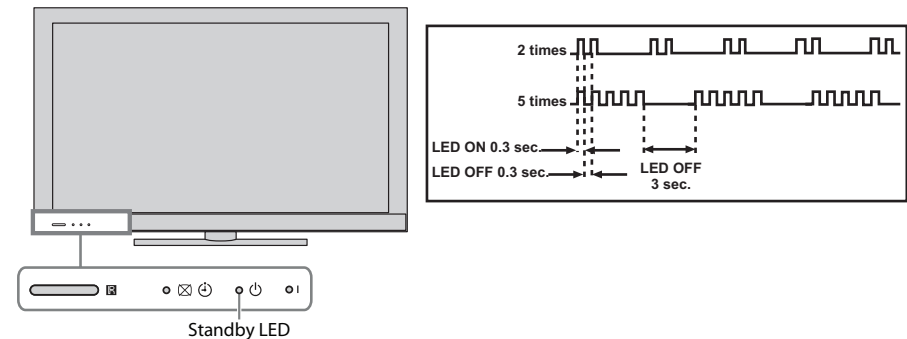
- Fluctuations in picture brightness
- Intermittent picture freezing or noise
- Problems with certain inputs (especially HDMI)
- Intermittent or distorted audio
- Erratic remote control operation
- TV turns on and off by itself
- Loss of color
- Internet connectivity
- Certain features not working correctly (photo or video file viewing)

SELF DIAGNOSIS FUNCTION

Critical voltages and circuit operations are monitored by the CPU on the Main Board. If an error is detected the Self Diagnosis function in the TV will force the TV to shut down by the CPU. The monitored circuit in which the fault occurred will automatically cause the CPU to blink the Standby LED in groups of repeating sequences. The number of times the Standby LED blinks indicates the possible cause of the problem.

Not all of the available protect codes are used in every model. For example, models that don't have the local dimming feature do not use the 4X blink error as this circuit is found in models that are backlit with fluorescent lamps. The information in this section provides guidance in locating the possible component causing the shutdown.

STANDBY LED BLINK COUNT



LED DISPLAY & BLINK COUNT


SECTION 2 - TROUBLESHOOTING

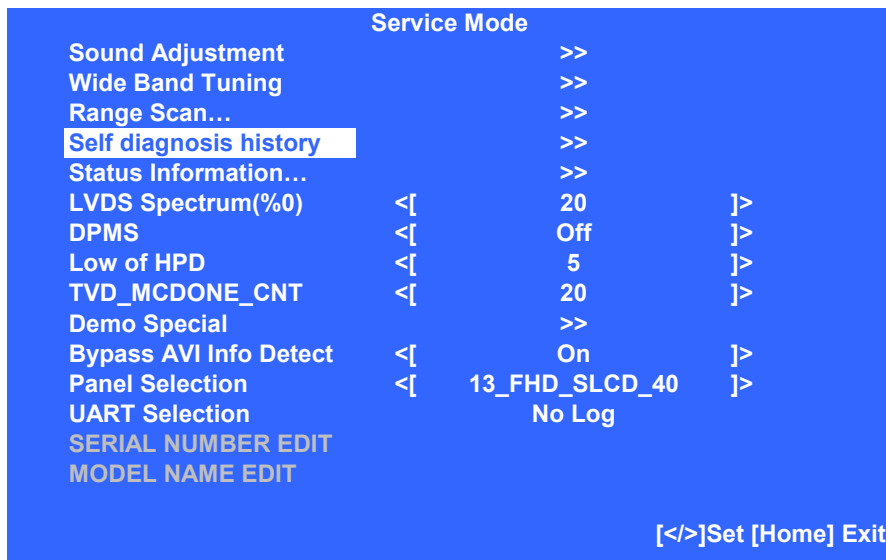
VIEWING THE SELF CHECK DIAGNOSIS HISTORY

When an error is detected, the Self Check screen records the number of times the error occurred. This is helpful in confirming past occurrences of an error and for determining if an error is intermittent when the customer is not sure what is causing the television to shut down. If the screen displays a "0", no error has occurred.

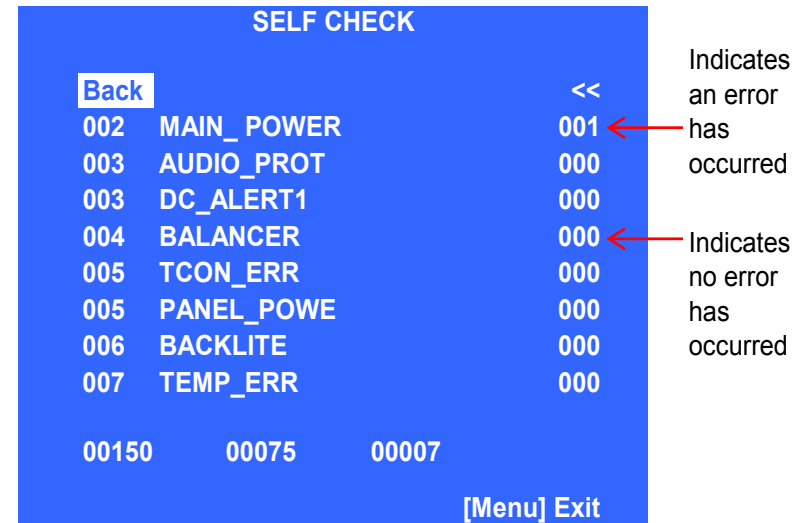
1. TV must be in Standby mode.
2. Press the following buttons on the **Remote Commander** within a second of each other:

DISPLAY → Channel [5] → Volume [+] → POWER

3. To access the Self diagnosis history page, press  until **Self diagnosis history** is highlighted.



4. Then press  to view the **Self Check** screen.



SAMPLE SELF CHECK DIAGNOSIS PAGE

2X Blink - Main Power Error

A loss of REG12V from the power supply triggers this protect event. The usual cause is a failure of the main switching supply. In some instances, excessive loading on the secondary supply lines can cause the switching regulator to stop or fail again, if a replacement board is installed.

3X Blink- DC Regulator/Audio Error

The REG 5V and D3.3V source originating on the Main Board is monitored for low-voltage conditions by the CPU. A failure causing a 3X shutdown requires replacing the Main Board.

4X Blink – Balancer Error

NOT USED IN THIS MODEL SERIES.

5X Blink - TCON Error/Panel Error

The 5X blink protection mode indicates a communications error with the timing control circuits (TCON Board) has occurred. If the TCON Board is available for replacement, replace it, if not, replace the LCD Panel Assembly. In rare cases a loose or defective LVDS cable could also be the cause.

SECTION 2 - TROUBLESHOOTING

6X Blink - Backlight Inverter System Failure

If the inverter circuits fails to generate high voltage or one or more of the backlight lamps fails to light, the television will shut down and display this diagnostics error. Observing for the presence of backlighting is crucial in determining which component is likely at fault.

If the backlights turn on before the 6X shutdown occurs, it is safe to assume that the inverter circuits are functioning and one of the lamps failed to ignite. Replacing the LCD Panel assembly is necessary. If the backlights never turn on before the 6X shutdown, the Inverter MT Board has failed. If this board is available for replacement, replace it, if not, replace the LCD Panel Assembly.

7X Blink - Temperature Failure

A digital thermometer IC located on the Main Board provides a temperature reading of the chassis and LCD panel. If the temperature exceeds a pre-determined point the TV will shut down. If this problem occurs immediately at turn-on, the temperature sensing IC has failed and replacing the main board is required. If this occurs after the TV has been running for a while, check for ventilation issues that could cause the TV to run hotter than normal.

TRIAGE CHART

Use this general Triage Chart to determine what may possibly be causing the error before going out to the customers location.

1. Confirm the symptom from the customer.
2. Select that symptom from the chart.
3. Bring the primary component listed for that symptom.
4. Follow the associated flowcharts in the Training Manual to isolate the board.
5. Chart Color Code.

RED DOT: (Primary) Most likely defective part.
BLUE Triangle: (Secondary) Possible defective part.

Board	Protection Modes					Power	Video			Audio
	2X	3X	5X	6X	7X	Dead set	No Video	Whole Screen Distortion	Isolated Area Distortion	No Audio
Main Board		●			●*	▲	▲	●		●
Power Supply	●			●***		●				
H Board										
Inverter				▲*						
LCD Panel				●**					●	
TCON			●				●	▲	▲	

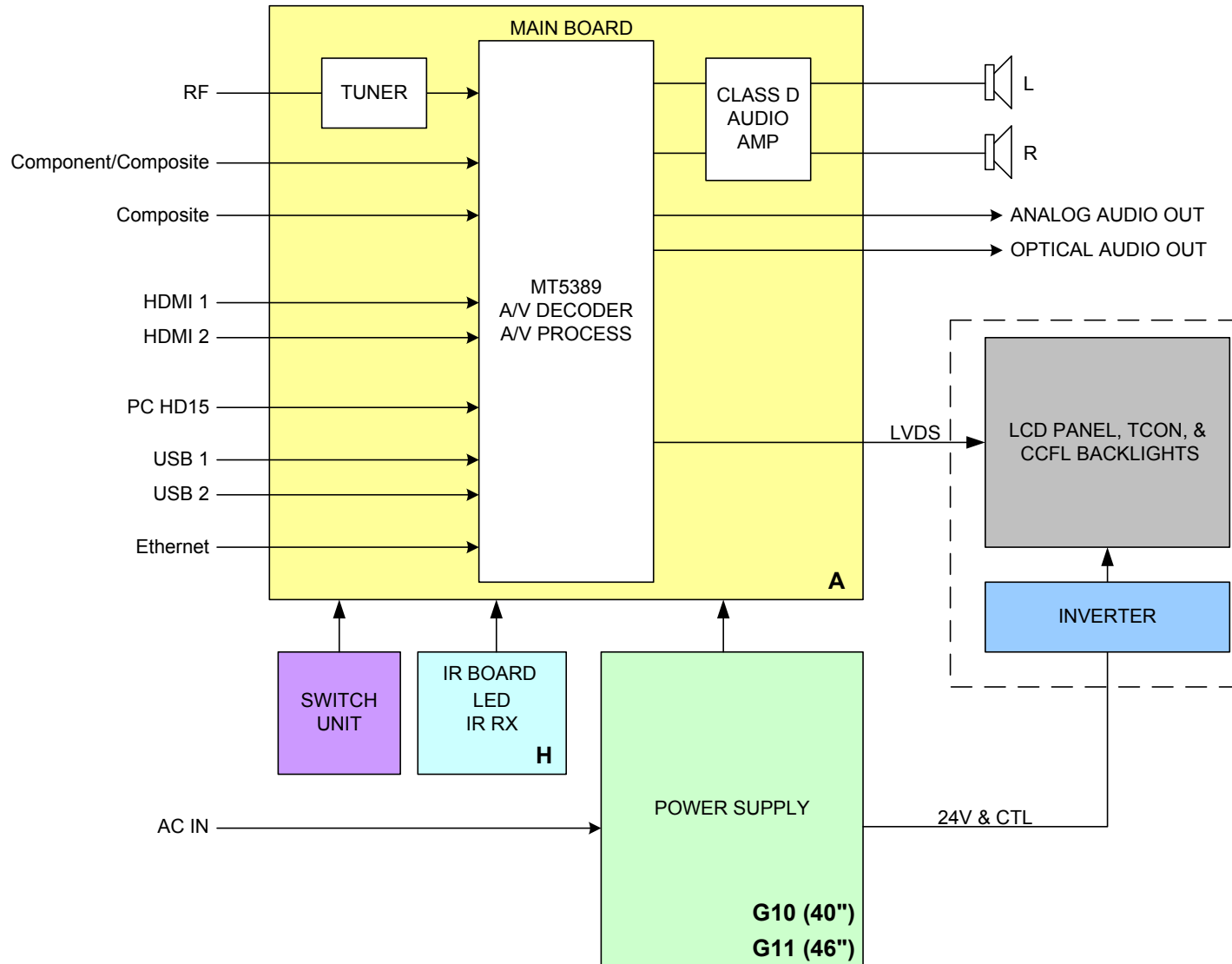
*NOTE: REFER TO LCD PANEL SERVICE MANUAL IN REFERENCE LIBRARY DATABASE FOR CORRECT REPLACEMENT PARTS BASED ON SERIAL NUMBER.

●* TV Immediate Shuts Off After Power ON & 7X
 ●**Backlight Turns ON before TV Shuts Off
 ●***Backlight Does NOT Turn ON before TV Shuts
 ▲* Secondary Component

To access the most recent version of the Triage documents for the models listed in this manual, login into the Sony Authorized Servicer Portal at <http://www.sony.com/asp>.

SECTION 3 - FLOW CHARTS AND DIAGRAMS

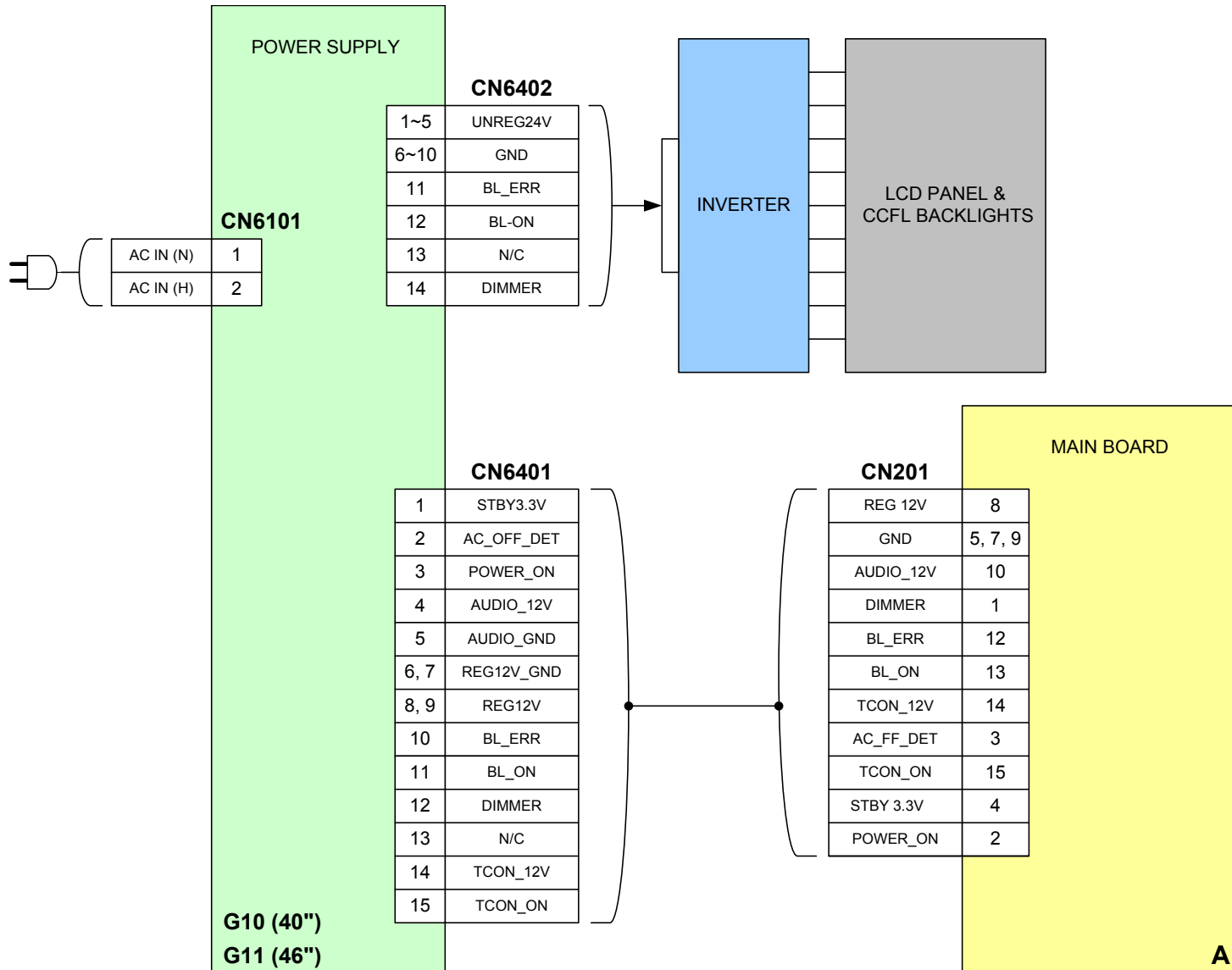
BLOCK DIAGRAM



OVERALL BLOCK DIAGRAM

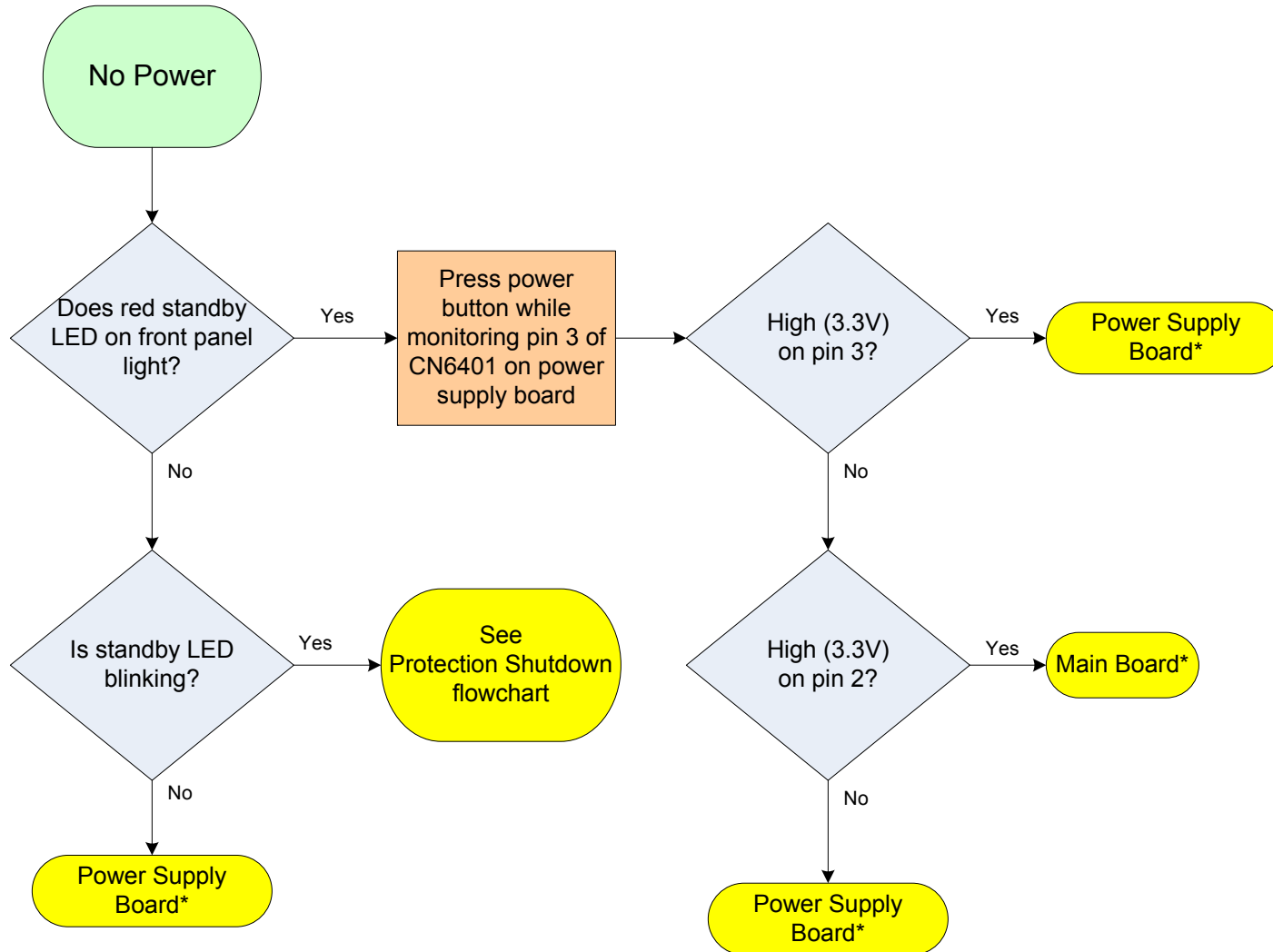
SECTION 3 - FLOW CHARTS AND DIAGRAMS

NO POWER



POWER AND CONTROL BLOCK DIAGRAM

SECTION 3 - FLOW CHARTS AND DIAGRAMS

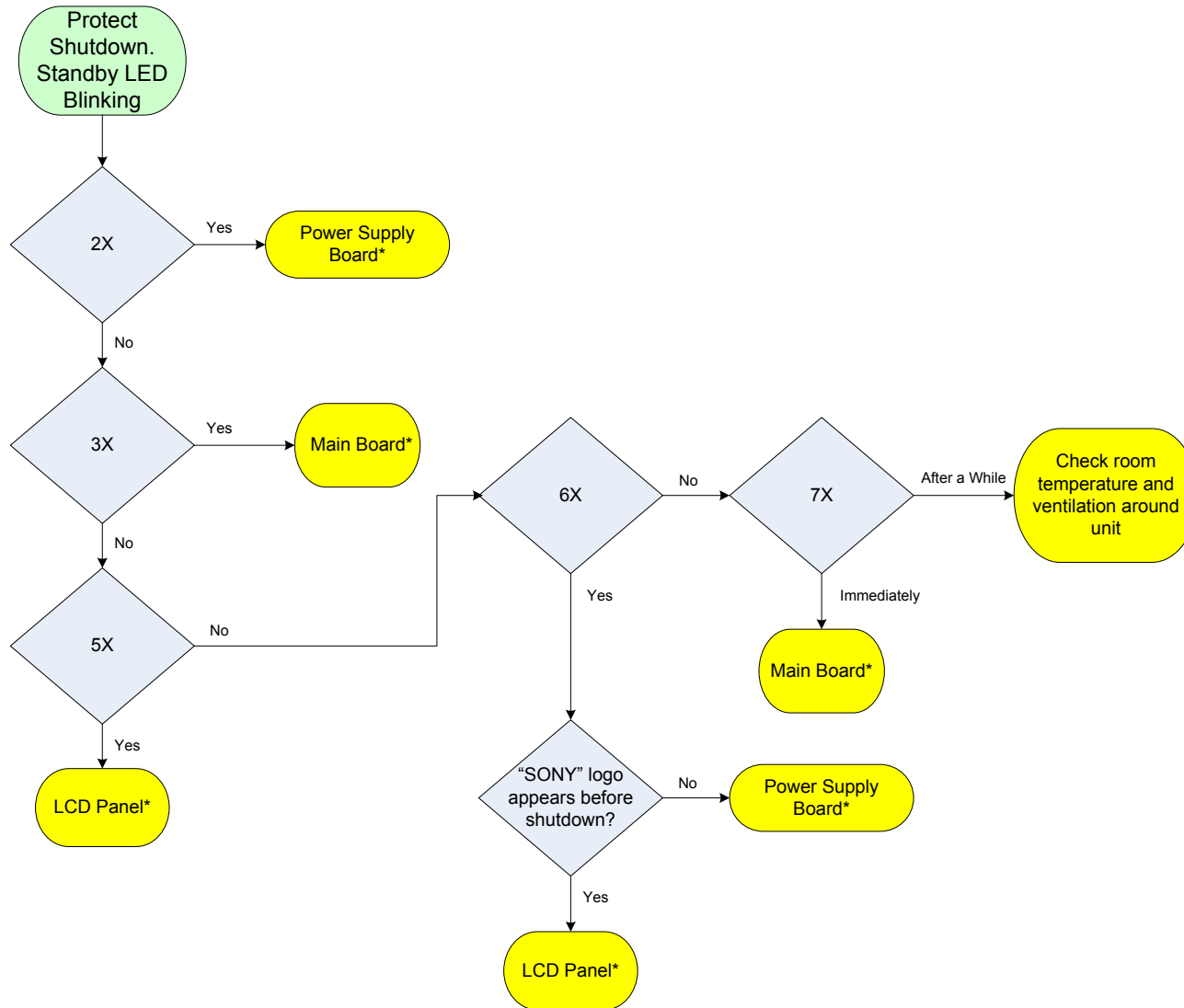


NO POWER FLOWCHART

*For Part Number information, Refer to ["Section 4 - Disassembly/Part Number Information" on page 15.](#)

SECTION 3 - FLOW CHARTS AND DIAGRAMS

STANDBY LED BLINKING

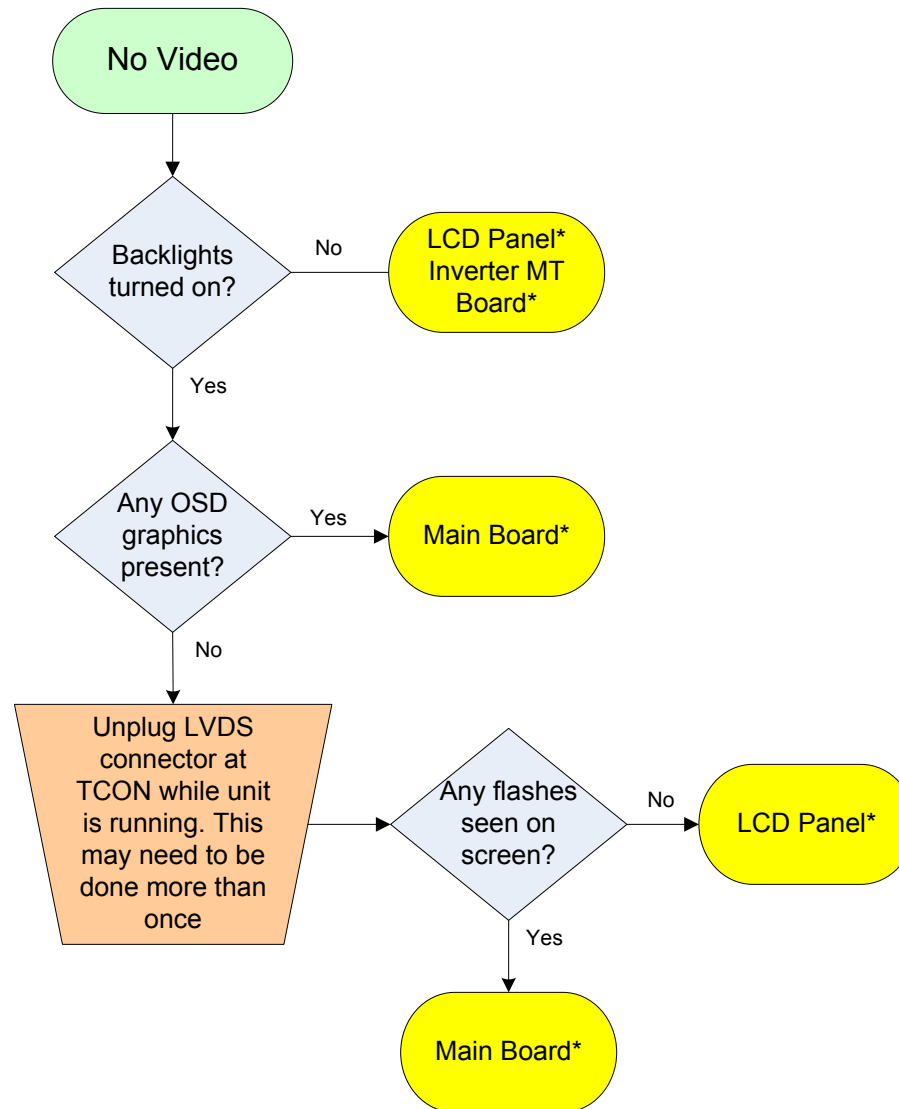


PROTECTION SHUTDOWN FLOWCHART

*For Part Number information, Refer to [“Section 4 - Disassembly/Part Number Information” on page 15.](#)

SECTION 3 - FLOW CHARTS AND DIAGRAMS

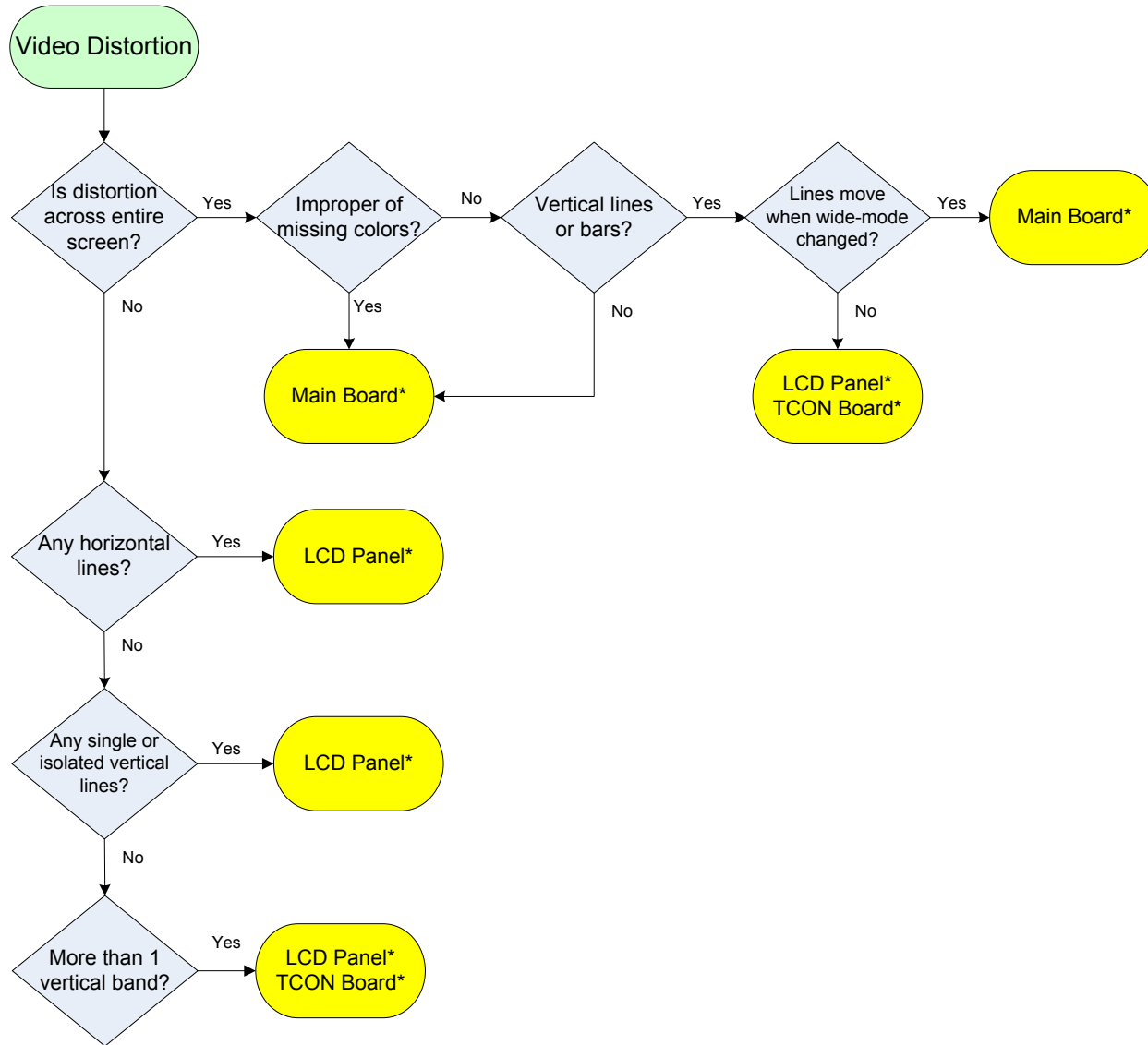
NO VIDEO



NO VIDEO FLOWCHART

*For Part Number information, Refer to ["Section 4 - Disassembly/Part Number Information" on page 15.](#)

SECTION 3 - FLOW CHARTS AND DIAGRAMS



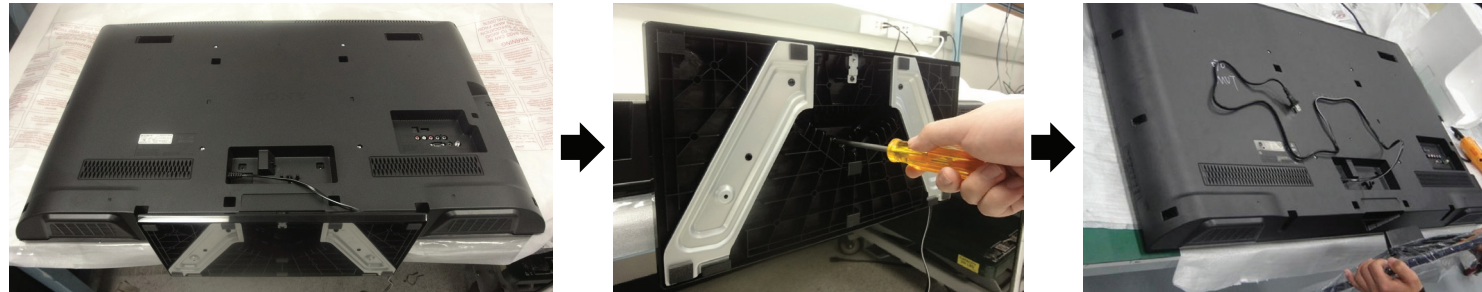
VIDEO DISTORTION FLOWCHART

*For Part Number information, Refer to ["Section 4 - Disassembly/Part Number Information" on page 15.](#)

SECTION 4 - DISASSEMBLY/PART NUMBER INFORMATION

TABLE-TOP STAND AND REAR COVER REMOVAL

Ⓐ Gently place LCD TV face down onto a soft cloth and remove 3 screws from Table-Top Stand.



Ⓑ Remove screws from Rear Cover.
17 from KDL-40BX450/40BX451 Only
19 from KDL-46BX450/46BX451 Only

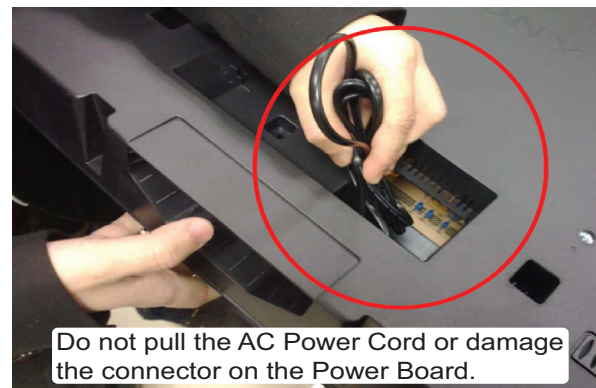


CAUTION: Do not damage the Power Board Connector and AC Power Cord when removing the Rear Cover.

Ⓒ Carefully lift Rear Cover from the bottom and push forward to release top hooks.



Ⓓ Hold Power Supply Cord while lifting up Rear Cover, then pass Power Supply Cord through Rear Cover opening.





Do not pull the AC Power Cord or damage the connector on the Power Board.


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

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

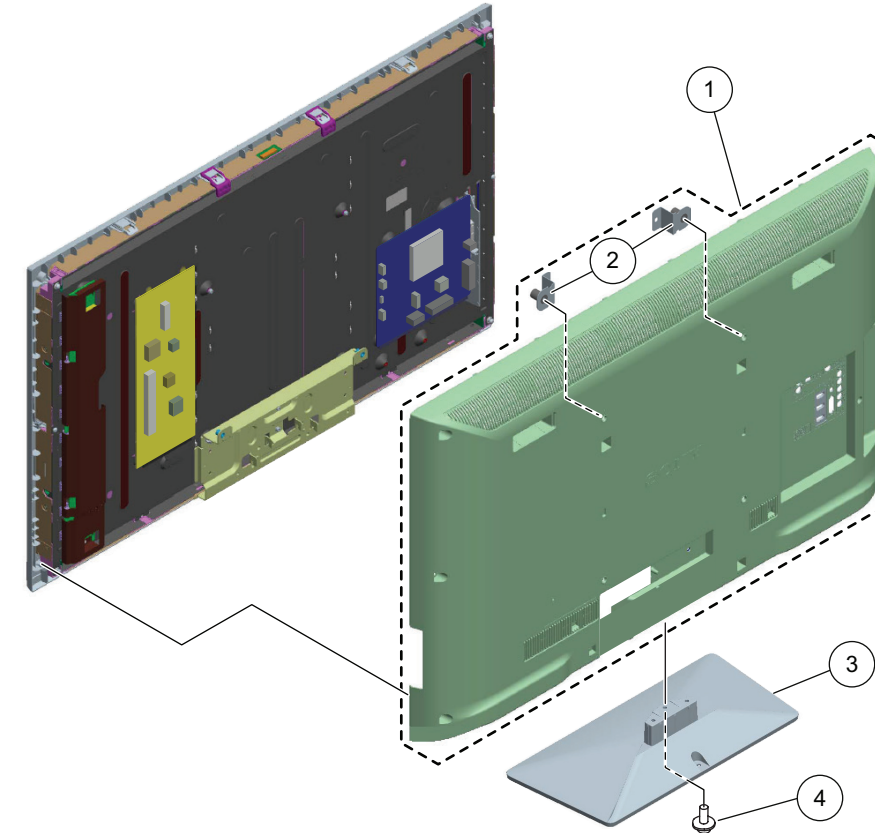
* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.

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 Authorized Servicer Portal at <http://www.sony.com/asp> website for any additional service related issues.)

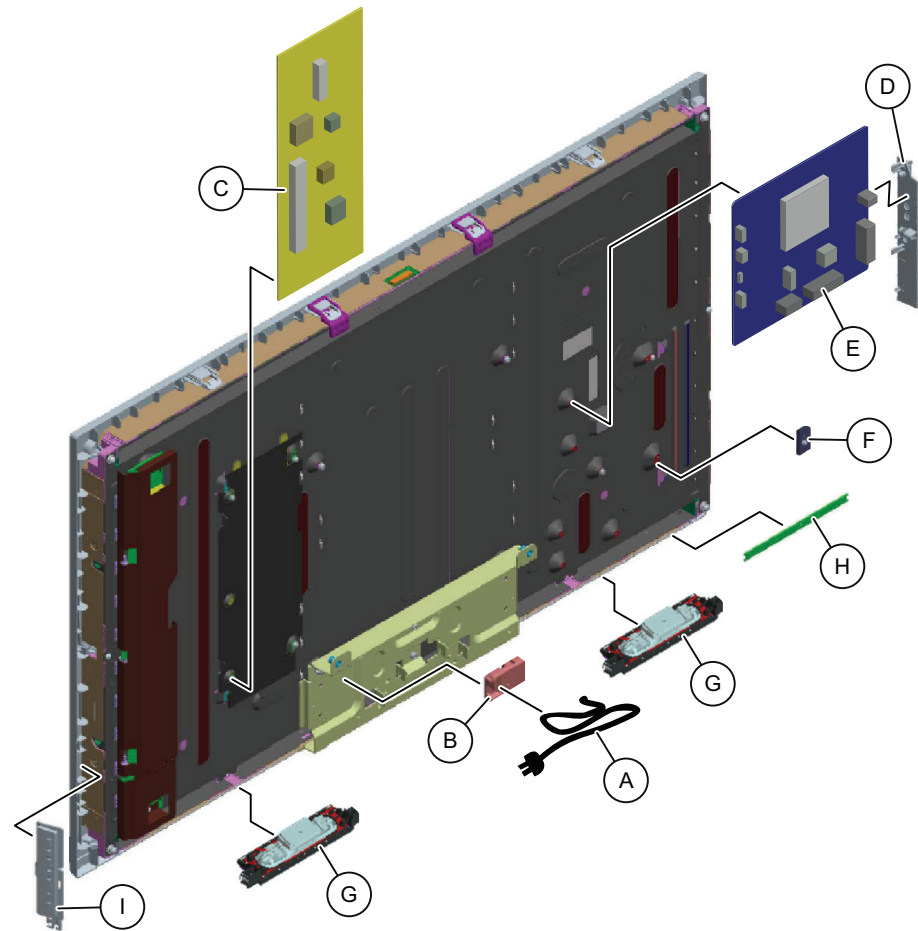


REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
1	4-409-856-11	REAR COVER (40APOF) (KDL-40BX450/40BX451 ONLY)	[2]	4	2-580-608-11	SCREW, +PSW M5X16 (SCREWS TO ATTACH TABLE-TOP STAND TO LCD TV)	
1	4-409-857-11	REAR COVER (46APOF) (KDL-46BX450/46BX451 ONLY)	[2]				For product protection and safety reasons, Sony strongly recommends that you use the screws provided with the TV.
2	N/A	BRACKET, VESA (40APOF)					CAUTION: These screws cannot be used to secure the TV to the Wall Mount Brackets
3	X-2583-463-1	STAND ASSEMBLY (40APOF) (KDL-40BX450/40BX451 ONLY)					
3	X-2583-464-1	STAND ASSEMBLY (46APOF) (KDL-46BX450/46BX451 ONLY)					

SECTION 4 - DISASSEMBLY/PART NUMBER INFORMATION

MAIN BOARD (A) AND POWER SUPPLY BOARD (G10/G11) REMOVAL

- (A) Disconnect Power Supply Cord from G10/G11 Board.
- (B) Release clips and lift-up AC Cord Cover.
- (C) Remove 4 screws and disconnect 2 connectors from G10/G11 Board.
- (D) Release clips and slide-out Side Bracket.
- (E) Remove 4 screws and disconnect 4 connectors from A Board.
- (F) Remove 1 screw from MB Bracket.
- (G) Remove 4 screws and disconnect connectors from Left and Right Speakers.
- (H) Release clips and disconnect 1 connector from H Board.
- (I) Disconnect 1 connector, then tilt Switch Unit left and lift-up.

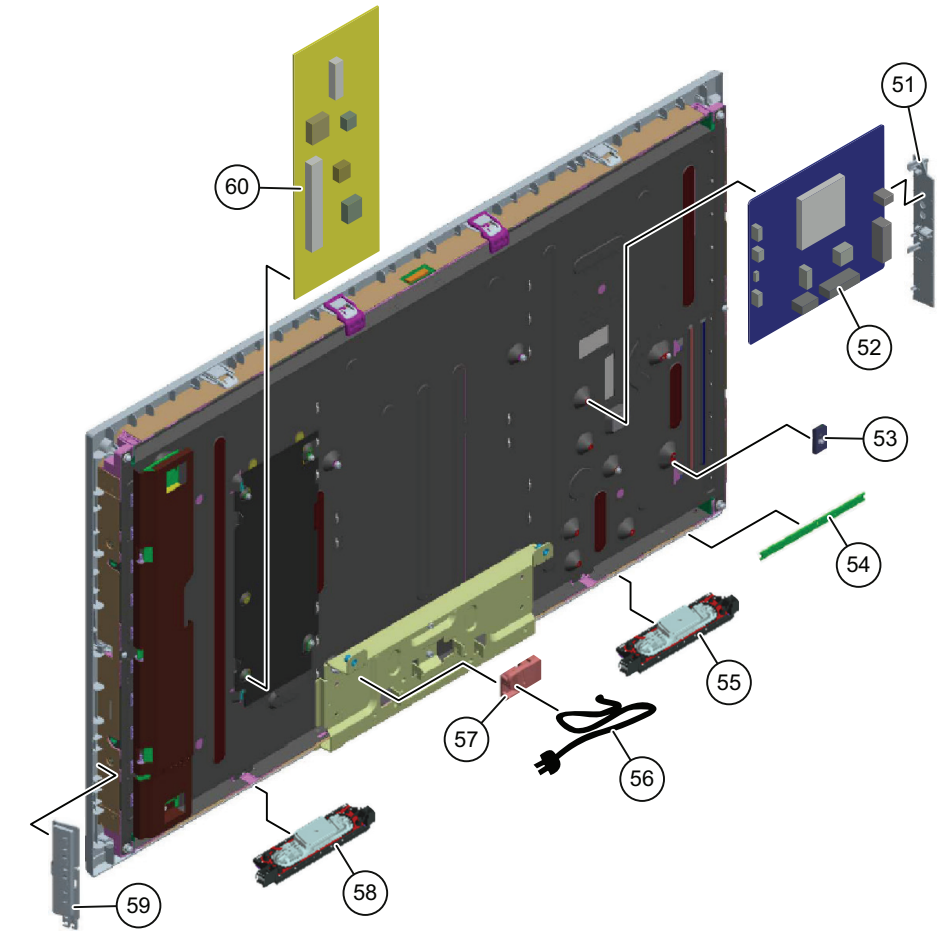


NOTE: The components identified by shading and \triangle mark are critical for safety. Replace only with part number specified.

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.


NOTE: The components identified by a red outline and a \triangle 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 Authorized Servicer Portal at <http://www.sony.com/asp> website for any additional service related issues.)




REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
51	4-300-805-11	BRACKET, SIDE (APOF)		53	4-300-807-01	BRACKET, MB (40APOF)	
\triangle 52	1-895-182-11	A BOARD, COMPLETE		54	1-895-183-11	H BOARD, MOUNTED	
		(KDL-40BX450/46BX450 ALL EXCEPT LA MODELS)		55	1-858-771-11	SPEAKER 4X10 (L)	
		AFTER REPLACING THE MAIN BOARD, YOU MUST UPDATE THE SOFTWARE TO THE LATEST VERSION		\triangle 56	1-839-938-31	POWER-SUPPLY CORD	
\triangle 52	1-895-182-21	A BOARD, COMPLETE		57	4-300-803-01	COVER, AC CORD (40APOF)	
		(KDL-40BX450/46BX450 FOR LA MODELS ONLY)		58	1-858-771-21	SPEAKER 4X10 (R)	
		AFTER REPLACING THE MAIN BOARD, YOU MUST UPDATE THE SOFTWARE TO THE LATEST VERSION		59	1-490-188-11	SWITCH UNIT	
\triangle 52	1-895-182-31	A BOARD, COMPLETE		60	1-474-380-11	G10 BOARD, COMPLETE	
		(KDL-40BX451/46BX451 ONLY)		60	1-474-382-12	G11 BOARD, COMPLETE	
		AFTER REPLACING THE MAIN BOARD, YOU MUST UPDATE THE SOFTWARE TO THE LATEST VERSION				(KDL-46BX450/46BX451 ONLY)	

SECTION 4 - 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.

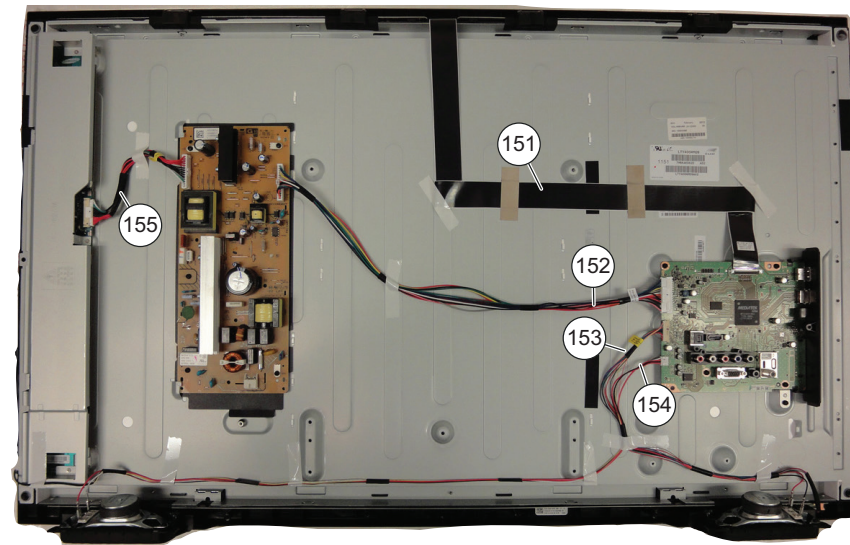
NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. See Appendix A: Encryption Key Components in the back of this manual.

(Check the Sony Authorized Servicer Portal at <http://www.sony.com/asp> website for any additional service related issues.)

CONNECTORS

SCREWS

SCREW INFORMATION NOT AVAILABLE FOR THESE MODELS



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
151	1-910-103-98	(LVDS) CONNECTOR ASSEMBLY 46 51P (FFC) (KDL-40BX450/40BX451 ONLY)		153	1-910-105-99	CONNECTOR ASSEMBLY 40 14P MB-H&KEY (KDL-40BX450/40BX451 ONLY)	
151	1-910-103-97	(LVDS) CONNECTOR ASSEMBLY 46 51P (FFC) (KDL-46BX450/46BX451 ONLY)		154	1-910-105-98	CONNECTOR ASSEMBLY 40 4P MB-SP (KDL-40BX450/40BX451 ONLY)	
152	1-910-106-00	CONNECTOR ASSEMBLY 40 15P MB-PSU (KDL-40BX450/40BX451 ONLY)		154	1-910-103-93	CONNECTOR ASSEMBLY 46 4P MB-SP (KDL-46BX450/46BX451 ONLY)	
152	1-910-103-95	CONNECTOR ASSEMBLY 46 15P MB-PSU (KDL-46BX450/46BX451 ONLY)		155	1-910-103-96	CONNECTOR ASSEMBLY 46 14P PSU-INV	

SECTION 4 - DISASSEMBLY/PART NUMBER INFORMATION

ACCESSORIES AND PACKAGING

PART NO.	DESCRIPTION
1-756-988-21	BATTERY, MANGANESE (R6)
3-299-071-05	FLYER, SAFETY
4-418-207-11	GUIDE, QUICK SET UP (ENGLISH VERSION)
4-418-207-21	GUIDE, QUICK SET UP (FRENCH VERSION)
4-418-207-31	GUIDE, QUICK SET UP (SPANISH VERSION)
4-418-206-11	MANUAL, INSTRUCTION (ENGLISH VERSION)
4-418-206-21	MANUAL, INSTRUCTION (FRENCH VERSION)
4-418-206-31	MANUAL, INSTRUCTION (SPANISH VERSION)
2-580-608-11	SCREW, +PSW M5X16 (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.
4-416-690-11	SUPPLEMENT (STAND INSTALLATION)

MISCELLANEOUS

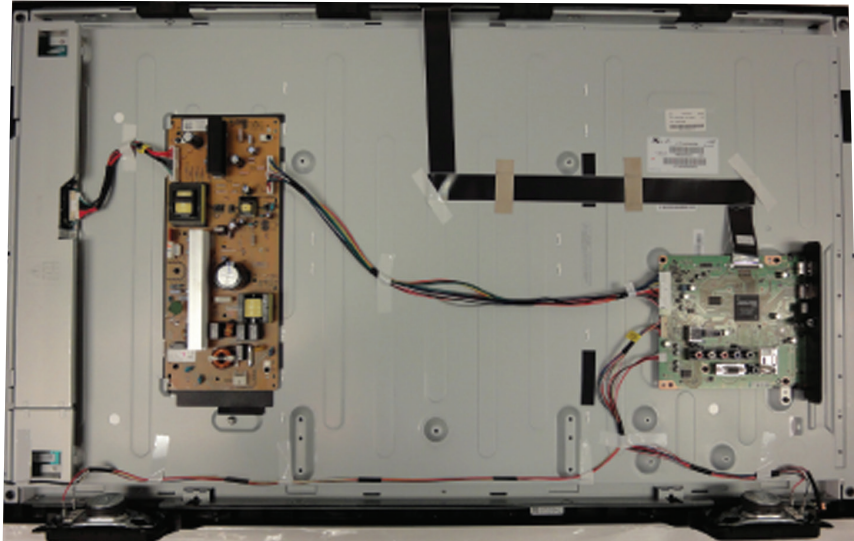
PART NO.	DESCRIPTION
4-419-435-11	LABEL, MX ENERGY (APO) (KDL-40BX450/40BX451 ONLY)
4-419-435-21	LABEL, MX ENERGY (APO) (KDL-46BX450/46BX451 ONLY)

REMOTE COMMANDER

PART NO.	DESCRIPTION
1-489-990-11	REMOTE COMMANDER (RM-YD080)

SECTION 4 - DISASSEMBLY/PART NUMBER INFORMATION

WIRE DRESSING



LAYOUT EXAMPLE FOR ALL MODELS

SECTION 5 - UPDATES AND ADJUSTMENTS

OVERVIEW

The models in this manual utilize a “generic” type of Main Board, therefore a software update must be performed and certain service adjustment settings must be changed or confirmed whenever the Main Board, LCD Panel or TCON Board is replaced.

There are 2 reasons for updating the software on the TVs.

- Software updates for customers
These updates are for enhancements or improvements that have been made to the software after the TV was released. These updates are accessed by the customer from the Sony Support Site at <http://esupport.sony.com>.
- Software update for servicers
These updates are specifically for servicers to use during a service call and are only available on the Sony Authorized Servicer Portal at <http://www.sony.com/asp>.

SOFTWARE UPDATES FOR CUSTOMERS

The subject of software updates is very important. The televisions of today have advanced to the point where they are not simply a television anymore. They are evolving into devices that are designed to integrate with numerous other devices found in the home. Some examples are: portable audio and video devices, still cameras, home computer networks and accessing the internet to name a few.

Communications with these varying devices requires that the television be compatible with varying communications protocols. Although standards are detailed for each of these protocols, the real world dictates that occasional errors may occur that could prevent devices from operating or communicating properly.

Keeping the software in the television up-to-date is a procedure that is normally handled by the owner of the television. Most customers who own computers and other digital devices are familiar with and are accustomed to updating the software in their products. If a customer contacts the Sony

Customer Support Center and it is deemed to be correctable with a software update, the issue is handled at the customer level.

Software updates can be performed by:

- Customer Manual Downloads

Software updates can be accessed by the customer from the Sony Support Site at <http://esupport.sony.com> where they can be downloaded and placed on a USB thumb drive to be loaded onto the TV. The instructions for downloading the software file vary from chassis to chassis and sometimes from model to model. The customer is provided with the instructions to properly format the USB thumb drive, unzip the file, and the procedures for loading the software into the television

SOFTWARE UPDATES FOR SERVICERS

Replacement Main Boards are now stocked with basic software. Once the replacement board is installed in the TV, the most current software needs to be installed using a USB thumb drive containing the necessary software.

This new method of supplying Main Boards significantly reduces the complexity of replacing the Main Boards. Information about the LCD panel is stored on the TCON circuits. This information is automatically loaded onto the Main Board when the TV is powered up. With the correct software version the Main Board and/or the TCON can be replaced more efficiently. The software update and procedures for the software installation are located on the Sony Authorized Servicer Portal at

SECTION 5 - UPDATES AND ADJUSTMENTS

<http://www.sony.com/asp>.

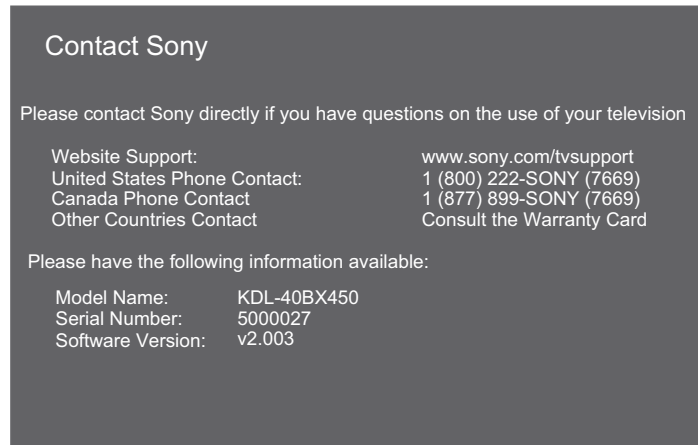
SOFTWARE UPDATE RESPONSIBILITY

Software updates are designed to be performed by the customer. Warranty repairs in which the issue can be resolved by a software update **are not reimbursable**. Most issues involving software updates are handled by the customer service center and should not be directed to an authorized service center. It is the responsibility of the servicer to prevent service calls for issues that involve software updates. Exceptions to this are certain cases whereby the customer is unable or unwilling to perform the task. In this situation, the servicer will be notified and receive the proper authorization for reimbursement.

It is the servicer's responsibility, however, to **make certain that any TV requiring a legitimate service is running the latest software version and to install it if necessary**.

CHECKING THE SOFTWARE VERSION

The easiest way to check the version of software that is currently on the TV is to access the Contact Sony screen by using the customer menu.



EXAMPLE OF SOFTWARE VERSION
LOCATED ON THE CONTACT SONY SCREEN

EXAMPLES OF SOFTWARE CORRECTABLE SYMPTOMS

Always check the Sony Authorized Servicer Portal at www.sony.com/asp site for any known and/or listed issues that are software related. Most symptoms that are correctable by software updates involve communications issues with other devices or minor glitches in the operation of a specific function. Below is a list of some of the symptoms that may be corrected with a software update:

- Fluctuations in picture brightness
- Intermittent picture freezing or noise
- Problems with certain inputs (especially HDMI)
- Intermittent or distorted audio
- Erratic remote control operation
- Unit turns on and off by itself
- Loss of color
- Internet connectivity

SECTION 5 - UPDATES AND ADJUSTMENTS

- Certain features not working correctly (photo or video file viewing)

OVERVIEW

As mentioned in [page 21](#), the models in this manual utilize a “generic” type main board, therefore certain service adjustments settings must be changed or confirmed when either the Main Board, LCD Panel or TCON Board are replaced.

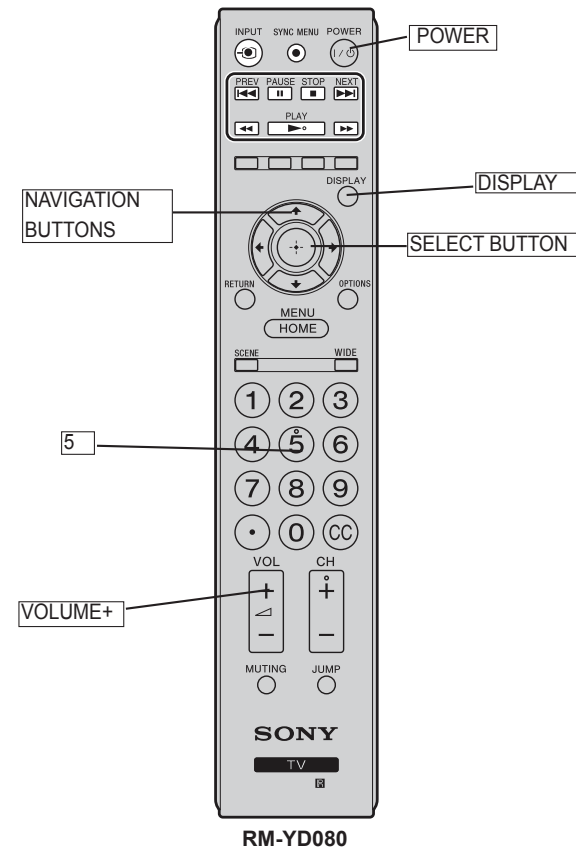
UPDATING THE SOFTWARE

After replacing the Main Board, LCD Panel or TCON Board, you **MUST UPDATE** the **SOFTWARE** to the latest version.

ACCESSING SERVICE ADJUSTMENT MODE

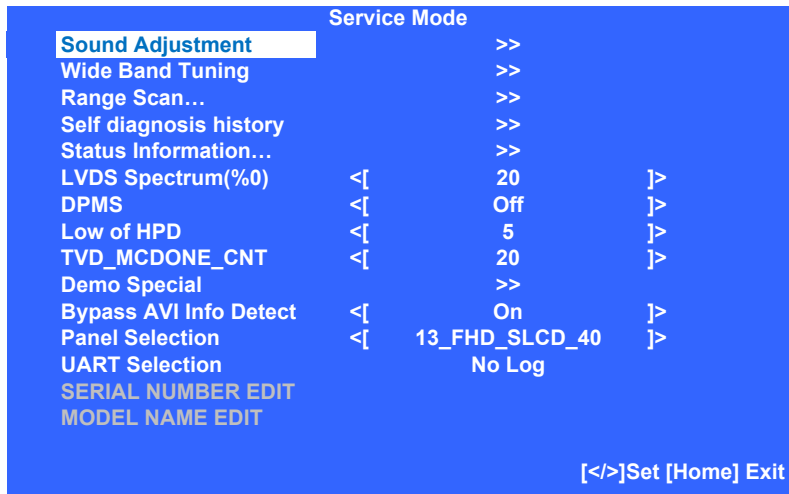
1. TV must be in Standby mode.
2. Press the following buttons on the Remote Commander within a second of each other:

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



SECTION 5 - UPDATES AND ADJUSTMENTS

3. The **Service Mode** initial screen, will be displayed.



4. Do one of the following:
- Proceed to **Completing Service Requirements when Replacing the Main Board**.
 - Proceed to **Completing Service Requirements when Replacing the LCD Panel**.

COMPLETING SERVICE REQUIREMENTS WHEN REPLACING THE MAIN BOARD

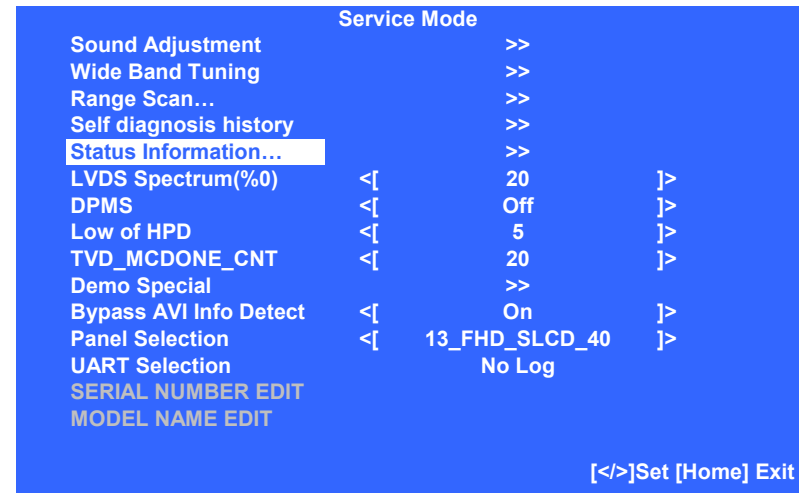
The following must be performed after replacing the Main Board to ensure that all of the features for the TV will be available.

- View the Status Information
- Select the Panel ID Code
- Add the Serial Number
- Add the Model Name

VIEWING THE STATUS INFORMATION

After replacing the Main Board you **MUST UPDATE** the **SOFTWARE** to the **latest version**.

- Verify the latest software is installed before proceeding to the service adjustments.
- Press \downarrow until **Status Information** is selected.



- Then press \rightarrow to view the **Status Information** screen.

SECTION 5 - UPDATES AND ADJUSTMENTS

8. The latest version is displayed as shown:

```

MAIN FW VER:      v2.003
MAIN NVM VER:     TD1.000
BOOT LOADER VER: v1.000
PANEL VER:       V0.00024
PQ VER:          v1.0000
AQ VER:          AQ0.0016
KP VER:          1.5
ANT-SW:          Antenna
Phy.Ch.:         33
Status:          Unlock
INT VER:         002125_3_001_889_84
S/N:             N/A
Freq. (khz):     585250
Modulation:      NTSC
Offset Freq:     N/A
    
```

9. Do one of the following:

- a. If the latest software is installed, proceed to **Selecting the Panel ID Code**.
- b. If the latest software is not installed, update the software and then proceed to **Selecting the Panel ID Code**.

SELECTING THE PANEL ID CODE

CAUTION: You **MUST SELECT THE CORRECT PANEL ID CODE** for the picture to display properly.

Verify before proceeding to the next step:

- Verified the Status Information

10. Press \downarrow until **Panel Selection** is selected.

```

Service Mode
Sound Adjustment      >>
Wide Band Tuning     >>
Range Scan...        >>
Self diagnosis history >>
Status Information... >>
LVDS Spectrum(%0)   <[ 20 ]>
DPMS                  <[ Off ]>
Low of HPD            <[ 5 ]>
TVD_MCDONE_CNT       <[ 20 ]>
Demo Special         >>
Bypass AVI Info Detect <[ On ]>
Panel Selection      <[ 13_FHD_SLCD_40 ]>
UART Selection        No Log
SERIAL NUMBER EDIT
MODEL NAME EDIT
[</>]Set [Home] Exit
    
```

11. Using the table below, press the \leftarrow or \rightarrow to select the correct Panel Code for the Panel ID.

Modle Name	Panel Code	Panel Type	Panel ID
KDL-40BX450 KDL-40BX451	13_FHD_SLCD_40	SLCD	LTY400HM
KDL-46BX450 KDL-46BX451	14_FHD_SLCD_46	SLCD	LTY460HM

CAUTION: If you do not select the correct Panel ID Code, the picture may not display.

12. Verify the Panel ID Code is correct before proceeding to the next step.
13. Proceed to **Adding the Serial Number**.

SECTION 5 - UPDATES AND ADJUSTMENTS

ADDING THE SERIAL NUMBER

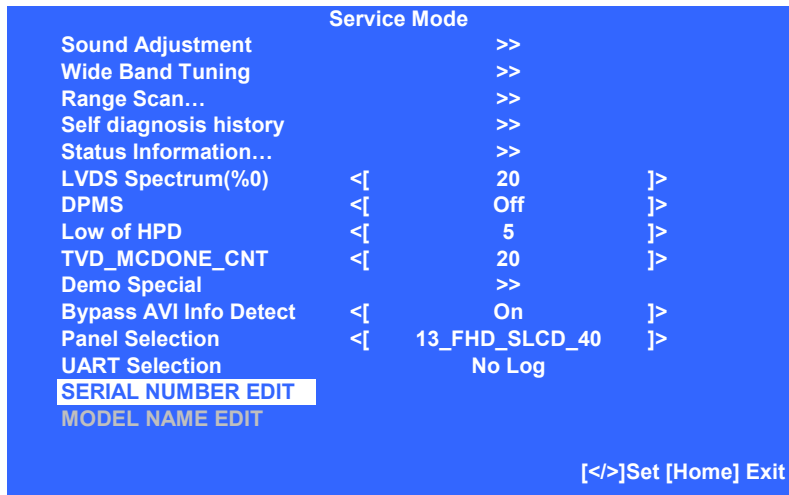
Verify before proceeding to the next step:

- Verified Status Information
- Selected the Panel ID Code

14. Locate the **Serial Number** for the TV on the side of the Rear Cover of the TV.

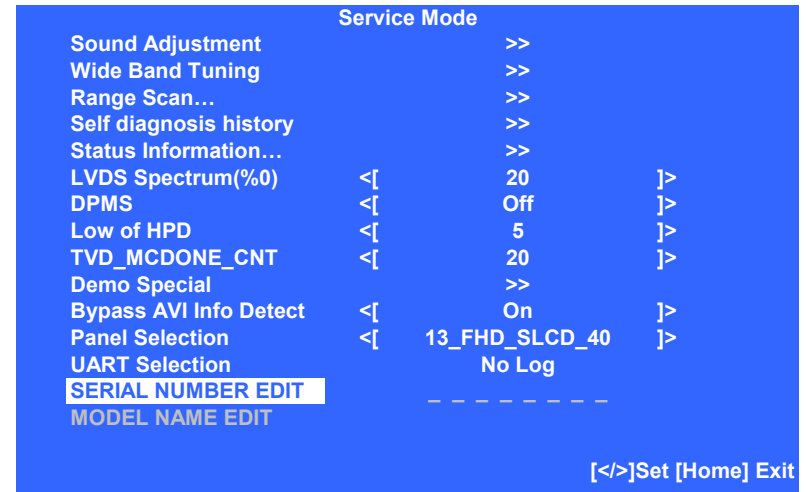


15. Press \downarrow until **SERIAL NUMBER EDIT** is selected.

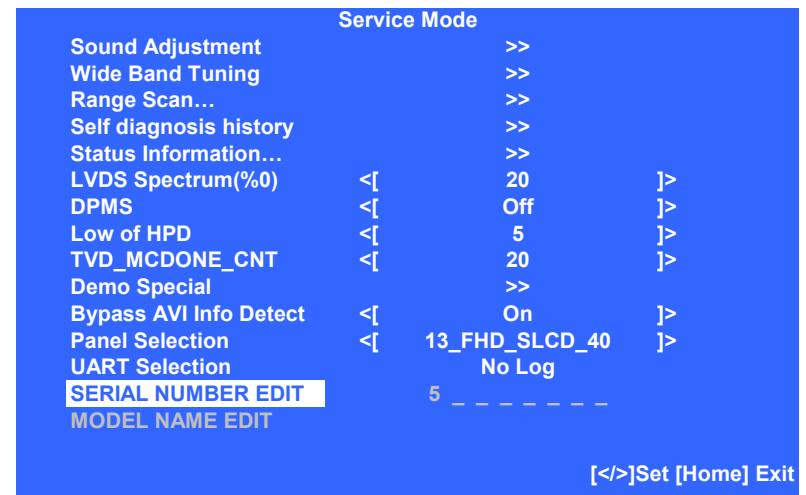


16. Press \rightarrow to be able to select the first digit.

CAUTION: The Serial Number can only be selected once. Be sure to verify the information is correct before saving the changes.



17. Press \uparrow or \downarrow until the first digit of the Serial Number of the TV displays.



SECTION 5 - UPDATES AND ADJUSTMENTS

18. Continue to use the \rightarrow and \leftarrow or \downarrow to enter the remaining digits of the Serial Number.

```
Service Mode
Sound Adjustment >>
Wide Band Tuning >>
Range Scan... >>
Self diagnosis history >>
Status Information... >>
LVDS Spectrum(%0) <[ 20 ]>
DPMS <[ Off ]>
Low of HPD <[ 5 ]>
TVD_MCDONE_CNT <[ 20 ]>
Demo Special >>
Bypass AVI Info Detect <[ On ]>
Panel Selection <[ 13_FHD_SLCD_40 ]>
UART Selection No Log
SERIAL NUMBER EDIT 5000027
MODEL NAME EDIT

[</>]Set [Home] Exit
```

19. Verify the Serial Number is correct before proceeding to the next step.
20. When the complete Serial Number is displayed, press \oplus .
21. When the confirmation screen displays, press \leftarrow to select **YES**, and then press \oplus .
22. Proceed to **Adding the Model Name**.

ADDING THE MODEL NAME

Verify before proceeding to the next step:

- Verified Status Information
- Selected the Panel ID Code
- Added the Serial Number

CAUTION: The Model Name can only be selected once. Be sure to verify the information is correct before saving the changes.

23. Press \downarrow until **MODEL NAME EDIT** is selected.

```
Service Mode
Sound Adjustment >>
Wide Band Tuning >>
Range Scan... >>
Self diagnosis history >>
Status Information... >>
LVDS Spectrum(%0) <[ 20 ]>
DPMS <[ Off ]>
Low of HPD <[ 5 ]>
TVD_MCDONE_CNT <[ 20 ]>
Demo Special >>
Bypass AVI Info Detect <[ On ]>
Panel Selection <[ 13_FHD_SLCD_40 ]>
UART Selection No Log
SERIAL NUMBER EDIT 5000027
MODEL NAME EDIT

[</>]Set [Home] Exit
```

SECTION 5 - UPDATES AND ADJUSTMENTS

24. Press \rightarrow to be able to select the first character.

```

Service Mode
Sound Adjustment          >>
Wide Band Tuning         >>
Range Scan...            >>
Self diagnosis history    >>
Status Information...     >>
LVDS Spectrum(%0)       <[ 20      ]>
DPMS                     <[ Off   ]>
Low of HPD               <[ 5     ]>
TVD_MCDONE_CNT          <[ 20    ]>
Demo Special             >>
Bypass AVI Info Detect   <[ On    ]>
Panel Selection          <[ 13_FHD_SLCD_40 ]>
UART Selection           No Log
SERIAL NUMBER EDIT      5000027
MODEL NAME EDIT         -----
                                                                    [</>]Set [Home] Exit
    
```

25. Press \uparrow or \downarrow until the first character of the Model Name of the TV displays.

```

Service Mode
Sound Adjustment          >>
Wide Band Tuning         >>
Range Scan...            >>
Self diagnosis history    >>
Status Information...     >>
LVDS Spectrum(%0)       <[ 20      ]>
DPMS                     <[ Off   ]>
Low of HPD               <[ 5     ]>
TVD_MCDONE_CNT          <[ 20    ]>
Demo Special             >>
Bypass AVI Info Detect   <[ On    ]>
Panel Selection          <[ 13_FHD_SLCD_40 ]>
UART Selection           No Log
SERIAL NUMBER EDIT      5000027
MODEL NAME EDIT         K -----
                                                                    [</>]Set [Home] Exit
    
```

26. Continue to use the \rightarrow and \uparrow or \downarrow to enter the remaining characters of the Model Name.

```

Service Mode
Sound Adjustment          >>
Wide Band Tuning         >>
Range Scan...            >>
Self diagnosis history    >>
Status Information...     >>
LVDS Spectrum(%0)       <[ 20      ]>
DPMS                     <[ Off   ]>
Low of HPD               <[ 5     ]>
TVD_MCDONE_CNT          <[ 20    ]>
Demo Special             >>
Bypass AVI Info Detect   <[ On    ]>
Panel Selection          <[ 13_FHD_SLCD_40 ]>
UART Selection           No Log
SERIAL NUMBER EDIT      5000027
MODEL NAME EDIT         KDL- 40BX450
                                                                    [</>]Set [Home] Exit
    
```

27. Verify the Model Name is correct before proceeding to the next step.

28. When the complete Model Name is displayed, press \oplus .

29. When the confirmation screen displays, press \leftarrow to select **YES**, and then press \oplus .

30. Press **POWER** to exit **Service Mode**.

SECTION 5 - UPDATES AND ADJUSTMENTS

COMPLETING SERVICE REQUIREMENTS WHEN REPLACING THE LCD PANEL

The following must be performed after replacing the LCD Panel.

- View the Status Information
- Verify the Panel ID Code
- Reset the Panel Operation Time
 1. TV must be in Standby mode.
 2. Press the following buttons on the **Remote Commander** within a second of each other:

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

```
Service Mode
Sound Adjustment >>
Wide Band Tuning >>
Range Scan... >>
Self diagnosis history >>
Status Information... >>
LVDS Spectrum(%0) <[ 20 ]>
DPMS <[ Off ]>
Low of HPD <[ 5 ]>
TVD_MCDONE_CNT <[ 20 ]>
Demo Special >>
Bypass AVI Info Detect <[ On ]>
Panel Selection <[ 13_FHD_SLCD_40 ]>
UART Selection No Log
SERIAL NUMBER EDIT 5000027
MODEL NAME EDIT KDL-40BX450
[</>]Set [Home] Exit
```

VIEWING THE STATUS INFORMATION

After replacing the LCD Panel you **MUST UPDATE** the **SOFTWARE** to the **latest version**. Verify the latest software is installed before proceeding to the service adjustments.

3. For instructions refer to the section [“Viewing the Status Information” on page 24.](#)
4. Do one of the following:
 - a. If the latest software is installed, proceed to **Verifying the Panel ID Code.**
 - b. If the latest software is not installed, update the software and then proceed to **Verifying the Panel ID Code.**

VERIFYING THE PANEL ID CODE

5. Press **↵** until **Panel Selection** is selected.

```
Service Mode
Sound Adjust... >>
Wide Band Tuning >>
Range Scan... >>
Self diagnosis history >>
Status Information... >>
LVDS Spectrum(%0) <[ 20 ]>
DPMS <[ Off ]>
Low of HPD <[ 5 ]>
TVD_MCDONE_CNT <[ 20 ]>
Demo Special >>
Bypass AVI Info Detect <[ On ]>
Panel Selection <[ 13_FHD_SLCD_40 ]>
UART Selection No Log
SERIAL NUMBER EDIT 5000027
MODEL NAME EDIT KDL-40BX450
[</>]Set [Home] Exit
```


SECTION 5 - UPDATES AND ADJUSTMENTS

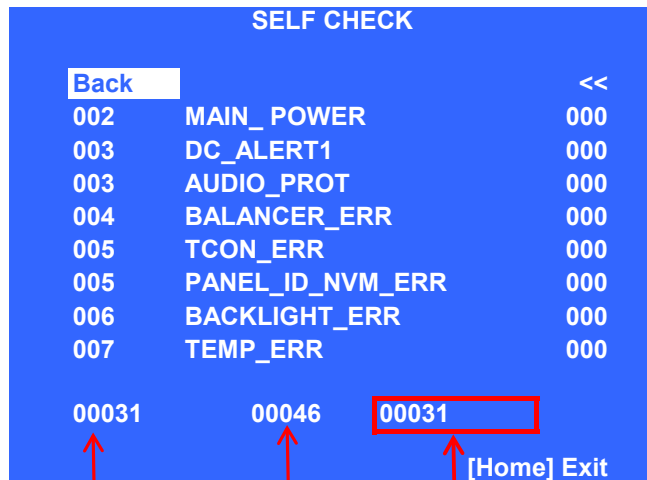
6. Using the table below, verify the correct Panel Code for the Panel ID.

Modle Name	Panel Code	Panel Type	Panel ID
KDL-40BX450 KDL-40BX451	13_FHD_SLCD_40	SLCD	LTY400HM
KDL-46BX450 KDL-46BX451	14_FHD_SLCD_46	SLCD	LTY460HM

7. Proceed to **Resetting the Panel Operation Time**.

RESETTING PANEL OPERATION TIME

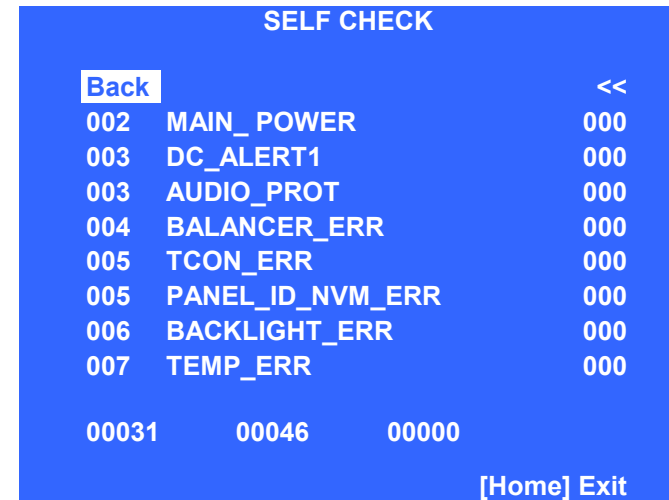
8. Press  until **Self diagnosis history** is selected.
9. On the **Self Check** screen, identify the **Panel Operation Time** location.



TOTAL OPERATION BOOT COUNT **PANEL OPERATION**

10. Press **7** → **0**.

11. Verify **Panel Operation Time** has been changed to 00000.



12. To exit the **Self Check**, press **HOME**.

SECTION 5 - UPDATES AND ADJUSTMENTS

ACCESSING FACTORY ADJUSTMENT MODE

1. TV must be ON.
2. Press the following buttons on the **Remote Commander** within a second of each other:



NOTE: The instructions to access Factory Mode are NOT THE SAME as the Service Mode procedure.

Factory Mode			
Input Source	<[	TV	>]
White Balance	<[	Off	>]
Internal Pattern	<[	Off	>]
Color Temp		>>	
Aging Mode	<[	Off	>]
ADC Calibration		>>	
TVD ADC Calibration		>>	
Auto Phase	<[	Off	>]
Factory Reset (default)		Off	
Recall Data	<[	Off	>]
Data Backup	<[	Off	>]
Site Air Channels	<[	Off	>]
Site Cable Channels	<[	Off	>]
System FW	v2.003		
Model Name	KDL-40BX450		
Serial Number	5000027		
Picture Quality	v1.0000		
Audio Quality	AQ1.0000		
Panel Info	13_FHD_SLCD_40		
EDID Version	HDMI: 1.3 / VGA: 1.3		
Factory Version	v2.003		
[</>]Set [EXIT] Exit			

ADJUSTING THE COLOR TEMPERATURE

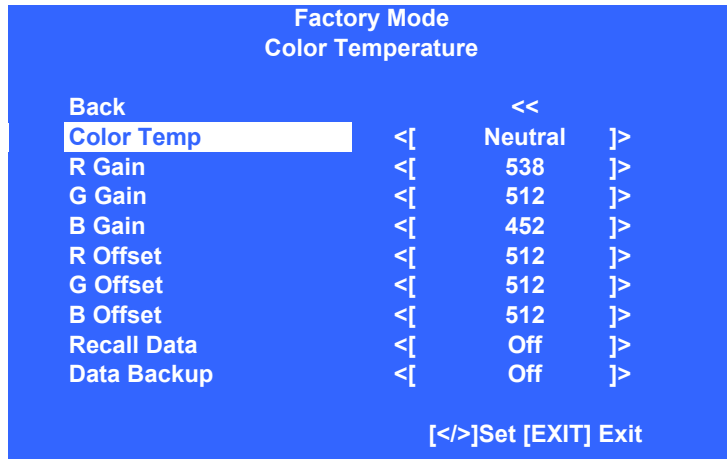
The default White Balance data values are set for optimal viewing. The following instructions are for technicians who have been requested to customize calibrations for their customers.


3. Using the , scroll down to select **Color Temp**.

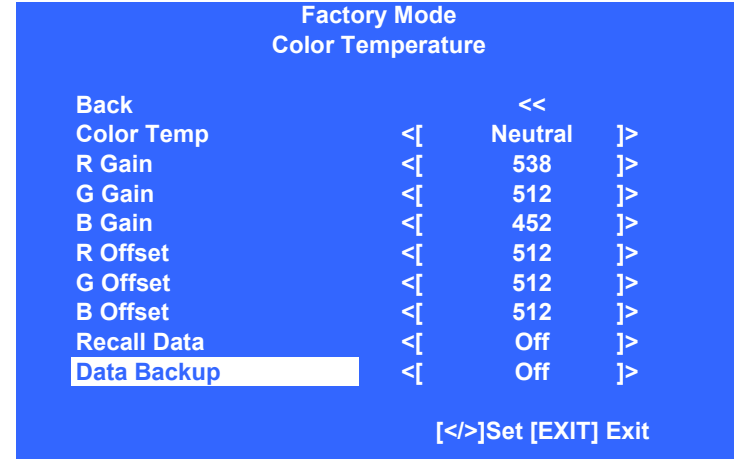
Factory Mode			
Input Source	<[	TV	>]
White Balance	<[	Off	>]
Internal Pattern	<[	Off	>]
Color Temp		>>	
Aging Mode	<[	Off	>]
ADC Calibration		>>	
TVD ADC Calibration		>>	
Auto Phase	<[	Off	>]
Factory Reset (default)		Off	
Recall Data	<[	Off	>]
Data Backup	<[	Off	>]
Site Air Channels	<[	Off	>]
Site Cable Channels	<[	Off	>]
System FW	v2.003		
Model Name	KDL-40BX450		
Serial Number	5000027		
Picture Quality	v1.0000		
Audio Quality	AQ1.0000		
Panel Info	13_FHD_SLCD_40		
EDID Version	HDMI: 1.3 / VGA: 1.3		
Factory Version	v2.003		
[</>]Set [EXIT] Exit			


4. Press to access **Color Temp** adjustments.

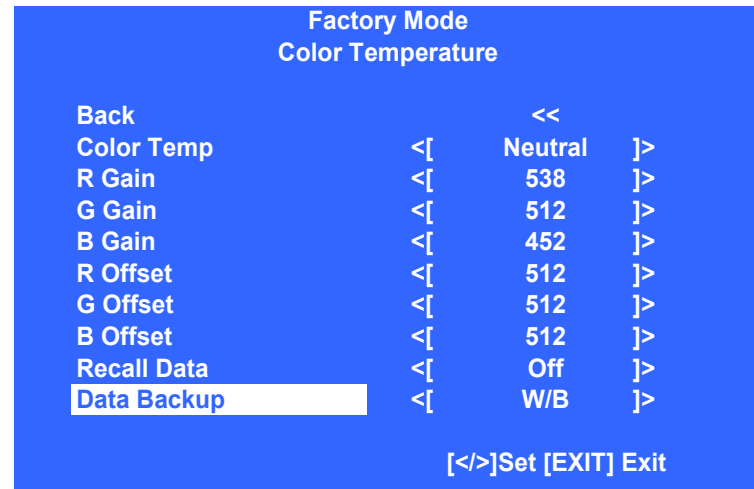
SECTION 5 - UPDATES AND ADJUSTMENTS




5. Press the ← or → to select the **Color Temp** type (Cool, Neutral, Warm1, or Warm2).
6. After the correct Color Temperature is selected, press the ↓ to select the temperature type that needs to be modified.
7. After the correct temperature type is selected, press the → to increase the data value or press ← to decrease the data value.
8. Complete the data value adjustments to the remaining temperature items within the selected temperature type.
NOTE: Changes to the data value must be saved within the temperature type selected before making changes to one of the other temperature types.
9. To save the changes, press the ↓ to select **Data Backup**, then press .



10. Press → to select the option: W/B and press .



11. Do one of the following:
 - a. To make changes to one of the other temperature types, repeat steps 5 through 10.
 - b. To exit **Factory mode**, press HOME.



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Sony LCSC
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KDL-40BX450/40BX451/46BX450/46BX451

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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 lock icon**.
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 lock icon** 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 lock icon** in the service manual **MUST BE DESTROYED**.

HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

Service Procedure for Panel, Board and Software Change / Upgrade

ORIGINAL MANUAL ISSUE DATE: 4/2012

AZ3 CHASSIS

Version	Date	Subject
1.0	4/2012	Original manual issue.

SONY®

9-888-510-01

Service Procedure for Panel, Board and Software Change / Upgrade

AZ3 CHASSIS

SONY®

9-888-510-01

READ ME

Notes for Replacing Service Parts for AZ3 Series

- ★ After replacing the **BA*** board, **Panel**, you need to upgrade Software by using the **USB memory**.
(Upgrade Software even if replacing the Panel only.)
- ★ Before upgrading Software, **be sure to disconnect all cables**.
- ★ After upgrading the version, you need to confirm the **SEG, DEST, MODELNAME, SERIAL, BU_TRANS** and **BU_FLASH** from the Service menu.
(Incorrect settings affect the set's capabilities.)
- ! ★ When upgrading Software, **be sure to download the most recent version**.
(If the version of Software already on the repair board is **newer** than the version of Software for upgrade, Software is not upgraded.)

Preparing USB for Upgrade

There is no special restriction on USB memory. If you connect the USB memory to the computer and it is recognized on the XMB, you can use it. The USB memory can be formatted in either **FAT** or **FAT32**.

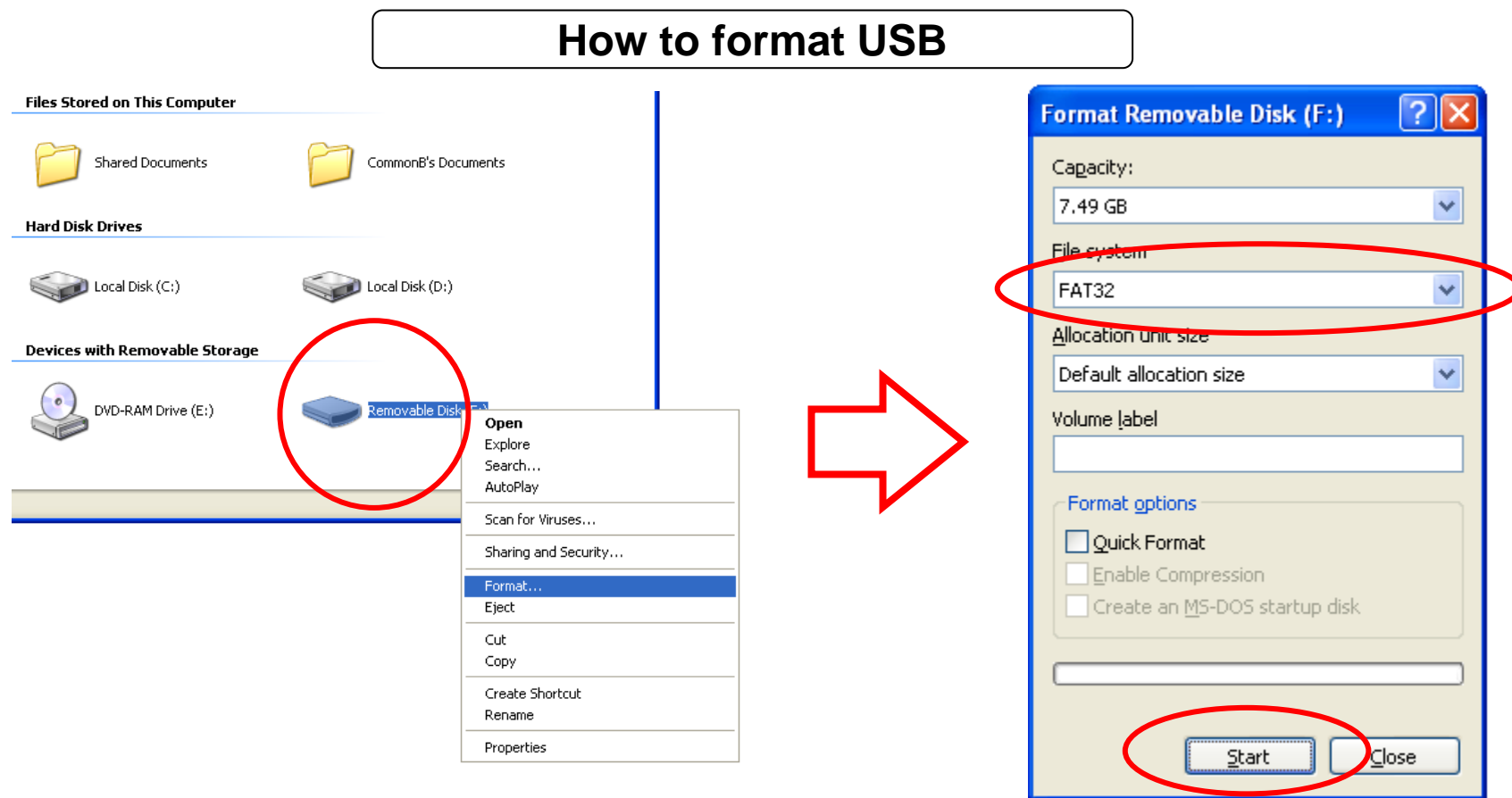


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SEC.1 SERVICE BOARD

1-1. Steps After Replacing the Service Board

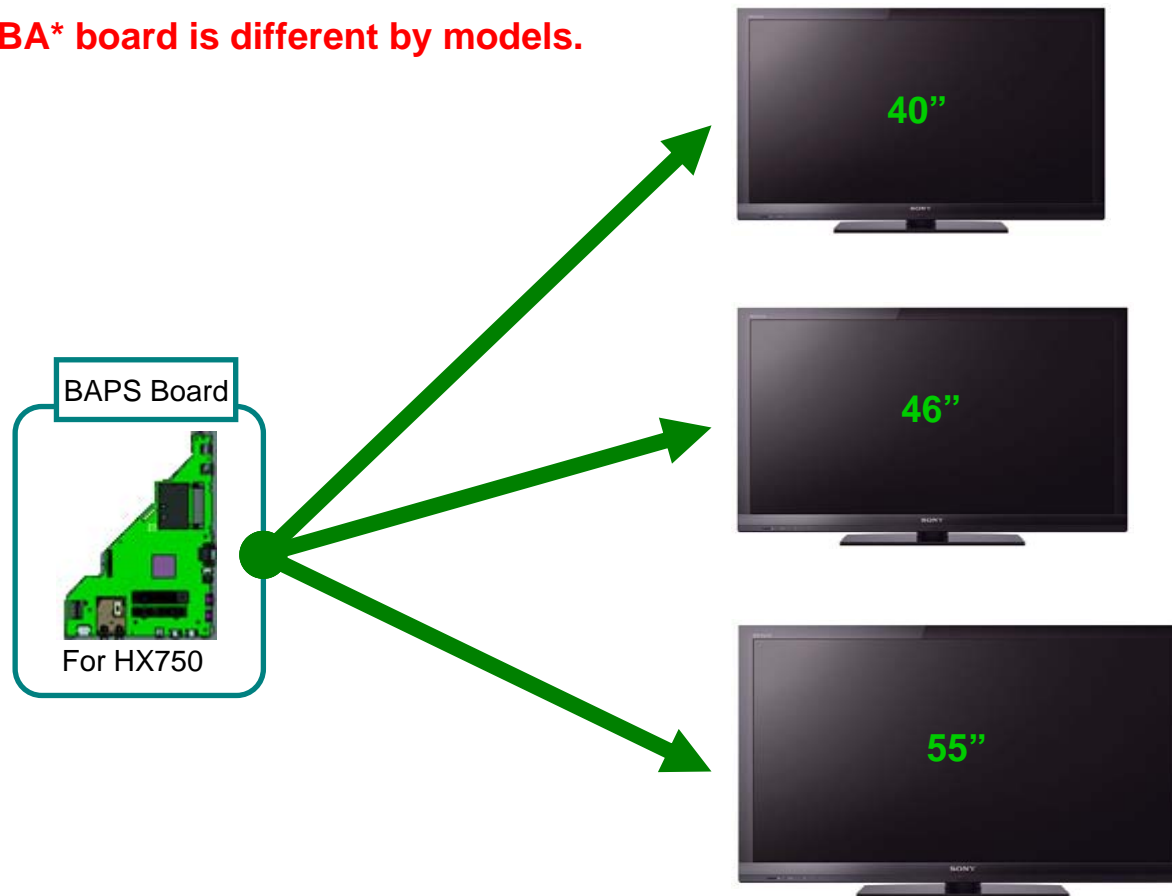
Note: Before operation, disconnect all cables connected to the TV.

1. Replace the BA* board.
2. By using the USB memory, upgrade Software.
3. Confirm and specify the following from the Service menu:
 - a. Check and set Digital MENU 002 MODEL, 000 SEG.
*Operate [NVM Write (Mute + 0)] each setting.
 - b. Check and set Digital MENU 002 MODEL, 001 DEST.
*Operate [NVM Write (Mute + 0)] each setting.
 - c. Check and set Digital MENU 002 MODEL, 002 MODELNAME.
*Operate [NVM Write (Mute + 0)] each setting.
 - d. Check and set Digital MENU 002 MODEL, 003 SERIAL.
*Operate [Decision (12/Enter/Select)] after setting.
 - e. Set VPC MENU 000 DATA_COPY, 000 BU_TRANS.
 - f. Check Model ID, Product ID and Software Version from Digital MENU.
4. Conclude the operation.

1-2. Images Supported by the Service Board

<Example> BAPS Board (KDL-**HX750 Series)

Note: The BA* board is different by models.

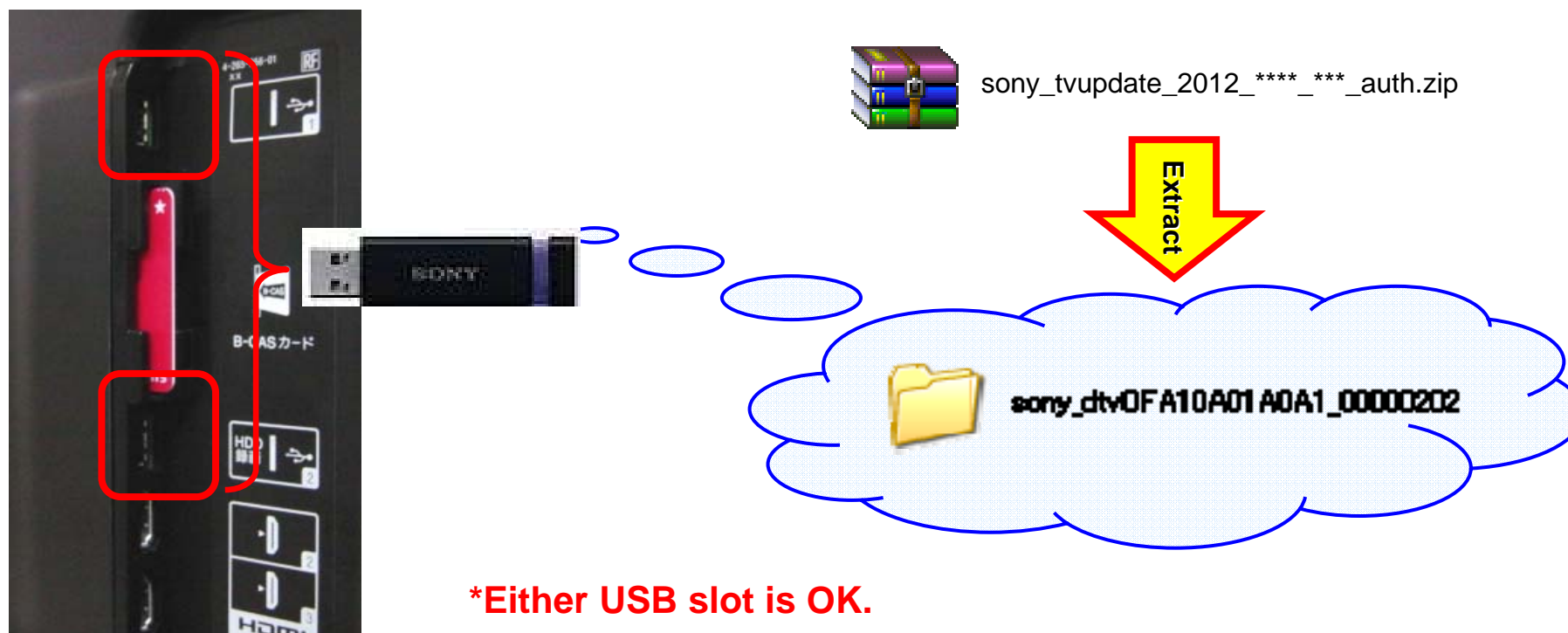


1-3. Preparing USB for Upgrade

[Making procedure]

1. Get a tvupdate file for upgrade.
2. Extract tvupdate file. (e.g. sony_tvupdate_2012_****_***_auth.zip) *** may differ depend on the destination.
3. Confirm folder name. (e.g. sony_dtv*****_*****)
4. Copy the folder under root directory of USB device.

Note: The upgrade will not be performed if the folder structure, name of the folder, or name of the file inside the folder is modified.



1-4. How to Upgrade the Version by Using USB

[Steps for upgrading the version]

1. When you turn on the TV after replacing the BA* board, there will be two cases depend on the Model ID setting.

a. The green LED and amber LED blink, and no image and sound.

→ Insert USB device for upgrade into the USB slot on the TV while the TV is turned on.

b. The green LED lights, and image/sound is normal.

- KDL-xxHX85x → Execute the procedure in page 11 ~ 13, and then insert USB device for upgrade into the USB slot on the TV while the TV is turned on.

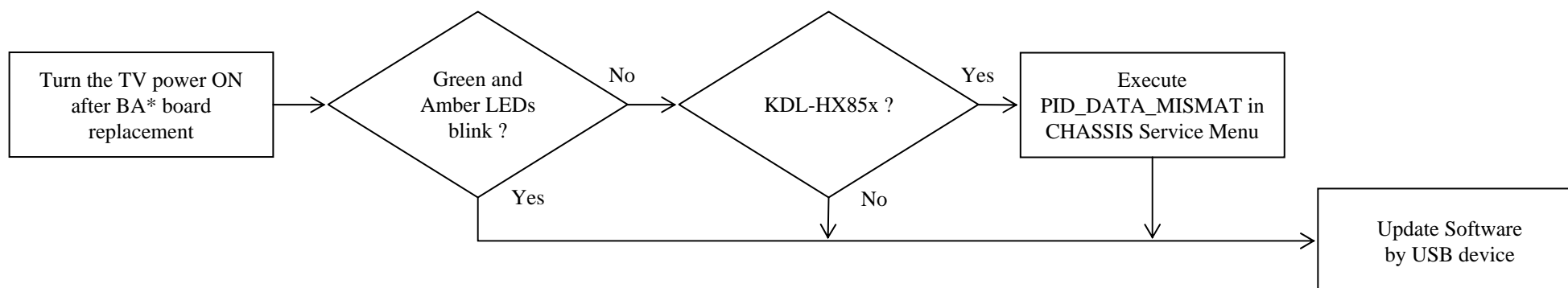
- The other models → Insert USB device for upgrade into the USB slot on the TV while the TV is turned on. (same as “a.”)

Note: Please power on by the power button of TV or remote commander within 5 seconds if TV is go to standby when inserting the AC plug.

2. The TV is reset about a minute later, and then the Red LED lights and the Amber LED blinks.

Note: After replacing the BA* board, the upgrade startup screen may not be displayed. In addition, be sure not to remove USB device while it is writing.

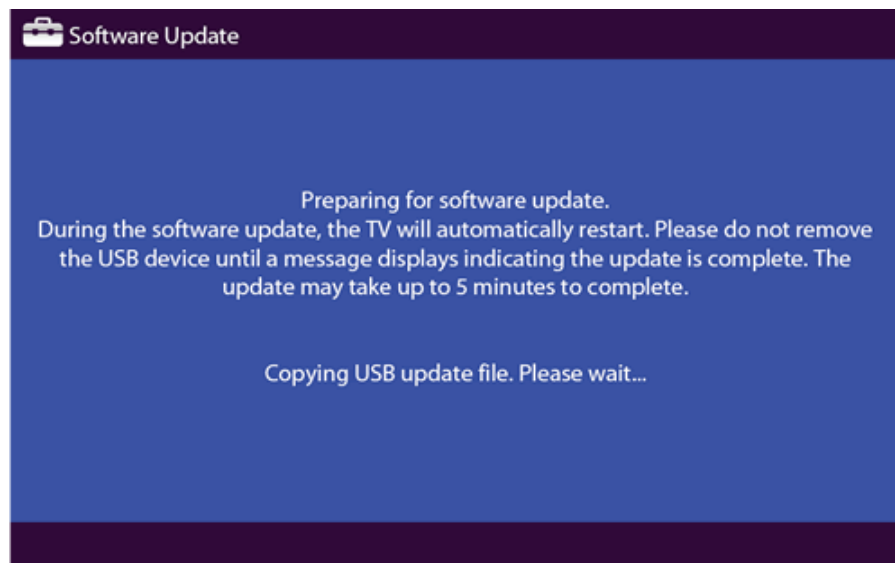
3. After the writing is complete, the TV is rebooted and the screen indicating the upgrade is complete is displayed. Remove USB from the TV and press the “Enter” button while the TV is turned on.



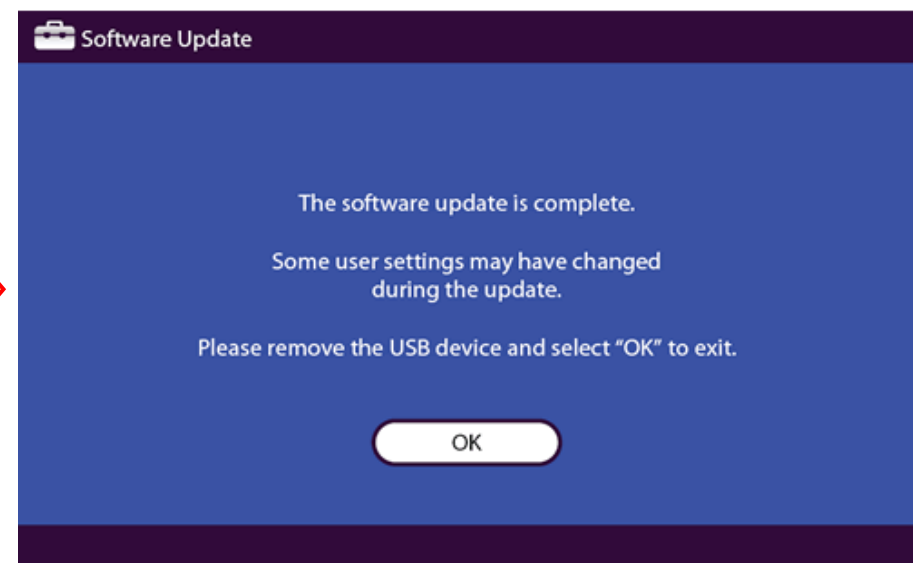
1-5. Samples of Software Update screens

TV will reboot in a minute after the USB device is inserted, then the **Red LED** lights and the **Amber LED** blinks. After about 3 minutes, the TV will reboot and turned on. After a while, a completion message is displayed.

Upgrading...



Upgrade is complete.



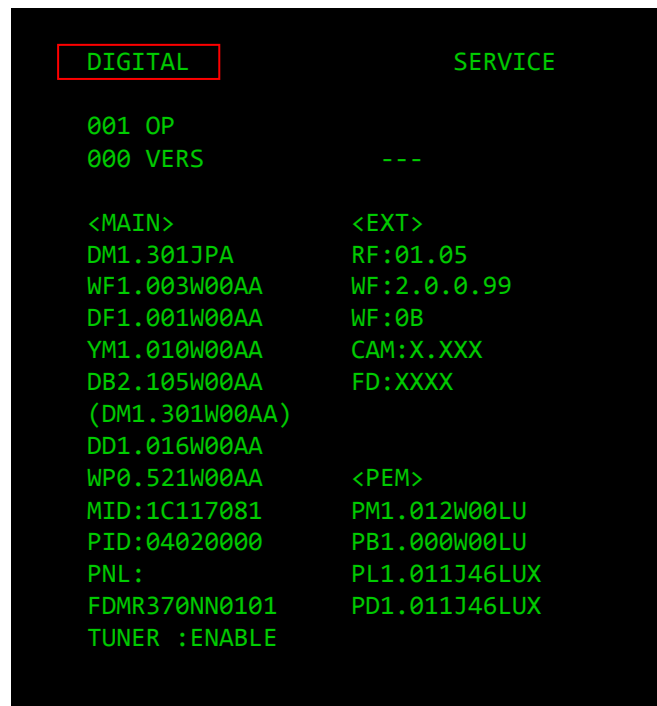
No image or message may be displayed.

1-6. Additional steps for 1-4 (Forced update)

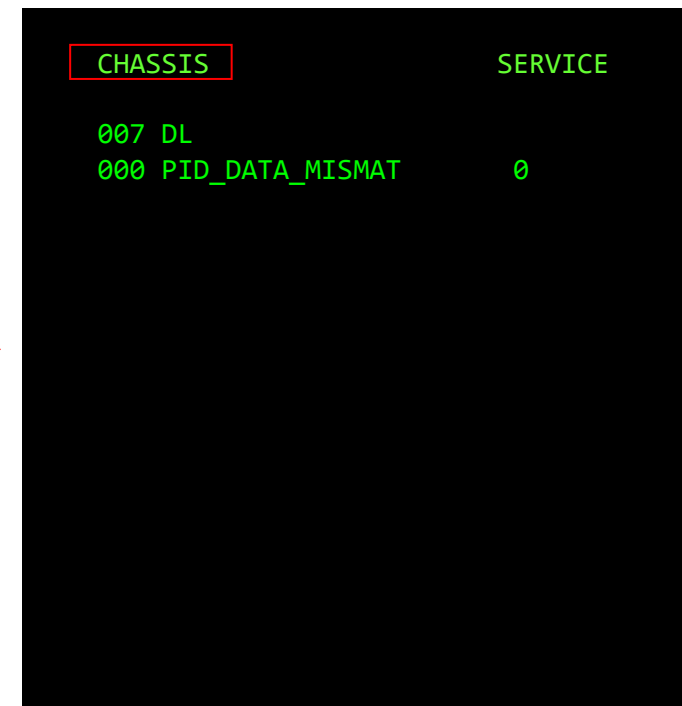
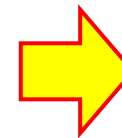
- a. Access to Service Mode by pressing the buttons “DISPLAY → 5ch → Vol+ → POWER” on the remote commander when TV in standby.
 - b. Press the OPTIONS key to go from the Digital Service menu to the Chassis Service menu.
- (There are 3 Service menus “DIGITAL” → “CHASSIS” → “VPC”)



Remote Commander



Digital Service menu



Chassis Service menu

1-6-1. Change PID_DATA_MISMAT.

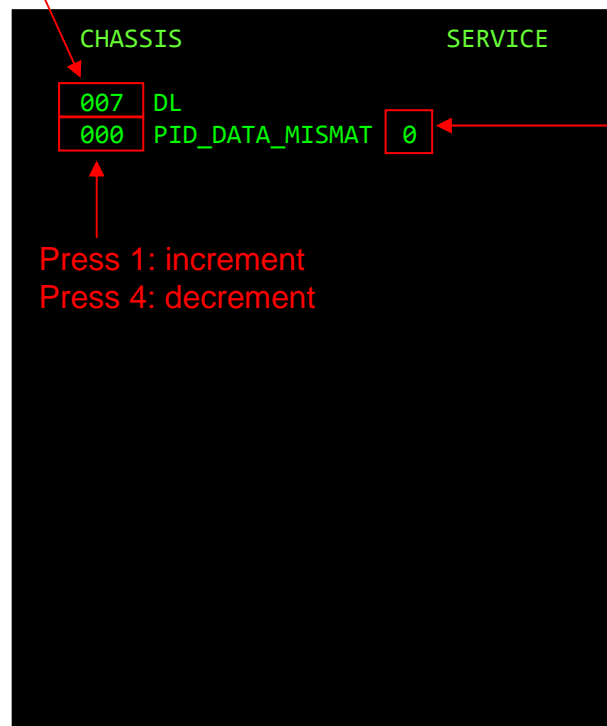
[To change PID_DATA_MISMAT of CHASSIS]

- a. Press the “2/5” key on the remote commander to select 007 DL.
- b. Press the “1/4” key on the remote commander to select 000 PID_DATA_MISMAT.
- c. Press the “3/6” key on the remote commander to change the data to 1 from 0.



Remote Commander

Press 2: increment
Press 5: decrement



Press 1: increment
Press 4: decrement

Press 3: increment
Press 6: decrement

Chassis Service menu

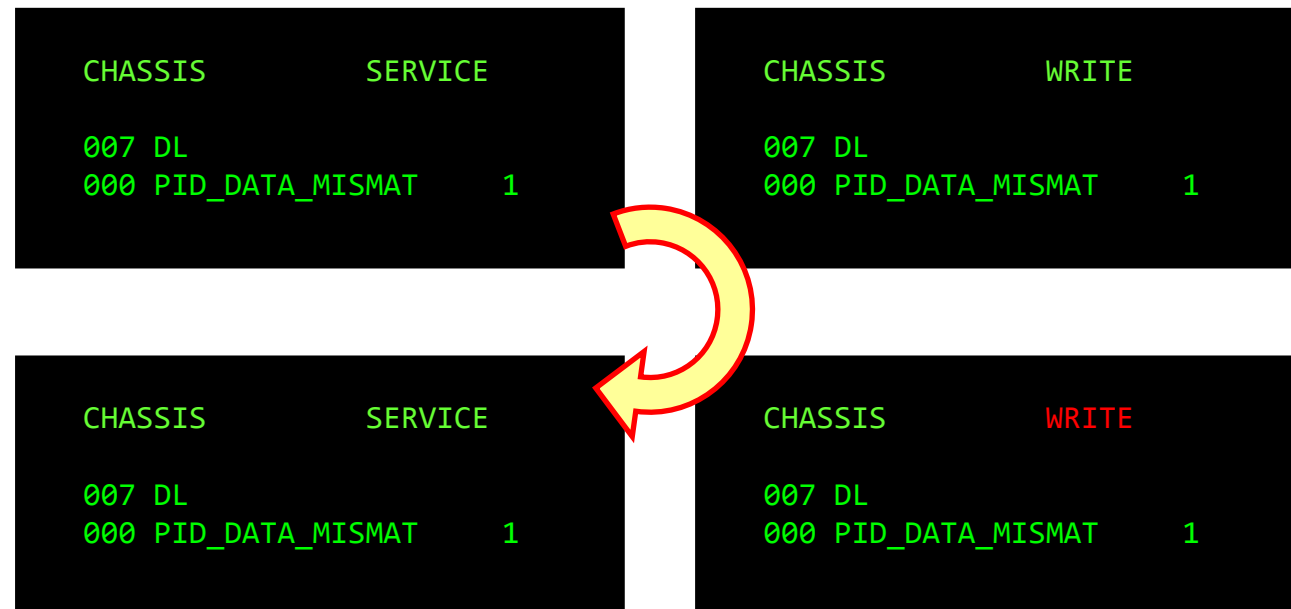
1-6-2. How to Store Changed Data

[To store data changed in “CHASSIS”]

- Press “MUTING” on the remote commander. “SERVICE” will be changed to “WRITE” .
- Press “0” on the remote commander.
 “WRITE” displayed in green on the screen is changed to “WRITE” displayed in red, and then back to “SERVICE”.
- Power OFF → ON by using the power button on TV or Remote Commander.
 The “PID_DATA_MISMATCH” will be changed back to “0”. Please go back to page 9 and proceed next step.



Remote Commander



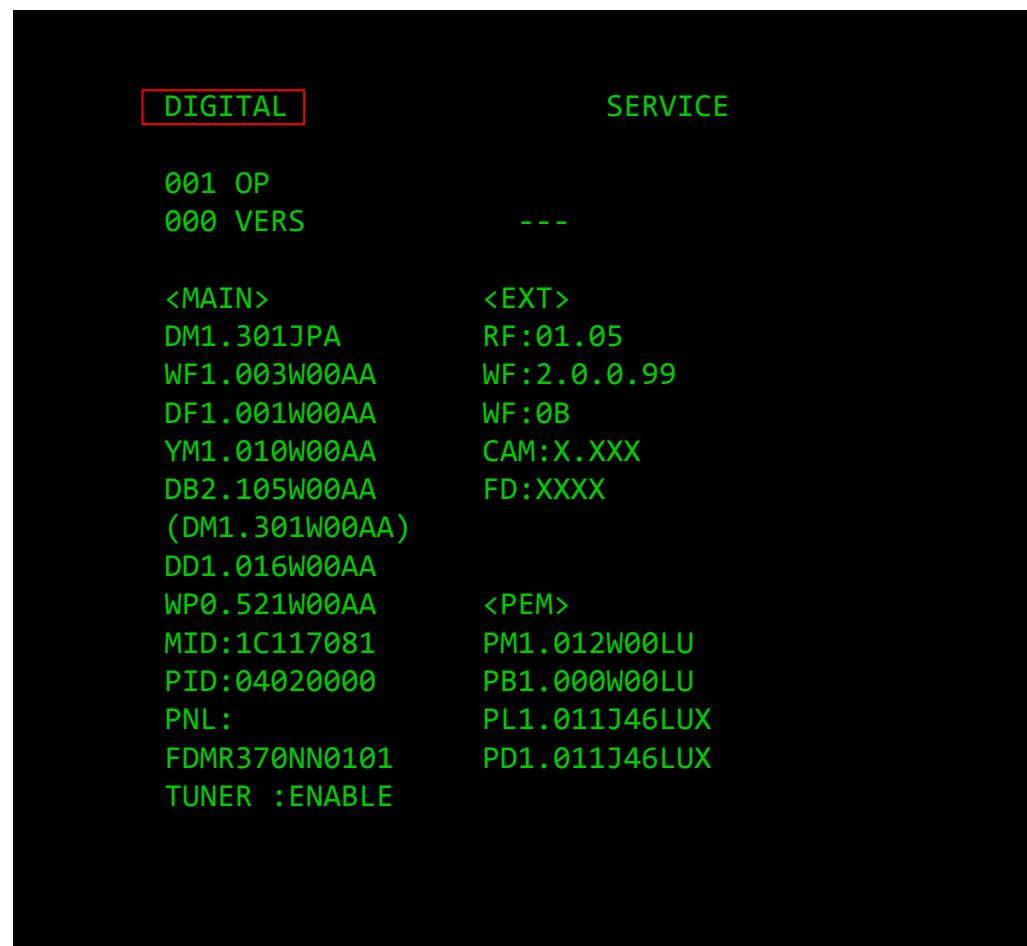
Chassis Service menu

1-7. Setting necessary items in the Service Menu

- Access to Service Mode by pressing the buttons “DISPLAY → 5ch → Vol+ → POWER” on the remote commander when TV in standby.
- Press the OPTIONS key to go to the Digital Service menu. (There are 3 Service menus “DIGITAL” → “CHASSIS” → “VPC”)



Remote Commander



Digital Service menu

1-7-1. Selecting the Segment

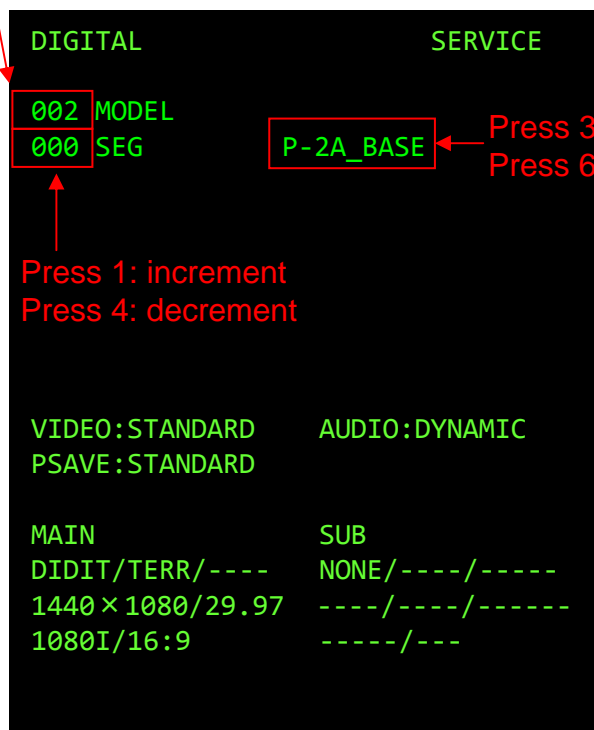
[To change SEG of DIGITAL]

- Press the “2/5” key on the remote commander to select 002 MODEL.
- Press the “1/4” key on the remote commander to select 000 SEG.
- Press the “3/6” key on the remote commander to select SEGMENT from the cross-reference table.



b a c

Press 2: increment
Press 5: decrement



Press 1: increment
Press 4: decrement

Press 3: increment
Press 6: decrement

SEG	Model Name
3a-G_BASE	KDL-**HX85*
3a_BASE	KDL-**HX75* KDL-**EX750 (Japan)
3a_WIFI_READY	KDL-**HX752 (Argentina) KDL-**HX75A (Taiwan) KDL-**HX75A (Hong Kong)
P-2A_BASE	KDL-**EX65* KDL-**EX55* KDL-**EX54*
P-2S_BASE	KDL-**NX65*

The SEG and model names may differ depend on the destination.

Remote Commander

Digital Service menu

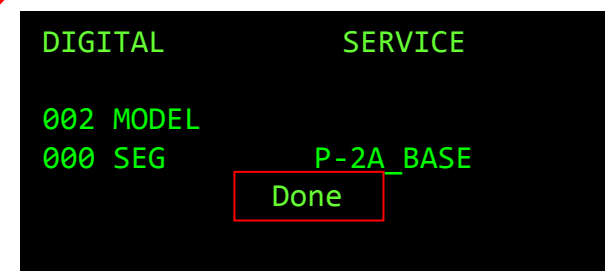
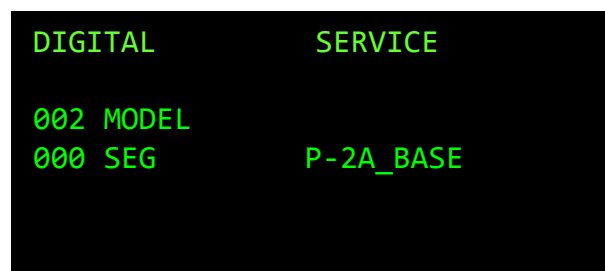
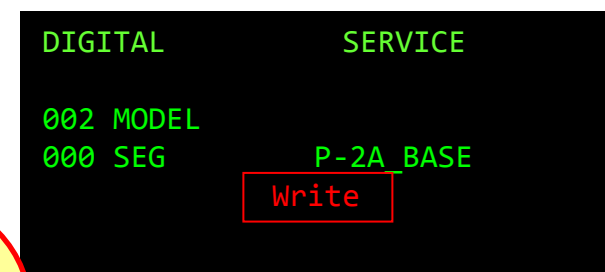
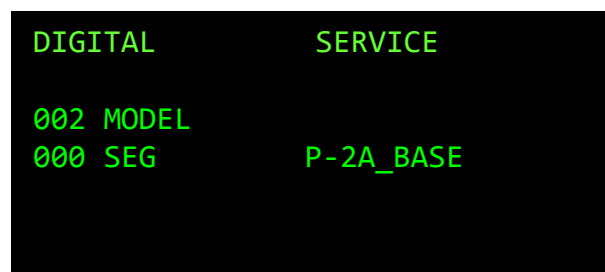
1-7-2. How to Store Changed Data

[To store data changed in “DIGITAL”]

- a. Press “MUTING” on the remote commander.
- b. Press “0” on the remote commander.
 “Write” displayed in red on the screen is changed to “Done” displayed in green.
- c. If the indication mentioned above is displayed, data has been stored.



Remote Commander



Digital Service menu

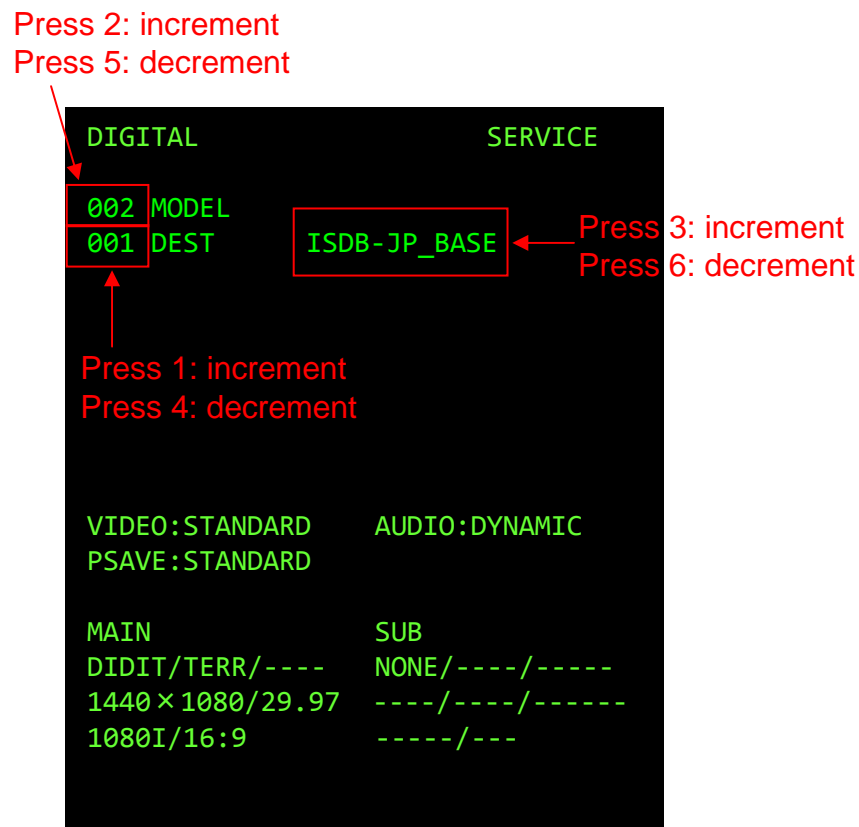
1-7-3. Selecting the Destination

[To change DEST of DIGITAL]

- Press the “2/5” key on the remote commander to select 002 MODEL.
- Press the “1/4” key on the remote commander to select 001 DEST.
- Press the “3/6” key on the remote commander to select DESTINATION from the cross-reference table.



Remote Commander



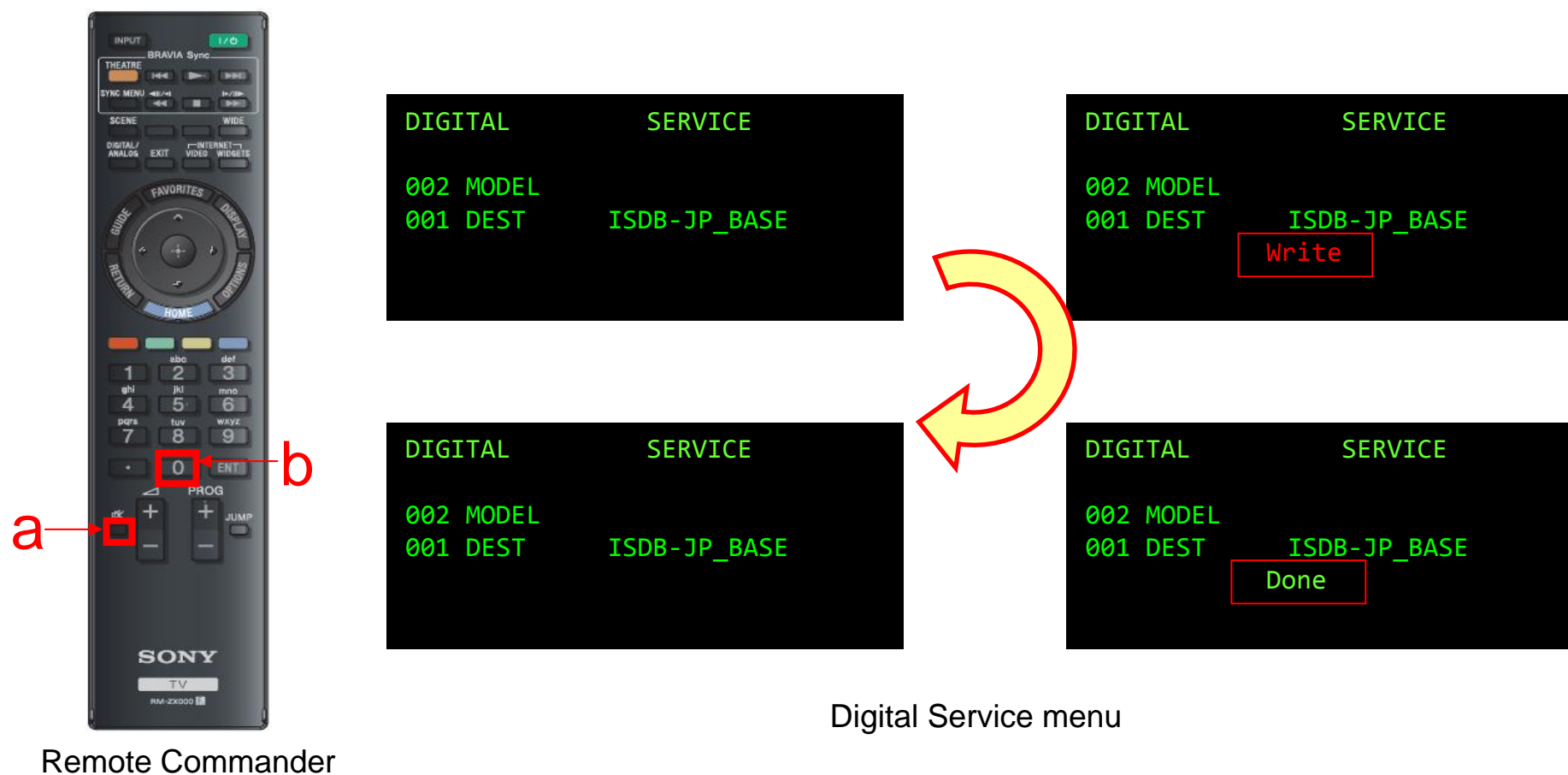
Digital Service menu

001 DEST	
ATSC-KR_BASE	DVB-GA-T_BASE
ATSC-LTN_BASE	DVB-GA-T_NO-NU
ATSC-UC_BASE	DVB-GA-T_NO-SKNU
DTMB-CN_BASE	DVB-GA-T_NO-SKY
DTMB-HK_BASE	DVB-GA-T2_BASE
DVB-AEP-C2_BASE	DVB-GA-T2_NO-NU
DVB-AEP-C2_MHP	DVB-GA-T2_NO-SKNU
DVB-AEP-C2_NO-NOR	DVB-LTN_BASE
DVB-AEP-S2_BASE	DVB-TW_BASE
DVB-AEP-T2_BASE	ISDB-JP_BASE
DVB-AEP-T2_MHP	ISDB-LTN_BASE
DVB-AEP-T2_NO-NOR	ISDB-LTN_NO-GIN
DVB-AEP-TC_BASE	
DVB-AEP-TC_NO-NOR	

1-7-4. How to Store Changed Data

[To store data changed in “DIGITAL”]

- a. Press “MUTING” on the remote commander.
- b. Press “0” on the remote commander.
 “Write” displayed in red on the screen is changed to “Done” displayed in green.
- c. If the indication mentioned above is displayed, data has been stored.



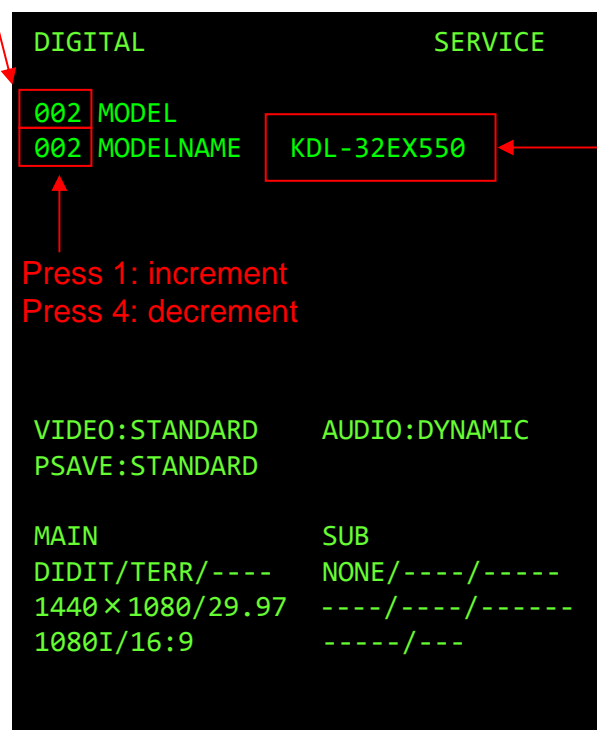
1-7-5. Selecting the Model Name

[To change MODELNAME of DIGITAL]

- Press the “2/5” key on the remote commander to select 002 MODEL.
- Press the “1/4” key on the remote commander to select 002 MODELNAME.
- Press the “3/6” key on the remote commander to select MODELNAME.



Press 2: increment
Press 5: decrement



Press 3: increment
Press 6: decrement

Press 1: increment
Press 4: decrement

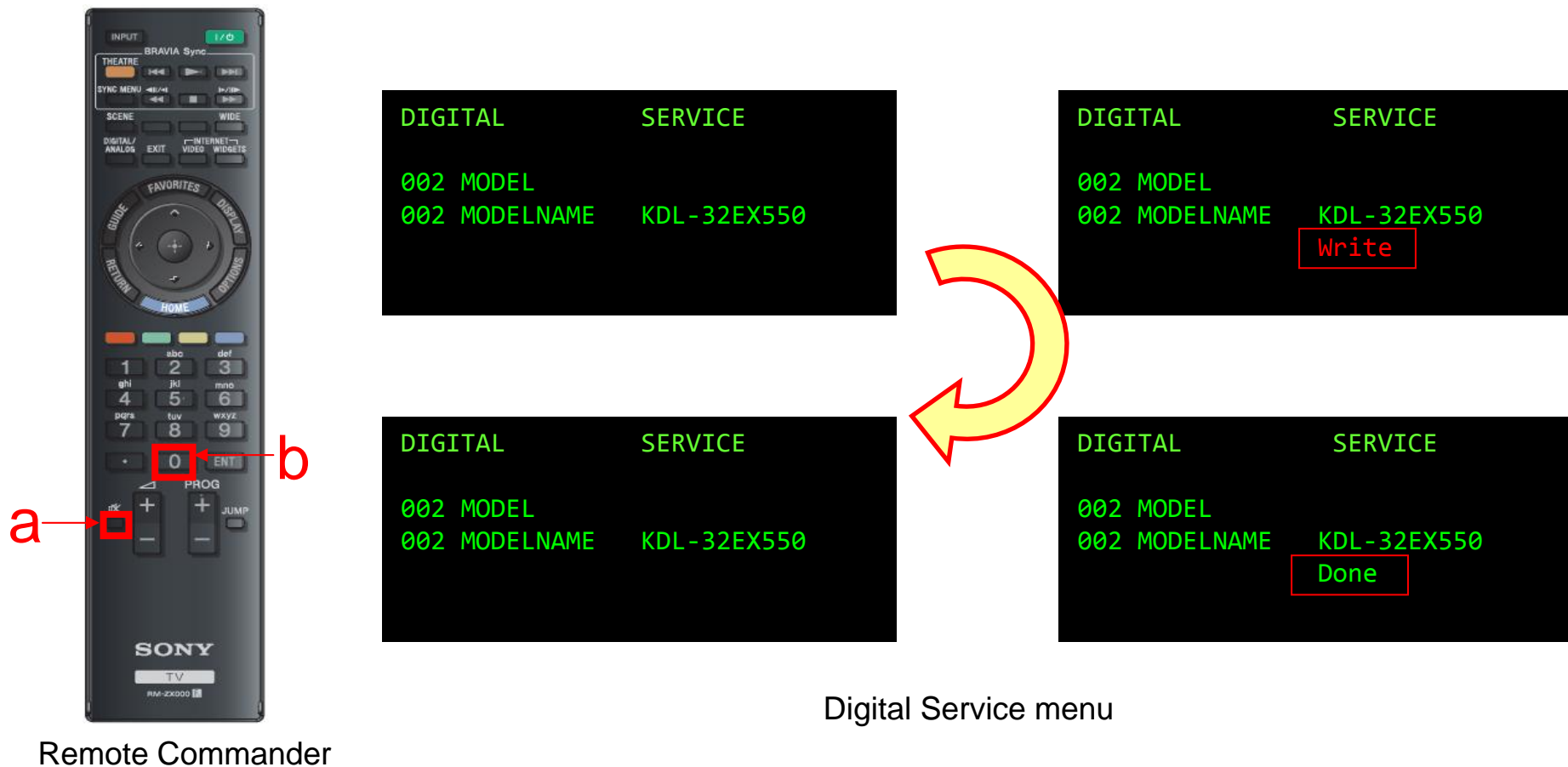
Remote Commander

Digital Service menu

1-7-6. How to Store Changed Data

[To store data changed in “DIGITAL”]

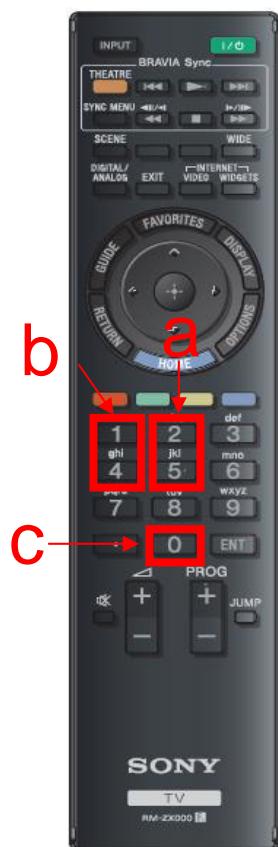
- a. Press “MUTING” on the remote commander.
- b. Press “0” on the remote commander.
 “Write” displayed in red on the screen is changed to “Done” displayed in green.
- c. If the indication mentioned above is displayed, data has been stored.



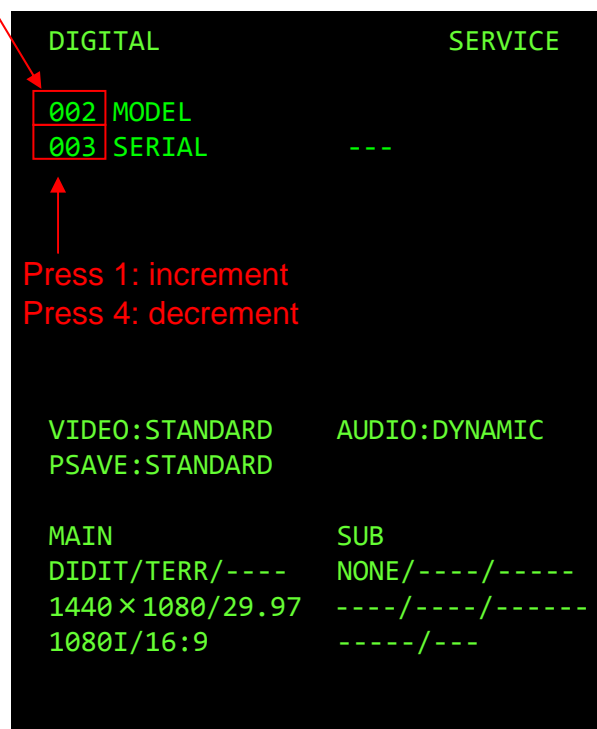
1-7-7. Adding the Serial Number (1/2)

[To change SERIAL of DIGITAL]

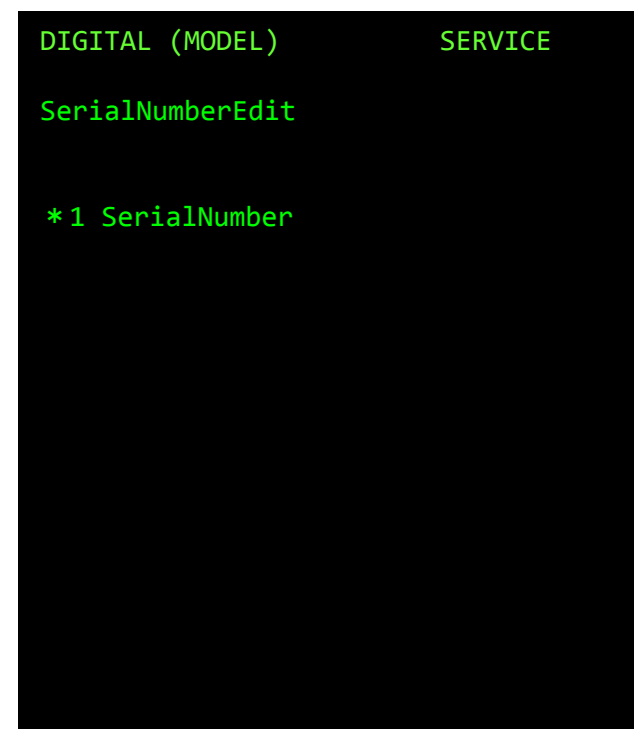
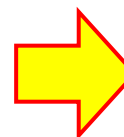
- Press the “2/5” key on the remote commander to select 002 MODEL.
- Press the “1/4” key on the remote commander to select 003 SERIAL.
- Press the “0” key on the remote commander to display the Serial Number Edit option.



Press 2: increment
Press 5: decrement



Caution: The serial number can only be entered once. Please make sure to enter the correct serial number for the customer's TV.



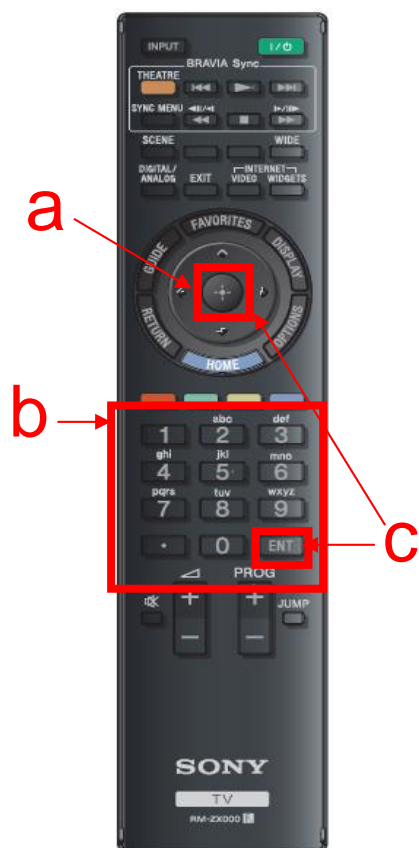
Remote Commander

Digital Service menu

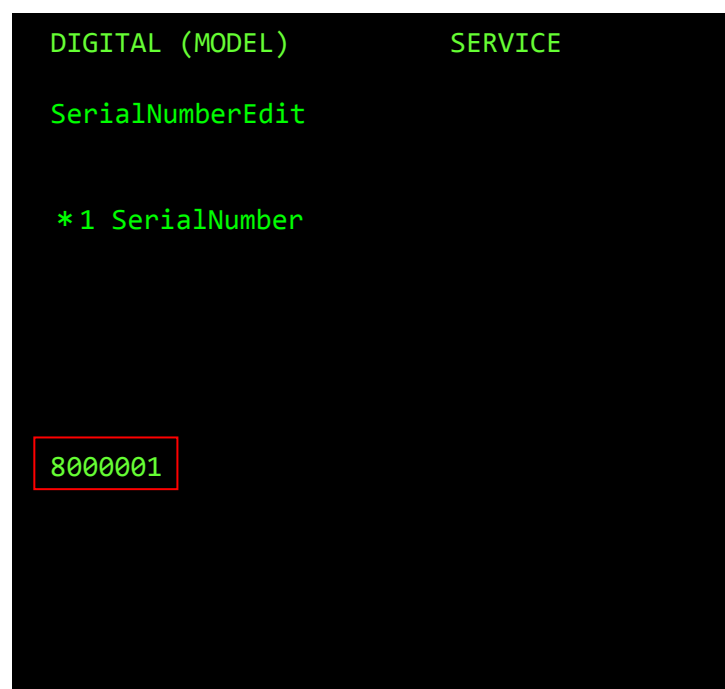
1-7-8. Adding the Serial Number (2/2)

[To change SERIAL of DIGITAL]

- Press “+”(Select) button the remote commander to display the Serial Number input screen.
- Using the number keys on the remote commander, enter the serial number of the TV.
- After confirming the serial number, press the “ENT” or “+”(Select) key on the remote commander to write the serial number.



Remote Commander



Digital Service menu

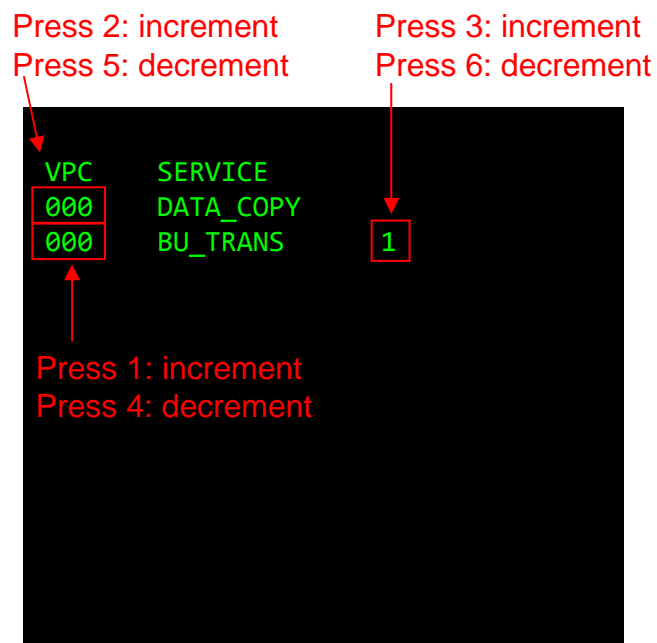
Caution: The serial number can only be entered once. Please make sure to enter the correct serial number for the customer's TV.

1-7-9. Selecting the BU TRANS

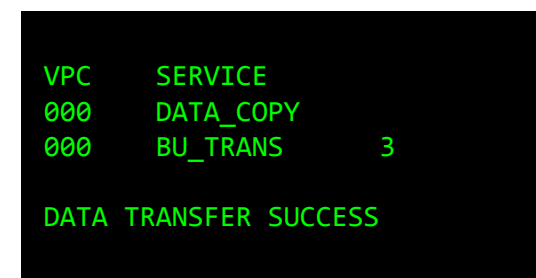
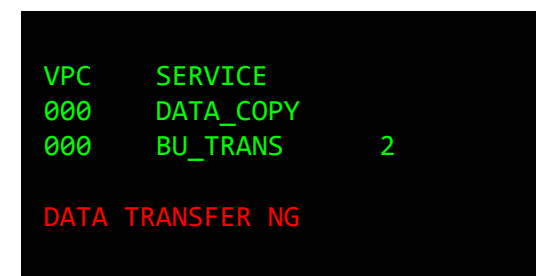
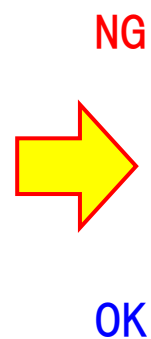
[To BU_TRANS of VPC]

Note: This procedure is necessary for KDL-**HX85* only.

- a. Press the OPTIONS key to go to the VPC Service menu. (There are 3 Service menus “DIGITAL” → “CHASSIS” → “VPC”)
- b. Press the “2/5” key on the remote commander to select 000 DATA COPY.
- c. Press the “1/4” key on the remote commander to select 000 BU_TRANS.
- d. Press the “3/6” key on the remote commander to select from 0 to 1. Data transfer will be done in few seconds.



VPC Service menu



This procedure is to copy W/B adjustment data in T-con board on Panel to BA* board.

Remote Commander

1-7-10. Confirming the Software version, Model ID and Product ID

- a. After completing all the service adjustment changes, verify that the correct Model ID and Product ID displays in the Service menu.
- b. Press the OPTIONS key to go to the Digital Service menu. (There are 3 Service menus “DIGITAL” → “CHASSIS” → “VPC”)
- c. Verify the Software version, Model ID and Product ID are the correct. *Please refer the appendix pages to verify the Model ID and Product ID.*



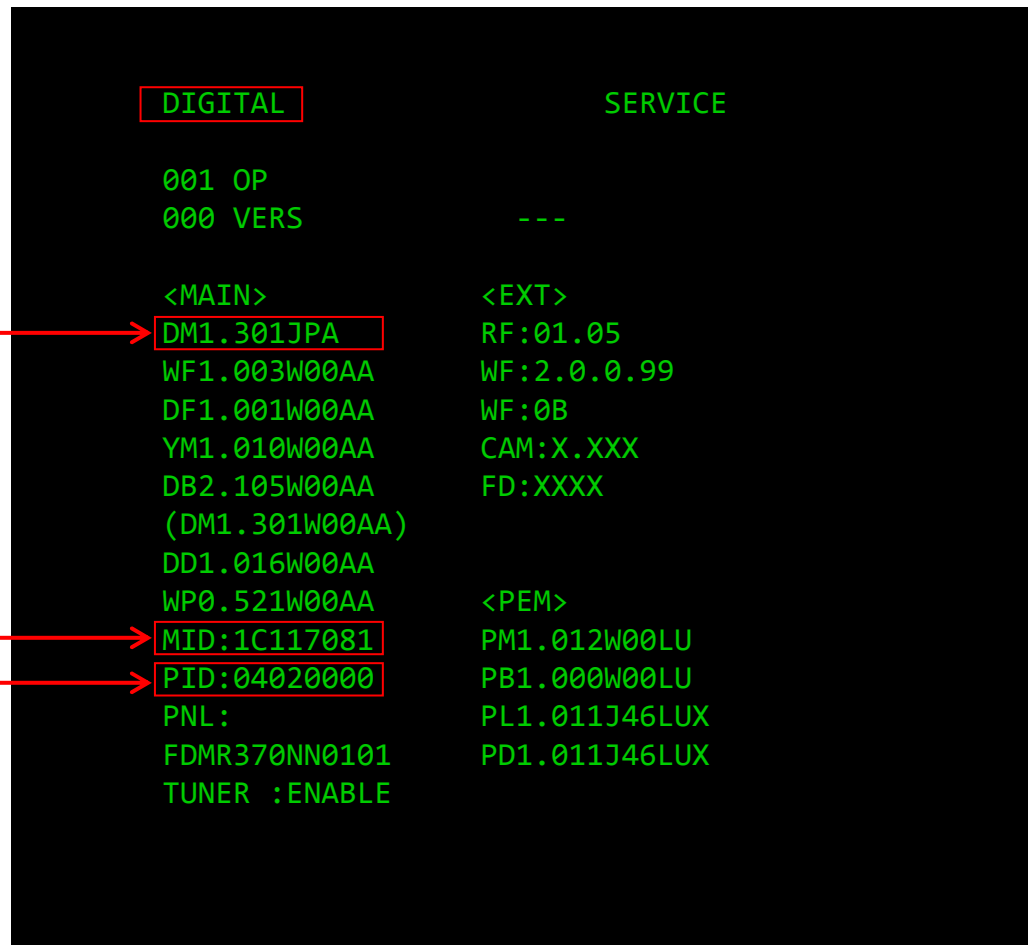
Remote Commander

OPTIONS

Software version

Model ID

Product ID



Digital Service menu

1-8. Finish Operation

The upgrade process is complete and unplug the AC cord

“What you are warned against doing!”

***Because the ID for identifying the device is installed on the BA* board of TV, never attempt to mount the BA* board removed from a customer’s set onto the other set. (This ID information is used in BIV-IPTV.)**

***In addition, BA* board reuse in unauthorized section is also prohibited.**

Note: In the worst case it may lead to legal action.

SEC.2 SERVICE PANEL

2-1. Steps After Replacing the Service Panel

Note: Before operation, disconnect all cables connected to the TV.

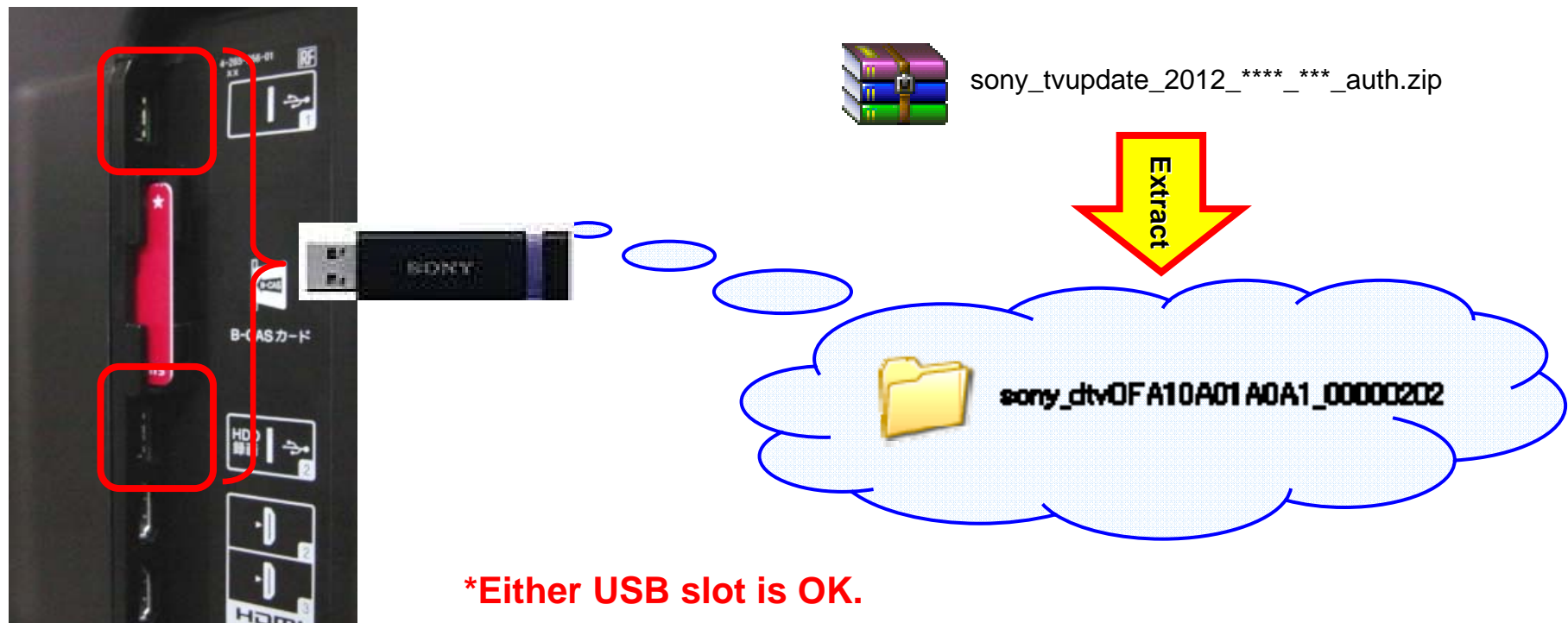
1. Replace the Service Panel.
2. By using the USB memory, upgrade Software.
3. Confirm and change the following from the Service menu:
 - a. Change VPC MENU 001 DATA_BACKUP , 000 BU_FLASH.
 - b. Confirm Model ID , Product ID , Software Version from DIGITAL menu.
4. Reset the Panel Operation Time from the Service menu.
5. Conclude the operation.

2-2. Preparing USB for Upgrade

[Making procedure]

1. Get a tvupdate file for upgrade.
2. Extract tvupdate file. (e.g. sony_tvupdate_2012_****_***_auth.zip) *** may differ depend on the destination.
3. Confirm folder name. (e.g. sony_dtv*****_*****)
4. Copy the folder under root directory of USB device.

Note: The upgrade will not be performed if the folder structure, name of the folder, or name of the file inside the folder is modified.



***Either USB slot is OK.**

2-3. How to Upgrade the Version by Using USB

[Steps for upgrading the version]

1. When you turn on the TV after replacing the Panel, there will be two cases depend on the Model ID setting.

a. The green LED and amber LED blink, and no image and sound.

→ Insert USB device for upgrade into the USB slot on the TV while the TV is turned on.

b. The green LED lights, and image/sound is normal.

- KDL-xxHX85x → Execute the procedure in page 30 ~ 32, and then insert USB device for upgrade into the USB slot on the TV while the TV is turned on.

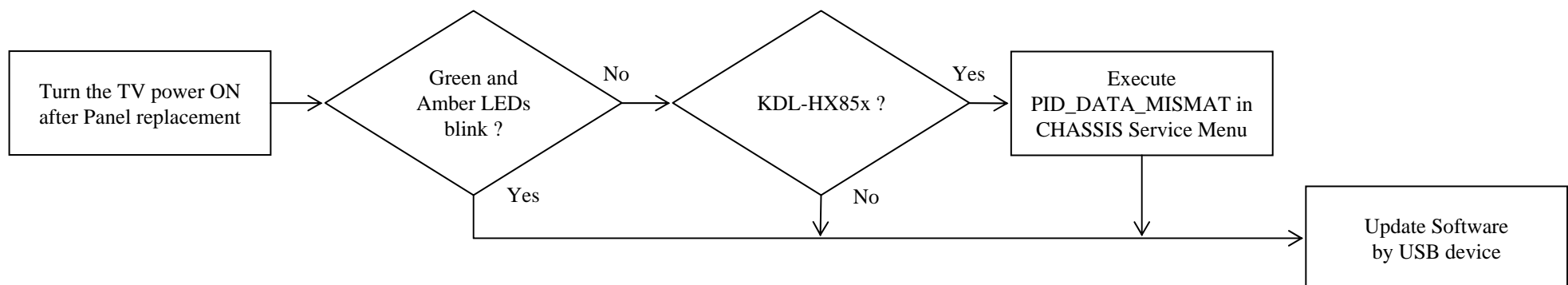
- The other models → Insert USB device for upgrade into the USB slot on the TV while the TV is turned on. (same as “a.”)

Note: Please power on by the power button of TV or remote commander within 5 seconds if TV is go to standby when inserting the AC plug.

2. The TV is reset about a minute later, and then the Red LED lights and the Amber LED blinks.

Note: After replacing the Panel, the upgrade startup screen may not be displayed. In addition, be sure not to remove USB device while it is writing.

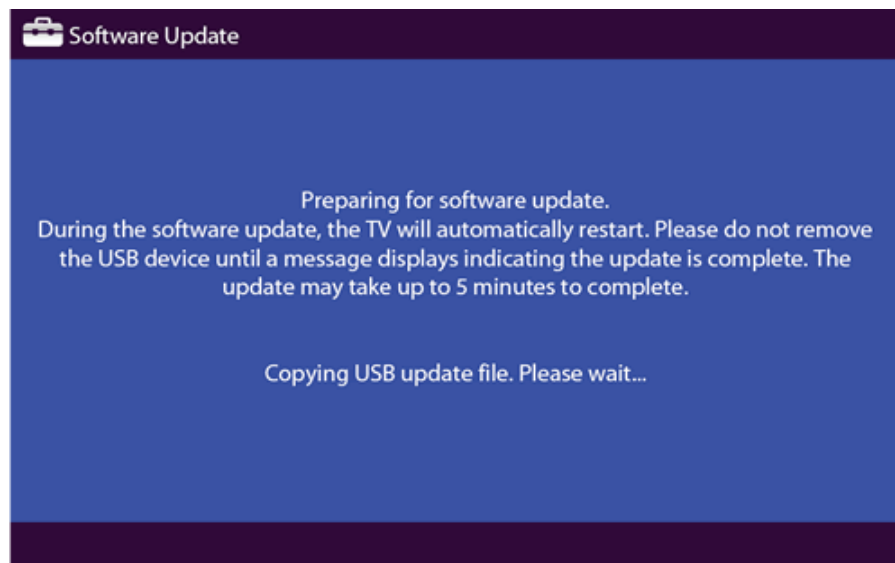
3. After the writing is complete, the TV is rebooted and the screen indicating the upgrade is complete is displayed. Remove USB from the TV and press the “Enter” button while the TV is turned on.



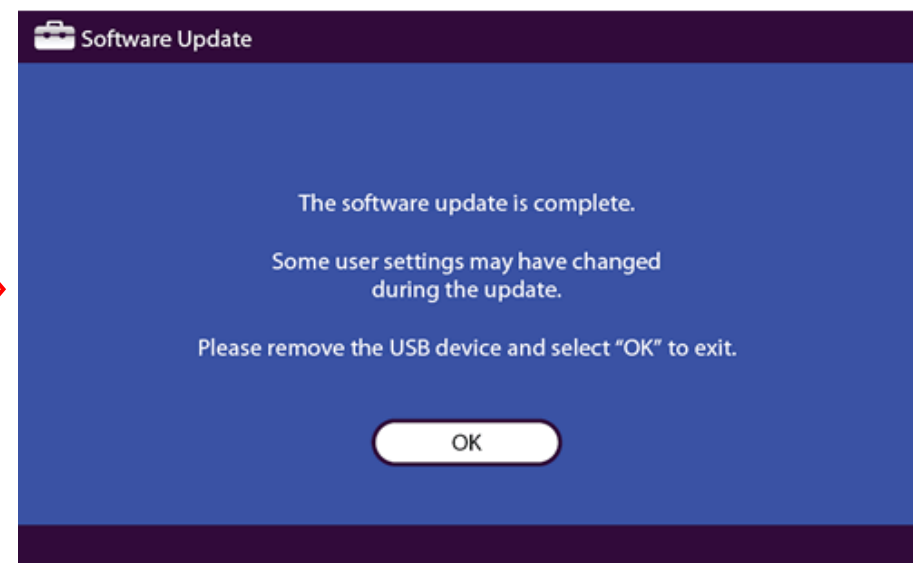
2-4. Samples of Software Update screens

TV will reboot in a minute after the USB device is inserted, then the **Red LED** lights and the **Amber LED** blinks. After about 3 minutes, the TV will reboot and turned on. After a while, a completion message is displayed.

Upgrading...



Upgrade is complete.



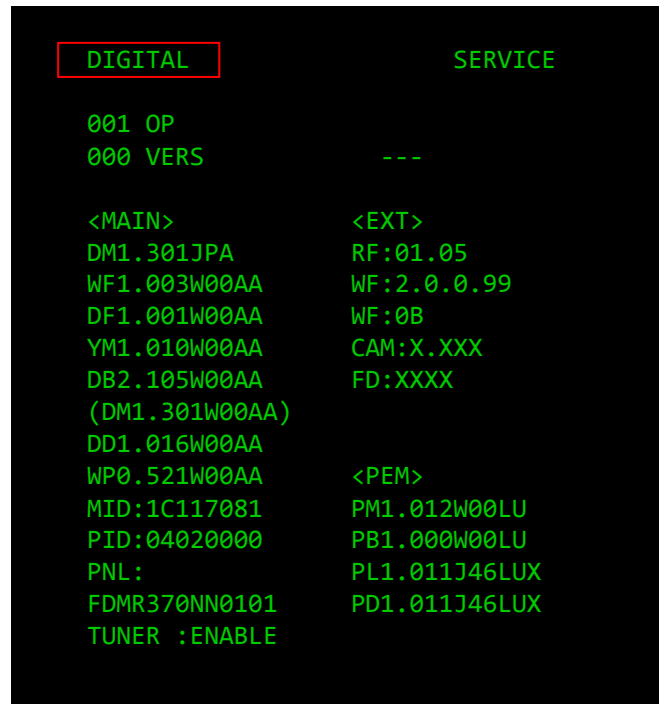
No image or message may be displayed.

2-5. Additional steps for 2-3 (Forced update)

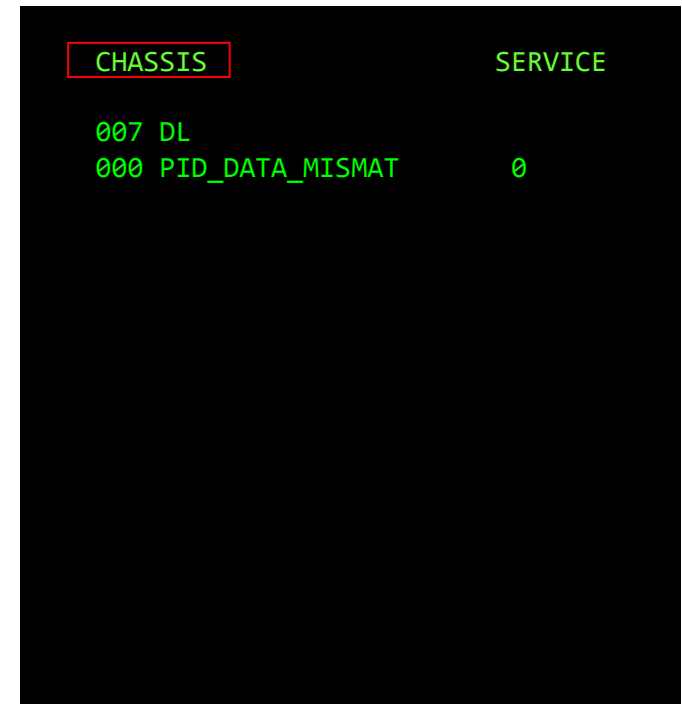
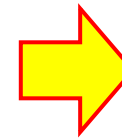
- a. Access to Service Mode by pressing the buttons “DISPLAY → 5ch → Vol+ → POWER” on the remote commander when TV in standby.
 - b. Press the OPTIONS key to go from the Digital Service menu to the Chassis Service menu.
- (There are 3 Service menus “DIGITAL” → “CHASSIS” → “VPC”)



Remote Commander



Digital Service menu



Chassis Service menu

2-5-1. Change PID_DATA_MISMAT.

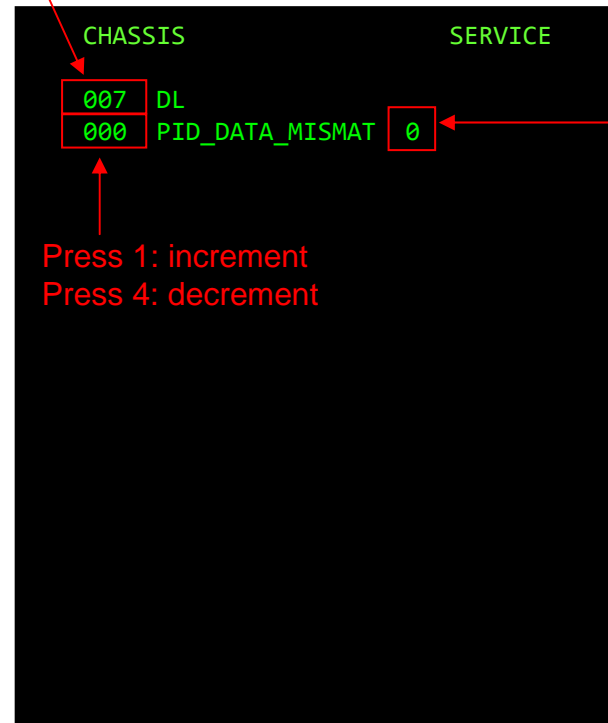
[To change PID_DATA_MISMAT of CHASSIS]

- Press the “2/5” key on the remote commander to select 007 DL.
- Press the “1/4” key on the remote commander to select 000 PID_DATA_MISMAT.
- Press the “3/6” key on the remote commander to change the data to 1 from 0.



Remote Commander

Press 2: increment
Press 5: decrement



Press 1: increment
Press 4: decrement

Press 3: increment
Press 6: decrement

Chassis Service menu

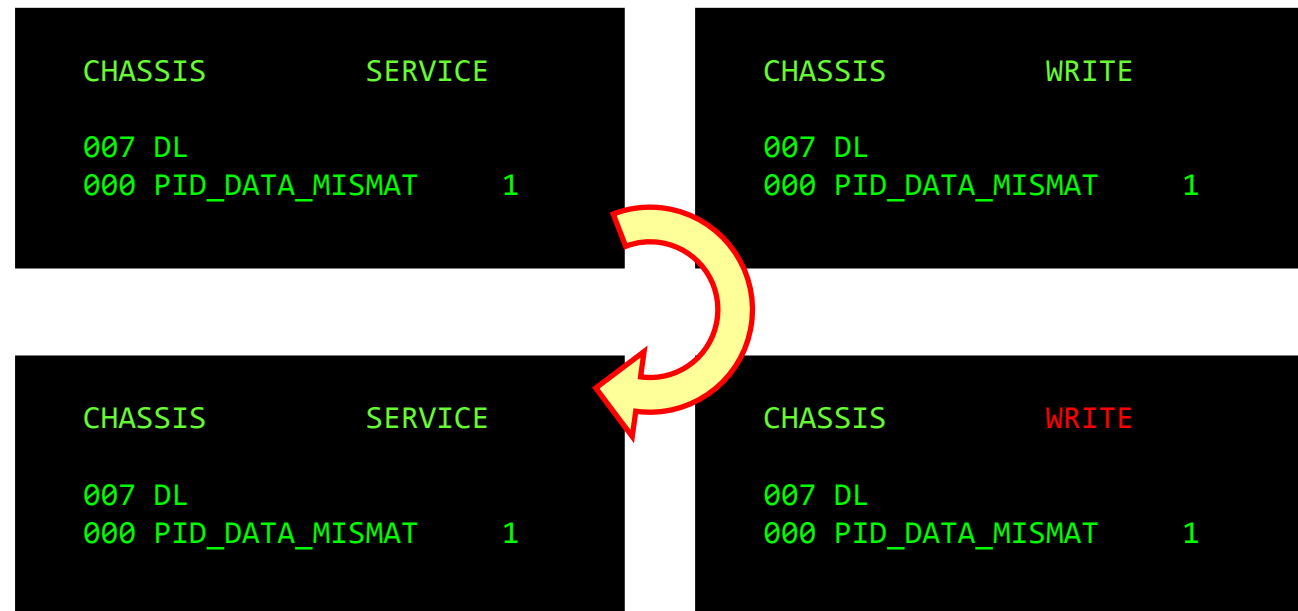
2-5-2. How to Store Changed Data

[To store data changed in “CHASSIS”]

- Press “MUTING” on the remote commander. “SERVICE” will be changed to “WRITE” .
- Press “0” on the remote commander.
 “WRITE” displayed in green on the screen is changed to “WRITE” displayed in red, and then back to “SERVICE”.
- Power OFF → ON by using the power button on TV or Remote Commander.
 The “PID_DATA_MISMAT” will be changed back to “0”. Please go back to page 28 and proceed next step.



Remote Commander



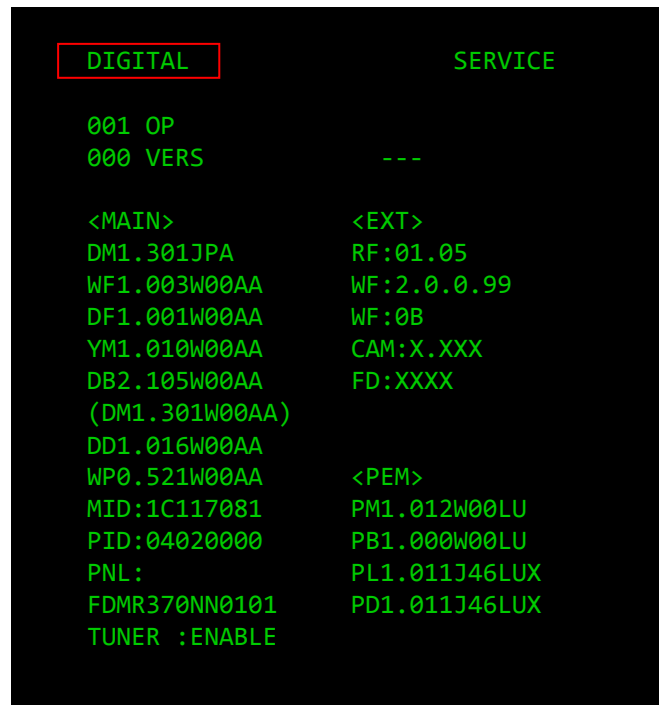
Chassis Service menu

2-6. Setting necessary items in the Service Menu

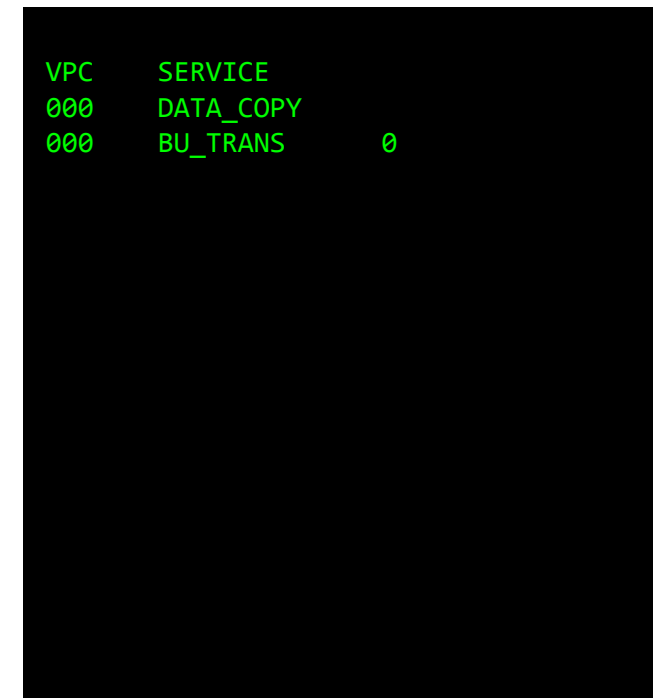
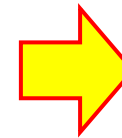
- Access Service Mode by pressing the buttons “DISPLAY → 5ch → Vol+ → POWER” on the remote commander when TV in standby.
- Press the OPTIONS key to go to the VPC Service menu. (There are 3 Service menus “DIGITAL” → “CHASSIS” → “VPC”)



Remote Commander



Digital Service menu



VPC Service menu

2-6-1. Selecting the BU_FLASH

Note: This procedure is necessary for KDL-**HX85* only.

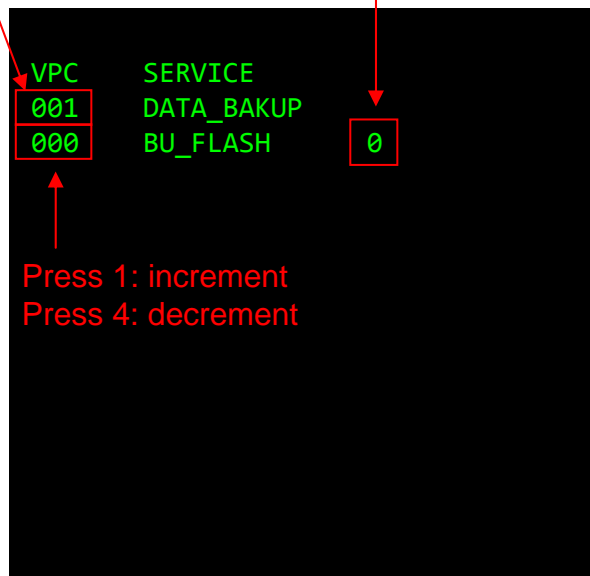
[To BU_FLASH of VPC]

- Press the “2/5” key on the remote commander to select 001 DATA_BAKUP.
- Press the “1/4” key on the remote commander to select 000 BU_FLASH.
- Press the “3/6” key on the remote commander to select from 0 to 1. Data transfer will be done in few seconds.



Press 2: increment
Press 5: decrement

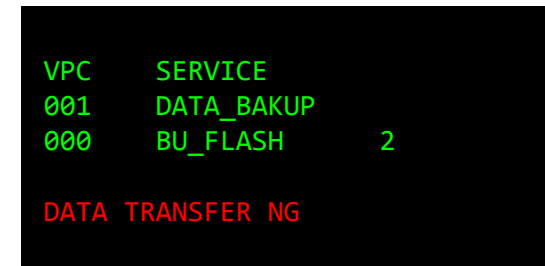
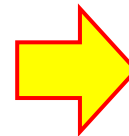
Press 3: increment
Press 6: decrement



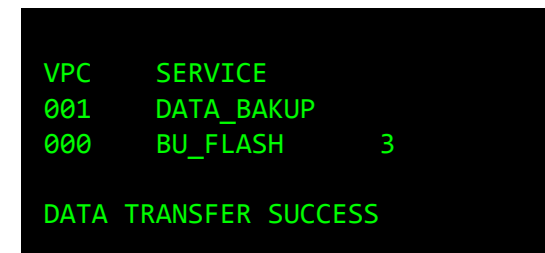
Press 1: increment
Press 4: decrement

VPC Service menu

NG



OK



Remote Commander

This procedure is to copy W/B adjustment data in BA* board to T-con board on Panel.

2-6-2. Confirming the Software version, Model ID and Product ID

- After completing all the service adjustment changes, verify that the correct Model ID and Product ID displays in the Service menu.
- Press the OPTIONS key to go to the Digital Service menu. (There are 3 Service menus “DIGITAL” → “CHASSIS” → “VPC”)
- Verify the Software version, Model ID and Product ID are the correct. *Please refer the appendix pages to verify the Model ID and Product ID.*



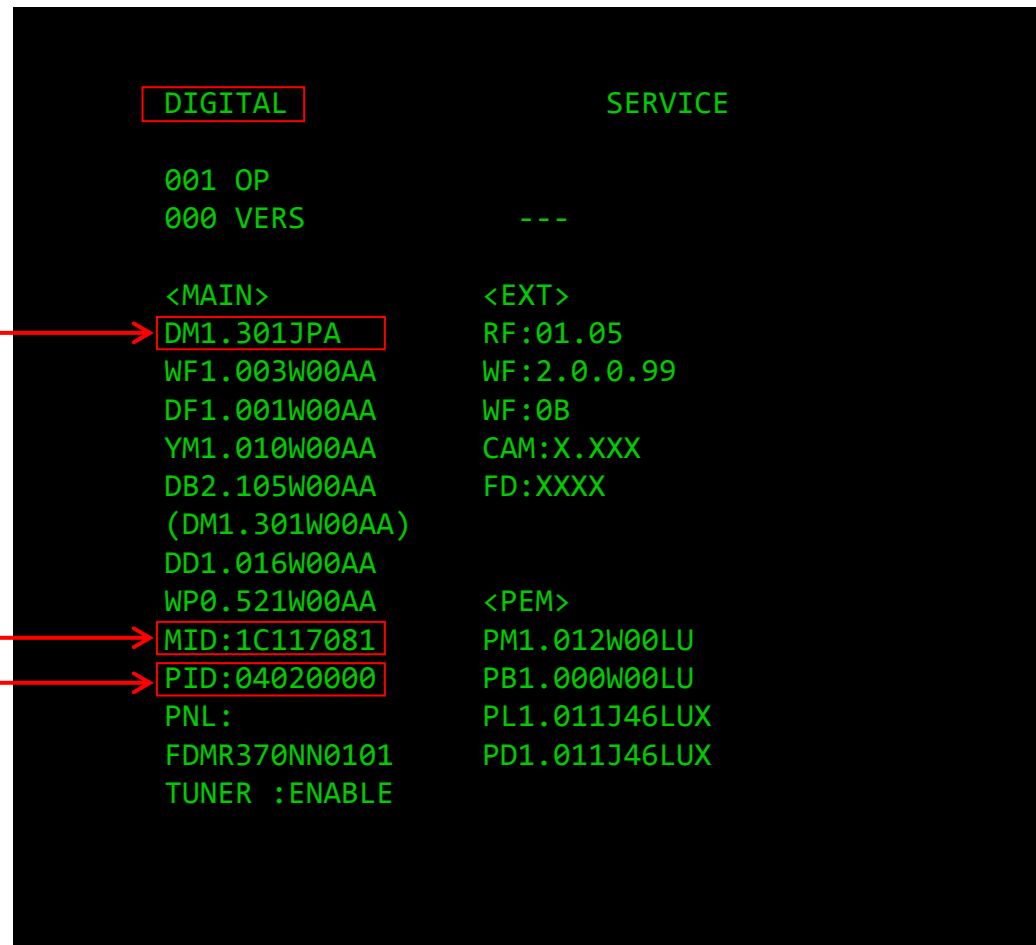
Remote Commander

OPTIONS

Software version

Model ID

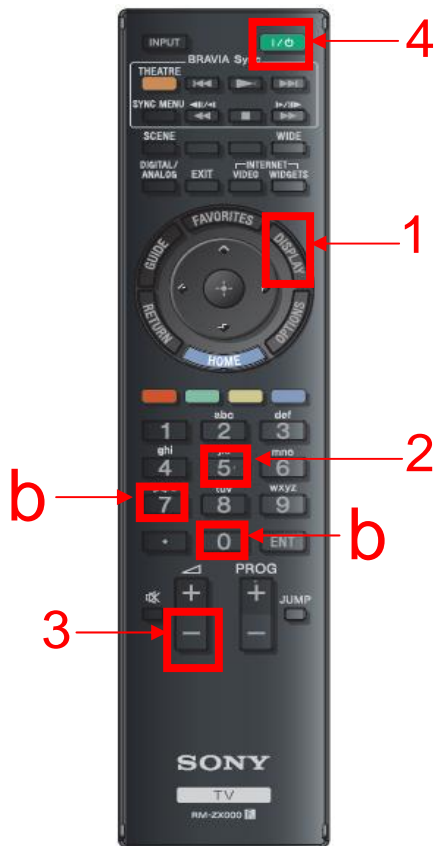
Product ID



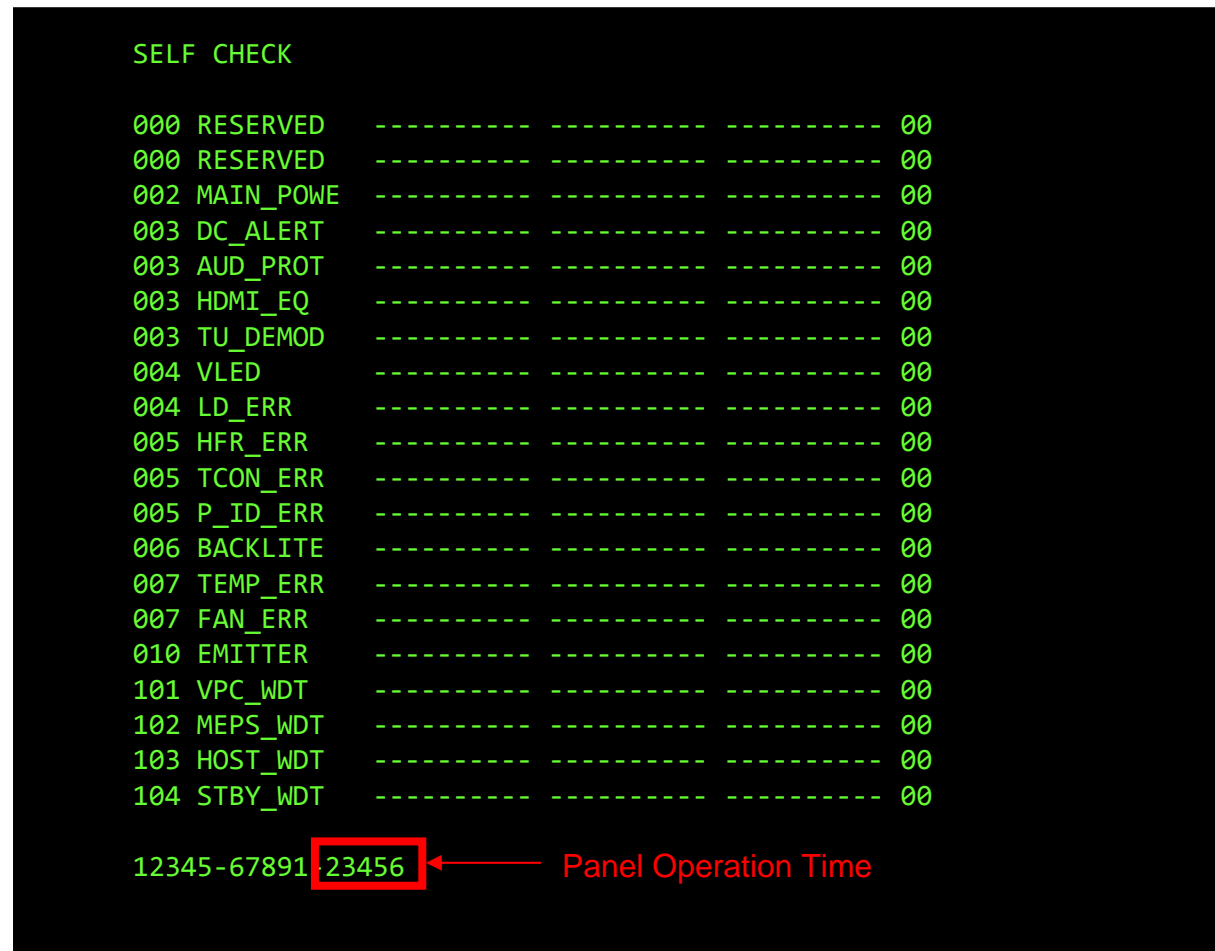
Digital Service menu

2-7. Resetting the Panel Operation Time

- Access to Self Check screen by pressing the buttons “DISPLAY → 5ch → Vol- → POWER” on the remote commander when TV in standby.
- Press “7” → “0” on the remote commander to clear the LCD Panel operation time.



Remote Commander



Self Check screen

2-8. Finish Operation

The upgrade process is complete and unplug the AC cord

END

9-888-510-01

**Sony Corporation
Home Entertainment
Business Group**

English
2011DL08-Data
Made in Japan
© 2012. 4

APPENDIX 1 - TUNER DISABLE FOR EUROPE B2B MODELS

1-1. Scope and Notes

Procedure described in this Appendix should be applied after BA* Board exchange process.

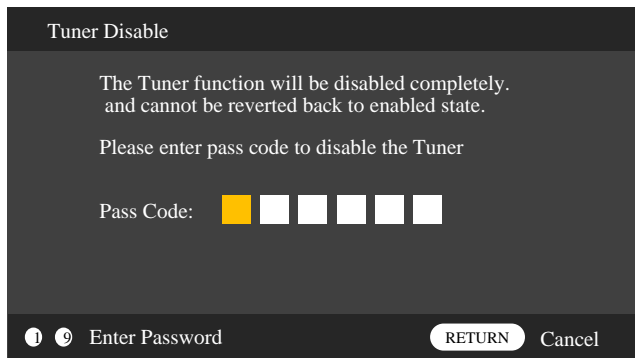
CAUTION!!! This function is irreversible. If you disable tuner function by mistake, you need to replace to new BA* board in order to re-enable tuner.

- Preparation

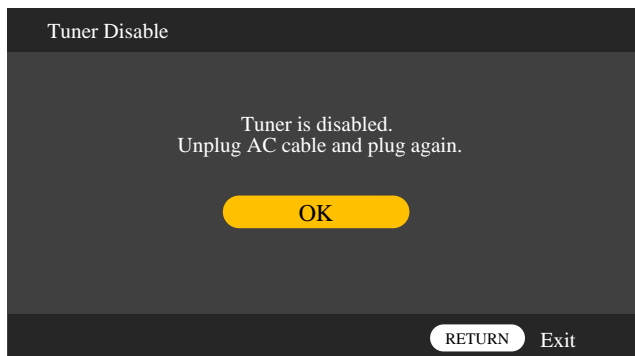
- Pass Code is required for this function. Please refer the Technical Bulletin to get the Pass Code.
- USB memory which includes "EU_Tuner_Disable.dat" file in the root is required.

1-2. Procedure to Disable Tuner

1. TV Power ON and Insert USB memory with “EU_Tuner_Disable.dat” file
→ Tuner Disable Display appears

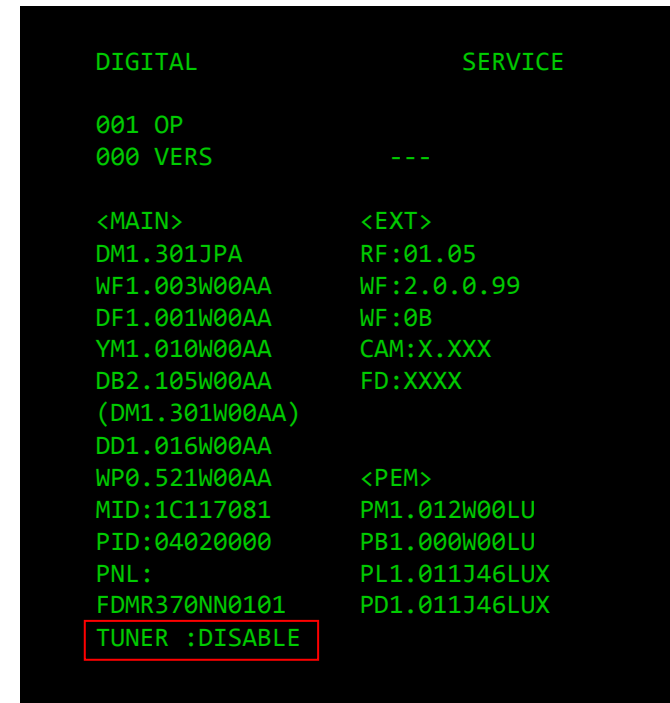


2. Enter Pass Code by numeric key of remote commander.
* If invalid code is entered 3 times, need to close dialog and start again.



3. Press “Enter” of remote commander and unplug AC and plug again.

4. Confirm Status of Tuner Function (ENABLE/DISABLE)
Access Service Mode by pressing the buttons when TV in Standby.
“DISPLAY → 5ch → Vol+ → POWER” on the remote commander.



5. Power OFF → ON
6. Finish

1-3. B2B Tuner Disable Model List

Model Name	Serial Number
KDL-55HX753	5,500,001-5,600,000
KDL-46EX653	5,500,001-5,600,000
KDL-40EX653	5,500,001-5,600,000
KDL-32EX653	1,300,001-1,400,000

- Tuner Disable function by USB memory is supported for EU-T and EU-T2 models.
- Available production models are only listed models. Please DO NOT use this feature for other models.
- Tuner Disable Display doesn't appear on unsupported models.

APPENDIX 2 - RS232C SETTING FOR CHINA HOTEL MODELS

1-1. Scope and Notes

Procedure described in this Appendix should be applied after BA* Board exchange process for China Hotel Model (with RS232C Control).

By executing the procedure described in this Appendix, RS232C Control protocol will be set to “Sony Standard”.
(Default setting of service board is “No Serial”.)

1-2. Procedure to Set HOTEL RS232C Protocol

1. Access Service Mode by pressing the buttons when TV in Standby.
 “DISPLAY → 5ch → Vol+ → POWER” on the remote commander.

```

DIGITAL                SERVICE

001 OP
000 VERS      ---

<MAIN>              <EXT>
DM1.301JPA         RF:01.05
WF1.003W00AA      WF:2.0.0.99
DF1.001W00AA      WF:0B
YM1.010W00AA      CAM:X.XXX
DB2.105W00AA      FD:XXXX
(DM1.301W00AA)
DD1.016W00AA
WP0.521W00AA      <PEM>
MID:1C117081      PM1.012W00LU
PID:04020000      PB1.000W00LU
PNL:              PL1.011J46LUX
FDMR370NN0101    PD1.011J46LUX
TUNER :ENABLE
    
```

2. Select [002 MODEL – 004 SHIP_CONFIRM]
 Press “1” button on the remote commander several times.

```

DIGITAL                SERVICE

002 MODEL
004 SHIP_CONFIRM  ---
    
```

3. Enter to SHIP_CONFIRM
 Press “0” button on the remote commander.

```

DIGITAL (MODEL)      SERVICE

Confirmation for Shipping
    
```

4. Enter to Product Code Input Menu
 Press “+”(Select) button on the remote commander.

```

DIGITAL (MODEL)      SERVICE

Confirmation for Shipping

Current ProductCode
P_____
Please input 8 digit ProductCode
(00000000-99999999)
P_____
    
```

5. Enter to Product Code Input Menu
 Input 8 digit of Product Code by remote commander
 and then press “+”(Select) button.
 *Please refer to the next page for the Product Code.

```

DIGITAL (MODEL)      SERVICE
Confirmation for Shipping

Current ProductCode
P_____
Please input 8 digit ProductCode
(00000000-99999999)
P18494500
    
```

7. Power OFF → ON
8. Finish (If you see an error code at step 6, go to step 1.)

6. Confirm the completion of the process
 *Please refer to the next page for the Error Code (Result : 0xXXXX)

```

DIGITAL (MODEL)      SERVICE
Confirmation for Shipping

P18494500 ←ProductCode you input

Done      ←Completion Message
    
```

1-3. China Hotel Model (with RS232C Control) Product Code and Error Code

< Product Code >

Model Name	Product Code	Serial Number
KDL-55HX750	18493500	1,450,001-1,500,000
KDL-46HX750	18493600	
KDL-40HX750	18494500	
KDL-46EX650	18494600	
KDL-40EX650	18494700	
KDL-32EX650	18494800	
KDL-32EX550	18494900	

< Error Code >

Error Code	Status
0x0001	Product Code input error → Please confirm Product Code
0x0010	Need Software Update → Please update Software by USB
0x0020	
0x0040	
0x0080	

APPENDIX 3 - SI SELECTION SETTING FOR GA HOTEL MODELS

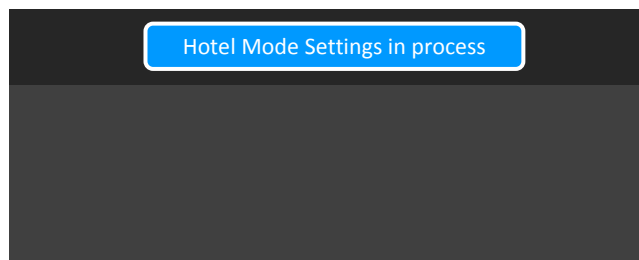
1-1. Scope and Notes

Procedure described in this Appendix should be applied after BA* Board exchange process for GA Hotel Model (with RS232C Control) .

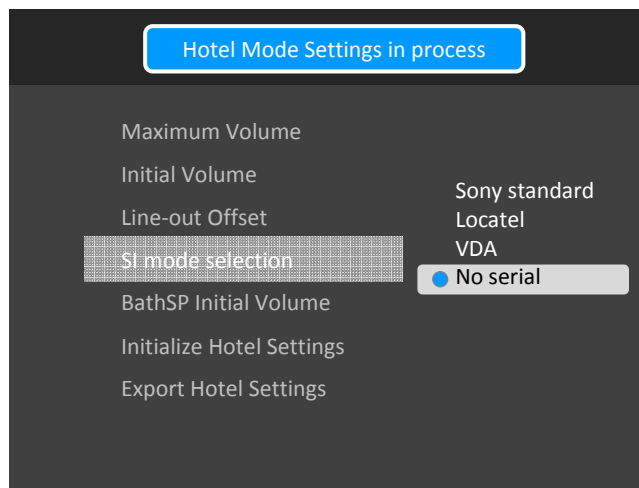
By executing the procedure described in this Appendix, RS232C Control protocol will be set to appropriate mode (Locatel/VDA/SonyStandard).
(Default setting of service board is “No Serial”)

1-2. Procedure to Set HOTEL RS232C Protocol

1. Access Hotel Setting Mode by pressing the buttons when TV in Standby.
“DISPLAY → MUTING → Vol+ → POWER” on the remote commander.



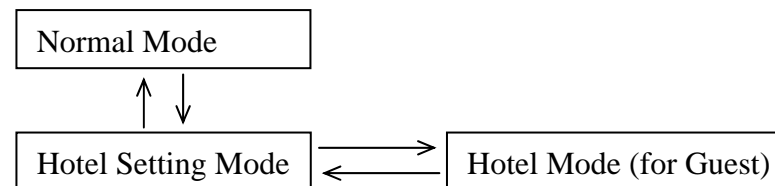
2. Enter to [HOME] → [Settings] → [Hotel Mode] and select [SI mode selection]



3. Select appropriate protocol from the list.
4. Power OFF → ON
5. Confirm SI mode selection setting in [Settings]
6. Finish

< NOTE >

- To exit Hotel Mode (for Guest), press the buttons when TV in Power ON.
“DISPLAY → MUTING → Vol+ → Home” on the remote commander.
- To exit Hotel Setting Mode, press the buttons when TV in Standby.
“DISPLAY → MUTING → Vol- → POWER” on the remote commander.



- “Cloning” is also available for this Protocol setting.
In case you use “Cloning” instead of this procedure, please check SI mode selection setting after “Cloning”.
- Reboot is required to activate this Protocol setting.

1-3. GA Hotel Model (with RS232C Control) Model List

< Locatel/VDA Model List >

Model Name	Serial Number
KDL-55HX750	3,020,001-3,030,000
KDL-46HX750	
KDL-40HX750	
KDL-46EX650	
KDL-40EX650	
KDL-32EX650	

Appendix 4 - Model ID / Product ID and Panel Information

<Americas>

Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-26EX555	18462000	4423A224	04047040	V260B3-LE2	P-2A_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-32EX550	18452502	1C23A122	03047040	LTY320AN0301	P-2A_BASE	ATSC-LTN_BASE	AAA	LA1
KDL-32EX550	18452502	1C23A12F	03047040	LTY320AN0501	P-2A_BASE	ATSC-LTN_BASE	AAA	LA1
KDL-32EX555	18456700	1C23A222	04187040	LTY320AN0301	P-2A_BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-32EX555	18456700	1C23A22F	04187040	LTY320AN0501	P-2A_BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-32EX555	18461900	1C23A222	04047040	LTY320AN0301	P-2A_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-32EX555	18461900	1C23A22F	04047040	LTY320AN0501	P-2A_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-32EX555	18456701	1C23A222	04187040	LTY320AN0301	P-2A_BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-32EX555	18456701	1C23A22F	04187040	LTY320AN0501	P-2A_BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-32EX557	18460000	1C23AC22	05047040	LTY320AN0301	P-2A_BASE	DVB-LTN_BASE	GAA	CO1
KDL-32EX557	18460000	1C23AC2F	05047040	LTY320AN0501	P-2A_BASE	DVB-LTN_BASE	GAA	CO1
KDL-32EX650	18468602	1C23A125	03047040	LTY320HN0301	P-2A_BASE	ATSC-LTN_BASE	AAA	LA1
KDL-32EX651	18487802	1C23A125	03047040	LTY320HN0301	P-2A_BASE	ATSC-LTN_BASE	AAA	LA1
KDL-32EX655	18463800	1D23A225	04047040	LTY320HN0301	P-2A_BASE	ISDB-LTN_BASE	BRA	AR4
KDL-32EX655	18468400	1C23A225	04047040	LTY320HN0301	P-2A_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-32EX655	18468700	1C23A225	04187040	LTY320HN0301	P-2A_BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-32EX655	18468701	1C23A225	04187040	LTY320HN0301	P-2A_BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-32EX655	18468410	1C23A225	04047040	LTY320HN0301	P-2A_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-32EX657	18468800	1C23AC25	05047040	LTY320HN0301	P-2A_BASE	DVB-LTN_BASE	GAA	CO1
KDL-32HX750	18452002	0C33A121	03042040	LTY320HQ0101	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-32HX750	18452002	0C33A121	03042040	LTY320HQ0102	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-32HX755	18455900	0C33A221	04182040	LTY320HQ0101	3a BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-32HX755	18455900	0C33A221	04182040	LTY320HQ0102	3a BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-32HX755	18461600	0C33A221	04042040	LTY320HQ0101	3a BASE	ISDB-LTN_BASE	BRA	BR6
KDL-32HX755	18461600	0C33A221	04042040	LTY320HQ0102	3a BASE	ISDB-LTN_BASE	BRA	BR6
KDL-32HX755	18455901	0C33A221	04182040	LTY320HQ0101	3a BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-32HX755	18455901	0C33A221	04182040	LTY320HQ0102	3a BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-32HX757	18460700	0C33AC21	05042040	LTY320HQ0101	3a BASE	DVB-LTN_BASE	GAA	CO1
KDL-32HX757	18460700	0C33AC21	05042040	LTY320HQ0102	3a BASE	DVB-LTN_BASE	GAA	CO1
KDL-32NX655	18504700	1C53A228	04048040	FSL320NT0101	P-2S_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-40EX650	18468902	1C23A126	03047040	LTY400HM1001	P-2A_BASE	ATSC-LTN_BASE	AAA	LA1
KDL-40EX651	18487702	1C23A126	03047040	LTY400HM1001	P-2A_BASE	ATSC-LTN_BASE	AAA	LA1
KDL-40EX655	18463900	1D23A226	04047040	LTY400HM1001	P-2A_BASE	ISDB-LTN_BASE	BRA	AR4
KDL-40EX655	18468500	1C23A226	04047040	LTY400HM1001	P-2A_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-40EX655	18469000	1C23A226	04187040	LTY400HM1001	P-2A_BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-40EX655	18469001	1C23A226	04187040	LTY400HM1001	P-2A_BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-40EX657	18469100	1C23AC26	05047040	LTY400HM1001	P-2A_BASE	DVB-LTN_BASE	GAA	CO1
KDL-40HX750	18451902	0C33A115	03042040	LTY400HL0401	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-40HX750	18451902	0C33A115	03042040	LTY400HL0402	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-40HX750	18451902	0C33A115	03042040	LTY400HL0501	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-40HX752	18463700	0D33A215	040420C0	LTY400HL0401	3a WIFI_READY	ISDB-LTN_BASE	BRA	AR4
KDL-40HX752	18463700	0D33A215	040420C0	LTY400HL0402	3a WIFI_READY	ISDB-LTN_BASE	BRA	AR4
KDL-40HX752	18463700	0D33A215	040420C0	LTY400HL0501	3a WIFI_READY	ISDB-LTN_BASE	BRA	AR4
KDL-40HX755	18455800	0C33A215	04182040	LTY400HL0401	3a BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-40HX755	18455800	0C33A215	04182040	LTY400HL0402	3a BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-40HX755	18455800	0C33A215	04182040	LTY400HL0501	3a BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-40HX755	18461500	0C33A215	04042040	LTY400HL0401	3a BASE	ISDB-LTN_BASE	BRA	BR6
KDL-40HX755	18461500	0C33A215	04042040	LTY400HL0402	3a BASE	ISDB-LTN_BASE	BRA	BR6
KDL-40HX755	18461500	0C33A215	04042040	LTY400HL0501	3a BASE	ISDB-LTN_BASE	BRA	BR6
KDL-40HX755	18455801	0C33A215	04182040	LTY400HL0401	3a BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-40HX755	18455801	0C33A215	04182040	LTY400HL0402	3a BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-40HX755	18455801	0C33A231	04182040	LTY400HL0501	3a BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-40HX757	18460800	0C33AC15	05042040	LTY400HL0401	3a BASE	DVB-LTN_BASE	GAA	CO1
KDL-40HX757	18460800	0C33AC15	05042040	LTY400HL0402	3a BASE	DVB-LTN_BASE	GAA	CO1
KDL-40HX757	18460800	0C33AC15	05042040	LTY400HL0501	3a BASE	DVB-LTN_BASE	GAA	CO1
KDL-40NX655	18504800	1C53A229	04048040	FSL400NT0101	P-2S_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-46EX650	18471302	1C23A127	03047040	LTY460HN0501	P-2A_BASE	ATSC-LTN_BASE	AAA	LA1
KDL-46EX650	18471302	1C23A130	03047040	LTY460HN0701	P-2A_BASE	ATSC-LTN_BASE	AAA	LA1
KDL-46EX651	18487602	1C23A127	03047040	LTY460HN0501	P-2A_BASE	ATSC-LTN_BASE	AAA	LA1
KDL-46EX651	18487602	1C23A130	03047040	LTY460HN0701	P-2A_BASE	ATSC-LTN_BASE	AAA	LA1
KDL-46EX655	18456400	1C23A227	04187040	LTY460HN0501	P-2A_BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-46EX655	18456400	1C23A230	04187040	LTY460HN0701	P-2A_BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-46EX655	18471200	1C23A227	04047040	LTY460HN0501	P-2A_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-46EX655	18471200	1C23A230	04047040	LTY460HN0701	P-2A_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-46EX655	18456401	1C23A227	04187040	LTY460HN0501	P-2A_BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-46EX655	18456401	1C23A230	04187040	LTY460HN0701	P-2A_BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-46EX657	18460300	1C23AC27	05047040	LTY460HN0501	P-2A_BASE	DVB-LTN_BASE	GAA	CO1

<Americas>

Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-46EX657	18460300	1C23AC30	05047040	LTY460HN0701	P-2A_BASE	DVB-LTN_BASE	GAA	CO1
KDL-46HX750	18451800	0D33A116	01042040	LTY460HQ0501	3a BASE	ATSC-UC_BASE	AAA	U2
KDL-46HX750	18451800	0D33A116	01042040	LTY460HQ0502	3a BASE	ATSC-UC_BASE	AAA	U2
KDL-46HX750	18451800	0D33A132	01042040	LTY460HQ0601	3a BASE	ATSC-UC_BASE	AAA	U2
KDL-46HX750	18451801	0D33A116	01042040	LTY460HQ0501	3a BASE	ATSC-UC_BASE	AAA	CA2
KDL-46HX750	18451801	0D33A116	01042040	LTY460HQ0502	3a BASE	ATSC-UC_BASE	AAA	CA2
KDL-46HX750	18451801	0D33A132	01042040	LTY460HQ0601	3a BASE	ATSC-UC_BASE	AAA	CA2
KDL-46HX750	18451802	0C33A116	03042040	LTY460HQ0501	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-46HX750	18451802	0C33A116	03042040	LTY460HQ0502	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-46HX750	18451802	0C33A132	03042040	LTY460HQ0601	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-46HX751	18496602	0C33A116	03042040	LTY460HQ0501	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-46HX751	18496602	0C33A116	03042040	LTY460HQ0502	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-46HX751	18496602	0C33A132	03042040	LTY460HQ0601	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-46HX751	18496601	0D33A116	01042040	LTY460HQ0501	3a BASE	ATSC-UC_BASE	AAA	CA2
KDL-46HX751	18496601	0D33A116	01042040	LTY460HQ0502	3a BASE	ATSC-UC_BASE	AAA	CA2
KDL-46HX751	18496601	0D33A132	01042040	LTY460HQ0601	3a BASE	ATSC-UC_BASE	AAA	CA2
KDL-46HX751	18496600	0D33A116	01042040	LTY460HQ0501	3a BASE	ATSC-UC_BASE	AAA	U2
KDL-46HX751	18496600	0D33A116	01042040	LTY460HQ0502	3a BASE	ATSC-UC_BASE	AAA	U2
KDL-46HX751	18496600	0D33A132	01042040	LTY460HQ0601	3a BASE	ATSC-UC_BASE	AAA	U2
KDL-46HX751	18496600	0D33A132	01042040	LTY460HQ0601	3a BASE	ATSC-UC_BASE	AAA	U2
KDL-46HX752	18463600	0D33A216	040420C0	LTY460HQ0501	3a WIFI_READY	ISDB-LTN_BASE	BRA	AR4
KDL-46HX752	18463600	0D33A216	040420C0	LTY460HQ0502	3a WIFI_READY	ISDB-LTN_BASE	BRA	AR4
KDL-46HX752	18463600	0D33A232	040420C0	LTY460HQ0601	3a WIFI_READY	ISDB-LTN_BASE	BRA	AR4
KDL-46HX755	18455700	0C33A216	04182040	LTY460HQ0501	3a BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-46HX755	18455700	0C33A216	04182040	LTY460HQ0502	3a BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-46HX755	18455700	0C33A232	04182040	LTY460HQ0601	3a BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-46HX755	18461400	0C33A216	04042040	LTY460HQ0501	3a BASE	ISDB-LTN_BASE	BRA	BR6
KDL-46HX755	18461400	0C33A216	04042040	LTY460HQ0502	3a BASE	ISDB-LTN_BASE	BRA	BR6
KDL-46HX755	18461400	0C33A232	04042040	LTY460HQ0601	3a BASE	ISDB-LTN_BASE	BRA	BR6
KDL-46HX755	18455701	0C33A216	04182040	LTY460HQ0501	3a BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-46HX755	18455701	0C33A216	04182040	LTY460HQ0502	3a BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-46HX755	18455701	0C33A232	04182040	LTY460HQ0601	3a BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-46HX757	18460900	0C33AC16	05042040	LTY460HQ0501	3a BASE	DVB-LTN_BASE	GAA	CO1
KDL-46HX757	18460900	0C33AC16	05042040	LTY460HQ0502	3a BASE	DVB-LTN_BASE	GAA	CO1
KDL-46HX757	18460900	0C33AC32	05042040	LTY460HQ0601	3a BASE	DVB-LTN_BASE	GAA	CO1
KDL-46HX850	18451400	0543A11F	01041040	FQLR460LT0101	3a-G_BASE	ATSC-UC_BASE	AAA	U2
KDL-46HX850	18451401	0543A11F	01041040	FQLR460LT0101	3a-G_BASE	ATSC-UC_BASE	AAA	CA2
KDL-46HX850	18451402	0443A11F	03041040	FQLR460LT0101	3a-G_BASE	ATSC-LTN_BASE	AAA	LA1
KDL-46HX855	18456200	0443A21F	04181040	FQLR460LT0101	3a-G_BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-46HX855	18461800	0443A21F	04041040	FQLR460LT0101	3a-G_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-46HX855	18456201	0443A21F	04181040	FQLR460LT0101	3a-G_BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-46HX857	18460500	0443AC1F	05041040	FQLR460LT0101	3a-G_BASE	DVB-LTN_BASE	GAA	CO1
KDL-55HX750	18451700	0D33A117	01042040	LTY550HQ0401	3a BASE	ATSC-UC_BASE	AAA	U2
KDL-55HX750	18451700	0D33A133	01042040	LTY550HQ0501	3a BASE	ATSC-UC_BASE	AAA	U2
KDL-55HX750	18451701	0D33A117	01042040	LTY550HQ0401	3a BASE	ATSC-UC_BASE	AAA	CA2
KDL-55HX750	18451701	0D33A133	01042040	LTY550HQ0501	3a BASE	ATSC-UC_BASE	AAA	CA2
KDL-55HX750	18451702	0C33A117	03042040	LTY550HQ0401	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-55HX750	18451702	0C33A133	03042040	LTY550HQ0501	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-55HX751	18487502	0C33A117	03042040	LTY550HQ0401	3a BASE	ATSC-LTN_BASE	AAA	LA1
KDL-55HX751	18487502	0C						

Appendix 4 - Model ID / Product ID and Panel Information

<Americas>

Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-55HX855	18456100	0443A220	04181040	FQLR550LT0101	3a-G_BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-55HX855	18456100	0443A235	04181040	FQLR550LT0102	3a-G_BASE	ISDB-LTN_NO-GIN	BRB	CL3
KDL-55HX855	18461700	0443A220	04041040	FQLR550LT0101	3a-G_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-55HX855	18461700	0443A235	04041040	FQLR550LT0102	3a-G_BASE	ISDB-LTN_BASE	BRA	BR6
KDL-55HX855	18456101	0443A220	04181040	FQLR550LT0101	3a-G_BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-55HX855	18456101	0443A235	04181040	FQLR550LT0102	3a-G_BASE	ISDB-LTN_NO-GIN	BRB	VZ2
KDL-55HX857	18460600	0443AC20	05041040	FQLR550LT0101	3a-G_BASE	DVB-LTN_BASE	GAA	CO1
KDL-55HX857	18460600	0443AC35	05041040	FQLR550LT0102	3a-G_BASE	DVB-LTN_BASE	GAA	CO1

<Asia>

Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-26EX550	18442600	4423A424	08047040	V260B3-LE2	P-2A_BASE	DTMB-HK_BASE	GAA	HK5
KDL-26EX550	18470701	4523A524	090C7040	V260B3-LE2	P-2A_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-26EX550	18470706	4423A524	090C7040	V260B3-LE2	P-2A_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-32EX550	18442500	1C23A422	08047040	LY320AN0301	P-2A_BASE	DTMB-HK_BASE	GAA	HK5
KDL-32EX550	18442500	1C23A42F	08047040	LY320AN0501	P-2A_BASE	DTMB-HK_BASE	GAA	HK5
KDL-32EX550	18470601	1D23A522	090C7040	LY320AN0301	P-2A_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-32EX550	18470601	1D23A52F	090C7040	LY320AN0501	P-2A_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-32EX650	18468100	1C23A325	06047040	LY320HN0301	P-2A_BASE	DVB-TW_BASE	GAA	TW6
KDL-32EX650	18468300	1C23A425	08047040	LY320HN0301	P-2A_BASE	DTMB-HK_BASE	GAA	HK5
KDL-32EX650	18470500	1D23A525	09047040	LY320HN0301	P-2A_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-32EX650	18470501	1D23A525	090C7040	LY320HN0301	P-2A_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-32EX650	18470506	1C23A525	090C7040	LY320HN0301	P-2A_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-32EX650	18470505	1D23A525	090C7040	LY320HN0301	P-2A_BASE	DVB-GA-T_NO-NU	GAA	SA2
KDL-32EX650	18470502	1D23A525	09047040	LY320HN0301	P-2A_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-32EX650	18470503	1D23A525	09047040	LY320HN0301	P-2A_BASE	DVB-GA-T_BASE	GAA	MY1
KDL-32EX650	18470504	1D23A525	090C7040	LY320HN0301	P-2A_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-32EX650	18493300	1D73A525	09047040	LY320HN0301	P-2A_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-32EX650	18502300	1D23A525	09047040	LY320HN0301	P-2A_BASE	DVB-GA-T_BASE	GAA	IR2
KDL-32EX650	18502400	1D23A525	09047040	LY320HN0301	P-2A_BASE	DVB-GA-T_BASE	GAA	EG2
KDL-32EX650	18502500	1D23A525	09047040	LY320HN0301	P-2A_BASE	DVB-GA-T_BASE	GAA	PK1
KDL-32EX653	18495100	1D23A525	09107040	LY320HN0301	P-2A_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-32HX750	18433100	0D33A521	09042040	LY320HQ0101	3a_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-32HX750	18433100	0D33A521	09042040	LY320HQ0102	3a_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-32HX750	18437500	0C33A121	02042040	LY320HQ0101	3a_BASE	ATSC-KR_BASE	AAA	KR2
KDL-32HX750	18437500	0C33A121	02042040	LY320HQ0102	3a_BASE	ATSC-KR_BASE	AAA	KR2
KDL-32HX750	18439100	0C33A321	06042040	LY320HQ0101	3a_BASE	DVB-TW_BASE	GAA	TW6
KDL-32HX750	18439100	0C33A321	06042040	LY320HQ0102	3a_BASE	DVB-TW_BASE	GAA	TW6
KDL-32HX750	18440700	0C33A421	08042040	LY320HQ0101	3a_BASE	DTMB-HK_BASE	GAA	HK5
KDL-32HX750	18440700	0C33A421	08042040	LY320HQ0102	3a_BASE	DTMB-HK_BASE	GAA	HK5
KDL-32HX750	18433101	0D33A521	090C2040	LY320HQ0101	3a_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-32HX750	18433101	0D33A521	090C2040	LY320HQ0102	3a_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-32HX750	18433106	0C33A521	090C2040	LY320HQ0101	3a_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-32HX750	18433106	0C33A521	090C2040	LY320HQ0102	3a_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-32HX750	18433105	0D33A521	090C2040	LY320HQ0101	3a_BASE	DVB-GA-T_NO-NU	GAA	SA2
KDL-32HX750	18433105	0D33A521	090C2040	LY320HQ0102	3a_BASE	DVB-GA-T_NO-NU	GAA	SA2
KDL-32HX750	18433104	0D33A521	090C2040	LY320HQ0101	3a_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-32HX750	18433104	0D33A521	090C2040	LY320HQ0102	3a_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-32HX750	18433102	0D33A521	09042040	LY320HQ0101	3a_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-32HX750	18433102	0D33A521	09042040	LY320HQ0102	3a_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-32HX753	18495900	0D33A521	09102040	LY320HQ0101	3a_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-32HX753	18495900	0D33A521	09102040	LY320HQ0102	3a_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-32HX75A	18471100	0C33A421	080420C0	LY320HQ0101	3a_WIFI_READY	DTMB-HK_BASE	GAA	HK5
KDL-32HX75A	18471100	0C33A421	080420C0	LY320HQ0102	3a_WIFI_READY	DTMB-HK_BASE	GAA	HK5
KDL-32NX650	18504600	1D53A528	09048040	FLL320NT0101	P-2S_BASE	DVB-GA-T_BASE	GAA	AF1
KDL-32NX650	18504604	1D53A528	090C8040	FLL320NT0101	P-2S_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-32NX650	18504601	1D53A528	090C8040	FLL320NT0101	P-2S_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-32NX650	18504606	1C53A528	090C8040	FLL320NT0101	P-2S_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-32NX653	18504400	1D53A528	09108040	FLL320NT0101	P-2S_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-40EX650	18468000	1C23A326	06047040	LY400HM1001	P-2A_BASE	DVB-TW_BASE	GAA	TW6
KDL-40EX650	18468200	1C23A426	08047040	LY400HM1001	P-2A_BASE	DTMB-HK_BASE	GAA	HK5
KDL-40EX650	18470400	1D23A526	09047040	LY400HM1001	P-2A_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-40EX650	18470401	1D23A526	090C7040	LY400HM1001	P-2A_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-40EX650	18470406	1C23A526	090C7040	LY400HM1001	P-2A_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-40EX650	18470405	1D23A526	090C7040	LY400HM1001	P-2A_BASE	DVB-GA-T_NO-NU	GAA	SA2
KDL-40EX650	18470402	1D23A526	09047040	LY400HM1001	P-2A_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-40EX650	18470403	1D23A526	09047040	LY400HM1001	P-2A_BASE	DVB-GA-T_BASE	GAA	MY1
KDL-40EX650	18470404	1D23A526	090C7040	LY400HM1001	P-2A_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-40EX650	18493200	1D73A526	09047040	LY400HM1001	P-2A_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-40EX650	18501800	1D23A526	09047040	LY400HM1001	P-2A_BASE	DVB-GA-T_BASE	GAA	IR2
KDL-40EX650	18501900	1D23A526	09047040	LY400HM1001	P-2A_BASE	DVB-GA-T_BASE	GAA	EG2
KDL-40EX650	18502000	1D23A526	09047040	LY400HM1001	P-2A_BASE	DVB-GA-T_BASE	GAA	PK1
KDL-40EX650	18502100	1D23A526	09047040	LY400HM1001	P-2A_BASE	DVB-GA-T_BASE	GAA	SA1
KDL-40EX650	18502200	1D23A526	09047040	LY400HM1001	P-2A_BASE	DVB-GA-T_BASE	GAA	E41
KDL-40EX653	18495200	1D23A526	09107040	LY400HM1001	P-2A_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-40EX653	18495203	1D23A526	091C7040	LY400HM1001	P-2A_BASE	DVB-GA-T_NO-SKY	GAB	MY1
KDL-40EX65A	18514703	1D23A526	09047040	LY400HM1001	P-2A_BASE	DVB-GA-T_BASE	GAA	MY1
KDL-40HX750	18433000	0D33A515	09042040	LY400HL0401	3a_BASE	DVB-GA-T_BASE	GAA	ME6

Appendix 4 - Model ID / Product ID and Panel Information

<Asia>								
Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-40HX750	18433000	0D33A515	09042040	LTY400HL0402	3a BASE	DVB-GA-T_BASE	GAA	ME6
KDL-40HX750	18433000	0D33A531	09042040	LTY400HL0501	3a BASE	DVB-GA-T_BASE	GAA	ME6
KDL-40HX750	18437400	0C33A115	02042040	LTY400HL0401	3a-G_BASE	ATSC-KR_BASE	AAA	KR2
KDL-40HX750	18437400	0C33A115	02042040	LTY400HL0402	3a-G_BASE	ATSC-KR_BASE	AAA	KR2
KDL-40HX750	18437400	0C33A131	02042040	LTY400HL0501	3a BASE	ATSC-KR_BASE	AAA	KR2
KDL-40HX750	18439000	0C33A315	06042040	LTY400HL0401	3a BASE	DVB-TW_BASE	GAA	TW6
KDL-40HX750	18439000	0C33A315	06042040	LTY400HL0402	3a BASE	DVB-TW_BASE	GAA	TW6
KDL-40HX750	18439000	0C33A331	06042040	LTY400HL0501	3a BASE	DVB-TW_BASE	GAA	TW6
KDL-40HX750	18440600	0C33A415	08042040	LTY400HL0401	3a BASE	DTMB-HK_BASE	GAA	HK5
KDL-40HX750	18440600	0C33A415	08042040	LTY400HL0402	3a BASE	DTMB-HK_BASE	GAA	HK5
KDL-40HX750	18440600	0C33A431	08042040	LTY400HL0501	3a BASE	DTMB-HK_BASE	GAA	HK5
KDL-40HX750	18433001	0D33A515	090C2040	LTY400HL0401	3a BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-40HX750	18433001	0D33A515	090C2040	LTY400HL0402	3a BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-40HX750	18433001	0D33A531	090C2040	LTY400HL0501	3a BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-40HX750	18433006	0C33A515	090C2040	LTY400HL0401	3a BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-40HX750	18433006	0C33A515	090C2040	LTY400HL0402	3a BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-40HX750	18433006	0C33A531	090C2040	LTY400HL0501	3a BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-40HX750	18433005	0D33A515	090C2040	LTY400HL0401	3a BASE	DVB-GA-T_NO-NU	GAA	SA2
KDL-40HX750	18433005	0D33A515	090C2040	LTY400HL0402	3a BASE	DVB-GA-T_NO-NU	GAA	SA2
KDL-40HX750	18433005	0D33A531	090C2040	LTY400HL0501	3a BASE	DVB-GA-T_NO-NU	GAA	SA2
KDL-40HX750	18433004	0D33A515	090C2040	LTY400HL0401	3a BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-40HX750	18433004	0D33A515	090C2040	LTY400HL0402	3a BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-40HX750	18433004	0D33A531	090C2040	LTY400HL0501	3a BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-40HX750	18433002	0D33A515	09042040	LTY400HL0401	3a BASE	DVB-GA-T_BASE	GAA	TH8
KDL-40HX750	18433002	0D33A515	09042040	LTY400HL0402	3a BASE	DVB-GA-T_BASE	GAA	TH8
KDL-40HX750	18433002	0D33A531	09042040	LTY400HL0501	3a BASE	DVB-GA-T_BASE	GAA	TH8
KDL-40HX750	18433003	0D33A515	09042040	LTY400HL0401	3a BASE	DVB-GA-T_BASE	GAA	MY1
KDL-40HX750	18433003	0D33A515	09042040	LTY400HL0402	3a BASE	DVB-GA-T_BASE	GAA	MY1
KDL-40HX750	18433003	0D33A531	09042040	LTY400HL0501	3a BASE	DVB-GA-T_BASE	GAA	MY1
KDL-40HX750	18493000	0D83A515	09042040	LTY400HL0401	3a BASE	DVB-GA-T_BASE	GAA	ME6
KDL-40HX750	18493000	0D83A515	09042040	LTY400HL0402	3a BASE	DVB-GA-T_BASE	GAA	ME6
KDL-40HX750	18493000	0D83A531	09042040	LTY400HL0501	3a BASE	DVB-GA-T_BASE	GAA	ME6
KDL-40HX750	18500800	0D33A515	09042040	LTY400HL0401	3a BASE	DVB-GA-T_BASE	GAA	IR2
KDL-40HX750	18500800	0D33A515	09042040	LTY400HL0402	3a BASE	DVB-GA-T_BASE	GAA	IR2
KDL-40HX750	18500800	0D33A531	09042040	LTY400HL0501	3a BASE	DVB-GA-T_BASE	GAA	IR2
KDL-40HX750	18500900	0D33A515	09042040	LTY400HL0401	3a BASE	DVB-GA-T_BASE	GAA	PK1
KDL-40HX750	18500900	0D33A515	09042040	LTY400HL0402	3a BASE	DVB-GA-T_BASE	GAA	PK1
KDL-40HX750	18500900	0D33A531	09042040	LTY400HL0501	3a BASE	DVB-GA-T_BASE	GAA	PK1
KDL-40HX750	18501000	0D33A515	09042040	LTY400HL0401	3a BASE	DVB-GA-T_BASE	GAA	SA1
KDL-40HX750	18501000	0D33A515	09042040	LTY400HL0402	3a BASE	DVB-GA-T_BASE	GAA	SA1
KDL-40HX750	18501000	0D33A531	09042040	LTY400HL0501	3a BASE	DVB-GA-T_BASE	GAA	SA1
KDL-40HX753	18496200	0D33A515	09102040	LTY400HL0401	3a BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-40HX753	18496200	0D33A515	09102040	LTY400HL0402	3a BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-40HX753	18496200	0D33A531	09102040	LTY400HL0501	3a BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-40HX75A	18470900	0C33A315	060420C0	LTY400HL0401	3a WIFI_READY	DVB-TW_BASE	GAA	TW6
KDL-40HX75A	18470900	0C33A315	060420C0	LTY400HL0402	3a WIFI_READY	DVB-TW_BASE	GAA	TW6
KDL-40HX75A	18470900	0C33A331	060420C0	LTY400HL0501	3a WIFI_READY	DVB-TW_BASE	GAA	TW6
KDL-40HX75A	18471000	0C33A415	080420C0	LTY400HL0401	3a WIFI_READY	DTMB-HK_BASE	GAA	HK5
KDL-40HX75A	18471000	0C33A415	080420C0	LTY400HL0402	3a WIFI_READY	DTMB-HK_BASE	GAA	HK5
KDL-40HX75A	18471000	0C33A431	080420C0	LTY400HL0501	3a WIFI_READY	DTMB-HK_BASE	GAA	HK5
KDL-40HX850	18437000	043A11E	02041040	FQLR400LT0101	3a-G_BASE	ATSC-KR_BASE	AAA	KR2
KDL-40HX850	18437000	043A134	02041040	FQLR400LT0102	3a-G_BASE	ATSC-KR_BASE	AAA	KR2
KDL-40HX850	18440200	043A41E	08041040	FQLR400LT0101	3a-G_BASE	DTMB-HK_BASE	GAA	HK5
KDL-40HX850	18440200	043A434	08041040	FQLR400LT0102	3a-G_BASE	DTMB-HK_BASE	GAA	HK5
KDL-40HX850	18432601	0543A51E	090C1040	FQLR400LT0101	3a-G_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-40HX850	18432601	0543A534	090C1040	FQLR400LT0102	3a-G_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-40HX850	18495600	0543A51E	09101040	FQLR400LT0101	3a-G_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-40HX850	18495600	0543A534	09101040	FQLR400LT0102	3a-G_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-40HX855	18500400	0543A51E	09041040	FQLR400LT0101	3a-G_BASE	DVB-GA-T_BASE	GAA	AF1
KDL-40HX855	18500400	0543A534	09041040	FQLR400LT0102	3a-G_BASE	DVB-GA-T_BASE	GAA	AF1
KDL-40HX855	18500402	0543A51E	09041040	FQLR400LT0101	3a-G_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-40HX855	18500402	0543A534	09041040	FQLR400LT0102	3a-G_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-40HX855	18500404	0543A51E	090C1040	FQLR400LT0101	3a-G_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-40HX855	18500404	0543A534	090C1040	FQLR400LT0102	3a-G_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-40HX855	18500403	0543A51E	09041040	FQLR400LT0101	3a-G_BASE	DVB-GA-T_NO-NU	GAA	MY1
KDL-40HX855	18500403	0543A534	09041040	FQLR400LT0102	3a-G_BASE	DVB-GA-T_NO-NU	GAA	MY1
KDL-40NX650	18504500	1D53A529	09048040	FSLL400NT0101	P-2S_BASE	DVB-GA-T_BASE	GAA	AF1

<Asia>								
Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-40NX650	18504504	1D53A529	090C8040	FSLL400NT0101	P-2S_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-40NX650	18504501	1D53A529	090C8040	FSLL400NT0101	P-2S_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-40NX653	18504300	1D53A529	09108040	FSLL400NT0101	P-2S_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-46EX650	18470300	1D23A527	09047040	LTY460HN0501	P-2A_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-46EX650	18470300	1D23A530	09047040	LTY460HN0701	P-2A_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-46EX650	18470301	1D23A527	090C7040	LTY460HN0501	P-2A_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-46EX650	18470301	1D23A530	090C7040	LTY460HN0701	P-2A_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-46EX650	18470306	1C23A527	090C7040	LTY460HN0501	P-2A_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-46EX650	18470306	1C23A530	090C7040	LTY460HN0701	P-2A_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-46EX650	18489100	1C23A327	06047040	LTY460HN0501	P-2A_BASE	DVB-TW_BASE	GAA	TW6
KDL-46EX650	18489100	1C23A330	06047040	LTY460HN0701	P-2A_BASE	DVB-TW_BASE	GAA	TW6
KDL-46EX650	18470305	1D23A527	090C7040	LTY460HN0501	P-2A_BASE	DVB-GA-T_NO-NU	GAA	SA2
KDL-46EX650	18470305	1D23A530	090C7040	LTY460HN0701	P-2A_BASE	DVB-GA-T_NO-NU	GAA	SA2
KDL-46EX650	18470302	1D23A527	09047040	LTY460HN0501	P-2A_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-46EX650	18470302	1D23A530	09047040	LTY460HN0701	P-2A_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-46EX650	18470303	1D23A527	09047040	LTY460HN0501	P-2A_BASE	DVB-GA-T_BASE	GAA	MY1
KDL-46EX650	18470303	1D23A530	09047040	LTY460HN0701	P-2A_BASE	DVB-GA-T_BASE	GAA	MY1
KDL-46EX650	18470304	1D23A527	090C7040	LTY460HN0501	P-2A_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-46EX650	18470304	1D23A530	090C7040	LTY460HN0701	P-2A_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-46EX650	18493100	1D23A527	09047040	LTY460HN0501	P-2A_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-46EX650	18493100	1D23A530	09047040	LTY460HN0701	P-2A_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-46EX650	18501400	1D23A527	09047040	LTY460HN0501	P-2A_BASE	DVB-GA-T_BASE	GAA	IR2
KDL-46EX650	18501400	1D23A530	09047040	LTY460HN0701	P-2A_BASE	DVB-GA-T_BASE	GAA	IR2
KDL-46EX650	18501500	1D23A527	09047040	LTY460HN0501	P-2A_BASE	DVB-GA-T_BASE	GAA	EG2
KDL-46EX650	18501500	1D23A530	09047040	LTY460HN0701	P-2A_BASE	DVB-GA-T_BASE	GAA	EG2
KDL-46EX650	18501600	1D23A527	09047040	LTY460HN0501	P-2A_BASE	DVB-GA-T_BASE	GAA	PK1
KDL-46EX650	18501600	1D23A530	09047040	LTY460HN0701	P-2A_BASE	DVB-GA-T_BASE	GAA	PK1
KDL-46EX650	18501700	1D23A527	09047040	LTY460HN0501	P-2A_BASE	DVB-GA-T_BASE	GAA	SA1
KDL-46EX650	18501700	1D23A530	09047040	LTY460HN0701	P-2A_BASE	DVB-GA-T_BASE	GAA	SA1
KDL-46EX653	18495300	1D23A527	09107040	LTY460HN0501	P-2A_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-46EX653	18495300	1D23A530	09107040	LTY460HN0701	P-2A_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-46EX653	18495303	1D23A527	091C7040	LTY460HN0501	P-2A_BASE	DVB-GA-T_NO-SKY	GAB	MY1
KDL-46EX653	18495303	1D23A530	091C7040	LTY460HN0701	P-2A_BASE	DVB-GA-T_NO-SKY	GAB	MY1
KDL-46EX65A	18514603	1D23A527	09047040	LTY460HN0501	P-2A_BASE	DVB-GA-T_BASE	GAA	MY1
KDL-46EX65A	18514603	1D23A530	09047040	LTY460HN0701	P-2A_BASE	DVB-GA-T_BASE	GAA	MY1
KDL-46HX750	18432900	0D33A516	09042040	LTY460HQ0501	3a-G_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-46HX750	18432900	0D33A516	09042040	LTY460HQ0502	3a-G_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-46HX750	18437300	0C33A116	02042040	LTY460HQ0501	3a BASE	ATSC-KR_BASE	AAA	KR2
KDL-46HX750	18437300	0C33A116	02042040	LTY460HQ0502	3a BASE	ATSC-KR_BASE	AAA	KR2
KDL-46HX750	18437300	0C33A132	02042040	LTY460HQ0601	3a BASE	ATSC-KR_BASE	AAA	KR2
KDL-46HX750	18438900	0C33A316	06042040	LTY460HQ0501	3a BASE	DVB-TW_BASE	GAA	TW6
KDL-46HX750	18438900	0C33A316	06042040	LTY460HQ0502	3a BASE	DVB-TW_BASE	GAA	TW6
KDL-46HX750	18438900	0C33A332	06042040	LTY460HQ0601	3a BASE	DVB-TW_BASE	GAA	TW6
KDL-46HX750	18440500	0C33A416	08042040	LTY460HQ0501	3a BASE	DTMB-HK_BASE	GAA	HK5
KDL-46HX750	18440500	0C33A416	08042040	LTY460HQ0502	3a BASE	DTMB-HK_BASE	GAA	HK5
KDL-46HX750	18440500	0C33A432	08042040	LTY460HQ0601	3a BASE	DTMB-HK_BASE	GAA	HK5
KDL-46HX750	18432901	0D33A516	090C2040	LTY460HQ0501	3a BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-46HX750	18432901	0D33A516	090C2040	LTY460HQ0502	3a BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-46HX750	18432901	0D33A532	090C2040	LTY460HQ0601	3a BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-46HX750	18432906	0C33A5						

Appendix 4 - Model ID / Product ID and Panel Information

<Asia>								
Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-46HX750	18492900	0D83A532	09042040	LTY460HQ0601	3a_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-46HX750	18500500	0D33A516	09042040	LTY460HQ0501	3a_BASE	DVB-GA-T_BASE	GAA	IR2
KDL-46HX750	18500500	0D33A516	09042040	LTY460HQ0502	3a_BASE	DVB-GA-T_BASE	GAA	IR2
KDL-46HX750	18500500	0D33A532	09042040	LTY460HQ0601	3a_BASE	DVB-GA-T_BASE	GAA	IR2
KDL-46HX750	18500600	0D33A516	09042040	LTY460HQ0501	3a_BASE	DVB-GA-T_BASE	GAA	PK1
KDL-46HX750	18500600	0D33A516	09042040	LTY460HQ0502	3a_BASE	DVB-GA-T_BASE	GAA	PK1
KDL-46HX750	18500600	0D33A532	09042040	LTY460HQ0601	3a_BASE	DVB-GA-T_BASE	GAA	PK1
KDL-46HX750	18500700	0D33A516	09042040	LTY460HQ0501	3a_BASE	DVB-GA-T_BASE	GAA	SA1
KDL-46HX750	18500700	0D33A516	09042040	LTY460HQ0502	3a_BASE	DVB-GA-T_BASE	GAA	SA1
KDL-46HX750	18500700	0D33A532	09042040	LTY460HQ0601	3a_BASE	DVB-GA-T_BASE	GAA	SA1
KDL-46HX753	18496300	0D33A516	09102040	LTY460HQ0501	3a_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-46HX753	18496300	0D33A516	09102040	LTY460HQ0502	3a_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-46HX753	18496300	0D33A532	09102040	LTY460HQ0601	3a_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-46HX75A	18470800	0C33A316	060420C0	LTY460HQ0501	3a_WIFI_READY	DVB-TW_BASE	GAA	TW6
KDL-46HX75A	18470800	0C33A316	060420C0	LTY460HQ0502	3a_WIFI_READY	DVB-TW_BASE	GAA	TW6
KDL-46HX75A	18470800	0C33A332	060420C0	LTY460HQ0601	3a_WIFI_READY	DVB-TW_BASE	GAA	TW6
KDL-46HX850	18436900	0443A11F	02041040	FQLR460LT0101	3a-G_BASE	ATSC-KR_BASE	AAA	KR2
KDL-46HX850	18438500	0443A31F	06041040	FQLR460LT0101	3a-G_BASE	DVB-TW_BASE	GAA	TW6
KDL-46HX850	18440100	0443A41F	08041040	FQLR460LT0101	3a-G_BASE	DTMB-HK_BASE	GAA	HK5
KDL-46HX850	18432501	0543A51F	090C1040	FQLR460LT0101	3a-G_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-46HX850	18432506	0443A51F	090C1040	FQLR460LT0101	3a-G_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-46HX853	18495800	0543A51F	09101040	FQLR460LT0101	3a-G_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-46HX855	18500300	0543A51F	09041040	FQLR460LT0101	3a-G_BASE	DVB-GA-T_BASE	GAA	AF1
KDL-46HX855	18500302	0543A51F	09041040	FQLR460LT0101	3a-G_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-46HX855	18500304	0543A51F	090C1040	FQLR460LT0101	3a-G_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-46HX855	18500303	0543A51F	09041040	FQLR460LT0101	3a-G_BASE	DVB-GA-T_BASE	GAA	MY1
KDL-55HX750	18432800	0D33A517	09042040	LTY550HQ0401	3a_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-55HX750	18432800	0D33A533	09042040	LTY550HQ0501	3a_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-55HX750	18437200	0C33A117	02042040	LTY550HQ0401	3a_BASE	ATSC-KR_BASE	AAA	KR2
KDL-55HX750	18437200	0C33A133	02042040	LTY550HQ0501	3a_BASE	ATSC-KR_BASE	AAA	KR2
KDL-55HX750	18438800	0C33A317	06042040	LTY550HQ0401	3a_BASE	DVB-TW_BASE	GAA	TW6
KDL-55HX750	18438800	0C33A333	06042040	LTY550HQ0501	3a_BASE	DVB-TW_BASE	GAA	TW6
KDL-55HX750	18440400	0C33A417	08042040	LTY550HQ0401	3a_BASE	DTMB-HK_BASE	GAA	HK5
KDL-55HX750	18440400	0C33A433	08042040	LTY550HQ0501	3a_BASE	DTMB-HK_BASE	GAA	HK5
KDL-55HX750	18432801	0D33A517	090C2040	LTY550HQ0401	3a_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-55HX750	18432801	0D33A533	090C2040	LTY550HQ0501	3a_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-55HX750	18432806	0C33A517	090C2040	LTY550HQ0401	3a_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-55HX750	18432806	0C33A533	090C2040	LTY550HQ0501	3a_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-55HX750	18432805	0D33A517	090C2040	LTY550HQ0401	3a_BASE	DVB-GA-T_NO-NU	GAA	SA2
KDL-55HX750	18432805	0D33A533	090C2040	LTY550HQ0501	3a_BASE	DVB-GA-T_NO-NU	GAA	SA2
KDL-55HX750	18432804	0D33A517	090C2040	LTY550HQ0401	3a_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-55HX750	18432804	0D33A533	090C2040	LTY550HQ0501	3a_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-55HX750	18432802	0D33A517	09042040	LTY550HQ0401	3a_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-55HX750	18432802	0D33A533	09042040	LTY550HQ0501	3a_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-55HX750	18432803	0D33A517	09042040	LTY550HQ0401	3a_BASE	DVB-GA-T_BASE	GAA	MY1
KDL-55HX750	18432803	0D33A533	09042040	LTY550HQ0501	3a_BASE	DVB-GA-T_BASE	GAA	MY1
KDL-55HX750	18492800	0D83A517	09042040	LTY550HQ0401	3a_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-55HX750	18492800	0D83A533	09042040	LTY550HQ0501	3a_BASE	DVB-GA-T_BASE	GAA	ME6
KDL-55HX753	18496000	0D33A517	09102040	LTY550HQ0401	3a_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-55HX753	18496000	0D33A533	09102040	LTY550HQ0501	3a_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-55HX850	18436800	0443A120	02041040	FQLR550LT0101	3a-G_BASE	ATSC-KR_BASE	AAA	KR2
KDL-55HX850	18436800	0443A135	02041040	FQLR550LT0102	3a-G_BASE	ATSC-KR_BASE	AAA	KR2
KDL-55HX850	18438400	0443A320	06041040	FQLR550LT0101	3a-G_BASE	DVB-TW_BASE	GAA	TW6
KDL-55HX850	18438400	0443A335	06041040	FQLR550LT0102	3a-G_BASE	DVB-TW_BASE	GAA	TW6
KDL-55HX850	18440000	0443A420	08041040	FQLR550LT0101	3a-G_BASE	DTMB-HK_BASE	GAA	HK5
KDL-55HX850	18440000	0443A435	08041040	FQLR550LT0102	3a-G_BASE	DTMB-HK_BASE	GAA	HK5
KDL-55HX850	18432401	0543A520	090C1040	FQLR550LT0101	3a-G_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-55HX850	18432401	0543A535	090C1040	FQLR550LT0102	3a-G_BASE	DVB-GA-T_NO-NU	GAA	IN5
KDL-55HX850	18432406	0443A520	090C1040	FQLR550LT0101	3a-G_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-55HX850	18432406	0443A535	090C1040	FQLR550LT0102	3a-G_BASE	DVB-GA-T_NO-NU	GAA	AU5
KDL-55HX853	18495700	0543A520	09101040	FQLR550LT0101	3a-G_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-55HX853	18495700	0543A535	09101040	FQLR550LT0102	3a-G_BASE	DVB-GA-T_NO-SKNU	GAB	KW1
KDL-55HX855	18500200	0543A520	09041040	FQLR550LT0101	3a-G_BASE	DVB-GA-T_BASE	GAA	AF1
KDL-55HX855	18500200	0543A535	09041040	FQLR550LT0102	3a-G_BASE	DVB-GA-T_BASE	GAA	AF1
KDL-55HX855	18500202	0543A520	09041040	FQLR550LT0101	3a-G_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-55HX855	18500202	0543A535	09041040	FQLR550LT0102	3a-G_BASE	DVB-GA-T_BASE	GAA	TH8
KDL-55HX855	18500204	0543A520	090C1040	FQLR550LT0101	3a-G_BASE	DVB-GA-T_NO-NU	GAA	EA4

<Asia>								
Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-55HX855	18500204	0543A535	090C1040	FQLR550LT0102	3a-G_BASE	DVB-GA-T_NO-NU	GAA	EA4
KDL-55HX855	18500203	0543A520	09041040	FQLR550LT0101	3a-G_BASE	DVB-GA-T_BASE	GAA	MY1
KDL-55HX855	18500203	0543A535	09041040	FQLR550LT0102	3a-G_BASE	DVB-GA-T_BASE	GAA	MY1

Appendix 4 - Model ID / Product ID and Panel Information

<China>

Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-26EX550	18465800	4523A424	07047040	V260B3-LE2	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-32EX550	18465700	1D23A422	07047040	LYT320AN0301	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-32EX550	18465700	1D23A422	07047040	LYT320AN0501	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-32EX550	18494900	1D73A422	07047040	LYT320AN0301	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-32EX550	18494900	1D73A422	07047040	LYT320AN0501	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-32EX650	18465600	1D23A425	07047040	LYT320HN0301	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-32EX650	18494800	1D73A425	07047040	LYT320HN0301	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-40EX650	18465500	1D23A426	07047040	LYT400HM1001	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-40EX650	18494700	1D73A426	07047040	LYT400HM1001	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-40HX750	18464900	0D33A415	07042040	LYT400HL0401	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-40HX750	18464900	0D33A415	07042040	LYT400HL0402	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-40HX750	18464900	0D33A431	07042040	LYT400HL0501	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-40HX750	18494500	0D83A415	07042040	LYT400HL0401	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-40HX750	18494500	0D83A415	07042040	LYT400HL0402	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-40HX750	18494500	0D83A431	07042040	LYT400HL0501	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-46EX650	18469500	1D23A427	07047040	LYT460HN0501	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-46EX650	18469500	1D23A430	07047040	LYT460HN0701	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-46EX650	18494600	1D73A427	07047040	LYT460HN0501	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-46EX650	18494600	1D73A430	07047040	LYT460HN0701	P-2A_BASE	DTMB-CN_BASE	GAC	CN8
KDL-46HX750	18464800	0D33A416	07042040	LYT460HQ0501	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-46HX750	18464800	0D33A416	07042040	LYT460HQ0502	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-46HX750	18464800	0D33A432	07042040	LYT460HQ0601	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-46HX750	18493600	0D83A416	07042040	LYT460HQ0501	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-46HX750	18493600	0D83A416	07042040	LYT460HQ0502	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-46HX750	18493600	0D83A432	07042040	LYT460HQ0601	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-46HX850	18465200	0543A41F	07041040	FQLR460LT0101	3a-G_BASE	DTMB-CN_BASE	GAC	CN8
KDL-55HX750	18464700	0D33A417	07042040	LYT550HQ0401	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-55HX750	18464700	0D33A433	07042040	LYT550HQ0501	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-55HX750	18493500	0D83A417	07042040	LYT550HQ0401	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-55HX750	18493500	0D83A433	07042040	LYT550HQ0501	3a_BASE	DTMB-CN_BASE	GAC	CN8
KDL-55HX850	18465100	0543A420	07041040	FQLR550LT0101	3a-G_BASE	DTMB-CN_BASE	GAC	CN8
KDL-55HX850	18465100	0543A435	07041040	FQLR550LT0102	3a-G_BASE	DTMB-CN_BASE	GAC	CN8

<Europe>

Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-22EX550	18497700	4423A823	0C047040	V216B1-LE3	P-2A_BASE	DVB-AEP-TC_BASE	EUA	CEI
KDL-22EX553	18499100	4423A923	0D047040	V216B1-LE3	P-2A_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-22EX553	18499204	4423A923	0D087040	V216B1-LE3	P-2A_BASE	DVB-AEP-T2_MHP	EUB	CEL
KDL-22EX553	18499110	4423A923	0D047040	V216B1-LE3	P-2A_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-22EX553	18499101	4423A923	0D147040	V216B1-LE3	P-2A_BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-22EX553	18499111	4423A923	0D147040	V216B1-LE3	P-2A_BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-22EX553	18499214	4423A923	0D087040	V216B1-LE3	P-2A_BASE	DVB-AEP-T2_MHP	EUB	CEL
KDL-22EX553	18510703	4423A923	0D147040	V216B1-LE3	P-2A_BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-22EX553	18510713	4423A923	0D147040	V216B1-LE3	P-2A_BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-22EX555	18498200	4423A723	0B047040	V216B1-LE3	P-2A_BASE	DVB-AEP-S2_BASE	EUA	CEI
KDL-26EX550	18497600	4423A824	0C047040	V260B3-LE2	P-2A_BASE	DVB-AEP-TC_BASE	EUA	CEI
KDL-26EX550	18497610	4423A824	0C047040	V260B3-LE2	P-2A_BASE	DVB-AEP-TC_BASE	EUA	CEI
KDL-26EX553	18498900	4423A924	0D047040	V260B3-LE2	P-2A_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-26EX553	18499004	4423A924	0D087040	V260B3-LE2	P-2A_BASE	DVB-AEP-T2_MHP	EUB	CEL
KDL-26EX553	18498910	4423A924	0D047040	V260B3-LE2	P-2A_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-26EX553	18498901	4423A924	0D147040	V260B3-LE2	P-2A_BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-26EX553	18498911	4423A924	0D147040	V260B3-LE2	P-2A_BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-26EX553	18499014	4423A924	0D087040	V260B3-LE2	P-2A_BASE	DVB-AEP-T2_MHP	EUB	CEL
KDL-26EX553	18510603	4423A924	0D147040	V260B3-LE2	P-2A_BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-26EX553	18510613	4423A924	0D147040	V260B3-LE2	P-2A_BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-26EX555	18498100	4423A724	0B047040	V260B3-LE2	P-2A_BASE	DVB-AEP-S2_BASE	EUA	CEI
KDL-26EX555	18498110	4423A724	0B047040	V260B3-LE2	P-2A_BASE	DVB-AEP-S2_BASE	EUA	CEI
KDL-32EX650	18497500	1C23A825	0C147040	LYT320HN0301	P-2A_BASE	DVB-AEP-TC_NO-NOR	EUA	EEN
KDL-32EX650	18497502	1C23A825	0C047040	LYT320HN0301	P-2A_BASE	DVB-AEP-TC_BASE	EUA	NOR
KDL-32EX653	18498700	1C23A925	0D047040	LYT320HN0301	P-2A_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-32EX653	18498804	1C23A925	0D087040	LYT320HN0301	P-2A_BASE	DVB-AEP-T2_MHP	EUB	CEL
KDL-32EX653	18498701	1C23A925	0D147040	LYT320HN0301	P-2A_BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-32EX653	18510503	1C23A925	0D147040	LYT320HN0301	P-2A_BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-32EX653	18513520	1C23A925	0D047040	LYT320HN0301	P-2A_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-32EX655	18498000	1C23A725	0B047040	LYT320HN0301	P-2A_BASE	DVB-AEP-S2_BASE	EUA	CEI
KDL-32HX750	18447000	0C33A821	0C042040	LYT320HQ0101	3a_BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-32HX750	18447000	0C33A821	0C042040	LYT320HQ0102	3a_BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-32HX751	18481100	0C33A821	0C042040	LYT320HQ0101	3a_BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-32HX751	18481100	0C33A821	0C042040	LYT320HQ0102	3a_BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-32HX753	18447100	0C33A921	0D042040	LYT320HQ0101	3a_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-32HX753	18447100	0C33A921	0D042040	LYT320HQ0102	3a_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-32HX753	18447101	0C33A921	0D142040	LYT320HQ0101	3a_BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-32HX753	18447101	0C33A921	0D142040	LYT320HQ0102	3a_BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-32HX753	18510903	0C33A921	0D142040	LYT320HQ0101	3a_BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-32HX753	18510903	0C33A921	0D142040	LYT320HQ0102	3a_BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-32HX755	18447300	0C33A821	0E042040	LYT320HQ0101	3a_BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-32HX755	18447300	0C33A821	0E042040	LYT320HQ0102	3a_BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-32HX755	18494104	0C33A821	0E082040	LYT320HQ0101	3a_BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-32HX755	18494104	0C33A821	0E082040	LYT320HQ0102	3a_BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-32HX757	18483100	0C33A821	0E042040	LYT320HQ0101	3a_BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-32HX757	18483100	0C33A821	0E042040	LYT320HQ0102	3a_BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-32HX758	18483500	0C33A821	0E042040	LYT320HQ0101	3a_BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-32HX758	18483500	0C33A821	0E042040	LYT320HQ0102	3a_BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-32HX759	18483900	0C33A821	0E042040	LYT320HQ0101	3a_BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-32HX759	18483900	0C33A821	0E042040	LYT320HQ0102	3a_BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-40EX650	18478900	1C23A826	0C147040	LYT400HM1001	P-2A_BASE	DVB-AEP-TC_NO-NOR	EUA	EEN
KDL-40EX653	18476600	1C23A926	0D047040	LYT400HM1001	P-2A_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-40EX653	18479304	1C23A926	0D087040	LYT400HM1001	P-2A_BASE	DVB-AEP-T2_MHP	EUB	CEL
KDL-40EX653	18476601	1C23A926	0D147040	LYT400HM1001	P-2A_BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-40EX653	18510403	1C23A926	0D147040	LYT400HM1001	P-2A_BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-40EX653	18513320	1C23A926	0D047040	LYT400HM1001	P-2A_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-40EX655	18476700	1C23A726	0B047040	LYT400HM1001	P-2A_BASE	DVB-AEP-S2_BASE	EUA	CEI
KDL-40HX750	18420100	0C33A815	0C142040	LYT400HL0401	3a_BASE	DVB-AEP-TC_NO-NOR	EUA	EEN
KDL-40HX750	18420100	0C33A815	0C142040	LYT400HL0402	3a_BASE	DVB-AEP-TC_NO-NOR	EUA	EEN
KDL-40HX750	18420100	0C33A831	0C142040	LYT400HL0501	3a_BASE	DVB-AEP-TC_NO-NOR	EUA	EEN
KDL-40HX751	18481000	0C33A815	0C042040	LYT400HL0401	3a_BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-40HX751	18481000	0C33A815	0C042040	LYT400HL0402	3a_BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-40HX751	18481000	0C33A831	0C042040	LYT400HL0501	3a_BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-40HX753	18446100	0C33A915	0D042040	LYT400HL0401	3a_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-40HX753	18446100	0C33A915	0D042040	LYT400HL0402	3a_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-40HX753	18446100	0C33A931	0D042040	LYT400HL0501	3a_BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-40HX753	18446101	0C33A915	0D142040	LYT400HL0401	3a_BASE	DVB-AEP-T2_NO-NOR	EUA	UKA

Appendix 4 - Model ID / Product ID and Panel Information

<Europe>

Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-40HX753	18446101	0C33A915	0D142040	LTY400HL0402	3a BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-40HX753	18446101	0C33A931	0D142040	LTY400HL0501	3a BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-40HX753	18511103	0C33A915	0D142040	LTY400HL0401	3a BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-40HX753	18511103	0C33A915	0D142040	LTY400HL0402	3a BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-40HX753	18511103	0C33A931	0D142040	LTY400HL0501	3a BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-40HX755	18446900	0C33AA15	0E142040	LTY400HL0401	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-40HX755	18446900	0C33AA15	0E142040	LTY400HL0402	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-40HX755	18446900	0C33AA31	0E142040	LTY400HL0501	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-40HX755	18446902	0C33AA15	0E042040	LTY400HL0401	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-40HX755	18446902	0C33AA15	0E042040	LTY400HL0402	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-40HX755	18446902	0C33AA31	0E042040	LTY400HL0501	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-40HX755	18494004	0C33AA15	0E082040	LTY400HL0401	3a BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-40HX755	18494004	0C33AA15	0E082040	LTY400HL0402	3a BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-40HX755	18494004	0C33AA31	0E082040	LTY400HL0501	3a BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-40HX756	18482600	0C33AA15	0E142040	LTY400HL0401	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-40HX756	18482600	0C33AA15	0E142040	LTY400HL0402	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-40HX756	18482600	0C33AA31	0E142040	LTY400HL0501	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-40HX757	18483000	0C33AA15	0E042040	LTY400HL0401	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-40HX757	18483000	0C33AA15	0E042040	LTY400HL0402	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-40HX757	18483000	0C33AA31	0E042040	LTY400HL0501	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-40HX758	18483400	0C33AA15	0E042040	LTY400HL0401	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-40HX758	18483400	0C33AA15	0E042040	LTY400HL0402	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-40HX758	18483400	0C33AA31	0E042040	LTY400HL0501	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-40HX759	18483800	0C33AA15	0E042040	LTY400HL0401	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-40HX759	18483800	0C33AA15	0E042040	LTY400HL0402	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-40HX759	18483800	0C33AA31	0E042040	LTY400HL0501	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-40HX759	18514302	0C33AA15	0E042040	LTY400HL0401	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-40HX759	18514302	0C33AA15	0E042040	LTY400HL0402	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-40HX759	18514302	0C33AA31	0E042040	LTY400HL0501	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-40HX850	18430200	0443A81E	0C041040	FQLR400LT0101	3a-G BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-40HX850	18430200	0443A834	0C041040	FQLR400LT0102	3a-G BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-40HX853	18444900	0443A91E	0D041040	FQLR400LT0101	3a-G BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-40HX853	18444900	0443A934	0D041040	FQLR400LT0102	3a-G BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-40HX853	18444901	0443A91E	0D141040	FQLR400LT0101	3a-G BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-40HX853	18444901	0443A934	0D141040	FQLR400LT0102	3a-G BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-40HX855	18445400	0443AA1E	0E041040	FQLR400LT0101	3a-G BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-40HX855	18445400	0443AA34	0E041040	FQLR400LT0102	3a-G BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-40HX855	18494404	0443AA1E	0E081040	FQLR400LT0101	3a-G BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-40HX855	18494404	0443AA34	0E081040	FQLR400LT0102	3a-G BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-46EX650	18478800	1C23A827	0C147040	LTY460HN0501	P-2A BASE	DVB-AEP-TC_NO-NOR	EUA	EEN
KDL-46EX650	18478800	1C23A830	0C147040	LTY460HN0701	P-2A BASE	DVB-AEP-TC_NO-NOR	EUA	EEN
KDL-46EX653	18476800	1C23A927	0D047040	LTY460HN0501	P-2A BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-46EX653	18476800	1C23A930	0D047040	LTY460HN0701	P-2A BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-46EX653	18479204	1C23A927	0D087040	LTY460HN0501	P-2A BASE	DVB-AEP-T2_MHP	EUB	CEL
KDL-46EX653	18479204	1C23A930	0D087040	LTY460HN0701	P-2A BASE	DVB-AEP-T2_MHP	EUB	CEL
KDL-46EX653	18476801	1C23A927	0D147040	LTY460HN0501	P-2A BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-46EX653	18476801	1C23A930	0D147040	LTY460HN0701	P-2A BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-46EX653	18510803	1C23A927	0D147040	LTY460HN0501	P-2A BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-46EX653	18510803	1C23A930	0D147040	LTY460HN0701	P-2A BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-46EX653	18513120	1C23A927	0D047040	LTY460HN0501	P-2A BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-46EX653	18513120	1C23A930	0D047040	LTY460HN0701	P-2A BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-46EX655	18476900	1C23A727	0B047040	LTY460HN0501	P-2A BASE	DVB-AEP-S2_BASE	EUA	CEI
KDL-46EX655	18476900	1C23A730	0B047040	LTY460HN0701	P-2A BASE	DVB-AEP-S2_BASE	EUA	CEI
KDL-46HX750	18420000	0C33A816	0C142040	LTY460HQ0501	3a BASE	DVB-AEP-TC_NO-NOR	EUA	EEN
KDL-46HX750	18420000	0C33A816	0C142040	LTY460HQ0502	3a BASE	DVB-AEP-TC_NO-NOR	EUA	EEN
KDL-46HX750	18420000	0C33A832	0C142040	LTY460HQ0601	3a BASE	DVB-AEP-TC_NO-NOR	EUA	EEN
KDL-46HX750	18480900	0C33A816	0C042040	LTY460HQ0501	3a BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-46HX751	18480900	0C33A816	0C042040	LTY460HQ0502	3a BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-46HX751	18480900	0C33A832	0C042040	LTY460HQ0601	3a BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-46HX753	18446000	0C33A916	0D042040	LTY460HQ0501	3a BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-46HX753	18446000	0C33A916	0D042040	LTY460HQ0502	3a BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-46HX753	18446000	0C33A932	0D042040	LTY460HQ0601	3a BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-46HX753	18446001	0C33A916	0D142040	LTY460HQ0501	3a BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-46HX753	18446001	0C33A916	0D142040	LTY460HQ0502	3a BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-46HX753	18446001	0C33A932	0D142040	LTY460HQ0601	3a BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-46HX753	18511003	0C33A916	0D142040	LTY460HQ0501	3a BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-46HX753	18511003	0C33A916	0D142040	LTY460HQ0502	3a BASE	DVB-AEP-T2_NO-NOR	EUA	RU3

<Europe>

Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-46HX753	18511003	0C33A932	0D142040	LTY460HQ0601	3a BASE	DVB-AEP-T2_NO-NOR	EUA	RU3
KDL-46HX755	18446800	0C33AA16	0E142040	LTY460HQ0501	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-46HX755	18446800	0C33AA16	0E142040	LTY460HQ0502	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-46HX755	18446800	0C33AA32	0E142040	LTY460HQ0601	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-46HX755	18446802	0C33AA16	0E042040	LTY460HQ0501	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-46HX755	18446802	0C33AA16	0E042040	LTY460HQ0502	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-46HX755	18446802	0C33AA32	0E042040	LTY460HQ0601	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-46HX755	18493904	0C33AA16	0E082040	LTY460HQ0501	3a BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-46HX755	18493904	0C33AA16	0E082040	LTY460HQ0502	3a BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-46HX755	18493904	0C33AA32	0E082040	LTY460HQ0601	3a BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-46HX756	18482500	0C33AA16	0E142040	LTY460HQ0501	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-46HX756	18482500	0C33AA16	0E142040	LTY460HQ0502	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-46HX756	18482500	0C33AA32	0E142040	LTY460HQ0601	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-46HX757	18482900	0C33AA16	0E042040	LTY460HQ0501	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-46HX757	18482900	0C33AA16	0E042040	LTY460HQ0502	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-46HX757	18482900	0C33AA32	0E042040	LTY460HQ0601	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-46HX758	18483300	0C33AA16	0E042040	LTY460HQ0501	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-46HX758	18483300	0C33AA16	0E042040	LTY460HQ0502	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-46HX758	18483300	0C33AA32	0E042040	LTY460HQ0601	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-46HX759	18483700	0C33AA16	0E042040	LTY460HQ0501	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-46HX759	18483700	0C33AA16	0E042040	LTY460HQ0502	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-46HX759	18483700	0C33AA32	0E042040	LTY460HQ0601	3a BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-46HX75G	18514402	0C33AA16	0E042040	LTY460HQ0501	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-46HX75G	18514402	0C33AA16	0E042040	LTY460HQ0502	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-46HX75G	18514402	0C33AA32	0E042040	LTY460HQ0601	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-46HX850	18423500	0443A81F	0C041040	FQLR460LT0101	3a-G BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-46HX853	18444800	0443A91F	0D041040	FQLR460LT0101	3a-G BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-46HX853	18444801	0443A91F	0D141040	FQLR460LT0101	3a-G BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-46HX855	18445700	0443AA1F	0E041040	FQLR460LT0101	3a-G BASE	DVB-AEP-C2_BASE	EUA	CEI
KDL-46HX855	18494304	0443AA1F	0E081040	FQLR460LT0101	3a-G BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-55HX750	18419900	0C33A817	0C142040	LTY550HQ0401	3a BASE	DVB-AEP-TC_NO-NOR	EUA	EEN
KDL-55HX750	18419900	0C33A833	0C142040	LTY550HQ0501	3a BASE	DVB-AEP-TC_NO-NOR	EUA	EEN
KDL-55HX751	18480800	0C33A817	0C042040	LTY550HQ0401	3a BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-55HX751	18480800	0C33A833	0C042040	LTY550HQ0501	3a BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-55HX753	18445900	0C33A917	0D042040	LTY550HQ0401	3a BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-55HX753	18445900	0C33A933	0D042040	LTY550HQ0501	3a BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-55HX753	18445901	0C33A917	0D142040	LTY550HQ0401	3a BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-55HX753	18445901	0C33A933	0D142040	LTY550HQ0501	3a BASE	DVB-AEP-T2_NO-NOR	EUA	UKA
KDL-55HX753	18512920	0C33A917	0D042040	LTY550HQ0401	3a BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-55HX753	18512920	0C33A933	0D042040	LTY550HQ0501	3a BASE	DVB-AEP-T2_BASE	EUA	CEI
KDL-55HX755	18446700	0C33AA17	0E142040	LTY550HQ0401	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-55HX755	18446700	0C33AA33	0E142040	LTY550HQ0501	3a BASE	DVB-AEP-C2_NO-NOR	EUA	EEN
KDL-55HX755	18446702	0C33AA17	0E042040	LTY550HQ0401	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-55HX755	18446702	0C33AA33	0E042040	LTY550HQ0501	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-55HX755	18493804	0C33AA17	0E082040	LTY550HQ0401	3a BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-55HX755	18493804	0C33A933	0E082040	LTY550HQ0501	3a BASE	DVB-AEP-C2_MHP	EUB	CEL
KDL-55HX75G	18514502	0C33AA17	0E042040	LTY550HQ0401	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-55HX75G	18514502	0C33AA33	0E042040	LTY550HQ0501	3a BASE	DVB-AEP-C2_BASE	EUA	NOR
KDL-55HX850	18423400	0443A820	0C041040	FQLR550LT0101	3a-G BASE	DVB-AEP-TC_BASE	EUA	EEN
KDL-55HX850	184							

Appendix 4 - Model ID / Product ID and Panel Information

<Japan>

Model Name	ProductCode	Model-ID	Product-ID	Panel Name	000 SEG	001 DEST	PKG	Spec
KDL-22EX540	18455100	4423AB23	0F047040	V216B1-LE3	P-2A_BASE	ISDB-JP_BASE	JPA	J1
KDL-22EX540	18455110	4423AB23	0F047040	V216B1-LE3	P-2A_BASE	ISDB-JP_BASE	JPA	J1
KDL-26EX540	18455000	4423AB24	0F047040	V260B3-LE2	P-2A_BASE	ISDB-JP_BASE	JPA	J1
KDL-32EX550	18454900	1C23AB22	0F047040	LTY320AN0301	P-2A_BASE	ISDB-JP_BASE	JPA	J1
KDL-32EX550	18454900	1C23AB2F	0F047040	LTY320AN0501	P-2A_BASE	ISDB-JP_BASE	JPA	J1
KDL-32HX750	18454800	2C33AB21	0F042040	LTY320HQ0101	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-32HX750	18454800	2C33AB21	0F042040	LTY320HQ0102	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-40EX750	18511900	2C63AB15	0F04A040	LTY400HL0401	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-40EX750	18511900	2C63AB15	0F04A040	LTY400HL0402	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-40EX750	18511900	2C63AB31	0F04A040	LTY400HL0501	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-40HX750	18454700	2C33AB15	0F042040	LTY400HL0401	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-40HX750	18454700	2C33AB15	0F042040	LTY400HL0402	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-40HX750	18454700	2C33AB31	0F042040	LTY400HL0501	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-40HX850	18454400	2443AB1E	0F041040	FQLR400LT0101	3a-G_BASE	ISDB-JP_BASE	JPA	J1
KDL-40HX850	18454400	2443AB34	0F041040	FQLR400LT0102	3a-G_BASE	ISDB-JP_BASE	JPA	J1
KDL-46HX750	18454600	2C33AB16	0F042040	LTY460HQ0501	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-46HX750	18454600	2C33AB16	0F042040	LTY460HQ0502	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-46HX750	18454600	2C33AB32	0F042040	LTY460HQ0601	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-46HX850	18454300	2443AB1F	0F041040	FQLR460LT0101	3a-G_BASE	ISDB-JP_BASE	JPA	J1
KDL-55HX750	18454500	2C33AB17	0F042040	LTY550HQ0401	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-55HX750	18454500	2C33AB33	0F042040	LTY550HQ0501	3a_BASE	ISDB-JP_BASE	JPA	J1
KDL-55HX850	18454200	2443AB20	0F041040	FQLR550LT0101	3a-G_BASE	ISDB-JP_BASE	JPA	J1
KDL-55HX850	18454200	2443AB35	0F041040	FQLR550LT0102	3a-G_BASE	ISDB-JP_BASE	JPA	J1


SONY PRODUCTS TECHNICAL NEWS

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Date: 6 April 2012

TVG-M12012

Issued	Checked	Approved
	 10:59 am, 4/6/12	

Contact/Request: Takayuki.Miyoshi@jp.sony.com

Subject : Show a picture noise in 1080/24p

Model : KDL-40BX450

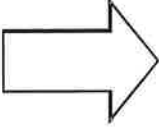



Destination : AU5

***Please refer to next page for details**

発行年月日/Date of issue
2012/03/19

設計サービスインフォメーション
Service Bulletin Request

P-1/ 1

起票 Issued by	確認 Checked by	承認 Approved by		CPSG 品質保証部門 サービス推進部 TV CS 課 秋山 課長 TV CS, Service Promotion Dept. CPSG Tutomu.Akiyama@jp.sony.com (9-561-7698)
				

件名/Subject : HDMI 1080/24p 入力で、画面にノイズが見える問題
Show a picture noise in 1080/24p

機種/Model

For China
KLV-40BX450(CN8)

For PA-Digital
KDL-40BX450(AU5)

対象/ S/N Range :

CH
CN8 ~#17019168
PA-Digital
AU5 ~#17504023

内容/Symptom

HDMI から 1080/24p の信号を入力した場合に、画面にノイズが見える事がある。
The screen may show a noise when customer input a 1080/24p signal from HDMI.

原因/Cause

バックライトの周波数設定が、最適でなかった。
Frequency setting of the backlight was not best setting.

処置/Solution

China Model
FW を Ver1.08 に Update してください。
Please update the FW Ver1.08.

PA-Digital Model
FW を Ver2.07 に Update してください。
Please update the FW Ver2.07.

使用部品情報 / Part Information

品名 / Description

P/N

商品整備の有無 /

Treatment required at REFURBISHMENT

はい / Yes, いいえ / No

詳細 / Details

HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL

AZ3FK CHASSIS 

LEVEL 3
CONFIDENTIAL

CONFIDENTIAL
ELECTRICAL SERVICE MANUAL
INTERNAL ONLY

ORIGINAL MANUAL ISSUE DATE: 2/2012

REVISION DATE	SUBJECT
2/17/2012	Original Manual Release Date
3/29/2012	Added KDL-32BX353/32BX354/40BX453/46BX453 models. Added KDL-32BX355/32BX356/40BX455/46BX455 models.
4/27/2012	Added Connector Diagram for BX35x/BX45x models.

LCD DIGITAL COLOR TV
SONY®

SERVICE MANUAL

AZ3FK CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DESTINATION</u>
KDL-32BX353	RM-YD081	COLUMBIA
KDL-32BX354	RM-YD081	COLUMBIA
KDL-32BX355	RM-YD081	CHILE/PERU/VZ
KDL-32BX356	RM-YD081	CHILE/PERU/VZ
KDL-40BX450	RM-YD080	CND/LA/MX/US
KDL-40BX451	RM-YD080	CND/MX
KDL-40BX453	RM-YD081	COLUMBIA
KDL-40BX455	RM-YD081	CHILE/PERU/VZ
KDL-40EX640	RM-YD075	CND/US
KDL-46BX450	RM-YD080	CND/LA/MX/US
KDL-46BX451	RM-YD080	MX
KDL-46BX453	RM-YD081	COLUMBIA
KDL-46BX455	RM-YD081	CHILE/PERU/VZ
KDL-46EX640	RM-YD075	CND/US
KDL-55EX640	RM-YD075	CND/US/MX

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CAUTIONS AND WARNINGS


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.

WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, in case of live chassis.

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  mark on the schematic diagrams and the parts list. It is essential that these critical parts be replaced only with the part number specified in the 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 warranty.


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.

ALERTE!!

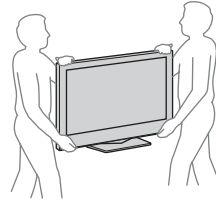
Afin d'éviter tout risque d'électrocution provenant d'un châssis sous tension, un transformateur d'isolement doit être utilisé lors de tout dépannage.

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.

SETTING UP AND CARRYING THE TV

- Disconnect all cables when 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.



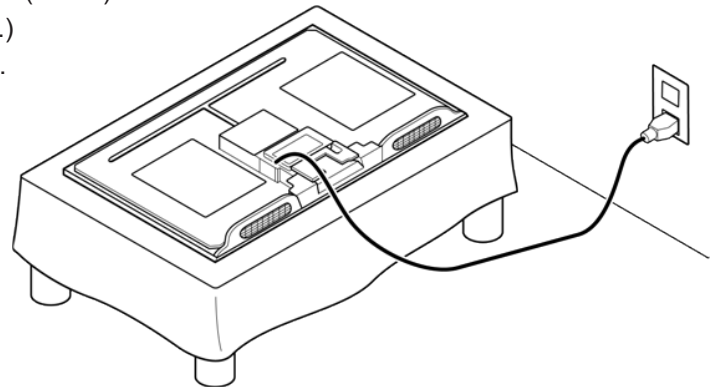
USE CAUTION WHEN HANDLING THE LCD PANEL

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

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

To avoid damaging the LCD panel:

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



CLEANING THE LCD PANEL

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 benzene for cleaning.
- ☑ Periodic vacuuming of the ventilation openings is recommended to ensure proper ventilation.
- ⊖ **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.

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 in "Leakage Test".

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. Follow the manufacturers' instructions provided with the tester.
2. A battery-operated AC milliammeter.
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. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable. (see Figure A)

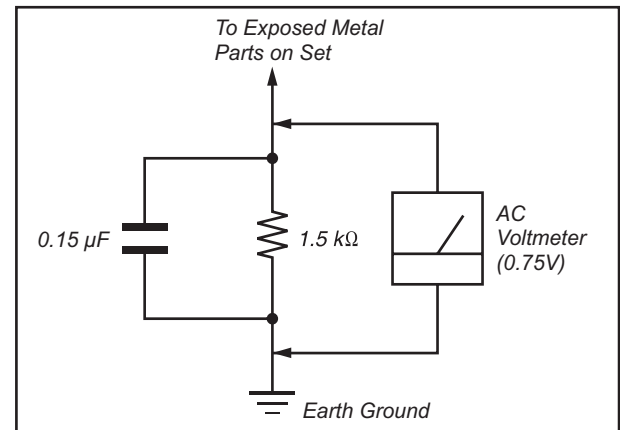


Figure A. Use an AC voltmeter to check AC leakage.

HOW TO FIND A GOOD EARTH GROUND

The cover-plate retaining screw on most AC outlet boxes is at earth ground. Verify the AC outlet box retaining screw ground by connecting a 60W to 100W incandescent (not a neon or fluorescent 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)

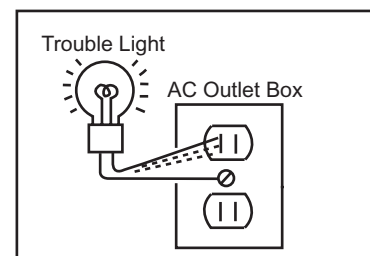
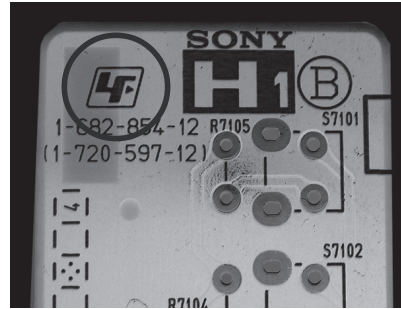


Figure B. Checking for earth ground.

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 celsius. This requires soldering equipment capable of accurate temperature control coupled with a good heat recovery characteristics.

SECTION 1: DIAGRAMS

1-1. PRINTED CIRCUIT 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 : $\frac{1}{4}$ W

$\frac{1}{4}$ W in resistance, $\frac{1}{10}$ W and $\frac{1}{16}$ 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 10M Ω 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 symbol are critical for safety. Replace only with part number specified.

The symbol indicates a fast-blow 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 spécifique.

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
- : RS NONFLAMMABLE METAL OXIDE
- : RB NONFLAMMABLE CEMENT
- : * ADJUSTMENT RESISTOR

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

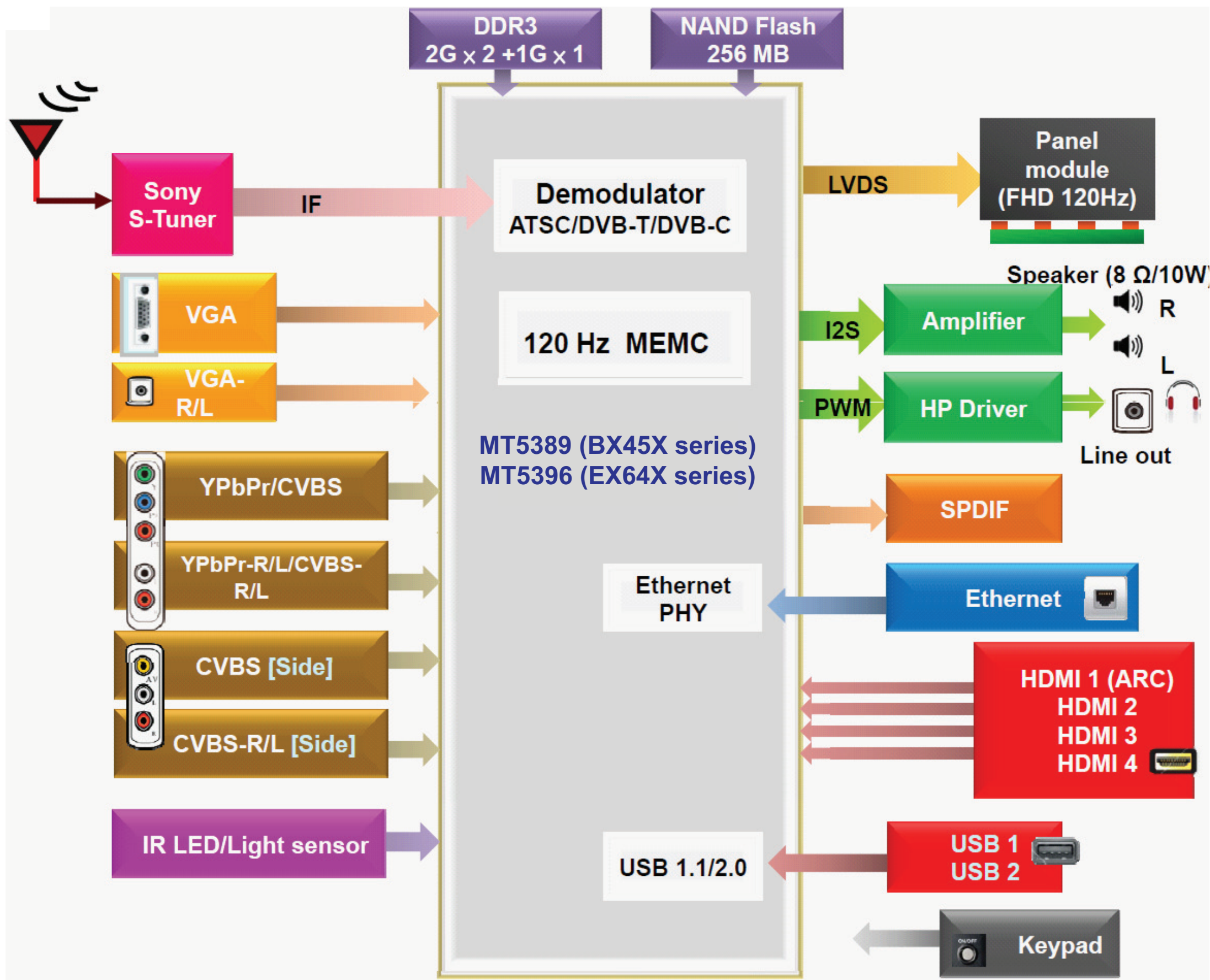
Terminal name of semiconductors in silk screen printed circuit (*)

	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 Cathode 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.)

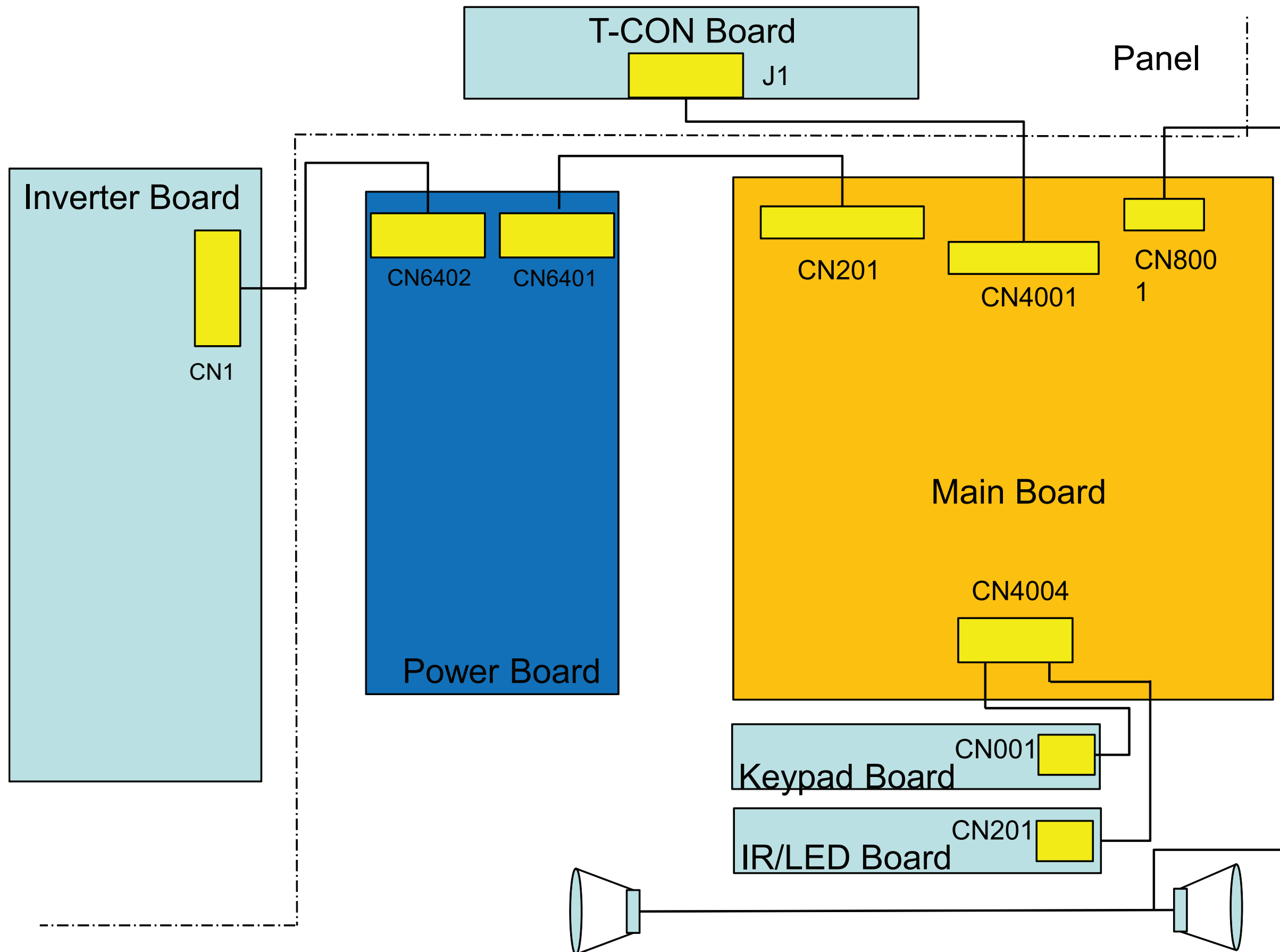
Ver.1.6

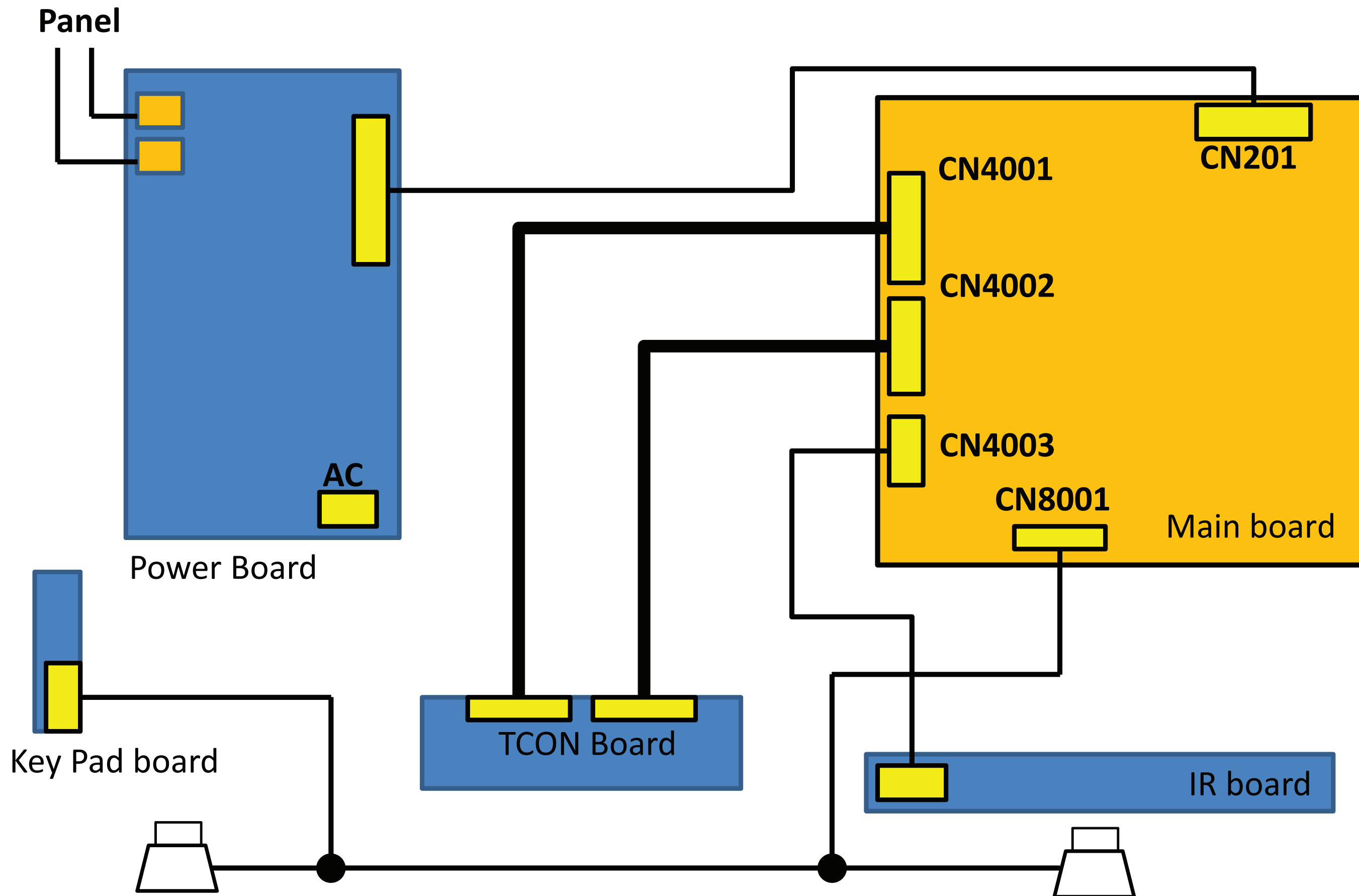
1-2. BLOCK DIAGRAM



1-3. CONNECTOR DIAGRAMS

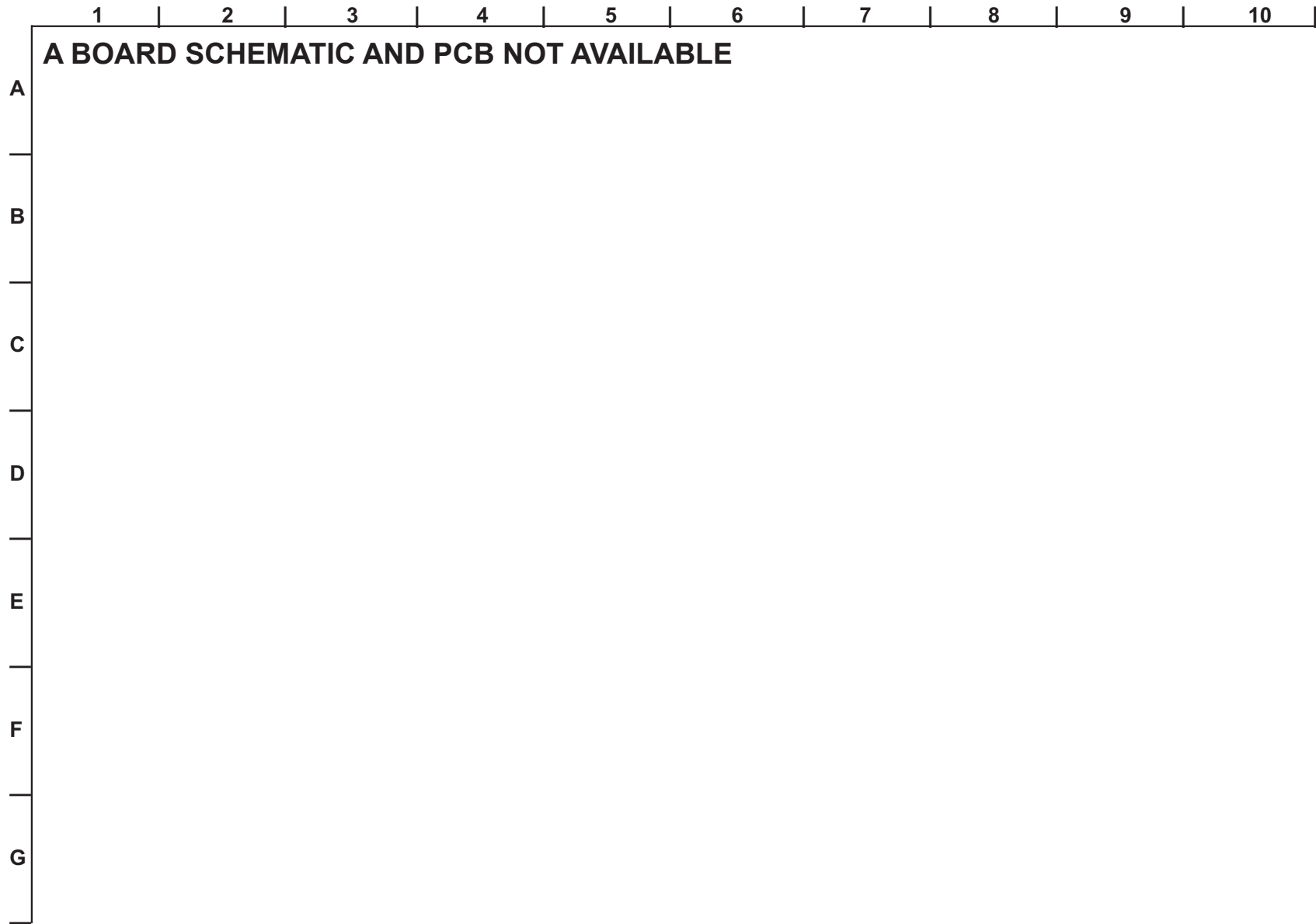
CONNECTORS (BX35X/BX45X SERIES)

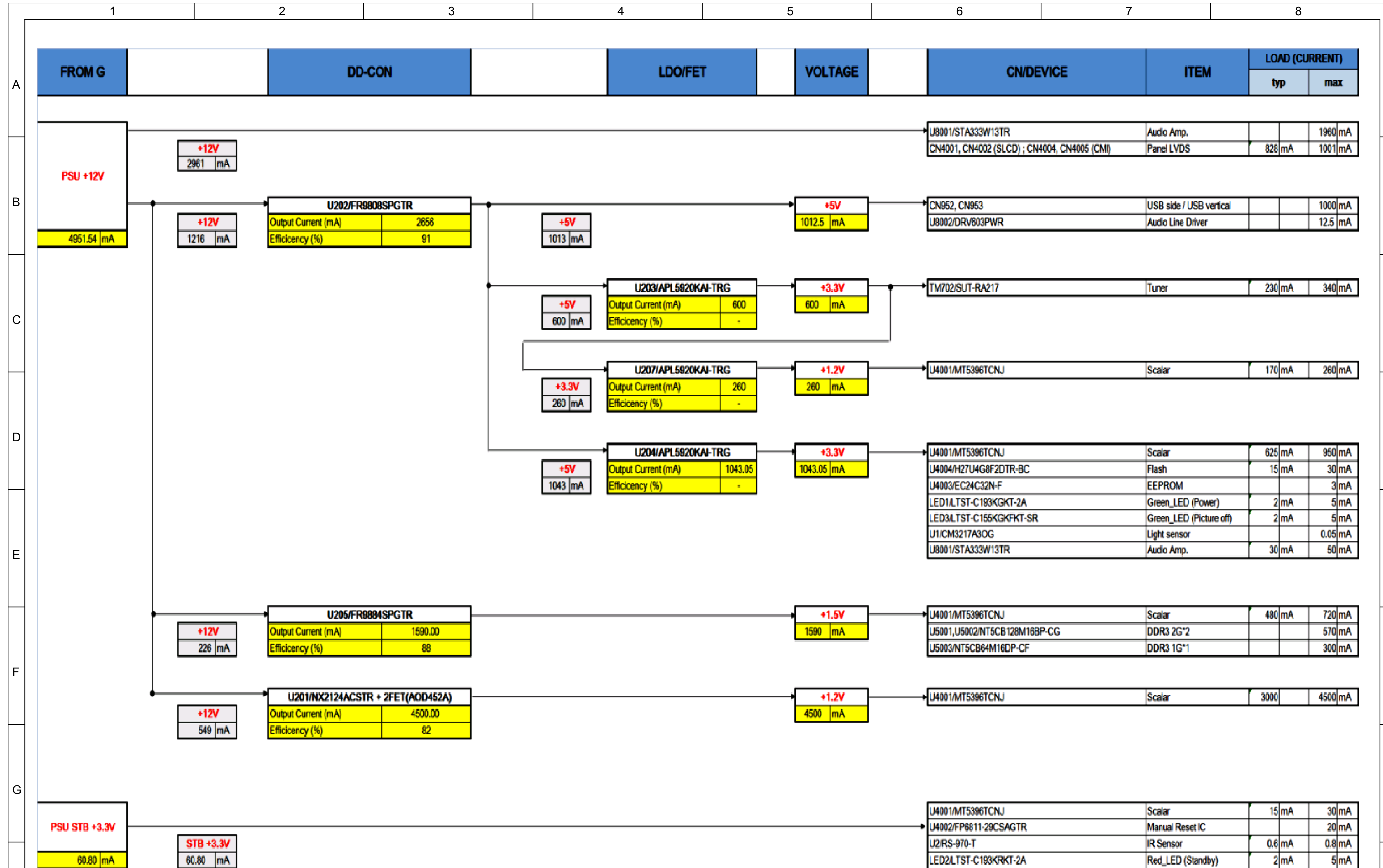




1-4. SCHEMATICS AND SUPPORTING INFORMATION

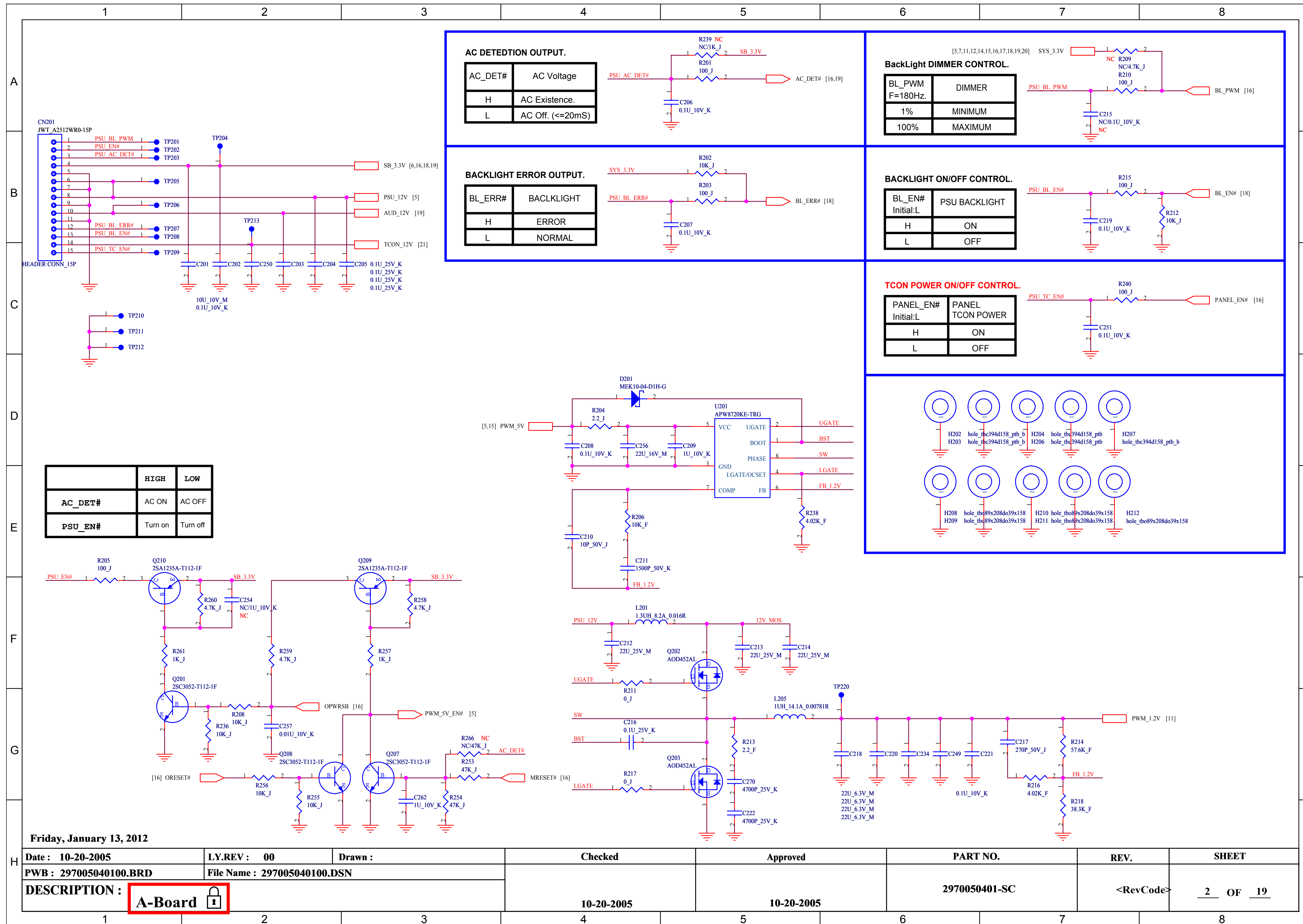
A BOARD SCHEMATIC (BX35X/BX45X SERIES)

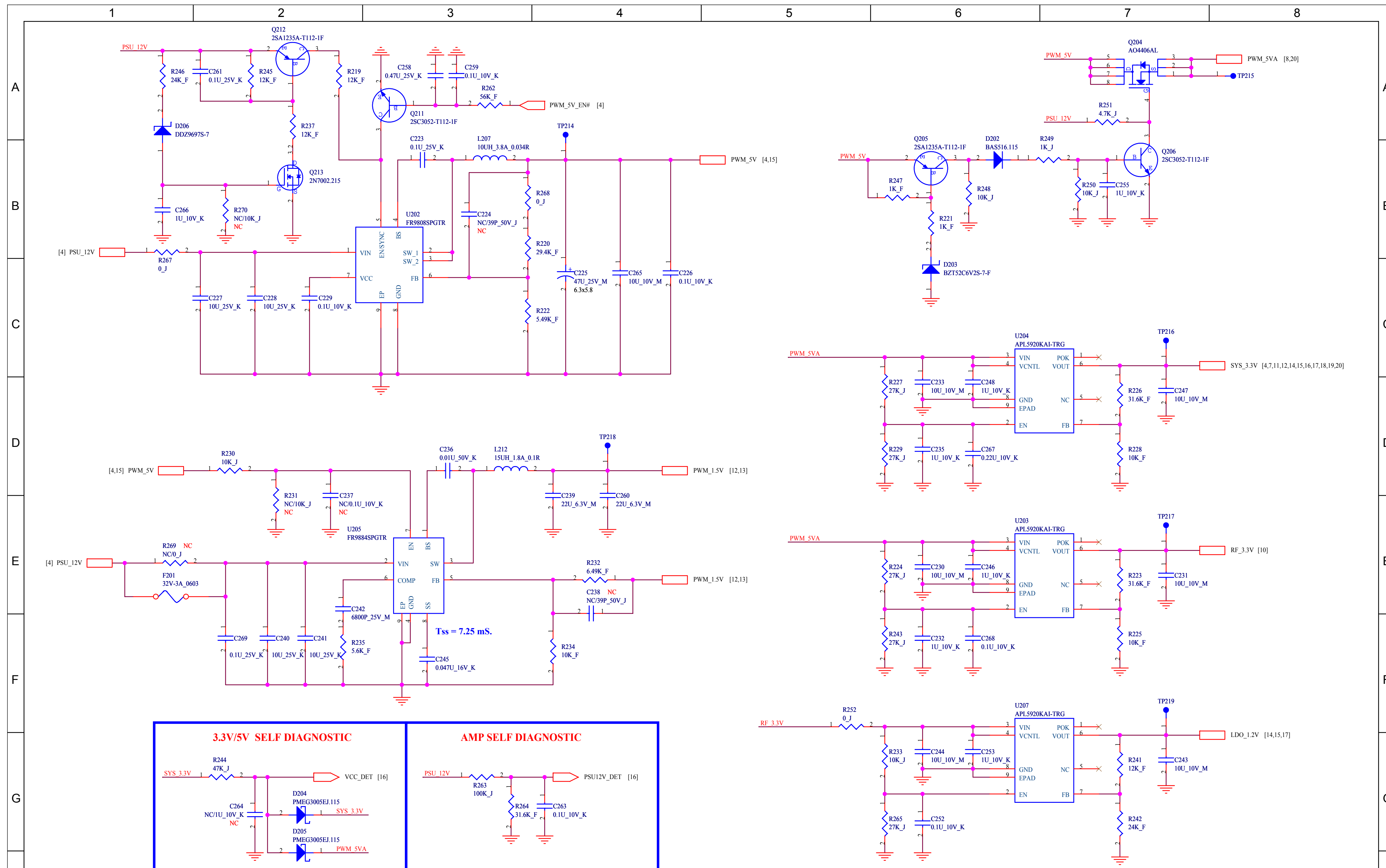




Friday, January 13, 2012

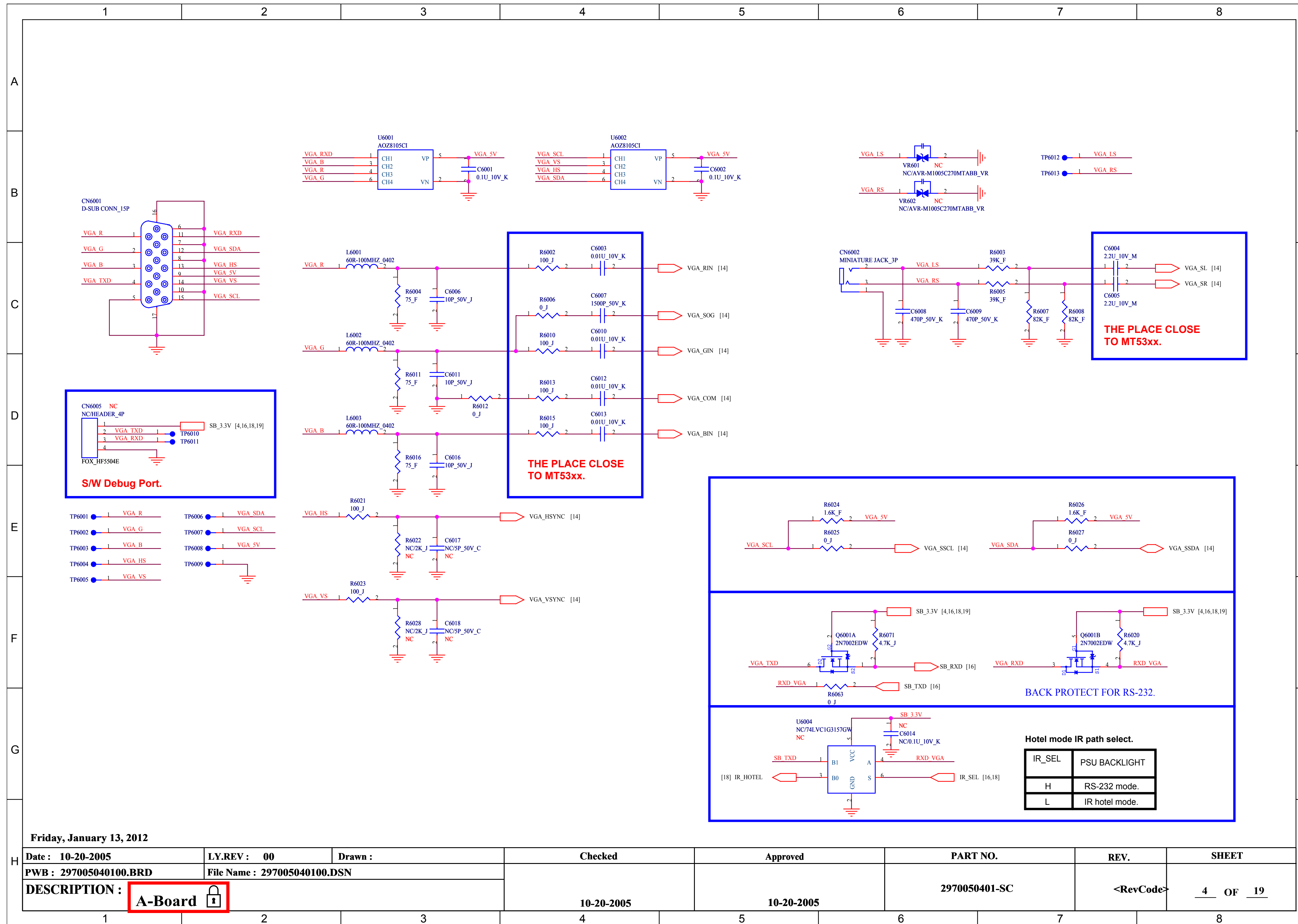
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DESCRIPTION : A-Board			10-20-2005	10-20-2005			





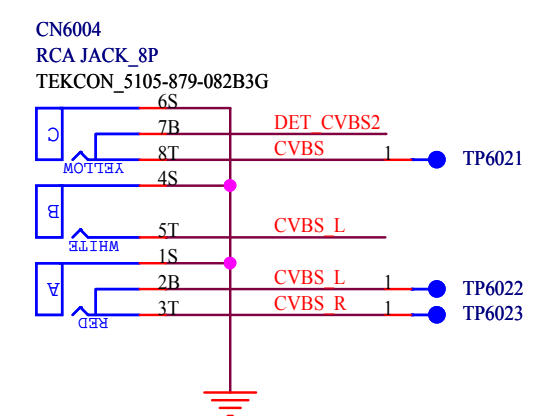
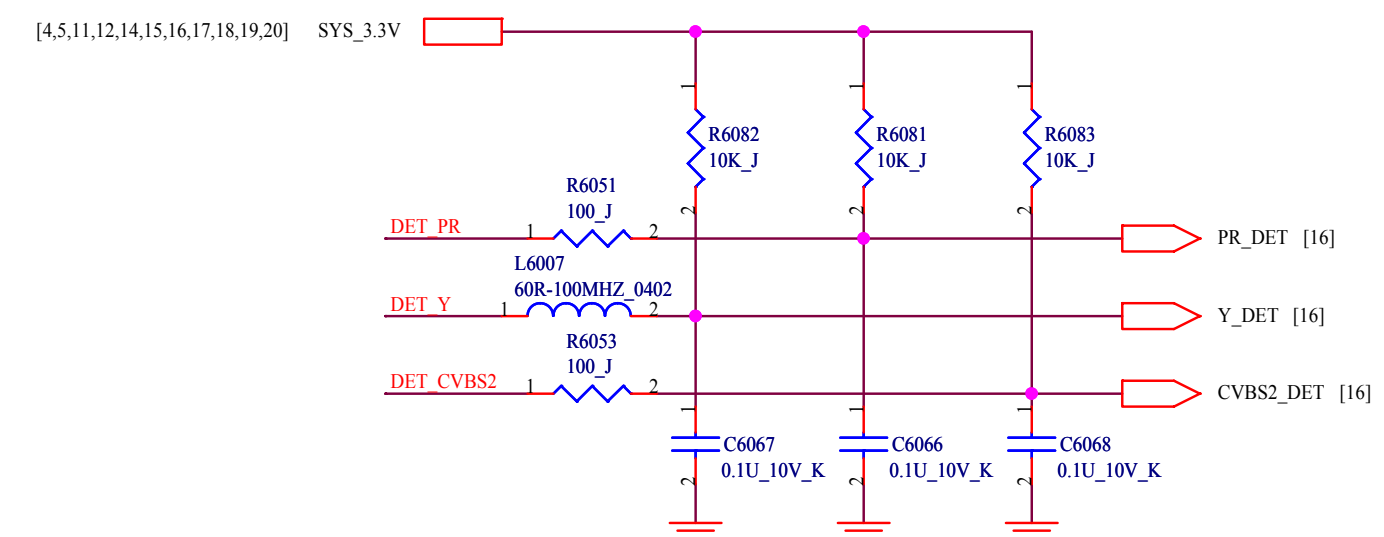
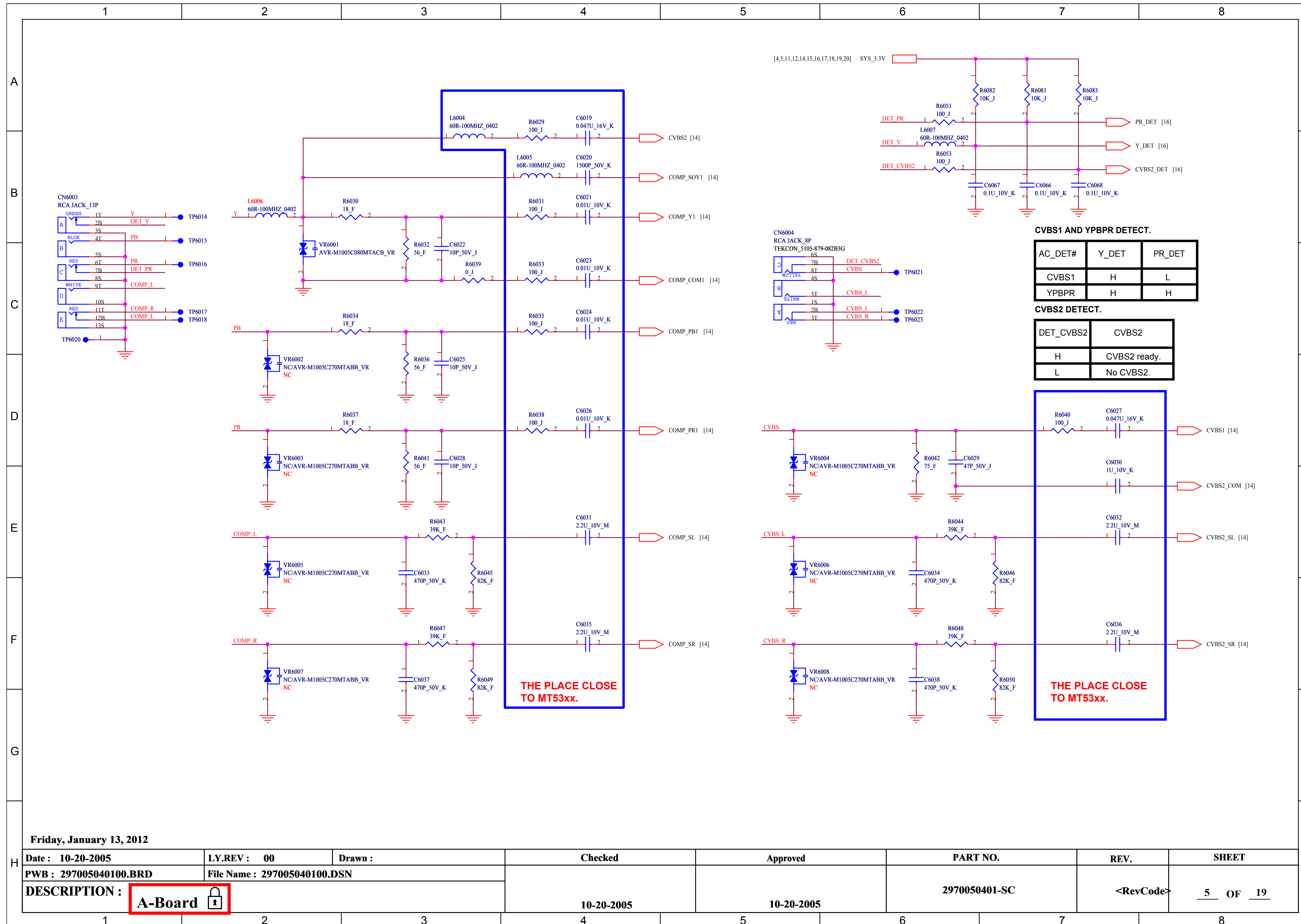
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DESCRIPTION : A-Board			10-20-2005	10-20-2005			



Friday, January 13, 2012

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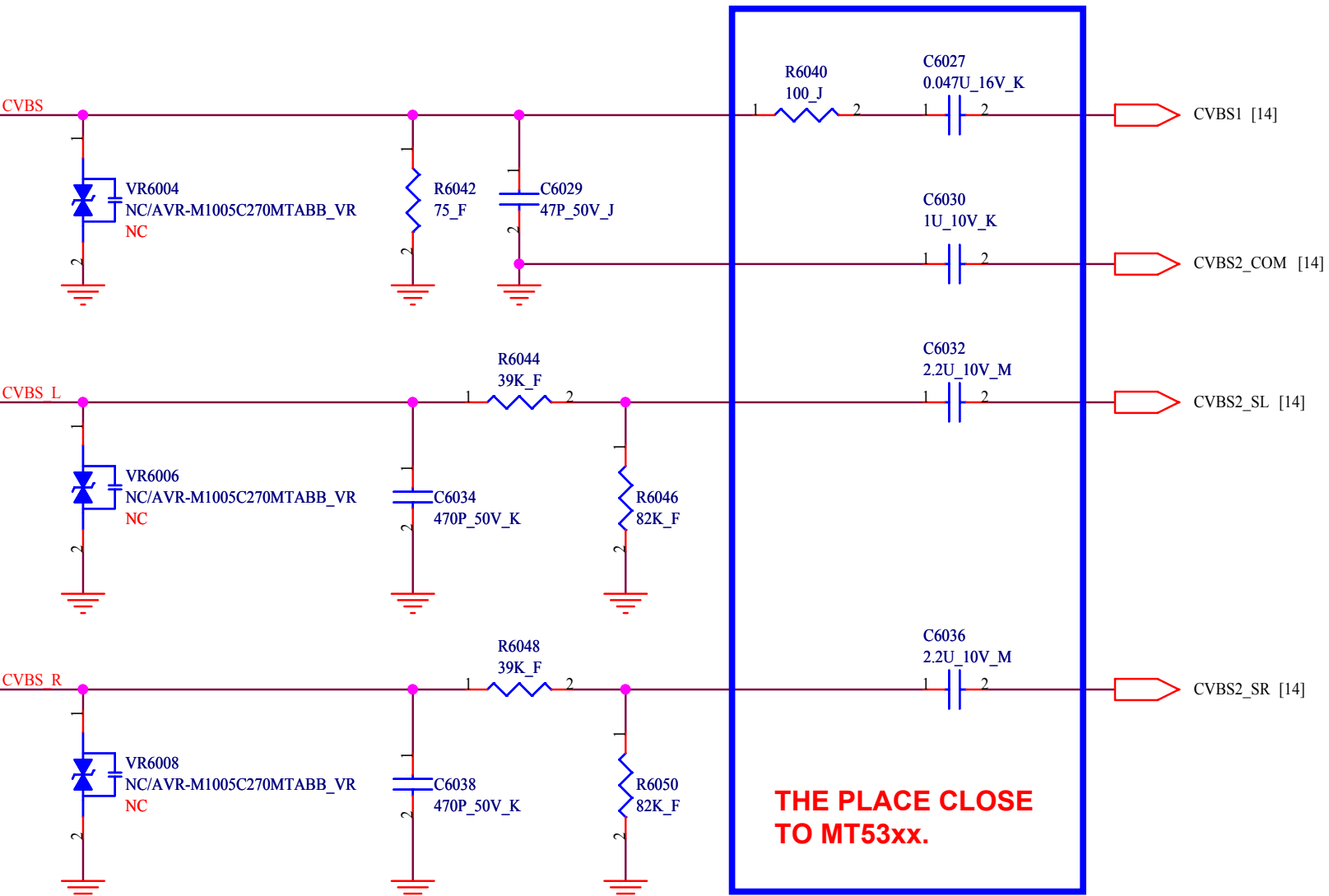


CVBS1 AND YPBPR DETECT.

AC_DET#	Y_DET	PR_DET
CVBS1	H	L
YPBPR	H	H

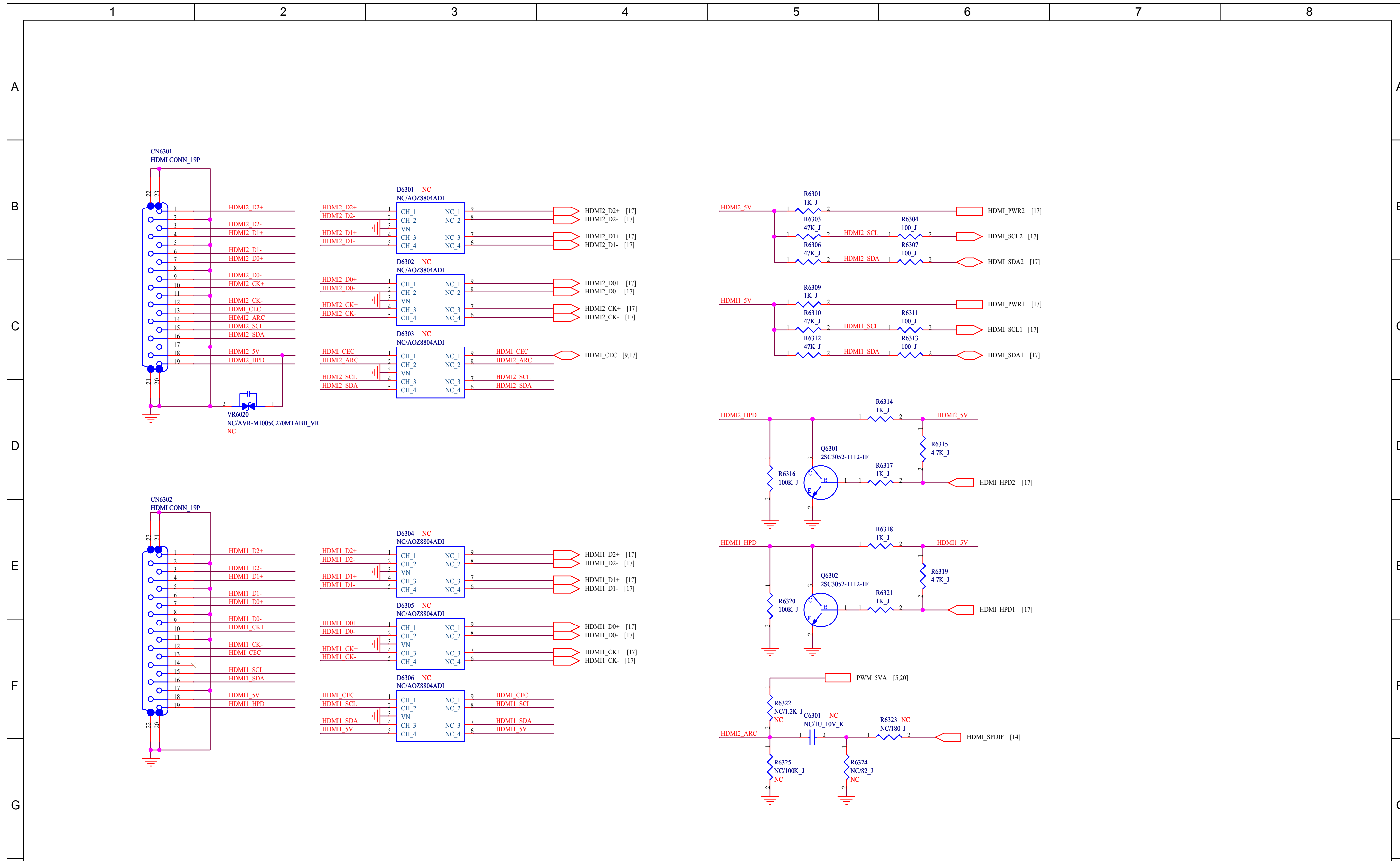
CVBS2 DETECT.

DET_CVBS2	CVBS2
H	CVBS2 ready.
L	No CVBS2.



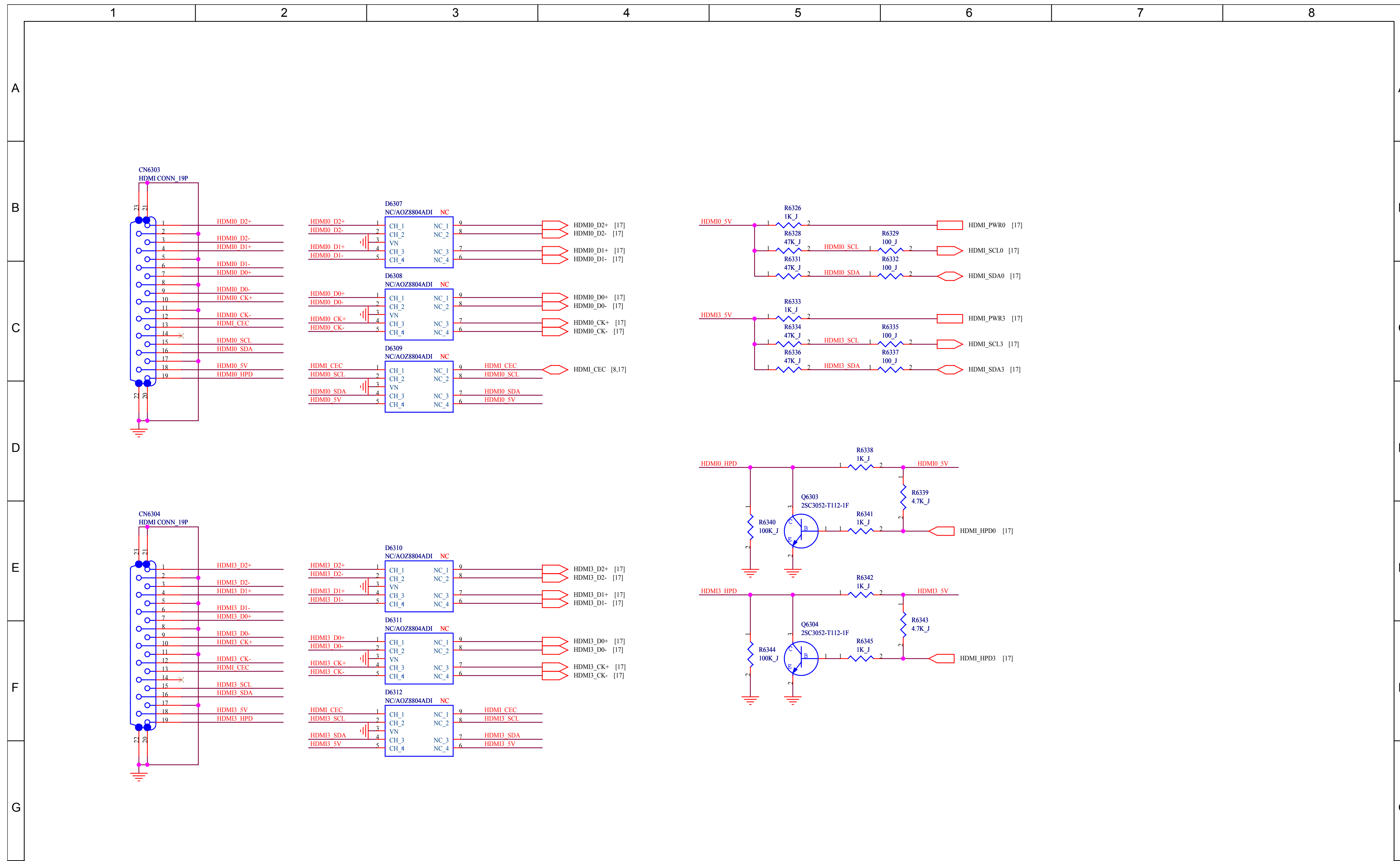
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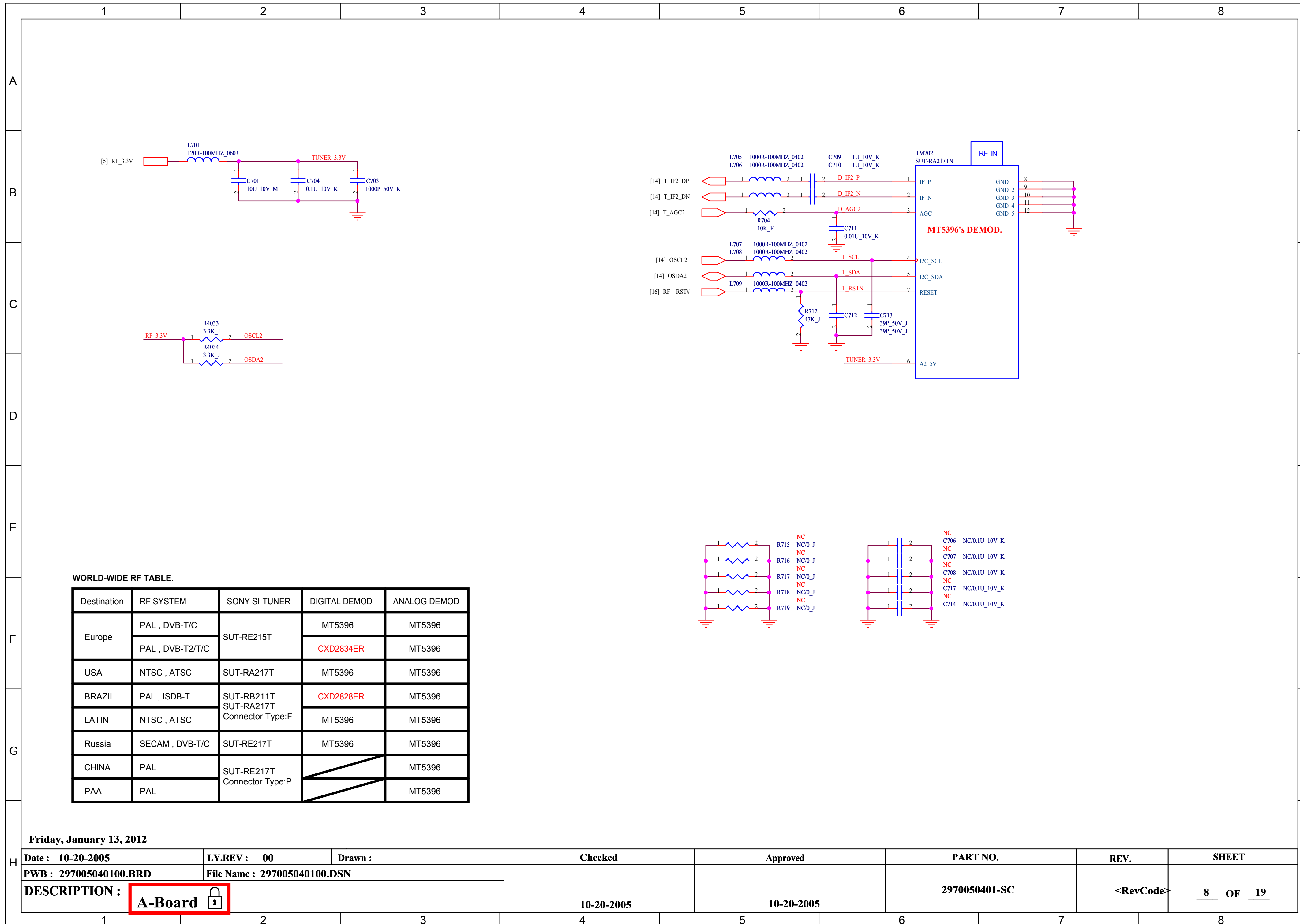
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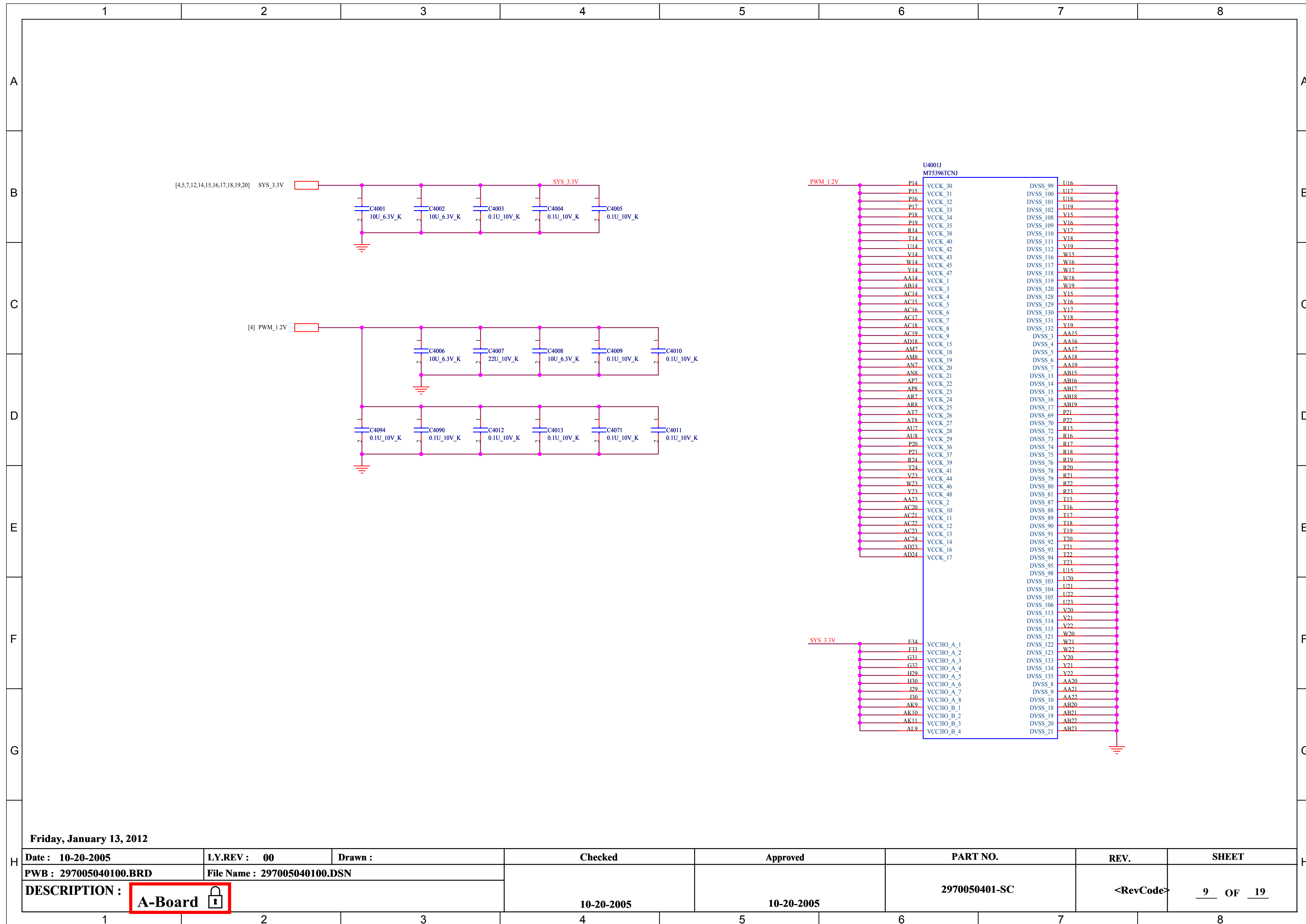
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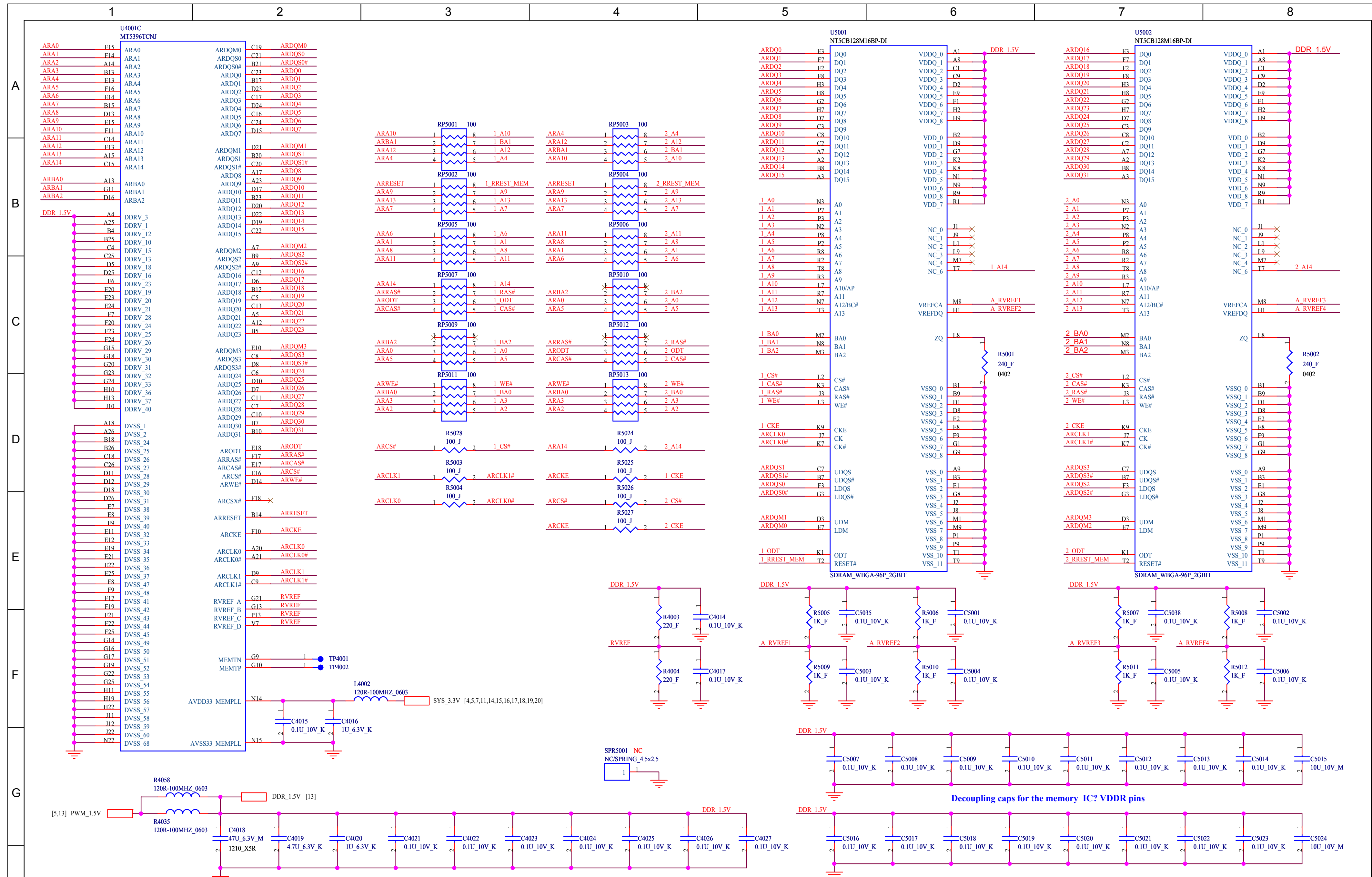
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Friday, January 13, 2012

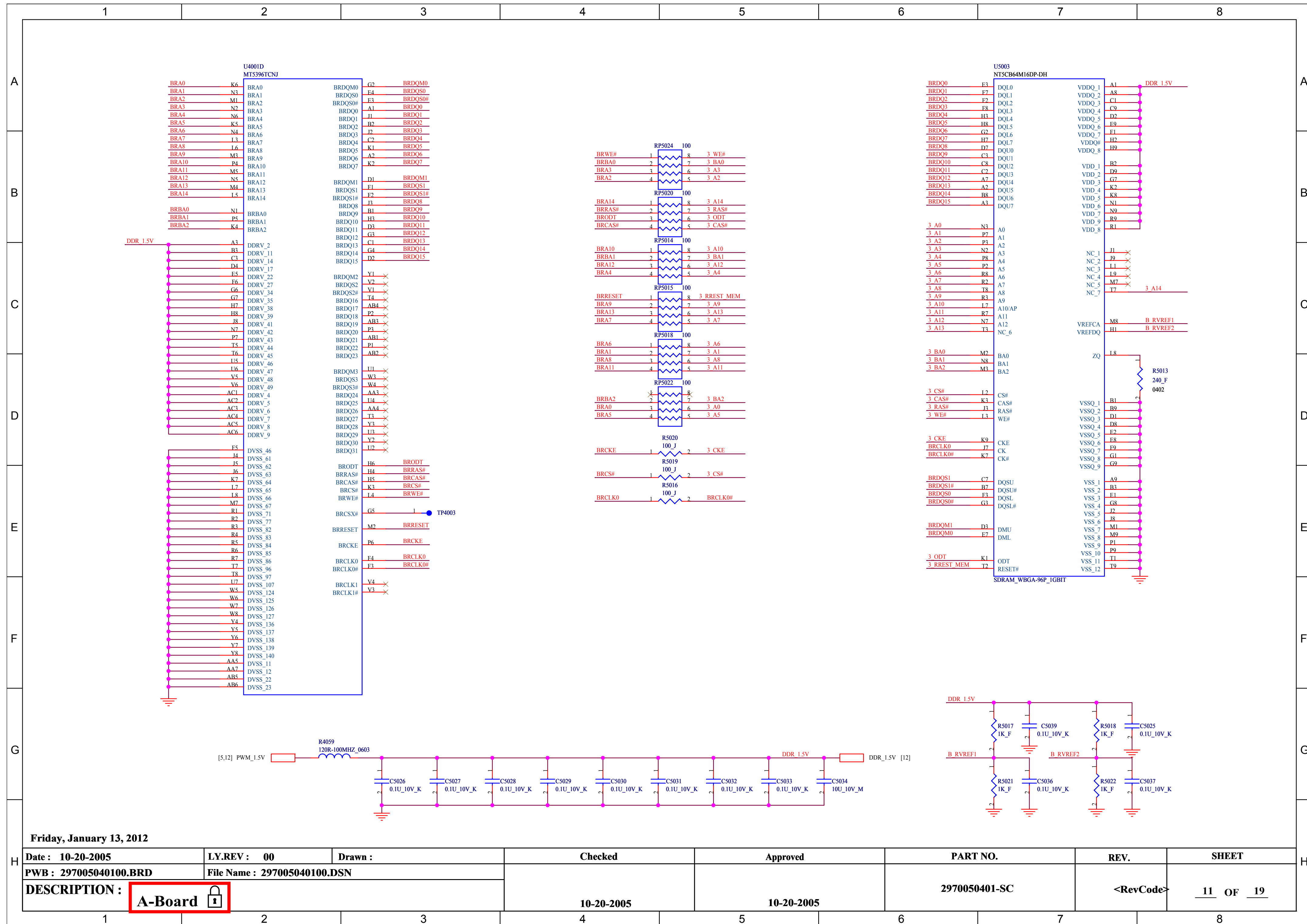
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			10-20-2005	10-20-2005			

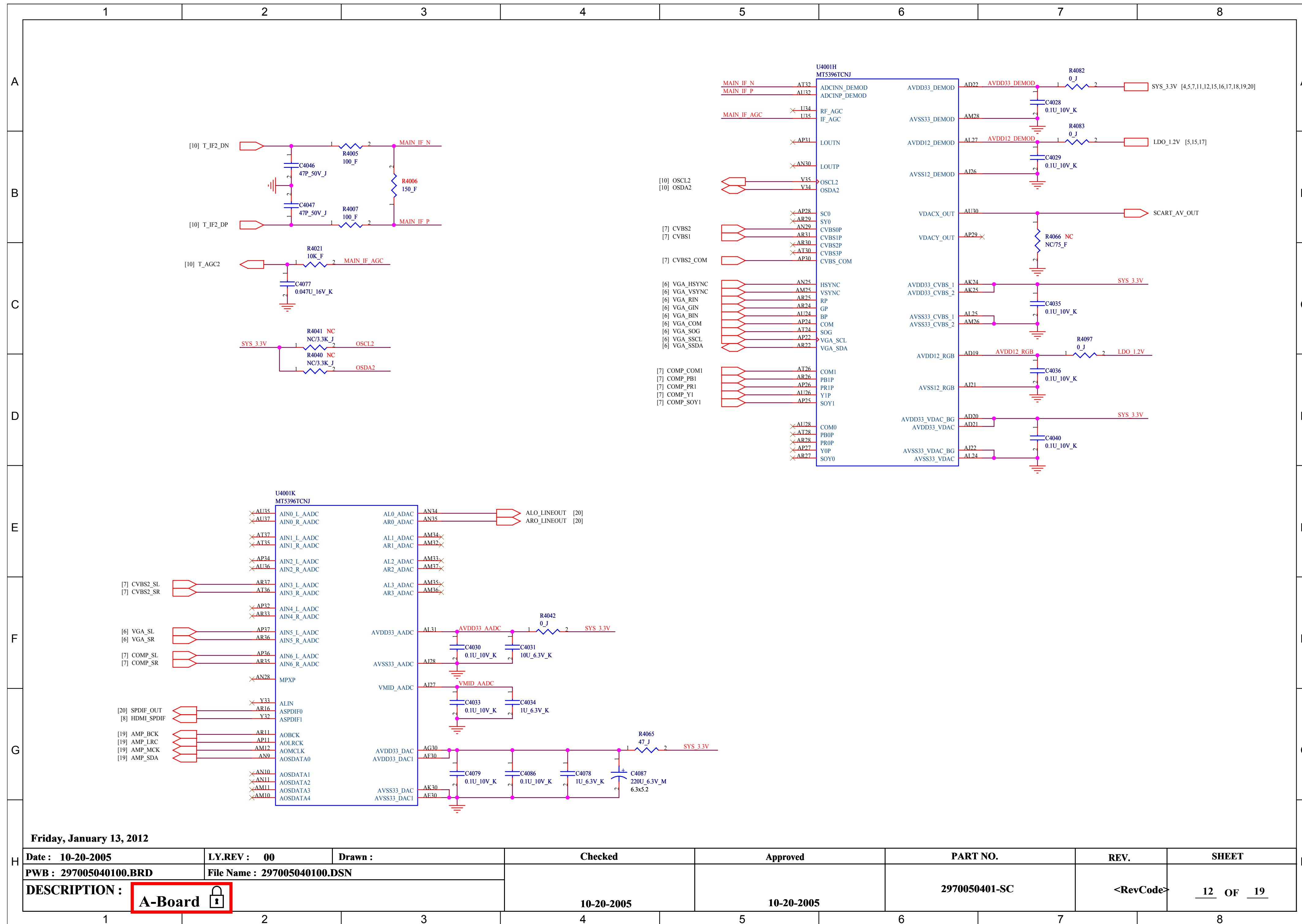


Friday, January 13, 2012

Decoupling caps for the MT5396 VDDR pins

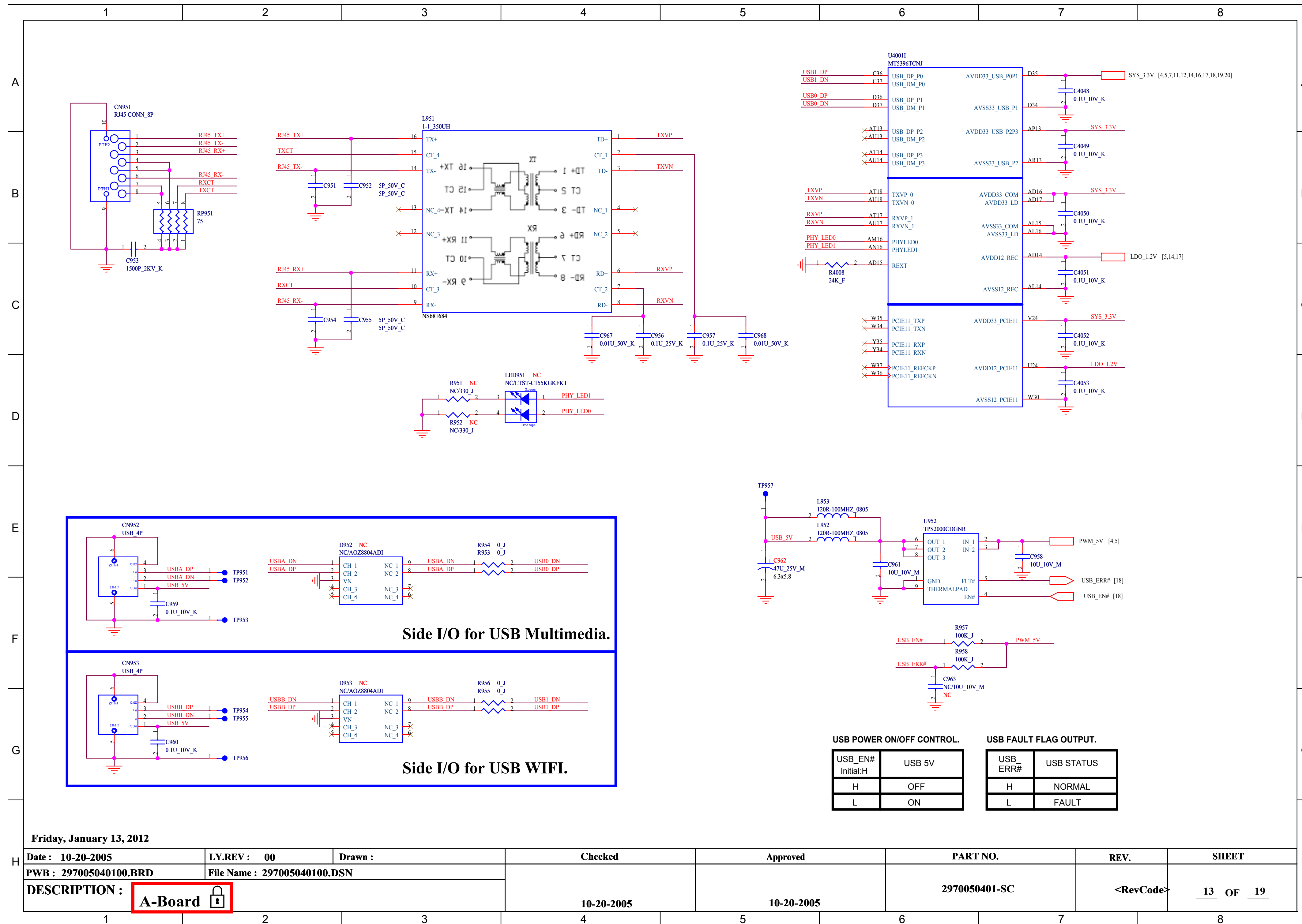
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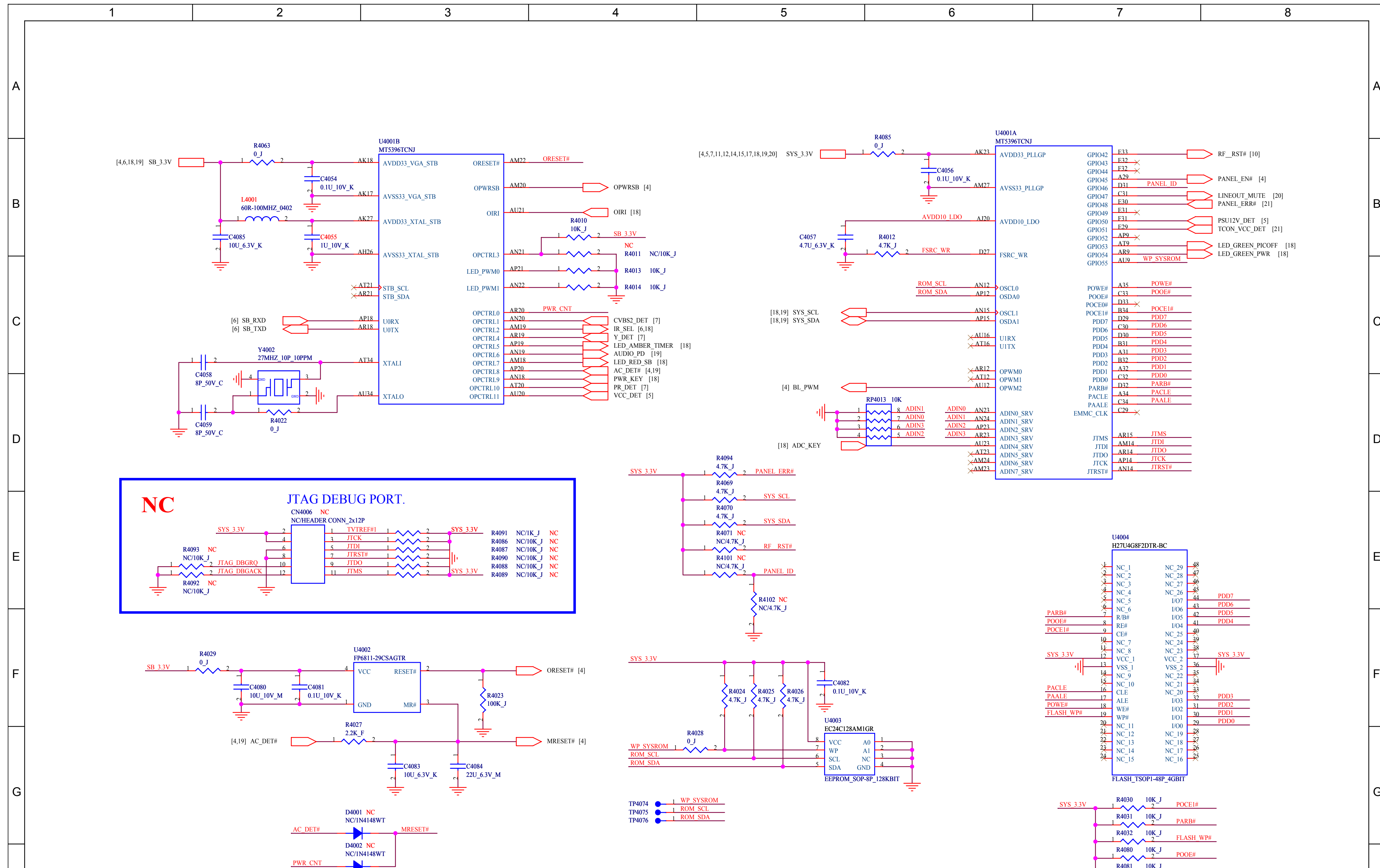
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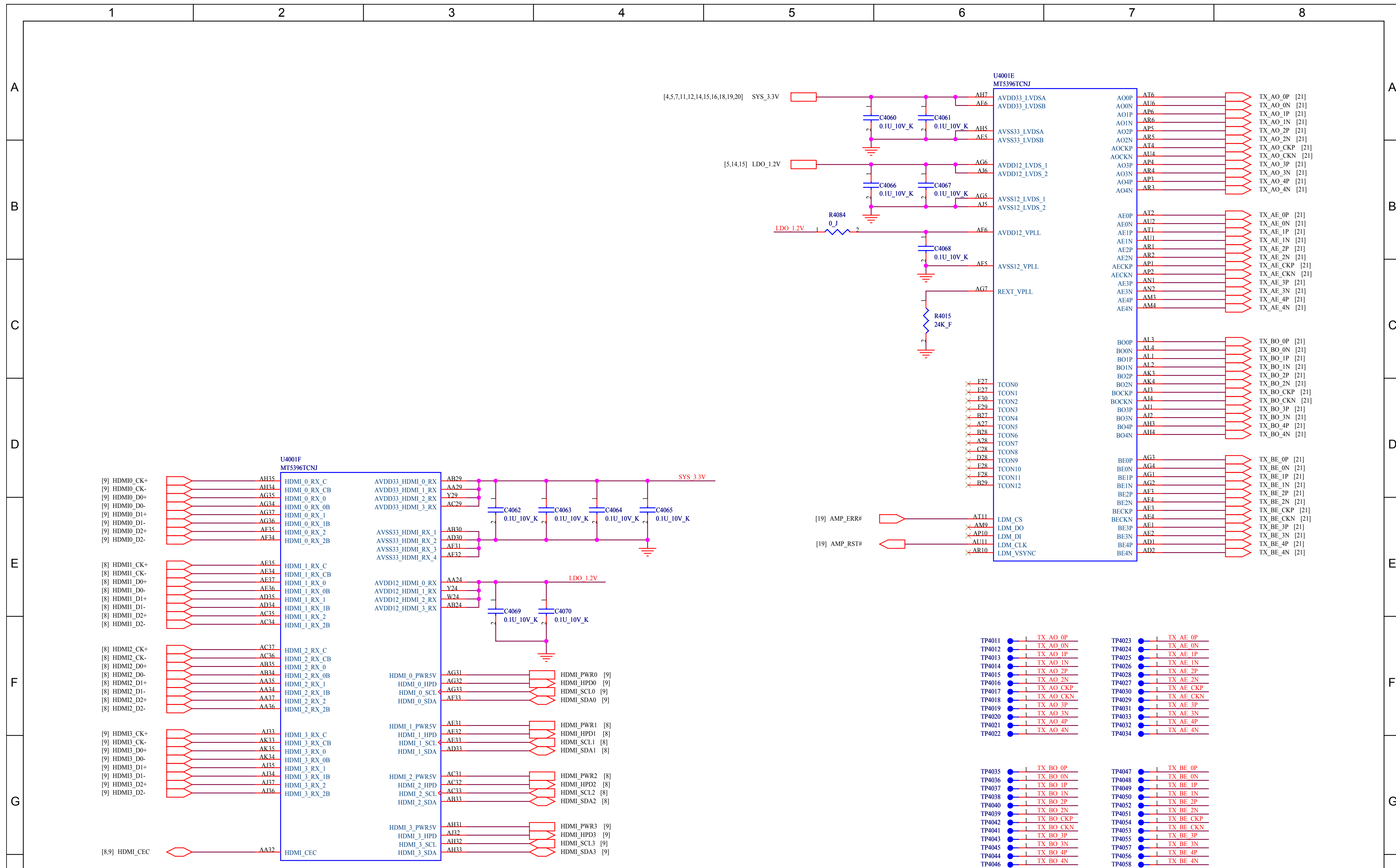
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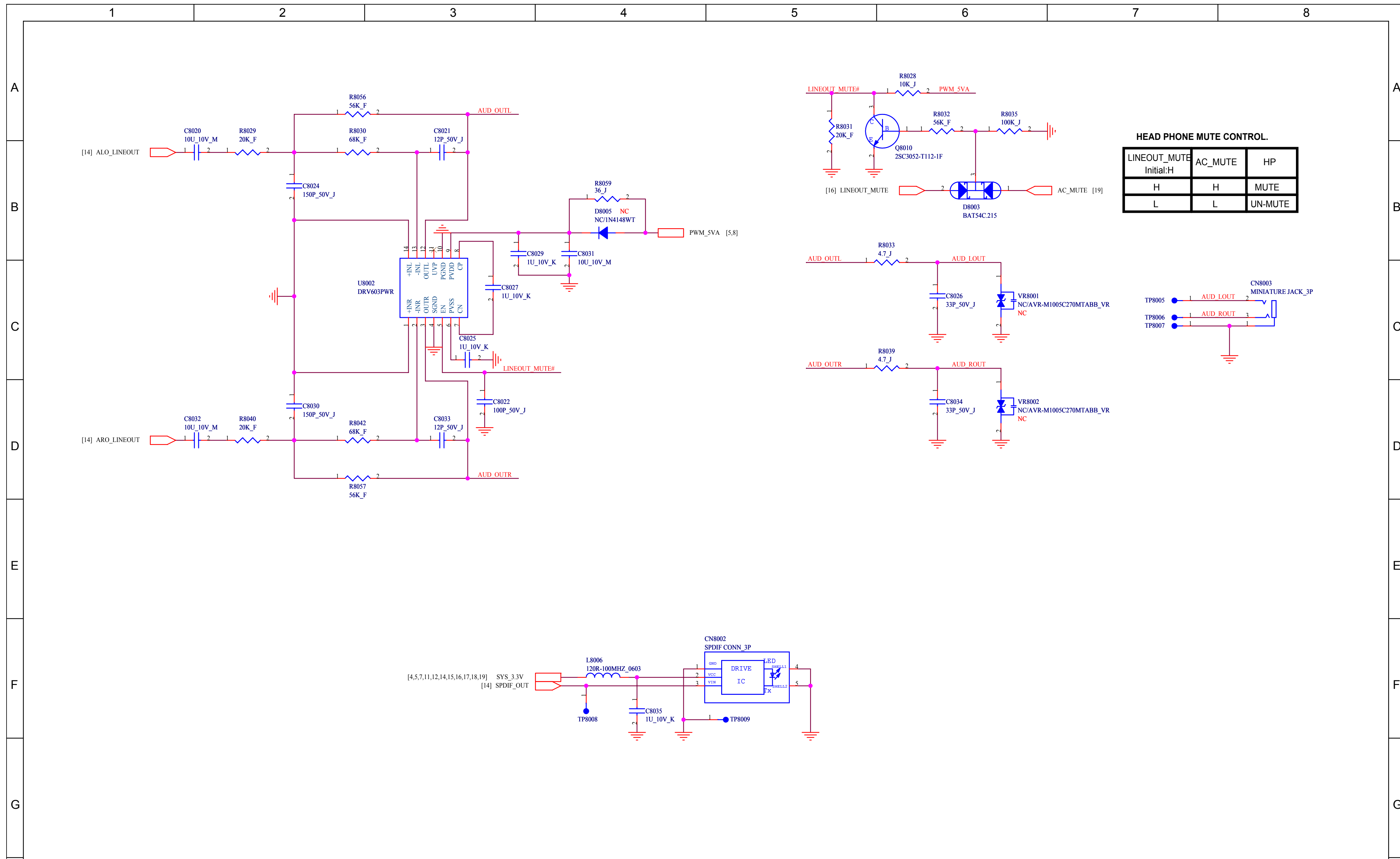
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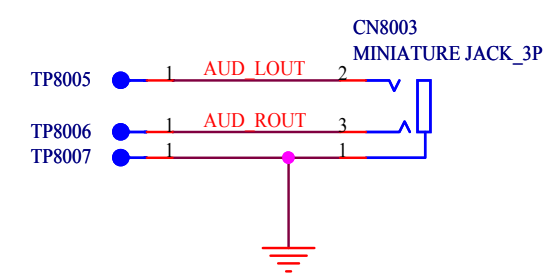
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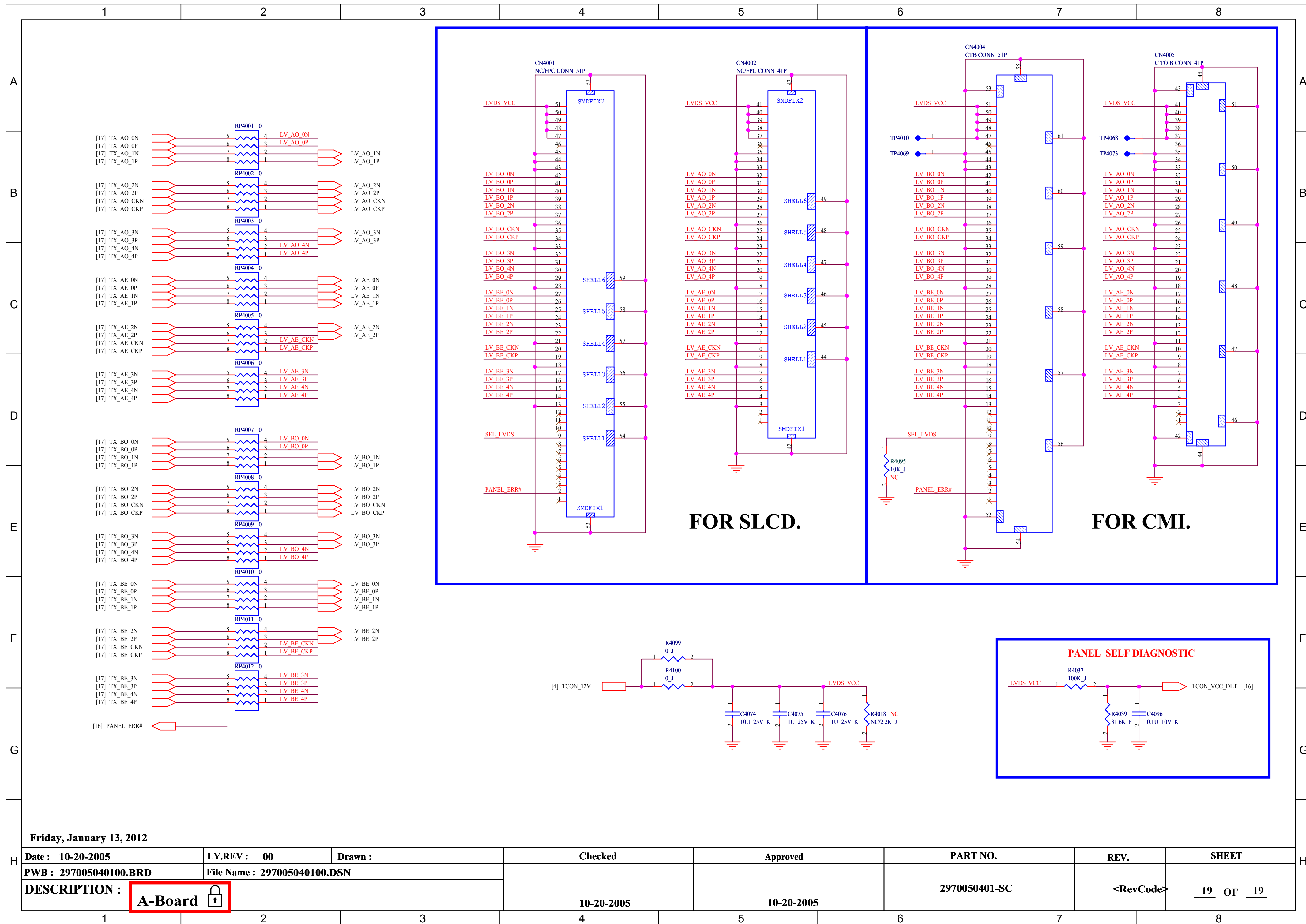
HEAD PHONE MUTE CONTROL.

LINEOUT_MUTE	AC_MUTE	HP
Initial:H		
H	H	MUTE
L	L	UN-MUTE



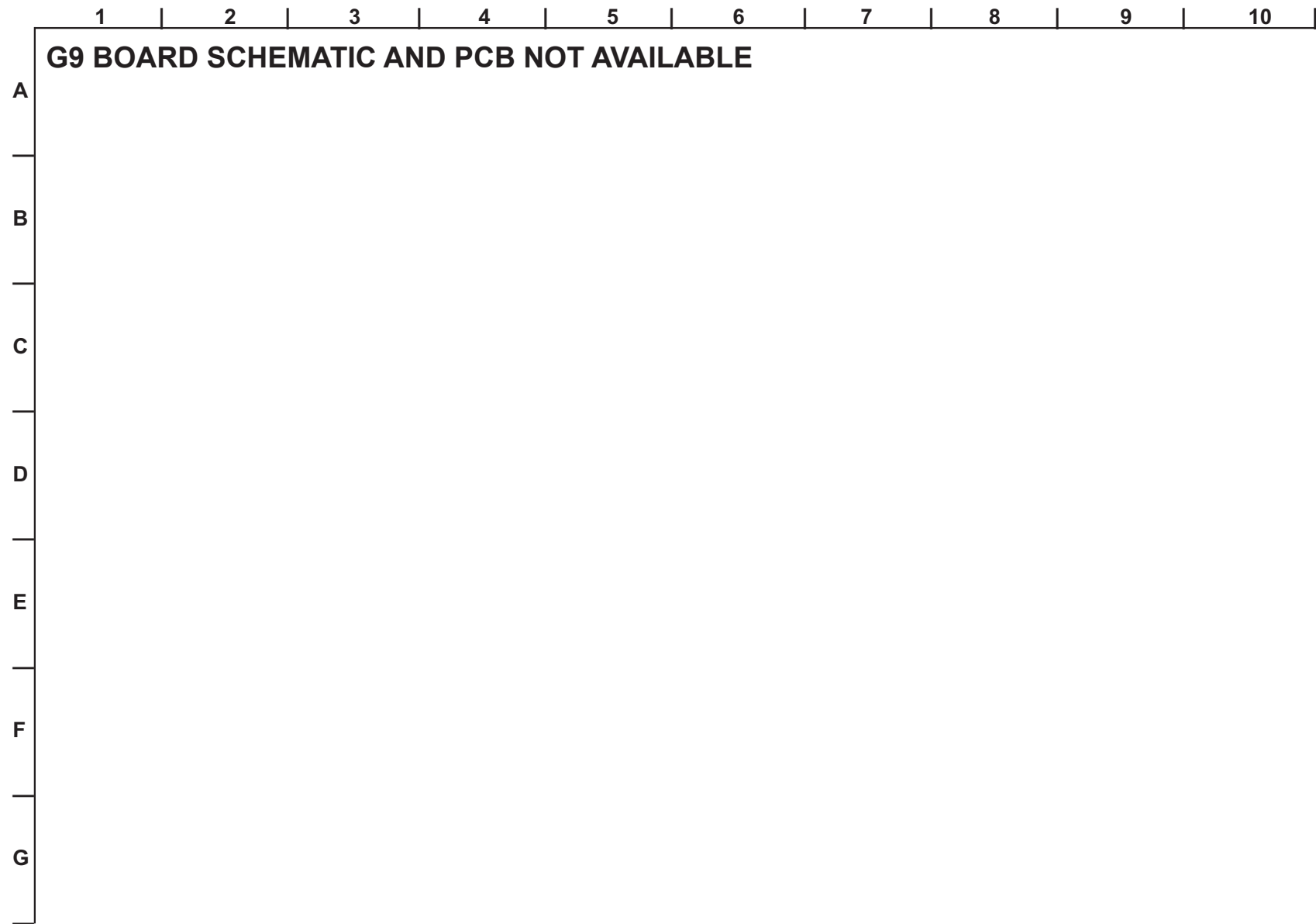
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DESCRIPTION : A-Board			10-20-2005	10-20-2005			



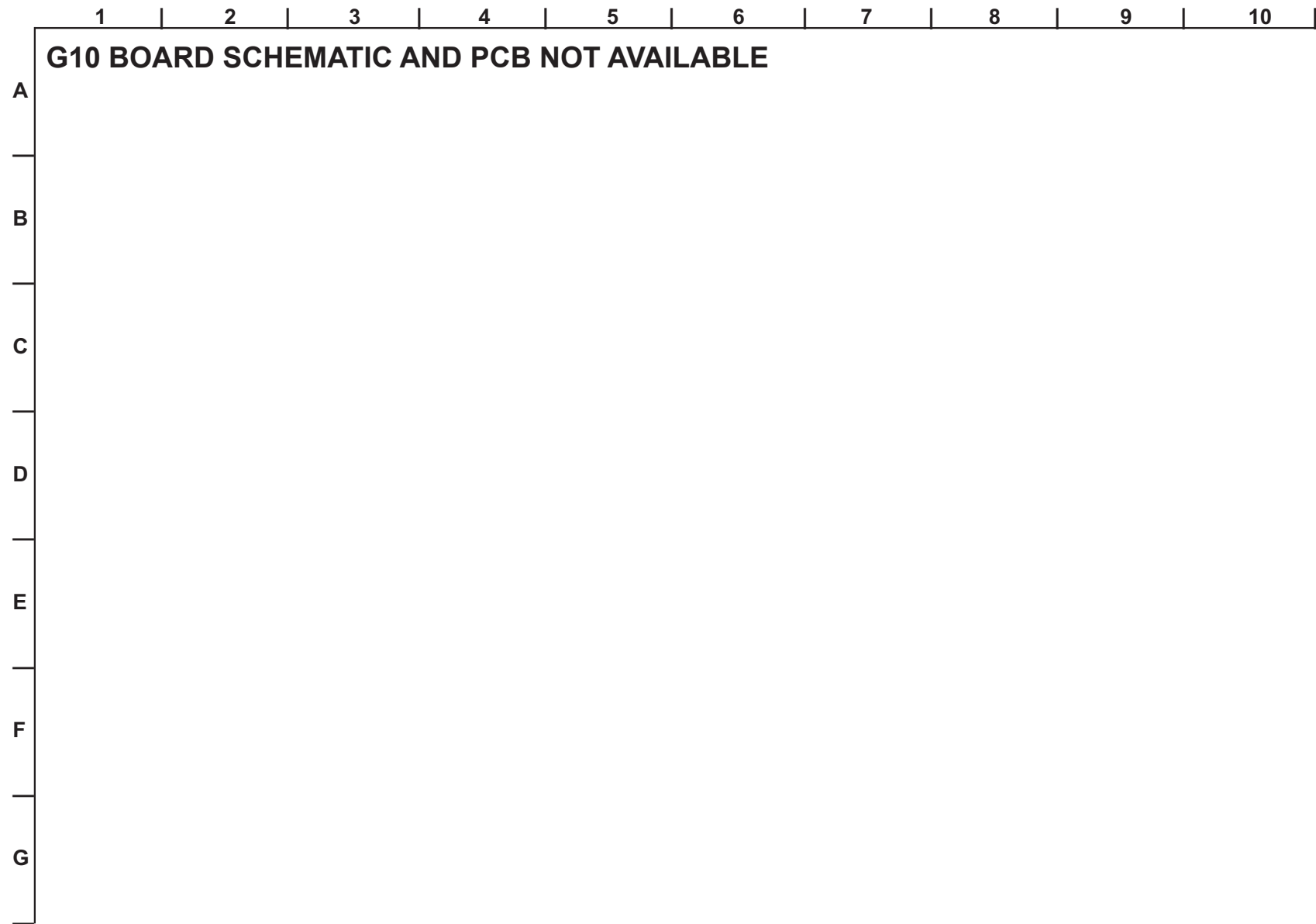
G9 BOARD SCHEMATIC

REFER TO ["SECTION 2: ELECTRICAL PARTS LIST" ON PAGE 41](#) TO DETERMINE IF THIS BOARD IS USED IN THE MODEL BEING REPAIRED



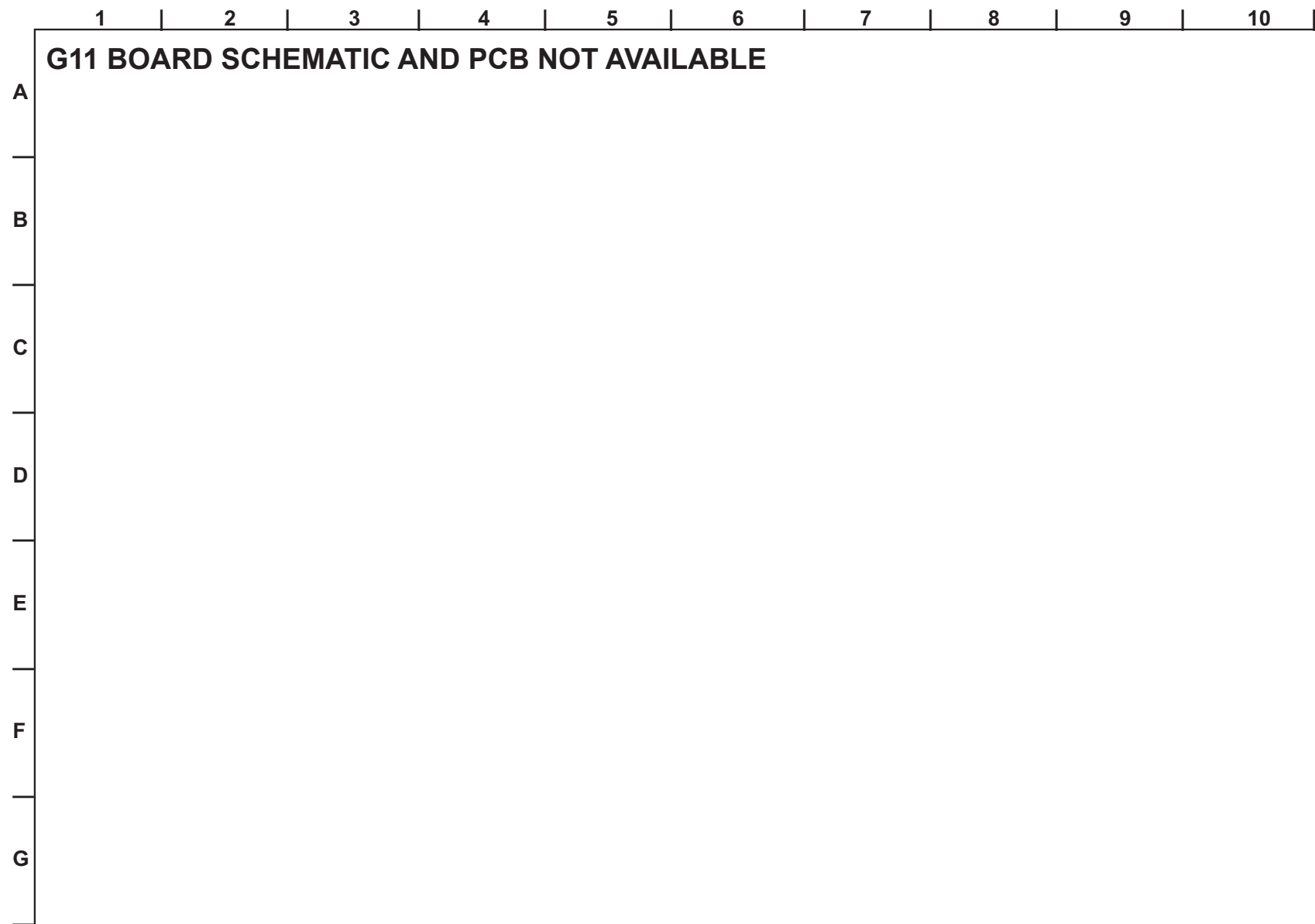
G10 BOARD SCHEMATIC

REFER TO ["SECTION 2: ELECTRICAL PARTS LIST" ON PAGE 41](#) TO DETERMINE IF THIS BOARD IS USED IN THE MODEL BEING REPAIRED



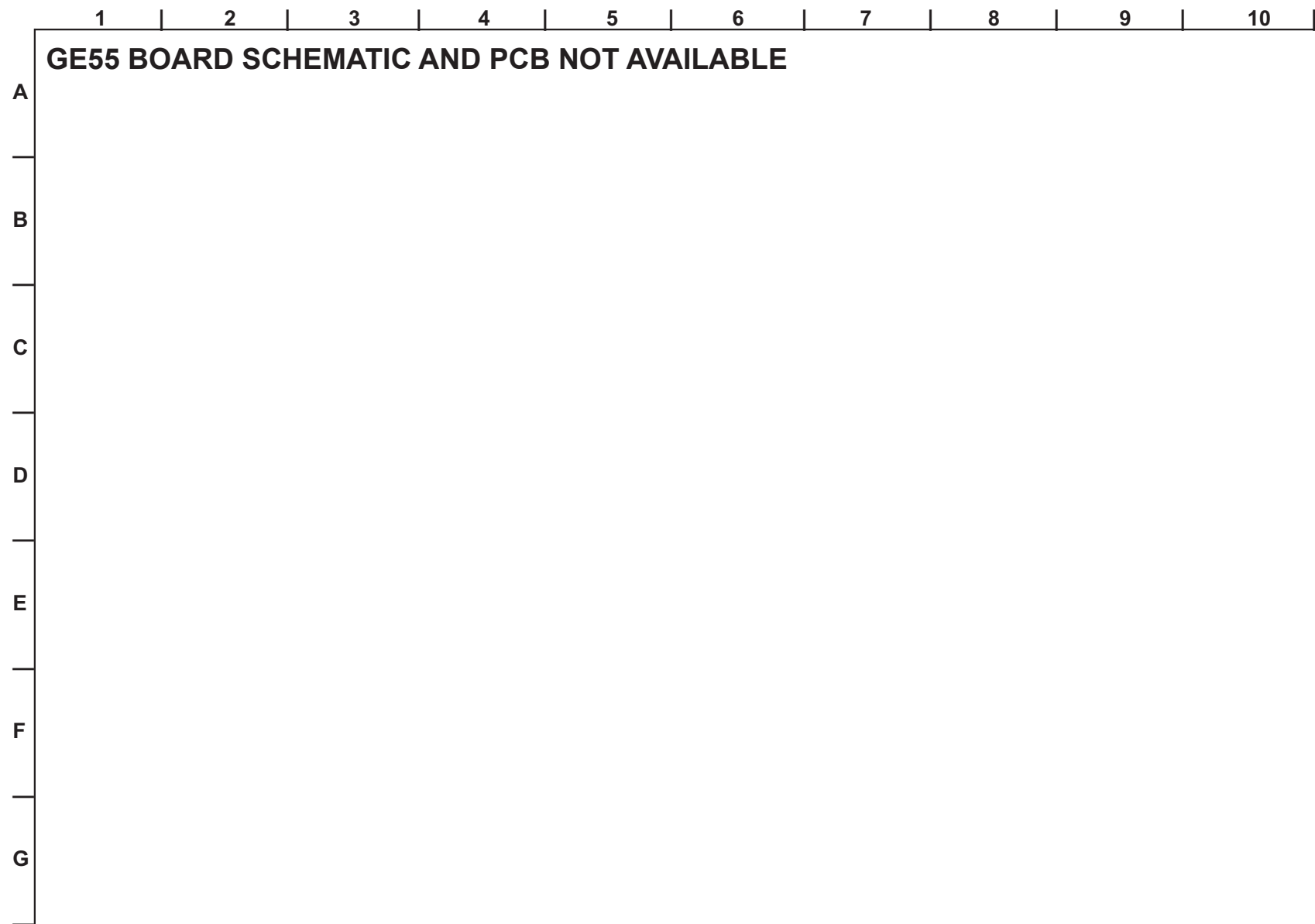
G11 BOARD SCHEMATIC

REFER TO ["SECTION 2: ELECTRICAL PARTS LIST" ON PAGE 41](#) TO DETERMINE IF THIS BOARD IS USED IN THE MODEL BEING REPAIRED



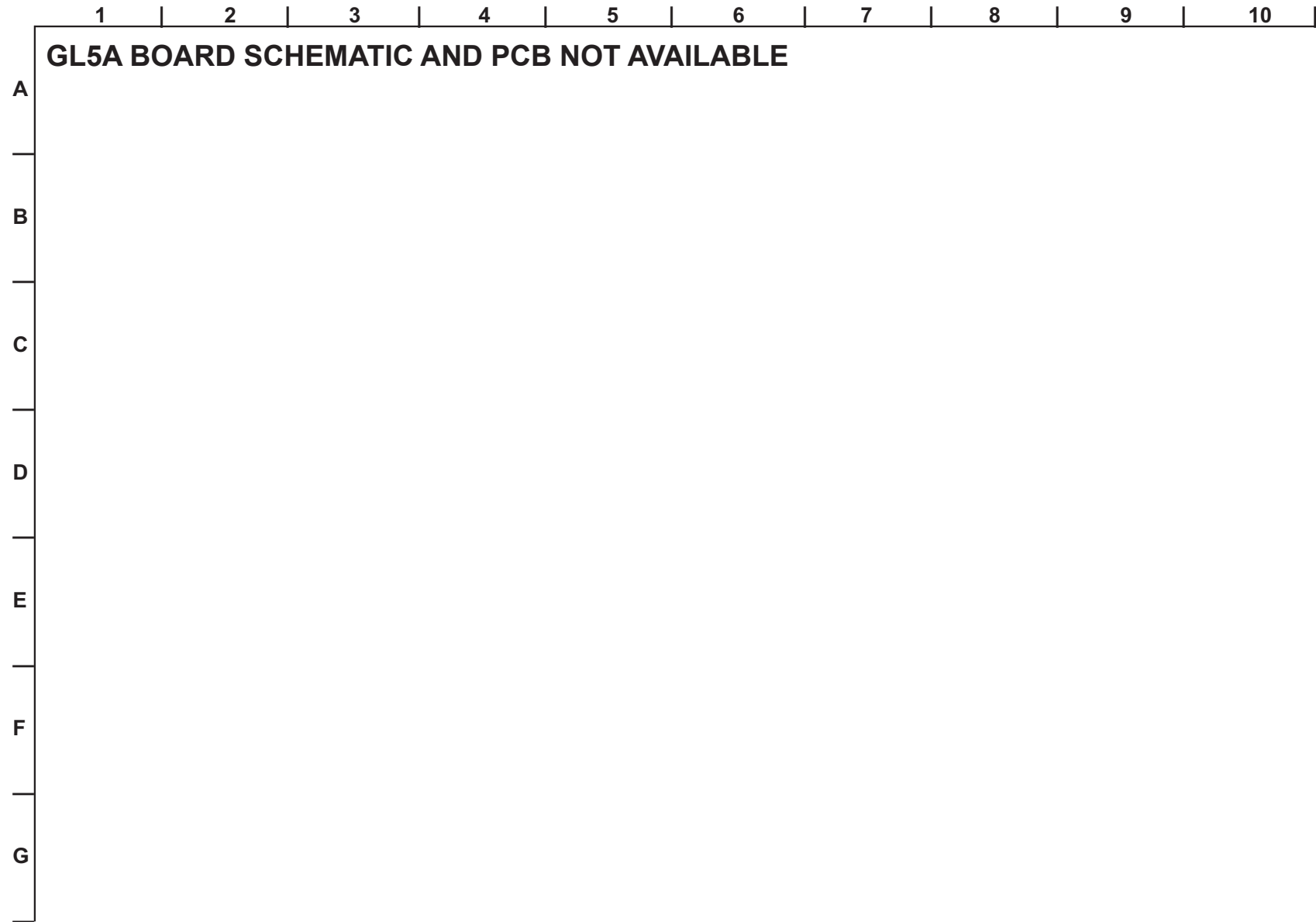
GE55 BOARD SCHEMATIC

REFER TO ["SECTION 2: ELECTRICAL PARTS LIST" ON PAGE 41](#) TO DETERMINE IF THIS BOARD IS USED IN THE MODEL BEING REPAIRED



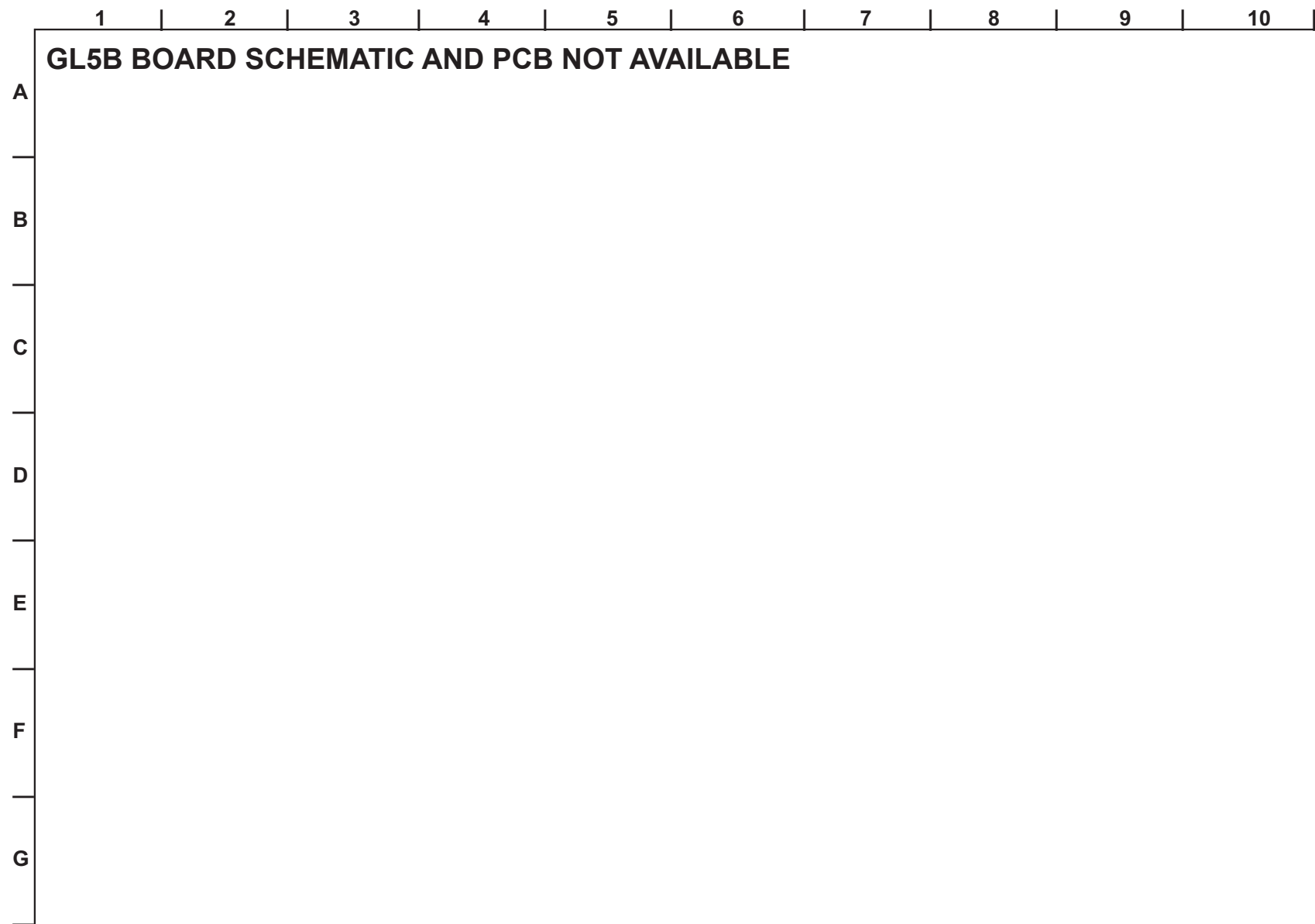
GL5A BOARD SCHEMATIC

REFER TO ["SECTION 2: ELECTRICAL PARTS LIST" ON PAGE 41](#) TO DETERMINE IF THIS BOARD IS USED IN THE MODEL BEING REPAIRED

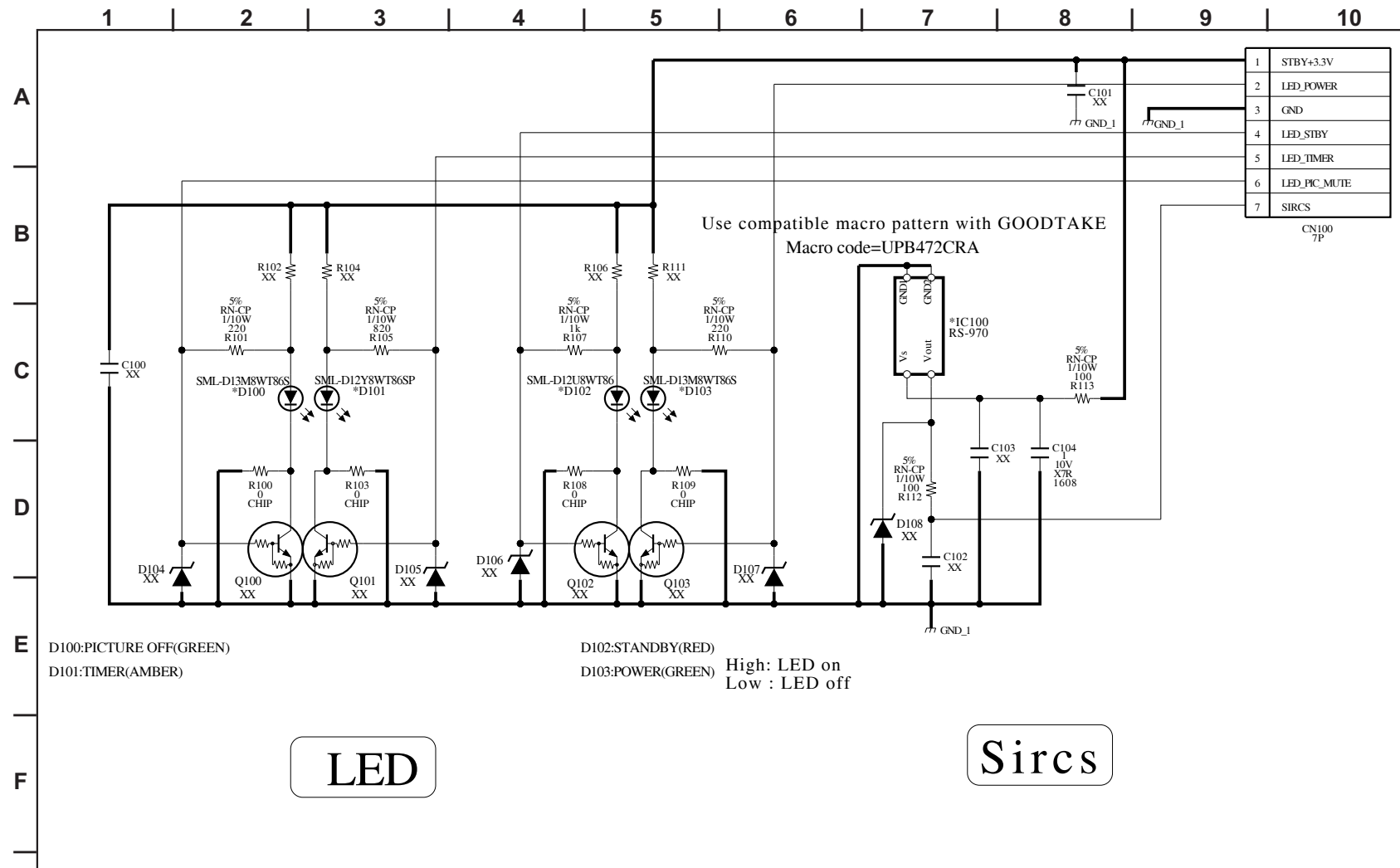


GL5B BOARD SCHEMATIC

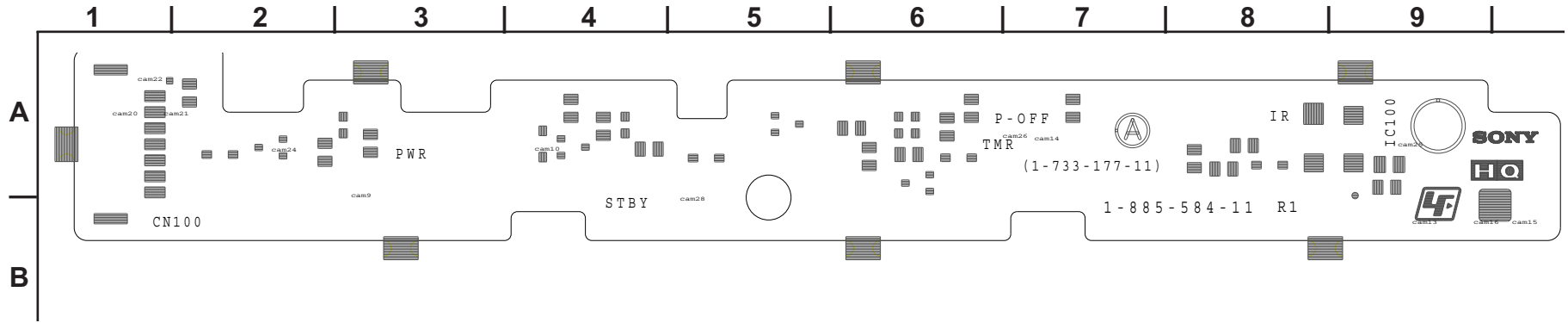
REFER TO ["SECTION 2: ELECTRICAL PARTS LIST" ON PAGE 41](#) TO DETERMINE IF THIS BOARD IS USED IN THE MODEL BEING REPAIRED



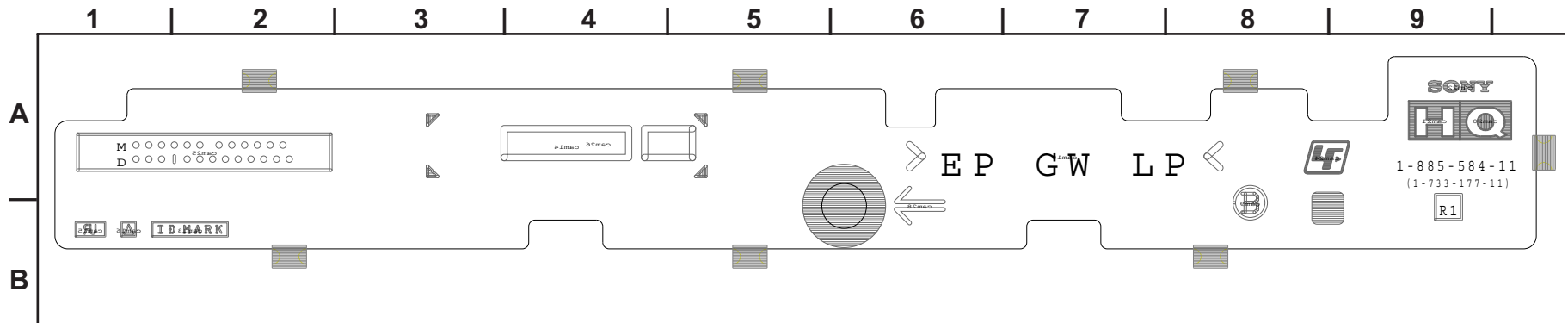
H BOARD SCHEMATIC




H [LED/SIRCS]
COMPONENT SIDE





H [LED/SIRCS]
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.









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.

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

- 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.

AFTER REPLACING THE MAIN BOARD OR LCD PANEL YOU MUST UPDATE THE SOFTWARE TO THE LATEST VERSION AND COMPLETE ANY SERVICE ADJUSTMENTS

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
KDL-32BX353/32BX354							
A							
	1-895-182-41	A BOARD, COMPLETE (KDL-32BX353 ONLY)					
	1-895-182-51	A BOARD, COMPLETE (KDL-32BX354 ONLY)					
G9							
	1-474-381-12	G9 BOARD, COMPLETE					
H							
	1-895-183-11	H BOARD, MOUNTED					
KDL-32BX355/32BX356							
A							
	1-895-184-21	A BOARD, COMPLETE (KDL-32BX355 ONLY)					
	1-895-184-31	A BOARD, COMPLETE (KDL-32BX356 ONLY)					
G9							
	1-474-381-12	G9 BOARD, COMPLETE					
H							
	1-895-183-11	H BOARD, MOUNTED					
KDL-40BX450/46BX450							
A							
	1-895-182-11	A BOARD, COMPLETE (FOR CND/MX/US MODELS ONLY)					
	1-895-182-21	A BOARD, COMPLETE (FOR LA MODELS ONLY)					
G10							
	1-474-380-11	G10 BOARD, COMPLETE (KDL-40BX450 ONLY)					
KDL-40BX451/46BX451							
A							
	1-895-182-31	A BOARD, COMPLETE					
G10							
	1-474-380-11	G10 BOARD, COMPLETE (KDL-40BX450 ONLY)					
G11							
	1-474-382-12	G11 BOARD COMPLETE (KDL-46BX451 ONLY)					
H							
	1-895-183-11	H BOARD, MOUNTED					
KDL-40BX453/46BX453							
A							
	1-895-182-61	A BOARD, COMPLETE					
G10							
	1-474-380-11	G10 BOARD, COMPLETE (KDL-40BX453 ONLY)					
G11							
	1-474-380-12	G11 BOARD, COMPLETE (KDL-46BX453 ONLY)					
H							
	1-895-183-11	H BOARD, MOUNTED					

G11


1-474-382-12 G11 BOARD COMPLETE
(KDL-46BX450 ONLY)

H

1-895-183-11 H BOARD, MOUNTED

KDL-40BX451/46BX451

A

 1-895-182-31 A BOARD, COMPLETE

G10

1-474-380-11 G10 BOARD, COMPLETE
(KDL-40BX450 ONLY)

G11


1-474-382-12 G11 BOARD COMPLETE
(KDL-46BX451 ONLY)

H

1-895-183-11 H BOARD, MOUNTED

KDL-40BX453/46BX453

A

 1-895-182-61 A BOARD, COMPLETE

G10

1-474-380-11 G10 BOARD, COMPLETE
(KDL-40BX453 ONLY)

G11

1-474-380-12 G11 BOARD, COMPLETE
(KDL-46BX453 ONLY)

H

1-895-183-11 H BOARD, MOUNTED




AFTER REPLACING THE MAIN BOARD OR LCD PANEL YOU MUST UPDATE THE SOFTWARE TO THE LATEST VERSION AND COMPLETE ANY SERVICE ADJUSTMENTS

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
KDL-40BX455/46BX455							
A				4-423-892-01		CUSHION, LOWER (40APOF) (KDL-40BX450 ONLY)	
	1-895-184-11	A BOARD, COMPLETE		4-400-053-11		CUSHION, LOWER (40 ZEUI) (KDL-40EX640 ONLY)	
G10				4-423-894-01		CUSHION, LOWER (46APOF) (KDL-46BX450 ONLY)	
	1-474-380-11	G10 BOARD, COMPLETE (KDL-40BX455 ONLY)		4-400-054-11		CUSHION, LOWER (46 ZEUI) (KDL-46EX640 ONLY)	
G11				4-400-055-12		CUSHION, LOWER (55 ZEUI) (KDL-55EX640 ONLY)	
	1-474-380-12	G11 BOARD, COMPLETE (KDL-46BX455 ONLY)		4-412-149-11		CUSHION, SIDE CENTER L (55 ZEUI) (KDL-55EX640 ONLY)	
H				4-412-150-11		CUSHION, SIDE CENTER R (55 ZEUI) (KDL-55EX640 ONLY)	
	1-895-183-11	H BOARD, MOUNTED		4-423-891-01		CUSHION, UPPER (40APOF) (KDL-40BX450 ONLY)	
KDL-40EX640/46EX640/55EX640							
A				4-400-047-11		CUSHION, UPPER (40 ZEUI) (KDL-40EX640 ONLY)	
	1-895-172-11	A BOARD, COMPLETE		4-423-893-01		CUSHION, UPPER (46APOF) (KDL-46BX450 ONLY)	
GL5				4-400-048-11		CUSHION, UPPER (46 ZEUI) (KDL-46EX640 ONLY)	
	1-895-173-11	GL5A BOARD, COMPLETE (KDL-40EX640 ONLY)		4-400-049-11		CUSHION, UPPER (55 ZEUI) (KDL-55EX640 ONLY)	
	1-895-174-11	GL5B BOARD COMPLETE (KDL-46EX640 ONLY)		4-419-434-11		LABEL, ENERGY GUIDE(APO) (KDL-40BX450 ONLY)	
GE55				4-420-093-01		LABEL, ENERGY GUIDE(NK2) (KDL-40EX640 ONLY)	
	1-895-175-11	GE55 BOARD, COMPLETE (KDL-55EX640 ONLY)		4-419-434-21		LABEL, ENERGY GUIDE(APO) (KDL-46BX450 ONLY)	
H				4-420-093-11		LABEL, ENERGY GUIDE(NK2) (KDL-46EX640 ONLY)	
	1-895-176-11	H BOARD, MOUNTED		4-420-093-21		LABEL, ENERGY GUIDE(NK2) (KDL-55EX640 ONLY)	
ACCESSORIES AND PACKING FOR US ONLY							
	4-408-075-31	BAG, PROTECTION (1400x900) (KDL-40BX450/40EX640 ONLY)		4-419-125-01		LABEL, FRONT (NK2 40) (KDL-40EX640 ONLY)	
	4-408-076-31	BAG, PROTECTION (1550x1050) (KDL-46BX450/46EX640 ONLY)		4-419-126-01		LABEL, FRONT (NK2 46) (KDL-46EX640 ONLY)	
	4-408-077-31	BAG,PROTECTION (1720X1200) (KDL-55EX640 ONLY)		4-419-127-01		LABEL, FRONT (NK2 55) (KDL-55EX640 ONLY)	
	4-416-841-01	CARTON, INDIVIDUAL (APO 40) (KDL-40BX450 ONLY)		3-674-673-22		STOPPER (A) (KDL-55EX640 ONLY)	
	4-416-845-01	CARTON, INDIVIDUAL (APO 46) (KDL-46BX450 ONLY)		4-400-062-11		TRAY (55 ZEUI) (KDL-55EX640 ONLY)	
	4-419-122-01	CARTON, INDIVIDUAL (NK2 40) (KDL-40EX640 ONLY)					
	4-419-123-01	CARTON, INDIVIDUAL (NK2 46) (KDL-46EX640 ONLY)					

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**.

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