# SERVICE MANUAL (TROUBLESHOOTING)

ORIGINAL MANUAL ISSUE DATE: 2023.11

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9-888-905-21

**LCD TV** 

SONY

Sony EMCS (Malaysia) Sdn. Bhd. HES-M © 2023.11

### MODEL LISTS

THIS SERVICE MANUAL CONTAINS **TROUBLESHOOTING** INFORMATION FOR BELOW REGIONS AND MODELS:



### **MODEL**

KD-43X85K	KD-50X85K	KD-55X85K	KD-65X85K	KD-75X85K	KD-85X80K
-	-	-	-	-	KD-85X85K
-	_	_	_	-	KD-85X80CK

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#### Please refer Service Manual (Disassembly) for below information:

- Tools and Equipments
- FFC Precautions
- Disassembly and Removal Caution
- Wire Dressing
- Circuit Board Location
- Exploded Views and Part Lists
- Smart Core
- Appendix Sharp Edge
  - FFC Replacement Cautions

Note: Pictures provided in this manual may have difference from actual sets

#### 1-1. Warnings and Caution.

- 1) CAUTION :These servicing instructions are for use by qualified service personnel only.
- 2) To reduce the risk of electric shock, do not perform any servicing other than that stated in the operating instructions unless you are qualified to do so.
- 3) WARNING!!: An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the ac power line. The replaceable fuse should be in the neutral of the mains supply. When replacing the fuse, the mains must be disconnected to de-energize the phase conductors. (\*Except AC ADAPTOR, because it does not carry out replacing an internal fuse.)
- 4) CARRYING THE TV: be sure to follow these guidelines to protect your property and avoid causing serious injury:
  - Carry the TV with an 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 damages.
- 5) SAFETY-RELATED COMPONENT WARNING!!: Components identified by shading and \_\_\_\_ mark on the exploded views, and in the parts list are critical for safe operations. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operations are identified in this manual. Follow these procedures whenever critical components are replaced, or improper operation is suspected.

#### 6) IMPORTANT REMINDER FOR TV MAIN BOARD REPLACEMENT:

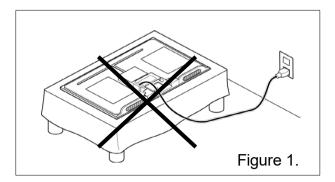
It is mandatory for service centers to confirm the TV's system information after each repair is carried out with Main board replacement. Whenever a TV Main board is replaced, the correct TV Model and Serial number must be reinserted into memory. This is a MANDATORY procedure that each service center must apply.

#### 1-2. Caution Handling of LCD Panel.

When repairing the LCD Panel, make sure you are grounded with a wrist band. When repairing the LCD Panel on the wall, the panel must be secured using the 4 mounting holes on the rear cover.

- 1) Do not press 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 temperature or in areas of high humidity for an extended period.
- 4) Do not expose the LCD panel to direct sunlight.
- 5) Avoid contact with water. It may cause short circuit within the module.
- 6) Disconnect the AC power when replacing the backlight.
- 7) Always clean the LCD panel with a soft cloth material.
- 8) Handle the wires or connectors of the backlight circuit with care. Damaging the wires may cause a short circuit.
- 9) Protect the panel from ESD to avoid damaging the electronic circuit (C-MOS).

10) During the repair, DO NOT leave the POWER ON or Burn-in period for more than 1 hour while the TV is facing down on a cloth. Refer Figure 1.



#### 1-3. Caution\_for\_Board\_handling.

The following problems will occur due to handling of the IC mounted on the board

- •Solder crack due to substrate handling (stress).
- •IC breakdown due to static electricity (ESD).

When repairing the TV at the customer's home or service station or Repair of defect board, please pay attention to the handling of the board.

Substrate that needs attention for handling:

- Main Board (B\*\* Board)
- Backend Board (D\*\* Board)

XThings to prepare in advance.



ESD cushion / sheet Please use a bag containing the board or a special seat





\*Caution: ESD wrist-strap to be checked daily.

Use Multi-meter to make sure resistance of ESD wrist-strap is OK.

(R=750K Ohms to 35Mega Ohms)

Caution for Board handling(Stress).
 Be sure to observe the following contents.







2 Do not hold/push Heat-Sink





3 Handle with care. Do not swing



Regardless of Good board or Defective board, always put it on ESD cushion / sheet slowly.





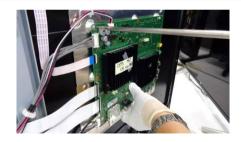
Do not stack up

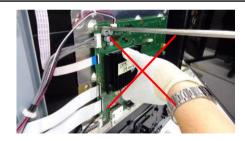


6 Keep vertical position and put in/take out from Box.
Always put into ESD bag then place into Box/Container Box



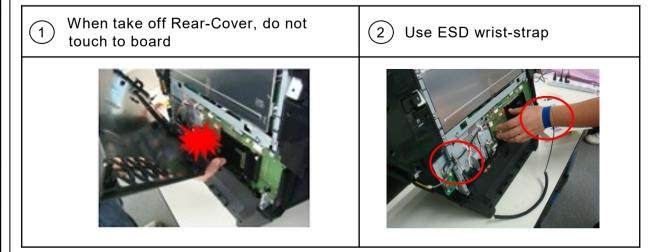
(7) Do not hold Heat-Sink when take out or install it.





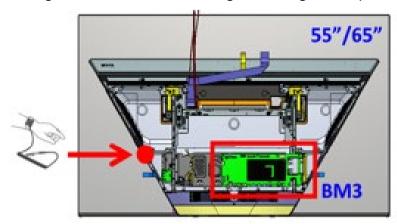
2) Caution for Board handling (ESD).

Be sure to observe the following contents

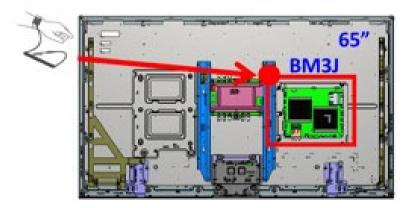


\*Installation example of wrist-strap.

Please connect the clip to the metal part of the chassis of the TV with the wristband grounded. Below is a grounding example of each model.



<K\*-65Z9F>



Use Multi-meter to make sure resistance of ESD wrist-strap is OK.

(R=750K Ohms to 35Mega Ohms)

(3) When holding board, do not hit or touch to Plastic part(s)



After take defective board out from TV, put it into ESD bag.

Do not place on floor mat/carpet direct. And, always put it on ESD cushion





#### 1-4. Caution About the Lithium Battery.

- Danger of explosion if battery is incorrectly replaced.
   Replace only with the same or equivalent type.
- 2) Outer case broken battery should not contact to water.

#### 1-5. 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 inter board wiring to ensure that no wires are pinched or contact high-wattage resistors.
- 3) Check all control knobs, shields, covers, ground straps and mounting hardware have been replaced. Be certain 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 them replacement.
- 5) Look for parts which show obvious signs of deterioration even though functioning. Point them to the customer and recommend for 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, metalized knobs, screws and all other exposed metal parts for AC leakage. Check leakage test as described next.
- 8) For safety reasons, repairing the Power board and/or Inverter board is prohibited.

#### 1-6. Leakage Test.

(To protect electric shock when customer touch the terminal.). Leakage current can be measured by V: Voltmeter or oscilloscope (r.m.s or peak reading).

Stabilized power supply instrument and isolated voltage transformer:

Use too much current capacity and isolated voltage transformer does not need to use stabilized power supply equipment.

Specification of RMS voltmeter: Input resistance > 1 Mohm, Input capacitance < 200 pF, Frequency range: 15 Hz – 1MHz. Refer Figure 2. Isolated type volt - meter (FLUKE 8921A etc \*1).

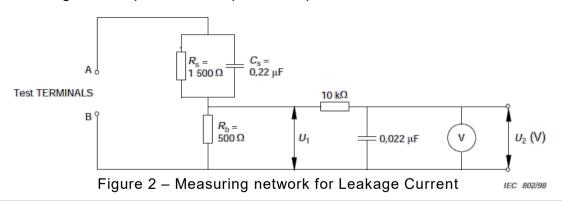
- \*1 Not use FLUKE 8920A that connected to protective earth by diode.
- # Leakage current of measurement instrument is less than 10µArms when under test equipment AC plug is opened.
- # Set up the following condition and turn on the set. Applied voltage: Nominal input voltage (Description on Nameplate).
- # Measure the leakage current between one phase conductor and neutral for terminal A and terminal B.

Read rms value, and then calculate to peak value PEAK VALUE =  $\sqrt{2}$  RMS VALUE.

Comply with the following requirement.

Class II equipment (2-pin plug): for each terminal, the worst value of measurement must not exceed AC 350uA peak).

Note: including AC adaptor, AC adaptor/DC operated unit combination.



#### 1-7. How to Find a Good Earth Ground.

- 1) A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground.
- 2) If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.
- 3) If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble-light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure 3).

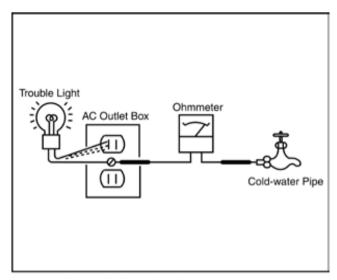


Figure 3. Checking for earth ground.

#### 1-8. Lead Free Information

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.



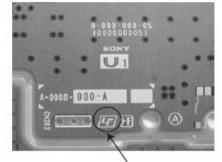


Figure 4: LF Logo

Figure 5: LF logo on circuit board

The servicing of these boards requires special precautions. It is strongly recommended to use Lead Free Solder material in order to guarantee optimal quality of new solder joints.

#### **SELF DIAGNOSIS FUNCTION**

The units in this manual contain a self-diagnostic function. If an error occurs, the Smart Core Red LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem.

A definition of the Smart Core Red LED flash indicators is listed in the instruction manual for the user's knowledge and reference.

If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

#### **DIAGNOSTIC TEST INDICATORS**

When an error occurs, the Smart Core Red LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas.

Result for all of the following diagnostic items are displayed on screen. If the screen displays a "0", no error has occurred.

#### Self Diag. Quick Reference (LED blinking)

Smart Core RED LED blinking count	Error Item	Detection Items			
2x	MAIN_POWER	<b g=""> Main 12V over voltage</b>			
214	DC_ALERT	<b g=""> Main 5.0V failure</b>			
3x	AUD_ERR	<b s=""> Audio amp. protection</b>			
,	LD_ERR	None			
4x	BCM_ERR	None			
5x	P_ID_ERR	<b g="" p="" t=""> Panel ID EEPROM I2C No ACK (Also panel power failure is a suspect)</b>			
6x	BACKLIGHT_ERR	<b g="" ld="" p=""> Backlight failure</b>			
7x	TEMP_ERR	<b h="" p=""> Over temperature protection</b>			
8x	4KBE_ERR	None			

Blue italic: detect at startup sequence only.

<G>: Power Supply board, <B>: Main board, <T>: T-con board, <LD>: LD board, <P>: Panel module, <S>: Speaker, <H>: H-board

#### **SELF DIAGNOSIS FUNCTION**

### Self Diag. Quick Reference (Not LED blinking [Record Only])

Error Item	Detection Items
TCON ERR	<t> T-CON device I2C communication failure</t>
AUD_ERR_I2C	<b> Audio amp I2C communication failure</b>
TEMP_ERR_I2C	<b h=""> Temp sensor I2C communication failure</b>
TU_DEMOD_I2C	<b> Tuner &amp; Demodulator I2C communication failure</b>

<B>: Main board, <T>: T-con board, <H>: H-board

#### **SELF DIAGNOSIS FUNCTION**

#### **Retry Limitation by Remote/Power Key**

Smart Core Red LED blinking count	Error Name	Retry Permission Times *1	Note		Number of off/on action for MAIN POWER		
2x	MAIN_POWER	STDWN_RTRY_LIMIT_MAINPOWR = 1		$\rightarrow$	shutdown is recorded to STDWN OFFON CNT MAIN POWER*2		
3x	DC_ALERT (5V)	STDWN_RTRY_LIMIT = 2		$\setminus$			
JX	AUD_ERR	STDWN_RTRY_LIMIT = 2					
4.4	LD_ERR	STDWN_RTRY_LIMIT = 2			Number of off/on action during the		
4x	BCM_ERR	STDWN_RTRY_LIMIT = 2		$] \setminus$	error shutdown is recorded to		
5x	P_ID_ERR	STDWN_RTRY_LIMIT = 2			STDWN_OFFON_CNT*2		
6x	BACKLIGHT	STDWN_RTRY_LIMIT = 2					
7x	TEMP_ERR	STDWN_RTRY_LIMIT = 2					
8x	4KBE_ERR	STDWN_RTRY_LIMIT = 2					

<sup>\*1)</sup> If STDWN\_OFFON\_CNT <= STDWN\_RTRY\_LIMIT, and STDWN\_OFFON\_CNT\_MAIN\_POWER <= STDWN\_RTRY\_LIMIT\_MAINPOWR, you can turn the set on by a remote/power key. At this time, if the error occurs again, the STDWN\_OFFON\_CNT is incremented by 1.

<sup>\*2)</sup> When the main micro operates normally for STDWN\_OFFON\_CLR = 60 minutes, STDWN\_OFFON\_CNT and STDWN\_OFFON\_CNT\_MAIN\_POWER are cleared.

#### **Triage Chart**

#### Before you make the service call:

- 1. Confirm the symptom from the customer.
- 2. Select that symptom from the chart.
- 3. Bring all the boards and cables listed for that symptom.
- 4. Follow the troubleshooting charts in the technical guides to isolate the board.
- 5. Chart Color Code: : Most likely defective part

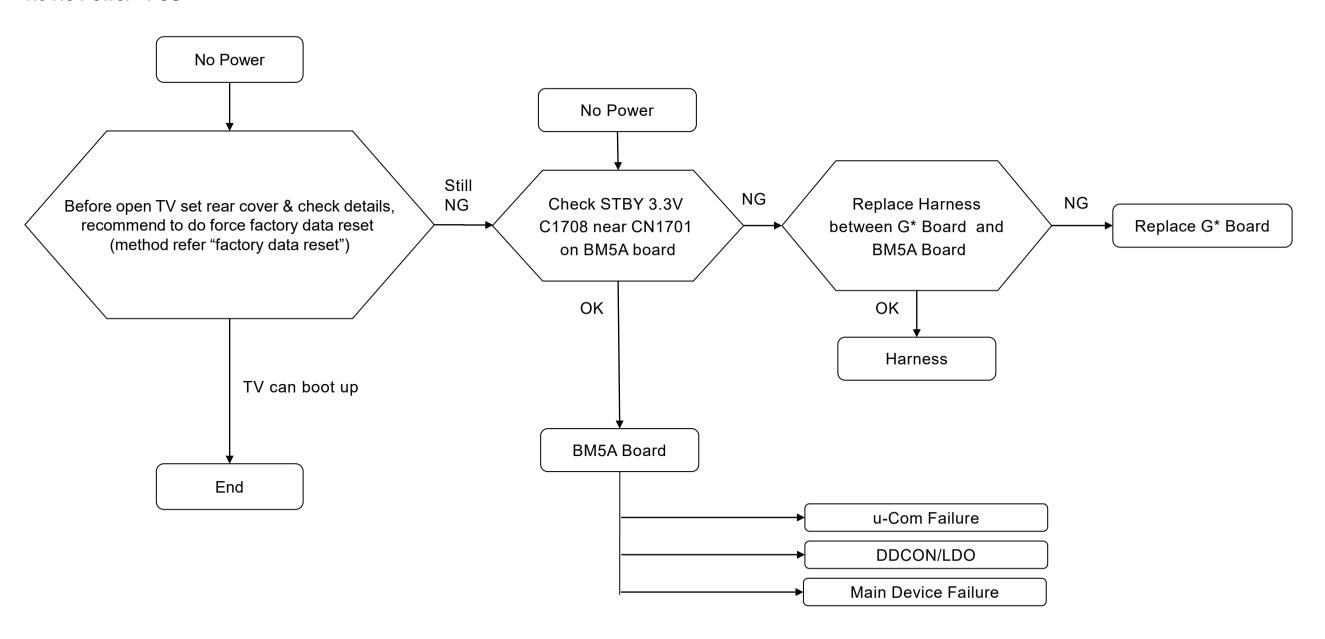
■ : Tertiary possible defective part

▲ : Secondary possible defective part

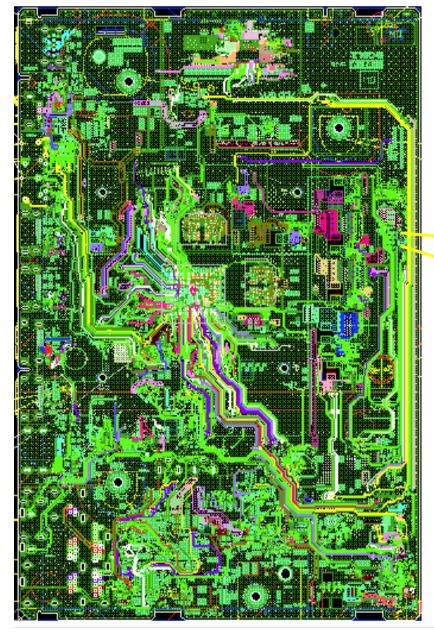
BLACK TEXT: Board that may correct the symptom

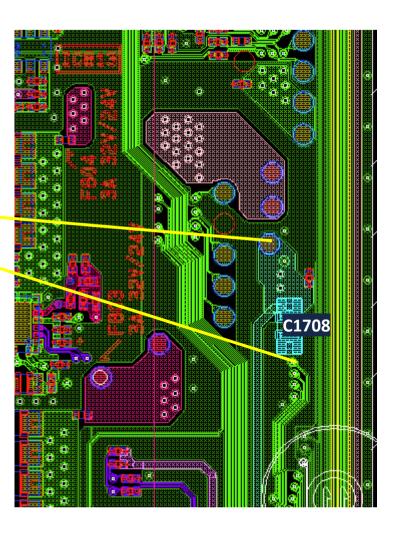
					possic																						
				s - Shutdown. P ed diagnostics s						Sy	mptom Error lo	s - no s g reco	hutdowr d only	ı			No Power	-1		Video ıg or d	istorted		Remote	Network	Audio	Smart Core	Bluetooth (BT)
Reference	2	3	4	5	6	7	8	TU_ DEMOD	TU_ DEMOD _I2C	TCON _ERR	FRCTC _I2C	AUD _ERR _I2C	4KPQ _ERR _I2C	TEMP _ERR _I2C	EARC _ERR _I2C	AMB _ERR _I2C	No White Power LED & does not respond to remote (Dead Set)	Stationary colored lines or dots	No video One of Inputs	input	No video of Camera	No video all Inputs	Operation	Cannot connect to Wireless Network	No Audio	Smart Core no LED (Set is still alive)	Bluetooth / One Step Remote (OSR) can't connect
Main Board	•	•		•	•	•			•	<b>^</b>		•		<b>A</b>			<b>A</b>	<b>A</b>	•	•	<b>A</b>	•	<b>A</b>	<b>^</b>	•	<b>A</b>	<b>^</b>
Power Board	•	•		•	•												•					_			<b>A</b>		
Receiver Board														•			<b>A</b>						•			•	
Speaker		<b>A</b>																							•		
Wi-Fi & BT Module																								•			•
LD-Board																											
V By One FFC				<b>A</b>						<b>A</b>								<b>A</b>				_					
T-con				•						•								<b>A</b>									
LCD Panel				<b>A</b>	•	_				•								•									
Camera (accessory)										•											•						
	Power	Power	Panel	Panel (Communication)	Panel (Backlight)	TEMP	4KBE																				
Problem		Audio	LD	T-con																							

#### 1.0 No Power - PSU



### **Checking Point**





**Board View** 

Top Side

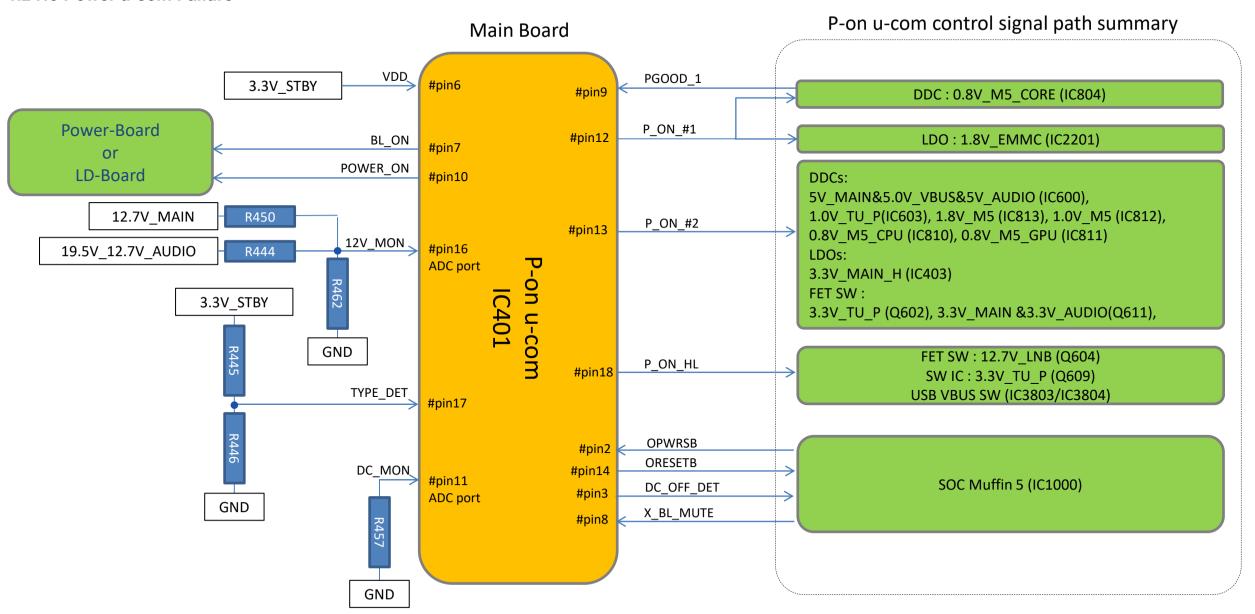


B Side

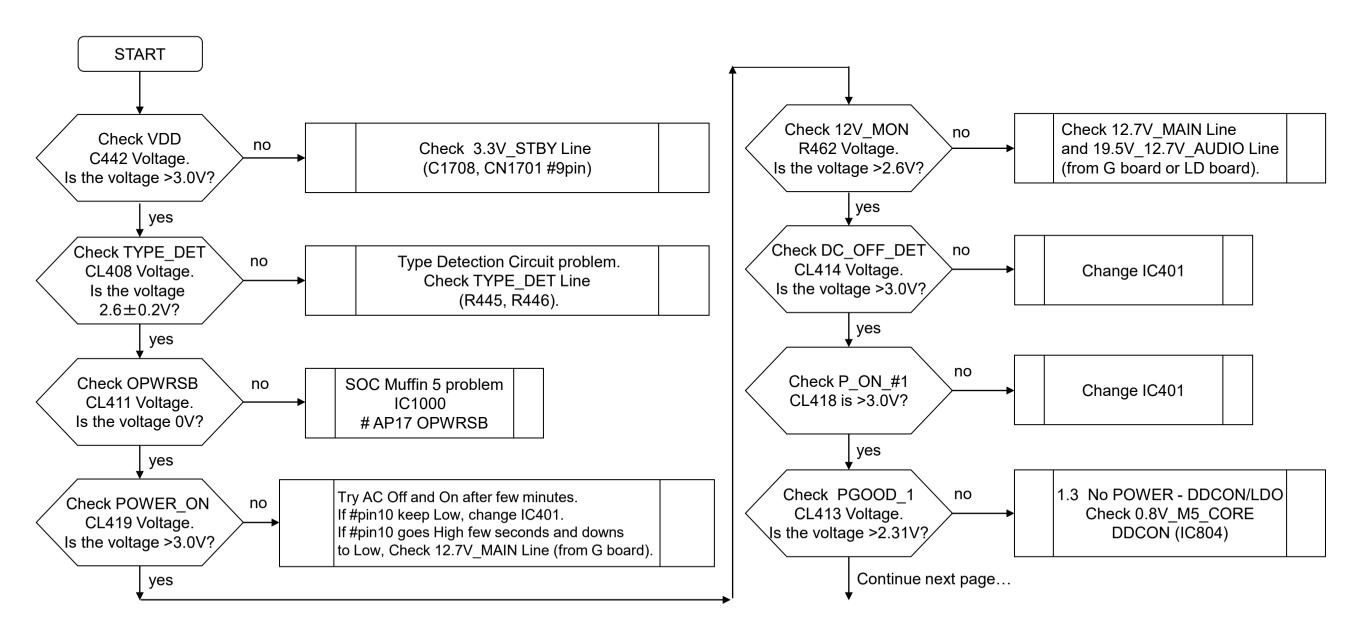


C1708

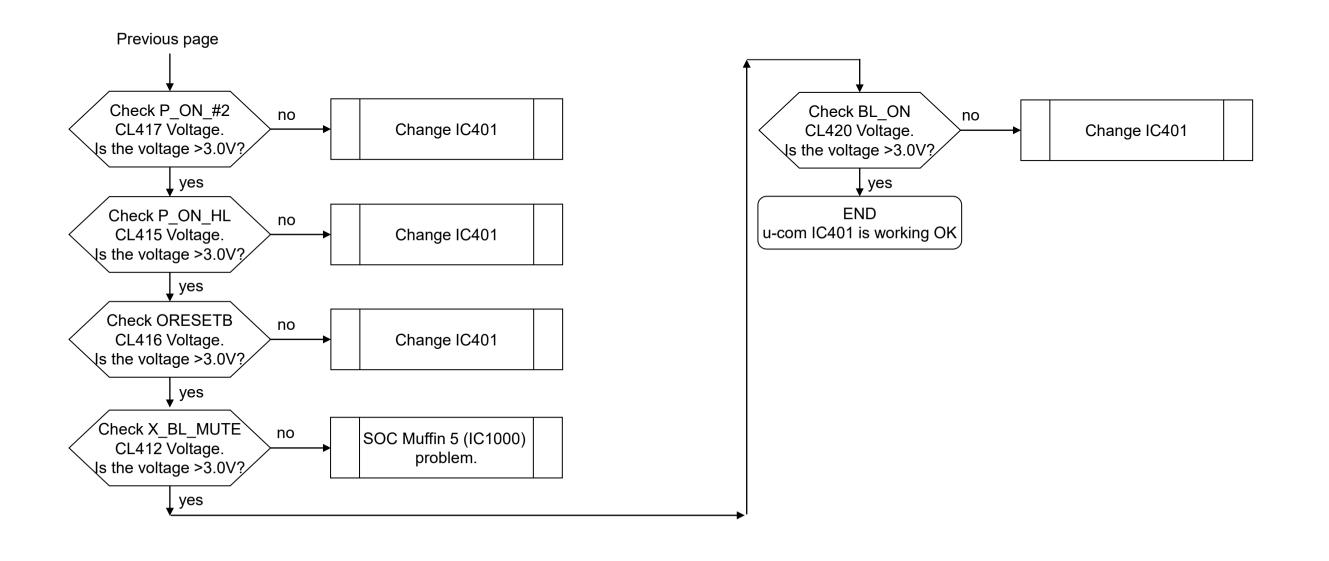
#### 1.2 No Power u-com Failure



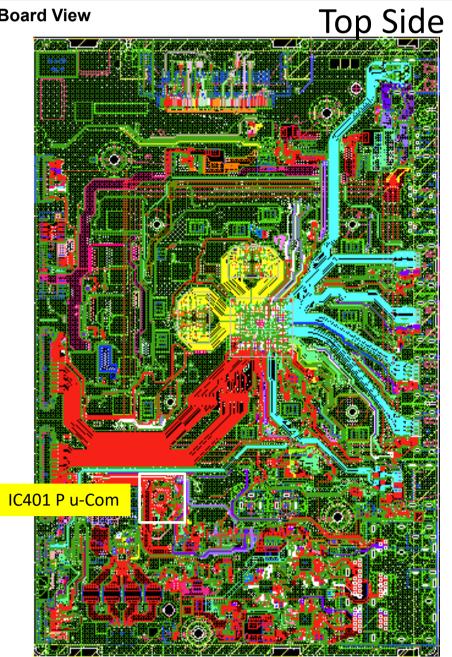
#### 1.2 No Power u-com Failure

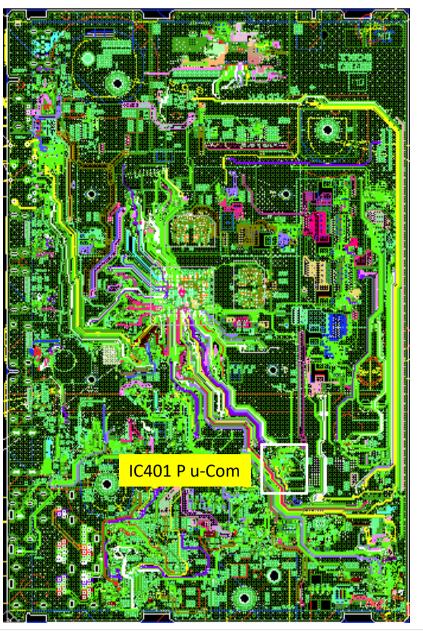


#### 1.2 No Power u-com Failure



**Board View** 





**Board View** 

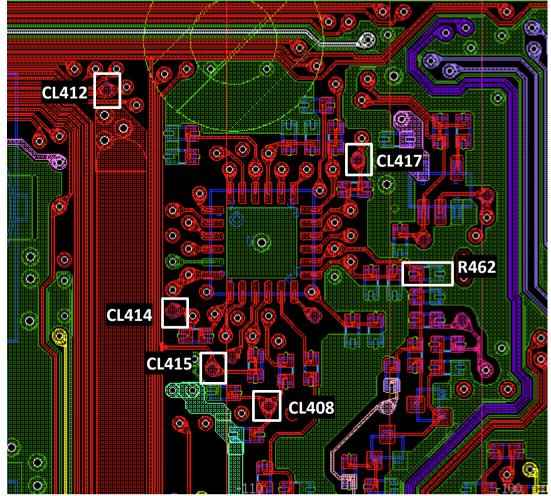
Top Side

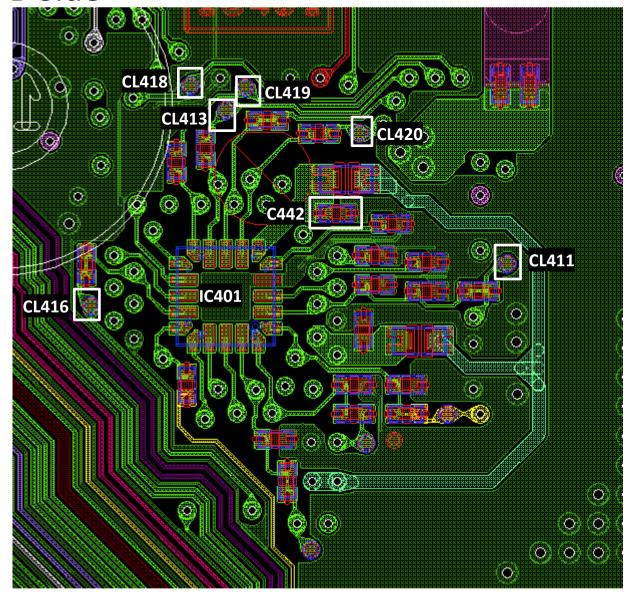




### **Checking Point**





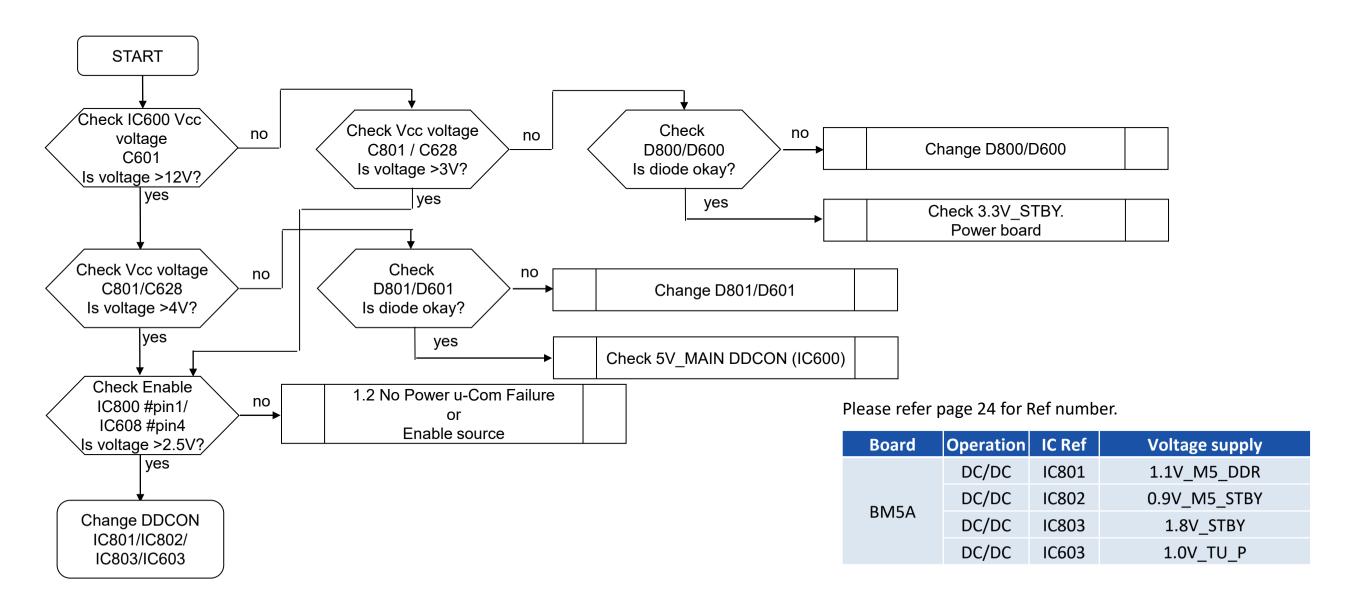


#### 1.3 No Power DDCON/LDO

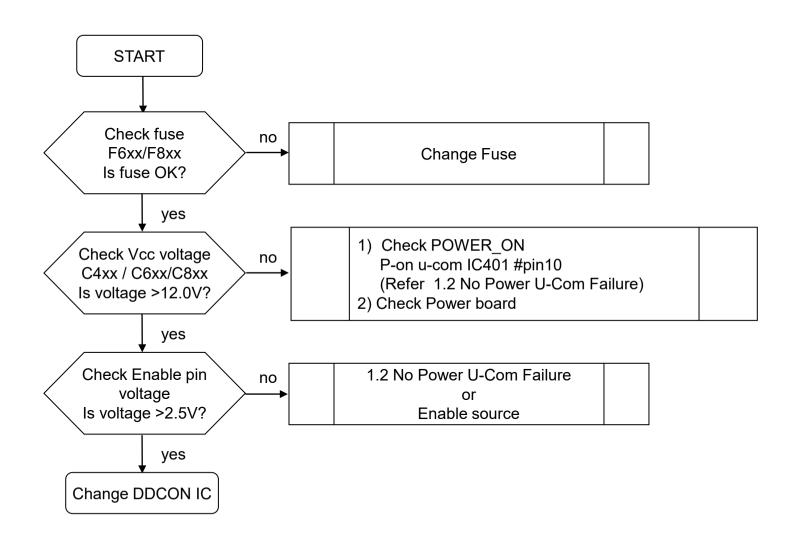
Board	Operation	IC Ref	Voltage supply	Output ref.	Enable pin	Enable source	Fuse	Vcc ref.
	DC/DC	IC414	5.0V_STBY_H	C482	R545	Vin	-	C479
	LDO	IC403	3.3V_MAIN_H	C416	IC403 Pin#3	P_ON_#2	-	C415
	DC/DC	IC600	5V_MAIN/5.0V_VBUS/5V_AUDIO	C610	IC600 Pin#15	P_ON_#2	F600	C601
	DC/DC	IC607	3.3V_DDC_OUT	C656	IC607 Pin#11	Vin	F604	C665
	DC/DC	IC603	1.0V_TU_P	C630	IC603 Pin#4	P_ON_#2 or IC1000 #AL18 (EWS_PWR_ON)	-	C628
	DC/DC	IC801	1.1V_M5_DDR	C806	IC801 Pin#4	R804/R907 (3.3V_STBY)	-	C801
	DC/DC	IC802	0.9V_M5_STBY	C809	IC802 Pin#4	R804/R907 (3.3V_STBY)	-	C807
BM5A	DC/DC	DC/DC IC803	1.8V_STBY	C812	IC803 Pin#4	R804 (3.3V_STBY)	-	C810
BIVISI	DC/DC	IC804	0.8V_M5_CORE	C846	IC804 Pin#8	P_ON_#1	F802	C831
	LDO	IC806	1.8V_M5_ET_STBY	C818	IC806 Pin#3	IC1000 #AN19 (ETHER_PWR_EN)	-	C817
	DC/DC	IC813	1.8V_M5	C904	IC813 Pin#4	P_ON_#2	F807	C902
	DC/DC	IC812	1.0V_M5	C898	IC812 Pin#4	P_ON_#2	F805	C896
	LDO	IC809	3.3V_M5_STBY	C816	R917	R917 (3.3V_STBY)	-	C815
	DC/DC	IC810	0.8V_M5_CPU	C861	IC810 Pin#19	P_ON_#2	F803	C855
	DC/DC	IC811	0.8V_M5_GPU	C874	IC811 Pin#19	P_ON_#2	F804	C868
	LDO	IC2201	1.8V_EMMC	C2216	IC2201 Pin#3	P_ON_#1 or ORESETB	-	C2214

P\_ON\_#1: P-on u-com IC401 #pin12 P\_ON\_#2: P-on u-com IC401 #pin13 ORESETB: P-on u-com IC401 #pin14

#### 1.3 No Power DDCON/LDO (DDCON Check)

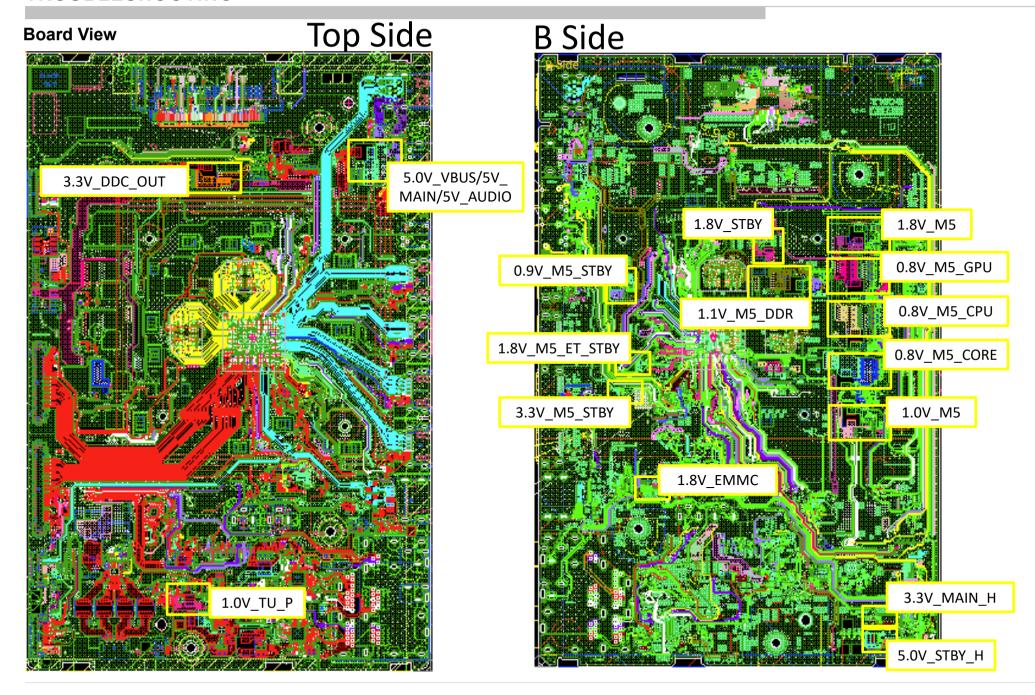


#### 1.3 No Power DDCON/LDO (DDCON Check)



### Please refer page 24 for Ref number.

Board	Operation	IC Ref	Voltage supply
	DC/DC	IC414	5.0V_STBY_H
	DC/DC	IC600	5V_MAIN/5V_AUDIO
	DC/DC	IC607	3.3V_DDC_OUT
BM5A	DC/DC	IC804	0.8V_M5_CORE
DIVIDA	DC/DC	IC813	1.8V_M5
	DC/DC	IC812	1.0V_M5
	DC/DC	IC810	0.8V_M5_CPU
	DC/DC	IC811	0.8V_M5_GPU

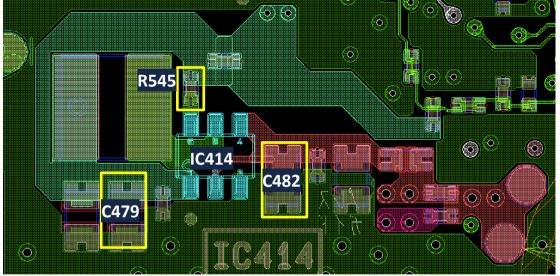


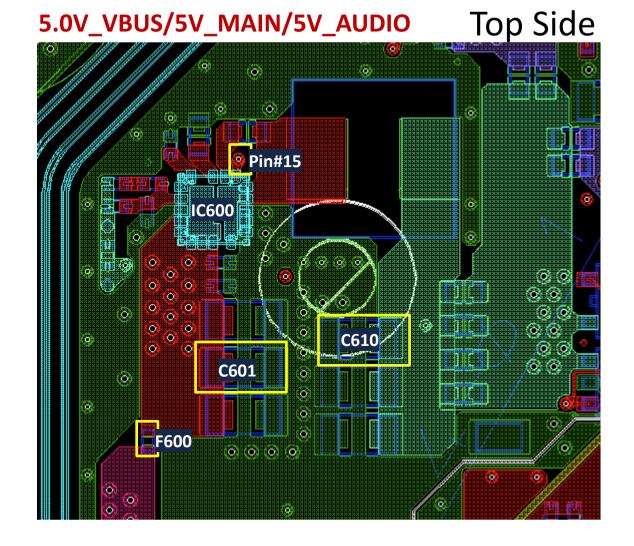
Top Side **B** Side **Board View** SONY BM5A >EP GW 3.3V\_DDC\_OUT 5.0V\_VBUS/5V\_M AIN/5V\_AUDIO 1.8V\_STBY 1.8V\_M5 0.9V\_M5\_STBY 0.8V\_M5\_GPU 1.1V\_M5\_DDR 0.8V\_M5\_CPU 1.8V\_M5\_ET\_STBY 0.8V\_M5\_CORE 3.3V\_M5\_STBY 1.0V\_M5 1.8V\_EMMC 1.0V\_TU\_P 3.3V\_MAIN\_H 5.0V\_STBY\_H

**Checking Point** 

5.0V\_STBY\_H

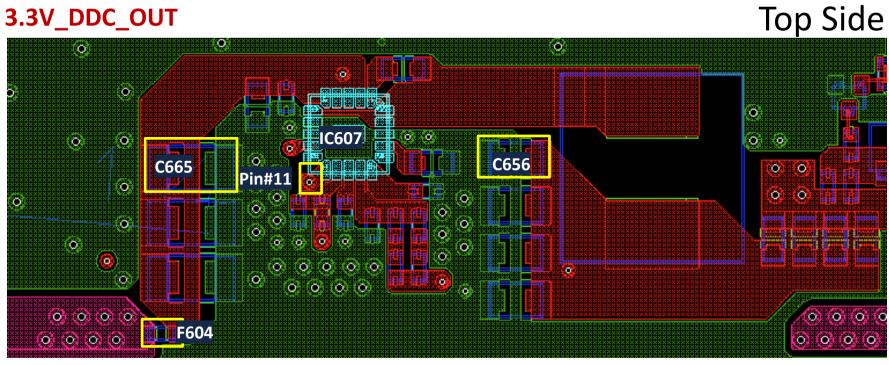




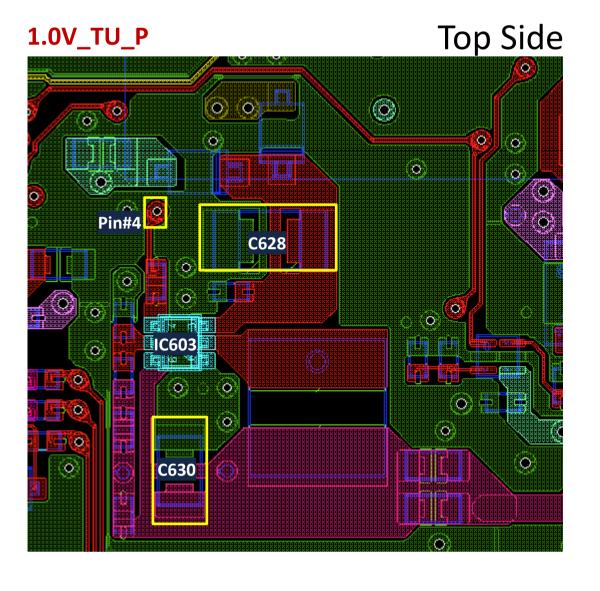


### **Checking Point**

# 3.3V\_DDC\_OUT

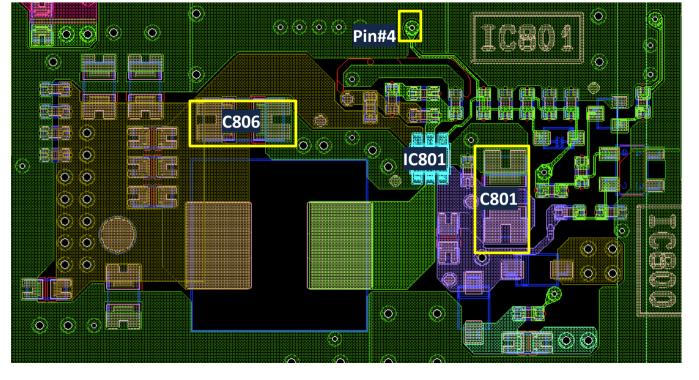


### **Checking Point**

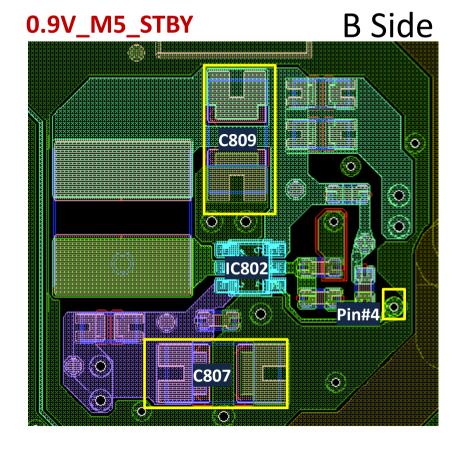


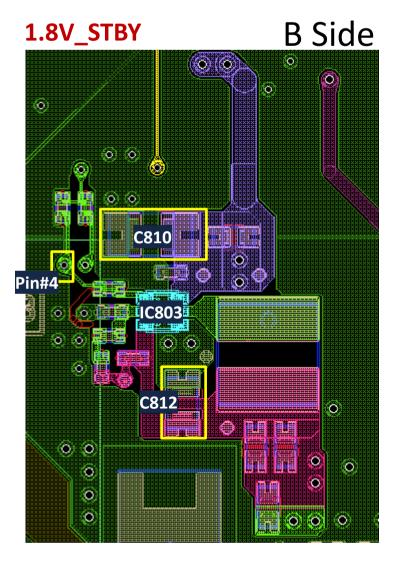
## 1.1V\_M5\_DDR





### **Checking Point**



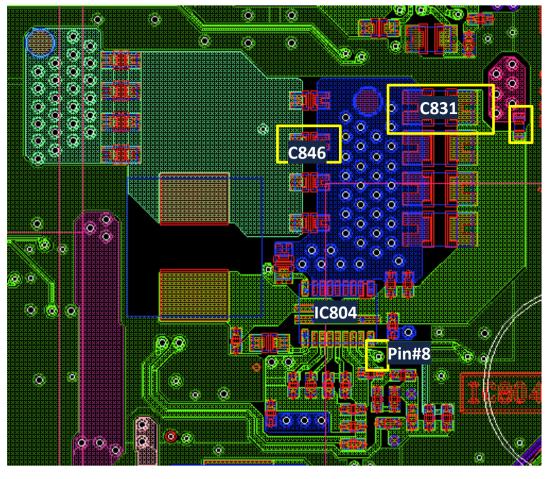


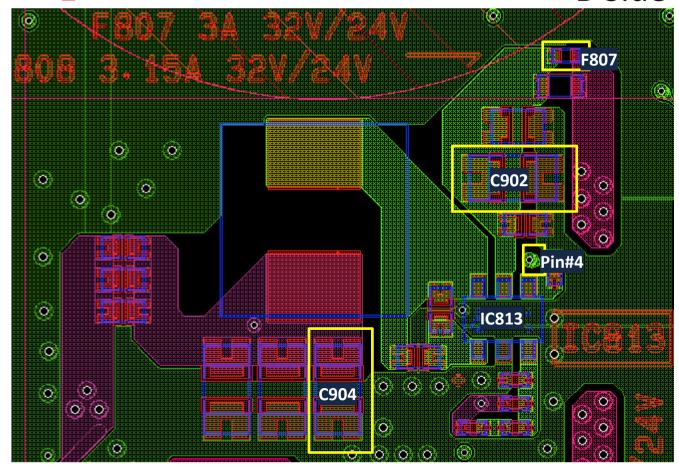
**Checking Point** 

**0.8V\_M5\_CORE** 

B Side

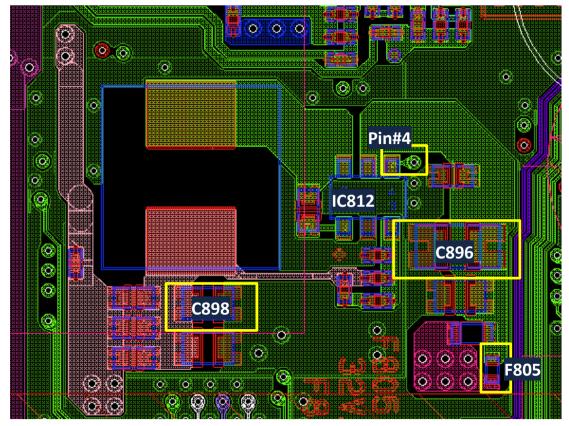
1.8V\_M5

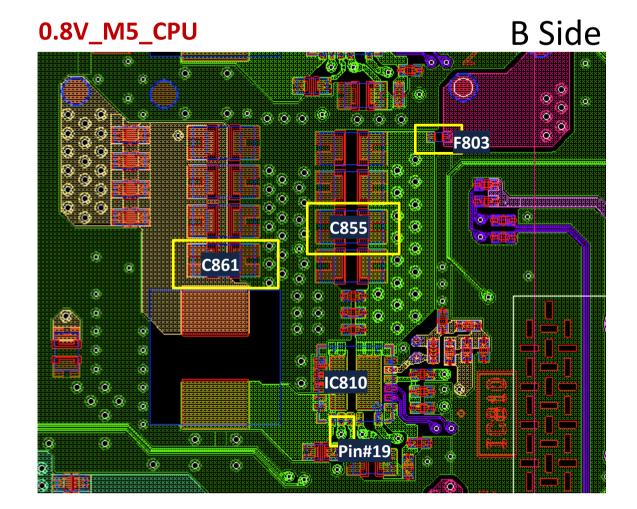




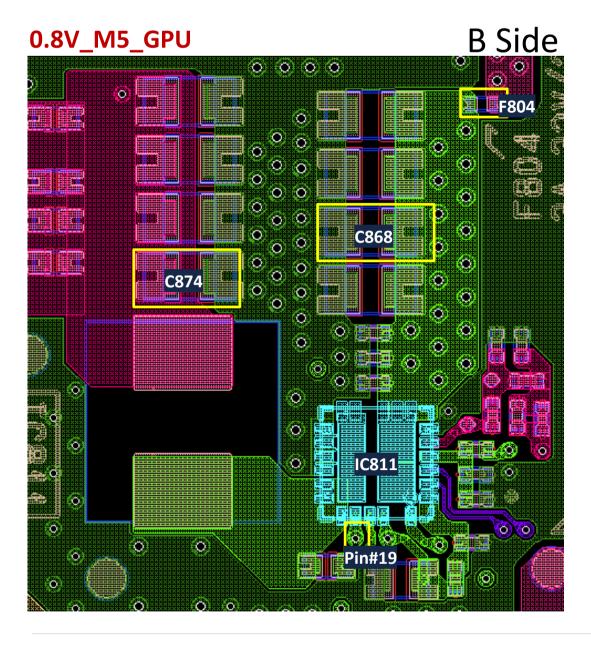
### **Checking Point**

1.0V\_M5 B Side

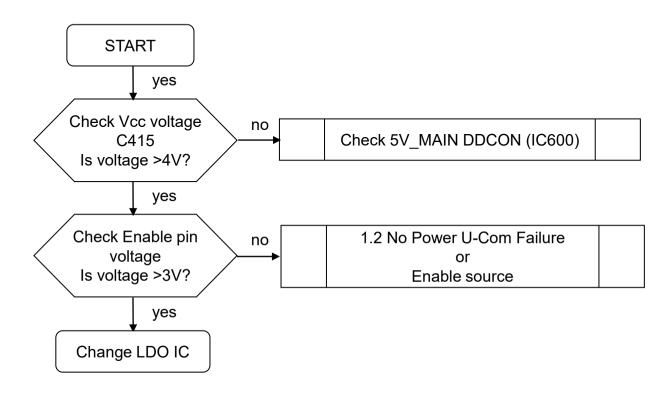




### **Checking Point**



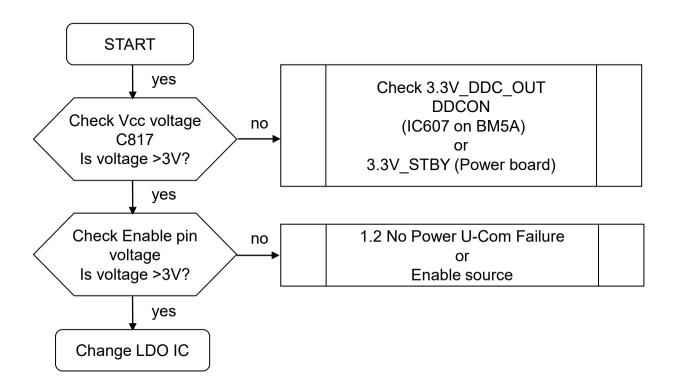
### 1.3 No Power DDCON/LDO (LDO Check)



### Please refer page 24 for Ref number.

Board	Operation	IC Ref	Voltage supply
BM5A	LDO	IC403	3.3V_MAIN_H

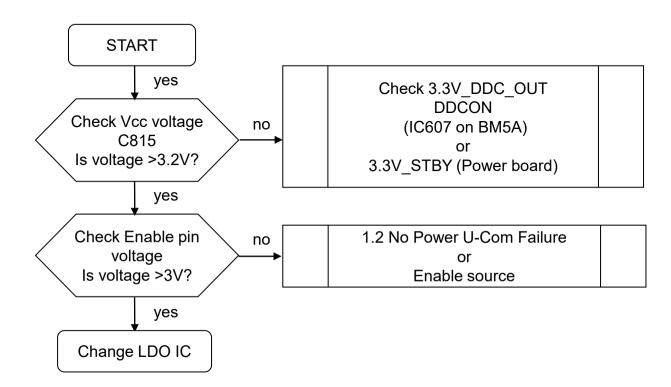
## 1.3 No Power DDCON/LDO (LDO Check)



Please refer page 24 for Ref number.

Board	Operation	IC Ref	Voltage supply	
BM5A	LDO	IC806	1.8V_M5_ET_STBY	

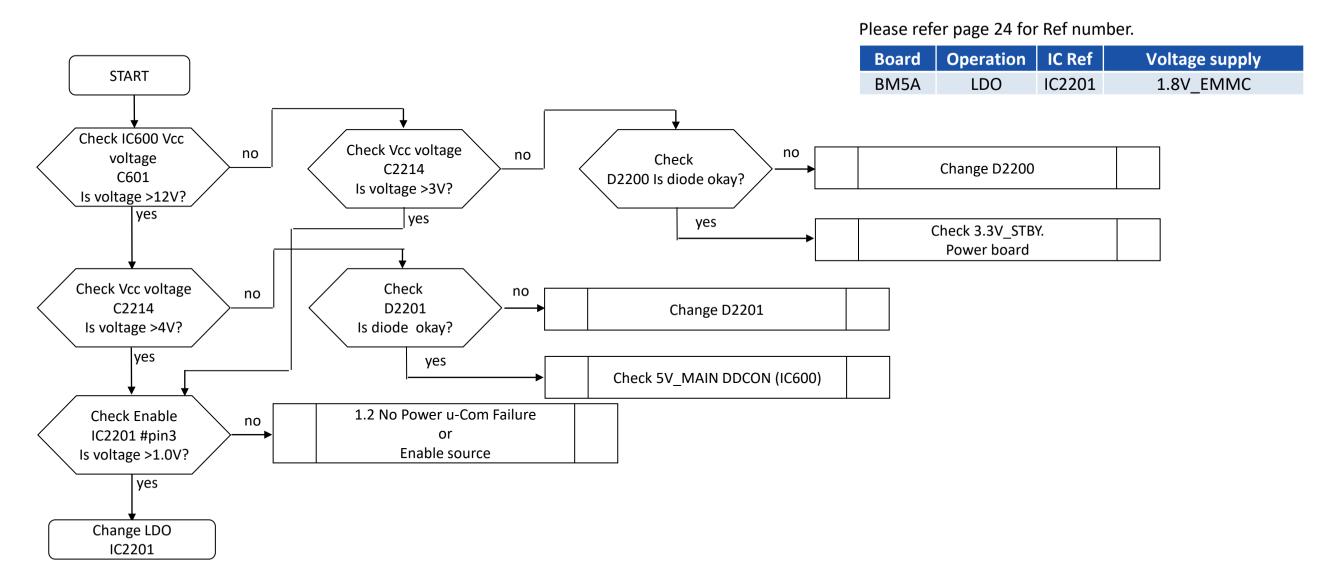
## 1.3 No Power DDCON/LDO (LDO Check)



## Please refer page 24 for Ref number.

Board	Operation	IC Ref	Voltage supply	
BM5A	LDO	IC809	3.3V_M5_STBY	

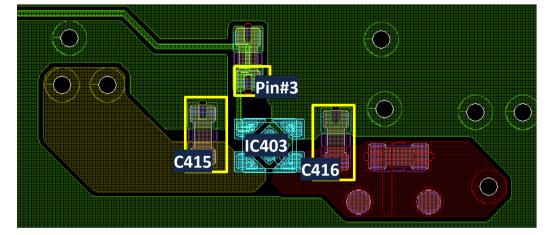
## 1.3 No Power DDCON/LDO (LDO Check)

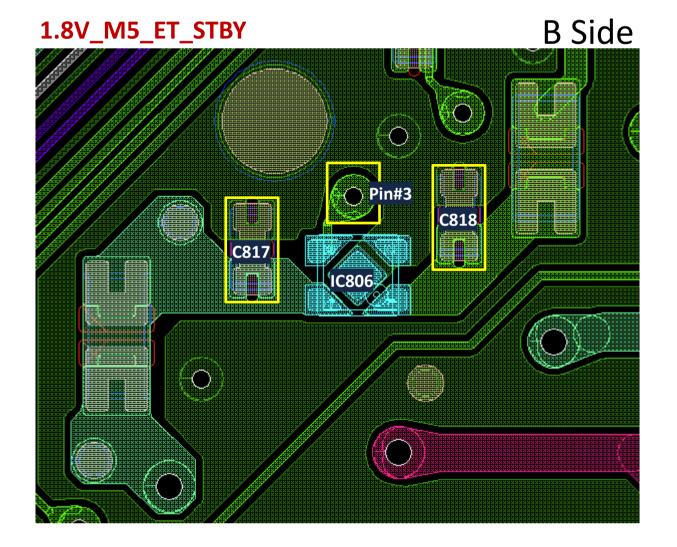


# **Checking Point**

3.3V\_MAIN\_H

**B** Side

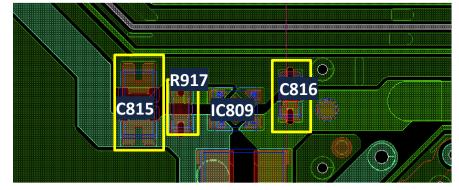




# **Checking Point**

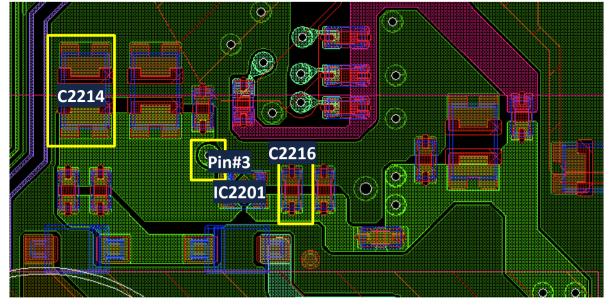
3.3V\_M5\_STBY

B Side

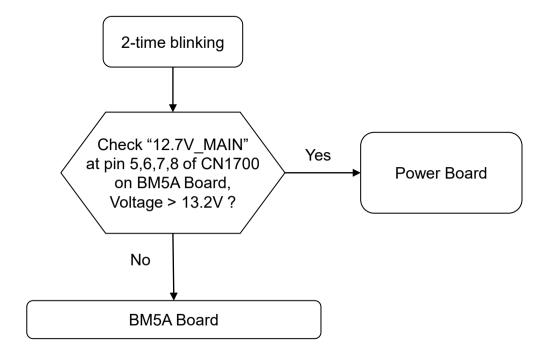


1.8V\_EMMC

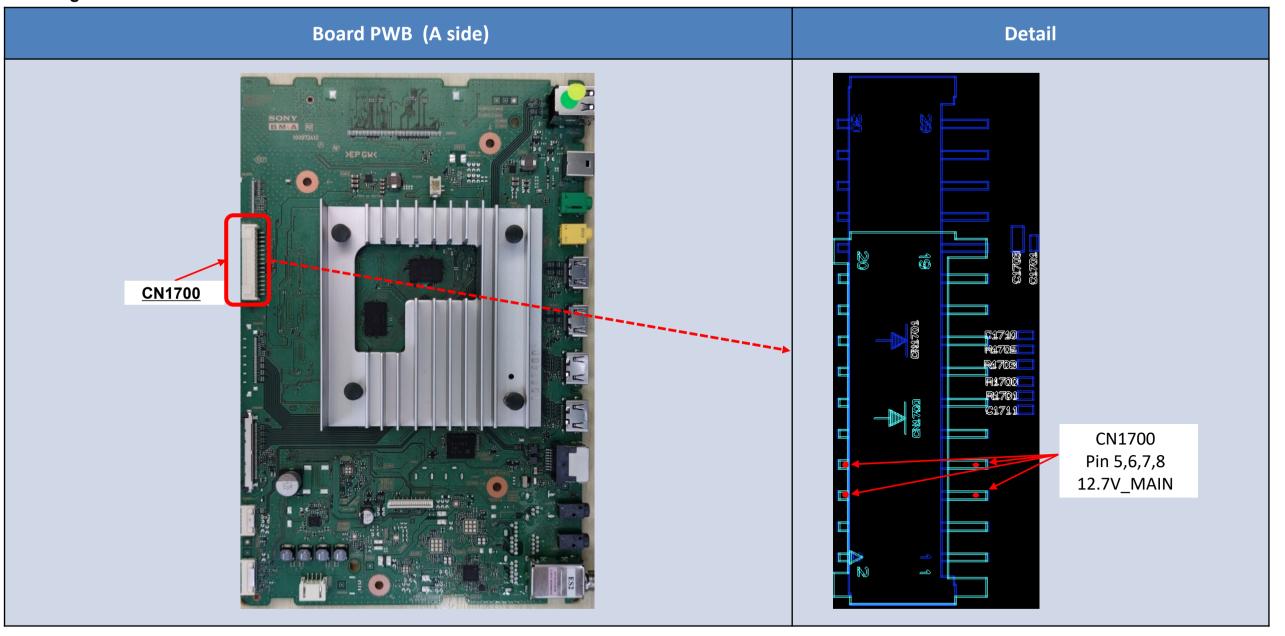




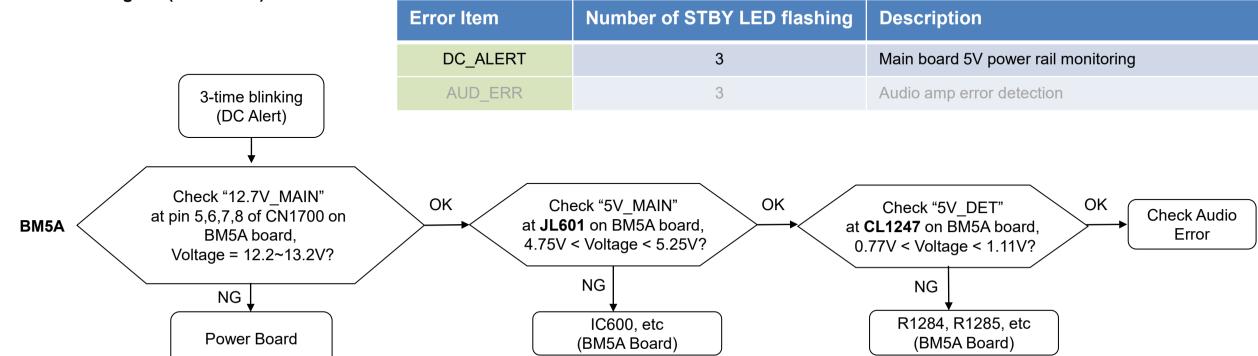
# 2.0 LED Blinking: 2x (Main power Error)



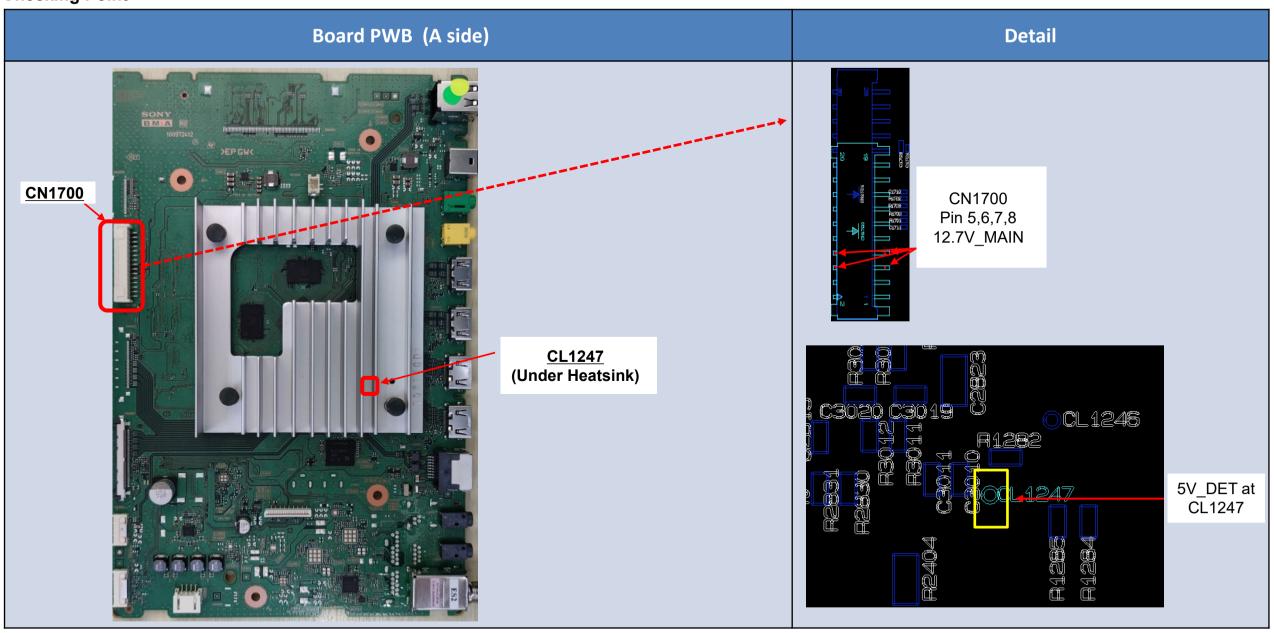
# **Checking Point**



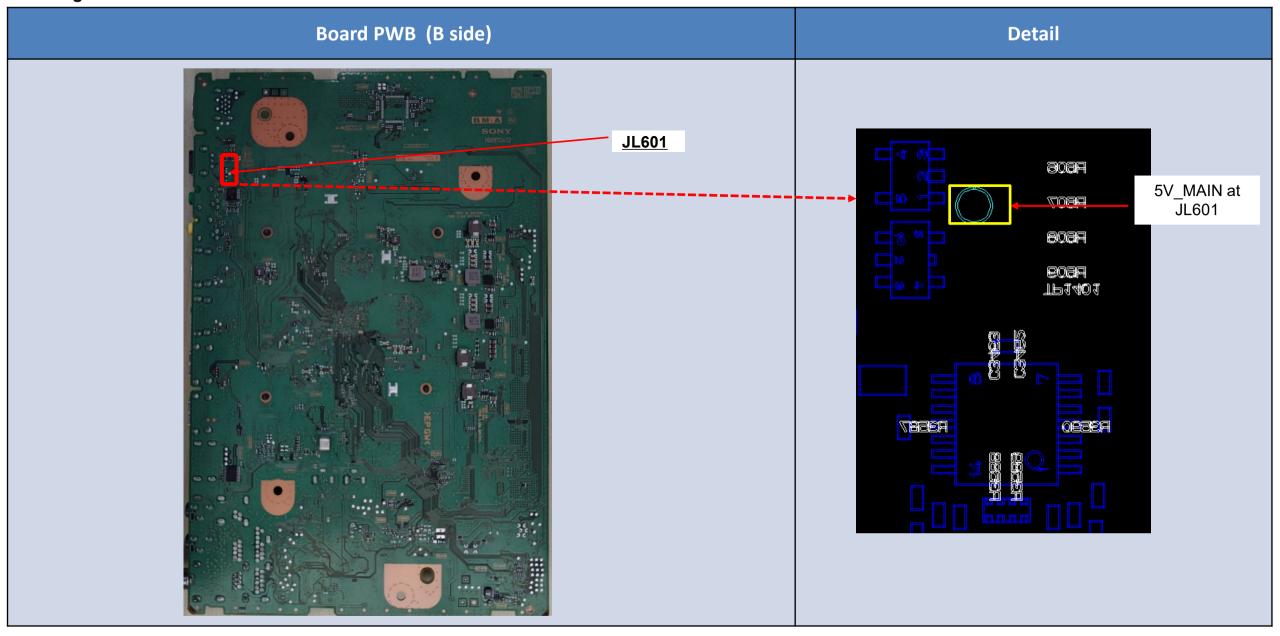
## 2.1 LED Blinking: 3x (DC ALERT)

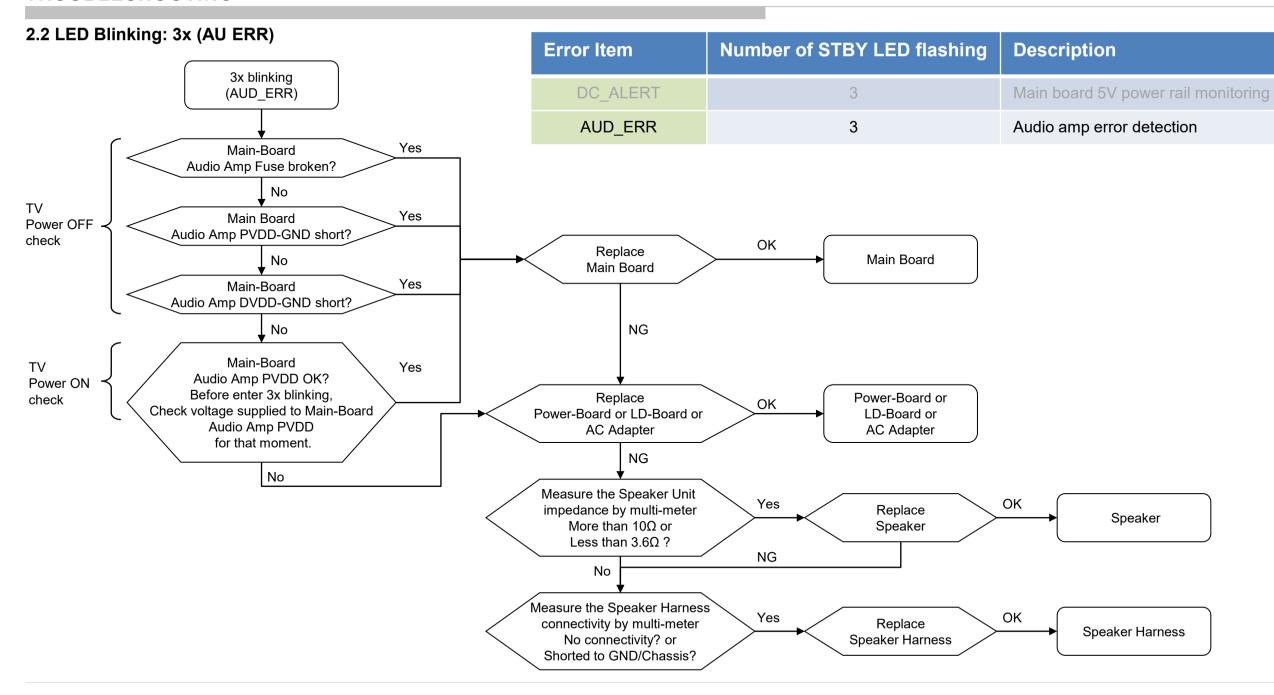


## **Checking Point**



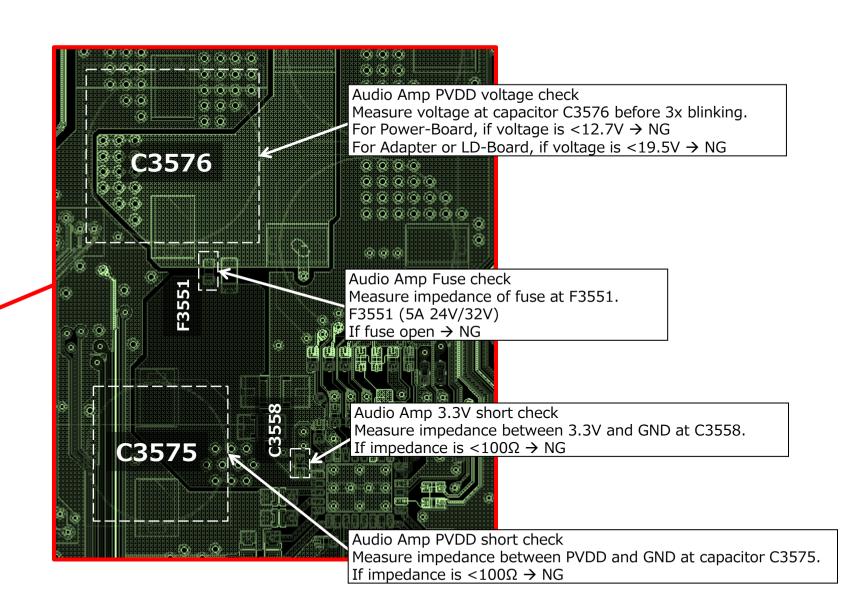
# **Checking Point**



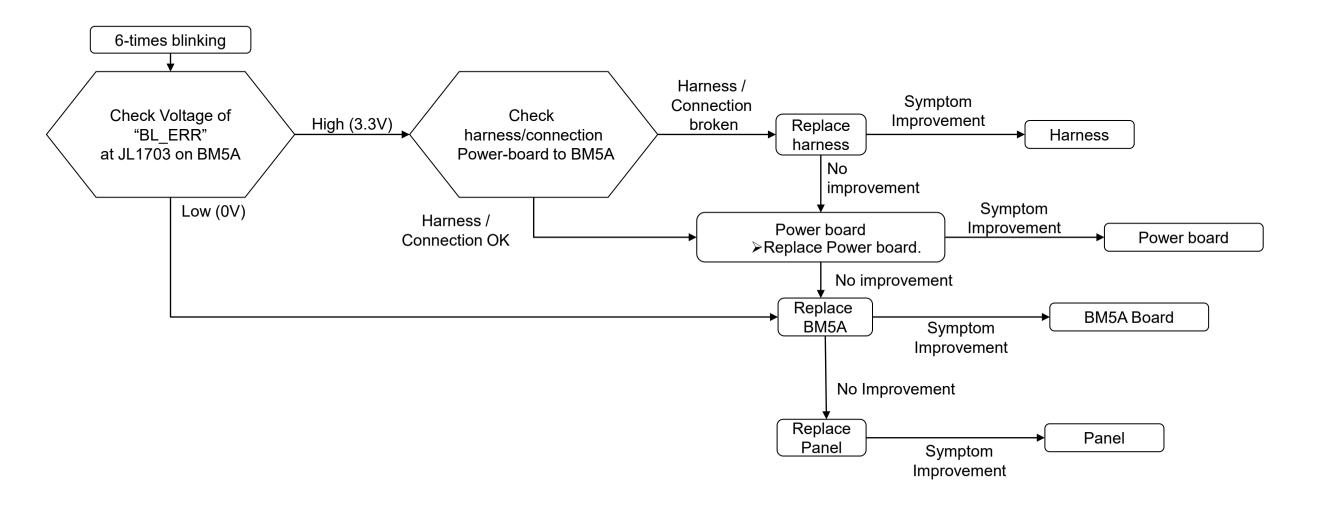


## 2.2 LED Blinking: 3x (AU ERR)

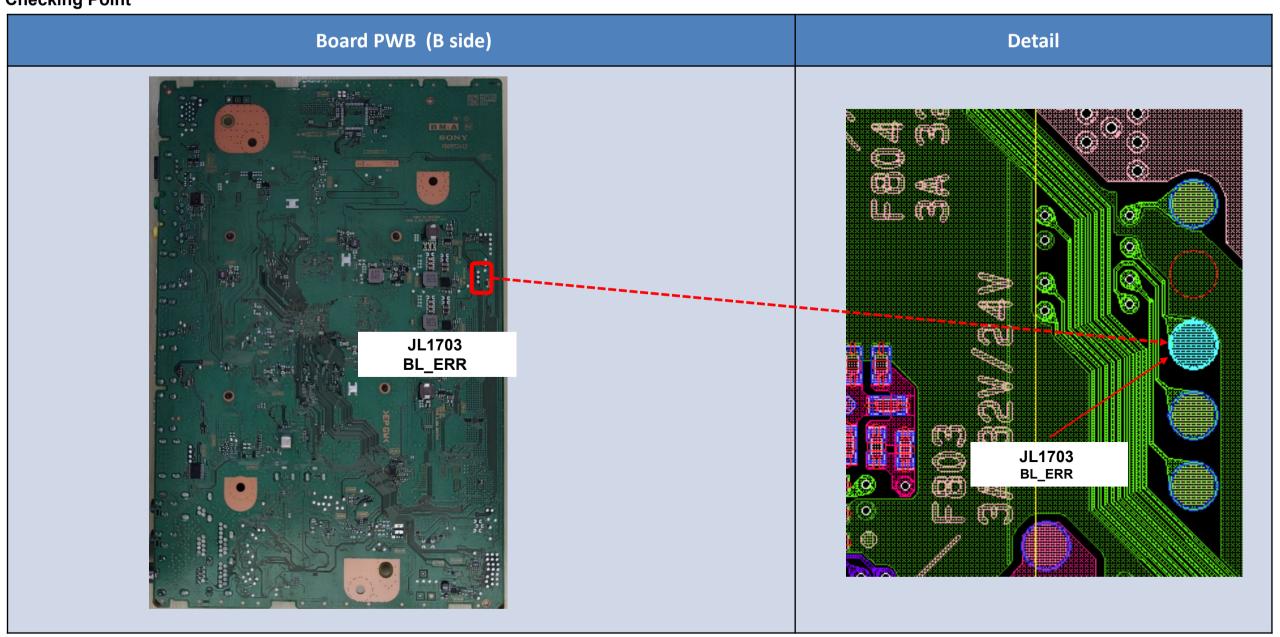




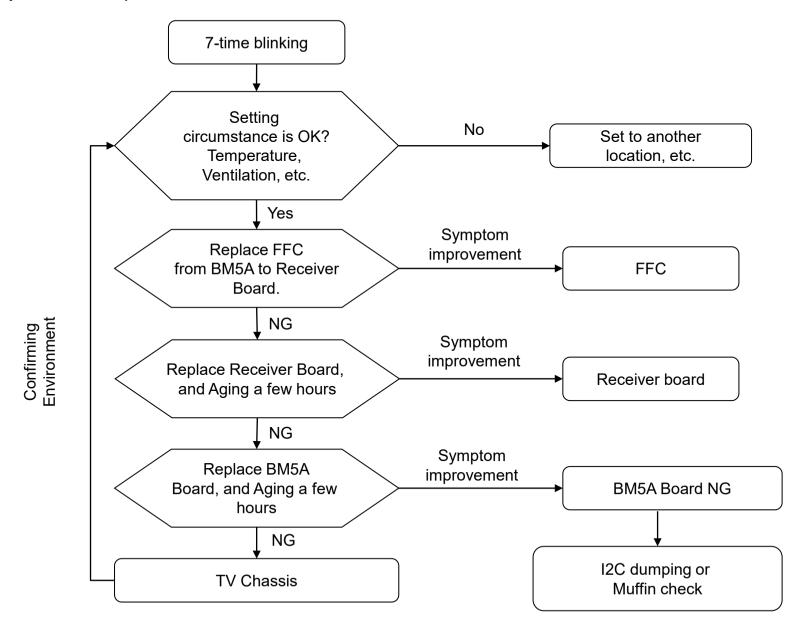
## 2.6 LED Blinking: 6x (Backlight Error)



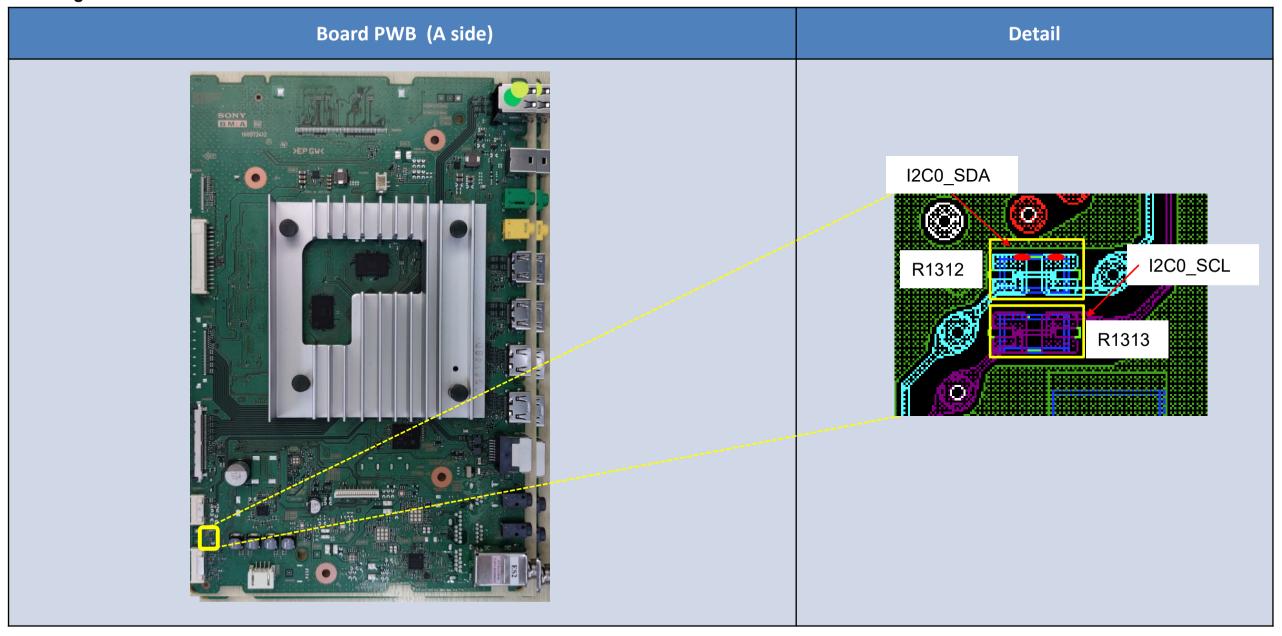
# **Checking Point**



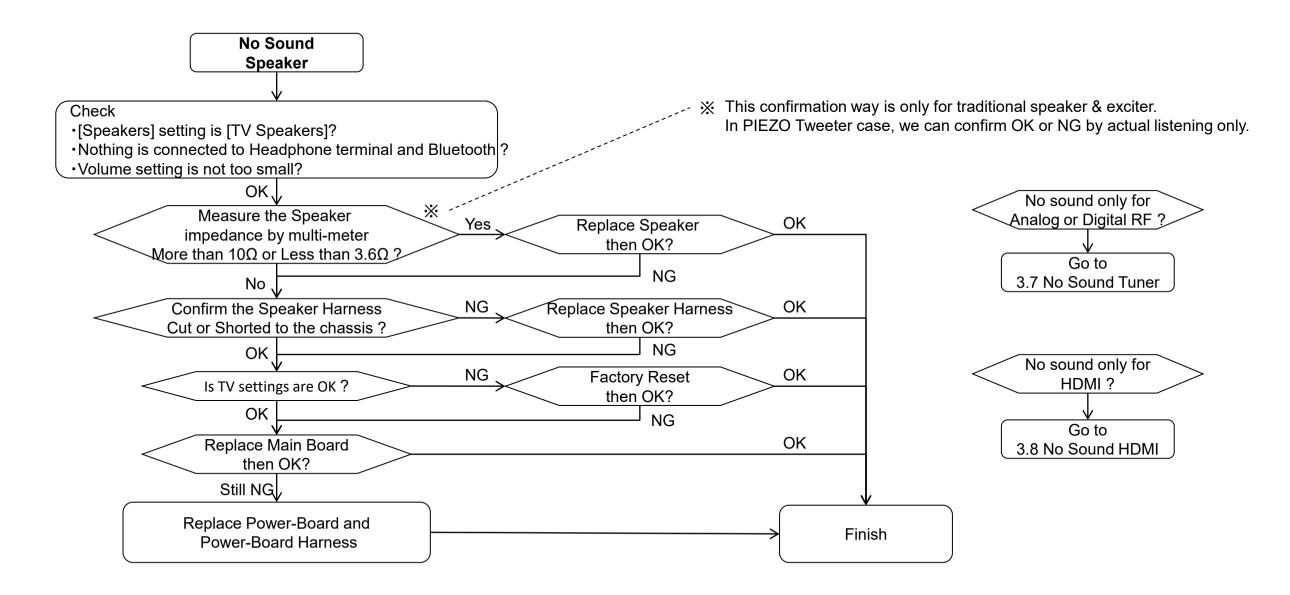
## 2.7 LED Blinking: 7x (Temperature Error)



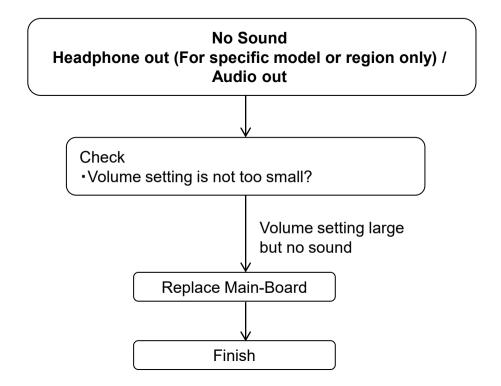
# **Checking Point**

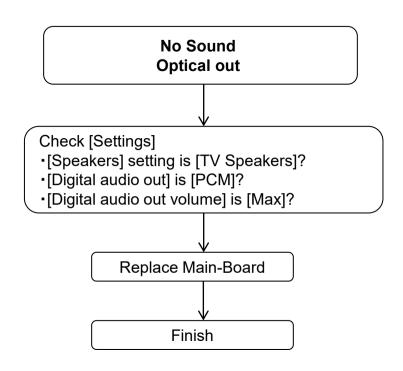


### 3.1 No Sound for Speaker

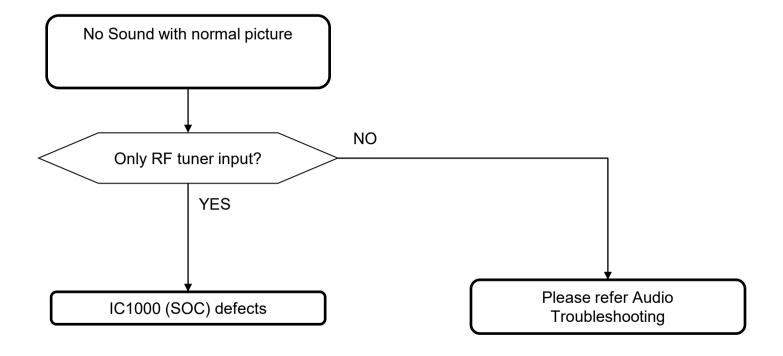


## 3.2 No Sound for Headphone out/ Audio out / Optical out

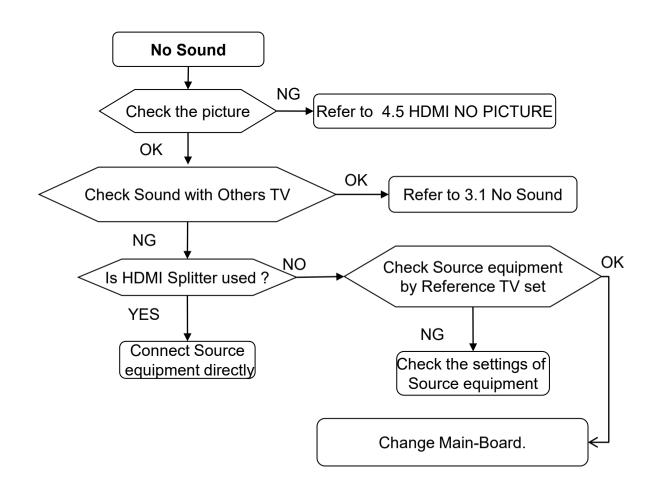


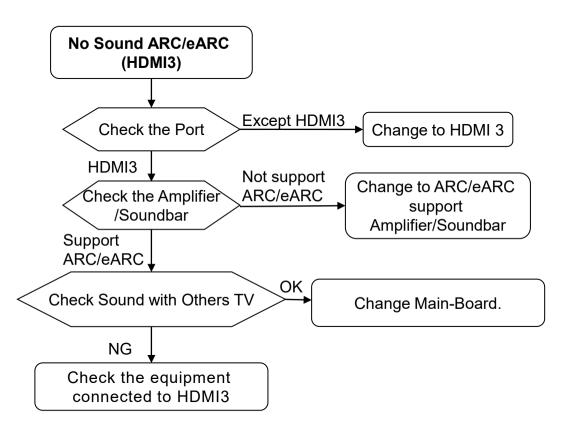


## 3.7 No Sound at Tuner

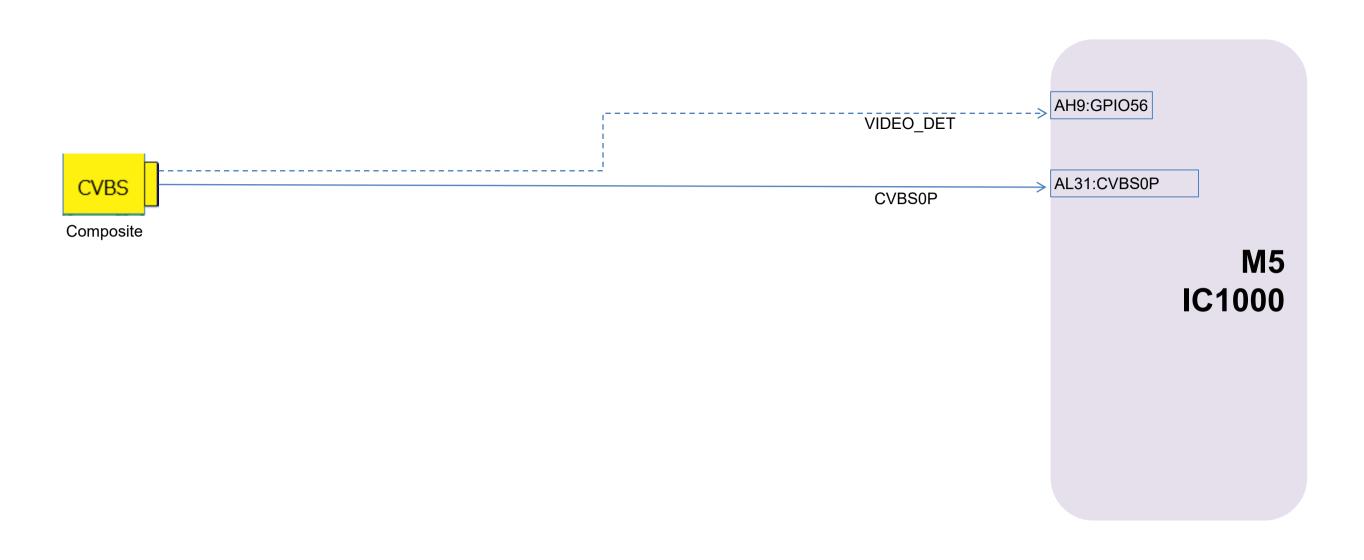


#### 3.8 No Sound HDMI 1/2/3/4





# 4.1 Analog Video Signal Path

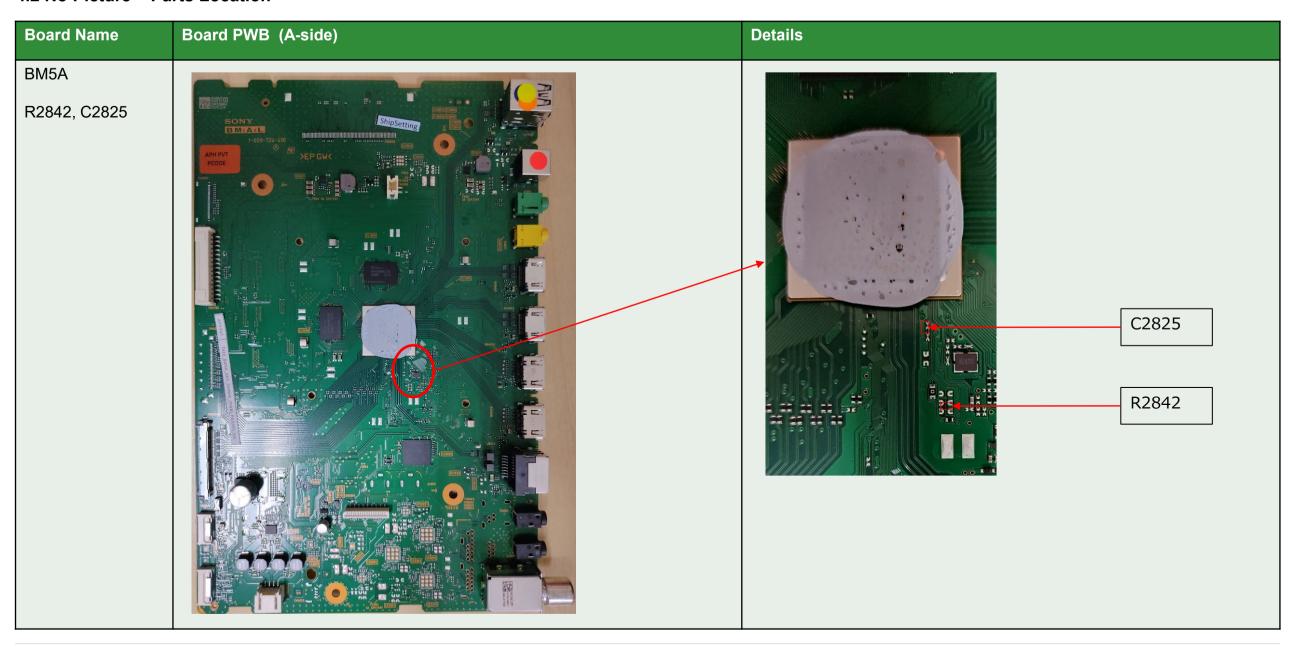


#### 4.2 No Picture – Investigation flow Checking condition: - TV ON. \*AV conversion cable is connected to conversion jack input (Yellow) at TV side. Composite input cable is connected to composite source output. Video - TV UI Display : Video in(WW)/AV in(EU) No Picture OK (Vpp: 3.3 V) No Check if Analog Video Check VIDEO DET signal at R2841 J2800 Connectivity Input UI is selectable? Is it 3.3V? Problem. Yes by using any Oscilloscope NG (Vpp: 0 V) \*\*Check all parts condition NG (Vpp: 0 V) Check waveform at CVBS0P line. OK between C2825 and IC1000. [D2800, VR2800, R2843, Is it Vpp: 0.56V? R2844, R2845, R2848, R2849, R2842, C2831] OK (Vpp: 0.56 V) \*AV conversion cable spec NG J2800 Connector Problem. Parts Broken. (Change connector) (Change Part) 3.5 mm :::::: 1: L IC1000 Problem. \*\* OK Condition : No part short-circuited 2: Video 3: Ground (Change Main board) NG Condition: Part short-circuited 4: R

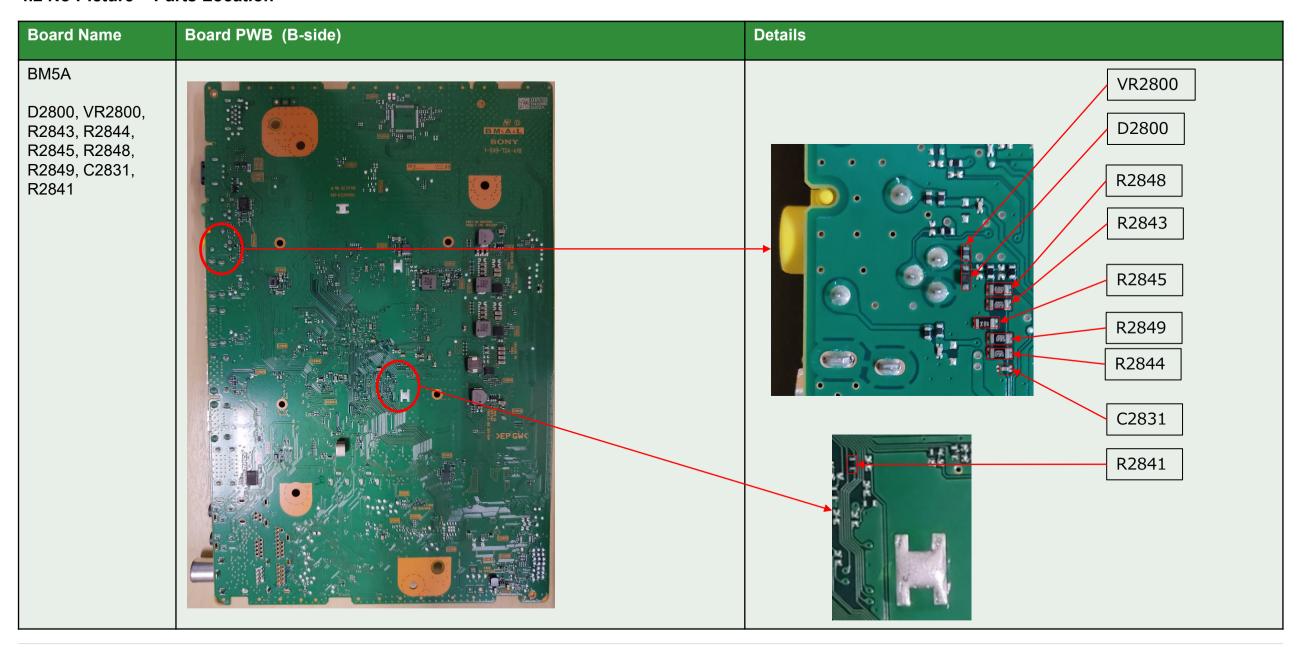
## 4.2 No Picture - Actions

Condition	Actions to be taken	
Muffin [IC1000] Problem	Change Main-board	
Connector Problem		
Connectivity Problem	Change Connector	
Parts Broken	Change Part according to ** remarks	

## 4.2 No Picture – Parts Location



## 4.2 No Picture – Parts Location



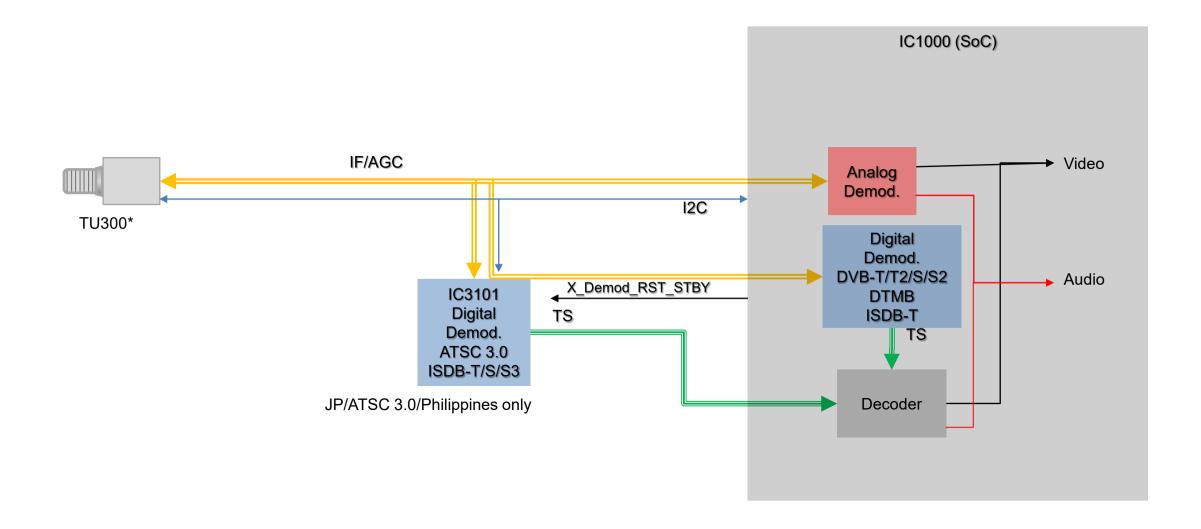
## **4.3 Input Skip Function**

## Under default condition;

If user insert analog video cables into video jacks, the Video/Component will be highlighted and can be selected. The detection mechanism is based on below tables.

Input	Signal	Non-Detect (Typical)	Detect (Typical)
VIDEO IN	VIDEO_DET IC1000 AH9-GPIO56	0V	3.3V

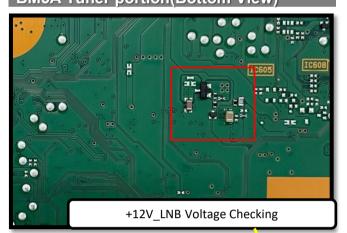
## 4.4 No Picture at Tuner

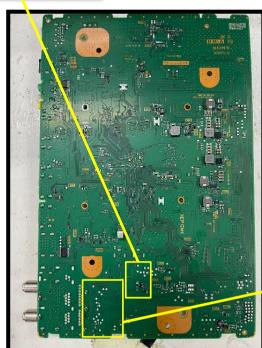


#### 4.4 No Picture at Tuner Notes: I2C - Parts for I2C SDA line: R3036, C3005 - Parts for I2C SCL line: R3035, C3006 RF input no picture / noisv picture Waveform confirmation point • I2C TU SDA line: JL3013 Check RF source cable • I2C TU SCL line : JL3012 Change RF cable and antenna and antenna, OK? NG Notes: Demodulator OK - Digital Tuning 1 : SoC inside demodulator Check Tuner power line: - Digital Tuning 2: On board demodulator 3.3V at JL3019 = 3.3V? NG Please refer DDCON 1.0V at FB3102=1.0V? (NA ATSC3.0. JP) \*1: Except US ATSC3.0, Please refer Digital Tuning 2 troubleshooting 1.0V at FB3103=1.0V(PA ISDB) OK NG All broadcasting channel Check part mounting condition NG Change NG parts connected cannot be received? for I2C SDA & SCL line. (Refer Note I2C) to I2C bus OK OK Satellite Terrestrial/Cable Check LNB power line NG Digital 12V at C3028 = 12V? Analog OK 12V LNB Voltage Checking For TW, NA-ATSC(MX/UC)\*1, For JP, NA ATSC 3.0, CH/HK, LA, PA, EU and PA ISDB Refer Analog Tuning Refer Digital Tuning 1 Refer Digital Tuning 2

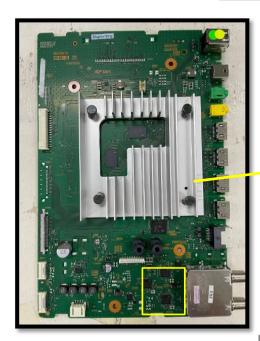
## 4.4 No Picture at Tuner

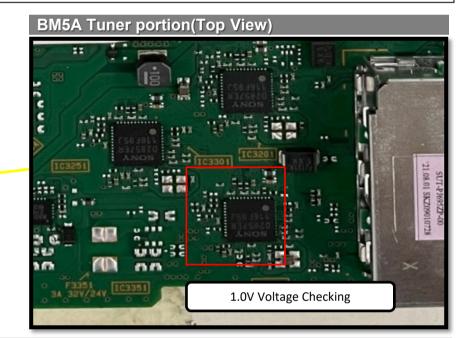
BM5A Tuner portion(Bottom View)



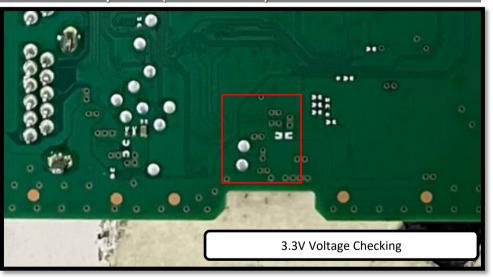


Note: Please refer to next slide for Ref.No and part location

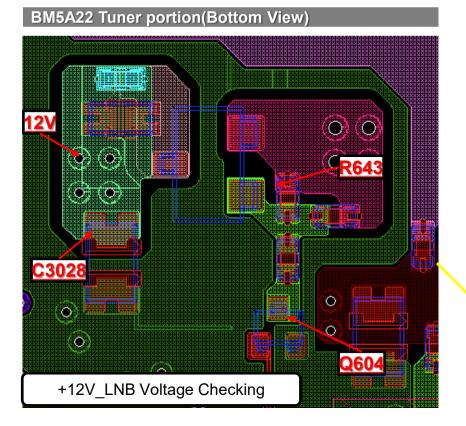


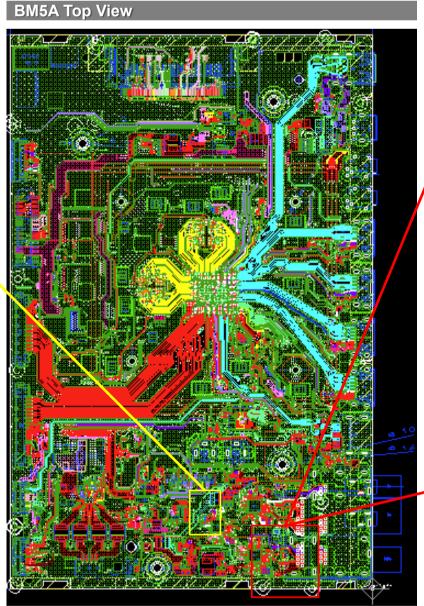


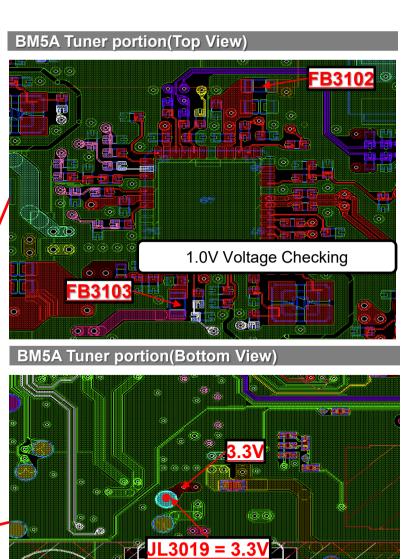
BM5A Tuner portion(Bottom View)



## 4.4 No Picture at Tuner - Tuner Power Lines: 3.3V, 12.0V, 1.0V

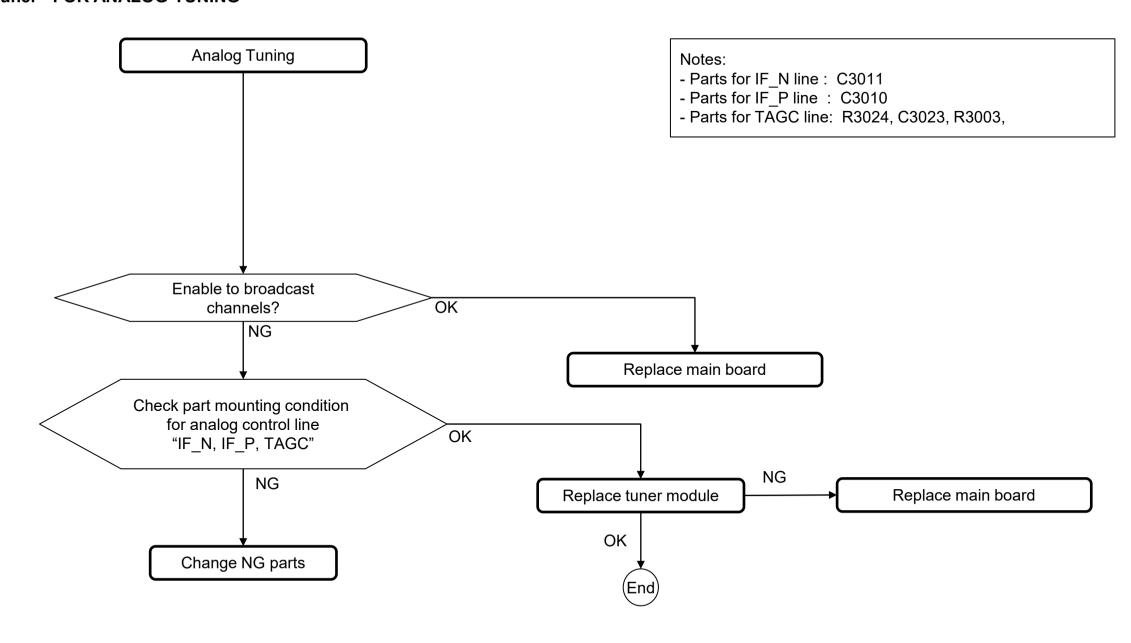




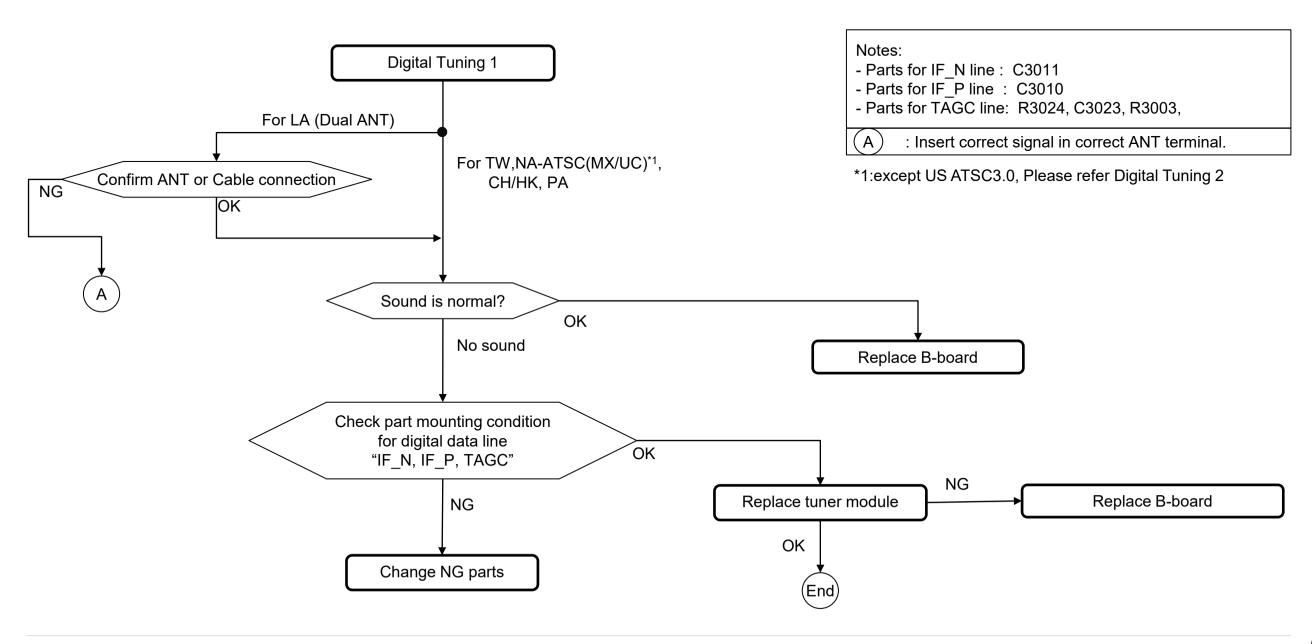


3.3V Voltage Checking

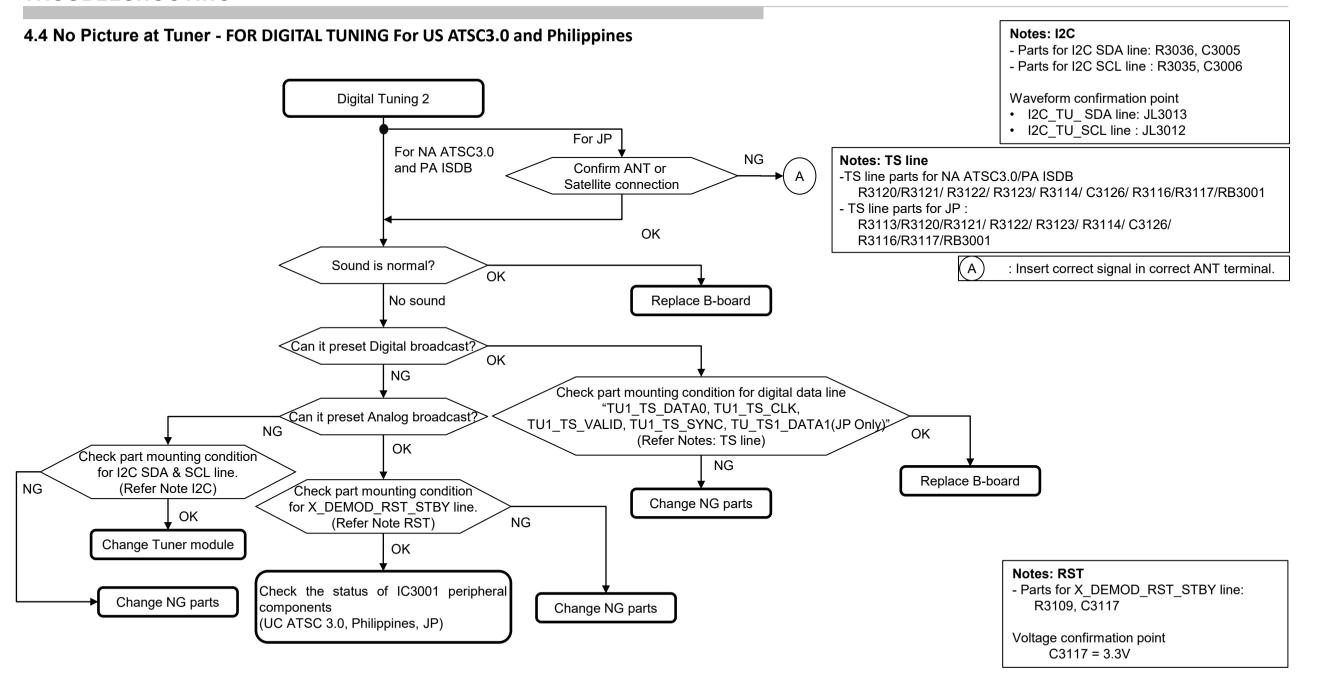
#### 4.4 No Picture at Tuner - FOR ANALOG TUNING



#### 4.4 No Picture at Tuner - FOR DIGITAL TUNING

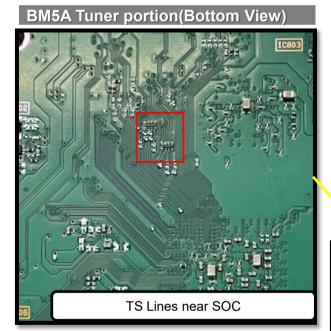


#### 4.4 No Picture at Tuner - FOR DIGITAL TUNING For US ATSC3.0 and Philippines Notes: I2C - Parts for I2C SDA line: R3036, C3005 - Parts for I2C SCL line: R3035, C3006 Digital Tuning 2 Waveform confirmation point • I2C TU SDA line: JL3013 • I2C\_TU\_SCL line : JL3012 For NA ATSC3.0 and PA ISDB Notes: TS line -TS line parts for NA ATSC3.0/PA ISDB R3120/R3121/ R3122/ R3123/ R3114/ C3126/ R3116/R3117/RB3001 OK Sound is normal? OK No sound Replace main board Can it preset Digital broadcast? OK NG Check part mounting condition for digital data line "TU1 TS DATA0, TU1 TS CLK, Can it preset TU1 TS VALID, TU1 TS SYNC, Analog broadcast? NG OK (Refer Notes: TS line) OK Check part mounting condition NG for I2C SDA & SCL line. Replace main NG (Refer Note I2C) Check part mounting condition board Change NG parts for X\_DEMOD\_RST\_STBY line. OK NG (Refer Note RST) Change Tuner module OK **Notes: RST** - Parts for X DEMOD RST STBY line: Check the status of IC3001 peripheral Change NG parts Change NG parts R3109, C3117 components (UC ATSC 3.0) Voltage confirmation point C3117 = 3.3V

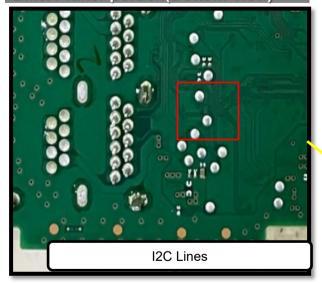


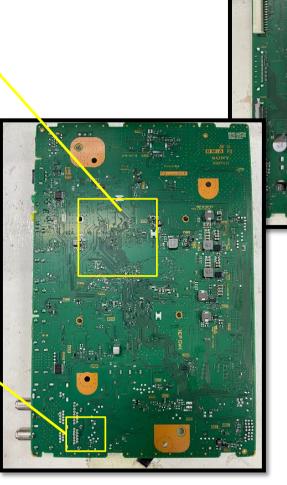
## 4.4 No Picture at Tuner

Note: Please refer to next slide for Ref.No and part location

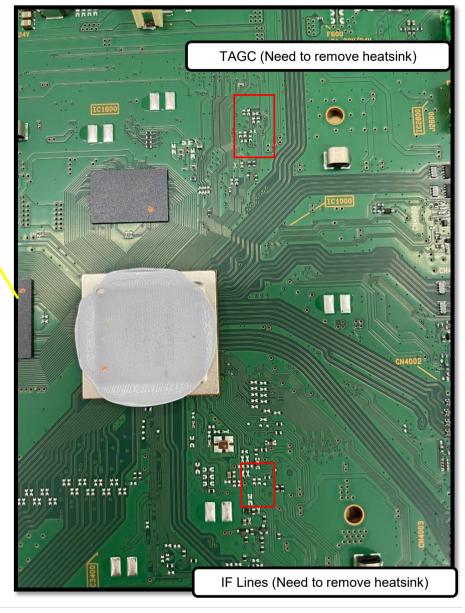


BM5A Tuner portion(Bottom View)

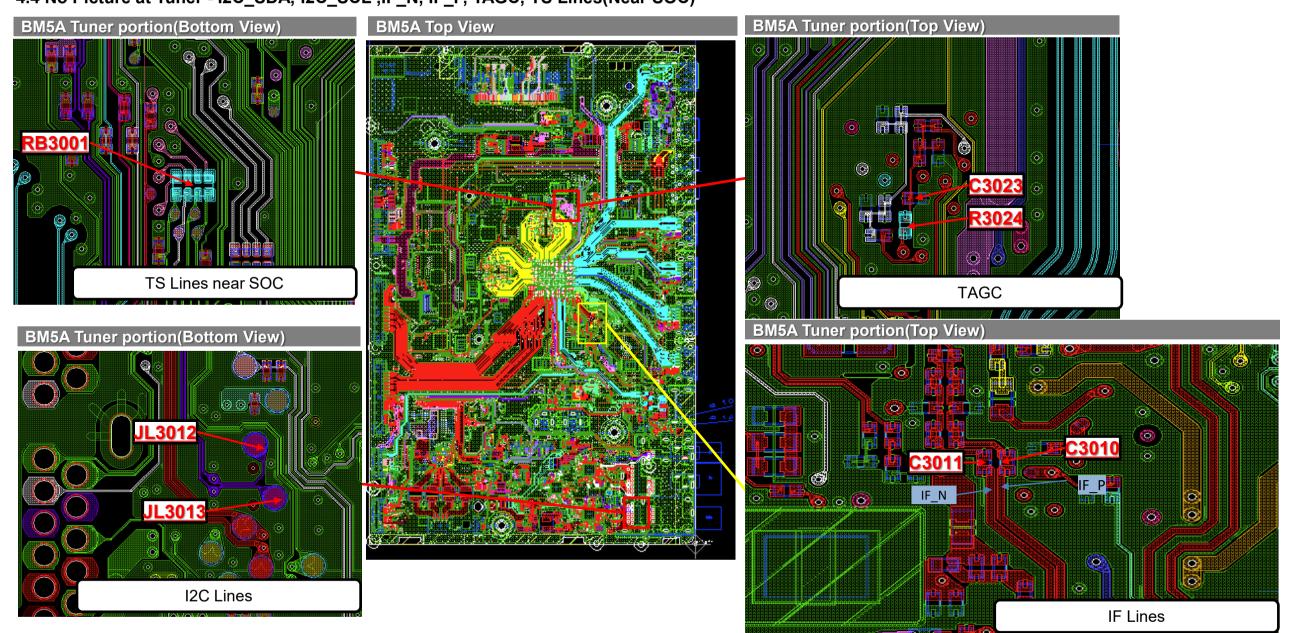




BM5A Tuner portion(Top View)



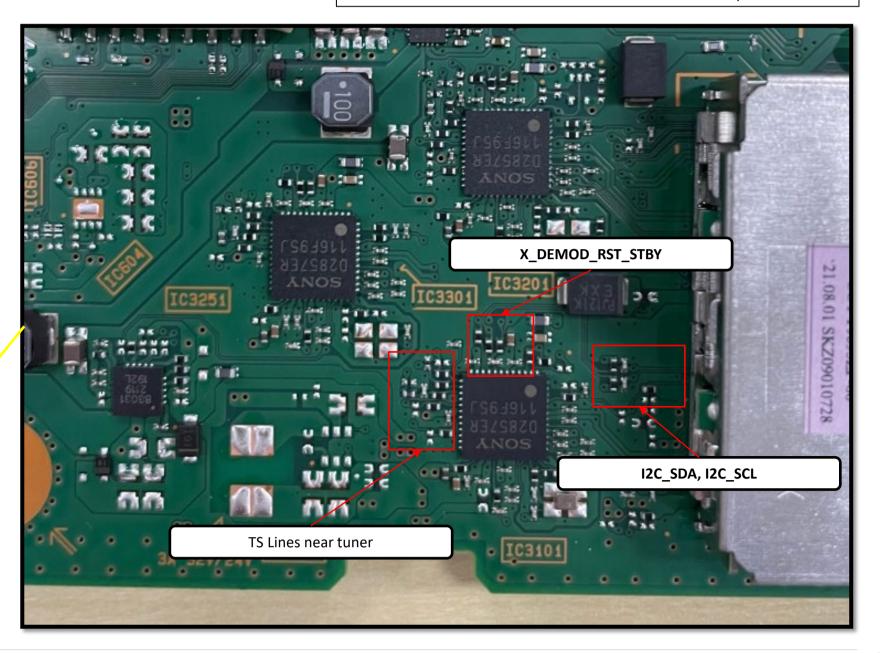
## 4.4 No Picture at Tuner - I2C\_SDA, I2C\_SCL ,IF\_N, IF\_P, TAGC, TS Lines(Near SOC)



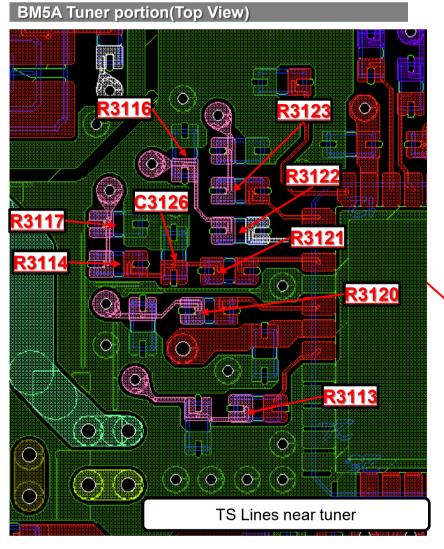
### 4.4 No Picture at Tuner

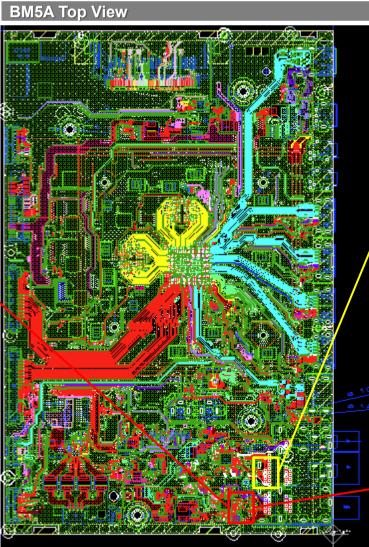
Note: Please refer to next slide for Ref.No and part location

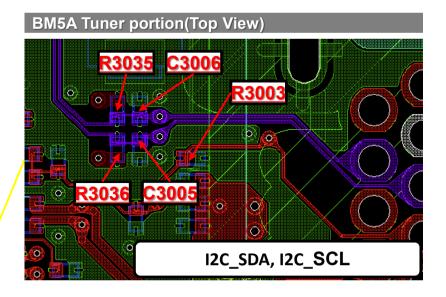


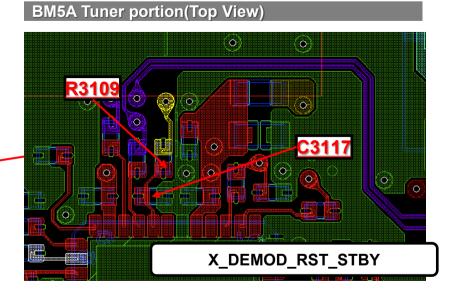


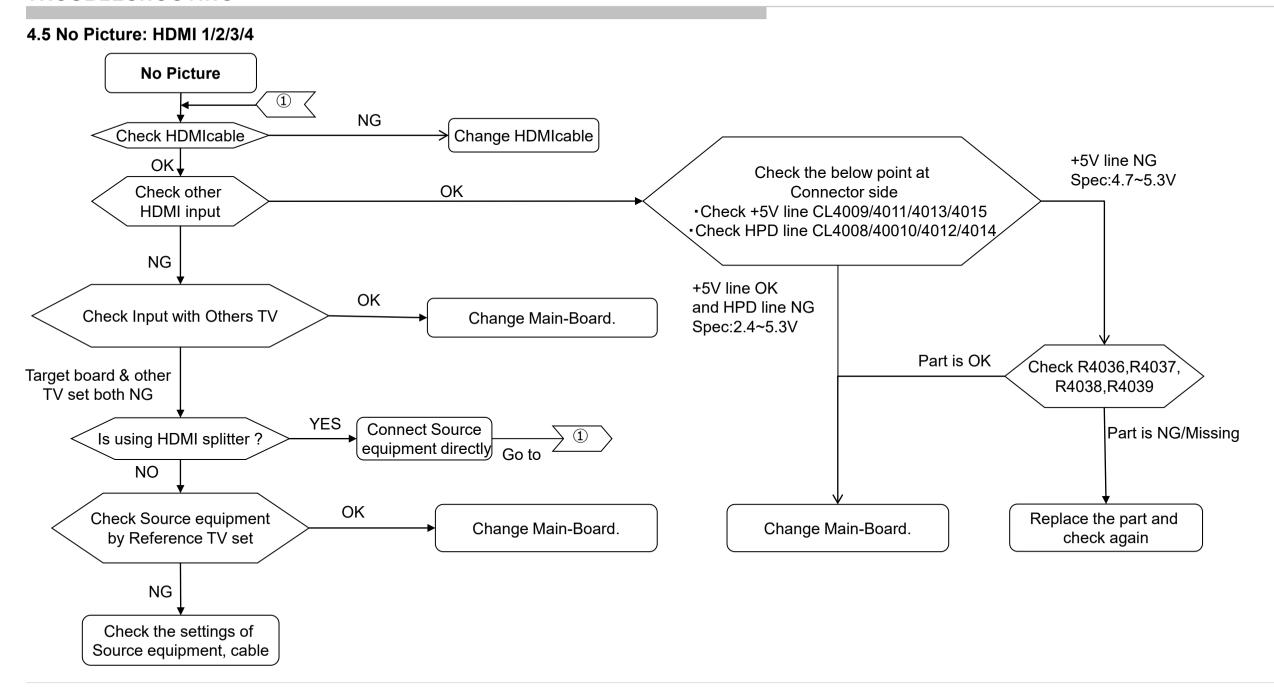
# 4.4 No Picture at Tuner - I2C\_SDA, I2C\_SCL, TS Lines(Near tuner), X\_DEMOD\_RST\_STBY











#### 4.5 No Picture: Check Points HDMI 1,2,3 & 4

HDMI 1

+5V part :R4036 +5V line :CL4009 HPD line :CL4008

HDMI 2

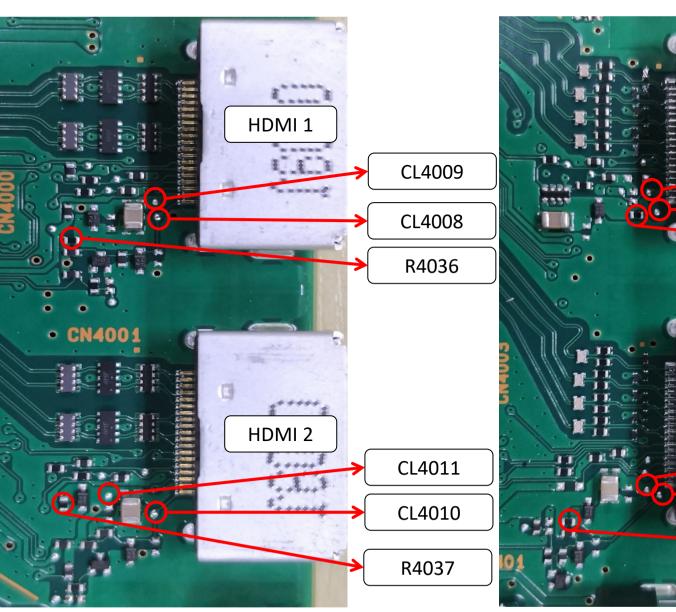
+5V part :R4037 +5V line :CL4011 HPD line :CL4010

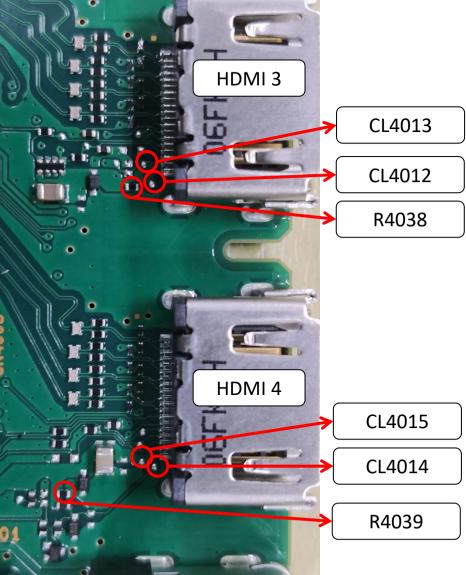
HDMI 3

+5V part :R4038 +5V line :CL4013 HPD line :CL4012

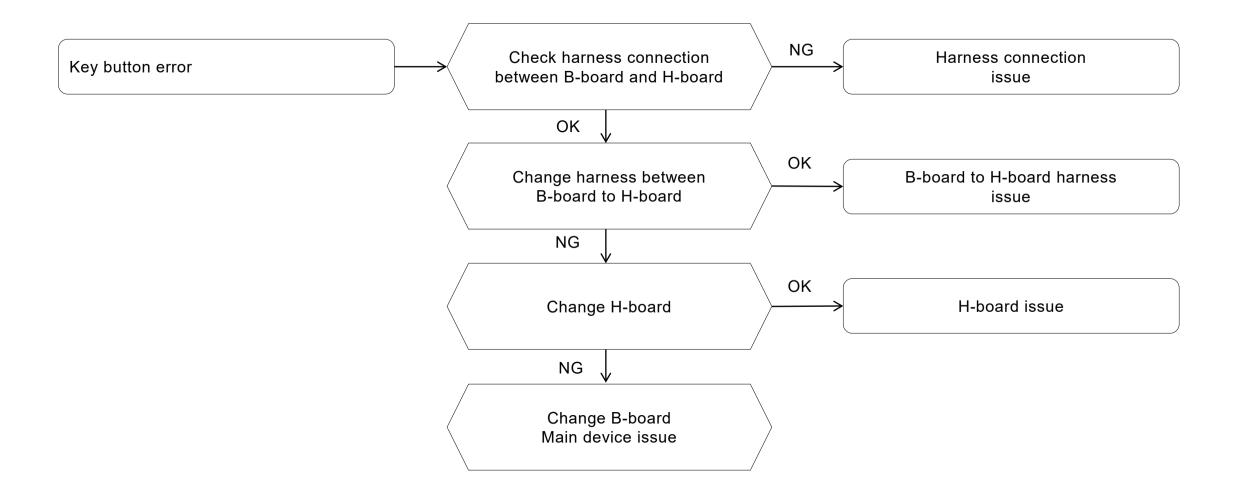
HDMI 4

+5V part :R4039 +5V line :CL4015 HPD line :CL4014

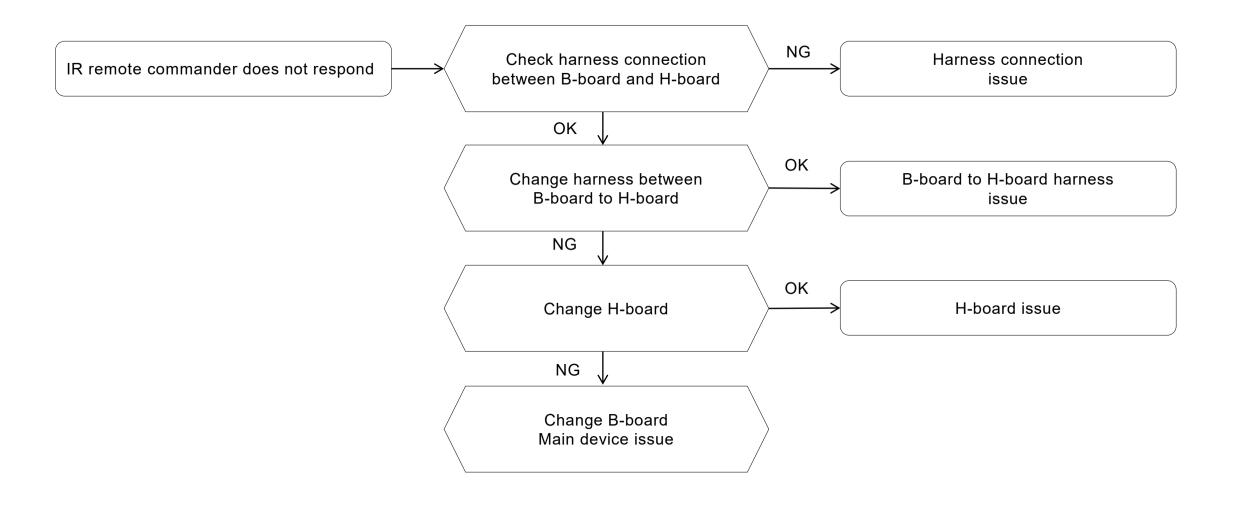




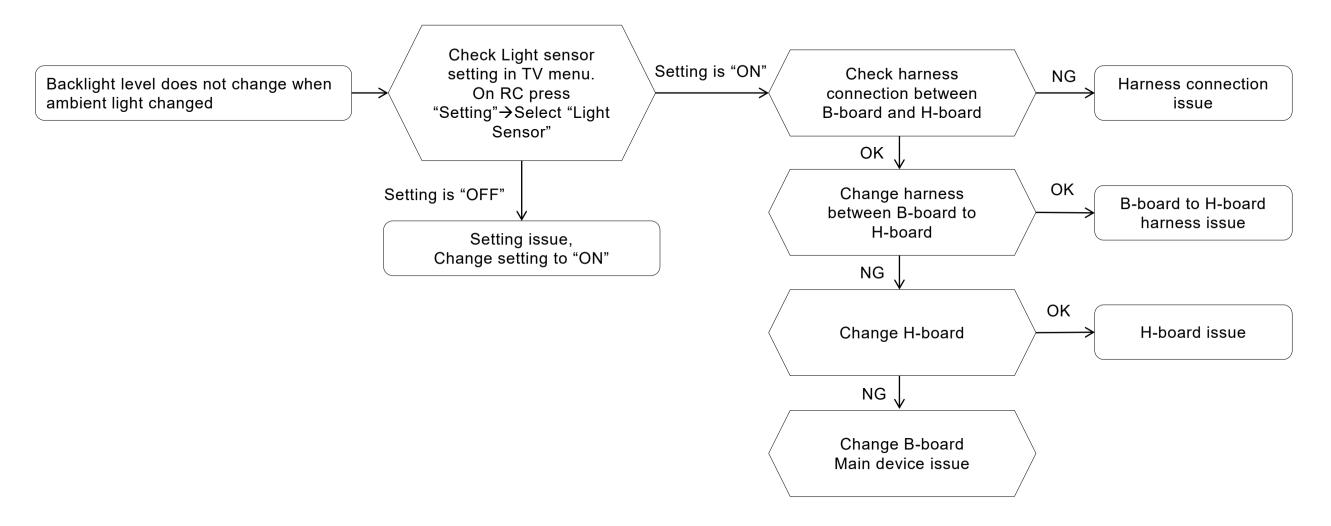
### 5.0 Key Switch Button Error



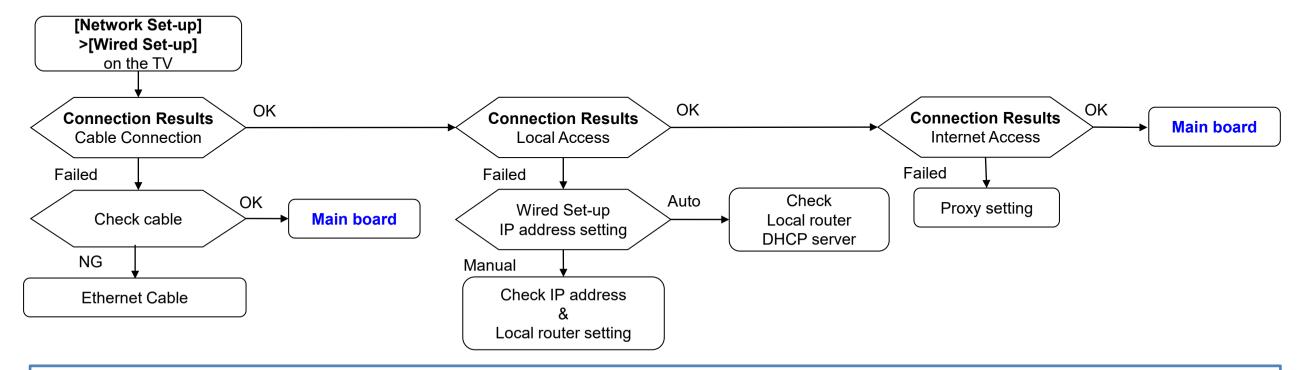
#### **5.1 IR Remote Commander Error**

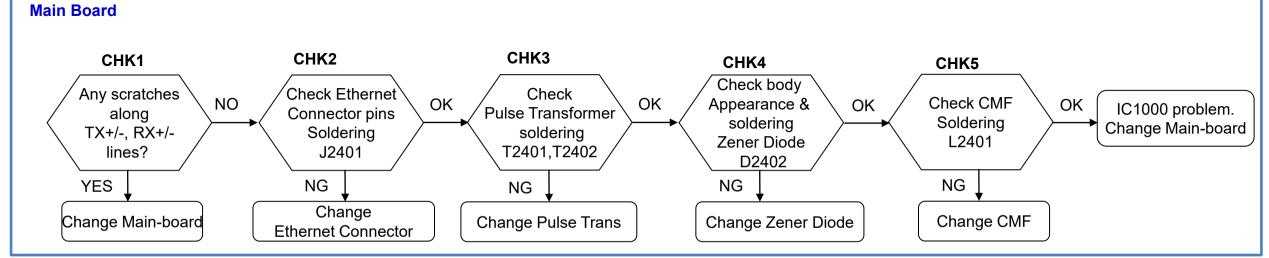


### **5.2 Light Sensor Error**

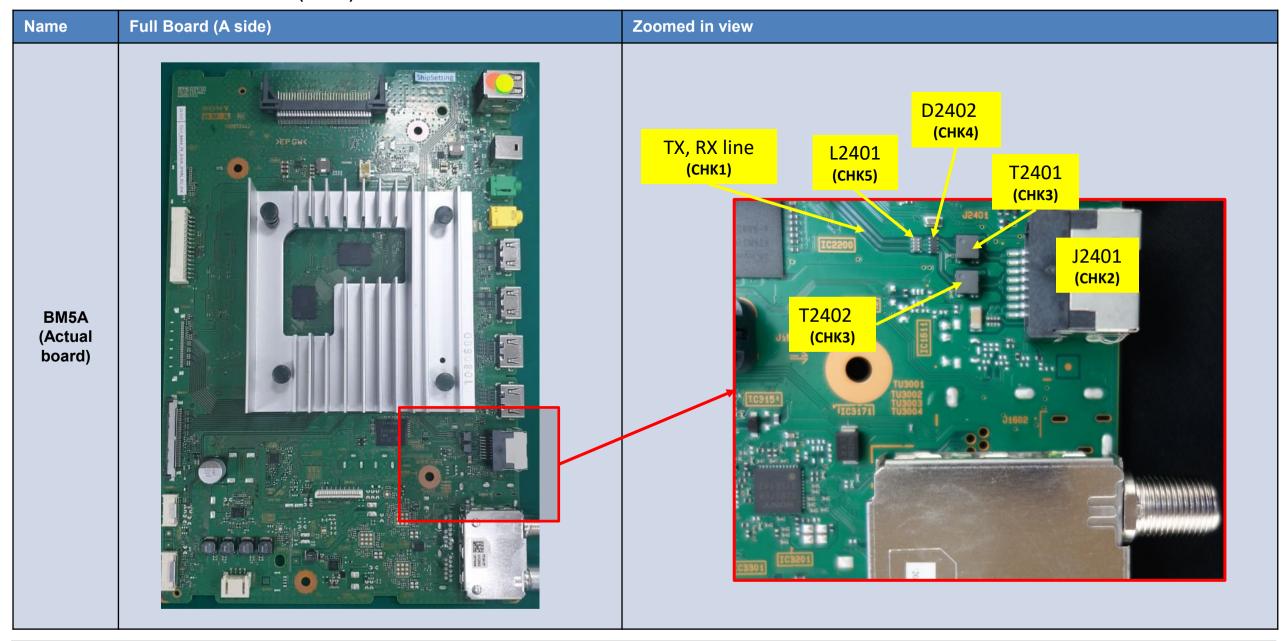


#### **6.0 Network Malfunction: Ethernet (wired)**

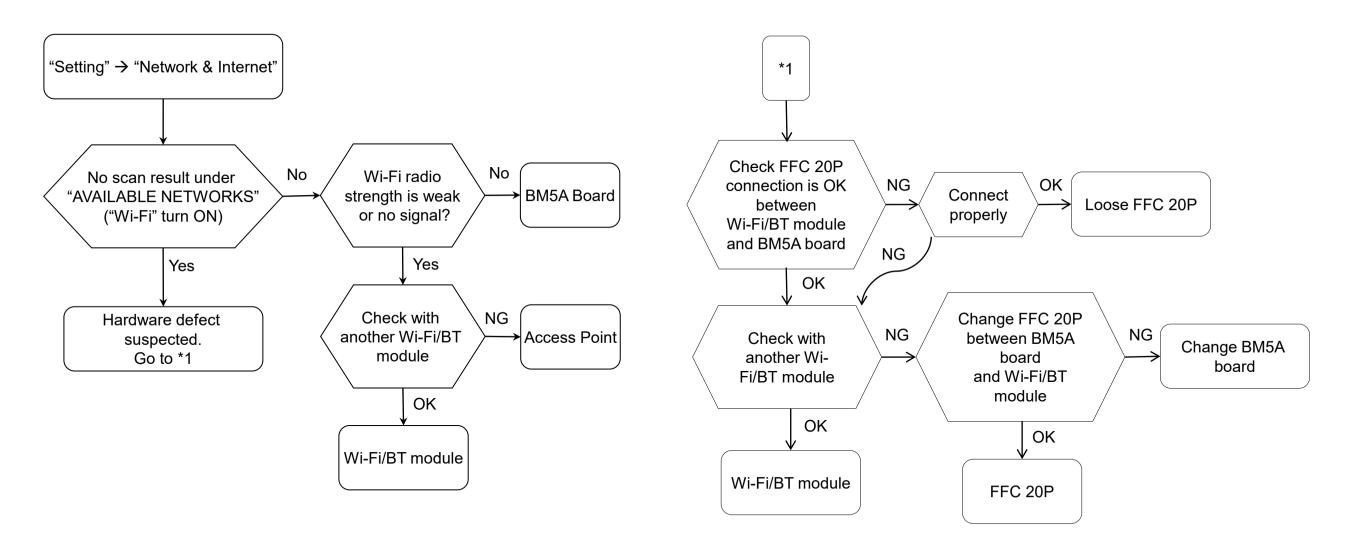




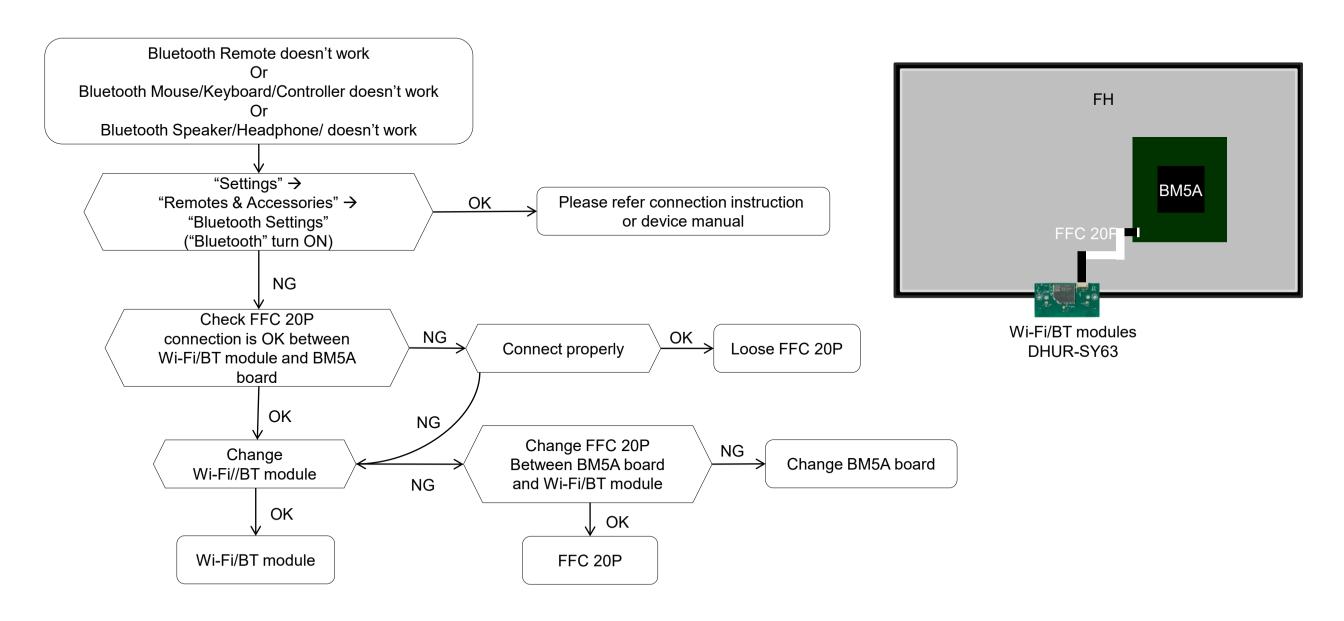
# **6.1 Network Malfunction: Ethernet (wired)**



#### 6.2 Wi-Fi Bluetooth - Wireless Network malfunction



#### 6.3 Wi-Fi Bluetooth - Bluetooth malfunction



### 6.3 Wi-Fi Bluetooth





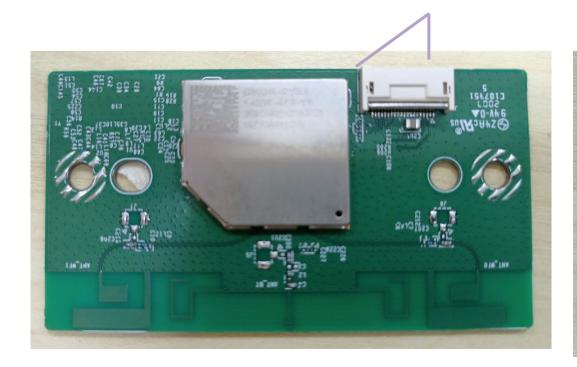




Wi-fi connector

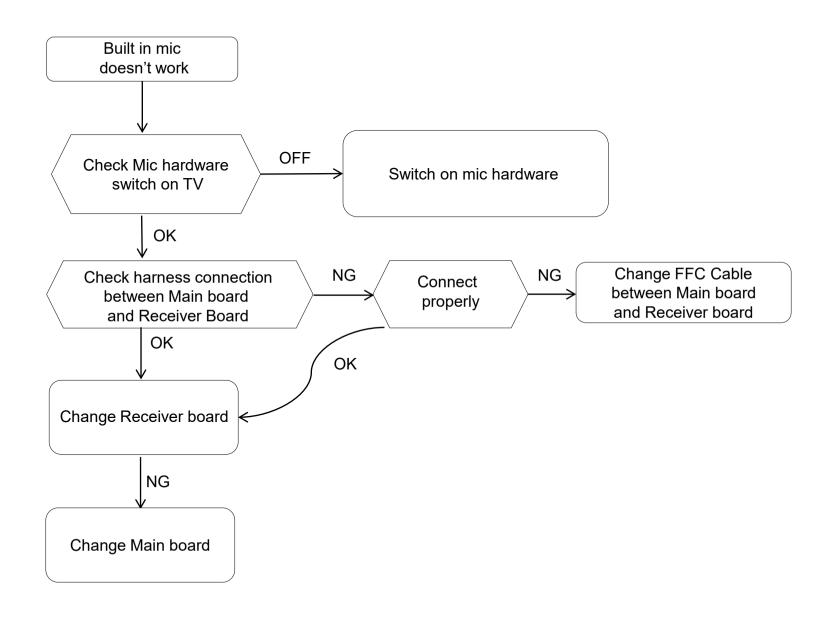
### Wi-Fi Module

### Wi-fi connector

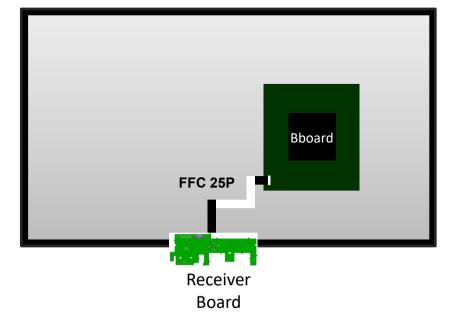




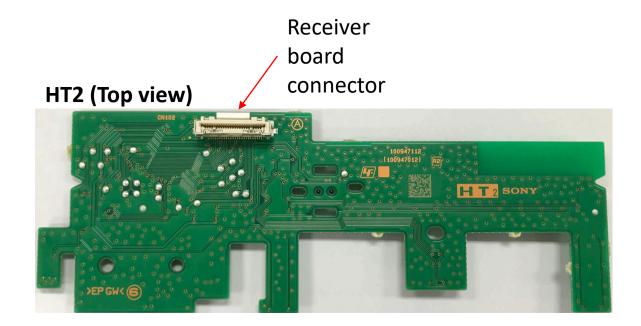
#### **6.4 Built in Mic Malfunction**



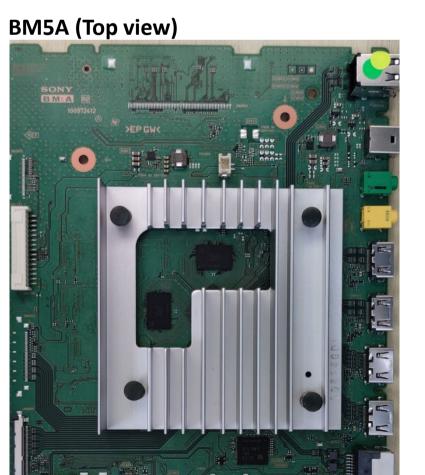
Main board: BM5A Receiver board: HT2



### **Board View**



Receiver board connector



USB Update

\*\*Caution:
1) Do not power off while the update is in progress.
2) Display may change depending on the model / SW version

1: Download USB image and unzip file.

2: Copy zip file to USB memory root folder.

3: USB memory insert TV.

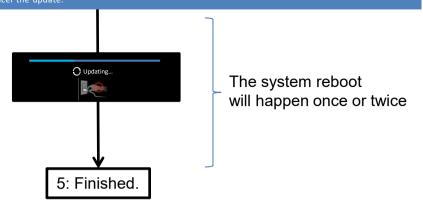
4-a: USB image is newer soft version.
Automatically show message and start update.
Please follow directions.

\*\*Caution:
1) Do not power off while the update is in progress.
2) Display may change depending on the model / SW version

4-b: USB image is not newer soft version.
Automatically show message.
Please follow directions.

# Updating your TV software...

During the software update, you can't use this TV. When the software update completes, the Illumination LED stops blinking and your TV restarts automatically. Please do not remove the USB flash drive until this blinking stops. The update takes about 10 minutes to complete.



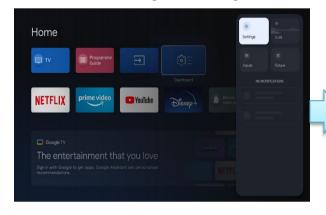


5: Finished.

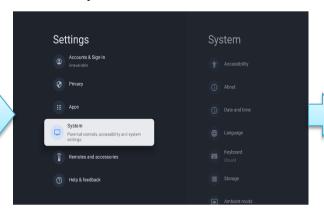
#### **SOFTWARE UPDATE & RESET**

### Factory Data Reset – with UI method

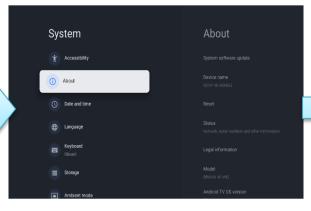
1. At Home Menu, go to Settings



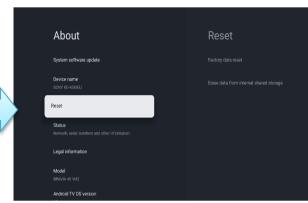
2. Select System / Device Preferences



3. Select 'About'

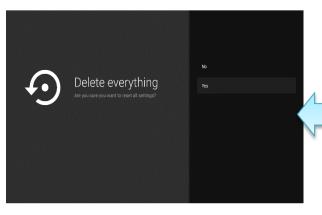


4. In About, Select 'Reset'

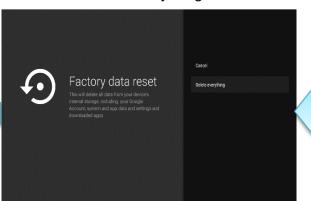




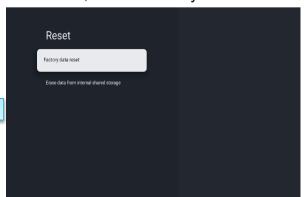
7. Select 'Yes'



6. Select 'Delete everything'



5. In Reset, Select 'Factory data reset'



### **SOFTWARE UPDATE & RESET**

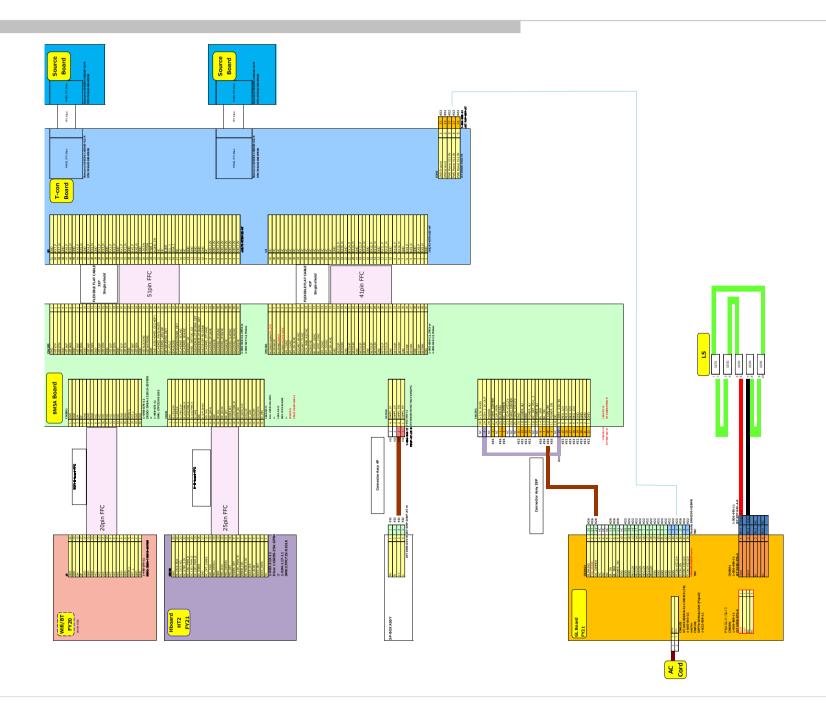
# Factory Data Reset – force method (without UI)

1. Press and hold the Power button. (The position of the Power button depends on the model.)

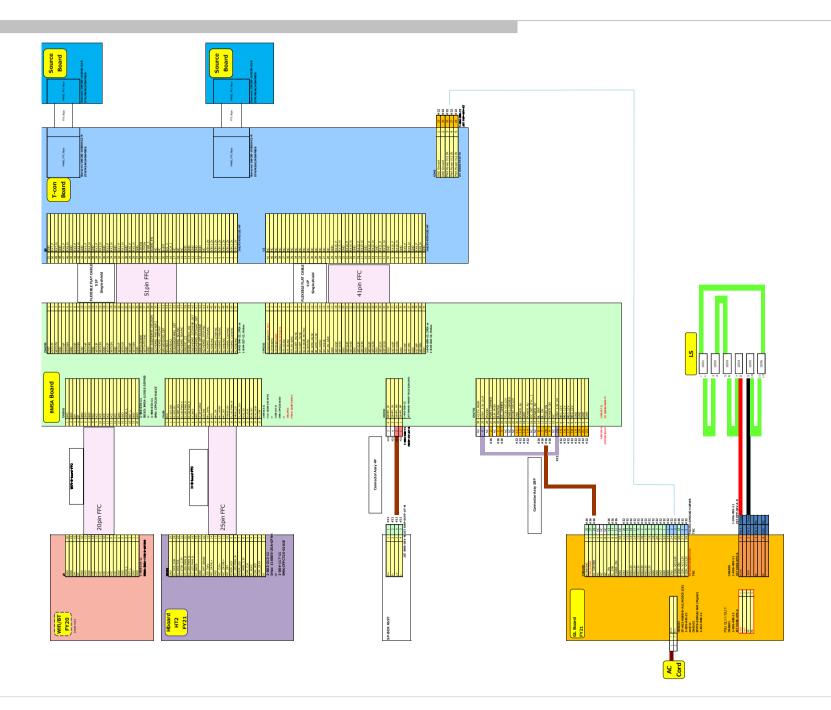


- 2. AC on.
- 3. Hold the Power button down for several seconds until the system starts Factory Data Reset.

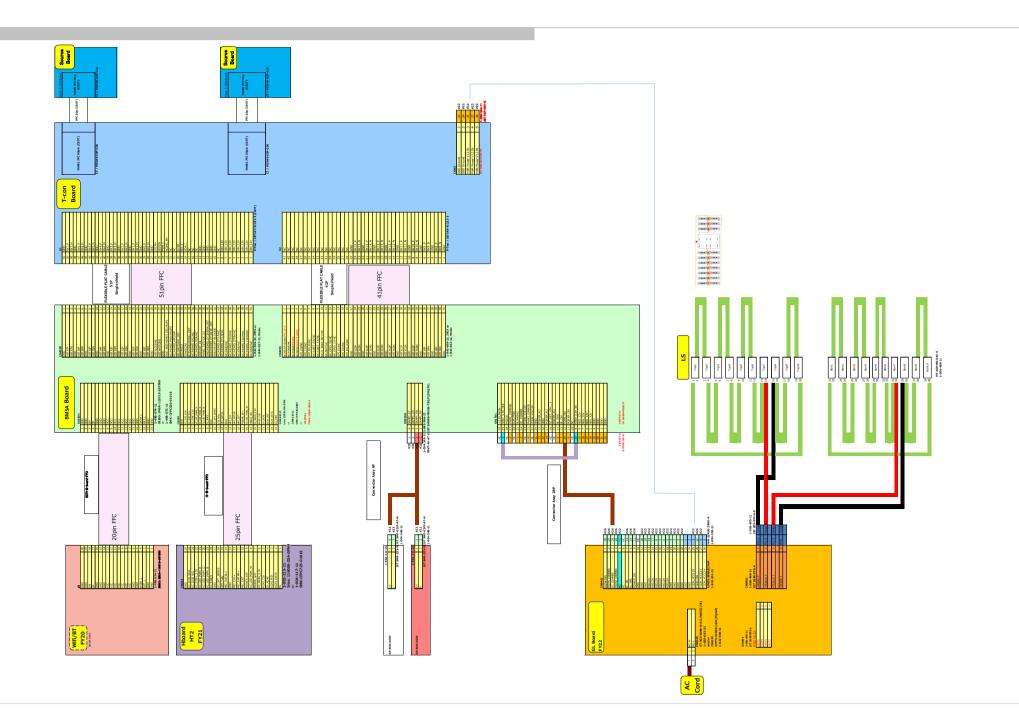
# 43" Connecting Diagram



# 50" Connecting Diagram

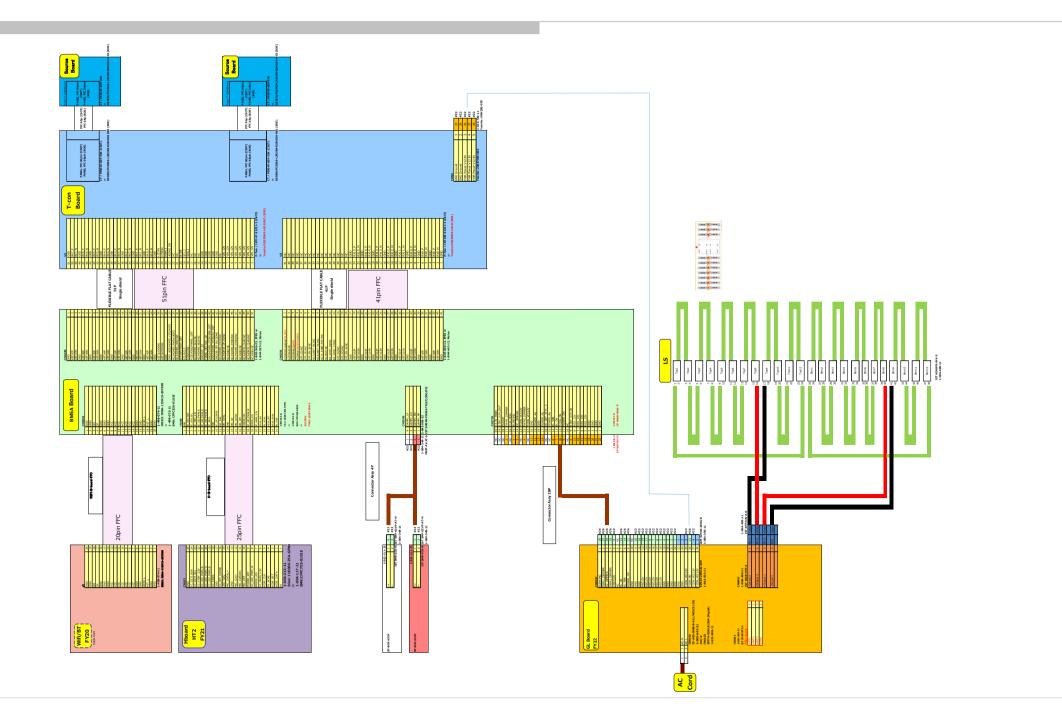


# 55" Connecting Diagram



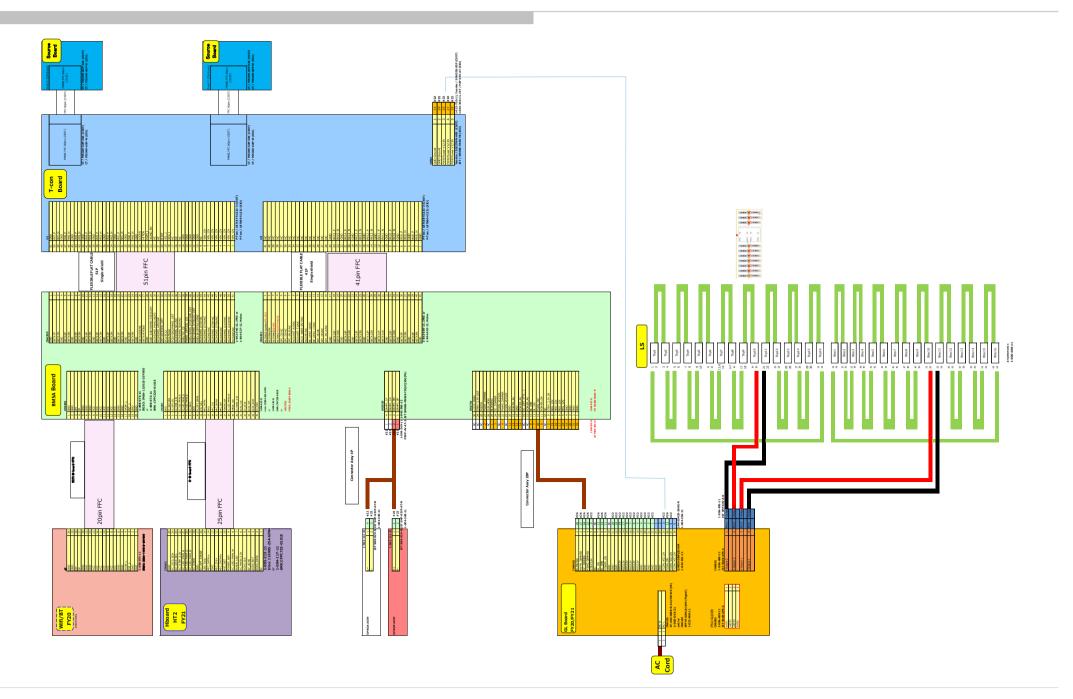
# 65" Connecting Diagram

MULTI O-CELL



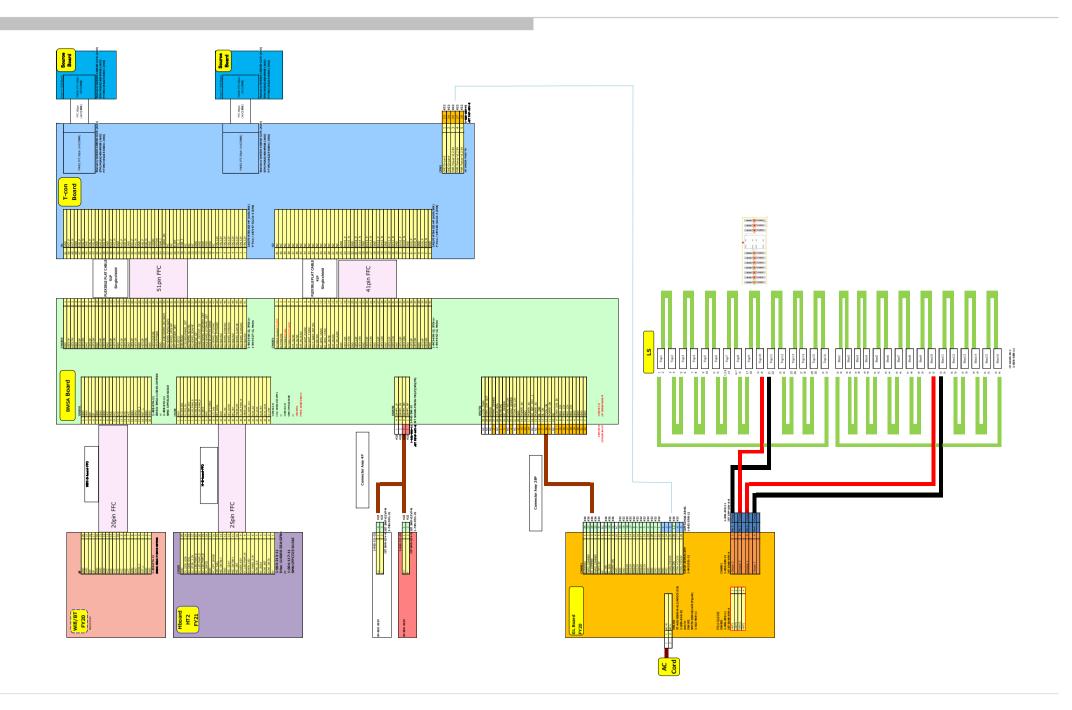
# 75" Connecting Diagram

MULTI O-CELL

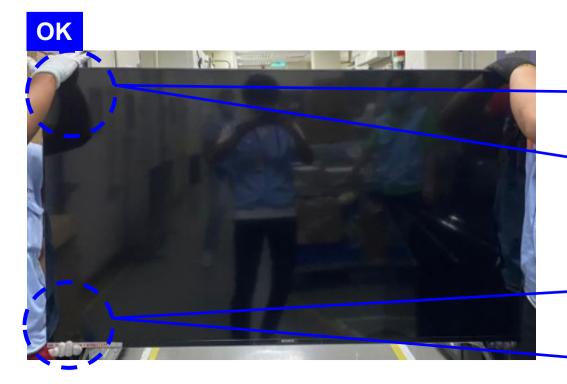


# 85" Connecting Diagram

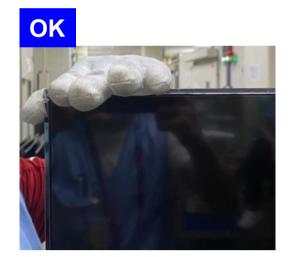
MULTI O-CELL



# 1. Holding Position



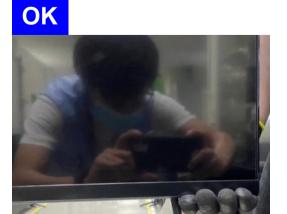
Be sure to wear gloves and work with two people



Holding edge of the Bezel without touching the O-cell



Hand pressing the O-Cell

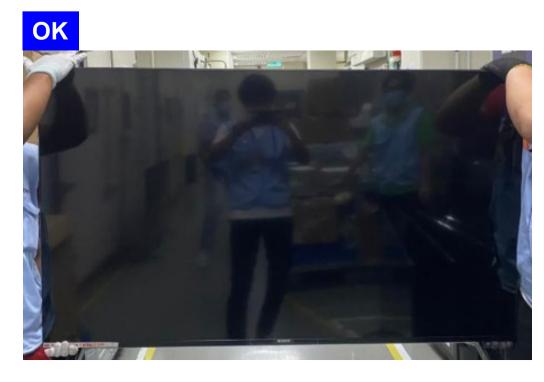


Support set at edge of the Bezel without touching the O-cell



Hand pressing the O-Cell

# 2. Carry Position

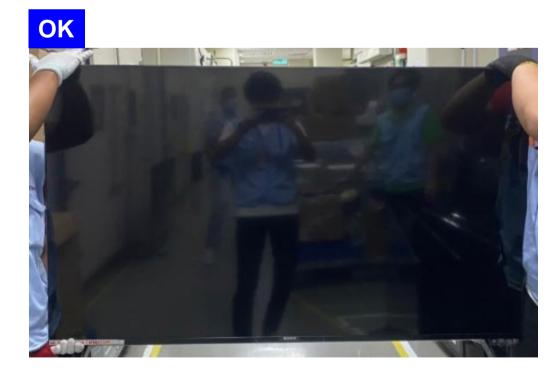


The panel should be carried in vertical.



**DO NOT** carry the panel horizontally

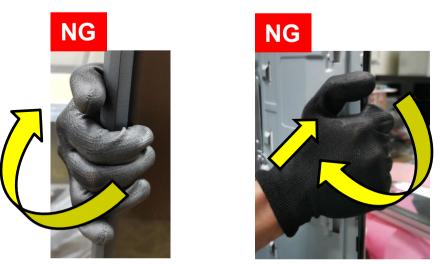
# 3. Carry Condition



The panel should be carried by two people.



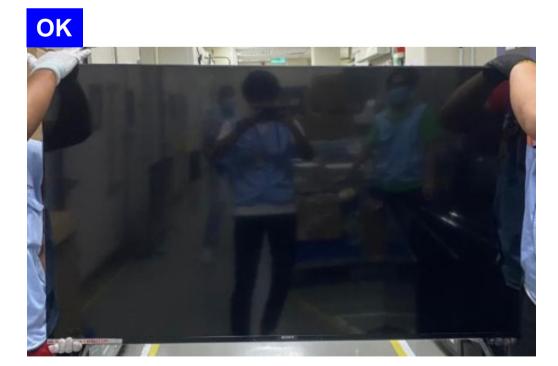
**DO NOT** carry the panel alone



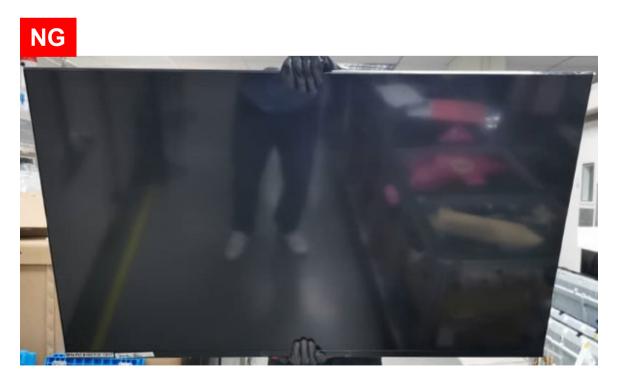
Since the O-cell may pop out, **DO NOT** apply force to the Back Chassis or rotate the Bezel



# 4. Carry Condition



The panel should be carried by the corners.



DO NOT carry the panel at the center area

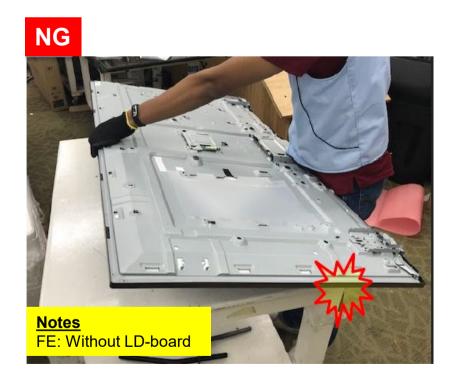
# 5. Resting Condition



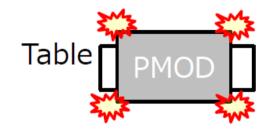
2 persons put the panel on the table



Panel can be fully supported by table surface

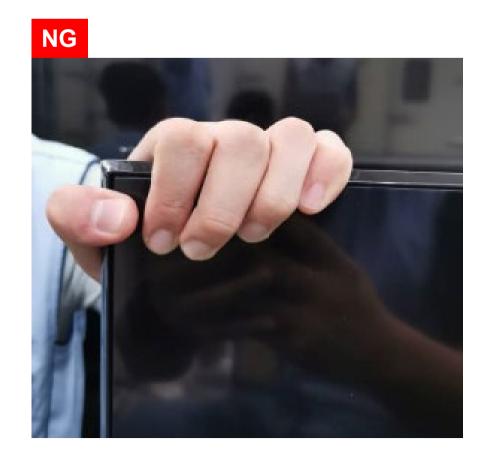


**DO NOT** put the panel on the table by yourself

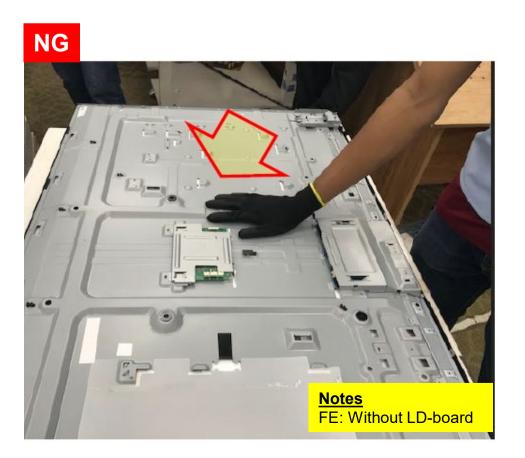


Panel is not fully supported by table surface (Corner / edge is hanging)

### 6. Prohibit Method

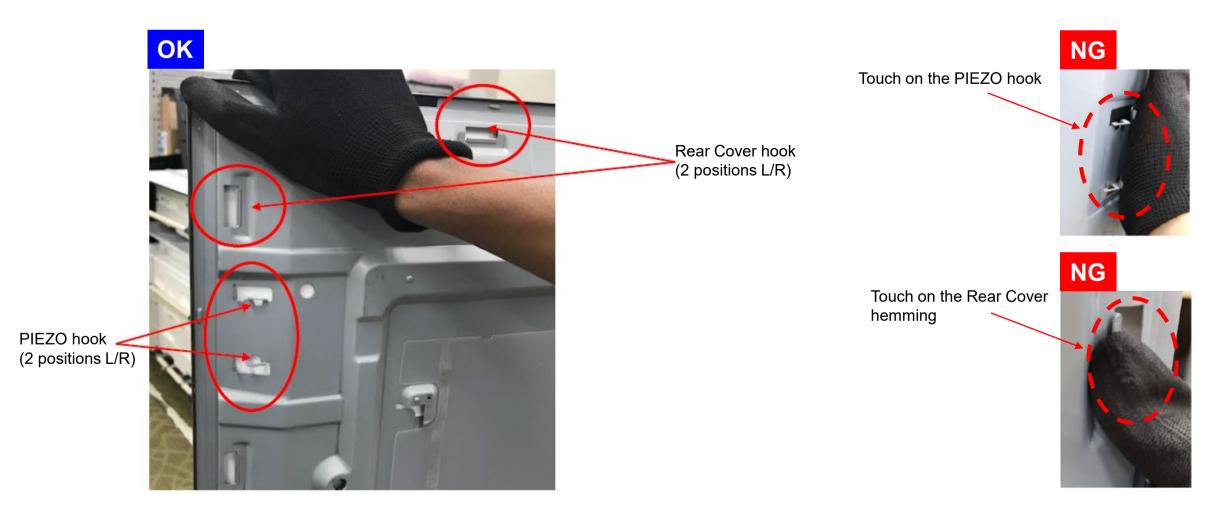


Handle the panel without gloves



Press on the panel during Assy & Disassy

### 7. Restricted Area



**DO NOT** touch the Piezo hook and the rear cover hook

Sony EMCS (Malaysia) Sdn. Bhd. HES-M

English © 2023.11

# SERVICE MANUAL (DISASSEMBLY)

ORIGINAL MANUAL ISSUE DATE: 2023.11

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9-888-905-U1

**LCD TV** 

SONY®

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### **MODEL LISTS**

Model	Remote	Destination
KD-43X85K	RMF-TX800U	UCM
KD-50X85K	RMF-TX800U	UCM
KD-55X85K	RMF-TX800U	UCM
KD-65X85K	RMF-TX800U	UCM
KD-75X85K	RMF-TX800U	UCM
KD-85X80K	RMF-TX800U	UC2
KD-85X85K	RMF-TX800U	UCM
KD-85X80CK	RMF-TX900U	UC2



RMF-TX800U



RMF-TX900U



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#### **TOOLS & EQUIPMENTS**

#### 1 LIST OF ITEMS TO PREPARE

- i. Screwdriver (e.g., #2 Phillips Screwdriver)
- ii Multimeter
- iii. ESD Wrist Straps
- iv. Metal Washer (Flat) or Coin (for remove Rear Cover)
- v. Ruler (for remove Rear Cover)
- vi. Service Manual (Disassembly) (for remove & replace details)

#### 2 OPTIONAL EQUIPMENTS

- i. Screwdriver (e.g., #0 Phillips Screwdriver)
- ii. Parts Tray for loose screws and small items
- iii. Flashlight
- iv. Service Manual (Troubleshooting)

#### 3 PREPARATION BEFORE REPAIRS

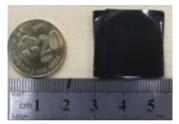
Before you begin, unplug the TV from the wall outlet and stand it up on a level work surface to begin removing the Rear Cover. If you are working on a TV that was wall-mounted, and does not have a stand, simply place the TV faced-down on top of a thick blanket, on a large/flat surface, or you may be able to lean it up against a wall near a wall outlet.

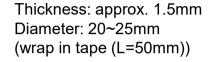














Plastic or Metal Ruler (In case of Metal ruler, wrap in tape (L=50mm) for prevent scratches)





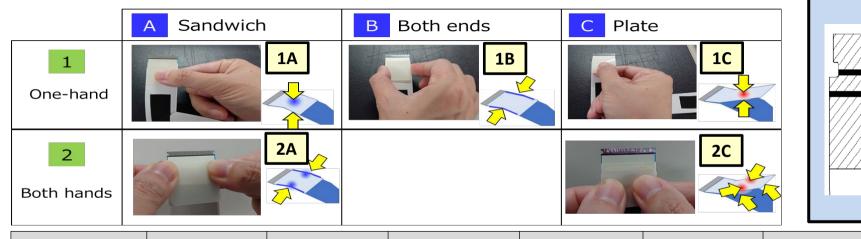
TOOLS & EQUIPMENTS | FFC PRECAUTIONS | SECTION 1 | SECTION 2 | SECTION 3 | SECTION 4 | SECTION 5 | SECTION 6 | SMART CORE | APPEND

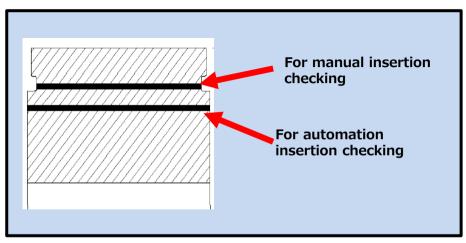
# FFC PRECAUTIONS

※Caution: DO NOT hold / touch copper side during FFC handling. **FFC Insertion Method** ESSENTIAL CAUTION INFO THAT MUST BE FOLLOWED BY PRODUCTION FOR ANY FFC INSERTION METHOD STRAIGHT INSERT OK NG Connector Connector FFC DO NOT INSERT FFC IN **FFC INSERT FFC IN SLANTING CONDITION** STRAIGHT CONDITION DO NOT APPLY EXCESSIVE FFC <15° BOARD **FORCE DURING INSERTION** INSERT ANGLE OK FFC Cross section of TV set from A NG - FFC Connector FFC bending Connector

#### RECOMMENDED FFC HOLDING METHOD MATRIX

#### INDICATION FOR FFC FULL INSERTION



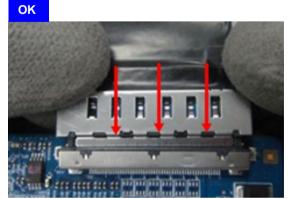


SYS SET

### FFC PRECAUTIONS

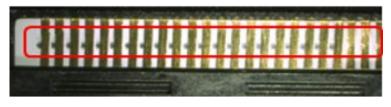
# **Caution for FFC with Housing Connector**

#### CAUTION FOR FFC WITH CONNECTOR INSTALLATION AT PANEL SIDE



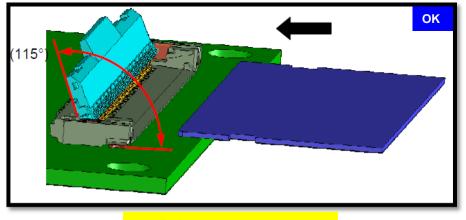


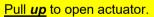
ABNORMAL HANDLING WILL CAUSE CONTACT SHIFTED & FOREIGN PARTICLES ISSUE AS PICTURE BELOW:

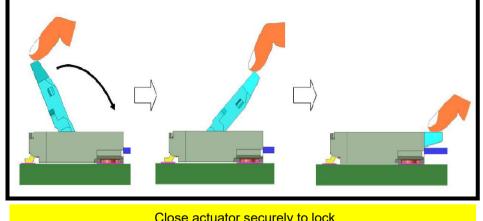




# **ZIFF FFC Insertion Caution**







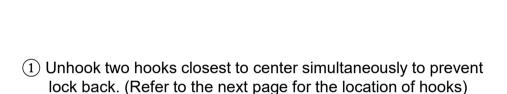
<u>Close</u> actuator securely to lock Make sure line indication on FFC is <u>align</u> with actuator. NG NG

Do not push *inwards* with excessive force.

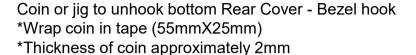
# 1-1. DISASSEMBLY AND REMOVAL CAUTION

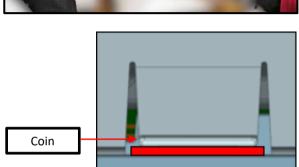
#### **REAR COVER**

- 1. Remove the screws from the rear cover (4 pcs)
- 2. Unhook the bottom hook, starting from center.



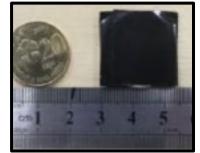
- (2) Unhook both hooks using coin or jig.
- (3) Use mirror or touch the line to assist locating the hook position.

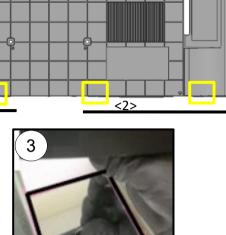


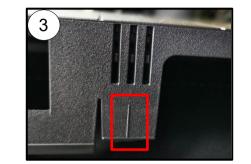


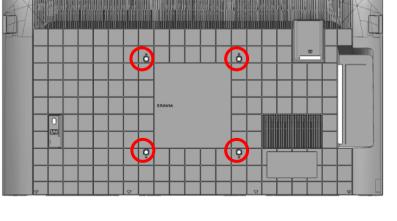


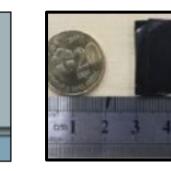
<1>







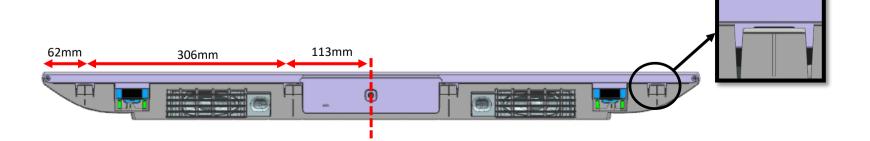




# 1-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

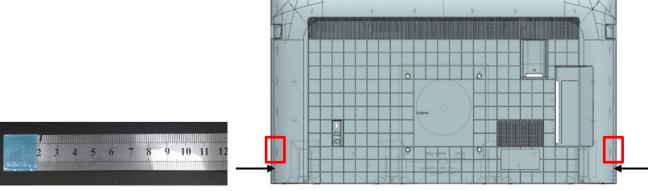
**Bottom Hook Position** 



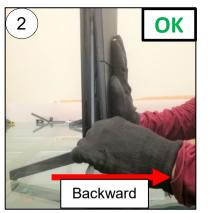
3. Unhook corner hook.

Ruler or jig to release corner hook \*Wrap ruler with tape to prevent scratch

- 1 Releasing the corner hook by pulling the Rear Cover corner and insert a jig or ruler.
- (2) Ensure the jig or ruler is pulled backward.
- ③ DO NOT pivot on bezel when inserting the jig or ruler.









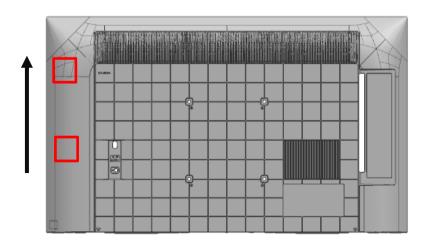
#### **REAR COVER**

4. Unhook left side hooks.

Total rear cover back chassis: 2 hooks

- ① Grip the rear cover by hand and use a ruler or jig to remove the hook of the rear cover back chassis.
- ② Flex the rear cover outward to remove the hook. Support set with arm.

# 1-1. DISASSEMBLY AND REMOVAL CAUTION







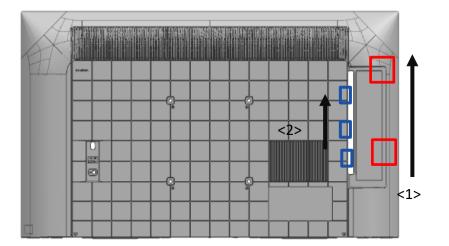
### 1-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

5. Unhook right side hooks.

Total side bracket hooks: 3 hooks.

Total rear cover back chassis hooks: 2 hooks



- (1) Remove the side hooks.
- 2 Pull the rear cover below the side jack to remove the hook.
- ③ Remove the remaining side hooks.







# 1-1. DISASSEMBLY AND REMOVAL CAUTION

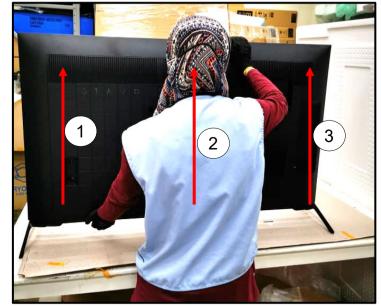
#### **REAR COVER**

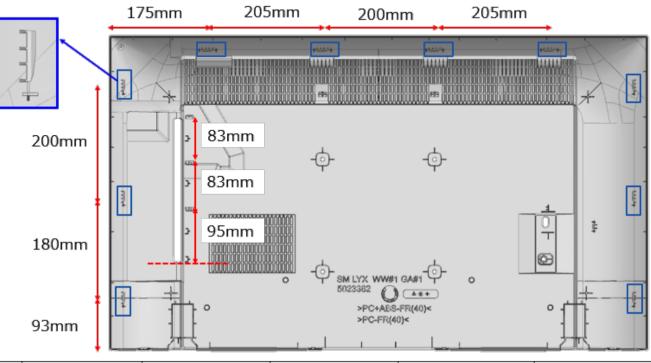
6. Unhook top row.

Total hooks (top row): 4 hooks

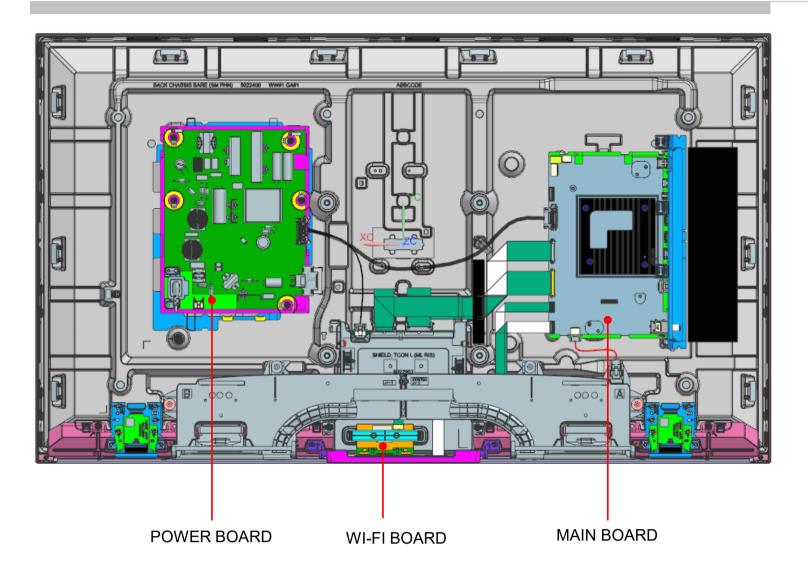
- 1) Tilt the rear cover and push upwards on the left and right side.
- (2) Pull the rear cover below the side jack to remove the upper hook.

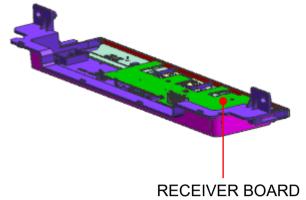
Hook positioning.





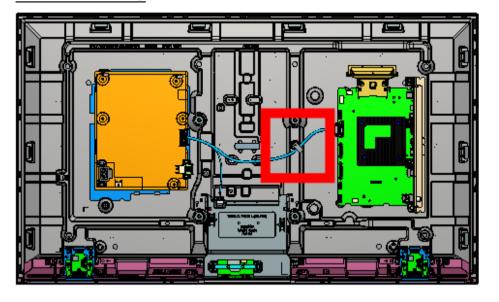
SECTION 1: KD-43X85K 1-2. BOARD LOCATION

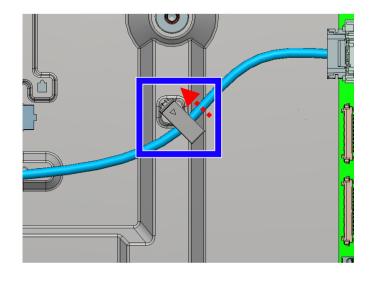




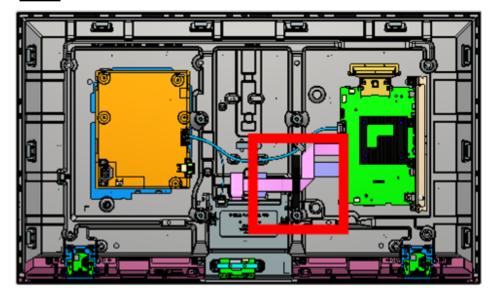
# SECTION 1: KD-43X85K 1-3. WIRE DRESSING

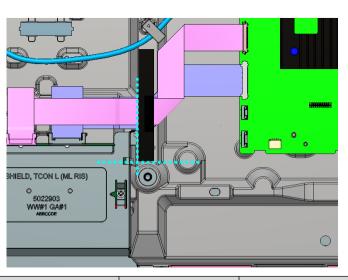
# WIRE DRESSING





# <u>TAPE</u>



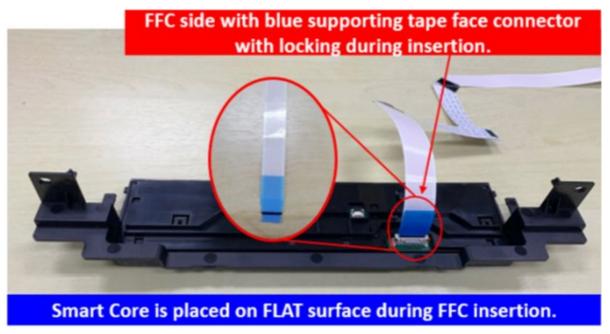


SECTION 1: KD-43X85K 1-3. WIRE DRESSING

### **INFORMATION**

### Caution:

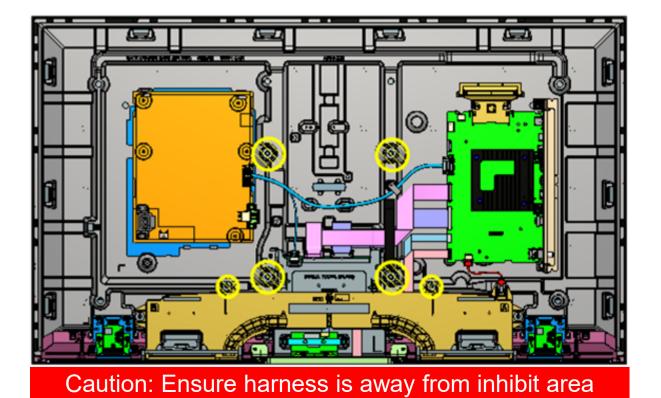
- 1. Operator need to fix Smart Core on <u>FLAT</u> surface before FFC insertion to ensure FFC STRAIGHT insertion.
- 2. FFC side with blue supporting tape, must face <u>CONNECTOR WITH LOCKING</u> during FFC insertion.



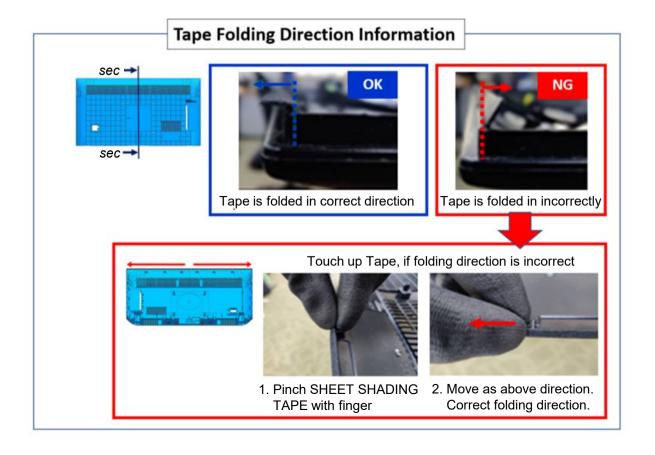
After assemble Receiver board to Smart Core, operator need to insert Receiver board FFC in straight condition.

SECTION 1: KD-43X85K 1-3. WIRE DRESSING

# **INFORMATION**

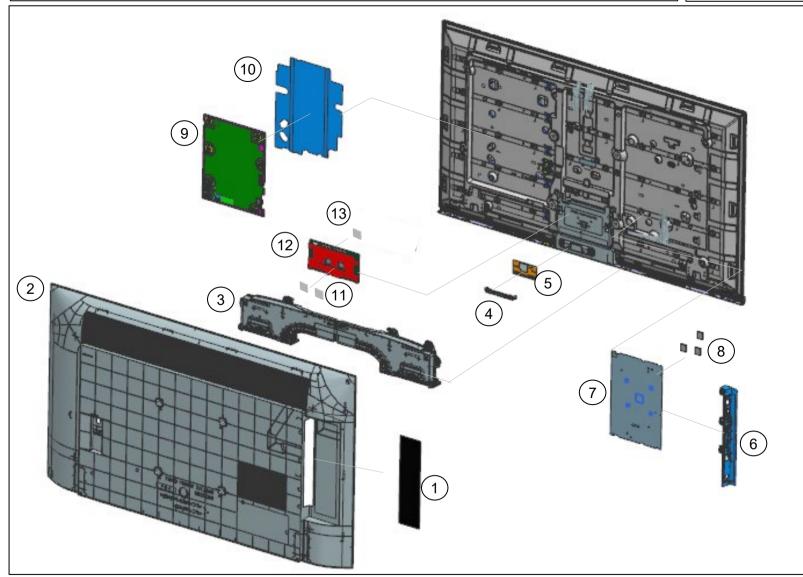


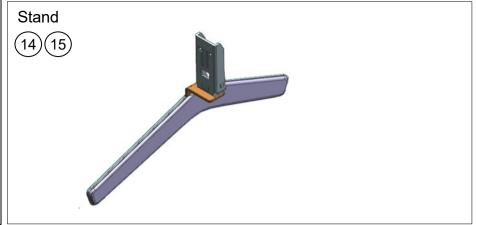
# INFORMATION



### 1-4. EXPLODED VIEW AND PART LIST

- Place the TV set facing downwards on a stable, level surface before disassembly and assembly of parts.
- And shaded parts are critical for safety. Replace only with part number specified.
- Parts contain confidential information. Strictly follow the instruction whenever the components are repaired and/or replaced
- \( \tau^\* \) Parts are not stocked since they are seldom required for routine service. Some delays should be anticipated when ordering these components.
- † Picture provided in this section might have slight difference from the actual sets.
  † The reference number beside the part indicates the disassembly sequence.
  † Remove screws before disassembly. Unplug connectors before disassembly





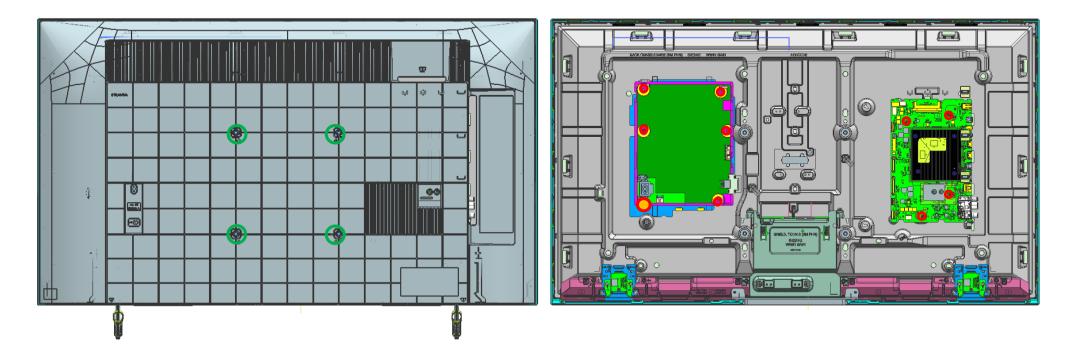
**SECTION 1** 

# SECTION 1: KD-43X85K 1-4. EXPLODED VIEW AND PART LIST

### **SET PART LIST**

REF. NO	PART NO.	DESCRIPTION	UCM
1	5-039-646-01	LABEL, SIDE TERMINAL HP (HRS)	•
<u>^</u> 2	5-029-459-23	REAR COVER ASSY (SM LYX)	•
3	1-009-790-11	SP-BOX ASSY,FY21 W30 ONE BOX	•
4	5-009-258-21	BRACKET, WIFI(BNN)	•
<b>5</b>	1-005-419-32	WLAN/BT MODULE(11AC)FXC	•
6	5-039-955-11	BRACKET SIDE (BNN) A	•
7	A-5042-692-A	COMPL_SVC_BM5A_FH_UCM	•
8	4-457-451-12	SHEET, THERMAL (BAF)	•
<u>^</u> 9	1-009-799-31	GL11B-STATIC CONVERTER (TV)	•
<u>1</u> 10	5-023-070-11	SHEET, INSULATION (SM PHN) A	•
11	5-027-341-01	SHEET, THERMAL (RIS)	•
12	1-011-389-22	MOUNTED PWB E-T-CON (43)	•
12	1-017-166-11	MOUNTED PWB E-T-CON (43)	•
13	4-699-975-02	SHEET,THERMAL(5567H)	•
14	5-022-182-23	STAND, L (SM LYX) A	•
15	5-022-183-23	STAND, R (SM LYX) A	•

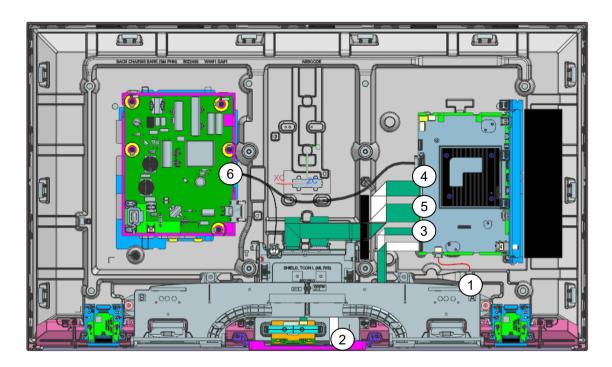
### **SCREW**



REMARKS	P/N	DESCRIPTION	QTY	TORQUE (N.m)
0	4-472-518-11	SCREW, +PSW M3X6	9	0.4 ± 0.05
0	2-580-592-01	SCREW, +PSW M3X8	1	0.4 ± 0.05
0	4-694-261-01	SCREW, +PSW M5X14	4	1.5 ± 0.1

# SECTION 1: KD-43X85K 1-4. EXPLODED VIEW AND PART LIST

# CONNECTOR



REF. NO	PART NO.	DESCRIPTION	REMARKS
1	1-010-989-12	CONNECTOR ASSY 4P (SP)	CN3550(BM5A)/CN6600(BM5STY)/ CN6603 (BM5ST)-SP(1)
2	1-010-993-11	FLEXIBLE FLAT CABLE 25P	CN1200(BM5A)-CN102(HT2)(1)
3	1-010-991-11	FLEXIBLE FLAT CABLE 20P	CN3801(BM5A)-J1(WIFI/BT)(1)
4	1-011-589-11	FLEXIBLE FLAT CABLE 41P	CN4201(BM5A)-TCON(1)
5	1-011-963-12	FLEXIBLE FLAT CABLE 51P	CN4200(BM5A)-U1(TCON)(1)
6	1-011-588-11	CONNECTOR ASSY 30P	CN1701(BM5A)-CN6401(GL)- CON3(TCON)(1)

# SECTION 1: KD-43X85K 1-4. EXPLODED VIEW AND PART LIST

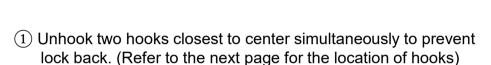
### **OTHER PARTS**

PART NO.	DESCRIPTION	UCM	REMARKS
4-535-064-61	ASSY,FALL LOCK,BELT LL	•	-
5-022-201-12	BAG, CL ASSY (SM LYX)	•	(Including CLAMPER (4L BNN) (Qty 2) installed at Main Stand. Refer Setup Guide for details)
5-009-030-01	CLAMPER,CABLE L(BNN)	•	-
1-005-642-12	C7L AC POWER CORD SETS (US)	•	-
1-013-691-23	REMOTE COMMANDER (RMF-TX800U)	•	-
*5-037-718-11	REFERENCE GUIDE	•	-
*5-037-727-11	SETUP GUIDE	•	-
7-600-031-97	TAPE (3M 1350FB-1)15MMX66M BLK	•	-
5-027-414-01	VESA SPACER S A (COM)	•	(Screw extension for Fall Lock Belt and Wall Mount, (Qty 1), Refer Setup Guide for details.)

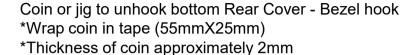
# 2-1. DISASSEMBLY AND REMOVAL CAUTION

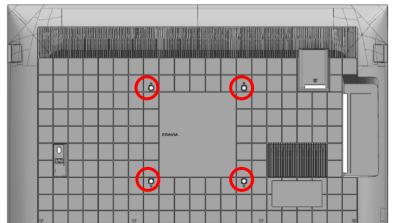
#### **REAR COVER**

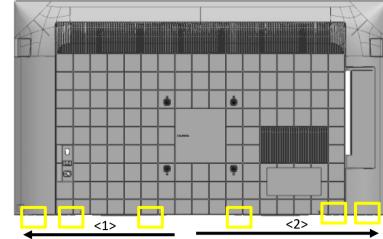
- 1. Remove the screws from the rear cover (4 pcs)
- 2. Unhook the bottom hook, starting from center.



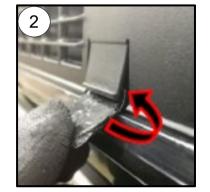
- 2 Unhook both hooks using coin or jig.
- (3) Use mirror or touch the line to assist locating the hook position.



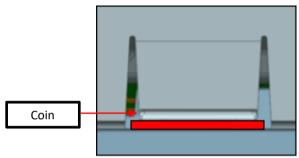


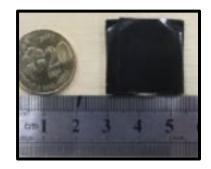


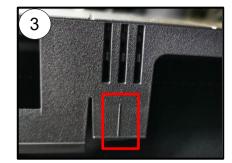








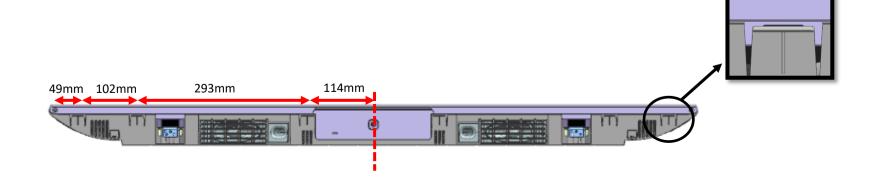




# 2-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

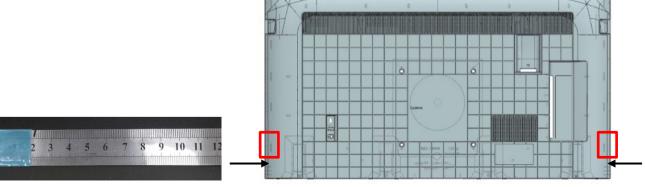
**Bottom Hook Position** 



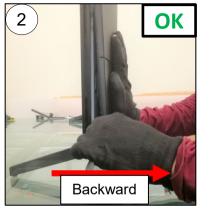
3. Unhook corner hook.

Ruler or jig to release corner hook \*Wrap ruler with tape to prevent scratch

- 1 Releasing the corner hook by pulling the Rear Cover corner and insert a jig or ruler.
- (2) Ensure the jig or ruler is pulled backward.
- ③ DO NOT pivot on bezel when inserting the jig or ruler.









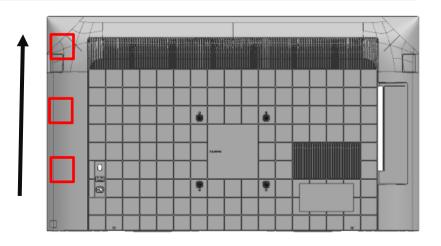
#### **REAR COVER**

4. Unhook left side hooks.

Total rear cover back chassis: 3 hooks

- ① Grip the rear cover by hand and use a ruler or jig to remove the hook of the rear cover back chassis.
- ② Flex the rear cover outward to remove the hook. Support set with arm.

# 2-1. DISASSEMBLY AND REMOVAL CAUTION







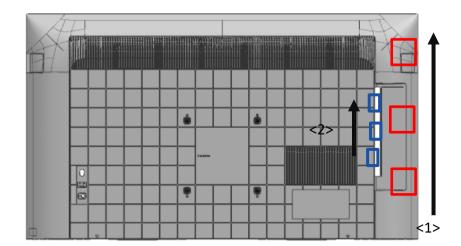
# 2-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

5. Unhook right side hooks.

Total side bracket hooks: 3 hooks.

Total rear cover back chassis hooks: 3 hooks



- (1) Remove the side hooks.
- 2 Pull the rear cover below the side jack to remove the hook.
- ③ Remove the remaining side hooks.







# 2-1. DISASSEMBLY AND REMOVAL CAUTION

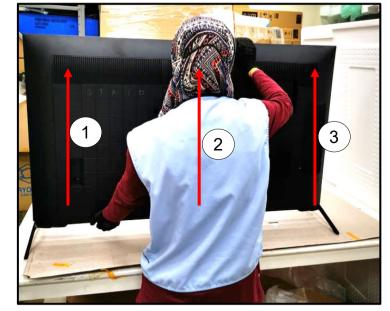
#### **REAR COVER**

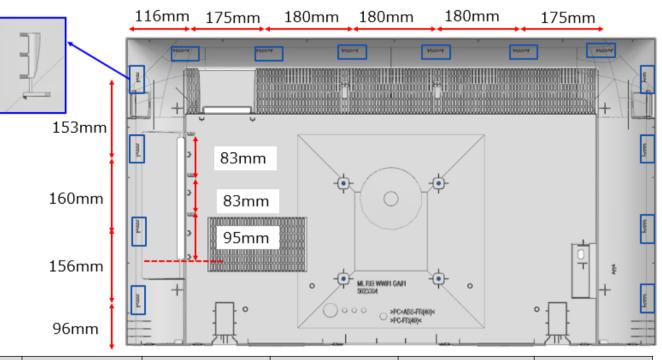
6. Unhook top row.

Total hooks (top row): 6 hooks

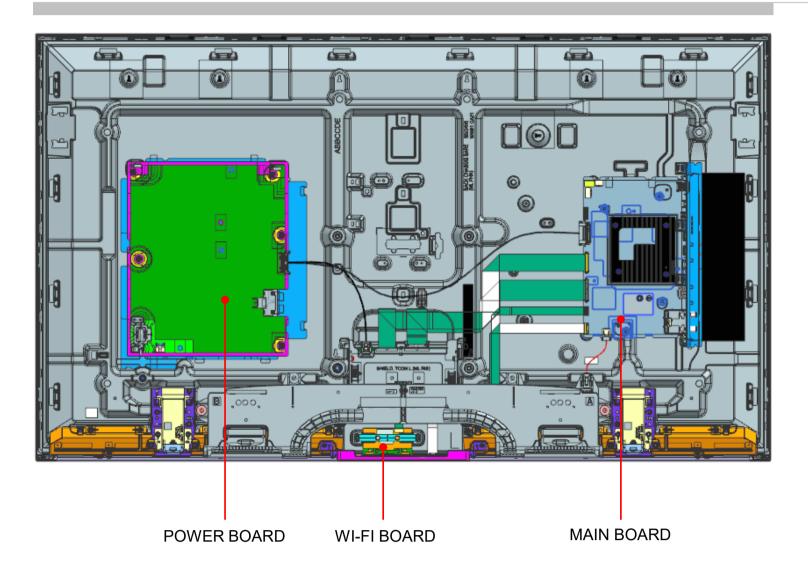
- 1 Tilt the rear cover and push upwards on the left and right side.
- (2) Pull the rear cover below the side jack to remove the upper hook.

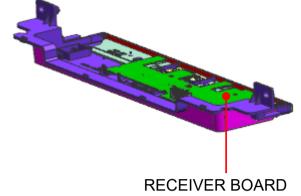
Hook positioning.



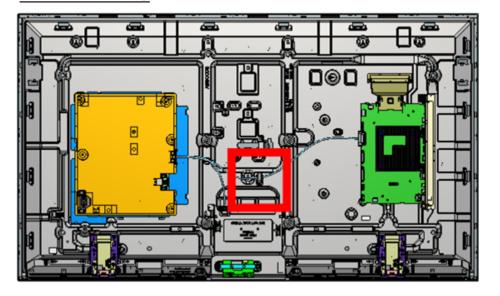


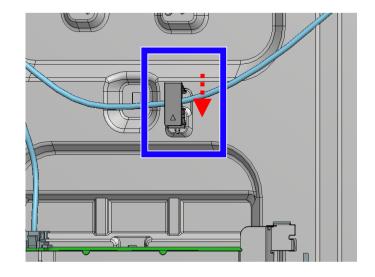
SECTION 2: KD-50X85K 2-2. BOARD LOCATION



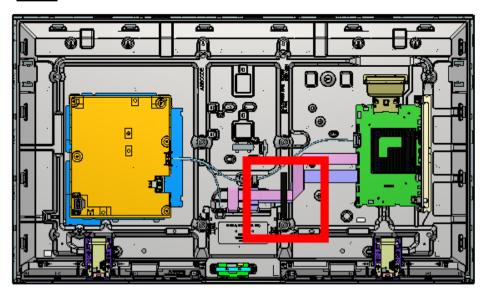


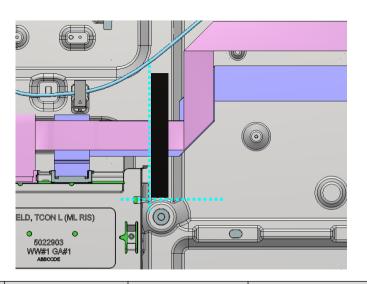
# WIRE DRESSING





# **TAPE**

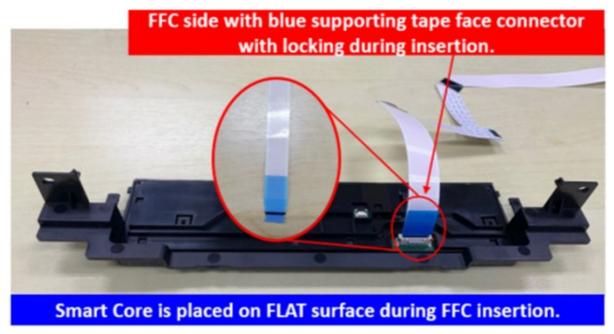




### **INFORMATION**

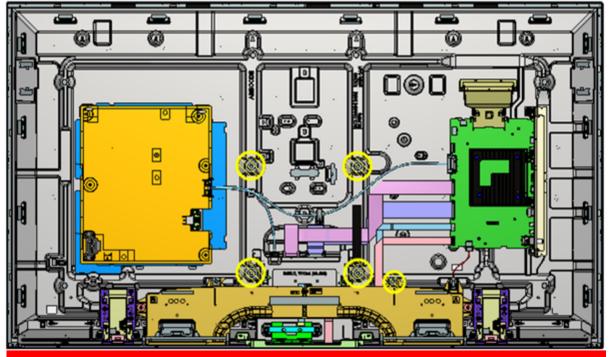
#### Caution:

- 1. Operator need to fix Smart Core on <u>FLAT</u> surface before FFC insertion to ensure FFC STRAIGHT insertion.
- 2. FFC side with blue supporting tape, must face <u>CONNECTOR WITH</u> LOCKING during FFC insertion.



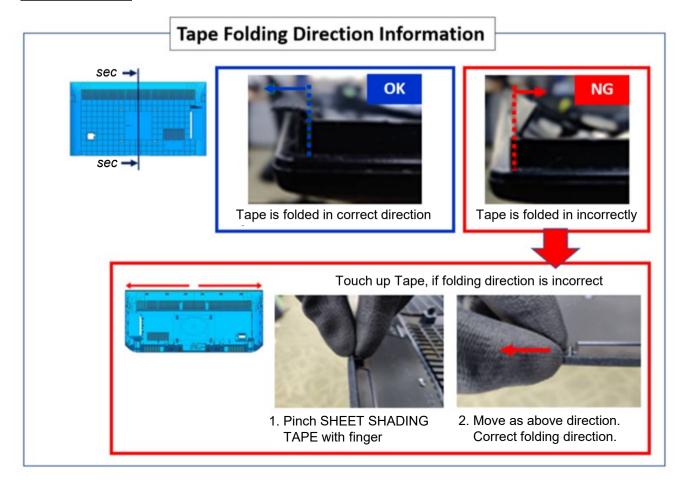
After assemble Receiver board to Smart Core, operator need to insert Receiver board FFC in straight condition.

# **INFORMATION**



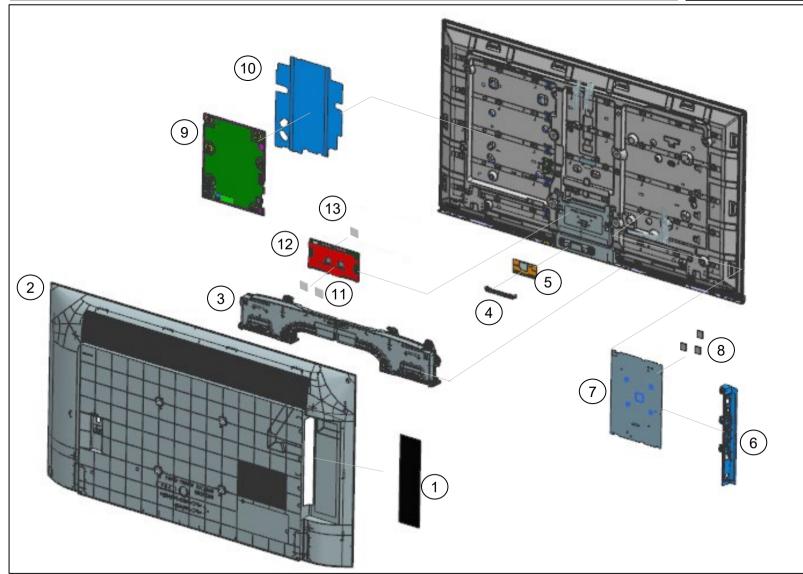
Caution: Ensure harness is away from inhibit area

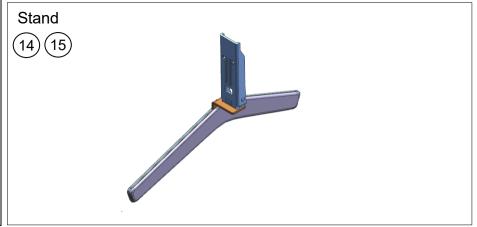
# **INFORMATION**



### 2-4. EXPLODED VIEW AND PART LIST

- Place the TV set facing downwards on a stable, level surface before disassembly and assembly of parts.
- And shaded parts are critical for safety. Replace only with part number specified.
- Parts contain confidential information. Strictly follow the instruction whenever the components are repaired and/or replaced
- \( \tau^\* \) Parts are not stocked since they are seldom required for routine service. Some delays should be anticipated when ordering these components.
- † Picture provided in this section might have slight difference from the actual sets.
  † The reference number beside the part indicates the disassembly sequence.
  † Remove screws before disassembly. Unplug connectors before disassembly





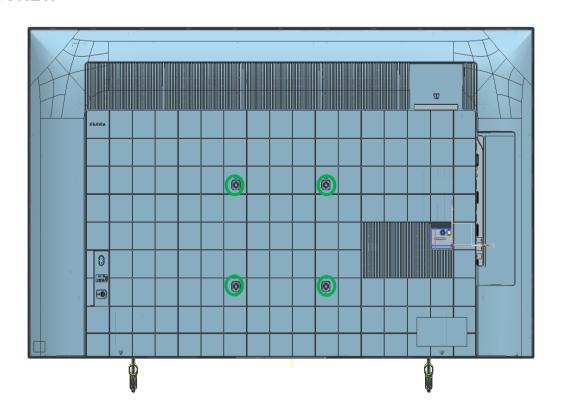
**SECTION 2** 

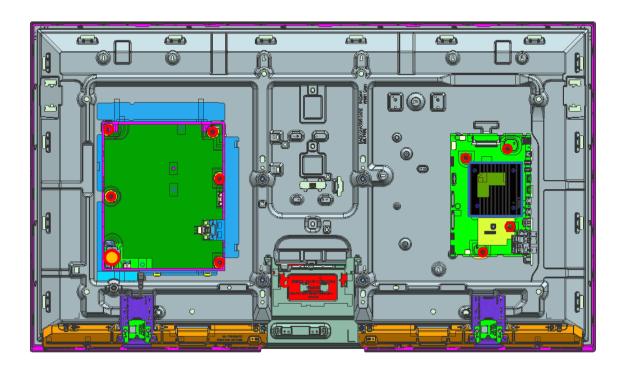
# 2-4. EXPLODED VIEW AND PART LIST

### SET PART LIST

REF. NO	PART NO.	DESCRIPTION	UCM
1	5-039-646-01	LABEL, SIDE TERMINAL HP (HRS)	•
<u>^</u> 2	5-027-812-24	REAR COVER ASSY (ML LYX)	•
3	1-009-790-11	SP-BOX ASSY,FY21 W30 ONE BOX	•
4	5-009-258-21	BRACKET, WIFI(BNN)	•
5	1-005-419-32	WLAN/BT MODULE(11AC)FXC	•
6	5-039-955-11	BRACKET SIDE (BNN) A	•
7	A-5042-692-A	COMPL_SVC_BM5A_FH_UCM	•
8	4-457-451-12	SHEET, THERMAL (BAF)	•
<u> </u>	1-009-800-31	GL12B-STATIC CONVERTER (TV)	•
<u> </u>	5-023-072-11	SHEET, INSULATION (ML PHN) A	•
11	5-027-341-01	SHEET, THERMAL (RIS)	•
12	1-011-266-32	MOUNTED PWB E-T-CON (50)	•
12	1-017-168-11	MOUNTED PWB E-T-CON (50)	•
13	4-699-975-02	SHEET,THERMAL(5567H)	•
14	5-022-892-23	STAND, L (ML LYX) A	•
15	5-022-893-23	STAND, R (ML LYX) A	•

### **SCREW**

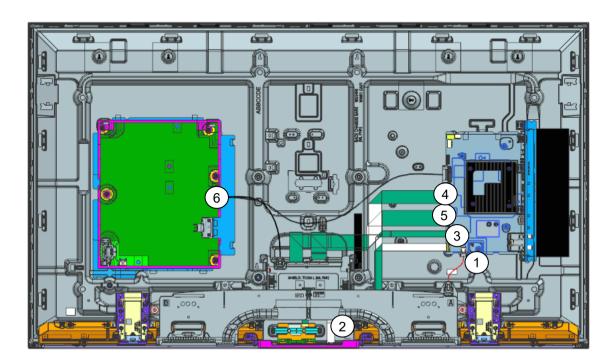




REMARKS	P/N	DESCRIPTION	QTY	TORQUE (N.m)
0	4-472-518-11	SCREW, +PSW M3X6	9	0.4 ± 0.05
0	2-580-592-01	SCREW, +PSW M3X8	1	0.4 ± 0.05
0	4-694-261-01	SCREW, +PSW M5X14	4	1.5 ± 0.1

# SECTION 2: KD-50X85K 2-4. EXPLODED VIEW AND PART LIST

### **CONNECTOR**



REF. NO	PART NO.	DESCRIPTION	REMARKS
1	1-010-989-12	CONNECTOR ASSY 4P (SP)	CN3550(BM5A)/CN6600(BM5STY)/ CN6603 (BM5ST)-SP(1)
2	1-011-002-11	FLEXIBLE FLAT CABLE 20P	CN3801(BM5A)-J1(WIFI/BT)(1)
3	1-011-004-11	FLEXIBLE FLAT CABLE 25P	CN1200(BM5A)-CN102(HT2)(1)
4	1-011-592-11	FLEXIBLE FLAT CABLE 41P	CN4201(BM5A)-TCON(1)
5	1-011-965-11	FLEXIBLE FLAT CABLE 51P	CN4200(BM5A)-U1(TCON)(1)
6	1-011-591-11	CONNECTOR ASSY 30P	CN1701(BM5A)-CN6401(GL)- CON3(TCON)(1)

# SECTION 2: KD-50X85K 2-4. EXPLODED VIEW AND PART LIST

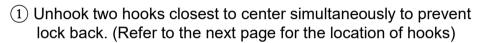
### **OTHER PARTS**

PART NO.	DESCRIPTION	UCM	REMARKS
4-535-064-61	ASSY,FALL LOCK,BELT LL	•	-
5-022-201-12	BAG, CL ASSY (SM LYX)	•	(Including CLAMPER (4L BNN) (Qty 2) installed at Main Stand. Refer Setup Guide for details)
5-009-030-01	CLAMPER,CABLE L(BNN)	•	-
1-005-642-12	C7L AC POWER CORD SETS (US)	•	-
1-013-691-23	REMOTE COMMANDER (RMF-TX800U)	•	-
*5-037-718-11	REFERENCE GUIDE	•	-
*5-037-727-11	SETUP GUIDE	•	-
7-600-031-97	TAPE (3M 1350FB-1)15MMX66M BLK	•	-
5-027-414-01	VESA SPACER S A (COM)	•	(Screw extension for Fall Lock Belt and Wall Mount, (Qty 1), Refer Setup Guide for details.)

# 3-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

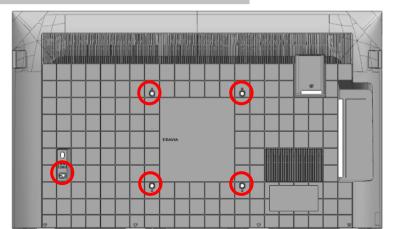
- 1. Remove the screws from the rear cover (5 pcs)
- 2. Unhook the bottom hook, starting from center.



- 2 Unhook both hooks using coin or jig.
- ③ Use mirror or touch the line to assist locating the hook position.

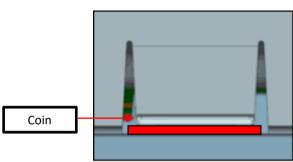


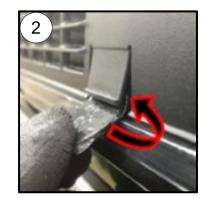
<sup>\*</sup>Thickness of coin approximately 2mm

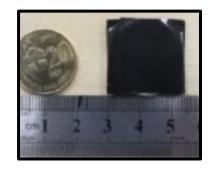




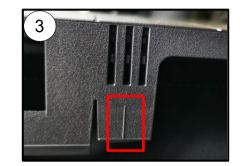








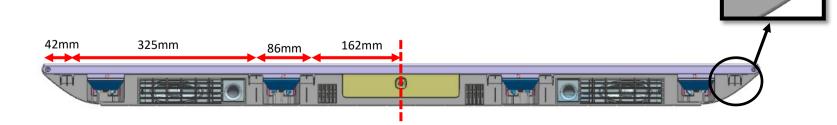




# 3-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

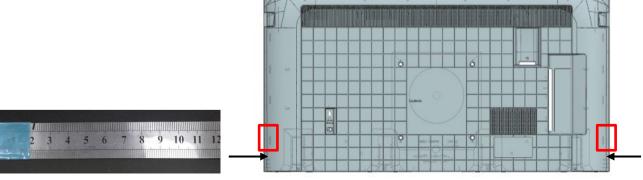
**Bottom Hook Position** 



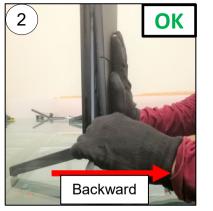
3. Unhook corner hook.

Ruler or jig to release corner hook \*Wrap ruler with tape to prevent scratch

- 1 Releasing the corner hook by pulling the Rear Cover corner and insert a jig or ruler.
- (2) Ensure the jig or ruler is pulled backward.
- ③ DO NOT pivot on bezel when inserting the jig or ruler.









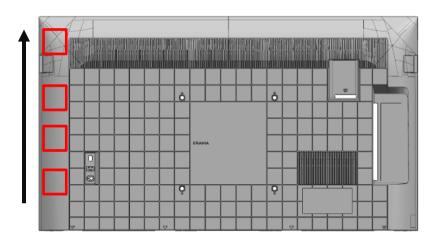
#### **REAR COVER**

4. Unhook left side hooks.

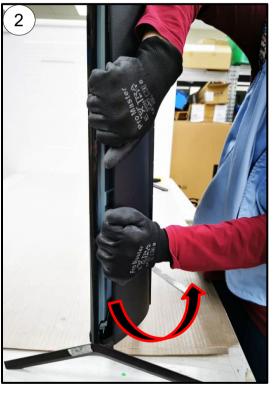
Total rear cover back chassis: 4 hooks

- ① Grip the rear cover by hand and use a ruler or jig to remove the hook of the rear cover back chassis.
- ② Flex the rear cover outward to remove the hook. Support set with arm.

# 3-1. DISASSEMBLY AND REMOVAL CAUTION







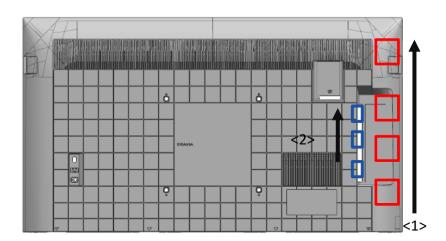
### 3-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

5. Unhook right side hooks.

Total side bracket hooks: 3 hooks.

Total rear cover back chassis hooks: 4 hooks



- 1 Remove the side hooks.
- 2 Pull the rear cover below the side jack to remove the hook.
- ③ Remove the remaining side hooks.







# 3-1. DISASSEMBLY AND REMOVAL CAUTION

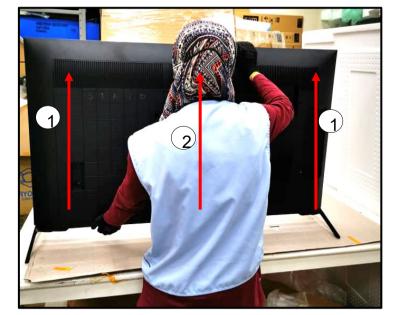
#### **REAR COVER**

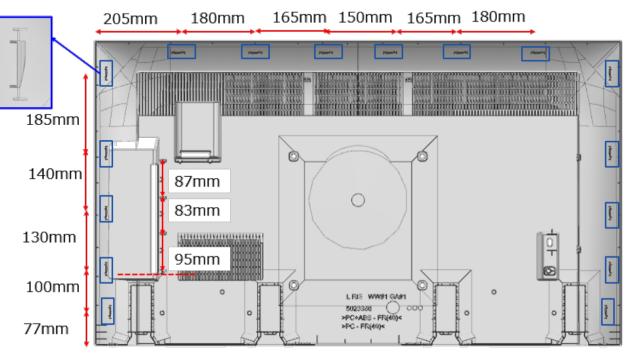
6. Unhook top row.

Total hooks (top row): 6 hooks

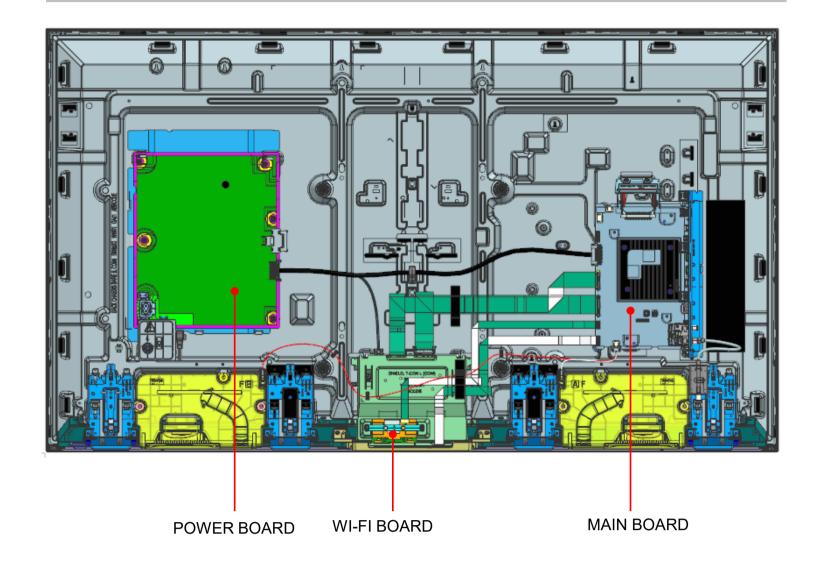
- 1 Tilt the rear cover and push upwards on the left and right side.
- 2 Pull the rear cover below the side jack to remove the upper hook.

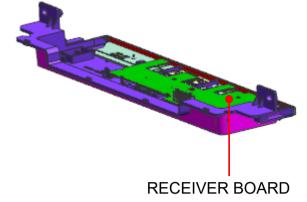
Hook positioning.



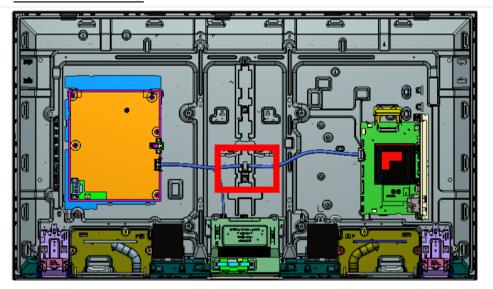


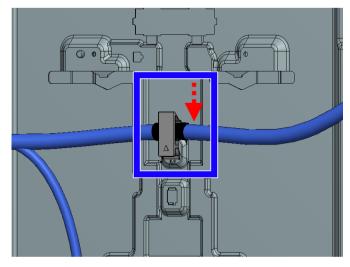
SECTION 3: KD-55X85K 3-2. BOARD LOCATION





## WIRE DRESSING





**INFORMATION** 

**INFORMATION** 

# FFC 41P/51P (Bottom Shield)

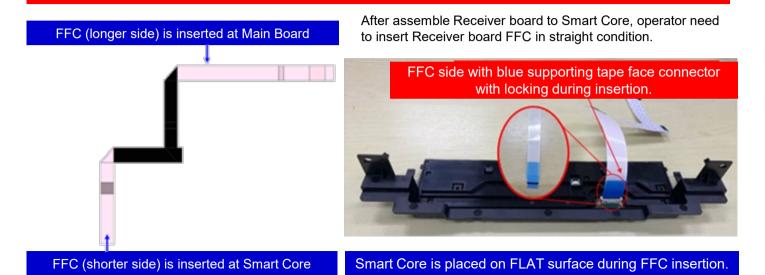




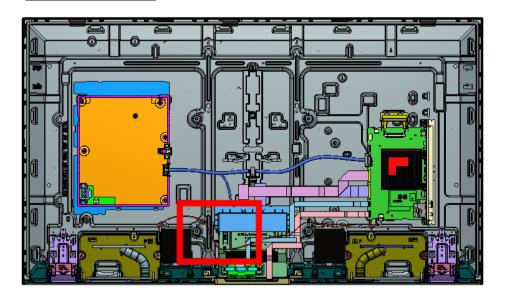
#### **INFORMATION**

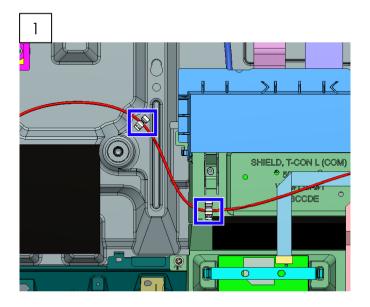
#### Caution:

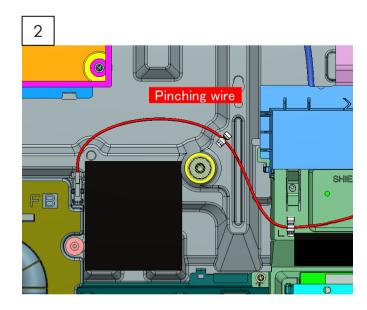
- 1. Operator need to fix Smart Core on FLAT surface before FFC insertion to ensure FFC STRAIGHT insertion.
- 2. FFC side with blue supporting tape, must face CONNECTOR WITH LOCKING during FFC insertion.



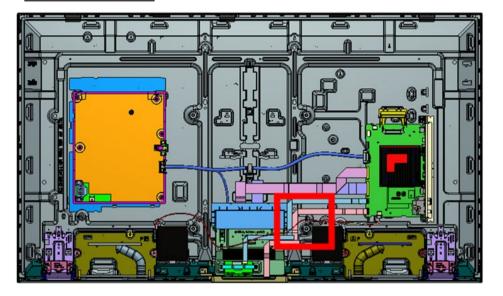
## WIRE DRESSING

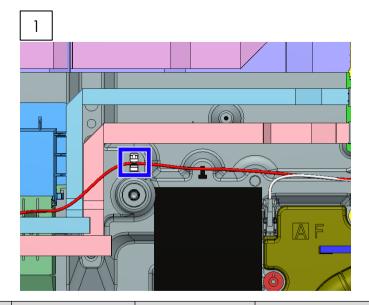


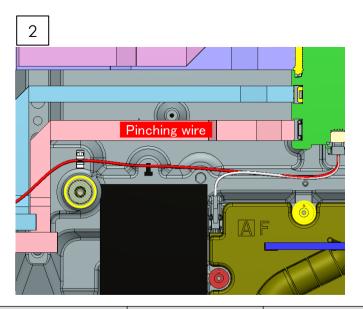




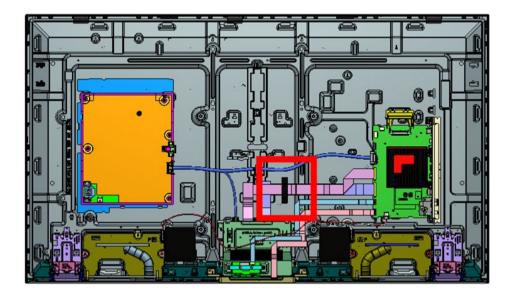
#### WIRE DRESSING

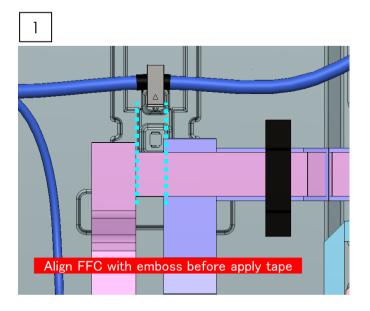


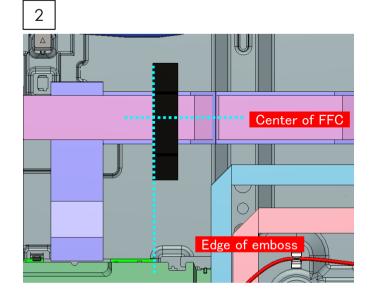


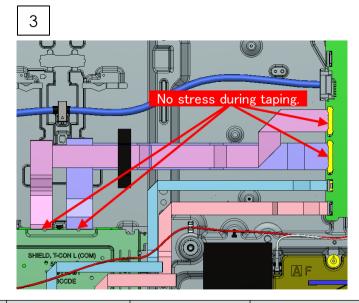


## **TAPE**

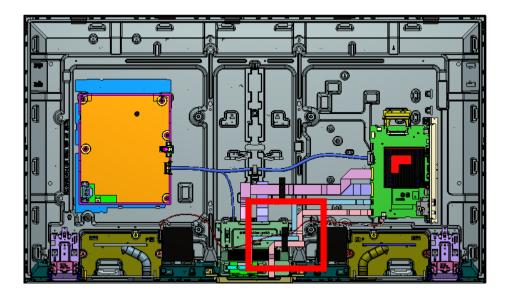


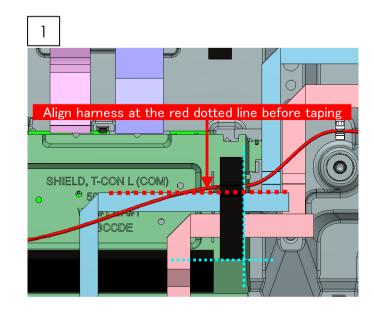


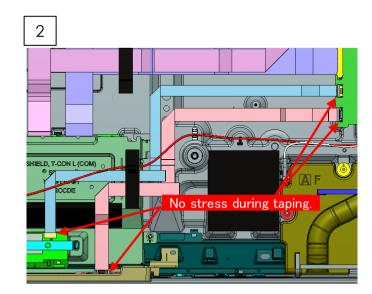




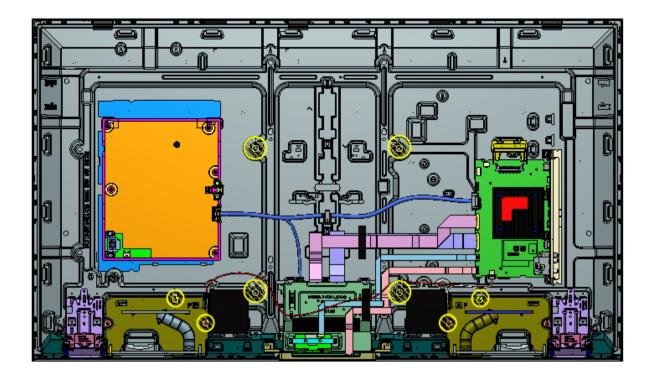
## **TAPE**





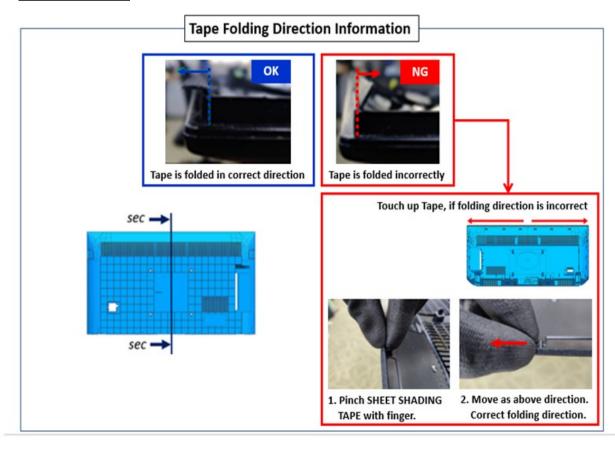


#### **INFORMATION**



Caution: Keep harness away from inhibit area

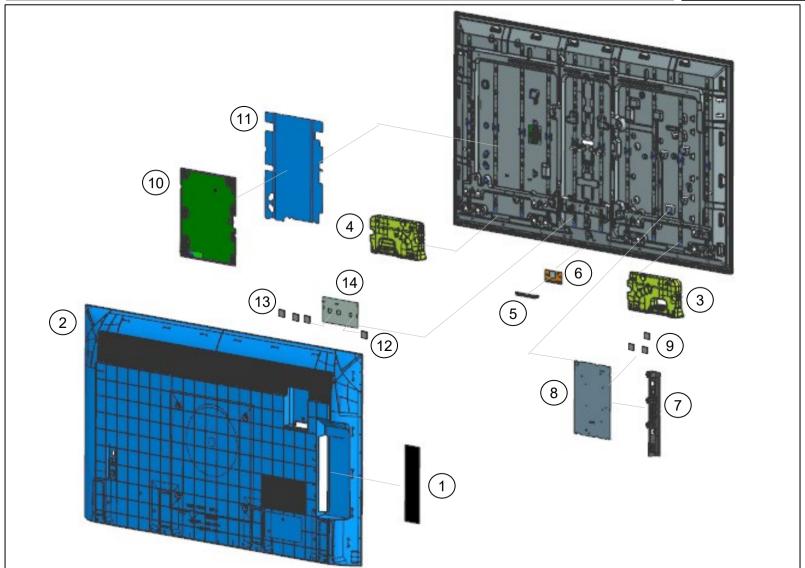
## INFORMATION

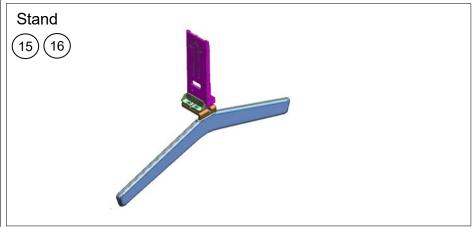


#### SECTION 3: KD-55X85K

#### 3-4. EXPLODED VIEW AND PART LIST

- Place the TV set facing downwards on a stable, level surface before disassembly and assembly of parts.
- And shaded parts are critical for safety. Replace only with part number specified.
- Parts contain confidential information. Strictly follow the instruction whenever the components are repaired and/or replaced
- \( \) Parts are not stocked since they are seldom required for routine service. Some delays should be anticipated when ordering these components.
- † Picture provided in this section might have slight difference from the actual sets.
  † The reference number beside the part indicates the disassembly sequence.
  † Remove screws before disassembly. Unplug connectors before disassembly





**SECTION 3** 

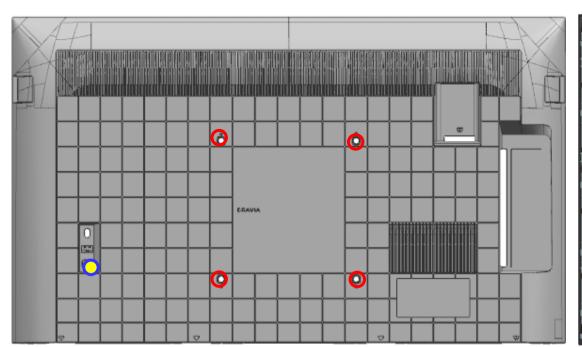
## SECTION 3: KD-55X85K

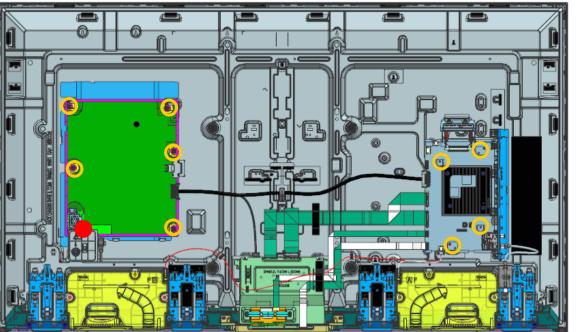
# 3-4. EXPLODED VIEW AND PART LIST

#### **SET PART LIST**

REF. NO	PART NO.	DESCRIPTION	ИСМ
1	5-039-646-01	LABEL, SIDE TERMINAL HP (HRS)	•
<u>^</u> 2	5-027-815-23	REAR COVER ASSY (L LYX)	•
3	1-004-509-12	SP-BOX ASSY,FY20 W30L-FA	•
4	1-004-509-22	SP-BOX ASSY,FY20 W30L-FB	•
5	5-009-258-21	BRACKET, WIFI(BNN)	•
6	1-005-419-32	WLAN/BT MODULE(11AC)FXC	•
7	5-039-955-11	BRACKET SIDE (BNN) A	•
8	A-5042-692-A	COMPL_SVC_BM5A_FH_UCM	•
9	4-457-451-12	SHEET, THERMAL (BAF)	•
<u>1</u> 10	1-013-506-21	GL23P-STATIC CONVERTER (TV)	•
<u> 11</u>	5-027-740-12	SHEET, INSULATION (L PHN) A	•
12	5-020-359-01	SHEET, THERMAL CSOT (APL)	•
13	5-027-341-01	SHEET, THERMAL (RIS)	•
14	1-014-113-11	MOUNTED PWB E-T-CON (55)	•
15	5-022-204-23	STAND, L (2L LYX) A	•
16	5-022-205-23	STAND, R (2L LYX) A	•

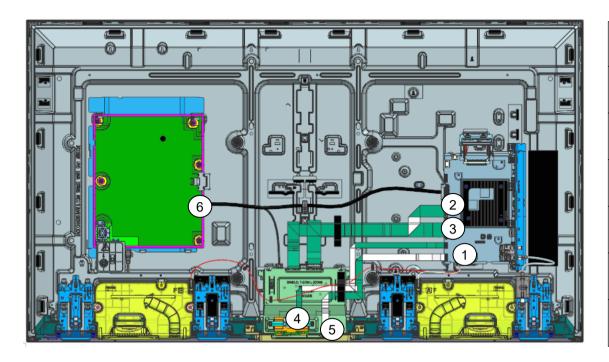
#### **SCREW**





REMARKS	P/N	DESCRIPTION		TORQUE (N.m)
0	4-472-518-11	SCREW, +PSW M3X6	9	0.4 ± 0.05
	2-580-592-01	SCREW, +PSW M3X8	1	0.4 ± 0.05
0	5-015-521-01	+PSW M6*16 W14	4	1.2 ± 0.1
0	4-579-926-01	SCREW M3X3.0 STEP	1	0.4 ± 0.05

#### CONNECTOR



REF. NO	PART NO.	DESCRIPTION	REMARKS
1	1-006-501-33	CONNECTOR ASSY 4P (SP)	CN3550(BM5A)/CN6600(BM5STY)-SP(1)
2	1-011-598-12	FLEXIBLE FLAT CABLE 41P	CN4201(BM5A)-TCON(1)
3	1-010-542-12	FLEXIBLE FLAT CABLE 51P	CN4200(BM5A)-U1(T-CON)(1)
4	1-006-505-11	FLEXIBLE FLAT CABLE 20P	CN3801(BM5A)-J1(WIFI/BT)(1)
5	1-006-510-11	FLEXIBLE FLAT CABLE 25P	CN1200(BM5A)-CN102(HT2)(1)
6	1-014-429-11	CONNECTOR ASSY 30P	CN1701(BM5A)-CN6401(GL)- CON3(TCON)(1)

#### **OTHER PARTS**

PART NO.	DESCRIPTION	UCM	REMARKS
4-535-064-61	ASSY,FALL LOCK,BELT LL	•	-
5-022-225-12	BAG, CL ASSY (2L LYX)	•	(Including CLAMPER (4L BNN) (Qty 2) installed at Main Stand. Refer Setup Guide for details)
5-009-030-01	CLAMPER,CABLE L(BNN)	•	-
5-009-031-02	CLAMPER,CABLE S(BNN)	•	-
1-005-642-12	C7L AC POWER CORD SETS (US)	•	-
1-013-691-23	REMOTE COMMANDER (RMF-TX800U)	•	-
*5-037-718-11	REFERENCE GUIDE	•	-
*5-038-479-11	SETUP GUIDE	•	-
7-600-031-97	TAPE (3M 1350FB-1)15MMX66M BLK	•	-
5-009-861-02	VESA SPACER A (COM)	•	(Screw extension for Fall Lock Belt and Wall Mount, (Qty 1), Refer Setup Guide for details.)

## 4-1. DISASSEMBLY AND REMOVAL CAUTION

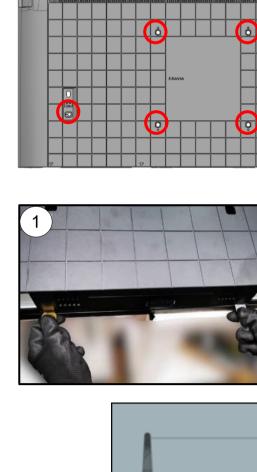
#### **REAR COVER**

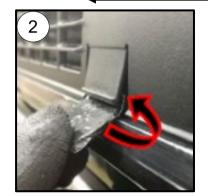
- 1. Remove the screws from the rear cover (5 pcs)
- 2. Unhook the bottom hook, starting from center.

- ① Unhook two hooks closest to center simultaneously to prevent lock back. (Refer to the next page for the location of hooks)
- 2 Unhook both hooks using coin or jig.
- ③ Use mirror or touch the line to assist locating the hook position.

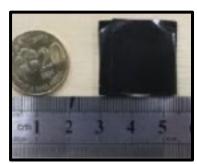
Coin or jig to unhook bottom Rear Cover - Bezel hook

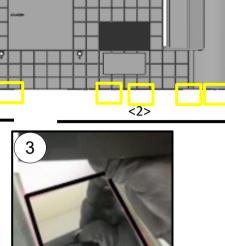
\*Wrap coin in tape (55mmX25mm)
\*Thickness of coin approximately 2mm

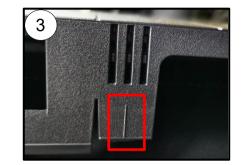


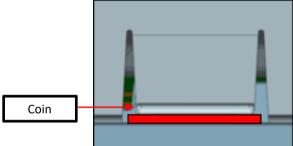


<1>









#### 4-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

**Bottom Hook Position** 

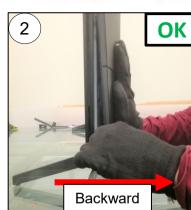
108mm 172mm 56mm 135mm 253mm

Unhook corner hook.

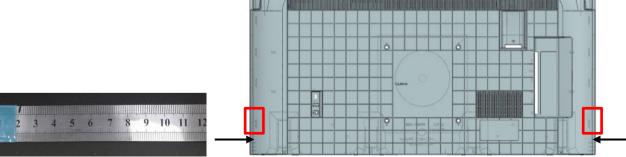
Ruler or jig to release corner hook \*Wrap ruler with tape to prevent scratch

- (1) Releasing the corner hook by pulling the Rear Cover corner and insert a jig or ruler.
- (2) Ensure the jig or ruler is pulled backward.
- (3) DO NOT pivot on bezel when inserting the jig or ruler.











#### 3ECTION 4. KD-03X03

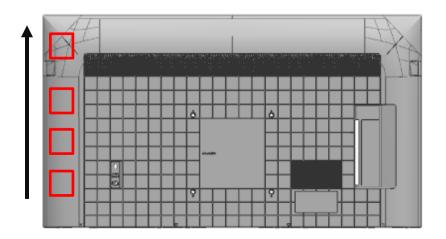
## **REAR COVER**

4. Unhook left side hooks.

Total rear cover back chassis: 4 hooks

- ① Grip the rear cover by hand and use a ruler or jig to remove the hook of the rear cover back chassis.
- 2 Flex the rear cover outward to remove the hook. Support set with arm.

## 4-1. DISASSEMBLY AND REMOVAL CAUTION







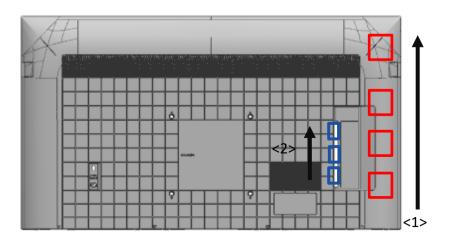
## 4-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

5. Unhook right side hooks.

Total side bracket hooks: 3 hooks.

Total rear cover back chassis hooks: 4 hooks



- (1) Remove the side hooks.
- 2 Pull the rear cover below the side jack to remove the hook.
- ③ Remove the remaining side hooks.







#### 4-1. DISASSEMBLY AND REMOVAL CAUTION

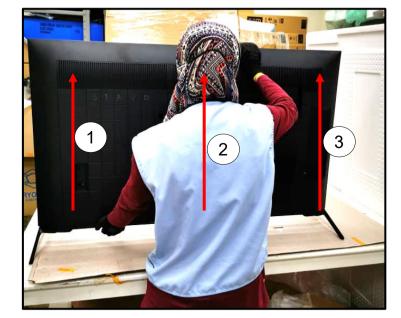
#### **REAR COVER**

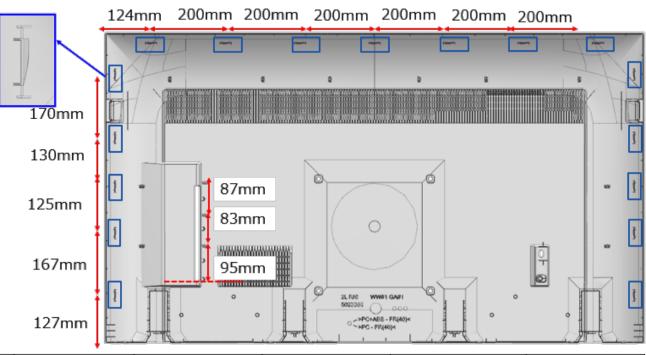
6. Unhook top row.

Total hooks (top row): 7 hooks

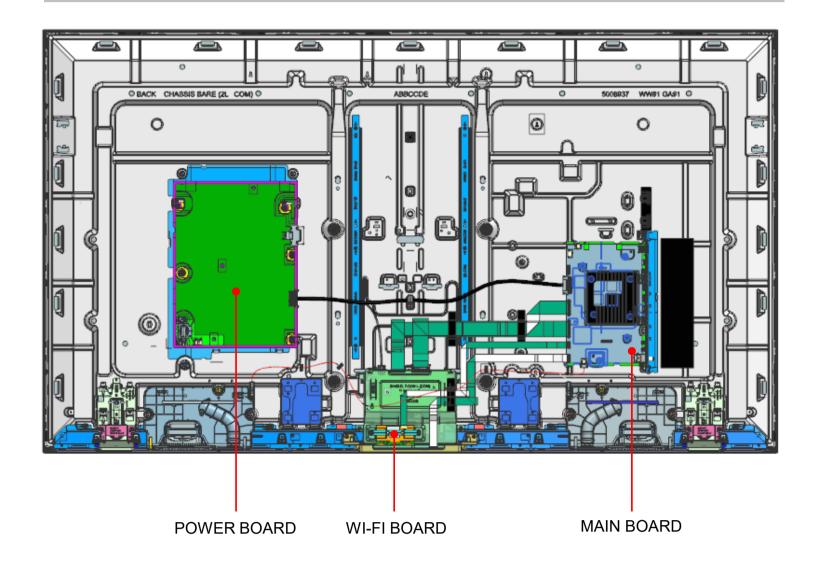
- 1 Tilt the rear cover and push upwards on the left and right side.
- 2 Pull the rear cover below the side jack to remove the upper hook.

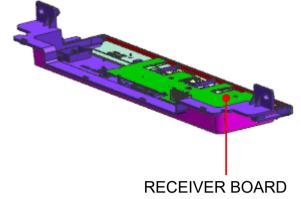
Hook positioning.



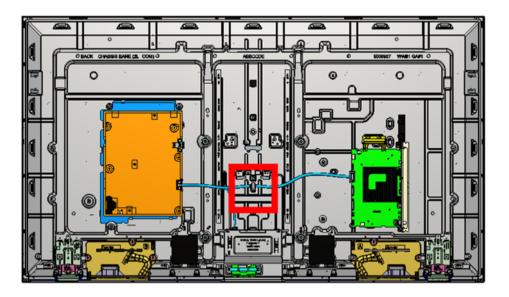


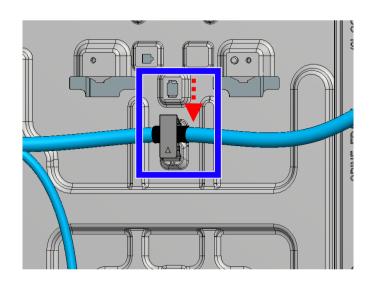
SECTION 4: KD-65X85K 4-2. BOARD LOCATION





## WIRE DRESSING





## **INFORMATION**

# FFC 41P/51P (Bottom Shield)



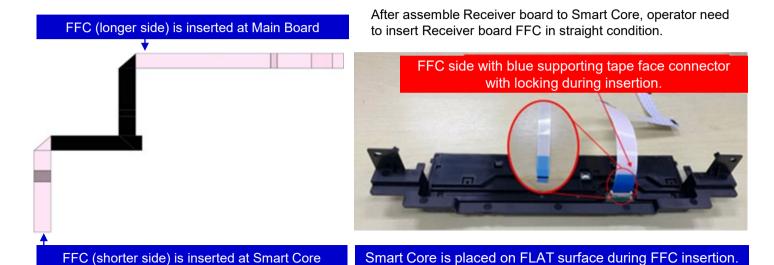


TOOLS & EQUIPMENTS	FFC PRECAUTIONS	SECTION 1	SECTION 2	SECTION 3	SECTION 4	SECTION 5	SMART CORE	APPENDIX

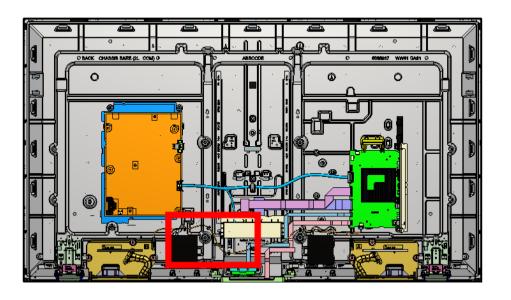
#### **INFORMATION**

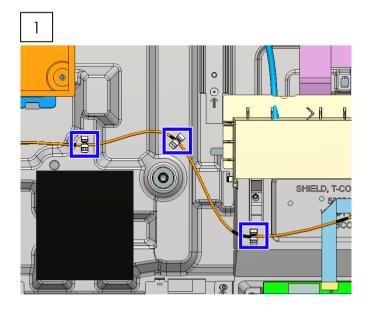
#### Caution:

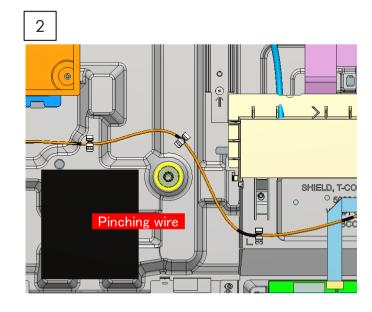
- 1. Operator need to fix Smart Core on FLAT surface before FFC insertion to ensure FFC STRAIGHT insertion.
- 2. FFC side with blue supporting tape, must face CONNECTOR WITH LOCKING during FFC insertion.



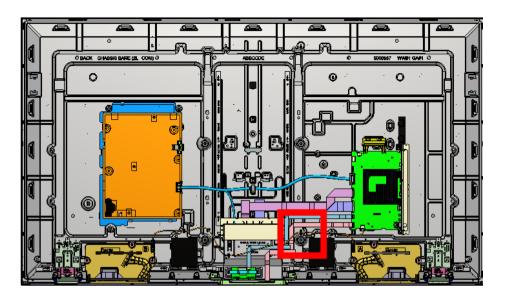
#### WIRE DRESSING

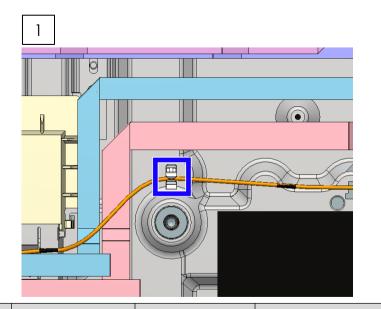


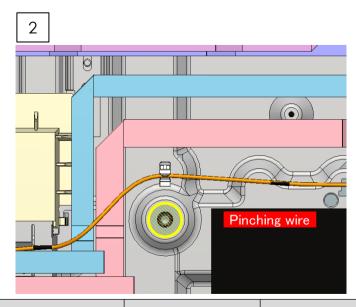




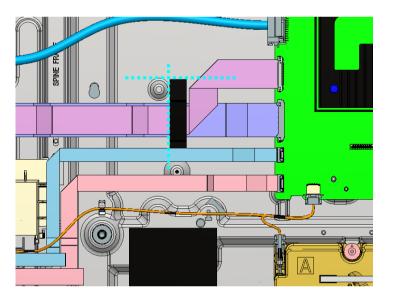
#### WIRE DRESSING



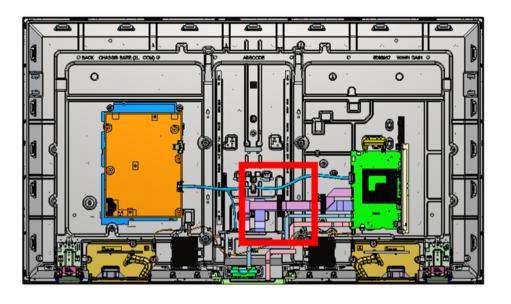


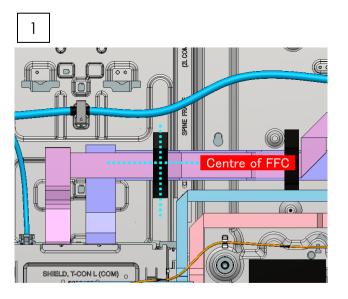


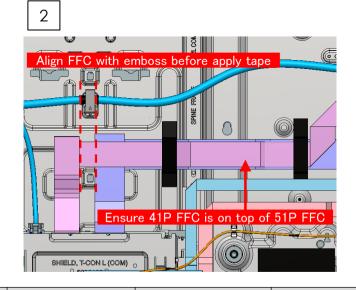
## **TAPE**



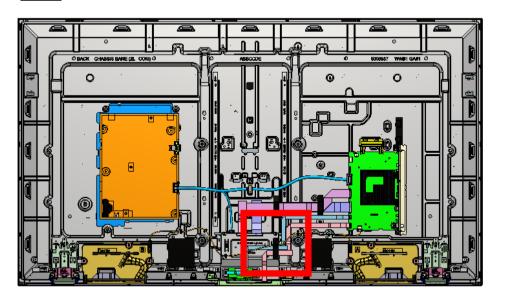
## **TAPE**

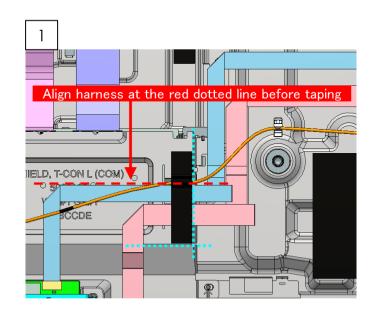


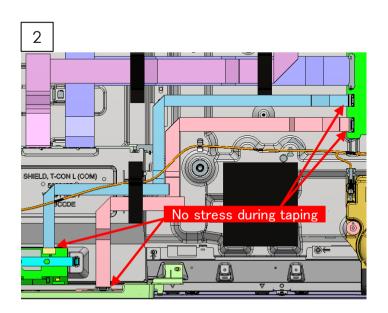




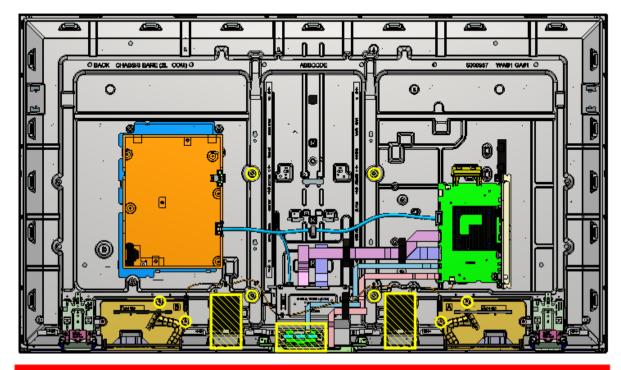
## **TAPE**





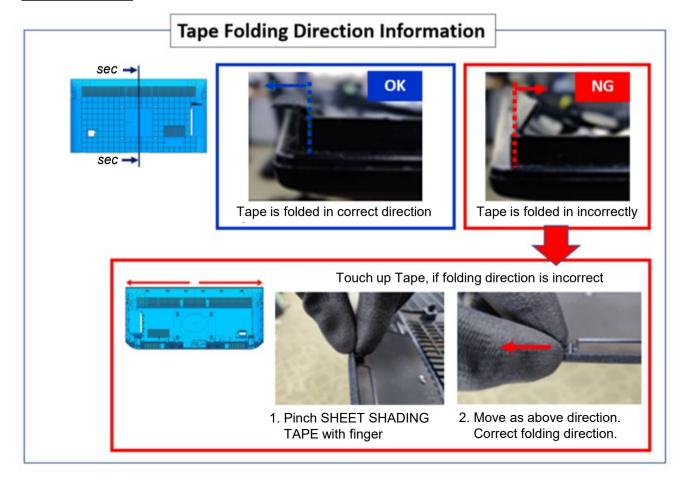


## **INFORMATION**



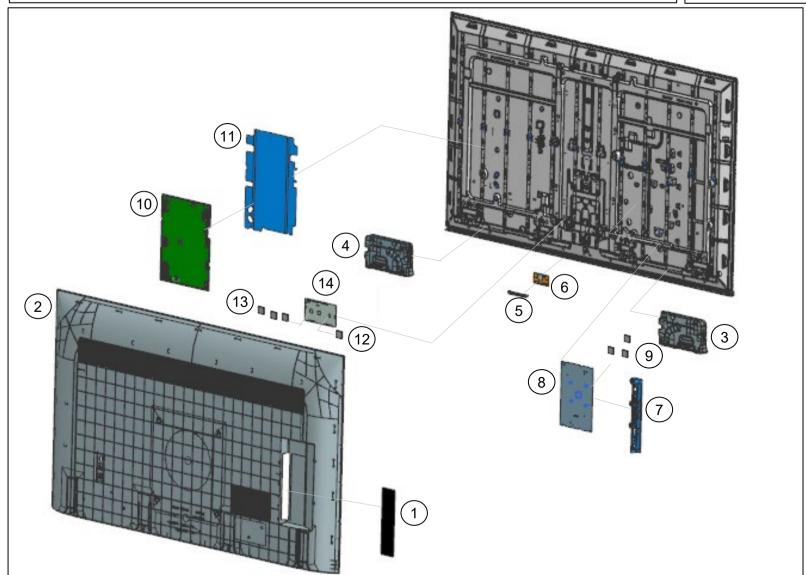
Caution: Keep harness away from Inhibit Area

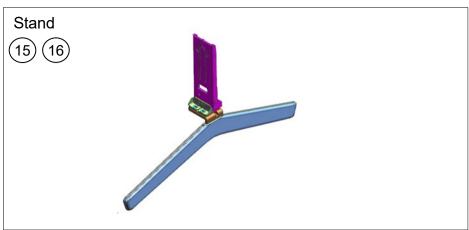
## **INFORMATION**



#### 4-4. EXPLODED VIEW AND PART LIST

- Place the TV set facing downwards on a stable, level surface before disassembly and assembly of parts.
- And shaded parts are critical for safety. Replace only with part number specified.
- Parts contain confidential information. Strictly follow the instruction whenever the components are repaired and/or replaced
- \( \) Parts are not stocked since they are seldom required for routine service. Some delays should be anticipated when ordering these components.
- † Picture provided in this section might have slight difference from the actual sets.
  † The reference number beside the part indicates the disassembly sequence.
  † Remove screws before disassembly. Unplug connectors before disassembly





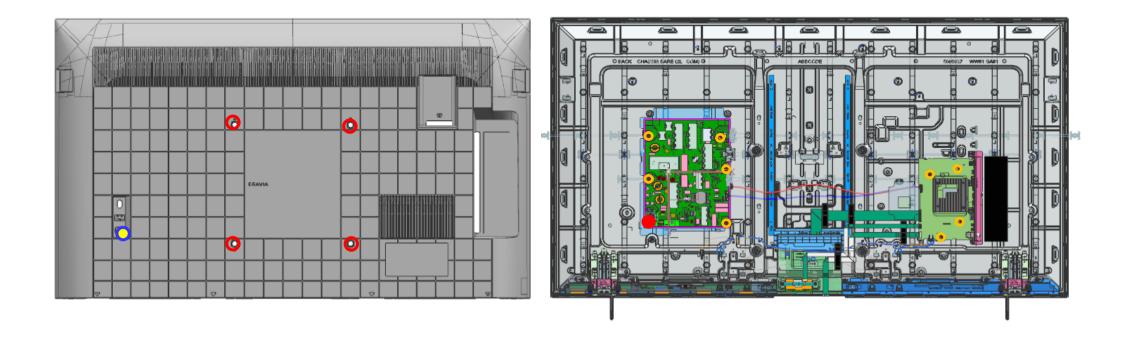
**SECTION 4** 

#### **SET PART LIST**

REF. NO	PART NO.	DESCRIPTION	UCM
1	5-039-646-01	LABEL, SIDE TERMINAL HP (HRS)	•
<u>^</u> 2	5-027-817-24	REAR COVER ASSY (2L LYX)	•
3	1-004-509-12	SP-BOX ASSY,FY20 W30L-FA	•
4	1-004-509-22	SP-BOX ASSY,FY20 W30L-FB	•
5	5-009-258-21	BRACKET, WIFI(BNN)	•
6	1-005-419-32	WLAN/BT MODULE(11AC)FXC	•
7	5-039-955-11	BRACKET SIDE (BNN) A	•
8	A-5042-692-A	COMPL_SVC_BM5A_FH_UCM	•
9	4-457-451-12	SHEET, THERMAL (BAF)	•
<u>1</u> 10	1-013-509-21	GL24P-STATIC CONVERTER (TV)	•
<u> </u>	5-027-741-11	SHEET, INSULATION (2L PHN) A	•
12	5-020-359-01	SHEET, THERMAL CSOT (APL)	•
13	5-027-341-01	SHEET, THERMAL (RIS)	•
14	1-014-115-11	MOUNTED PWB E-T-CON (65)	•
14	1-014-115-21	MOUNTED PWB E-T-CON (65)	•
15	5-022-204-23	STAND, L (2L LYX) A	•
16	5-022-205-23	STAND, R (2L LYX) A	•

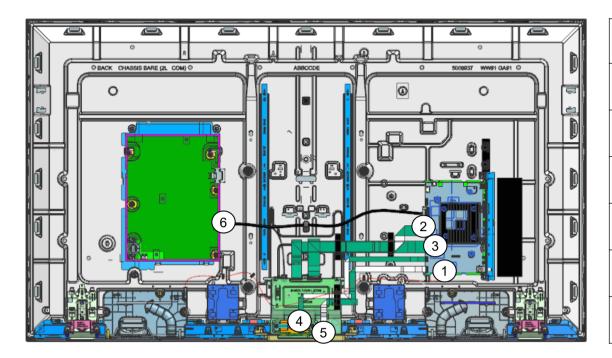
SYS SET

#### **SCREW**



REMARKS	P/N	DESCRIPTION		TORQUE (N.m)
0	4-472-518-11	SCREW, +PSW M3X6	9	0.4 ± 0.05
	2-580-592-01	SCREW, +PSW M3X8	1	0.4 ± 0.05
0	5-015-521-01	+PSW M6*16 W14	4	1.2 ± 0.1
0	4-579-926-01	SCREW M3X3.0 STEP	1	0.4 ± 0.05

#### CONNECTOR



REF. NO	PART NO.	DESCRIPTION	REMARKS
1	1-006-513-34	CONNECTOR ASSY 4P (SP)	CN3550(BM5A)/CN6600(BM5STY)-SP(1)
2	1-013-161-12	FLEXIBLE FLAT CABLE 41P	CN4201(BM5A)-TCON(1)
3	1-013-163-12	FLEXIBLE FLAT CABLE 51P	CN4200(BM5A)-U1(T-CON)(1)
4	1-006-505-11	FLEXIBLE FLAT CABLE 20P	CN3801(BM5A)-J1(WIFI/BT)(1)
5	1-006-510-11	FLEXIBLE FLAT CABLE 25P	CN1200(BM5A)-CN102(HT2)(1)
6	1-014-490-11	CONNECTOR ASSY 30P	CN1701(BM5A)-CN6401(GL)- CON3(TCON)(1)

#### **OTHER PARTS**

PART NO.	DESCRIPTION	исм	REMARKS
4-535-064-61	ASSY,FALL LOCK,BELT LL	•	-
5-022-225-12	BAG, CL ASSY (2L LYX)	•	(Including CLAMPER (4L BNN) (Qty 2) installed at Main Stand. Refer Setup Guide for details)
5-009-030-01	CLAMPER,CABLE L(BNN)	•	-
5-009-031-02	CLAMPER,CABLE S(BNN)	•	-
1-005-642-12	C7L AC POWER CORD SETS (US)	•	-
1-013-691-23	REMOTE COMMANDER (RMF-TX800U)	•	-
*5-037-718-11	REFERENCE GUIDE	•	-
*5-037-726-11	SETUP GUIDE	•	-
7-600-031-97	TAPE (3M 1350FB-1)15MMX66M BLK	•	-
5-009-861-02	VESA SPACER A (COM)	•	(Screw extension for Fall Lock Belt and Wall Mount, (Qty 1), Refer Setup Guide for details.)

#### 5-1. DISASSEMBLY AND REMOVAL CAUTION

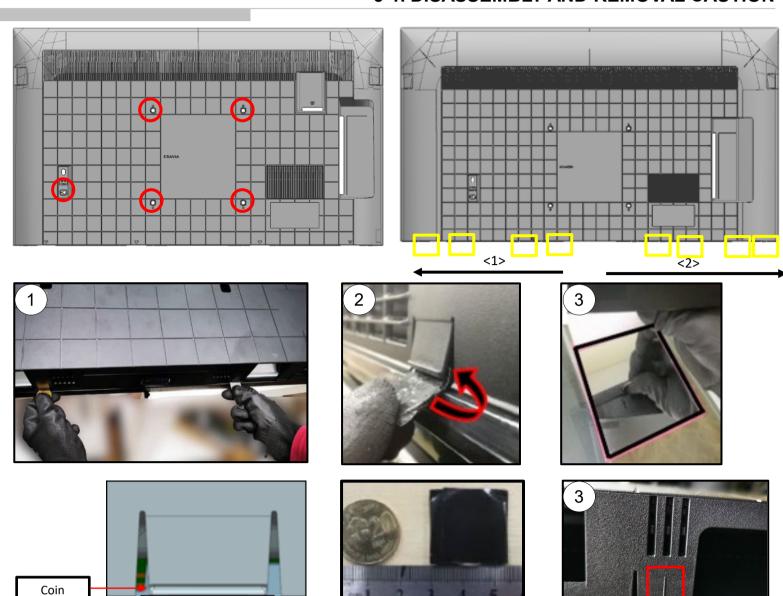
#### **REAR COVER**

- 1. Remove the screws from the rear cover (5 pcs)
- 2. Unhook the bottom hook, starting from center.

- ① Unhook two hooks closest to center simultaneously to prevent lock back. (Refer to the next page for the location of hooks)
- 2 Unhook both hooks using coin or jig.
- ③ Use mirror or touch the line to assist locating the hook position.

Coin or jig to unhook bottom Rear Cover - Bezel hook

- \*Wrap coin in tape (55mmX25mm)
- \*Thickness of coin approximately 2mm



#### 5-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

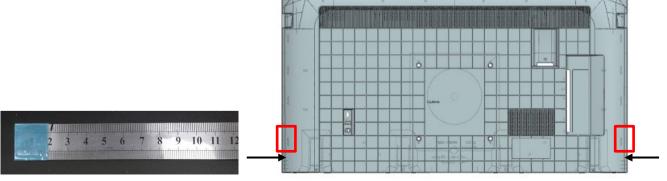
**Bottom Hook Position** 

80mm 137mm 313mm 157mm 150mm

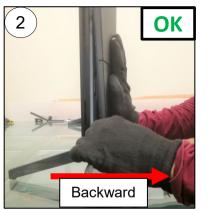
3. Unhook corner hook.

Ruler or jig to release corner hook
\*Wrap ruler with tape to prevent scratch

- 1 Releasing the corner hook by pulling the Rear Cover corner and insert a jig or ruler.
- (2) Ensure the jig or ruler is pulled backward.
- ③ DO NOT pivot on bezel when inserting the jig or ruler.









#### 5-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

4. Unhook left side hooks.

Total rear cover back chassis: 4 hooks

- ① Grip the rear cover by hand and use a ruler or jig to remove the hook of the rear cover back chassis.
- (2) Flex the rear cover outward to remove the hook. Support set with arm.







**SECTION 5** 

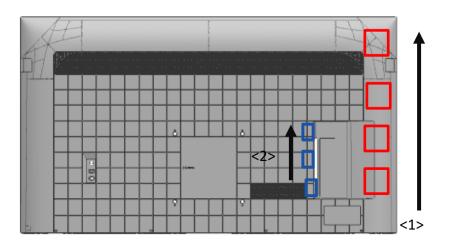
#### 5-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

5. Unhook right side hooks.

Total side bracket hooks: 3 hooks.

Total rear cover back chassis hooks: 4 hooks



- 1 Remove the side hooks.
- 2 Pull the rear cover below the side jack to remove the hook.
- ③ Remove the remaining side hooks.







SYS SET

#### 5-1. DISASSEMBLY AND REMOVAL CAUTION

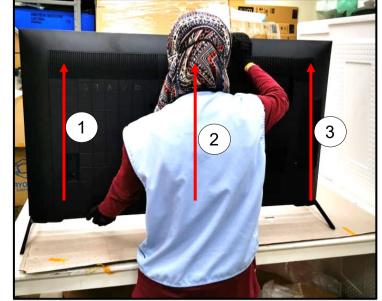
#### **REAR COVER**

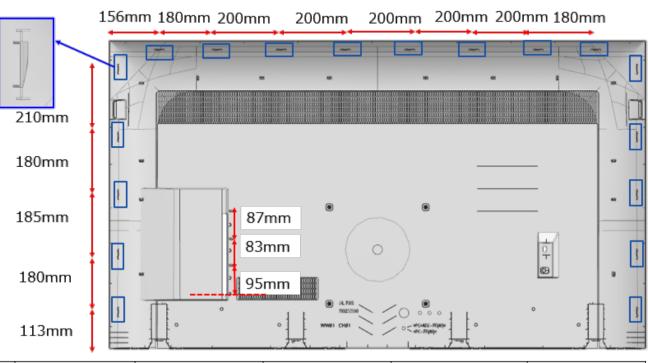
6. Unhook top row.

Total hooks (top row): 8 hooks

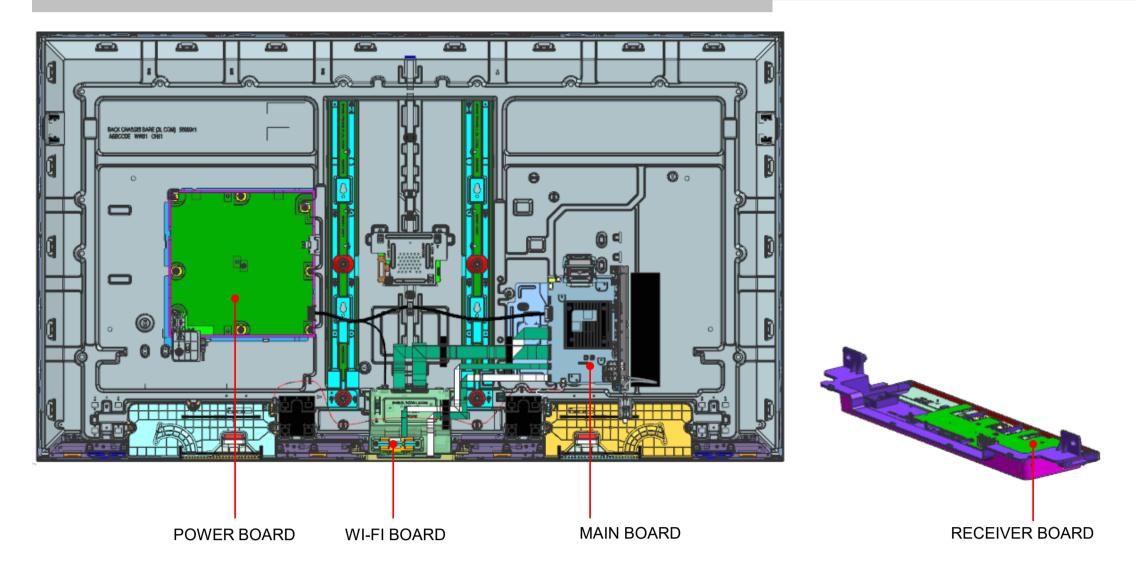
- 1 Tilt the rear cover and push upwards on the left and right side.
- 2 Pull the rear cover below the side jack to remove the upper hook.

Hook positioning.

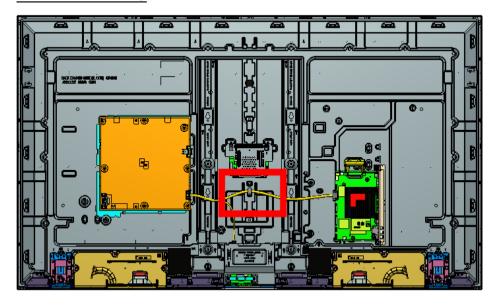


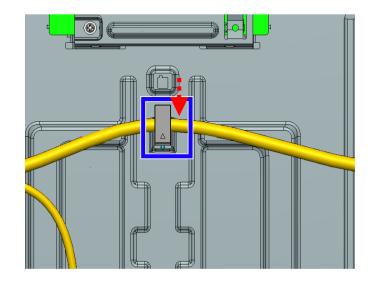


SECTION 5: KD-75X85K 5-2. BOARD LOCATION



## WIRE DRESSING





## **INFORMATION**

# FFC 41P/51P (Bottom Shield)



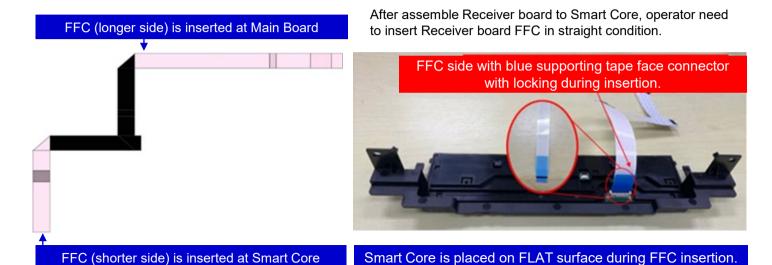


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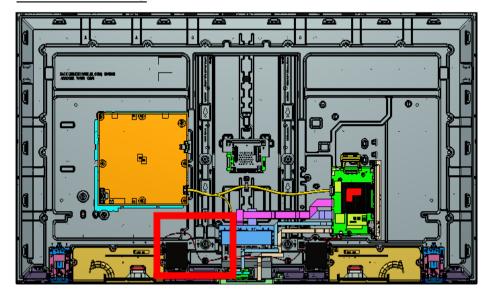
#### WIRE DRESSING

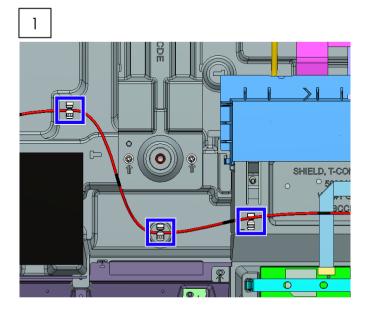
#### Caution:

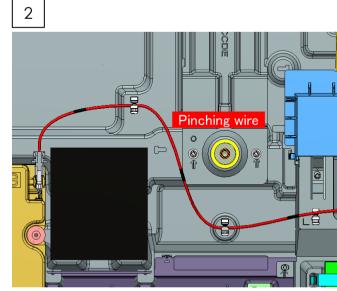
- 1. Operator need to fix Smart Core on FLAT surface before FFC insertion to ensure FFC STRAIGHT insertion.
- 2. FFC side with blue supporting tape, must face CONNECTOR WITH LOCKING during FFC insertion.



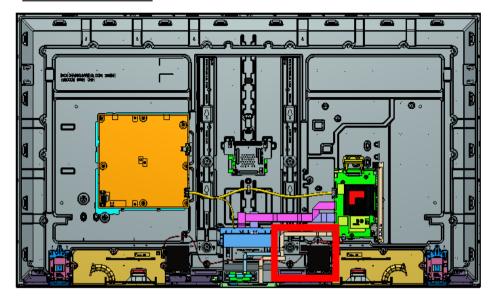
## WIRE DRESSING

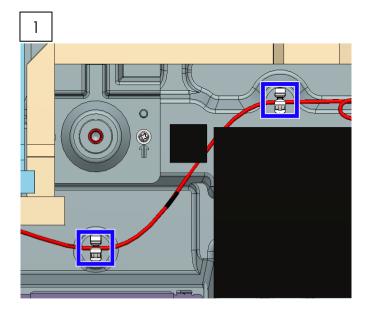


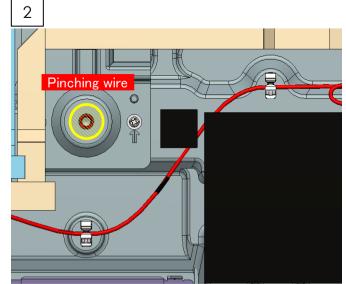




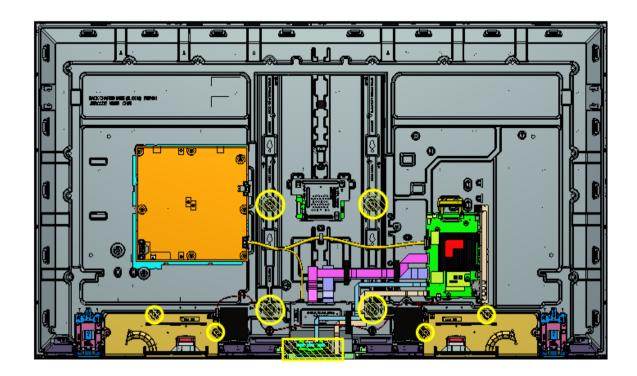
## WIRE DRESSING





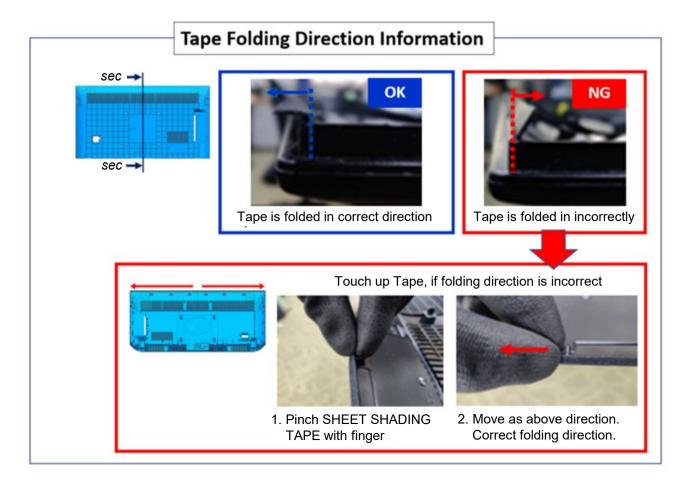


## **INFORMATION**



Caution: Keep harness away from Inhibit Area

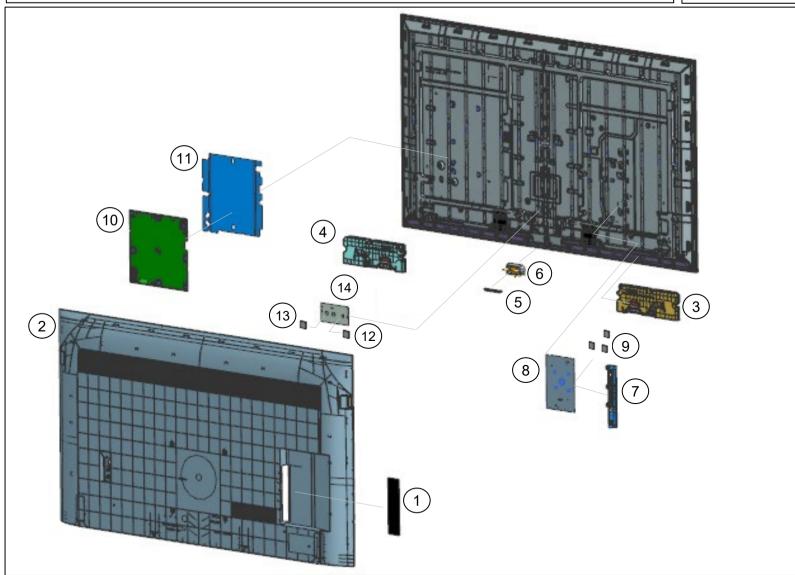
## INFORMATION



#### SECTION 5: KD-75X85K

#### 5-4. EXPLODED VIEW AND PART LIST

- Place the TV set facing downwards on a stable, level surface before disassembly and assembly of parts.
- And shaded parts are critical for safety. Replace only with part number specified.
- Parts contain confidential information. Strictly follow the instruction whenever the components are repaired and/or replaced
- \( \) Parts are not stocked since they are seldom required for routine service. Some delays should be anticipated when ordering these components.
- † Picture provided in this section might have slight difference from the actual sets.
  † The reference number beside the part indicates the disassembly sequence.
  † Remove screws before disassembly. Unplug connectors before disassembly





# SECTION 5: KD-75X85K

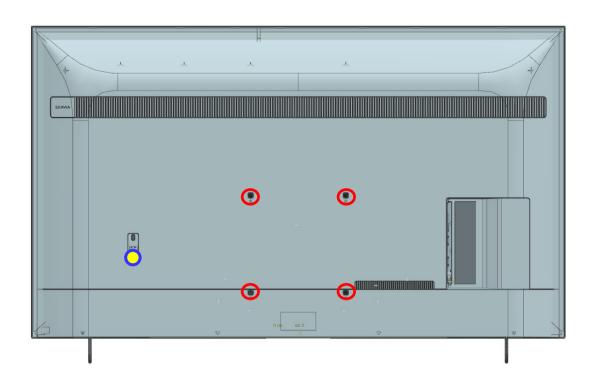
## SET PART LIST

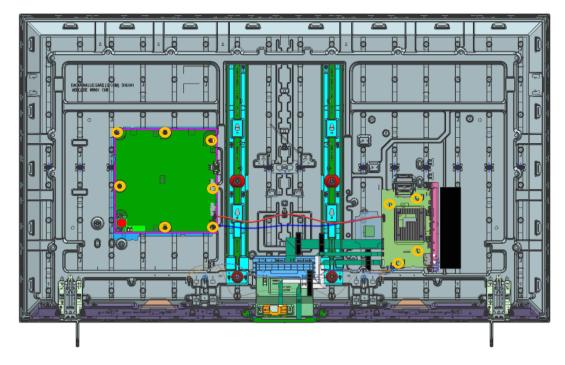
TOOLS & EQUIPMENTS

REF. NO	PART NO.	DESCRIPTION	исм
1	5-039-646-01	LABEL, SIDE TERMINAL HP (HRS)	•
<u>^</u> 2	5-039-624-21	REAR COVER ASSY (3L LYX)	•
3	1-004-511-12	SP-BOX ASSY,FY20 W30XL-A	•
4	1-004-511-22	SP-BOX ASSY,FY20 W30XL-B	•
5	5-009-258-21	BRACKET, WIFI(BNN)	•
6	1-005-419-32	WLAN/BT MODULE(11AC)FXC	•
7	5-039-955-11	BRACKET SIDE (BNN) A	•
8	A-5042-692-A	COMPL_SVC_BM5A_FH_UCM	•
9	4-457-451-12	SHEET, THERMAL (BAF)	•
<u>1</u> 10	1-004-424-42	GL03BP-STATIC CONVERTER (TV)	•
<u> 11</u>	5-027-742-11	SHEET, INSULATION (3L PHN) A	•
12	5-020-359-01	SHEET, THERMAL CSOT (APL)	•
13	5-027-341-01	SHEET, THERMAL (RIS)	•
14	1-014-117-11	MOUNTED PWB E-T-CON (75)	•
15	5-022-231-13	STAND, L (3L LYX) A	•
16	5-022-232-13	STAND, R (3L LYX) A	•

5-4. EXPLODED	<b>VIEW AND PART</b>	LIS'
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## **SCREW**

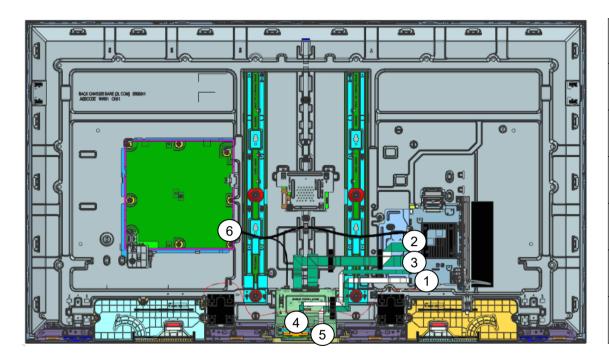




REMARKS	P/N	DESCRIPTION	QTY	TORQUE (N.m)
0	4-472-518-11	SCREW, +PSW M3X6	11	0.4 ± 0.05
	2-580-592-01	SCREW, +PSW M3X8	1	0.4 ± 0.05
0	5-015-521-01	+PSW M6*16 W14	4	1.2 ± 0.1
0	4-579-926-01	SCREW M3X3.0 STEP	1	0.4 ± 0.05

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#### **CONNECTOR**



REF. NO	PART NO.	DESCRIPTION	REMARKS
1	1-006-514-13	CONNECTOR ASSY 4P (SP)	CN3550(BM5A)/CN6600(BM5STY)-SP(1)
2	1-013-161-12	FLEXIBLE FLAT CABLE 41P	CN4201(BM5A)-TCON(1)
3	1-013-163-12	FLEXIBLE FLAT CABLE 51P	CN4200(BM5A)-U1(T-CON)(1)
4	1-006-505-11	FLEXIBLE FLAT CABLE 20P	CN3801(BM5A)-J1(WIFI/BT)(1)
5	1-006-510-11	FLEXIBLE FLAT CABLE 25P	CN1200(BM5A)-CN102(HT2)(1)
6	1-014-490-11	CONNECTOR ASSY 30P	CN1701(BM5A)-CN6401(GL)- CON3(TCON)(1)

#### **OTHER PARTS**

PART NO.	DESCRIPTION	ИСМ	REMARKS
4-535-064-61	ASSY,FALL LOCK,BELT LL	•	-
5-022-248-11	BAG, CL ASSY (3L LYX)	•	(Including CLAMPER (4L LYX) (Qty 2) installed at Main Stand. Refer Setup Guide for details)
5-009-030-01	CLAMPER,CABLE L(BNN)	•	-
5-009-031-02	CLAMPER,CABLE S(BNN)	•	-
1-005-642-12	C7L AC POWER CORD SETS (US)	•	-
1-013-691-23	REMOTE COMMANDER (RMF-TX800U)	•	-
*5-037-718-11	REFERENCE GUIDE	•	-
*5-037-726-11	SETUP GUIDE	•	-
7-600-031-97	TAPE (3M 1350FB-1)15MMX66M BLK	•	-
5-009-861-02	VESA SPACER A (COM)	•	(Screw extension for Fall Lock Belt and Wall Mount, (Qty 1), Refer Setup Guide for details.)

#### 6-1. DISASSEMBLY AND REMOVAL CAUTION

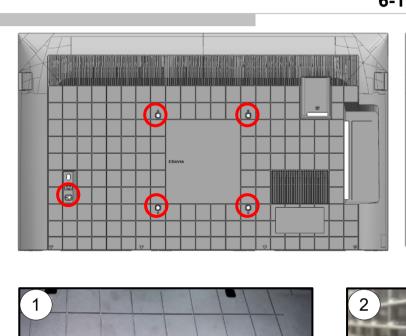
#### **REAR COVER**

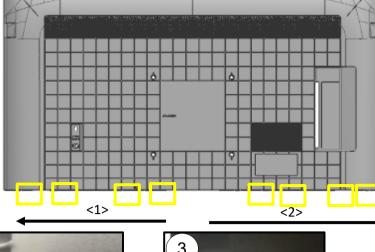
- 1. Remove the screws from the rear cover (5 pcs)
- 2. Unhook the bottom hook, starting from center.

- ① Unhook two hooks closest to center simultaneously to prevent lock back. (Refer to the next page for the location of hooks)
- 2 Unhook both hooks using coin or jig.
- (3) Use mirror or touch the line to assist locating the hook position.

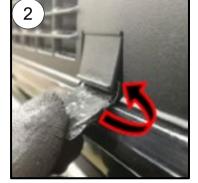
Coin or jig to unhook bottom Rear Cover - Bezel hook

- \*Wrap coin in tape (55mmX25mm)
- \*Thickness of coin approximately 2mm

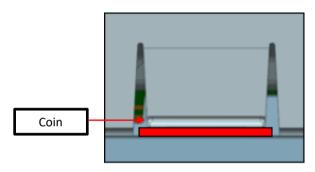


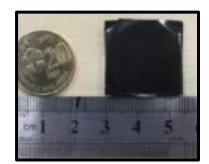


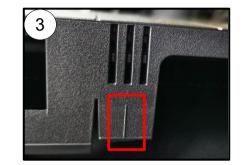








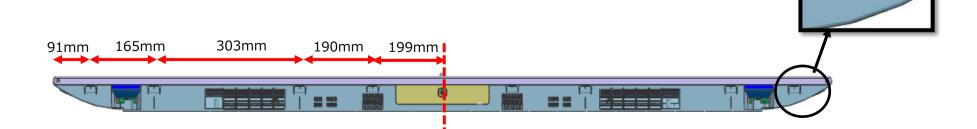




#### 6-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

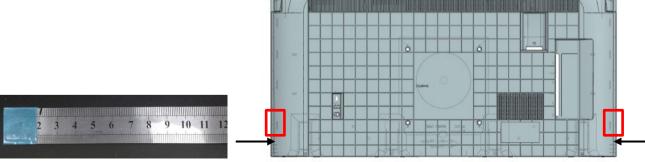
**Bottom Hook Position** 



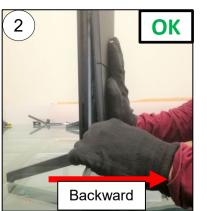
3. Unhook corner hook.

Ruler or jig to release corner hook
\*Wrap ruler with tape to prevent scratch

- 1 Releasing the corner hook by pulling the Rear Cover corner and insert a jig or ruler.
- (2) Ensure the jig or ruler is pulled backward.
- ③ DO NOT pivot on bezel when inserting the jig or ruler.









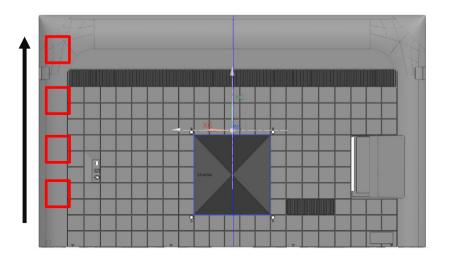
# REAR COVER

4. Unhook left side hooks.

Total rear cover back chassis: 4 hooks

- ① Grip the rear cover by hand and use a ruler or jig to remove the hook of the rear cover back chassis.
- (2) Flex the rear cover outward to remove the hook. Support set with arm.

## 6-1. DISASSEMBLY AND REMOVAL CAUTION







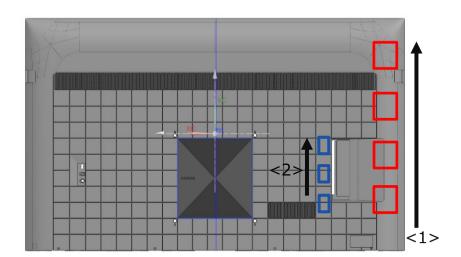
## 6-1. DISASSEMBLY AND REMOVAL CAUTION

#### **REAR COVER**

5. Unhook right side hooks.

Total side bracket hooks: 3 hooks.

Total rear cover back chassis hooks: 4 hooks



- 1 Remove the side hooks.
- 2 Pull the rear cover below the side jack to remove the hook.
- ③ Remove the remaining side hooks.







## 6-1. DISASSEMBLY AND REMOVAL CAUTION

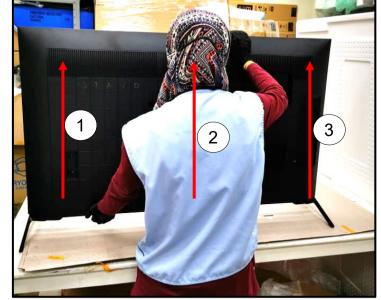
#### **REAR COVER**

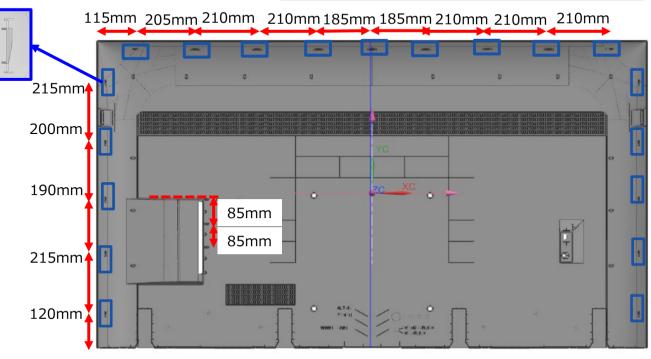
6. Unhook top row.

Total hooks (top row): 9 hooks

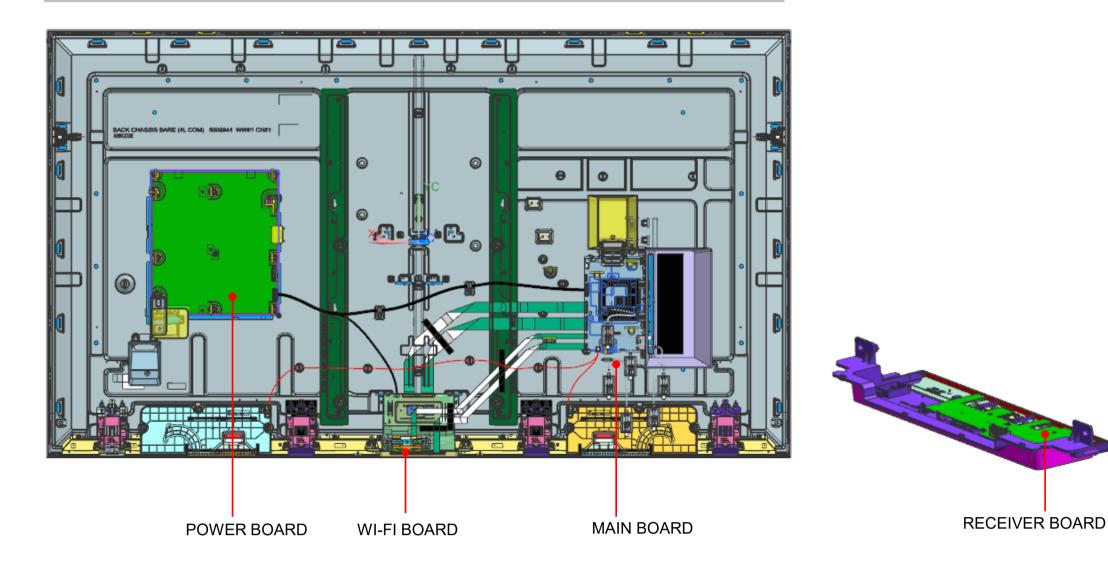
- 1 Tilt the rear cover and push upwards on the left and right side.
- 2 Pull the rear cover below the side jack to remove the upper hook.

Hook positioning.



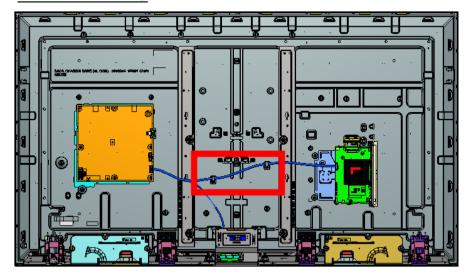


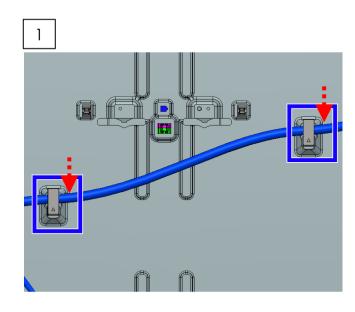
SECTION 6: KD-85X8\*K 6-2. BOARD LOCATION





#### WIRE DRESSING

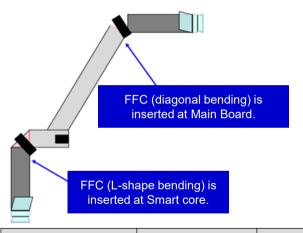




#### **INFORMATION**

#### Caution:

- 1. Operator need to fix Smart Core on FLAT surface before FFC insertion to ensure FFC STRAIGHT insertion.
- FC side with blue supporting tape, must face CONNECTOR WITH LOCKING during FFC insertion.



After assemble Receiver board to Smart Core, operator need to insert Receiver board FFC in straight condition.

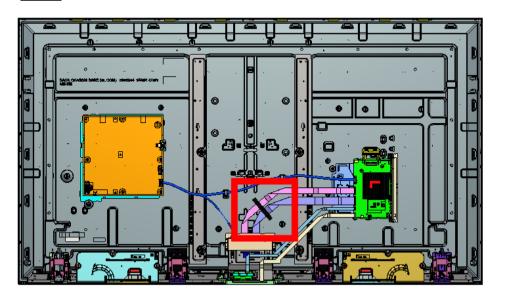


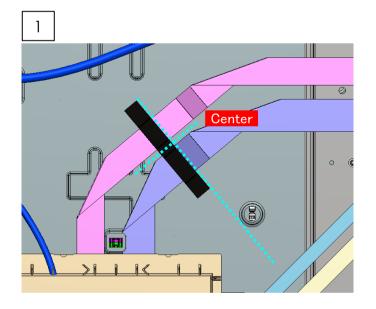
Smart Core is placed on FLAT surface during FFC insertion.

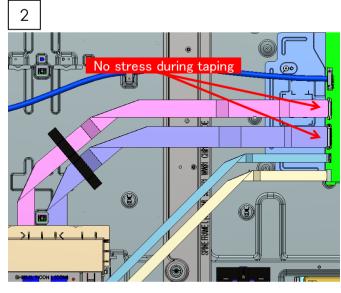
TOOLS & EQUIPMENTS FFC PRECAUTIONS SECTION 1 SECTION 2 SECTION 3 SECTION 4 SECTION 5 SECTION 6 SMART CORE APPENDIX

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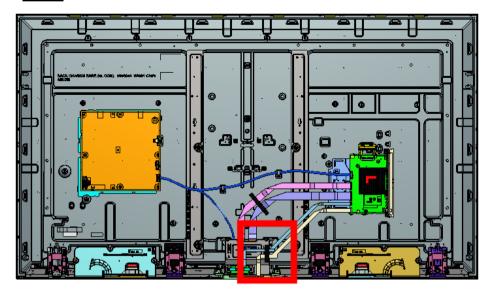
## **TAPE**

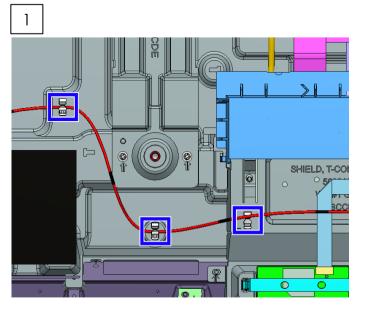


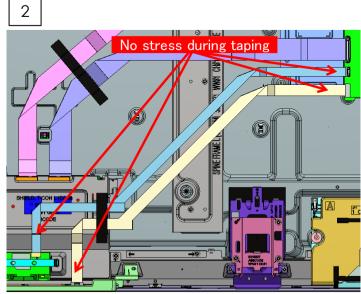




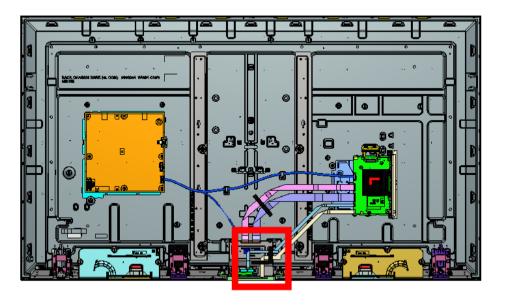
## **TAPE**

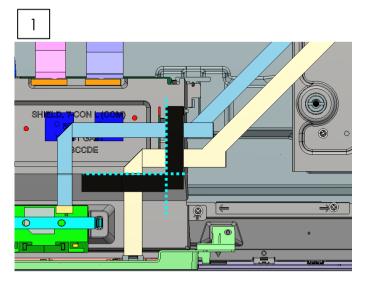


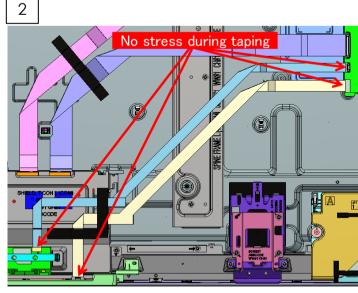




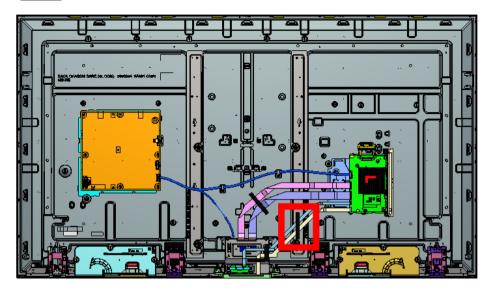
## **TAPE**

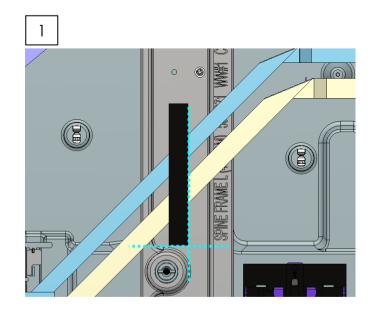


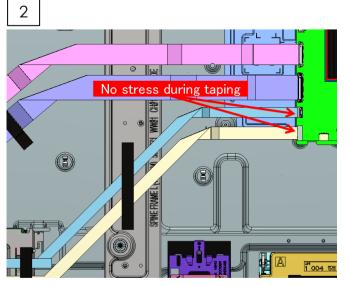




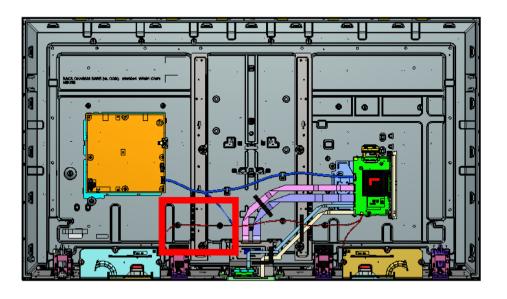
## **TAPE**





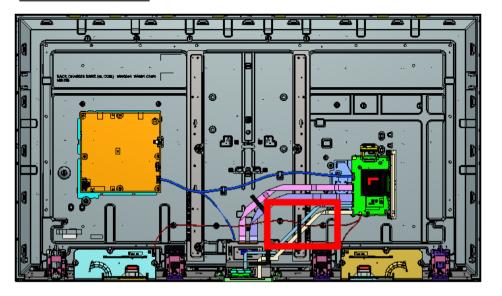


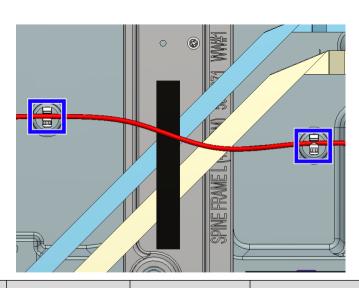
## WIRE DRESSING



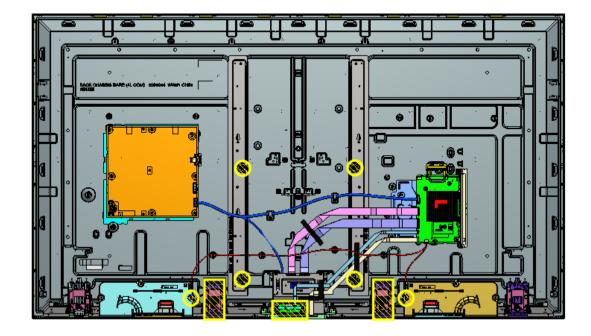


## WIRE DRESSING





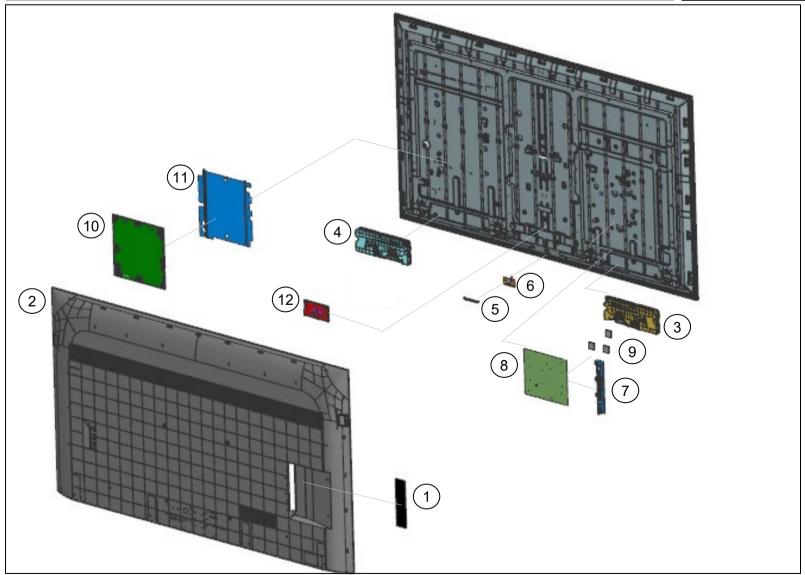
## **INFORMATION**

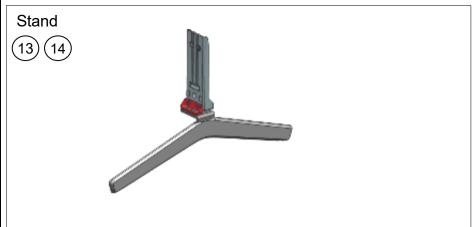


Caution: Keep harness away from Inhibit Area

#### 6-4. EXPLODED VIEW AND PART LIST

- Place the TV set facing downwards on a stable, level surface before disassembly and assembly of parts.
- And shaded parts are critical for safety. Replace only with part number specified.
- Parts contain confidential information. Strictly follow the instruction whenever the components are repaired and/or replaced
- \( \tau^\* \) Parts are not stocked since they are seldom required for routine service. Some delays should be anticipated when ordering these components.
- † Picture provided in this section might have slight difference from the actual sets.
  † The reference number beside the part indicates the disassembly sequence.
  † Remove screws before disassembly. Unplug connectors before disassembly





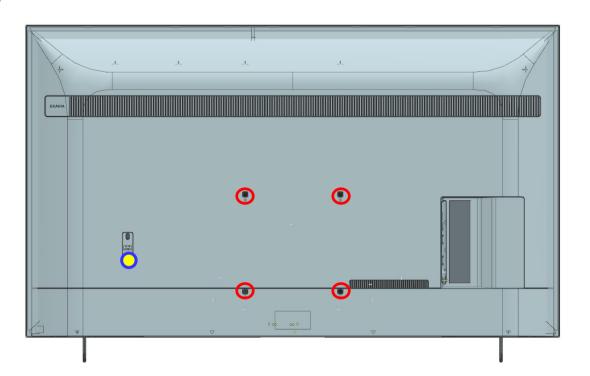
**SECTION 6** 

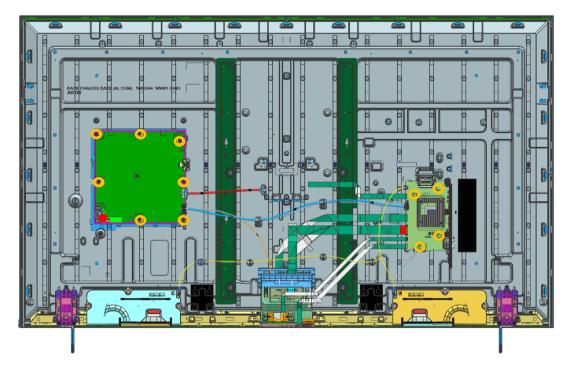
#### **SET PART LIST**

REF.	. NO	PART NO.	DESCRIPTION	KD-85X80K UC2	KD-85X85K UCM	KD-85X80CK UC2	REMARKS
1	1	5-039-646-01	LABEL, SIDE TERMINAL HP (HRS)	•	•	•	-
<u>^</u> 2	2	5-039-627-01	REAR COVER ASSY (4L HRS)	•	•	•	-
3	3	1-004-511-12	SP-BOX ASSY,FY20 W30XL-A	•	•	•	-
4	1	1-004-511-22	SP-BOX ASSY,FY20 W30XL-B	•	•	•	-
5	5	5-009-258-21	BRACKET, WIFI(BNN)	•	•	•	-
6	3	1-005-419-32	WLAN/BT MODULE(11AC)FXC	•	•	•	-
7	7	5-039-955-11	BRACKET SIDE (BNN) A	•	•	•	-
8	3	A-5042-692-A	COMPL_SVC_BM5A_FH_UCM	•	•	n/a	-
8	3	A-5042-693-A	COMPL_SVC_BM5A_FH_UCM_MIC	n/a	n/a	•	-
9	9	4-457-451-12	SHEET, THERMAL (BAF)	•	•	•	-
<u>/</u> 10	0	1-004-424-42	GL03BP-STATIC CONVERTER (TV)	•	•	•	-
<u> </u>	1	5-027-742-11	SHEET, INSULATION (3L PHN) A	•	•	•	-
12	2	1-014-135-11	MOUNTED PWB E-T-CON (85)	•	•	•	T-CON must be paired with P-Mod (O-Cell INX)
12	2	1-014-129-11	MOUNTED PWB E-T-CON (85)	•	•	•	T-CON must be paired with P-Mod (O-Cell AUO)
13	3	5-022-250-13	STAND, L (4L LYX) A	•	•	•	-
14	4	5-022-251-13	STAND, R (4L LYX) A	•	•	•	-

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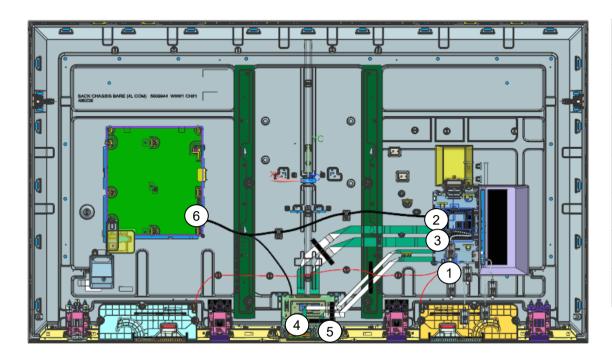
## **SCREW**





REMARKS	P/N	DESCRIPTION	QTY	TORQUE (N.m)
0	4-472-518-11	SCREW, +PSW M3X6	11	0.4 ± 0.05
	2-580-592-01	SCREW, +PSW M3X8	1	0.4 ± 0.05
0	5-015-521-01	+PSW M6*16 W14	4	1.2 ± 0.1
0	4-579-926-01	SCREW M3X3.0 STEP	1	0.4 ± 0.05

#### **CONNECTOR**



REF.	PART NO.	DESCRIPTION	REMARKS
1	1-006-517-11	CONNECTOR ASSY 4P (SP)	CN3350(BM5A)/CN6600(BM5STY)-SP(1)
2	1-011-600-11	FLEXIBLE FLAT CABLE 41P	CN4201(BM5A)-(T-CON)(1)
3	1-014-737-11	FLEXIBLE FLAT CABLE 51P	CN4200(BM5A)-(T-CON)(1)
4	1-006-521-11	FLEXIBLE FLAT CABLE 20P	CN1200(BM5A)-WIFI(1)
5	1-011-605-11	FLEXIBLE FLAT CABLE 25P	CN1201(BM5A)-CN102(HT2)(1)
6	1-011-595-11	CONNECTOR ASSY 30P	CN1701(BM5A)-CN6401(GL)- CON3(TCON)(1)

#### **OTHER PARTS**

PART NO.	DESCRIPTION	KD-85X80K	KD-85X85K	KD-85X80CK	REMARKS
PART NO.	DESCRIPTION	UC2	UCM	UC2	inam, unito
4-535-064-61	ASSY,FALL LOCK,BELT LL	•	•	•	-
5-022-260-11	BAG, CL ASSY (4L LYX)	•	•	•	(Including CLAMPER (4L LYX) (Qty 2) installed at Main Stand. Refer Setup Guide for details)
5-009-030-01	CLAMPER,CABLE L(BNN)	•	•	•	-
5-009-031-02	CLAMPER,CABLE S(BNN)	•	•	•	-
1-005-642-12	C7L AC POWER CORD SETS (US)	•	•	•	-
1-013-691-23	REMOTE COMMANDER (RMF-TX800U)	•	•	n/a	-
1-013-685-22	REMOTE COMMANDER (RMF-TX900U)	n/a	n/a	•	-
*5-037-718-11	REFERENCE GUIDE	•	•	•	-
*5-037-726-11	SETUP GUIDE	•	•	•	-
7-600-031-97	TAPE (3M 1350FB-1)15MMX66M BLK	•	•	•	-
5-009-861-02	VESA SPACER A (COM)	•	•	•	(Screw extension for Fall Lock Belt and Wall Mount, (Qty 1), Refer Setup Guide for details.)

## **SMART CORE**

## **DISASSEMBLY AND REMOVAL CAUTION**

1. Remove harness in yellow box.

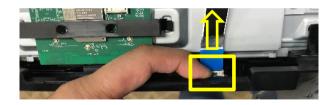
2. Release smart core hook in red box.

3. Remove the smart core.

#### **DISASSEMBLE COVER TOP**

Remove the hooks in the following order.

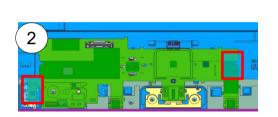
- 1 Lift the hook in red circle and slide it.
- (2) Hold the area in the red box and lift the receiver board.

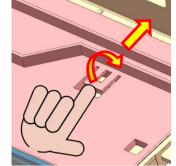






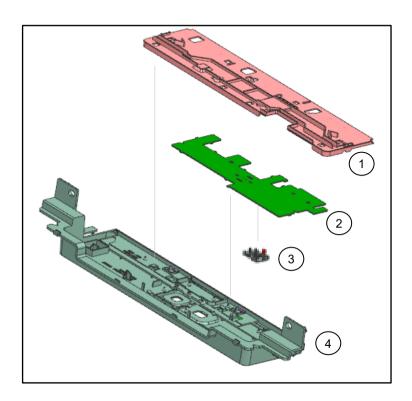








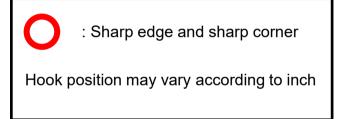
# SMART CORE EXPLODED VIEW AND PART LIST



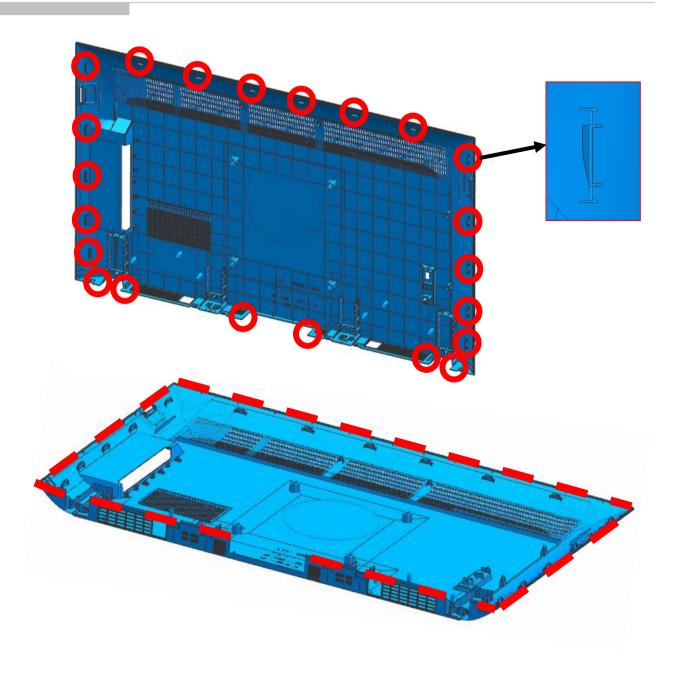
REF. NO	PART NO.	DESCRIPTION	REMARKS
1	*5-024-516-22	COVER, TOP (COM)	-
2	A-5042-371-A	FY22_HT2_MIC_WW_EV_PR MOUNT	80CK
2	A-5042-373-A	FY22_HT2_WW_EV_PR MOUNT	80K / 85K
3	5-024-521-22	SLIDE, SW	80CK
4	5-036-681-11	COVER, BTM(SM EPH) A	43" / 50"
4	5-036-705-11	COVER, BTM(3L EPH) A	55" / 65" / 75"
4	5-036-684-01	COVER, BTM(4L TGR) A	85" 80CK
4	5-036-684-11	COVER, BTM(4L TGR) A	85" 80K / 85K

APPENDIX SHARP EDGE

 Please wear gloves when removing rear cover to avoid sharp edge at bottom side and hook area as shown in the next figure.







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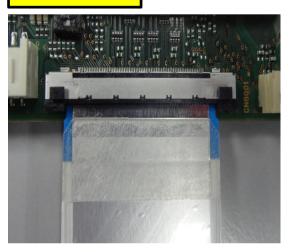
#### **APPENDIX**

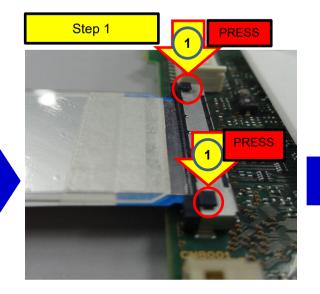
## FFC REPLACEMENT CAUTIONS

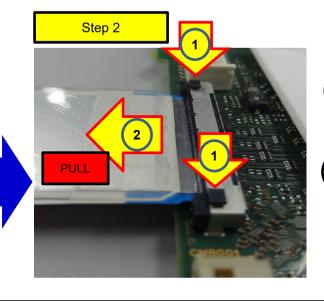
Remark: Refer to Board Location and Connector Diagram

## WITHDRAWAL OF 41P / 51P FFC CONNECTOR (TYPE 1)

Initial condition







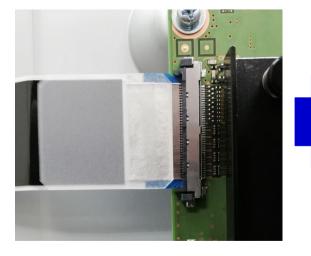
Press the release lock button downward at same time (highlighted in red).

Pull FFC in straight direction while pressing both release lock button at the same time.

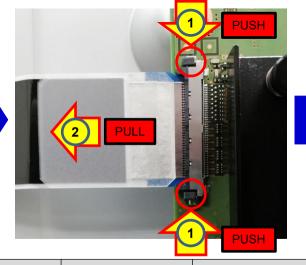
Note: FFC as in image is only for reference purpose. Actual FFC outlook may vary by each vendor.

## WITHDRAWAL OF 41P / 51P FFC CONNECTOR (TYPE 2)

Initial condition



Step 1 & 2



Caution



Push the side-release lock buttons inward (highlighted in red).

Pull-out FFC in straight direction while pushing side-release lock buttons at the same time.

Note: FFC as in image is only for reference purpose. Actual FFC outlook may vary by each vendor.

Ensure fingers does **NOT** touch parts on board and tuner connector when pushing the side locks.

TOOLS & EQUIPMENTS | FFC PRECAUTIONS | SECTION 1 | SECTION 2 | SECTION 3 | SECTION 4 | SECTION 5 | SECTION 6 | SMART CORE | APPENDIX

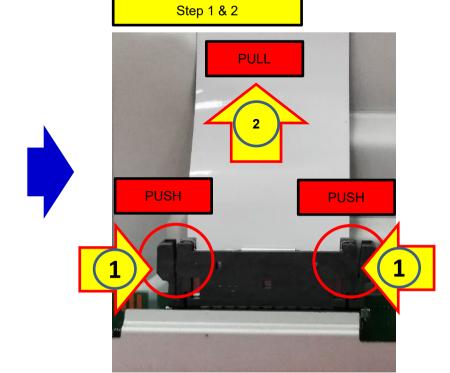
## **APPENDIX**

## FFC REPLACEMENT CAUTIONS

Remark: Refer to Board Location and Connector Diagram

## WITHDRAWAL OF 41P / 51P FFC CONNECTOR (TYPE 3)

Initial condition



- Push the side-release lock buttons inward (highlighted in red).
- Pull-out FFC in straight direction while pushing side-release lock buttons at the same time.

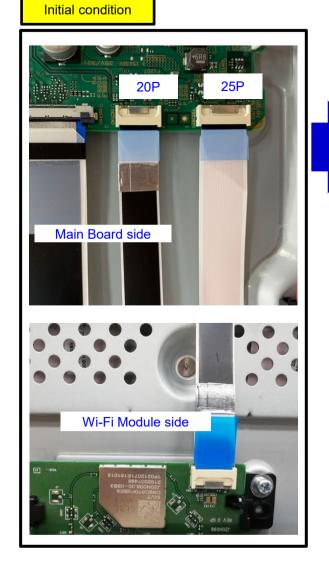
Note: FFC as in image is only for reference purpose. Actual FFC outlook may vary by each vendor.

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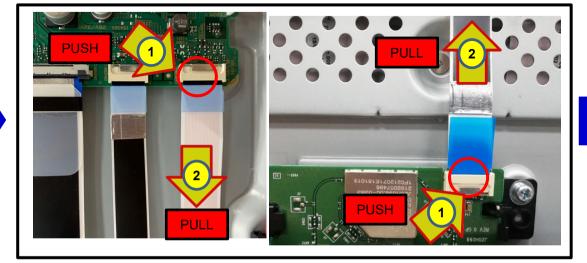
**APPENDIX** 

FFC REPLACEMENT CAUTIONS

# WITHDRAWAL OF 20P / 25P FFC CONNECTOR



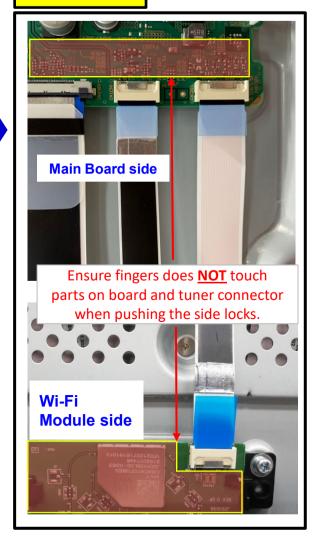
Step 1 & 2



- Push the side-release lock buttons inward (highlighted in red).
- Pull-out FFC in straight direction while pushing side-release lock buttons at the same time.

Note: FFC as in image is only for reference purpose. Actual FFC outlook may vary by each vendor.

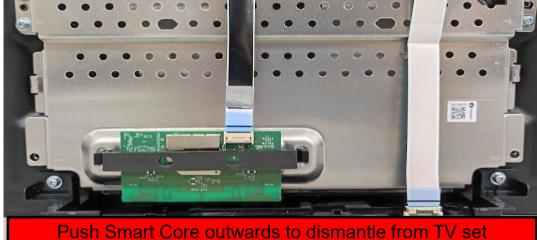
#### Caution



# APPENDIX FFC REPLACEMENT CAUTIONS

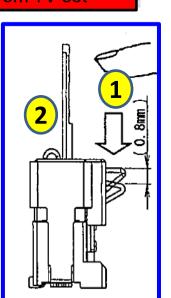
#### WITHDRAWAL OF 25P FFC CONNECTOR

## Pre-Step Before FFC Removal

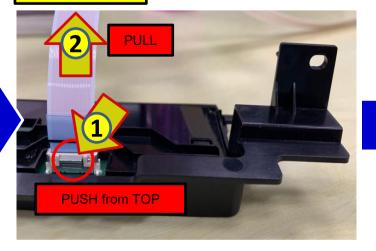


2

Remark: Release lock mechanism might be different. (depends on connector types)



Step 1 & 2

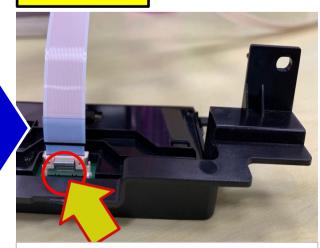


Push the side-release lock buttons inward (highlighted in red).

Pull-out FFC in straight direction while pushing side-release lock buttons at the same time.

Note: FFC as in image is only for reference purpose. Actual FFC outlook may vary by each vendor.

Caution



Do **NOT** push from side as connector will break due to excessive force applied.

Sony EMCS (Malaysia) Sdn. Bhd. HES-M

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