SERVICE MANUAL (TROUBLESHOOTING)

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9-888-905-21

LCD TV

SONY®

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

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

Self Diagnosis Supported model

MODEL

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

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Self Diagnosis Supported model

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

SAFETY NOTES

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).

SAFETY NOTES

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.

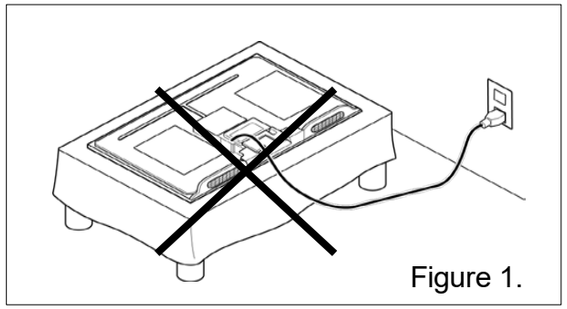


Figure 1.

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）

※Things to prepare in advance.

ESD wrist-strap.

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)

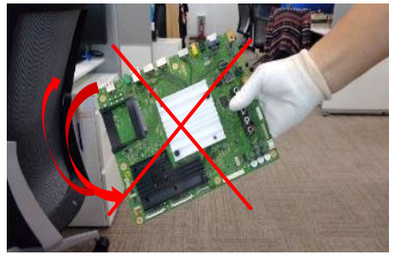
SAFETY NOTES

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

① Hold the board with both hands

② Do not hold/push Heat-Sink

③ Handle with care. Do not swing



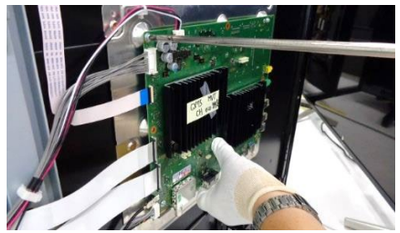
④ Regardless of Good board or Defective board, always put it on ESD cushion / sheet slowly.

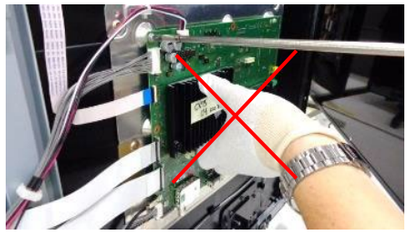
⑤ Do not stack up

SAFETY NOTES

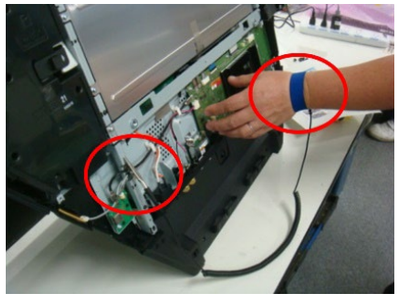
⑥ Keep vertical position and put in/take out from Box.
Always put into ESD bag then place into Box/Container Box

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





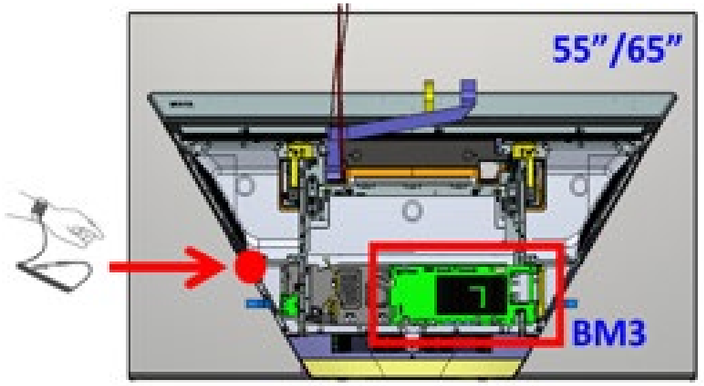
2) Caution for Board handling (ESD).
Be sure to observe the following contents

① When take off Rear-Cover, do not touch to board	② Use ESD wrist-strap
	

SAFETY NOTES

※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.



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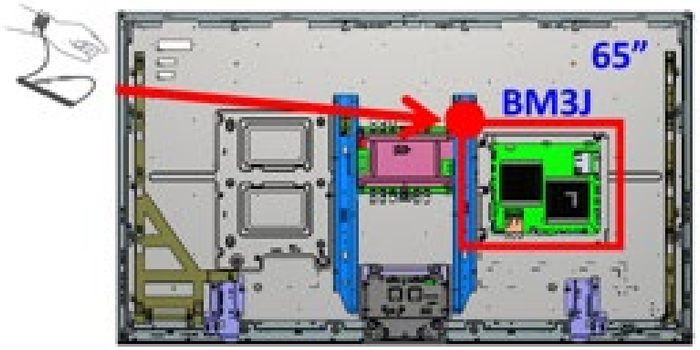


※Caution : ESD wrist-strap to be checked daily.

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

(R=750K Ohms to 35Mega Ohms)

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

④ 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.

1) 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.

SAFETY NOTES

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 =√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.

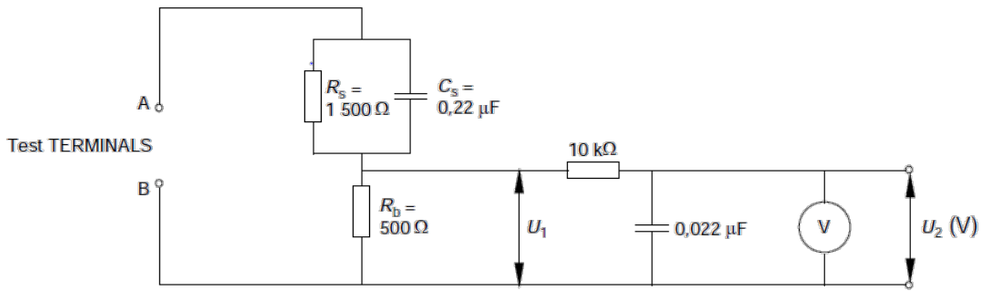


Figure 2 – Measuring network for Leakage Current

SAFETY NOTES

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).

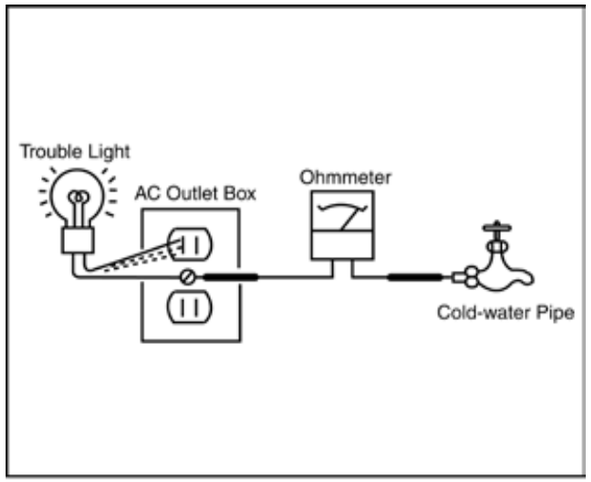


Figure 3. Checking for earth ground.

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

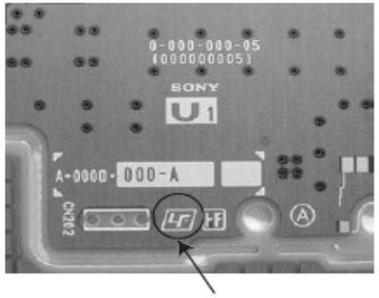


Figure 5: LF logo on circuit board

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
3x	DC_ALERT	<B/G> Main 5.0V failure
	AUD_ERR	<B/S> Audio amp. protection
4x	*LD_ERR*	*None*
	BCM_ERR	*None*
5x	*P_ID_ERR*	<B/T/P/G> *Panel ID EEPROM I2C No ACK (Also panel power failure is a suspect)*
6x	BACKLIGHT_ERR	<B/G/P/LD> Backlight failure
7x	TEMP_ERR	<B/H/P> Over temperature protection
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
AUD_ERR_I2C	<B> Audio amp I2C communication failure
TEMP_ERR_I2C	<B/H> Temp sensor I2C communication failure
TU_DEMOD_I2C	<B> Tuner & Demodulator I2C communication failure

<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
2x	MAIN_POWER	STDWN_RTRY_LIMIT_MAINPOWR = 1	
3x	DC_ALERT (5V)	STDWN_RTRY_LIMIT = 2	
	AUD_ERR	STDWN_RTRY_LIMIT = 2	
4x	LD_ERR	STDWN_RTRY_LIMIT = 2	
	BCM_ERR	STDWN_RTRY_LIMIT = 2	
5x	P_ID_ERR	STDWN_RTRY_LIMIT = 2	
6x	BACKLIGHT	STDWN_RTRY_LIMIT = 2	
7x	TEMP_ERR	STDWN_RTRY_LIMIT = 2	
8x	4KBE_ERR	STDWN_RTRY_LIMIT = 2	

Number of off/on action for MAIN_POWER shutdown is recorded to STDWN_OFFON_CNT_MAIN_POWER*2

Number of off/on action during the error shutdown is recorded to STDWN_OFFON_CNT*2

*1) 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.

*2) When the main micro operates normally for STDWN_OFFON_CLR = 60 minutes, STDWN_OFFON_CNT and STDWN_OFFON_CNT_MAIN_POWER are cleared.

TROUBLESHOOTING

Triage Chart

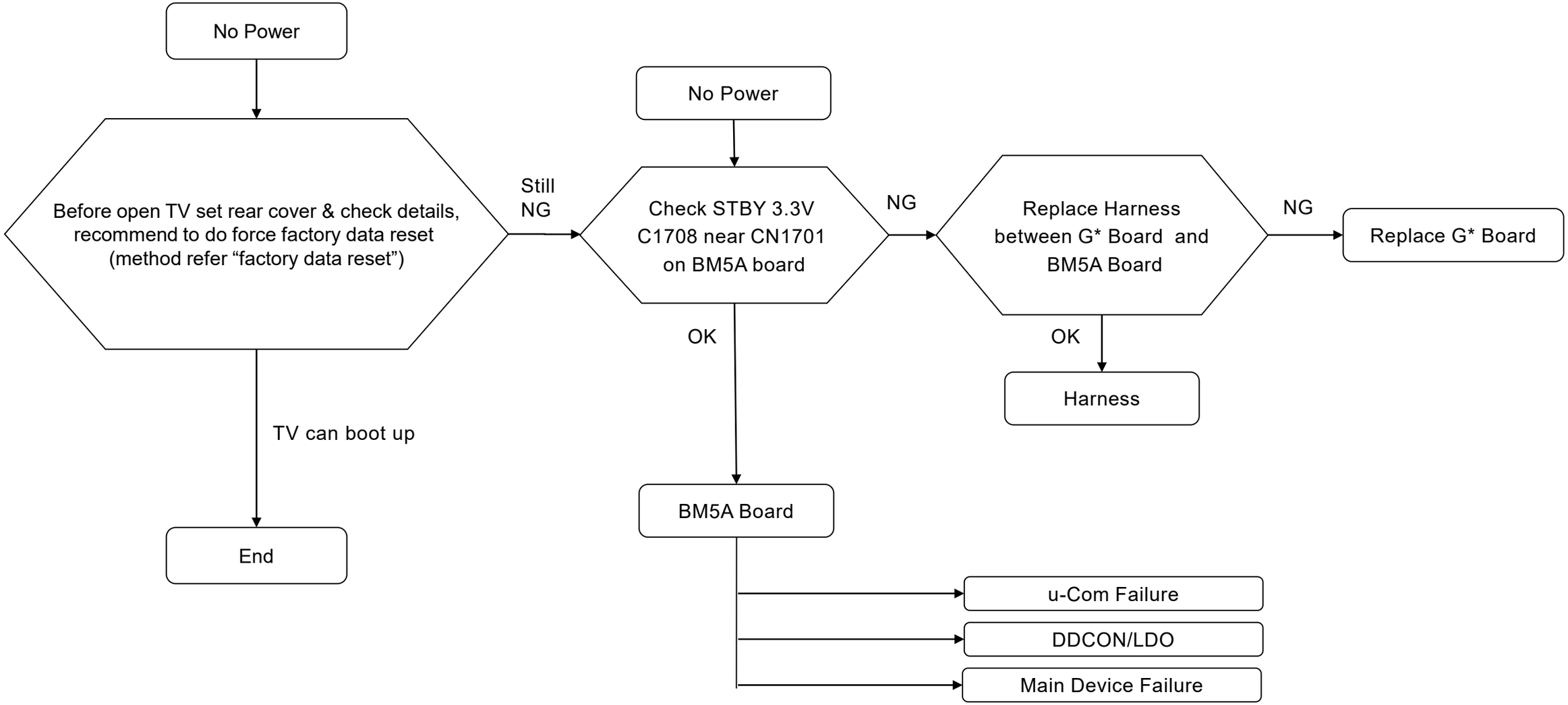
Before you make the service call:

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

Reference	Symptoms - Shutdown. Power LED blinking red diagnostics sequences							Symptoms - no shutdown Error log record only									No Power	Video - missing or distorted					Remote	Network	Audio	Smart Core	Bluetooth (BT)
	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	NO RF input	No video of Camera	No video all Inputs	No Remote 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	▲	●		■	■	●			●	▲		●		▲			▲	▲	●	●	▲	●	▲	▲	●	▲	▲
Power Board	●	▲		■	■												●					▲			▲		
Receiver Board														●			▲						●			●	
Speaker		▲																							●		
Wi-Fi & BT Module																								●			●
LD-Board																											
V By One FFC				▲						▲								▲				▲					
T-con				●						●								▲				■					
LCD Panel				▲	●	▲				■								●				■					
Camera (accessory)										■											●						
Problem	Power	Power	Panel	Panel (Communication)	Panel (Backlight)	TEMP	4KBE																				
		Audio	LD	T-con																							

TROUBLESHOOTING

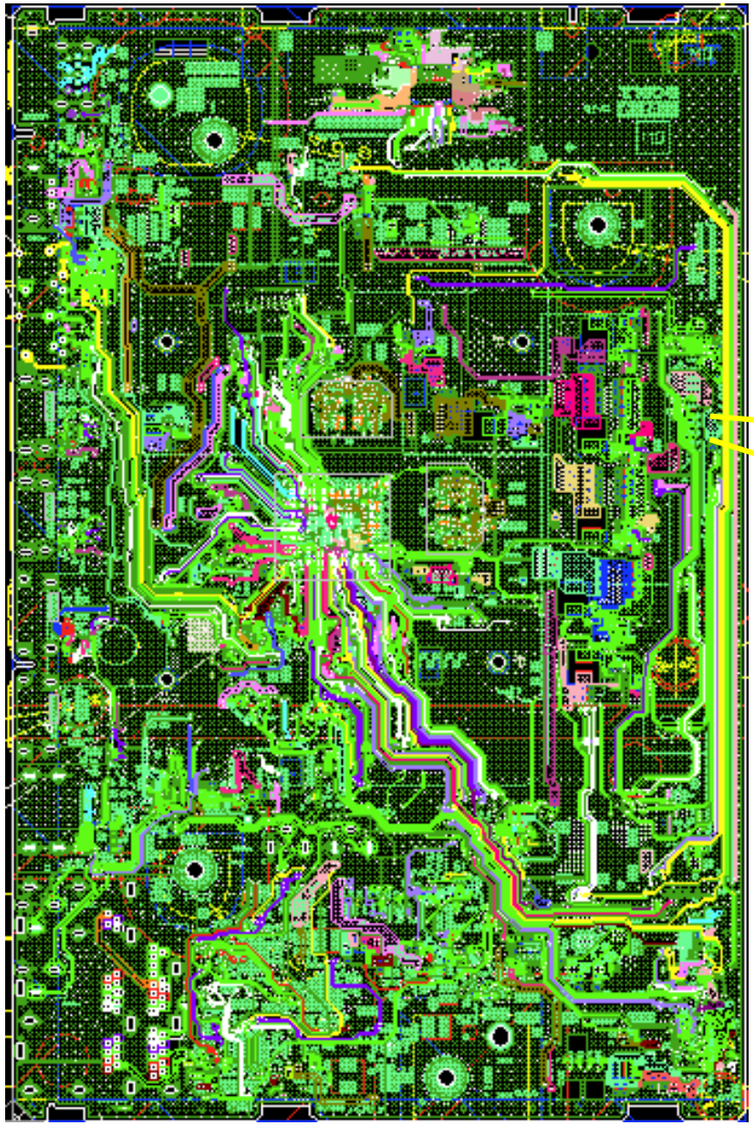
1.0 No Power - PSU

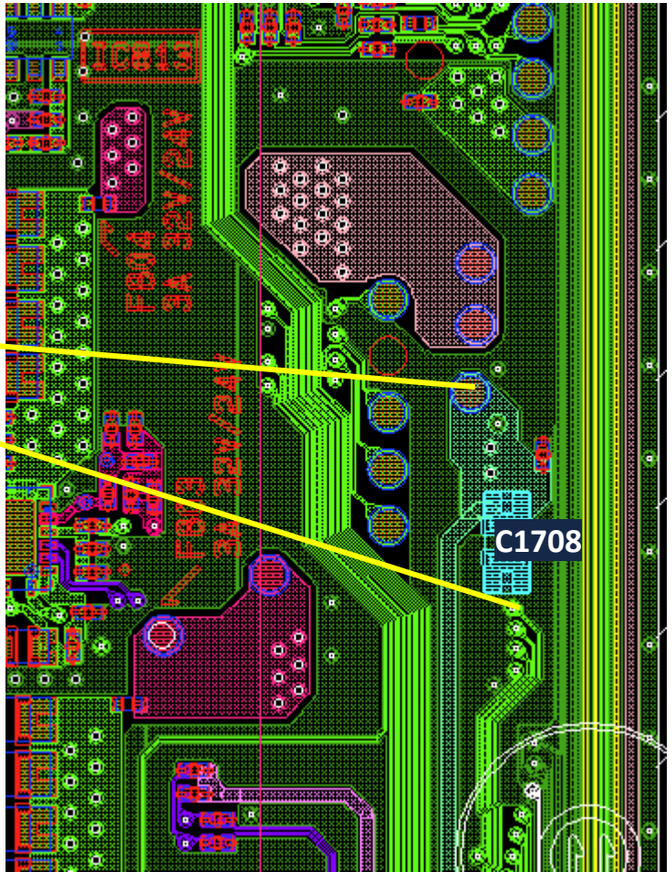


TROUBLESHOOTING

Checking Point

B Side

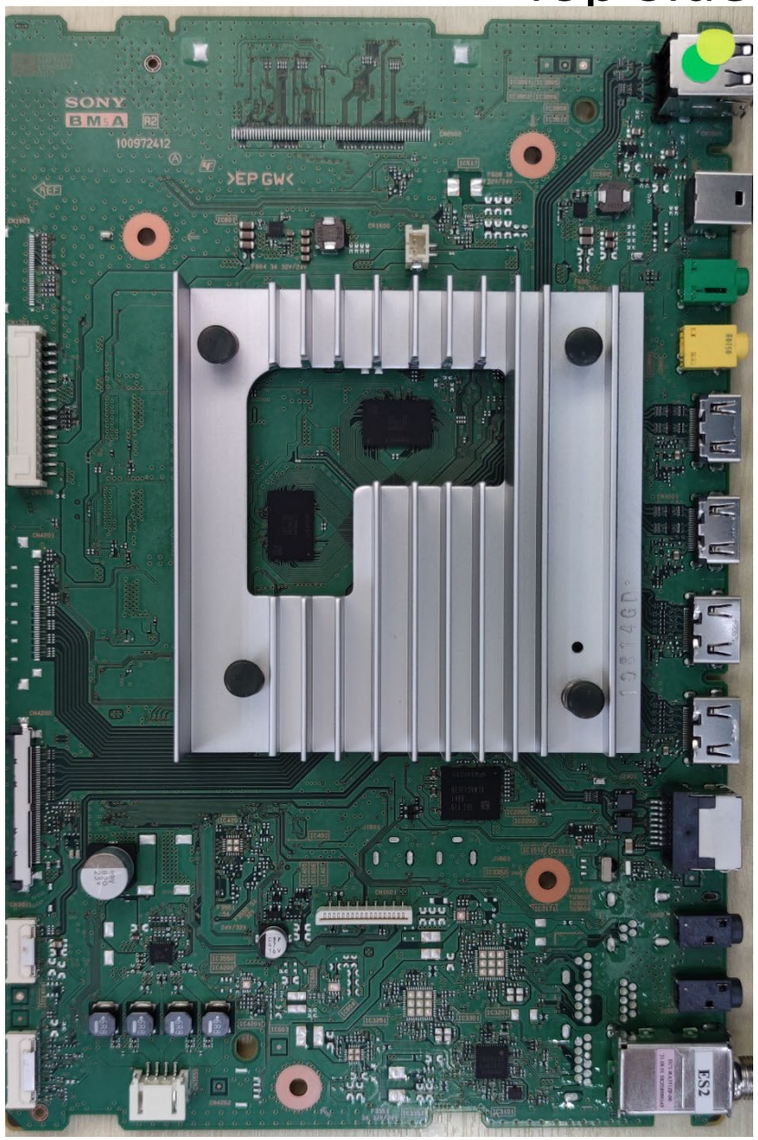




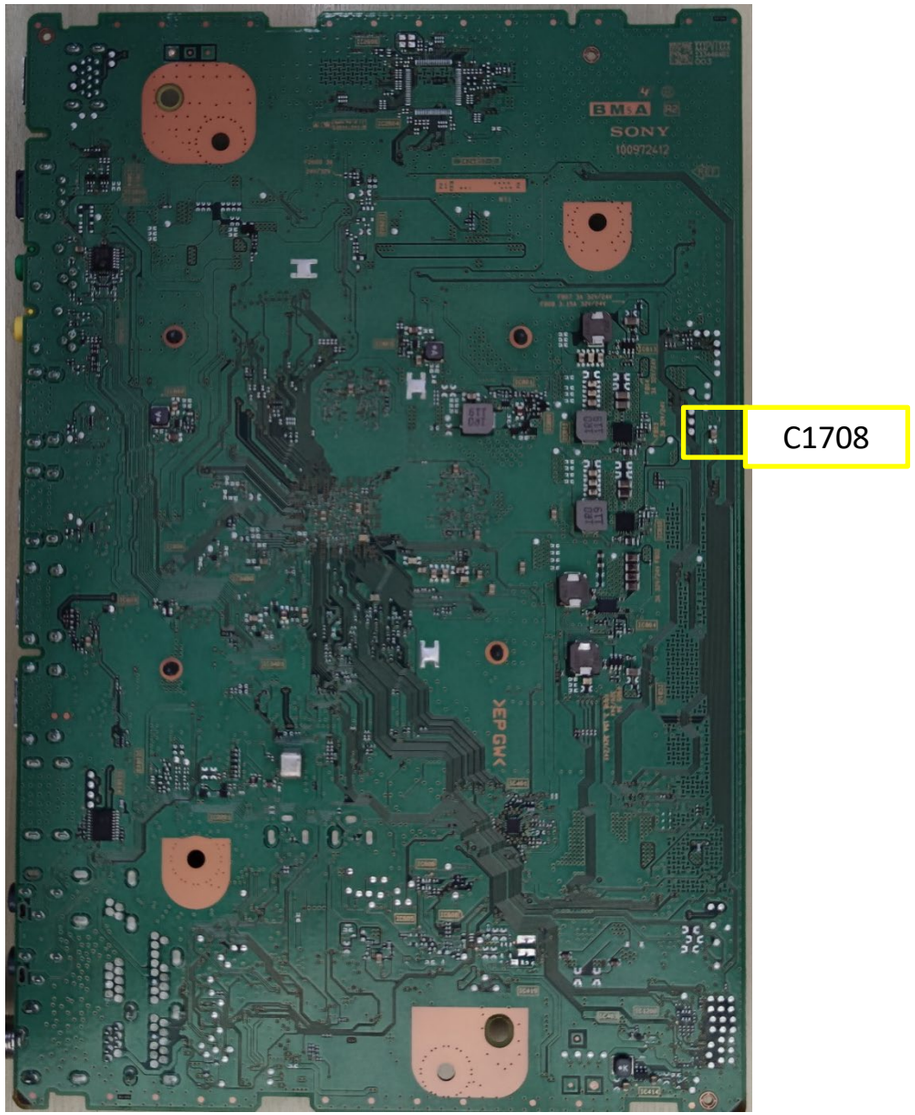
TROUBLESHOOTING

Board View

Top Side

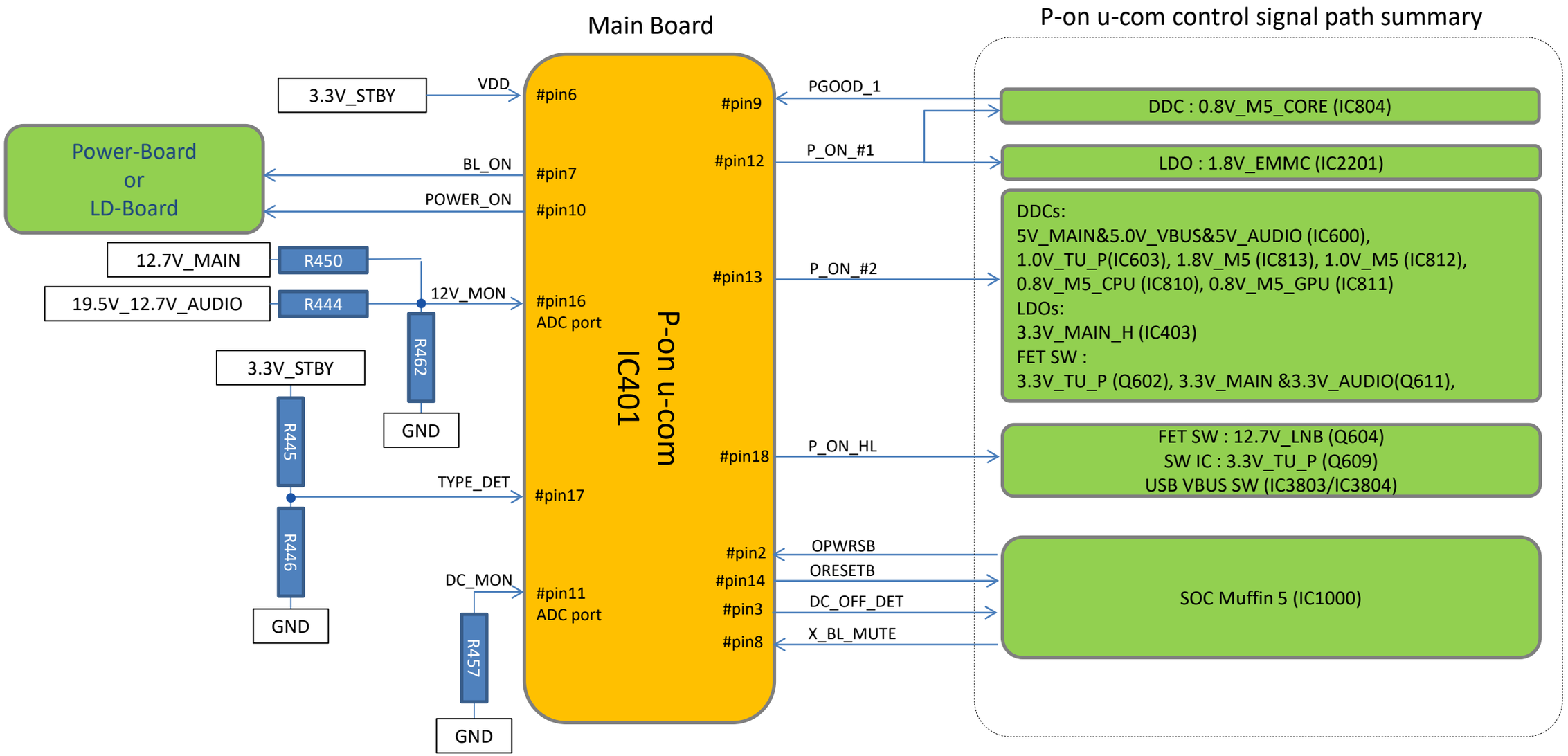


B Side



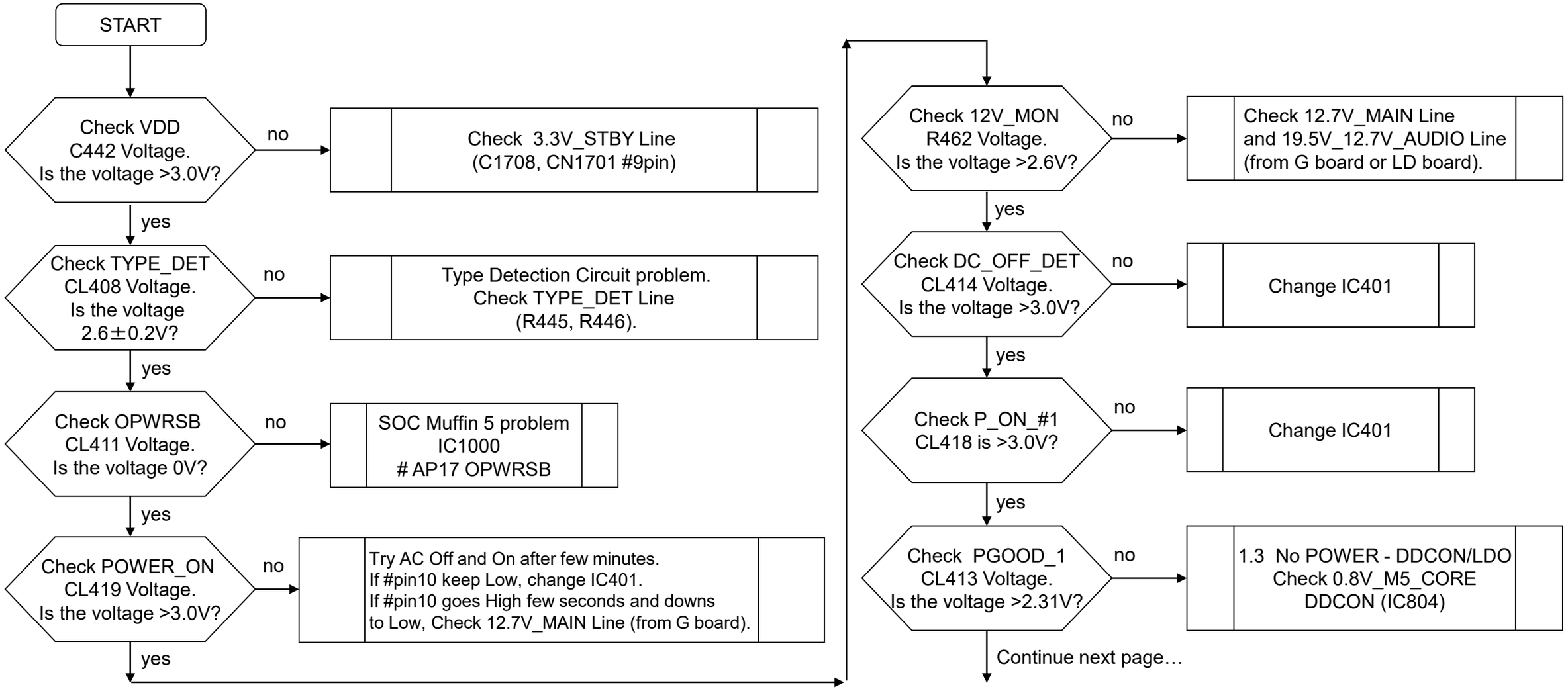
TROUBLESHOOTING

1.2 No Power u-com Failure



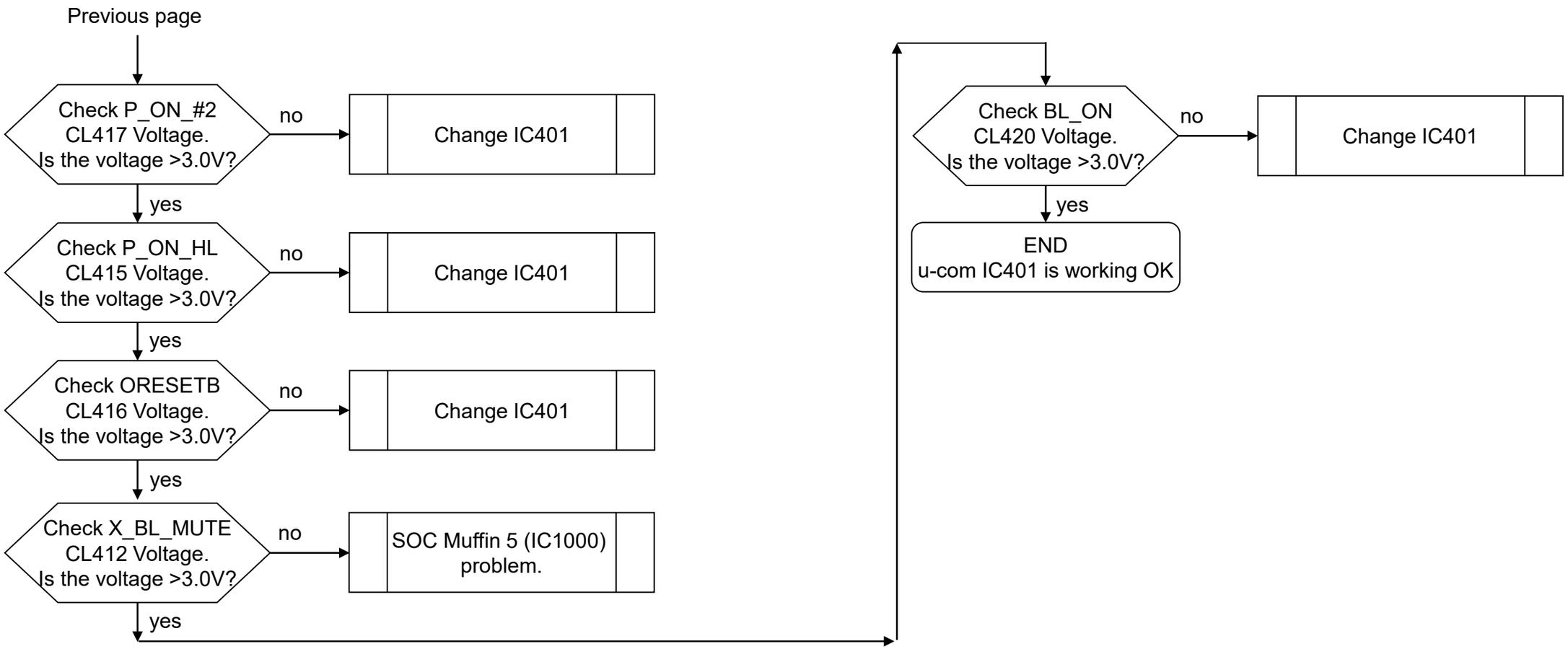
TROUBLESHOOTING

1.2 No Power u-com Failure



TROUBLESHOOTING

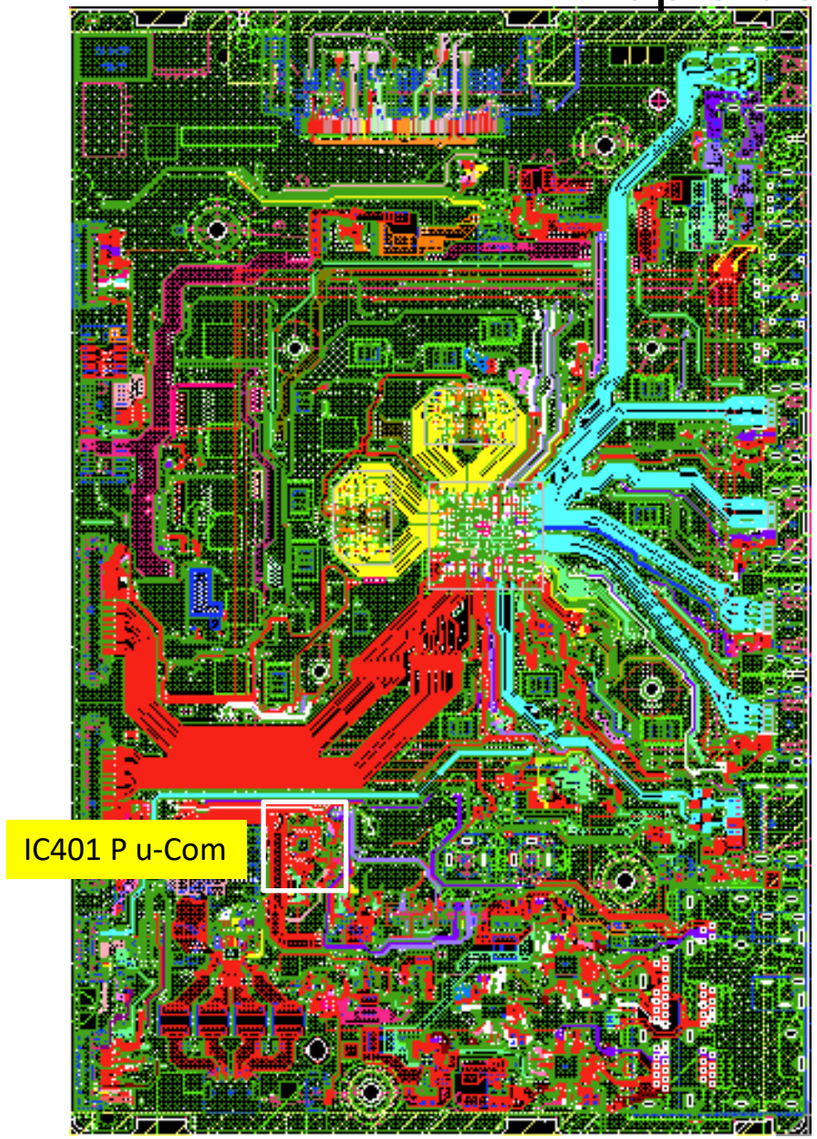
1.2 No Power u-com Failure



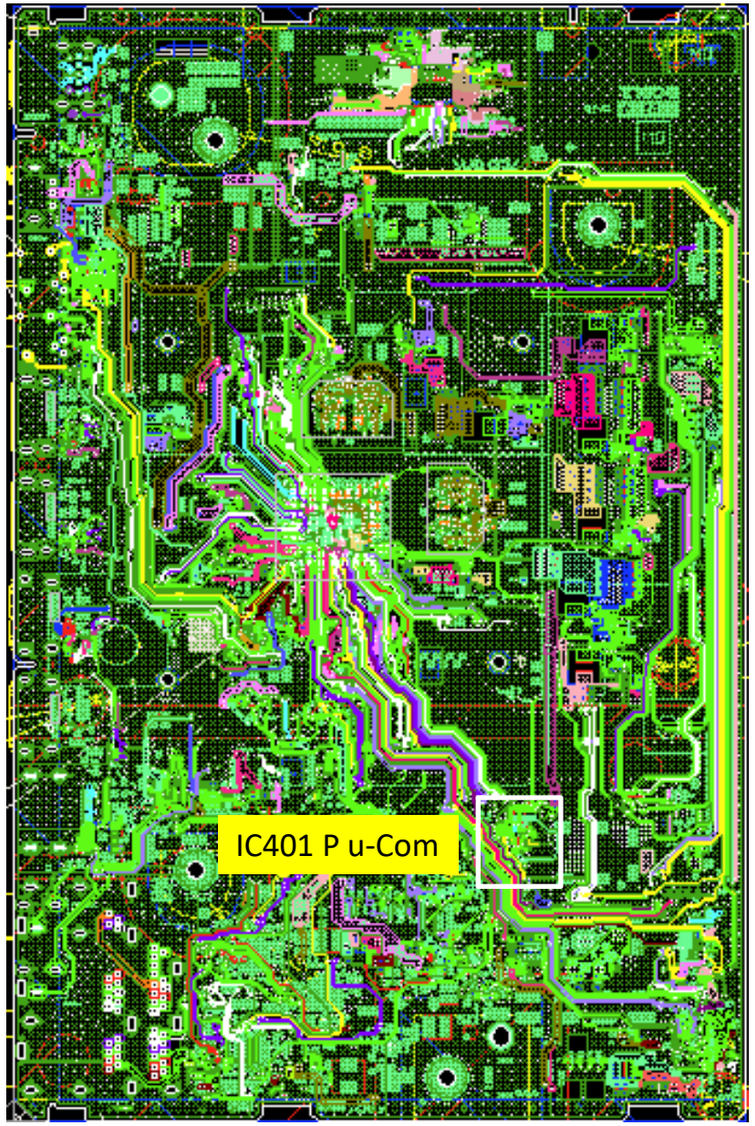
TROUBLESHOOTING

Board View

Top Side



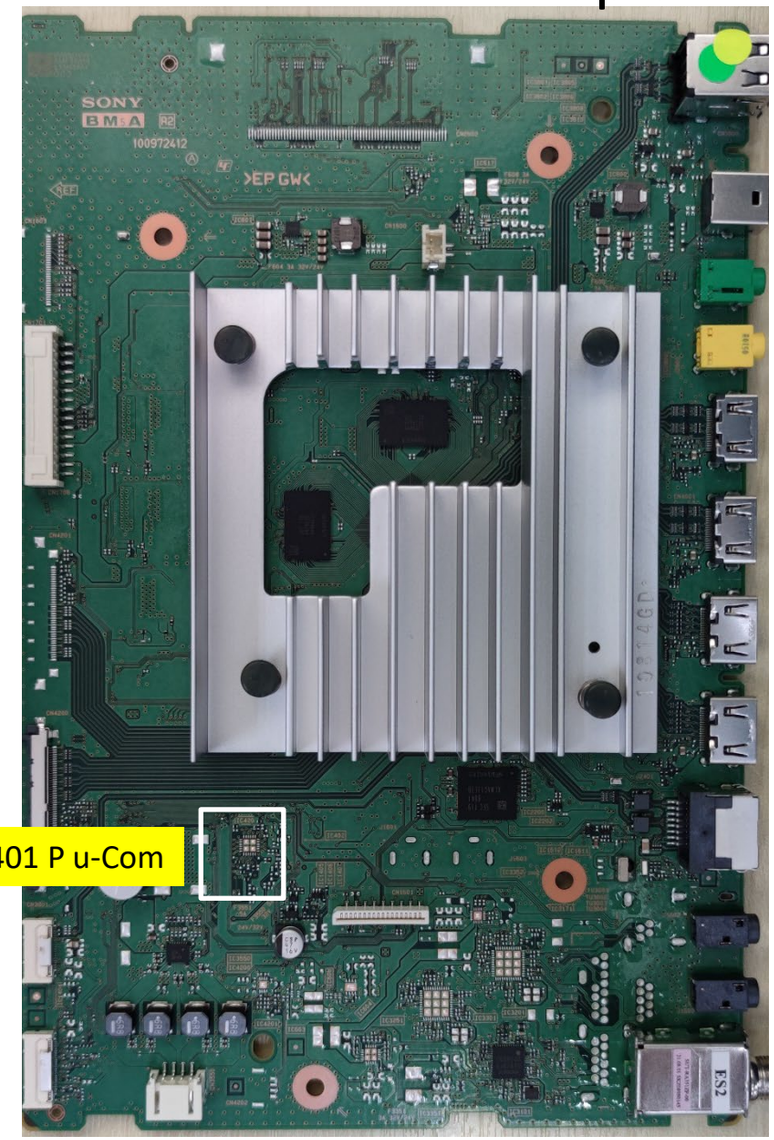
B Side



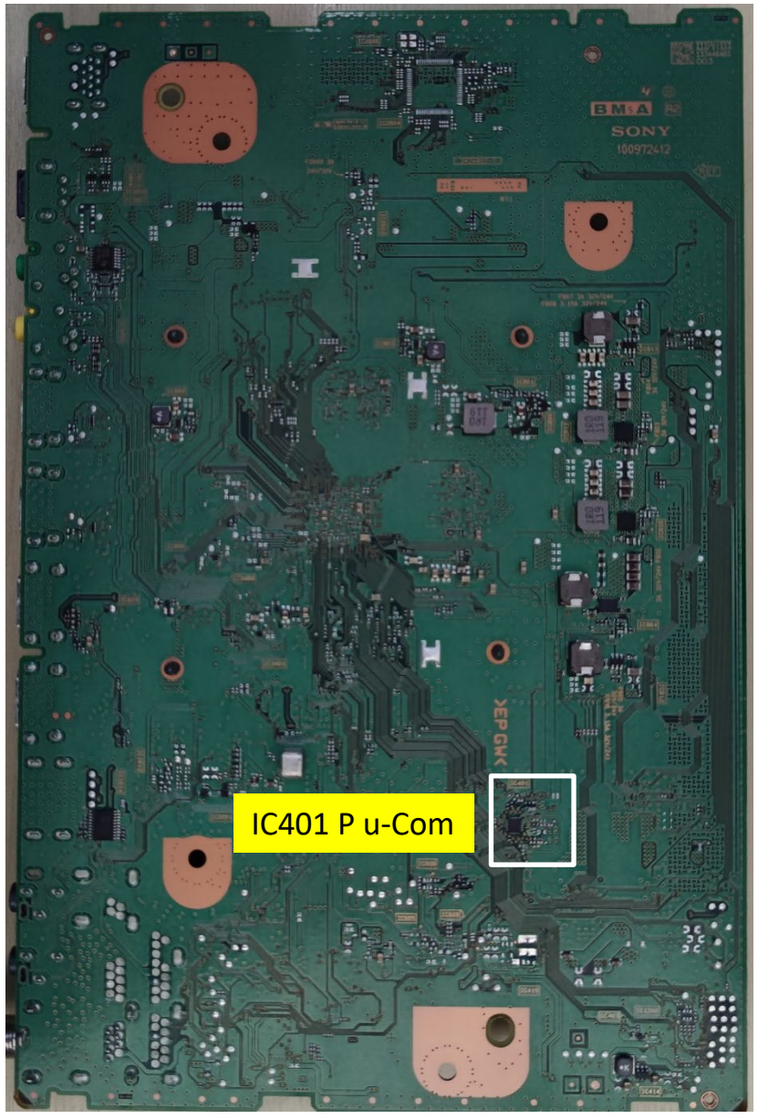
TROUBLESHOOTING

Board View

Top Side



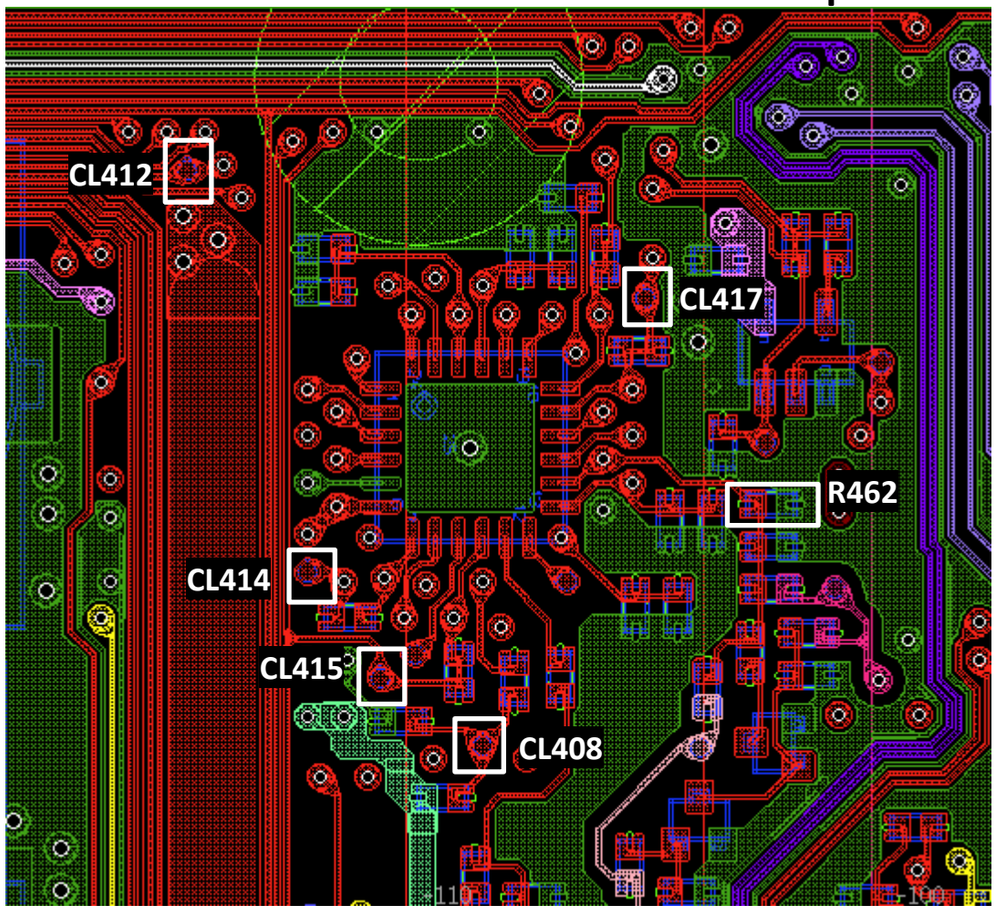
B Side



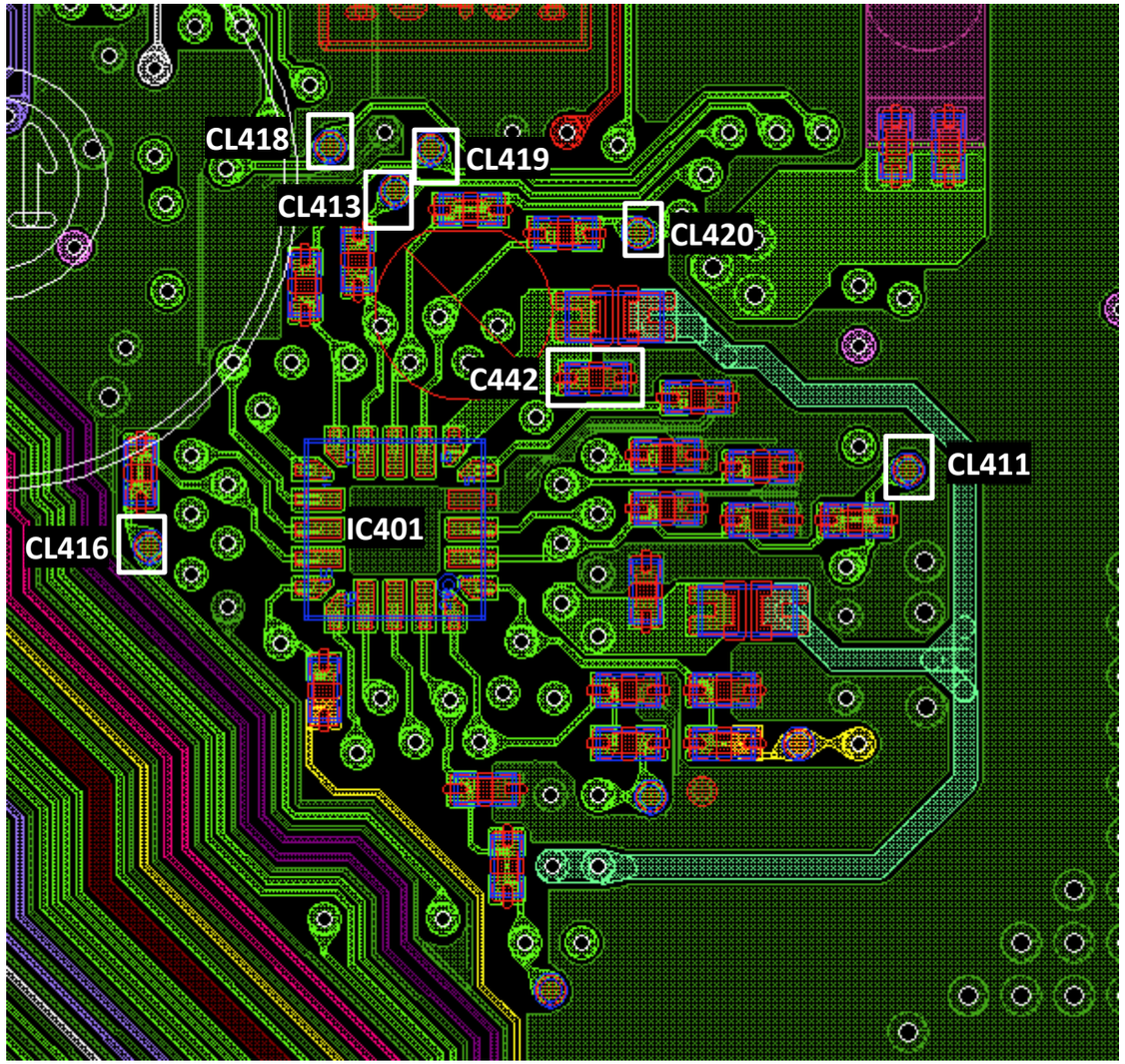
TROUBLESHOOTING

Checking Point

Top Side



B Side



TROUBLESHOOTING

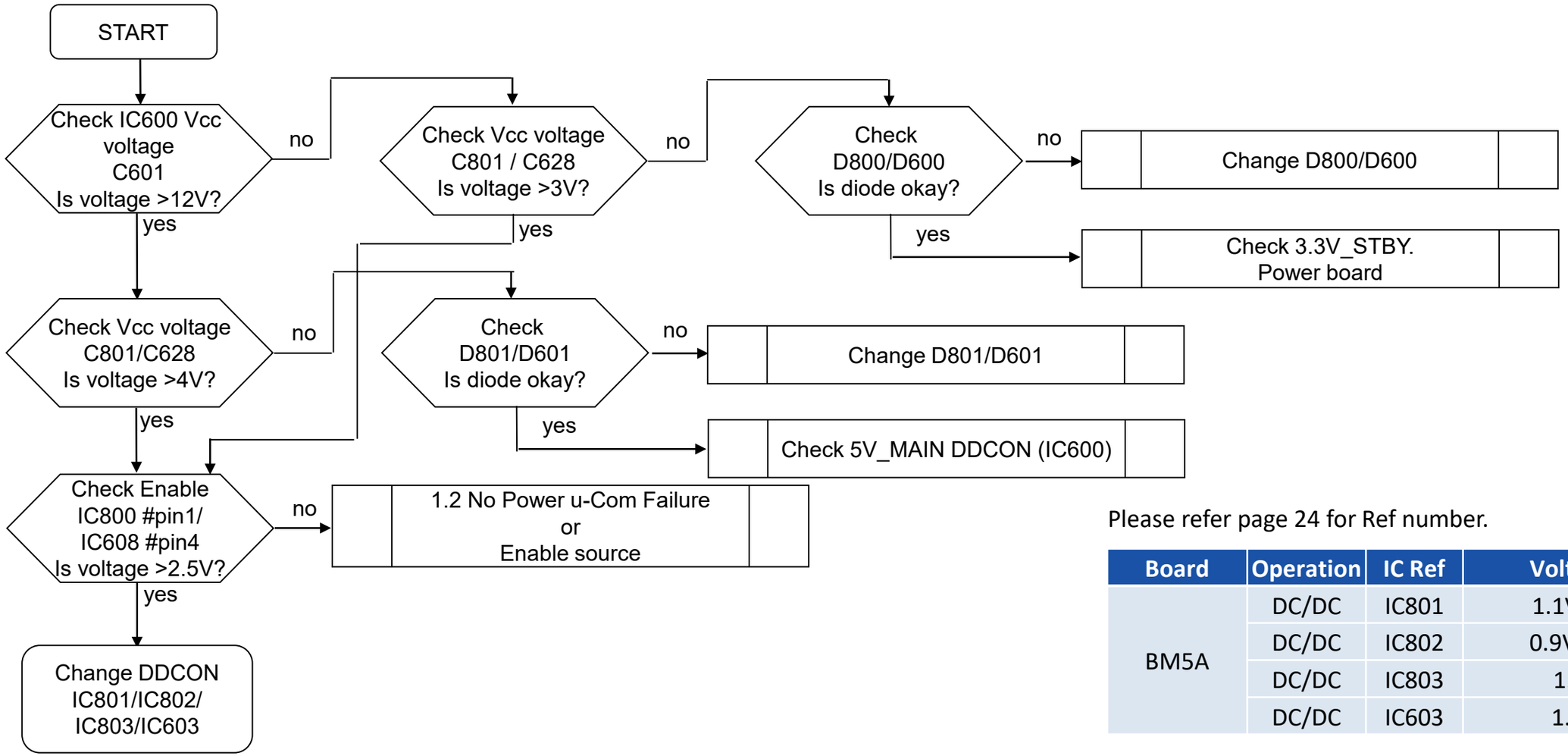
1.3 No Power DDCON/LDO

Board	Operation	IC Ref	Voltage supply	Output ref.	Enable pin	Enable source	Fuse	Vcc ref.
BM5A	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
	DC/DC	IC803	1.8V_STBY	C812	IC803 Pin#4	R804 (3.3V_STBY)	-	C810
	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

TROUBLESHOOTING

1.3 No Power DDCON/LDO (DDCON Check)

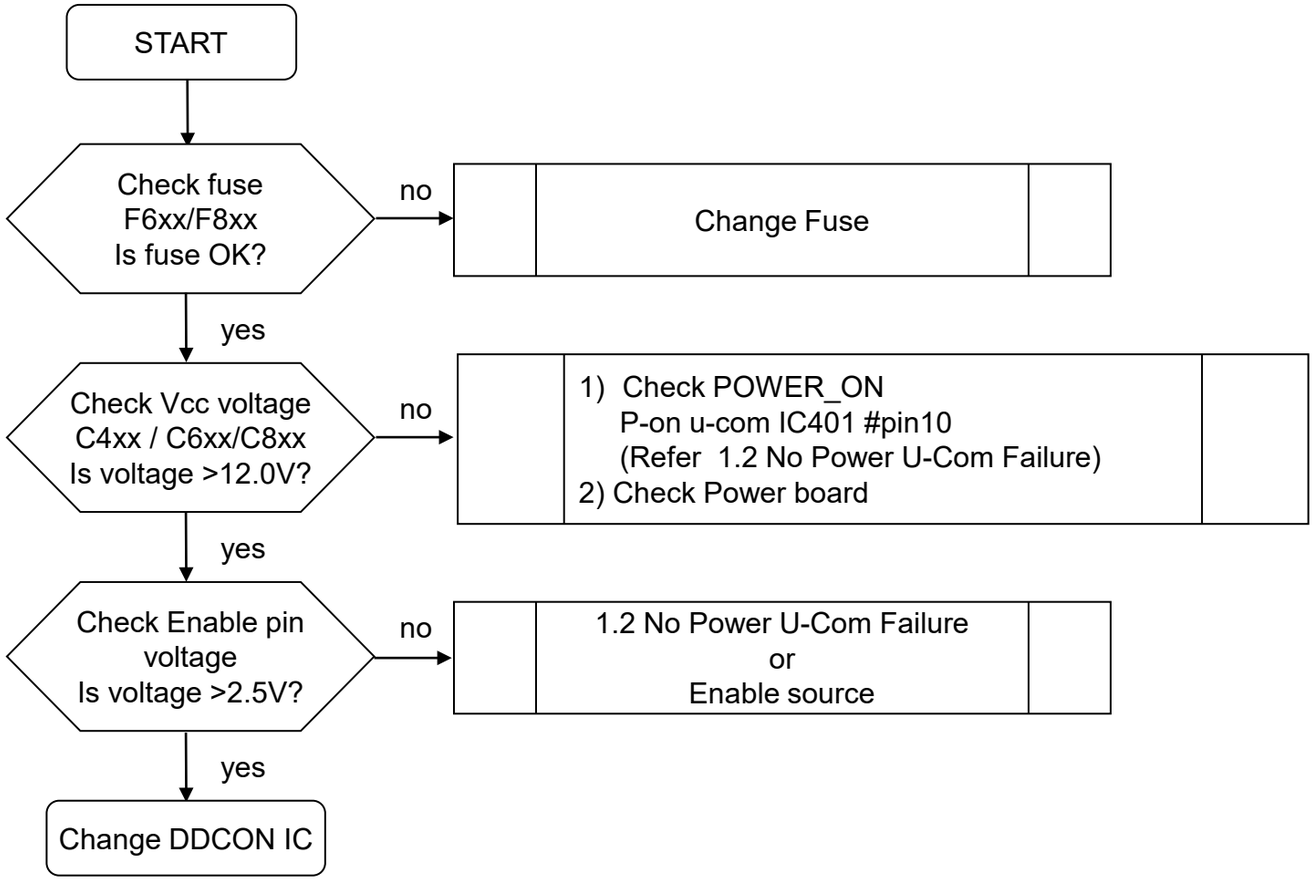


Please refer page 24 for Ref number.

Board	Operation	IC Ref	Voltage supply
BM5A	DC/DC	IC801	1.1V_M5_DDR
	DC/DC	IC802	0.9V_M5_STBY
	DC/DC	IC803	1.8V_STBY
	DC/DC	IC603	1.0V_TU_P

TROUBLESHOOTING

1.3 No Power DDCON/LDO (DDCON Check)



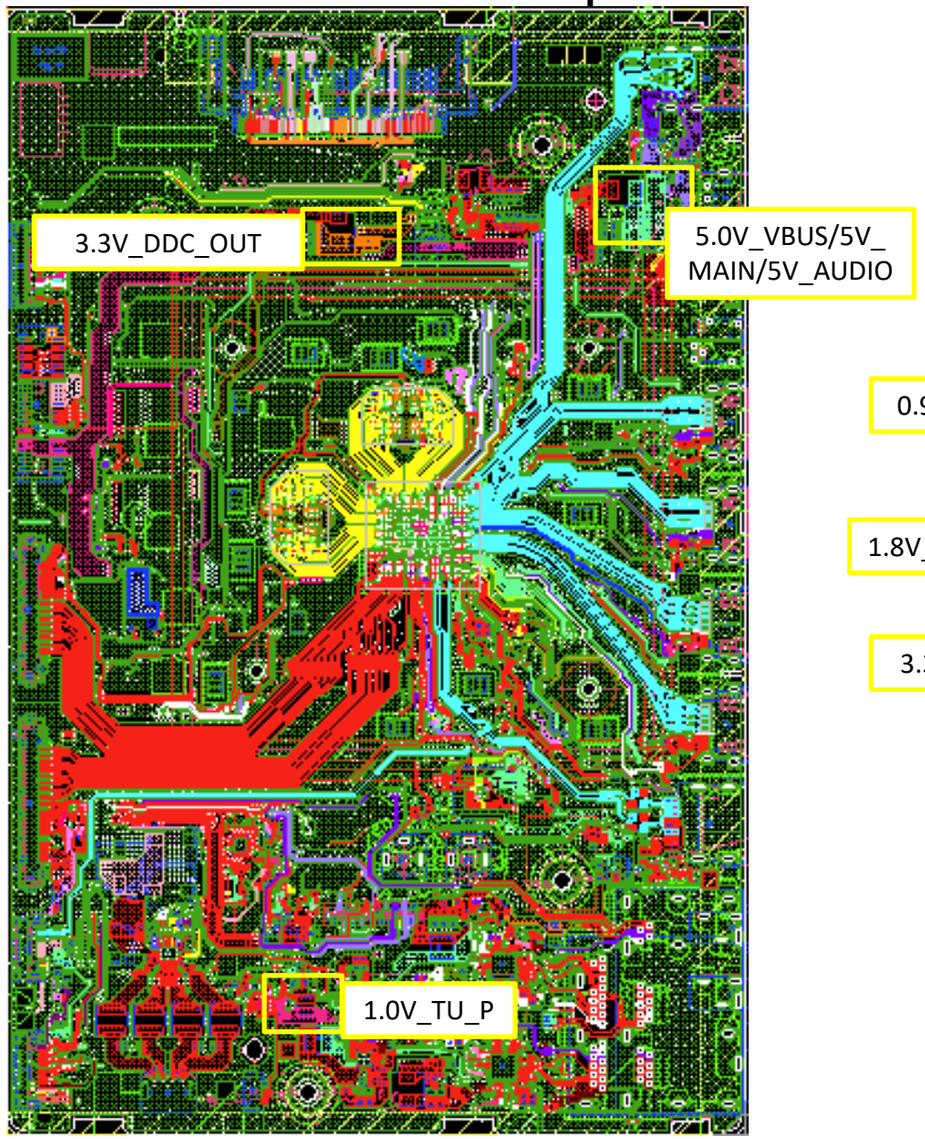
Please refer page 24 for Ref number.

Board	Operation	IC Ref	Voltage supply
BM5A	DC/DC	IC414	5.0V_STBY_H
	DC/DC	IC600	5V_MAIN/5V_AUDIO
	DC/DC	IC607	3.3V_DDC_OUT
	DC/DC	IC804	0.8V_M5_CORE
	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

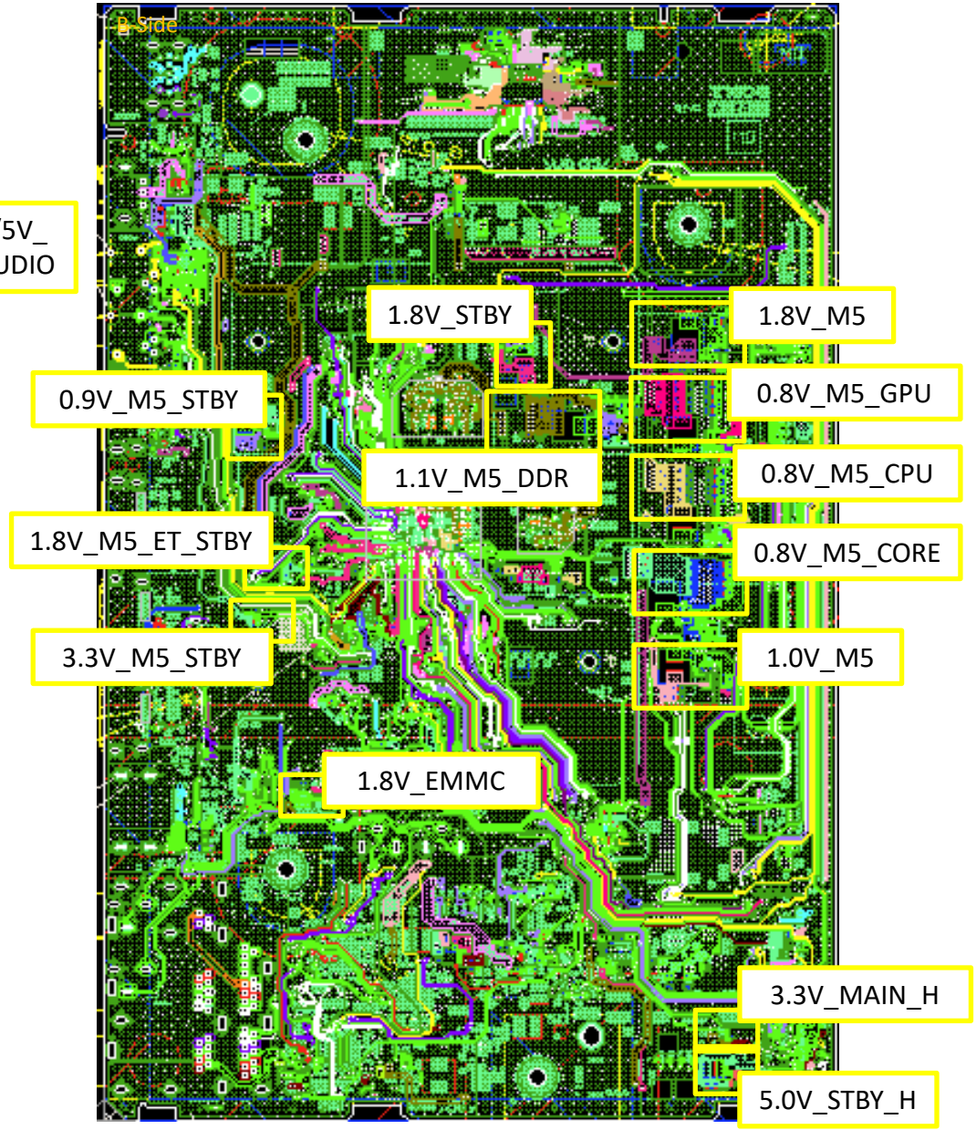
TROUBLESHOOTING

Board View

Top Side



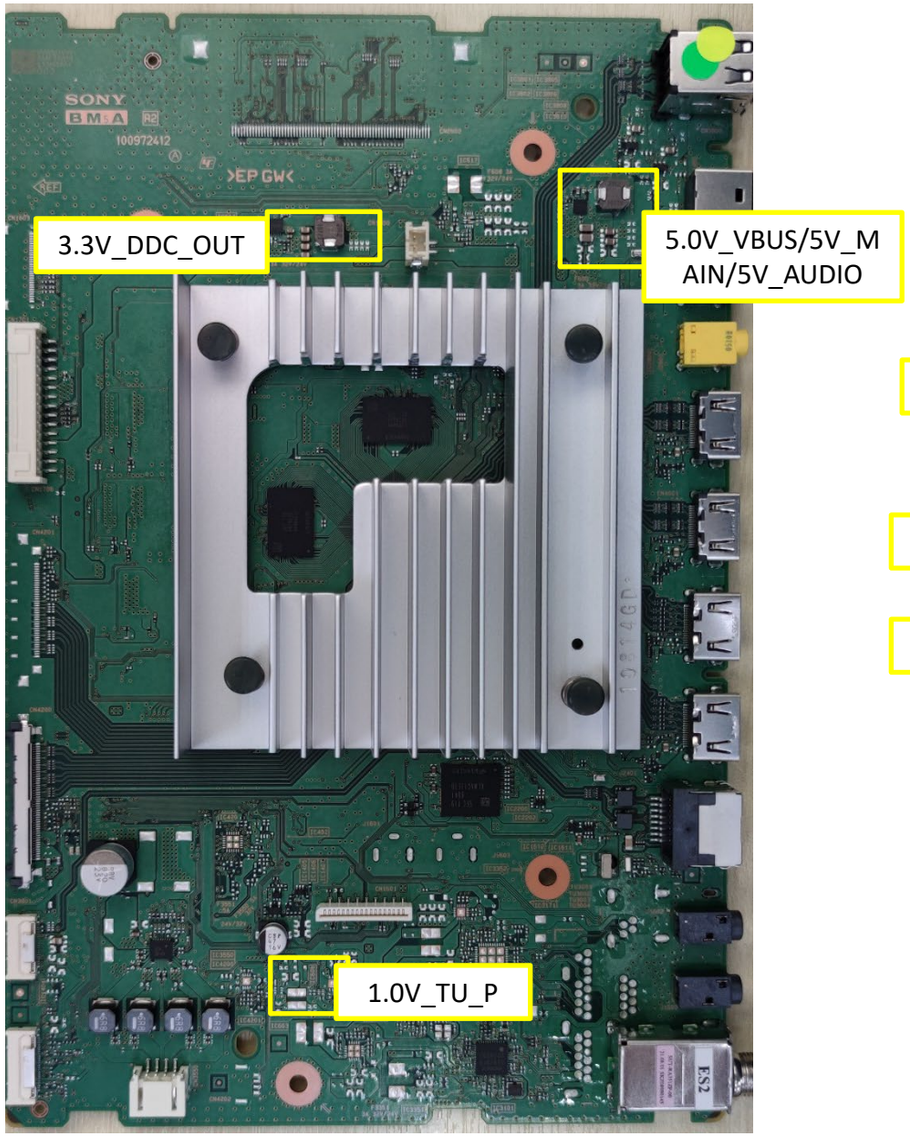
B Side



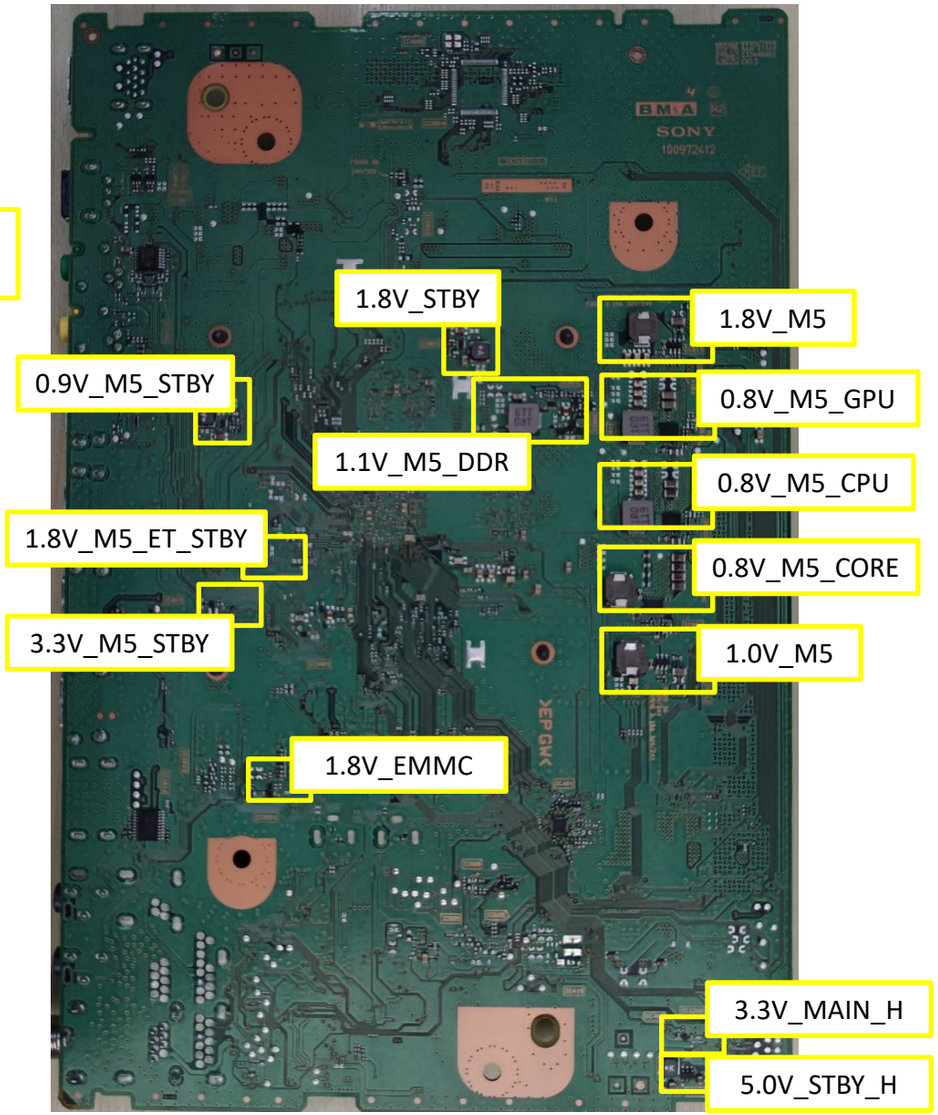
TROUBLESHOOTING

Board View

Top Side



B Side

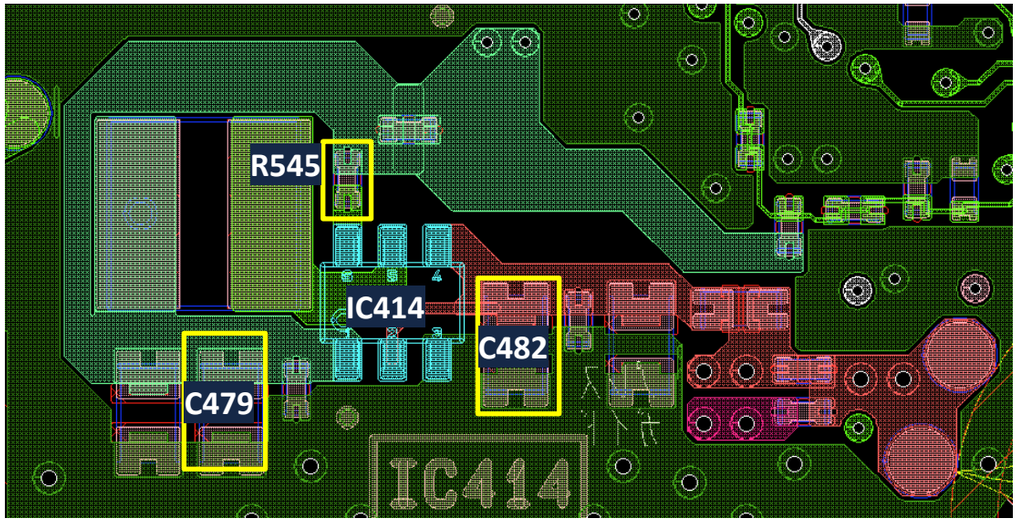


TROUBLESHOOTING

Checking Point

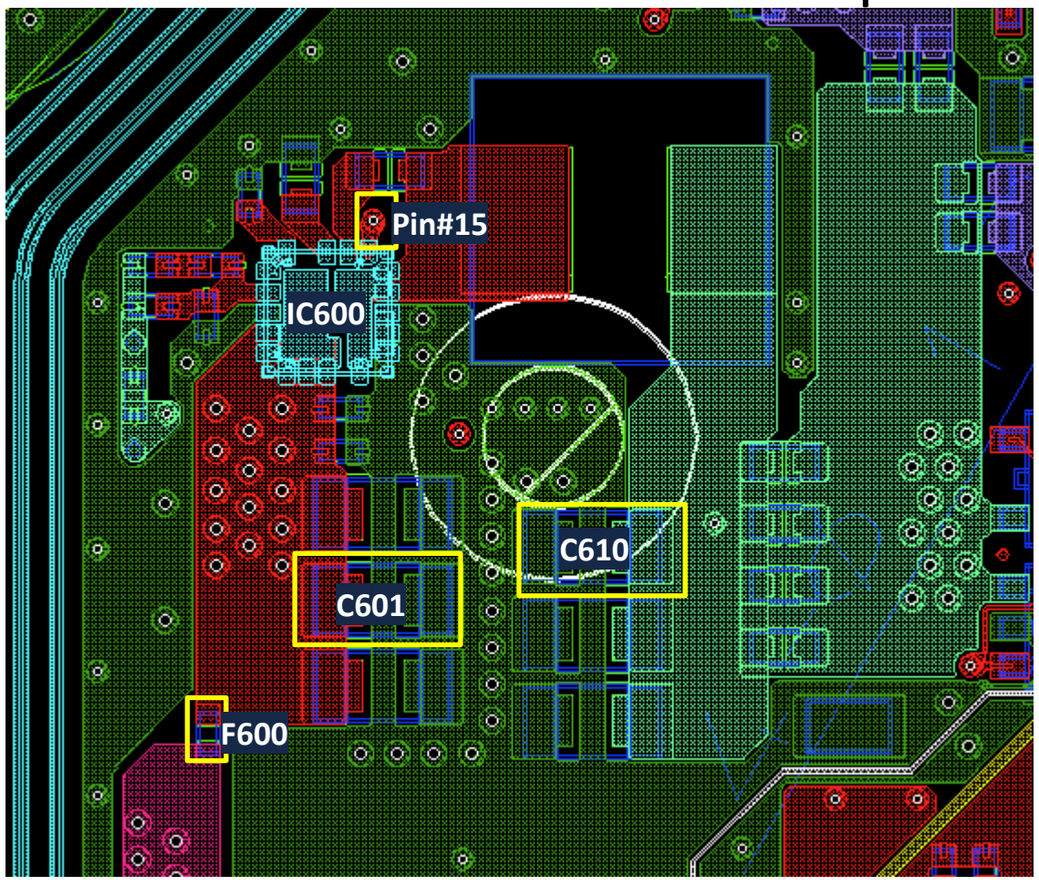
5.0V_STBY_H

B Side



5.0V_VBUS/5V_MAIN/5V_AUDIO

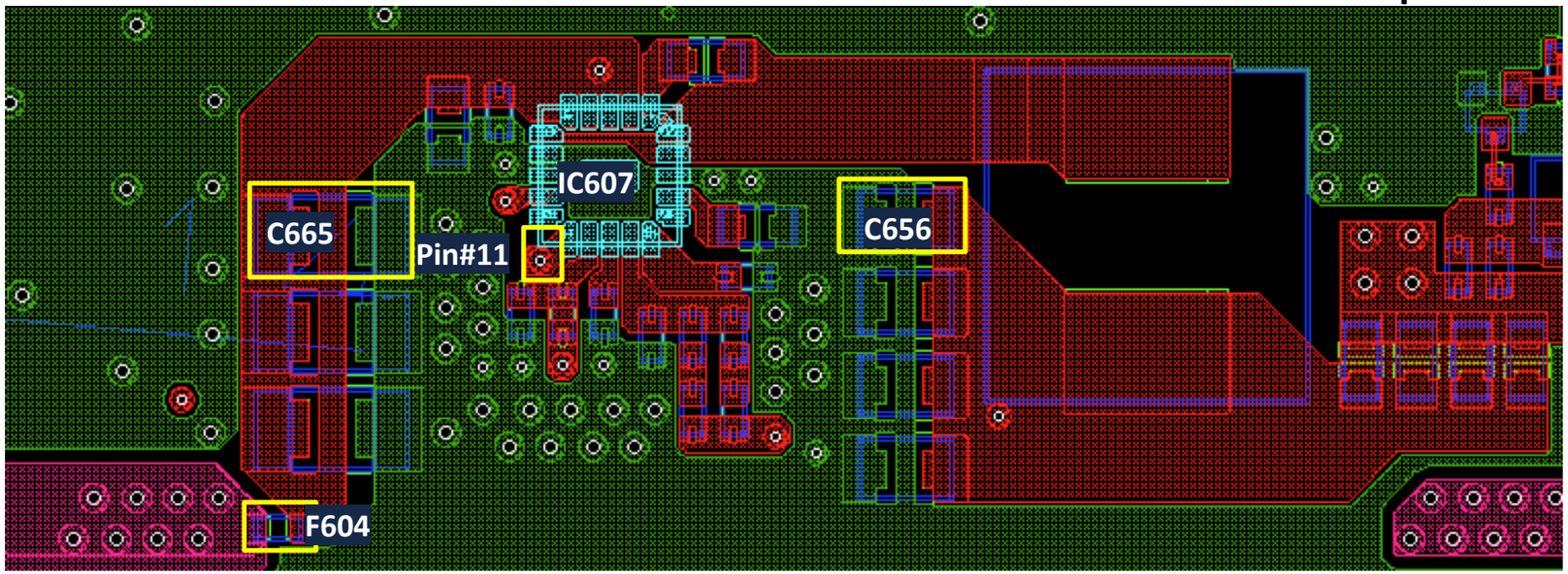
Top Side



Checking Point

3.3V_DDC_OUT

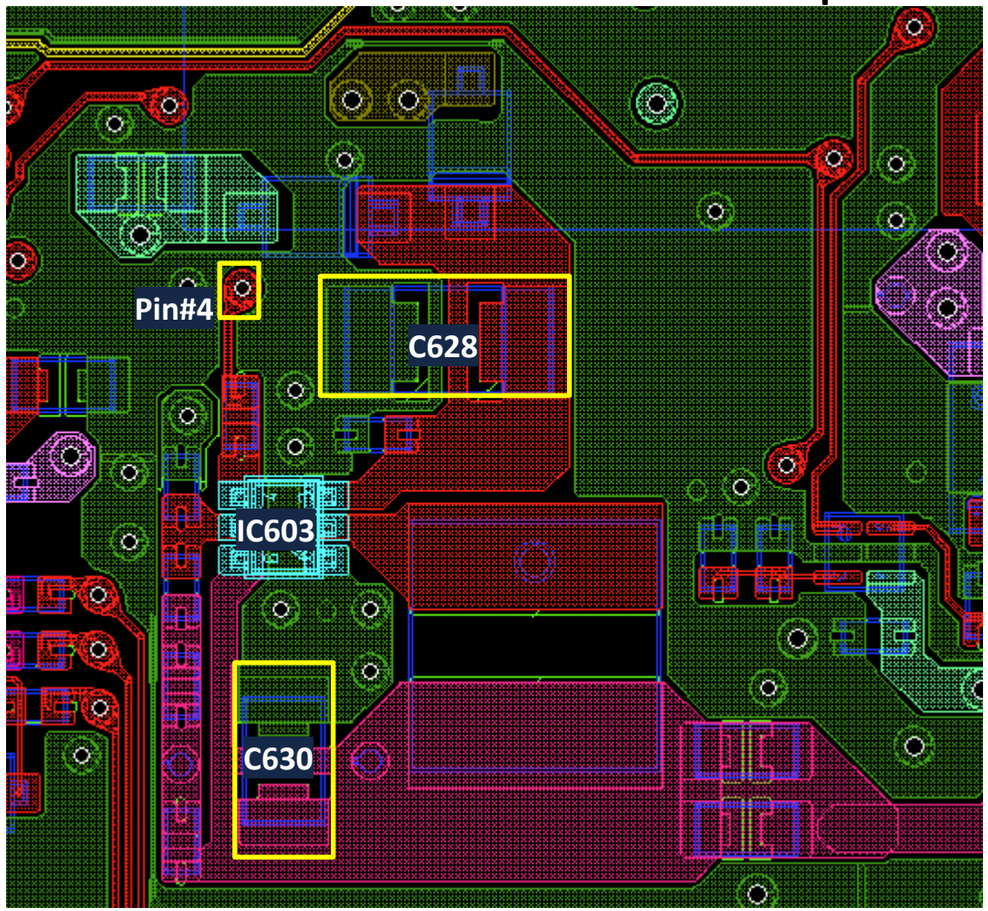
Top Side



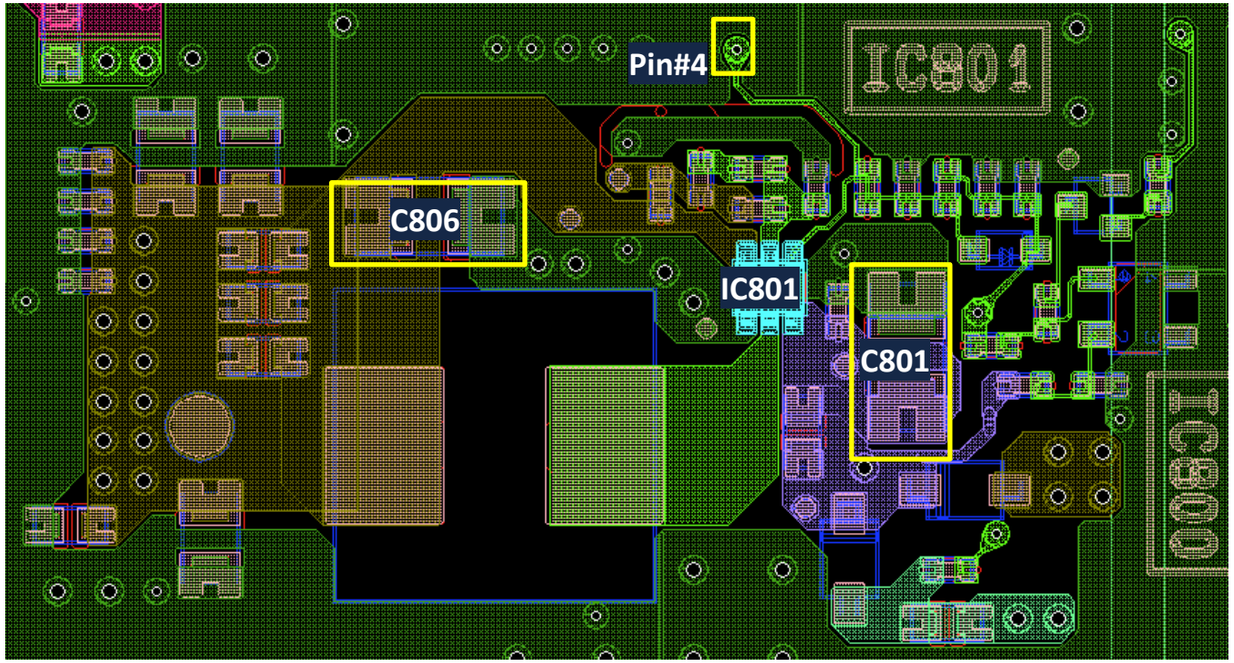
TROUBLESHOOTING

Checking Point

1.0V_TU_P Top Side



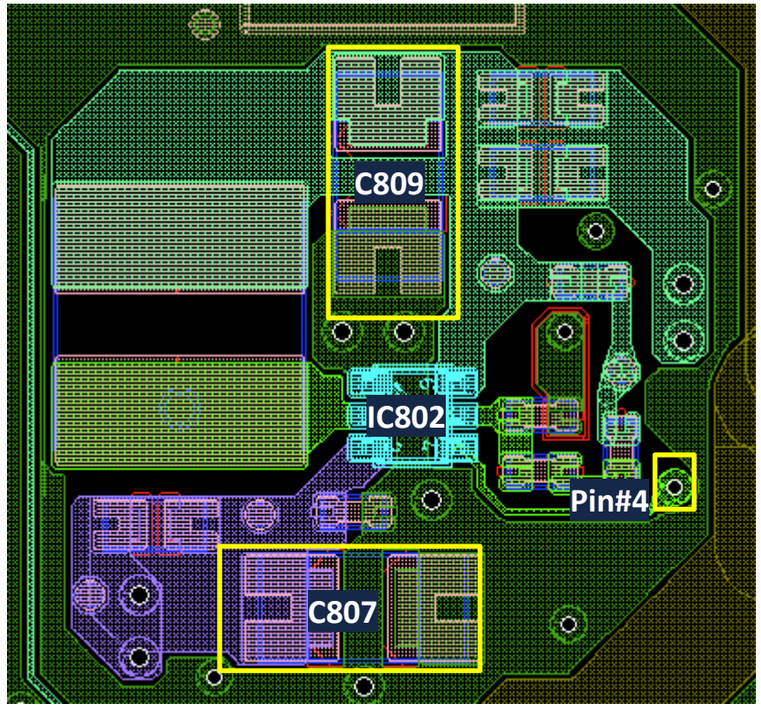
1.1V_M5_DDR B Side



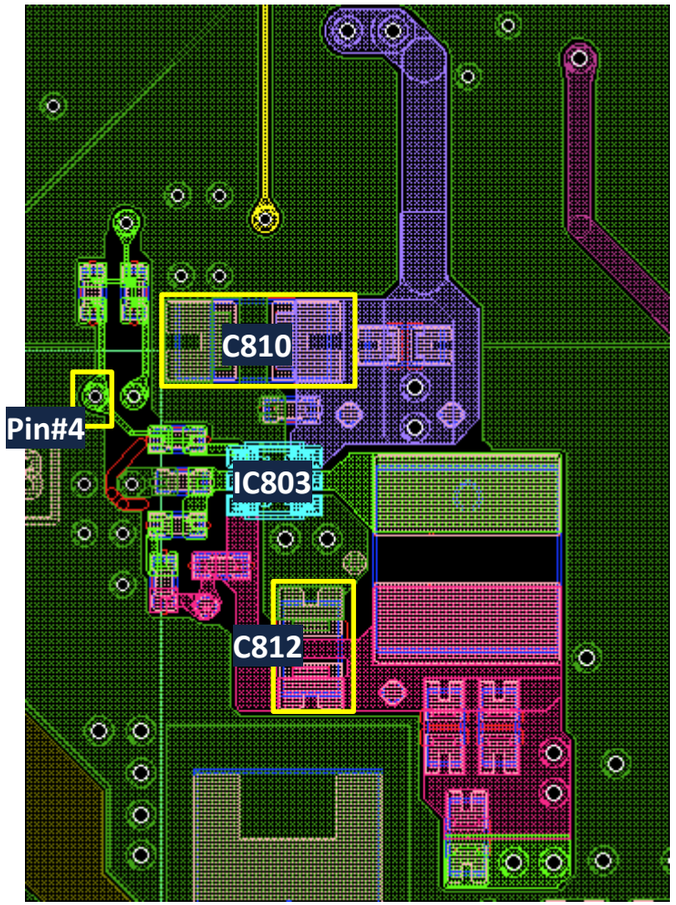
TROUBLESHOOTING

Checking Point

0.9V_M5_STBY B Side



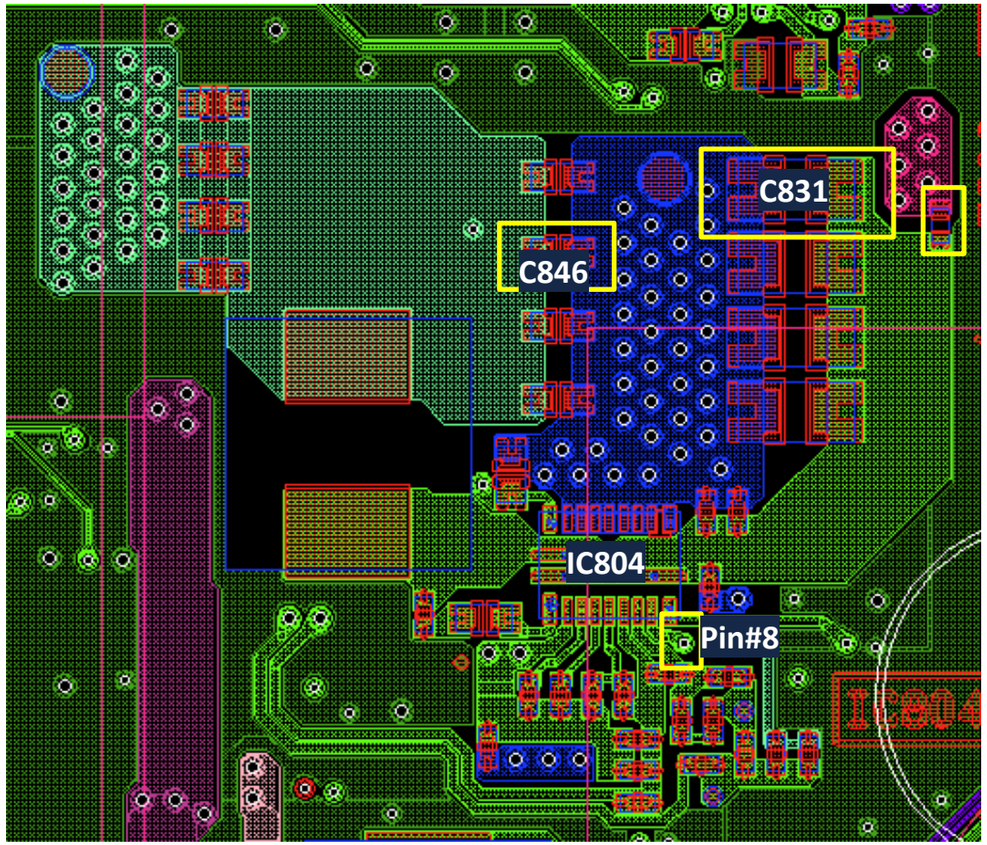
1.8V_STBY B Side



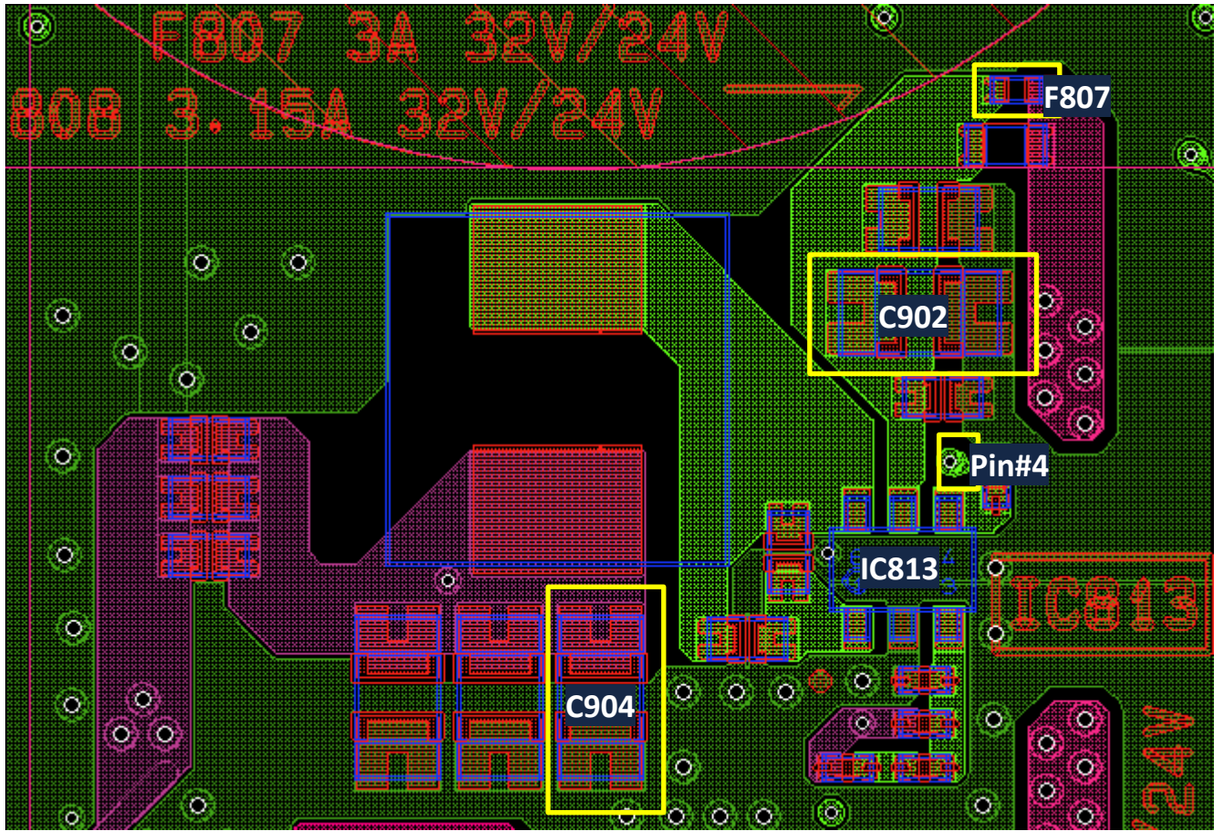
TROUBLESHOOTING

Checking Point

0.8V_M5_CORE B Side



1.8V_M5 B Side

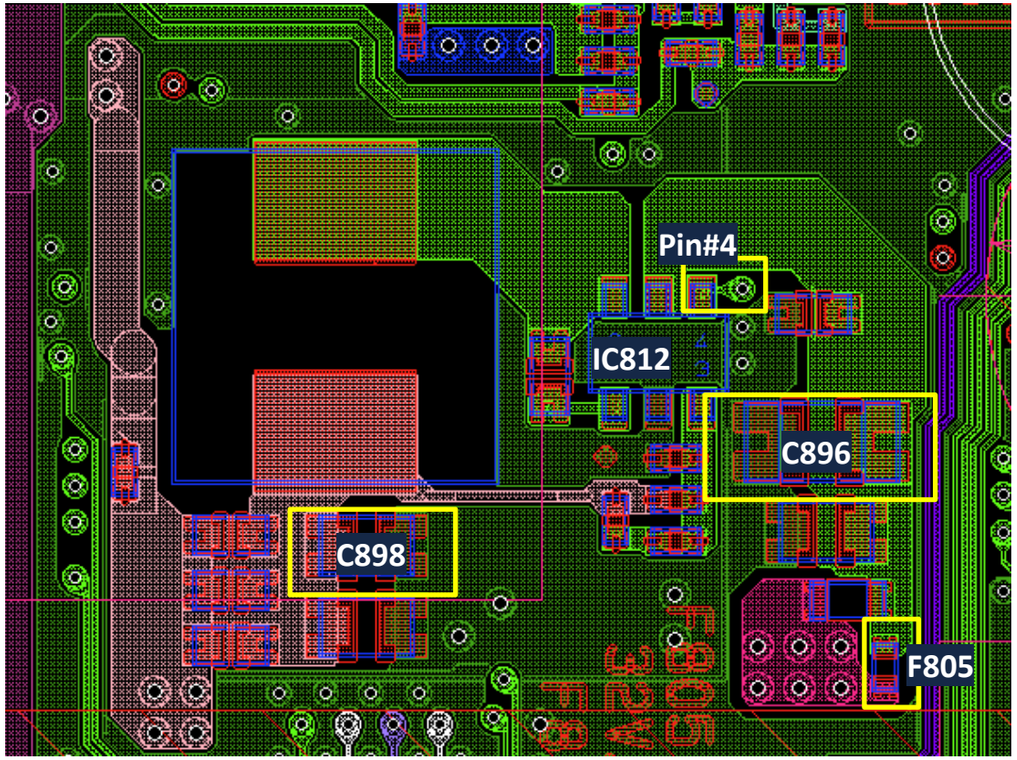


TROUBLESHOOTING

Checking Point

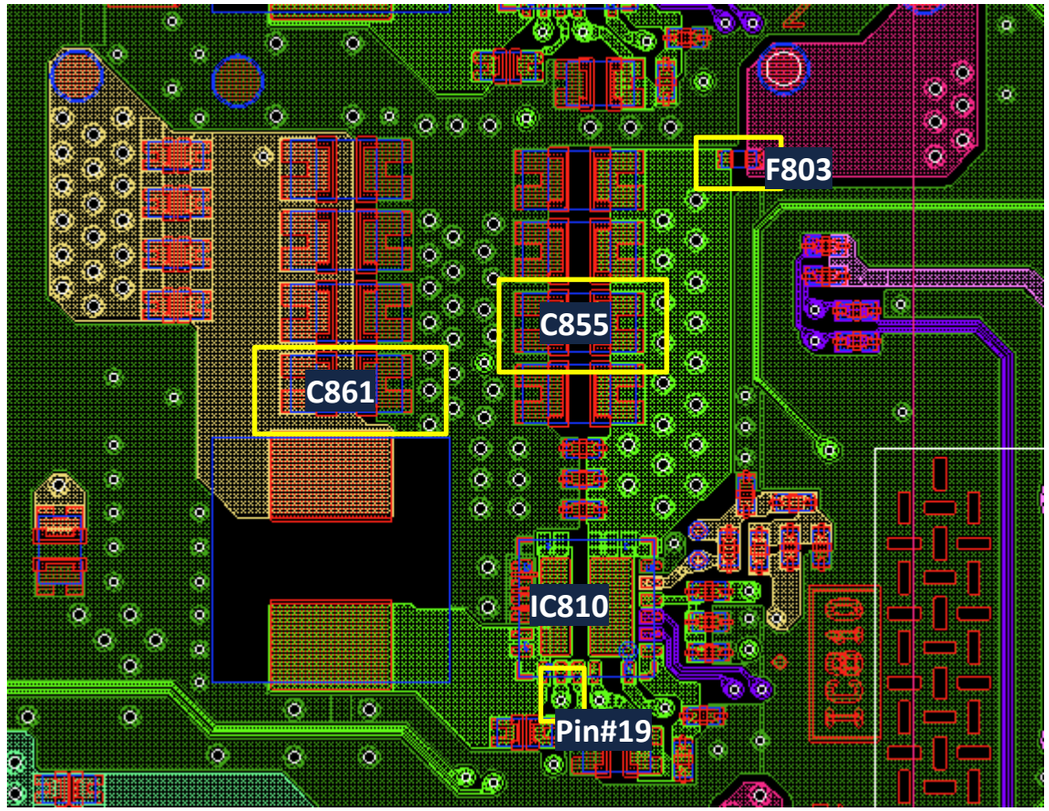
1.0V_M5

B Side



0.8V_M5_CPU

B Side

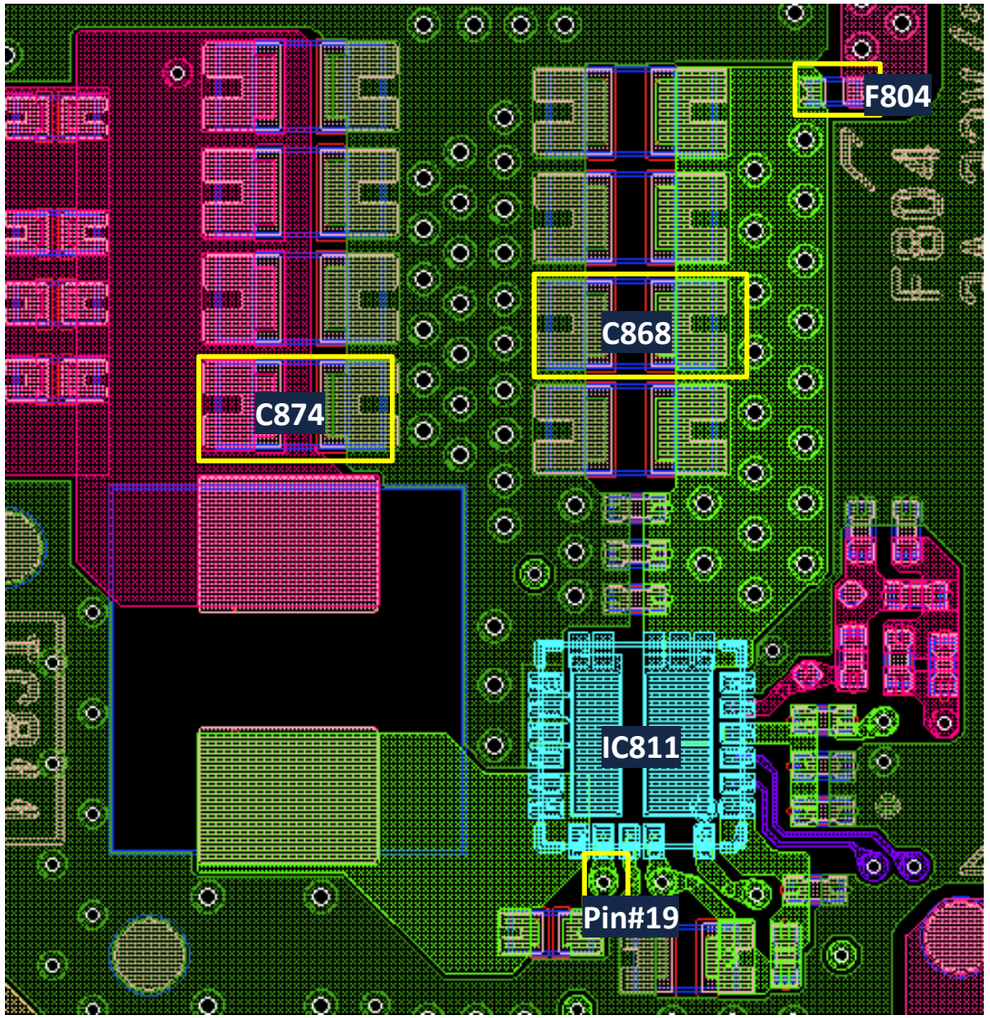


TROUBLESHOOTING

Checking Point

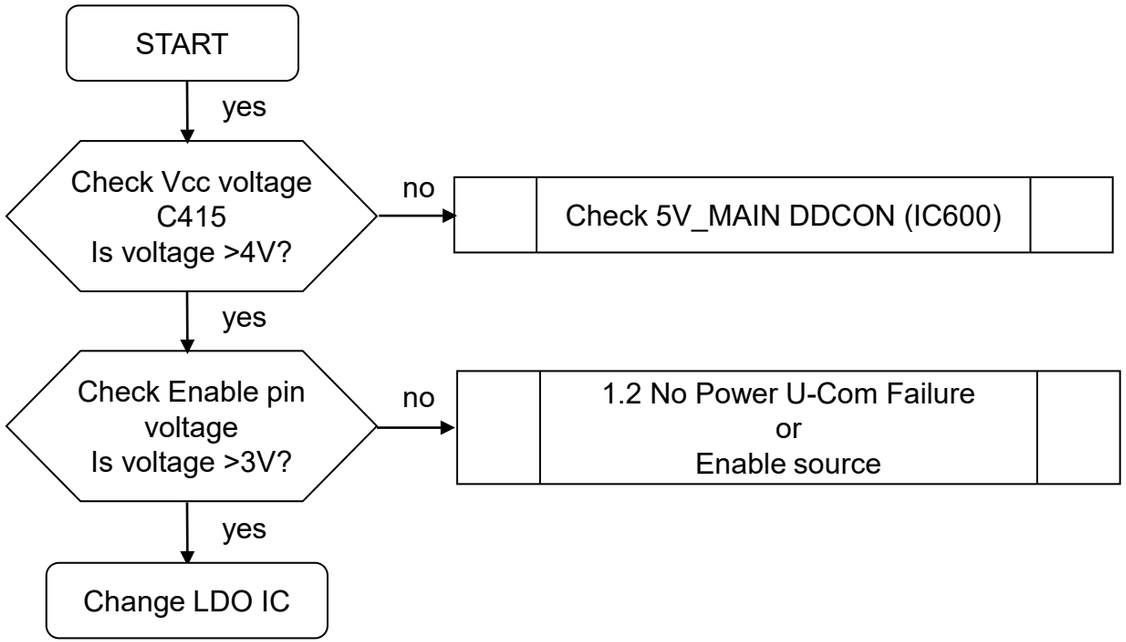
0.8V_M5_GPU

B Side



TROUBLESHOOTING

1.3 No Power DDCON/LDO (LDO Check)

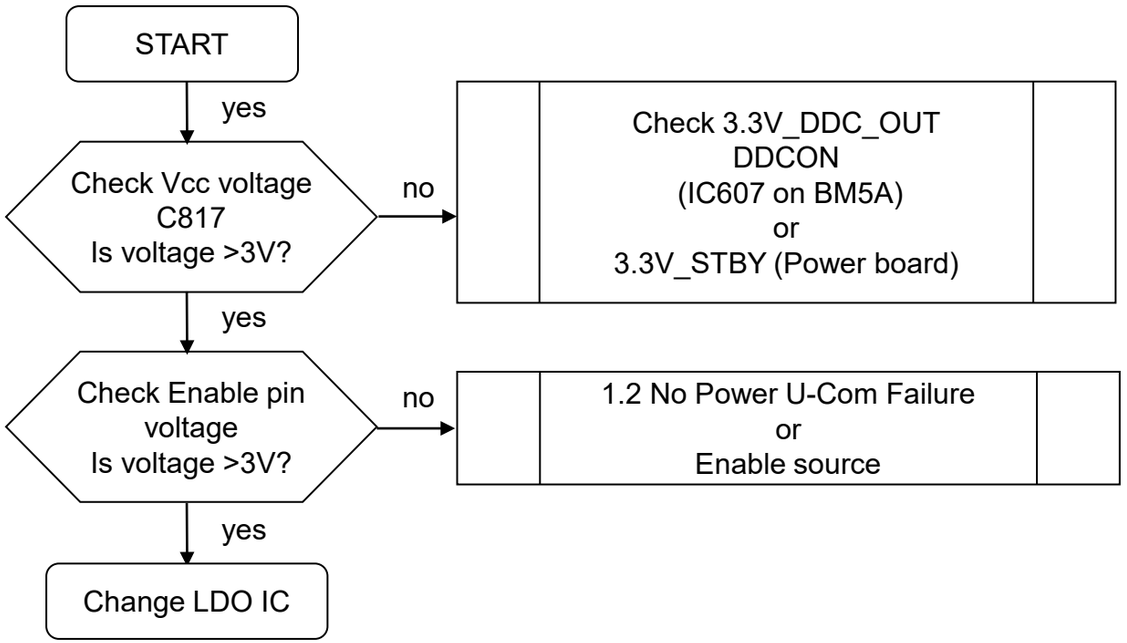


Please refer page 24 for Ref number.

Board	Operation	IC Ref	Voltage supply
BM5A	LDO	IC403	3.3V_MAIN_H

TROUBLESHOOTING

1.3 No Power DDCON/LDO (LDO Check)

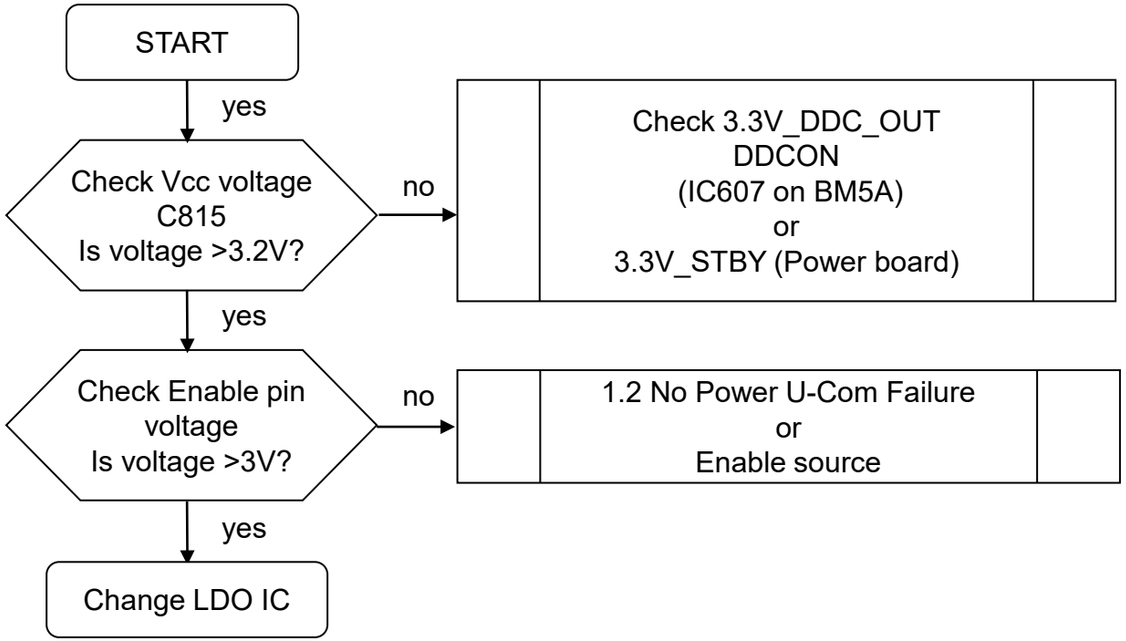


Please refer page 24 for Ref number.

Board	Operation	IC Ref	Voltage supply
BM5A	LDO	IC806	1.8V_M5_ET_STBY

TROUBLESHOOTING

1.3 No Power DDCON/LDO (LDO Check)



Please refer page 24 for Ref number.

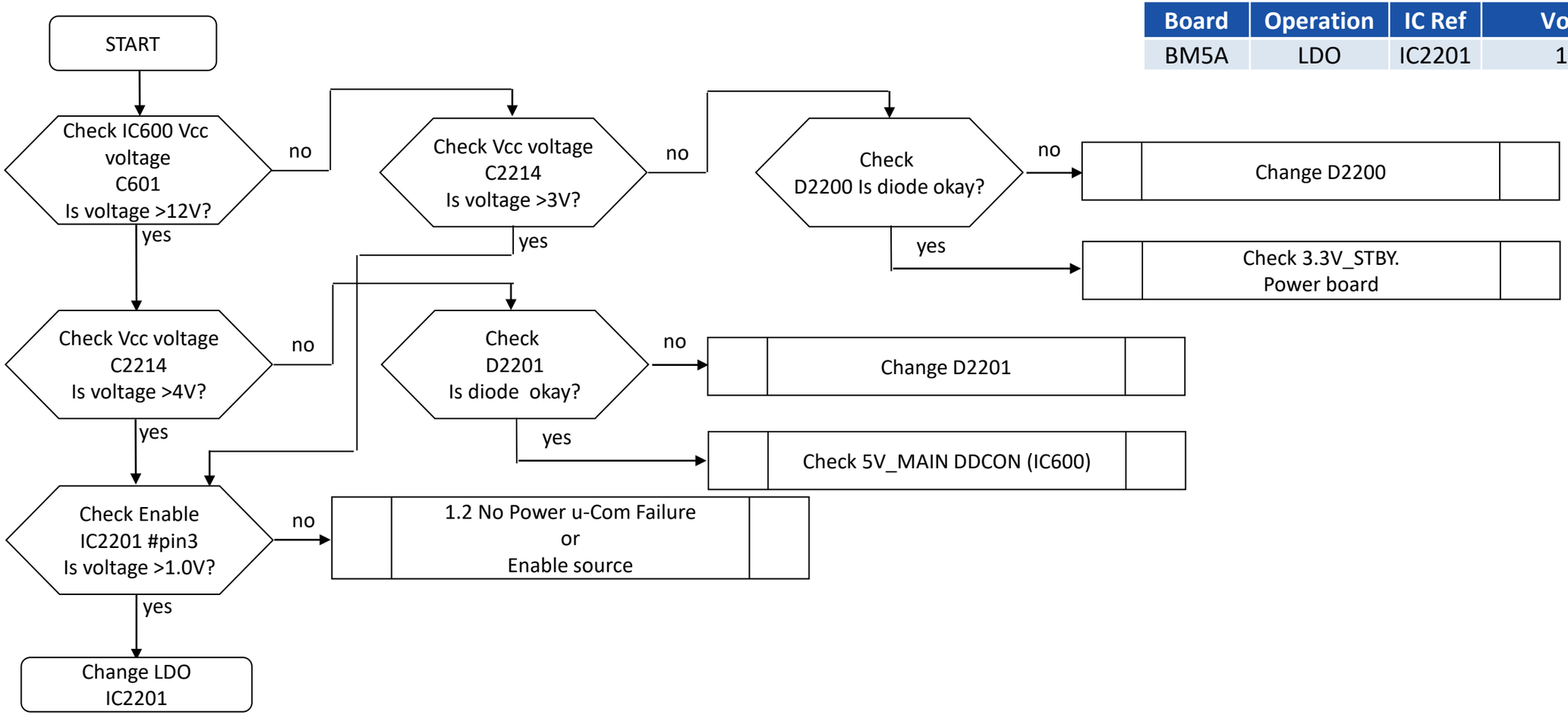
Board	Operation	IC Ref	Voltage supply
BM5A	LDO	IC809	3.3V_M5_STBY

TROUBLESHOOTING

1.3 No Power DDCON/LDO (LDO Check)

Please refer page 24 for Ref number.

Board	Operation	IC Ref	Voltage supply
BM5A	LDO	IC2201	1.8V_EMMC

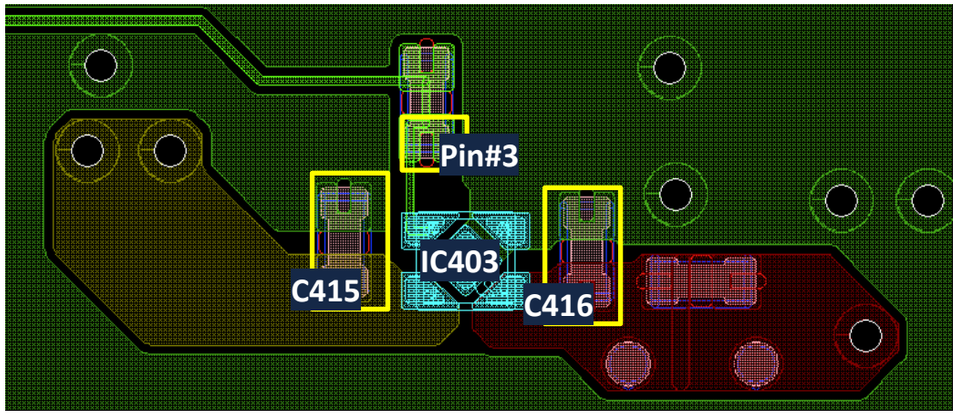


TROUBLESHOOTING

Checking Point

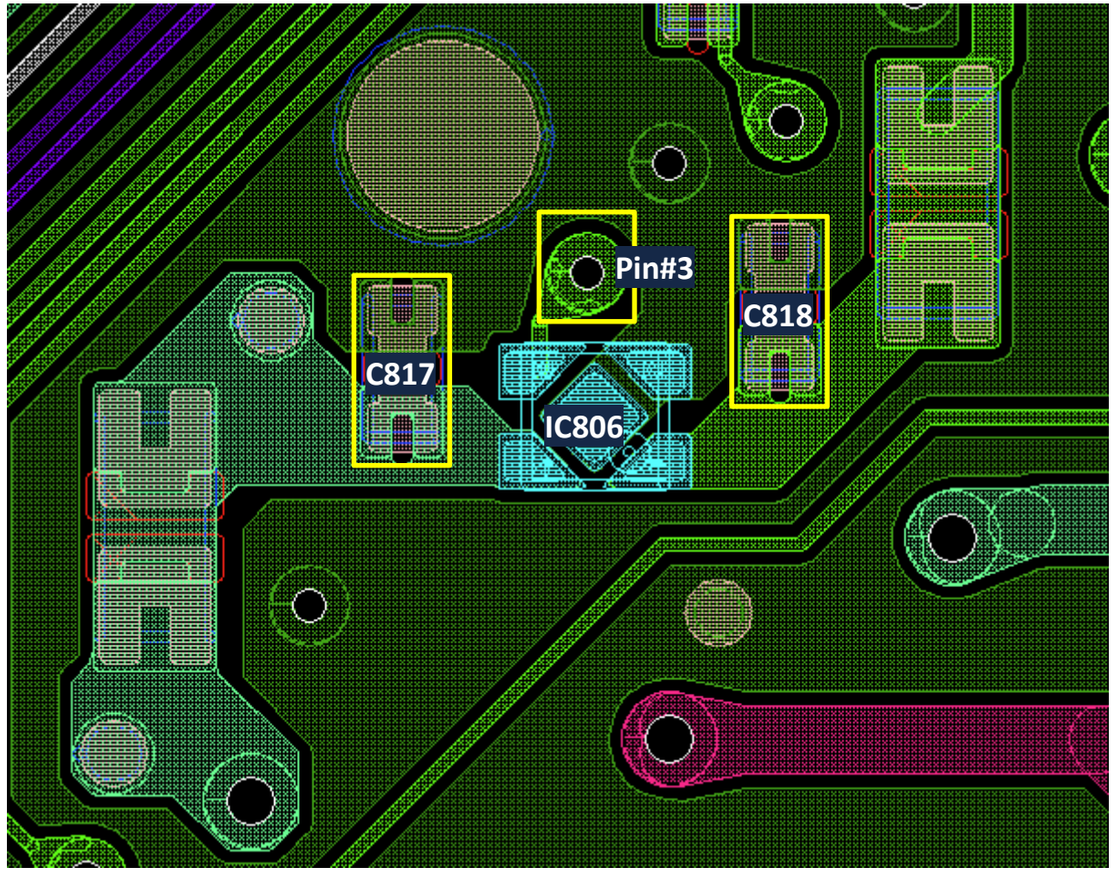
3.3V_MAIN_H

B Side



1.8V_M5_ET_STBY

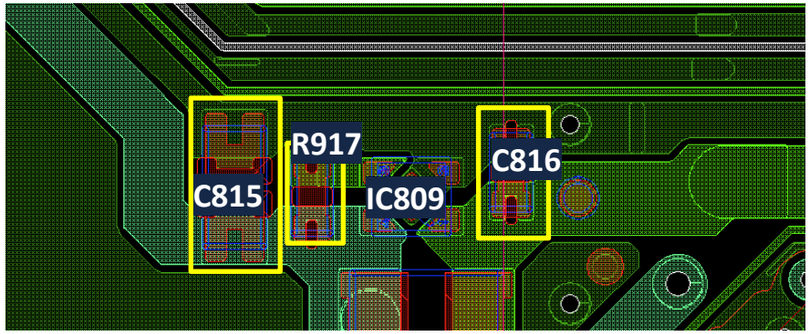
B Side



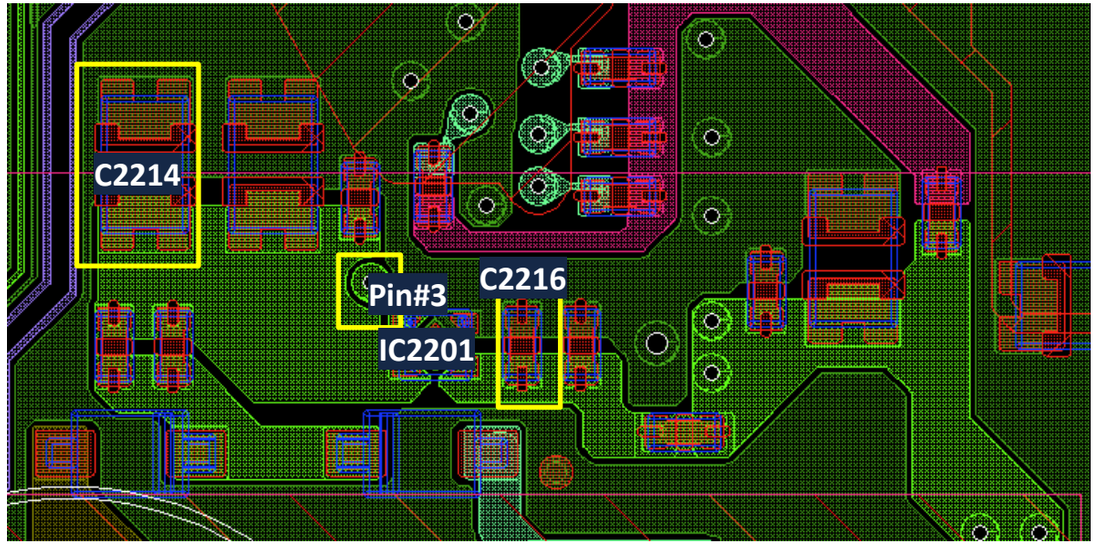
TROUBLESHOOTING

Checking Point

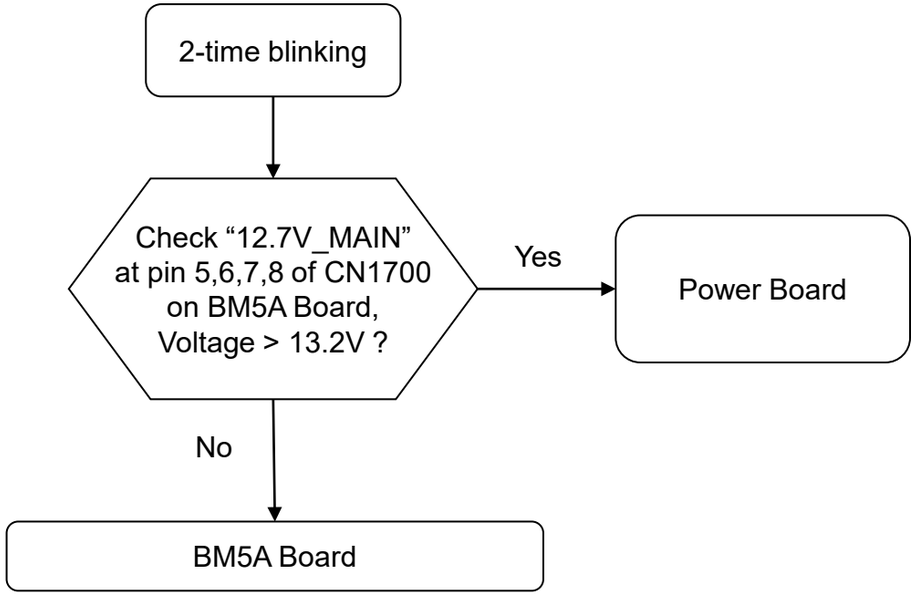
3.3V_M5_STBY B Side



1.8V_EMMC B Side

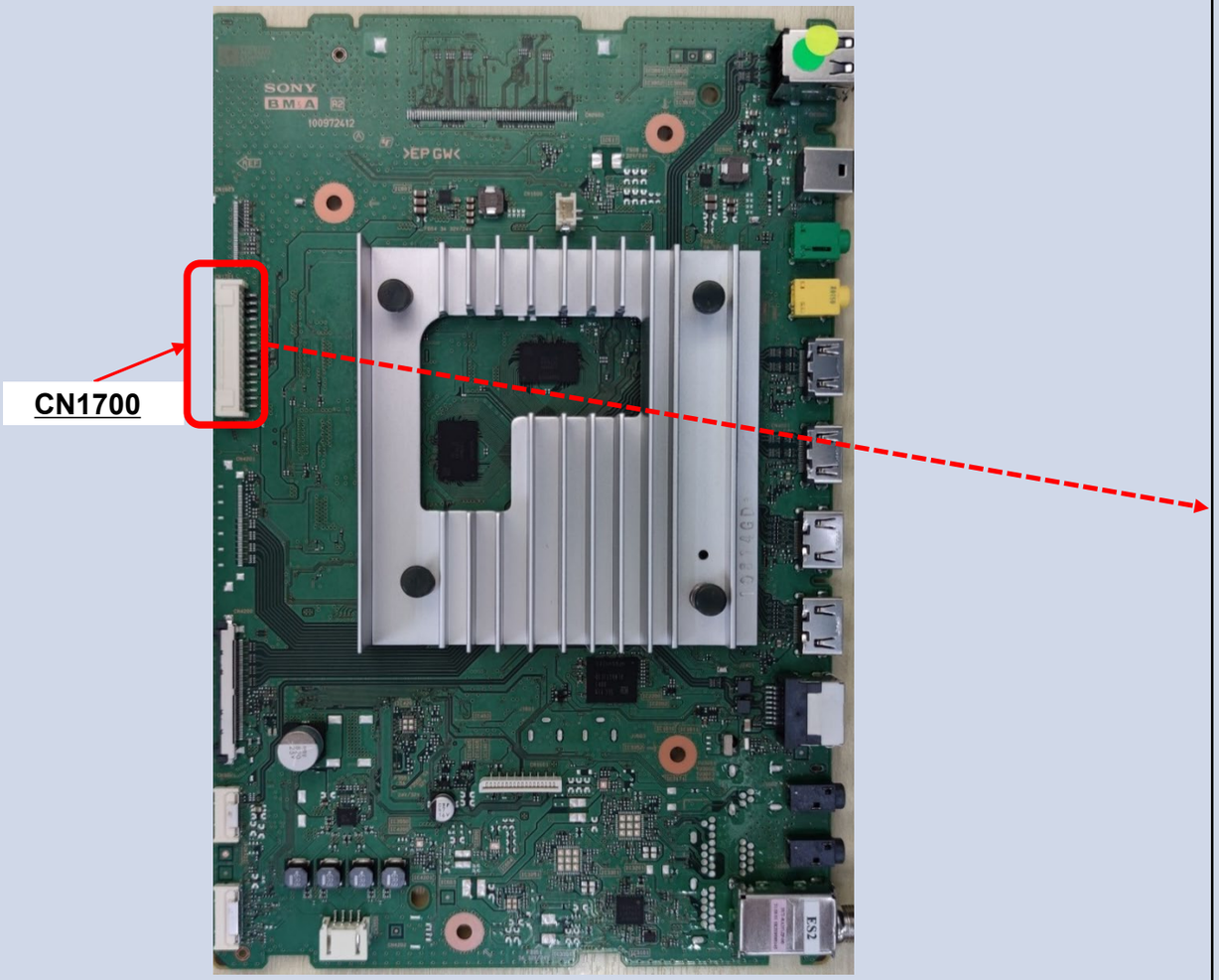
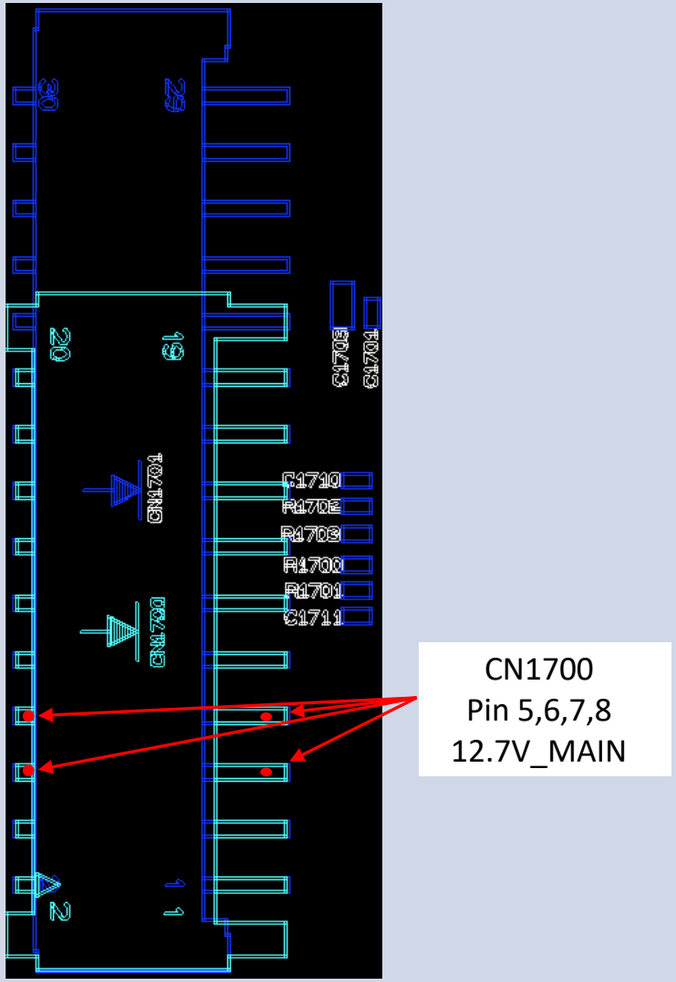


2.0 LED Blinking: 2x (Main power Error)



TROUBLESHOOTING

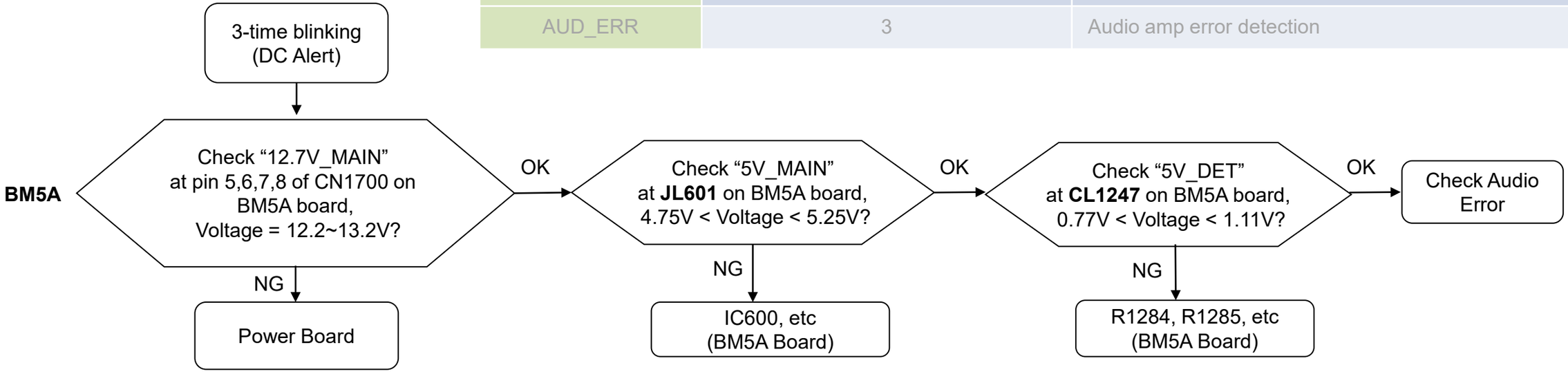
Checking Point

Board PWB (A side)	Detail
	

TROUBLESHOOTING

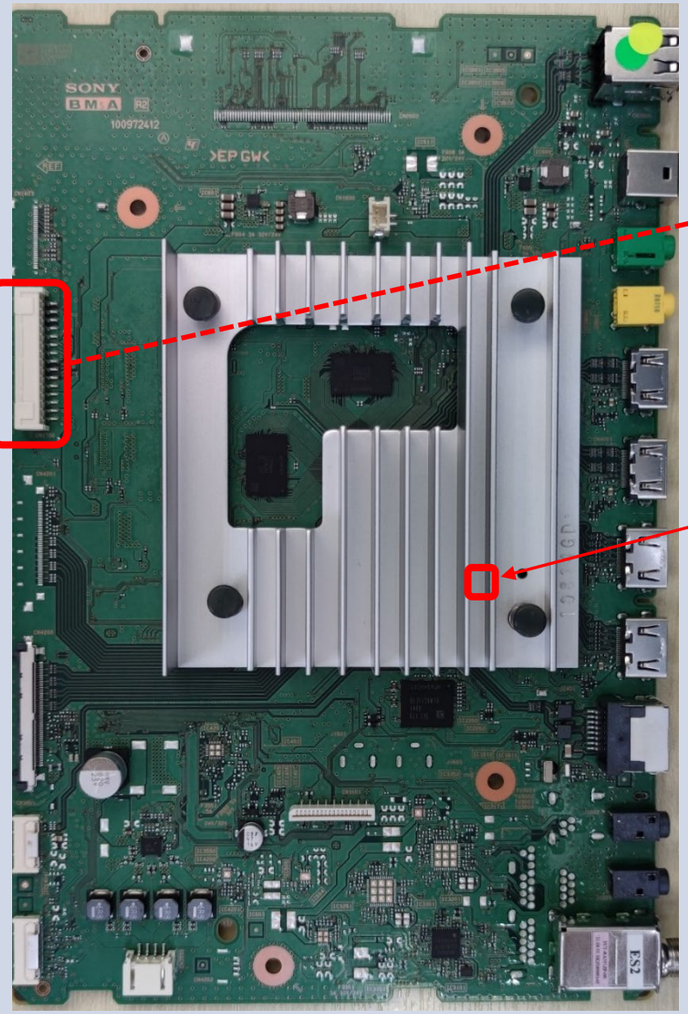
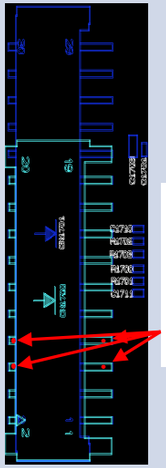
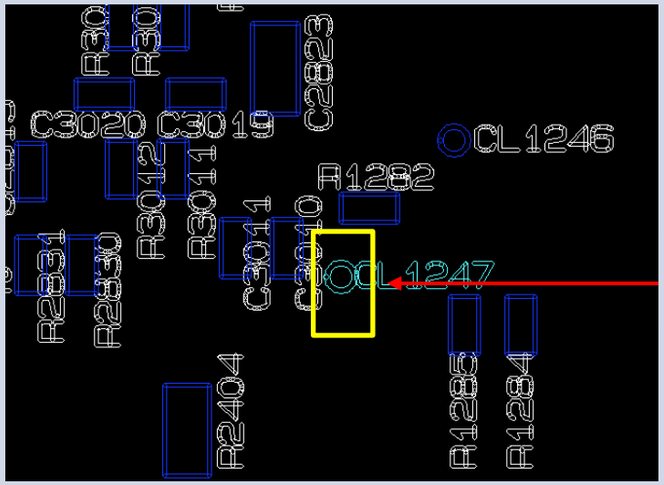
2.1 LED Blinking: 3x (DC ALERT)

Error Item	Number of STBY LED flashing	Description
DC_ALERT	3	Main board 5V power rail monitoring
AUD_ERR	3	Audio amp error detection



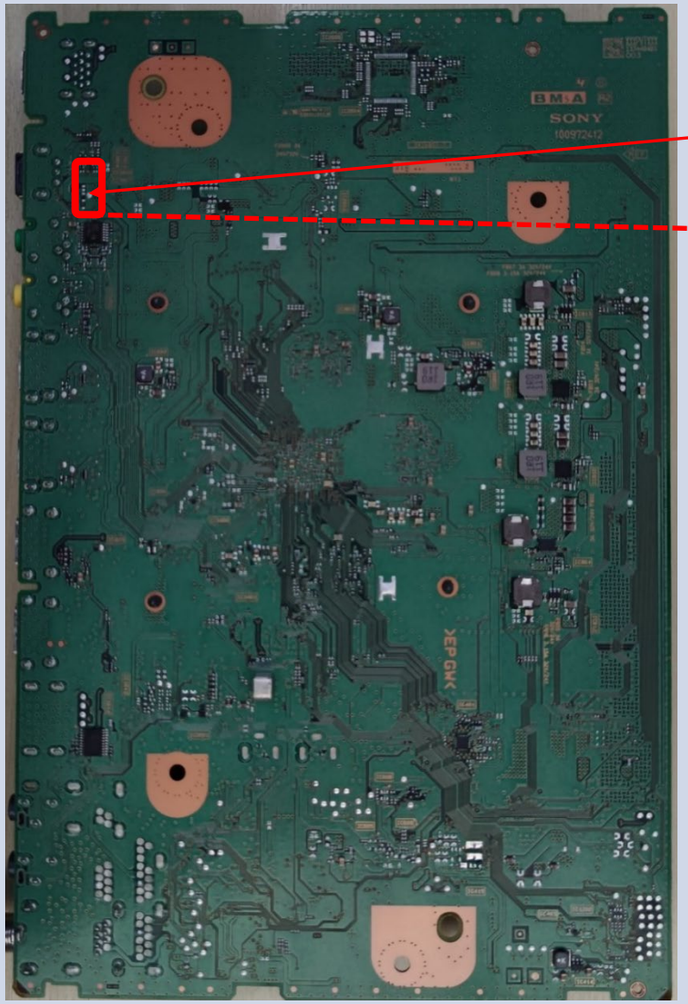
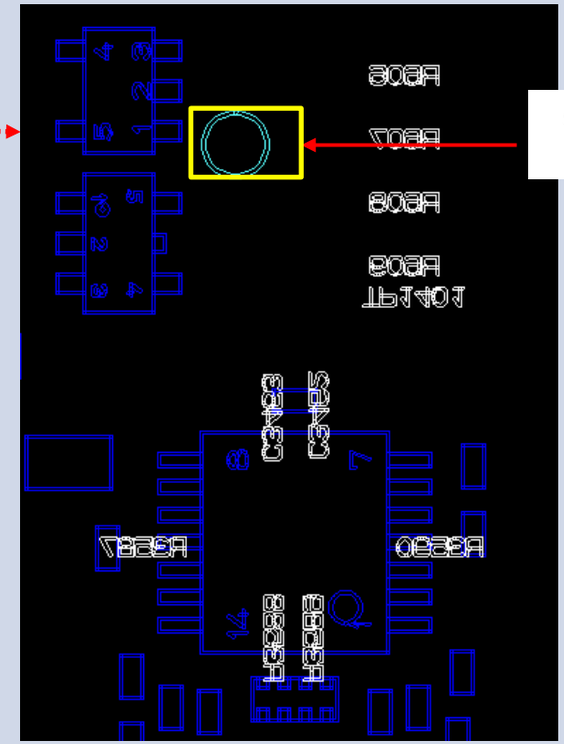
TROUBLESHOOTING

Checking Point

Board PWB (A side)	Detail
	 

TROUBLESHOOTING

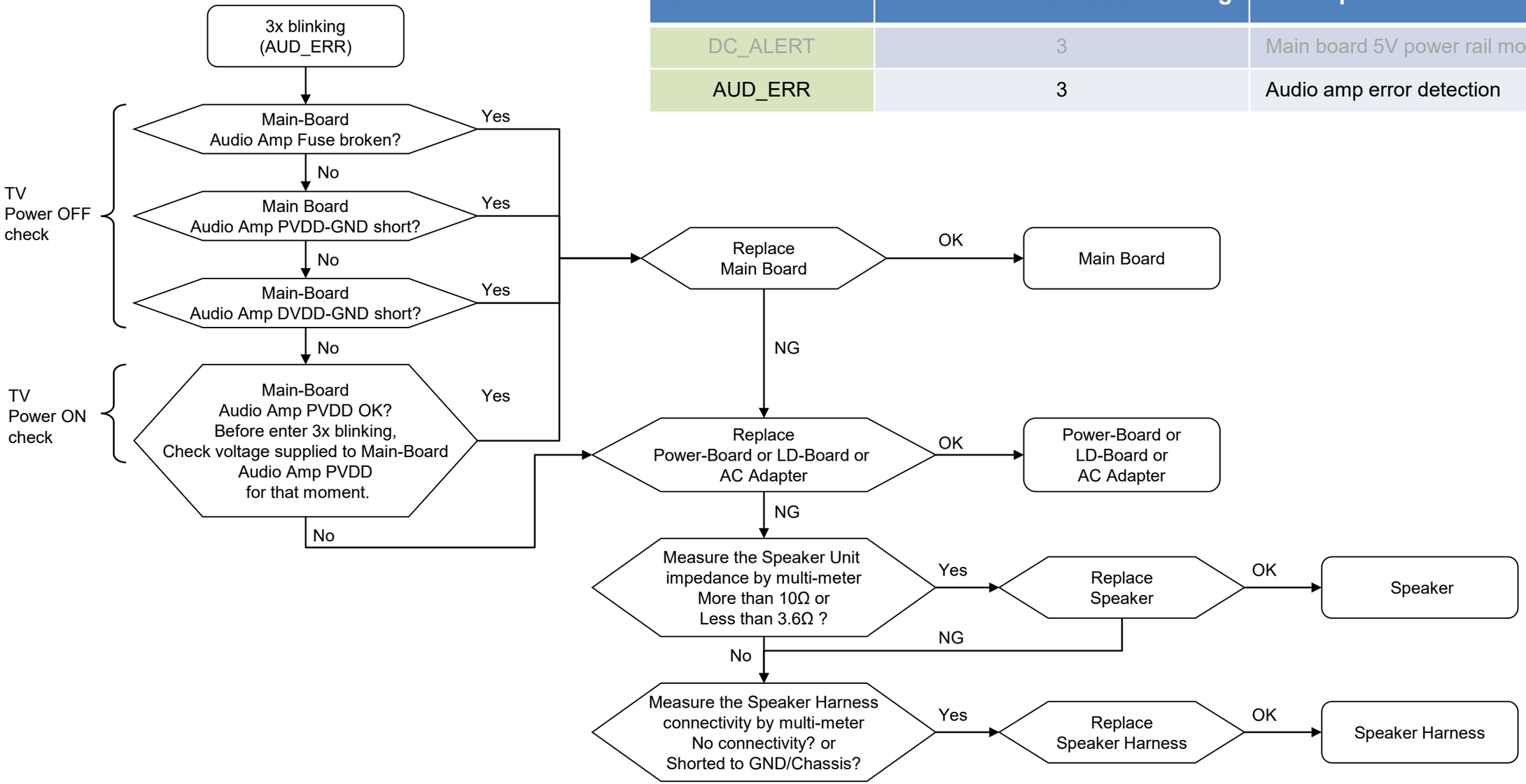
Checking Point

Board PWB (B side)	Detail
	

TROUBLESHOOTING

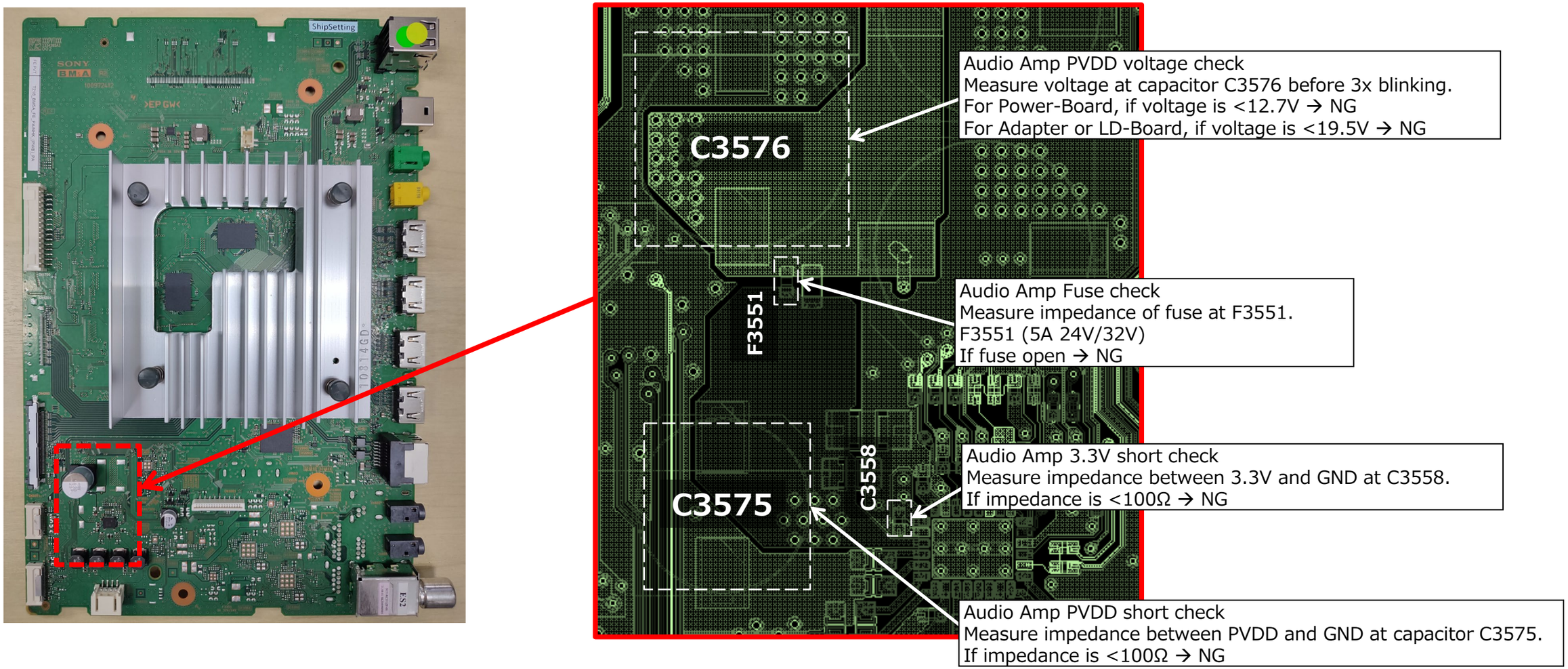
2.2 LED Blinking: 3x (AU ERR)

Error Item	Number of STBY LED flashing	Description
DC_ALERT	3	Main board 5V power rail monitoring
AUD_ERR	3	Audio amp error detection

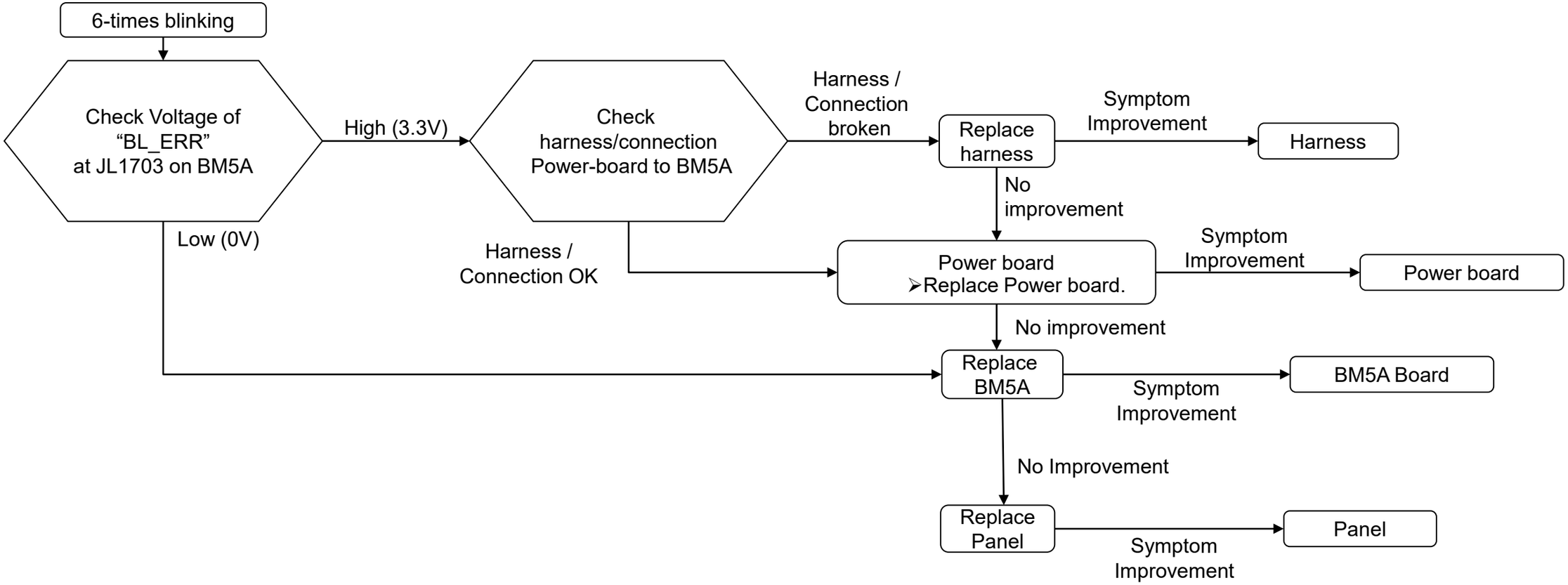


TROUBLESHOOTING

2.2 LED Blinking: 3x (AU ERR)

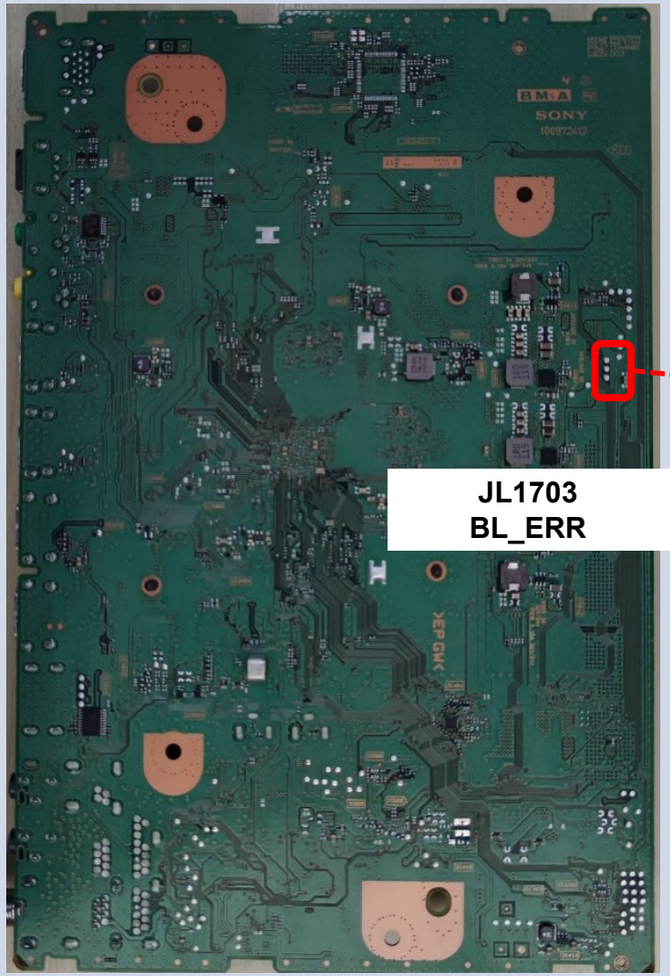
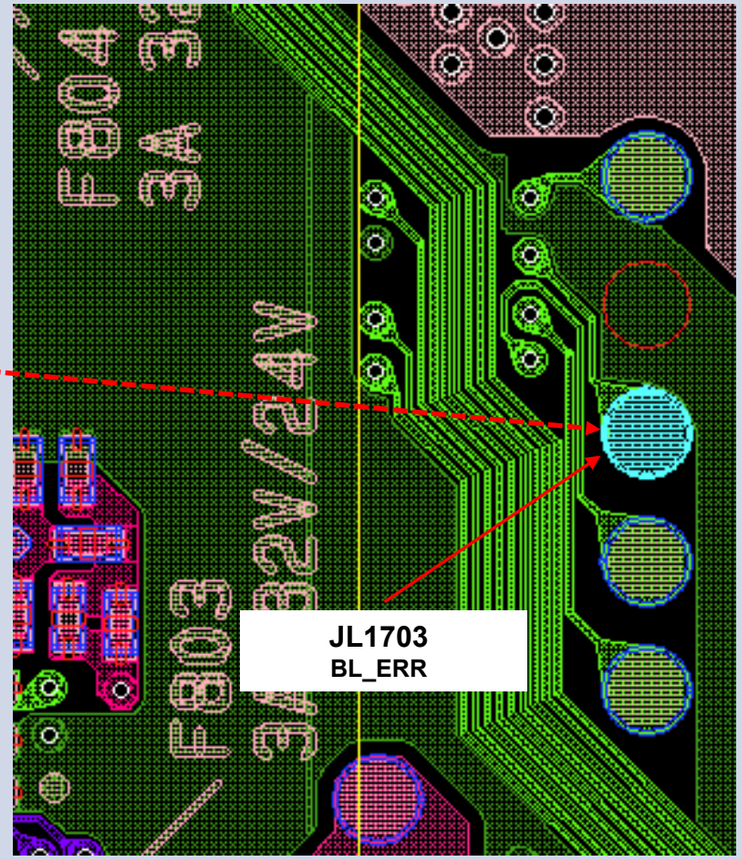


2.6 LED Blinking: 6x (Backlight Error)



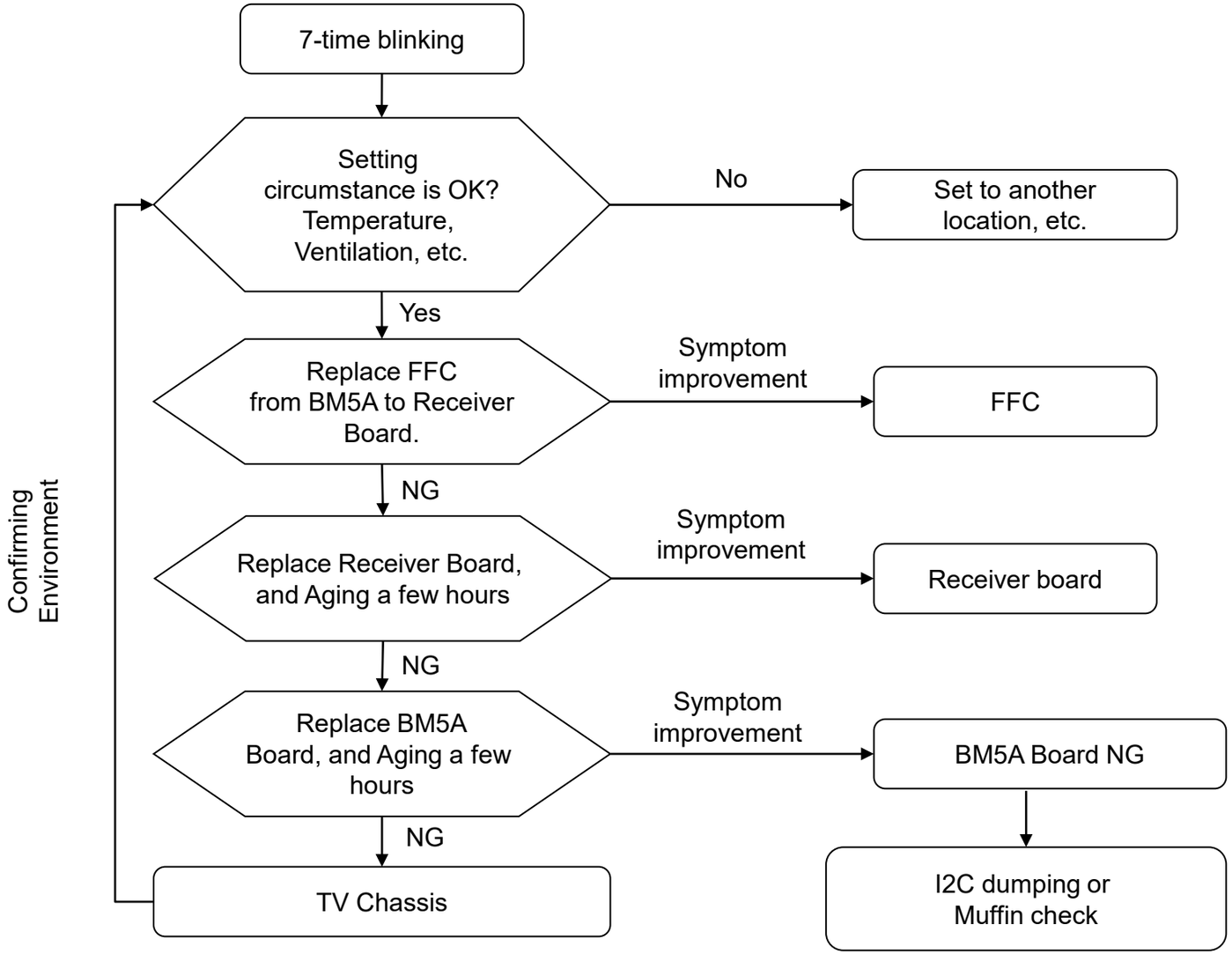
TROUBLESHOOTING

Checking Point

Board PWB (B side)	Detail
	

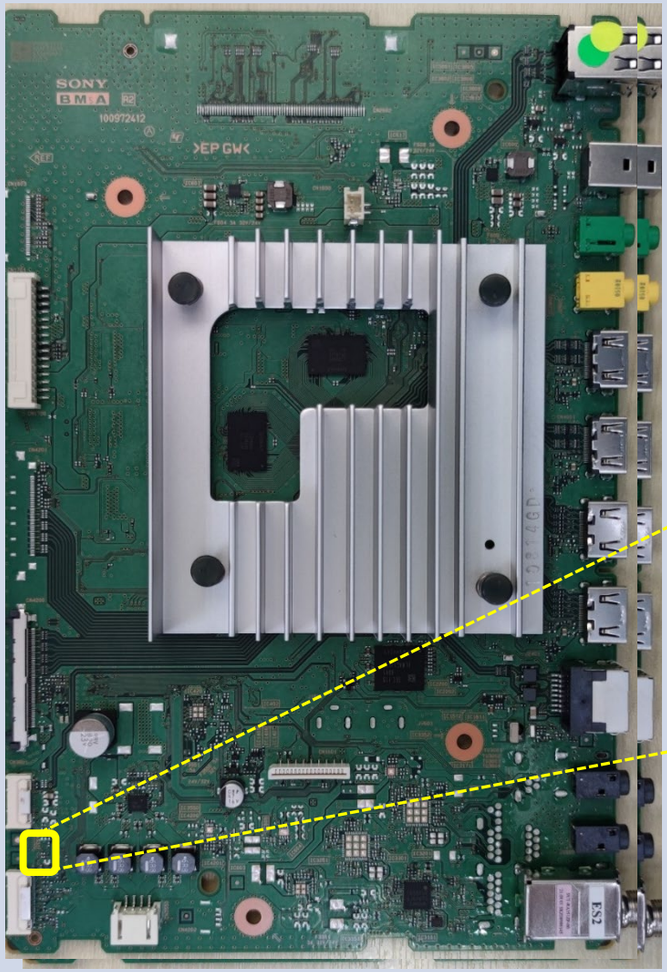
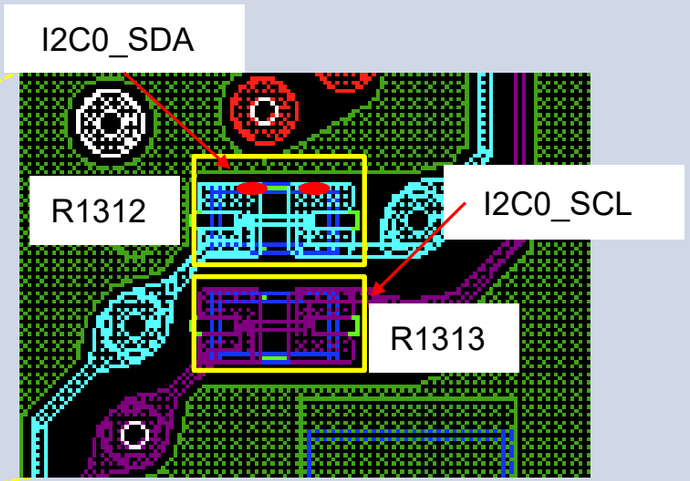
TROUBLESHOOTING

2.7 LED Blinking: 7x (Temperature Error)



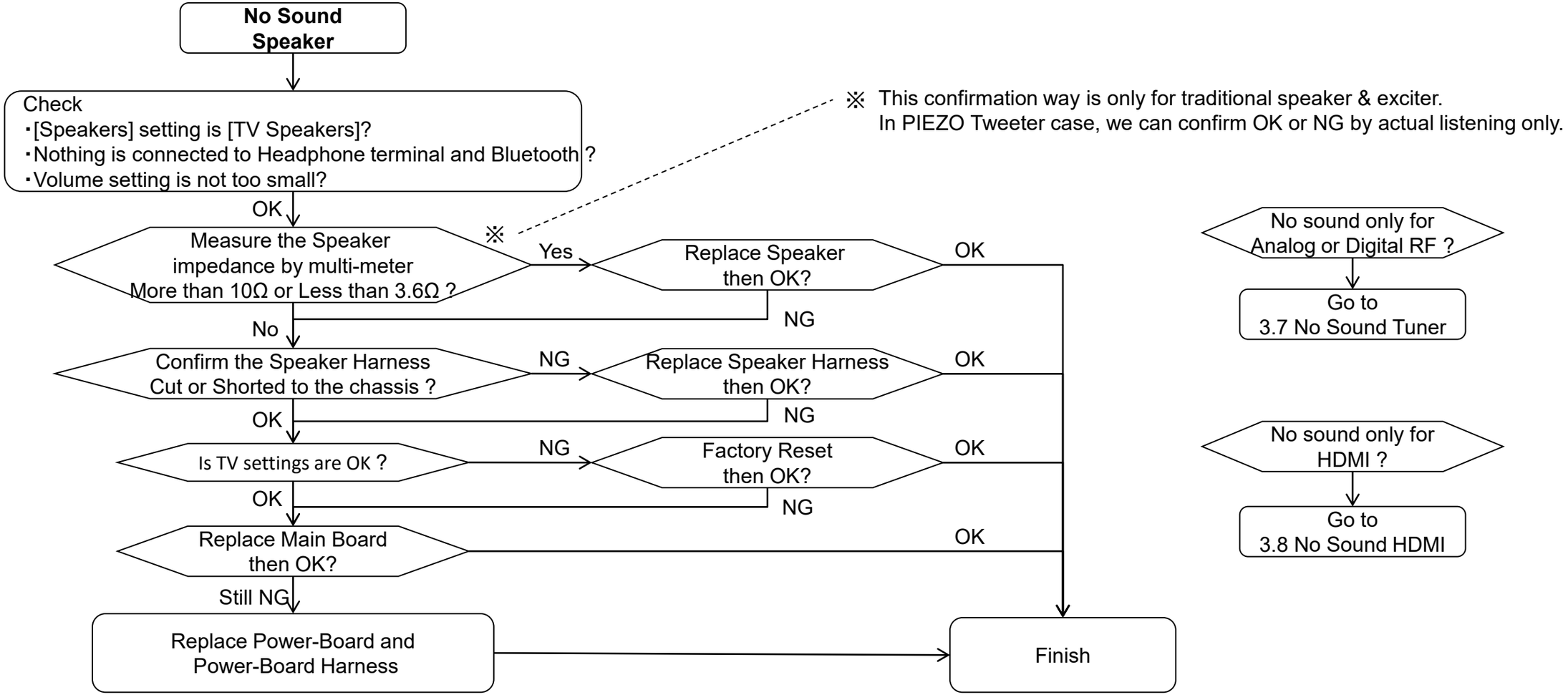
TROUBLESHOOTING

Checking Point

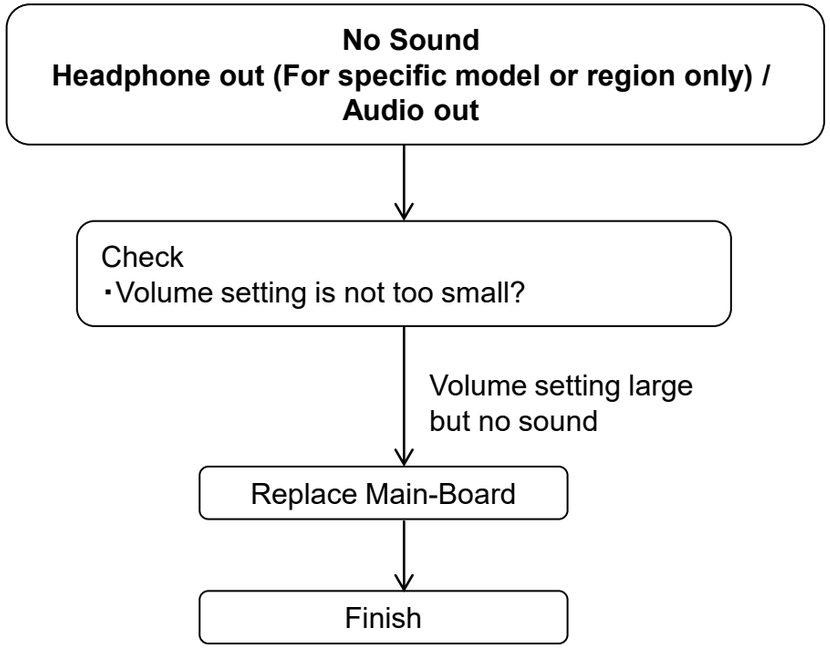
Board PWB (A side)	Detail
	

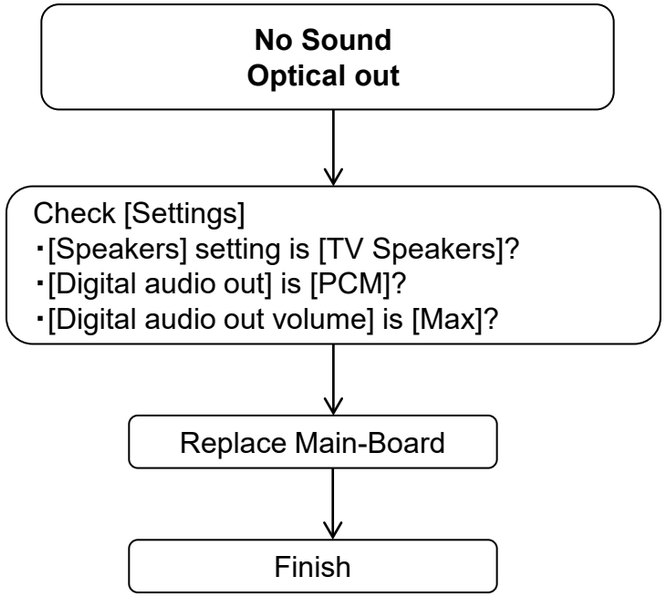
TROUBLESHOOTING

3.1 No Sound for Speaker

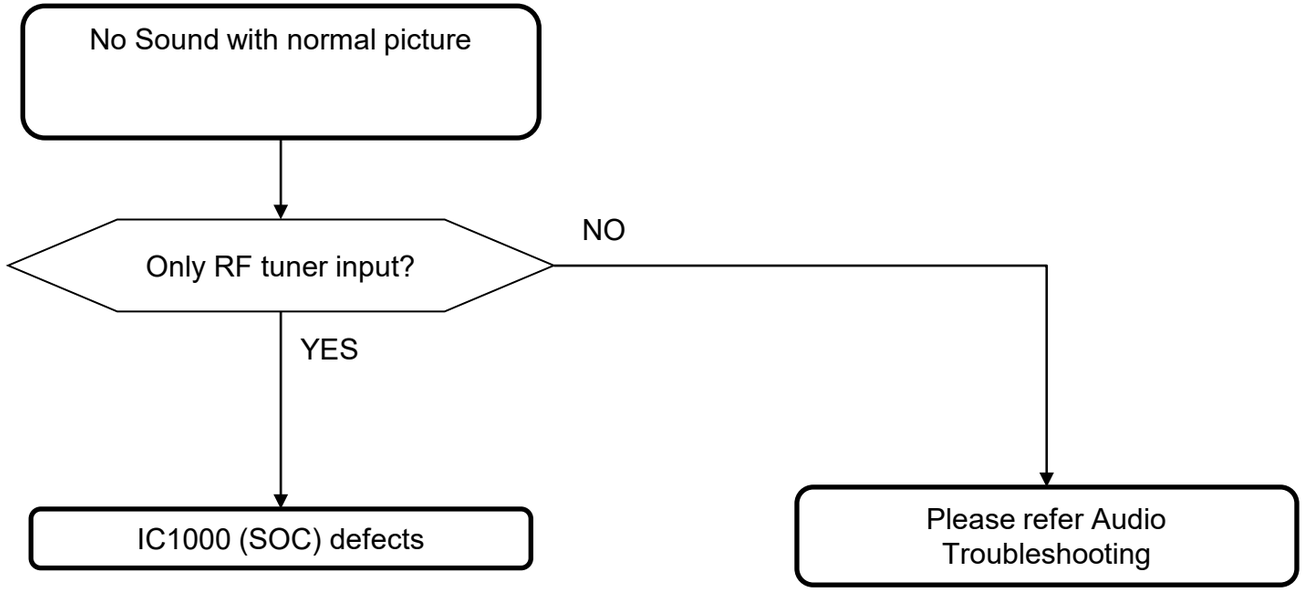


3.2 No Sound for Headphone out/ Audio out / Optical out



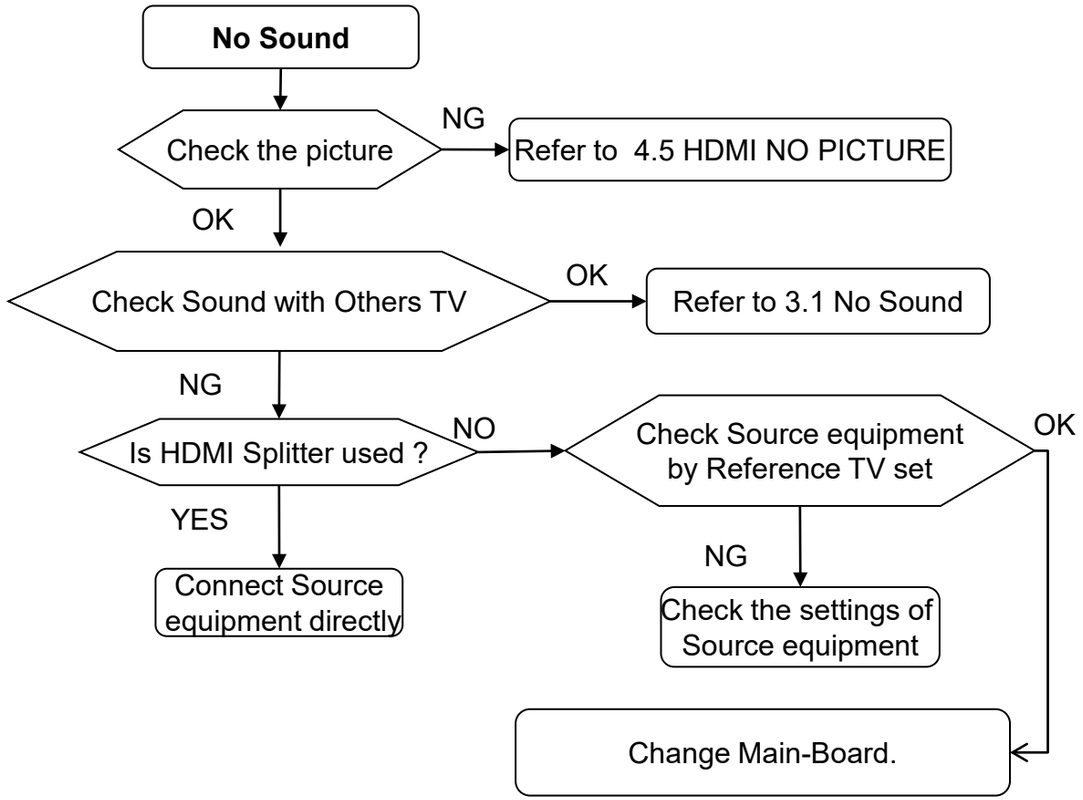


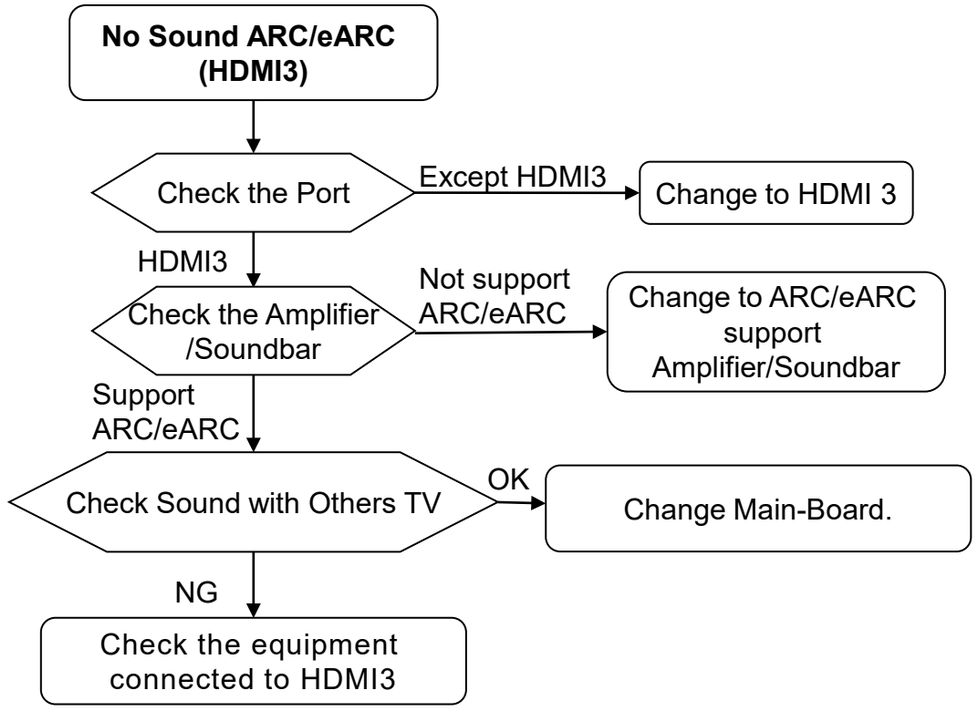
3.7 No Sound at Tuner



TROUBLESHOOTING

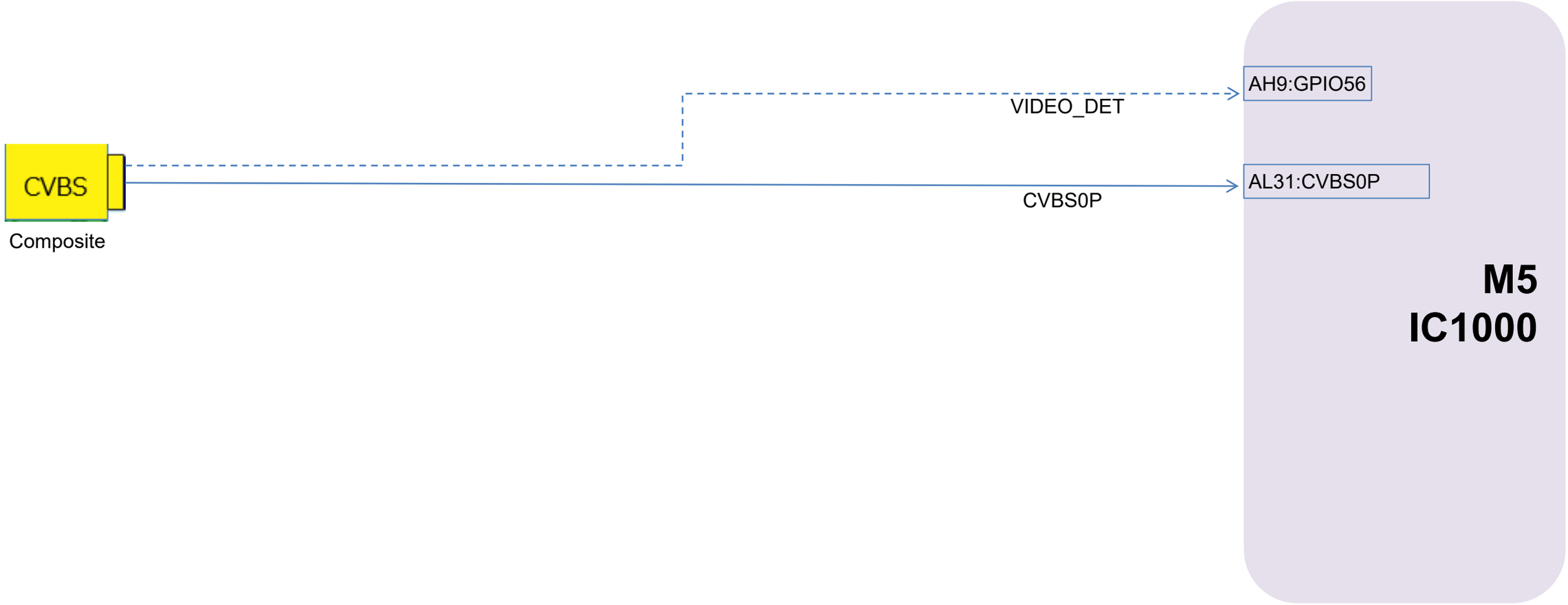
3.8 No Sound HDMI 1/2/3/4





TROUBLESHOOTING

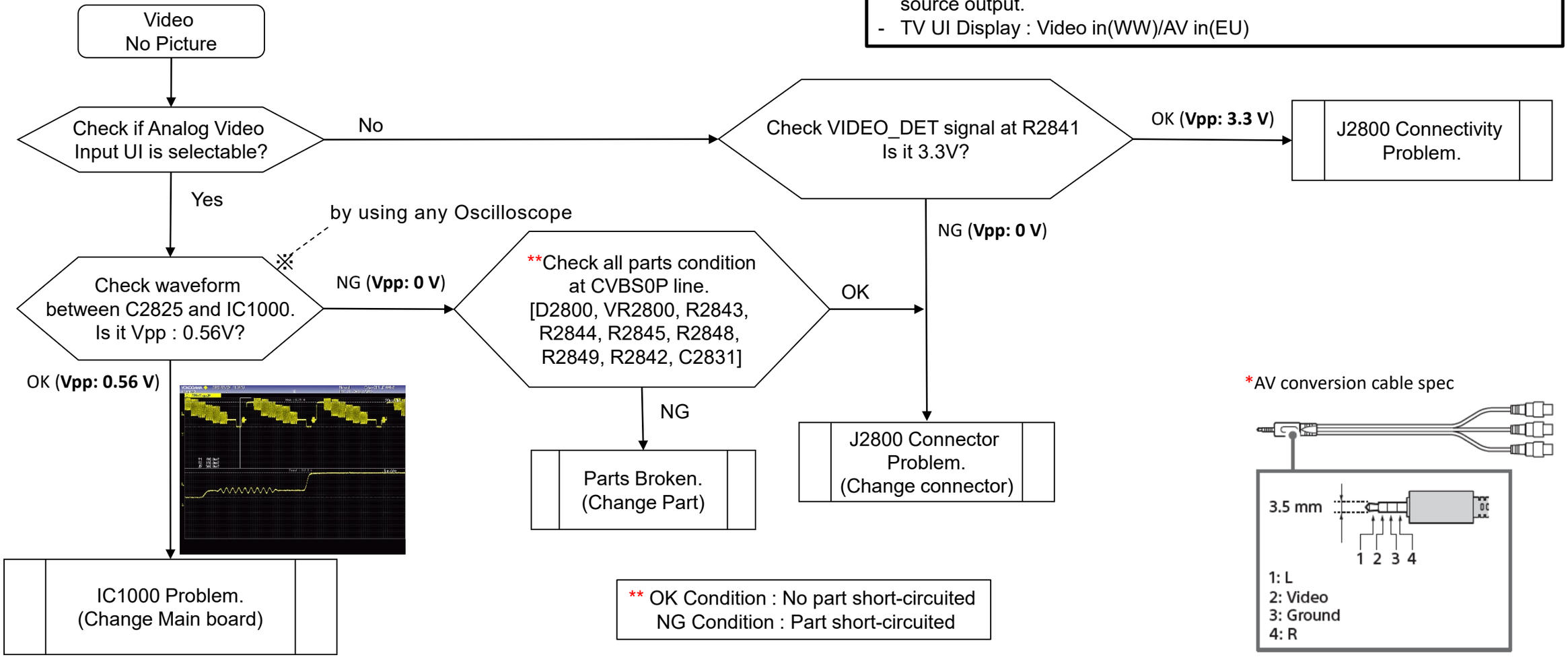
4.1 Analog Video Signal Path



TROUBLESHOOTING

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.
- TV UI Display : Video in(WW)/AV in(EU)



** OK Condition : No part short-circuited
NG Condition : Part short-circuited

*AV conversion cable spec

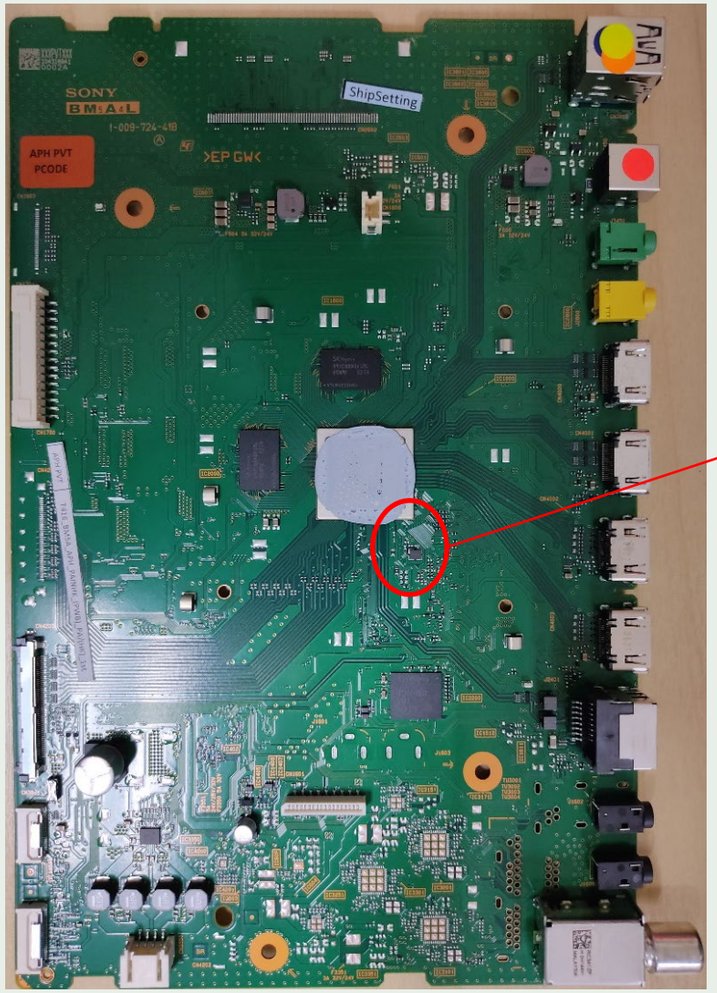
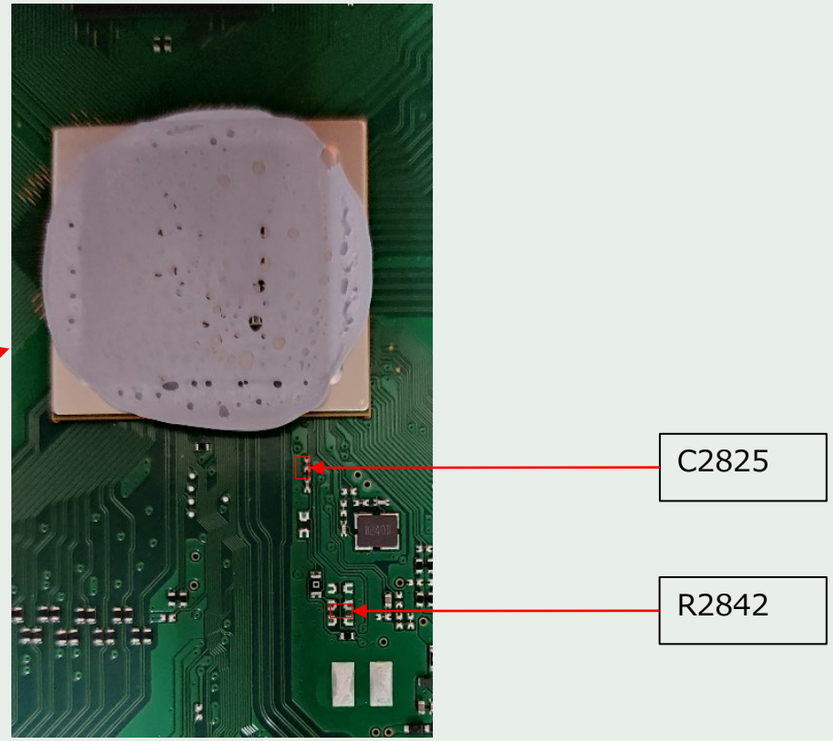
TROUBLESHOOTING

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

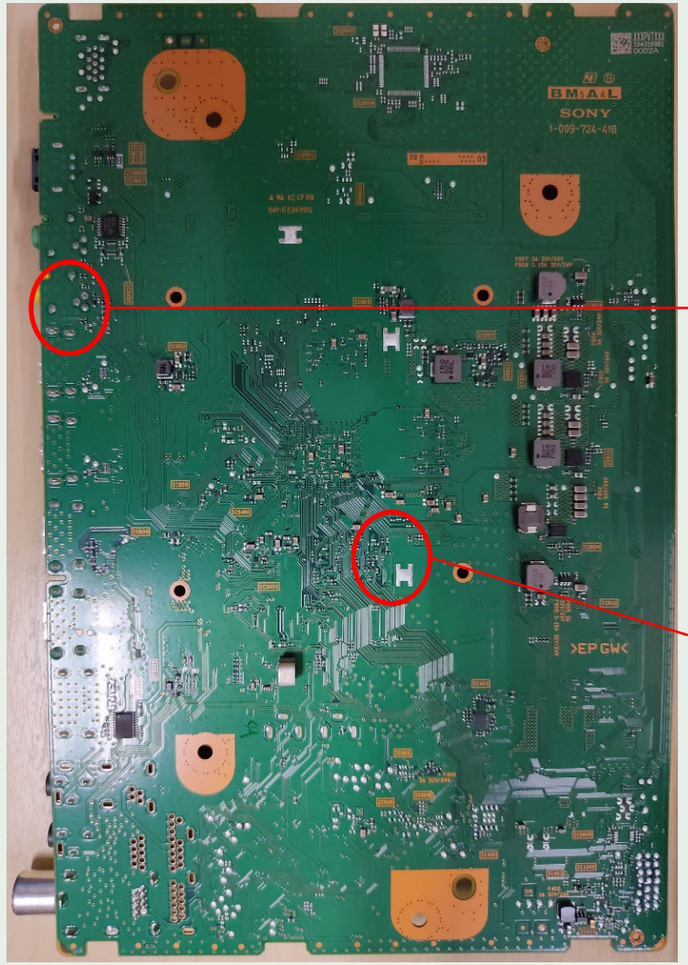
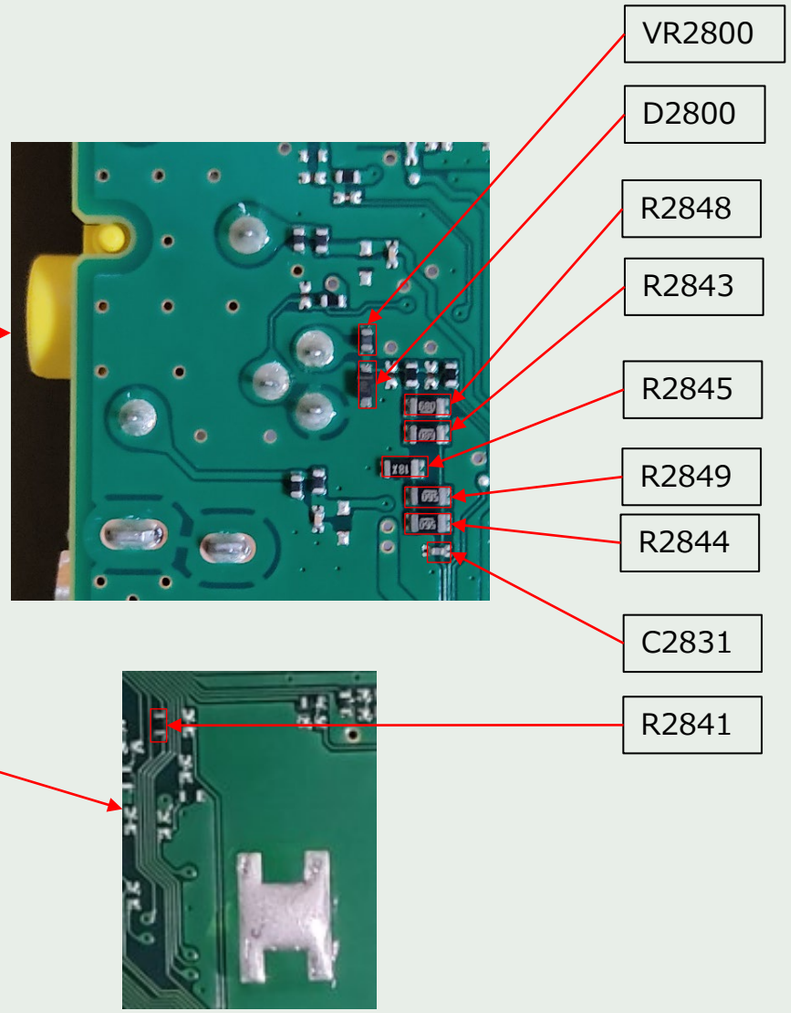
TROUBLESHOOTING

4.2 No Picture – Parts Location

Board Name	Board PWB (A-side)	Details
BM5A R2842, C2825		

TROUBLESHOOTING

4.2 No Picture – Parts Location

Board Name	Board PWB (B-side)	Details
BM5A D2800, VR2800, R2843, R2844, R2845, R2848, R2849, C2831, R2841		

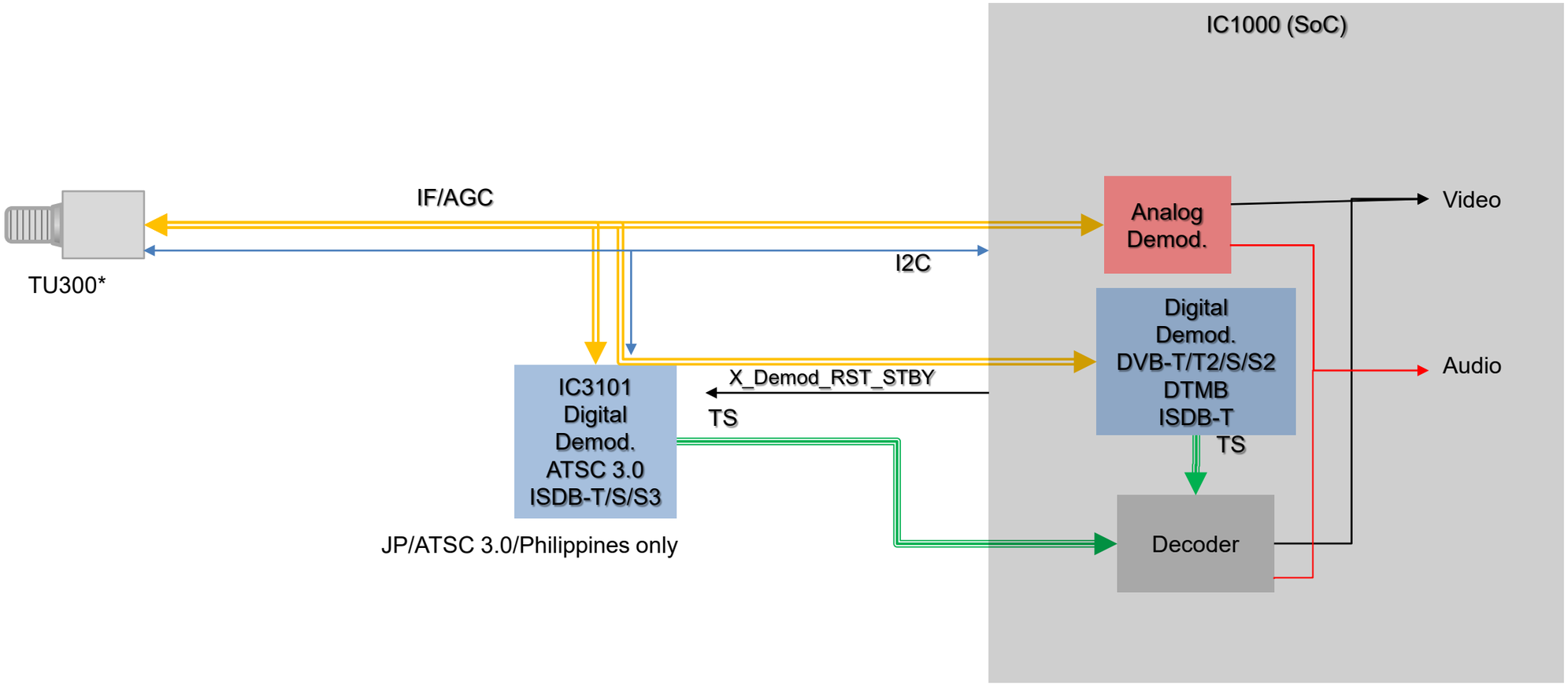
4.3 Input Skip Function

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

TROUBLESHOOTING

4.4 No Picture at Tuner



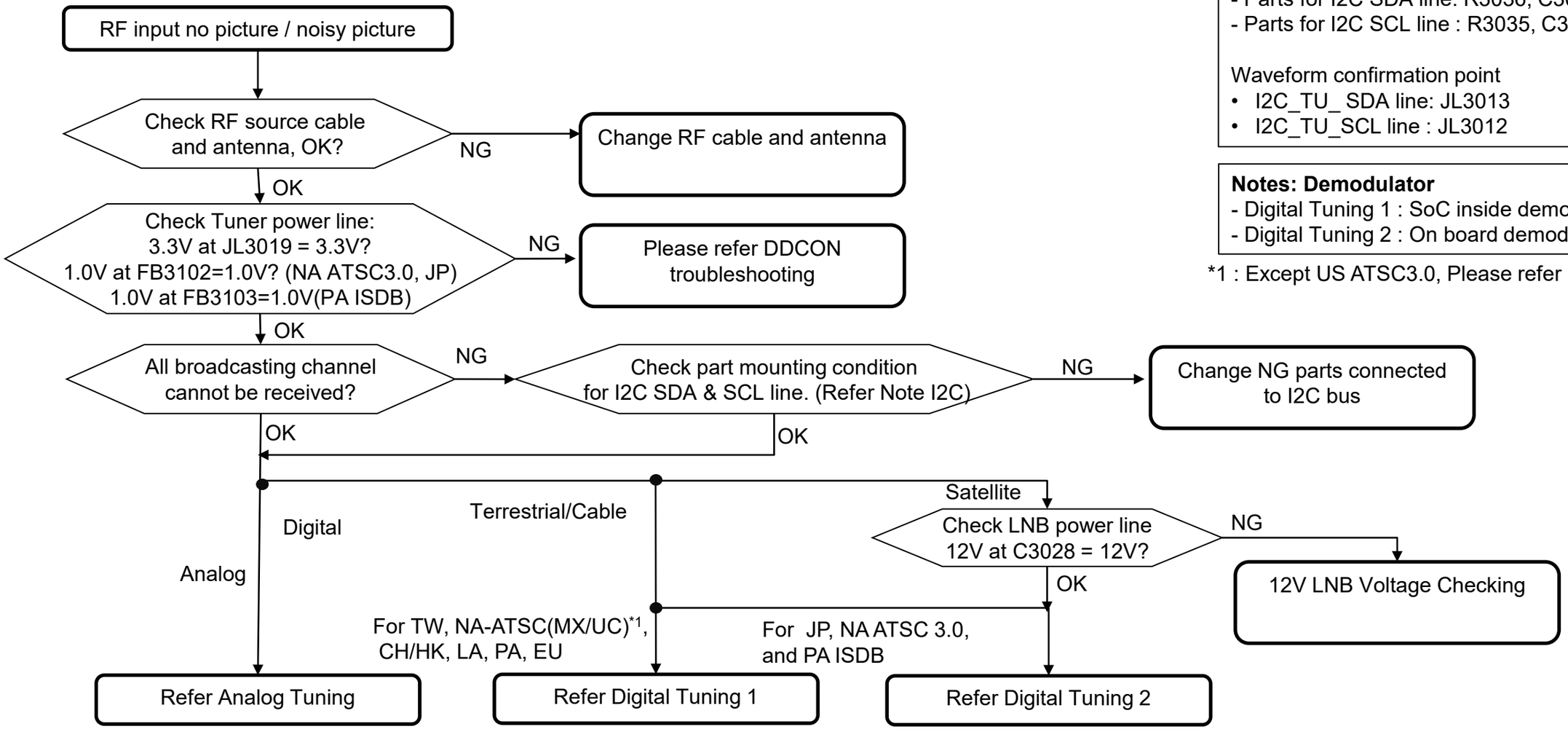
4.4 No Picture at Tuner

Notes: I2C
- Parts for I2C SDA line: R3036, C3005
- Parts for I2C SCL line : R3035, C3006

Waveform confirmation point
- I2C_TU_ SDA line: JL3013
- I2C_TU_SCL line : JL3012

Notes: Demodulator
- Digital Tuning 1 : SoC inside demodulator
- Digital Tuning 2 : On board demodulator

*1 : Except US ATSC3.0, Please refer Digital Tuning 2

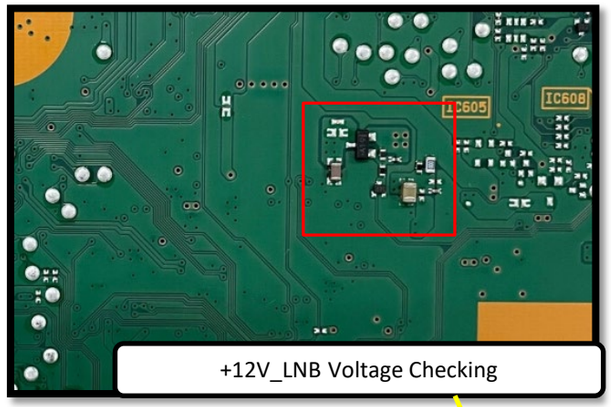


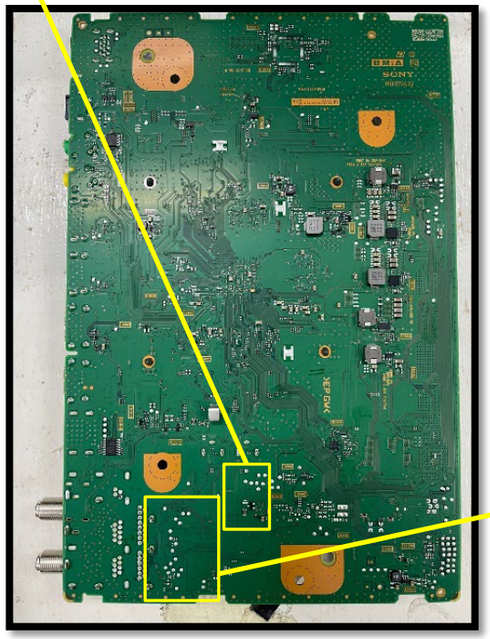
TROUBLESHOOTING

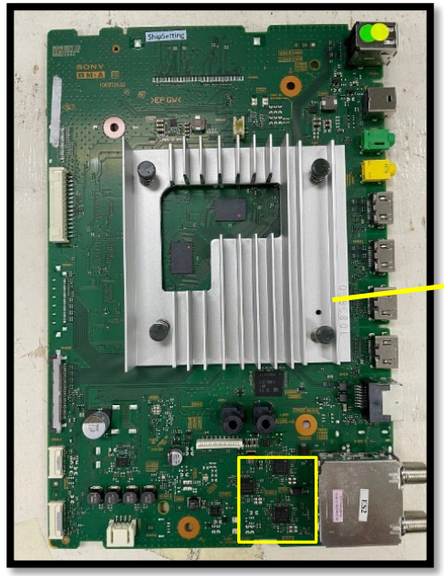
4.4 No Picture at Tuner

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

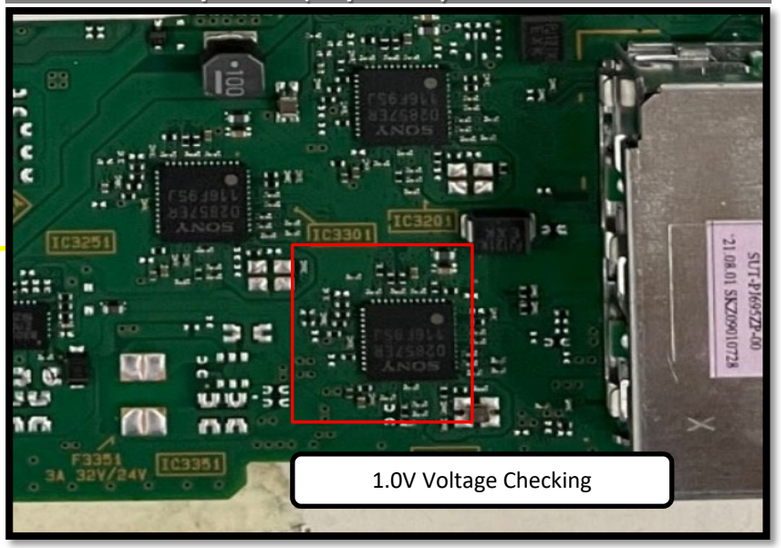
BM5A Tuner portion(Bottom View)



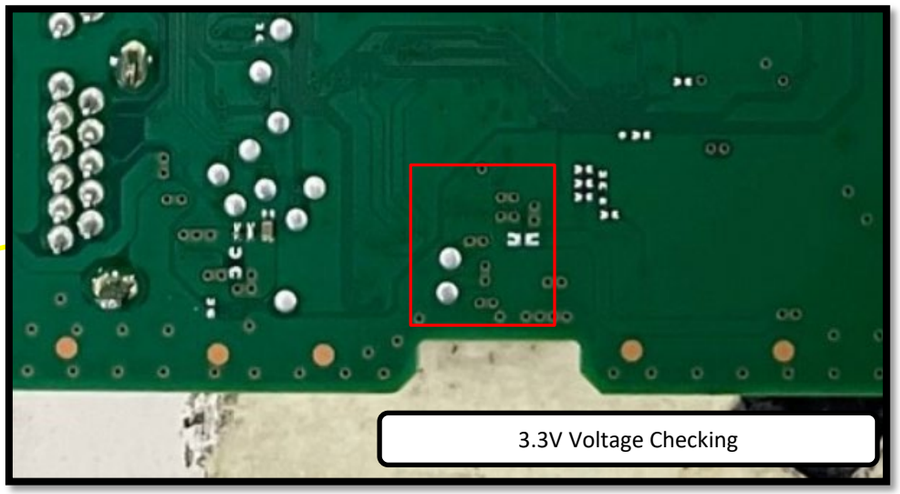




BM5A Tuner portion(Top View)



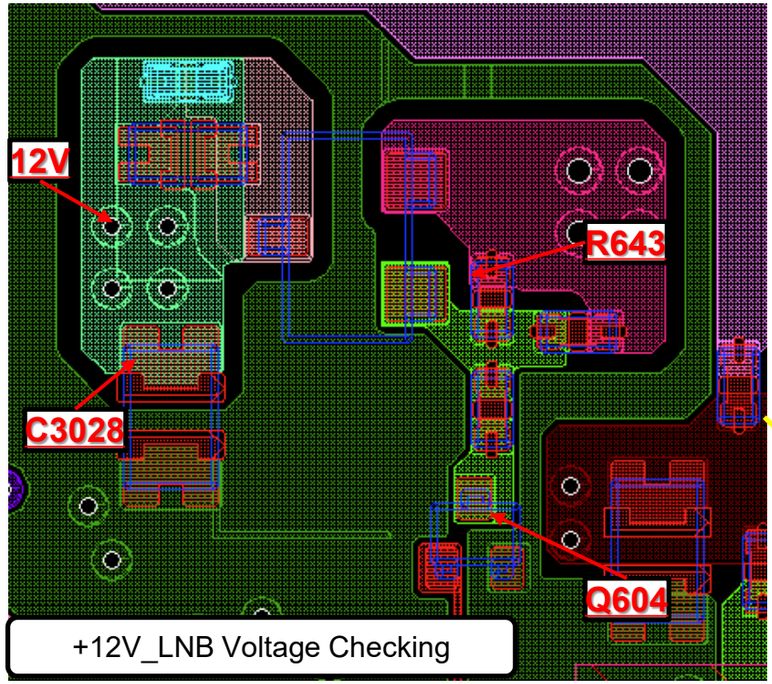
BM5A Tuner portion(Bottom View)



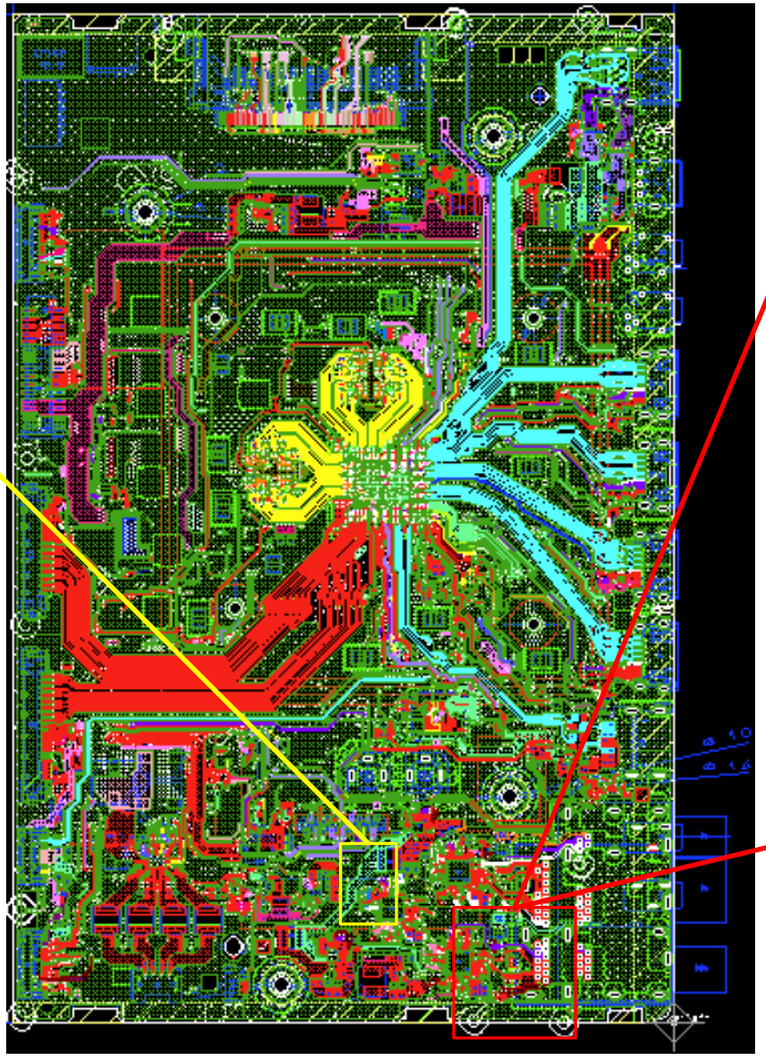
TROUBLESHOOTING

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

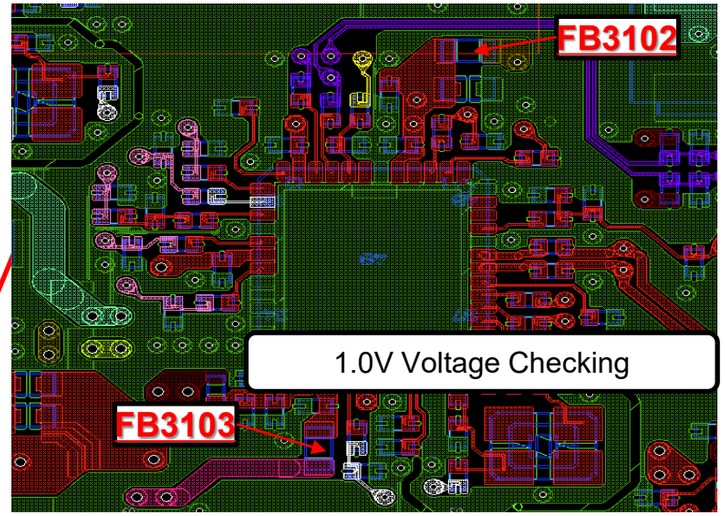
BM5A22 Tuner portion(Bottom View)



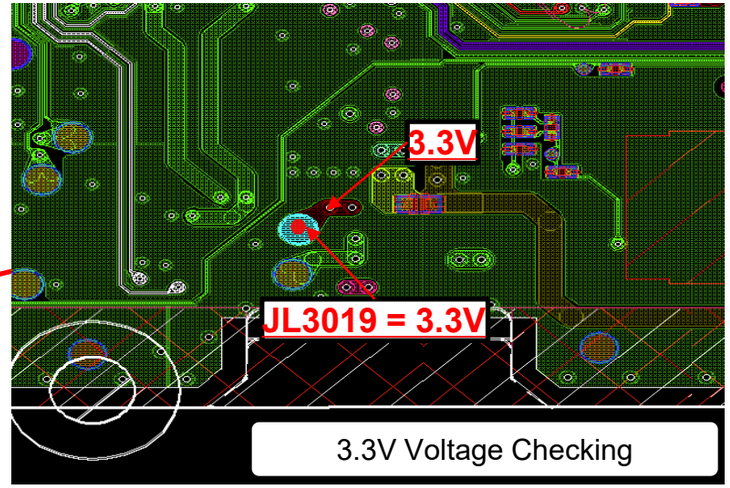
BM5A Top View



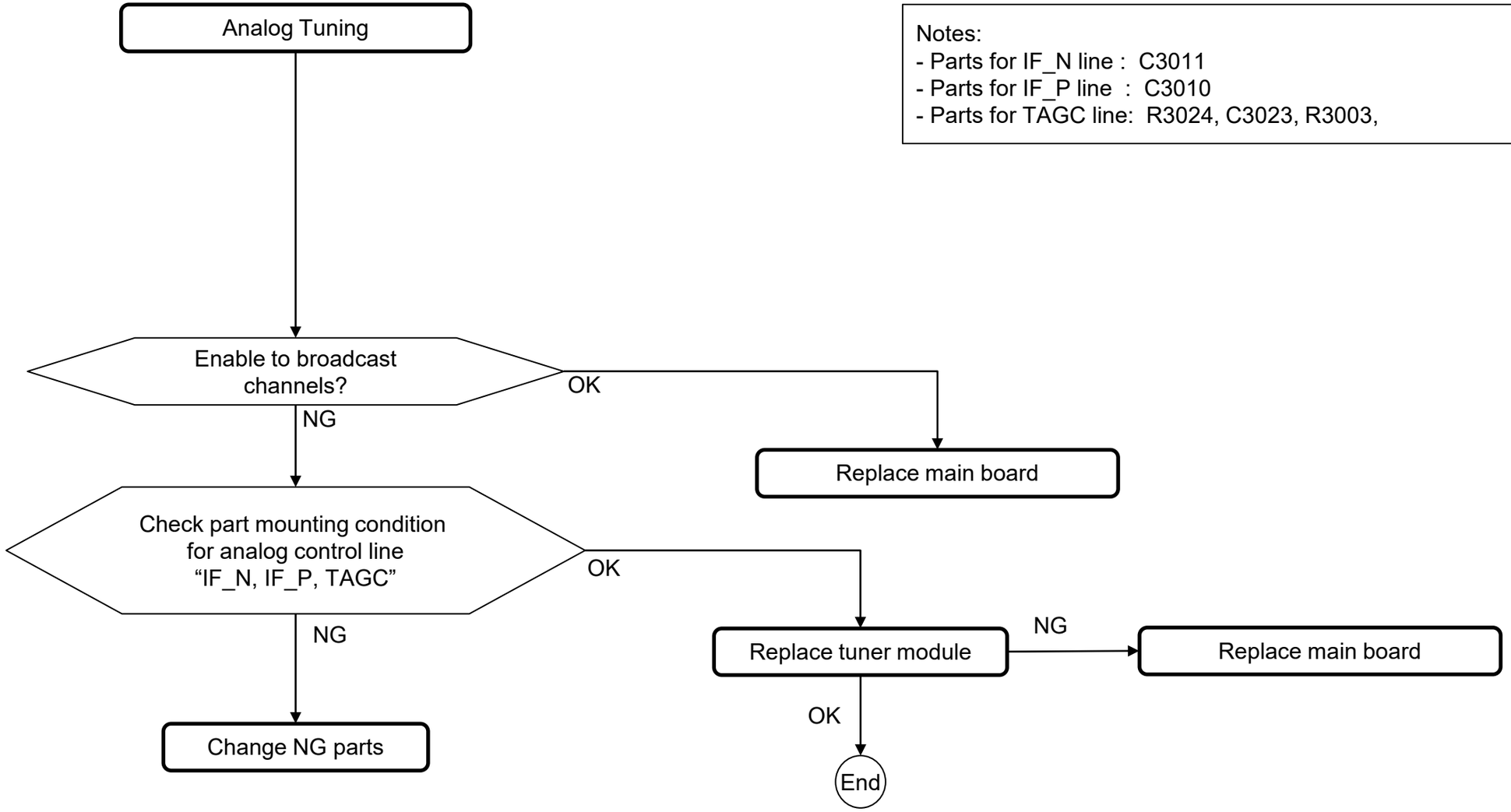
BM5A Tuner portion(Top View)



BM5A Tuner portion(Bottom View)



4.4 No Picture at Tuner - FOR ANALOG TUNING



Notes:
- Parts for IF_N line : C3011
- Parts for IF_P line : C3010
- Parts for TAGC line: R3024, C3023, R3003,

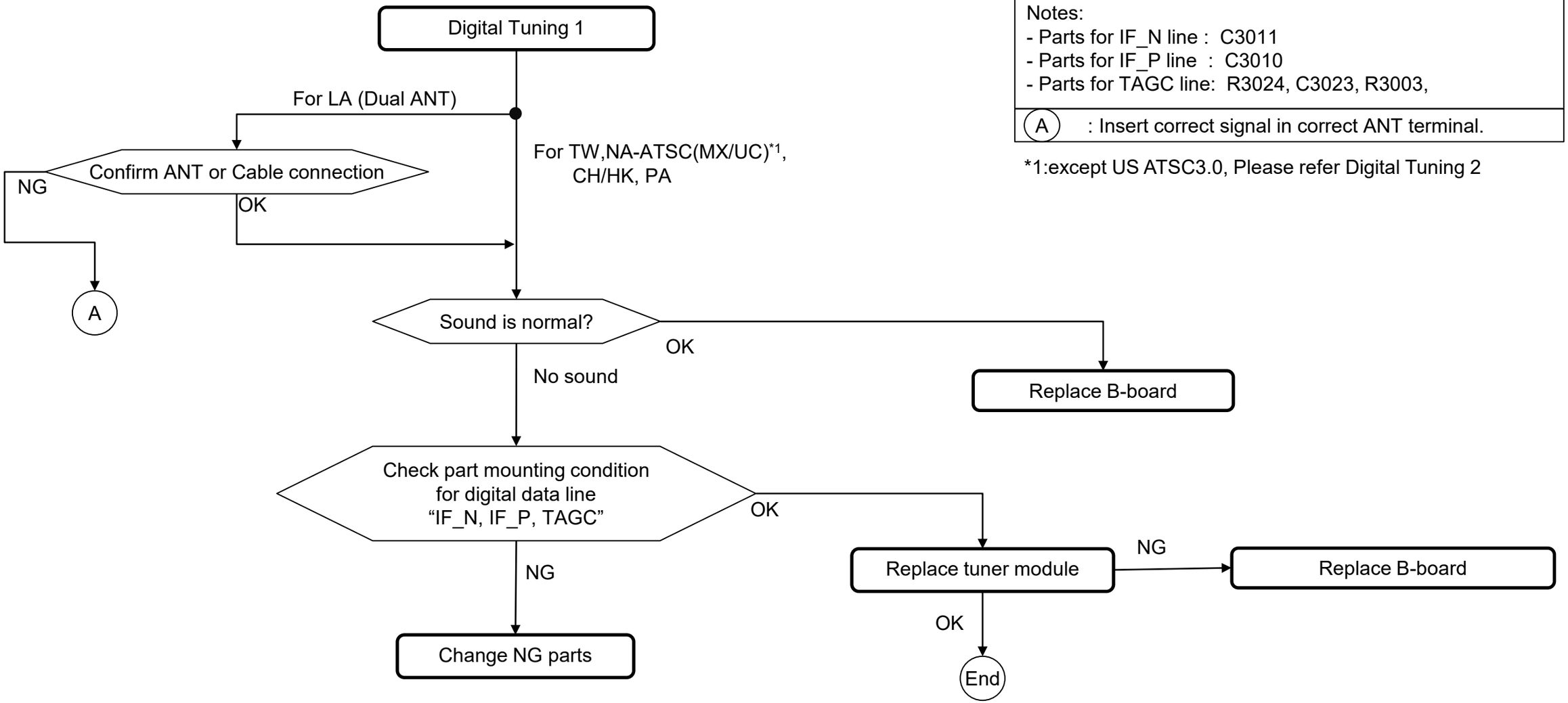
TROUBLESHOOTING

4.4 No Picture at Tuner - FOR DIGITAL TUNING

Notes:
- Parts for IF_N line : C3011
- Parts for IF_P line : C3010
- Parts for TAGC line: R3024, C3023, R3003,

(A) : Insert correct signal in correct ANT terminal.

*1:except US ATSC3.0, Please refer Digital Tuning 2



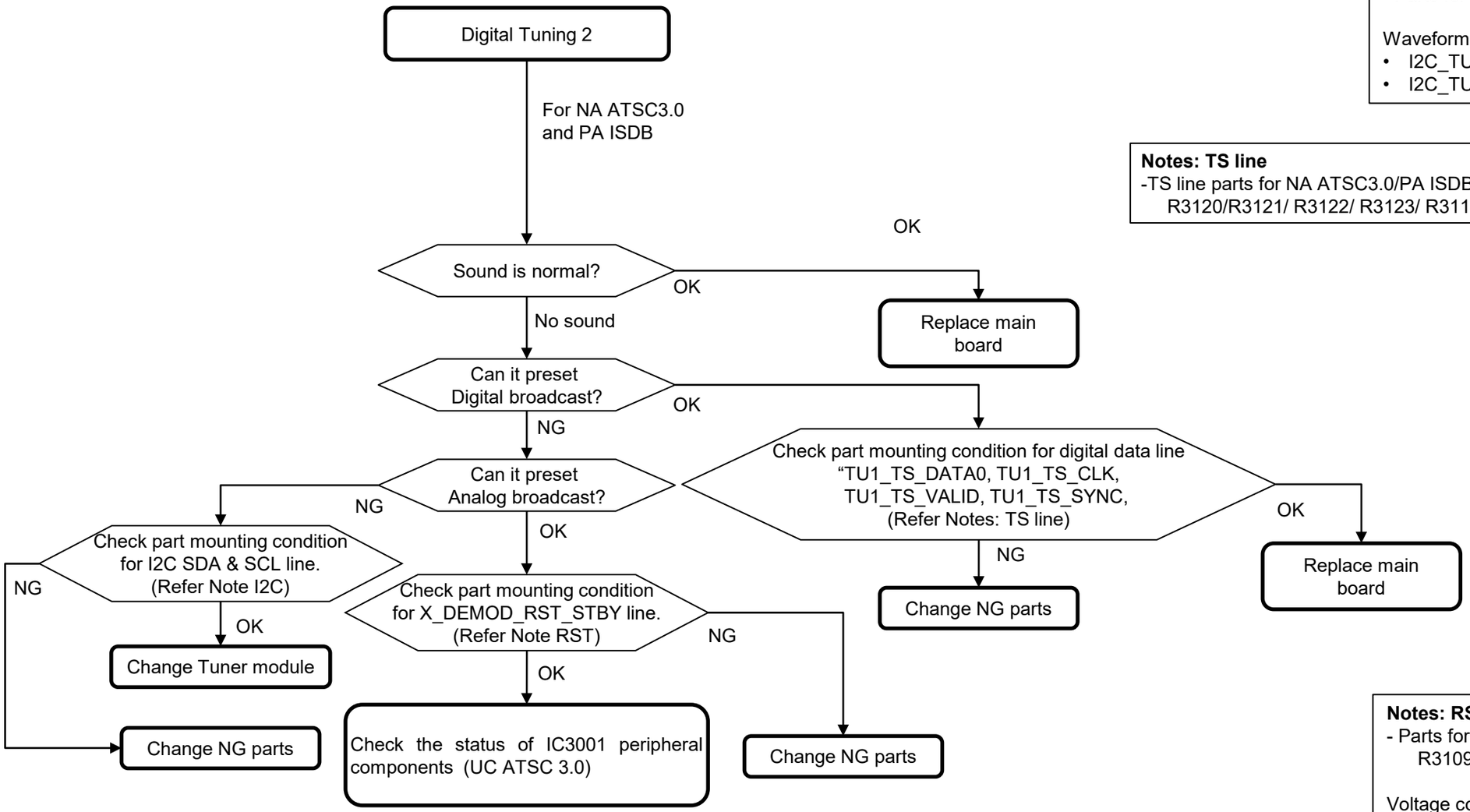
TROUBLESHOOTING

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

Waveform confirmation point
- I2C_TU_ SDA line: JL3013
- I2C_TU_SCL line : JL3012

Notes: TS line
-TS line parts for NA ATSC3.0/PA ISDB
R3120/R3121/ R3122/ R3123/ R3114/ C3126/ R3116/R3117/RB3001

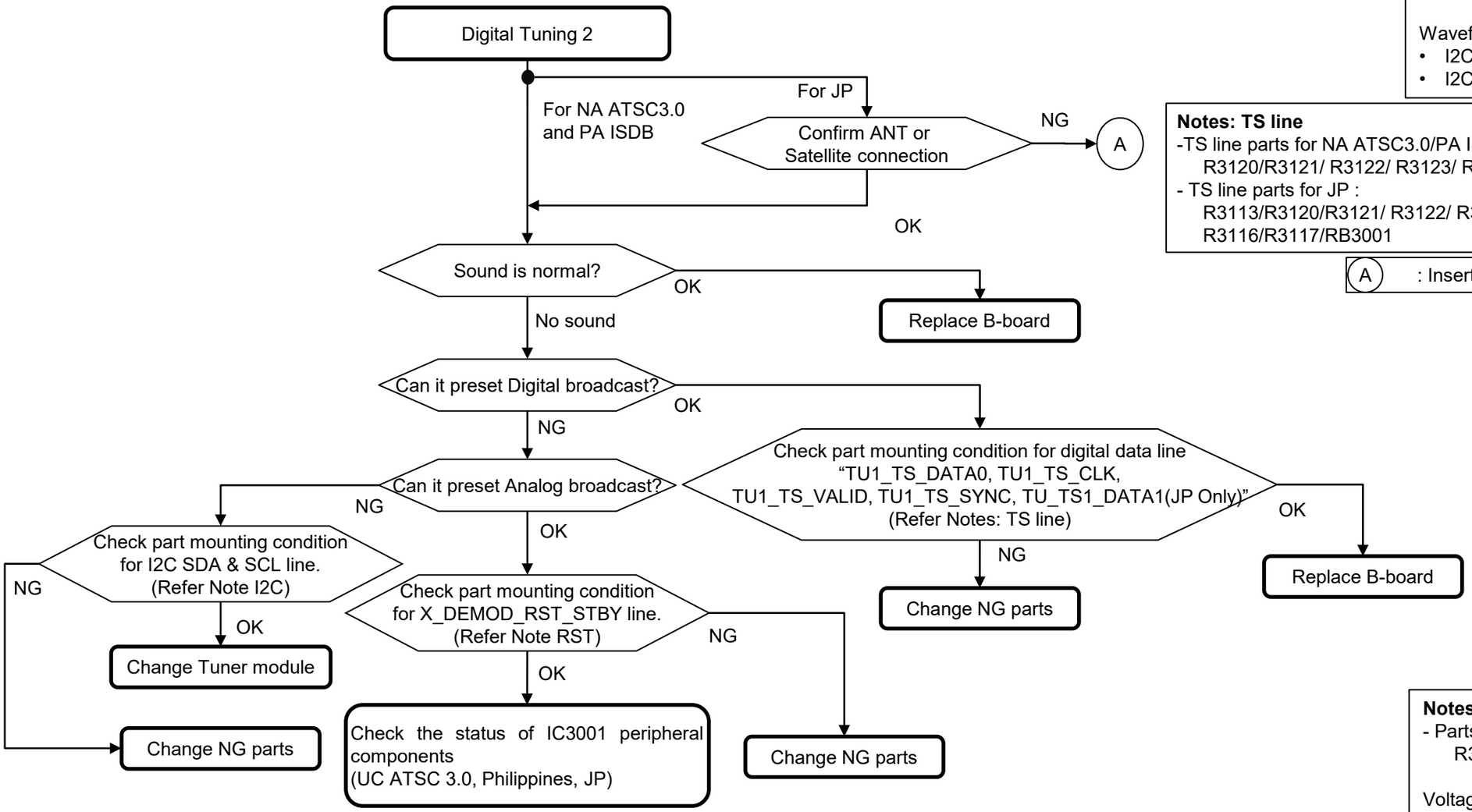


Notes: RST
- Parts for X_DEMOD_RST_STBY line:
R3109, C3117

Voltage confirmation point
C3117 = 3.3V

TROUBLESHOOTING

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

Waveform confirmation point
- I2C_TU_ SDA line: JL3013
- I2C_TU_SCL line : JL3012

Notes: TS line
-TS line parts for NA ATSC3.0/PA ISDB
R3120/R3121/ R3122/ R3123/ R3114/ C3126/ R3116/R3117/RB3001
- TS line parts for JP :
R3113/R3120/R3121/ R3122/ R3123/ R3114/ C3126/ R3116/R3117/RB3001

A : Insert correct signal in correct ANT terminal.

Notes: RST
- Parts for X_DEMOD_RST_STBY line:
R3109, C3117

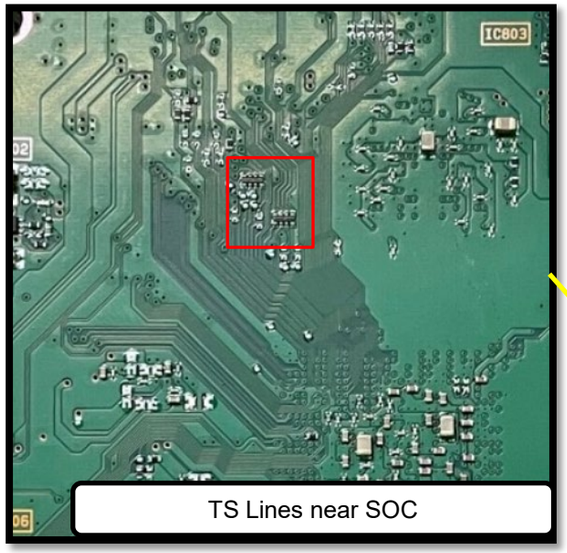
Voltage confirmation point
C3117 = 3.3V

TROUBLESHOOTING

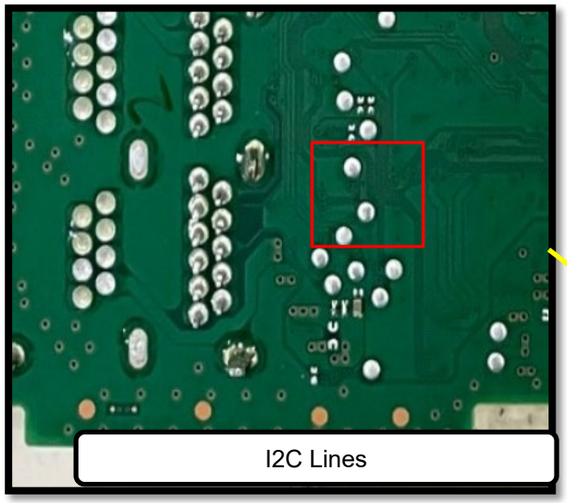
4.4 No Picture at Tuner

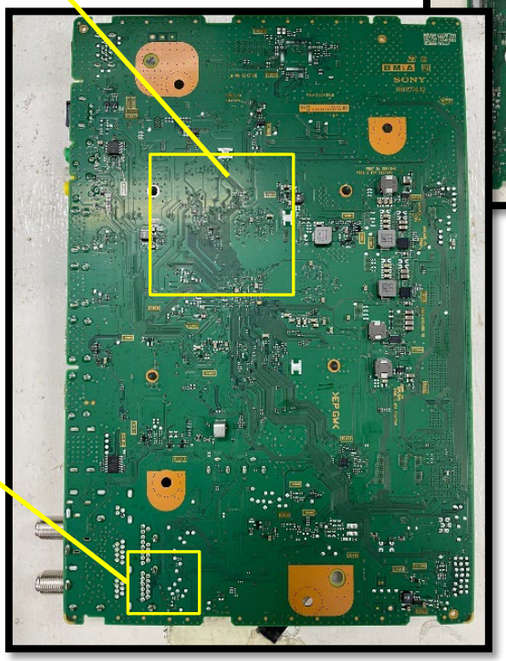
Note: Please refer to next slide for Ref.No and part location

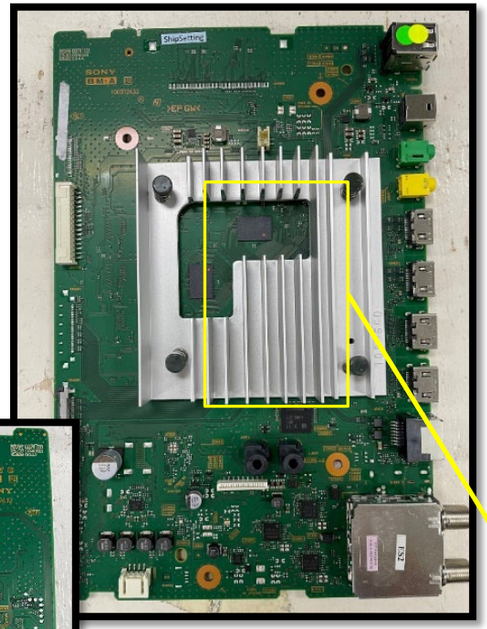
BM5A Tuner portion(Bottom View)



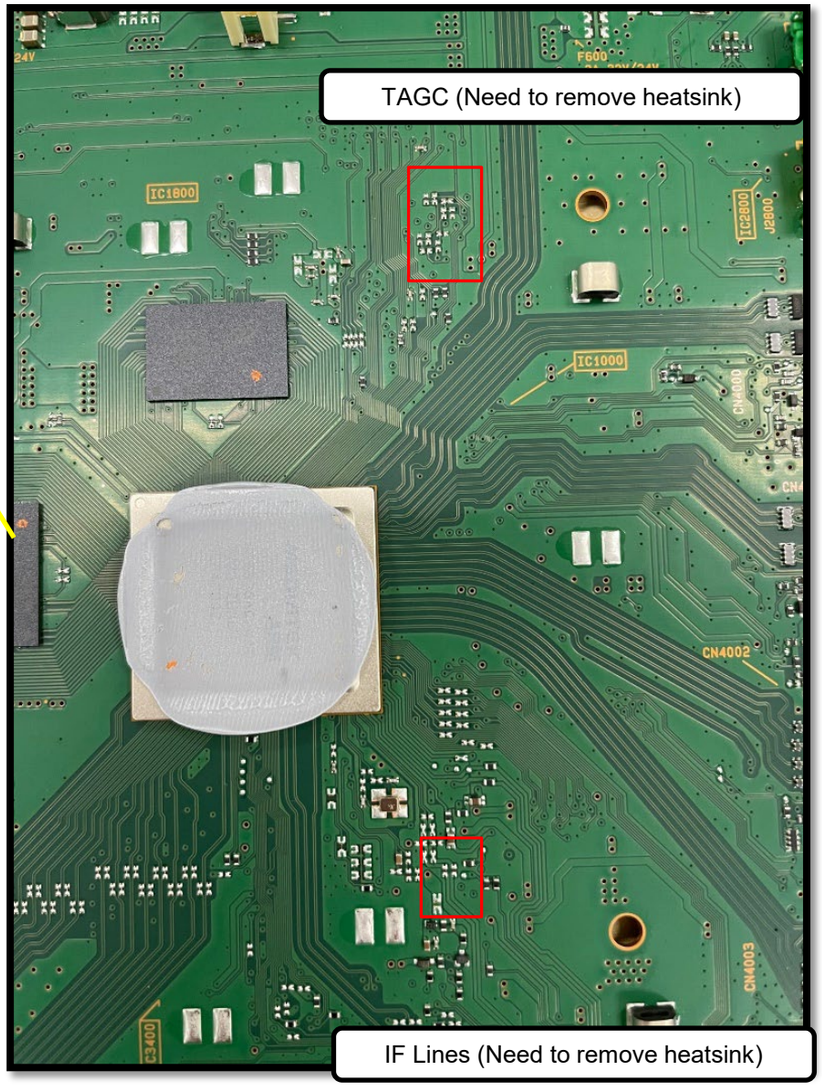
BM5A Tuner portion(Bottom View)







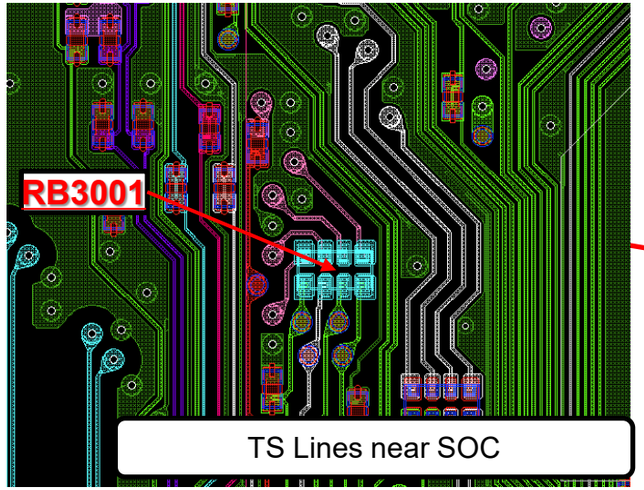
BM5A Tuner portion(Top View)



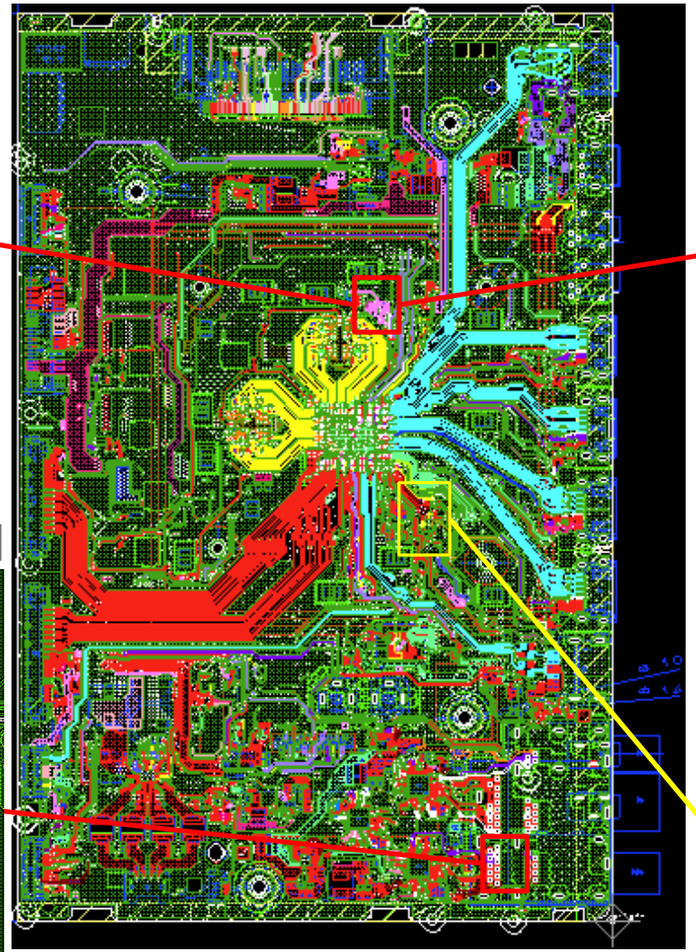
TROUBLESHOOTING

4.4 No Picture at Tuner - I2C_SDA, I2C_SCL ,IF_N, IF_P, TAGC, TS Lines(Near SOC)

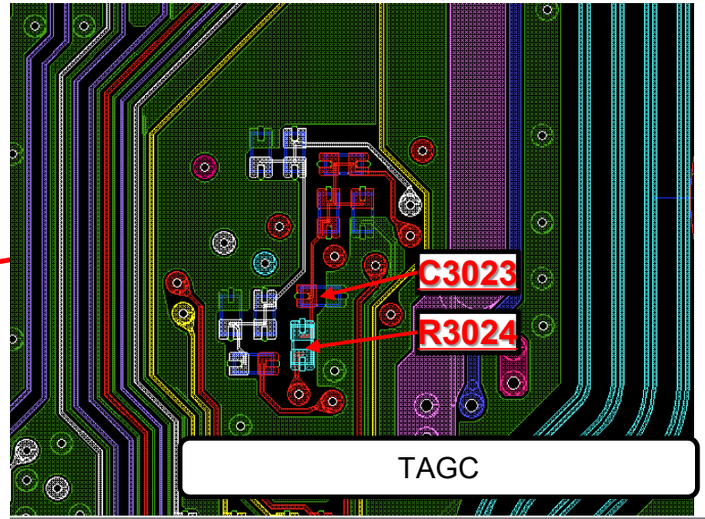
BM5A Tuner portion(Bottom View)



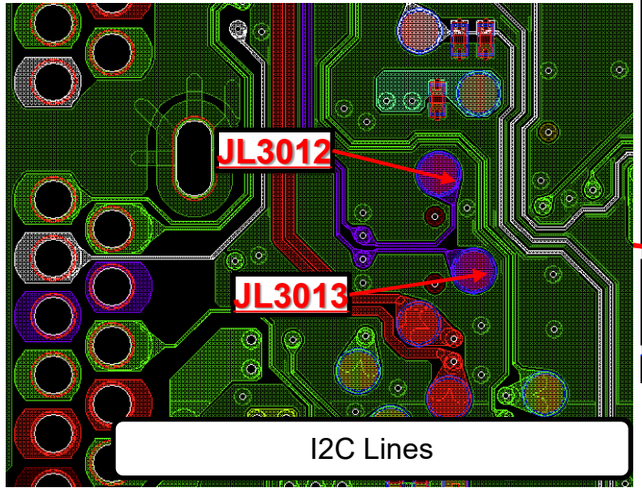
BM5A Top View



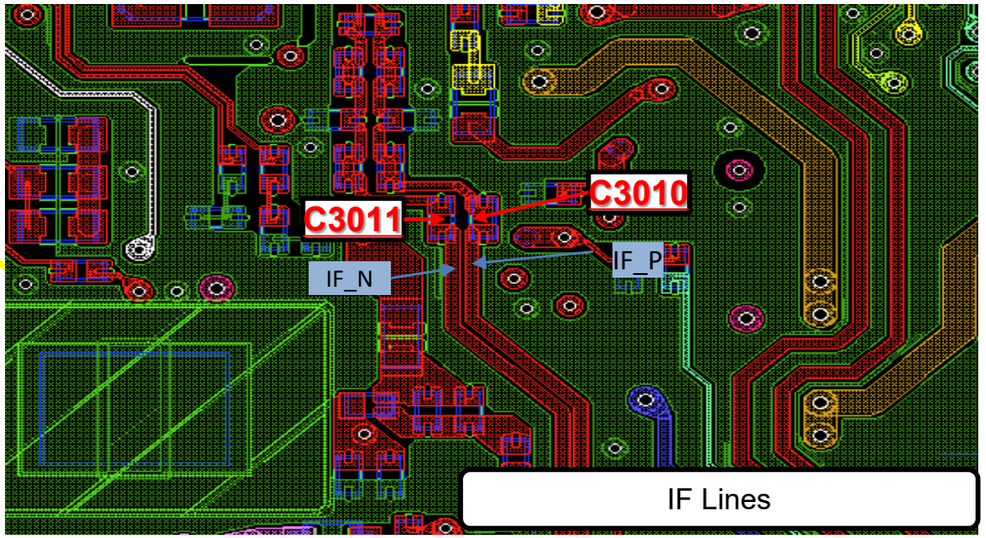
BM5A Tuner portion(Top View)



BM5A Tuner portion(Bottom View)



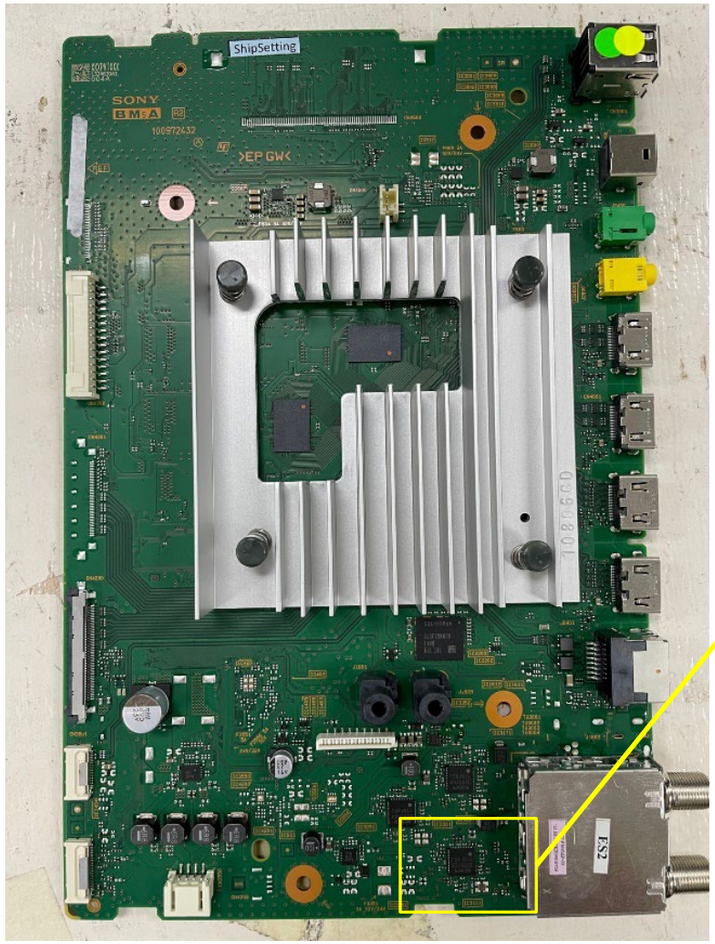
BM5A Tuner portion(Top View)

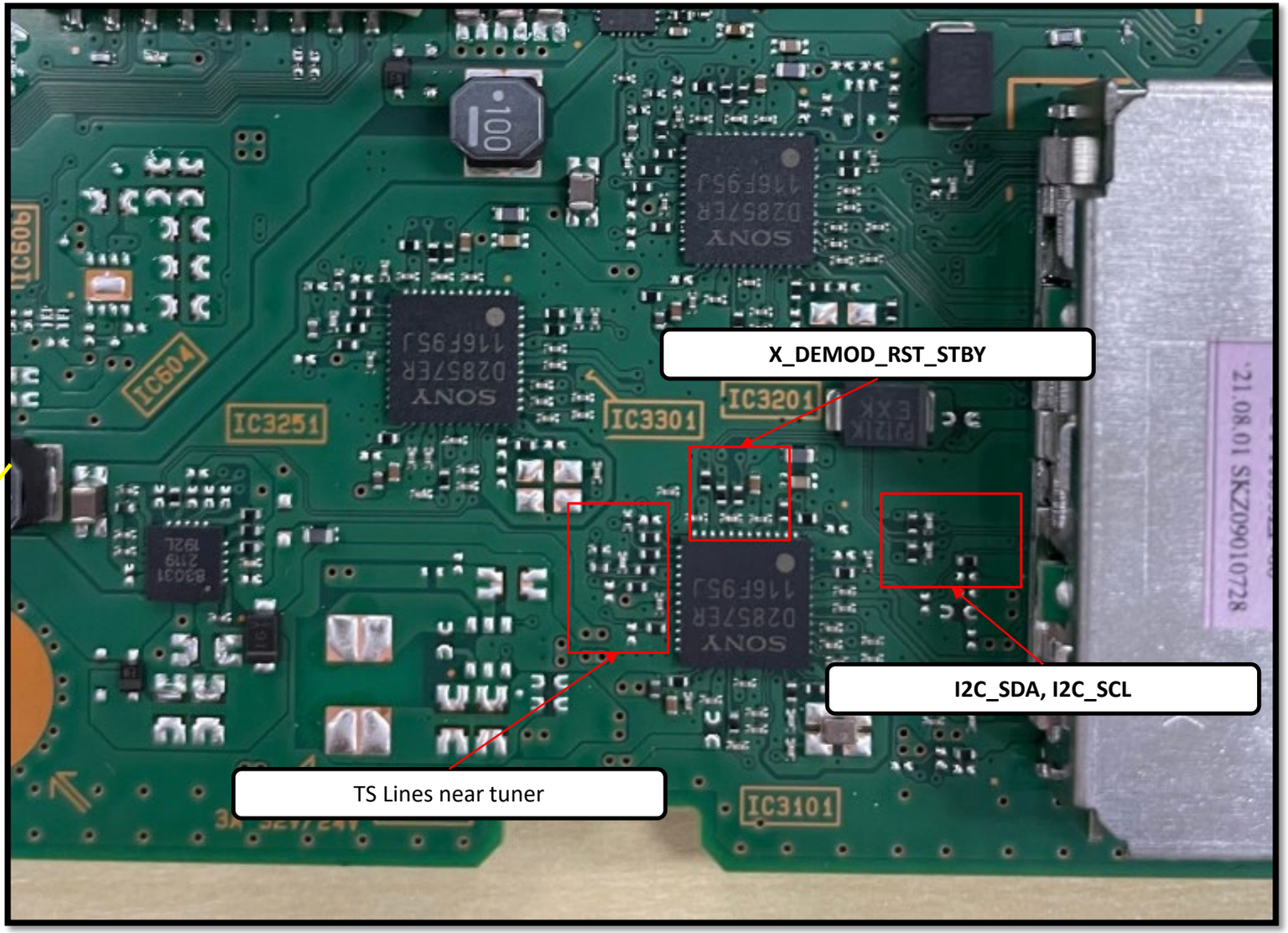


TROUBLESHOOTING

4.4 No Picture at Tuner

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

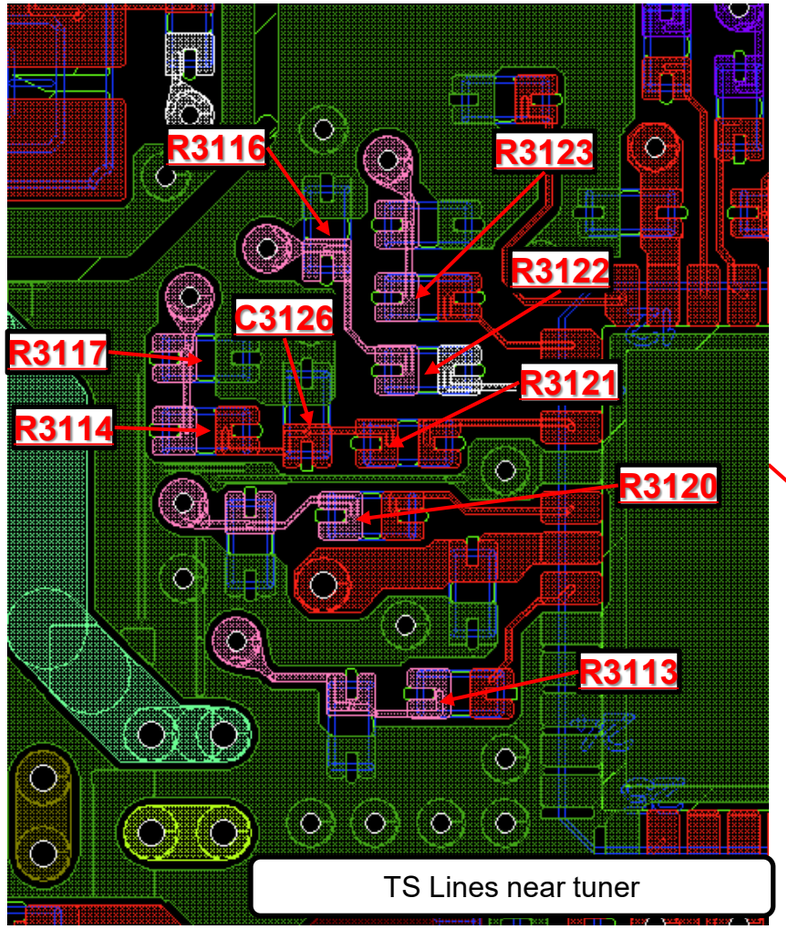




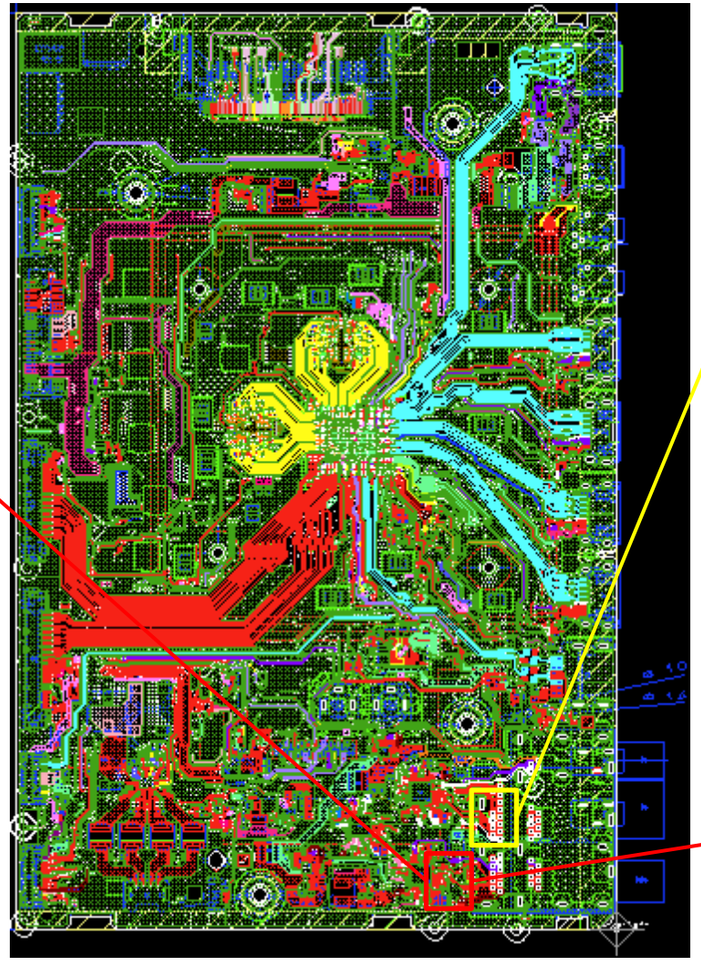
TROUBLESHOOTING

4.4 No Picture at Tuner - I2C_SDA, I2C_SCL, TS Lines(Near tuner), X_DEMOD_RST_STBY

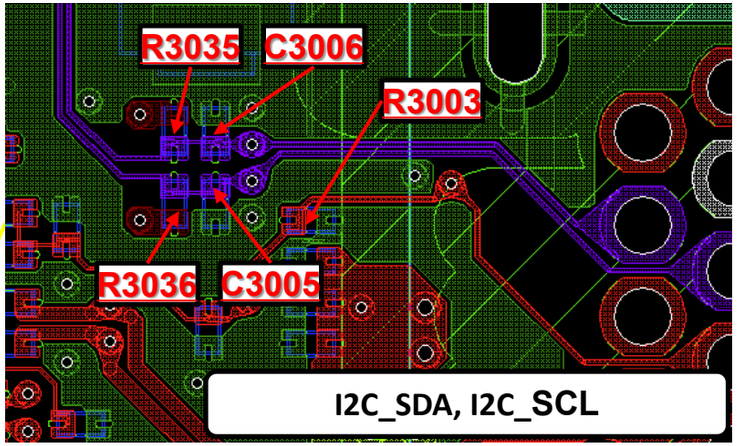
BM5A Tuner portion(Top View)



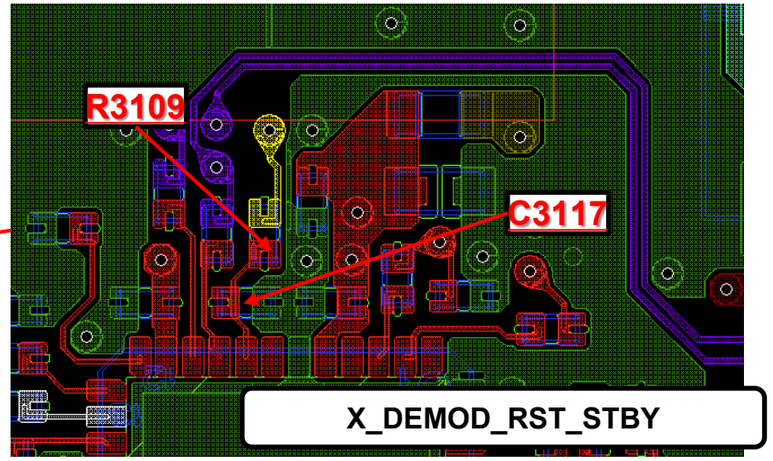
BM5A Top View



BM5A Tuner portion(Top View)

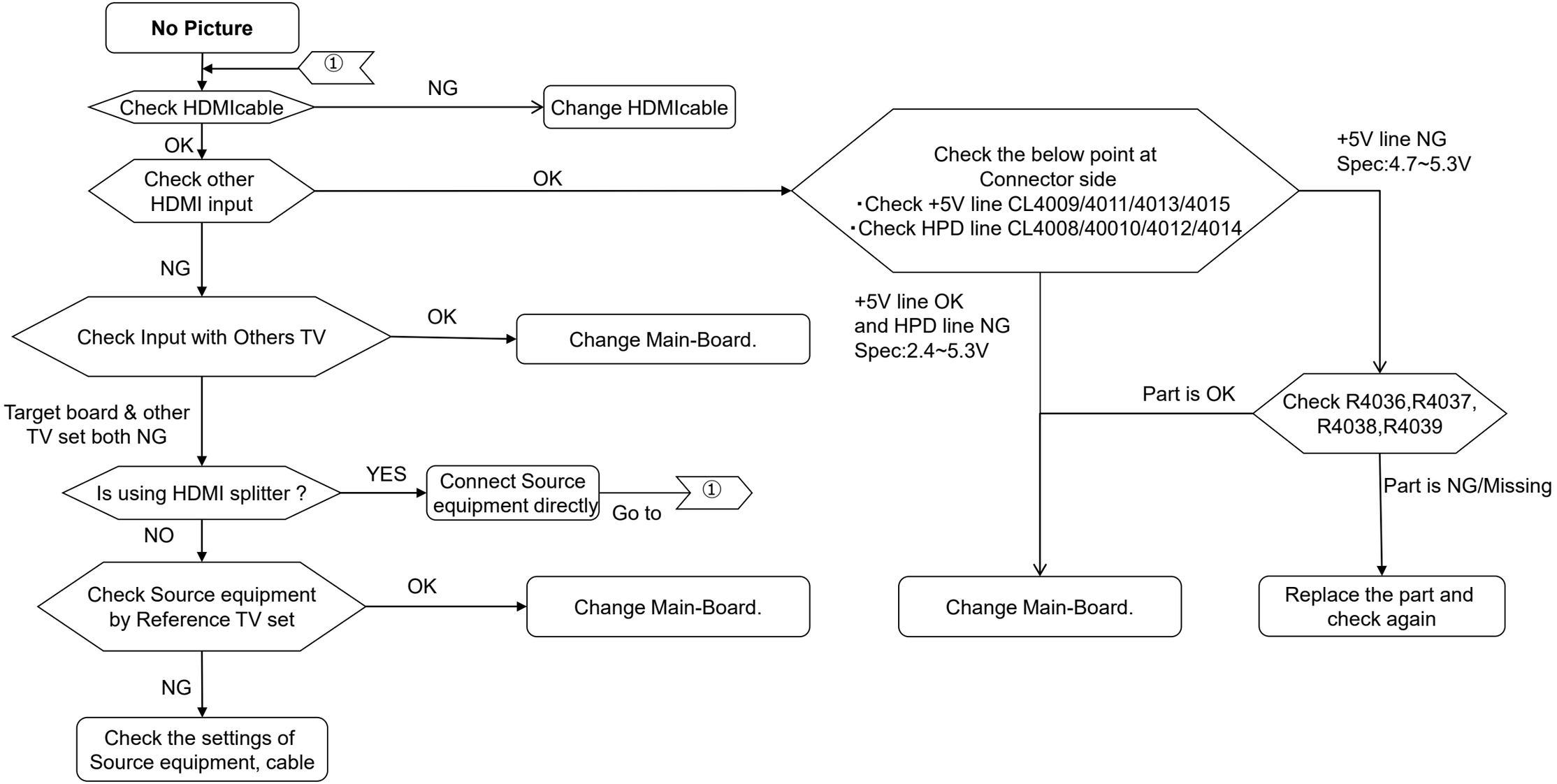


BM5A Tuner portion(Top View)



TROUBLESHOOTING

4.5 No Picture: HDMI 1/2/3/4



TROUBLESHOOTING

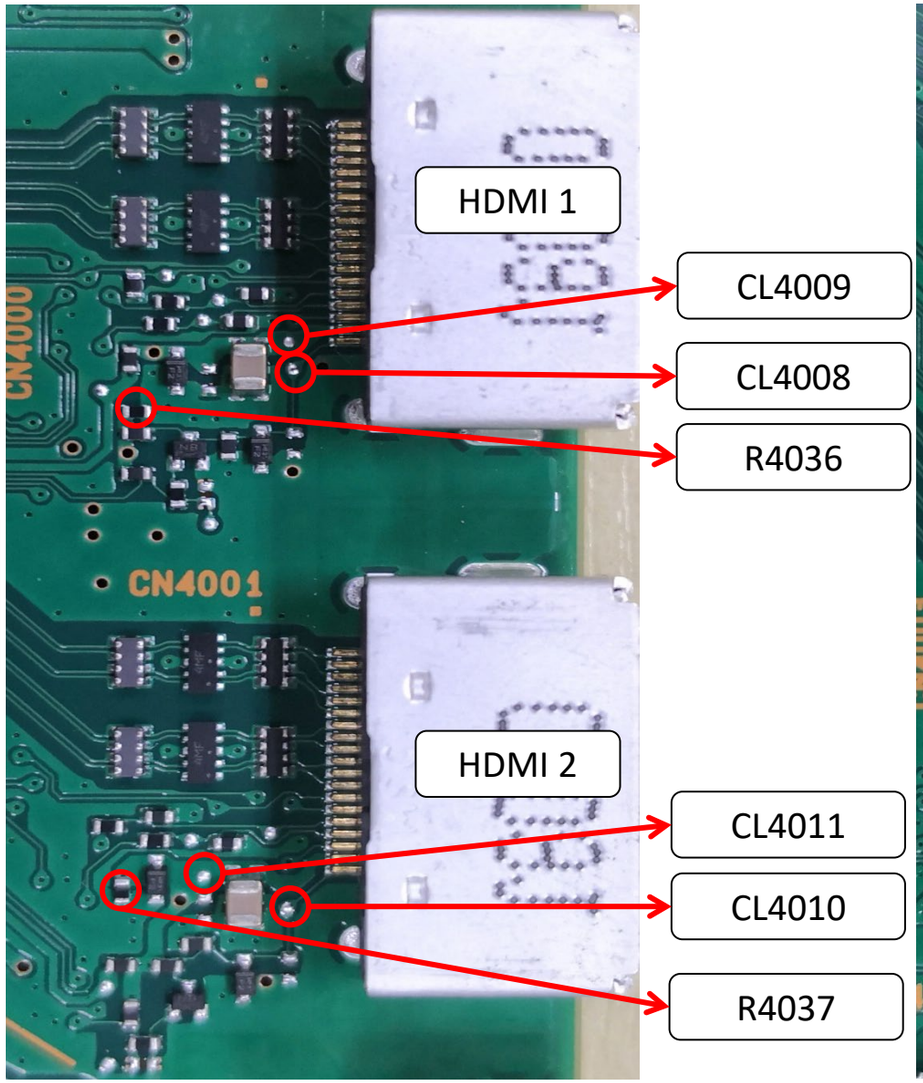
4.5 No Picture: Check Points HDMI 1,2,3 & 4

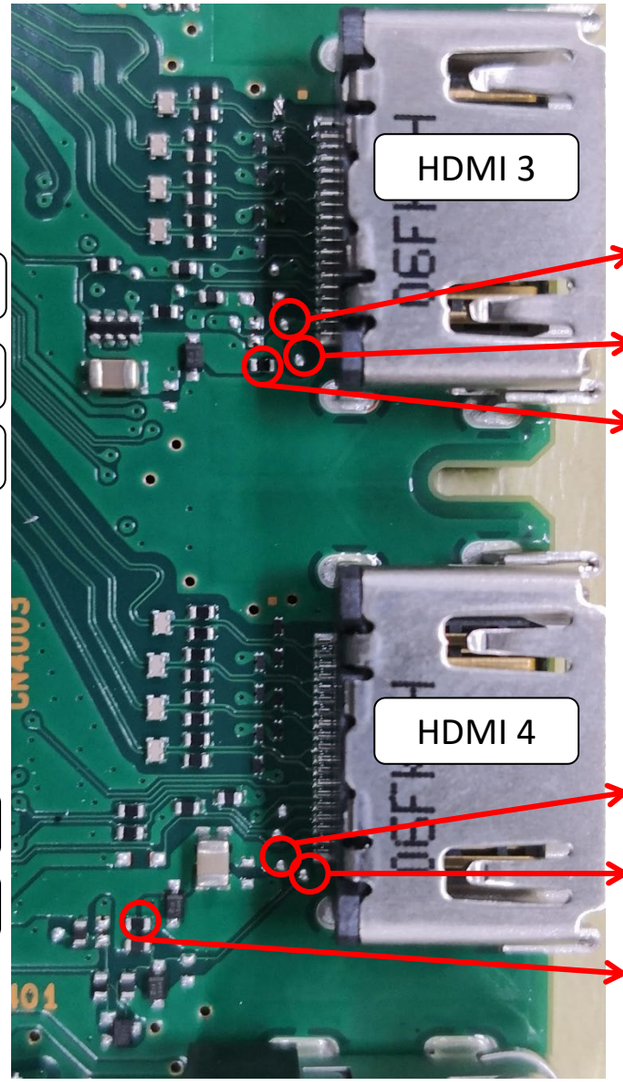
HDMI 1
+5V part :R4036
+5V line :CL4009
HPD line :CL4008

HDMI 2
+5V part :R4037
+5V line :CL4011
HPD line :CL4010

HDMI 3
+5V part :R4038
+5V line :CL4013
HPD line :CL4012

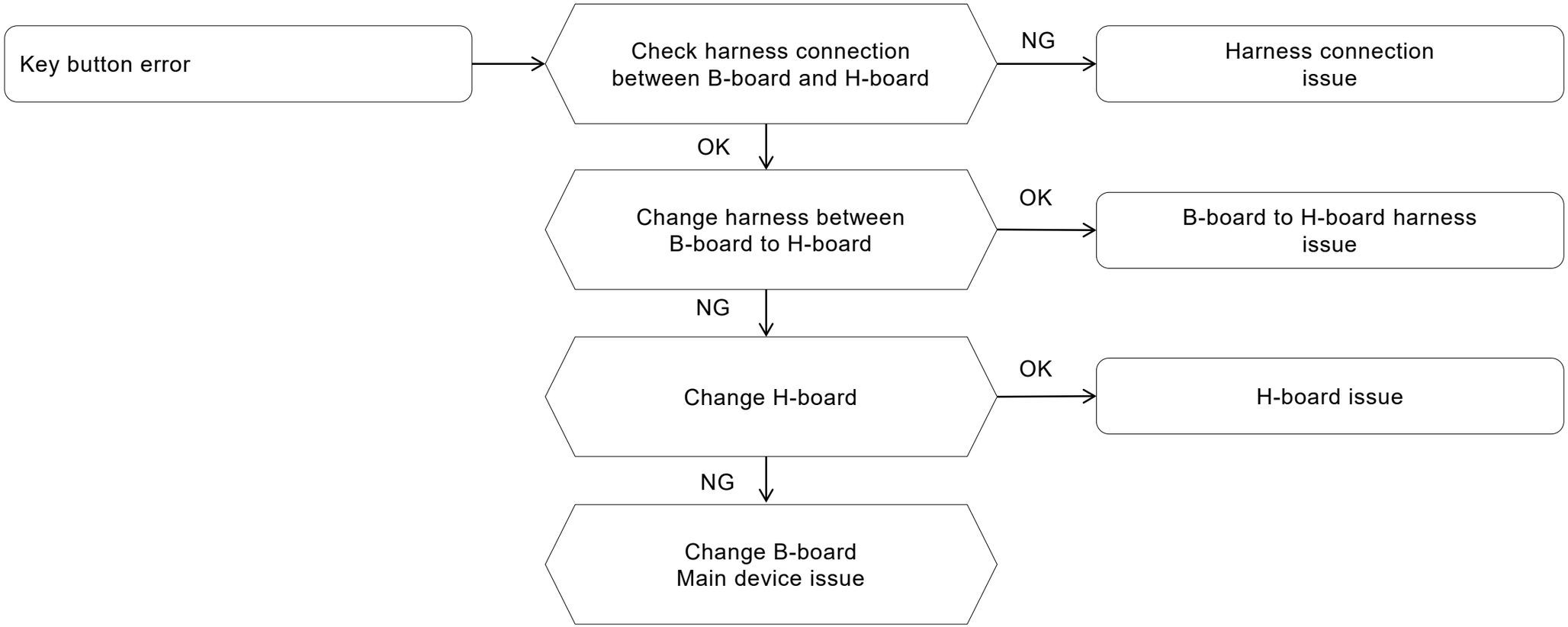
HDMI 4
+5V part :R4039
+5V line :CL4015
HPD line :CL4014





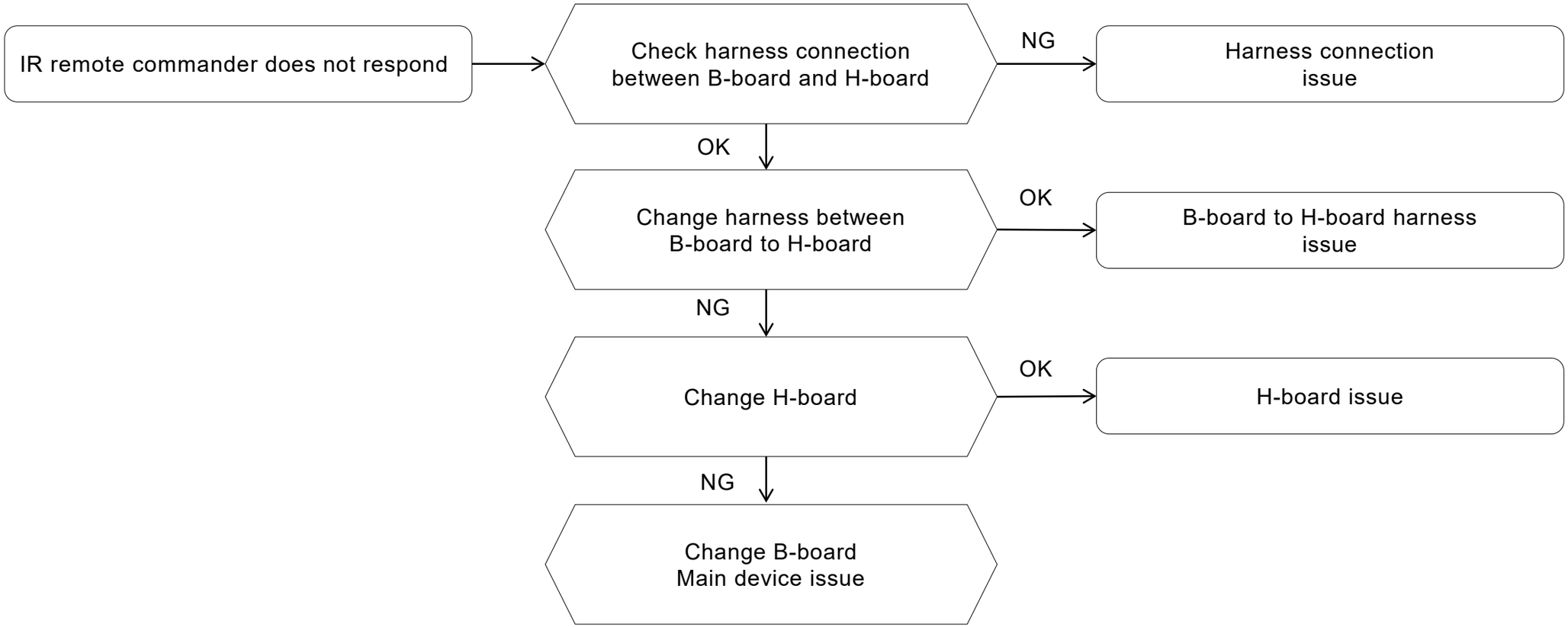
TROUBLESHOOTING

5.0 Key Switch Button Error



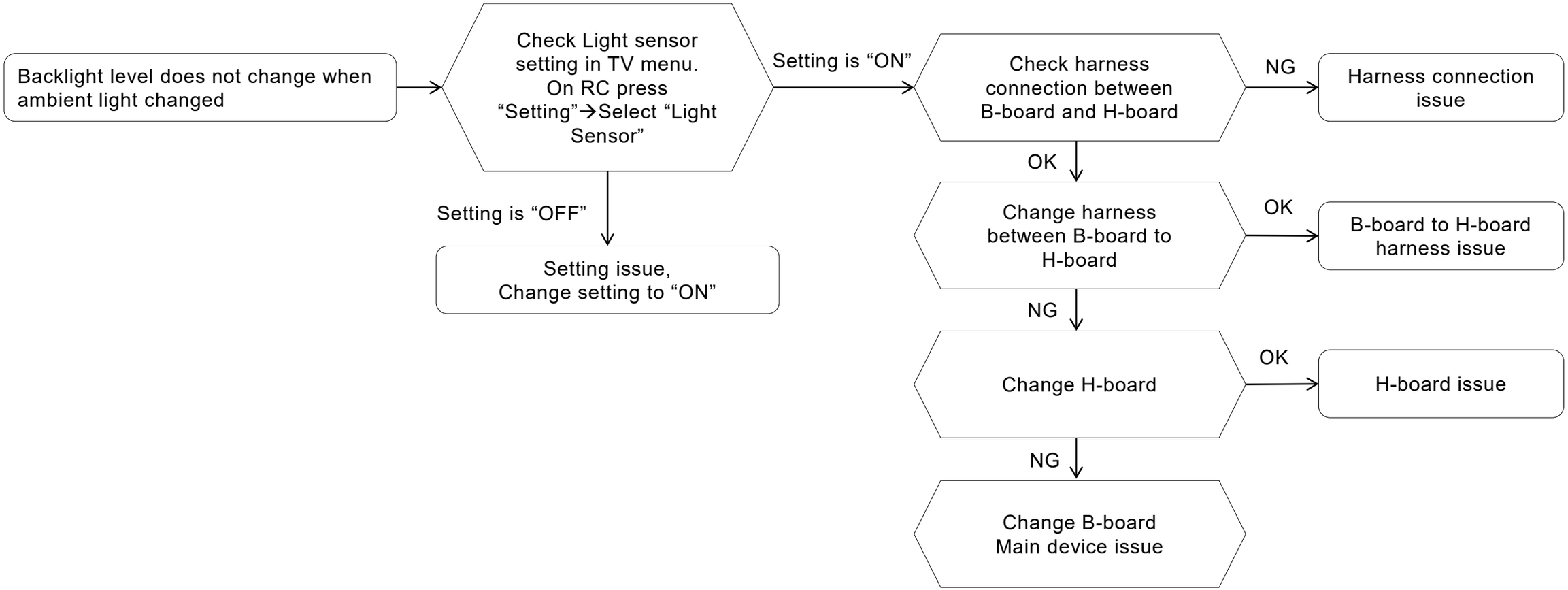
TROUBLESHOOTING

5.1 IR Remote Commander Error



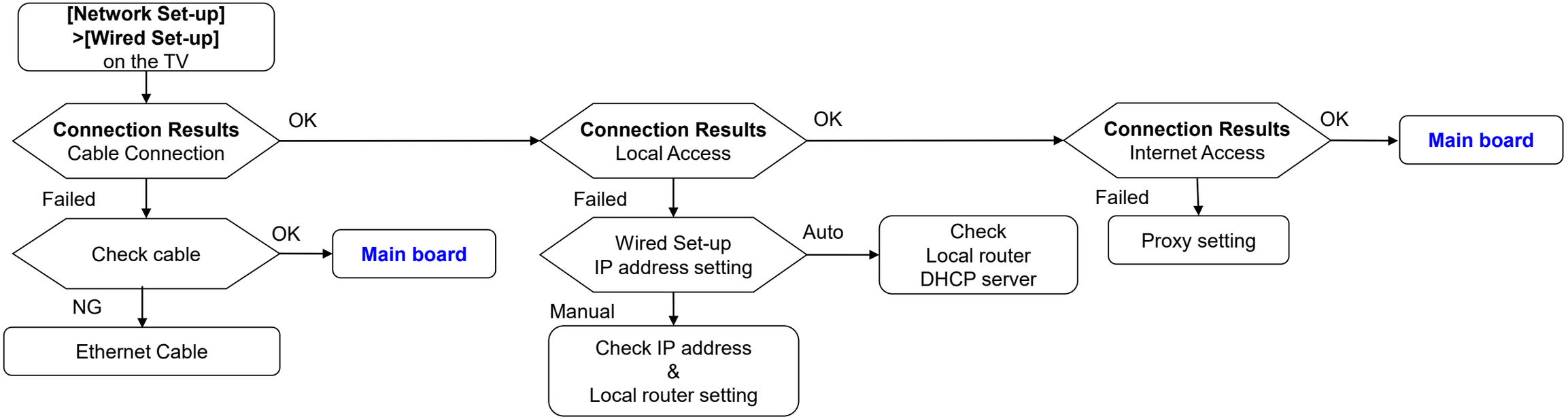
TROUBLESHOOTING

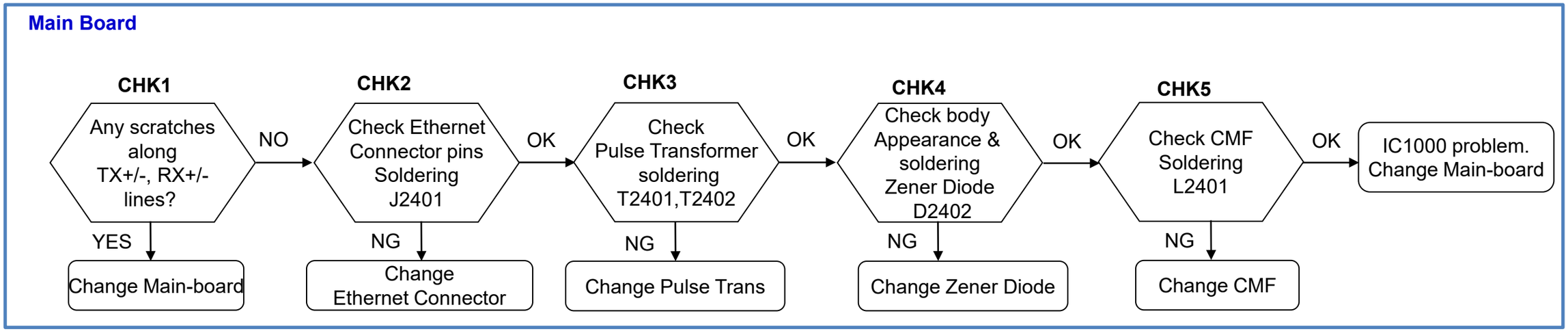
5.2 Light Sensor Error



TROUBLESHOOTING

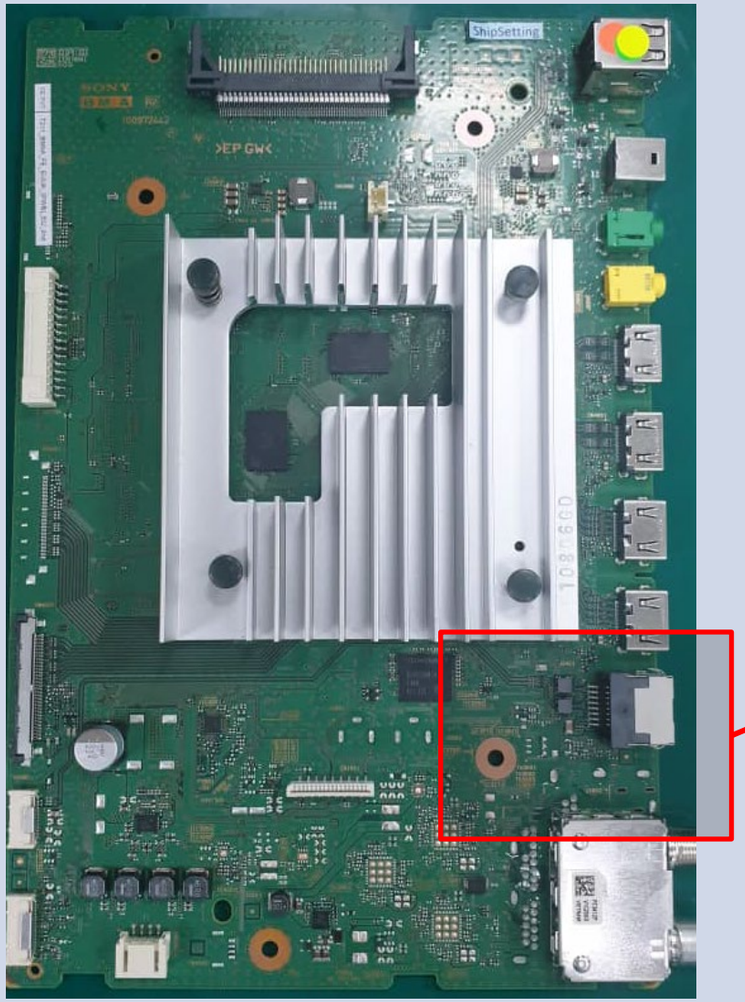
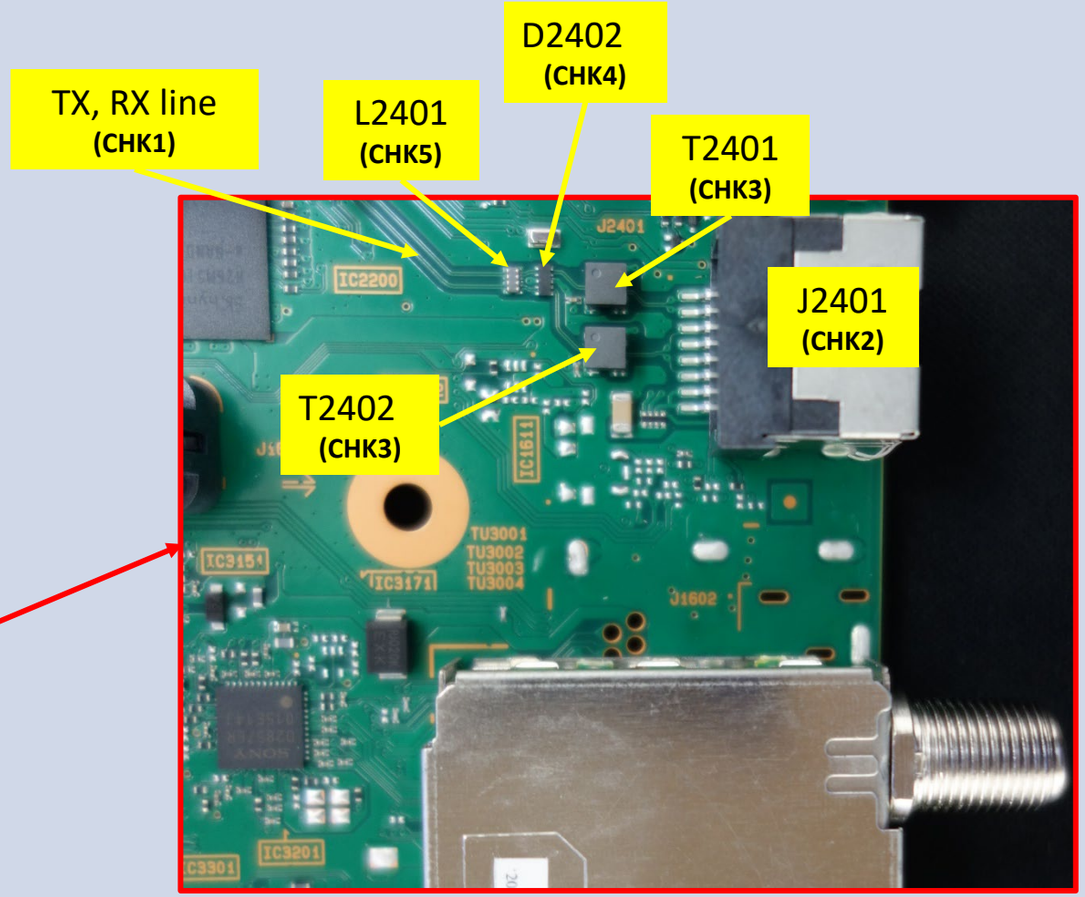
6.0 Network Malfunction: Ethernet (wired)





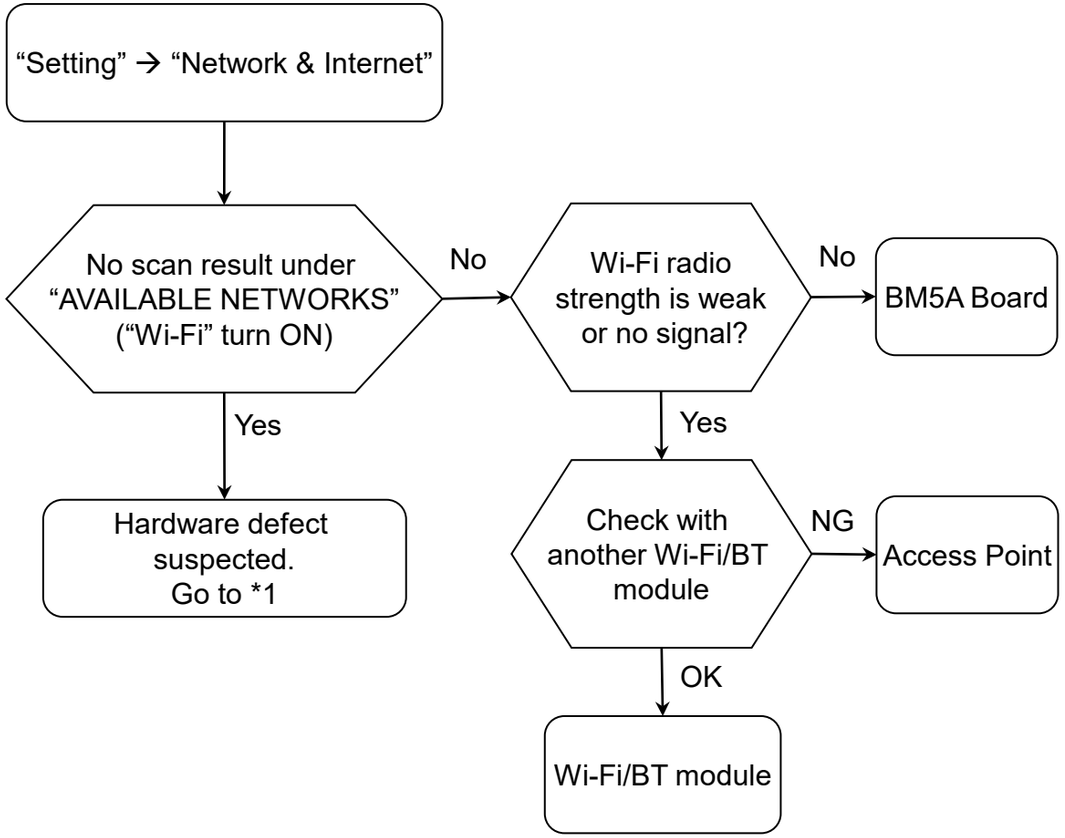
TROUBLESHOOTING

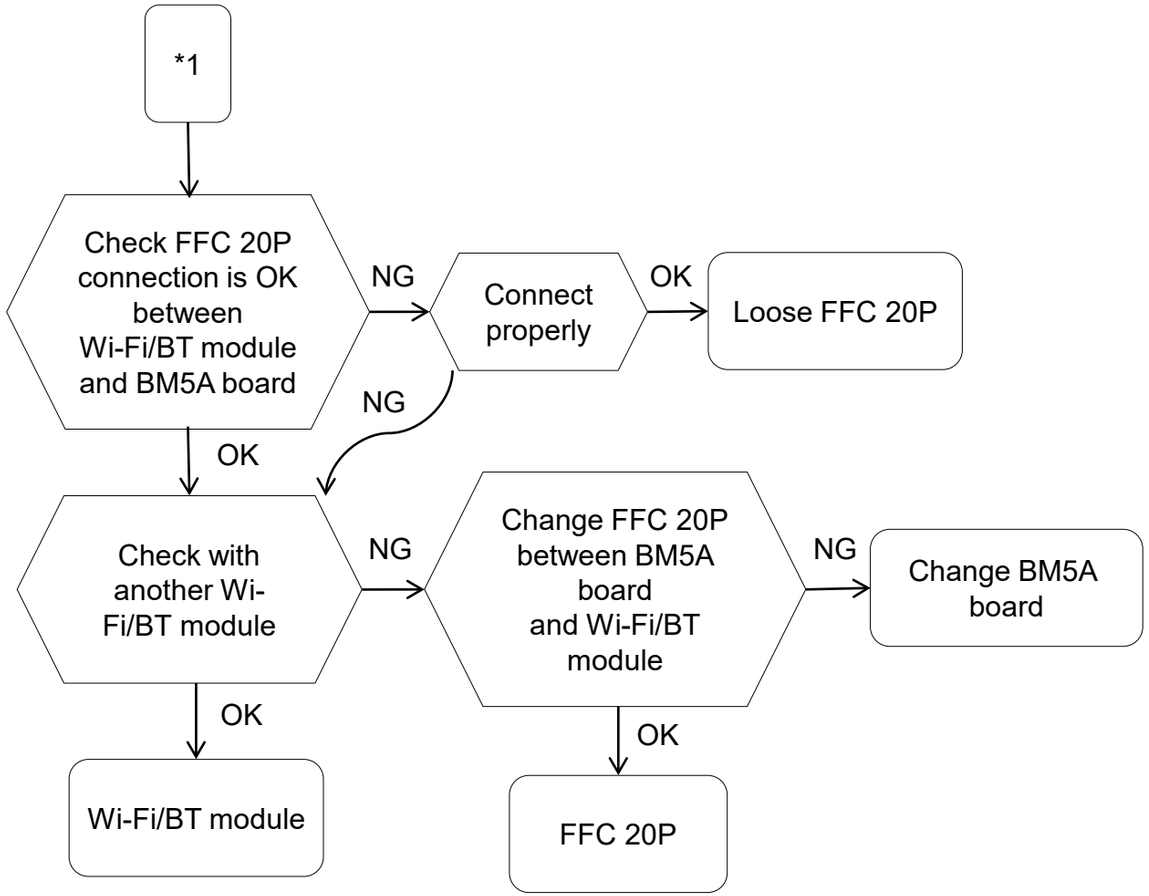
6.1 Network Malfunction: Ethernet (wired)

Name	Full Board (A side)	Zoomed in view
BM5A (Actual board)		

TROUBLESHOOTING

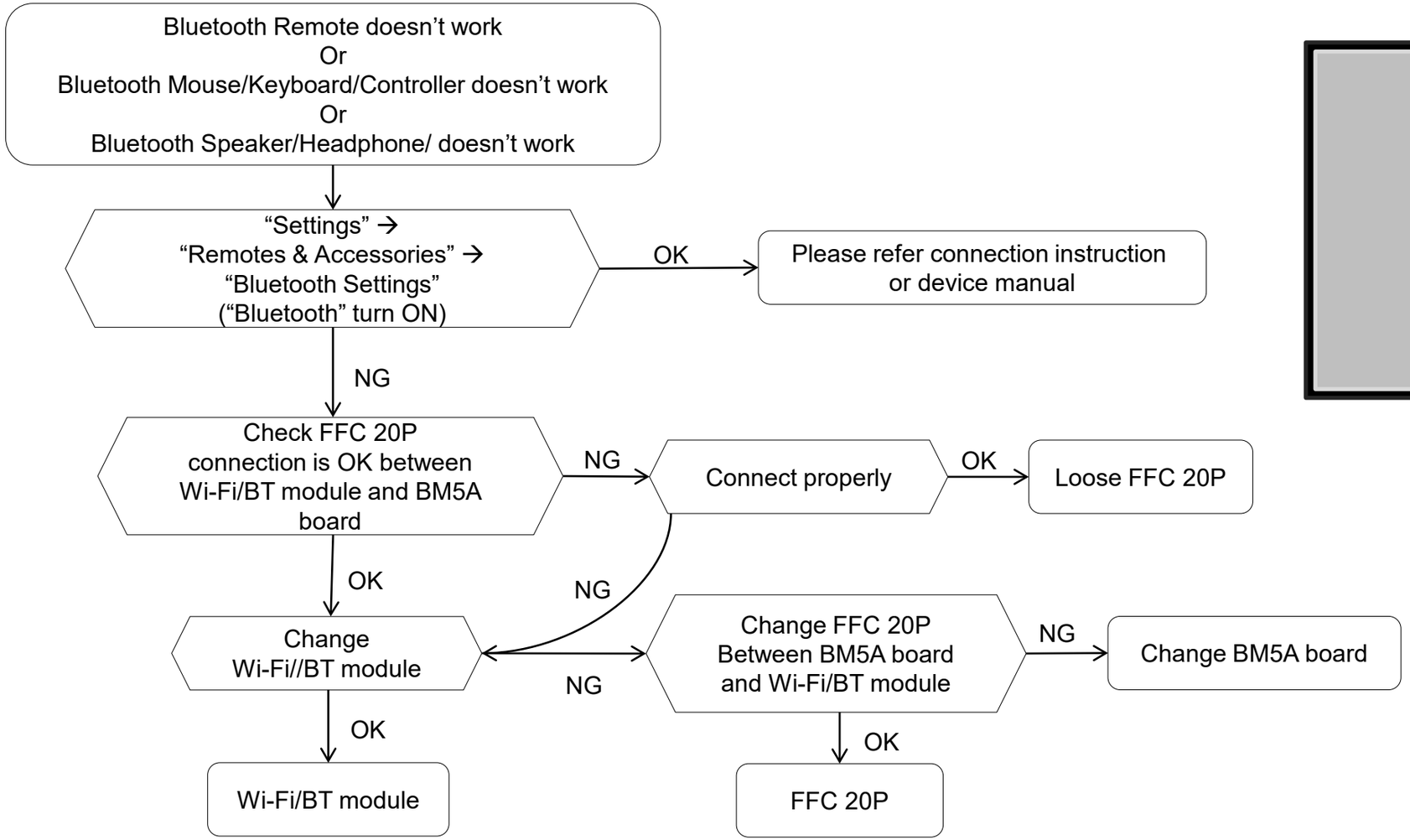
6.2 Wi-Fi Bluetooth - Wireless Network malfunction

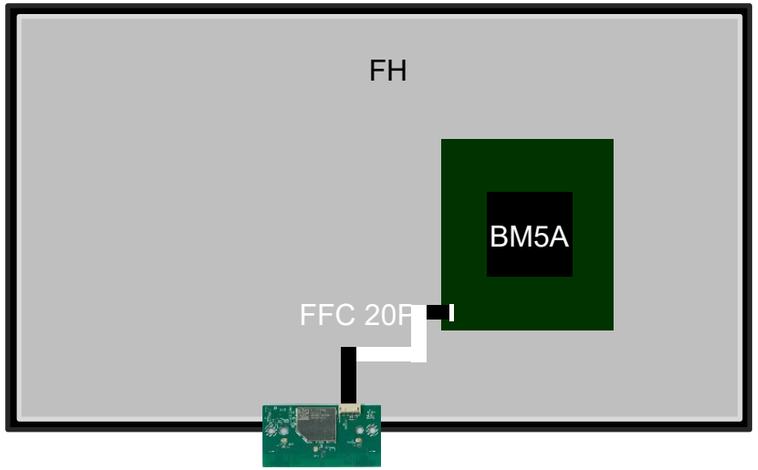




TROUBLESHOOTING

6.3 Wi-Fi Bluetooth - Bluetooth malfunction

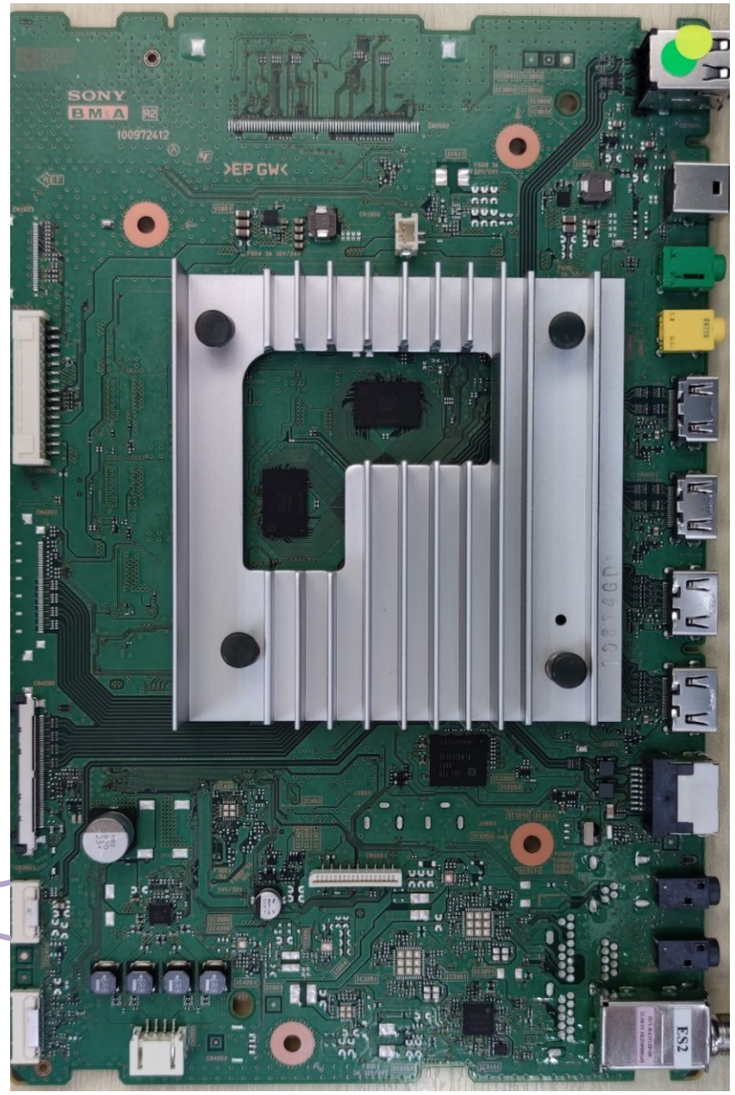




Wi-Fi/BT modules
DHUR-SY63

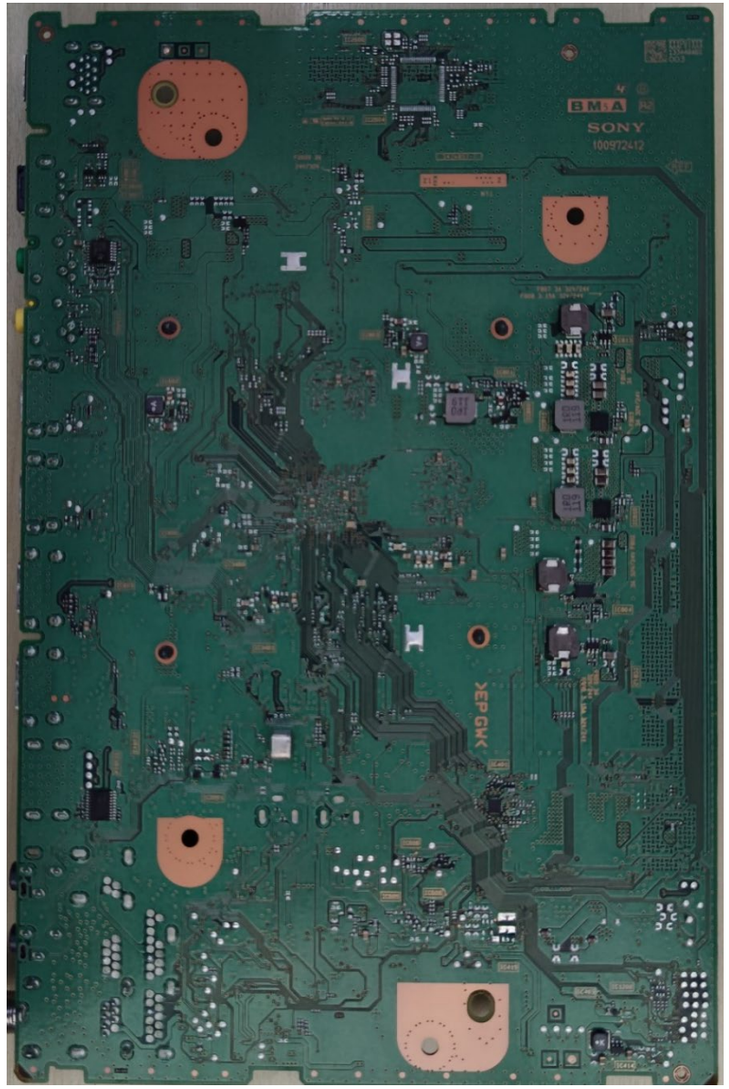
6.3 Wi-Fi Bluetooth

A Side



Wi-fi connector

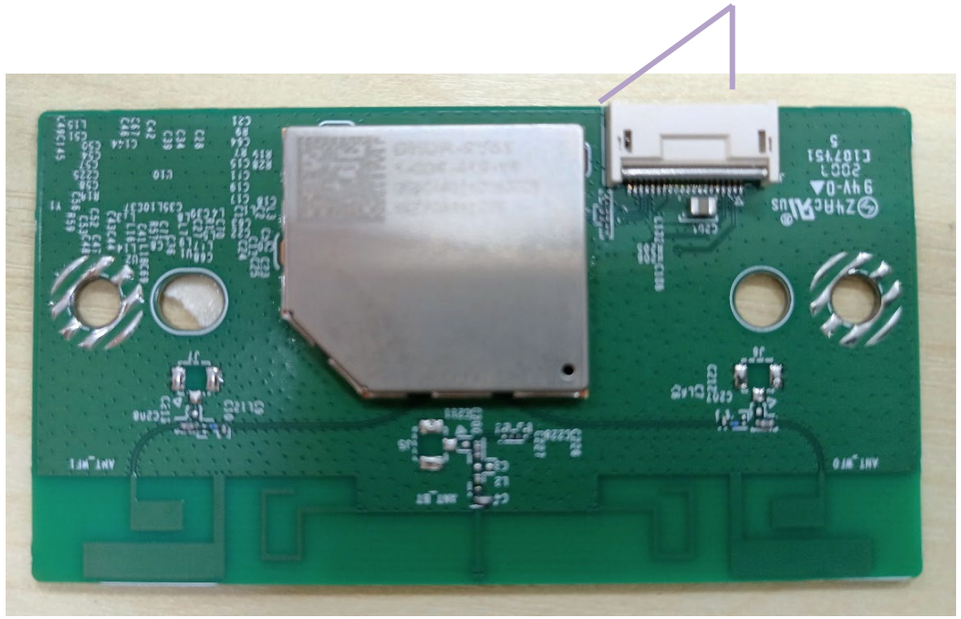
B Side

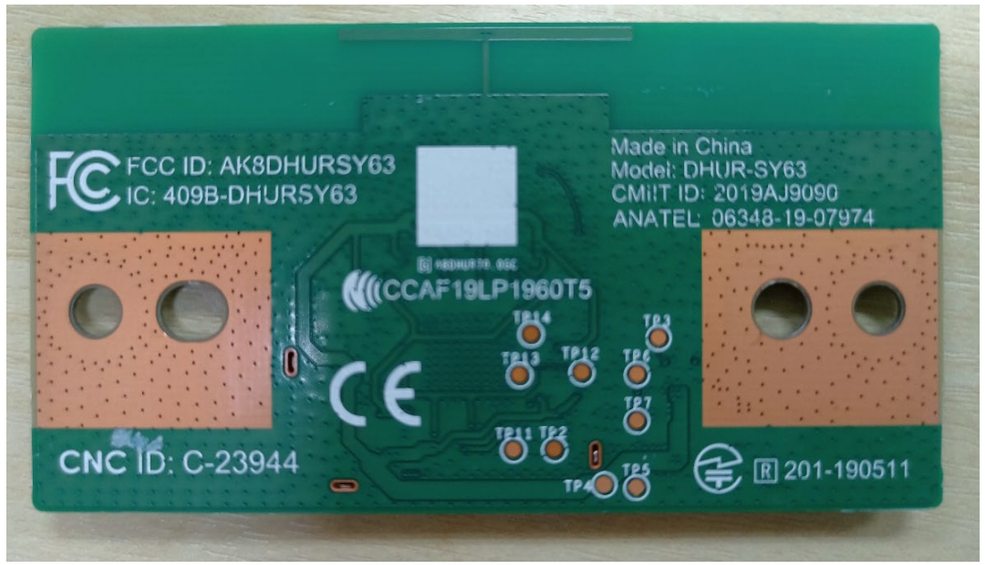


TROUBLESHOOTING

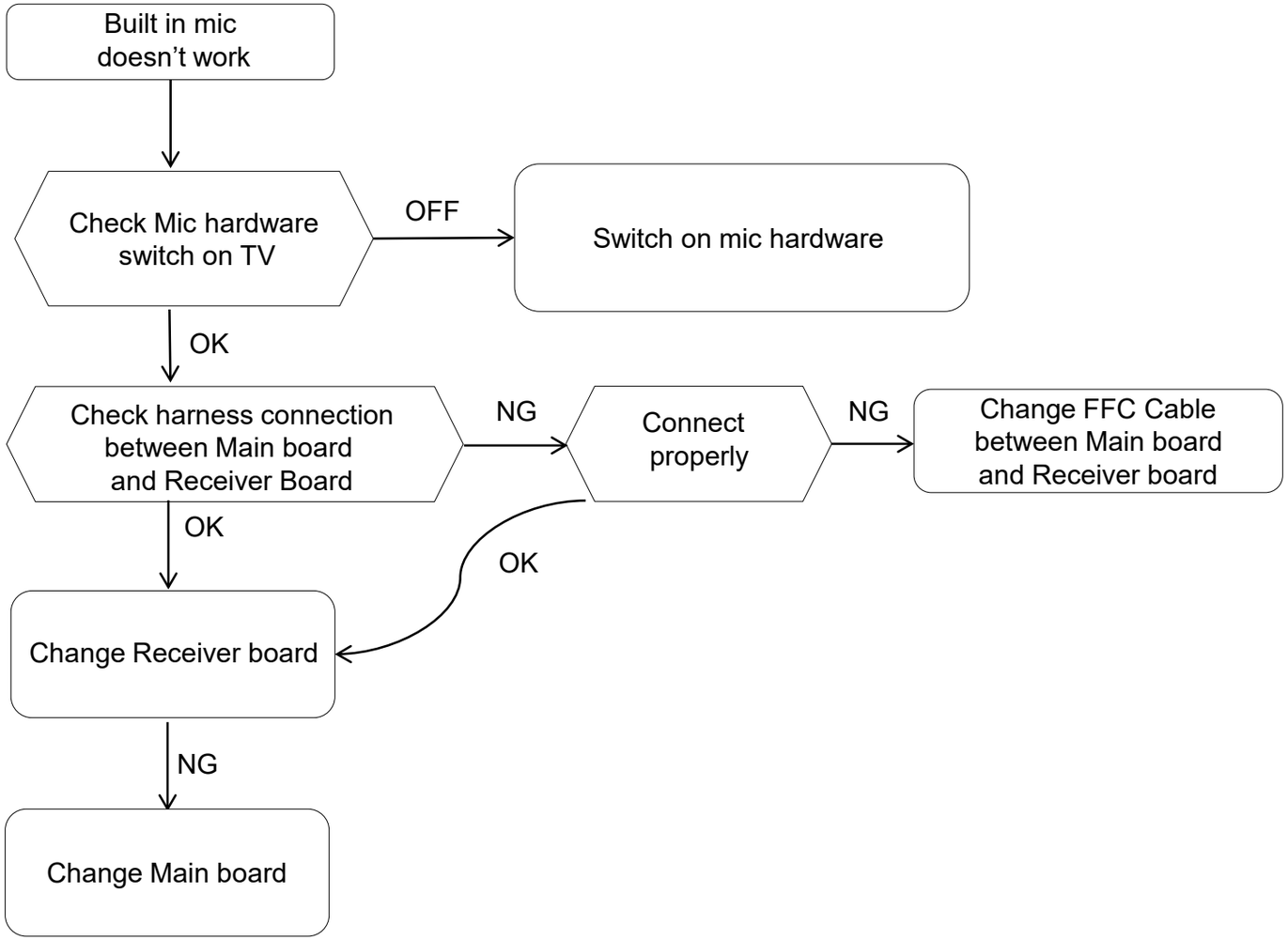
Wi-Fi Module

Wi-fi connector

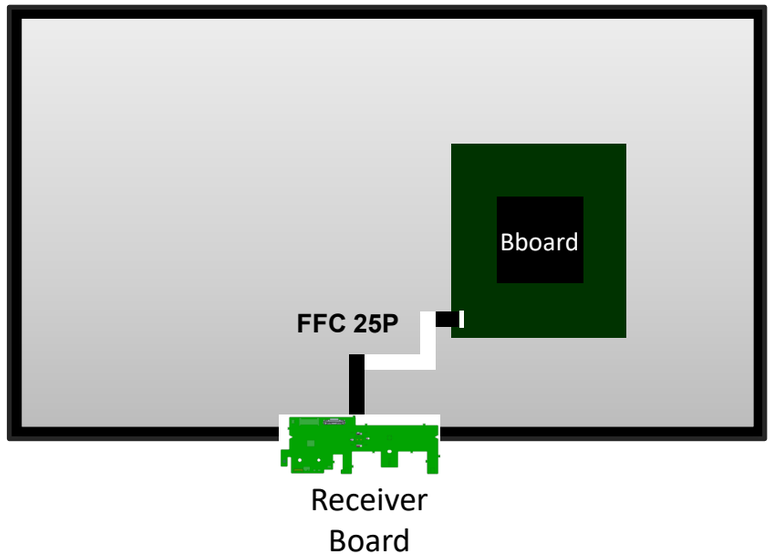




6.4 Built in Mic Malfunction



Main board: BM5A
Receiver board: HT2

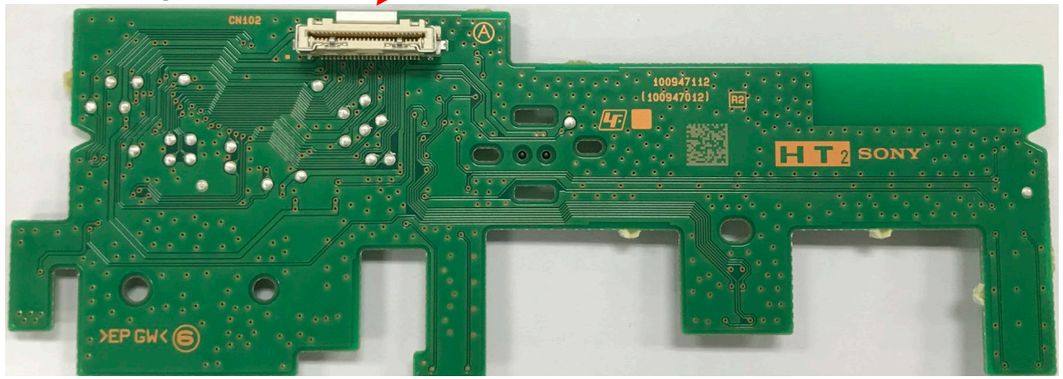


TROUBLESHOOTING

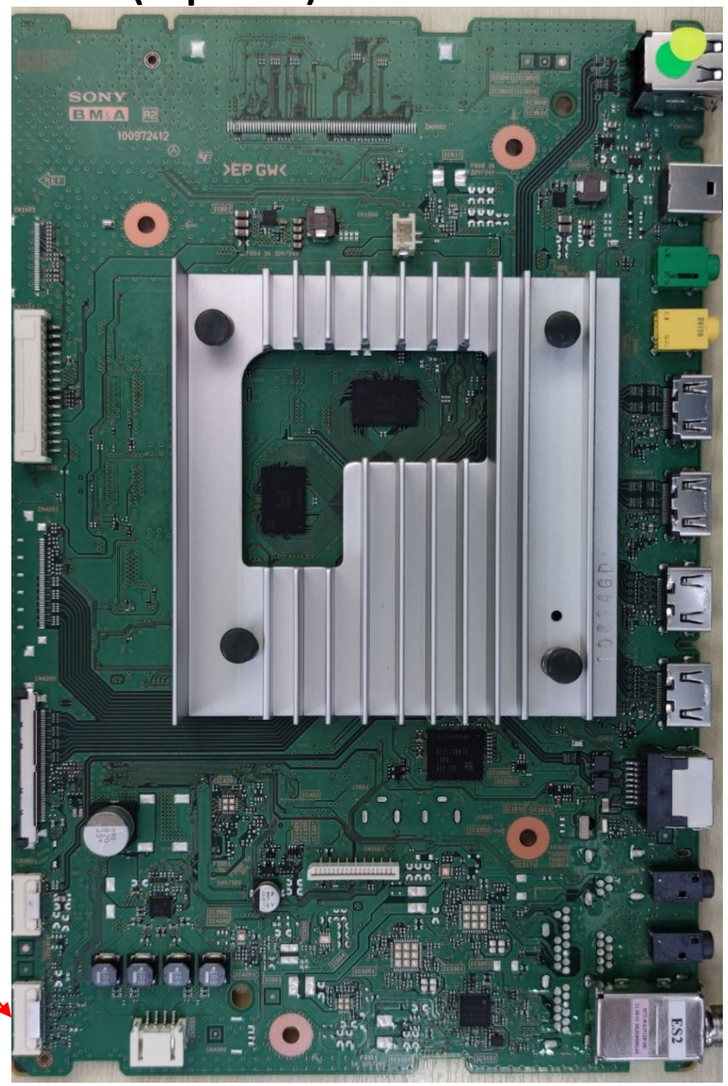
Board View

HT2 (Top view)

Receiver board connector



BM5A (Top view)



Receiver board connector

SOFTWARE UPDATE & RESET

USB Update

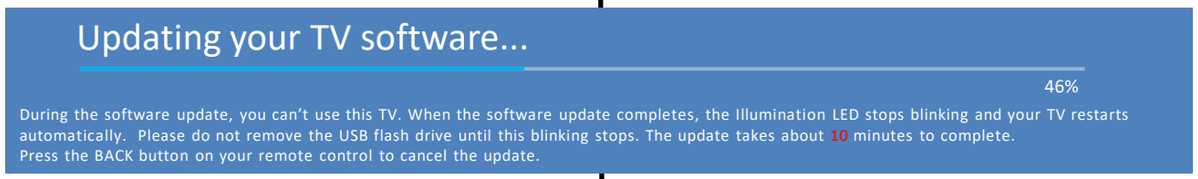
※Caution :
1) Do not power off while the update is in progress.
2) Display may change depending on the model / SW version

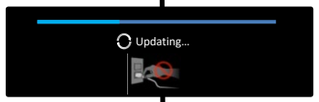
1: Download USB image and unzip file.

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.





The system reboot
will happen once or twice

5: Finished.

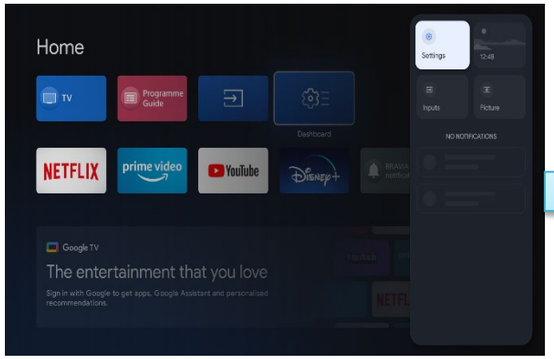
4-b: USB image is not newer soft version.
Automatically show message.
Please follow directions.

5: Finished.

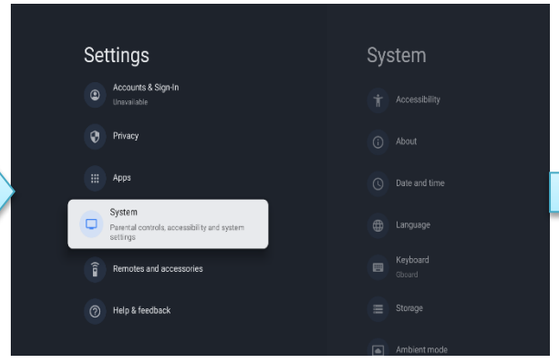
SOFTWARE UPDATE & RESET

Factory Data Reset – with UI method

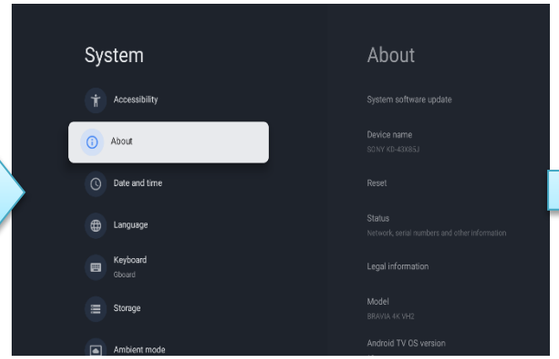
1. At Home Menu, go to Settings



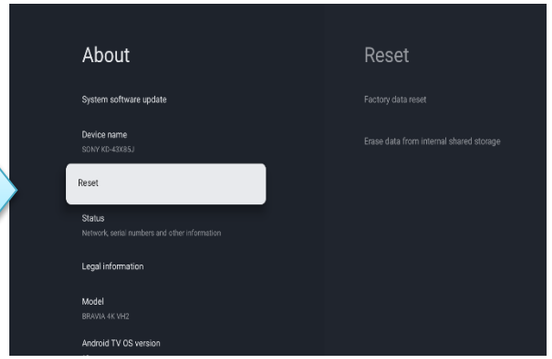
2. Select System / Device Preferences



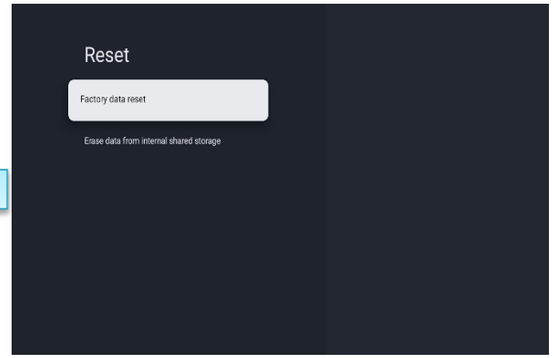
3. Select 'About'



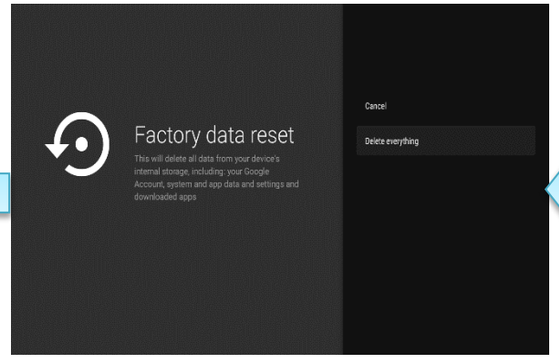
4. In About, Select 'Reset'



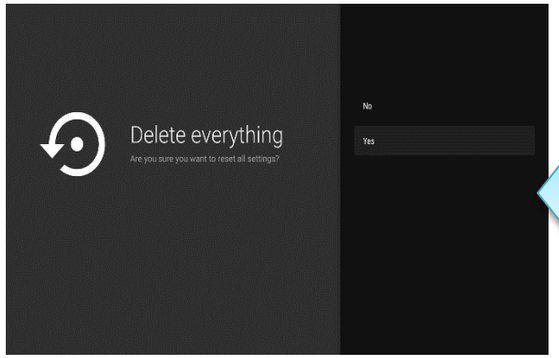
5. In Reset, Select 'Factory data reset'



6. Select 'Delete everything'



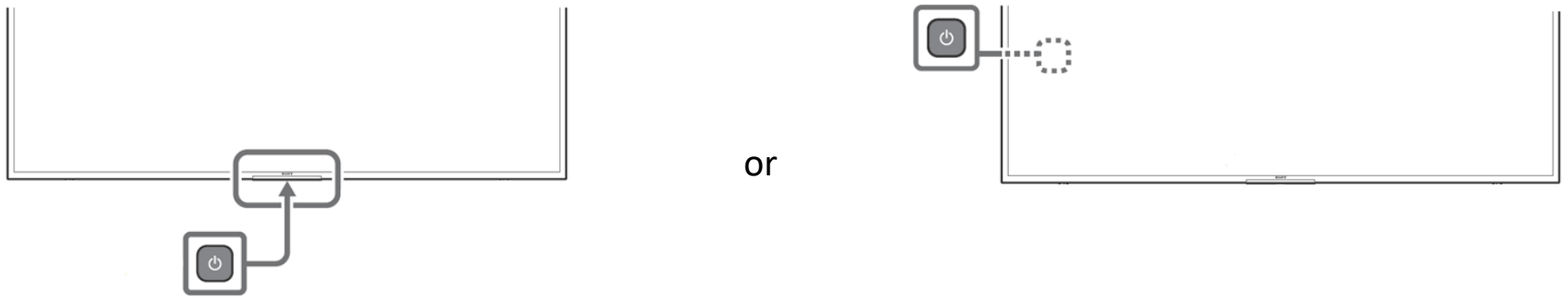
7. Select 'Yes'



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.)

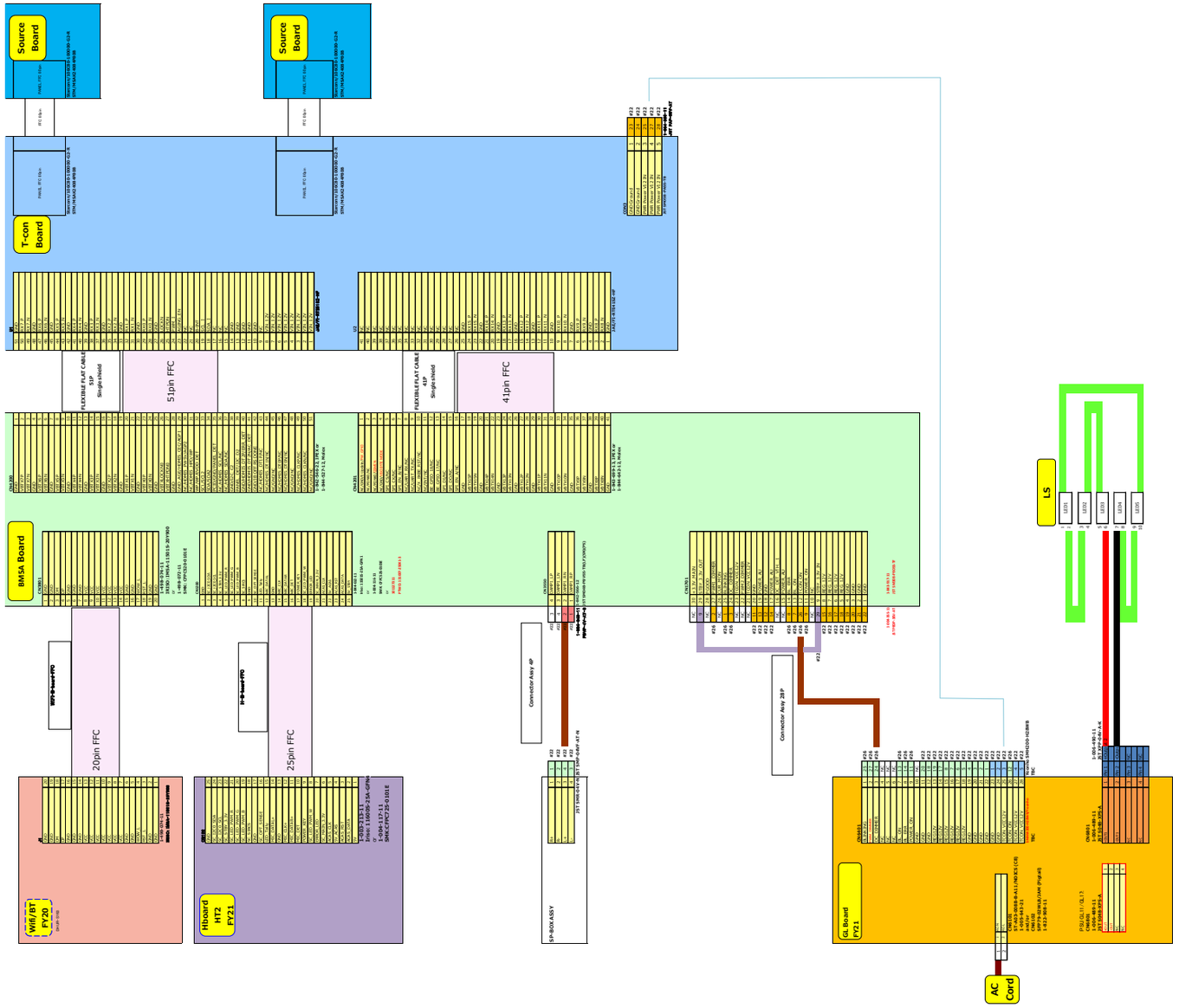


2. AC on.

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

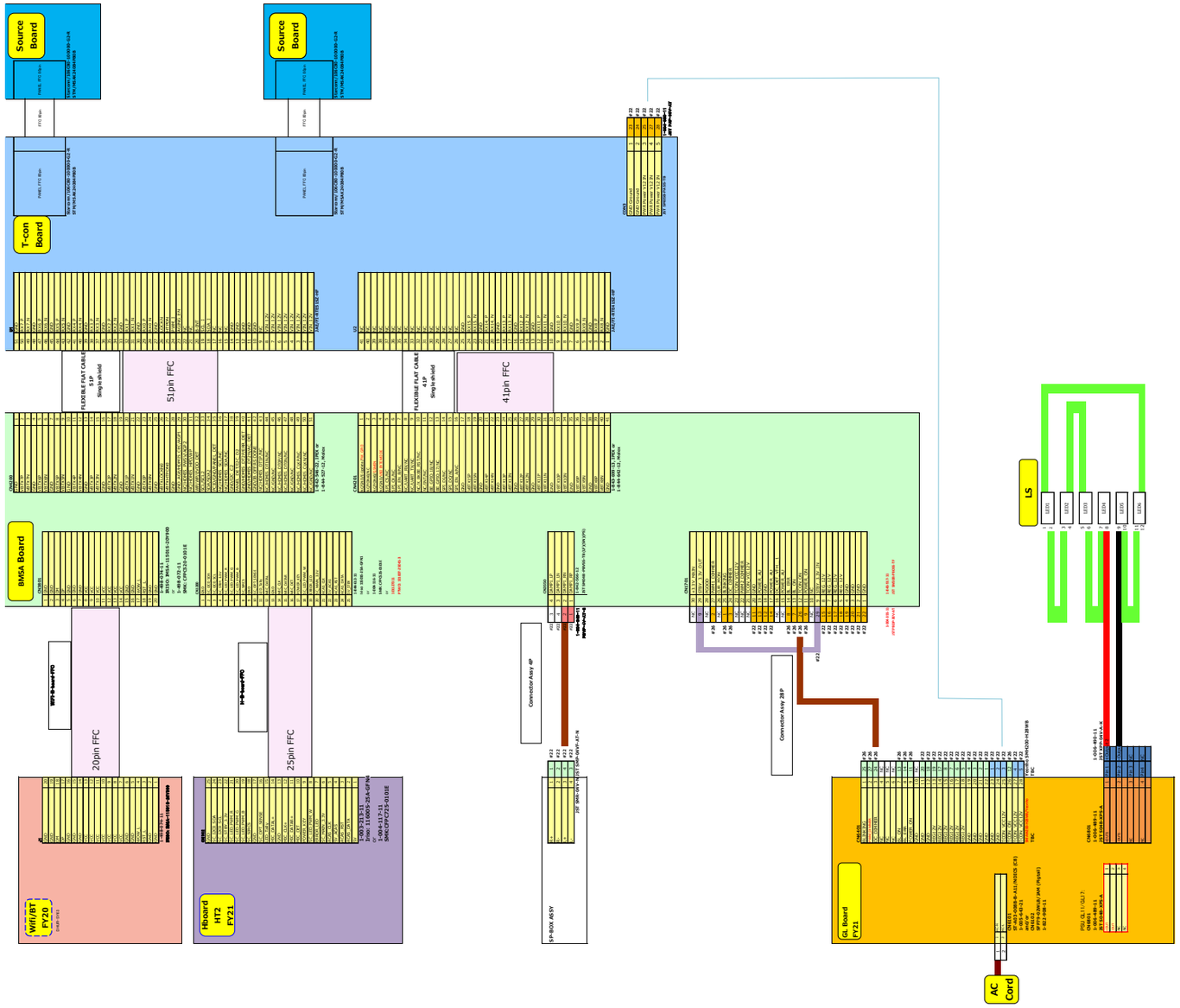
DIAGRAM

43” Connecting Diagram



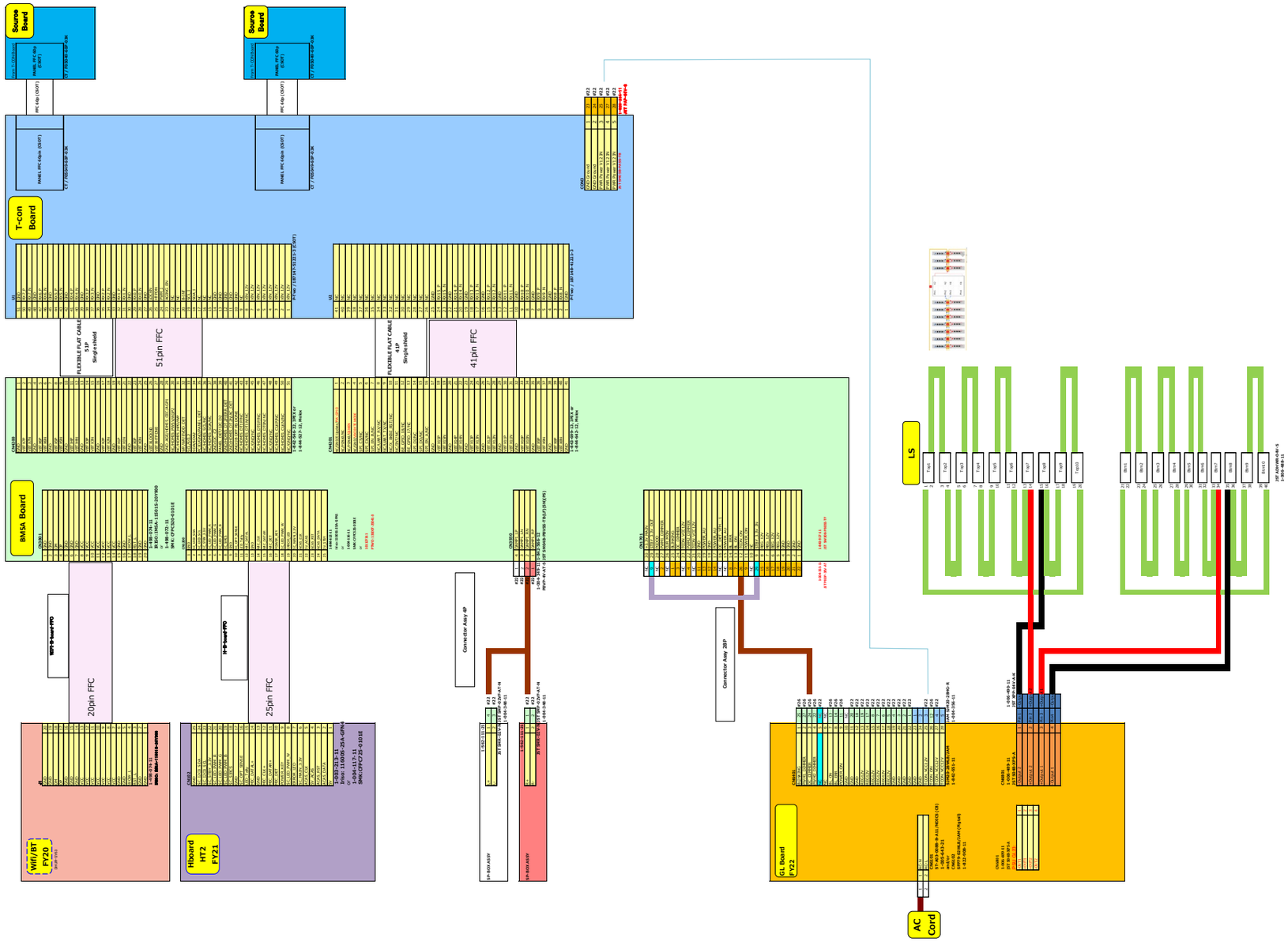
DIAGRAM

50” Connecting Diagram



DIAGRAM

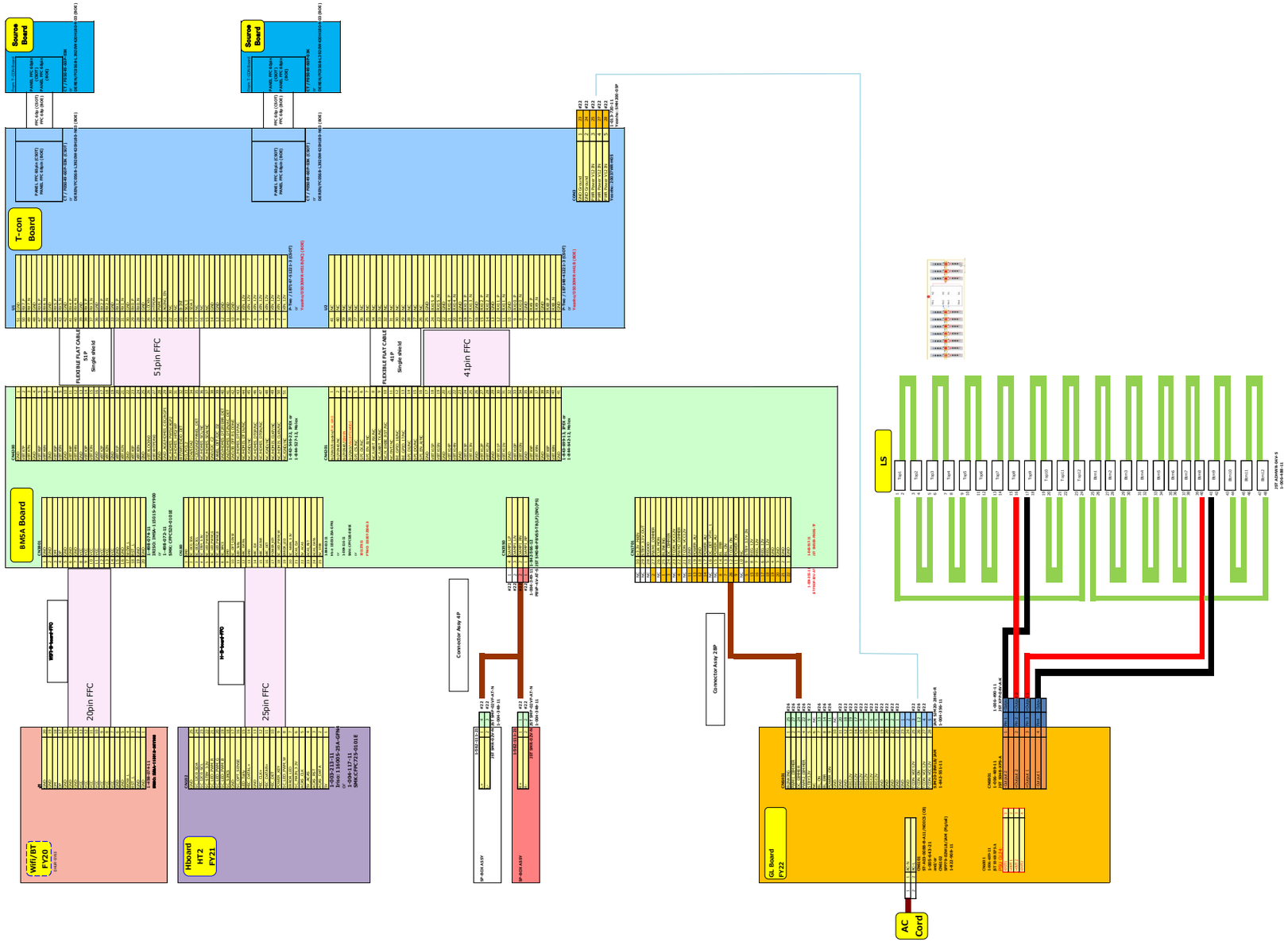
55” Connecting Diagram



DIAGRAM

65” Connecting Diagram

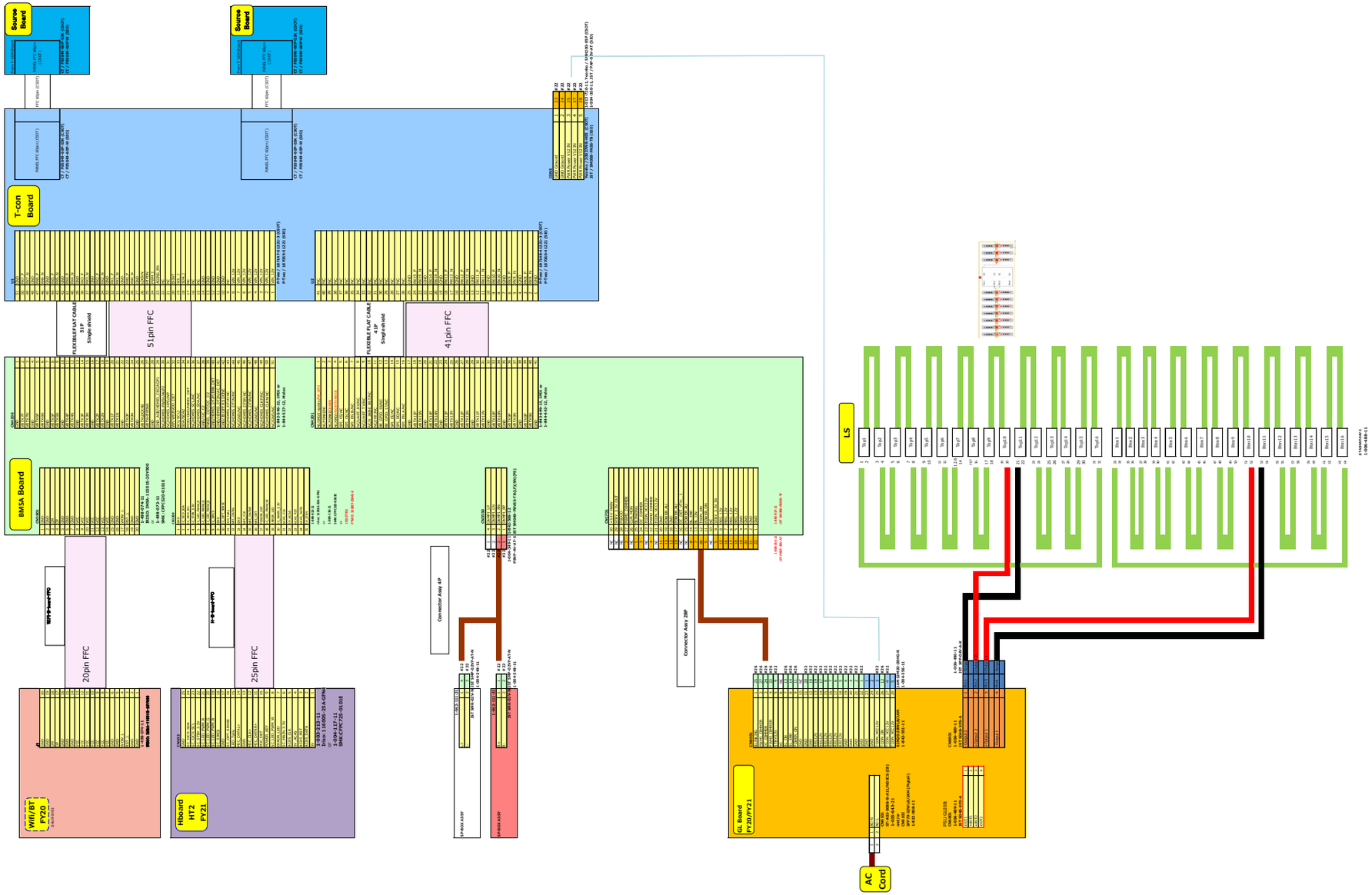
MULTI O-CELL



DIAGRAM

75” Connecting Diagram

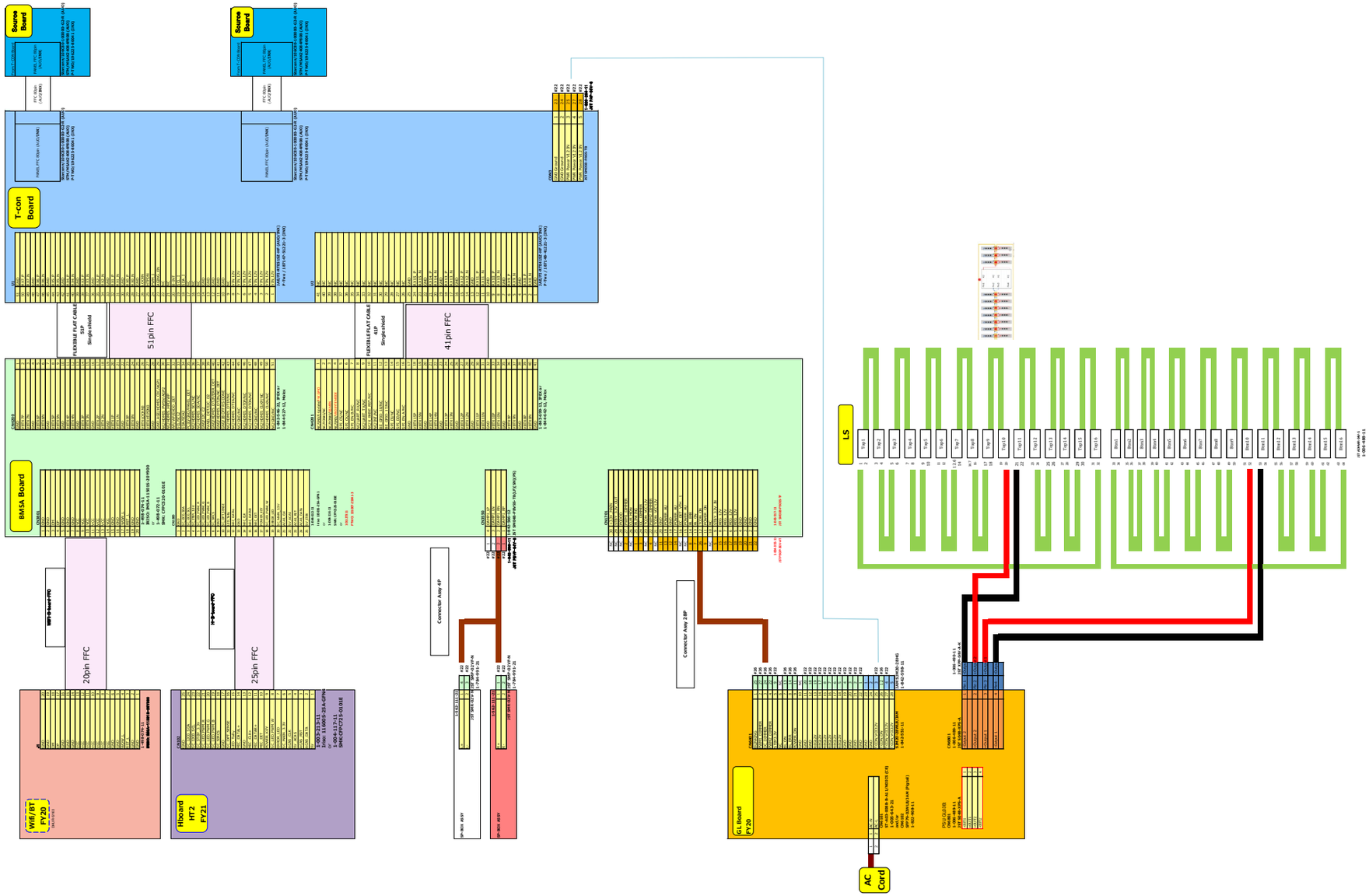
MULTI O-CELL



DIAGRAM

85” Connecting Diagram

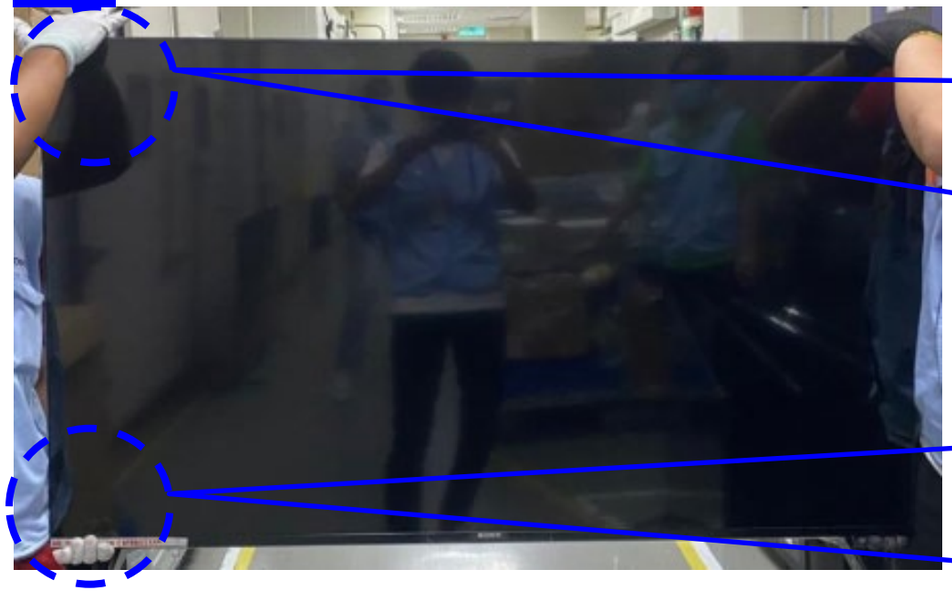
MULTI O-CELL



HANDLING GUIDE

1. Holding Position

OK



Be sure to wear gloves and work with two people

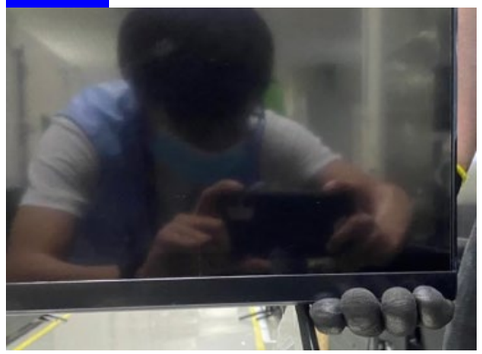
OK

Holding edge of the Bezel without touching the O-cell

NG

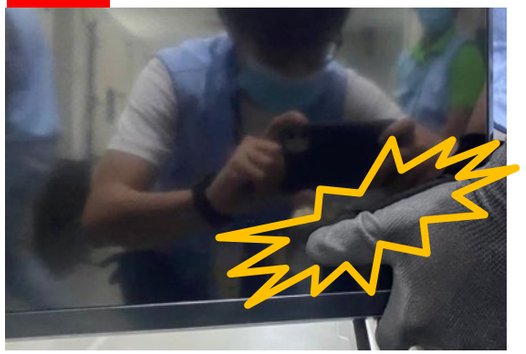
Hand pressing the O-Cell

OK



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

NG

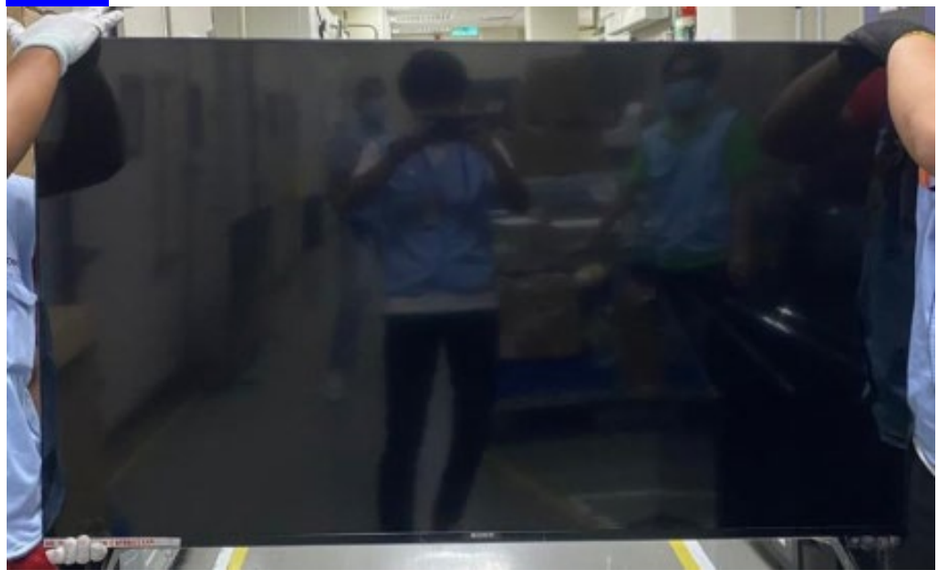


Hand pressing the O-Cell

HANDLING GUIDE

2. Carry Position

OK



The panel should be carried in vertical.

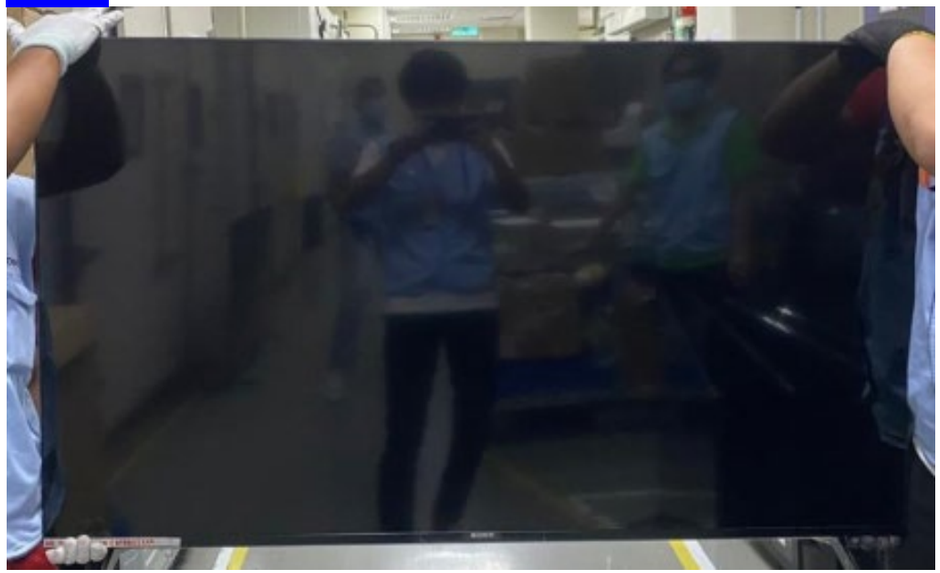
NG

DO NOT carry the panel horizontally

HANDLING GUIDE

3. Carry Condition

OK



The panel should be carried by two people.

NG

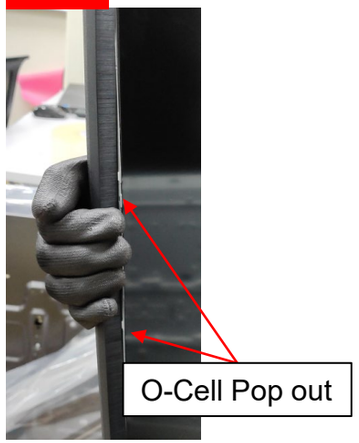
NG

DO NOT carry the panel alone

NG

NG

NG

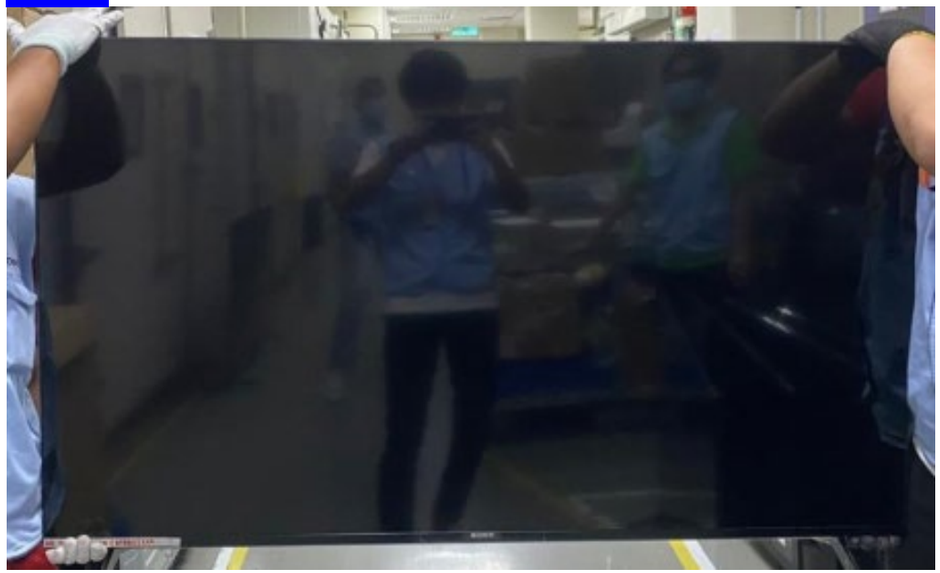


Since the O-cell may pop out, **DO NOT** apply force to the Back Chassis or rotate the Bezel

HANDLING GUIDE

4. Carry Condition

OK



The panel should be carried by the corners.

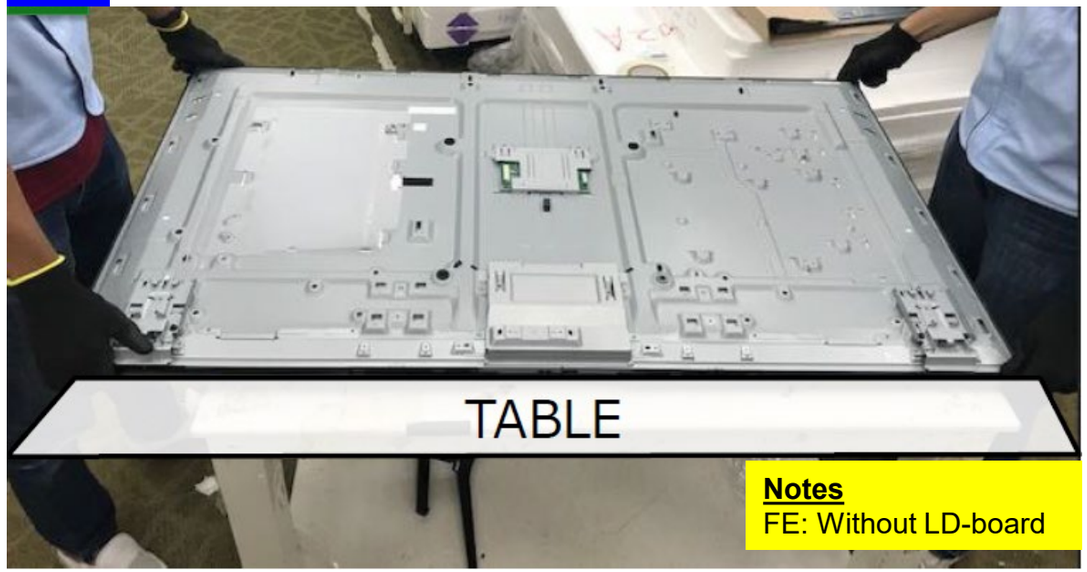
NG

DO NOT carry the panel at the center area

HANDLING GUIDE

5. Resting Condition

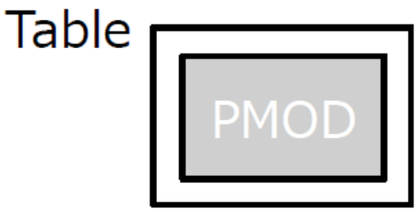
OK



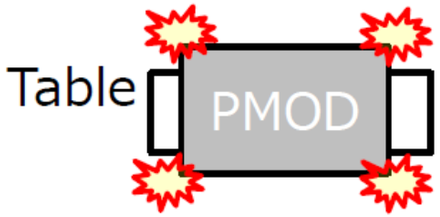
2 persons put the panel on the table

NG

DO NOT put the panel on the table by yourself



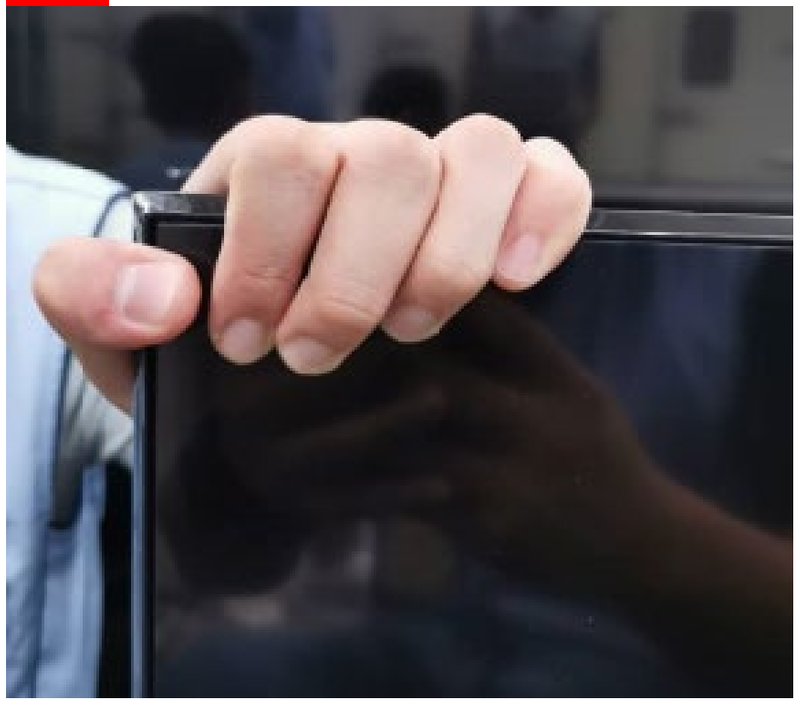
Panel can be fully supported by table surface



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

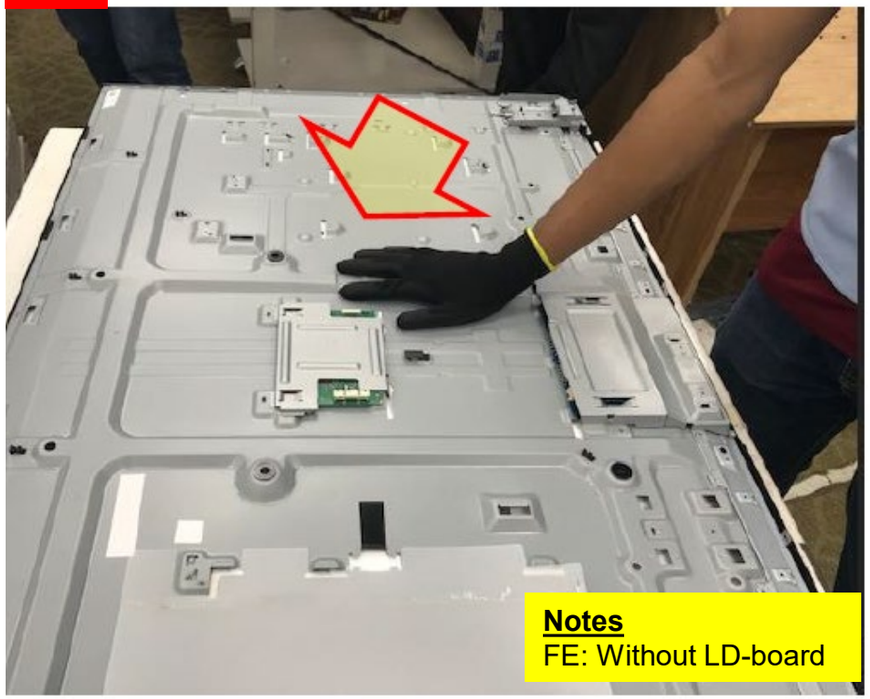
6. Prohibit Method

NG



Handle the panel without gloves

NG



Press on the panel during Assy & Disassy

HANDLING GUIDE

7. Restricted Area

OK

NG

Touch on the PIEZO hook

NG

Touch on the Rear Cover hemming

DO NOT touch the Piezo hook and the rear cover hook

SERVICE MANUAL (DISASSEMBLY)

ORIGINAL MANUAL ISSUE DATE: 2023.11

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9-888-905-U1

LCD TV

SONY®

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

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

Self Diagnosis Supported model

RMF-TX800U

RMF-TX900U

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Self Diagnosis Supported model

Please refer Service Manual (Troubleshooting) for below information:

- General Safety Notes
- Self Diagnosis Function
- Triage Chart
- Troubleshooting, Troubleshooting reference
- Software Update & Reset
- Diagram: Connector Diagram
- Handling Guide

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

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)

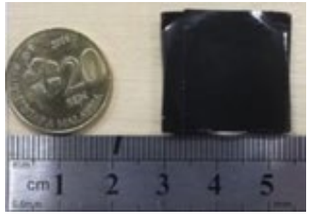
ii. Parts Tray for loose screws and small items

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.



Thickness: approx. 1.5mm
Diameter: 20~25mm
(wrap in tape (L=50mm))

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

FFC PRECAUTIONS

※Caution: DO NOT hold / touch copper side during FFC handling.

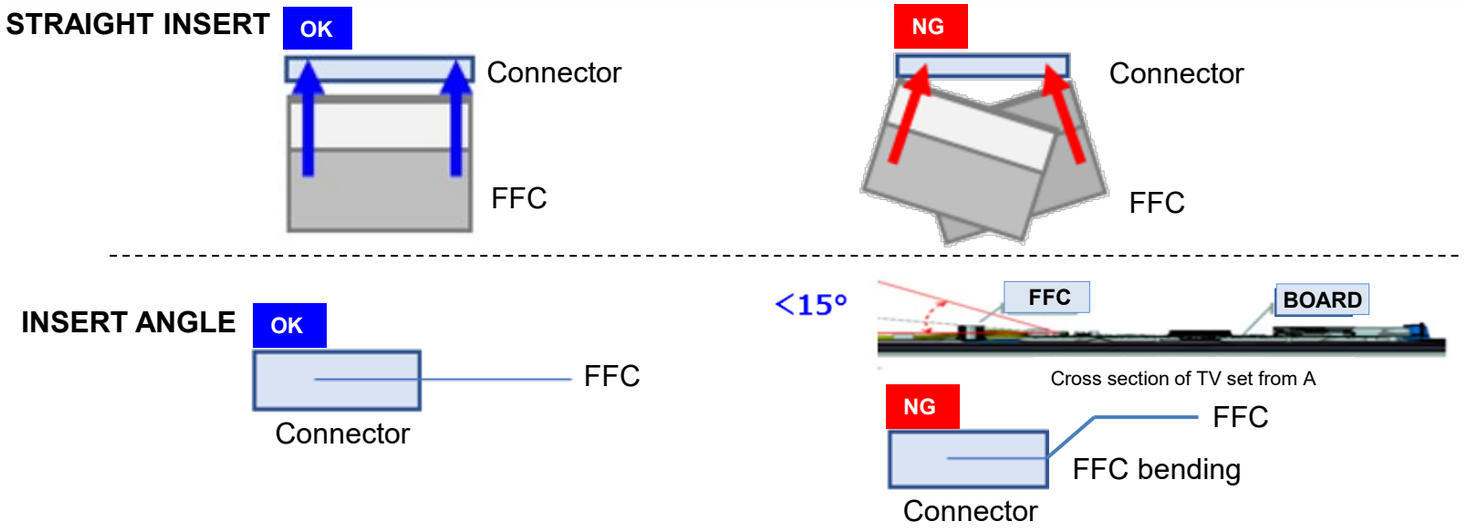
FFC Insertion Method

ESSENTIAL CAUTION INFO THAT MUST BE FOLLOWED BY PRODUCTION FOR ANY FFC INSERTION METHOD

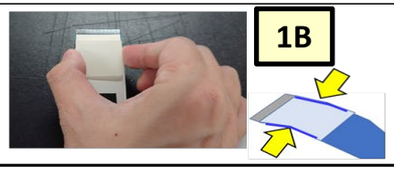
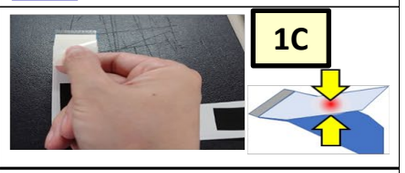
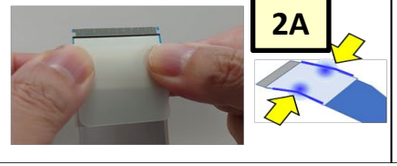
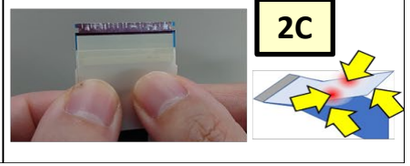
INSERT FFC IN STRAIGHT CONDITION

DO NOT INSERT FFC IN SLANTING CONDITION

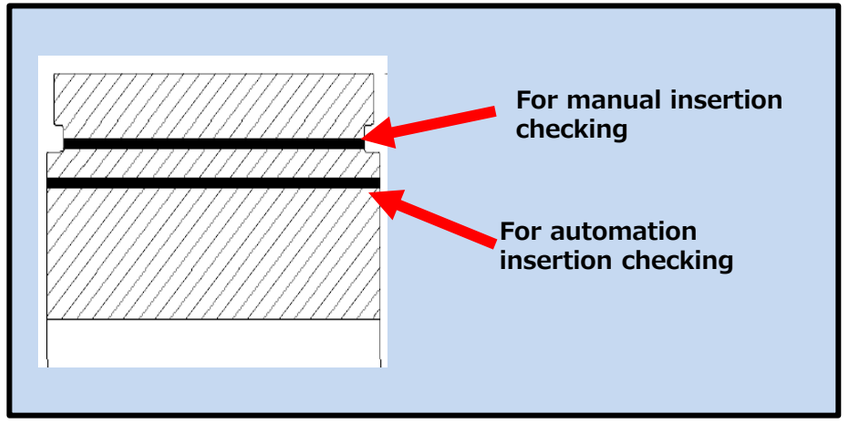
DO NOT APPLY EXCESSIVE FORCE DURING INSERTION



RECOMMENDED FFC HOLDING METHOD MATRIX

	A Sandwich	B Both ends	C Plate
1 One-hand	1A	 1B	 1C
2 Both hands	 2A		 2C

INDICATION FOR FFC FULL INSERTION

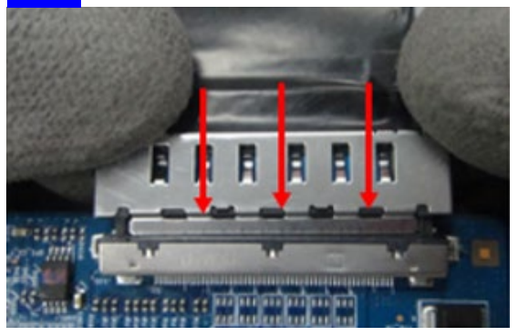


FFC PRECAUTIONS

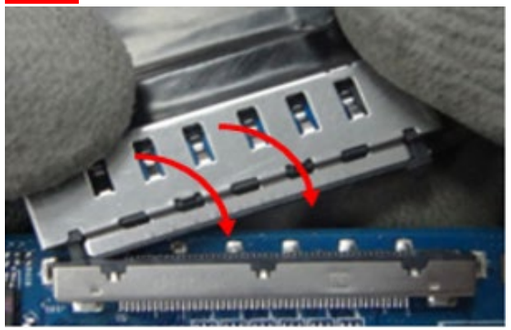
Caution for FFC with Housing Connector

CAUTION FOR FFC WITH CONNECTOR INSTALLATION AT PANEL SIDE

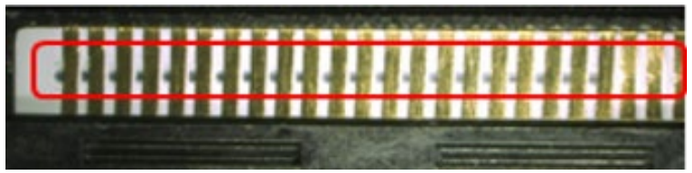
OK



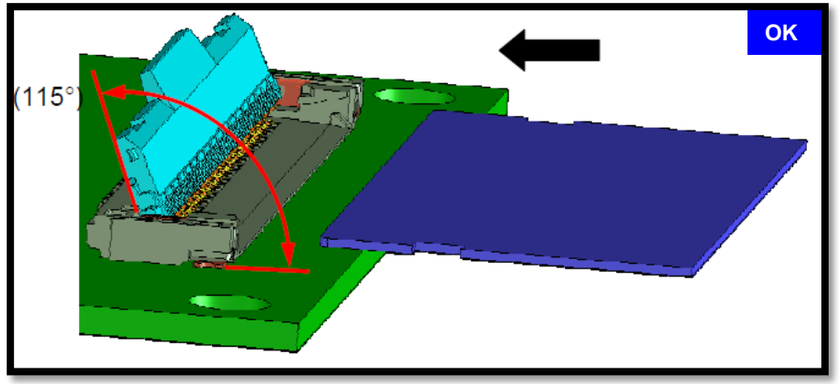
NG



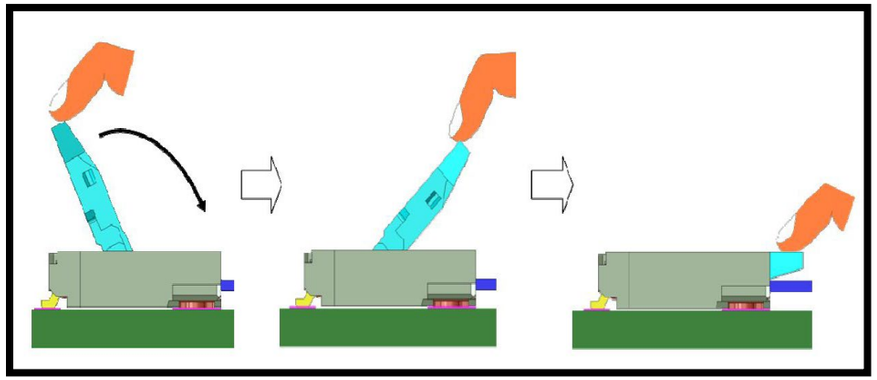
ABNORMAL HANDLING WILL CAUSE CONTACT SHIFTED & FOREIGN PARTICLES ISSUE AS PICTURE BELOW:



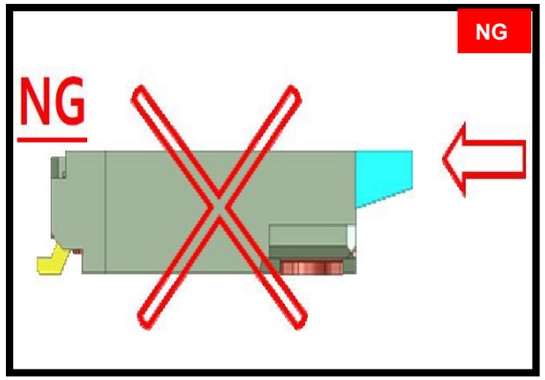
ZIFF FFC Insertion Caution



Pull ***up*** to open actuator.



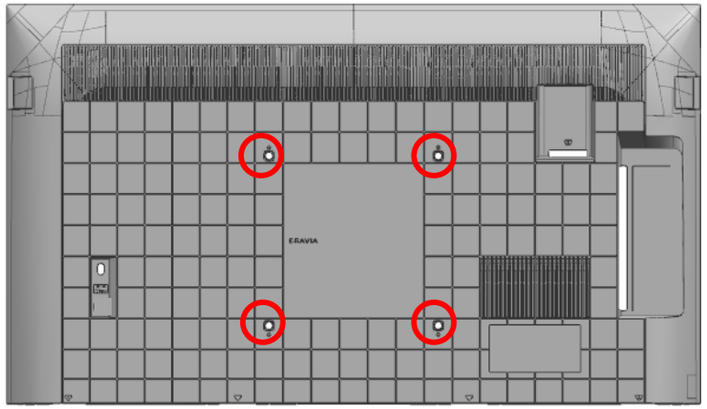
Close actuator securely to lock
Make sure line indication on FFC is align with actuator.



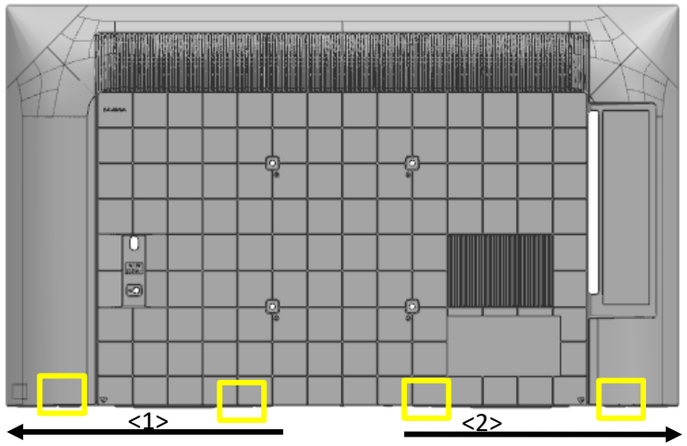
Do not push ***inwards*** with excessive force.

REAR COVER

1. Remove the screws from the rear cover (4 pcs)



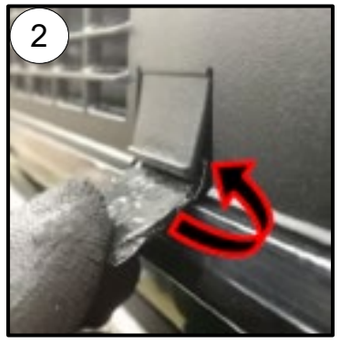
2. Unhook the bottom hook, starting from center.



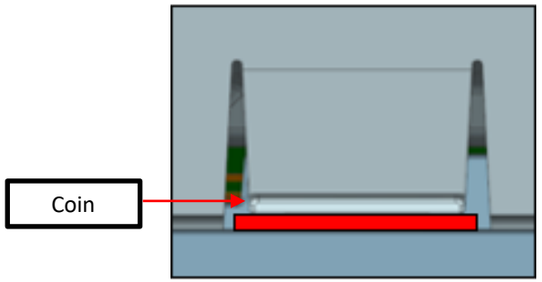
① Unhook two hooks closest to center simultaneously to prevent lock back. (Refer to the next page for the location of hooks)

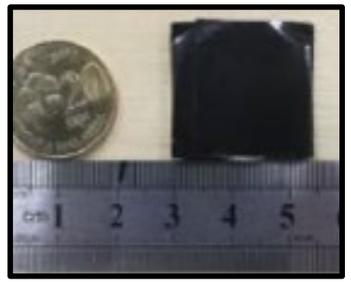
② Unhook both hooks using coin or jig.

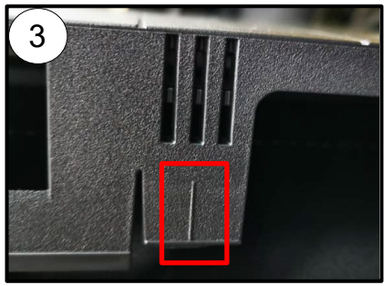
③ Use mirror or touch the line to assist locating the hook position.



Coin or jig to unhook bottom Rear Cover - Bezel hook
*Wrap coin in tape (55mmX25mm)
*Thickness of coin approximately 2mm

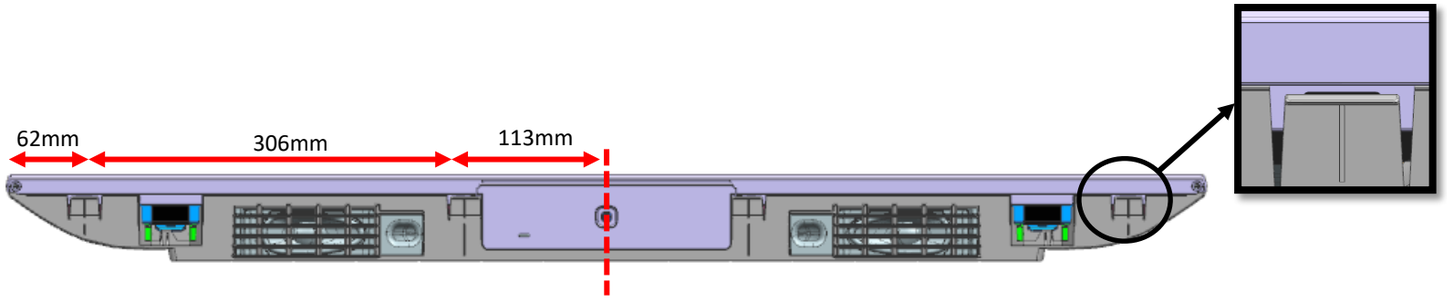




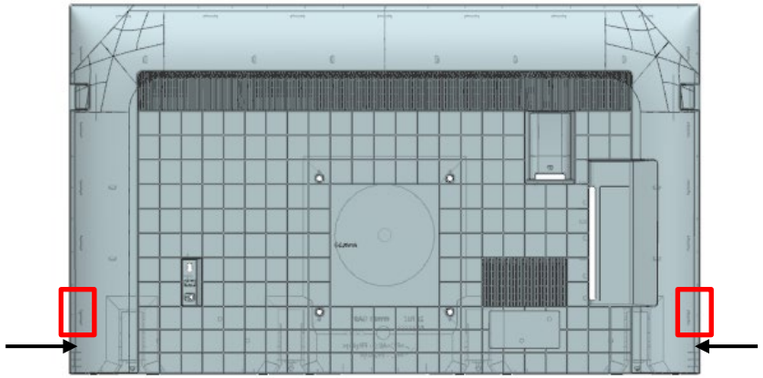


REAR COVER

Bottom Hook Position



3. Unhook corner hook.

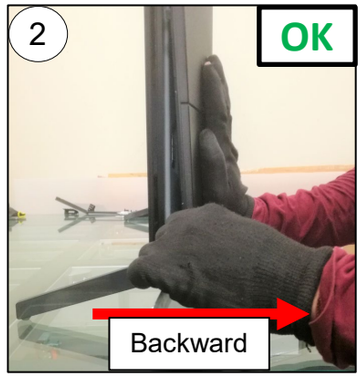


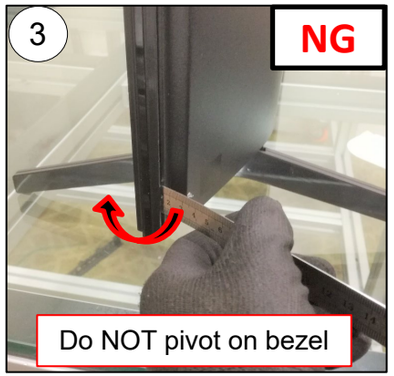
Ruler or jig to release corner hook
*Wrap ruler with tape to prevent scratch

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.

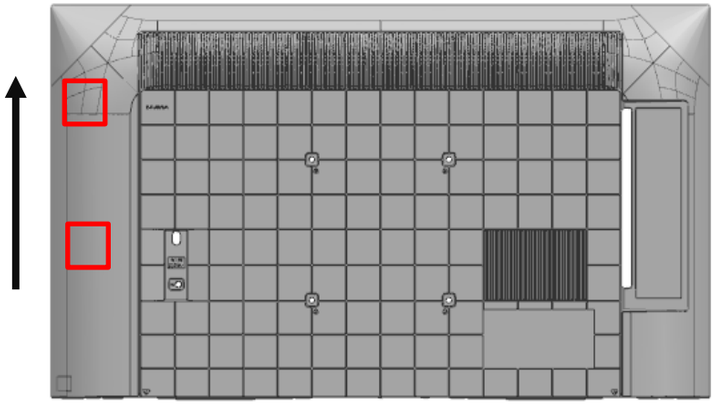




REAR COVER

4. Unhook left side hooks.

Total rear cover back chassis : 2 hooks



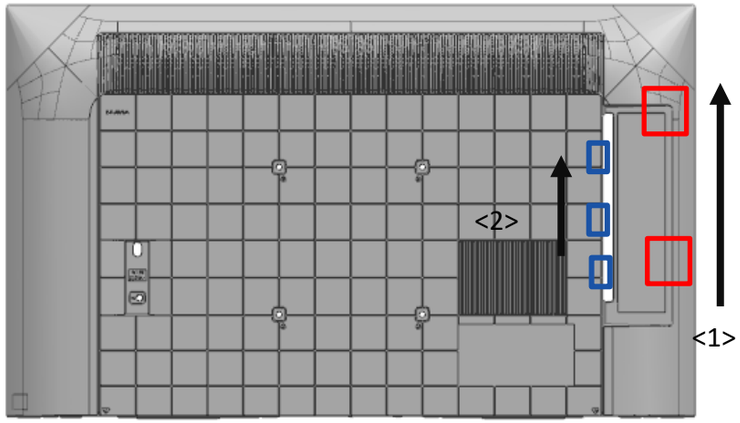
① Grip the rear cover by hand and use a ruler or jig to remove the hook of the rear cover back chassis.

② Flex the rear cover outward to remove the hook. Support set with arm.

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.

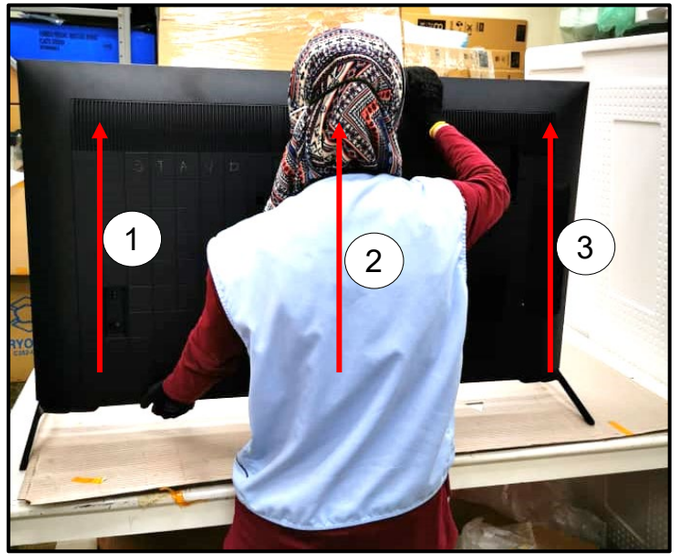
② Pull the rear cover below the side jack to remove the hook.

③ Remove the remaining side hooks.

REAR COVER

6. Unhook top row.

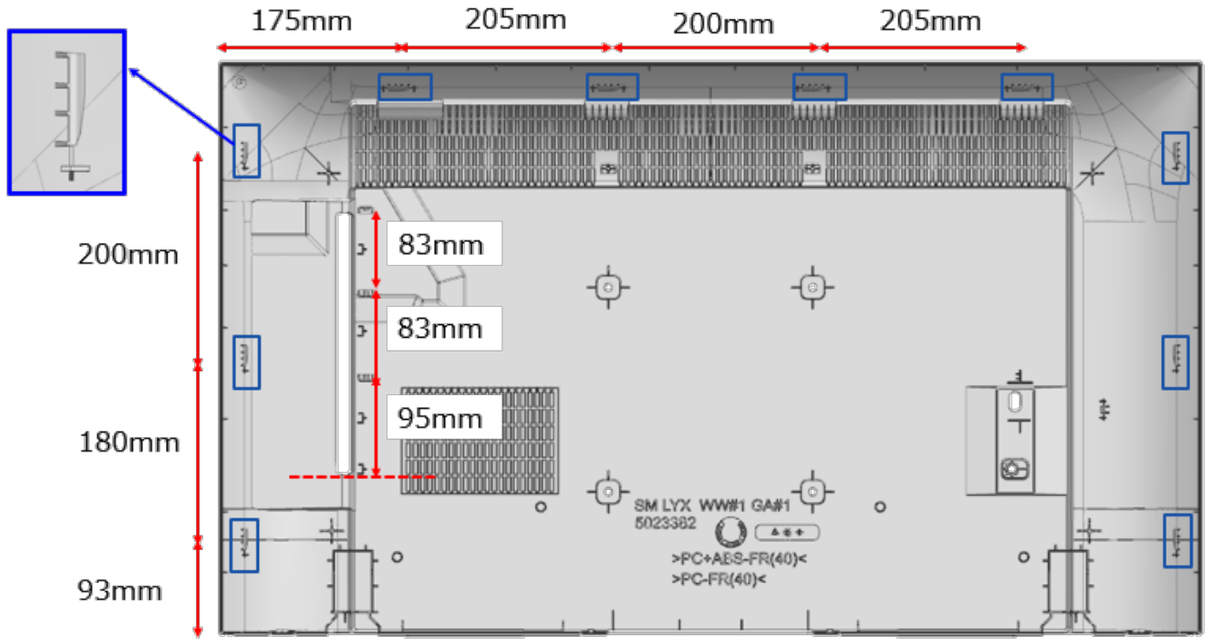
Total hooks (top row): 4 hooks



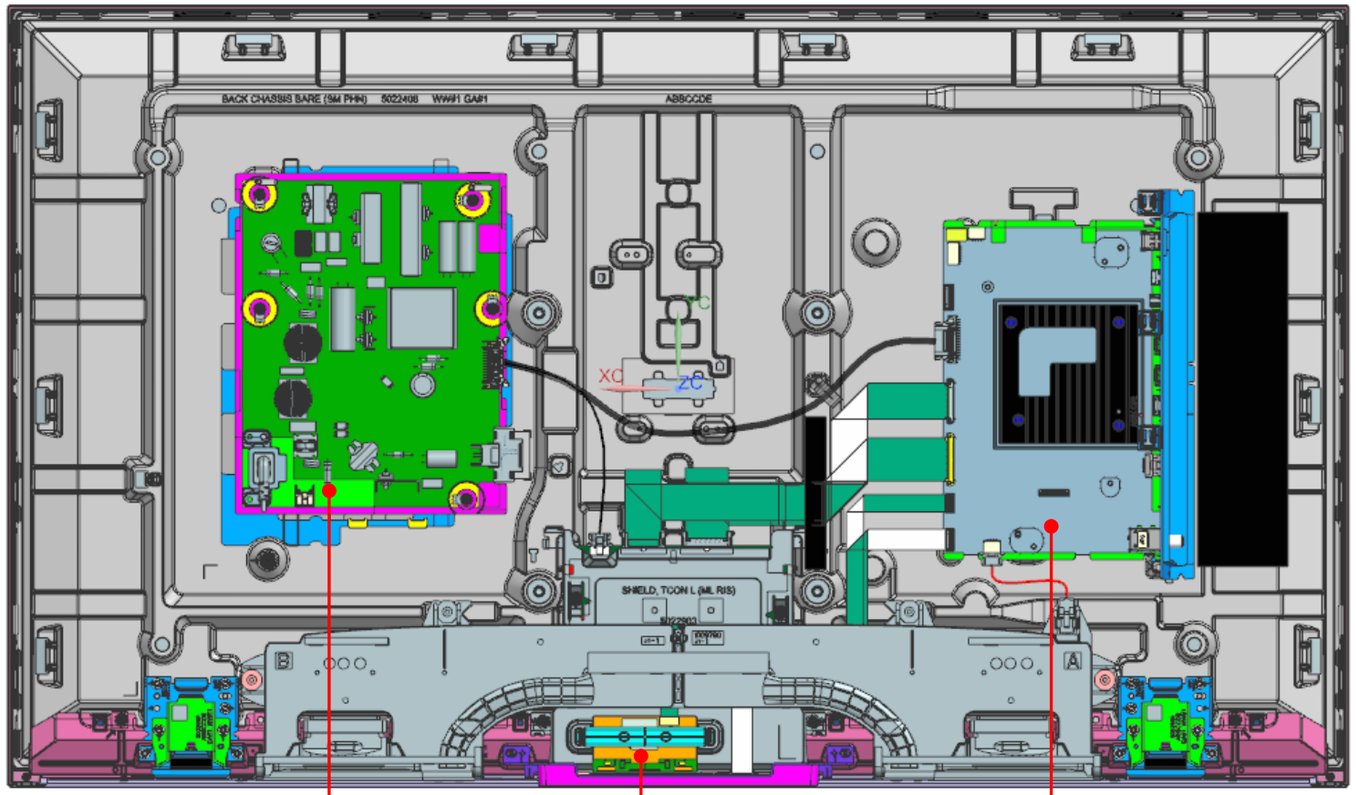
① Tilt the rear cover and push upwards on the left and right side.

② Pull the rear cover below the side jack to remove the upper hook.

Hook positioning.



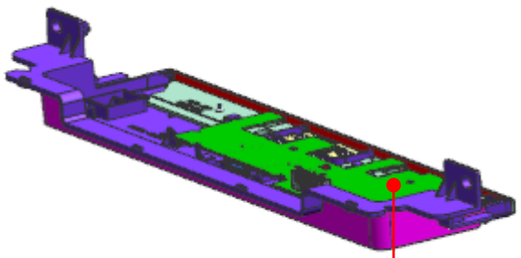
1-2. BOARD LOCATION



POWER BOARD

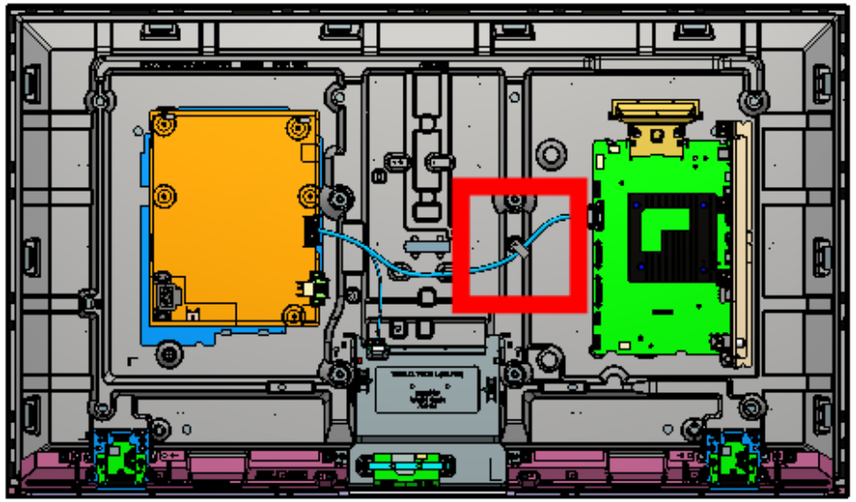
WI-FI BOARD

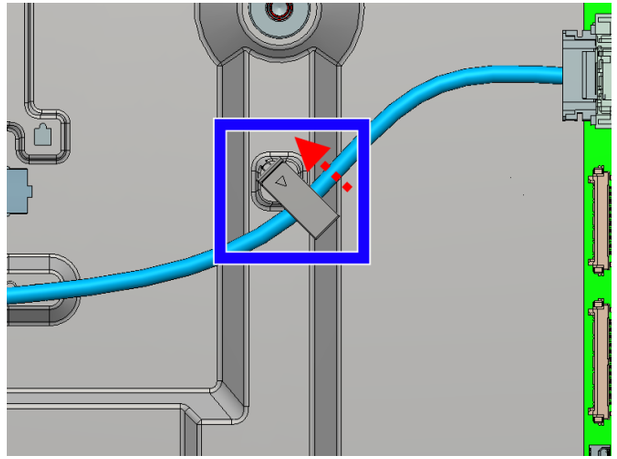
MAIN BOARD



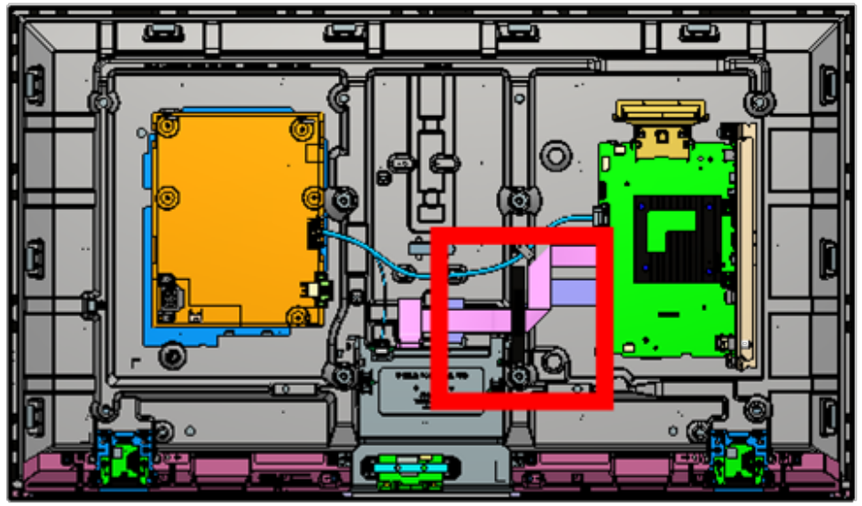
RECEIVER BOARD

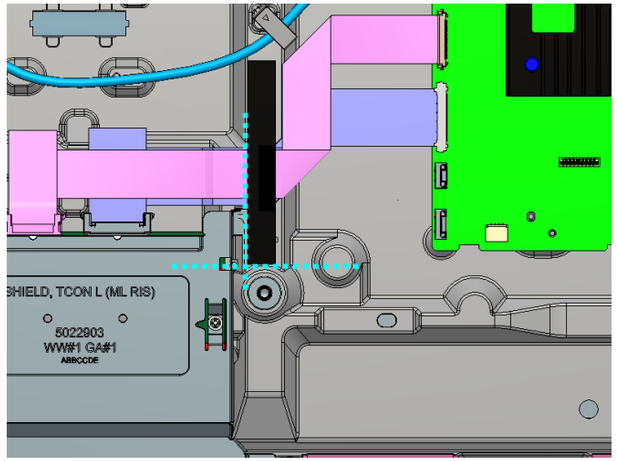
WIRE DRESSING





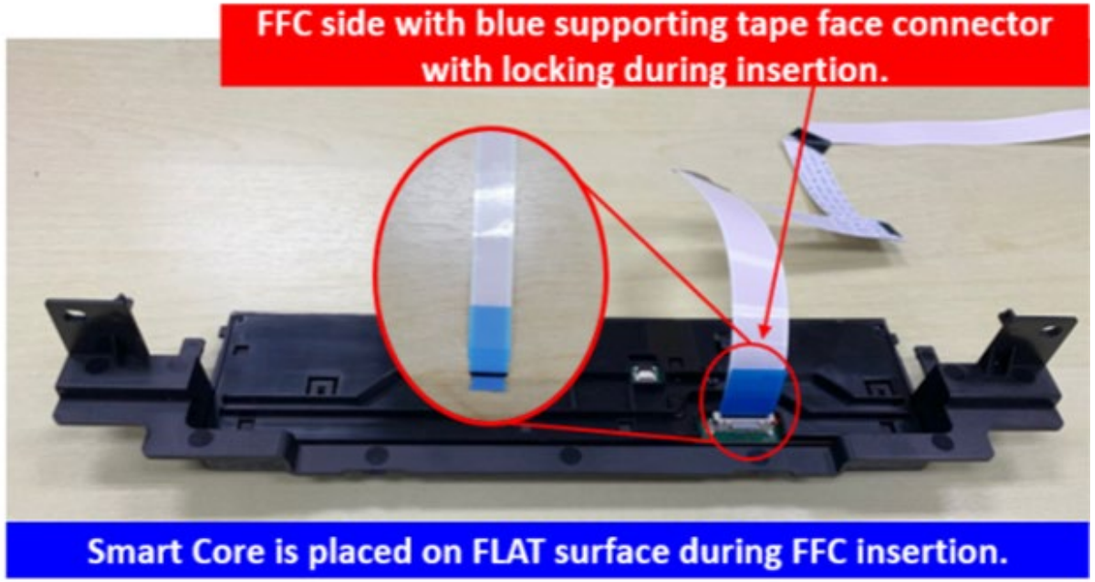
TAPE





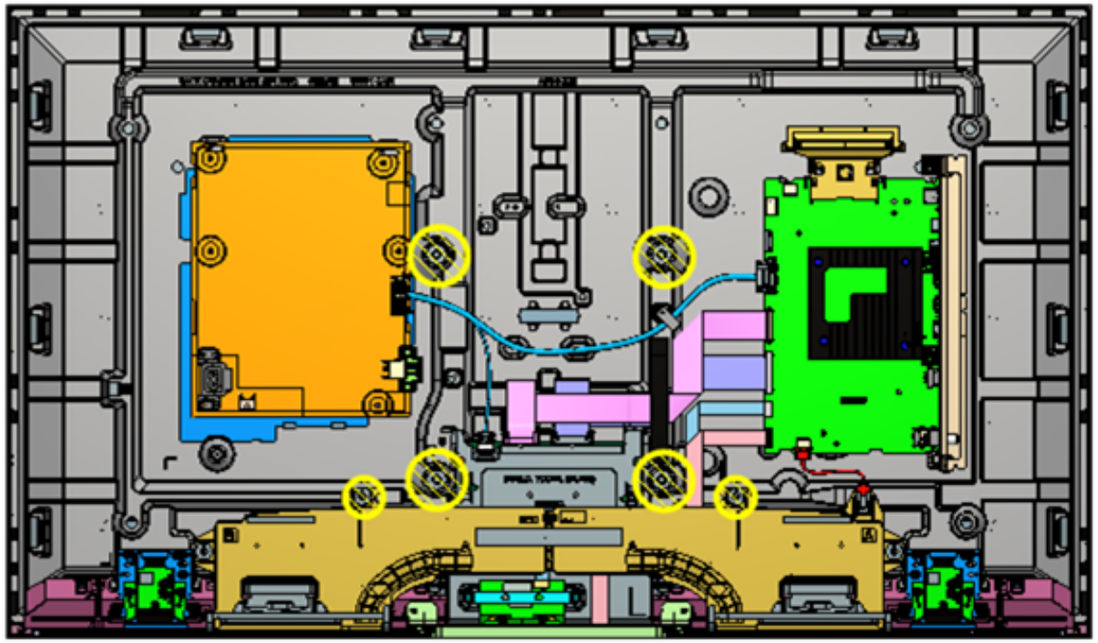
INFORMATION

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.



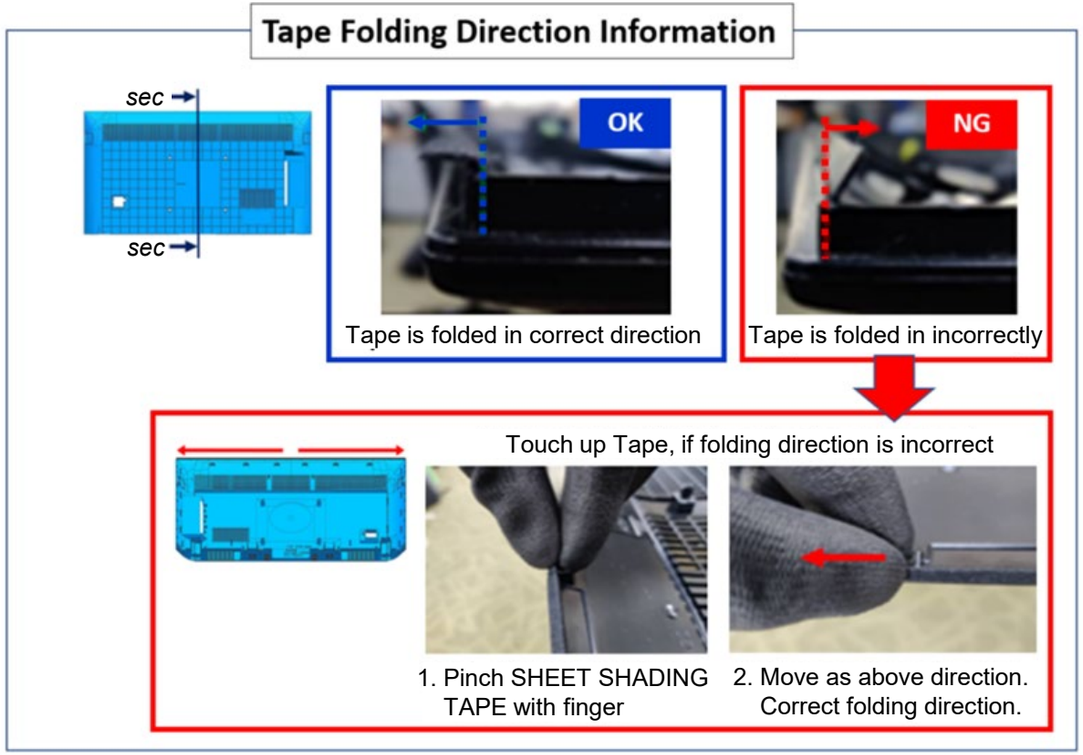
After assemble Receiver board to Smart Core, operator need to insert Receiver board FFC in straight condition.

INFORMATION



Caution: Ensure harness is away from inhibit area

INFORMATION

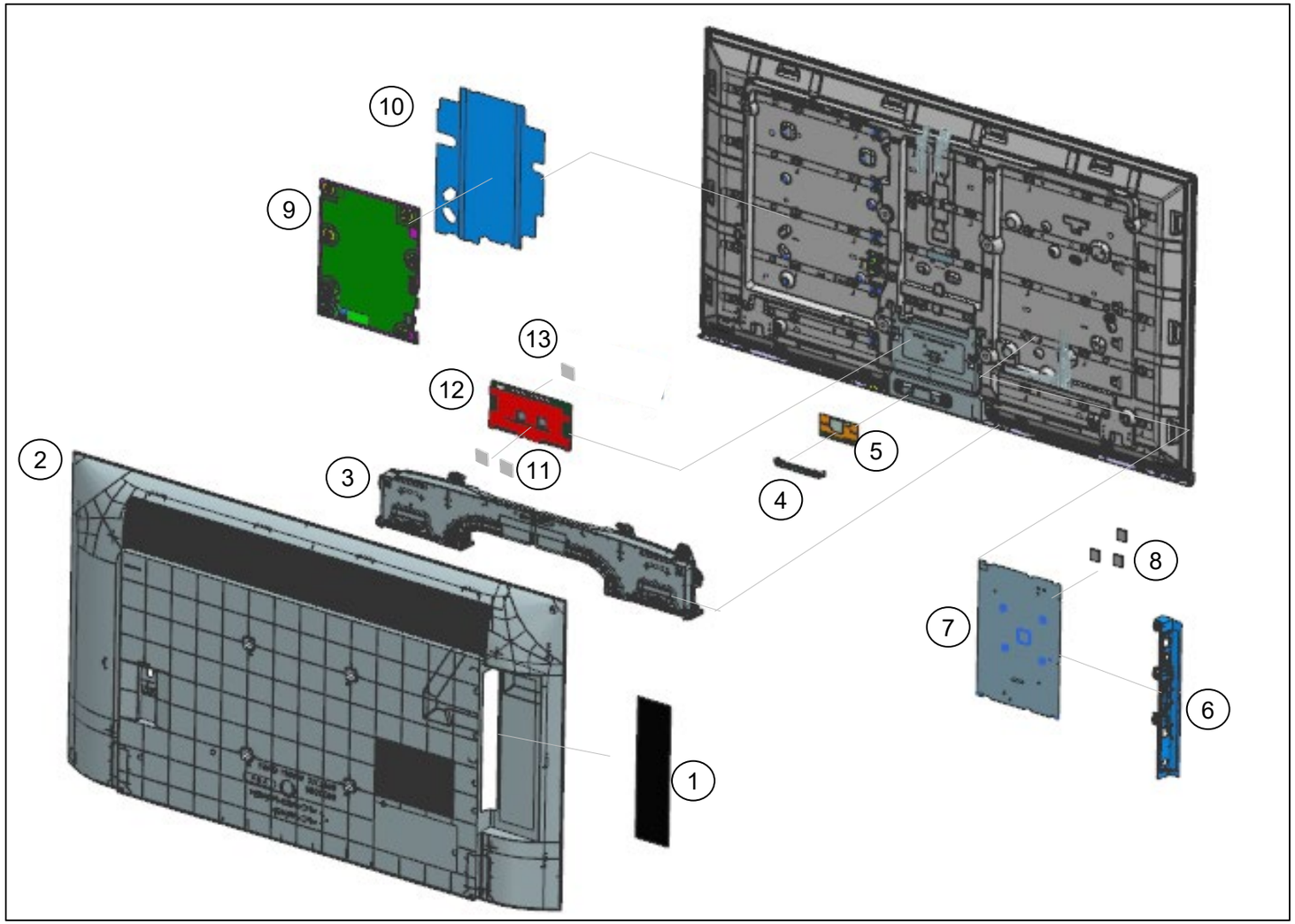


SECTION 1: KD-43X85K

1-4. EXPLODED VIEW AND PART LIST

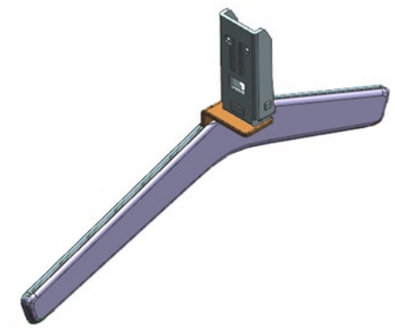
- Place the TV set facing downwards on a stable, level surface before disassembly and assembly of parts.
- ⚠ and shaded parts are critical for safety. Replace only with part number specified.
- 🔒 Parts contain confidential information. Strictly follow the instruction whenever the components are repaired and/or replaced

- (*) 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



Stand

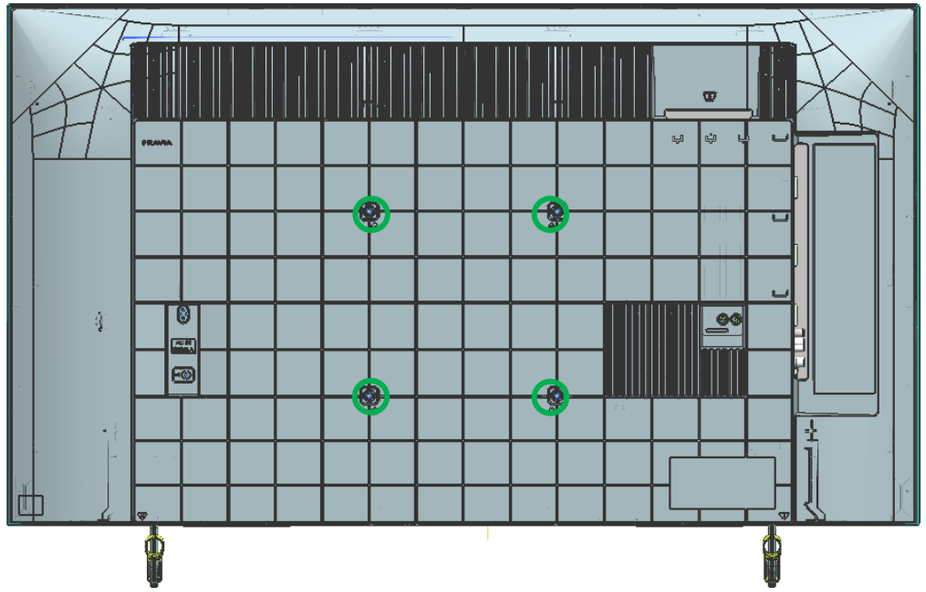
14 15

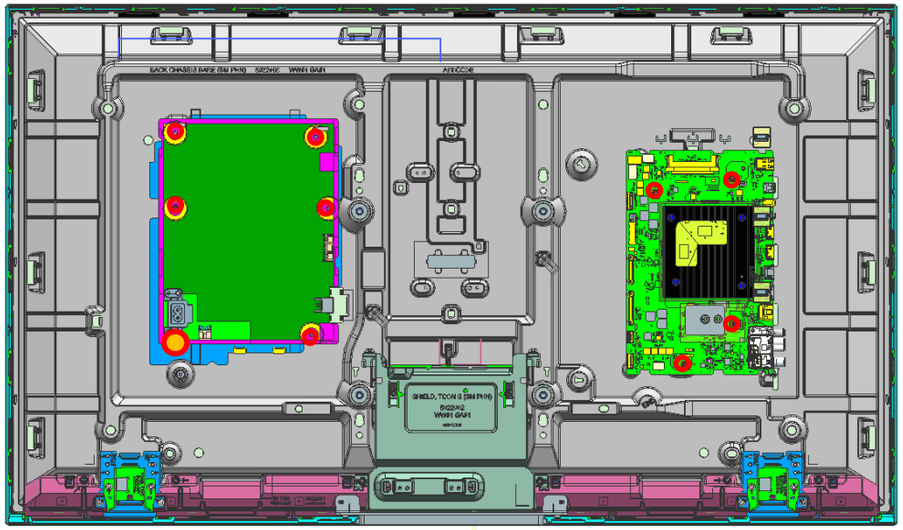


SET PART LIST

REF. NO	PART NO.	DESCRIPTION	UCM
1	5-039-646-01	LABEL, SIDE TERMINAL HP (HRS)	•
⚠ 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)	•
🔒 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)	•
⚠ 9	1-009-799-31	GL11B-STATIC CONVERTER (TV)	•
⚠ 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	•

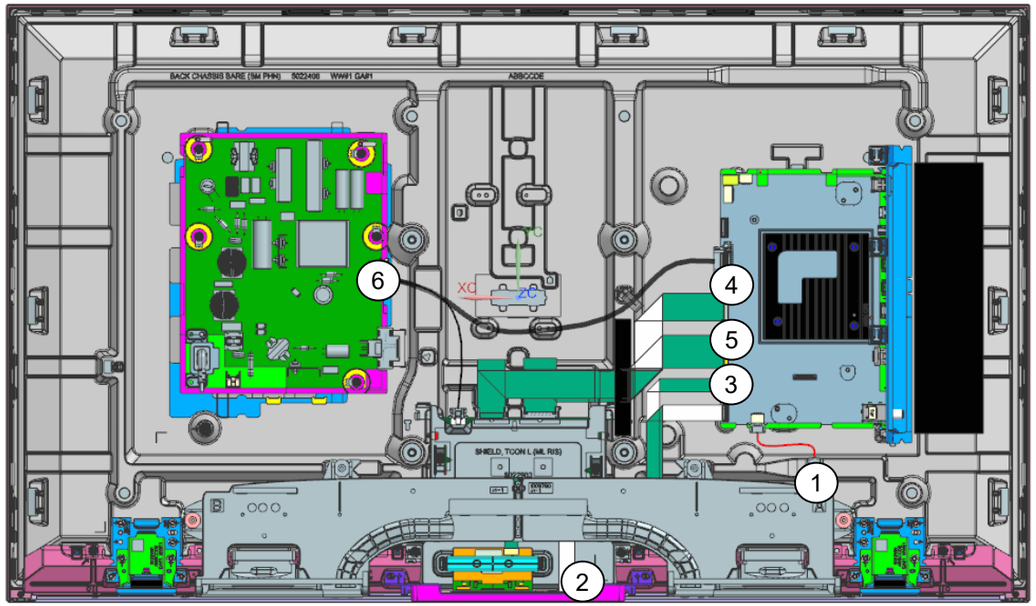
SCREW





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

CONNECTOR



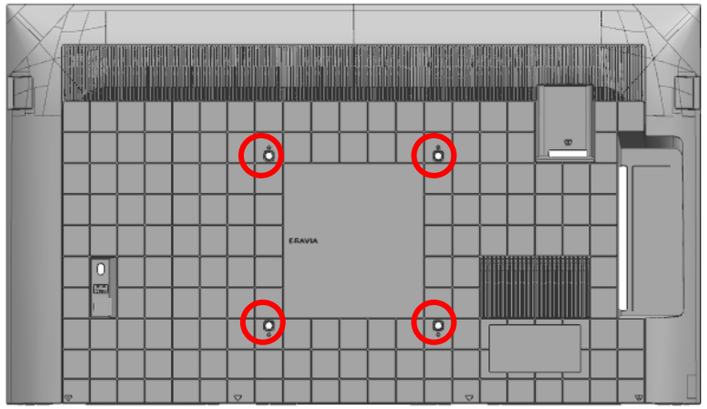
REF. NO	PART NO.	DESCRIPTION	REMARKS
1	1-010-989-12	CONNECTOR ASSY 4P (SP)	CN3550(BM5A)/CN6600(BM5STY)/ CN6603 (BM5ST)-SP(1)
2	1-010-993-11	FLEXIBLE FLAT CABLE 25P	CN1200(BM5A)-CN102(HT2)(1)
3	1-010-991-11	FLEXIBLE FLAT CABLE 20P	CN3801(BM5A)-J1(WIFI/BT)(1)
4	1-011-589-11	FLEXIBLE FLAT CABLE 41P	CN4201(BM5A)-TCON(1)
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)

OTHER PARTS

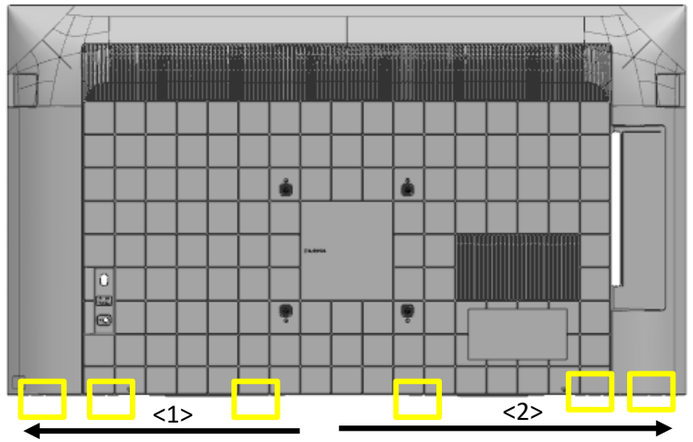
PART NO.	DESCRIPTION	UCM	REMARKS
4-535-064-61	ASSY,FALL LOCK,BELT LL	•	-
5-022-201-12	BAG, CL ASSY (SM LYX)	•	(Including CLAMPER (4L BNN) (Qty 2) installed at Main Stand. Refer Setup Guide for details)
5-009-030-01	CLAMPER,CABLE L(BNN)	•	-
⚠ 1-005-642-12	C7L AC POWER CORD SETS (US)	•	-
1-013-691-23	REMOTE 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.)

REAR COVER

1. Remove the screws from the rear cover (4 pcs)



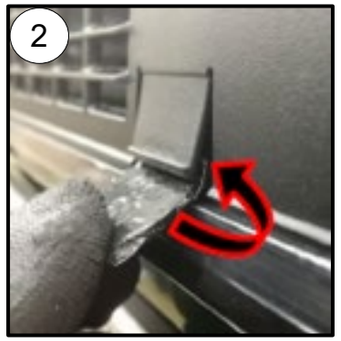
2. Unhook the bottom hook, starting from center.



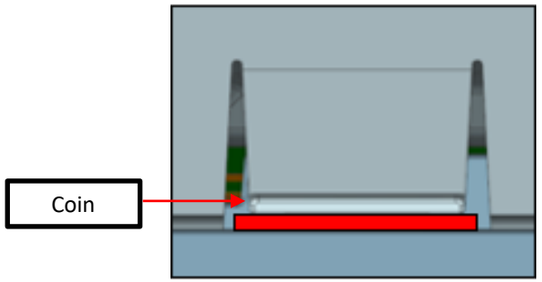
① Unhook two hooks closest to center simultaneously to prevent lock back. (Refer to the next page for the location of hooks)

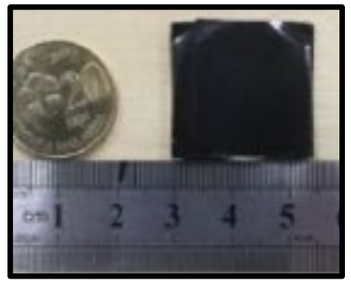
② Unhook both hooks using coin or jig.

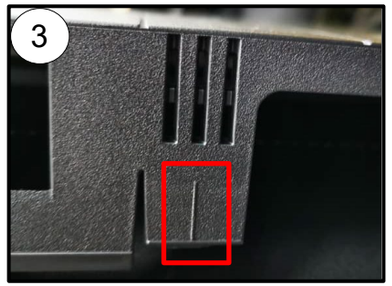
③ Use mirror or touch the line to assist locating the hook position.



Coin or jig to unhook bottom Rear Cover - Bezel hook
*Wrap coin in tape (55mmX25mm)
*Thickness of coin approximately 2mm

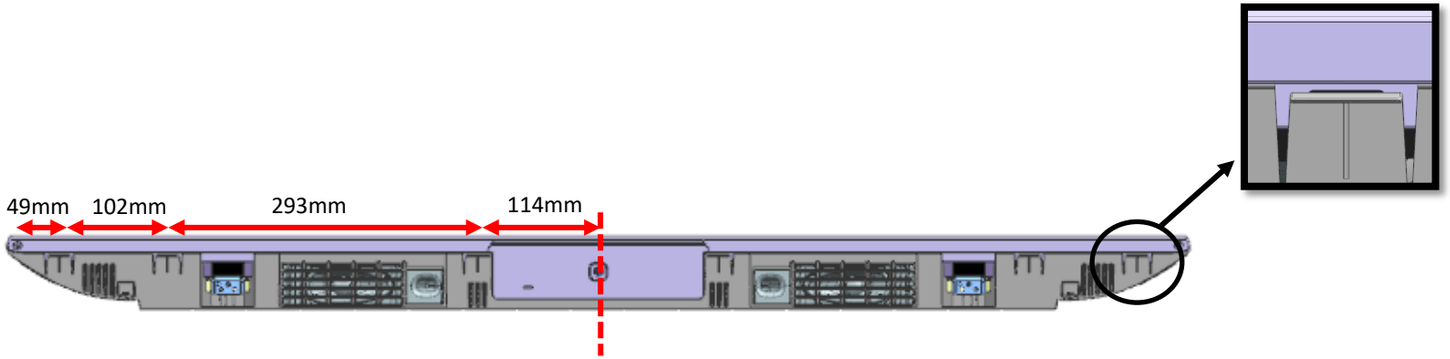




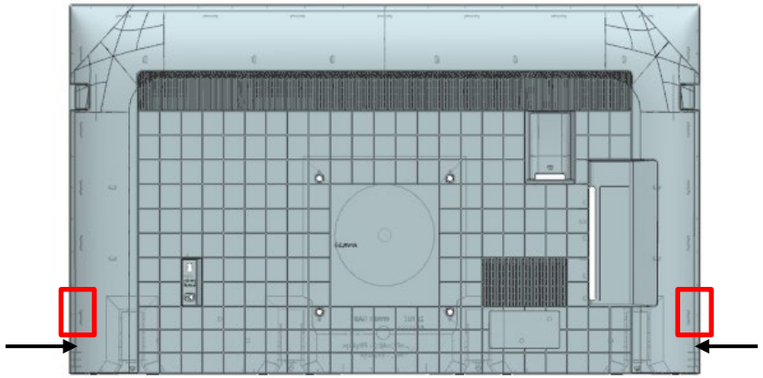


REAR COVER

Bottom Hook Position



3. Unhook corner hook.

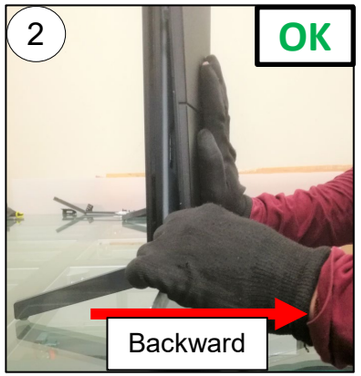


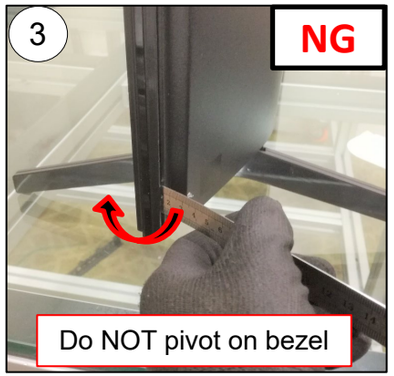
Ruler or jig to release corner hook
*Wrap ruler with tape to prevent scratch

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.

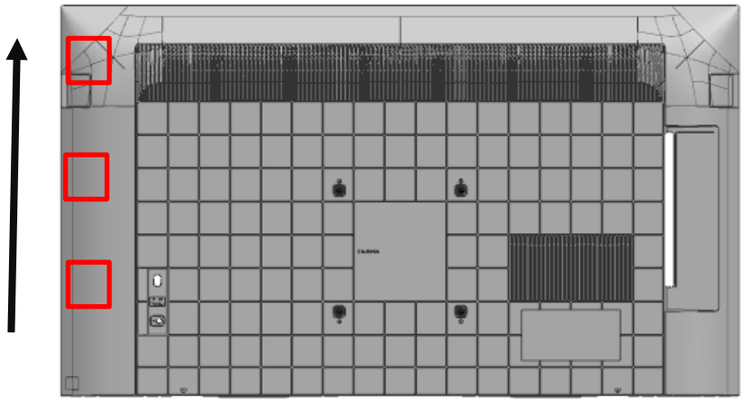




REAR COVER

4. Unhook left side hooks.

Total rear cover back chassis : 3 hooks



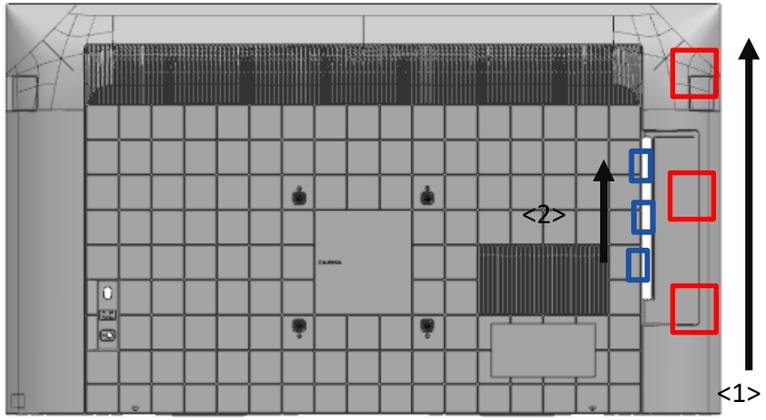
① Grip the rear cover by hand and use a ruler or jig to remove the hook of the rear cover back chassis.

② Flex the rear cover outward to remove the hook. Support set with arm.

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.

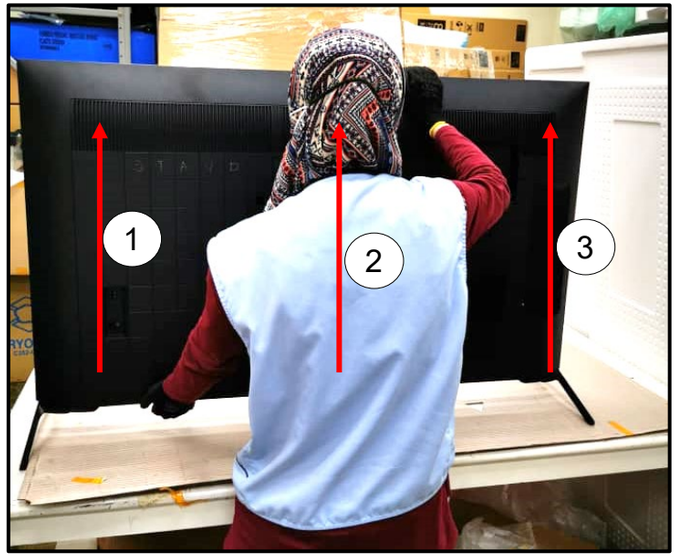
② Pull the rear cover below the side jack to remove the hook.

③ Remove the remaining side hooks.

REAR COVER

6. Unhook top row.

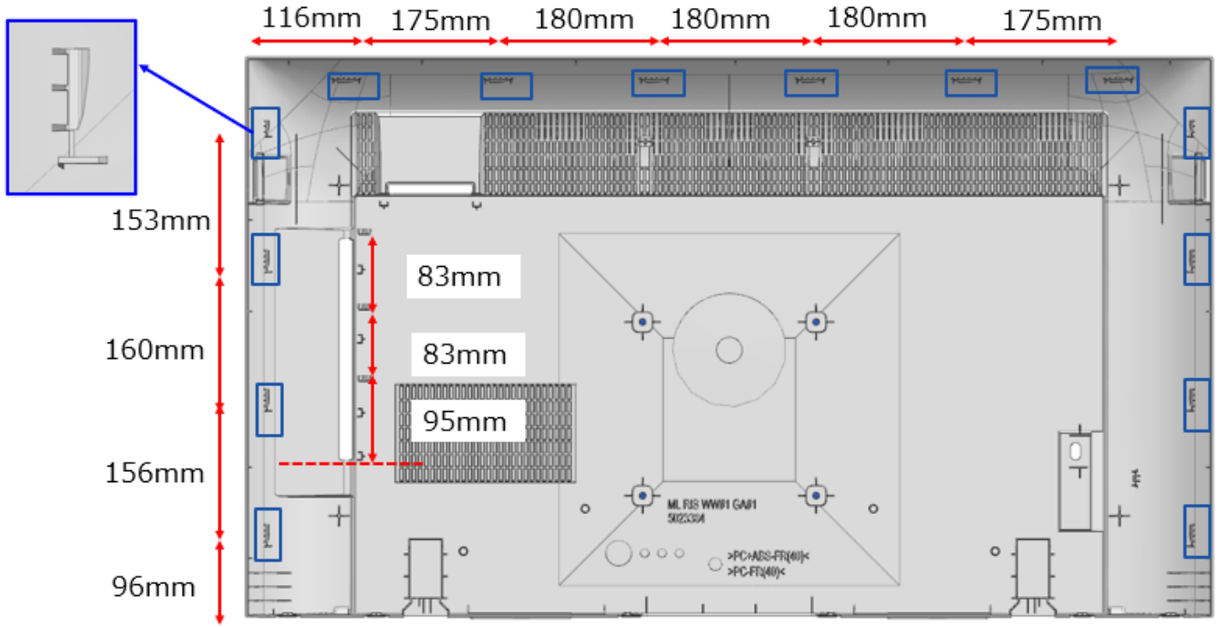
Total hooks (top row): 6 hooks



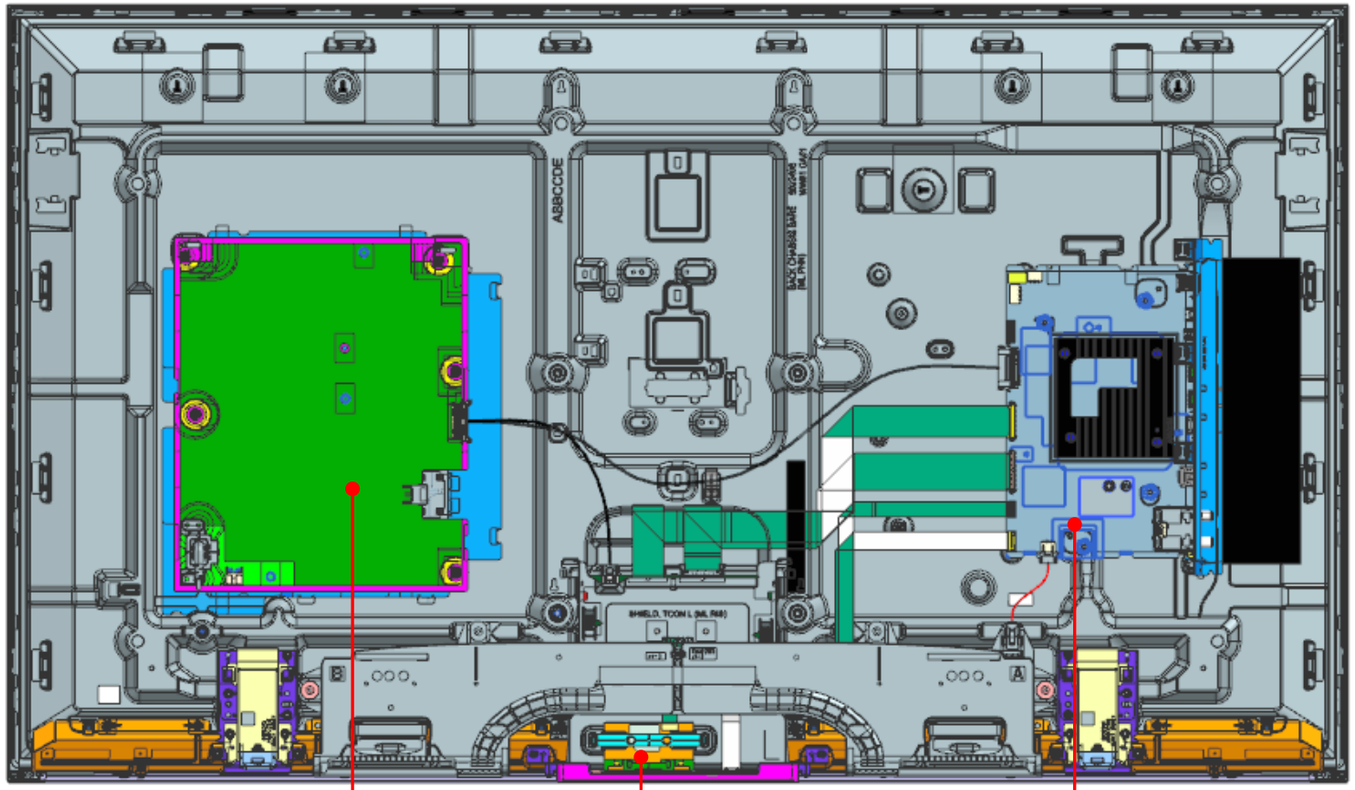
① Tilt the rear cover and push upwards on the left and right side.

② Pull the rear cover below the side jack to remove the upper hook.

Hook positioning.



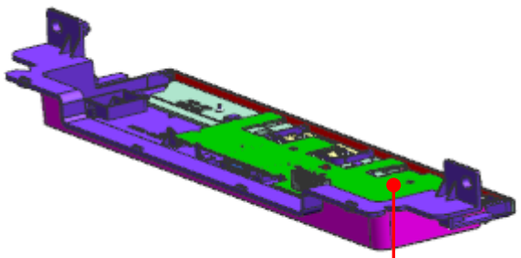
2-2. BOARD LOCATION



POWER BOARD

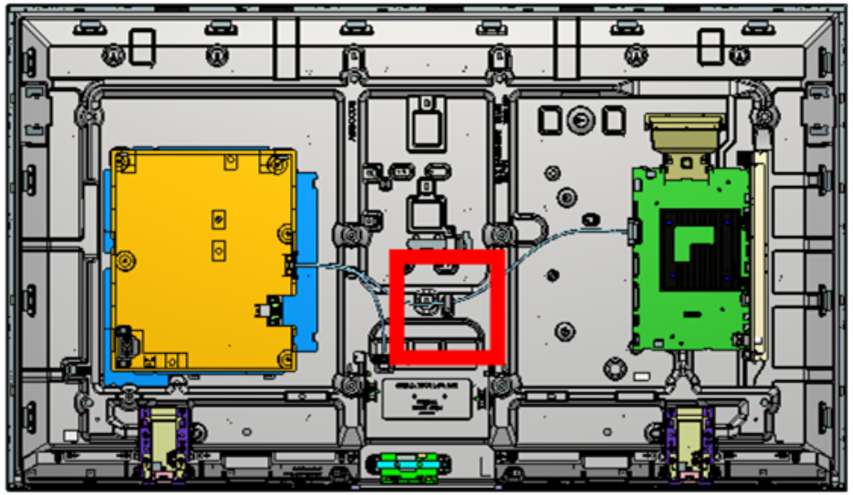
WI-FI BOARD

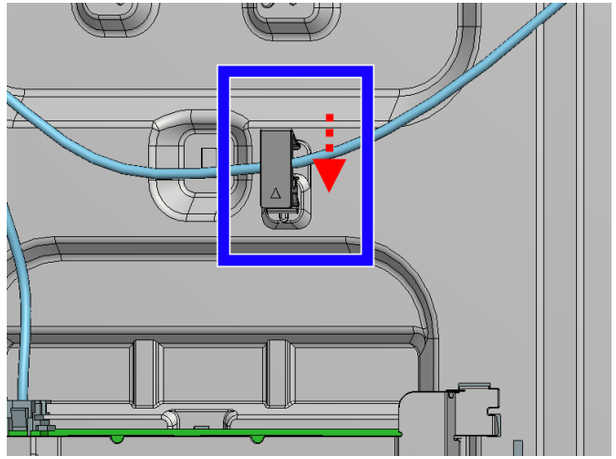
MAIN BOARD



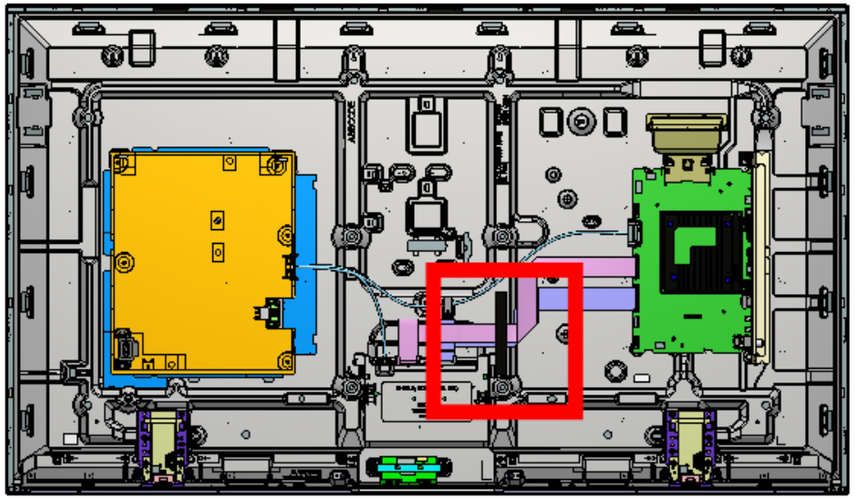
RECEIVER BOARD

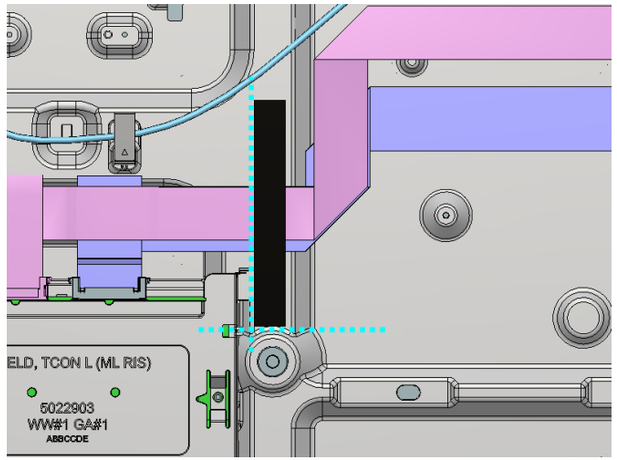
WIRE DRESSING





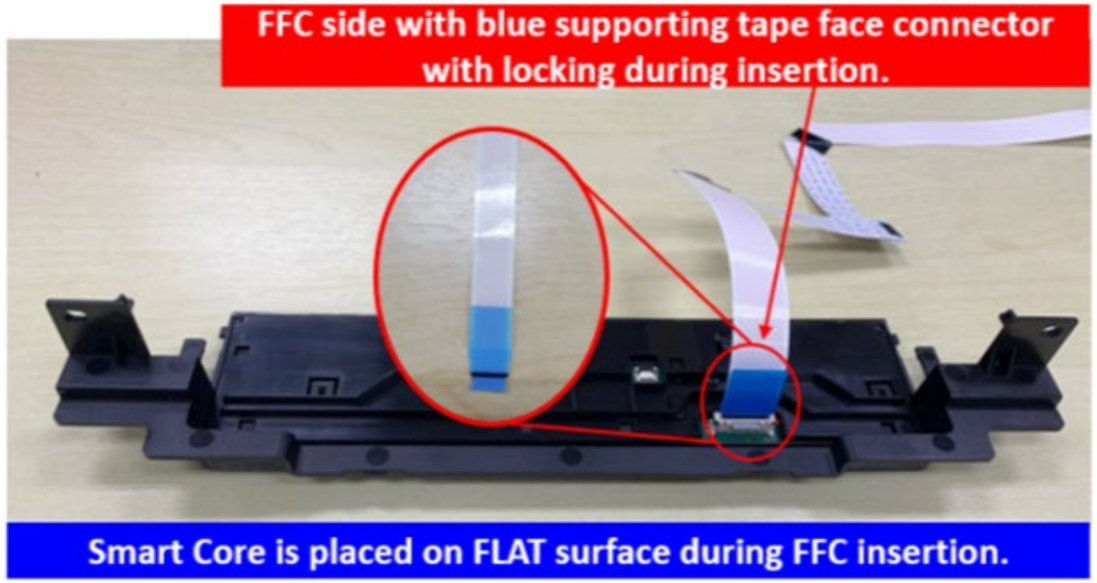
TAPE





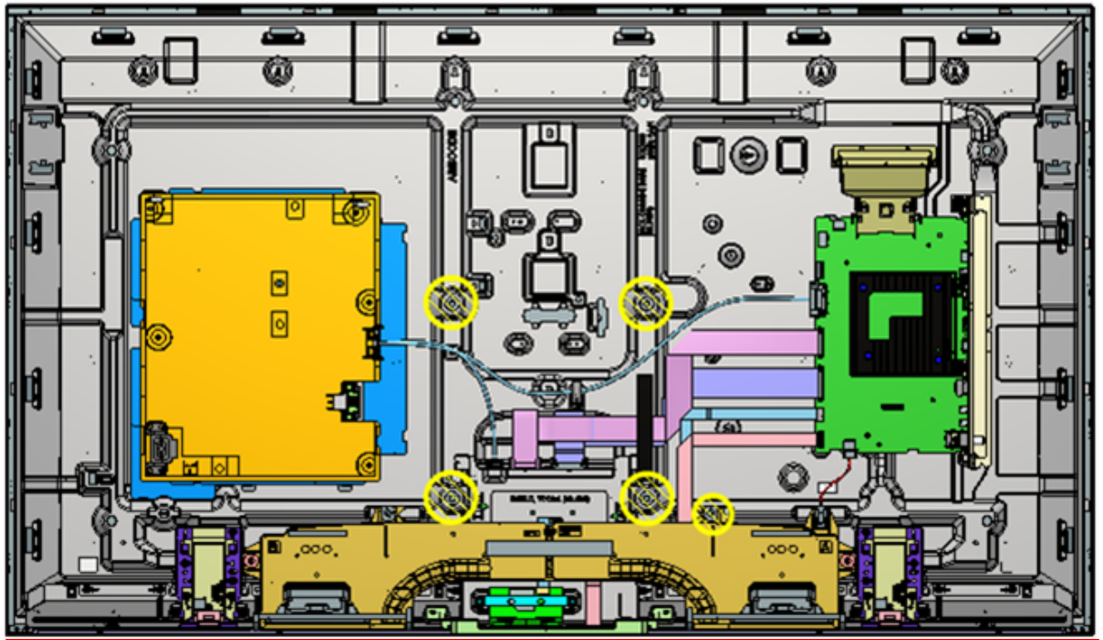
INFORMATION

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.



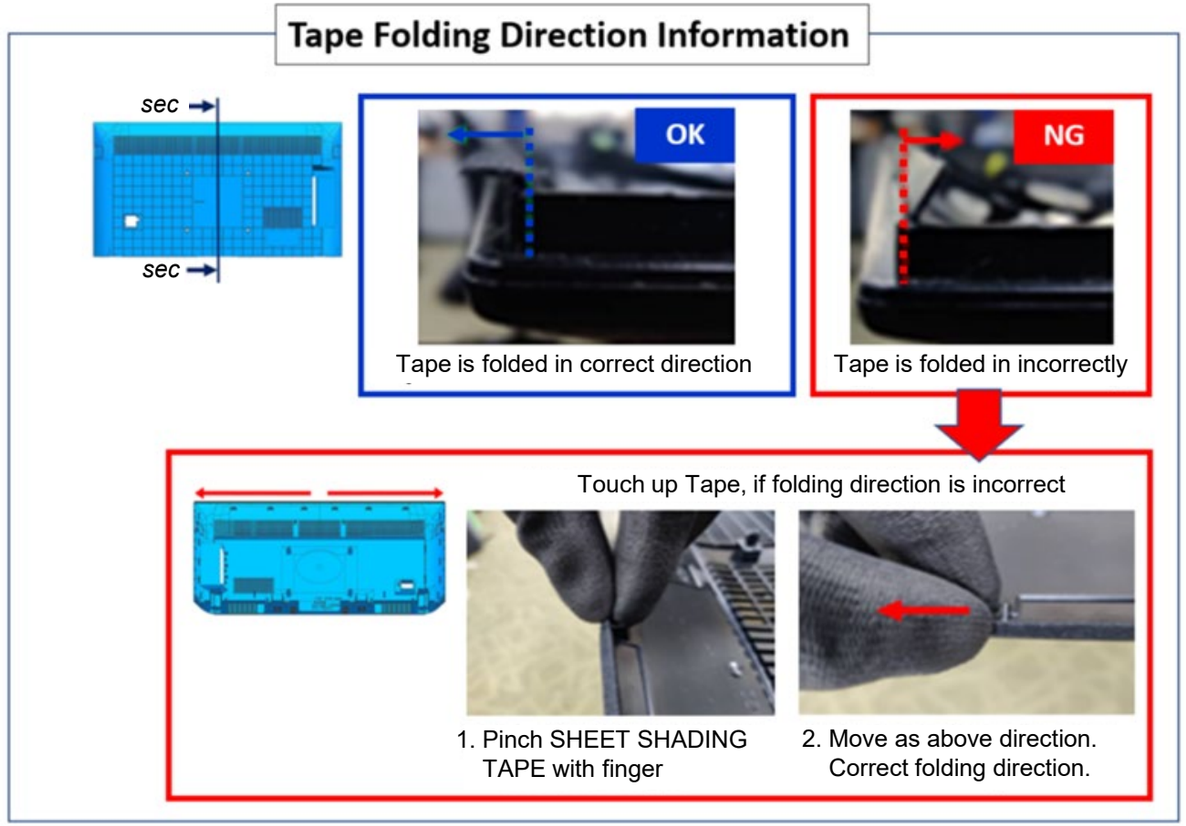
After assemble Receiver board to Smart Core, operator need to insert Receiver board FFC in straight condition.

INFORMATION



Caution: Ensure harness is away from inhibit area

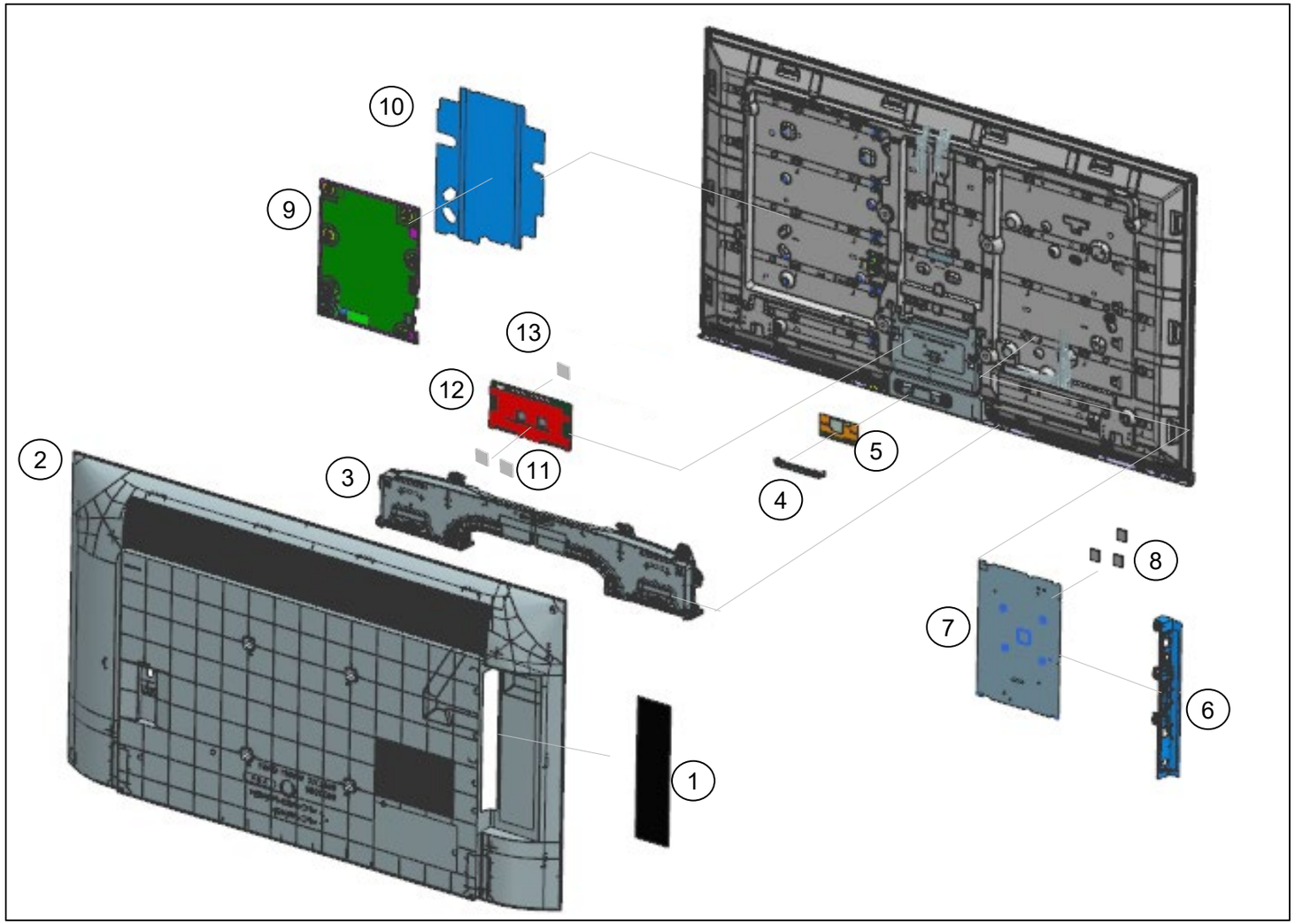
INFORMATION



2-4. EXPLODED VIEW AND PART LIST

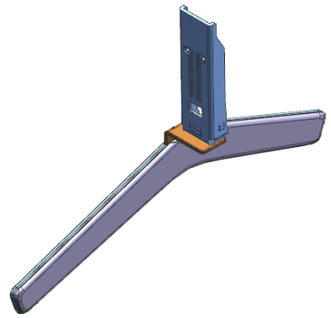
- Place the TV set facing downwards on a stable, level surface before disassembly and assembly of parts.
- ⚠ and shaded parts are critical for safety. Replace only with part number specified.
- 🔒 Parts contain confidential information. Strictly follow the instruction whenever the components are repaired and/or replaced

- (*) 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



Stand

14 15



SET PART LIST

REF. NO	PART NO.	DESCRIPTION	UCM
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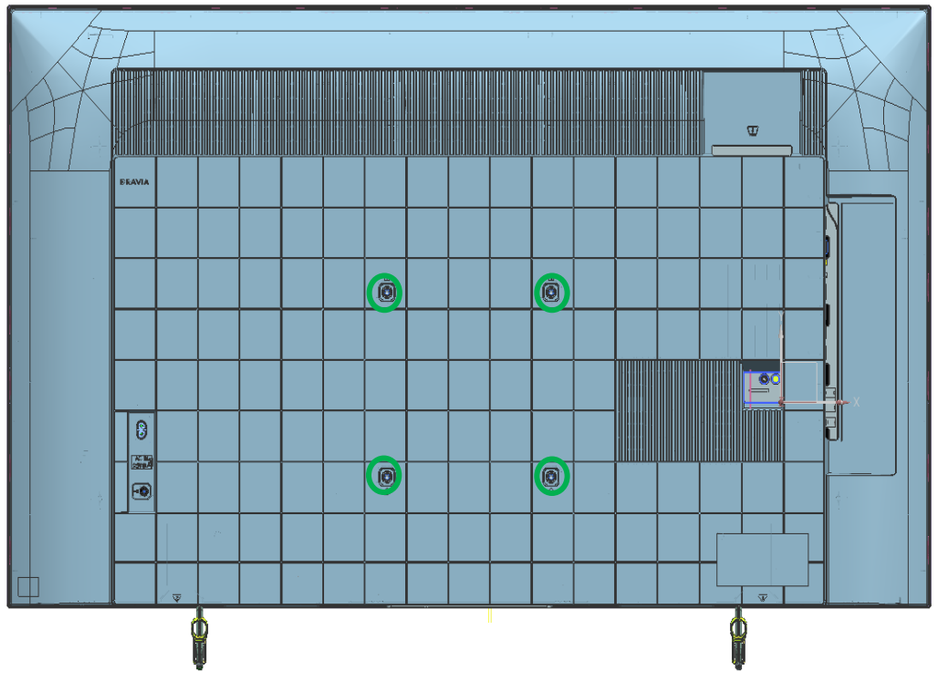
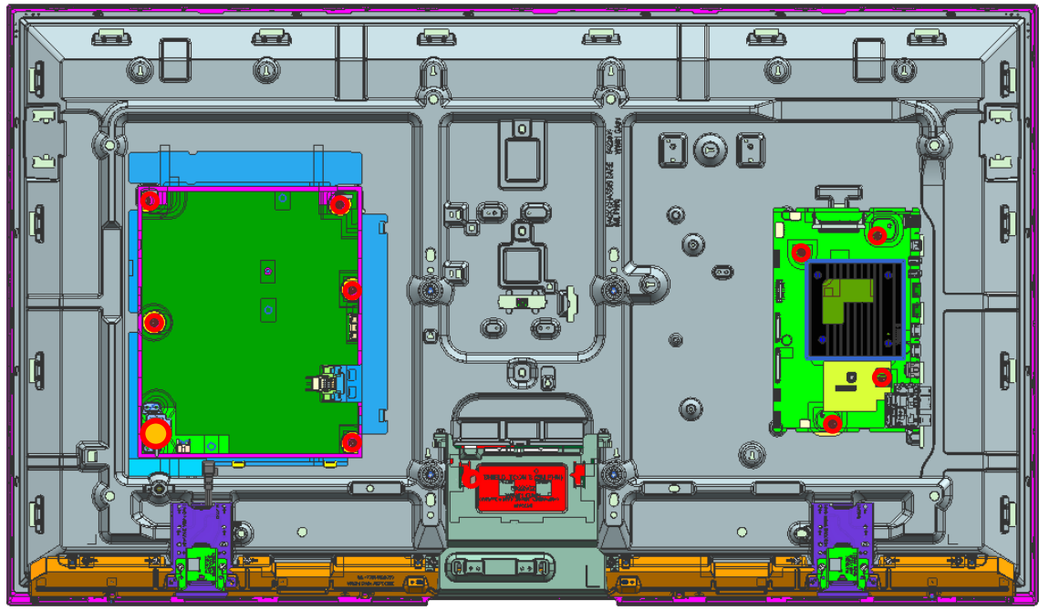
2	5-027-812-24	REAR COVER ASSY (ML LYX)	•
3	1-009-790-11	SP-BOX ASSY,FY21 W30 ONE BOX	•
4	5-009-258-21	BRACKET, WIFI(BNN)	•
5	1-005-419-32	WLAN/BT MODULE(11AC)FXC	•
6	5-039-955-11	BRACKET SIDE (BNN) A	•
7	A-5042-692-A	COMPL_SVC_BM5A_FH_UCM	•
8	4-457-451-12	SHEET, THERMAL (BAF)	•
9	1-009-800-31	GL12B-STATIC CONVERTER (TV)	•
10	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	•

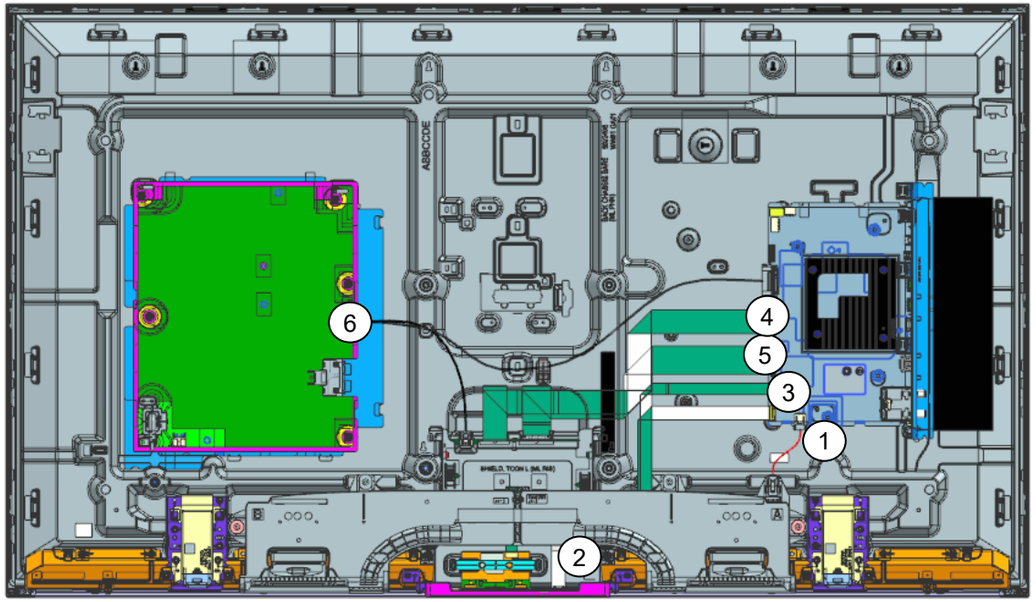
SCREW





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

CONNECTOR



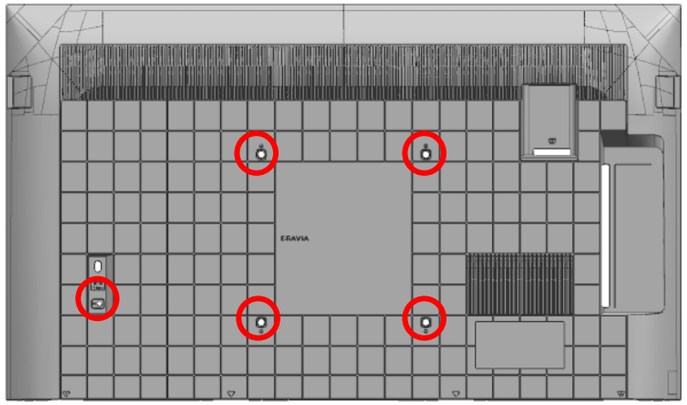
REF. NO	PART NO.	DESCRIPTION	REMARKS
1	1-010-989-12	CONNECTOR ASSY 4P (SP)	CN3550(BM5A)/CN6600(BM5STY)/ CN6603 (BM5ST)-SP(1)
2	1-011-002-11	FLEXIBLE FLAT CABLE 20P	CN3801(BM5A)-J1(WIFI/BT)(1)
3	1-011-004-11	FLEXIBLE FLAT CABLE 25P	CN1200(BM5A)-CN102(HT2)(1)
4	1-011-592-11	FLEXIBLE FLAT CABLE 41P	CN4201(BM5A)-TCON(1)
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)

OTHER PARTS

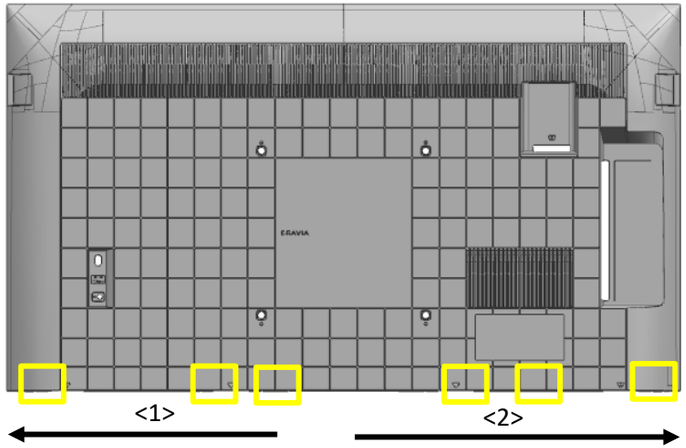
PART NO.	DESCRIPTION	UCM	REMARKS
4-535-064-61	ASSY,FALL LOCK,BELT LL	•	-
5-022-201-12	BAG, CL ASSY (SM LYX)	•	(Including CLAMPER (4L BNN) (Qty 2) installed at Main Stand. Refer Setup Guide for details)
5-009-030-01	CLAMPER,CABLE L(BNN)	•	-
⚠ 1-005-642-12	C7L AC POWER CORD SETS (US)	•	-
1-013-691-23	REMOTE 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.)

REAR COVER

1. Remove the screws from the rear cover (5 pcs)



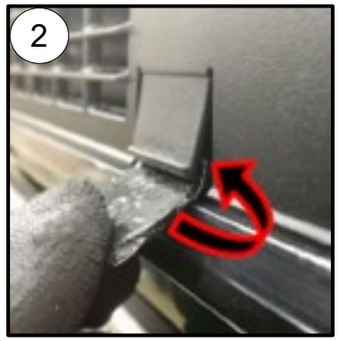
2. Unhook the bottom hook, starting from center.



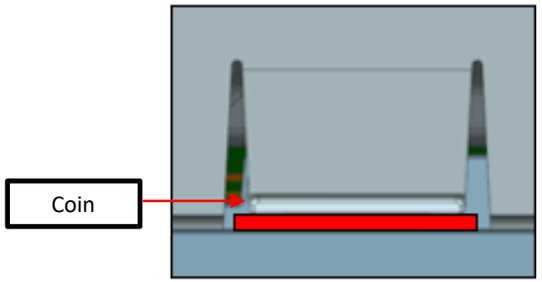
① Unhook two hooks closest to center simultaneously to prevent lock back. (Refer to the next page for the location of hooks)

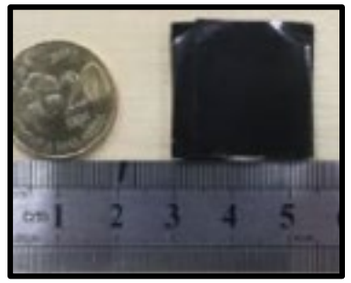
② Unhook both hooks using coin or jig.

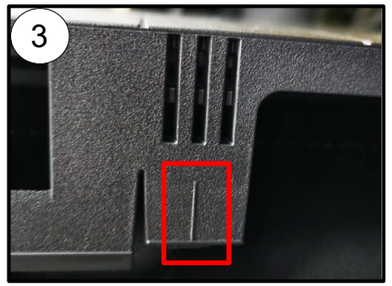
③ Use mirror or touch the line to assist locating the hook position.



Coin or jig to unhook bottom Rear Cover - Bezel hook
*Wrap coin in tape (55mmX25mm)
*Thickness of coin approximately 2mm

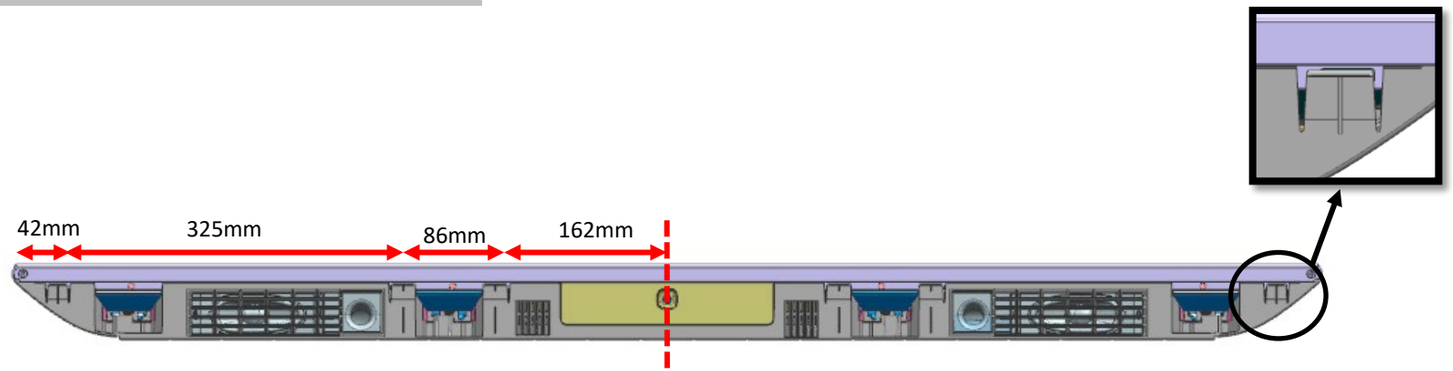




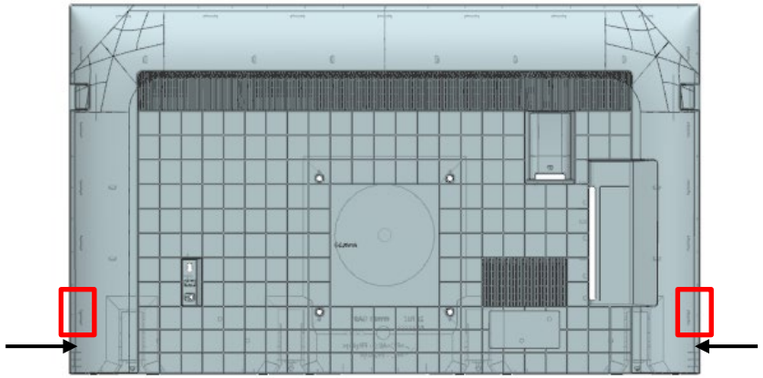


REAR COVER

Bottom Hook Position



3. Unhook corner hook.

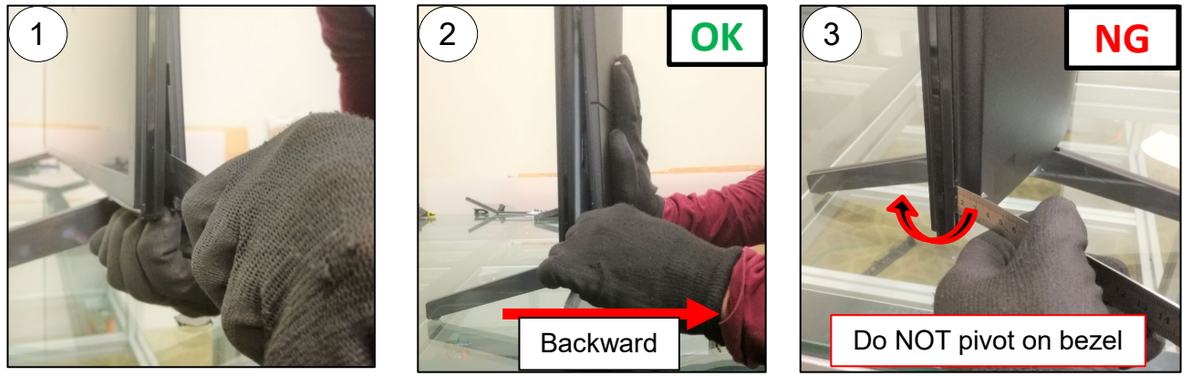


Ruler or jig to release corner hook
*Wrap ruler with tape to prevent scratch

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.

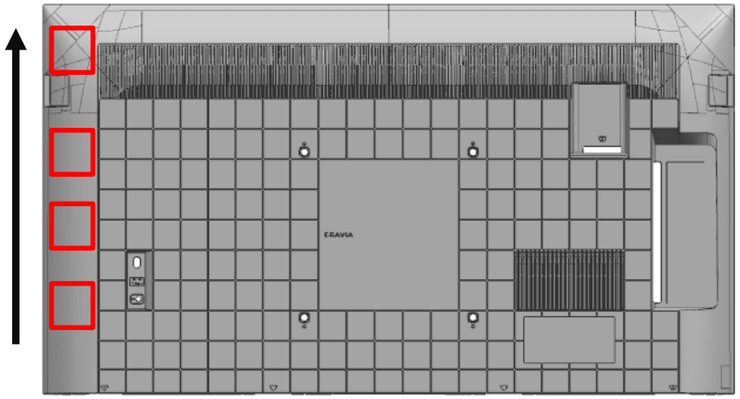
③ DO NOT pivot on bezel when inserting the jig or ruler.



REAR COVER

4. Unhook left side hooks.

Total rear cover back chassis : 4 hooks



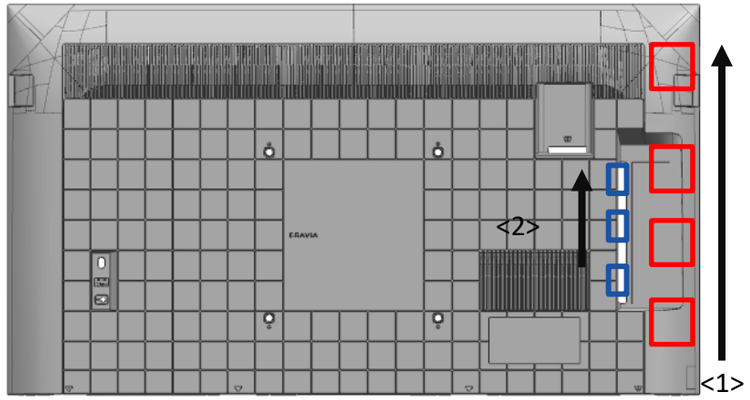
① Grip the rear cover by hand and use a ruler or jig to remove the hook of the rear cover back chassis.

② Flex the rear cover outward to remove the hook. Support set with arm.

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.

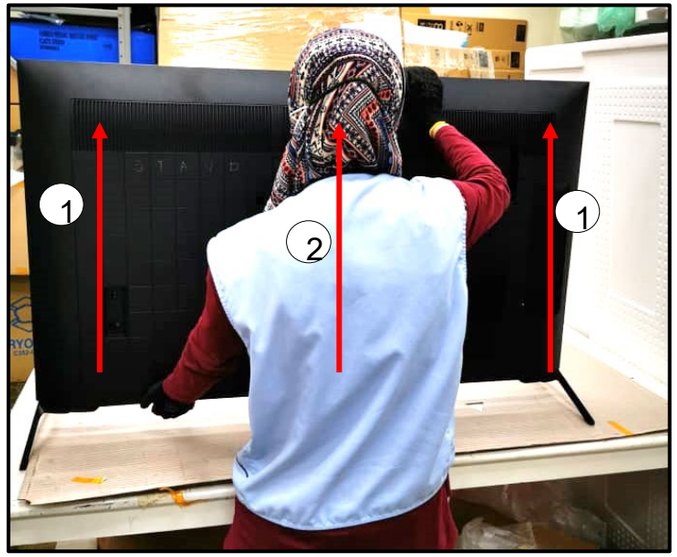
② Pull the rear cover below the side jack to remove the hook.

③ Remove the remaining side hooks.

REAR COVER

6. Unhook top row.

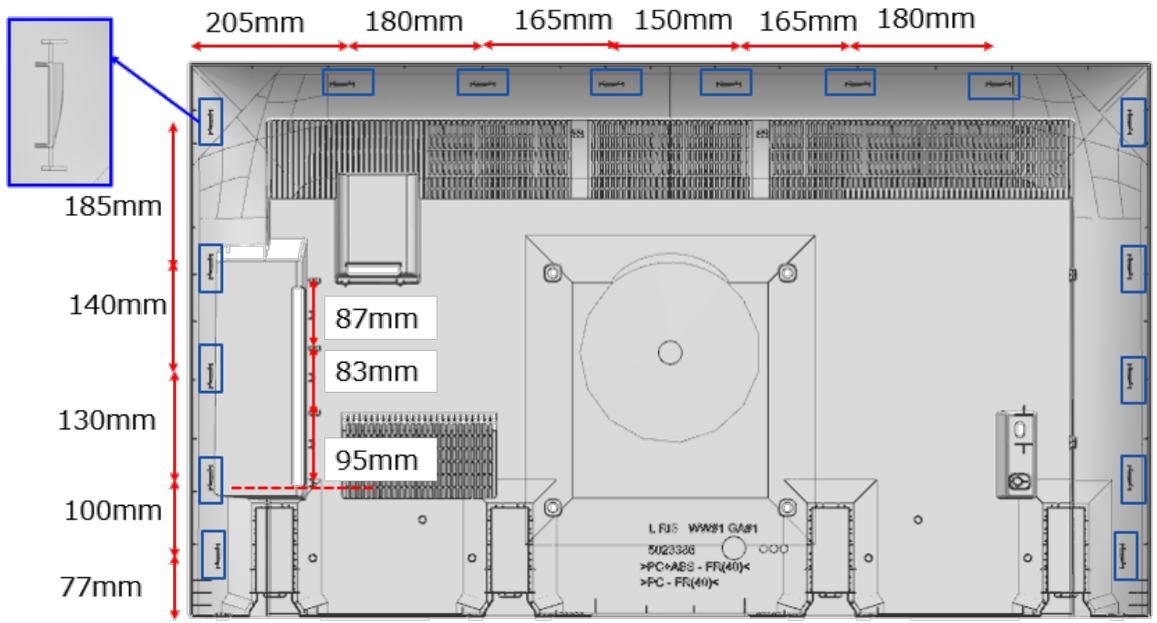
Total hooks (top row): 6 hooks

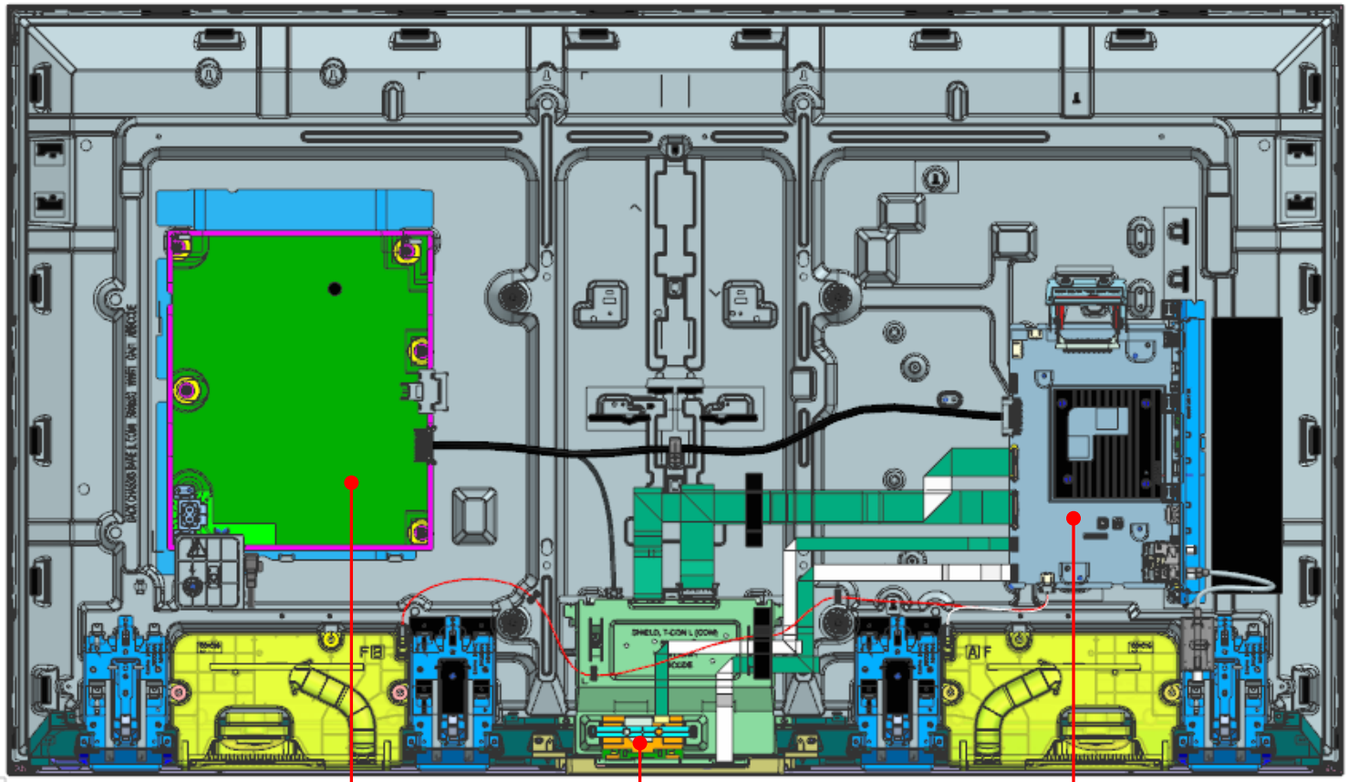


① Tilt the rear cover and push upwards on the left and right side.

② Pull the rear cover below the side jack to remove the upper hook.

Hook positioning.

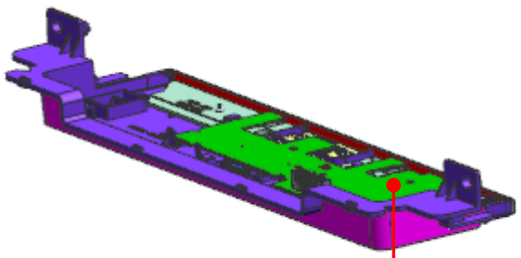




POWER BOARD

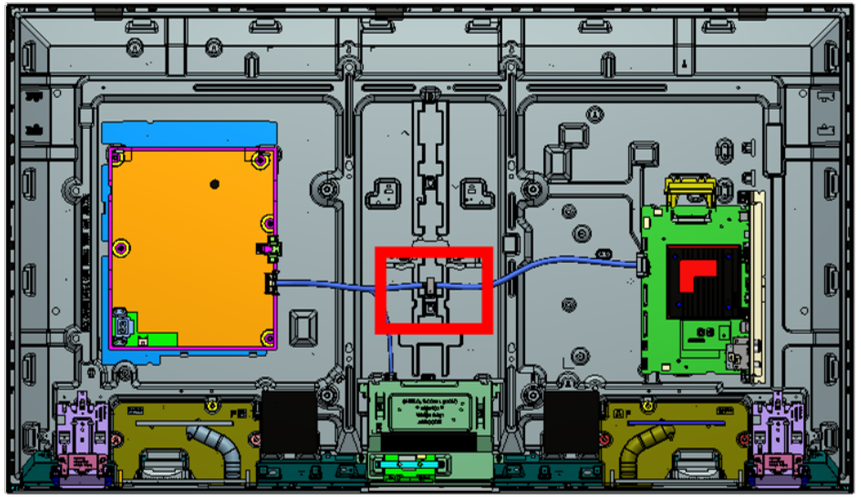
WI-FI BOARD

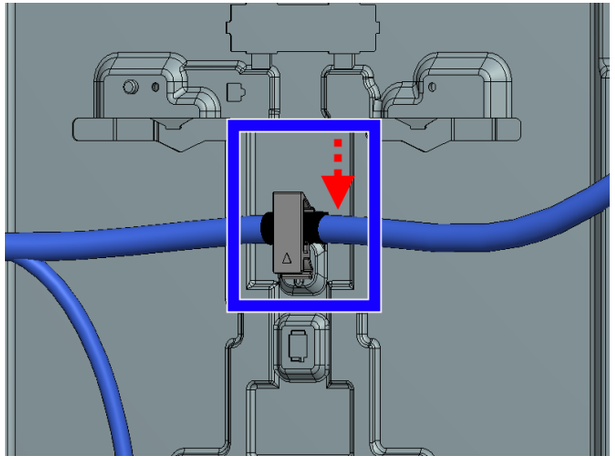
MAIN BOARD



RECEIVER BOARD

WIRE DRESSING

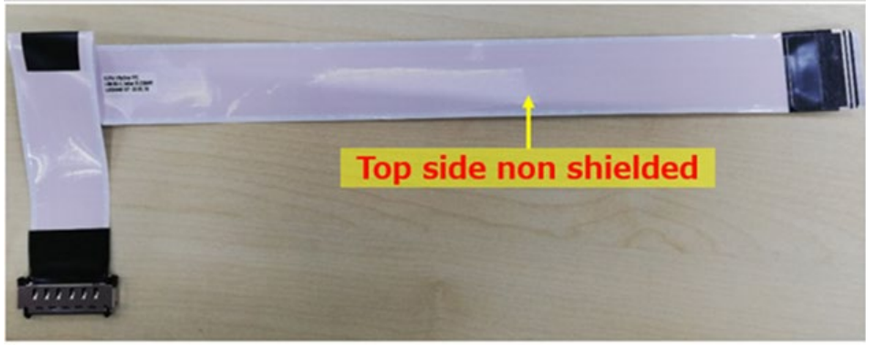


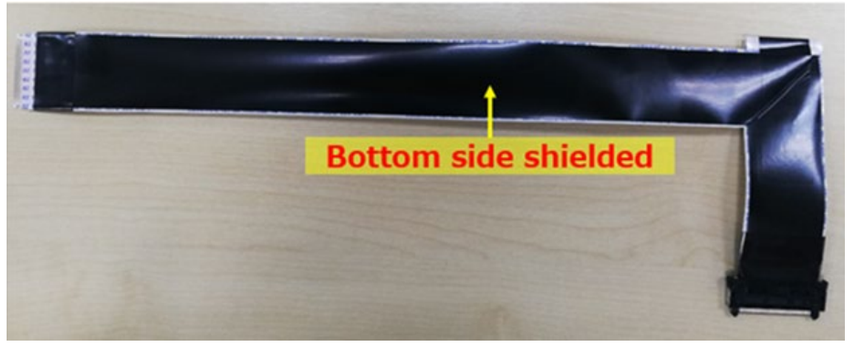


INFORMATION

INFORMATION

FFC 41P/51P (Bottom Shield)

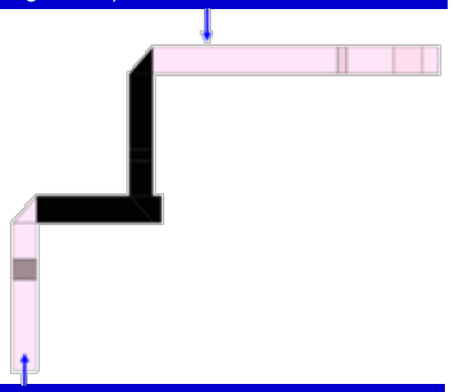




INFORMATION

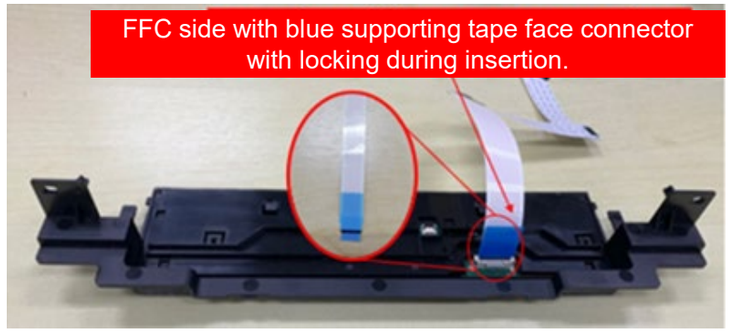
Caution:
1. Operator need to fix Smart Core onFLAT surface before FFC insertion to ensure FFC STRAIGHT insertion.
2. FFC side with blue supporting tape, must face CONNECTOR WITH LOCKING during FFC insertion.

FFC (longer side) is inserted at Main Board



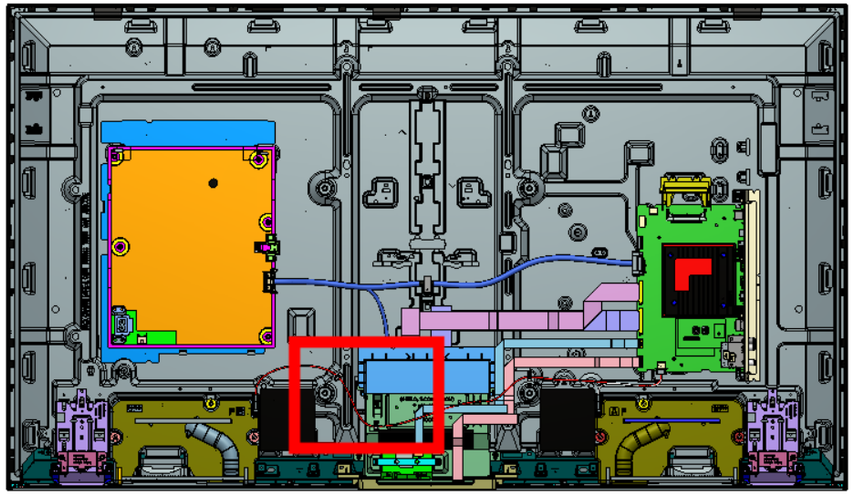
FFC (shorter side) is inserted at Smart Core

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

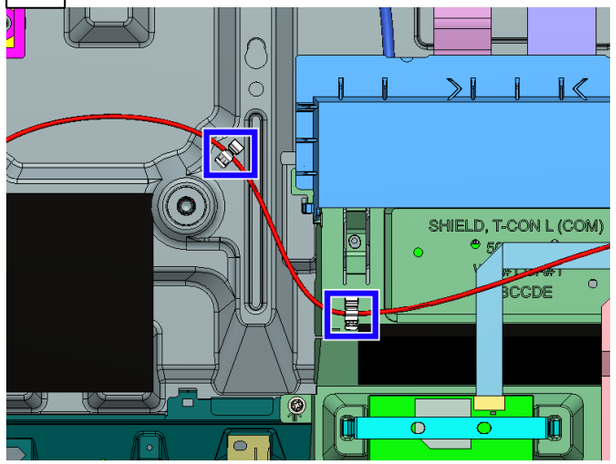


Smart Core is placed on FLAT surface during FFC insertion.

WIRE DRESSING



1



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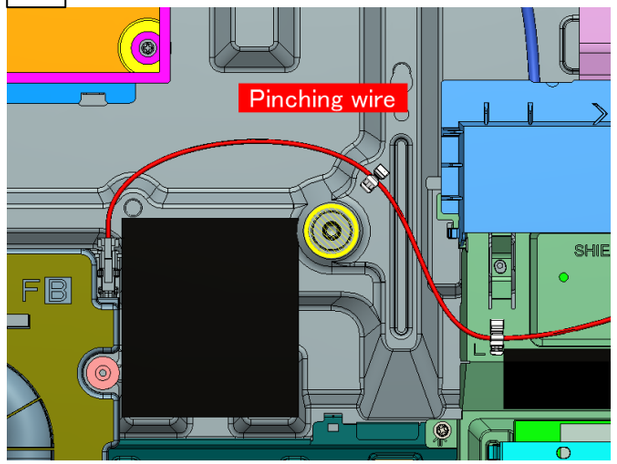
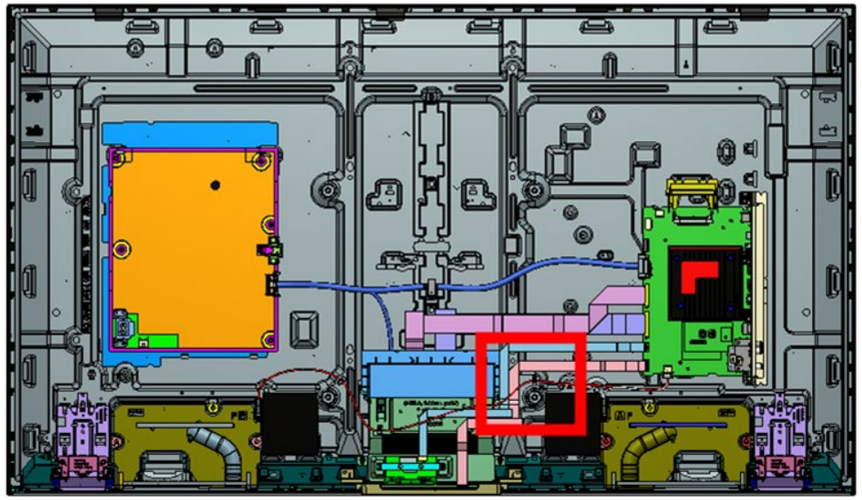
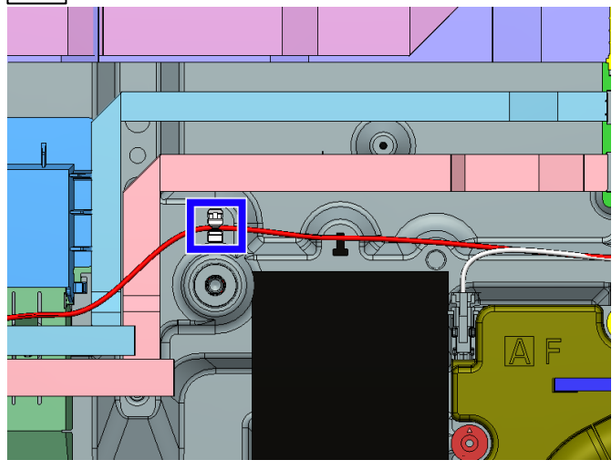


WIRE DRESSING



1



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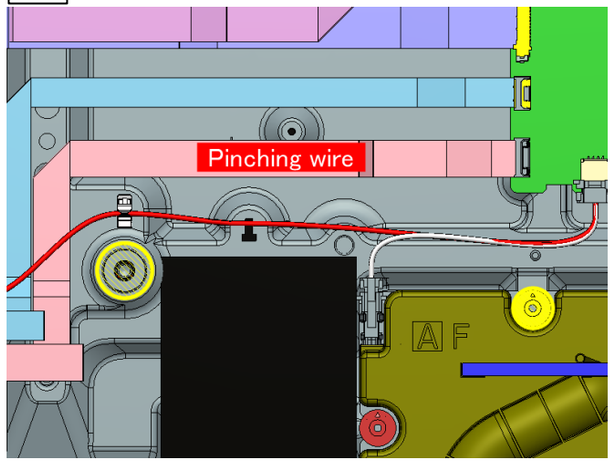
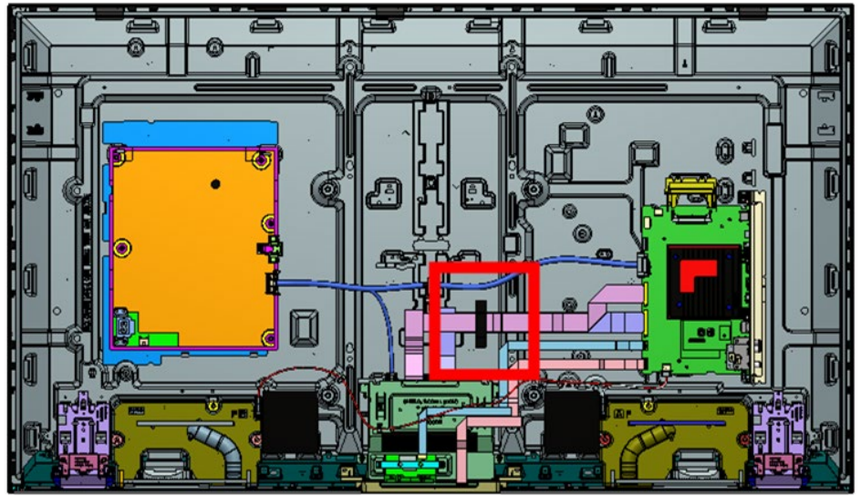
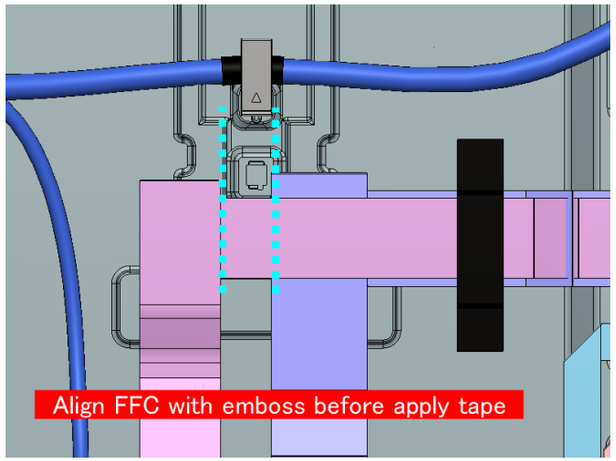


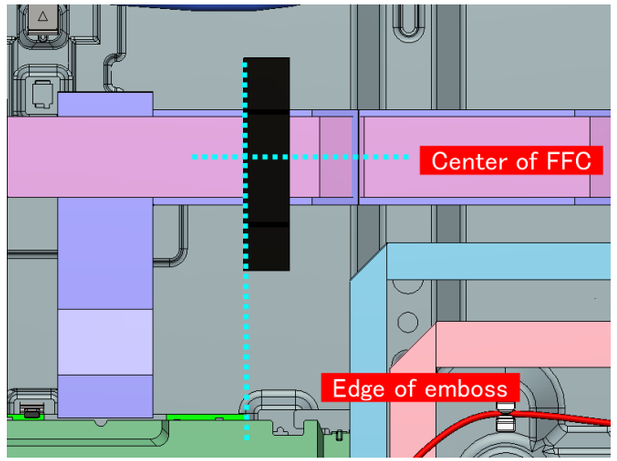
TAPE



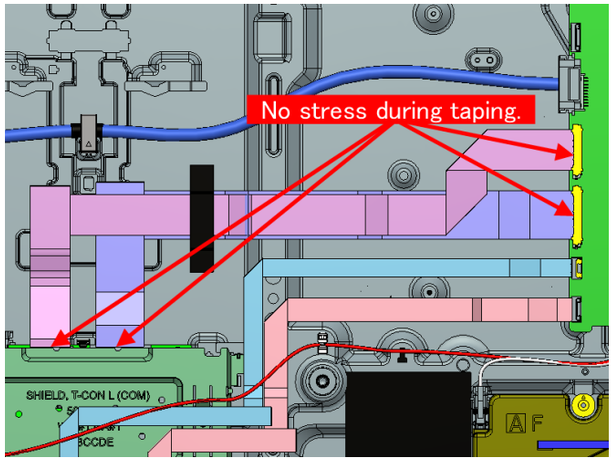
1


Align FFC with emboss before apply tape

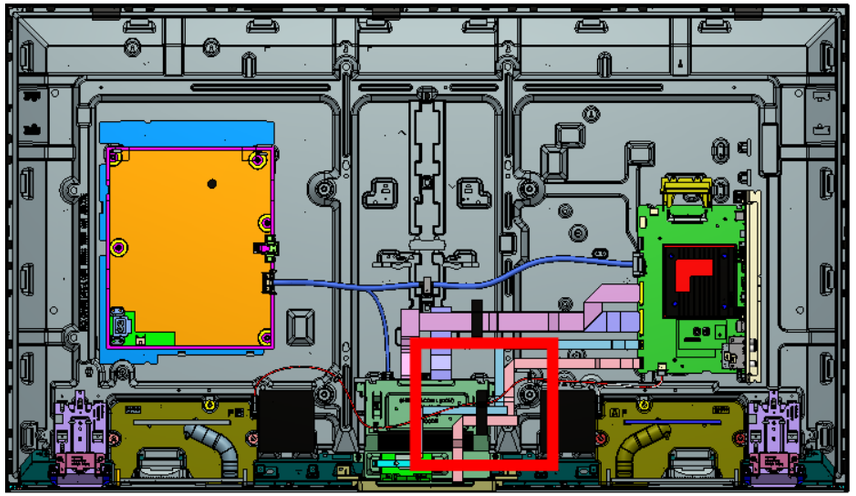
2


Center of FFC
Edge of emboss

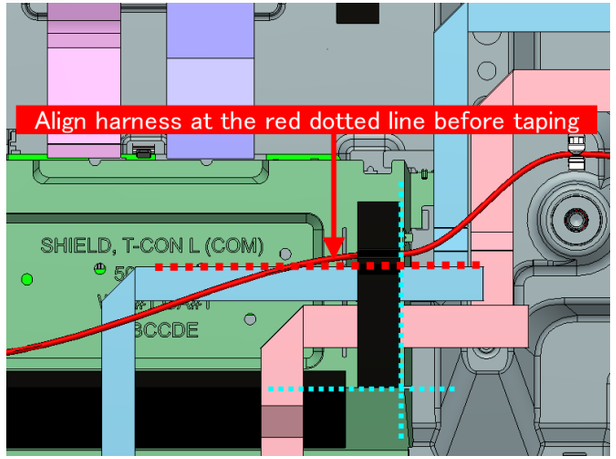
3


No stress during taping.
SHIELD, T-CON L (COM)

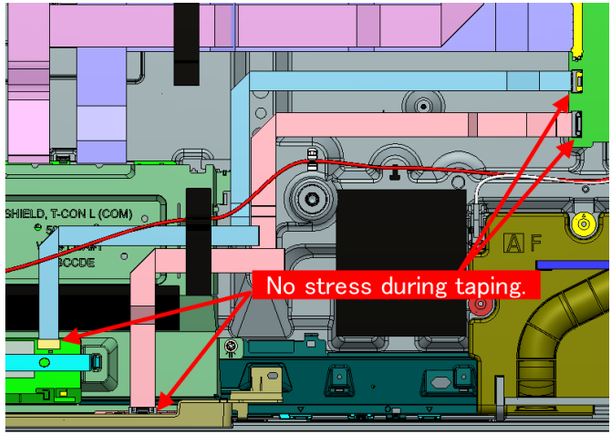
TAPE



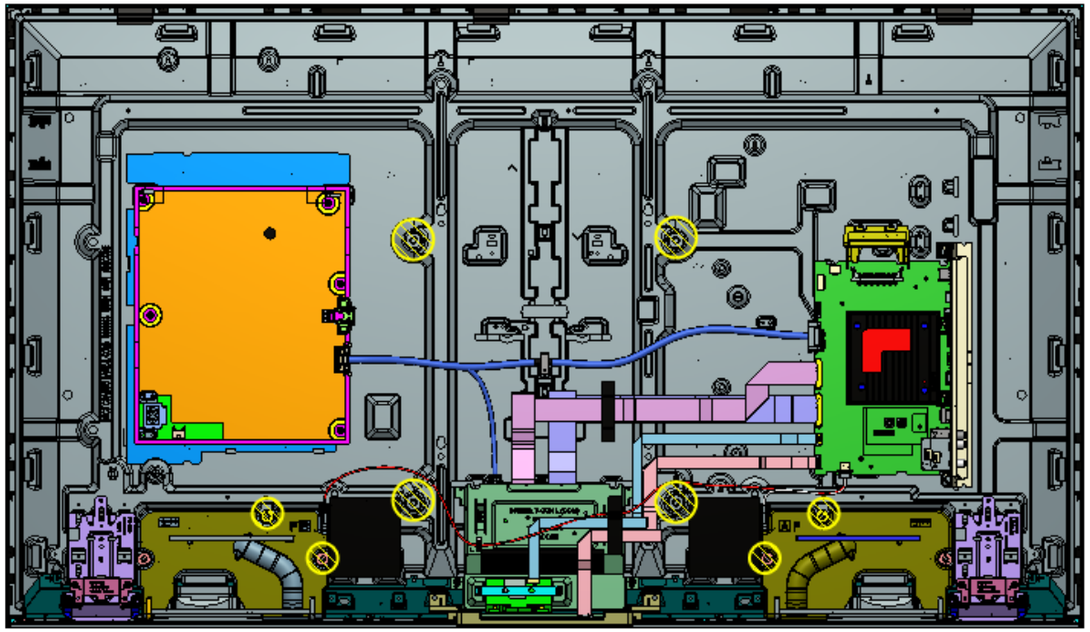
1


Align harness at the red dotted line before taping
SHIELD, T-CON L (COM)

2

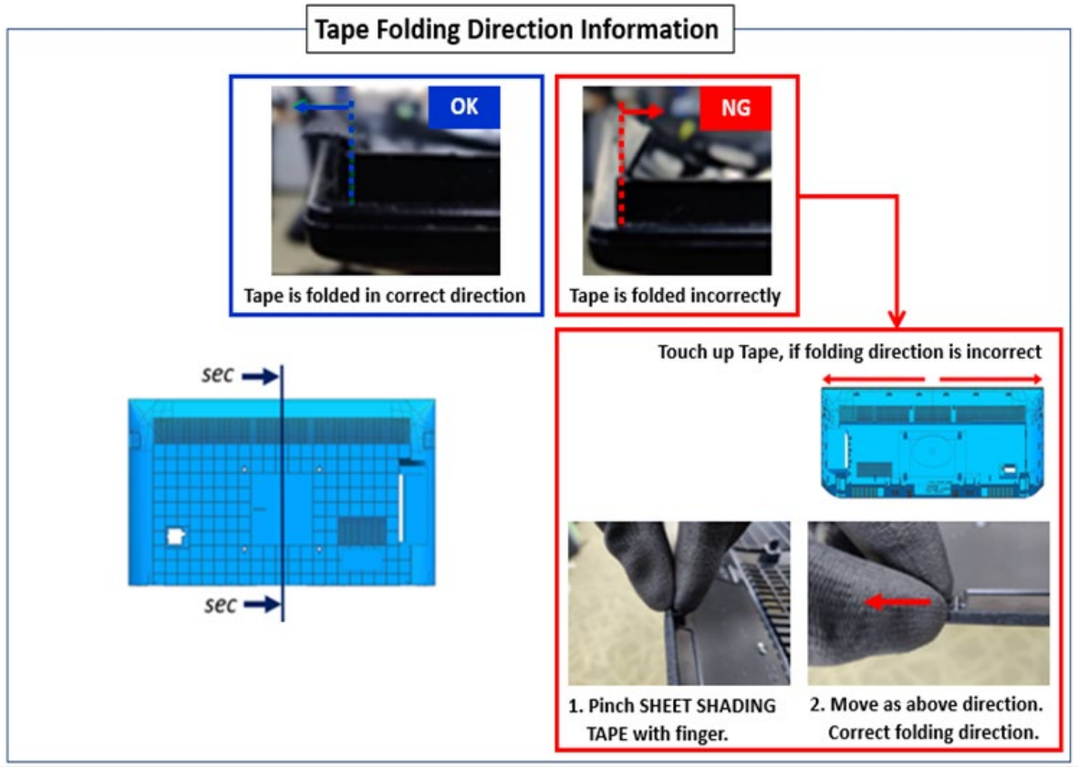

No stress during taping.

INFORMATION



Caution : Keep harness away from inhibit area

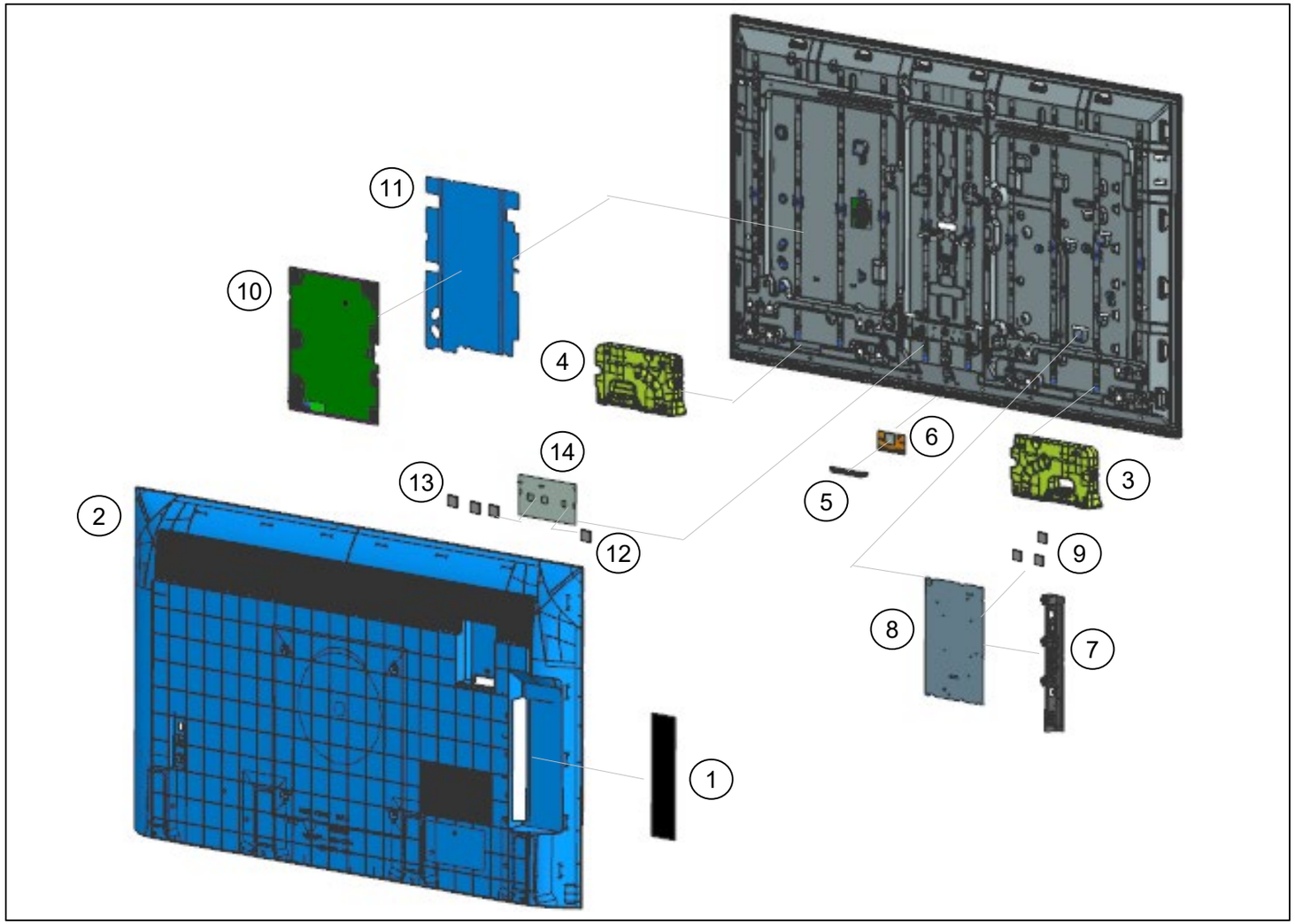
INFORMATION



3-4. EXPLODED VIEW AND PART LIST

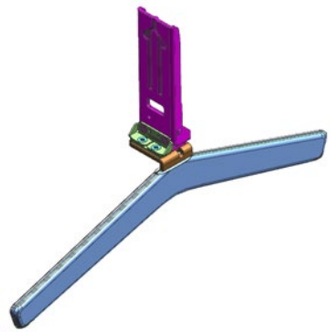
- Place the TV set facing downwards on a stable, level surface before disassembly and assembly of parts.
- ⚠ and shaded parts are critical for safety. Replace only with part number specified.
- 🔒 Parts contain confidential information. Strictly follow the instruction whenever the components are repaired 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



Stand

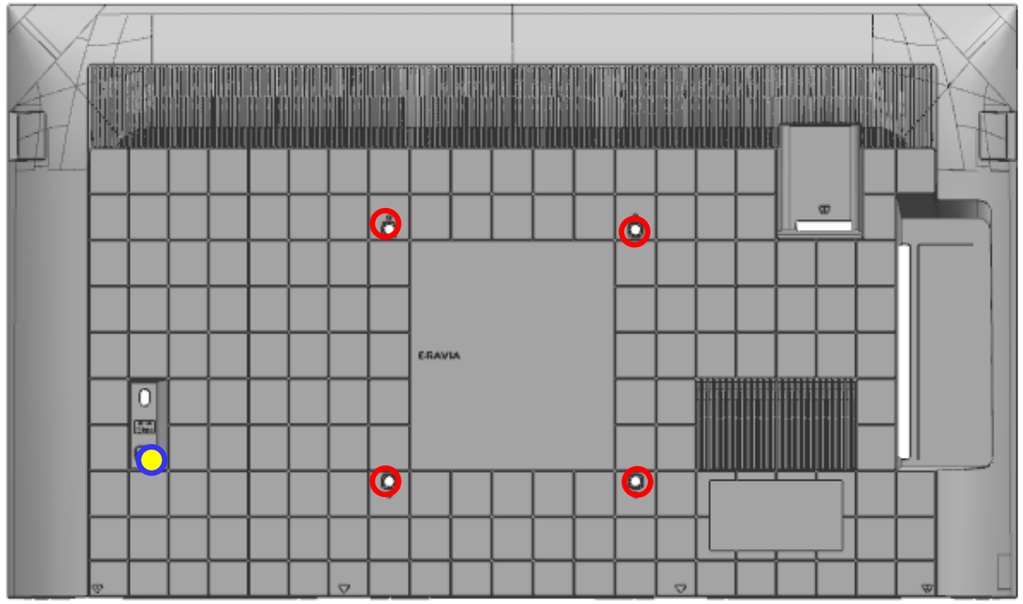
15 16

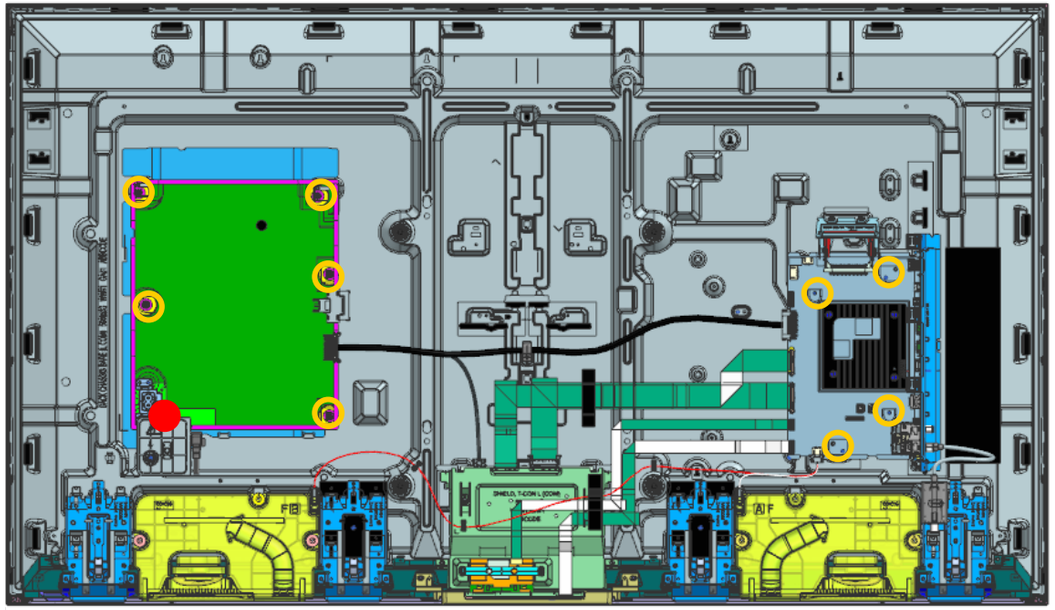


SET PART LIST

REF. NO	PART NO.	DESCRIPTION	UCM
1	5-039-646-01	LABEL, SIDE TERMINAL HP (HRS)	•
⚠ 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)	•
⚠ 10	1-013-506-21	GL23P-STATIC CONVERTER (TV)	•
⚠ 11	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	•

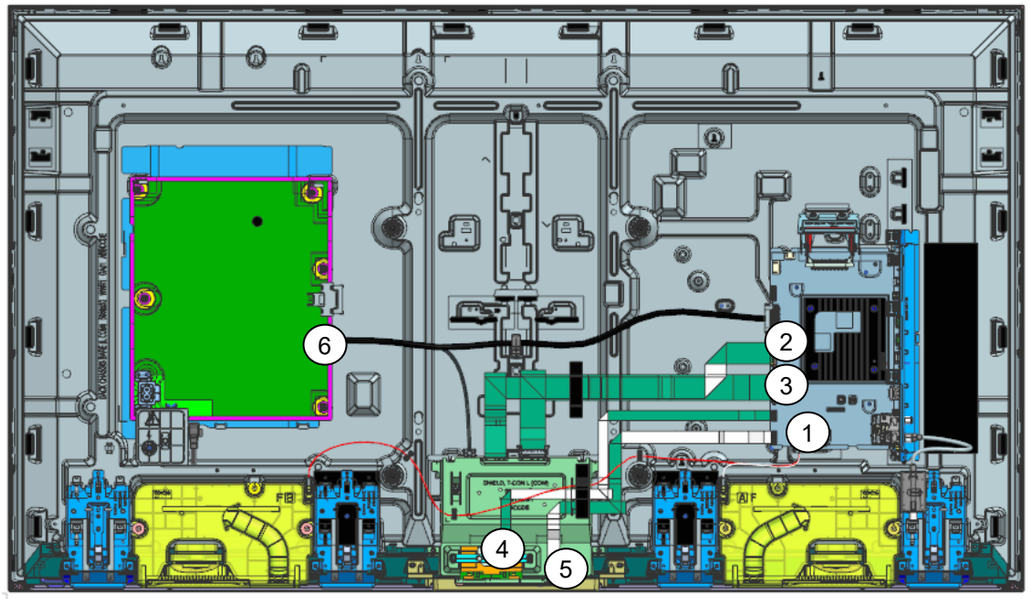
SCREW





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

CONNECTOR



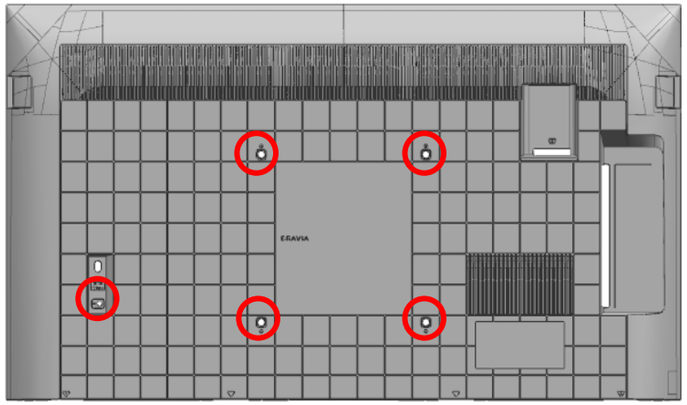
REF. NO	PART NO.	DESCRIPTION	REMARKS
1	1-006-501-33	CONNECTOR ASSY 4P (SP)	CN3550(BM5A)/CN6600(BM5STY)-SP(1)
2	1-011-598-12	FLEXIBLE FLAT CABLE 41P	CN4201(BM5A)-TCON(1)
3	1-010-542-12	FLEXIBLE FLAT CABLE 51P	CN4200(BM5A)-U1(T-CON)(1)
4	1-006-505-11	FLEXIBLE FLAT CABLE 20P	CN3801(BM5A)-J1(WIFI/BT)(1)
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

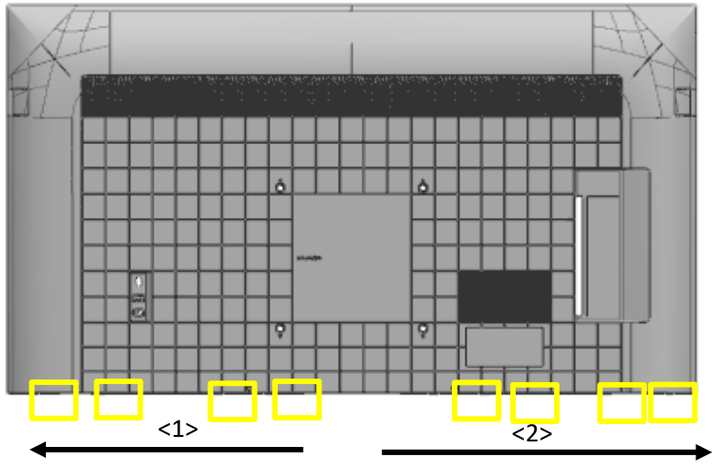
PART NO.	DESCRIPTION	UCM	REMARKS
4-535-064-61	ASSY,FALL LOCK,BELT LL	•	-
5-022-225-12	BAG, CL ASSY (2L LYX)	•	(Including CLAMPER (4L BNN) (Qty 2) installed at Main Stand. Refer Setup Guide for details)
5-009-030-01	CLAMPER,CABLE L(BNN)	•	-
5-009-031-02	CLAMPER,CABLE S(BNN)	•	-
⚠ 1-005-642-12	C7L AC POWER 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.)

REAR COVER

1. Remove the screws from the rear cover (5 pcs)



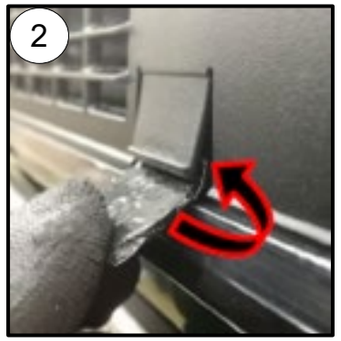
2. Unhook the bottom hook, starting from center.



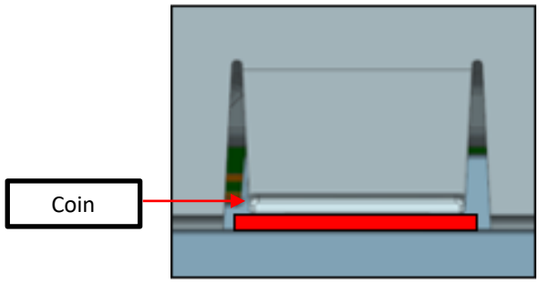
① Unhook two hooks closest to center simultaneously to prevent lock back. (Refer to the next page for the location of hooks)

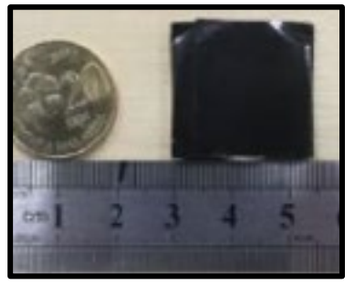
② Unhook both hooks using coin or jig.

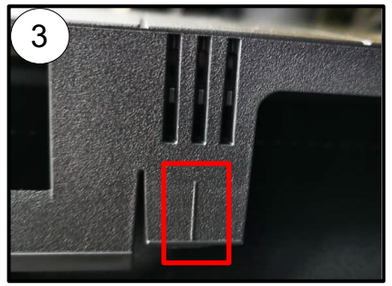
③ Use mirror or touch the line to assist locating the hook position.



Coin or jig to unhook bottom Rear Cover - Bezel hook
*Wrap coin in tape (55mmX25mm)
*Thickness of coin approximately 2mm

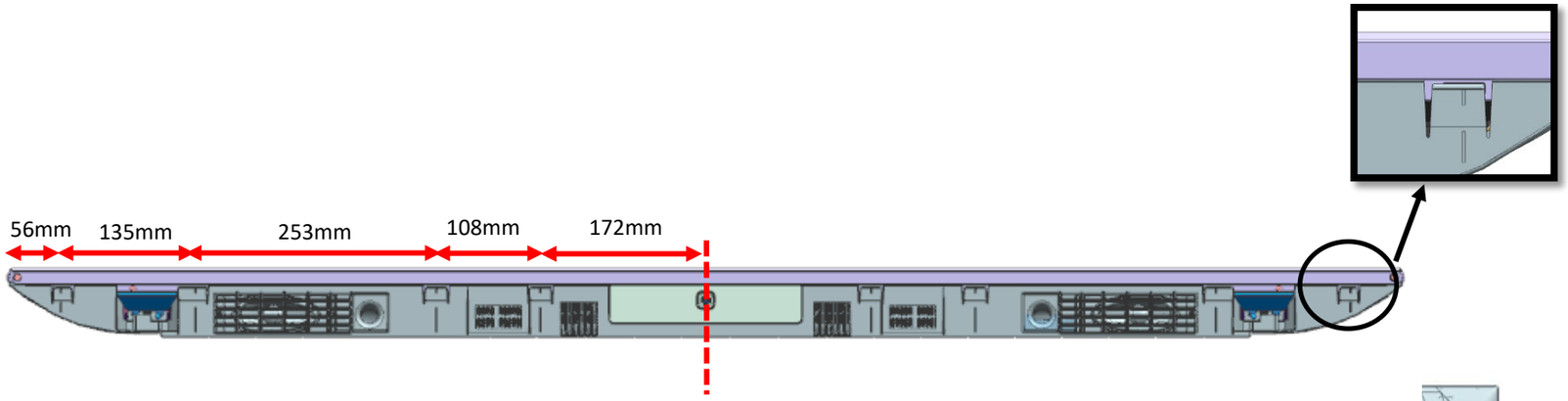




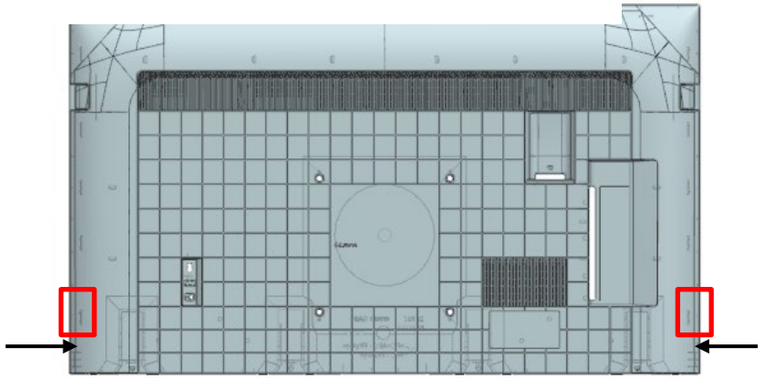


REAR COVER

Bottom Hook Position



3. Unhook corner hook.

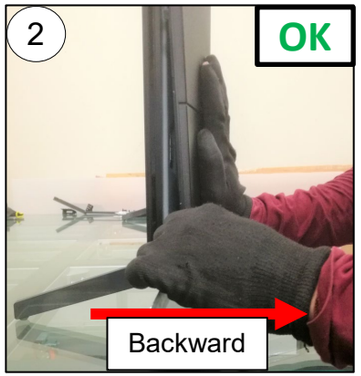


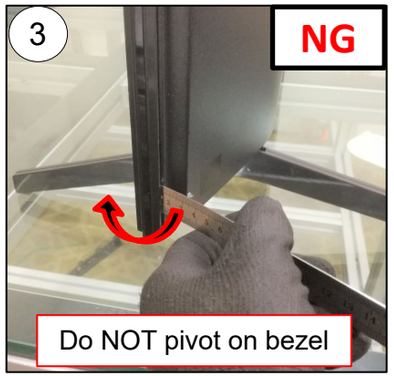
Ruler or jig to release corner hook
*Wrap ruler with tape to prevent scratch

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.

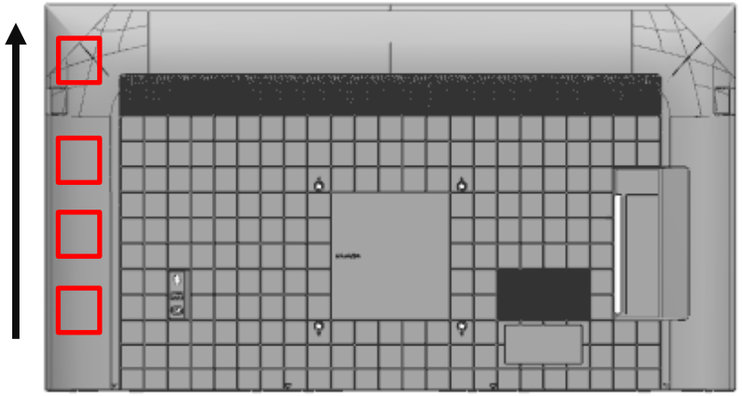




REAR COVER

4. Unhook left side hooks.

Total rear cover back chassis : 4 hooks



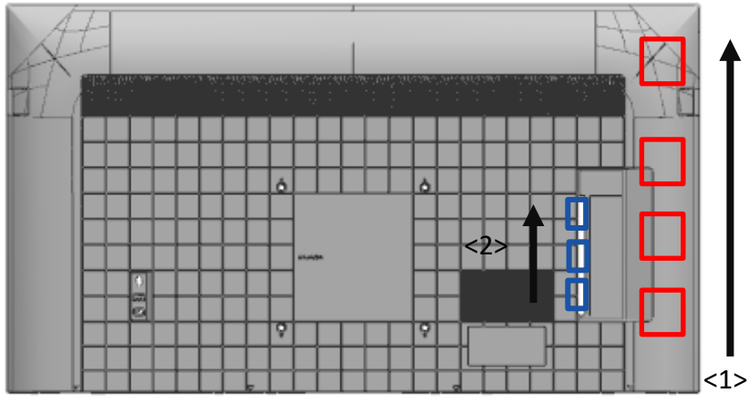
① Grip the rear cover by hand and use a ruler or jig to remove the hook of the rear cover back chassis.

② Flex the rear cover outward to remove the hook. Support set with arm.

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.

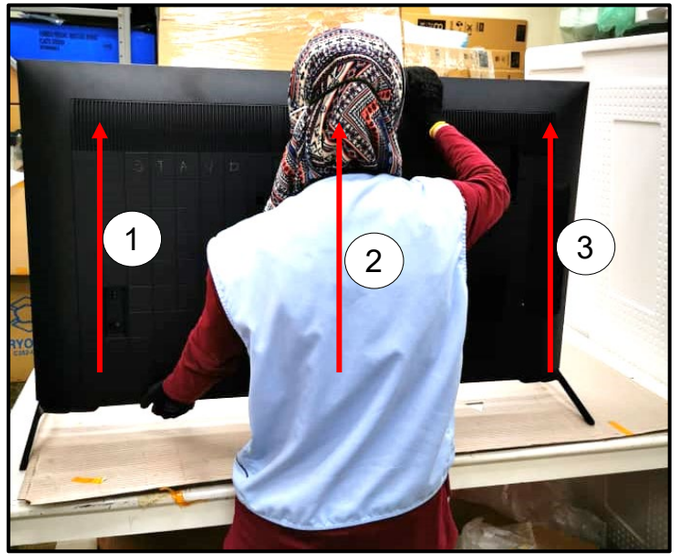
② Pull the rear cover below the side jack to remove the hook.

③ Remove the remaining side hooks.

REAR COVER

6. Unhook top row.

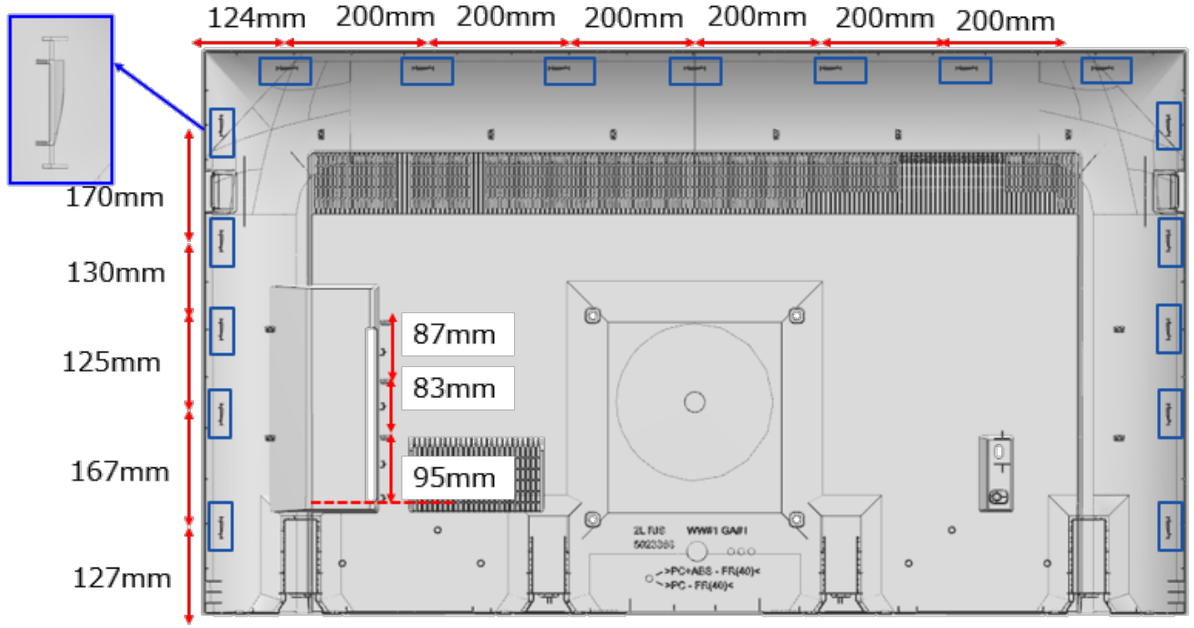
Total hooks (top row): 7 hooks

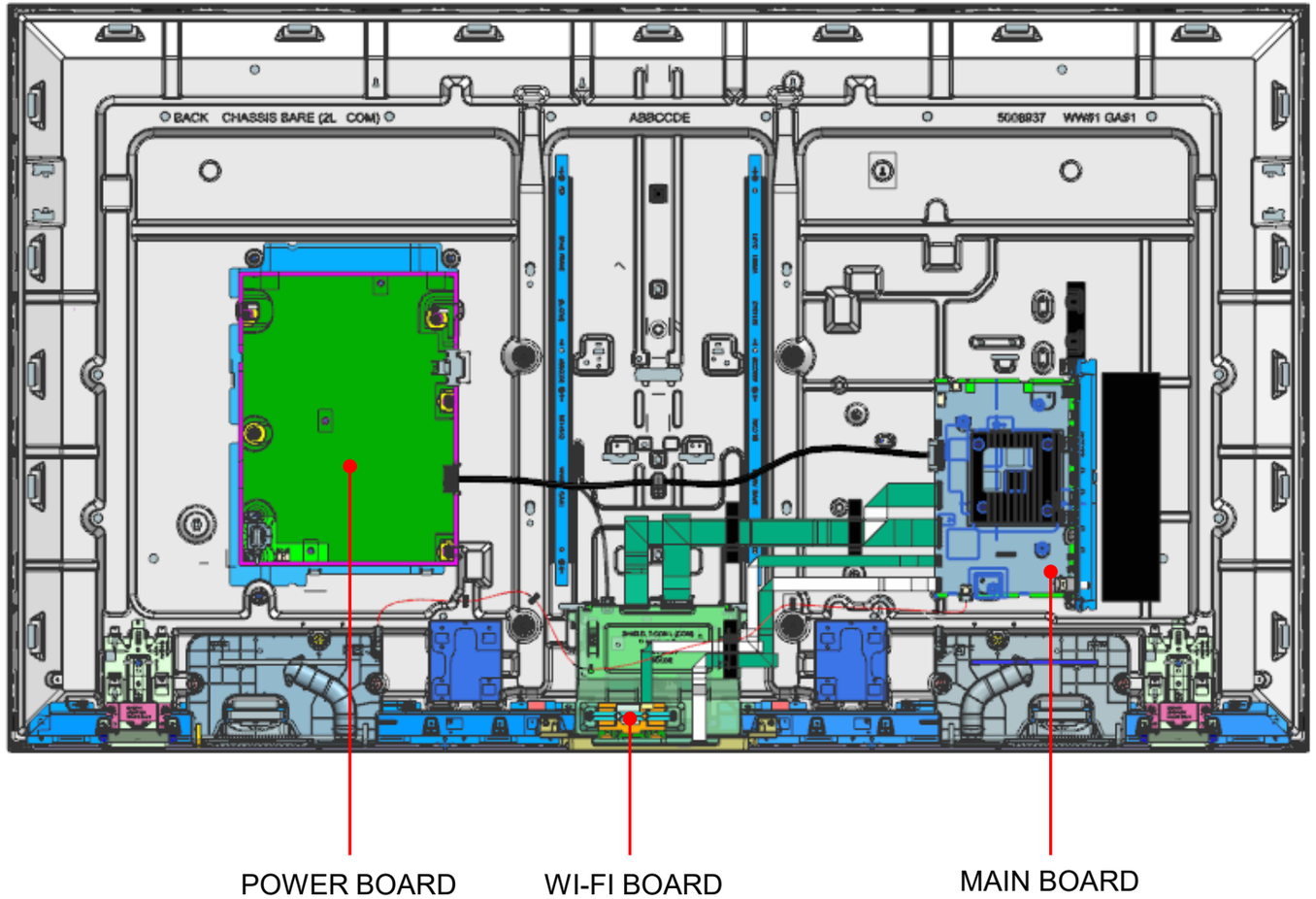


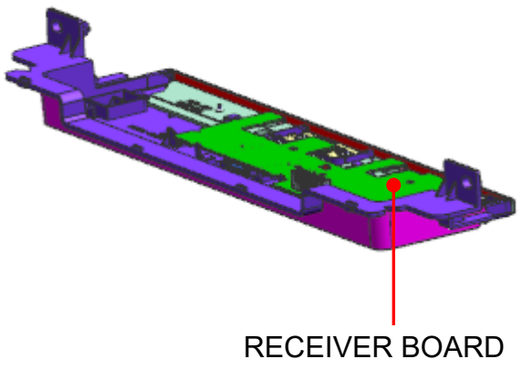
① Tilt the rear cover and push upwards on the left and right side.

② Pull the rear cover below the side jack to remove the upper hook.

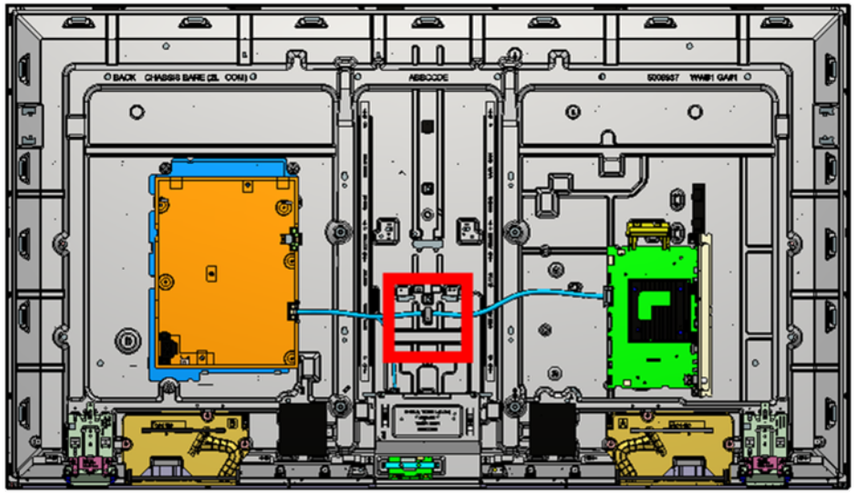
Hook positioning.

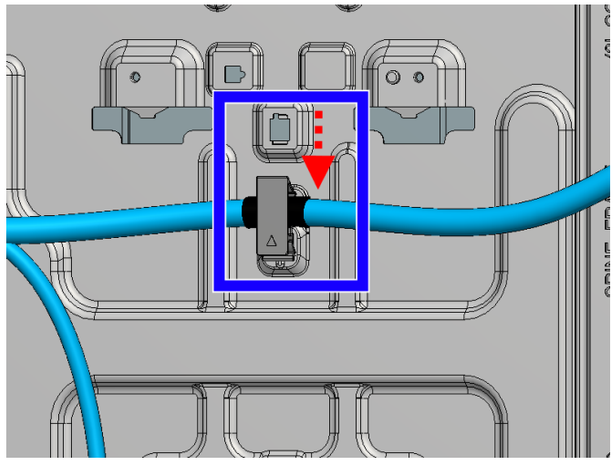



BACK CHASSIS BARE (2L COM)
ABBCCDE
5008937 WW91 GA91
POWER BOARD
WI-FI BOARD
MAIN BOARD


RECEIVER BOARD

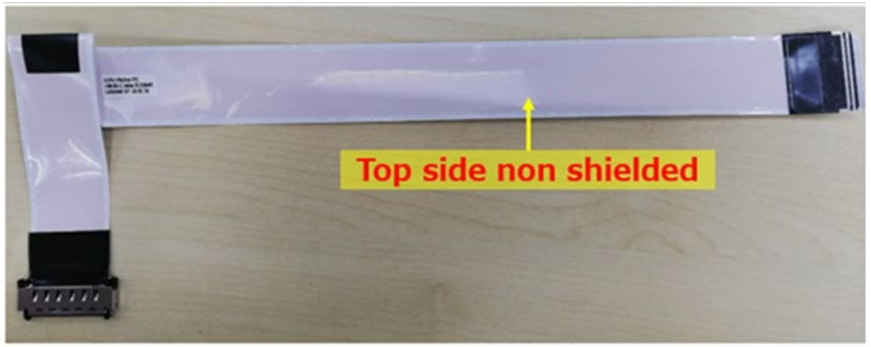
WIRE DRESSING

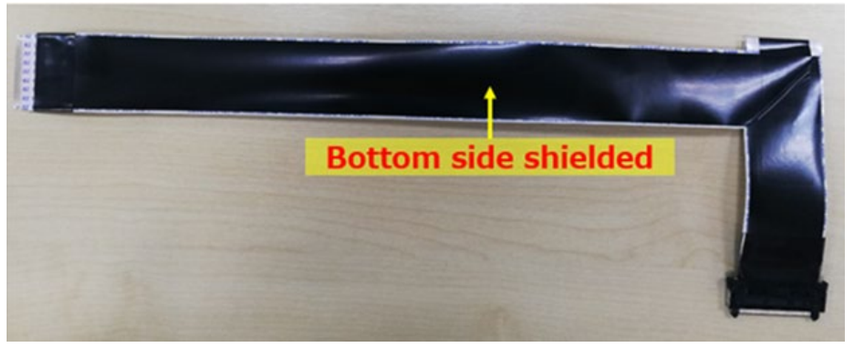




INFORMATION

FFC 41P/51P (Bottom Shield)

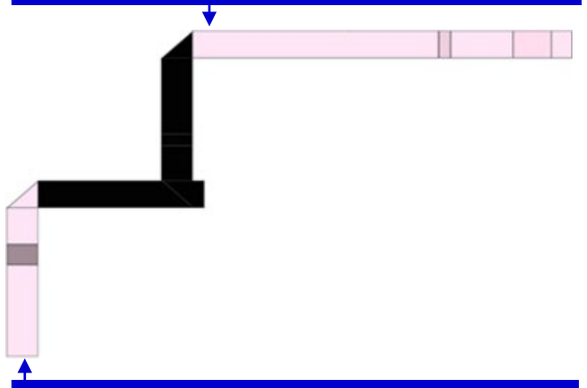




INFORMATION

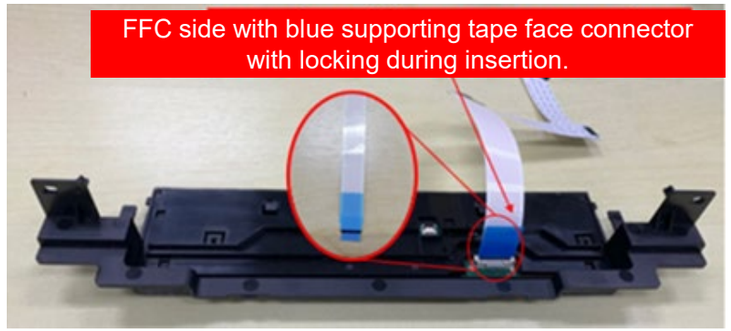
Caution:
1. Operator need to fix Smart Core onFLAT surface before FFC insertion to ensure FFC STRAIGHT insertion.
2. FFC side with blue supporting tape, must face CONNECTOR WITH LOCKING during FFC insertion.

FFC (longer side) is inserted at Main Board



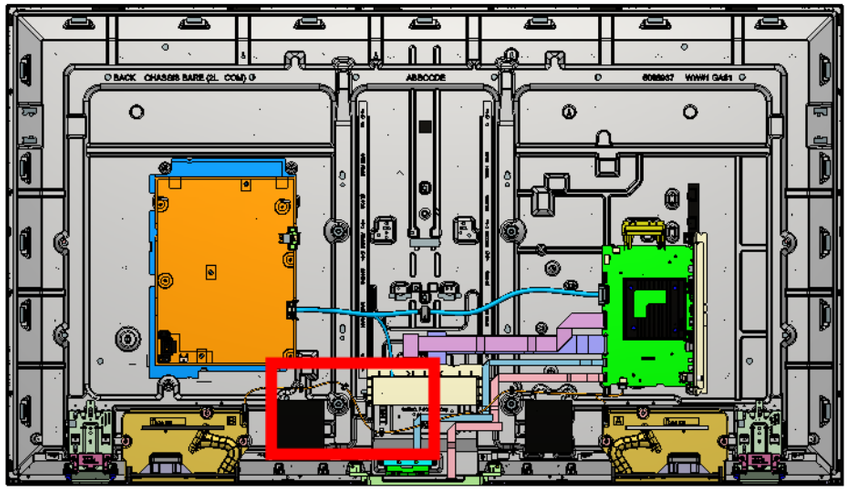
FFC (shorter side) is inserted at Smart Core

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

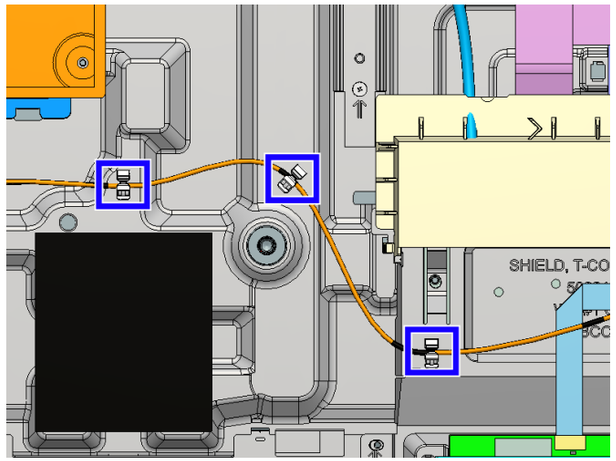


Smart Core is placed on FLAT surface during FFC insertion.

WIRE DRESSING



1



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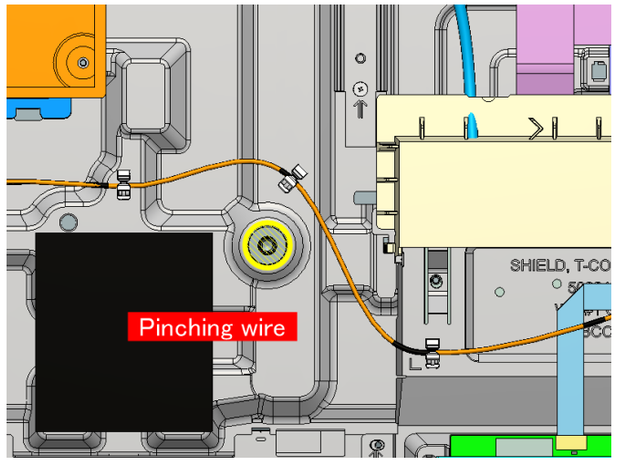
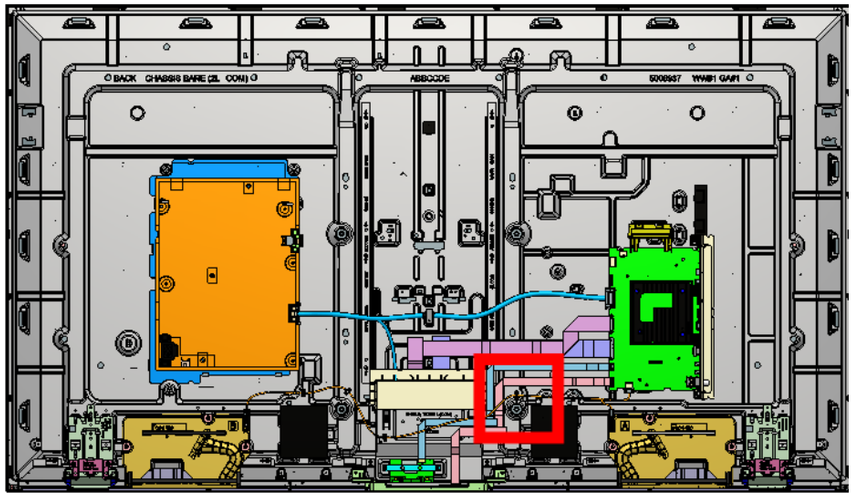
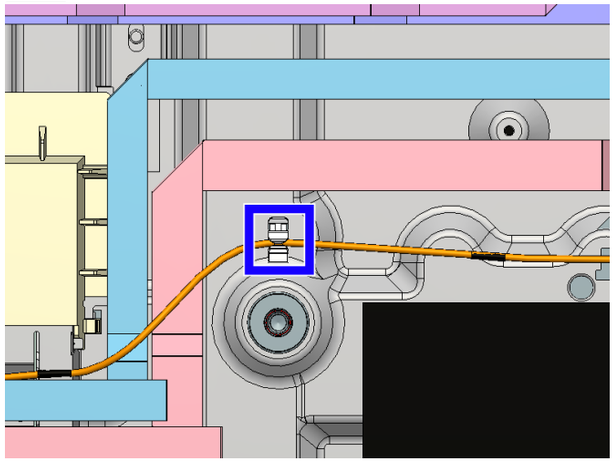


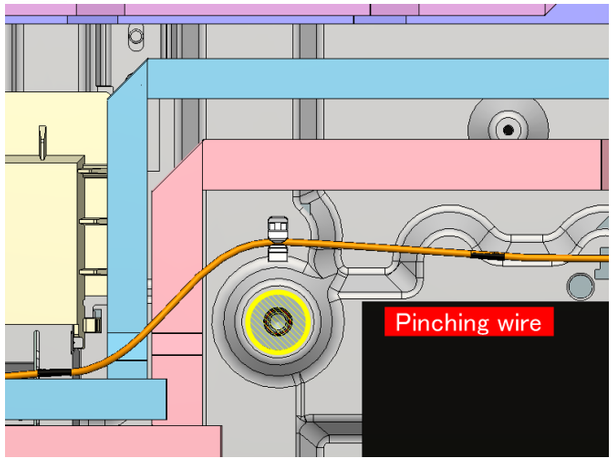
WIRE DRESSING



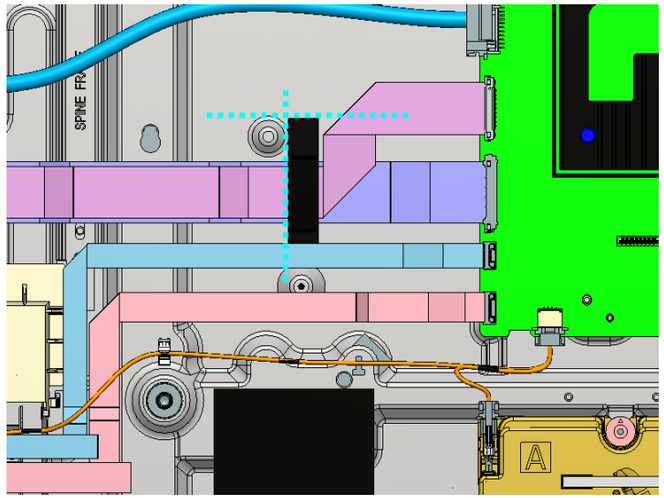
1



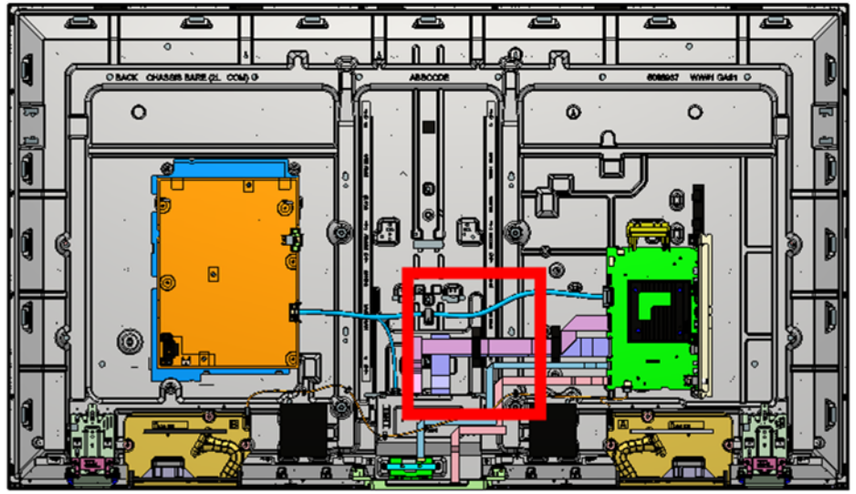
2



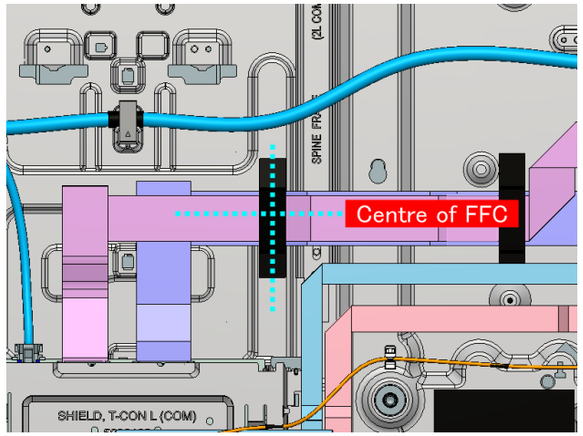
TAPE


SPINE FR
A

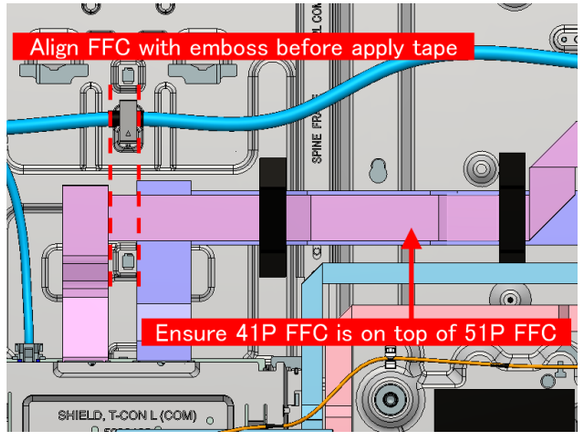
TAPE



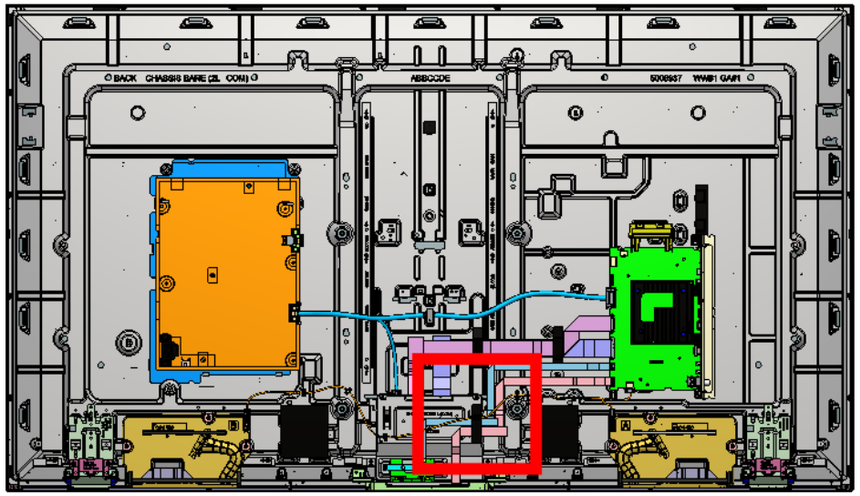
1


Centre of FFC
SHIELD, T-CON L (COM)

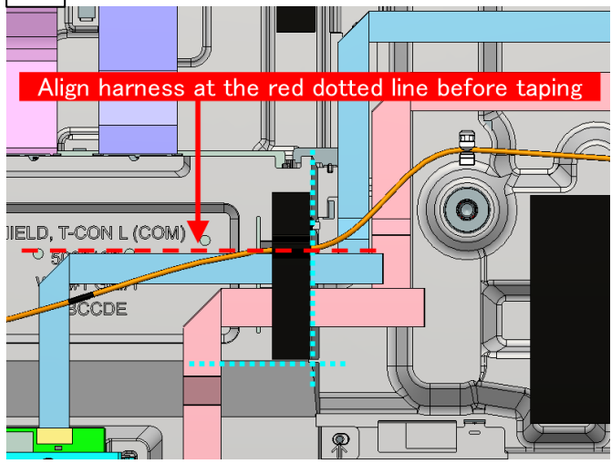
2


Align FFC with emboss before apply tape
Ensure 41P FFC is on top of 51P FFC
SHIELD, T-CON L (COM)

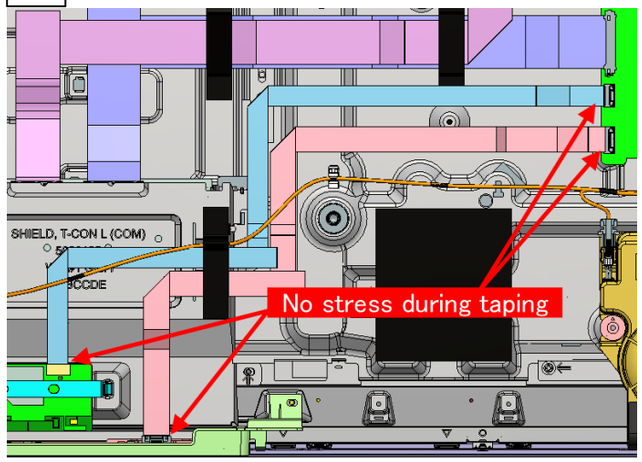
TAPE



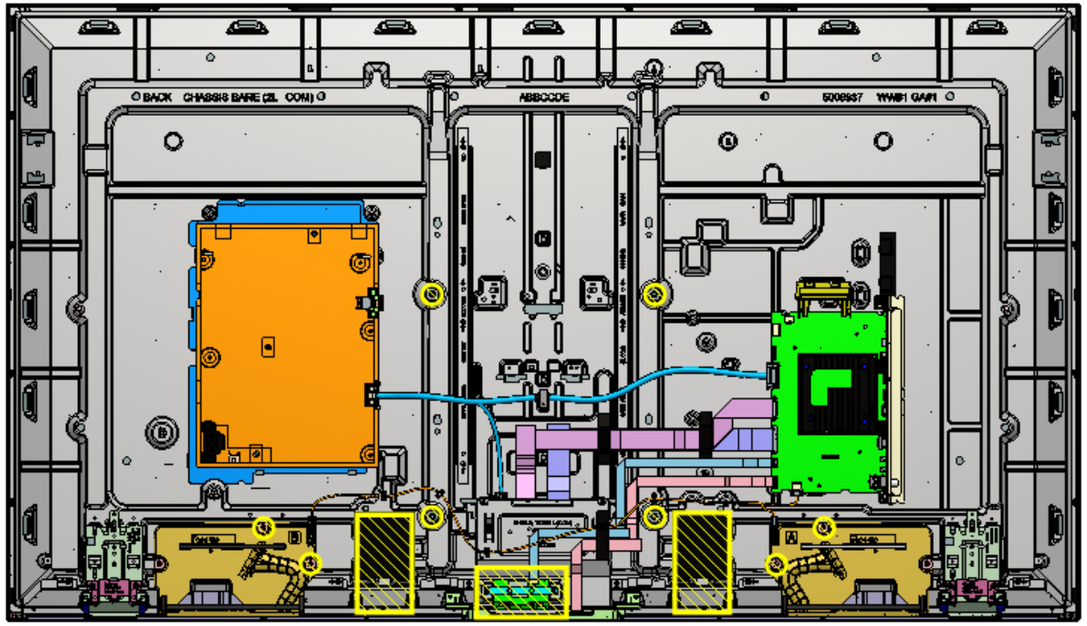
1


Align harness at the red dotted line before taping
IELD, T-CON L (COM)
CCDE

2

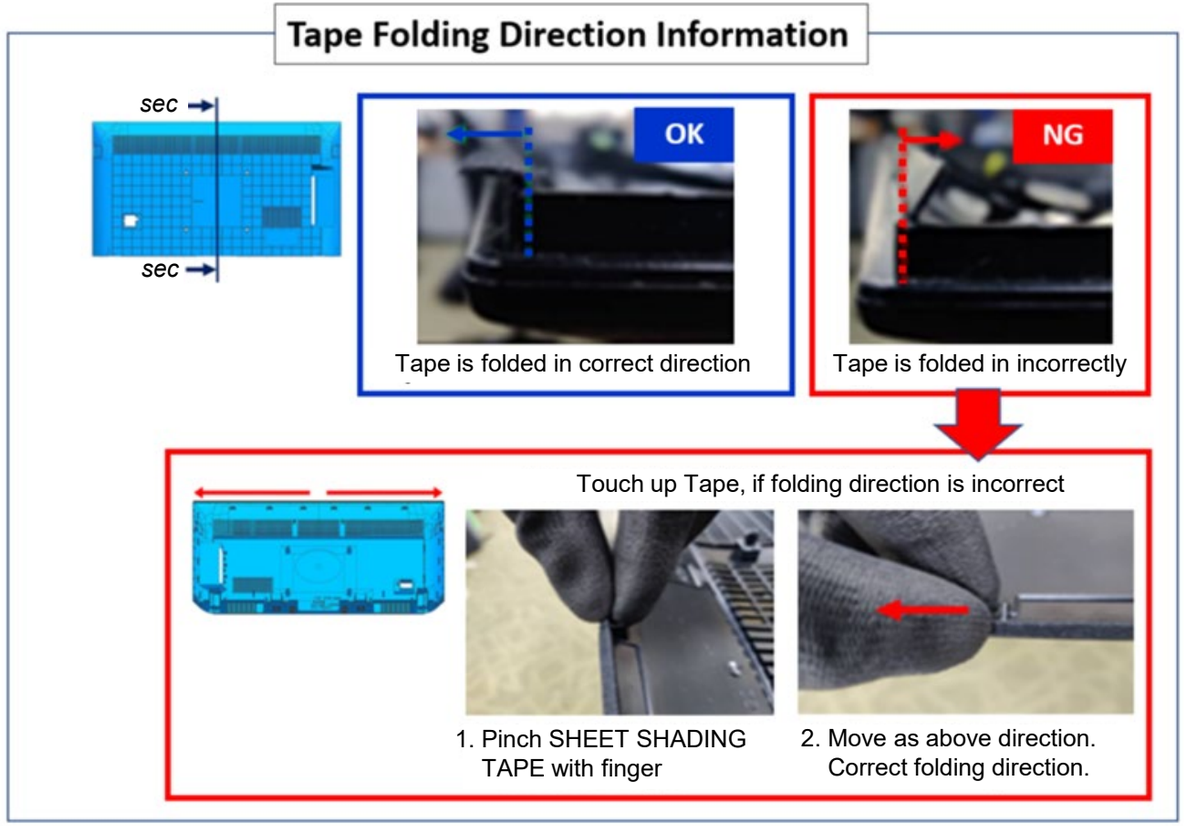

SHIELD, T-CON L (COM)
CCDE
No stress during taping

INFORMATION



Caution : Keep harness away from Inhibit Area

INFORMATION

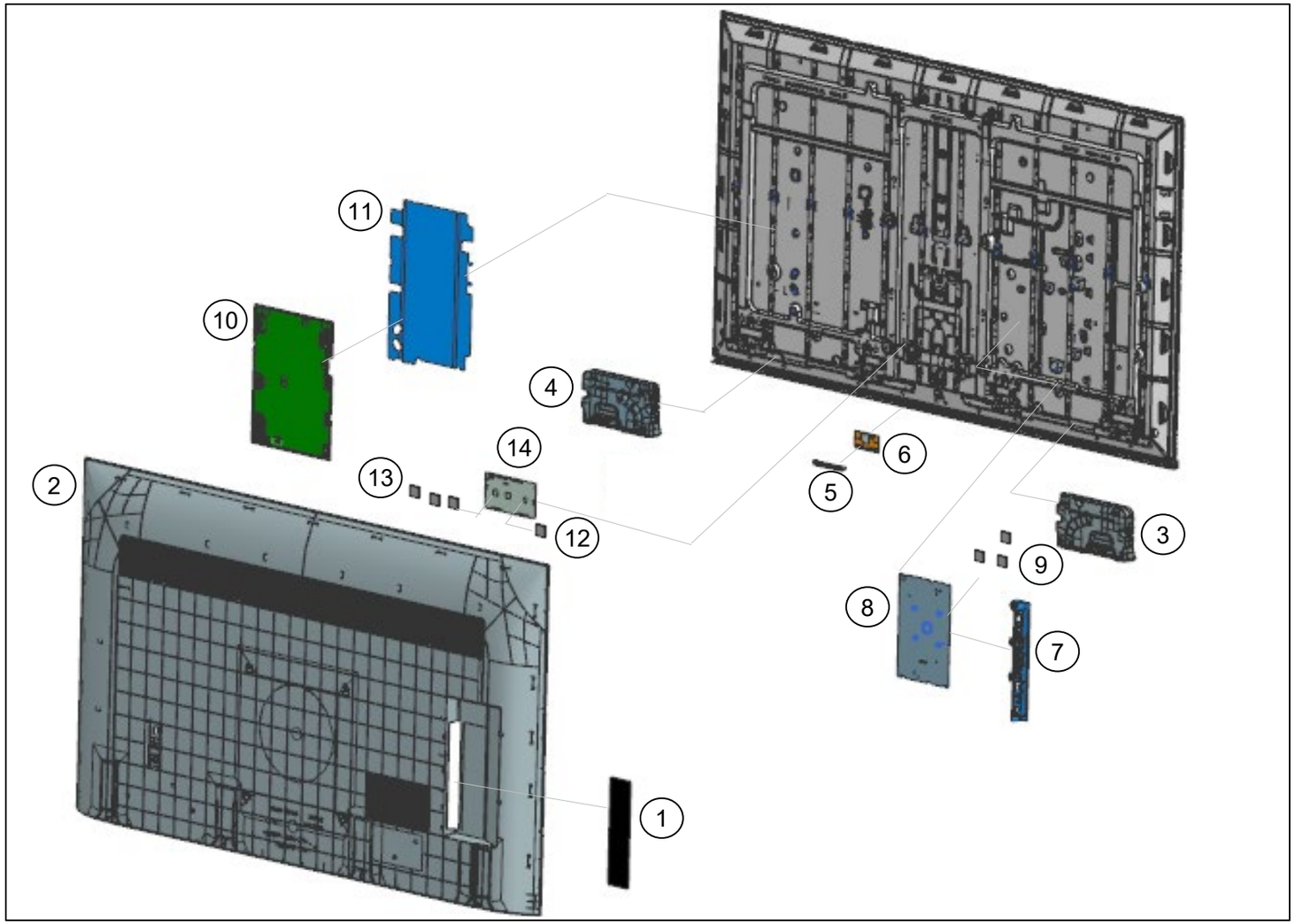


SECTION 4: KD-65X85K

4-4. EXPLODED VIEW AND PART LIST

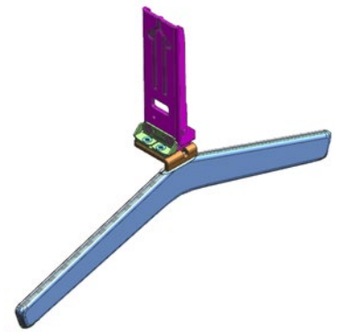
- Place the TV set facing downwards on a stable, level surface before disassembly and assembly of parts.
- ⚠ and shaded parts are critical for safety. Replace only with part number specified.
- 🔒 Parts contain confidential information. Strictly follow the instruction whenever the components are repaired 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



Stand

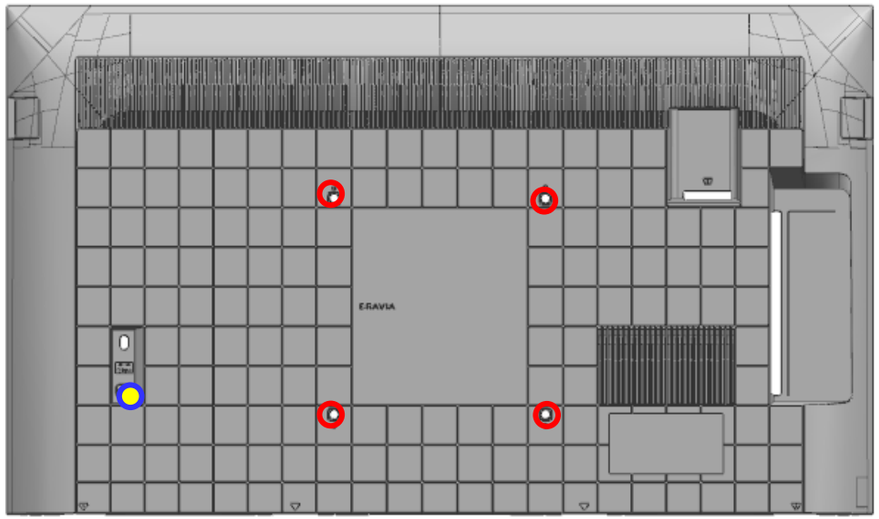
15 16

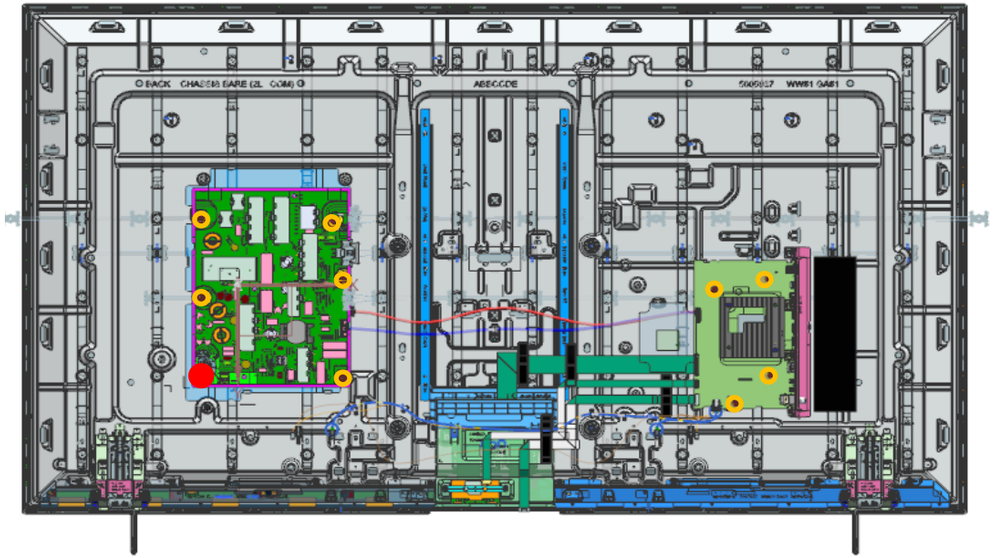


SET PART LIST

REF. NO	PART NO.	DESCRIPTION	UCM
1	5-039-646-01	LABEL, SIDE TERMINAL HP (HRS)	•
⚠ 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)	•
⚠ 10	1-013-509-21	GL24P-STATIC CONVERTER (TV)	•
⚠ 11	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	•

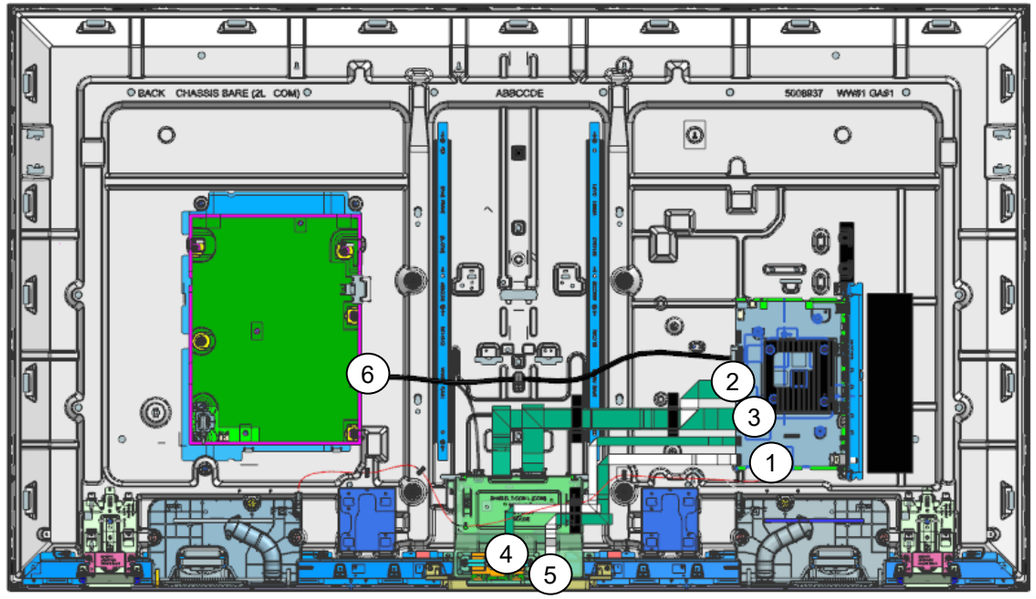
SCREW





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

CONNECTOR



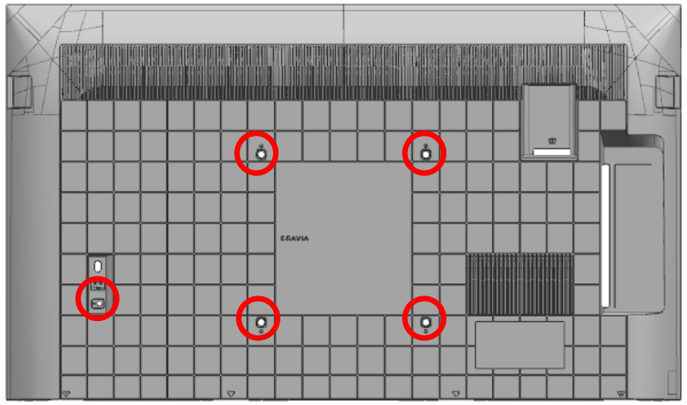
REF. NO	PART NO.	DESCRIPTION	REMARKS
1	1-006-513-34	CONNECTOR ASSY 4P (SP)	CN3550(BM5A)/CN6600(BM5STY)-SP(1)
2	1-013-161-12	FLEXIBLE FLAT CABLE 41P	CN4201(BM5A)-TCON(1)
3	1-013-163-12	FLEXIBLE FLAT CABLE 51P	CN4200(BM5A)-U1(T-CON)(1)
4	1-006-505-11	FLEXIBLE FLAT CABLE 20P	CN3801(BM5A)-J1(WIFI/BT)(1)
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

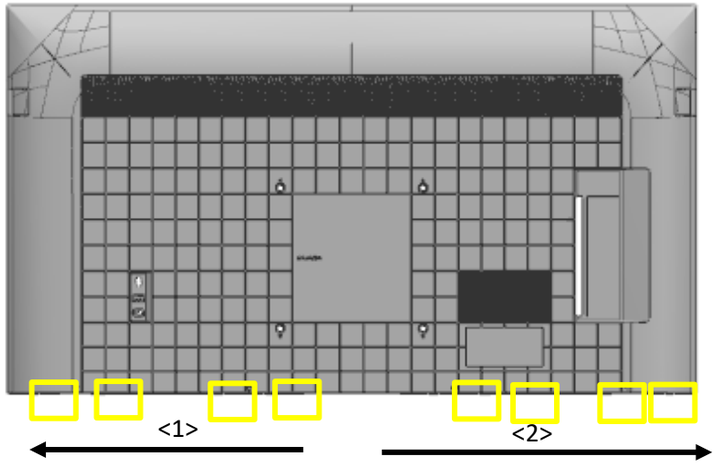
PART NO.	DESCRIPTION	UCM	REMARKS
4-535-064-61	ASSY,FALL LOCK,BELT LL	•	-
5-022-225-12	BAG, CL ASSY (2L LYX)	•	(Including CLAMPER (4L BNN) (Qty 2) installed at Main Stand. Refer Setup Guide for details)
5-009-030-01	CLAMPER,CABLE L(BNN)	•	-
5-009-031-02	CLAMPER,CABLE S(BNN)	•	-
⚠ 1-005-642-12	C7L AC POWER CORD SETS (US)	•	-
1-013-691-23	REMOTE COMMANDER (RMF-TX800U)	•	-
*5-037-718-11	REFERENCE GUIDE	•	-
*5-037-726-11	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.)

REAR COVER

1. Remove the screws from the rear cover (5 pcs)



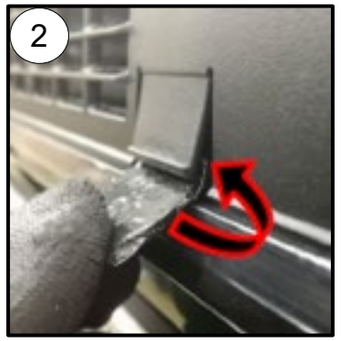
2. Unhook the bottom hook, starting from center.



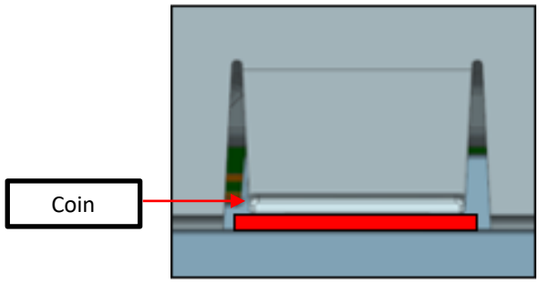
① Unhook two hooks closest to center simultaneously to prevent lock back. (Refer to the next page for the location of hooks)

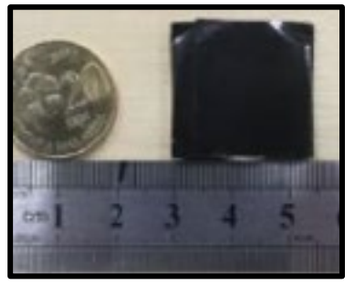
② Unhook both hooks using coin or jig.

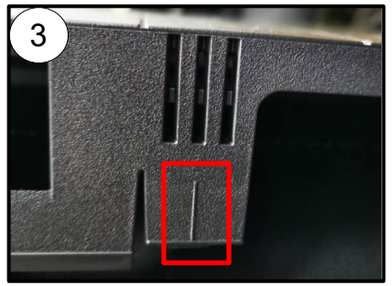
③ Use mirror or touch the line to assist locating the hook position.



Coin or jig to unhook bottom Rear Cover - Bezel hook
*Wrap coin in tape (55mmX25mm)
*Thickness of coin approximately 2mm

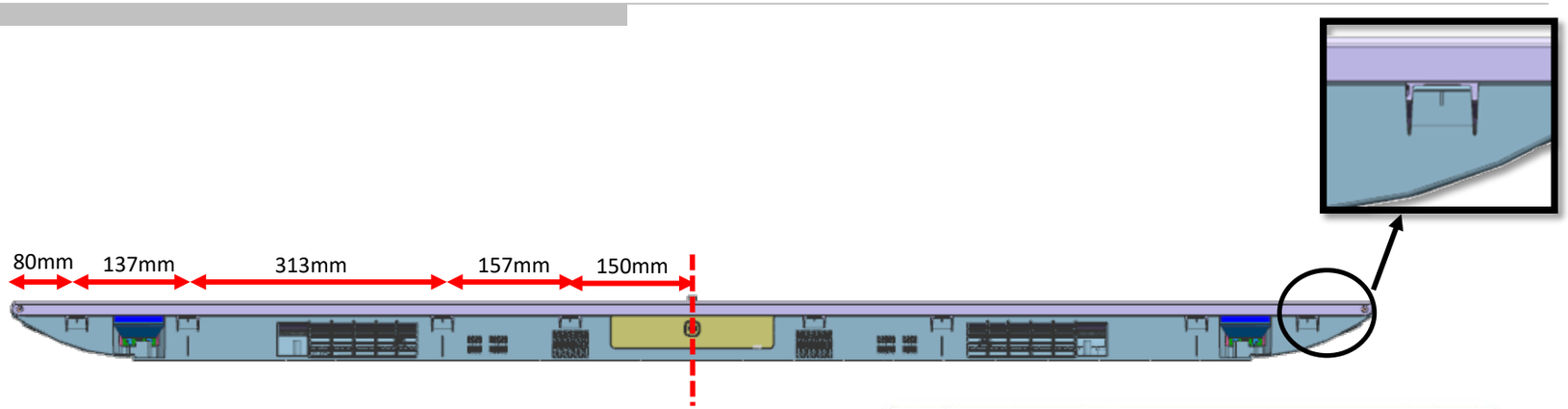




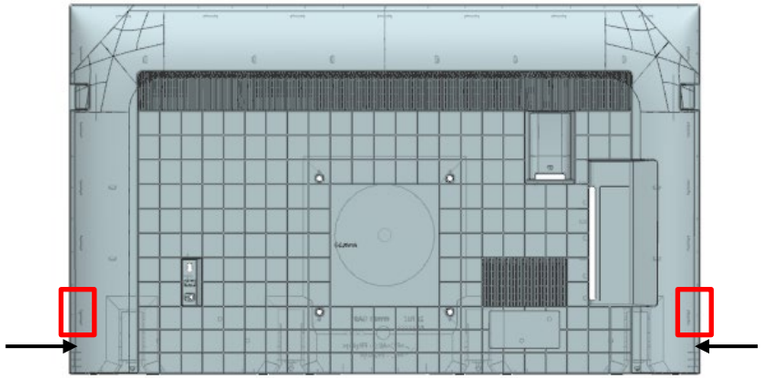


REAR COVER

Bottom Hook Position



3. Unhook corner hook.

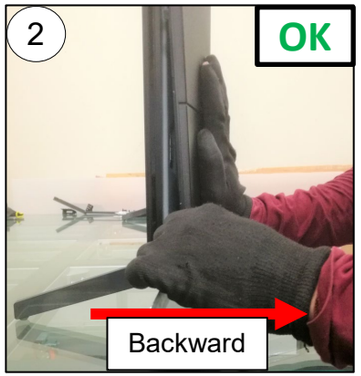


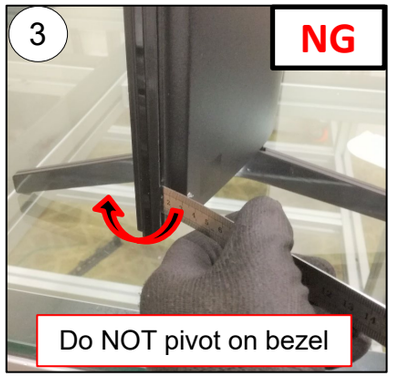
Ruler or jig to release corner hook
*Wrap ruler with tape to prevent scratch

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.

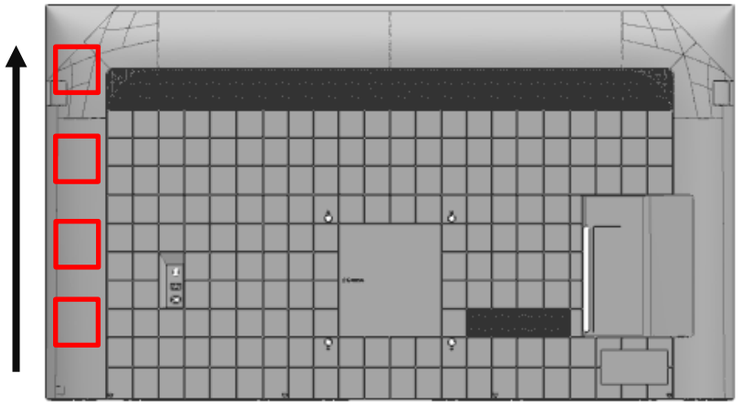




REAR COVER

4. Unhook left side hooks.

Total rear cover back chassis : 4 hooks



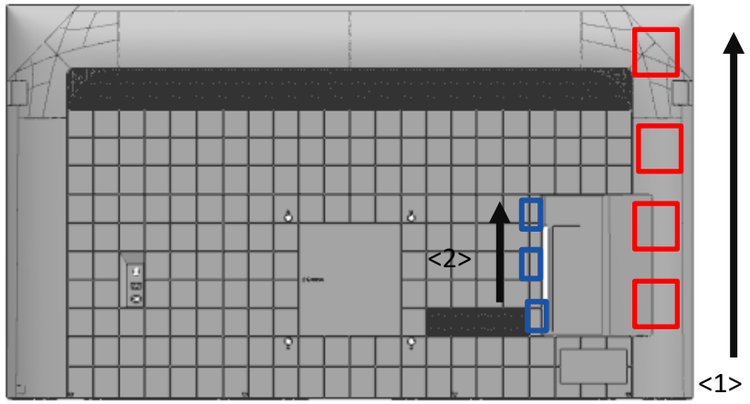
① Grip the rear cover by hand and use a ruler or jig to remove the hook of the rear cover back chassis.

② Flex the rear cover outward to remove the hook. Support set with arm.

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.

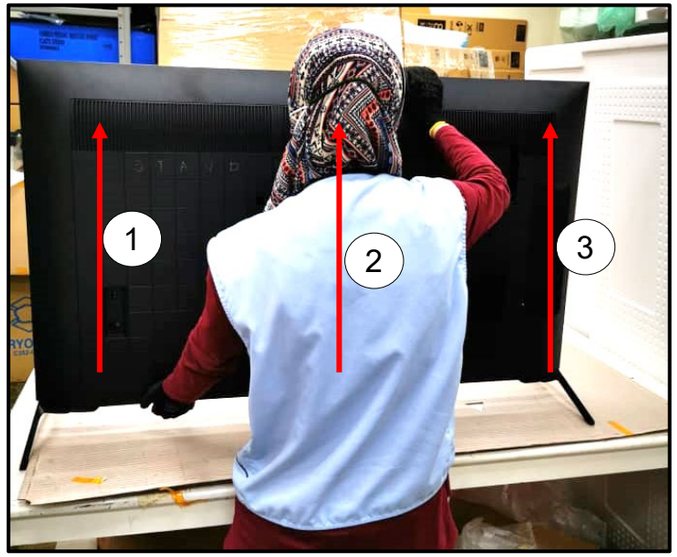
② Pull the rear cover below the side jack to remove the hook.

③ Remove the remaining side hooks.

REAR COVER

6. Unhook top row.

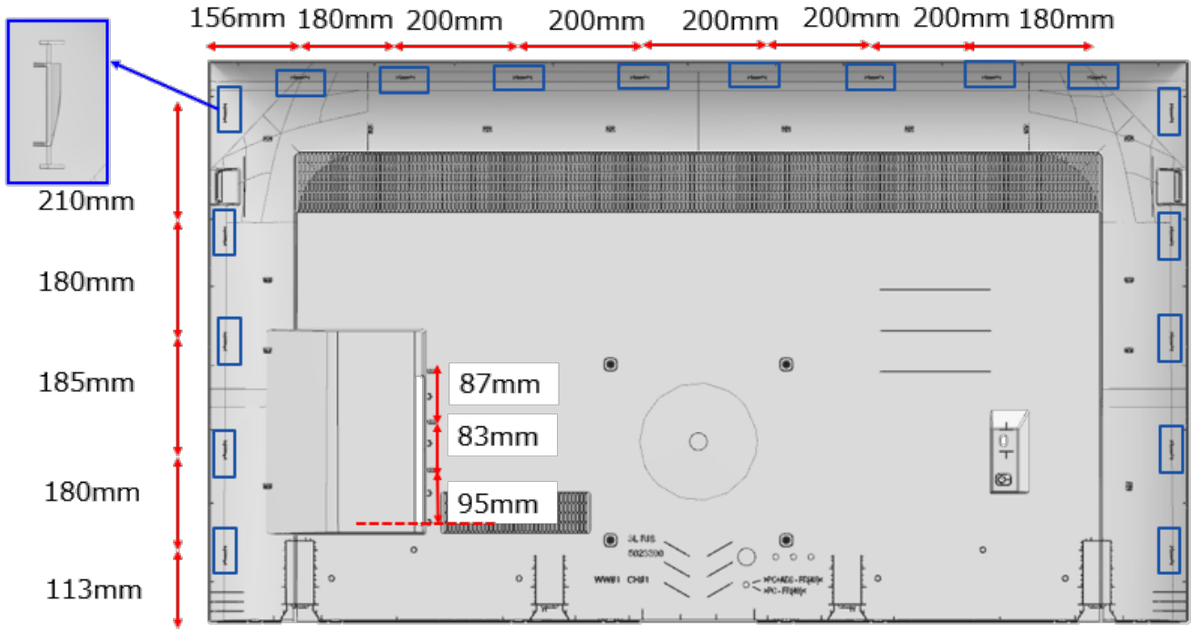
Total hooks (top row): 8 hooks



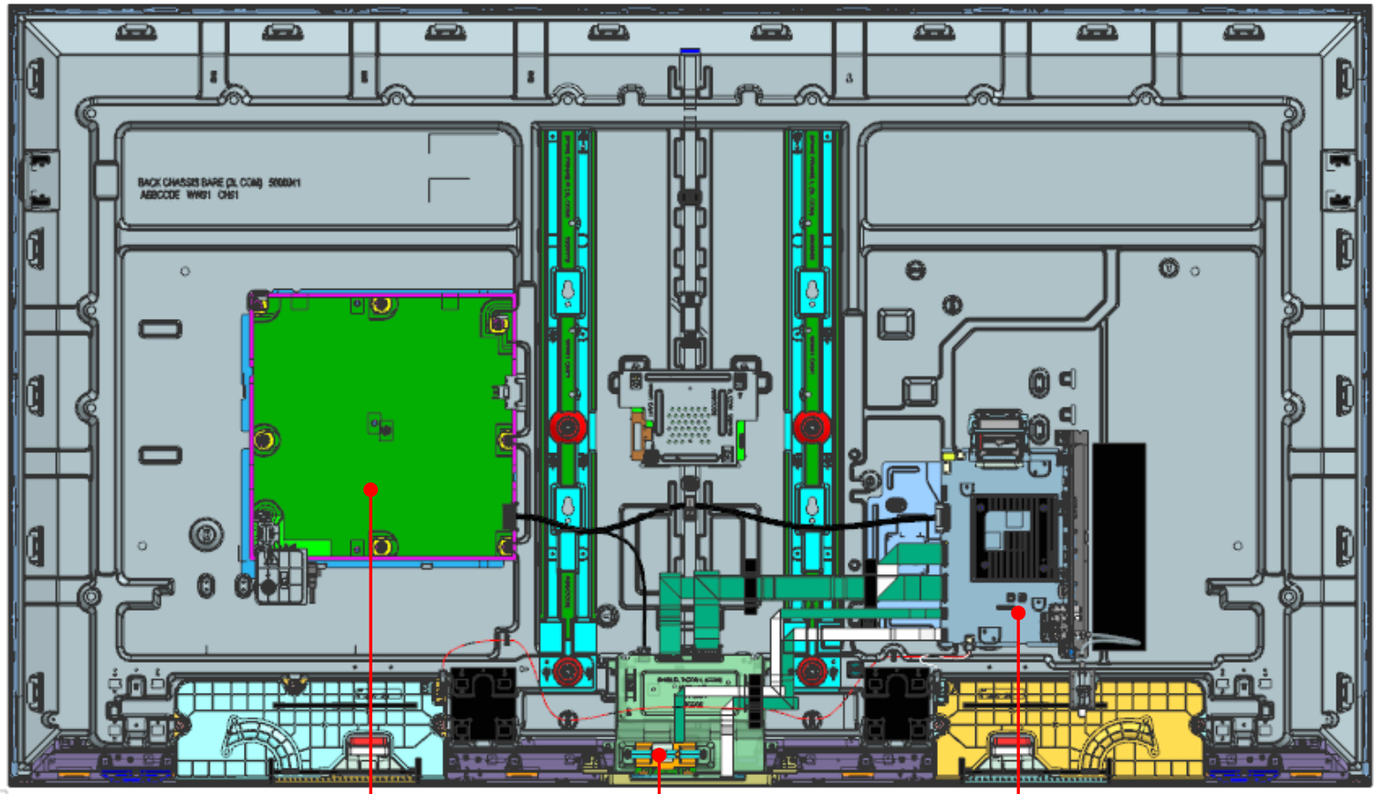
① Tilt the rear cover and push upwards on the left and right side.

② Pull the rear cover below the side jack to remove the upper hook.

Hook positioning.



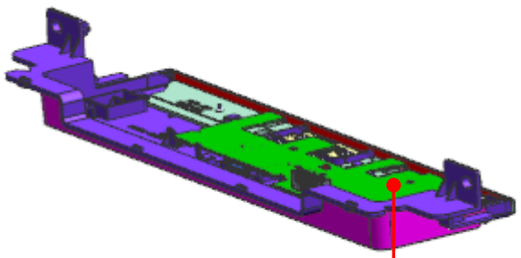
5-2. BOARD LOCATION



POWER BOARD

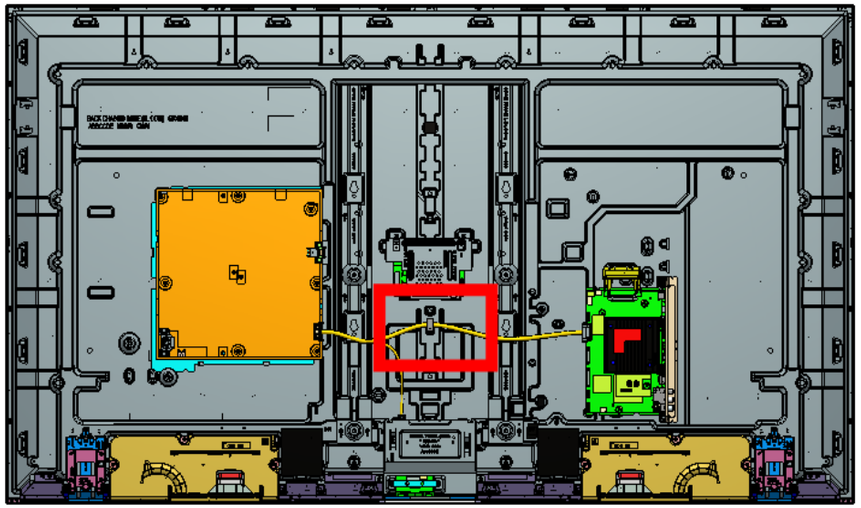
WI-FI BOARD

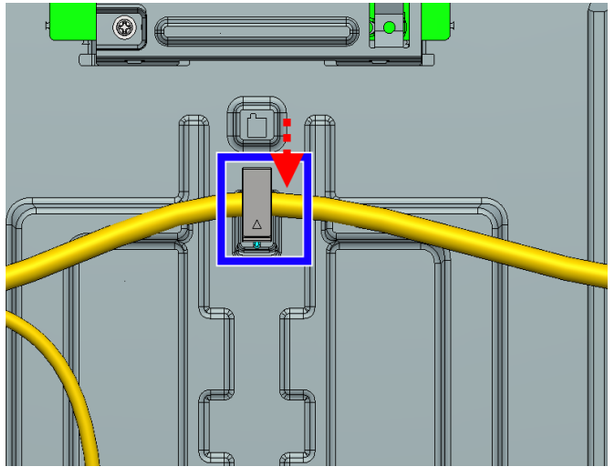
MAIN BOARD



RECEIVER BOARD

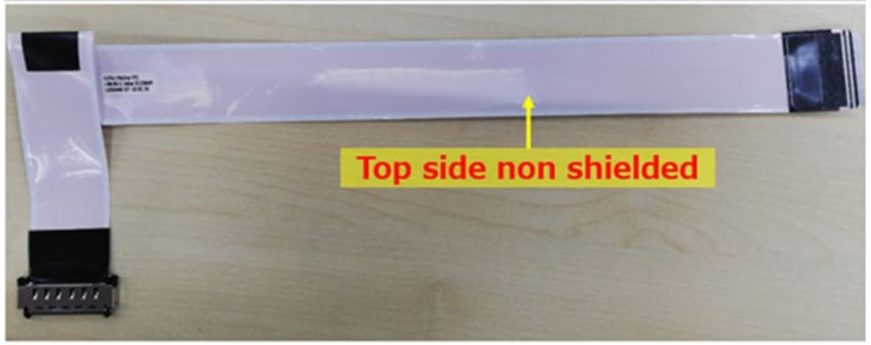
WIRE DRESSING

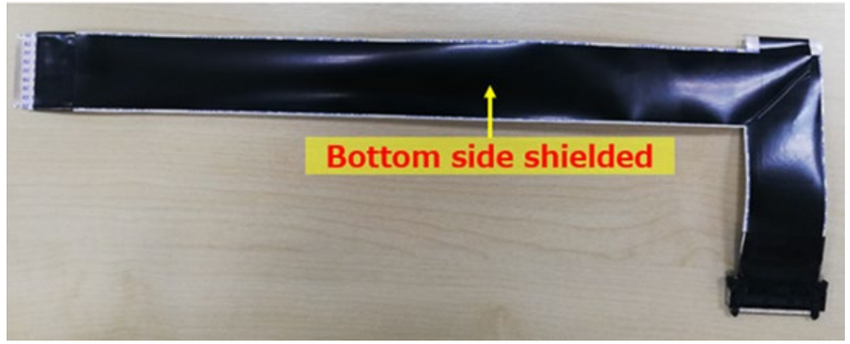




INFORMATION

FFC 41P/51P (Bottom Shield)

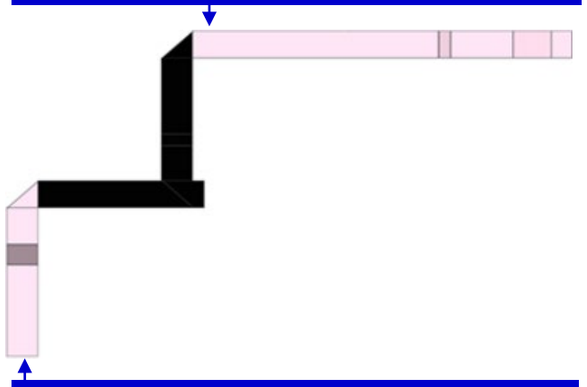




WIRE DRESSING

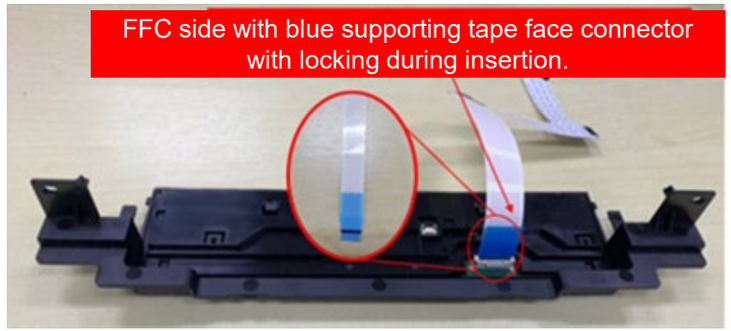
Caution:
1. Operator need to fix Smart Core onFLAT surface before FFC insertion to ensure FFC STRAIGHT insertion.
2. FFC side with blue supporting tape, must face CONNECTOR WITH LOCKING during FFC insertion.

FFC (longer side) is inserted at Main Board



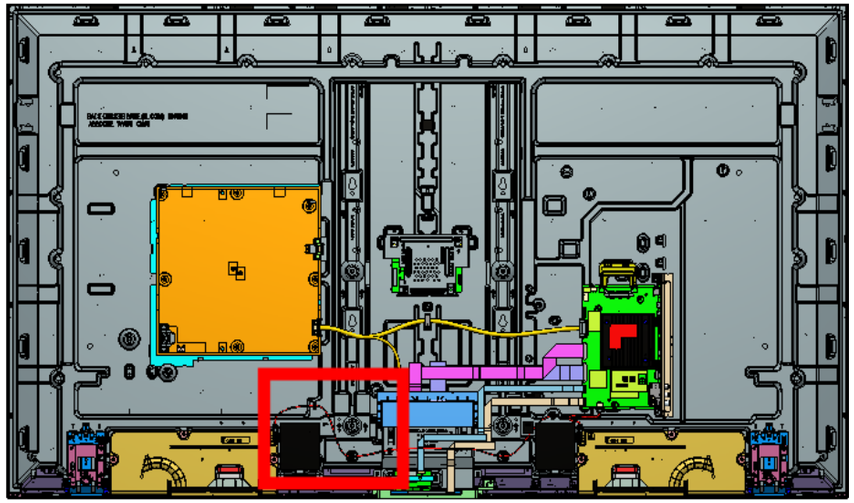
FFC (shorter side) is inserted at Smart Core

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

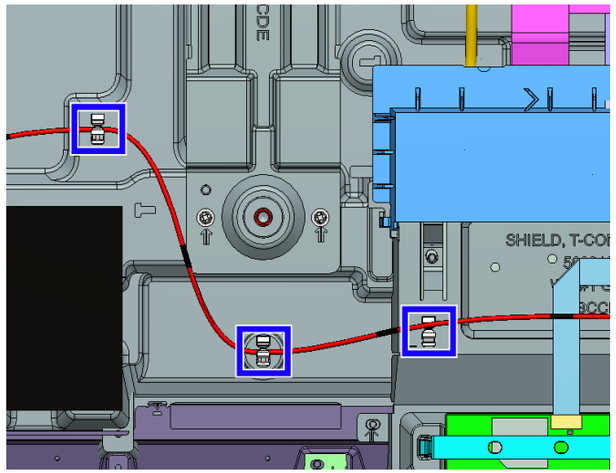


Smart Core is placed on FLAT surface during FFC insertion.

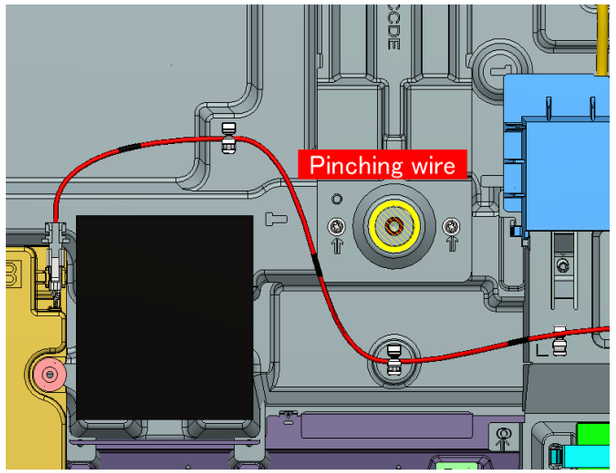
WIRE DRESSING



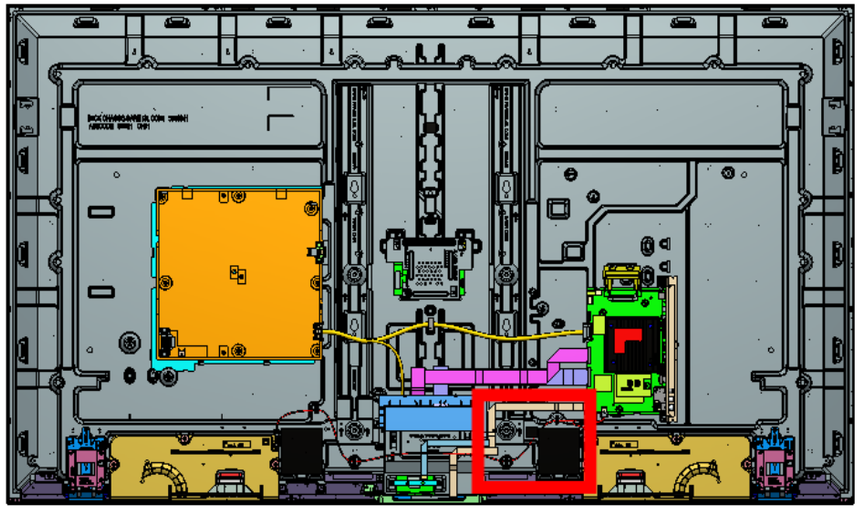
1



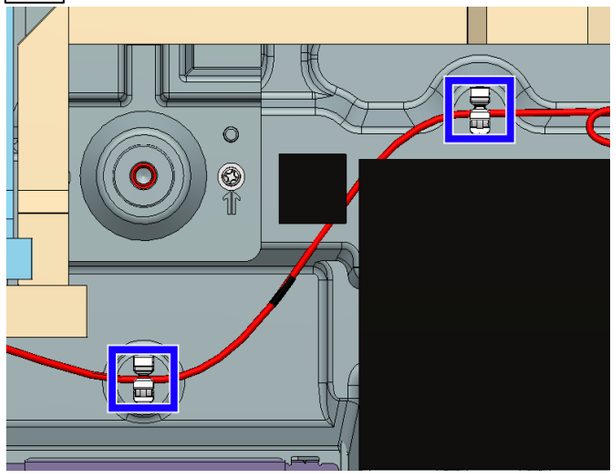
2



WIRE DRESSING



1



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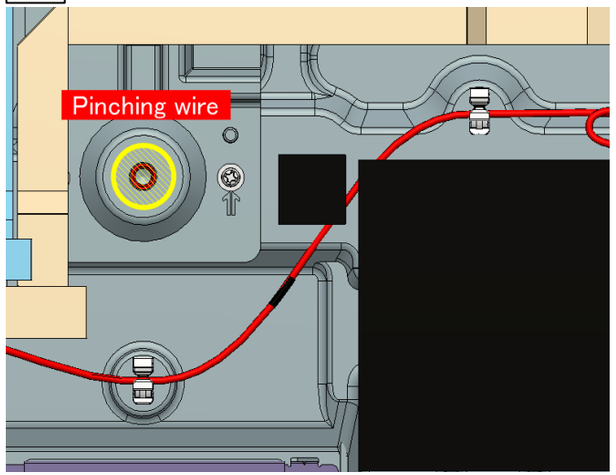
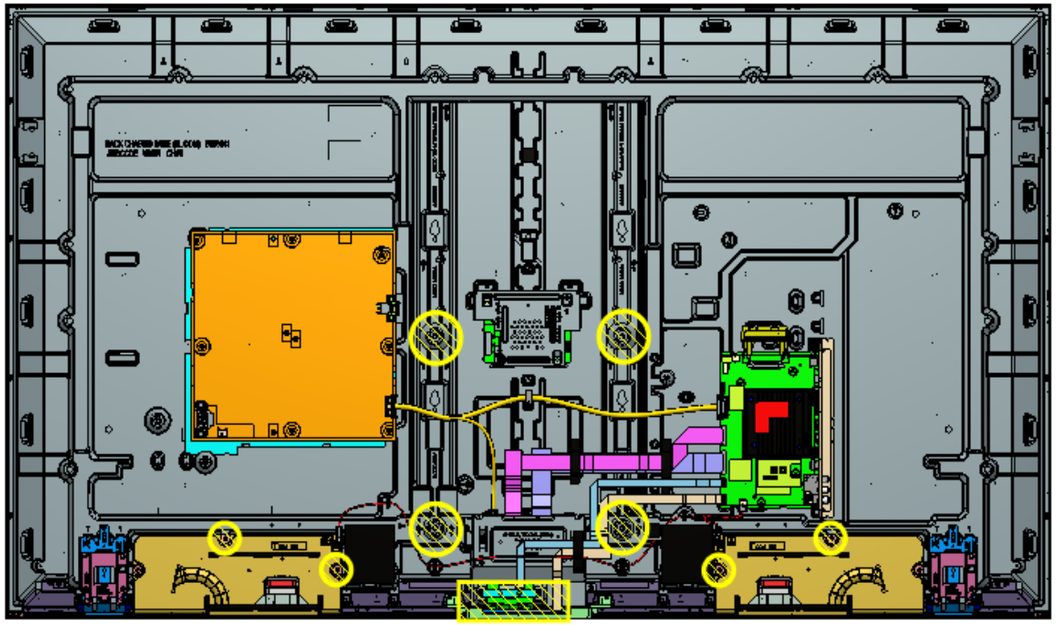
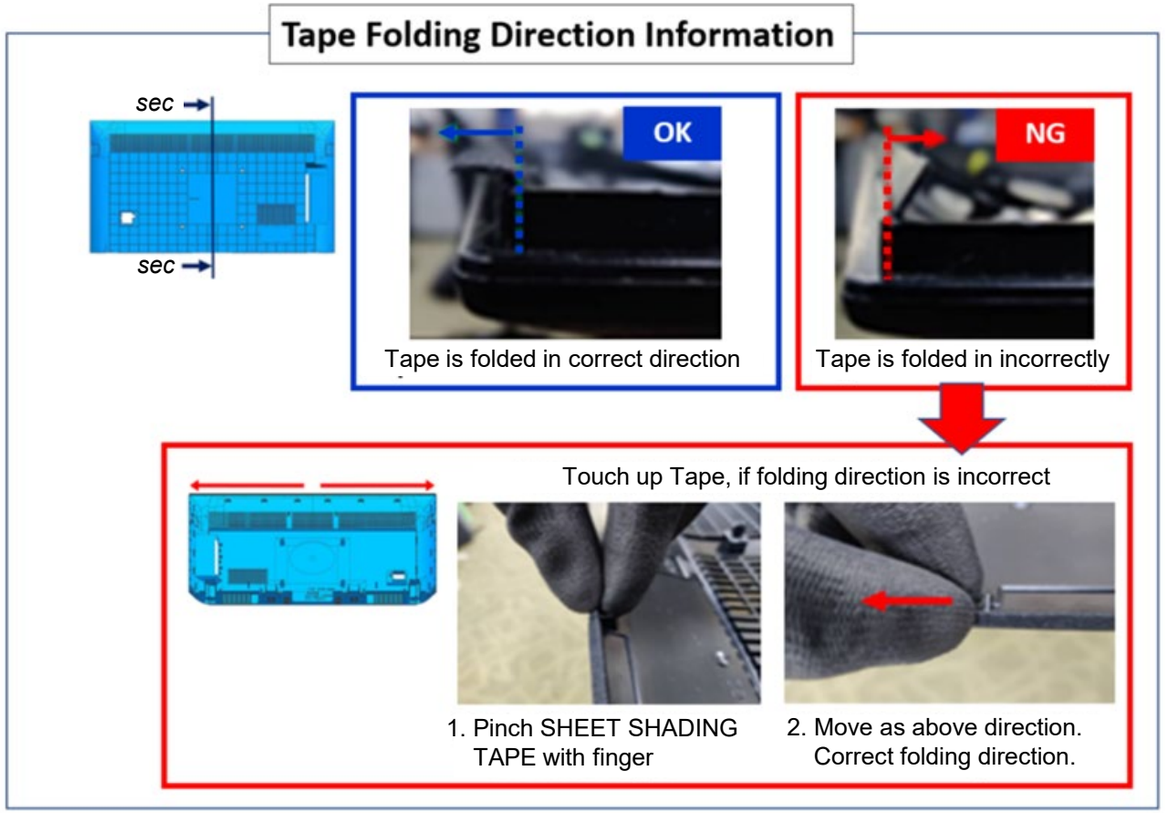


INFORMATION



Caution : Keep harness away from Inhibit Area

INFORMATION

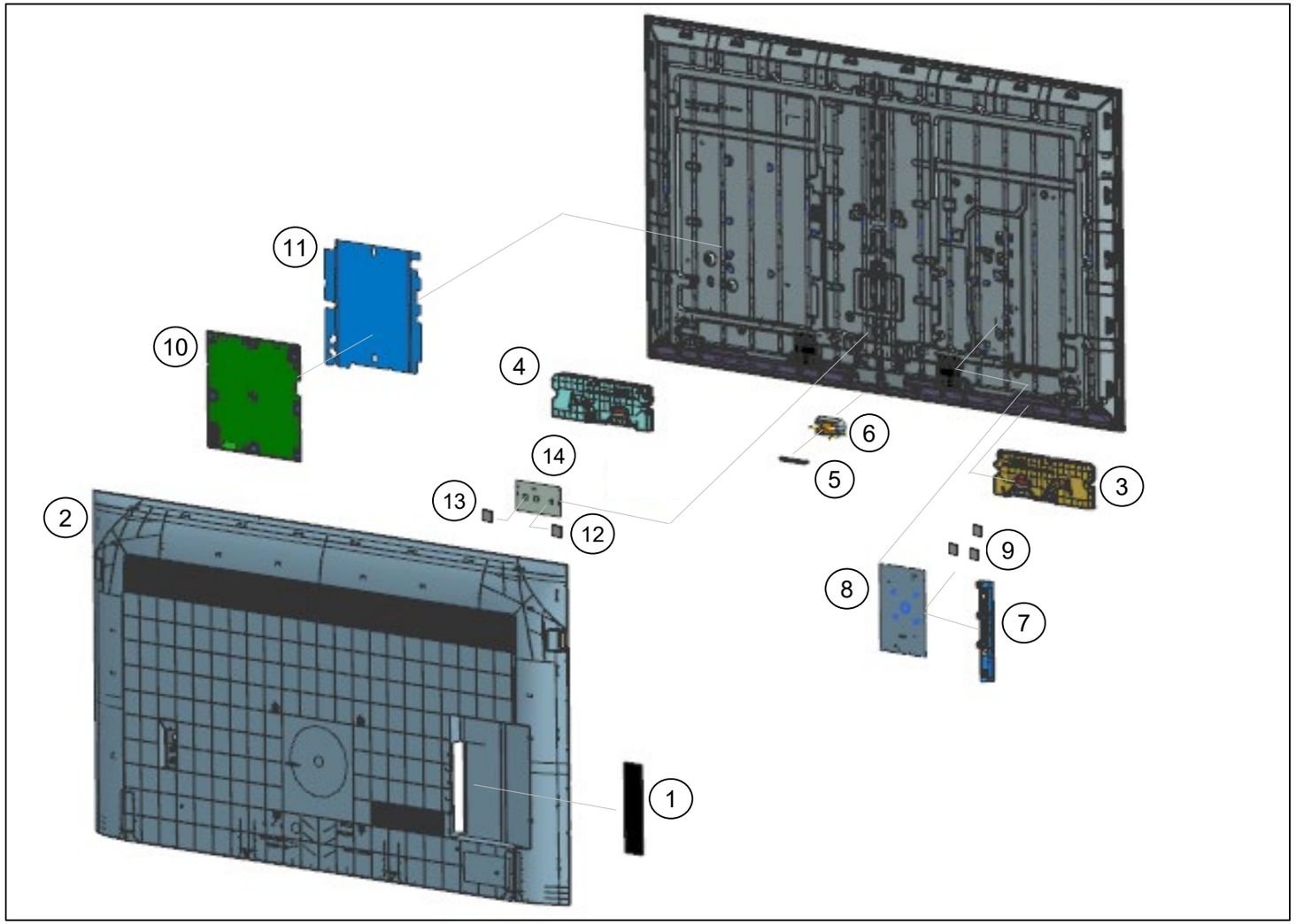


SECTION 5: KD-75X85K

5-4. EXPLODED VIEW AND PART LIST

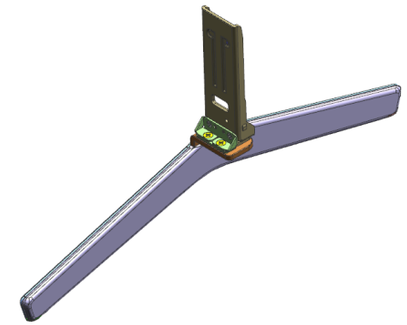
- Place the TV set facing downwards on a stable, level surface before disassembly and assembly of parts.
- ⚠ and shaded parts are critical for safety. Replace only with part number specified.
- 🔒 Parts contain confidential information. Strictly follow the instruction whenever the components are repaired 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



Stand

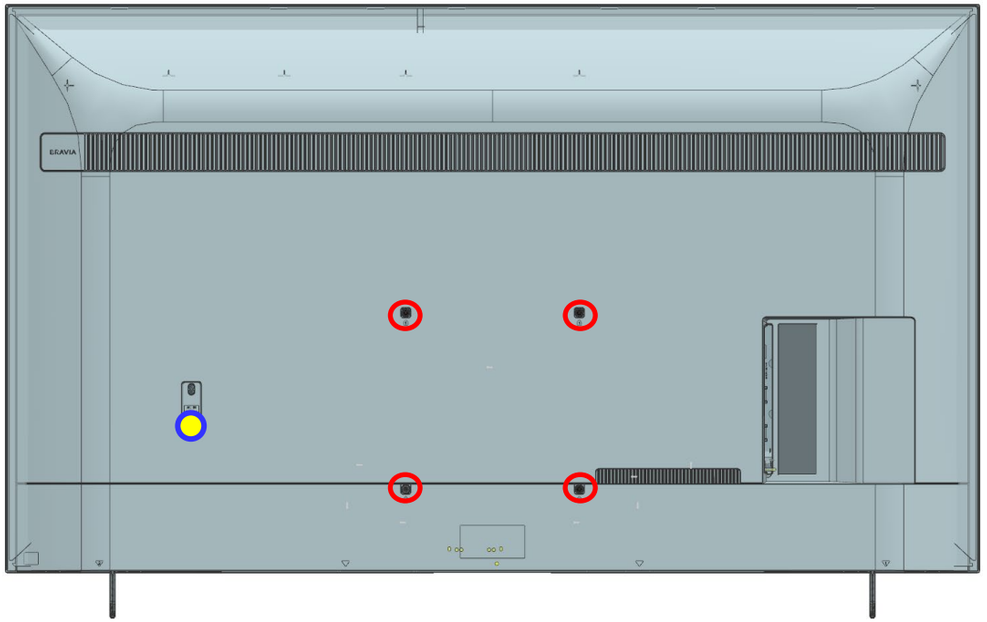
15 16

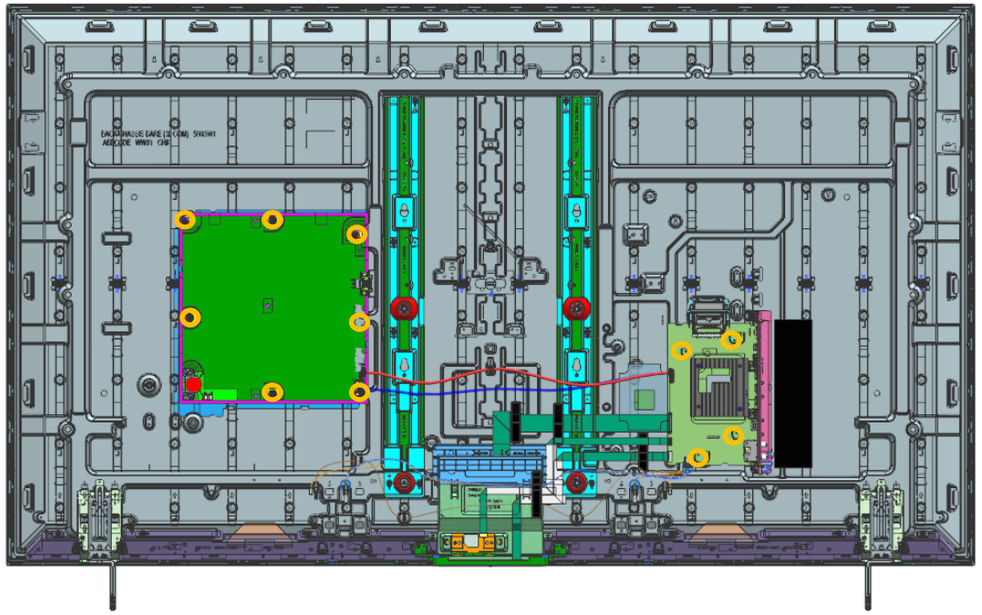


SET PART LIST

REF. NO	PART NO.	DESCRIPTION	UCM
1	5-039-646-01	LABEL, SIDE TERMINAL HP (HRS)	•
⚠ 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)	•
⚠ 10	1-004-424-42	GL03BP-STATIC CONVERTER (TV)	•
⚠ 11	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	•

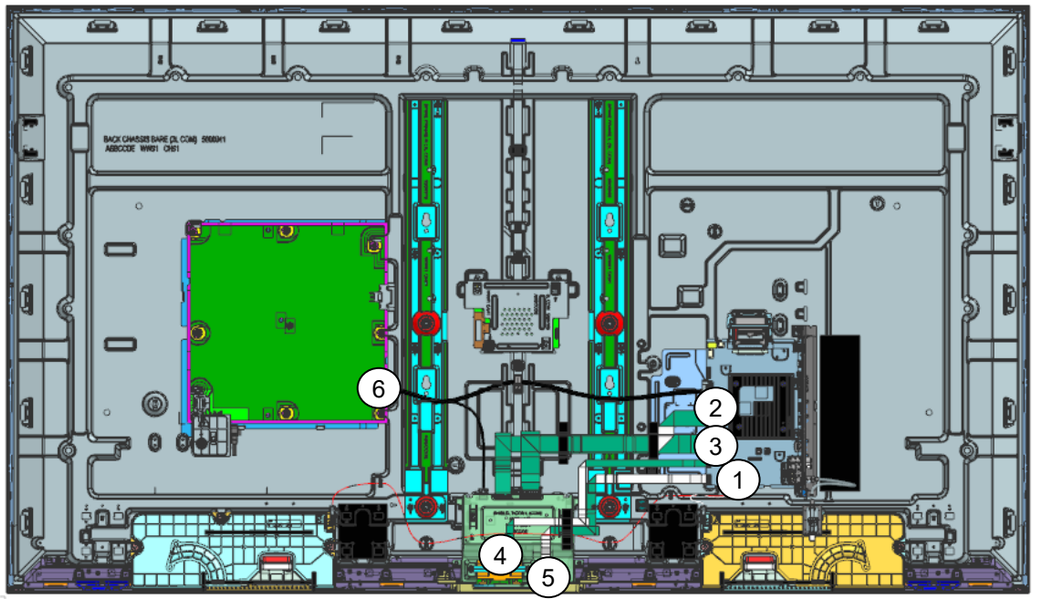
SCREW





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

CONNECTOR



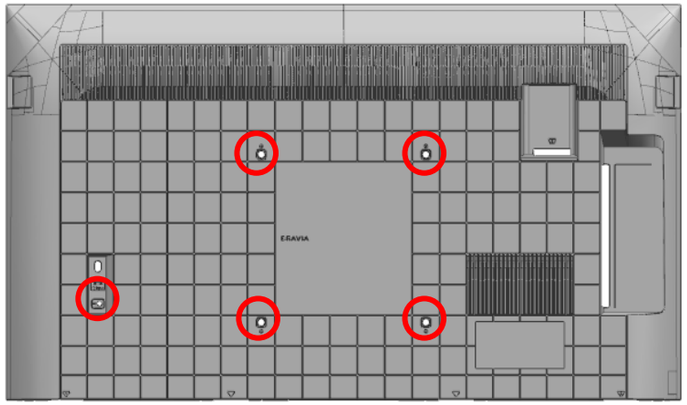
REF. NO	PART NO.	DESCRIPTION	REMARKS
1	1-006-514-13	CONNECTOR ASSY 4P (SP)	CN3550(BM5A)/CN6600(BM5STY)-SP(1)
2	1-013-161-12	FLEXIBLE FLAT CABLE 41P	CN4201(BM5A)-TCON(1)
3	1-013-163-12	FLEXIBLE FLAT CABLE 51P	CN4200(BM5A)-U1(T-CON)(1)
4	1-006-505-11	FLEXIBLE FLAT CABLE 20P	CN3801(BM5A)-J1(WIFI/BT)(1)
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

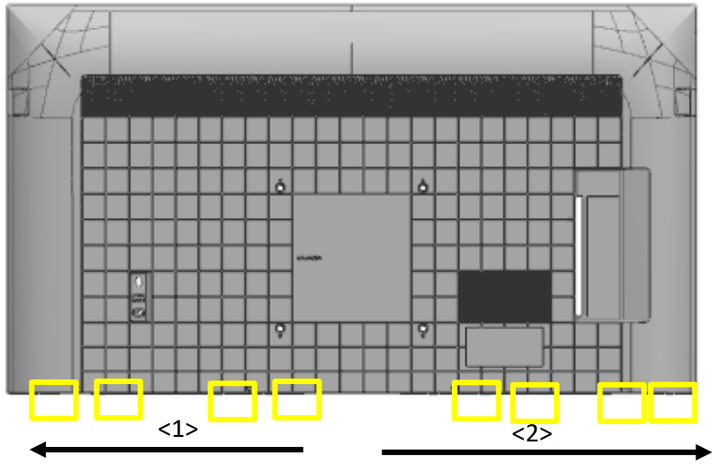
PART NO.	DESCRIPTION	UCM	REMARKS
4-535-064-61	ASSY,FALL LOCK,BELT LL	•	-
5-022-248-11	BAG, CL ASSY (3L LYX)	•	(Including CLAMPER (4L LYX) (Qty 2) installed at Main Stand. Refer Setup Guide for details)
5-009-030-01	CLAMPER,CABLE L(BNN)	•	-
5-009-031-02	CLAMPER,CABLE S(BNN)	•	-
⚠ 1-005-642-12	C7L AC POWER 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.)

REAR COVER

1. Remove the screws from the rear cover (5 pcs)



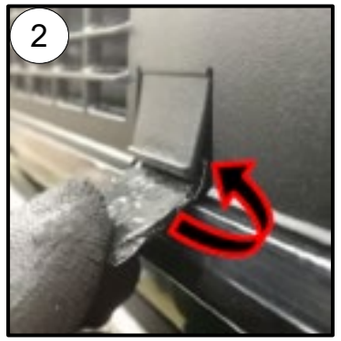
2. Unhook the bottom hook, starting from center.



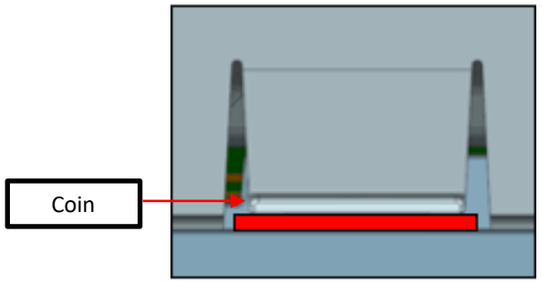
① Unhook two hooks closest to center simultaneously to prevent lock back. (Refer to the next page for the location of hooks)

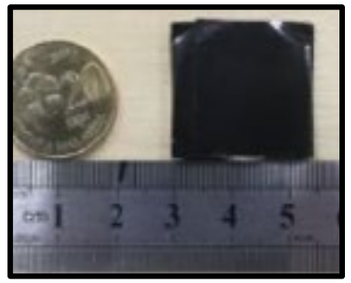
② Unhook both hooks using coin or jig.

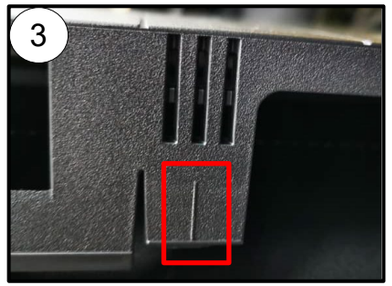
③ Use mirror or touch the line to assist locating the hook position.



Coin or jig to unhook bottom Rear Cover - Bezel hook
*Wrap coin in tape (55mmX25mm)
*Thickness of coin approximately 2mm

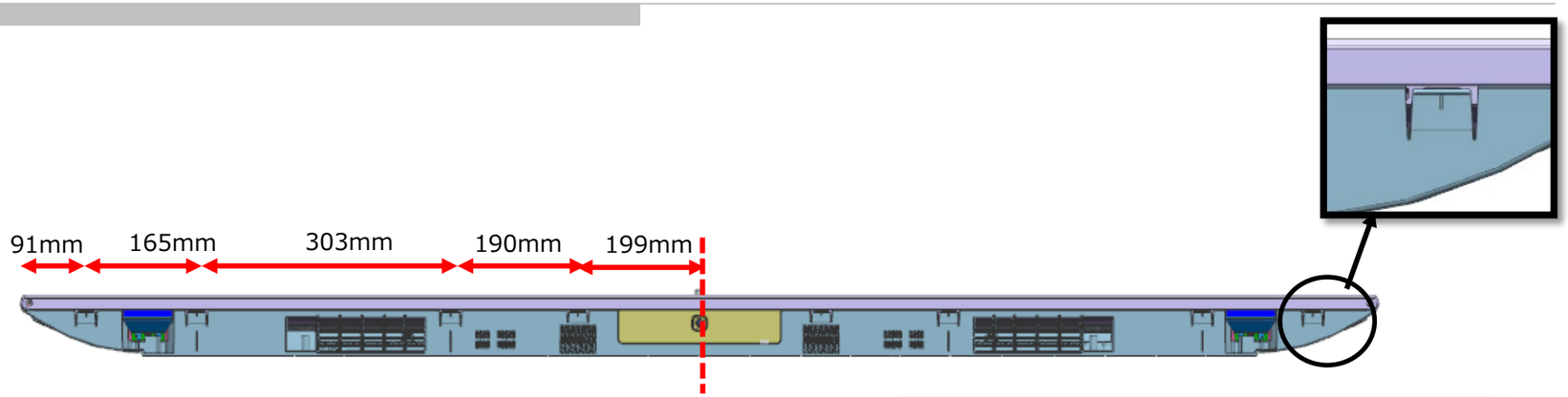




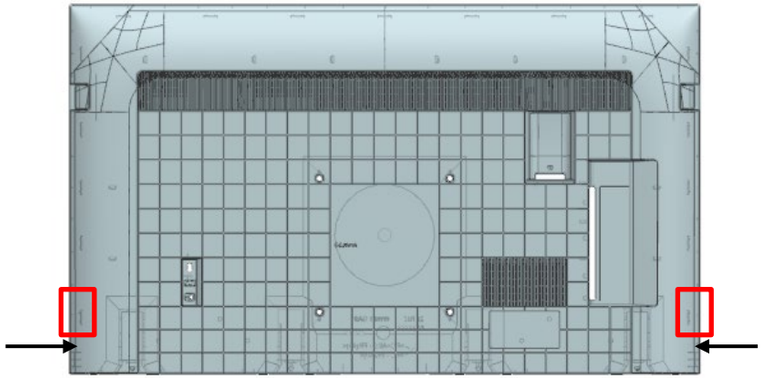


REAR COVER

Bottom Hook Position



3. Unhook corner hook.

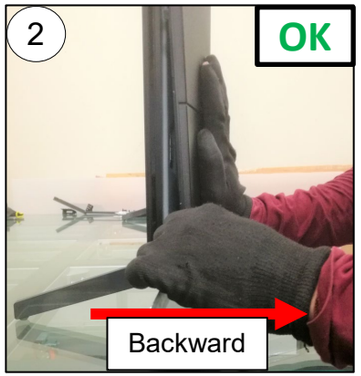


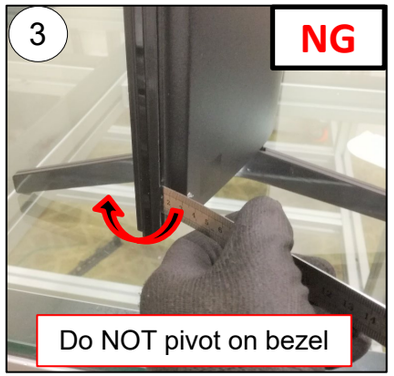
Ruler or jig to release corner hook
*Wrap ruler with tape to prevent scratch

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.

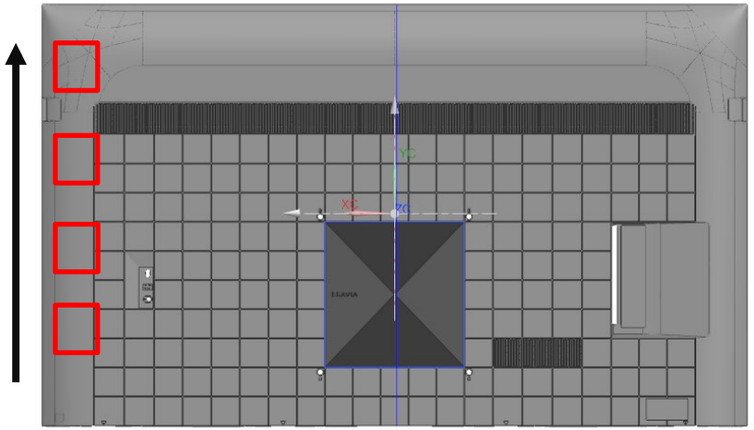




REAR COVER

4. Unhook left side hooks.

Total rear cover back chassis : 4 hooks



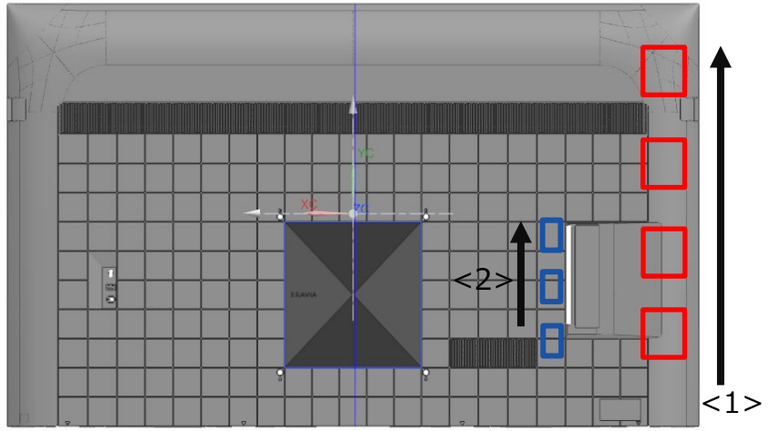
① Grip the rear cover by hand and use a ruler or jig to remove the hook of the rear cover back chassis.

② Flex the rear cover outward to remove the hook. Support set with arm.

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.

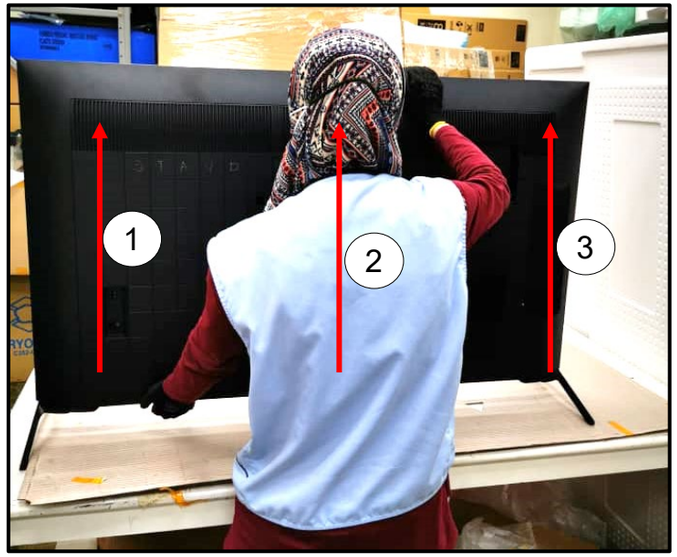
② Pull the rear cover below the side jack to remove the hook.

③ Remove the remaining side hooks.

REAR COVER

6. Unhook top row.

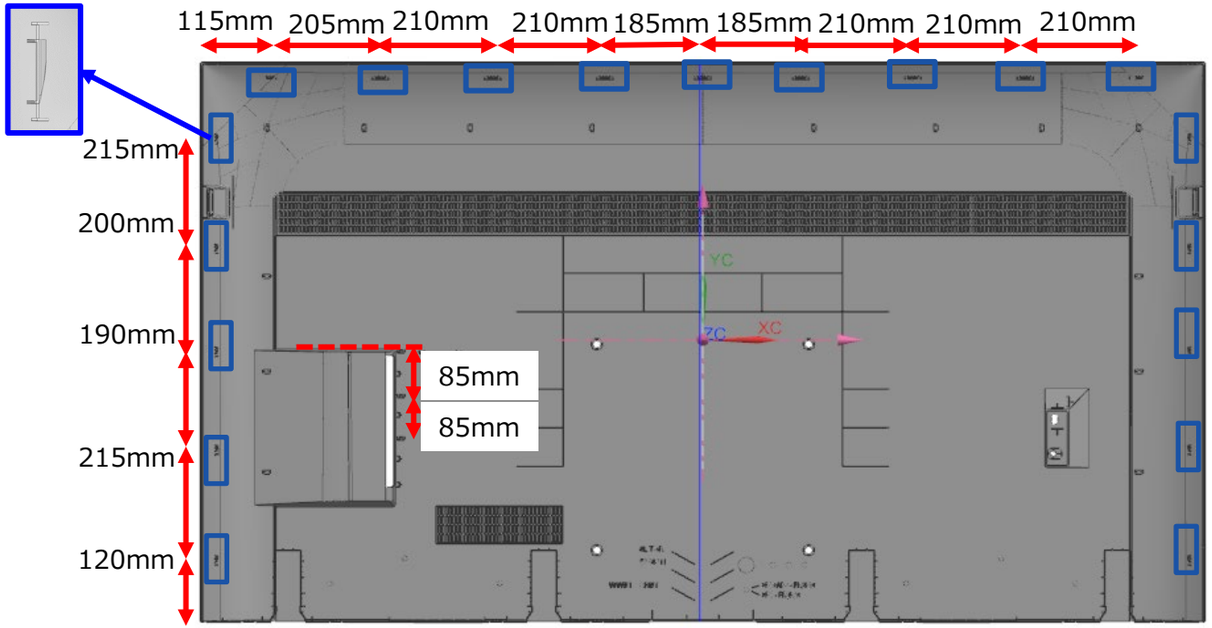
Total hooks (top row): 9 hooks

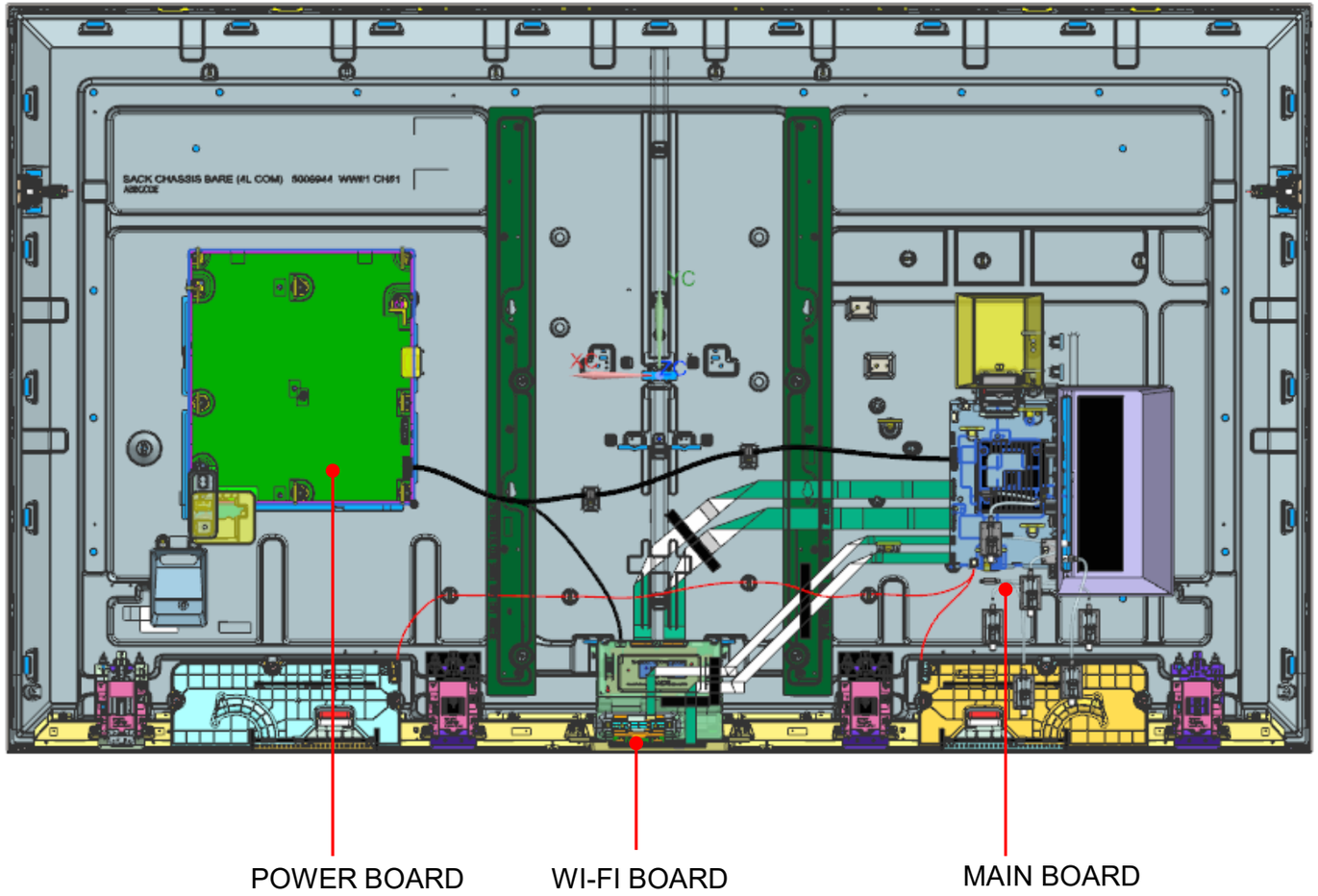


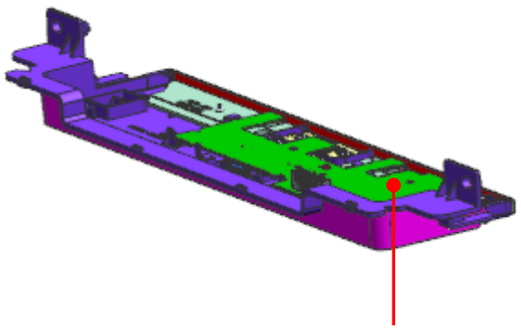
① Tilt the rear cover and push upwards on the left and right side.

② Pull the rear cover below the side jack to remove the upper hook.

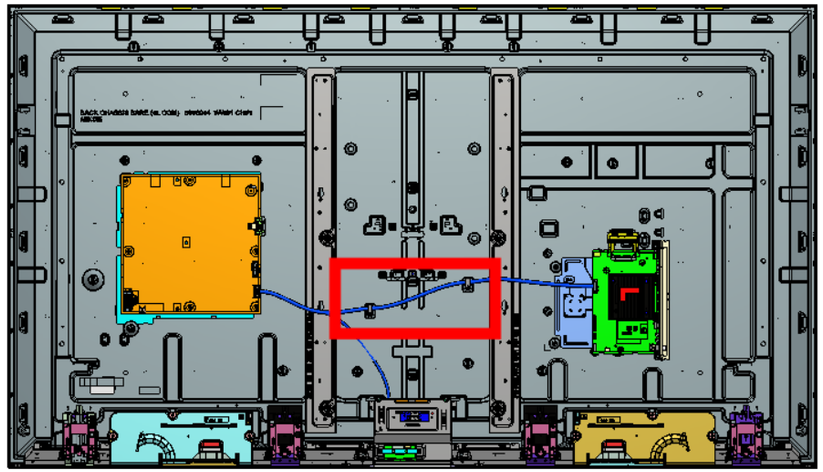
Hook positioning.



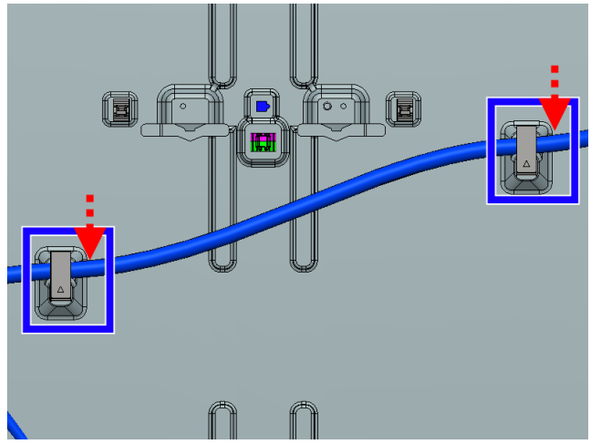

POWER BOARD
WI-FI BOARD
MAIN BOARD


RECEIVER BOARD

WIRE DRESSING

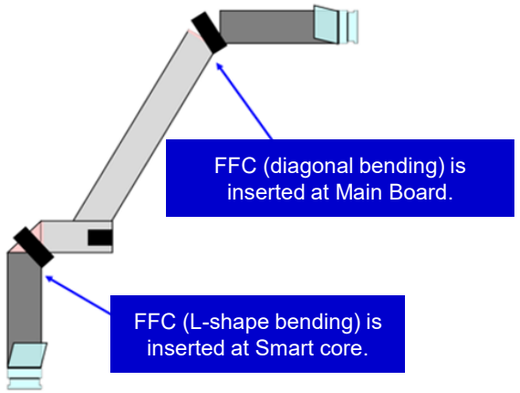


1

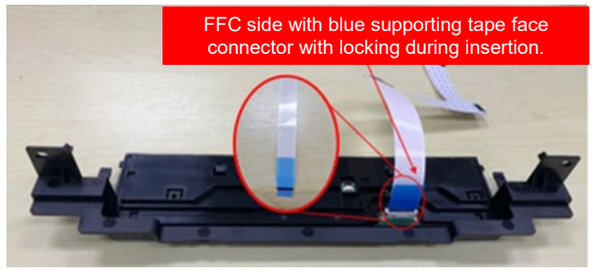


INFORMATION

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

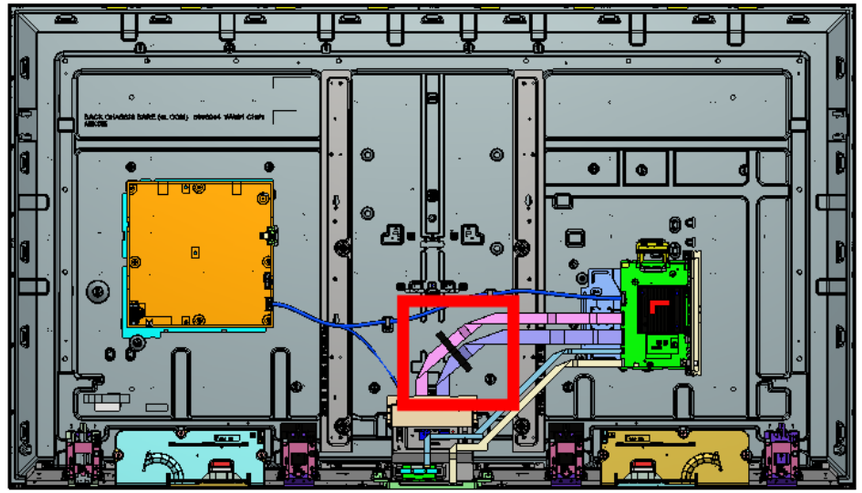


After assemble Receiver board to Smart Core, operator need to insert Receiver board FFC in straight condition.



Smart Core is placed on FLAT surface during FFC insertion.

TAPE



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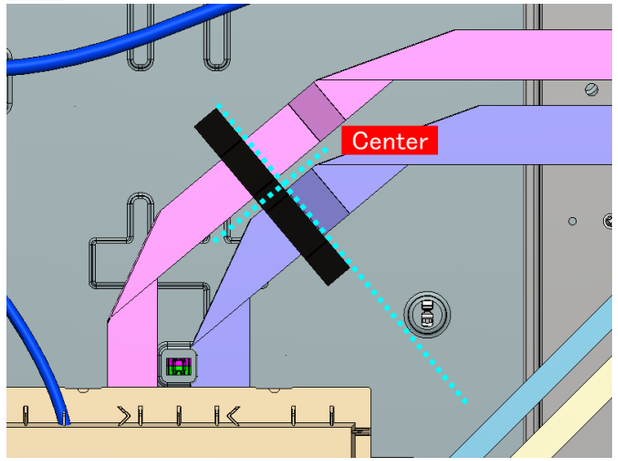

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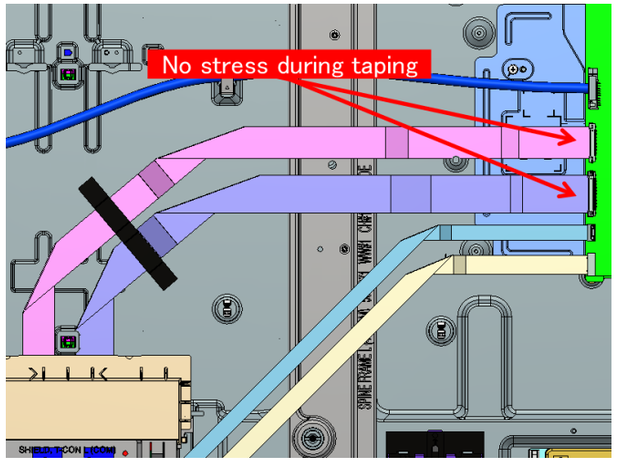
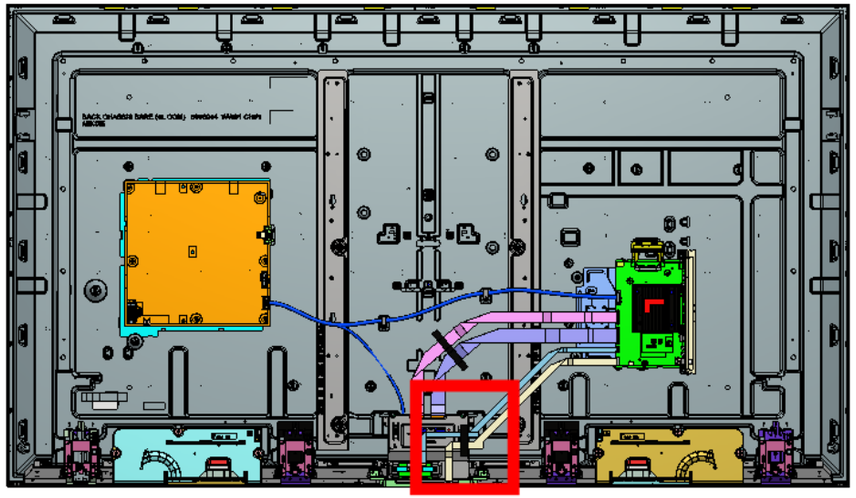


TAPE



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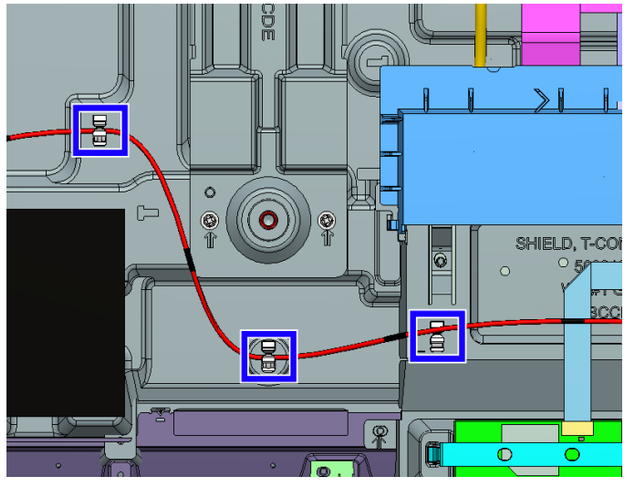
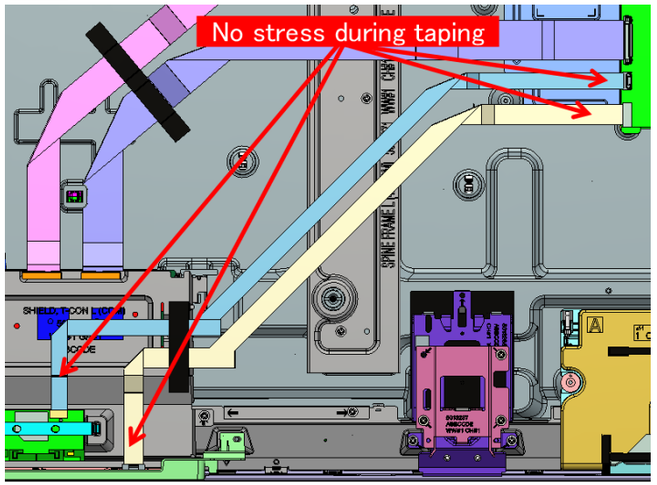
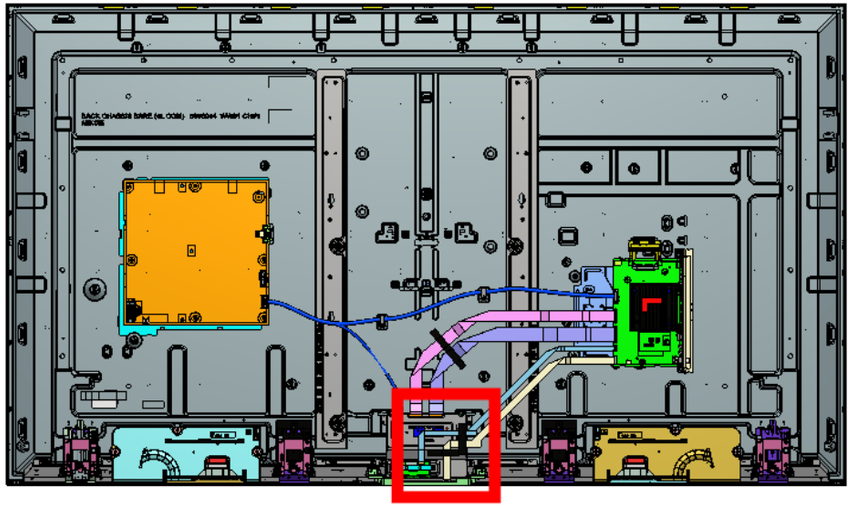


2



TAPE



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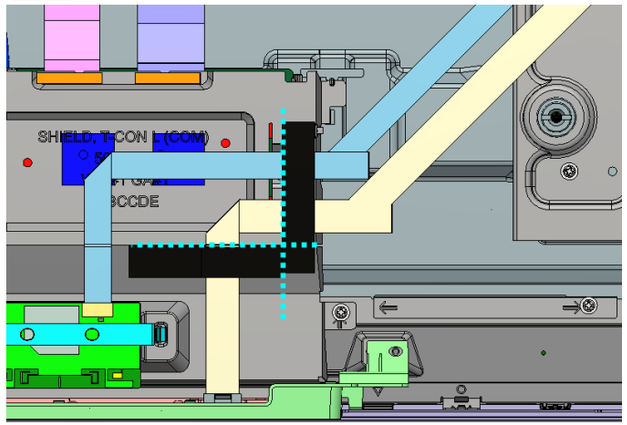

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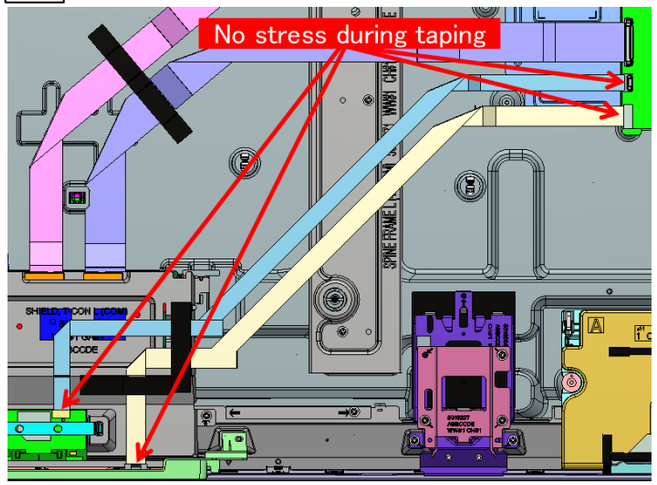
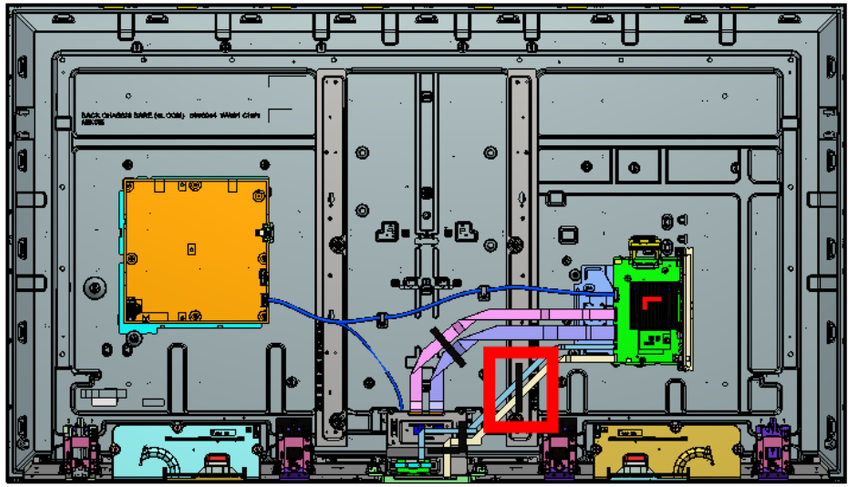


TAPE



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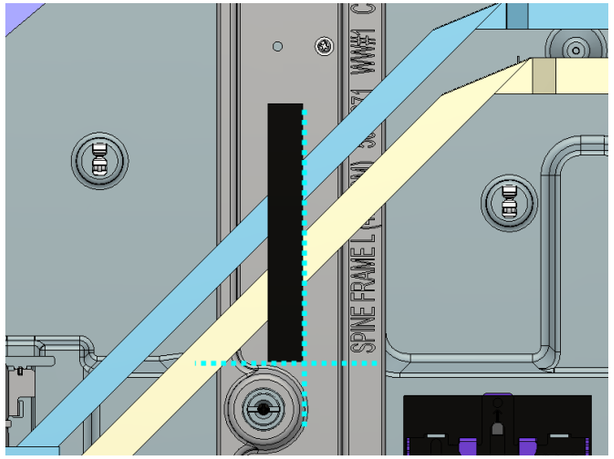

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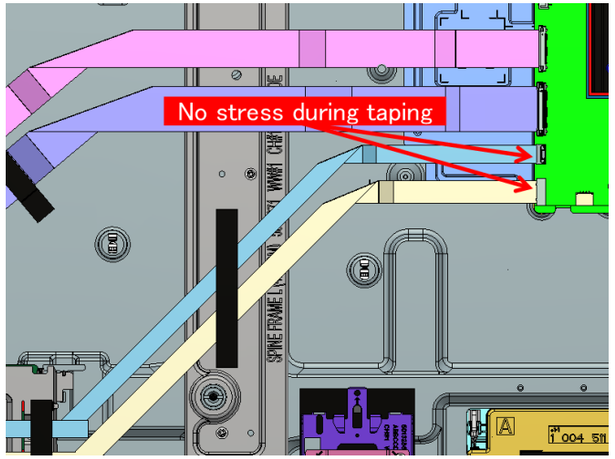
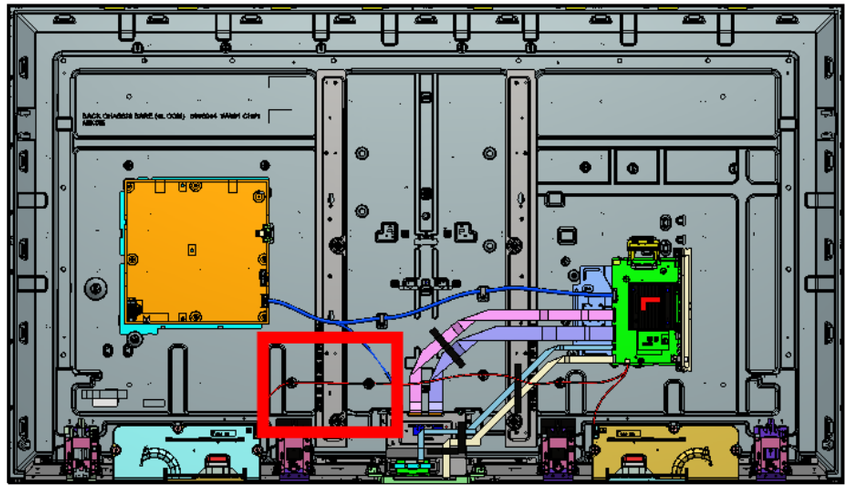
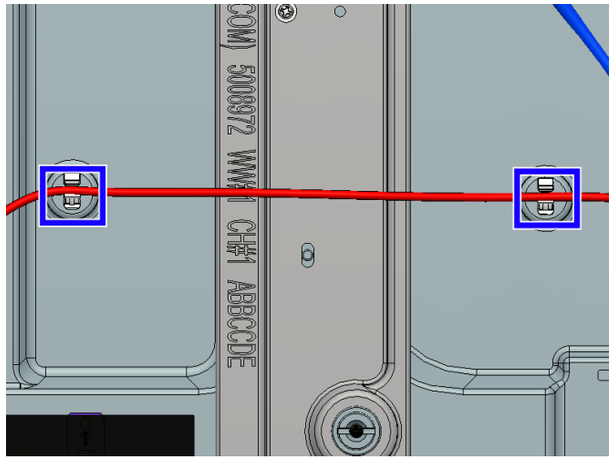
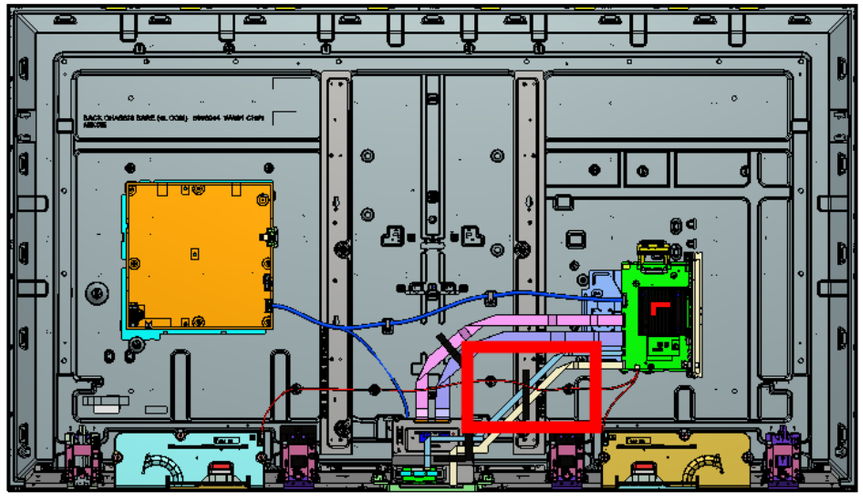


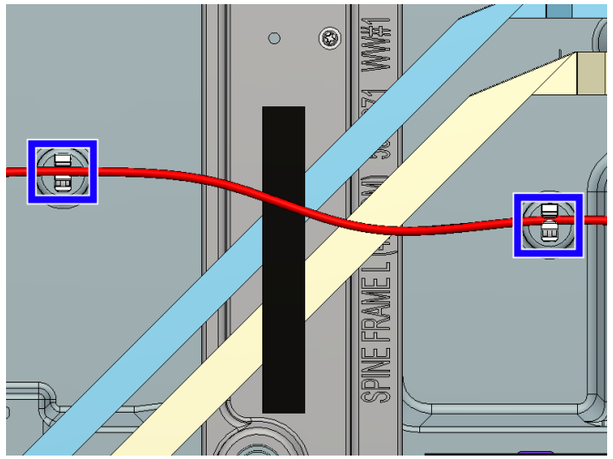
WIRE DRESSING



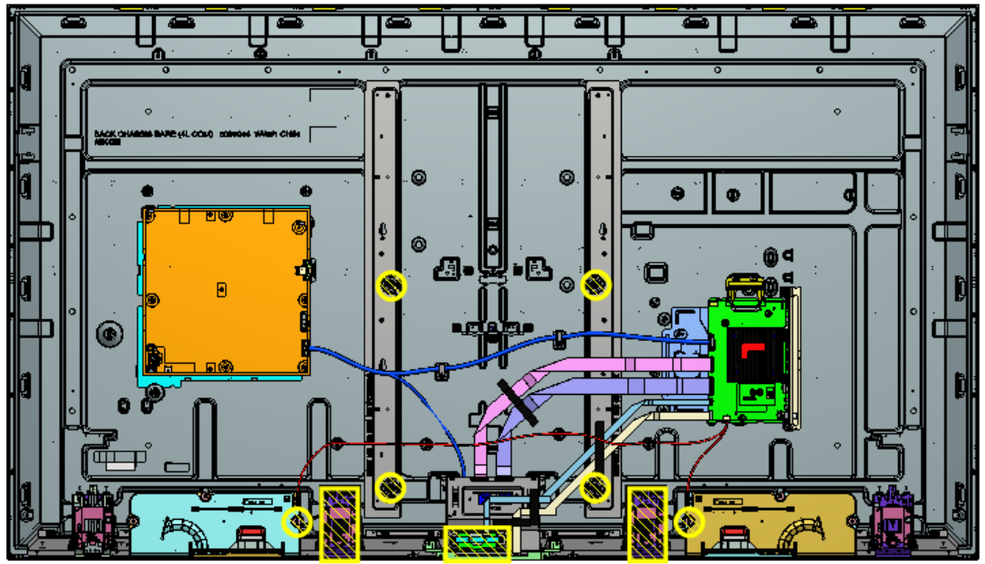


WIRE DRESSING





INFORMATION



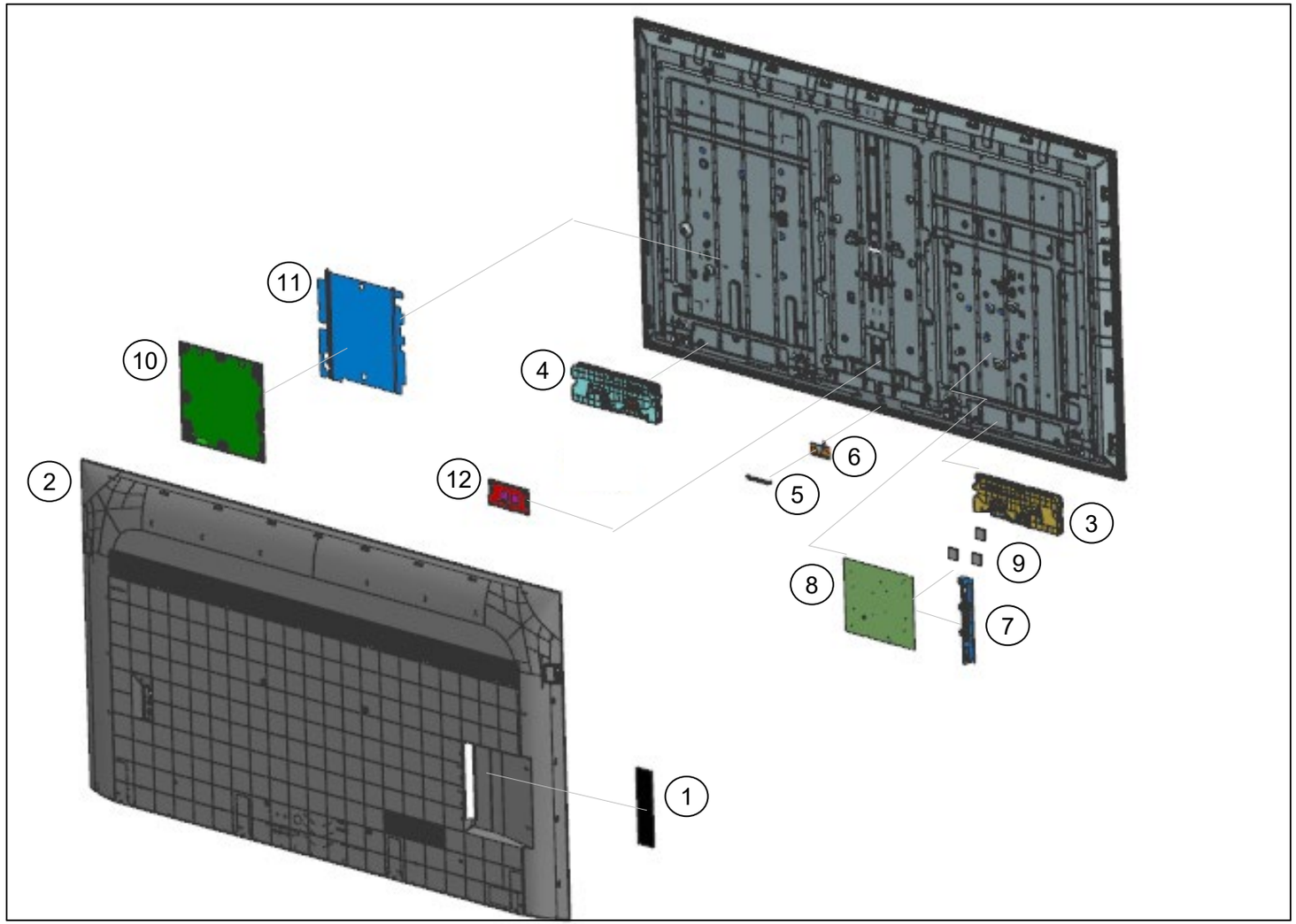
Caution : Keep harness away from Inhibit Area

SECTION 6: KD-85X8*K

6-4. EXPLODED VIEW AND PART LIST

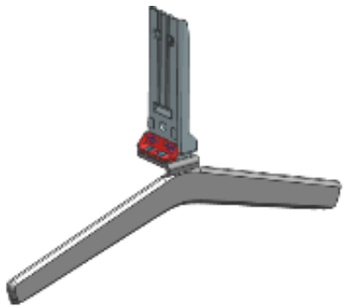
- Place the TV set facing downwards on a stable, level surface before disassembly and assembly of parts.
- ⚠ and shaded parts are critical for safety. Replace only with part number specified.
- 🔒 Parts contain confidential information. Strictly follow the instruction whenever the components are repaired and/or replaced

- (*) 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



Stand

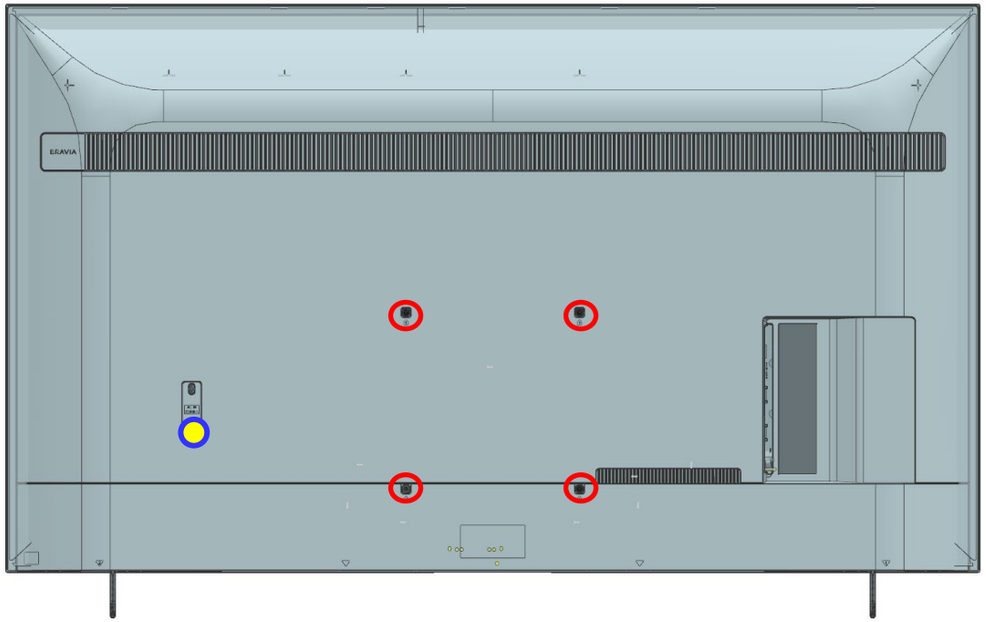
13 14

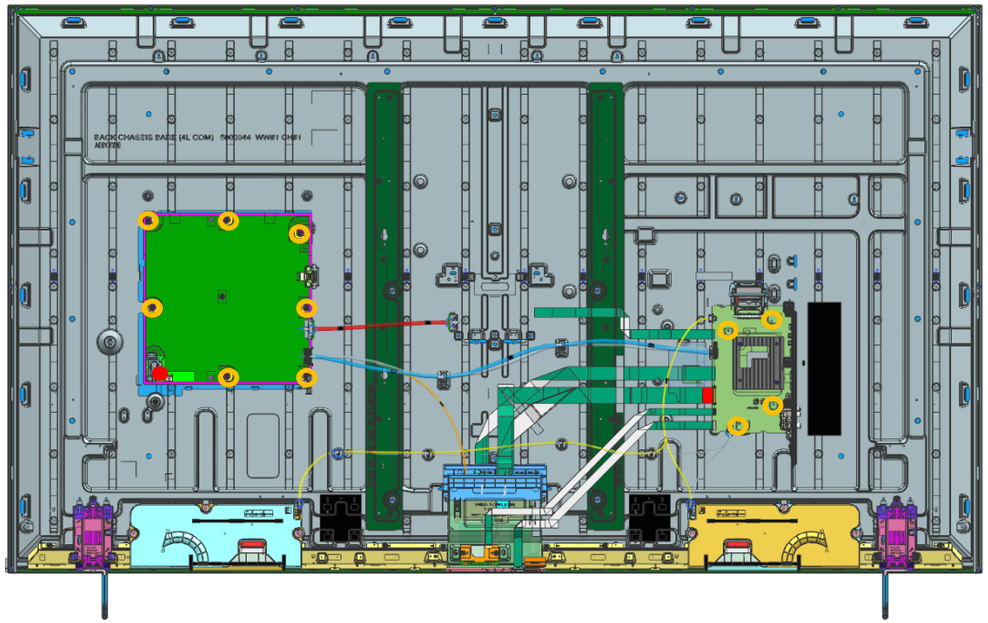


SET PART LIST

REF. NO	PART NO.	DESCRIPTION	KD-85X80K	KD-85X85K	KD-85X80CK	REMARKS
			UC2	UCM	UC2	
1	5-039-646-01	LABEL, SIDE TERMINAL HP (HRS)	•	•	•	-
2	5-039-627-01	REAR COVER ASSY (4L HRS)	•	•	•	-
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	•	•	n/a	-
8	A-5042-693-A	COMPL_SVC_BM5A_FH_UCM_MIC	n/a	n/a	•	-
9	4-457-451-12	SHEET, THERMAL (BAF)	•	•	•	-
10	1-004-424-42	GL03BP-STATIC CONVERTER (TV)	•	•	•	-
11	5-027-742-11	SHEET, INSULATION (3L PHN) A	•	•	•	-
12	1-014-135-11	MOUNTED PWB E-T-CON (85)	•	•	•	T-CON must be paired with P-Mod (O-Cell INX)
12	1-014-129-11	MOUNTED PWB E-T-CON (85)	•	•	•	T-CON must be paired with P-Mod (O-Cell AUO)
13	5-022-250-13	STAND, L (4L LYX) A	•	•	•	-
14	5-022-251-13	STAND, R (4L LYX) A	•	•	•	-

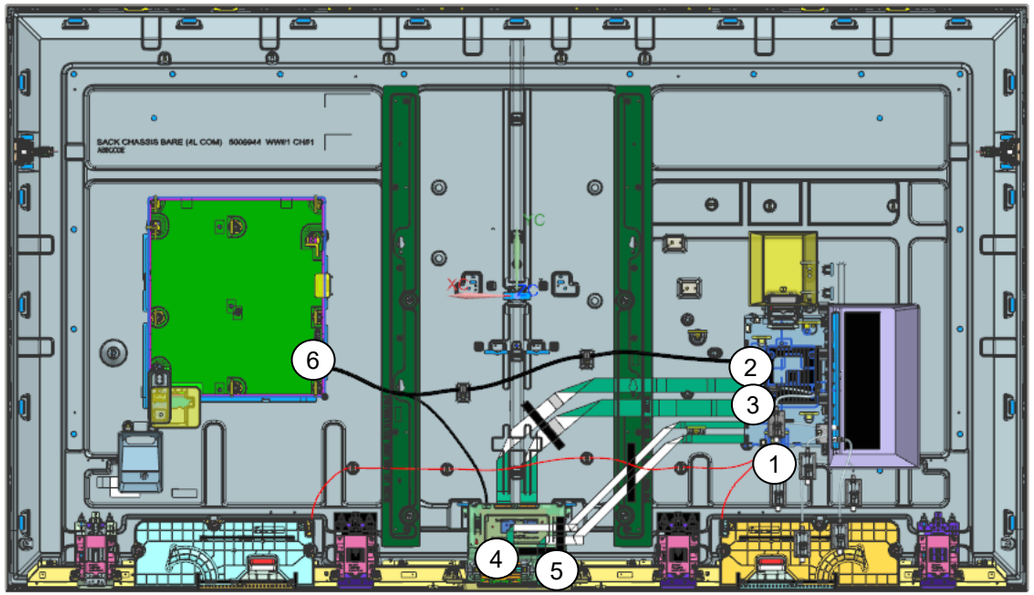
SCREW





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

CONNECTOR

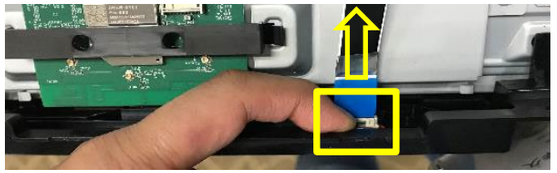


REF. NO	PART NO.	DESCRIPTION	REMARKS
1	1-006-517-11	CONNECTOR ASSY 4P (SP)	CN3350(BM5A)/CN6600(BM5STY)-SP(1)
2	1-011-600-11	FLEXIBLE FLAT CABLE 41P	CN4201(BM5A)-(T-CON)(1)
3	1-014-737-11	FLEXIBLE FLAT CABLE 51P	CN4200(BM5A)-(T-CON)(1)
4	1-006-521-11	FLEXIBLE FLAT CABLE 20P	CN1200(BM5A)-WIFI(1)
5	1-011-605-11	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
		UC2	UCM	UC2	
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.)

1. Remove harness in yellow box.



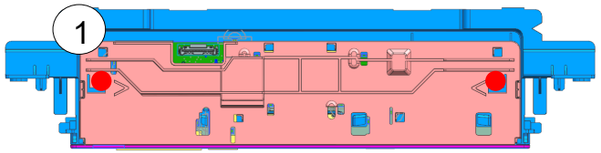
2. Release smart core hook in red box.

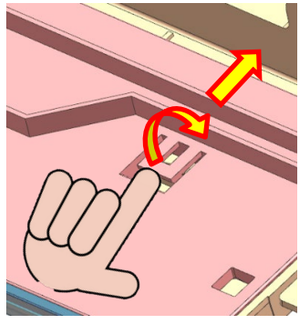
3. Remove the smart core.

DISASSEMBLE COVER TOP

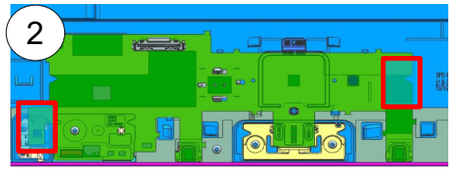
Remove the hooks in the following order.

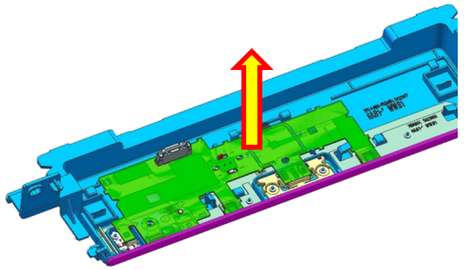
① Lift the hook in red circle and slide it.

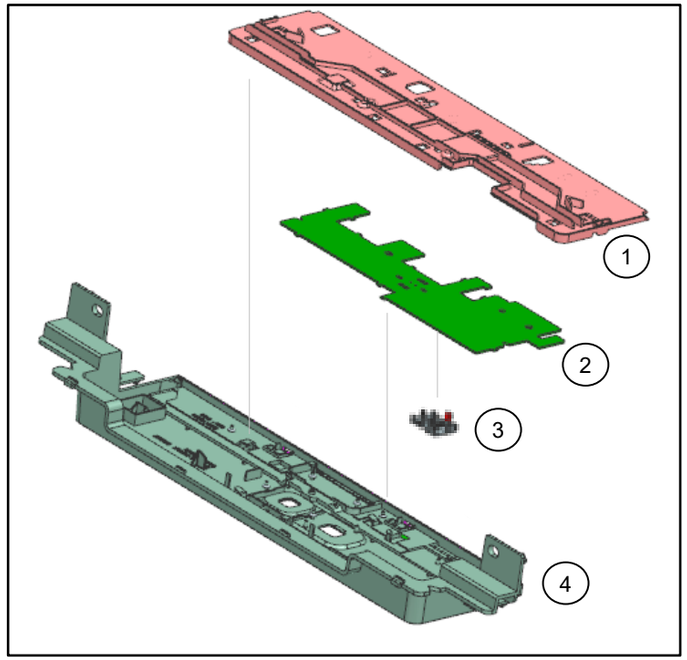




② Hold the area in the red box and lift the receiver board.







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

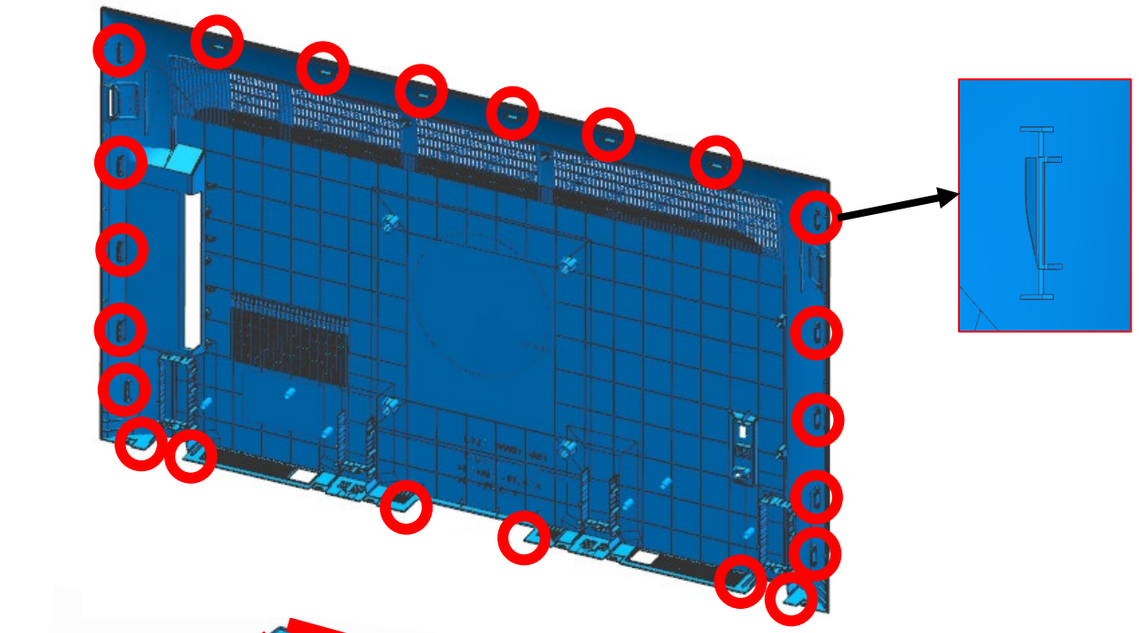
SHARP EDGE

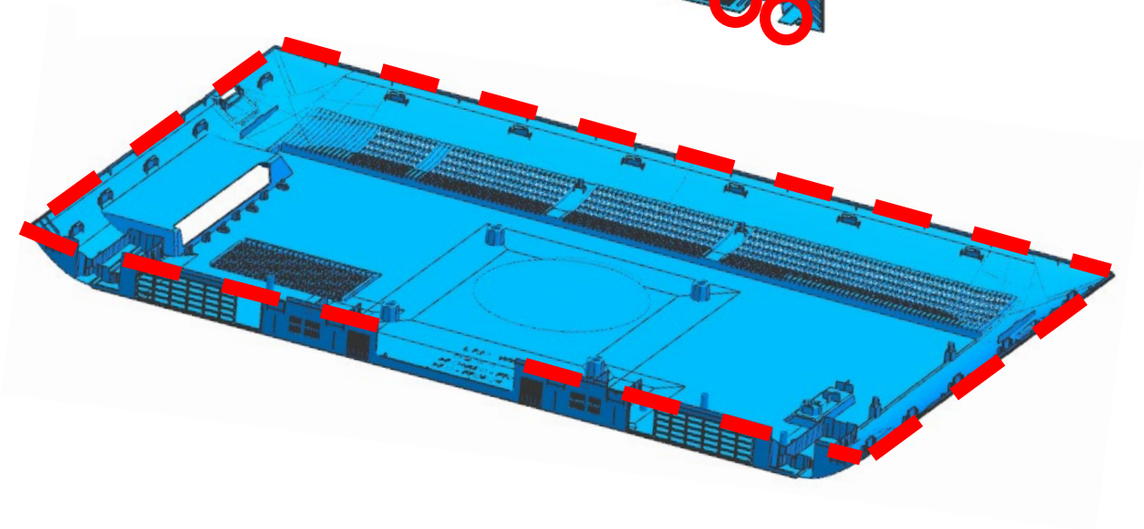
- Please wear gloves when removing rear cover to avoid sharp edge at bottom side and hook area as shown in the next figure.

: Sharp edge and sharp corner

Hook position may vary according to inch

: Sharp edge



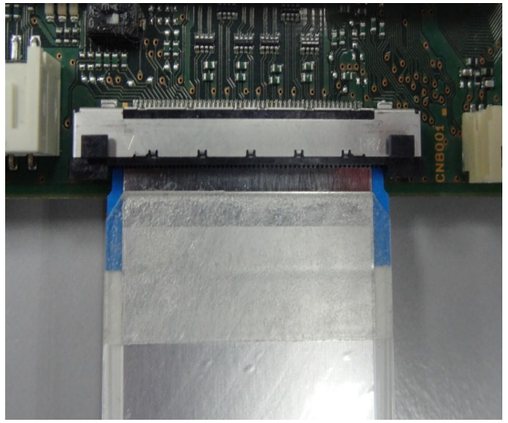


FFC REPLACEMENT CAUTIONS

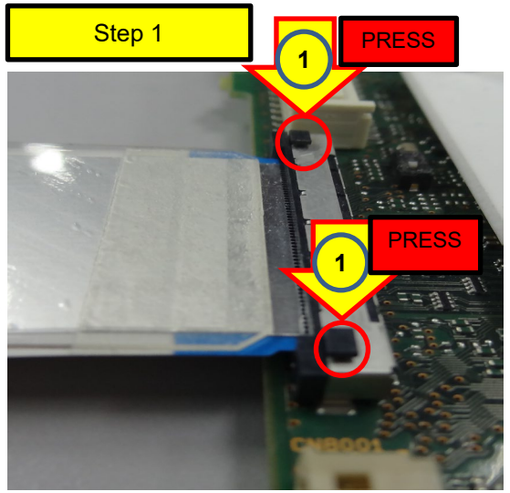
Remark: Refer to Board Location and Connector Diagram

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

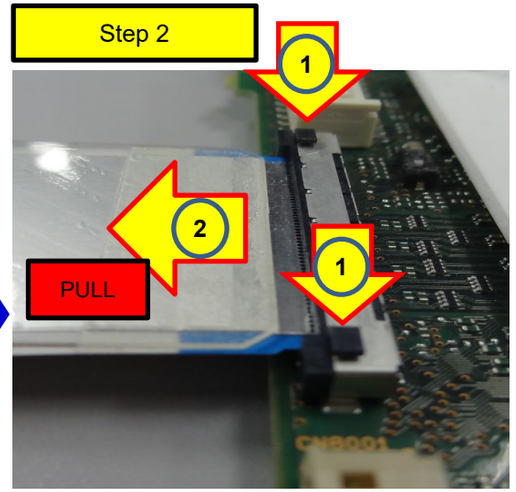
Initial condition



Step 1



Step 2



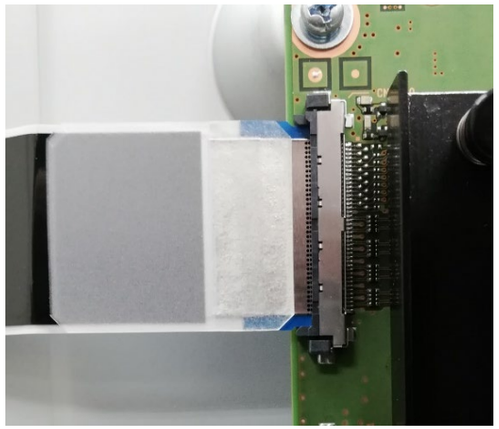
1 Press the release lock button downward at same time (highlighted in red).

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

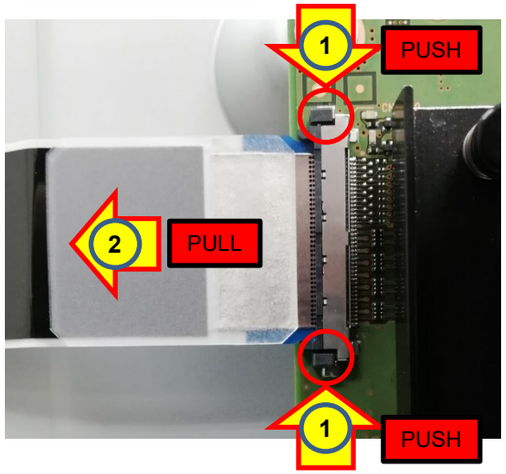
Note: FFC as in image is only for reference purpose. Actual FFC outlook may vary by each vendor.

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

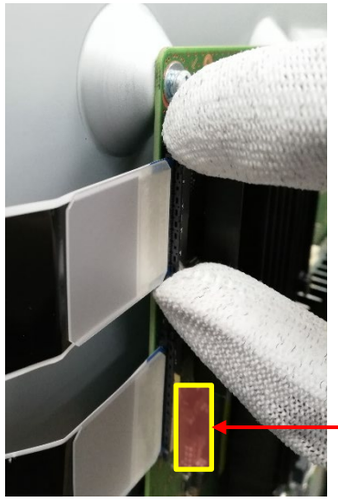
Initial condition



Step 1 & 2



Caution



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

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

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

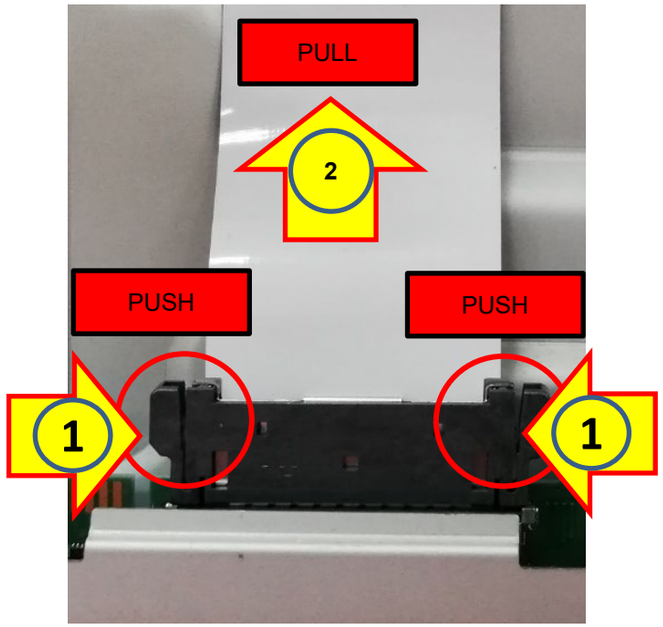
Note: FFC as in image is only for reference purpose. Actual FFC outlook may vary by each vendor.

Remark: Refer to Board Location and Connector Diagram

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

Initial condition

Step 1 & 2

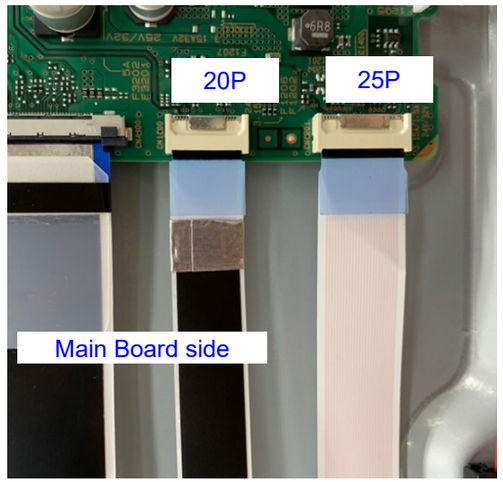


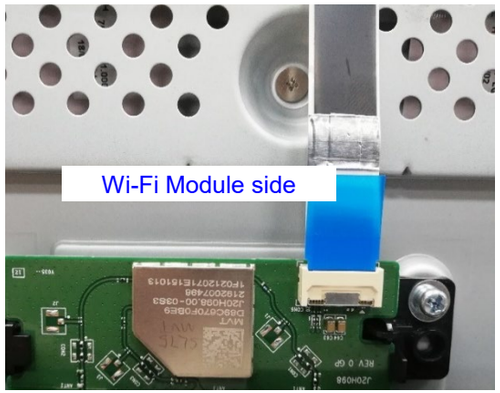
1. Push the side-release lock buttons inward (highlighted in red).
2. Pull-out FFC in straight direction while pushing side-release lock buttons at the same time.

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

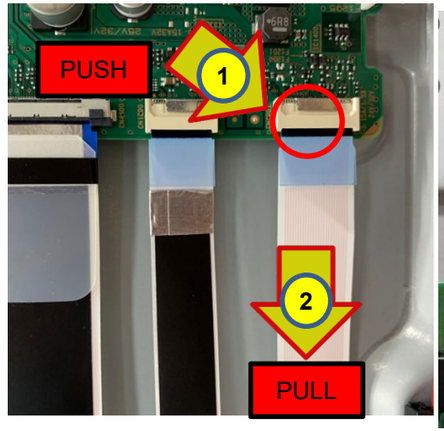
WITHDRAWAL OF 20P / 25P FFC CONNECTOR

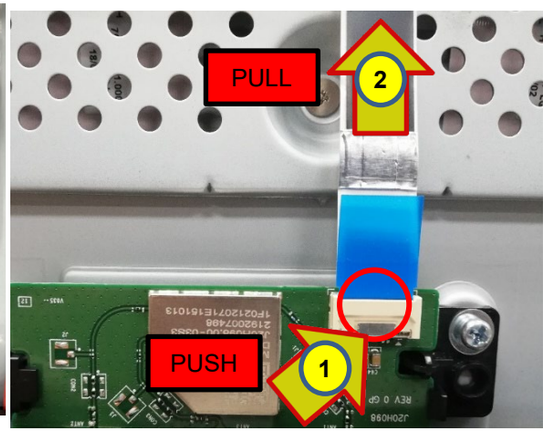
Initial condition





Step 1 & 2

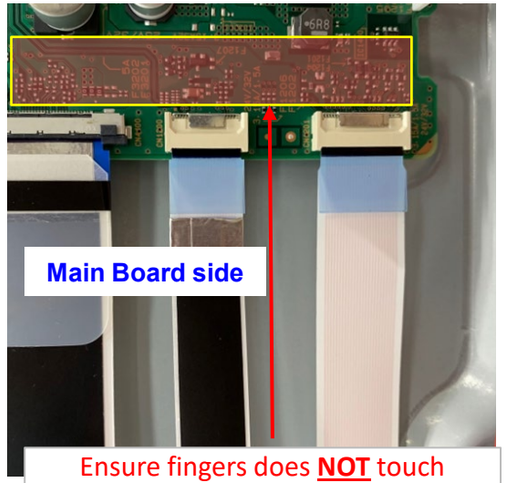




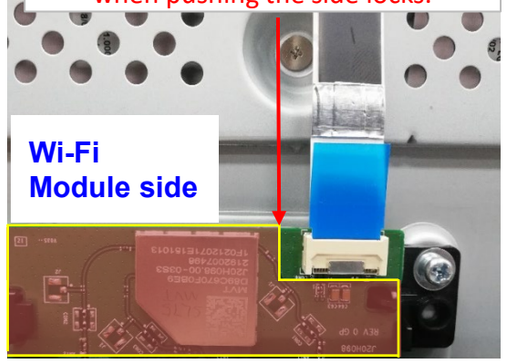
1. Push the side-release lock buttons inward (highlighted in red).
2. Pull-out FFC in straight direction while pushing side-release lock buttons at the same time.

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

Caution

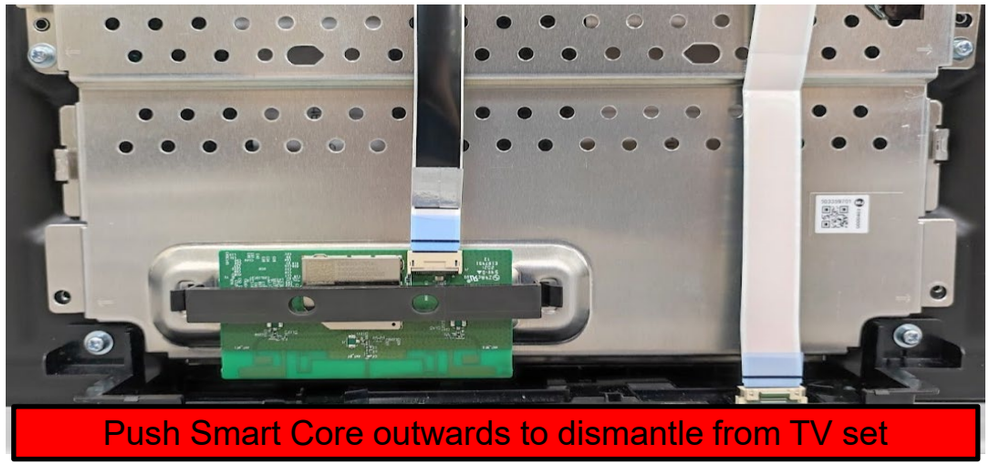


Ensure fingers does **NOT** touch parts on board and tuner connector when pushing the side locks.

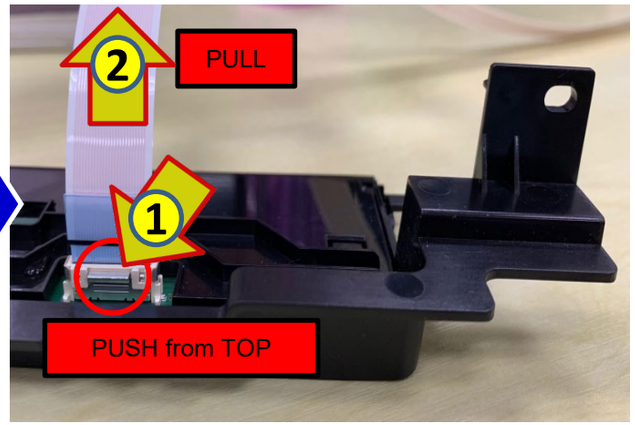


WITHDRAWAL OF 25P FFC CONNECTOR

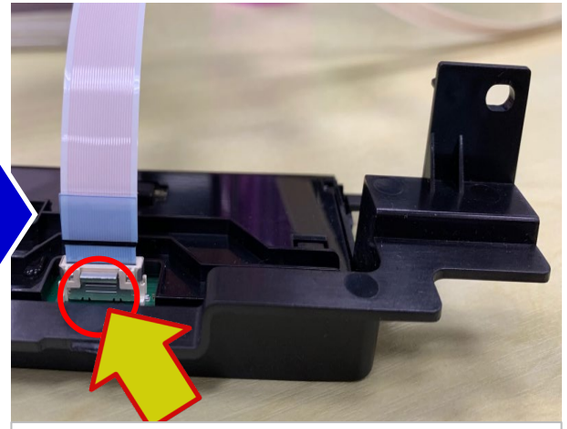
Pre-Step Before FFC Removal



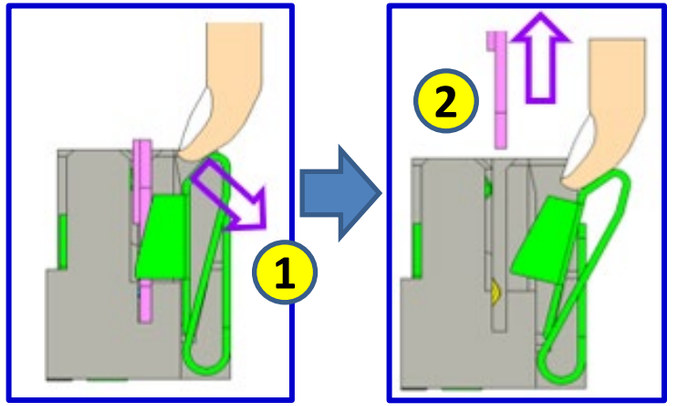
Step 1 & 2



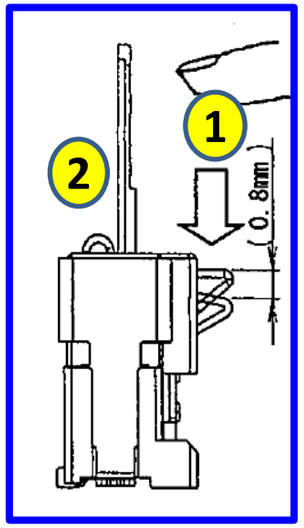
Caution



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



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



1. Push the side-release lock buttons inward (highlighted in red).
2. 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.