LED-TV

Chassis : N96A

Model : UE**C600*R*

UE**C650*U*

UE**C6700US

SERVICE Manual

TFT-LCD TV

UEC6000R* / UE**C650*U* / UE**C6700US**

Contents

Refer to the service manual in the GSPN (see the rear cover) for the more information.

Contents

GSPN (Global Service Partner Network)

Area	Web Site
North America	http://service.samsungportal.com
Latin America	http://latin.samsungportal.com
CIS	http://cis.samsungportal.com
Europe	http://europe.samsungportal.com
China	http://china.samsungportal.com
Asia	http://asia.samsungportal.com
Mideast & Africa	http://mea.samsungportal.com

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1. Precautions

1-1. Safety Precautions

Follow these safety, servicing and ESD precautions to prevent damage and to protect against potential hazards such as electrical shock.

1-1-1. Warnings

1. For continued safety, do not attempt to modify the circuit board.
2. Disconnect the AC power and DC power jack before servicing.

1-1-2. Servicing the LED TV

1. When servicing the LED TV, Disconnect the AC line cord from the AC outlet.
2. It is essential that service technicians have an accurate voltage meter available at all times.
   Check the calibration of this meter periodically.

1-1-3. Fire and Shock Hazard

Before returning the LED TV to the user, perform the following safety checks:

1. Inspect each lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the LED TV.
2. Inspect all protective devices such as nonmetallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistorcapacitor networks, mechanical insulators, etc.
3. Leakage Current Hot Check (Figure 1-1):
   WARNING : Do not use an isolation transformer during this test.
   Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).

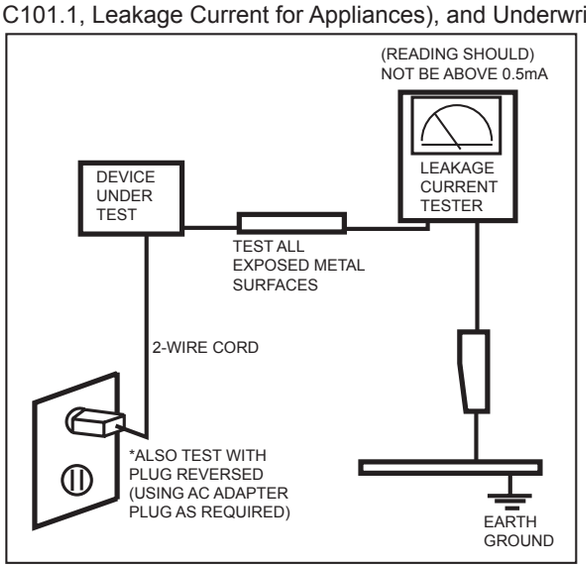

Figure 1-1. Leakage Current Test Circuit

4. With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: metal cabinets, screwheads and control shafts.
   The current measured should not exceed 0.5 milliamp.
   Reverse the power-plug prongs in the AC outlet and repeat the test.

1-1-4. Product Safety Notices

Some electrical and mechanical parts have special safetyrelated characteristics which are often not evident from visual inspection. The protection they give may not be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by ⚠ on schematics and parts lists. A substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire and/or other hazards. Product safety is under review continuously and new instructions are issued whenever appropriate.

1-2. Servicing Precautions

WARNING: An electrolytic capacitor installed with the wrong polarity might explode.
Caution: Before servicing units covered by this service manual, read and follow the Safety Precautions section of this manual.
Note: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions, always follow the safety precautions.

1-2-1 General Servicing Precautions

1. Always unplug the unit's AC power cord from the AC power source and disconnect the DC Power Jack before attempting to:
   (a) remove or reinstall any component or assembly, (b) disconnect PCB plugs or connectors, (c) connect a test component in parallel with an electrolytic capacitor.
2. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
3. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the area around the serviced part has not been damaged.
4. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
5. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500 V) to theblades of the AC plug.
   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
6. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3. Electrostatically Sensitive Devices (ESD) Precautions

Some semiconductor (solid state) devices can be easily damaged by static electricity. Such components are commonly called Electrostatically Sensitive Devices (ESD). Examples of typical ESD are integrated circuits and some field-effect transistors. The following techniques will reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. To avoid a shock hazard, be sure to remove the wrist strap before applying power to the LED TV.
2. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of an electrostatic charge.
3. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESDs.
4. Use only a grounded-tip soldering iron to solder or desolder ESDs.
5. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESDs.
6. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
7. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   Caution: Be sure no power is applied to the chassis or circuit and observe all other safety precautions.
8. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting your foot from a carpeted floor can generate enough static electricity to damage an ESD.

1-4. Installation Precautions

1. For safety reasons, more than a people are required for carrying the product.
2. Keep the power cord away from any heat emitting devices, as a melted covering may cause fire or electric shock.
3. Do not place the product in areas with poor ventilation such as a bookshelf or closet. The increased internal temperature may cause fire.
4. Bend the external antenna cable when connecting it to the product. This is a measure to protect it from being exposed to moisture. Otherwise, it may cause a fire or electric shock.
5. Make sure to turn the power off and unplug the power cord from the outlet before repositioning the product. Also check the antenna cable or the external connectors if they are fully unplugged. Damage to the cord may cause fire or electric shock.
6. Keep the antenna far away from any high-voltage cables and install it firmly. Contact with the highvoltage cable or the antenna falling over may cause fire or electric shock.
7. When installing the product, leave enough space (0.4m) between the product and the wall for ventilation purposes. A rise in temperature within the product may cause fire.

2. Product specifications

2-1. Feature & Specifications

Model	UE32C6000R*
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, D-SUB, 1EXT ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time :3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available in TV analog and digital mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, Ulter Clear Panel, 32-inch, 0.46125(H) x 0.15375(w) mm pixel pitch	
Scanning Frequency	Horizontal : 67.4KHz(TYP) Vertical : 59.94Hz (typ)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	27.49 x 15.46 inches(698.4(H) x 392.85(V)mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 150W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	773.9 x 242.2 x 545.3 mm_with stand (447.2 x 242.2 x 88 mm_stand) 773.9 x 31.4 x 479.4 mm_without stand	
Weight (Set)	8.4 kg_without stand 11 kg_with stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB-T/C (UK only : DVB-T/C/T2), PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE37C6000R*
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV, 1EXT ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time :3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available in TV analog and digital mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 40-Inch viewable, 0.46125(H) × 0.15375(W) mm pixel pitch	
Scanning Frequency	Horizontal : 67.4KHz (TYP) Vertical : 59.94Hz (TYP	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	34.867 × 19.613 inches (885.6(H) × 498.15(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 150W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	904.5 x 257.2 x 619.3 mm_with stand (522.2 x 257.2 x 89mm_stand) 904.5 x 31.4 x 559.8 mm_without stand	
Weight (Set)	10.6 kg_with stand 13.3 kg_without stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB-T/C (UK only : DVB-T/C/T2), PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE40C6000R*
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV, 1EXT ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time : 3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available in TV analog and digital mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 46-Inch viewable, 0.53025(H) × 0.53025(W) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	40.083 × 22.547 inches (1018.08 (H) × 572.67(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 160W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	961.9 x 257.2 x 651.3 mm_with stand (522.2 x 257.2 x 89 mm_stand) 961.9 x 31.4 x 589.1 mm_without stand	
Weight (Set)	12.4 kg_with stand 15.1 kg_without stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB-T/C (UK only : DVB-T/C/T2), PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE46C6000R*

Feature

- ▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV, 1EXT
- ▶ Brightness : 500cd/m^2
- ▶ Contrast Ratio : 3,000,000:1
- ▶ Response time : 3ms
- ▶ Dynamic contrast, Super-PVA
- ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available in TV analog and digital mode)

Specifications

Item	Description	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 52-Inch viewable, 0.63(H) × 0.63(W) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	47.624×26.788 inches (1209.6 (H) × 680.4 (V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 220W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	1096.6 x 277.2 x 725.9 mm_with stand (552.2 x 277.2 x 89 mm_stand) 1096.6 x 31.4 x 663.6 mm_without stand	
Weight (Set)	16.1 kg_with stand 20.8 kg_without stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB-T/C (UK only : DVB-T/C/T2), PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 15W, Left => 15W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE55C6000R*
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time : 3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available only in TV analog mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 40-Inch viewable, 0.46125(H) x 0.15375(W) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	34.87 x 19.61 inches (885.6(H) x 498.15(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 220W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	1287.8 x 307.2 x 835.2 mm_with stand (582.2 x 307.2 x 89 mm_stand) 1287.8 x 31.4 x 772.8 mm_without stand	
Weight (Set)	20.2 kg without stand 25.7 kg with stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB-T/C (UK only : DVB-T/C/T2), PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 15W, Left => 15W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE32C650*U*
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time : 3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available only in TV analog mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, Ulter Clear Panel, 32-inch, 0.46125(H) x 0.15375(w) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	40.083 × 22.547 inches (1018.08 (H) × 572.67(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 160W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	773.9 x 242.2 x 545.3 mm_with stand (447.2 x 242.2 x 88 mm_stand) 773.9 x 31.4 x 479.4 mm_without stand	
Weight (Set)	8.5 kg_without stand 10.2 kg_with stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB-T/C (UE32C6505 UK model only : DVB-T/C/T2), PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE37C650*U*
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time : 3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available only in TV analog mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 46-Inch viewable, 0.53025(H) × 0.53025(W) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	40.083 × 22.547 inches (1018.08 (H) × 572.67(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 160W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	904.5 x 257.2 x 619.3 mm_with stand (522.2 x 257.2 x 89mm_stand) 904.5 x 31.4 x 559.8 mm_without stand	
Weight (Set)	13.6 kg_with stand 10.9 kg_without stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB-T/C (UE37C6505 UK model only : DVB-T/C/T2), PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE40C650*U*
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time : 3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available only in TV analog mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 46-Inch viewable, 0.53025(H) × 0.53025(W) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	40.083 × 22.547 inches (1018.08 (H) × 572.67(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 160W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	961.9 x 257.2 x 651.3 mm_with stand (522.2 x 257.2 x 89 mm_stand) 961.9 x 31.4 x 589.1 mm_without stan	
Weight (Set)	15.3 kg_with stand 12.6 kg_without stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB-T/C (UE40C6505 UK model only : DVB-T/C/T2), PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE46C650*U*
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time : 3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available only in TV analog mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 46-Inch viewable, 0.53025(H) × 0.53025(W) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
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Active Display Horizontal/Vertical	40.083 × 22.547 inches (1018.08 (H) × 572.67(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 160W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	1096.6 x 277.2 x 725.9 mm_with stand (552.2 x 277.2 x 89 mm_stand) 1096.6 x 31.4 x 663.6 mm_without stand	
Weight (Set)	20.8 kg_with stand 16.1 kg_without stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB-T/C (UE46C6505 UK model only : DVB-T/C/T2, PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE55C650*U*
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time : 3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available only in TV analog mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 46-Inch viewable, 0.53025(H) × 0.53025(W) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	40.083 × 22.547 inches (1018.08 (H) × 572.67(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 160W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	1287.8 x 307.2 x 835.2 mm_with stand (582.2 x 307.2 x 89 mm_stand) 1287.8 x 31.4 x 772.8 mm_without stand	
Weight (Set)	20.4 kg_without stand 25.1 kg_with stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB-T/C (UE55C6505 UK model only : DVB-T/C/T2), PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE32C6700US
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time : 3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available only in TV analog mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, Ulter Clear Panel, 32-inch, 0.46125(H) x 0.15375(w) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	40.083 × 22.547 inches (1018.08 (H) × 572.67(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 160W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	773.9 x 242.2 x 545.3 mm_with stand (447.2 x 242.2 x 88 mm_stand) 773.9 x 31.4 x 479.4 mm_without stand	
Weight (Set)	8.5kg_without stand 10.2kg_with stan	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB -T/C/S/S2, PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE37C6700US
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time : 3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available only in TV analog mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 46-Inch viewable, 0.53025(H) × 0.53025(W) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	40.083 × 22.547 inches (1018.08 (H) × 572.67(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 160W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	904.5 x 257.2 x 619.3 mm_with stand (522.2 x 257.2 x 89mm_stand) 904.5 x 31.4 x 559.8 mm_without stand	
Weight (Set)	13.6 kg_with stand 10.9 kg_without stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB -T/C/S/S2, PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE40C6700US
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time : 3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available only in TV analog mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 46-Inch viewable, 0.53025(H) × 0.53025(W) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	40.083 × 22.547 inches (1018.08 (H) × 572.67(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 160W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	961.9 x 257.2 x 651.3mm_with stand (522.2 x 257.2 x 89 mm_stand) 961.9 x 31.4 x 589.1mm_without stand	
Weight (Set)	15.3 kg_with stand 12.6 kg_without stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB -T/C/S/S2, PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE46C6700US
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time : 3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available only in TV analog mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 46-Inch viewable, 0.53025(H) × 0.53025(W) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	40.083 × 22.547 inches (1018.08 (H) × 572.67(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 160W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	1096.6 x 277.2 x 725.9 mm_with stand (552.2 x 277.2 x 89 mm_stand) 1096.6 x 31.4 x 663.6 mm_without stand	
Weight (Set)	20.8 kg_with stand 16.1 kg_without stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB -T/C/S/S2, PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

Model	UE55C6700US
Feature	
▶ Digital-TV, RF, 4-HDMI, 1-Component, 1-AV, 2USB 2.0, USB2 (HDD is available only in USB1), D-SUB, Internet@TV ▶ Brightness : 500cd/m^2 ▶ Contrast Ratio : 3000000:1 ▶ Response time : 3ms ▶ Dynamic contrast, Super-PVA ▶ PIP(in HDMI 1, 2, 3, 4, Component1, PC Mode and Sub picture is available only in TV analog mode)	

Specifications		
Item	**Description**	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 46-Inch viewable, 0.53025(H) × 0.53025(W) mm pixel pitch	
Scanning Frequency	Horizontal : 67.5KHz (TYP) Vertical : 60Hz (TYP)	
Display Colors	1.07 billion colors	
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	148.5MHz	
Active Display Horizontal/Vertical	40.083 × 22.547 inches (1018.08 (H) × 572.67(V) mm)	
AC power voltage & Frequency	AC 110V ~ 220V, 60 Hz	
Power Consumption	< 160W (< 0.1W, stand by)	
Dimensions Set (W x D x H)	1287.8 x 307.2 x 835.2 mm_with stand (582.2 x 307.2 x 89 mm_stand) 1287.8 x 31.4 x 772.8 mm_without stand	
Weight (Set)	20.4kg_without stand 25.1kg_with stand	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB -T/C/S/S2, PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Audio spec.	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -10dB ~ + 10dB - TREBLE Control Range : -10dB ~ +10dB - Output Frequency : RF : ~ 15 kHz A/V : ~ 20 kHz	
Note: Anynet+, Media Play, Internet@TV		

2-2. Detail Factory Option

※ If you replace the main board with new one, please change the factory option as well.
The options you must change are "Type".

• UC6000

Model Name			UE32C6000R*	UE37C6000R*	UE40C6000R*	UE46C6000R*	UE55C6000R*
Panel		Vendor	AML	CMO	CMO	AUO	AUO
		CODE	BN07-00858A	BN07-00851A	BN07-00852A	BN07-00860A	BN07-00861A
		SPEC	LTF320HF02	T370FBE1-DB	T400FBE2-DB	LTF460HJ03	LTF550HJ03
SMPS		Vendor	SEM	DONGYANG	SEM	DONGYANG	SEM
		CODE	BN44-00355A	BN44-00355B	BN44-00357A	BN44-00357B	BN44-00359A
Byte	**Item**	Adjustment Range	EUROPE				
1	Type	58FAmV1D/58FArV1D/63FAmV1D 63FArV1D/50FAmV4D/50FArV4D 40A2UF0C/40A2UF7E/40A2UF8E 46A2UF0C/46A2UF7E/46A2UF8E 46A2UF9E/55A2UF0C/55A2UF7E 55A2UF8E/55A2UF9E/40A1UF0E 46A1UF0E/55A1UF0E/32A1AF0C 32L1AF0C/37L1AF0C/40A1AF0C 40L1AF0C/40A1UF0C/40D1UF0C 40L1UF0C/46A1AF0C/46L1AF0C 46A1UF0C/46D1UF0C/46L1UF0C 55A1UF0C/55L1UF0C/65L1UF0C 32A1UF0E/32D1UF0E/37L1UF0E 37D1UF0E/40D1UF0E/46D1UF0E 46L1UF0E/55D1UF0E/55L1UF0E 65L1UF0E/58FArV1/63FArV1 50FArV4	32A1UF0E	37D1UF0E	40D1UF0E	46L1UF0E	55L1UF0E
2	Local set	EU, EU_Italy, EU_Africa, EU_ Israel, NORDIG, AD_Au, CIS	EU	EU	EU	EU	EU
3	Model	UC7000, LC750, UC8000, UC6900, UC7700, UC8700, UC9000, PC7000, PC8000, PC7700, LC630, LC650, LC670, UC6000, UC6400, UC6500, UC6600, UC6700, UC6800, UC6200, PC6500, UC6510, UC6530, UC6540, UC6620, UC6710, UC6730, UC6740, UC6820	UC6000	UC6000	UC6000	UC6000	UC6000
4	Tuner	SEC_TCS, SEC_TC, SEC_T2, SEC_ISDB_T, SEC_ATV_SA SEC_T, HemmerH3	SEC_TC SEC_T2 (UK only)	SEC_TC SEC_T2 (UK only)	SEC_TC SEC_T2 (UK only)	SEC_TC SEC_T2 (UK only)	SEC_TC SEC_T2 (UK only)
5	DDR						
6	Light Effect	ON/OFF					
7	Ch Table	NONE, PBA, SUWON, SESK, SEH, SERK, SDMA_AU, SDMA_ NZ, SDMA_SG SEIN, SAVINA, SIEL_C, SIEL_N, TTSEC, TSED, TSE, IRAN					
8	Country						
9	Front Color	NONE, W-Milky, T-M-Brn, T-W-Brn, T-W-Gray, W-D-Gray, W-M-Whit W-Violet, T-C-Gray, T-R-BLK, S-BLK, S-C-Gray	T-C-Gray	T-C-Gray	T-C-Gray	T-C-Gray	T-C-Gray

• UC6500

Model Name			UE32C650*U*	UE37C650*U*	UE40C650*U*	UE46C650*U*	UE55C650*U*
Panel		Vendor	AML	CMO	CMO	AUO	AUO
		CODE	BN07-00858A	BN07-00851A	BN07-00852A	BN07-00860A	BN07-00861A
		SPEC	LTF320HF02	T370FBE1-DB	T400FBE2-DB	LTF460HJ03	LTF550HJ03
SMPS		Vendor	SEM	DONGYANG	SEM	DONGYANG	SEM
		CODE	BN44-00355A	BN44-00355B	BN44-00357A	BN44-00357B	BN44-00359A
Byte	**Item**	Adjustment Range	EUROPE				
1	Type	58FAmV1D/58FArV1D/63FAmV1D 63FArV1D/50FAmV4D/50FArV4D 40A2UF0C/40A2UF7E/40A2UF8E 46A2UF0C/46A2UF7E/46A2UF8E 46A2UF9E/55A2UF0C/55A2UF7E 55A2UF8E/55A2UF9E/40A1UF0E 46A1UF0E/55A1UF0E/32A1AF0C 32L1AF0C/37L1AF0C/40A1AF0C 40L1AF0C/40A1UF0C/40D1UF0C 40L1UF0C/46A1AF0C/46L1AF0C 46A1UF0C/46D1UF0C/46L1UF0C 55A1UF0C/55L1UF0C/65L1UF0C 32A1UF0E/32D1UF0E/37L1UF0E 37D1UF0E/40D1UF0E/46D1UF0E 46L1UF0E/55D1UF0E/55L1UF0E 65L1UF0E/58FArV1/63FArV1 50FArV4	32A1UF0E	37D1UF0E	40D1UF0E	46L1UF0E	55L1UF0E
2	Local set	EU, EU_Italy, EU_Africa, EU_ Israel, NORDIG, AD_Au, CIS	EU	EU	EU	EU	EU
3	Model	UC7000, LC750, UC8000, UC6900, UC7700, UC8700, UC9000, PC7000, PC8000, PC7700, LC630, LC650, LC670, UC6000, UC6400, UC6500, UC6600, UC6700, UC6800, UC6200, PC6500, UC6510, UC6530, UC6540, UC6620, UC6710, UC6730, UC6740, UC6820	UC6500	UC6500	UC6500	UC6500	UC6500
4	Tuner	SEC_TCS, SEC_TC, SEC_T2, SEC_ISDB_T, SEC_ATV_SA SEC_T, HemmerH3	SEC_TC SEC_T2 (6505, UK only)	SEC_TC SEC_T2 (6505, UK only)	SEC_TC SEC_T2 (6505, UK only)	SEC_TC SEC_T2 (6505, UK only)	SEC_TC SEC_T2 (6505, UK only)
5	DDR						
6	Light Effect	ON/OFF					
7	Ch Table	NONE, PBA, SUWON, SESK, SEH, SERK, SDMA_AU, SDMA_ NZ, SDMA_SG SEIN, SAVINA, SIEL_C, SIEL_N, TTSEC, TSED, TSE, IRAN					
8	Country						
9	Front Color	NONE, W-Milky, T-M-Brn, T-W-Brn, T-W-Gray, W-D-Gray, W-M-Whit W-Violet, T-C-Gray, T-R-BLK, S-BLK, S-C-Gray	T-W-Gray	T-W-Gray	T-W-Gray	T-W-Gray	T-W-Gray

• UC6700

Model Name			UE32C6700US	UE37C6700US	UE40C6700US	UE46C6700US	UE55C6700US
Panel		Vendor	AML	CMO	CMO	AUO	AUO
		CODE	BN07-00858A	BN07-00851A	BN07-00852A	BN07-00860A	BN07-00861A
		SPEC	LTF320HF02	T370FBE1-DB	T400FBE2-DB	LTF460HJ03	LTF550HJ03
SMPS		Vendor	SEM	DONGYANG	SEM	DONGYANG	SEM
		CODE	BN44-00355A	BN44-00355B	BN44-00357A	BN44-00357B	BN44-00359A
Byte	**Item**	Adjustment Range	EUROPE				
1	Type	58FAmV1D/58FArV1D/63FAmV1D 63FArV1D/50FAmV4D/50FArV4D 40A2UF0C/40A2UF7E/40A2UF8E 46A2UF0C/46A2UF7E/46A2UF8E 46A2UF9E/55A2UF0C/55A2UF7E 55A2UF8E/55A2UF9E/40A1UF0E 46A1UF0E/55A1UF0E/32A1AF0C 32L1AF0C/37L1AF0C/40A1AF0C 40L1AF0C/40A1UF0C/40D1UF0C 40L1UF0C/46A1AF0C/46L1AF0C 46A1UF0C/46D1UF0C/46L1UF0C 55A1UF0C/55L1UF0C/65L1UF0C 32A1UF0E/32D1UF0E/37L1UF0E 37D1UF0E/40D1UF0E/46D1UF0E 46L1UF0E/55D1UF0E/55L1UF0E 65L1UF0E/58FArV1/63FArV1 50FArV4	32A1UF0E (SEC Panel : BN07-00858A) 32D1UF0E (CMO Panel : BN07-00850A)	37D1UF0E	40D1UF0E	46L1UF0E	55L1UF0E
2	Local set	EU, EU_Italy, EU_Africa, EU_ Israel, NORDIG, AD_Au, CIS	EU	EU	EU	EU	EU
3	Model	UC7000, LC750, UC8000, UC6900, UC7700, UC8700, UC9000, PC7000, PC8000, PC7700, LC630, LC650, LC670, UC6000, UC6400, UC6500, UC6600, UC6700, UC6800, UC6200, PC6500, UC6510, UC6530, UC6540, UC6620, UC6710, UC6730, UC6740, UC6820	UC6700	UC6700	UC6700	UC6700	UC6700
4	Tuner	SEC_TCS, SEC_TC, SEC_T2, SEC_ISDB_T, SEC_ATV_SA SEC_T, HemmerH3	SEC_TCS	SEC_TCS	SEC_TCS	SEC_TCS	SEC_TCS
5	DDR						
6	Light Effect	ON/OFF					
7	Ch Table	NONE, PBA, SUWON, SESK, SEH, SERK, SDMA_AU, SDMA_ NZ, SDMA_SG SEIN, SAVINA, SIEL_C, SIEL_N, TTSEC, TSED, TSE, IRAN					
8	Country						
9	Front Color	NONE, W-Milky, T-M-Brn, T-W-Brn, T-W-Gray, W-D-Gray, W-M-Whit W-Violet, T-C-Gray, T-R-BLK, S-BLK, S-C-Gray	T-W-Gray	T-W-Gray	T-W-Gray	T-W-Gray	T-W-Gray

2-3. Spec Comparison to the Old Models

Model	UC6000/6500/6700	UB6000
Design		
Display Type	LED TV	LED TV
Resolution	1920 x 1080	1920 x 1080
LCD Panel	TFT LCD Panel 100Hz	TFT LCD Panel 100Hz
Screen Size	32" 37" 40" 46" 55"	32" 37" 40" 46" 55"
Picture ratio	16 : 9	16 : 9
Brightness	500 cd/m^2	500 cd/m^2
Contrast Ratio	3,000,000:1	3,000,000:1
Light Sensor	O	X
Picture Enhacer	DNIe+(FBE3)	DNIe+(FBE3)
Equalizer	5 Band	5 Band
Auto Motion Plus 120Hz	YES	YES
Surround Sound	2 Way SRS TruSurround Dolby Digital	2 Way SRS TruSurround Dolby Digital
Speaker Output	10W + 10W (32" 37" 40" 46") 15W + 15W(55")	10W + 10W (40", 46") 15W + 15W(55")
Antenna	1 (Cable/Air)	1 (Cable/Air)

PAL On-Air Channel Frequence Table

channel	Europe	INDONESIA	IRELAND	South Africa	ANGOLA	NEWZEALAND	ITALY
	PAL-BG	PAL-BG	PAL-I	PAL-I	PAL-I	PAL-BG	PAL-BG
A	x	x	x	x	x	x	53.75
B	x	x	x	x	x	x	62.25
C1	x	x	x	x	x	x	x
C	x	x	x	x	x	x	82.25
D	x	x	x	x	x	x	175.25
E	x	x	x	x	x	x	183.75
F	x	x	x	x	x	x	192.25
G	x	x	x	x	x	x	201.25
H	x	x	x	x	x	x	210.25
H1	x	x	x	x	x	x	217.25
H2	x	x	x	x	x	x	224.25
0	x	x	x	x	x	x	x
1	x	44.25	45.75	x	43.25	45.25	x
2	48.25	55.25	53.75	x	52.25	55.25	x
3	55.25	62.25	61.75	x	60.25	62.25	x
4	62.25	175.25	175.25	175.25	175.25	175.25	x
5	175.25	182.25	183.25	183.25	183.25	182.25	x
5A	x	x	x	x	x	x	x
6	182.25	189.25	191.25	191.25	191.25	189.25	x
7	189.25	196.25	199.25	199.25	199.25	196.25	x
8	196.25	203.25	207.25	207.25	207.25	203.25	x
9	203.25	210.25	215.25	215.25	215.25	210.25	x
9A	x	x	x	x	x	x	x
10	210.25	217.25	223.25	223.25	223.25	217.25	x
11	217.25	224.25	231.25	231.25	x	224.25	x
12	224.25	x	x	239.25	x	x	x
13	x	x	x	247.25	x	x	x
14	x	x	x	x	x	x	x
15	x	x	x	x	x	x	x
16	x	x	x	x	x	x	x
17	x	x	x	x	x	x	x
18	x	x	x	x	x	x	x
19	x	x	x	x	x	x	x
20	x	x	x	x	x	x	x
21	471.25						
22	479.25						
23	487.25						
24	495.25						
25	503.25						
26	511.25						
27	519.25						
28	527.25						
29	535.25						
30	543.25						
31	551.25						
32	559.25						
33	567.25						
34	575.25						
35	583.25						
36	591.25						
37	599.25						
38	607.25						
39	615.25						
40	623.25						
41	631.25						
42	639.25						
43	647.25						
44	655.25						
45	663.25						
46	671.25						
47	679.25						
48	687.25						
49	695.25						
50	703.25						
51	711.25						
52	719.25						
53	727.25						
54	735.25						
55	743.25						
56	751.25						
57	759.25						
58	767.25						
59	775.25			x	x	775.25	
60	783.25			x	x	783.25	
61	791.25			x	x	791.25	
62	799.25			x	x	799.25	
63	807.25			x	x	807.25	
64	815.25			x	x	815.25	
65	823.25			x	x	823.25	
66	831.25			x	x	831.25	
67	839.25			x	x	839.25	
68	847.25			x	x	847.25	
69	855.25			x	x	855.25	

EUROPE	FRANCE		UK	CIS(OIRT)	AUSTRALIA	CHINA
SECAM-BG	SECAM-L	PALII	PAL-I	SECAM -DK	PAL-BG	PAL-D
x	47.75	x	x	x	x	x
x	55.75	x	x	x	x	x
x	60.50	x	x	x	x	x
x	63.75	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	x	x
x	x	x	x	x	46.25	x
41.25	176.00	45.00	x	49.75	57.25	49.75
48.25	184.00	51.75	x	59.25	64.25	57.75
55.25	192.00	56.75	x	77.25	86.25	65.75
62.25	200.00	61.75	x	85.25	95.25	77.25
175.25	208.00	66.75	x	93.25	102.25	85.25
x	x	x	x	x	138.25	x
182.25	216.00	179.75	x	175.25	175.25	168.25
189.25	x	184.75	x	183.25	182.25	176.25
196.25	x	189.75	x	191.25	189.25	184.25
203.25	x	194.75	x	199.25	196.25	192.25
x	x	x	x	x	203.25	x
210.25	x	199.75	x	207.25	209.25	200.25
217.25	x	204.75	x	215.25	216.25	208.25
224.25	x	209.75	x	223.25	x	216.25
x	x	214.75	x	x	x	471.25
x	x	x	x	x	x	479.25
x	x	x	x	x	x	487.25
x	x	x	x	x	x	495.25
x	x	x	x	x	x	503.25
x	x	x	x	x	x	511.25
x	x	x	x	x	x	519.25
x	x	x	x	x	x	527.25
					x	535.25
					x	543.25
					x	551.25
					x	559.25
					x	607.25
					x	615.25
					x	623.25
					527.25	631.25
					534.25	639.25
					541.25	647.25
					548.25	655.25
					555.25	663.25
					562.25	671.25
					569.25	679.25
					576.25	687.25
					583.25	695.25
					590.25	703.25
					597.25	711.25
					604.25	719.25
					611.25	727.25
					618.25	735.25
					625.25	743.25
					632.25	751.25
					639.25	759.25
					646.25	767.25
					653.25	775.25
					660.25	783.25
					667.25	791.25
					674.25	799.25
					681.25	807.25
					688.25	815.25
					695.25	823.25
					702.25	831.25
					709.25	839.25
					716.25	847.25
					723.25	855.25
					730.25	863.25
					737.25	x
					744.25	x
					751.25	x
					758.25	x
					765.25	x
					772.25	x
					779.25	x
					786.25	567. 25
					793.25	575. 25
					800.25	583. 25
					807.25	591. 25
					814.25	599. 25

PAL CATV Channel Frequence Table

channel	Europe	INDONESIA	IRELAND	South Africa	ANGOLA	NEWZEALAND	ITALY
	PAL-BG	PAL-BG	PAL-BG	SEAAM	SEAAM	PAL-BG	PAL-BG
S1'	69.25						
S2'	76.25						
S3'	83.25						
S4'	90.25						
S5'	97.25						
S1	105.25						
S2	112.25						
S3	119.25						
S4	126.25						
S5	133.25						
S6	140.25						
S7	147.25						
S8	154.25						
S9	161.25						
S10	168.25						
S11	231.25						
S12	238.25						
S13	245.25						
S14	252.25						
S15	259.25						
S16	266.25						
S17	273.25						
S18	280.25						
S19	287.25						
S20	294.25						
S21	303.25						
S22	311.25						
S23	319.25						
S24	327.25						
S25	335.25						
S26	343.25						
S27	351.25						
S28	359.25						
S29	367.25						
S30	375.25						
S31	383.25						
S32	391.25						
S33	399.25						
S34	407.25						
S35	415.25						
S36	423.25						
S37	431.25						
S38	439.25						
S39	447.25						
S40	455.25						
S41	463.25						

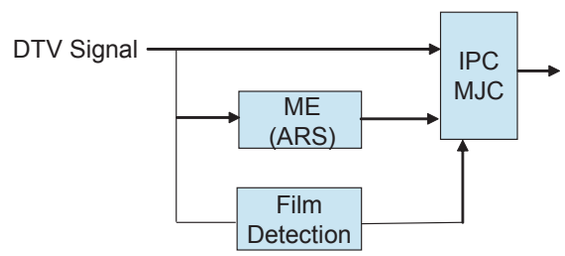
CCIR	FRANCE				AUSTRALIA	CHINA
SEAAM	SEAAM-L	PALII	PALI UK	SECAM OIRT	PAL-BG	PAL-D
						x
						x
						x
						x
						x
	116.75	103.25			105.25	112.25
	128.75	111.25			112.25	120.25
	140.75	119.25			119.25	128.25
	152.75	127.25			126.25	136.25
	164.75	135.25			133.25	144.25
	176.75	143.25			140.25	152.25
	188.75	151.25			147.25	160.25
	200.75	159.25			154.25	224.25
	212.75	167.25			161.25	232.25
	224.75	231.25			168.25	240.25
	236.75	239.25			231.25	248.25
	248.75	247.25			238.25	256.25
	260.75	253.00			245.25	264.25
	272.75	263.25			252.25	272.25
	284.75	271.25			259.25	280.25
	296.75	279.25			266.25	288.25
	0	287.25			273.25	296.25
	0	295.25			280.25	304.25
	0	303.25			287.25	312.25
	0	0.00			294.25	320.25
	303.25	0.00			303.25	328.25
	311.25	311.25				336.25
	319.25	319.25				344.25
	327.25	327.25				352.25
	335.25	335.25				360.25
	343.25	343.25				368.25
	351.25	351.25				376.25
	359.25	359.25				384.25
	367.25	367.25				392.25
	375.25	375.25				400.25
	383.25	383.25				408.25
	391.25	391.25				416.25
	399.25	399.25				424.25
	407.25	407.25				432.25
	415.25	415.25				440.25
	423.25	423.25				448.25
	431.25	431.25				456.25
	439.25	439.25				x
	447.25	447.25				x
	455.25	455.25				x
	463.25	463.25				x

2-4. Movie Plus: MJC(Motion Judder Cancellation)

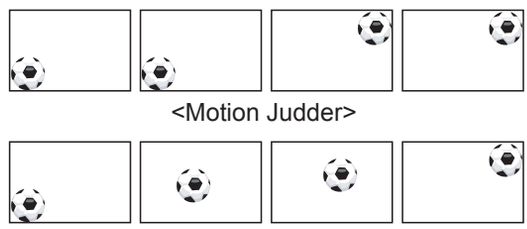
Technology

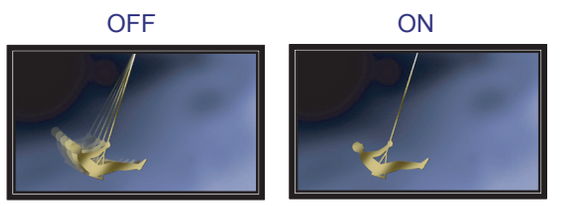
- Motion Judder cancellation for HD film image.
- Adaptive Recursive Search (ARS)
  - Implementation IPC/MJC at same time
  - Search Range
    - Horizontal : ± 72 Pixel, Vertical : ± 12 Line

Block Diagram



Example

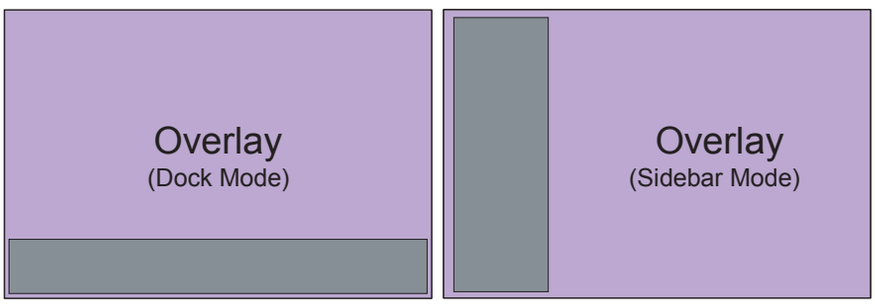




2-5. Internet@TV

2-5-1. Overlay Mode

It offers contents to maximize the benefits of the large screen size.



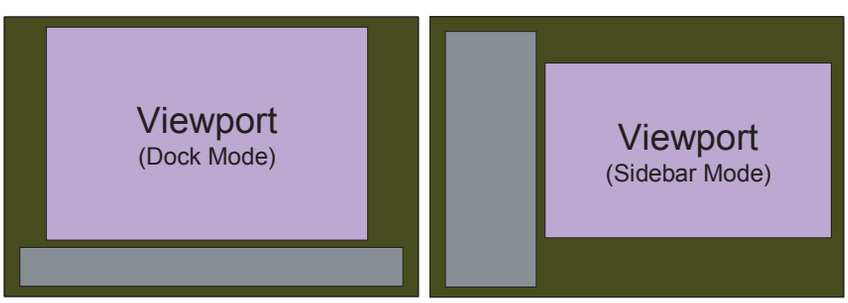
A. In overlay mode, the video plays in its native size, covering up to the full screen.
Graphical elements in the graphical plane are overlaid on top of the video plane.

B. In overlay mode while displaying the sidebar, at least 2/3 of the video is free of graphical overlays.

C. In overlay mode while displaying the dock, at least 3/4 of the video is free of graphical overlays.

D. YahooTV is executed to overlay mode at first time.

2-5-2. Viewport Mode



A. In viewport mode, the video plays in a scaled-down size, covering only a portion of the screen. This smaller viewing area for video is called the viewport.

B. The viewport should cover at least half of the screen area. Graphics are displayed in areas outside of the viewport.

C. The purpose of the viewport mode is to display the entire video without obstruction.

D. The viewport mode preserves the 16:9 aspect ratio of the video.

2-5-3. Yahoo OOBE

■ Description

A. All users go through OOBE (Guided Setup) to access the dock the first time.

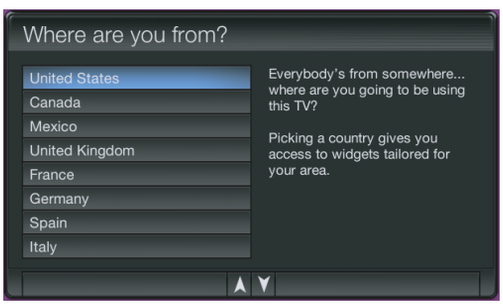
B. All users must specify a location and accept the TOS before the TV Widgets service are accessible. The rest of the screens are optional.

C. When user inputs Back button (Return key), TV goes back to the previous screen.

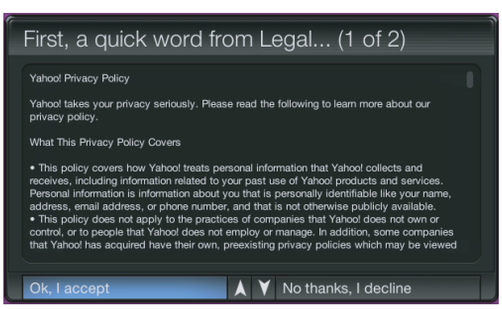
D. IF user input EXIT key, OOBE is goes to hide mode. And user input WIDGET key, previous screen is displayed again.

E. Back Ground of OOBE is TV video.

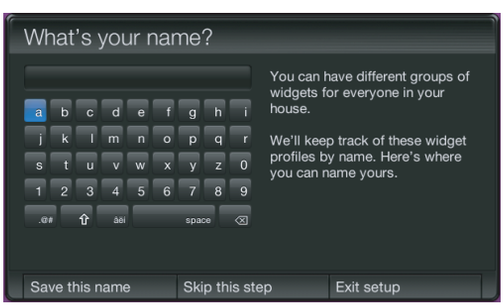
Start page explain value proposition



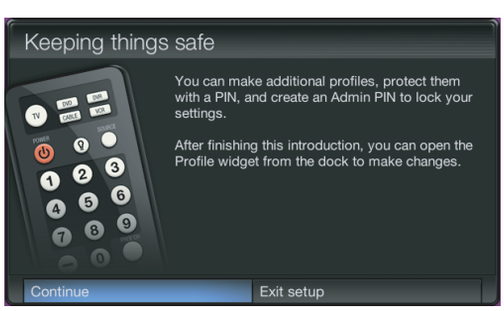
User must choose country before TOS is accepted.
Country is sorted by Alphabet.
If user select Up/Down arrow, Before/Next page is displayed.



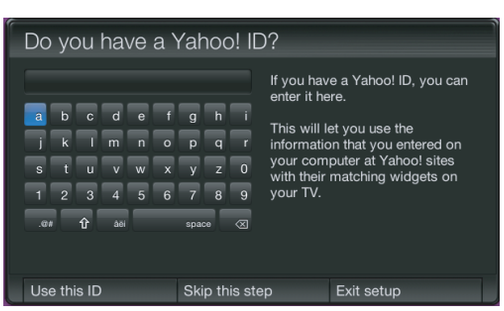
TOS will updated based on country selected.



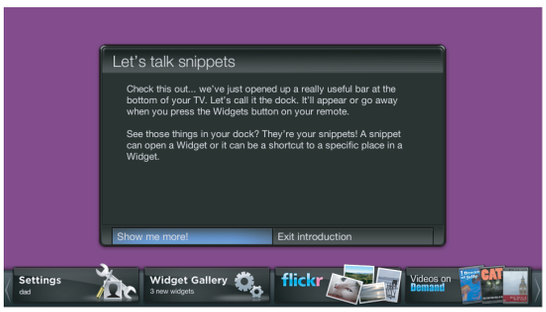
Optional Screen: users are asked to enter in a profile name. A default name (Profile One) is given to them if they do not create a name.



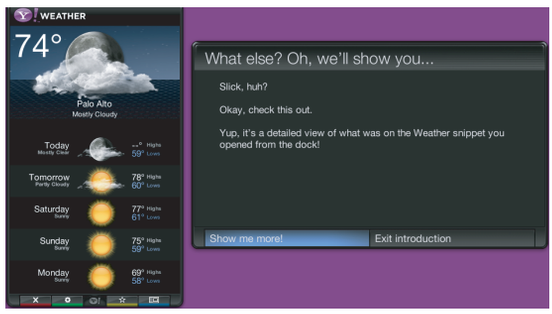
Explanation on profiles and security.



Optional Yahoo! sign in screens.



Tutorial: Screens explaining how dock works.



Tutorial: Screens explaining the sidebar and global nav buttons.

Final screen before dock comes up.

2-5-4. Gallery Widget

■ Overview

A. In the TV Widgets, widget gallery services are online services where widget developers publish widgets for download.

B. The default widget gallery for the platform is the Widget Gallery Services.

C. To find and install new widgets, launch the gallery widget from the dock.

D. The gallery widget has access to a privileged set of APIs accessible only to Yahoo! signed widgets.

E. These privileged APIs are used to download and install software on your device.

F. Third party widget developers do not have access to these privileged APIs.

G. The gallery widget can potentially be extended by an OEM to connect to one or more widget gallery back-end servers.

H. The Yahoo! Gallery Widget provides the only way to install new widgets from the Widget Gallery Services, which contain a catalog of 3rd party widgets managed by Yahoo!.

Note: the above image will be updated and visuals elements laid out in this may not apply.

2-5-5. Profile Widget

■ Overview

A. The Profile widget is the way to configure your widget environment for your user profile. With the settings widget you can configure:

i. Profile Management: Create, edit and switch profiles.

ii. Security Settings: Setup a Profile and/or Owner PIN for security purposes.

iii. System Settings: Repeat guided setup, set and edit location and restore factory defaults

B. The Profile widget is located in the dock. Press the TV Widget launch key on the remote control to launch the dock, and then press the RIGHT or LEFT ARROW until you focus on the settings widget.

C. User profile name is displayed on the Profile snippet.

D. Select the Profile snippet to launch the settings widget.

E. The Profile widget opens up into its sidebar.

F. The following functionality is available from the Profile menu:

i. Switch Profile

ii. Settings for Current Profile

iii. System Settings

iv. Administrative Controls

v. Sign-out of Current Profile

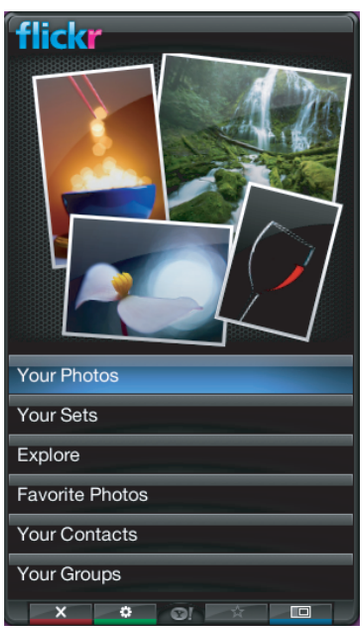
2-5-6. Flickr TV Widget

■ Description

A. Flickr TV Widget is a Widget for displaying photos from Flickr. You can view your:

i. Personal photos
ii. Your sets of photos
iii. Explore Flickr's user community photos
iv. Your favorite photos
v. Your contacts' photos
vi. Your groups

■ Initial Sidebar View

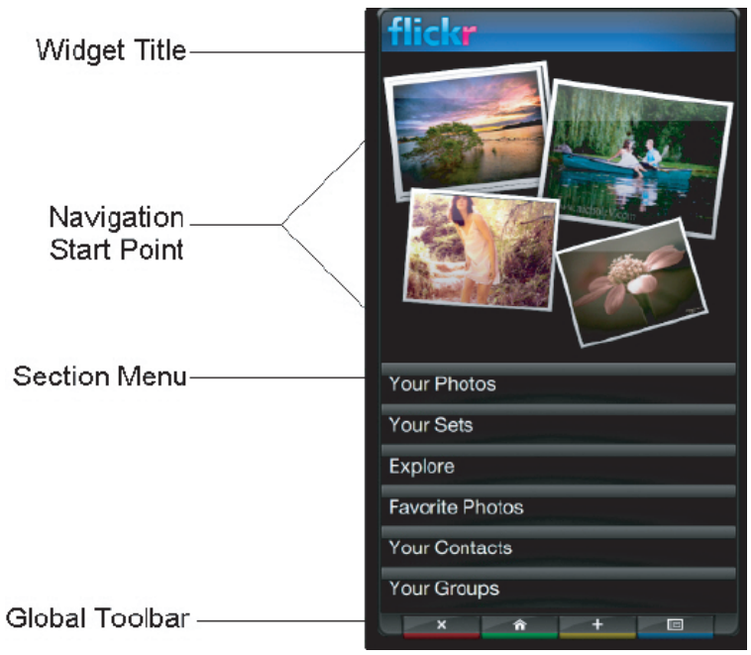


A. If the user is not signed and user is signed but user has no photo then the default images will be displayed from the Flickr Explore category.

B. If the user is signed in and the user has 1 photo or more photos, then the photos will be displayed in the top portion of the Widget Sidebar.

C. The picture layout changes based on the number of photos (1, 2, 3, or 4).

■ Initial Sidebar View



A. If the user is not signed and user is signed but user has no photo then the default images will be displayed from the Flickr Explore category.

B. If the user is signed in and the user has 1 photo or more photos, then the photos will be displayed in the top portion of the Widget Sidebar.

C. The picture layout changes based on the number of photos (1, 2, 3, or 4).

2-5-7. Weather Widget

■ Overview

A. The Weather Widget utilizes the “Tab View" layout of the Widget Sidebar

i. The tab view is a viewable area than contains groups of user interface elements organized under tab headers.

ii. The tab view does not have a page control. Using both tabs and page controls in the same view is prevented to avoid confusion.

iii. At the top of the tab view is the tab header.

iv. The tab header is designated by a row of slanted buttons, each containing a tab label.

v. A small portion of a slanted button is shown on the far right side of the tab header to indicate that more tabs exist but are not currently visible.

vi. The tab view uses a carousel design to navigate through each tab.

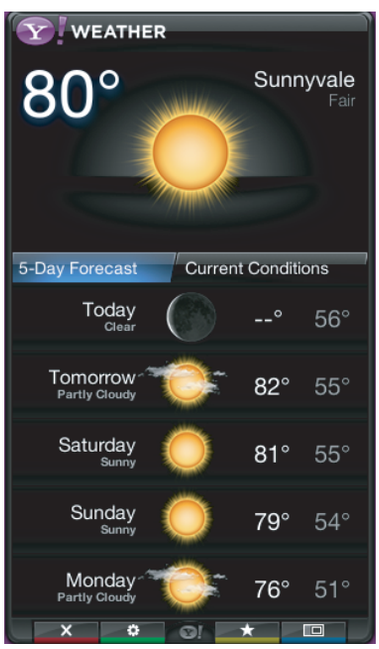
vii. This means if you navigate past the last tab in the list, the first tab is displayed again, and the list starts over.

viii. You never reach the end of the tab list.

ix. As you navigate through the tabs by pressing the RIGHT or LEFT ARROWS on the remote control, you will see all tab headers in the tab carousel before it starts to repeat.

x. The number of tab headers that can be visible depends on each label and the space allotted.

xi. It is recommended that at least two tabs be visible on the initial tab header.



2-5-8. Finance Widget

■ Overview

A. Yahoo! Finance Icon is displayed on first time use

B. Snippet will include default set of stock indicators if the user is not logged in nor selected stocks tickers to track then the following information will be displayed in the snippet

C. The snippet will only display status of one stock symbol at a time

D. The snippet will display the stock symbol, current value, percentage gain/loss, and point gain/loss

2-5-9. News Widget

■ Overview

A. The News Widget sidebar will then be displayed

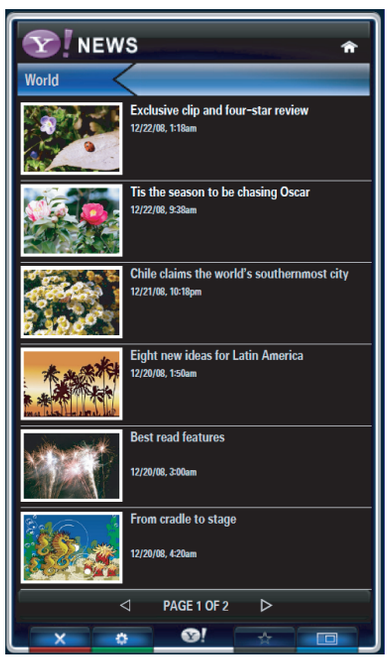
B. Several stories will be displayed in the top featured area of the Widget

i. Navigation will be available to move from one story to the next

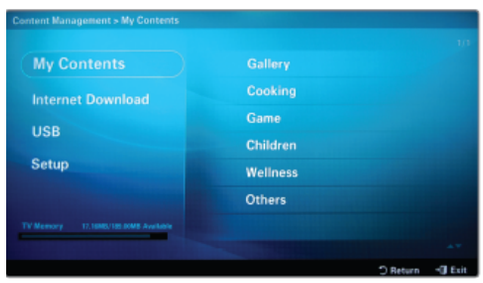
ii. These stories are automatically updated by Yahoo!

iii. The feature sections will navigate left and right

iv. Current page number and total pages will be displayed



2-6. Using the Content Management



Content Management

You can select multiple content items by selecting content items repeatedly and pressing the Yellow button.

My Contents

You can check the content saved in the TV memory for each subitem of the Content Library.

- Select a content item and press the ENTER button.
  You can play or delete the selected content item.

USB

You can check the content saved on the USB device for each subitem of the Content Library.

Select a content item and press the ENTER button.

You can play the selected content item or copy it to the TV memory.

- "Content Library only supports USB Mass Storage Class devices (MSC). MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives and Flash Card Readers (Both USB HDD and HUB are not supported.)
- Playing a game using an external USB memory device will allow you to save your game (depending on the game). Take care as removing the USB memory device while saving data to the USB memory device may cause the data to be lost.
- Downloading New Contents
  New content other than the built-in contents will be provided via the Samsung.com website with or without charge.

Downloading Content

1. Visit the www.samsung.com website and open the Content Library page.
2. Enter the product number (UDN, Unique Device Number).
3. Select a content item in the Contents Download page.
4. Download the contents onto the USB memory device.
5. Go to Content Library main menu by pressing Contents button or choosing Content Library (Menu → Application → Content Library).
6. Plug the USB memory into USB port on the side of the TV.

Finding a product number (Unique Device Number, UDN)

1. Insert the USB memory into the USB port on the side of the TV.
2. In the USB Browser main screen, press the Green button (Show UDN).
3. The 18-digit number on the screen is the product code.

Provided Content

Additional contents are available on www.samsung.com

Setup

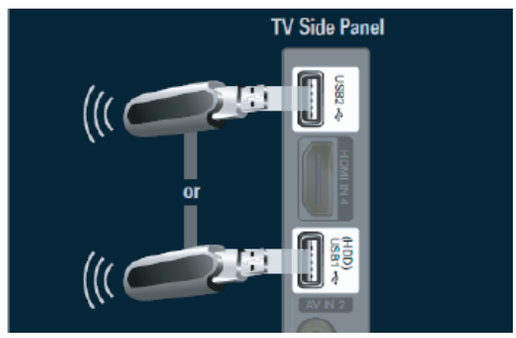
- Screen Saver Run Time: Sets the time when the screen saver is run.
- Save UDN: Saves the UDN number to a USB device.

2-7. Media Play

2-7-1 Using the Media Play Function

This function enables you to view and listen to photo(JPEG), audio files(MP3) and movie(MPEG) saved on a USB Mass Storage Class (MSC) device.

1. Press the POWER button on the remote control or front panel.
   - The TV is powered on.
2. Connect a USB device containing JPEG and/or MP3 and or/MPEG files to the usb jack (USB jack) on the side of the TV.



- (If you enter the Media Play mode with no USB device connected the message “No external storage device found. Check the connection status." will appear. In this case, insert the USB device, exit the screen by pressing the MEDIA.P button on the remote control and enter the MEDIA.P screen again.
- MTP (Media Transfer Protocol) is not supported.
- The file system only supports FAT16/32 (The NTFS file system is supported).
- Certain types of USB Digital camera and audio devices may not be compatible with this TV.
- Media Play only supports USB Mass Storage Class devices (MSC). MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives and Flash Card Readers (Both USB HDD and HUB are not supported.)
- Please connect directly to the USB port of your TV. If you are using a separate cable connection, there may be a USB Compatibility problem.
- Before connecting your device to the TV, please back up your files to prevent them from damage or loss of data.SAMSUNG is not responsible for any data file damage or data loss.
- Do not disconnect the USB device while it is loading.
- MSC supports MP3 and JPEG files, while a PTP device supports JPEG files only.
- The sequential jpeg format is supported.
- Photo and audio files must be named in English, French or Spanish. If not, the files can not be played. Change the file names to English, French or Spanish if necessary.
- The higher the resolution of the image, the longer it takes to display on the screen.
- The maximum supported JPEG resolution is 15360 x 8640 pixels.
- For unsupported or corrupted files, the “Not Supported File Format" message is displayed.

2-7-2. Supported Video Formats

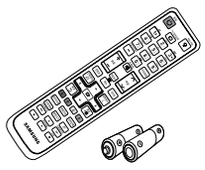
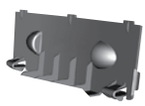
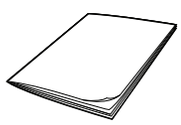
File Extention	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbsp)	Audio Codec
*.avi	AVI	Divx 3.11/4.x/5.1/6.0	1920x1080	6 ~ 30	8	MP3 AC3 LPCM ADPCM DTS Core
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP/MP/HP	1920x1080	6 ~ 30	25	
		MPEG4 SP/ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	800x600	6 ~ 30	8	
*.mkv	MKV	Divx 3.11/4.x/5.1/6.0	1920x1080	6 ~ 30	8	MP3 AC3 LPCM ADPCM DTS Core
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP/MP/HP	1920x1080	6 ~ 30	25	
		MPEG4 SP/ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	800x600	6 ~ 30	8	
*.asf	ASF	Divx 3.11/4.x/5.1/6.0	1920x1080	6 ~ 30	8	MP3 AC3 LPCM ADPCM WMA
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP/MP/HP	1920x1080	6 ~ 30	25	
		MPEG4 SP/ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	800x600	6 ~ 30	8	
*.wmv	ASF	Window Media Video v9	1920x1080	6 ~ 30	25	WMA
*.mp4	MP4	H.264 BP/MP/HP	1920x1080	6 ~ 30	25	MP3 ADPCM AAC
		MPEG4 SP/ASP	1920x1080	6 ~ 30	8	
		XVID	1920x1080	6 ~ 30	8	
*.3gp	3GPP	H.264 BP/MP/HP	1920x1080	6 ~ 30	25	ADPCM AAC HE-AAC QCELP AMR NB/WB
		MPEG4 SP/ASP	1920x1080	6 ~ 30	8	
*.vro	VRO VOB	MPEG2	1920x1080	24/25/30	30	AC3 MPEG LPCM
		MPEG1	1920x1080	24/25/30	30	
"*.mpg *.mpeg"	PS	MPEG1	1920x1080	24/25/30	30	AC3 MPEG LPCM AAC
		MPEG2	1920x1080	24/25/30	30	
		H.264	1920x1080	6 ~ 30	25	AC3 AAC MP3 DD+ HE-AAC
*.ts *.tp *.trp	TS	MPEG2	1920x1080	24/25/30	30	
		H.264	1920x1080	6 ~ 30	25	
		VC1	1920x1080	6 ~ 30	25	
*.rmvb	RMVB	RV 3.0/ RV 4.0	720x576	24/25/30	10	RealAudio 6, 9, 10

NOTE

- If there are problems with the contents of a codec, the codec will not be supported.
- If the information for a Container is incorrect and the file is in error, the Container will not be able to play correctly.
- Sound or video may not work if the contents have a standard bitrate/frame rate above the compatible Fram/sec listed in the table above.
- If the Index Table is in error, the Seek (Jump) function is not supported.

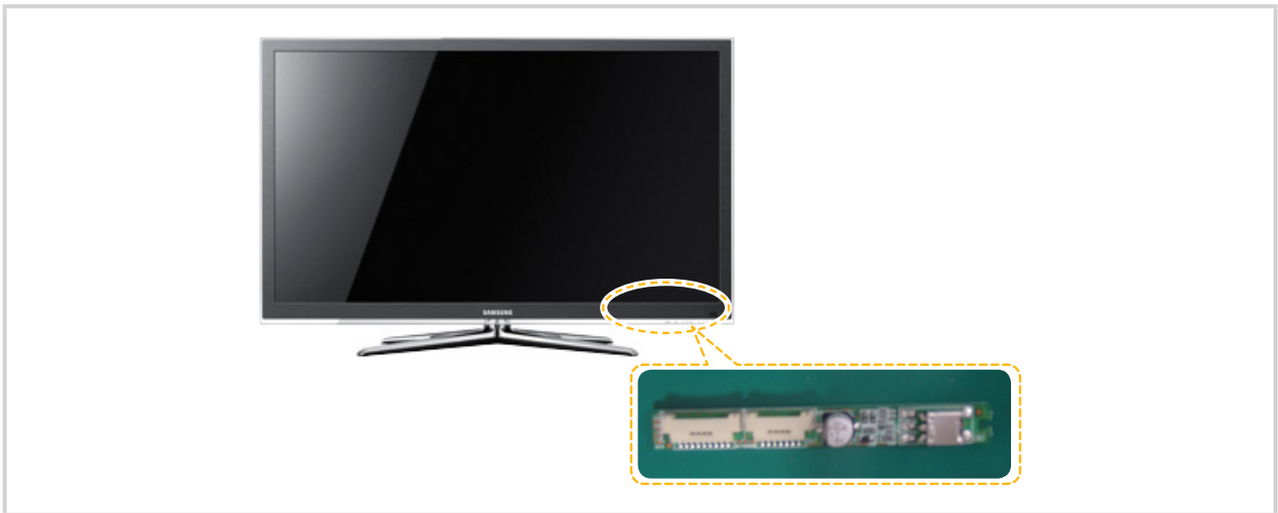
Video Decoder	Audio Decoder
• Supports up to H.264, Level 4.1	• Supports up to WMA 7, 8, 9, STD
• H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported.	• WMA 9 PRO does not support 2 channel excess multi channel or lossless audio.
• GMC 2 over is not support.	• WMA sampling rate 22050Hz mono is not supported.

2-8. Accessories

Product	Description	Code. No	Remark
	Remote Control & Batteries (AAA x 2)	BN59-01039A	Supplied Accessories
	Power Cord	3903-000525	
	Cover-Bottom	32" : BN63-06542B 37" : BN63-06543B 40" : BN63-06543B 46" : BN63-06543B 55" : BN63-06543B	
	Warranty card QSG Safety Guide	BN68-00516E BN68-02839D AA68-03242T	
	Cleaning Cloth	BN63-01798B	
	User Manual	BN68-02694A	
	Stand Screw (M4 x 16)	6002-001294	
	Holder-Wire Cable	BN61-05596A	
	TV-Holder & Screw (M4 x 16)	BN96-10788C	

2-9. Light Sensor

Light sensor is used to measure the ambient light level in the enviroment as perceived by the human eye. It is designed to detect bright and dim ambient light conditions as a means of controlling the brightness of a LED display and /or keypad.



* In our product, light sensor operates only "Standard" mode.

* **Eco Sensor**

  step1 : Read the Lux five times as the unit of 400ms.

  step2 : Transfrom the taken Lux to 20 level.

  step3 : Get the most frequent grade, them set up the current level.

  step4 : If |current level| - |previous level| > 1 , change the level

  step5 : Refresh the Backlight set-up as the 200ms.

Lux	> 200	190	...	10	0
Sensor Backlight	**20**	**19**	**....**	**1**	**0**

2-10. DVB-T2

2-10-1. DVB-T vs T2

	DVB-T	DVB-T2
FEC	Convolutional Coding + Reed Solomon 1/2, 2/3, 3/4, 5/6, 7/8	LPDC + BCH 1/2, 3/5, 2/3, 3/4, 4/5, 5/6
Modes	QPSK, 16QAM, 64QAM	QPSK, 16QAM, 64QAM, 256QAM
Guard Interval	1/4, 1/8, 1/16, 1/32	1/4, 19/256, 1/8, 19/128, 1/16, 1/32, 1/128
FFT size	2k, 8k	1k, 2k, 4k, 8k, 16k, 32k
Scattered Pilots	8% of total	1%, 2%, 4%, 8% of total
Continual Pilots	2.6% of total	0.35% of total

2-10-2. DVB-T2 Capacity

	Current UK mode	T2
Modulation	64QAM	256QAM
FFT size	2K	32K
Guard Interval	1/32	1/128
FEC	2/3 CC + RS (8%)	3/5LDPC + BCH (0.3%)
Scattered Pilots	8%	1%
Continual Pilots	2.6%	0.35%
P1/P2 overhead	0%	0.7%
Bandwidth	Standard	Extended
Capacity	24 Mbit/s	35.4Mbit/s

DVB-T2 Channel capacity incresed 47% than DVB-T.

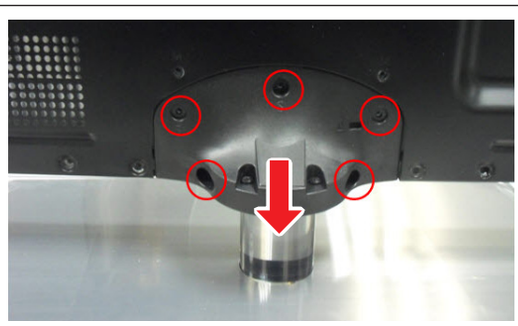
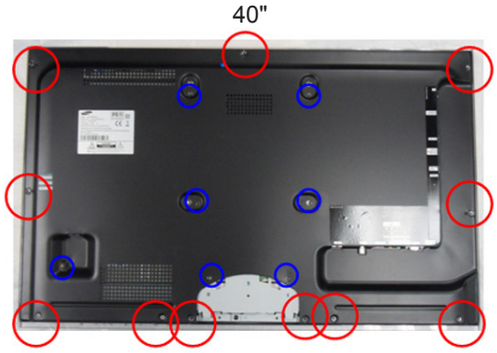
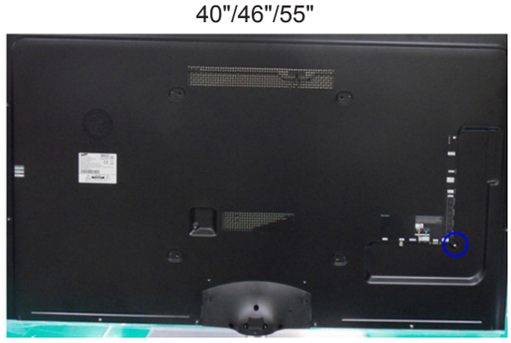
3. Disassembly and Reassembly

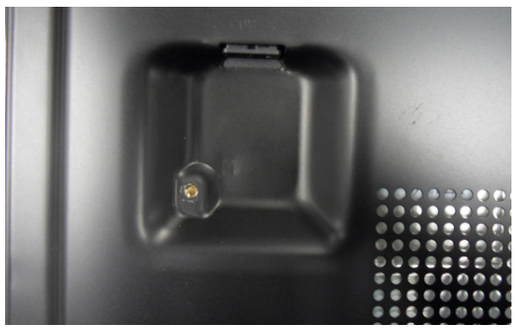
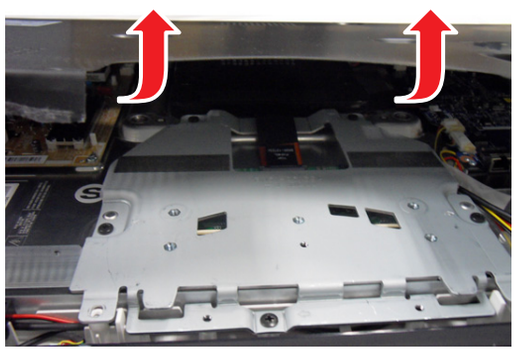
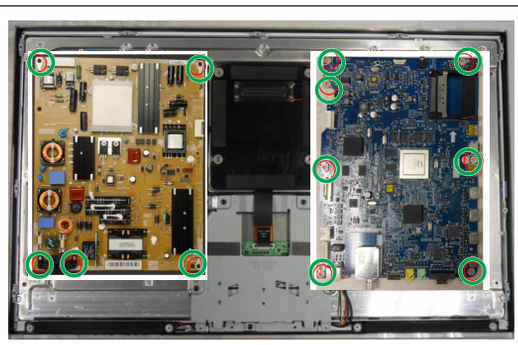
This section of the service manual describes the disassembly and reassembly procedures for the UN40B7000WF LCD TV.

⚠ **WARNING:** This monitor contains electrostatically sensitive devices. Use caution when handling these components.

3-1. Disassembly and Reassembly

⚠ **Cautions:** 1. Disconnect the monitor from the power source before disassembly.
2. Follow these directions carefully; never use metal instruments to pry apart the cabinet.

Description	Picture Description	Screws
1. Place monitor face down on cushioned table. Remove screws from the Stand. Remove stand.		
		 6003-000133
2. Remove the screws of rear-cover.	40" 	 6003-000133  6003-001003
	40"/46"/55" 	 6003-001003

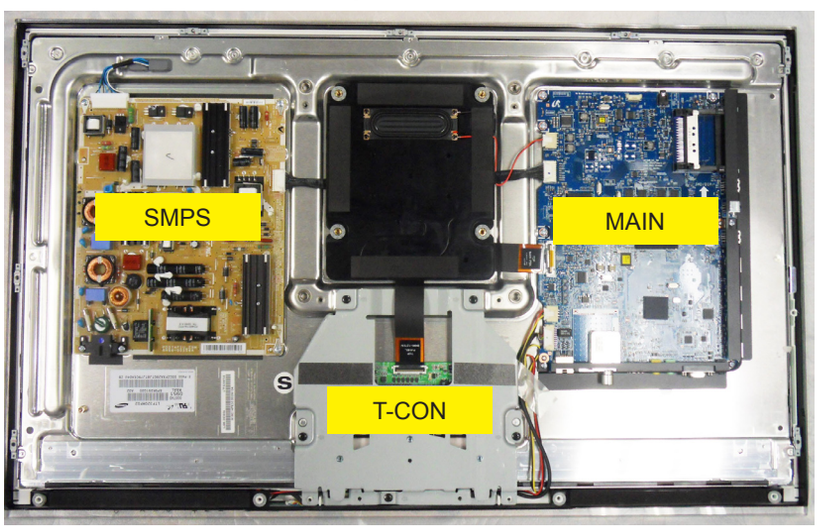
Description	Picture Description	Screws
Pull out a AC Power Cord.		
3. Lift up the rear-cover.		
4. Remove the cables and screws from SMPS, Main board and Woofer and Bracket stand link.		 6001-002283
5. Remove the panel bracket screws from the panel.		
		

※ Reassembly procedures are in the reverse order of disassembly procedures.

4. Troubleshooting

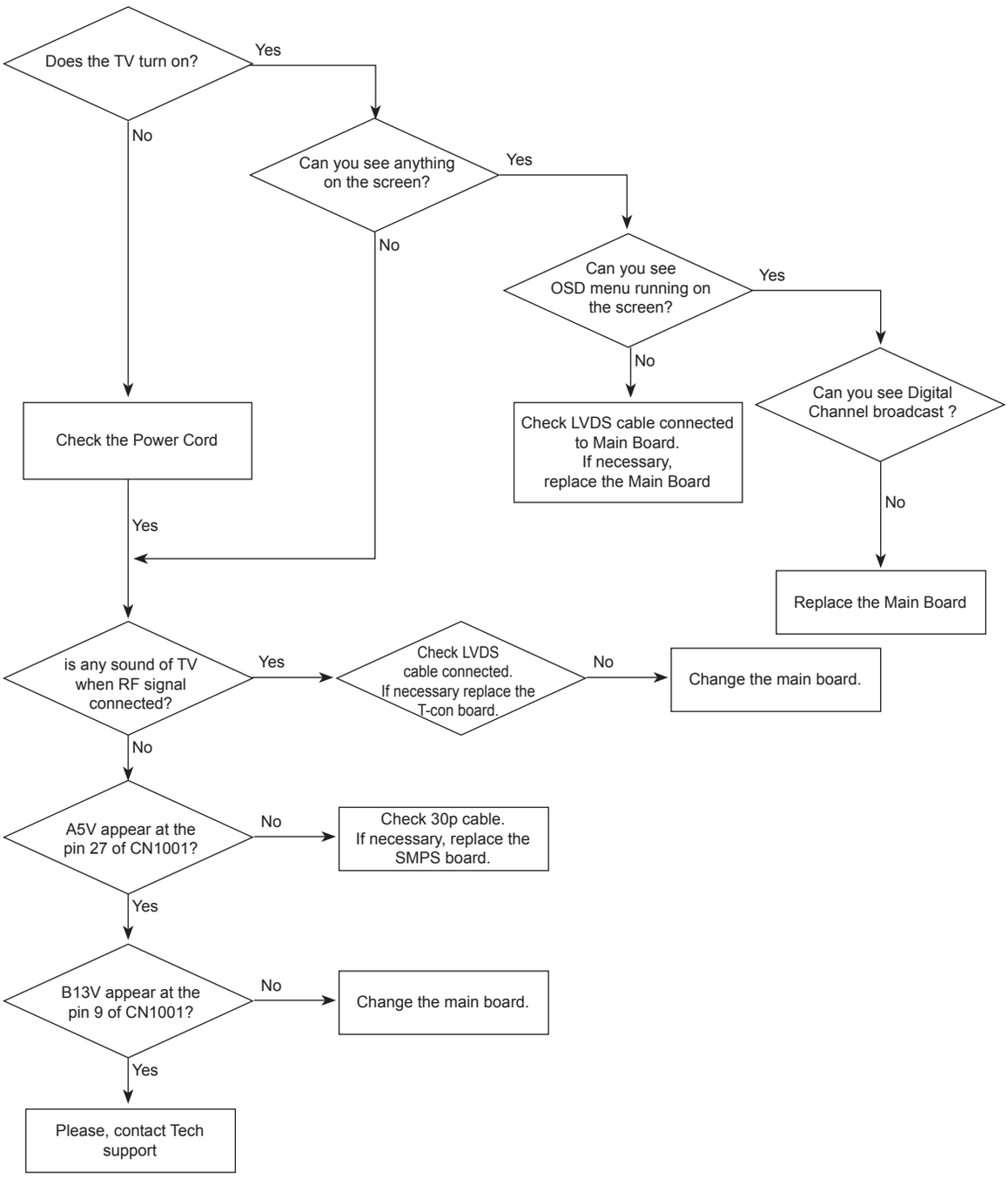
4-1. Troubleshooting

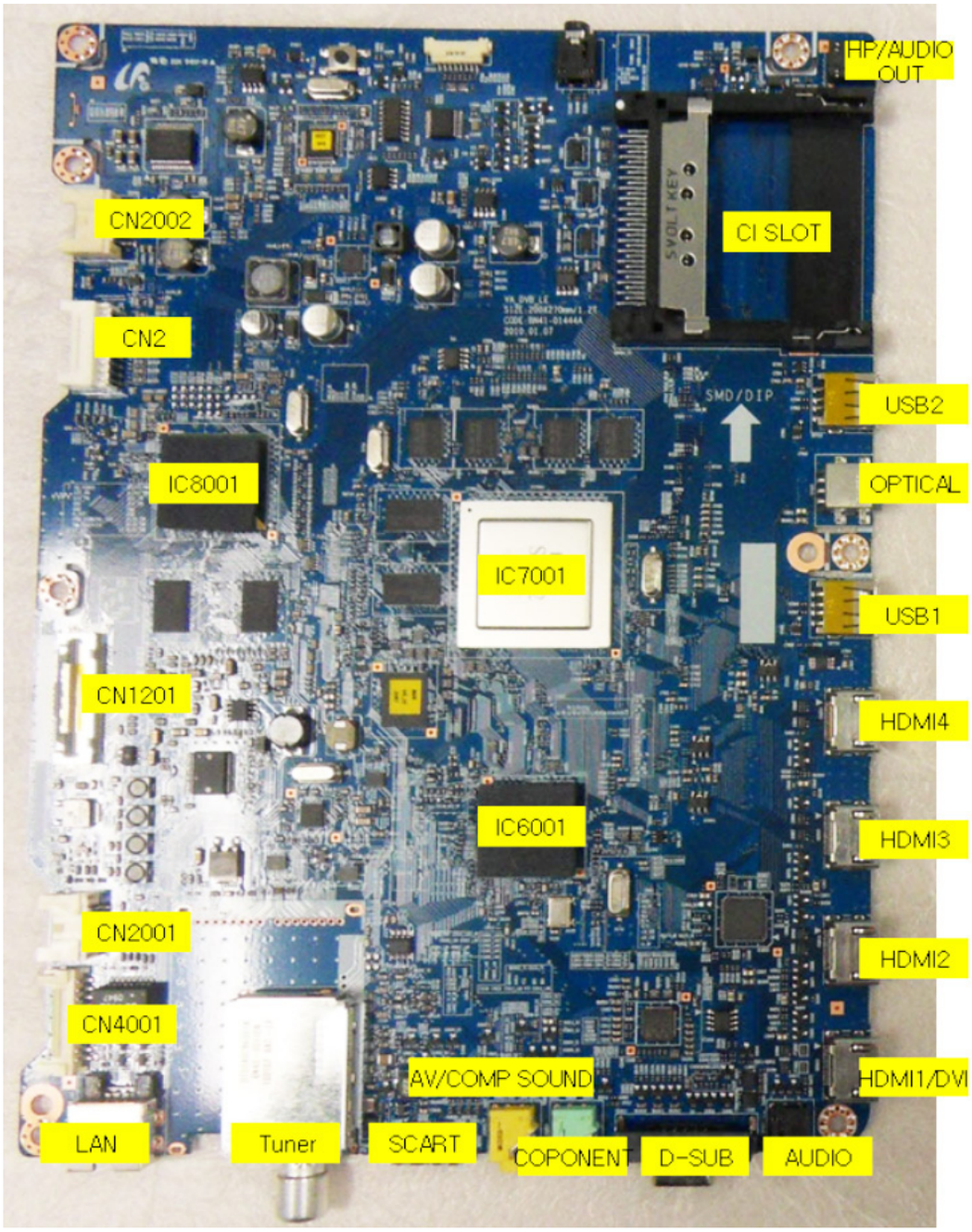
1. Check the various cable connections first.
   • Check to see if there is a burnt or damaged cable.
   • Check to see if there is a disconnected or loose cable connection.
   • Check to see if the cables are connected according to the connection diagram.
2. Check the power input to the Main Board.
3. Check the internal patterns from both the FRC and FBE3 options.
   FRC: Factory mode(mute 1 - 8- 2 power on when TV is “standby on “) -> Control -> Test Pattern -> FRC PATT_ BeforeDDR / AfterDDR
   * FRCM pattern is created by FRCM IC(T-con)
   FBE3: Factory mode(mute 1 - 8- 2 power on when TV is “standby on “) -> Control -> Test Pattern ->FBE Pattern Sel
   * Main pattern is created by Main IC(Chelsea)
   Case1: FBE3 ok,FRC NG: change the T-con Board
   Case2: FBE3 NG, FRC NG: change the main Board



* FRCQ : Micronas FRC chip

■ Simple flow chart of malfunction




HP/AUDIO OUT
CN2002
CI SLOT
CN2
SMD/DIP
USB2
IC8001
OPTICAL
IC7001
USB1
CN1201
HDMI4
IC6001
HDMI3
CN2001
HDMI2
CN4001
AV/COMP SOUND
HDMI1/DVI
LAN
Tuner
SCART
COPONENT
D-SUB
AUDIO

■ Troubleshooting about new functions

I tried to set up BGM in Media play. I can select a file but I cannot configure the Mood settings.	An explanation of Media play	The BGM shuffle and Mood settings are only available when the Music DB configuration is complete. Enter the Music category and compelete the Music DB configuration first.
I cannot enter Photos, Music or Movie after running Media play.	An explanation of Media play	Check if the USB memory contains MP3 or JPEG files.
Photo thumbnails are not displayed in the Photo category.	An explanation of Media play	This may occur when the photo format is not supported by the TV or the JPEG files do not include thumbnails.
Video thumbnails are not displayed in the Movie category.	An explanation of Media play	A video thumbnail is only displayed when the video has been played at least once.
The JPEG files on the USB memory are not in the list.	An explanation of Media play	Files with a path longer than 256 characters will not be displayed.
I have connected a digital camera, but I cannot browse the folders.	An explanation of Media play	When a device is connected in PTP mode, a browsing folder is not supported.
I cannot play the currently highlighted file.	An explanation of Media play	Check if another file is selected (checked). The selected file will be played
I want to know about supported photo color formats.	An explanation of Media play	The RGB, YUV, YCbCr, CMYK, YCCK, GRAY formats are supported.
I want to know about the maximum supported photo resolution.	An explanation of Media play	The maximum resolution is 15360x8640 pixels.
I want to know about supported music sampling frequencies.	An explanation of Media play	Supported frequencies are 8, 11.025, 12, 16, 22.05, 24, 32, 44.1, 48 Khz
I cannot play MP3 files downloaded from websites. (Paid MP3 download sites such as Melon)	An explanation of Media play	Playing DRM files (used to protect content) is not supported.
I want to know about supported USB devices.	An explanation of Media play	The TV only supports devices that do not support the Mass Storage Class or PTP Class. Devices are not supported when they are connected to the TV via a USB hub. Supporting USB devices that require an additional device driver installation is not guaranteed.
The supported photo play is slow.	An explanation of Media play	Since the TV does not use caching unlike for a PC, it make take some time to display a high-resolution photo.
I cannot play paid MP3 files.	An explanation of Media play	If the MP3 file is a DRM (Copy Protected) file, the file will not be played.
I cannot play a digital camera that supports PTP.	An explanation of Media play	Check the PTP mode of the digital camera. It will not work in Printer Connection mode.
I cannot use the morning call function with a digital camera that supports PTP.	An explanation of Media play	A morning call cannot be set with a PTP device.
I have changed the device settings to MSC connection mode after connecting PTP or during an operation, but the device is not recognized.	An explanation of Media play	Switching the connection mode between MSC and PTP after a connection is made or during anoperation is not supported. You can only change the digital camera connection mode after disconnecting it.
The WLAN does not work.	An explanation of Media play	Equipment other than the WLAN USB stick supplied by Samsung Electronics (as a bundle) will not work. The sharer must support IEEE 801.11 g/b. IEEE 801.11 n is supported.

I cannot find Internet Sharer in the Wlan settings menu.	An explanation of Wiselink Pro	Only InfraStructure mode of the sharer is supported. Ad-Hoc mode is not supported. If multiple sharers are being used, configure them so that they do not use the same channel. Set up the sharer to not control the ICMP so that it answers the Ping test.
The WLAN data rate is slow.	An explanation of Wiselink Pro	If the distance from the sharer is too far, the operation may slow or the sharer may not be found. If there is an obstacle, wall or electronic device between the TV and the sharer, the operation may slow or the sharer may not be found due to a difficulty in communication.
The DLNA server that I could see on the TV has suddenly disappeared. What should I do?	PC Share Manager Search	1.Check if the PC is turned off. 2. Check if the Samsung TV is set to reject connections in the access control menu of the Samsung PC Share Manager. If so, change the setting to allow connections. 3.Check if the LAN cable is connected to the PC and the TV.
Although the Samsung PC server is on, a message pops up informs you that the Samsung server is off.	PC Share Manager Search	When the shared folder of the server is reconfigured, the DLNA server function stops temporarily and then resumes after the reconfiguration is completed. When the server is renamed, the DLNA server function also temporarily stops and then resumes .
I have registered a file with the Samsung PC Share Manager to watch it on the TV, but I cannot find the file on the TV. What should I do?	Content Sharing	1. The Share function is not provided for every file. Files in a format that is not supported by DLNA are not displayed on the TV even if they are displayed on a PC. Please accept our apologies, we are working on this. 2. Check if the folder with the files registered to Samsung PC Share Manager is shared. The folder should be also shared. 3. Check if you have clicked the Apply button after sharing the folder including the file. If you are unsure about this, please click the button again and recheck if the file is displayed after a while.
I can see the folders shared through the PC Share Manager, but I cannot see the files.	Content Sharing	Since it shows only files corresponding to the Image, Music, and Movie categories, files that do not correspond to these categories may not be displayed.
The 2x and 3x Fast Forward video function on the PC connected to the network does not work.	DLNA Video Play	The function that supports playing a video on a PC connected over the network does not support the 2x and 3x Fast Forward functions.
Video is played intermittently.	DLNA Video Play	Check if the network is stable. Check if the network cable is properly connected and if the network is not overloaded. If there is a wireless network section between the server and the DTV, the communications environment may be unstable.
Pressing the Pause key while a video or music file is playing does not work. The Seek function does not work either.	DLNA Video Play	The Pause function may not be supported depending on the content provided by the DLNA server or the server. The Seek function is also not supported.
I cannot move folders and files or cannot copy them by Dragging & Dropping them in the PC Share Manager program.	PC Share Manager function	The PC Share Manager program provides file sharing with a PC and the TV and does not provide those functions.
I changed New DTV replacing older one. However, after changing the DTV, I can not discover PC Server, though I use same IP address which I used before.	Access control function runs based solery on MAC address of target device.	You should set new DTV as “accept” in PC share manager Menu->SHARE->Set Device Policy
I cannot play a video file.	DLNA Video Play	Only videos recorded by specific Samsung camcorders and digital cameras can be played. Other videos may or may not be played depending on the resolution and format.
I can see visuals but I cannot hear audio when playing a video.	DLNA Video Play	If the audio format is not supported or the file is a non-interleaved file, only video is played.

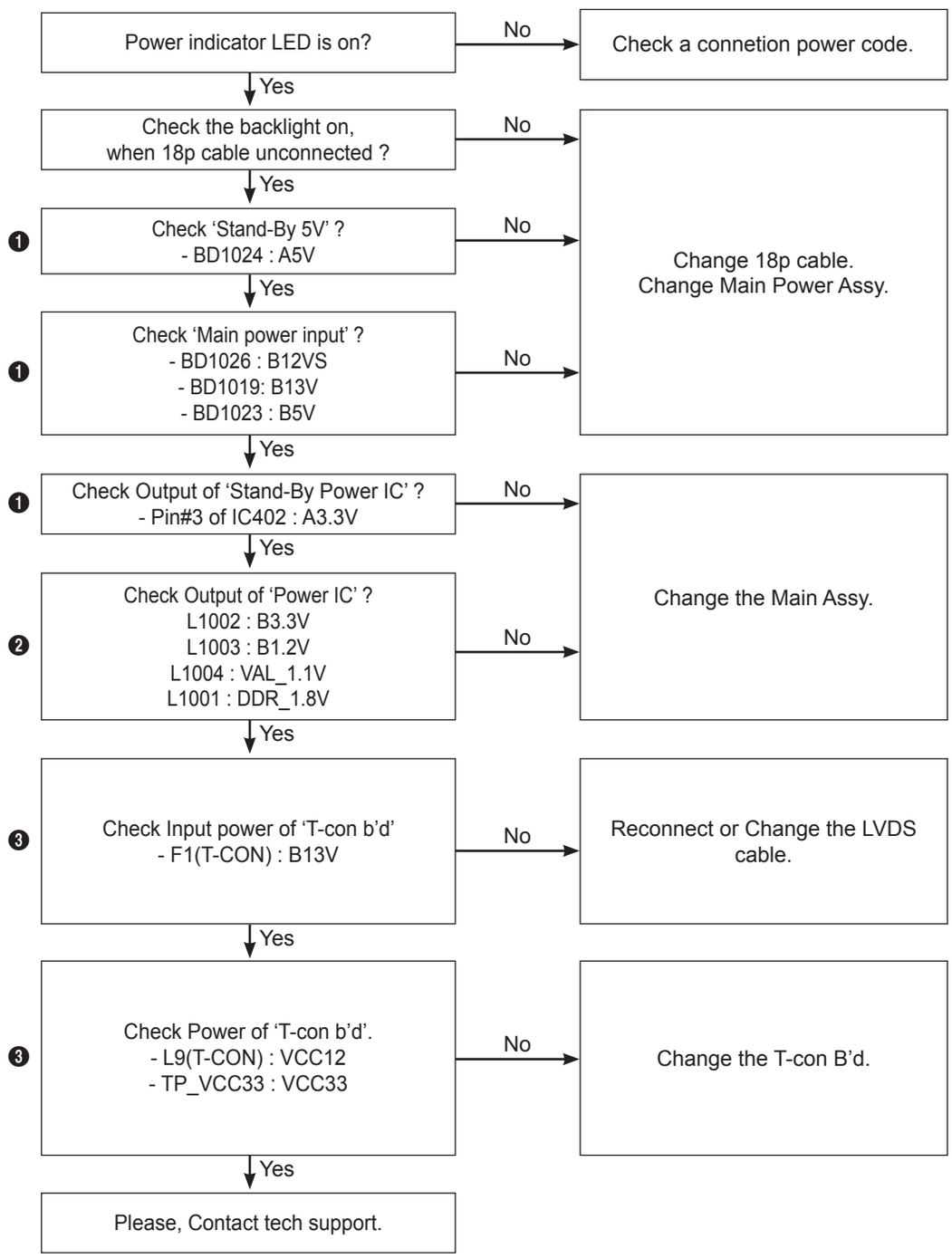
I cannot play files with the wmv or flv extension.	DLNA Video Play	The video play function is not supported for files with these extensions.
I cannot use the 20 second Seek function while playing at 2x Fast Forward.	DLNA Video Play	To use the Seek function while playing at 2x Fast Forward, press the Play button to first make the playing speed normal. After that, you will be able to use the Seek function.
Although I can play some files, I cannot play others even if they have the same resolution and format.	DLNA Video Play	For unsupported videos, some videos at a certain resolution and format may be played.
I can run Trick and Seek with a USB device, but I cannot run Trick and Seek with DLNA.	DLNA Video Play	For DNLA, Trick is not supported. And only Seek is supported for PS and TS.
How can I show captions?	DLNA Video Play	Only the first language is displayed.
When I enter Internet@TV, the “Connecting to the service...” warning message box appears where I can select either Retry or Cancel, and I cannot enter Internet@TV. (The Panel Bar is not displayed.)	An explanation of Internet@TV	This happens when normal information is not received from the Internet@TV after purchasing the TV. In this case, connect the Internet cable and then try again.
Although I can enter Internet@TV, I cannot connect to the service.	An explanation of Internet@TV	This happens when Internet@TV has been properly connected at least once but the Internet is not currently connected. In this case, connect the Internet cable and try again.
When the network is connected, I cannot connect to some of the information.	An explanation of Internet@TV	This happens when the CP sends incomplete information. In this case, reconnect to the Internet and try again.
Photos are not displayed or are displayed intermittently in the Detailed News View.	An explanation of Internet@TV	This may occur due to a slow Internet speed. Retry and ask your Internet Service Provider about the low data rate problem.
The Mode information of the News changes. (E.g. ‘Entertainment’ was in the News mode list, but it has been removed from the list.)	An explanation of Internet@TV	The Mode information of the News is simply displayed as it is provided by the CP and is not relevant to the TV.
The displayed stock price is different from the current price.	An explanation of Internet@TV	The corresponding information is supplied by CP and is not relevant to the TV. The information provided by the CP is delayed information and the announcement informing the viewer that the information is delayed information is displayed in the service.

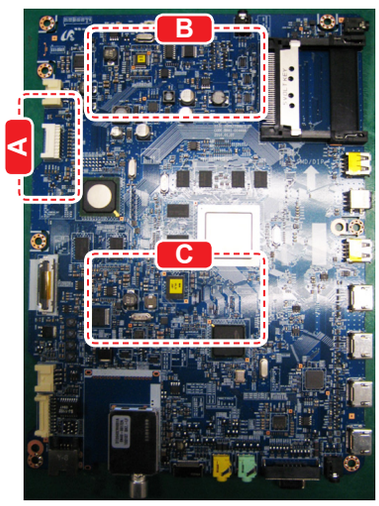
• AllShare

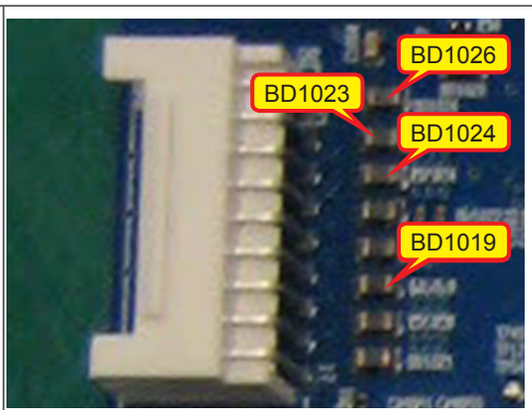
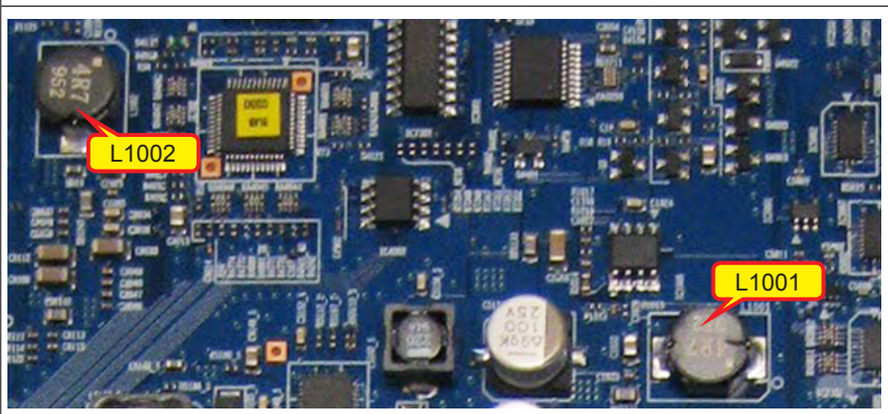
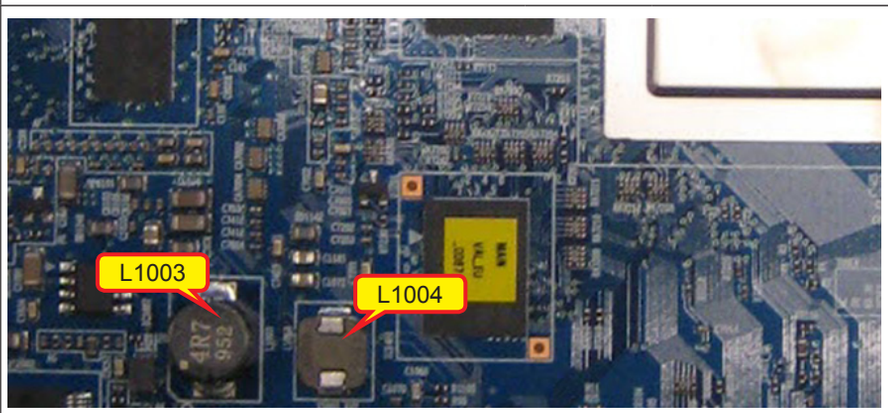
Problem	Possible Solution
• General	
I see no device connected to AllShare.	• To use a device connected to AllShare, the device must be connected to PC Share Manager which is the DLNA server for MediaPlay and to a cell phone that has the Connected Home or Screen Share function which are found on Samsung Smartphones. • Check that the PC Share Manager is enabled, the Samsung TV is set to allow connections and the ScreenShare function on the connected cell phone is enabled. • To use the cell phone's Connected Home function, check that the shared folder is set and the Share mode is 'On.'
I tried to play a video from my cell phone using the Connected Home function on the Samsung TV but the video would not display on the TV.	• When a video is transmitted from Connected Home to a TV for the first time, the settings screen that allows transfer to a TV is displayed. • Check that the transfer was not set to be rejected on this settings screen. If you have set the cell phone to 'Blocked' in the 'Media' options of the AllShare settings, please change the setting to 'Unblocked' and retry.
A video that can be played on my cell phone cannot be played on my TV.	• Please check the resolution and display format provided by MediaPlay of the TV.
I cannot resume playback of a video using Connected Home.	• The resuming function is not supported for a video played on a cell phone.
When I play a video through Connected Home, I get intermittent picture loss.	• An 801.11b/g bandwidth network is used between a cell phone and a sharing device. There may be frequent buffering for HD quality videos, this also depends on the condition of the wireless connection. • Please optimize your wireless Internet environment settings (avoid using wireless Internet or bluetooth altogether if possible) or lower the picture quality of the video.
• Notification	
Can all devices with the DLNA function be recognized through Notification?	• Only Samsung software and devices with the DLNA server function can be recognized through Notification.
Can I use all the services related to DLNA?	• Presently, you can only use the services related to ScreenShare and MediaPlay. We will launch a new DLNA service in the future.
The notification screen that appears after a device connects disappears within a few seconds. How can I access this connected device again?	• The DLNA Notification is only displayed when a device is first connected to a TV. To access the device again, please use the AllShare menu.
• ScreenShare Client	
I cannot find the RUIS on my cell phone.	1. Check that the cell phone is connected to the wireless sharing device correctly. 2. Check that the DTV is connected either using a network cable or wirelessly to the wireless sharing device correctly. 3. Confirm the IP address and subnet mask to ensure that the cell phone and DTV are connected to the same network. 4. Check that the RUIS on the cell phone is enabled. 5. If the RUIS on the cell phone is enabled, please disable it and then enable it again.

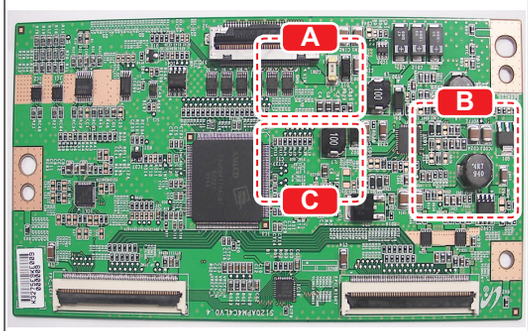
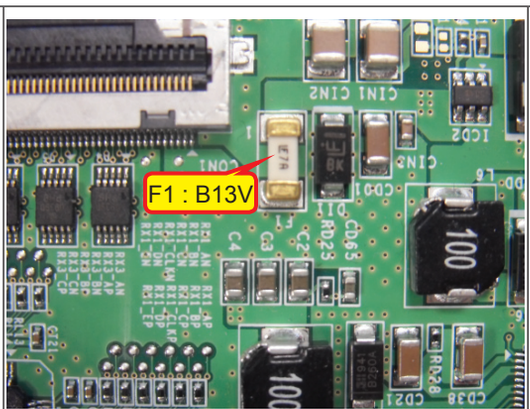
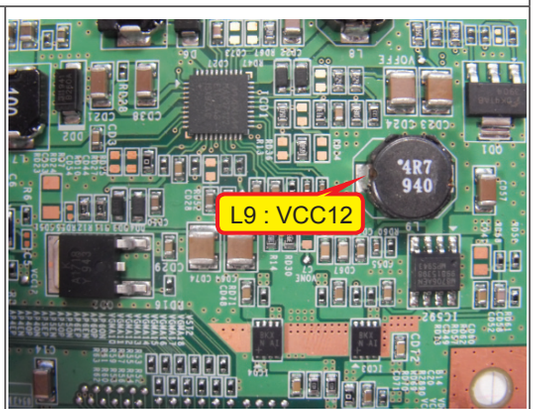
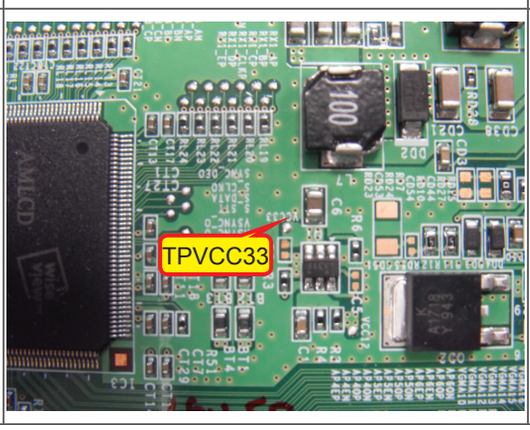
Problem	Possible Solution
• **ScreenShare Server**	
I cannot find the remote control service provided by the ScreenShare Server from the ScreenShare Client.	1. Check that the ScreenShare Client device is correctly connected to the network of the sharing device that the DTV is connected to. 2. Run network test in the network setup menu and confirm that MAC Address, IP Address, Subnet, Gateway, DNS Server and Gateway Ping each shows a success message. 3. In the network setup menu, check that the ScreenShare Client and ScreenShare Server are on the same subnet. - You can confirm they are on the same subnet by checking the IP address, subnet mask and gateway address of the TV and ScreenShare Client as follows: - If the IP address of the DTV is 10.88.83.4 and the subnet mask is 255.255.255.0, the first six digits of the ScreenShare Client's IP address must be the same (10.88.83) as that of the DTV, and the subnet mask and gateway address must be the same as the DTV. - If the IP address of the DTV is 10.88.83.4 and the subnet mask is 255.255.0.0, the first four digits of the ScreenShare Client's IP address must be the same (10.88) as that of the DTV, and the subnet mask and gateway address must be the same as the DTV. 4. Move from the Allshare screen to the Setup screen, and open the Setup menu to check if the ScreenShare Client is connected to the same ScreenShare Server as the TV name shown in the Setup options. 5. Move from the Allshare screen to the Setup screen, and open ScreenShare to check that the device, ScreenShare Client, is found on the list at the right side and is set to "Allowed."
The DTV did not update after pressing buttons on the remote control that uses the remote control service on the ScreenShare Client.	• Check that the TV is turned on. You cannot turn on the TV using the remote control service (on the ScreenShare) when the TV is turned off.

4-1-1. No Power

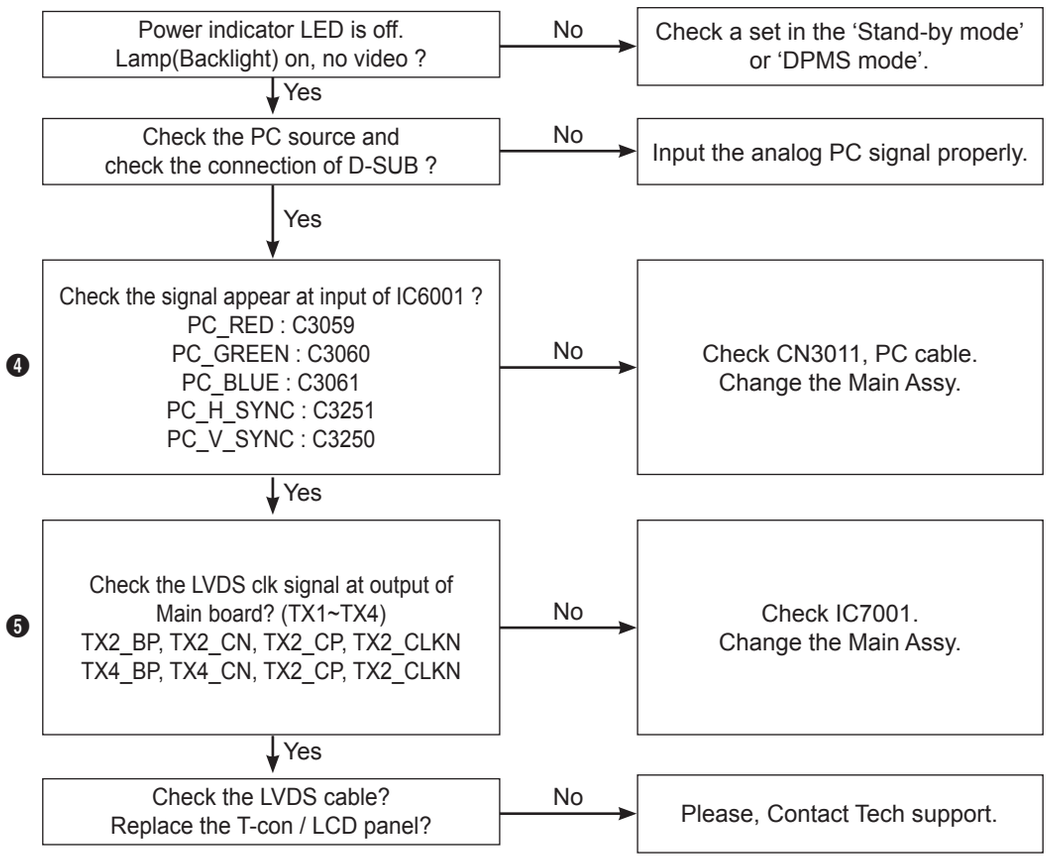
Symptom	– The LEDs on the front panel do not work when connecting the power cord. – The SMPS relay does not work when connecting the power cord. – The units appears to be dead.
Major checkpoints	The IP relay or the LEDs on the front panel does not work when connecting the power cord if the cables are improperly connected or the Main Board or SMPS is not functioning. In this case, check the following: – Check the internal cable connection status inside the unit. – Check the fuses of each part. – Check the output voltage of SMPS. – Replace the Main Board.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

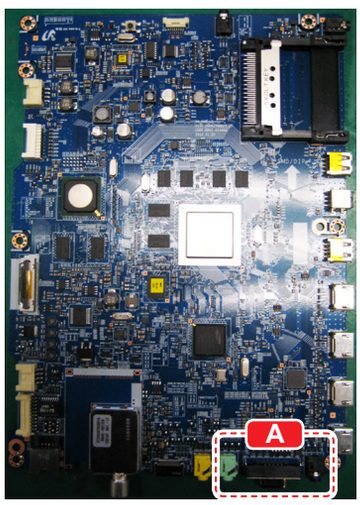
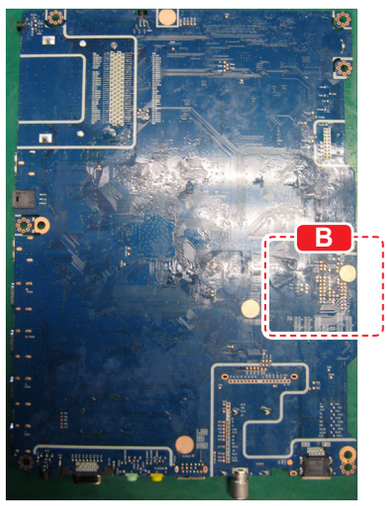
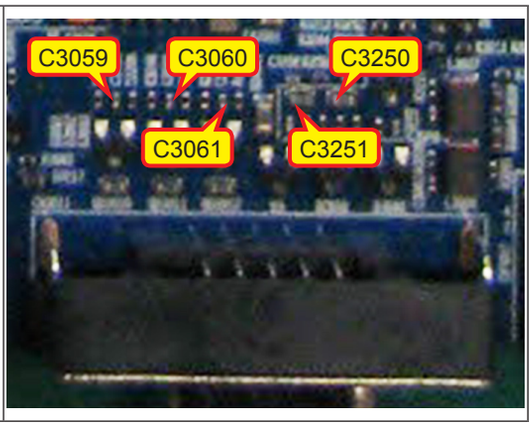
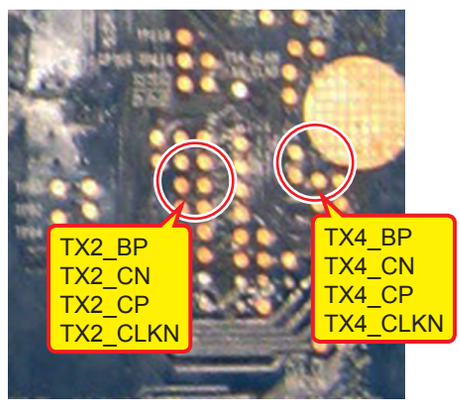
Location (Main)			
TOP		BOTTOM	

Detail	
A	
B	
C	

Location (T-CON)			
TOP		BOTTOM	
Detail			
A		B	
C			

4-1-2. No Video (Analog PC signal)

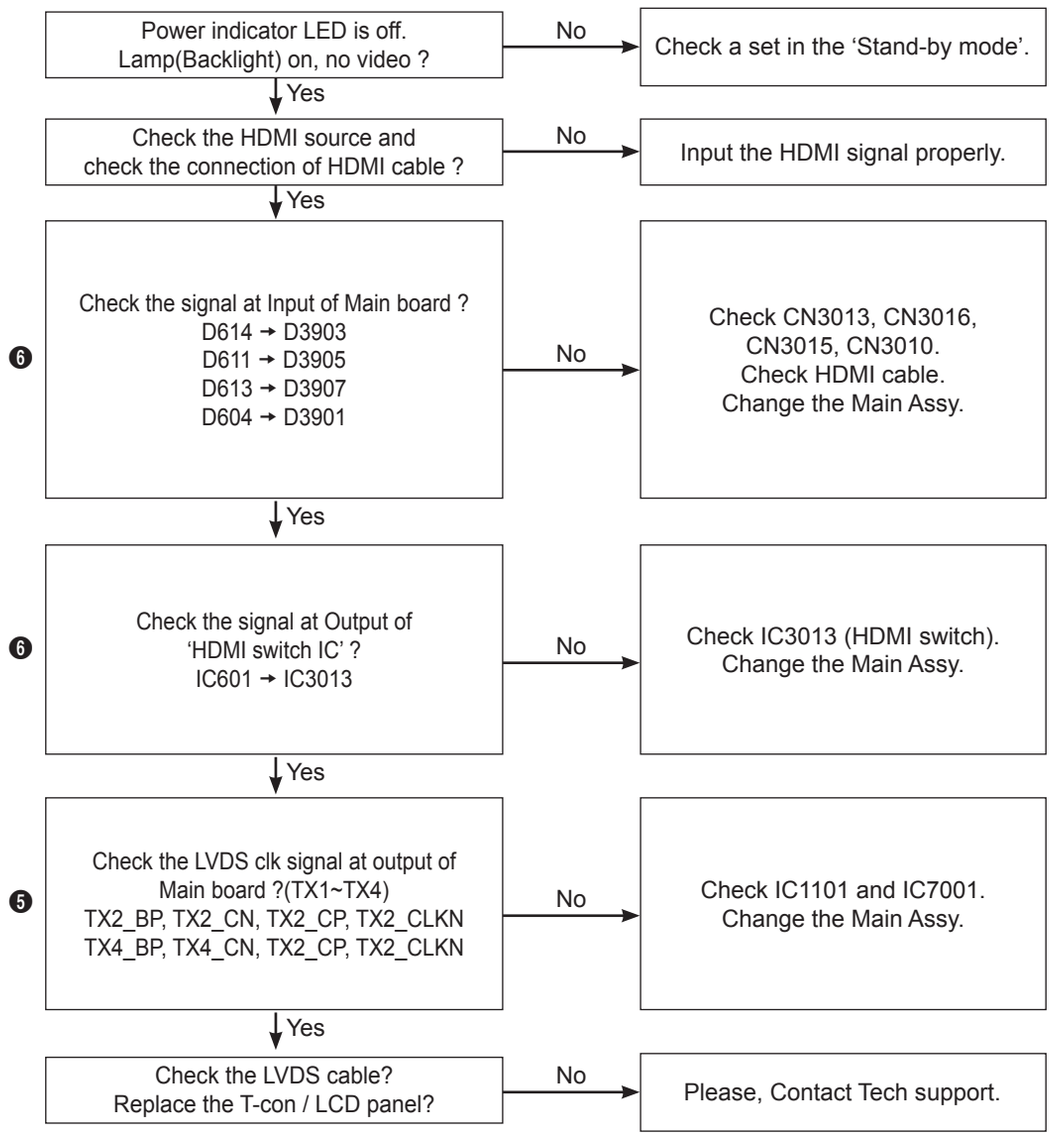
Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the PC source – Check the Arsenal, Check the Valencia. – Refer to the next page to check the lacation such a CN201 or IC201 SVC Manual mentioned.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

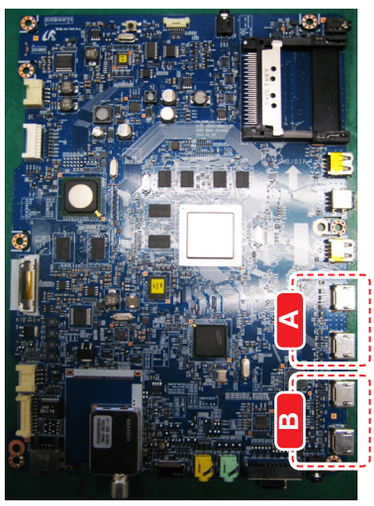
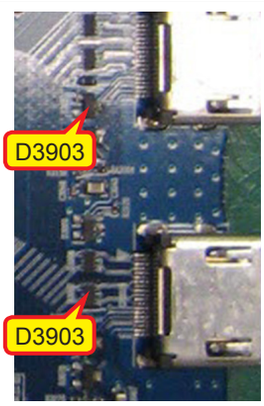
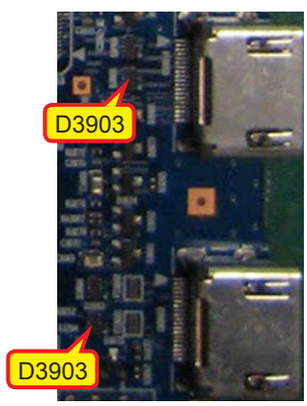
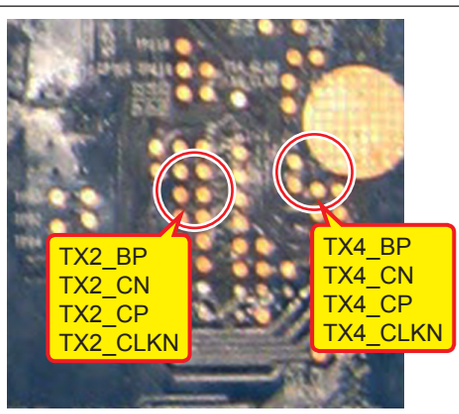
Location (Main)			
TOP		BOTTOM	
Detail			
A		B	

■ WAVEFORMS

❶	R, G, B, H_sync input signal of IC6001(SDP84)

4-1-3. No Video (HDMI 1, 2, 3, 4 - Digital Signal)

Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the HDMI source. – Check the HDMI switch, Check the Valencia. – Refer to the next page to check the lacation such a CN201 or IC201 SVC Manual mentioned.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

<table>
<tr><th colspan="4">Location (Main)</th></tr>
<tr><td>TOP</td><td> 
</td><td>BOTTOM</td><td> 
</td></tr>
<tr><th colspan="4">Detail</th></tr>
<tr><td>A</td><td> 
</td><td>B</td><td> 
</td></tr>
<tr><td>C</td><td> 
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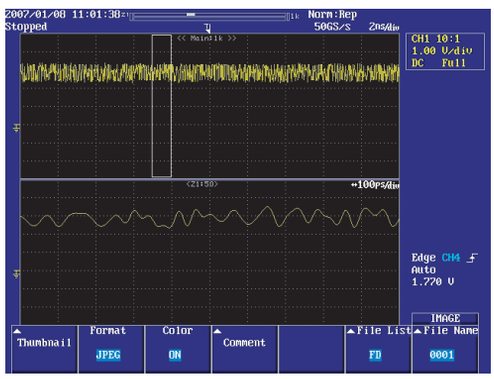
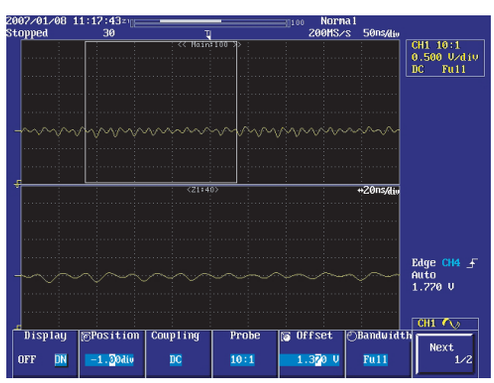
■ WAVEFORMS

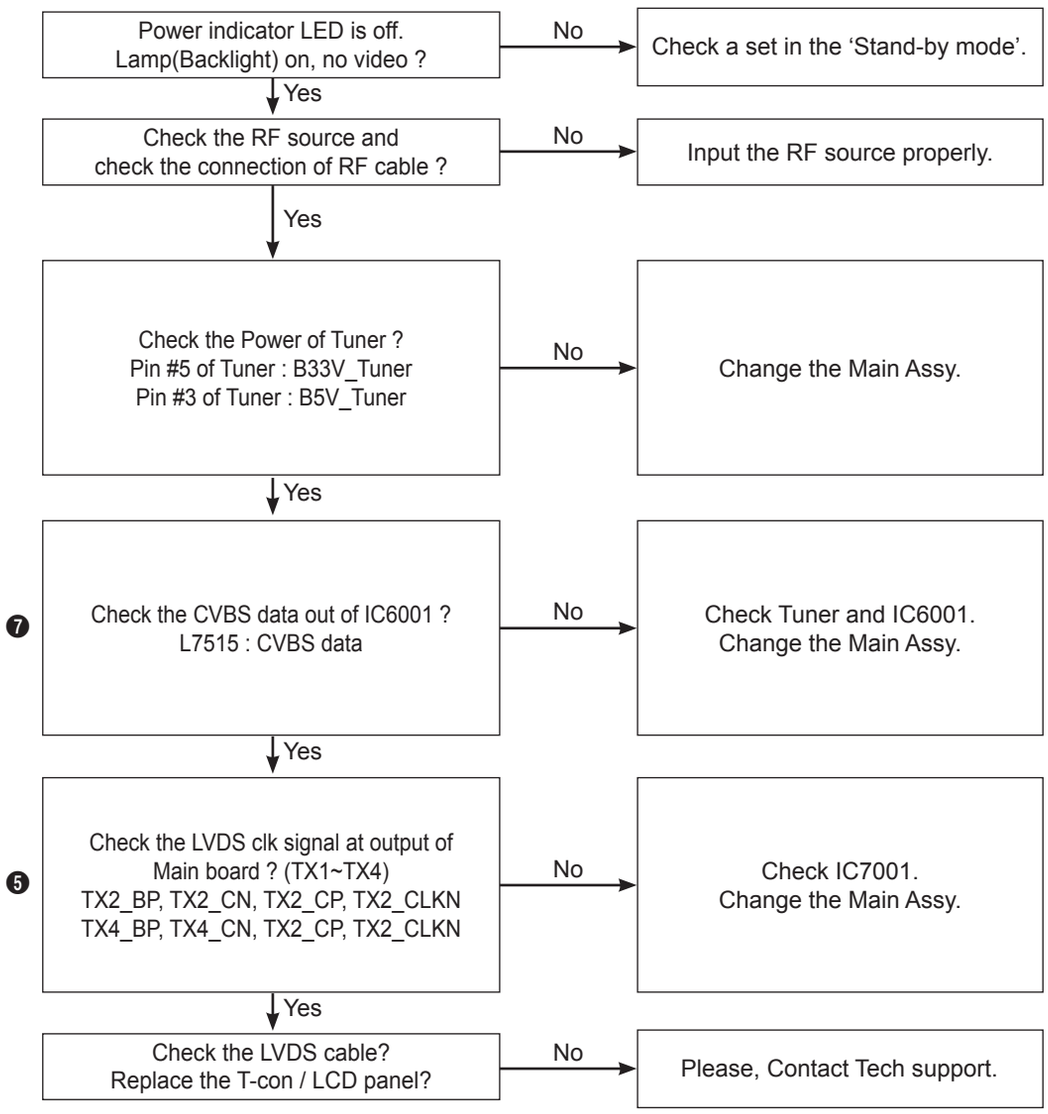
❷	Digital Output Data

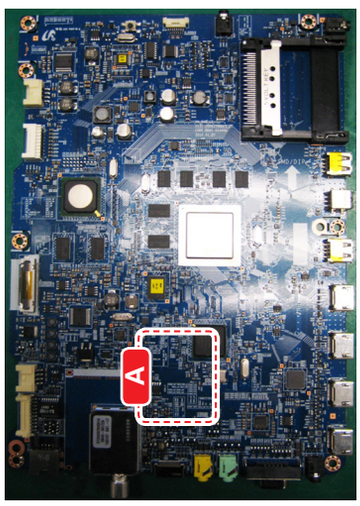
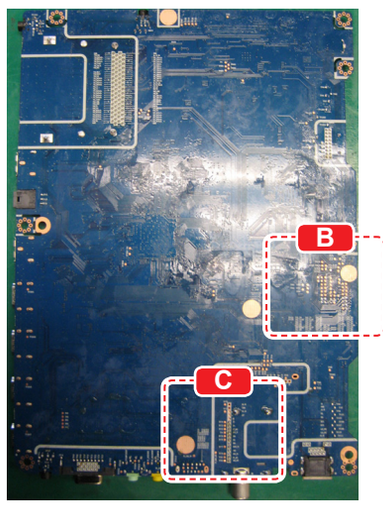
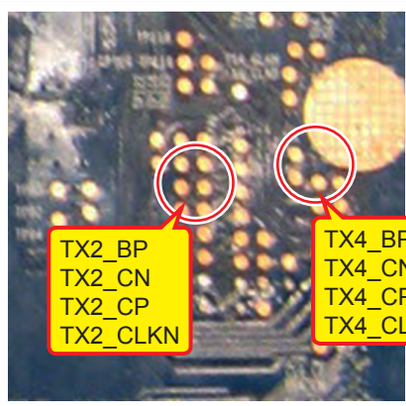
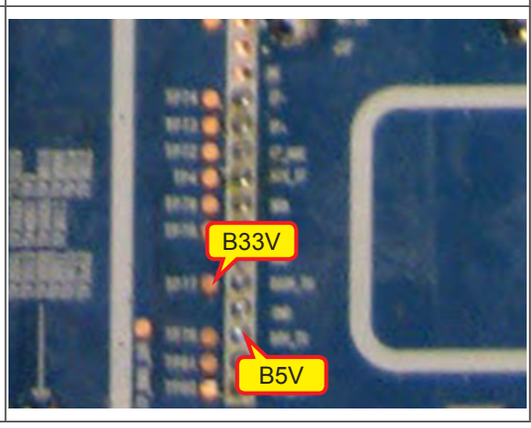


❸	Signal of HDMI(Data)



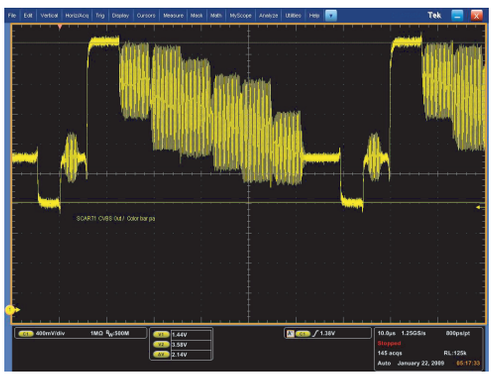
4-1-4. No Video (Tuner_CVBS)

Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the Tuner CVBS source. – Check the Tuner, Check the Valencia. – Refer to the next page to check the lacation such a CN201 or IC201 SVC Manual mentioned.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

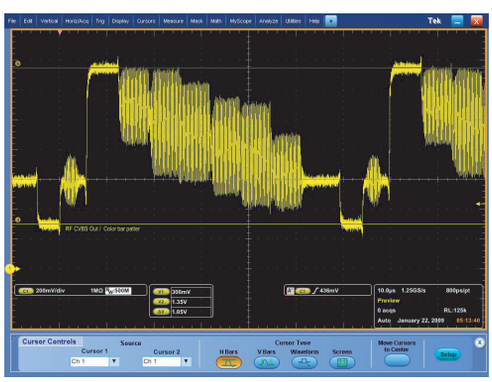
Location (Main)			
TOP		BOTTOM	
Detail			
A		B	
C			

■ WAVEFORMS

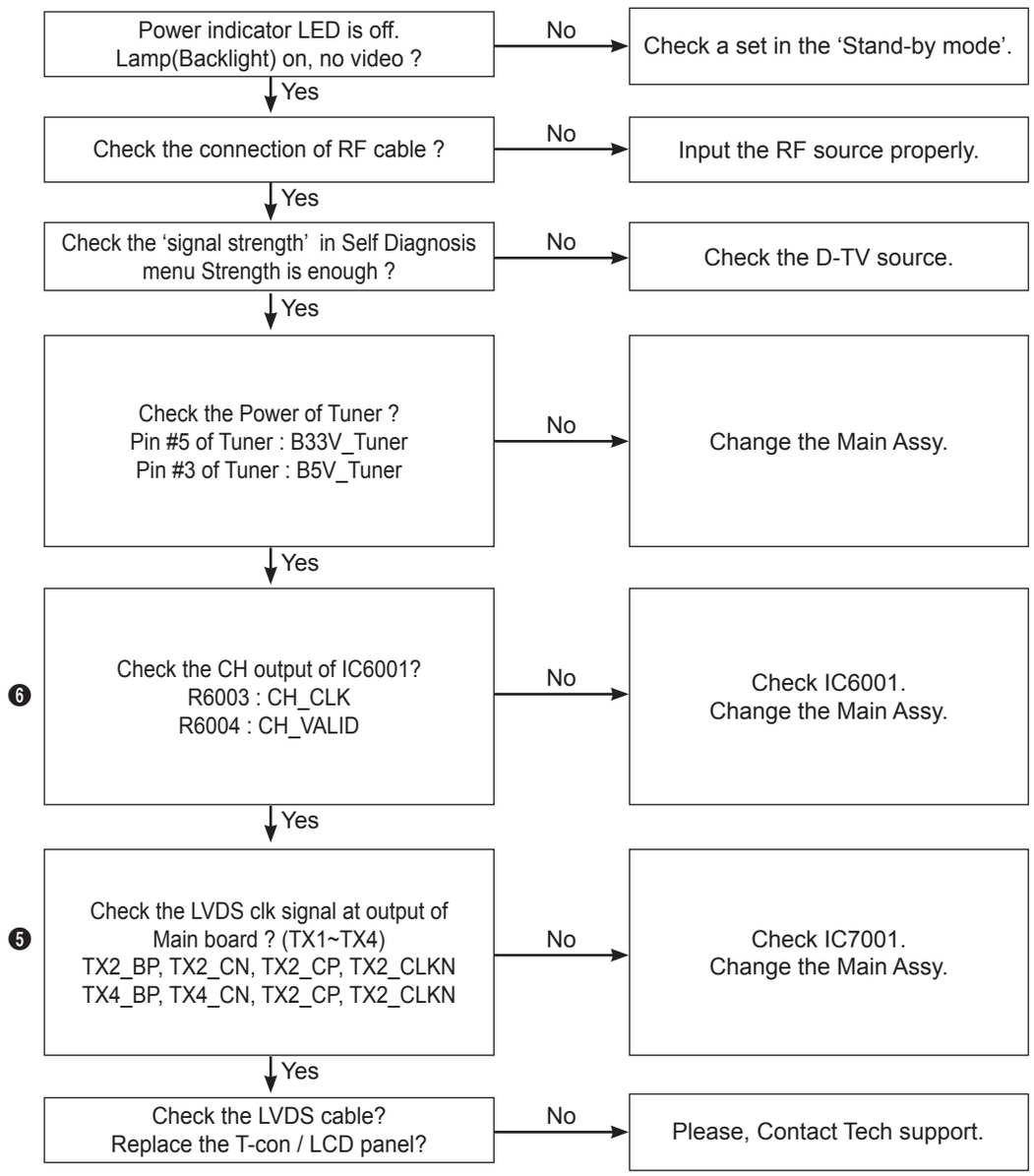
❸	CVBS Output Signal

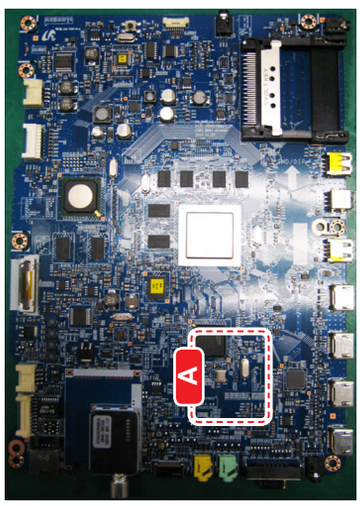
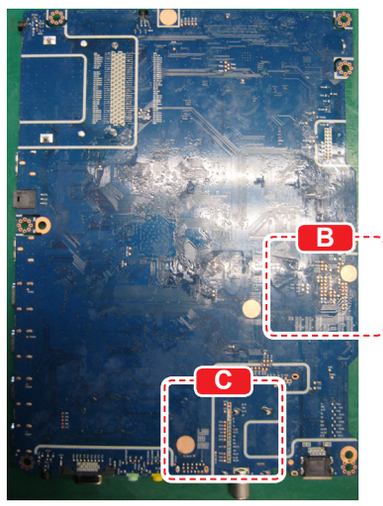
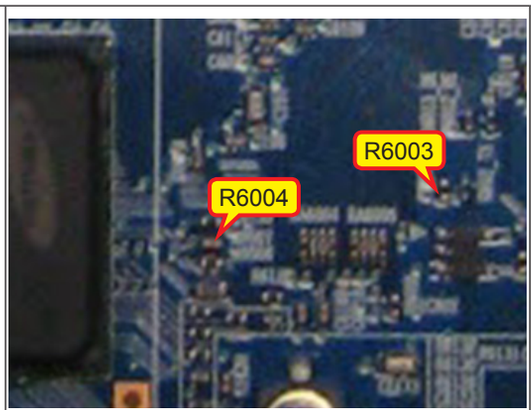
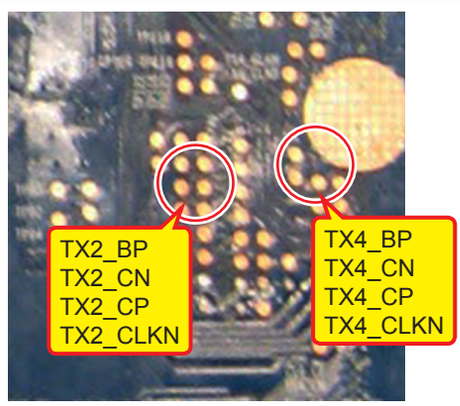
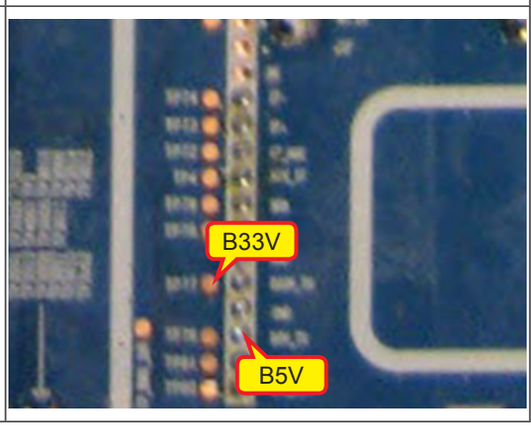


❹	Tuner_CVBS Output Signal



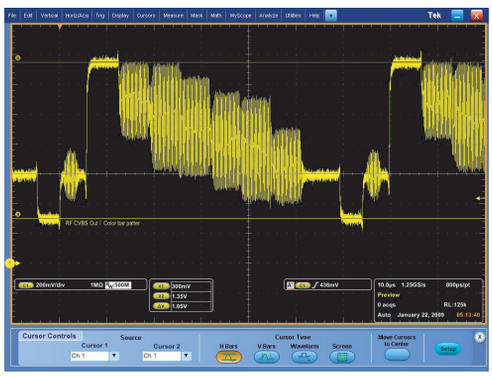
4-1-5. No Video (Tuner DTV)

Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the DTV source. – Check the Tuner, Check the Valencia. – Refer to the next page to check the lacation such a CN201 or IC201 SVC Manual mentioned.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

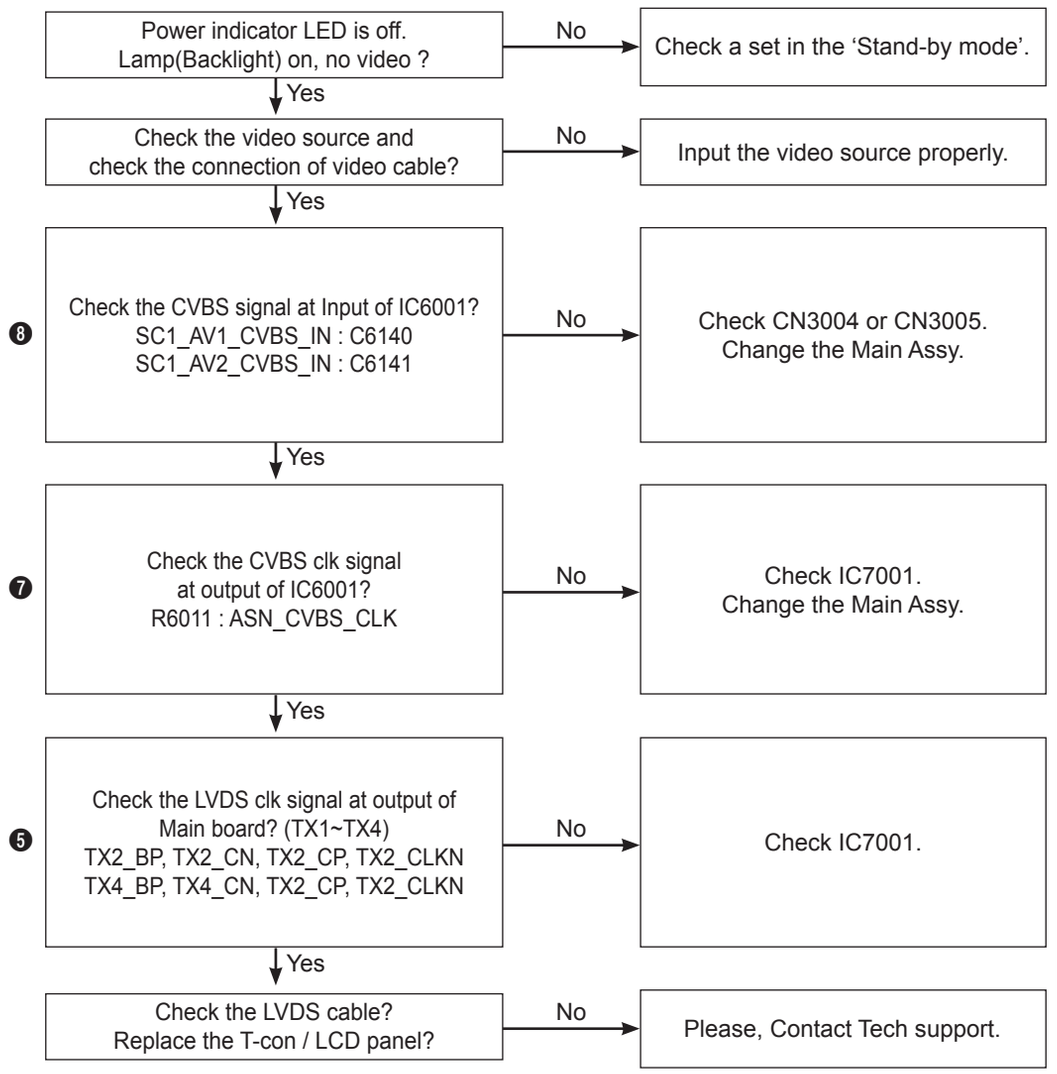
Location (Main)			
TOP		BOTTOM	
Detail			
A		B	
C			

■ WAVEFORMS

❹	CVBS Output Signal at C6852, C6853, C6854

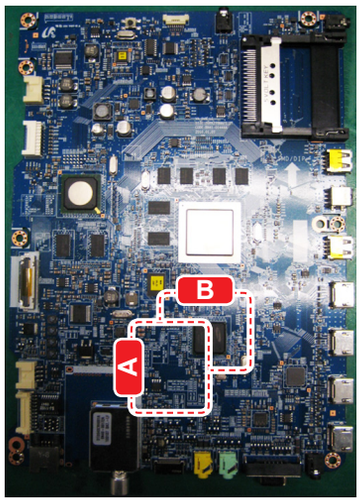


4-1-6. No Video (Video CVBS 1, 2)

Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the Video CVBS source – Check the Valencia. – Refer to the next page to check the lacation such a CN201 or IC201 SVC Manual mentioned.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

Location (Main)

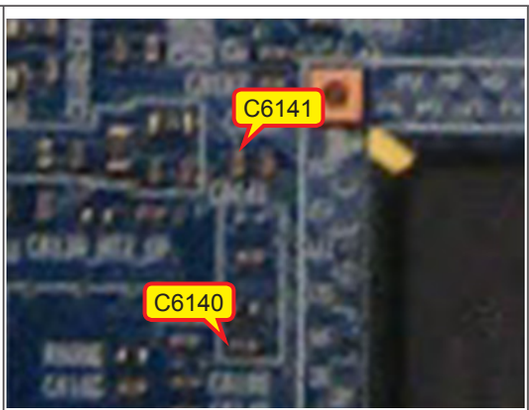
TOP



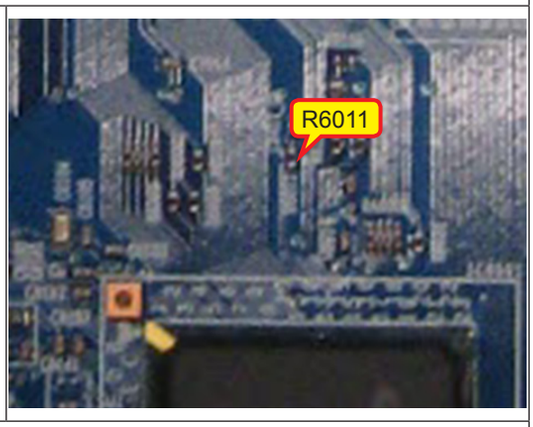
BOTTOM

Detail

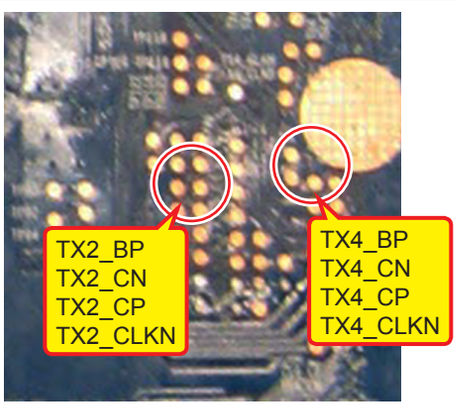
A



B

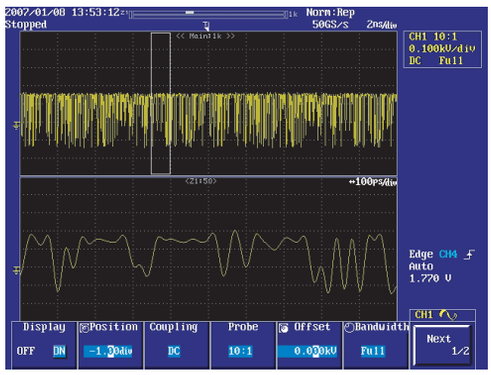


C

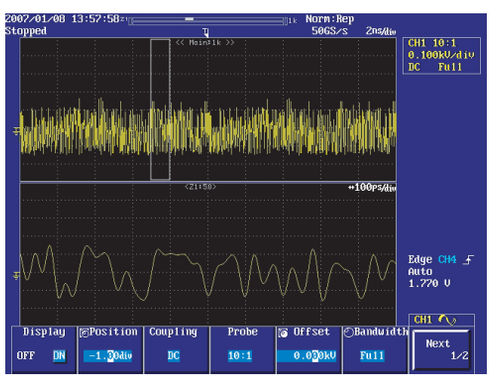


■ WAVEFORMS

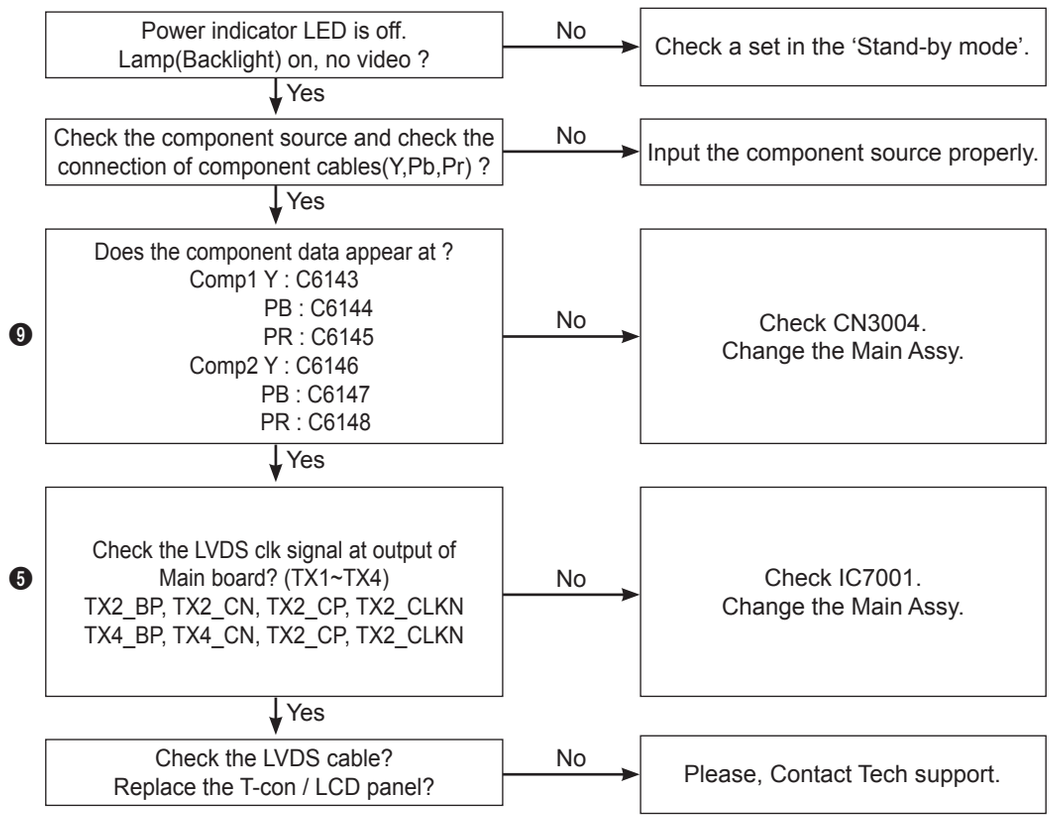
❻	The Signal are Inputed to IC2002

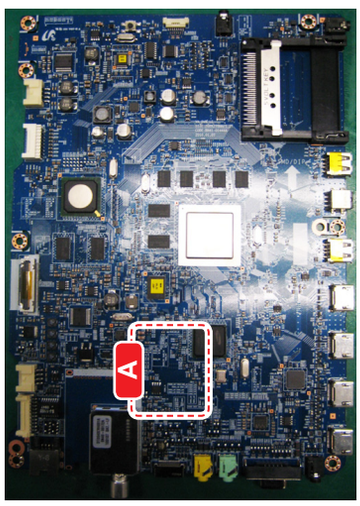
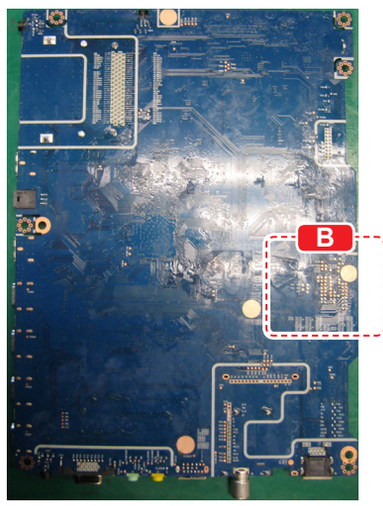
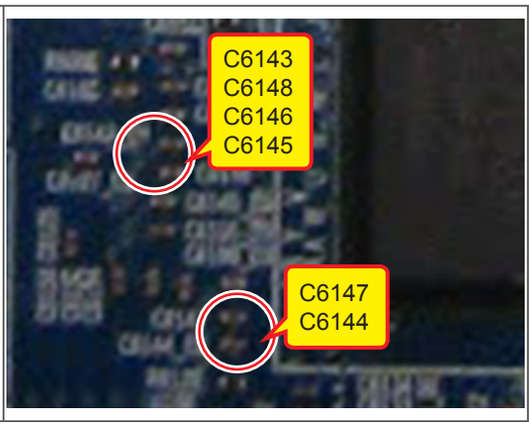
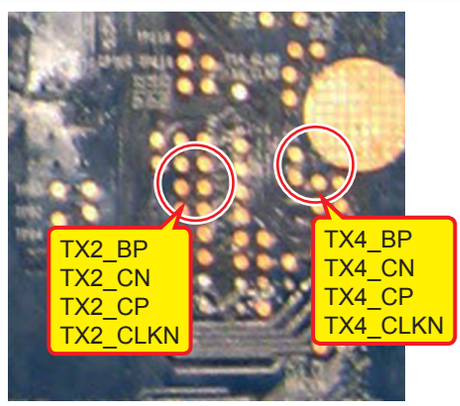


❼	The Signal are Inputed to IC2002



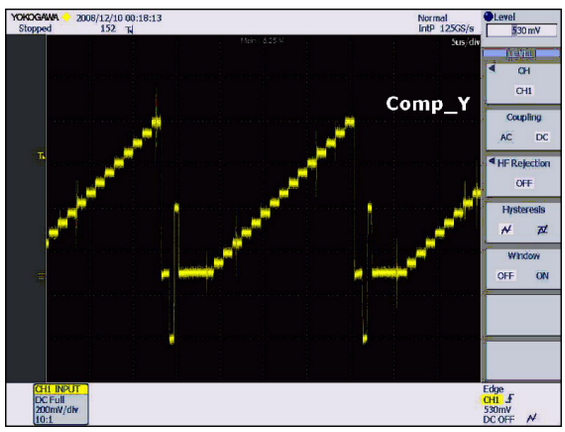
4-1-7. No Video (Component 1, 2)

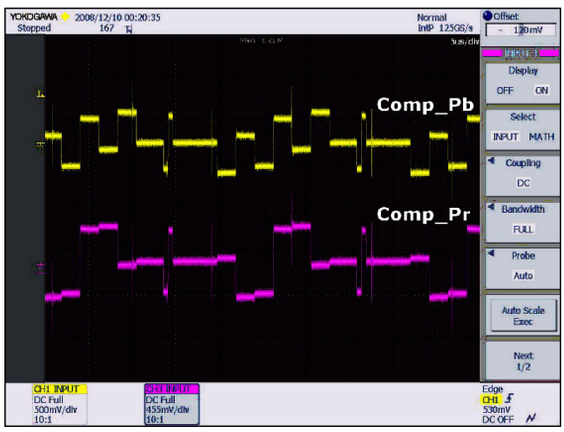
Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the Component source – Check the Valencia. – Refer to the next page to check the lacation such a CN3004, IC6001 SVC Manual mentioned.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

Location (Main)			
TOP		BOTTOM	
Detail			
A		B	

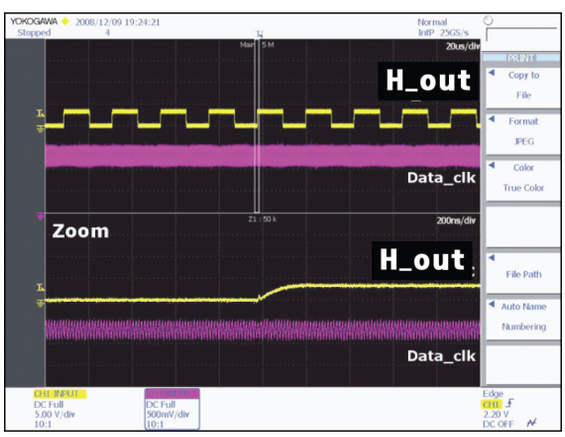
WAVEFORMS

❾	Compnent_Y (Gray scale) / Pb / Pr (Color bar)

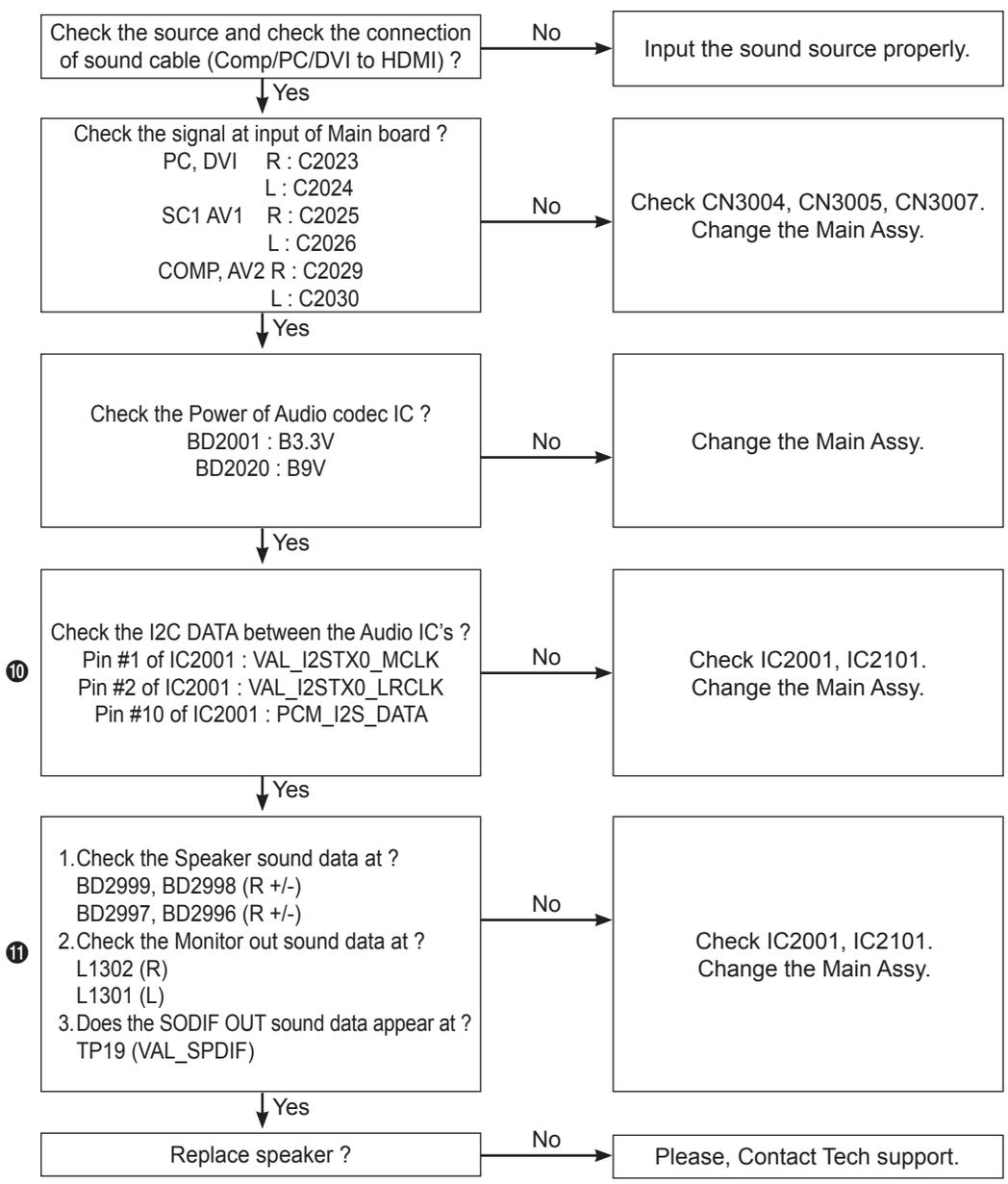


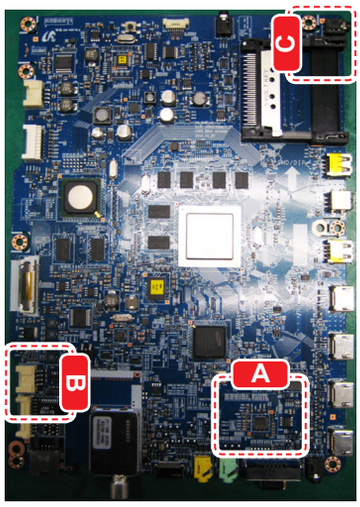
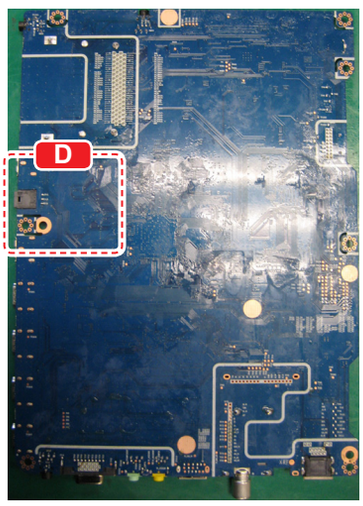
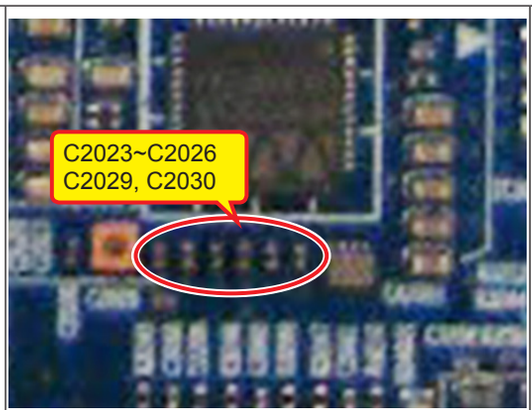
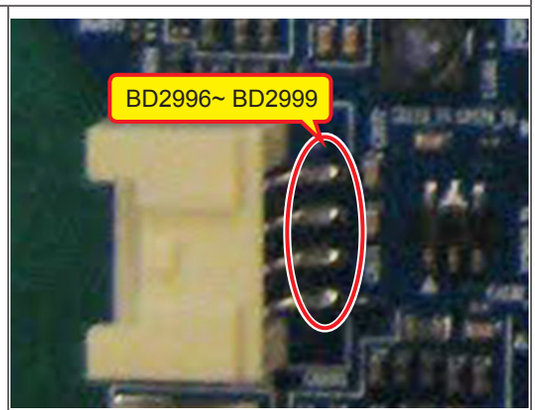
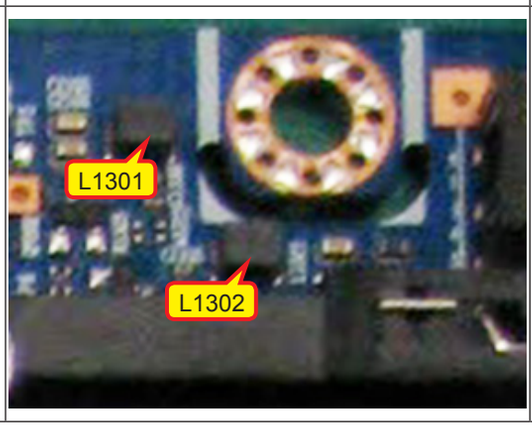
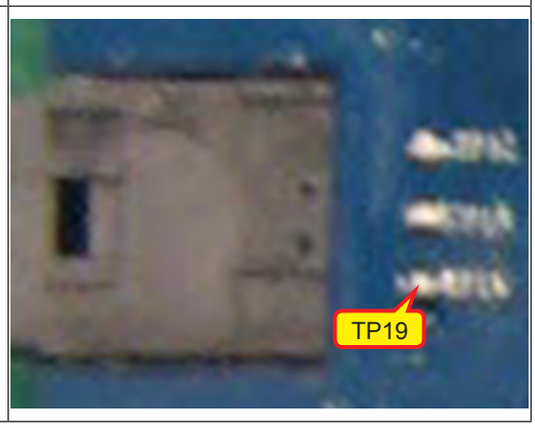


❺	LVDS output



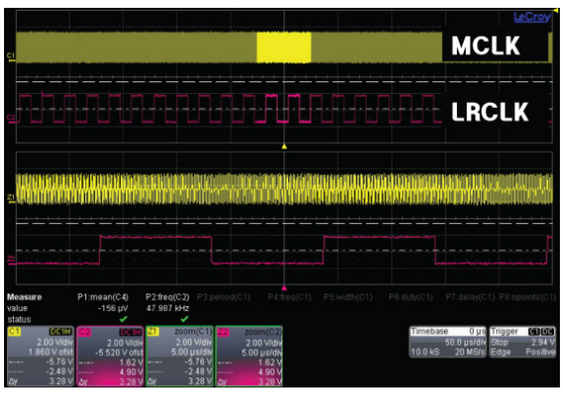
4-1-8. No Sound (1.Speaker 2.Monitor_out, 3.Optical)

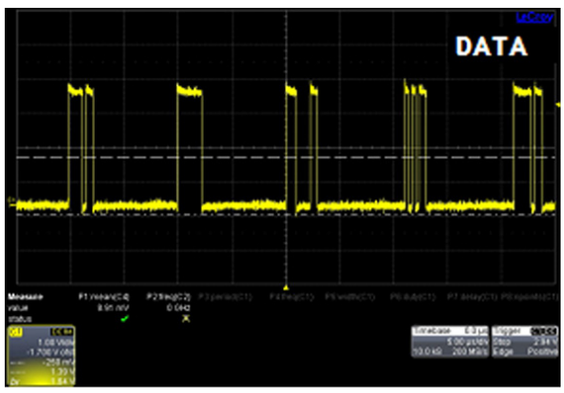
Symptom	– Video is normal but there is no sound..
Major checkpoints	– When the speaker connectors are disconnected or damaged. – When the sound processing part of the Main Board is not functioning. – Speaker defect.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

Location (Main)			
TOP		BOTTOM	
Detail			
A		B	
C		D	

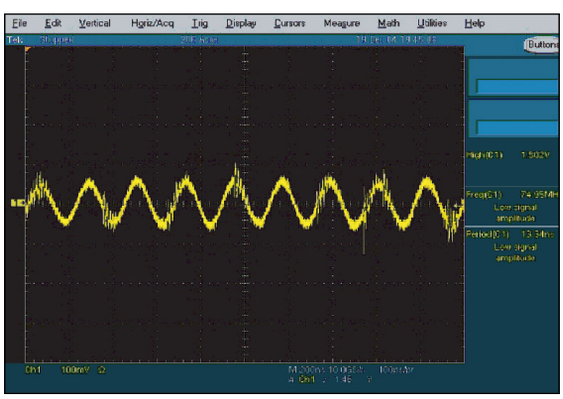
WAVEFORMS

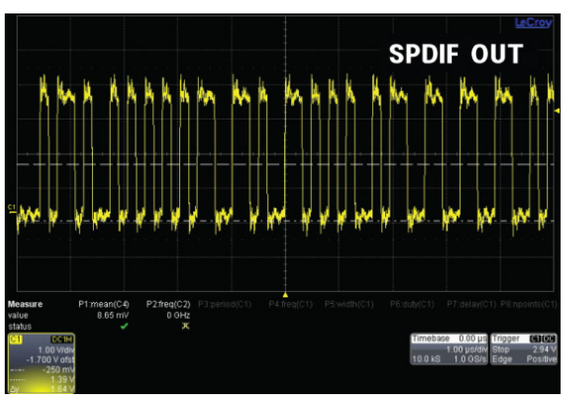
⑩ MCLK / LRCLK / PCM_I2C_DATA





⑪ Speaker / Monitor OUT , SPDIF OUT





Connecting a PC

Using the D-sub cable

1. Connect a D-Sub Cable between PC IN [PC] connector on the TV and the PC output connector on your computer
2. Connect a PC Audio Cable between the PC IN [AUDIO] jack on the TV and the Audio Out jack of the sound card on your computer.

Using the HDMI/DVI Cable

1. Connect an HDMI/DVI cable between the HDMI1/DVI jack on the TV and the PC output jack on your computer.
2. Connect a PC audio cable between the PC in [AUDIO] jack on the TV and the Audio Out jack of the sound card on you computer.

Connecting a DVI

1. Connect an HDMI/DVI cable between the HDMI1/DVI jack on the TV and the PC output jack on your device.
2. Connect a DVI audio cable between the DVI in [AUDIO] jack on the TV and the Audio Out jack of the sound on you Device .

* Each PC has a different back panel configuration.

* When connecting a PC, match the color of the connection terminal to the cable, and PC sound cable from sound card on your computer.

* When using an HDMI/DVI cable connection, you must use the HDMI IN 1 terminal and DVI sound cable from your DVI device.

4-2. Alignments and Adjustments

4-2-1. General Alignment instruction

1. Usually, a color LCD-TV needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync.
2. Use the specified test equipment or its equivalent.
3. Correct impedance matching is essential.
4. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test result.
5. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
6. Do not attempt to connect or disconnect any wire while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
7. To protect against shock hazard, use an isolation transformer.

4-3. Factory Mode Adjustments

4-3-1 Entering Factory Mode

To enter 'Service Mode' Press the remote -control keys in this sequence :

- If you do not have Factory remote - control

INFO → MENU → MUTE → Power on

- If you have Factory remote - control

PICTURE ON → INFO → FACTORY

- The buttons are active in the service mode.

1. Remote - Control Key : Power, Arrow Up, Arrow Down, Arrow Left
   Arrow Right, Menu, Enter, Number Key(0~9)
2. Function - Control Key : Power, CH +, CH -, VOL +, VOL -,
   Menu, TV/VIDEO(Enter)

4-3-2 How to Access Service Mode

Using the Customer Remote

1. Turn the power off and set to stand-by mode
2. Press the remote buttons in this order; POWER OFF - INFO - MENU - MUTE - POWER ON to turn the set on.
3. The set turns on and enters service mode. This may take approximately 20 seconds.
4. Press the Power button to exit and store data in memory.
   - If you fail to enter service mode, repeat steps 1 and 2 above.
5. Initial SERVICE MODE DISPLAY State
   Mode: CDTV . RES : 480I

Option	T-VALDEUC-XXXX
Control	T-VALDEUS-XXXX
SVC	EDID SUCCESS
Expert	CALIB : AV O COMP O PC O HDMI O
ADC/WB	Option : xxxx xxxx xxxx
Advanced	
	T-VALDEU-0101
	DTP-SP-VAL-1098
	RFS : 61-1G-62
	0000-00-00
	READING : XXXX
	Type : 32D1UF0E
	Model : UE32C6500
	MAC SUCCESS
	CIP SUCCESS LOCK X
	Factory Data Ver : XXX
	EERC Version : XXXX
	DTP-AP-COMP-XXX-XX-XXXX
	DTP-HIIG-XXXX-XX
	DTP-BP-XXXX-XX
	Date of purchase : XX/XX/XXXX

6. Buttons operations withn Service Mode

Menu	Full Menu Display/Move to Parent Menu
Direction Keys ▲/▼	Item Selection by Moving the Cursor
Direction Keys ◄/►	Data Increase / Decrease for the Selected Item
Source	Cycles through the active input source that are connected to the unit

4-3-3 Factory Data

■ Option

OPTION	Item	Range	Use
	Factory Reset		
	Type	Inch Vendor(A:AMLCD, D:CMO, L:AUO, I:CPT) Panel frequency (6:50/60Hz, 1:100/120Hz, 2:200/240Hz) Panel(A:AG, T:TN, U:UC) Resolution(F:FHD, H:HD, U:UD) Panel 1st/2nd(1st:0, 2nd:1) BLU (C:CCFL, L:LED, E:EDGE LED) ex) 32D1UF0E : Vendor : CMO inch : 32 120Hz FHD U/C Edge LED panel	Select Panel Type
	Local Set	EU, EU_Italy, EU_Africa, EU_Israel, NORDIG, AD_Au, CIS	Select Area
	Model	LC350, LC450, LC450H, LC451, LC452, LC457H, LC459H, LC480 LC530, LC530H, LC539H, LC540, LC550, LC560, LC570, LC580 LC610, LC620, LC630, LC631, LC632, LC633, LC640, LC650, LC652 LC653, LC654, LC670, UC4000, UC4000H, UC4010, UC5000, UC5100 UC6000, UC6200, UC6300, UC6400, UC6400H, UC6500, UC6510 UC6530, UC6540, UC6550, UC6600, UC6620, UC6630, UC6700, UC6710 UC6730, UC6740, UC6800, UC6830, UC6900, UC6900H, UC8000 PC420, PC430, PC431, Pc432, PC450, PC451, PC480, PC520, PC530 PC531, PC540, PC541, PC550, PC551, PC560, PC580, PC590, PC670 PC6100, PC6400, PC6500, PC7000, PC7700, PC8000 *Default : LC650	Select Model
	Tuner	DRXKSEMCO, S2Semco, CXD_T2, DRXKSEM_E, DRXKALPS, DRXKSEM_2 SEMPA081, SEMPA082	
	DDR	0, 1, 2	
	Light Effect	ON/OFF	
	Ch table	NONE, PBA, SUWON, SESK, SEH, SERK, SDMA_AU, SDMA_NZ, SDMA_SG SEIN, SAVINA, SIEL_C, SIEL_N, TTSEC, TSED, TSE, IRAN	
	Country		
	Front Color	NONE, W-Milky, T-M-Brn, T-W-Brn, T-W-Gray, W-D-Gray, W-M-Whit W-Violet, T-C-Gray, T-R-BLK, S-BLK, S-C-Gray	Select Design for illuminance Sensor

■ Control

EDID	Item	Range	Use
	EDID ON/OFF	OFF	
	EDID WRITE ALL	SUCCESS	
	EDID WRITE PC	SUCCESS	
	EDID WRITE HDMI	SUCCESS	
	EDID WRITE HDMI1	…	
	EDID WRITE HDMI2	…	
	EDID WRITE HDMI3	…	
	EDID WRITE HDMI4	…	
	EDID 1.2PORT	NONE,Not Support	
	Front Color	NONE, W-Milky, T-M-Brn, T-W-Brn, T-W-Gray, W-D-Gray, W-M-Whit W-Violet, T-C-Gray, T-R-BLK, S-BLK, S-C-Gray	

Sub Option	Item	Range	Option
	Mute Time(VIDEO)	2	
	PROTECT	on/off	
	SUB U-COM	On/off	
	Watchdog	0	
	WD COUNT	0	
	SPREAD SPECTURM	2	
	HDMI AV MUTE TIME	40	
	DVI/HDMI SOUND	Auto	
	HOT PLUG OFF HOLD TIME	1500ms	
	HDMI LOSS TIME	1	
	HDMI_PC LOSS TIME	1	
	PC LOSS TIME	1	
	HDMI EQ1	MIDDLE	
	HDMI EQ2	MIDDLE	
	HDMI EQ3	MIDDLE	
	HDMI EQ4	MIDDLE	
	SIDE AV	OFF	
	PANEL DISPLAY TIME	735hr	
	Checksum	0*0000	
	View Log		
	Font Data Viewer		

Hotel Option	Item	Range	Use
	HOTEEL MODE	OFF	
	POWER ON CHANNEL	3	
	POWER ON BAND	AIR	
	POWER ON VOLUME	10	
	MAX VOLUME	100	
	PANEL BUTTOM LOCK	ON	
	POWER ON SOURCE	TV	

Shop Option	Item	Range	Use
	Shop Mode	OFF	
	USB DEMO ON(SEC)	OFF	
	USB DEMO OFF(SEC)	OFF	

■ SVC

SVC	Item	Range	Use
	Test Pattern	Pattern Sel : off, White, Grey, Balck, Red, Green, Blue RRC PC Mode : On/Off Logic Pattern Sel Logic Level Sel	Test for input Scaler. If you can see pattern well, there is a problem at input of Scaler
	Panel Auto Setting		
	Panel Display Time	261Hr	
	Logic Usb D/L	off	
	Tuner Status	DVB (SNR 31, BER 0, Singal Strength 91, Bandwidth 8MHz, Frequency 482000kHz LNA Status On, FFT 2K, Modulation 16QAM, Code Rate 7/8, GI 1/8 Hair Modulation NONE, Frequency Offset 19000.00Hz, Timing Offset -11.00ppm AGC 79, UCB 0, PLL Type SEMCO121B, DEMOD Type DRX39xyK, TPS Lock LOCK RSLOCK Lock, SSI 91, SQI 100) ISDB-T (FFT Size_1, Guard Interval_1, Freq.Offset_1, SNR_1, IF AGC_1, TMCC Lock_1 TS Packet_1, Master Lock_1, A_Modulation_1, A_Code Rate_1, A_Timer InterLeave_1 A_Segments Num_1, A_BER_1, B_Modulation_1, B_Code Rate_1, B_Timer InterLeave_1 B_Segments Num_1, B_BER_1, C_Modulation_1, C_Code Rate_1, C_Timer InterLeave_1 C_Segments Num_1, C_BER_1)	

■ Expert

Expert	Item	Range	Use
	N/D ADJ	…	
	Source	…	

■ ADC/WB

ADC/WB	Item	Range	Use
	ADC	AV CAL : SUCCESS,COMP CAL : INITIAL , PC CAL : FAIL	
	ADC Target	Each MODE LOW,HIGH Delta(same as 09`)	
	ADC Result	Each MODE Calibration result value (same as 09`)	
	WB	8(Dynamic)+4(Movie)	

WB Movie	Item	Range	Use
	W/B Movie ON/OFF	ON/OFF	
	MODE	Dynamic/Movie/Natural	
	Color Tone	Cool/NORMAL/WARM1/WARM2	
	MSub Brightness	128	
	Msub Contrast	128	
	N_Rgain	21	
	N_Bgain	-8	
	N_Roffset	-1	
	N_Boffset	1	
	W1_Rgain	…	
	W1_Bgain	…	
	W1_Roffset	…	
	W1_Boffset	…	
	W2_Rgain	…	
	W2_Bgain	…	
	W2_Roffset	…	
	W2_Boffset	…	
	Movie Contrast	95	
	Movie Bright	45	
	Movie Color	50	
	Movie Sharpness	20	
	Movie Tint	0	
	Movie Backlight	10	
	Movie Gamma	OFF	
	M_Sub_Gamma	0	
	HDMI Balck Level	Normal	

SubSetting	Item	Range	Use
	Gamma	0.95	
	PWM Max	100	
	PWM Mid	10	
	PWM Min	0	
	Contrast Dimming	OFF	
	7.5 IRE NTSC	…	
	7.5 IRE OFFSET	…	
	48Hz Enable	OFF	
	Peak Dimming	ON	
	Dynamic CE	ON	

ColorMapping	Item	Range	Use
	Auto_Red_R	50	
	Auto_Red_G	0	
	Auto_Red_B	0	
	Auto_Green_R	0	
	Auto_Green_G	50	
	Auto_Green_B	0	
	Auto_Blue_R	0	
	Auto_Blue_G	0	
	Auto_Blue_B	50	
	Auto_Yellow_R	50	
	Auto_Yellow_G	50	
	Auto_Yellow_B	0	
	Auto_Cyan_R	0	
	Auto_Cyan_G	50	
	Auto_Cyan_B	50	
	Auto_Magenta_R	50	
	Auto_Magenta_G	0	
	Auto_Magenta_B	50	

EPA 3D	Item	Range	Use
	Standard Contrast	95	
	Standard Brightness	45	
	Standard Sharpness	50	
	Standard Color	50	
	Standard Tint	0	
	Standard Backlight	7	
	3D Contrast	95	
	3D Brightness	45	
	V_3D PWM Delay_60	119	
	V_3D ANA Delay_60	245	
	V_3D PWM_Delay_50	107	
	V_3D ANA Delay_50	220	
	Motion plus Delay	0	
	Home Delay	0	
	Shop Delay	511	

CH_VDEC	Item	Range	Use
	AGC_mode	1	
	Gain_VCR	0	
	Y_Gain_Man	880	
	Y_Shape_sel	13	
	Y_shape_SCM	29	
	C_Shape_sel	4	
	C_Shape_SCM	4	
	If_iir	0	
	If_filt_sel	6	
	ST_Beg_NTSC	0	
	VS_Slice_Level	4	
	HS_Slice_Level	3	
	FB_Delay_adj	0	
	RGB_Dealy_adj	0	
	slice_mod_fine	0	
	scm_fdet_lvl	150	
	bl_range	3	

AR_ADC	Item	Range	Use
	PHASE	16	
	SOG_BW	7	
	SSC_PC	6	
	RGB_DLY	0	

YC_Delay	Item	Range	Use
	PAL_BG	0	
	PAL_DK	0	
	PAL_J	0	
	PAL_M	0	
	PAL_N	0	
	SECAM_BG	0	
	SECAM_DK	0	
	SECAM_L	0	
	NTSC_358	0	
	NTSC_443	0	
	AV_PAL	0	
	AV_PAL_M	0	
	AV_PAL_N	0	
	AV_SECAM	0	
	AV_NT358	0	
	AV_NT443	0	
	AV_PAL60	0	

CH_DP	Item	Range	Use
	BD_MAX_PERCENT_X	55	
	BD_MAX_PERCENT_Y	50	
	BD_DETAIL_AMT_MAX	0	
	BD_TOUCH_SUPP	8	
	BD_TOUCH_SUP_INV	24	
	DR_SIGMA_FIL_GAIN	20	
	DR_SIGMA_IN_ETE	12	
	SD2HD_Metric	196	

Sharpness	Item	Range	Use
	Pre_GainH1	12	
	Pre_GainH2	20	
	Pre_GainH3	30	
	Pre_GainV1	6	
	Pre_GainV2	16	
	Pre_GainV3	12	
	Post_GainH1	16	
	Post_GainH2	30	
	Post_GainH3	50	
	Post_GainV1	30	
	Post_GainV2	50	
	Post_GainV3	30	
	Post_GainPE1	180	
	Post_GainPE2	220	
	Post_GainPV1	100	
	Post_GainPV2	180	
	CTI_Gain	15	
	Pre_LTIH	8	
	LTI_H	20	
	LTI_V	20	
	PRE_CORNING_H	0	
	PRE_CORNING_V	0	
	POST_CORING	0	
	Pre_TOT	32	
	Post_TOT	32	
	SH Sub Color	59	

Sharpness_LNA	Item	Range	Use
	S1_Pre_GainH1	7	
	S1_Pre_GainH2	9	
	S1_Pre_GainH3	10	
	S1_Pre_GainV1	9	
	S1_Pre_GainV2	9	
	S1_Pre_GainV3	4	
	S1_Post_GainH1	14	
	S1_Post_GainH2	21	
	S1_Post_GainH3	0	
	S1_Post_GainV1	12	
	S1_Post_GainV2	19	
	S1_Post_GainV3	0	
	S1_Post_GainPE1	45	
	S1_Post_GainPE2	60	
	S1_Post_GainPV1	33	
	S1_Post_GainPV2	48	
	S2_Pre_GainH1	4	
	S2_Pre_GainH2	6	
	S2_Pre_GainH3	7	
	S2_Pre_GainV1	6	
	S2_Pre_GainV2	6	
	S2_Pre_GainV3	3	
	S2_Post_GainH1	9	
	S2_Post_GainH2	14	
	S2_Post_GainH3	0	
	S2_Post_GainV1	8	
	S2_Post_GainV2	12	
	S2_Post_GainV3	0	
	S2_Post_GainPE1	30	
	S2_Post_GainPE2	40	
	S2_Post_GainPV1	22	
	S2_Post_GainPV2	32	
	S3_Pre_GainH1	1	
	S3_Pre_GainH2	1	
	S3_Pre_GainH3	1	
	S3_Pre_GainV1	1	
	S3_Pre_GainV2	1	
	S3_Pre_GainV3	0	
	S3_Post_GainH1	2	
	S3_Post_GainH2	3	
	S3_Post_GainH3	0	
	S3_Post_GainV1	2	
	S3_Post_GainV2	3	
	S3_Post_GainV3	0	
	S3_Post_GainPE1	7	
	S3_Post_GainPE2	10	
	S3_Post_GainPV1	5	
	S3_Post_GainPV2	8	

LNA_Plus	Item	Range	Use
	Synctip_Noise	521	
	dB0	8	
	dB1	13	
	dB2	16	
	dB3	28	
	dB4	39	
	dB5	57	
	dB6	74	
	dB7	135	
	dB8	175	
	dB9	270	
	LNA+_Yfilter	11	

FRCS	Item	Range	Use
	FRCS LVDS Format	JEIDA	
	FRCS LVDS BitWidth	10Bit	
	FRCS LVDS Sequence	0-1	
	FRCS Hangup Detection	ON	
	FRCS FMD Demo	OFF	

LDASic	Item	Range	Use
	R_LD4_L3DD_RATIO	4	
	R_LD4_LD_ON	ON	
	R_DELAY	0	
	R_ALL_READ	0	
	R_LVDS_TX_FMT	1	
	R_LVDS_SW	0	

3D	Item	Range	Use
	EmitOn	On	
	EmitStartPosi60	2	
	EmitStartPosi50	2	
	EmitStartPosi48	2	
	3DSyncVstart60	275	
	3DSyncVend60	840	
	3DSyncVstart50	275	
	3DSyncVend50	840	
	3DSyncVstart48	275	
	3DSyncVend48	840	
	2D3D Focus	128	
	2D3D Depth1	10	
	2D3D Depth2	20	
	2D3D Depth3	30	
	2D3D Depth4	40	
	2D3D Depth5	50	
	2D3D Depth6	60	
	2D3D Depth7	70	
	2D3D Depth8	80	
	2D3D Depth9	90	
	2D3D Depth10	100	
	N240 PWM Delay_60	0	
	N240 ANA Delay_60	0	
	N240 PWM Delay_50	0	
	N240 ANA Delay_50	0	
	N240 PWM Delay_48	0	
	N240 ANA Delay_48	0	

Reading	Item	Range	Use
	POST_FDISPLAY	0	
	RAMP_SPEED	1	
	POST_RAMP_SPEED	1	
	LVDS_RX_FMT	1	
	LVDS_TX_FMT	1	
	LVDS_RX_BIT	1	
	LVDS_TX_BIT	1	
	POST_OUT1_ORDER	0	
	POST_OUT2_ORDER	1	
	POST_OUT3_ORDER	2	
	POST_OUT4_ORDER	3	
	CROSS_PATTERN	OFF	
	EnableFB	1	
	HMVSRMargin_2X_H	6	
	HMVSRMargin_2X_M	6	
	HMVSRMargin_2X_L	6	
	VMVSRMargin_2X	2	
	HSADPercentT1_2X	10	
	HSADPercentT2_2X	14	
	HMVSRMargin_FILM_H	6	
	HMVSRMargin_ FILM_M	6	
	HMVSRMargin_FILM_L	6	
	VMVSRMargin_FILM	2	
	HSADPercentT1_FILM	10	
	HSADPercentT2_FILM	14	

LED Driver	Item	Range	Use
	VSYNC_DELAY_3D_50	399	
	VSYNC_DELAY_3D_60	399	

FRC	FRCQ Option	Item	Range	Use
		SSC_OnOff	ON	
		SSC_Width	96	
		SSC_Freq	240	
		FMD_Demo	0	
		CSB Vertical	ON	
		CSB Horizontal	ON	
		X_VStabStatVid	7	
		X_VStabStatF	0	
		X_VStabCorF	8	
		X_VStabSensF	48	
		X_HaloSizStatVid	7	
		X_HaloSizStatF	0	
		X_HaloSizCorF	12	
		X_HaloSizSensF	32	
		Film_Low_SD	31	
		Film_Medium_SD	6	
		Film_High_SD	0	
		Flim_Low_HD	31	
		Film_Medium_HD	6	
		Film_High_HD	0	
		Video_Judder_Low	10	
		Video_Judder_Med	5	
		Video_Judder_High	0	
		Hangup Detection	ON	
		Q LVDS Seuence	0-1-2-3	
		Q LVDS Format	Jeida	
		Q LVDS bit width	10bit	
		PC_Mode_OnOff	OFF	

FRC	FRCQ Fallback	Item	Range	Use
		SensD_Film_Low	31	
		SensD_Film_Medium	31	
		SensD_Film_High	31	
		Rel_Start_Film	20	
		Rel_Slope_Film	3	
		H_Len_Start_Film	127	
		H_Len_Slope_Film	1	
		V_Len_Start_Film	40	
		V_Len_Slope_Film	1	
		SensD_Video	0	
		Rel_Start_Video	20	
		Rel_Slope_Video	1	
		H_Len_Start_Video	127	
		H_Len_Slope_Video	1	
		V_Len_Start_Video	40	
		V_Len_Slope_Video	1	

Picture Update

4-4. White Balance - Calibration

4-4-1 White Balance -Calibration

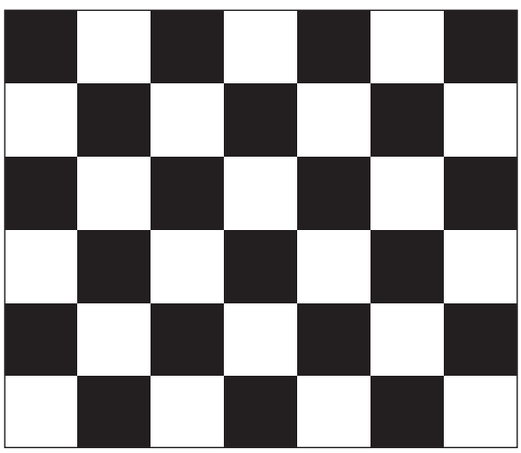
ADC/WB	→	AV Calibration Comp Calibration PC Calibration HDMI Calibration
ADC		

4-4-2 Service Adjustment

You must perform Calibration in the Lattice Pattern before adjusting the White Balance.

■ Color Calibration

Adjust spec.
1. Source : HDMI
2. Setting Mode : 1280*720@60Hz
3. Pattern : Pattern #24 (Chess Pattern)



(Chess Pattern)

4. Use Equipment : CA210 & Master MSPG925 Generator

- Use other equipment only after comparing the result with that of the Master equipment.

Input mode	Calibration	Pattern
CVBS IN (Model_#2)	Perform in PAL B&W Pattern #24	Lattice
Component IN (Model_#6)	Perform in 720p B&W Pattern #24	Lattice
PC Analog IN (Model_#21)	Perform in VESA XGA (1024x768) B&W Pattern #24	Lattice
HDMI IN (Model_#6)	Perform in 720p B&W Pattern #24	Lattice

<Table 1>

■ Method of Color Calibration (AV)

1) Apply the NTSC Lattice (N0.2) pattern signal to the AV IN 1 port
2) Press the Source key to switch to “AV1” mode
3) Enter Service mode
4) Select the “ADC/WB” and “ADB” menu
5) Select the “AV Calibration” menu.
6) In “AV Calibration Off” status, press the “►” key to perform Calibration.
7) When Calibration is complete, it returns to the high-level menu.
8) You can see the change of the “AV Calibration” status from Failure to Success.

■ Method of Color Calibration (Component)

1) Apply the 720p Lattice (N0. 6) pattern signal to the Component IN 1 port
2) Press the Source key to switch to “Component1” mode
3) Enter Service mode
4) Select the “ADC/WB” and “ADB” menu
5) Select the “Comp Calibration” menu.
6) In “Comp Calibration Off” status, press the “►” key to perform Calibration.
7) When Calibration is complete, it returns to the high-level menu.
8) You can see the change of the “Comp Calibration” status from Failure to Success.

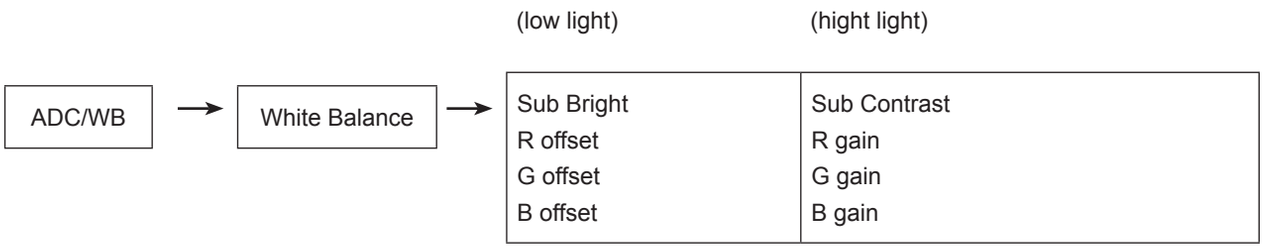
■ Method of Color Calibration (PC)

1) Apply the VESA XGA Lattice (N0. 21) pattern signal to the PC IN port
2) Press the Source key to switch to “PC” mode
3) Enter Service mode
4) Select the “ADC/WB” and “ADB” menu
5) Select the “PC Calibration” menu.
6) In “PC Calibration Off” status, press the “►” key to perform Calibration.
7) When Calibration is complete, it returns to the high-level menu.
8) You can see the change of the “PC Calibration” status from Failure to Success.

■ Method of Color Calibration (HDMI)

1) Apply the 720p Lattice (N0. 6) pattern signal to the HDMI1/DVI IN port
2) Press the Source key to switch to “HDMI1” mode
3) Enter Service mode
4) Select the “ADC/WB” and “ADB” menu
5) Select the “HDMI Calibration” menu.
6) In “HDMI Calibration Off” status, press the “►” key to perform Calibration.
7) When Calibration is complete, it returns to the high-level menu.
8) You can see the change of the “HDMI Calibration” status from Failure to Success.

4-4-3 White Balance - Adjustment



(W/B adjustment Condition refer next page)

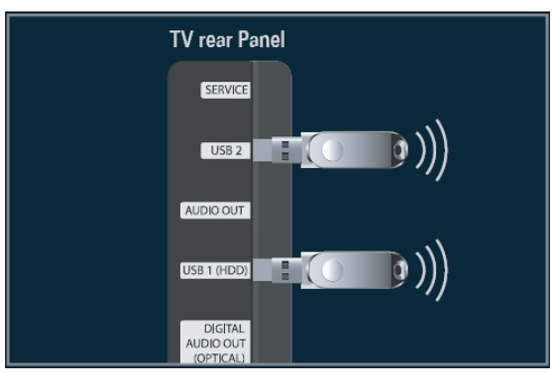
4-5. Servicing Information

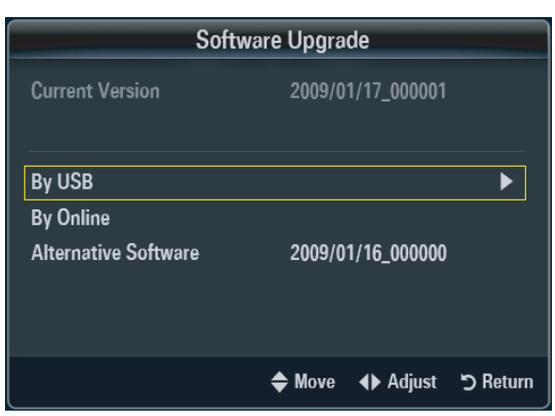
4-5-1 Upgrading the Software

Samsung may offer upgrades for TV's firmware in the future. Please contact the Samsung call center at 1-800-SAMSUNG (726-7864) to receive information about downloading upgrades and using a USB drive. Upgrades will be possible by connecting a USB drive to the USB port located on your TV.

1. Insert a USB drive containing the firmware upgrade into the Wiselink Pro port on the side of the TV.
2. If pop up is showed, press the exit or or press the No button. (If you press Yes button, display is changed to Wiselink Pro Menu)
3. Press the **MENU** button to display the menu. Press the ▲ or ▼ button to select "Setup", then press the **ENTER** button.
4. Press the ▲ or ▼ button to select "SW Upgrade", then press the **ENTER** button.
5. Press the **ENTER** button. The message "Scanning for USB... It may take up to 30 seconds." is displayed.
6. The message "Upgrade version XXXX to version XXXX? The system will be reset after upgrade." is displayed. Press the ◄ or ► to select the "OK", then press the **ENTER** button.

Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied. The TV will turn off and turn on automatically after completing the firmware upgrade. Please check the firmware version after the upgrades are complete. When software is upgraded, video and audio settings you have made will return to their default (factory) settings.
We recommend you write down your settings so that you can easily reset them after the upgrade.

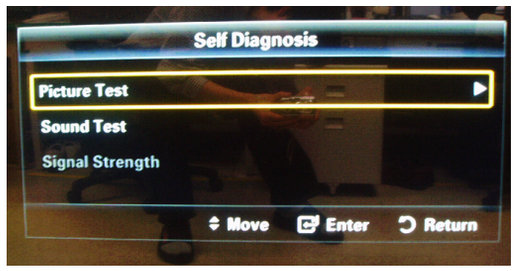




4-5-2 Self Diagnostic

This is simple test function that judge whether is TV SET's problem or not.
There are two self-test. Picture and Sound.

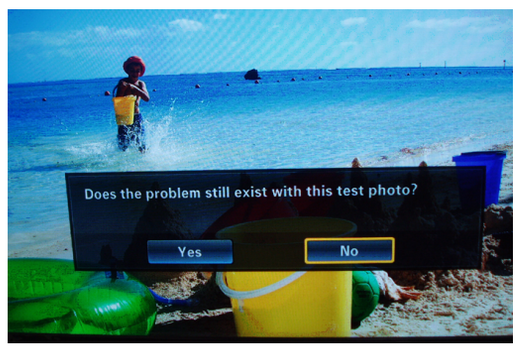
1. Press "Menu -> Support -> Self Diagnosis"
   The message "Picture Test / Sound Test" is displayed.

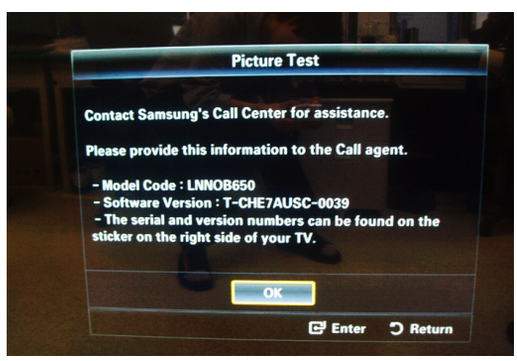


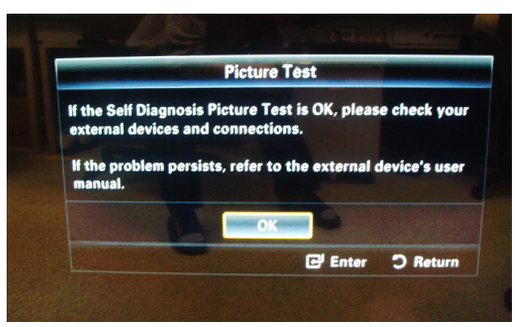
2. Picture Test
   1) The message "Does the problem still exist with this test pattern?" is displayed.

   2) Press "Yes". This is a TV SET problem.
      The massage "Contact Samsung's call center at 1-800-SAMSUNG for assistance." is displayed.

   3) Press "No".
      This is not a TV SET problem.
      The message "If the self diagnosis picture is OK, picture distortion may caused by your external device.
      Please check connection. If the problem still persists, refer to the external device's user manual." is displayed.

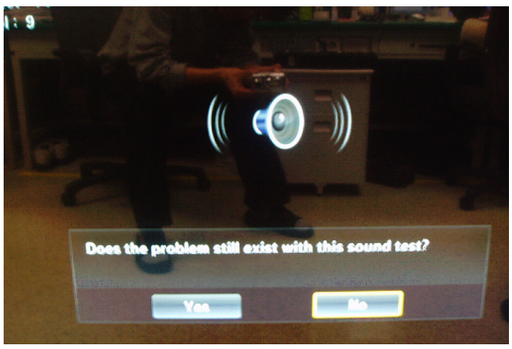




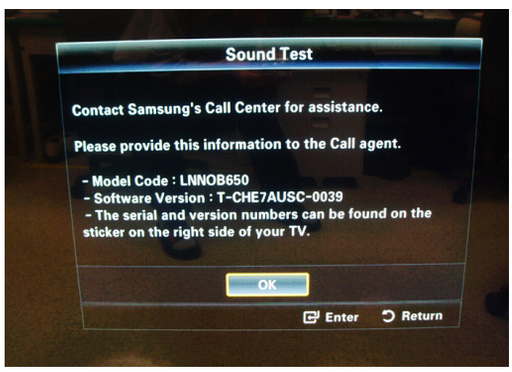


3. Sound Test

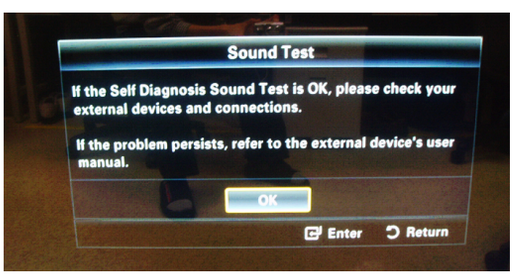
1) The message “Does the problem still exist with this sound test?” is displayed.



2) Press “Yes”. This is a TV SET problem.
The message “Contact Samsung’s call center at 1-800-SAMSUNG for assistance.”is displayed

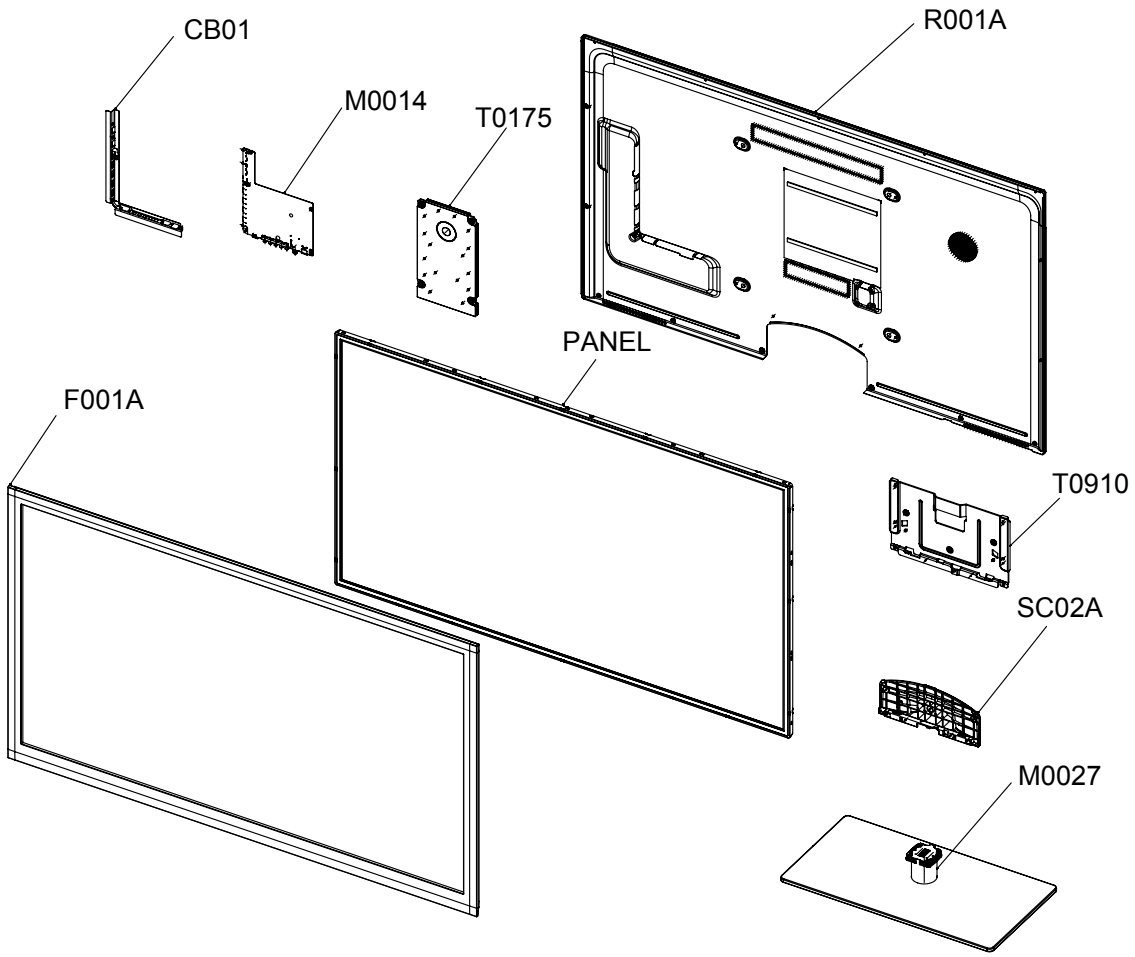


3) Press “No”.
This is not a TV SET problem.
The message “If the self diagnosis picture is OK, picture distortion may caused by your external device.
Please check connection. If the problem still persists, refer to the external device’s user manual.” is displayed.



5. Exploded View & Part List

5-1. UE55C6500UW Exploded View



5-2. UE55C6500UW Parts List

Location No.	Code No.	Description & Specification	Q'ty	S.A/S.N.A	Remark
CB01	BN61-04924A	BRACKET-AV;LB700 40,PCM,T0.5,BKN-P824, P	1	SNA	
F001A	BN96-12904A	ASSY COVER P-FRONT;UC6500 55,PC(CLR)+PC(	1	SA	
M0014	BN94-03588F	ASSY PCB MAIN;UE55C6500UWXXC B	1	SA	
M0027	BN96-12937A	ASSY STAND P-BASE;UC6400 55,SUS430,T0.6	1	SA	
PANEL	BN95-00386A	ASSY PRODUCT LCD;T550FBE1-FA,SLL8CA1,10b	1	SA	
R001A	BN96-12916E	ASSY COVER P-REAR;UC6000 55,AUSTRALIA,PC	1	SA	
SC02A	BN96-13131E	ASSY COVER P-GUIDE STAND;UC7000,PC+ABS G	1	SA	
T0175	BN96-12965C	ASSY SPEAKER P;4ohm,4pin,25W,R: 800,Encl	1	SA	
T0910	BN96-12929A	ASSY BRACKET P-STAND LINK;UC6500 46,SECC	1	SNA	

5-2-1. UE55C6500UW Parts List

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
0.1		BN90-02547A	ASSY COVER FRONT;UC6500 55	1	SNA	
..2	F001A	BN96-12904A	ASSY COVER P-FRONT;UC6500 55,PC(CLR)+PC(	1	SA	
...3		BN61-06213A	BRACKET-STOPPER BOSS;C8K,SECC+SK5,T1.2	11	SNA	
...3	CCM1	BN63-05199B	COVER-SHEET;AMBER,PE,T0.08,W65mm,200M,CL	3.7	SNA	
...3	F001	BN63-06497B	COVER-FRONT;UC6500 55,PC(CLR)+PC(GRAPHIT	1	SNA	
....4		0103-007268	RESIN-PC;TP0010,2.0V0,NH PC,NH PC 2.0 V2	1,200.00	SNA	
....4		0103-007293	RESIN-PC;GY0154,2.0V2,NH PC,NH PC 2.0 V2	1,300.00	SNA	
...3	R002A	BN96-12911A	ASSY COVER P-MIDDLE;UC6500 55,ABS,V0,WHI	1	SNA	
....4		BN61-04692A	BOSS-PRIMER;#94,clear,35cps	1.3	SNA	
....4		BN61-04731A	BOSS-TAPE;AMBER,ACRYL,T1.1,W8.0mm,WHITE	2.66	SNA	
....4		BN61-04731B	BOSS-TAPE;AMBER,ACRYL,T1.1,W12.0mm,WHITE	1.16	SNA	
....4		BN63-06535A	COVER-FRONT MIDDLE;UC6500 55inch,ABS,WHI	1	SNA	
.....5		0103-004618	RESIN-ABS;WT0034,HB,ABS,High Flow ABS	600	SNA	
....4		BN61-06539C	BOSS-TAPE;UC8000,acryl,T0.16,W10,Transpa	3.74	SNA	
....4		BN60-00162Y	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.35T	3.75	SA	
...3	T0382	BP61-00495C	HOLDER-CARE;PJT,ACRYL-FOAM,T0.25,W30.0mm	0.16	SNA	
...3	FB21A	BN96-13685E	ASSY BOARD P-TOUCH FUNCTION&IR;LC6620,CT	1	SA	
...3	CIS1	0203-001598	TAPE-FILAMENT;#8915,0.15,12,55000,CLR	0.16	SNA	
...3		BN68-02700A	LABEL-LED-POP;Highlight Sticker Color,PE	1	SNA	
...3	T0176	BN96-12942A	ASSY SPEAKER P;8ohm,4pin,15W,L:600 R:970	1	SA	
0.1	R001A	BN90-02554A	ASSY COVER REAR;UC6500 55	1	SNA	
..2	R001A	BN96-12916E	ASSY COVER P-REAR;UC6000 55,AUSTRALIA,PC	1	SA	
...3	T0069	BN60-00123A	SPACER-FELT;UB7000,FELT,L470,BLK,T0.35,W	1	SNA	
...3		BN60-00162A	SPACER-FOAM;FOAM,50000L,BLK,0.35T,20W	1.24	SNA	
...3	R001	BN63-06520D	COVER-REAR;UC6500 55inch,PCM,T0.5,BKN-P8	1	SNA	
...3		BN68-02543T	LABEL-TERMINAL BOTTOM;Rev.02 UC6000,EO,P	1	SNA	
...3		BN68-02544B	LABEL-TERMINAL SIDE;Rev.01 UC5000/6000,E	1	SNA	
...3		BN96-12924C	ASSY MISC P-INSULATOR;UC6500 46/55,PC,T0	1	SNA	
....4		BN60-00122F	SPACER-SPONGE;UC6500,CR,L250,T2.0,W10	2	SNA	
....4		BN63-06631A	SHEET-INSULATOR SMPS;UC6100 55inch,PC,T0	1	SNA	
...3		BN60-00162Y	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.35T	0.4	SA	
..2	T0081	6001-002610	SCREW-MACHINE;BH,+,M4,L6,ZPC(BLK),SWRCH1	8	SA	
..2	SCREW	6003-001782	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	15	SA	
..2	T0382	BP61-00495C	HOLDER-CARE;PJT,ACRYL-FOAM,T0.25,W30.0mm	0.1	SNA	
0.1		BN91-05169A	ASSY LCD-AUO;BN95-00386A,HQ	1	SNA	
..2	PANEL	BN95-00386A	ASSY PRODUCT LCD;T550FBE1-FA,SLL8CA1,10b	1	SA	
...3		BN01-00013A	FILM-PROTECTION;T550FBE1-FA,LLDPE 3120,0	1	SNA	
...3		BN39-01304A	FLAT CABLE-FFC;T550FBE1-FA,80,0.15,55mm,	4	SNA	
...3		BN74-00053A	TAPE-PROTECTION;T460BE1-FB,T550BE1-FB,3M	12	SNA	
...3		BN90-02742A	ASSY MISC-BLU;T550FBE1-FA	1	SNA	
....4		BN63-07047A	SHEET-REFLECTOR;T550FBE1-FA,SLP7-7C,0.4,	1	SNA	
....4		BN63-07048A	SHEET-DIFFUSER;T550FBE1-FA,UTE23-10B,0.2	1	SNA	
....4		BN63-07049A	SHEET-PRISM H;T550FBE1-FA,PTX337L,0.42,6	1	SNA	
....4		BN63-07050A	SHEET-DBEF-D;T550FBE1-FA,DBEF-D2-400,0.4	1	SNA	
....4		BN96-13855A	ASSY FRAME P-MOLD MIDDLE (U);T550FBE1-FA	1	SNA	
.....5		BN60-00179A	SPACER-PANEL(UD);T550FAE1-FA,SI(TES2523U	2	SNA	
.....5		BN60-00180A	SPACER-PANEL(SM);T550FAE1-FA,SI(TES2523U	2	SNA	
.....5		BN61-06310A	FRAME-MIDDLE MOLD(U);55,PC+GF,black,1.0,	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
.....5		BN69-05036A	PAD-REFLECTOR (UD);T550FAE1-FA,OTHER,0.2	2	SNA	
....4		BN96-13856A	ASSY FRAME P-MOLD MIDDLE (D);T550FBE1-FA	1	SNA	
.....5		BN60-00179A	SPACER-PANEL(UD);T550FAE1-FA,SI(TES2523U	2	SNA	
.....5		BN60-00180A	SPACER-PANEL(SM);T550FAE1-FA,SI(TES2523U	2	SNA	
.....5		BN61-06311A	FRAME-MIDDLE MOLD(D);55,PC+GF,black,1.0,	1	SNA	
.....5		BN69-05036A	PAD-REFLECTOR (UD);T550FAE1-FA,OTHER,0.2	2	SNA	
....4		BN96-13857A	ASSY FRAME P-MOLD MIDDLE (L);T550FBE1-FA	1	SNA	
.....5		BN60-00181A	SPACER-PANEL(LR);T550FAE1-FA,SI(TES2523U	1	SNA	
.....5		BN61-06312A	FRAME-MIDDLE MOLD(L);55,PC+GF,black,1.0,	1	SNA	
.....5		BN69-05037A	PAD-SILICON MIDDLE;T550FAE1-FA,OTHER,2.5	2	SNA	
....4		BN96-13858A	ASSY FRAME P-MOLD MIDDLE (R);T550FBE1-FA	1	SNA	
.....5		BN60-00181A	SPACER-PANEL(LR);T550FAE1-FA,SI(TES2523U	1	SNA	
.....5		BN61-06313A	FRAME-MIDDLE MOLD(R);55,PC+GF,black,1.0,	1	SNA	
.....5		BN69-05037A	PAD-SILICON MIDDLE;T550FAE1-FA,OTHER,2.5	2	SNA	
....4		BN96-13859A	ASSY MISC P-LGP-LED;T550FBE1-FA	1	SNA	
.....5		BN61-06494A	LGP-LED;T550FBE1-FA,PMMA,3.0,1229.8*697	1	SNA	
.....5		BN74-00068A	TAPE-REFLECTOR LGP V;T550FBE1-FA,UX-150+	4	SNA	
.....5		BN74-00069A	TAPE-REFLECTOR LGP V;T550FBE1-FA,UX-150+	4	SNA	
....4		BN96-13947A	ASSY MISC P-CHASSIS BOTTOM;T550FBE1-FA	4	SNA	
.....5	EC13	BN39-01307A	LEAD CONNECTOR;55" 120Hz G/D wire-harnes	4	SNA	
.....5		BN61-06492A	HOLDER-WIRE;T460FAE1-FA ,T550FAE1-FA,Sil	4	SNA	
.....5		BN62-00069A	INSULATION-SOURCE LR;T550FBE1-FA,SWT-913	8	SNA	
.....5		BN62-00070A	INSULATION-POWER;T550FBE1-FA,DFR 117ECO	4	SNA	
.....5	CC02	BN64-01305A	CHASSIS-BOTTOM;55,AL 5052-0,1.0,1242.4,7	4	SNA	
.....5		BN74-00059A	TAPE-PET WIRE;T460FAE1-FA , T550FAE1-FA,	56	SNA	
.....5		BN74-00060A	TAPE-PET PD BRD;T460FAE1-FA , T550FAE1-F	4	SNA	
.....5		BN74-00061A	TAPE-BOTTOM CHASSIS;T460FAE1-FA , T550FA	16	SNA	
.....5	T0081	6001-002610	SCREW-MACHINE;BH,+,M4,L6,ZPC(BLK),SWRCH1	24	SA	
.....5		BN61-06618A	BRACKET-BOTTOM;55",SECC,1.0,400.0,36.0	4	SNA	
....4		BN96-14024A	ASSY MISC P-CHASSIS-BOTTOM-BAR(U);T550FB	1	SNA	
.....5		BN62-00048A	HEAT SINK-UP;55,AL 6063-T5,4.3,1224.6,40	1	SNA	
.....5		BN74-00063A	TAPE-REFLECTOR;T550FBE1-FA,SK2100HE,1217	2	SNA	
....4		BN96-14029A	ASSY MISC P-CHASSIS-BOTTOM-BAR(D);T550FB	1	SNA	
.....5		BN62-00049A	HEAT SINK-DOWN;55,AL 6063-T5,4.3,1224.6,	1	SNA	
.....5		BN74-00063A	TAPE-REFLECTOR;T550FBE1-FA,SK2100HE,1217	2	SNA	
....4		BN96-13571A	ASSY MISC P-LED BAR;UC6000 55inch,SEC VD	4	SNA	
....4		BN74-00055A	TAPE-WIRE;DW-0.1T,30*12*0.05T	10	SNA	
....4		6001-002615	SCREW-MACHINE;CH,+,M1.6,L3.5,NI PLT,SWRC	28	SNA	
....4		6001-002617	SCREW-MACHINE;CH,+,M3,L4,Ni_PLT (White),	19	SNA	
...3		BN96-12878A	ASSY OPEN CELL;T546HW02 V3,54.6,16:9,AMV	1	SNA	
...3	TCON	BN96-13688A	ASSY PCB P-T-CON;T550FBE1-FA,SUWON,120HZ	1	SA	
...3		BN96-13860A	ASSY MISC P-CHASSIS TOP;T550FBE1-FA	1	SNA	
....4		BN60-00177A	SPACER-TOP(UD);T550FBE1-FA,SKC SB00(0.1T	4	SNA	
....4		BN60-00178A	SPACER-TOP(LR);T550FBE1-FA,SKC SB00(0.1T	2	SNA	
....4	AC157	BN64-01306A	CHASSIS-TOP;55,SECC,0.8,1247.6,719.9	1	SNA	
...3		BN96-13864A	ASSY COVER P-SOURCE (L);T550FBE	1	SNA	
....4		BN60-00173A	SPACER-SOURCE;T460FAE1-FA,W/S CR POM TAP	3	SNA	
....4		BN62-00076A	INSULATION-COVER(L);T550FBE1-FA,SWT-9132	1	SNA	
....4		BN63-06756A	SHIELD-PCB_COVER_L;55,SECC,0.8,601.6,30	1	SNA	
...3		BN96-13865A	ASSY COVER P-SOURCE (R);T550FBE1-FA	1	SNA	
....4		BN60-00173A	SPACER-SOURCE;T460FAE1-FA,W/S CR POM TAP	3	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4		BN63-06757A	SHIELD-PCB_COVER_R;55,SECC,0.8,601.2,30	1	SNA	
....4		BN62-00077A	INSULATION-COVER(R);T550FBE1-FA,SWT-9132	1	SNA	
...3		BN01-00015A	FILM-T-CON;T550FBE1-FA,CI931,0.125,263.0	1	SNA	
...3		6001-002614	SCREW-MACHINE;CH,+,M2.5,L14,ZPC (BLK),SW	16	SNA	
...3		6001-002617	SCREW-MACHINE;CH,+,M3,L4,Ni_PLT (White),	13	SNA	
0.1		BN91-05274A	ASSY SHIELD;UE55C6500UWXXC	1	SNA	
..2	T0081	6001-000115	SCREW-MACHINE;BH,+,-,M3,L10,ZPC(WHT),SWR	2	SNA	
..2	T0081	6001-002283	SCREW-MACHINE;BH,+,M3,L5,ZPC(WHT),SWRCH1	9	SNA	
..2	M2893	BN39-01267E	LEAD CONNECTOR;LB6T,FLAT CONNECTOR ASS'Y	1	SA	
..2	P001A	BN44-00359A	SMPS-LED TV PD BD;PD55AF1E_ZSM,PSLF211B0	1	SA	
..2	M0251	BN96-12723N	ASSY CABLE P-FPCB LVDS;LED120Hz-55inch,F	1	SA	
..2	T0910	BN96-12929A	ASSY BRACKET P-STAND LINK;UC6500 46,SECC	1	SNA	
...3	M0115	BN61-06167A	BRACKET-STAND LINK;UC6500 46inch,HGI,T3.	1	SNA	
...3		BN61-02932G	BRACKET-STOPPER NUT;LED TV,M4,D6,L6.5,BR	5	SNA	
...3		BN60-00184A	SPACER-FOAM;FOAM,30000mm,DARK GRAY,1T,30	0.19	SNA	
..2	T0175	BN96-12965C	ASSY SPEAKER P;4ohm,4pin,25W,R: 800,Encl	1	SA	
..2		BN73-00273A	SILICON/RUBBER-GAPPAD;UE46B7700,SILICON+	1	SNA	
..2	T0081	6001-002610	SCREW-MACHINE;BH,+,M4,L6,ZPC(BLK),SWRCH1	4	SA	
..2	SCREW	6003-001782	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	1	SA	
..2	CIS1	0203-001586	TAPE-FILAMENT;#893,0.15,25,55	0.2	SNA	
0.1		BN92-05596A	ASSY BOX;UC6500 55	1	SNA	
..2	M0521	BN69-04718A	BOX-SET,IN;55UC6400-BS,CB,C-01,DW1, YEL,	1	SNA	
..2		BN69-04795C	BOX-SET,OUT;55UC6500,CB,C-03,DW3, YEL,W1	1	SNA	
..2		BH68-00662A	LABEL BOX-00;ALL MODEL,MOJO 90G,60,110,W	1	SNA	
0.1		BN92-05618A	ASSY P/MATERIAL;UC6500 55	1	SNA	
..2	T0214	0203-001269	TAPE-OPP MASKING;#301,T0.06,W75,L50000,N	0.77	SNA	
..2	T0214	0203-001595	TAPE-OPP MASKING;OPP-2,0.075,75,800M,CLR	1.73	SNA	
..2		6902-000604	BAG WRAPPING;LDPE,T0.02,W500,L10000,TRP,	7.43	SNA	
..2	T0524	6902-000960	BAG PE;NITRON,T0.015/T0.5,W1600,L1100,TR	1	SNA	
..2	M040	6922-000003	BAND PP;PP,T0.8,W18,L1650M,TRP,DA69-9014	0.99	SNA	
..2	T0214	AA61-20285C	HOLDER-BOX;CORAL,PP,BLACK,HB,17.5g	4	SA	
..2		BN69-00257E	PACKING-BAG SHEET;-,CB,-,1400,500,-,-,WH	1	SNA	
..2	T0246	BN69-04560A	CUSHION-01,SET;UC6100 55inch,EPS,M50	1	SNA	
..2		BN69-05006A	CUSHION-SIDE;LED TV 55INCH,EPS	1	SNA	
..2		BN68-02422B	LABEL-WARNING SHIPPING;ALL MODEL,A/P 100	1	SNA	
..2		BN69-04822X	PALLET;-,WOOD,1580,1070,130,-,-,SESK-82	1	SNA	
..2		BN69-05167A	PAD-01,CUSHION;55" LED,CB,DW-1,YEL,W840,	1	SNA	
..2		BN69-00257C	PACKING-PAD;PAPER,CB-SW4,1350,830,YEL,36	1	SNA	
..2		BN69-03982D	PAD PACKING-EDGE;LB6T,PAPER,8,120,1900,Y	1	SNA	
..2		6902-000379	BAG AIR;LDPE,T0.2,W1000,L1800,TRP,1260.0	1	SNA	
0.1		BN92-05795A	ASSY LABEL;UE32C6500UWXXC	1	SNA	
..2	T0527	AA68-03752B	LABEL-STICKER;WW,ALL,Art Paper(90g),25,3	1	SNA	
..2	T0527	BP68-00052B	LABEL-00,RATING;CCTV,TETRON PAPER,T0.05,	1	SNA	
0.1	ACCE1	BN92-05796B	ASSY ACCESSORY;UE40C6500UWXXC	1	SNA	
..2		BN96-13271A	ASSY ACCESSORY-MANUAL;UE32C6500UWXXC	1	SNA	
...3	T0524	6902-000110	BAG PE;LDPE,T0.05,W250,L400,TRP,28,2,9.2	1	SNA	
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3		BN68-00514E	MANUAL FLYER-05,WARRANTY CARD;comm,Samsu	1	SNA	
...3		BN68-02186A	MANUAL FLYER-TOC GUIDE;COMM,SAMSUNG,11 L	1	SNA	
...3		BN68-02694A	MANUAL USERS;C6500,SAMSUNG,6ANGS,W.EUROP	1	SNA	
...3		BN68-02839D	MANUAL FLYER-WARRANTY CARD;comm,Samsung,	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3		AA68-03242V	MANUAL FLYER-SAFETY GUIDE;comm,Samsung,1	1	SNA	
..2	ACCE2	BN96-13271C	ASSY ACCESSORY-CABEL;UE40C6500UWXXC	1	SNA	
...3	EC11	3903-000525	CBF-POWER CORD;DT,CEE,LP-21L,250V,2.5A,B	1	SA	
...3	T0120	4301-000121	BATTERY-MN;1.5V,R03,10.5x44.5m,HOLDER,7.	2	SNA	
...3	REMO2	BN59-01039A	REMOCON;TM1060,SAMSUNG,20PIN SINGLE,49KE	1	SA	
...3		BN61-05596A	HOLDER-WIRE CABLE;LED TV,LDPE,T0.8,L150,	1	SNA	
...3	M9889	BN63-01798B	CLOTH-CLEAN;cloth,180,200,sea blue,ToC	1	SA	
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3	EH03A	BN96-10276B	ASSY HOLDER P-RING;09 LEDTV ALL MODEL,AB	1	SA	
....4		6902-000683	BAG ZIPPER;LDPE,T0.05,W60,L60,TRP,4-PE M	1	SNA	
....4	AH365	BN61-05280A	HOLDER-RING;LB7000 46inch,ABS, HB,gray	4	SNA	
...3	EH02A	BN96-10810A	ASSY HOLDER P;09 LEDTV MODEL,NYRON	1	SA	
....4	BAG	6902-000031	BAG ZIPPER;LDPE,T0.05,W80,L160,TRP,0,0,4	1	SNA	
....4	M0114	BN61-05373A	HOLDER-WIRE;LB7000 46,NYRON	3	SNA	
....4		BN61-05491A	HOLDER-WIRE STAND;UB7000 46inch,NYRON	1	SNA	
...3		BN96-12031D	ASSY ACCESSORY-SCREW;09 LEDTV(40/46/55),	1	SNA	
....4	M0081	6003-000133	SCREW-TAPTYPE;BH,+,-,S,M4,L8,ZPC(BLK),SW	1	SA	
....4		BN69-04419E	PACKING-BAG PE;LB650,LDPE,70,90,6003-000	1	SNA	
...3	M0114	BN39-01154C	CBF SIGNAL;Chelsea Slim, STEREO Plug to	1	SA	
...3	M0114	BN39-01154F	CBF SIGNAL;UE40B7000WWXXC,24P/20P,30AWG,	1	SA	
...3	M0114	BN39-01154H	CBF SIGNAL;UE40B7000WWXXC,RCA 3PIN,30AWG	1	SA	
...3	T0524	6902-000110	BAG PE;LDPE,T0.05,W250,L400,TRP,28,2,9.2	1	SNA	
...3		BN96-14099A	ASSY ACCESSORY-CLAMP;10 LEDTV(40/46/55),	1	SNA	
....4		AA65-30023A	CLAMPER CORE-CABLE;NYLON-66,BLK	1	SNA	
....4		BN69-04419J	PACKING-BAG PE;UC5000,LDPE,70,90,Power-C	1	SNA	
...3	RB01	BN63-06543B	COVER-BOTTOM;UC7000 40,HIPS,V0,BK0020	1	SA	
....4		0103-004637	RESIN-HIPS;BK0020,V0,HIPS,NoN-Deca,NoN-D	70	SNA	
0.1	S001A	BN90-02564C	ASSY STAND;UC6500 55	1	SNA	
..2	M0027	BN96-12937A	ASSY STAND P-BASE;UC6400 55,SUS430,T0.6	1	SA	
...3	SCREW	6003-001374	SCREW-TAPTYPE;FH,+,B,M4,L12,NI PLT,SWRCH	6	SNA	
...3		BN61-04248D	BOSS-TAPE;#4920,acryl,0.45mm,20mm,3M,whi	1.44	SNA	
...3		BN61-04692A	BOSS-PRIMER;#94,clear,35cps	0.4	SNA	
...3		BN61-05383B	BRACKET-SWIVEL BOTTOM;UB8000 46inch,HGI,	1	SNA	
...3		BN61-05460A	HOLDER-SWIVEL RING BOTTOM;UB8000 46inch,	1	SNA	
...3		BN61-05461A	HOLDER-SWIVEL RING TOP;UB8000 46inch,Ace	1	SNA	
...3	GSN01	BN61-06224A	GUIDE-STAND NECK;UC6400 40inch,PETG inse	1	SNA	
....4		0103-007257	RESIN-PETG;ECOZEN-SE,NP01,TP0003,3.2 V2,	150	SNA	
....4		BN61-06079A	GUIDE-NECK-INSERT;40,LC650,PETG,HB,TP000	1	SNA	
...3		BN61-06235A	BRACKET-STAND BOTTOM;UC6100 55inch,HGI,T	1	SNA	
...3	CCM1	BN63-04755A	COVER-SHEET;AMBER,PE,T0.05,W150mm,200M,6	1.25	SNA	
...3	M0111	BN63-06626A	COVER-STAND;UC6400 55inch,Al,T0.6	1	SNA	
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3	T0527	BN68-01648B	LABEL WARNING;WW,PET,T0.05,40,25,EXPORT	1	SNA	
...3	M0126	BN73-00182A	RUBBER-FOOT;P750,CR RUBBER	4	SNA	
...3	M0126	BN73-00216A	RUBBER-FOOT;LB650,RUBBER,16*33,T2.5,Dark	4	SNA	
...3		BN74-00031A	GREASE;kanto-kasei FL-955,grease,wht	0.6	SNA	
...3		BN60-00162L	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.5T,	1.68	SNA	
..2	SC02A	BN96-13131E	ASSY COVER P-GUIDE STAND;UC7000,PC+ABS G	1	SA	
...3	T0524	6902-001063	BAG PE;LDPE,T0.05,W180,L350,TRP,RECYCLE	1	SNA	
...3	T0920	BN61-06221A	GUIDE-STAND;UC6500 40inch,PC,G/F 20%,V2,	1	SNA	
....4		0103-007285	RESIN-PC;BK0007,2.0 V2,PC/GF20%,Glass fi	450	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3		BN68-02824B	MANUAL FLYER-01,STAND GUIDE;5 ~ 6 series	1	SNA	
...3		BN96-12031C	ASSY ACCESSORY-SCREW;09 LEDTV,6003-00013	1	SNA	
....4	M0081	6003-000133	SCREW-TAPTYPE;BH,+,-,S,M4,L8,ZPC(BLK),SW	5	SA	
....4		6902-000336	BAG ZIPPER;LDPE,T0.05,W70,L80,TRP,0.500g	1	SNA	
....4		BN68-02215H	MANUAL FLYER-STAND GUIDE;B6000 ~ 8000,SA	1	SNA	
...3		BN96-12031M	ASSY ACCESSORY-SCREW;10 LEDTV(40/46/55),	1	SNA	
....4	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	5	SA	
....4		BN69-04419K	PACKING-BAG PE;UC5000,LDPE,70,90,4X12, 5	1	SNA	
0.1	M0017	BN91-05069E	ASSY CHASSIS;UE55C6500UWXXC	1	SNA	
..2	M0014	BN94-03588F	ASSY PCB MAIN;UE55C6500UWXXC B	1	SA	
...3		0202-001608	SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0.	1	SNA	
...3	T0562	6046-001015	STAND OFF;#4-40,L5,Ni PLT,C3601,M3	2	SNA	
...3	CB01	BN61-04924A	BRACKET-AV;LB700 40,PCM,T0.5,BKN-P824, P	1	SNA	
...3	T0066	BN62-00071A	HEAT SINK-ES;22*22*2.6,Ceramic,T2.6,TAPE	2	SNA	
...3	T0066	BN62-00072A	HEAT SINK-ES;40*40*2.6,Ceramic,T2.6,TAPE	1	SNA	
...3		BN97-04241A	ASSY CI PLUS;BN46-00027A,platform Euro C	1	SNA	
....4		BN46-00027A	KEY CODE-CI PLUS;CI PLUS KEY,TCTC,SERIAL	1	SNA	
...3		BN97-04400F	ASSY SMD;UE55C6500UWXXC B,BN94-03588B	1	SNA	
....4		0202-001767	SOLDER-CREAM;LST-5710,D20~38,Sn-57Bi-1Ag	1	SNA	
....4	DS01A	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	18	SA	
....4		0403-001164	DIODE-ZENER;MMSZ5232B,5.32-5.88V,500MW,S	1	SA	
....4		0403-001783	DIODE-ZENER;BZB84-C6V2,5.8/6.6V,300mW,SO	19	SNA	
....4	D0254	0404-001404	DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23,	8	SA	
....4	T0139	0406-001200	DIODE-TVS;RCLAMP0504F,6/-/-V,150W,SC-70	2	SA	
....4	T0139	0406-001271	DIODE-TVS;RCLAMP0524P,6/-/-V,150W,SLP251	8	SNA	
....4	SD3	0407-000114	DIODE-SWITCHING;KDS184,80V,100mA,SOT-23,	1	SNA	
....4	Q101	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	12	SA	
....4		0501-000669	TR-SMALL SIGNAL;KTA1505Y,PNP,150mW,SOT-2	2	SA	
....4	CEQ2	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	3	SA	
....4	Q409	0505-000274	FET-SILICON;AO4435L,P,-30V,-11A,0.014ohm	1	SNA	
....4	Q409	0505-002386	FET-SILICON;AO3415AL,P,-20V,-4A,0.045ohm	1	SA	
....4	IC104	0801-002630	IC-CMOS LOGIC;74AHCT1G08,2-INPUT AND GAT	1	SA	
....4	ND51C2	0801-002780	IC-CMOS LOGIC;74LVC1G17,SCHMITT-TRIGGER	1	SA	
....4	IC104	0801-003330	IC-CMOS LOGIC;Octal buffer,DQFN,20P,4.5x	2	SA	
....4	IC104	0802-001012	IC-CMOS LOGIC;74LCX245,TRANSCEIVER,DQFN,	1	SNA	
....4		1001-000164	IC-ANALOG MULTIPLEX;74HC4052,CMOS,SOP,16	1	SA	
....4	IC106	1001-001573	IC-VIDEO SWITCH;Sil9287BCNUTR,QFN,72P,10	1	SNA	
....4	IC112	1103-000129	IC-EEPROM;24C02,2Kbit,256x8,SOP,8P,5x4mm	1	SA	
....4	IC112	1103-001310	IC-EEPROM;24LC02B,256X8BIT,SOIC,8P,3.91X	1	SNA	
....4	IC112	1103-001475	IC-EEPROM;M24256-BR,256Kbit,32Kx8,SOP,8P	1	SNA	
....4		1105-001931	IC-DDR2 SDRAM;K4T51163Q,DDR2-800,512Mbit	2	SA	
....4		1105-002058	IC-DDR2 SDRAM;K4T1G164QE-HCF8,DDR2,1Gbit	2	SA	
....4		1105-002075	IC-DDR2 SDRAM;K4T1G084QE-HCF8,DDR2,1Gbit	4	SA	
....4	T0085	1201-002487	IC-AUDIO AMP;MAX9728A,QFN,12P,3x3mm,DUAL	1	SA	
....4	T0124	1201-002992	IC-POWER AMP;STA369BWS,PSSO,36P,10.3x7.5	2	SA	
....4	T0087	1203-002519	IC-POSI.FIXED REG.;KIA7809AF,DPAK,3P,240	1	SA	
....4	IC012	1203-003544	IC-POSI.ADJUST REG.;RT9173BPS,SOP-8,8P,5	1	SA	
....4		1203-004363	IC-VOL. DETECTOR;RT9818C-29PV,SOT-23,3P,	1	SA	
....4		1203-004364	IC-VOL. DETECTOR;RT9818C-42PV,SOT-23,3P,	1	SA	
....4		1203-005538	IC-DC/DC CONVERTER;AOZ1021HAIL,SOP,8P,4.	3	SA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4		1203-006012	IC-DC/DC CONVERTER;MP8725EL,QFN14,14P,3x	1	SA	
....4	T0087	1203-006109	IC-POSI.FIXED REG.;S-1206B33-M3T1G,SOT-2	1	SA	
....4	IC012	1203-006138	IC-POSI.ADJUST REG.;AP1117DGZ-13-89,TO-2	1	SA	
....4	T0087	1203-006141	IC-POSI.FIXED REG.;S-1172B33-U5T1G,SOT-8	2	SA	
....4		1203-006142	IC-DC/DC CONVERTER;BD8924G,5P,2.9x1.6x1.	1	SA	
....4		1203-006167	IC-POSI.FIXED REG.;S-1172B12-U5T1G,SOT-8	1	SA	
....4	IC118	1204-003085	IC-VIDEO PROCESS;SDP91-PS,PBGA,496P,23x2	1	SA	
....4		1204-003100	IC-DECODER;SDP92,FCPBGAH,937P,35x35mm,PL	1	SA	
....4	IC118	1204-003101	IC-VIDEO PROCESS;SDP94,PBGA,345P,19x19mm	1	SNA	
....4		1205-003201	IC-BUS SWITCH;TC7WB125FK,SSOP,8P,2x2.3mm	1	SA	
....4		1205-003479	IC-SWITCH;TPS2051BDBVR,SOT-23,5P,2.9x1.6	1	SA	
....4		1205-003733	IC-SWITCH;AP2191MPG-13,MSOP-8L-EP,8P,2.9	1	SA	
....4		1205-003735	IC-SWITCH;AP2151WG-7,SOT25,5P,2.9x1.6mm,	1	SA	
....4		1205-003834	IC-ETHERNET CONTROLLER;RTL8201E-VC-GR,QF	1	SA	
....4		1205-003840	IC-CODEC;WM8595GEFL/RS,QFN,48P,7x7x0.9mm	1	SA	
....4		1405-001185	VARISTOR;24Vdc,1.6x0.8x0.36mm,TP	1	SA	
....4		1405-001233	VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP	28	SA	
....4	PR6	2007-000072	R-CHIP;47ohm,5%,1/10W,TP,1608	6	SNA	
....4	MR604	2007-000137	R-CHIP;2Kohm,5%,1/16W,TP,1005	14	SNA	
....4	R105	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	26	SNA	
....4	AR49	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	25	SNA	
....4	MR306	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	5	SNA	
....4	R319	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	51	SNA	
....4		2007-000146	R-CHIP;6.8Kohm,5%,1/16W,TP,1005	1	SNA	
....4	R104	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	25	SNA	
....4	R102	2007-000149	R-CHIP;12Kohm,5%,1/16W,TP,1005	1	SA	
....4	RR33	2007-000154	R-CHIP;24Kohm,5%,1/16W,TP,1005	1	SA	
....4	AR43	2007-000155	R-CHIP;27Kohm,5%,1/16W,TP,1005	1	SNA	
....4	MR13	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	18	SNA	
....4	DR39	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	8	SNA	
....4	R509	2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	4	SNA	
....4	R111	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	37	SNA	
....4	HDR17	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	6	SNA	
....4	R338	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	39	SNA	
....4	UR23	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	8	SNA	
....4		2007-000231	R-CHIP;1.3Kohm,1%,1/10W,TP,1608	2	SA	
....4	MR39	2007-000242	R-CHIP;1.5Kohm,5%,1/16W,TP,1005	1	SNA	
....4	UR53	2007-000305	R-CHIP;10Mohm,5%,1/10W,TP,1608	1	SNA	
....4	HR12	2007-000591	R-CHIP;22ohm,1%,1/10W,TP,1608	1	SNA	
....4		2007-000606	R-CHIP;240ohm,1%,1/10W,TP,1608	2	SA	
....4	JR11	2007-000614	R-CHIP;24Kohm,1%,1/10W,TP,1608	2	SNA	
....4	KAR28	2007-000637	R-CHIP;270Kohm,5%,1/10W,TP,1608	1	SNA	
....4	R945	2007-000726	R-CHIP;300ohm,1%,1/10W,TP,1608	1	SA	
....4	R19	2007-000763	R-CHIP;330ohm,1%,1/10W,TP,1608	1	SNA	
....4	R528	2007-000835	R-CHIP;39ohm,1%,1/10W,TP,1608	1	SA	
....4	DR37	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	4	SNA	
....4	R740	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SNA	
....4	OTR1	2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	5	SNA	
....4	DR43	2007-001298	R-CHIP;51ohm,5%,1/16W,TP,1005	1	SNA	
....4	CER07	2007-001308	R-CHIP;200ohm,5%,1/16W,TP,1005	3	SNA	
....4	R326	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	6	SNA	

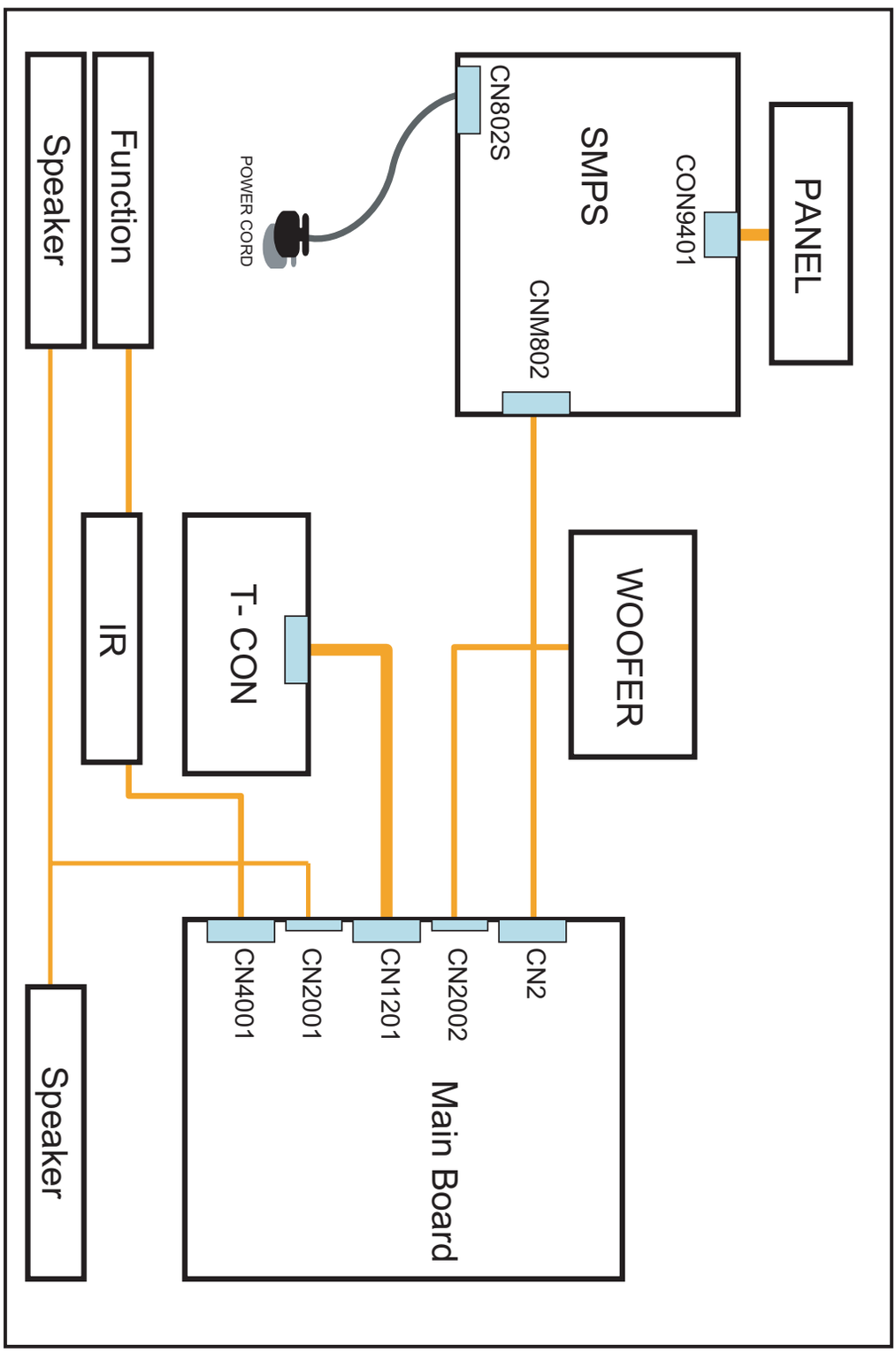
Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4		2007-001333	R-CHIP;18Kohm,5%,1/16W,TP,1005	1	SNA	
....4		2007-001335	R-CHIP;36Kohm,5%,1/16W,TP,1005	2	SA	
....4	MR316	2007-002796	R-CHIP;510ohm,5%,1/16W,TP,1005	1	SA	
....4	PR24	2007-002970	R-CHIP;56ohm,5%,1/16W,TP,1005	2	SA	
....4	AVR22	2007-003013	R-CHIP;2.4Kohm,5%,1/16W,TP,1005	1	SNA	
....4		2007-003022	R-CHIP;62ohm,5%,1/16W,TP,1005	17	SNA	
....4		2007-007008	R-CHIP;300ohm,5%,1/16W,TP,1005	1	SNA	
....4	TR30	2007-007009	R-CHIP;75ohm,5%,1/16W,TP,1005	4	SA	
....4	PR8	2007-007015	R-CHIP;13Kohm,5%,1/16W,TP,1005	1	SNA	
....4	R365	2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	3	SNA	
....4		2007-007132	R-CHIP;15Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-007134	R-CHIP;39Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-007136	R-CHIP;4.7Kohm,1%,1/16W,TP,1005	6	SNA	
....4		2007-007137	R-CHIP;1.2Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-007138	R-CHIP;27Kohm,1%,1/16W,TP,1005	2	SNA	
....4		2007-007139	R-CHIP;47Kohm,1%,1/16W,TP,1005	1	SA	
....4	DR4	2007-007142	R-CHIP;10Kohm,1%,1/16W,TP,1005	8	SNA	
....4		2007-007156	R-CHIP;1ohm,5%,1/16W,TP,1005	3	SNA	
....4		2007-007197	R-CHIP;3.3ohm,5%,1/16W,TP,1005	2	SNA	
....4		2007-007306	R-CHIP;100ohm,1%,1/16W,TP,1005	17	SNA	
....4		2007-007318	R-CHIP;1Kohm,1%,1/16W,TP,1005	32	SNA	
....4		2007-007352	R-CHIP;130Kohm,1%,1/10W,TP,1608	1	SA	
....4		2007-007469	R-CHIP;110ohm,1%,1/16W,TP,1005	1	SNA	
....4	HDR44	2007-007470	R-CHIP;7.5Kohm,1%,1/16W,TP,1005	2	SNA	
....4		2007-007617	R-CHIP;2.49Kohm,1%,1/10W,TP,1608	1	SA	
....4		2007-007698	R-CHIP;5.1Kohm,1%,1/16W,TP,1005	2	SNA	
....4		2007-007724	R-CHIP;40.2ohm,1%,1/10W,TP,1608	2	SA	
....4		2007-007730	R-CHIP;6.8Mohm,1%,1/10W,TP,1608	1	SA	
....4		2007-007947	R-CHIP;36ohm,1%,1/10W,TP,1608	1	SA	
....4	MR11	2007-008015	R-CHIP;75ohm,1%,1/16W,TP,1005	24	SNA	
....4		2007-008263	R-CHIP;3Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-008275	R-CHIP;30Kohm,1%,1/16W,TP,1005	1	SNA	
....4		2007-008391	R-CHIP;6.34Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-008811	R-CHIP;1.5ohm,5%,1/16W,TP,1005	1	SA	
....4		2007-009853	R-CHIP;1.6Kohm,1%,1/16W,TP,1005	1	SNA	
....4		2011-001015	R-NETWORK;1Kohm,5%,1/16W,L,CHIP,8P,TP,3.	4	SC	
....4	MR38	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	SA	
....4	ZRN10	2011-001261	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,2.	4	SA	
....4	DAR09	2011-001262	R-NETWORK;22ohm,5%,1/16W,L,CHIP,8P,TP,2.	25	SA	
....4		2011-001264	R-NETWORK;10ohm,5%,1/16W,L,CHIP,8P,TP,2.	6	SNA	
....4		2011-001345	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,2	2	SA	
....4	DRP29	2011-001396	R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,8P,TP,	1	SA	
....4		2011-001427	R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,2.0	1	SA	
....4		2011-001449	R-NETWORK;22ohm,5%,1/16W,L,4P,TP,1010	8	SA	
....4		2011-001497	R-NETWORK;470ohm,5%,1/16W,L,CHIP,4P,TP,1	2	SNA	
....4	C24	2203-000041	C-CER,CHIP;0.01nF,0.25pF,50V,C0G,1608	1	SA	
....4	AC1	2203-000125	C-CER,CHIP;1.2nF,10%,50V,X7R,TP,1608,-	6	SA	
....4	PC43	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005	11	SA	
....4	MC2	2203-000254	C-CER,CHIP;10nF,10%,16V,X7R,TP,1005	6	SA	
....4	DC54	2203-000278	C-CER,CHIP;.01nF,0.5pF,50V,C0G,TP,1005	3	SA	
....4	RC34	2203-000280	C-CER,CHIP;0.01nF,0.5pF,50V,C0G,1608	3	SA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	C3	2203-000384	C-CER,CHIP;0.015nF,5%,50V,C0G,1608	2	SNA	
....4	C304	2203-000405	C-CER,CHIP;0.18nF,5%,50V,C0G,1608	1	SNA	
....4	MC302	2203-000425	C-CER,CHIP;.018nF,5%,50V,C0G,TP,1005	8	SA	
....4	C254	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,TP,1005	14	SA	
....4	C507	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,TP,1005	3	SA	
....4	AD480	2203-000585	C-CER,CHIP;0.22nF,10%,50V,X7R,1005	1	SA	
....4	ZC14	2203-000626	C-CER,CHIP;0.022nF,5%,50V,C0G,1608	2	SNA	
....4	MC9	2203-000627	C-CER,CHIP;.022nF,5%,50V,C0G,TP,1005	1	SNA	
....4	AD480	2203-000679	C-CER,CHIP;0.027nF,5%,50V,C0G,1005	1	SA	
....4	AD480	2203-000714	C-CER,CHIP;3.3nF,10%,50V,X7R,TP,1005,-	1	SA	
....4	DC25	2203-000812	C-CER,CHIP;.033nF,5%,50V,C0G,1005	9	SA	
....4	CK40B	2203-000838	C-CER,CHIP;0.39NF,5%,50V,C0G,TP,1608	3	SNA	
....4	C132	2203-000854	C-CER,CHIP;0.039nF,5%,50V,C0G,1005	4	SA	
....4	AD480	2203-000995	C-CER,CHIP;.047nF,5%,50V,C0G,TP,1005	3	SA	
....4	AC124	2203-000998	C-CER,CHIP;0.047nF,5%,50V,C0G,1608	2	SNA	
....4	HDC5	2203-001072	C-CER,CHIP;0.056nF,5%,50V,NP0,1005	1	SA	
....4	C101	2203-001124	C-CER,CHIP;0.68NF,10%,50V,X7R,TP,1005	1	SA	
....4	KAC5	2203-001126	C-CER,CHIP;0.68nF,10%,50V,X7R,1608	2	SNA	
....4	AD480	2203-001428	C-CER,CHIP;470nF,10%,50V,X7R,TP,2012	1	SNA	
....4	AD480	2203-001851	C-CER,CHIP;0.016nF,5%,50V,NP0,TP,1608	2	SNA	
....4	AD480	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	18	SNA	
....4	AVC08	2203-002398	C-CER,CHIP;22nF,10%,50V,X7R,1608	10	SNA	
....4	AD480	2203-002720	C-CER,CHIP;10nF,10%,25V,X7R,TP,1005	2	SNA	
....4	C711	2203-002982	C-CER,CHIP;6.8nF,10%,50V,X7R,1005	1	SA	
....4	AD480	2203-005054	C-CER,CHIP;0.0047nF,0.25pF,50V,NP0,TP,10	3	SA	
....4	DC18	2203-005138	C-CER,CHIP;1.8nF,10%,50V,X7R,1005	6	SA	
....4	AAC1	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,TP,1608	29	SNA	
....4	AD480	2203-005344	C-CER,CHIP;22nF,10%,25V,X7R,TP,1005,-	11	SNA	
....4	AD480	2203-005393	C-CER,CHIP;0.005nF,0.1pF,50V,NP0,TP,1005	2	SNA	
....4	AD480	2203-005533	C-CER,CHIP;1000nF,20%,6.3V,X7R,TP,1608	2	SNA	
....4	PC8	2203-005642	C-CER,CHIP;0.22nF,5%,50V,NP0,1005	1	SNA	
....4	AD480	2203-005968	C-CER,CHIP;4.7NF,10%,50V,X7R,TP,1005	3	SNA	
....4	AD480	2203-006039	C-CER,CHIP;1nF,10%,2000V,X7R,3216	1	SA	
....4	AD480	2203-006104	C-CER,CHIP;1000nF,10%,50V,X7R,3225	1	SA	
....4	AD480	2203-006126	C-CER,CHIP;47nF,10%,16V,X7R,1005	3	SNA	
....4	PC11	2203-006141	C-CER,CHIP;1000nF,10%,16V,X5R,1608	3	SNA	
....4	C102	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	252	SNA	
....4	AD480	2203-006307	C-CER,CHIP;1000nF,10%,25V,X5R,2012	1	SNA	
....4	AD480	2203-006333	C-CER,CHIP;10000nF,20%,16V,X5R,TP,3216	10	SNA	
....4	AD480	2203-006336	C-CER,CHIP;10000nF,10%,25V,X5R,3216	11	SA	
....4	C125	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012	4	SC	
....4	HE4	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,2012	12	SA	
....4	HDC11	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005	26	SNA	
....4	AD480	2203-006636	C-CER,CHIP;220nF,10%,25V,X7R,1608	9	SA	
....4	AD480	2203-006824	C-CER,CHIP;4700nF,10%,10V,X5R,1608	4	SNA	
....4	AD480	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,TP,1005	2	SNA	
....4	AD480	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (	2	SNA	
....4	AD480	2203-007233	C-CER,CHIP;22000nF,10%,16V,X5R,TP,3216	2	SA	
....4	AD480	2203-007270	C-CER,CHIP;10000nF,10%,10V,X5R,TP,1608	81	SNA	
....4		2503-001051	C-NETWORK;100nFx4,20%,16V,2012	10	SA	
....4		2601-001056	TRANS-SMD,PULSE;350UH,-,1:1,1:1,12.7X6.7	1	SA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	T0052	2703-000158	INDUCTOR-SMD;1uH,10%,2012	4	SA	
....4	T0052	2703-000222	INDUCTOR-SMD;560nH,10%,2012	3	SA	
....4	T0052	2703-000296	INDUCTOR-SMD;680nH,10%,1608	1	SA	
....4	VL6	2703-000398	INDUCTOR-SMD;10uH,10%,3225	8	SA	
....4	T0052	2703-001239	INDUCTOR-SMD;3.3uH,10%,1608	1	SA	
....4	T0052	2703-002238	INDUCTOR-SMD;1UH,5%,2012	2	SNA	
....4	T0052	2703-002332	INDUCTOR-SMD;330nH,5%,1608	1	SA	
....4	T0052	2703-002557	INDUCTOR-SMD;270NH,5%,1608	3	SNA	
....4	T0052	2703-003150	INDUCTOR-SMD;4.7uH,20%,5050	4	SNA	
....4		2703-003296	INDUCTOR-SMD;47uH,10%,2012	1	SNA	
....4	T0052	2703-003559	INDUCTOR-SMD;4.7uH,20%,8080	4	SNA	
....4	T0052	2703-003713	INDUCTOR-SMD;1.5uH,20%,7366	2	SA	
....4	X202	2801-003326	CRYSTAL-SMD;24MHz,30ppm,28-ABX,20pF,50oh	2	SA	
....4	X202	2801-003773	CRYSTAL-SMD;12MHz,30ppm,28-AAN,20pF,50oh	1	SA	
....4	X202	2801-003954	CRYSTAL-SMD;27MHz,30ppm,28-AAN,16pF,50oh	1	SA	
....4	X202	2801-004629	CRYSTAL-SMD;27MHz,20ppm,12pF,50ohm,TP	1	SNA	
....4	X202	2801-004734	CRYSTAL-SMD;25.000000MHz,20ppm,28-AAN,12	1	SA	
....4		2804-001878	OSCILLATOR-CLOCK;49.152MHz,50ppm,10TTL/1	1	SA	
....4	F103	2901-001506	FILTER-EMI SMD;5V,0.13A,0pF,2x1x0.5mm,TP	2	SA	
....4	T0568	3301-001236	BEAD-SMD;60ohm,1608	14	SNA	
....4	T0568	3301-001404	BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz	45	SA	
....4	T0568	3301-001526	BEAD-SMD;10ohm,1.6x0.8x0.8mm,1000mA,TP,,	13	SNA	
....4	T0568	3301-002039	BEAD-SMD;26ohm,1608,TP	9	SA	
....4		3701-001293	CONNECTOR-HDMI;19P,2R,FEMALE,SMD-A,AU	4	SA	
....4	CN906	3707-001095	CONNECTOR-OPTICAL;SMD-A(Ultra Slim),SPDI	1	SA	
....4	AC510	3708-002777	CONNECTOR-FPC/FFC/PIC;82P,0.5mm/0.75mm,S	1	SA	
....4		3710-002276	SOCKET-INTERFACE;24P,1R,0.5mm,SMD-A,AU,B	1	SA	
....4	CON_US	3711-005616	HEADER-BOARD TO CABLE;BOX,10P,1R,2mm,SMD	1	SNA	
....4	HB01A	3711-007336	HEADER-BOARD TO CABLE;B0X,4P,1R,2.5mm,SM	2	SA	
....4		3722-003044	JACK-USB;4P/1C,NI,BLK,SMD-A,A-TYPE	2	SA	
....4		BN41-01444B	PCB MAIN;C6500 valencia eu,FR-4,4,1.2T,2	1	SNA	
....4		BN97-04194A	ASSY MICOM-MAIN;T-VALDEUC-1007.5,2010.03	1	SNA	
.....5		1107-001868	IC-NAND FLASH;KFG8GH6U4M-AIB6,1GByte,512	1	SNA	
....4		3701-001698	CONNECTOR-DSUB;15P,3ROW,FEMALE,ANGLE,NI	1	SA	
....4		3709-001603	CONNECTOR-CARD SLOT;68P(U/SLIM 60mm) W/L	1	SA	
....4		3711-007302	HEADER-BOARD TO BOARD;BOX,18P,2R,2mm,ANG	1	SA	
....4	JA330	3722-002844	JACK-PHONE;1/7P,NI,LAUREL-GREEN,ANGLE	1	SA	
....4	JA330	3722-002845	JACK-PHONE;1/7P,NI,YELLOW,ANGLE	1	SA	
....4	JA330	3722-002846	JACK-PHONE;1/6,NI,BLACK,ANGLE	2	SNA	
....4		3722-002849	JACK-MODULAR;8P/8C(ULTRA SLIM),YES,ANGLE	1	SNA	
....4	ET01	BN40-00172A	TUNER;DTOS40CVH081A,DVB-T/C,164CH,38.9MH	1	SA	
....4		BN97-04608A	ASSY MICOM;N96A,2010.03.23,T-VALDEUS-300	1	SNA	
.....5	IC520	0903-001651	IC-MICROCONTROLLER;61P802-RG480WT,LQFP,4	1	SNA	

6. Wiring Diagram

6-1. Wiring Diagram



6-2. Connector

CN1201(to Panel)			
1	NC	42	Tx1_AN
2	NC	43	GND
3	NC	44	GND
4	NC	45	GND
5	NC	46	NC
6	NC	47	PANEL_VCC_PW
7	GND	48	PANEL_VCC_PW
8	SDA_PANEL2	49	PANEL_VCC_PW
9	PANEL_WP	50	PANEL_VCC_PW
10	NC	51	PANEL_VCC_PW
11	NC	52	GND
12	SCL	53	TX2_AN
13	GND	54	TX2_AP
14	TX3_EP	55	TX2_BN
15	TX3_EN	56	TX2_BP
16	TX3_DP	57	TX2_CN
17	TX3_DN	58	TX2_CP
18	GND	59	GND
19	TX3_CLKN	60	TX2_CLKN
20	TX3_CLKP	61	TX2_CLKP
21	GND	62	GND
22	TX3_CP	63	TX2_DN
23	TX3_CN	64	TX2_DP
24	TX3_BP	65	TX2_EN
25	TX3_BN	66	TX2_EP
26	TX3_AP	67	GND
27	TX3_AN	68	TX4_AN
28	GND	69	TX4_AP
29	TX1_EP	70	TX4_BN
30	TX1_EN	71	TX4_BP
31	TX1_DP	72	TX4_CN
32	TX1_DN	73	TX3_CP
33	GND	74	GND
34	TX1_CLKP	75	TX4_CLKN
35	TX1_CLKN	76	TX4_CLKP
36	GND	77	GND
37	TX1_CP	78	TX4_DN
38	TX1_CN	79	TX4_DP
39	TX1_BP	80	TX4_EN
40	TX1_BN	81	TX4_EP
41	TX1_AP	82	GND

CN2(POWER)			
1	B12V	10	GND
2	A5V	11	GND
3	B12V	12	B5V
4	GND	13	B13V
5	B5V	14	TOP_PWM_ DIMMING
6	B5V	15	B13V
7	B5V	16	SW_INVERTER
8	GND	17	B13V
9	GND	18	DET_5V

CN3004(to Component)			
1	GND	5	NC
2	COMP_Y	6	NC
3	IDENT_COMP_1	7	COMP_PR
4	COMP_PB		

CN3013(to HDMI1)			
1	HDMI1_RX2+_HDMI	11	GND
2	GND	12	HDMI1_RXCLK-_HDMI
3	HDMI1_RX2-_HDMI	13	HDMI_CEC
4	HDMI1_RX1+_HDMI	14	GND
5	GND	15	HDMI1_SCL_DDC
6	HDMI1_RX1-_HDMI	16	HDMI1_SDA_DDC
7	HDMI1_RX0+_HDMI	17	GND
8	GND	18	HDMI1_5V
9	HDMI1_RX0-_HDMI	19	HDMI1_HPD
10	HDMI1_RXCLK+_HDMI		

CN3016(to HDMI2)			
1	HDMI2_RX2+_HDMI	11	GND
2	GND	12	HDMI2_RXCLK-_HDMI
3	HDMI2_RX2-_HDMI	13	HDMI_CEC
4	HDMI2_RX1+_HDMI	14	GND
5	GND	15	HDMI2_SCL_DDC
6	HDMI2_RX1-_HDMI	16	HDMI2_SDA_DDC
7	HDMI2_RX0+_HDMI	17	GND
8	GND	18	HDMI2_5V
9	HDMI2_RX0-_HDMI	19	HDMI2_HPD
10	HDMI2_RXCLK+_HDMI		

CN3015(to HDMI3)			
1	HDMI3_RX2+_HDMI	11	GND
2	GND	12	HDMI3_RXCLK-_HDMI
3	HDMI3_RX2-_HDMI	13	HDMI_CEC
4	HDMI3_RX1+_HDMI	14	GND
5	GND	15	HDMI3_SCL_DDC
6	HDMI3_RX1-_HDMI	16	HDMI3_SDA_DDC
7	HDMI3_RX0+_HDMI	17	GND
8	GND	18	HDMI3_5V
9	HDMI3_RX0-_HDMI	19	HDMI3_HPD
10	HDMI3_RXCLK+_HDMI		

CN3010(to HDMI4)			
1	HDMI4_RX2+_HDMI	11	GND
2	GND	12	HDMI4_RXCLK-_HDMI
3	HDMI4_RX2-_HDMI	13	HDMI_CEC
4	HDMI4_RX1+_HDMI	14	GND
5	GND	15	HDMI4_SCL_DDC
6	HDMI4_RX1-_HDMI	16	HDMI4_SDA_DDC
7	HDMI4_RX0+_HDMI	17	GND
8	GND	18	HDMI4_5V
9	HDMI4_RX0-_HDMI	19	HDMI4_HPD
10	HDMI4_RXCLK+_HDMI		

CN3011(to PC)			
1	PC_RED	9	5V
2	PC_GREEN	10	PC_IDENT
3	PC_BLUE	11	GND
4	GND	12	SDA
5	GND	13	PC_HS
6	GND	14	PC_VS
7	GND	15	SCL
8	GND		

CN1301(Speaker Out)			
1	R-_OUT	3	L-_OUT
2	R+_OUT	4	L+_OUT

OP3001(Optical Jack)			
1	VIN	3	GND
2	VCC		

CN3005(COMP)			
1	GND	5	NC
2	AV2_CVBS	6	NC
3	INDENT_AV2	7	COMP_AV2_SL_IN
4	COMP_AV2_SR_IN		

CN7502(USB1)			
1	USB0_5V_PW	3	USB0_DP
2	USB0_DM	4	GND

CN7501(USB2)			
1	USB1_5V_PW	3	USB1_DP
2	USB1_DM	4	GND

CN4001(FUCTION)			
1	IR	6	KEY_INPUT1
2	GND	7	KEY_INPUT2
3	3.3V	8	LED_STB
4	MSCL_A5V	9	LED_CNTR
5	MSDA_A5V	10	3.3V

CN3002(SCART)			
1	GND	13	NC
2	GND	14	SC1_G
3	GND	15	GND
4	GND	16	NC
5	SC1_AV_CVBS_IN	17	IDENT_SC1_AV
6	GND	18	SC1_B
7	SC1_CVBS_OUT	19	GND
8	GND	20	SC1_AV_SL_IN
9	SC1_FB	21	SC1_AV_SR_IN
10	GND	22	GND
11	SC1_R	23	SC1_SL_OUT
12	GND	24	SC1_SR_OUT

6-3. Connector Functions

Connector	Functions
CNM802 ⟷ CN2	Supply power from SMPS to Main Board.
CN1201 ⟷ T-CON	The LVDS signal transfered from Main Board to Panel.

6-4. Cables

Use	Main-SMPS	Main-Tcon(LVDS)	Function Assy
Code	32" 55" BN39-01237N(18P 225mm) 40" 46" BN39-01267E(18P 250mm) 37" BN39-01267F(18P 350mm)	32" BN96-12723J 37" BN96-12723K 40" BN96-12723L 46" BN96-12723M 55" BN96-12723N	32" BN96-13685A 37" BN96-13685B 40" BN96-13685C 46" BN96-13685D 55" BN96-12685E
Photo