

SAMSUNG

LED TV

Chassis : U85A

Model : UA32F45*0A*

UAF53*0A***

UAF55**A***

SERVICE^{Manual}

LED TV



UAF5500A***

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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



For continued safety, do not attempt to modify the circuit board.

Disconnect the AC power and DC power jack before servicing.

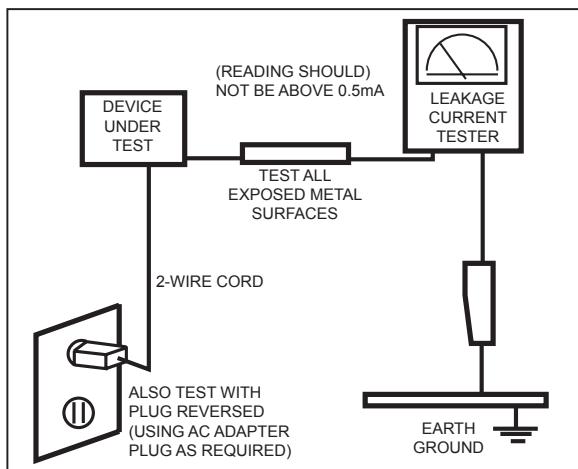
1-1-2. Servicing the LED TV

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 monitor 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 monitor.
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:



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).

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 the blades 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. Static Electricity 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 monitor.
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.



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.
8. If an equipment is provided with a replaceable battery, and if replacement by an incorrect type could result in an explosion (for example, with some lithium batteries), the following applies:



CAUTION

- Risk of explosion if battery is replaced by an incorrect type dispose of used batteries according to the instructions.
- Do not dispose of batteries in a fire.
- Do not short circuit, disassemble or overheat the batteries.
- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
- Do not be exposed to excessive heat such as sunshine, fire or the like.

2. Product Specifications

2-1. Product Information

2-1-1. Model Comparison

Model	UE**F5500		
Front View	 <small>* W : Width H : High D : Depth</small>		
Detail View			
Front Color	Black (Panel)		
Dimensions (W x H x D)	32F45	Set with Stand	750.9 x 476.9 x 207.8 mm / 29.6 x 18.8 x 8.2 inches
		Set without Stand	750.9 x 456.6 x 59.3 mm / 29.6 x 18.0 x 2.3 inches
	32F53 32F55	Set with Stand	738.0 x 509.6 x 265.0 mm / 29.1 x 20.1 x 10.4 inches
		Set without Stand	738.0 x 445.4 x 49.0 mm / 29.1 x 17.5 x 1.9 inches
	40F53 40F55	Set with Stand	928.2 x 615.5 x 265.0 mm / 36.5 x 24.2 x 10.4 inches
		Set without Stand	928.2 x 552.3 x 49.4 mm / 36.5 x 21.7 x 1.9 inches
	46F53 46F55	Set with Stand	1059.6 x 700.0 x 307.3 mm / 41.7 x 27.6 x 12.1 inches
		Set without Stand	1059.6 x 626.2 x 49.4 mm / 41.7 x 24.7 x 1.9 inches
	50F55	Set with Stand	1135.4 x 741.8 x 307.3 mm / 44.7 x 29.2 x 12.2 inches
		Set without Stand	1135.4 x 668.0 x 49.8 mm / 44.7 x 26.3 x 2.0 inches

2. Product specifications

Weight	32F45	Set with Stand	5.6 kg / 12.3 lbs
		Set without Stand	5.3 kg / 11.7 lbs
	32F53 32F55	Set with Stand	5.7 kg / 12.6 lbs
		Set without Stand	5.0 kg / 11.0 lbs
	40F53 40F55	Set with Stand	8.9 kg / 19.6 lbs
		Set without Stand	8.0 kg / 17.6 lbs
	46F53 46F55	Set with Stand	11.5 kg / 25.4 lbs
		Set without Stand	10.8 kg / 23.8 lbs
	50F55	Set with Stand	14.7 kg / 32.4 lbs
		Set without Stand	13.0 kg / 28.7 lbs
Panel Type	Anti Glare		
Internal Memory	4 GByte		
DDR	1 GByte		
Feature	Smart TV		

2-1-2. Feature & Specifications

Model	UA32F55**A* / UA32F5300A* (M or W: DVB-T, K: DVB-T2, R: READY)			
Feature				
<ul style="list-style-type: none"> Digital-TV, RF, 3-HDMI, 1-Component, 1-A/V, 2-USB2.0, LAN Brightness : 300 cd/m² Dynamic Contrast Ratio : Mega Contrast Response Time : 6.5 ms CMR : 120 				
Specifications				
Item	Description			
LCD Panel	32 inch FHD 60Hz			
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)			
Display Colors	16.7 M 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	74.25 MHz			
Active Display (H x V)* * Horizontal x Vertical	698.4(H) X 392.9(V) (mm) / 27.5(H) X 15.5(V) (inches)			
AC Power Voltage & Frequency	AC 220 V ~ 240 V / AC 100 V ~ 240 V, 50 Hz / 60 Hz			
Power Consumption	86 / 85 W (Under 0.3 W, Stand by)			
Dimensions Set (W x H x D)* * Width x High x Depth	Set with Stand	738.0 x 509.6 x 265.0 mm / 29.1 x 20.1 x 10.4 inches		
	Set without Stand	738.0 x 445.4 x 49.0 mm / 29.1 x 17.5 x 1.9 inches		
Weight	Set with Stand	5.7 kg / 12.6 lbs		
	Set without Stand	5.0 kg / 11.0 lbs		
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)		
	System	DVB-T/C/T2C(depend on country), PAL , SECAM , NT4.43		
	Sound	PAL-B/G/I/D/K, Nicam, Dolby Digital Plus/Pulse		
Environmental Considerations	Operating Temperature: 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity: 10% ~ 80%, non-condensing Storage Temperature: -4°F ~ 113°F (-20°C ~ 45°C) Storage Humidity: 5% ~ 95%, non-condensing			
Audio Specifications	MAX Internal Audio Output Power : Each 10 W(Left/Right) Equalizer : 5 Band Output Frequency : <ul style="list-style-type: none"> RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz 			
Note : Dolby Digital Plus/Pulse, USB2.0, Film mode, Energy Saving, Eco sensor, SmartTV				

2. Product specifications

Model	UA40F55**A* / UA40F53**A* (M or W: DVB-T, K: DVB-T2, R: READY)			
Feature				
<ul style="list-style-type: none"> Digital-TV, RF, 3-HDMI, 1-Component, 1-A/V, 2-USB2.0, LAN Brightness : 300 cd/m² Dynamic Contrast Ratio : Mega Contrast Response Time : 6.5 ms CMR : 100 				
Specifications				
Item	Description			
LCD Panel	40 inch FHD 60Hz			
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)			
Display Colors	16.7 M 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	74.25 MHz			
Active Display (H x V)* * Horizontal x Vertical	885.6(H) X 498.2(V) (mm) / 34.9(H) X 19.6(V) (inches)			
AC Power Voltage & Frequency	AC 220 V ~ 240 V / AC 100 V ~ 240 V, 50 Hz / 60 Hz			
Power Consumption	115 / 117 W (Under 0.3 W, Stand by)			
Dimensions Set (W x H x D)* * Width x High x Depth	Set with Stand	928.2 x 615.5 x 265.0 mm / 36.5 x 24.2 x 10.4 inches		
	Set without Stand	928.2 x 552.3 x 49.4 mm / 36.5 x 21.7 x 1.9 inches		
Weight	Set with Stand	8.9 kg / 19.6 lbs		
	Set without Stand	8.0 kg / 17.6 lbs		
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)		
	System	DVB-T/C/T2C(depend on country), PAL , SECAM , NT4.43		
	Sound	PAL-B/G/I/D/K, Nicam, Dolby Digital Plus/Pulse		
Environmental Considerations	Operating Temperature: 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity: 10% ~ 80%, non-condensing Storage Temperature: -4°F ~ 113°F (-20°C ~ 45°C) Storage Humidity: 5% ~ 95%, non-condensing			
Audio Specifications	MAX Internal Audio Output Power : Each 10 W(Left/Right) Equalizer : 5 Band Output Frequency : <ul style="list-style-type: none"> RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz 			
Note : Dolby Digital Plus/Pulse, USB2.0, Film mode, Energy Saving, Eco sensor, SmartTV				

Model	UA46F55**A* / UA46F53**A* (M or W: DVB-T, K: DVB-T2, R: READY)			
Feature				
<ul style="list-style-type: none"> Digital-TV, RF, 3-HDMI, 1-Component, 1-A/V, 2-USB2.0, LAN Brightness : 300 cd/m² Dynamic Contrast Ratio : Mega Contrast Response Time : 6.5 ms CMR : 100 				
Specifications				
Item	Description			
LCD Panel	46 inch FHD 60Hz			
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)			
Display Colors	16.7 M 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	74.25 MHz			
Active Display (H x V)* <small>* Horizontal x Vertical</small>	1018.1(H) X 572.7(V) (mm) / 40.1(H) X 22.5(V) (inches)			
AC Power Voltage & Frequency	AC 220 V ~ 240 V / AC 100 V ~ 240 V, 50 Hz / 60 Hz			
Power Consumption	117 / 119 W (Under 0.3 W, Stand by)			
Dimensions Set (W x H x D)* <small>* Width x High x Depth</small>	Set with Stand	1059.6 x 700.0 x 307.3 mm / 41.7 x 27.6 x 12.1 inches		
	Set without Stand	1059.6 x 626.2 x 49.4 mm / 41.7 x 24.7 x 1.9 inches		
Weight	Set with Stand	11.5 kg / 25.4 lbs		
	Set without Stand	10.8 kg / 23.8 lbs		
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)		
	System	DVB-T/C/T2C(depend on country), PAL , SECAM , NT4.43		
	Sound	PAL-B/G/I/D/K, Nicam, Dolby Digital Plus/Pulse		
Environmental Considerations	Operating Temperature: 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity: 10% ~ 80%, non-condensing Storage Temperature: -4°F ~ 113°F (-20°C ~ 45°C) Storage Humidity: 5% ~ 95%, non-condensing			
Audio Specifications	MAX Internal Audio Output Power : Each 10 W(Left/Right) Equalizer : 5 Band Output Frequency : <ul style="list-style-type: none"> RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz 			
Note : Dolby Digital Plus/Pulse, USB2.0, Film mode, Energy Saving, Eco sensor, SmartTV				

2. Product specifications

Model	UA50F55**A* (M or W: DVB-T, K: DVB-T2, R: READY)			
Feature				
<ul style="list-style-type: none"> Digital-TV, RF, 3-HDMI, 1-Component, 1-A/V, 2-USB2.0, LAN Brightness : 300 cd/m² Dynamic Contrast Ratio : Mega Contrast Response Time : 6.5 ms CMR : 100 				
Specifications				
Item	Description			
LCD Panel	50 inch FHD 60Hz			
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)			
Display Colors	16.7 M 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	74.25 MHz			
Active Display (H x V)* <small>* Horizontal x Vertical</small>	1023.0(H) X 577.6(V) (mm) / 40.3(H) X 22.7(V) (inches)			
AC Power Voltage & Frequency	AC 220 V ~ 240 V / AC 100 V ~ 240 V, 50 Hz / 60 Hz			
Power Consumption	139 / 143 W (Under 0.3 W, Stand by)			
Dimensions Set (W x H x D)* <small>* Width x High x Depth</small>	Set with Stand	1135.4 x 741.8 x 307.3 mm / 44.7 x 29.2 x 12.2 inches		
	Set without Stand	1135.4 x 668.0 x 49.8 mm / 44.7 x 26.3 x 2.0 inches		
Weight	Set with Stand	14.7 kg / 32.4 lbs		
	Set without Stand	13.0 kg / 28.7 lbs		
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)		
	System	DVB-T/C/T2C(depend on country), PAL , SECAM , NT4.43		
	Sound	PAL-B/G/I/D/K, Nicam, Dolby Digital Plus/Pulse		
Environmental Considerations	Operating Temperature: 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity: 10% ~ 80%, non-condensing Storage Temperature: -4°F ~ 113°F (-20°C ~ 45°C) Storage Humidity: 5% ~ 95%, non-condensing			
Audio Specifications	MAX Internal Audio Output Power : Each 10 W(Left/Right) Equalizer : 5 Band Output Frequency : <ul style="list-style-type: none"> RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz 			
Note : Dolby Digital Plus/Pulse, USB2.0, Film mode, Energy Saving, Eco sensor, SmartTV				

Model	UA32F45**A* (M or W: DVB-T, K: DVB-T2, R: READY)			
Feature				
<ul style="list-style-type: none"> Digital-TV, RF, 3-HDMI, 1-Component, 1-A/V, 2-USB2.0, LAN Brightness : 300 cd/m² Dynamic Contrast Ratio : Mega Contrast Response Time : 6.5 ms CMR : 120 				
Specifications				
Item	Description			
LCD Panel	32 inch FHD 60Hz			
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)			
Display Colors	16.7 M colors			
Maximum Resolution	Horizontal : 1366 Pixels Vertical : 768 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	74.25 MHz			
Active Display (H x V)* <small>* Horizontal x Vertical</small>	703.4(H) X 397.8(V) (mm) / 27.7(H) X 15.7(V) (inches)			
AC Power Voltage & Frequency	AC 220 V ~ 240 V / AC 100 V ~ 240 V, 50 Hz / 60 Hz			
Power Consumption	68 / 70 W (Under 0.3 W, Stand by)			
Dimensions Set (W x H x D)* <small>* Width x High x Depth</small>	Set with Stand	750.9 x 476.9 x 207.8 mm / 29.6 x 18.8 x 8.2 inches		
	Set without Stand	750.9 x 456.6 x 59.3 mm / 29.6 x 18.0 x 2.3 inches		
Weight	Set with Stand	5.6 kg / 12.3 lbs		
	Set without Stand	5.3 kg / 11.7 lbs		
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)		
	System	DVB-T/C/T2C(depend on country), PAL , SECAM , NT4.43		
	Sound	PAL-B/G/I/D/K, Nicam, Dolby Digital Plus/Pulse		
Environmental Considerations	Operating Temperature: 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity: 10% ~ 80%, non-condensing Storage Temperature: -4°F ~ 113°F (-20°C ~ 45°C) Storage Humidity: 5% ~ 95%, non-condensing			
Audio Specifications	MAX Internal Audio Output Power : Each 10 W(Left/Right) Equalizer : 5 Band Output Frequency : <ul style="list-style-type: none"> RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz 			
Note : Dolby Digital Plus/Pulse, USB2.0, Film mode, Energy Saving, SmartTV				

2-2. Accessories

Product	Description	Code. No	Remark
	Remote Control & Batteries (AAA x 2)	AA59-00790A (AU) AA59-00793A (NZ,SG) AA59-00797A (Etc.)	
	Power Cord	3903-000845 (AU,NZ) 3903-000847 (SG) 3903-000849 (Etc.)	
	Owners Manual	BN68-04827A (AU) BN68-04827F (NZ) BN68-04827C (SG) BN68-04827B (Etc.)	

3. Disassembly and Reassembly

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



WARNING

This LED TV contains electrostatically sensitive devices. Use caution when handling these components.

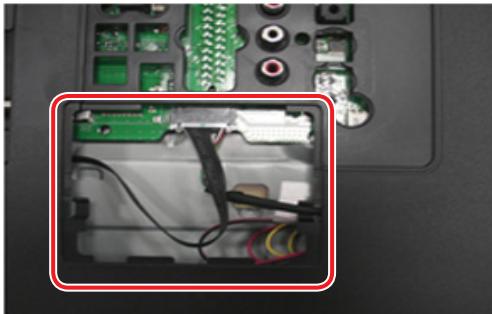


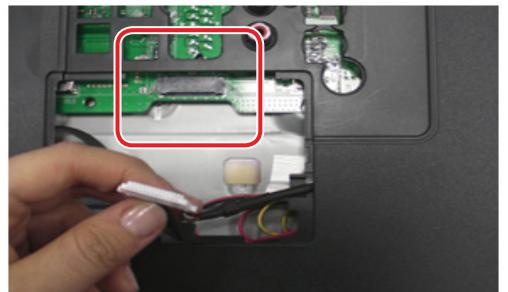
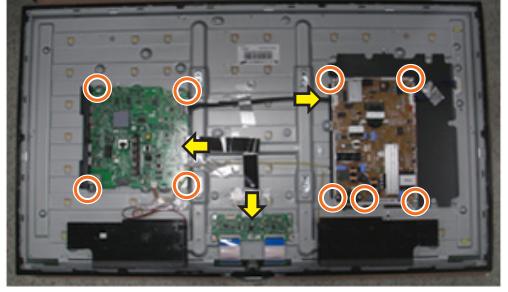
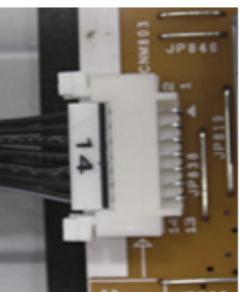
CAUTION

1. Disconnect the LED TV from the power source before disassembly.
2. Follow these directions carefully; never use metal instruments to pry apart the cabinet.
3. If there is no additional comment, it is same for all inches.

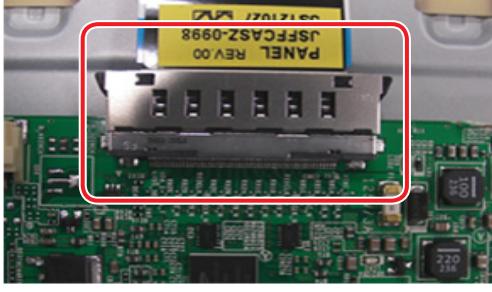
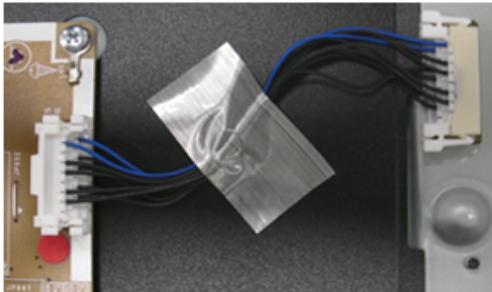
Description	Picture Description	Screws
1 Place TV face down on cushioned table.		
2 Remove 4 screws from the Stand and Remove Stand.		 6003-001782

3. Disassembly and Reassemble

Description	Picture Description	Screws
3 Remove 15 screws of Rear Cover.		 6003-001782  6003-002755
4 Remove the Cover Jack.	 	
5 Lift up Rear Cover slightly from the bottom.		

Description	Picture Description	Screws
6 Disconnect the Function Assy Cable.		
7 Remove the Rear Cover.		
8 Remove 9 screws of Main Board and Power Board.		 6001-003016
9 Remove the Speakers and Power Cables.	  	

3. Disassembly and Reassemble

Description	Picture Description	Screws
10 Remove the LVDS Cable and Panel Drive Cable.	 	
11 Completed disassembly.		



NOTE

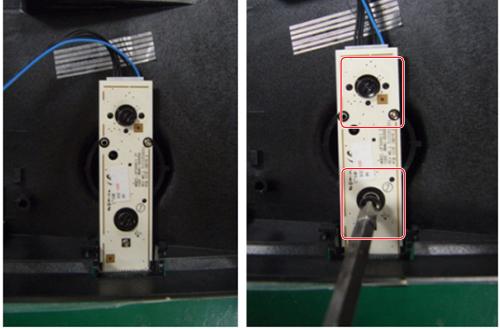
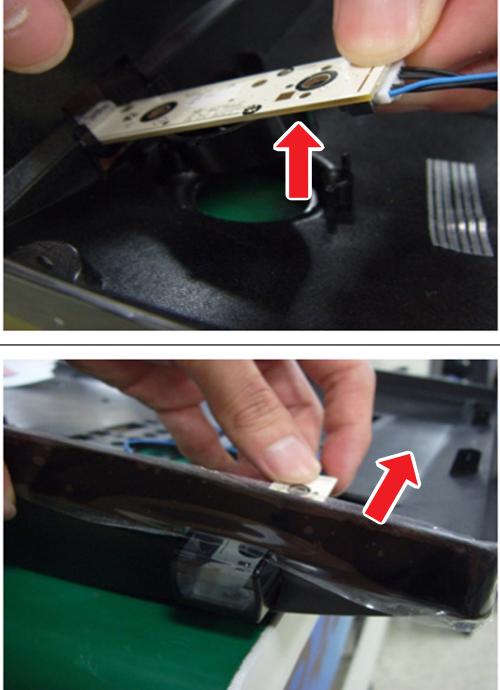
Reassembly procedures are in the reverse order of disassembly procedures.

■ Screw Size

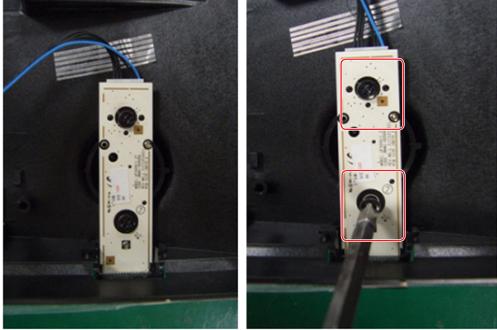
Code No.	COLOR	A (mm)	B (mm)	C (mm)	Q'ty	Screw Image
6003-001782	BLACK	7.80~8.20	1.85~1.95	3.81~3.91	32" : 10EA, 40" : 17EA, 46": 20EA, 50" : 20EA	
6001-002755	BLACK	7.1~7.5	1.9~2.0	2.98~3.02	32" : 2EA, 40"/46"/50": 4EA	
6001-003016	WHITE	5.6~6.0	1.15~1.25	2.92~2.98	9EA	

3-2. Assy Board P-Jog Switch & Ir

■ How to disassembly

Description	Picture Description	Refer
<p>1 Loosen 2 screws.</p>		
<p>2 Pull out a jog function.</p>		

■ How to assembly

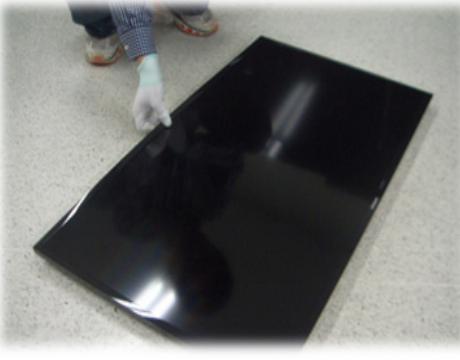
Description	Picture Description	Refer
1 Insert a jog function.		
2 Put 2 screws.		

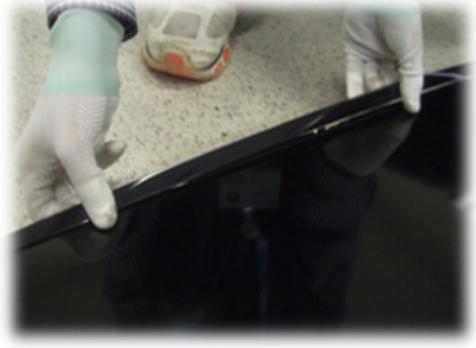
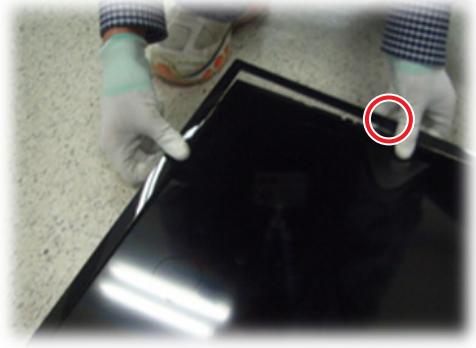
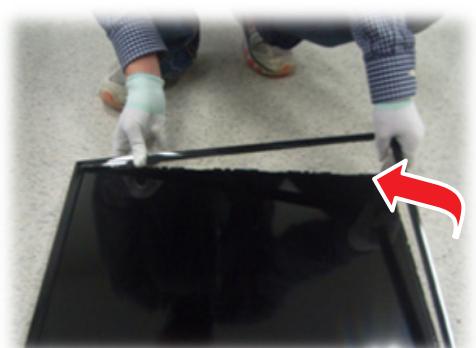
When you want to ignore the funtion key actions

Option			
Control	Config Option	Navigation Key Func	0 : New Function (Naviagtion) Key [Default]
Debug			1 : Old Function (Touch) Key
SVC			2 : Do not work Function key
ADC/WB			
Advanced			

3-3. Disassembly(PTC)

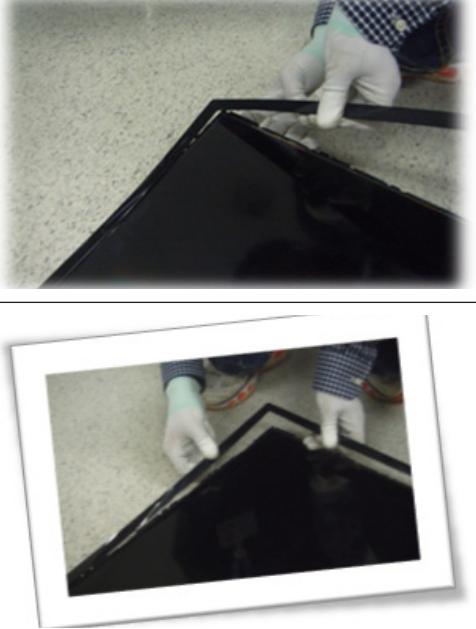
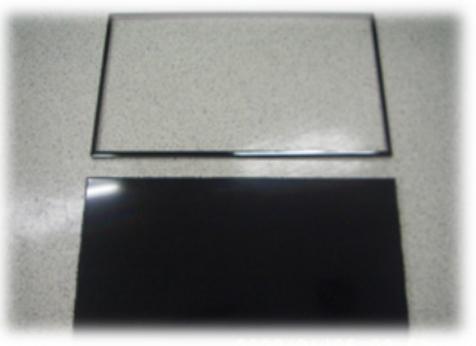
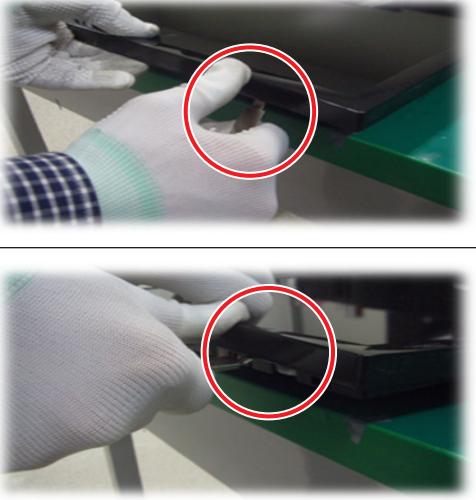
■ How to disassembly

Description	Picture Description	Refer
<p>1 Place TV face up on cushioned table.</p>		
<p>2 Products at the top of the central TOP-CHASSIS is rotated by 45 degrees outward and pulls.</p>	 	

Description	Picture Description	Refer
<p>3 Pull in the same way from the center of the top.</p>	 	
<p>4 Pull the left part of the product as shown while holding the raised portion on figure 3.</p>		
<p>5 Pull the bottom part of the product as figure 2 while holding the raised portion on figure 4.</p>		

3. Disassembly and Reassemble

Description	Picture Description	Refer
<p>6 As shown in the picture, Lift the bottom of the TOP-CHASSIS.</p>	 	
<p>7 Pull the products at the bottom of the right side of the chassis.</p>	 	

Description	Picture Description	Refer
<p>8 Lift the bottom of the chassis with one hand and holding the bottom of the product after you pull the right side of the product chassis.</p>		
<p>9 Disassembly is complete.</p>		
<p>! CAUTION To use JIG : Does not lift the chassis by hand, JIG using the lift.</p>		



Reassembly procedures are in the reverse order of disassembly procedures.

4. Troubleshooting

4-1. Troubleshooting

■ Previous Check

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. How to distinguish if the problem is caused by Main Board or T-Con Board.
 - **No Video** : If the problem is No Video but BLU is on and Indication LED is blinking repeatedly and faster than normal booting, replace the T-Con Board.
 - **Distorted Picture** : Check the inner patterns.

For All mode

X12	FOX_FT1 FRC Post	Picture	Problem
OK	OK	NG	Main Board or Signal Source
NG	OK	NG	Main Board
NG	NG	NG	Main or LVDS cable or T-con or Panel

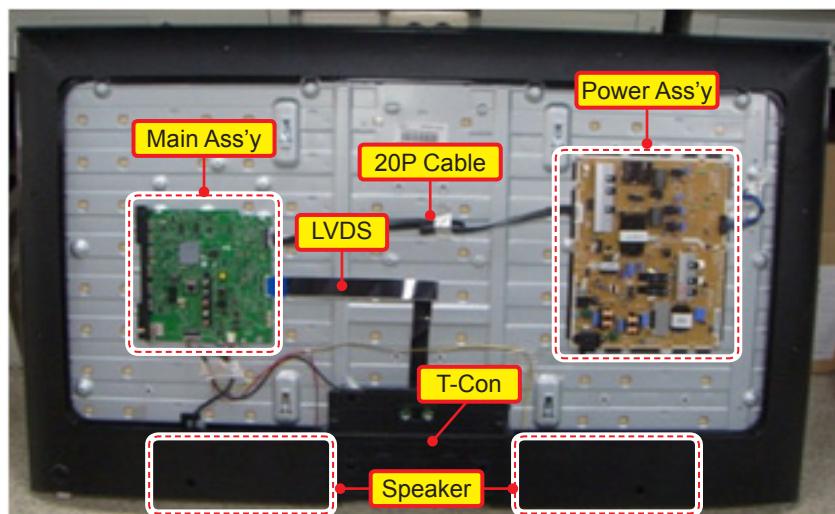
Only for HDMI mode (additional check)

HDMI	Picture	Problem
OK	NG	There is no problems after HDMI IC check HDMI source or HDMI jack.
NG	NG	There is no problems before HDMI IC check X10+ pattern or LVDS cable or T-con.

■ How to check inner pattern?

1. Factory mode. ((mute → 1 → 8 → 2 → Power on when TV is in 'stand-by mode')
2. Move to SVC menu.
3. Move to Test Pattern.
4. Check inner patterns.

■ Inside View



4-2. How to Check Fault Symptom

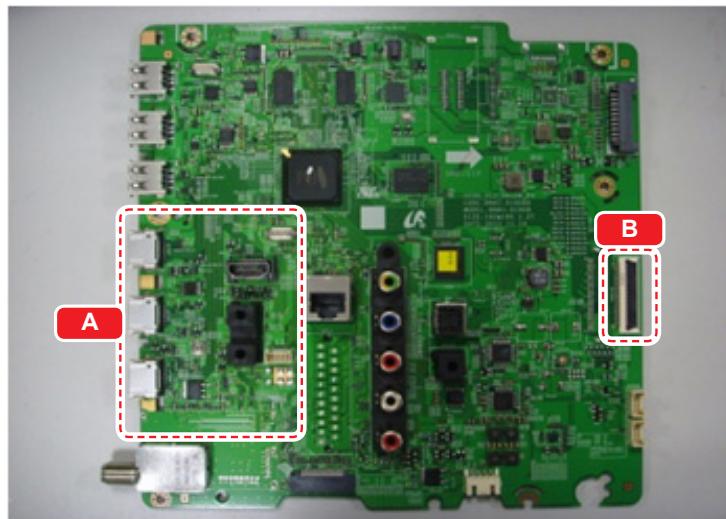
■ No Video (HDMI 1, 2, 3 - Digital Signal)

*Refer to the next page to check the location such as CN201 or IC201 SVC Manual mentioned.

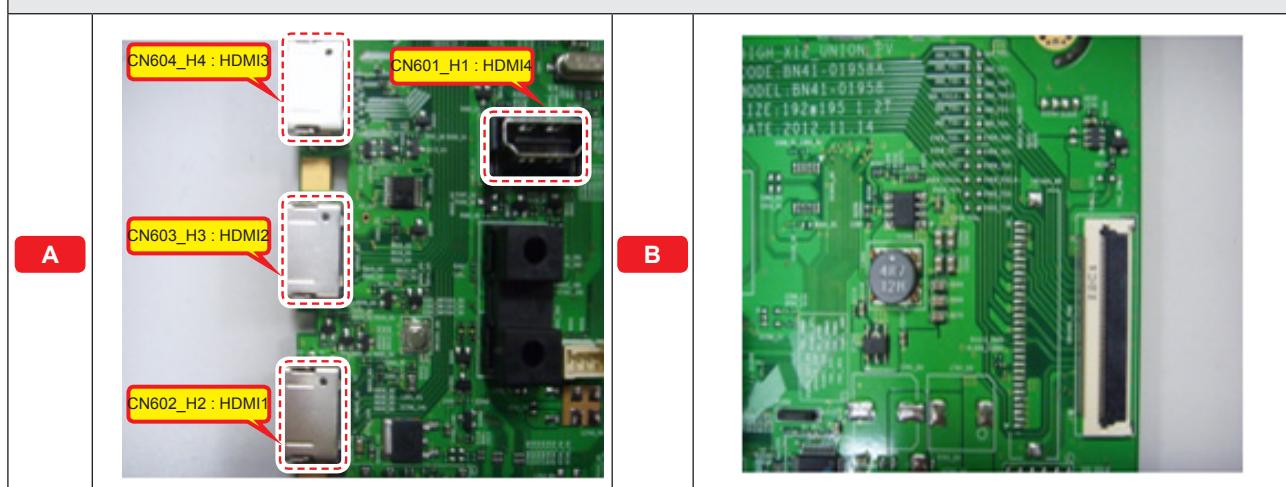
Symptom	<ul style="list-style-type: none"> • Audio is normal but no picture is displayed on the screen.
Major checkpoints	<ul style="list-style-type: none"> • Check the HDMI source. • Check the HDMI switch. • This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	<pre> graph TD A["Power indicator LED is off. Lamp(Backlight) on, no video ?"] -- Yes --> B["Check the HDMI source and check the connection of HDMI cable ?"] A -- No --> C["Check a set in the 'Stand-by mode'."] B -- Yes --> D["Check the signal at Input of Main board ? HDMI1 Clk : Pin #10, #12 of CN602_H2 DATA : Pin #7, #9, #4, #6, #1, #3 of CN602_H2 HDMI2 Clk : Pin #10, #12 of CN603_H3 DATA : Pin #7, #9, #4, #6, #1, #3 of CN603_H3 HDMI3 Clk : Pin #10, #12 of CN604_H4 DATA : Pin #7, #9, #4, #6, #1, #3 of CN604_H4 HDMI4 Clk : Pin #10, #12 of CN601_H1 DATA : Pin #7, #9, #4, #6, #1, #3 of CN601_H1"] B -- No --> E["Input the HDMI signal properly."] D --> F["Check CN601~4. Check HDMI cable. Change the Main Ass'y or Check IC1001(X12). Change the Main Ass'y."] D --> G["Check IC1001(X12). Change the Main Ass'y."] D --> H["Please, Contact Tech support."] F --> I["Check the LVDS clk signal at output of Main board.(TX) TX2_CLK : ODD_TXCLK_DN/DP TX4_CLK : EVEN_TXCLK_DN/DP"] I -- Yes --> J["Check the LVDS cable? Replace the T-con / LCD panel?"] I -- No --> K["Please, Contact Tech support."] J -- No --> L["Please, Contact Tech support."] </pre>
Caution	Make sure to disconnect the power before working on the IP board.

■ Location of Parts

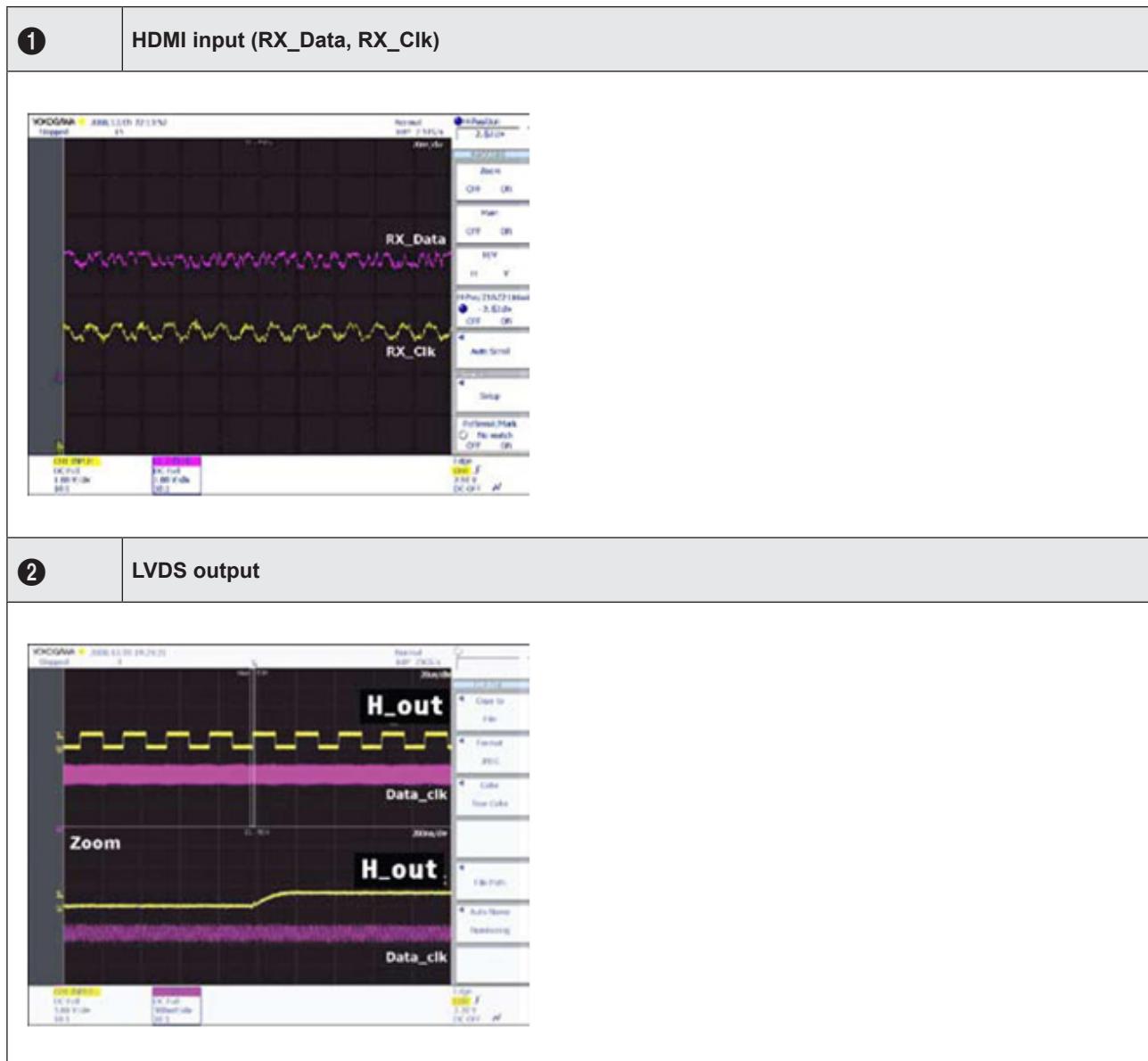
Main Board_Front



Detail



■ WAVEFORMS

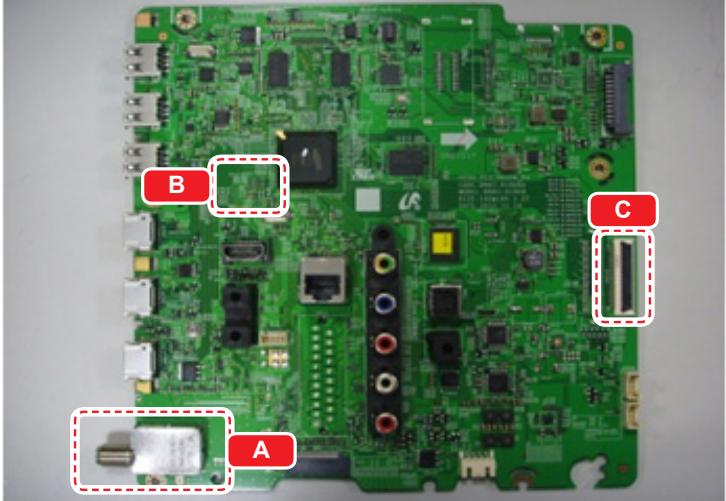
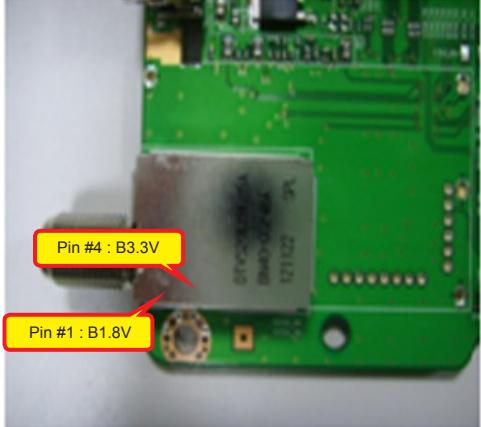
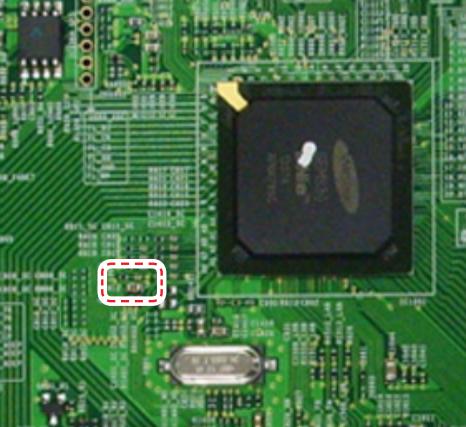


■ No Video (Tuner_CVBS)

*Refer to the next page to check the location such a CN201 or IC201 SVC Manual mentioned.

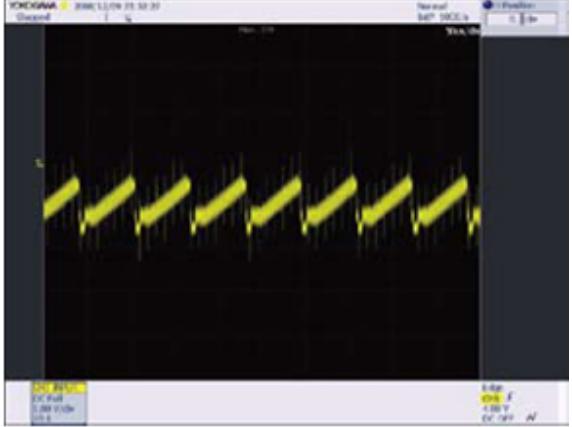
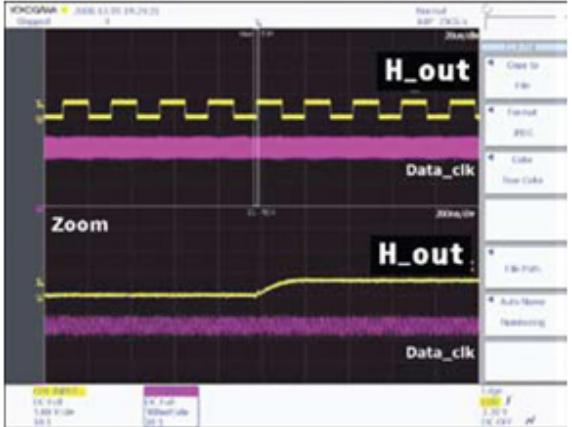
Symptom	<ul style="list-style-type: none"> • Audio is normal but no picture is displayed on the screen.
Major checkpoints	<ul style="list-style-type: none"> • Check the Tuner CVBS source. • Check the Tuner. • This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	<pre> graph TD A["Power indicator LED is off. Lamp(Backlight) on, no video ?"] -- Yes --> B["Check the RF source and check the connection of RF cable ?"] A -- No --> C["Check a set in the 'Stand-by mode'."] B -- Yes --> D["Check the Power of Tuner ? Pin #4 of Tuner : B3.3V_Tuner Pin #1 of Tuner : B1.8V_Tuner"] B -- No --> E["Input the RF source properly."] D -- Yes --> F["① Check the CVBS data out of IC1001 ? C807 : Tuner CVBS"] D -- No --> G["Change the Main Ass'y."] F -- Yes --> H["② Check the LVDS clk signal at output of Main board.(TX) TX2_CLK : ODD_TXCLK_DN/DP TX4_CLK : EVEN_TXCLK_DN/DP"] F -- No --> I["Check IC1001(X12). Change the Main Ass'y."] H -- Yes --> J["③ Check the LVDS cable? Replace the T-con / LCD panel?"] H -- No --> K["Check IC1001(X12). Change the Main Ass'y."] J -- Yes --> L["Please, Contact Tech support."] J -- No --> M["Please, Contact Tech support."] </pre>
Caution	Make sure to disconnect the power before working on the IP board.

■ Location of Parts

Main Board_Front			
			
Detail			
A		B	
C			

4. Troubleshooting

■ WAVEFORMS

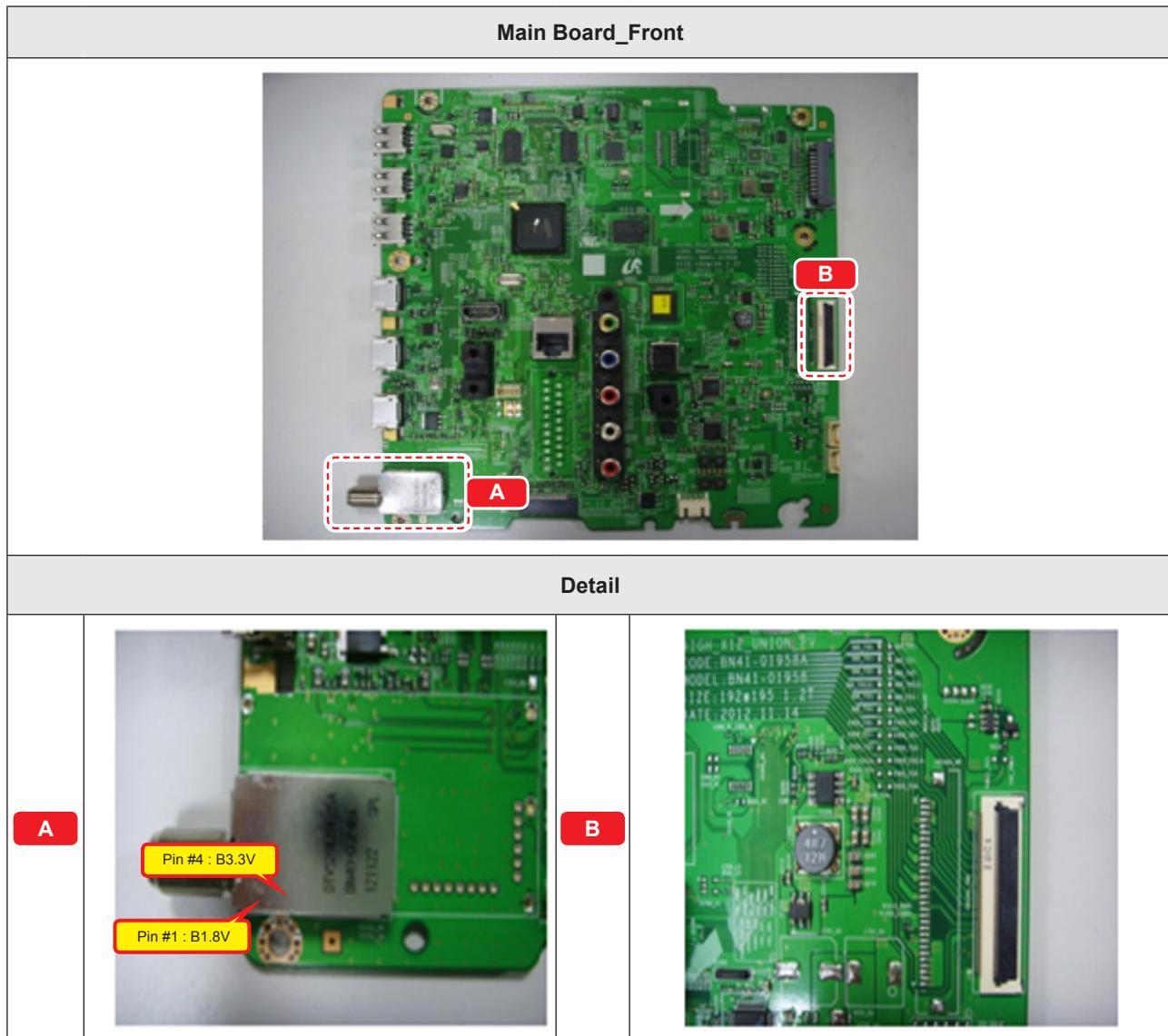
①	CVBS OUT (Grey Bar)
	
②	LVDS output
	

■ No Video (Tuner DTV)

*Refer to the next page to check the location such as CN201 or IC201 SVC Manual mentioned.

Symptom	<ul style="list-style-type: none"> • Audio is normal but no picture is displayed on the screen.
Major checkpoints	<ul style="list-style-type: none"> • Check the DTV source. • Check the Tuner. • This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	<pre> graph TD A["Power indicator LED is off. Lamp(Backlight) on, no video ?"] -- Yes --> B["Check the RF source and check the connection of RF cable ?"] A -- No --> C["Check a set in the 'Stand-by mode'."] B -- Yes --> D["Check the 'signal strength' in Self Diagnosis menu Strength is enough ?"] B -- No --> E["Input the RF source properly."] D -- Yes --> F["Check the Power of Tuner ? Pin #4 of Tuner : B3.3V_Tuner Pin #1 of Tuner : B1.8V_Tuner"] D -- No --> G["Check the D-TV source."] F -- Yes --> H["Check the LVDS clk signal at output of Main board.(TX) TX2_CLK : ODD_TXCLK_DN/DP TX4_CLK : EVEN_TXCLK_DN/DP"] F -- No --> I["Change the Main Ass'y."] H -- Yes --> J["Check the LVDS cable? Replace the T-con / LCD panel?"] H -- No --> K["Please, Contact Tech support."] </pre>
Caution	Make sure to disconnect the power before working on the IP board.

■ Location of Parts



■ WAVEFORMS

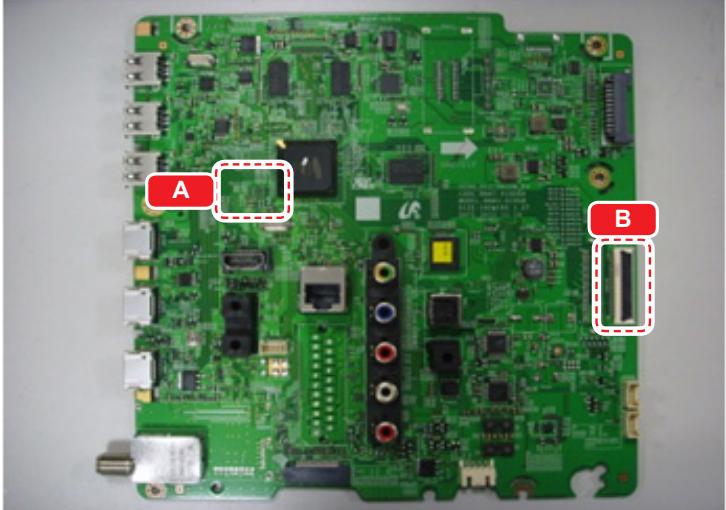
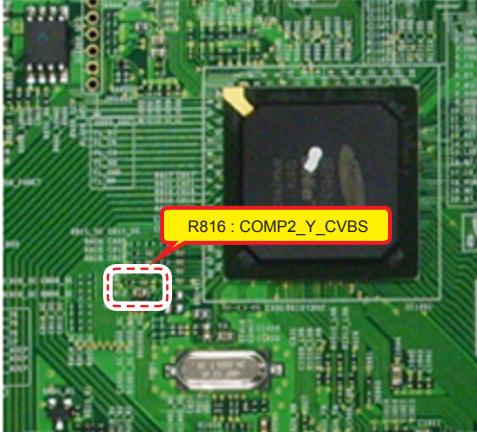


■ No Video (Video AV)

*Refer to the next page to check the location such as CN201 or IC201 SVC Manual mentioned.

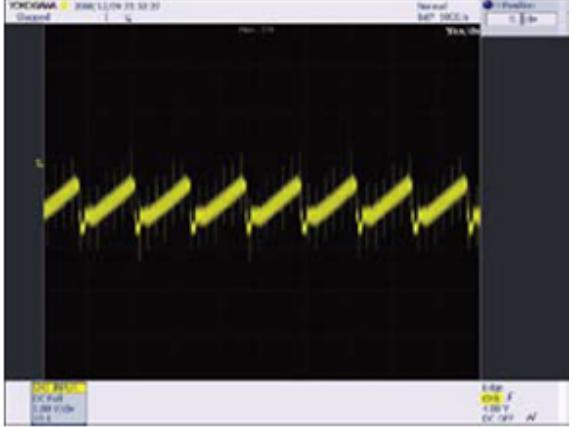
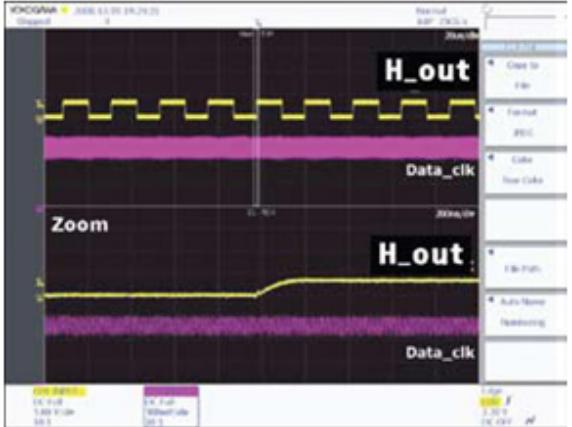
Symptom	<ul style="list-style-type: none"> • Audio is normal but no picture is displayed on the screen.
Major checkpoints	<ul style="list-style-type: none"> • Check the Video CVBS source • This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	<pre> graph TD A["Power indicator LED is off. Lamp(Backlight) on, no video ?"] -- Yes --> B["Check the video source and check the connection of video cable?"] A -- No --> C["Check a set in the 'Stand-by mode'."] B -- Yes --> D["Check the LVDS clk signal at output of Main board.(TX) TX2_CLK : ODD_TXCLK_DN/DP TX4_CLK : EVEN_TXCLK_DN/DP"] B -- No --> E["Input the video source properly."] D -- Yes --> F["Check the LVDS cable? Replace the T-con / LCD panel?"] D -- No --> G["Check IC1001(X12). Change the Main Ass'y."] F -- No --> H["Please, Contact Tech support."] </pre> <p>②</p>
Caution	Make sure to disconnect the power before working on the IP board.

■ Location of Parts

Main Board_Front		
		
Detail		
A	 R816 : COMP2_Y_CVBS	B

4. Troubleshooting

■ WAVEFORMS

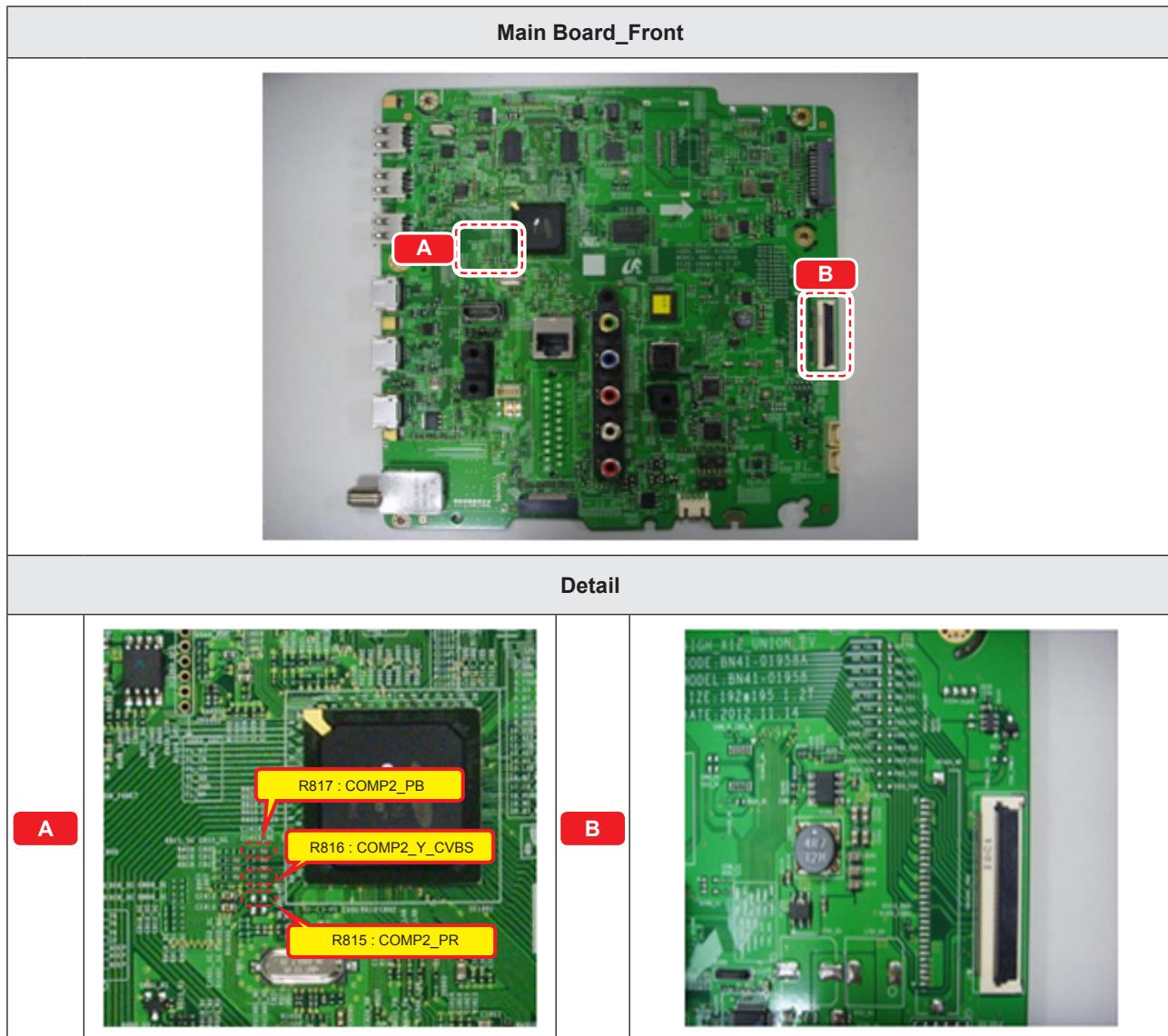
①	CVBS OUT (Grey Bar)
	
②	LVDS output
	

■ No Video (Component)

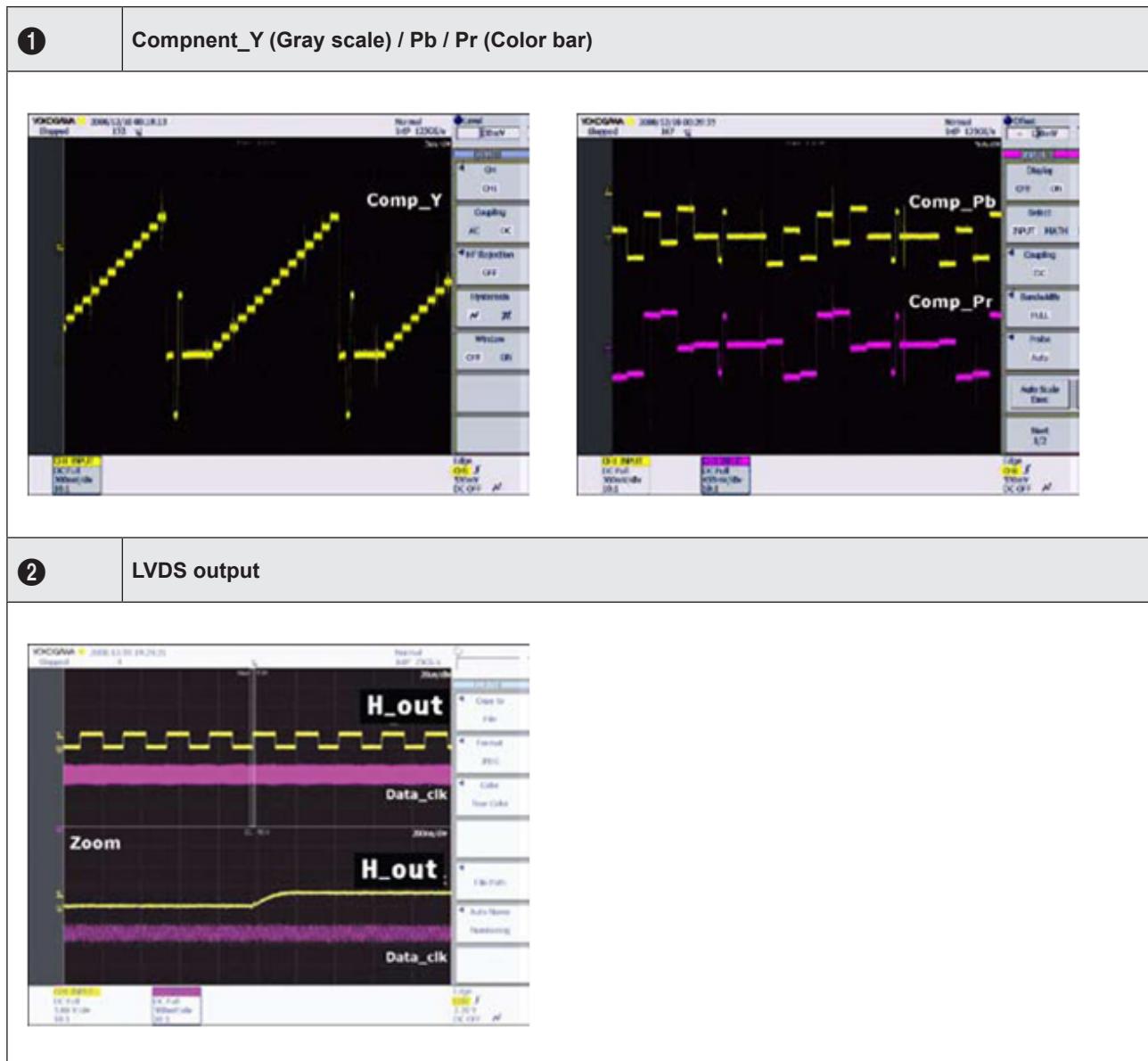
*Refer to the next page to check the location such as CN201 or IC201 SVC Manual mentioned.

Symptom	<ul style="list-style-type: none"> • Audio is normal but no picture is displayed on the screen.
Major checkpoints	<ul style="list-style-type: none"> • Check the Component source. • This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	<pre> graph TD A["Power indicator LED is off. Lamp(Backlight) on, no video ?"] -- Yes --> B["Check the component source and check the connection of component cables(Y,Pb,Pr) ?"] B -- Yes --> C["Does the component data appear at ? COMP2_Y_CVBS : R816 Pb : R817 Pr : R815"] C -- Yes --> D["Check the LVDS clk signal at output of Main board.(TX) TX2_CLK : ODD_TXCLK_DN/DP TX4_CLK : EVEN_TXCLK_DN/DP"] D -- Yes --> E["Check the LVDS cable? Replace the T-con / LCD panel?"] E -- No --> F["Please, Contact Tech support."] E -- Yes --> G["Check a set in the 'Stand-by mode'."] G -- No --> H["Input the component source properly."] H -- No --> I["Check CN502. Change the Main Assy"] I -- No --> J["Check IC1001(X12). Change the Main Ass'y."] </pre>
Caution	Make sure to disconnect the power before working on the IP board.

■ Location of Parts



■ WAVEFORMS

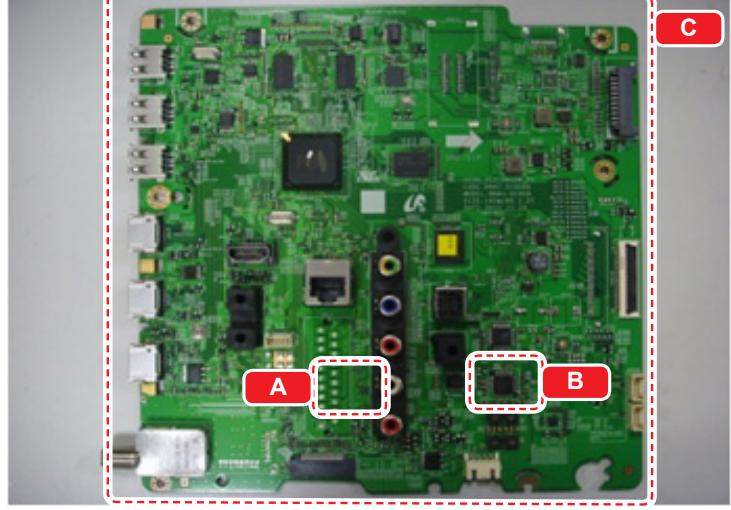
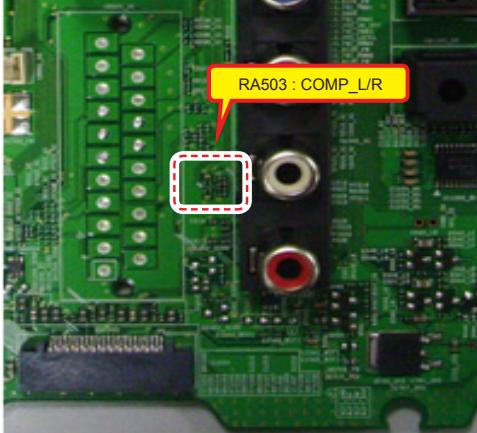
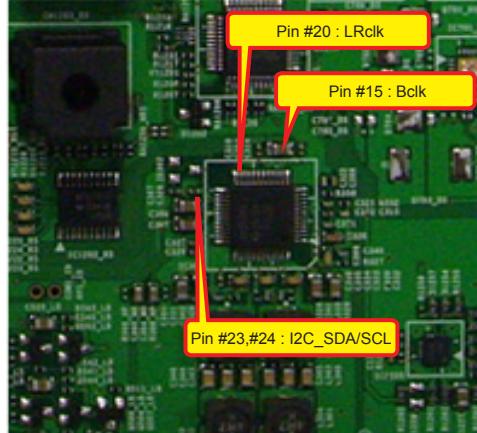
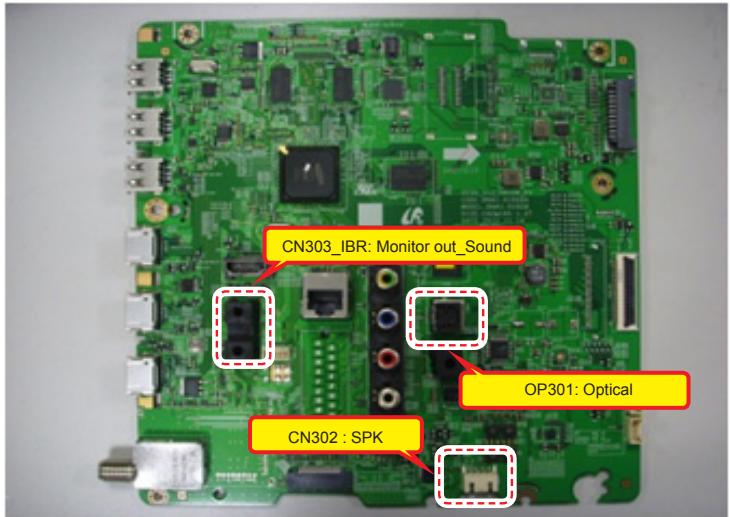


■ No Sound (1.Speaker 2.Monitor_out, 3.Optical)_X12

*Refer to the next page to check the location such a CN201 or IC201 SVC Manual mentioned.

Symptom	<ul style="list-style-type: none"> • Video is normal but there is no sound.
Major checkpoints	<ul style="list-style-type: none"> • When the speaker connectors are disconnected or damaged. • When the sound processing part of the Main Board is not functioning. • Speaker defect.
Diagnostics	<pre> graph TD A["Check the source and check the connection of sound cable (Comp) ?"] -- Yes --> B["Check the signal at input of Main board? AV, COMP L/R : RA503"] A -- No --> C["Input the sound source properly."] B -- Yes --> D["Check the DATA between the Audio IC's ? Pin #15 of IC301 : Bclk Pin #20 of IC301 : LRclk Pin #23,#24 of IC301 : I2C_SDA/SCL"] B -- No --> E["Check CN502. Change the Main Assy."] D -- Yes --> F["1. Check the Speaker sound data at CN302 2. Check the Monitor out sound data at CN303_IBR 3. Does the SODIF OUT sound data appear at ? OP301"] D -- No --> G["Check IC301. Change the Main Assy."] F -- Yes --> H["Replace speaker ?"] F -- No --> I["Please, Contact Tech support."] </pre>
Caution	Make sure to disconnect the power before working on the IP board.

■ Location of Parts

Main Board_Front		
	Detail	
	 <p>A: RA503 : COMP_L/R</p> <p>B: Pin #20 : LRclk Pin #15 : Bclk Pin #23,#24 : I2C_SDA/SCL</p>	C
A		
C	 <p>CN303_IBR: Monitor out_Sound</p> <p>CN302 : SPK</p> <p>OP301: Optical</p>	

4. Troubleshooting

■ WAVEFORMS



4-3. Factory Mode Adjustments

4-3-1. Detail Factory Option


NOTE

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

■ 5500_5300

Model Name		UA32F5*00	UA40F5*00	UA46F5*00
Panel	Vendor	AUO LCM	SDC SHARP	SDC
	Code	BN07-01259A BN95-01109A	BN95-00887A BN95-00909A	BN95-00891A
	Spec.	HF320BGA-B1 HF320BGS-V1	LSF400HM02 LK400D3HB7K	LSF460HN02
SMPS	PD Board	BN44-00605A	BN44-00645A	BN44-00611A
MAIN ASSY (depend on country)	Chassis Ass'y	BN91-10540Y	BN91-10540Z	BN91-10596A
	PBA Ass'y code	BN94-06295Y	BN94-06295Z	BN94-06309D
Byte	Item			
0	Factory Reset	-	-	-
1	Type	32R6AF0S 32H6AF0S	40A6AF0S 40H6AF0S	46A6AF0S
2	Local Set	AD_AU_NZ2		
3	SW Model	F5500		
4	BOM Model	5500		
5	Tuner	SIADI		
6	Ch table	NONE		
7	Country	-		
8	Front Color	U-S-C-5K		

■ 5500, 5300, 4500

Model Name		UA50F5*00	UA32F4500
Panel	Vendor	AUO AUO	CMI
	Code	BN07-01278A BN07-01278B	BN07-01263A
	Spec.	HF500BGA-B1 HF500BGA-B2	HF320AGM-C1
SMPS	PD Board	BN44-00612A	BN44-00604B
MAIN ASSY (depend on country)	Chassis Ass'y	BN91-10323X	BN91-10318F
	PBA Ass'y code	BN94-06364A	BN94-06174F
Byte	Item		
0	Factory Reset	-	-
1	Type	50R6AF0S 50R6AF0S	32P6AH0S
2	Local Set	AD_AU_NZ2	
3	SW Model	F5500	F4500
4	BOM Model	5500	4500
5	Tuner	SI_ADI	
6	Ch table	NONE	NONE
7	Country	-	
8	Front Color	U-S-C-5K	NONE

4-3-2. Entering Factory Mode

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

- If you do not have Factory remote control



- If you have Factory remote control



- If you don't have Factory remote control, can't control some menus

■ Initial SERVICE MODE DISPLAY State

Option	T-MST12UABC-xxxx T-MST12DEUS-xxxx BT Version : xxxx Camera Version : xxxx E-Manual : xxxx EDID SUCCESS CALIB : AV/COMP/PC/HDMI/ Option : 40H6AF0S,AD_AU_NZ2,5500,NONE USB RS232C : OFF
Control	SDAL-X12-MAIN-xxxx-xxxx RFS : "X12 0071" KER/201x-xx-xx KERNEL : 8.0837, D / Onboot :xxxx.x Backend IC[x], Data Ver : xxxx TCON Version : xxxx DTP-DTVTD-xxxx
Debug	Model : UA40F5500 Wired MAC SUCCESS Wireless MAC SUCCESS DRM : Crt O, Nf O, Wv O, Hc O, Dc O, Mx O, MI O Factory Data Ver : 97 EERC Version : 51 DTP-BP-HAL-3183 DTP-AP-CNC-3151 DTP-AP-MM-3145 DTP-AP-WP-3148 DTP-BP-MW-3156 DTP-BP-APP-3156 POP-FLA-13-TEMP Date of purchase : mm/dd/yyyy
SVC	
ADC/WB	
Advanced	

4-3-3. Factory Data


Note

- Version of the software is written in 0002.
- Black : I should not be possible to adjust or change that does not require a change item
Blue : Adjustment Services for the corresponding
Red : Items that are secured

■ Option

Factory Menu Name	Data	Range	Remark	Key
Factory Reset	-			
Type	40H6AF0S	32P6AH0S (UF4500) 32R6AF0S/40H6AF0S/46A6AF0S/50R6AF0S(UF5500)		
Local Set	AD_AU_NZ2	EU/EU_GER (depended on buyer code)		
SW Model	UF5500	UF5500/UF4500		
BOM Model	5500	5500/4500		
TUNER	SIADI	Do not change		
Ch Table	NONE			
MRT Option				
Front Color	U-S-C-5K	NONE/U-S-C-5K		
LVDS FORMAT	JEIDA			
Language_Arabic	US			
Region	USA			
PnP Language	ENG_US			
WIFI REGION	S			
OTN Support	ON			
OTA Support	OFF			
TTX	OFF			
China HD	OFF			
NT Conversion	OFF			
Num of DTV	1			
Num of AV	1			
Num of COMP	1			
Num of HDMI	4			
Num of SCART	0			
Num of USB Port	3			
Num of HeadPhone	0			
Num of RVU	1			

Factory Menu Name	Data	Range	Remark	Key
Num of Display	2			
Num of IPTV	0			
Num of RUI	0			
Num of PVR RECORD	0			
TOOLS Support	40			
LNA Support	OFF			
24Px4 Support	OFF			
BD Wise Support	ON			
Data Service Support	OFF			
PVR Support	OFF			
CI Support	OFF			
LEDMotionPlus Support	ON			
Natural Mode Support	ON			
Relax Mode Support	OFF			
HDMI/DVI SEL	4			
Select LCD/PDP	LCD			
Wall Mount	OFF			
HV Flip		HV Flip / H Filp / OFF		
Light Effect	OFF			
e-Pop Default	1			
CAMERA Support	OFF			
NETWORK Support	3			
EcoSensor Support	ON			
3D Support	ON			
BT Support	ON			
BT ADDRESS				
Engineer Option				
Auto Power	MEMORY			
Type Of PANEL KEY	None			
5 Way Function Key	R BACK			
Contents Bar	OFF			
Cable Modulation	QAM			
Standby led on/off	OFF			
Recognition Support				
IF AGC	0			

4. Troubleshooting

Factory Menu Name	Data	Range	Remark	Key
D AGC	0			
PH BW	0			
FQ BW	0			
PH RATE	0			
PD EN	0			
PEQ Inx	0			
WF Scale				
WF Type	0			
Nu of Network Stream	1			
DP V Size	0			
Backend Device	FOX-FT1			
BT_AUDIO_ON_OFF	OFF			
Config_AV_PATH				
ECO Standby	OFF			
Fast Logo Delay	0			
Num of PANEL KEY	6			

■ Control

Factory Menu Name	Data	Range	Remark	Key
EDID				
EDID ON/OFF	OFF			
EDID WRITE ALL	...			
EDID WRITE HDMI	...			
EDID Ver	...	HDMI 1.3/HDMI1.2		
EDID Port				
Sub Option				
RS-232 Jack	UART	Debug/UART		
Watchdog	OFF			
Checksum	0x0000			
Fast Boot in Production	OFF			
USB Serial	OFF			
Eeprom Reset				
ECO IC TYPE	NONE			
Info Link Server Type	development			
Info Link Country	None			

Factory Menu Name	Data	Range	Remark	Key
TTX Group	-			
Visual Test	-			
MediaPlayDB	-			
OPTION_SWU				
OTN Server Type	operating			
OTN Test Server	OFF			
SWU Reset				
SWU Duration	OFF			
SWU Fail Test	OFF			
OPTION_NUM				
Num of ATV	1			
Num of SVIDEO	0			
Num of PC	0			
Num of DVI	0			
Num of OPTICAL Link	1			
Num of MEDIA	1			
Num of Tuner	1			
Num of ISP	1			
RF Remocon Support	OFF			
CDD mode	-			
DPMS Support	OFF			
Num of IPTV CIP	0			
Num of CI	0			
Num of DECODER	0			
T-CON Device				
BOARD CONTROL	OFF			
HP LINE	LineOut			
RM				
Server Type	Operating			
RTS Mode	OFF			
PSA				
FKP Download1	0			
FKP Download2	0			
LMK threshold	3			
Low threshold	10			
High threshold	15			
CSB	ON			

4. Troubleshooting

Factory Menu Name	Data	Range	Remark	Key
CLB	ON			
PDP Option				
Pixel Shift Test	OFF			
Logic SW	0			
Panel Temperature	0			
LOGIC Waveform Day	0			
Logic CheckSum	0			
MRT	0			
SAPC Timer				
APC Speed				
Hotel Option				
Hospitality Mode	OFF			
Power On	...			
Menu OSD	...			
Operation	...			
Music Mode	...			
External Source	...			
Eco Solution	...			
Cloning	...			
Shop Option				
Shop Mode	OFF			
Exhibition Mode	OFF			
3D Cube	OFF			
Asia Option				
Unbalance	OFF			
AF Level adjust	3			
TX Power Level	0			
Mono Last Memory	OFF			
H Shaking	OFF			
Sound				
Carrier_Mute	OFF			
High Devi	OFF			
Speaker Delay Normal	0x6Eh			
SPDIF PCM Gain	-9dB			
FM M Prescale	0x30h			
FM Prescale	0x00h			
AM Prescale	0x32h			

Factory Menu Name	Data	Range	Remark	Key
NICAM Prescale	0x48h			
BTSC Mono Prescale	0x19h			
BTSC stereo Prescale	0x2Fh			
BTSC SAP Prescale	0x2Bh			
A2Ident High THID	31			
A2Ident Low THID	0			
Pilot Level High Thld	0x28h			
Pilot Level Low Thld	0x10h			
Carrier2 Amp High THID	4			
Carrier2 Amp Low THID	3			
Carrier2 SNR High THR	16			
Carrier2 SNR Low THR	80			
Sig Error On	35			
Sig Error Off	41			
Amp Model	TAS5745			
Amp Volume	0xcbh			
Amp Scale	0x35h			
Amp Check Sum	0x000821B2			
Woofer Type	0			
Woofer Scale	0			
Woofer Check Sum	0x8ah			
Woofer Local EQ Checksum	0			
Speaker EQ	ON			
PEQ Test	Ready			
Local Speaker EQ	0			
Local EQ Checksum	0			
Speaker cut-off Freq	4			
Audio-IP Test				
SRS Tuning Parm	0			
TruBass-Checksum	0			
Mic Scale	0			
Subwoofer Support	0			
India Sound	OFF			
AudioDock BT delay	50			
Wall Filter Type	0			
Wiselink Delay Menu	90			

4. Troubleshooting

■ Debug

Factory Menu Name	Data	Range	Remark	Key
Spread Spectrum				
LVDS Spread	ON			
DDR Spread	1.0% Spectrum			
Period	30K			
Amplitude	1			
HD SSC ON/Off	ON			
HD SSC Value	1			
LVDS SSC ON/Off	ON			
LVDS SSC Value	0			
DDR SSC ON/Off	ON			
DDR SSC Value	1			
FRC LVDS SSC ON/OFF	ON			
FRC LVDS SSC MRR	10			
FRC LVDS SSC MFR	1			
FRC LVDS SSC Period	1			
FRC LVDS SSC Modulation	1			
FRC DDR SSC ON/OFF	ON			
FRC DDR SSC MRR	15			
FRC DDR SSC MFR	1			
FRC DDR SSC Period	1			
FRC DDR SSC Modulation	1			
DDR Margin				
A CTRL_OFFSET_0_3	0x0			
A CTRL_OFFSET_D	0x0			
B CTRL_OFFSET_0_3	0x0			
B CTRL_OFFSET_D	0x0			
ND ADJ Support	OFF			
MICOM POWER OFF	OFF			
RF Mute Time	6ms			
CI+1.3	OFF			
FRC				
FRC FDISPLAY ON/OFF	0			
3D FDISPLAY ON/OFF	OFF			
PC Mode ON/OFF	OFF			
Tuner Margin	10			
MPEG Margin	1000			

Factory Menu Name	Data	Range	Remark	Key
H.264 Margin	8			
CAM Wait Time				
TS Clock delyd	0			
TCON_TEMP READ	0			
TEMP LAST	60			
DCC VERSION	0x0			
DCC CHK SEL	0			
DCC CHECK LOCAL	0x0			
DCC CHECK TOTAL	0x0			
MulitACC Checksum	0			
IIC Bus stop	OFF			
Tuner Status				
DVB				
SNR				
BER				
Signal Strength				
Bandwidth				
Frequency				
LNA Status				
FFT				
Modulation				
Code Rate				
GI				
Hier Modulation				
Frequency offset				
Timing offset				
AGC				
UCB				
PLL Type				
DEMOD Type				
TPS Lock				
RS Lock				
SSI				
SQI				
Firmware Version				
ISDB-T				
FFT Size_1				

4. Troubleshooting

Factory Menu Name	Data	Range	Remark	Key
Guard Interval_1				
Freq. Offset_1				
SNR_1				
IF AGC_1				
TMCC Lock_1				
TS Packer_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				

■ SVC

Factory Menu Name	Data	Range	Remark	Key
Test Pattern				
Pattern Sel	OFF			
Logic Pattern Sel	...			
Logic Level Sel	...			
FRC Pre Test Pattern	0			
FRC Post Test Pattern	0			
FRC3D Fdisplay	OFF			
FRC3D PC Mode	OFF			
SOC TCON Test Pattern	0			
SOC TCON Pattern Level	255			
SOC TCON FRC Pattern	0			

Factory Menu Name	Data	Range	Remark	Key
HDMI WB Pattern	OFF			
HDMI Pattern Sel	0			
Parma Pre Test Pattern	0			
Parma Post Test Pattern	0			
Panel Display Time	0Hr			
SVC Info	0			
Delete S/N	0			
Upgrade				
T-CON Usb Download	Failute			
T-CON CheckSum	Error			
Logic Usb D/L	...			
SUBMICOM UPGRADE	Failute			
BT UPGRADE				
BT FREEPAIRING	ON			
Function Upgrade	Failute			
FRC3D FW Upgrade				
Camera Upgrade				
Mic Upgrade				
CPLD USB Download				
JP MICOM UPGRADE	Failute			
DP MICOM UPGRADE	Failute			
Jump Upgrade	Failute			
Smart Hub Reset	0			
ER Count				
WD Count	0			
AR Count	0			
WIFI ER Count	0			
BT ER Count	0			
HDMI Err Cnt	0			
Camera ER Count	0			
LOG(View Log)				
Select Log Type	NVRAM			
Log View	0			
Delete Log				
Debug Log Down				
Emergency Log Copy				

4. Troubleshooting

Factory Menu Name	Data	Range	Remark	Key
Self Diagnosis				
Loop Back				
LAN Test				
AV Audio Test				
DVIN Audio Test				
CVBS Test				
COMP Test				
USB HUB Test				
HDMI Test				
SCART Audio Test				
SCART CVBS Test				
SCART RGB Test				
CPU				
DDR				
FLASH				
EEPROM				
Sound AMP				
HDMI Switch IC				
USB HUB IC				
WIFI				
LVDS				
T-CON/FRC				
PCB Test				
MOIP				
App Self Test				
Device self Test				
Voltage				
EcoSensor				
BT				
EXT Sound Inspection				
Woofer Sound Inspection	NONE			
ATV CH Inspection				
DTV CH Inspection				
Satellite CH Inspection				
IPERF	Stopped			
OPTION HDMI				
Expert				

Factory Menu Name	Data	Range	Remark	Key
DVB CI				
CAL Data Backup	...			
CAL Data Restore	...			

■ ADC/WB

Factory Menu Name	Data	Range	Remark	Key
ADC				
AV Calibration	Success			
Comp Calibration	Success			
PC Calibration	Success			
HDMI Calibration	Success			
ADC Result				
1st_Y_GH	258			
1st_Y_GL	128			
1st_Cb_BH	...			
1st_Cb_BL	...			
1st_Cr_RH	...			
1st_Cr_RL	...			
2nd_R_L	132			
2nd_G_L	132			
2nd_B_L	132			
2nd_R_H	70			
2nd_G_H	70			
2nd_B_H	70			
White Balance				
R-Offset	128			
G-Offset	128			
B-Offset	128			
R-Gain	128			
G-Gain	128			
B-Gain	128			
WB_W2_R_Offset	128			
WB_W2_B_Offset	128			
WB_W2_R_Gain	164			
WB_W2_B_Gain	63			
WB_N_R_Offset	128			
WB_N_B_Offset	128			

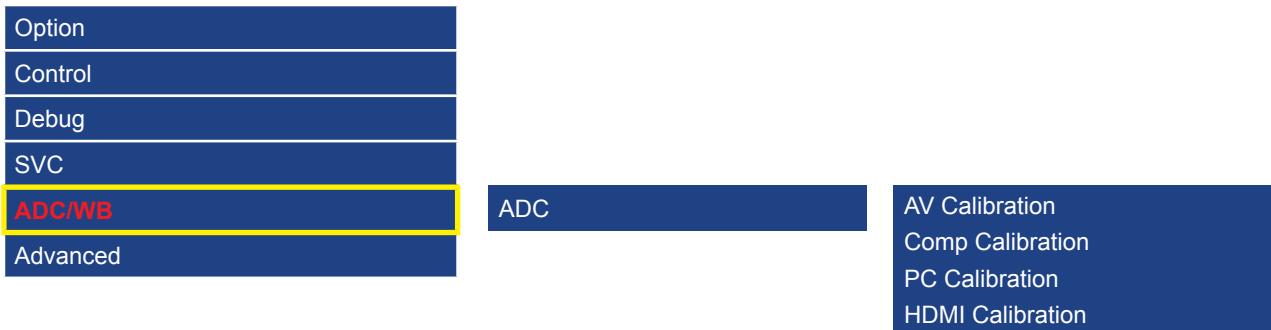
4. Troubleshooting

Factory Menu Name	Data	Range	Remark	Key
WB_N_R_Gain	151			
WB_N_B_Gain	108			
MGA				
MGA On/Off	OFF			
R1_Gain	...			
B1_Gain	...			
G1_Gain	...			
R2_Gain	...			
B2_Gain	...			
G2_Gain	...			
R3_Gain	...			
B3_Gain	...			
G3_Gain	...			
R4_Gain	...			
B4_Gain	...			
G4_Gain	...			
R5_Gain	...			
B5_Gain	...			
G5_Gain	...			
R6_Gain	...			
B6_Gain	...			
G6_Gain	...			
R7_Gain	...			
B7_Gain	...			
G7_Gain	...			
R8_Gain	...			
B8_Gain	...			
G8_Gain	...			
R9_Gain	...			
B9_Gain	...			
G9_Gain	...			
R10_Gain	...			
B10_Gain	...			
G10_Gain	...			

4-4. White Balance

4-4-1. Calibration

1. Into the Factory Mode.
2. Select SVC Menu.
3. Select ADC/WB menu.
4. Select ADC menu.



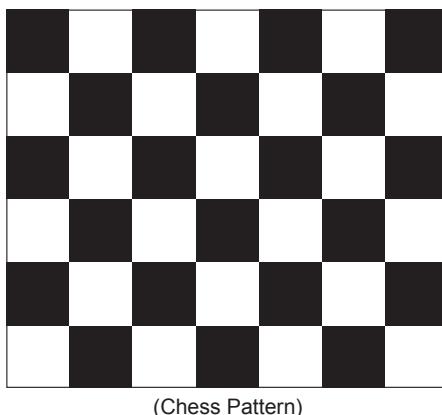
4-4-2. Service Adjustment

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

■ Color Calibration

- Adjust Specification

Source	Setting Mode	Pattern	Use Equipment
HDMI	1280 x 720@60 Hz	Pattern #24 (Chess Pattern)	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_#1)	Perform in NTSC 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	Perform in 720p B&W Pattern #24	Lattice

■ Method of Color Calibration (AV)

1. Apply the NTSC Lattice (N0. 3) 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” 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)

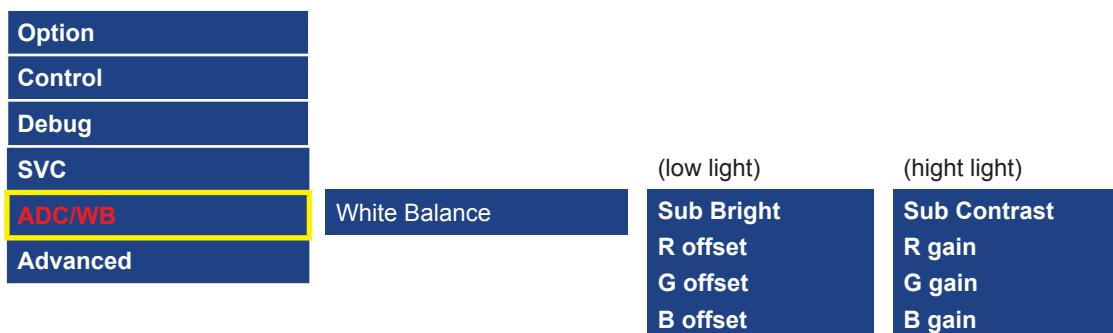
1. Apply the 720p Lattice (N0. 6) pattern signal to the Component IN 1 port.
2. Press the Source key to switch to “Component1” mode.
3. Enter Service mode.
4. Select the “ADC” menu.
5. Select the “Comp Calibration” menu.
6. In “Comp Calibration Off” status, press the “▶” key to perform Calibration.
7. 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 (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” 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. Adjustment

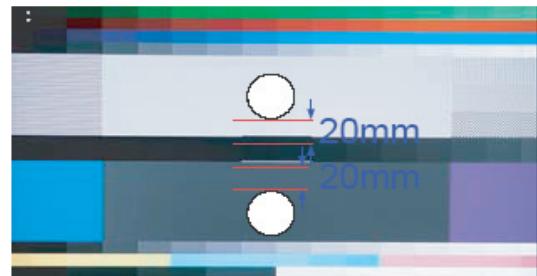
1. Into the Factory Mode.
2. Select **SVC** Menu.
3. Select **ADC/WB** menu.
4. Select **White Balance** menu.



4-5. White Ratio (Balance) Adjustment

1. You can adjust the white ratio in factory mode (1:Calibration, 3:White-Balance).
2. Since the adjustment value and the data value vary depending on the input source, you have to adjust these in CVBS, Component 1 and HDMI 1 modes.
3. The optimal values for each mode are configured by default. It varies with Panel's size and Specification.

- Equipment : CS-210
- Pattern: MIK K-7256 #92 "Flat W/B Pattern" as standard
- Altenate Equipmet : CA200& anyone Master supported pattern#92(refer to right photo)
- Use other Equipment only after comparing the result with that of the Master equipment.
- Set Aging time : 60 min



Calibration and Manual setting for WB adjustment

- HDMI : Calibration at #24 Chessboard Pattern Manual adjustment at #92 pattern (720p)
- COMP: Calibration at #24 Chessboard Pattern Manual adjustment at #92 pattern (720p)
- CVBS: Calibration at #24 Chessboard Pattern Manual adjustment at #92 pattern (NTSC)



Note

If finishing in HDMI mode, adjustment coordinate is almost same in AV/COMP mode.

White Balance Manual adjustment

Type
LED_LOW

RGB Measurement		
Levels	Code	Check
10 IRE	0x01	O
20 IRE	0x02	O
30 IRE	0x03	X
40 IRE	0x04	O
50 IRE	0x05	X
60 IRE	0x06	X
70 IRE	0x07	O
80 IRE	0x08	X
90 IRE	0x09	X
100 IRE	0x0A	O

Panel Inspection Spec.				
Levels	Check	x(±)	y(±)	Gamma(±)
10 IRE	O	0.020	0.020	0.35
20 IRE	O	0.020	0.020	0.35
30 IRE	O	0.020	0.020	0.35
40 IRE	O	0.020	0.020	0.35
50 IRE	O	0.020	0.020	0.35
60 IRE	O	0.020	0.020	NA
70 IRE	O	0.020	0.020	NA
80 IRE	O	0.020	0.020	NA
90 IRE	O	0.020	0.020	NA
100 IRE	O	NA	NA	NA

Gray Check			Adjust Spec(xyL)			2nd Adjust Spec(xyL)		
Levels	Code	Check	x(±)	y(±)	L(±)	x(±)	y(±)	L(±)
10 IRE	0x01	X	0.007	0.007	0.11	0.007	0.007	0.11
20 IRE	0x02	O	0.007	0.007	0.08	0.007	0.007	0.08
30 IRE	0x03	X	0.007	0.007	0.06	0.007	0.007	0.06
40 IRE	0x04	O	0.005	0.005	0.05	0.005	0.005	0.05
50 IRE	0x05	X	0.005	0.005	0.04	0.005	0.005	0.04
60 IRE	0x06	X	0.005	0.005	0.03	0.005	0.005	0.03
70 IRE	0x07	O	0.004	0.004	0.02	0.004	0.004	0.02
80 IRE	0x08	X	0.004	0.004	0.01	0.004	0.004	0.01
90 IRE	0x09	X	0.004	0.004	0.01	0.004	0.004	0.01
100 IRE	0x0A	X	NA	NA	NA	NA	NA	NA

Target Gamma		2.30	
Black	x	y	Contrast
	0.231	0.208	300000
Target xy	Option	x	y
	Auto	0.282	0.299

Panel Spec.		±	
Gamma	2.2	0.30	20~128
x	0.281	0.030	255
y	0.288	0.030	
ACC x	255 white	0.015	26~255
ACC y	x,y value	0.015	

Color Tone Target			Spec.	
High	x	y	x(±)	y(±)
COOL	0.274	0.286		
NORMAL	0.293	0.307	0.004	0.004
WARM2	0.328	0.353		
Low	x	y	x(±)	y(±)
COOL	NA	NA		
NORMAL	NA	NA	NA	NA
WARM2	NA	NA		

10IRE Gamma target	2.30
RetryCount	3

4-6. Detail Specifications

4-6-1. UA**F5500A*_UA**F5300AM_1

- General Information

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Product	LED	LED	LED
Cabinet Basic Code	FK	FK	FK
Series	5	5	5
Series Name	LED F5500 / F5300	LED F5500 / F5300	LED F5500 / F5300
Country	AUSTRALIA	NEW ZEALAND	SINGAPORE
Tools Support	Yes	Yes	Yes
Platform(TV)	Mstar X12	Mstar X12	Mstar X12

- Display

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Inch	32/40/46/50	32/40/46/50	32/40/46/50
Resolution	1,920 x 1,080	1,920 x 1,080	1,920 x 1,080
Ultra Clear Panel	No	No	No
Cell Light Series	N/A	N/A	N/A
Real Black Pro Panel	N/A	N/A	N/A
Clear Image Panel	N/A	N/A	N/A
Lvds Format	JEIDA	JEIDA	JEIDA
HV Flip	ON	ON	ON

- Video

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Picture Engine	HyperReal Engine	HyperReal Engine	HyperReal Engine
OLED Motion Rate	N/A	N/A	N/A
Clear Motion Rate	100	100	100
600Hz Subfield Motion	N/A	N/A	N/A
Dynamic Contrast Ratio	Mega Contrast	Mega Contrast	Mega Contrast
New Picture Differentiation	N/A	N/A	N/A
Micro Dimming	No	No	No
Cinema Smooth	N/A	N/A	N/A
Precision Black (Local Dimming)	No	No	No
Wide Color Enhancer (Plus)	Yes	Yes	Yes
Auto Motion Plus 120/240Hz	No	No	No
Motion Judder Canceller	N/A	N/A	N/A
Film Mode	Yes	Yes	Yes

Brightness	Yes	Yes	Yes
Contrast Ratio	4000:1	4000:1	4000:1
Picture	WSS,Film Mode,HDMI Black Level	WSS,Film Mode,HDMI Black Level	WSS,Film Mode,HDMI Black Level
Detail Resolution	50/60Hz	50/60Hz	50/60Hz
Response Time	6.5ms	6.5ms	6.5ms
Viewing Angle (H/V)	178/178	178/178	178/178
Natural Mode Support	Yes	Yes	Yes
Relax Mode Support	N/A	N/A	N/A

- **Audio**

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Dolby	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse
SRS / DNSe+	DTS Studio Sound	DTS Studio Sound	DTS Studio Sound
dts 2.0+Digital Out / DTS Premium Audio	DTS Premium Audio 5.1	DTS Premium Audio 5.1	DTS Premium Audio 5.1
3D Sound	No	No	No
Sound Customizer	No	No	No
Speaker Type	Down Firing + Full Range	Down Firing + Full Range	Down Firing + Full Range
Sound Output (RMS)	10W X 2	10W X 2	10W X 2
Woofer	No	No	No
Sound	Mono,Dual,Stereo,Nicam, Auto volume, DTS Studio Sound, Audio Language, Audio format	Mono,Dual,Stereo,Nicam, Auto volume, SRS-Trusurround	Mono,Dual,Stereo,Nicam, Auto volume, DTS Studio Sound, Audio Language ,Audio format
Sound Amp IC	TI TAS5745	NeoFidelity NTP7412S	TI TAS5745
Speaker Volume	10W +10W	10Wx2	10W +10W
Woofer Speaker Volume	N/A	N/A	N/A
Analog	2Ch		2Ch
Digital	Optical		Optical

- **SMART TV Functionality**

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Samsung SMART TV	N/A	N/A	N/A
Smart Guide	Yes	No	No
Family Story	Yes	Yes	Yes
Movie & TV Shows	No	No	No
Fitness	Yes	Yes	Yes
Apps	Yes	Yes	Yes
Kids	Yes	Yes	Yes

4. Troubleshooting

Social	Yes	Yes	Yes
Automated Content Recognition (ACR)	N/A	N/A	N/A
Music, Photos & Clip	Yes	Yes	Yes
Samsung SMART View	Yes (Clone View only)	Yes (Clone View only)	Yes (Clone View only)
Smart Hub	Yes	Yes	Yes
Search All	N/A	N/A	N/A
Your Video	No	No	No
Social TV	N/A	N/A	N/A
Samsung Sports Experience (SSE)	N/A	N/A	N/A
Samsung Apps	N/A	N/A	N/A
Smart Scene	No	No	No
Skype™ on Samsung TV	N/A	N/A	N/A
Web Browser	Yes	Yes	Yes
AllShare Control	No	N/A	N/A
Recommendation Bar	Yes	No	No

- **VESA Standard**

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Samsung SMART TV	M8	M8	M8

- **Smart Interaction**

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Camera Built-in	No	No	No
Face Recognition	Ready	Ready	Ready
Hand Gesture Recognition	Ready	Ready	Ready
Voice Recognition (Embedded)	No	No	No
Voice Recognition (Server)	No	No	No
VM App	N/A	N/A	N/A
NLU (Natural Language Understanding)	No	No	No
Camera App	No	No	No
HM App	N/A	N/A	N/A
Samsung TV Apps supported	Yes	Yes	Yes

- **Feature**

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Samsung 3D	No	No	No
3D Converter	No	No	No
Dual View	N/A	N/A	N/A

Samsung One Line	N/A	N/A	N/A
History	Yes	Yes	Yes
MultiTasking	N/A	N/A	N/A
Smart Phone Remote support	Yes	Yes	Yes
Smart Evolution Support	No	No	No
Extended PVR	Yes	Yes	Yes
Time Shift	Yes	Yes	Yes
Allshare Play	Yes	Yes	Yes
AllShare Cloud Storage	N/A	N/A	N/A
ConnectShare™ (USB2.0)	Movie	Movie	Movie
AllShare Cast	Yes	Yes	Yes
RUI	N/A	N/A	N/A
RVU	N/A	N/A	N/A
WiFi Direct	Yes	Yes	Yes
Wireless LAN Built-in	Yes	Yes	Yes
Wireless LAN Adaptor Support	No	No	No
ISP Bound Service	N/A	N/A	N/A
BT HID Built-in	N/A	N/A	N/A
USB HID Support	Yes	Yes	Yes
OSD Language	Local Languages	Local Languages	Local Languages
Samsung IR Blaster Support	Yes	No	No
User Interface	Golden Bridge	Golden Bridge	Golden Bridge
Digital Noise Filter	Yes	Yes	Yes
Analog Signal Booster	N/A	N/A	N/A
Network Speaker Support	N/A	N/A	N/A
MHL	No	No	No
Sound Share	N/A	N/A	No
WiDi	N/A	N/A	N/A
Regional EQ	N/A	N/A	N/A
InstaPort S (HDMI quick switch)	No	No	No
HDMI 1.4 3D Auto Setting	No	No	No
HDMI 1.4 A/Return Ch. Support	No	No	No
EPG	Yes	Yes	Yes
Analog Clean View	Yes	Yes	No
HbbTV	N/A	N/A	N/A
Teletext (TTX)	Yes	Yes	Yes
Triple Protector	N/A	N/A	N/A
Miracast	No	No	No
Anynet+ (HDMI-CEC)	Yes	Yes	Yes
BD Wise Plus	No	No	No

4. Troubleshooting

Auto Channel Search	Yes	Yes	Yes
Auto Power Off	Yes	Yes	Yes
Auto Volume Leveler	Yes	Yes	Yes
Caption (Subtitle)	Yes	Yes	Yes
2 Tuner	No	No	No
Clock&On/Off Timer	Yes	Yes	Yes
Game Mode	Yes	Yes	Yes
Battery Ready	N/A	N/A	N/A
Picture-In-Picture	Yes	Yes	Yes
Sleep Timer	Yes	Yes	Yes
Screen Burn Protection	N/A	N/A	N/A
Channel List USB-Clone	N/A	N/A	N/A
V-Chip	N/A	N/A	N/A
Embedded POP	Yes	Yes	Yes
Calibration Mode	N/A	N/A	N/A
Channel	Auto Store,Ch Guide, Signal Level, Scheduler(Reminder), Fine Tune	Auto Store,Ch Guide, SignalLevel,S cheduler(Reminder), Fine Tune	Auto Store,Ch Guide, SignalLevel, Scheduler(Reminder), Fine Tune
Plug&Play	Yes	Yes	Yes
Child Lock	Yes	Yes	Yes
Sports Mode	Advanced	Advanced	Advanced
Paratal Lock	Yes	Yes	Yes
Kids Lock	N/A	N/A	N/A
Media Play(USB & DLNA)	Yes	Yes	Yes
Bluetooth	N/A	N/A	N/A
Home Network Centre	Yes	Yes	Yes
Zero Stand-By Power	N/A	N/A	N/A
USB Copy	N/A	N/A	N/A
ACS	No	No	No
IP Video Closed Caption	No	No	No

- Additional Feature

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Self Diagnosis	Yes	Yes	Yes
Software Upgrade	Yes	Yes	Yes
HD Connection Guide	Yes	Yes	Yes
Contact Samsung	Yes	Yes	Yes

- S/W

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
MCU	X12	X12	X12
OS	Linux	Linux	Linux

- System

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
DTV Tuner	DVB-T/C	DVB-T/C	DVB-T2/C
Analog Tuner	Yes	Yes	Yes
CI/CI+	N/A	N/A	N/A
MHP / MHEG (version) / ACAP	N/A	MHEG 5	N/A
NTSC 3.58	AV Only	AV Only	AV Only
NTSC 4.43, VIT	Yes	Yes	Yes
PAL-B/G, D/K, I, I/I'	Yes	Yes	Yes
Scan Type	Progressive	Progressive	Progressive
SECAM-B/G, D/K	Yes	Yes	Yes
SECAM-B/G, D/K, L/L`	Yes	Yes	Yes
Trinorma (PAL M,N)	N/A	N/A	N/A
Broadcast System	MHEG,MHP,TTX	MHEG,MHP,TTX	MHEG,MHP,TTX
ATV Sound System	BG,I,DK,L	BG,I,DK,L	BG,I,DK,L
DTV Video System	DVBT,DVBC	DVBT,DVBC	DVBT,DVBC
DTV Sound System	Dolby	Dolby	Dolby
Tuner Vendor & Model	/	/	/

- Core Component

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
DDR SDRAM	Samsung	Samsung	Samsung
Nand Flash Memory	Samsung	Samsung	Samsung
OneNand Flash Memory	N/A	N/A	N/A
FlexOneNand Flash Memory	N/A	N/A	N/A
Serial Flash Memory	WINBOND	WINBOND	WINBOND
HDMI Switch	N/A	N/A	N/A
Display Device Vender	AUO	AUO	AUO

- Input & Output

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
HDMI	3	3	3
Resolution	1920 x 1080i 60,1920 x 1080i 50	1920 x 1080i 60,1920 x 1080i 50	1920 x 1080i 60,1920 x 1080i 50

4. Troubleshooting

DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
MHL Port	N/A	N/A	N/A
HDMI/DVI SEL	Yes	Yes	Yes
USB	2	2	2
Port 1 Type	Host	Host	Host
Port 2 Type	Host	Host	Host
Port 3 Type	N/A	N/A	N/A
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
OS	Linux	Linux	Linux
Component In (Y/Pb/Pr)	1	1	1
Composite In (AV)	1 (Common Use for Component Y)	1 (Common Use for Component Y)	1 (Common Use for Component Y)
Ethernet (LAN)	1	1	1
Headphone	No	No	No
Digital Audio Out (Optical)	1	1	1
Audio Out (Mini Jack / LR)	1	1	1
PC In (D-sub)	No	No	No
PC Audio In (Mini Jack)	No	No	No
DVI Audio In (Mini Jack)	0	0	0
RF In (Terrestrial/Cable Input)	1	1	1
RF In (Satelite Input)	No	No	No
RS232C (AV CONTROL)	No	No	No
CI Slot	N/A	N/A	N/A
Scart	N/A	N/A	N/A
Port 1 Type	N/A	N/A	N/A
Port 2 Type	N/A	N/A	N/A
Port 3 Type	N/A	N/A	N/A
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
Coaxial	No	No	No
EX-Link	No	No	No
Monitor Output	No	No	No
DVI	/	/	/
Resolution	1920 x 1080i 60	1920 x 1080i 60	1920 x 1080i 60
DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
D-Sub Resolution	N/A N/A	N/A N/A	N/A N/A

- Design

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Design	Logo Deco	Logo Deco	Logo Deco
Bezel Type	NNB	NNB	NNB
Slim Type	Slim 1	Slim 1	Slim 1
Front Color	Black	Black	Black
Light Effect (Deco)	No	No	No
Stand Type	Quad	Quad	Quad
Swivel (Left/Right)	Yes	Yes	Yes
Push & Pull Camera	N/A	N/A	N/A
Design Name	N/A	N/A	N/A
Design	Steam Mold	Steam Mold	Steam Mold
Front Resin	PC+ABS+GF15%	PC+ABS+GF15%	PC+ABS+GF15%
Stand Packing Type	Bundle	Bundle	Bundle

- Eco

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Energy Efficiency Class	/	/	/
Eco Mark	Planet First	Planet First	Planet First
Eco Label	/	/	/
Eco Sensor	Yes	Yes	Yes

- Power

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Power Supply (V)	AC220-240V 50/60Hz	AC220-240V 50/60Hz	AC220-240V 50/60Hz
Power Consumption (Max)	/	/	/
Power Consumption (Energy Saving Mode)	/	/	/
Power Consumption (Stand-by)	0.3W	0.3W	0.3W
Power Consumption (IEC 62087 Edition 2)	N/A	N/A	N/A
Peak Luminance Ratio	N/A	N/A	N/A
Yearly Power Consumption (EU standard)	N/A	N/A	N/A
Frequency (Hz)	50/60Hz	50/60Hz	50/60Hz
SMPS/IP Board	SEM	SEM	SEM

- Security

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Kensington Lock	Yes	Yes	Yes

4. Troubleshooting

- Dimension (WxHxD)

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Set Size without Stand (mm)	/	/	/
Set Size with Stand (mm)	/	/	/
Package Size (mm)	/	/	/

- Weight

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Set Weight without Stand (kg)	/	/	/
Set Weight with Stand (kg)	/	/	/
Package Weight (kg)	/	/	/

- Loading Quantity

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
20/40Ft	240/504	240/504	240/504

- Accessory

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
3D Active Glasses (Included)	No	No	No
IR Blaster (Included)	No	No	No
Wireless LAN Adaptor (Included)	Yes	No	No
Network Speaker (Included)	0	0	0
MOIP Camera (Included)	No	No	No
Wireless Keyboard (Included)	0	0	0
Battery Pack (for Battery Ready TV)	0	0	0
Remote Controller Model	N/A	N/A	N/A
Battery (for Remote Control)	TM1250A	TM1250A	TM1250A
Mini Wall Mount Support	Yes	Yes	Yes
Ultra Slim Wall Mount Support	Yes	Yes	Yes
VESA Wall Mount Support	No	No	No
Electric Wall Mount Support	Yes	Yes	Yes
Electric Stand Support	N/A	N/A	N/A
Slim Gender Cable	N/A	N/A	N/A
ANT-Cable	0	0	0
Power Cable	0	0	0
User Manual	Yes	Yes	Yes
E-Manual	Yes	Yes	Yes
Floor Stand Support	Yes	Yes	Yes
	No	No	No

- License

Item	UA**F5500AMXXY UA**F5300AMXXY	UA**F5500AMXRD UA**F5300AMXRD	UA**F5500AKXXS
Oracle JAVA	NO	NO	NO
Universial Remote Control	NO	NO	NO
MS DRM	NO	NO	NO
Movie Codec	DivX	DivX	DivX

4-6-2. UA**F5500AM_UA**F5300AM_2

- General Information

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Product	LED	LED	LED
Cabinet Basic Code	FK	FK	FK
Series	5	5	5
Series Name	LED F5500 / F5300	LED F5500 / F5300	LED F5500 / F5300
Country	IRAN	ISRAEL	INDONESIA
Tools Support	Yes	Yes	Yes
Platform(TV)	Mstar X12	Mstar X12	Mstar X12

- Display

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Inch	32/40/46/50	32/40/46/50	32/40/50
Resolution	1,920 x 1,080	1,920 x 1,080	1,920 x 1,080
Ultra Clear Panel	No	No	No
Cell Light Series	N/A	N/A	N/A
Real Black Pro Panel	N/A	N/A	N/A
Clear Image Panel	N/A	N/A	N/A
Lvds Format	JEIDA	JEIDA	JEIDA
HV Flip	ON	ON	ON

- Video

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Picture Engine	HyperReal Engine	HyperReal Engine	HyperReal Engine
OLED Motion Rate	N/A	N/A	N/A
Clear Motion Rate	100	100	100
600Hz Subfield Motion	N/A	N/A	N/A
Dynamic Contrast Ratio	Mega Contrast	Mega Contrast	Mega Contrast
New Picture Differentiation	N/A	N/A	N/A
Micro Dimming	No	No	No

4. Troubleshooting

Cinema Smooth	N/A	N/A	N/A
Precision Black (Local Dimming)	No	No	No
Wide Color Enhancer (Plus)	Yes	Yes	Yes
Auto Motion Plus 120/240Hz	No	No	No
Motion Judder Canceller	N/A	N/A	N/A
Film Mode	Yes	Yes	Yes
Brightness	Yes	Yes	Yes
Contrast Ratio	4000:1	4000:1	4000:1
Picture	WSS,Film Mode,HDMI Black Level	WSS,Film Mode,HDMI Black Level	WSS,Film Mode,HDMI Black Level
Detail Resolution	50/60Hz	50/60Hz	50/60Hz
Response Time	6.5ms	6.5ms	6.5ms
Viewing Angle (H/V)	178/178	178/178	178/178
Natural Mode Support	Yes	Yes	yes
Relax Mode Support	N/A	N/A	N/A

- **Audio**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Dolby	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse	Dolby Digital /Dolby Digital Plus
SRS / DNSe+	DTS Studio Sound	DTS STUDIO SOUND	DTS STUDIO SOUND
dts 2.0+Digital Out / DTS Premium Audio	DTS Premium Audio 5.1	DTS Premium Audio 5.1	DTS Premium Audio
3D Sound	No	No	No
Sound Customizer	No	No	No
Speaker Type	Down Firing + Full Range	Down Firing + Full Range	Down Firing + Full Range
Sound Output (RMS)	10W X 2	10W X 2	10W X 2
Woofer	No	No	No
Sound	Mono,Dual,Stereo, Nicam,Auto volume, DTS Studio Sound,Audio Language, Audio format	Mono,Dual,Stereo, Nicam,Auto volume, DTS Studio Sound,Audio Language, Audio format	Mono,Dual,Stereo, Nicam,Auto volume, DTS Studio Sound,Audio Language, Audio format
Sound Amp IC	TI TAS5745	TI TAS5745	TI TAS5745
Speaker Volume	10W +10W	10W +10W	10W +10W
Woofer Speaker Volume	N/A	N/A	N/A
Analog	2Ch	2Ch	2Ch
Digital	Optical	Optical	Optical

- **SMART TV Functionality**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Samsung SMART TV	N/A	N/A	N/A

Smart Guide	No	No	No
Family Story	Yes	Yes	Yes
Movie & TV Shows	No	No	No
Fitness	N/A	Yes	Yes
Apps	Yes	Yes	Yes
Kids	Yes	Yes	Yes
Social	Yes	Yes	Yes
Automated Content Recognition (ACR)	N/A	N/A	N/A
Music, Photos & Clip	Yes	Yes	Yes
Samsung SMART View	Yes (Clone View only)	Yes (Clone View only)	Yes (Clone View only)
Smart Hub	Yes	Yes	Yes
Search All	N/A	N/A	N/A
Your Video	No	No	No
Social TV	N/A	N/A	N/A
Samsung Sports Experience (SSE)	N/A	N/A	N/A
Samsung Apps	N/A	N/A	N/A
Smart Scene	No	No	No
Skype™ on Samsung TV	N/A	N/A	N/A
Web Browser	Yes	Yes	Yes
AllShare Control	N/A	N/A	N/A
Recommendation Bar	No	No	No

- **VESA Standard**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Samsung SMART TV	M8	M8	M8

- **Smart Interaction**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Camera Built-in	No	No	No
Face Recognition	Ready	Ready	Ready
Hand Gesture Recognition	Ready	Ready	Ready
Voice Recognition (Embedded)	No	No	No
Voice Recognition (Server)	No	No	No
VM App	N/A	N/A	N/A
NLU (Natural Language Understanding)	No	No	No
Camera App	No	No	No
HM App	N/A	N/A	N/A
Samsung TV Apps supported	Yes	Yes	Yes

4. Troubleshooting

- Feature

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Samsung 3D	No	No	No
3D Converter	No	No	No
Dual View	N/A	N/A	N/A
Samsung One Line	N/A	N/A	N/A
History	Yes	Yes	Yes
MultiTasking	N/A	N/A	0
Smart Phone Remote support	Yes	Yes	Yes
Smart Evolution Support	No	No	No
Extended PVR	Yes	Yes	No
Time Shift	Yes	Yes	No
Allshare Play	Yes	Yes	Yes
AllShare Cloud Storage	N/A	N/A	N/A
ConnectShare™ (USB2.0)	Movie	Movie	Movie
AllShare Cast	Yes	Yes	No
RUI	N/A	N/A	N/A
RVU	N/A	N/A	N/A
WiFi Direct	Yes	Yes	Yes
Wireless LAN Built-in	Yes	Yes	Yes
Wireless LAN Adaptor Support	No	No	No
ISP Bound Service	N/A	N/A	N/A
BT HID Built-in	N/A	N/A	N/A
USB HID Support	Yes	Yes	Yes
OSD Language	Local Languages	Local Languages	Local Languages
Samsung IR Blaster Support	No	No	No
User Interface	Golden Bridge	Golden Bridge	Golden Bridge
Digital Noise Filter	Yes	Yes	Yes
Analog Signal Booster	N/A	N/A	N/A
Network Speaker Support	N/A	N/A	N/A
MHL	No	No	No
Sound Share	N/A	N/A	N/A
WiDi	N/A	N/A	N/A
Regional EQ	N/A	N/A	N/A
InstaPort S (HDMI quick switch)	No	No	No
HDMI 1.4 3D Auto Setting	No	No	No
HDMI 1.4 A/Return Ch. Support	No	No	No
EPG	Yes	Yes	yes
Analog Clean View	Yes	Yes	Yes
HbbTV	N/A	N/A	N/A

Teletext (TTX)	Yes	Yes	Yes
Triple Protector	N/A	N/A	N/A
Miracast	No	No	No
Anynet+ (HDMI-CEC)	Yes	Yes	Yes
BD Wise Plus	No	No	No
Auto Channel Search	Yes	Yes	Yes
Auto Power Off	Yes	Yes	Yes
Auto Volume Leveler	Yes	Yes	Yes
Caption (Subtitle)	Yes	Yes	No
2 Tuner	No	No	No
Clock&On/Off Timer	Yes	Yes	Yes
Game Mode	Yes	Yes	Yes
Battery Ready	N/A	N/A	N/A
Picture-In-Picture	Yes	Yes	Yes
Sleep Timer	Yes	Yes	Yes
Screen Burn Protection	N/A	N/A	N/A
Channel List USB-Clone	N/A	N/A	N/A
V-Chip	N/A	N/A	N/A
Embedded POP	Yes	Yes	Yes
Calibration Mode	N/A	N/A	N/A
Channel	Auto Store,Ch Guide, Signal Level, Scheduler(Reminder), Fine Tune	Auto Store,Ch Guide, Signal Level, Scheduler(Reminder), Fine Tune	Auto Store,Ch Guide, Signal Level, Scheduler(Reminder), Fine Tune
Plug&Play	Yes	Yes	Yes
Child Lock	Yes	Yes	Yes
Sports Mode	Advanced	Advanced	Advanced
Paratal Lock	Yes	Yes	Yes
Kids Lock	N/A	N/A	N/A
Media Play(USB & DLNA)	Yes	Yes	Yes
Bluetooth	N/A	N/A	N/A
Home Network Centre	Yes	Yes	Yes
Zero Stand-By Power	N/A	N/A	N/A
USB Copy	N/A	N/A	N/A
ACS	No	No	No
IP Video Closed Caption	No	No	No

- Additional Feature

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Self Diagnosis	Yes	Yes	Yes
Software Upgrade	Yes	Yes	Yes

4. Troubleshooting

HD Connection Guide	Yes	Yes	Yes
Contact Samsung	Yes	Yes	Yes

- **S/W**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
MCU	X12	X12	X12
OS	Linux	Linux	Linux

- **System**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
DTV Tuner	DVB-T/C	DVB-T/C	DVB-T/C
Analog Tuner	Yes	Yes	Yes
CI/CI+	N/A	N/A	N/A
MHP / MHEG (version) / ACAP	N/A	N/A	N/A
NTSC 3.58	AV Only	AV Only	AV Only
NTSC 4.43, VIT	Yes	Yes	Yes
PAL-B/G, D/K, I, I/I'	Yes	Yes	Yes
Scan Type	Progressive	Progressive	Progressive
SECAM-B/G, D/K	Yes	Yes	Yes
SECAM-B/G, D/K, L/L`	Yes	Yes	Yes
Trinorma (PAL M,N)	N/A	N/A	N/A
Broadcast System	MHEG,MHP,TTX	MHEG,MHP,TTX	MHEG,MHP,TTX
ATV Sound System	BG,I,DK,L	BG,I,DK,L	BG,I,DK,L
DTV Video System	DVBT,DVBC	DVBT,DVBC	DVBT,DVBC
DTV Sound System	Dolby	Dolby	Dolby
Tuner Vendor & Model	/	/	/

- **Core Component**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
DDR SDRAM	Samsung	Samsung	Samsung
Nand Flash Memory	Samsung	Samsung	Samsung
OneNand Flash Memory	N/A	N/A	N/A
FlexOneNand Flash Memory	N/A	N/A	N/A
Serial Flash Memory	WINBOND	WINBOND	WINBOND
HDMI Switch	N/A	N/A	N/A
Display Device Vender	AUO	AUO	AUO

- Input & Output**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
HDMI	3	3	3
Resolution	1920 x 1080i 60, 1920 x 1080i 50	1920 x 1080i 60, 1920 x 1080i 50	1920 x 1080i 60, 1920 x 1080i 50
DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
MHL Port	N/A	N/A	N/A
HDMI/DVI SEL	Yes	Yes	Yes
USB	2	2	2
Port 1 Type	Host	Host	Host
Port 2 Type	Host	Host	Host
Port 3 Type	N/A	N/A	N/A
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
OS	Linux	Linux	Linux
Component In (Y/Pb/Pr)	1	1	1
Composite In (AV)	1 (Common Use for Component Y)	1 (Common Use for Component Y)	1 (Common Use for Component Y)
Ethernet (LAN)	1	1	1
Headphone	No	No	No
Digital Audio Out (Optical)	1	1	1
Audio Out (Mini Jack / LR)	1	1	1
PC In (D-sub)	No	No	No
PC Audio In (Mini Jack)	No	No	No
DVI Audio In (Mini Jack)	0	0	0
RF In (Terrestrial/Cable Input)	1	1	1
RF In (Satellite Input)	No	No	No
RS232C (AV CONTROL)	No	No	No
CI Slot	N/A	N/A	N/A
Scart	N/A	N/A	N/A
Port 1 Type	N/A	N/A	N/A
Port 2 Type	N/A	N/A	N/A
Port 3 Type	N/A	N/A	N/A
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
Coaxial	No	No	No
EX-Link	No	No	No
Monitor Output	No	No	No
DVI			
Resolution	1920 x 1080i 60	1920 x 1080i 60	1920 x 1080i 60

4. Troubleshooting

DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
D-Sub Resolution	N/A N/A	N/A N/A	N/A N/A

- Design

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Design	Logo Deco	Logo Deco	RHCM
Bezel Type	NNB	NNB	NNB
Slim Type	Slim 1	Slim 1	Slim 1
Front Color	Black	Black	Black
Light Effect (Deco)	No	No	NO
Stand Type	Quad	Quad	Quad
Swivel (Left/Right)	Yes	Yes	Yes
Push & Pull Camera	N/A	N/A	N/A
Design Name	N/A	N/A	N/A
Design	Steam Mold	Steam Mold	Steam Mold
Front Resin	PC+ABS+GF15%	PC+ABS+GF15%	PC+ABS+GF15%
Stand Packing Type	Bundle	Bundle	Bundle

- Eco

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Energy Efficiency Class	/	/	/
Eco Mark	Planet First	Planet First	Planet First
Eco Label	/	/	/
Eco Sensor	Yes	Yes	Yes

- Power

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Power Supply (V)	AC220-240V 50/60Hz	AC220-240V 50/60Hz	AC220-240V 50/60Hz
Power Consumption (Max)	/	/	/
Power Consumption (Energy Saving Mode)	/	/	/
Power Consumption (Stand-by)	0.3W	0.3W	0.3W
Power Consumption (IEC 62087 Edition 2)	N/A	N/A	N/A
Peak Luminance Ratio	N/A	N/A	N/A
Yearly Power Consumption (EU standard)	N/A	N/A	N/A
Frequency (Hz)	50/60Hz	50/60Hz	50/60Hz
SMPS/IP Board	SEM.	SEM	SEM

- **Security**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Kensington Lock	Yes	Yes	Yes

- **Dimension (WxHxD)**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Set Size without Stand (mm)	/	/	/
Set Size with Stand (mm)	/	/	/
Package Size (mm)	/	/	/

- **Weight**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Set Weight without Stand (kg)	/	/	/
Set Weight with Stand (kg)	/	/	/
Package Weight (kg)	/	/	/

- **Loading Quantity**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
20/40Ft	240/504	240/504	240/504

- **Accessory**

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
3D Active Glasses (Included)	No	No	No
IR Blaster (Included)	No	No	No
Wireless LAN Adaptor (Included)	0	0	0
Network Speaker (Included)	No	No	No
MOIP Camera (Included)	0	0	0
Wireless Keyboard (Included)	0	0	0
Battery Pack (for Battery Ready TV)	N/A	N/A	N/A
Remote Controller Model	TM1250A	TM1250A	TM1250A
Battery (for Remote Control)	Yes	Yes	Yes
Mini Wall Mount Support	Yes	Yes	Yes
Ultra Slim Wall Mount Support	No	No	No
VESA Wall Mount Support	Yes	Yes	Yes
Electric Wall Mount Support	N/A	N/A	N/A
Electric Stand Support	N/A	N/A	N/A
Slim Gender Cable	0	0	0
ANT-Cable	0	0	0

4. Troubleshooting

Power Cable	Yes	Yes	Yes
User Manual	Yes	Yes	Yes
E-Manual	Yes	Yes	Yes
Floor Stand Support	No	No	No

- License

Item	UA**F5500AMXHC UA**F5300AMXHC	UA**F5500AMXSQ UA**F5300AMXSQ	UA**F5500AMXXD
Oracle JAVA	NO	NO	NO
Universal Remote Control	NO	NO	NO
MS DRM	NO	NO	NO
Movie Codec	DivX	DivX	DivX

4-6-3. UA**F5500AK_UA**F5*00AW_UA32F4500AM - 3

- General Information

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Product	LED	LED	LED
Cabinet Basic Code	FK	FK	FK
Series	5	5	4
Series Name	LED F5500	LED F5500	LED F4500
Country	KENYA	MOROCCO	ARGENTINA
Tools Support	Yes	Yes	Yes
Platform(TV)	Mstar X12	Mstar X12	Mstar X12

- Display

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Inch	32/40/46/50	32/40/46/50	32
Resolution	1,920 x 1,080	1,920 x 1,080	1,366 x 768
Ultra Clear Panel	No	No	No
Cell Light Series	N/A	N/A	N/A
Real Black Pro Panel	N/A	N/A	N/A
Clear Image Panel	N/A	N/A	N/A
Lvds Format	JEIDA	JEIDA	JEIDA
HV Flip	ON	ON	ON

- Video

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Picture Engine	HyperReal Engine	HyperReal Engine	HyperReal Engine
OLED Motion Rate	N/A	N/A	N/A

Clear Motion Rate	100	100	100
600Hz Subfield Motion	N/A	N/A	N/A
Dynamic Contrast Ratio	Mega Contrast	Mega Contrast	Mega Contrast
New Picture Differentiation	N/A	N/A	N/A
Micro Dimming	No	No	No
Cinema Smooth	N/A	N/A	N/A
Precision Black (Local Dimming)	No	No	No
Wide Color Enhancer (Plus)	Yes	Yes	Yes
Auto Motion Plus 120/240Hz	No	No	No
Motion Judder Canceller	N/A	N/A	N/A
Film Mode	Yes	Yes	Yes
Brightness	Yes	Yes	Yes
Contrast Ratio	4000:1	4000:1	4000:1
Picture	WSS,Film Mode,HDMI Black Level	WSS,Film Mode,HDMI Black Level	WSS,Film Mode,HDMI Black Level
Detail Resolution	50/60Hz	50/60Hz	50/60Hz
Response Time	6.5ms	6.5ms	6.5ms
Viewing Angle (H/V)	178/178	178/178	178/178
Natural Mode Support	Yes	Yes	N/A
Relax Mode Support	N/A	N/A	N/A

- **Audio**

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Dolby	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse
SRS / DNSe+	DTS Studio Sound	DTS Studio Sound	DTS Studio Sound
dts 2.0+Digital Out / DTS Premium Audio	DTS Premium Audio 5.1	DTS Premium Audio 5.1	DTS Premium Audio 5.1
3D Sound	No	No	No
Sound Customizer	No	No	No
Speaker Type	Down Firing + Full Range	Down Firing + Full Range	Down Firing + Full Range
Sound Output (RMS)	10W X 2	10W X 2	10W X 2
Woofer	No	No	No
Sound	Mono,Dual,Stereo, Nicam,Auto volume, DTS Studio Sound, Audio Language, Audio format	Mono,Dual,Stereo, Nicam,Auto volume, SRS-Trusurround, Audio Language, Audio format	Mono,Dual,Stereo, Nicam,Auto volume, DTS Studio Sound, Audio Language, Audio format
Sound Amp IC	TI TAS5745	TI TAS5745	TI TAS5745
Speaker Volume	10W +10W	10W +10W	10W + 10W
Woofer Speaker Volume	N/A	N/A	N/A
Analog	2Ch	2Ch	2Ch
Digital	Optical	Optical	Optical

4. Troubleshooting

- SMART TV Functionality

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Samsung SMART TV	N/A	N/A	N/A
Smart Guide	No	No	Yes
Family Story	Yes	Yes	No
Movie & TV Shows	No	No	No
Fitness	Yes	Yes	Yes
Apps	Yes	Yes	Yes
Kids	Yes	Yes	Yes
Social	Yes	Yes	Yes
Automated Content Recognition (ACR)	N/A	N/A	N/A
Music, Photos & Clip	Yes	Yes	Yes
Samsung SMART View	Yes (Clone View only)	Yes (Clone View only)	Yes (Clone View only)
Smart Hub	Yes	Yes	Yes
Search All	N/A	N/A	N/A
Your Video	No	No	No
Social TV	N/A	N/A	N/A
Samsung Sports Experience (SSE)	N/A	N/A	N/A
Samsung Apps	N/A	N/A	N/A
Smart Scene	No	No	No
Skype™ on Samsung TV	N/A	N/A	N/A
Web Browser	Yes	Yes	Yes
AllShare Control	N/A	N/A	No
Recommendation Bar	No	No	Yes

- VESA Standard

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Samsung SMART TV	M8	M8	M8

- Smart Interaction

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Camera Built-in	No	No	No
Face Recognition	Ready	Ready	Ready
Hand Gesture Recognition	Ready	Ready	Ready
Voice Recognition (Embedded)	No	No	No
Voice Recognition (Server)	No	No	No
VM App	N/A	N/A	N/A
NLU (Natural Language Understanding)	No	No	No

Camera App	No	No	No
HM App	N/A	N/A	N/A
Samsung TV Apps supported	Yes	Yes	Yes

- Feature

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Samsung 3D	No	No	No
3D Converter	No	No	No
Dual View	N/A	N/A	N/A
Samsung One Line	N/A	N/A	N/A
History	Yes	Yes	Yes
MultiTasking	N/A	N/A	N/A
Smart Phone Remote support	Yes	Yes	Yes
Smart Evolution Support	No	No	No
Extended PVR	Yes	Yes	Yes
Time Shift	Yes	Yes	Yes
Allshare Play	Yes	Yes	Yes
AllShare Cloud Storage	N/A	N/A	N/A
ConnectShare™ (USB2.0)	Movie	Movie	Movie
AllShare Cast	Yes	Yes	Yes
RUI	N/A	N/A	N/A
RVU	N/A	N/A	N/A
WiFi Direct	Yes	Yes	Yes
Wireless LAN Built-in	Yes	Yes	No
Wireless LAN Adaptor Support	No	No	Yes
ISP Bound Service	N/A	N/A	N/A
BT HID Built-in	N/A	N/A	N/A
USB HID Support	Yes	Yes	Yes
OSD Language	Local Languages	Local Languages	Local Languages
Samsung IR Blaster Support	No	No	Yes
User Interface	Golden Bridge	Golden Bridge	Golden Bridge
Digital Noise Filter	Yes	Yes	Yes
Analog Signal Booster	N/A	N/A	N/A
Network Speaker Support	N/A	N/A	N/A
MHL	No	No	No
Sound Share	N/A	N/A	N/A
WiDi	N/A	N/A	N/A
Regional EQ	N/A	N/A	N/A
InstaPort S (HDMI quick switch)	No	No	No

4. Troubleshooting

HDMI 1.4 3D Auto Setting	No	No	No
HDMI 1.4 A/Return Ch. Support	No	No	No
EPG	Yes	Yes	Yes
Analog Clean View	N/A	N/A	Yes
HbbTV	N/A	N/A	N/A
Teletext (TTX)	Yes	Yes	Yes
Triple Protector	Yes	N/A	N/A
Miracast	No	No	No
Anynet+ (HDMI-CEC)	Yes	Yes	Yes
BD Wise Plus	No	No	No
Auto Channel Search	Yes	Yes	Yes
Auto Power Off	Yes	Yes	Yes
Auto Volume Leveler	Yes	Yes	Yes
Caption (Subtitle)	Yes	Yes	Yes
2 Tuner	No	No	No
Clock&On/Off Timer	Yes	Yes	Yes
Game Mode	Yes	Yes	Yes
Battery Ready	N/A	N/A	N/A
Picture-In-Picture	Yes	Yes	Yes
Sleep Timer	Yes	Yes	Yes
Screen Burn Protection	N/A	N/A	N/A
Channel List USB-Clone	N/A	N/A	N/A
V-Chip	N/A	N/A	N/A
Embedded POP	Yes	Yes	Yes
Calibration Mode	N/A	N/A	N/A
Channel	Auto Store,Ch Guide, Signal Level,Scheduler (Reminder),Fine Tune	Auto Store,Ch Guide, Signal Level,Scheduler (Reminder),Fine Tune	Auto Store,Ch Guide, SignalLevel,Scheduler (Reminder),Fine Tune
Plug&Play	Yes	Yes	Yes
Child Lock	Yes	Yes	Yes
Sports Mode	Advanced	Advanced	Advanced
Paratal Lock	Yes	Yes	Yes
Kids Lock	N/A	N/A	N/A
Media Play(USB & DLNA)	Yes	Yes	Yes
Bluetooth	N/A	N/A	N/A
Home Network Centre	Yes	Yes	Yes
Zero Stand-By Power	N/A	No	N/A
USB Copy	N/A	N/A	N/A
ACS	No	No	No
IP Video Closed Caption	No	No	No

- Additional Feature

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Self Diagnosis	Yes	Yes	Yes
Software Upgrade	Yes	Yes	Yes
HD Connection Guide	Yes	Yes	Yes
Contact Samsung	Yes	Yes	Yes

- S/W

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
MCU	X12	X12	X12
OS	Linux	Linux	Linux

- System

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
DTV Tuner	DVB-T2/C	DVB-T/C	DVB-T/C
Analog Tuner	Yes	Yes	Yes
CI/CI+	CI+ (1.3)	CI+ (1.3)	N/A
MHP / MHEG (version) / ACAP	N/A	N/A	N/A
NTSC 3.58	AV Only	AV Only	AV only
NTSC 4.43, VIT	Yes	Yes	Yes
PAL-B/G, D/K, I, I'	Yes	Yes	Yes
Scan Type	Progressive	Progressive	Progressive
SECAM-B/G, D/K	Yes	Yes	Yes
SECAM-B/G, D/K, L/L'	Yes	Yes	Yes
Trinorma (PAL M,N)	N/A	N/A	N/A
Broadcast System	MHEG,MHP,TTX	MHEG,MHP,TTX	MHEG,MHP,TTX
ATV Sound System	BG,I,DK,L	BG,I,DK,L	BG,I,DK,L
DTV Video System	DVBT,DVBC	DVBT,DVBC	DVBT,DVBC
DTV Sound System	Dolby	Dolby	Dolby
Tuner Vendor & Model	/	/	/

- Core Component

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
DDR SDRAM	Samsung	Samsung	Samsung
Nand Flash Memory	Samsung	Samsung	Samsung
OneNand Flash Memory	N/A	N/A	N/A
FlexOneNand Flash Memory	N/A	N/A	N/A
Serial Flash Memory	WINBOND	WINBOND	WINBOND
HDMI Switch	N/A	N/A	N/A

4. Troubleshooting

Display Device Vendor	AUO	AUO	AUO
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- Input & Output**

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
HDMI	3	3	3
Resolution	1920 x 1080i 60,1920 x 1080i 50	1920 x 1080i 60,1920 x 1080i 50	1920 x 1080i 60,1920 x 1080i 50
DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
MHL Port	N/A	N/A	N/A
HDMI/DVI SEL	Yes	Yes	Yes
USB	2	2	2
Port 1 Type	Host	Host	Host
Port 2 Type	Host	Host	Host
Port 3 Type	N/A	N/A	N/A
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
OS	Linux	Linux	Linux
Component In (Y/Pb/Pr)	1	1	1
Composite In (AV)	1 (Common Use for Component Y)	1 (Common Use for Component Y)	1 (Common Use for Component Y)
Ethernet (LAN)	1	1	1
Headphone	No	1	No
Digital Audio Out (Optical)	1	1	1
Audio Out (Mini Jack / LR)	1	No	1
PC In (D-sub)	No	No	No
PC Audio In (Mini Jack)	No	No	No
DVI Audio In (Mini Jack)	0	0	0
RF In (Terrestrial/Cable Input)	1	1	1
RF In (Satelite Input)	No	No	No
RS232C (AV CONTROL)	No	No	No
CI Slot	1	1	N/A
Scart	N/A	1	N/A
Port 1 Type	RGB	RGB	N/A
Port 2 Type	N/A	N/A	N/A
Port 3 Type	N/A	N/A	N/A
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
Coaxial	No	No	N/A
EX-Link	No	No	N/A
Monitor Output	No	No	N/A

DVI			
Resolution	1920 x 1080i 60	1920 x 1080i 60	1920 x 1080i 60, 1920 x 1080i 50
DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
D-Sub Resolution	N/A N/A	N/A N/A	N/A N/A

- Design

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Design	Logo Deco	Logo Deco	ToC
Bezel Type	NNB	NNB	NNB
Slim Type	Slim 1	Slim 1	Slim 1
Front Color	Black	Black	Black
Light Effect (Deco)	No	No	No
Stand Type	Quad	Quad	Arch
Swivel (Left/Right)	Yes	Yes	No
Push & Pull Camera	N/A	N/A	N/A
Design Name	N/A	N/A	N/A
Design	Steam Mold	Steam Mold	Steam Mold
Front Resin	PC+ABS+GF15%	PC+ABS+GF15%	PC+ABA+GF15%
Stand Packing Type	Bundle	Bundle	Bundle

- Eco

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Energy Efficiency Class	/	/	/
Eco Mark	Planet First	Planet First	Planet First
Eco Label	/	/	/
Eco Sensor	Yes	Yes	No

- Power

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Power Supply (V)	AC100-240V 50/60Hz	AC220-240V 50/60Hz	AC220-240V 50/60Hz
Power Consumption (Max)	/	/	/
Power Consumption (Energy Saving Mode)	/	/	/
Power Consumption (Stand-by)	0.3W	0.3W	0.3W
Power Consumption (IEC 62087 Edition 2)	N/A	N/A	N/A
Peak Luminance Ratio	N/A	N/A	N/A
Yearly Power Consumption (EU standard)	N/A	N/A	N/A

4. Troubleshooting

Frequency (Hz)	50/60Hz	50/60Hz	50/60Hz
SMPS/IP Board	SEM	SEM	DongYang E&P

- **Security**

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Kensington Lock	Yes	Yes	Yes

- **Dimension (WxHxD)**

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Set Size without Stand (mm)	/	/	/
Set Size with Stand (mm)	/	/	/
Package Size (mm)	/	/	/

- **Weight**

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Set Weight without Stand (kg)	/	/	/
Set Weight with Stand (kg)	/	/	/
Package Weight (kg)	/	/	/

- **Loading Quantity**

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
20/40Ft	240/504	240/504	240/504

- **Accessory**

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
3D Active Glasses (Included)	No	No	No
IR Blaster (Included)	No	No	Yes
Wireless LAN Adaptor (Included)	0	0	0
Network Speaker (Included)	No	No	No
MOIP Camera (Included)	0	0	0
Wireless Keyboard (Included)	0	0	0
Battery Pack (for Battery Ready TV)	N/A	N/A	N/A
Remote Controller Model	TM1250A	TM1250A	TM1250A
Battery (for Remote Control)	Yes	Yes	Yes
Mini Wall Mount Support	Yes	Yes	Yes
Ultra Slim Wall Mount Support	No	No	No
VESA Wall Mount Support	Yes	Yes	Yes
Electric Wall Mount Support	N/A	N/A	N/A

Electric Stand Support	N/A	N/A	N/A
Slim Gender Cable	0	0	0
ANT-Cable	0	0	0
Power Cable	Yes	Yes	Yes
User Manual	Yes	Yes	Yes
E-Manual	Yes	Yes	Yes
Floor Stand Support	No	No	No

- License

Item	UA**F5500AKXKE	UA**F5500AWXMV UA**F5300AWXMV	UA32F4500AMXXY
Oracle JAVA	NO	NO	NO
Universal Remote Control	NO	NO	NO
MS DRM	NO	NO	TBD
Movie Codec	DivX	DivX	TBD

4-6-4. UA32F4500A* - 4

- General Information

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Product	LED	LED	LED
Cabinet Basic Code	FK	FK	FK
Series	4	4	4
Series Name	LED F4500	LED F4500	LED F4500
Country	NEW ZEALAND	SINGAPORE	IRAN
Tools Support	Yes	Yes	Yes
Platform(TV)	Mstar X12	Mstar X12	Mstar X12

- Display

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Inch	32	32	32
Resolution	1,366 x 768	1,366 x 768	1,366 x 768
Ultra Clear Panel	No	No	No
Cell Light Series	N/A	N/A	N/A
Real Black Pro Panel	N/A	N/A	N/A
Clear Image Panel	N/A	N/A	N/A
Lvds Format	JEIDA	JEIDA	JEIDA
HV Flip	ON	ON	ON

4. Troubleshooting

- **Video**

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Picture Engine	HyperReal Engine	HyperReal Engine	HyperReal Engine
OLED Motion Rate	N/A	N/A	N/A
Clear Motion Rate	100	100	100
600Hz Subfield Motion	N/A	N/A	N/A
Dynamic Contrast Ratio	Mega Contrast	Mega Contrast	Mega Contrast
New Picture Differentiation	N/A	N/A	N/A
Micro Dimming	No	No	No
Cinema Smooth	N/A	N/A	N/A
Precision Black (Local Dimming)	No	No	No
Wide Color Enhancer (Plus)	Yes	Yes	Yes
Auto Motion Plus 120/240Hz	No	No	No
Motion Judder Canceller	N/A	N/A	N/A
Film Mode	Yes	Yes	Yes
Brightness	Yes	Yes	Yes
Contrast Ratio	4000:1	4000:1	4000:1
Picture	WSS,Film Mode,HDMI Black Level	WSS,Film Mode,HDMI Black Level	WSS,Film Mode,HDMI Black Level
Detail Resolution	50/60Hz	50/60Hz	50/60Hz
Response Time	6.5ms	6.5ms	6.5ms
Viewing Angle (H/V)	178/178	178/178	178/178
Natural Mode Support	N/A	N/A	N/A
Relax Mode Support	N/A	N/A	N/A

- **Audio**

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Dolby	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse
SRS / DNSe+	DTS Studio Sound	DTS Studio Sound	DTS Studio Sound
dts 2.0+Digital Out / DTS Premium Audio	DTS Premium Audio 5.1	DTS Premium Audio 5.1	DTS Premium Audio 5.1
3D Sound	No	No	No
Sound Customizer	No	No	No
Speaker Type	Down Firing + Full Range	Down Firing + Full Range	Down Firing + Full Range
Sound Output (RMS)	10W X 2	10W X 2	10W X 2
Woofer	No	No	No
Sound	Mono,Dual,Stereo, Nicam,Auto volume, DTS Studio Sound, Audio Language, Audio format	Mono,Dual,Stereo, Nicam,Auto volume, DTS Studio Sound, Audio Language, Audio format	Mono,Dual,Stereo, Nicam,Auto volume ,DTS Studio Sound, Audio Language, Audio format
Sound Amp IC	TI TAS5745	TI TAS5745	TI TAS5745
Speaker Volume	10W + 10W	10W + 10W	10W + 10W

Woofer Speaker Volume	N/A	N/A	N/A
Analog	2Ch	2Ch	2Ch
Digital	Optical	Optical	Optical

- SMART TV Functionality

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Samsung SMART TV	N/A	N/A	N/A
Smart Guide	No	No	No
Family Story	No	No	No
Movie & TV Shows	No	No	No
Fitness	Yes	Yes	N/A
Apps	Yes	Yes	Yes
Kids	Yes	Yes	Yes
Social	Yes	Yes	Yes
Automated Content Recognition (ACR)	N/A	N/A	N/A
Music, Photos & Clip	Yes	Yes	Yes
Samsung SMART View	Yes (Clone View only)	Yes (Clone View only)	Yes (Clone View only)
Smart Hub	Yes	Yes	Yes
Search All	N/A	N/A	N/A
Your Video	No	No	No
Social TV	N/A	N/A	N/A
Samsung Sports Experience (SSE)	N/A	N/A	N/A
Samsung Apps	N/A	N/A	N/A
Smart Scene	No	No	No
Skype™ on Samsung TV	N/A	N/A	N/A
Web Browser	Yes	Yes	Yes
AllShare Control	N/A	N/A	N/A
Recommendation Bar	No	No	No

- VESA Standard

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Samsung SMART TV	M8	M8	M8

- Smart Interaction

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Camera Built-in	No	No	No
Face Recognition	Ready	Ready	Ready
Hand Gesture Recognition	Ready	Ready	Ready
Voice Recognition (Embedded)	No	No	No
Voice Recognition (Server)	No	No	No

4. Troubleshooting

VM App	N/A	N/A	N/A
NLU (Natural Language Understanding)	No	No	No
Camera App	No	No	No
HM App	N/A	N/A	N/A
Samsung TV Apps supported	Yes	Yes	Yes

- Feature

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Samsung 3D	No	No	No
3D Converter	No	No	No
Dual View	N/A	N/A	N/A
Samsung One Line	N/A	N/A	N/A
History	Yes	Yes	Yes
MultiTasking	N/A	N/A	N/A
Smart Phone Remote support	Yes	Yes	Yes
Smart Evolution Support	No	No	No
Extended PVR	Yes	Yes	Yes
Time Shift	Yes	Yes	Yes
Allshare Play	Yes	Yes	Yes
AllShare Cloud Storage	N/A	N/A	N/A
ConnectShare™ (USB2.0)	Movie	Movie	Movie
AllShare Cast	Yes	Yes	Yes
RUI	N/A	N/A	N/A
RVU	N/A	N/A	N/A
WiFi Direct	Yes	Yes	Yes
Wireless LAN Built-in	No	No	No
Wireless LAN Adaptor Support	Yes	Yes	Yes
ISP Bound Service	N/A	N/A	N/A
BT HID Built-in	N/A	N/A	N/A
USB HID Support	Yes	Yes	Yes
OSD Language	Local Languages	Local Languages	Local Languages
Samsung IR Blaster Support	No	No	No
User Interface	Golden Bridge	Golden Bridge	Golden Bridge
Digital Noise Filter	Yes	Yes	Yes
Analog Signal Booster	N/A	N/A	N/A
Network Speaker Support	N/A	N/A	N/A
MHL	No	No	No
Sound Share	N/A	N/A	N/A
WiDi	N/A	N/A	N/A
Regional EQ	N/A	N/A	N/A

InstaPort S (HDMI quick switch)	No	No	No
HDMI 1.4 3D Auto Setting	No	No	No
HDMI 1.4 A/Return Ch. Support	No	No	No
EPG	Yes	Yes	Yes
Analog Clean View	Yes	No	Yes
HbbTV	N/A	N/A	N/A
Teletext (TTX)	Yes	Yes	Yes
Triple Protector	N/A	N/A	N/A
Miracast	No	No	No
Anynet+ (HDMI-CEC)	Yes	Yes	Yes
BD Wise Plus	No	No	No
Auto Channel Search	Yes	Yes	Yes
Auto Power Off	Yes	Yes	Yes
Auto Volume Leveler	Yes	Yes	Yes
Caption (Subtitle)	Yes	Yes	Yes
2 Tuner	No	No	No
Clock&On/Off Timer	Yes	Yes	Yes
Game Mode	Yes	Yes	Yes
Battery Ready	N/A	N/A	N/A
Picture-In-Picture	Yes	Yes	Yes
Sleep Timer	Yes	Yes	Yes
Screen Burn Protection	N/A	N/A	N/A
Channel List USB-Clone	N/A	N/A	N/A
V-Chip	N/A	N/A	N/A
Embedded POP	Yes	Yes	Yes
Calibration Mode	N/A	N/A	N/A
Channel	Auto Store,Ch Guide, Signal Level, Scheduler(Reminder), ,Fine Tune	Auto Store,Ch Guide, Signal Level, Scheduler(Reminder), Fine Tune	Auto Store,Ch Guide, Signal Level, Scheduler(Reminder), Fine Tune
Plug&Play	Yes	Yes	Yes
Child Lock	Yes	Yes	Yes
Sports Mode	Advanced	Advanced	Advanced
Paratal Lock	Yes	Yes	Yes
Kids Lock	N/A	N/A	N/A
Media Play(USB & DLNA)	Yes	Yes	Yes
Bluetooth	N/A	N/A	N/A
Home Network Centre	Yes	Yes	Yes
Zero Stand-By Power	N/A	N/A	N/A
USB Copy	N/A	N/A	N/A
ACS	No	No	No

4. Troubleshooting

IP Video Closed Caption	No	No	No
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- Additional Feature

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Self Diagnosis	Yes	Yes	Yes
Software Upgrade	Yes	Yes	Yes
HD Connection Guide	Yes	Yes	Yes
Contact Samsung	Yes	Yes	Yes

- S/W

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
MCU	X12	X12	X12
OS	Linux	Linux	Linux

- System

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
DTV Tuner	DVB-T/C	DVB-T2/C	DVB-T/C
Analog Tuner	Yes	Yes	Yes
CI/CI+	N/A	N/A	N/A
MHP / MHEG (version) / ACAP	MHEG 5	N/A	N/A
NTSC 3.58	AV only	AV only	AV only
NTSC 4.43, VIT	Yes	Yes	Yes
PAL-B/G, D/K, I, I'	Yes	Yes	Yes
Scan Type	Progressive	Progressive	Progressive
SECAM-B/G, D/K	Yes	Yes	Yes
SECAM-B/G, D/K, L/L'	Yes	Yes	Yes
Trinorma (PAL M/N)	N/A	N/A	N/A
Broadcast System	MHEG,MHP,TTX	MHEG,MHP,TTX	MHEG,MHP,TTX
ATV Sound System	BG,I,DK,L	BG,I,DK,L	BG,I,DK,L
DTV Video System	DVBT,DVBC	DVBT,DVBC	DVBT,DVBC
DTV Sound System	Dolby	Dolby	Dolby
Tuner Vendor & Model	TBD TBD	TBD TBD	TBD TBD

- Core Component

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
DDR SDRAM	Samsung	Samsung	Samsung
Nand Flash Memory	Samsung	Samsung	Samsung
OneNand Flash Memory	N/A	N/A	N/A
FlexOneNand Flash Memory	N/A	N/A	N/A
Serial Flash Memory	WINBOND	WINBOND	WINBOND
HDMI Switch	N/A	N/A	N/A

Display Device Vender	AUO	AUO	AUO
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• **Input & Output**

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
HDMI	3	3	3
Resolution	1920 x 1080i 60, 1920 x 1080i 50	1920 x 1080i 60, 1920 x 1080i 50	1920 x 1080i 60, 1920 x 1080i 50
DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
MHL Port	N/A	N/A	N/A
HDMI/DVI SEL	Yes	Yes	Yes
USB	2	2	2
Port 1 Type	Host	Host	Host
Port 2 Type	Host	Host	Host
Port 3 Type	N/A	N/A	N/A
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
OS	Linux	Linux	Linux
Component In (Y/Pb/Pr)	1	1	1
Composite In (AV)	1 (Common Use for Component Y)	1 (Common Use for Component Y)	1 (Common Use for Component Y)
Ethernet (LAN)	1	1	1
Headphone	No	No	No
Digital Audio Out (Optical)	1	1	1
Audio Out (Mini Jack / LR)	1	1	1
PC In (D-sub)	No	No	No
PC Audio In (Mini Jack)	No	No	No
DVI Audio In (Mini Jack)	0	0	0
RF In (Terrestrial/Cable Input)	1	1	1
RF In (Satelite Input)	No	No	No
RS232C (AV CONTROL)	No	No	No
CI Slot	N/A	N/A	N/A
Scart	N/A	N/A	N/A
Port 1 Type	N/A	N/A	N/A
Port 2 Type	N/A	N/A	N/A
Port 3 Type	N/A	N/A	N/A
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
Coaxial	N/A	N/A	N/A
EX-Link	N/A	N/A	N/A

4. Troubleshooting

Monitor Output	N/A	N/A	N/A
DVI			
Resolution	1920 x 1080i 60,1920 x 1080i 50	1920 x 1080i 60,1920 x 1080i 50	1920 x 1080i 60,1920 x 1080i 50
DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
D-Sub Resolution	N/A N/A	N/A N/A	N/A N/A

- Design

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Design	ToC	ToC	ToC
Bezel Type	NNB	NNB	NNB
Slim Type	Slim 1	Slim 1	Slim 1
Front Color	Black	Black	Black
Light Effect (Deco)	No	No	No
Stand Type	Arch	Arch	Arch
Swivel (Left/Right)	No	No	No
Push & Pull Camera	N/A	N/A	N/A
Design Name	N/A	N/A	N/A
Design	Steam Mold	Steam Mold	Steam Mold
Front Resin	PC+ABA+GF15%	PC+ABA+GF15%	PC+ABA+GF15%
Stand Packing Type	Bundle	Bundle	Bundle

- Eco

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Energy Efficiency Class	/	/	/
Eco Mark	Planet First	Planet First	Planet First
Eco Label	/	/	N/A
Eco Sensor	No	No	No

- Power

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Power Supply (V)	AC220-240V 50/60Hz	AC220-240V 50/60Hz	AC100-240V 50/60Hz
Power Consumption (Max)	/	/	/
Power Consumption (Energy Saving Mode)	/	/	/
Power Consumption (Stand-by)	0.3W	0.3W	0.3W
Power Consumption (IEC 62087 Edition 2)	N/A	N/A	N/A
Peak Luminance Ratio	N/A	N/A	N/A
Yearly Power Consumption (EU standard)	N/A	N/A	N/A
Frequency (Hz)	50/60Hz	50/60Hz	50/60Hz

SMPS/IP Board	DongYang E&P	DongYang E&P	DongYang E&P
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• **Security**

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Kensington Lock	Yes	Yes	Yes

• **Dimension (WxHxD)**

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Set Size without Stand (mm)	/	/	/
Set Size with Stand (mm)	/	/	/
Package Size (mm)	/	/	/

• **Weight**

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Set Weight without Stand (kg)	/	/	/
Set Weight with Stand (kg)	/	/	/
Package Weight (kg)	/	/	/

• **Loading Quantity**

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
20/40Ft	240/504	240/504	240/504

• **Accessory**

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
3D Active Glasses (Included)	No	No	No
IR Blaster (Included)	No	No	No
Wireless LAN Adaptor (Included)	0	0	0
Network Speaker (Included)	No	No	No
MOIP Camera (Included)	0	0	0
Wireless Keyboard (Included)	0	0	0
Battery Pack (for Battery Ready TV)	N/A	N/A	N/A
Remote Controller Model	TM1250A	TM1250A	TM1250A
Battery (for Remote Control)	Yes	Yes	Yes
Mini Wall Mount Support	Yes	Yes	Yes
Ultra Slim Wall Mount Support	No	No	No
VESA Wall Mount Support	Yes	Yes	Yes
Electric Wall Mount Support	N/A	N/A	N/A
Electric Stand Support	N/A	N/A	N/A
Slim Gender Cable	0	0	0
ANT-Cable	0	0	0
Power Cable	Yes	Yes	Yes

4. Troubleshooting

User Manual	Yes	Yes	Yes
E-Manual	Yes	Yes	Yes
Floor Stand Support	No	No	No

- License

Item	UA32F4500AMXRD	UA32F4500AKXXS	UA32F4500AMXHC
Oracle JAVA	NO	NO	NO
Universal Remote Control	NO	NO	NO
MS DRM	TBD	TBD	TBD
Movie Codec	TBD	TBD	TBD

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- General Information

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Product	LED	LED	LED
Cabinet Basic Code	FK	FK	FK
Series	4	4	4
Series Name	LED F4500	LED F4500	LED F4500
Country	ISRAEL	INDONESIA	MOROCCO
Tools Support	Yes	Yes	Yes
Platform(TV)	Mstar X12	Mstar X12	Mstar X12

- Display

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Inch	32	32	32
Resolution	1,366 x 768	1,366 x 768	1,366 x 768
Ultra Clear Panel	No	No	No
Cell Light Series	N/A	N/A	N/A
Real Black Pro Panel	N/A	N/A	N/A
Clear Image Panel	N/A	N/A	N/A
Lvds Format	JEIDA	JEIDA	JEIDA
HV Flip	ON	ON	ON

- Video

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Picture Engine	HyperReal Engine	HyperReal Engine	HyperReal Engine
OLED Motion Rate	N/A	N/A	N/A
Clear Motion Rate	100	100	100
600Hz Subfield Motion	N/A	N/A	N/A

Dynamic Contrast Ratio	Mega Contrast	Mega Contrast	Mega Contrast
New Picture Differentiation	N/A	N/A	N/A
Micro Dimming	No	No	No
Cinema Smooth	N/A	N/A	N/A
Precision Black (Local Dimming)	No	No	No
Wide Color Enhancer (Plus)	Yes	Yes	Yes
Auto Motion Plus 120/240Hz	No	No	No
Motion Judder Canceller	N/A	N/A	N/A
Film Mode	Yes	Yes	Yes
Brightness	Yes	Yes	Yes
Contrast Ratio	4000:1	4000:1	4000:1
Picture	WSS,Film Mode,HDMI Black Level	WSS,Film Mode,HDMI Black Level	WSS,Film Mode,HDMI Black Level
Detail Resolution	50/60Hz	50/60Hz	50/60Hz
Response Time	6.5ms	6.5ms	6.5ms
Viewing Angle (H/V)	178/178	178/178	178/178
Natural Mode Support	N/A	N/A	N/A
Relax Mode Support	N/A	N/A	N/A

- **Audio**

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Dolby	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse
SRS / DNSe+	DTS Studio Sound	DTS Studio Sound	DTS Studio Sound
dts 2.0+Digital Out / DTS Premium Audio	DTS Premium Audio 5.1	DTS Premium Audio 5.1	DTS Premium Audio 5.1
3D Sound	No	No	No
Sound Customizer	No	No	No
Speaker Type	Down Firing + Full Range	Down Firing + Full Range	Down Firing + Full Range
Sound Output (RMS)	10W X 2	10W X 2	10W X 2
Woofer	No	No	No
Sound	Mono,Dual,Stereo, Nicam,Auto volume, DTS Studio Sound, Audio Language, Audio format	Mono,Dual,Stereo, Nicam,Auto volume, DTS Studio Sound, Audio Language, Audio format	Mono,Dual,Stereo, Nicam,Auto volume, DTS Studio Sound, Audio Language, Audio format
Sound Amp IC	TI TAS5745	TI TAS5745	TI TAS5745
Speaker Volume	10W + 10W	10W + 10W	10W + 10W
Woofer Speaker Volume	N/A	N/A	N/A
Analog	2Ch	2Ch	2Ch
Digital	Optical	Optical	Optical

4. Troubleshooting

- SMART TV Functionality

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Samsung SMART TV	N/A	N/A	N/A
Smart Guide	No	No	No
Family Story	No	No	Yes
Movie & TV Shows	No	No	No
Fitness	Yes	Yes	Yes
Apps	Yes	Yes	Yes
Kids	Yes	Yes	Yes
Social	Yes	Yes	Yes
Automated Content Recognition (ACR)	N/A	N/A	N/A
Music, Photos & Clip	Yes	Yes	Yes
Samsung SMART View	Yes (Clone View only)	Yes (Clone View only)	Yes (Clone View Only)
Smart Hub	Yes	Yes	Yes
Search All	N/A	N/A	N/A
Your Video	No	No	No
Social TV	N/A	N/A	N/A
Samsung Sports Experience (SSE)	N/A	N/A	N/A
Samsung Apps	N/A	N/A	N/A
Smart Scene	No	No	No
Skype™ on Samsung TV	N/A	N/A	N/A
Web Browser	Yes	Yes	Yes
AllShare Control	N/A	N/A	N/A
Recommendation Bar	No	No	No

- VESA Standard

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Samsung SMART TV	M8	M8	M8

- Smart Interaction

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Camera Built-in	No	No	No
Face Recognition	Ready	Ready	Ready
Hand Gesture Recognition	Ready	Ready	Ready
Voice Recognition (Embedded)	No	No	No
Voice Recognition (Server)	No	No	No
VM App	N/A	N/A	N/A
NLU (Natural Language Understanding)	No	No	No
Camera App	No	No	No
HM App	N/A	N/A	N/A

Samsung TV Apps supported	Yes	Yes	Yes
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• Feature

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Samsung 3D	No	No	No
3D Converter	No	No	No
Dual View	N/A	N/A	N/A
Samsung One Line	N/A	N/A	N/A
History	Yes	Yes	Yes
MultiTasking	N/A	N/A	N/A
Smart Phone Remote support	Yes	Yes	Yes
Smart Evolution Support	No	No	No
Extended PVR	Yes	Yes	Yes
Time Shift	Yes	Yes	Yes
Allshare Play	Yes	Yes	Yes
AllShare Cloud Storage	N/A	N/A	N/A
ConnectShare™ (USB2.0)	Movie	Movie	Movie
AllShare Cast	Yes	Yes	Yes
RUI	N/A	N/A	N/A
RVU	N/A	N/A	N/A
WiFi Direct	Yes	Yes	Yes
Wireless LAN Built-in	No	No	Yes
Wireless LAN Adaptor Support	Yes	Yes	No
ISP Bound Service	N/A	N/A	N/A
BT HID Built-in	N/A	N/A	N/A
USB HID Support	Yes	Yes	Yes
OSD Language	Local Languages	Local Languages	Local Language
Samsung IR Blaster Support	No	No	N/A
User Interface	Golden Bridge	Golden Bridge	Golden Bridge
Digital Noise Filter	Yes	Yes	Yes
Analog Signal Booster	N/A	N/A	N/A
Network Speaker Support	N/A	N/A	N/A
MHL	No	No	No
Sound Share	N/A	N/A	N/A
WiDi	N/A	N/A	N/A
Regional EQ	N/A	N/A	N/A
InstaPort S (HDMI quick switch)	No	No	No
HDMI 1.4 3D Auto Setting	No	No	No
HDMI 1.4 A/Return Ch. Support	No	No	No
EPG	Yes	Yes	Yes

4. Troubleshooting

Analog Clean View	Yes	Yes	N/A
HbbTV	N/A	N/A	N/A
Teletext (TTX)	Yes	Yes	Yes
Triple Protector	N/A	N/A	N/A
Miracast	No	No	No
Anynet+ (HDMI-CEC)	Yes	Yes	Yes
BD Wise Plus	No	No	No
Auto Channel Search	Yes	Yes	Yes
Auto Power Off	Yes	Yes	Yes
Auto Volume Leveler	Yes	Yes	Yes
Caption (Subtitle)	Yes	Yes	Yes
2 Tuner	No	No	No
Clock&On/Off Timer	Yes	Yes	Yes
Game Mode	Yes	Yes	Yes
Battery Ready	N/A	N/A	N/A
Picture-In-Picture	Yes	Yes	Yes
Sleep Timer	Yes	Yes	Yes
Screen Burn Protection	N/A	N/A	N/A
Channel List USB-Clone	N/A	N/A	N/A
V-Chip	N/A	N/A	N/A
Embedded POP	Yes	Yes	Yes
Calibration Mode	N/A	N/A	N/A
Channel	Auto Store,Ch Guide, Signal Level, Scheduler(Reminder), Fine Tune	Auto Store,Ch Guide, Signal Level, Scheduler(Reminder), Fine Tune	Auto Store,Ch Guide, Signal Level, Scheduler(Reminder), Fine Tune
Plug&Play	Yes	Yes	Yes
Child Lock	Yes	Yes	Yes
Sports Mode	Advanced	Advanced	Advanced
Paratal Lock	Yes	Yes	Yes
Kids Lock	N/A	N/A	N/A
Media Play(USB & DLNA)	Yes	Yes	Yes
Bluetooth	N/A	N/A	N/A
Home Network Centre	Yes	Yes	Yes
Zero Stand-By Power	N/A	N/A	No
USB Copy	N/A	N/A	N/A
ACS	No	No	No
IP Video Closed Caption	No	No	No

- Additional Feature

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Self Diagnosis	Yes	Yes	Yes

Software Upgrade	Yes	Yes	Yes
HD Connection Guide	Yes	Yes	Yes
Contact Samsung	Yes	Yes	Yes

- **S/W**

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
MCU	X12	X12	X12
OS	Linux	Linux	Linux

- **System**

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
DTV Tuner	DVB-T/C	DVB-T/C	DVB-T/C
Analog Tuner	Yes	Yes	Yes
CI/CI+	N/A	N/A	CI+ (1.3)
MHP / MHEG (version) / ACAP	N/A	N/A	N/A
NTSC 3.58	AV only	AV only	AV only
NTSC 4.43, VIT	Yes	Yes	Yes
PAL-B/G, D/K, I, I/I'	Yes	Yes	Yes
Scan Type	Progressive	Progressive	Progressive
SECAM-B/G, D/K	Yes	Yes	Yes
SECAM-B/G, D/K, L/L'	Yes	Yes	Yes
Trinorma (PAL M,N)	N/A	N/A	N/A
Broadcast System	MHEG,MHP,TTX	MHEG,MHP,TTX	MHEG,MHP,TTX
ATV Sound System	BG,I,DK,L	BG,I,DK,L	BG,I,DK,L
DTV Video System	DVBT,DVBC	DVBT,DVBC	DVBT,DVBC
DTV Sound System	Dolby	Dolby	Dolby
Tuner Vendor & Model	TBD TBD	TBD TBD	TBD TBD

- **Core Component**

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
DDR SDRAM	Samsung	Samsung	Samsung
Nand Flash Memory	Samsung	Samsung	Samsung
OneNand Flash Memory	N/A	N/A	N/A
FlexOneNand Flash Memory	N/A	N/A	N/A
Serial Flash Memory	WINBOND	WINBOND	WINBOND
HDMI Switch	N/A	N/A	N/A
Display Device Vender	AUO	AUO	AUO

- **Input & Output**

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
HDMI	3	3	3

4. Troubleshooting

Resolution	1920 x 1080i 60,1920 x 1080i 50	1920 x 1080i 60,1920 x 1080i 50	1920 x 1080i 60,1920 x 1080i 50
DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
MHL Port	N/A	N/A	N/A
HDMI/DVI SEL	Yes	Yes	Yes
USB	2	2	2
Port 1 Type	Host	Host	Host
Port 2 Type	Host	Host	Host
Port 3 Type	N/A	N/A	N/A
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
OS	Linux	Linux	Linux
Component In (Y/Pb/Pr)	1	1	1
Composite In (AV)	1 (Common Use for Component Y)	1 (Common Use for Component Y)	1 (Common Use for Component Y)
Ethernet (LAN)	1	1	1
Headphone	No	No	1
Digital Audio Out (Optical)	1	1	1
Audio Out (Mini Jack / LR)	1	1	No
PC In (D-sub)	No	No	No
PC Audio In (Mini Jack)	No	No	No
DVI Audio In (Mini Jack)	0	0	0
RF In (Terrestrial/Cable Input)	1	1	1
RF In (Satelite Input)	No	No	No
RS232C (AV CONTROL)	No	No	No
CI Slot	N/A	N/A	1
Scart	N/A	N/A	1
Port 1 Type	N/A	N/A	RGB
Port 2 Type	N/A	N/A	N/A
Port 3 Type	N/A	N/A	N/A
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
Coaxial	N/A	N/A	N/A
EX-Link	N/A	N/A	N/A
Monitor Output	N/A	N/A	N/A
DVI			
Resolution	1920 x 1080i 60,1920 x 1080i 50	1920 x 1080i 60,1920 x 1080i 50	1920 x 1080i 60,1920 x 1080i 50
DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
D-Sub Resolution	N/A N/A	N/A N/A	N/A N/A

- Design

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Design	ToC	ToC	ToC
Bezel Type	NNB	NNB	NNB
Slim Type	Slim 1	Slim 1	Slim 1
Front Color	Black	Black	Black
Light Effect (Deco)	No	No	No
Stand Type	Arch	Arch	Arch
Swivel (Left/Right)	No	No	No
Push & Pull Camera	N/A	N/A	N/A
Design Name	N/A	N/A	N/A
Design	Steam Mold	Steam Mold	Steam Mold
Front Resin	PC+ABA+GF15%	PC+ABA+GF15%	PC+ABA+GF15%
Stand Packing Type	Bundle	Bundle	Bundle

- Eco

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Energy Efficiency Class	/	/	/
Eco Mark	Planet First	Planet First	Planet First
Eco Label	/	/	N/A
Eco Sensor	No	No	No

- Power

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Power Supply (V)	AC100-240V 50/60Hz	AC100-240V 50/60Hz	AC220-240V 50/60Hz
Power Consumption (Max)	/	/	/
Power Consumption (Energy Saving Mode)	/	/	/
Power Consumption (Stand-by)	0.3W	0.3W	0.3W
Power Consumption (IEC 62087 Edition 2)	N/A	N/A	N/A
Peak Luminance Ratio	N/A	N/A	N/A
Yearly Power Consumption (EU standard)	N/A	N/A	N/A
Frequency (Hz)	50/60Hz	50/60Hz	50/60Hz
SMPS/IP Board	DongYang E&P	DongYang E&P	DongYang E&P

- Security

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Kensington Lock	Yes	Yes	Yes

4. Troubleshooting

- Dimension (WxHxD)

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Set Size without Stand (mm)	/	/	/
Set Size with Stand (mm)	/	/	/
Package Size (mm)	/	/	/

- Weight

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
Set Weight without Stand (kg)	/	/	/
Set Weight with Stand (kg)	/	/	/
Package Weight (kg)	/	/	/

- Loading Quantity

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
20/40Ft	240/504	240/504	240/504

- Accessory

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV
3D Active Glasses (Included)	No	No	No
IR Blaster (Included)	No	No	No
Wireless LAN Adaptor (Included)	0	0	0
Network Speaker (Included)	No	No	No
MOIP Camera (Included)	0	0	0
Wireless Keyboard (Included)	0	0	0
Battery Pack (for Battery Ready TV)	N/A	N/A	N/A
Remote Controller Model	TM1250A	TM1250A	TM1250A
Battery (for Remote Control)	Yes	Yes	Yes
Mini Wall Mount Support	Yes	Yes	Yes
Ultra Slim Wall Mount Support	No	No	No
VESA Wall Mount Support	Yes	Yes	Yes
Electric Wall Mount Support	N/A	N/A	N/A
Electric Stand Support	N/A	N/A	N/A
Slim Gender Cable	0	0	0
ANT-Cable	0	0	0
Power Cable	Yes	Yes	Yes
User Manual	Yes	Yes	Yes
E-Manual	Yes	Yes	Yes
Floor Stand Support	No	No	No

- License

Item	UA32F4500AMXSQ	UA32F4500AMXXD	UA32F4500AWXMV

Oracle JAVA	NO	NO	NO
Universal Remote Control	NO	NO	NO
MS DRM	TBD	TBD	TBD
Movie Codec	TBD	TBD	TBD

4-6-6. UA32F4500AK_ UA32F5*00AR - 6

- General Information

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Product	LED	LED	LED
Cabinet Basic Code	FK	FK	FK
Series	4	5	5
Series Name	LED F4500	LED F5500	LED F5500
Country	KENYA	THAILAND	CHINA
Tools Support	Yes	N/A	N/A
Platform(TV)	Mstar X12	Mstar X12	Mstar X12

- Display

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Inch	32	32/40/46	32/40/46/50
Resolution	1,366 x 768	1,920 x 1,080	1,920 x 1,080
Ultra Clear Panel	No	No	No
Cell Light Series	N/A	N/A	N/A
Real Black Pro Panel	N/A	N/A	N/A
Clear Image Panel	N/A	N/A	N/A
Lvds Format	JEIDA	JEIDA	JEIDA
HV Flip	ON	ON	ON

- Video

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Picture Engine	HyperReal Engine	HyperReal Engine	HyperReal Engine
OLED Motion Rate	N/A	N/A	N/A
Clear Motion Rate	100	100	100
600Hz Subfield Motion	N/A	N/A	N/A
Dynamic Contrast Ratio	Mega Contrast	Mega Contrast	Mega Contrast
New Picture Differentiation	N/A	N/A	N/A
Micro Dimming	No	No	No
Cinema Smooth	N/A	N/A	N/A
Precision Black (Local Dimming)	No	No	No

4. Troubleshooting

Wide Color Enhancer (Plus)	Yes	Yes	Yes
Auto Motion Plus 120/240Hz	No	No	No
Motion Judder Canceller	N/A	N/A	N/A
Film Mode	Yes	Yes	Yes
Brightness	Yes	300nits	300nits
Contrast Ratio	4000:1	5000:1	5000:1
Picture	WSS,Film Mode,HDMI Black Level	Film Mode,HDMI Black Level	Film Mode,HDMI Black Level
Detail Resolution	50/60Hz	50/60Hz	50/60Hz
Response Time	6.5ms	8ms	8ms
Viewing Angle (H/V)	178/178	178/178	178/178
Natural Mode Support	N/A	Yes	Yes
Relax Mode Support	N/A	N/A	N/A

- **Audio**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Dolby	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse
SRS / DNSe+	DTS Studio Sound	SRS TheaterSound HD	DTS Studio Sound
dts 2.0+Digital Out / DTS Premium Audio	DTS Premium Audio 5.1	DTS Premium Audio	DTS Premium Audio 5.1
3D Sound	No	No	No
Sound Customizer	No	No	No
Speaker Type	Down Firing + Full Range	Down Firing + Full Range	Down Firing + Full Range
Sound Output (RMS)	10W X 2	10W X 2	10W X 2
Woofer	No	No	No
Sound	Mono,Dual,Stereo, Nicam,Auto volume, DTS Studio Sound, Audio Language,Audio format	Mono,Stereo,Auto volume	Mono,Stereo,Auto volume
Sound Amp IC	TI TAS5745	TI TAS5745	TI TAS5745
Speaker Volume	10W + 10W	10W x 2	10W x 2
Woofer Speaker Volume	N/A	No	No
Analog	2Ch	2Ch	2Ch
Digital	Optical	Optical	Optical

- **SMART TV Functionality**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Samsung SMART TV	N/A	N/A	N/A
Smart Guide	No	No	No
Family Story	No	Yes	Yes
Movie & TV Shows	No	No	No

Fitness	Yes	Yes	Yes
Apps	Yes	Yes	Yes
Kids	Yes	Yes	Yes
Social	Yes	Yes	Yes
Automated Content Recognition (ACR)	N/A	N/A	N/A
Music, Photos & Clip	Yes	Yes	Yes
Samsung SMART View	Yes (Clone View only)	Yes (Clone View only)	Yes (Clone View only)
Smart Hub	Yes	Yes	Yes
Search All	N/A	N/A	N/A
Your Video	No	No	No
Social TV	N/A	N/A	N/A
Samsung Sports Experience (SSE)	N/A	N/A	N/A
Samsung Apps	N/A	N/A	N/A
Smart Scene	No	No	No
Skype™ on Samsung TV	N/A	N/A	N/A
Web Browser	Yes	Yes	Yes
AllShare Control	N/A	N/A	N/A
Recommendation Bar	No	No	No

- **VESA Standard**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Samsung SMART TV	M8	M8	M8

- **Smart Interaction**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Camera Built-in	No	No	No
Face Recognition	Ready	Ready	N/A
Hand Gesture Recognition	Ready	Ready	N/A
Voice Recognition (Embedded)	No	No	No
Voice Recognition (Server)	No	No	No
VM App	N/A	N/A	N/A
NLU (Natural Language Understanding)	No	No	No
Camera App	No	No	No
HM App	N/A	N/A	N/A
Samsung TV Apps supported	Yes	Yes	Yes

4. Troubleshooting

- Feature

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Samsung 3D	No	No	No
3D Converter	No	No	No
Dual View	N/A	N/A	N/A
Samsung One Line	N/A	N/A	N/A
History	Yes	Yes	Yes
MultiTasking	N/A	N/A	N/A
Smart Phone Remote support	Yes	Yes	Yes
Smart Evolution Support	No	No	No
Extended PVR	Yes	No	No
Time Shift	Yes	No	No
Allshare Play	Yes	Yes	Yes
AllShare Cloud Storage	N/A	N/A	N/A
ConnectShare™ (USB2.0)	Movie	Movie	Movie
AllShare Cast	Yes	Yes	Yes
RUI	N/A	N/A	N/A
RVU	N/A	N/A	N/A
WiFi Direct	Yes	Yes	Yes
Wireless LAN Built-in	No	Yes	Yes
Wireless LAN Adaptor Support	Yes	No	No
ISP Bound Service	N/A	N/A	N/A
BT HID Built-in	N/A	N/A	N/A
USB HID Support	Yes	Yes	Yes
OSD Language	Local Languages	Local Languages	Local Languages
Samsung IR Blaster Support	No	No	No
User Interface	Golden Bridge	Golden Bridge	Golden Bridge
Digital Noise Filter	Yes	Yes	Yes
Analog Signal Booster	N/A	N/A	N/A
Network Speaker Support	N/A	N/A	N/A
MHL	No	No	No
Sound Share	N/A	N/A	N/A
WiDi	N/A	N/A	N/A
Regional EQ	N/A	N/A	N/A
InstaPort S (HDMI quick switch)	No	No	No
HDMI 1.4 3D Auto Setting	No	No	No
HDMI 1.4 A/Return Ch. Support	No	No	No
EPG	Yes	No	No
Analog Clean View	N/A	Yes	Yes
HbbTV	N/A	N/A	N/A

Teletext (TTX)	Yes	Yes	No
Triple Protector	Yes	Yes	N/A
Miracast	No	No	No
Anynet+ (HDMI-CEC)	Yes	Yes	Yes
BD Wise Plus	No	No	No
Auto Channel Search	Yes	Yes	Yes
Auto Power Off	Yes	Yes	Yes
Auto Volume Leveler	Yes	Yes	Yes
Caption (Subtitle)	Yes	No	No
2 Tuner	No	No	No
Clock&On/Off Timer	Yes	Yes	Yes
Game Mode	Yes	Yes	Yes
Battery Ready	N/A	N/A	N/A
Picture-In-Picture	Yes	Yes	Yes
Sleep Timer	Yes	Yes	Yes
Screen Burn Protection	N/A	N/A	N/A
Channel List USB-Clone	N/A	N/A	N/A
V-Chip	N/A	N/A	N/A
Embedded POP	Yes	Yes	Yes
Calibration Mode	N/A	N/A	N/A
Channel	Auto Store,Ch Guide, Signal Level, Scheduler(Reminder), Fine Tune	Auto Store,Signal Level,Fine Tune	Auto Store,Signal Level,Fine Tune
Plug&Play	Yes	Yes	Yes
Child Lock	Yes	Yes	Yes
Sports Mode	Advanced	Basic	No
Paratal Lock	Yes	Yes	Yes
Kids Lock	N/A	N/A	No
Media Play(USB & DLNA)	Yes	Yes	Yes
Bluetooth	N/A	No	No
Home Network Centre	Yes	N/A	N/A
Zero Stand-By Power	N/A	N/A	N/A
USB Copy	N/A	No	N/A
ACS	No	No	No
IP Video Closed Caption	No	No	No

- Additional Feature

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Self Diagnosis	Yes	Yes	Yes
Software Upgrade	Yes	Yes	Yes

4. Troubleshooting

HD Connection Guide	Yes	Yes	Yes
Contact Samsung	Yes	Yes	Yes

- **S/W**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
MCU	X12	X12	X12
OS	Linux	Linux	Linux

- **System**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
DTV Tuner	DVB-T2/C	Ready	Ready
Analog Tuner	Yes	Yes	Yes
CI/CI+	CI+ (1.3)	N/A	N/A
MHP / MHEG (version) / ACAP	N/A	N/A	N/A
NTSC 3.58	AV only	Yes	Yes
NTSC 4.43, VIT	Yes	Yes	Yes
PAL-B/G, D/K, I, I'	Yes	Yes	Yes
Scan Type	Progressive	Progressive	Progressive
SECAM-B/G, D/K	Yes	Yes	Yes
SECAM-B/G, D/K, L/L`	Yes	N/A	N/A
Trinorma (PAL M,N)	N/A	N/A	N/A
Broadcast System	MHEG,MHP,TTX	TTX	TTX
ATV Sound System	BG,I,DK,L	BG,I,DK	BG,I,DK
DTV Video System	DVBT,DVBC	N/A	N/A
DTV Sound System	Dolby	Dolby	Dolby
Tuner Vendor & Model	TBD TBD	Xuguang BN40-00254B	Xuguang BN40-00254B

- **Core Component**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
DDR SDRAM	Samsung	Samsung	Samsung
Nand Flash Memory	Samsung	Samsung	Samsung
OneNand Flash Memory	N/A	N/A	N/A
FlexOneNand Flash Memory	N/A	N/A	N/A
Serial Flash Memory	WINBOND	N/A	N/A
HDMI Switch	N/A	N/A	N/A
Display Device Vender	AUO	Panel Allocation	Panel Allocation

- Input & Output**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
HDMI	3	3	3
Resolution	1920 x 1080i 60,1920 x 1080i 50	1920 x 1080	1920 x 1080
DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
MHL Port	N/A	N/A	N/A
HDMI/DVI SEL	Yes	N/A	N/A
USB	2	2	2
Port 1 Type	Host	Host	Host
Port 2 Type	Host	Host	Host
Port 3 Type	N/A	Host	Host
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
OS	Linux	Linux	Linux
Component In (Y/Pb/Pr)	1	1	1
Composite In (AV)	1 (Common Use for Component Y)	1 (Common Use for Component Y)	1 (Common Use for Component Y)
Ethernet (LAN)	1	1	1
Headphone	No	No	No
Digital Audio Out (Optical)	1	1	1
Audio Out (Mini Jack / LR)	1	1	1
PC In (D-sub)	No	No	No
PC Audio In (Mini Jack)	No	No	No
DVI Audio In (Mini Jack)	0	0	0
RF In (Terrestrial/Cable Input)	1	1	1
RF In (Satellite Input)	No	No	No
RS232C (AV CONTROL)	No	No	No
CI Slot	1	N/A	N/A
Scart	N/A	N/A	N/A
Port 1 Type	N/A	N/A	N/A
Port 2 Type	N/A	N/A	N/A
Port 3 Type	N/A	N/A	N/A
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
Coaxial	N/A	No	No
EX-Link	N/A	No	No
Monitor Output	N/A	No	No
DVI			

4. Troubleshooting

Resolution	1920 x 1080i 60, 1920 x 1080i 50	1920 x 1080i 60	1920 x 1080i 60
DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
D-Sub Resolution	N/A N/A	N/A N/A	N/A N/A

- Design

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Design	ToC	Logo Deco	Logo Deco
Bezel Type	NNB	NNB	NNB
Slim Type	Slim 1	Slim 1	Slim 1
Front Color	Black	Black	Black
Light Effect (Deco)	No	No	No
Stand Type	Arch	Square	Quad
Swivel (Left/Right)	No	Yes	Yes
Push & Pull Camera	N/A	N/A	N/A
Design Name	N/A	N/A	N/A
Design	Steam Mold	Steam Mold	Steam Mold
Front Resin	PC+ABA+GF15%	PC+ABS+GF15%	PC+ABS+GF15%
Stand Packing Type	Bundle	Bundle	Bundle

- Eco

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Energy Efficiency Class			/
Eco Mark	Planet First	Planet First	/
Eco Label	N/A	N/A	/
Eco Sensor	No	Yes	Yes

- Power

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Power Supply (V)	AC100-240V 50/60Hz	AC100-240V 50/60Hz	AC100-240V 50/60Hz
Power Consumption (Max)	TBD	/	/
Power Consumption (Energy Saving Mode)	TBD	/	/
Power Consumption (Stand-by)	0.3W	0.3W	0.3W
Power Consumption (IEC 62087 Edition 2)	N/A	N/A	N/A
Peak Luminance Ratio	N/A	N/A	N/A
Yearly Power Consumption (EU standard)	N/A	N/A	N/A
Frequency (Hz)	50/60Hz	50/60Hz	50/60Hz

SMPS/IP Board	DongYang E&P	/	/
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- **Security**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Kensington Lock	Yes	Yes	Yes

- **Dimension (WxHxD)**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Set Size without Stand (mm)	/	/	/
Set Size with Stand (mm)	/	/	/
Package Size (mm)	/	/	/

- **Weight**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Set Weight without Stand (kg)	/	/	/
Set Weight with Stand (kg)	/	/	/
Package Weight (kg)	/	/	/

- **Loading Quantity**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
20/40Ft	240/504	240/504	240/504

- **Accessory**

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
3D Active Glasses (Included)	No	No	No
IR Blaster (Included)	No	No	No
Wireless LAN Adaptor (Included)	0	0	0
Network Speaker (Included)	No	No	No
MOIP Camera (Included)	0	0	0
Wireless Keyboard (Included)	0	0	0
Battery Pack (for Battery Ready TV)	N/A	N/A	N/A
Remote Controller Model	TM1250A	TM1250A	TM1250A
Battery (for Remote Control)	Yes	Yes	Yes
Mini Wall Mount Support	Yes	Yes	Yes
Ultra Slim Wall Mount Support	No	No	No
VESA Wall Mount Support	Yes	Yes	Yes
Electric Wall Mount Support	N/A	N/A	N/A
Electric Stand Support	N/A	N/A	N/A

4. Troubleshooting

Slim Gender Cable	0	0	0
ANT-Cable	0	0	0
Power Cable	Yes	Yes	Yes
User Manual	Yes	Yes	Yes
E-Manual	Yes	Yes	Yes
Floor Stand Support	No	No	No

- License

Item	UA32F4500AKXKE	UA**F5500ARXXT	UA**F5500ARXXZ UA**F5300ARXXZ
Oracle JAVA	NO	NO	NO
Universal Remote Control	NO	NO	NO
MS DRM	TBD	NO	NO
Movie Codec	TBD	DivX	DivX

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- General Information

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Product	LED	LED	LED
Cabinet Basic Code	FK	FK	FK
Series	5	5	5
Series Name	LED F5500	LED F5500	LED F5500
Country	INDIA	KENYA	UNITED ARAB EMIRATES
Tools Support	N/A	N/A	N/A
Platform(TV)	Mstar X12	Mstar X12	Mstar X12

- Display

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Inch	32/40/46/50	32/40/46/50	32/40/46/50
Resolution	1,920 x 1,080	1,920 x 1,080	1,920 x 1,080
Ultra Clear Panel	No	No	No
Cell Light Series	N/A	N/A	N/A
Real Black Pro Panel	N/A	N/A	N/A
Clear Image Panel	N/A	N/A	N/A
Lvds Format	JEIDA	JEIDA	JEIDA
HV Flip	ON	ON	ON

- Video

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Picture Engine	HyperReal Engine	HyperReal Engine	HyperReal Engine
OLED Motion Rate	N/A	N/A	N/A
Clear Motion Rate	100	100	100
600Hz Subfield Motion	N/A	N/A	N/A
Dynamic Contrast Ratio	Mega Contrast	Mega Contrast	Mega Contrast
New Picture Differentiation	N/A	N/A	N/A
Micro Dimming	No	No	No
Cinema Smooth	N/A	N/A	N/A
Precision Black (Local Dimming)	No	No	No
Wide Color Enhancer (Plus)	Yes	Yes	Yes
Auto Motion Plus 120/240Hz	No	No	No
Motion Judder Canceller	N/A	N/A	N/A
Film Mode	Yes	Yes	Yes
Brightness	300nits	300nits	300nits
Contrast Ratio	5000:1	5000:1	5000:1
Picture	Film Mode,HDMI Black Level	Film Mode,HDMI Black Level	Film Mode,HDMI Black Level
Detail Resolution	50/60Hz	50/60Hz	50/60Hz
Response Time	8ms	8ms	8ms
Viewing Angle (H/V)	178/178	178/178	178/178
Natural Mode Support	Yes	Yes	Yes
Relax Mode Support	N/A	N/A	N/A

- **Audio**

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Dolby	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse
SRS / DNSe+	DTS Studio Sound	DTS Studio Sound	DTS Studio Sound
dts 2.0+Digital Out / DTS Premium Audio	DTS Premium Audio 5.1	DTS Premium Audio 5.1	DTS Premium Audio 5.1
3D Sound	No	No	No
Sound Customizer	No	No	No
Speaker Type	Down Firing + Full Range	Down Firing + Full Range	Down Firing + Full Range
Sound Output (RMS)	10W X 2	10W X 2	10W X 2
Woofer	No	No	No
Sound	Mono,Stereo,Auto volume	Mono,Stereo,Auto volume	Mono,Stereo,Auto volume
Sound Amp IC	TI TAS5745	TI TAS5745	TI TAS5745
Speaker Volume	10W x 2	10W x 2	10W x 2
Woofer Speaker Volume	No	No	No
Analog	2Ch	2Ch	2Ch

4. Troubleshooting

Digital	Optical	Optical	Optical
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- **SMART TV Functionality**

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Samsung SMART TV	N/A	N/A	N/A
Smart Guide	No	No	No
Family Story	Yes	Yes	Yes
Movie & TV Shows	No	No	No
Fitness	Yes	Yes	Yes
Apps	Yes	Yes	Yes
Kids	Yes	Yes	Yes
Social	Yes	Yes	Yes
Automated Content Recognition (ACR)	N/A	N/A	N/A
Music, Photos & Clip	Yes	Yes	Yes
Samsung SMART View	Yes (Clone View only)	Yes (Clone View only)	Yes (Clone View only)
Smart Hub	Yes	Yes	Yes
Search All	N/A	N/A	N/A
Your Video	No	No	No
Social TV	N/A	N/A	N/A
Samsung Sports Experience (SSE)	N/A	N/A	N/A
Samsung Apps	N/A	N/A	N/A
Smart Scene	No	No	No
Skype™ on Samsung TV	N/A	N/A	N/A
Web Browser	Yes	Yes	Yes
AllShare Control	N/A	N/A	N/A
Recommendation Bar	No	No	No

- **VESA Standard**

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Samsung SMART TV	M8	M8	M8

- **Smart Interaction**

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Camera Built-in	No	No	No
Face Recognition	Ready	Ready	Ready
Hand Gesture Recognition	Ready	Ready	Ready
Voice Recognition (Embedded)	No	No	No
Voice Recognition (Server)	No	No	No

VM App	N/A	N/A	N/A
NLU (Natural Language Understanding)	No	No	No
Camera App	No	No	No
HM App	N/A	N/A	N/A
Samsung TV Apps supported	Yes	Yes	Yes

- Feature

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Samsung 3D	No	No	No
3D Converter	No	No	No
Dual View	N/A	N/A	N/A
Samsung One Line	N/A	N/A	N/A
History	Yes	Yes	Yes
MultiTasking	N/A	N/A	N/A
Smart Phone Remote support	Yes	Yes	Yes
Smart Evolution Support	No	No	No
Extended PVR	No	No	No
Time Shift	No	No	No
Allshare Play	Yes	Yes	Yes
AllShare Cloud Storage	N/A	N/A	N/A
ConnectShare™ (USB2.0)	Movie	Movie	Movie
AllShare Cast	Yes	Yes	Yes
RUI	N/A	N/A	N/A
RVU	N/A	N/A	N/A
WiFi Direct	Yes	Yes	Yes
Wireless LAN Built-in	Yes	Yes	Yes
Wireless LAN Adaptor Support	No	No	No
ISP Bound Service	N/A	N/A	N/A
BT HID Built-in	N/A	N/A	N/A
USB HID Support	Yes	Yes	Yes
OSD Language	Local Languages	Local Languages	Local Languages
Samsung IR Blaster Support	No	No	No
User Interface	Golden Bridge	Golden Bridge	Golden Bridge
Digital Noise Filter	Yes	Yes	Yes
Analog Signal Booster	N/A	N/A	N/A
Network Speaker Support	N/A	N/A	N/A
MHL	No	No	No
Sound Share	N/A	N/A	N/A
WiDi	N/A	N/A	N/A

4. Troubleshooting

Regional EQ	N/A	N/A	N/A
InstaPort S (HDMI quick switch)	No	No	No
HDMI 1.4 3D Auto Setting	No	No	No
HDMI 1.4 A/Return Ch. Support	No	No	No
EPG	No	No	No
Analog Clean View	Yes	Yes	Yes
HbbTV	N/A	N/A	N/A
Teletext (TTX)	Yes	Yes	Yes
Triple Protector	Yes	Yes	Yes (Pakistan Only)
Miracast	No	No	No
Anynet+ (HDMI-CEC)	Yes	Yes	Yes
BD Wise Plus	No	No	No
Auto Channel Search	Yes	Yes	Yes
Auto Power Off	Yes	Yes	Yes
Auto Volume Leveler	Yes	Yes	Yes
Caption (Subtitle)	No	No	No
2 Tuner	No	No	No
Clock&On/Off Timer	Yes	Yes	Yes
Game Mode	Yes	Yes	Yes
Battery Ready	N/A	N/A	N/A
Picture-In-Picture	Yes	Yes	Yes
Sleep Timer	Yes	Yes	Yes
Screen Burn Protection	N/A	N/A	N/A
Channel List USB-Clone	N/A	N/A	N/A
V-Chip	N/A	N/A	N/A
Embedded POP	Yes	Yes	Yes
Calibration Mode	N/A	N/A	N/A
Channel	Auto Store,Signal Level,Fine Tune	Auto Store,Signal Level,Fine Tune	Auto Store,Signal Level,Fine Tune
Plug&Play	Yes	Yes	Yes
Child Lock	Yes	Yes	Yes
Sports Mode	Basic	Basic	Basic
Paratal Lock	Yes	Yes	Yes
Kids Lock	N/A	N/A	N/A
Media Play(USB & DLNA)	Yes	Yes	Yes
Bluetooth	No	No	No
Home Network Centre	N/A	N/A	N/A
Zero Stand-By Power	N/A	N/A	N/A
USB Copy	No	N/A	N/A
ACS	No	No	No

IP Video Closed Caption	No	No	No
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- Additional Feature

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Self Diagnosis	Yes	Yes	Yes
Software Upgrade	Yes	Yes	Yes
HD Connection Guide	Yes	Yes	Yes
Contact Samsung	Yes	Yes	Yes

- S/W

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
MCU	X12	X12	X12
OS	Linux	Linux	Linux

- System

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
DTV Tuner	Ready	Ready	Ready
Analog Tuner	Yes	Yes	Yes
CI/CI+	N/A	N/A	N/A
MHP / MHEG (version) / ACAP	N/A	N/A	N/A
NTSC 3.58	Yes	Yes	Yes
NTSC 4.43, VIT	Yes	Yes	Yes
PAL-B/G, D/K, I, I/I'	Yes	Yes	Yes
Scan Type	Progressive	Progressive	Progressive
SECAM-B/G, D/K	Yes	Yes	Yes
SECAM-B/G, D/K, L/L'	N/A	N/A	N/A
Trinorma (PAL M,N)	N/A	N/A	N/A
Broadcast System	TTX	TTX	TTX
ATV Sound System	BG,I,DK	BG,I,DK	BG,I,DK
DTV Video System	N/A	N/A	N/A
DTV Sound System	Dolby	Dolby	Dolby
Tuner Vendor & Model	Xuguang BN40-00254B	Xuguang BN40-00254B	Xuguang BN40-00254B

- Core Component

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
DDR SDRAM	Samsung	Samsung	Samsung
Nand Flash Memory	Samsung	Samsung	Samsung
OneNand Flash Memory	N/A	N/A	N/A

4. Troubleshooting

FlexOneNand Flash Memory	N/A	N/A	N/A
Serial Flash Memory	N/A	N/A	N/A
HDMI Switch	N/A	N/A	N/A
Display Device Vender	Panel Allocation.	Panel Allocation.	Panel Allocation.

- **Input & Output**

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
HDMI	3	3	3
Resolution	1920 x 1080	1920 x 1080	1920 x 1080
DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
MHL Port	N/A	N/A	N/A
HDMI/DVI SEL	N/A	N/A	N/A
USB	2	2	2
Port 1 Type	Host	Host	Host
Port 2 Type	Host	Host	Host
Port 3 Type	Host	Host	Host
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A
OS	Linux	Linux	Linux
Component In (Y/Pb/Pr)	1	1	1
Composite In (AV)	1 (Common Use for Component Y)	1 (Common Use for Component Y)	1 (Common Use for Component Y)
Ethernet (LAN)	1	1	1
Headphone	No	No	No
Digital Audio Out (Optical)	1	1	1
Audio Out (Mini Jack / LR)	1	1	1
PC In (D-sub)	No	No	No
PC Audio In (Mini Jack)	No	No	No
DVI Audio In (Mini Jack)	0	0	0
RF In (Terrestrial/Cable Input)	1	1	1
RF In (Satelite Input)	No	No	No
RS232C (AV CONTROL)	No	No	No
CI Slot	N/A	N/A	N/A
Scart	N/A	N/A	N/A
Port 1 Type	N/A	N/A	N/A
Port 2 Type	N/A	N/A	N/A
Port 3 Type	N/A	N/A	N/A
Port 4 Type	N/A	N/A	N/A
Port 5 Type	N/A	N/A	N/A

Coaxial	No	No	No
EX-Link	No	No	No
Monitor Output	No	No	No
DVI			
Resolution	1920 x 1080i 60	1920 x 1080i 60	1920 x 1080i 60
DVI Port	Port1 Type	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz	1920 x 1080 60 Hz
D-Sub Resolution	N/A N/A	N/A N/A	N/A N/A

- Design

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Design	Logo Deco	Logo Deco	Logo Deco
Bezel Type	NNB	NNB	NNB
Slim Type	Slim 1	Slim 1	Slim 1
Front Color	Black	Black	Black
Light Effect (Deco)	No	No	No
Stand Type	Square	Quad	Quad
Swivel (Left/Right)	Yes	Yes	Yes
Push & Pull Camera	N/A	N/A	N/A
Design Name	N/A	N/A	N/A
Design	Steam Mold	Steam Mold	Steam Mold
Front Resin	PC+ABS+GF15%	PC+ABS+GF15%	PC+ABS+GF15%
Stand Packing Type	Bundle	Bundle	Bundle

- Eco

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Energy Efficiency Class	/	/	/
Eco Mark	Planet First	Planet First	Planet First
Eco Label	N/A	N/A	N/A
Eco Sensor	Yes	Yes	Yes

- Power

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Power Supply (V)	AC100-240V 50/60Hz	AC100-240V 50/60Hz	AC100-240V 50/60Hz
Power Consumption (Max)	/	/	/
Power Consumption (Energy Saving Mode)	/	/	/
Power Consumption (Stand-by)	0.3W	0.3W	0.3W
Power Consumption (IEC 62087 Edition 2)	N/A	N/A	N/A

4. Troubleshooting

Peak Luminance Ratio	N/A	N/A	N/A
Yearly Power Consumption (EU standard)	N/A	N/A	N/A
Frequency (Hz)	50/60Hz	50/60Hz	50/60Hz
SMPS/IP Board	/	/	/

- **Security**

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Kensington Lock	Yes	Yes	Yes

- **Dimension (WxHxD)**

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Set Size without Stand (mm)	/	/	/
Set Size with Stand (mm)	/	/	/
Package Size (mm)	/	/	/

- **Weight**

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Set Weight without Stand (kg)	/	/	/
Set Weight with Stand (kg)	/	/	/
Package Weight (kg)	/	/	/

- **Loading Quantity**

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
20/40Ft	240/504	240/504	240/504

- **Accessory**

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
3D Active Glasses (Included)	No	No	No
IR Blaster (Included)	No	No	No
Wireless LAN Adaptor (Included)	0	0	0
Network Speaker (Included)	No	No	No
MOIP Camera (Included)	0	0	0
Wireless Keyboard (Included)	0	0	0
Battery Pack (for Battery Ready TV)	N/A	N/A	N/A
Remote Controller Model	TM1250A	TM1250A	TM1250A
Battery (for Remote Control)	Yes	Yes	Yes
Mini Wall Mount Support	Yes	Yes	Yes
Ultra Slim Wall Mount Support	No	No	No

VESA Wall Mount Support	Yes	Yes	Yes
Electric Wall Mount Support	N/A	N/A	N/A
Electric Stand Support	N/A	N/A	N/A
Slim Gender Cable	0	0	0
ANT-Cable	0	0	0
Power Cable	Yes	Yes	Yes
User Manual	Yes	Yes	Yes
E-Manual	Yes	Yes	Yes
Floor Stand Support	No	No	No

- License

Item	UA**F5500ARLXL	UA**F5500ARXSJ	UA**F5500ARXZN UA**F5300ARXZN
Oracle JAVA	NO	NO	NO
Universal Remote Control	NO	NO	NO
MS DRM	NO	NO	NO
Movie Codec	DivX	DivX	DivX

4-6-8. UA**F55*0AR - 8

- General Information

Item	UA**F5520ARXZN	UA50F5500ARX**
Product	LED	LED
Cabinet Basic Code	FK	FK
Series	5	5
Series Name	LED F5500	LED F5500
Country	UNITED ARAB EMIRATES	READY
Tools Support	N/A	N/A
Platform(TV)	Mstar X12	Mstar X12

- Display

Item	UA**F5520ARXZN	UA50F5500ARX**
Inch	40/46	50
Resolution	1,920 x 1,080	1,920 x 1,080
Ultra Clear Panel	No	No
Cell Light Series	N/A	N/A
Real Black Pro Panel	N/A	N/A
Clear Image Panel	N/A	N/A
Lvds Format	JEIDA	JEIDA
HV Flip	ON	ON

4. Troubleshooting

- **Video**

Item	UA**F5520ARXZN	UA50F5500ARX**
Picture Engine	HyperReal Engine	HyperReal Engine
OLED Motion Rate	N/A	N/A
Clear Motion Rate	100	100
600Hz Subfield Motion	N/A	N/A
Dynamic Contrast Ratio	Mega Contrast	Mega Contrast
New Picture Differentiation	N/A	N/A
Micro Dimming	No	No
Cinema Smooth	N/A	N/A
Precision Black (Local Dimming)	No	No
Wide Color Enhancer (Plus)	Yes	Yes
Auto Motion Plus 120/240Hz	No	No
Motion Judder Canceller	N/A	N/A
Film Mode	Yes	Yes
Brightness	300nits	300nits
Contrast Ratio	5000:1	5000:1
Picture	Film Mode,HDMI Black Level	Film Mode,HDMI Black Level
Detail Resolution	50/60Hz	50/60Hz
Response Time	8ms	8ms
Viewing Angle (H/V)	178/178	178/178
Natural Mode Support	Yes	Yes
Relax Mode Support	N/A	N/A

- **Audio**

Item	UA**F5520ARXZN	UA50F5500ARX**
Dolby	Dolby Digital Plus / Dolby Pulse	Dolby Digital Plus / Dolby Pulse
SRS / DNSe+	DTS Studio Sound	SRS TheaterSound HD
dts 2.0+Digital Out / DTS Premium Audio	DTS Premium Audio 5.1	DTS Premium Audio
3D Sound	No	No
Sound Customizer	No	No
Speaker Type	Down Firing + Full Range	Down Firing + Full Range
Sound Output (RMS)	10W X 2	10W X 2
Woofer	No	No
Sound	Mono,Stereo,Auto volume	Mono,Stereo,Auto volume
Sound Amp IC	TI TAS5745	TI TAS5745
Speaker Volume	10W x 2	10W x 2
Woofer Speaker Volume	No	No
Analog	2Ch	2Ch

Digital	Optical	Optical
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- SMART TV Functionality

Item	UA**F5520ARXZN	UA50F5500ARX**
Samsung SMART TV	N/A	N/A
Smart Guide	No	No
Family Story	Yes	Yes
Movie & TV Shows	No	No
Fitness	Yes	Yes
Apps	Yes	Yes
Kids	Yes	Yes
Social	Yes	Yes
Automated Content Recognition (ACR)	N/A	N/A
Music, Photos & Clip	Yes	Yes
Samsung SMART View	Yes (Clone View only)	Yes (Clone View only)
Smart Hub	Yes	Yes
Search All	N/A	N/A
Your Video	No	No
Social TV	N/A	N/A
Samsung Sports Experience (SSE)	N/A	N/A
Samsung Apps	N/A	N/A
Smart Scene	No	No
Skype™ on Samsung TV	N/A	N/A
Web Browser	Yes	Yes
AllShare Control	N/A	N/A
Recommendation Bar	No	No

- VESA Standard

Item	UA**F5520ARXZN	UA50F5500ARX**
Samsung SMART TV	M8	M8

- Smart Interaction

Item	UA**F5520ARXZN	UA50F5500ARX**
Camera Built-in	No	No
Face Recognition	Ready	Ready
Hand Gesture Recognition	Ready	Ready
Voice Recognition (Embedded)	No	No
Voice Recognition (Server)	No	No
VM App	N/A	N/A

4. Troubleshooting

NLU (Natural Language Understanding)	No	No
Camera App	No	No
HM App	N/A	N/A
Samsung TV Apps supported	Yes	Yes

- Feature

Item	UA**F5520ARXZN	UA50F5500ARX**
Samsung 3D	No	No
3D Converter	No	No
Dual View	N/A	N/A
Samsung One Line	N/A	N/A
History	Yes	Yes
MultiTasking	N/A	N/A
Smart Phone Remote support	Yes	Yes
Smart Evolution Support	No	No
Extended PVR	No	No
Time Shift	No	No
Allshare Play	Yes	Yes
AllShare Cloud Storage	N/A	N/A
ConnectShare™ (USB2.0)	Movie	Movie
AllShare Cast	Yes	Yes
RUI	N/A	N/A
RVU	N/A	N/A
WiFi Direct	Yes	Yes
Wireless LAN Built-in	Yes	Yes
Wireless LAN Adaptor Support	No	No
ISP Bound Service	N/A	N/A
BT HID Built-in	N/A	N/A
USB HID Support	Yes	Yes
OSD Language	Local Languages	Local Languages
Samsung IR Blaster Support	No	No
User Interface	Golden Bridge	Golden Bridge
Digital Noise Filter	Yes	Yes
Analog Signal Booster	N/A	N/A
Network Speaker Support	N/A	N/A
MHL	No	No
Sound Share	N/A	N/A
WiDi	N/A	N/A
Regional EQ	N/A	N/A

InstaPort S (HDMI quick switch)	No	No
HDMI 1.4 3D Auto Setting	No	No
HDMI 1.4 A/Return Ch. Support	No	No
EPG	No	No
Analog Clean View	Yes	Yes
HbbTV	N/A	N/A
Teletext (TTX)	Yes	Yes
Triple Protector	Yes (Pakistan Only)	Yes
Miracast	No	No
Anynet+ (HDMI-CEC)	Yes	Yes
BD Wise Plus	No	No
Auto Channel Search	Yes	Yes
Auto Power Off	Yes	Yes
Auto Volume Leveler	Yes	Yes
Caption (Subtitle)	No	No
2 Tuner	No	No
Clock&On/Off Timer	Yes	Yes
Game Mode	Yes	Yes
Battery Ready	N/A	N/A
Picture-In-Picture	Yes	Yes
Sleep Timer	Yes	Yes
Screen Burn Protection	N/A	N/A
Channel List USB-Clone	N/A	N/A
V-Chip	N/A	N/A
Embedded POP	Yes	Yes
Calibration Mode	N/A	N/A
Channel	Auto Store,Signal Level,Fine Tune	Auto Store,Signal Level,Fine Tune
Plug&Play	Yes	Yes
Child Lock	Yes	Yes
Sports Mode	Basic	Basic
Paratal Lock	Yes	Yes
Kids Lock	N/A	N/A
Media Play(USB & DLNA)	Yes	Yes
Bluetooth	No	No
Home Network Centre	N/A	N/A
Zero Stand-By Power	N/A	N/A
USB Copy	N/A	No
ACS	No	No
IP Video Closed Caption	No	No

4. Troubleshooting

- Additional Feature

Item	UA**F5520ARXZN	UA50F5500ARX**
Self Diagnosis	Yes	Yes
Software Upgrade	Yes	Yes
HD Connection Guide	Yes	Yes
Contact Samsung	Yes	Yes

- S/W

Item	UA**F5520ARXZN	UA50F5500ARX**
MCU	X12	X12
OS	Linux	Linux

- System

Item	UA**F5520ARXZN	UA50F5500ARX**
DTV Tuner	Ready	Ready
Analog Tuner	Yes	Yes
CI/CI+	N/A	N/A
MHP / MHEG (version) / ACAP	N/A	N/A
NTSC 3.58	Yes	Yes
NTSC 4.43, VIT	Yes	Yes
PAL-B/G, D/K, I, I/I'	Yes	Yes
Scan Type	Progressive	Progressive
SECAM-B/G, D/K	Yes	Yes
SECAM-B/G, D/K, L/L`	N/A	N/A
Trinorma (PAL M,N)	N/A	N/A
Broadcast System	TTX	TTX
ATV Sound System	BG,I,DK	BG,I,DK
DTV Video System	N/A	N/A
DTV Sound System	Dolby	Dolby
Tuner Vendor & Model	Xuguang BN40-00254B	TBD TBD

- Core Component

Item	UA**F5520ARXZN	UA50F5500ARX**
DDR SDRAM	Samsung	Samsung
Nand Flash Memory	Samsung	Samsung
OneNand Flash Memory	N/A	N/A
FlexOneNand Flash Memory	N/A	N/A
Serial Flash Memory	N/A	N/A
HDMI Switch	N/A	N/A
Display Device Vender	Panel Allocation.	TBD

- Input & Output**

Item	UA**F5520ARXZN	UA50F5500ARX**
HDMI	3	3
Resolution	1920 x 1080	1920 x 1080
DVI Port	Port1 Type	Port1 Type
PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz
MHL Port	N/A	N/A
HDMI/DVI SEL	N/A	N/A
USB	2	2
Port 1 Type	Host	Host
Port 2 Type	Host	Host
Port 3 Type	Host	Host
Port 4 Type	N/A	N/A
Port 5 Type	N/A	N/A
OS	Linux	Linux
Component In (Y/Pb/Pr)	1	1
Composite In (AV)	1 (Common Use for Component Y)	1 (Common Use for Component Y)
Ethernet (LAN)	1	1
Headphone	No	No
Digital Audio Out (Optical)	1	1
Audio Out (Mini Jack / LR)	1	1
PC In (D-sub)	No	No
PC Audio In (Mini Jack)	No	No
DVI Audio In (Mini Jack)	0	0
RF In (Terrestrial/Cable Input)	1	1
RF In (Satellite Input)	No	No
RS232C (AV CONTROL)	No	No
CI Slot	N/A	N/A
Scart	N/A	N/A
Port 1 Type	N/A	N/A
Port 2 Type	N/A	N/A
Port 3 Type	N/A	N/A
Port 4 Type	N/A	N/A
Port 5 Type	N/A	N/A
Coaxial	No	No
EX-Link	No	No
Monitor Output	No	No
DVI		
Resolution	1920 x 1080i 60	1920 x 1080i 60
DVI Port	Port1 Type	Port1 Type

4. Troubleshooting

PC Resolution	1920 x 1080 60 Hz	1920 x 1080 60 Hz
D-Sub Resolution	N/A N/A	N/A N/A

- Design

Item	UA**F5520ARXZN	UA50F5500ARX**
Design	Logo Deco	Logo Deco
Bezel Type	NNB	NNB
Slim Type	Slim 1	Slim 1
Front Color	Black	Black
Light Effect (Deco)	No	No
Stand Type	Quad	Square
Swivel (Left/Right)	Yes	Yes
Push & Pull Camera	N/A	N/A
Design Name	N/A	N/A
Design	Steam Mold	Steam Mold
Front Resin	PC+ABS+GF15%	PC+ABS+GF15%
Stand Packing Type	Bundle	Bundle

- Eco

Item	UA**F5520ARXZN	UA50F5500ARX**
Energy Efficiency Class	/	TBD
Eco Mark	Planet First	Planet First
Eco Label	N/A	N/A
Eco Sensor	Yes	Yes

- Power

Item	UA**F5520ARXZN	UA50F5500ARX**
Power Supply (V)	AC100-240V 50/60Hz	AC100-240V 50/60Hz
Power Consumption (Max)	/	TBD
Power Consumption (Energy Saving Mode)	/	TBD
Power Consumption (Stand-by)	0.3W	0.3W
Power Consumption (IEC 62087 Edition 2)	N/A	N/A
Peak Luminance Ratio	N/A	N/A
Yearly Power Consumption (EU standard)	N/A	N/A
Frequency (Hz)	50/60Hz	50/60Hz
SMPS/IP Board	SMPS Allocation	TBD

- **Security**

Item	UA**F5520ARXZN	UA50F5500ARX**
Kensington Lock	Yes	Yes

- **Dimension (WxHxD)**

Item	UA**F5520ARXZN	UA50F5500ARX**
Set Size without Stand (mm)	/	/
Set Size with Stand (mm)	/	/
Package Size (mm)	/	/

- **Weight**

Item	UA**F5520ARXZN	UA50F5500ARX**
Set Weight without Stand (kg)	/	/
Set Weight with Stand (kg)	/	/
Package Weight (kg)	/	/

- **Loading Quantity**

Item	UA**F5520ARXZN	UA50F5500ARX**
20/40Ft	240/504	96/192

- **Accessory**

Item	UA**F5520ARXZN	UA50F5500ARX**
3D Active Glasses (Included)	No	No
IR Blaster (Included)	No	No
Wireless LAN Adaptor (Included)	0	0
Network Speaker (Included)	No	No
MOIP Camera (Included)	0	0
Wireless Keyboard (Included)	0	0
Battery Pack (for Battery Ready TV)	N/A	N/A
Remote Controller Model	TM1250A	TM1250A
Battery (for Remote Control)	Yes	Yes
Mini Wall Mount Support	Yes	Yes
Ultra Slim Wall Mount Support	No	No
VESA Wall Mount Support	Yes	Yes
Electric Wall Mount Support	N/A	N/A
Electric Stand Support	N/A	N/A
Slim Gender Cable	0	0
ANT-Cable	0	0
Power Cable	Yes	Yes
User Manual	Yes	Yes
E-Manual	Yes	Yes

4. Troubleshooting

Floor Stand Support	No	No
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- **License**

Item	UA**F5520ARXZN	UA50F5500ARX**
Oracle JAVA	NO	NO
Universial Remote Control	NO	NO
MS DRM	NO	TBD
Movie Codec	DivX	TBD

4-7. Software Upgrade

Software Upgrade can be performed by downloading the latest firmware from samsung.com to a USB memory device.

- Current Version - The software already installed in the TV.

Software is represented as 'Year/Month/Day_Version'.

4-7-1. How to Check the Software Version

■ Use the Main Menu

1. Click the "MENU" key in remote controller.
2. Select "Support" menu.
3. Locate the menu cursor "Software Upgrade" menu.
4. Click the "INFO" key.
 - Check the Main SW and Micom version.



■ Use the Factory Mode

Access the factory mode

Option	
Control	T-MST12UABC-xxxx T-MST12DEUS-xxxx
Debug	BT Version : xxxx Camera Version : xxxx
SVC	E-Manual : xxxx EDID SUCCESS
ADC/WB	CALIB : AV/COMP/PC/HDMI/ Option : 40H6AF0S,AD_AU_NZ2,5500,NONE
Advanced	USB RS232C : OFF
	SDAL-X12-MAIN-xxxx-xxxx RFS : "X12 0071" KER/201x-xx-xx KERNEL : 8.0837, D / Onboot :xxxx.x Backend IC[x], Data Ver : xxxx TCON Version : xxxx DTP-DTVTD-xxxx
	Model : UA40F5500 Wired MAC SUCCESS Wireless MAC SUCCESS DRM : Crt O, Nf O, Wv O, Hc O, Dc O, Mx O, MI O Factory Data Ver : 97 EERC Version : 51 DTP-BP-HAL-3183 DTP-AP-CNC-3151 DTP-AP-MM-3145 DTP-AP-WP-3148 DTP-BP-MW-3156 DTP-BP-APP-3156 POP-FLA-13-TEMP Date of purchase : mm/dd/yyyy

4-7-2. How to Upgrade Software and Micom

Insert a USB drive containing the firmware upgrade downloaded from samsung.com into the TV. Please be careful not to 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 (the new version will have a higher number than the older version). 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 before beginning firmware update. After update is completed, restore your previous settings.

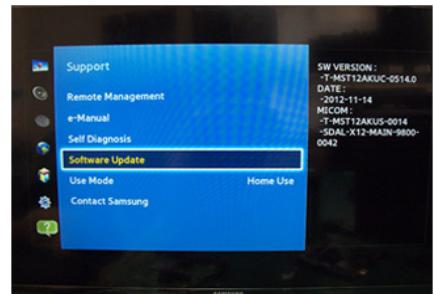
■ Main Software Upgrade

1. Store the sw program named "T-MST12UABC" in USB memory stick.
 - Connect the USB.

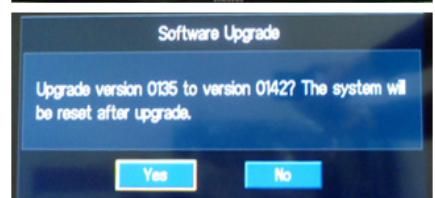


2. Click the "MENU" key in Remote Controller.
3. Select "Support" menu.

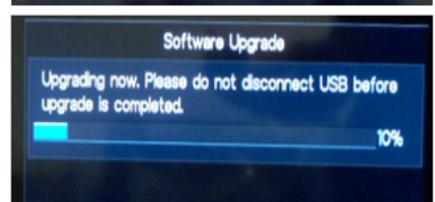
Locate the menu cursor "Software Update" menu



4. Click the "ENTER" key.



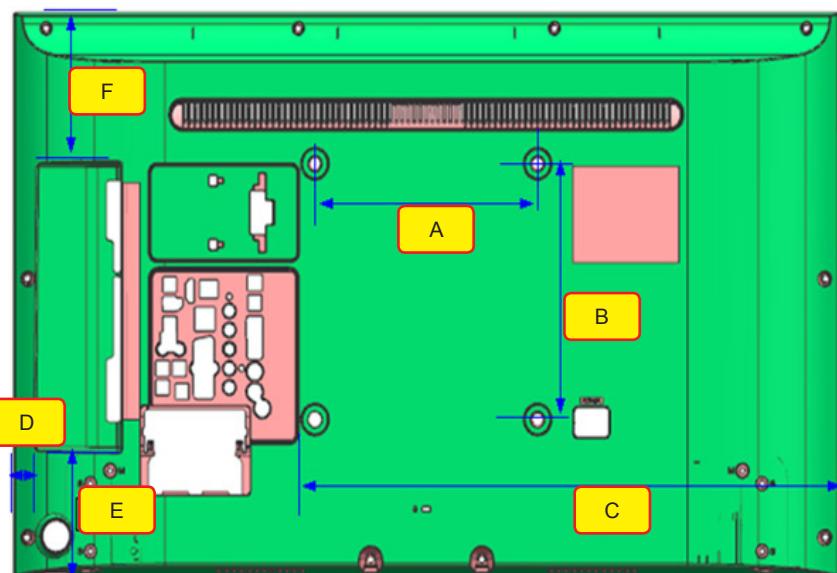
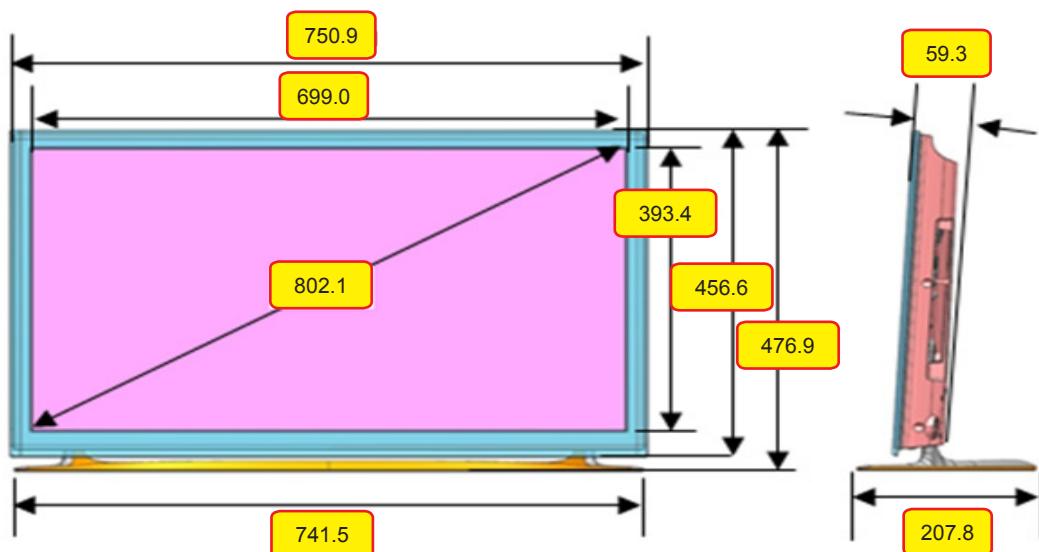
5. Click the "ENTER" key.
 - Wait for upgrade complete.
 - Check the Software Version.



4-8. Rear Cover Dimension

■ 4500

SET Size (With Stand)	750.9 * 476.9 * 207.8
SET Size (Without Stand)	750.9 * 456.6 * 59.3
Packing Size	835 * 657 * 143
NET (SET) Weight (With Stand)	5.6 kg
NET (SET) Weight (Without Stand)	5.3 kg
Gross Weight (After Packing) W / W	7.5 kg



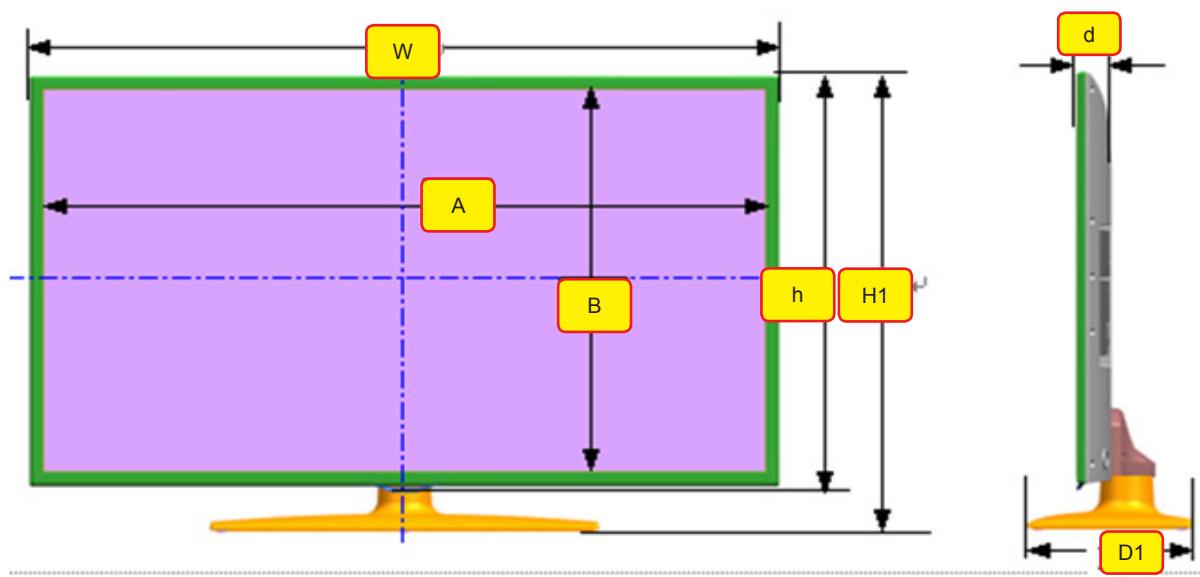
Item	A, mm	B, mm	C, mm	D, mm	E, mm	F, mm
32"	200	200	484.4	18.2	96.9	115.7

■ 5300

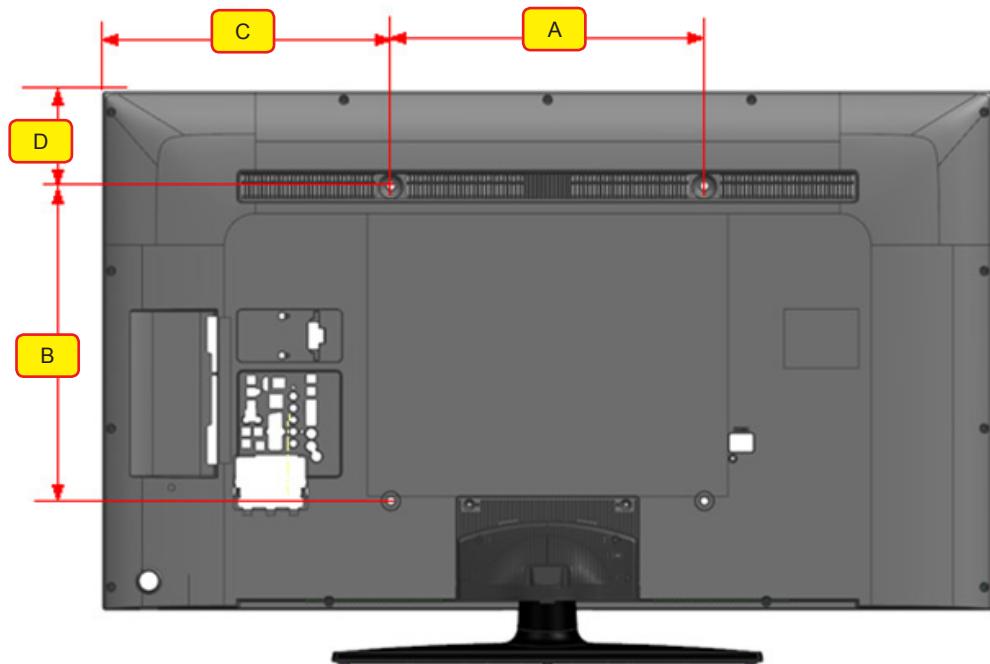
BASIC	SPEC	AREA	32"	40"
F5000 F5020 F5070 F5080 F5100 F5200 F5300 F5370	SET w/o Stand (W * H * D) (mm)	W/W	738.0 * 445.4 * 49.0	928.2*612.2*235.0
	SET with Stand (W * H * D) (mm)	W/W	738.0 * 505.8 * 191.7	928.2*552.3*49.4
	Packing (W * H * D) mm	W/W	919.0 * 514.0 * 143.0	1160*616*147
		KO	X	1017*616*147
	Weigh (w/o Stand) (kg)	W/W	5	8.0
	Weigh (with Stand) (kg)	W/W	5.6	9.5
	Packing (kg)	W/W	7.4	12
		KO	X	10.2
	Opening Size	W/W	703.4 * 397.8 (807.4)	890.6*503.2 (1022.2)
	Load Q'ty	20ft/40ft/40ft High Cube	352/704/880	198/414/552
		45ft(Europe Truck)	920	720
		53ft(SAMEX Truck)	1260	784

BASIC	SPEC	AREA	46"
F5000 F5020 F5070 F5080 F5100 F5200 F5300 F5370	SET w/o Stand (W * H * D) (mm)	W/W	1059.6 * 626.2 * 49.4
	SET with Stand (W * H * D) (mm)	W/W	1059.6 * 686.1 * 235.0
	Packing (W * H * D) mm	W/W	1309 * 716 * 158
		KO	X
	Weigh (w/o Stand) (kg)	W/W	10.8
	Weigh (with Stand) (kg)	W/W	12.3
	Packing (kg)	W/W	16
		KO	X
	Opening Size	W/W	1021.4 * 576.0 (1171.9)
	Load Q'ty	20ft/40ft/40ft High Cube	165/345/345
		45ft(Europe Truck)	432
		53ft(SAMEX Truck)	504

4. Troubleshooting



UF5300	32"	40"	46"
WALL MOUNT (A * B)	200 * 200	200 * 200	400 * 400
C	269	364.1	329.8
D	116.2	170.4	78.1



■ 5500

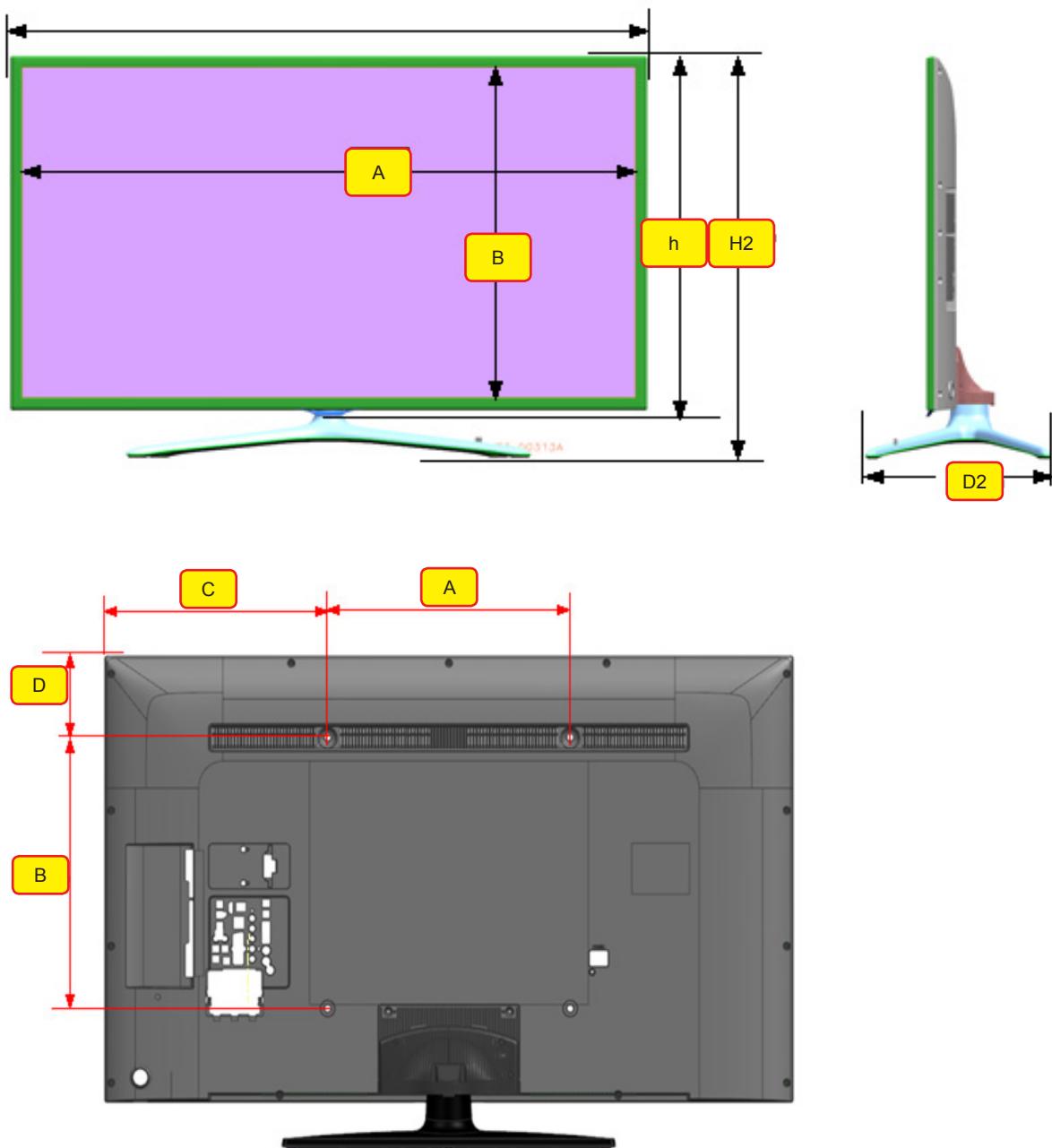
32", 40"

Item	32"	40"
SET (W/Quad Stand) mm (W * H2 * D2)	738.0 * 509.6 * 265	928.2 * 615.5 * 265
SET (W/O Stand) mm (W * h * d)	738.2 * 445.4 * 49.0	928.2 * 552.3 * 49.4
Packing (out) mm (W * H * D)	985 * 596 * 143	1190 * 616 * 147
Packing (out) HQ mm (W * H * D)	-	-
SET Depth mm (d)	49	49.4
Screen Size (A * B) (Diagonal)	703.4 * 397.8 (807.4)	890.6 * 503.2 (1022.2)
Loading Q' ty (BOX) 20ft / 40ft / 40ft-HC / 45ft / 53ft	USA / EUR HQ (8 Ton / 11 Ton)	240 / 504 - -

46", 50"

Item	46"	50"
SET (W/Quad Stand) mm (W * H2 * D2)	1059.6 * 700.0 * 307.3	1135.4 * 741.8 * 307.3
SET (W/O Stand) mm (W * h * d)	1059.6 * 626.2 * 49.4	1135.4 * 668 * 49.8
Packing (out) mm (W * H * D)	1343 * 718 * 158	1427 * 771 * 163
Packing (out) HQ mm (W * H * D)	-	-
SET Depth mm (d)	49.4	49.8
Screen Size (A * B) (Diagonal)	1021.4 * 576 (1171.9)	1098.8 * 619.4 (1260.6)
Loading Q' ty (BOX) 20ft / 40ft / 40ft-HC / 45ft / 53ft	USA / EUR HQ (8 Ton / 11 Ton)	165 / 345 - -

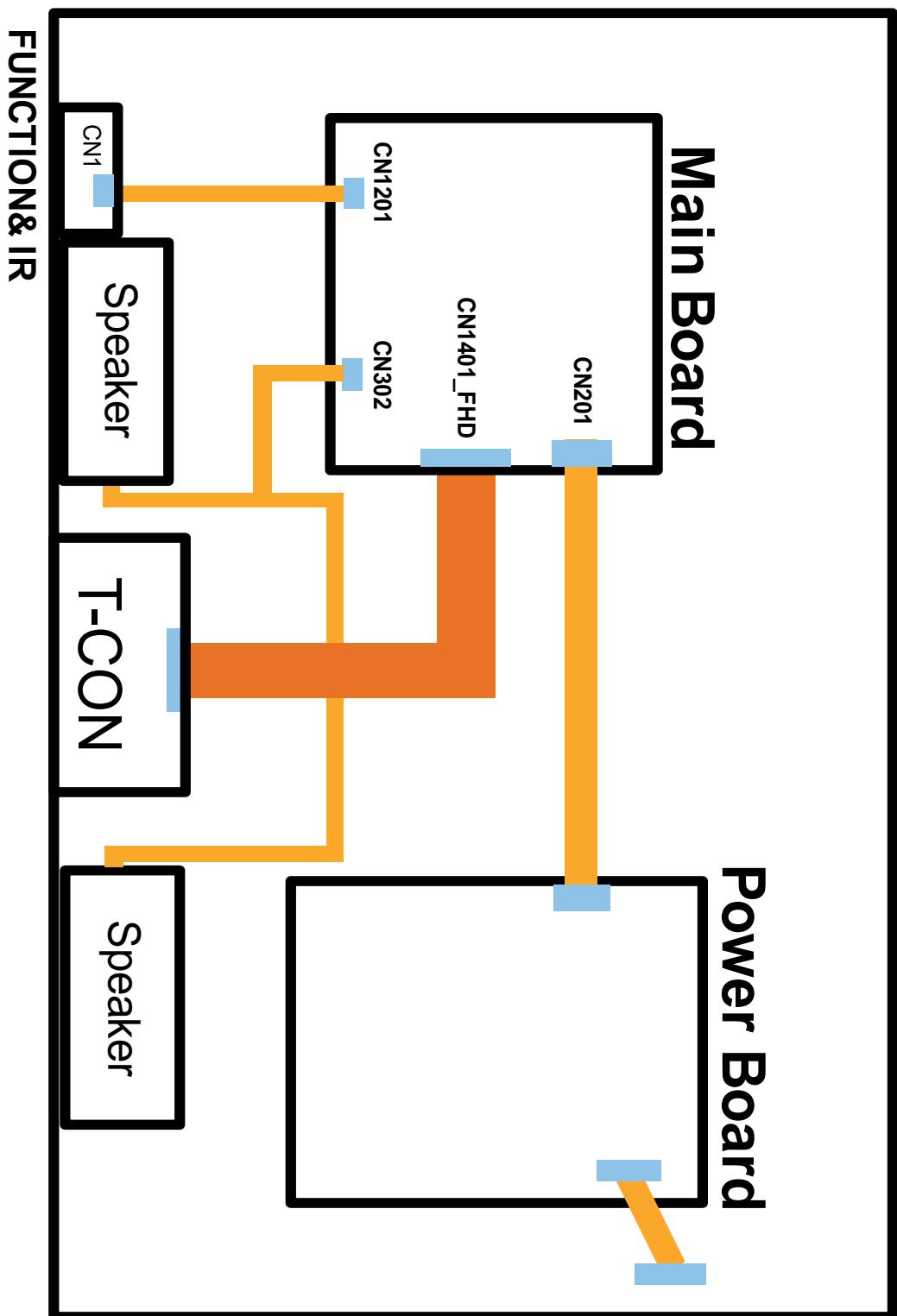
4. Troubleshooting



UF5500	32"	40"	46"	50"
WALL MOUNT (A X B)	200 X 200	200 X 200	400 X 400	400 X 400
C	269	364.1	329.8	367.7
D	116.2	170.4	78.1	120

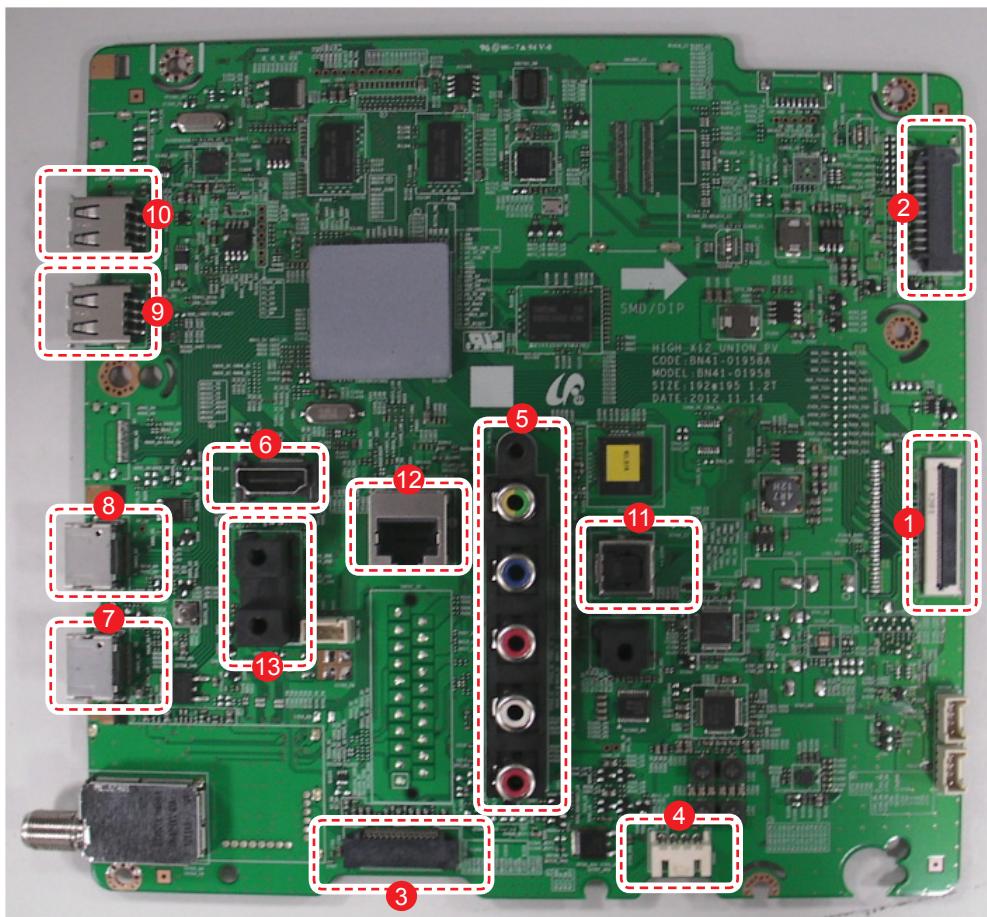
5. Wiring Diagram

5-1. Wiring Diagram



5-2. Connector

■ Main Board



① CN1401_FHD			
1	NC	16	EVEN_TX3+
2	GND	17	EVEN_TX3-
3	FRC_SDA	18	GND
4	FRC_PWM1	19	EVEN_TXCLK-
5	FRC_SCL	20	EVEN_TXCLK+
6	FRC_PWM3	21	GND
7	FRC_PWM2	22	EVEN_TX2+
8	TCON_SDA	23	EVEN_TX2-
9	PANEL_I2C_EN	24	EVEN_TX1+
10	BT_SYNC	25	EVEN_TX1-
11	UPDATE_CHK	26	EVEN_TX0+
12	TCON_SCL	27	EVEN_TX0-
13	GND	28	GND
14	EVEN_TX4+	29	ODD_TX4+
15	EVEN_TX4-	30	ODD_TX4-

① CN1401_FHD			
31	ODD_TX3+	42	ODD_TX0-
32	ODD_TX3-	43	GND
33	GND	44	GND
34	ODD_TXCLK+	45	GND
35	ODD_TXCLK-	46	FRC_PWM4
36	GND	47	PANEL_13V_PW
37	ODD_TX2+	48	PANEL_13V_PW
38	ODD_TX2-	49	PANEL_13V_PW
39	ODD_TX1+	50	PANEL_13V_PW
40	ODD_TX1-	51	PANEL_13V_PW
41	ODD_TX0+		

② CN201 (to Powr board)			
1	B5V	11	B13V
2	SW_POWER	12	B13V
3	B5V	13	B13V
4	A5V	14	PWM_DIMM
5	GND	15	NC
6	GND	16	NC
7	B13VS	17	NC
8	GND	18	NC
9	B13VS	19	NC
10	SW_INVERTER	20	NC

⑥ CN601 (HDMI3)			
1	HDMI1_RX2+	11	GND
2	GND	12	HDMI1_RXCLK-
3	HDMI1_RX2-	13	CEC
4	HDMI1_RX1+	14	NC
5	GND	15	HDMI1_SCL_DDC
6	HDMI1_RX1-	16	HDMI1_SDA_DDC
7	HDMI1_RX0+	17	GND
8	GND	18	HDMI1_5V
9	HDMI1_RX0-	19	HDMI1_HOT_PLUG
10	HDMI1_RXCLK+		

③ CN1201 (FUNCTION)			
1	IR	14	A5.3V
2	GND	15	LED_STB
3	GND	16	BT_WAKE
4	FRAME_SYNC_IN	17	IR_GND
5	A3.3V	18	POWER_DET
6	BT_SYNC	19	NC
7	MSCL	20	BT_RESET
8	GND	21	NC
9	MSDA	22	NC
10	USB_BT_DP	23	GND
11	KEY_INPUT1	24	WIFI_DP
12	USB_BT_DM	25	WIFI_DM
13	KEY_INPUT2	26	B5V_DC_PW

⑦ CN602 (HDMI1)			
1	HDMI2_RX2+	11	GND
2	GND	12	HDMI2_RXCLK-
3	HDMI2_RX2-	13	CEC
4	HDMI2_RX1+	14	ARC2_SIGLE
5	GND	15	HDMI2_SCL_DDC
6	HDMI2_RX1-	16	HDMI2_SDA_DDC
7	HDMI2_RX0+	17	GND
8	GND	18	HDMI2_5V
9	HDMI2_RX0-	19	HDMI2_HOT_PLUG
10	HDMI2_RXCLK+		

④ CN302 (SPEAKER)			
1	R+	3	L+
2	R-	4	L-

⑧ CN603 (HDMI2)			
1	HDMI3_RX2+	11	GND
2	GND	12	HDMI3_RXCLK-
3	HDMI3_RX2-	13	CEC
4	HDMI3_RX1+	14	NC
5	GND	15	HDMI3_SCL_DDC
6	HDMI3_RX1-	16	HDMI3_SDA_DDC
7	HDMI3_RX0+	17	GND
8	GND	18	HDMI3_5V
9	HDMI3_RX0-	19	HDMI3_HOT_PLUG
10	HDMI3_RXCLK+		

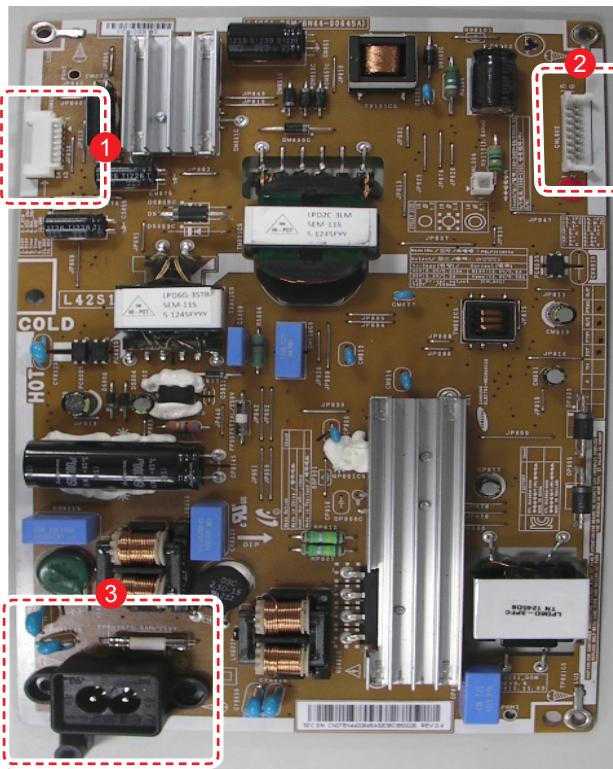
⑤ CN502 (COMPONENT)			
1	GND	9	TEST_PR
2	COMP2_Y_CVBS	10	GND
3	IDENT_VIDEO2	11	COMP2_AV2_SR_IN
4	GND	12	TEST_SL
5	COMP2_PB	13	GND
6	IDENT_COMP2	14	COMP2_AV2_SR_IN
7	GND	15	TEST_SR
8	COMP2_PR		

⑨ CN1501 (USB1)			
1	B5V_USB1_PW	3	USB1_DP
2	USB2_DM	4	GND

5. Wiring Diagram

⑩ CN1502 (USB2)			
1	B5V_USB2_PW	3	USB2_DP
2	USB2_DM	4	GND
⑪ OP301 (OPTICAL)			
1	SPDIF_OUT	3	GND
2	B5V_DC_PW		
⑫ CN1402 (LAN)			
1	LAN_TXD+	5	B2.5V
2	B2.5V	6	LAN_RXD-
3	LAN_TXD-	7	NC
4	LAN_RXD+	8	GND
⑬ CN304_NIRB / CN303_IRB			
1	GND	5	TEST_SR
2	HP_LINE_SL_OUT	6	IDENT_HP
3	HP_LINE_SR_OUT	7	GND
4	TEST_SL	8	GND
9	IRB	12	NC
10	IRB	13	IPR_JACK_ID
11	NC	14	GND

■ SMPS



① CNM803 (to MAIN board)

1	B13V	8	GND
2	PWM_DIM	9	GND
3	B13V	10	GND
4	ECO_ON/OFF	11	B5V
5	Vamp	12	A5V
6	BLU_ON/OFF	13	B5V
7	Vamp	14	PS ON/OFF

② CNL802

1	NC	9	2-
2	NC	10	2+
3	4-	11	1-
4	4+	12	1+
5	3-	13	NC
6	3+	14	NC
7	NC	15	IF2
8	NC	16	IF1

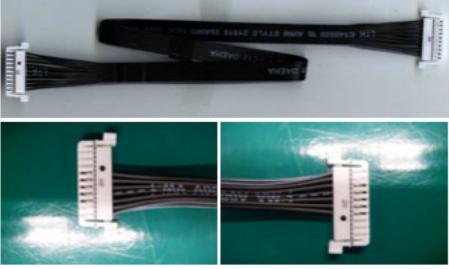
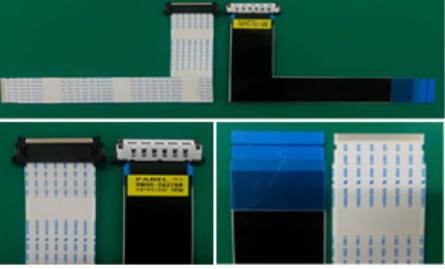
③ CN801S

1	N	2	L
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5-3. Connector Functions

Connector	Function
CN201 ↔ IP CN	Supply main power and dimming signal from IP board to Main Board.
CN1401_FHD ↔ T-CON CNF1	The LVDS signal transferred from Main Board to Panel.

5-4. Cables

Use	LEAD (Main-IP 14P)	LVDS CALBE (Main - Panel 51P)
Code No.	UA32F45** : BN39-01652S UA32F53**/55** : BN39-01652S UA40F53**/55** : BN39-01652T UA46F53**/55** : BN39-01652D UA50F55** : BN39-01652U	UA32F53**/55** : BN96-24278U, BN96-29942A UA40F53**/55** : BN96-24278X UA46F53**/55** : BN96-24278V UA50F55** : BN96-26699B
Image		
Use	LVDS CALBE (Main - Panel 30P)	
Code No.	UA32F45** : BN96-26659C	
Image	