



# LED TV

Chassis : U85A

Model : UE32F6270SS

UE40F6270SS

UE46F6270SS

UE50F6270SS

## ***SERVICE*** Manual

### LED TV



UE\*\*F6270SS

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1. Precautions
2. Product specifications
3. Disassembly and Reassembly
4. Troubleshooting
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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.

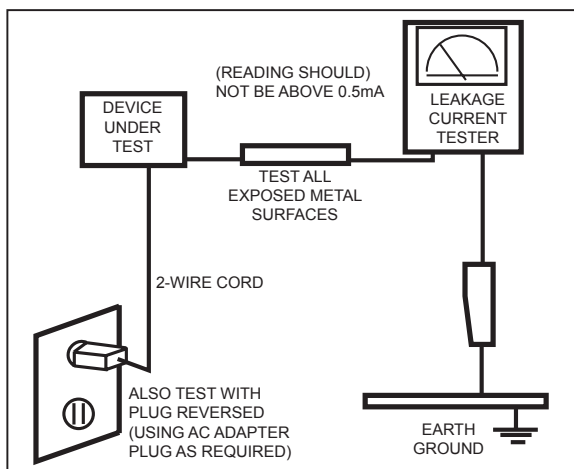
### 1-1-2. Servicing the LED TV

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 resistor/capacitor 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



An electrolytic capacitor installed with the wrong polarity might explode.



Before servicing units covered by this service manual, read and follow the Safety Precautions section of this manual.



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.



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## 1-4. Installation Precautions

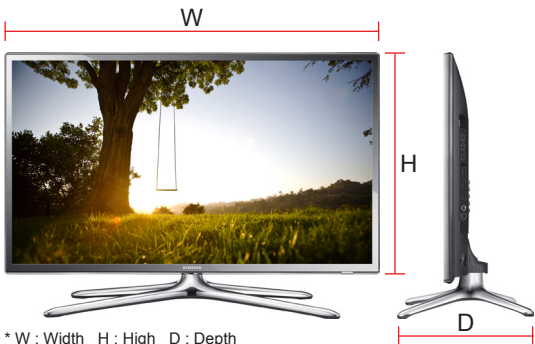
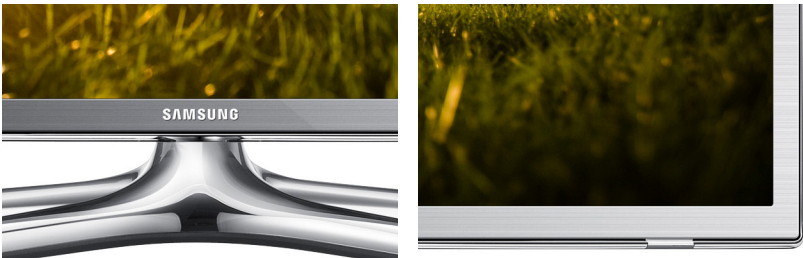
1. For safety reasons, more than a people are required for carrying the product.
2. Keep the power cord away from any heat emitting devices, as a melted covering may cause fire or electric shock.
3. Do not place the product in areas with poor ventilation such as a bookshelf or closet. The increased internal 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 8. 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

Model	UE**F6270SS		
Front View	 <p>* W : Width H : High D : Depth</p>		
Detail View			
Front Color	Clear / Silver		
Dimensions (W x H x D)	32"	Set with Stand	738.2 x 510.2 x 264.8 mm
		Set without Stand	738.2 x 437.0 x 49.5 mm
	40"	Set with Stand	928.2 x 617.3 x 264.8 mm
		Set without Stand	928.2 x 543.8 x 49.6 mm
	46"	Set with Stand	1059.8 x 704.6 x 306.9 mm
		Set without Stand	1059.8 x 617.7 x 49.6 mm
Weight	32"	Set with Stand	7.1 kg
		Set without Stand	6.1 kg
	40"	Set with Stand	10.4 kg
		Set without Stand	9.2 kg
	46"	Set with Stand	13.8 kg
		Set without Stand	12.2 kg
	50"	Set with Stand	15.4 kg
		Set without Stand	13.7 kg
Panel Type	Silver		
Internal Memory	4 G		
DDR	1 G		
Feature	SMART GUIDE / USB HID / DLNA / Full browsing / Miracast		

## 2-2. Product specification

### 2-2-1. Product Specifications


**NOTE**

Design and specifications are subject to change without prior notice.

Item		UE**F6270SSXZG
General Information	Product	LED
	Series	6
	Country	GERMANY
Display	Inch	32" / 40" / 46" (50")
	Resolution	1,920 x 1,080
	Ultra Clear Panel	No
Video	Clear Motion Rate	100
	Micro Dimming	No
	Precision Black (Local Dimming)	No
	Picture Engine	HyperReal Engine
	Dynamic Contrast Ratio	Mega Contrast
	Motion Judder Canceller	N/A
	Wide Color Enhancer (Plus)	Yes
	Film Mode	Yes
	Natural Mode Support	Yes
Audio	3D Sound	No
	Sound Output (RMS)	10W x 2
	Dolby	Dolby Digital Plus / Dolby Pulse
	SRS / DNSe+	DTS Studio Sound
	dts 2.0 + Digital Out / DTS Premium Audio	DTS Premium Audio 5.1
	Speaker Type	Down Firing + Full Range
	Sound Customizer	No
	Woofer	No
Smart TV 2.0	Smart Hub	Yes
	On TV	Yes
	Movies & TV Shows	Yes
	Apps	Yes
	Social	Yes
	Photos, Videos & Music	Yes
	Fitness	Yes
	Kids	Yes
	ACR (Advertisement)	N/A
	Samsung Sports Experience (SSE)	N/A

Item		UE**F6270SSXZG
Smart TV 2.0	Samsung SMART View	Yes (Clone View only)
	Smart Appliance	N/A
	S Recommendation	Yes
	Prism Screen	No
	Web Browser	Yes
Smart Interaction 2.0	Camera Built-in	No
	Face recognition	No
	Motion control	No
	Voice Control (Embedded)	No
	Voice Control (Server)	No
	Voice Interaction	No
	Camera App	No
	Samsung TV Apps supported	Yes
System	DTV Tuner	DVB-T/C/S2
	Analog Tuner	Yes
	MHP / MHEG (version)/ ACAP / GINGA	N/A
	CI/CI+	CI+ (1.3)
Input&Output	Audio Out (Mini Jack)	No
	Component In (Y/Pb/Pr)	1
	Composite In (AV)	1 (Common Use for Component Y)
	Digital Audio Out (Optical)	1
	DVI Audio In (Mini Jack)	1
	Ethernet (LAN)	1
	HDMI	4
	PC Audio In (Mini Jack)	No
	PC In (D-sub)	No
	RF In (Terrestrial/Cable Input)	1
	RF In (Satellite Input)	1
	RS-232C (AV CONTROL)	No
	USB	3
	Headphone	1
	Scart	1
	CI Slot	1
	IR Out	1
Design	Design	One Design
	Slim Type	Slim
	Bezel Type	Narrow
	Front Color	Metal

## 2. Product specifications

Item		UE**F6270SSXZG
Design	Light Effect (Deco)	No
	Swivel (Left/Right)	Yes
	Stand Type	Quad
	Push & Pull Camera	N/A
Feature	3D Converter	No
	ConnectShare™ (USB 2.0)	Movie
	Samsung 3D	No
	History	Yes
	MultiTasking	N/A
	Smart Evolution Support	No
	Wireless LAN Built-in	Yes
	Wireless LAN Adapter Support	No
	OSD Language	26 European Languages
	EPG	Yes
	HbbTV	Yes
	HDMI 1.4 3D Auto Setting	No
	HDMI 1.4 A/Return Ch. Support	Yes
	Time Shift	Yes
	AllShare (Content Sharing, Screen Mirroring)	Yes
	Teletext (TTXT)	Yes
	InstaPort S (HDMI quick switch)	No
	Anynet+ (HDMI-CEC)	Yes
	Auto Channel Search	Yes
	Auto Power Off	Yes
	Auto Volume Leveler	Yes
	Caption (Subtitle)	Yes
	Clock&On/Off Timer	Yes
	Game Mode	Yes
	Sports Mode	Advanced
	Picture-In-Picture	Yes
	Sleep Timer	Yes
	Extended PVR	Yes
	Smart Phone Remote support	Yes
	WiFi Direct	Yes
	ISP Bound Service	Yes
	BT HID Built-in	No
	USB HID Support	Yes
	Network Speaker Support	N/A

Item		UE**F6270SSXZG
Feature	Sound Share	No
	Regional EQ	N/A
	Digital Clean View	Yes
	Analog Clean View	N/A
	MHL	No
	Twin Tuner	No
	BD Wise Plus	Yes
	USB Copy	N/A
	ACS	N/A
	IP Video Closed Caption	N/A
	Embedded POP	Yes
Eco	Energy Efficiency Class	A+
	Eco Sensor	Yes
Accessory	3D Active Glasses (Included)	No
	IR Extender Cable (Included)	Yes
	Wireless LAN Adaptor (Included)	No
	Network Speaker (Included)	No
	MolP Camera	No
	Wireless Keyboard	No
	Remote Controller Model	TM1250
	Batteries (for Remote Control)	Yes
	Ultra Slim Wall Mount Supported	No
	Mini Wall Mount Supported	Yes
	Vesa Wall Mount Supported	Yes
	Slim Gender Cable	No
	Power Cable	Yes
	ANT-Cable	No
	User Manual	Yes
	E-Manual	Yes
	Floor Stand Support	No

## 2-2-2. Feature & Specifications

### ■ Feature

- Digital-TV, RF, 4-HDMI, 1-Component, 1-A/V, 3-USB2.0(Media Play), LAN, Wi-Fi
- PIP(in HDMI 1, 2, 3, 4 Component and Sub picture is available only in TV mode(DTV/ATV))
- Dolby Digital Plus Pulse, DTS Premium Sound 5.1, DTS Studio Sound

## ■ Specifications

Model	UE32F6270SS	UE40F6270SS	UE46F6270SS
Specifications			
Item	Description		
Screen Size	32 inches	40 inches	46 inches
LCD Panel	FHD 120 Hz		
Display Colors	1.07 B		
Display Resolution	1920 x 1080		
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated		
Input Signal Frequency	Horizontal : 31 ~ 80 kHz Vertical : 56 ~ 75 Hz		
Input Sync Signal	H/V Separate, TTL, P. or N.		
Maximum Pixel Clock Rate	138 MHz		
AC Power Voltage & Frequency	AC 220 V ~ 240 V, 50/60 Hz		
Environmental Considerations	Operating Temperature : 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity : 10% ~ 80%, non-condensing Storage Temperature : -4°F ~ 113°F (-25°C ~ 45°C) Storage Humidity : 5% ~ 95%, non-condensing		
Sound Output	10W x 2		
Note : AllShare, SMART Guide, Web Browser, USB HID, IR Blaster, Smart Control			



## 2. Product specifications

Model	UE50F6270SS
Specifications	
Item	Description
Screen Size	50 inches
LCD Panel	FHD 120 Hz
Display Colors	1.07 B
Display Resolution	1920 x 1080
Input Signal	Analog 0.7 Vp-p $\pm$ 5% positive at 75 $\Omega$ , internally terminated
Input Signal Frequency	Horizontal : 31 ~ 80 kHz Vertical : 56 ~ 75 Hz
Input Sync Signal	H/V Separate, TTL, P. or N.
Maximum Pixel Clock Rate	138 MHz
AC Power Voltage & Frequency	AC 220 V ~ 240 V, 50/60 Hz
Environmental Considerations	Operating Temperature : 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity : 10% ~ 80%, non-condensing Storage Temperature : -4°F ~ 113°F (-25°C ~ 45°C) Storage Humidity : 5% ~ 95%, non-condensing
Sound Output	10W x 2
<b>Note</b> : AllShare, SMART Guide, Web Browser, USB HID, IR Blaster, Smart Control	


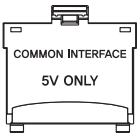
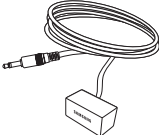
## 2-3. Accessories



### NOTE

- The items' colors and shapes may vary depending on the model.
- Cables not included in the package contents can be purchased separately.
- The part code for some accessories may differ depending on your region.

Product	Code. No	Product	Code. No
• Remote Control	AA59-00790A	• Warranty Card	BN68-00514K
• Batteries (AAA x 2)	4301-000121	• User Manual	BN68-04880B
• Power Cord	3903-000849		

Image	Product	Code. No
	• Holder-Ring	BN61-07295A
	• CI Card Adapter	3709-001791
	• IR Extension Cable	BN96-26652B

## 2-4. Viewing the Functions

### 2-4-1. Supported Formats

#### ■ Supported Subtitle Formats

##### Exterminal

Name	File Extension
MPEG-4 Timed text	.txt
SAMI	.smi
SubRip	.srt
SubViewer	.sub
Micro DVD	.sub or .txt
SubStation Alpha	.ssa
Advanced SubStation Alpha	.ass
Powerdivx	.psb

##### Internal

Name	File Extension
Xsub	AVI
SubStation Alpha	MKV
Advanced SubStation Alpha	MKV
SubRip	MKV
MPEG-4 Timed text	MP4

#### ■ Supported Music File Formats

File Extension	Type	Codec	Comments
*.mp3	MPEG	MPEG1 Audio Layer 3	
*.m4a	MPEG4	AAC	
*.mpa			
*.aac			
*.flac	FLAC	FLAC	Supports up to 2 channel
*.ogg	OGG	Vorbis	Supports up to 2 channel
*.wma	WMA	WMA	WMA 10 Pro supports up to 5.1 channel. WMA lossless audio is not supported. Supports up to M2 profile (except LBR mode)
*.wav	wav	wav	
*.mid *.midi	midi	midi	type 0, type 1 are supported.
*.ape	ape	ape	

## ■ Supported Video Formats

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec				
*.avi	AVI MKV ASF MP4 3GP MOV FLV VRO VOB PS TS SVAF	Divx 3.11 / 4 / 5 / 6	1920 x 1080	6~30	30	AC3 LPCM ADPCM(IMA, MS) AAC HE-AAC WMA DD+ MPEG(MP3) G.711(A-Law, μ-Law)				
*.mkv		MPEG4 SP/ASP								
*.asf		H.264 BP/MP/HP								
*.wmv		Motion JPEG	640 x 480		8					
*.mp4										
*.3gp		Microsoft MPEG-4 v3	1280 x 720		30					
*.vro										
*.mpg		Window Media Video v7,v8	1920x1080		60					
*.mpeg										
*.ts		Window Media Video v9	1920x1080		4					
*.tp										
*.trp		MPEG2			20					
*.mov										
*.flv		MPEG1			60					
*.vob										
*.svi		MVC	640 x 480		4					
*.m2ts										
*.mts		VP6	1920 x1080		20					
*.divx										
*.webm	WebM	VP8	1920 x1080	6~30	20	Vorbis				

## ■ Other Restrictions

Codecs may not function properly if there is a problem with the content data. Video content does not play or does not play correctly if there is an error in the content or container. "Sound or video may not work if they have standard bit rates/ frame rates above the TV's compatibility ratings." If the Index Table is wrong, the Seek (Jump) function does not work. "When playing video over a network connection, the video may not play smoothly because of data transmission speeds." Some USB/digital camera devices may not be compatible with the player.

## ■ Video Decoders

- Supports up to H.264, Level 4.1 (does not support FMO/ASO/RS)
- VC1 AP L4 is not supported.
- All video codecs excluding WMV v7, v8, MSMPEG4 v3, MVC, and VP6:
  - Below 1280 x 720: 60 frame max
  - Above 1280 x 720: 30 frame max
- GMC is not supported.
- Supports SVAF top/bottom and left/right only.
- Supports Blu-ray/DVD MVC specs only.

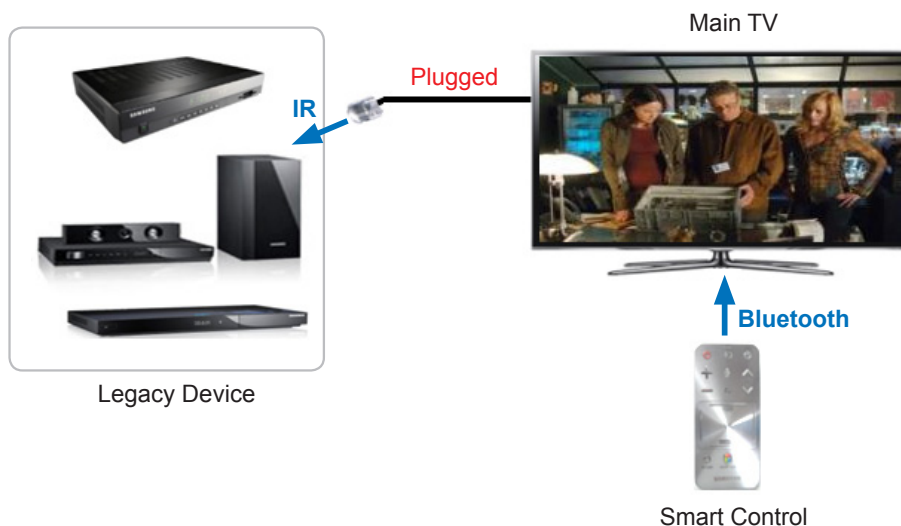
## ■ Audio Decoders

- WMA 10 Pro supports up to 5.1 channels. Supports up to M2 profile. (Excluding M0 LBR mode)
- WMA lossless audio is not supported.
- Vorbis is supported for up to 2 channels.
- DD+ is supported for up to 5.1 channels.

## 2-4-2. IR Blaster

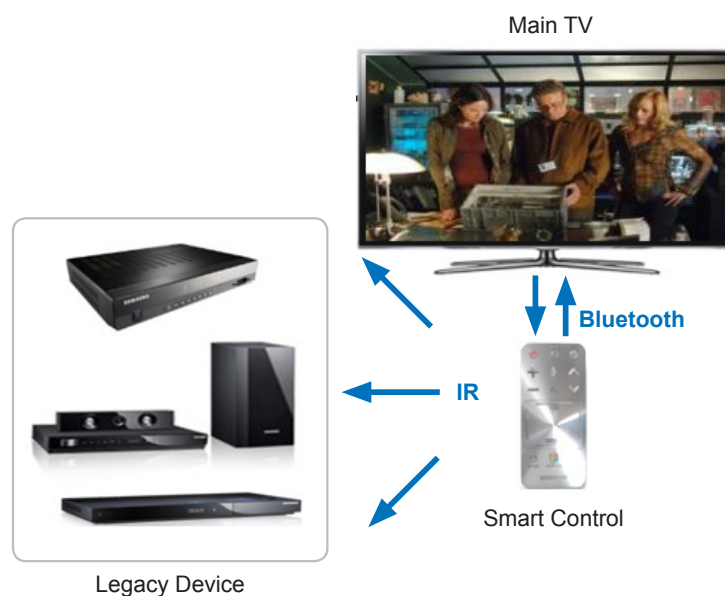
### ■ Using wired IR Blaster

1. Push the Smart Control Key.
  - Key Data is transmitted to the TV. (Bluetooth)
2. Key Data is transmitted to the IR Blaster MCU.
  - Uart (the internal communication of TV)
3. External Device is operated.
  - IR Transmit . (IR blaster → Device)



### ■ Not using wired IR Blaster

1. Push the Smart Control Key.
  - Key Data is transmitted to the TV. (Bluetooth)
2. Key Data is transmitted to the Smart Control.
  - Bluetooth
3. External Device is operated.
  - IR Transmit (Smart Control → Device)



### 2-4-3. SMART Interaction



#### NOTE

The camera is sold separately.

This Smart TV is enabled with SMART Interaction, a facial- and movement-recognition feature that allows users to control the TV without the need for a remote control. To use SMART Interaction, you will need to purchase and install a separate camera. SMART Interaction makes it possible to configure settings and access features with ease. It takes approximately 15 seconds for motion recognition to come online after turning on the TV.

#### ■ Face Recognition

This product saves thumbnail images of users' faces for use during the Face Login. Logging into the Smart Hub via face recognition may be less secure than logging in using an ID and password.

Users can register their faces and log into their Smart Hub accounts through Face Recognition. One face may be registered per account. Depending on the ambient brightness level and the user's skin tone, the TV may have difficulty recognizing the user's face.

- Face Registration

A Smart Hub login is required to register a face. Log into the Smart Hub. Create a new account if you do not already have one.

- Face Recognition Login

Select Face Recognition Mode from the login window. The TV automatically recognizes a user's face. If recognition fails, try again. If the password entry option has been enabled under Change account information, you need to enter your password as well in order to log into the Smart Hub.

#### ■ TV Camera Use

Under some circumstances and under certain legal conditions, the use/misuse of the TV camera may result in legal liability. There may be obligations under local privacy laws regarding the protection of individuals concerning personal data and on the free movement of such data, and possibly other laws including criminal laws, regulating camera surveillance both in the workplace and elsewhere.

By using the TV camera, users agree that it will not be used (i) in locations where cameras are generally prohibited (such as bathrooms, locker rooms or changing rooms), (ii) in any manner that will result in an invasion of a person's privacy or (iii) in violation of any applicable laws, regulations or statutes.

If you are using a camera, first check the back for a sticker. Remove the sticker cover before adjusting the TV camera angle. When you are no longer using the camera, rotate the lens downward and secure it in place. This prevents any inadvertent or unintentional camera operation.

#### ■ Motion Control Environment Test

##### Screen Menu → Smart Features → Motion Control

Use Motion Control to change the channel, adjust the volume, move the pointer, and control other TV functions. Some applications may not support Motion Control.

#### Operating Environment

Users should be located between 1.5m and 4m from the camera. The actual recognition range may vary depending on the camera angle and other factors.

Motion Control relies on the TV camera and therefore will not function if the camera is pointed up or down. Adjust the camera to the correct angle. Do not point the camera directly at the sun or any other light source or obstruct its view.

In order for the camera to recognize movement, the user has to stand out from the background.

The appropriate ambient brightness is between 50 to 500 lux.

Avoid direct sunlight when using Motion Control.

Run Motion Control Environment Test before using Motion Control to determine the camera's recognition range.

## Motion Control Environment Test

### Screen Menu → Smart Features → Motion Control → Motion Control Environment Test

Run this test before using Motion Control to ensure proper functionality

1. Run Motion Control Environment Test and select Start within 4.9ft and 13.1ft of the TV. If light reflects on the TV
2. Adjust the camera angle so that you appear inside the square displayed on the screen. Once you have finished

## Motion Control Options

Motion Control: Activates/deactivates Motion Control.




Animated Motion Guide: Displays an animated guide when user motion is detected.

## Motion Control Activation

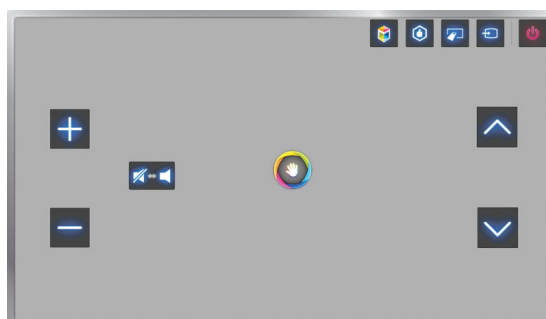
Raise your hand with the palm facing the TV. Hold it for a moment and slowly wave your arm and hand from side to side three or four times. When your hand is successfully recognized, the Motion Control is activated and an arrow cursor is displayed on the screen.









## Using the Basic Motion Controls

The following basic motion control commands are available:

		
<p>This action moves the cursor to the desired position.</p>	<p>Make a fist to select an option or execute a command. Keeping your fist clenched is like holding down a remote control button.</p>	<p>Make a circle with your hand in the counterclockwise direction to return to the previous menu.</p>

## Motion Control Screen



Screen Icons	Explanation
	Adjust the volume.
	Turns the TV sound on/off.
	Changes the channel.
	Launch Smart Hub.
	Check the recommended program information and air times. Select a program from the list to view detailed information about that program.
	Enter a channel number using the number panel to jump to the channel. Use the playback control panel with the on-screen color buttons to control a media file that is currently playing.
	Change the source.
	Turn off the TV.



## 2-4-4. SMART HUB

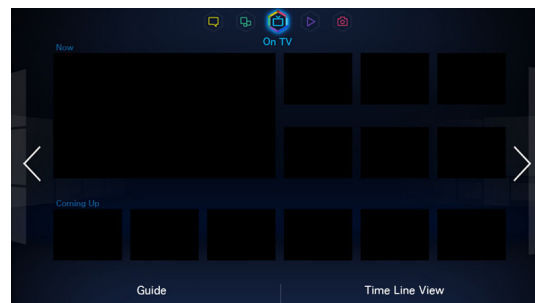
This TV features Smart Hub, a multi-purpose entertainment and family center. With Smart Hub, users can surf the web, download applications, and stay in touch with family and friends through social networking services. In addition, you can enjoy photo, video, and music files stored on external storage devices.



### On TV

This functions is only available on U.S and Canada.

While you watch TV, a list of recommended programs on other channels appears on the screen. You can use this list to change the channel and find out more information about the recommended programs including how much time is left until they air.



### Movies & TV Shows

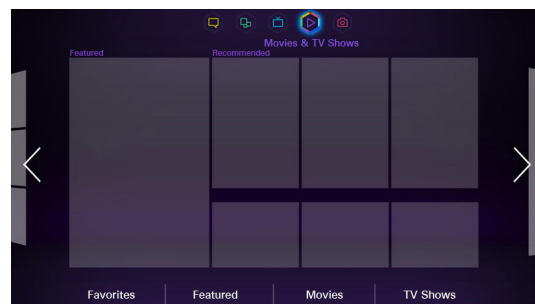
Purchase and watch movies and series without a separate external device.

This functions is only available on U.S and Canada.

Users can buy movies and TV shows online.

Open Smart Hub and select Movies & TV Shows.

This service may be not available depending on the country or region.

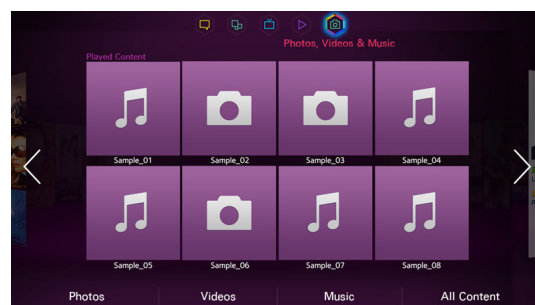


### Movies & TV Shows

Play back photo, video, and music files from an external storage device.

Open Smart Hub and select Photos, Videos & Music.

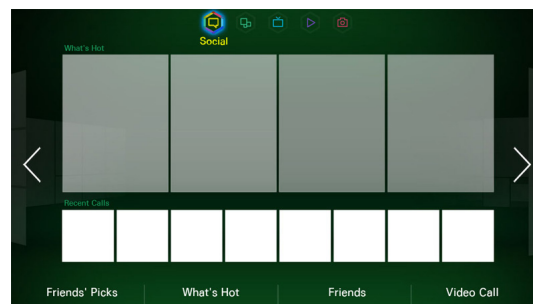
Enjoy photo, video and music files from an external storage device directly on your TV. Back up important files before connecting an external storage device to the TV. Samsung will not be held responsible for damaged or lost files.



## Social



Watch the latest YouTube videos and you and your friends' video posts on Facebook and Twitter. You can also make video calls to friends by connecting the TV to a camera (sold separately).

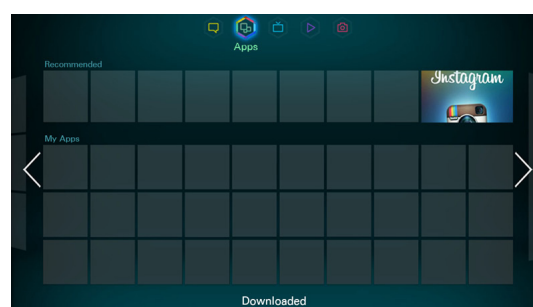


## Apps



Download and install applications such as WebBrowser and Family Tree.

Samsung Apps offers an extensive collection of free and paid news, sports, weather, and gaming content you can directly download to and enjoy on your TV. First, check the network and make sure the TV is connected to the Internet. Your TV needs to be connected to the Internet in order to use Apps.



- Samsung Apps

Samsung Apps offers various free and paid news, sports, weather, and gaming applications. Samsung Apps lets you search for applications and install them directly on your TV. Read and agree to the terms and conditions of use and then browse through the categories or directly search for applications.

- Fitness

Fitness is an application that helps you stay fit. Create a profile, set up an exercise plan, and start exercising according to a structured regimen. Read and agree to the terms and conditions before using Fitness.

- Kids

This is a quick launcher and recommended list for applications and content that is suitable for children and even provides services not currently installed on your TV. Using Kids, you can download applications and content for your children to your TV. Certain services, however, are fee-based.

- WebBrowser

WebBrowser is a web-browsing application. Using WebBrowser, you can browse the Internet on your TV as you would on your computer and even watch TV while you surf the web. The browsing experience, however, may not be the same as it is on your computer. Use a keyboard and mouse for a more convenient web browsing experience.

- Social Networks

Share your thoughts and comments about a program on the air through social networking services. Social Networks displays social network services such as Twitter, Facebook, Google Talk, and NateOn on a single screen. You can even post messages and comments in the same manner as you would using a computer. You must first link your Samsung account to the respective SNS accounts before you can access them using Social Networks.

## 3. Disassembly and Reassembly

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



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


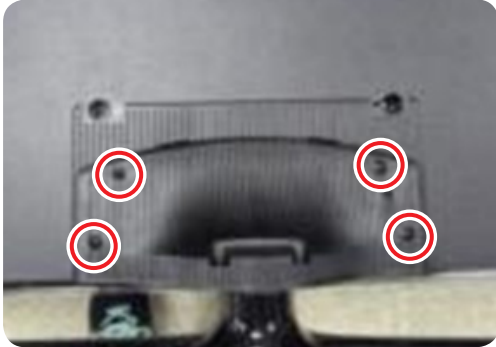

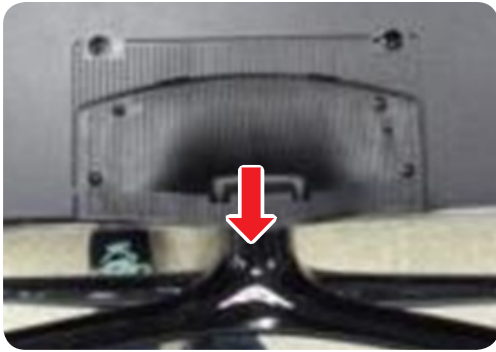
### 3-1. Disassembly and Reassembly




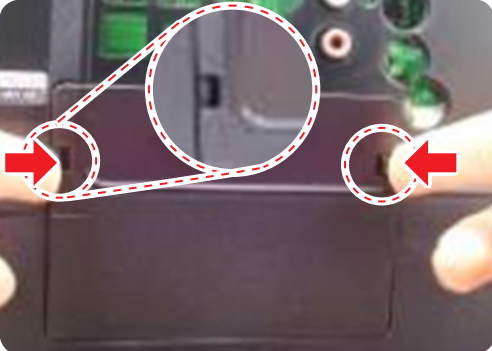

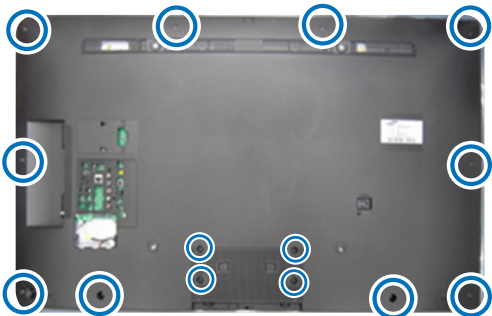

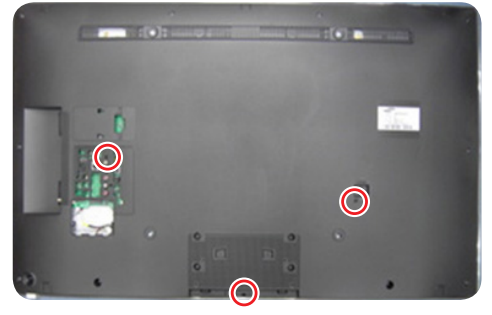

1. Disconnect the LED TV from the power source before disassembly.
2. Follow these directions carefully; never use metal instruments to pry apart the cabinet.
3. If there is no additional coment, it is same for all inches.


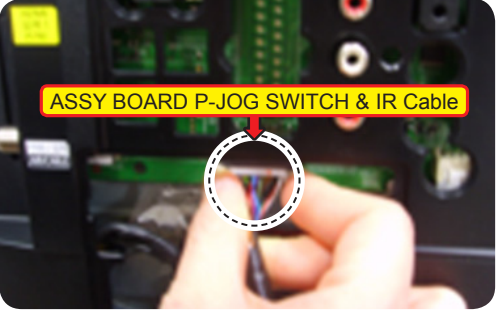
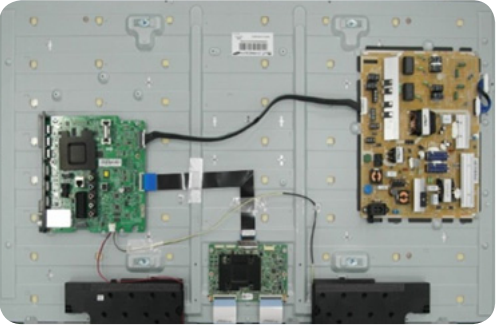

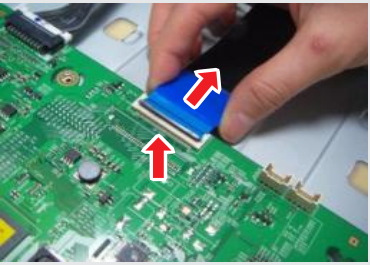
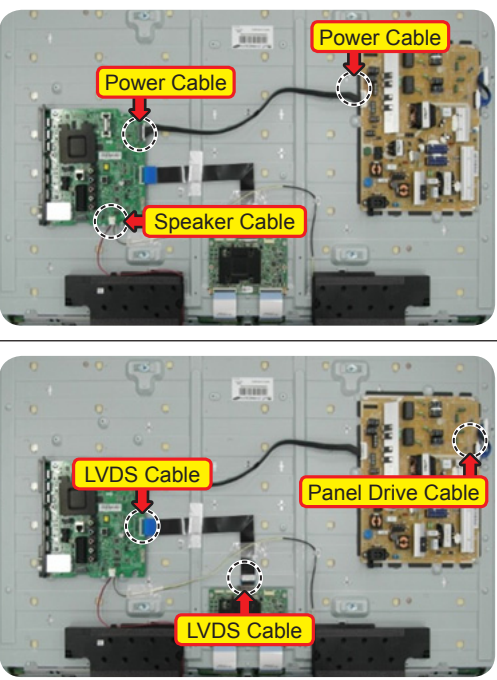


#### 3-1-1. LED TV

##### ■ 32 / 40 / 46 Inches

Description	Picture Description	Screws
1 Place TV face down on cushioned table.		
2 Remove 4 screws from the ASSY GUIDE P-STAND.		<p>Torque : 9~11Kgf.cm. 128~156psi</p>  <p>6003-001782 SCREW-MACHINE M4.0, L12.0 BLK</p>
3 Remove STAND.		



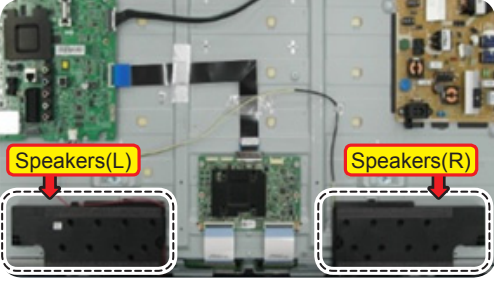
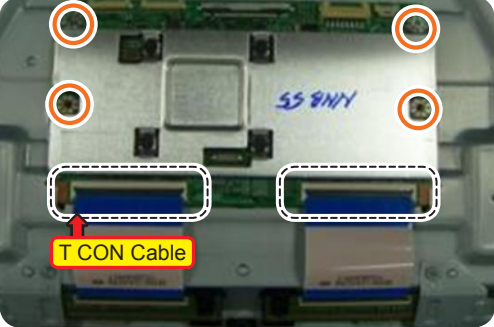


### 3. Disassembly and Reassemble

Description	Picture Description	Screws
<b>4</b> Remove the COVER-JACK after push the locking in both sides.		
		
		
<b>5</b> Remove screws of ASSY COVER P-MIDDLE, REAR. <ul style="list-style-type: none"> <li>• 32 inch : 9 EA</li> <li>• 40 inch : 14 EA</li> <li>• 46 inch : 14 EA</li> </ul> <ul style="list-style-type: none"> <li>• 32 inch : 2 EA</li> <li>• 40 inch : 2 EA</li> <li>• 46 inch : 3 EA</li> </ul>		<div data-bbox="1246 1350 1410 1529">  <p>Torque : 7~8Kgf.cm. 100~113psi</p> </div> <div data-bbox="1230 1547 1422 1626"> <p>6001-002755 SCREW-MACHINE M3.0, L6.0 BLK</p> </div>
		<div data-bbox="1246 1700 1410 1879">  <p>Torque : 9~11Kgf.cm. 128~156psi</p> </div> <div data-bbox="1230 1897 1422 1975"> <p>6003-001782 SCREW-MACHINE M4.0, L12.0 BLK</p> </div>

Description	Picture Description	Screws
<p><b>6</b> Disconnect the ASSY BOARD P-JOG SWITCH &amp; IR Cable.</p> <p> <b>NOTE</b></p> <p>First remove the cable before you remove the ASSY COVER P-MIDDLE, REAR.</p>		
<p><b>7</b> Remove the ASSY COVER P-MIDDLE, REAR.</p>		
<p><b>8</b> Remove the Power Cables and Speaker Cables.</p> <p>Remove the LVDS Cable and Panel Drive Cable.</p> <p> <b>NOTE</b></p> <p>Applied to Double locking.</p> <ol style="list-style-type: none"> <li>1. Flip up the locking tab on top of the connector.</li> <li>2. Squeeze the edge of the connector to release the second tab lock and gently pull the connector away.</li> </ol> 		
<p><b>9</b> Remove the screws of ASSY PCB MAIN.</p>		<p> Torque : 7~8Kgf.cm. 100~113psi</p> <p>6001-002756 SCREW-MACHINE M3.0, L6.0 WHT</p>



### 3. Disassembly and Reassemble

Description	Picture Description	Screws
<b>10</b> Remove the screws of DC VSS-LED TV PD BD.		<div data-bbox="1246 293 1414 472">  <p>Torque : 7~8Kgf.cm. 100~113psi</p> </div> <p data-bbox="1230 495 1422 573">6001-002756 SCREW-MACHINE M3.0, L6.0 WHT</p>
<b>11</b> Remove the ASSY SPEAKER (L/R).		
<b>12</b> Remove the 4 screws of ASSY T CON and unlock the locking of T CON Cable.		<div data-bbox="1246 987 1414 1167">  <p>Torque : 7~8Kgf.cm. 100~113psi</p> </div> <p data-bbox="1230 1189 1422 1267">6001-002756 SCREW-MACHINE M3.0, L6.0 WHT</p>
<b>13</b> Completed disassembly. <ul style="list-style-type: none"> <li>Panel.</li> </ul>		



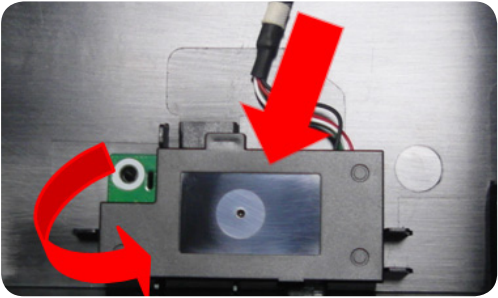
#### NOTE


Reassembly procedures are in the reverse order of disassembly procedures.

## Screw Size

Code No.	COLOR	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Screw Image
6003-001782	BLACK	7.80~8.20	1.85~1.95	3.81~3.91	11.4~12.0	-	
6001-002755	BLACK	7.1~7.5	1.9~2.0	2.98~3.02	5.7~6.0	4.4~5.4	
6001-002756	WHITE	5.6~6.0	1.15~1.25	2.92~2.98	3.7~4.0	4.4~5.4	

3-1-2. NETWORK

Description	Picture Description	Refer
1 Remove the NETWORK(Wi-Fi module).		

 **NOTE**

Reassembly procedures are in the reverse order of disassembly procedures.

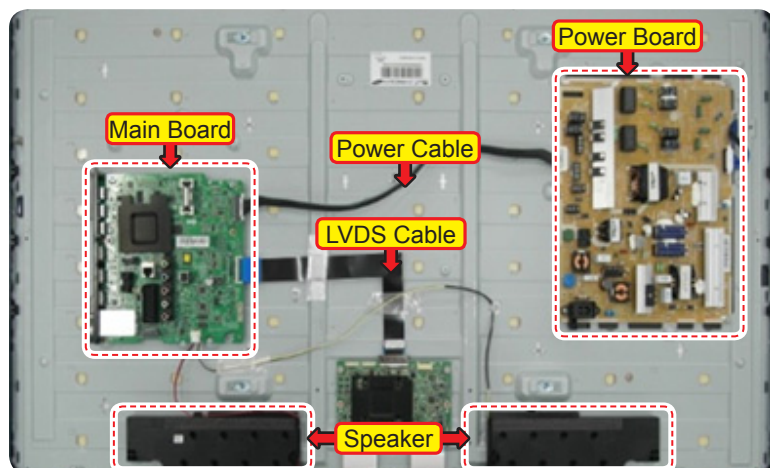


## 4. Troubleshooting

### 4-1. Troubleshooting

#### 4-1-1. 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**

- 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 Board 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. Enter the service mode → Choose 'SVC' → Check the 'internal pattern.'

2. Enter 'Service Mode.'

- If you do not have Factory remote control



- If you have Factory remote control

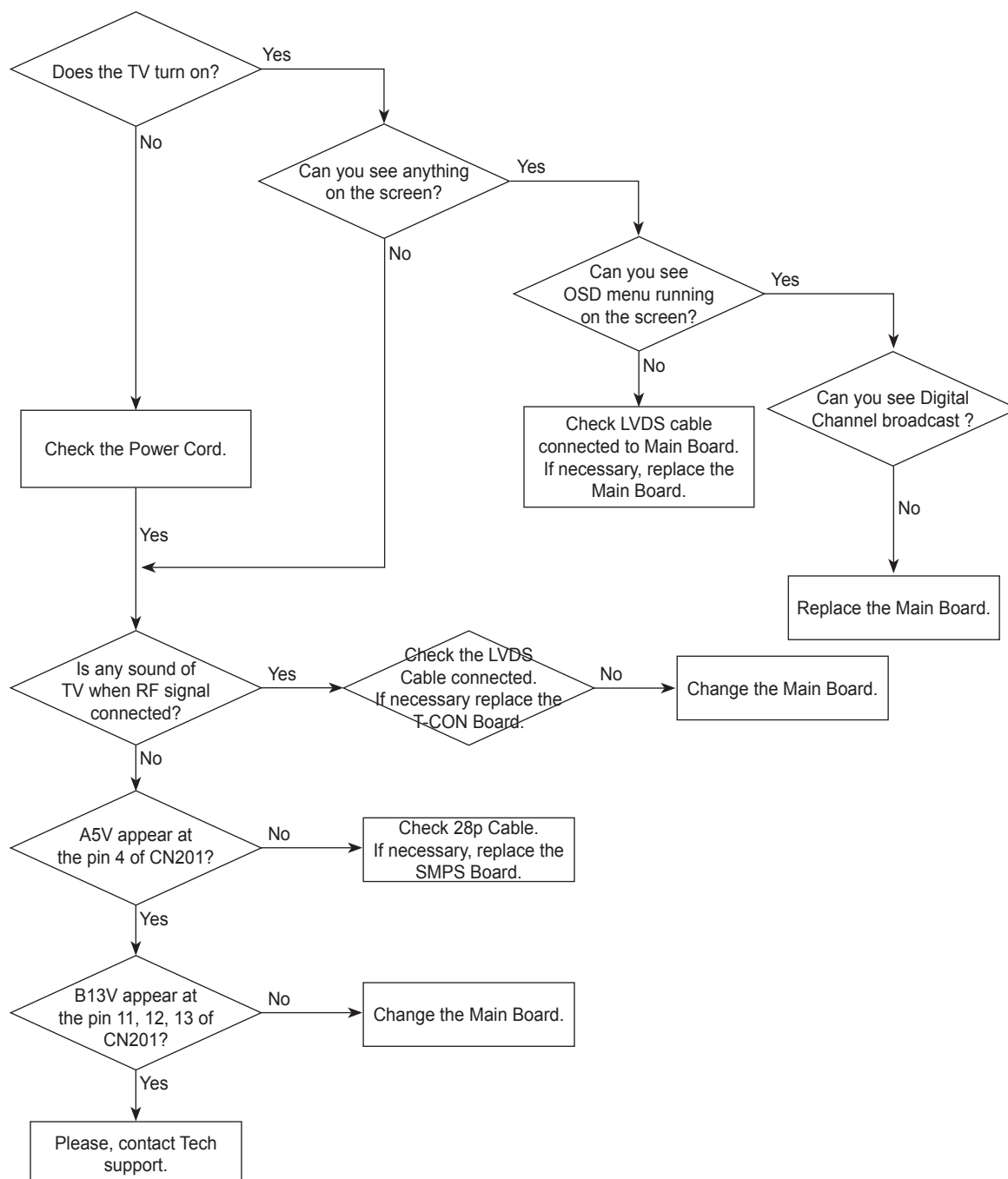


3. Choose 'SVC → Test pattern'.



4. Check inner patterns.

## 4-1-2. Simple flow chart of malfunction



## 4-2. How to Check Fault Symptom

### 4-2-1. NO Power

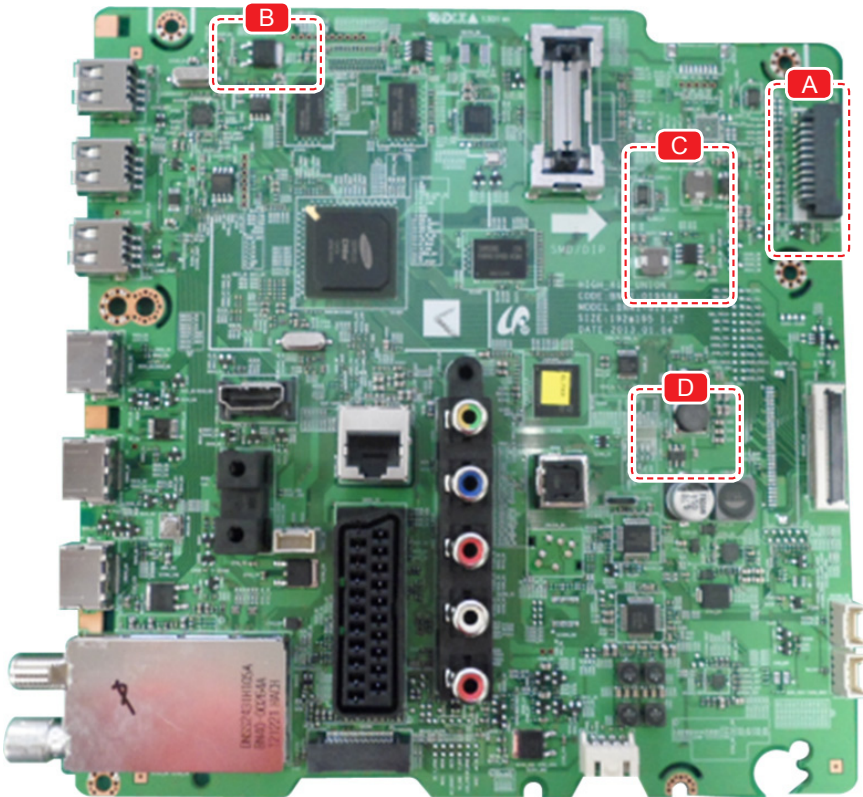
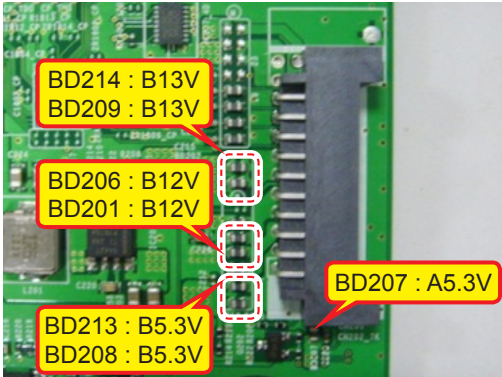
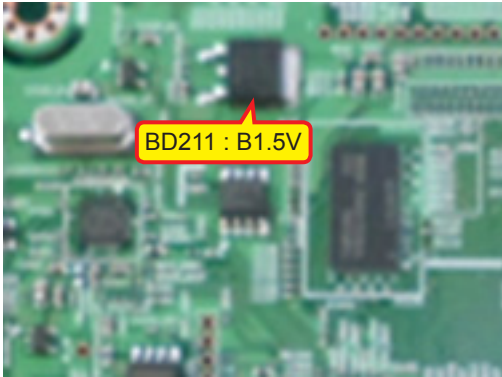
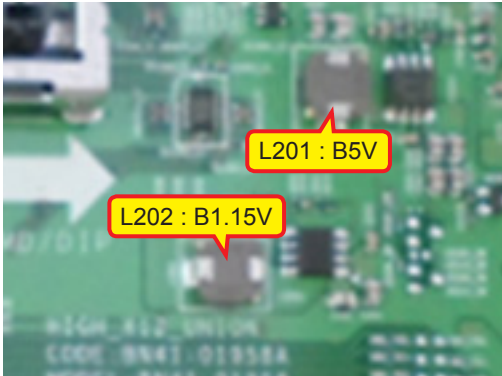
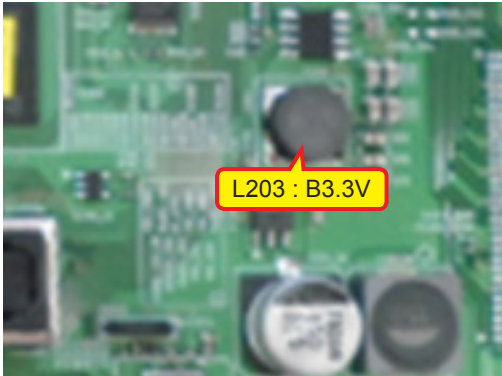

**Note**

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

<b>Symptom</b>	<ul style="list-style-type: none"> <li>The LEDs on The front panel do not work when connecting The power cord.</li> <li>The SMPS relay does not work when connecting The power cord.</li> <li>The units appears to be dead.</li> </ul>
<b>Major checkpoints</b>	<p>The IP relay or the LEDs on the front panel does not work when connecting the power cord if the cables are improperly connected or the Main Board or SMPS is not functioning. In this case, check the following:</p> <ul style="list-style-type: none"> <li>Check the internal cable connection status inside the unit.</li> <li>Check the fuses of each part.</li> <li>Check the output voltage of SMPS.</li> <li>Replace the Main Board.</li> </ul>
<b>Diagnostics</b>	<pre> graph TD     Q1[Power indicator LED is on?] -- No --&gt; A1[Check the power cord connection.]     Q1 -- Yes --&gt; Q2[Check the backlight on, when 20 PIN cable unconnected ?]     Q2 -- No --&gt; A2[Change 20p cable. Change Main Power Ass'y.]     Q2 -- Yes --&gt; Q3[Check 'Stand-By 5V' ? BD207 : A5.3V]     Q3 -- No --&gt; A2     Q3 -- Yes --&gt; Q4[Check 'Power input of Main Ass'y' ? - BD206 / BD201 : B12VS - BD214 / 209 : B13V - BD208 / BD213 : B5V]     Q4 -- No --&gt; A2     Q4 -- Yes --&gt; Q5[Check 'Power IC output of Main Ass'y' ? - IC202 : A3.3V - L202 : B1.15V / L201 : B5V - L203 : B3.3V / BD211 : B1.5V]     Q5 -- No --&gt; A3[Change the Main Ass'y.]     Q5 -- Yes --&gt; Q6[Check Input power of 'T CON Board' ? - F1(T CON) : B13V]     Q6 -- No --&gt; A4[Reconnect or Change. the LVDS cable.]     Q6 -- Yes --&gt; Q7[Check Power of 'T CON Board'. - BD1(T CON) : Panel_12V - B1.1V(T CON-TP) : FT1_1.1V_PW]     Q7 -- No --&gt; A5[Change the T CON Board.]           </pre>

<b>Diagnostics</b>	<div data-bbox="598 224 646 291">↓ Yes ↓</div> <div data-bbox="392 293 857 356">Please, Contact tech support.</div>
<b>Caution</b>	Make sure to disconnect the power before working on the IP Board.

■ Location of Parts

Main Board_Front			
			
Detail			
A	 <p>BD214 : B13V BD209 : B13V BD206 : B12V BD201 : B12V BD213 : B5.3V BD208 : B5.3V BD207 : A5.3V</p>	B	 <p>BD211 : B1.5V</p>
C	 <p>L201 : B5V L202 : B1.15V</p>	D	 <p>L203 : B3.3V</p>

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



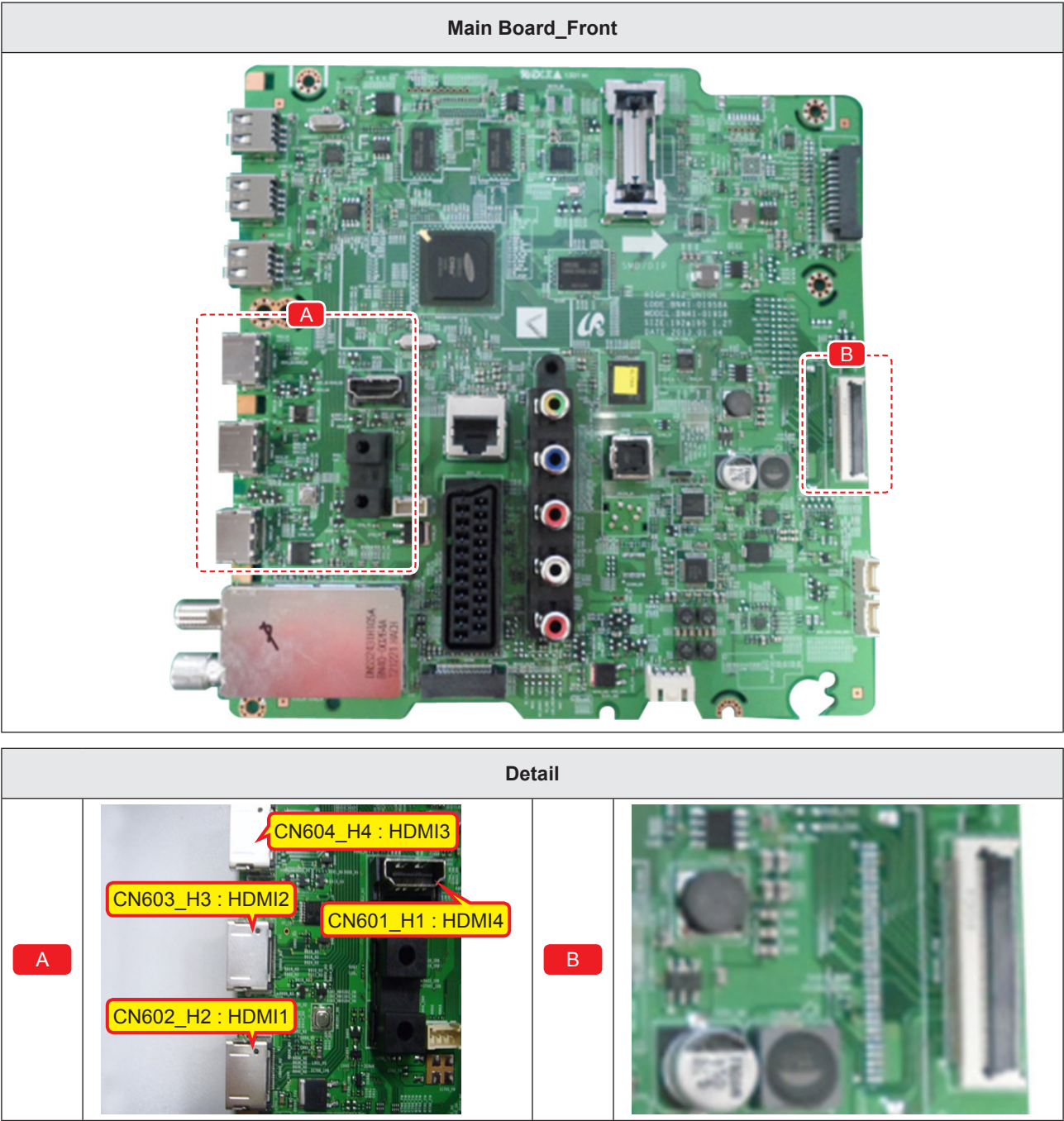
### Note

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

<b>Symptom</b>	<ul style="list-style-type: none"> <li>Audio is normal but no picture is displayed on the screen.</li> </ul>
<b>Major checkpoints</b>	<ul style="list-style-type: none"> <li>Check the HDMI source.</li> <li>Check the HDMI switch.</li> <li>This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.</li> </ul>
<b>Diagnostics</b>	<div> <div> <p>Power indicator LED is off. Lamp(Backlight) on, no video ?</p> <p>No → Check a set in the 'Stand-by mode'.</p> <p>Yes ↓</p> <p>Check the HDMI source and check the connection of HDMI cable ?</p> <p>No → Input the HDMI signal properly.</p> <p>Yes ↓</p> <p>Check the signal at Input of Main Board ?</p> <ul style="list-style-type: none"> <li><b>HDMI1 Clk</b> Pin #10, #12 of CN602_H2 <ul style="list-style-type: none"> <li>DATA Pin #7, #9, #4, #6, #1, #3 of CN602_H2</li> </ul> </li> <li><b>HDMI2 Clk</b> Pin #10, #12 of CN603_H3 <ul style="list-style-type: none"> <li>DATA Pin #7, #9, #4, #6, #1, #3 of CN603_H3</li> </ul> </li> <li><b>HDMI3 Clk</b> Pin #10, #12 of CN604_H4 <ul style="list-style-type: none"> <li>DATA Pin #7, #9, #4, #6, #1, #3 of CN604_H4</li> </ul> </li> <li><b>HDMI4 Clk</b> Pin #10, #12 of CN601_H1 <ul style="list-style-type: none"> <li>DATA Pin #7, #9, #4, #6, #1, #3 of CN601_H1</li> </ul> </li> </ul> <p>No → Check CN601~4. Check HDMI cable. Change the Main Ass'y. or Check IC1001(X12). Change the Main Ass'y.</p> <p>Yes ↓</p> <p>Check the LVDS clk signal at output of Main Board. (TX)</p> <ul style="list-style-type: none"> <li>TX2_CLK : ODD_TXCLK_DN/DP</li> <li>TX4_CLK : EVEN_TXCLK_DN/DP</li> </ul> <p>No → Check IC1001(X12). Change the Main Ass'y.</p> <p>Yes ↓</p> <p>Check the LVDS cable? Replace the T CON / LCD panel?</p> <p>No → Please, Contact tech support.</p> </div> <div> <p>①</p> </div> <div> <p>②</p> </div> </div>
<b>Caution</b>	Make sure to disconnect the power before working on the IP Board.



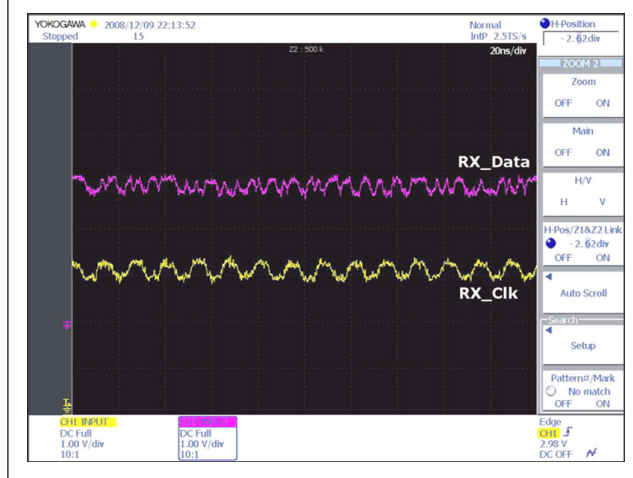
■ Location of Parts



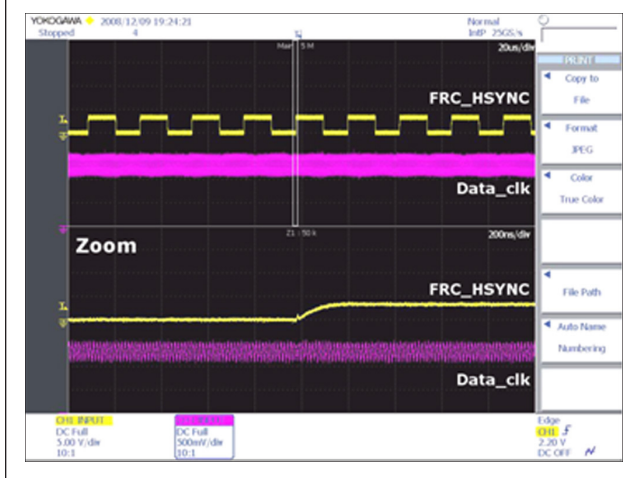


## Waveforms

### ① HDMI input (RX\_Data, RX\_Clk)



### ② LVDS output



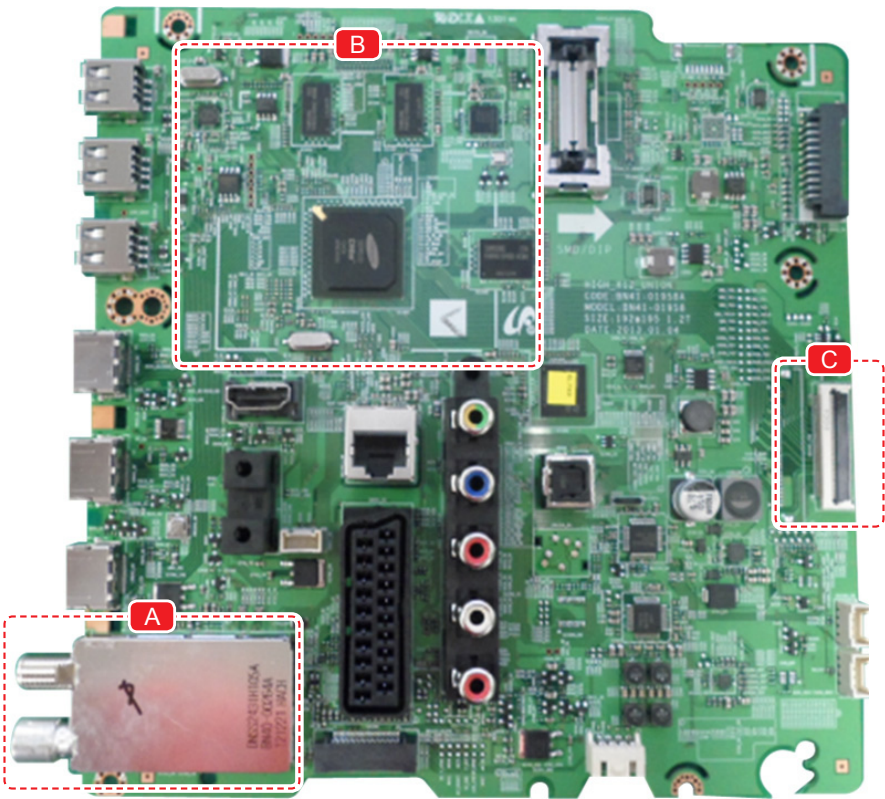
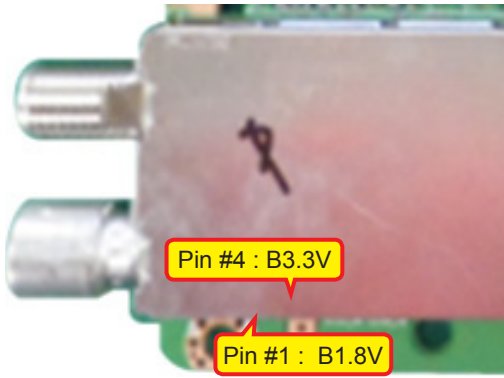
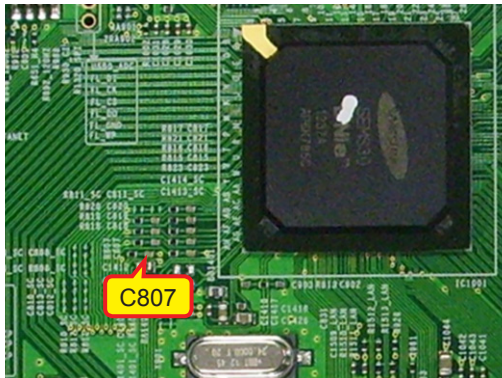

### 4-2-3. No Video (Tuner\_CVBS)


**Note**

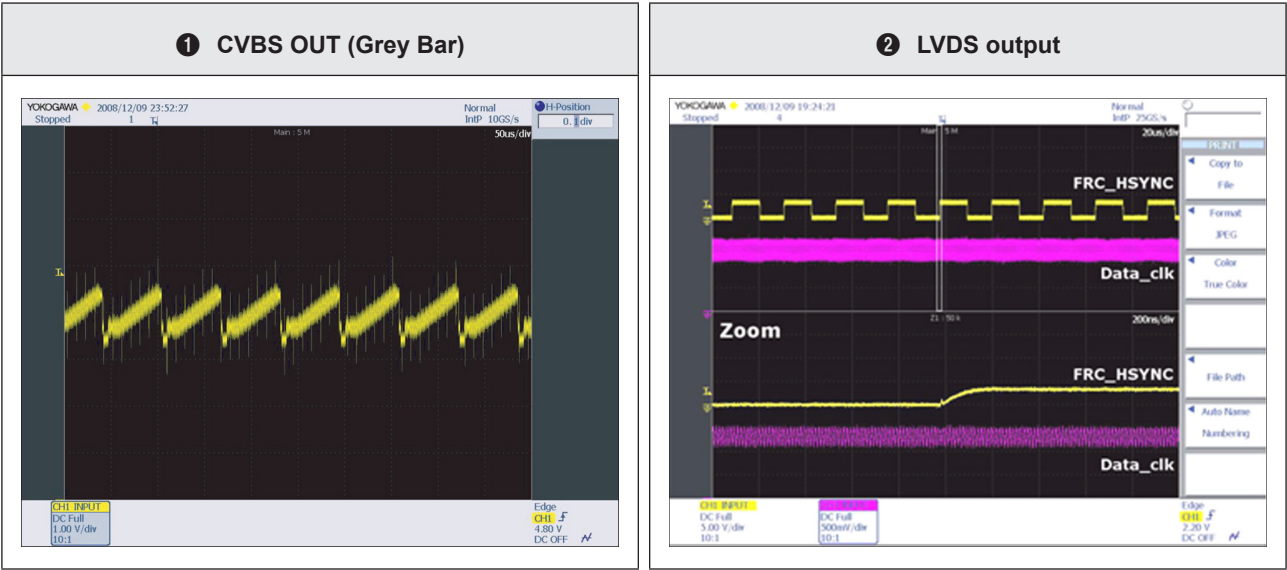
Refer to the next page to check the location such a CN201 or IC201 SVC Manual mentioned.

<b>Symptom</b>	<ul style="list-style-type: none"> <li>Audio is normal but no picture is displayed on the screen.</li> </ul>
<b>Major checkpoints</b>	<ul style="list-style-type: none"> <li>Check the Tuner CVBS source.</li> <li>Check the Tuner.</li> <li>This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.</li> </ul>
<b>Diagnostics</b>	<pre> graph TD     Q1[Power indicator LED is off. Lamp(Backlight) on, no video ?] -- No --&gt; A1[Check a set in the 'Stand-by mode'.]     Q1 -- Yes --&gt; Q2[Check the RF source and check the connection of RF cable.]     Q2 -- No --&gt; A2[Input the RF source properly.]     Q2 -- Yes --&gt; Q3[Check the Power of Tuner ? - Pin #4 of Tuner : B3.3V_Tuner - Pin #1 of Tuner : B1.8V_Tuner]     Q3 -- No --&gt; A3[Change the Main Ass'y.]     Q3 -- Yes --&gt; Q4[Check the CVBS data out of IC1001 ? C807 : Tuner CVBS]     Q4 -- No --&gt; A4[Check IC1001(X12). Change the Main Ass'y.]     Q4 -- Yes --&gt; Q5[Check the LVDS clk signal at output of Main board. (TX) - TX2_CLK : ODD_TXCLK_DN/DP - TX4_CLK : EVEN_TXCLK_DN/DP]     Q5 -- No --&gt; A5[Check IC1001(X12). Change the Main Ass'y.]     Q5 -- Yes --&gt; Q6[Check the LVDS cable? Replace the T CON / LCD panel?]     Q6 -- No --&gt; A6[Please, Contact tech support.]           </pre>
<b>Caution</b>	Make sure to disconnect the power before working on the IP Board.

## ■ Location of Parts

Main Board_Front			
			
Detail			
A		B	
			

Waveforms



## 4-2-4. No Vido (Tuner DTV)



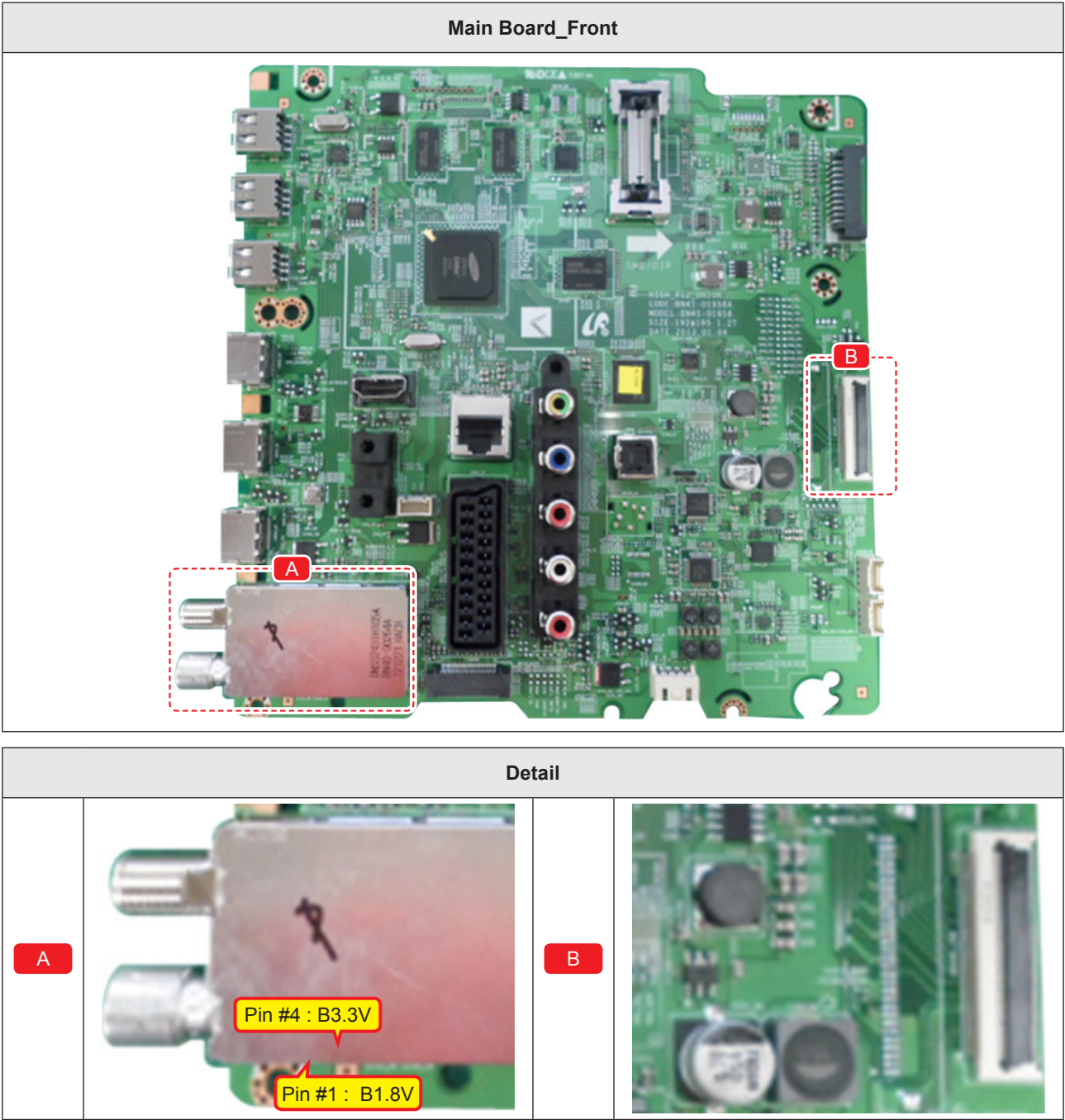
### Note

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

<b>Symptom</b>	<ul style="list-style-type: none"> <li>Audio is normal but no picture is displayed on the screen.</li> </ul>
<b>Major checkpoints</b>	<ul style="list-style-type: none"> <li>Check the DTV source.</li> <li>Check the Tuner.</li> <li>This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.</li> </ul>
<b>Diagnostics</b>	<pre> graph TD     Q1[Power indicator LED is off. Lamp(Backlight) on, no video ?] -- No --&gt; A1[Check a set in the 'Stand-by mode'.]     Q1 -- Yes --&gt; Q2[Check the RF source and check the connection of RF cable.]     Q2 -- No --&gt; A2[Input the RF source properly.]     Q2 -- Yes --&gt; Q3[1 Check the 'signal strength' in Self Diagnosis menu Strength is enough ?]     Q3 -- No --&gt; A3[Check the D-TV source.]     Q3 -- Yes --&gt; Q4[2 Check the Power of Tuner ? - Pin #4 of Tuner : B3.3V_Tuner - Pin #1 of Tuner : B1.8V_Tuner]     Q4 -- No --&gt; A4[Change the Main Ass'y.]     Q4 -- Yes --&gt; Q5[2 Check the LVDS clk signal at output of Main board. (TX) - TX2_CLK : ODD_TXCLK_DN/DP - TX4_CLK : EVEN_TXCLK_DN/DP]     Q5 -- No --&gt; A5[Check IC1001(X12) Change the Main Ass'y.]     Q5 -- Yes --&gt; Q6[Check the LVDS cable? Replace the T CON / LCD panel?]     Q6 -- No --&gt; A6[Please, Contact tech support.]           </pre>
<b>Caution</b>	Make sure to disconnect the power before working on the IP Board.

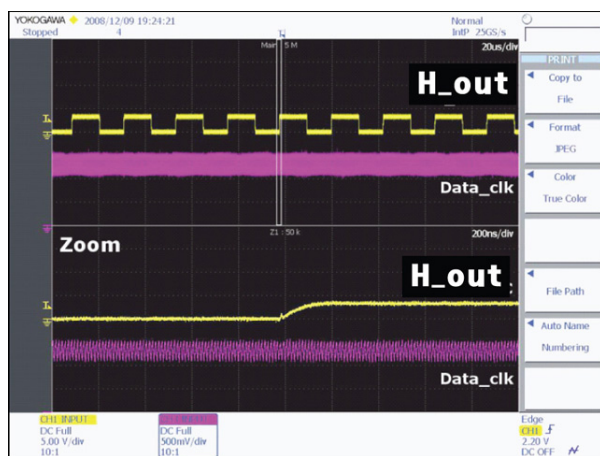


■ Location of Parts

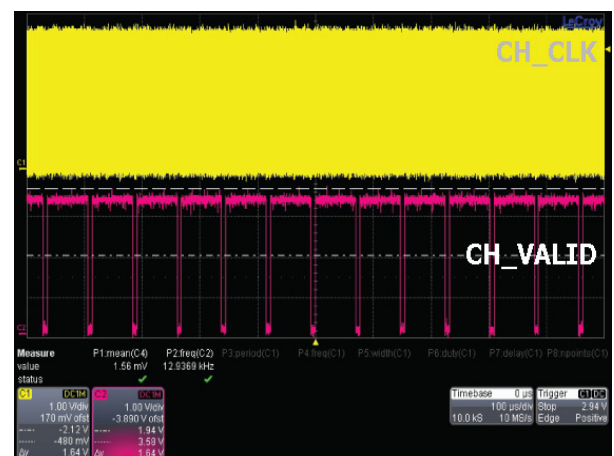


## Waveforms

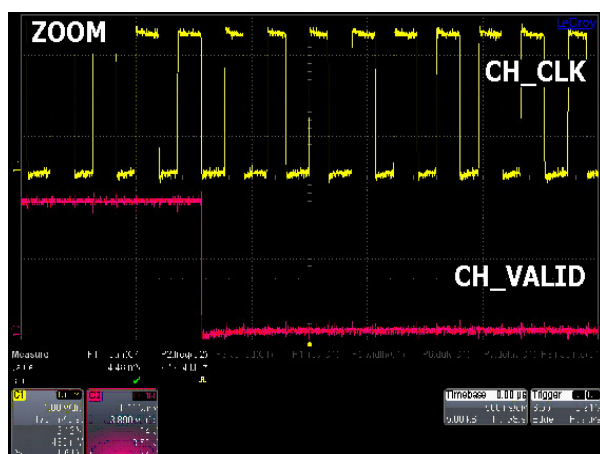
### ① CVBS OUT (Grey Bar)



### ② CH\_CLK, CH\_VALID



### ② CH\_CLK, CH\_VALID



## 4-2-5. No Video (Video AV)



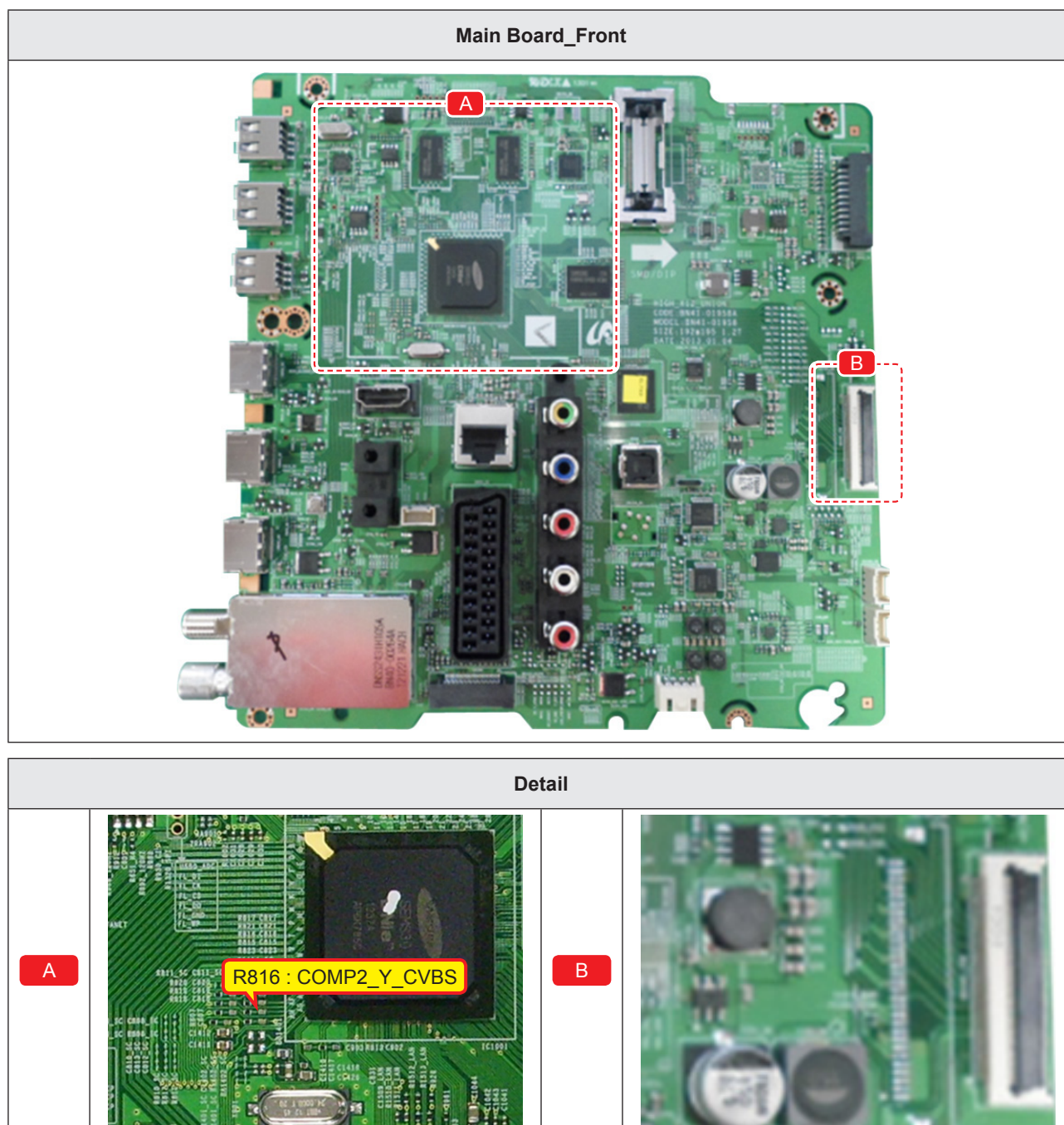
### Note

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

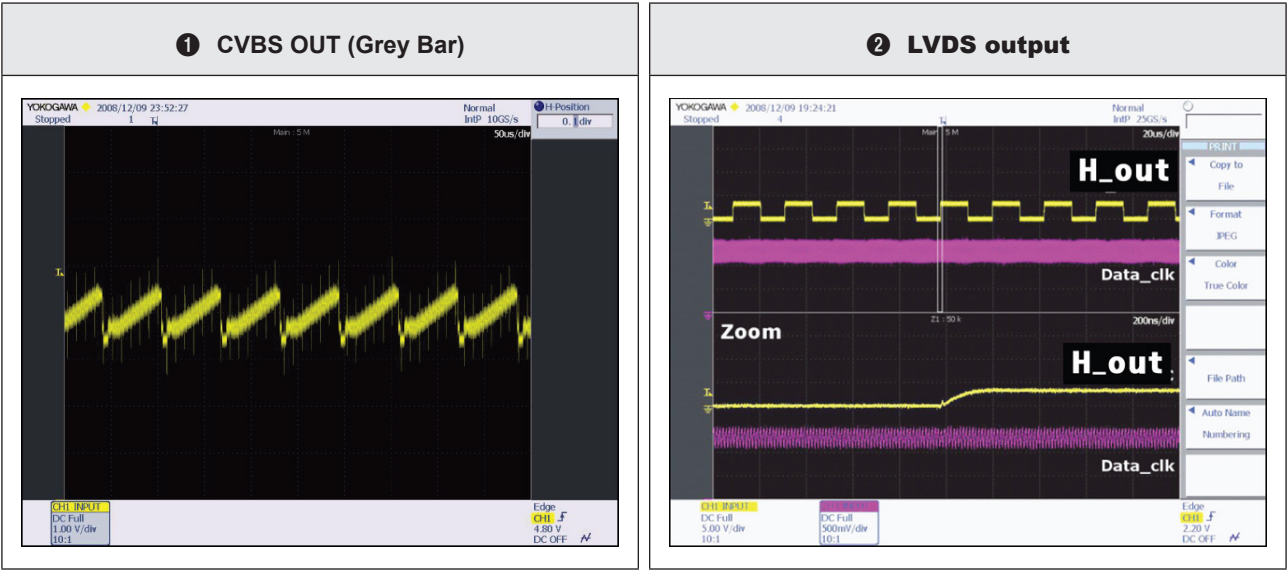
<b>Symptom</b>	<ul style="list-style-type: none"> <li>Audio is normal but no picture is displayed on the screen.</li> </ul>
<b>Major checkpoints</b>	<ul style="list-style-type: none"> <li>Check the Video CVBS source.</li> <li>This may happen when the LVDS cable connecting the Main Board and the Panel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



## ■ Location of Parts



Waveforms



## 4-2-6. No Video (COMPONENT)

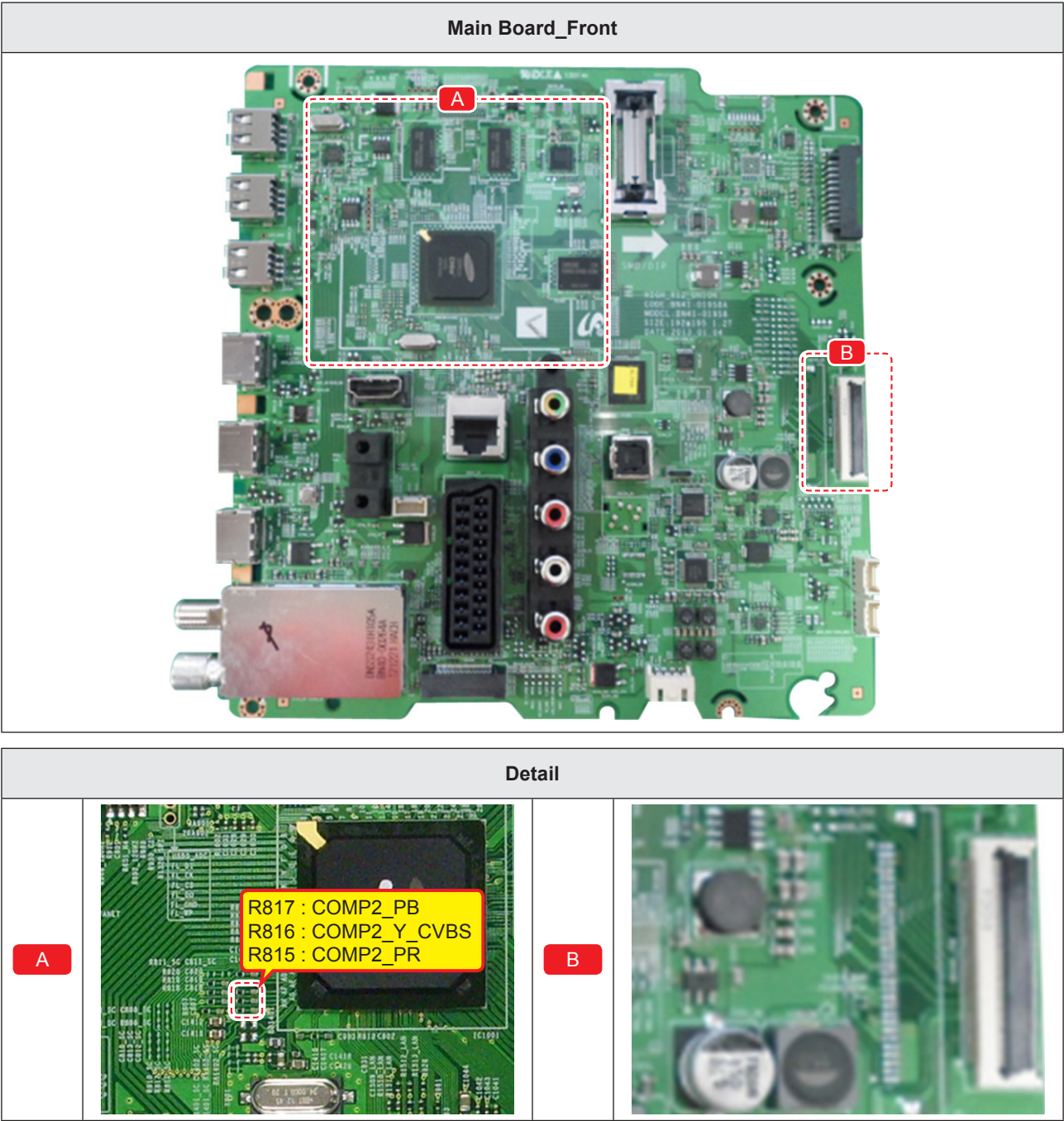


### Note

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

<b>Symptom</b>	<ul style="list-style-type: none"> <li>Audio is normal but no picture is displayed on the screen.</li> </ul>
<b>Major checkpoints</b>	<ul style="list-style-type: none"> <li>Check the Component source</li> <li>This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.</li> </ul>
<b>Diagnostics</b>	<div> <div> <div>Power indicator LED is off. Lamp(Backlight) on, no video ?</div> <div>No → Check a set in the 'Stand-by mode'.</div> <div>Yes ↓</div> </div> <div> <div>Check the component source and check the connection of component cables ? Y, Pb, Pr</div> <div>No → Input the component source properly.</div> <div>Yes ↓</div> </div> <div> <div> <b>①</b> Does the component data appear at ?            - COMP2_Y_CVBS : R816            - Pb : R817            - Pr : R815         </div> <div>No → Check CN502. Change the Main Ass'y.</div> <div>Yes ↓</div> </div> <div> <div> <b>②</b> Check the LVDS clk signal at output of Main Board. (TX)            - TX2_CLK : ODD_TXCLK_DN/DP            - TX4_CLK : EVEN_TXCLK_DN/DP         </div> <div>No → Check IC1001(X12). Change the Main Ass'y.</div> <div>Yes ↓</div> </div> <div> <div>Check the LVDS cable? Replace the T CON / LCD panel?</div> <div>No → Please, Contact tech support.</div> </div> </div>
<b>Caution</b>	Make sure to disconnect the power before working on the IP Board.

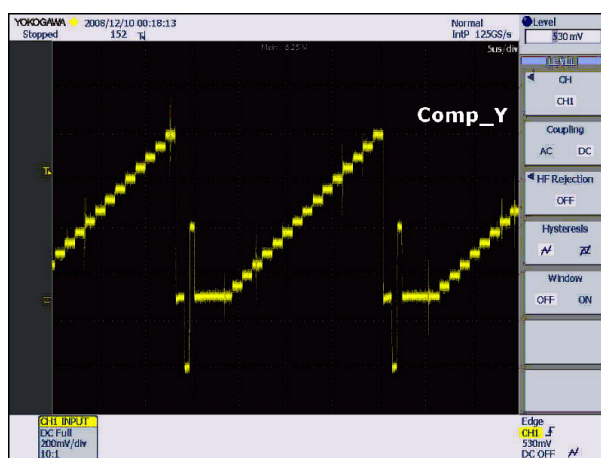
■ Location of Parts



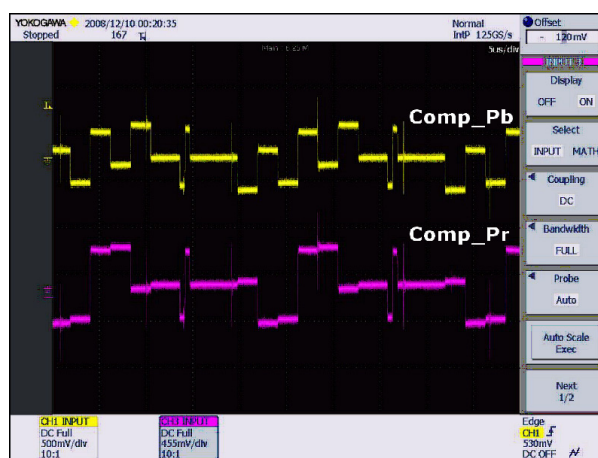


## Waveforms

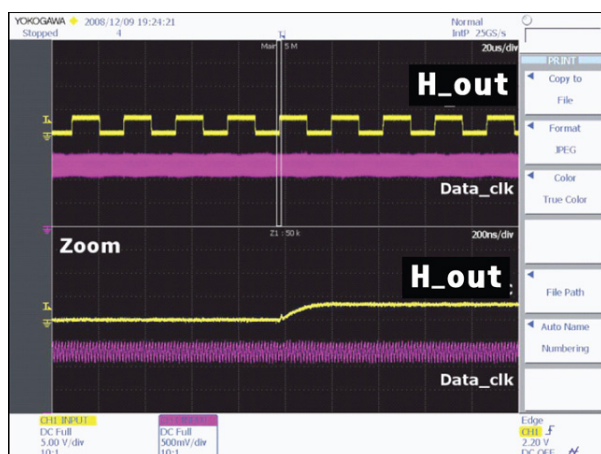
### ① Component\_Y (Gray scale) / Pb / Pr (Color bar)



### ① Component\_Y (Gray scale) / Pb / Pr (Color bar)



### ② LVDS output



## 4-2-7. No Sound (1.Speaker 2.Monitor\_out 3.Optical)

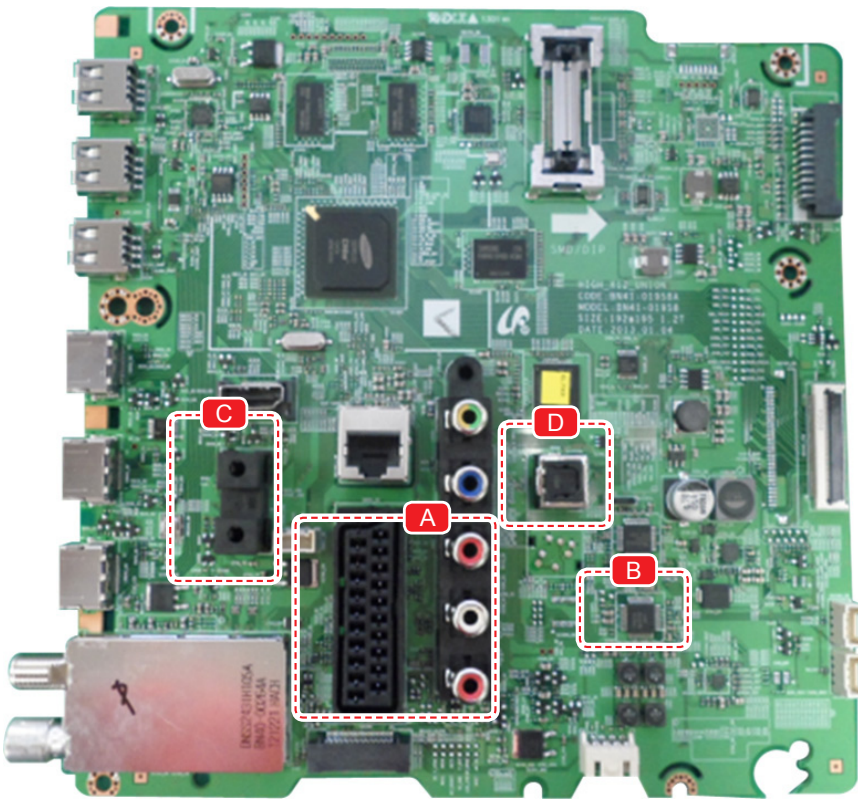
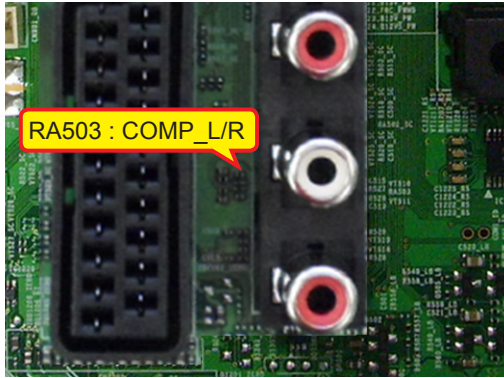
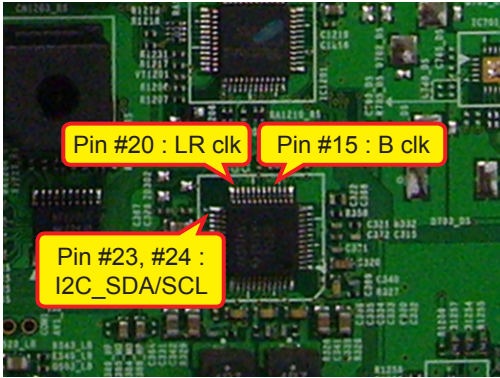
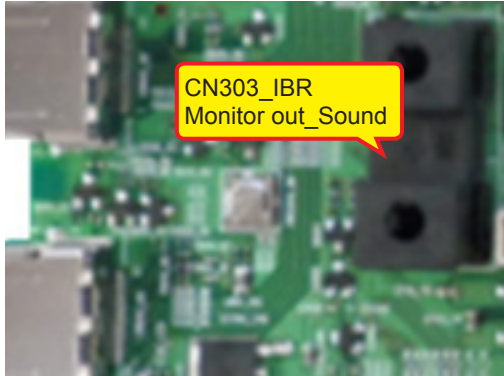
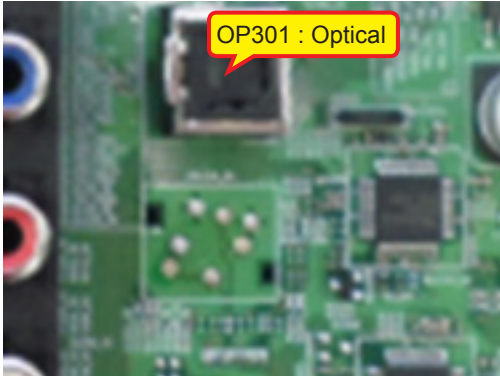


### Note

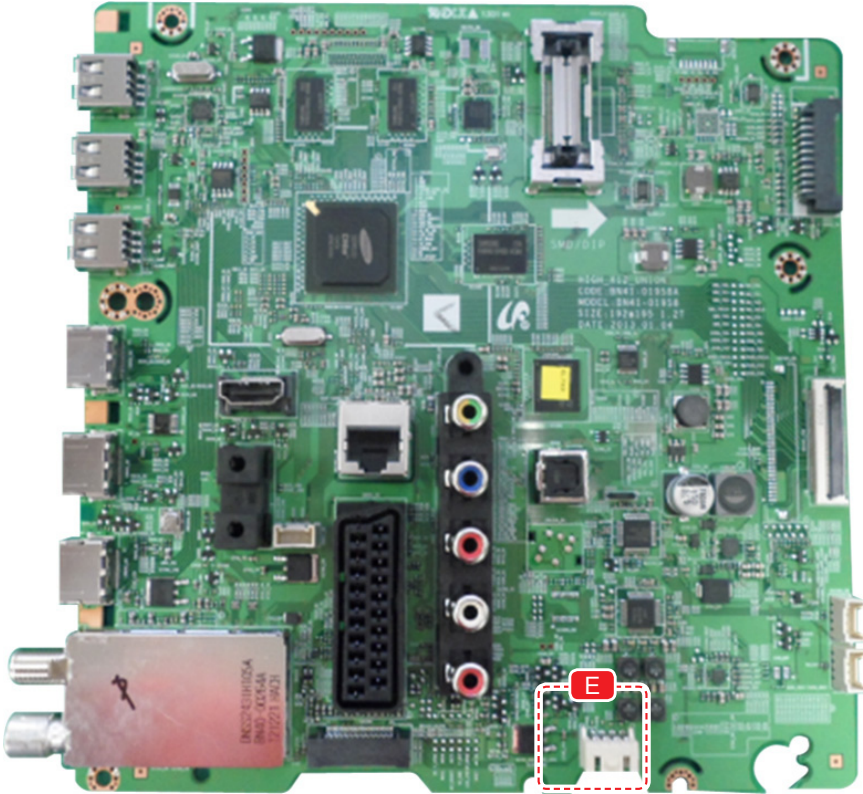


Refer to the next page to check the location such a CN201 or IC201 SVC Manual mentioned.

<b>Symptom</b>	<ul style="list-style-type: none"> <li>Video is normal but there is no sound.</li> </ul>
<b>Major checkpoints</b>	<ul style="list-style-type: none"> <li>When the speaker connectors are disconnected or damaged.</li> <li>When the sound processing part of the Main Board is not functioning.</li> <li>Speaker defect.</li> </ul>
<b>Diagnostics</b>	<div> <div> <div>Check the source and check the connection of sound cable ? COMP</div> <div>No → Input the sound source properly.</div> </div> <div> <div>Yes ↓</div> <div>Check the signal at input of Main Board? AV, COMP L/R : RA503</div> <div>No → Check CN502. Change the Main Ass'y.</div> </div> <div> <div>Yes ↓</div> <div> <b>1</b> Check the DATA between the Audio IC's ?           <ul style="list-style-type: none"> <li>Pin #15 of IC301 : B clk</li> <li>Pin #20 of IC301 : LR clk</li> <li>Pin #23, #24 of IC301 : I2C_SDA/ SCL</li> </ul> </div> <div>No → Check IC301. Change the Main Ass'y.</div> </div> <div> <div>Yes ↓</div> <div> <b>2</b> <ol style="list-style-type: none"> <li>Check the Speaker sound data at ?               <ul style="list-style-type: none"> <li>CN302</li> </ul> </li> <li>Check the Monitor out sound data at ?               <ul style="list-style-type: none"> <li>CN303_IBR</li> </ul> </li> <li>Does the SODIF OUT sound data appear at ?               <ul style="list-style-type: none"> <li>OP301</li> </ul> </li> </ol> </div> <div>No → Change the Main Ass'y.</div> </div> <div> <div>Yes ↓</div> <div>Replace speaker ?</div> <div>No → Please, Contact Tech support.</div> </div> </div>
<b>Caution</b>	Make sure to disconnect the power before working on the IP Board.

## ■ Location of Parts

Main Board_Front			
			
Detail			
A	 <p>RA503 : COMP_L/R</p>	B	 <p>Pin #20 : LR clk</p> <p>Pin #15 : B clk</p> <p>Pin #23, #24 : I2C_SDA/SCL</p>
	 <p>CN303_IBR Monitor out_Sound</p>		 <p>OP301 : Optical</p>

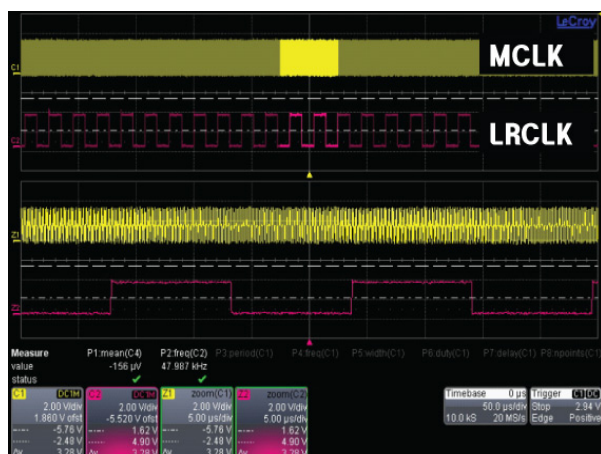
■ Location of Parts

Main Board_Front			
			
Detail			
			

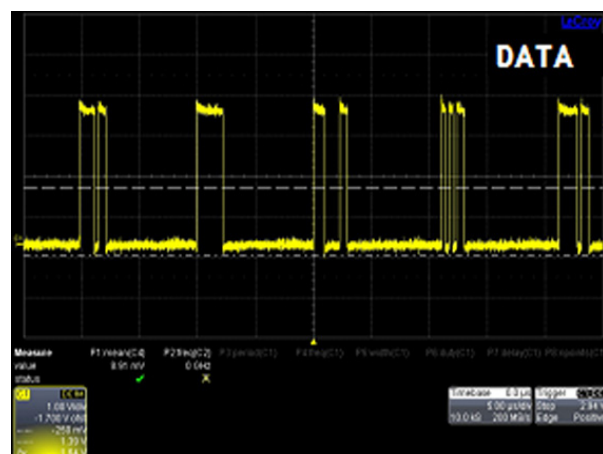


## Waveforms

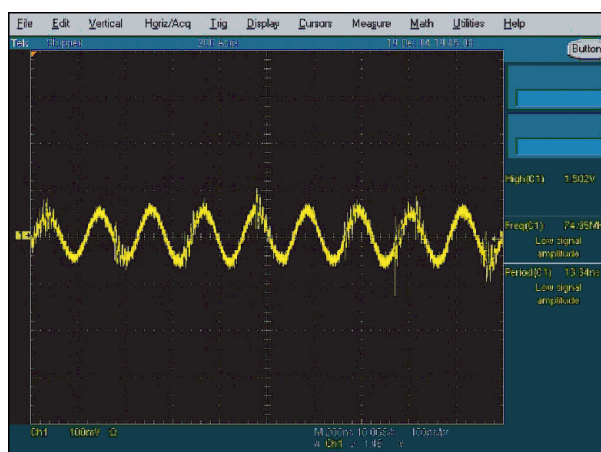
### ① MCLK / LRCLK / PCM\_I2C\_DATA



### ① MCLK / LRCLK / PCM\_I2C\_DATA



### ② Speaker / Monitor OUT , SPDIF OUT



### ② Speaker / Monitor OUT , SPDIF OUT



## 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**".

#### ■ UE\*\*F6270SSXZG

Inches		32"	40"	46"	50"
PANEL	Vendor	SDC	SDC	SDC	AUO
	Code	BN95-00908A	BN95-00910A	BN95-00911A	BN07-01278C
	Spec.	CY-HF320BGLV2V	CY-HF400BGLV2V	CY-HF460BGLV2V	HF500BGA-B3
SMPS	Vendor	DONGYANG	SEM	SEM	SEM
	Code	BN44-00615A	BN44-00616A	BN44-00616A	BN44-00617A
	Spec.	L32ZF_DDY	L46ZF_DSM	L46ZF_DSM	L50ZF_DSM
MAIN ASSY	Chassis Ass'y	BN91-10610G	BN91-10610H	BN91-10610J	BN91-10610K
	PBA Ass'y	BN94-06715E	BN94-06715F	BN94-06715G	BN94-06715H
Byte	Item				
0	Factory Reset	-	-	-	-
1	Type	32A6AF0S	40A6AF0S	46A6AF0S	TBD
2	Local set	EU	EU	EU	EU
3	SW Model	UF6270	UF6270	UF6270	UF6270
4	BOM Model	6270	6270	6270	6270
5	Tuner	AUTO	AUTO	AUTO	AUTO
6	Ch table	NONE	NONE	NONE	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



- Buttons operations within Service Mode

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

#### HOW to enter the Advanced menu (Picture)

- Cursor move to 'Advanced'. →
- Push the '0' button 4 times. →
- You can see the 'Picture' menu.

- If you don't have Factory remote control, can't control some menus. (Expert, Advanced menu)

Option	T-MST12DEUC-xxxx
Control	T-MST12DEUS-xxxx
Debug	BT Version : xxxx
SVC	E-Manual : xxxx
ADC/WB	Camera Version : xxxx
Advanced	Blaster-version : ----
	EDID SUCCESS
	CALIB : AV/COMP/PC/HDMI/
	Option : xxxx,UE,6400,NONE
	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 : UE46F6400
	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

### 4-3-3. Factory Data

#### ■ Option

Factory Menu Name	Data	Range
<b>Factory Reset</b>	-	
<b>Type</b>	32A6AF0S 40A6AF0S 46A6AF0S TBD	
<b>Local Set</b>	EU	
<b>SW Model</b>	UF6270	
<b>BOM Model</b>	6270	
<b>TUNER</b>	AUTO	SI_ADI FOX_T2C SI_TCS2
<b>Ch Table</b>	NONE	
<b>MRT Option</b>		
Front Color		
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	
Num of Display	2	
Num of IPTV	0	
Num of RUI	0	
Num of PVR RECORD	0	
TOOLS Support	40	

Factory Menu Name	Data	Range
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		
<b>Engineer Option</b>		
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	
D AGC	0	
PH BW	0	
FQ BW	0	
PH RATE	0	
PD EN	0	
PEQ Inx	0	
WF Scale		

#### 4. Troubleshooting

Factory Menu Name	Data	Range
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
<b>EDID</b>		
EDID ON/OFF	OFF	
EDID WRITE ALL	...	
EDID WRITE HDMI	...	
EDID Ver	...	
EDID Port		
<b>Sub Option</b>		
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	
TTX Group	-	
Visual Test	-	
MediaPlayDB	-	
OPTION_SWU		
OTN Server Type	operating	
OTN Test Server	OFF	
SWU Reset		
SWU Duration	OFF	
SWU Fail Test	OFF	

Factory Menu Name	Data	Range
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	
CLB	ON	
<b>PDP Option</b>		
Pixel Shift Test	OFF	
Logic SW	0	
Panel Temperature	0	
LOGIC Waveform Day	0	
Logic CheckSum	0	
MRT	0	
SAPC Timer		

#### 4. Troubleshooting

Factory Menu Name	Data	Range
APC Speed		
<b>Hotel Option</b>		
Hospitality Mode	OFF	
Power On	...	
Menu OSD	...	
Operation	...	
Music Mode	...	
External Source	...	
Eco Solution	...	
Cloning	...	
<b>Shop Option</b>		
Shop Mode	OFF	
Exhibition Mode	OFF	
3D Cube	OFF	
<b>Asia Option</b>		
Unbalance	OFF	
AF Level adjust	3	
TX Power Level	0	
Mono Last Memory	OFF	
H Shaking	OFF	
<b>SOUND</b>		
Carrier_Mute	OFF	
High Devi	OFF	
Speaker Delay Normal	0x6Eh	
SPDIF PCM Gain	-9dB	
FM M Prescale	0x30h	
FM Prescale	0x00h	
AM Prescale	0x32h	
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	



Factory Menu Name	Data	Range
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 Ferq	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	

## ■ Debug

Factory Menu Name	Data	Range
<b>Spread Spectrum</b>		
LVDS Spread	ON	
DDR Spread	1.0% Spectrum	
Period	30K	
Amplitude	1	
HD SSC ON/Off	ON	
HD SSC Value	1	

#### 4. Troubleshooting

Factory Menu Name	Data	Range
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	
<b>DDR Margin</b>		
A CTRL_OFFSET_0_3	0x0	
A CTRL_OFFSET_D	0x0	
B CTRL_OFFSET_0_3	0x0	
B CTRL_OFFSET_D	0x0	
<b>ND ADJ Support</b>	OFF	
<b>MICOM POWER OFF</b>	OFF	
<b>RF Mute Time</b>	6ms	
<b>CI+1.3</b>	OFF	
<b>FRC</b>		
FRC FDISPLAY ON/OFF	0	
3D FDISPLAY ON/OFF	OFF	
PC Mode ON/OFF	OFF	
<b>Tuner Margin</b>	10	
<b>MPEG Margin</b>	1000	
<b>H.264 Margin</b>	8	
<b>CAM Wait Time</b>		
<b>TS Clock deldy</b>	0	
<b>TCON_TEMP READ</b>	0	
<b>TEMP LAST</b>	60	
<b>DCC VERSION</b>	0x0	
<b>DCC CHK SEL</b>	0	
<b>DCC CHECK LOCAL</b>	0x0	

Factory Menu Name	Data	Range
<b>DCC CHECK TOTAL</b>	0x0	
<b>MultACC Checksum</b>	0	
<b>IIC Bus stop</b>	OFF	
<b>Tuner Status</b>		
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		
Guard Interval_1		
Freq. Offset_1		
SNR_1		
IF AGC_1		
TMCC Lock_1		
TS Packer_1		
Master Lock_1		
A_Modulation_1		

#### 4. Troubleshooting

Factory Menu Name	Data	Range
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
<b>Test Pattern</b>		
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	
HDMI WB Pattern	OFF	
HDMI Pattern Sel	0	
Parma Pre Test Pattern	0	
Parma Post Test Pattern	0	
<b>Panel Display Time</b>	0Hr	
<b>SVC Info</b>	0	
<b>Delete S/N</b>	0	
<b>Upgrade</b>		
T-CON Usb Download	Failute	

Factory Menu Name	Data	Range
T-CON CheckSum	Error	
Logic Usb D/L	...	
SUBMICOM UPGRADE	Failute	
BT UPGRADE		
BT FREPAIRING	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	
<b>Smart Hub Reset</b>	0	
<b>ER Count</b>		
WD Count	0	
AR Count	0	
WIFI ER Count	0	
BT ER Count	0	
HDMI Err Cnt	0	
Camera ER Count	0	
<b>LOG(View Log)</b>		
Select Log Type	NVRAM	
Log View	0	
Delete Log		
Debug Log Down		
Emergency Log Copy		
<b>Self Diagnosis</b>		
Loop Back		
LAN Test		
AV Audio Test		
DVIN Audio Test		
CVBS Test		
COMP Test		
USB HUB Test		
HDMI Test		
SCART Audio Test		

#### 4. Troubleshooting

Factory Menu Name	Data	Range
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		
<b>IPERF</b>	Stopped	
<b>OPTION HDMI</b>		
<b>Expert</b>		
<b>DVB CI</b>		
<b>CAL Data Backup</b>	...	
<b>CAL Data Restore</b>	...	

#### ■ ADC/WB

Factory Menu Name	Data	Range
<b>ADC</b>		
AV Calibration	Success	
Comp Calibraion	Success	
PC Calibration	Success	

Factory Menu Name	Data	Range
HDMI Calibration	Success	
<b>ADC Result</b>		
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	
<b>White Balance</b>		
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	
WB_N_R_Gain	151	
WB_N_B_Gain	108	
<b>MGA</b>		
MGA On/Off	OFF	
R1_Gain	...	
B1_Gain	...	
G1_Gain	...	
R2_Gain	...	
B2_Gain	...	
G2_Gain	...	

#### 4. Troubleshooting

---

Factory Menu Name	Data	Range
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 **ADC/WB** menu.
3. Select **ADC** menu.

Option	AV Calibration
Control	Comp Calibration
Debug	HDMI Calibration
SVC	
<b>ADC/WB</b>	
Advanced	

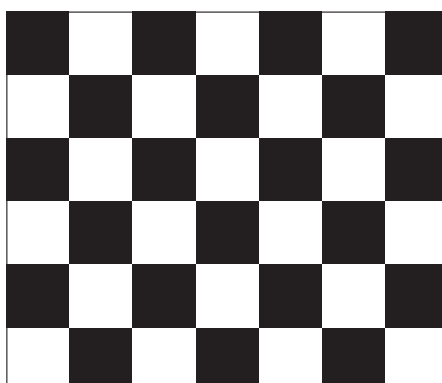
### 4-4-2. Service Adjustment

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



(Chess Pattern)

- 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
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)**

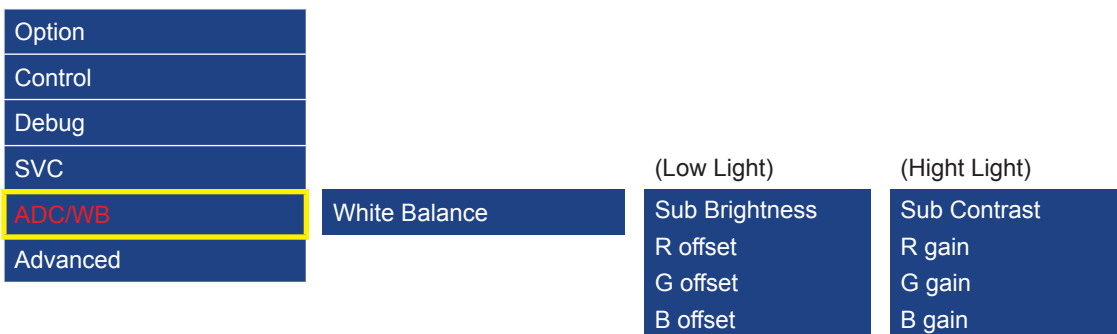
1. Apply the 720p Lattice (N0. 6) pattern signal to the Component IN 1 port.
2. Press the Source key to switch to “Component1” mode.
3. Enter Service mode.
4. Select the “ADC” menu.
5. Select the “Comp Calibration” menu.
6. In “Comp Calibration Off” status, press the “▶” key to perform Calibration.
7.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

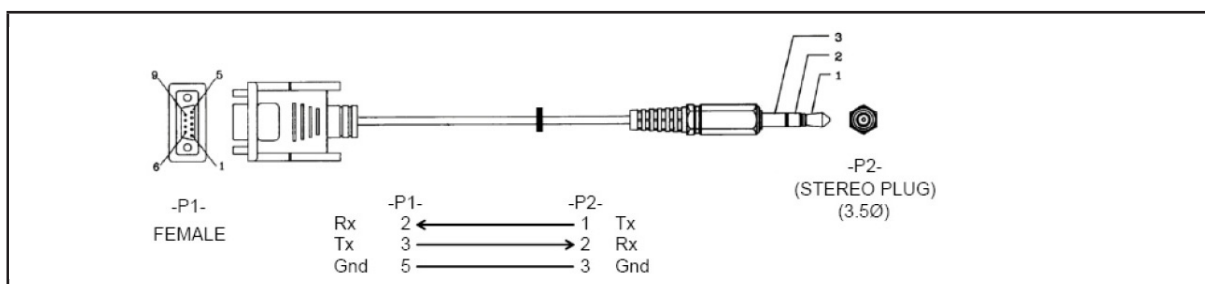
9. Into the Factory Mode.
10. Select **ADC/WB** menu.
11. Select **White Balance** menu.



## 4-5. RS-232C

- **RS232C Control**

- Port : COM#(Serial)
- Bit rate : 115200
- Data Bit : 8 bit
- Parity : None
- Stop Bits : 1
- Flow Control : None



- **Description of RS232C**

Pin#	Name	Full Name	Pin#	Name	Full Name	Pin#	Name	Full Name
1	CD	Carrier Detect	4	DTR	Data Terminal Ready	7	RTS	Request To Send
2	RxD	Received Data	5	GND	Signal Ground	8	CTS	Clear To Send
3	TxD	Transmitted Data	6	DSR	Data Set Ready	9	RI	Ring Indicator

## 4-6. AV Control Tab

Control Item				Cmd1	Cmd2	Cmd3	Value
<b>General</b>	Power	Power		0x00	0x00	0x00	0x00
		Off					0x01
		On					0x02
	Volume	Direct		0x01	0x00	0x00	(0~100)
		Up				0x01	0x00
		Down				0x02	0x00
	Mute			0x02	0x00	0x00	0x00
		Ch.	Direct	0x04	-		
			Continuous	0x03	0x00	0x01	0x00
			Down			0x02	0x00

Control Item				Cmd1	Cmd2	Cmd3	Value
<b>Input</b>	Source List	TV	TV	0x0a	0x00	0x00	0x00
			AV			0x01	0x00
		AV	AV1				0x01
			AV2				0x01
			AV3				0x02
		S-Video	S-Video1			0x02	0x00
			S-Video2				0x01
			S-Video3				0x02
		Component	Component1			0x03	0x00
			Component2				0x01
			Component3				0x02
		PC	PC1			0x04	0x00
			PC2				0x01
			PC3				0x02
		HDMI	HDMI1			0x05	0x00
			HDMI2				0x01
			HDMI3				0x02
			HDMI4				0x03
		DVI	DVI1			0x06	0x00
			DVI2				0x01
			DVI3				0x02

Control Item				Cmd1	Cmd2	Cmd3	Value
<b>PICTURE</b>	Mode	Dynamic(Entertain)		0x0b	0x00	0x00	0x00
		Standard					0x01
		Movie					0x02
		Natural					0x03

Control Item				Cmd1	Cmd2	Cmd3	Value
PICTURE	Mode	CAL-NIGHT					0x04
		CAL-DAY					0x05
		BD Wise					0x06
		Relax					0x07
	BackLight (CellLight)		0~20		0x01	0x00	(0~20)
	Contrast		0~100		0x02	0x00	(0~100)
	Brightness		0~100		0x03	0x00	(0~100)
	Sharpness		0~100		0x04	0x00	(0~100)
	Color		0~10		0x05	0x00	(0~100)
	Tint	G/R			0x06	0x00	(0~100)
	Advanced Settings	Black Tone	Off		0x07	0x00	0x00
			Dark				0x01
			Darker				0x02
			Darkest				0x03
		Dynamic Contrast	Off			0x01	0x00
			Low				0x01
			Medium				0x02
			High				0x03
		Shadow Detail	-2 ~ 2			0x02	(-2~2)
		Gamma	-3 ~ 3			0x03	(-3~3)
		RGB Only Mode	Off			0x05	0x00
			Red				0x01
			Green				0x02
			Blue				0x03
		Color Space	Auto			0x06	0x00
			Native				0x01
			Custom				0x02
		White Balance	R-Offset(LCD)			0x07	(0~50)
		White Balance	G-Offset(LCD)			0x08	(0~50)
		White Balance	B-Offset(LCD)			0x09	(0~50)
		White Balance	R-Gain(LCD)			0x0a	(0~50)
		White Balance	G-Gain(LCD)			0x0b	(0~50)
		White Balance	B-Gain(LCD)			0x0c	(0~50)
		White Balance	Reset(LCD)			0x0d	0x00
		Flesh Tone	-15 ~ 15			0x0e	(-15~15)
		Edge Enhancement	Off			0x0f	0x00

New function of 12"  
(only PDP TV)

Control Item				Cmd1	Cmd2	Cmd3	Value
<b>PICTURE</b>			On				0x01
			Off			0x10	0x00
			On				0x01
			Off			0x11	0x00
		Motion Lighting	On				0x01
			Off		0x0a	0x07	0x00
		LED Motion Plus	On(Normal)				0x01
			Cinema				0x02
			Ticker				0x03
	Picture Option	Color Tone	Cool		0x0a	0x00	0x00
			Standard				0x01
			Warm1				0x02
			Warm2				0x03
		Digital Noise Filter	Off			0x02	0x00
			Low				0x01
			Medium				0x02
			High				0x03
			Auto				0x04
			Auto Visualization				0x05
		MPEG Noise Filter	Off			0x03	0x00
			Low				0x01
			Medium				0x02
			High				0x03
			Auto				0x04
		HDMI Black Level	Normal			0x04	0x00
			Low				0x01
		Film Mode	Off			0x05	0x00
			Auto1				0x01
			Auto2				0x02
			Cinema Smooth				0x03
		Auto Motion Plus	Off			0x06	0x00
			Clear				0x01
			Standard				0x02
			Smooth				0x03
			Custom				0x04

Change Normal → Standard mode

New function of 12" (only PDP TV)

Control Item				Cmd1	Cmd2	Cmd3	Value
PICTURE			Demo				0x05
	Screen Adjustment	Picture Size	16:9	0x0b	0x0a	0x01	0x00
			Zoom1				0x01
			Zoom2				0x02
			Wide Fit				0x03
			4:3				0x04
			Screen Fit				0x05
			Smart View I				0x06
			Smart View II				0x07
			Auto Wide				0x08
			Wide Zoom				0x09
			Zoom				0x0a
			Reset Picture	Reset Picture		0x0b	0x0b
	3D	3D Mode	Off	0x0b	0x0c	0x00	0x00
			2D ↔ 3D				0x01
			Side By Side				0x02
			Top Bottom				0x03
			Line By Line				0x04
			Vertical Line				0x05
			Checker BD				0x06
			Frame Sequence				0x07
		3D ↔ 2D	Off			0x01	0x00
			On				0x01
		3D View Point				0x02	(-5~5)
		Depth				0x03	(1~10)
		3D Auto View	Off			0x05	0x00
			Message Notice				0x01
			On				0x02

New function of 12" (only DVB TV)

Control Item				Cmd1	Cmd2	Cmd3	Value
Sound	Sound Mode	Standard		0x0c	0x00	0x00	0x00
		Music					0x01
		Movie					0x02
		Clear Voice					0x03
		Amplify					0x04

New function of 12"  
(only DVB TV)

#### 4. Troubleshooting

Control Item				Cmd1	Cmd2	Cmd3	Value
Sound	Equalizer	Balance			0x01	0x00	(0~20)
		100hz				0x01	(0~20)
		300hz				0x02	(0~20)
		1khz				0x03	(0~20)
		3khz				0x04	(0~20)
		10khz				0x05	(0~20)
		Reset				0x06	0x00
	SRS TruSurround HD (echo)	Off			0x02	0x00	0x00
	Virtual Surround (echo)	On					0x01
	SRS TruDialog (echo)	Off			0x03	0x00	0x00
	Dialog Clarify (X9)	On					0x01
	Preferred Language	English			0x04	0x00	0x00
		Spanish					0x01
		French					0x02
		Korean					0x03
		Japanese					0x04
	Multi-Track Sound	Mono			0x05	0x00	0x00
		Stereo					0x01
		SAP					0x02
	Auto Volume	Off			0x06	0x00	0x00
		ON					0x01
		Night					0x02
	Speaker Select	TV Speaker			0x07	0x00	0x00
		External Speaker					0x01
	Sound Select	Main			0x08	0x00	0x00
		Sub					0x01
	Sound Reset	Sound Reset			0x09	0x00	0x00
	3D Audio	Off			0x0a	0x00	0x00
		Low					0x01
		Medium					0x02
		High					0x03

New function of 12"



Control Item			Cmd1	Cmd2	Cmd3	Value
<b>KEY</b>	Key Generation		0x0d	0x00	0x00	refer to table
<b>OSD</b>	Show/Hide Control	Show	0x0e	0x00	0x00	0x00
		Hide				0x01
<b>Get Status</b>	Power (On/Off)		0xf0	0x00	0x00	0x00
	Volume(0~100)		0xf0	0x01	0x00	0x00
	Mute (On/Off)		0xf0	0x02	0x00	0x00
	Channel Number		0xf0	0x03	0x00	0x00
	Source (TV/AV/.../HDMI/...)		0xf0	0x04	0x00	0x00
	Picture Size		0xf0	0x05	0x00	0x00
	3D (On/Off)		0xf0	0x06	0x00	0x00
	Picture Mode		0xf0	0x07	0x00	0x00
	Sound Mode		0xf0	0x08	0x00	0x00

New function of 12"

Key value	Value
Up	96 (0x60)
Down	97 (0x61)
Left	101 (0x65)
Right	98 (0x62)
Menu	26 (0x1A)
Internet	147 (0x93)
Enter(OK)	104 (0x68)
EXIT	45 (0x2D)

## 4-7. Software Upgrade

Software Upgrade can be performed by downloading the latest firmware from [samsung.com](http://samsung.com) to a USB memory device.

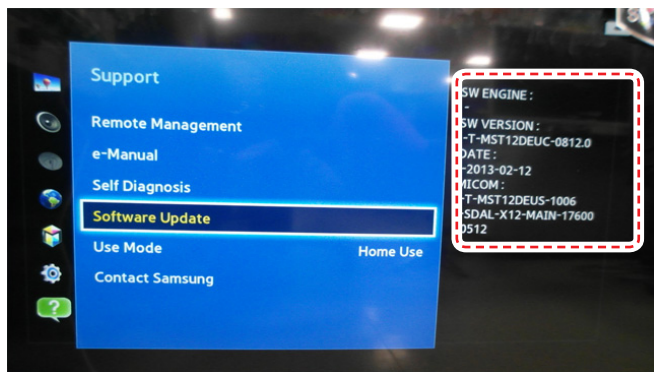
- Current Version - The software already installed in the TV.

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

Option
Control
Debug
SVC
ADC/WB
Advanced

T-MST12DEUC-xxxx  
T-MST12DEUS-xxxx  
BT Version : xxxx  
E-Manual : xxxx  
Camera Version : xxxx  
Blaster-version : ----

EDID SUCCESS  
CALIB : AV/COMP/PC/HDMI/  
Option : xxxx,UE,6400,NONE  
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

## 4-7-2. How to Upgrade Software

1. Insert a USB drive containing the firmware upgrade downloaded from [samsung.com](http://samsung.com) into the TV.



### NOTE

Please be careful not to disconnect the power or remove the USB drive while upgrades are being applied.

2. The TV will turn off and turn on automatically after completing the firmware upgrade.
3. Please check the firmware version after the upgrades are complete.
  - the new version will have a higher number than the older version.



### NOTE

- 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.

4. After update is completed, restore your previous settings.

## ■ Main Software Upgrade

1

Store the sw program named "**T-MST12DEUC**" in USB memory stick.

2

Click the "**MENU**" key in Remote Controller.

3

Select "**Support - Software Update - Update Now**" menu.

4

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

## ■ Sub Software Upgrade

### USB Download

1. After Main Software upgrade, Enter the Factory menu by below method.

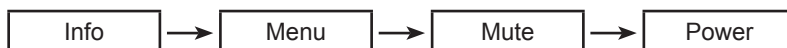
– Factory Remocon

- Click the Remocon button continuedly. (Info key+ Factory key)



– Nomal Remocon

- ① Turn off the TV. → ② Click the Remocon button continuedly.



2. Select the “SVC”.

Option
Control
<b>SVC</b>
Expert
ADC/WB
Advanced

3. Select the “SUBMICOM UPGRADE”.

Test pattern		DCC CHK SEL	0
Panel Display Time	1Hr	DCC CHECK LOCAL	0x0
Tuner Status		DCC CHECK TOTAL	
T-CON Usb Download	Failure	Fuction Upgrade	off
T-CON CheckSum	Error	Smart Hub Reset	off
Tuner Margin	10	WIFI ER COUNT	0
TS Clock delay	0	BT ER COUNT	0
<b>SUBMICOM UPGRADE</b>	<b>off</b>	Debug Log Down	
BT ADDRESS	0000	MultitACC Checksum	Error
BT UPGRADE		SVC Info	
BT FREEPAIRING	ON	TS Clock delay TC	0
SVC Reset		TS Clock delay S	0
TCON_TEMP READ	0.00	CAL Data Backup	....
TEMP LAST	60.00	CAL Data Restore	....
DCC VERSION	0x0		

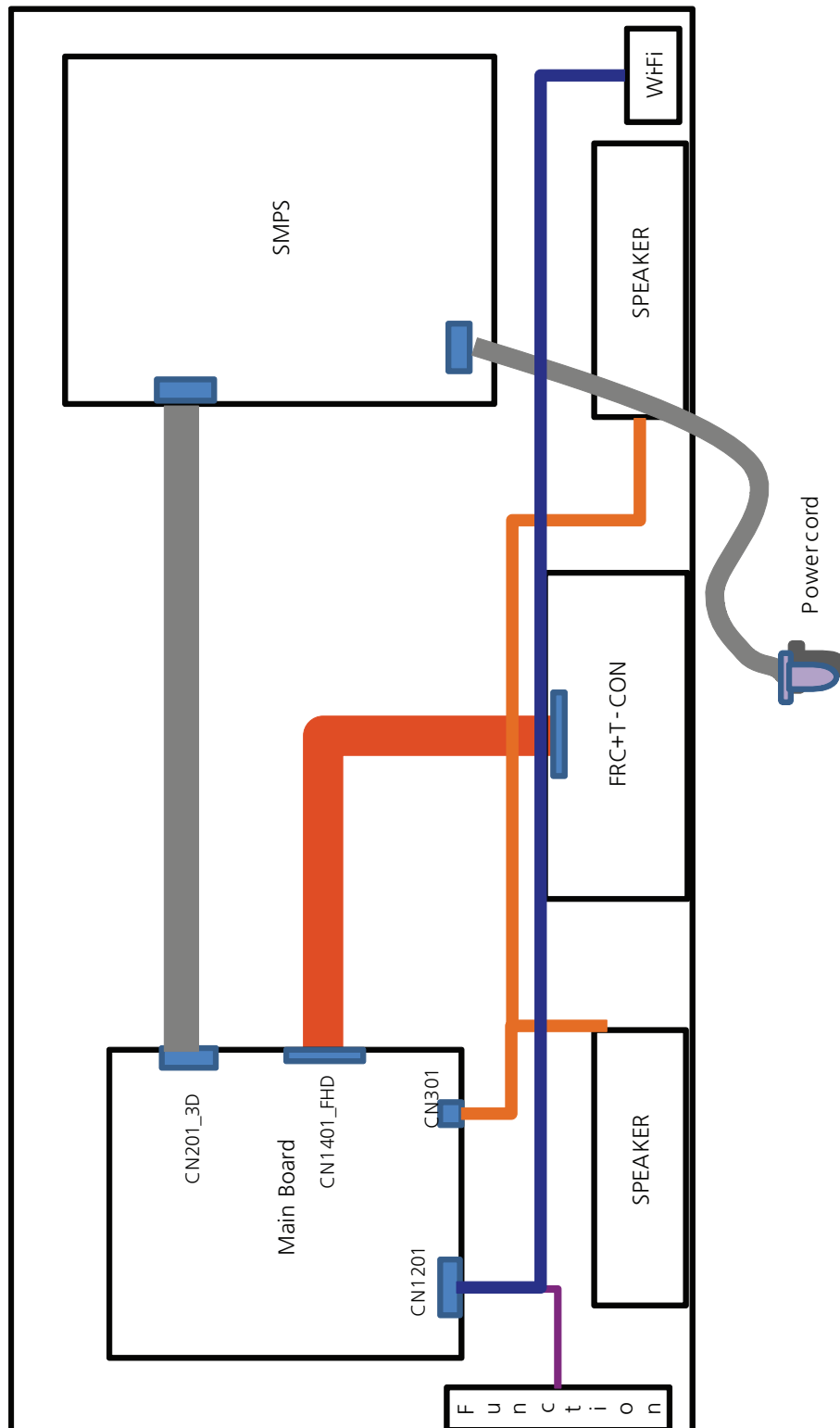
4. Click the “→” remocon key.

<b>SUBMICOM UPGRADE</b>	Wait
-------------------------	------

- Wait for upgrade complete.
- Check the Software version.

## 5. Wiring Diagram

### 5-1. Wiring Diagram



## 5-2. Connector

CN1401_FHD			
1	NC	27	EVEN_TX0-
2	GND	28	GND
3	FRC_SDA	29	ODD_TX4+
4	FRC_PWM1	30	ODD_TX4-
5	FRC_SCL	31	ODD_TX3+
6	FRC_PWM3	32	ODD_TX3-
7	FRC_PWM2	33	GND
8	TCON_SDA	34	ODD_TXCLK+
9	PANEL_I2C_EN	35	ODD_TXCLK-
10	BT_SYNC	36	GND
11	UPDATE_CHK	37	ODD_TX2+
12	TCON_SCL	38	ODD_TX2-
13	GND	39	ODD_TX1+
14	EVEN_TX4+	40	ODD_TX1-
15	EVEN_TX4-	41	ODD_TX0+
16	EVEN_TX3+	42	ODD_TX0-
17	EVEN_TX3-	43	GND
18	GND	44	GND
19	EVEN_TXCLK-	45	GND
20	EVEN_TXCLK+	46	FRC_PWM4
21	GND	47	PANEL_13V_PW
22	EVEN_TX2+	48	PANEL_13V_PW
23	EVEN_TX2-	49	PANEL_13V_PW
24	EVEN_TX1+	50	PANEL_13V_PW
25	EVEN_TX1-	51	PANEL_13V_PW
26	EVEN_TX0+		

CN601(to HDMI1)			
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+		

CN602(to HDMI2)			
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+		

CN603(to HDMI3)			
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+		

CN604(to HDMI4)			
1	HDMI4_RX2+	11	GND
2	GND	12	HDMI4_RXCLK-
3	HDMI4_RX2-	13	CEC
4	HDMI4_RX1+	14	NC
5	GND	15	HDMI4_SCL_DDC
6	HDMI4_RX1-	16	HDMI4_SDA_DDC
7	HDMI4_RX0+	17	GND
8	GND	18	HDMI4_5V
9	HDMI4_RX0-	19	HDMI4_HOT_PLUG
10	HDMI4_RXCLK+		

CN302(to Speaker)			
1	R+	3	L+
2	R-	4	L-

OP301(to Optical Jack)			
1	SPDIF_OUT	3	GND
2	B5V_DC_PW		

CN1501(USB1)			
1	B5V_USB1_PW	3	USB1_DP
2	USB1_DM	4	GND

CN1502(USB2)			
1	B5V_USB2_PW	3	USB2_DP
2	USB2_DM	4	GND

CN1503(USB3)			
1	B5V_USB3_PW	3	USB3_DP
2	USB3_DM	4	GND

CN1402_LAN			
1	LAN_TXD+	5	B2.5V
2	B2.5V	6	LAN_RXD-
3	LAN_TXD-	7	NC
4	LAN_RXD+	8	GND

CN1201(to Function/IR)			
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

CN502(to Component&AV)			
1	GND	9	COMP2_PR
2	COMP2_Y_CVBS	10	COMP2_PR
3	INDENT_VIEDO2	11	GND
4	GND	12	COMP2_PB
5	COMP2_PB	13	INDENT_COMP2
6	INDENT_COMP2	14	GND
7	GND	15	COMP2_Y_CVBS
8	COMP2_PR		

CN304_NIRB_1~7 (to Headpune&LR OUT)			
1	GND	5	TEST_SR
2	HP_LINE_SL_OUT	6	IDENT_HP
3	HP_LINE_SR_OUT	7	GND
4	TEST_SL		

CN303_IBR_1~14			
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

CN201(to Power board)			
1	B5.3V_PW	11	B13V_PW
2	SW_POWER_OUT	12	ECO_ON
3	B5.3V_PW	13	B13V_PW
4	A5.3V_PW	14	CPLD_PWM1
5	GND	15	GND
6	GND	16	CPLD_PWM2
7	B12VS_PW	17	OVD_ON_OFF
8	GND	18	CPLD_PWM3
9	GND	19	OVD_LEVEL
10	SW_INVERTER	20	CPLD_PWM4

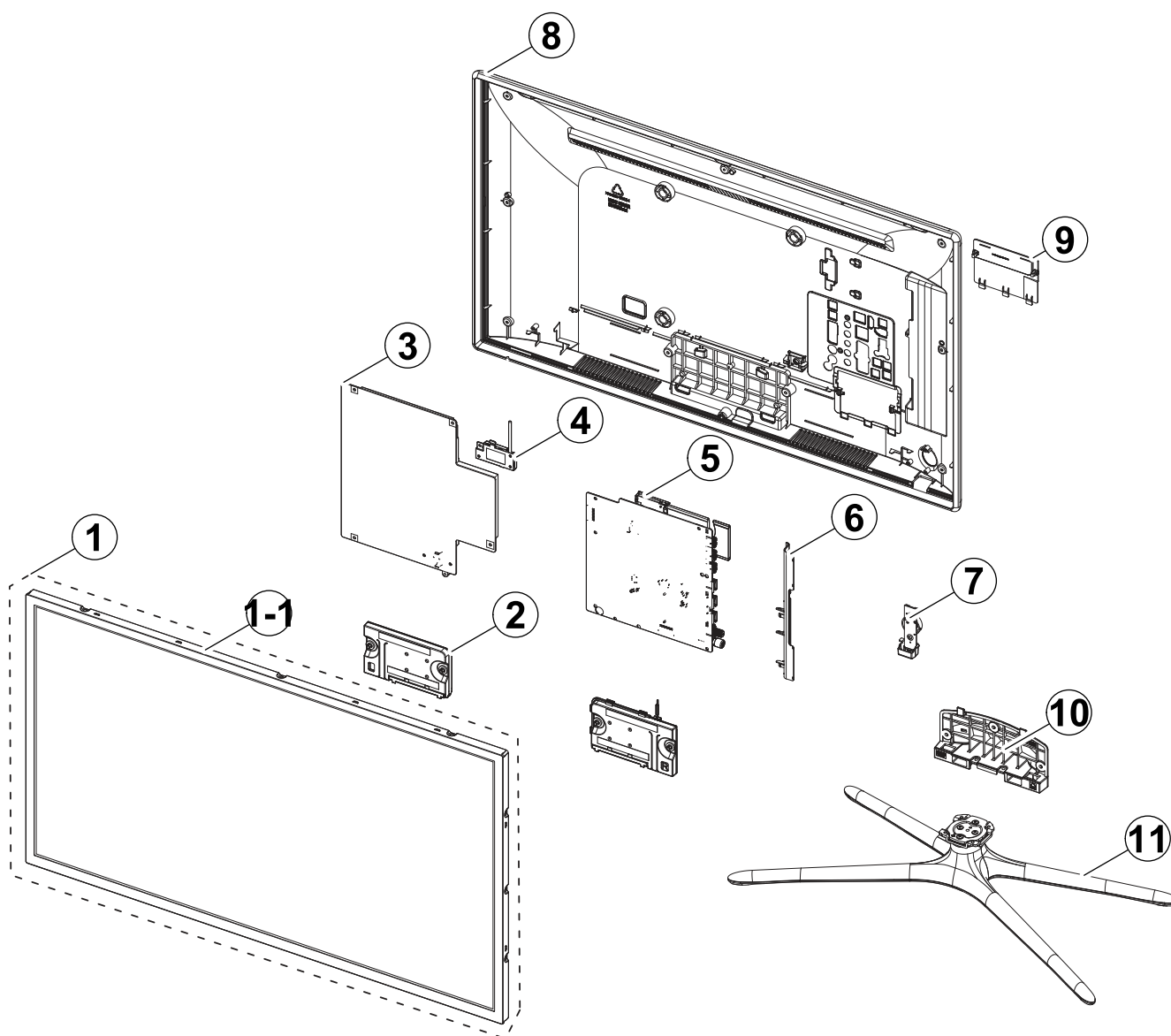
### 5-3. Connector Functions

Connector	Function
CN201_3D ↔ IP CNM803	Supply main power and dimming signal from IP Board to Main Board.
CN1401_FHD ↔ FRC+T-CON	The LVDS signal transfered from Main Board to Panel.



# 1. Exploded View & Part List

## Exploded View



**Parts List**

No.	Lvl.	Loc.	Material Code	Description & Specification	SNA	Qty.
1	2	PANEL	BN95-00908A	PRODUCT LCD-AMLCD; LSF320HN02,CY-HF320BGL	SA	1
1-1	3	TC01A	BN96-25581A	ASSY MISC P-CHASSIS TOP 32 6.2K; Y13 SF-L	SA	1
2	2	SP01A	BN96-25563A	ASSY SPEAKER P; 6ohm,10W,Enclosure_F6k	SA	1
3	2	P001A	BN44-00615A	DC VSS-LED TV PD BD; L32ZF_DDY,L32ZF_DDY,	SA	1
4	3	NW01	BN59-01161A	NETWORK; WIDT-30Q,Internal WiFi,USB,IEEE8	SA	1
5	2	M0014	BN94-06715E	ASSY PCB MAIN; UE32F6270SSXZG	SA	1
6	3		BN61-08781A	HOLDER-SIDE AV; UF6100,HIPS,BK0020,HB,W/W	SNA	1
7	4	FB01A	BN96-26664B	ASSY BOARD P-JOG SWITCH & IR; UE32F6270,F	SA	1
8	3	MR01A	BN96-25531P	ASSY COVER P-MIDDLE,REAR; UF6270 32,PC V2	SA	1
9	2	FC05	BN63-10206K	COVER-JACK; UF4000,32,PC+ABS,BK0008,V0	SNA	1
10	2	SG01A	BN96-25541A	ASSY GUIDE P-STAND; UF6100 32,QUAD	SA	1
11	2	SB04A	BN96-25546A	ASSY STAND P-BASE; UF6100 32,QUAD Chrome	SA	1

## 2. Electrical Parts List

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
			<b>UE32F6270SSXZG (TD01)</b>		
1	S001A	BN90-04142A	ASSY STAND;UE5000 37	1	SNA
..2	SG01A	BN96-25541A	ASSY GUIDE P-STAND;UF6100 32,QUAD	1	SA
..3	SG03	BN61-08822A	GUIDE-STAND;UF6100 32",PC+GF,G/F 20%	1	SA
..3		BN69-08751A	WRAP VINYL-SHRINK;STAND,PLASTIC OTHERS,P	0	SNA
..3		BN96-29120B	ASSY ACCESSORY-SCREW;HG28AB670BWXXL	1	SNA
...4	SCREW	6003-001782	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	7	SA
...4		BN69-09241B	PACKING-BAG-SCREW;LDPE,0.05,70,90,,TRP,	1	SNA
..2	SB04A	BN96-25546A	ASSY STAND P-BASE;UF6100 32,QUAD Chrome	1	SA
..3		6002-001294	SCREW-TAPPING;BH,+,M4,L16,ZPC(BLK)	4	SA
..3	SCREW	6003-001315	SCREW-TAPTYPE;BH,+,B,M4,L20,ZPC(WHT),SWR	4	SNA
..3	SCREW	6003-001425	SCREW-TAPTYPE;BH,+,B,M4,L25,ZPC(BLK),SWR	1	SNA
..3	SCREW	6003-001785	SCREW-TAPTYPE;FH,+,B,M4,L8,ZPC(BLK),SWRC	4	SA
..3		BN61-08228A	BRACKET-SWIVEL,BOTTOM;UE6100,32",QUAD,SP	1	SNA
..3		BN61-08229A	BRACKET-SWIVEL,TOP;UE6100,32",QUAD,SPCC,	1	SNA
..3		BN61-08230B	HOLDER-SWIVEL,TOP;32" QUAD STAND,ACETAL,	1	SNA
...4		0103-009825	RESIN-POM;TS-25A,Dark Gray,GY0199,HB	2	SNA
..3		BN61-08733A	HOLDER-SWIVEL,BOTTOM;32-40 SLIM QUAD STA	1	SNA
..3		BN61-08734A	HOLDER-STAND,NECK;32-40 SLIM QUAD STAND,	1	SNA
...4		0103-007285	RESIN-PC;MW32020GFU,K032202GFV,BK0007,V2	100	SNA
..3		BN61-08735A	BRACKET-STAND,TOP;32-40 SLIM QUAD STAND,	1	SNA
..3		BN61-08736A	BRACKET-STAND,BOTTOM;32-40 SLIM QUAD STA	1	SNA
..3		BN63-05135E	COVER-SHEET;4-LEG,Rhcm PE Vinyl,T0.05,W6	1	SNA
..3		BN63-10154A	COVER-STAND,TOP-FRONT;32-40 SLIM QUAD ST	1	SNA
..3		BN63-10155A	COVER-STAND,TOP-REAR-LEFT;32-40 SLIM QUA	1	SNA
..3		BN63-10156A	COVER-STAND,TOP-REAR-RIGHT;32-40 SLIM QU	1	SNA
..3		BN63-10157A	COVER-STAND,BASE;32-40 SLIM QUAD STAND,A	1	SNA
...4		0103-005041	RESIN-PC;FR3200TV,901408,BK0008,1.2mm V-	105	SNA
...4		BN68-00513D	LABEL-RESIN;resin,-,art paper,-,10,25,-,	1	SNA
..3		BN67-00385D	RUBBER-FOOT;RUBBER-FOOT,SILICONE,ROUND,1	4	SNA
..3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),BLACK,	1	SNA
..3		BN68-03757A	LABEL-INCH;INCH,-,art paper,-,10,20,-,wh	1	SNA
1		BN90-04366H	ASSY COVER MIDDLE;UF6K	1	SNA
..2		6001-002755	SCREW-MACHINE;BH,+,M3,L6,ZPC(BLK),SWRCH1	9	SA
..2	SCREW	6003-001782	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	2	SA
..2	MR02A	BN96-29340C	ASSY COVER P-MIDDLE, REAR;32F62,,,,BN96	1	SNA
..3	SCREW	6003-000115	SCREW-TAPTYPE;BH,+,B,M3,L6,ZPC(BLK),SWRC	1	SA
..3	NW01	BN59-01161A	NETWORK;WIDT-30Q,Internal WiFi,USB,IEEE8	1	SA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
...3	MR01A	BN96-25531P	ASSY COVER P-MIDDLE,REAR;UF6270 32,PC V2	1	SA
...4		0203-001598	TAPE-FILAMENT;#8915,0.15,12,55000,CLR	0	SNA
...4	SCREW	6003-000115	SCREW-TAPTYPE;BH,+,B,M3,L6,ZPC(BLK),SWRC	2	SA
...4	CB20	BN61-08819A	BRACKET-WALL;UF6100 32",SECC,T1.2	1	SNA
...4		BN63-08608B	COVER-SHEET;Rhcm,PE Vinyl,T 0.04,80MM,20	2	SNA
...4		BN63-10166D	COVER-MIDDLE,REAR;UF6200/6400,PC/PC+ABS,	1	SNA
....5		0103-007268	RESIN-PC;TN-1045M,70784,TP0010,0.8, 3.0	253	SNA
....5		0103-007678	RESIN-PC ABS;CF210M,6209G,BK0007,V0 (1.5	1023	SNA
....5		BN68-00513D	LABEL-RESIN;resin,-,art paper,-,10,25,-,	1	SNA
...4	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),BLACK,	1	SNA
...4		BN68-03518D	LABEL-STICKER-CI SLOT;WW,ALL,PE,132.5,72	1	SNA
...4		BN68-04709W	LABEL-TERMINAL SIDE;UF6400,EO/CIS SATELL	1	SNA
...4	FB01A	BN96-26664B	ASSY BOARD P-JOG SWITCH & IR;UE32F6270,F	1	SA
....5	EC13	BN39-01765B	LEAD CONNECTOR;UE32F6300,Flat Connector,	1	SNA
....5		BN96-26664A	ASSY BOARD P-JOG SWITCH & IR;UE40F6270,F	1	SNA
1		BN90-04580N	ASSY W/I;UF7K	1	SNA
.2		BN81-08159Z	PART SET-ELEC W/I;UF4* ~ UF8* ELEC	1	SNA
.2		BN81-08366B	PART SET-MECH W/I;UF6N,U32FN*	1	SNA
1		BN91-06968H	ASSY SHIELD;UE32F6270SSXZG	1	SNA
.2		6001-003016	SCREW-MACHINE;PWH,+,M3.0,L5.0,ZPC(WHT),S	9	SA
.2		BN02-00102B	TAPE FILAMENT;UE7000,#893,0.15,25,50,WHI	0	SNA
.2	EC13	BN39-01652S	LEAD CONNECTOR;UE32F5500,Lead Connector,	1	SA
.2	EC13	BN39-01744G	LEAD CONNECTOR;2D NNB,Lead Connector,UL1	1	SA
.2	P001A	BN44-00615A	DC VSS-LED TV PD BD;L32ZF_DDY,L32ZF_DDY,	1	SA
.2	FC05	BN63-10206K	COVER-JACK;UF4000,32,PC+ABS,BK0008,V0	1	SNA
...3		0103-007678	RESIN-PC ABS;CF210M,6209G,BK0007,V0 (1.5	18	SNA
.2	FL06	BN96-24278U	ASSY CABLE P-FFC;UN32F5500,FFC,217mm,51P	1	SA
.2	SP01A	BN96-25563A	ASSY SPEAKER P;6ohm,10W,Enclosure_F6k	1	SA
1		BN91-10241A	ASSY LCM-AMLCD;BN95-00908A,CY-HF320BGLV2	1	SNA
.2	PANEL	BN95-00908A	PRODUCT LCD-AMLCD;LSF320HN02,CY-HF320BGL	1	SA
...3		6001-002757	SCREW-MACHINE;BH,+,M3,L4,ZPC(WHT),SWRCH1	6	SA
...3		6001-002903	SCREW-MACHINE;CH,+,M3,L8,ZPC(BLK),SWRCH1	7	SNA
...3		AK68-02233C	LABEL RATING;BD-E,XS,KR,RU,ZW,ART PAPER,	1	SNA
...3	AS109	BN63-11086A	SHEET-SIDE;F6200,TAPE,0.125,25mm,130m,SI	2	SNA
...3		BN90-04401A	ASSY MISC-BLU;Slim F-LED,6.2K 2D	1	SNA
...4		BN02-00152H	TAPE ETC-SHEET FIXING;Y13 Slim F-LED,PET	4	SNA
...4		BN61-08637A	LGP-DIFFUSER PLATE;32" Slim FLED_Diffus	1	SNA
...4		BN61-09304A	SUPPORT-PLATE;Y13 SLIM / VNB,PC,WHT + CL	4	SNA
...4		BN63-10446A	SHEET-REFLECTOR;SY95,SHEET*,0.188,699.4,	1	SNA
...4		BN63-10448A	SHEET-DIFFUSER;32inch, S_NNB, Optical Sh	1	SNA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
...4		BN96-25300A	ASSY MISC P-LED BAR;32inch FHD Slim Dire	5	SA
...4		BN96-25319E	ASSY MISC P-CHASSIS BOTTOM 6.2K;Y13 SF-L	1	SNA
....5		6001-002759	SCREW-MACHINE;CH,+,M3,L4,ZPC(BLK),SWRCH1	1	SA
....5		6001-003005	SCREW-MACHINE;BH,+,M3,L6,ZPC(WHT),SWRCH1	3	SNA
....5		BN02-00040C	TAPE DOUBLE FACE-D-PLATE;F-LED ALL,MKT50	2	SNA
....5		BN02-00043D	TAPE ETC-SHEET FIXING;Y13 slim F-LED,PET	2	SNA
....5		BN02-00134E	TAPE ETC-SHEET FIXING;SFLED 32/40/46/55/	6	SNA
....5		BN61-08161A	HOLDER-LED-PCB;Direct-LED,PC,white	1	SNA
....6		0103-009493	RESIN-PC;LH-1070W,W92853,WT0107,V-2	1	SNA
....5		BN61-08815A	HOLDER-SOURCE PCB;SLIM-FLED,ABS+PC,BLK,V	4	SNA
....6		0103-005041	RESIN-PC;FR3200TV,901408,BK0008,1.2mm V-	6	SNA
....5		BN61-09049A	BRACKET-WALL MOUNT;Y13 ALL Model,SPCC,T1	3	SNA
....5		BN61-09101A	SUPPORT-SOURCE PCB;SF-LED,ABS+PC,V0,GRAY	4	SNA
....6		0103-009930	RESIN-PC ABS;NH-1017SG,GRAY,GY0275,V0	6	SNA
....5		BN62-00338F	INSULATION-PD BOARD;Y13 SF-LED 32",PC-FI	1	SNA
....5		BN64-02200E	CHASSIS-BOTTOM 6.2K;Y13 F-LED Slim 32",E	1	SNA
....5		BN96-25335A	ASSY BOARD P-D-LED INTERFACE;32inch Slim	1	SNA
...4		BN96-25582A	ASSY FRAME P-MOLD MIDDLE 32 6.2K;Y13 F-L	1	SNA
....5		BN60-00744A	SPACER-RUBBER;Y13 F-LED SLIM,SH-0140U+AT	2	SNA
....5		BN60-00748W	SPACER-PANEL U;13 SF-LED 32 6.2K,SILICON	1	SNA
....5		BN60-00748X	SPACER-PANEL D;13 SF-LED 32 6.2K,SILICON	1	SNA
....5		BN60-00748Y	SPACER-PANEL LR;13 SF-LED 32 6.2K,SILICO	2	SNA
....5		BN60-00748Z	SPACER-PANEL CORNER;13 SF-LED 32 6.2K,SI	4	SNA
....5		BN61-09063A	FRAME-MOLD MIDDLE(F6.2K);Y13 SF-LED 32(6	1	SNA
....6		0103-009559	RESIN-PC;210GNH15,6919A,BK0007,PC ABS GF	150	SNA
..3	TCON	BN95-00854A	ASSY T CON;LSF320HN02,32 FHD 60Hz	1	SA
...4		BN97-06992A	ASSY SMD;BN95-00854A	1	SNA
....5		0202-001899	SOLDER-CREAM;M705-GRN360-K2-VT,25-36um,S	1	SNA
....5		0404-001314	DIODE-SCHOTTKY;B260A,60V,2000mA,SMA,TP	1	SNA
....5		0404-001640	DIODE-SCHOTTKY;SS1060HEWS,60V,1000mA,SOD	2	SA
....5		0406-001317	DIODE-TVS;SMAJ14A,15.6/-/17.2V,400W,SMA	2	SNA
....5		0406-001324	DIODE-TVS;RClamp1502B,16.7/-/V,200W,SOT	1	SNA
....5		0406-001445	DIODE-TVS;RClamp7512N,2.7/2.8/2.9,300W,S	2	SA
....5		0406-001483	DIODE-TVS;ESD5B5.0ST1G,5,8V/- /7.8V,50W,	2	SA
....5		0406-001556	DIODE-TVS;NUP4114UCW1,6/-/V,180W,SC-88	1	SA
....5		0406-001578	DIODE-TVS;P4SMAJ40A,44.4,51.1,400W,SMA	1	SA
....5		0501-000465	TR-SMALL SIGNAL;MMBT3904,NPN,350mW,SOT-2	1	SA
....5		0505-002826	FET-SILICON;ZXMN6A07F,N,60V,1A,0.4ohm,0.	1	SNA
....5		0505-003224	FET-SILICON;AO6405,P,-30V,-5A,0.052ohm,2	1	SA
....5	EL02	0601-002037	LED;SMD(TOP VIEW),BLUE,1.6x0.8mm,465/470	3	SA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
....5		1203-006138	IC-POS.LADJUST REG.;AP1117DGZ-13-89,TO-2	1	SA
....5		1203-006998	IC-DC/DC CONVERTER;RT6905,QFN,48P,7x7mm,	1	SNA
....5		1203-007450	IC-VOL. GENERATOR;SM4181,QFN,48Z30,7x7x0	1	SNA
....5		2007-000052	R-CHIP;10Kohm,1%,1/10W,TP,1608	1	SA
....5		2007-000066	R-CHIP;20Kohm,1%,1/10W,TP,1608	1	SNA
....5		2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	4	SA
....5		2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	13	SA
....5		2007-000151	R-CHIP;15Kohm,5%,1/16W,TP,1005	1	SNA
....5		2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	SNA
....5		2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	5	SNA
....5		2007-000336	R-CHIP;120Kohm,1%,1/10W,TP,1608	2	SA
....5		2007-000772	R-CHIP;33Kohm,1%,1/10W,TP,1608	1	SA
....5		2007-000779	R-CHIP;33ohm,1%,1/10W,TP,1608	7	SA
....5		2007-002768	R-CHIP;6.2Kohm,1%,1/10W,TP,1608	2	SA
....5		2007-002900	R-CHIP;11Kohm,1%,1/10W,TP,1608	1	SNA
....5		2007-007131	R-CHIP;13Kohm,1%,1/16W,TP,1005	1	SA
....5		2007-007132	R-CHIP;15Kohm,1%,1/16W,TP,1005	3	SA
....5		2007-007136	R-CHIP;4.7Kohm,1%,1/16W,TP,1005	11	SNA
....5		2007-007142	R-CHIP;10Kohm,1%,1/16W,TP,1005	4	SNA
....5		2007-007156	R-CHIP;1ohm,5%,1/16W,TP,1005	2	SNA
....5		2007-007305	R-CHIP;120ohm,1%,1/16W,TP,1005	1	SNA
....5		2007-007306	R-CHIP;100ohm,1%,1/16W,TP,1005	1	SNA
....5		2007-007307	R-CHIP;150ohm,1%,1/16W,TP,1005	1	SNA
....5		2007-007309	R-CHIP;12Kohm,1%,1/16W,TP,1005,0.35	1	SA
....5		2007-007313	R-CHIP;6.8Kohm,1%,1/16W,TP,1005	1	SA
....5		2007-007318	R-CHIP;1Kohm,1%,1/16W,TP,1005	2	SNA
....5		2007-007352	R-CHIP;130Kohm,1%,1/10W,TP,1608	1	SA
....5		2007-007587	R-CHIP;3.6Kohm,1%,1/16W,TP,1005	1	SNA
....5		2007-007698	R-CHIP;5.1Kohm,1%,1/16W,TP,1005	6	SNA
....5		2007-007766	R-CHIP;2Kohm,1%,1/16W,TP,1005	1	SNA
....5		2007-007798	R-CHIP;10ohm,1%,1/16W,TP,1005	12	SA
....5		2007-007992	R-CHIP;1ohm,1%,1/10W,TP,1608	3	SA
....5		2007-008015	R-CHIP;75ohm,1%,1/16W,TP,1005	18	SNA
....5		2007-008117	R-CHIP;2.7Kohm,1%,1/16W,TP,1005	4	SA
....5		2007-008563	R-CHIP;270ohm,1%,1/16W,TP,1005	2	SA
....5	AD480	2203-000783	C-CER,CHIP;0.33nF,5%,50V,C0G,TP,1608	1	SA
....5	AD480	2203-002398	C-CER,CHIP;22nF,10%,50V,X7R,TP,1608	1	SNA
....5	AD480	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,TP,1608	1	SC
....5	AD480	2203-005138	C-CER,CHIP;1.8nF,10%,50V,X7R,TP,1005	2	SA
....5	AD480	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,TP,1608	5	SNA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
....5	AD480	2203-005918	C-CER,CHIP;1000nF,10%,6.3V,X7R,TP,1608	2	SNA
....5	AD480	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,TP,1005,0.5	15	SNA
....5	AD480	2203-006320	C-CER,CHIP;2200nF,10%,16V,X7R,TP,2012	1	SNA
....5	AD480	2203-006399	C-CER,CHIP;1000nF,10%,6.3V,X5R,TP,1005	12	SA
....5	AD480	2203-006698	C-CER,CHIP;1000nF,10%,25V,X7R,TP,1608,0.	16	SNA
....5	AD480	2203-006841	C-CER,CHIP;1000nF,10%,16V,X5R,TP,1005	2	SNA
....5	AD480	2203-006890	C-CER,CHIP;10000nF,20%,6.3V,X5R,TP,1608	4	SNA
....5	AD480	2203-006960	C-CER,CHIP;1000nF,10%,50V,X7R,TP,2012	1	SNA
....5	AD480	2203-007240	C-CER,CHIP;22000nF,20%,6.3V,X5R,TP,1608,	10	SA
....5	AD480	2203-007306	C-CER,CHIP;10000nF,10%,25V,X5R,TP,2012,1	24	SNA
....5		2409-001240	C-ORGANIC,SMD;33uF,20%,25V,LR,TP,7343(1.	1	SA
....5		2703-003488	INDUCTOR-SMD;10uH,20%,6965,0.071ohm,3500	1	SA
....5		2703-003747	INDUCTOR-SMD;22uH,20%,6060,0.135ohm,1300	2	SA
....5		2703-003803	INDUCTOR-SMD;4.7uH,20%,6060,0.031ohm,270	1	SA
....5		2703-003862	INDUCTOR-SMD;10uH,20%,6060,0.065ohm,1900	1	SA
....5		2703-003867	INDUCTOR-SMD;22uH,20%,4040,1.8T,0.29Ohm,	1	SA
....5		3301-002039	BEAD-SMD;26ohm,1608,TP	21	SA
....5		3601-001038	FUSE-SURFACE MOUNT;125V,3A,FAST-ACTING,C	1	SA
....5		3708-002656	CONNECTOR-FPC/FFC/PIC;68P,0.5mm,SMD-A,Au	2	SA
....5	EH01	3711-005601	HEADER-BOARD TO CABLE;BOX,8P,1R,2mm,SMD-	1	SA
....5	EH01	3711-005925	HEADER-BOARD TO CABLE;BOX,51P,1R,0.5mm,S	1	SA
....5		BN13-00060A	IC ASIC;LTF60B0,S60TB,169,3.3,-20to+70C,	1	SA
....5		BN41-01938B	PCB-T CON;2013 FHD 60Hz,FR-4,4,1.0T,150*	1	SNA
....5		BN97-07018A	ASSY MICOM;0F32A6F118_121226,2013.01.30	1	SNA
....6		1103-001565	IC-EEPROM;M24C64-WMN6TPK,100pF,SO8,8Q,4.	1	SA
..3	TC-OC	BN96-24430B	ASSY CABLE P-FFC;D5K,D6K,FFC,42mm1,68P	2	SNA
..3	OC	BN96-24838A	ASSY OPEN CELL;LSF320HN02-A,8bit,32 INCH	1	SA
...4		BN81-07434A	A/S-ADHESIVE-A.C.F(CP);ADHESIVE-A.C.F,1-	1	SNA
...4		BN81-07877A	A/S-IC DRIVER SOURCE;IC DRIVER SOURCE,13	1	SNA
...4		BN81-07888A	A/S-POLARIZER-C/F;8-POLARIZER-C/F	1	SNA
...4		BN81-07902A	A/S-POLARIZER-TFT;POLARIZER-TFT	1	SNA
...4		BN81-07913B	A/S-ASSY PCB-SOURCE RIGHT;ASSY PCB-SOURC	1	SNA
...4		BN81-07914B	A/S-ASSY PCB-SOURCE LEFT;ASSY PCB-SOURCE	1	SNA
...4		BN81-07943A	A/S-ADHESIVE-A.C.F(TP500B);ADHESIVE-A.C.	1	SNA
..3	TC01A	BN96-25581A	ASSY MISC P-CHASSIS TOP 32 6.2K;Y13 SF-L	1	SA
...4		BN60-00752A	SPACER-TOP;Y13 F7/7.1K 40"~55",PORON*,BL	2	SNA
...4		BN63-11089B	COVER-SHEET;Y13 SF-LED,PET+SILICON,T0.05	2	SNA
...4		BN63-11089C	COVER-SHEET;Y13 SF-LED,PET+SILICON,T0.05	1	SNA
...4		BN64-02299A	CHASSIS-TOP(F6.2K);Y13 SF-LED 32(6.2K),S	1	SNA
...4		BN64-02377C	BADGE-BRAND F6200;F6200,Ni,0.05,5,35,TIT	1	SNA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
...3		BN96-26726C	ASSY MISC P-SHIELD SOURCE,PCB;Y13 SF-LED	2	SNA
...4		BN02-00152A	TAPE ETC-SHEET FIXING;Y13 Slim F-LED,PET	2	SNA
...4		BN02-00152F	TAPE ETC-SHEET FIXING;Y13 Slim F-LED,PET	4	SNA
...4		BN60-00554A	SPACER-SOURCE;SNB 40/46/55,Silicone-Rubb	4	SNA
...4		BN63-10489A	SHIELD-SOURCE PCB;Y13 SF-LED 32",EGI-SEC	2	SNA
1	M0017	BN91-10610G	ASSY CHASSIS;UE32F6270SSX*	1	SNA
.2	M0014	BN94-06715E	ASSY PCB MAIN;UE32F6270SSXZG	1	SA
...3		BN61-08781A	HOLDER-SIDE AV;UF6100,HIPS,BK0020,HB,W/W	1	SNA
...4		0103-004628	RESIN-HIPS;HF-1690H,K2901,BK0020,1.5mm H	13	SNA
...3		BN62-00273B	HEAT SINK-PS;TV Echo-P,A5052,5t,BLACK,40	1	SNA
...3		BN62-00367A	PAD GAP;F6400,SILICON,35 35 mm,6.5,Light	1	SNA
...3		BN67-00364C	RUBBER-FOOT;X13,RUBBER,10*10,6,Gray,SQUA	1	SNA
...3		BN97-07143A	ASSY DRM-KEY;CI(BN46-00115J),HDCP(BN46-0	1	SNA
...4		BN46-00109H	KEY CODE-CERTIFI;MAC,TV/AV,General	1	SNA
...4		BN46-00110N	KEY CODE-CERTIFI;MIRACAST,TV,X12 /X13	1	SNA
...4		BN46-00115J	KEY CODE-CERTIFI;CI+,TV,2013X,Euro	1	SNA
...3		BN97-07649J	ASSY SMD;F6270,DVB-T/C/S2,BN41-01958B	1	SNA
...4		0202-001899	SOLDER-CREAM;M705-GRN360-K2-VT,25-36um,S	3	SNA
...4	DS01A	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	2	SA
...4		0403-001783	DIODE-ZENER;BZB84-C6V2,5.8/6.6V,300mW,SO	5	SNA
...4		0404-001404	DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23,	3	SA
...4		0404-001787	DIODE-SCHOTTKY;SS3P4,40V,3000mA,DO-220AA	3	SA
...4		0406-001200	DIODE-TVS;RCLAMP0504F,6/-/-V,150W,SC-70	4	SA
...4		0406-001271	DIODE-TVS;RCLAMP0524P,6/-/-V,150W,SLP251	1	SNA
...4		0406-001290	DIODE-TVS;3.0SMCJ20A,22.2/-/24.5V,3000W,	1	SNA
...4		0501-000279	TR-SMALL SIGNAL;KSA1182-Y,PNP,150mW,SOT-	2	SA
...4		0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	9	SC
...4		0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	11	SA
...4		0505-002560	FET-SILICON;AO6415,P,-20V,-3.3A,0.15ohm,	1	SA
...4		0505-002598	FET-SILICON;AP2317GN,P,-20V,-4.2A,0.052o	1	SA
...4		0801-002701	IC-CMOS LOGIC;74VHCT125A,BUFFER,TSSOP,14	1	SA
...4		0801-002780	IC-CMOS LOGIC;74LVC1G17,SCHMITT-TRIGGER	1	SA
...4		0801-003330	IC-CMOS LOGIC;Octal buffer,DQFN,20P,4.5x	1	SA
...4		0904-002803	IC-USC;AU6258S-JKF,QFN,28Z30,5.0mm X 5.0	1	SNA
...4		1001-001545	IC-ANALOG MULTIPLEX;TS3USB221ERSER,R-PQF	1	SA
...4		1103-001487	IC-EEPROM;AT24C256C-SSHL-T,256Kbit,32Kx8	1	SA
...4		1105-002338	IC-DDR3 SDRAM;K4B4G1646B-HCMA,DDR3 1866,	1	SA
...4		1105-002430	IC-DDR3 SDRAM;K4B2G1646E-BCMA,DDR3 1866,	2	SA
...4		1201-003183	IC-AUDIO AMP;DRV612,HTSSOP,14P,5x4.4mm,D	1	SA
...4		1201-003526	IC-AUDIO AMP;TAS5745,QFP,48Z30,7x7mm,DUA	1	SNA



Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
...4		1203-004364	IC-VOL. DETECTOR;RT9818C-42PV,SOT-23,3P,	1	SA
...4		1203-006109	IC-POSIFIXED REG.;S-1206B33-M3T1G,SOT-2	2	SA
...4		1203-006130	IC-POSIFIXED REG.;S-1172B25-U5T1G,SOT-8	1	SA
...4		1203-006135	IC-POSIFIXED REG.;AP1117D-33-GZ-13-89,T	1	SA
...4		1203-006136	IC-POSIFIXED REG.;AP1117D-18-GZ-13-89,T	1	SA
...4		1203-006138	IC-POSIAJUST REG.;AP1117DGZ-13-89,TO-2	1	SA
...4		1203-007211	IC-POSIFIXED REG.;G9915-12T45U,TO-252,3	1	SA
...4		1203-007238	IC-PWM CONTROLLER;TPS54427,DDA,8P,4.8x3.	1	SNA
...4		1203-007242	IC-POSIAJUST REG.;G2992BP11U,SOP-8,8P,	1	SA
...4		1203-007502	IC-DC/DC CONVERTER;AOZ3011PI,SO-8,8Z30,4	1	SA
...4		1203-007667	IC-DC/DC CONVERTER;A8303SESTR-T,QFN,20Z3	1	SNA
...4		1203-007695	IC-DC/DC CONVERTER;AOZ3018,SO-8,8Z30,4,9	1	SNA
...4		1203-007728	IC-VOL. DETECTOR;RT9831GQW,QW : WQFN-20L	1	SA
...4		1204-003421	IC-DECODER;SEMS30,PBGA,729Z30,21.6x21.6m	1	SA
...4		1205-004447	IC-SWITCH;TPS2051CDBVR,SOT23-5,5P,3x1.65	4	SA
...4		1205-004691	IC-SWITCH;BD82022FVJ,MSOP-8L JEDEC,8Z30,	1	SNA
...4		1405-001271	VARISTOR;35V,20Vdc,5A,1.0x0.5x0.6mm,TP,1	28	SA
...4		2007-000137	R-CHIP;2Kohm,5%,1/16W,TP,1005	13	SNA
...4		2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	13	SA
...4		2007-000142	R-CHIP;2.7Kohm,5%,1/16W,TP,1005	1	SNA
...4		2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	47	SNA
...4		2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	42	SA
...4		2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	6	SNA
...4		2007-000155	R-CHIP;27Kohm,5%,1/16W,TP,1005	1	SNA
...4		2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	15	SNA
...4		2007-000169	R-CHIP;510Kohm,5%,1/16W,TP,1005	1	SA
...4		2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	3	SNA
...4		2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	13	SNA
...4		2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	5	SNA
...4		2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	13	SNA
...4		2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	2	SNA
...4		2007-000256	R-CHIP;1.6Kohm,1%,1/10W,TP,1608	1	SA
...4		2007-000336	R-CHIP;120Kohm,1%,1/10W,TP,1608	1	SA
...4		2007-000583	R-CHIP;22Kohm,1%,1/10W,TP,1608	2	SA
...4		2007-000695	R-CHIP;3.3ohm,5%,1/10W,TP,1608	2	SNA
...4		2007-000775	R-CHIP;33Kohm,5%,1/16W,TP,1005	1	SNA
...4		2007-000803	R-CHIP;36Kohm,1%,1/10W,TP,1608	2	SA
...4		2007-000857	R-CHIP;4.3Kohm,1%,1/10W,TP,1608	4	SNA
...4		2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	3	SNA
...4		2007-000979	R-CHIP;5.6Kohm,1%,1/10W,TP,1608	1	SA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
...4		2007-001116	R-CHIP;680ohm,1%,1/10W,TP,1608	1	SA
...4		2007-001125	R-CHIP;68Kohm,1%,1/10W,TP,1608	1	SA
...4		2007-001168	R-CHIP;75ohm,5%,1/4W,TP,3216	1	SA
...4		2007-001288	R-CHIP;18ohm,5%,1/16W,TP,1005	4	SA
...4		2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	15	SNA
...4		2007-001298	R-CHIP;51ohm,5%,1/16W,TP,1005	2	SNA
...4		2007-001301	R-CHIP;68ohm,5%,1/16W,TP,1005	7	SA
...4		2007-002970	R-CHIP;56ohm,5%,1/16W,TP,1005	4	SA
...4		2007-003015	R-CHIP;2.2ohm,5%,1/16W,TP,1005	1	SNA
...4		2007-003022	R-CHIP;62ohm,5%,1/16W,TP,1005	26	SNA
...4		2007-007001	R-CHIP;3.9Kohm,5%,1/16W,TP,1005	1	SA
...4		2007-007095	R-CHIP;390ohm,5%,1/16W,TP,1005	1	SA
...4		2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	8	SNA
...4		2007-007135	R-CHIP;18Kohm,1%,1/16W,TP,1005	4	SNA
...4		2007-007138	R-CHIP;27Kohm,1%,1/16W,TP,1005	1	SNA
...4		2007-007139	R-CHIP;47Kohm,1%,1/16W,TP,1005	1	SA
...4		2007-007142	R-CHIP;10Kohm,1%,1/16W,TP,1005	2	SNA
...4		2007-007156	R-CHIP;1ohm,5%,1/16W,TP,1005	11	SNA
...4		2007-007316	R-CHIP;3.3Kohm,1%,1/16W,TP,1005	3	SNA
...4		2007-007318	R-CHIP;1Kohm,1%,1/16W,TP,1005	33	SNA
...4		2007-007331	R-CHIP;90.9Kohm,1%,1/10W,TP,1608	1	SA
...4		2007-007463	R-CHIP;1.1Kohm,1%,1/16W,TP,1005	1	SA
...4		2007-007470	R-CHIP;7.5Kohm,1%,1/16W,TP,1005	1	SNA
...4		2007-007517	R-CHIP;240ohm,1%,1/16W,TP,1005	4	SNA
...4		2007-007538	R-CHIP;56Kohm,1%,1/16W,TP,1005	1	SA
...4		2007-007766	R-CHIP;2Kohm,1%,1/16W,TP,1005	5	SNA
...4		2007-007942	R-CHIP;1Mohm,1%,1/16W,TP,1005	1	SNA
...4		2007-007981	R-CHIP;180Kohm,1%,1/16W,TP,1005	1	SNA
...4		2007-008015	R-CHIP;75ohm,1%,1/16W,TP,1005	11	SNA
...4		2007-008133	R-CHIP;56.2Kohm,1%,1/10W,TP,1608	1	SA
...4		2007-008137	R-CHIP;24Kohm,1%,1/16W,TP,1005	2	SNA
...4		2007-008275	R-CHIP;30Kohm,1%,1/16W,TP,1005	1	SNA
...4		2007-008298	R-CHIP;49.9ohm,1%,1/16W,TP,1005	4	SA
...4		2007-008426	R-CHIP;12.4Kohm,1%,1/10W,TP,1608	1	SA
...4		2007-008649	R-CHIP;220ohm,1%,1/16W,TP,1005	1	SNA
...4		2007-008807	R-CHIP;53.6Kohm,1%,1/16W,TP,1005	1	SA
...4		2011-001261	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,2.	2	SA
...4		2011-001262	R-NETWORK;22ohm,5%,1/16W,L,CHIP,8P,TP,2.	3	SA
...4		2011-001344	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,2	4	SA
...4		2011-001449	R-NETWORK;22ohm,5%,1/16W,L,4P,TP,1010	6	SA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
...4		2011-001506	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,4P,TP,1	6	SNA
...4		2011-001527	R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,4P,TP,	5	SNA
...4		2011-001587	R-NETWORK;100ohm,5%,1/16W,L,CHIP-V,4P,TP	6	SNA
...4	AD480	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005	6	SA
...4	AD480	2203-000386	C-CER,CHIP;0.015nF,5%,50V,C0G,TP,1005	3	SA
...4	AD480	2203-000425	C-CER,CHIP;0.018nF,5%,50V,C0G,TP,1005	3	SA
...4	AD480	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,TP,1005	7	SA
...4	AD480	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,TP,1005	8	SA
...4	AD480	2203-000530	C-CER,CHIP;2.7nF,10%,50V,X7R,TP,1005,-	1	SNA
...4	AD480	2203-000575	C-CER,CHIP;220nF,10%,25V,X7R,TP,2012	6	SNA
...4	AD480	2203-000679	C-CER,CHIP;0.027nF,5%,50V,C0G,TP,1005	2	SA
...4	AD480	2203-000812	C-CER,CHIP;0.033nF,5%,50V,C0G,TP,1005	5	SA
...4	AD480	2203-000995	C-CER,CHIP;0.047nF,5%,50V,C0G,TP,1005	3	SA
...4	AD480	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,TP,1005	23	SNA
...4	AD480	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	4	SNA
...4	AD480	2203-002711	C-CER,CHIP;100nF,10%,25V,X7R,TP,1608	3	SA
...4	AD480	2203-003039	C-CER,CHIP;0.008nF,0.25pF,50V,C0G,TP,100	2	SNA
...4	AD480	2203-005083	C-CER,CHIP;220nF,10%,50V,X7R,TP,1608,0.8	2	SA
...4	AD480	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,TP,1608	5	SNA
...4	AD480	2203-005344	C-CER,CHIP;22nF,10%,25V,X7R,TP,1005,0.5T	2	SNA
...4	AD480	2203-005642	C-CER,CHIP;0.22nF,5%,50V,NP0,TP,1005	2	SNA
...4	AD480	2203-005968	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1005,0.5	2	SNA
...4	AD480	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,TP,1005	121	SA
...4	AD480	2203-006126	C-CER,CHIP;47nF,10%,16V,X7R,TP,1005	17	SNA
...4	AD480	2203-006324	C-CER,CHIP;2200nF,10%,10V,X5R,TP,1608	6	SA
...4	AD480	2203-006348	C-CER,CHIP;1000nF,10%,25V,X5R,TP,1608,0.	4	SA
...4	AD480	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012	25	SC
...4	AD480	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,TP,2012	29	SA
...4	AD480	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005	19	SNA
...4	AD480	2203-006824	C-CER,CHIP;4700nF,10%,10V,X5R,TP,1608,-	10	SNA
...4	AD480	2203-006890	C-CER,CHIP;10000nF,20%,6.3V,X5R,TP,1608	23	SNA
...4	AD480	2203-006960	C-CER,CHIP;1000nF,10%,50V,X7R,TP,2012	1	SNA
...4	AD480	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,TP,1005	2	SNA
...4	AD480	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012,1	8	SNA
...4	AD480	2203-007513	C-CER,CHIP;10000nF,10%,10V,X5R,TP,1608,0	4	SA
...4	AD480	2203-007544	C-CER,CHIP;100nF,10%,50V,X7R,TP,1005	4	SA
...4		2402-001403	C-AL,SMD;100uF,20%,35V,TP,10.3X10.3	1	SNA
...4		2703-000158	INDUCTOR-SMD;1uH,10%,2012,.40ohm,50mA,45,	4	SA
...4		2703-000408	INDUCTOR-SMD;3.3uH,20%,3225,.28ohm,500mA	1	SA
...4		2703-001229	INDUCTOR-SMD;2.2uH,10%,1608,1.150ohm,15mA	1	SC

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
...4		2703-001938	INDUCTOR-SMD;56nH,5%,1005,1.5Ohm,200mA,1	1	SA
...4		2703-003713	INDUCTOR-SMD;1.5uH,20%,7366,0.015ohm,700	2	SA
...4		2703-003790	INDUCTOR-SMD;4.7uH,20%,8080,0.025ohm,450	1	SA
...4		2703-003930	INDUCTOR-SMD;4.7uH,20%,5050,0.072Ohm,245	4	SA
...4		2703-004562	INDUCTOR-SMD;15uH,20%,10.3x10.2 mm,4.5T,	1	SNA
...4		2801-000102	CRYSTAL-SMD;12MHz,30ppm,12pF,100ohm,TP	1	SA
...4		2801-003326	CRYSTAL-SMD;24MHz,30ppm,28-ABX,20pF,50oh	1	SA
...4		2801-003856	CRYSTAL-SMD;0.032768MHz,20ppm,28-ACP,7pF	1	SNA
...4		2801-004775	CRYSTAL-SMD;12MHz,30ppm,16pF,30ohm,TP	1	SNA
...4		3301-000314	BEAD-SMD;120ohm,1608,TP,120ohm/100MHz	8	SNA
...4		3301-002039	BEAD-SMD;26ohm,1608,TP	27	SA
...4		3601-001374	FUSE-SURFACE MOUNT;32V,5A,FAST-ACTING,PL	1	SA
...4		3701-001856	CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-S,AU	1	SA
...4		3701-001861	CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-A,AU	3	SA
...4		3707-001106	CONNECTOR-OPTICAL;STRAIGHT W/L,SPDIF	1	SA
...4		3708-003073	CONNECTOR-FPC/FFC/PIC;51P,0.5mm,SMD,AU,N	1	SNA
...4		3710-003908	CONNECTOR-SOCKET;64P,2R,0.5mm,SMD-S,AU,B	1	SA
...4	EH01	3711-007742	HEADER-BOARD TO CABLE;BOX,20P,2R,2mm,ANG	1	SA
...4	EH01	3711-008131	HEADER-BOARD TO CABLE;BOX,4P,1R,2.5mm,AN	1	SA
...4	EH01	3711-008558	HEADER-BOARD TO CABLE;BOX,26P,2R,1.25mm,	1	SA
...4		3722-003229	JACK-MODULAR;8P/8C W/L,Y,STRAIGHT,N,Au,1	1	SA
...4		3722-003457	JACK-USB;4P/1C,NI,BLK,A	3	SA
...4		3722-003546	JACK-PIN;5P+Screw hole,NI+SN,G,Y/BLU/RED	1	SA
...4		3722-003617	JACK-PHONE;14P/2C,SN,BLK,STRAIGHT,3.6PI,	1	SA
...4		3722-003655	JACK-SCART;21P,SN,BLK	1	SA
...4	ET01	BN40-00264A	TUNER;DNSS243IH105A,DNSS243IH105A,DVB-TC	1	SA
...4		BN41-01958B	PCB MAIN;X12, LED 6 Series,FR-4,4,A,1.2T	1	SNA
...4		BN97-07121A	ASSY MICOM;X12-PM51-0011-130709,2013.07.	1	SNA
....5		1107-002226	IC-NOR FLASH;W25Q40CLSSIP,4Mbit,SOIC,8P,	1	SNA
...4		BN97-07122A	ASSY MICOM;T-MST12DEUC-XXXX,U85A,2012.11	1	SNA
....5		1107-002077	IC-NAND FLASH;KLM4G1FE3B-B001,4Gbyte,32G	1	SA
...4		BN97-07123A	ASSY MICOM;T-MST12DEUS-1009,2013.06.19	1	SNA
....5		0903-001863	IC-MICROCONTROLLER;WT61P807-RG48,LQFP,48	1	SA
...4		BN97-07278A	ASSY MICOM-BLASTER;Blaster-Version:3.03,	1	SNA
....5		BN13-00063A	PLD;MAXQ610J,QFN,44	1	SNA
1		BN92-11708Q	ASSY BOX;UF6K	1	SNA
.2		BH68-00662A	LABEL BOX-01;ALL MODEL,ART PAPER,60,110,	1	SNA
.2		BN69-08500D	BOX-SET;32UF6200-QS,CB,A-01,SW2,YEL,W973	1	SNA
1		BN92-11715A	ASSY P/MATERIAL;UF6000 32	1	SNA
.2		6902-000379	BAG AIR;LDPE,T0.2,W1000,L1800,TRP,1260.0	1	SNA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
.2		6902-001953	BAG ROLL;HDPE/PE FOAM,HDPE T0.018mm,T0.2	2	SNA
.2		6922-000003	BAND PP;PP,T0.8,W18,L1650M,TRP,DA69-9014	0	SNA
.2		BN68-02422B	LABEL-WARNING SHIPPING;ALL MODEL,A/P 100	1	SNA
.2		BN69-00257B	PACKING-PAD;PAPER,CB-SW4,1130,820,300g,Y	1	SNA
.2		BN69-03982M	PAD PACKING-EDGE;EDGE,PAPER,-,T5,W120,L2	1	SNA
.2		BN69-05418A	PACKING-BAG WRAPPING;-LDPE,-,0,019,500,	2	SNA
.2		BN69-06640D	PACKING-TRUCK PAD;TRUCK PAD,PAPER,-,-,DW	1	SNA
.2		BN69-08271A	CUSHION-SET;UF62/63/6400-QS,EPS,16.7g/L,	1	SNA
..3		0103-005099	RESIN-EPS;BASF303,Natural,Natural	403	SNA
.2		BN69-09013R	PALLET;UE32F6400,WOOD,-,1120,990,141,140	1	SNA
.2		BN74-00008D	TAPE-OPP MASKING;OPP,T0.05,W75,L800M,CLR	2	SNA
1	ACCE1	BN92-11910M	ASSY ACCESSORY;F6200	1	SNA
.2		BN68-05417A	LABEL-01,STICKER;ALL,EDC,Polypropylene,T	1	SNA
.2		BN96-25426U	ASSY ACCESSORY MANUAL/CABLE;UE32F6270SSX	1	SNA
..3		3709-001791	CONNECTOR-CARD SLOT;64P,0.5mm,SMD-A,AU,P	1	SA
..3	T0268	3903-000849	CBF-POWER CORD;DT,CEE,LP-21L,250V,2.5A,B	1	SA
..3		4301-000121	BATTERY-MN;1.5V,R03,10.5x44.5mm,7.5g,AAA	2	SNA
..3		6902-000110	BAG PE;LDPE,T0.05,W250,L400,TRP,2	1	SNA
..3	REMO2	AA59-00790A	REMOCON;TM1250,49,3.0V,F6370, F6300, F62	1	SA
..3		BN68-00514K	MANUAL FLYER-03,WARRANTY CARD;comm,Samsu	1	SNA
..3		BN68-04735A	LABEL-E,PASS;ALL MODEL,ART PAPER 90G,50,	1	SNA
..3		BN68-04880B	MANUAL USERS-03;UF6270,SAMSUNG,ENG/DEU/F	1	SNA
..3		BN68-04972A	MANUAL FLYER-03,REGULATORY GUI;ALL,SAMSU	1	SNA
..3		BN68-05115S	LEAFLET-02,FICHE;UF6200,EUROPE,W/P80g,IS	1	SNA
..3	FL06	BN96-26652B	ASSY CABLE P;IR BLASTER,IR BLASTER CABL,	1	SA
1		BN92-13651A	ASSY LABEL;UF6N,,,,,	1	SNA
.2		0203-001598	TAPE-FILAMENT;#8915,0.15,12,55000,CLR	0	SNA
.2		BN68-05118C	LEAFLET-04,QSG;UF6200 ~ UF6700,EU N.AFRI	1	SNA
.2	T0527	BP68-00052B	LABEL-00,RATING;FPTV,PET,T0.05,93,73	1	SNA