SMPS

Main

Woofer

Speaker

T-CON
(below Bracket)

Speaker

SERVICE BULLETINS

No Bulletins listed as of 1/11/12

Version	Parts No	Short Description
ALL	BN44-00361A	SMPS
GA01	BN94-03370H	Main PCB
DB02	BN94-04223F	Main PCB
GA01	BN96-14644A	T-CON PCB
ALL	BN96-15397E	Function & IR PCB
DB02	BN07-00942A	Panel
GA01	BN95-00397A	Panel
ALL	BN96-14696A	Front Cover
ALL	BN96-14697A	Rear Cover
ALL	BN96-14700A	Stand Base
ALL	BN40-00162A	Tuner
ALL	BN96-12845D	Power Cord
ALL	BN96-12942D	Speaker
ALL	BN96-12965D	Speaker
ALL	BN96-14108E	LVDS Cable

FIRMWARE

2/21/2011
(T-VALAUSC, 1035.0)
Reason: Support Netflix 2.1 and MLB.tv apps. Support new TV camera (Model: CY-STC1100). Add "3D Optimize" option on Menu for better 3D image.(Only LCD/LED TV)
Previous: 1032.0
Prevents :
-USB Power Overload' message pops up even USB port is not connected
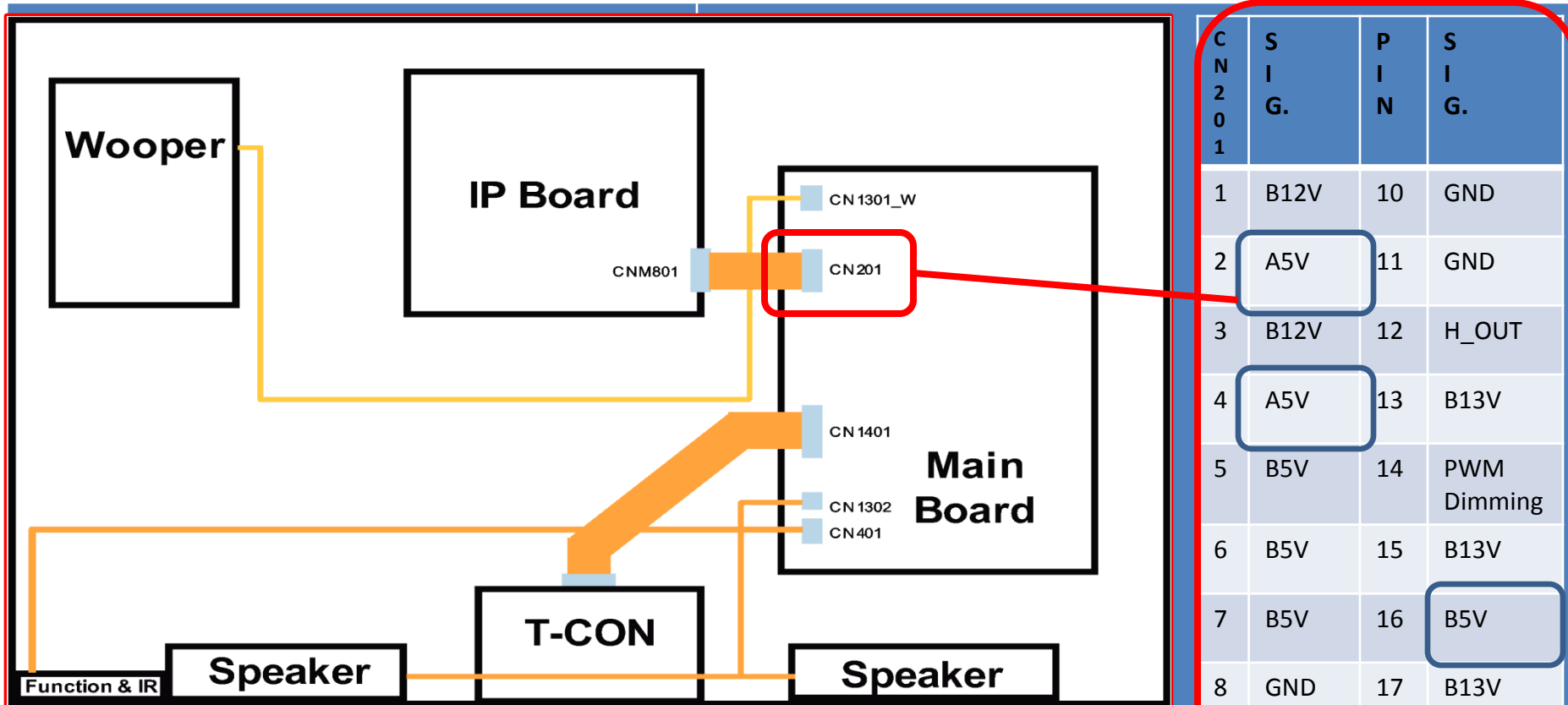 -Plug & Play is displayed upon power up.

HOT TIPS
Power On Problems: (see **page 2**)
Video Problems: (see **page 3.4**)
Other:
HDMI Bleed-over

Fast Track Troubleshooting Manual

SAMSUNG

Wooper	IP Board	Main Board

CN1301_W
CNM801
CN201
CN1401
CN1302
CN401
T-CON
Function & IR
Speaker
Speaker

CN201	SIG.	PIN	SIG.
1	B12V	10	GND
2	A5V	11	GND
3	B12V	12	H_OUT
4	A5V	13	B13V
5	B5V	14	PWM Dimming
6	B5V	15	B13V
7	B5V	16	B5V
8	GND	17	B13V
9	GND	18	IP_DET

Power On Sequence:
1. **Standby Voltages: CN201-2, 4 (5V)**
2. **Power On probable error on CN201-2 or 4 PS_ON)**
3. **Low Voltage Supplies On CN201-5,6,7,13,17**
4. **Back Light Supply On CN201 -16**
5. **Back Light Confirmation CN201-18**

To Force Backlight On without Main Board :
1. Remove Power Cord
2. Disconnect CN201
3. Plug In Power Cord
4. Backlight should be on immediately.

2

TROUBLESHOOTING VIDEO PROBLEMS

1. Verify Video Operation

a. **Customer Picture Test** (models available)
b. **"Display"** (If display is OK source is suspected)
C. Substitute with known good Source
   (**external DVD or Signal Generator**)

2. Using Test Patterns in Service Mode

- ENTER SERVICE MODE –

1. Select an active source signal. (HDMI preferred)
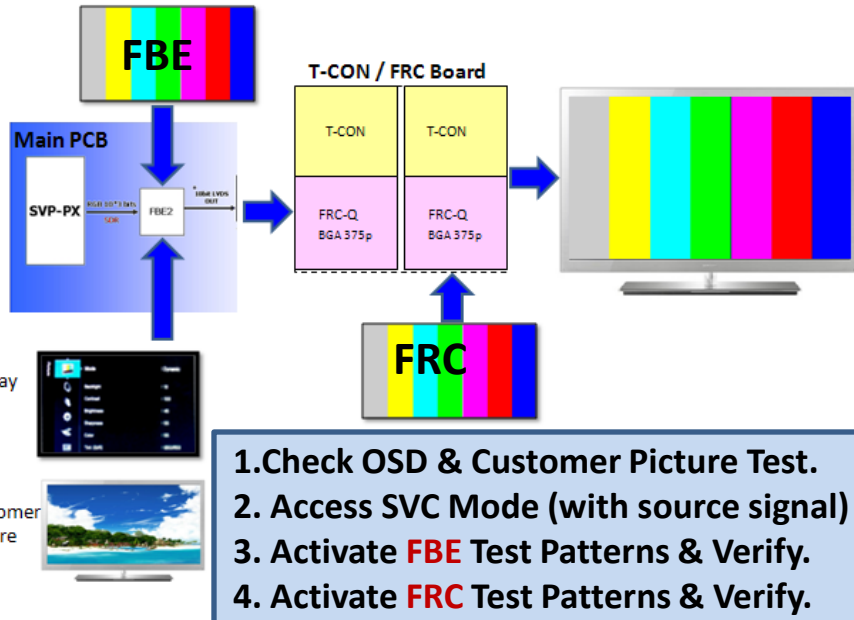   Test Pattern may rely on signal source to appear.

Customer Remote	Service Remote
2. Power off	**2.** Power On
3. Mute, 182, Power	**3.** Info, Factory

2010 Models

LCD Signal Path for Troubleshooting

FBE

Main PCB

SVP-PX → FBE2

T-CON / FRC Board
T-CON | T-CON
FRC-Q BGA 375p | FRC-Q BGA 375p

FRC

Display

Customer Picture Test

1. Check OSD & Customer Picture Test.
2. Access SVC Mode (with source signal)
3. Activate **FBE** Test Patterns & Verify.
4. Activate **FRC** Test Patterns & Verify.

2011 LED 8000 Series

Verify Test Mode Signals
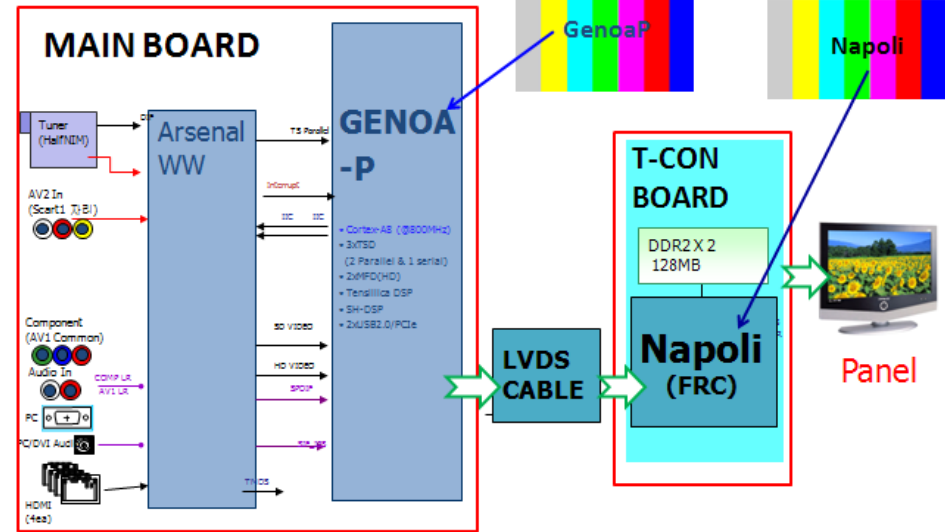
MAIN BOARD

Tuner (Half NIM)
AV2 In (Scart1 TxBI)
Component (AV1 Common)
Audio In AV1 LR COMP LR
PC
PC/DVI Aud
HDMI (4ea)

Arsenal WW

GENOA-P
- Cortex-A8 (@800MHz)
- 3xTSD (2 Parallel & 1 serial)
- 2xMFD(HD)
- Tensilica DSP
- SH-DSP
- 2xUSB2.0/PCIe

GenoaP

Napoli

T-CON BOARD
DDR2 X 2 128MB

LVDS CABLE

Napoli (FRC)

Panel

1. Select an active source signal. (HDMI preferred)
   Test Pattern may rely on signal source to appear.
2. Access Service Mode
3. Access **SVC**
4. Access **Test Patterns**
5. Access **Genoa-P**
6. Check Test Patterns
7. If OK suspect input Source
8. Access **Napoli**
9. Check Test Patterns
10. If OK and Genoa-P was not good
    Suspect Main Board or LVDS Cable

3

SAMSUNG

ON SCREEN FAILURE EXAMPLES:
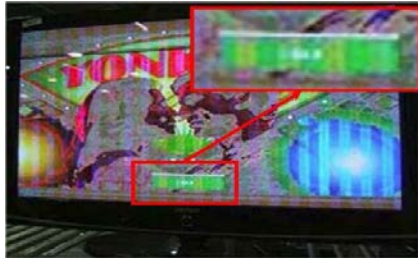
If Picture & Display errors
Defective Main Board, LVDS,
or T-CON

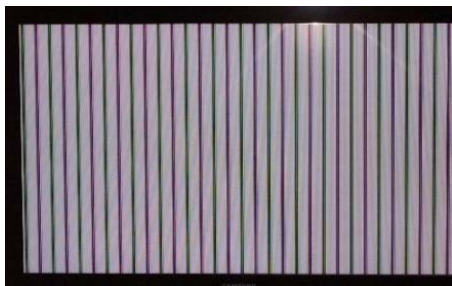Green lines or a green screen
defective main board , LVDS , or
T-CON.

Original Image   **Image on Screen**

Pixelization can be caused by the main board
but is more commonly a source error

Vertical or Horizontal Lines :Defective
Panel likely but also T-CON, LVDS, or Main
Board. Use Test Patterns in Factory Service
Mode to determine error)

ALIGNMENTS:

1. **Check/Set Option Bytes:**

Using the Customer Remote
1. Turn the power off and set to stand-by mode
2. Press the remote buttons in this order; POWER OFF-MUTE-1-8-2-POWER ON to turn the set on.
3. The set turns on and enters service mode. This may take approximately 20 seconds.
4. Press the Power button to exit and store data in memory.
   - If you fail to enter service mode, repeat steps 1 and 2 above.
5. Initial SERVICE MODE DISPLAY State

No.	Project	PB5G	PB5G	PB5G
	Model	B550	B550	B550
	Model Code	PN50B550T2FXZA	PN58B550T2FXZA	PN63B550T2FXZA
	ITEMS			
1	Factory Reset	-	-	-
2	Type	50FSpL4	58FNfK1	63FMeK1
3	Model	PB550	PB550	PB550
4	TUNER	ALPS	ALPS	ALPS
5	Region	US	US	US
6	DDR	SAMSUNG	SAMSUNG	SAMSUNG
7	Light Effect	Off	Off	Off
8	Inch	50"	58"	63"
9	Exhibition Mode	Off	Off	Off

Option Bytes
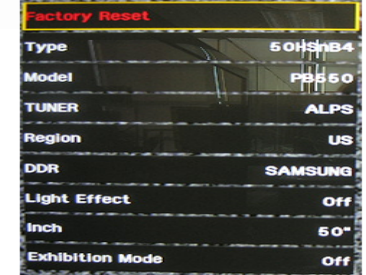
2. Check/Perform Firmware Upgrade for all repairs.
3. Perform reset in Service Mode & Plug and Play if Main board is replaced.

SPECIAL NOTES:

Inform customer of reset of all
Settings if Main Board or Panel is replaced.

Option											
Type	Model	Tuner	Region	DDR	Light Effect	Audio AMP	Ch Table	Country	Front Color	Local Set	Exhibition Mode
65L1UFOE	UC6500	SEMCO	-	-	OFF	-	-	USA	W-Violet	-	-
65L1UFOE	UC6500	SEMCO		-	OFF	-		USA	W-Violet		