SAMSUNG

LCD-TV

Chassis : GCR40ASA
GCR40CCN

Model : LA40A450C1X
LA40A350C1X

SERVICE Manual

TFT-LCD TV

LA40A450C1X / LA40A350C1X

Contents

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

Contents

GSPN (Global Service Partner Network)

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

Printed in Korea
P/N: BN82-00339A-00

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LCD-Panel Repair Guide

(T-Con Board)

2008. 06. 05

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VD-Division, Global CS-Team

Caution

- Don’t handle the Panel under the Power-On.

  And for disassembly, you have to wait more than **5minute** after power off

- If you feel any strange sound, smell or smoke, then need to remove the power

- Don’t handle the Panel with wet materials, especially hands

- Don’t handle the Panel in the Dust and Dirty place.

- Hold the Connector body when you remove or assemble any cable.

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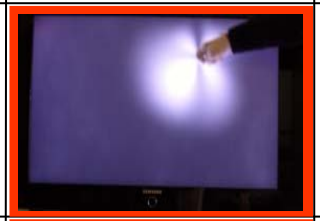
Major Defects and Causes

Description	Item	Symptom	Symptom Detail	Repair Section
Display	Abnormal Display		- Distortion and unstable picture	**Control Board** (T-Con) Change
	No Display		-Only Black or White Screen is displayed but BLU is on. ※ you can check if the backlight is on by pressing the screen slightly. - Color is not Displayed. - Possibly the cause is Fuse open	**Control Board** (T-Con) Change
	Noise		- Noise on the Display	**Control Board** (T-Con) Change
	Dark Display		- Image is not visible or one of them is dark. - Back Light (B/L) is turned off.	**Control Board** (T-Con) Change

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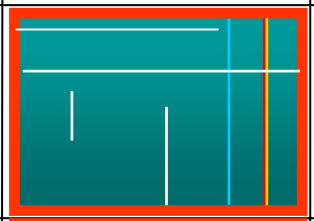
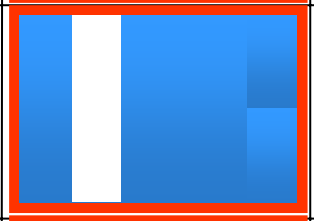
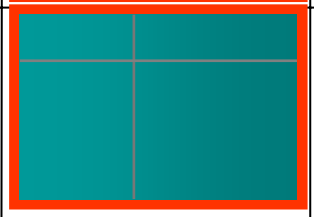
Major Defects and Causes

Description	Item	Symptom	Symptom Detail	Repair Section
Lamp Off	**Lamp Off**	[redacted]	- Lamp is Turned off by the Inverter or Lamp itself.	**Inverter Board** Change

Major Defects and Causes

Description	Item	Symptom	Symptom Detail	Repair Section
Line	Vertical and Horizontal Line		- Visible the Vertical or Horizontal Line	Panel Defect (None-Repairable)
	Vertical Block		- Vertical Block Defect	Panel Defect (None-Repairable)
	Cross Line		- Crossed the Vertical and horizontal Line	Panel Defect (None-Repairable)
	Horizontal Block		- Horizontal Block Defect	Panel Defect (None-Repairable)

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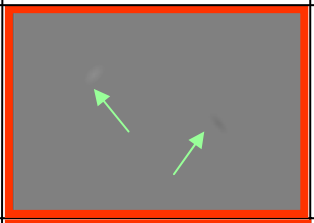
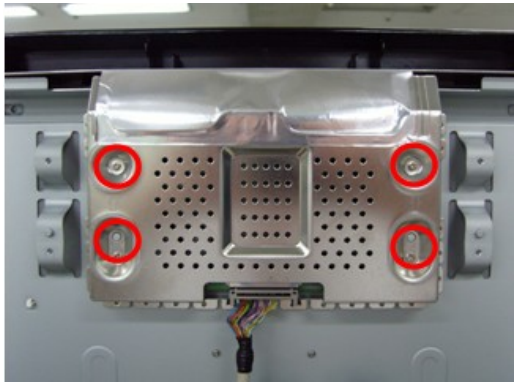
Major Defects and Causes

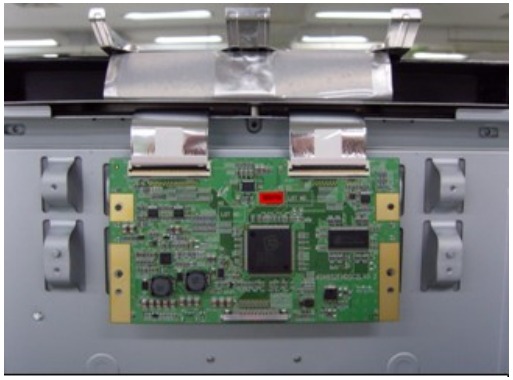
Description	Item	Symptom	Symptom Detail	Repair Section
Stain & Appearance	Gap		- Cell Gap differences by the external forces	User Defect
	Reflection Film Stain		- Looks the foreign particle on the reflection film by the Handling	User Defect
	Brocken		- Strong external forces or the Handling mistake	User Defect
	Reflection Film pollution		- External failure, display failure, and other failures due to contamination of the panel which is caused by user's miss handling.	User Defect

How to Change T-con Board

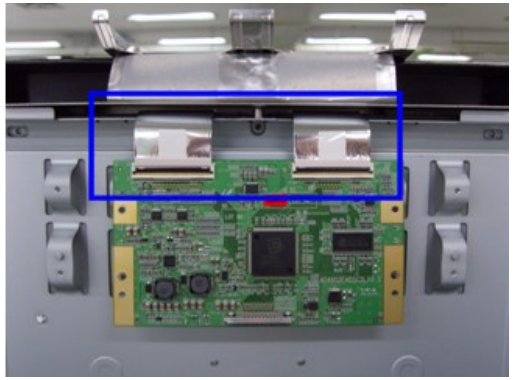
① Remove 4 Screws



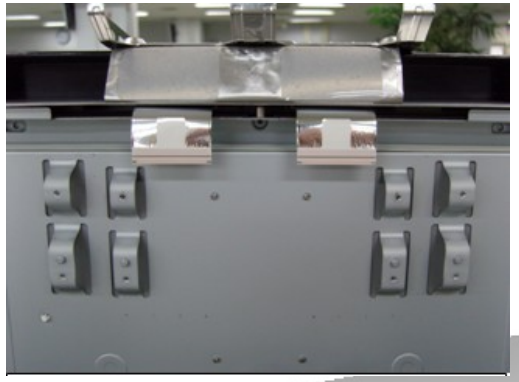
② Bend back the shield case and remove the LVDS cable



③ Remove 2 cables from T-con Board



④ Replace the defective Board with new one.



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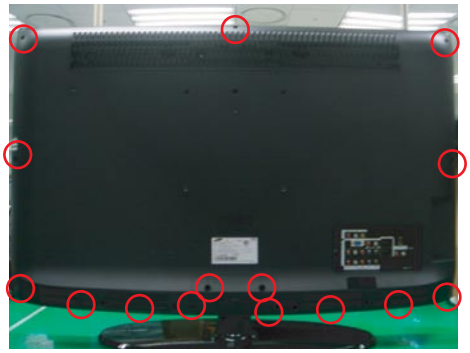
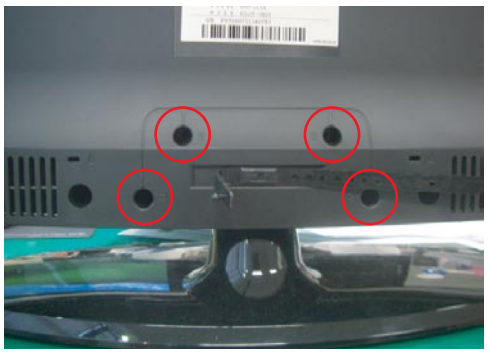
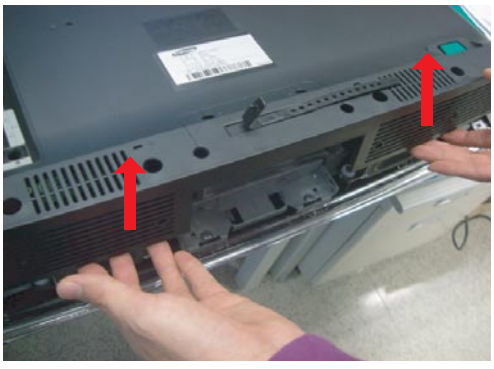
3. Disassembly and Reassemble

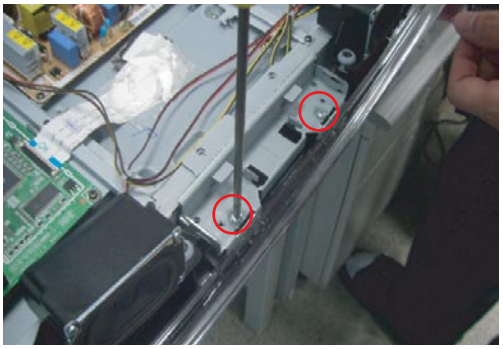
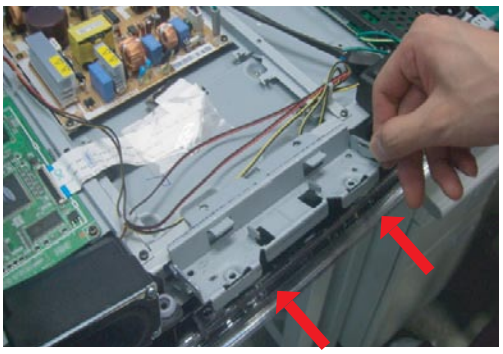
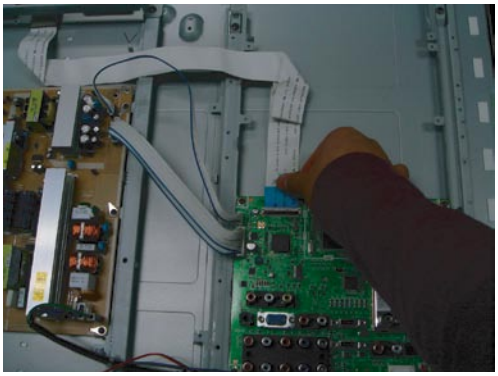
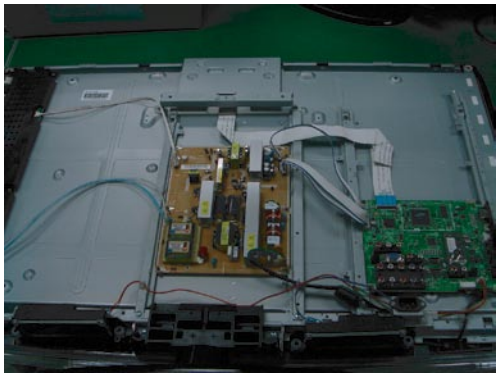
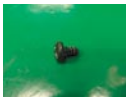
This section of the service manual describes the disassembly and reassembly procedures for the LA40A450C1 LCD TV.

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

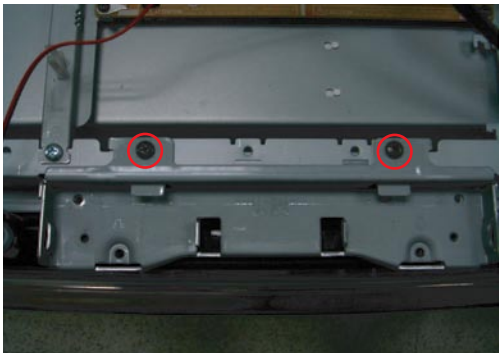
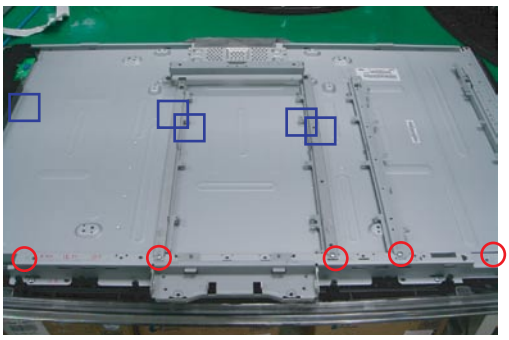
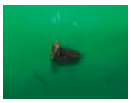
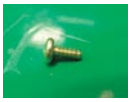
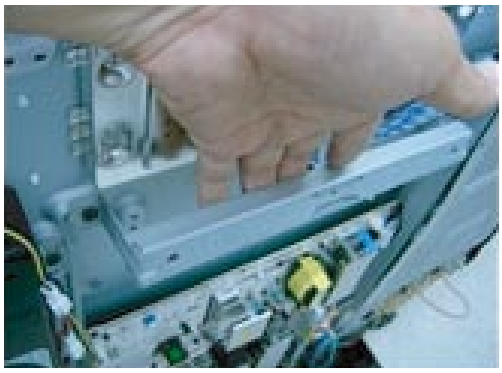
3-1. Disassembly

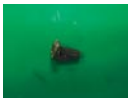
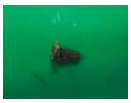
⚠ **Cautions:** 1. Disconnect the monitor from the power source before disassembly.
2. Follow these directions carefully; never use metal instruments to pry apart the cabinet.

Description	Picture Description	Screws
1. Place monitor face down on cushioned table. Remove the screws from the Stand. Remove stand.		
		 ◯ x4
2. Lift up rear cover and remove the stand.		
		

Description	Picture Description	Screws
3. Remove Screw from the stand BRKT and lift up the stand BRKT.	 	
4. Disonnect cable from the boards.		
5. Remove the screws of Scaler board's shield case and boards.		 

Description	Picture Description	Screws
6. Remove screws and Lift up the Lod pa		
		
		

Description	Picture Description	Screws
7. Remove the screws of Stand BKLT. Lift up the Stand BKLT.		 ◯x2
8. Remove the Bracket of Boards		 □x6  ◯x6
* Caution: Don't force yourself on wall mount bracket during disassembly. It may be deformationed.		

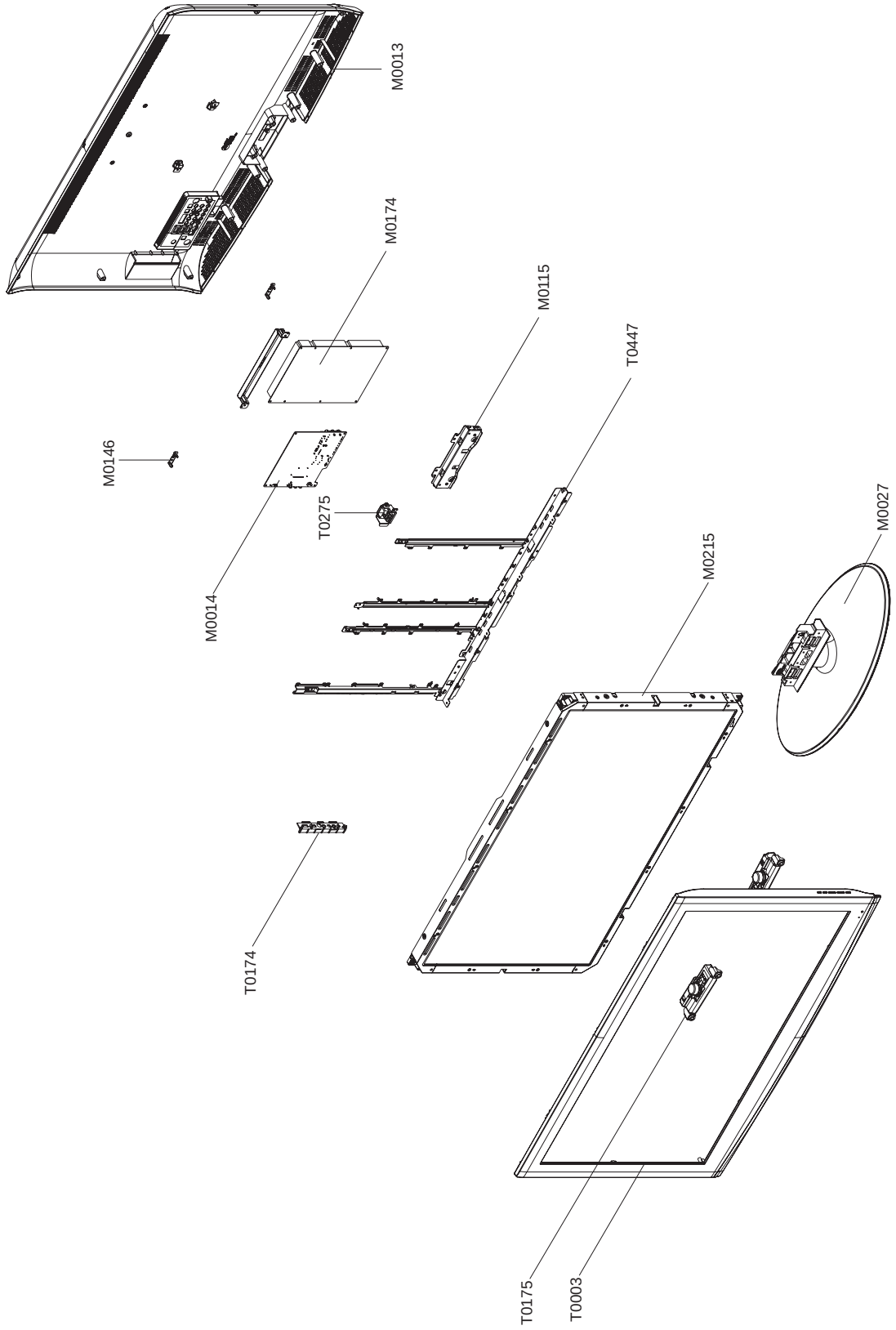
Description	Picture Description	Screws
9. Remove the screws on Panel.		 ◯x4  □x2
	  	 ◯x3

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

Memo

5. Exploded View & Part List

5-1. LA40A450C1X / LA40A350C1X Exploded View



5-1-2. LA40A450C1X / LA40A350C1X Parts List

Location No.	Code No.	Description & Specification	Q'ty	S.A/S.N.A	Remark
T0003	BN96-06786R	ASSY COVER P-FRONT;40L450,SO,ABS+PMMA,HB	1	S.A	
M0215	BN07-00523A	LCD-PANEL;LTF400AA01	1	S.A	
T0175	BN96-06818D	ASSY SPEAKER P;8ohm,CORAL,L450,10W,400/6	1	S.A	
T0447	BN96-06960A	ASSY BRACKET P-PANEL;40A450C,SECC,T1.0,C	1	S.N.A	
M0014	BN94-01714A	ASSY PCB MAIN;LA40A450C1XXT	1	S.A	
M0115	BN61-02882A	BRACKET-STAND LINK;TULIP,40,SECC,T1.6,-,	1	S.N.A	
T0101	BN61-03348A	BRACKET-WALL;LCD TV 32,SECC T1.2,-,-,-,-	2	S.N.A	
M0013	BN96-06790C	ASSY COVER P-REAR;40L450,SO,HIPS,HB,BK50	1	S.A	
M0027	BN96-06259A	ASSY STAND P-BASE;37,40L450,,ABS+PMMA,HB	1	S.A	

5-2. LA40A450C1X Parts List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
		LA40A450C1LXL	LA40A450C1,N56A/40AC1-GCR,40,LCD-TV,TANZ			
0.1	M0001	BN90-01503D	ASSY COVER FRONT;40L450,SO	1	S.N.A	
..2	T0175	BN96-06818D	ASSY SPEAKER P;8ohm,CORAL,L450,10W,400/6	1	S.A	
..2	T0003	BN96-06786R	ASSY COVER P-FRONT;40L450,SO,ABS+PMMA,HB	1	S.A	
...3	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	2	S.A	
...3	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	1	S.A	
...3	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	2	S.A	
...3		BN61-03261B	BOSS-TAPE;Tulip,ACRYL,T1.1,W20mm,GRAY,TA	0.74	S.N.A	
...3	CCM1	BN63-02183G	COVER-SHEET;Rhcm,PE Vinyl,T0.05,1100mm,2	0.992	S.N.A	
...3	M0112	BN63-04170D	COVER-FRONT;40L450,SO,ABS+PMMA,-,-,-,HB,	1	S.N.A	
...3	T0059	BN64-00379A	INDICATOR LED;ROME-II,23,PC,CLEAR	1	S.N.A	
...3	T0061	BN64-00453A	WINDOW-REMOCON;32R71,PC,V0,VIOLET,DIFFUS	1	S.N.A	
...3	T0022	BN64-00755A	KNOB-CONTROL;32L450,ABS,V0,BK07	1	S.N.A	
...3		BN64-00762A	DECORATION-BOTTOM;L450 40INCH,PC,-,-,-,-	1	S.N.A	
...3		BN96-06795B	ASSY HOLDER P-BOSS;37,40L450,EO,HIPS,HB,	1	S.N.A	
....4		BN61-03677B	HOLDER-BOSS BOTTOM;37,40L450,EO,HIPS,HB,	1	S.N.A	
....4		BN61-03261B	BOSS-TAPE;Tulip,ACRYL,T1.1,W20mm,GRAY,TA	0.74	S.N.A	
...3	M0145	BN96-07269A	ASSY BOARD P-FUNCTION;LN40A450C1D,CT5000	1	S.A	
...3	M0146	BN96-07270E	ASSY BOARD P-POWER & IR;LN40A450C1D,CT50	1	S.A	
...3	M0279	AA63-01637A	FELT;50P9,FELT,0.5,10,80	1	S.N.A	
...3	T0069	BP60-00015V	SPACER-FELT;L450 40",FELT,L900,BLK,T0.35	1	S.N.A	
...3	T0069	BP60-00015X	SPACER-FELT;L450 40",FELT,L510,BLK,T0.35	2	S.N.A	
0.1	M0002	BN90-01508C	ASSY COVER REAR;40L450,SO	1	S.N.A	
..2	T0081	6002-001294	SCREW-TAPPING;BH,+,,M4,L16,ZPC(BLK)	1	S.A	
..2	T0081	6002-001294	SCREW-TAPPING;BH,+,,M4,L16,ZPC(BLK)	1	S.A	
..2	T0081	6002-001294	SCREW-TAPPING;BH,+,,M4,L16,ZPC(BLK)	1	S.A	
..2	T0081	6002-001294	SCREW-TAPPING;BH,+,,M4,L16,ZPC(BLK)	11	S.A	
..2	M0013	BN96-06790C	ASSY COVER P-REAR;40L450,SO,HIPS,HB,BK50	1	S.A	
...3	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	2	S.A	
...3	T0101	BN61-03348A	BRACKET-WALL;LCD TV 32,SECC T1.2,-,-,-,-	2	S.N.A	
...3	M0006	BN63-04175C	COVER-REAR;40L450,SO,LO,CO,HIPS,-,-,-,HB	1	S.N.A	
...3	T0064	BN65-00002A	CLAMPER CORE;BORDEAUX,LDPE,-,-,BLK,-	1	S.N.A	
...3	T0071	BN64-00777A	INLAY-TERMINAL;L450,SO,PS SHEET,T0.5,183	1	S.N.A	
0.1	M0216	BN90-01572A	ASSY STAND;40L450,W/W	1	S.N.A	
..2	M0027	BN96-06259A	ASSY STAND P-BASE;37,40L450,,ABS+PMMA,HB	1	S.A	
...3	T0081	6002-001294	SCREW-TAPPING;BH,+,,M4,L16,ZPC(BLK)	4	S.A	
...3	M0081	6003-001239	SCREW-TAPTITE;FH,+,-,B,M4,L10,ZPC(WHT),S	8	S.A	
...3		BN61-02248A	HOLDER-SWIVEL RING;40R71,ACETAL NATUAL,T	1	S.N.A	
...3		BN61-02883A	BRACKET-STAND BOTTOM;BORDEAUX PLUS,40,SE	1	S.N.A	
...3		BN61-02885A	HOLDER-SWIVEL RING;MURANO40,ACETAL NATUR	1	S.N.A	
...3		BN61-02886A	BRACKET-HINGE SWIVEL;BORDEAUX PLUS,40,SE	1	S.N.A	
...3	T0920	BN61-03681A	GUIDE-STAND;40L450,PC+GF 20%,-,-,-,BK500	1	S.N.A	
...3	CCM1	BN63-02183E	COVER-SHEET;Rhcm,PE Vinyl,T0.05,750mm,20	0.5	S.N.A	
...3	T0004	BN63-03030A	COVER-STAND BASE;40R81,ABS+PMMA,-,-,-,HB	1	S.N.A	
...3	T0132	BN73-00052A	RUBBER FOOT;ARES 17,CR Rubber Gray,T1.5	4	S.N.A	
..2	T0081	6002-001294	SCREW-TAPPING;BH,+,,M4,L16,ZPC(BLK)	4	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
0.1		BN91-01985C	ASSY LCD-AMLCD;LN40A450C1DXZA,LTF400AA01	1	S.N.A	
..2	M0215	BN07-00523A	LCD-PANEL;LTF400AA01	1	S.A	
0.1		BN91-02109A	ASSY SHIELD-AQE;AAH-LA40A450C1X*	1	S.N.A	
..2	T0081	6002-001294	SCREW-TAPPING;BH,+,,M4,L16,ZPC(BLK)	2	S.A	
..2	M0081	6003-000115	SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC	2	S.A	
..2	M0081	6003-000115	SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC	6	S.A	
..2	M0081	6003-000115	SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC	6	S.A	
..2	M0081	6003-000337	SCREW-TAPTITE;BH,+,S,M4,L10,ZPC(BLK),SWR	3	S.A	
..2	M0081	6003-000337	SCREW-TAPTITE;BH,+,S,M4,L10,ZPC(BLK),SWR	1	S.A	
..2	M0081	6003-000337	SCREW-TAPTITE;BH,+,S,M4,L10,ZPC(BLK),SWR	1	S.A	
..2	M0081	6003-000337	SCREW-TAPTITE;BH,+,S,M4,L10,ZPC(BLK),SWR	1	S.A	
..2	M0081	6003-000337	SCREW-TAPTITE;BH,+,S,M4,L10,ZPC(BLK),SWR	2	S.A	
..2	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	1	S.A	
..2	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	2	S.A	
..2	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	5	S.A	
..2	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	2	S.A	
..2	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	2	S.A	
..2	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	1	S.A	
..2	M2893	BN39-00789A	LEAD CONNECTOR;LA46F71BX,UL1007#26,UL100	1	S.A	
..2	M2893	BN39-00802F	LEAD CONNECTOR;LE46S86BDX,UL1007#26,24PI	1	S.A	
..2	M2893	BN39-00830C	LEAD CONNECTOR;LN40A450C1D,UL3443 #28,7P	1	S.A	
..2	M0174	BN44-00197A	IP BOARD;SIP408A,PEARL,15mA,130mA,150Hz,	1	S.A	
..2	M0115	BN61-02882A	BRACKET-STAND LINK;TULIP,40,SECC,T1.6,-,	1	S.N.A	
..2	M0254	BN61-02952C	HOLDER-SIDE AV;32S81,UO,HIPS,V0(NON-DECA	1	S.N.A	
..2	M0146	BN61-03415A	BRACKET-PANEL TOP;PEONY 46,SECC T1.2	2	S.N.A	
..2	T0101	BN61-03700A	BRACKET-WALL;L450 40INCH,SECC,T1.2,-,-,-	1	S.N.A	
..2	T0447	BN96-06960A	ASSY BRACKET P-PANEL;40A450C,SECC,T1.0,C	1	S.N.A	
...3	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	1	S.A	
...3	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	1	S.A	
...3	M0081	6003-001188	SCREW-TAPTITE;BH,+,-,B,M4,L10,ZPC(WHT),S	2	S.A	
...3		BN61-02879A	BRACKET-GUIDE MAIN;TULIP,40,SECC,T1.2,-,	1	S.N.A	
...3		BN61-02880A	BRACKET-GUIDE POWER R;TULIP,40,SECC,T1.2	1	S.N.A	
...3		BN61-02881A	BRACKET-GUIDE POWER L;TULIP,40,SECC,T1.2	1	S.N.A	
...3		BN61-03697A	BRACKET-GUIDE POWER R;L450 40INCH,SECC,T	1	S.N.A	
...3		BN61-03861A	BRACKET-PANEL BOTTOM;L450 40INCH,SECC,T1	1	S.N.A	
...3	M0081	6003-001439	SCREW-TAPTITE;BH,+,-,S,M4,L8,ZPC(WHT),SW	1	S.N.A	
...3	M0131	AA63-01438A	GASKET;Bordeaux,Conductive Fabric,7mm,8m	1	S.N.A	
...3	M0131	BN63-03519A	GASKET;Tulip,Conductive Fabric,10,14,300	3	S.N.A	
...3	M0125	BN96-04938B	ASSY INLET P;UL1617#22,250/250mm	1	S.A	
..2	M2893	BN39-01021A	LEAD CONNECTOR;LN46A550P,UL1007#26,2pin,	1	S.A	
..2	M0214	BN96-07158U	ASSY CABLE P-FLAT;CORAL,FFC,503mm,30p,em	1	S.A	
..2	M0114	BN61-02500A	HOLDER-WIRE;NYLON6.6,NATURAL	4	S.N.A	
..2	M0131	BN63-04729A	GASKET;CORAL 450,Polyurethane Foam,1.0mm	1	S.N.A	
0.1	M0003	BN92-03170H	ASSY BOX;40L450,SO,,	1	S.N.A	
..2		AA02-00013A	TAPE ETC-RIBBON;-,-,-,101CM,250MT,-,-,-	0.27	S.N.A	
..2	M0521	BN69-02287A	BOX-SET,IN;L450-40,CB,A1,DY-01,W1463,D75	1.02	S.N.A	
..2		BN69-02620A	BOX-SET,OUT;40L450,CB,C-03,DW-75,YEL,W10	1.02	S.N.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
0.1	M0113	BN92-03176B	ASSY P/MATERIAL;40L450,EO	1	S.N.A	
..2	T0376	6902-000001	BAG AIR;LDPE,T0.2,L1800,W1000,TRP,,,LDPE	0.016	S.N.A	
..2	T0524	6902-000524	BAG PE;HDPE/NITRON,T0.015/T0.5,W1200,L11	1	S.N.A	
..2		AA63-10007E	BAND PP;-,T1.0,W15,-,CLR,-,-	4.86	S.N.A	
..2	T0214	BN74-00008A	TAPE-OPP MASKING;OPP-2,T0.05,W100,L800M,	1.23	S.N.A	
..2	T0214	AA61-20285C	HOLDER-BOX;CORAL,PP,BLACK,HB	2	S.N.A	
0.1	M0019	BN92-03365G	ASSY LABEL;LA40A450C1X*	1	S.N.A	
..2		AA02-00013A	TAPE ETC-RIBBON;-,-,-,101CM,250MT,-,-,-	0.05	S.N.A	
..2		AA02-00015A	TAPE ETC-RIBBON;-,-,-,64CM,250MT,-,-,-	0.035	S.N.A	
0.1	M0045	BN92-03436B	ASSY ACCESSORY;LA37A450C1XSV,LA40A450C1X	1	S.N.A	
..2		AA02-00012A	TAPE ETC-RIBBON;-,-,-,54CM,250MT,-,-,-	0.02	S.N.A	
..2	M0045	BN96-07416Y	ASSY ACCESSORY-MANUAL;TANZANIA, 26~ NCH,	1	S.A	
...3	T0524	6902-000110	BAG PE;LDPE,T0.05,W250,L400,TRP,28,2	1	S.N.A	
...3		AA68-03242M	MANUAL FLYER-02,SAFETY GUIDE;comm,Samsun	1	S.N.A	
...3		AA68-03879A	MANUAL FLYER-01,REGISTRATION C;comm,Sams	1	S.N.A	
...3	T0511	BN68-01507J	MANUAL USERS;COMM,SAMSUNG,Eng,Asia,W/P 8	1	S.N.A	
...3	T0511	BN68-01507M	MANUAL USERS;COMM,SAMSUNG,Ara,M.Asia/Afr	1	S.N.A	
...3	T0511	BN68-01507P	MANUAL USERS;COMM,SAMSUNG,Fre,M.Asia/Afr	1	S.N.A	
..2	M0045	BN96-07417L	ASSY ACCESSORY-CABLE;LA37A450C1XHC,CORAL	1	S.A	
...3	T0074	BN59-00685A	REMOCON;TM-96B,49,EUROPE_READY-450	1	S.A	
...3		BN63-01798A	CLOTH-CLEAN;RE40**,CLOTH,180,200,RHCM	1	S.N.A	
...3	T0531	BN63-04243B	COVER-BOTTOM;37,40L450,HIPS,HB,BK500	1	S.N.A	
...3	T0268	3903-000145	CBF-POWER CORD;DT,EU,FP3/YES,U(IEC C13-R	1	S.A	
0.1	M0017	BN91-02383A	ASSY CHASSIS;CORAL 40	1	S.N.A	
..2		AA02-00012A	TAPE ETC-RIBBON;-,-,-,54CM,250MT,-,-,-	0.03	S.N.A	
..2	M0014	BN94-01904D	ASSY PCB MAIN;40 INCH,Middle East,JADE	1	S.A	
...3	T0245	0202-001608	SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0.	0.25	S.N.A	
...3	JA3003_3H	3701-001388	CONNECTOR-HDMI;20P,Phosphor Bronze,ANGLE	1	S.A	
...3	JA3004_PC	3701-001480	CONNECTOR-DSUB;15P,3R,FEMAIL,STAMPED PIN	1	S.A	
...3	CN330	3711-000058	HEADER-BOARD TO CABLE;BOX,4P,1R,2.5MM,AN	1	S.A	
...3	CN330	3711-004379	HEADER-BOARD TO CABLE;BOX,4P,1R,2mm,STRA	1	S.A	
...3	CN330	3711-004484	HEADER-BOARD TO CABLE;BOX,5P,1R,2mm,STRA	1	S.A	
...3	CN330	3711-004484	HEADER-BOARD TO CABLE;BOX,5P,1R,2mm,STRA	1	S.A	
...3	CN330	3711-004531	HEADER-BOARD TO CABLE;BOX,10P,1R,2mm,ANG	1	S.A	
...3	CN330	3711-005842	HEADER-BOARD TO CABLE;BOX,24P,2R,2MM,STR	1	S.A	
...3	JA330	3722-001061	JACK-PHONE;1P,3.6PI,AG,BLK,N	1	S.A	
...3	JA330	3722-001061	JACK-PHONE;1P,3.6PI,AG,BLK,N	1	S.A	
...3	CN3214	3722-002275	JACK-DIN;4P,-,SN,BLK,-	1	S.A	
...3	JA3204	3722-002680	JACK-EAR PHONE;6P,NiSn,BLK,ANGLE	1	S.A	
...3	JA333	3722-002691	JACK-PIN;2P,Ni,WHT/RED,STRAIGHT	1	S.A	
...3	JA333	3722-002691	JACK-PIN;2P,Ni,WHT/RED,STRAIGHT	1	S.A	
...3	JA333	3722-002699	JACK-PIN;3P,Ni,YEL/WHT/RED,STRAIGHT	1	S.A	
...3	JA333	3722-002711	JACK-PIN;10P,Ni,GRN/BLU/RED/WHT/RED,STRA	1	S.A	
...3	CIS3	BN40-00083A	TUNER;TCPS3001PD32S(H),TCPS3001PD32S(H),	1	S.A	
...3	M0107	BN63-01847A	SHIELD-COVER;ROME,SPTE,T0.3,49.5,79.5,HE	1	S.N.A	
...3	HDCP	BN97-01987A	ASSY HDCP;BN46-00018A,PS-42V6S,D73A,MSTA	1	S.N.A	
....4		BN46-00018A	KEY CODE-CERTIFICATE;(HDCP KEY)PPM42M5S,	1	S.N.A	
...3	T0174	BN97-02305D	ASSY SMD;BN94-01904D	1	S.N.A	

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....4	SUB05	0202-001477	SOLDER-CREAM;LST309-M,-,D20~45um,96.5Sn/	2.31	S.N.A	
....4	D2002	0401-000133	DIODE-SWITCHING;RLS4148,75V,150mA,LL-34,	1	S.A	
....4	D2003	0401-000133	DIODE-SWITCHING;RLS4148,75V,150mA,LL-34,	1	S.A	
....4	D2004	0401-000133	DIODE-SWITCHING;RLS4148,75V,150mA,LL-34,	1	S.A	
....4	D2009	0401-000133	DIODE-SWITCHING;RLS4148,75V,150mA,LL-34,	1	S.A	
....4	D2012	0401-000133	DIODE-SWITCHING;RLS4148,75V,150mA,LL-34,	1	S.A	
....4	D2019	0401-000133	DIODE-SWITCHING;RLS4148,75V,150mA,LL-34,	1	S.A	
....4	D1004	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3003	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3004	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3006	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3007	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3008	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3009	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3010	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3011	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3012	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3013	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3016	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3017	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3019	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3021	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3022	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3023	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3024	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3025	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3026	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3027	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3030_3H	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3031_3H	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3034_3H	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3035_3H	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3036_3H	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3037_3H	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3038_3H	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3039_3H	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3040_3H	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3041_3H	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3045	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3046	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3047	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3061	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3062	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3064	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3066	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3202	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3203	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3204	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3205_PAD	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3206	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3207_LAMP	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	D3217	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3218	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3219	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3230	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D3236	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D5002	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D5003	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	S.A	
....4	D2001	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3	1	S.A	
....4	D3063	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3	1	S.A	
....4	D3065	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3	1	S.A	
....4	D3067	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3	1	S.A	
....4	D3077	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3	1	S.A	
....4	D3079	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3	1	S.A	
....4	D3080_3H	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3	1	S.A	
....4	D3244	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3	1	S.A	
....4	D2008	0403-000002	DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD	1	S.A	
....4	D3020	0403-000002	DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD	1	S.A	
....4	D3033_3H	0403-000002	DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD	1	S.A	
....4	D3048	0403-000002	DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD	1	S.A	
....4	D3049	0403-000002	DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD	1	S.A	
....4	D3050	0403-000002	DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD	1	S.A	
....4	D3051	0403-000002	DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD	1	S.A	
....4	D3052	0403-000002	DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD	1	S.A	
....4	D3070	0403-000002	DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD	1	S.A	
....4	D3074	0403-000002	DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD	1	S.A	
....4	D5001	0403-000002	DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD	1	S.A	
....4	D3002	0403-000771	DIODE-ZENER;VLZ6V2B,5.96-6.27V,500mW,SOD	1	S.A	
....4	D3015	0403-000771	DIODE-ZENER;VLZ6V2B,5.96-6.27V,500mW,SOD	1	S.A	
....4	D3029_3H	0403-000771	DIODE-ZENER;VLZ6V2B,5.96-6.27V,500mW,SOD	1	S.A	
....4	D3042	0403-000771	DIODE-ZENER;VLZ6V2B,5.96-6.27V,500mW,SOD	1	S.A	
....4	D5002_DE	0403-000771	DIODE-ZENER;VLZ6V2B,5.96-6.27V,500mW,SOD	1	S.A	
....4	D3001	0403-001052	DIODE-ZENER;RD8.2MB,7.7-8.7V,200mW,SOT-2	1	S.A	
....4	D3014	0403-001052	DIODE-ZENER;RD8.2MB,7.7-8.7V,200mW,SOT-2	1	S.A	
....4	D3028_3H	0403-001052	DIODE-ZENER;RD8.2MB,7.7-8.7V,200mW,SOT-2	1	S.A	
....4	D3208	0403-001052	DIODE-ZENER;RD8.2MB,7.7-8.7V,200mW,SOT-2	1	S.A	
....4	D5201	0403-001052	DIODE-ZENER;RD8.2MB,7.7-8.7V,200mW,SOT-2	1	S.A	
....4	D1005	0403-001425	DIODE-ZENER;BZX84C33,31-35V,350mW,SOT-23	1	S.A	
....4	D0254	0404-001020	DIODE-SCHOTTKY;BAT54C,30V,200mA,SOT-23,T	1	S.A	
....4	D0254	0404-001020	DIODE-SCHOTTKY;BAT54C,30V,200mA,SOT-23,T	1	S.A	
....4	D0254	0404-001020	DIODE-SCHOTTKY;BAT54C,30V,200mA,SOT-23,T	1	S.A	
....4	D3053	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3054	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3055	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3056	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3057	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3058	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3068	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3069	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3213	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3215	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3223	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	D3224	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3225	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3226	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3227	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3231	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3232	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3233	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3237	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3238	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3239	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D3240	0406-001172	DIODE-TVS;CDS3C30GTH,48/-/50V,SMD	1	S.A	
....4	D2013	0407-000123	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-	1	S.A	
....4	Q1001	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q1002_LCD	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q2003	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q2004	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q2007	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q2008	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q2009	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q3006	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q3208	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q5002	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q5201	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q5202	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q6003_LCD	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	1	S.A	
....4	Q2005	0501-000669	TR-SMALL SIGNAL;KTA1505Y,PNP,150mW,SOT-2	1	S.A	
....4	Q2006	0501-000669	TR-SMALL SIGNAL;KTA1505Y,PNP,150mW,SOT-2	1	S.A	
....4	Q1004_LCD	0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	S.A	
....4	Q6004_40	0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	S.A	
....4	Q409	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	S.A	
....4	Q409	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	S.A	
....4	Q409	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	S.A	
....4	Q409	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	S.A	
....4	Q409	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	S.A	
....4	Q409	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	S.A	
....4	Q409	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	S.A	
....4	Q409	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	S.A	
....4	Q409	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	S.A	
....4	Q409	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	1	S.A	
....4	Q409	0505-001165	FET-SILICON;SI3443BDV,P,-20V,+-4.4A,65mo	1	S.A	
....4	Q409	0505-001170	FET-SILICON;SI9933ADY-T1,P,-20V,3.4A,0.0	1	S.A	
....4	IC104	0801-002633	IC-CMOS LOGIC;7WBD3125,2bit BUS SWITCH,S	1	S.A	
....4	IC104	0801-002633	IC-CMOS LOGIC;7WBD3125,2bit BUS SWITCH,S	1	S.A	
....4	IC104	0801-002633	IC-CMOS LOGIC;7WBD3125,2bit BUS SWITCH,S	1	S.A	
....4	IC104	0801-002633	IC-CMOS LOGIC;7WBD3125,2bit BUS SWITCH,S	1	S.A	
....4	IC2002	1001-000164	IC-ANALOG MULTIPLEX;74HC4052,CMOS,SOP,16	1	S.A	
....4	IC5203	1001-000164	IC-ANALOG MULTIPLEX;74HC4052,CMOS,SOP,16	1	S.A	
....4	IC106	1001-001440	IC-VIDEO SWITCH;SiI9185CTU,QFP,80P,3.3V,	1	S.A	
....4	IC110	1006-001076	IC-DRIVER/RECEIVER;MAX232ECWE+T,SOP,16P,	1	S.A	
....4	IC112	1103-000129	IC-EEPROM;24C02,2Kbit,256x8Bit,SOP,8P,5x	1	S.A	
....4	IC112	1103-000129	IC-EEPROM;24C02,2Kbit,256x8Bit,SOP,8P,5x	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	IC112	1103-000129	IC-EEPROM;24C02,2Kbit,256x8Bit,SOP,8P,5x	1	S.A	
....4	IC112	1103-000129	IC-EEPROM;24C02,2Kbit,256x8Bit,SOP,8P,5x	1	S.A	
....4	IC112	1103-001385	IC-EEPROM;AT24C256,256Kbit,32Kx8,SOP,8P,	1	S.A	
....4	IC5201	1105-001838	IC-DDR SDRAM;EM6A9160TS0A-5G,DDR SDRAM,1	1	S.A	
....4	DU410	1201-000166	IC-OP AMP;LM358,SOP,ST,8P,150MIL,DUAL,10	1	S.A	
....4	DU410	1201-000541	IC-OP AMP;062,SOP,8P,153MIL,DUAL,6V/mV,P	1	S.A	
....4	T0085	1201-002487	IC-AUDIO AMP;MAX9728A,QFN,12P,3x3mm,DUAL	1	S.A	
....4	T0124	1201-002677	IC-POWER AMP;NTP3100,QFN56,56P,8x8mm,DUA	1	S.A	
....4	T0087	1203-001815	IC-POSI.FIXED REG.;78M09,TO-252,3P,-,PLA	1	S.A	
....4	T0087	1203-002842	IC-POSI.FIXED REG.;AP1117D-33A,TO-252,3P	1	S.A	
....4	IC012	1203-002995	IC-POSI.ADJUST REG.;AP1117D-A,TO-252,3P,	1	S.A	
....4	IC012	1203-002995	IC-POSI.ADJUST REG.;AP1117D-A,TO-252,3P,	1	S.A	
....4	IC012	1203-002995	IC-POSI.ADJUST REG.;AP1117D-A,TO-252,3P,	1	S.A	
....4	IC012	1203-002995	IC-POSI.ADJUST REG.;AP1117D-A,TO-252,3P,	1	S.A	
....4	T0087	1203-003696	IC-POSI.FIXED REG.;NCP1117DT18T5G,DPAK,3	1	S.A	
....4	IC5002	1203-004363	IC-VOL. DETECTOR;RT9818C-29PV,SOT-23,3P,	1	S.A	
....4	IC2005	1203-004364	IC-VOL. DETECTOR;RT9818C-42PV,SOT-23,3P,	1	S.A	
....4	IC1012	1203-005188	IC-DC/DC CONVERTER;AOZ1021AIL,SOP,8P,4.9	1	S.A	
....4	IC118	1204-002779	IC-VIDEO PROCESS;S4LF122X01,PBGA,208P,17	1	S.A	
....4	IC109	1205-003432	IC-LCD CONTROLLER;SEMS01,LQFP,256P,30x30	1	S.A	
....4	IC3012	1405-001185	VARISTOR;24Vdc,1.6x0.8x0.36mm,TP	1	S.A	
....4	IC3013	1405-001185	VARISTOR;24Vdc,1.6x0.8x0.36mm,TP	1	S.A	
....4	IC3014_3H	1405-001185	VARISTOR;24Vdc,1.6x0.8x0.36mm,TP	1	S.A	
....4	R110	2007-000052	R-CHIP;10Kohm,1%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000066	R-CHIP;20Kohm,1%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000106	R-CHIP;220Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000106	R-CHIP;220Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000137	R-CHIP;2Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000137	R-CHIP;2Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000151	R-CHIP;15Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000151	R-CHIP;15Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000151	R-CHIP;15Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000151	R-CHIP;15Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000151	R-CHIP;15Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000151	R-CHIP;15Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000151	R-CHIP;15Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000151	R-CHIP;15Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000242	R-CHIP;1.5Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000287	R-CHIP;100ohm,1%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000287	R-CHIP;100ohm,1%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000539	R-CHIP;200ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000651	R-CHIP;27Kohm,1%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000763	R-CHIP;330ohm,1%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000775	R-CHIP;33Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000775	R-CHIP;33Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000831	R-CHIP;39Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000831	R-CHIP;39Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000869	R-CHIP;4.7Kohm,1%,1/10W,TP,1608	1	S.A	
....4	R110	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	1	S.N.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R110	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-000950	R-CHIP;47ohm,5%,1/4W,TP,3216	1	S.A	
....4	R110	2007-000950	R-CHIP;47ohm,5%,1/4W,TP,3216	1	S.A	
....4	R110	2007-000950	R-CHIP;47ohm,5%,1/4W,TP,3216	1	S.A	
....4	R110	2007-000950	R-CHIP;47ohm,5%,1/4W,TP,3216	1	S.A	
....4	R110	2007-000950	R-CHIP;47ohm,5%,1/4W,TP,3216	1	S.A	
....4	R110	2007-000950	R-CHIP;47ohm,5%,1/4W,TP,3216	1	S.A	
....4	R110	2007-000950	R-CHIP;47ohm,5%,1/4W,TP,3216	1	S.A	
....4	R110	2007-000950	R-CHIP;47ohm,5%,1/4W,TP,3216	1	S.A	
....4	R110	2007-000950	R-CHIP;47ohm,5%,1/4W,TP,3216	1	S.A	
....4	R110	2007-001010	R-CHIP;51Kohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	1	S.A	
....4	R110	2007-001285	R-CHIP;5.6ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-001285	R-CHIP;5.6ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-001285	R-CHIP;5.6ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-001285	R-CHIP;5.6ohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001305	R-CHIP;120ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001305	R-CHIP;120ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001313	R-CHIP;330ohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	1	S.N.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	R110	2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-007136	R-CHIP;4.7Kohm,1%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-007297	R-CHIP;110ohm,1%,1/10W,TP,1608	1	S.A	
....4	R110	2007-007319	R-CHIP;390ohm,1%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-007334	R-CHIP;200Kohm,1%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-007334	R-CHIP;200Kohm,1%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-007334	R-CHIP;200Kohm,1%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-007791	R-CHIP;9.1Kohm,1%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-007791	R-CHIP;9.1Kohm,1%,1/16W,TP,1005	1	S.N.A	
....4	R110	2007-008429	R-CHIP;499ohm,1%,1/16W,TP,1005	1	S.N.A	
....4	RA5009	2011-000585	R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5010	2011-000585	R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5011	2011-000585	R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5012	2011-000585	R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5013	2011-000585	R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5014	2011-000585	R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5021	2011-000881	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5022	2011-000881	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5023	2011-000881	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5201	2011-000881	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5202	2011-000881	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5203	2011-000881	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5204	2011-000881	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5205	2011-000881	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,3.	1	S.A	
....4	RA5006	2011-001001	R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,3.2	1	S.A	
....4	RA6004_FBE	2011-001001	R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,3.2	1	S.A	
....4	RA6005_FBE	2011-001001	R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,3.2	1	S.A	
....4	RA6006_FBE	2011-001001	R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,3.2	1	S.A	
....4	RA6007	2011-001001	R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,3.2	1	S.A	
....4	RA6011_L	2011-001001	R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,3.2	1	S.A	
....4	RA5001	2011-001011	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5002	2011-001011	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5003	2011-001011	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5004	2011-001011	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5015	2011-001011	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5025	2011-001011	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5030	2011-001011	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5031	2011-001011	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5034	2011-001011	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5005	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5007	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5008	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5016	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5017	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5018	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5019	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5020	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5026	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5027	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5028	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5029	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	RA5032	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	RA5033	2011-001093	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3	1	S.A	
....4	C120	2203-000189	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608	1	S.A	
....4	C120	2203-000189	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608	1	S.A	
....4	C120	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	S.A	
....4	C120	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	S.A	
....4	C120	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	S.A	
....4	C120	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	S.A	
....4	C120	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	S.A	
....4	C120	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	S.A	
....4	C120	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C120	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000440	C-CER,CHIP;1nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-000440	C-CER,CHIP;1nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,1005	1	S.A	
....4	C120	2203-000627	C-CER,CHIP;0.022nF,5%,50V,C0G,1005	1	S.N.A	
....4	C120	2203-000627	C-CER,CHIP;0.022nF,5%,50V,C0G,1005	1	S.N.A	
....4	C120	2203-000627	C-CER,CHIP;0.022nF,5%,50V,C0G,1005	1	S.N.A	
....4	C120	2203-000627	C-CER,CHIP;0.022nF,5%,50V,C0G,1005	1	S.N.A	
....4	C120	2203-000815	C-CER,CHIP;0.033nF,5%,50V,C0G,1608	1	S.A	
....4	C120	2203-000815	C-CER,CHIP;0.033nF,5%,50V,C0G,1608	1	S.A	
....4	C120	2203-000925	C-CER,CHIP;470nF,+80-20%,50V,Y5V,2012	1	S.A	
....4	C120	2203-000925	C-CER,CHIP;470nF,+80-20%,50V,Y5V,2012	1	S.A	
....4	C120	2203-000975	C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,-	1	S.A	
....4	C120	2203-000995	C-CER,CHIP;0.047nF,5%,50V,C0G,1005	1	S.A	
....4	C120	2203-000995	C-CER,CHIP;0.047nF,5%,50V,C0G,1005	1	S.A	
....4	C120	2203-000998	C-CER,CHIP;0.047nF,5%,50V,C0G,1608	1	S.A	
....4	C120	2203-001630	C-CER,CHIP;330nF,+80-20%,16V,Y5V,1608	1	S.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	1	S.N.A	
....4	C120	2203-002398	C-CER,CHIP;22nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-002398	C-CER,CHIP;22nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-002398	C-CER,CHIP;22nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-002398	C-CER,CHIP;22nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-002687	C-CER,CHIP;1.2nF,10%,50V,X7R,TP,1005	1	S.A	
....4	C120	2203-002687	C-CER,CHIP;1.2nF,10%,50V,X7R,TP,1005	1	S.A	
....4	C120	2203-002687	C-CER,CHIP;1.2nF,10%,50V,X7R,TP,1005	1	S.A	
....4	C120	2203-002687	C-CER,CHIP;1.2nF,10%,50V,X7R,TP,1005	1	S.A	
....4	C120	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,1608	1	S.A	
....4	C120	2203-005065	C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608	1	S.A	
....4	C120	2203-005065	C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608	1	S.A	
....4	C120	2203-005065	C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608	1	S.A	
....4	C120	2203-005065	C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608	1	S.A	
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,1608	1	S.A	
....4	C120	2203-005261	C-CER,CHIP;1000nF,10%,25V,X7R,3216	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005384	C-CER,CHIP;4700nF,+80-20%,10V,Y5V,2012	1	S.A	
....4	C120	2203-005533	C-CER,CHIP;1000nF,20%,6.3V,X7R,TP,1608	1	S.A	
....4	C120	2203-005533	C-CER,CHIP;1000nF,20%,6.3V,X7R,TP,1608	1	S.A	
....4	C120	2203-005642	C-CER,CHIP;0.22nF,5%,50V,NP0,1005	1	S.N.A	
....4	C120	2203-005809	C-CER,CHIP;1000nF,10%,16V,X7R,-,2012	1	S.A	
....4	C120	2203-005809	C-CER,CHIP;1000nF,10%,16V,X7R,-,2012	1	S.A	
....4	C120	2203-005809	C-CER,CHIP;1000nF,10%,16V,X7R,-,2012	1	S.A	
....4	C120	2203-005809	C-CER,CHIP;1000nF,10%,16V,X7R,-,2012	1	S.A	
....4	C120	2203-005834	C-CER,CHIP;22000nF,+80-20%,10V,Y5V,3216	1	S.A	
....4	C120	2203-005834	C-CER,CHIP;22000nF,+80-20%,10V,Y5V,3216	1	S.A	
....4	C120	2203-005834	C-CER,CHIP;22000nF,+80-20%,10V,Y5V,3216	1	S.A	
....4	C120	2203-005968	C-CER,CHIP;4.7NF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-005968	C-CER,CHIP;4.7NF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-005968	C-CER,CHIP;4.7NF,10%,50V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006126	C-CER,CHIP;47NF,10%,16V,X7R,TP,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	S.N.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	S.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,1005	1	S.N.A	
....4	C120	2203-006618	C-CER,CHIP;2200nF,+80-20%,16V,Y5V,-,1608	1	S.N.A	
....4	C120	2203-006618	C-CER,CHIP;2200nF,+80-20%,16V,Y5V,-,1608	1	S.N.A	
....4	C120	2203-006618	C-CER,CHIP;2200nF,+80-20%,16V,Y5V,-,1608	1	S.N.A	
....4	C120	2203-006618	C-CER,CHIP;2200nF,+80-20%,16V,Y5V,-,1608	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006681	C-CER,CHIP;100nF,+80-20%,25V,Y5V,1005	1	S.N.A	
....4	C120	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,1005	1	S.N.A	
....4	C120	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,1005	1	S.N.A	
....4	C120	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,1005	1	S.N.A	
....4	C120	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,1005	1	S.N.A	
....4	C120	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,1005	1	S.N.A	
....4	C120	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,1005	1	S.N.A	
....4	C120	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,1005	1	S.N.A	
....4	C120	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (	1	S.N.A	
....4	C120	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (	1	S.N.A	
....4	C120	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (	1	S.N.A	
....4	C120	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (	1	S.N.A	
....4	C120	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (	1	S.N.A	
....4	C120	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (	1	S.N.A	
....4	C120	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (	1	S.N.A	
....4	C1005_OP	2402-001128	C-AL,SMD;100##F,20%,16V,-,TP,6.3X5.7mm	1	S.A	
....4	C1015	2402-001128	C-AL,SMD;100##F,20%,16V,-,TP,6.3X5.7mm	1	S.A	
....4	C3051_RDY	2402-001129	C-AL,SMD;47UF,20%,16V,WT,TP,6.3X5.2MM	1	S.A	
....4	C1013	2402-001183	C-AL,SMD;22UF,20%,16V,WT,TP,5.3X5.3X6MM	1	S.A	
....4	C1025	2402-001238	C-AL,SMD;1uF,20%,50V,HR,TP,4.3x4.3x5.2mm	1	S.A	
....4	C1010	2402-001259	C-AL,SMD;220uF,20%,16V,WT,REEL,8X10	1	S.A	
....4	C6044_CMO	2402-001273	C-AL,SMD;220uF,20%,35V,WT,REEL,10X10mm	1	S.A	
....4	C2014	2402-001330	C-AL,SMD;330uF,20%,25V,TP,10x10mm	1	S.N.A	
....4	T0052	2703-000398	INDUCTOR-SMD;10uH,10%,3225	1	S.A	
....4	T0052	2703-000398	INDUCTOR-SMD;10uH,10%,3225	1	S.A	
....4	T0052	2703-000398	INDUCTOR-SMD;10uH,10%,3225	1	S.A	
....4	T0052	2703-000398	INDUCTOR-SMD;10uH,10%,3225	1	S.A	
....4	T0052	2703-000398	INDUCTOR-SMD;10uH,10%,3225	1	S.A	
....4	T0052	2703-000398	INDUCTOR-SMD;10uH,10%,3225	1	S.A	
....4	T0052	2703-000398	INDUCTOR-SMD;10uH,10%,3225	1	S.A	
....4	T0052	2703-000398	INDUCTOR-SMD;10uH,10%,3225	1	S.A	
....4	T0052	2703-000398	INDUCTOR-SMD;10uH,10%,3225	1	S.A	
....4	T0052	2703-000417	INDUCTOR-SMD;220uH,5%,3225	1	S.A	
....4	T0052	2703-001426	INDUCTOR-SMD;680uH,20%,7070	1	S.A	
....4	T0052	2703-001778	INDUCTOR-SMD;3.3uH,20%,3225	1	S.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	T0052	2703-003362	INDUCTOR-SMD;4.7uH,20%,7070	1	S.A	
....4	L2001	2704-000018	INDUCTOR-SMD-ARRAY;15uH,2000mA,2,0.124oh	1	S.N.A	
....4	L2002	2704-000018	INDUCTOR-SMD-ARRAY;15uH,2000mA,2,0.124oh	1	S.N.A	
....4	X202	2801-003667	CRYSTAL-SMD;14.31818MHz,30ppm,28-AAN,16p	1	S.A	
....4	T0568	3301-000314	BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,-	1	S.N.A	
....4	T0568	3301-000314	BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,-	1	S.N.A	
....4	T0568	3301-001145	BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm	1	S.N.A	
....4	T0568	3301-001145	BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm	1	S.N.A	
....4	T0568	3301-001145	BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm	1	S.N.A	
....4	T0568	3301-001145	BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm	1	S.N.A	
....4	T0568	3301-001145	BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm	1	S.N.A	
....4	T0568	3301-001145	BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm	1	S.N.A	
....4	T0568	3301-001148	BEAD-SMD;60ohm,1608,TP,-,-	1	S.N.A	
....4	T0568	3301-001148	BEAD-SMD;60ohm,1608,TP,-,-	1	S.N.A	
....4	T0568	3301-001148	BEAD-SMD;60ohm,1608,TP,-,-	1	S.N.A	
....4	T0568	3301-001163	BEAD-SMD;80ohm,2012,TP,-,192ohm/867MHz	1	S.N.A	
....4	T0568	3301-001163	BEAD-SMD;80ohm,2012,TP,-,192ohm/867MHz	1	S.N.A	
....4	T0568	3301-001163	BEAD-SMD;80ohm,2012,TP,-,192ohm/867MHz	1	S.N.A	
....4	T0568	3301-001163	BEAD-SMD;80ohm,2012,TP,-,192ohm/867MHz	1	S.N.A	
....4	T0568	3301-001163	BEAD-SMD;80ohm,2012,TP,-,192ohm/867MHz	1	S.N.A	
....4	T0568	3301-001163	BEAD-SMD;80ohm,2012,TP,-,192ohm/867MHz	1	S.N.A	
....4	T0568	3301-001163	BEAD-SMD;80ohm,2012,TP,-,192ohm/867MHz	1	S.N.A	
....4	T0568	3301-001163	BEAD-SMD;80ohm,2012,TP,-,192ohm/867MHz	1	S.N.A	
....4	T0568	3301-001163	BEAD-SMD;80ohm,2012,TP,-,192ohm/867MHz	1	S.N.A	
....4	T0568	3301-001236	BEAD-SMD;60ohm,1608,-,-,-	1	S.N.A	
....4	T0568	3301-001236	BEAD-SMD;60ohm,1608,-,-,-	1	S.N.A	
....4	T0568	3301-001236	BEAD-SMD;60ohm,1608,-,-,-	1	S.N.A	
....4	T0568	3301-001324	BEAD-SMD;15ohm,2012,600mA,TP,,,0.1ohm	1	S.A	
....4	T0568	3301-001324	BEAD-SMD;15ohm,2012,600mA,TP,,,0.1ohm	1	S.A	
....4	T0568	3301-001324	BEAD-SMD;15ohm,2012,600mA,TP,,,0.1ohm	1	S.A	
....4	T0568	3301-001324	BEAD-SMD;15ohm,2012,600mA,TP,,,0.1ohm	1	S.A	
....4	T0568	3301-001324	BEAD-SMD;15ohm,2012,600mA,TP,,,0.1ohm	1	S.A	
....4	T0568	3301-001324	BEAD-SMD;15ohm,2012,600mA,TP,,,0.1ohm	1	S.A	
....4	T0568	3301-001324	BEAD-SMD;15ohm,2012,600mA,TP,,,0.1ohm	1	S.A	
....4	T0568	3301-001393	BEAD-SMD;60ohm,3216,1500mA,TP,41ohm/40MH	1	S.N.A	
....4	T0568	3301-001404	BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz	1	S.A	
....4	T0568	3301-001404	BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz	1	S.A	
....4	T0568	3301-001404	BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz	1	S.A	
....4	T0568	3301-001404	BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz	1	S.A	
....4	T0568	3301-001404	BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz	1	S.A	
....4	T0568	3301-001404	BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz	1	S.A	
....4	T0568	3301-001404	BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz	1	S.A	
....4	T0568	3301-001404	BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz	1	S.A	
....4	JA3001	3701-001367	CONNECTOR-HDMI;19P,2R,FEMALE,SMD,AU	1	S.A	
....4	JA3002	3701-001367	CONNECTOR-HDMI;19P,2R,FEMALE,SMD,AU	1	S.A	
....4	CN6001_FFC	3708-001150	CONNECTOR-FPC/FFC/PIC;30P,1mm,SMD-A,SN,Y	1	S.A	
....4	T0077	BN41-00984A	PCB MAIN;Pyrope,FR-4,4,1.2t,192*158,1	1	S.N.A	
....4	M0107	BN61-03858A	BRACKET-PCB;L450,BRASS(H62Y),T0.4,5mm,7m	1	S.N.A	
....4	M0107	BN61-03858A	BRACKET-PCB;L450,BRASS(H62Y),T0.4,5mm,7m	1	S.N.A	
....4	M0107	BN61-03858A	BRACKET-PCB;L450,BRASS(H62Y),T0.4,5mm,7m	1	S.N.A	
....4	M0107	BN61-03858A	BRACKET-PCB;L450,BRASS(H62Y),T0.4,5mm,7m	1	S.N.A	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	M0018	BN97-02130A	ASSY MICOM;T-CRL32MEAM-1004.0,2008-04-07	1	S.N.A	
.....5	IC115	1107-001709	IC-FLASH MEMORY;MX25L1605A,16Mbit,2Mx8,S	1	S.N.A	
....4	R110	2007-000149	R-CHIP;12Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000149	R-CHIP;12Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000149	R-CHIP;12Kohm,5%,1/16W,TP,1005	1	S.A	
....4	R110	2007-000149	R-CHIP;12Kohm,5%,1/16W,TP,1005	1	S.A	
....4	C120	2203-000236	C-CER,CHIP;0.1nF,5%,50V,C0G,1608	1	S.A	
....4	C120	2203-000236	C-CER,CHIP;0.1nF,5%,50V,C0G,1608	1	S.A	
...3	JA333	3722-002728	JACK-PIN;3P, SHIELD,Ni,RED/WHT/YEL,ANGLE	1	S.A	

LCD-Panel Repair Guide

(T-Con Board)

2008. 06. 05

SAMSUNG ELECTRONICS

VD-Division, Global CS-Team

Caution

- Don’t handle the Panel under the Power-On.

  And for disassembly, you have to wait more than **5minute** after power off

- If you feel any strange sound, smell or smoke, then need to remove the power

- Don’t handle the Panel with wet materials, especially hands

- Don’t handle the Panel in the Dust and Dirty place.

- Hold the Connector body when you remove or assemble any cable.

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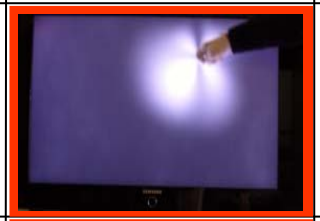
Major Defects and Causes

Description	Item	Symptom	Symptom Detail	Repair Section
Display	Abnormal Display		- Distortion and unstable picture	**Control Board** (T-Con) Change
	No Display		-Only Black or White Screen is displayed but BLU is on. ※ you can check if the backlight is on by pressing the screen slightly. - Color is not Displayed. - Possibly the cause is Fuse open	**Control Board** (T-Con) Change
	Noise		- Noise on the Display	**Control Board** (T-Con) Change
	Dark Display		- Image is not visible or one of them is dark. - Back Light (B/L) is turned off.	**Control Board** (T-Con) Change

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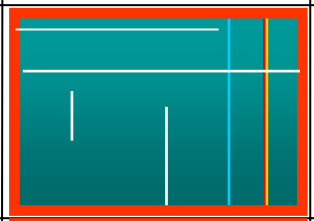
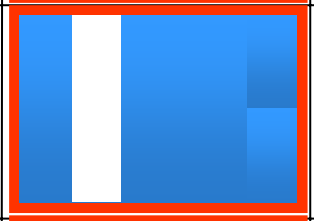
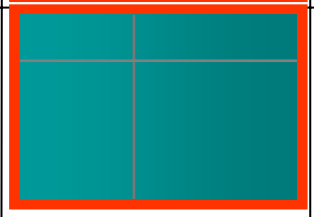
Major Defects and Causes

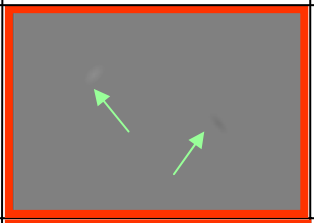
Description	Item	Symptom	Symptom Detail	Repair Section
Lamp Off	**Lamp Off**	[redacted]	- Lamp is Turned off by the Inverter or Lamp itself.	**Inverter Board** Change

Major Defects and Causes

Description	Item	Symptom	Symptom Detail	Repair Section
Line	Vertical and Horizontal Line		- Visible the Vertical or Horizontal Line	Panel Defect (None-Repairable)
	Vertical Block		- Vertical Block Defect	Panel Defect (None-Repairable)
	Cross Line		- Crossed the Vertical and horizontal Line	Panel Defect (None-Repairable)
	Horizontal Block		- Horizontal Block Defect	Panel Defect (None-Repairable)

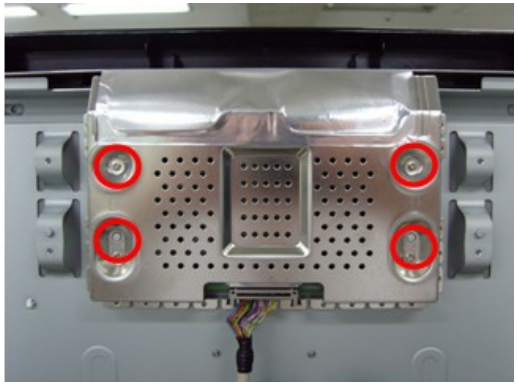
SAMSUNG ELECTRONICS

Major Defects and Causes

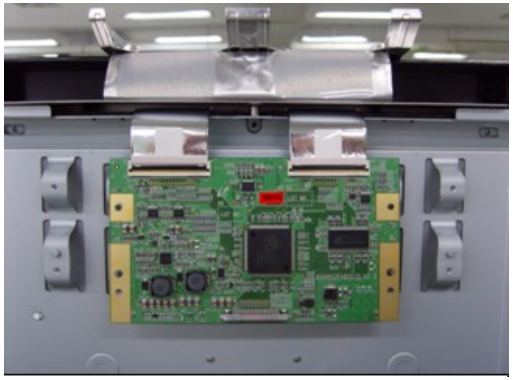
Description	Item	Symptom	Symptom Detail	Repair Section
Stain & Appearance	Gap		- Cell Gap differences by the external forces	User Defect
	Reflection Film Stain		- Looks the foreign particle on the reflection film by the Handling	User Defect
	Brocken		- Strong external forces or the Handling mistake	User Defect
	Reflection Film pollution		- External failure, display failure, and other failures due to contamination of the panel which is caused by user's miss handling.	User Defect

How to Change T-con Board

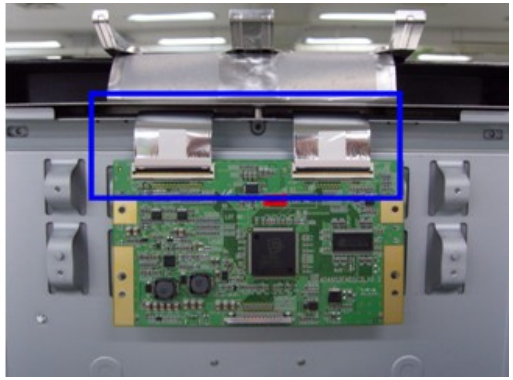
① Remove 4 Screws



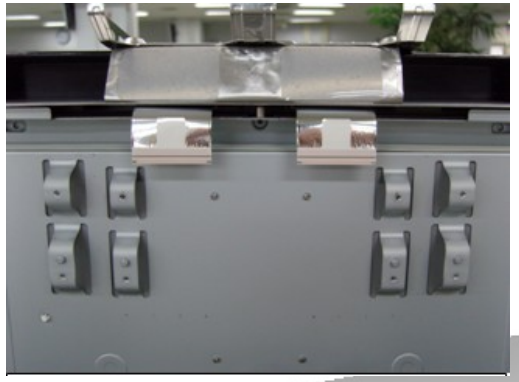
② Bend back the shield case and remove the LVDS cable



③ Remove 2 cables from T-con Board



④ Replace the defective Board with new one.



SAMSUNG ELECTRONICS

1. Precautions

1-1. Safety Precautions

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

1-1-1. Warnings

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

1-1-2. Servicing the LCD TV

1. When servicing the LCD 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 LCD TV to the user, perform the following safety checks:

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

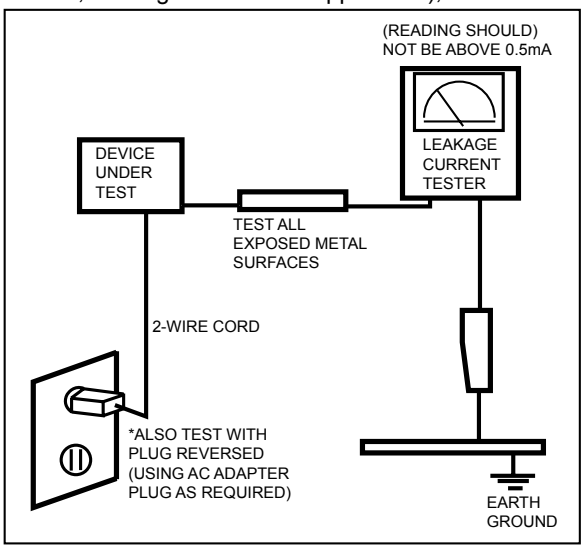


Figure 1-1. Leakage Current Test Circuit

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

1-1-4. Product Safety Notices

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

1-2. Servicing Precautions

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

1-2-1 General Servicing Precautions

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

1-3. Electrostatically Sensitive Devices (ESD) Precautions

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

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

1-4. Installation Precautions

1. For safety reasons, more than two 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 (10cm) between the product and the wall for ventilation purposes. A rise in temperature within the product may cause fire.

Memo

2. Product specifications

2-1. Feature & Specifications

Model	LA40A450C1X / LA40A350C1X

Feature

- RF, 3-HDMI, 2-Component, 2-AV, 1-S-Video,1- D-SUB,1-Headphone,1-Audio output
- Brightness : 450cd/m^2
- Contrast Ratio : 10000:1
- Response time : 8ms
- Dynamic contrast, Super-PVA
- PIP(in HDMI 1, 2, 3, Component 1, PC Mode and Sub picture is available only in TV analog mode)

Specifications

Item	Description	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 40-Inch viewable, 0.46125(H) x 0.46125(W) x 3 mm pixel pitch	
Scanning Frequency	Horizontal : 30 kHz ~ 80 kHz (Automatic) Vertical : 56 Hz ~ 75 Hz (Automatic)	
Display Colors	16.7 million colors	
Maximum resolution	Horizontal : 1366 Pixels Vertical : 768 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	310MHz	
Active Display Horizontal/Vertical	34.84 x 19.59 inches (885.168 (H) x 497.664 (V) mm)	
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz	
Power Consumption	<221.8 W (< 1W, stand by)	
Dimensions Set (W x D x H)	43.08 x 11.41 x 26.59 inches (1094.3 x 289.9 x 675.4mm)_with stand 43.08 x 4.04 x 23.9 inches (1094.3 x 102.8 x 607.3 mm)_without stand	
Weight (Set)	52.24 lbs (23.7kg)	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	NT3.58, PAL, SECAM, NT4.43
	Sound	BG, DK, I,M
Environmental Considerations	Operating Temperature : 50˚F ~ 104˚F (10˚C ~ 40˚C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13˚F ~ 113˚F (-25˚C ~ 45˚C) Storage Humidity : 5% ~ 95%, non-condensing	
Environmental Considerations	- MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -8 dB ~ + 8dB - TREBLE Control Range : -8 dB ~ +8 dB - Headphone Out : 10 mW MAX - Output Frequency : RF : 80 Hz ~ 15 kHz A/V : 80 Hz ~ 20 kHz	
Note: Anynet+		

CHANNEL FREQUENCY TABLE

1. OUTPUT FREQUENCY : ANALOG fv:45.75MHz, fs:41.25MHz DIGITAL Fc:44MHz
2. TUNING STEP SIZE : FIRST PLL 250KHz SECOND PLL 62.5KHz

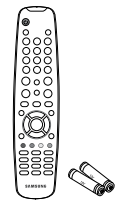
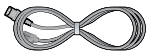
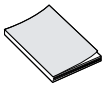
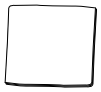
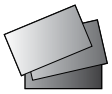
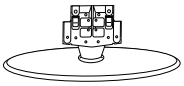
OSD	CH NO	AIR		BAND	CH NO		BAND	CH NO		CH NO	
		Air-DTV	Air-NTSC			Cable STD			Cable HRC		Cable IRC
1	1							A-8	72.00	A-8	73.25
2	2	57	55.25	V-L	2	55.25	V-L	2	54.00	2	55.25
3	3	63	61.25	V-L	3	61.25	V-L	3	60.00	3	61.25
4	4	69	67.25	V-L	4	67.25	V-L	4	66.00	4	67.25
5	5	79	77.25	V-L	5	77.25	V-L	A-7	78.00	A-7	79.25
6	6	85	83.25	V-L	6	83.25	V-L	A-6	84.00	A-6	85.25
7	7	177	175.25	V-H	7	175.25	V-H	7	174.00	7	175.25
8	8	183	181.25	V-H	8	181.25	V-H	8	180.00	8	181.25
9	9	189	187.25	V-H	9	187.25	V-H	9	186.00	9	187.25
10	10	195	193.25	V-H	10	193.25	V-H	10	192.00	10	193.25
11	11	201	199.25	V-H	11	199.25	V-H	11	198.00	11	199.25
12	12	207	205.25	V-H	12	205.25	V-H	12	204.00	12	205.25
13	13	213	211.25	V-H	13	211.25	V-H	13	210.00	13	211.25
14	14	473	471.25	UHF	A	121.25	MID	A	120.00	A	121.25
15	15	479	477.25	UHF	B	127.25	MID	B	126.00	B	127.25
16	16	485	483.25	UHF	C	133.25	MID	C	132.00	C	133.25
17	17	491	489.25	UHF	D	139.25	MID	D	138.00	D	139.25
18	18	497	495.25	UHF	E	145.25	MID	E	144.00	E	145.25
19	19	503	501.25	UHF	F	151.25	MID	F	150.00	F	151.25
20	20	509	507.25	UHF	G	157.25	MID	G	156.00	G	157.25
21	21	515	513.25	UHF	H	163.25	MID	H	162.00	H	163.25
22	22	521	519.25	UHF	I	169.25	MID	I	168.00	I	169.25
23	23	527	525.25	UHF	J	217.25	SUPER	J	216.00	J	217.25
24	24	533	531.25	UHF	K	223.25	SUPER	K	222.00	K	223.25
25	25	539	537.25	UHF	L	229.25	SUPER	L	228.00	L	229.25
26	26	545	543.25	UHF	M	235.25	SUPER	M	234.00	M	235.25
27	27	551	549.25	UHF	N	241.25	SUPER	N	240.00	N	241.25
28	28	557	555.25	UHF	O	247.25	SUPER	O	246.00	O	247.25
29	29	563	561.25	UHF	P	253.25	SUPER	P	252.00	P	253.25
30	30	569	567.25	UHF	Q	259.25	SUPER	Q	258.00	Q	259.25
31	31	575	573.25	UHF	R	265.25	SUPER	R	264.00	R	265.25
32	32	581	579.25	UHF	S	271.25	SUPER	S	270.00	S	271.25
33	33	587	585.25	UHF	T	277.25	SUPER	T	276.00	T	277.25
34	34	593	591.25	UHF	U	283.25	SUPER	U	282.00	U	283.25
35	35	599	597.25	UHF	V	289.25	SUPER	V	288.00	V	289.25
36	36	605	603.25	UHF	W	295.25	SUPER	W	294.00	W	295.25
37	37	611	609.25	UHF	AA	301.25	HYPER	AA	300.00	AA	301.25
38	38	617	615.25	UHF	BB	307.25	HYPER	BB	306.00	BB	307.25
39	39	623	621.25	UHF	CC	313.25	HYPER	CC	312.00	CC	313.25
40	40	629	627.25	UHF	DD	319.25	HYPER	DD	318.00	DD	319.25
41	41	635	633.25	UHF	EE	325.25	HYPER	EE	324.00	EE	325.25
42	42	641	639.25	UHF	FF	331.25	HYPER	FF	330.00	FF	331.25
43	43	647	645.25	UHF	GG	337.25	HYPER	GG	336.00	GG	337.25
44	44	653	651.25	UHF	HH	343.25	HYPER	HH	342.00	HH	343.25
45	45	659	657.25	UHF	II	349.25	HYPER	II	348.00	II	349.25
46	46	665	663.25	UHF	JJ	355.25	HYPER	JJ	354.00	JJ	355.25
47	47	671	669.25	UHF	KK	361.25	HYPER	KK	360.00	KK	361.25
48	48	677	675.25	UHF	LL	367.25	HYPER	LL	366.00	LL	367.25
49	49	683	681.25	UHF	MM	373.25	HYPER	MM	372.00	MM	373.25
50	50	689	687.25	UHF	NN	379.25	HYPER	NN	378.00	NN	379.25
51	51	695	693.25	UHF	OO	385.25	HYPER	OO	384.00	OO	385.25
52	52	701	699.25	UHF	PP	391.25	HYPER	PP	390.00	PP	391.25
53	53	707	705.25	UHF	QQ	397.25	HYPER	QQ	396.00	QQ	397.25
54	54	713	711.25	UHF	RR	403.25	HYPER	RR	402.00	RR	403.25
55	55	719	717.25	UHF	SS	409.25	HYPER	SS	408.00	SS	409.25
56	56	725	723.25	UHF	TT	415.25	HYPER	TT	414.00	TT	415.25
57	57	731	729.25	UHF	UU	421.25	HYPER	UU	420.00	UU	421.25
58	58	737	735.25	UHF	VV	427.25	HYPER	VV	426.00	VV	427.25
59	59	743	741.25	UHF	WW	433.25	HYPER	WW	432.00	WW	433.25
60	60	749	747.25	UHF	XX	439.25	HYPER	XX	438.00	XX	439.25
61	61	755	753.25	UHF	YY	445.25	HYPER	YY	444.00	YY	445.25
62	62	761	759.25	UHF	ZZ	451.25	HYPER	ZZ	450.00	ZZ	451.25
63	63	767	765.25	UHF	AAA	457.25	HYPER	AAA	456.00	AAA	457.25
64	64	773	771.25	UHF	BBB	463.25	HYPER	BBB	462.00	BBB	463.25
65	65	779	777.25	UHF	CCC	469.25	ULTRA	CCC	468.00	CCC	469.25
66	66	785	783.25	UHF	DDD	475.25	ULTRA	DDD	474.00	DDD	475.25
67	67	791	789.25	UHF	EEE	481.25	ULTRA	EEE	480.00	EEE	481.25
68	68	797	795.25	UHF	FFF	487.25	ULTRA	FFF	486.00	FFF	487.25
69	69	803	801.25	UHF	GGG	493.25	ULTRA	GGG	492.00	GGG	493.25

OSD	CH NO	AIR		BAND	CH NO		BAND	CH NO		CH NO	
		Air-DTV	Air-NTSC			Cable STD			Cable HRC		Cable IRC
70	70				HHH	499.25	ULTRA	HHH	498.00	HHH	499.25
71	71				III	505.25	ULTRA	III	504.00	III	505.25
72	72				JJJ	511.25	ULTRA	JJJ	510.00	JJJ	511.25
73	73				KKK	517.25	ULTRA	KKK	516.00	KKK	517.25
74	74				LLL	523.25	ULTRA	LLL	522.00	LLL	523.25
75	75				MMM	529.25	ULTRA	MMM	528.00	MMM	529.25
76	76				NNN	535.25	ULTRA	NNN	534.00	NNN	535.25
77	77				000	541.25	ULTRA	000	540.00	000	541.25
78	78				PPP	547.25	ULTRA	PPP	546.00	PPP	547.25
79	79				79	553.25	ULTRA	79	552.00	79	553.25
80	80				80	559.25	ULTRA	80	558.00	80	559.25
81	81				81	565.25	ULTRA	81	564.00	81	565.25
82	82				82	571.25	ULTRA	82	570.00	82	571.25
83	83				83	577.25	ULTRA	83	576.00	83	577.25
84	84				84	583.25	ULTRA	84	582.00	84	583.25
85	85				85	589.25	ULTRA	85	588.00	85	589.25
86	86				86	595.25	ULTRA	86	594.00	86	595.25
87	87				87	601.25	ULTRA	87	600.00	87	601.25
88	88				88	607.25	ULTRA	88	606.00	88	607.25
89	89				89	613.25	ULTRA	89	612.00	89	613.25
90	90				90	619.25	ULTRA	90	618.00	90	619.25
91	91				91	625.25	ULTRA	91	624.00	91	625.25
92	92				92	631.25	ULTRA	92	630.00	92	631.25
93	93				93	637.25	ULTRA	93	636.00	93	637.25
94	94				94	643.25	ULTRA	94	642.00	94	643.25
95	95				A-5	91.25	FM	A-5	90.00	A-5	91.25
96	96				A-4	97.25	FM	A-4	96.00	A-4	97.25
97	97				A-3	103.25	FM	A-3	102.00	A-3	103.25
98	98				A-2	109.25	MID	A-2	108.00	A-2	109.25
99	99				A-1	115.25	MID	A-1	114.00	A-1	115.25
100	100				100	649.25	ULTRA	100	648.00	100	649.25
101	101				101	655.25	ULTRA	101	654.00	101	655.25
102	102				102	661.25	ULTRA	102	660.00	102	661.25
103	103				103	667.25	ULTRA	103	666.00	103	667.25
104	104				104	673.25	ULTRA	104	672.00	104	673.25
105	105				105	679.25	ULTRA	105	678.00	105	679.25
106	106				106	685.25	ULTRA	106	684.00	106	685.25
107	107				107	691.25	ULTRA	107	690.00	107	691.25
108	108				108	697.25	ULTRA	108	696.00	108	697.25
109	109				109	703.25	ULTRA	109	702.00	109	703.25
110	110				110	709.25	ULTRA	110	708.00	110	709.25
111	111				111	715.25	ULTRA	111	714.00	111	715.25
112	112				112	721.25	ULTRA	112	720.00	112	721.25
113	113				113	727.25	ULTRA	113	726.00	113	727.25
114	114				114	733.25	ULTRA	114	732.00	114	733.25
115	115				115	739.25	ULTRA	115	738.00	115	739.25
116	116				116	745.25	ULTRA	116	744.00	116	745.25
.	.				.	.	.	.	.	.	.
.	.				.	.	.	.	.	.	.
125	125				125	799.25	ULTRA	125	798.00	125	799.25
.	.				.	.	.	.	.	.	.

2-3. Spec Comparison to the Old Models

Model	Coral (LA40A450C1)	Jasmin (LA40S86B)
Design		
Display Type	LCD TV	LCD TV
Built-in Tuner	O	O
Resolution	1366 x 768	1366 x 768
LCD Panel	TFT LCD Panel 50Hz	TFT LCD Panel 50Hz
Screen Size	40”	40”
Picture ratio	16 : 9	16 : 9
Dimensions (W x H x D)	38.97 x 11.81 x 27.33 inches_with stand 38.97 x 3.22 x 25.22 inches_without stand	42.66 x 11.81 x 27.16 inches_with stand 42.66 x 3.73 x 25.13 inches_without stand
Weight	41.0lbs (18.6 kg) (with stand) 34.0lbs (15.4 kg) (without stand)	21.5Kg
Brightness	450cd/m^2	500cd/m^2
Contrast Ratio	10000:1	8000:1
Picture Enhacer	DNIe (FBE3)	DNIe (FBE2)
Equalizer	O	O
Auto Motion Plus 100Hz	X	X
Surround Sound	3 Way SRS TruSurround Dolby Digital	2 Way SRS TruSurround Dolby Digital
Speaker Output	10W + 10W	10W + 10W
Antenna	1	1

2-4. Accessories

Product	Description	Code. No	Remark
	Remote Control & Batteries (AAA x 2)	BN59-00685A (A450) BN59-00689A (A350)	Samsung Electronics Service center
	Power Cord	3903-00145	
	Cover-Bottom	BN63-03665B	
	Owner’s Instructions	BN68-01507J (A450) BN68-01507Q (A350)	
	Cleaning Cloth	BN63-01798A	
	Warranty Card / Registration Card / Safety Guide Manual (Not available in all locations)	6801-001011	
	Stand Screw x 4	6002-001294	
	Stand	BN90-01572A	

Memo

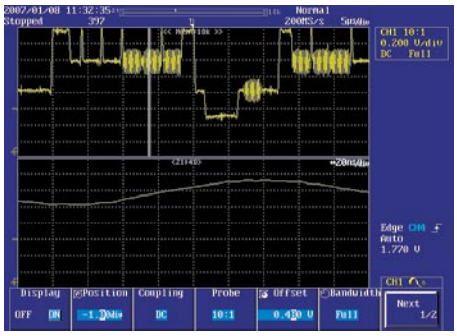
ECN No.		ECN Date		ECN Type		Model Code	
Title	LCD Panel Repair Guide						

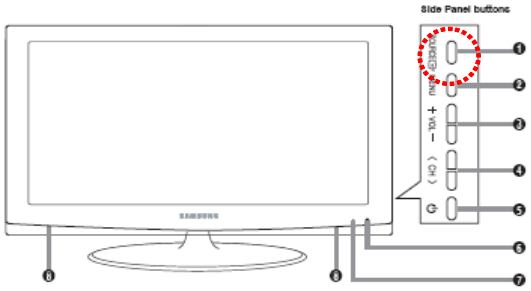
Symptoms	Some of defect in panel can be repaired by replacing T-Con Board or Inverter only.
Cause	As replacing whole panel could make loss of time and cost in those cases, we provide simple guide for panel repair.
Solution	T-Con boards and inverters are suppied as spare parts for only some specific panels at the moment.
Others	We will apply it to many panels in the future.

4. Troubleshooting

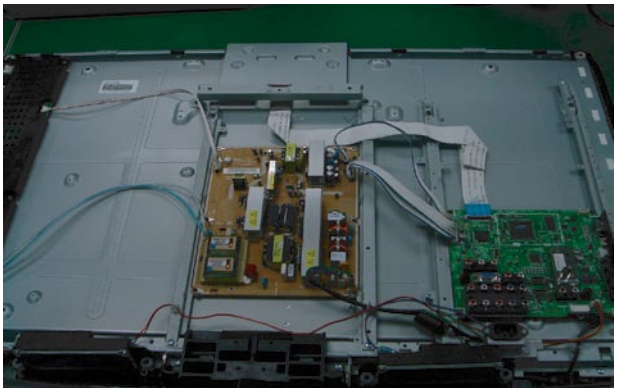
4-1. Troubleshooting

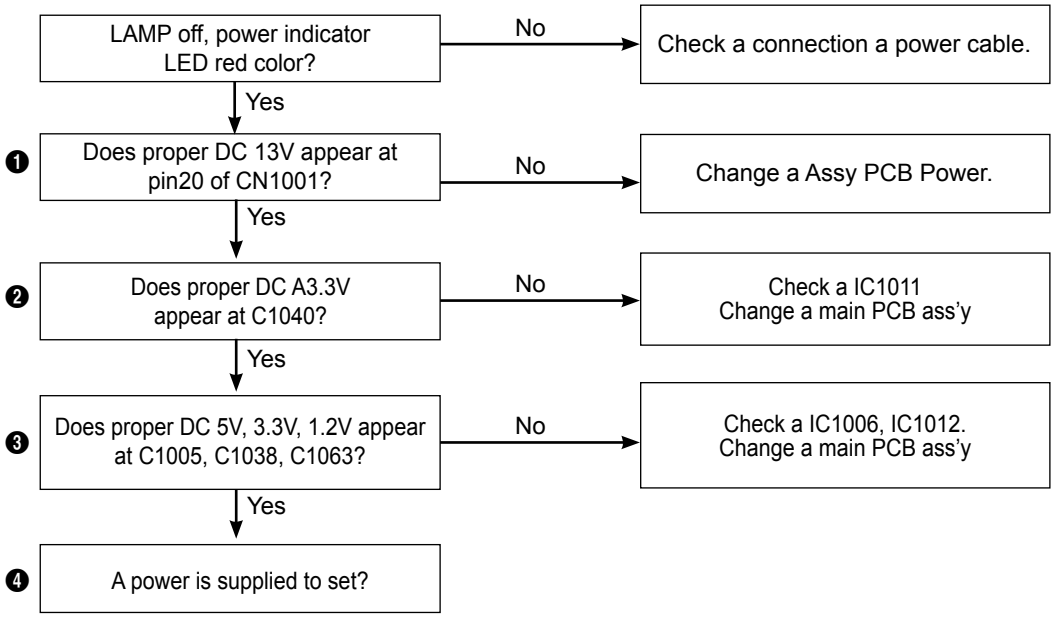
1. Check the various cable connections first.
   • Check to see if there is a burnt or damaged cable.
   • Check to see if there is a disconnected or loose cable connection.
   • Check to see if the cables are connected according to the connection diagram.
2. Check the power input to the Main Board.



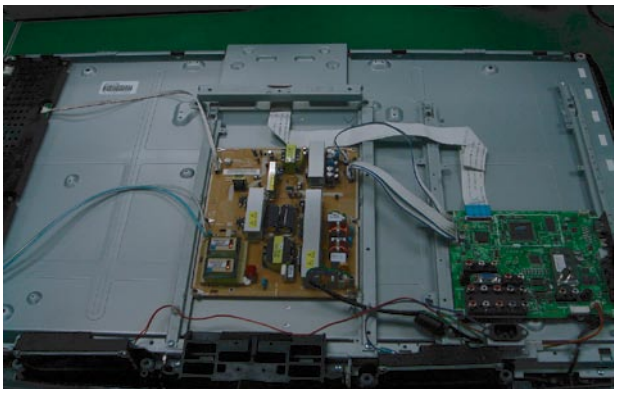


4-1-1. No Power

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

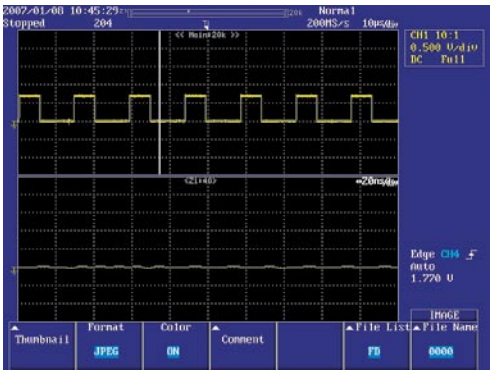


4-1-2. No Video (Analog PC signal)

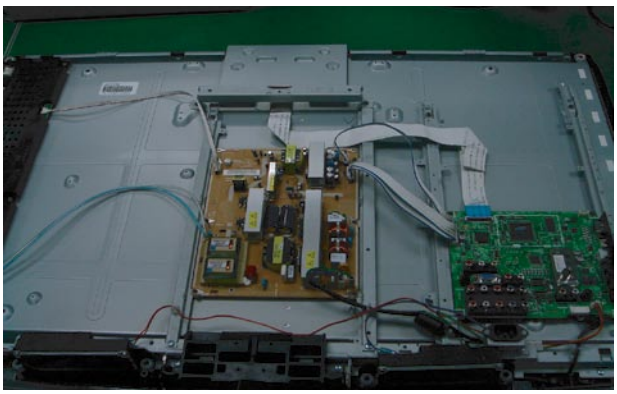
Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the PC source – Check the M-star – This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

WAVEFORMS

❶	R,G,B Output Signal

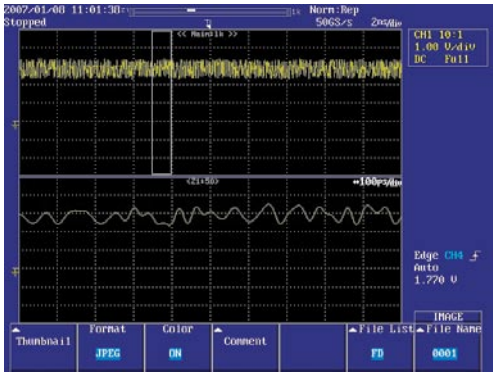


4-1-3. No Video (HDMI - Digital Signal)

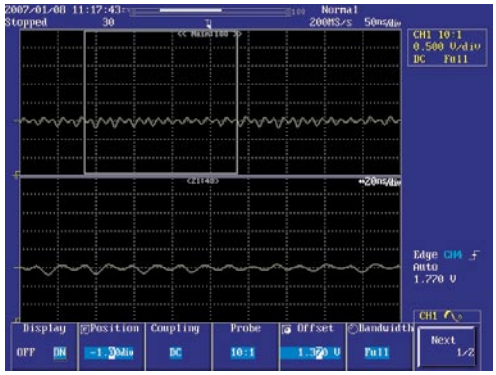
Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the HDMI source – Check the M-star – This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

WAVEFORMS

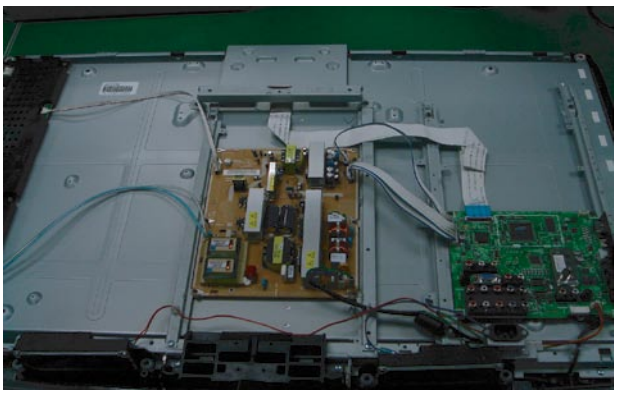
❷	**Digital Output Data**



❸	**Signal of HDMI(Data)**

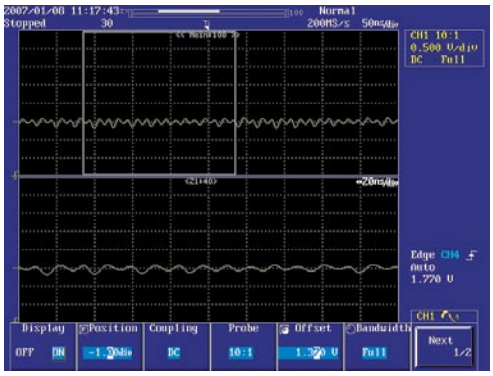


4-1-4. No Video (Tuner_CVBS)

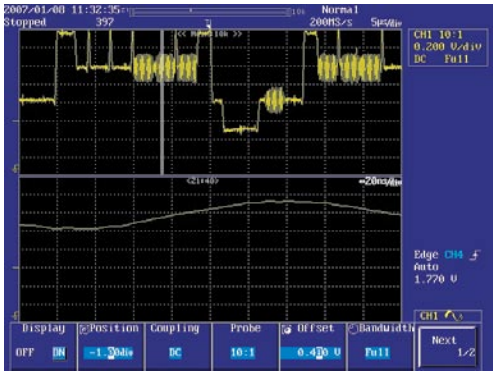
Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the Tuner CVBS source – Check the M-star – This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

WAVEFORMS

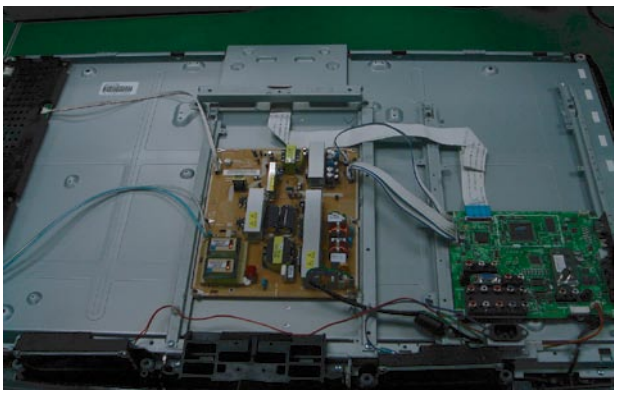
❸	CVBS Output Signal



❹	Tuner_CVBS Output Signal

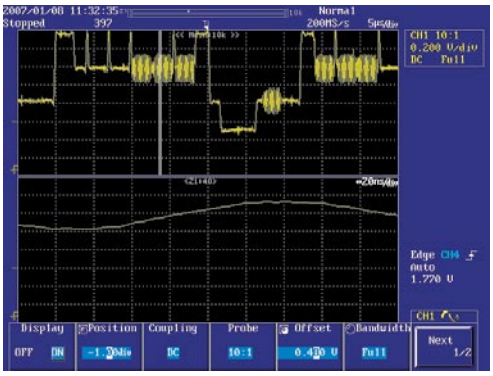


4-1-5. No Picture (Video_CVBS)

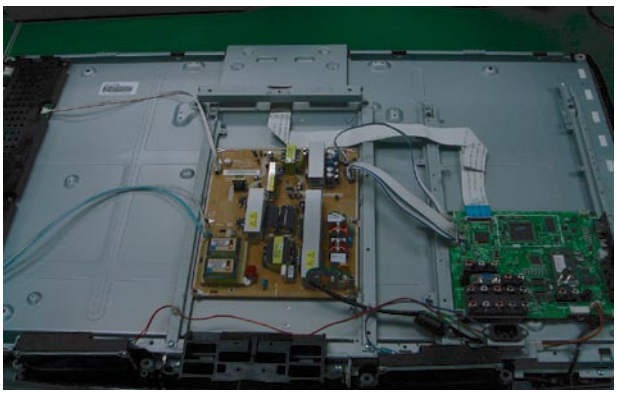
Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the Video Source – Check the M-star – This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

WAVEFORMS

❹	**CVBS Output Signal**

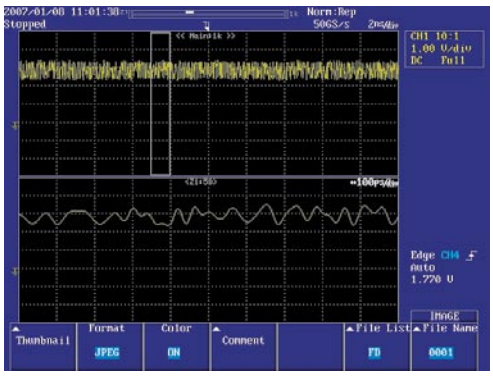


4-1-6. No Picture (S-VIDEO_Y,C)

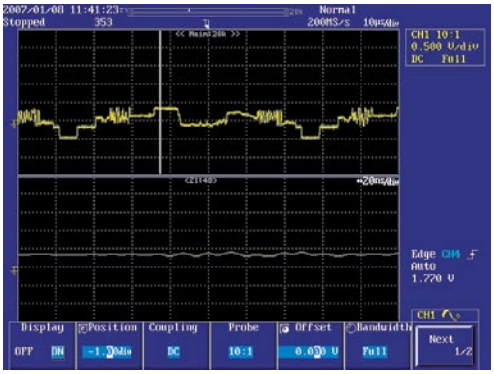
Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the S-Video_Y,C source – Check the M-star – This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	 Power Indicator is off. Lamp on, no picure. → No → Connect the s-video cable. Operating a video player. ↓ Yes ❶ Does the Y/C signal appear at C5062or C5063 of IC5001? → No → Check a connection harness. ↓ Yes ❷ Check a LVDS cable ? Replcelcd panel? ↓ Yes Please, Call to Samsung Co. LTD.
Caution	Make sure to disconnect the power before working on the IP board.

WAVEFORMS

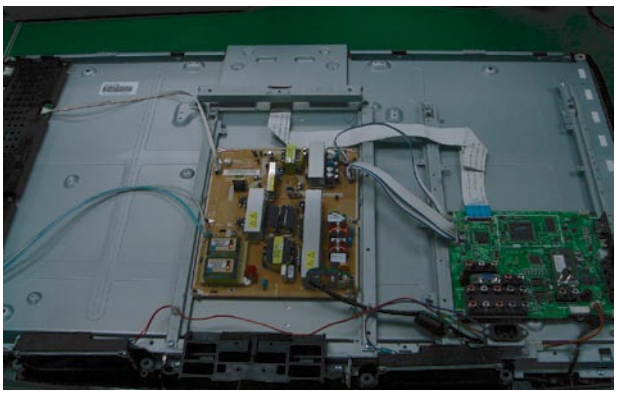
❷	**Digital Output Data**



❺	**Analog Signal(Y,C)**

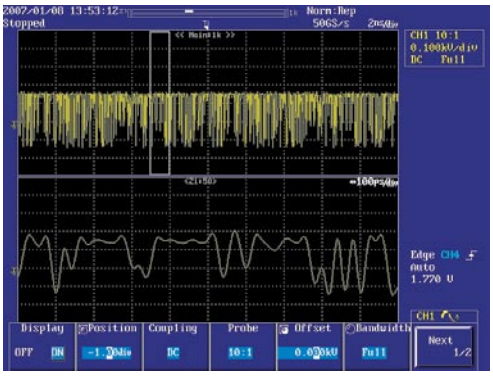


4-1-7. No Sound

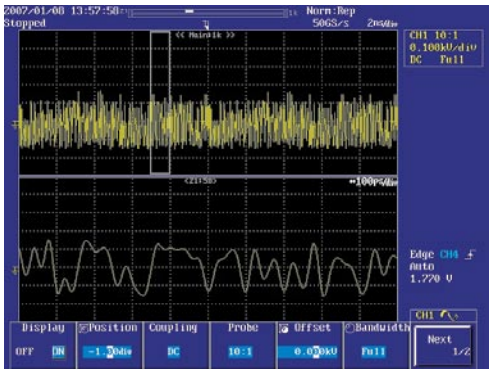
Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the RF Source – Check the M-star – This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

WAVEFORMS

❻	**The Signal are Inputed to IC1201**



❼	**The Signal are Inputed to IC1202**



4-2. Alignments and Adjustments

4-2-1. General Alignment Instuction

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

4-3. Factory Mode Adjustments

4-3-1 Entering Factory Mode

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

- If you do not have Factory remote - control

INFO → MENU → MUTE → Power on

- If you have Factory remote - control

PICTURE ON → DISPLAY → FACTORY

- The buttons are active in the service mode.

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

4-3-2 Panel Check

You have to check Panel Maker Because of different adjustments as follows.
First of all, Check the label rating!

1) Label Rating File
   - LCD PANEL MARK
     A:ACER(AUO) S : SEC C : CMO

* If not printed you could consider S(sec) panel mark.

4-3-3 Factory Data

1. Option Table(Service)
2. WB Adjust
3. Information
4. Advanced Menu

Checksum
T-CRL32MEAM-****
HDCP Success
Month/Day/Year/Hour/MIN/SEC

1. Option Table(Service)

No	Item	Range	Option
1	Factory Reset		
2	Country(0x55)	Default_0	
3	Ready	ON/OFF	ON
4	Inch Option	19/22/23/26/27/32/37/40 /42/46/50/52/57	40
5	Dimm Type	INT/INT_NEG/EXT_POS/EXT_NEG/EXT/	EXT
6	Panel Type	19AM_TN/22AU_TN/22CM_TN/26AM_AG/ 26AU_AG/26CM_NG/32AU_AG/32AU_NG/ 32CM_NG/32CM_AG/37AU_AG/37CP_AG/ 40AU_AG/40AM_AG	40AU_AG
7	Model Option	Coral/Jade/Tanzanite/Pyrope/Amber Pyrope_3D/Carnelian/Carnelian_3D	Coral
8	Anynet +	ON <-> OFF	ON
9	Light Effect	ON <-> OFF	OFF
10	TTX	ON <-> OFF	OFF
11	TTX List	List <-> FLOF	FLOF
12	TTX Group	Lang OSD/ W Europe/Russia/Greek/Turek/ Arab/Farsi/ ArabHbrw	Lang OSD
13	Carrier Mute	ON <-> OFF	OFF
14	High Devi	ON <-> OFF	ON
15	Volume Curve	EA/EU	EA
16	HotPlug	ON <-> OFF	ON
17	HotPlugCtrl	ON <-> OFF	ON
18	HotPlugDelay	0 ~ 63	12
19	Auto Power	ON <-> OFF	ON
20	LNA Menu	OFF	
21	Hotel Option	On <-> Off	OFF
22	D.Gamma	OFF/0.85/0.88/0.90/0.93/0.95/0.98/ M1/M2/M3/M4	0.93
23	PC Ident	ON <-> OFF	
24	Language	Europe/CIS (21 Language)	English
25	Ch Table	SUWON/SESK/SHE/etc	Select Local area
26	DDR	Etron	
27	Shop Mode	ON <-> OFF	OFF
28	Nordic	OFF	
29	Arabic	ON <-> OFF	ON
30	NT Conversion	ON <-> OFF	OFF

No	Item	Range	Option
31	Control	-	
	WM Calib	ON/OFF	OFF
	EDID Protect	ON/OFF	ON
	Edid Type	Coral/P450-50HP/P450-42HP	L12_1366_768
	EDIE Write	Failure/Success	L12_1366_768 Succes
	WB Data Reset	ON <-> OFF	OFF
	EEPROM Reset		
	Logic Download	ON <-> OFF	OFF
32	PDP Filter	42” 3D	
33	PDP Group	P34A_R3d	
34	Spread Spectrum	ON/OFF	ON
	Step1	0~255	30
	Step2	0~255	9
	Range1	-	0
	Range2	-	44
	FBE SSC	-	5

Advanced Menu	Adjust		
	Uart Select	OFF/Main/Idtv/LVDS ON	OFF
	Debug Mode	Normal/NONE/MSTAR/RunTime	Normal
	HP Detect	Low/High	High

4-4. White Balance - Calibration

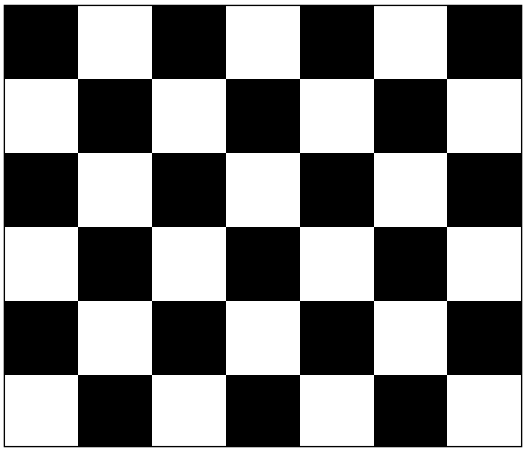
4-4-1 White Balance -Calibration

1. Calibration	→	AV Calibration Comp Calibration PC Calibration HDMI Calibration

4-4-2 Service Adjustment - You must perform Calibration in the Lattice Pattern before adjusting the White Balance.

■ Color Calibration

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



(Chess Pattern)

4. Use Equipment : CA210 & Master MSPG925 Generator

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

Input mode	Calibration	Pattern
CVBS IN (Model_#1)	Perform in NTSC B&W Pattern #24	Lattice
Component IN (Model_#6)	Perform in 720p B&W Pattern #24	Lattice
PC Analog IN (Model_#21)	Perform in VESA XGA (1024x768) B&W Pattern #24	Lattice
HDMI IN	Perform in 720p B&W Pattern #24	Lattice

<Table 1>

■ 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 “Calibration” 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 “Calibration” menu
5) Select the “Comp Calibration” menu.
6) In “Comp Calibration Off” status, press the “►” key to perform Calibration.
7) When Calibration is complete, it returns to the high-level menu.
8) You can see the change of the “Comp Calibration” status from Failure to Success.

■ Method of Color Calibration (PC)

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

■ Method of Color Calibration (HDMI)

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

4-4-3 White Balance - Adjustment

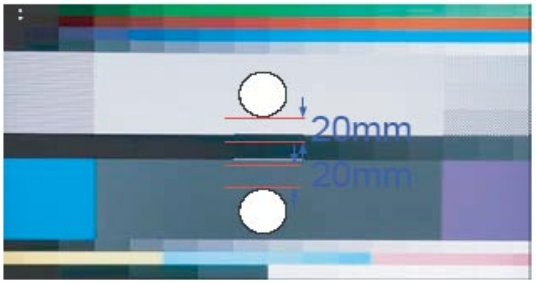
		(low light)	(hight light)
3. W/B	→	Sub Bright R offset G offset B offset	Sub Contrast R gain G gain B gain

(W/B adjustment Condition refer next page)

4-5. White Ratio (Balance) Adjustment

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

- Equipment : CS-210
- Pattern: MIK K-7256 #92 "Flat W/B Pattern" as standard
- Use other equipment only after comparing the result with that of the Master equipment.
- Set Aging time : 60min



- Calibration and Manual setting for WB adjustment.

HDMI : Time #6 720P, Pattern #24 Chessboard Calibration	→	Manual adjustment #92 pattern (720p)
COMP: Time #6 720P, Pattern #24 Chessboard Calibration	→	Manual adjustment at #92 pattern (720p)
CVBS: Time #2 PAL, Pattern #24 Chessboard Calibration	→	Manual adjustment at #92 pattern (NTSC)
PC: Time #21 1024*768, Pattern #24 Chessboard Calibration	→	Manual adjustment at #92 pattern (NTSC)

- If finishing in HDMI mode, adjustment coordinate is almost same in AV/COMP mode.
- White Balance Manual Adjustment

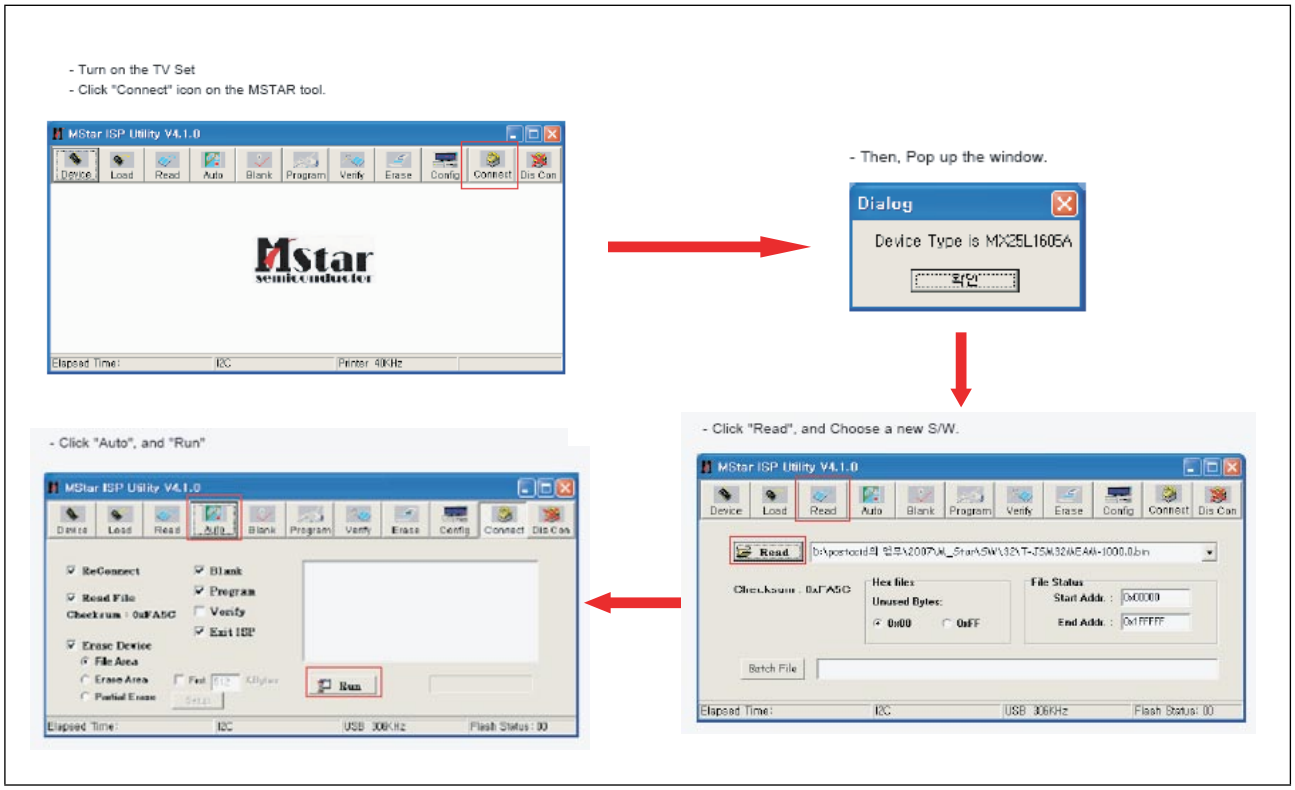
	CA-210				
		x	y	Y(L)	T(K) + MPCD
CVBS (NTSC)	H/L	272	287	- (Sub_CT:145)	11,000 (+10)
	L/L	272	287	12.2cd/m² (3.52 Ft - Sub_BR:128)	11,000 (+10)
COMP (720P)	H/L	272	287	- (Sub_CT:145)	11,000 (+10)
	L/L	272	287	12.1cd/m² (3.5 Ft - Sub_BR:128)	11,000 (+10)
HDMI (720P)	H/L	272	287	- (Sub_CT:145)	11,000 (+10)
	L/L	272	287	12.0cd/m² (3.5 Ft - Sub_BR:128)	11,000 (+10)

- Adjustment Specification
  White Balance : High light (±3), Low light (±5)
  Luminance : High light (±0.1Ft/L), Low light (±0.1Ft/L)

4-6. HOW TO UPGRADE

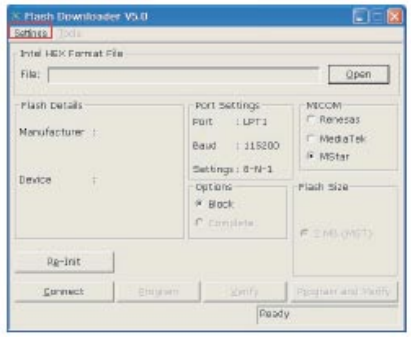
4-6-1 Software Upgrade (MSTAR ISP Tool)

■ MSTAR ISP TOOL



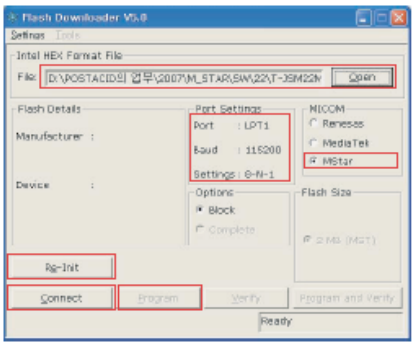
4-6-2 Software Upgrade (Flash Downloader)

■ Flash Downloader



1. Click "Settings"

2. Select LPT1



3. Click "open" and select a file that you want to download
4. Select "Mstar" in MICOM sector
5. Click "Re-Init"
6. Click "Connect"
7. Click "Program"

4-6-3 After S/W Upgrade

■ How to Access Service Mode

■ Entering Factory Mode

<Power OFF> → <INFO> → <MENU> → <MUTE> → <Power ON>

■ Factory Data

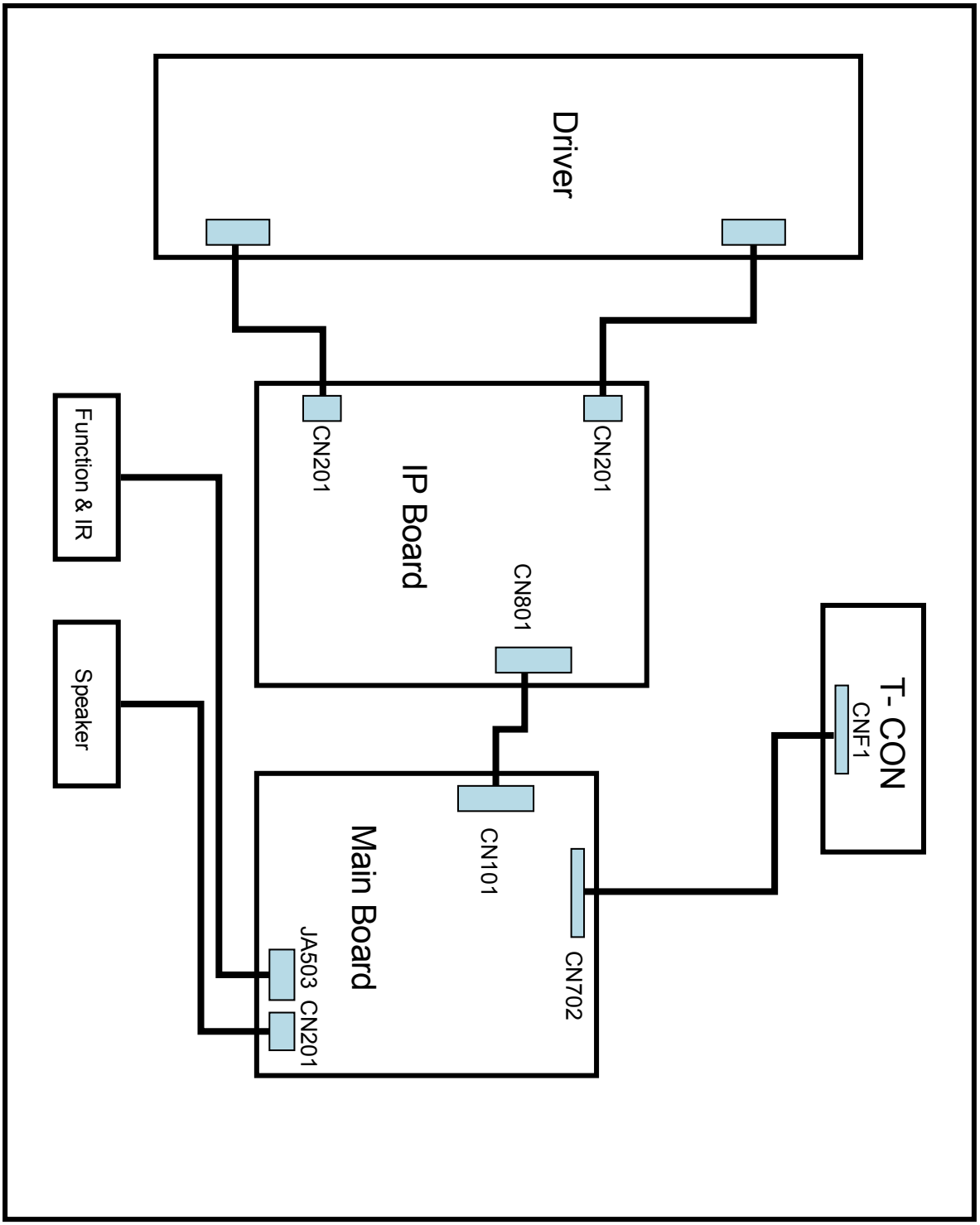
1. Option Table(Service)
2. WB Adjust
3. Information
4. Advanced Menu
   If you want to enter here, press “0000”.

■ How to Initialize.

Click “1. Option Table(Service)” → “Factory Reset” in Factory Menu.
You can make every setting in Factory Initial Status.

6. Wiring Diagram

6-1. Wiring Diagram



CN1001

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
HSYNC_OUT	SW_POWER	GND	A5V	GND	GND	B13V	B13V	GND	GND	GND	GND	B5V	B5V	B5V	B5V	GND	GND	GND	B13V	B13V	B13V	NC	NC

JA3003_3H

1	RX2+
2	GND
3	RX2-
4	RX1+
5	GND
6	RX1-
7	RX0+
8	GND
9	RX0-
10	RXCLK+
11	GND
12	RXCLK-
13	CEC
14	GND
15	DDC SCL
16	DDC SDA
17	GND
18	5V
19	IDENT

CN3214

1	GND
2	GND
3	GND
4	Y
5	C
6	IDENT
7	GND

CN3212

1	GND
2	IDENT
3	CVBS
4	GND
5	SR_IN
6	SL_IN
7	GND
8	SL_IN
9	SR_IN

JA3204

1	GND
2	NC
3	OUT_L
4	IDENT
5	OUT_R

CN6003_LCD

1	SW_INVERTER
2	ANA_DIMMING_OUT
3	PWM_DIMMING_OUT
4	GND
5	SENSE POWER

CN6003_LCIS

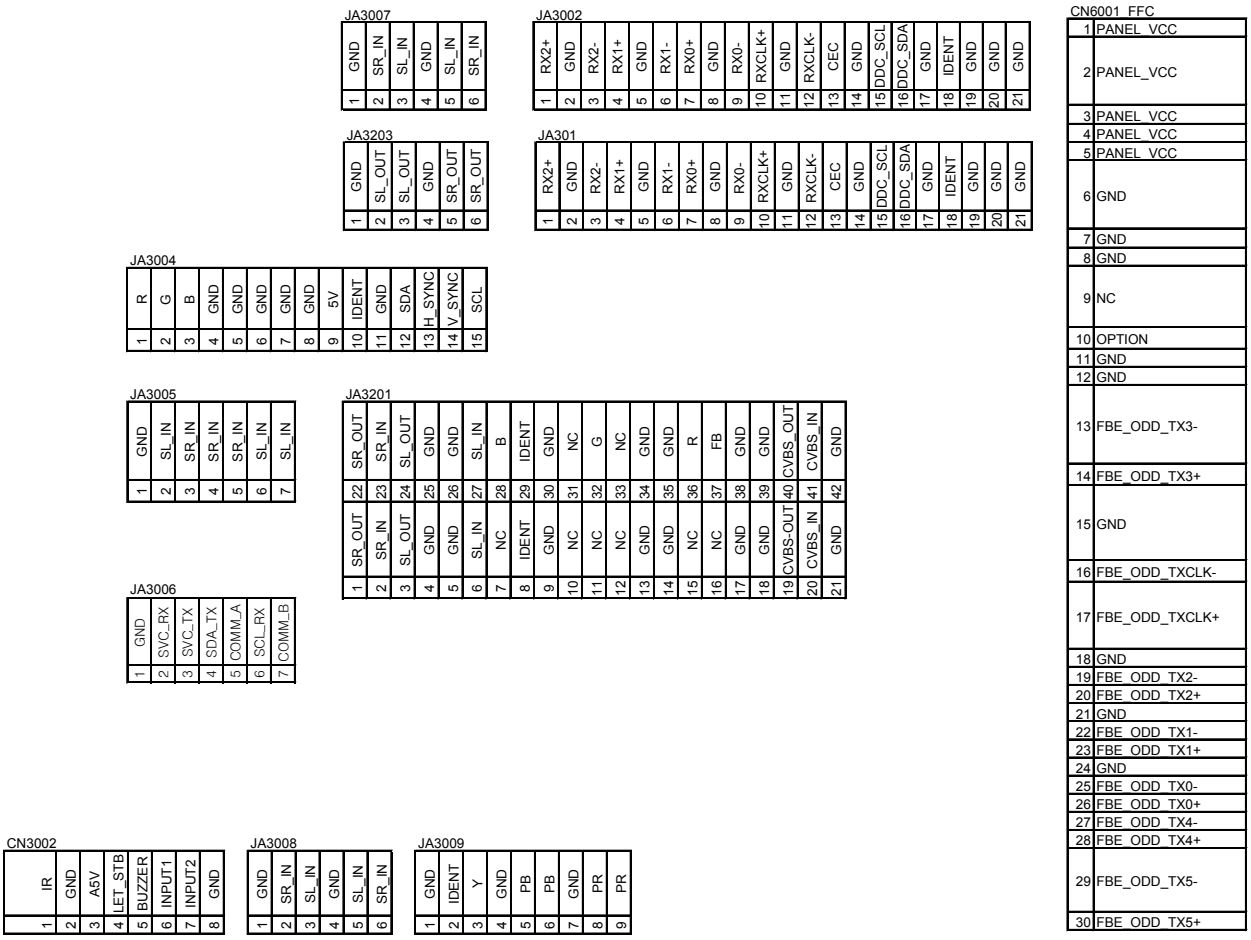
1	ANA_DIMMING_OUT
2	PWM_DIMMING_OUT
3	B9V
4	FFL_H
5	B5V
6	SW_INVERTER
7	SENSE_POWER
8	GND

CN2101

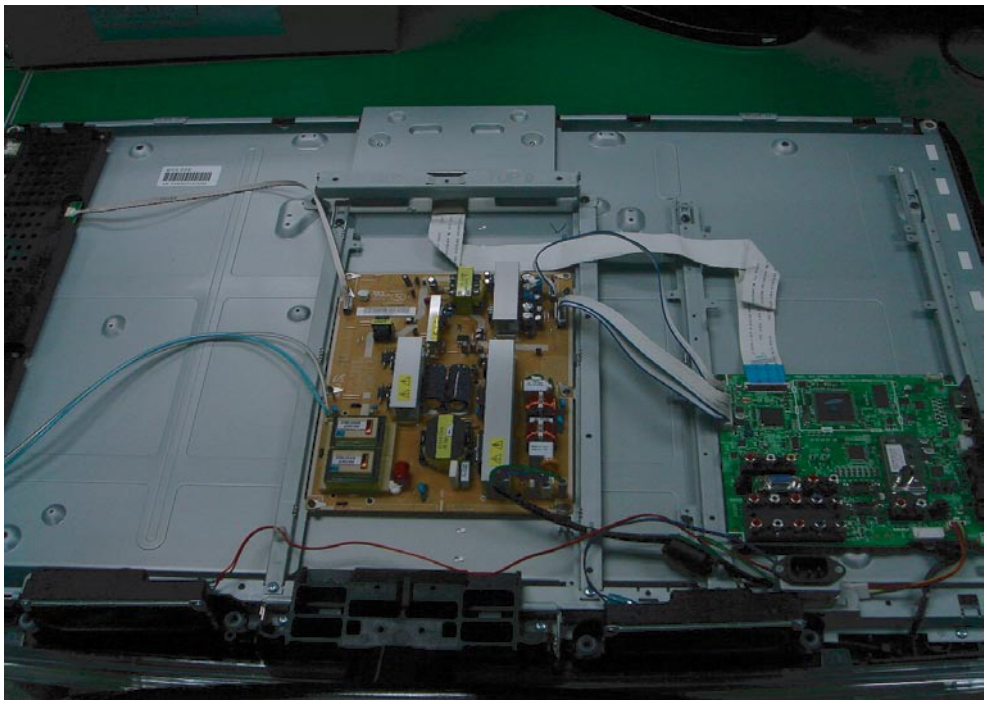
1	L-
2	L+
3	R-
4	R+

CN6002_DIP

1	FBE_ODD_TX0-
2	FBE_ODD_TX0+
3	FBE_ODD_TX1-
4	FBE_ODD_TX1+
5	FBE_ODD_TX2-
6	FBE_ODD_TX2+
7	FBE_ODD_TXCLK-
8	FBE_ODD_TXCLK+
9	FBE_ODD_TX3-
10	FBE_ODD_TX3+
11	FBE_ODD_TX4-
12	FBE_ODD_TX4+
13	FBE_ODD_TX5-
14	FBE_ODD_TX5+
15	GND
16	GND
17	GND
18	NC
19	NC
20	NC
21	OPTION
22	DDC_DTRL_L
23	GND
24	GND
25	GND
26	GND
27	PANEL_VCC
28	PANEL_VCC
29	PANEL_VCC
30	PANEL_VCC


JA3007
1 GND
2 SR_IN
3 SL_IN
4 GND
5 SL_IN
6 SR_IN
JA3002
1 RX2+
2 GND
3 RX2-
4 RX1+
5 GND
6 RX1-
7 RX0+
8 GND
9 RX0-
10 RXCLK+
11 GND
12 RXCLK-
13 CEC
14 GND
15 DDC_SCL
16 DDC_SDA
17 GND
18 IDENT
19 GND
20 GND
21 GND
CN6001_FFC
1 PANEL_VCC
2 PANEL_VCC
3 PANEL_VCC
4 PANEL_VCC
5 PANEL_VCC
6 GND
7 GND
8 GND
9 NC
10 OPTION
11 GND
12 GND
13 FBE_ODD_TX3-
14 FBE_ODD_TX3+
15 GND
16 FBE_ODD_TXCLK-
17 FBE_ODD_TXCLK+
18 GND
19 FBE_ODD_TX2-
20 FBE_ODD_TX2+
21 GND
22 FBE_ODD_TX1-
23 FBE_ODD_TX1+
24 GND
25 FBE_ODD_TX0-
26 FBE_ODD_TX0+
27 FBE_ODD_TX4-
28 FBE_ODD_TX4+
29 FBE_ODD_TX5-
30 FBE_ODD_TX5+
JA3203
1 GND
2 SL_OUT
3 SL_OUT
4 GND
5 SR_OUT
6 SR_OUT
JA301
1 RX2+
2 GND
3 RX2-
4 RX1+
5 GND
6 RX1-
7 RX0+
8 GND
9 RX0-
10 RXCLK+
11 GND
12 RXCLK-
13 CEC
14 GND
15 DDC_SCL
16 DDC_SDA
17 GND
18 IDENT
19 GND
20 GND
21 GND
JA3004
1 R
2 G
3 B
4 GND
5 GND
6 GND
7 GND
8 5V
9 IDENT
10 GND
11 SDA
12 H_SYNC
13 V_SYNC
14 SCL
15
JA3005
1 GND
2 SL_IN
3 SR_IN
4 SR_IN
5 SR_IN
6 SL_IN
7 SL_IN
JA3201
1 SR_OUT
2 SR_IN
3 SL_OUT
4 GND
5 GND
6 SL_IN
7 NC
8 IDENT
9 GND
10 NC
11 NC
12 NC
13 GND
14 GND
15 NC
16 NC
17 GND
18 GND
19 CVBS-OUT
20 CVBS_IN
21 GND
22 SR_OUT
23 SR_IN
24 SL_OUT
25 GND
26 GND
27 SL_IN
28 B
29 IDENT
30 GND
31 NC
32 G
33 NC
34 GND
35 GND
36 R
37 FB
38 GND
39 GND
40 CVBS_OUT
41 CVBS_IN
42 GND
JA3006
1 GND
2 SVC_RX
3 SVC_TX
4 SDA_TX
5 COMM_A
6 SCL_RX
7 COMM_B
CN3002
1 IR
2 GND
3 A5V
4 LET_STB
5 BUZZER
6 INPUT1
7 INPUT2
8 GND
JA3008
1 GND
2 SR_IN
3 SL_IN
4 GND
5 SL_IN
6 SR_IN
JA3009
1 GND
2 IDENT
3 Y
4 GND
5 PB
6 PB
7 GND
8 PR
9 PR

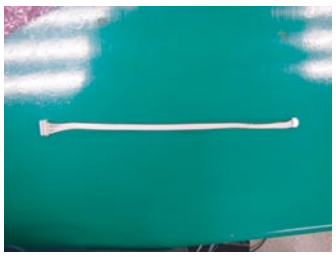
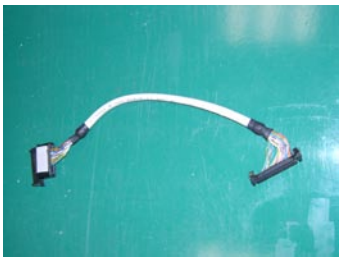
6-2. Wiring Picture



6-3. Connector Functions

Connector	Functions
	Supply main power from SMPS to Main Board. * defective symptom : abnormal Picture
CN1001 <-> CNM802	Supply dimming power from SMPS to Main Board. * defective symptom : abnormal Picture
CN2101 <-> SPEAKER	Connection Main Board and Speaker. * defective symptom : No picture
CN3002 <-> Function & IR	Connection Main Board and Function & IR Assy. * defective symptom : No picture, diable Power On/Off
CN6001_FFC <-> T-CON	The LVDS signal transferred from Main Board to Panel. * defective symptom : No picture but normal sound
CNM803 <-> CN1	Supply power and signal from SMPS to Inverter. * defective symptom : No picture but normal sound
CN801S,GT801 <-> Inlet Socket	Supply power from Inlet Socket to SMPS. * defective symptom : No picture but normal sound

6-4. Cables

Code	BH39-00362G	BH39-00362B	BN39-00674A
Photo			
Code	BN39-00789A	BN39-00830C	BN39-00849G
Photo			
Code	BN39-00802A	BN39-00802F	BN39-00802G
Photo			
Code	BN96-07158D	BN96-07158A	BN96-07158C
Photo			
Code	BN96-07158B	BN96-07158N	
Photo