



QLED TV

Project : QRQ900A

Chassis : QWY81

Model : GQ**Q900RGLXZG

QE**Q900RALXXN

QE**Q900RAUXRU

SERVICE Manual

QLED TV



Q900R

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2. Product specifications
3. Disassembly and Reassembly
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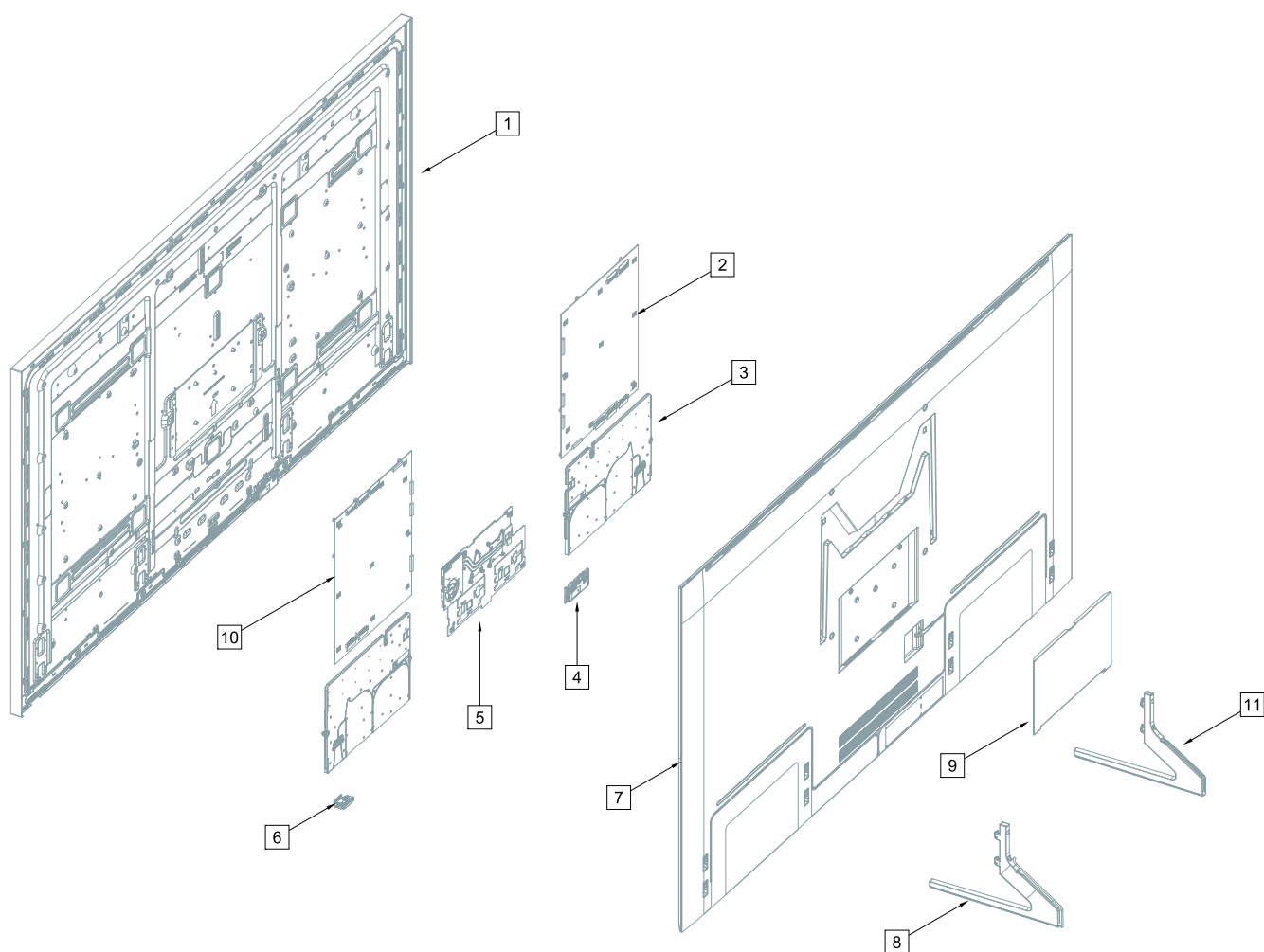


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1. QA75Q900RBKXXV (FC02)

Exploded View

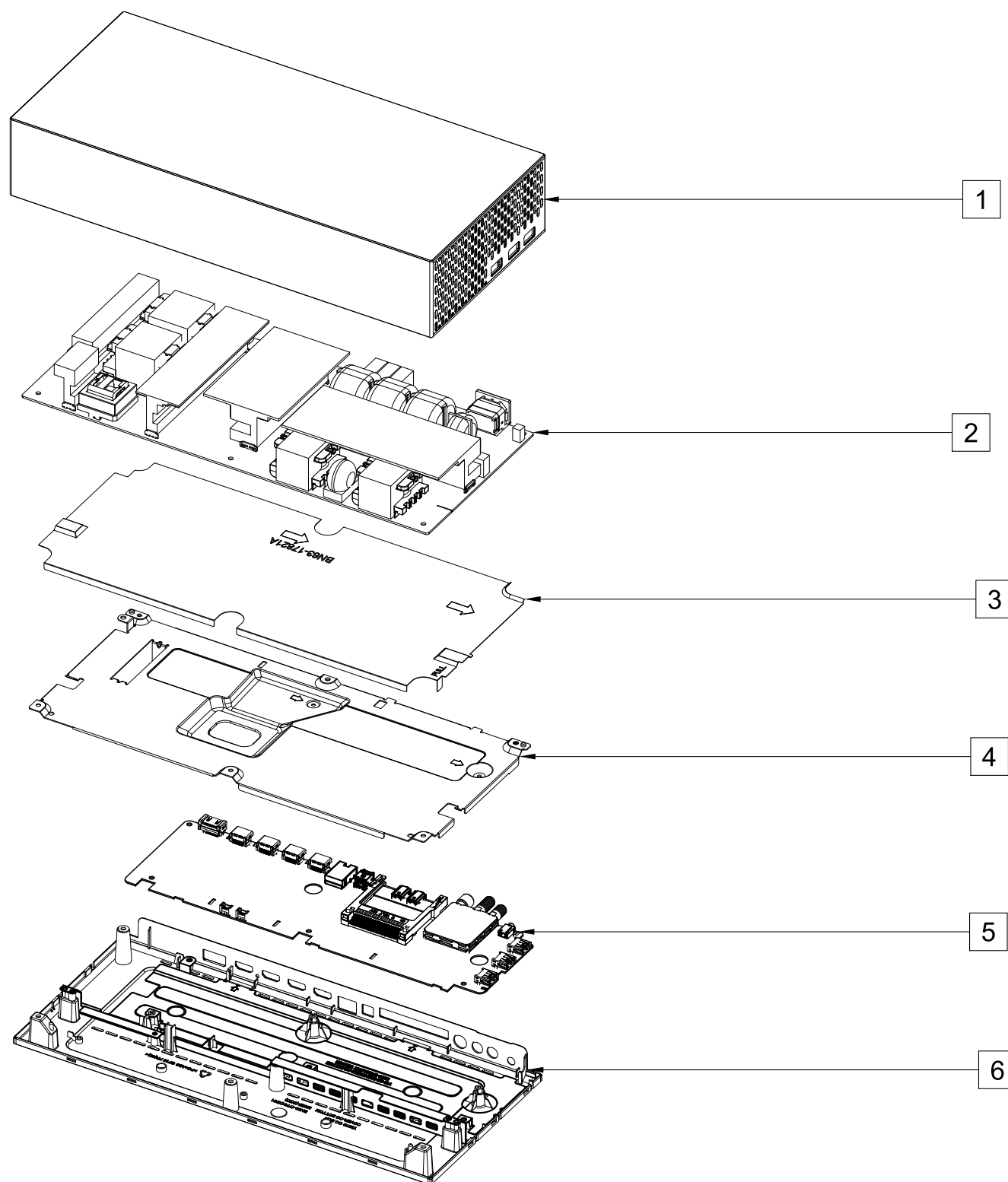


Parts List

No.	Lvl.	Loc.	Material Code	Description & Specification	SNA	Qty.
1	1		BN95-05616C	PRODUCT LCD-SDC; CY-TR075JLLV2V/H,Q900RB,	SA	1
2	2		BN44-00994A	DC VSS-DRIVER BOARD; L75S9SNRA_RHS,DC/DC,	SA	1
3	2		BN96-47523C	ASSY SPEAKER P-FRONT; TV-SPK,Q900,6ohm,10	SA	1
4	2		BN61-14942A	HOLDER-WIFI; 75Q9F,ABS,BK0007,HB	SNA	1
5	2	M0014	BN94-14725A	ASSY PCB MAIN; 75Q900RB-XV,BN94-14164C	SA	1
6	2		BN96-49258A	ASSY BOARD P-FUNCTION TACT; Y19 Q900 75',	SA	1
7	2	R001A	BN96-49207C	ASSY COVER P-REAR; 75QRQ900Z,PC+ABS+ED20%	SA	1
8	2		BN96-47688A	ASSY STAND P-COVER TOP LEFT; 75Q9N90A,ALD	SA	1
9	2		BN96-48105A	ASSY COVER P-CLEAN BACK WALL MOUNT; 75QRQ	SA	1
10	2		BN44-00994B	DC VSS-DRIVER BOARD; L75S9SNRB_RHS,DC/DC,	SA	1
11	2		BN96-47690A	ASSY STAND P-COVER TOP RIGHT; 75Q9N90A,AL	SA	1

2. ONE CONNECT Exploded View & Part List

ONE CONNECT Exploded View



Parts List

No.	Lvl.	Loc.	Material Code	Description & Specification	SNA	Qty.
1	2		BN96-47701A	ASSY COVER P-OC TOP; 75QRQ900A,PC,V-1,TP0	SA	1
2	2	OC-SMPS	BN44-00972B	DC VSS-POWER BOARD; P480NQB_NDY,AC/DC,490	SA	1
3	2		BN63-17821A	INSULATOR-SMPS; 75QRQ900A,PC,BLACK,L381.8	SA	1
4	2		BN63-17776A	SHIELD-OC TOP; 75QRQ900A,EGI-SECC,T0.8	SA	1
5	2		BN94-14476C	ASSY PCB OC; QRQ900Z	SA	1
6	2		BN96-47702N	ASSY COVER P-OC BOTTOM; 75QRQ900Z,PC+ABS+	SA	1

3. Electrical Parts List

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
			QA75Q900RBKXXV (FC02)		
1	S001A	BN90-10201C	ASSY STAND;QRQ900A	1	SNA
.2		BN96-47688A	ASSY STAND P-COVER TOP LEFT;75Q900A,ALD	1	SA
..3		BN63-17850A	COVER-STAND TOP LEFT;75QRQ900A,ALDC12,BL	1	SNA
..3		BN68-09340A	LABEL-STICKER;85QRQ900A,PET,T0.05,W15,L3	2	SNA
.2		BN96-47690A	ASSY STAND P-COVER TOP RIGHT;75Q900A,AL	1	SA
..3		0201-003279	ADHESIVE-AA;UPUV,CLEAR	1	SNA
..3	RF01	BN61-13520F	FOOT-RUBBER;55Q8,RUBBER,GRAY,W6,L25,T3	4	SNA
..3		BN63-17851A	COVER-STAND TOP RIGHT;75QRQ900A,ALDC12,B	1	SNA
1		BN90-10984B	ASSY W/I;QRQ900Z	1	SNA
.2		BN81-08159Z	A/S PART SET-ELEC W/I;LED TV ELEC spec-C	1	SNA
.2		BN81-17115U	A/S PART SET-MECH W/I;QRQ900Z,Q75RZ*	1	SNA
1	R001A	BN90-10989C	ASSY COVER REAR;QRQ900Z	1	SNA
.2	R001A	BN96-49207C	ASSY COVER P-REAR;75QRQ900Z,PC+ABS+ED20%	1	SA
..3		BN02-00094A	TAPE SINGLE FACE;Y12 F-LED,PET,T0.05,W30	1	SNA
..3	R001	BN63-17803B	COVER-REAR;75QRQ900A,PC+ABS+ED20%,V-1,BK	1	SNA
...4		BN68-05603E	LABEL-RESIN;ART,W8,L50,UL LABEL (COVER R	1	SNA
..3		BN63-18054A	SHEET-THERMAL;85QRQ900A,GRAPHITE,T0.3,W6	1	SNA
..3	RF01	BN67-00338J	FOOT-RUBBER;32K5300,Si,BLACK,W10,L10,T1.	4	SNA
..3		BN68-08413H	LABEL-STICKER LICENSE;75QRQ900A,PC,T0.25	1	SNA
1		BN91-20862L	ASSY SHIELD;QRQ900Z	1	SNA
.2		6001-003168	SCREW-MACHINE;CH,+,M3,L5,ZPC(BLK),SWRCH1	2	SA
.2		BN39-02428A	LEAD CONNECTOR-POWER;Q900R_75 82",UL2101	1	SA
.2		BN39-02431A	LEAD CONNECTOR-POWER;Q900R_75 82",UL2151	1	SA
.2		BN39-02481A	LEAD CONNECTOR-SUB ASSY;QN65Q900RB,UL214	1	SA
.2		BN59-01314A	NETWORK-WLAN CLIENT;WCP730M,78.3x29.3x7.	1	SA
.2		BN61-14942A	HOLDER-WIFI;75Q9F,ABS,BK0007,HB	1	SNA
.2		BN62-00870A	PAD GAP-THERMAL;QN85Q900R,RUBBER,T3.5,L4	1	SNA
.2		BN62-00871A	PAD GAP-THERMAL;Q900R,RUBBER,T2.5,L40,H2	2	SNA
.2		BN62-00872A	PAD GAP-THERMAL;Q900R,RUBBER,T2,L40,H20,	4	SNA
.2		BN63-18124A	SHEET-EVA;65Q9A900A,EVA,T10,W16,L45,BLAC	2	SNA
.2	M0019	BN68-00970A	LABEL-SECURITY;ALL,PET,T0.05,W60,L60,SEA	1	SNA
.2		BN96-39488A	FFC CABLE;KS9500,Straight,L57,96P	4	SA
.2		BN96-47523C	ASSY SPEAKER P-FRONT;TV-SPK,Q900,6ohm,10	1	SA
.2		BN96-47750A	FFC CABLE;Q900R_65 75 82",Fold,L180,68P,	1	SA
.2		BN96-47752A	FFC CABLE;Q900R_65 75 82",Fold,L180,68P,	1	SA
.2		BN96-47866A	FFC CABLE;QN75Q900R,Fold,L635,24P	1	SA
.2		BN96-48105A	ASSY COVER P-CLEAN BACK WALL MOUNT;75QRQ	1	SA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
..3		BN61-15056A	MAGNET NEODYMIUM;55LS003,Nd,T2,W10,L20	2	SNA
..3		BN63-18132A	COVER-CLEAN BACK WALL MOUNT;75QRQ900A,PC	1	SNA
...4		0103-010818	RESIN PC ABS;CM20G/BK00749,BLACK,BK0007,	6150	SNA
.2		BN96-49258A	ASSY BOARD P-FUNCTION TACT;Y19 Q900 75',	1	SA
.2	T0382	BP61-00492C	TAPE SINGLE FACE;ACRYL,ACRYL,T0.25,W50,L	0	SNA
1		BN91-21306G	ASSY ONE CONNECT;QRQ900Z	1	SNA
.2		0203-001598	TAPE-SINGLE FACE;PP,T0.15,W12,N/A,CLEAR	0	SNA
.2	SCREW	6001-002789	SCREW-MACHINE;BH,+,M4,L6,ZPC(WHT),SWRCH1	1	SA
.2	SCREW	6003-000275	SCREW-TAPTYPE;BH,+,B,M3,L10,ZPC(BLK),SWR	4	SA
.2	SCREW	6003-000283	SCREW-TAPTYPE;BH,+,-,B,M3,L8,ZPC(WHT),SW	8	SNA
.2		6902-002984	BAG PE;HDPE/PE FOAM,-,T0.015/T0.5,W500,L	1	SNA
.2	M0131	AA63-01071A	GASKET-EMI;EMI Shielding,Conductive Tape	1	SNA
.2	M0909	AA63-01387A	GASKET-EMI;EMI Shielding,Conductive Tape	1	SNA
.2		BN39-02438A	LEAD CONNECTOR-POWER;Q900R,UL21516,26P,L	1	SA
.2	OC-SMP	SBN44-00972B	DC VSS-POWER BOARD;P480NQB_NDY,AC/DC,490	1	SA
.2		BN62-00866A	PAD GAP-RUBBER;Q900 OC,T4,L155,H90,GRAY,	2	SNA
.2		BN62-00883A	PAD GAP-THERMAL;QN65Q90RAFXZA,Si,T12.5,L	1	SNA
.2	M0131	BN63-02627A	GASKET-EMI;Oxford,Conductive Fabric,T8,W	4	SNA
.2		BN63-17776A	SHIELD-OC TOP;75QRQ900A,EGI-SECC,T0.8	1	SA
.2		BN63-17821A	INSULATOR-SMPS;75QRQ900A,PC,BLACK,L381.8	1	SA
.2		BN68-05458A	LABEL-BARCODE;ALL,ART,W45,L12,BLACK,WHIT	1	SNA
.2		BN68-07104D	LABEL-RATING;Monitor,WW,PP,T0.161,W90,L5	1	SNA
.2		BN68-08730A	LABEL-E PASS;QTV,WW,ART,T0.161,W60,L15,P	4	SNA
.2		BN69-18538B	BOX ACCESSORY;82QRQ90B,CB,SW-E,Non Stand	1	SNA
.2		BN69-18599A	PAD-EPE;75QNQ90A,EPE,W55,L395,H30,WHITE	1	SNA
.2		BN94-14476C	ASSY PCB OC;QRQ900Z	1	SA
..3		BN68-05458A	LABEL-BARCODE;ALL,ART,W45,L12,BLACK,WHIT	2	SNA
..3		BN97-15673C	ASSY SMD;QRQ900Z	1	SNA
...4	DS01A	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	1	SA
...4		0403-000489	DIODE-ZENER;MMSZ5228B,3.705~4.095V,500mW	4	SA
...4		0403-001783	DIODE-ZENER;BZB84-C6V2,5.8~6.6V,300mW,SO	4	SNA
...4		0403-001785	DIODE-ZENER;NZH5V1B,4.94~5.2V,500mW,SOD-	3	SA
...4		0406-001200	DIODE-TVS;RClamp0504F,6V,1MAV,TP	7	SA
...4		0406-001635	DIODE-TVS;SMF5.0A,6.4V,6.7V,7V,200MAV,20	19	SA
...4		0406-001778	DIODE-TVS;PUSB3FR4,6V,9V,0.2MAV,0.7VPA,0	7	SA
...4		0406-001820	DIODE-TVS;AZ1023-04F,4.5V,6V,7.5V,0.5MAV	2	SA
...4		0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	7	SA
...4		0501-000462	TR-SMALL SIGNAL;MMBT2907A,PNP,350mW,SOT-	5	SA
...4		0505-002598	FET-SILICON;AP2317GN,P,20V,-4.2A,0.052oh	2	SA
...4		0505-002893	FET-SILICON;AO4801AS,P,30V,-5A,2W,SOIC-8	1	SA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
...4		0505-003397	FET-SILICON;2N7002K,N,60V,0.38A,1.19ohm,	9	SA
...4		0601-003620	LED-IR;SMD Angle Type,1.4mm,200mW,5V,940	2	SA
...4		0903-002242	IC-MICROCONTROLLER;UEI1704,QFN,20P,4x4x0	1	SA
...4		0904-002882	IC-USC;GL852G-OHY38,QFN,28P,5x5mm,12MHz,	2	SA
...4		1006-001595	IC-DRIVER/RECEIVER;UT3221G-P16-R,TSSOP-1	1	SA
...4		1203-009193	IC-DC/DC CONVERTER;SYD113IADC,TSOT23-6,6	5	SA
...4		1203-009194	IC-DC/DC CONVERTER;SYD104IADC,TSOT23-6,6	3	SA
...4		1204-003778	IC-DECODER;SDP1805S,FCBGA,490P,21x21x1.5	1	SA
...4		1205-005519	IC-SWITCH;ET20163,SOT23-5,5P,2.95x3.02mm	3	SA
...4		1405-001232	VARISTOR;6.4V,5.6VDC,30A,1608,TP,19V,200	26	SNA
...4		1405-001381	VARISTOR;11V,8VDC,30A,1608,TP,25V,500pF	12	SA
...4		1405-001382	VARISTOR;24.5V,16VDC,120A,2012,TP,42V,40	4	SA
...4		1405-001452	VARISTOR;15V,12VDC,8A,1608,TP,46V,18pF	8	SA
...4		2007-000137	R-CHIP;2Kohm,5%,1/16W,TP,1005	12	SA
...4		2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005,T0.35	13	SA
...4		2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005,T0.35	13	SNA
...4		2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005,T0.35	18	SA
...4		2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005,T0.35	1	SNA
...4		2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005,T0.35	33	SNA
...4		2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005,T0.35	3	SA
...4		2007-000501	R-CHIP;2.2ohm,1%,1/10W,TP,1608	4	SA
...4		2007-000779	R-CHIP;33ohm,1%,1/10W,TP,1608	8	SNA
...4		2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005,T0.35	3	SA
...4		2007-001116	R-CHIP;680ohm,1%,1/10W,TP,1608	2	SA
...4		2007-007131	R-CHIP;13Kohm,1%,1/16W,TP,1005,T0.35	3	SA
...4		2007-007136	R-CHIP;4.7Kohm,1%,1/16W,TP,1005,T0.35	120	SA
...4		2007-007137	R-CHIP;1.2Kohm,1%,1/16W,TP,1005,T0.35	1	SA
...4		2007-007138	R-CHIP;27Kohm,1%,1/16W,TP,1005,T0.35	3	SA
...4		2007-007142	R-CHIP;10Kohm,1%,1/16W,TP,1005,T0.35	57	SA
...4		2007-007306	R-CHIP;100ohm,1%,1/16W,TP,1005,T0.35	30	SA
...4		2007-007309	R-CHIP;12Kohm,1%,1/16W,TP,1005,T0.35	8	SA
...4		2007-007311	R-CHIP;22Kohm,1%,1/16W,TP,1005,T0.35	18	SA
...4		2007-007312	R-CHIP;20Kohm,1%,1/16W,TP,1005,T0.35	15	SA
...4		2007-007313	R-CHIP;6.8Kohm,1%,1/16W,TP,1005,T0.35	16	SA
...4		2007-007316	R-CHIP;3.3Kohm,1%,1/16W,TP,1005,T0.35	6	SNA
...4		2007-007318	R-CHIP;1Kohm,1%,1/16W,TP,1005,T0.35	28	SNA
...4		2007-007517	R-CHIP;240ohm,1%,1/16W,TP,1005,T0.35	16	SNA
...4		2007-007528	R-CHIP;1.5Kohm,1%,1/16W,TP,1005,T0.35	2	SA
...4		2007-007588	R-CHIP;1.8Kohm,1%,1/16W,TP,1005,T0.3	5	SA
...4		2007-007766	R-CHIP;2Kohm,1%,1/16W,TP,1005,T0.35	29	SA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
...4		2007-008015	R-CHIP;75ohm,1%,1/16W,TP,1005,T0.35	3	SNA
...4		2007-008661	R-CHIP;2.1Kohm,1%,1/10W,TP,1608	1	SA
...4		2007-008779	R-CHIP;0ohm,1%,1/16W,TP,1005	7	SA
...4		2011-001344	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,2	3	SA
...4		2011-001519	R-NETWORK;33OHM,5%,1/16W,L,CHIP,4P,TP,1.	4	SA
...4		2011-001587	R-NETWORK;100ohm,5%,1/16W,L,CHIP,4P,TP,1	2	SA
...4		2011-001590	R-NETWORK;47Kohm,5%,1/16W,L,CHIP,4P,TP,1	4	SNA
...4	AD480	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005,T0.5	15	SNA
...4	AD480	2203-000254	C-CER,CHIP;10nF,10%,16V,X7R,TP,1005,T0.5	1	SA
...4	AD480	2203-000359	C-CER,CHIP;0.15nF,5%,50V,C0G,TP,1005,T0.	3	SA
...4	AD480	2203-000585	C-CER,CHIP;0.22nF,10%,50V,X7R,TP,1005	1	SA
...4	AD480	2203-000940	C-CER,CHIP;0.47nF,10%,50V,X7R,TP,1005,T0	11	SNA
...4	AD480	2203-001412	C-CER,CHIP;0.03nF,5%,50V,C0G,TP,1005	3	SNA
...4	AD480	2203-006126	C-CER,CHIP;47nF,10%,16V,X7R,TP,1005,T0.5	9	SNA
...4	AD480	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,TP,1005,T0.	626	SA
...4	AD480	2203-006307	C-CER,CHIP;1000nF,10%,25V,X5R,TP,2012	2	SNA
...4	AD480	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,TP,2012,	1	SA
...4	AD480	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005,T0	43	SA
...4	AD480	2203-007271	C-CER,CHIP;2200nF,10%,10V,X5R,TP,1005,T0	23	SNA
...4	AD480	2203-008315	C-CER,CHIP;22000nF,20%,25V,X5R,TP,2012,T	45	SA
...4		2703-000158	INDUCTOR-SMD;1uH,10%,0.4Ohm,50mA,45,Mult	2	SA
...4		2703-000213	INDUCTOR-SMD;470nH,10%,1.35Ohm,35mA,15,M	1	SA
...4		2703-002269	INDUCTOR-SMD;56nH,5%,1005,T0.5,1.4Ohm,15	3	SA
...4		2801-000102	CRYSTAL-SMD;12MHz,30ppm,12pF,100ohm,TP	3	SA
...4		3601-001376	FUSE-SURFACE MOUNT;32V,3A,FAST-ACTING,Hi	2	SA
...4		3701-001967	CONNECTOR-HDMI;19P,A,FEMALE,AU,0.5mm,BLK	3	SA
...4		3701-002024	CONNECTOR-HDMI;19P,A,FEMALE,AU,0.5mm,BLK	1	SNA
...4		3707-001123	CONNECTOR-OPTICAL;ANGLE,SPDIF,2.5PI	1	SA
...4		3710-004375	CONNECTOR-SOCKET;34P,2R,0.8mm,SMD-A,Au,B	1	SA
...4	EH01	3711-008492	HEADER-BOARD TO CABLE;BOX,26P,2R,2mm,ANG	1	SA
...4		3722-003199	JACK-MODULAR;8P/8C,Y,ANGLE,NONE,AU,1PORT	1	SA
...4		3722-003216	JACK-PHONE;1P/7C,AU,BLK,SMD-A,3.6PI,10.2	1	SA
...4		3722-003457	JACK-USB;4P/1C,NI,BLK,ANGLE,A,2.0,13.1x1	3	SA
...4		3722-003814	JACK-PHONE;1P/7C,NI/SN,YEL,ANGLE,3.5PI,1	1	SA
...4	JACK	3722-003873	JACK-PHONE;1P/7C,AU/SN,BLU,ANGLE,3.5PI,1	1	SA
...4		BN40-00330B	TUNER-DTV AIR CABLE;GTTH-7A11,DVB-TC,38.	1	SA
...4		BN41-02698A	PCB-OC;Q90, Q85_OC, Q80_OC,FR-4,4L,T1.2,	1	SNA
...4		BN97-15857A	ASSY MICOM;MMMICOM_OC_JP,Q90R,EN25QH16B,	1	SNA
....5		1107-002587	IC-NOR FLASH;EN25QH16B,16MBit,SOP,8P,2.7	1	SNA
.2		BN96-47701A	ASSY COVER P-OC TOP;75QRQ900A,PC,V-1,TP0	1	SA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
..3		BN02-00303A	TAPE-DOUBLE FACE;PET,T0.2,W8,CLEAR,DOUBL	0	SNA
..3		BN02-00358A	TAPE DOUBLE FACE;27SD590C,ACRYL,T1,W8,L1	1	SNA
..3		BN61-15817A	BRACKET-OC EMI;65Q9NQ9FA,STS,T0.3,NATURAL	1	SNA
..3		BN62-00859A	HEAT SINK-PS;75QRQ900A,A1050,T1.5,W166.1	1	SNA
..3		BN63-16151A	SHEET-PROTECTION COVER;40K6200,PO,T0.068	0	SNA
..3		BN63-17780A	COVER-OC TOP;75QRQ900A,PC,V-1,TP0116,W/W	1	SNA
...4		0103-011270	RESIN PC;NH3022PN3/3354M,Violet,TP0116,V	474	SNA
..3		BN63-17822A	INSULATOR-SMPS;75QRQ900A,PC,BLACK,L387.2	1	SNA
..3		BN63-17834A	SHEET-THERMAL;75QRQ900A,GRAPHITE,T1,W161	1	SNA
.2		BN96-47702N	ASSY COVER P-OC BOTTOM;75QRQ900Z,PC+ABS+	1	SA
..3	SCREW	6003-000282	SCREW-TAPTYPE;BH,+,-,B,M3,L8,ZPC(BLK),SW	1	SA
..3		BN62-00302A	PAD GAP-THERMAL;SILICON,T8,L40,H40,GRAY,	1	SNA
..3		BN62-00884A	PAD GAP-THERMAL;QN65Q90RAFXZA,SI,T8,L40,	1	SNA
..3		BN63-17244A	SHEET-PROTECTION COVER;55LS003,PO,T0.06,	0	SNA
..3		BN63-17520A	SHIELD-OC BOTTOM;65Q9NQ9FA,EGI-SECC,T0.5,	1	SNA
..3		BN63-17718A	SHIELD-OC TOP FRONT;65Q9NQ9FA,EGI-SECC,T0	1	SNA
..3		BN63-17781C	COVER-OC BOTTOM;75QRQ900A,PC+ABS+GF15%,V	1	SNA
...4		0103-010275	RESIN PC ABS;235GNH15/6919H,Black,BK0007	268	SNA
..3	RF01	BN67-00327J	FOOT-RUBBER;PE400,RUBBER,GRAY,T2.5,,	4	SNA
1	M0017	BN91-21394A	ASSY CHASSIS;75Q900RB-XV,BN91-21304A	1	SNA
.2	M0014	BN94-14725A	ASSY PCB MAIN;75Q900RB-XV,BN94-14164C	1	SA
..3	M0909	AA63-01387A	GASKET-EMI;EMI Shielding,Conductive Tape	1	SNA
..3		BN62-00574A	HEAT SINK-ES;F7000,A6063,W28,L14,BLACK,t	1	SNA
..3		BN62-00867A	HEAT SINK-PS;Q900R,A1050,W120,L70,BLACK,	1	SNA
..3		BN62-00878A	HEAT SINK-HEAT PIPE MODULE;Q900RB,Cu,W11	1	SNA
..3		BN62-00880A	HEAT SINK-PS;Q900RB,A1050,W160,L170,BLAC	1	SNA
..3		BN63-10803A	GASKET-EMI;PS43F4900,FABRIC,T4,W10,L36,G	1	SNA
..3		BN97-15609E	ASSY SMD;QRQ900Z	1	SNA
...4		0202-001830	SOLDER-CREAM;LFM-48W TM-HP,D20~38um,96.5	8	SNA
...4		0403-001779	DIODE-ZENER;MMSZ5234BT1G,5.89~6.51V,500m	1	SA
...4		0403-001797	DIODE-ZENER;NZH3V0B,2.85~3.15V,500mW,SOD	1	SNA
...4		0403-001900	DIODE-ZENER;SMFZ6.2V,6.5~7V,1000mW,SOD-1	2	SA
...4		0403-002014	DIODE-ZENER;KDZ16B,16.2~18.3V,1000mW,SOD	1	SNA
...4		0404-001404	DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23,	1	SA
...4		0404-001640	DIODE-SCHOTTKY;SS1060HEWS,60V,1000mA,SOD	1	SA
...4		0404-001881	DIODE-SCHOTTKY;SS3040-HE,40V,3000mA,SOD-	2	SA
...4		0404-001953	DIODE-SCHOTTKY;MBRA340F-HAF,40V,3000mA,S	6	SA
...4		0404-001976	DIODE-SCHOTTKY;SV540,40V,5000mA,TO-277,T	4	SA
...4		0406-001438	DIODE-TVS;SMCJ14A,15.6V,17.2V,1MAV,6.5VP	2	SA
...4		0406-001718	DIODE-TVS;SMF36A,40V,44.2V,3.8MAV,1.25VP	1	SA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
...4		0406-001786	DIODE-TVS;PJEC5V0V6TM,5V,7V,8V,0.1MAV,9V	1	SA
...4		0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	SA
...4		0504-000126	TR-DIGITAL;KSR1101,NPN,200mW,4.7K/4.7K,S	1	SA
...4		0505-002660	FET-SILICON;Si2308BDS,N,60V,2.3A,0.156oh	1	SA
...4		0505-003205	FET-SILICON;DMG4435SSS-13,P,30V,-7.3A,1.	2	SA
...4		0505-003620	FET-SILICON;AOD4286,N,100V,14A,55.5mohm,	2	SA
...4		0505-003752	FET-SILICON;PJL9409,P,30V,50A,0.035ohm,3	4	SNA
...4		0801-002780	IC-CMOS LOGIC;74LVC1G17,SCHMITT-TRIGGER	1	SNA
...4		0801-003580	IC-CMOS LOGIC;TC7WB66CFK,SSOP,8P,2.0X2.3	3	SA
...4		1003-002949	IC-LEVEL DRIVER;VLS2SM,QFN,40P,6x6x0.9mm	1	SA
...4		1103-001564	IC-EEPROM;S-24C512CI-J800,512Kbit,64Kx8,	1	SA
...4		1105-002926	IC-DDR4 SDRAM;H9HCNNN4KUMLHR,LPDDR4-SDRA	5	SA
...4		1105-002989	IC-DDR4 SDRAM;MT53E384M32D2DS-053 WT:E,L	1	SA
...4		1105-002992	IC-DDR4 SDRAM;MT53E256M32D2DS-053 WT:B,L	1	SA
...4		1201-004170	IC-AUDIO AMP;TAS880021A,TSSOP,48P,12.5x6	3	SA
...4		1203-006288	IC-VOL. DETECTOR;RT9818B-18GV,SOT-23-3,3	3	SA
...4		1203-008139	IC-DC/DC CONVERTER;TPS56C20PWPR,HTSSOP,2	2	SA
...4		1203-008777	IC-DC/DC CONVERTER;TPS563201,SOT-23,6,1.	5	SA
...4		1203-009057	IC-POS1.ADJUST REG.;G943F11U,SOP-8,8P,4.	1	SA
...4		1203-009063	IC-DC/DC CONVERTER;VPM2SM,QFN,56P,7x7x0.	2	SA
...4		1203-009067	IC-DC/DC CONVERTER;TPS564201,SOT-23,6P,3	2	SA
...4		1203-009069	IC-DC/DC CONVERTER;TPS566250,SOP,8P,6.2x	1	SA
...4		1203-009164	IC-DC/DC CONVERTER;CSD95378BQ5M,SON,13P,	2	SA
...4		1203-009166	IC-PWM CONTROLLER;TPS40428RHAR,VQFN,40P,	1	SA
...4		1203-009186	IC-POS1.ADJUST REG.;TLV759P01PDRVR,TP,6P	4	SA
...4		1203-009188	IC-VOL. DETECTOR;G623F11U,TP,8P,4.9x6x1.	2	SA
...4		1203-009197	IC-DC/DC CONVERTER;RT6203E,SOP-8,8P,5x4x	1	SA
...4		1203-009198	IC-DC/DC CONVERTER;TPS549A20,VQFN-CLIP,2	1	SA
...4		1204-003766	IC-DECODER;SDP1801,FCBGA,935P,31x31x2.19	1	SA
...4		1204-003770	IC-DECODER;SDP1802,FCBGA,672P,27x27x2.4m	2	SA
...4		1204-003775	IC-DECODER;SDP1803,FCBGA,929P,31x31x2.19	1	SA
...4		1205-005749	IC-SWITCH;G2897KD1U,TDFN2X3-14,14P,2x3mm	2	SA
...4	IS01	1209-002183	IC-SENSOR;S-5851AAA-M6T1U,SOT,6Z30,2.9x1	1	SA
...4		1404-001731	THERMISTOR-NTC;33Kohm,4050K,1MWC,TP,1.6x	1	SNA
...4		1405-001185	VARISTOR;500V,24VDC,1608,TP,150V,0.055pF	2	SA
...4		1405-001271	VARISTOR;35V,20VDC,5A,1005,TP,100V,10pF	22	SA
...4		2007-000052	R-CHIP;10Kohm,1%,1/10W,TP,1608	2	SA
...4		2007-000066	R-CHIP;20Kohm,1%,1/10W,TP,1608	1	SA
...4		2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608,T0.45	34	SA
...4		2007-000154	R-CHIP;24Kohm,5%,1/16W,TP,1005	4	SA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
...4		2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005,T0.35	8	SA
...4		2007-000772	R-CHIP;33Kohm,1%,1/10W,TP,1608	2	SA
...4		2007-000979	R-CHIP;5.6Kohm,1%,1/10W,TP,1608	1	SA
...4		2007-001125	R-CHIP;68Kohm,1%,1/10W,TP,1608	6	SA
...4		2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005,T0.35	10	SA
...4		2007-001298	R-CHIP;51ohm,5%,1/16W,TP,1005,T0.35	11	SA
...4		2007-002437	R-CHIP;2ohm,5%,1/10W,TP,1608	4	SNA
...4		2007-002899	R-CHIP;10ohm,1%,1/10W,TP,1608	33	SA
...4		2007-002906	R-CHIP;200Kohm,1%,1/10W,TP,1608	1	SA
...4		2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005,T0.35,-	38	SA
...4		2007-007132	R-CHIP;15Kohm,1%,1/16W,TP,1005,T0.35	1	SA
...4		2007-007134	R-CHIP;39Kohm,1%,1/16W,TP,1005,T0.35	1	SA
...4		2007-007139	R-CHIP;47Kohm,1%,1/16W,TP,1005,T0.35	1	SA
...4		2007-007156	R-CHIP;1ohm,5%,1/16W,TP,1005,T0.35	2	SA
...4		2007-007310	R-CHIP;8.2Kohm,1%,1/16W,TP,1005,T0.35	30	SA
...4		2007-007314	R-CHIP;5.6Kohm,1%,1/16W,TP,1005,T0.35	1	SA
...4		2007-007319	R-CHIP;390ohm,1%,1/16W,TP,1005	1	SNA
...4		2007-007489	R-CHIP;150Kohm,1%,1/16W,TP,1005,T0.35	1	SNA
...4		2007-007520	R-CHIP;20ohm,1%,1/10W,TP,1608	12	SA
...4		2007-007538	R-CHIP;56Kohm,1%,1/16W,TP,1005,T0.35	3	SNA
...4		2007-007671	R-CHIP;11Kohm,1%,1/16W,TP,1005,T0.35	2	SA
...4		2007-007733	R-CHIP;51ohm,1%,1/10W,TP,1608	2	SA
...4		2007-007736	R-CHIP;510Kohm,1%,1/10W,TP,1608	5	SA
...4		2007-007767	R-CHIP;200ohm,1%,1/16W,TP,1005	5	SA
...4		2007-007798	R-CHIP;10ohm,1%,1/16W,TP,1005,T0.35	26	SA
...4		2007-007992	R-CHIP;1ohm,1%,1/10W,TP,1608	2	SA
...4		2007-008067	R-CHIP;21Kohm,1%,1/10W,TP,1608	1	SA
...4		2007-008117	R-CHIP;2.7Kohm,1%,1/16W,TP,1005,T0.35	2	SA
...4		2007-008134	R-CHIP;12.4Kohm,1%,1/16W,TP,1005	1	SC
...4		2007-008137	R-CHIP;24Kohm,1%,1/16W,TP,1005,T0.35	1	SNA
...4		2007-008263	R-CHIP;3Kohm,1%,1/16W,TP,1005,T0.35	1	SNA
...4		2007-008275	R-CHIP;30Kohm,1%,1/16W,TP,1005,T0.35	1	SNA
...4		2007-008294	R-CHIP;33ohm,1%,1/16W,TP,1005,T0.35	5	SA
...4		2007-008298	R-CHIP;49.9ohm,1%,1/16W,TP,1005,T0.35	9	SA
...4		2007-008596	R-CHIP;0.1ohm,1%,1/4W,TP,3216	5	SC
...4		2007-009322	R-CHIP;1.3Kohm,1%,1/16W,TP,1005	2	SA
...4		2011-001264	R-NETWORK;10ohm,5%,1/16W,L,CHIP,8P,TP,2.	48	SNA
...4		2011-001589	R-NETWORK;0ohm,5%,1/16W,L,CHIP,4P,TP,1.0	4	SNA
...4	AD480	2203-000278	C-CER,CHIP;0.01nF,0.5pF,50V,C0G,TP,1005	3	SA
...4	AD480	2203-000425	C-CER,CHIP;0.018nF,5%,50V,C0G,TP,1005	13	SA

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...4	AD480	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,TP,1005	5	SA
...4	AD480	2203-000440	C-CER,CHIP;1nF,10%,50V,X7R,TP,1608,T0.8	2	SNA
...4	AD480	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,TP,1005	4	SA
...4	AD480	2203-000530	C-CER,CHIP;2.7nF,10%,50V,X7R,TP,1005,-	1	SA
...4	AD480	2203-000627	C-CER,CHIP;0.022nF,5%,50V,C0G,TP,1005	8	SA
...4	AD480	2203-000715	C-CER,CHIP;3.3nF,10%,50V,X7R,TP,1608	2	SA
...4	AD480	2203-000812	C-CER,CHIP;0.033nF,5%,50V,C0G,TP,1005	1	SA
...4	AD480	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,TP,1005	21	SNA
...4	AD480	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	1	SA
...4	AD480	2203-002711	C-CER,CHIP;100nF,10%,25V,X7R,TP,1608	5	SA
...4	AD480	2203-005057	C-CER,CHIP;0.0082nF,0.25pF,50V,C0G,TP,10	2	SA
...4	AD480	2203-005083	C-CER,CHIP;220nF,10%,50V,X7R,TP,1608,T0.	12	SNA
...4	AD480	2203-005138	C-CER,CHIP;1.8nF,10%,50V,X7R,TP,1005	1	SA
...4	AD480	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,TP,1005,T0.	84	SNA
...4	AD480	2203-006260	C-CER,CHIP;220nF,10%,10V,X5R,TP,1005	3	SNA
...4	AD480	2203-006361	C-CER,CHIP;1000nF,10%,10V,X5R,TP,2012	2	SC
...4	AD480	2203-006391	C-CER,CHIP;1000nF,10%,10V,X7R,TP,1608	1	SNA
...4	AD480	2203-006698	C-CER,CHIP;1000nF,10%,25V,X7R,TP,1608,T0	11	SA
...4	AD480	2203-006838	C-CER,CHIP;2200nF,10%,6.3V,X5R,TP,1005	3	SA
...4	AD480	2203-006841	C-CER,CHIP;1000nF,10%,16V,X5R,TP,1005,T0	27	SNA
...4	AD480	2203-006844	C-CER,CHIP;470nF,10%,10V,X5R,TP,1005	4	SA
...4	AD480	2203-006890	C-CER,CHIP;10000nF,20%,6.3V,X5R,TP,1608	15	SNA
...4	AD480	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012,T	24	SNA
...4	AD480	2203-007230	C-CER,CHIP;47000nF,20%,6.3V,X5R,TP,2012,	12	SA
...4	AD480	2203-007240	C-CER,CHIP;22000nF,20%,6.3V,X5R,TP,1608,	145	SA
...4	AD480	2203-007269	C-CER,CHIP;22000nF,20%,10V,X5R,TP,2012(2	27	SA
...4	AD480	2203-007306	C-CER,CHIP;10000nF,10%,25V,X5R,TP,2012,T	66	SNA
...4	AD480	2203-007393	C-CER,CHIP;4700nF,10%,10V,X5R,TP,1005,T0	32	SNA
...4	AD480	2203-007423	C-CER,CHIP;10000nF,10%,35V,X7R,TP,3216	4	SA
...4	AD480	2203-007544	C-CER,CHIP;100nF,10%,50V,X7R,TP,1005,T0.	68	SA
...4	AD480	2203-007795	C-CER,CHIP;10000nF,20%,10V,X5R,TP,1005,T	146	SA
...4	AD480	2203-008096	C-CER,CHIP;2200nF,10%,50V,X5R,TP,2012,1.	2	SA
...4	AD480	2203-008412	C-CER,CHIP;4700nF,10%,50V,X5R,TP,2012,T1	4	SNA
...4		2409-001213	C-ORGANIC,SMD;150uF,20%,6.3V,-,TP,3.5x2.	7	SNA
...4		2409-001240	C-ORGANIC,SMD;33uF,20%,25V,LR,TP,7343(1.	2	SA
...4		2703-003488	INDUCTOR-SMD;10uH,20%,6965,0.071Ohm,3500	2	SA
...4		2703-003637	INDUCTOR-SMD;22uH,20%,7070,0.18ohm,2000m	1	SA
...4		2703-003713	INDUCTOR-SMD;1.5uH,20%,7366,T3,0.015Ohm,	4	SA
...4		2703-003747	INDUCTOR-SMD;22uH,20%,6060,0.135ohm,1300	1	SA
...4		2703-003862	INDUCTOR-SMD;10uH,20%,6060,0.065ohm,1900	5	SA

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...4		2703-003937	INDUCTOR-SMD;1uH,20%,70647,T3,0.008Ohm,9	4	SA
...4		2703-004226	INDUCTOR-SMD;8.2uH,20%,10.7x10mm,T3.8,0.	2	SA
...4		2703-004724	INDUCTOR-SMD;8.2uH,20%,5050,T4,0.072Ohm,	12	SA
...4		2703-005191	INDUCTOR-SMD;1.5uH,20%,6060,T4.5,0.02Ohm	7	SA
...4		2703-005193	INDUCTOR-SMD;2.2uH,20%,6060,T4.5,0.024Oh	4	SA
...4		2703-005194	INDUCTOR-SMD;3.3uH,20%,6060,T4.5,0.03Ohm	2	SA
...4		2703-005700	INDUCTOR-SMD;470nH,20%,11x10mm,T3.8,0.00	2	SA
...4		2703-005715	INDUCTOR-SMD;820nH,20%,11x10mm,T3.8,0.00	1	SNA
...4		2801-004938	CRYSTAL-SMD;24MHz,20ppm,SMD,12pF,60Ohm,T	3	SA
...4		2801-005372	CRYSTAL-SMD;24.576MHz,20ppm,HCX-3SB,12 p	2	SA
...4		3301-001364	BEAD-SMD;1000ohm,1608,TP,1085ohm/108MHz,	6	SNA
...4		3301-001901	BEAD-SMD;220ohm,1608,TP,220ohm/100MHz	31	SA
...4		3301-002039	BEAD-SMD;26ohm,1608,TP	116	SA
...4		3601-001374	FUSE-SURFACE MOUNT;32V,5A,FAST-ACTING,PL	13	SA
...4		3708-003062	CONNECTOR-FPC/FFC/PIC;24P,0.5mm,SMD-A,AU	1	SA
...4		3708-003176	CONNECTOR-FPC/FFC/PIC;68P,0.5mm,SMD-A,AU	2	SA
...4		3708-003241	CONNECTOR-FPC/FFC/PIC;96P,0.5mm,SMD-A,AU	4	SNA
...4		3710-004374	CONNECTOR-SOCKET;34P,1R,0.8mm,SMD-A,Au,B	1	SA
...4	EH01	3711-007838	HEADER-BOARD TO CABLE;BOX,6P,1R,1.25mm,S	1	SA
...4		3711-007975	CONNECTOR-HEADER;BOX,10P,1R,1.25mm,SMD-A	2	SA
...4	EH01	3711-008453	HEADER-BOARD TO CABLE;BOX,18P,2R,2mm,ANG	1	SA
...4	EH01	3711-008488	HEADER-BOARD TO CABLE;BOX,14P,2R,2mm,ANG	1	SA
...4	EH01	3711-008739	HEADER-BOARD TO CABLE;BOX,30P,2R,2mm,ANG	1	SA
...4		6302-001232	GASKET-EMI;SMT Gasket,Sn/Cu plated PI-Fi	27	SNA
...4		BN41-02705A	PCB-MAIN;Q900, 8K,FR-4,10L,T1.6,330x245m	1	SNA
...4	CB07	BN61-13312B	BRACKET-SCREWLESS PCB;55KS8000,SK5,T0.3,	4	SNA
...4		BN97-15851A	ASSY MICOM;TCON DATA,75A1QE9TR,75inch SD	1	SNA
....5		1107-002566	IC-NOR FLASH;W25Q32JVSSIQ,32Mbit,16384x2	2	SNA
...4		BN97-15856A	ASSY MICOM;MMMICOM_OCTV,Q900, 8K,W25Q40C	1	SNA
....5		1107-002226	IC-NOR FLASH;W25Q40CLSSIP,4Mbit,SOIC,8P,	1	SA
...4		BN97-15904A	ASSY MICOM;T-MSMUABC,ASSY MICOM_MAIN,QRQ	1	SNA
....5		1107-002590	IC-EMMC;KLM8G1GETF-B041007,8Gbyte,64Gbx1	1	SNA
..3		BN97-15725A	ASSY DRM;Muse-M built_in,ISDB,NagSam, MA	1	SNA
...4		BN46-00109H	KEY CODE-CERTIFICATION;MAC,TV/AV,General	1	SNA
...4		BN46-00110P	KEY CODE-CERTIFICATION;MIRACAST(HDCP2.2)	1	SNA
...4		BN46-00962A	KEY CODE;Muse-M built_in,Nagra CSC Data,	1	SNA
1		BN92-25279C	ASSY BOX;QRQ900Z	1	SNA
.2		BN68-07893A	LABEL BOX;ALL,THERMAL PAPER,W60,L110,WHT	1	SNA
.2		BN68-07943A	LABEL BOX;ALL,XXV,ART,W100,L150,150g	1	SNA
.2		BN69-18572A	BOX UNIT-IN;75QN90A,CB,DW1,C1,L2282,W562	1	SNA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
.2		BN69-18573M	BOX UNIT-OUT;75QRQ900Z,CB,DW4,F3,L1849,W	1	SNA
1	ACCE1	BN92-25313J	ASSY ACCESSORY;QRQ900Z	1	SNA
.2		BN39-02436B	ONECONNECT CABLE;QN65Q900RCFXZA,31P/31P,	1	SA
.2		BN96-48873C	ASSY ACCESSORY MANUAL CABLE;QRQ900Z	1	SNA
..3	T0268	3903-001110	POWER CORD-DT;EUR,3P-F,250V,10A,BLK,L150	1	SA
..3		4301-000103	BATTERY-ALKALINE;1.5V,750mAH,LR03,10.2x4	2	SNA
..3	ANT04	AA59-00853A	MODULE RF-SHIELD BOX;SGLBF-6B,PAL-BG,DK,	1	SA
..3	EC03	BN39-02189A	GENDER CABLE;DC to RCA Cable,3P,L100,UL2	1	SA
..3	EC03	BN39-02190A	GENDER CABLE;DC to RCA Cable,2P,L100,UL2	1	SA
..3		BN59-01311F	REMOCON-SMART CONTROL;2019 TV,SAMSUNG,21	1	SA
..3	T0527	BN68-00513A	LABEL-E PASS;ALL MODEL,WW,YUPO,W50,L15,W	1	SNA
..3		BN68-08112A	LABEL-SECURITY;ALL,PET,T0.05,W55,L52,GLO	1	SNA
..3		BN68-09545B	LEAFLET-ACCESSORY KIT;QRQ90B,XY & MR & HC & RQ	1	SNA
..3		BN68-09564D	MANUAL USERS;Q900,XV,VIETNAM,MOJO,0,1 CO	1	SNA
..3		BN69-13935A	BAG ACCESSORY;LDPE,T0.07,W700,L350,TRP,R	1	SNA
..3	EH03A	BN96-46480A	ASSY HOLDER P-RING;65QNQ9FA,ABS,BLACK,HB	1	SA
...4		6902-001404	BAG PE;LDPE,T0.05,W80,L100,TRP,Bio. N	1	SNA
...4		BN61-15782A	HOLDER-WALL RING;55QNQ9FA,ABS,T2,BK0007,	4	SNA
..3		BN96-49300A	ASSY ACCESSORY-SCREW;65QRQ60T,ALL,W/W,60	1	SNA
...4	SCREW	6003-001906	SCREW-TAPTYPE;BH,+,S,M4,L12,ZPC(BLK),SWR	4	SA
...4		6902-003075	BAG SCREW;LDPE,T0.05,W70,L90,TRP,RECYCLE	1	SNA
..3		BN96-49362A	ASSY HOLDER P-OC CABLE;65QRQ900Z,PC,TP00	1	SA
...4	SCREW	6003-001208	SCREW-TAPTYPE;BH,+,S,M4,L12,ZPC(BLK),SWR	1	SA
...4		6902-000683	BAG PE;LDPE,T0.05,W60,L60,TRP,Bio. N,Zip	1	SNA
...4	AH089	BN61-14021A	HOLDER-CABLE;55KS8000,PA66,BK0007,V-2	1	SA
...4		BN61-15791A	HOLDER-OC CABLE;65QNQ8CB,PC,TP0003,V-2	1	SNA
1		BN92-26152B	ASSY P/MATERIAL;QRQ900Z	1	SNA
.2		6902-000379	BAG AIR;LDPE,T0.13,W1000,L1800,TRP,Hole	0	SNA
.2		6902-000609	BAG ROLL;LDPE,T0.05,W2400,L1000,TRP,RECY	410	SNA
.2		6902-001584	BAG PE;HDPE/PE FOAM,T0.015/T0.5,W2000,L1	1	SNA
.2		6922-000013	BAND;PP,T0.8,W18,L2300 M,TRP	7	SNA
.2		BN02-00319B	TAPE-SINGLE FACE;OPP,T0.05,W75,L800M,CLE	2	SNA
.2		BN69-11504A	WRAP VINYL;LDPE,T0.018,W500,L10000,Trans	13	SNA
.2		BN69-17053Q	PACKING ANGLE;ALL,PAPER,T3,W1800,L50,YEL	1	SNA
.2		BN69-18437A	CUSHION-SET;75QRQ900A,EPS,16.7g/l,WHITE	1	SNA
..3		BN81-01918A	A/S-RESIN;EPS,SG-302	2	SNA
.2		BN69-18441A	CUSHION-SET SIDE;75QRQ900A,EPS,16.7g/l,W	1	SNA
.2		BN96-42554A	ASSY PACKING P-PAD;75Q7F,CB+EPS,Y17 75in	1	SNA
..3		BN69-15257A	CUSHION-SET FRONT;75Q7F,EPS,33.3g/l,WHIT	3	SNA
...4		BN81-01918A	A/S-RESIN;EPS,SG-302	1	SNA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
..3		BN69-15753A	PAD-SHEET;75Q7F,CB,W912,L1397,WHITE,Y17	1	SNA
.2		BN96-45139C	ASSY PACKING P-PAD;75Q7F,PP/EPE,WITH WAR	2	SNA
..3		BN68-08908A	LABEL WARNING;ALL MODEL,ART,W70,L100,90g	2	SNA
..3		BN69-16841C	PAD-EPE;75Q7F,EPE,T1.2/T3,W100,L940,MIXE	2	SNA
1		BN92-26154B	ASSY LABEL POP;QRQ900Z	1	SNA
.2		BN68-09631Y	LABEL POP-BEZEL;75Q900R,PET,T0.188,W133,	1	SNA
1		BN92-26171A	ASSY LABEL;QRQ900Z	1	SNA
.2		BN02-00102B	TAPE-SINGLE FACE;OPP,T0.15,W25,L50M,WHIT	3	SNA
.2		BN68-08409B	LABEL-RATING;QTV,WW,PP,T0.161,W150,L48,T	1	SNA
.2		BN68-09518C	LABEL-ENERGY;QA75Q900RBKXXV,VIET NAM,PET	1	SNA
.2		BN68-09569A	LEAFLET-QUICK SETUP GUIDE;Q900R,OTHERS,W	1	SNA
1		BN95-05616C	PRODUCT LCD-SDC;CY-TR075JLLV2V/H,Q900RB,	1	SA
.2		6001-002343	SCREW-MACHINE;CH,+,M3,L12,ZPC(BLK),SWRCH	12	SA
.2		BN02-00105G	TAPE SINGLE FACE;CJ89,PET,T0.1,W50,L210,	2	SNA
.2		BN02-00105H	TAPE SINGLE FACE;65QRQ900A,PET,T0.05,W70	10	SNA
.2		BN44-00994A	DC VSS-DRIVER BOARD;L75S9SNRA_RHS,DC/DC,	1	SA
..3		BN97-00031L	ASSY MICOM-LD_FW;Y19_Q900R_8k,19Y_Q900	2	SNA
.2		BN44-00994B	DC VSS-DRIVER BOARD;L75S9SNRB_RHS,DC/DC,	1	SA
.2	M0131	BN63-00520A	GASKET-EMI;APPOLO_PAL,Conductive Fabric,	2	SNA
.2		BN68-05722A	LABEL-E PASS;POLYPROPYLENE,NON-COATING	1	SNA
.2		BN74-00053E	TAPE-SINGLE FACE;PAPER,3M2307,T0.14,W20,	0	SNA
.2		BN90-10431B	ASSY BACK LIGHT UNIT;QRQ900RB , 75	1	SNA
..3		BN61-15667A	DIFFUSER PLATE;18Y_Q9F_75INCH_DIFFUSERPL	1	SNA
..3		BN61-15668A	OPTICAL SHEET-HIGH COLOR;18Y_Q9F_75INCH_	1	SNA
..3		BN61-16195A	OPTICAL SHEET-COMPLEX;19Y_75inch_Q90_com	1	SNA
..3		BN61-16199A	OPTICAL SHEET-COMPLEX;19Y_75inch_Q70_COM	1	SNA
..3		BN96-47336A	ASSY FRAME P-MIDDLE BOTTOM;75Q900A,PC+G	1	SNA
...4		BN60-01606A	SPACER-FOAM;65UNU8000F,PU FOAM,L50M,BLAC	2	SNA
...4		BN61-15923A	FRAME-MIDDLE BOTTOM;75QRQ900A,PC+GF10%,V	1	SNA
....5		0103-007368	RESIN PC;LS-3104G,K2495,BK0048,3.0mm V-2	60	SNA
..3		BN96-49526A	ASSY CHASSIS REAR P;Assy chassis rear, 7	1	SNA
...4		6001-003336	SCREW-MACHINE;CH,+,M3,L4,ZPC(WHT),SWRCH1	69	SA
...4		BN63-17896B	INSULATOR-LED PCB;19Y_75Q900_L,PET,WHITE	1	SNA
...4		BN63-17897B	INSULATOR-LED PCB;19Y_75Q900_R,PET,WHITE	1	SNA
...4		BN96-47341A	ASSY FRAME P-CHASSIS REAR TOP;75Q900A,P	1	SNA
....5		BN60-01459A	SPACER-SILICONE;55PMF,Si,L10,WHITE,T1.8,	2	SNA
....5		BN61-15932A	FRAME-CHASSIS REAR TOP;75QRQ900A,PC+GF10	1	SNA
.....6		0103-011284	RESIN PC;LS-3104G/FW9931,White,WT0134,V-	473	SNA
...4		BN96-47345B	ASSY CHASSIS REAR P;75QRQ900A,EGI-SECC,S	1	SNA
....5	SCREW	6001-003016	SCREW-MACHINE;PWH,+,M3,L5.0,ZPC(WHT),SWR	16	SA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
....5	SCREW	6003-001788	SCREW-TAPTYPE;BH,+,S,M4,L8,NI PLT,SWRCH1	4	SNA
....5		BN02-00102B	TAPE-SINGLE FACE;OPP,T0.15,W25,L50M,WHIT	7	SNA
....5		BN02-00105H	TAPE SINGLE FACE;65QRQ900A,PET,T0.05,W70	2	SNA
....5		BN02-00352B	TAPE-SINGLE FACE;PET,T0.05,W30,L50M,BLAC	0	SNA
....5		BN60-00162C	SPACER-FOAM;PE FOAM,L50M,GRAY,T0.5,W15	0	SNA
....5	CB20	BN61-11982C	BRACKET-WALL;65QNQ7FC,CR-SPCC,BLACK,M8,L	4	SNA
....5		BN61-13557P	BRACKET-WIRE;75QNQ8CB,SW-C,T1,SILVER,L66	6	SNA
....5		BN61-13557T	BRACKET-WIRE;65UNU7100X,SW-C,T1,SILVER,L	1	SNA
....5		BN61-13557U	BRACKET-WIRE;65UNU7100X,SW-C,T1,SILVER,L	2	SNA
....5		BN61-13557X	BRACKET-WIRE;65UNU7100X,SW-C,T1,SILVER,L	2	SNA
....5	CB18	BN61-15914A	BRACKET-STAND LINK;75QRQ900A,EGI-SECC,T1	4	SNA
....6		BN61-15975A	STUD-PEM;65NU7100,SUM24L,T0.5,L8,HEAD 7m	8	SNA
....5	CB18	BN61-15919A	BRACKET-STAND LINK;75QRQ900A,HGI,T2.5,NA	1	SNA
....6		BN61-14854A	STUD-PEM;Q7F,SUM24L,T0.8,L8,M6,D8,A type	5	SNA
....5		BN63-17858A	INSULATOR-SOURCE PCB;75QRQ900A,PET,BLACK	1	SNA
....5		BN63-18143A	INSULATOR-SHEET;75QRQ900A,PET,BLACK,L100	0	SNA
....5		BN63-18246A	INSULATOR-SMPS;75QRQ900Z,PC,BLACK,L406,W	2	SNA
....5		BN63-18290A	SHEET-THERMAL;75QRQ900Z,GRAPHITE,T0.7,W4	1	SNA
....5	CC04	BN64-04102B	CHASSIS-REAR;75QRQ900A,EGI-SECC,-,T1,NAT	1	SNA
....6		BN01-00596A	STEEL;75Q9S,EGI-SECC,L1720,1mm,1005mm,AG	1	SNA
....5	T0527	BN68-00513A	LABEL-E PASS;ALL MODEL,WW,YUPO,W50,L15,W	1	SNA
....5		BN96-47848A	FFC CABLE;Q9S 75,Fold,L460,68P,#2	2	SNA
....5		BN96-47849A	FFC CABLE;Q9S 75,Fold,L770,68P,#3	2	SNA
....5		BN96-47850A	FFC CABLE;Q9S 75,Fold,L1320,68P,#1	2	SNA
....5		BN96-47851A	FFC CABLE;Q9S 75,Fold,L1050,68P,#4	2	SNA
....5		BN96-47852A	FFC CABLE;Q9S 75,Fold,L300,68P,#5	2	SNA
...4		BN96-48096A	ASSY FRAME P-CHASSIS REAR BOTTOM;75QRQ90	1	SNA
....5		BN61-15931A	FRAME-CHASSIS REAR BOTTOM;75QRQ900A,PC+G	1	SNA
...4		BN96-48098A	ASSY FRAME P-CHASSIS REAR LEFT RIGHT;75Q	2	SNA
....5		BN61-15933A	FRAME-CHASSIS REAR LEFT RIGHT;75QRQ900A,	2	SNA
....5		BN96-47726A	ASSY MISC P-REFLECTOR;Q9F_Piece reflecto	8	SNA
...4		BN96-48404A	ASSY LED BAR P;Y19 Q900 75INCH,CEM3,Y19	10	SNA
.2		BN96-47321A	ASSY CHASSIS FRONT P;75QNQ90A,AI,8K	1	SNA
..3		6001-002912	SCREW-MACHINE;CH,+,M3,L3,ZPC(BLK),SWRCH1	2	SA
..3		BN02-00074E	TAPE SINGLE FACE;U7201,PET,T0.05,W10,L20	4	SNA
..3		BN02-00486A	TAPE-DOUBLE FACE;PU FOAM,T0.5,W3.2,L33M,	4	SA
..3		BN02-00489A	TAPE SINGLE FACE;55KS7500,PET,T0.22,W3,L	3	SNA
..3		BN63-17419E	SHEET-PROTECTION COVER;UNU8000F,PO,T0.04	4	SNA
..3	AC155	BN64-04105A	CHASSIS-FRONT;75QRQ900A,AI,-,NATURAL,S	1	SNA
..3		BN64-04110A	CHASSIS-FRONT BOTTOM;75QRQ900A,PC+GF10%,	1	SNA

Level	Loc.	Part Code	Description & Specification	Qty.	SA/SNA
..4		0103-007368	RESIN PC;LS-3104G,K2495,BK0048,3.0mm V-2	72	SNA
.2		BN96-47328A	ASSY COVER P-DECORATION;75Q90A,STS430J	1	SNA
..3		BN60-01606A	SPACER-FOAM;65UNU8000F,PU FOAM,L50M,BLAC	2	SNA
..3		BN63-17419D	SHEET-PROTECTION COVER;65Q90A,PO,T0.04	3	SNA
..3	FD01	BN63-17807A	COVER-DECORATION;75Q90A,STS430J1L,T0.	1	SNA
.2		BN96-47329A	ASSY COVER P-SOURCE PCB LEFT;75Q90A,EG	1	SNA
..3		BN63-17812A	COVER-SOURCE PCB LEFT;75Q90A,EGI-SECC	1	SNA
..3		BN63-17857A	INSULATOR-SOURCE PCB COVER LEFT;75Q90A	1	SNA
.2		BN96-47334A	ASSY COVER P-SOURCE PCB RIGHT;75Q90A,E	1	SNA
..3		BN63-17813A	COVER-SOURCE PCB RIGHT;75Q90A,EGI-SEC	1	SNA
..3		BN63-17856A	INSULATOR-SOURCE PCB COVER RIGHT;75Q90A	1	SNA
.2		BN96-47864A	FFC CABLE;QN75Q900R,Fold,L1173,24P	1	SA
.2		BN96-49262A	ASSY OPEN CELL;SDC,75Inch,8K_Dfilm new o	1	SNA
..3		BN81-16264A	A/S-ADHESIVE-A.C.F;ADHESIVE-A.C.F,0201-0	1	SNA
..3		BN81-16789A	A/S-ADHESIVE-A.C.F;ADHESIVE-A.C.F,0201-0	1	SNA
..3		BN81-16798A	A/S-IC DRIVER SOURCE-ODD;IC DRIVER SOURC	1	SNA
..3		BN81-16799A	A/S-IC DRIVER SOURCE-EVEN;IC DRIVER SOUR	1	SNA
..3		BN81-16800A	A/S-POLARIZER TFT;POLARIZER TFT,LJ01-116	1	SNA
..3		BN81-16802A	A/S-ASSY PCB-SOURCE(F-L);ASSY PCB-SOURCE	1	SNA
..3		BN81-16803A	A/S-ASSY PCB-SOURCE(F-R);ASSY PCB-SOURCE	1	SNA
..3		BN81-16804A	A/S-ASSY PCB-SOURCE(B-L);ASSY PCB-SOURCE	1	SNA
..3		BN81-16805A	A/S-ASSY PCB-SOURCE(B-R);ASSY PCB-SOURCE	1	SNA
..3		BN81-17560A	A/S-POLARIZER CF;POLARIZER CF,S010-14931	1	SNA




3. Disassembly and Reassemble

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


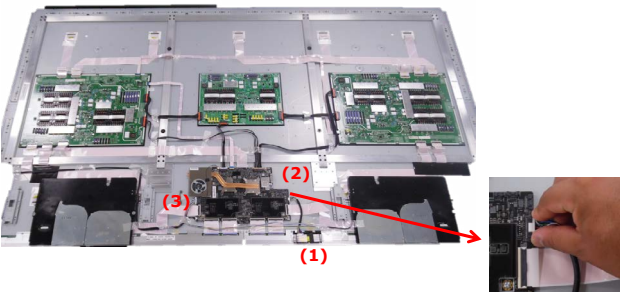
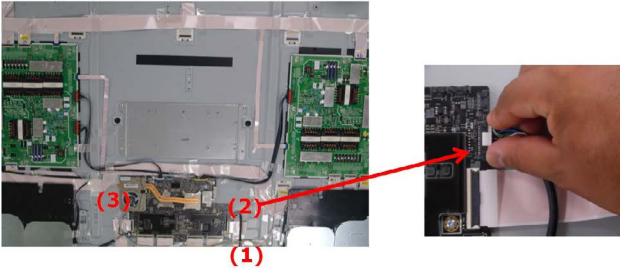
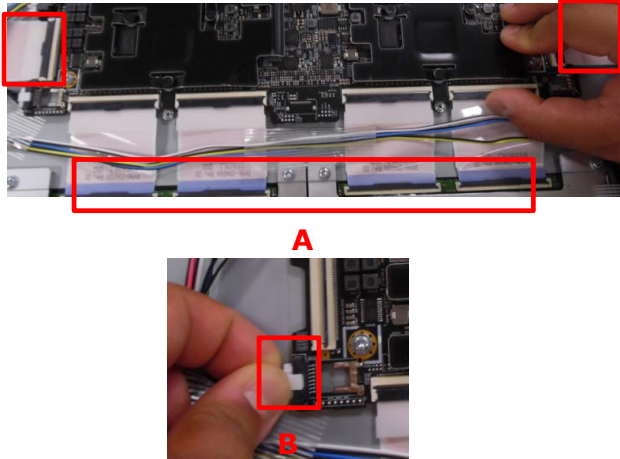


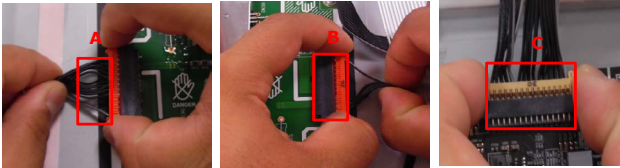
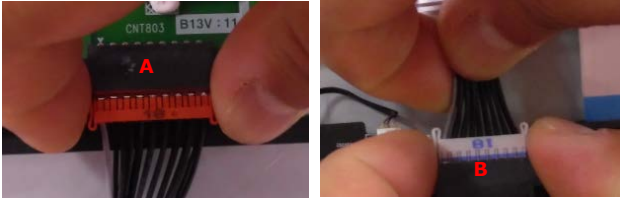
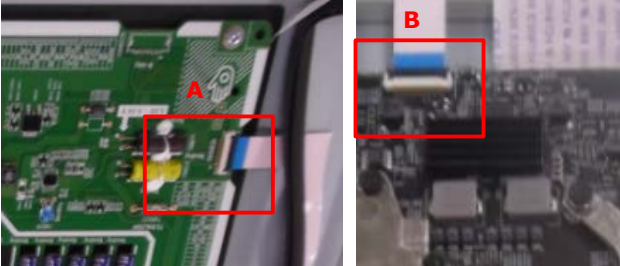
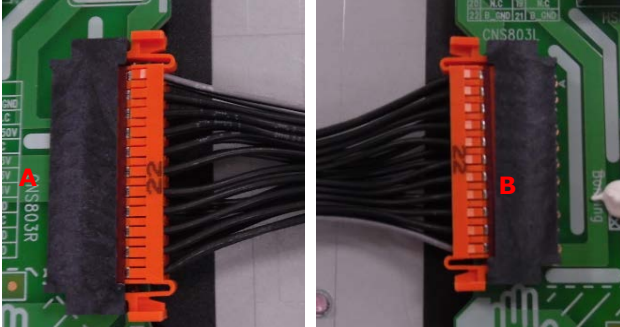
1. Disconnect the LED TV from the power source before disassembly.
2. Follow these directions carefully.
 - Use the Samsung Open Jig and Cushion to remove the Rear Cover.
 - Open Jig Tool, Protection Cushion (curved models Only)
 - Recommended Torque for Cabinet/Stand screws : 10 ~ 12kgf
 - A strength of Torque can be changed depending on the situation.

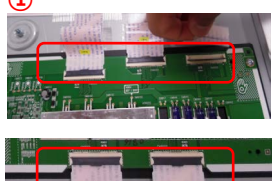
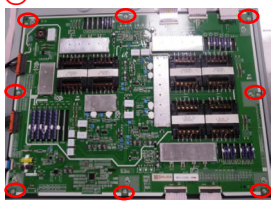
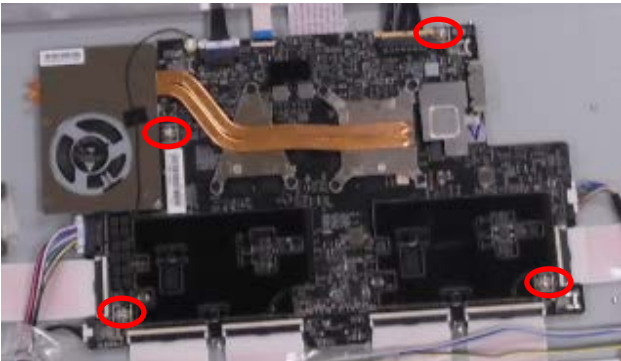
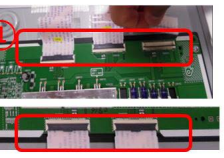



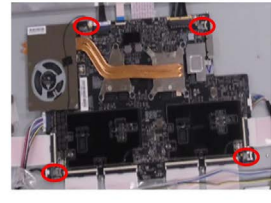
3-1. TV Disassembly


Description & Screws	Picture Description
1 Place the TV on the Protection Cushion.	
2 4EA screws on TV stand guide. And then remove stand.	
3 Insert the Open Jig tool completely into bottom of the rear cover(①) and following directions ②→③→④	

3. Disassembly and Reassemble

Description & Screws	Picture Description
<p>4 Gently lift up the Rear Cover from the bottom corners to release all mounting clips as indicated by Red Rectangles. If tabs break, Using Back cover as it is.</p>	 <p>Locking tabs locations</p>
<p>5 (85") Remove the BT/WIFI module from Source Cover(1). Remove the BT/WIFI and speaker cables from the TV board(2) then remove the speakers(3).</p>	
<p>5-1 (65/75") Remove the BT/WIFI module from Source Cover(1). Remove the BT/WIFI and speaker cables from the TV board(2) then remove the speakers(3).</p>	
<p>6 Remove USI-T cables(A) and Function cable(B) on TV board.</p>	 <p>A</p> <p>B</p>









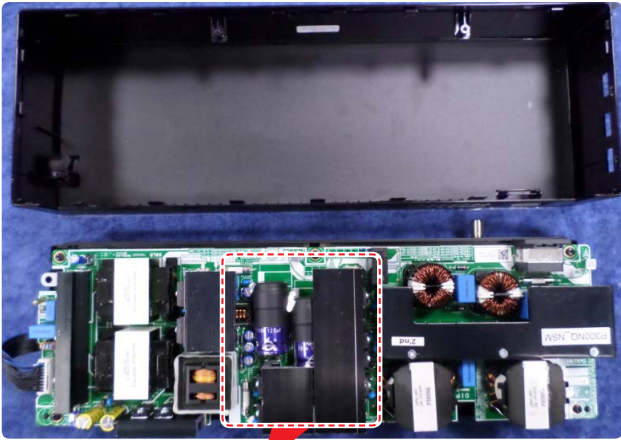
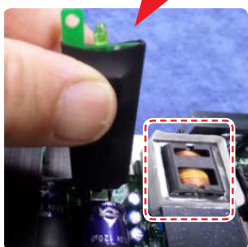
Description & Screws	Picture Description
7 Remove the power cable(A), (B) on Power board. Remove the power cable(C) on TV Board	 <p>The first image shows a hand pulling a black power cable labeled 'A' from a green circuit board. The second image shows a hand pulling a black power cable labeled 'B' from a green circuit board. The third image shows a hand pulling a black power cable labeled 'C' from a black circuit board.</p>
8 Remove the power cable(A) on Power board. Remove the power cable(B) on TV Board	 <p>The first image shows a hand pulling a black power cable labeled 'A' from a green circuit board. The second image shows a hand pulling a black power cable labeled 'B' from a black circuit board.</p>
9 Remove the ffc(SPI)(A) on Power board. Remove ffc(SPI) (B) on TV Board	 <p>The first image shows a hand pulling a blue and white ffc(SPI) cable labeled 'A' from a green circuit board. The second image shows a hand pulling a blue and white ffc(SPI) cable labeled 'B' from a black circuit board.</p>
10 Remove the power cable(A), (B) on Power board	 <p>The first image shows a hand pulling a black power cable labeled 'A' from a green circuit board. The second image shows a hand pulling a black power cable labeled 'B' from a green circuit board.</p>


Description & Screws	Picture Description
<div data-bbox="167 280 774 392"><div>11</div><div>(85")Removing LD/ SMPS board</div><div><div>- Remove each FFC Cable(BLU) (①)</div><div>- Undo 8 screw points(②)</div></div></div> <div data-bbox="247 537 470 593"><div>Removing Main board</div><div>- Undo 4 screw points</div></div>	<div data-bbox="805 324 1428 907"><div><div>①</div></div><div><div>②</div></div><div></div></div>
<div data-bbox="167 929 774 1198"><div>11-1</div><div>(65/75")Removing LD/ SMPS board</div><div><div>- Remove each FFC Cable(BLU) (①)</div><div>- Gently lift up to release the lock (②)</div><div>- If the board is DCDC_A, use both hands to hold the board and slide to the right to release(③)</div><div>- If the board is DCDC_B, use both hands to hold the board and slide to the left to release (③)</div></div></div> <div data-bbox="247 1344 742 1444"><div>- Gently lift up to release the lock (①)</div><div>- Use both hands to hold the board and slide to the right to release(②)</div></div>	<div data-bbox="805 952 1428 1601"><div><div>①</div></div><div><div>②</div></div><div><div>③</div></div><div><div>①</div></div><div><div>②</div></div></div>



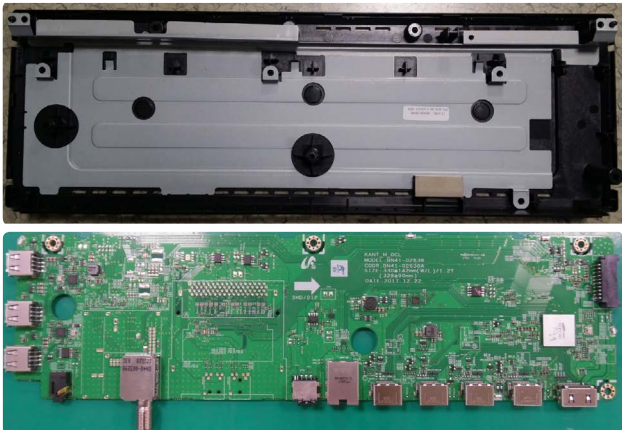
 **NOTE**

Reassembly procedures are in the reverse order of disassembly procedures.

3-2. One Connect Disassembly

Description & Screws	Picture Description
<p>1 Remove the 3 screws from ASSY COVER P-OC BOTTOM.</p> <p>Screws</p> <p> 6003-000282 SCREW-TAPTYPE : M3 x L8, ZPC(BLK) • C/BOTTOM+C/TOP</p>	 
<p>2 Use the Open Tool to unlock each corner.</p> <p>Open Jigs</p> <ul style="list-style-type: none"> Use Open Jig Tool or a similar Tool. <p> BN81-14946B</p>	 
<p>3 Turn One Connect Box upright and Remove Top Cover.</p> <p> WARNING</p> <p>Before Removing SMPS Board</p> <ul style="list-style-type: none"> You have to discharge the SMPS by using service JIG. ✓ If LED ON : LED OFF, discharge is completed. <p>A/S-DISCHARGE-JIG</p> <p> BN81-12884A</p>	 

Description & Screws	Picture Description
<div>4</div> <div>Remove the Cables.</div>	 <div>CNM803(26Pin)</div> <div>LEAD CONNECTOR-POWER</div>
<div>5</div> <div>Remove the 5 screws at each marked screw location on the board.</div> <div><div>Screws</div><div> 6003-000282 SCREW-TAPTYPE : M3 x L8, ZPC(BLK)<ul style="list-style-type: none">• SMPS+S/TOP</div></div>	
<div>6</div> <div>Lift off the black Insulator Sheet taped to the plate assembly at "PULL" marked location. Be careful not to tear it.</div>	
<div>7</div> <div>Remove the 2 screws on the plate Assembly then remove the assembly.</div> <div><div>Screws</div><div> 6003-000282 SCREW-TAPTYPE : M3 x L8, ZPC(BLK)<ul style="list-style-type: none">• S/TOP+C/BOTTOM</div></div>	

Description & Screws	Picture Description
<p>8 Remove the 4 screws on the One Connect Board.</p> <p>Screws</p> <p> 6003-000282 SCREW-TAPTYPE : M3 x L8, ZPC(BLK) • MAIN BOARD+C/BOTTOM</p>	
<p>9 Completed the disassembly.</p>	

**NOTE**

Reassembly procedures are in the reverse order of disassembly procedures.



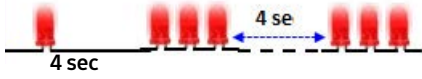
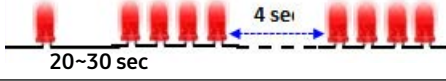
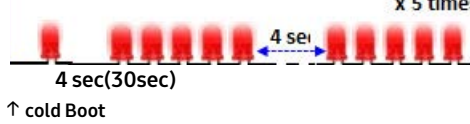
4. Troubleshooting

4-1. Diagnostic Methods (Flashing Symptom Codes)

After TV is "**COLD BOOTED**" (AC Power Re-Cycled), Flashing symptom codes will operate and show the defect block with number of LED flash.

Place a mirror or phone directly under Standby LED to observe flashing.

■ Defect type and Number of LED flash

Defect Block	Detection Method	Number of LED Flash	
OC Box	-	LED Off	No Blinking
Main Board	<ul style="list-style-type: none"> Watch Dog Count > Reboot > Flash Error > Flash 	1 time	 , Blinks 1 time when cold Boot
Panel	<ul style="list-style-type: none"> Error > Reboot > Flash Error > Flash (after 10m) 	2 time	 4 sec(10mm)
SMPS	<ul style="list-style-type: none"> Error > Reboot > Flash Error > Flash 	3 time	 4 sec
BT/WiFi	<ul style="list-style-type: none"> Cold Boot > 30 sec after module starts 	4 time	 20~30 sec
AOC	<ul style="list-style-type: none"> Cold Boot > 30 sec after module starts Signal level below threshold 	5 time	 4 sec(30sec) ↑ cold Boot

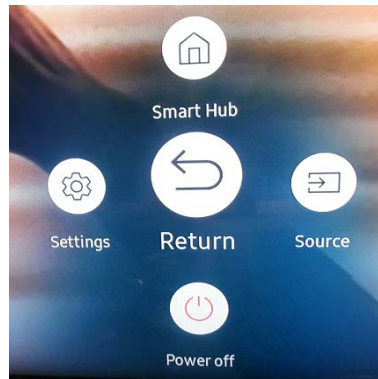
■ How to COLD BOOT the TV

1. Unplug and re-plug in the power cord.
 2. While TV is on, Press & Hold Power Button of TV remote for 4 seconds.
TV will turn off and on by itself.
 - When wrong OCB is connected to TV and power consumption is different, an error message **will display**.
 - If wrong OCB is connected to TV but power consumption is the same, an error message **will not display**.
- See chart below for details

■ OCB SMPS Power Consumption Type

No	OCB SMPS TYPE (in Factory Menu)	Matching Model Code	Matching Panel Type	Power Consumption
1	65Q900	QRQ900	65A1ME9TN	400W
2	75Q900	QRQ900	75A1ME9TN	480W
4	82Q900	QRQ900	82A1ME9TN	650W
5	85Q900	QRQ900	85L1ME9TN	650W

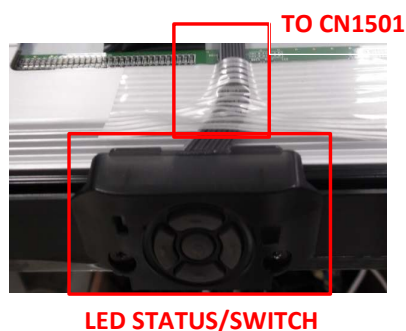
4-2. Function Control Operation Test



[On Screen Selections with Function Control]

■ FUNCTION/IR Control Test

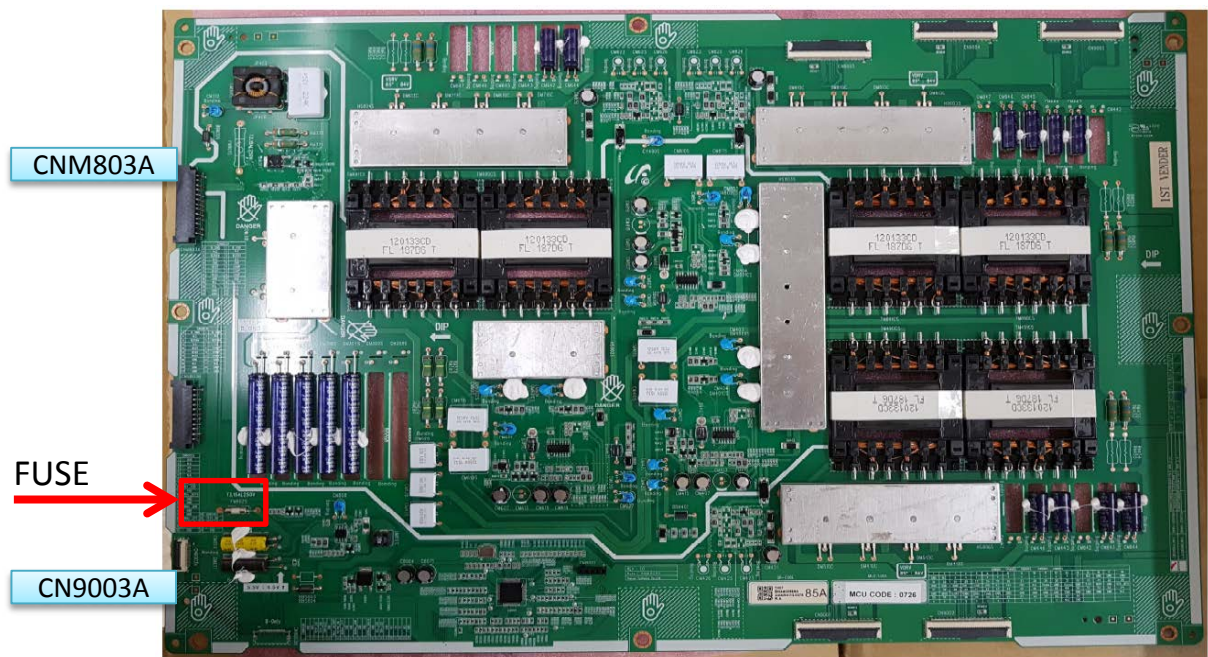
1. Place TV in Power Standby :
2. Check **LED Status**. (Note: Can be turned off in menu)
3. If **LED is OFF (& LED should be on with menu setting)**
 - ✓ LED 1.7Vdc (pin 8) and VCC for 3.3Vdc (pin 3)
 - If missing suspect Function Assy/Cable/Main board.
4. If **LED is ON**
 - ✓ Switch Operation activates on screen display
 - If missing:
 - ✓ Key _Input1(Pin 6) or Key _Input2(Pin 7) change to 0V with a command.
 - If wrong voltage or no change:
 - ✓ Switch for stuck or miss-operation.
5. Check IR operation with Standard Remote command changes. (3.3V to 2.5V effective DC)
6. SDA, SCL for effective 3.3Vdc (after power on)
 - If missing suspect Function Assy/Cable Assy./Main Assy.



LED STATUS/SWITCH

CN1501 (FUNCTION/IR)			
1	IR 3.3Vdc to 2.5Vdc (Effective DC)	2	GND
3	A3.3V_PW	4	SENSOR_SCL_I2C 3.3Vdc (effective DC)
5	SENSOR_SDA_I2C 3.3Vdc (effective DC)	6	KEY_INPUT1 1.8dc to 0V with command
7	KEY_INPUT2 1.8dc to 0V with command	8	LED_STB_OUT 1.7Vdc STBY

4-3. Power



CNM803A (SMAW250-H26S5)									
1	B-GND	2	B-GND	3	N.C	4	N.C	5	B350V
6	B350V	7	N.C	8	N.C	9	GND	10	GND
11	VAMP	12	B13V	13	VAMP	14	B13V	15	GND
16	GND	17	GND	18	PS_ON	19	N.C	20	N.C
21	GND	22	GND	23	GND	24	GND	25	GND
26	GND	27	GND	28	GND	29	GND	30	GND

CN9003A (05002HR-H24J05)									
1	GND	2	N.C	3	5V	4	5V	5	N.C
6	GND	7	SDA_LED	8	SDA_LED	9	GND	10	SERIAL_DATA
11	GND	12	GND	13	SERIAL_UHR	14	GND	15	GND
16	SERIAL-STT	17	VSTNC_IN	18	BLU_ON_OFF	19	GND	20	CONTACT
21	TEST_SD	22	TEST_LD	23	GND	24	GND	25	GND

4-3-1. TV POWER STANDBY TEST

1. TV in Standby
 - ✓ **Standby LED Indicator** (Note: Status can be changed in user menu and may default off)
2. If Not Lit: (and should have been lit with status setting)
 - ✓ B350V Line / One Connect Cable
3. If missing:
 - ✓ One Connect Cable status
4. If TV does not power on:
 - ✓ Resistance on SMPS **FUSE** after first removing AC power cord.
5. If fuse is open:
 - ✓ replace SMPS.
6. If fuse is OK:
 - ✓ **Standby: A13V** (Always On) supplies to Main Board.
 - ✓ replace **Main Board**
7. If still missing:
 - ✓ replace **ONE Connect Cable**.

4-3-2. TV POWER ON SEQUENCE TEST

1. **PowerTV On**
 - ✓ **PS_ON .2Vdc** (when off) changes to **3.3Vdc** (on)
 - Note: Will stay On for short time when powered off.
2. If voltage error or no change:
 - ✓ Jog Function & IR Control Test
3. If OK :
 - ✓ Check a connecting status of One Connect Cable between TV and OC
 - ✓ Remove and reconnect the AC power cord
 - ✓ Change One Connect Cable
4. IF TV still won't power on
 - ✓ All **A13V** supplies for approx. 12.7VDC(CDR)
 - ✓ All **Vamp** supplies for approx. 18 VDC
5. If any wrong voltages:
 - ✓ Replace SMPS
6. If still wrong voltage:
 - ✓ replace TV Board and OC Box
7. **Backlight ON**
 - ✓ **Backlight On/Off** 0V Off to 3.4Vdc ON (CNM803 PIN.26)
 - ✓ replace TV Board or OC Box

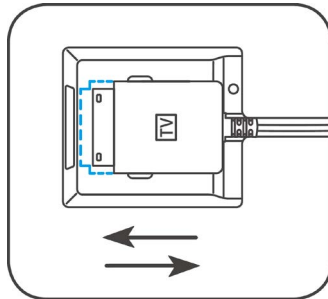
4-3-3. TV POWER ON SEQUENCE TEST

- ✓ In 2018 OC model, system power is supplied by OC Box.
- ✓ We can't SMPS/PANEL Backlight test without OC Box and TV Board
- ✓ If we use OC Box and TV Board, It is the same test condition as TV POWER SEQUENCE TEST

4-4. Video

4-4-1. ONE CONNECT

■ Main Section



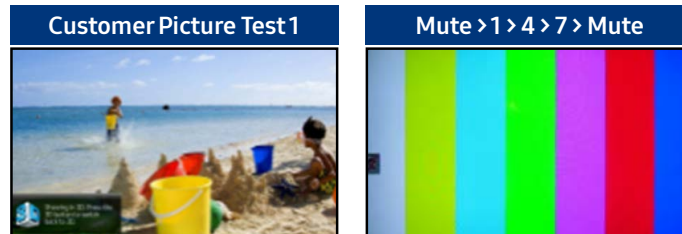
Video Operation

- **If No Video**
 - ✓ Check connection status of One Connect Cable
 - ✓ Reconnect One Connect Cable both side (TV and OCL)
- **If NG:**
 - ✓ Replace One Connect Box / Cable (defective)
 - ✓ TV MAIN (defective)

4-4-2. MAIN/T-CON BOARD

- Scaller & US Post of KANT-M2 Main CPU Section > PRE FRC Main Section > POST FRC Main Section > T-CON Section

■ Scaller & US Post of KANT-M2 Main CPU Section

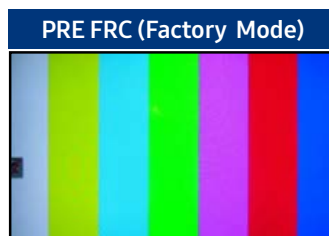


Video Operation

Generated on Main CPU Section.

- **If OK:**
 - ✓ Source & Input Cables
 - ✓ Other inputs
- **If Noisy:**
 - ✓ Pre Scaler Patterns
 - ✓ US Post Patterns
 - ✓ Pre FRC Pattern

■ PRE FRC Main Section

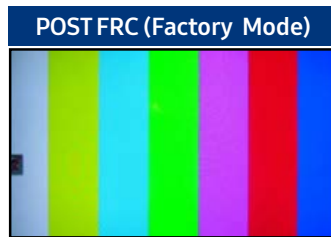


Video Operation

Generated at Pre FRC, in TV Main Board.

- **If OK:**
 - ✓ Check/Replace defective TV Main Board
- **If Noisy:**
 - ✓ Post FRC Pattern

■ POST FRC Main Section



Video Operation

Generated at Post FRC in TV Main Board

- **If OK:**
 - ✓ Check/Replace defective TV Main Board
- **If Noisy:**
 - ✓ Mute > 3 > 6 > 9 > Mute

■ T-CON Section



[May not be available for Larger models over 70 inches.]

Video Operation

Generated at T-CON Section in TV Main/T-CON

1. **If OK:**
 - ✓ Check/Replace defective TV Main/T-CON Board
2. **If Noisy:**
 - ✓ Main/T-CON Board
 - ✓ Panel

4-4-3. PANEL



1. If Noisy Video:

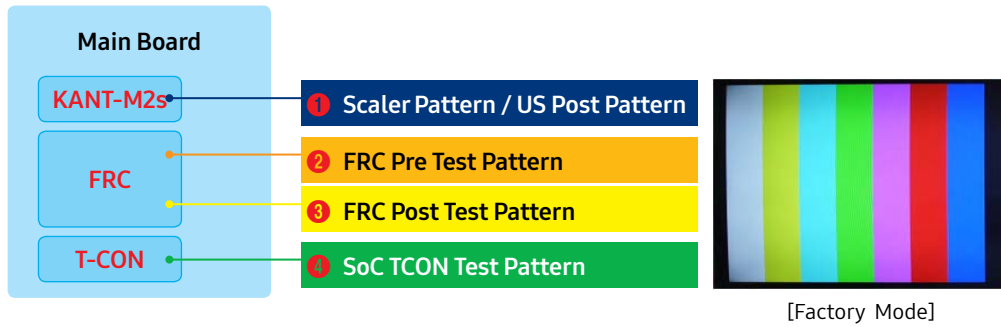
- ✓ Soc T-CON Pattern in Factory Mode
 - Use type of Noise observed (Bars, single lines, video distortion, etc to help.)
 - If noise is only on one half of screen check / swap panel cables.
 - Verify Defective Panel Cables, TV Main/T-CON Board or Panel.

2. If No Video & Back Lights are OK (on):

- ✓ If sound is OK check Panel 13Vdc supplies to Panel
- ✓ If No sound replace TV Main Board

4-4-4. Check Test Patterns

- ENTER : **Factory mode** > **SVC** > **Test Pattern**



1. Verify "Scaler Pattern" and "US Post Pattern"
2. Verify "FRC Pre Test Pattern"
3. Verify "FRC Post Test Pattern"
4. Verify "SoC TCON Test Pattern"

4-5. Audio

- Source (One Connect) > One Connect/TV Main Board > Speakers

■ Source (One Connect)

- **No TV Sound**
 - ✓ Menu > Audio > Speaker Settings set to **TV Speaker**
- **Noisy / Distorted TV Audio**
 - ✓ Customer Menu > Support > **Sound Test**
 - **If Sound Test FAILS : (Missing / Noisy Audio)**
 - ✓ Speakers (compare resistance/quality)
 - ✓ Main Board /Connector/Cable
 - ✓ With external Audio Generator (device or App)
 - Compare audio level out to speakers with multi meter.
 - ✓ Replace defective Speakers or Main Board or Cable.
 - **If Sound Test OK :**
 - ✓ Audio Source & External Cables
 - ✓ Other Inputs
- **Optical Digital Out Errors**
 - ✓ Red light from Optical Digital Out.
 - If missing replace OC or TV's Main Board

■ One Connect/TV Main Board

- **No HDMI Audio**
 - ✓ Source / HDMI Cable & One Connect Mini Connectors
 - Swap with other HDMI Inputs / Sources.
 - Perform **EDID Write** in Factory Mode (Can restore missing HDMI Audio).
 - ✓ Bulletins and Latest firmware on TV.
 - If not restored replace One Connect
 - Check Audio Format PCM / Dolby based on external Receiver
- **ARC Issues**
 - ✓ HDMI Cable is input to the ARC Designated HDMI port.
 - ✓ ARC (HDMI Control) is enabled on the external Receiver.
- **Bluetooth Audio "Sound Share" Connection Issues**
 - ✓ Sound Bar is in TV Mode.
 - To Connect, Press & Hold Play Button until Sound Bar pairing mode begins.

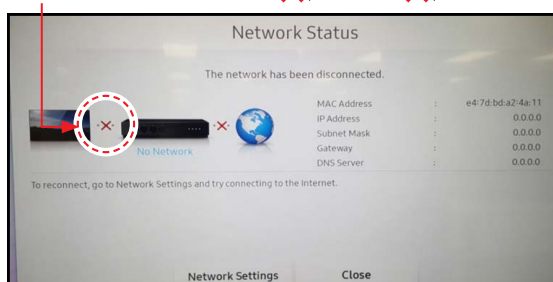
4-6. Network



■ TV to Router "Failure"

- ✓ **Check** Network Status

Check Network Status (TV ~~→~~ Router ~~→~~ Internet)



- ✓ **Wired & Wireless MAC Address** in Customer Support Menu.
 - **No Wired MAC Address:** Replace **Main Board**.
 - **No Wireless MAC Address:**
- ✓ **Module cabling & voltages** from Main Board.
 - If operating voltages are OK but signal missing.
 - ✓ Replace **WiFi Module** (WiFi/Bluetooth Module).
- ✓ **Proper security passcode**
- ✓ **Check** Wi-Fi signal strength at TV (use WiFi Analyzer or similar App).
 - Try another source (Hot spot or Test Router)
- ✓ **Check** related Bulletins.
- ✓ **Check** **Factory Mode** → **SVC** → **Info** → **WiFi Error Count** (replace module for high error counts).

■ Router to Network "Failure"

- ✓ **Check** Network Status

Check Network Status (TV → Router ~~→~~ Internet)



- Instruct the customer the TV has proper connection to the router and is likely OK.
- ✓ **Check** other devices using network are OK. If they test OK this does not mean the TV should be working.
 - Try another source (Hotspot) to test/show TV Network operation.

4-7. Smart Hub

- [Network Test/Gateway Test](#) > [DNS Test](#) > [ISP Blocking](#) > [Samsung Server Test](#) > [Samsung Apps Test](#)



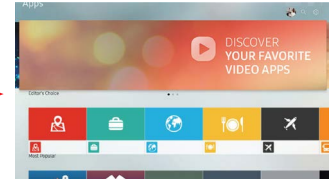
<TV>



<Router>



<Internet>



<Samsung Server>

Go to [Menu](#) > [Support](#) > [Self Diagnosis](#) > [Smart Hub Connection Test](#)

■ Network / Gateway

- If it Fails:
 - ✓ TV to Router Connection Test in "[Network Trouble shooting](#)"

■ DNS Test

- If it Fails:
 - ✓ **DNS** setting in "Network Settings"
- If DNS is set manually:
 - ✓ Settings are correct (may be set to 8.8.8.8 to prevent Netflix issues)
- If it still fails:
 - ✓ DNS Test with setting to Auto Mode
- If it fails both Manual & Auto problem is ISP or Router.

■ ISP Blocking

- If it Fails:
 - ✓ Internet Service Provider is Active.
 - ✓ With DNS setting at 8888.
 - ✓ With Hot Spot.

■ Samsung Server Test

- If it Fails:
 - ✓ Network Status.
- If OK:
 - ✓ Reset Smart Hub.
 - ✓ Terms of Agreement are accepted.

■ Samsung Apps Test

- If it Fails:
 - ✓ **Reset** Smart Hub.
 - ✓ Samsung Apps load correctly.
 - ✓ Perform "**Apps Reset**" in Factory Mode.
 - ✓ Go to Smart Hub and complete Terms of Agreement and set up information.
 - ✓ Samsung Apps load correctly.
 - ✓ Before selecting an App, allow Apps to load or failure wilre-occur.

4. Troubleshooting

For Netflix Operation/Connection Issues:

- ✓ **Check** Certificate & Netflix ESN Status in Factory Mode.

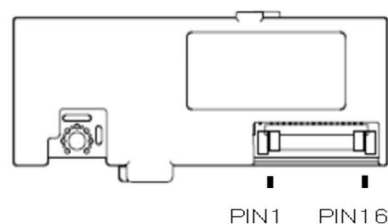


- If Certificate and ESN exists, "CO", "Nfo", change the **DNS** to **8.8.8.8**
- If Certificate is missing, "C/" replace the TV's Main Board.
- If ESN number is missing: **NF**/ do not replace the Main Board.
 - Reset TV Clock and check for correct Time & Date. Netflix relies on correct settings.
 - Reset Smart Hub. / Reset Apps In Factory Mode.

For Streaming Issues:

- Go to TV Web Browser / Go to speedof.me / testmy.net
 - ✓ **Check Speed** for at least 5 Mbps(HD streaming) / 25 Mbps (4K Streaming).
 - ✓ **Check Latency** for less than 50ms.

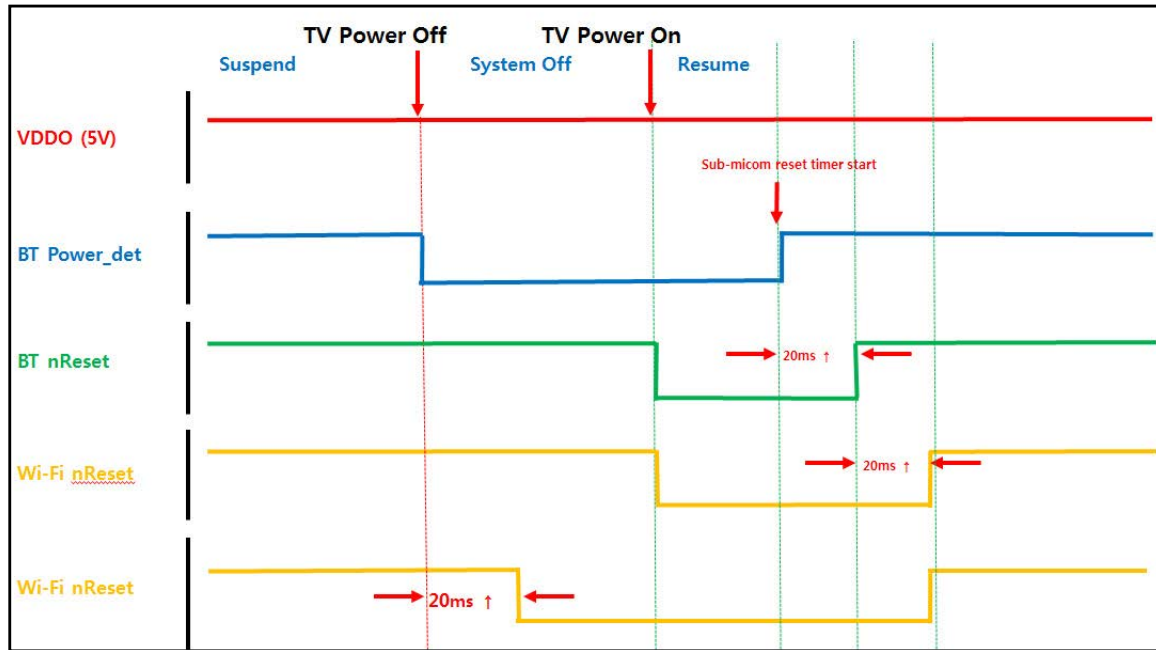
4-8. Bluetooth / WiFi Module



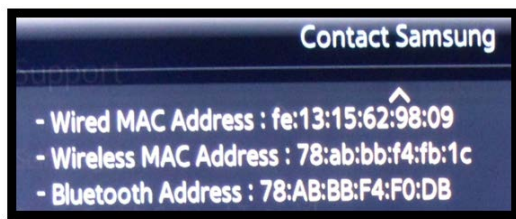
Pin1

■ Pin Description

Pins	Name	Interface	I/O	Description	Standby	Power ON
1	BT_RESET	Digital	I	BT Block Reset	3.3 Vdc	3.3 Vdc
2	BT_POWER DET	Digital	I	BT power detect	0	3.3 Vdc
3	BT_WAKE_UP	Digital	O	BT host wake up	3.3 Vdc	3.3 Vdc
4	GND	Analog	-	Ground	NC	
5	BT_USB DM	Digital	I/O	BT USB interface negative	0	0.7V eff.dc BT Sig (DM) 4V p-p
6	BT_USB DP	Digital	I/O	BT USB interface positive	0	2.5V eff.dc BT Sig (DM) 4V p-p
7	GND	Analog	-	Ground	0	0
8	BT_3D_SYNC_IN	Digital	I	BT VSYNC input	0V	0V
9	WIFI_USB_SUSPEND	Digital	I	WiFi USB PHY On/Off Ctrl	0V	3.3 Vdc
10	GND	Analog	-	Ground	0	0
11	WIFI_USB DP	Digital	I/O	WiFi USB interface positive	3.3 Vdc	2.5V eff.dc WiFi Sig (DP) 0.5V p-p
12	WIFI_USB DM	Digital	I/O	WiFi USB interface negative	0	2.5V eff.dc WiFi Sig (DM) 0.5V p-p
13	GND	Analog	-	Ground	0	0
14	VCC	Analog	I	DC +5V Power supply input	5 Vdc VCC	5 Vdc VCC
15	WIFI_WAKE UP	Digital	O	WiFi host wake up	3.3 Vdc	3.3 Vdc
16	WIFI_RESET	Digital	I	WiFi Block Reset	3.3 Vdc	3.3 Vdc



- Go to Menu/Support/Contact Samsung



- ✓ Wired MAC Address (missing or error - replace Main Board)
- ✓ Wireless MAC Address
- ✓ Bluetooth Address
- If Bluetooth Address or Wireless MAC Address are missing or errors exist
 - ✓ BT & Wi-Fi Connector Voltages. If Voltages are OK but no BT or Wi-Fi Signals voltage(s), replace defective Module.

4-9. Replacing Main Board

When replacing Main Board, certain values needs to be manually input in Factory menu to complete the replacement.

■ Steps to Replace Main Board

1. Enter Factory Menu (Use Factory Remote only).

- Power TV on : **Select TV Source > Info/Factory > Option**

2. Change Each value according to the TV Model.

- Type, Local Set, SW Model, BOM Model** must be set to correct value.

- Sample Model : QN85Q900RAFXZA**

Type

- Check Panel label (located in the back chassis of panel) and choose same Type code from the list.



<Panel Label>

Home	Updates	Exit
Factory Reset		
Type	85A1ME9TN	
Local Set	US	
SW Model	QNQ900	
BOM Model	90RA	
TUNER	S_T2C	
Ch Table	NONE	
MRT Option		
Production Option		
Engineer Option		
55A1QU7QN	55L1QU7QN	
75L1QU7QN	55A1QU8XN	
55L1QU7QN	55A1QU7QN	
65A1MU9TN	85A1ME9TN	
65A1QU7QN	65L1QU7QN	
65A1QU8XN	65L1QU8XN	
55A6AU0NN	55L6AU0NN	

<Type list in the Factory Menu>

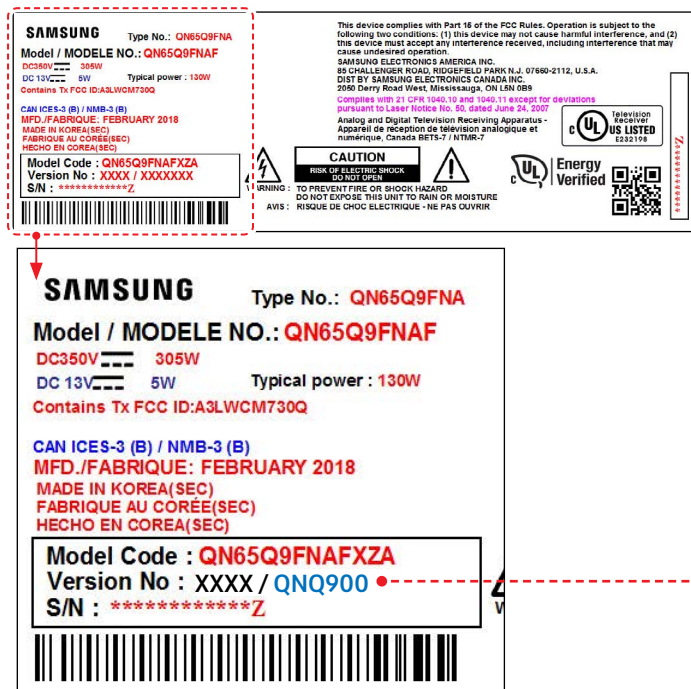
Local Set

- Set according to Local region(country).

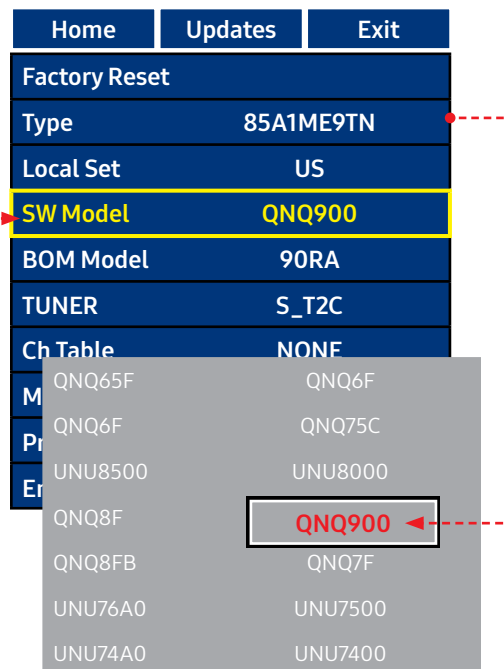
4. Troubleshooting

SW Model

- Check Label Rating of the TV(located on the Rear Cover).
 - SW Model is digits **after "/"** in **Version No.**
 - Choose same SW Model code from the list.



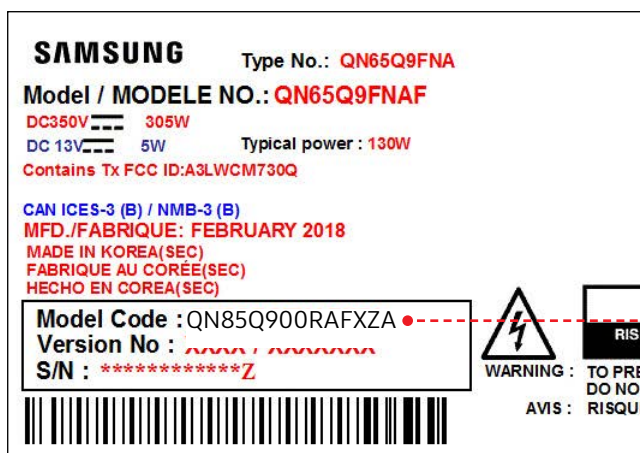
<"SW Model" in Label Rating>



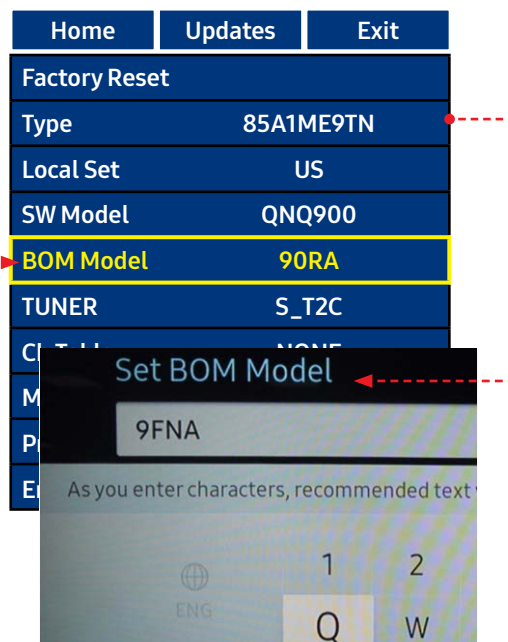
<SW Model list in the Factory Menu>

BOM Model

- 6th~9th Digit of Model Code.
 - Check 6th~9th digit of Model code and type in.
 - e.g.) Model Code : QN85**Q900RA**FXZA then BOM Model : **90RA**



<"BOM Model" in Label Rating>



<BOM Model input in Factory Menu>

4-10. Factory Mode

■ Setting TV into Factory Mode



AA81-00243A

Factory Remote

1. Power TV ON.
2. Select TV Source.
3. **Info** → **Factory**.
4. Use **MENU** for return.

Samsung IR Remote

1. TV Power Standby.
2. Press as follows.

- Remote Button

NTSC **MUTE** → **1** → **8** → **2** → **POWER**

PAL **INFO** → **MENU** → **MUTE** → **POWER**

■ Important Items

- **Option** (must set Option Bytes when replacing Main Board.)
- Option → **Factory Reset** (returns TV to out of box condition. Does not reset Apps.)
 - **Factory Reset** : Select Factory Reset

Factory Reset	
Type	85A1ME9TN
Local Set	US
SW Model	QNQ900
BOM Model	90RA
TUNER	S_T2C
Ch Table	NONE

← Ex. Sample Model

- SVC → **Test Patterns**
- SVC → Info → **ER Count** (Important to check for errors.)
 - Resets to 0 with Factory Reset.

Setting Option Bytes

1. Enter Factory Mode with **Service Remote** (only).
2. Check Option Byte Table located on **GSPN** (Fast Track or Tips).
3. Select each item to change.
4. Soft power TV Off to load.

First Screen Appearing in Factory Mode

- Ex. Sample Model

MODE : DTV, RES : NOTSUPPORT

Home

Updates

Exit

Option

Control

Debug

SVC

ADC/WB

Advanced

T-KTM2AKUC-0824.20
T-KTM2OCTV-0043_D
T-KTM2OCIP-1030_D

TIZEN-4.0-MAIN2018-KantM2-RELEASE_20180224.2
(Debug)

BT Version : BLUETOOTH-VER-1302
E-Manual : KM2ATSCN-1.0.5
Blaster Version : A70304-U61001-170201
E-POP Version : KANTMUD-0.2.5
EDID FAIL
HDCP SUCCESS
CALIB : AV / COMP / PC / HDMI /
Option : 6SA1MU9TN,US,9FNA,NONE
DICP : Not Supported 00
FRC-[KANT-M2 USIT][120Hz][HW:07/01]
DIMMING-[DIRECT-30X16][04]
TCON-[KANT-M2] FW[8914] DATA[N55ABUQM1B]

Model : QN65Q9FNA
Wired MAC SUCCESS
Wireless MAC SUCCESS
WiFi Version : 4.5.30.016.068.fw11

CO NI/ W/ MO D/ H2 PO AO O S/ N/ RO SC/ SIO WS/ DI/ UX I/ (P)
NSOO,0000000007000002,0000
Factory Data Ver: 18141 / Fixed Ver: 1804
EERC Version : 79 / WB Ver: 1

CPLD/LD : N/A
SmartControl : A7810300
Board Info : 2018/01/02/PR/PR/BN41-02634A
Factory Reset In Production : ----
SID : others
Date of purchase : 2/27/2018

QUICK TIPS:-

* Set value of HV Flip from shell prompt without launching factory app. For detail check Updates window

* Launch Factory:- "org.tizen.factory"

* Get value of any item from shell prompt without launching factory app. For detail check Updates window

* Launch Factory:- "org.tizen.factory"

* Set value of type localset and model from shell prompt along with factory reset:-
"launch_app org.tizen.factory type value
localset value model value"

* Use channel up/down to toggle items when at last depth

* Use arrow right/left to toggle values when at last depth

* Home button can be used to jump directly to home screen of factory app from any level

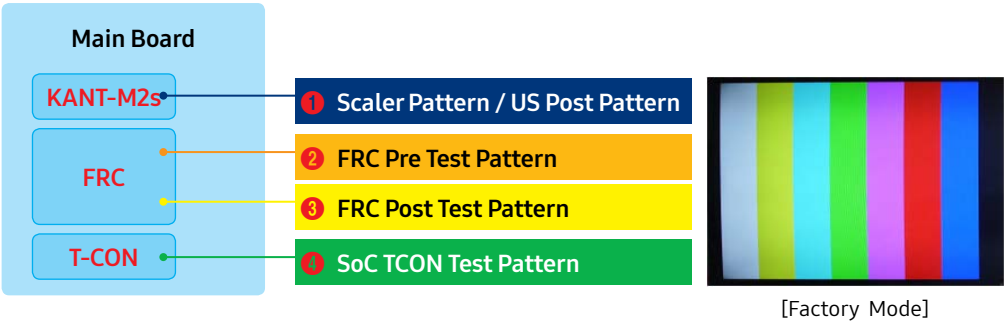
* Exit button can be used to Exit factory app without launching aging app

Slide Details

- Sample Model : QN65Q9FNAFXZA

Home	Updates	Exit		✓ Testing Items
Option			T-KTM2AKUC-XXXX.XX	✓ Micom Version
Control			T-KTM2OCTV-XXXX	✓ Sub Micom_TV
Debug			T-KTM2OCJP-XXXX	✓ Sub Micom_JP
SVC			TIZEN-4.0-17-COMMON-KantM2-RELEASE_XXXXXXXX.X	✓ Tizen
ADC/WB			BT VERSION : ****	✓ BT Version
Advanced			E-MANUAL : ****	✓ E-Manual
			Blaster Version : ****	✓ Blaster Version
			E-POP Version : ****	✓ E-Pop Version
			EDID SUCCESS	
			HDCP SUCCESS	
			CALIB : AV/COMP/PC/HDMI/	
			Option :--A1ME9TN,US, 90RA,NONE	
			DTCP : Not Supported (X)	
			FRC-[LUXE-O][120Hz][OC][HW:****]	
			DIMMING-[DIRECT-30X16][XX]	
			[LUXE-T]B[0001]FW[09000000A/F:0900000A]	
			MD[N75ABQ0F16/F:N75ABQ0F16]	
			SD[N75ABQ0F16/F:N75ABQ0F16]	
			Model : QN75Q90RA	
			Wired MAC SUCCESS	✓ Wired MAC Success
			Wireless MAC SUCCESS	✓ Wireless MAC Success
			WIFI Version : ****	
			CO Nf/ W/ M/ D/ H2 PO AO O SO N/ RO SC/ SiO WS/ DI/ UX I/ (T)	✓ CO Status ("O" Operational)
			NS//.1100	
			Factory Data Ver : ** / Fixde Ver : **	
			EERC Version : ** / WB Ver : **	
			CPLD/LD : N/A	
			SmartControl : ****	
			Board Info : ****/**/**/**/BN41-*****	
			Factory Reset in Production : ----	
			SID : ----	
			Date of purchase : --/--/----	


■ SVC ➤ Test Patterns



- 1. Verify "Scaler Pattern" and "US Post Pattern".
- 2. Verify "FRC Pre Test Pattern".
- 3. Verify "FRC Post Test Pattern".
- 4. Verify "SoC TCON Test Pattern".

Scaler Pattern	OFF
US Post Pattern	OFF
FRC Pre Pattern	0
FRC Post Pattern	0
SOC TCON Pattern	0
SOC TCON Pattern Level	255
FRC OSD Pre Pattern	0
FRC OSD Post Pattern	0
FRC2 Pre Pattern	0
FRC2 Post Pattern	0
SOC TCON2 Pattern	0
SOC TCON2 Pattern Level	255
SOC TCON3 Pattern	0
SOC TCON3 Pattern Level	255

■ SVC > Info > ER Count

WD Count	0	Serdes Error Count	2
AR Count	0	Serdes Reset Count	0
RS Count	1	Serdes WatchDog On/Off	OFF
WIFI NO DETECTION COUNT	3	AC Over-Voltage Detect	0
WIFI DETACHMENT COUNT	2	Vcc Fall Count	0
BT NO DETECTION COUNT	0	HDMI No Signal	
BT DETACHMENT COUNT	1	HDMI Blinking	
BT MGT OPEN FAIL COUNT	0	HDMI Color Space	
BT MGT DISCONNECT COUNT	0		
BT TV AUDIO DROP	0		
BT AUDIO TIMER EXP	0		
Camera ER Count			
FRC3D Emergency Reboot On/Off	ON		
FRC3D ER Count	0		
Fan Error Count	0		

- **WD Count:** Watch Dog (Hardware related issue).
- **AR Count:** Auto Reset (software (i.e. Apps) related).
- ✓ **important Error Count** Status Screen.
- Verify each item listed.

■ **Factory Mode** > **Control** > **EDID**

- 1. Remove ALL **HDMI** connections.
- 2. Factory Mode → Control → **EDID**. (→ **Enter** Key)

Option	EDID
Control	Sub Option
Debug	Hotel Option
SVC	Shop Option
ADC/WB	Asia Option
Advanced	Sound

- 3. Select EDID/OFF to ON. (→ **Right Arrow** Key)

EDID ON/OFF	ON
-------------	----

- 4. Select EDID WRITE ALL. (→ **Enter** Key)

EDID WRITE ALL	Success
----------------	---------

- 5. Wait to Success. (→ **Right Arrow** Key)

EDID WRITE ALL	Wait
----------------	------

- 6. Confirm EDID WRITE ALL Success. (→ **Menu** Key)

EDID WRITE ALL	Success
----------------	---------

4-11. Factory Mode Adjustments

4-11-1. Entering Factory Mode

- To enter [Service Mode] press the remote-control keys in this sequence :

- With Consumer Remote (IR Remote)

✓ Remote Button :

NTSC POWER OFF → MUTE → 1 → 8 → 2 → POWER ON

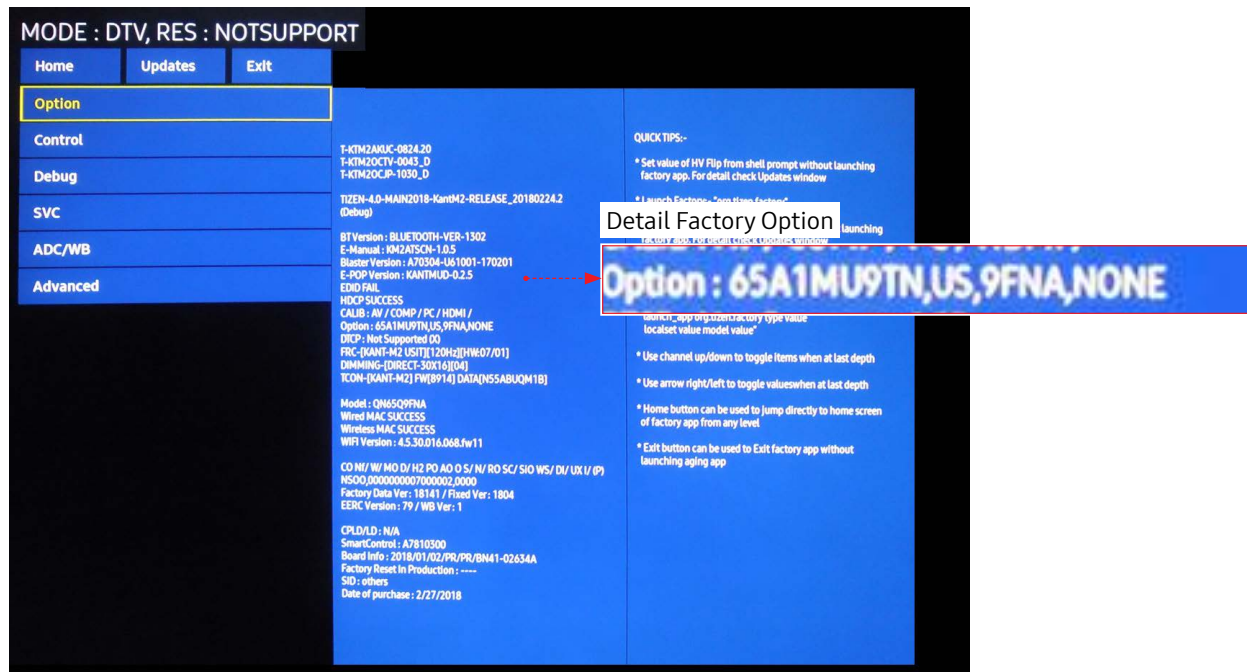
PAL POWER OFF → INFO → MENU → MUTE → POWER ON

- With Factory Remote

INFO → FACTORY

- The following screen appears.

- Please refer to "Detail Factory Option" page for details.



4-11-2. Detail Factory Option



NOTE

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

Model Name	QN85Q900	QN75Q900	GQ65Q900
Side Version	AA	FA	FA
Type	85L1ME9TN	75A1ME9TN	65A1ME9TN
Local set	EU_GER		
SW Model	QRQ900		
BOM Model	90RA		
TUNER	D_T2CS2		
Ch table	NONE		

Model Name		QE85Q900	QE75Q900	QN85Q900
Panel	Side Version	AA	FA	FA
	Vendor	AUO	SDC	SDC
	Code	BN95-05313A	BN95-05314A	BN95-05315A
	Spec	CY-EN085JLAV1V/H	CY-TN075JLLV1V/H	CY-TN065JLLV1V/H
	Type	85L1ME9TN	75A1ME9TN	65A1ME9TN
SMPS	Vendor	DYREL	DYREL	SOLUM
	Code	BN44-00973A	BN44-00972A	BN44-00937A
	Spec	P650NQ_NDY	P480NQ_NDY	P400NQ_NSM

4-11-3. Factory Data

■ Option

Factory Menu Name	Data	Range
Factory Reset	-	
Type	85L1ME9TN	
Local set	US	
SW Model	QRQ900	
BOM Model	90RA	
TUNER	D_T2C	
Ch table	NONE	
MRT Option		
Engineer Option		

■ Control

Factory Menu Name	Data	Range
EDID		
EDID ON/OFF	OFF	
EDID WRITE ALL	...	
EDID WRITE HDMI	...	
EDID WRITE PC	...	
HDMI EDID Ver	...	
HDMI EDID Port	...	
Sub Option		
RS-232 Jack	UART	RS-232 mode setting
EXT Link Support	ON	
Serial Log On/Off	OFF	
Watchdog	ON	
Checksum	0x0000	
Fast Boot In Production	ON	
USB Serial	OFF	
ECO IC TYPE	NOT_DETECT	
COLOR IC TYPE	RISF315	
Info Link Server Type	operating	
Info Link Country	None	
TTX Group	UserOSD	
OPTION_SWU		
LMF LEAVE THRESHOLD	160	
LMF TRIM THRESHOLD	120	
LMF TERM THRESHOLD	80	

4. Troubleshooting

Factory Menu Name	Data	Range
FAnet Thread	2	
CI CPLD Version	1	
ACM_MC	ON	
UNIQUE TRIPLET	ON	
T-CON Device	LUXE-T	
SPI Protection		
FKP Server Type	Default	
Preloading Support	ON	
Multitasking Support	ON	
Browser preloading Support	FULL	
EXT IR Boot Support	ON	
APP BOOTING SUPPORT	ON	
Cloudscan Always Upload	OFF	
STB Power Sync Support	ON	
OOM Panic Burst Interval	60	
OOM Panic Burst Number	8	
Power off interval Reset	60	
APP Boot Support after Reset	1	
Long press Power off Reset	OFF	
Perf Mode	0	
Inhouse App upgrader	ON	
Hotel Option		
Hospitality Mode	OFF	
Power On		
Menu OSD		
Operation		
Music Mode		
External Source		
Eco Solution		
Cloning		
Shop Option		
Exhibition Mode	OFF	
Peak Mode	ON	
Metadata	ON	
Shopmode Picture Reset	ON	
Asia Option		
Unbalance	OFF	

Factory Menu Name	Data	Range
AF Level adjust	0	
TX Power Level	0	
Mono Last Memory	OFF	
H Shaking	0	
SOUND		
High Devi	OFF	<ul style="list-style-type: none"> If the broadcast signal is not good, TV will complement the characteristics of the signal (most use when weak signal comes from the growing area countries)
Carrier_Mute	OFF	<ul style="list-style-type: none"> If the noise comes from weakness-electromagnetic field, TV will be set Mute automatically (Only default on in North America)
Pilot Level High Thld	0x70h	<ul style="list-style-type: none"> The High threshold value of stereo signal(If Pilot level is greather than High threshold value, recognize Stereo signal)
Pilot Level Low Thld	0x20h	<ul style="list-style-type: none"> The Low threshold value of stereo signal(If Pilot level is less than Low threshold value, recognize Mono signal)
Amp Volume	0xc4h	
Amp Scale	0x3dh	
Amp EQ Check Sum	0x00003655	
Subwoofer Support	3	
Woofer Type	0	
Woofer Volume	0xc7h	
Woofer Scale	0x3dh	
Woofer Check sum	0x000074CA	
Woofer DRC Check sum	0x00000000	
PEQ Inx	198	
PEQ Test	Ready	
Speaker EQ	ON	
Amp Recoerty	ON	
Bottom Checksum	0x000053F3	
SPDIF PCM Gain	-9	
NTV CU Delay	NORMAL	
Lipsync Inx	45	
Lipsync Checksum	0x151E	
Lipsync USB Test	Ready	
Lipsync BT Checksum	0x0000	
TP volume	0xc4h	
TP Scale	0x35h	
TP EQ CheckSum	NONE	

■ Debug

Factory Menu Name	Data	Range
Spread Spectrum		
MAIN DDR SSC ON OFF	ON	
MAIN DDR SSC Value	0	
MAIN Vx1 SSC ON/OFF	OFF	
MAIN Vx1 SSC Value	1	
TCON-B DDR SSC ON/OFF	ON	
TCON-B DDR SSC Period	0	
TCON-B DDR SSC Modulation	0	
MAIN USIT SSC ON/OFF	BYPASS	
MAIN USIT SSC MF	0	
MAIN USIT SSC MR	0	
OCL Serdes SSC ON OFF	ON	
OCL Serdes SSC Value	0	
TCON-B USIT SSC ON/OFF	2	
TCON-B USIT SSC Period	0	
TCON-B USIT SSC Modulation	0	
8K Vx1 SSC Value	1	
8K DDR SSC Value	1	
8K EBUS SSC Value	1	
8K SSC ON/OFF	ON	
RF Mute Time	600ms	
Tuner Margin	3	European specifications
FRC		
FRC FDISPLAY ON/OFF	OFF	
PC Mode ON/OFF	OFF	
FRC VX1 RX EQ SETTING	OFF	
FRC VX1 TX Pre_emphasis setting	0	
Netflix OSD Threshold	179	
TCON		
TCON_TEMP READ	34	
TEMP LAST	6000	
DCC VERSION	0x0	
TCON Demura Bypass	OFF	
TCON FDisplay	OFF	
Panel Code 1	*****	
Panel Code 2	**	
Panel Revision	***	
Panel Menu Week	****	
Panel S/N 1	*****	
Panel S/N 2	**	
Panel S/N 3		
Panel S/N 4		
MPEG Margin	20	
H.264 Margin	15	

Factory Menu Name	Data	Range
Voice Debug	OFF	
Power Management		
Cert Option	Waiting	
RM_BIST_DTV	5	
RM_BIST_ATV	0	
RM_BIST_CABLE	29	
Stress Mode	OFF	
Log Analyzer	ON	
Error Popup On/Off	OFF	
DeadLock KILL	OFF	
CES Option	OFF	
CES Convergence Option	OFF	
CES ATSC 3_0	OFF	
CES OOB M VPD SUPPORT	OFF	
BT DUT	OFF	
BT EU DUT		
BT Throughput	Failure	
Reproduce Module	ON	
21_9		
L-DETECT STABLE TIME	7	
L-DETECT UNSTABLE TIME	3	
L-DETECT USB SUPPORT	0	
DB Download		
MRT Option Dump	Failure	
Sub Option Dump	Failure	
Engineer Option Dump	Failure	
Picture Data Dump	Failure	
VCONF Dump	Failure	
Read Eco Sensor Data	0	
No Signal Power OFF	ON	
Default HDMI1 Booting	OFF	
Run EW	720h	

■ SVC

Factory Menu Name	Data	Range
Self Test(for HW)		<ul style="list-style-type: none"> the Output of test pattern from each IC
Info		
Reset		
Apps Reset		
SVC Reset		
SPI Flash Reset		
Data Sync Reset		
Factory Data Reset		

4. Troubleshooting

Factory Menu Name	Data	Range
OPTION_HDMI		
HOT PLUG DURATION	800ms	
HDMI FLT CNT SIG	0ms	
HDMI FLT CNT LOS	0ms	
HDMI MUTE TIME	0ms	
HDMI NFST UNMUTE TIME	600ms	
HdmiRx EQ	0	
HDMI TMDS ERR DET	1	
Auto EQ sweep	READY	
VMD OPT	0	
HdmiRx PLL_BW	0	
DVB CI		
TS Clock delay TC	0	
TS Clock delay S	0	
CI Control Buf ON	ON	
TS Clock delay CPU	2	
EW Diagnosis	Failure	
Test Pattern		
Scaler Pattern	OFF	
US Post Pattern	OFF	
FRC Pre Pattern	0	
FRC Post Pattern	0	
SOC TCON Pattern	0	
SOC TCON Pattern Level	255	
FRC OSD Pre Pattern	0	
FRC OSD Post Pattern	0	
FRC2 Pre Pattern	0	
FRC2 Post Pattern	0	
SOC TCON2 Pattern	0	
SOC TCON2 Pattern Level	255	
SOC TCON3 Pattern	0	
SOC TCON3 Pattern Level	255	
Upgrade		
T-CON DATA UPGRADE		
T-CON FW UPGRADE		
T-CON CheckSum		
T-CON2 DATA UPGRADE		
T-CON2 FW UPGRADE		
T-CON2 CheckSum		
PANEL EEPROM UPGRADE		
PANEL FLASH UPGRADE		
Logic Usb D/L		
SUBMICOM UPGRADE		<ul style="list-style-type: none"> Upgrade Sub-Micom Program
SUBMICOM JP USB UPGRADE		
BT UPGRADE		
BT FREEPAIRING		

Factory Menu Name	Data	Range
Function Upgrade		
FRC3D FW UPGRADE		
FRC3D SRP UPGRADE		
FRC3D LD UPGRADE		
FRC2 3D FW UPGRADE		
Camera Upgrade		<ul style="list-style-type: none"> Upgarde Camera module(There is upgrade program in Main-Image)
Mic Upgrade		<ul style="list-style-type: none"> Upgarde MIC in Camera module(There is upgrade program in Main-Image)
Jump UPGRADE		
IR Blaster Upgrade		
Pic Data USB Update		
Audio Data USB Update		
Eco Data USB Update		
SC ADK Upgrade		
Other Setting		
Delete S/N		
IPERF	Stopped	
Expert		
CAL Data Backup	...	
CAL Data Restore		
MICOM POWER OFF	ON	
NTV CU FW VER	0	
ATV IF AGC SPEED	0	
Upgrade UHD OSD Test	0	
Main USB Path		
JackP USB Path		
Apps Update		
Picture Direct	OFF	
Source Banner Hide	OFF	
Auto Detection Group	0	
V APP	OFF	
SWI	OFF	
KantS Cutoff PEQ	0	
Restart No	3	
SVC Panel	ORIGINAL	
S/N		
Serial number		
Writing S/N		

■ ADC/WB

Factory Menu Name	Data	Range
ADC		
AV Calibaration		
Comp Calibration		
PC Calibration		
HDMI Calibration		7

4. Troubleshooting

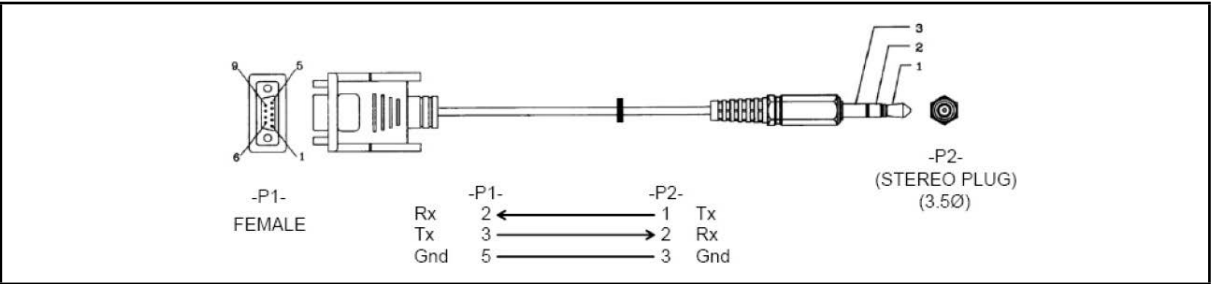
Factory Menu Name	Data	Range
ADC Result		
1st_Y_GH	0	
1st_Y_GL	0	
1st_Cb_BH	0	
1st_Cb_BL	0	
1st_Cr_RH	0	
1st_Cr_RL	0	
2nd_R_L	128	
2nd_G_L	128	
2nd_B_L	128	
2nd_R_H	69	
2nd_G_H	69	
2nd_B_H	69	
White Balance		
R-Offset	128	
G-Offset	128	
B-Offset	128	
R-Gain	128	
G-Gain	128	
B-Gain	128	
WB_W2_R_Offset	128	
WB_W2_B_Offset	128	
WB_W2_R_Gain	143	
WB_W2_B_Gain	80	
WB_N_R_Offset	128	
WB_N_B_Offset	128	
WB_N_R_Gain	132	
WB_N_B_Gain	120	
MGA		
MGA On/Off	OFF	
R1_Gain	512	
G1_Gain	512	
B1_Gain	512	
R2_Gain	512	
G2_Gain	512	
B2_Gain	512	
R3_Gain	512	
G3_Gain	512	
B3_Gain	512	
R4_Gain	512	
G4_Gain	512	
B4_Gain	512	
R5_Gain	512	
G5_Gain	512	
B5_Gain	512	
R6_Gain	512	

Factory Menu Name	Data	Range
G6_Gain	512	
B6_Gain	512	
R7_Gain	512	
G7_Gain	512	
B7_Gain	512	
R8_Gain	512	
G8_Gain	512	
B8_Gain	512	
R9_Gain	512	
G9_Gain	512	
B9_Gain	512	
R10_Gain	512	
G10_Gain	512	
B10_Gain	512	
SPI White Balance		
SPI White Balance On/Off	OFF	
SPI R-Offset	0	
SPI G-Offset	0	
SPI B-Offset	0	
SPI R-Gain	0	
SPI G-Gain	0	
SPI B-Gain	0	
SPI N Rgain	0	
SPI N Bgain	0	
SPI N Roffset	0	
SPI N Boffset	0	
SPI W2 Rgain	0	
SPI W2 Bgain	0	
SPI W2 Roffset	0	
SPI W2 Boffset	0	
SPI MGA	0	
WB Data to SPI	0	

■ Advanced

4-12. RS-232C

- **RS232C Control**
 - Port : COM#(Serial)
 - Baud rate : 9600
 - Data Bit : 8 bit
 - Parity : None
 - Stop Bits : 1
 - Flow Control : None



- Description of RS232C

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

4-13. AV Control Tab

Control Item				Cmd1	Cmd2	Cmd3	Value
General	Power	Power		0x00	0x00	0x00	0x00
		Off					0x01
		On					0x02
	Volume	Direct		0x01	0x00	0x00	(0~100)
		Up				0x01	0x00
		Down				0x02	0x00
	Mute			0x02	0x00	0x00	0x00
	Ch.	Direct		0x04	-		
		Continuous	Up	0x03	0x00	0x01	0x00
			Down			0x02	0x00
Input	Source List	TV		0x0a	0x00	0x00	0x00
		AV	AV1			0x01	0x00
			AV2				0x01
			AV3				0x02
		S-Video	S-Video1			0x02	0x00
			S-Video2				0x01
			S-Video3				0x02
		Component	Component1			0x03	0x00
			Component2				0x01
			Component3				0x02
		PC	PC1			0x04	0x00
			PC2				0x01
			PC3				0x02
		HDMI	HDMI1			0x05	0x00
			HDMI2				0x01
			HDMI3				0x02
			HDMI4				0x03
		DVI	DVI1			0x06	0x00
			DVI2				0x01
			DVI3				0x02
		RVU	RVU			0x07	0x00
PICTURE	Mode	Dynamic(Entertain)		0x0b	0x00	0x00	0x00
		Standard					0x01
		Movie					0x02
		Natural					0x03
		CAL-NIGHT					0x04
		CAL-DAY					0x05
		BD Wise					0x06
		Relax					0x07

Control Item			Cmd1	Cmd2	Cmd3	Value
PICTURE	BackLight(CellLight)			0x01	0x00	(0~20)
	Contrast			0x02	0x00	(0~100)
	Brightness			0x03	0x00	(0~100)
	Sharpness			0x04	0x00	(0~100)
	Color			0x05	0x00	(0~100)
	Tint	G/R		0x06	0x00	(0~100)
	Advanced Settings	Black Tone	Off	0x07	0x00	0x00
			Dark			0x01
			Darker			0x02
			Darkest			0x03
		Dynamic Contrast	Off		0x01	0x00
			Low			0x01
			Medium			0x02
			High			0x03
		Gamma	-3 ~ 3		0x03	(-3~3)
		RGB Only Mode	Off		0x05	0x00
			Red			0x01
			Green			0x02
			Blue			0x03
		Color Space	Auto		0x06	0x00
			Native			0x01
			Custom			0x02
		White Balance	R-Offset(LCD)		0x07	(-50~50)
		White Balance	G-Offset(LCD)		0x08	(-50~50)
		White Balance	B-Offset(LCD)		0x09	(-50~50)
		White Balance	R-Gain(LCD)		0x0a	(-50~50)
		White Balance	G-Gain(LCD)		0x0b	(-50~50)
		White Balance	B-Gain(LCD)		0x0c	(-50~50)
		White Balance	Reset(LCD)		0x0d	0x00
		Flesh Tone	-15 ~ 15		0x0e	(-15~15)
		xvYCC	Off		0x10	0x00
			On			0x01
		Motion Lighting	Off		0x11	0x00
			On			0x01
		Color Space Custom Color	Red		0x12	0x00
			Green			0x01
			Blue			0x02
			Yellow			0x03

Control Item				Cmd1	Cmd2	Cmd3	Value
PICTURE			Cyan				0x04
			Magenta				0x05
		Color Space Custom Color Red Value	0~100			0x13	0~100
		Color Space Custom Color Green Value	0~100			0x14	0~100
		Color Space Custom Color Blue Value	0~100			0x15	0~100
		Reset				0x16	0x00
		LED Motion Plus	Off		0x0a	0x07	0x00
			On(Normal)				0x01
			Cinema				0x02
			Ticker				0x03
		10p White Balance	Off		0x0e	0x00	0
			On			0x00	1
			Red		0x0f	(1~10)	(-50~50)
			Green		0x10	(1~10)	(-50~50)
			Blue		0x11	(1~10)	(-50~50)
			Reset		0x12	0	(1~10)
			10 Point		0x13	0x00	0x00
			Interval		0x14	0x00	0x00
	Picture Option	Color Tone	Cool		0x0a	0x00	0x00
			Standard				0x01
			Warm1				0x02
			Warm2				0x03
		Digital Noise Filter	Off			0x02	0x00
			Low				0x01
			Medium				0x02
			High				0x03
			Auto				0x04
			Auto Visualization				0x05
		MPEG Noise Filter	Off			0x03	0x00
			Low				0x01
			Medium				0x02
			High				0x03
			Auto				0x04
		HDMI Black Level	Normal			0x04	0x00
			Low				0x01

Control Item				Cmd1	Cmd2	Cmd3	Value
PICTURE		Film Mode	Off			0x05	0x00
			Auto1				0x01
			Auto2				0x02
			Cinema Smooth				0x03
		Auto Motion Plus	Off			0x06	0x00
			Clear				0x01
			Standard				0x02
			Smooth				0x03
			Custom				0x04
		Blur Reduction				0x07	value
		Judder Reduction				0x08	value
		LED Clear Motion				0x09	Off
		Reset				0x10	0x00
		HDMI UHD Color	Off			0x11	0x00
			On				0x01
		Analog Clean View	On			0x12	0x00
			Off				0x01
	Screen Adjustment	Picture Size	16:9	0x0c	0x0a	0x01	0x00
			Zoom1				0x01
			Zoom2				0x02
			Wide Fit				0x03
			4:3				0x04
			Screen Fit				0x05
			Smart View I				0x06
			Smart View II				0x07
			Auto Wide				0x08
			Wide Zoom				0x09
			Zoom				0x0a
		Fit to Screen	Off		0x0b	0x00	0x00
		Zoom	Zoom1		0x0c	0x00	0x00
			Zoom2				0x01
			Zoom3				0x02
			Zoom4				0x03
		Position	Position1			0x01	0x00
			Position2				0x01
			Position3				0x02
			Position4				0x03
		Reset			0x0d	0x00	0x00

Control Item				Cmd1	Cmd2	Cmd3	Value
PICTURE	Reset Picture	Reset Picture		0x0d	0x0b	0x00	0x00
	Factory-SVB	Expert-N/D Adj	On	0x0b	0x0d	0x00	0x00
			Off				0x01
			Fix				0x02
	Apply Picture Mode	All Sources		0x0f	0x00	0x00	0x00
		Current Source					0x01
	Pip	Pip	Off	0x11	0x00	0x00	0x00
			On				0x01
		Antenna	Cable			0x01	0x00
			Air				0x01
		Channel	DTV Cable			0x02	0x00
			DTV Terrestrial				0x01
		Size	Size1			0x03	0x00
			Size2				0x01
			Size3				0x02
			Size4				0x03
		Position	Position1			0x04	0x00
			Position2				0x01
			Position3				0x02
			Position4				0x03
		Sound Select	Main			0x05	0x00
			Sub				0x01
	Picture Off			0x12	0x00	0x00	0x00
Sound	Sound Mode	Standard		0x0c	0x00	0x00	0x00
		Music					0x01
		Movie					0x02
		Clear Voice					0x03
		Amplify					0x04
	Equalizer	Balance			0x01	0x00	(0~20)
		100hz				0x01	(0~20)
		300hz				0x02	(0~20)
		1khz				0x03	(0~20)
		3khz				0x04	(0~20)
		10khz				0x05	(0~20)
		Reset				0x06	0x00
	SRS TruSurround HD (internalization)	Off			0x02	0x00	0x00
	Virtual Surrond (externalization)	On					0x01

Control Item			Cmd1	Cmd2	Cmd3	Value
Sound	SRS TruDialog (internalization)	Off		0x03	0x00	0x00
	Dialog Clarify (externalization)	On				0x01
	Preferred Language	English		0x04	0x00	0x00
		Spanish				0x01
		French				0x02
		Korean				0x03
		Japanese				0x04
	Multi-Track Sound	Mono		0x05	0x00	0x00
		Stereo				0x01
		SAP				0x02
	Auto Volume	Off		0x06	0x00	0x00
		Normal				0x01
		Night				0x02
	Speaker Select	TV Speaker		0x07	0x00	0x00
		External Speaker				0x01
		Audio Out				0x01
	Sound Select	Main		0x08	0x00	0x00
		Sub				0x01
	Sound Reset	Sound Reset		0x09	0x00	0x00
	3D Audio	Off		0x0a	0x00	0x00
		Low				0x01
		Medium				0x02
		High				0x03
	Auto Stereo	Manual		0x0b	0x00	0x00
		Auto				0x01
	TV Installation Type	Stand		0x0c	0x00	0x00
		Wallmount				0x01
	Audio Delay	Dealy Value (0~250)		0x0d	0x00	0~250 (0x00~0xFA)
	SRS CS Headphone	Off		0x0e	0x00	0x00
	Balance			0x0f	0x00	0x00
	Add New Device	On		0x10	0x00	0x00
		Off				0x01
	Audio Multi-Output	Off		0x11	0x00	0x00
	Multiroom Link Settings	Multiroom		0x12	0x00	0x00
	HDMI Audio Input Format	Bitstream		0x13	0x00	0x00
		PCM				0x01

Control Item			Cmd1	Cmd2	Cmd3	Value
	Audio Format	PCM		0x14	0x00	0x00
		Dolby Digital				0x01
		DTS				0x02
		DTS Neo 2:5				0x03
		AAC/HEAAC				0x04
Sound	Dolby Digital Comp	RF		0x15	0x00	0x01
		Off		0x16	0x00	0x00
	HD Audio	On				0x01
KEY	Key Generation		0x0d	0x00	0x00	Refer to next table
OSD	Show/Hide Control	Show	0x0e	0x00	0x00	0x00
		Hide				0x01
Get Status	Power (On/Off)		0xf0	0x00	0x00	0x00
	Volume(0~100)		0xf0	0x01	0x00	0x00
	Mute (On/Off)		0xf0	0x02	0x00	0x00
	Channel Number		0xf0	0x03	0x00	0x00
	Source (TV/AV/.../HDMI/...)		0xf0	0x04	0x00	0x00
	Picture Size		0xf0	0x05	0x00	0x00
	3D (On/Off)		0xf0	0x06	0x00	0x00
	Picture Mode		0xf0	0x07	0x00	0x00
	Sound Mode		0xf0	0x08	0x00	0x00

* Refer for Table

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

4-14. Updating the TV's Software

View your TV's software version and update it if necessary.



-  >  [Settings](#) > [Support](#) > [Software Update](#)

4-14-1. Updating the TV's software to the latest version



DO NOT turn off the TV's power until the update is complete. The TV will turn off and on automatically after completing the software update. All video and audio settings return to their default settings after a software update.

■ Updating through the Internet

-  >  [Settings](#) > [Support](#) > [Software Update](#) > [Update Now](#)
- Updating from the Internet requires an active Internet connection.

■ Updating through a USB device

-  >  [Settings](#) > [Support](#) > [Software Update](#) > [Update Now](#)

After downloading the update file from the Samsung website and storing it on a USB device, connect the USB device to the TV to update.

- To update using a USB flash drive, download the update package from Samsung.com to your computer. Then, save the update package in the USB device's top-level folder. Otherwise, the TV will not be able to locate the update package.

4-14-2. Updating the TV automatically

-  >  [Settings](#) > [Support](#) > [Software Update](#) > [Auto Update](#)

If the TV is connected to the Internet, you can have the TV update its software automatically while you are watching the TV. When the background update is completed, it is applied the next time the TV is turned on.

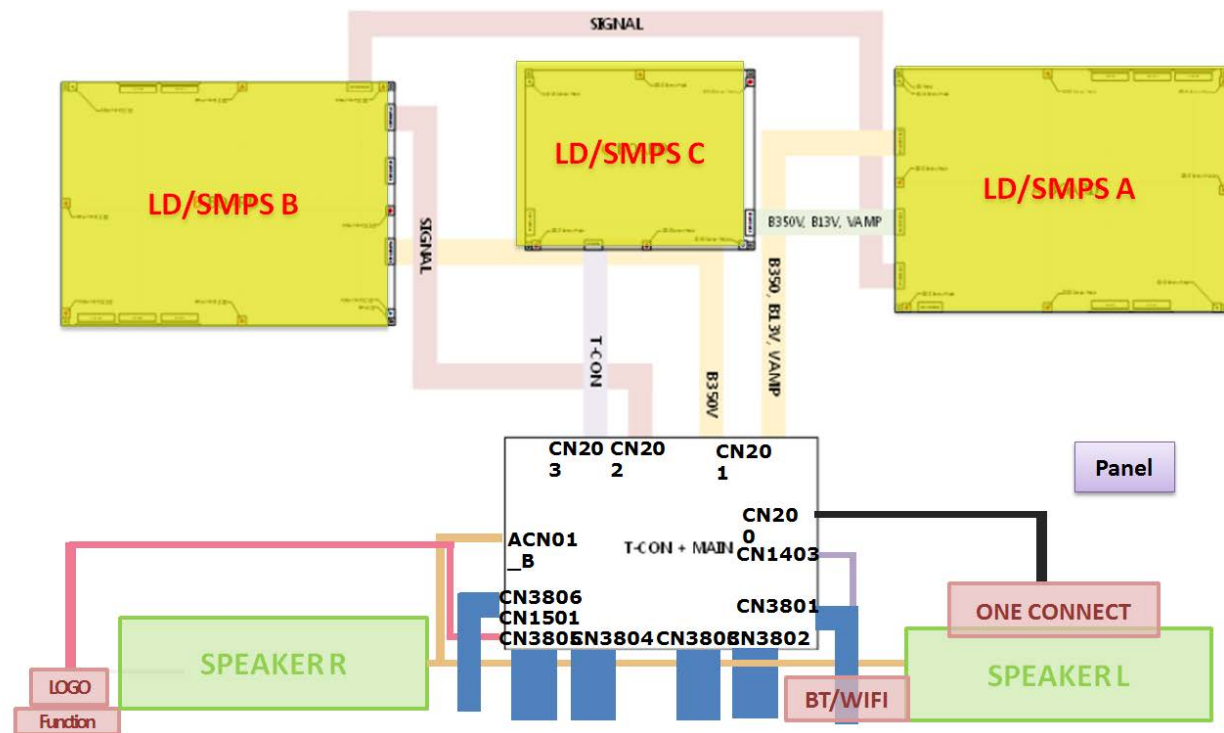
If you agree to the Smart Hub terms and conditions, [Auto Update](#) is set to [On](#) automatically. If you want this function disabled, use the Select button to turn it off.

- This function may take a longer time if another network function is running concurrently.
- This function requires an Internet connection.

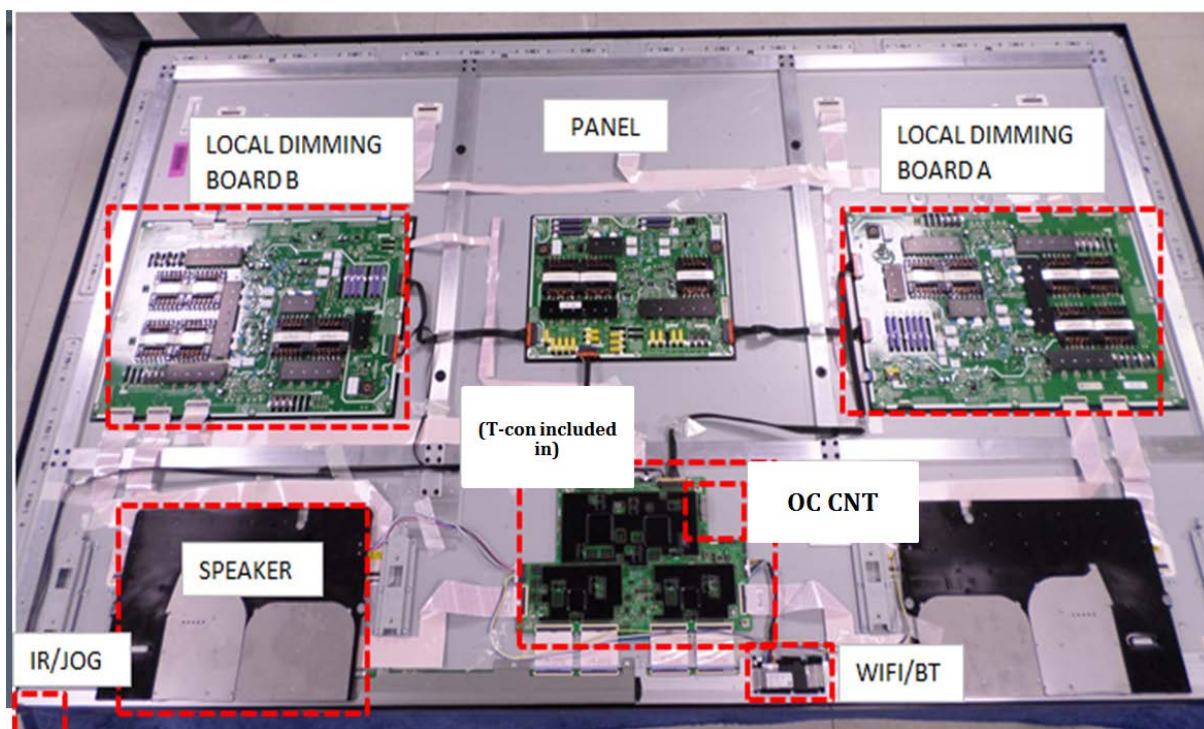
5. Wiring Diagram

5-1. Wiring Diagram

- 85 inch_ Wiring Diagram

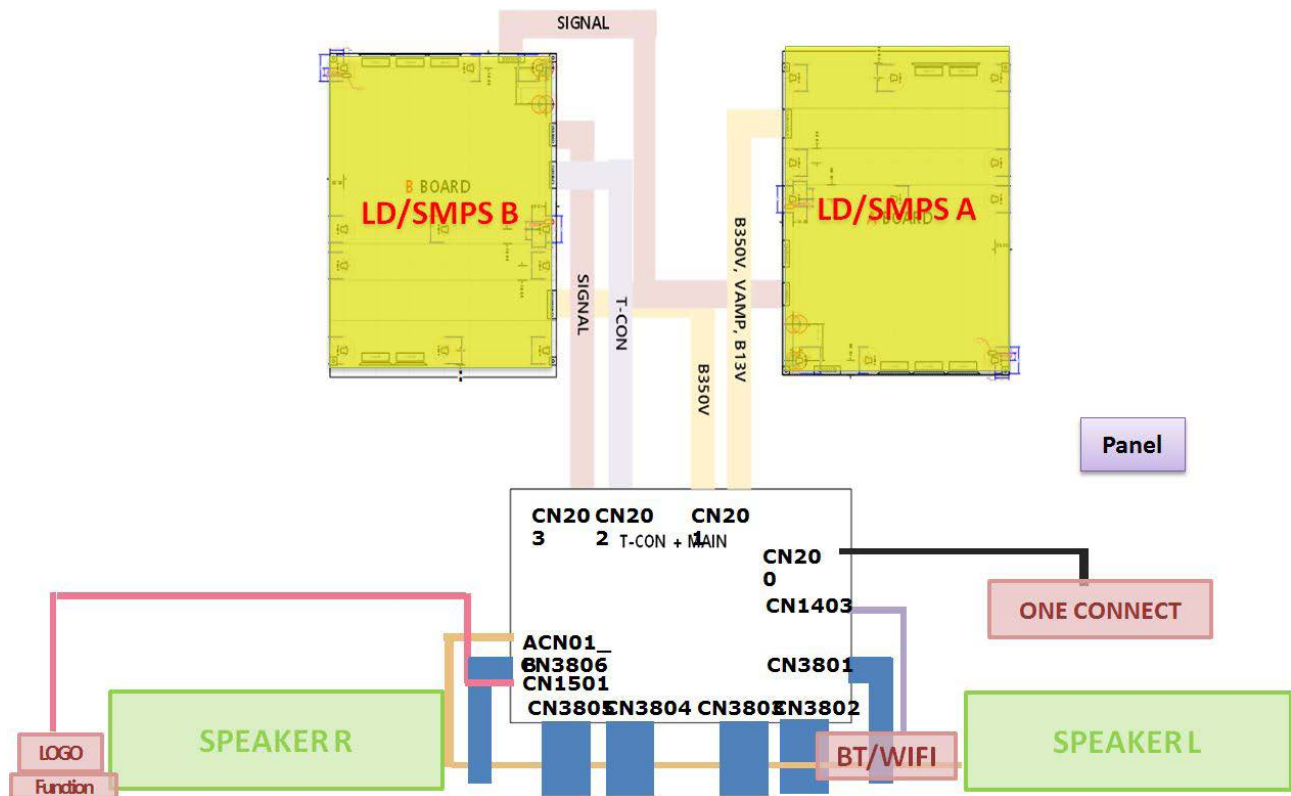


- 85 inches_inner

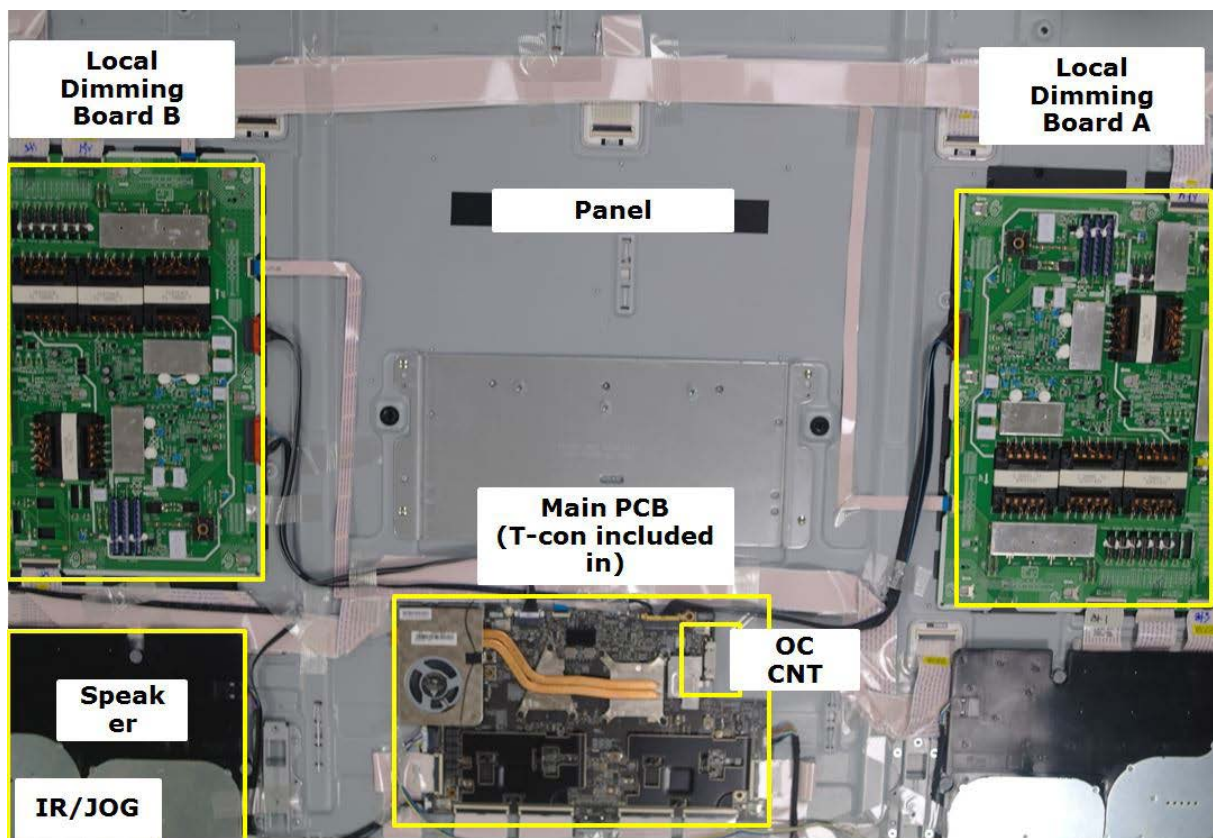


5. Wiring Diagram






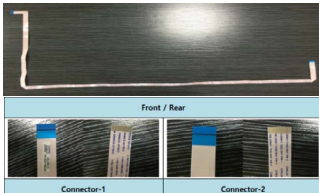
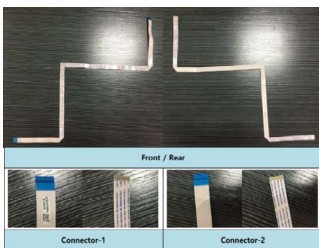

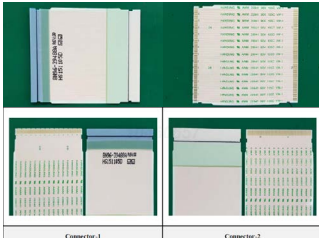

- 65/75 inch_ Wiring Diagram



- 65/75 inches_inner

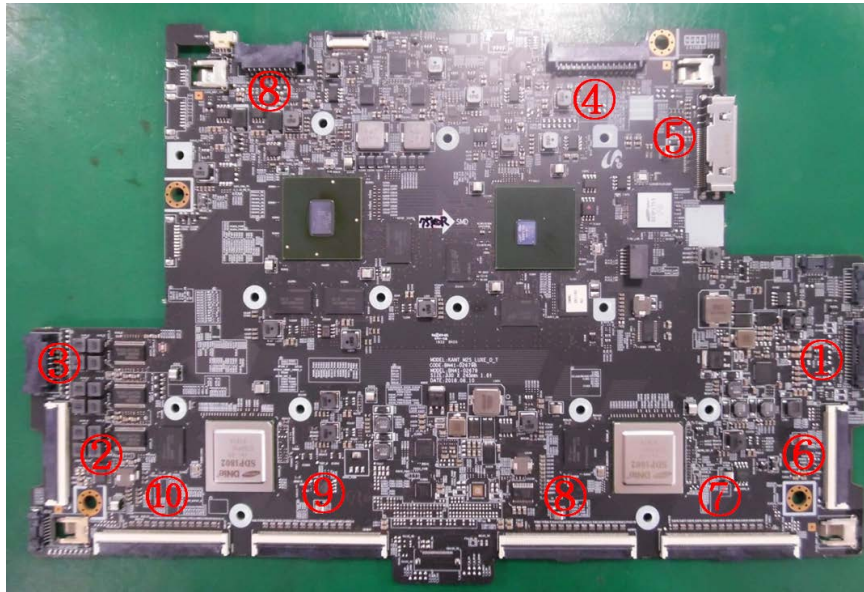


■ Cable Information

Part Name & Connection		Part Spec			Part No.	Remark
①	Main power		30-26p, 26p	65" 450/500mm 75" 500/500mm 82" 500/500mm 85" 650/650mm	BN39-02432A BN39-02431A BN39-02431A BN39-02430A	A B'ard : 20p B B'ard : 10p
②	Panel power		18-18p	65" 450mm 75" 500mm 82" 550mm 85" 200mm	BN39-02429A BN39-02428A BN39-02428A BN39-02440A	
③	IR cable		8-8p	65" 950mm 75" 1100mm 82" 1200mm 85" 1200mm	BN96-47777A BN96-47778A BN96-47778A BN96-47779A	
④	BT/WiFi cable		16-16p	150mm	BN39-02211F	
⑤	DCDC<->DCDC		22-22p	DCDC_A <-> DCDC_C 250mm DCDC_B <-> DCDC_C 300mm	BN39-02433A BN39-02434A	Only 85"
⑥	SPI DIMMING		24p	65" 952mm 75" 1173mm 82" 1228mm 85" 1287mm	BN96-47863A BN96-47864A BN96-47869A BN96-47870A	
			24p	65" 570mm 75" 635mm 82" 663mm 85" 746mm	BN96-47865A BN96-47866A BN96-47867A BN96-47868A	
⑦	USIT		68p	65/75/82" 180mm L 65/75/82" 180mm R 85" 550mm L 85" 550mm R	BN96-47750A BN96-47752A BN96-47751A BN96-47753A	
⑧	USIT		96p	57mm	BN96-39488A	Straight
⑨	OC		20-26p 26-26p	120mm	BN39-02437A BN39-02438A	65" 75/82/85"

5-2. Connector

5-2-1. Main Board



■ Main Board Pin Map

1 CN1403 (BT/WIFI)			
1	BT_NRESET	2	BT_POWER_DET
3	BT_WAKE	4	GND
5	D-_USB_BT	6	D+_USB_BT
7	GND	8	BT_WELCOME
9	WIFI_PHY_ON	10	GND
11	D+_USB_WIFI	12	D-_USB_WIFI
13	GND	14	A5V_PW
15	WIFI_WOW	16	WIFI_NRESET

2 ACN01_B (SPEAKER)			
1	TWT_R+	2	TWT_R-
3	MID_R+	4	MID_R-
5	WF_R+	6	WF_R-
7	TWT_L+	8	TWT_L-
9	MID_L+	10	MID_L-
11	WF_L+	12	WF_L-
13	N.C	14	N.C

3 CN1501 (FUNCTION/IR)			
1	IR	2	IR_GND
3	A3.3V_PW	4	SENSOR_SCL_I2C
5	SENSOR_SDA_I2C	6	KEY_INPUT1
7	KEY_INPUT2	8	LED_STB_OUT

4 CN201 (Power)			
1	GND	2	GND
3	GND	4	GND
5	VAMP	6	B13V
7	VAMP	8	B13V
9	VAMP	10	B13V
11	GND	12	GND
13	NC	14	NC
15	A_B350V	16	A_B350V
17	NC	18	NC
19	B_GND	20	B_GND
21	GND	22	GND
23	NC	24	NC
25	B_B350V	26	B_B350V
27	NC	28	NC
29	B_GND	30	B_GND

5 CN200 (ONE CONNECT)

1	Reserved	2	Serdes Rx L1 GND(Data)
3	Rx L1-(Data)	4	Rx L1+(Data)
5	Tx L1 GND(Data)	6	Tx L1+(Data)
7	Tx L1-(Data)	8	HDMI TMDS CLK GND(Video)
9	CLK-(Video)	10	CLK+(Video)
11	D0 GND(Video)	12	D0-(Video)
13	D0+(Video)	14	D1 GND(Video)
15	D1-(Video)	16	D1 +(Video)
17	D2 GND(Video)	18	D2-(Video)
19	D2+(Video)	20	ACT
21	Cable Detect	22	A3.3V
23	I.Mon	24	Signal Detect
25	Power13V+	26	Power 350V1-
27	Power 350V2-	28	Power 350V3-
29	Power 350V1+	30	Power 350V2+
31	Power 350V3+		

6 CN3801 (USIT)

1	FB_TRDY_6	18	VCC_1.9V_M_PW	35	LC1_GOA	52	CKV15_GOA
2	N.C.	19	VCC_1.9V_M_PW	36	LC2_GOA	53	CKV16_GOA
3	AVDD_O_17V_PW	20	VCC_1.9V_M_PW	37	N.C.	54	GND
4	AVDD_O_17V_PW	21	N.C.	38	CKV1_GOA	55	VOFF_-11V_PW
5	AVDD_O_17V_PW	22	VCOM1_CELL	39	CKV2_GOA	56	VOFF_-11V_PW
6	AVDD_O_17V_PW	23	V1_OC	40	CKV3_GOA	57	VOFF_-11V_PW
7	AVDD_O_17V_PW	24	V2_OC	41	CKV4_GOA	58	N.C.
8	AVDD_O_17V_PW	25	N.C.	42	CKV5_GOA	59	VSS_OUT1_CELL
9	AVDD_O_17V_PW	26	N.C.	43	CKV6_GOA	60	VSS_OUT1_CELL
10	AVDD_O_17V_PW	27	FB_VRD	44	CKV7_GOA	61	VSS_OUT1_CELL
11	UH_CELL	28	N.C.	45	CKV8_GOA	62	N.C.
12	UL_CELL	29	N.C.	46	CKV9_GOA	63	VGHD_30V_PW
13	HAVDD_8.5V_PW	30	STVP1_GOA	47	CKV10_GOA	64	SFC7
14	HAVDD_8.5V_PW	31	STVP2_GOA	48	CKV11_GOA	65	VGHD_30V_PW
15	HAVDD_8.5V_PW	32	GOA_RESET	49	CKV12_GOA	66	SFC8
16	LH_CELL	33	GND	50	CKV13_GOA	67	GND
17	LL_CELL	34	ASG_MON_R	51	CKV14_GOA	68	FB_TRDY_7

5. Wiring Diagram

7 CN3802 (USIT)							
1	FB_TRDY_5	25	GND	49	GND	73	GND
2	GND	26	TX_CH39_B+_USIT	50	TX_CH43_B+_USIT	74	TX_CH47_B+_USIT
3	SFC5	27	TX_CH39_B-_USIT	51	TX_CH43_B-_USIT	75	TX_CH47_B-_USIT
4	GND	28	GND	52	GND	76	GND
5	TX_CH36_A+_USIT	29	TX_CH40_A+_USIT	53	TX_CH44_A+_USIT	77	SFC6
6	TX_CH36_A-_USIT	30	TX_CH40_A-_USIT	54	TX_CH44_A-_USIT	78	GND
7	GND	31	GND	55	GND	79	T_M_D_HOLD_SPI
8	TX_CH36_B+_USIT	32	TX_CH40_B+_USIT	56	TX_CH44_B+_USIT	80	T_M_D_WP_SPI
9	TX_CH36_B-_USIT	33	TX_CH40_B-_USIT	57	TX_CH44_B-_USIT	81	T_M_D_MISO_SPI
10	GND	34	GND	58	GND	82	T_M_D_MOSI_SPI
11	TX_CH37_A+_USIT	35	TX_CH41_A+_USIT	59	TX_CH45_A+_USIT	83	T_M_D_CS_SPI
12	TX_CH37_A-_USIT	36	TX_CH41_A-_USIT	60	TX_CH45_A-_USIT	84	T_M_D_CK_SPI
13	GND	37	GND	61	GND	85	GND
14	TX_CH37_B+_USIT	38	TX_CH41_B+_USIT	62	TX_CH45_B+_USIT	86	N.C.
15	TX_CH37_B-_USIT	39	TX_CH41_B-_USIT	63	TX_CH45_B-_USIT	87	T_M_VCC_3.3V_PW
16	GND	40	GND	64	GND	88	PORTNUM
17	TX_CH38_A+_USIT	41	TX_CH42_A+_USIT	65	TX_CH46_A+_USIT	89	XON
18	TX_CH38_A-_USIT	42	TX_CH42_A-_USIT	66	TX_CH46_A-_USIT	90	VCOM1_CELL
19	GND	43	GND	67	GND	91	V1_OC
20	TX_CH38_B+_USIT	44	TX_CH42_B+_USIT	68	TX_CH46_B+_USIT	92	N.C.
21	TX_CH38_B-_USIT	45	TX_CH42_B-_USIT	69	TX_CH46_B-_USIT	93	N.C.
22	GND	46	GND	70	GND	94	N.C.
23	TX_CH39_A+_USIT	47	TX_CH43_A+_USIT	71	TX_CH47_A+_USIT	95	GND
24	TX_CH39_A-_USIT	48	TX_CH43_A-_USIT	72	TX_CH47_A-_USIT	96	FB_TRDY_6

8 CN3803 (USIT)							
1	FB_TRDY_4	25	TX_CH24_A-_USIT	49	TX_CH28_A-_USIT	73	TX_CH32_A-_USIT
2	GND	26	GND	50	GND	74	GND
3	AVDD_17V_PW	27	TX_CH24_B+_USIT	51	TX_CH28_B+_USIT	75	TX_CH32_B+_USIT
4	AVDD_17V_PW	28	TX_CH24_B-_USIT	52	TX_CH28_B-_USIT	76	TX_CH32_B-_USIT
5	AVDD_17V_PW	29	GND	53	GND	77	GND
6	AVDD_17V_PW	30	TX_CH25_A+_USIT	54	TX_CH29_A+_USIT	78	TX_CH33_A+_USIT
7	AVDD_17V_PW	31	TX_CH5_A-_USIT	55	TX_CH29_A-_USIT	79	TX_CH33_A-_USIT
8	AVDD_17V_PW	32	GND	56	GND	80	GND
9	AVDD_17V_PW	33	TX_CH25_B+_USIT	57	TX_CH29_B+_USIT	81	TX_CH33_B+_USIT
10	AVDD_17V_PW	34	TX_CH25_B-_USIT	58	TX_CH29_B-_USIT	82	TX_CH33_B-_USIT
11	UH_CELL	35	GND	59	GND	83	GND
12	UL_CELL	36	TX_CH26_A+_USIT	60	TX_CH30_A+_USIT	84	TX_CH34_A+_USIT
13	HAVDD_8.5V_PW	37	TX_CH26_A-_USIT	61	TX_CH30_A-_USIT	85	TX_CH34_A-_USIT
14	HAVDD_8.5V_PW	38	GND	62	GND	86	GND
15	HAVDD_8.5V_PW	39	TX_CH26_B+_USIT	63	TX_CH30_B+_USIT	87	TX_CH34_B+_USIT
16	LH_CELL	40	TX_CH26_B-_USIT	64	TX_CH30_B-_USIT	88	TX_CH34_B-_USIT
17	LL_CELL	41	GND	65	GND	89	GND
18	VCC_1.8V_M_PW	42	TX_CH27_A+_USIT	66	TX_CH31_A+_USIT	90	TX_CH35_A+_USIT
19	VCC_1.8V_M_PW	43	TX_CH27_A-_USIT	67	TX_CH31_A-_USIT	91	TX_CH35_A-_USIT
20	VCC_1.8V_M_PW	44	GND	68	GND	92	GND
21	N.C.	45	TX_CH27_B+_USIT	69	TX_CH31_B+_USIT	93	TX_CH35_B+_USIT
22	SRF_R	46	TX_CH27_B-_USIT	70	TX_CH31_B-_USIT	94	TX_CH35_B-_USIT
23	GND	47	GND	71	GND	95	GND
24	TX_CH24_A+_USIT	48	TX_CH28_A+_USIT	72	TX_CH32_A+_USIT	96	FB_TRDY_5

5. Wiring Diagram

9 CN3804 (USIT)							
1	FB_TRDY_3	25	TX_CH15_B-_USIT	49	TX_CH19_B-_USIT	73	TX_CH23_B-_USIT
2	GND	26	GND	50	GND	74	GND
3	TX_CH12_A+_USIT	27	TX_CH16_A+_USIT	51	TX_CH20_A+_USIT	75	SRF_L
4	TX_CH12_A-_USIT	28	TX_CH16_A-_USIT	52	TX_CH20_A-_USIT	76	N.C,
5	GND	29	GND	53	GND	77	VCC_1.8V_S_PW
6	TX_CH12_B+_USIT	30	TX_CH16_B+_USIT	54	TX_CH20_B+_USIT	78	VCC_1.8V_S_PW
7	TX_CH12_B-_USIT	31	TX_CH16_B-_USIT	55	TX_CH20_B-_USIT	79	VCC_1.8V_S_PW
8	GND	32	GND	56	GND	80	LL_CELL
9	TX_CH13_A+_USIT	33	TX_CH17_A+_USIT	57	TX_CH21_A+_USIT	81	LH_CELL
10	TX_CH13_A-_USIT	34	TX_CH17_A-_USIT	58	TX_CH21_A-_USIT	82	HAVDD_8.5V_PW
11	GND	35	GND	59	GND	83	HAVDD_8.5V_PW
12	TX_CH13_B+_USIT	36	TX_CH17_B+_USIT	60	TX_CH21_B+_USIT	84	HAVDD_8.5V_PW
13	TX_CH13_B-_USIT	37	TX_CH17_B-_USIT	61	TX_CH21_B-_USIT	85	UL_CELL
14	GND	38	GND	62	GND	86	LH_CELL
15	TX_CH14_A+_USIT	39	TX_CH18_A+_USIT	63	TX_CH22_A+_USIT	87	AVDD_17V_PW
16	TX_CH14_A-_USIT	40	TX_CH18_A-_USIT	64	TX_CH22_A-_USIT	88	AVDD_17V_PW
17	GND	41	GND	65	GND	89	AVDD_17V_PW
18	TX_CH14_B+_USIT	42	TX_CH18_B+_USIT	66	TX_CH22_B+_USIT	90	AVDD_17V_PW
19	TX_CH14_B-_USIT	43	TX_CH18_B-_USIT	67	TX_CH22_B-_USIT	91	AVDD_17V_PW
20	GND	44	GND	68	GND	92	AVDD_17V_PW
21	TX_CH15_A+_USIT	45	TX_CH19_A+_USIT	69	TX_CH23_A+_USIT	93	AVDD_17V_PW
22	TX_CH15_A-_USIT	46	TX_CH19_A-_USIT	70	TX_CH23_A-_USIT	94	AVDD_17V_PW
23	GND	47	GND	71	GND	95	N.C.
24	TX_CH15_B+_USIT	48	TX_CH19_B+_USIT	72	TX_CH23_B+_USIT	96	FB_TRDY_4

10 CN3805 (USIT)

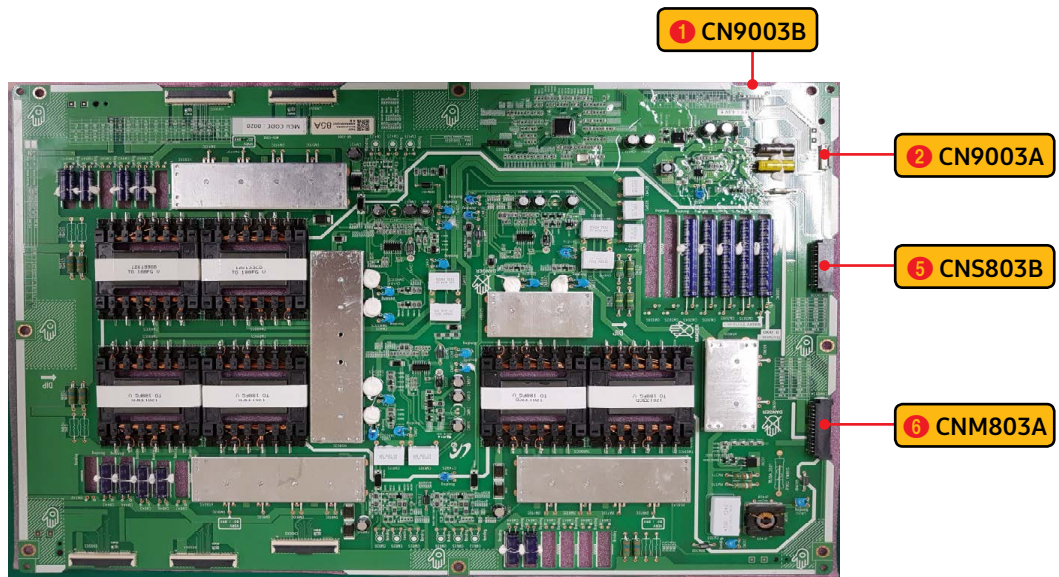
1	FB_TRDY_2	25	TX_CH15_B-_USIT	49	TX_CH19_B-_USIT	73	TX_CH23_B-_USIT
2	GND	26	GND	50	GND	74	GND
3	N.C.	27	TX_CH16_A+_USIT	51	TX_CH20_A+_USIT	75	SRF_L
4	N.C.	28	TX_CH16_A-_USIT	52	TX_CH20_A-_USIT	76	N.C.
5	N.C.	29	GND	53	GND	77	VCC_1.8V_S_PW
6	V1_OC	30	TX_CH16_B+_USIT	54	TX_CH20_B+_USIT	78	VCC_1.8V_S_PW
7	VCOM1_CELL	31	TX_CH16_B-_USIT	55	TX_CH20_B-_USIT	79	VCC_1.8V_S_PW
8	XON	32	GND	56	GND	80	LL_CELL
9	PORTNUM	33	TX_CH17_A+_USIT	57	TX_CH21_A+_USIT	81	LH_CELL
10	VCC_3.3V_PW	34	TX_CH17_A-_USIT	58	TX_CH21_A-_USIT	82	HAVDD_8.5V_PW
11	N.C.	35	GND	59	GND	83	HAVDD_8.5V_PW
12	GND	36	TX_CH17_B+_USIT	60	TX_CH21_B+_USIT	84	HAVDD_8.5V_PW
13	T_S_D_HOLD_SPI	37	TX_CH17_B-_USIT	61	TX_CH21_B-_USIT	85	UL_CELL
14	T_S_D_WP_SPI	38	GND	62	GND	86	LH_CELL
15	T_S_D_MISO_SPI	39	TX_CH18_A+_USIT	63	TX_CH22_A+_USIT	87	AVDD_17V_PW
16	T_S_D_MOSI_SPI	40	TX_CH18_A-_USIT	64	TX_CH22_A-_USIT	88	AVDD_17V_PW
17	T_S_D_CS_SPI	41	GND	65	GND	89	AVDD_17V_PW
18	T_S_D_CK_SPI	42	TX_CH18_B+_USIT	66	TX_CH22_B+_USIT	90	AVDD_17V_PW
19	TX_CH14_B-_USIT	43	TX_CH18_B-_USIT	67	TX_CH22_B-_USIT	91	AVDD_17V_PW
20	GND	44	GND	68	GND	92	AVDD_17V_PW
21	TX_CH15_A+_USIT	45	TX_CH19_A+_USIT	69	TX_CH23_A+_USIT	93	AVDD_17V_PW
22	TX_CH15_A-_USIT	46	TX_CH19_A-_USIT	70	TX_CH23_A-_USIT	94	AVDD_17V_PW
23	GND	47	GND	71	GND	95	N.C.
24	TX_CH15_B+_USIT	48	TX_CH19_B+_USIT	72	TX_CH23_B+_USIT	96	FB_TRDY_4

11 CN3806 (USIT)

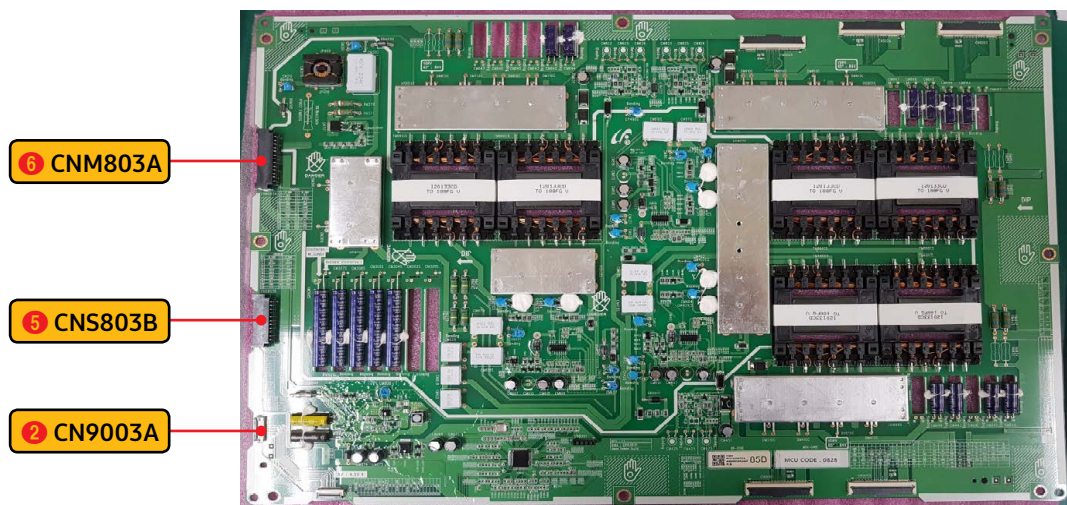
1	FB_TRDY_1	18	CKV14_GOA	35	N.C.	52	LL_CELL
2	N.C.	19	CKV13_GOA	36	GND	53	LH_CELL
3	VGHD_30V_PW	20	CKV12_GOA	37	GOA_RESET	54	HAVDD_8.5V_PW
4	VGHD_30V_PW	21	CKV11_GOA	38	STVP2_GOA	55	HAVDD_8.5V_PW
5	VGHD_30V_PW	22	CKV10_GOA	39	STVP1_GOA	56	HAVDD_8.5V_PW
6	VGHD_30V_PW	23	CKV9_GOA	40	N.C.	57	UL_CELL
7	N.C.	24	CKV8_GOA	41	N.C.	58	UH_CELL
8	VSS_OUT1_CELL	25	CKV7_GOA	42	FB_C	59	AVDD_17V_PW
9	VSS_OUT1_CELL	26	CKV6_GOA	43	N.C.	60	AVDD_17V_PW
10	VSS_OUT1_CELL	27	CKV5_GOA	44	N.C.	61	AVDD_17V_PW
11	N.C.	28	CKV4_GOA	45	V2_OC	62	AVDD_17V_PW
12	VOFF_-11V_PW	29	CKV3_GOA	46	V1_OC	63	AVDD_17V_PW
13	VOFF_-11V_PW	30	CKV2_GOA	47	VCOM1_CELL	64	AVDD_17V_PW
14	VOFF_-11V_PW	31	CKV1_GOA	48	N.C.	65	AVDD_17V_PW
15	GND	32	ASG_MON_L	49	VCC_1.9V_S_PW	66	AVDD_17V_PW
16	CKV16_GOA	33	LC2_GOA	50	VCC_1.9V_S_PW	67	N.C.
17	CKV15_GOA	34	LC1_GOA	51	VCC_1.9V_S_PW	68	FB_TRDY_2

5-2-2. LD/SMPS Board

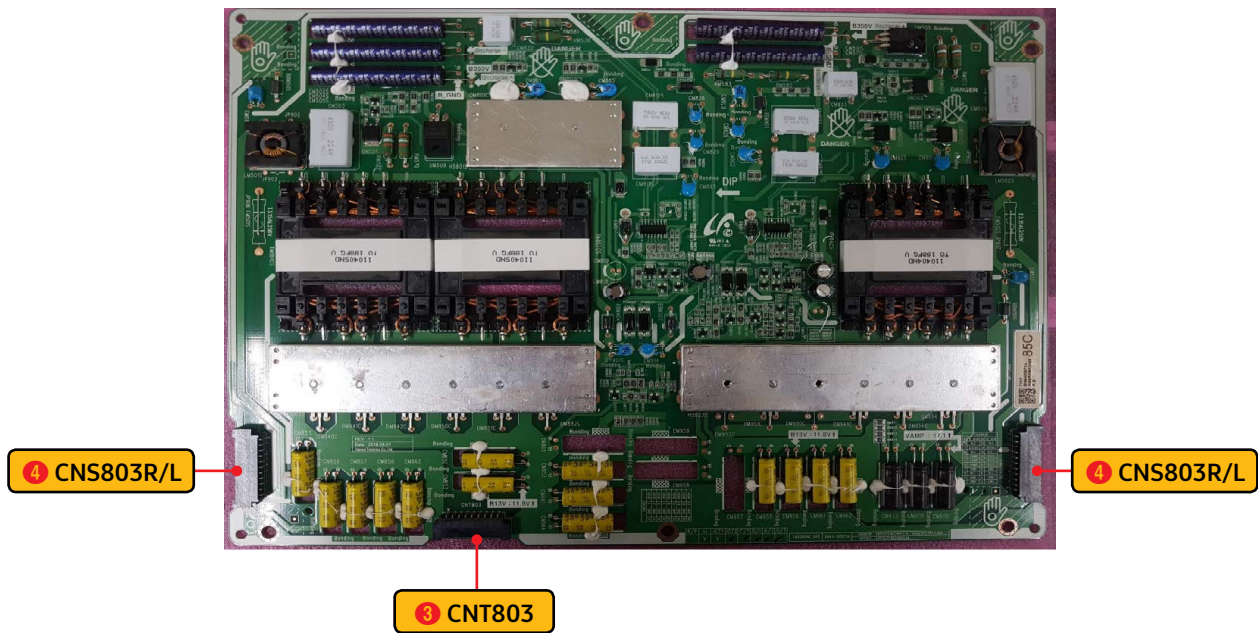
- LD/SMPS A



- LD/SMPS B



- LD/SMPS C



■ LD/SMPS Board Pin Map

1 CN9003B			
1	GND	13	GND
2	GND	14	GND
3	TEST_LD	15	SERIAL_DATA
4	TEST_SD	16	GND
5	CONTACT	17	SCL_LED
6	GND	18	SDA_LED
7	BLU_ON_OFF	19	GND
8	VSYNC_IN	20	N.C
9	SERIAL_STT	21	5V
10	GND	22	5V
11	GND	23	N.C
12	SERIAL_UHR	24	GND

2 CN9003A			
1	GND	13	SERIAL_UHR
2	N.C	14	GND
3	5V	15	GND
4	5V	16	SERIAL_STT
5	N.C	17	VSTNC_IN
6	GND	18	BLU_ON_OFF
7	SDA_LED	19	GND
8	SCL_LED	20	CONTACT
9	GND	21	TEST_SD
10	SERIAL_DATA	22	TEST_LD
11	GND	23	GND
12	GND	24	GND

3 CNT803			
1	B13V	10	GND
2	GND	11	B13V
3	B13V	12	GND
4	GND	13	B13V
5	B13V	14	GND
6	GND	15	B13V
7	B13V	16	GND
8	GND	17	B13V
9	B13V	18	GND

4 CNS803R/L			
1	GND	2	GND
3	GND	4	GND
5	N.C	6	N.C
7	GND	8	GND
9	VAMP	10	B13V
11	VAMP	12	B13V
13	VAMP	14	B13V
15	N.C	16	N.C
17	B350V	18	B350V
19	N.C	20	N.C
21	B_GND	22	B_GND

5 CNS803B			
1	B_GND	2	B_GND
3	N.C	4	N.C
5	B350V	6	B350V
7	N.C	8	N.C
9	VAMP	10	B13V
11	VAMP	12	B13V
13	VAMP	14	B13V
15	GND	16	GND
17	N.C	18	N.C
19	GND	20	GND
21	GND	22	GND

6 CNM803A			
1	B_GND	2	B_GND
3	N.C	4	N.C
5	B350V	6	B350V
7	N.C	8	N.C
9	GND	10	GND
11	VAMP	12	B13V
13	VAMP	14	B13V
15	VAMP	16	B13V
17	GND	18	GND
19	PS_ON	20	N.C
21	N.C	22	N.C
23	GND	24	GND
25	GND	26	GND

5-2-3. One Connect Board



■ One Connect Board Pin Map

① CN501 (USB1)			
1	USB1_VCC_5V_PW	3	JACK1_D+_USB
2	JACK1_D-_USB	4	GND

② CN502 (USB2)			
1	USB2_VCC_5V_PW	3	JACK2_D+_USB
2	JACK2_D-_USB	4	GND

③ CN500 (USB3)			
1	USB3_VCC_5V_PW	3	JACK3_D+_USB
2	JACK3_D-_USB	4	GND

④ CN603_RS (EX-LINK)			
1	GND	5	N.C
2	EX_TX_TP	6	N.C
3	N.C	7	GND
4	EX_RX_TP		

⑤ OP700 (OPTICAL)			
1	VIN	4	SW1
2	VCC	5	SW2
3	GND		

⑥ CN602_LAN (LAN)			
1	EPHY_TXP	5	LAN_GND
2	LAN_GND	6	EPHY_RXN
3	EPHY_TXN	7	N.C
4	EPHY_RXP	8	LAN_GND

⑦ CN801_H1 (HDMI)			
1	HDMI1_RX2+_HDMI	11	GND
2	GND	12	HDMI1_RXC-_HDMI
3	HDMI1_RX2-_HDMI	13	CEC
4	HDMI1_RX1+_HDMI	14	N.C
5	GND	15	HDMI1_SCL_DDC
6	HDMI1_RX1-_HDMI	16	HDMI1_SDA_DDC
7	HDMI1_RX0+_HDMI	17	HDMI1_CABLE_DET
8	GND	18	HDMI1_5V_PW
9	HDMI1_RX0-_HDMI	19	HDMI1_HPD
10	HDMI1_RXC+_HDMI		

⑧ CN800_H2 (HDMI)			
1	HDMI2_RX2+_HDMI	11	GND
2	GND	12	HDMI2_RXC-_HDMI
3	HDMI2_RX2-_HDMI	13	CEC
4	HDMI2_RX1+_HDMI	14	N.C
5	GND	15	HDMI2_SCL_DDC
6	HDMI2_RX1-_HDMI	16	HDMI2_SDA_DDC
7	HDMI2_RX0+_HDMI	17	HDMI2_CABLE_DET
8	GND	18	HDMI2_5V_PW
9	HDMI2_RX0-_HDMI	19	HDMI2_HPD
10	HDMI2_RXC+_HDMI		

5. Wiring Diagram

9 CN900_H3 (HDMI)			
1	HDMI3_RX2+_HDMI	11	GND
2	GND	12	HDMI3_RXC-_HDMI
3	HDMI3_RX2-_HDMI	13	CEC
4	HDMI3_RX1+_HDMI	14	N.C
5	GND	15	HDMI3_SCL_DDC
6	HDMI3_RX1-_HDMI	16	HDMI3_SDA_DDC
7	HDMI3_RX0+_HDMI	17	HDMI3_CABLE_DET
8	GND	18	HDMI3_5V_PW
9	HDMI3_RX0-_HDMI	19	HDMI3_HPD
10	HDMI3_RXC+_HDMI		

10 CN901_H4 (HDMI)			
1	HDMI4_RX2+_HDMI	11	GND
2	GND	12	HDMI4_RXC-_HDMI
3	HDMI4_RX2-_HDMI	13	CEC
4	HDMI4_RX1+_HDMI	14	N.C
5	GND	15	HDMI4_SCL_DDC
6	HDMI4_RX1-_HDMI	16	HDMI4_SDA_DDC
7	HDMI4_RX0+_HDMI	17	HDMI4_CABLE_DET
8	GND	18	HDMI4_5V_PW
9	HDMI4_RX0-_HDMI	19	HDMI4_HPD
10	HDMI4_RXC+_HDMI		

11 CN301 (SERDES)			
1	GND	17	GND
2	HDMI_TMDS_DATA0-	18	HDMI_TMDS_CLK-
3	HDMI_TMDS_DATA0+	19	HMDI_TMDS_CLK+
4	GND	20	B5V_PW
5	HMDI_TMDS_DATA1-	21	CABLE_DETECT
6	HDMI_TMDS_DATA1+	22	A3.3V_PW
7	GND	23	ACT
8	HDMI_TMDS_DATA2-	24	SIGNAL_DETECT
9	HDMI_TMDS_DATA2+	25	IMON
10	GND	26	TV_A13V_PW
11	SERDES_TX_L1+	27	B350V_GND
12	SERDES_TX_L1-	28	B350V_GND
13	GND	29	B350V_GND
14	SERDES_RX_L1+	30	N.C
15	SERDES_RX_L1-	31	B350V_2_PW
16	B350V_1_PW		

12 CN201 (POWER)			
1	B350V_GND	14	N.C
2	B350V_GND	15	GND
3	B350V_GND	16	GND
4	B350V_GND	17	A13V_PW
5	N.C	18	A13V_PW
6	N.C	19	A13V_PW
7	B350V_2_PW	20	A13V_PW
8	B350V_2_PW	21	GND
9	N.C	22	GND
10	N.C	23	TV_A13V_PW
11	B350V_1_PW	24	SW_POWER_350V
12	B350V_1_PW	25	TV_A13V_PW
13	N.C	26	IR_SMPS