

SAFETY PRECAUTIONS

SERVICE WARNING

Only qualified service technicians who are familiar with safety checks and guidelines should perform service work. Before replacing parts, disconnect power source to protect electrostatically sensitive parts. Do not attempt to modify any circuit unless so recommended by the manufacturer. When servicing the receiver, use an isolation transformer between the line cord and power receptacle.

GENERAL GUIDELINES

Perform a final SAFETY CHECK before returning receiver to customer. Check repaired area for poorly soldered connections, and check entire circuit board for solder splashes. Check board wiring for pinched wires or wires contacting any high wattage resistors. Check that all control knobs, shields, covers, grounds, and mounting hardware have been replaced. Be sure to replace all insulators and restore proper lead dress.

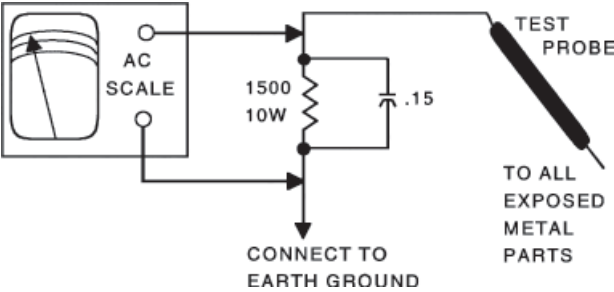
SAFETY CHECKS — FIRE AND SHOCK HAZARD

Cold Leakage Checks for Receivers with Isolated Ground

Unplug the AC cord, connect a jumper across the plug prongs, and turn the power switch on (if applicable). Use an ohmmeter to measure the resistance between the jumped AC plug and any exposed metal cabinet parts such as antenna screw heads, control shafts, or handle brackets. Exposed metal parts with a return path should measure between 1M ohms and 5.2M ohms. Parts without a return path must measure infinity.

Hot Leakage Current Check

Plug the AC cord directly into an AC outlet. DO NOT use an isolation transformer. Use a 1500 ohms, 10W resistor in parallel with a .15µF capacitor to connect between any exposed metal parts on the receiver and a good earth ground. (See figure below.) Use an AC voltmeter with at least 5000 ohms per volt sensitivity to measure the voltage across the resistor. Check all exposed metal parts and measure voltage at each point. Voltage measurements should not exceed .75VAC, 500µA. Any value exceeding this limit constitutes a potential shock hazard and must be corrected. If the AC plug is not polarized, reverse the AC plug and repeat exposed metal part voltage measurement at each point.



POWER CONSUMPTION

Power Consumption: 180W @100V-240VAC 50/60Hz

Note: Use an appropriate sized Variac and/or Isolation Transformer during servicing.

The listing of any available replacement part herein in no case constitutes a recommendation, warranty, or guarantee by SAMS Technical Publishing LLC, as to the quality and suitability of such replacement part. The numbers of the listed parts have been compiled from information furnished to SAMS Technical Publishing LLC, by the manufacturers of the specific type of replacement part listed.

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QUICKFACT
FROM PHOTOFACTM
LCD SERIES

SET 5610

MODEL L32WD14 (CHASSIS IFC130L)

RCA

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Do not use lead based solder for repair.

For a Complete List of Manuals,
Visit www.samswebsite.com

5610
Technical Service Data

RCA
MODEL L32WD14 (CHASSIS IFC130L)
with JSK3220-007 POWER SUPPLY



Representative Model

Essential Coverage For Servicing

LCD Receivers...

- Component Locations
- Parts list
- Placement chart
- Power Supply Schematic



NOVEMBER 2010 SET 5610

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MISCELLANEOUS ADJUSTMENTS

Entering Factory Service Menu

Turn the TV OFF, press the Volume down key on the remote and the Volume down key on the TV’s keyboard simultaneously for approximately 10 seconds until the TV turns ON. When the menu is displayed use the Up/Down keys to select an item and use the Left/Right keys to adjust values. Press the “Clear” key on the remote or select “Go Back” in the menu to exit the Factory Service Menu

Note: Record original values before adjusting any values.

To Exit Factory Service Menu
Press the “Clear” key on the remote or select “Go Back” in the menu to exit the Factory Service Menu.

Main Menu Items

Dealer Service Menu: Shows current Software Version loaded in the instrument.
Go Back: Returns to the previous menu.
Test Pattern: Menu will bring up color test screens.
Speaker Test: Press OK for a 5 second test tone.
Operating hours: Shows the number of operating hours.
NVM Initialize: Resets all customer Volatile Memory settings to factory defaults. Press OK key to start the process.
Reset Operating Hours: Resets operating hours to 0.
Current Software Info: Displays the current software version.
Picture: Customer Picture Menu.
Video Alignment: Video Alignment Menu.
Clear RRT: Clears the Regional Ratings Table. Select OK to clear the table.

Using the Test Pattern Menu

The Test Pattern Menu will display either a multiple color bar or a flat color screen. Each display will be visible for approximately 5 seconds.
Use the Up/Down Arrow on the remote to select the Test Pattern from the menu. Then use the OK key on the remote to enter the next menu. Select Go Back to return to the previous menu.
Select Single Color to bring up two options: Manual or Automatic
Under Manual, select which color to display (Red, Green, Blue, White or Black). Press the OK key on the remote to display the pattern.
Under Automatic, select OK to start the automatic scrolling though the different color screens (Red, Green, Blue, White or Black). Press the OK key to stop scrolling.
Press Go Back to find Multiple Color in the menu then press OK to display multiple bands of color.
Software Upgrade
Software upgrades are installed by the use of a generic USB device. Specific instructions related to software updates will be released within the software data package.

Local Upgrades/Applications

Checks for software upgrades, then initiates the upgrade process.

Current Software Info

Shows date and version of the software.

Video Alignment

The Cut Off alignment is used to define the color coordinates for low level luminance.
The White Point is used to define the color coordinates for bright luminance.
This alignment must be completed using Line Input (CVBS).
Start Video Alignment by entering the Factory Service Mode and select Video from the menu, then select Normal from the Color Temperature sub-menu.

Note: It is only necessary to perform the Cut Off and White Point Alignments with the Color Temperature set to the Normal position. The values for Cool and

Warm are interpolated based on the Normal settings.
Insert a grey test pattern with a 10 to 20 Nits luminance level.
Use a Color TV Analyzer to measure the coordinates at the center of the screen. Adjust Red, Green, Blue Offset for x=0.280 +/- 5%, y=0.290 +/- 5%.
Insert a 50IRE (or 150 nits) grey test pattern.
Measure the coordinates at the center of the screen. Adjust Red, Green, Blue Gain for x=0.280 +/- 5%, y=0.290 +/- 5%.

Note: It may be necessary to switch between the Cut Off and White Point Alignments in order to achieve the proper alignment.

Exit the Factory Service Menu by pressing the Clear key on the remote.

Brightness Alignment

Enter the Factory Service Menu.
Select Video from the menu then select Brightness.
Insert a Pluge test pattern thru the RF input with a 2% setup background showing a 0% and 4% bar.
Adjust the Brightness so that the 0% bar is invisible with the 4% bar visible.

Note: Record original values before adjusting any values.

Exit the Factory Service Menu by pressing the Clear key on the remote.

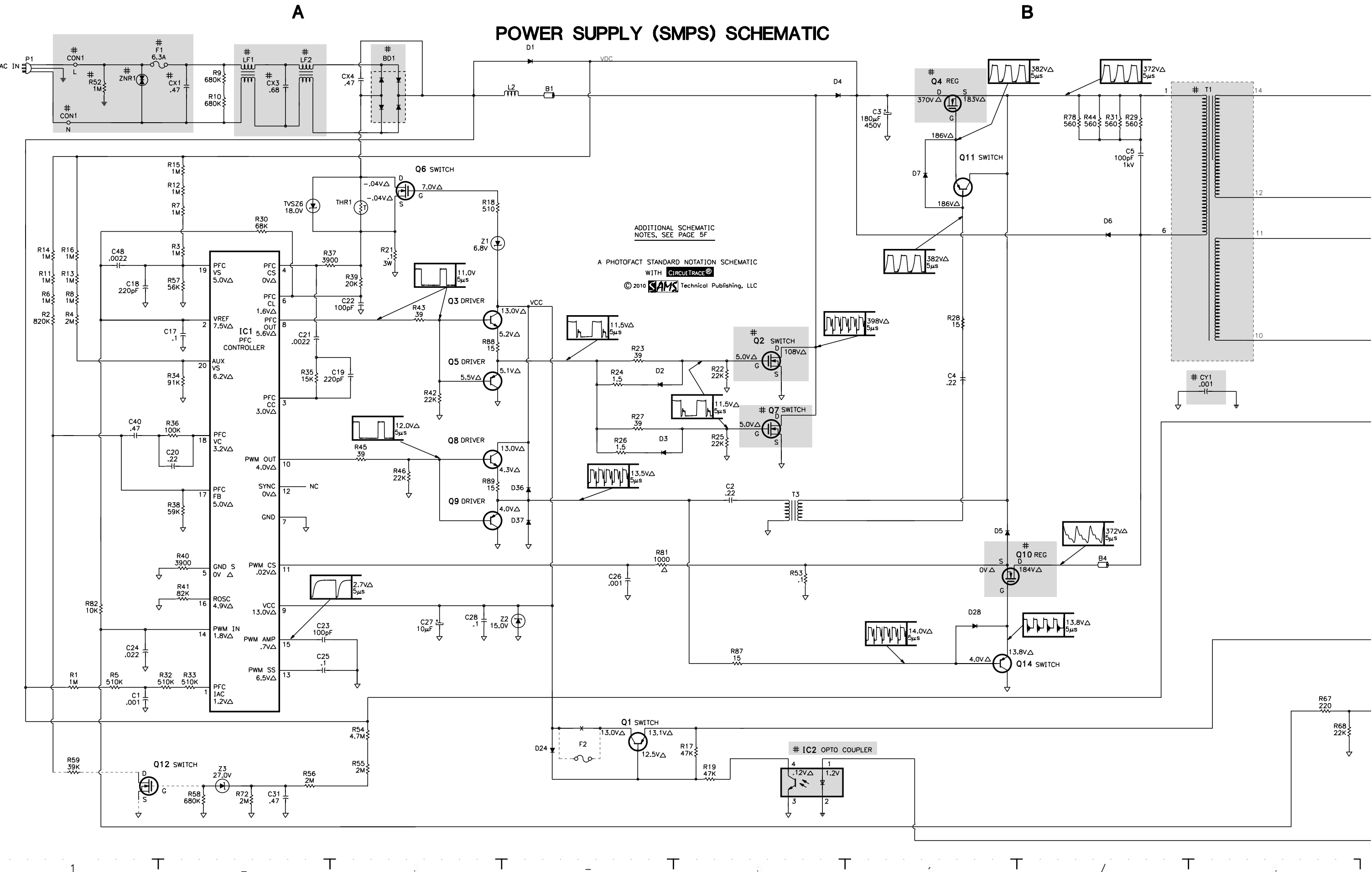
Peak White Adjustment

The Peak White Alignment must be completed to the following standards.
Enter the Factory Service Menu.
Select Video from the menu then select Peak White.
Input a test pattern with a 100% white centered pad on a dark background.
Using a color TV Analyzer measure the luminance level (Y[nit]) of the white pad.
Adjust with the Scaling Contrast and the Light Output Level (PW Level) for 400 Nits +20%/ -10%.

Exit the Factory Service Menu by pressing the Clear key on the remote.

SCHEMATIC COMPONENT LOCATION GUIDE

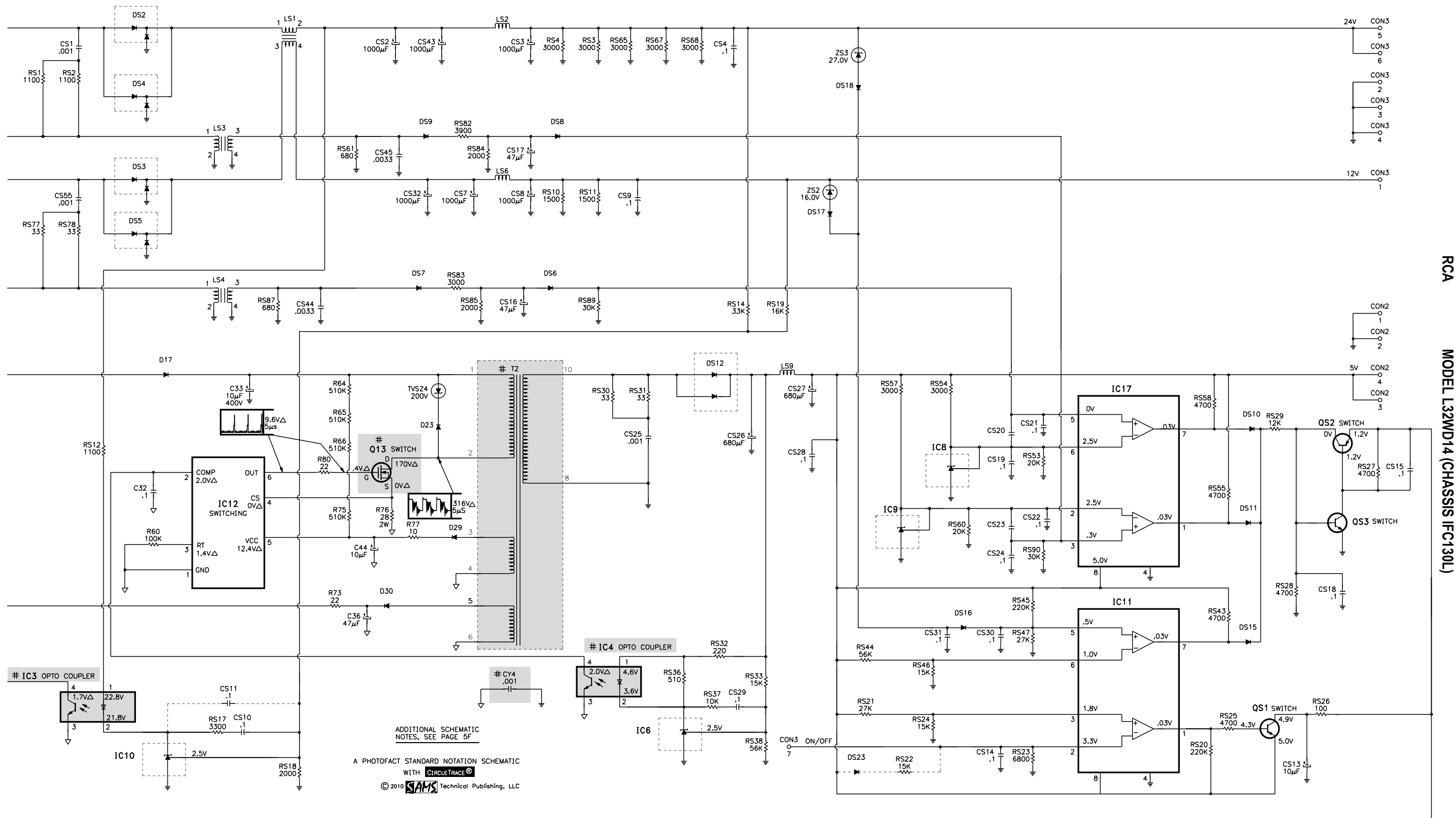
B1	A4	CS27	C13	IC10	E9	R30	B2	RS23	E14
B4	D7	CS28	C13	IC11	D15	R31	A7	RS24	E14
BD1	A3	CS29	E12	IC12	D10	R32	E1	RS25	E15
C1	E1	CS3	A11	IC17	C15	R33	E2	RS26	E16
C2	C5	CS30	D14	IP002	E19	R34	C2	RS27	C16
C3	A6	CS31	D14	IP085	B19	R35	C2	RS28	D16
C4	C6	CS32	B11	L2	A3	R36	C2	RS29	C16
C5	A7	CS4	A13	LF1	A2	R37	B2	RS3	A12
C17	B2	CS43	A11	LF2	A2	R38	C2	RS30	C12
C18	B1	CS44	C10	LP085	B21	R39	B3	RS31	C12
C19	C3	CS45	B11	LS1	A10	R40	D2	RS32	E12
C20	C2	CS55	B9	LS2	A11	R41	D2	RS33	E13
C21	B2	CS7	B11	LS3	B10	R42	C3	RS36	D12
C22	B3	CS8	B11	LS4	C10	R43	B3	RS37	E12
C23	D2	CS9	B12	LS6	B11	R44	A7	RS38	E13
C24	D1	CX1	A2	LS9	C13	R45	C3	RS4	A12
C25	D2	CX3	A2	P1	A1	R46	C3	RS43	D15
C26	D4	CX4	A3	Q1	E4	R52	A1	RS44	E13
C27	D3	CY1	C7	Q2	B5	R53	D5	RS45	D14
C28	D3	CY4	E11	Q3	B3	R54	E3	RS46	E14
C31	E2	D1	A4	Q4	A6	R55	E3	RS47	D14
C32	D9	D2	C4	Q5	C3	R56	E2	RS53	C14
C33	C10	D3	C4	Q6	B3	R57	B2	RS54	C14
C36	D10	D4	A5	Q7	C5	R58	E2	RS55	D15
C40	C1	D5	D6	Q8	C3	R59	E1	RS57	C13
C44	D11	D6	B7	Q9	D3	R60	D9	RS58	C15
C48	B1	D7	B6	Q10	D6	R64	C10	RS60	D14
CP005	E20	D17	C9	Q11	B6	R65	C10	RS61	B10
CP006	E20	D23	C11	Q12	E1	R66	C10	RS65	A12
CP082	A21	D24	E4	Q13	C11	R67	E8	RS67	A12
CP083	A21	D28	D6	Q14	D6	R68	E8	RS68	A12
CP084	C20	D29	D11	QS1	E15	R72	E2	RS77	B9
CP085	B19	D30	D11	QS2	C16	R73	D10	RS78	B9
CP086	D20	D36	C4	QS3	D16	R75	D10	RS82	B11
CP087	C20	D37	D4	R1	E1	R76	D11	RS83	C11
CP088	B20	DP012	E20	R2	B1	R77	D11	RS84	B11
CP089	C20	DP086	B21	R3	B2	R78	A7	RS85	C11
CP090	B21	DS10	C15	R4	B1	R80	D10	RS87	C10
CP091	B22	DS11	D15	R5	E1	R81	D4	RS89	C12
CP092	B22	DS12	C12	R6	B1	R82	D1	RS90	D14
CP093	B22	DS15	D15	R7	B2	R87	D5	T1	A8
CP098	B21	DS16	D14	R8	B1	R88	C3	T2	C11
CP099	B20	DS17	B13	R9	A2	R89	C3	T3	C5
CP122	E19	DS18	A13	R10	A2	RP002	E19	THR1	B3
CS1	A9	DS2	A9	R11	B1	RP003	E19	TVSZ4	C11
CS10	E10	DS23	E13	R12	B2	RP085	B18	TVSZ6	B2
CS11	E10	DS3	B9	R13	B1	RP086	D20	Z1	B3
CS13	E16	DS4	A9	R14	B1	RP087	B21	Z2	D4
CS14	E14	DS5	B9	R15	A2	RP088	C21	Z3	E2
CS15	C16	DS6	C11	R16	B1	RP098	B21	ZNR1	A1
CS16	C11	DS7	C11	R17	E5	RS1	A9	ZS2	B13
CS17	B11	DS8	B12	R18	B3	RS10	B12	ZS3	A13
CS18	D16	DS9	B11	R19	E5	RS11	B12		
CS19	C14	F1	A1	R21	B3	RS12	C9		
CS2	A11	F2	E4	R22	C5	RS14	C13		
CS20	C14	IC1	B2	R23	C4	RS17	E10		
CS21	C14	IC2	E6	R24	C4	RS18	E10		
CS22	D14	IC3	E9	R25	C5	RS19	C13		
CS23	D14	IC4	D12	R26	C4	RS2	A9		
CS24	D14	IC6	E12	R27	C4	RS20	E15		
CS25	C12	IC8	C14	R28	B6	RS21	E13		
CS26	C13	IC9	D13	R29	A7	RS22	E13		



C

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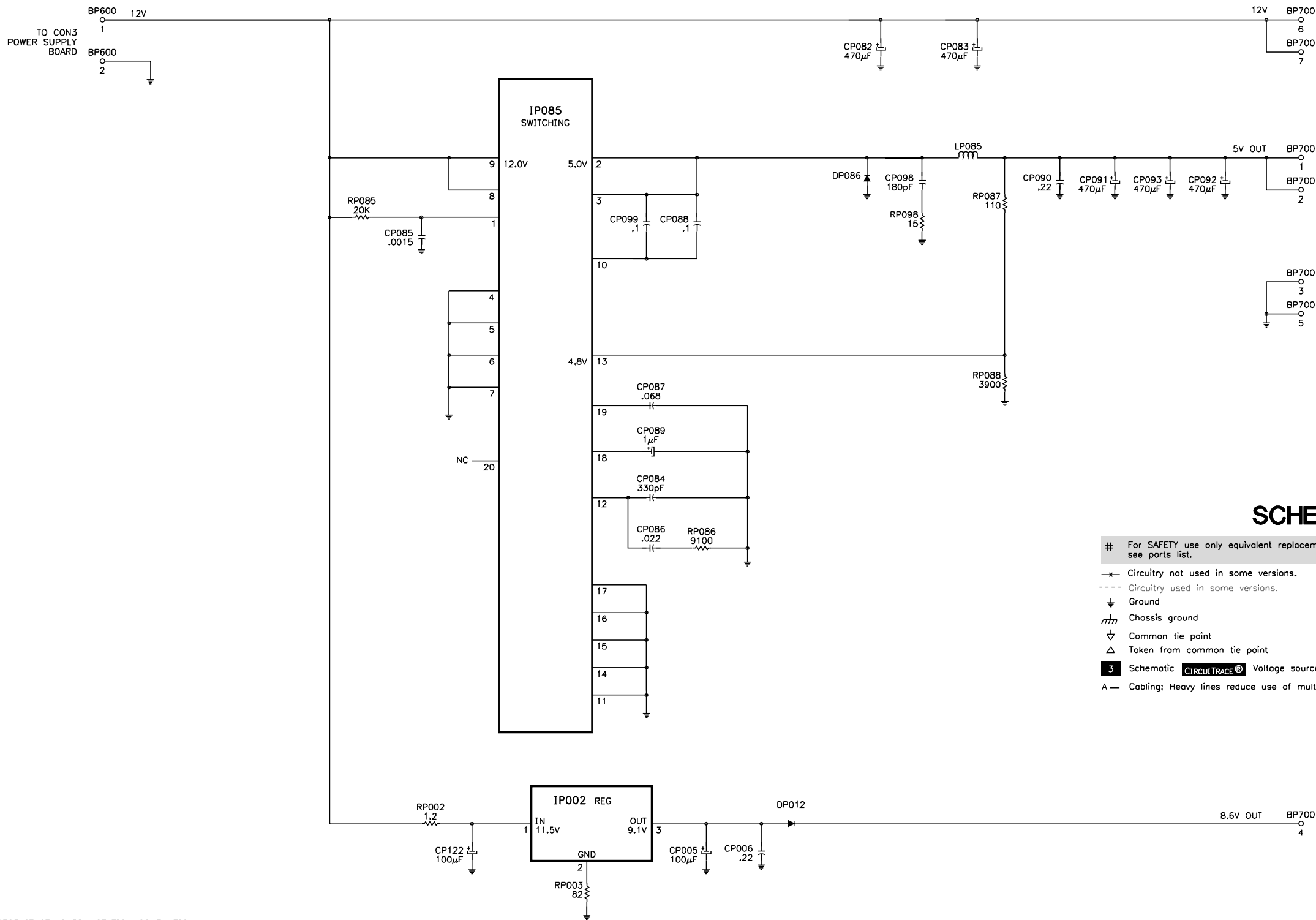
POWER SUPPLY (SMPS) SCHEMATIC continued



RCA

MODEL L32WD14 (CHASSIS IFC130L)

POWER INTERFACE SCHEMATIC



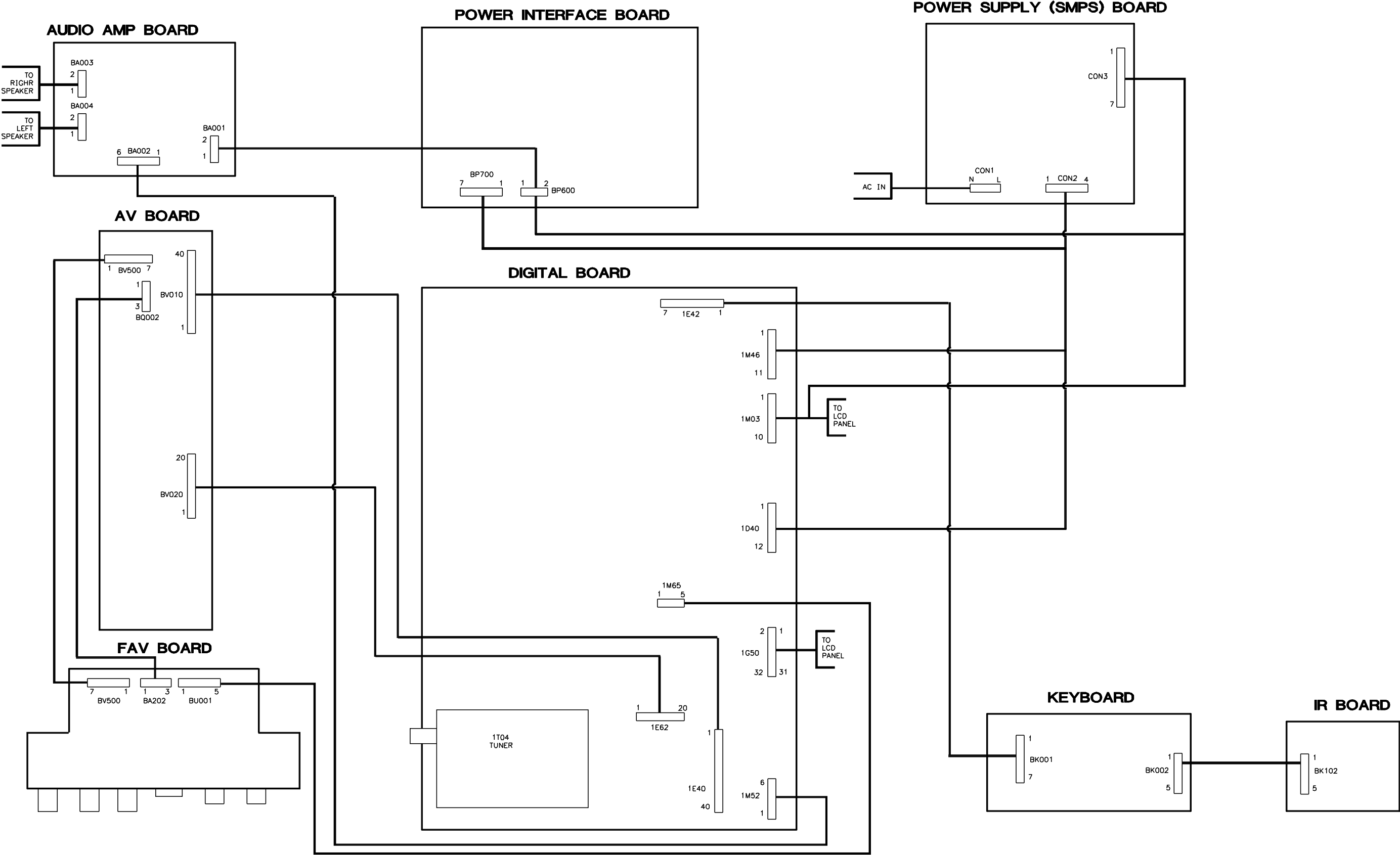
SCHEMATIC NOTES

- # For SAFETY use only equivalent replacement part, see parts list.
 - Circuitry not used in some versions.
 - Circuitry used in some versions.
 - ⏏ Ground
 - ⏏ Chassis ground
 - ⏏ Common tie point
 - ⏏ Taken from common tie point
 - 3 Schematic Voltage source tie point.
 - A Cabling: Heavy lines reduce use of multiple lines.
- Waveforms and voltages are taken from ground, unless otherwise noted.
Waveforms taken with triggered scope and colorbar signal.
Waveform voltage is peak to peak. Timebase is per division. Waveforms shown at 10 divisions.
Supply voltages maintained as seen at input.
Voltages measured with digital meter and a 1000μV RF signal, with colorbar pattern applied to antenna terminal.
Controls adjusted for normal operation.
Capacitors are 50 volts or less, 5% or greater unless noted.
Capacitor values are in microfarads unless noted.
Electrolytic capacitors are 50 volts or less, 20% or greater unless noted.
Resistors are less than 1W, 5% or greater unless noted.
Value in () used in some versions.
Measurements with switching as shown unless noted.
Rated voltage shown on zener diodes.

A PHOTOFAC STANDARD NOTATION SCHEMATIC
WITH CIRCUITTRACE®
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BOARD PLACEMENT CHART

See Connector Charts For Additional Information.



RCA MODEL L32WD14 (CHASSIS IFC130L)

See Connector Charts For Additional Information.

TUNER INFORMATION

Diagram of the back of the board showing component locations and power connections:

- BP700**: A component with 7 pins. Pins 1 through 6 are connected to 12V, 8.6V, 5V, 12V, and ground respectively. Pin 7 is connected to ground.
- BP600**: A component with 2 pins. Pin 1 is connected to ground. Pin 2 is connected to 12V.
- IP002**: A component with 3 pins. Pin 1 is connected to ground.
- (1) IP085**: A component located in the upper right area of the board.
- (1) USED ON OTHER SIDE OF BOARD**: A note indicating that component (1) is used on the other side of the board.

7 1

CON3

LS1

DS5

DS3

DS4

DS2

DS12

IC10

IC2

IC3

IC4

IC6

IC1

IC5

IC7

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[illegible]

A diagram of a vertical column with 19 horizontal segments, numbered (1) to (19) from top to bottom. A small rectangular box with diagonal hatching is positioned at the top right of the column.

1T04 TUNER		
PIN	Description	Voltage
1	DC_PWR	3.0V
2	5V	5.0V
3	OOB	0V
4	FM-T	0V
5	RF_GC	0V
6	DNU	0V
7	AS	0V
8	SCL	3.3V
9	SDA	3.3V
10	NC	-
11	VTUN	5.0V
12	IF_OUT	1.0V
13	IF_AGC	2.8V
14	IF_1	0.9V
15	IF_2	0V
16	GND	0V
17	GND	0V
18	GND	0V
19	GND	0V

1. Plug the AC power cord in, a 5.2V STBY voltage is generated on the Main Power Board and leaves @ CON2 pin-3. From there it goes to the Digital Board @ 1M46 pin-7, exits at 1E42 pin-5 and then to the Key Board @ BK001 pin-5.
2. When the Power On key on the remote or the key board is pressed a 5.0V level leaves 1M03 pin-7 on the Digital Board to CON3 pin-7 on the Main Power Board to turn the TV on. Now the Main Power Board generates a 12.0V @ CON3 pin-1 and a 24.0V @ CON3 pin-5 & 6.
3. The 12.0V leaves CON3 pin-1 to the Power Interface Board BP600 pin-1 & Audio Amp Board BA001 pin-1. The 12.0V passes thru the Power Interface Board @ BP700 pin-6 & 7 to the Digital Board 1M46 pins-4, 9 & 11. Also the 12.0V is used to generate 8.6V that leaves @ BP700 pin-4 to the Digital Board 1M46 pin-3, plus the 12.0V is used to generate 5.0V that leaves @ BP700 pins-1 & 2 to the Digital Board 1M46 pins-5 & 1D40 pins-4, 5 & 6.
4. The 24.0V leaves CON3 pins-5 & 6 to connectors CN1 & CN2 on the LCD Panel.

The above Turn-On Sequence should help in understanding the initial supply voltages needed to turn on the TV. Any other connector voltages can be found in the Connector Chart listings.

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CONNECTOR VOLTAGE CHART

AUDIO AMP BOARD

BA001			BA002			BA003		
PIN	PIN ID	Voltage	PIN	PIN ID	Voltage	PIN	PIN ID	Voltage
1	12VDD	11.7V	1	AMP_L_IN	5.6V	1	R_OUT_NEG	5.9V
2	GND	0V	2	GND_BTL	0V	2	R_OUT_POS	5.9V
			3	AMP_R_IN	5.5V			
			4	AGND	0V			
			5	AMUTE	0.02V	1	L_OUT_NEG	6.0V
			6	A_PLOP (STBY)	0V	2	L_OUT_POS	6.0V

AV BOARD

BQ002			BV500			BV020		
PIN	PIN ID	Voltage	PIN	PIN ID	Voltage	PIN	PIN ID	Voltage
1	HP_R	0V	1	FAV CVBS	0V		SEE: DIGITAL BOARD 1E62	
2	AGND	0V	2	AGND	0V			
3	HP_L	0V	3	FRONT_C	0V			
			4	AGND	0V			
			5	FAVL	0V			
			6	FAVR	0V			
			7	AGND	0V			

DIGITAL BOARD

1E42			1M46			1D40		
PIN	PIN ID	Voltage	PIN	PIN ID	Voltage	PIN	PIN ID	Voltage
1	LED1	2.2V	1	GND	0V	1	NC	-
2	LED2	4.5V	2	GND	0V	2	NC	-
3	GND	0V	3	8.6V	8.6V	3	GND	0V
4	R	3.3V	4	12V	12.0V	4	5V	5.0V
5	5V STBY	5.0V	5	5V	5.0V	5	5V	5.0V
6	TV KEY/ON	2.0V	6	GND	0V	6	5V	5.0V
7	GND	0V	7	5.2V STBY	5.2V	7	NC	-
			8	NC	-	8	GND	0V
			9	12V	12.0V	9	NC	-
			10	NC	-	10	GND	0V
			11	12V	12.0V	11	NC	-
						12	NC	-

1M65		
PIN	PIN ID	Voltage
1	VBUS	5.1V
2	USB-	0V
3	USB+	0V
4	AGND	0V
5	AGND	0V

1M52		
PIN	PIN ID	Voltage
1	AMP_L_IN	5.6V
2	GND_BTL	0V
3	AMP_R_IN	5.5V
4	AGND	0V
5	AMUTE	0.02V
6	A_PLOP (STBY)	0V

1G50		
PIN	PIN ID	Voltage
1	VDISP	4.9V
2	VDISP	4.9V
3	VDISP	4.9V
4	VDISP	4.9V
5	VDISP	4.9V
6	VDISP	4.9V
7	CTRIL-DISP1	0V
8	CTRIL-DISP2	0V
9	CTRIL-DISP3	0V
10	CTRIL-DISP4	0V
11	TXPNXA+	0V
12	TXPNXA-	1.2V
13	TXAC+	1.2V
14	GND	0V
15	TXPNXB-	1.3V
16	TXPNXB+	1.3V

1G50		
PIN	PIN ID	Voltage
17	GND	0V
18	TXPNXC-	1.2V
19	TXPNXC+	1.2V
20	GND	0V
21	TXPNXCLK-	1.2V
22	TXPNXCLK+	1.2V
23	GND	0V
24	TXPNXD-	1.3V
25	TXPNXD+	1.3V
26	GND	0V
27	TXPNXE-	0V
28	TXPNXE+	0V
29	GND	0V
30	SCL_I2C4_DISP	0V
31	SDA_I2C4_DISP	0V
32	GND	0V

DIGITAL BOARD (CONTINUED)

1M03			IE40		
PIN	PIN ID	Voltage	PIN	PIN ID	Voltage
1	BKLIGHT-CONTL	8.4V	1	GND	0V
2	NC	-	2	AV2/AV4_G-Y	1.4V
3	LIGHT-ON-OUT	5.1V	3	GND	0V
4	GND	0V	4	AV2/AV4_B-PB	1.4V
5	NC	-	5	AV2/AV4_R-PR	1.4V
6	NC	-	6	GND	0V
7	POWER-ON-HI	4.8V	7	+8V6-SW	8.6V
8	NC	-	8	GND	0V
9	NC	-	9	Y-CVBS-MON-OU	4.5V
10	NC	-	10	GND	0V
			11	NC	-
			12	GND	0V
			13	AUDIO-OUT2-L	3.6V
			14	AUDIO-OUT2-R	3.6V
			15	GND	0V
			16	AUDIO-HDPH-L	0V
			17	AUDIO-HDPH-R	0V
			18	GND	0V
			19	AV1-CVBS	0V
			20	GND	0V

1E62		
PIN	PIN ID	Voltage
1	GND	0V
2	YPBPR2_Y	1.2V
3	GND	0V
4	YPBPR2_PB	1.2V
5	GND	0V
6	YPBPR2_PR	1.2V
7	GND	0V
8	SPL_IN	0V
9	HSYNC-HIRATE	3.3V
10	SPL_OUT	0V
11	GLINK-IR-OUT	0V
12	GLINK-TXD	3.3V
13	GLINK-RXD	2.3V
14	A_PLOP	0V
15	P50	3.2V
16	SCL-MM	0V
17	SDA-MM	0V
18	LED2	4.5V
19	LIGHT-SENSOR	0.4V
20	COM-SND	3.2V

FAV BOARD

BV500			BU001		
PIN	PIN ID	Voltage	PIN	PIN ID	Voltage
1	FAV CVBS	0V	1	VBUS	5.1V
2	AGND	0V	2	USB-	0V
3	FRONT_C	0V	3	USB+	0V
4	AGND	0V	4	AGND	0V
5	FAVL	0V	5	AGND	0V
6	FAVR	0V			
7	AGND	0V			

BA202		
PIN	PIN ID	Voltage
1	HP_R	0V
2	AGND	0V
3	HP_L	0V

KEY BOARD

BK002			BK001		
PIN	PIN ID	Voltage	PIN	PIN ID	Voltage
1	GND	0V	1	LED1	2.2V
2	REMOTE	4.7V	2	LED2	4.5V
3	5V	4.9V	3	GND	0V
4	G LED	1.8V	4	R	3.3V
5	R LED	0.6V	5	5V STBY	4.9V
			6	TV KEY/ON	2.0V
			7	GND	0V

IR BOARD		
PIN	PIN ID	Voltage
1	GND	0V
2	REMOTE	3.3V
3	5V	4.9V
4	G LED	2.4V
5	R LED	0.6V

See Placement Chart for connector locations.

See Placement Chart for connector locations.

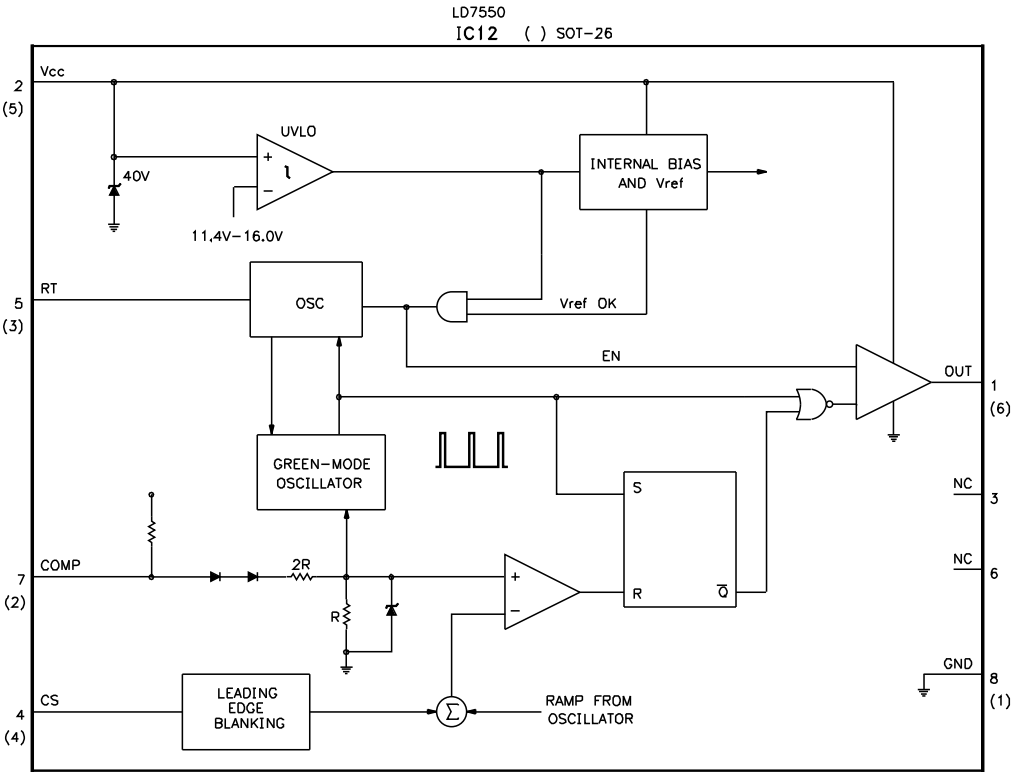
POWER SUPPLY (SMPS) BOARD

CON1			CON3		
PIN	PIN ID	Voltage	PIN	PIN ID	Voltage
1	L	AC IN	1	12V	11.9V
2	N	AC IN	2	GND	0V
			3	GND	0V
			4	GND	0V
CON2			5	24V	23.9V
PIN	PIN ID	Voltage	6	24V	23.9V
1	NC	-	7	Power On_3.3V	3.3V
2	GND	0V			
3	5.2V_STBY	5.1V			
4	NC	-			

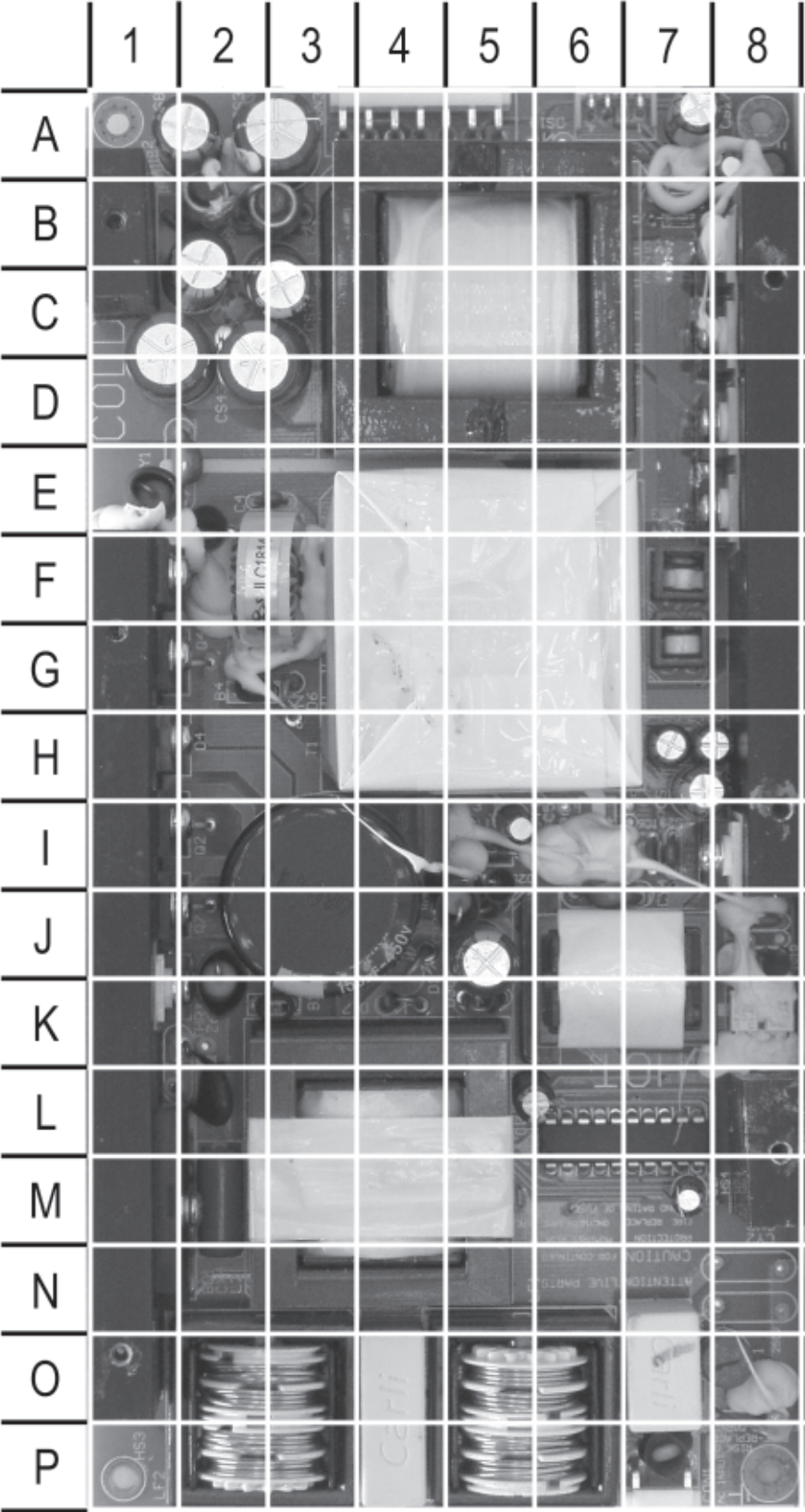
POWER INTERFACE BOARD

BP600			BP700		
PIN	PIN ID	Voltage	PIN	PIN ID	Voltage
1	12V	12.0V	1	5V OUT	5.0V
2	GND	0V	2	5V OUT	5.0V
			3	GND	0V
			4	8.6V OUT	8.6V
			5	GND	0V
			6	12V	12.0V
			7	12V	12.0V

IC FUNCTION

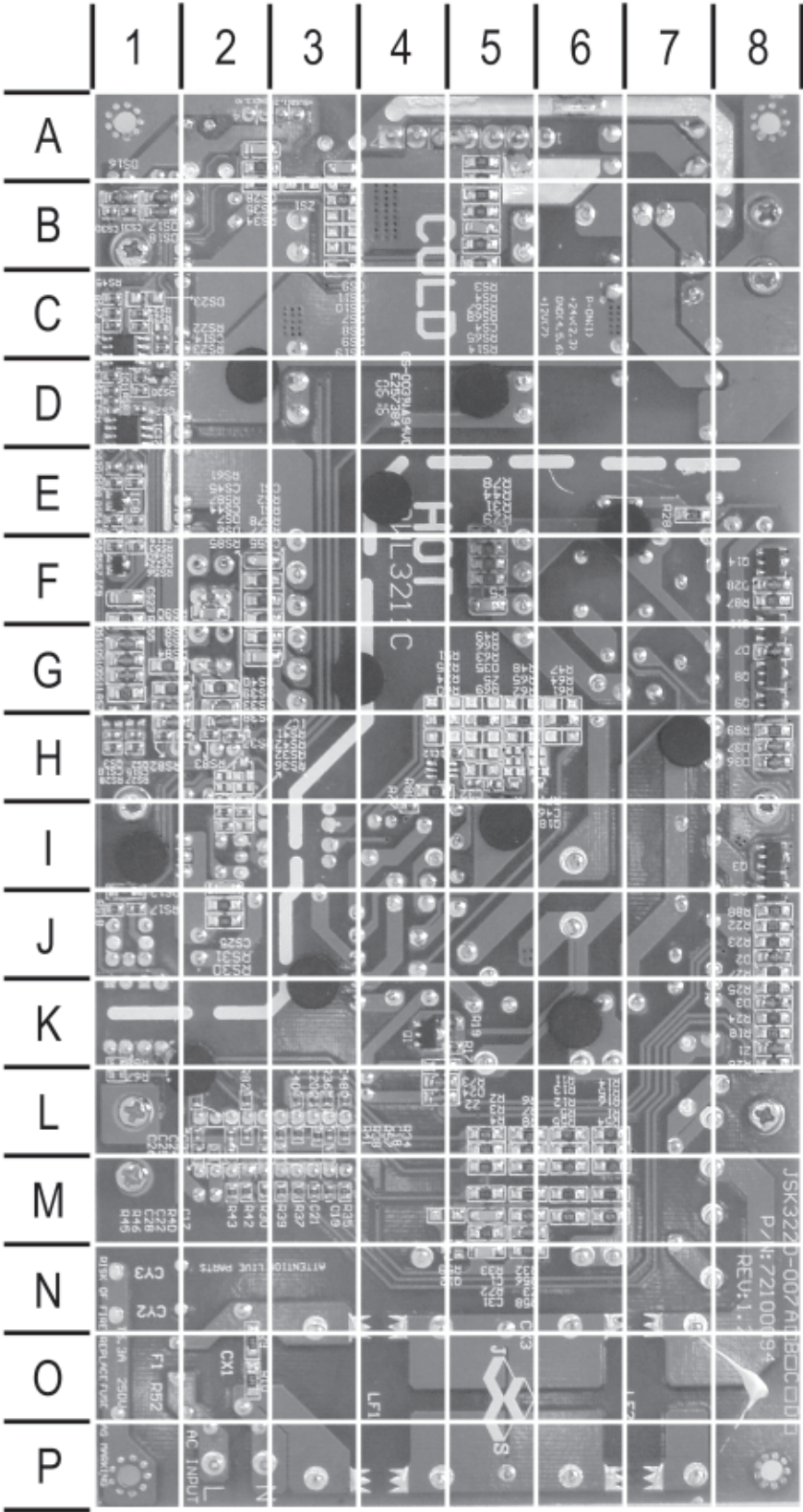


POWER SUPPLY (SMPS) BOARD TOP



TOP GRIDTRACE LOCATION GUIDE							
B1	K3	CS29	I7	DS2	E8	LS9	A8
B4	G2	CS3	A3	DS3	C8	Q2	I1
BD1	M1	CS32	C3	DS4	D8	Q4	G1
C2	G2	CS43	D1	DS5	B8	Q6	K1
C3	J3	CS7	C2	F1	O8	Q7	J1
C4	E2	CS8	A2	F2		Q10	F1
C27	M7	CX1	O7	IC1	L6	Q13	I4
C33	J5	CX3	P4	IC2	K8	R21	K2
C36	L5	CX4	M2	IC3	K8	R52	O8
C44	I5	CY1	E2	IC4	I6	R53	E1
CON1	P7	CY4	J6	IC6	I7	R76	J5
CON2	A6	D1	J4	IC10	I8	T1	G5
CON3	A3	D4	H1	L2	M4	T2	K6
CS10	J8	D5	E2	LF1	P5	T3	F2
CS13	A8	D6	G3	LF2	P2	THR1	L2
CS16	H7	D17	K4	LS1	C5	Z4	J5
CS17	H7	D23	I5	LS2	B3	ZNR1	P7
CS2	D2	D29	I5	LS3	F7	ZS2	B7
CS26	H7	D30	K5	LS4	G7	ZS3	B7
CS27	A7	DS12	I8	LS6	B2		

POWER SUPPLY (SMPS) BOARD BOTTOM



BOTTOM, GRIDTRACE LOCATION GUIDE									
C1	M5	D28	F8	R13	L6	R66	H5	RS38	I2
C5	F5	D36	H8	R14	L6	R67	L1	RS43	D1
C17	L3	D37	H9	R15	L6	R68	K1	RS44	D2
C18	L3	DS6	H2	R16	M6	R72	M5	RS45	C1
C19	M3	DS7	G2	R17	K5	R73	L5	RS46	C1
C20	L3	DS8	G1	R18	K8	R75	H4	RS47	C1
C21	M3	DS9	H1	R19	K5	R77	I4	RS53	E1
C22	L2	DS10	G1	R22	J8	R78	E5	RS54	E1
C23	L2	DS11	G1	R23	J8	R80	I4	RS55	G1
C24	L2	DS15	G1	R24	K8	R81	L2	RS57	F1
C25	L2	DS16	B1	R25	K8	R82	L2	RS58	F1
C26	L2	DS17	B1	R26	K8	R87	F8	RS60	F1
C28	L2	DS18	B1	R27	J8	R88	J8	RS61	F2
C31	N5	IC8	E1	R28	E7	R89	H8	RS65	B5
C32	H5	IC9	F1	R29	E5	RS1	F2	RS67	B5
C40	L3	IC11	C1	R30	M2	RS2	F2	RS68	B5
C48	L3	IC12	H4	R31	F5	RS3	A5	RS77	G2
CS1	F2	IC17	D1	R32	M5	RS4	A5	RS78	F2
CS4	B5	Q1	K4	R33	M5	RS10	B3	RS82	H1
CS9	A3	Q3	I8	R34	L3	RS11	B3	RS83	H2
CS14	C1	Q5	I8	R35	M3	RS12	J1	RS84	H2
CS15	H1	Q8	G8	R36	L3	RS14	B5	RS85	H2
CS18	H1	Q9	G8	R37	M3	RS17	J1	RS87	G2
CS19	E1	Q11	G8	R38	L3	RS18	J1	RS89	D1
CS20	E1	Q14	F8	R39	M3	RS19	B3	RS90	G1
CS21	D1	Q81	D1	R40	L3	RS20	D1	Z1	K8
CS22	E1	Q82	H1	R41	L3	RS21	C1	Z2	L4
CS23	F1	Q83	H2	R42	M2	RS22	C1	Z3	M5
CS24	D1	R1	M6	R43	M2	RS23	C1		
CS25	I2	R2	L5	R44	F5	RS24	C1		
CS28	A2	R3	L5	R45	L2	RS25	D1		
CS30	B1	R4	M5	R46	L2	RS26	G1		
CS31	B1	R5	M6	R54	M6	RS27	H1		
CS44	G2	R6	L5	R55	M6	RS28	H1		
CS45	F2	R7	L5	R56	M5	RS29	G1		
CS55	G2	R8	M5	R57	L3	RS30	J2		
D2	J8	R9	O2	R58	N5	RS31	J2		
D3	K8	R10	O2	R60	H5	RS32	I2		
D7	G8	R11	L6	R64	H6	RS33	I2		
D24	L4	R12	M6	R65	H5	RS37	I2		

PARTS LIST

Item No.	Type No.	Mfr. Part No.	Notes	Item No.	Function/Rating	Mfr. Part No.	Notes
# BD1	D15XB60	-	Bridge Rectifier	C3	180uF 450V	-	-
D1	1N5406	-	-	C5	100pF 1KV	-	-
D2, 3	1N4148	-	-	C33	10uF 400V	-	-
D4	1806	-	-	# CX1	.0047	-	-
D5, 6	BYV26C	-	-	# CX3	.68	-	-
D7	1N4148	-	-	# CY1	.001	-	-
D17	UF4007	-	Ultra Fast Rectifier	# CY4	.001	-	-
D23	UF4007	-	Ultra Fast Rectifier	# F1	Fuse	-	6.3A 125V
D24, 28	1N4148	-	-	L2	Inductor	-	JLC4219
D29, 30	DIN4937	-	-	# LF1, 2	Filter	-	JLB2859
D36, 37	1N4148	-	-	LP085	125uH	-	-
DP012	RGP15G	-	-	LS1	Inductor	-	JLC5008
DP086	SR560	-	-	LS2	Inductor	-	JLC0510
DS2	MBR20150CT	-	20A, 150V Schottky Dual Diode	LS3	Inductor	-	JLB0931
DS3	FYP2010DN	-	20A, 100V Schottky Dual Diode	LS4	Inductor	-	JLB0931
DS4	MBR20150CT	-	20A, 150V Schottky Dual Diode	LS6	Inductor	-	JLC0510
DS5	FYP2010DN	-	20A, 100V Schottky Dual Diode	LS9	Inductor	-	JLC0657
DS6, 7, 8, 9	1N4148	-	-	P1	AC Power Cord	270462	Polarized
DS10, 11	1N4148	-	-	R21	1 5% 5W	-	-
DS12	MBR10100CT	-	10A, 100V Schottky Dual Diode	# R52	1M 5%1/2W	-	-
DS15, 16, 17, 18	1N4148	-	-	THR1	NTC5D-9	-	Thermistor
DS23	1N4148	-	-	TVSZ4	P6KE200A	-	200V Transient Voltage Suppressor
IC1	TDA16888	-	Combined PFC & PWM Internal Sync	TVSZ6	P6KE18A	-	18V Transient Voltage Suppressor
# IC2, 3, 4	PC817C	-	Opto-Coupler	# T1	Transformer	-	BCK50298S
IC6	KA431AZ	-	2.5V Shunt Regulator Diode 1%	# T2	Transformer	-	BCK190284
IC8, 9	AS431M	-	Precision Adj. Shunt Regulator	T3	Transformer	-	JLC1814
IC10	KA431AZ	-	2.5V Shunt Regulator Diode 1%		Cable	274013	LVDS
IC11	LM393	-	Dual OP-AMP		Panel	-	LCD, CMO V320B1
IC12	LD7550B	-	Low Current Start-Up PWM CNTRL		PC Board	272066	Audio Amp
IC17	LM393	-	Dual OP-AMP		PC Board	274037	AV
IP002	LF90DBT	-	Very Low Voltage Drop 9.0V Regulator		PC Board	272064	Digital
IP085	L4973D5	-	5.1V Step-Down Switch Regulator		PC Board	274038	FAV
Q1	2SB1132	-	-		PC Board	274039	IR
Q2	13N50C	-	MOS-FET		PC Board	274040	Key
Q3	2SD1664	-	-		PC Board	272062	Power Supply (SMPS), JSK 3220-007D
# Q4	13N50C	-	MOS-FET		PC Board	274041	Power Interface
Q5	2SB1132	-	-		Transmitter	272068	Remote R301C1
Q6	RF3205	-	MOS-FET	# For SAFETY use only equivalent replacement parts. Use Lead Free Solder			
Q7	13N50C	-	MOS-FET				
Q8	2SD1664	-	-				
Q9	2SB1132	-	-				
# Q10	13N50C	-	MOS-FET				
Q11	2SB1132	-	-				
Q12	-	-	MOS-FET				
# Q13	8N60C	-	MOS-FET				
Q14	2SB1132	-	-				
QS1, 2	BT3906	-	-				
QS3	BT3904	-	-				
Z1	6.8V 1/2W	-	-				
Z2	15V 1/2W	-	-				
Z3	27V 1/2W	-	-				
# ZNR1	PVR07D 470K	-	-				
ZS2	16V 1/2W	-	-				
ZS3	27V 1/2W	-	-				

Important Parts Information

■ Parts not listed in the parts list are commonly available at your local electronics parts retailer.

■ The parts listed here are those not usually available from a well-stocked supply cabinet or bin.

■ On the parts lists, safety items are marked with a # to remind you that only exact replacements are recommended for these items.

■ When ordering parts, state the model number, part number, and description.

RCA

MODEL L32WD14 (CHASSIS IFC130L)