

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.

SERVICING THE HIGH VOLTAGE AND CRT

Use EXTREME CAUTION when servicing the high voltage circuits. To discharge static high voltage, connect a 10K ohms resistor in series with a test lead between the receiver ground and CRT anode lead. DO NOT lift the CRT by the neck. Always wear shatterproof goggles when handling the CRT to protect eyes in case of implosion.

X-RAY RADIATION AND HIGH VOLTAGE LIMITS

Be aware of the instructions and procedures covering X-ray radiation. In solid-state receivers and monitors, the CRT is the only potential source of X-rays. Keep an accurate high voltage meter available at all times. Check meter calibration periodically. Whenever servicing a receiver, check the high voltage at various brightness levels to be sure it is regulating properly. Keep high voltage at rated value, NO HIGHER. Excessive high voltage may cause X-ray radiation or failure of associated components. DO NOT depend on protection circuits to keep voltage at rated value. When troubleshooting a receiver with excessive high voltage, avoid close contact with the CRT. DO NOT operate the receiver longer than necessary. To locate the cause of excessive high voltage, use a variable AC transformer to regulate voltage. In present receivers, many electrical and mechanical components have safety related characteristics which are not detectable by visual inspection. Such components are identified by a # on both the schematic and the parts list. For SAFETY, use only equivalent replacement parts when replacing these components.

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.

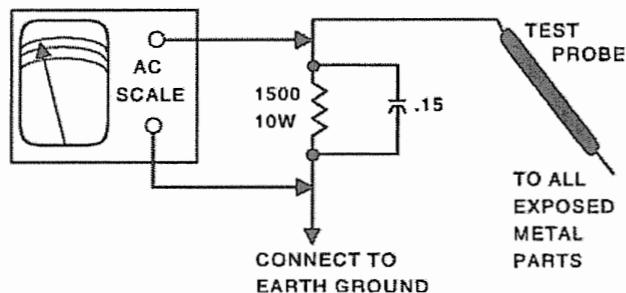
SAFETY CHECKS — FIRE AND SHOCK HAZARD

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.



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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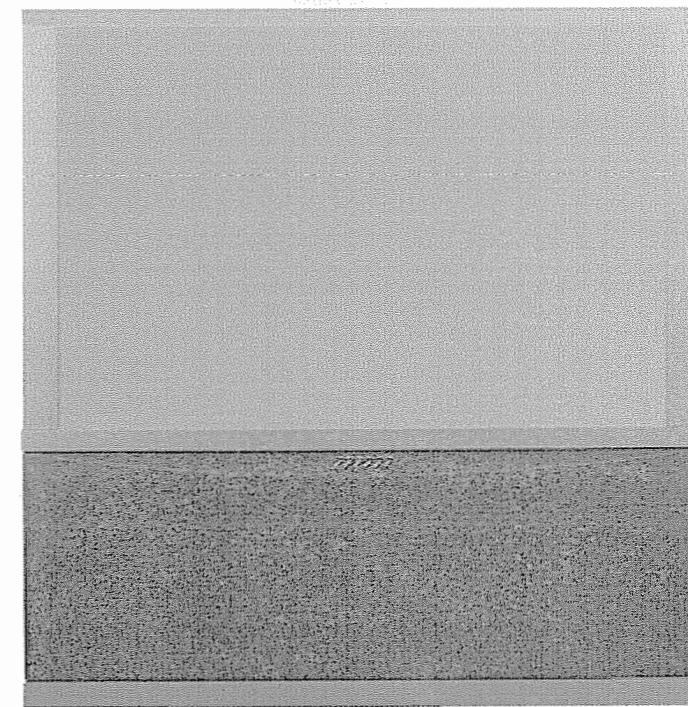
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PHOTOFAC[®] HD Technical Service Data

RCA

Model D40W20YX1 (Chassis ATC221)



SET 5132

MODEL D40W20YX1 (CHASSIS ATC221)

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TUNER INFORMATION

MAIN TUNER VOLTAGE CHART

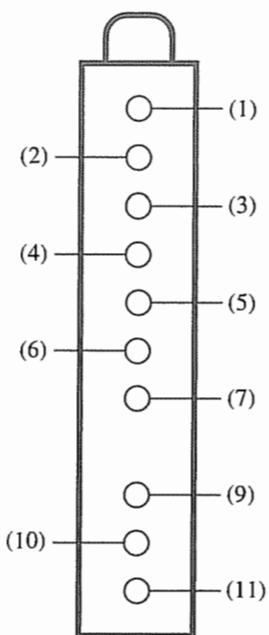
Pin	VHF Low Band	VHF High Band	UHF Band
(1) AGC	2.5V	2.6V	3.0V
(2) TU	1.6V	4.5V	5.5V
(3) AS	1.3V	1.3V	1.3V
(4) CLK	4.7V	4.7V	4.7V
(5) DAT	4.7V	4.7V	4.7V
(6) UB	5.0V	5.0V	5.0V
(7) +5V	5.0V	5.0V	5.0V
(9) +33V	32.5V	32.5V	32.5V
(10) IF2	0V	0V	0V
(11) IFT	0V	0V	0V

NOTE: VHF Low Band voltages taken on channel 2.

VHF High Band voltages taken on channel 7.

UHF Band voltages taken on channel 14.

MAIN TUNER TERMINAL GUIDE



SLAVE TUNER VOLTAGE CHART

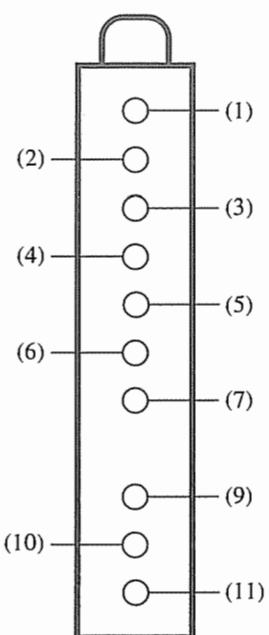
Pin	VHF Low Band	VHF High Band	UHF Band
(1) AGC	2.6V	2.6V	3.0V
(2) TU	1.5V	4.5V	5.5V
(3) AS	0V	0V	0V
(4) CLK	4.7V	4.7V	4.7V
(5) DAT	4.7V	4.7V	4.7V
(6) UB	5.0V	5.0V	5.0V
(7) +5V	5.0V	5.0V	5.0V
(9) +33V	32.5V	32.5V	32.5V
(10) IF2	0V	0V	0V
(11) IFT	0V	0V	0V

NOTE: VHF Low Band voltages taken on channel 2.

VHF High Band voltages taken on channel 7.

UHF Band voltages taken on channel 14.

SLAVE TUNER TERMINAL GUIDE



MISCELLANEOUS ADJUSTMENTS

NOTE: All procedures require an antenna connected and power applied to the set.

HIGH VOLTAGE CHECK

Tune in a picture. Set brightness, contrast, and color to minimum. Connect a high voltage probe to CRT anode. High voltage should measure 30kV to 32kV.

SUB BRIGHTNESS

NOTE: Turn the TV on for at least 15 minutes for warm up before doing the Sub Brightness Adjustment.

Tune in a gray scale bar staircase signal. Access the Customer Control Main Menu. Select Picture Quality, select Picture Preset, then select Normal Lighting. This will reset the customer controls. Access the Service Menu, adjust the Sub Brightness so that the first bar on the gray scale signal is black and the rest of the gray scale bars are clearly distinguishable from each other.

SUB CONTRAST

Tune in a gray scale bar staircase signal. Access the Customer Control Main Menu. Select Picture Quality, select Picture Preset, then select Normal Lighting. This will reset the customer controls. Access the Service Menu, adjust the Sub Contrast to mid range. Connect an oscilloscope to pin 6 of the CRT socket to measure the green voltage peak to peak. Adjust the Sub Contrast to have 109V between the blanking and the white level. Repeat the process with the scope connected to pin 8 of the CRT socket for the red and to pin 11 of the CRT socket for the blue.

COLOR TEMPERATURE

NOTE: Turn the TV on for at least 15 minutes for warm up before doing the Color Temperature Adjustment.

Tune in a gray scale bar staircase signal. Access the Customer Control Main Menu. Select Picture Quality, select Picture Preset, then select Normal Lighting. This will reset the customer controls. Perform the Screen Adjustment procedure. Access the Service Menu. Adjust RG Drive Gain value to 42, and adjust Blue Drive Gain value to 42. Adjust Red Cutoff value to 10. Adjust the Green Cutoff value and the Blue Cutoff value for the best gray tone on the first few bars of the signal. The Red Cutoff value may be readjusted to produce the best picture quality. Adjust the Green Gain and the Blue Gain for the best white level on the last bars of the signal. Check the low light to high light gray scale tracking. Repeat the procedure, if necessary, to obtain the best performance. Tune in a regular channel and adjust brightness for picture in normal room lighting.

Apply a composite video signal to Video 1 Input. Select Video 1 as the main picture source. Turn on PIP, and select Video 1 as the PIP picture. Connect an oscilloscope to pin 8 of the Blue CRT socket to measure the blue voltage peak to peak. Access the Service Menu. Adjust the PIP brightness level so that the PIP picture has the same brightness as the main picture. Adjust the PIP contrast level so that the PIP contrast has the same as the main picture contrast.

SERVICE MENU

The following adjustment procedures are accessed thru the Field Service Menu. To access the Field Service Menu, with the receiver off, press the volume down button on the receiver and hold it down while pressing the channel down button for at least eight seconds. The set will turn on and the screen will display the Field Service Main Menu. Adjustments are made by selecting the proper menu item and changing the value of that item. To navigate thru the Field Service Menu use channel up and down buttons on the receiver front. To adjust the current value of that menu item use volume + and - buttons on the receiver front. To save the changes on any of the adjustments, select TUBE from the Field Service Menu and then select the STORE item which must be checked. All service adjustments are bus controlled except focus and screen. The remote control can also be used by pressing the arrows buttons up or down to navigate thru the menu and by pressing the arrows buttons to the left or to the right to select an item to adjust. Pressing the clear button on the remote will clear the Field Service Menu from the screen. Pressing the menu button with a long press will display the Field Service Menu back. The OK button on the remote is used to select or deselect a menu item.

NOTE: Before making any changes to any value, make a record of the On Set values.

FIELD SERVICE MENU CHART

QUIT

TUBE

CHASSIS SETUP

FEATURE SETUP

GEOMETRY

VIDEO

IF

ERROR

CONVERGENCE

CHASSIS SETUP MENU CHART

Return

Clear Programs

Default Sound Presets

Kbd. Config Horizontal

Bus Quiet

Burn-In Prot.

Dev Support

FEATURE SETUP MENU CHART

Return

Pict. Rotation	x
Blue Screen	x
Curtains Effect	x
Subwoofer	x
Autoconvergence	x
DVI	x
Defaults	

GEOMETRY MENU CHART

Tune in a crosshatch pattern. Select the Geometry item from the field service menu.

Item	Value	Remarks
Return	-	-
V-Slope	C0	Adjust vertical slope until the middle line of the crosshatch is just visible.
V-Amplitude	8C	Adjust for half an inch over size on top and bottom of the crosshatch pattern.
V-Position	50	Adjust for the best centering of the crosshatch pattern vertically on the screen.
V-Linearity	18	Adjust for equal heights of the squares on top and bottom of the crosshatch pattern.
H-Delay Tuner 1	80	Using the Main Tuner, adjust to center the video inside the displayed curtains.
H-Delay Tuner 2	80	Using the Slave Tuner, adjust to center the video inside the displayed PIP window.
H-Position	98	Adjust for the best centering of the crosshatch pattern horizontally on the screen.
H- Amplitude	84	Adjust for half an inch over size on the right and the left of the crosshatch pattern.
EW- Amplitude	44	Adjust for straight vertical lines in the middle of the CRT.
EW-Trapezium	84	Adjust for straight vertical lines on the left and right of the crosshatch pattern.
Breathing	8C	Adjust until horizontal amplitude will change with different current at the same ratio as the vertical amplitude.
H-Parallel	70	Horizontal Parallelogram is to adjust the offset between the top and bottom of the crosshatch pattern.
EW-Symmetry	70	Adjust for straight vertical lines at the right and the left of the crosshatch pattern.
EW-Upper Corner	98	Adjust for straight vertical lines at the top of the crosshatch pattern.
EW-Lower Corner	9C	Adjust for straight vertical lines at the bottom of the crosshatch pattern.
H-Max (1)	A0	-
H-Min (1)	40	-
Check XRP	Start	-

(1) H-Max and H-Min set the range limitations of the H-Amplitude Adjustment. This adjustment should only be used when CRT is replaced and does not appear in the CRT list. To access this adjustment, Dev Support item must be checked in the Chassis Setup Menu.

VIDEO MENU CHART

Allow 15 minutes for warm up. Tune in a crosshatch pattern. Adjust for the best focus. Select the Video item from the field service menu.

Item	Value	Remarks
Return	-	-
G2 Alignment	-	-
Scaling Color	58	-
Peak White	-	-
White Point R	80	-
White Point G	80	-
White Point B	80	-
Scaling Brightness	68	-
Black Offset R	70	Tune in a gray scale bar staircase signal.
Black Offset G	70	Tune in a gray scale bar staircase signal.
Contrast Max	-	-
Scaling Tint Main	80	-
Scaling Tint Second	88	-
Text Contrast	80	-
Drive Level	60	-
Full White 4/3	50	-
Scaling Contrast	E0	-

IF MENU CHART

Item	Value	Remarks
Return	-	-
Tuner 1: AGC Takeover	4C	-
Tuner 1: IF PLL VCO	66	-
OK	-	-
Tuner 2: AGC Takeover	40	-
Tuner 2: IF PLL VCO	58	-
Low	-	-
FFI-Bit	Do not adjust.	-

ERROR CODES CHART

ERROR CODES

If certain failures occur, the matching error codes will be stored in the NVM. These error codes can be read in one of two methods.

The first method of reading an error code is with the error menu. The last five error codes will be displayed, along with a time stamp from the run time counter. The most recent error code will be displayed on top. The time stamp is displayed as "Run Hours". An error counter will not count beyond 255. To clear the error codes from memory, select the Clear Error Codes Box from the menu. A long press will clear all stored codes. After every

ERROR CODES CHART

Error Code	Error Location	Circuit	Condition Indicated
11	12C_1 Low SDA Line	-	Data Line of 12C Bus_1 Held Low.
12	12C_1 Low SCL Line	-	Clock Line of 12C Bus_1 Held Low.
13	12C_2 Low SDA Line	-	Data Line of 12C Bus_2 Held Low.
14	12C_2 Low SCL Line	-	Clock Line of 12C Bus_2 Held Low.
15	12C_3 Low SDA Line	-	Data Line of 12C Bus_3 Held Low.
16	12C_3 Low SCL Line	-	Clock Line of 12C Bus_3 Held Low.
17	12C_4 Low SDA Line	-	Data Line of 12C Bus_4 Held Low.
18	12C_4 Low SCL Line	-	Clock Line of 12C Bus_4 Held Low.
19	Chassis Detection	HW	No Valid Chassis Detected.
21	No ACKN IC500	Video	IC500 fails to acknowledge.
22	POR Bit is Set	Video	Power supply problem at (POR) power on reset (VCC IC500).
23	SXA...D	Video	Correct Xtal Ident of IC500.
24	No ACKN IC700	Video	IC700 fails to acknowledge.
25	POR Bit is Set	Video	Power supply problem at (POR) power on reset (VCC IC700).
26	SXA...D	Video	Correct Xtal Ident of IC700.
27	No ACKN IC600	Video	Video Switch IC600 fails to acknowledge.
28	No ACKN IV100	PSI	PSI IC IV100 fails to acknowledge.
29	PDD Bit is Set	PSI	Power supply problem at (POR) power on reset (VCC IV100).
31	No ACKN IV200	Deflection	IV200 fails to acknowledge.
32	POR Bit is Set	Deflection	Power supply problem at (POR) power on reset (VCC IV200).
33	FLS Bit is Set	Deflection	Safety Circuit is active.
34	NHF Bit is Set	Deflection	High Voltage Transformer is failing.
35	NRF Bit is Set	Deflection	Oscillator is not locked.
36	BCF Bit is Set	Deflection	Tube is still not warm after warmup time.

repair is done to the chassis it is recommended to clear the error codes, and reset them back to value 0.

The second method of reading an error code is to count the flashes of the power LED. Only the last error code stored in the NVM can be read with this method. The LED will blink two separate digits.

Example, if the last error code stored in the NVM is 24. The LED will blink two short flashes, followed by a short pause, then will flash four times followed by a long pause. The error code flashes will be repeated 4 times.

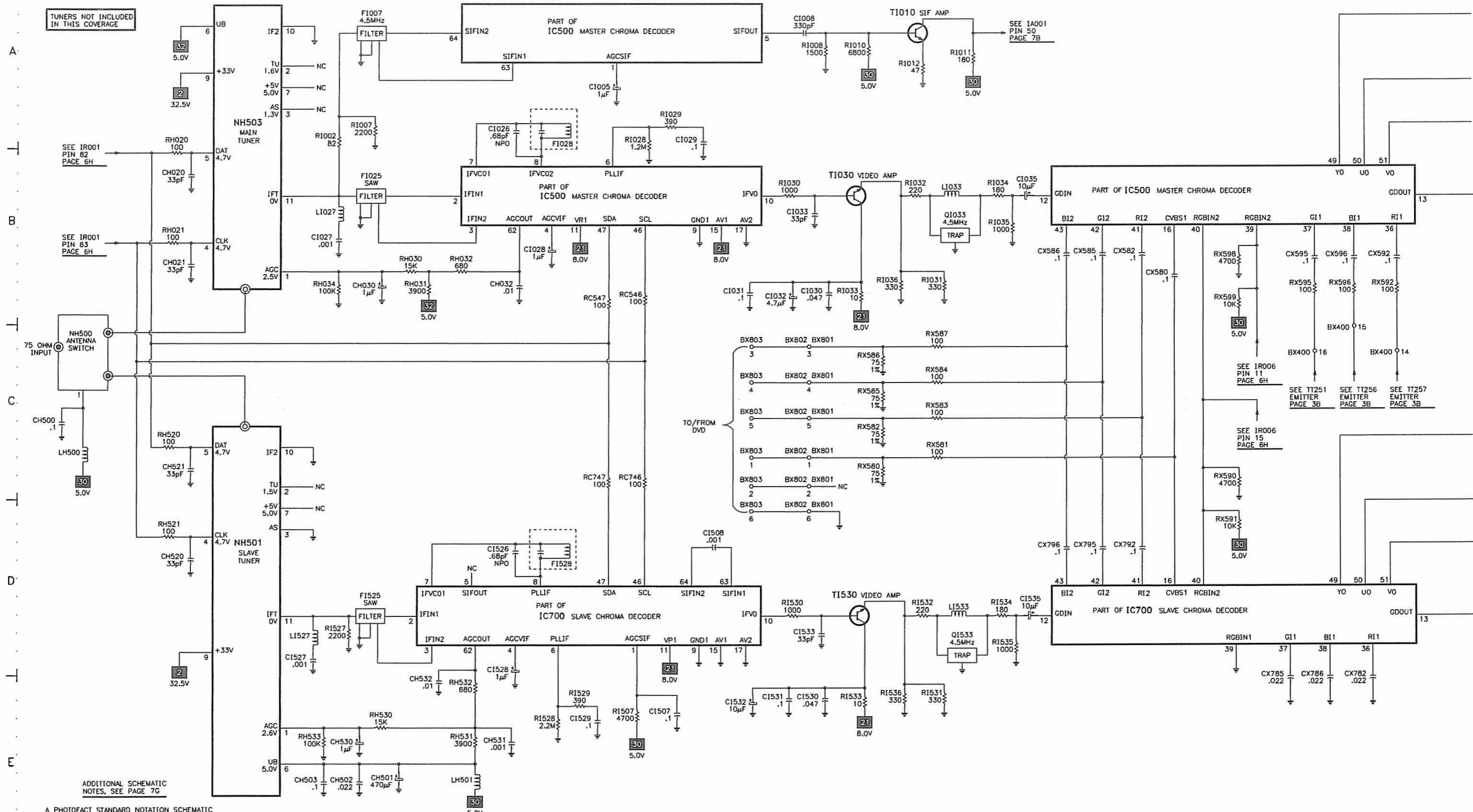
ERROR CODES CHART continued

Error Code	Error Location	Circuit	Condition Indicated
37	NDF Bit is Set	Deflection	Vertical problem.
38	XRP Bit is Set	Deflection	X-Ray Protection activated during normal operation.
39	SL Bit is Set	Deflection	Phase 1 is not locked.
41	No ACKN IA001	Audio	MSP fails to acknowledge.
44	No ACKN IT900	Audio	AV Input Switch of DRI Inputs/IC fails to acknowledge.
45	Wrong MSP	Audio	Wrong MSP is fitted.
51	No ACKN IU030	-	IU030 Upconverter fails to acknowledge.
52	No ACKN IU002	A/D	Master ADC IC IU002 fails to acknowledge.
53	No ACKN IU003	A/D	Slave ADC IC IU003 fails to acknowledge.
54	No ACKN IR005	-	NVM IC IR005 fails to acknowledge.
55	No ACKN IR006	-	Port Expander IC IR006 fails to acknowledge.
59	Wrong GenCAM used	-	GenCAM cut 2.1 Must be used.
61	5V Good	HW	Switched 5V is not available.
62	5V and 8V Good	HW	Switched 5V & 8V is not available.
63	Power_Fail	HW	Unexpected level on Power_Fail Line found (Main too low).
64	XRP Alignment	HW	Overvoltage High Voltage.
65	XRP NVM Verify	HW	Write to XRP NVM area failed.
66	XRP NVM not recoverable	HW	XRP NVM contents are corrupted and cannot be recovered.
69	H & V Sync not valid	HW	H & V Sync not present (Sub OSD module not good).
71	No ACKN IT500	DRI	Frame Comb Filter IT500 fails to acknowledge.
72	No ACKN IT200	DRI	2H Video Switch IT200 fails to acknowledge.
73	No ACKN IT400	DRI	2H PSI IT400 fails to acknowledge.
78	No ACKN DVD Unit	DVD	DVD Keyboard CPU fails to acknowledge.
81	No ACKN IK01	PTV Models	Convergence IC IK01 fails to acknowledge.
82	No ACKN M24C32 (RP-NVM)	PTV Models	2H PSI IT400 fails to acknowledge.
83	Wrong Convergence Test Pattern	PTV Models	Convergence Test Pattern is wrong.
84	Wrong Convergence	PTV Models	Tube type is RP, but Convergence was not detected.
93	Install problem of 12C Bus1 & 2	Software	Problem to install the 12C Bus Driver for the 12C Bus1 & 2.
94	Install problem of 12C Bus3 & 4	Software	Problem to install the 12C Bus Driver for the 12C Bus 3 & 4.
95	Install problem of 12C Bus Driver	Software	Problem to install the Port for 12C Bus or the other ports.
96	Install problem of ADC Driver	Software	Problem to install the ADC Driver.
97	Install problem of AV-Link Driver	Software	Problem to install the AV-Link Driver.
98	Install problem of SDRAM Timing	Software	Problem to install the SDRAM Timing.
99	Watchdog	Software	Watchdog was Active.

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TELEVISION SCHEMATIC

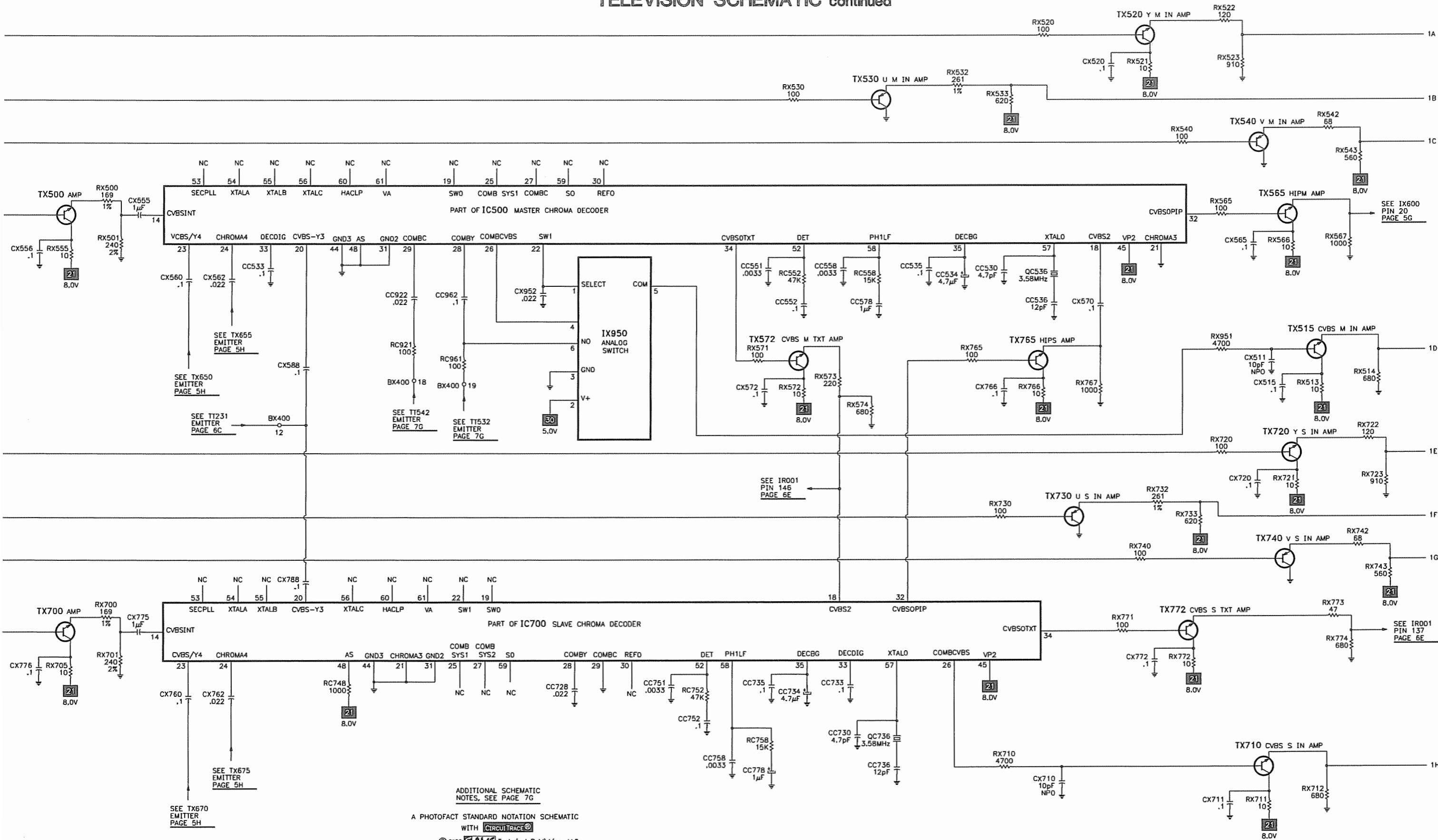
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TELEVISION SCHEMATIC continued

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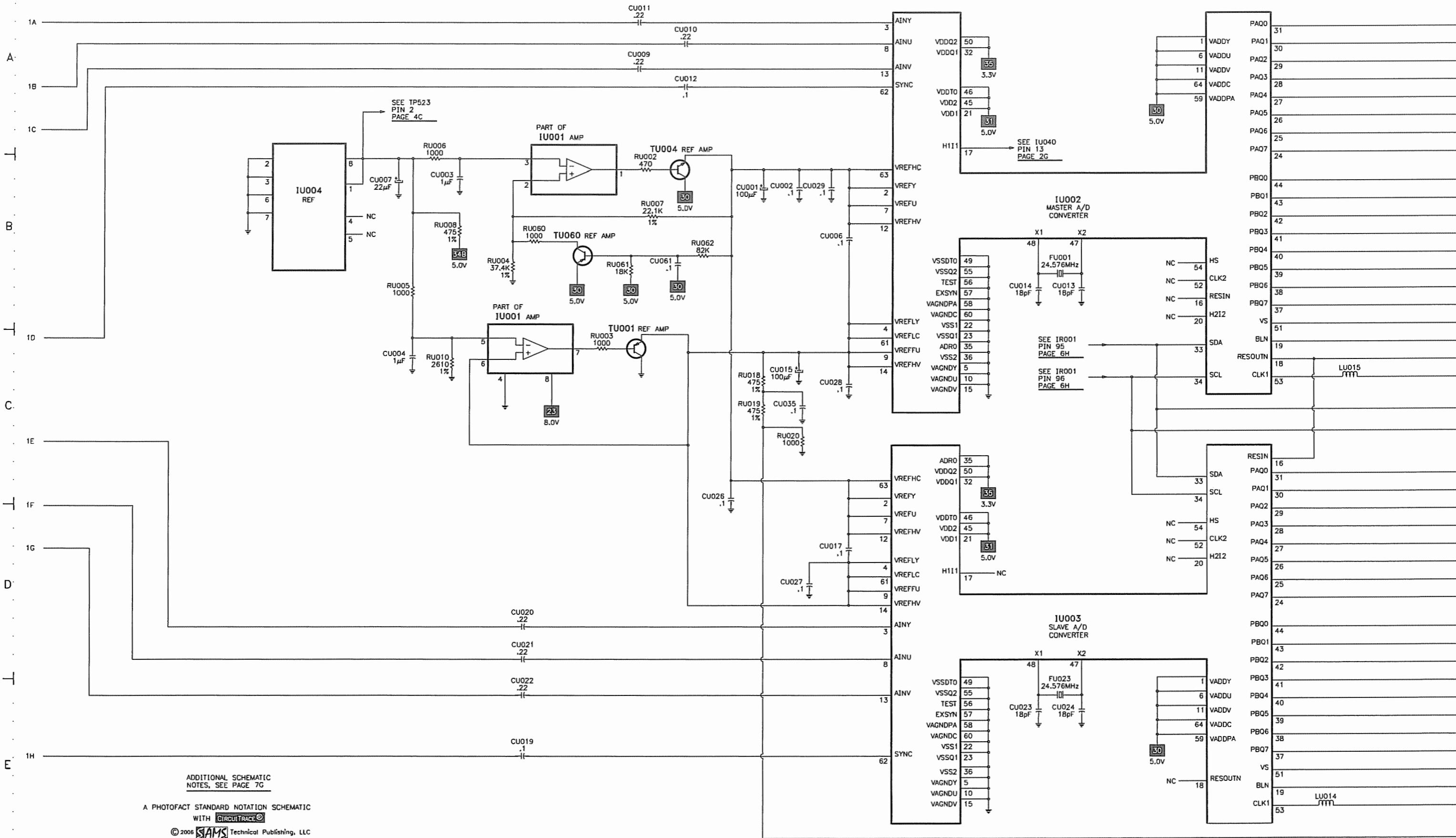
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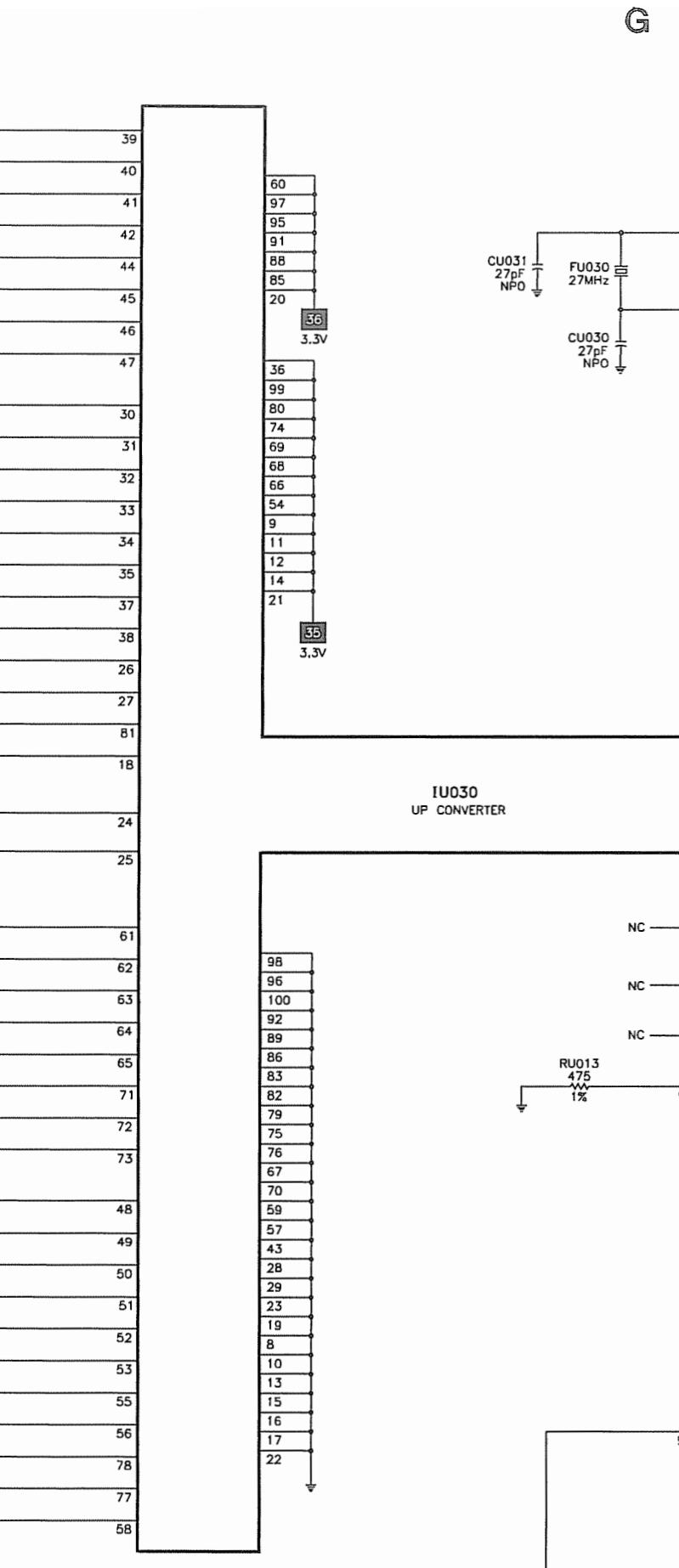
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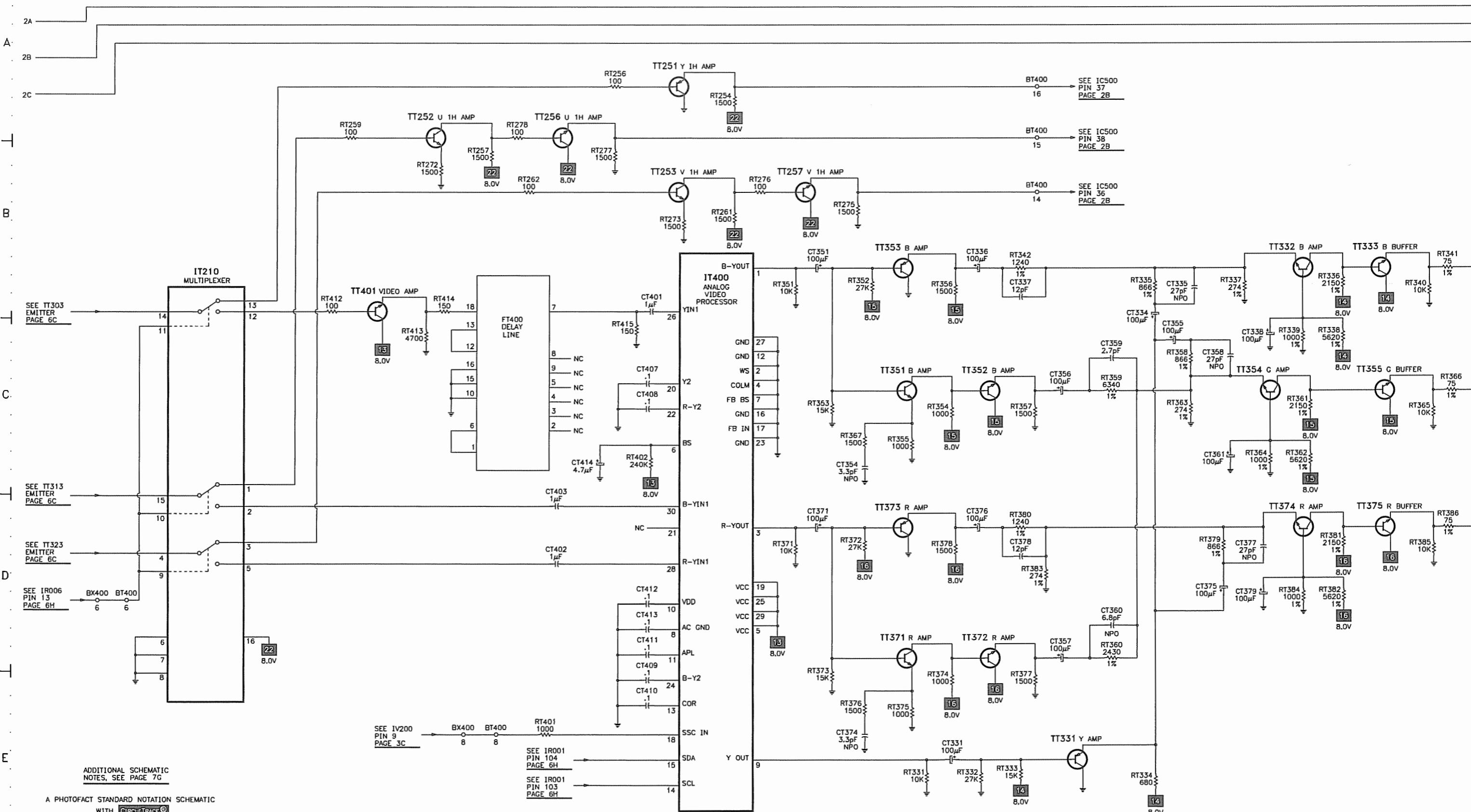




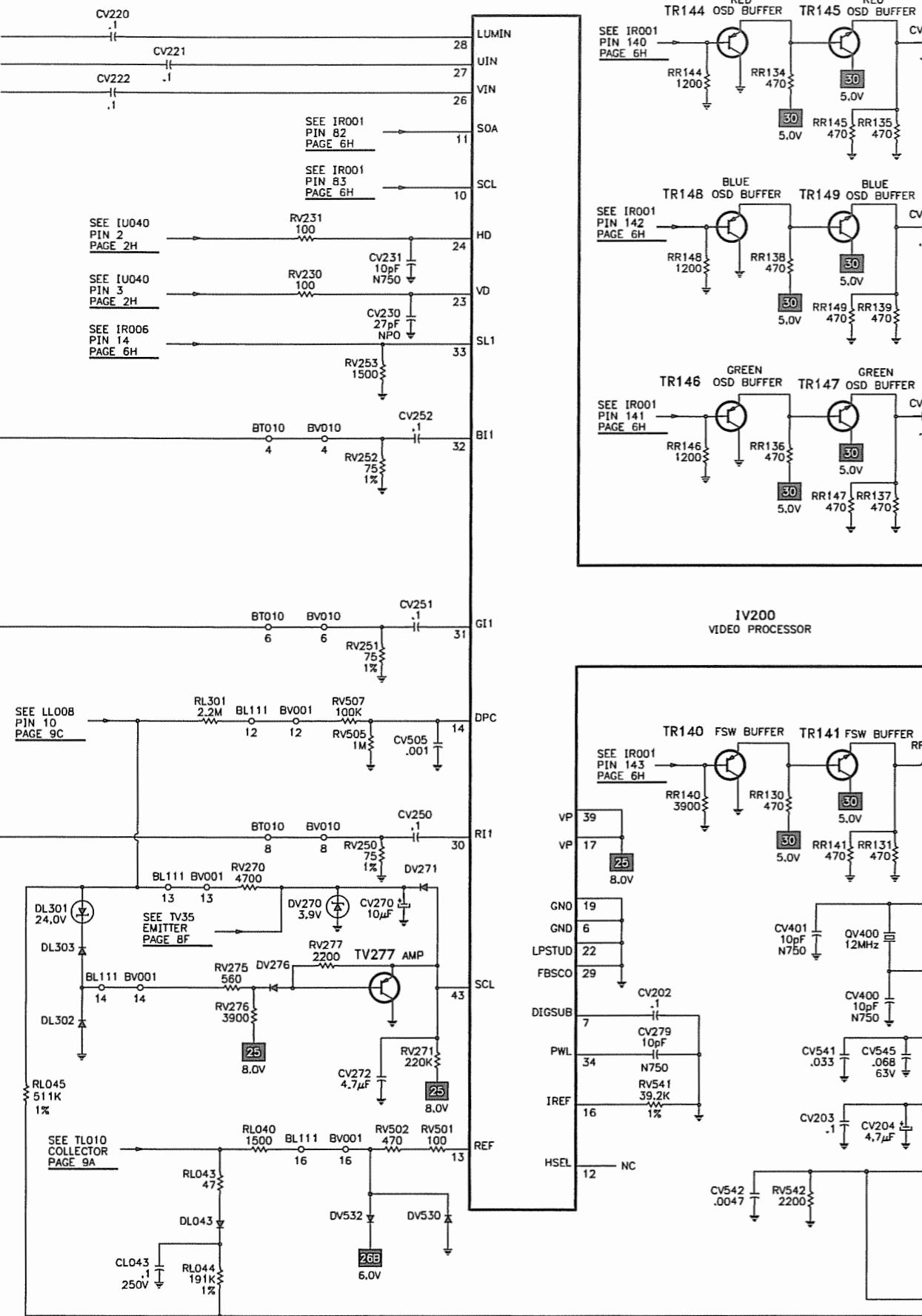
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TELEVISION SCHEMATIC continued

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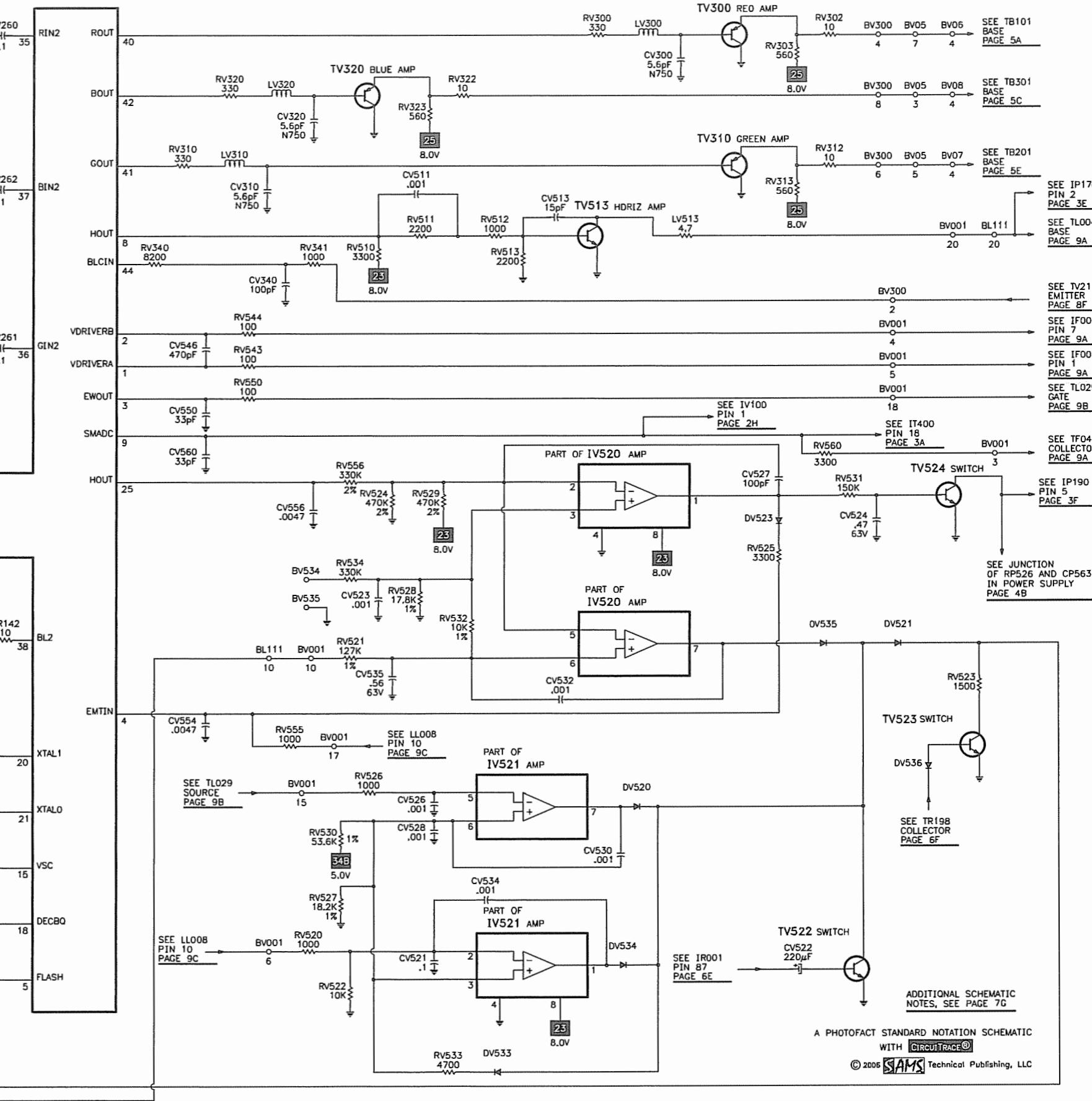


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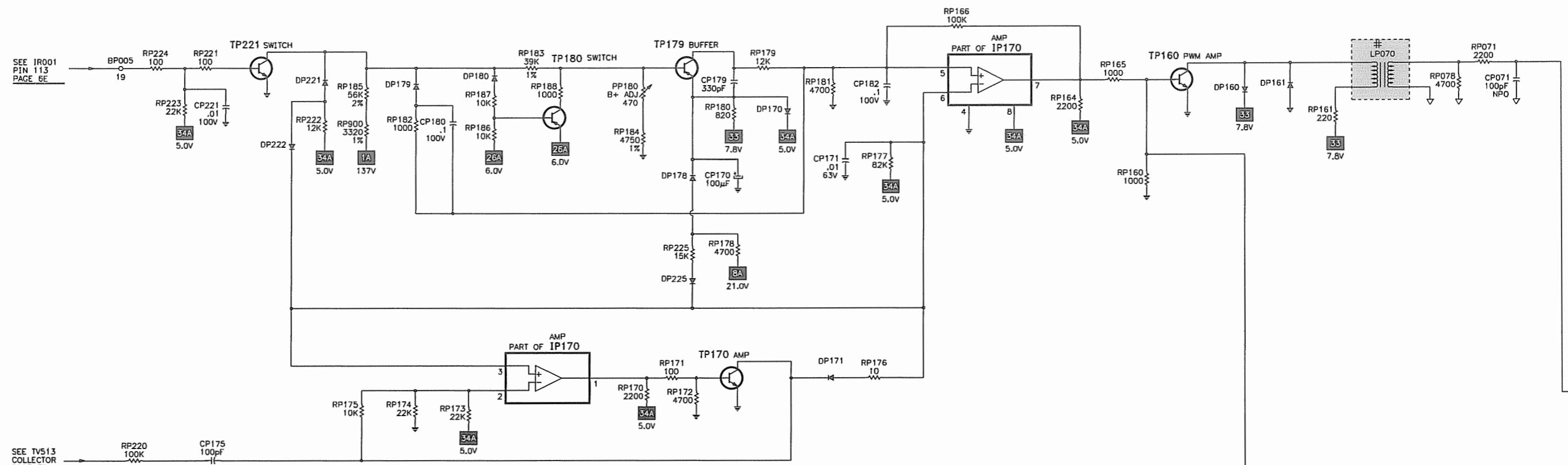


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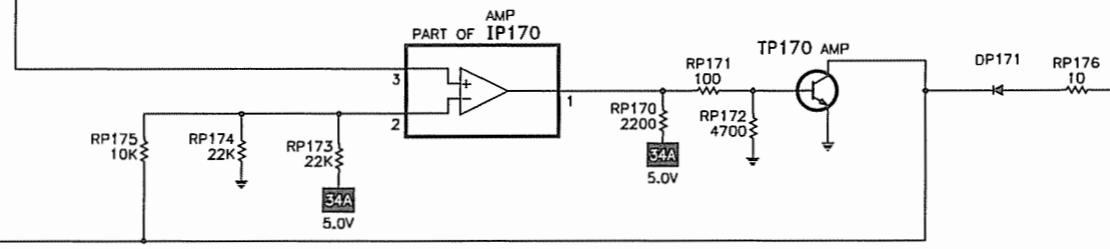
POWER SUPPLY SCHEMATIC

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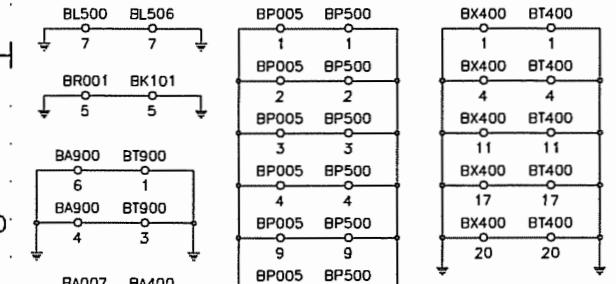
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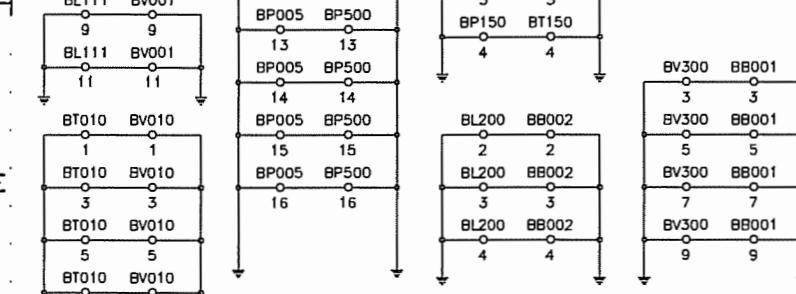
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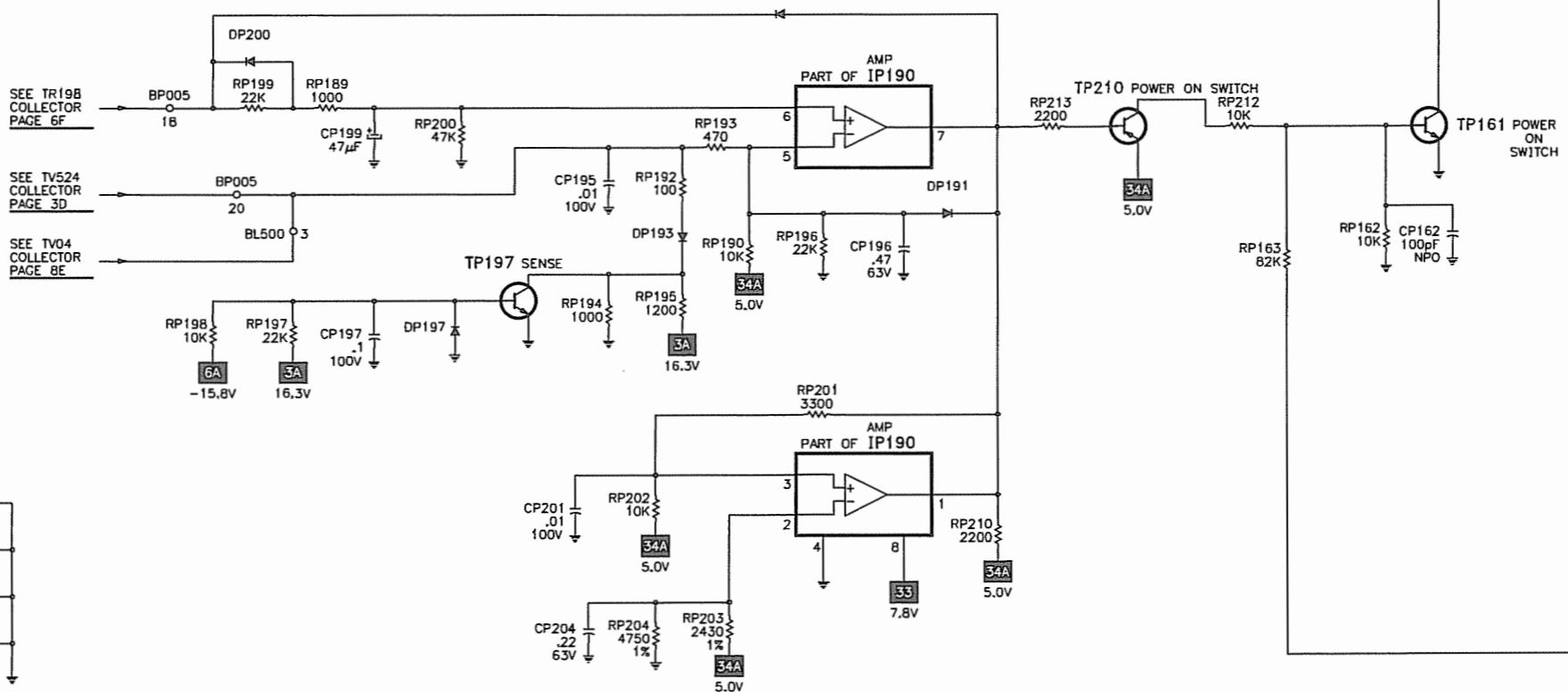
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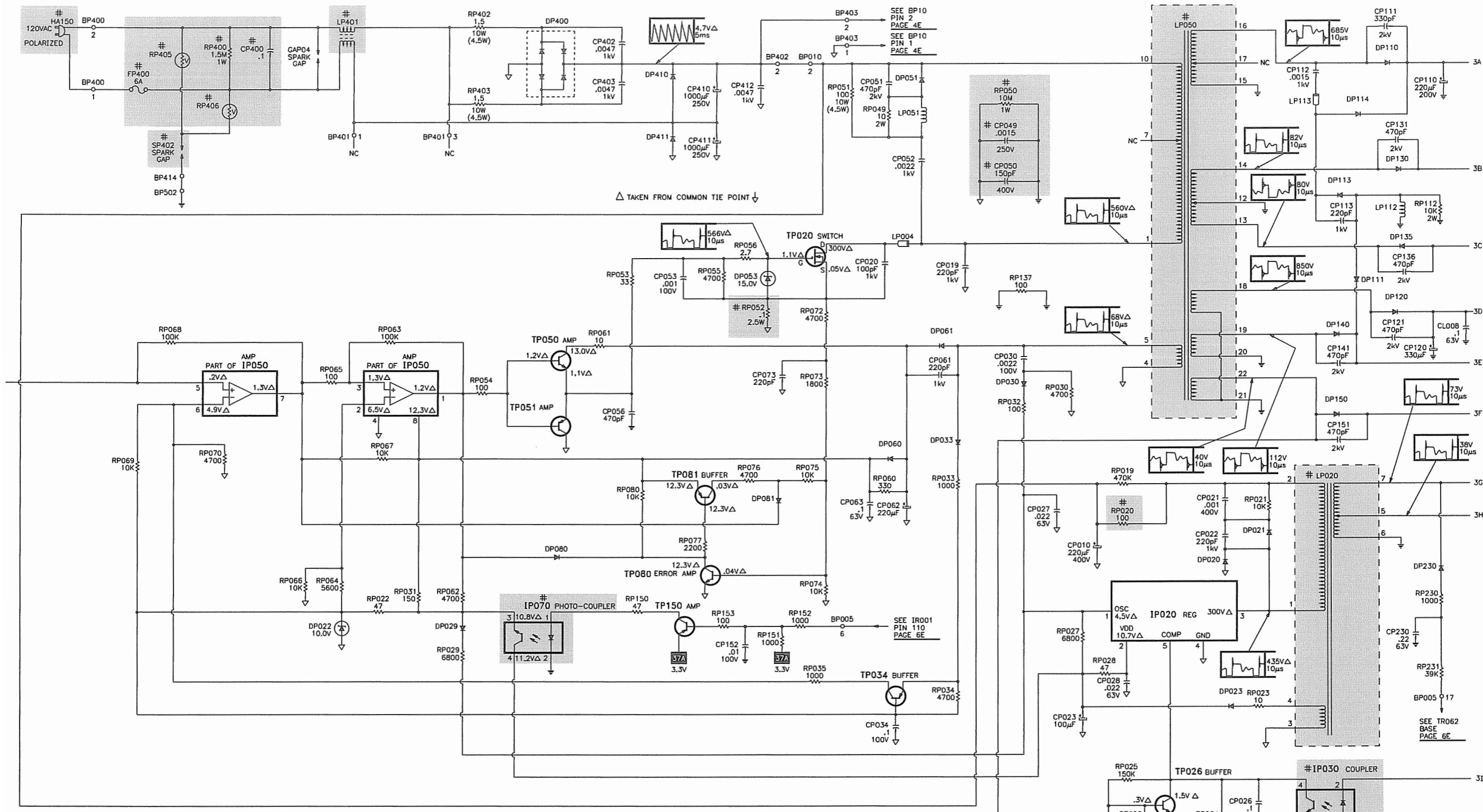


ADDITIONAL SCHEMATIC NOTES, SEE PAGE 7G

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POWER SUPPLY SCHEMATIC continued



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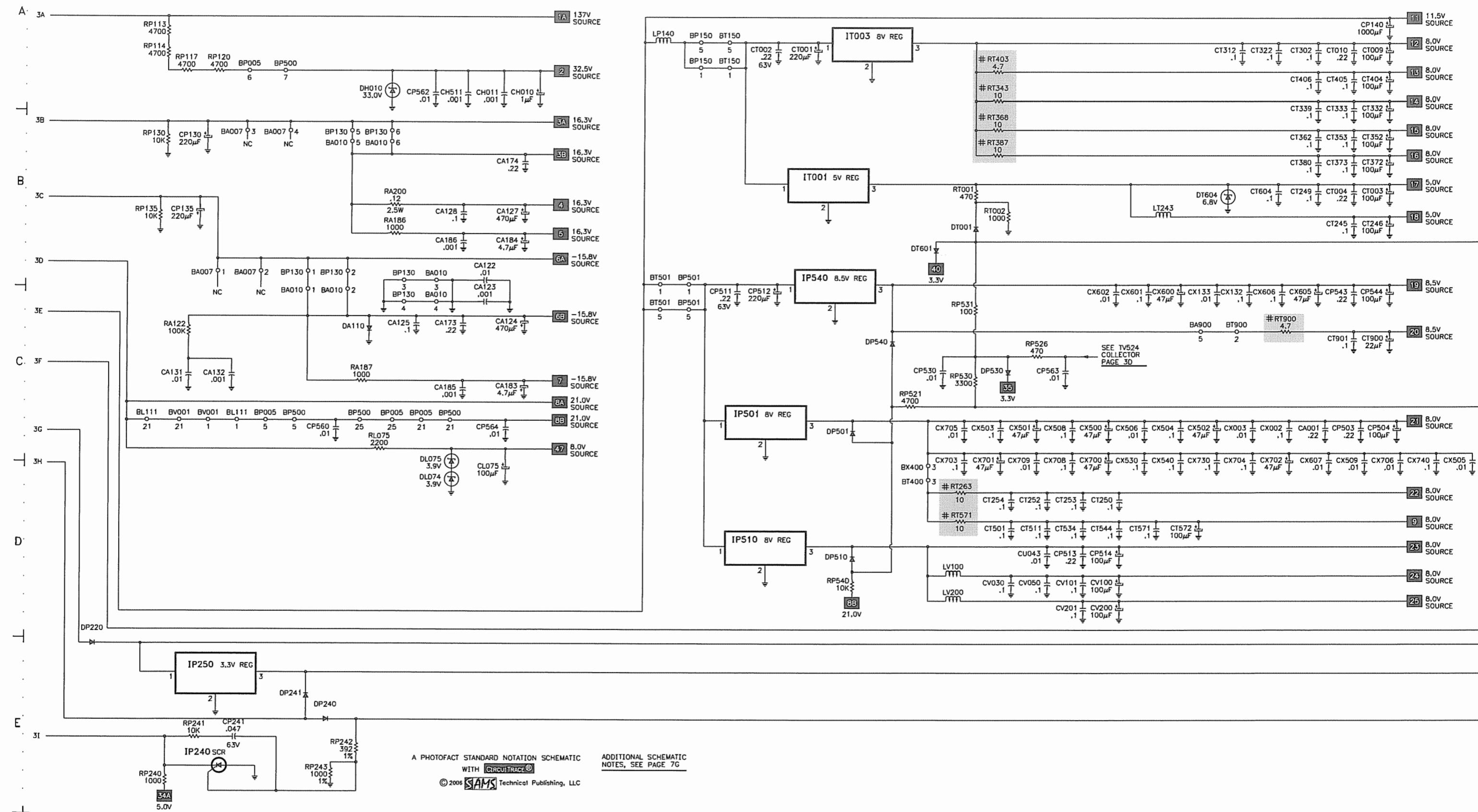
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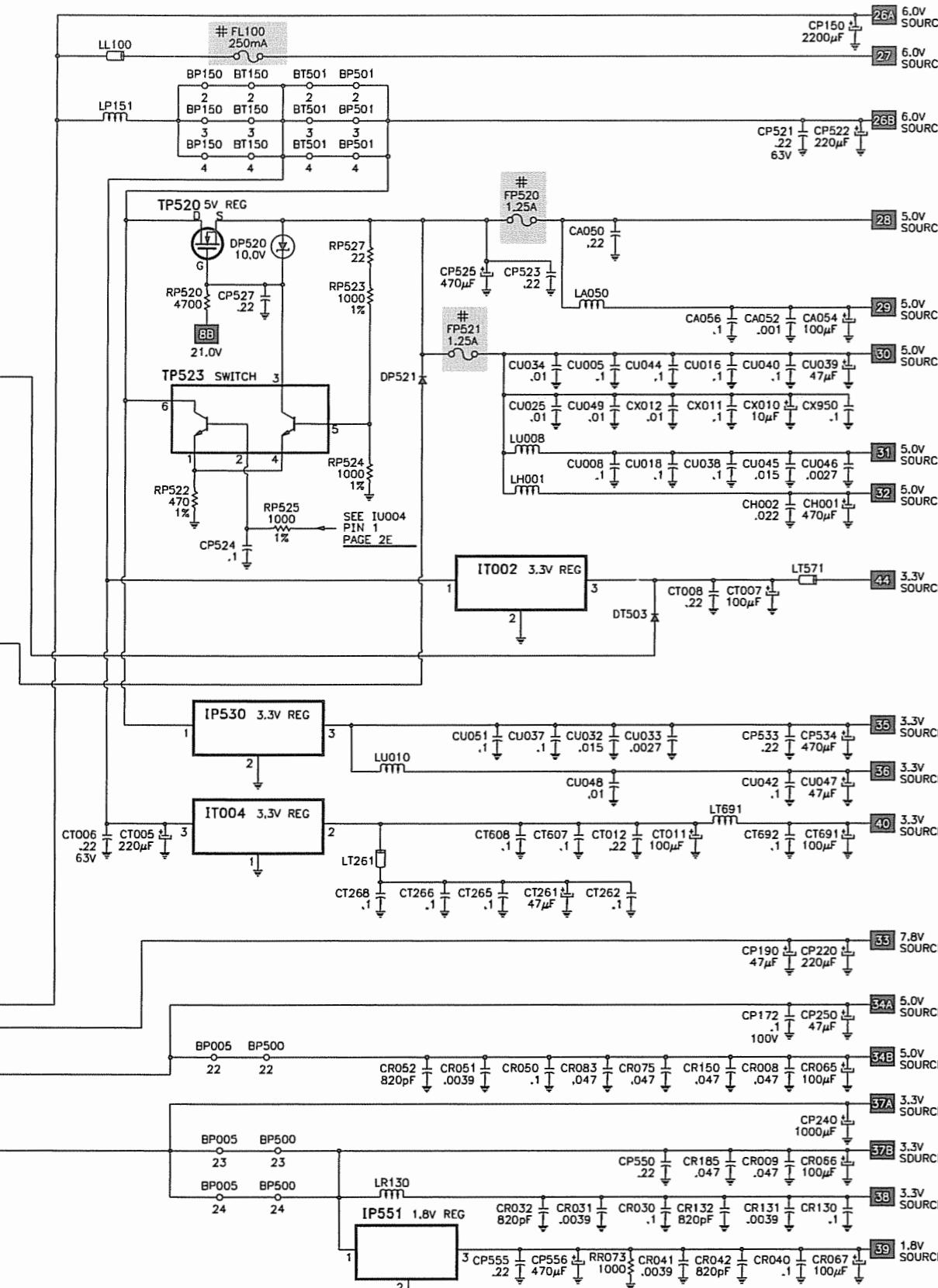
POWER SUPPLY SCHEMATIC continued

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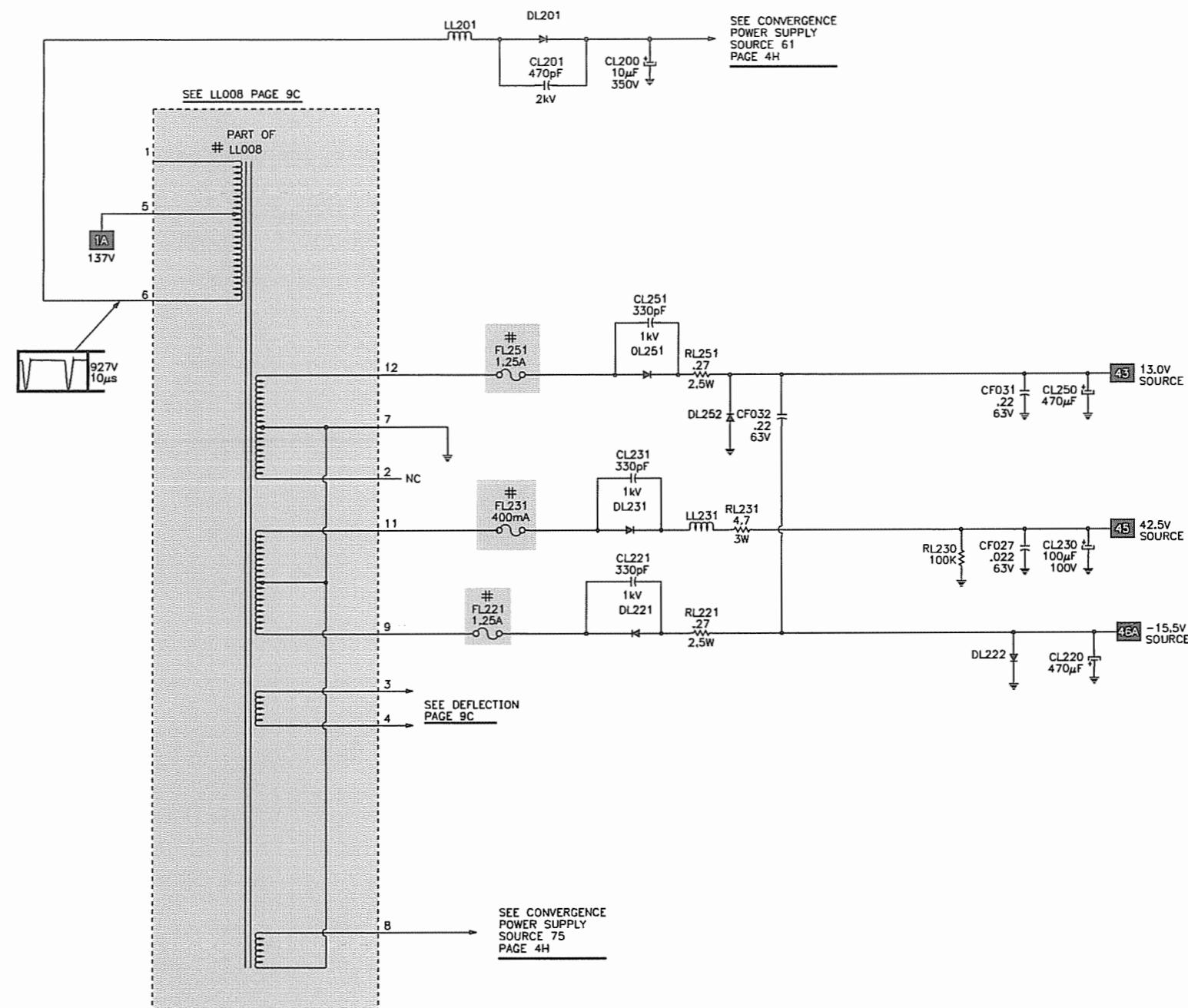


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POWER SUPPLY SCHEMATIC continued



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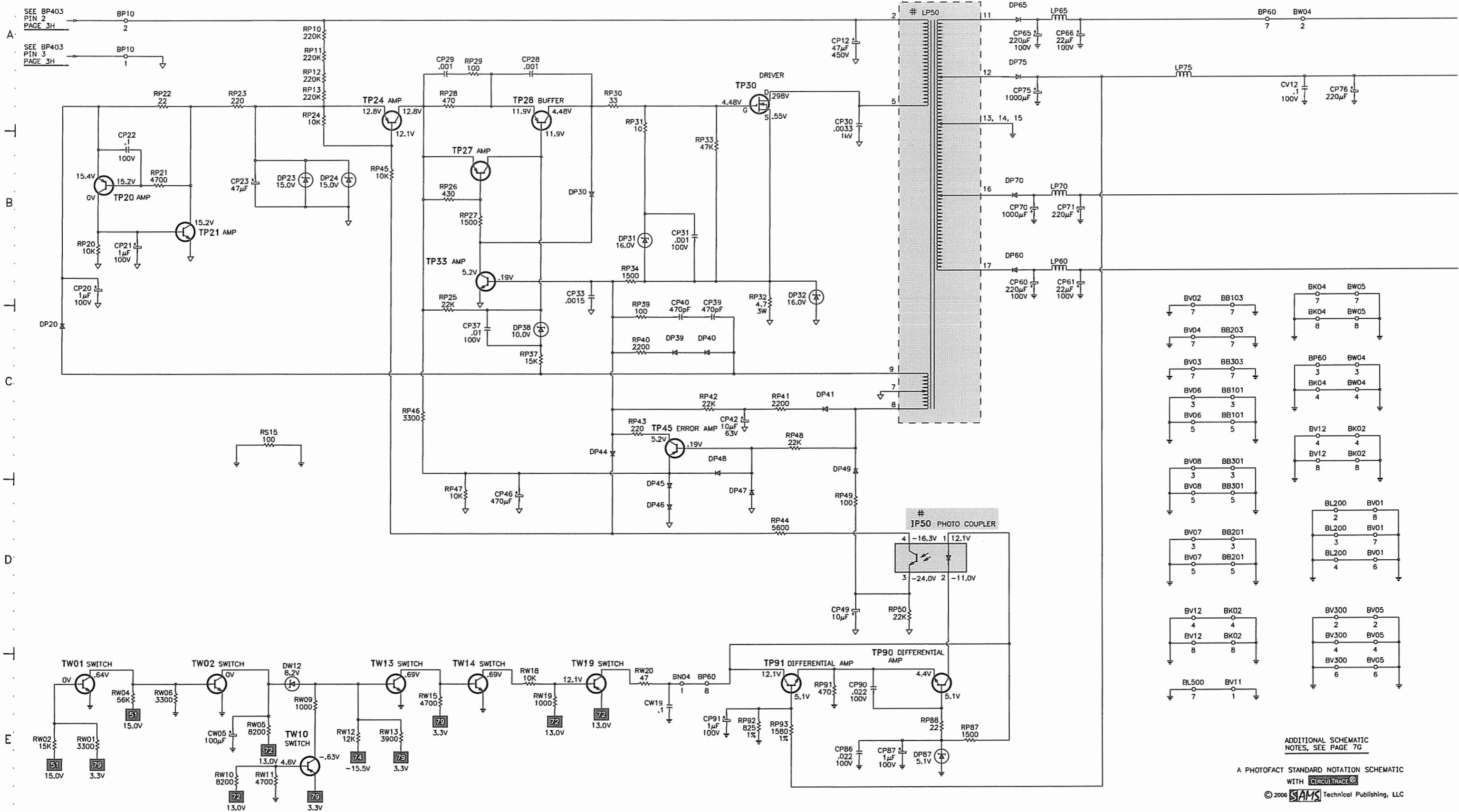


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CONVERGENCE POWER SUPPLY SCHEMATIC



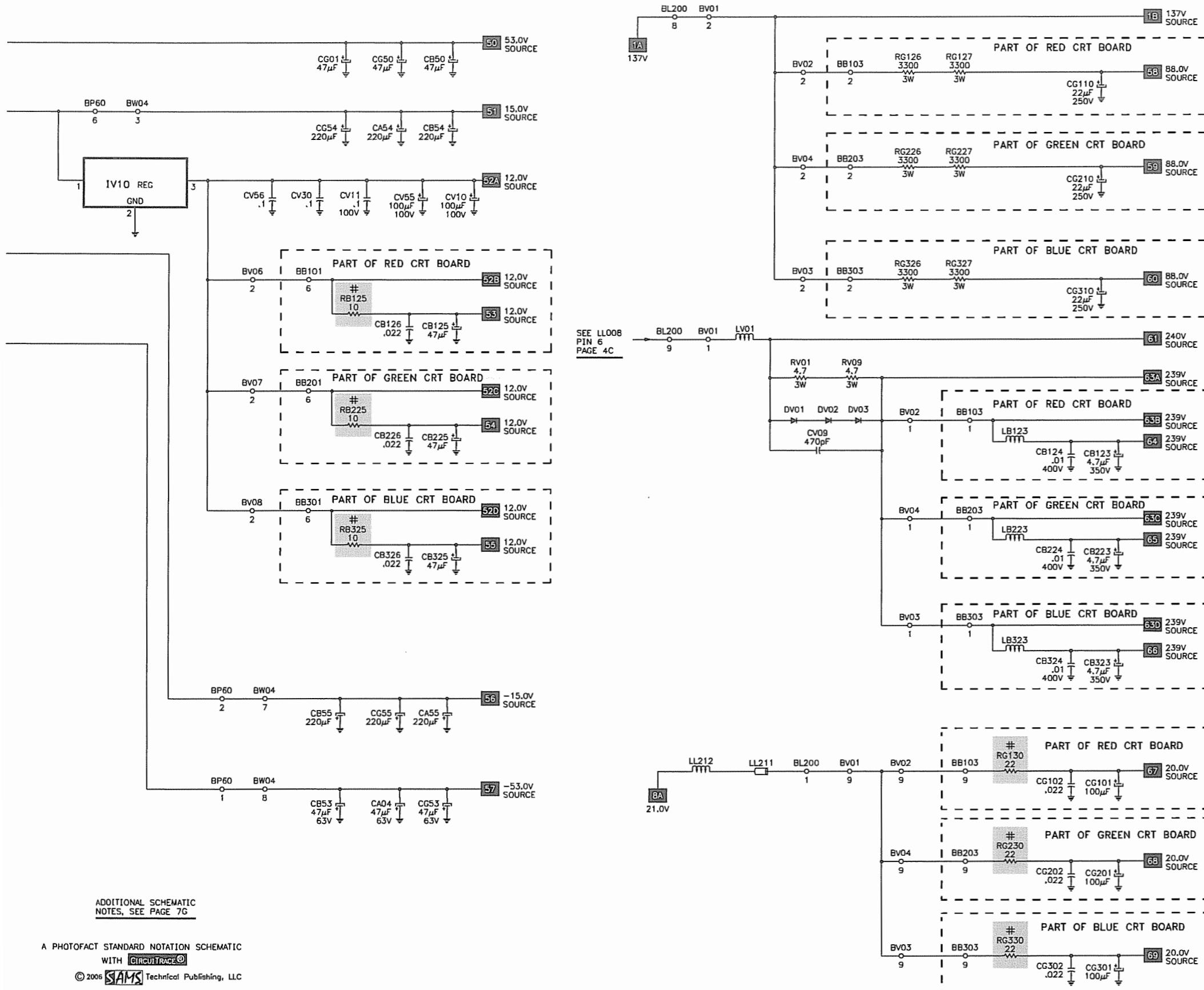
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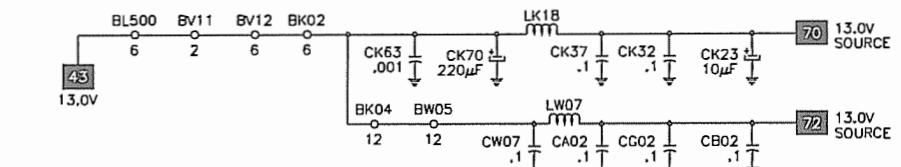
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CONVERGENCE POWER SUPPLY SCHEMATIC continued



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ADDITIONAL SCHEMATIC NOTES, SEE PAGE 7G

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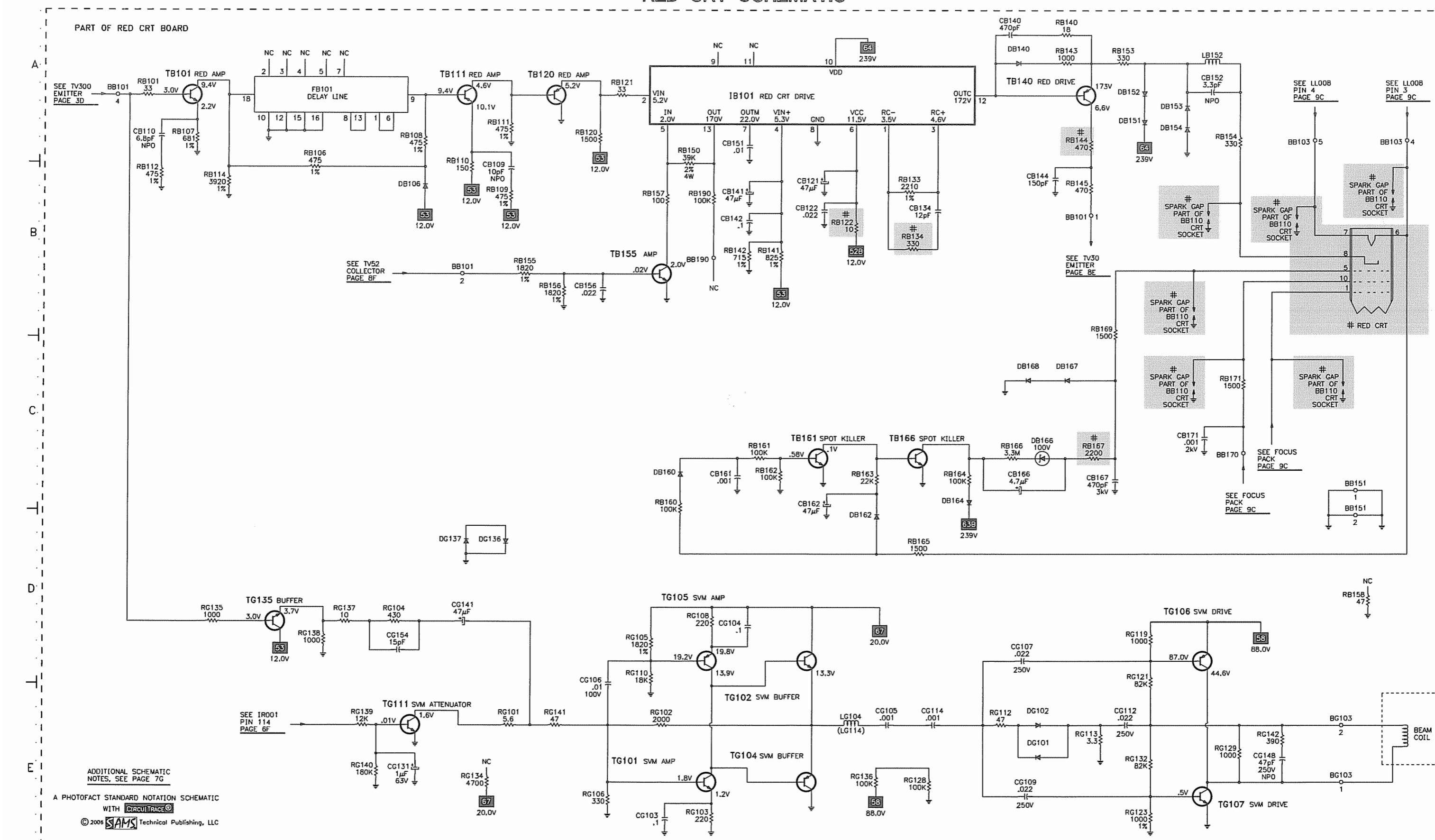
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A

RED CRT SCHEMATIC

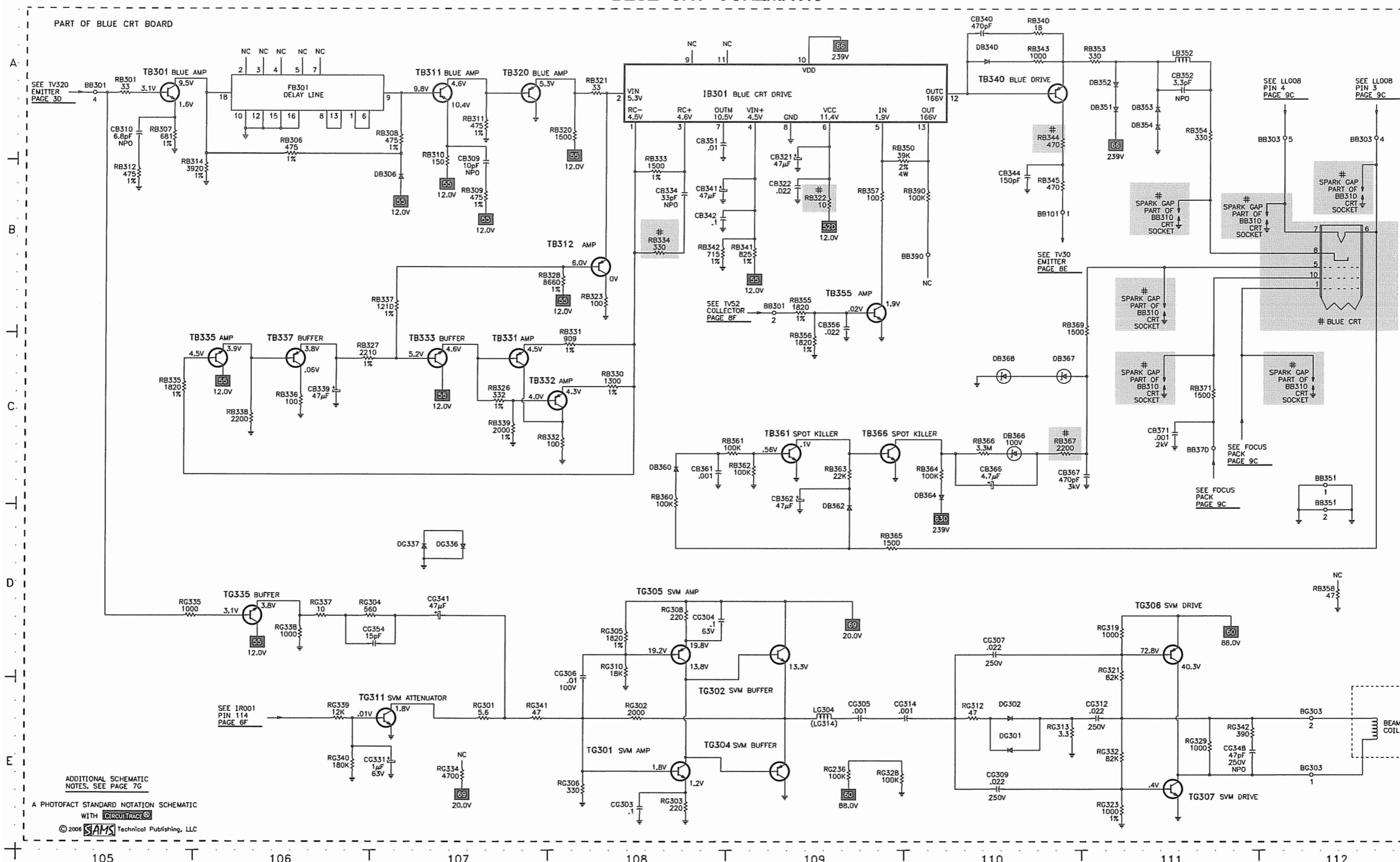
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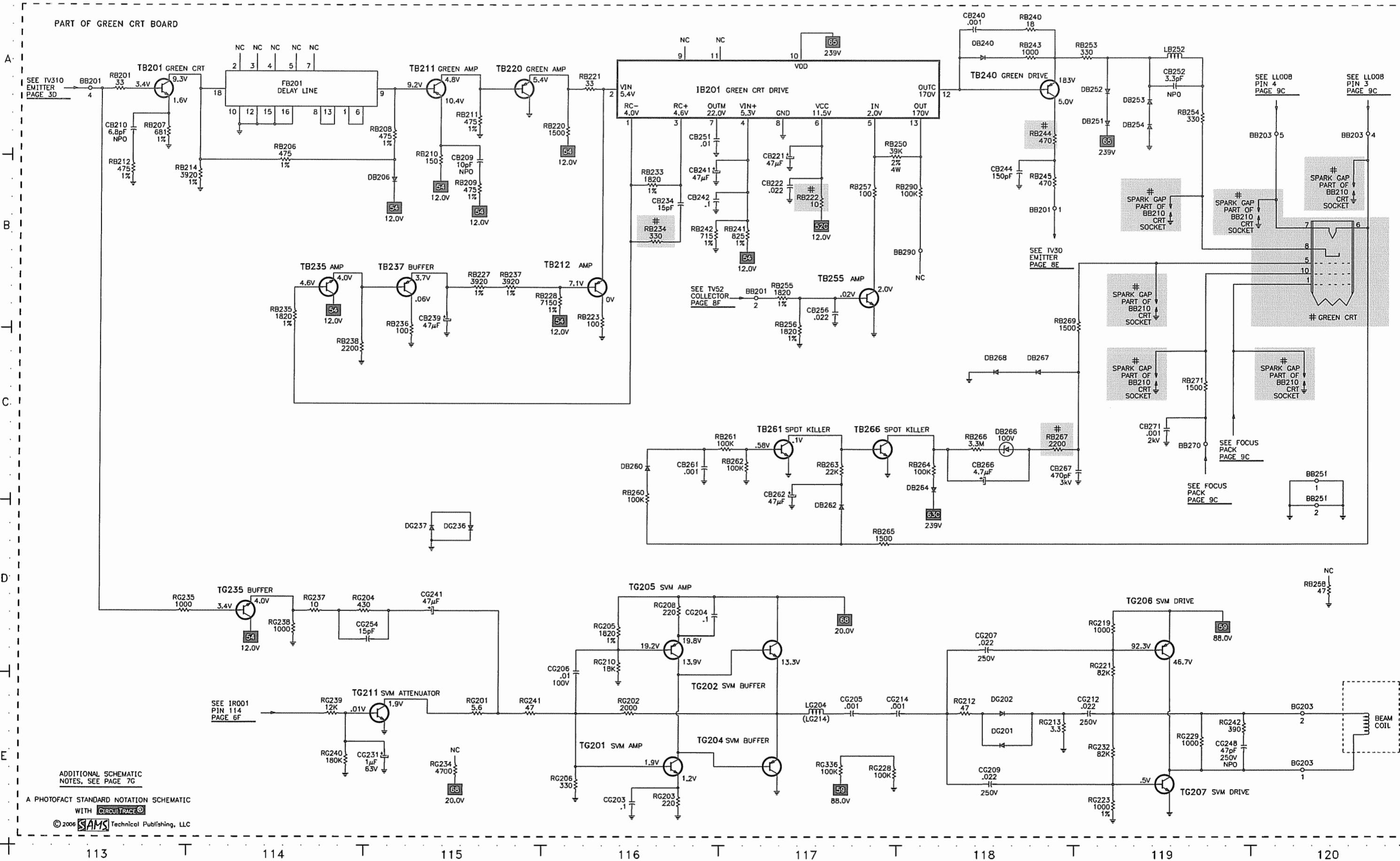
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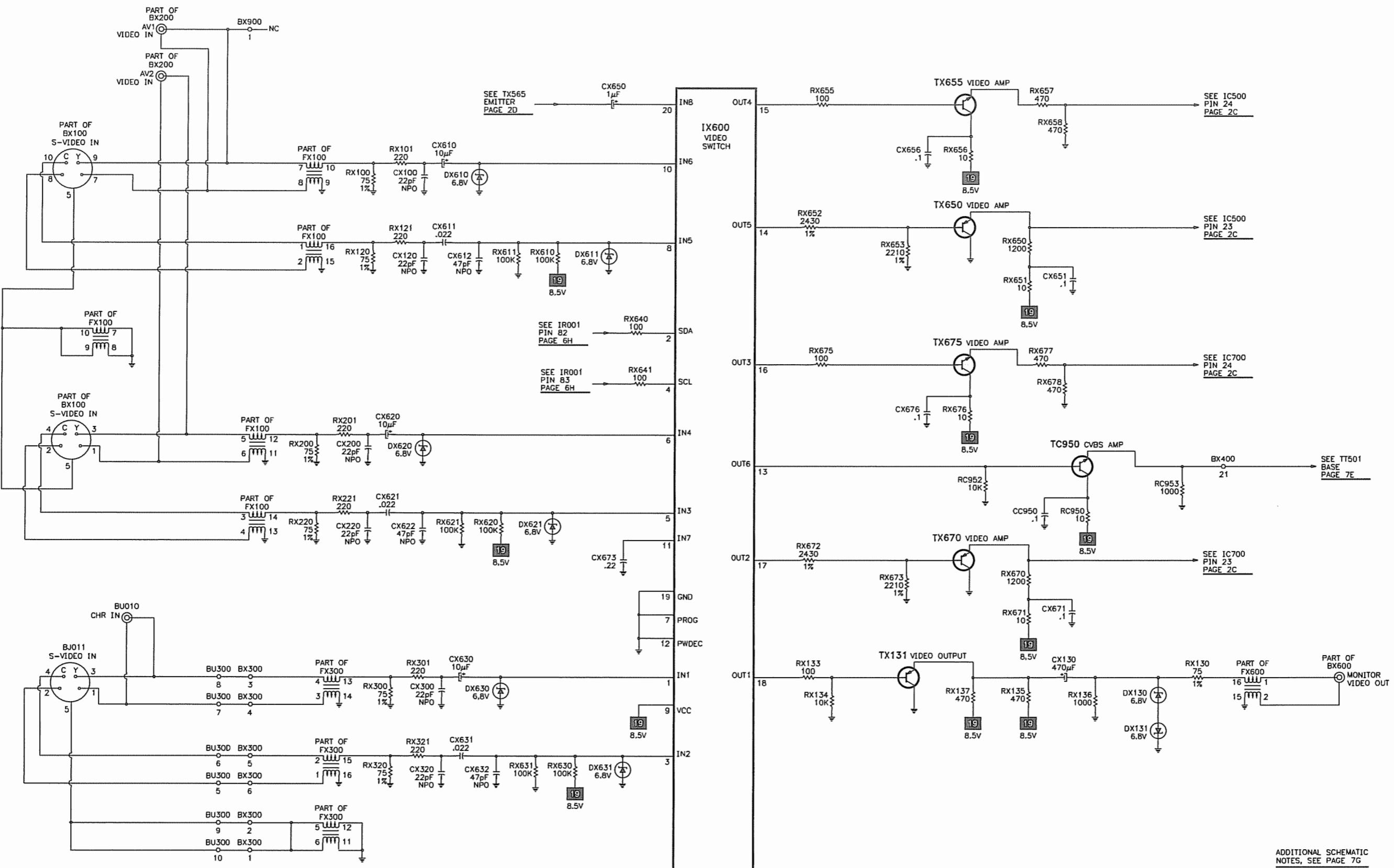
BLUE CRT SCHEMATIC



GREEN CRT SCHEMATIC



VIDEO SWITCHING SCHEMATIC



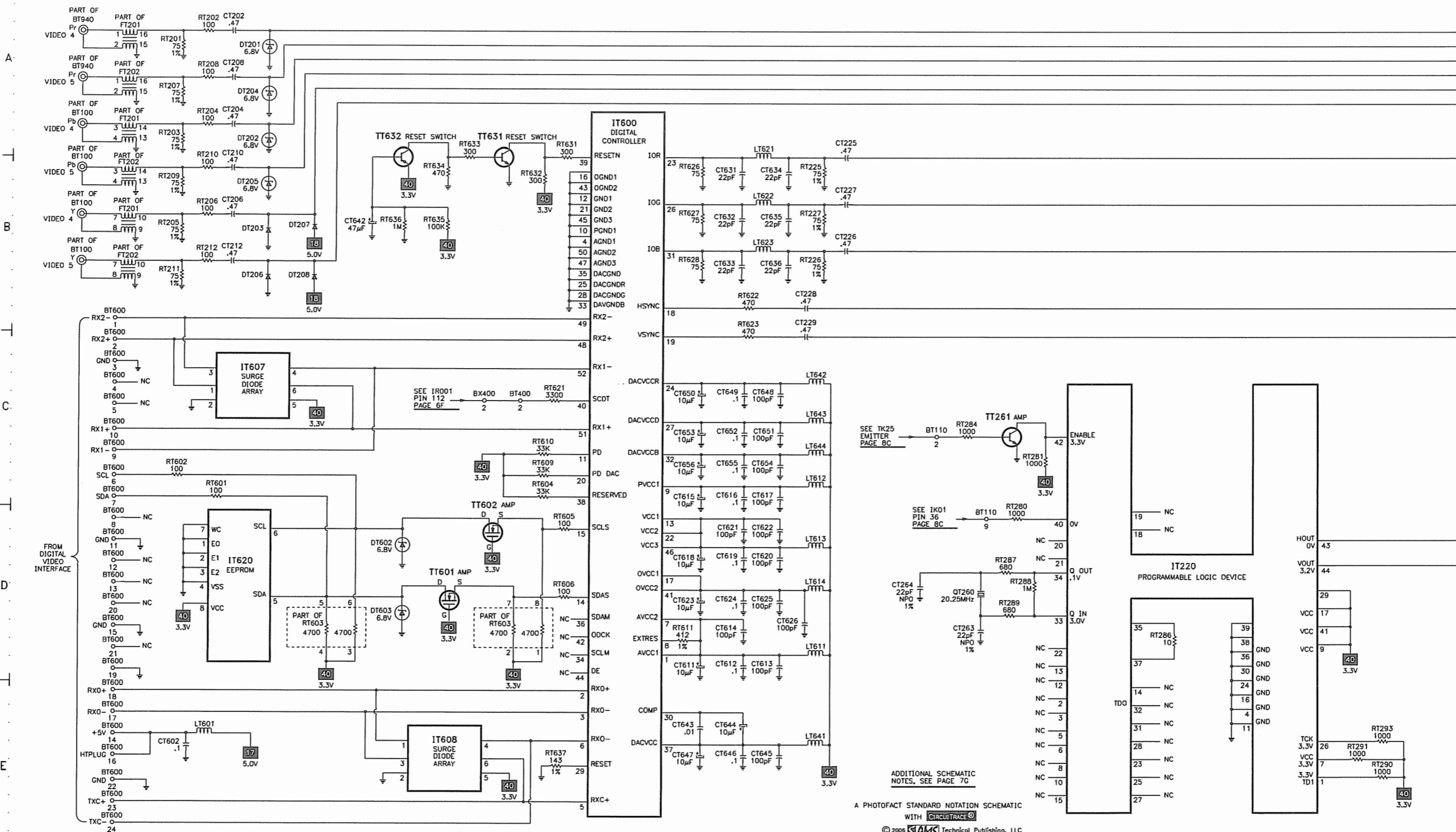
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A

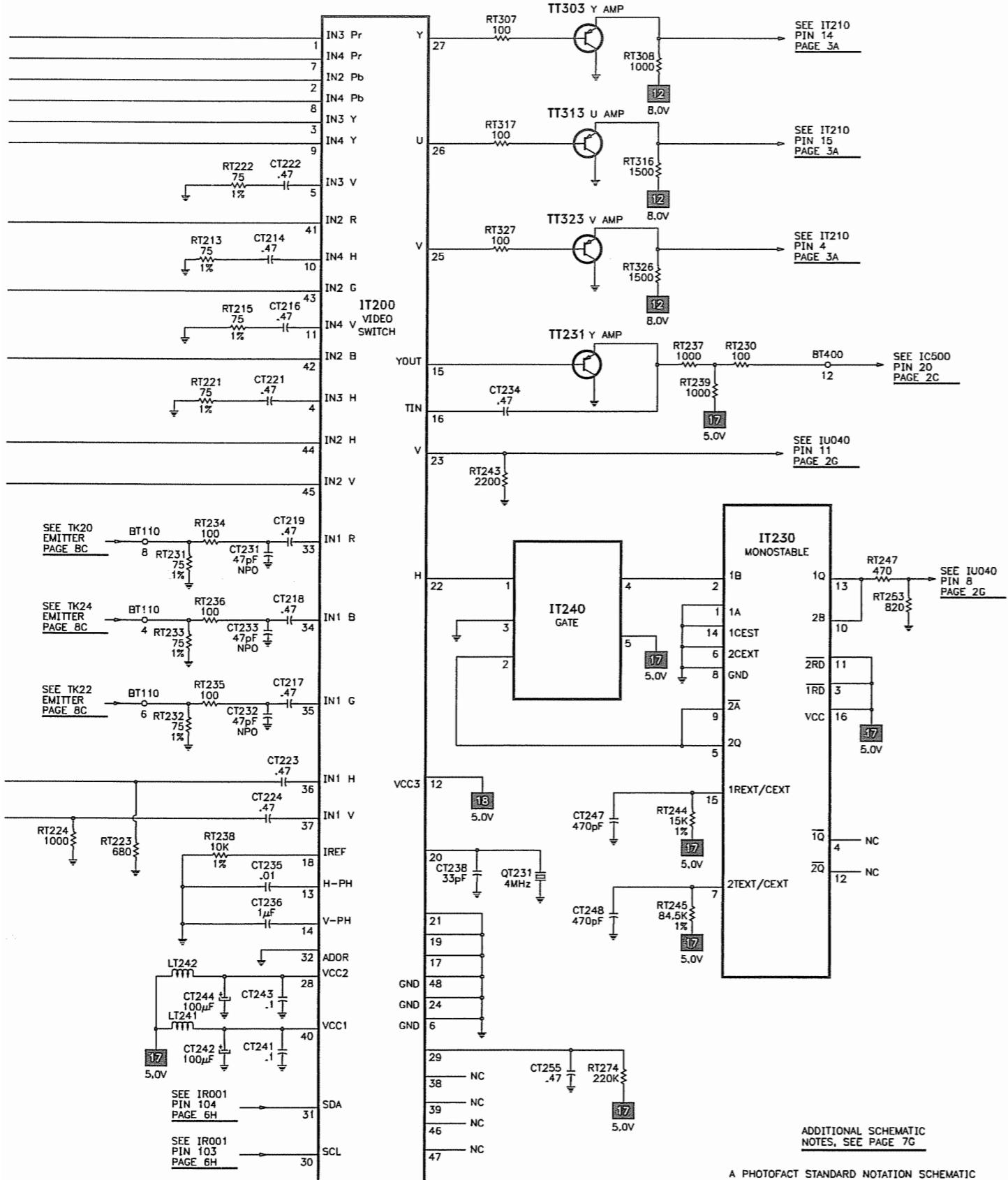
VIDEO SWITCHING SCHEMATIC continued

B

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C
VIDEO SWITCHING SCHEMATIC continued



TEST EQUIPMENT

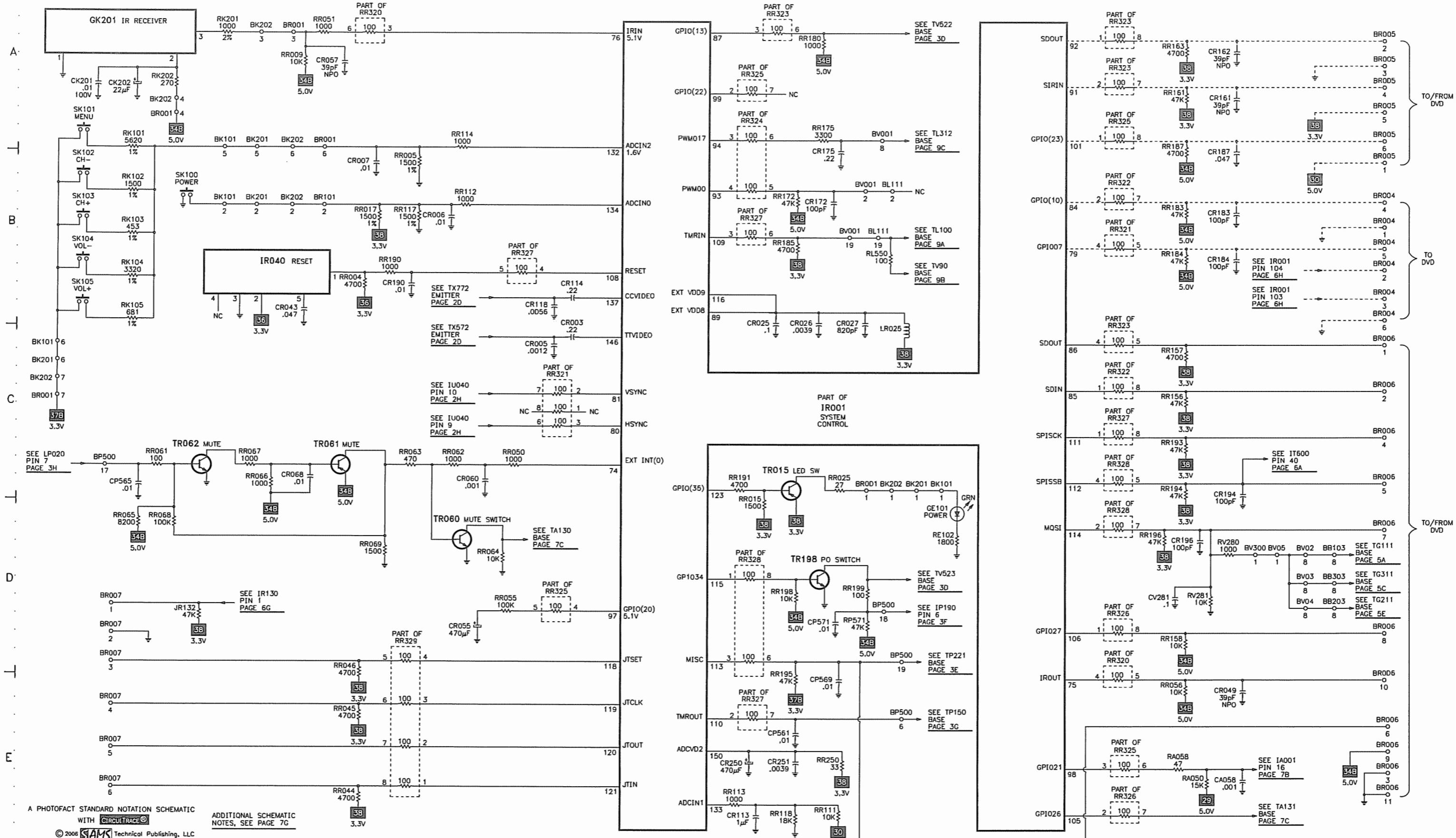
Test equipment listed by participating manufacturer illustrates typical or equivalent equipment used by Sams engineers to obtain measurements. This equipment is compatible with most types used by field service technicians.

Equipment	Sencore No.	Equipment	Sencore No.
Oscilloscope	SC3100	Isolation Transformer	PR570
Generators		Capacitance Analyzer	LC102
RGB	CM2125	CRT Analyzer	CR7000
Multiburst Signal	VG91	AC Leakage Tester	PR570
Color Bar	VG91	Inductance Analyzer	LC102
TV Stereo	VG91	Flyback Yoke Tester	TVA92
Digital VOM	SC3100	Field Strength Meter	SL753
Frequency Meter	SC3100	Transistor Tester	TF46
Hi-Voltage Probe	HP200	Horizontal Analyzer	HA-2500
Accessory Probes	TP212	Video Analyzer	VG91, TVA92

ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 7G

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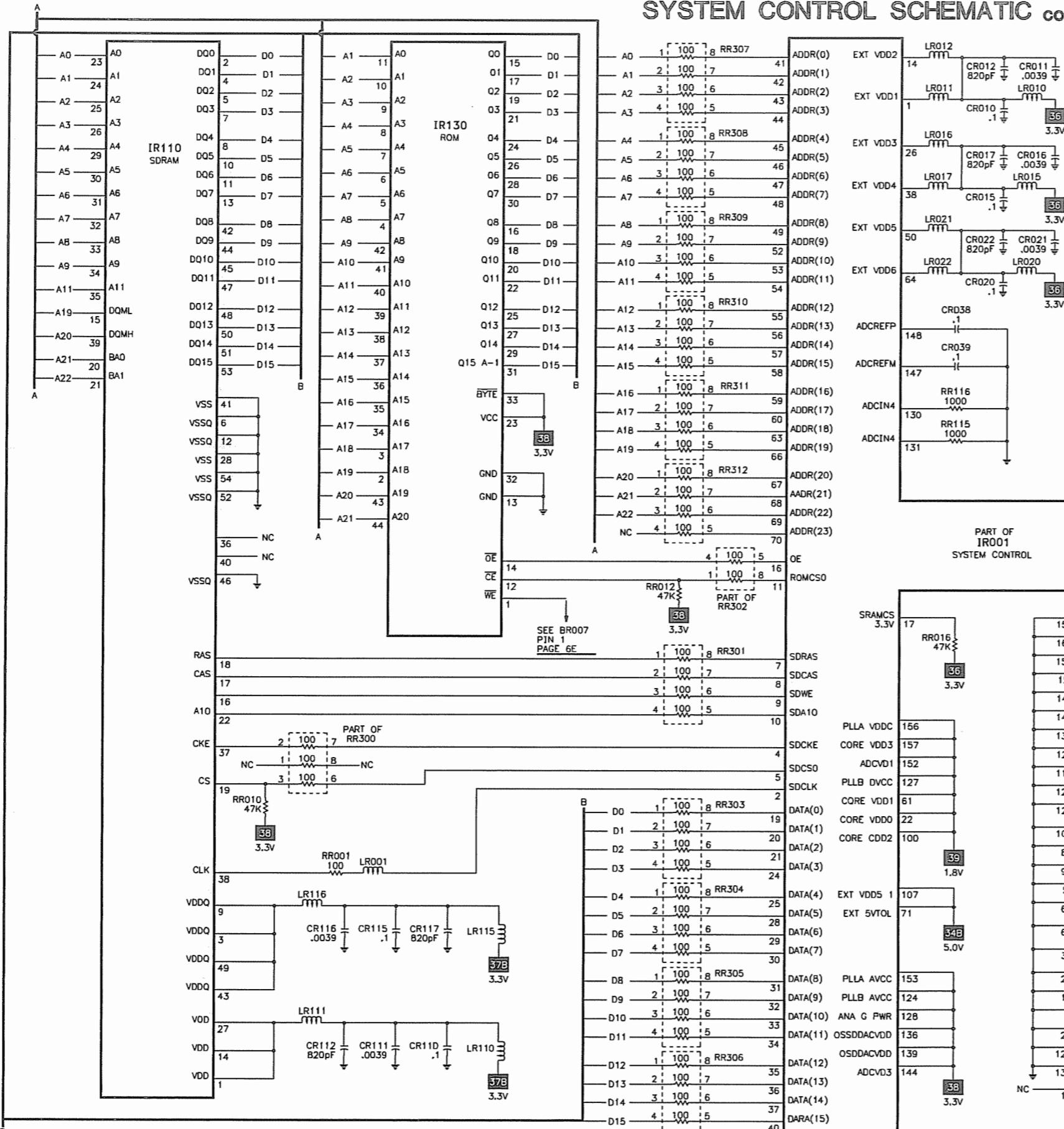
SYSTEM CONTROL SCHEMATIC



G

H

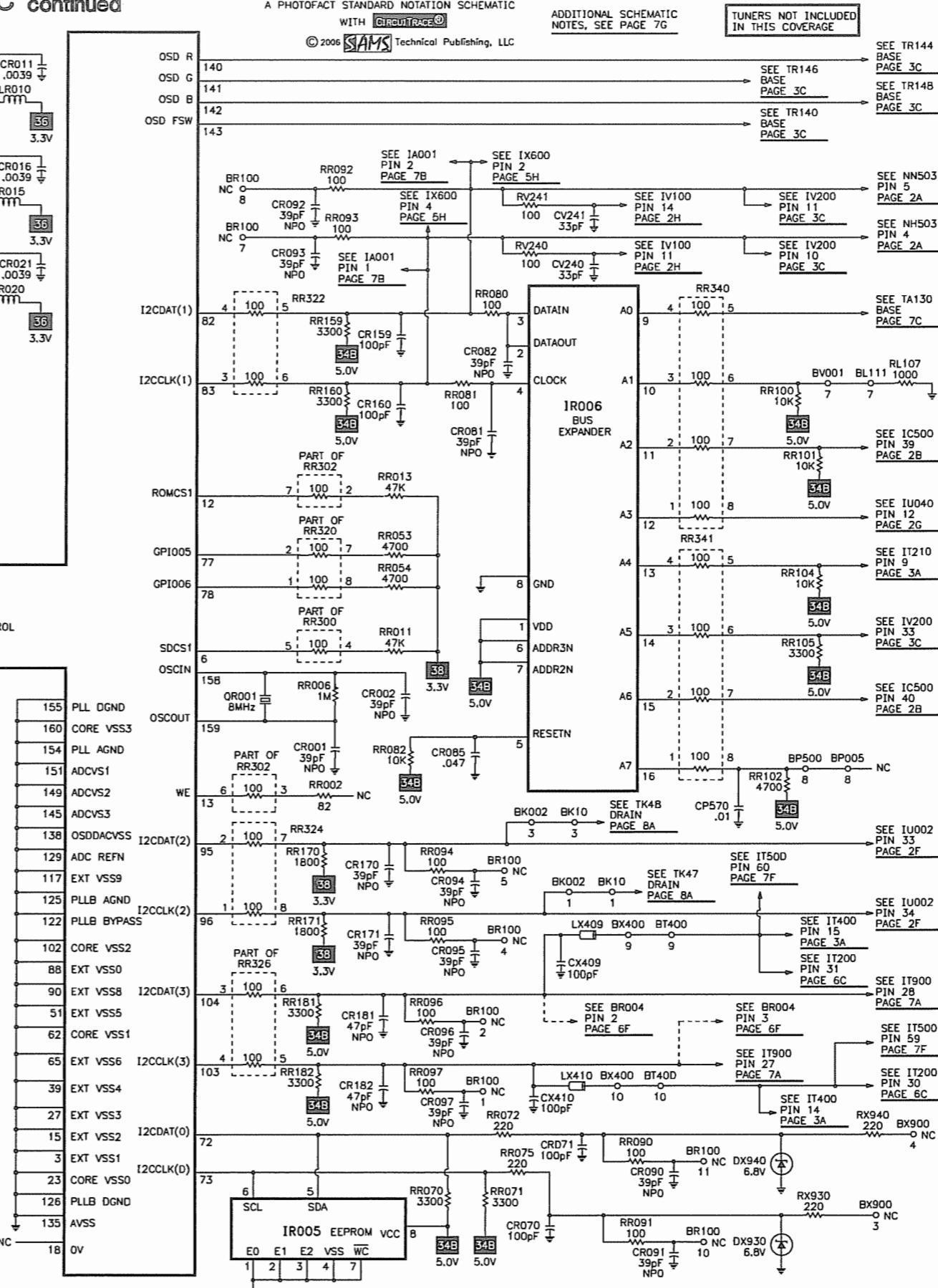
SYSTEM CONTROL SCHEMATIC continued



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ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 7G

TUNERS NOT INCLUDED
IN THIS COVERAGE



RCA

MODEL D40W20YX1 (CHASSIS ATC221)

149

150

151

152

153

154

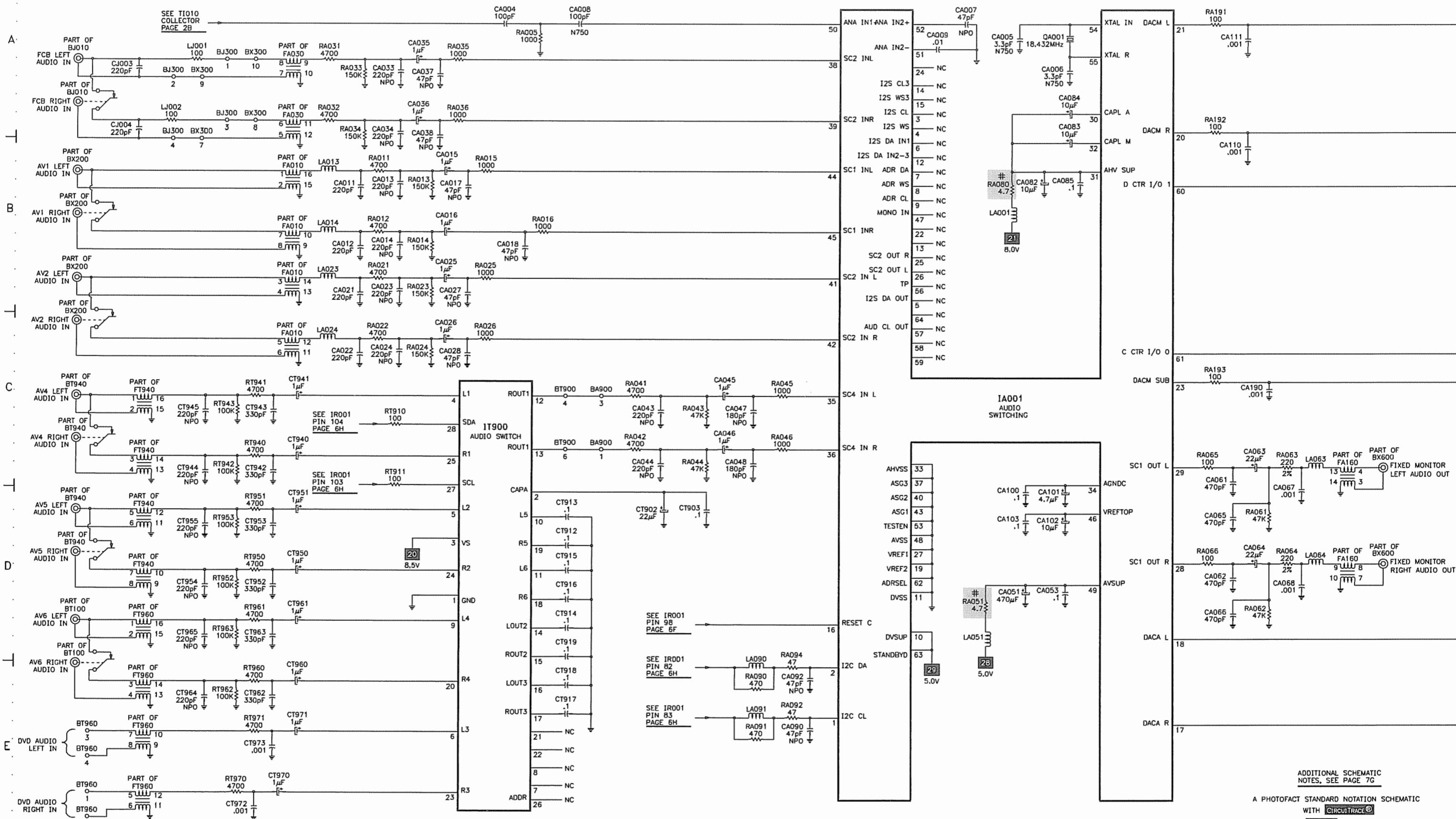
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156

7

A

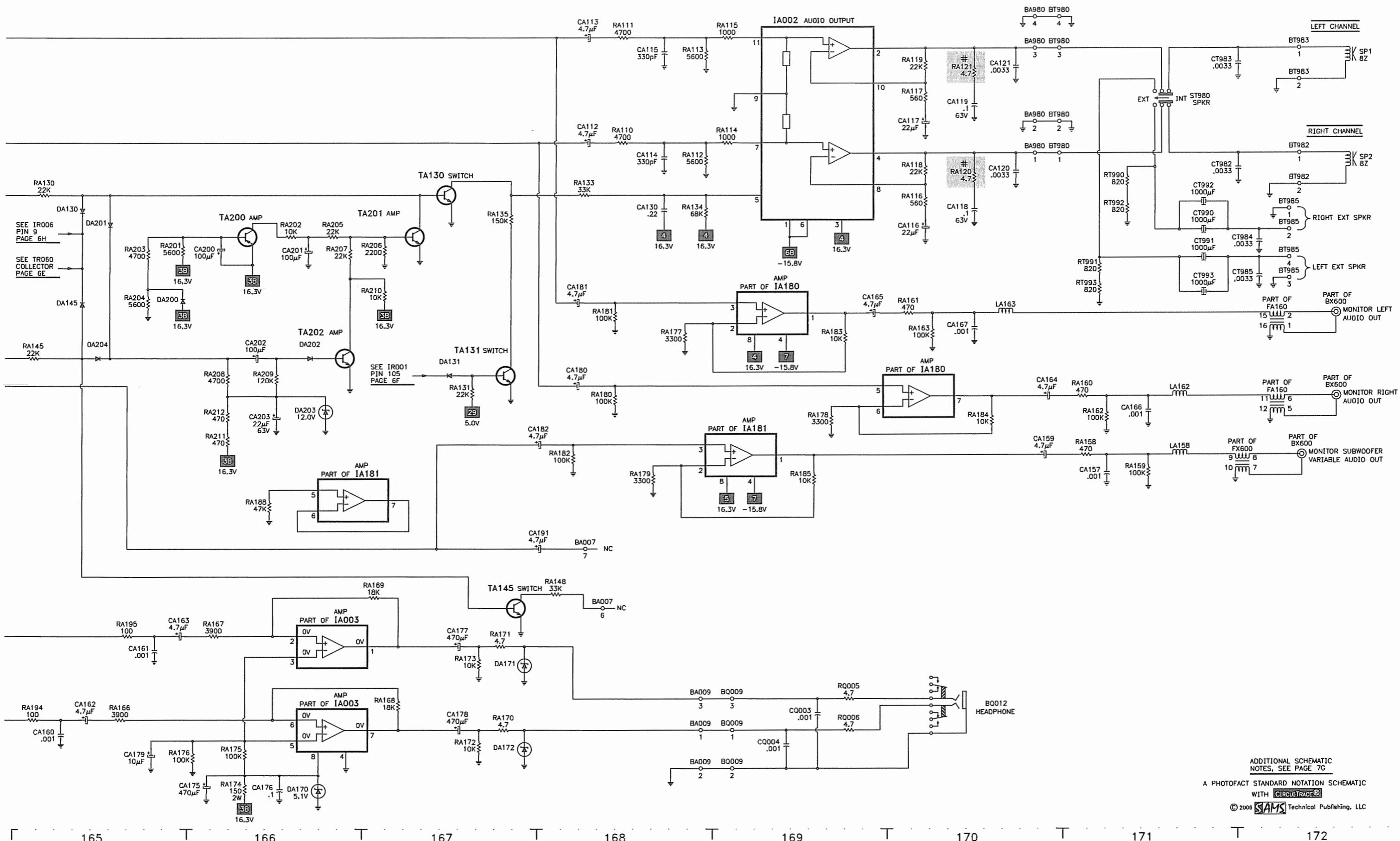
AUDIO SCHEMATIC



C

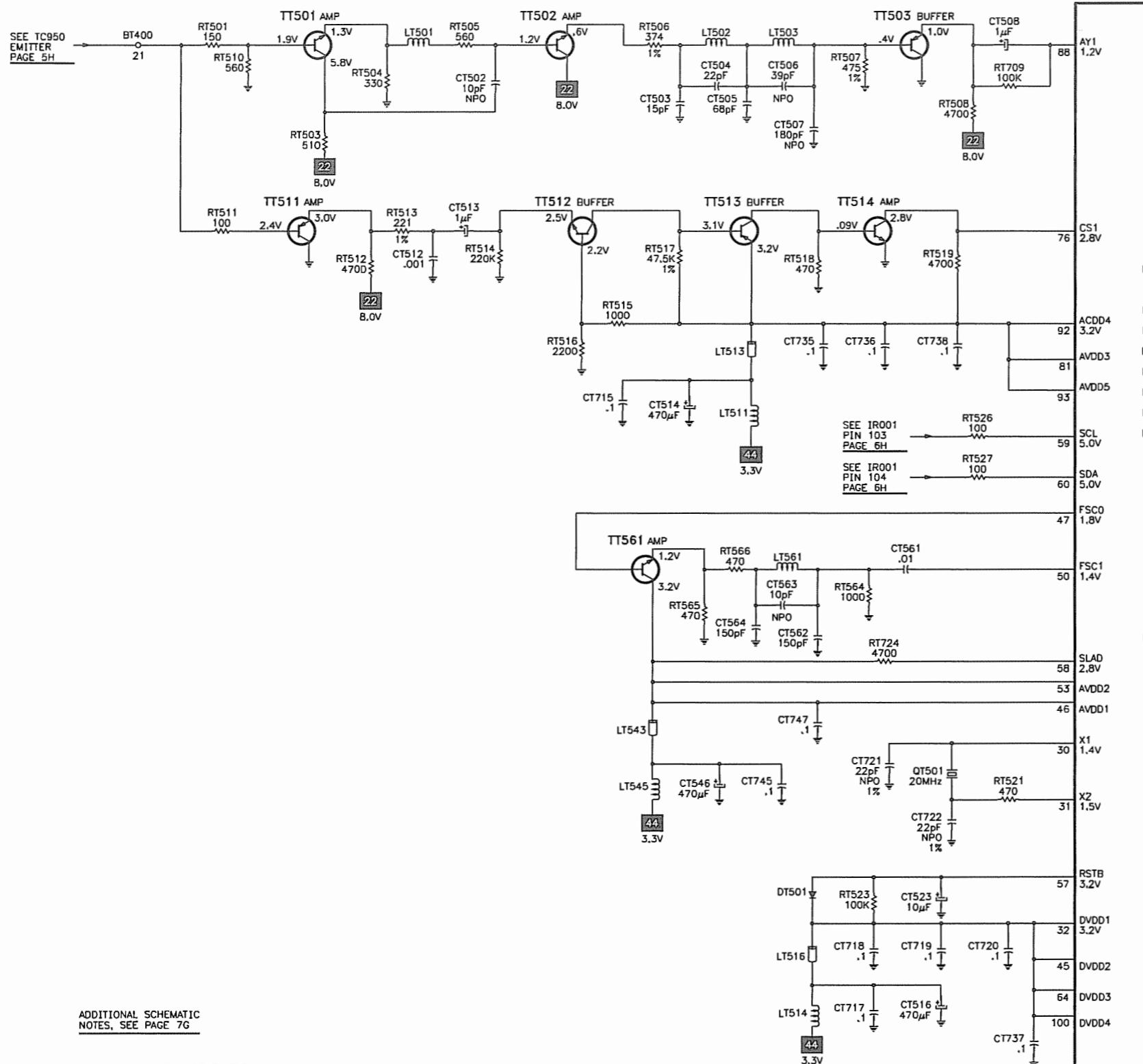
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AUDIO SCHEMATIC continued



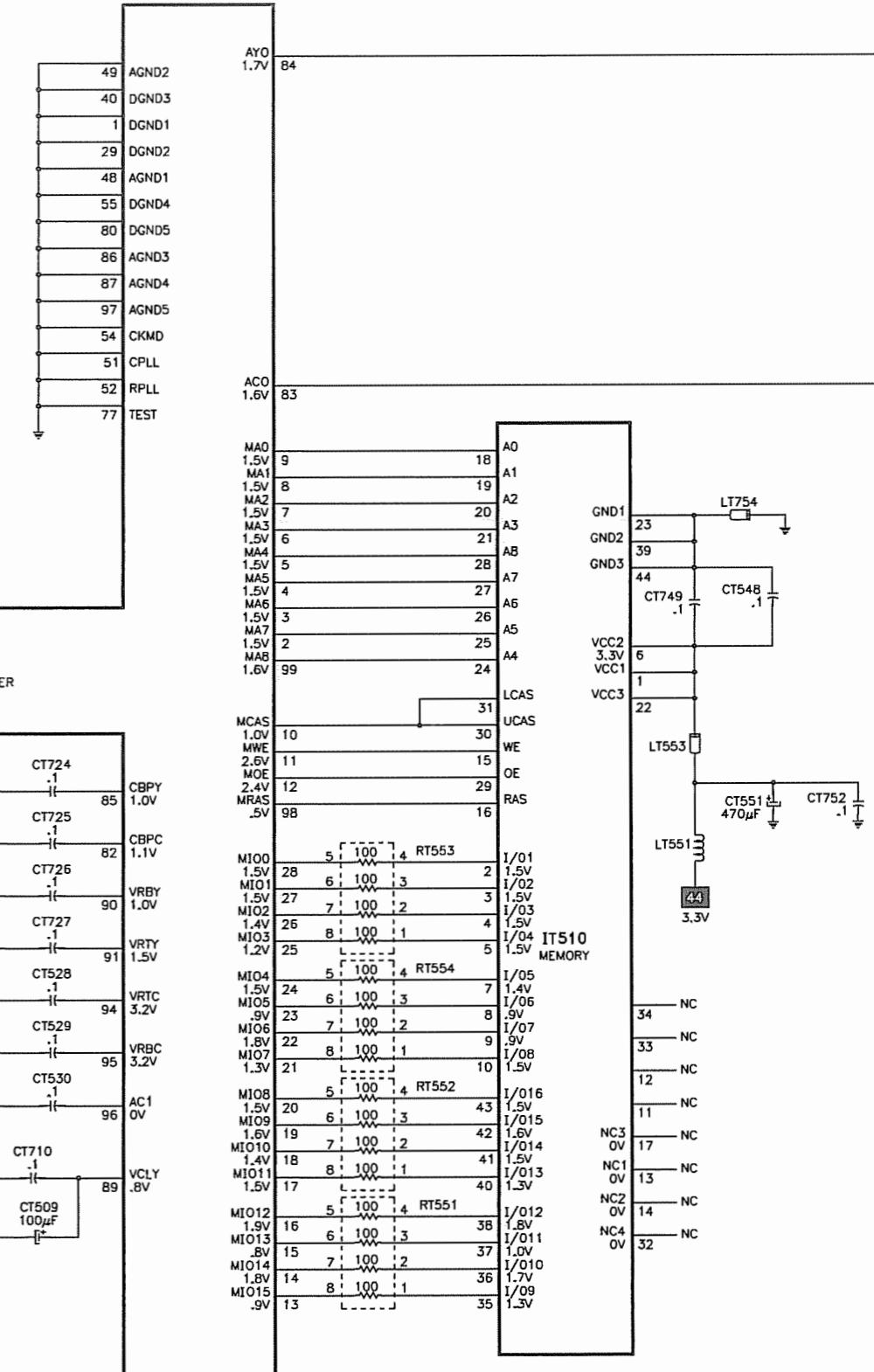
COMB FILTER SCHEMATIC

A



E

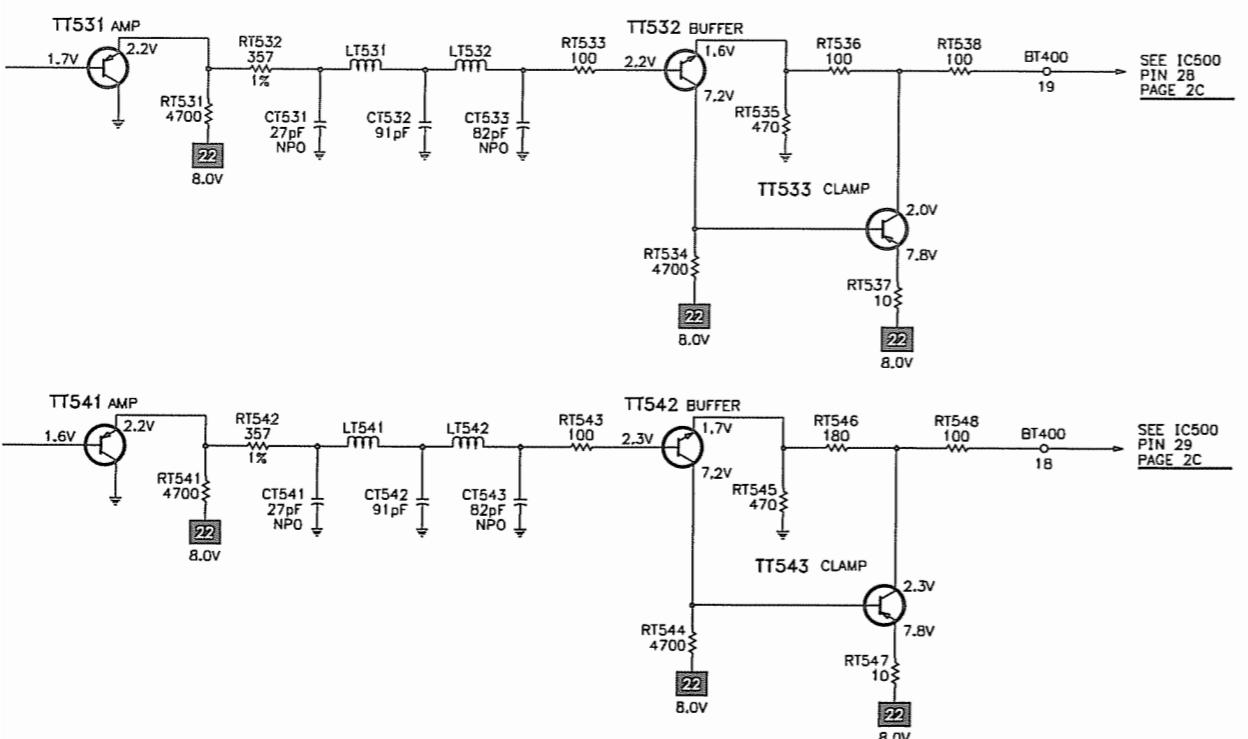
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G
COMB FILTER SCHEMATIC continued



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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 CIRCUITTRACE® 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.

181 T 182 T 183 T 184 T

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.
- Where items may be replaced with equivalent parts, several alternates are shown from participating vendors.
- 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.

Obtaining Parts

Many of these parts are available from your local Sams authorized distributor or the manufacturer of the equipment. Call Sams for the name of your nearest distributor:

800-428-7267

Participating Vendors

Information on test equipment and replacement parts is listed in these pages for the following participating vendors.

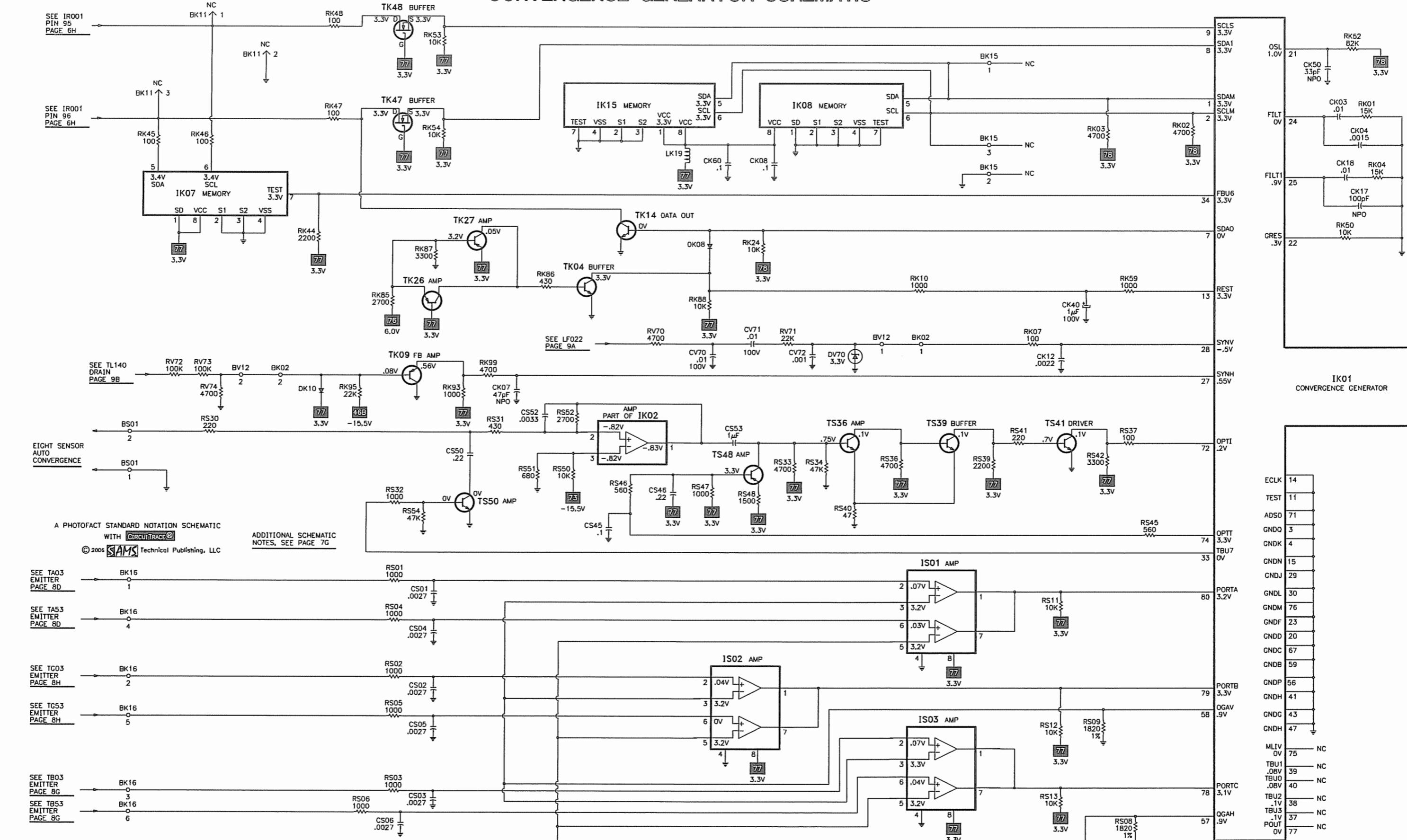
▪ NTE Electronics, Inc. (NTE)

▪ Sencore, Inc.

A

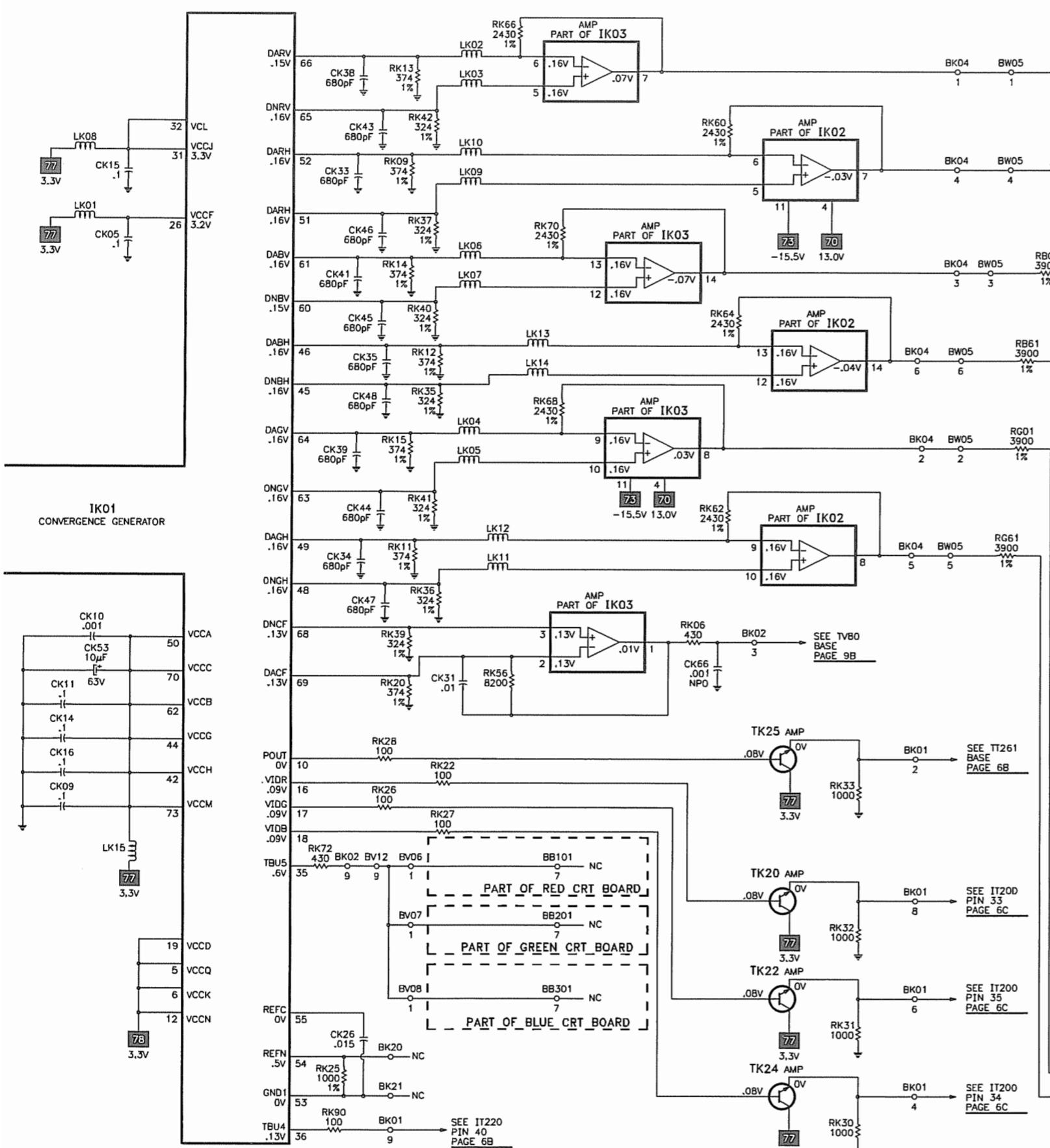
CONVERGENCE GENERATOR SCHEMATIC

B

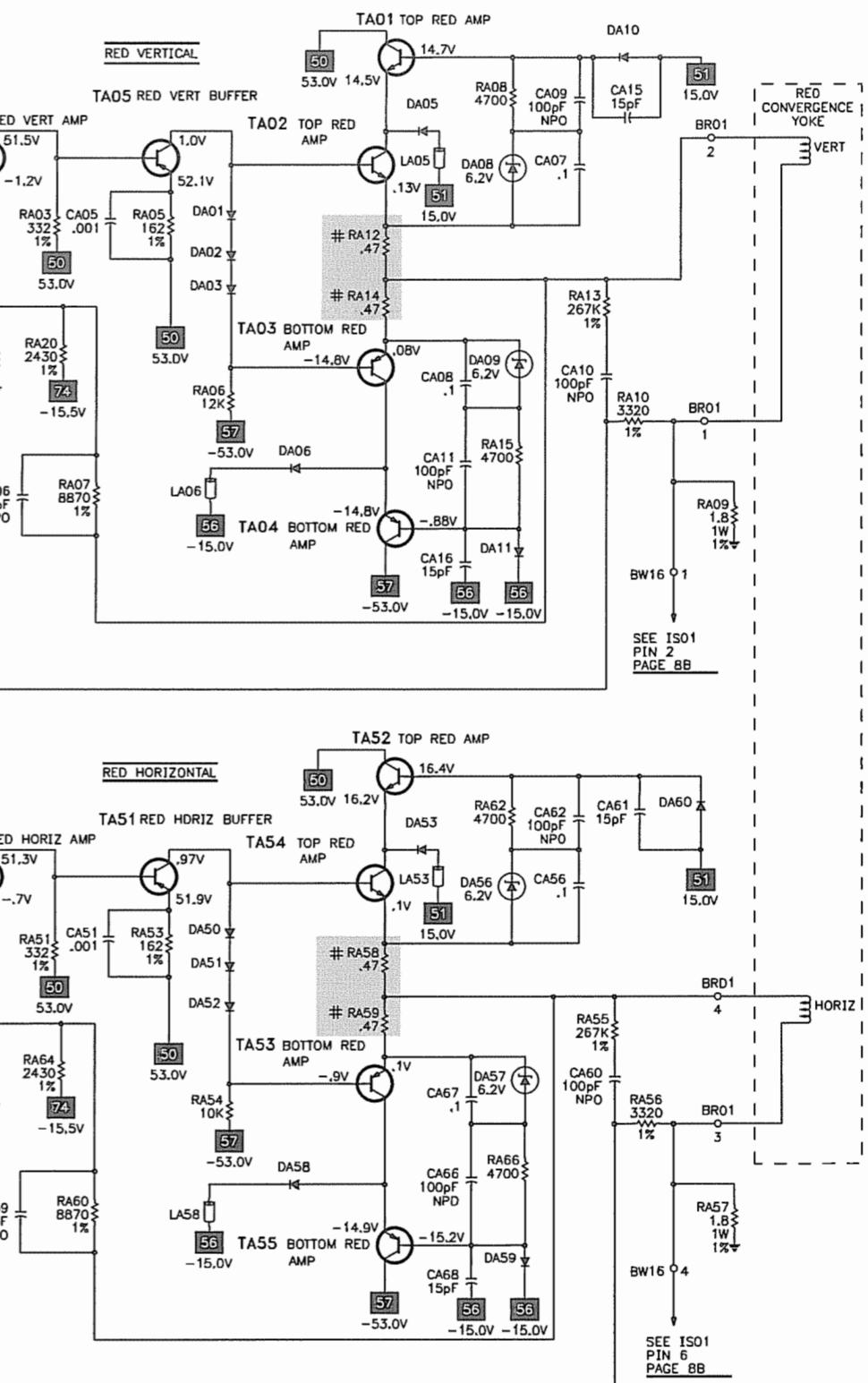


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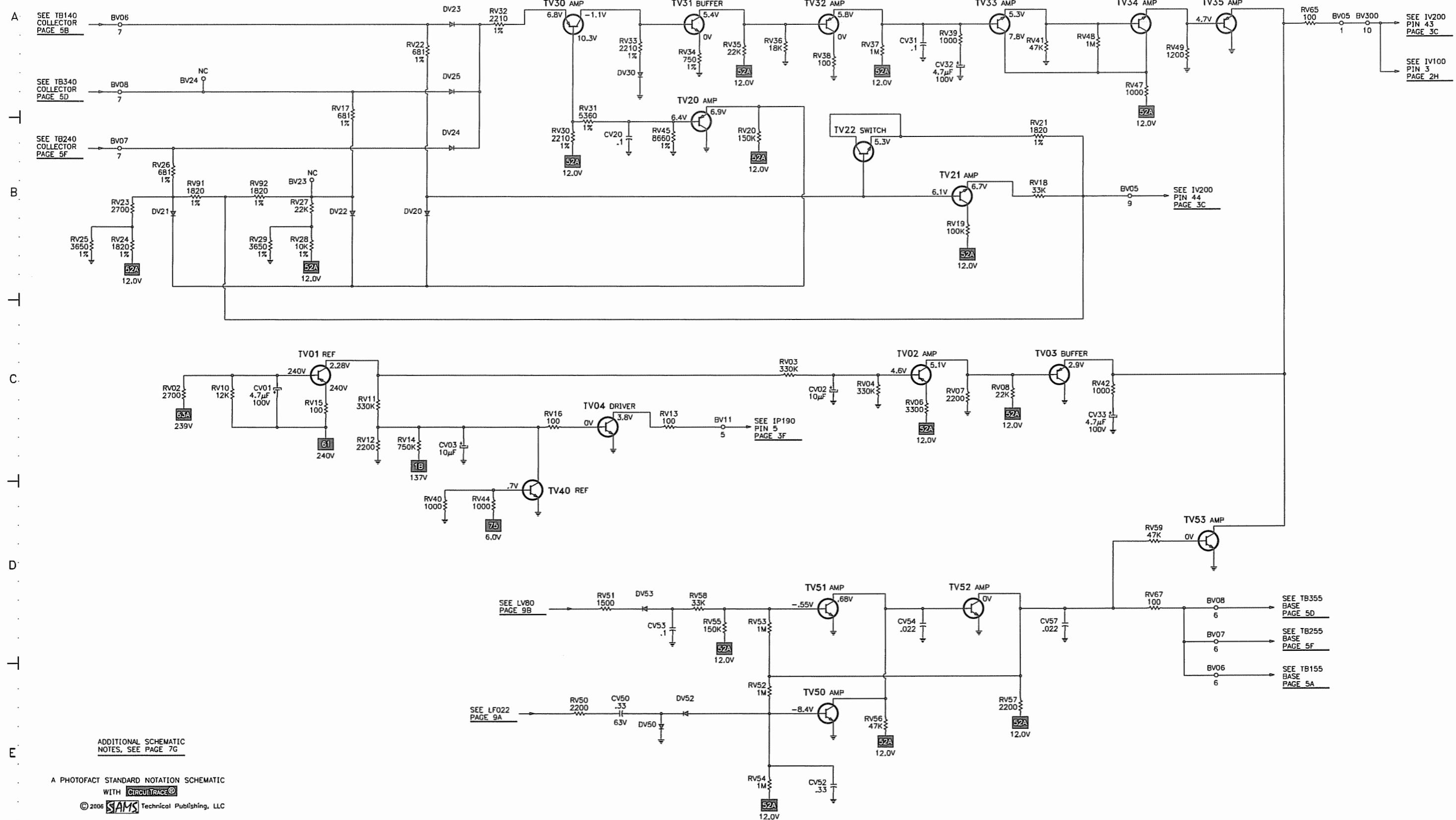
CONVERGENCE GENERATOR SCHEMATIC continued



D

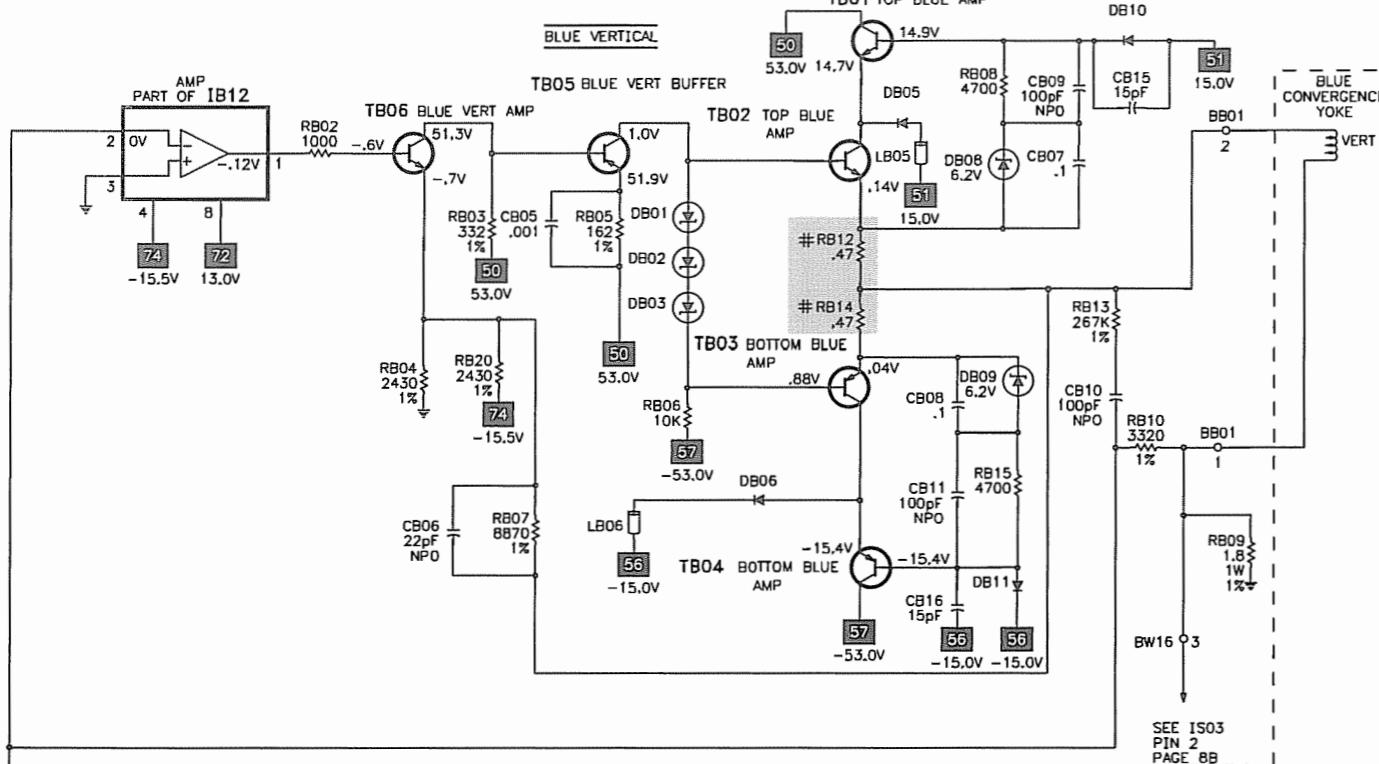


CONVERGENCE ADAPTER SCHEMATIC

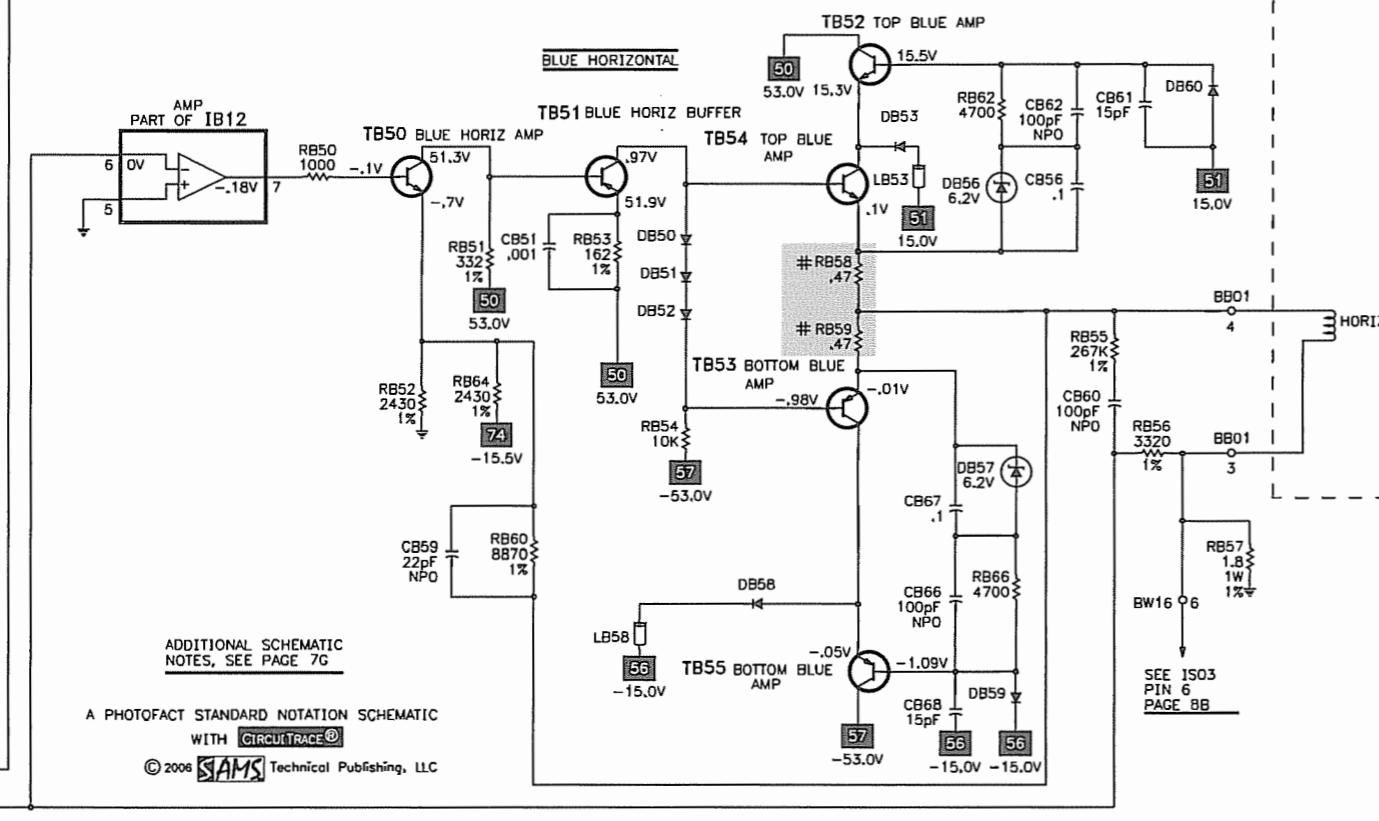


CONVERGENCE POWER AMP SCHEMATIC

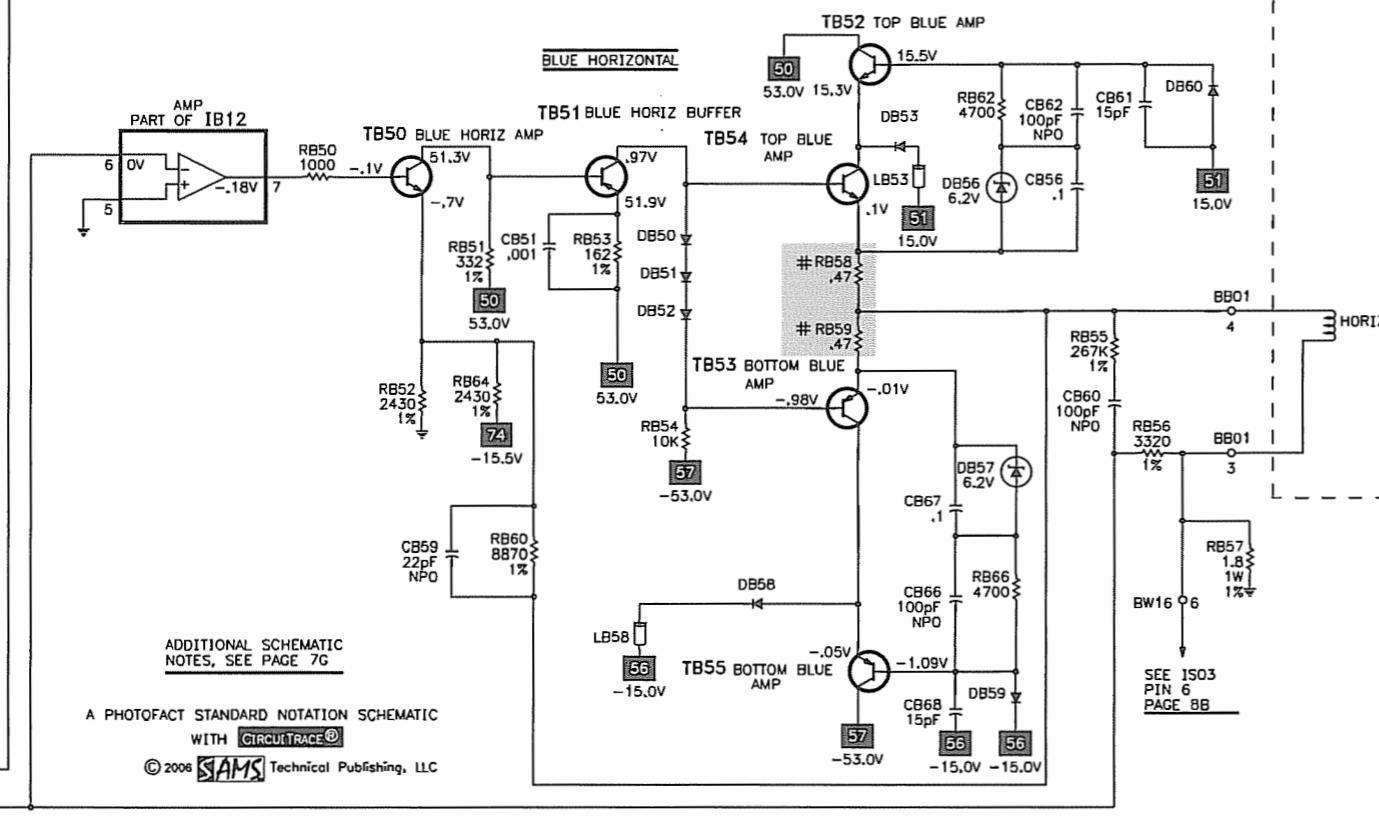
A



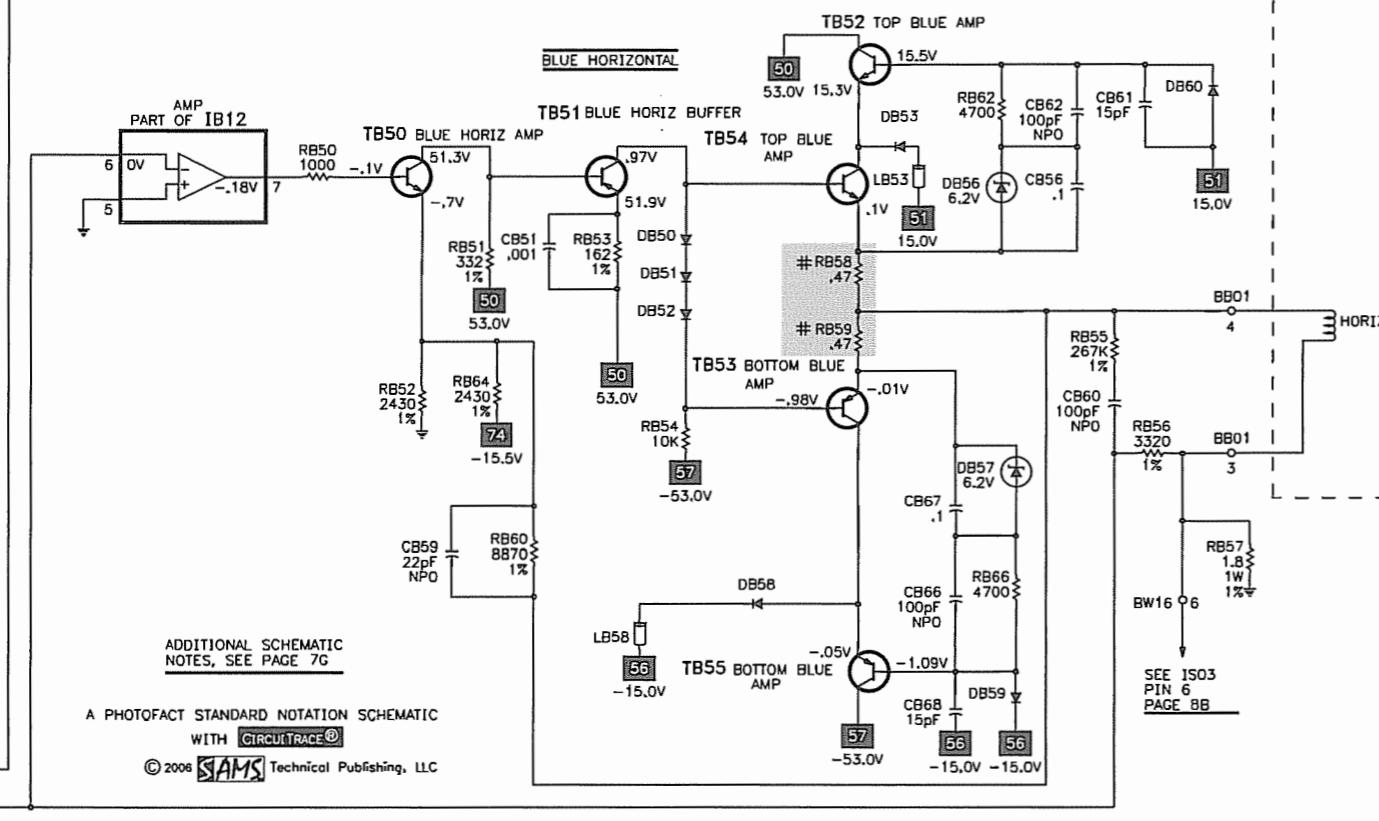
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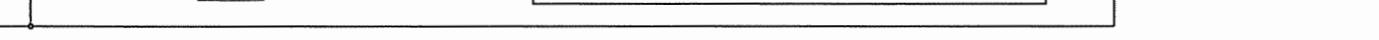
C



D



E



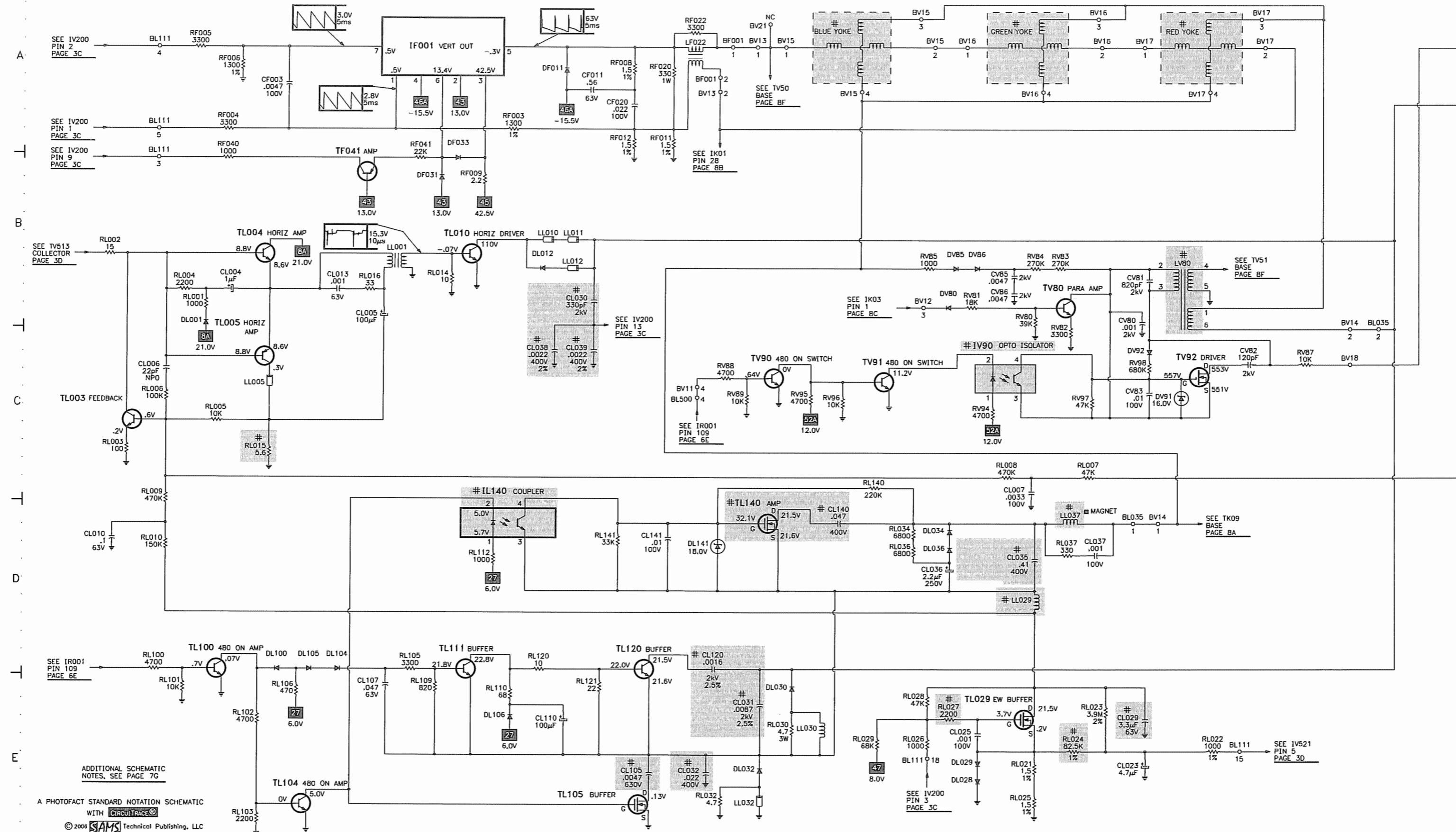
RCA

MODEL D40W20YX1 (CHASSIS ATC221)

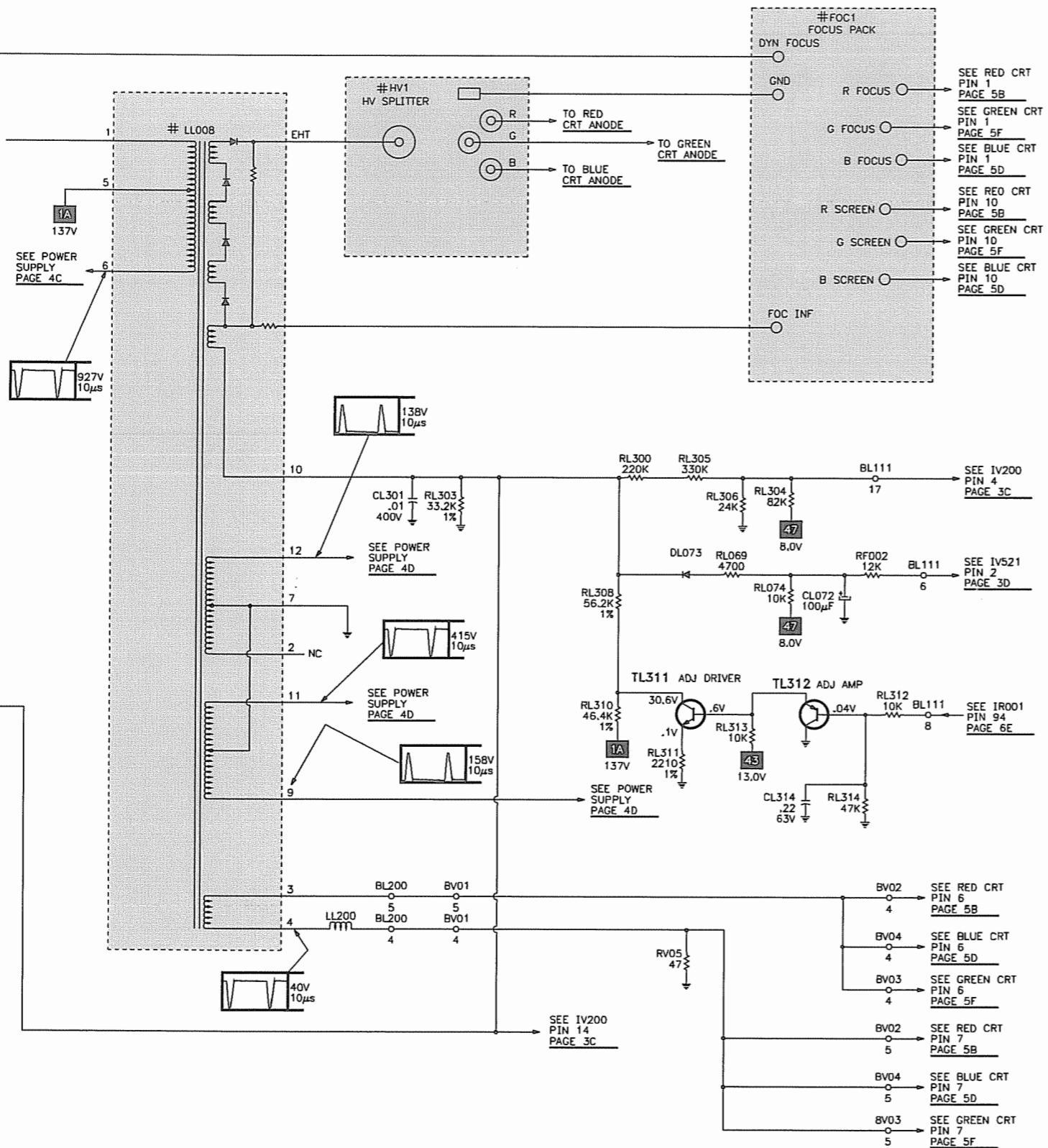
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DEFLECTION SCHEMATIC

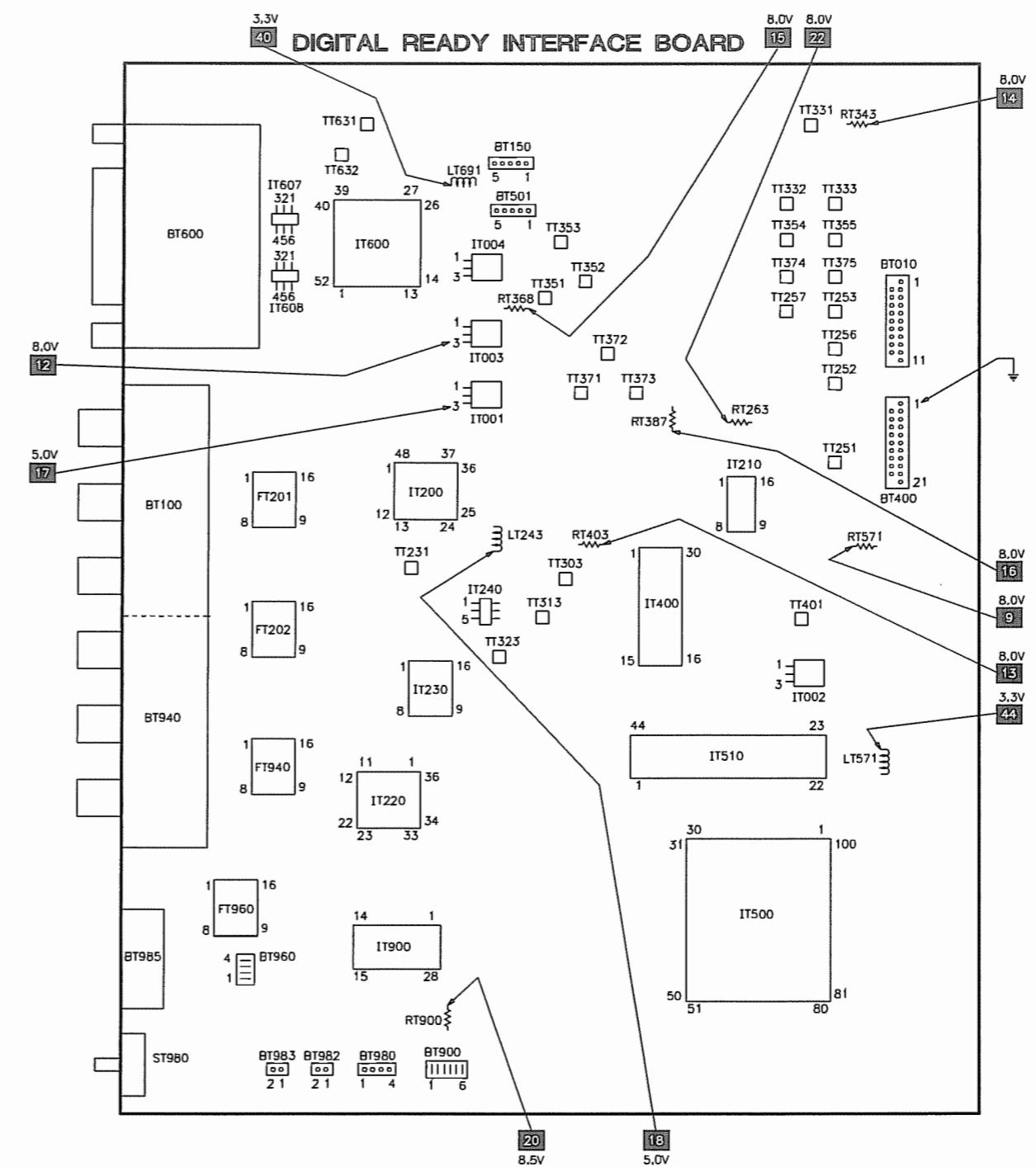
B



C
DEFLECTION SCHEMATIC continued



PLACEMENT CHART

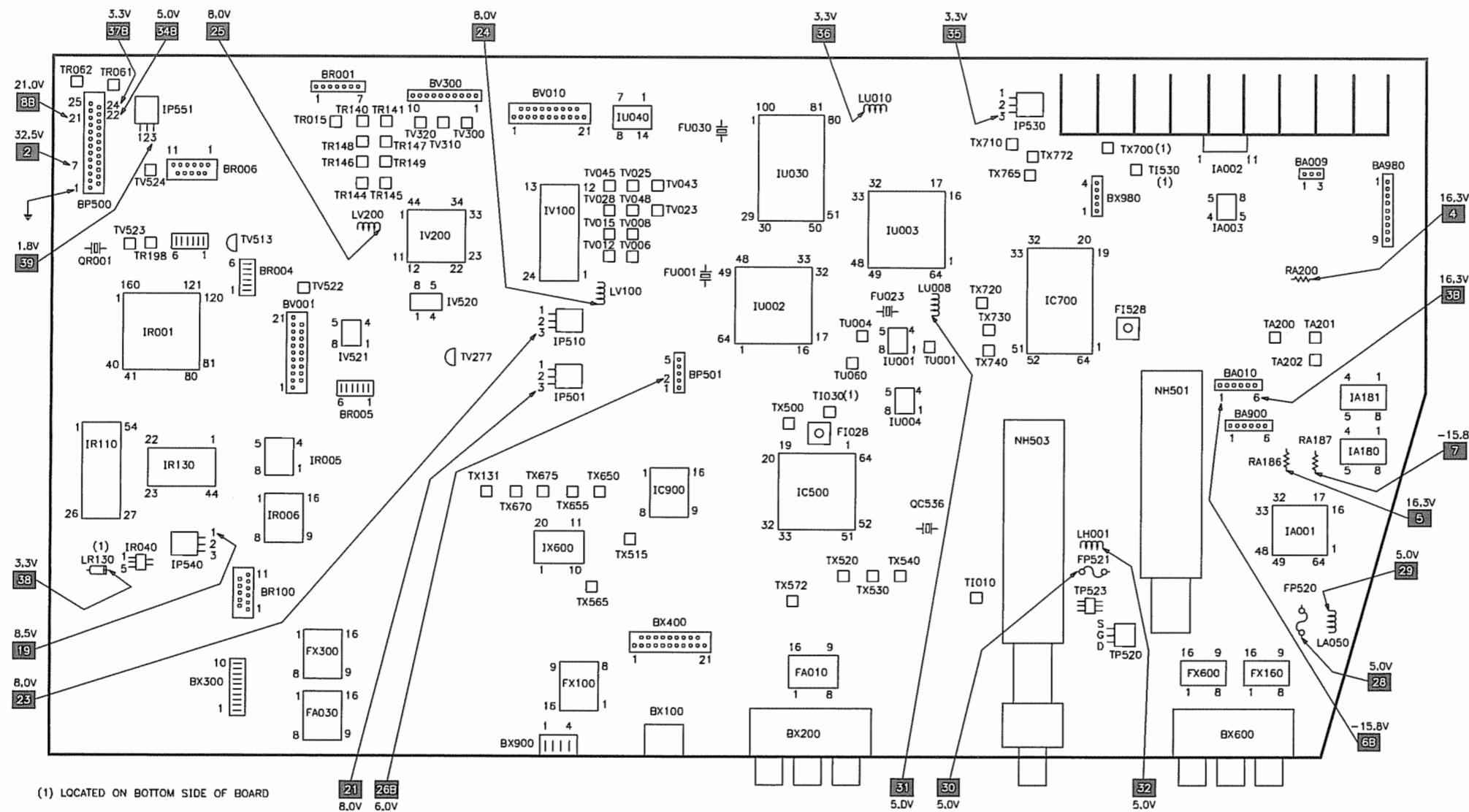


ADDITIONAL SCHEMATIC NOTES, SEE PAGE 7G

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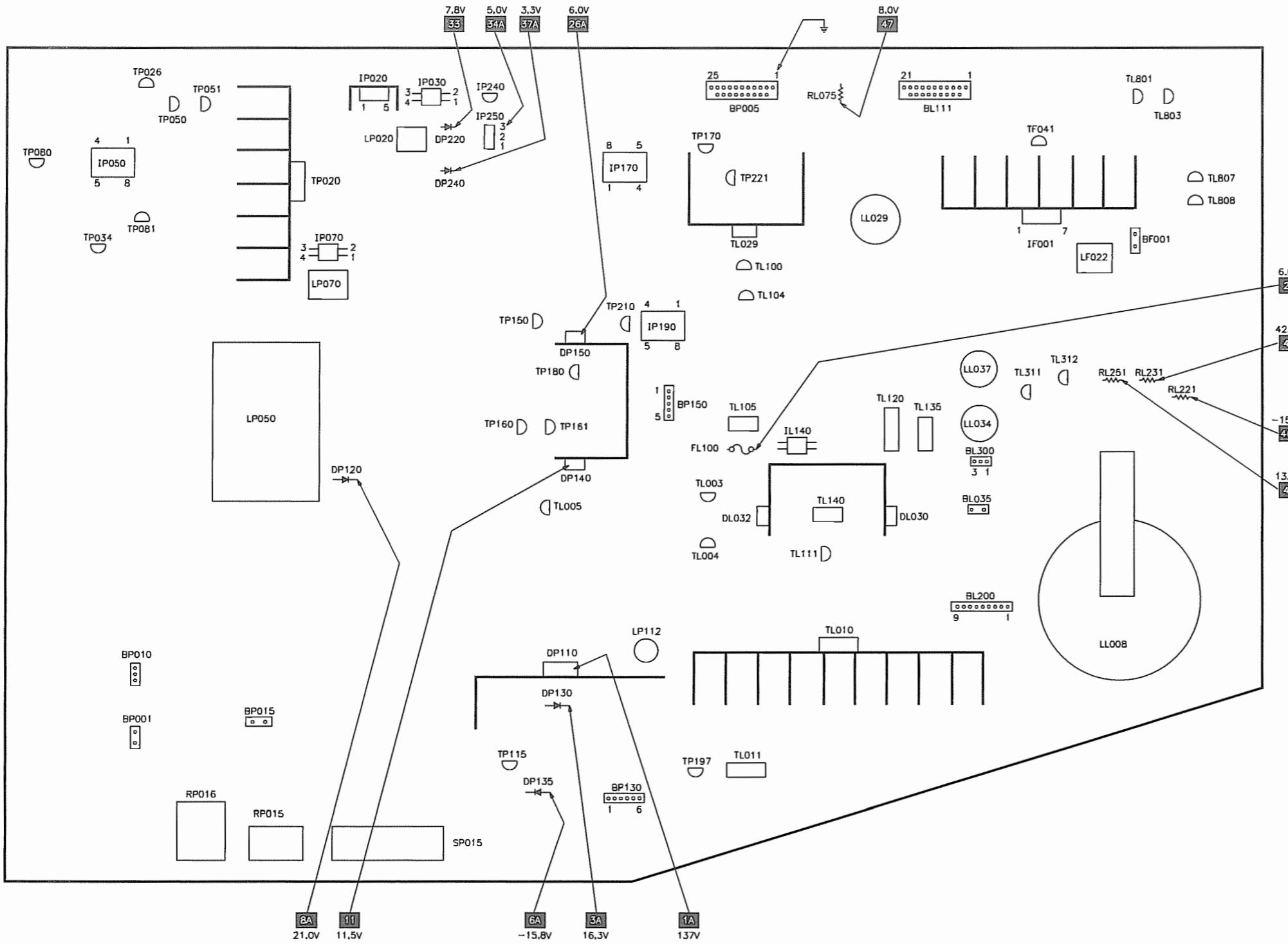
PLACEMENT CHART continued

SMALL SIGNAL BOARD

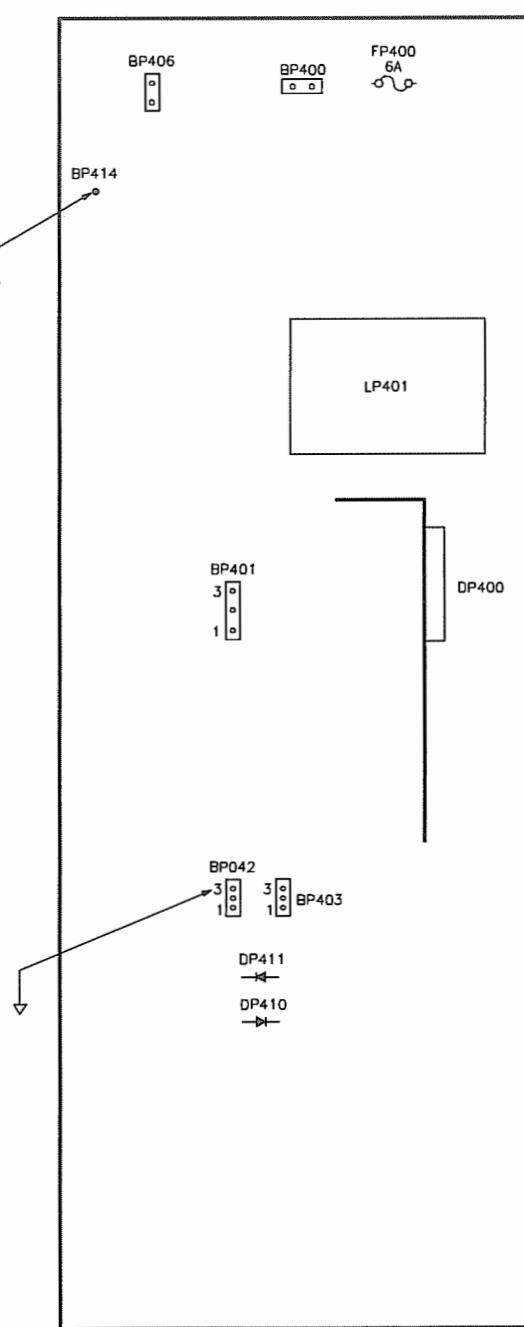


PLACEMENT CHART continued

POWER SUPPLY/DEFLECTION BOARD

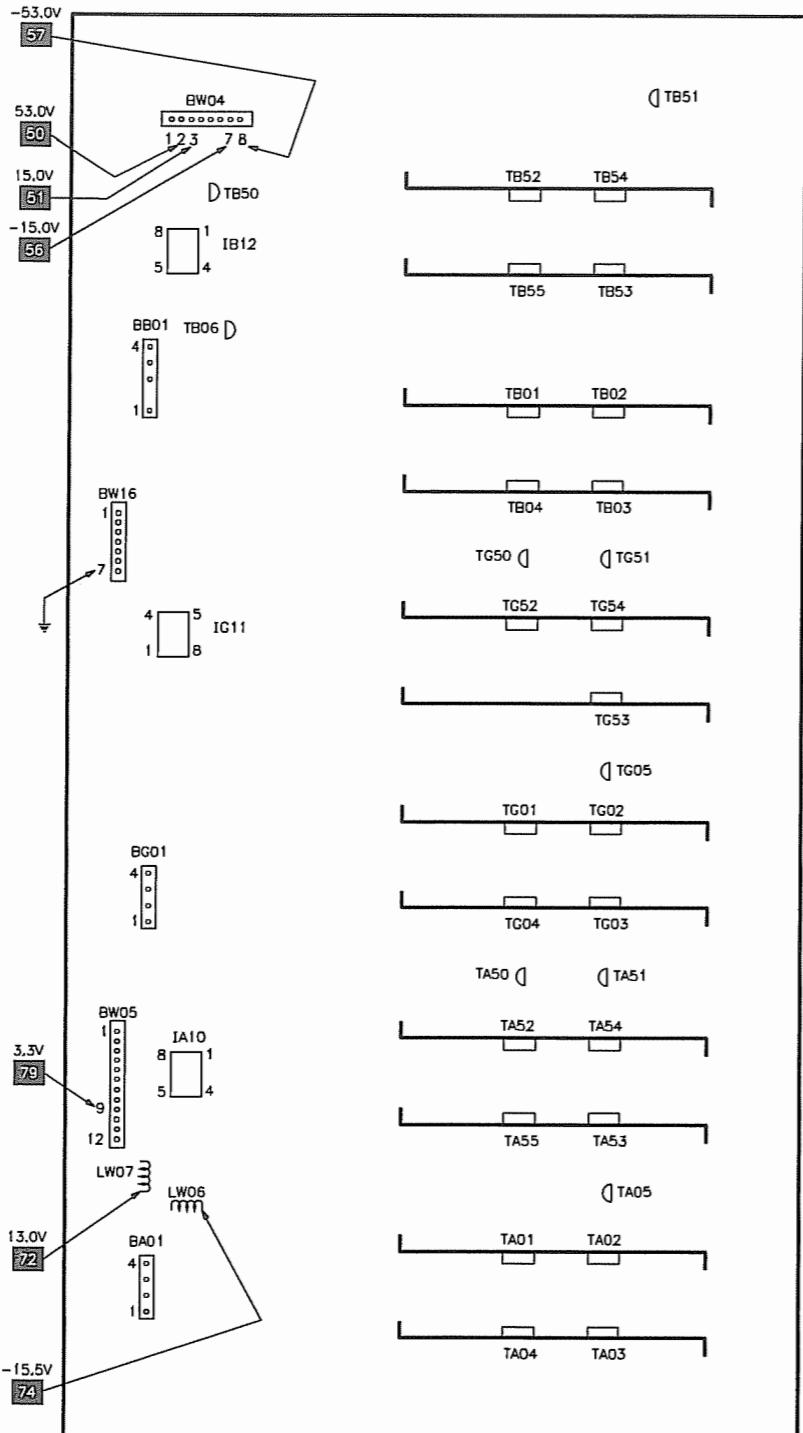


MAIN INPUT DOUBLER BOARD

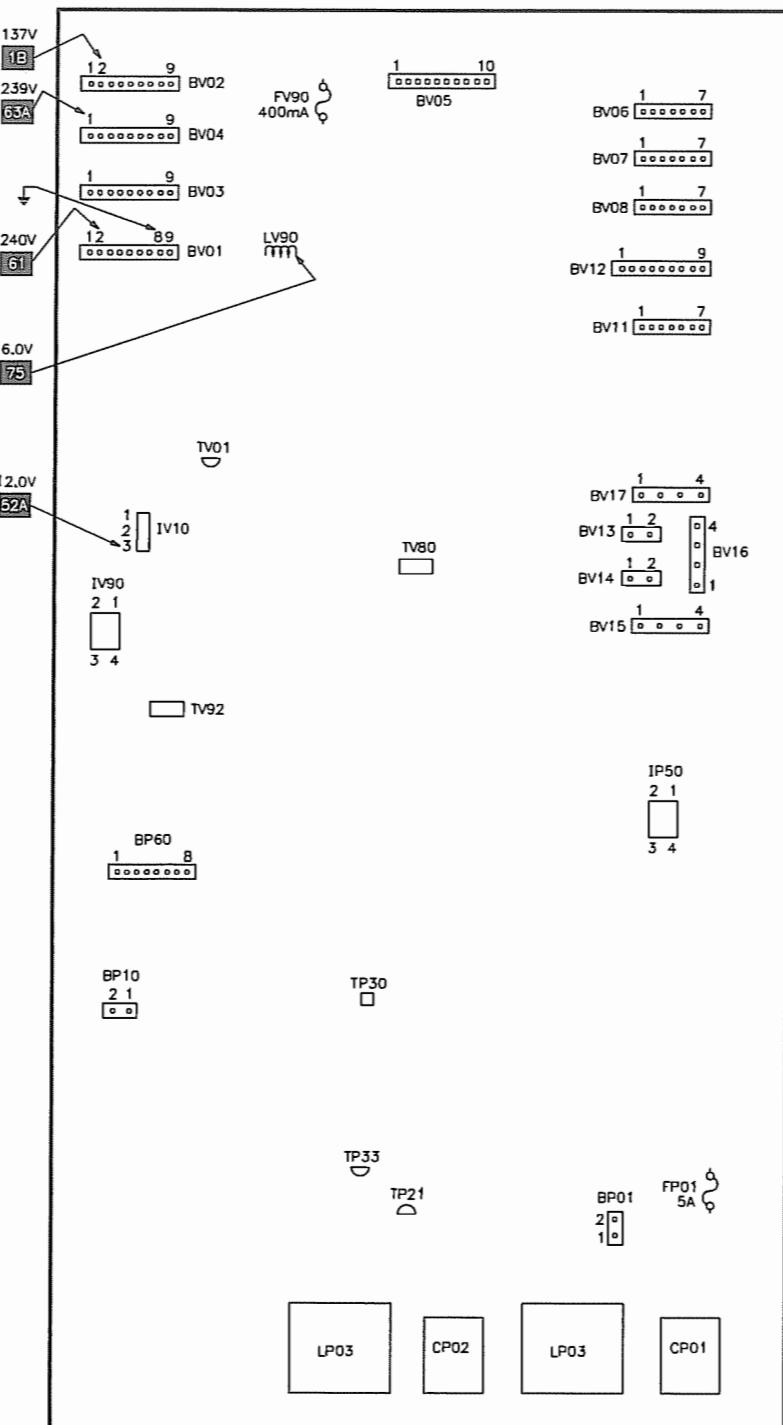


PLACEMENT CHART continued

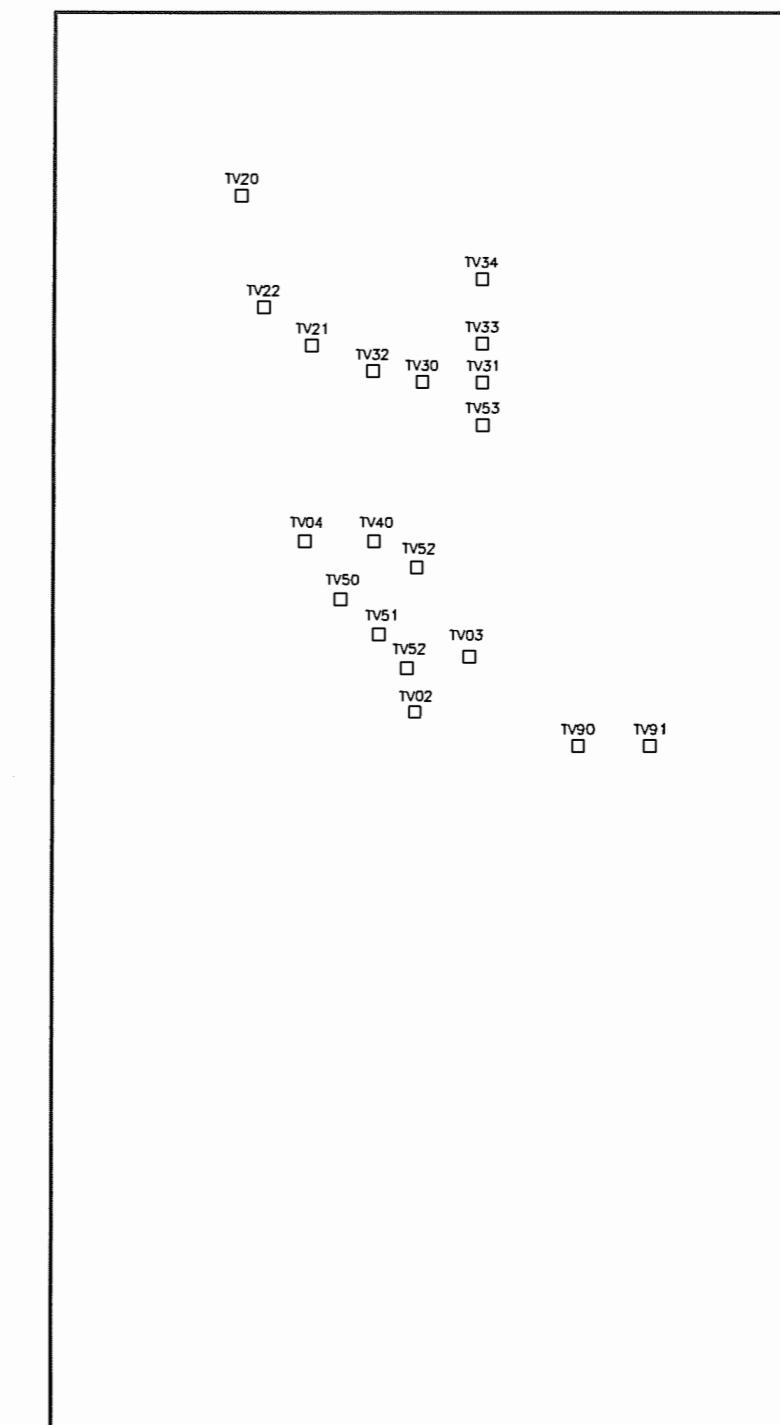
CONVERGENCE AMP



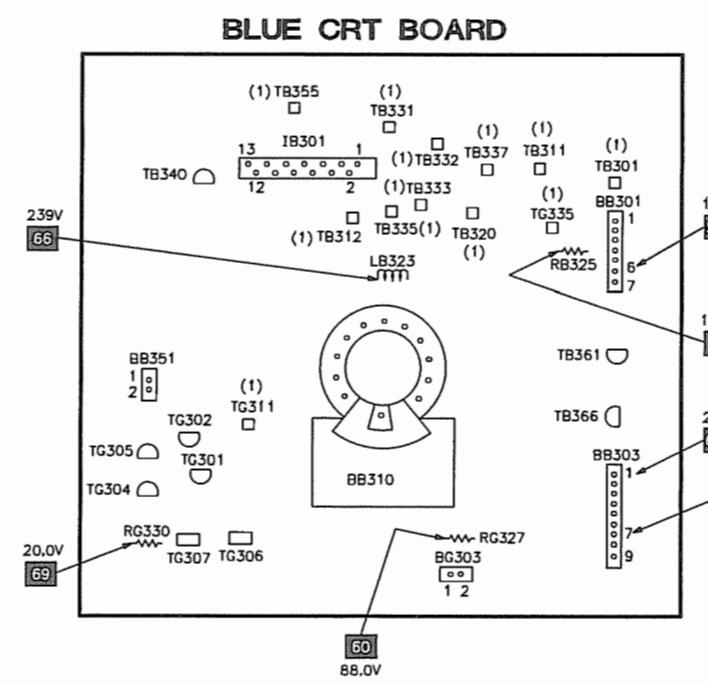
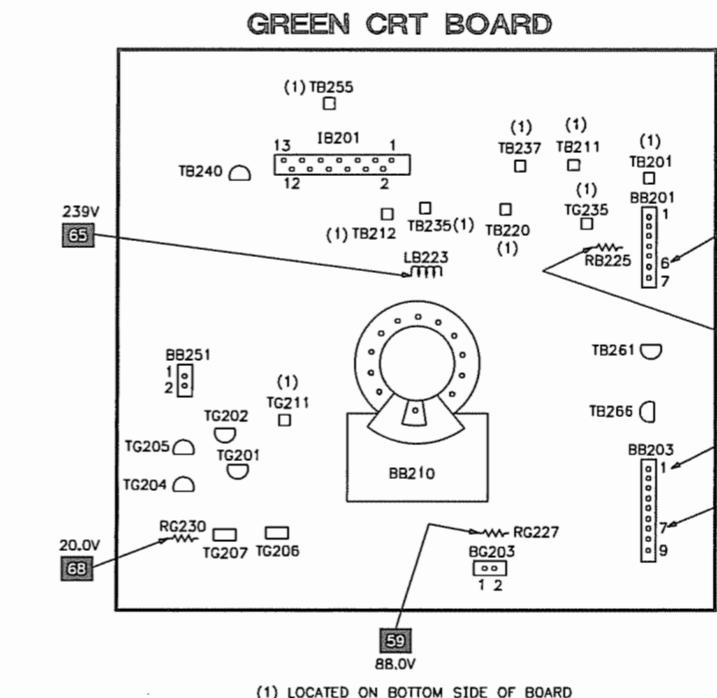
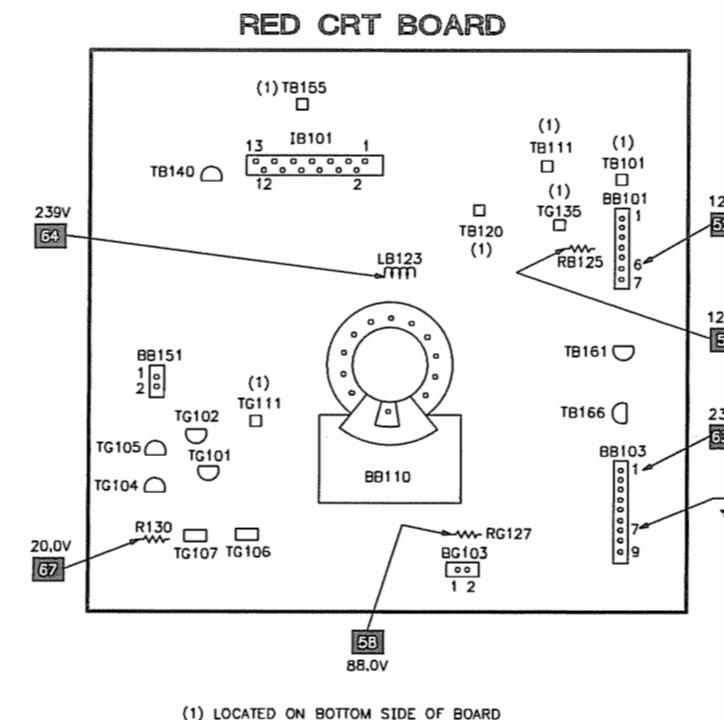
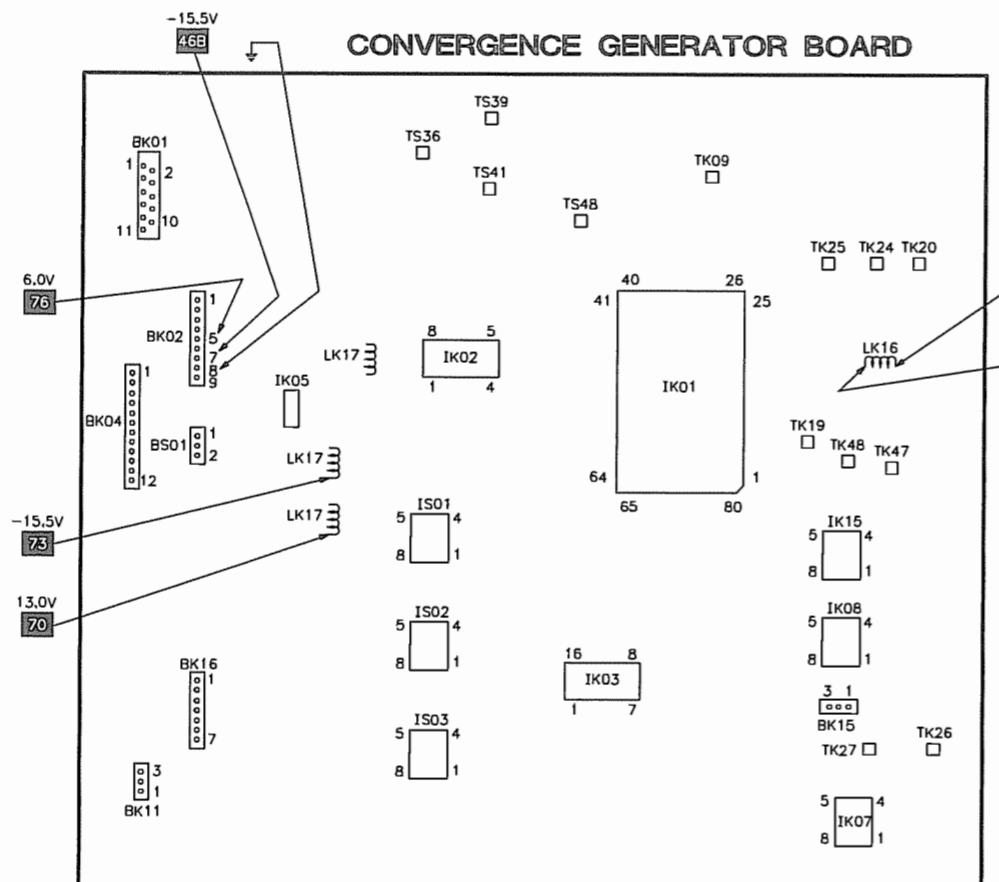
CONVERGENCE ADAPTER/POWER SUPPLY BOARD - TOP VIEW



CONVERGENCE ADAPTER/POWER SUPPLY BOARD - BOTTOM VIEW



PLACEMENT CHART continued



SCHEMATIC COMPONENT LOCATION GUIDE

BJ010	A157	CA114	B168	CB234	B116	CG148	E103	CK16	CP063	C61	CP90	E85	CS52	C188	CT405	A72	CT735	B176	CV002	A28	CW07	A96	DA05	A199	DG237	D115	DP49	D85	FT201	A129	IS03	E190	LL005	C218		
BJ011	D121	CA115	A168	CB239	C115	CG15	A215	CK17	BP071	A56	CP91	E84	CS53	C189	CT406	A72	CT736	B176	CV003	A28	CW19	E84	DA06	B199	DG301	E110	DP501	C69	FT201	B129	IT001	B69	LL008	A225		
BLUE	A221	CA116	B170	CB240	A118	CG154	D98	CK18	BP073	C61	CQ003	E169	CT001	A69	CT407	C36	CT737	E177	CV004	A28	CX002	C71	DA08	A199	DG302	E110	DP510	D69	FT202	A129	IT002	C74	LL008	A77		
BQ012	E170	CA117	A170	CB241	B116	CG16	B215	CK19	BP074	A64	CQ004	E169	CT002	A69	CT408	C36	CT738	B176	CV005	A28	CX003	C71	DA09	B200	DG336	D107	DP520	B73	FT202	B129	IT003	A69	LL010	B219		
BT100	A129	CA118	B170	CB242	B116	CG201	E94	CK201	A141	CP111	A64	CR001	C154	CT003	B72	CT409	E36	CT745	D176	CV006	A29	CX010	B75	DA10	DG337	D107	DP521	B74	FT202	B129	IT004	D73	LL011	B219		
BT100	B129	CA119	A170	CB244	B118	CG202	E93	CK202	A141	CP112	A64	CR002	C154	CT004	B72	CT410	E36	CT747	D176	CV009	B29	CX100	B123	DA11	B200	DG50	D214	DP530	C70	FT400	C35	IT200	B138	LL012	B219	
BT100	B129	CA120	B170	CB251	B116	CG203	E116	CK21	D95	CP113	B64	CR003	C144	CT005	D73	CT411	D36	CT749	C180	CV01	C202	CX011	B75	DA110	C66	DG51	D214	DP540	C69	FT940	C157	IT210	B33	LL029	D222	
BT100	B129	CA121	A170	CB252	A119	CG204	D116	CK23	A96	CP12	A85	CR005	C143	CT006	D73	CT412	D36	CT752	C180	CV011	A30	CX012	B75	DA130	B165	DG52	D214	DP60	B86	FT940	C157	IT220	D135	LL030	E221	
BT100	D157	CA122	C67	CB256	B117	CG205	E117	CK24	B96	CP120	C64	CR006	B143	CT007	C75	CT413	D36	CT790	C72	CV016	A31	CX120	B123	DA131	C167	DG53	C215	DP65	A86	FT940	D157	IT230	C139	LL032	E221	
BT940	A129	CA123	C67	CB261	C116	CG206	E116	CK25	D96	CP121	C64	CR007	B142	CT008	C75	CT414	C36	CT901	C72	CV02	C205	CX130	D126	DA145	C165	DG56	C215	DP70	B86	FT940	D157	IT240	C139	LL037	D222	
BT940	A129	CA124	C67	CB262	D117	CG207	D118	CK26	E194	CP130	B65	CR008	E75	CT009	A72	CT501	D70	CT902	D160	CV021	B28	CX132	C71	DA170	E166	DG60	C216	DP75	A86	FT960	D157	IT400	B36	LL100	A73	
BT940	C157	CA125	C67	CB266	C118	CG209	E118	CK31	D94	CP131	B64	CR009	E75	CT010	A72	CT502	D175	CT903	C160	CV022	B28	CX133	C71	DA171	E167	DH010	B66	DP87	E86	FT960	E157	IT500	C178	LL200	D226	
BT940	D157	CA127	B67	CB267	C118	CG210	B94	CK32	A96	CP135	B65	CR010	A153	CT011	D75	CT503	A175	CT912	D159	CV03	C203	CX200	C123	DA172	E167	DK08	B189	D70	DP100	B70	FT960	E157	IT510	D180	LL201	A77
BU010	D122	CA128	B67	CB271	C119	CG212	E118	CK33	A194	CP136	B64	CR011	A153	CT012	D75	CT504	A175	CT913	D159	CV030	D70	CX220	C123	DA200	C165	DK09	D96	DP101	A130	FT960	E157	IT600	B132	LL211	D92	
BX100	A121	CA130	B168	CB309	B107	CG214	E117	CK34	C194	CP140	A72	CR012	A153	CT020	A130	CT505	A176	CT914	D159	CV041	C28	CX300	C123	DA201	B165	DK10	C186	DP102	B130	FU001	B22	IT607	C130	LL212	D92	
BX100	C121	CA131	C65	CB310	A105	CG231	E115	CK35	B194	CP141	C64	CR015	A153	CT024	A130	CT506	A176	CT915	D159	CV042	C28	CX320	C123	DA202	C166	DL001	C218	DP103	B130	FU023	E22	IT608	E131	LL231	C78	
BX200	A122	CA132	C66	CB321	B109	CG241	D115	CK36	B96	CP150	A75	CR016	A153	CT026	B130	CT507	A176	CT916	D159	CV050	D70	CX409	C125	DA203	C166	DL012	B219	DP104	A26	IT620	D130	LP004	B61			
BX200	A122	CA145	A200	CB322	B109	CG248	E119	CK37	A96	CP151	C64	CR017	A153	CT028	A130	CT508	A177	CT917	E159	CV09	C92	CX410	E155	DA204	C165	DL028	E222	DP105	B130	FV90	C95	IT900	C159	LP020	C64	
BX200	B157	CA157	C171	CB323	D94	CG254	D114	CK38	A194	CP152	D60	CR020	B153	CT210	B130	CT509	E178	CT918	E159	CV10	B91	CV500	C70	DA50	C199	DL029	E222	DP106	B130	FP100	B20	LP050	A63			
CA001	C72	CA165	C170	CB324	D93	CG301	E94	CK39	C194	CP162	D55	CR021	B153	CT212	B130	CT511	D70	CT919	E159	CV100	D70	CX501	C70	DA51	D199	DL030	E221	DP107	B130	FX100	B22	IU001	C19	LP051	A61	
CA004	A159	CA166	C171	CB344	B110	CG310	B94	CK47	C194	CP190	D75	CR038	B153	CT223	D137	CT530	D178	CT951	D158	CV201	D70	CX511	C16	DA01	A211	DL100	E218	DP101	B130	FX600	C172	IV100	B31	LP50	A86	
CA005	A162	CA167	C170	CB351	B108	CG312	E110	CK48	B194	CP195	D52	CR039	B153	CT224	D137	CT531	A181	CT952	D158	CV202	D43	CX515	C16	DB02	B211	DL104	E218	DP102	C92	GAP04	A58	IV520	C46	LP65	A86	
CA006	A162	CA173	C67	CB352	A111	CG314	E109	CK53	A194	CP175	C50	CR027	C145	CT225	B133	CT532	A182	CT953	D158	CV203	E43	CX520	A15	DB03	B211	DL105	E218	DP103	C92	GEO1	A146	IV520	C46	LP70	B86	
CA008	A160	CA175	E166	CB361	C108	CG341	D107	CK60	B189	CP199	A52	CR030	E75	CT221	D75	CT534	D70	CT955	D158	CV220	A41	CX540	D71	DA06	B211	DL141	E220	DP103	B111	GREEN	A222	IV521	E46	LR001	D150	
CA009	A162	CA176	E166	CB362	D109	CG348	E111</td																													

SCHEMATIC COMPONENT LOCATION GUIDE continued

LW06	B96	RA169	D167	RB164	C102	RB366	C110	RG212	E118	RK01	A192	RL102	E218	RP173	C51	RR001	D150	RR195	E145	RT222	B137	RT402	C36	RU005	B19	RV340	B44	RX135	D126	SK102	B141	TG50	C214	TT375	D40
LW07	A96	RA170	E167	RB165	D101	RB367	C110	RG213	E118	RK02	A191	RL103	E218	RP174	C51	RR002	D154	RR196	E147	RT223	D137	RT403	A70	RU006	B19	RV341	B45	RX136	D126	SK103	B141	TG51	C214	TT401	C34
LX409	D155	RA171	D167	RB166	C102	RB369	C110	RG219	D119	RK03	A191	RL105	E219	RP175	C51	RR004	D142	RR198	E145	RT224	D137	RT412	C34	RU007	B20	RV35	A204	RX137	D126	SK104	B141	TG52	C215	TT501	A174
LX410	E155	RA172	E167	RB167	C102	RB371	C111	RG221	E119	RK04	B192	RL106	E218	RP176	C53	RR005	B143	RR199	E145	RT225	B133	RT413	C35	RU008	B19	RV36	A205	RX200	D122	SK105	C141	TG53	D215	TT502	A175
NH500	C1	RA173	E167	RB169	C102	RB390	C110	RG223	E119	RK06	C195	RL107	B156	RP177	B53	RR006	C154	RR250	E145	RT226	B133	RT414	C35	RU010	C19	RV37	A205	RX201	C123	SP1	A172	TG54	C215	TT503	A176
NH503	D2	RA174	E166	RB171	C103	RB50	C210	RG226	B93	RK07	C190	RL109	E219	RP178	B52	RR009	A142	RR300	C154	RT227	B133	RT415	C36	RU013	D26	RV38	A205	RX220	C122	SP2	B172	TG50	C214	TT511	B174
PP180	A52	RA176	E166	RB20	B210	RB52	D210	RG228	E117	RK10	B190	RL112	D219	RP180	A52	RR011	C154	RR301	C152	RT231	C137	RT503	B174	RU019	C21	RV40	D203	RX300	D123	ST980	A171	TG53	D5	TT513	B175
QA001	A162	RA177	C168	RB201	A113	RB53	D210	RG236	E119	RK101	B141	RL120	E219	RP181	A53	RR012	C152	RR302	B154	RT232	D137	RT504	A174	RU020	C21	RV41	A206	RX301	D123	TA01	A199	TG04	B188	TT514	B176
QC536	B14	RA178	C169	RB206	B114	RB54	D211	RG230	E93	RK102	B141	RL121	E220	RP182	B51	RR013	C154	RR302	C152	RT233	C137	RT505	A174	RU040	E28	RV42	C206	RX320	E123	TA02	A199	TG09	C187	TT531	A181
QC736	E13	RA179	C168	RB207	A113	RB55	D212	RG232	E119	RK103	B141	RL140	D221	RP183	A51	RR015	D145	RR302	D154	RT234	C137	RT506	A175	RU060	B19	RV44	D203	RX321	E123	TA03	B199	TG14	B188	TT532	A182
QI033	D6	RA180	C168	RB208	A115	RB56	D212	RG234	E115	RK104	B141	RL141	D220	RP184	B52	RR016	C153	RR303	D152	RT235	C137	RT507	A176	RU061	B20	RV45	D204	RX500	B9	TA04	B199	TG20	D196	TT533	B183
QI533																																			
QR001	C154	RA182	C168	RB210	B115	RB58	D211	RG236	E109	RK11	B194	RL230	C79	RP186	B51	RR025	D145	RR305	C152	RT237	B139	RT510	A174	RV001	A27	RV48	A206	RX513	C16	TA06	A198	TG24	B186	TT542	B182
QT231	D139	RA183	C169	RB211	A115	RB59	D211	RG237	D114	RK12	B194	RL231	C78	RP187	A51	RR044	E142	RR306	E152	RT238	D137	RT511	B174	RV005	A28	RV49	A207	RX514	C16	TA130	B167	TG25	D196	TT543	C183
QT236	D134	RA184	C170	RB212	B113	RB60	D210	RG238	D114	RK13	B194	RL251	B78	RP188	A51	RR045	E142	RR307	A142	RT239	B139	RT512	B174	RV007	A29	RV50	E203	RX520	A14	TA131	C167	TG26	B187	TT561	C175
QT501	D176	RA185	C169	RB214	B114	RB61	B197	RG239	E114	RK14	B194	RL300	C227	RP189	D51	RR046	E142	RR308	A152	RT243	C138	RT513	B174	RV008	A30	RV501	E42	RX521	A15	TA145	D167	TG27	B187	TT601	D131
QV400	D44	RA186	B66	RB220	A116	RB62	C211	RG240	E114	RK15	C194	RL301	C41	RP190	D53	RR050	C143	RR309	B152	RT244	D139	RT514	B175	RV009	A29	RV502	E42	RX522	A15	TA200	B166	TG47	A187	TT602	D131
RA005	A159	RA187	C66	RB221	A116	RB64	D210	RG241	E115	RK20	B194	RL303	C226	RP192	D53	RR051	A142	RR310	B152	RT245	D139	RT515	B175	RV01	C92	RV505	C42	RX523	A15	TA201	B167	TG48	A187	TT631	B131
RA001	A197	RA188	D166	RB222	B117	RB66	D211	RG242	E119	RK201	A142	RL304	C227	RP193	D53	RR053	C154	RR311	B152	RT247	C140	RT516	B175	RV010	A29	RV507	C42	RX530	A13	TA202	C166	TG03	C217	TT632	B131
RA011	B158	RA191	A163	RB223	C116	RC546	B4	RG301	E107	RK202	A141	RL305	C227	RP194	D52	RR054	C154	RR312	C152	RT253	C140	RT517	B175	RV011	A30	RV51	D204	RX532	A14	TA50	C198	TG04	B188	TT642	B182
RA012	B158	RA192	B163	RB225	C90	RC547	B4	RG302	E108	RK22	B194	RL306	C227	RP195	D53	RR055	D143	RR320	A142	RT254	A36	RT518	B176	RV012	B30	RV510	E45	RX533	A14	TA51	C198	TG05	B188	TT646	B20
RA013	B159	RA193	C163	RB227	B115	RC552	B13	RG303	E108	RK224	B189	RL308	C227	RP196	D53	RR056	E147	RR320	C154	RT256	A36	RT519	B176	RV013	A30	RV511	C45	RX540	B15	TA52	C199	TG05	B189	TT647	B20
RA014	B159	RA194	E165	RB228	B116	RC558	B13	RG304	D106	RK225	B194	RL310	C227	RP197	D51	RR061	C141	RR320	B147	RT257	D177	RT511	B177	RV014	A31	RV512	B46	RX542	A16	TA53	D199	TG09	B188	TT648	A28
RA015	B159	RA195	D165	RB233	B116	RC746	C4	RG305	D108	RK226	B194	RL311	D227	RP198	D51	RR062	C143	RR321	B147	RT259	B34	RT523	D176	RV016	A31	RV513	B46	RX543	B16	TA54	C199	TG09	B189	TT649	A29
RA016	B159	RA20	B198	RA200	B66	RB235	C114	RC748	E10	RG3																									

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Item No.	Type No.	Mfr. Part No.	NTE Part No.	Item No.	Type No.	Mfr. Part No.	NTE Part No.
DA01, 02, 03	1N4148	198589	NTE519	DL001	-	198589	NTE519
DA05, 06	-	244870	-	DL012	-	244834	-
DA08, 09	-	223783	-	DL028	-	259231	-
DA10, 11	1N4148	198589	NTE519	DL029	-	259238	-
DA110	-	259551	-	DL030	-	259875	-
DA130, 31, 45	-	206077	NTE519	DL032	-	259638	-
DA170	-	219249	NTE5010T1	DL034, 36	-	259601	-
DA171, 72	-	259215	-	DL043	-	230757	-
DA200, 01, 02	-	206077	NTE519	DL073	1N4148	198589	NTE519
DA203	-	258700	-	DL074, 75	-	231865	-
DA204	-	206077	NTE519	DL100	1N4148	198589	NTE519
DA50, 51, 52	1N4148	198589	NTE519	DL104, 05, 06	-	244870	-
DA53	-	244870	-	DL141	-	226463	-
DA56, 57	-	223783	-	DL201	-	258740	-
DA58	-	244870	-	DL221	-	259984	-
DA59, 60	1N4148	198589	NTE519	DL222	-	259231	-
DB01, 02, 03	1N4148	198589	NTE519	DL231	-	259234	-
DB05, 06	-	244870	-	DL251	-	259984	-
DB08, 09	-	223783	-	DL252	-	259231	-
DB10	1N4148	198589	NTE519	DL301	-	259971	-
DB106	1N4148	198589	NTE519	DL302, 03	-	244870	-
DB11	1N4148	198589	NTE519	DP020	-	259234	-
DB140	1N4148	198589	NTE519	DP021	-	256971	-
DB151 Thru				DP022	-	239132	-
DB154	-	230757	-	DP023	-	230757	-
DB160, 62	1N4148	198589	NTE519	DP029, 30, 33	1N4148	198589	NTE519
DB164	-	230757	-	DP051	-	259865	-
DB166	-	259552	-	DP053	-	223694	-
DB167, 68	-	259232	-	DP060	-	198589	NTE519
DB206, 40	1N4148	198589	NTE519	DP061	-	244834	-
DB251 Thru				DP080, 81	-	198589	NTE519
DB254	-	230757	-	DP110	-	259646	-
DB260, 62	1N4148	198589	NTE519	DP111	-	258740	-
DB264	-	230757	-	DP113	-	259865	-
DB266	-	259552	-	DP114	-	258740	-
DB267, 68	-	259232	-	DP120, 30, 35	-	259868	-
DB306, 40	1N4148	198589	NTE519	DP140, 50	-	259632	-
DB351 Thru				DP160, 61	1N4148	198589	NTE519
DB354	-	230757	-	DP170, 71	1N4148	198589	NTE519
DB360, 62	1N4148	198589	NTE519	DP178, 79, 80	1N4148	198589	NTE519
DB364	-	230757	-	DPI91, 93, 97	1N4148	198589	NTE519
DB366	-	259552	-	DP20	-	230757	-
DB367, 68	-	259232	-	DP200, 11	1N4148	198589	NTE519
DB50, 51, 52	1N4148	198589	NTE519	DP220	-	244834	-
DB53	-	244870	-	DP221, 22, 25	1N4148	198589	NTE519
DB56, 57	-	223783	-	DP23	-	223694	-
DB58	-	244870	-	DP230	1N4148	198589	NTE519
DB59, 60	1N4148	198589	NTE519	DP24	-	223694	-
DF011	-	259223	-	DP240, 41	-	244834	-
DF031, 33	-	244870	-	DP30	1N4148	198589	NTE519
DG01, 02, 03	1N4148	198589	NTE519	DP31, 32	-	259955	-
DG05, 06	-	244870	-	DP38	-	226456	-
DG08, 09	-	223783	-	DP39, 40	1N4148	198589	NTE519
DG10	1N4148	198589	NTE519	DP400	-	259877	-
DG101, 02	1N4148	198589	NTE519	DP41	1N4148	198589	NTE519
DG11	1N4148	198589	NTE519	DP410, 11	-	257783	-
DG136, 37	1N4148	198589	NTE519	DP44 Thru			
DG201, 02	1N4148	198589	NTE519	DP49	1N4148	198589	NTE519
DG236, 37	1N4148	198589	NTE519	DP501, 10	-	206077	NTE519
DG301, 02	1N4148	198589	NTE519	DP520	-	259553	-
DG336, 37	1N4148	198589	NTE519	DP521, 30, 40	-	206077	NTE519
DG50, 51, 52	1N4148	198589	NTE519	DP60, 65	-	244834	-
DG53	-	244870	-	DP70, 75	-	259246	-
DG56	-	223783	-	DP87	-	259226	-
DG60	1N4148	198589	NTE519	DT001	-	232709	-
DH010	-	259224	-	DT201, 02	-	259555	-
DK08	-	206077	NTE519	DT203	-	259550	-
DK09	-	259973	-	DT204, 05	-	259555	-
DK10	-	206077	NTE519	DT206, 07, 08	-	259550	-

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DT501, 03	-	232709	-	IT003	-	259831	-
DT601	-	232709	-	IT004	-	259864	-
DT602, 03, 04	-	259555	-	IT200	CXA2151Q	259495	-
DV01, 02, 03	-	244870	-	IT210	HEF4053BT	259221	-
DV110, 11	-	206077	NTE519	IT220	-	259308	-
DV20 Thru				IT230	-	259310	-
DV25	1N4148	198589	NTE519	IT240	-	259318	-
DV270	-	259554	-	IT400	STV2165-CE	258741	-
DV271, 76	-	259550	-	IT500	-	248541	-
DV30, 50, 52	1N4148	198589	NTE519	IT510	-	248542	-
DV520, 21, 23	-	206077	NTE519	IT600	-	259507	-
DV53	1N4148	198589	NTE519	IT607, 08	-	259505	-
DV530, 32	-	259551	-	IT620	-	260087	-
DV533 Thru				IT900	TEA6422	259269	-
DV536	-	206077	NTE519	IU001	-	259619	-
DV70	-	237523	-	IU002, 03	-	259267	-
DV80	1N4148	198589	NTE519	IU004	-	259282	-
DV85, 86	-	258728	-	IU030	-	259266	-
DV90	-	244870	-	IU040	-	259311	-
DV91	-	259955	-	IV10	-	259625	-
DV92	-	256971	-	IV100	TDA9178T	259258	-
DV93	-	244870	-	IV200	TDA9330H	259259	-
DW12	-	232545	-	IV520, 21	-	259619	-
DX130, 31	-	259555	-	# IV90	-	257786	-
DX610, 11, 20, 21	-	259555	-	IX600	TEA6416C	258730	-
DX630, 31	-	259555	-	IX950	-	259309	-
DX930, 40	-	259555	-	TA01, 02	-	259539	-
GE101	-	257862	-	TA03, 04	-	259540	-
IA001	-	259287	-	TA05	-	259542	-
IA002	-	258736	-	TA06	-	259513	-
IA003	-	259292	-	TA130, 31, 45	-	259547	-
IA10	-	259220	-	TA200	-	256808	-
IA180, 81	-	259227	-	TA201	-	259545	-
IB101	-	249239	-	TA202	-	259545	-
IB12	-	259220	-	TA50	-	259513	-
IB201	-	249239	-	TA51	-	259542	-
IB301	-	249239	-	TA52	-	259539	-
IC500	TDA9321H	259624	-	TA53	-	259540	-
IC700	TDA9321H	259624	-	TA54	-	259539	-
IF001	-	258738	-	TA55	-	259540	-
IG11	-	259220	-	TB01, 02	-	259539	-
IK01	-	248573	-	TB03, 04	-	259540	-
IK02, 03	-	259239	-	TB05	-	259542	-
IK05	-	259225	-	TB06	-	259513	-
IK07	-	248601	-	TB101	-	259545	-
IK08	-	260088	-	TB111, 20	-	256808	-
IK15	-	248602	-	TB140	-	259542	-
# IL140	-	257786	-	TB155, 61	-	259545	-
IP020	-	259275	-	TB166	-	259541	-
# IP030	-	257786	-	TB201	-	259545	-
IP050	LM393N	259273	NTE943M	TB211, 12, 20	-	256808	-
# IP070	-	257786	-	TB235	-	259545	-
IP170, 90	LM393N	259273	NTE943M	TB237	-	256808	-
IP240	-	259281	-	TB240	-	259542	-
IP250	-	259862	-	TB255, 61	-	259545	-
# IP50	-	257786	-	TB266	-	259541	-
IP501, 10	-	259827	-	TB301	-	259545	-
IP530	-	259864	-	TB311, 12	-	256808	-
IP540	-	259831	-	TB320, 31, 32	-	256808	-
IP551	-	259863	-	TB333, 35	-	259545	-
IR001	-	259286	-	TB337	-	256808	-
IR005	-	260086	-	TB340	-	259542	-
IR006	-	256781	-	TB355, 61	-	259545	-
IR040	-	259284	-	TB366	-	259541	-
IR110	48LC4M16A2	259277	-	TB50	-	259513	-
IR130	-	259324	-	TB51	-	259542	-
IS01, 02, 03	-	258731	-	TB52	-	259539	-
IT001	-	259289	-	TB53	-	259540	-
IT002	-	259864	-	TB54	-	259539	-

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Item No.	Type No.	Mfr. Part No.	NTE Part No.	Item No.	Type No.	Mfr. Part No.	NTE Part No.
TB55	-	259540	-	TP21	-	259545	-
TC950	-	259545	-	TP210	-	198749	NTE159
TF041	-	198749	NTE159	TP221	-	259513	-
TG01, 02	-	259539	-	TP24	-	198749	NTE159
TG03, 04	-	259540	-	TP27, 28	-	256808	-
TG05	-	259542	-	TP30	-	259630	-
TG06	-	259513	-	TP33	-	219354	NTE188
TG101	-	259513	-	TP45	-	198749	NTE159
TG102	-	219354	NTE188	TP520	-	259732	-
TG104	-	215977	-	TP523	-	259650	-
TG105	-	198749	NTE159	TP90, 91	-	259545	-
TG106	-	259639	-	TR015	-	256808	-
TG107	-	259995	-	TR060	-	259547	-
TG111	-	259545	-	TR061	-	256808	-
TG135	-	256808	-	TR062	-	259545	-
TG201	-	259513	-	TR140	-	256808	-
TG202	-	219354	NTE188	TR141	-	259545	-
TG204	-	215977	-	TR144	-	256808	-
TG205	-	198749	NTE159	TR145	-	259545	-
TG206	-	259639	-	TR146	-	256808	-
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TG301	-	259513	-	TS36, 39, 41	-	248805	-
TG302	-	219354	NTE188	TS48	-	258661	-
TG304	-	215977	-	TS50	-	248805	-
TG305	-	198749	NTE159	TT231, 51	-	256808	-
TG306	-	259639	-	TT252, 53, 56	-	259545	-
TG307	-	259995	-	TT257, 61	-	259545	-
TG311	-	259545	-	TT303, 13, 23, 31	-	256808	-
TG335	-	256808	-	TT332, 33, 51, 52	-	259545	-
TG50	-	259513	-	TT353	-	256808	-
TG51	-	259542	-	TT354, 55	-	259545	-
TG52	-	259539	-	TT371, 72	-	259545	-
TG53	-	259540	-	TT373	-	256808	-
TG54	-	259539	-	TT374, 75	-	259545	-
TI010, 30	-	259545	-	TT401	-	259545	-
TI530	-	259545	-	TT501, 02	-	259545	-
TK04	-	248805	-	TT503, 11	-	256808	-
TK09	-	258661	-	TT512	-	259545	-
TK14, 20	-	248805	-	TT513	-	256808	-
TK22, 24, 25	-	248805	-	TT514	-	259545	-
TK26, 27	-	258661	-	TT531	-	256808	-
TK47, 48	-	258729	-	TT532	-	259545	-
TL003	-	259513	-	TT533, 41	-	256808	-
TL004	-	177788	NTE31	TT542	-	259545	-
TL005	-	259533	-	TT543	-	256808	-
TL010	-	259899	-	TT561	-	259545	-
TL029	-	256868	-	TT601, 02	-	243577	-
TL100, 04	-	259513	-	TT631	-	259545	-
TL105	-	259622	-	TT632	-	256808	-
TL111	-	219354	NTE188	TU001	-	259544	-
TL120	ST1803DHI	259871	-	TU004	-	258660	-
# TL140	-	256868	-	TU060	-	256808	-
TL311	-	232549	-	TV006	-	256808	-
TL312	-	198749	NTE159	TV008	-	259545	-
TP020	-	259856	-	TV01	-	259542	-
TP026	-	259513	-	TV012	-	259545	-
TP034	-	198749	NTE159	TV015	-	256808	-
TP050	-	219354	NTE188	TV02	-	256808	-
TP051	-	215977	-	TV023	-	256808	-
TP080	-	259513	-	TV025	-	259545	-
TP081	-	198749	NTE159	TV028	-	256808	-
TP150	-	215977	-	TV03	-	256808	-
TP160, 61	-	259513	-	TV04	-	259545	-
TP170	-	219354	NTE188	TV043	-	256808	-
TP179, 80	-	198749	NTE159	TV045	-	259545	-
TP197	-	259513	-	TV048	-	256808	-
TP20	-	256808	-	TV20	-	256808	-

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TV21, 22	-	259545	-
TV277	-	215977	-
TV30	-	256808	-
TV300	-	256808	-
TV31	-	259545	-
TV310	-	256808	-
TV32	-	256808	-
TV320	-	256808	-
TV33, 34	-	259545	-
TV35	-	256808	-
TV40, 50, 51	-	259545	-
TV513	-	259513	-
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TV53	-	259545	-
TV80	-	259543	-
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TV92	-	259630	-
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TW10	-	258661	-
TW13, 14	-	248805	-
TW19	-	258661	-
TX131	-	256808	-
TX500, 15, 20	-	259545	-
TX530, 40	-	256808	-
TX565, 72	-	259545	-
TX650	-	256808	-
TX655	-	259545	-
TX670	-	256808	-
TX675	-	259545	-
TX700, 10, 20	-	259545	-
TX730, 40	-	256808	-
TX765, 72	-	259545	-

Item No.	Function/Rating	Mfr. Part No.	Notes
# BB110	Socket	259316	CRT, Red
# BB210	Socket	259316	CRT, Green
# BB310	Socket	259316	CRT, Blue
BJ011	Socket	259637	S-Video Input
# BLUE CRT	CRT Projection Assembly	258484	-
BLUE YOKE	Yoke	258490	Convergence
# BLUE YOKE	Yoke	258490	Deflection
BQ012	Jack	257785	Headphone
BT100	Jack	259903	Assembly
BT600	Jack	259952	DVI-HDTV
BT940	Jack	259906	Assembly
BU010	Jack	-	Chr Input
BX100	Socket	259879	Assembly
BX200	Jack	259904	Assembly
BX600	Jack	259902	Assembly
CA005, 06	3.3pF 10% 50V N750	259569	-
CA007	47pF 5% 50V NPO	256817	-
CA008	100pF 5% 50V N750	243372	-
CA013, 14	220pF 5% 50V NPO	249036	-
CA017, 18	47pF 5% 50V NPO	256817	-
CA023, 24	220pF 5% 50V NPO	249036	-
CA027, 28	47pF 5% 50V NPO	256817	-
CA033, 34	220pF 5% 50V NPO	249036	-
CA037, 38	47pF 5% 50V NPO	256817	-
CA043, 44	220pF 5% 50V NPO	249036	-
CA047, 48	180pF 50V NPO	256822	-
CA06	22pF 5% 50V NPO	256814	-
CA09	100pF 50V NPO	256818	-
CA090, 92	47pF 5% 50V NPO	256817	-
CA10, 11	100pF 50V NPO	256818	-
CA59	22pF 5% 50V NPO	256814	-

Item No.	Function/Rating	Mfr. Part No.	Notes
CA60, 62, 66	100pF 50V NPO	256818	-
CB06	22pF 5% 50V NPO	256814	-
CB09, 10	100pF 50V NPO	256818	-
CB109	10pF 50V NPO	256815	-
CB11	100pF 50V NPO	256818	-
CB110	6.8pF 50V NPO	258742	-
CB152	3.3pF 50V NPO	256813	-
CB167	470pF 10% 3kV	244853	-
CB171	.001 2kV	198806	-
CB209	10pF 50V NPO	256815	-
CB210	6.8pF 50V NPO	258742	-
CB252	3.3pF 50V NPO	256813	-
CB267	470pF 10% 3kV	244853	-
CB271	.001 2kV	198806	-
CB309	10pF 50V NPO	256815	-
CB310	6.8pF 50V NPO	258742	-
CB334	33pF 50V NPO	256816	-
CB352	3.3pF 50V NPO	256813	-
CB367	470pF 10% 3kV	244853	-
CB371	.001 2kV	198806	-
CB59	22pF 5% 50V NPO	256814	-
CB60, 62, 66	100pF 50V NPO	256818	-
CG06	22pF 5% 50V NPO	157199	-
CG09, 10, 11	100pF 50V NPO	256818	-
CG148	47pF 10% 250V NPO	157314	-
CG248	47pF 10% 250V NPO	157314	-
CG348	47pF 10% 250V NPO	157314	-
CG59	22pF 5% 50V NPO	256814	-
CG60, 62	100pF 50V NPO	256818	-
CI026	.68pF 50V NPO	263132	-
CI526	.68pF 50V NPO	263132	-
CK07	47pF 50V NPO	256817	-
CK17	100pF 50V NPO	256818	-
CK50	33pF 50V NPO	256816	-
CK66	.001 20% 50V NPO	247002	-
CL006	22pF 5% 50V NPO	157199	-
# CL029	3.3μF 20% 63V	259285	-
# CL030	330pF 2.5% 2kV	259307	-
# CL031	.0087 2.5% 2kV	259321	-
# CL032	.022 5% 400V	259248	-
# CL035	.41 5% 400V	259268	-
# CL038, 39	.0022 2% 400V	259305	-
# CL105	.0047 5% 630V	259306	-
# CL120	.0016 2.5% 2kV	259304	-
# CL140	.047 5% 400V	259280	-
CL201	470pF 10% 2kV	259623	-
CL221, 31, 51	330pF 20% 1kV	259366	-
CP019	220pF 10% 1kV	259677	-
CP020	100pF 20% 1kV	263608	-
CP022	220pF 10% 1kV	259677	-
# CP049	.0015 20% 250V	259314	-
# CP050	150pF 20% 400V	259567	-
CP051	470pF 10% 2kV	259368	-
CP052	.0022 20% 1kV	259960	-
CP061	220pF 10% 1kV	259677	-
CP071	100pF 5% 50V NPO	143871	-
CP111	330pF 10% 2kV	259570	-
CP112	.0015 20% 1kV	259270	-
CP113	220pF 10% 1kV	259677	-
CP121	470pF 10% 2kV	259368	-
CP131, 36	470pF 10% 2kV	259368	-
CP141, 51	470pF 10% 2kV	259368	-
CP162, 75	100pF 5% 50V NPO	143871	-
CP30	.0033 20% 1kV	259959	-
# CP400	.1 20%	256793	-
CP402, 03	.0047 20% 1kV	259222	-
# CP404	.001 20% 250VAC	263908	-
CP412	.0047 1kV	259222	-
CR001, 02	39pF 5% 50V NPO	259565	-

PARTS LIST continued

Item No.	Function/Rating	Mfr. Part No.	Notes	Item No.	Function/Rating	Mfr. Part No.	Notes
CR049, 57	39pF 5% 50V NPO	259565	-	FU023	Crystal	259850	24.576MHz
CR081, 82	39pF 5% 50V NPO	259565	-	FU030	Crystal	259849	27MHz
CR090 Thru				# FV90	Fuse	259213	400mAmp, 125V
CR097	39pF 5% 50V NPO	259565	-	FX100	-	259492	-
CR161, 62	39pF 5% 50V NPO	259565	-	FX300	-	259492	-
CR170, 71	39pF 5% 50V NPO	259565	-	FX600	-	259492	-
CR181, 82	47pF 5% 50V NPO	256817	-	GK201	Receiver	259938	IR
CT231, 32, 33	47pF 5% 50V NPO	256817	-	# GREEN CRT	CRT Projection Assembly	258483	-
CT263, 64	22pF 1% 50V NPO	259634	-	GREEN YOKE	Yoke	-	Convergence
CT335	27pF 5% 50V NPO	246955	-	# GREEN YOKE	Yoke	258490	Deflection
CT354	3.3pF 50V NPO	256813	-	# HA150	Line Cord	258780	AC, Polarized
CT358	27pF 5% 50V NPO	246955	-	# HV1	HV Splitter	263092	-
CT360	6.8pF 50V NPO	258742	-	L12100	300µH	259496	-
CT374	3.3pF 50V NPO	256813	-	LA001	10µH	259620	-
CT377	27pF 5% 50V NPO	246955	-	LA013, 14	-	259861	-
CT502	10pF 50V NPO	256815	-	LA023, 24	-	259861	-
CT506	39pF 5% 50V NPO	259565	-	LA05	Ferrite Bead	258716	-
CT507	180pF 50V NPO	256822	-	LA050, 51	10µH	259620	-
CT531	27pF 5% 50V NPO	246955	-	LA06	Ferrite Bead	258716	-
CT533	82pF 5% 50V NPO	243371	-	LA063, 64	-	259861	-
CT541	27pF 5% 50V NPO	246955	-	LA090, 91	15µH	259373	-
CT543	82pF 5% 50V NPO	243371	-	LA158, 62, 63	-	259861	-
CT563	10pF 50V NPO	256815	-	LA53, 58	Ferrite Bead	258716	-
CT721, 22	22pF 1% 50V NPO	259634	-	LB05, 06	Ferrite Bead	258716	-
CT944, 45	220pF 5% 50V NPO	249036	-	LB123	68µH	259357	-
CT954, 55	220pF 5% 50V NPO	249036	-	LB152	3.3µH	251881	-
CT964, 65	220pF 5% 50V NPO	249036	-	LB223	68µH	259357	-
CT990 Thru				LB252	3.3µH	251881	-
CT993	1000µF 20% 25V NP	259886	-	LB323	68µH	259357	-
CU030, 31	27pF 5% 50V NPO	246955	-	LB352	3.3µH	251881	-
CV006	374 1% 1/16W	259840	-	LB53, 58	Ferrite Bead	258716	-
CV011	39pF 5% 50V NPO	259565	-	LF022	60µH	258169	-
CV021, 41	180pF 50V NPO	256822	-	LG05, 06	Ferrite Bead	258716	-
CV230	27pF 5% 50V NPO	246955	-	LG104	Ferrite Core Dual	259869	-
CV231, 79	10pF 50V N750	259560	-	LG204	Ferrite Core Dual	259869	-
CV300, 10	5.6pF ±.25pF 50V N750	244059	-	LG304	Ferrite Core Dual	259869	-
CV400, 01	10pF 50V N750	259560	-	LG53	Ferrite Bead	258716	-
CV80	.001 2kV	198806	-	LH001	10µH	259620	-
CV81	820pF 2% 2kV	259907	-	LH500, 01	10µH	259620	-
CV82	120pF 3.5% 2kV	259908	-	LI027	.27µH	243674	-
CV85, 86	.0047 20% 2kV	259365	-	LI033	15µH	259373	-
CV91	330pF 20% 1kV	259366	-	LI527	.27µH	243674	-
CX100, 20	22pF 5% 50V NPO	174406	-	LI533	15µH	259373	-
CX200, 20	22pF 5% 50V NPO	174406	-	LK01	10µH	258719	-
CX300, 20	22pF 5% 50V NPO	174406	-	LK02 Thru			-
CX511	10pF 50V NPO	256815	-	LK07	1µH	243496	-
CX612, 22, 32	47pF 5% 50V NPO	256817	-	LK08	10µH	258719	-
CX710	10pF 50V NPO	256815	-	LK09 Thru			-
FA010, 30	-	259492	-	LK14	1µH	243496	-
FA160	-	259492	-	LK15 Thru			-
FB101	Delay Line	258699	-	LK19	10µH	258719	-
FB201	Delay Line	258699	-	LL001	Horizontal Drive	259293	-
FB301	Delay Line	258699	-	LL005	Ferrite Bead	235858	-
FI007	Filter	259256	4.5MHz	# LL008 (1)	Horizontal Output	259296	-
FI025	Filter	259257	SAW	LL010	Ferrite Bead	258716	-
FI028	VCO	259621	-	LL011, 12	Ferrite Bead	235858	-
FI525	Filter	259257	SAW	# LL029	118µH	259261	-
FI528	VCO	259621	-	LL030	-	259838	-
# FL100	Fuse	259212	250mAmp, 125V	LL032	Ferrite Bead	258716	-
# FL221	Fuse	259214	1.25Amp, 125V	# LL037	Horizontal Linearity	259244	-
# FL231	Fuse	259213	400mAmp, 125V	LL100	Ferrite Bead	244840	-
# FL251	Fuse	259214	1.25Amp, 125V	LL200	21.5µH	259936	-
# FOC1	Focus Pack	240623	Focus/Screen	LL201	22µH	253638	-
# FP400	Fuse	259216	6Amp, 125V	LL211	Ferrite Bead	235858	-
# FP520, 21	Fuse	259214	1.25Amp, 125V	LL212	22µH	253638	-
FT201, 02	-	259492	-	LL231	10µH	258719	-
FT400	Delay Line	259905	-	LP004	Ferrite Bead	244840	-
FT940, 60	-	259492	-	# LP020	Standby	259276	-
FU001	Crystal	259850	24.576MHz	# LP050	SMT	259320	-

PARTS LIST continued

Item No.	Function/Rating	Mfr. Part No.	Notes	Item No.	Function/Rating	Mfr. Part No.	Notes
LP051	-	259838	-	QC536	Crystal	259571	3.58MHz
# LP070	P-S Deflection	259279	-	QC736	Crystal	259571	3.58MHz
LP112	100µH	259854	-	QI033	Trap	198613	4.5MHz
LP113	Ferrite Bead	258716	-	QI533	Trap	198613	4.5MHz
LP140, 51	47µH	259853	-	QR001	Filter	235882	8MHz
# LP401	-	253697	-	QT231	Resonator	242877	4MHz
# LP50	SMT	259271	-	QT260	Crystal	259897	20.25MHz
LP60, 65	68µH	258702	-	QT501	Crystal	227894	20MHz
LP70, 75	68µH	258702	-	QV400	Crystal	259636	12MHz
LR001	-	259860	-	RA01	3900 1% .4W	259476	-
LR010	-	259648	-	RA03	332 1% 1/4W	259472	-
LR011, 12	-	259859	-	RA04	2430 1% 1/4W	259471	-
LR015	-	259648	-	RA05	162 1% 1/4W	259465	-
LR016, 17	-	259859	-	# RA051	47 5% 1/4W	235901	-
LR020	-	259648	-	RA063, 64	220 2% 1/8W	181492	-
LR021, 22	-	259859	-	RA07	8870 1% 1/4W	259485	-
LR025	-	259648	-	# RA080	4.7 5% 1/4W	235901	-
LR110	-	259648	-	RA09	1.8 1% 1W	259358	-
LR111	-	259859	-	RA10	3320 1% 1/4W	259475	-
LR115	-	259648	-	# RA12	.47 10% .4W	259486	-
LR116	-	259859	-	# RA120, 21	4.7 5% 1/4W	235901	-
LR130	-	259648	-	RA13	267K 1% 1/4W	259469	-
LS30, 31	-	263911	-	# RA14	.47 10% .4W	259486	-
LT241, 42, 43	10µH	259644	-	RA20	2430 1% 1/4W	259471	-
LT261	Ferrite Bead	259250	-	RA51	332 1% 1/4W	259472	-
LT501	15µH	238094	-	RA52	2430 1% 1/4W	259471	-
LT502	5.6µH	243892	-	RA53	162 1% 1/4W	259465	-
LT503	12µH	243499	-	RA55	267K 1% 1/4W	259469	-
LTS11	47µH	195713	-	RA56	3320 1% 1/4W	259475	-
LT513	Ferrite Bead	215546	-	RA57	1.8 1% 1W	259358	-
LT514	47µH	195713	-	# RA58, 59	.47 10% .4W	259486	-
LT516	Ferrite Bead	215546	-	RA60	8870 1% 1/4W	259485	-
LT531	10µH	243675	-	RA61	3900 1% 1/4W	259476	-
LT532	12µH	243499	-	RA64	2430 1% 1/4W	259471	-
LT541	10µH	243675	-	RB01	3900 1% 1/4W	259476	-
LT542	12µH	243499	-	RB03	332 1% 1/4W	259472	-
LT543	Ferrite Bead	215546	-	RB04	2430 1% 1/4W	259471	-
LT545, 51	47µH	195713	-	RB05	162 1% 1/4W	259465	-
LT553	Ferrite Bead	215546	-	RB07	8870 1% 1/4W	259485	-
LT561	15µH	238094	-	RB09	1.8 1% 1W	259358	-
LT571	Ferrite Bead	226467	-	RB10	3320 1% 1/4W	259475	-
LT601	.33µH	259323	-	RB106	475 1% 62.5mW	253719	-
LT611 Thru				RB107	681 1% 62.5mW	253811	-
LT614	.33µH	259363	-	RB108, 09	475 1% 62.5mW	253719	-
LT621, 22, 23	-	247980	-	RB111, 12	475 1% 62.5mW	253719	-
LT641 Thru				RB114	3920 1% 62.5mW	253727	-
LT644	.33µH	259363	-	# RB12	.47 10% .4W	259486	-
LT691	10µH	259644	-	# RB122, 25	10 5% 1/4W	232249	-
LT754	Ferrite Bead	215546	-	RB13	267K 1% 1/4W	259469	-
LU008	10µH	259644	-	RB133	2210 1% 62.5mW	253722	-
LU010	10µH	259644	-	# RB134	330 5% 1/16W	256735	-
LU014, 15	Filter	259860	-	# RB14	.47 10% .4W	259486	-
LV002	1µH	243496	-	RB141	825 1% 1/4W	259963	-
LV004	2.2µH	239143	-	RB142	715 1% 1/4W	245488	-
LV01	220µH	259237	-	# RB144	470 5% 1/2W	258704	-
LV011	3.9µH	259364	-	RB150	39K 2% 4W	258739	-
LV021, 41	5.6µH	243892	-	RB155, 56	1820 1% 1/16W	263291	-
LV100	10µH	259620	-	# RB167	2200 5% 1/2W	258705	-
LV200	10µH	259620	-	RB20	2430 1% 1/4W	259471	-
LV300, 10, 20	2.2µH	239143	-	RB206	475 1% 62.5mW	253719	-
# LV80	-	259233	-	RB207	681 1% 62.5mW	253811	-
LV90	10µH	258719	-	RB208, 09	475 1% 62.5mW	253719	-
LW06, 07	10µH	258719	-	RB211, 12	475 1% 62.5mW	253719	-
LX409, 10	Ferrite Bead	259250	-	RB214	3920 1% 62.5mW	253727	-
NH500	Switch	259618	Antenna	# RB222, 25	10 5% 1/4W	232249	-
NH501	Tuner	259617	Slave, CTF5805	RB227	3920 1% 62.5mW	253727	-
NH503	Tuner	259617	Main, CTF5805	RB228	7150 1% 1/16W	259767	-
PP180	470	230995	B+ Adjust	RB233	1820 1% 1/16W	259843	-
QA001	Crystal	258733	18.432MHz	# RB234	330 5% 1/16W	256735	-

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Item No.	Function/Rating	Mfr. Part No.	Notes	Item No.	Function/Rating	Mfr. Part No.	Notes
RB235	1820 1% 1/16W	263291	-	RG52	2430 1% 1/16W	259607	-
RB237	3920 1% 62.5mW	253727	-	RG53	162 1% 1/4W	259465	-
RB241	825 1% 1/4W	259963	-	RG55	267K 1% 1/4W	259469	-
RB242	715 1% 1/4W	245488	-	RG56	3320 1% 1/4W	259475	-
# RB244	470 5% 1/2W	258704	-	RG57	1.8 1% 1W	259358	-
RB250	39K 2% 4W	258739	-	# RG58, 59	.47 10% .4W	259486	-
RB255, 56	1820 1% 1/16W	263291	-	RG60	8870 1% 1/4W	259485	-
# RB267	2200 5% 1/2W	258705	-	RG61	3900 1% .4W	259476	-
RB306	475 1% 62.5mW	253719	-	RG64	2430 1% 1/4W	259471	-
RB307	681 1% 62.5mW	253811	-	RK09	374 1% 1/16W	259840	-
RB308, 09, 11, 12	475 1% 62.5mW	253719	-	RK101	5620 1% 1/4W	259480	-
RB314	3920 1% 62.5mW	253727	-	RK102	1500 1% 1/4W	259348	-
# RB322, 25	10 5% 1/4W	232249	-	RK103	453 1% 1/4W	259477	-
RB326	332 1% 62.5mW	253718	-	RK104	3320 1% 1/4W	259475	-
RB327	2210 1% 62.5mW	253722	-	RK105	681 1% 1/4W	259481	-
RB328	8660 1% 1/16W	259490	-	RK11 Thru			
RB330	1300 1% 1/16W	259844	-	RK15	374 1% 1/16W	259840	-
RB331	909 1% 1/16W	259775	-	RK20	374 1% 1/16W	259840	-
RB333	1500 1% 62.5mW	253720	-	RK201	1000 2% 1/4W	259430	-
# RB334	330 5% 1/16W	256735	-	RK25	1000 1% 1/16W	263913	-
RB335	1820 1% 1/16W	263291	-	RK35, 36, 37	324 1% 1/16W	259839	-
RB337	1210 1% 1/16W	253803	-	RK39 Thru			
RB339	2000 1% 62.5mW	253726	-	RK42	324 1% 1/16W	259839	-
RB341	825 1% 1/4W	259963	-	RK60, 62, 64	2430 1% 1/16W	259841	-
RB342	715 1% 1/4W	245488	-	RK66, 68, 70	2430 1% 1/16W	259841	-
# RB344	470 5% 1/2W	258704	-	# RL015	5.6 5% 1/4W	259461	-
RB350	39K 2% 4W	258739	-	RL021	1.5 1% .7W	259230	-
RB355, 56	1820 1% 1/16W	263291	-	RL022	1000 1% 1/4W	179753	-
# RB367	2200 5% 1/2W	258705	-	RL023	3.9M 2% .4W	259336	-
RB51	332 1% 1/4W	259472	-	# RL024	82.5K 1% 1/4W	263909	-
RB52	2430 1% 1/4W	259471	-	RL025	1.5 1% .7W	259230	-
RB53	162 1% 1/4W	259465	-	# RL027	2200 5% 1/2W	258705	-
RB55	267K 1% 1/4W	259469	-	RL030	4.7 5% 3W	259564	-
RB56	3320 1% 1/4W	259475	-	RL044	191K 1% 1/4W	259466	-
RB57	1.8 1% 1W	259358	-	RL045	511K 1% 1/4W	259478	-
# RB58, 59	.47 10% .4W	259486	-	RL231	4.7 5% 3W	259564	-
RB60	8870 1% 1/4W	259485	-	RL303	33.2K 1% 1/4W	259473	-
RB61	3900 1% .4W	259476	-	RL308	56.2K 1% 1/4W	200447	-
RB64	2430 1% 1/4W	259471	-	RL310	46.4K 1% .7W	259228	-
# RED CRT	CRT Projection Assembly	258482	-	RL311	2210 1% 1/4W	259470	-
RED YOKE	Yoke	-	Convergence Deflection	# RP020	100 5% 3/W	258703	-
# RED YOKE	Yoke	258490	-	# RP050	10M 5% 1W	259608	-
RF003, 06	1300 1% .4W	259467	-	# RP051	100 5% 10W	-	-
RF008	1.5 1% .7W	259230	-	# RP052	100 5% 4.5W	259876	-
RF011, 12	1.5 1% .7W	259230	-	RP183	.1 5% 2.5W	258722	-
RG01	3900 1% .4W	259476	-	RP184	39K 1% 1/4W	259345	-
RG03	332 1% 1/4W	259472	-	RP185	4750 1% 1/4W	214091	-
RG04	2430 1% 1/4W	259471	-	RP185	56K 2% 1/4W	176801	-
RG05	162 1% 1/4W	259465	-	RP203	2430 1% 1/4W	259471	-
RG07	8870 1% 1/4W	259485	-	RP204	4750 1% 1/4W	214091	-
RG09	1.8 1% 1W	259358	-	RP242	392 1% 1/4W	259474	-
RG10	3320 1% 1/4W	259475	-	RP243	1000 1% 1/4W	179753	-
RG105	1820 1% 62.5mW	253721	-	RP32	4.7 5% 3W	259564	-
# RG12	.47 10% .4W	259486	-	# RP400	1.5M 5% 1W	259288	-
RG123	1000 1% 1/10W	252359	-	# RP401	1.5 5% 1W	259288	-
RG126, 27	3300 5% 3W	259643	-	RP402, 03	1.5 5% 10W	-	-
RG13	267K 1% 1/4W	259469	-	# RP405, 06	1.5 5% 4.5W	259872	-
# RG130	22.5% 1/4W	259459	-	VDR	-	259512	-
# RG14	.47 10% .4W	259486	-	RP522	470 1% 1/16W	259758	-
RG20	2430 1% 1/4W	259471	-	RP523, 24, 25	1000 1% 1/10W	252359	-
RG205	1820 1% 62.5mW	253721	-	RP900	3320 1% 1/4W	259473	-
RG223	1000 1% 1/10W	252359	-	RP92	825 1% 1/4W	259484	-
RG226, 27	3300 5% 3W	259643	-	RP93	1580 1% 1/4W	259468	-
# RG230	22.5% 1/4W	259459	-	RR005	1500 1% 62.5mW	253720	-
RG305	1820 1% 62.5mW	253721	-	RR017	1500 1% 62.5mW	253720	-
RG323	1000 1% 1/10W	252359	-	RR117	1500 1% 62.5mW	253720	-
RG326, 27	3300 5% 3W	259643	-	RR300 Thru			
# RG330	22.5% 1/4W	259459	-	RR312	100 X 4 Network	259855	-
RG51	332 1% 1/4W	259472	-	RR320 Thru			

PARTS LIST continued

Item No.	Function/Rating	Mfr. Part No.	Notes	Item No.	Function/Rating	Mfr. Part No.	Notes
RR329	100 X 4 Network	259855	-	RV29	3650 1% .4W	259349	-
RR340, 41	100 X 4 Network	259855	-	RV30	2210 1% 62.5mW	253722	-
RS08, 09	1820 1% 1/16W	263914	-	RV31	5360 1% .4W	259479	-
RT201, 03, 05	75 1% 1/8W	259969	-	RV32, 33	2210 1% 62.5mW	253722	-
RT207, 09, 11	75 1% 1/8W	259969	-	RV34	750 1% 1/16W	259558	-
RT213, 15, 21	75 1% 1/8W	259969	-	RV45	8660 1% 1/16W	259490	-
RT222, 25, 26	75 1% 1/8W	259969	-	RV521	127K 1% 1/8W	259956	-
RT227, 31, 32, 33	75 1% 1/8W	259969	-	RV524	470K 2% 1/8W	259957	-
RT238	10K 1% 1/10W	252355	-	RV527	18.2K 1% 62.5mW	253807	-
RT244	15K 1% 1/16W	259563	-	RV528	17.8K 1% 1/8W	259970	-
RT245	84.5K 1% 1/16W	259953	-	RV529	470K 2% 1/8W	259957	-
# RT263	10 10% 1/4W	259343	-	RV530	53.6K 1% 1/16W	259603	-
RT335	866 1% 1/16W	259503	-	RV532	10K 1% 1/8W	220130	-
RT336	2150 1% 1/16W	259640	-	RV541	39.2K 1% 62.5mW	253848	-
RT337	274 1% 1/16W	259602	-	RV556	330K 2% 1/8W	205304	-
RT338	5620 1% 1/16W	259562	-	RV91, 92	1820 1% 1/16W	263291	-
RT339	1000 1% 1/10W	252359	-	RX100, 20, 30	75 1% 1/8W	259969	-
RT341	75 1% 1/8W	259969	-	RX200, 20	75 1% 1/8W	259969	-
RT342	1240 1% 1/16W	259609	-	RX300, 20	75 1% 1/8W	259969	-
# RT343	10 10% 1/4W	259343	-	RX500	169 1% 1/8W	259968	-
RT358	866 1% 1/16W	259503	-	RX501	240 2% 1/8W	190460	-
RT359	6340 1% 1/16W	259604	-	RX532	261 1% 1/16W	259670	-
RT360	2430 1% 1/16W	259607	-	RX580, 82, 85, 86	75 1% 1/8W	259969	-
RT361	2150 1% 1/16W	259640	-	RX652	2430 1% 1/16W	259607	-
RT362	5620 1% 1/16W	259562	-	RX653	2210 1% 62.5mW	253722	-
RT363	274 1% 1/16W	259602	-	RX672	2430 1% 1/16W	259607	-
RT364	1000 1% 1/10W	252359	-	RX673	2210 1% 62.5mW	253722	-
RT366	75 1% 1/8W	259969	-	RX700	169 1% 1/8W	259968	-
# RT368	10 10% 1/4W	259343	-	RX701	240 2% 1/8W	190460	-
RT379	866 1% 1/16W	259503	-	RX732	261 1% 1/16W	259670	-
RT380	1240 1% 1/16W	259609	-	SK100	Switch	257860	Power
RT381	2150 1% 1/16W	259640	-	SK101	Switch	257860	Menu
RT382	5620 1% 1/16W	259562	-	SK102	Switch	257860	Channel -
RT383	274 1% 1/16W	259602	-	SK103	Switch	257860	Channel +
RT384	1000 1% 1/10W	252359	-	SK104	Switch	257860	Volume -
RT386	75 1% 1/8W	259969	-	SK105	Switch	257860	Volume +
# RT387	10 10% 1/4W	259343	-	SP1, 2	Speaker	205260	51mm, 8 Ohms, 2W
# RT403	4.7 5% 1/4W	235901	-		Speaker	258666	103mm, 8 Ohms, 20W
RT506	374 1% 1/16W	259840	-	# SP402, 03	Spark Gap	259511	-
RT507	475 1% 62.5mW	253719	-	ST980	Switch	259501	Speaker, Internal/External
RT513	221 1% 62.5mW	253717	-		Coil	258798	SVM
RT517	47.5K 1% 62.5mW	253716	-		Fuse Holder	244842	-
RT532, 42	357 1% 62.5mW	253668	-		Lens	258489	Delta 240
RT551 Thru					Mirror	258773	Projection, Mylar
RT554	100 X 4 Network	243669	-		Mirror	258772	Projection, Glass
# RT571	10 10% 1/4W	259343	-		PC Board	253485	Audio Crossover
RT603	4700 X 4 Network	259493	-		PC Board	258757	Blue CRT
RT611	412 1% 1/16W	259497	-		PC Board	258755	Convergence Adaptor/Power Supply
RT637	143 1% 1/16W	259499	-		PC Board	258754	Convergence Amp
# RT900	4.7 5% 1/4W	235901	-		PC Board	258753	Convergence Generator
RU004	37.4K 1% 1/16W	259605	-		PC Board	258745	Digital Ready Interface
RU007	22.1K 1% 62.5mW	253724	-	#	PC Board	258748	Front A/V Input
RU008	475 1% 62.5mW	253719	-		PC Board	258747	Front Panel
RU010	2610 1% 1/16W	259722	-		PC Board	258758	Green CRT
RU013, 18, 19	475 1% 62.5mW	253719	-		PC Board	258764	IR Preamp
RV007	750 1% 1/16W	259558	-		PC Board	258750	Main Input Doubler
RV01	4.7 5% 3W	259564	-		PC Board	258762	Power Supply/Deflection
RV010	475 1% 62.5mW	253719	-		PC Board	258756	Red CRT
RV011	665 1% 1/10W	252361	-	#	PC Board	258761	Small Signal
RV013	475 1% 62.5mW	253719	-		Screen	258786	Projection
RV014	825 1% 1/16W	259641	-		Sensor	248432	Convergence
RV09	4.7 5% 3W	259564	-		Transmitter	257003	Remote, RCR160TALM
RV17	681 1% .4W	259482	-				
RV21	1820 1% 1/16W	263291	-				
RV22	681 1% .4W	259482	-				
RV24	1820 1% 1/16W	263291	-				
RV25	3650 1% 1/16W	259610	-				
RV250, 51, 52	75 1% 1/8W	259969	-				
RV26	681 1% .4W	259482	-				
RV28	10K 1% .4W	160155	-				

For SAFETY use only equivalent replacement part.
(1) Screen and focus controls are part of LL008.

MODEL D40W20YX1 (CHASSIS ATC221)

RCA