TOSHIBA

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SERVICE MANUAL

COLOUR TELEVISION

C00S Chassis

32ZD06B, 28ZD06B

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WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is (A) kV at zero beam current (minimum brightness) under a (C) V AC power source. The high voltage must not, under any circumstances, exceed (B) kV.

   Refer to table-1 for high voltage (A), (B) & AC voltage (C). (See SETTING & ADJUSTING DATA on page 18)

   Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
3. Some part in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

SAFETY PRECAUTION

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; nonmetallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE “X-RAY RADIATION PRECAUTION”, “SAFETY PRECAUTION” AND “PRODUCT SAFETY NOTICE” ON PAGE 3 OF THIS MANUAL.

SET-UP ADJUSTMENT

■ The following adjustments should be made when a complete realignment is required or a new picture tube is installed. Perform the adjustments in order as follows :

1. Color Purity
2. Convergence
3. White Balance

Note: The PURITY/CONVERGENCE MAGNET assembly and rubber wedges need mechanical positioning. Refer to figure 1.
Mounting position of the purity magnet assembly should fit to same position as old one because slightly difference to the position depend on a kind of tube.

* There are no adjustment of purity and convergence in some picture tube (Unified with purity magnet)

COLOR PURITY ADJUSTMENT

NOTE : Before attempting any purity adjustments, the receiver should be operated for at least fifteen minutes.

1. Demagnetize the picture tube and cabinet using a degaussing coil.
2. Set the brightness and contrast to maximum.
3. Use a green raster from among the built-in test signals.
4. Loosen the clamp screw holding the yoke and slide the yoke backward or forward to provide vertical green belt (zone) in the picture screen.
5. Remove the Rubber Wedges.
6. Rotate and spread the tabs of the purity magnet (See figure 2.) around the neck of the picture tube until the green belt is in the center of the screen. At the same time, enter the raster vertically.
7. Slowly move the yoke forward or backward until a uniform green screen is obtained. Tighten the clamp screw of the yoke temporarily.
8. Check the purity of the red and blue raster.

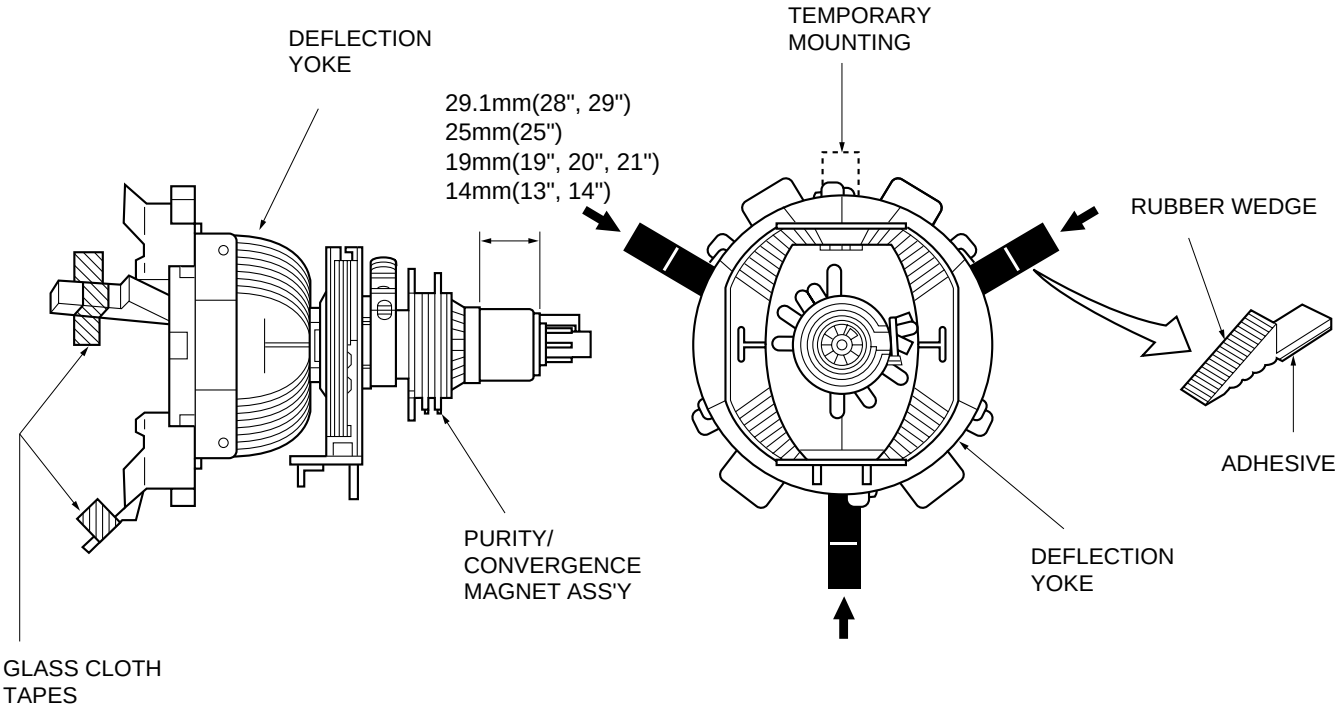


Figure 1.

CONVERGENCE ADJUSTMENTS

NOTE: Before attempting any convergence adjustments, the receiver should be operated for at least fifteen minutes.

■ CENTER CONVERGENCE ADJUSTMENT

1. Use the cross-dot pattern from among the built-in test signals.
2. Set the brightness and contrast for well defined pattern.
3. Adjust two tabs of the 4-Pole Magnets to change the angle between them (See figure 2.) and superimpose red and blue vertical lines in the center area of the picture screen.
4. Turn the both tabs at the same time keeping the angle constant to superimpose red and blue horizontal lines at the center of the screen.
5. Adjust two tabs of 6-Pole Magnets to superimpose red/blue line and green one. Adjusting the angle affects the vertical lines and rotating both magnets affects the horizontal lines.
6. Repeat adjustments 3, 4, 5 keeping in mind red, green and blue movement, because 4-Pole Magnets and 6-Pole Magnets have mutual interaction and make dot movement complex.

■ CIRCUMFERENCE CONVERGENCE ADJUSTMENT

1. Loosen the clamping screw of deflection yoke slightly to allow the yoke to tilt.
2. Temporarily put a wedge as shown in figure 1. (Do not remove cover paper on adhesive part of the wedge.)
3. Tilt front of the deflection yoke up or down to obtain better convergence in circumference. (See figure 3.) Push the mounted wedge into the space between picture tube and the yoke to fix the yoke temporarily.
4. Put other wedge into bottom space and remove the cover paper to stick.
5. Tilt front of the yoke right or left to obtain better convergence in circumference. (See figure 3.)
6. Keep the yoke position and put another wedge in either upper space. Remove cover paper and stick the wedge on picture tube to fix the yoke.
7. Detach the temporarily mounted wedge and put it in another upper space. Stick it on picture tube to fix the yoke.
8. After fixing three wedges, recheck overall convergence. Tighten the screw firmly to fix the yoke and check the yoke is firm.
9. Stick three adhesive tapes on wedges as shown in figure 1.

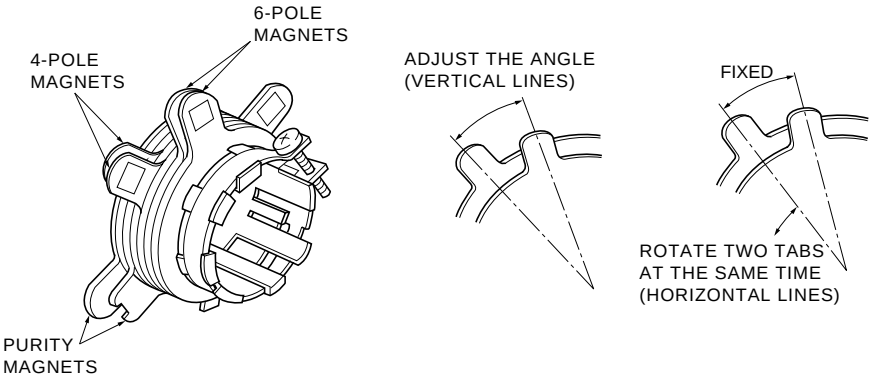
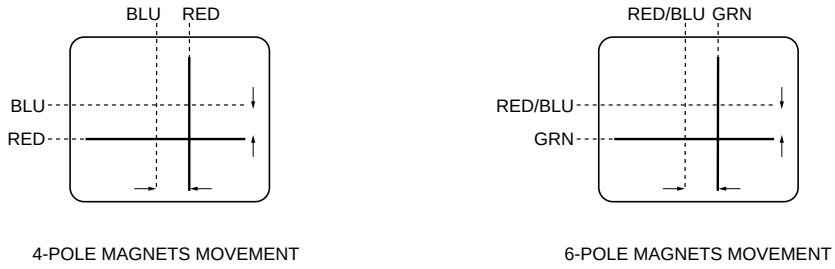


Figure 2.



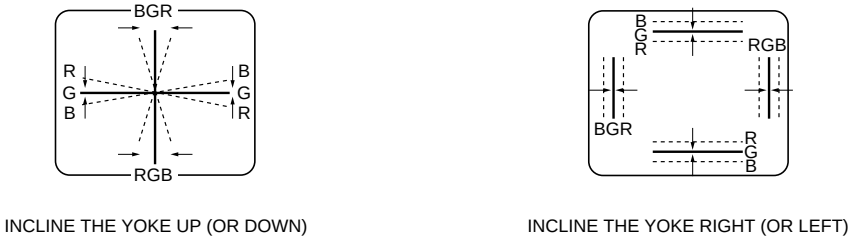


Figure 3. Dot Movement Pattern

SERVICE MODE

1. ENTERING TO SERVICE MODE

1) Press 🔇 button once on Remote Control.

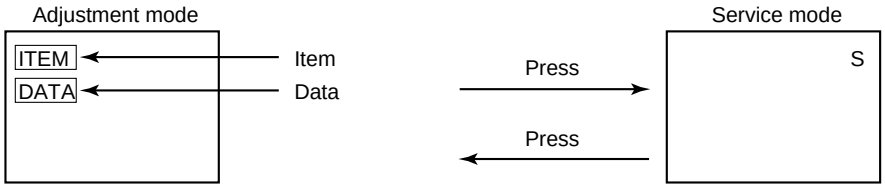
2) Press 🔇 button again to keep pressing.

3) While pressing the 🔇 button, press MENU button on TV set.

(Service mode display)

2. DISPLAYING THE ADJUSTMENT MENU

1) Press MENU button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

A single horizontal line ON/OFF:	–/– – button (on Remote) or ⊖ button (on TV)
Test signal selection :	⊖ button (on Remote)
Selection of the adjustment items :	Channel ▲/▼ (on TV or Remote)
Change of the data value :	Volume ◿ +/– (on TV or Remote)
Adjustment menu mode ON/OFF :	MENU button (on TV)
Initialization of the memory (QA02) :	CALL + Channel button on TV (▲)
Reset the count of operating protect circuit to “00”:	CALL + Channel button on TV (▼)
“RCUT” selection :	1 button
“GCUT” selection :	2 button
“BCUT” selection :	3 button
“CNTX” (or “SCNT”) selection :	4 button – – – – – Color thickness correction
“COLC” selection :	5 button
“TNTC” selection :	6 button
Self diagnostic display ON/OFF :	9 button

note: Displayed differently as shown below, depending on the setting of the receiving color system.
COLP (PAL)
COLC (NTSC)
COLS (SECAM)

CAUTION : Never try to perform initialization unless you have changed the memory IC.

4. SELECTING THE ADJUSTING ITEMS

1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2. (▼ button for reverse order)

Refer to table-2 for preset data of adjustment mode.
(See SETTING & ADJUSTING DATA on page 18)

5. ADJUSTING THE DATA

1) Pressing of VOLUME +/– button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

6. EXIT FROM SERVICE MODE

1) Pressing POWER button to turn off the TV once.

■ INITIALIZATION OF MEMORY DATA OF QA02

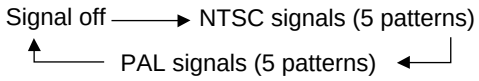
After replacing QA02, the following initialization is required.

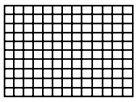
1. Enter the service mode, then select any register item.
2. Press and hold the CALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 has been complated.
3. Check the picture carefully. If necessary, adjust any adjustment item above. Perform “Auto search Memory” on the owner’s manual.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

7. TEST SIGNAL SELECTION

1) Every pressing of ⊕ button on the Remote Control changes the built-in test patterns on screen as described below in SERVICE MODE.

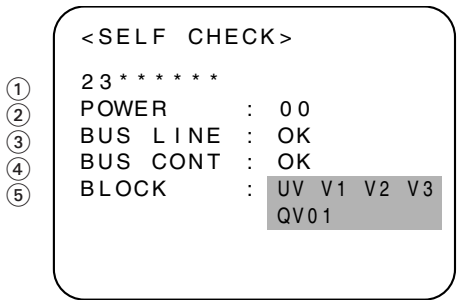


Signals	Picture
• Red raster • Green raster • Blue raster • All White	
• Black cross-hatch	

* The signals marked with ■ are not usable to display in the Test signal for some model.

8. SELF DIAGNOSTIC FUNCTION

1) Press “9” button on Remote Control during display of adjustment menu in the service mode.
   The diagnosis will begin to check if interface among IC’s are executed properly.
2) During diagnosis, the following displays are shown.



Indicated color of mode now selected : Green and Red
Indicated color of other modes : White

Green : Normal
Red : The microcomputer operates to provide judgement of no video signal. The red color is still indicated though the signal is input, failure may exist in input signal line including QV01.
QV01 : In case of indication green ---Normal
In case of indication red with input signal----
Failure may exist in output line including QV01.

① Part number of microcomputer (QA01)
② Operation number of protecting circuit ----“00” is normal.
When indication is other than “00”, overcurrent apts to flow, and circuit parts may possibly be damaged.
③ BUS LINE CHECK ----“OK” is normal.
“SDA1-GND” ---------- SDA-GND short circuit.
“SCL1-GND” ---------- SCL-GND short circuit.
“SCL1-SDA1” ---------- SCL-SDA short circuit.
④ BUS CONT ----“OK” is normal.
When indication shows “Q ○○○ NG”, the device with the number may possibly be damaged.
⑤BLOCK
UV : TV reception mode
V1 : VIDEO 1 input mode (→①1)
V2 : VIDEO 2 input mode (→①2)
V3 : VIDEO 3 input mode (→①3)

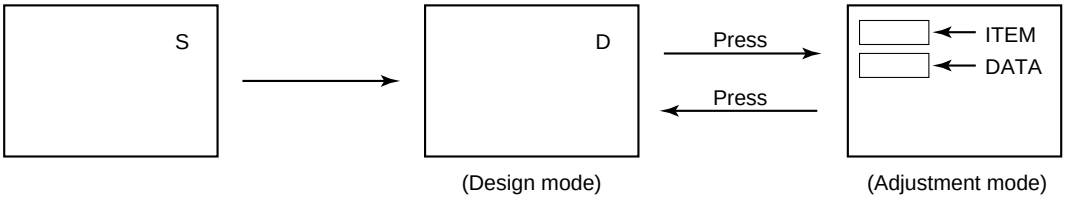
NOTE: Component which controls character display on screen is ICF01 (TELETEXT IC.). If this display function fails to operate due to damage in ICF01, self diagnosis procedure is as follows.
(1) In case that power indicator is blinking with interval of 0.5 seconds; it means protecting circuit (Current limiter) is operating, and circuit components may possibly be damaged. Check related components.
(2) In case that power indicator is blinking with interval of 1 second; Protecting circuit does not operate, but a part of Bus line does not operate normally. Check Bus line.

* The items marked with ■ are not usable to display in the SELF DIAGNOSTIC FUCTION for some model.

DESIGN MODE

1. ENTERING TO DESIGN MODE

1) Select the Service mode. 2) While pressing or CALL button on Remote and press MENU button on TV. 3) Press MENU button on TV.



When QA02 is initialized, items “OPT0” and “OPT1” of DESIGN MODE are set to the data of the representative model of this chassis family.
Therefore, because ON-SCREEN specification remains in the state of the representative of model. This model is required to reset the data of items “OPT0” and “OPT1”.

2. SELECTING THE ADJUSTING ITEMS

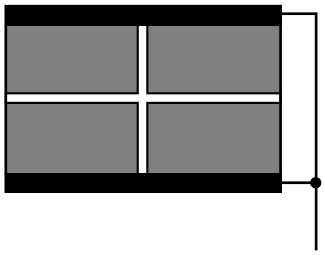
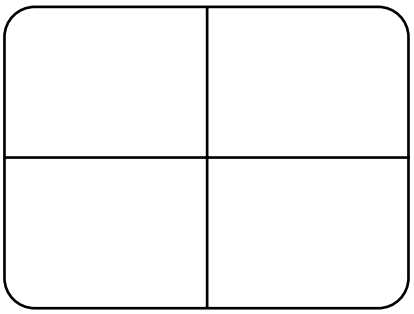
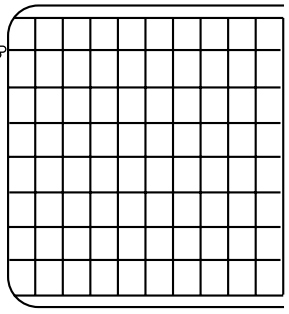
Every pressing of CHANNEL ▼ button in the design mode changes the adjustment items in the order of table-3.
(▲ button for reverse order)

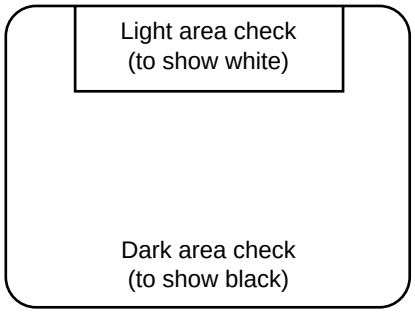
Refer to table-3 for data of design mode.
(See SETTING & ADJUSTING DATA on page 18)

3. ADJUSTING THE DATA

Pressing of VOLUME ▲ or ▼ button will change the value of data.

ELECTRICAL ADJUSTMENTS

ITEM	ADJUSTMENT PROCEDURE
FOCUS VR ADJ	1. Enter the service mode, then select any register item. 2. Press the TV/VIDEO button on the Remote until the black cross-bar pattern appears on the screen. 3. Adjust the FOCUS control (on T461) for well defined scanning lines on the picture screen.
SUB-BRIGHTNESS (BRTC) Note: Constrict the picture height until the vertical retrace line appears adjusting the item HIT (HEIGHT).	1. Set CONTRAST to minimum, and BRIGHTNESS to center by adjusting user controls. 2. Set the TV in service mode to get white cross-bar of inside pattern. 3. Select BRTC (brightness correction), and adjust the ◿ – /+ button to reduce the value so that white portion of inside pattern slightly light. 4. Adjust ◿ – /+ button to increase the data value of BRTC, and set it just before the difference between the belt of vertical retrace and the border of black portion of inside pattern is visible. After that, return vertical height and contrast.  Belt of vertical retrace
HORIZONTAL POSITION ADJUSTMENT (HPOS) VERTICAL POSITION ADJUSTMENT (VPOS)	1. Set the TV in service mode, and get black or white cross-bar signal with VIDEO button on remote hand unit. 2. Select either HPOS (Horizontal picture phase) or VPOS (Vertical picture phase) with CHANNEL ▲, ▼ buttons, and adjust horizontal or vertical picture position in the center of screen with VOLUME ◿ – /+ buttons. 
VERTICAL AMPLITUDE ADJUSTMENT (HIT)	1. Set the TV in service mode, and get black or white cross-hatch signal with VIDEO button on remote hand unit. 2. Select HIT (Vertical amplitude) with CHANNEL ▲, ▼ buttons, and adjust vertical amplitude with VOLUME ◿ – /+ buttons so that vertical amplitude lacks a little. 3. Adjust vertical amplitude with VOLUME ◿ – /+ buttons so that the first bar on cross-hatch signal touches edge of screen. The first ☞ 

ITEM	ADJUSTMENT PROCEDURE
WHITE BALANCE ADJUSTMENT ● CUTOFF ADJUSTMENT (RCUT) (GCUT) (BCUT) ● DRIVE ADJUSTMENT (GDRV) (BDRV)	1. Set Contrast to 40, and brightness to +20 by picture control. 2. Set the TV in service mode, and get the inside W/B adjusting signal with VIDEO button. 3. Select RCUT, GCUT and BCUT with CHANNEL ▲, ▼ buttons, to set individual values to Initial reference data, and to set GDRV and BDRV to Initial reference data with VOLUME ◿ – /+ buttons (See page 18). 4. Press -/- - button on the remote control and rotate Screen VR to get one slight horizontal line on screen. Note: Every pressing of -/- - button provides Horizontal line picture and Normal picture alternately. 5. Press -/- - button to release horizontal line picture, and select the two other colors which did not light in the above step with CHANNEL ▲, ▼ buttons. Then tap VOLUME ◿ – /+ buttons so that three colors slightly light in the same level. ※ To correct white balance in light area, select GDRV and BDRV with CHANNEL ▲, ▼ buttons to adjust. ※ To correct white balance in dark area, perform fine adjustment of RCUT, GCUT and BCUT. 

(Reference Factory Adjustments)

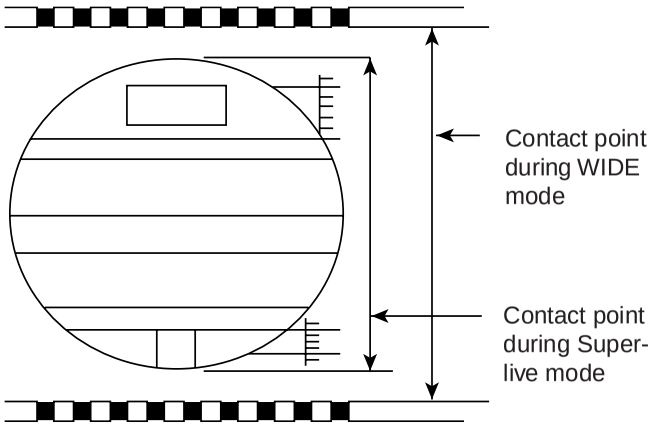
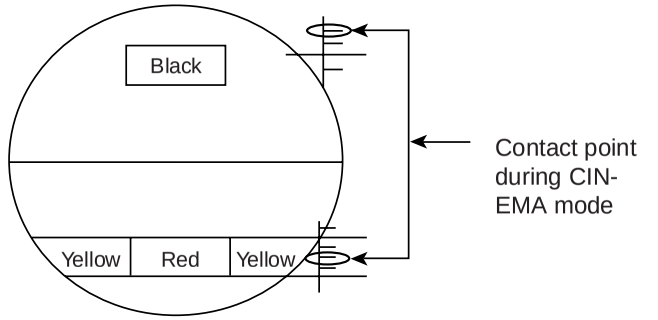
Items	Names	Settings (User control)	Input signals	Measuring points	Adjusting methods	Adjusting standards
[SCNT]	Sub-contrast	Dynamic MODE Screen size: WIDE Audio system: I	Sub-bright signal (PAL-I Signal)	TP46B	① Adjust the amplitude from the pedestal level to the white peak.	2.4 ± 0.1 Vp-p
[BRTC]	Sub-bright Center	Dynamic MODE Screen size: WIDE	Sub-bright Signal	Screen adjust-ment	① Adjust the number of collapsed black lines of the sub-bright signal. ② To adjust after W/B, [SCNT] adjustment.	4±1.5 pieces Screen adjustment
[COLP]	Sub-color center PAL	Dynamic MODE Screen size: Dynamic	Sub-bright Signal (PAL)	TP46B	① Adjust the amplitude of B-Y. (Be sure to apply Y mute during adjustment)	1.2 ± 0.1 Vo-p
SCREEN VR [RCUT] [GCUT] [BCUT] [GDRV] [BDRV]	R Cutoff G Cutoff B Cutoff G Drive B Drive	MODE Screen size: WIDE [RCUT]: 40H [GCUT]: 40H [BCUT]: 40H [GDRV]: 40H [BDRV]: 40H		Screen adjustment	① Enter Horizontal Straight-line Mode. ② Gradually increase the screen VR until R, G, or B line starts to light up slightly. ③ Determine the screen VR adjustment po-sition here. ④ Gradually increase remaining two screen VRs – except the line that lit up as men-tioned in item ② above – until respective line starts to light up slightly. (Adjust until the screen becomes almost white.) ⑤ Exit from Horizontal Straight-line Mode. ⑥ Using CA100, repeat this adjustment until correct value is set to both the dark and bright parts.	Bright part (103cd/m^2) 8750K-0.002uv Dark part (17cd/m^2) 8750K-0.002uv Screen judgment (CA100)

Items	Names	Settings (User control)	Input signals	Measuring points	Adjusting methods	Adjusting standards
[SBY]	SECAM B-Y Black level		SECAM Color bar	TP01	① Vary [SBY] so that the level of mono-chrome signal part aligns with that of BLK.	0 ± 10 mV
[SRY]	SECAM R-Y Black level		SECAM Color bar	TP02	① Vary [SRY] so that the level of mono-chrome signal part aligns with that of BLK.	0 ± 10 mV
[COLS]	Sub-color Center SECAM	Dynamic MODE Screen size: WIDE	SECAM Color bar	TP46B	① Adjust the amplitude of B-Y. (Be sure to apply Y mute during adjust-ment)	1.6 ± 0.1 Vo-p (Pedestal to Peak)

1. Data adjustment

<table>
<tr><th></th><th>Adjusting items</th><th colspan="2">Adjusting methods</th></tr>
<tr><td rowspan="3">Vertical</td><td>WIDE mode
Vertical amplitude [HIT]

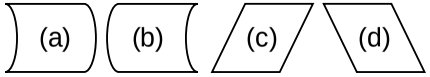
Vertical position [VPS1]</td><td>PAL WG Phillips Pattern, User adjustment standard
Adjust the vertical amplitude by [HIT] so that both upper and lower flags will disappear from the screen.

PAL Phillips Pattern, User adjustment standard
Adjust the vertical position [VPS1] with Phillips Pattern so that the vertical screen position will come to the center (see the right sketch).</td><td rowspan="2"> 
</td></tr>
<tr><td>Super-live mode
Vertical amplitude [HIT]</td><td>PAL Phillips Pattern, User adjustment standard
Adjust the vertical amplitude by [HIT] so that the top and bottom of the circle will touch the CPT mask with Philips Pattern (see the right sketch).</td></tr>
<tr><td>CINEMA mode
Vertical amplitude [HIT]</td><td>Phillips Pattern, User adjustment standard
Adjust the vertical amplitude by [HIT] so that the points shown in the right bottom sketch will touch the CRT mask (see the right sketch).</td><td> 
</td></tr>
</table>

2. Circuit adjustment (Volume/data adjustment)

No.	Target model names	Adjusting items	Adjusting methods
1	All models	Focus adjustment (1) HOR. FOCUS	Conditions: PAL Retoma signal WIDE mode, User adjustment standard Adjustment: Set it at the position, where the screen center becomes optimum focus and most counterclockwise, using the focus volume (F1) of the fly-back transformer (T461).
		Focus adjustment (2) VERT.FOCUS	Conditions: PAL Retoma signal WIDE mode, User adjustment standard Adjustment: Set it at the position, where the screen center becomes optimum focus and most counterclockwise, using the focus volume (F2) of the fly-back transformer (T461).
2	All models	Vertical position adjustment	Conditions: PAL WG Phillips Pattern WIDE mode, User adjustment standard Adjustment: Use [VPS1] and make adjustments so that the upper and lower positions will touch the mask. (Adjust and orient CPT either toward the south or north. If this is impossible, offset the difference.)

3. Data Adjustment

	Adjustment items	Adjustment methods
Horizontal	WIDE mode (During 4:3) Horizontal phase: [HPOS] Horizontal amplitude: [WIDE] Side DPC: [PARA] Trapezoidal distortion: [TRAP] Corner distortion: [CNR] Center warp: [CPAR] Parallelogram distortion: [CSAW]	Use PAL WG Phillips Pattern and adjust the horizontal amplitude to fit the mask to the frames of left and right flags in WIDE mode. Use PAL WG Phillips Pattern and adjust so that the side-pin and trapezoidal distortions become optimum in WIDE mode. Use the horizontal phase [HPOS] for the horizontal screen position, and make adjustments so that the position will become a center. Check and confirm the side-pin at the mode of 4:3. (If necessary, examine the grade of side panel at the mode of 4:3 and reconfirm) • **Note:** In case distortion adjustment is insufficient by the [PARA] [TRAP] adjustments, make adjustments by using the data of [CNR], [CPAR], and [CSAW].  ① Decrease [CPAR] in case of the distortion shown in Fig. (a). On the contrary, increase [CPAR] in case of the distortion shown in Fig. (b). ② Decrease [CSAW] in case of the distortion shown in Fig. (c). On the contrary, increase [CSAW] in case of the distortion shown in Fig. (d).
	Super-live mode Horizontal amplitude: [WIDE] Side DPC: [PARA] Trapezoidal distortion: [TRAP] Horizontal phase [HPOS] Corner distortion: [CNR]	Use PAL Phillips Pattern and fit the frames of the left and right flags to the mask in Super-live and WIDE modes. Make adjustments to achieve optimum side-pin distortion and trapezoidal distortion. If any further adjustment is required, use the horizontal phase [HPOS] and corner distortion [CNR] for adjustment.
	CINEMA mode Horizontal amplitude: [WIDE] Side DPC: [PARA] Trapezoidal distortion: [TRAP] Horizontal phase: [HPOS] Corner distortion: [CNR]	Use PAL Phillips Pattern and adjust the horizontal amplitude to fit the mask to the frames of left and right flags in CINEMA mode. Make adjustments to achieve optimum side-pin distortion and trapezoidal distortion. If any further adjustment is required, use the horizontal phase [HPOS] and corner distortion [CNR] for adjustment.

CIRCUIT CHECK

HIGH VOLTAGE CHECK

CAUTION: There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

1. Connect an accurate high voltage meter to the second anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST controls to minimum (zero beam current).
3. High voltage must be measured below (B) kV.

Refer to table-1 for high voltage (B).
(See SETTING & ADJUSTING DATA on page 18)

4. Vary the BRIGHTNESS control to both extremes to be sure the high voltage does not exceed the limit under any conditions.

CHAPTER 2 SPECIFIC INFORMATIONS

SETTING & ADJUSTING DATA

【SAFETY INSTRUCTIONS】

		32”	28"
HIGH VOLTAGE AT ZERO BEAM:	(A)	33.4 kV	33.4 kV
MAX HIGH VOLTAGE:	(B)	34.0 kV	34.0 kV
AC VOLTAGE	(C)	220~240 V	220~240 V

Table-1

【SERVICE MODE】

ADJUSTING ITEMS AND DATAS IN THE SERVICE MODE:

Item	Adjustment	Reference data	
		32"	28"
RCUT	R CUTOFF (B/W)	40H	←
GCUT	G CUTOFF (B/W)	40H	←
BCUT	B CUTOFF (B/W)	40H	←
GDRV	R DRIVE	35H	←
BDRV	B DRIVE	35H	←
BRTC	SUB BRIGHT CEN	80H	←
COLP	SUB COLOR CEN PAL	3DH	←
COLS	SUB COLOR CEN SECAM	3DH	←
SCNT	SUB CONTRAST	08H	←
SRY	SECAM R-Y	07H	←
SBY	SECAM B-Y	01H	←

Item	Adjustment	Reference data	
		32"	28"
HPOS	50Hz H-POSITION (WIDE)	67H	←
VPOS	V-POSITION (WIDE)	00H	←
HIT	HEIGHT	38H	←
VLIN	V-LINEARITY (WIDE)	12H	←
VSC	V-S CORRECTION (WIDE)	23H	←
VPS2	V-SHIFT (WIDE)	40H	←
WID	PICTURE WIDTH (WIDE)	2CH	29H
PARA	E-W PARABOLA (WIDE)	1CH	1DH
CNR	E-W CORNER	10H	←
TRAP	TRAPEZIUM	4BH	45H
VFC	V-F CORRECTION	0FH	←

Table-2

【DESIGN MODE】

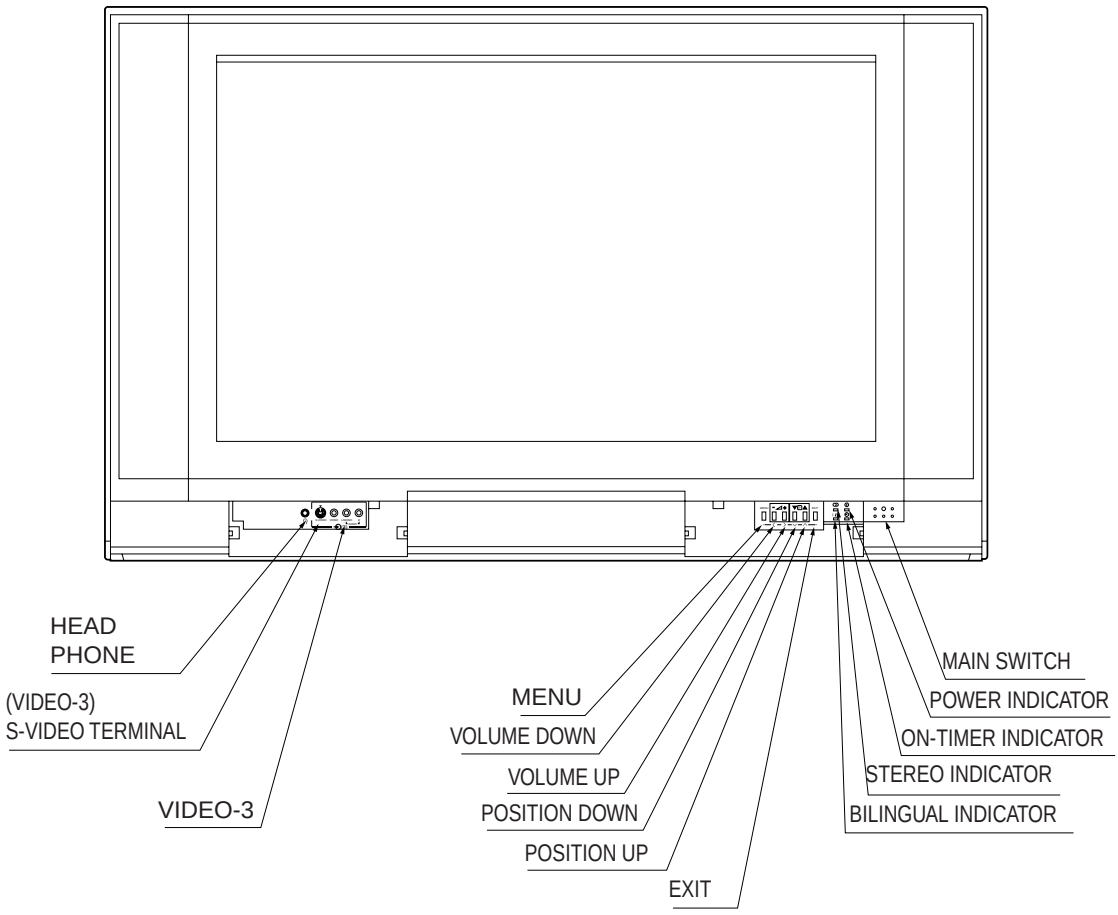
ADJUSTING ITEMS AND DATAS IN THE DESIGN MODE:

Item	Name of adjustment		Data	Remarks
		Preset Data		
* There are no adjusting item in the DESIGN MODE.				

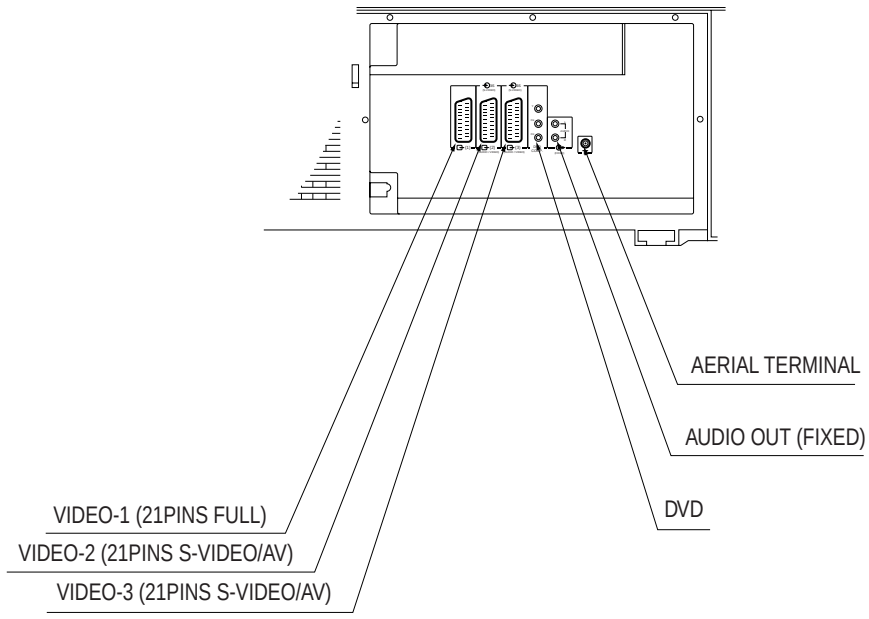
Table-3

LOCATION OF CONTROLS (Representative: 32ZD06B)

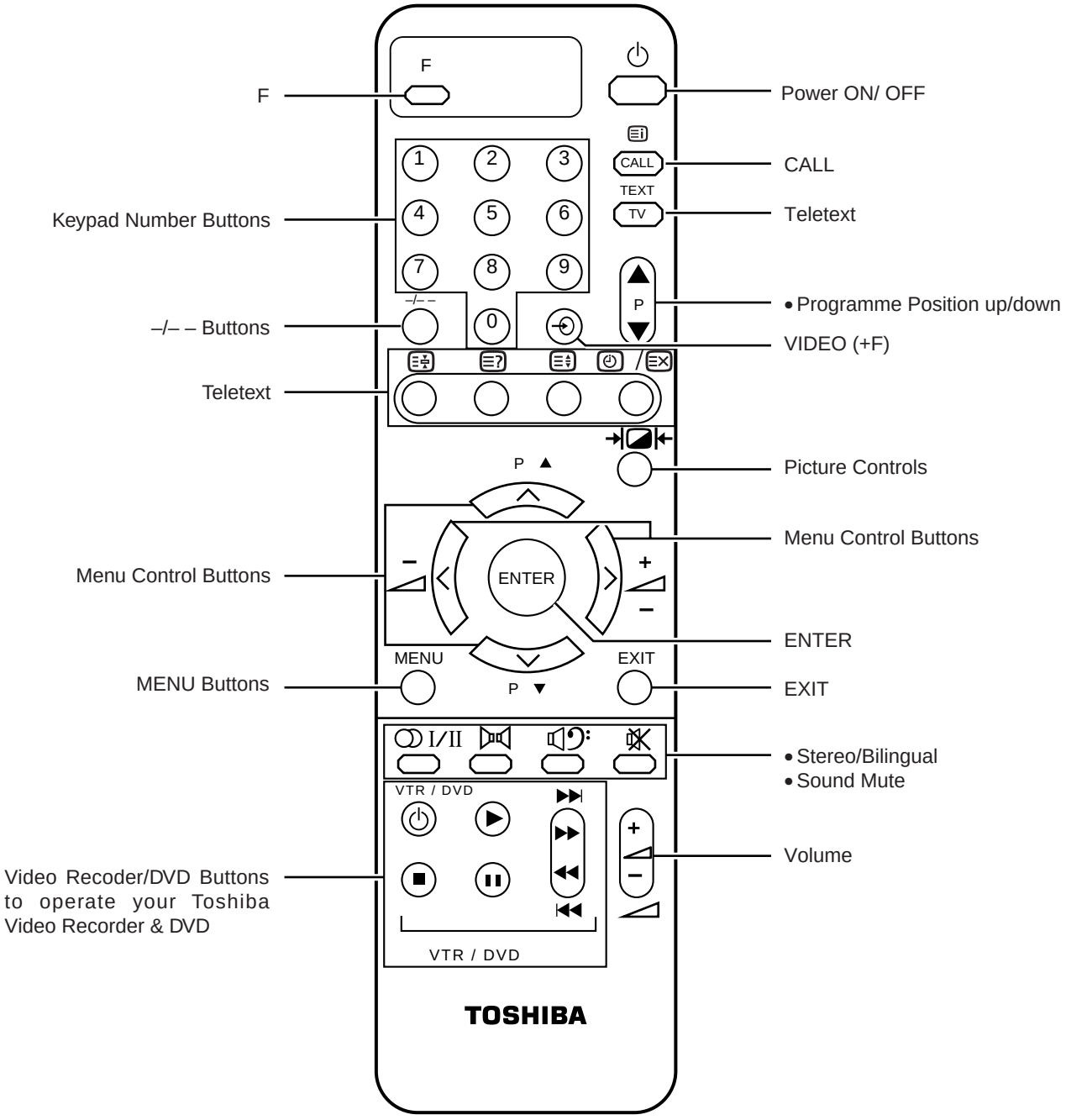
Front



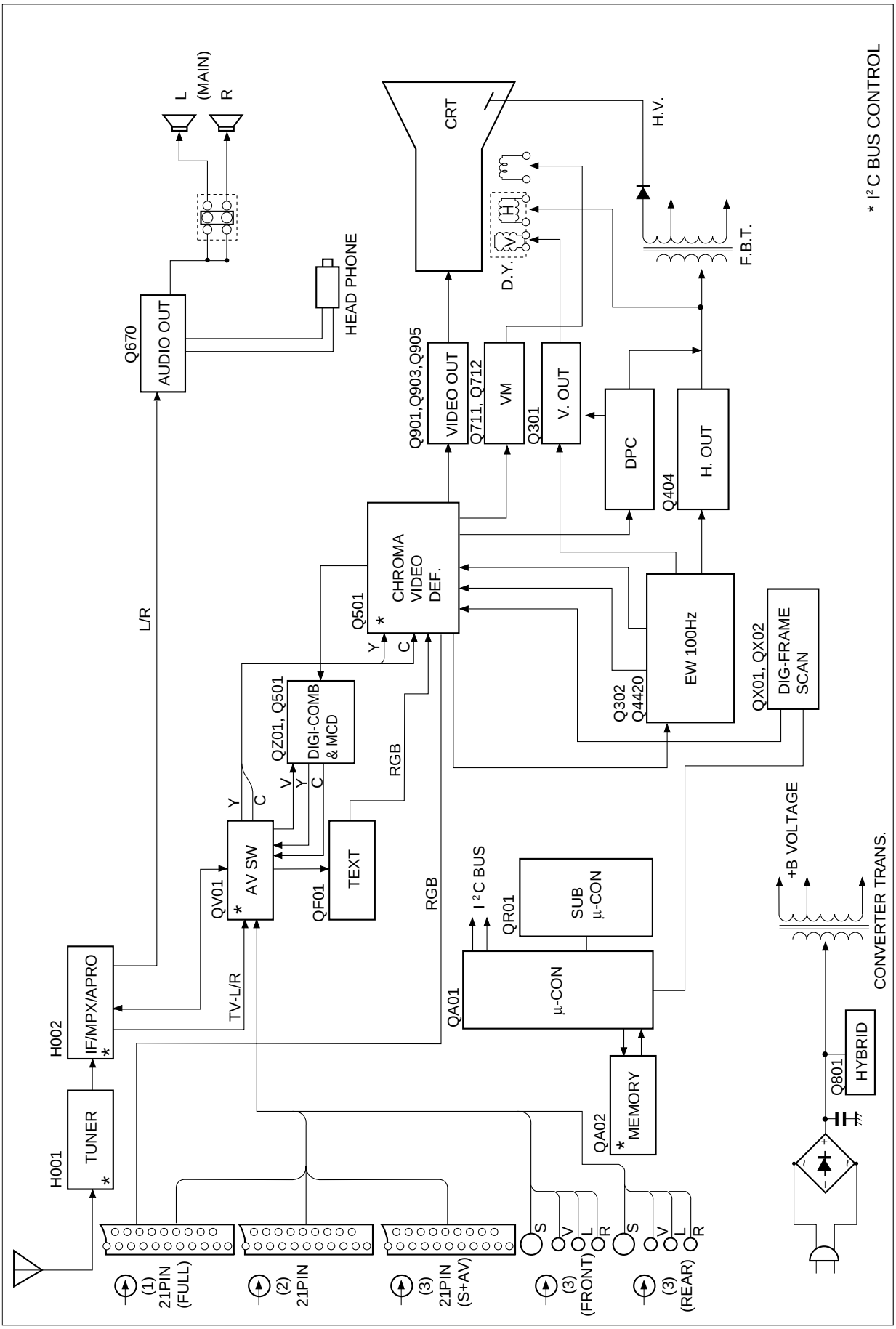
Rear terminals



Remote Controller



CIRCUIT BLOCK DIAGRAM



CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

NOTICE:

- *The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.*
- *The PC board assembly with ∗ mark is no longer available after the end of the production.*

Models : 32ZD06B, 28ZD06B

Capacitors	CD	:	Ceramic Disk	PF	:	Plastic Film	EL	: Electrolytic
Resistors	CF	:	Carbon Film	CC	:	Carbon Composition	MF	: Metal Film
	OMF	:	Oxide Metal Film	VR	:	Variable Resistor	FR	: Fusible Resistor

(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

Location No.	Part No.	Description
CAPACITORS		
C102	24763221	EL, 220μF, ±20%, 16V
C105	24212102	CD, 1000pF, ±10%
C106	24797100	EL, 10μF, ±20%, 50V
C108	24794221	EL, 220μF, ±20%, 16V
C109	24232103	CD, 0.01μF, +80%, -20%
C110	24797229	EL, 2.2μF, ±20%, 50V
C111	24797229	EL, 2.2μF, ±20%, 50V
C115	24232103	CD, 0.01μF, +80%, -20%
C201	24567104	PF, 0.1μF
C202	24232103	CD, 0.01μF, +80%, -20%
C203	24567104	PF, 0.1μF
C204	24797010	EL, 1μF, ±20%, 50V
C205	24797229	EL, 2.2μF, ±20%, 50V
C206	24797220	EL, 22μF, ±20%, 50V
C214	24567334	PF, 0.33μF
C215	24436101	CD, 100pF
C219	24436100	CD, 10pF, ±0.25pF
C220	24436100	CD, 10pF, ±0.25pF
C221	24436100	CD, 10pF, ±0.25pF
C229	24092398	CD, 0.1μF, +80%, -20%, 25V
C230	24232103	CD, 0.01μF, +80%, -20%
C232	24092398	CD, 0.1μF, +80%, -20%, 25V
C261	24794101	EL, 100μF, ±20%, 16V
C262	24232103	CD, 0.01μF, +80%, -20%
C263	24794470	EL, 47μF, ±20%, 16V
C264	24794100	EL, 10μF, ±20%, 16V
C302	24214471	CD, 470pF, ±10%, 500V
C303	24214471	CD, 470pF, ±10%, 500V
C305	24795222	EL, 2200μF, ±20%, 25V
C308	24797221	EL, 220μF, ±20%, 50V
C310	24795222	EL, 2200μF, ±20%, 25V
C313	24082057	PF, 0.22μF, 100V
C314	24793101	EL, 100μF, ±20%, 10V
C315	24212222	CD, 2200pF, ±10% (32ZD06B)
C315	24212102	CD, 1000pF, ±10% (28ZD06B)
C315	24797478	EL, 0.47μF, ±20%, 50V
C316	24795221	EL, 220μF, ±20%, 25V (32ZD06B)
C316	24795471	EL, 470μF, ±20%, 25V (28ZD06B)

Location No.	Part No.	Description
C318	24794471	EL, 470μF, ±20%, 16V
C320	24795221	EL, 220μF, ±20%, 25V (32ZD06B)
C320	24795471	EL, 470μF, ±20%, 25V (28ZD06B)
C321	24567224	PF, 0.22μF
C322	24617915	EL, 1μF, ±10%, 50V
C323	24567474	PF, 0.47μF
C325	24590223	PF, 0.022μF
C326	24797010	EL, 1μF, ±20%, 50V
C327	24794471	EL, 470μF, ±20%, 16V
C329	24567224	PF, 0.22μF
C332	24212102	CD, 1000pF, ±10%
C341	24567474	PF, 0.47μF
C366	24082049	PF, 0.047μF, 100V
C370	24794100	EL, 10μF, ±20%, 16V
C371	24797100	EL, 10μF, ±20%, 50V
C372	24797470	EL, 47μF, ±20%, 50V
C373	24797470	EL, 47μF, ±20%, 50V
C390	24567474	PF, 0.47μF
C391	24567474	PF, 0.47μF
C392	24567474	PF, 0.47μF
C393	24567474	PF, 0.47μF
C401	24232103	CD, 0.01μF, +80%, -20%
C403	24590223	PF, 0.022μF
C404	24797229	EL, 2.2μF, ±20%, 50V
C410	24092341	CD, 470pF, ±10%, 2kV
C413	24214332	CD, 3300pF, ±10%, 500V
C416	24668101	EL, 100μF, ±20%, 35V
C417	24214391	CD, 390pF, ±10%, 500V
C419	24212102	CD, 1000pF, ±10%
C420	24794101	EL, 100μF, ±20%, 16V
C421	24567104	PF, 0.1μF
C423	24829623	PF, 0.063μF, 400V (32ZD06B)
C423	24829683	PF, 0.068μF, 400V (28ZD06B)
C424	24794101	EL, 100μF, ±20%, 16V
C425	24794101	EL, 100μF, ±20%, 16V
C430	24232103	CD, 0.01μF, +80%, -20%
C430	24820392	PF, 0.0036μF, 630V
C431	24232103	CD, 0.01μF, +80%, -20%
C431	24794101	EL, 100μF, ±20%, 16V

Location No.	Part No.	Description
C440	24082941	PF, 3000pF, ±3%, 1500V (32ZD06B)
C440	24082942	PF, 3300pF, ±3%, 1500V (28ZD06B)
C442	24082639	PF, 0.12μF, 400V (32ZD06B)
C442	24082640	PF, 0.13μF, 400V (28ZD06B)
C443	24082638	PF, 0.11μF, 400V
C444	24082830	PF, 3000pF, ±3%, 1800V (32ZD06B)
C444	24082831	PF, 3300pF, ±3%, 1800V (28ZD06B)
C445	24828473	PF, 0.047μF, 200V
C446	24679330	EL, 33μF, ±20%, 250V
C447	24829183	PF, 0.018μF, 400V
C448	24640908	EL, 33μF, ±20%, 160V
C460	24073092	EL, 330μF, ±20%, 50V
C461	24082834	PF, 4300pF, ±3%, 1800V (32ZD06B)
C461	24082835	PF, 4700pF, ±3%, 1800V (28ZD06B)
C462	24794222	EL, 2200μF, ±20%, 16V
C463	24212392	CD, 3900pF, ±10%
C464	24640872	EL, 10μF, ±20%, 100V
C466	24082410	PF, 4700pF, ±3%, 1250V
C470	24794470	EL, 47μF, ±20%, 16V
C471	24590473	PF, 0.047μF (32ZD06B)
C471	24085988	EL, 1.0μF, ±20%, 50V, Non-Polar (28ZD06B)
C472	24567474	PF, 0.47μF
C473	24669010	EL, 1μF, ±20%, 50V
C475	24095887	PF, 0.01μF, ±3%, 630V (32ZD06B)
C476	24794220	EL, 22μF, ±20%, 16V
C477	24590102	PF, 1000pF (32ZD06B)
C477	24590272	PF, 2700pF (28ZD06B)
C479	24214471	CD, 470pF, ±10%, 500V
C481	24085988	EL, 1.0μF, ±20%, 50V, Non-Polar (32ZD06B)
C481	24567104	PF, 0.1μF (28ZD06B)
C482	24212152	CD, 1500pF, ±10%
C483	24590392	PF, 3900pF (28ZD06B)
C490	24082983	PF, 1.5μF, 250V
C491	24082989	PF, 2.7μF, 250V
C492	24829473	PF, 0.047μF, 400V
C494	24082637	PF, 0.1μF, 400V
C495	24092343	CD, 680pF, ±10%, 2kV
C496	24092343	CD, 680pF, ±10%, 2kV
C501	24092293	Chip, 0.1μF, +80%, -20%, 25V
C502	24092293	Chip, 0.1μF, +80%, -20%, 25V
C502	24232103	CD, 0.01μF, +80%, -20%
C503	24794221	EL, 220μF, ±20%, 16V
C503	24794470	EL, 47μF, ±20%, 16V
C504	24814103	Chip, 0.01μF, +80%, -20%
C505	24794470	EL, 47μF, ±20%, 16V
C506	24814103	Chip, 0.01μF, +80%, -20%
C507	24092293	Chip, 0.1μF, +80%, -20%, 25V
C508	24092293	Chip, 0.1μF, +80%, -20%, 25V
C508	24797010	EL, 1μF, ±20%, 50V
C509	24092293	Chip, 0.1μF, +80%, -20%, 25V
C509	24794101	EL, 100μF, ±20%, 16V
C510	24794101	EL, 100μF, ±20%, 16V
C510	24797479	EL, 4.7μF, ±20%, 50V
C511	24092293	Chip, 0.1μF, +80%, -20%, 25V
C511	24232103	CD, 0.01μF, +80%, -20%

Location No.	Part No.	Description
C512	24092293	Chip, 0.1μF, +80%, -20%, 25V
C513	24092293	Chip, 0.1μF, +80%, -20%, 25V
C513	24232103	CD, 0.01μF, +80%, -20%
C514	24567104	PF, 0.1μF
C514	24794470	EL, 47μF, ±20%, 16V
C515	24567104	PF, 0.1μF
C515	24814103	Chip, 0.01μF, +80%, -20%
C516	24774100	Chip, 10pF, ±0.5pF, CH
C517	24797478	EL, 0.47μF, ±20%, 50V
C518	24436101	CD, 100pF
C518	24814103	Chip, 0.01μF, +80%, -20%
C519	24092293	Chip, 0.1μF, +80%, -20%, 25V
C520	24212102	CD, 1000pF, ±10%
C520	24797229	EL, 2.2μF, ±20%, 50V
C521	24212102	CD, 1000pF, ±10%
C521	24567223	PF, 0.022μF
C522	24814103	Chip, 0.01μF, +80%, -20%
C525	24567104	PF, 0.1μF
C555	24092398	CD, 0.1μF, +80%, -20%, 25V
C556	24797010	EL, 1μF, ±20%, 50V
C608	24793101	EL, 100μF, ±20%, 10V
C613	24794471	EL, 470μF, ±20%, 16V
C661	24797478	EL, 0.47μF, ±20%, 50V
C664	24797100	EL, 10μF, ±20%, 50V
C665	24797010	EL, 1μF, ±20%, 50V
C666	24797010	EL, 1μF, ±20%, 50V
C667	24212102	CD, 1000pF, ±10%
C668	24212102	CD, 1000pF, ±10%
C669	24797330	EL, 33μF, ±20%, 50V
C670	24797330	EL, 33μF, ±20%, 50V
C671	24797100	EL, 10μF, ±20%, 50V
C672	24795470	EL, 47μF, ±20%, 25V
C673	24781102	Chip, 1000pF, SL
C673	24795470	EL, 47μF, ±20%, 25V
C674	24781102	Chip, 1000pF, SL
C674	24797100	EL, 10μF, ±20%, 50V
C675	24795470	EL, 47μF, ±20%, 25V
C677	24590102	PF, 1000pF
C678	24590102	PF, 1000pF
C678	24781102	Chip, 1000pF, SL
C679	24781102	Chip, 1000pF, SL
C680	24668102	EL, 1000μF, ±20%, 35V
C681	24668102	EL, 1000μF, ±20%, 35V
C681	24781102	Chip, 1000pF, SL
C682	24668102	EL, 1000μF, ±20%, 35V
C682	24781102	Chip, 1000pF, SL
C685	24591124	PF, 0.12μF
C687	24232103	CD, 0.01μF, +80%, -20%
C688	24794220	EL, 22μF, ±20%, 16V
C689	24591124	PF, 0.12μF
C704	24591822	PF, 8200pF
C705	24797229	EL, 2.2μF, ±20%, 50V
C707	24794470	EL, 47μF, ±20%, 16V
C712	24794470	EL, 47μF, ±20%, 16V
C713	24790100	EL, 10μF, ±20%, 160V
C714	24436101	CD, 100pF (28ZD06B)
C715	24214472	CD, 4700pF, ±10%, 500V
C716	24436101	CD, 100pF (28ZD06B)
C717	24214472	CD, 4700pF, ±10%, 500V
C718	24794470	EL, 47μF, ±20%, 16V
C719	24435151	CD, 150pF, 500V, SL (32ZD06B)
C719	24435560	CD, 56pF, 500V (28ZD06B)
C720	24790100	EL, 10μF, ±20%, 160V

Location No.	Part No.	Description
C721	24794470	EL, 47μF, ±20%, 16V
⚠C801	24503054	PF, 0.1μF, ±20%, 275V
⚠C802	24503054	PF, 0.1μF, ±20%, 275V
C805	24092281	CD, 4700pF, ±20%, AC250V
C806	24092281	CD, 4700pF, ±20%, AC250V
C808	24667331	EL, 330μF, ±20%, 25V
C810	24086873	EL, 330μF, ±20%, 400V
C810	24763102	EL, 1000μF, ±20%, 16V
⚠C813	24092555	CD, 1000pF, ±20%, AC250V
⚠C814	24092555	CD, 1000pF, ±20%, AC250V
C817	24092339	CD, 330pF, ±10%, 2kV
C818	24095931	PF, 2200pF, 1250V
C819	24676220	EL, 22μF, ±20%, 100V
C821	24214471	CD, 470pF, ±10%, 500V
C822	24567474	PF, 0.47μF
C823	24214471	CD, 470pF, ±10%, 500V
C829	24590332	PF, 3300pF
C831	24794470	EL, 47μF, ±20%, 16V
C832	24794470	EL, 47μF, ±20%, 16V
C833	24669100	EL, 10μF, ±20%, 50V
C836	24794470	EL, 47μF, ±20%, 16V
C841	24669100	EL, 10μF, ±20%, 50V
C842	24669100	EL, 10μF, ±20%, 50V
C843	24567104	PF, 0.1μF
C846	24567224	PF, 0.22μF
C872	24669221	EL, 220μF, ±20%, 50V
C884	24086916	EL, 330μF, ±20%, 160V
C885	24214471	CD, 470pF, ±10%, 500V
C887	24214471	CD, 470pF, ±10%, 500V
C889	24669222	EL, 2200μF, ±20%, 50V
C890	24667222	EL, 2200μF, ±20%, 25V
C891	24667332	EL, 3300μF, ±20%, 25V
C892	24667222	EL, 2200μF, ±20%, 25V
C893	24092337	CD, 220pF, ±10%, 2kV
C895	24669470	EL, 47μF, ±20%, 50V
C896	24214471	CD, 470pF, ±10%, 500V
C897	24667332	EL, 3300μF, ±20%, 25V
C898	24567224	PF, 0.22μF
C899	24214471	CD, 470pF, ±10%, 500V
C902	24092345	CD, 1000pF, ±10%, 2kV
C904	24436471	CD, 470pF
C905	24436471	CD, 470pF
C907	24436471	CD, 470pF
C909	24679330	EL, 33μF, ±20%, 250V
C910	24797478	EL, 0.47μF, ±20%, 50V
C911	24203100	EL, 10μF, ±20%, 16V
C912	24794102	EL, 1000μF, ±20%, 16V
C913	24794101	EL, 100μF, ±20%, 16V
C914	24212103	CD, 0.01μF, ±10%
C915	24092398	CD, 0.1μF, +80%, -20%, 25V
C920	24591104	PF, 0.1μF
C921	24591104	PF, 0.1μF
C930	24214101	CD, 100pF, ±10%, 500V
C931	24214101	CD, 100pF, ±10%, 500V
C940	24436390	CD, 39pF
C4376	24590103	PF, 0.01μF
C4405	24590103	PF, 0.01μF
C4408	24590103	PF, 0.01μF
C4418	24590103	PF, 0.01μF
C4425	24797010	EL, 1μF, ±20%, 50V
C4426	24794101	EL, 100μF, ±20%, 16V
C4447	24590103	PF, 0.01μF
C4490	24082637	PF, 0.1μF, 400V
C4491	24082637	PF, 0.1μF, 400V

Location No.	Part No.	Description
CA09	24474101	CD, 100pF, ±10%
CA10	24474101	CD, 100pF, ±10%
CA12	24212101	CD, 100pF, ±10%
CA13	24436101	CD, 100pF
CA15	24474101	CD, 100pF, ±10%
CA16	24474101	CD, 100pF, ±10%
CA17	24474101	CD, 100pF, ±10%
CA33	24232103	CD, 0.01μF, +80%, -20%
CA42	24794100	EL, 10μF, ±20%, 16V
CA43	24232103	CD, 0.01μF, +80%, -20%
CA44	24232103	CD, 0.01μF, +80%, -20%
CA68	24794100	EL, 10μF, ±20%, 16V
CA69	24232103	CD, 0.01μF, +80%, -20%
CB01	24794470	EL, 47μF, ±20%, 16V
CB02	24567104	PF, 0.1μF
CB90	24232103	CD, 0.01μF, +80%, -20%
CC15	24232103	CD, 0.01μF, +80%, -20%
CC16	24474102	CD, 1000pF, ±10%
CC20	24781220	Chip, 22pF, SL
CC26	24232103	CD, 0.01μF, +80%, -20%
CC27	24232103	CD, 0.01μF, +80%, -20%
CC45	24774050	Chip, 5pF, ±0.25pF, CH
CC45	24814103	Chip, 0.01μF, +80%, -20%
CC46	24774050	Chip, 5pF, ±0.25pF, CH
CC46	24814103	Chip, 0.01μF, +80%, -20%
CF03	24567104	PF, 0.1μF
CF04	24766101	EL, 100μF, ±20%, 50V
CF05	24766101	EL, 100μF, ±20%, 50V
CF06	24774220	Chip, 22pF, CH
CF07	24774220	Chip, 22pF, CH
CF08	24567104	PF, 0.1μF
CF09	24567104	PF, 0.1μF
CF10	24206100	EL, 10μF, ±20%, 50V
CF11	24567104	PF, 0.1μF
CF12	24814103	Chip, 0.01μF, +80%, -20%
CF14	24814103	Chip, 0.01μF, +80%, -20%
CF16	24567224	PF, 0.22μF
CF18	24794101	EL, 100μF, ±20%, 16V
CF19	24814103	Chip, 0.01μF, +80%, -20%
CF20	24766010	EL, 1μF, ±20%, 50V
CR01	24797010	EL, 1μF, ±20%, 50V
CR02	24232103	CD, 0.01μF, +80%, -20%
CR09	24567104	PF, 0.1μF
CR10	24794470	EL, 47μF, ±20%, 16V
CR11	24567104	PF, 0.1μF
CR12	24567104	PF, 0.1μF
CR13	24567104	PF, 0.1μF
CR14	24567104	PF, 0.1μF
CR18	24567104	PF, 0.1μF
CR19	24567104	PF, 0.1μF
CR20	24567104	PF, 0.1μF
CS01	24797229	EL, 2.2μF, ±20%, 50V
CS02	24797229	EL, 2.2μF, ±20%, 50V
CS03	24797229	EL, 2.2μF, ±20%, 50V
CS04	24797229	EL, 2.2μF, ±20%, 50V
CS05	24206229	EL, 2.2μF, ±20%, 50V
CS06	24206229	EL, 2.2μF, ±20%, 50V
CS07	24797229	EL, 2.2μF, ±20%, 50V
CS08	24797229	EL, 2.2μF, ±20%, 50V
CS09	24797229	EL, 2.2μF, ±20%, 50V
CS10	24797229	EL, 2.2μF, ±20%, 50V
CS12	24781102	Chip, 1000pF, SL
CS13	24781102	Chip, 1000pF, SL
CS14	24797100	EL, 10μF, ±20%, 50V

Location No.	Part No.	Description
CS15	24797100	EL, 10μF, ±20%, 50V
CS17	24794100	EL, 10μF, ±20%, 16V
CS18	24794100	EL, 10μF, ±20%, 16V
CS19	24797478	EL, 0.47μF, ±20%, 50V
CS22	24794100	EL, 10μF, ±20%, 16V
CS23	24794100	EL, 10μF, ±20%, 16V
CV02	24092293	Chip, 0.1μF, +80%, -20%, 25V
CV03	24092293	Chip, 0.1μF, +80%, -20%, 25V
CV04	24092293	Chip, 0.1μF, +80%, -20%, 25V
CV05	24814103	Chip, 0.01μF, +80%, -20%
CV06	24092293	Chip, 0.1μF, +80%, -20%, 25V
CV08	24794101	EL, 100μF, ±20%, 16V
CV09	24815473	Chip, 0.047μF, ±10%
CV10	24794220	EL, 22μF, ±20%, 16V
CV12	24092178	Chip, 0.1μF, ±10%, 25V
CV14	24781102	Chip, 1000pF, SL
CV15	24781102	Chip, 1000pF, SL
CV16	24781102	Chip, 1000pF, SL
CV17	24781102	Chip, 1000pF, SL
CV18	24781102	Chip, 1000pF, SL
CV19	24781102	Chip, 1000pF, SL
CV23	24203101	EL, 100μF, ±20%, 16V
CV24	24814103	Chip, 0.01μF, +80%, -20%
CV35	24814103	Chip, 0.01μF, +80%, -20%
CV39	24794101	EL, 100μF, ±20%, 16V
CV40	24814103	Chip, 0.01μF, +80%, -20%
CV46	24212332	CD, 3300pF, ±10%
CV47	24212332	CD, 3300pF, ±10%
CV48	24212102	CD, 1000pF, ±10%
CV65	24203101	EL, 100μF, ±20%, 16V
CV66	24794101	EL, 100μF, ±20%, 16V
CX101	24794470	EL, 47μF, ±20%, 16V
CX102	24085981	EL, 10μF, ±20%, 16V, Non-Polar
CX104	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX105	24774330	Chip, 33pF, CH
CX106	24774270	Chip, 270pF, CH
CX107	24774101	Chip, 100pF, CH
CX108	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX111	24092621	Chip, 1μF, ±10%, 10V
CX112	24794100	EL, 10μF, ±20%, 16V
CX113	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX114	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX115	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX116	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX117	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX118	24794100	EL, 10μF, ±20%, 16V
CX119	24794100	EL, 10μF, ±20%, 16V
CX120	24794100	EL, 10μF, ±20%, 16V
CX121	24774470	Chip, 47pF, CH
CX122	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX123	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX124	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX125	24794100	EL, 10μF, ±20%, 16V
CX126	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX128	24092441	Chip, 1μF, +80%, -20%, 16V
CX129	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX130	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX143	24085981	EL, 10μF, ±20%, 16V, Non-Polar
CX145	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX148	24774101	Chip, 100pF, CH
CX149	24774470	Chip, 47pF, CH
CX150	24774271	Chip, 270pF, CH

Location No.	Part No.	Description
CX151	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX152	24794100	EL, 10μF, ±20%, 16V
CX155	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX156	24794100	EL, 10μF, ±20%, 16V
CX157	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX159	24092441	Chip, 1μF, +80%, -20%, 16V
CX160	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX163	24085981	EL, 10μF, ±20%, 16V, Non-Polar
CX165	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX168	24774101	Chip, 100pF, CH
CX169	24774470	Chip, 47pF, CH
CX170	24774271	Chip, 270pF, CH
CX171	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX172	24794100	EL, 10μF, ±20%, 16V
CX176	24794100	EL, 10μF, ±20%, 16V
CX177	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX179	24092441	Chip, 1μF, +80%, -20%, 16V
CX180	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX184	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX185	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX186	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX187	24794100	EL, 10μF, ±20%, 16V
CX188	24794100	EL, 10μF, ±20%, 16V
CX189	24794100	EL, 10μF, ±20%, 16V
CX190	24774330	Chip, 33pF, CH
CX191	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX192	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX193	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX201	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX202	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX204	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX205	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX206	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX208	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX209	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX211	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX212	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX214	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX215	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX216	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX218	24794221	EL, 220μF, ±20%, 16V
CX221	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX222	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX224	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX225	24794220	EL, 22μF, ±20%, 16V
CX226	24794101	EL, 100μF, ±20%, 16V
CX227	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX228	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX230	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX231	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX232	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX234	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX235	24797229	EL, 2.2μF, ±20%, 50V
CX236	24794101	EL, 100μF, ±20%, 16V
CX237	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX238	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX239	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX240	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX241	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX243	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX244	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX245	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX246	24092293	Chip, 0.1μF, +80%, -20%, 25V

Location No.	Part No.	Description
CX247	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX249	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX250	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX251	24794470	EL, 47μF, ±20%, 16V
CX261	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX262	24774470	Chip, 47pF, CH
CX271	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX301	24794100	EL, 10μF, ±20%, 16V
CX302	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX303	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX305	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX306	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX308	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX309	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX310	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX321	24794100	EL, 10μF, ±20%, 16V
CX323	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX326	24774680	Chip, 68pF, CH
CX328	24774330	Chip, 33pF, CH
CX330	24794470	EL, 47μF, ±20%, 16V
CX341	24794100	EL, 10μF, ±20%, 16V
CX343	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX346	24774181	Chip, 180pF, CH
CX348	24774181	Chip, 180pF, CH
CX361	24794100	EL, 10μF, ±20%, 16V
CX363	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX366	24774181	Chip, 180pF, CH
CX368	24774181	Chip, 180pF, CH
CX401	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX402	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX403	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX404	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX405	24794471	EL, 470μF, ±20%, 16V
CX406	24794471	EL, 470μF, ±20%, 16V
CX407	24774220	Chip, 22pF, CH
CX408	24774220	Chip, 22pF, CH
CX409	24774220	Chip, 22pF, CH
CX410	24774220	Chip, 22pF, CH
CX411	24774220	Chip, 22pF, CH
CX412	24774220	Chip, 22pF, CH
CX421	24774221	Chip, 220pF, CH
CX422	24774221	Chip, 220pF, CH
CX423	24774221	Chip, 220pF, CH
CX424	24774221	Chip, 220pF, CH
CX425	24774221	Chip, 220pF, CH
CX427	24774221	Chip, 220pF, CH
CX428	24774330	Chip, 33pF, CH
CX429	24774330	Chip, 33pF, CH
CX430	24774221	Chip, 220pF, CH
CX431	24073020	EL, 1000μF, ±20%, 10V
CX432	24092294	Chip, 0.33μF, +80%, -20%, 16V
CX433	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX434	24092441	Chip, 1μF, +80%, -20%, 16V
CX435	24092293	Chip, 0.1μF, +80%, -20%, 25V
CX436	24073035	EL, 22μF, ±20%, 16V
CZ01	24092293	Chip, 0.1μF, +80%, -20%, 25V
CZ02	24814103	Chip, 0.01μF, +80%, -20%
CZ03	24092442	Chip, 0.47μF, +80%, -20%, 16V
CZ05	24814103	Chip, 0.01μF, +80%, -20%
CZ07	24092293	Chip, 0.1μF, +80%, -20%, 25V
CZ09	24781220	Chip, 22pF, SL
CZ10	24781100	Chip, 10pF, ±0.5pF%, SL

Location No.	Part No.	Description
CZ11	24781220	Chip, 22pF, SL
CZ12	24814103	Chip, 0.01μF, +80%, -20%
CZ13	24814103	Chip, 0.01μF, +80%, -20%
CZ14	24794100	EL, 10μF, ±20%, 16V
CZ17	24814103	Chip, 0.01μF, +80%, -20%
CZ19	24781181	Chip, 180pF, SL
CZ20	24814103	Chip, 0.01μF, +80%, -20%
CZ21	24781122	Chip, 1200pF, SL
CZ22	24794100	EL, 10μF, ±20%, 16V
CZ23	24814103	Chip, 0.01μF, +80%, -20%
CZ24	24814103	Chip, 0.01μF, +80%, -20%
CZ25	24794100	EL, 10μF, ±20%, 16V
CZ26	24814103	Chip, 0.01μF, +80%, -20%
CZ28	24814103	Chip, 0.01μF, +80%, -20%
CZ29	24814103	Chip, 0.01μF, +80%, -20%
CZ30	24794100	EL, 10μF, ±20%, 16V
CZ31	24092293	Chip, 0.1μF, +80%, -20%, 25V
CZ32	24781101	Chip, 100pF, SL
CZ33	24781270	Chip, 27pF, SL
CZ34	24781101	Chip, 100pF, SL
CZ35	24781270	Chip, 27pF, SL
CZ37	24814103	Chip, 0.01μF, +80%, -20%
CZ45	24781100	Chip, 10pF, ±0.5pF%, SL

RESISTORS

R101	24366101	CF, 100 ohm
R101	24553223	OMF, 22k ohm, 1W
R102	24366103	CF, 10k ohm
R204	24366104	CF, 100k ohm
R205	24366101	CF, 100 ohm
R206	24366471	CF, 470 ohm
R208	24366103	CF, 10k ohm
R209	24366103	CF, 10k ohm
R210	24366101	CF, 100 ohm
R211	24366101	CF, 100 ohm
R211	24366473	CF, 47k ohm
R212	24366101	CF, 100 ohm
R213	24366681	CF, 680 ohm
R214	24366681	CF, 680 ohm
R215	24366681	CF, 680 ohm
R216	24366103	CF, 10k ohm
R217	24366392	CF, 3900 ohm
R218	24366101	CF, 100 ohm
R219	24366101	CF, 100 ohm
R219	24366473	CF, 47k ohm
R220	24366101	CF, 100 ohm
R223	24366472	CF, 4700 ohm
R227	24366223	CF, 22k ohm
R229	24366472	CF, 4700 ohm
R231	24366222	CF, 2200 ohm
R235	24366222	CF, 2200 ohm
R236	24366101	CF, 100 ohm
R237	24366101	CF, 100 ohm
R238	24366562	CF, 5600 ohm
R260	24366222	CF, 2200 ohm
R261	24366681	CF, 680 ohm
R262	24366102	CF, 1k ohm
R263	24366102	CF, 1k ohm
R264	24366103	CF, 10k ohm
R265	24366392	CF, 3900 ohm
R266	24366332	CF, 3300 ohm
R267	24366101	CF, 100 ohm
R269	24366151	CF, 150 ohm
R270	24366102	CF, 1k ohm

Location No.	Part No.	Description
R271	24366472	CF, 4700 ohm
R271	24872103	Chip, 10k ohm, 1/16W
R272	24872103	Chip, 10k ohm, 1/16W
R303	24321109	MF, 1 ohm, 1/2W
R305	24339518	MF, 0.51 ohm, 2W
R306	24339518	MF, 0.51 ohm, 2W
R307	24366101	CF, 100 ohm
R310	24366511	CF, 510 ohm
R311	24366911	CF, 910 ohm
R312	24366153	CF, 15k ohm
R313	24552132	OMF, 1300 ohm, 1/2W (32ZD06B)
R313	24366132	CF, 1300 ohm (28ZD06B)
R314	24366102	CF, 1k ohm
R315	24366332	CF, 3300 ohm
R315	24366474	CF, 470k ohm
R316	24366394	CF, 390k ohm
R317	24366511	CF, 510 ohm
R318	24366101	CF, 100 ohm
R319	24366101	CF, 100 ohm
R320	24366155	CF, 1.5M ohm
R321	24552392	OMF, 3900 ohm, 1/2W
R322	24366102	CF, 1k ohm
R323	24366103	CF, 10k ohm
R324	24366681	CF, 680 ohm
R325	24366103	CF, 10k ohm
R326	24339109	MF, 1 ohm, 2W
R327	24339109	MF, 1 ohm, 2W
R328	24366102	CF, 1k ohm
R330	24366103	CF, 10k ohm
R331	24366104	CF, 100k ohm
R333	24552912	OMF, 9100 ohm, 1/2W
R335	24366103	CF, 10k ohm
R336	24383181	OMF, 180 ohm, 2W
R338	24003898	MF, 3300 ohm, 1/4W
R341	24366822	CF, 8200 ohm
R343	24366273	CF, 27k ohm
R353	24366471	CF, 470 ohm
R370	24366822	CF, 8200 ohm
R371	24366103	CF, 10k ohm
R373	24366103	CF, 10k ohm
R374	24366472	CF, 4700 ohm
R375	24552150	OMF, 15 ohm, 1/2W
R400	24946561	CC, 560 ohm, 1/2W
R402	24366102	CF, 1k ohm
R403	24366302	CF, 3k ohm
R405	24553682	OMF, 6800 ohm, 1W
R407	24366103	CF, 10k ohm
R411	24366180	CF, 18 ohm
R414	24531560	FR, 56 ohm, 1/2W
R415	24366101	CF, 100 ohm
R415	24553561	OMF, 560 ohm, 1W
R416	24381563	OMF, 56k ohm, 1/2W
R417	24510101	Cement, 100 ohm, 5W
R421	24366222	CF, 2200 ohm (28ZD06B)
R422	24366473	CF, 47k ohm (28ZD06B)
R424	24366152	CF, 1500 ohm
R425	24366182	CF, 1800 ohm
R426	24366751	CF, 750 ohm
R427	24366392	CF, 3900 ohm
R428	24366561	CF, 560 ohm
R429	24552560	OMF, 56 ohm, 1/2W
R431	24366103	CF, 10k ohm
R432	24366473	CF, 47k ohm

Location No.	Part No.	Description
R433	24366681	CF, 680 ohm
R434	24366472	CF, 4700 ohm
R435	24366184	CF, 180k ohm
R441	24383561	OMF, 560 ohm, 2W
R445	24321129	MF, 1.2 ohm, 1/2W
R460	24552332	OMF, 3300 ohm, 1/2W
R461	24381182	OMF, 1800 ohm, 1/2W
R462	24366333	CF, 33k ohm
R463	24323229	MF, 2.2 ohm, 2W
R464	24366273	CF, 27k ohm
R465	24366101	CF, 100 ohm
R466	24366272	CF, 2700 ohm
R467	24327224	MF, 220k ohm, ±1%, 1/4W
R469	24000211	FR, 15 ohm, 1/2W
R470	24339568	MF, 0.56 ohm, 2W
R471	24531271	FR, 270 ohm, 1/2W
R472	24366101	CF, 100 ohm
R473	24366183	CF, 18k ohm
R473	24366334	CF, 330k ohm
R474	24366183	(28ZD06B)
R474	24376393	CF, 39k ohm, 1/2W
R476	24366471	CF, 470 ohm
R477	24366102	CF, 1k ohm
R478	24381333	OMF, 33k ohm, 1/2W (32ZD06B)
R479	24531680	FR, 68 ohm, 1/2W
R480	24552222	OMF, 2200 ohm, 1/2W
R481	24366223	CF, 22k ohm
R482	24366183	CF, 18k ohm
R483	24366223	CF, 22k ohm
R487	24366474	CF, 470k ohm
R488	24366154	CF, 150k ohm
R489	24366102	CF, 1k ohm
R490	24366101	CF, 100 ohm
R491	24366101	CF, 100 ohm
R492	24366472	CF, 4700 ohm
R499	24366101	CF, 100 ohm
R501	24872682	Chip, 6800 ohm, 1/16W
R502	24366101	CF, 100 ohm
R502	24872272	Chip, 2700 ohm, 1/16W
R503	24366101	CF, 100 ohm
R504	24872101	Chip, 100 ohm, 1/16W
R505	24872101	Chip, 100 ohm, 1/16W
R506	24872273	Chip, 27k ohm, 1/16W
R507	24872392	Chip, 3900 ohm, 1/16W
R512	24872102	Chip, 1k ohm, 1/16W
R513	24366472	CF, 4700 ohm
R513	24872102	Chip, 1k ohm, 1/16W
R514	24366101	CF, 100 ohm
R514	24872102	Chip, 1k ohm, 1/16W
R515	24872102	Chip, 1k ohm, 1/16W
R516	24872102	Chip, 1k ohm, 1/16W
R517	24872102	Chip, 1k ohm, 1/16W
R518	24366102	CF, 1k ohm
R518	24366681	CF, 680 ohm
R519	24872472	Chip, 4700 ohm, 1/16W
R520	24872103	Chip, 10k ohm, 1/16W
R521	24872103	Chip, 10k ohm, 1/16W
R612	24366103	CF, 10k ohm
R613	24366224	CF, 220k ohm
R661	24552221	OMF, 220 ohm, 1/2W
R662	24366104	CF, 100k ohm
R662	24552221	OMF, 220 ohm, 1/2W
R670	24366392	CF, 3900 ohm

Location No.	Part No.	Description
R671	24366102	CF, 1k ohm
R671	24366822	CF, 8200 ohm
R672	24366102	CF, 1k ohm
R672	24366392	CF, 3900 ohm
R673	24366822	CF, 8200 ohm
R676	24366223	CF, 22k ohm
R676	24872223	Chip, 22k ohm, 1/16W
R677	24366223	CF, 22k ohm
R677	24872223	Chip, 22k ohm, 1/16W
R678	24366682	CF, 6800 ohm
R678	24872223	Chip, 22k ohm, 1/16W
R679	24366682	CF, 6800 ohm
R679	24872223	Chip, 22k ohm, 1/16W
R684	24366229	CF, 2.2 ohm
R685	24366229	CF, 2.2 ohm
R688	24366222	CF, 2200 ohm
R692	24872681	Chip, 680 ohm, 1/16W
R693	24872681	Chip, 680 ohm, 1/16W
R702	24552221	OMF, 220 ohm, 1/2W
R712	24366101	CF, 100 ohm
R715	24366223	CF, 22k ohm
R716	24366273	CF, 27k ohm
R717	24366183	CF, 18k ohm
R718	24366681	CF, 680 ohm
R722	24552471	OMF, 470 ohm, 1/2W
R723	24366101	CF, 100 ohm
R724	24366181	CF, 180 ohm (32ZD06B)
R724	24366820	CF, 82 ohm (28ZD06B)
R725	24366821	CF, 820 ohm
R730	24552100	OMF, 10 ohm, 1/2W
R731	24553331	OMF, 330 ohm, 1W
R732	24366220	CF, 22 ohm
R733	24366683	CF, 68k ohm
R734	24366220	CF, 22 ohm
R735	24366683	CF, 68k ohm
R736	24366470	CF, 47 ohm
R737	24366681	CF, 680 ohm
R738	24366102	CF, 1k ohm
R739	24366681	CF, 680 ohm
R740	24366470	CF, 47 ohm
R741	24366229	CF, 2.2 ohm
R742	24366229	CF, 2.2 ohm
R743	24554101	OMF, 100 ohm, 2W (32ZD06B)
R743	24554181	OMF, 180 ohm, 2W (28ZD06B)
R744	24366122	CF, 1200 ohm
R745	24366122	CF, 1200 ohm
⚠R801	24009954	Metal-Glazed Resistor, 2.2M ohm, 1/2W
R803	24383333	OMF, 33k ohm, 2W
R804	24366334	CF, 330k ohm
R805	24366681	CF, 680 ohm
R807	24366334	CF, 330k ohm
R808	24019484	PTC Thermistor, 4.5 ohm
R809	24366393	CF, 39k ohm
R810	24568159	Cement, 1.5 ohm, 7W
R814	24366682	CF, 6800 ohm
R815	24366332	CF, 3300 ohm
R818	24019460	MF, 0.1 ohm, 2W
R819	24310829	MF, 8.2 ohm, 1/2W
R821	24366101	CF, 100 ohm
R822	24552103	OMF, 10k ohm, 1/2W
R823	24552822	OMF, 8200 ohm, 1/2W

Location No.	Part No.	Description
R824	24569689	Cement, 6.8 ohm, 10W
R827	24366681	CF, 680 ohm
R828	24366821	CF, 820 ohm
R829	24321338	MF, 0.33 ohm, 1/2W
R831	24366471	CF, 470 ohm
R834	24366471	CF, 470 ohm
R835	24322229	MF, 2.2 ohm, 1W
R841	24531120	FR, 12 ohm, 1/2W
R842	24552392	OMF, 3900 ohm, 1/2W
R843	24366331	CF, 330 ohm
R846	24366101	CF, 100 ohm
R847	24366472	CF, 4700 ohm
R849	24366471	CF, 470 ohm
R850	24366103	CF, 10k ohm
R851	24366102	CF, 1k ohm
R852	24366225	CF, 2.2M ohm
R865	24366332	CF, 3300 ohm
R868	24366472	CF, 4700 ohm
⚠R899	24005015	Metal-Glazed Resistor, 8.2M ohm, 1W
R901	24376561	CF, 560 ohm, 1/2W
R902	24376561	CF, 560 ohm, 1/2W
R903	24376561	CF, 560 ohm, 1/2W
R904	24366472	CF, 4700 ohm
R905	24366150	CF, 15 ohm
R909	24366100	CF, 10 ohm
R914	24366471	CF, 470 ohm
R915	24366680	CF, 68 ohm
R916	24366270	CF, 27 ohm (32ZD06B)
R916	24366180	CF, 18 ohm (28ZD06B)
R917	24366471	CF, 470 ohm
R918	24366180	CF, 18 ohm
R920	24000880	FR, 5.1 ohm, 1W
R921	24366471	CF, 470 ohm
R922	24366680	CF, 68 ohm
R924	24366180	CF, 18 ohm
R925	24366471	CF, 470 ohm
R928	24366471	CF, 470 ohm
R929	24366680	CF, 68 ohm
R930	24366180	CF, 18 ohm
R932	24366332	CF, 3300 ohm
R933	24366750	CF, 75 ohm
R934	24366361	CF, 360 ohm
R935	24366102	CF, 1k ohm
R936	24366750	CF, 75 ohm
R937	24366471	CF, 470 ohm
R939	24366680	CF, 68 ohm
R942	24366392	CF, 3900 ohm
R943	24366392	CF, 3900 ohm
R944	24366392	CF, 3900 ohm
R945	24366270	CF, 27 ohm (32ZD06B)
R945	24366180	CF, 18 ohm (28ZD06B)
R946	24366270	CF, 27 ohm (32ZD06B)
R946	24366180	CF, 18 ohm (28ZD06B)
R960	24383153	OMF, 15k ohm, 2W
R961	24383153	OMF, 15k ohm, 2W
R962	24383153	OMF, 15k ohm, 2W
R963	24383153	OMF, 15k ohm, 2W
R964	24383153	OMF, 15k ohm, 2W
R965	24383153	OMF, 15k ohm, 2W
R966	24383153	OMF, 15k ohm, 2W
R967	24383153	OMF, 15k ohm, 2W
R968	24383153	OMF, 15k ohm, 2W
R969	24366101	CF, 100 ohm

Location No.	Part No.	Description
R970	24366101	CF, 100 ohm
R971	24366101	CF, 100 ohm
R977	24366561	CF, 560 ohm
R980	24366471	CF, 470 ohm
R981	24366471	CF, 470 ohm
R982	24366682	CF, 6800 ohm
R983	24366222	CF, 2200 ohm
R984	24366821	CF, 820 ohm
R985	24367471	CF, 470 ohm, ±2%
R986	24367681	CF, 680 ohm, ±2%
R987	24367681	CF, 680 ohm, ±2%
R988	24367472	CF, 4700 ohm, ±2%
R989	24367472	CF, 4700 ohm, ±2%
R990	24366561	CF, 560 ohm
R991	24367391	CF, 390 ohm, ±2%
R992	24366150	CF, 15 ohm
R4222	24366472	CF, 4700 ohm
R4223	24366103	CF, 10k ohm
R4224	24366272	CF, 2700 ohm
R4225	24366102	CF, 1k ohm
R4310	24366183	CF, 18k ohm
R4403	24366101	CF, 100 ohm
R4404	24366101	CF, 100 ohm
R4406	24366752	CF, 7500 ohm
R4407	24366361	CF, 360 ohm
R4410	24366103	CF, 10k ohm
R4411	24366103	CF, 10k ohm
R4416	24366101	CF, 100 ohm
R4417	24366101	CF, 100 ohm
R4418	24366102	CF, 1k ohm
R4419	24366103	CF, 10k ohm
R4425	24552471	OMF, 470 ohm, 1/2W
R4426	24366152	CF, 1500 ohm
R4461	24366102	CF, 1k ohm
R4462	24366133	CF, 13k ohm
R4463	24366682	CF, 6800 ohm
R4464	24366223	CF, 22k ohm
R4472	24366103	CF, 10k ohm
R4490	24382222	OMF, 2200 ohm, 1W
R4491	24366392	CF, 3900 ohm
R4492	24366103	CF, 10k ohm
R4493	24382104	OMF, 100k ohm, 1W
R4495	24366473	CF, 47k ohm
R4799	24366103	CF, 10k ohm
RA01	24366102	CF, 1k ohm
RA03	24366102	CF, 1k ohm
RA04	24366102	CF, 1k ohm
RA05	24366102	CF, 1k ohm
RA07	24366102	CF, 1k ohm
RA08	24366102	CF, 1k ohm
RA09	24366682	CF, 6800 ohm
RA10	24366682	CF, 6800 ohm
RA11	24366331	CF, 330 ohm
RA12	24366331	CF, 330 ohm
RA13	24366153	CF, 15k ohm
RA16	24366102	CF, 1k ohm
RA17	24366102	CF, 1k ohm
RA18	24366102	CF, 1k ohm
RA19	24366331	CF, 330 ohm
RA20	24366331	CF, 330 ohm
RA21	24366331	CF, 330 ohm
RA22	24366331	CF, 330 ohm
RA23	24366472	CF, 4700 ohm
RA24	24366472	CF, 4700 ohm

Location No.	Part No.	Description
RA25	24366103	CF, 10k ohm
RA26	24366102	CF, 1k ohm
RA27	24366102	CF, 1k ohm
RA29	24366102	CF, 1k ohm
RA29	24366104	CF, 100k ohm
RA30	24366102	CF, 1k ohm
RA30	24366103	CF, 10k ohm
RA31	24366561	CF, 560 ohm
RA33	24366103	CF, 10k ohm
RA35	24366102	CF, 1k ohm
RA37	24366101	CF, 100 ohm
RA38	24366101	CF, 100 ohm
RA40	24366331	CF, 330 ohm
RA41	24366273	CF, 27k ohm
RA43	24366102	CF, 1k ohm
RA44	24366103	CF, 10k ohm
RA62	24366102	CF, 1k ohm
RA63	24366102	CF, 1k ohm
RA65	24366103	CF, 10k ohm
RA66	24366103	CF, 10k ohm
RA67	24366472	CF, 4700 ohm
RA70	24366333	CF, 33k ohm
RA71	24366683	CF, 68k ohm
RA72	24366223	CF, 22k ohm
RA73	24366103	CF, 10k ohm
RA75	24366333	CF, 33k ohm
RA76	24366103	CF, 10k ohm
RA77	24366223	CF, 22k ohm
RA78	24366102	CF, 1k ohm
RA78	24366683	CF, 68k ohm
RA85	24366102	CF, 1k ohm
RA89	24366152	CF, 1500 ohm
RB01	24366271	CF, 270 ohm
RB02	24366271	CF, 270 ohm
RB03	24366101	CF, 100 ohm
RB04	24366223	CF, 22k ohm
RB05	24366223	CF, 22k ohm
RB07	24366271	CF, 270 ohm
RB08	24366271	CF, 270 ohm
RB09	24366470	CF, 47 ohm
RB10	24366101	CF, 100 ohm
RB11	24366103	CF, 10k ohm
RB30	24366103	CF, 10k ohm
RB43	24366103	CF, 10k ohm
RB44	24366103	CF, 10k ohm
RB45	24366101	CF, 100 ohm
RB81	24366122	CF, 1200 ohm
RB82	24366123	CF, 12k ohm
RB83	24366123	CF, 12k ohm
RB84	24366562	CF, 5600 ohm
RB90	24366392	CF, 3900 ohm
RB91	24366473	CF, 47k ohm
RB92	24366271	CF, 270 ohm
RB93	24366271	CF, 270 ohm
RB94	24366222	CF, 2200 ohm
RB95	24366222	CF, 2200 ohm
RB96	24366273	CF, 27k ohm
RB97	24366273	CF, 27k ohm
RB98	24366102	CF, 1k ohm
RC01	24000824	Chip, Jumper, 2125 type
RC02	24000824	Chip, Jumper, 2125 type
RD08	24366102	CF, 1k ohm
RD16	24366333	CF, 33k ohm
RD28	24366102	CF, 1k ohm

Location No.	Part No.	Description
RF01	24872332	Chip, 3300 ohm, 1/16W
RF03	24872682	Chip, 6800 ohm, 1/16W
RF04	24872223	Chip, 22k ohm, 1/16W
RF06	24872102	Chip, 1k ohm, 1/16W
RF08	23103832	Chip (Ferrite Bead), TEM2125M
RF09	23103832	Chip (Ferrite Bead), TEM2125M
RF10	23103832	Chip (Ferrite Bead), TEM2125M
RF11	24872103	Chip, 10k ohm, 1/16W
RF12	24872101	Chip, 100 ohm, 1/16W
RF13	24872101	Chip, 100 ohm, 1/16W
RF14	24872101	Chip, 100 ohm, 1/16W
RF15	24872103	Chip, 10k ohm, 1/16W
RF16	24872471	Chip, 470 ohm, 1/16W
RF20	24872152	Chip, 1500 ohm, 1/16W
RF21	24000824	Chip, Jumper, 2125 type
RF22	24872102	Chip, 1k ohm, 1/16W
RF26	24872102	Chip, 1k ohm, 1/16W
RF32	24872101	Chip, 100 ohm, 1/16W
RF34	24872102	Chip, 1k ohm, 1/16W
RF39	24872472	Chip, 4700 ohm, 1/16W
RR01	24366102	CF, 1k ohm
RR02	24366104	CF, 100k ohm
RR03	24366222	CF, 2200 ohm
RR04	24366101	CF, 100 ohm
RR05	24366102	CF, 1k ohm
RR06	24366223	CF, 22k ohm
RR07	24366152	CF, 1500 ohm
RR10	24366102	CF, 1k ohm
RR11	24366681	CF, 680 ohm
RR12	24366152	CF, 1500 ohm
RR13	24366152	CF, 1500 ohm
RR15	24366391	CF, 390 ohm
RR16	24366391	CF, 390 ohm
RR17	24366391	CF, 390 ohm
RR18	24366102	CF, 1k ohm
RR20	24872103	Chip, 10k ohm, 1/16W
RR22	24366103	CF, 10k ohm
RR23	24366103	CF, 10k ohm
RR24	24000824	Chip, Jumper, 2125 type
RR25	24872102	Chip, 1k ohm, 1/16W
RR32	24366331	CF, 330 ohm
RR33	24366331	CF, 330 ohm
RR34	24366331	CF, 330 ohm
RR35	24366392	CF, 3900 ohm
RR36	24366392	CF, 3900 ohm
RR37	24366392	CF, 3900 ohm
RR40	24366102	CF, 1k ohm
RR48	24366102	CF, 1k ohm
RR74	24366102	CF, 1k ohm
RR75	24366102	CF, 1k ohm
RR76	24366102	CF, 1k ohm
RR77	24366102	CF, 1k ohm
RR78	24366102	CF, 1k ohm
RS01	24872681	Chip, 680 ohm, 1/16W
RS02	24872681	Chip, 680 ohm, 1/16W
RS03	24872562	Chip, 5600 ohm, 1/16W
RS04	24872562	Chip, 5600 ohm, 1/16W
RS05	24872562	Chip, 5600 ohm, 1/16W
RS06	24872562	Chip, 5600 ohm, 1/16W
RS07	24872562	Chip, 5600 ohm, 1/16W
RS08	24872562	Chip, 5600 ohm, 1/16W

Location No.	Part No.	Description
RS09	24872562	Chip, 5600 ohm, 1/16W
RS10	24872562	Chip, 5600 ohm, 1/16W
RS13	24872101	Chip, 100 ohm, 1/16W
RS14	24872101	Chip, 100 ohm, 1/16W
RS15	24872104	Chip, 100k ohm, 1/16W
RS16	24872104	Chip, 100k ohm, 1/16W
RS17	24872223	Chip, 22k ohm, 1/16W
RS18	24872223	Chip, 22k ohm, 1/16W
RS19	24872681	Chip, 680 ohm, 1/16W
RS20	24872681	Chip, 680 ohm, 1/16W
RS21	24872222	Chip, 2200 ohm, 1/16W
RS22	24872222	Chip, 2200 ohm, 1/16W
RS23	24872101	Chip, 100 ohm, 1/16W
RS24	24872101	Chip, 100 ohm, 1/16W
RS27	24872104	Chip, 100k ohm, 1/16W
RS28	24872104	Chip, 100k ohm, 1/16W
RS29	24872223	Chip, 22k ohm, 1/16W
RS30	24872223	Chip, 22k ohm, 1/16W
RS31	24872103	Chip, 10k ohm, 1/16W
RS32	24872104	Chip, 100k ohm, 1/16W
RS35	24872223	Chip, 22k ohm, 1/16W
RS36	24872223	Chip, 22k ohm, 1/16W
RS37	24872104	Chip, 100k ohm, 1/16W
RS38	24872104	Chip, 100k ohm, 1/16W
RS43	24872681	Chip, 680 ohm, 1/16W
RS44	24872681	Chip, 680 ohm, 1/16W
RV05	24872101	Chip, 100 ohm, 1/16W
RV06	24872152	Chip, 1500 ohm, 1/16W
RV07	24872103	Chip, 10k ohm, 1/16W
RV08	24872103	Chip, 10k ohm, 1/16W
RV09	24872101	Chip, 100 ohm, 1/16W
RV10	24872101	Chip, 100 ohm, 1/16W
RV12	24872681	Chip, 680 ohm, 1/16W
RV13	24872681	Chip, 680 ohm, 1/16W
RV22	24366222	CF, 2200 ohm
RV23	24552101	OMF, 100 ohm, 1/2W
RV24	24366181	CF, 180 ohm
RV25	24872101	Chip, 100 ohm, 1/16W
RV26	24366181	CF, 180 ohm
RV27	24872750	Chip, 75 ohm, 1/16W
RV28	24872562	Chip, 5600 ohm, 1/16W
RV29	24872103	Chip, 10k ohm, 1/16W
RV30	24872750	Chip, 75 ohm, 1/16W
RV31	24872750	Chip, 75 ohm, 1/16W
RV32	24872750	Chip, 75 ohm, 1/16W
RV33	24872562	Chip, 5600 ohm, 1/16W
RV34	24872562	Chip, 5600 ohm, 1/16W
RV37	24872750	Chip, 75 ohm, 1/16W
RV60	24872102	Chip, 1k ohm, 1/16W
RV61	24552101	OMF, 100 ohm, 1/2W
RV62	24872101	Chip, 100 ohm, 1/16W
RV63	24366151	CF, 150 ohm
RV64	24872750	Chip, 75 ohm, 1/16W
RV65	24552101	OMF, 100 ohm, 1/2W
RV66	24872750	Chip, 75 ohm, 1/16W
RV67	24366151	CF, 150 ohm
RV68	24872101	Chip, 100 ohm, 1/16W
RV70	24872101	Chip, 100 ohm, 1/16W
RV71	24872472	Chip, 4700 ohm, 1/16W
RV80	24366681	CF, 680 ohm
RV81	24872750	Chip, 75 ohm, 1/16W
RV82	24872101	Chip, 100 ohm, 1/16W
RV83	24366681	CF, 680 ohm
RV85	24872750	Chip, 75 ohm, 1/16W

Location No.	Part No.	Description
RV86	24872750	Chip, 75 ohm, 1/16W
RV87	24872750	Chip, 75 ohm, 1/16W
RV89	24872750	Chip, 75 ohm, 1/16W
RV90	24872681	Chip, 680 ohm, 1/16W
RV91	24872681	Chip, 680 ohm, 1/16W
RV95	24872750	Chip, 75 ohm, 1/16W
RV96	24872750	Chip, 75 ohm, 1/16W
RV97	24872750	Chip, 75 ohm, 1/16W
RX101	24872393	Chip, 39k ohm, 1/16W
RX102	24872153	Chip, 15k ohm, 1/16W
RX103	24872221	Chip, 220 ohm, 1/16W
RX104	24872392	Chip, 3900 ohm, 1/16W
RX106	24872331	Chip, 330 ohm, 1/16W
RX107	24872821	Chip, 820 ohm, 1/16W
RX108	24872680	Chip, 68 ohm, 1/16W
RX109	24872122	Chip, 1200 ohm, 1/16W
RX110	24872122	Chip, 1200 ohm, 1/16W
RX111	24872681	Chip, 680 ohm, 1/16W
RX112	24872470	Chip, 47 ohm, 1/16W
RX113	24872471	Chip, 470 ohm, 1/16W
RX114	24872681	Chip, 680 ohm, 1/16W
RX115	24872101	Chip, 100 ohm, 1/16W
RX116	24872681	Chip, 680 ohm, 1/16W
RX117	24872201	Chip, 200 ohm, 1/16W
RX118	24872221	Chip, 220 ohm, 1/16W
RX119	24872101	Chip, 100 ohm, 1/16W
RX120	24872101	Chip, 100 ohm, 1/16W
RX121	24872101	Chip, 100 ohm, 1/16W
RX122	24872122	Chip, 1200 ohm, 1/16W
RX123	24872331	Chip, 330 ohm, 1/16W
RX124	24872101	Chip, 100 ohm, 1/16W
RX125	24872101	Chip, 100 ohm, 1/16W
RX130	24872561	Chip, 560 ohm, 1/16W
RX131	24872102	Chip, 1k ohm, 1/16W
RX141	24872101	Chip, 100 ohm, 1/16W
RX143	24872393	Chip, 39k ohm, 1/16W
RX144	24872153	Chip, 15k ohm, 1/16W
RX145	24872201	Chip, 200 ohm, 1/16W
RX146	24872221	Chip, 220 ohm, 1/16W
RX147	24872681	Chip, 680 ohm, 1/16W
RX150	24872101	Chip, 100 ohm, 1/16W
RX152	24872331	Chip, 330 ohm, 1/16W
RX155	24872102	Chip, 1k ohm, 1/16W
RX156	24872272	Chip, 2700 ohm, 1/16W
RX157	24872471	Chip, 470 ohm, 1/16W
RX158	24872471	Chip, 470 ohm, 1/16W
RX161	24872101	Chip, 100 ohm, 1/16W
RX163	24872393	Chip, 39k ohm, 1/16W
RX164	24872153	Chip, 15k ohm, 1/16W
RX165	24872201	Chip, 200 ohm, 1/16W
RX166	24872221	Chip, 220 ohm, 1/16W
RX167	24872681	Chip, 680 ohm, 1/16W
RX170	24872101	Chip, 100 ohm, 1/16W
RX172	24872331	Chip, 330 ohm, 1/16W
RX175	24872102	Chip, 1k ohm, 1/16W
RX176	24872272	Chip, 2700 ohm, 1/16W
RX177	24872471	Chip, 470 ohm, 1/16W
RX178	24872471	Chip, 470 ohm, 1/16W
RX179	24872101	Chip, 100 ohm, 1/16W
RX180	24872101	Chip, 100 ohm, 1/16W
RX181	24872680	Chip, 68 ohm, 1/16W
RX185	24872470	Chip, 47 ohm, 1/16W
RX186	24872101	Chip, 100 ohm, 1/16W
RX191	24872100	Chip, 10 ohm, 1/16W

Location No.	Part No.	Description
RX192	24872100	Chip, 10 ohm, 1/16W
RX193	24872100	Chip, 10 ohm, 1/16W
RX201	24872102	Chip, 1k ohm, 1/16W
RX202	24872103	Chip, 10k ohm, 1/16W
RX203	24872103	Chip, 10k ohm, 1/16W
RX204	24000824	Chip, Jumper, 2125 type
RX205	24019439	Chip, 47 ohm, 1/16W
RX206	24019439	Chip, 47 ohm, 1/16W
RX207	24019439	Chip, 47 ohm, 1/16W
RX208	24019439	Chip, 47 ohm, 1/16W
RX209	24019439	Chip, 47 ohm, 1/16W
RX210	24019439	Chip, 47 ohm, 1/16W
RX211	24019439	Chip, 47 ohm, 1/16W
RX212	24019439	Chip, 47 ohm, 1/16W
RX214	24872103	Chip, 10k ohm, 1/16W
RX216	24872102	Chip, 1k ohm, 1/16W
RX221	24872470	Chip, 47 ohm, 1/16W
RX222	24872470	Chip, 47 ohm, 1/16W
RX223	24872470	Chip, 47 ohm, 1/16W
RX225	24872151	Chip, 150 ohm, 1/16W
RX226	24872331	Chip, 330 ohm, 1/16W
RX229	24872332	Chip, 3300 ohm, 1/16W
RX231	24872470	Chip, 47 ohm, 1/16W
RX232	24872470	Chip, 47 ohm, 1/16W
RX233	24872470	Chip, 47 ohm, 1/16W
RX235	24872274	Chip, 270k ohm, 1/16W
RX236	24872472	Chip, 4700 ohm, 1/16W
RX237	24872221	Chip, 220 ohm, 1/16W
RX240	24872272	Chip, 2700 ohm, 1/16W
RX256	24000824	Chip, Jumper, 2125 type
RX258	24872470	Chip, 47 ohm, 1/16W
RX259	24872470	Chip, 47 ohm, 1/16W
RX261	24872101	Chip, 100 ohm, 1/16W
RX263	24872101	Chip, 100 ohm, 1/16W
RX274	24872221	Chip, 220 ohm, 1/16W
RX275	24872221	Chip, 220 ohm, 1/16W
RX276	24872221	Chip, 220 ohm, 1/16W
RX277	24872221	Chip, 220 ohm, 1/16W
RX278	24872221	Chip, 220 ohm, 1/16W
RX279	24872471	Chip, 470 ohm, 1/16W
RX280	24872471	Chip, 470 ohm, 1/16W
RX281	24019439	Chip, 47 ohm, 1/16W
RX282	24019439	Chip, 47 ohm, 1/16W
RX283	24019439	Chip, 47 ohm, 1/16W
RX284	24019439	Chip, 47 ohm, 1/16W
RX285	24872332	Chip, 3300 ohm, 1/16W
RX286	24872332	Chip, 3300 ohm, 1/16W
RX291	24872101	Chip, 100 ohm, 1/16W
RX292	24872101	Chip, 100 ohm, 1/16W
RX293	24872332	Chip, 3300 ohm, 1/16W
RX301	24872201	Chip, 200 ohm, 1/16W
RX302	24872272	Chip, 2700 ohm, 1/16W
RX303	24872201	Chip, 200 ohm, 1/16W
RX304	24872272	Chip, 2700 ohm, 1/16W
RX305	24872201	Chip, 200 ohm, 1/16W
RX306	24872272	Chip, 2700 ohm, 1/16W
RX307	24872222	Chip, 2200 ohm, 1/16W
RX308	24872112	Chip, 1.1k ohm, 1/16W
RX309	24872122	Chip, 1200 ohm, 1/16W
RX310	24872122	Chip, 1200 ohm, 1/16W
RX311	24872122	Chip, 1200 ohm, 1/16W
RX312	24872101	Chip, 100 ohm, 1/16W
RX313	24872152	Chip, 1500 ohm, 1/16W
RX314	24872101	Chip, 100 ohm, 1/16W

Location No.	Part No.	Description
RX315	24872101	Chip, 100 ohm, 1/16W
RX316	24872101	Chip, 100 ohm, 1/16W
RX321	24872223	Chip, 22k ohm, 1/16W
RX322	24872223	Chip, 22k ohm, 1/16W
RX325	24872101	Chip, 100 ohm, 1/16W
RX330	24872821	Chip, 820 ohm, 1/16W
RX331	24872151	Chip, 150 ohm, 1/16W
RX332	24872821	Chip, 820 ohm, 1/16W
RX334	24872561	Chip, 560 ohm, 1/16W
RX341	24872223	Chip, 22k ohm, 1/16W
RX342	24872223	Chip, 22k ohm, 1/16W
RX345	24872101	Chip, 100 ohm, 1/16W
RX350	24872821	Chip, 820 ohm, 1/16W
RX351	24872121	Chip, 120 ohm, 1/16W
RX352	24872681	Chip, 680 ohm, 1/16W
RX354	24872561	Chip, 560 ohm, 1/16W
RX361	24872223	Chip, 22k ohm, 1/16W
RX362	24872223	Chip, 22k ohm, 1/16W
RX365	24872101	Chip, 100 ohm, 1/16W
RX370	24872821	Chip, 820 ohm, 1/16W
RX371	24872121	Chip, 120 ohm, 1/16W
RX372	24872681	Chip, 680 ohm, 1/16W
RX374	24872561	Chip, 560 ohm, 1/16W
RX402	24872101	Chip, 100 ohm, 1/16W
RX404	24872101	Chip, 100 ohm, 1/16W
RX406	24872101	Chip, 100 ohm, 1/16W
RX408	24872101	Chip, 100 ohm, 1/16W
RX410	24872101	Chip, 100 ohm, 1/16W
RX412	24872101	Chip, 100 ohm, 1/16W
RX421	24872221	Chip, 220 ohm, 1/16W
RX422	24872221	Chip, 220 ohm, 1/16W
RX423	24872221	Chip, 220 ohm, 1/16W
RX424	24872221	Chip, 220 ohm, 1/16W
RX425	24872221	Chip, 220 ohm, 1/16W
RX427	24872221	Chip, 220 ohm, 1/16W
RX428	24872221	Chip, 220 ohm, 1/16W
RX429	24872221	Chip, 220 ohm, 1/16W
RX430	24872221	Chip, 220 ohm, 1/16W
RX431	24322478	MF, 0.47 ohm, 1W
RZ01	24872102	Chip, 1k ohm, 1/16W
RZ02	24872102	Chip, 1k ohm, 1/16W
RZ03	24872332	Chip, 3300 ohm, 1/16W
RZ04	24872102	Chip, 1k ohm, 1/16W
RZ05	24872391	Chip, 390 ohm, 1/16W
RZ06	24872821	Chip, 820 ohm, 1/16W
RZ08	24872391	Chip, 390 ohm, 1/16W
RZ09	24872101	Chip, 100 ohm, 1/16W
RZ13	24872102	Chip, 1k ohm, 1/16W
RZ14	24872102	Chip, 1k ohm, 1/16W
RZ15	24872102	Chip, 1k ohm, 1/16W
RZ17	24872391	Chip, 390 ohm, 1/16W
RZ18	24872391	Chip, 390 ohm, 1/16W
RZ20	24872101	Chip, 100 ohm, 1/16W
RZ29	24872101	Chip, 100 ohm, 1/16W
RZ30	24872101	Chip, 100 ohm, 1/16W

COILS & TRANSFORMERS

L101	23221803	Coil, Choke, TLN3040D
L201	23289840	Coil, Peaking, TRF4100AT
L301	23103859	Coil (Ferrite Bead), TEM2011
L302	23289846	Coil, Peaking, TRF4101AT
L400	23289840	Coil, Peaking, TRF4100AT
L400	23289846	Coil, Peaking, TRF4101AT
L410	23103859	Coil (Ferrite Bead), TEM2011
L441	23233983	Coil, Linearity, TLN2199AG
L442	23248216	Coil, Choke, TLN3459AH (32ZD06B)
L442	23248164	Coil, Choke, TLN3437AD (28ZD06B)
L443	23248246	Coil, Choke, TLN3498AH (32ZD06B)
L443	23248199	Coil, Choke, TLN3467AD (28ZD06B)
L449	23103859	Coil (Ferrite Bead), TEM2011
L461	23248183	Coil, Choke, TLN3343AD
L470	23103859	Coil (Ferrite Bead), TEM2011
L491	23211923	Coil, Choke, AT4043/100
L501	23238714	Coil, Peaking, TRF4100AJ
L501	23289840	Coil, Peaking, TRF4100AT
L503	23289840	Coil, Peaking, TRF4100AT
L503	23289844	Coil, Peaking, TRF4470AT
L510	23103852	Coil, Filter, TEM2028AH
L511	23103852	Coil, Filter, TEM2028AH
L512	23103898	Coil, Filter, TEM2030AH
L513	23103898	Coil, Filter, TEM2030AH
L513	23103898	Coil, Filter, TEM2030AH
L515	23103898	Coil, Filter, TEM2030AH
L676	23103832	Chip (Ferrite Bead), TEM2125M
L677	23103832	Chip (Ferrite Bead), TEM2125M
L682	23103832	Chip (Ferrite Bead), TEM2125M
L683	23103832	Chip (Ferrite Bead), TEM2125M
L684	23289834	Coil, Peaking, TRF41R0AT
L685	23289834	Coil, Peaking, TRF41R0AT
L701	23289840	Coil, Peaking, TRF4100AT
L702	23261974	Coil, Choke, HC5-035
L704	23103859	Coil (Ferrite Bead), TEM2011
L705	23103859	Coil (Ferrite Bead), TEM2011
L801	23217469	Transformer, Choke, TPW2024AS
L811	23103859	Coil (Ferrite Bead), TEM2011
L876	23280016	Coil, Peaking, TRF4100AZ
L883	23221747	Coil, Choke, TRF9253D
L885	23248073	Coil, Choke, TLN3299D
L886	23103775	Coil (Ferrite Bead), TEM2014
L889	23280016	Coil, Peaking, TRF4100AZ
L891	23103859	Coil (Ferrite Bead), TEM2011
L892	23103859	Coil (Ferrite Bead), TEM2011
L893	23280016	Coil, Peaking, TRF4100AZ
L894	23289840	Coil, Peaking, TRF4100AT
L895	23222694	Coil, Width, TLN2026
L896	23103859	Coil (Ferrite Bead), TEM2011
L897	23222694	Coil, Width, TLN2026
⚠ L901	23200404	Coil, Degaussing, TSB-2395AM (32ZD06B)
⚠ L901	23200408	Coil, Degaussing, TSB-2397AM (28ZD06B)
L902	23289846	Coil, Peaking, TRF4101AT
L903	23289846	Coil, Peaking, TRF4101AT
L904	23289846	Coil, Peaking, TRF4101AT
L905	23289841	Coil, Peaking, TRF4150AT
L906	23289841	Coil, Peaking, TRF4150AT
L907	23289841	Coil, Peaking, TRF4150AT
L908	23289840	Coil, Peaking, TRF4100AT
L910	23289834	Coil, Peaking, TRF41R0AT

Location No.	Part No.	Description
LA01	23289840	Coil, Peaking, TRF4100AT
LC30	23103775	Coil (Ferrite Bead), TEM2014
LC31	23103775	Coil (Ferrite Bead), TEM2014
LC43	23103775	Coil (Ferrite Bead), TEM2014
LC44	23103775	Coil (Ferrite Bead), TEM2014
LC45	23289834	Coil, Peaking, TRF41R0AT
LF01	23103775	Coil (Ferrite Bead), TEM2014
LF06	23238562	Coil, Peaking, TRF4109AJ
LF07	23238562	Coil, Peaking, TRF4109AJ
LF08	23238714	Coil, Peaking, TRF4100AJ
LF09	23238714	Coil, Peaking, TRF4100AJ
LF10	23238562	Coil, Peaking, TRF4109AJ
LF11	23289834	Coil, Peaking, TRF41R0AT
LF12	23289840	Coil, Peaking, TRF4100AT
LF13	23289840	Coil, Peaking, TRF4100AT
LF17	23289840	Coil, Peaking, TRF4100AT
LR01	23289834	Coil, Peaking, TRF41R0AT
LR02	23289834	Coil, Peaking, TRF41R0AT
LR26	23103898	Coil, Filter, TEM2030AH
LS45	23103832	Chip (Ferrite Bead), TEM2125M
LS46	23103832	Chip (Ferrite Bead), TEM2125M
LV01	23103852	Coil, Filter, TEM2028AH
LV02	23103898	Coil, Filter, TEM2030AH
LV03	23103852	Coil, Filter, TEM2028AH
LV06	23103832	Chip (Ferrite Bead), TEM2125M
LV07	23103832	Chip (Ferrite Bead), TEM2125M
LV09	23289840	Coil, Peaking, TRF4100AT
LV10	23103852	Coil, Filter, TEM2028AH
LV11	23103852	Coil, Filter, TEM2028AH
LV20	23103898	Coil, Filter, TEM2030AH
LV42	23289840	Coil, Peaking, TRF4100AT
LV43	23289840	Coil, Peaking, TRF4100AT
LV49	23103852	Coil, Filter, TEM2028AH
LX101	23103822	Chip (Ferrite Bead), TEM2117T
LX104	23245827	Chip, Inductor, TRF45R6CB
LX105	23103822	Chip (Ferrite Bead), TEM2117T
LX106	23103822	Chip (Ferrite Bead), TEM2117T
LX107	23103822	Chip (Ferrite Bead), TEM2117T
LX110	23103822	Chip (Ferrite Bead), TEM2117T
LX143	23245835	Chip, Inductor, TRF4270CB
LX144	23103822	Chip (Ferrite Bead), TEM2117T
LX145	23103822	Chip (Ferrite Bead), TEM2117T
LX150	23103822	Chip (Ferrite Bead), TEM2117T
LX152	23103822	Chip (Ferrite Bead), TEM2117T
LX153	23103822	Chip (Ferrite Bead), TEM2117T
LX163	23245835	Chip, Inductor, TRF4270CB
LX201	23103886	Chip (Ferrite Bead), TEM2129AM
LX221	23103822	Chip (Ferrite Bead), TEM2117T
LX222	23103822	Chip (Ferrite Bead), TEM2117T
LX223	23103822	Chip (Ferrite Bead), TEM2117T
LX226	23103822	Chip (Ferrite Bead), TEM2117T
LX227	23103822	Chip (Ferrite Bead), TEM2117T
LX231	23103822	Chip (Ferrite Bead), TEM2117T
LX232	23103822	Chip (Ferrite Bead), TEM2117T
LX233	23103822	Chip (Ferrite Bead), TEM2117T
LX236	23103822	Chip (Ferrite Bead), TEM2117T
LX237	23103822	Chip (Ferrite Bead), TEM2117T
LX241	23103822	Chip (Ferrite Bead), TEM2117T
LX261	23103822	Chip (Ferrite Bead), TEM2117T

Location No.	Part No.	Description
LX271	23103822	Chip (Ferrite Bead), TEM2117T
LX301	23103822	Chip (Ferrite Bead), TEM2117T
LX321	23103822	Chip (Ferrite Bead), TEM2117T
LX322	23245825	Chip, Inductor, TRF43R9CB
LX342	23245826	Chip, Inductor, TRF44R7CB
LX362	23245826	Chip, Inductor, TRF44R7CB
LX401	23103886	Chip (Ferrite Bead), TEM2129AM
LX402	23103822	Chip (Ferrite Bead), TEM2117T
LX403	23103822	Chip (Ferrite Bead), TEM2117T
LX404	23103822	Chip (Ferrite Bead), TEM2117T
LX405	23103822	Chip (Ferrite Bead), TEM2117T
LX407	23103822	Chip (Ferrite Bead), TEM2117T
LX421	23238562	Coil, Peaking, TRF4109AJ
LX422	23238562	Coil, Peaking, TRF4109AJ
LX423	23238562	Coil, Peaking, TRF4109AJ
LX424	23238562	Coil, Peaking, TRF4109AJ
LX425	23238562	Coil, Peaking, TRF4109AJ
LX427	23238562	Coil, Peaking, TRF4109AJ
LX428	23238718	Coil, Peaking, TRF4479AJ
LX429	23238718	Coil, Peaking, TRF4479AJ
LX430	23238562	Coil, Peaking, TRF4109AJ
LX431	23103880	Coil (Ferrite Bead), TEM2011Y
LZ01	23238710	Coil, Peaking, TRF4220AJ
LZ02	23238714	Coil, Peaking, TRF4100AJ
LZ03	23238714	Coil, Peaking, TRF4100AJ
LZ04	23238708	Coil, Peaking, TRF4330AJ
LZ05	23238709	Coil, Peaking, TRF4270AJ
LZ06	23103852	Coil, Filter, TEM2028AH
LZ07	70131060	Baze Filter, ZBF253D-00
LZ08	23238707	Coil, Peaking, TRF4390AJ
LZ09	70131060	Baze Filter, ZBF253D-00
LZ10	70131060	Baze Filter, ZBF253D-00
⚠T400	23224364	Transformer, Focus, TLN2168AH
T401	23224371	Transformer, Horiz, Drive, TLN1080AH
⚠T461	23236625	Transformer, Flyback, TFB4162AD
T461B	23501175	Cable, Forcus (32ZD06B)
T461C	23501176	Cable, Forcus (32ZD06B)
T461D	23236447	ANODE4115B (32ZD06B)
T801	23211728	Line Filter, TRF3231AQ
T802	23211728	Line Filter, TRF3231AQ
⚠T863	23217434	Transformer, Converter, TPW3427AG

SEMICONDUCTORS

Q200	A6330059	Transistor, 2SC2482(C)
Q201	A6317440	Transistor, 2SC1815-Y
Q202	A6534040	Transistor, 2SA1015-Y
Q203	A6534040	Transistor, 2SA1015-Y
Q204	A6534040	Transistor, 2SA1015-Y
Q205	A6534040	Transistor, 2SA1015-Y
Q206	A6317440	Transistor, 2SC1815-Y
Q209	A6534040	Transistor, 2SA1015-Y
Q237	A6317440	Transistor, 2SC1815-Y
Q261	A6534040	Transistor, 2SA1015-Y
Q262	A6317440	Transistor, 2SC1815-Y
Q263	A6317440	Transistor, 2SC1815-Y
Q274	A6335470	Transistor, 2SC2712-Y
Q301	23905610	IC, LA7846N
Q301B	70391355	Screw, BITTB3X8 SZN
Q302	B01A0151	IC, TA1317N

Location No.	Part No.	Description
Q303	A6534040	Transistor, 2SA1015-Y
Q304	A6317440	Transistor, 2SC1815-Y
Q370	A6002020	Transistor, RN1202
Q370	A6534040	Transistor, 2SA1015-Y
Q371	A6002020	Transistor, RN1202
Q390	23905953	IC, MC7812BT
Q390B	70391355	Screw, BITTB3X8 SZN
Q391	23319247	IC, MC7912CT
Q391B	70391355	Screw, BITTB3X8 SZN
Q402	A6325413	Transistor, 2SC2235-O
Q404	A6374144	Transistor, 2CS5570
Q404B	A8012650	Spacer, AC263
Q404D	72471082	Screw, BRDT2W3X10 SZN
Q418	23314141	Transistor, 2SC3852
Q418B	70391355	Screw, BITTB3X8 SZN
Q420	23314141	Transistor, 2SC3852
Q420B	70391355	Screw, BITTB3X8 SZN
Q421	A6317440	Transistor, 2SC1815-Y
Q422	A6317440	Transistor, 2SC1815-Y (28ZD06B)
Q425	A6317440	Transistor, 2SC1815-Y
Q426	A6002060	Transistor, RN1206
Q427	A6002060	Transistor, RN1206
Q428	A6002060	Transistor, RN1206
Q430	23314141	Transistor, 2SC3852
Q430B	70391355	Screw, BITTB3X8 SZN
Q432	A6317440	Transistor, 2SC1815-Y
Q460	23314850	Transistor, 2SA1788, E
Q460B	72471082	Screw, BRDT2W3X10 SZN
Q461	A6317440	Transistor, 2SC1815-Y
Q462	A6317440	Transistor, 2SC1815-Y
Q470	A6317440	Transistor, 2SC1815-Y
Q470	A6547250	Transistor, 2SA1320
Q471	A6317440	Transistor, 2SC1815-Y
Q472	A6317440	Transistor, 2SC1815-Y
Q473	A6534040	Transistor, 2SA1015-Y
Q501	B01A2290	IC, TB1239BF(J)
Q504	A6541130	Transistor, 2SA1162-Y
Q505	A6541130	Transistor, 2SA1162-Y
Q506	A6317440	Transistor, 2SC1815-Y
Q507	A6361770	Transistor, 2SC3437-Y
Q510	B0386208	IC, TA1276AN
Q612	A6534040	Transistor, 2SA1015-Y
Q670	B0376856	IC, TA8211AH
Q670B	70391355	Screw, BITTB3X8 SZN
Q671	A6342200	Transistor, 2CS2878-A
Q672	A6342200	Transistor, 2CS2878-A
Q688	A6002040	Transistor, RN1204
Q705	A6317440	Transistor, 2SC1815-Y
Q706	A6317440	Transistor, 2SC1815-Y
Q707	A6734590	Transistor, 2SC752(G)TM-Y
Q709	A6317440	Transistor, 2SC1815-Y
Q710	A6534040	Transistor, 2SA1015-Y
Q711	23314911	Transistor, 2SB1569A E
Q711B	70391355	Screw, BITTB3X8 SZN
Q712	23314914	Transistor, 2SD2400A E
Q712B	70391355	Screw, BITTB3X8 SZN
Q719	A6317440	Transistor, 2SC1815-Y
Q801	23135008	IC, STR-F6668B
Q801B	72471082	Screw, BRDT2W3X10 SZN
Q802	23314141	Transistor, 2SC3852
Q802B	70391355	Screw, BITTB3X8 SZN
Q805	A6317440	Transistor, 2SC1815-Y
⚠ Q826	A8643108	Photo Coupler, TLP621(GR-LF

Location No.	Part No.	Description
Q827	23319693	IC, SE116N, LF4
Q830	23314141	Transistor, 2SC3852
Q830B	70391355	Screw, BITTB3X8 SZN
Q831	23314141	Transistor, 2SC3852
Q831B	70391355	Screw, BITTB3X8 SZN
Q833	23314141	Transistor, 2SC3852
Q833B	70391355	Screw, BITTB3X8 SZN
Q840	23318299	IC, L78MR05
Q840B	70391355	Screw, BITTB3X8 SZN
Q841	A6317440	Transistor, 2SC1815-Y
Q842	A6317440	Transistor, 2SC1815-Y
Q901	A6368700	Transistor, 2CS4544
Q901B	70391355	Screw, BITTB3X8 SZN
Q902	A6317440	Transistor, 2SC1815-Y
Q903	A6368700	Transistor, 2CS4544
Q903B	70391355	Screw, BITTB3X8 SZN
Q904	A6317440	Transistor, 2SC1815-Y
Q905	A6368700	Transistor, 2CS4544
Q905B	70391355	Screw, BITTB3X8 SZN
Q906	A6317440	Transistor, 2SC1815-Y
Q907	A6509140	Transistor, 2SA562TM-Y
Q908	A6321240	Transistor, 2SC2120-Y
Q910	A6317440	Transistor, 2SC1815-Y
Q911	A6317440	Transistor, 2SC1815-Y
Q912	A6534040	Transistor, 2SA1015-Y
Q913	A6534040	Transistor, 2SA1015-Y
Q914	A6317440	Transistor, 2SC1815-Y
Q4420	B01A0067	IC, TA1300AN
Q4462	A6317440	Transistor, 2SC1815-Y
Q4490	A8641063	Photo Coupler, TLP521-1
Q4491	23314917	Transistor, 2SK2003-01MR
Q4493	A6317440	Transistor, 2SC1815-Y
QA01	23000619	IC, CXP750010-139S
QA02	23906642	IC, AT24C64-10PC
QA05	A6734590	Transistor, 2SC752(G)TM-Y
QB01	A6534040	Transistor, 2SA1015-Y
QB03	A6002050	Transistor, RN1205
QB03	A6534040	Transistor, 2SA1015-Y
QB04	A6534040	Transistor, 2SA1015-Y
QB30	A6317440	Transistor, 2SC1815-Y
QB81	A6342200	Transistor, 2CS2878-A
QB82	A6342200	Transistor, 2CS2878-A
QB83	A6534040	Transistor, 2SA1015-Y
QB92	A6317440	Transistor, 2SC1815-Y
QB93	A6534040	Transistor, 2SA1015-Y
QB94	A6534040	Transistor, 2SA1015-Y
QB95	A6534040	Transistor, 2SA1015-Y
QB96	A6534040	Transistor, 2SA1015-Y
QF01	23000507	IC, SDA5275-3S
QF03	23314204	Transistor, 2SC2412K, Q
QF04	A6734590	Transistor, 2SC752(G)TM-Y
QF08	A6541130	Transistor, 2SA1162-Y
QF10	23000347	IC, MSM5116400D
QF11	23906367	IC, PST9146NL
QR01	23000123	IC, MB90096-192
QR03	23114530	Transistor, 2SA933S-Q
QR24	A6335470	Transistor, 2SC2712-Y
QS01	A6359870	Transistor, 2SC3326-B
QS02	A6359870	Transistor, 2SC3326-B
QS03	A6335470	Transistor, 2SC2712-Y
QS04	A6335470	Transistor, 2SC2712-Y
QS05	A6359870	Transistor, 2SC3326-B
QS06	A6359870	Transistor, 2SC3326-B
QS07	A6014040	Transistor, RN2404

Location No.	Part No.	Description
QS08	A6359870	Transistor, 2SC3326-B
QS09	A6359870	Transistor, 2SC3326-B
QV01	23000369	IC, MM1495XD
QV02	A6317440	Transistor, 2SC1815-Y
QV06	A6541130	Transistor, 2SA1162-Y
QV07	A6335470	Transistor, 2SC2712-Y
QV09	A6317440	Transistor, 2SC1815-Y
QV10	A6335470	Transistor, 2SC2712-Y
QV12	A6317440	Transistor, 2SC1815-Y
QV14	A6317440	Transistor, 2SC1815-Y
QX01	23906921	IC, TC90A61F
QX02	23000198	IC, EM636327Q-8
QX03	23905013	IC, TLC29321PW
QX04	23906951	IC, SN74AHCT1G32
QX05	23906951	IC, SN74AHCT1G32
QX07	23905939	IC, TLC2933IPW
QX08	23906951	IC, SN74AHCT1G32
QX09	23906951	IC, SN74AHCT1G32
QX11	23906318	IC, ADS932E
QX12	23906318	IC, ADS932E
QX15	23314345	Transistor, IMZ1 T108
QX16	23314345	Transistor, IMZ1 T108
QX17	23314345	Transistor, IMZ1 T108
QX18	23314345	Transistor, IMZ1 T108
QX19	A6541130	Transistor, 2SA1162-Y
QX20	A6030670	IC, TC7S66F
QX21	A6030630	IC, TC7S08F
QX22	23314345	Transistor, IMZ1 T108
QX24	23314345	Transistor, IMZ1 T108
QX25	23000197	IC, SN74AHC2G53H
QX26	A6541130	Transistor, 2SA1162-Y
QX27	A6030670	IC, TC7S66F
QX29	23314345	Transistor, IMZ1 T108
QX31	23314345	Transistor, IMZ1 T108
QX33	A6541130	Transistor, 2SA1162-Y
QX34	A6030670	IC, TC7S66F
QX35	23314345	Transistor, IMZ1 T108
QX37	A6335470	Transistor, 2SC2712-Y
QX38	A6335470	Transistor, 2SC2712-Y
QX39	A6335470	Transistor, 2SC2712-Y
QX41	A6335470	Transistor, 2SC2712-Y
QX42	A6335470	Transistor, 2SC2712-Y
QX44	A6335470	Transistor, 2SC2712-Y
QX45	A6335470	Transistor, 2SC2712-Y
QX47	A6335470	Transistor, 2SC2712-Y
QX48	A6335470	Transistor, 2SC2712-Y
QX49	23000095	IC, SN74AHC2G241
QX50	B0485484	IC, TC74HCT541AF
QX51	23906770	IC, BA033FP-E2
QX52	A6030695	IC, TC7SH32FU(BR
QX53	A6030695	IC, TC7SH32FU(BR
QX54	A6004010	Transistor, RN1401
QX55	B0370000	IC, TC78L05F
QX56	A6541130	Transistor, 2SA1162-Y
QX57	A6004010	Transistor, RN1401
QX58	A6004010	Transistor, RN1401
QZ01	B0410895	IC, TC90A49P
QZ02	A6335470	Transistor, 2SC2712-Y
QZ04	A6541130	Transistor, 2SA1162-Y
QZ05	A6541130	Transistor, 2SA1162-Y
QZ07	A6541130	Transistor, 2SA1162-Y
QZ08	A6335470	Transistor, 2SC2712-Y
D101	23316756	Diode, Zener, MTZJ33D
D201	23115599	Diode, 1N4148

Location No.	Part No.	Description
D240	23115599	Diode, 1N4148
D301	23118094	Diode, EU2A, LF-F10
D302	23118094	Diode, EU2A, LF-F10
D304	23118094	Diode, EU2A, LF-F10
D312	23115599	Diode, 1N4148
D313	23115599	Diode, 1N4148
D320	23115599	Diode, 1N4148
D336	23316672	Diode, Zener, MTZJ5.6B
D337	23316672	Diode, Zener, MTZJ5.6B
D370	23118479	Diode, BYD33J
D370	23316658	Diode, Zener, MTZJ3.6A
D371	23115599	Diode, 1N4148
D371	23118479	Diode, BYD33J
D373	23316690	Diode, Zener, MTZJ10B
D374	23115599	Diode, 1N4148
D404	23357043	Diode, FMQ-G5GS
D404B	72471082	Screw, BRDT2W3X10 SZN
D406	23118479	Diode, BYD33J
D415	23118094	Diode, EU2A, LF-F10
D418	23316749	Diode, Zener, MTZJ30A
D419	23316691	Diode, Zener, MTZJ10C
D420	23316715	Diode, Zener, MTZJ11A
D421	23316680	Diode, Zener, MTZJ7.5A
D422	23316726	Diode, Zener, MTZJ15C
D431	23316670	Diode, Zener, MTZJ5.1C
D432	23316670	Diode, Zener, MTZJ5.1C
D436	23115599	Diode, 1N4148
D441	23316687	Diode, Zener, MTZJ9.1B
D460	23118479	Diode, BYD33J
D461	23316803	Diode, FMU-G16S
D461B	70391355	Screw, BITTB3X8 SZN
D463	23115599	Diode, 1N4148
D464	23316718	Diode, Zener, MTZJ12A
D466	23316672	Diode, Zener, MTZJ5.6B
D467	23118479	Diode, BYD33J
D470	23316670	Diode, Zener, MTZJ5.1C
D474	23316719	Diode, Zener, MTZJ12B (32ZD06B)
D488	23115599	Diode, 1N4148
D490	23115599	Diode, 1N4148
D498	23316745	Diode, Zener, MTZJ27A
D499	23115599	Diode, 1N4148
D501	23115599	Diode, 1N4148
D506	23316673	Diode, Zener, MTZJ5.6C
D507	23357037	Diode, Zener, UDZSTE175.6B
D508	23357037	Diode, Zener, UDZSTE175.6B
D509	23357037	Diode, Zener, UDZSTE175.6B
D511	23357037	Diode, Zener, UDZSTE175.6B
D512	23357037	Diode, Zener, UDZSTE175.6B
D513	23357037	Diode, Zener, UDZSTE175.6B
D611	23115599	Diode, 1N4148
D612	23115599	Diode, 1N4148
D613	23115599	Diode, 1N4148
D614	23115599	Diode, 1N4148
D670	23115599	Diode, 1N4148
D671	23115599	Diode, 1N4148
D674	23115599	Diode, 1N4148
D675	23115599	Diode, 1N4148
D704	23115599	Diode, 1N4148
D705	23115599	Diode, 1N4148
D715	23115599	Diode, 1N4148
D721	23115599	Diode, 1N4148
D801	23357041	Diode, LN6SB60-F05
D804	23316725	Diode, Zener, MTZJ15B

Location No.	Part No.	Description
D805	23316553	Diode, 1SS145
D806	23118479	Diode, BYD33J
D810	23316738	Diode, Zener, MTZJ22B
D811	23115599	Diode, 1N4148
D815	23316746	Diode, Zener, MTZJ27B
D817	23115599	Diode, 1N4148
D818	23316738	Diode, Zener, MTZJ22B
D819	23316678	Diode, Zener, MTZJ6.8B
D828	23115599	Diode, 1N4148
D836	23316673	Diode, Zener, MTZJ5.6C
D842	23316724	Diode, Zener, MTZJ15A
D844	23316717	Diode, Zener, MTZJ11C
D848	23316675	Diode, Zener, MTZJ6.2B
D855	23115599	Diode, 1N4148
D871	23118479	Diode, BYD33J
D883	23316406	Diode, FML-G16S
D883B	70391355	Screw, BITTB3X8 SZN
D885	23118052	Diode, RU4Z LF-L1
D891	23357020	Diode, SF5S4
D891B	70391355	Screw, BITTB3X8 SZN
D892	23316184	Diode, FML-G12S
D892B	70391355	Screw, BITTB3X8 SZN
D893	23316673	Diode, Zener, MTZJ5.6C
D894	23316673	Diode, Zener, MTZJ5.6C
D896	23118479	Diode, BYD33J
D901	23115599	Diode, 1N4148
D904	23115599	Diode, 1N4148
D905	23115599	Diode, 1N4148
D906	23115599	Diode, 1N4148
D907	23115599	Diode, 1N4148
D908	23115599	Diode, 1N4148
D909	23115599	Diode, 1N4148
D911	23118479	Diode, BYD33J
D912	23115599	Diode, 1N4148
D4222	23316744	Diode, Zener, MTZJ24D
D4223	23115532	Diode, ERB12-01
D4410	23115599	Diode, 1N4148
D4411	23115599	Diode, 1N4148
D4412	23115599	Diode, 1N4148
DA02	23115599	Diode, 1N4148
DA03	23115599	Diode, 1N4148
DA42	23115599	Diode, 1N4148
DB01	23358505	Diode (LED), SLR56VC196F
DB02	23358503	Diode (LED), SCL003MC3FX
DB03	23358503	Diode (LED), SCL003MC3FX
DB04	23358515	Diode (LED), SCL003DC3FXG, Orange
DB30	23115599	Diode, 1N4148
DF01	23316654	Diode, Zener, MTZJ3.0A
DR01	23115599	Diode, 1N4148
DR02	23115599	Diode, 1N4148
DR02	23316557	Diode, HSM221C, TL
DR03	23115599	Diode, 1N4148
DR03	23118351	Diode, Zener, RD4.7M-T1BB2
DV14	23118296	Diode, Zener, RD9.1M-T1BB2
DV21	23115599	Diode, 1N4148

MISCELLANEOUS

B221	23037312	Screw, BTBW 3X12 SZN
B224	23037312	Screw, BTBW 3X12 SZN
BB10	23368627	Plug, 8P
BB10A	23903022	Socket, 8P
BB10B	23903022	Socket, 8P
BB11	23368627	Plug, 8P
BB11A	23903022	Socket, 8P
BB11B	23903022	Socket, 8P
BB12	23368627	Plug, 8P
BB12A	23903022	Socket, 8P
BB12B	23903022	Socket, 8P
BB14	23368627	Plug, 8P
BB14A	23903022	Socket, 8P
BB14B	23903022	Socket, 8P
BB15	23368627	Plug, 8P
BB15A	23903022	Socket, 8P
BB15B	23903022	Socket, 8P
BB16	23368627	Plug, 8P
BB16A	23903022	Socket, 8P
BB16B	23903022	Socket, 8P
⚠F470	23144503	Fuse, 1.25A, 250V
F470A	23165433	Holder, Fuse
⚠F801	23144508	Fuse, 4.0A, 250V
F801A	23165433	Holder, Fuse
⚠F802	23144506	Fuse, 2.5A, 250V
F802A	23165433	Holder, Fuse
F889	23144458	Fuse, 5.0A, 250V
F889A	23165433	Holder, Fuse
G299	24366103	CF, 10k ohm
G306	24366562	CF, 5600 ohm
G312	24366472	CF, 4700 ohm (32ZD06B)
G312	24366822	CF, 8200 ohm (28ZD06B)
G337	24366153	CF, 15k ohm (32ZD06B)
G401	23103859	Coil (Ferrite Bead), TEM2011
G402	23103859	Coil (Ferrite Bead), TEM2011
G403	23103859	Coil (Ferrite Bead), TEM2011
G404	23103859	Coil (Ferrite Bead), TEM2011
G430	23115532	Diode, ERB12-01E
G443	23115599	Diode, 1N4148
G465	23316672	Diode, Zener, MTZJ5.6B
G484	24591152	PF, 1500pF
G510	23289838	Coil, Peaking, TRF44R7AT
G527	24567104	PF, 0.1μF
G528	24567104	PF, 0.1μF
G529	24567104	PF, 0.1μF
G824	23222694	Coil, Choke, TLN2026
G911	23289846	Coil, Peaking, TRF4101AT
GC09	23261959	Coil, Choke, TRF9240
GC11	23261959	Coil, Choke, TRF9240
GJ02	24000824	Chip Jumper, 2125Type
GJ03	24000824	Chip Jumper, 2125Type
GJ07	24000824	Chip Jumper, 2125Type
GJ09	24000824	Chip Jumper, 2125Type
GJ10	24000824	Chip Jumper, 2125Type
GJ14	24000824	Chip Jumper, 2125Type
GJ15	24000824	Chip Jumper, 2125Type
GJ16	24000824	Chip Jumper, 2125Type
GJ17	24000824	Chip Jumper, 2125Type
GJ22	24000824	Chip Jumper, 2125Type
GJ23	24000824	Chip Jumper, 2125Type
GS01	24000824	Chip Jumper, 2125Type
GV03	23103832	Chip (Ferrite Bead), TEM2125M
GV04	23103832	Chip (Ferrite Bead), TEM2125M
GV05	24872101	Chip, 100 ohm, 1/16W
GV06	23103832	Chip (Ferrite Bead), TEM2125M
GV07	24000824	Chip Jumper, 2125Type
GV08	24000824	Chip Jumper, 2125Type

Location No.	Part No.	Description
GV11	24000824	Chip Jumper, 2125Type
GV35	24872101	Chip, 100 ohm, 1/16W
GV41	24872102	Chip, 1k ohm, 1/16W
H002	23148733	Module, MPSN11B, NICAM/IGR A-PRO A
KB01	23904946	Remote Sensor, RPM-676CBR-S
P402A	23902213	Socket, B-B, 10P
P402B	23368130	Plug, 10P
P403A	23902213	Socket, B-B, 10P
P403B	23368130	Plug, 10P
P501A	23902650	Socket, B-B, 13P
P501B	23367722	Plug, B-B,13P
P502A	23902655	Socket, B-B, 15P
P502B	23367724	Plug, B-B,15P
P512A	23902863	Socket, 20P
P512B	23368520	Plug, B-B, 20P
P513A	23902863	Socket, 20P
P513B	23368520	Plug, B-B, 20P
P661	23363607	Jack, Headphone
⚠P801	23372151	Power Cord
PF01	23902655	Socket, B-B, 15P
PF01A	23367724	Plug, B-B,15P
PH01	23902604	Socket, 21P
PH02	23902604	Socket, 21P
PH03	23902604	Socket, 21P
PV01	23365450	Jack, 0S5P
PX01A	23902655	Socket, B-B, 15P
PX01B	23367724	Plug, B-B,15P
PX02A	23902781	Socket, B-B, 12P
PX02B	23368531	Plug, B-B, 12P
⚠S801	23344416	Switch, Power
SA01	23145430	Switch, Push, 1C1P
SA02	23145430	Switch, Push, 1C1P
SA03	23145430	Switch, Push, 1C1P
SA04	23145430	Switch, Push, 1C1P
SA05	23145430	Switch, Push, 1C1P
SA06	23145430	Switch, Push, 1C1P
SR41	23146564	Relay, DC12V (28ZD06B)
⚠SR83	23146570	Relay, DC12V
⚠V901A	23903027	Socket, CRT, 8P
W661	23351143	Speaker, SPK-1400, 60X120mm, 8 ohm
W662	23351143	Speaker, SPK-1400, 60X120mm, 8 ohm
X4401	23153721	Ceramic Resonator, 503kHz, TCR1023
X501	23153438	Crystal, 16.200MHz
XA01	23153497	Crystal, 16.0 MHz
XF01	23153421	Crystal, 20.48MHz
Z420	23144539	Protector, PRF20005491, 125V, 2A
Z871	23144543	Protector, PRF50005491, 125V, 5A
Z890	23144543	Protector, PRF50005491, 125V, 5A
Z891	23144543	Protector, PRF50005491, 125V, 5A
Z894	23144539	Protector, PRF20005491, 125V, 2A
Z896	23144539	Protector, PRF20005491, 125V, 2A
Z897	23144536	Protector, PRF10005491, 125V, 1A
Z898	23144539	Protector, PRF20005491, 125V, 2A
ZX101	23103852	Filter, TEM2028AH
ZX201	23103823	Filter, TEM2027D
ZX202	23103823	Filter, TEM2027D
ZX321	23103823	Filter, TEM2027D
ZX341	23103823	Filter, TEM2027D
ZX361	23103823	Filter, TEM2027D
ZX401	23303181	Filter, TEM1012N
ZX402	23303181	Filter, TEM1012N

PC BOARD ASSEMBLIES

＊U102A	23784999	BACK-T(CH) Board, PB9509B-1
＊U103	23784878	D-COMB&MCD(CH) Board, PB9510A
＊U104A	23784365	EPG-TEXT(CH)VER.2 Board, PB9411B
＊U105	23784880	DFS(CH) VER.4 Board, PB9512A
＊U901	23784881	CRT Drive/DSM Board, PB9513A (32ZD06B)
＊U901	23785133	CRT Drive/DSM Board, PB9513C (28ZD06B)
＊U902	23708159	Signal/Blanking Board, PB9514C
＊U903	23785013	Power Board, PB9515C (32ZD06B)
＊U903	23785134	Power Board, PB9515E (28ZD06B)
＊U904	23784884	DEF Board, PB9516A (32ZD06B)
＊U904	23785135	DEF Board, PB9588A (28ZD06B)
＊U905	23784885	EW100HZ Board, PB9517A (32ZD06B)
＊U905	23785203	EW100HZ Board, PB9517B (28ZD06B)
＊U906A	23784997	CONT-1 Board, PB9518B-1
＊U906B	23784998	CONT-2 Board, PB9518B-2

PICTURE TUBE

⚠V901	23312874	Picture Tube, W76ERF031X04 (32ZD06B)
⚠V901	23312886	Picture Tube, W66ERF031X44 (28ZD06B)

TUNER

H001	23321345	Tuner, UF822BLW

ACCESSORIES

K902	23306365	Remote Hand Unit, CT-90042
AT03	23588265	Battery Cover
Y101	23563947	Owner's Manual, English, 32ZD06B/28ZD06B

CABINET PARTS

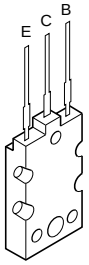
A201S	23540095	Front Cover (32ZD06B)
A201S	23540116	Front Cover (28ZD06B)
A214	23035412	Screw, BTB4X12SZN
A215	23035412	Screw, BTB4X12SZN
A231	23445395	Button, Power

Location No.	Part No.	Description
A236	23527127	Speaker Grille L/R (32ZD06B)
A236	23527129	Speaker Grille L/R (28ZD06B)
A238	23527130	Grille, Panel Center
A241	70368125	Push Catch for Door
A242	23427819	Door Proper R
A243	23427831	Door Proper L
⚠A401	23549286	Back Cover (32ZD06B)
⚠A401	23549340	Back Cover (28ZD06B)
A701	23525554	Case (32ZD06B)
A701	23064258	Carton (28ZD06B)
A702	23946038	Packing, Bottom (32ZD06B)
A702	23946063	Packing, Bottom (28ZD06B)
A703	23946037	Packing, Top (32ZD06B)
A703	23946064	Packing, Top (28ZD06B)

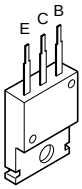
Location No.	Part No.	Description

TERMINAL VIEW OF TRANSISTORS

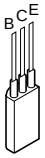
① 2SD2253
(old)
2SC5243
2SC5570



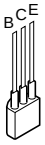
② 2SC3852
2SD1763A
2SC1569
2SC4544
2SA1788
2SA1306
2SA1186A



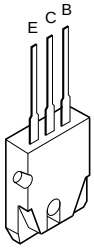
③ 2SC752GTM
2SC2482
2SC2655
2SC4721P



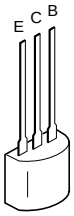
④ 2SC752
2SA562TM
2SA1015
2SC1815
2SC2878
2SC1740S
2SC2120
2SA9335



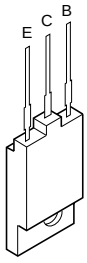
⑤ 2SA1788



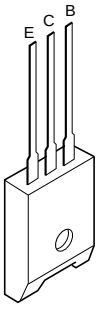
⑥ RN2203
RN2201
RN2004
RN1203
RN1204
RN2204
RN1205
RN1202
RN1201



⑦ 2SD1554
2SD2253
2SD1556
2SC5143
2SD2553



⑧ ON4409



SPECIFICATIONS (Representative: 32ZD06B)

Input Power Rating:	AC 220 ~ 240 Volts, 50 Hz
Aerial Input Impedance:	75 ohm unbalanced type for VHF, UHF and CATV
Receiving Channels:	**System** **Channel** **VHF** **UHF** **CATV** PAL I UK 21 ~ 69 PAL, SECAM 50 Hz/60 Hz (For Video Disk play back) 4.43 NTSC (For VCR playback), 3.58 NTSC (For VCR playback)
Intermediate Frequencies:	Picture I-F carrier frequency ..... 38.9 MHz (L VL) Sound I-F carrier frequency ..... 32.9 MHz
Picture Tube:	32 inches, 760 mm (measured on diagonal of viewable picture area) 106° deflection
Sound Output:	10 W + 10 W (at 10% Distortion, Main)
Speakers:	60 mm × 120 mm oval, 2 pcs (Main)
Aux. Terminals:	21 pin socket (FULL), 21 pin socket (S-VIDEO/AV), MONITOR OUTPUT, STEREO HEADPHONE JACK (3.5mm). DVD Terminal
Cabinet:	Table type
Dimensions:	Height ..... 574 mm Width ..... 918 mm Depth ..... 560 mm
Mass:	60.0 kg

* Please refer to owner's manual in detail.

TOSHIBA

FILE NO. 030-200005

SERVICE MANUAL

COLOUR TELEVISION

C00S Chassis

32ZD06B, 28ZD06B

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN

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SCHEMATIC DIAGRAM

MODEL : 32ZD06B / 28ZD06B

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

NOTE:

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
    Electolytic capacitor  Mylar capacitor
3. The parts indicated with " ⚠ " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 220 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

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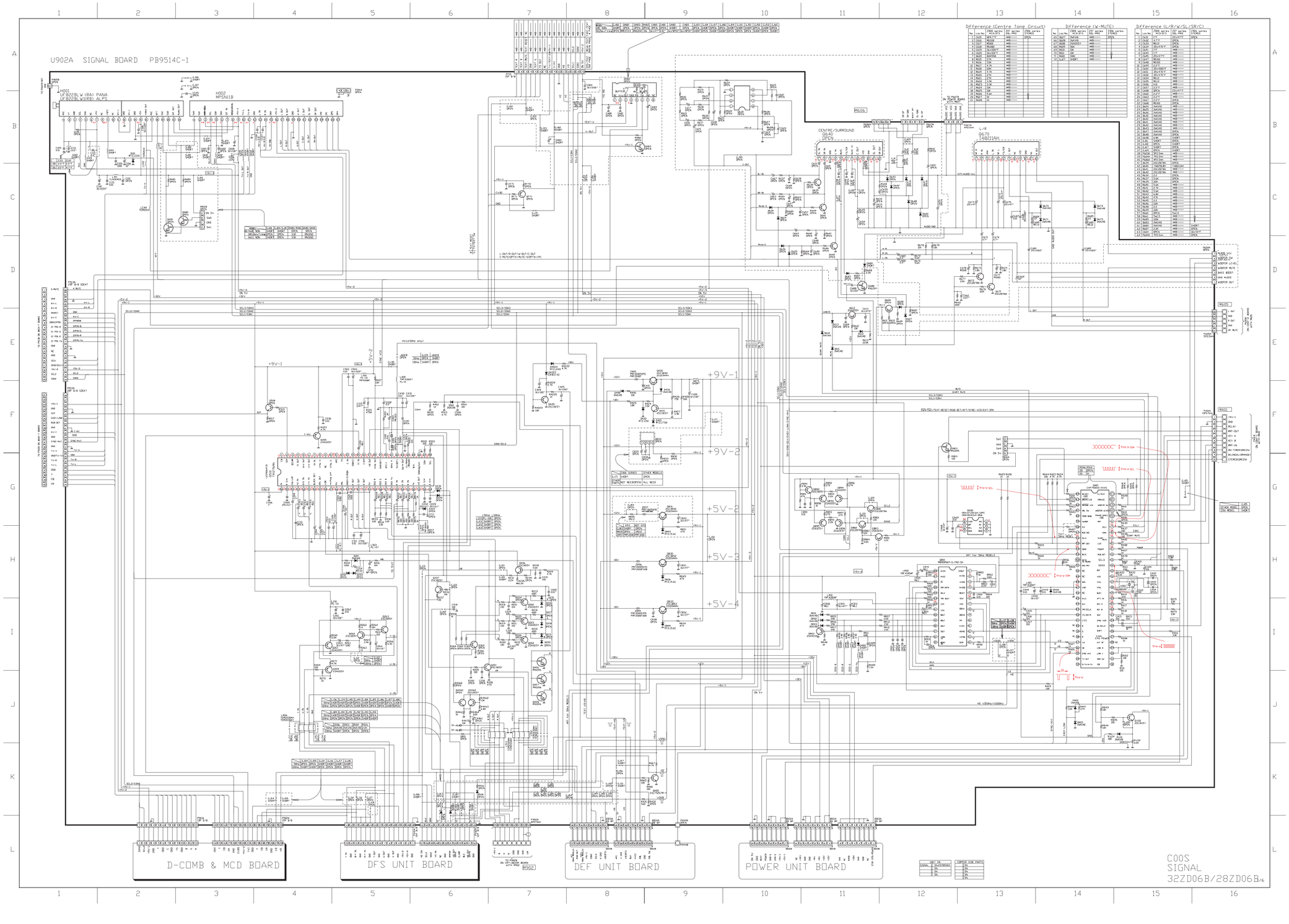
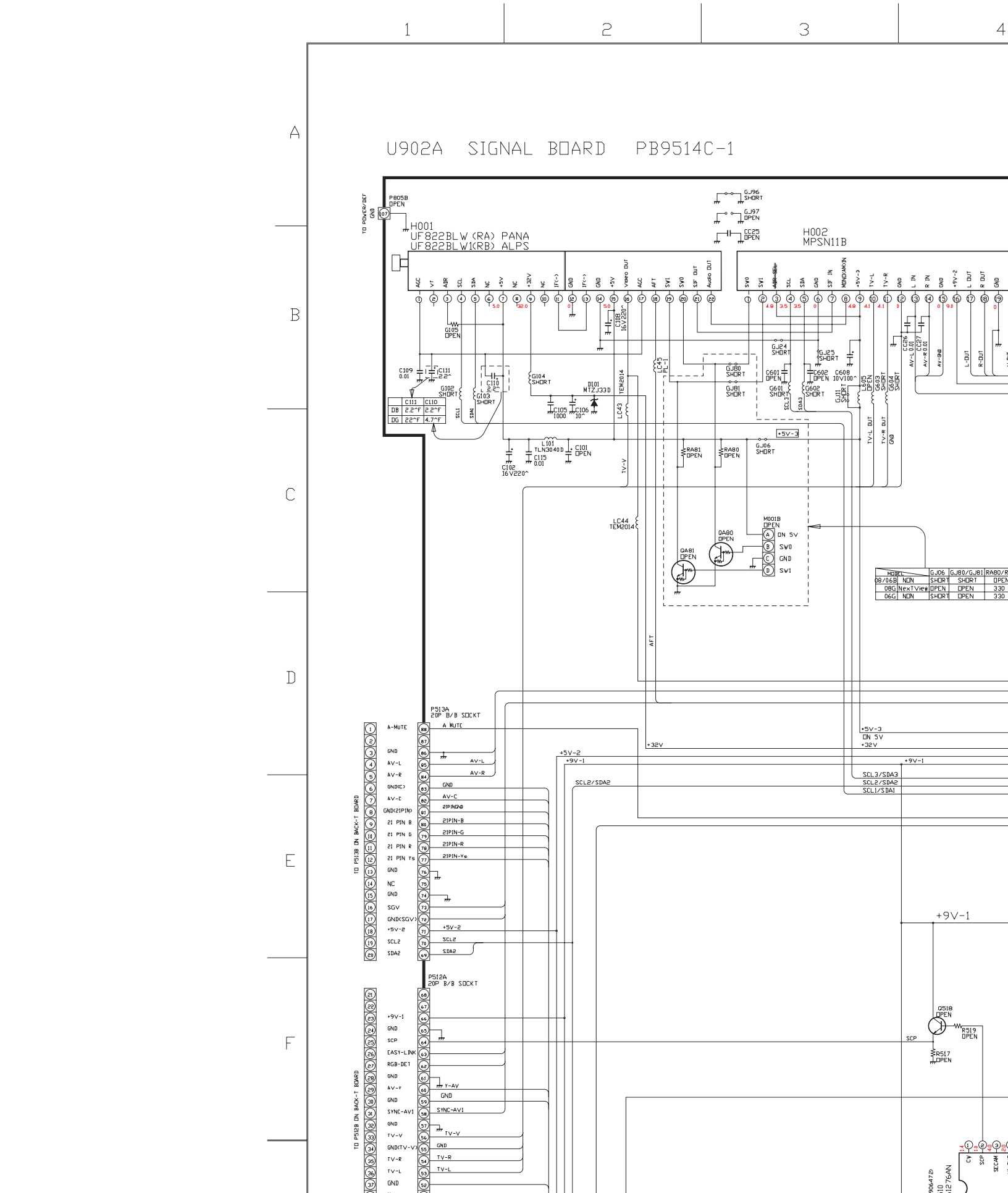
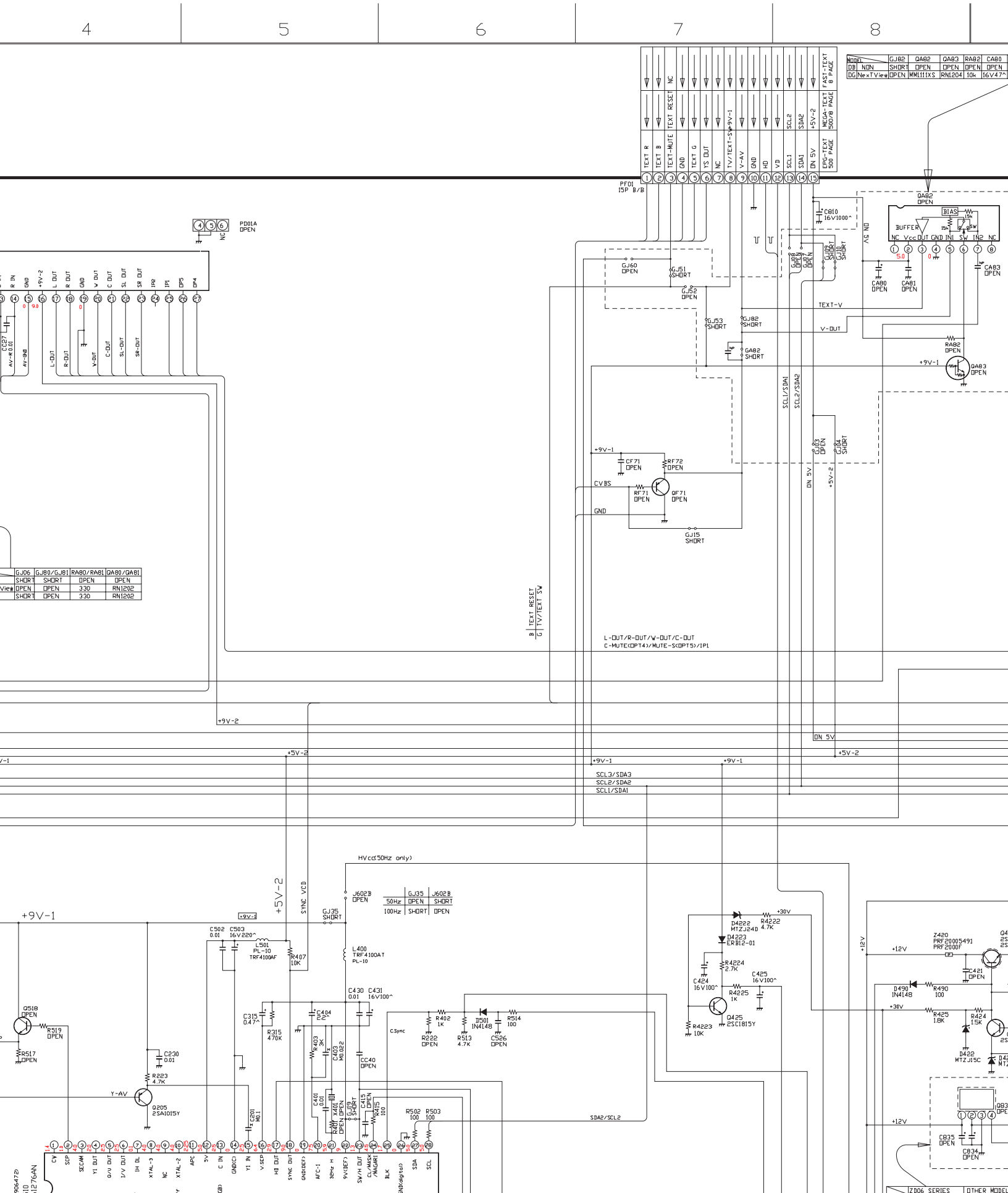


U902A SIGNAL BOARD PB9514C-1

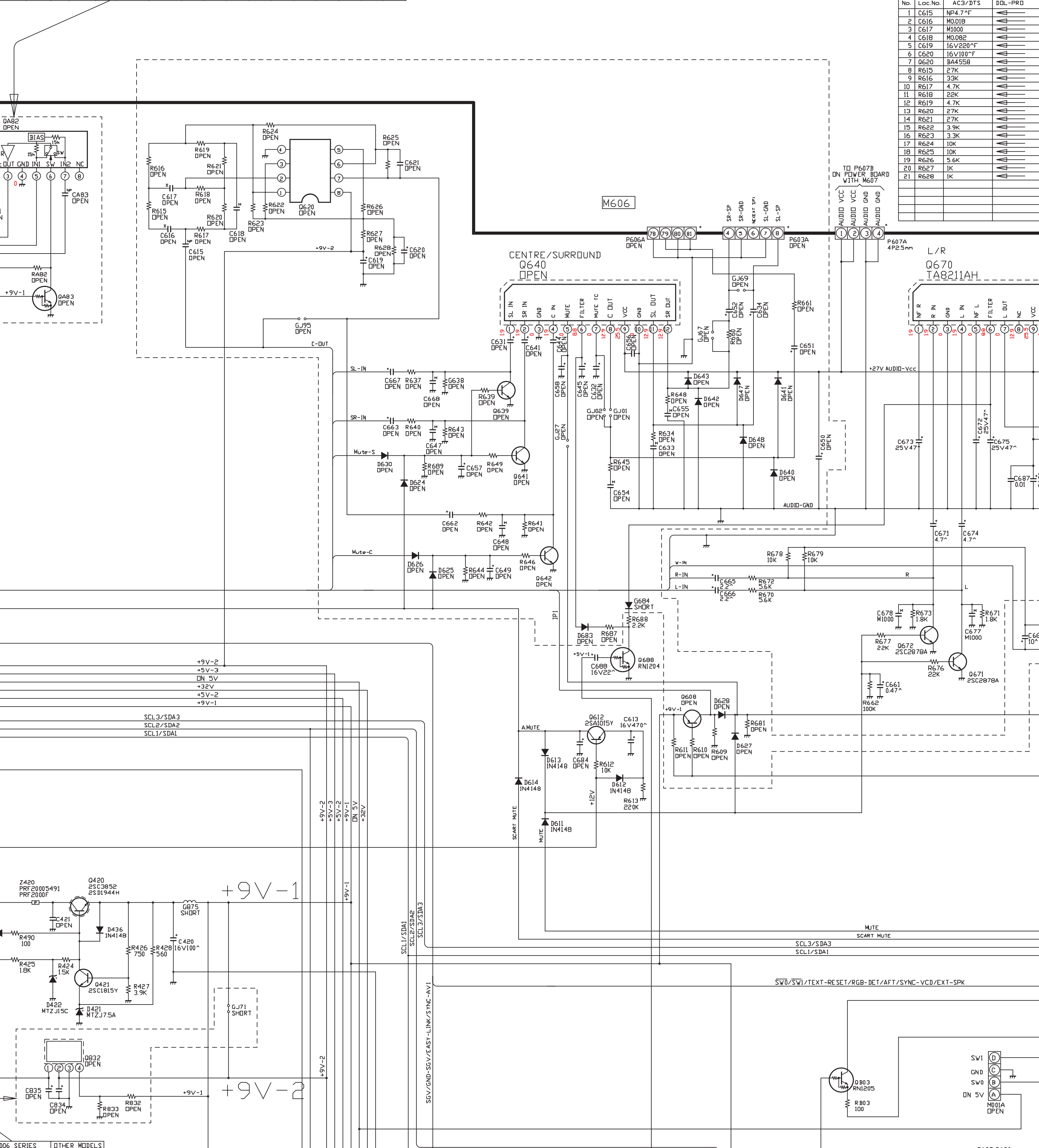



4
5
6
7
8
PF01
15P B/B
TEXT R
TEXT B
TEXT-MUTE
GND
TEXT G
YS OUT
NC
TV/TEXT-SW
+9V-1
V-AV
GND
HD
VD
SCL2
SDA2
+5V-2
DN 5V
EPG-TEXT 500 PAGE
MEGA-TEXT 500/8 PAGE
TEXT RESET
NC
FAST-TEXT 8 PAGE
MODEL | GJ82 | QA82 | QA83 | RA82 | CA80
DB NON | SHORT | OPEN | OPEN | OPEN | OPEN
DG NexTView | OPEN | MM1111XS | RN1204 | 10k | 16V47^
PD01A
OPEN
NC
C810
16V1000^
QA82
OPEN
BIAS
BUFFER
NC Vcc OUT GND IN1 SW IN2 NC
GJ60
OPEN
GJ51
SHORT
GJ52
OPEN
GJ53
SHORT
GJ82
SHORT
GJ08
OPEN
GJ09
SHORT
GJ10
SHORT
CA80
OPEN
CA81
OPEN
CA83
OPEN
TEXT-V
V-OUT
RA82
OPEN
QA83
OPEN
+9V-1
GA82
SHORT
SCL1/SDA1
SCL2/SDA2
GJ03
OPEN
GJ04
SHORT
DN 5V
+5V-2
+9V-1
CF71
OPEN
RF72
OPEN
CVBS
RF71
OPEN
QF71
OPEN
GND
GJ15
SHORT
L-DUT
R-DUT
V-DUT
C-DUT
SL-DUT
SR-DUT
CC27
AV-GND
GJ06 | GJ80/GJ81 | RA80/RA81 | QA80/QA81
SHORT | SHORT | OPEN | OPEN
OPEN | OPEN | 330 | RN1202
SHORT | OPEN | 330 | RN1202
B TEXT RESET
G TV/TEXT SW
L-OUT/R-OUT/W-OUT/C-OUT
C-MUTE(OPT4)/MUTE-SC(OPT5)/IP1
+9V-2
+5V-2
+9V-1
+9V-1
SCL3/SDA3
SCL2/SDA2
SCL1/SDA1
HVcc(50Hz only)
J602B
OPEN
50Hz | OPEN | SHORT
100Hz | SHORT | OPEN
+9V-1
+5V-2
SYNC VCB
GJ35
SHORT
C502 0.01
C503 16V220^
L501
PL-10
TRF4100AF
R407
10K
L400
TRF4100AT
PL-10
C430 0.01
C431 16V100^
Q518
OPEN
R519
OPEN
R517
OPEN
C230
0.01
R223
4.7K
Y-AV
Q205
2SA1015Y
C315
0.47^
R315
470K
C404
n/a
R403
3K
C403
M0.022
CC40
OPEN
C401
.001
X401
OPEN
GJ13
SHORT
C415
OPEN
R415
100
R402
1K
R822
OPEN
D501
1N4148
R519
4.7K
R514
100
C526
OPEN
C.Sync
R502
100
R503
100
SDA2/SCL2
D4222
MTZJ24D
+30V
R4222
4.7K
D4223
ERB12-01
R4224
2.7K
C424
16V100^
C425
16V100^
R4225
1K
Q425
2SC1815Y
R4223
10K
+12V
Z420
PRF20005491
PRF2000F
C421
OPEN
D490
1N4148
R490
100
+30V
R425
1.8K
R424
1.5K
D422
MTZJ15C
+12V
C835
OPEN
C834
OPEN
CV
SCP
SECAM
Y1 OUT
G/U OUT
V OUT
1H DL
XTAL-3
NC
XTAL-2
APC
5V
C IN
GND(C)
Y1 IN
V SEP
H/I OUT
SYNC OUT
GND(DEF)
AFC-1
3BHz H
9V(DEF)
SW/H OUT
CL/MASK /NAGARI
BLK
SDA
SCL
IZD06 SERIES
OTHER MODEL

QA82	QA83	RA82	CA80	CA81	GA82	CA83	GJ03	GJ04	GJ07	GJ08	GJ09	GJ10	GJ51	GJ52	GJ53	GJ60
OPEN	OPEN	OPEN	OPEN	OPEN	SHORT	OPEN	OPEN	SHORT	OPEN	OPEN	SHORT	SHORT	SHORT	OPEN	SHORT	OPEN
M1111XS	RN1204	10k	16V47^	0.01^	16VNP10^	16VNP10^	SHORT	OPEN	SHORT	SHORT	OPEN	OPEN	OPEN	SHORT	OPEN	SHORT

Difference (Centre Ton

No.	Loc.No.	ZD08 series AC3/DTS	Z07 series DOL-PRO
1	C615	NP4.7^F	←
2	C616	M0.018	←
3	C617	M1000	←
4	C618	M0.082	←
5	C619	16V220^F	←
6	C620	16V100^F	←
7	Q620	BA4558	←
8	R615	27K	←
9	R616	33K	←
10	R617	4.7K	←
11	R618	22K	←
12	R619	4.7K	←
13	R620	27K	←
14	R621	27K	←
15	R622	3.9K	←
16	R623	3.3K	←
17	R624	10K	←
18	R625	10K	←
19	R626	5.6K	←
20	R627	1K	←
21	R628	1K	←



13 14 15 16

A B C D E F

ce (Centre Tone Circuit)

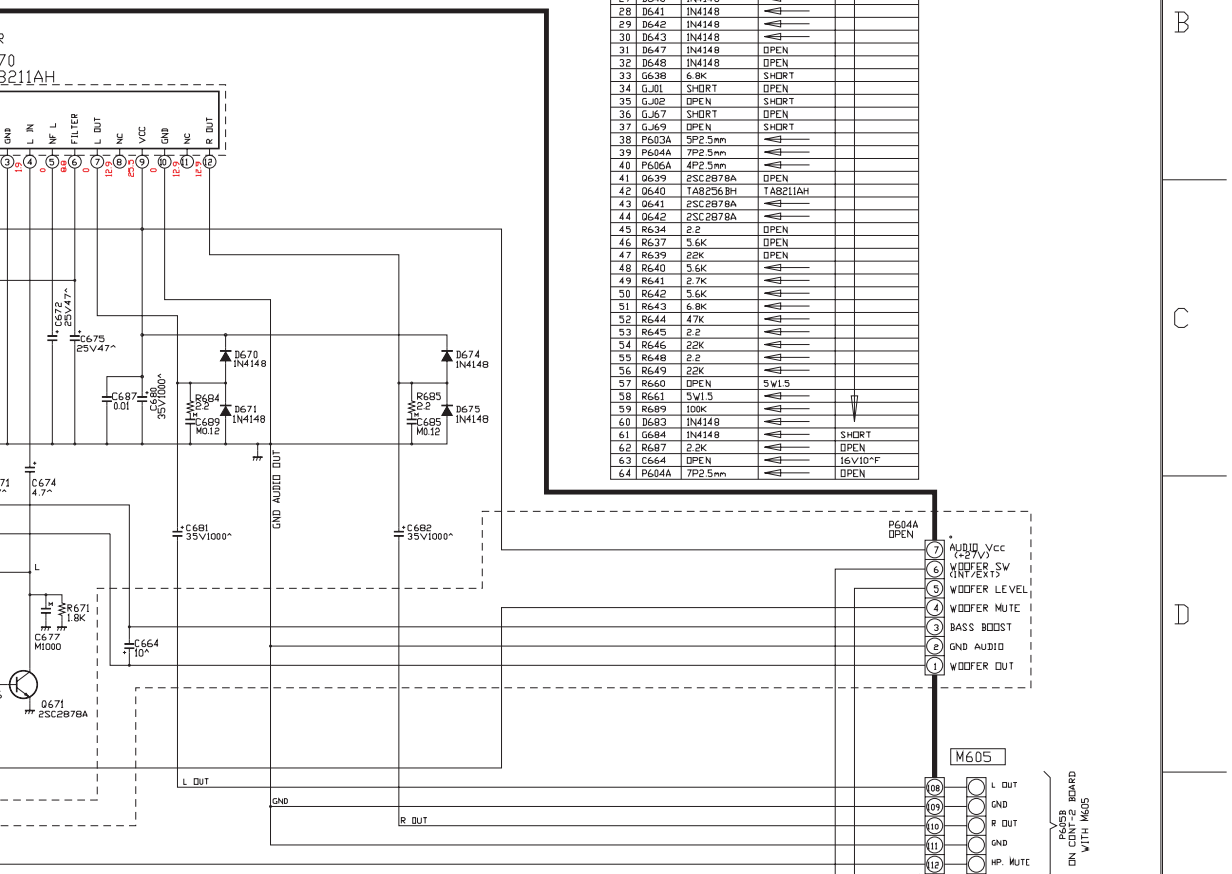
ZD08 series AC3/DTS	Z07 series DOL-PRO	ZD06 series STEREO
NP4.7^F		OPEN
M0.018		
M1000		
M0.082		
16V220^F		
16V100^F		
BA4558		
27K		
33K		
4.7K		
22K		
4.7K		
27K		
27K		
3.9K		
3.3K		
10K		
10K		
5.6K		
1K		
1K		

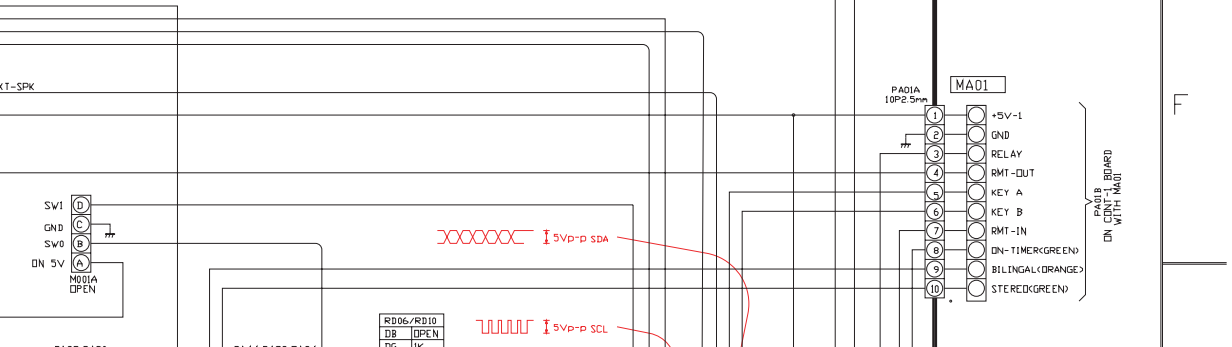
Difference (W-MUTE)

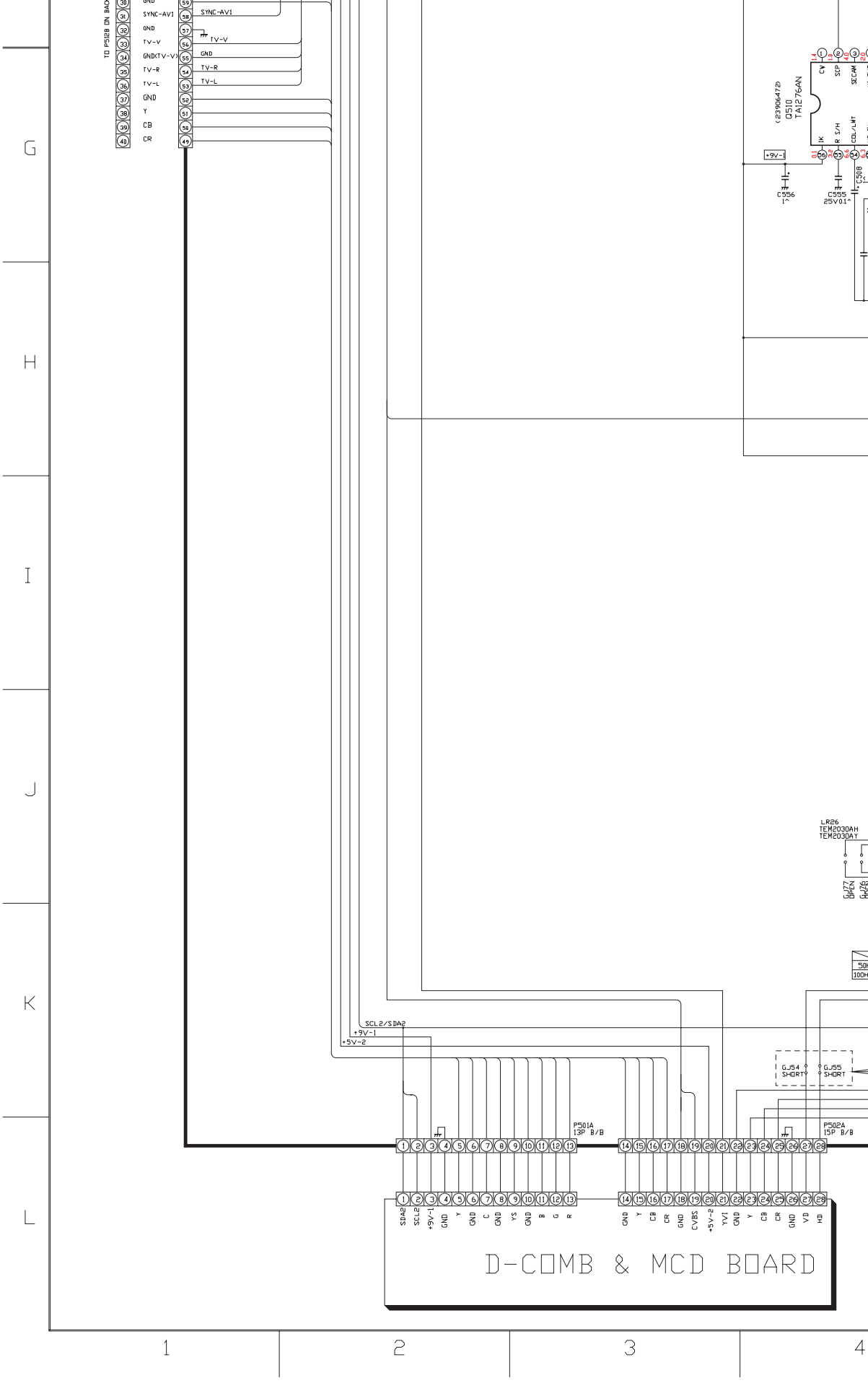
No.	Loc.No.	ZD08 series AC3/DTS	Z07 series DOL-PRO	ZD06 series STEREO
65	D627	1N4148		OPEN
66	D628	1N4148		
67	Q608	2SA1015Y		
68	R609	56K		
69	R610	10K		
70	R611	10K		
71	R681	100K		
72	GJ27	SHORT		

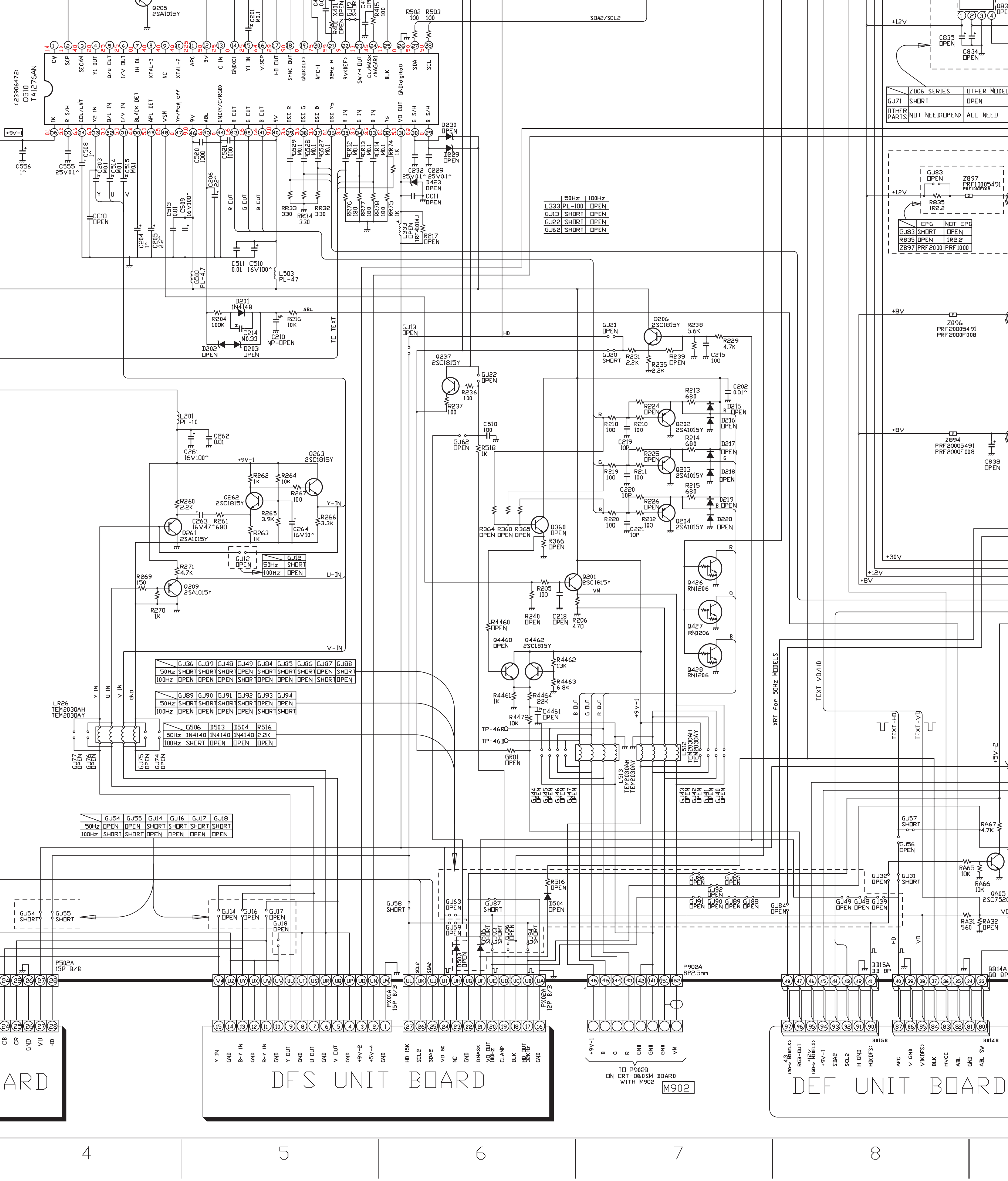
Difference (L/R/W/SL/SR/C)

No.	Loc.No.	ZD08 series AC3/DTS	Z07 series DOL-PRO	ZD06 series STEREO
1	C631	1^F	25V47^F	OPEN
2	C632	4.7^F	OPEN	
3	C633	M0.12	OPEN	
4	C634	35V470^F	OPEN	
5	C641	1^F		
6	C644	1^F		
7	C645	25V47^F		
8	C647	M0.001		
9	C648	M0.001		
10	C649	2.2^F		
11	C650	35V1000^F		
12	C651	35V470^F		
13	C652	35V470^F		
14	C654	M0.12		
15	C655	M0.12		
16	C656	0.01		
17	C657	2.2^F		
18	C658	OPEN	25V47^F	
19	C662	2.2^F		
20	C663	2.2^F		
21	C667	2.2^F	OPEN	
22	C668	M0.001	OPEN	
23	D624	1N4148		
24	D625	1N4148		
25	D626	1N4148		
26	D630	1N4148		
27	D640	1N4148		
28	D641	1N4148		
29	D642	1N4148		
30	D643	1N4148		
31	D647	1N4148	OPEN	
32	D648	1N4148	OPEN	
33	G638	6.8K	SHORT	
34	GJ01	SHORT	OPEN	
35	GJ02	OPEN	SHORT	
36	GJ67	SHORT	OPEN	
37	GJ69	OPEN	SHORT	
38	P603A	5P2.5mm		
39	P604A	7P2.5mm		
40	P606A	4P2.5mm		
41	Q639	2SC2878A	OPEN	
42	Q640	TA8256BH	TA8211AH	
43	Q641	2SC2878A		
44	Q642	2SC2878A		
45	R634	2.2	OPEN	
46	R637	5.6K	OPEN	
47	R639	22K	OPEN	
48	R640	5.6K		
49	R641	2.7K		
50	R642	5.6K		
51	R643	6.8K		
52	R644	47K		
53	R645	2.2		
54	R646	22K		
55	R648	2.2		
56	R649	22K		
57	R660	OPEN	5W1.5	
58	R661	5W1.5		
59	R689	100K		
60	D683	1N4148		
61	G684	1N4148		SHORT
62	R687	2.2K		OPEN
63	C664	OPEN		16V10^F
64	P604A	7P2.5mm		OPEN






TO P528 IN BACK
SYNC-AV1
TV-V
GND
TV-R
TV-L
Y
CB
CR
Q510
TA1276AN
C556
C555
C508
LR26
TEM2030AH
TEM2030AY
SCL2/SDA2
+9V-1
+5V-2
GJ54
SHORT
GJ55
SHORT
P501A
13P B/B
P502A
15P B/B
SDA2
SCL2
+5V-1
GND
Y
C
B
G
R
CVBS
+5V-2
YV1
VD
HD
D-COMB & MCD BOARD



	ZD06 SERIES	OTHER MODEL
GJ71	SHORT	OPEN
OTHER PARTS	NOT NEED(OPEN)	ALL NEED

	EPG	NOT EPG
GJ83	SHORT	OPEN
R835	OPEN	1R2.2
Z897	PRF2000	PRF1000

	50Hz	100Hz
L333	PL-100	OPEN
GJ13	SHORT	OPEN
GJ22	SHORT	OPEN
GJ62	SHORT	OPEN

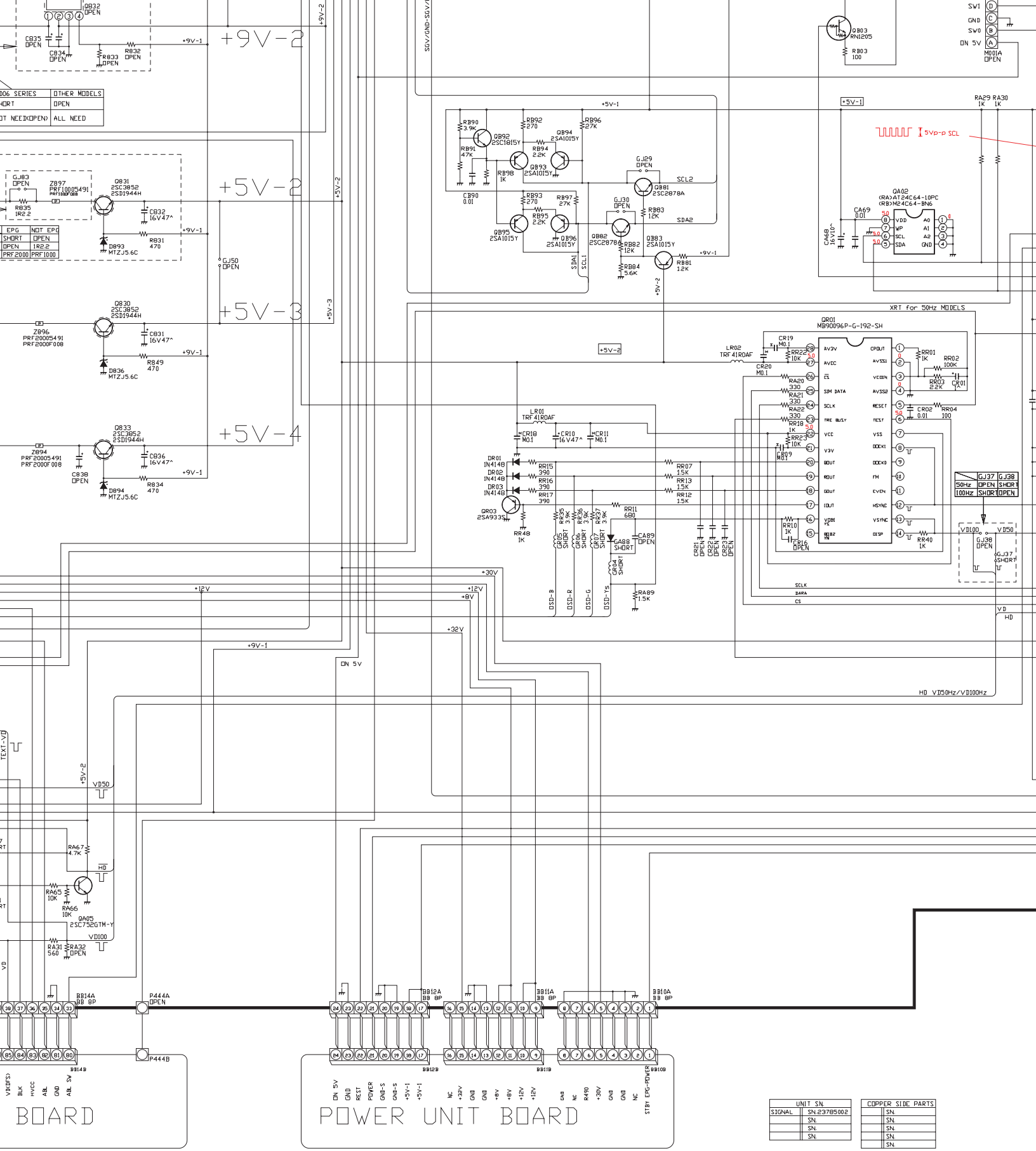
	GJ12
50Hz	SHORT
100Hz	OPEN

	GJ36	GJ39	GJ48	GJ49	GJ84	GJ85	GJ86	GJ87	GJ88
50Hz	SHORT	SHORT	SHORT	OPEN	SHORT	SHORT	SHORT	OPEN	SHORT
100Hz	OPEN	OPEN	OPEN	SHORT	OPEN	OPEN	OPEN	SHORT	OPEN

	GJ89	GJ90	GJ91	GJ92	GJ93	GJ94
50Hz	SHORT	SHORT	SHORT	SHORT	OPEN	OPEN
100Hz	OPEN	OPEN	OPEN	OPEN	SHORT	SHORT

	G506	D503	D504	R516
50Hz	1N4148	1N4148	1N4148	2.2K
100Hz	SHORT	OPEN	OPEN	OPEN

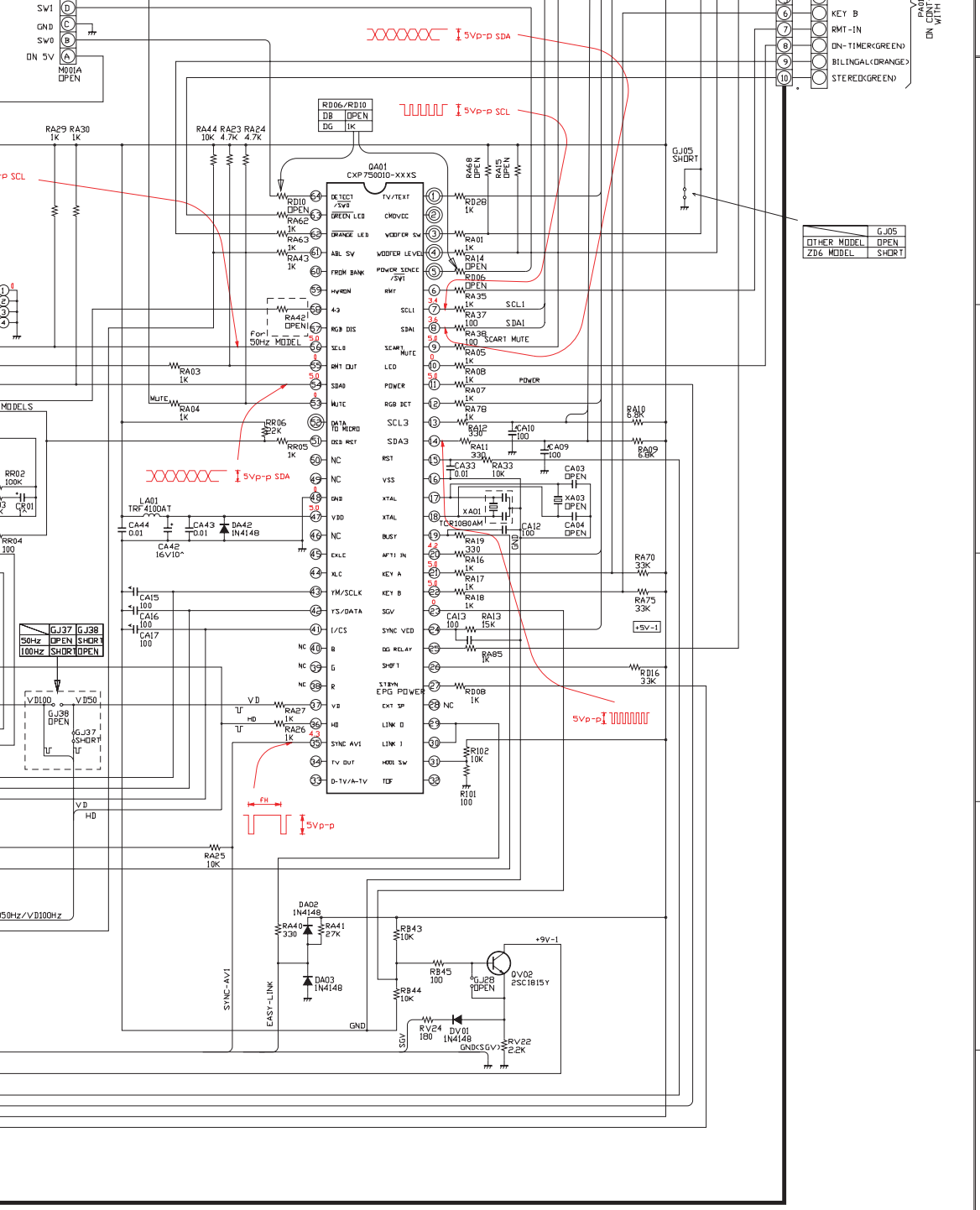
	GJ54	GJ55	GJ14	GJ16	GJ17	GJ18
50Hz	OPEN	OPEN	SHORT	SHORT	SHORT	SHORT
100Hz	SHORT	SHORT	OPEN	OPEN	OPEN	OPEN



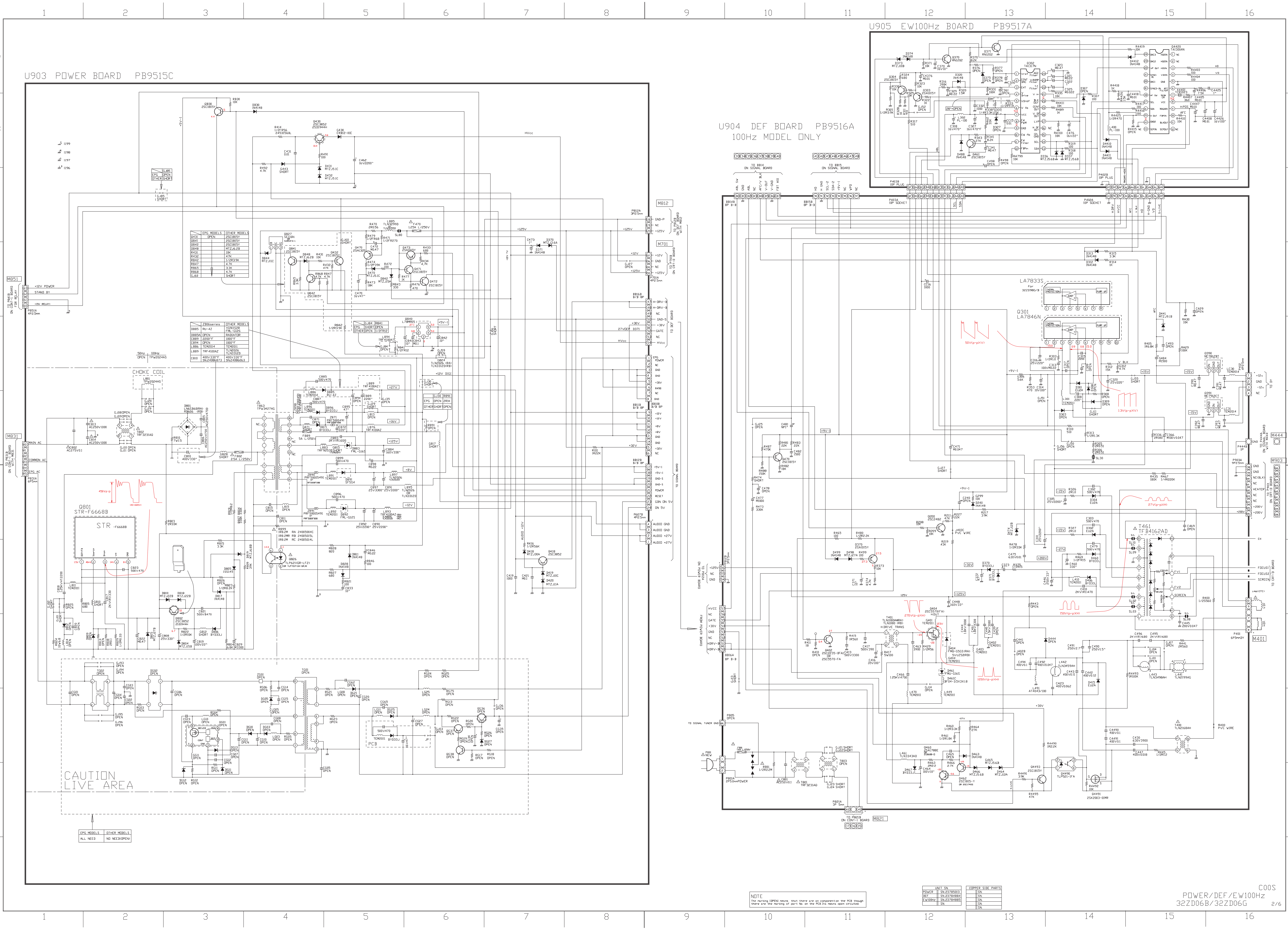
UNIT SN.	
SIGNAL	SN.23785002
	SN.
	SN.
	SN.

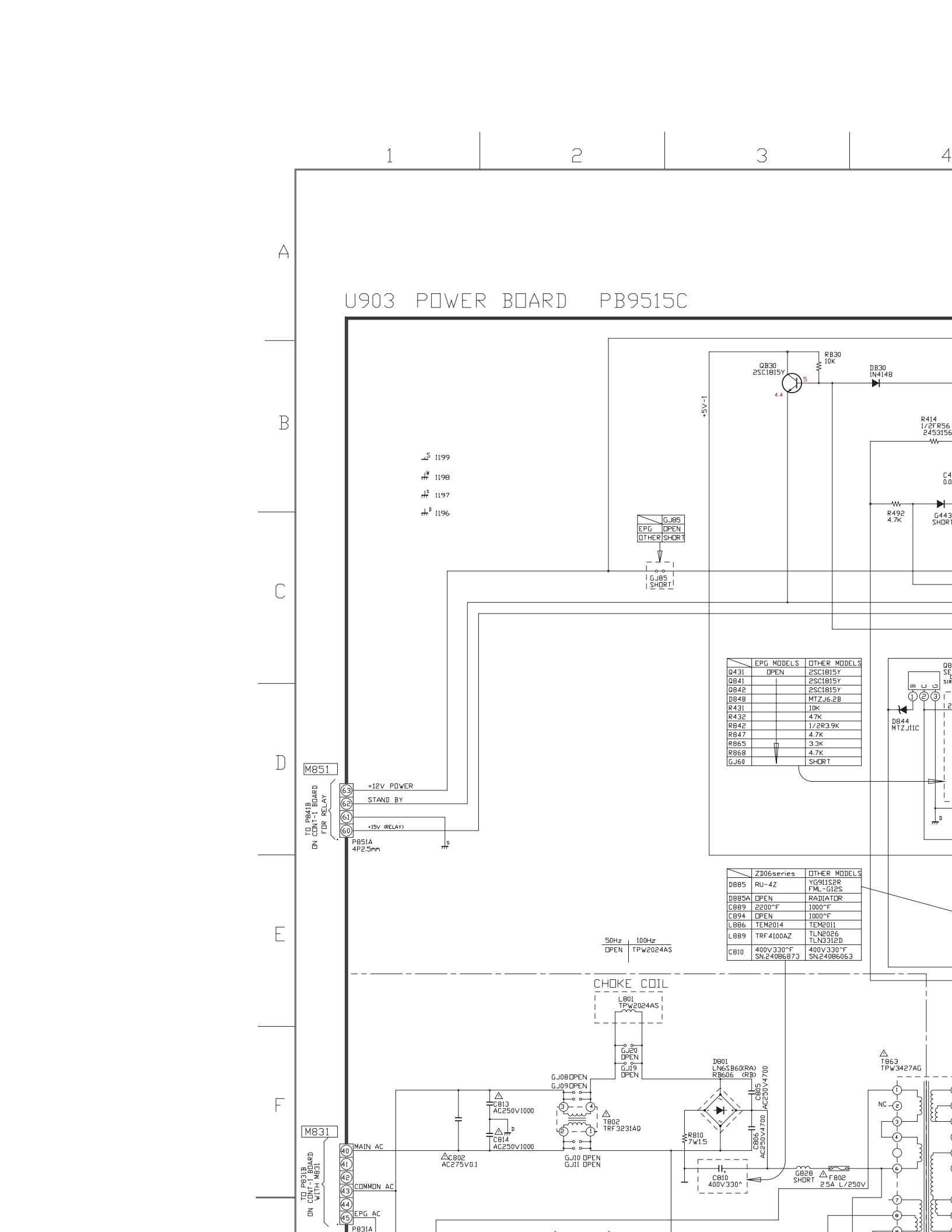
COPPER SIDE PARTS	
	SN.
	SN.
	SN.
	SN.
	SN.

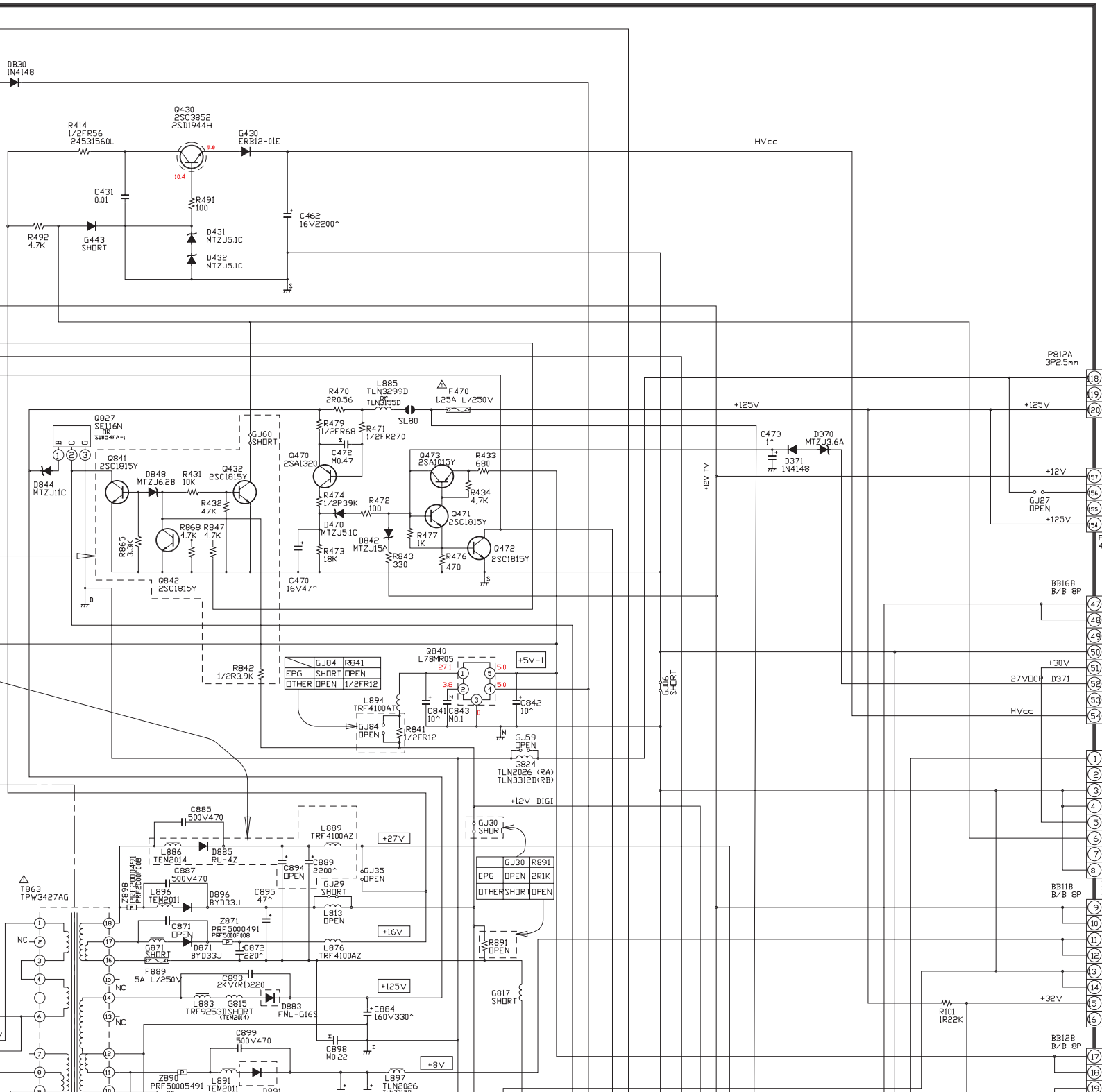
9	10	11	12	13

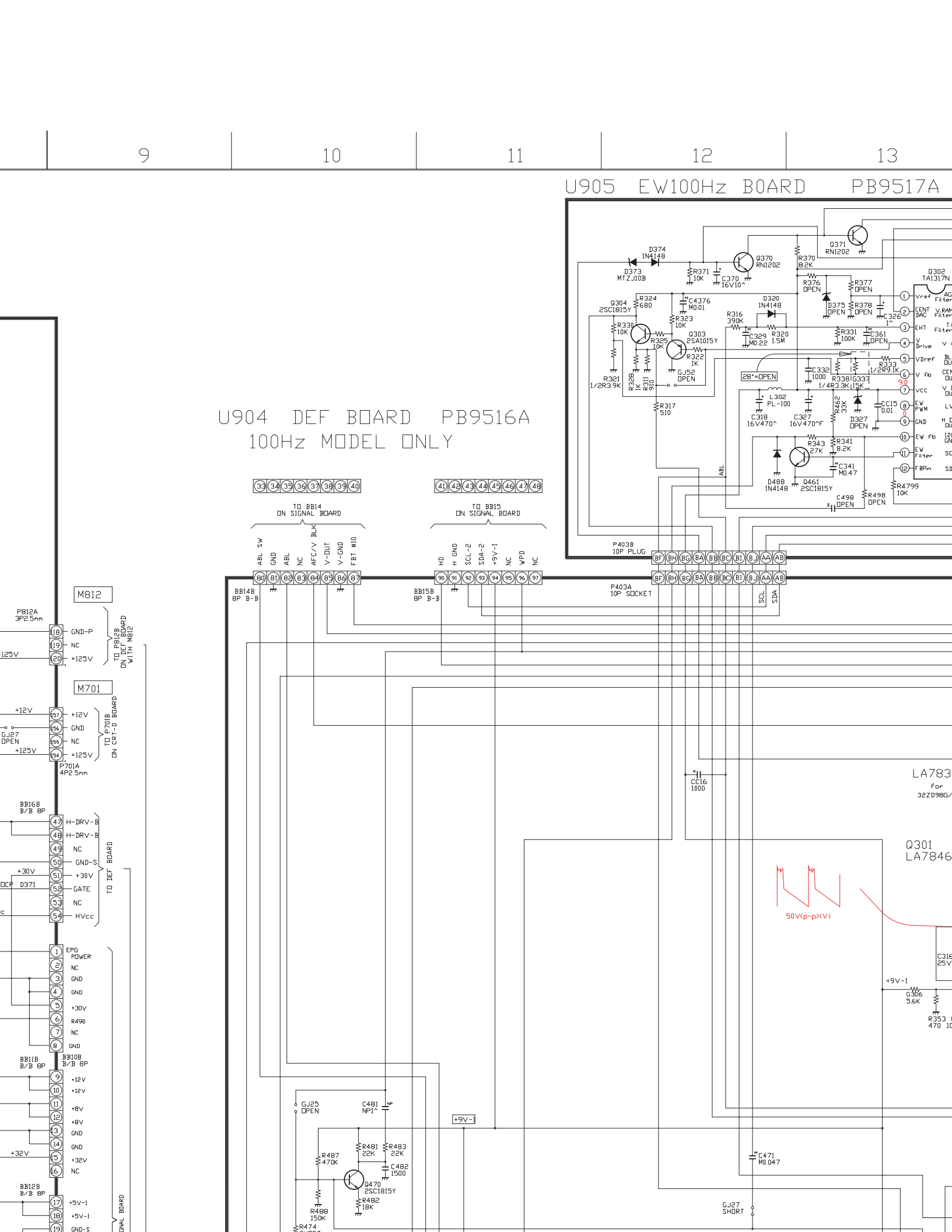


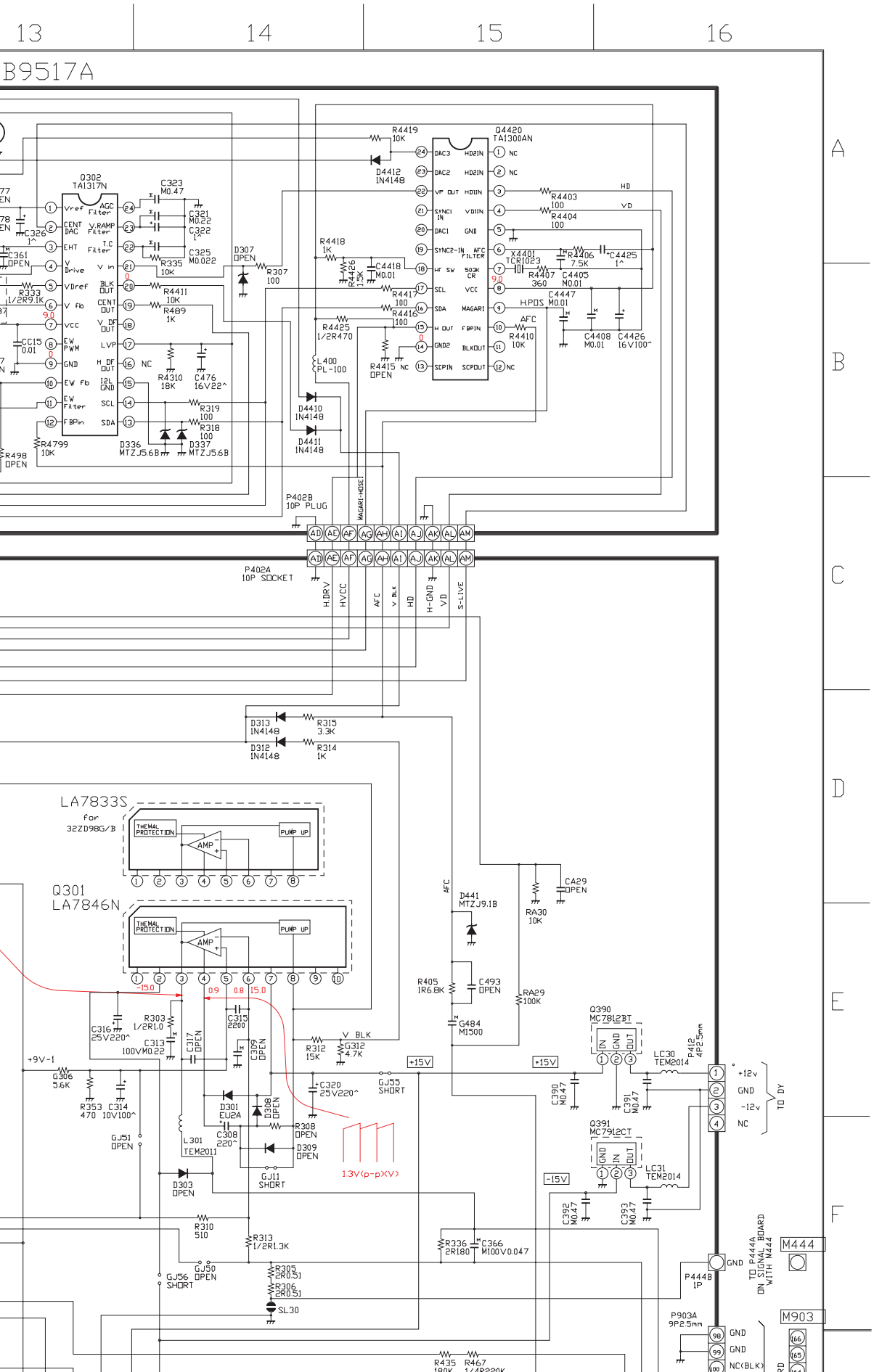
C00S
SIGNAL
32ZD06B/28ZD06B 1/6

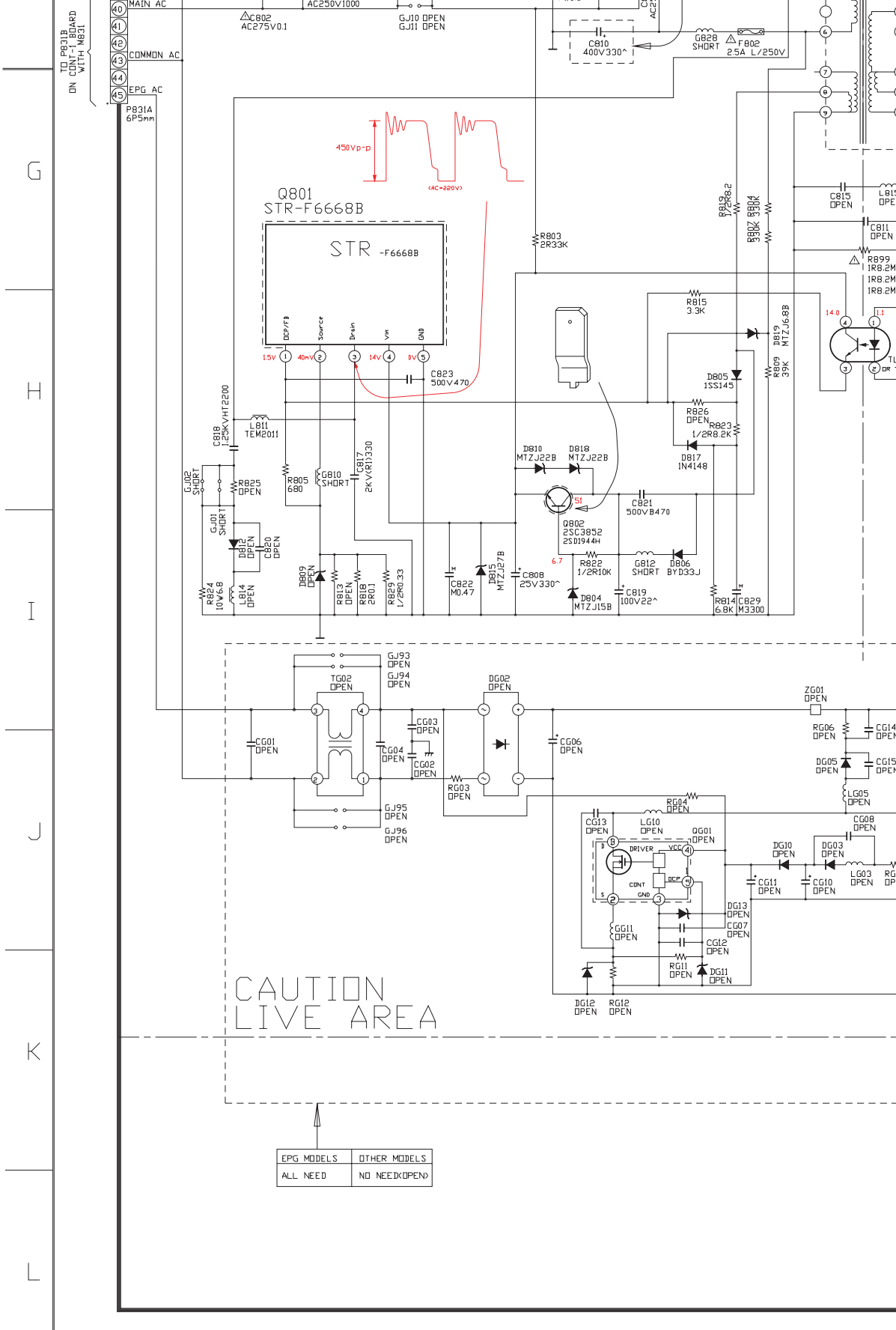

U903 POWER BOARD PB9515C
U904 DEF BOARD PB9516A
100Hz MODEL ONLY
U905 EW100Hz BOARD PB9517A
CHOKE COIL
CAUTION
LIVE AREA
Q801
STR-F6668B
Q301
LA7846N
LA7833S
T461
TFB4162AD
M812
M701
M851
M831
M903
M401
M821
M464
NOTE
C00S
POWER/DEF/EW100Hz
32ZD06B/32ZD06G
2/6

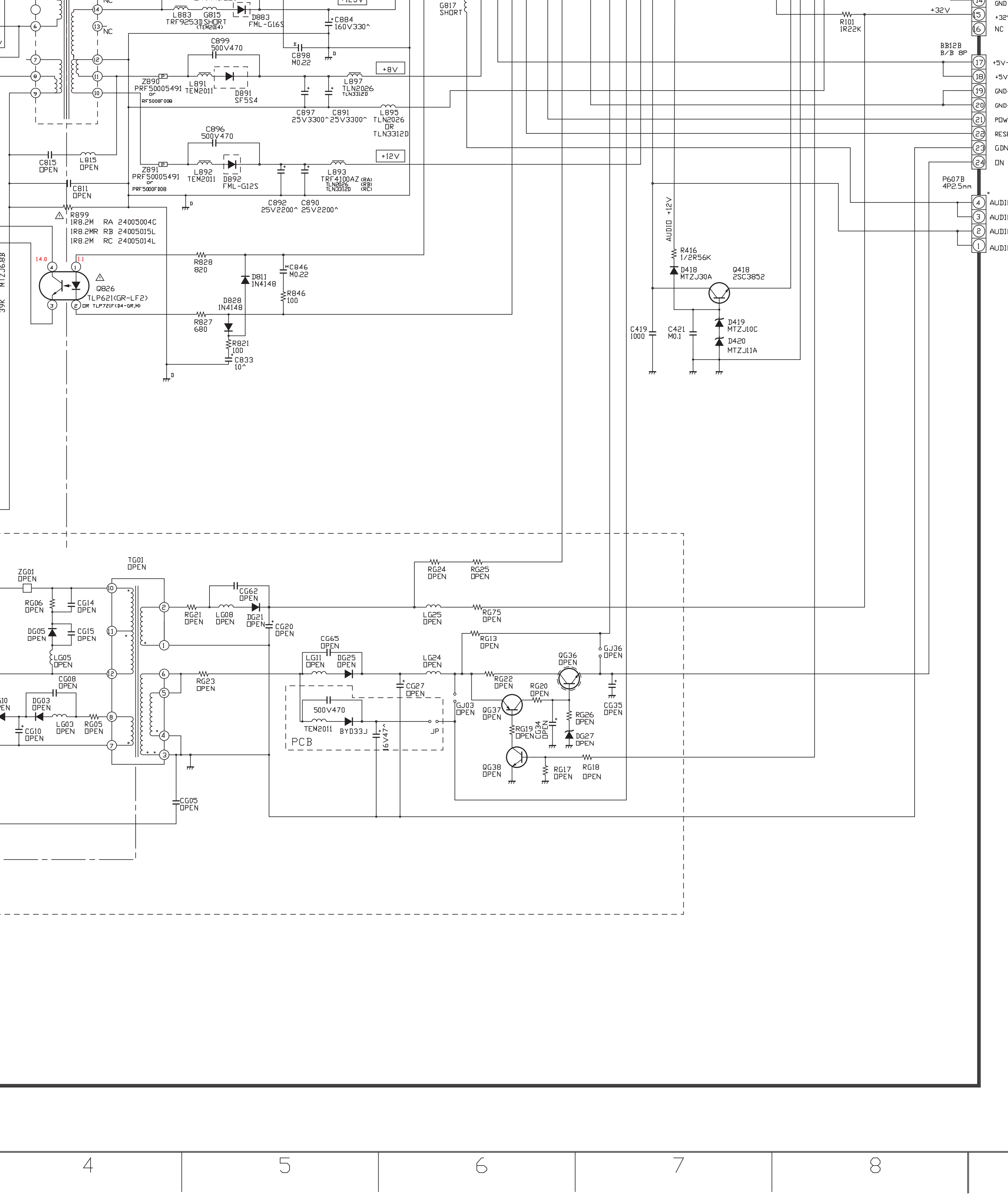

U903 POWER BOARD PB9515C
QB30 2SC1815Y
RB30 10K
DB30 IN4148
+5V-1
R414 1/2WR56 2453156
R492 4.7K
GJ85 SHORT
GJ85 OPEN
EPG
OTHER SHORT
1199
1198
1197
1196
M851
+12V POWER
STAND BY
+15V (RELAY)
TO P841B ON CONT-1 BOARD FOR RELAY
P851A 4P2.5mm
EPG MODELS
OTHER MODELS
Q431 OPEN 2SC1815Y
Q841 2SC1815Y
Q842 2SC1815Y
D848 MTZJ6.2B
R431 10K
R432 47K
R842 1/2R3.9K
R847 4.7K
R865 3.3K
R868 4.7K
GJ60 SHORT
DB44 MTZJ11C
ZD06series
OTHER MODELS
D885 RU-4Z YG911S2R FML-G12S
D885A OPEN RADIATOR
C889 2200^F 1000^F
C894 OPEN 1000^F
L886 TEM2014 TEM2011
L889 TRF4100AZ TLN2026 TLN3312D
C810 400V330^F SN.24086873 400V330^F SN.24086063
50Hz OPEN
100Hz TPW2024AS
CHOKE COIL
L801 TPW2024AS
GJ20 OPEN
GJ19 OPEN
GJ08 OPEN
GJ09 OPEN
C813 AC250V1000
C814 AC250V1000
T802 TRF3231AQ
GJ10 OPEN
GJ11 OPEN
C802 AC275V0.1
DB01 LN6SB60(RA) RB606 (RB)
C805 AC250V4700
C806 AC250V4700
R810 7W1.5
C810 400V330^
G828 SHORT
FB02 2.5A L/250V
T863 TPW3427AG
NC
M831
MAIN AC
COMMON AC
EPG AC
TO P831B ON CONT-1 BOARD WITH M831
P831A 5P2.5mm


DB30 1N4148
Q430 2SC3852 2SD1944H
R414 1/2FR56 24531560L
G430 ERB12-01E
HVcc
C431 0.01
R491 100
C462 16V2200^
R492 4.7K
G443 SHORT
D431 MTZJ5.1C
D432 MTZJ5.1C
L885 TLN3299D TLN3155D
F470 1.25A L/250V
SL80
R470 2R0.56
R479 1/2FR68
R471 1/2FR270
C472 M0.47
Q827 SEJ16N
G460 SHORT
Q841 2SC1815Y
D848 MTZJ6.2B
R431 10K
Q432 2SC1815Y
D844 MTZJ11C
R432 47K
R865 3.3K
R868 4.7K
R847 4.7K
Q842 2SC1815Y
Q470 2SA1320
R474 1/2P39K
R472 100
D470 MTZJ5.1C
R473 18K
D842 MTZJ15A
R843 330
R476 470
Q472 2SC1815Y
C470 16V47^
Q473 2SA1015Y
R433 680
R434 4.7K
Q471 2SC1815Y
R477 1K
C473 1^
D370 MTZJ3.6A
D371 1N4148
+12V TV
+125V
+12V
GND
NC
GJ27 OPEN
P812A 3P2.5mm
P701A 4P2.5mm
BB16B B/B 8P
H-DRV
NC
GND
+30V
27VDCP D371
GATE
HVcc
EPG
PDWEI
+30V
R490
BB11B B/B 8P
BB10B B/B 8P
+8V
+32V
R101 1R22K
BB12B B/B 8P
+5V-1
GND-S
R842 1/2R3.9K
GJ84 R841
EPG SHORT OPEN
OTHER OPEN 1/2FR12
Q840 L78MR05
+5V-1
L894 TRF4100AT
C841 10^
C843 M0.1
C842 10^
GJ84 OPEN
R841 1/2FR12
GJ59 OPEN
G824 TLN2026 (RA) TLN3312D(RB)
GJ06 SHORT
+12V DIGI
GJ30 SHORT
GJ30 R891
EPG OPEN 2R1K
OTHER SHORT OPEN
R891 OPEN
G817 SHORT
C885 500V470
L889 TRF4100AZ
+27V
L886 TEM2014
D885 RU-4Z
C887 500V470
C894 OPEN
C889 2200^
GJ35 OPEN
GJ29 SHORT
T863 TPW3427AG
Z898 PRF2000491 PRF2000F00B
L896 TEM2011
D896 BYD33J
C895 47^
L813 OPEN
+16V
C871 OPEN
Z871 PRF5000491 PRF5000F00B
G871 SHORT
D871 BYD33J
C872 220^
L876 TRF4100AZ
F889 5A L/250V
C893 2KV(R1)220
+125V
L883 TRF9253D (TEM2014)
G815 SHORT
D883 FML-G16S
C884 160V330^
C899 500V470
C898 M0.22
+8V
Z890 PRF5000491
L891 TEM2011
D891
L897 TLN2026
NC

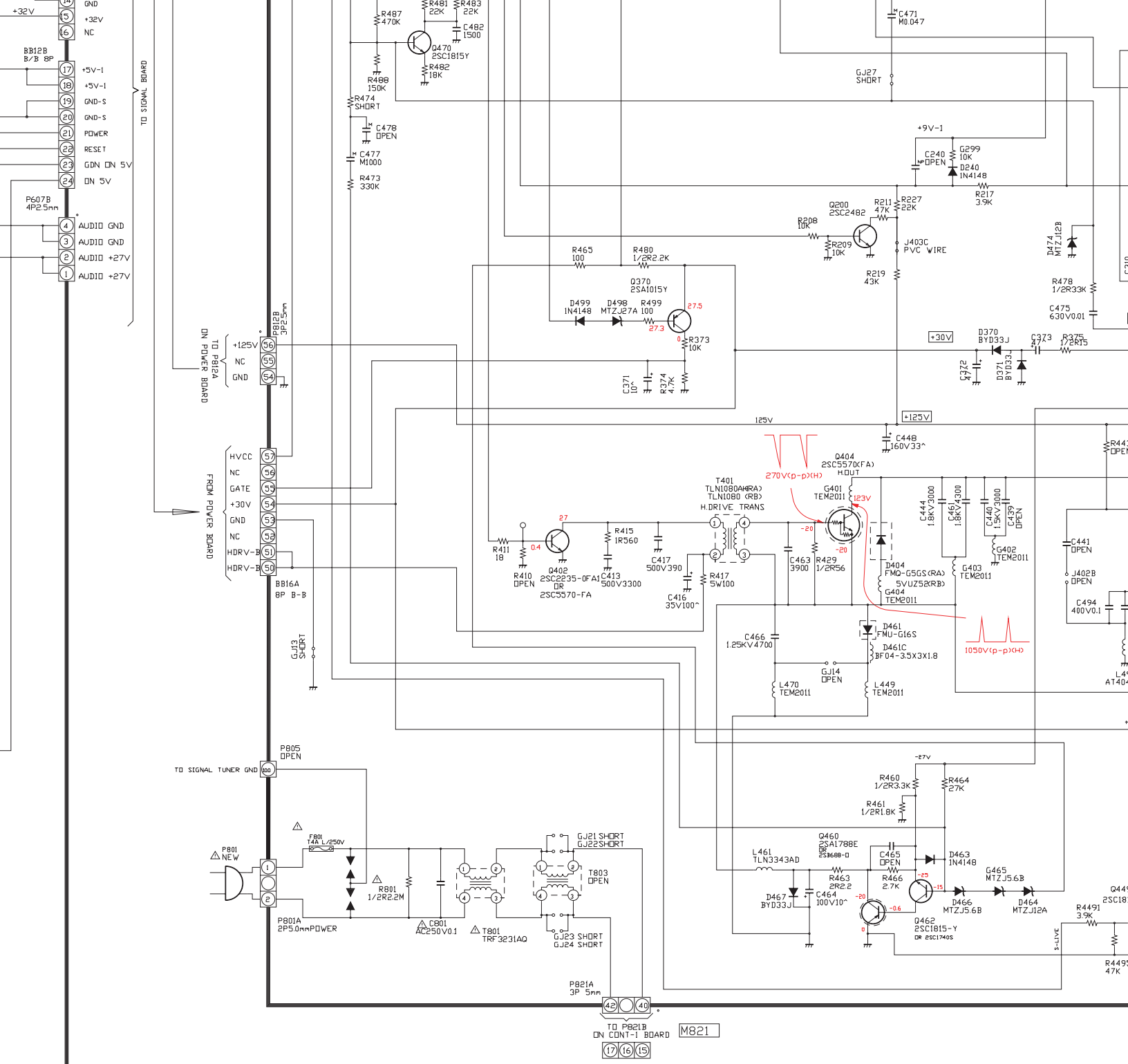

9
10
11
12
13
U905 EW100Hz BOARD PB9517A
U904 DEF BOARD PB9516A
100Hz MODEL ONLY
M812
M701
TO P812B ON DEF BOARD WITH M812
TO P701B ON CRT-D BOARD
TO DEF BOARD
TO SIGNAL BOARD
TO BB14 ON SIGNAL BOARD
TO BB15 ON SIGNAL BOARD
P812A 3P2.5mm
P701A 4P2.5mm
BB16B B/B 8P
BB11B B/B 8P
BB10B B/B 8P
BB12B B/B 8P
BB14B 8P B-B
BB15B 8P B-B
P403B 10P PLUG
P403A 10P SOCKET
GND-P
NC
+125V
+12V
GND
H-DRV-B
GND-S
+30V
GATE
HVcc
EPG POWER
R490
+8V
+5V-I
GND-S
ABL SW
ABL
AFC/V
V-OUT
V-GND
FBT #10
H GND
SCL-2
SDA-2
+9V-I
WPD
SCL
SDA
D374 1N4148
D373 MTZJ10B
Q370 RN1202
Q371 RN1202
Q302 TA1317N
Q304 2SC1815Y
Q303 2SA1015Y
D320 1N4148
D488 1N4148
Q461 2SC1815Y
Q470 2SC1815Y
L302 PL-100
28"=OPEN
GJ52 OPEN
GJ25 OPEN
GJ27 OPEN
GJ27 SHORT
LA783
for
32ZD98G/
Q301
LA7846
50V(p-p)(V)


13
14
15
16
B9517A
A
B
C
D
E
F
Q302
TA1317N
Vref
CENT DAC
EHT
V Drive
VDref
V fb
VCC
EW PWM
GND
EW fb
EW Filter
FBPin
AGC Filter
V.RAMP Filter
T.C Filter
V in
BLK OUT
CENT OUT
V_DF OUT
LVP
H_DF OUT
I2L GND
SCL
SDA
NC
C323 M0.47
C321 M0.22
C322 1^
C325 M0.022
R335 10K
C326 1^
C361 OPEN
R333 1/2R9.1K
CC15 0.01
R4799 10K
R498 OPEN
R4411 10K
R489 1K
R4310 18K
C476 16V22^
R319 100
R318 100
D336 MTZJ5.6B
D337 MTZJ5.6B
D307 OPEN
R307 100
R4419 10K
D4412 IN4148
Q4420
TA1300AN
DAC3
DAC2
VP OUT
SYNC1 IN
DAC1
SYNC2-IN
HF SW
SCL
SDA
H OUT
GND2
SCPIN
HD2IN
VD2IN
GND
AFC FILTER
503K CR
VCC
MAGARI
FBPIN
BLKOUT
SCPOUT
NC
R4418 1K
R4426 1.5K
C4418 M0.01
R4417 100
R4416 100
R4425 1/2R470
R4415 NC OPEN
L400 PL-100
D4410 IN4148
D4411 IN4148
R4403 100
R4404 100
HD
VD
X4401 TCR1023
R406 7.5K
C4425 1^
R4407 360
C4405 M0.01
C4447 M0.01
H.POS
AFC
R4410 10K
C4408 M0.01
C4426 16V100^
P402B 10P PLUG
P402A 10P SOCKET
MAGARI-HOSEI
H.DRV
HVCC
AFC
V BLK
HD
H-GND
VD
S-LIVE
D313 IN4148
R315 3.3K
D312 IN4148
R314 1K
LA7833S
for 32ZD98G/B
THEMAL PROTECTION
AMP
PUMP UP
Q301
LA7846N
D441 MTZJ9.1B
CA29 OPEN
RA30 10K
R405 1R6.8K
C493 OPEN
RA29 100K
G484 M1500
-15.0
0.9
0.8
15.0
C316 25V220^
R303 1/2R1.0
C313 100VM0.22
C317 OPEN
C315 2200
C309 OPEN
R312 15K
V_BLK
G312 4.7K
+9V-1
G306 5.6K
R353 470
C314 10V100^
GJ51 OPEN
L301 TEM2011
D301 EU2A
C308 220^
D308 OPEN
R308 OPEN
D309 OPEN
GJ11 SHORT
D303 OPEN
GJ55 SHORT
C320 25V220^
+15V
-15V
1.3V(p-pXV)
Q390
MC78L12BT
IN
GND
OUT
C390 M0.47
C391 M0.47
LC30 TEM2014
P412 4P2.5mm
+12v
GND
-12v
NC
TO DY
Q391
MC79L12CT
LC31 TEM2014
C392 M0.47
C393 M0.47
R310 510
R313 1/2R1.3K
R336 2R180
C366 M100V0.047
GJ56 SHORT
GJ50 OPEN
R305 2R0.51
R306 2R0.51
SL30
P444B 1P
TO P444A ON SIGNAL BOARD WITH M444
M444
P903A 9P2.5mm
GND
GND
NC(BLK)
M903
R435 180K
R467 1/4P330K


TO P831B ON CONTROL BOARD WITH M831
MAIN AC
COMMON AC
EPG AC
P831A 6P5mm
C802 AC275V0.1
AC250V1000
GJ10 OPEN
GJ11 OPEN
C810 400V330^
G828 SHORT
FB02 2.5A L/250V
450Vp-p
(AC=220V)
Q801
STR-F6668B
STR -F6668B
DCP/FB
Source
Drain
Vin
GND
1.5V
40mV
14V
0V
R803 2R33K
R819 1/2R8.2
R807 330K
R804 330K
C815 OPEN
C811 OPEN
R899 1R8.2M 1R8.2M 1R8.2M
R815 3.3K
D819 MTZJ6.8B
R809 39K
D805 1SS145
R826 OPEN
R823 1/2R8.2K
D817 1N4148
C823 500V470
L811 TEM2011
C818 1.25KV/HT2200
C817 2KV(R)330
C810 SHORT
R805 680
R825 OPEN
GJ02 SHORT
GJ01 SHORT
D812 OPEN
C820 OPEN
R824 10W6.8
L814 OPEN
D809 OPEN
R813 OPEN
R818 2R01
R829 1/2R0.33
D810 MTZJ22B
D818 MTZJ22B
Q802 2SC3852 2SD1944H
C821 500VB470
R822 1/2R10K
G812 SHORT
D806 BYD33J
C808 25V330^
D804 MTZJ15B
C819 100V22^
R814 6.8K
C829 M3300
C822 M0.47
D815 MTZJ27B
GJ93 OPEN
GJ94 OPEN
TG02 OPEN
DG02 OPEN
ZG01 OPEN
CG01 OPEN
CG03 OPEN
CG04 OPEN
CG02 OPEN
CG06 OPEN
RG03 OPEN
RG06 OPEN
CG14 OPEN
DG05 OPEN
CG15 OPEN
LG05 OPEN
GJ95 OPEN
GJ96 OPEN
RG04 OPEN
CG13 OPEN
LG10 OPEN
QG01 OPEN
DRIVER
VCC
OCP
CONT
GND
DG10 OPEN
DG03 OPEN
CG08 OPEN
LG03 OPEN
CG11 OPEN
CG10 OPEN
DG13 OPEN
CG07 OPEN
GG11 OPEN
CG12 OPEN
RG11 OPEN
DG11 OPEN
DG12 OPEN
RG12 OPEN
CAUTION
LIVE AREA
EPG MODELS
OTHER MODELS
ALL NEED
NO NEED(OPEN)



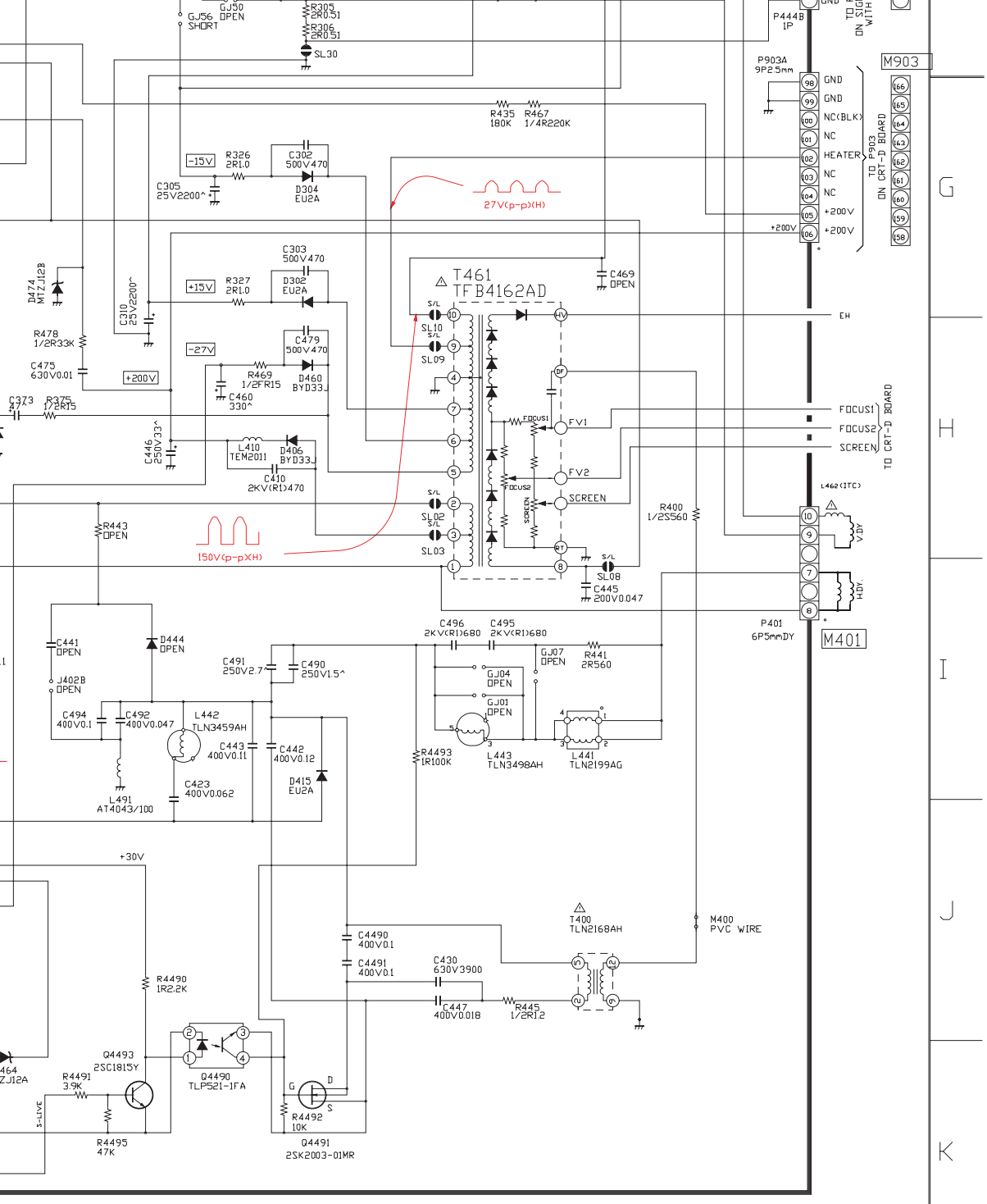
L883 TRF92530
G815 SHORT (TEM2014)
D883 FML-G16S
C884 160V330^
+12.5V
G817 SHORT
+32V
R101 1R22K
GND
+32V
NC
BB12B B/B 8P
+5V-1
GND-S
POWER
RESET
GDN
ON 5
P607B 4P2.5mm
AUDIO
C899 500V470
C898 M0.22
+8V
Z890 PRF50005491 or RF5000F008
L891 TEM2011
D891 SF5S4
L897 TLN2026 TLN3312D
C897 25V3300^
C891 25V3300^
L895 TLN2026 OR TLN3312D
C896 500V470
+12V
Z891 PRF50005491 or PRF5000F008
L892 TEM2011
D892 FML-G12S
L893 TRF4100AZ (RA) TLN2026 (RB) TLN3312D (RC)
C892 25V2200^
C890 25V2200^
C815 OPEN
L815 OPEN
C811 OPEN
R899 1R8.2M RA 24005004C
1R8.2MR RB 24005015L
1R8.2M RC 24005014L
MTZJ6.8B
39K
Q826 TLP621(GR-LF2) OR TLP721F(D4-GR,M)
R828 820
D811 1N4148
C846 M0.22
R846 100
D828 1N4148
R827 680
R821 100
C833 10^
AUDIO +12V
R416 1/2R56K
D418 MTZJ30A
Q418 2SC3852
C419 1000
C421 M0.1
D419 MTZJ10C
D420 MTZJ11A
TG01 OPEN
ZG01 OPEN
RG06 OPEN
CG14 OPEN
DG05 OPEN
CG15 OPEN
LG05 OPEN
CG08 OPEN
DG03 OPEN
LG03 OPEN
RG05 OPEN
CG10 OPEN
CG62 OPEN
RG21 OPEN
LG08 OPEN
DG21 OPEN
CG20 OPEN
RG23 OPEN
CG05 OPEN
RG24 OPEN
RG25 OPEN
LG25 OPEN
RG75 OPEN
CG65 OPEN
LG11 OPEN
DG25 OPEN
LG24 OPEN
CG27 OPEN
500V470
TEM2011
BYD33J
16V47^
PCB
JP
RG13 OPEN
GJ36 OPEN
QG36 OPEN
RG22 OPEN
RG20 OPEN
GJ03 OPEN
QG37 OPEN
CG34 OPEN
RG26 OPEN
DG27 OPEN
CG35 OPEN
RG19 OPEN
QG38 OPEN
RG17 OPEN
RG18 OPEN
4
5
6
7
8



NOTE
The marking [OPEN] means that there are on component on the PCB though there are the marking of part No. on the PCB.Its means open circuited.

UNIT SN.	
POWER	SN.23785013
DEF	SN.23784884
EW100Hz	SN.23784885
	SN.

COPPER SIDE PARTS	
	SN.
	SN.
	SN.
	SN.
	SN.



C00S
POWER/DEF/EW100Hz
32ZD06B/32ZD06G 2/6

U903 POWER BOARD PB9515E

U904 DEF BOARD PB9588A
28" 100Hz MODEL ONLY

U905 EW100Hz BOARD PB9517B

CAUTION
LIVE AREA

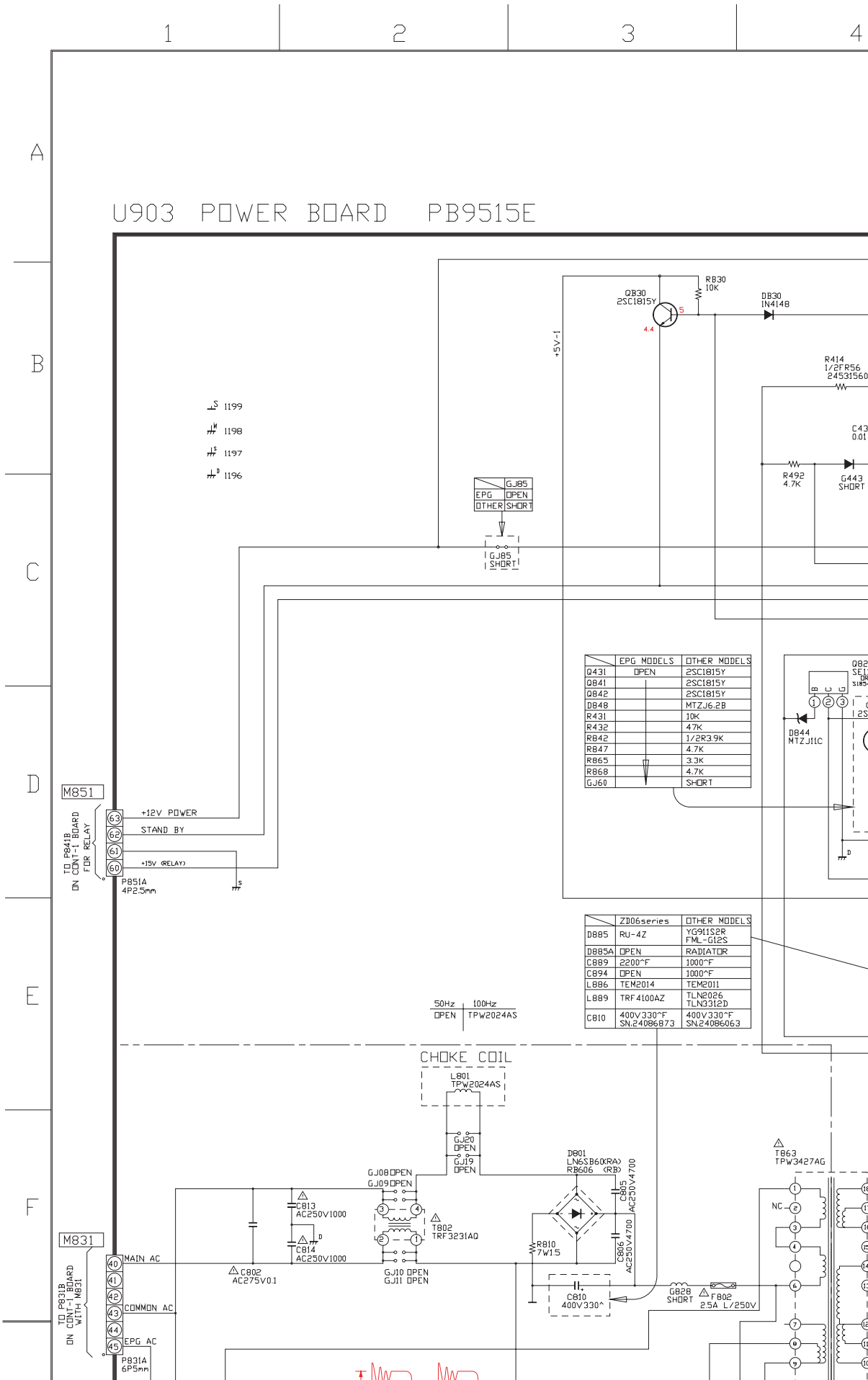
EPG MODELS	OTHER MODELS
ALL NEED	NO NEED(OPEN)

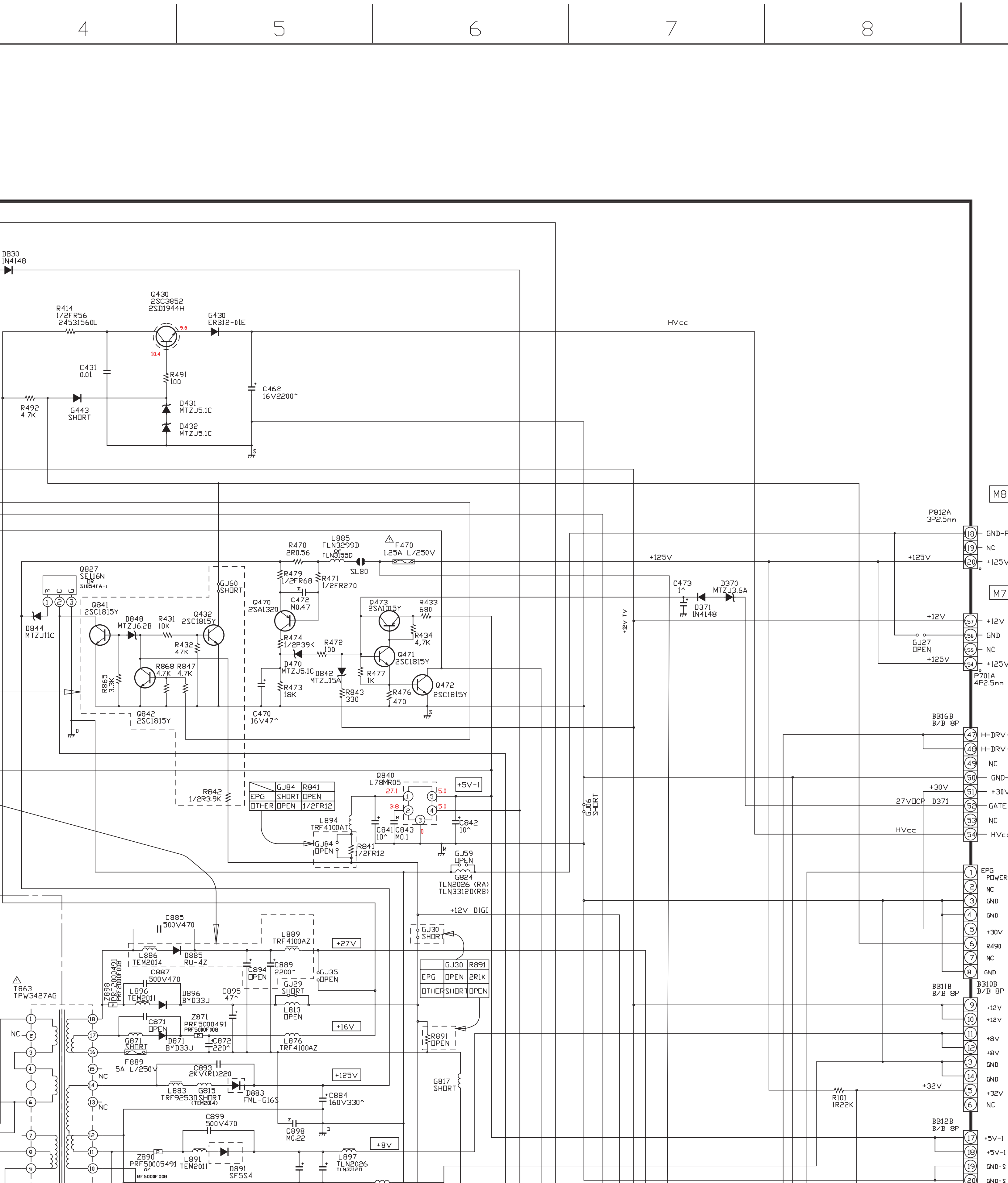
NOTE
The marking (OPEN) means that there are components on the PCB though there are the marking of part No on the PCB.Its means open circuited.

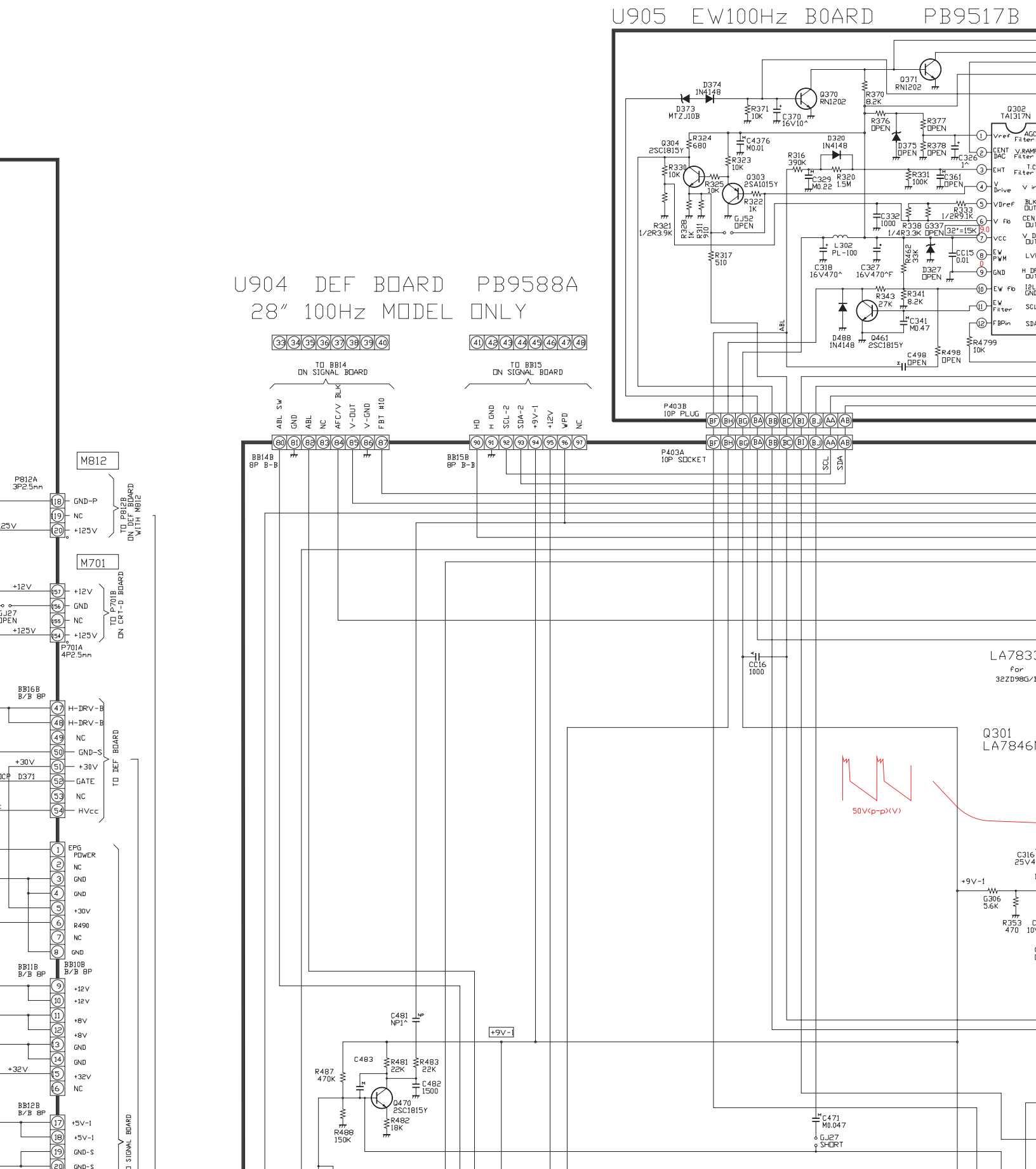
UNIT SN	
POWER	SN.23785134
DEF	SN.23785135
EW100Hz	SN.23785203
	SN.

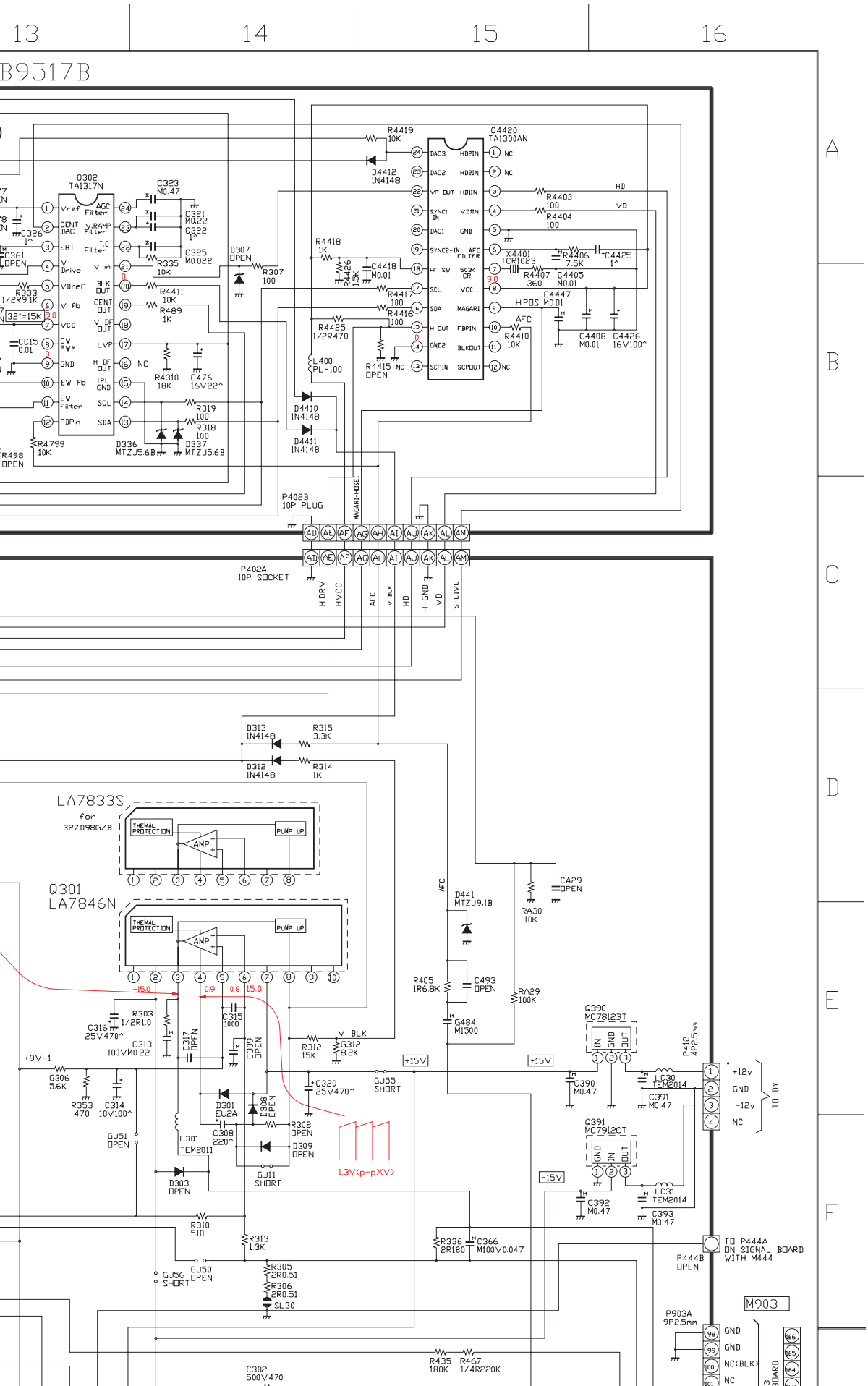
COPPER SIDE PARTS	
	SN.
	SN.
	SN.
	SN.
	SN.

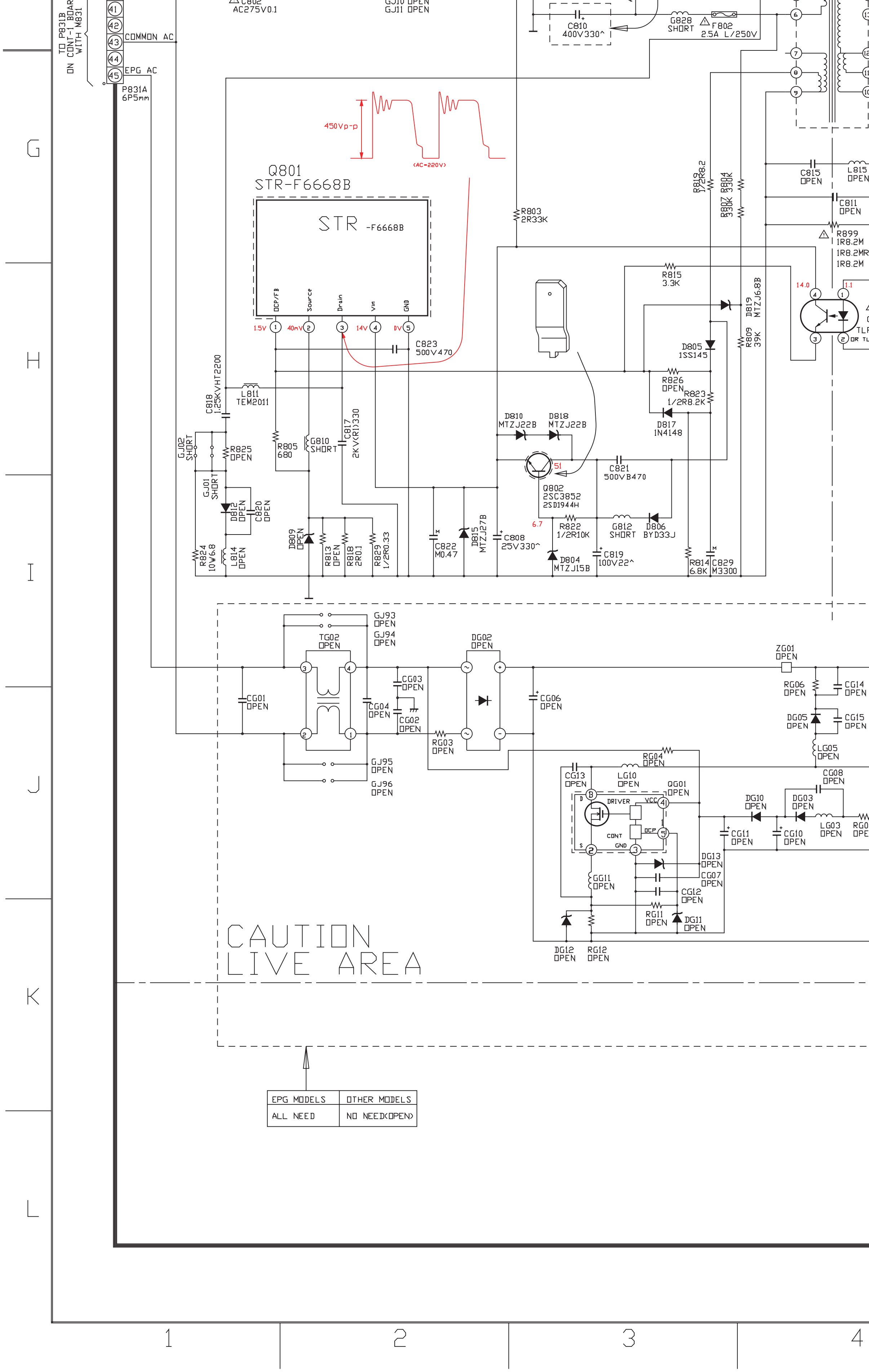
C00S
POWER/DEF/EW100Hz
28ZD06B/28ZD06G
2/6


U903 POWER BOARD PB9515E
1199
1198
1197
1196
GJ85
EPG OPEN
OTHER SHORT
GJ85 SHORT
QB30 2SC1815Y
RB30 10K
DB30 1N4148
+5V-1
R414 1/2FR56 24531560
R492 4.7K
G443 SHORT
D844 MTZJ11C
EPG MODELS
OTHER MODELS
Q431 OPEN 2SC1815Y
Q841 2SC1815Y
Q842 2SC1815Y
D848 MTZJ6.2B
R431 10K
R432 4.7K
R842 1/2R3.9K
R847 4.7K
R865 3.3K
R868 4.7K
GJ60 SHORT
ZD06series
OTHER MODELS
D885 RU-4Z YG911S2R FML-G12S
D885A OPEN RADIATOR
C889 2200^F 1000^F
C894 OPEN 1000^F
L886 TEM2014 TEM2011
L889 TRF4100AZ TLN2026 TLN3312D
C810 400V330^F SN.24086873 400V330^F SN.24086063
50Hz 100Hz
OPEN TPW2024AS
M851
TO P841B ON CONT-I BOARD FOR RELAY
+12V POWER
STAND BY
+15V (RELAY)
P851A 4P2.5mm
CHOKE COIL
L801 TPW2024AS
GJ08 OPEN
GJ19 OPEN
GJ08 OPEN
GJ09 OPEN
C813 AC250V1000
C814 AC250V1000
T802 TRF3231AQ
C802 AC275V0.1
GJ10 OPEN
GJ11 OPEN
D801 LN6SB60(RA) RB606 (RB)
C805 AC250V4700
C806 AC250V4700
R810 7W1.5
C810 400V330^
GJ28 SHORT
F802 2.5A L/250V
T863 TPW3427AG
NC
M831
TO P831B ON CONT-I BOARD WITH M831
MAIN AC
COMMON AC
EPG AC
P831A 6P5mm

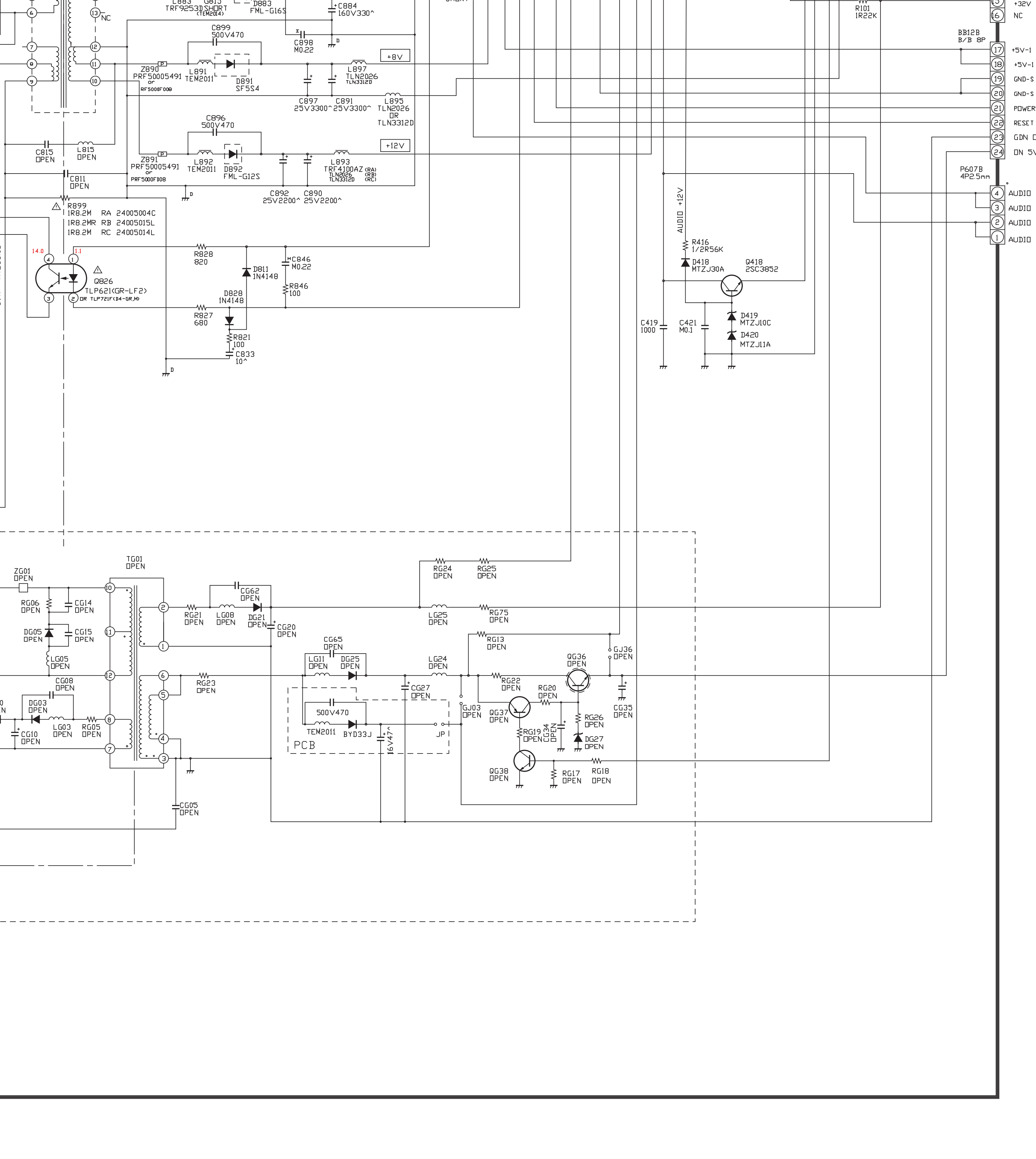

4
5
6
7
8
D830
1N4148
Q430
2SC3852
2SD1944H
R414
1/2FR56
24531560L
G430
ERB12-01E
HVcc
C431
0.01
R491
100
C462
16V2200^
R492
4.7K
G443
SHORT
D431
MTZJ5.1C
D432
MTZJ5.1C
M8
P812A
3P2.5mm
GND-P
NC
+125V
R470
2R0.56
L885
TLN3299D
TLN3155D
F470
1.25A L/250V
SL80
R479
1/2FR68
R471
1/2FR270
C472
M0.47
Q827
SE116N
S1854FA-1
GJ60
SHORT
C473
D370
MTZJ3.6A
D371
1N4148
M7
Q841
2SC1815Y
D848
MTZJ6.2B
R431
10K
Q432
2SC1815Y
Q470
2SA1320
Q473
2SA1015Y
R433
680
+12V
+12V TV
D844
MTZJ11C
R432
47K
R474
1/2P39K
R472
100
R434
4.7K
GJ27
OPEN
GND
NC
R865
3.3K
R868
4.7K
R847
4.7K
D470
MTZJ5.1C
D842
MTZJ15A
Q471
2SC1815Y
R477
1K
Q472
2SC1815Y
P701A
4P2.5mm
Q842
2SC1815Y
R473
18K
R843
330
R476
470
C470
16V47^
BB16B
B/B 8P
H-DRV
GND
+30V
GATE
HVcc
R842
1/2R3.9K
GJ84
R841
EPG
SHORT
OPEN
OTHER
OPEN
1/2FR12
Q840
L78MR05
+5V-1
C841
10^
C843
M0.1
C842
10^
L894
TRF4100AT
GJ06
SHORT
27VOCP
D371
GJ59
OPEN
G824
TLN2026 (RA)
TLN3312D(RB)
+12V DIGI
EPG
POWER
R490
C885
500V470
L889
TRF4100AZ
+27V
GJ30
SHORT
L886
TEM2014
D885
RU-4Z
C894
OPEN
C889
2200^
GJ35
OPEN
GJ30
R891
2R1K
BB10B
B/B 8P
BB11B
T863
TPW3427AG
Z898
PRF2000491
C887
500V470
L896
TEM2011
D896
BYD33J
C895
47^
GJ29
SHORT
L813
OPEN
Z871
PRF5000491
PRF5000F008
C871
OPEN
+16V
R891
OPEN
+8V
G871
SHORT
D871
BYD33J
C872
220^
L876
TRF4100AZ
F889
5A L/250V
C893
2KV(R1)220
+125V
G817
SHORT
L883
TRF9253D
G815
SHORT
(TEM2014)
D883
FML-G16S
C884
160V330^
+32V
R101
1R22K
C899
500V470
C898
M0.22
BB12B
B/B 8P
+8V
+5V-1
GND-S
Z890
PRF50005491
RF5000F008
L891
TEM2011
D891
SF5S4
L897
TLN2026
TLN3312D
NC


U905 EW100Hz BOARD PB9517B
U904 DEF BOARD PB9588A
28" 100Hz MODEL ONLY
TO BB14 ON SIGNAL BOARD
TO BB15 ON SIGNAL BOARD
ABL S/W
GND
ABL
NC
AFC/V BLK
V-OUT
V-GND
FBT #10
HD
H GND
SCL-2
SDA-2
+9V-1
+12V
WPD
NC
BB14B 8P B-B
BB15B 8P B-B
P403B 10P PLUG
P403A 10P SOCKET
SCL
SDA
ABL
M812
P812A 3P2.5mm
GND-P
NC
+125V
TO P812B ON DEF BOARD WITH M812
M701
P701A 4P2.5mm
+12V
GND
NC
+125V
TO P701B ON CRT-D BOARD
BB16B B/B 8P
H-DRV-B
H-DRV-B
NC
GND-S
+30V
GATE
NC
HVcc
TO DEF BOARD
EPG POWER
NC
GND
GND
+30V
R490
NC
GND
BB11B B/B 8P
BB10B B/B 8P
+12V
+12V
+8V
+8V
GND
GND
+32V
NC
BB12B B/B 8P
+5V-1
+5V-1
GND-S
GND-S
TO SIGNAL BOARD
D374 1N4148
D373 MTZJ10B
R371 10K
C370 16V10^
Q370 RN1202
Q371 RN1202
R370 8.2K
R376 OPEN
R377 OPEN
Q302 TA1317N
Vref
CENT DAC
EHT
V Drive
VDref
V Fb
VCC
EW PWM
GND
EW Fb
EW Filter
FBPin
D375 OPEN
R378 OPEN
C326 1^
Q304 2SC1815Y
R324 680
C4376 M0.01
R323 10K
R330 10K
R325 10K
Q303 2SA1015Y
R322 1K
GJ52 OPEN
R321 1/2R3.9K
R328 1K
R311 910
R317 510
D320 1N4148
R316 390K
C329 M0.22
R320 1.5M
R331 100K
C361 OPEN
C332 1000
R333 1/2R91K
R338 1/4R3.3K
G337 OPEN
32"=15K
9.0
L302 PL-100
C318 16V470^
C327 16V470^F
R462 33K
D327 OPEN
CC15 0.01
R343 27K
R341 8.2K
C341 M0.47
D488 1N4148
Q461 2SC1815Y
C498 OPEN
R498 OPEN
R4799 10K
CC16 1000
LA7833
for 32ZD98G/1
Q301 LA7846
50V(p-p)(V)
C316 25V4
+9V-1
G306 5.6K
R353 470
C481 NP1^
C483
R481 22K
R483 22K
R487 470K
C482 1500
Q470 2SC1815Y
R482 18K
R488 150K
C471 M0.047
GJ27 SHORT

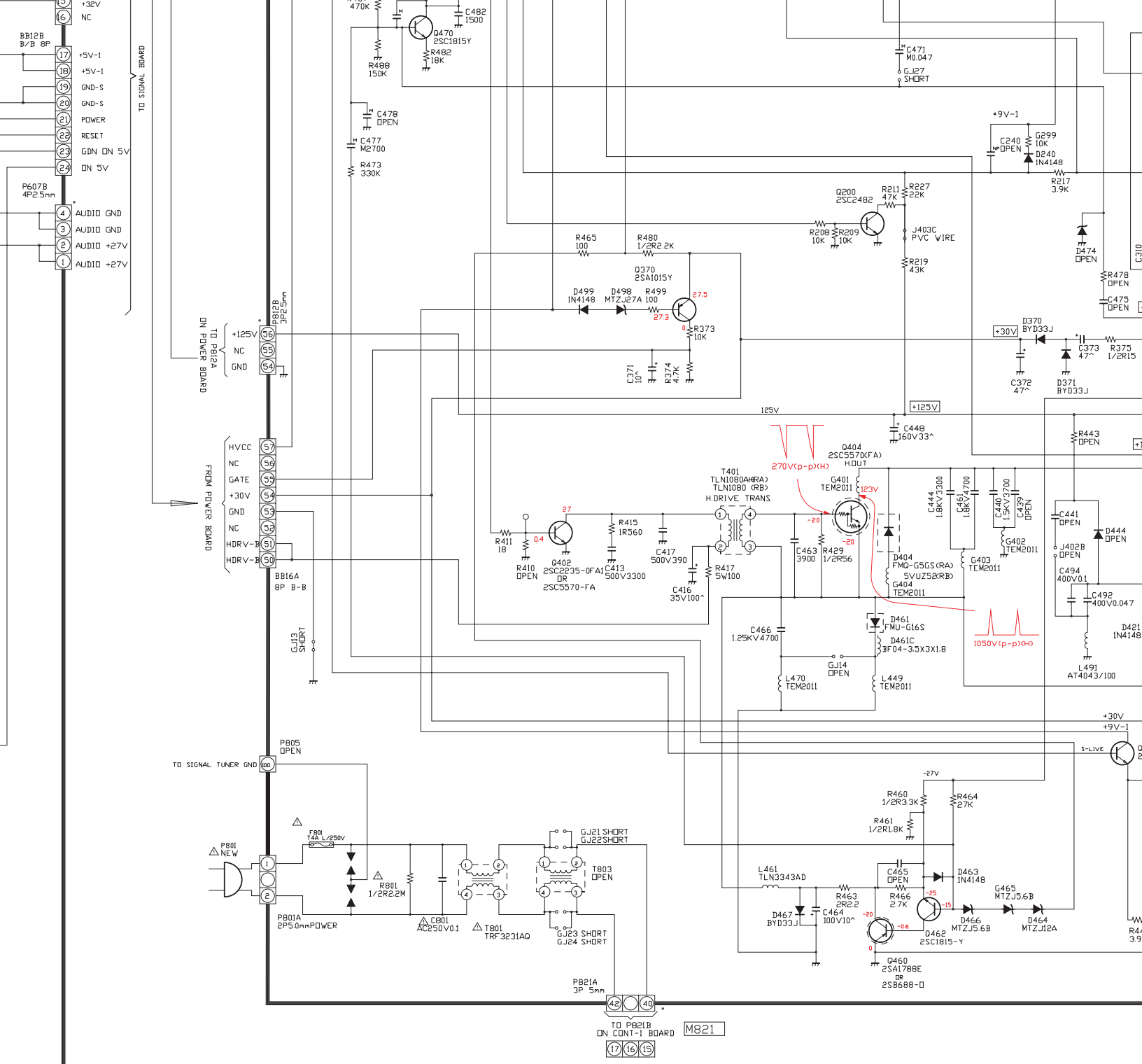

13
14
15
16
A
B
C
D
E
F
B9517B
Q4420
TA1300AN
R4419
10K
D4412
1N4148
R4403
100
R4404
100
HD
VD
Q302
TA1317N
C323
M0.47
C321
M0.22
C322
1^
C325
M0.022
R335
10K
D307
OPEN
R307
100
R4418
1K
R4426
1.5K
C4418
M0.01
R4417
100
R4416
100
R4425
1/2R470
R4415
OPEN
L400
PL-100
D4410
1N4148
D4411
1N4148
X4401
TCR1023
R4406
7.5K
C4425
1^
R4407
360
C4405
M0.01
C4447
M0.01
H.POS
AFC
R4410
10K
C4408
M0.01
C4426
16V100^
R4411
10K
R489
1K
R4310
18K
C476
16V22^
R319
100
R318
100
D336
MTZJ5.6B
D337
MTZJ5.6B
R4799
10K
P402B
10P PLUG
MAGARI+HDSEL
P402A
10P SOCKET
H.DRV
HVCC
AFC
V BLK
HD
H-GND
VD
S-LIVE
D313
1N4148
D312
1N4148
R315
3.3K
R314
1K
LA7833S
for
32ZD98G/B
THEMAL PROTECTION
AMP
PUMP UP
Q301
LA7846N
D441
MTZJ9.1B
RA30
10K
CA29
OPEN
R405
1R6.8K
C493
OPEN
RA29
100K
G484
M1500
-15.0
0.9
0.8
15.0
R303
1/2R1.0
C316
25V470^
C315
1000
C313
100VM0.22
C317
OPEN
C309
OPEN
R312
15K
G312
8.2K
V BLK
+9V-1
G306
5.6K
R353
470
C314
10V100^
GJ51
OPEN
D301
EU2A
C308
220^
R308
OPEN
D309
OPEN
D308
OPEN
L301
TEM2011
D303
OPEN
GJ11
SHORT
1.3V(p-pXV)
C320
25V470^
GJ55
SHORT
+15V
+15V
Q390
MC7812BT
IN
GND
OUT
C390
M0.47
L30
TEM2014
C391
M0.47
P412
4P2.5mm
+12v
GND
-12v
NC
TO DY
Q391
MC7912CT
GND
IN
OUT
-15V
C392
M0.47
L31
TEM2014
C393
M0.47
R310
510
R313
1.3K
R336
2R180
C366
M100V0.047
GJ56
SHORT
GJ50
OPEN
R305
2R0.51
R306
2R0.51
SL30
P444B
OPEN
TO P444A
ON SIGNAL BOARD
WITH M444
M903
P903A
9P2.5mm
GND
GND
NC(BLK)
NC
C302
500V470
R435
180K
R467
1/4R220K



TO P831B ON CONT-1 BOARD WITH M831
COMMON AC
EPG AC
P831A 6P5mm
C802 AC275V0.1
GJ10 OPEN
GJ11 OPEN
C810 400V330^
G828 SHORT
F802 2.5A L/250V
450Vp-p
(AC=220V)
Q801
STR-F6668B
STR -F6668B
DCP/FB
Source
Drain
Vin
GND
1.5V
40mV
14V
0V
C823 500V470
R803 2R33K
R815 3.3K
D819 MTZJ6.8B
D805 1SS145
R826 OPEN
R823 1/2R8.2K
D817 1N4148
R809 39K
R807 330K
R804 330K
R819 1/2R8.2
C815 OPEN
L815 OPEN
C811 OPEN
R899 1R8.2M 1R8.2MR 1R8.2M
14.0
1.1
C818 1.25KVHT2200
L811 TEM2011
GJ02 SHORT
R825 OPEN
R805 680
G810 SHORT
C817 2KV(R)330
GJ01 SHORT
D812 OPEN
C820 OPEN
D810 MTZJ22B
D818 MTZJ22B
51
C821 500VB470
Q802 2SC3852 2SD1944H
6.7
R822 1/2R10K
G812 SHORT
D806 BYD33J
R824 10V6.8
L814 OPEN
D809 OPEN
R813 OPEN
R818 2R0.1
R829 1/2R0.33
C822 M0.47
D815 MTZJ27B
C808 25V330^
D804 MTZJ15B
C819 100V22^
R814 6.8K
C829 M3300
GJ93 OPEN
GJ94 OPEN
TG02 OPEN
DG02 OPEN
ZG01 OPEN
CG01 OPEN
CG03 OPEN
CG04 OPEN
CG02 OPEN
CG06 OPEN
RG06 OPEN
CG14 OPEN
DG05 OPEN
CG15 OPEN
LG05 OPEN
RG03 OPEN
GJ95 OPEN
GJ96 OPEN
RG04 OPEN
CG13 OPEN
LG10 OPEN
QG01 OPEN
DRIVER
VCC
CONT
GND
OCP
CG08 OPEN
DG10 OPEN
DG03 OPEN
CG11 OPEN
CG10 OPEN
LG03 OPEN
DG13 OPEN
CG07 OPEN
GG11 OPEN
CG12 OPEN
RG11 OPEN
DG11 OPEN
DG12 OPEN
RG12 OPEN
CAUTION LIVE AREA
EPG MODELS
OTHER MODELS
ALL NEED
NO NEED(OPEN)
G
H
I
J
K
L
1
2
3
4


C884
160V330^
D883
FML-G16S
C899
500V470
C898
M0.22
+8V
Z890
PRF50005491
L891
TEM2011
D891
SF5S4
L897
TLN2026
TLN3312D
C897
25V3300^
C891
25V3300^
L895
TLN2026
OR
TLN3312D
C896
500V470
+12V
Z891
PRF50005491
L892
TEM2011
D892
FML-G12S
L893
TRF4100AZ
C892
25V2200^
C890
25V2200^
C815
OPEN
L815
OPEN
C811
OPEN
R899
1R8.2M RA 24005004C
1R8.2MR RB 24005015L
1R8.2M RC 24005014L
R828
820
D811
1N4148
C846
M0.22
R846
100
Q826
TLP621(GR-LF2)
D828
1N4148
R827
680
R821
100
C833
10^
R101
1R22K
+32V
NC
BB12B
B/B 8P
+5V-1
GND-S
POWER
RESET
GDN
ON 5V
P607B
4P2.5mm
AUDIO
AUDIO +12V
R416
1/2R56K
D418
MTZJ30A
Q418
2SC3852
C419
1000
C421
M0.1
D419
MTZJ10C
D420
MTZJ11A
TG01
OPEN
ZG01
OPEN
RG06
OPEN
CG14
OPEN
DG05
OPEN
CG15
OPEN
LG05
OPEN
CG08
OPEN
DG03
OPEN
LG03
OPEN
RG05
OPEN
CG10
OPEN
CG62
OPEN
RG21
OPEN
LG08
OPEN
DG21
OPEN
CG20
OPEN
RG23
OPEN
CG05
OPEN
RG24
OPEN
RG25
OPEN
LG25
OPEN
RG75
OPEN
RG13
OPEN
GJ36
OPEN
CG65
OPEN
LG11
OPEN
DG25
OPEN
LG24
OPEN
CG27
OPEN
RG22
OPEN
QG36
OPEN
RG20
OPEN
CG35
OPEN
500V470
TEM2011
BYD33J
16V47^
JP
PCB
GJ03
OPEN
QG37
OPEN
RG19
OPEN
CG34
OPEN
RG26
OPEN
DG27
OPEN
QG38
OPEN
RG17
OPEN
RG18
OPEN

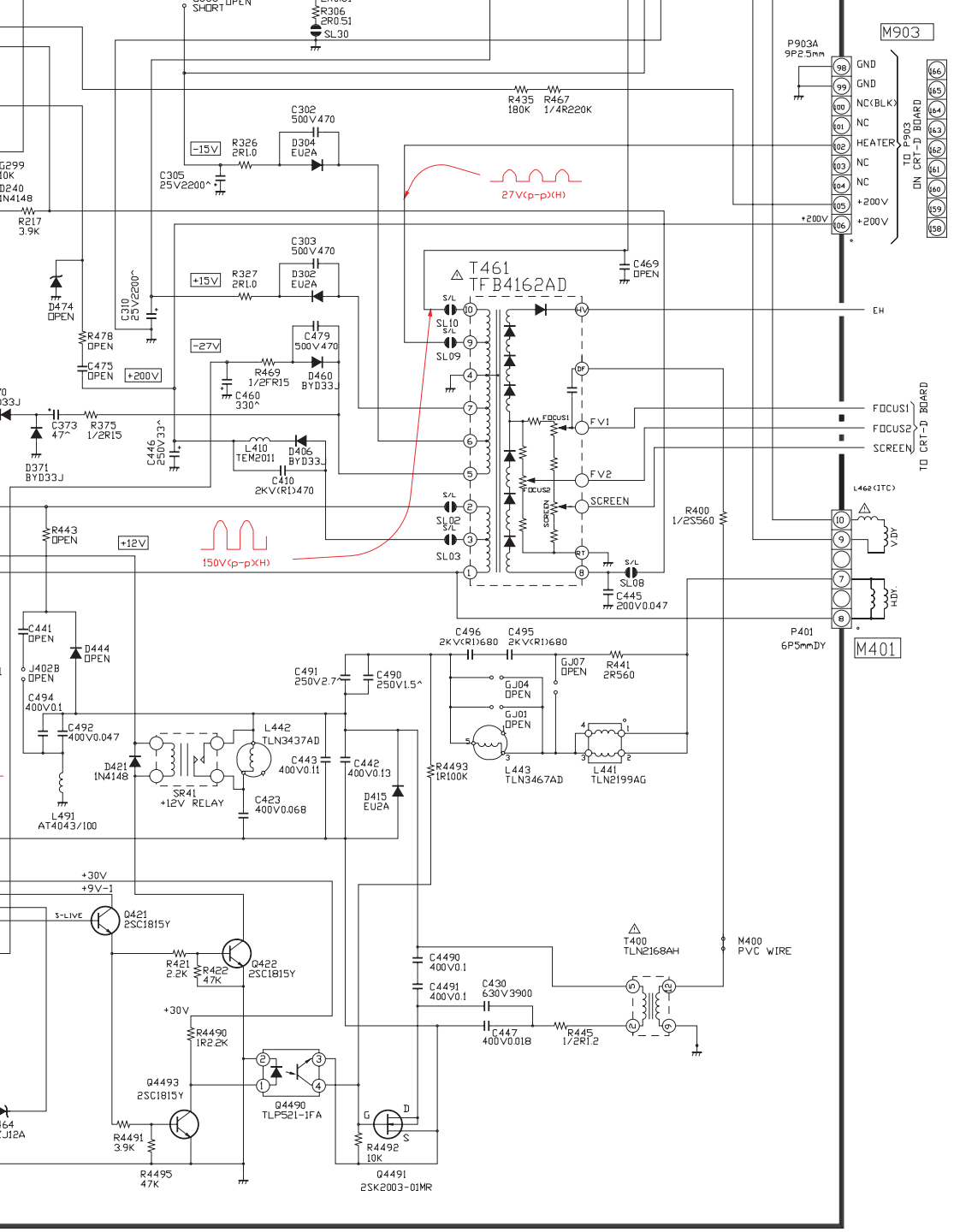
4	5	6	7	8



NOTE
The marking [OPEN] means that there are on component on the PCB though there are the marking of part No. on the PCB.Its means open circuited.

UNIT SN.	
POWER	SN.23785134
DEF	SN.23785135
EW100Hz	SN.23785203
	SN.

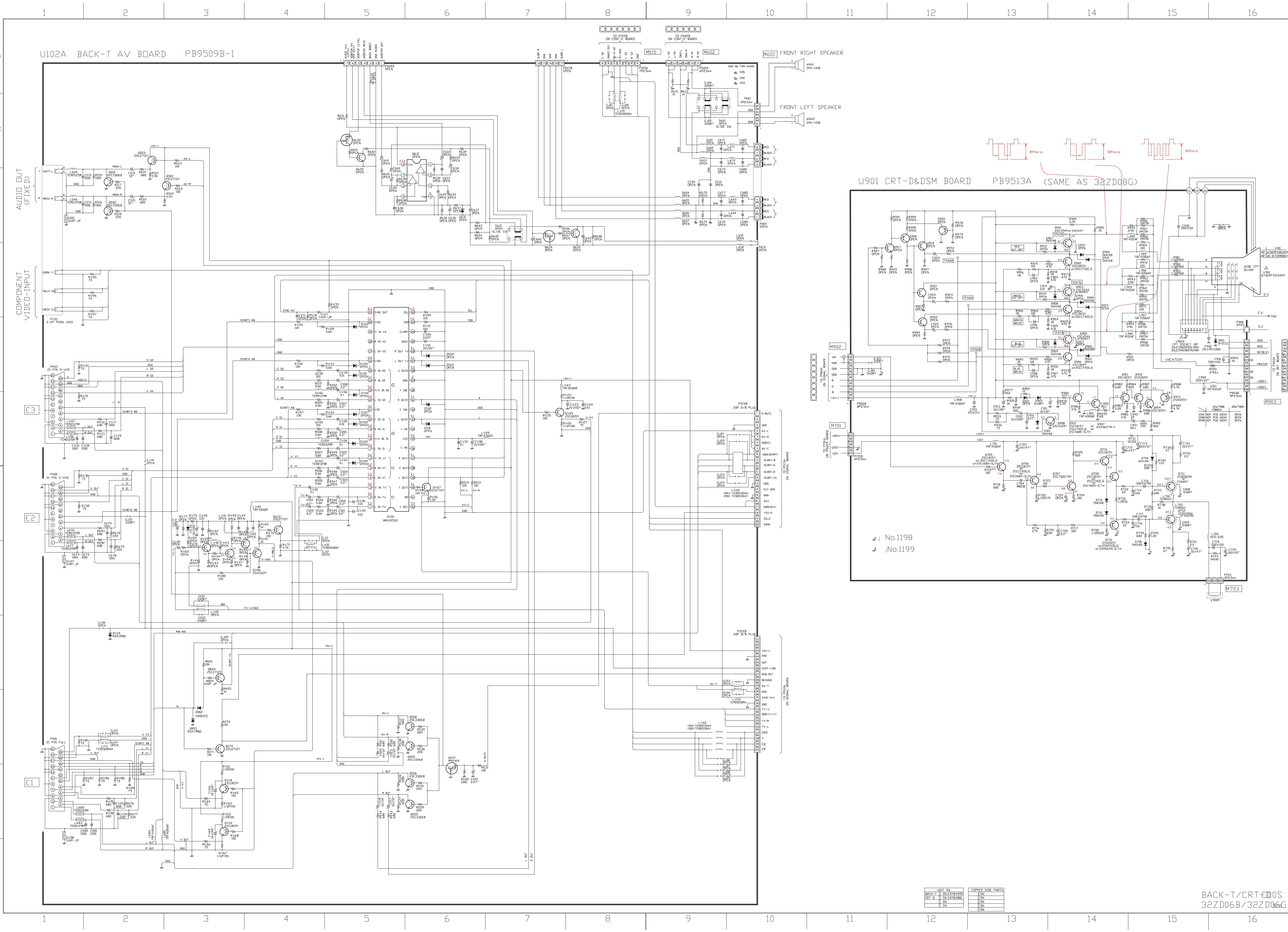
COPPER SIDE PARTS	
	SN.
	SN.
	SN.
	SN.
	SN.



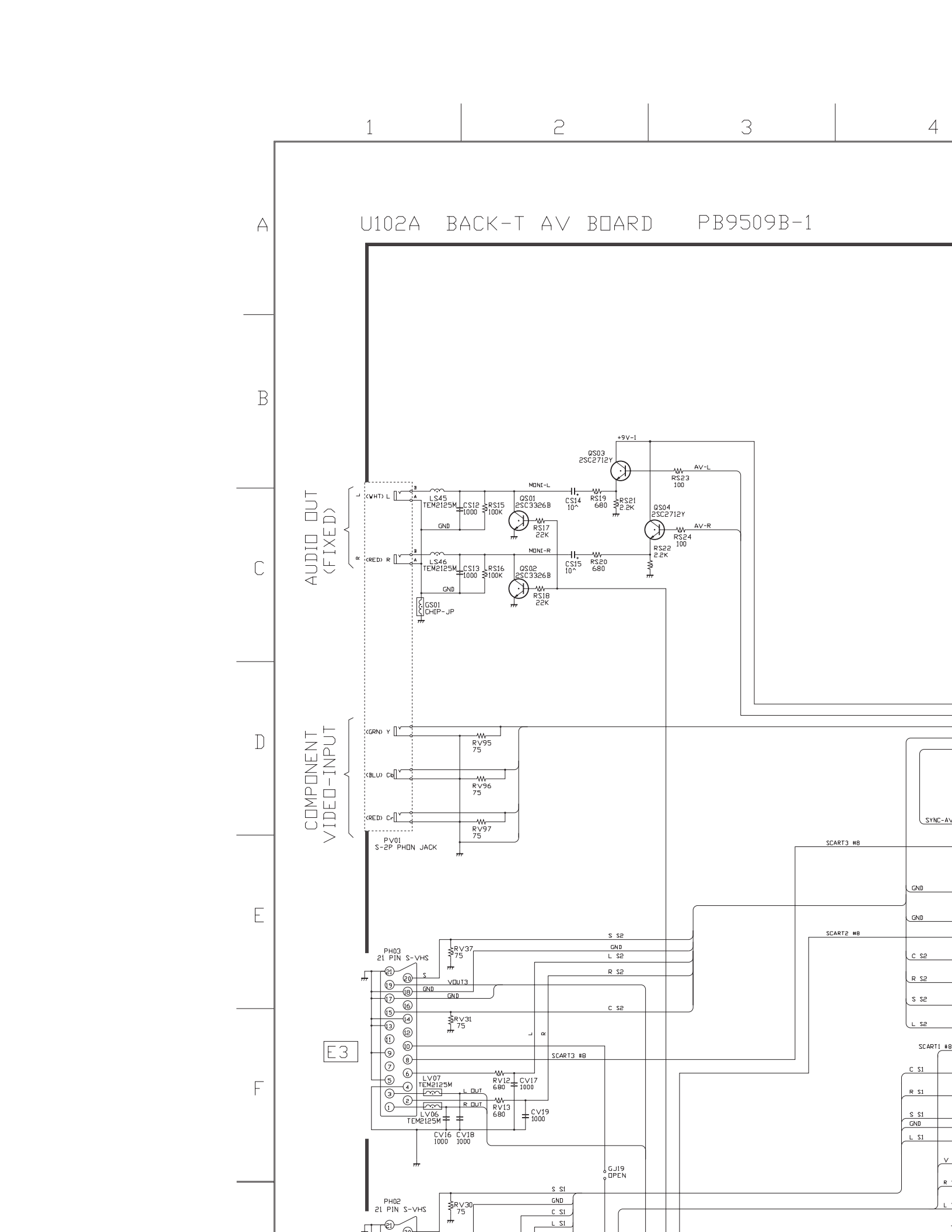
C00S

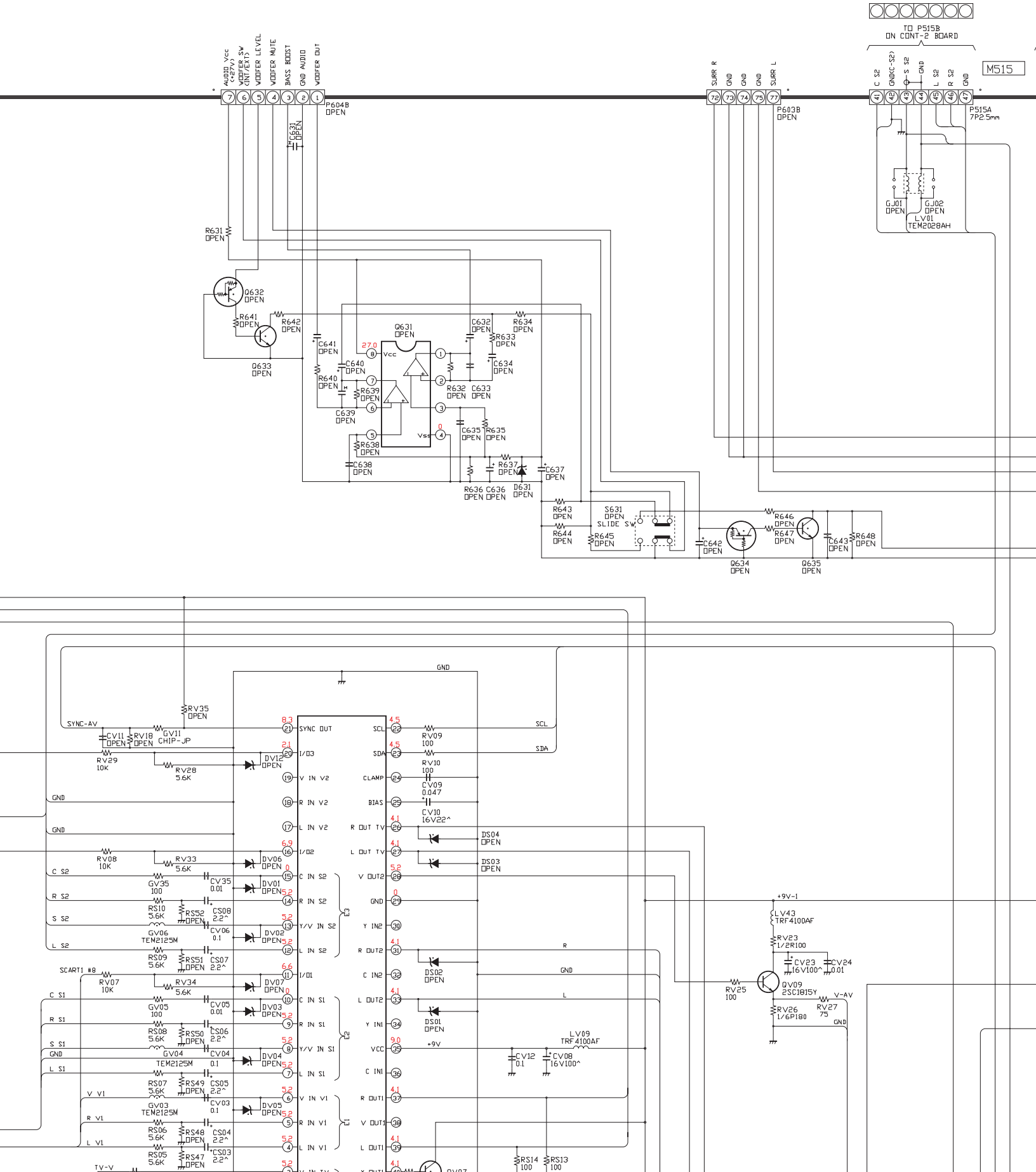
POWER/DEF/EW100Hz

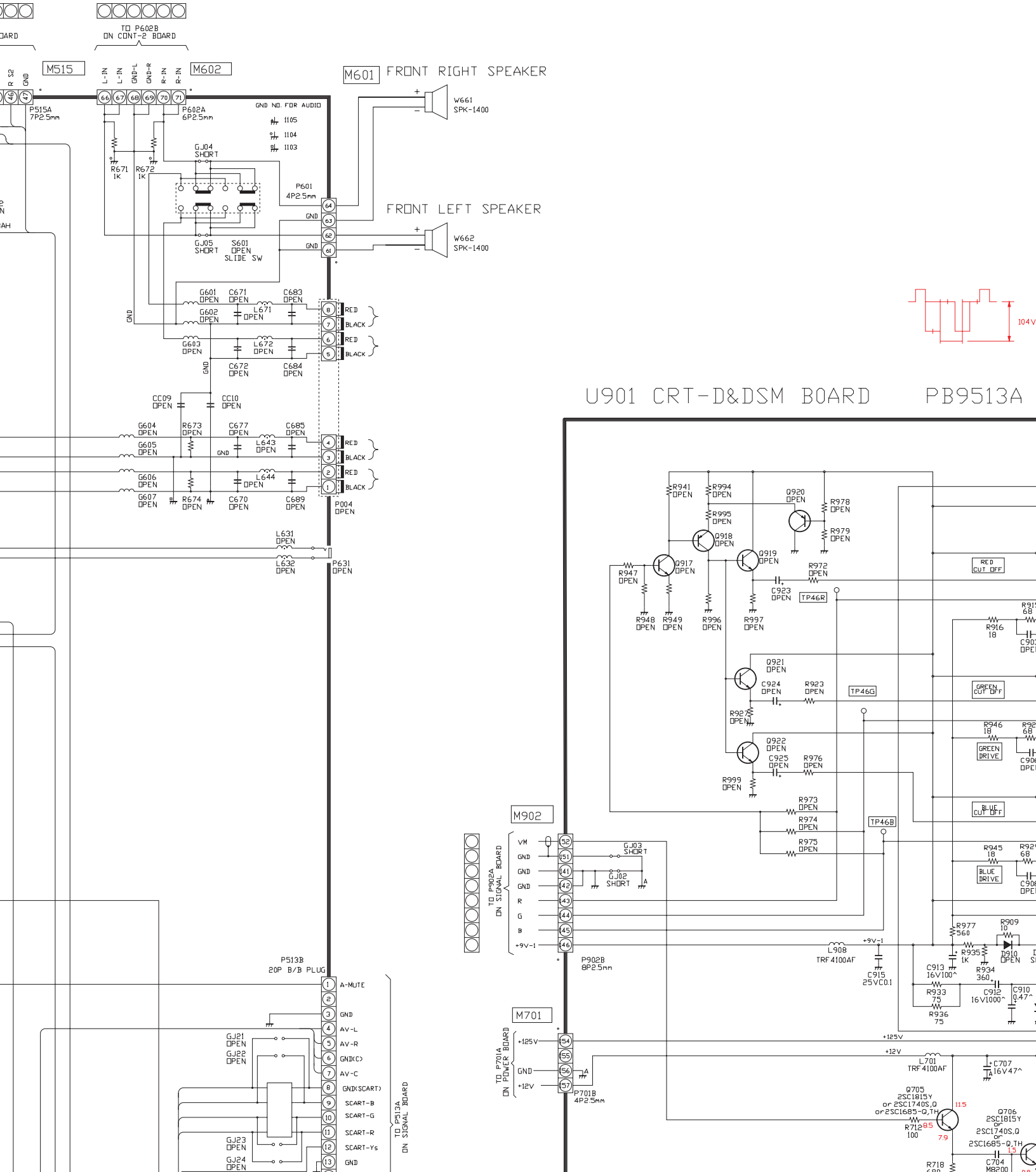
28ZD06B/28ZD06G 2/6

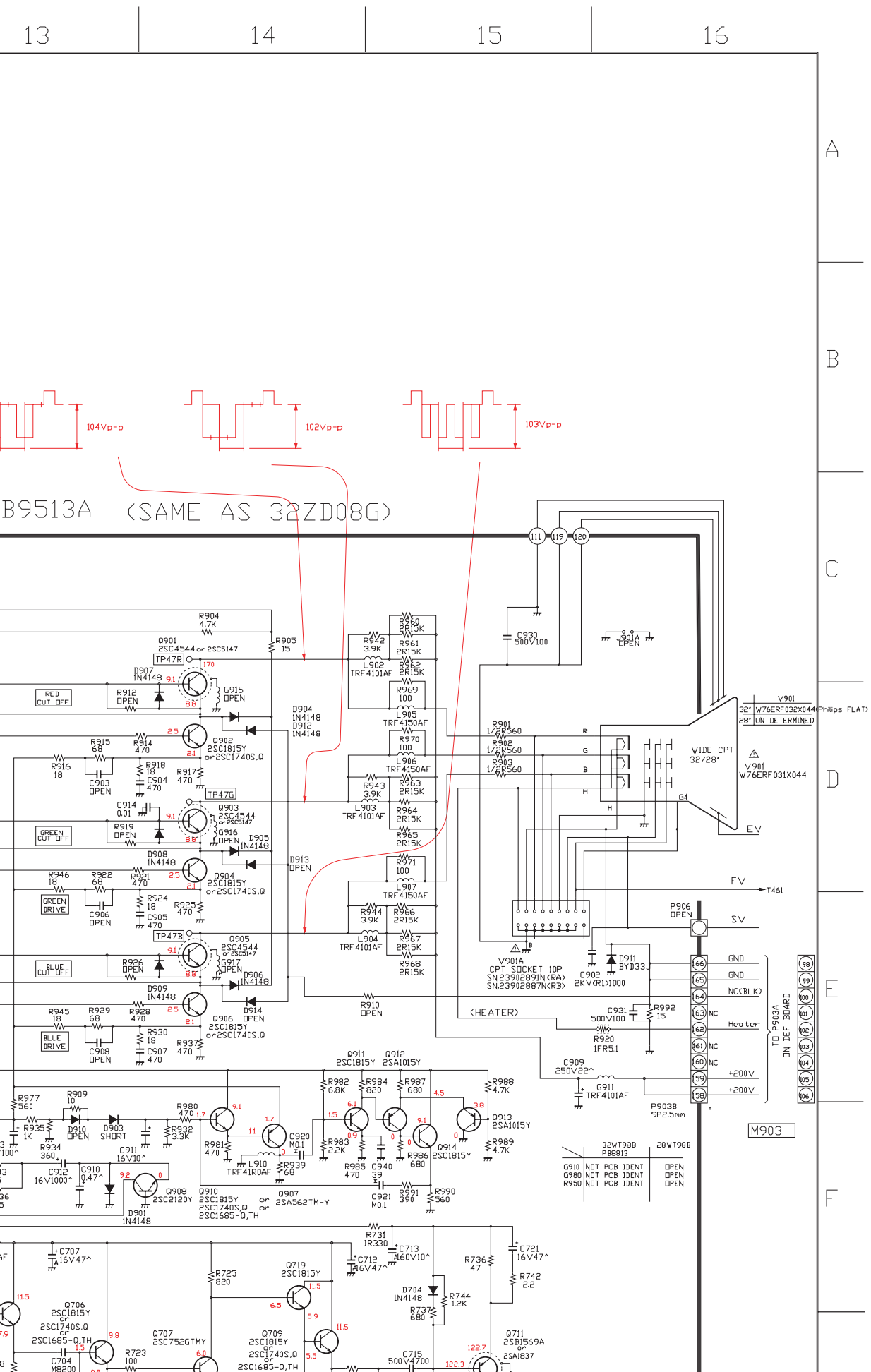


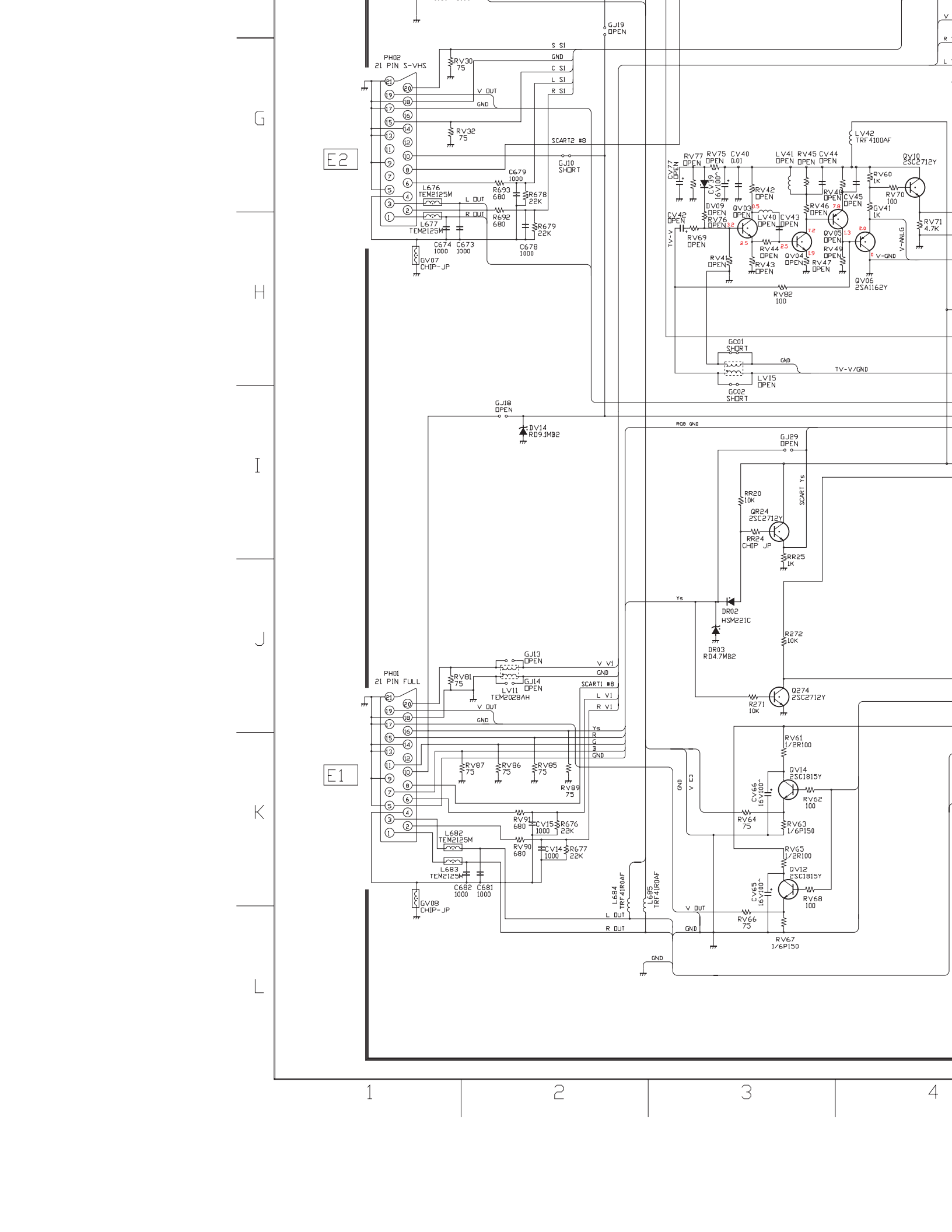
U102A BACK-T AV BOARD PB9509B-1
U901 CRT-D&DSM BOARD PB9513A (SAME AS 32ZD08G)
FRONT RIGHT SPEAKER
FRONT LEFT SPEAKER
AUDIO OUT (FIXED)
COMPONENT VIDEO-INPUT
E1
E2
E3
M601
M515
M602
M701
M703
M902
M903
No.1198
No.1199
BACK-T/CRT-DDS
32ZD06B/32ZD06G

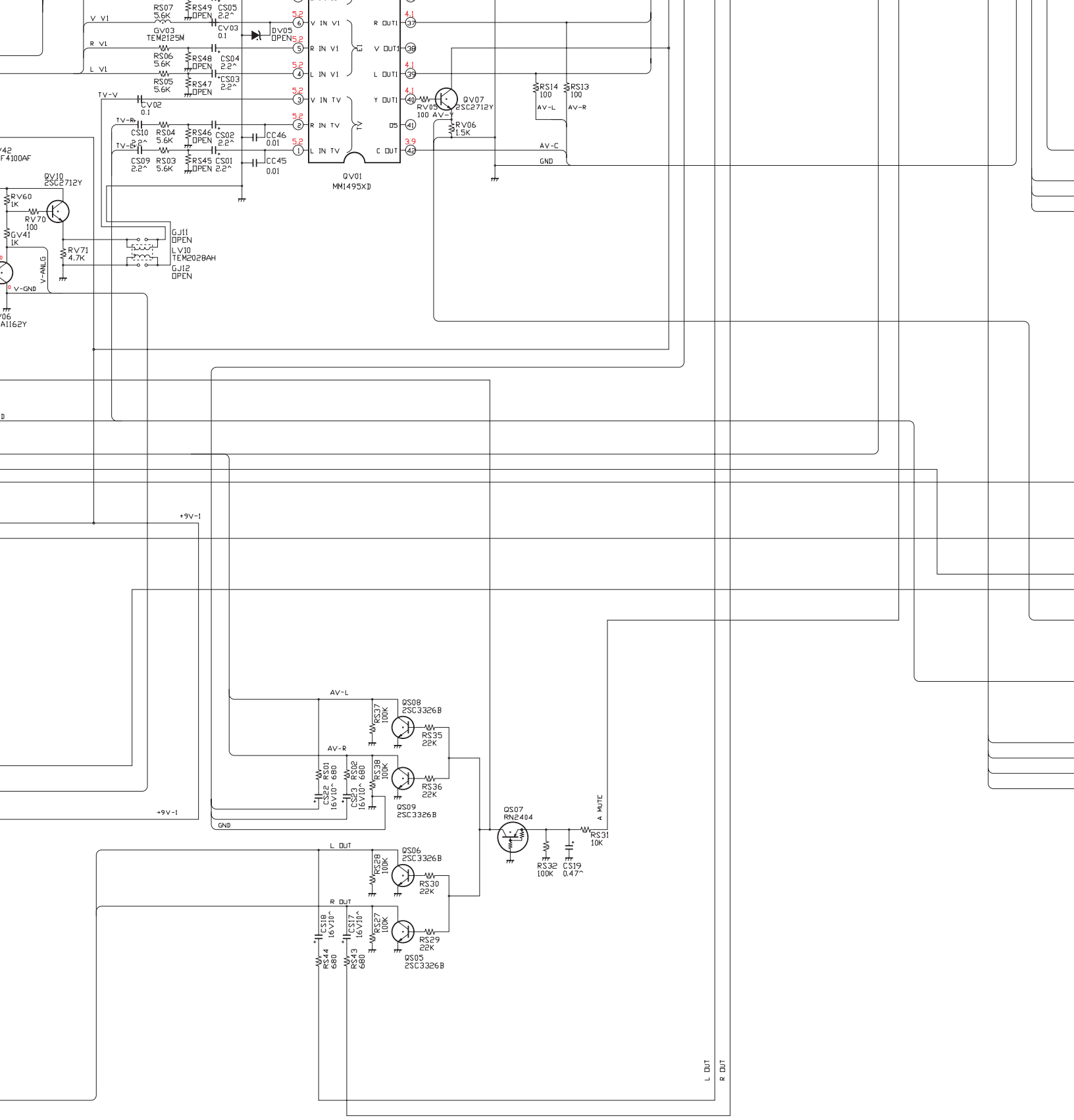

1
2
3
4
A
B
C
D
E
F
U102A BACK-T AV BOARD PB9509B-1
AUDIO OUT (FIXED)
COMPONENT VIDEO-INPUT
+9V-1
QS03 2SC2712Y
AV-L
RS23 100
MONI-L
(WHT) L
LS45 TEM2125M
CS12 1000
RS15 100K
QS01 2SC3326B
CS14 10^
RS19 680
RS21 2.2K
QS04 2SC2712Y
AV-R
RS24 100
RS22 2.2K
GND
RS17 22K
MONI-R
(RED) R
LS46 TEM2125M
CS13 1000
RS16 100K
QS02 2SC3326B
CS15 10^
RS20 680
RS18 22K
GS01 CHIP-JP
(GRN) Y
(BLU) Cb
(RED) Cr
RV95 75
RV96 75
RV97 75
PV01 S-2P PHON JACK
SCART3 #8
GND
SCART2 #8
S S2
GND
L S2
R S2
C S2
PH03 21 PIN S-VHS
RV37 75
S
VOUT3
GND
GND
RV31 75
L
R
E3
SCART3 #8
LV07 TEM2125M
L OUT
RV12 680
CV17 1000
R OUT
RV13 680
CV19 1000
LV06 TEM2125M
CV16 1000
CV18 1000
GJ19 OPEN
S S1
GND
C S1
L S1
PH02 21 PIN S-VHS
RV30 75
SYNC-AV
C S2
R S2
S S2
L S2
SCART1 #8
C S1
R S1
S S1
GND
L S1

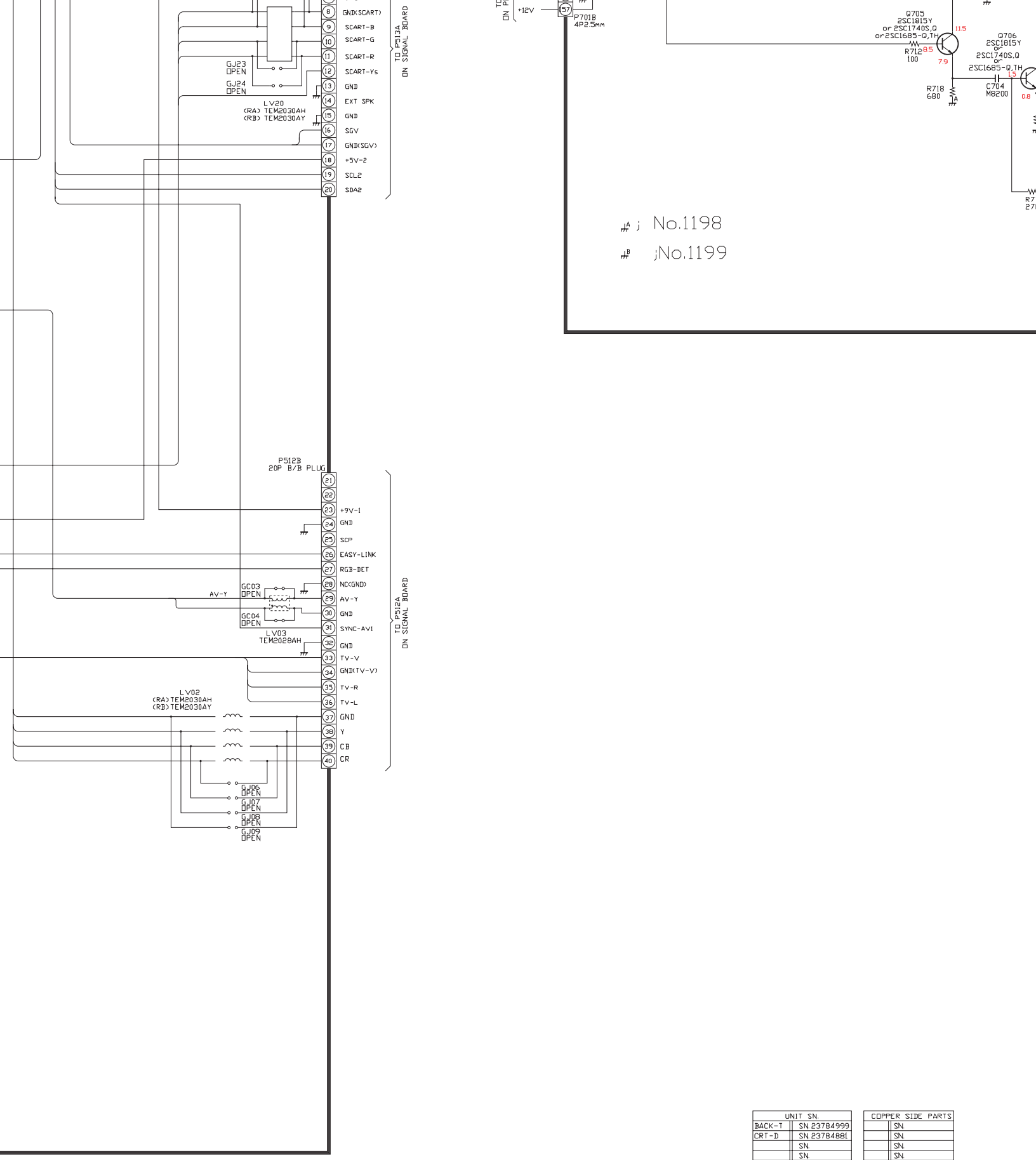

TO P515B
ON CONT-2 BOARD
M515
P604B
OPEN
P603B
OPEN
P515A
7P2.5mm
AUDIO Vcc (+27V)
SLIDE SW (INPUT)
WOOFER LEVEL
WOOFER MUTE
BASS BOOST
GND AUDIO
WOOFER OUT
SURR R
GND
GND
GND
SURR L
C S2
GNDC-S2)
S S2
GND
L S2
R S2
GND
C631 OPEN
GJ01 OPEN
GJ02 OPEN
LV01 TEM2028AH
R631 OPEN
Q632 OPEN
R641 OPEN
R642 OPEN
Q633 OPEN
Q631 OPEN
C641 OPEN
C640 OPEN
R640 OPEN
R639 OPEN
C639 OPEN
R638 OPEN
C638 OPEN
C632 OPEN
R633 OPEN
C634 OPEN
R632 OPEN
C633 OPEN
C635 OPEN
R635 OPEN
R637 OPEN
C637 OPEN
R636 OPEN
C636 OPEN
D631 OPEN
R643 OPEN
R644 OPEN
S631 OPEN SLIDE SW
R645 OPEN
C642 OPEN
Q634 OPEN
R646 OPEN
R647 OPEN
Q635 OPEN
C643 OPEN
R648 OPEN
GND
RV35 OPEN
SYNC-AV
CV11 OPEN
RV18 OPEN
GV11 CHIP-JP
RV29 10K
RV28 5.6K
DV12 OPEN
RV08 10K
RV33 5.6K
DV06 OPEN
C S2
GV35 100
CV35 0.01
DV01 OPEN
R S2
RS10 5.6K
RS52 OPEN
CS08 2.2^
S S2
GV06 TEM2125M
CV06 0.1
DV02 OPEN
L S2
RS09 5.6K
RS51 OPEN
CS07 2.2^
SCART1 #8
RV07 10K
RV34 5.6K
DV07 OPEN
C S1
GV05 100
CV05 0.01
DV03 OPEN
R S1
RS08 5.6K
RS50 OPEN
CS06 2.2^
S S1
GV04 TEM2125M
CV04 0.1
DV04 OPEN
L S1
RS07 5.6K
RS49 OPEN
CS05 2.2^
V V1
GV03 TEM2125M
CV03 0.1
DV05 OPEN
R V1
RS06 5.6K
RS48 OPEN
CS04 2.2^
L V1
RS05 5.6K
RS47 OPEN
CS03 2.2^
TV-V
SYNC OUT
I/O3
V IN V2
R IN V2
L IN V2
I/O2
C IN S2
R IN S2
Y/V IN S2
L IN S2
I/O1
C IN S1
R IN S1
Y/V IN S1
L IN S1
V IN V1
R IN V1
L IN V1
E3
E2
E1
SCL
SDA
CLAMP
BIAS
R OUT TV
L OUT TV
V OUT2
GND
Y IN2
R OUT2
C IN2
L OUT2
Y IN1
VCC
C IN1
R OUT1
V OUT1
L OUT1
RV09 100
RV10 100
CV09 0.047
CV10 16V22^
DS04 OPEN
DS03 OPEN
DS02 OPEN
DS01 OPEN
+9V
LV09 TRF4100AF
CV12 0.1
CV08 16V100^
RS14 100
RS13 100
+9V-1
LV43 TRF4100AF
RV23 1/2R100
CV23 16V100^
CV24 0.01
QV09 2SC1815Y
RV25 100
RV26 1/6P180
RV27 75
V-AV
R
L
GND


TO P602B
ON CONT-2 BOARD
M515
M602
M601 FRONT RIGHT SPEAKER
W661
SPK-1400
FRONT LEFT SPEAKER
W662
SPK-1400
P515A
7P2.5mm
P602A
6P2.5mm
GND NO. FOR AUDIO
1105
1104
1103
GJ04
SHORT
R671
1K
R672
1K
P601
4P2.5mm
GJ05
SHORT
S601
OPEN
SLIDE SW
G601 OPEN
G602 OPEN
C671 OPEN
L671 OPEN
C683 OPEN
G603 OPEN
L672 OPEN
C672 OPEN
C684 OPEN
RED
BLACK
CC09 OPEN
CC10 OPEN
G604 OPEN
G605 OPEN
G606 OPEN
G607 OPEN
R673 OPEN
R674 OPEN
C677 OPEN
L643 OPEN
L644 OPEN
C670 OPEN
C685 OPEN
C689 OPEN
P004
OPEN
L631
OPEN
L632
OPEN
P631
OPEN
U901 CRT-D&DSM BOARD PB9513A
104V
M902
TO P902A
ON SIGNAL BOARD
VM
GND
R
G
B
+9V-1
GJ03
SHORT
GJ02
SHORT
P902B
8P2.5mm
M701
TO P701A
ON POWER BOARD
+125V
GND
+12V
P701B
4P2.5mm
P513B
20P B/B PLUG
A-MUTE
GND
AV-L
AV-R
GND(C)
AV-C
GND(SCART)
SCART-B
SCART-G
SCART-R
SCART-Ys
GND
GJ21
OPEN
GJ22
OPEN
GJ23
OPEN
GJ24
OPEN
TO P513A
ON SIGNAL BOARD
R941 OPEN
R994 OPEN
Q920 OPEN
R978 OPEN
R995 OPEN
Q918 OPEN
R979 OPEN
Q919 OPEN
Q917 OPEN
R947 OPEN
R972 OPEN
C923 OPEN
TP46R
R948 OPEN
R949 OPEN
R996 OPEN
R997 OPEN
Q921 OPEN
C924 OPEN
R923 OPEN
TP46G
R927 OPEN
Q922 OPEN
C925 OPEN
R976 OPEN
R999 OPEN
R973 OPEN
R974 OPEN
TP46B
R975 OPEN
RED CUT OFF
GREEN CUT OFF
BLUE CUT OFF
R916 18
R946 18
GREEN DRIVE
R945 18
BLUE DRIVE
R977 560
R909 10
R935 1K
D910 OPEN
L908 TRF4100AF
+9V-1
C915 25VC0.1
C913 16V100^
R934 360
R933 75
C912 16V1000^
C910 0.47^
R936 75
+125V
+12V
L701 TRF4100AF
C707 16V47^
Q705 2SC1815Y or 2SC1740S,Q or 2SC1685-Q,TH
R712 100
Q706 2SC1815Y or 2SC1740S,Q or 2SC1685-Q,TH
C704 M8200
R718
11.5
9.5
7.9
1.5


13
14
15
16
A
B
C
D
E
F
104Vp-p
102Vp-p
103Vp-p
B9513A (SAME AS 32ZD08G)
R904 4.7K
Q901 2SC4544 or 2SC5147
R905 15
TP47R
D907 1N4148
RED CUT OFF
R912 OPEN
G915 OPEN
D904 1N4148
D912 1N4148
R915 68
R914 470
Q902 2SC1815Y or 2SC1740S,Q
R916 18
C903 OPEN
R918 18
C904 470
R917 470
TP47G
C914 0.01
Q903 2SC4544 or 2SC5147
GREEN CUT OFF
R919 OPEN
G916 OPEN
D905 1N4148
D908 1N4148
D913 OPEN
R946 18
R922 68
R921 470
Q904 2SC1815Y or 2SC1740S,Q
GREEN DRIVE
R924 18
C906 OPEN
C905 470
R925 470
TP47B
Q905 2SC4544 or 2SC5147
BLUE CUT OFF
R926 OPEN
G917 OPEN
D906 1N4148
D909 1N4148
R945 18
R929 68
R928 470
Q906 2SC1815Y or 2SC1740S,Q
D914 OPEN
BLUE DRIVE
R930 18
C907 470
R937 470
C908 OPEN
R910 OPEN
(HEATER)
R942 3.9K
R960 2R15K
R961 2R15K
R962 2R15K
L902 TRF4101AF
R969 100
L905 TRF4150AF
R970 100
L906 TRF4150AF
R943 3.9K
R963 2R15K
R964 2R15K
R965 2R15K
L903 TRF4101AF
R971 100
L907 TRF4150AF
R944 3.9K
R966 2R15K
R967 2R15K
L904 TRF4101AF
R968 2R15K
C930 500V100
I901A OPEN
R901 1/2R560
R902 1/2R560
R903 1/2R560
V901 32" W76ERF032X044 (Philips FLAT) 28" UN DETERMINED
WIDE CPT 32/28"
V901 W76ERF031X044
EV
FV
T461
SV
P906 OPEN
V901A CPT SOCKET 10P SN:23902891N(RA) SN:23902887N(RB)
C902 2KV(R1)1000
D911 BYD33J
C931 500V100
R992 15
R920 1FR5.1
C909 250V22^
G911 TRF4101AF
P903B 9P2.5mm
GND
GND
NC(BLK)
NC
Heater
NC
NC
+200V
+200V
TO P903A DN DEF BOARD
M903
32WT98B PB8813
28WT98B
G910 NOT PCB IDENT OPEN
G980 NOT PCB IDENT OPEN
R950 NOT PCB IDENT OPEN
Q911 2SC1815Y
Q912 2SA1015Y
R977 560
R909 10
R935 1K
D910 OPEN
D903 SHORT
R980 470
R932 3.3K
R934 360
C912 16V1000^
C910 0.47^
C911 16V10^
R981 470
C920 M0.1
L910 TRF4R0AF
R939 68
R982 6.8K
R984 820
R987 680
R988 4.7K
R983 2.2K
R985 470
C940 39
R986 680
Q914 2SC1815Y
R989 4.7K
Q913 2SA1015Y
C921 M0.1
R991 390
R990 560
Q908 2SC2120Y
D901 1N4148
Q910 2SC1815Y or 2SC1740S,Q or 2SC1685-Q,TH
Q907 2SA562TM-Y
R731 1R330
C713 A60V10^
C712 A6V47^
C707 A16V47^
R725 820
Q719 2SC1815Y
D704 1N4148
R744 1.2K
R737 680
R736 47
C721 16V47^
R742 2.2
Q706 2SC1815Y or 2SC1740S,Q or 2SC1685-Q,TH
Q707 2SC752GTMY
Q709 2SC1815Y or 2SC1740S,Q or 2SC1685-Q,TH
Q711 2SB1569A or 2SA1837
C704 M8200
R723 100
C715 500V4700

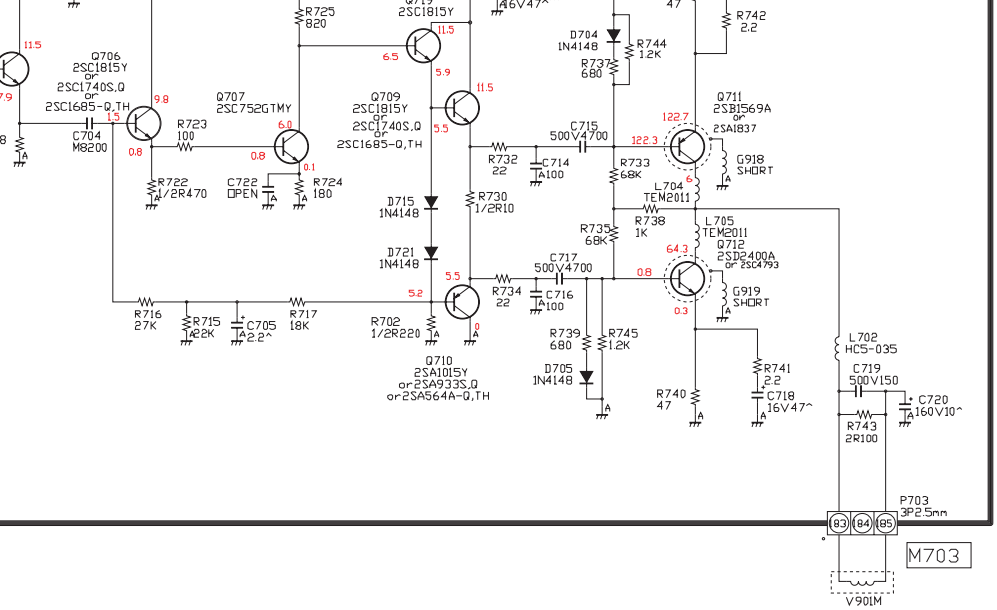

PH02
21 PIN S-VHS
RV30 75
RV32 75
S S1
GND
C S1
L S1
R S1
V OUT
GND
SCART2 #8
GJ10 SHORT
GJ19 OPEN
C679 1000
R693 680
R678 22K
L676 TEM2125M
L OUT
R OUT
R692 680
R679 22K
L677 TEM2125M
C674 1000
C673 1000
C678 1000
GV07 CHIP-JP
E2
LV42 TRF4100AF
RV77 OPEN
RV75 OPEN
CV40 0.01
LV41 OPEN
RV45 OPEN
CV44 OPEN
QV10 2SC2712Y
CV77 OPEN
CV79 16V100
RV42 OPEN
RV60 1K
RV70 100
RV48 OPEN
CV45 OPEN
DV09 OPEN
RV76 OPEN
QV03 OPEN
RV46 OPEN
GV41 1K
RV71 4.7K
CV42 OPEN
LV40 OPEN
CV43 OPEN
QV05 OPEN
V-ANLG
TV-V
RV69 OPEN
RV44 OPEN
QV04 OPEN
RV49 OPEN
V-GND
RV41 OPEN
RV43 OPEN
RV47 OPEN
QV06 2SA1162Y
RV82 100
GC01 SHORT
GND
TV-V/GND
LV05 OPEN
GC02 SHORT
GJ18 OPEN
DV14 RD9.1MB2
RGB GND
GJ29 OPEN
RR20 10K
QR24 2SC2712Y
SCART Ys
RR24 CHIP JP
RR25 1K
Ys
DR02 HSM221C
DR03 RD4.7MB2
R272 10K
Q274 2SC2712Y
R271 10K
PH01
21 PIN FULL
RV81 75
GJ13 OPEN
GJ14 OPEN
LV11 TEM2028AH
V V1
GND
L V1
R V1
V OUT
GND
SCART1 #8
Ys
R
G
B
GND
E1
RV87 75
RV86 75
RV85 75
RV89 75
RV91 680
CV15 1000
R676 22K
RV90 680
CV14 1000
R677 22K
L682 TEM2125M
L683 TEM2125M
C682 1000
C681 1000
GV08 CHIP-JP
L684 TRF41R0AF
L685 TRF41R0AF
L OUT
R OUT
V OUT
GND
GND
V E3
RV61 1/2R100
QV14 2SC1815Y
CV66 16V100
RV62 100
RV64 75
RV63 1/6P150
RV65 1/2R100
QV12 2SC1815Y
CV65 16V100
RV68 100
RV66 75
RV67 1/6P150
GND


V V1
R V1
L V1
TV-V
TV-R
TV-L
RS07 5.6K
RS49 OPEN
CS05 2.2^
GV03 TEM2125M
CV03 0.1
DV05 OPEN
RS06 5.6K
RS48 OPEN
CS04 2.2^
RS05 5.6K
RS47 OPEN
CS03 2.2^
CV02 0.1
CS10 2.2^
RS04 5.6K
RS46 OPEN
CS02 2.2^
CC46 0.01
CS09 2.2^
RS03 5.6K
RS45 OPEN
CS01 2.2^
CC45 0.01
V IN V1
R IN V1
L IN V1
V IN TV
R IN TV
L IN TV
R OUT1
V OUT1
L OUT1
Y OUT1
D5
C OUT
QV01 MM1495XD
RV05 100 AV-Y
QV07 2SC2712Y
RV06 1.5K
RS14 100
RS13 100
AV-L
AV-R
AV-C
GND
QV10 2SC2712Y
RV60 1K
RV70 100
GV41 1K
RV71 4.7K
GJ11 OPEN
LV10 TEM2028AH
GJ12 OPEN
V-ANLG
V-GND
+9V-1
AV-L
AV-R
RS37 100K
QS08 2SC3326B
RS35 22K
CS22 16V10^
RS01 680
CS23 16V10^
RS02 680
RS38 100K
RS36 22K
QS09 2SC3326B
GND
QS07 RN2404
RS31 10K
A MUTE
RS32 100K
CS19 0.47^
L OUT
RS28 100K
QS06 2SC3326B
RS30 22K
R OUT
CS18 16V10^
CS17 16V10^
RS27 100K
RS29 22K
RS44 680
RS43 680
QS05 2SC3326B
L OUT
R OUT

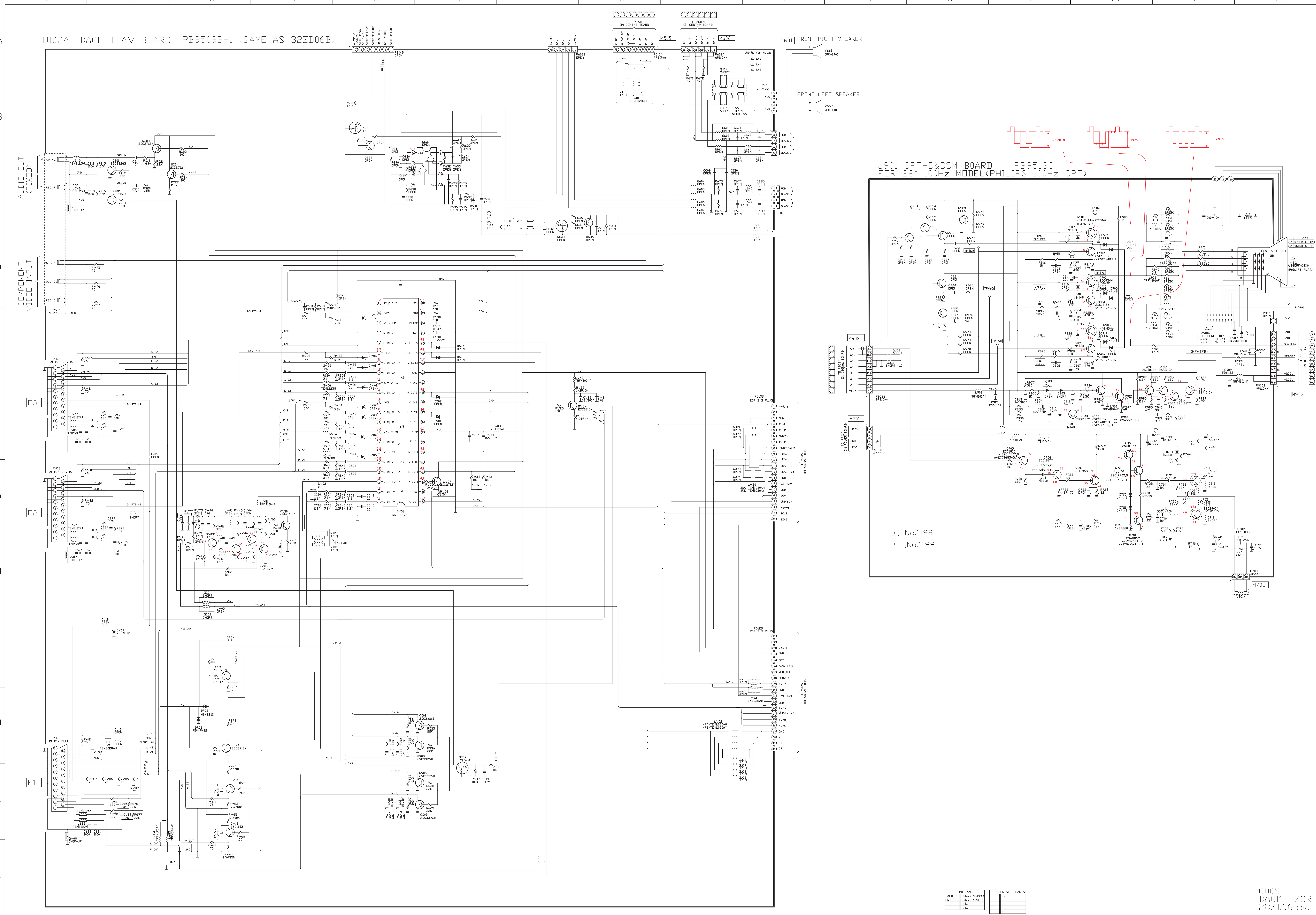


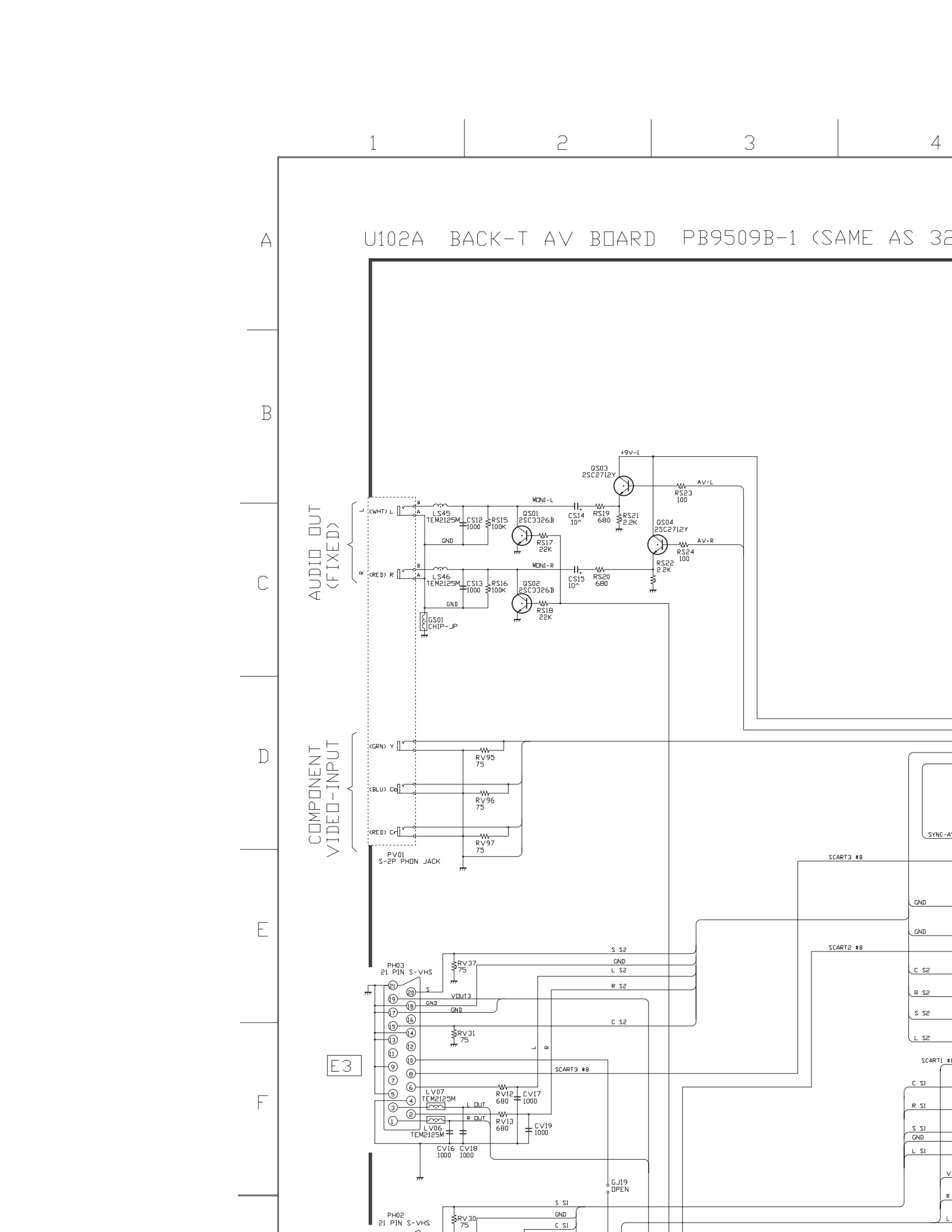
UNIT SN.	
BACK-T	SN.23784999
CRT-D	SN.23784881
	SN.
	SN.

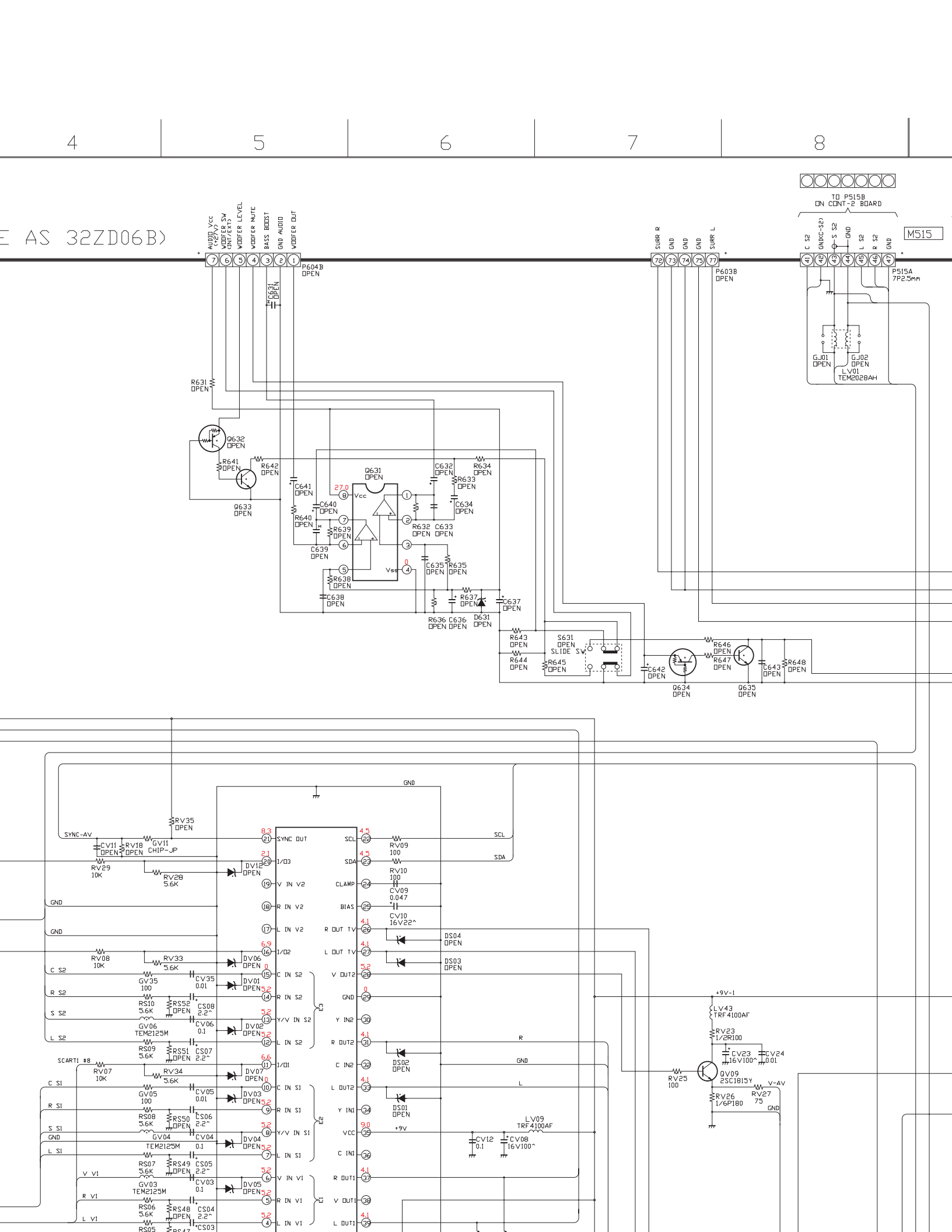
COPPER SIDE PARTS	
	SN.
	SN.
	SN.
	SN.
	SN.

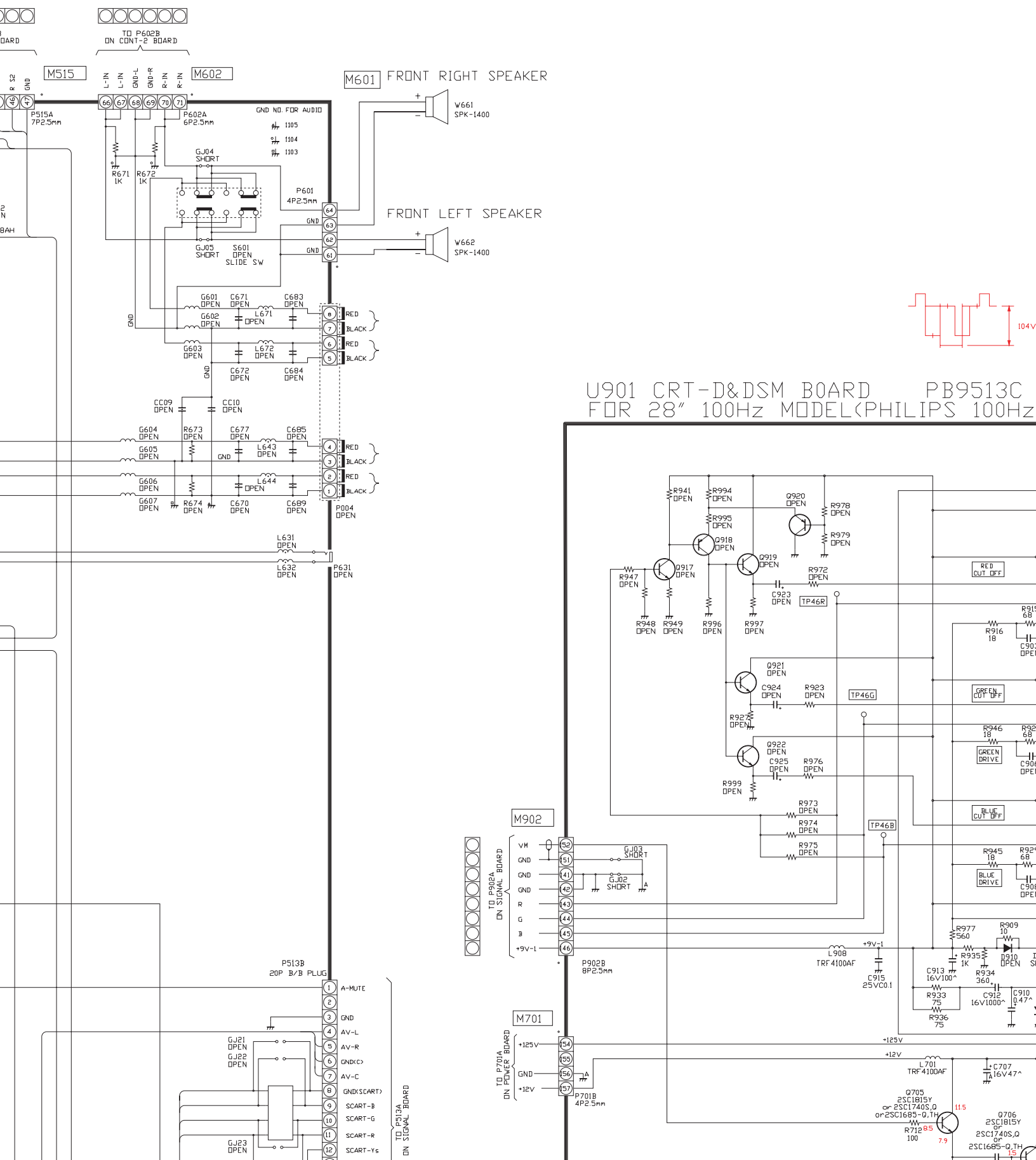


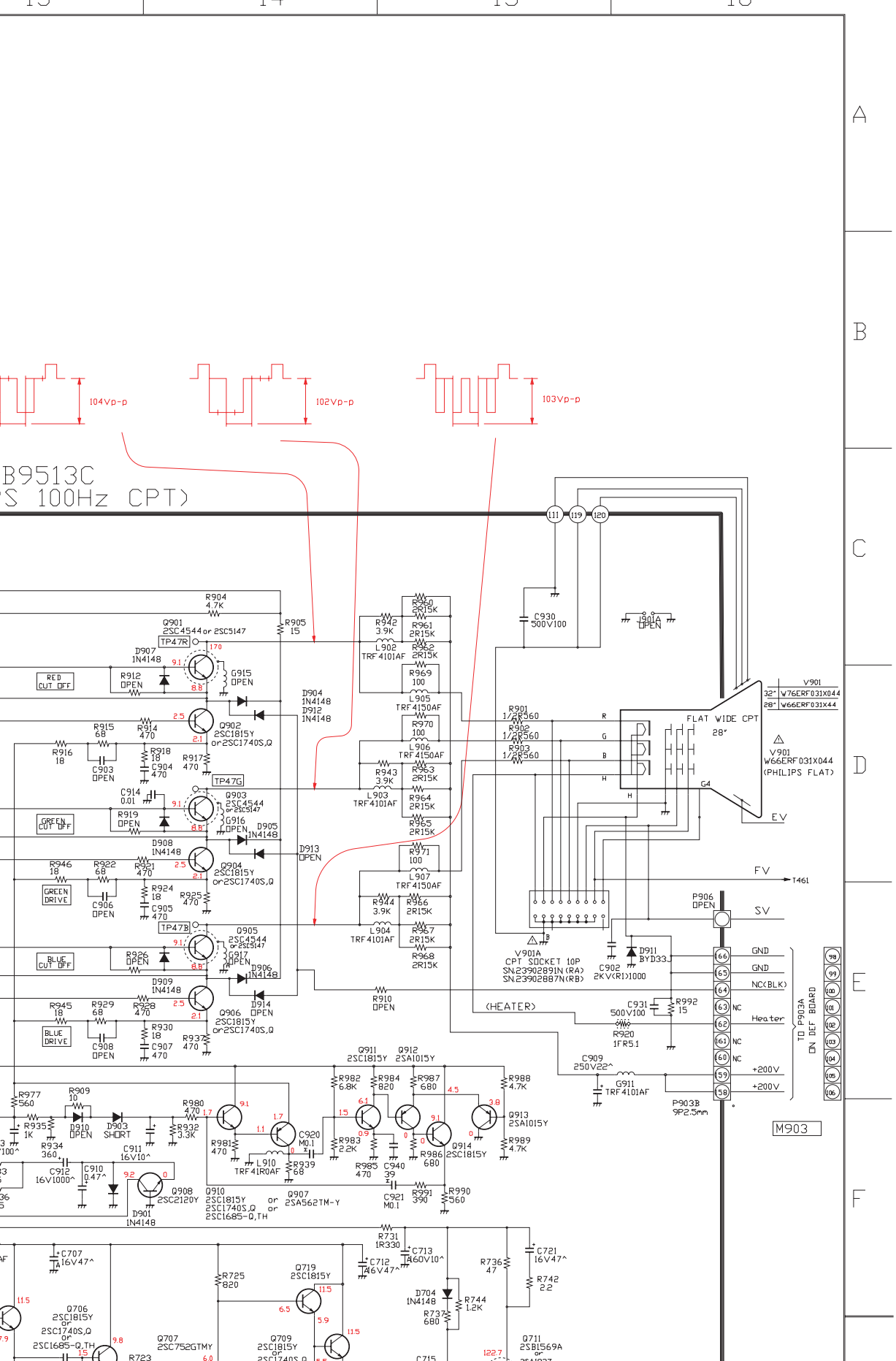
BACK-T/CRT-CD0S
32ZD06B/32ZD06G

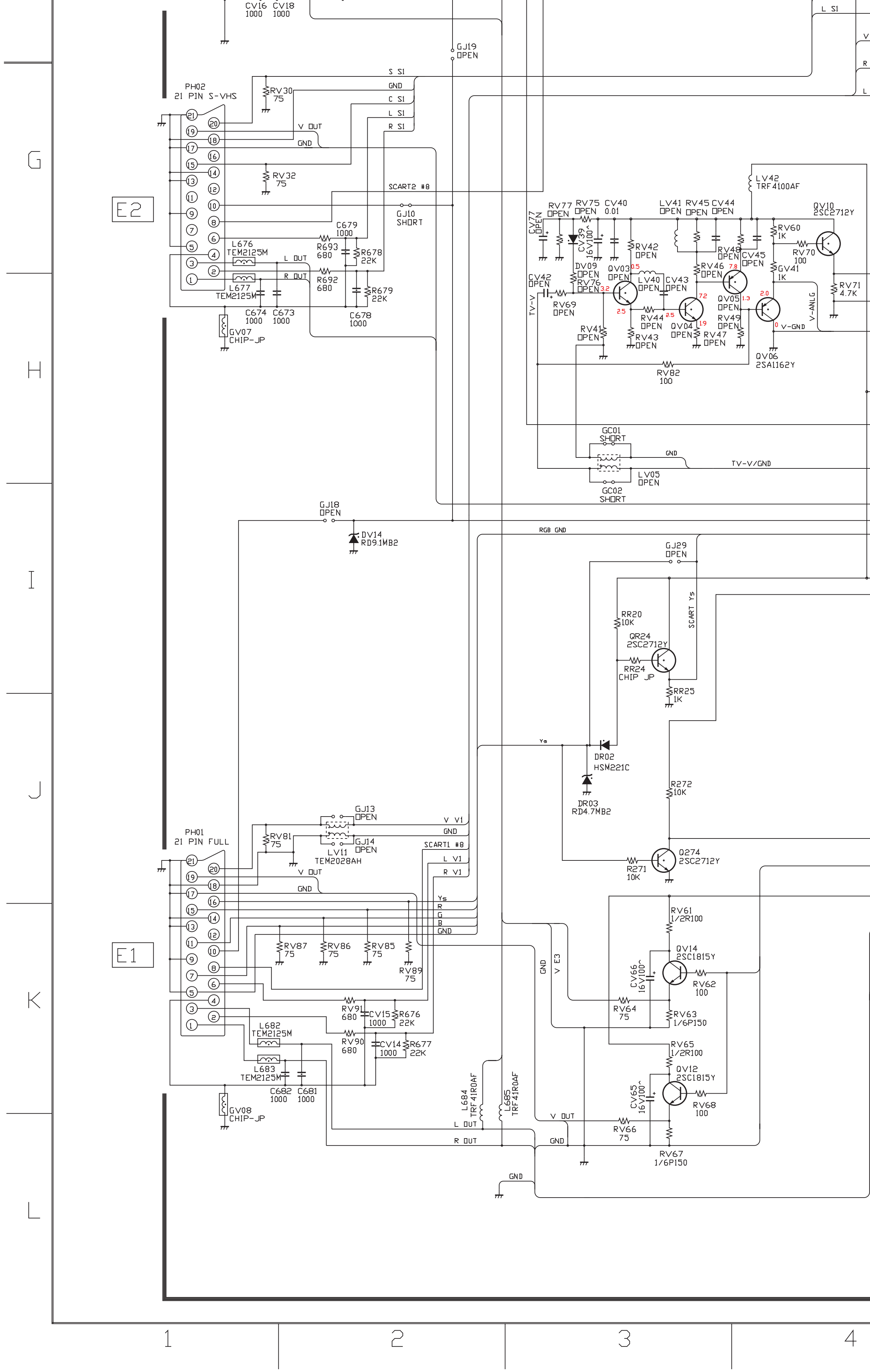

U102A BACK-T AV BOARD PB9509B-1 (SAME AS 32ZD06B)
U901 CRT-D&DSM BOARD PB9513C
FOR 28" 100Hz MODEL(PHILIPS 100Hz CPT)
FRONT RIGHT SPEAKER
FRONT LEFT SPEAKER
AUDIO OUT (FIXED)
COMPONENT VIDEO-INPUT
M601
M602
M515
M902
M903
M701
M703
E1
E2
E3
No.1198
No.1199
C00S
BACK-T/CRT-D
28ZD06B 3/6


1
2
3
4
A
B
C
D
E
F
U102A BACK-T AV BOARD PB9509B-1 (SAME AS 32
AUDIO OUT (FIXED)
COMPONENT VIDEO-INPUT
+9V-L
QS03 2SC2712Y
AV-L
RS23 100
MONI-L
LS45 TEM2125M
CS12 1000
RS15 100K
QS01 2SC3326B
CS14 10^
RS19 680
RS21 2.2K
QS04 2SC2712Y
AV-R
RS24 100
RS17 22K
RS22 2.2K
MONI-R
LS46 TEM2125M
CS13 1000
RS16 100K
QS02 2SC3326B
CS15 10^
RS20 680
RS18 22K
GND
GS01 CHIP-JP
(WHT) L
(RED) R
(GRN) Y
(BLU) CB
(RED) CR
RV95 75
RV96 75
RV97 75
PV01 S-2P PHON JACK
PH03 21 PIN S-VHS
RV37 75
RV31 75
S
VOUT3
GND
E3
LV07 TEM2125M
LV06 TEM2125M
L OUT
R OUT
RV12 680
RV13 680
CV17 1000
CV19 1000
CV16 1000
CV18 1000
SCART3 #8
SCART2 #8
S S2
GND
L S2
R S2
C S2
GJ19 OPEN
PH02 21 PIN S-VHS
RV30 75
S S1
C S1
SYNC-A
R S1
L S1

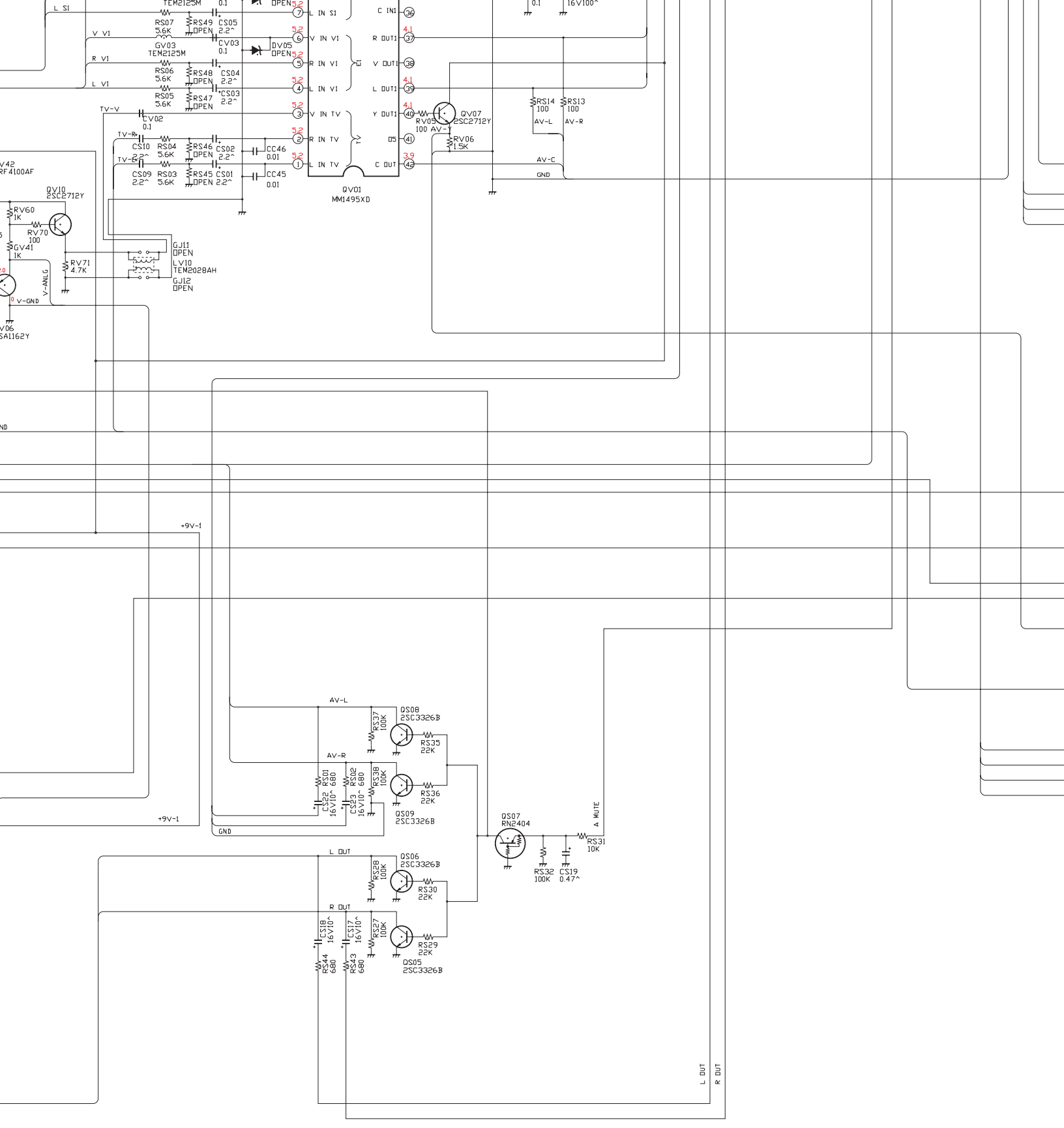

4
5
6
7
8
E AS 32ZD06B)
AUDIO Vcc (+27V)
WOOFER SW (INT/EXT)
WOOFER LEVEL
WOOFER MUTE
BASS BOOST
GND AUDIO
WOOFER OUT
P604B OPEN
SURR R
GND
GND
GND
SURR L
P603B OPEN
TO P515B ON CONT-2 BOARD
C S2
GND(C-S2)
S S2
GND
L S2
R S2
GND
M515
P515A 7P2.5mm
GJ01 OPEN
GJ02 OPEN
LV01 TEM2028AH
R631 OPEN
Q632 OPEN
R641 OPEN
R642 OPEN
Q633 OPEN
Q631 OPEN
C641 OPEN
C640 OPEN
R640 OPEN
R639 OPEN
C639 OPEN
R638 OPEN
C638 OPEN
C632 OPEN
R633 OPEN
C634 OPEN
R634 OPEN
R632 OPEN
C633 OPEN
C635 OPEN
R635 OPEN
R636 OPEN
C636 OPEN
R637 OPEN
C637 OPEN
D631 OPEN
R643 OPEN
R644 OPEN
S631 OPEN SLIDE SW
R645 OPEN
C642 OPEN
Q634 OPEN
R646 OPEN
R647 OPEN
Q635 OPEN
C643 OPEN
R648 OPEN
GND
RV35 OPEN
SYNC-AV
CV11 OPEN
RV18 OPEN
GV11 CHIP-JP
RV29 10K
RV28 5.6K
DV12 OPEN
RV08 10K
RV33 5.6K
DV06 OPEN
C S2
GV35 100
CV35 0.01
DV01 OPEN
R S2
RS10 5.6K
RS52 OPEN
CS08 2.2^
S S2
GV06 TEM2125M
CV06 0.1
DV02 OPEN
L S2
RS09 5.6K
RS51 OPEN
CS07 2.2^
SCART1 #8
RV07 10K
RV34 5.6K
DV07 OPEN
C S1
GV05 100
CV05 0.01
DV03 OPEN
R S1
RS08 5.6K
RS50 OPEN
CS06 2.2^
S S1
GV04 TEM2125M
CV04 0.1
DV04 OPEN
L S1
RS07 5.6K
RS49 OPEN
CS05 2.2^
V V1
GV03 TEM2125M
CV03 0.1
DV05 OPEN
R V1
RS06 5.6K
RS48 OPEN
CS04 2.2^
L V1
RS05
*CS03
SYNC OUT
I/O3
V IN V2
R IN V2
L IN V2
I/O2
C IN S2
R IN S2
Y/V IN S2
L IN S2
I/O1
C IN S1
R IN S1
Y/V IN S1
L IN S1
V IN V1
R IN V1
L IN V1
E3
E2
E1
SCL
SDA
CLAMP
BIAS
R OUT TV
L OUT TV
V OUT2
GND
Y IN2
R OUT2
C IN2
L OUT2
Y IN1
VCC
C IN1
R OUT1
V OUT1
L OUT1
RV09 100
RV10 100
CV09 0.047
CV10 16V22^
DS04 OPEN
DS03 OPEN
DS02 OPEN
DS01 OPEN
+9V
LV09 TRF4100AF
CV12 0.1
CV08 16V100^
+9V-1
LV43 TRF4100AF
RV23 1/2R100
CV23 16V100^
CV24 0.01
QV09 2SC1815Y
RV25 100
RV26 1/6P180
RV27 75
V-AV
R
L
GND

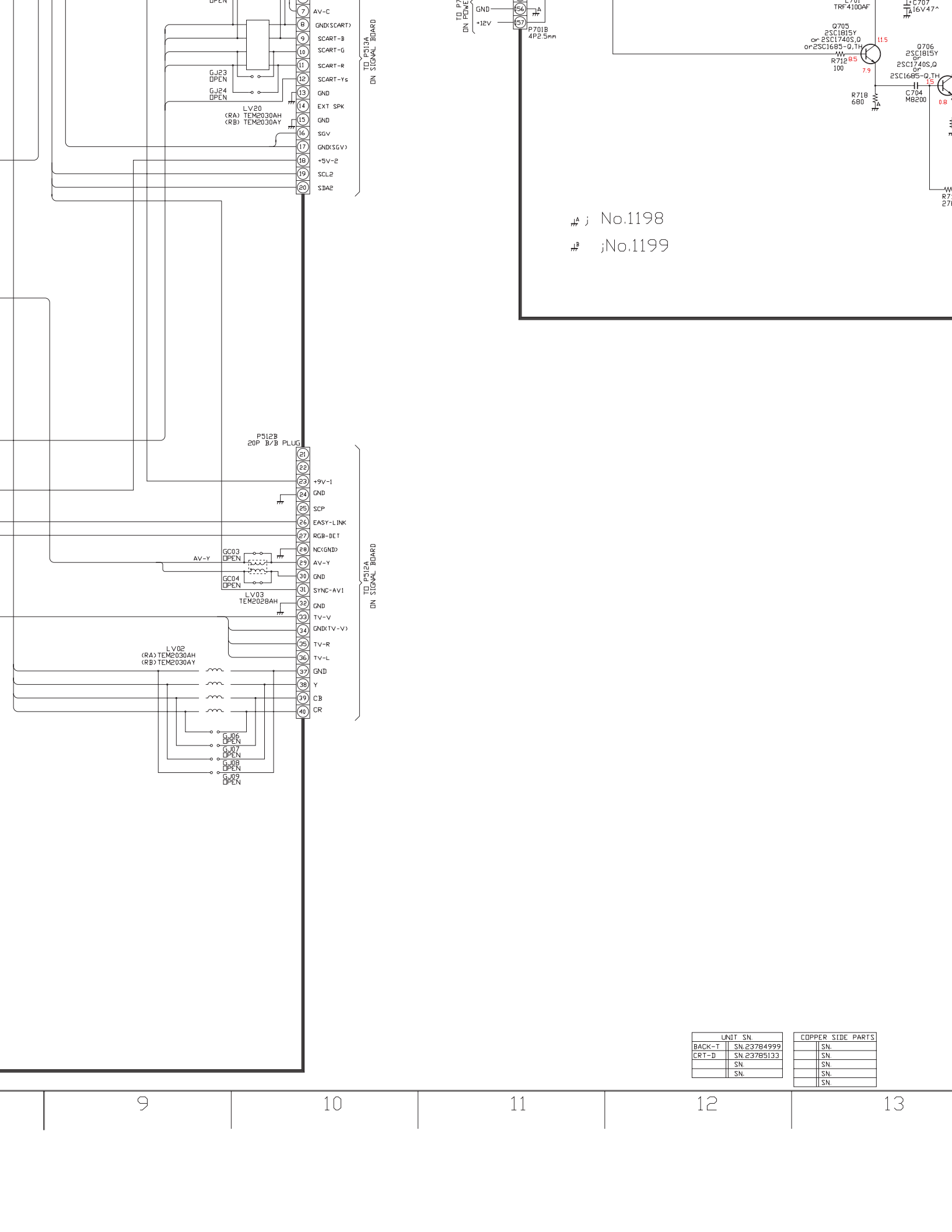

TO P602B
ON CONT-2 BOARD
M515
M602
M601 FRONT RIGHT SPEAKER
W661
SPK-1400
FRONT LEFT SPEAKER
W662
SPK-1400
P515A
7P2.5mm
P602A
6P2.5mm
GND NO. FOR AUDIO
1105
1104
1103
GJ04
SHORT
R671
1K
R672
1K
P601
4P2.5mm
GJ05
SHORT
S601
OPEN
SLIDE SW
RED
BLACK
P004
OPEN
P631
OPEN
104V
U901 CRT-D&DSM BOARD PB9513C
FOR 28" 100Hz MODEL(PHILIPS 100Hz
RED CUT OFF
GREEN CUT OFF
BLUE CUT OFF
GREEN DRIVE
BLUE DRIVE
TP46R
TP46G
TP46B
M902
TO P902A
ON SIGNAL BOARD
GJ03
SHORT
GJ02
SHORT
P902B
8P2.5mm
M701
TO P701A
ON POWER BOARD
P701B
4P2.5mm
P513B
20P B/B PLUG
A-MUTE
GND
AV-L
AV-R
GND(C)
AV-C
GND(SCART)
SCART-B
SCART-G
SCART-R
SCART-Ys
GJ21
OPEN
GJ22
OPEN
GJ23
OPEN
TO P513A
ON SIGNAL BOARD
L908
TRF4100AF
L701
TRF4100AF
+125V
+12V
+9V-1
Q705
2SC1815Y
or 2SC1740S,Q
or2SC1685-Q,TH
Q706
2SC1815Y
or
2SC1740S,Q
or
2SC1685-Q,TH
R712
100


13
14
15
16
A
B
C
D
E
F
104Vp-p
102Vp-p
103Vp-p
B9513C
S 100Hz CPT)
FLAT WIDE CPT
28"
V901
W66ERF031X044
(PHILIPS FLAT)
EV
FV
SV
(HEATER)
M903
TO P903A
ON DEF BOARD
RED CUT OFF
GREEN CUT OFF
BLUE CUT OFF
GREEN DRIVE
BLUE DRIVE
Q901 2SC4544 or 2SC5147
Q902 2SC1815Y or 2SC1740S,Q
Q903 2SC4544 or 2SC5147
Q904 2SC1815Y or 2SC1740S,Q
Q905 2SC4544 or 2SC5147
Q906 2SC1815Y or 2SC1740S,Q
Q907 2SA562TM-Y
Q908 2SC2120Y
Q910 2SC1815Y or 2SC1740S,Q or 2SC1685-Q,TH
Q911 2SC1815Y
Q912 2SA1015Y
Q913 2SA1015Y
Q914 2SC1815Y
Q915 OPEN
Q916 OPEN
Q917 OPEN
Q706 2SC1815Y or 2SC1740S,Q or 2SC1685-Q,TH
Q707 2SC752GTMY
Q709 2SC1815Y or 2SC1740S,Q
Q711 2SB1569A
D901 1N4148
D902 BYD33J
D903 SHORT
D904 1N4148
D905 1N4148
D906 1N4148
D907 1N4148
D908 1N4148
D909 1N4148
D910 OPEN
D911 BYD33J
D912 1N4148
D913 OPEN
D914 OPEN
D704 1N4148
L902 TRF4101AF
L903 TRF4101AF
L904 TRF4101AF
L905 TRF4150AF
L906 TRF4150AF
L907 TRF4150AF
L910 TRF4R0AF
G911 TRF4101AF
C902 2KV<RI>1000
C909 250V22^
C910 0.47^
C911 16V10^
C912 16V1000^
C920 M0.1
C921 M0.1
C930 500V100
C931 500V100
C940 39
P906 OPEN
P903B 9P2.5mm
V901A CPT SOCKET 10P
SN.23902891N(RA)
SN.23902887N(RB)
V901 32" W76ERF031X044
28" W66ERF031X44
GND
GND
NC(BLK)
Heater
+200V
+200V
T461



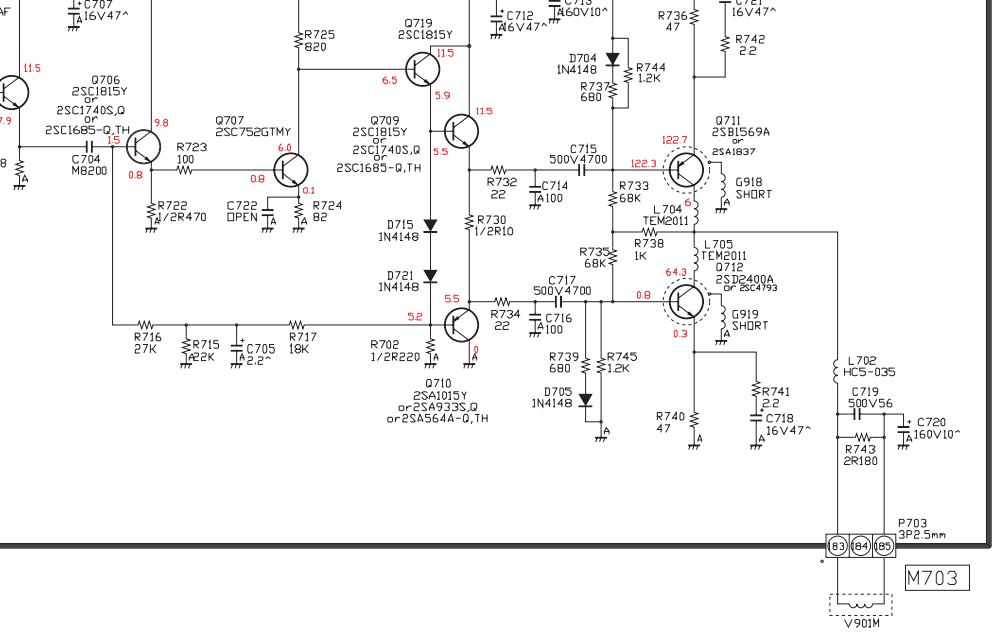
PH02
21 PIN S-VHS
PH01
21 PIN FULL
E2
E1
S S1
GND
C S1
L S1
R S1
V OUT
SCART2 #8
SCART1 #8
L OUT
R OUT
GJ19 OPEN
GJ10 SHORT
GJ18 OPEN
GJ13 OPEN
GJ14 OPEN
GJ29 OPEN
RV30 75
RV32 75
R693 680
R692 680
R678 22K
R679 22K
C679 1000
C674 1000
C673 1000
C678 1000
L676 TEM2125M
L677 TEM2125M
GV07 CHIP-JP
GV08 CHIP-JP
CV16 1000
CV18 1000
LV42 TRF4100AF
QV10 2SC2712Y
QV06 2SA1162Y
RV82 100
RV60 1K
RV70 100
RV71 4.7K
GV41 1K
V-ANLG
V-GND
TV-V
TV-V/GND
GC01 SHORT
GC02 SHORT
LV05 OPEN
DV14 RD9.1MB2
RGB GND
SCART Ys
RR20 10K
QR24 2SC2712Y
RR24 CHIP JP
RR25 1K
DR02 HSM221C
DR03 RD4.7MB2
R272 10K
R271 10K
Q274 2SC2712Y
RV81 75
LV11 TEM2028AH
V V1
L V1
R V1
RV87 75
RV86 75
RV85 75
RV89 75
RV91 680
RV90 680
CV15 1000
CV14 1000
R676 22K
R677 22K
L682 TEM2125M
L683 TEM2125M
C682 1000
C681 1000
L684 TRF41R0AF
L685 TRF41R0AF
V E3
RV61 1/2R100
QV14 2SC1815Y
RV62 100
CV66 16V100
RV64 75
RV63 1/6P150
RV65 1/2R100
QV12 2SC1815Y
CV65 16V100
RV68 100
RV66 75
RV67 1/6P150
G
H
I
J
K
L
1
2
3
4


L S1
V V1
R V1
L V1
TV-V
TV-R
TV-L
RS07 5.6K
RS49 OPEN
CS05 2.2^
GV03 TEM2125M
CV03 0.1
DV05 OPEN
RS06 5.6K
RS48 OPEN
CS04 2.2^
RS05 5.6K
RS47 OPEN
CS03 2.2^
CV02 0.1
RS04 5.6K
RS46 OPEN
CS02 2.2^
CS10 2.2^
RS03 5.6K
RS45 OPEN
CS01 2.2^
CS09 2.2^
CC46 0.01
CC45 0.01
L IN S1
V IN V1
R IN V1
L IN V1
V IN TV
R IN TV
L IN TV
C IN1
R OUT1
V OUT1
L OUT1
Y OUT1
D5
C OUT
E1
TV
QV01 MM1495XD
QV07 2SC2712Y
RV05 100 AV-Y
RV06 1.5K
RS14 100
RS13 100
AV-L
AV-R
AV-C
GND
QV10 2SC2712Y
RV60 1K
RV70 100
GV41 1K
RV71 4.7K
V-ANLG
V-GND
GJ11 OPEN
LV10 TEM2028AH
GJ12 OPEN
+9V-1
AV-L
AV-R
QS08 2SC3326B
QS09 2SC3326B
RS37 100K
RS35 22K
RS01 680
RS02 680
RS38 100K
RS36 22K
CS22 16V10^
CS23 16V10^
GND
L OUT
R OUT
QS06 2SC3326B
QS05 2SC3326B
RS28 100K
RS30 22K
RS27 100K
RS29 22K
RS44 680
RS43 680
CS18 16V10^
CS17 16V10^
QS07 RN2404
A MUTE
RS31 10K
RS32 100K
CS19 0.47^



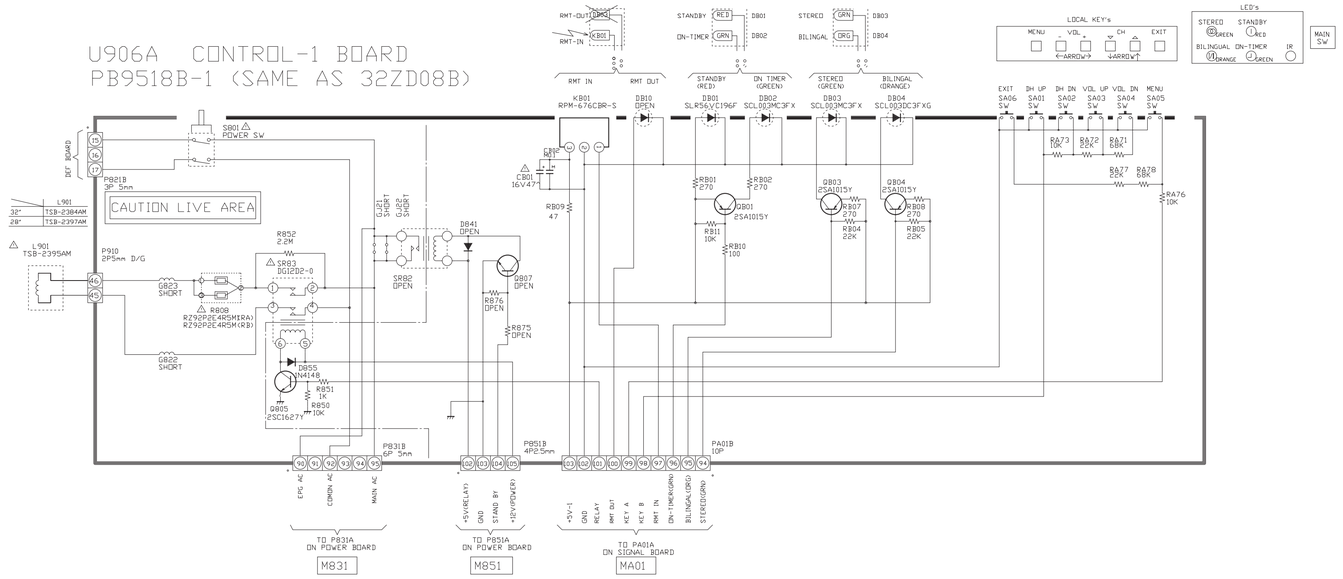
UNIT SN.	
BACK-T	SN.23784999
CRT-D	SN.23785133
	SN.
	SN.

COPPER SIDE PARTS	
	SN.
	SN.
	SN.
	SN.
	SN.

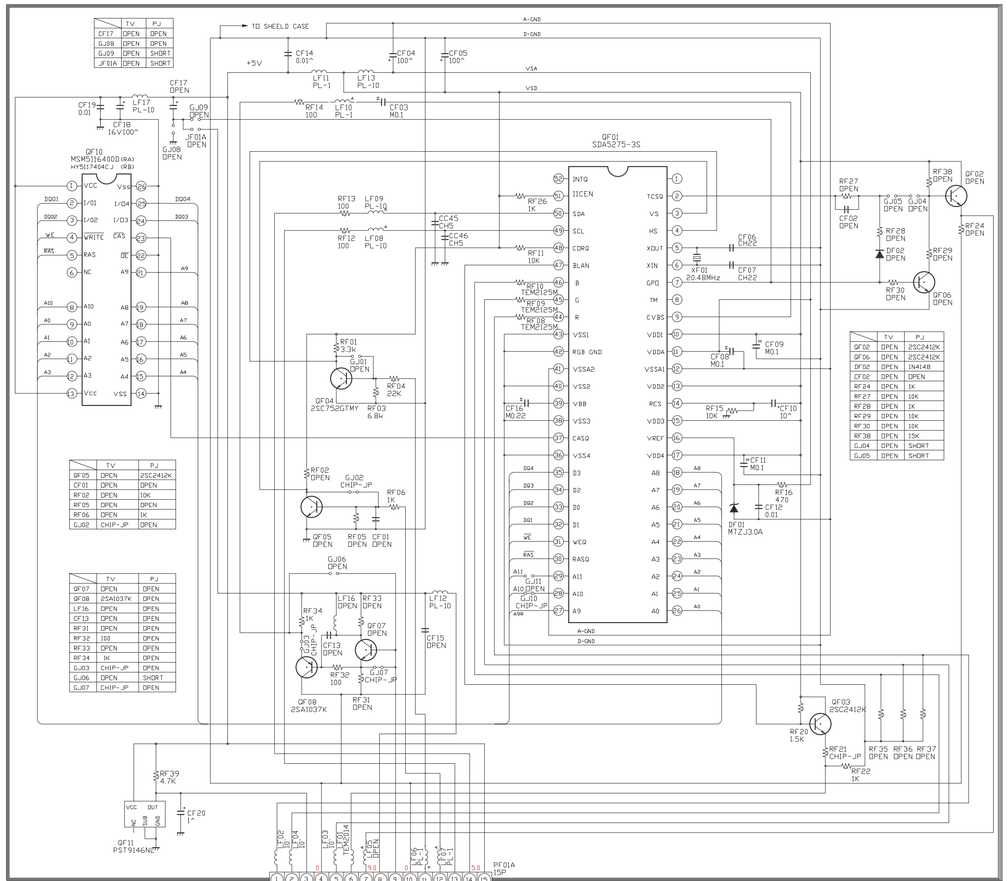


COOS
BACK-T/CRT-D
28ZD06B 3/6

U906A CONTROL-1 BOARD PB9518B-1 (SAME AS 32ZD08B)



U104A TEXT BOARD PB9411B (SAME AS 32ZD08B) MEGA-TEXT 500PAGE MEMORY



	TV	PJ
CF17	OPEN	OPEN
GJ08	OPEN	OPEN
GJ09	OPEN	SHORT
JF01A	OPEN	SHORT

	TV	PJ
QF05	OPEN	2SC2412K
CF01	OPEN	OPEN
RF02	OPEN	10K
RF05	OPEN	OPEN
RF06	OPEN	1K
GJ02	CHIP-JP	OPEN

	TV	PJ
QF07	OPEN	OPEN
QF08	2SA1037K	OPEN
LF16	OPEN	OPEN
CF13	OPEN	OPEN
RF31	OPEN	OPEN
RF32	100	OPEN
RF33	OPEN	OPEN
RF34	1K	OPEN
GJ03	CHIP-JP	OPEN
GJ06	OPEN	SHORT
GJ07	CHIP-JP	OPEN

	TV	PJ
QF02	OPEN	2SC2412K
QF06	OPEN	2SC2412K
DF02	OPEN	1N4148
CF02	OPEN	OPEN
RF24	OPEN	1K
RF27	OPEN	10K
RF28	OPEN	1K
RF29	OPEN	10K
RF30	OPEN	10K
RF38	OPEN	15K
GJ04	OPEN	SHORT
GJ05	OPEN	SHORT

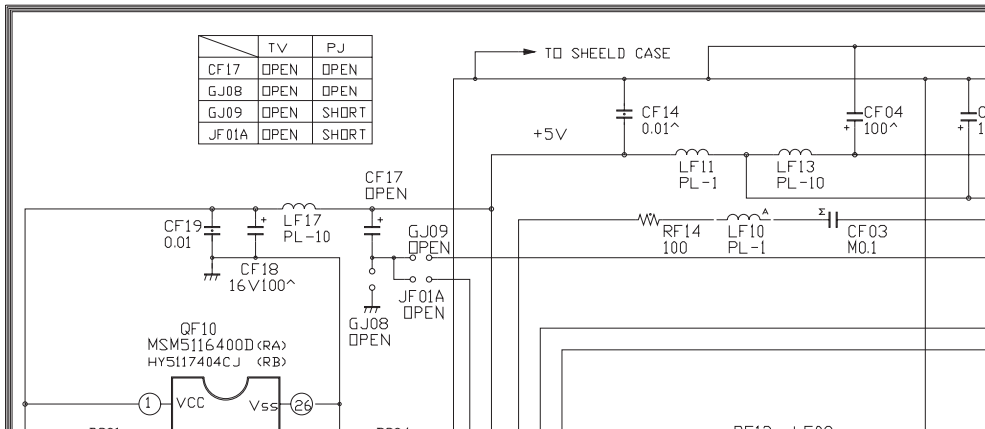
U906B CONTROL-2 BOARD PB9518B-2 (SAME AS 32ZD08B)

UNIT SN	
CONT-1	SN.23784997
CONT-2	SN.23784998
500TEXT	SN.23784365
	SN.
	SN.

COPPER SIDE PARTS	
	SN.
	SN.
	SN.
	SN.
	SN.

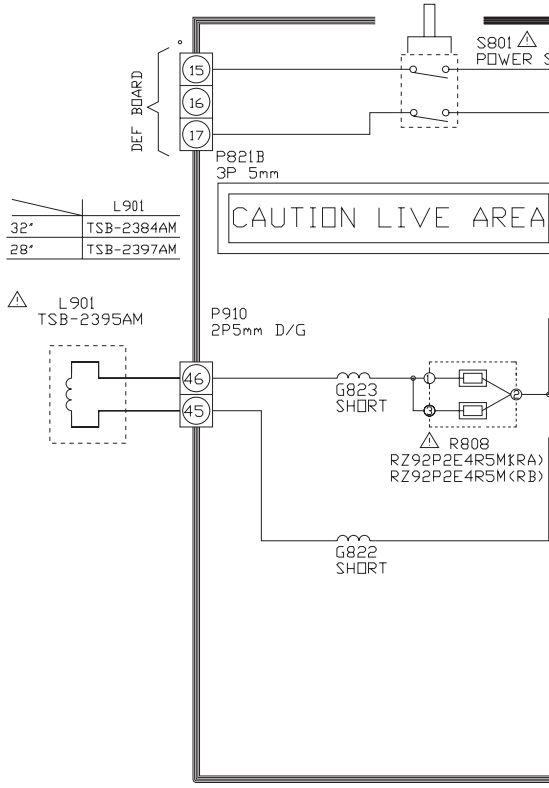
COOS
CONT-1/-2/TEXT
32ZD06B/28ZD06B/32ZD06G/28ZD06G

U104A TEXT BOARD PB9411B (SAME
MEGA-TEXT 500PAGE MEMO

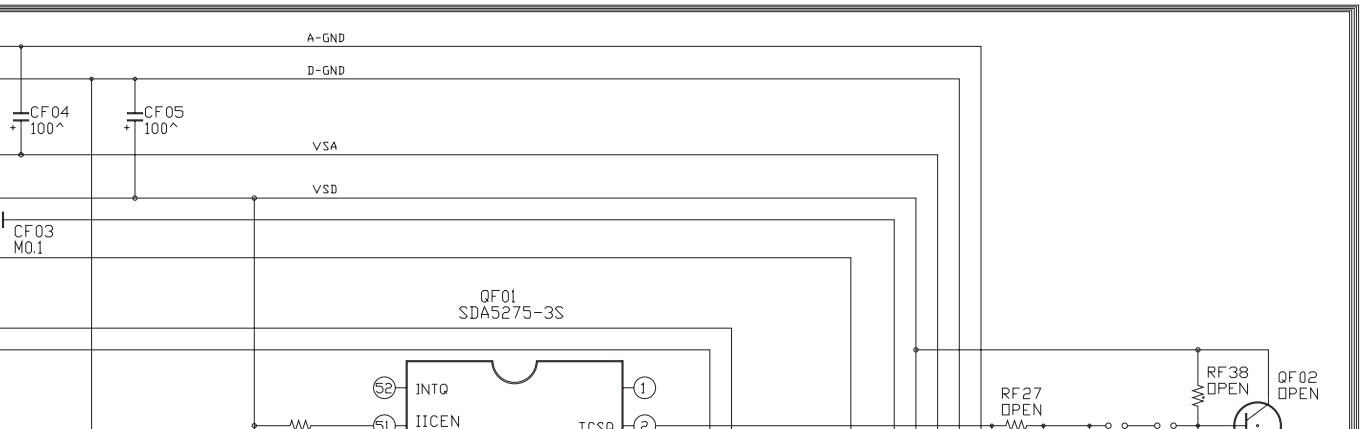


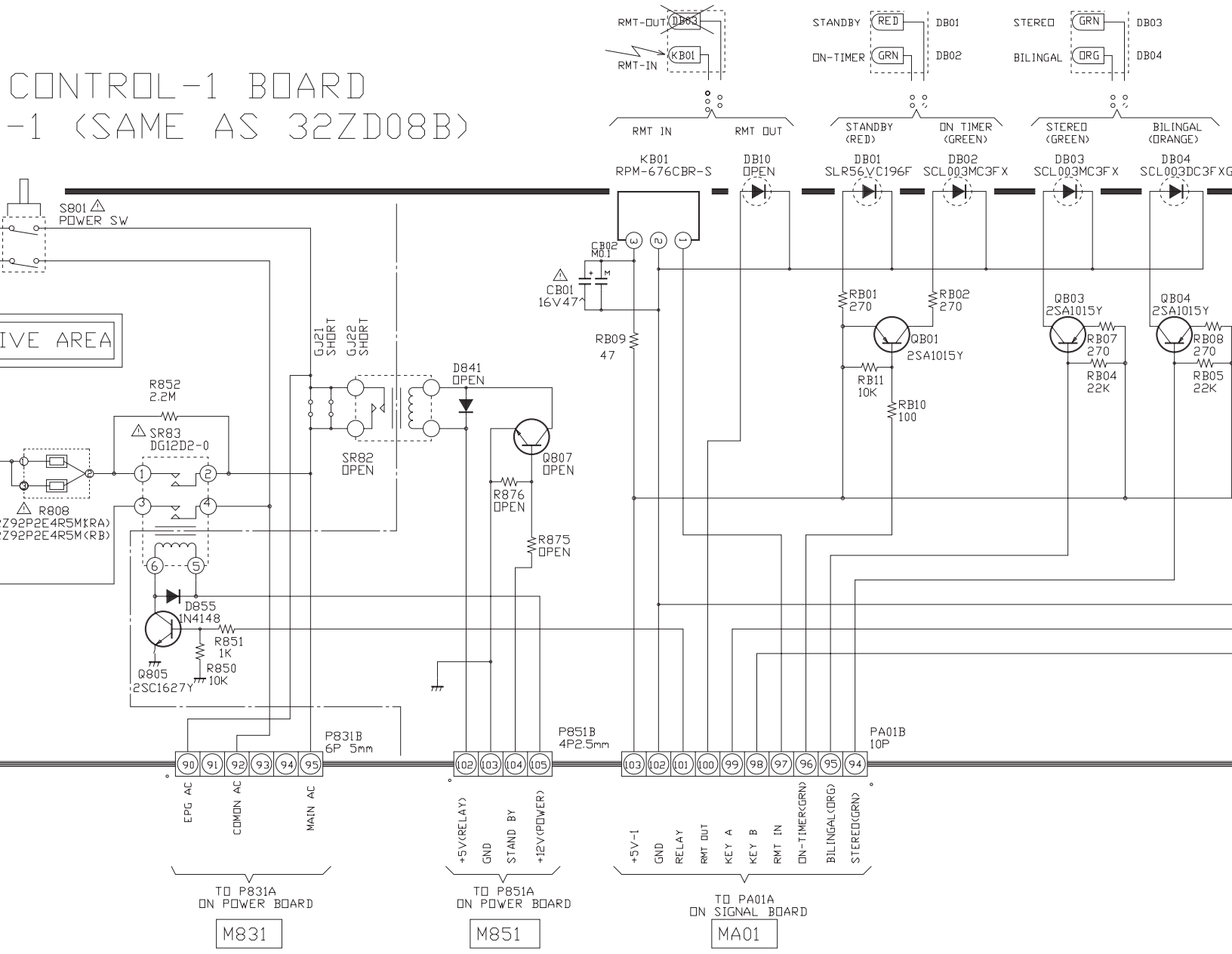
3 4 5 6

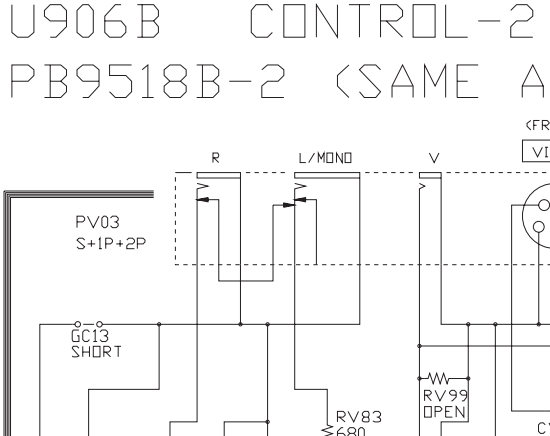
U906A CONTR
PB9518B-1 (S



(SAME AS 32ZD08B)
MEMORY

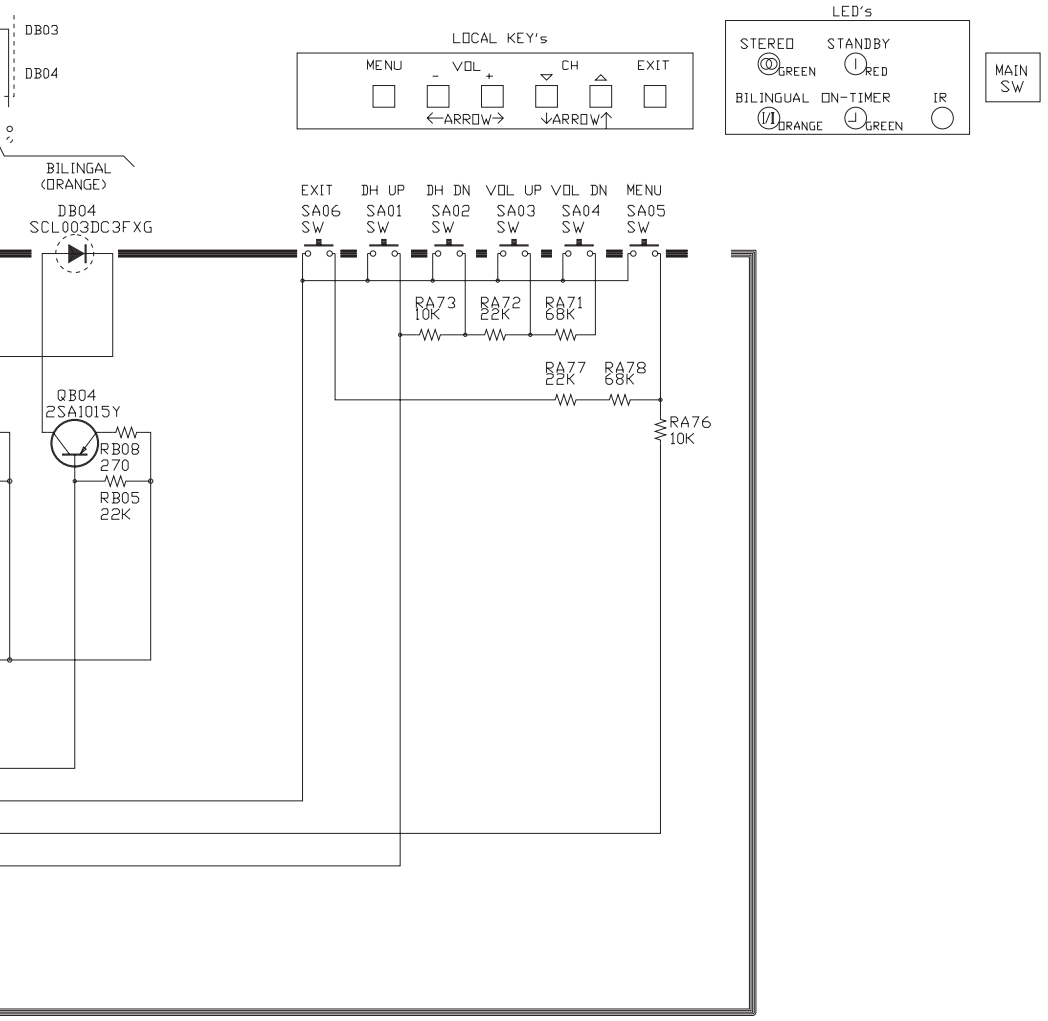



CONTROL-1 BOARD
-1 (SAME AS 32ZD08B)
RMT-OUT
DB03
KB01
RMT-IN
STANDBY
RED
DB01
ON-TIMER
GRN
DB02
STEREO
GRN
DB03
BILINGAL
ORG
DB04
RMT IN
RMT OUT
STANDBY (RED)
ON TIMER (GREEN)
STEREO (GREEN)
BILINGAL (ORANGE)
KB01 RPM-676CBR-S
DB10 OPEN
DB01 SLR56VC196F
DB02 SCL003MC3FX
DB03 SCL003MC3FX
DB04 SCL003DC3FXG
S801
POWER SW
CB02 M0.1
CB01 16V47
RB09 47
RB01 270
RB02 270
QB01 2SA1015Y
RB11 10K
RB10 100
QB03 2SA1015Y
RB07 270
RB04 22K
QB04 2SA1015Y
RB08 270
RB05 22K
IVE AREA
R852 2.2M
SR83 DG12D2-0
GJ21 SHORT
GJ22 SHORT
SR82 OPEN
D841 OPEN
Q807 OPEN
R876 OPEN
R875 OPEN
R808
Z92P2E4R5M(RA)
Z92P2E4R5M(RB)
D855 1N4148
R851 1K
R850 10K
Q805 2SC1627Y
P831B 6P 5mm
P851B 4P2.5mm
PA01B 10P
EPG AC
COMON AC
MAIN AC
+5V(RELAY)
GND
STAND BY
+12V(POWER)
+5V-1
GND
RELAY
RMT OUT
KEY A
KEY B
RMT IN
ON-TIMER(GRN)
BILINGAL(ORG)
STEREO(GRN)
TO P831A ON POWER BOARD
TO P851A ON POWER BOARD
TO PA01A ON SIGNAL BOARD
M831
M851
MA01


U906B CONTROL-2
PB9518B-2 (SAME A
R
L/MONO
V
PV03
S+1P+2P
GC13
SHORT
RV99
OPEN
RV83

10 | 11 | 12

FRONT VIEW



A

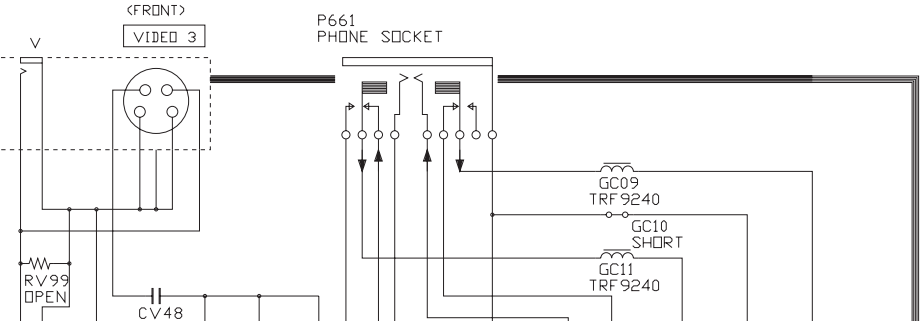
B

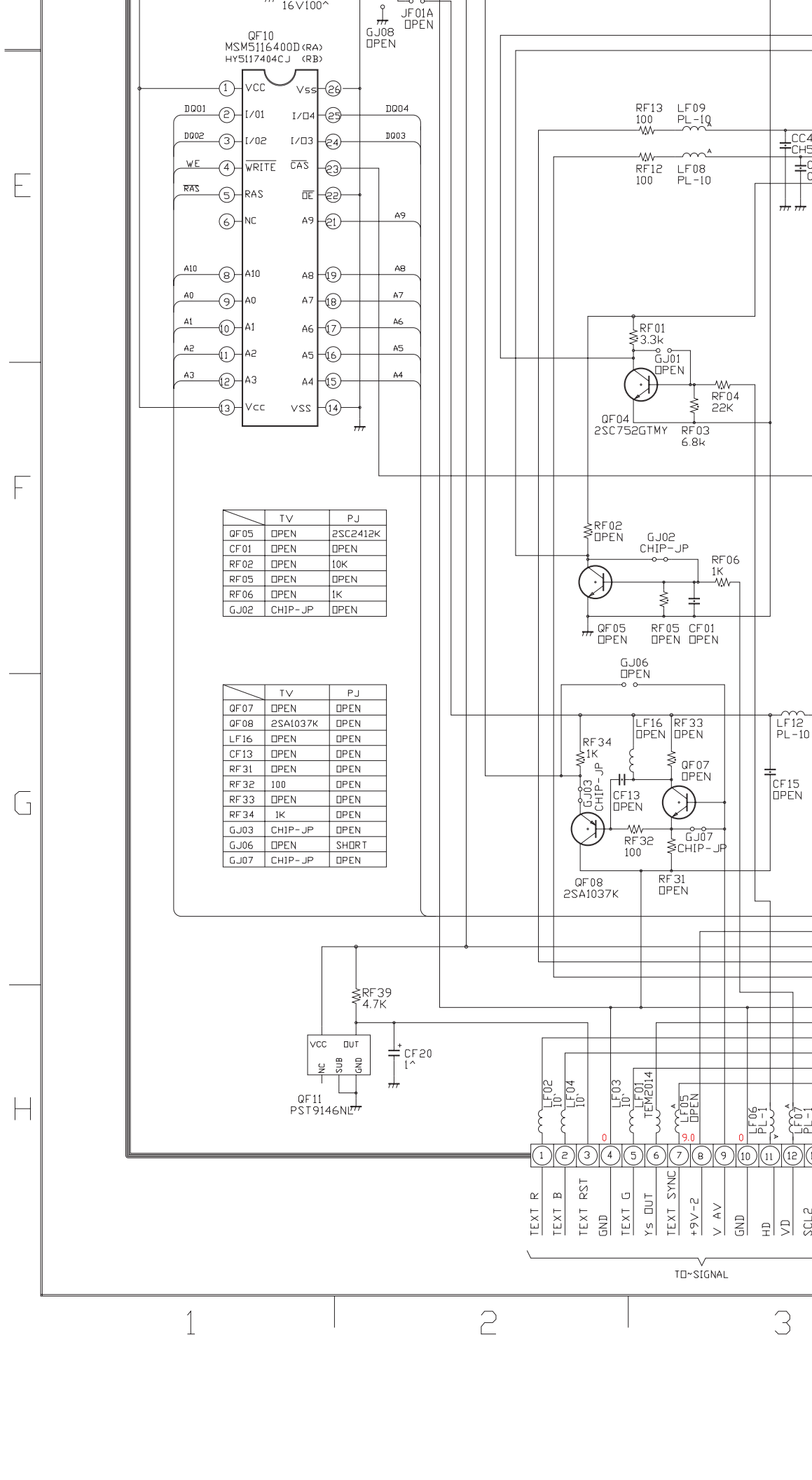
C

D

ROL-2 BOARD

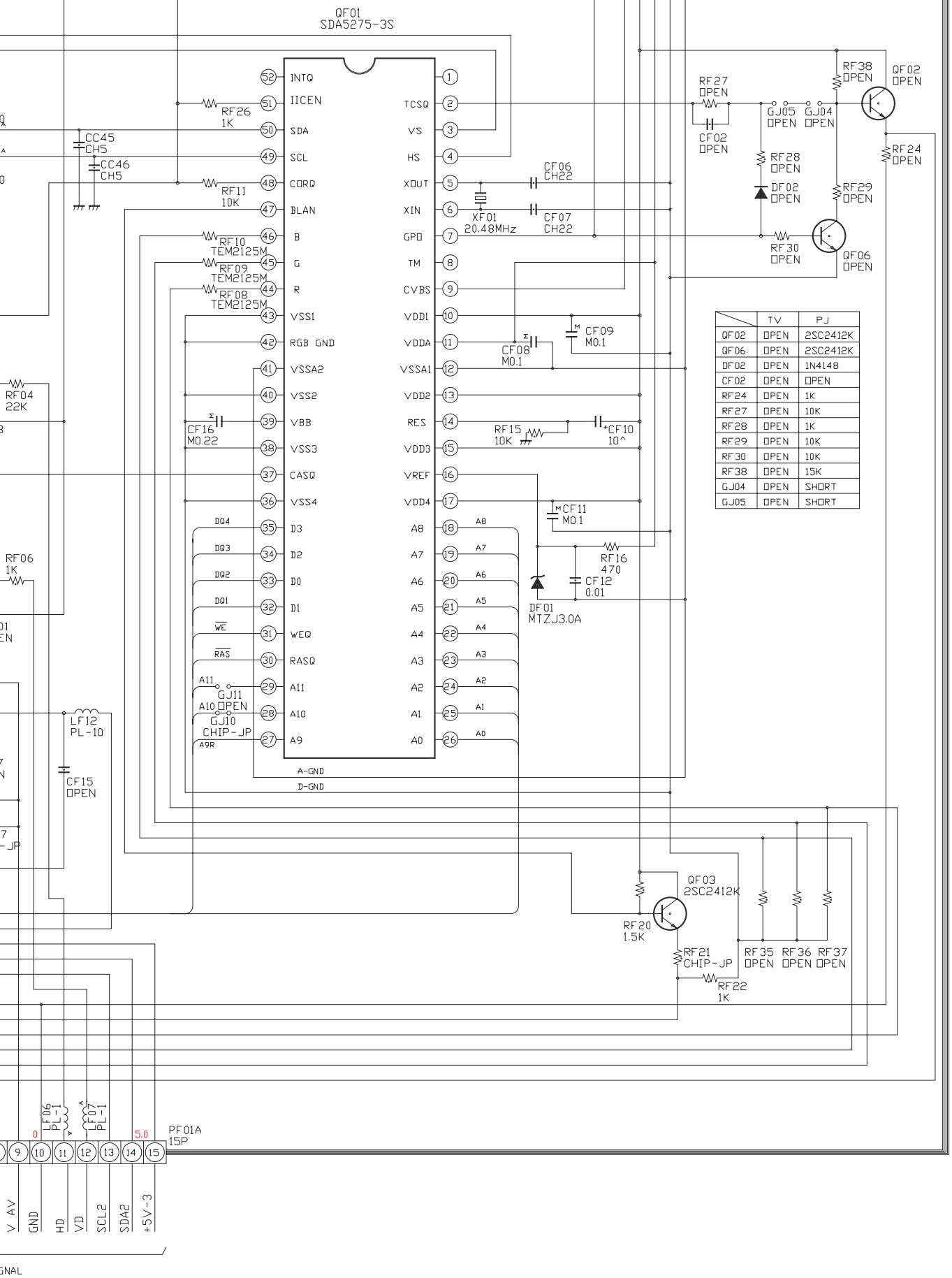
AME AS 32ZD08B)



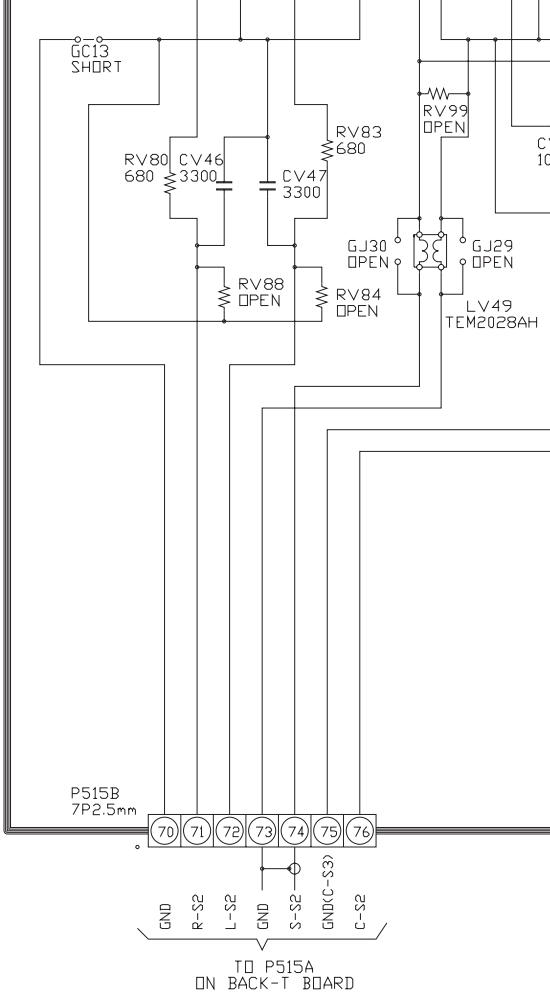


	TV	PJ
QF05	□PEN	2SC2412K
CF01	□PEN	□PEN
RF02	□PEN	10K
RF05	□PEN	□PEN
RF06	□PEN	1K
GJ02	CHIP-JP	□PEN

	TV	PJ
QF07	□PEN	□PEN
QF08	2SA1037K	□PEN
LF16	□PEN	□PEN
CF13	□PEN	□PEN
RF31	□PEN	□PEN
RF32	100	□PEN
RF33	□PEN	□PEN
RF34	1K	□PEN
GJ03	CHIP-JP	□PEN
GJ06	□PEN	SH□RT
GJ07	CHIP-JP	□PEN



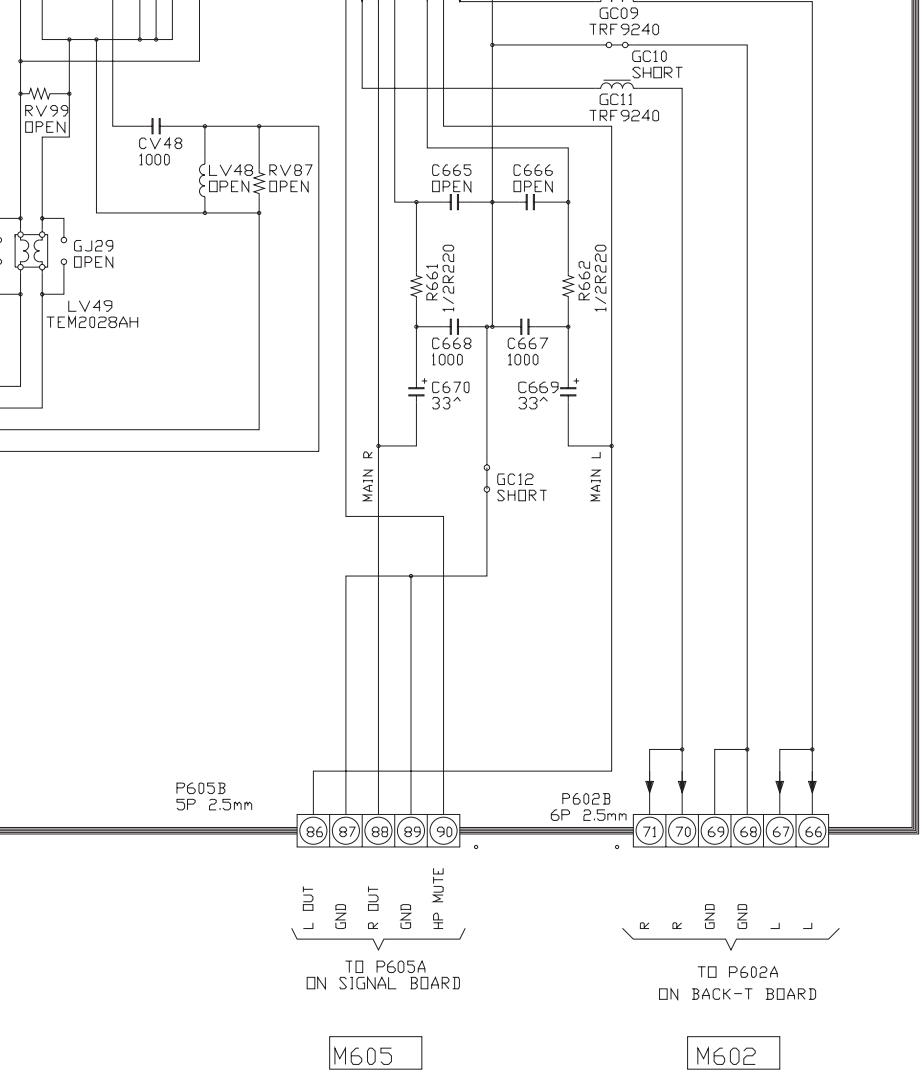
	TV	PJ
QF02	OPEN	2SC2412K
QF06	OPEN	2SC2412K
DF02	OPEN	1N4148
CF02	OPEN	OPEN
RF24	OPEN	1K
RF27	OPEN	10K
RF28	OPEN	1K
RF29	OPEN	10K
RF30	OPEN	10K
RF38	OPEN	15K
GJ04	OPEN	SHORT
GJ05	OPEN	SHORT



M515

UNIT SN.	
CONT-1	SN.23784997
CONT-2	SN.23784998
500TEXT	SN.23784365
	SN.
	SN.

COPPER SIDE PARTS	
	SN.
	SN.
	SN.
	SN.
	SN.



COOS

CONT-1/-2/TEXT

32ZD06B/28ZD06B/32ZD06G/28ZD06G 4/6

U105 DFS BOARD(Ver4.0)B9512A

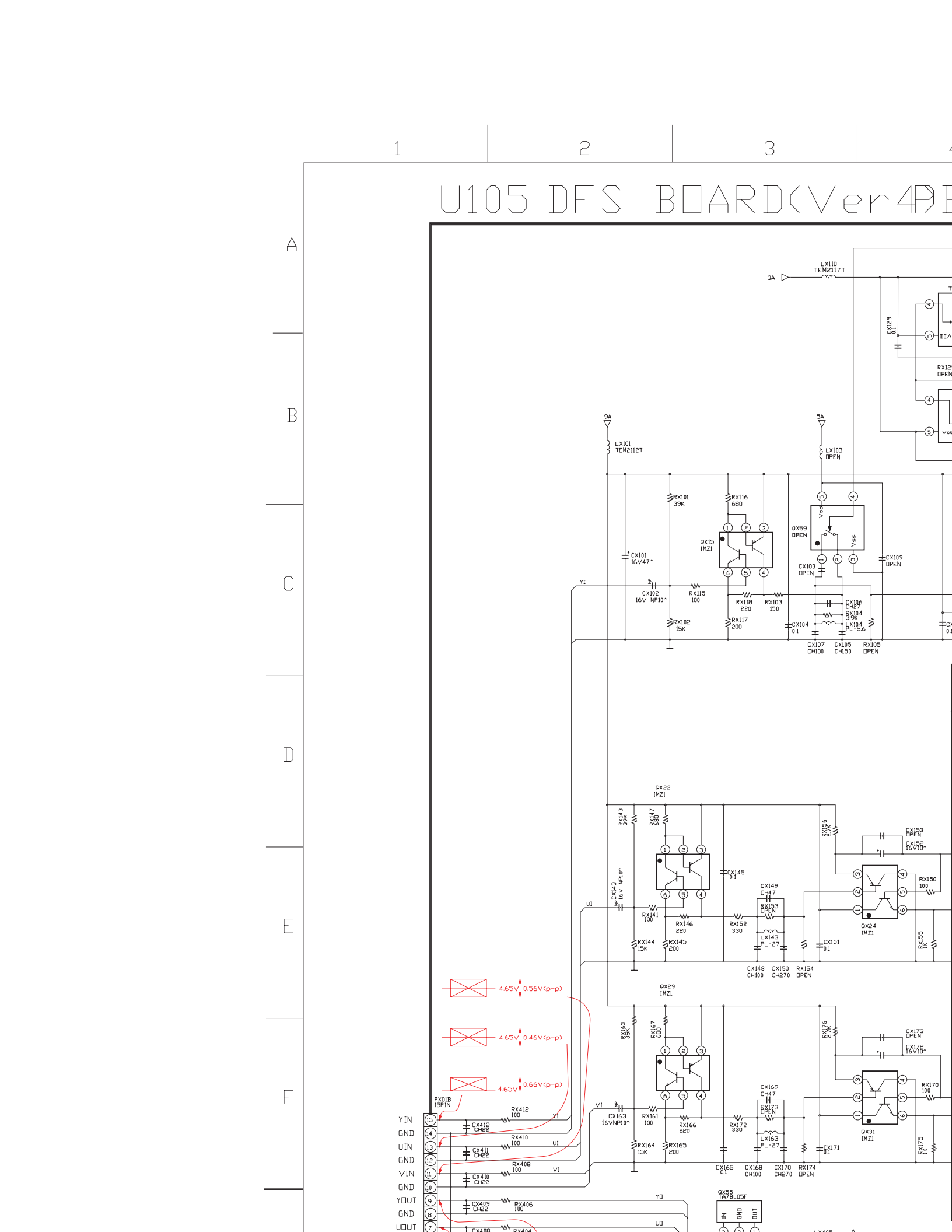
QX01
TC90A61F

QX02
EM636327Q-8
MS82V16520-8
MB81G163222

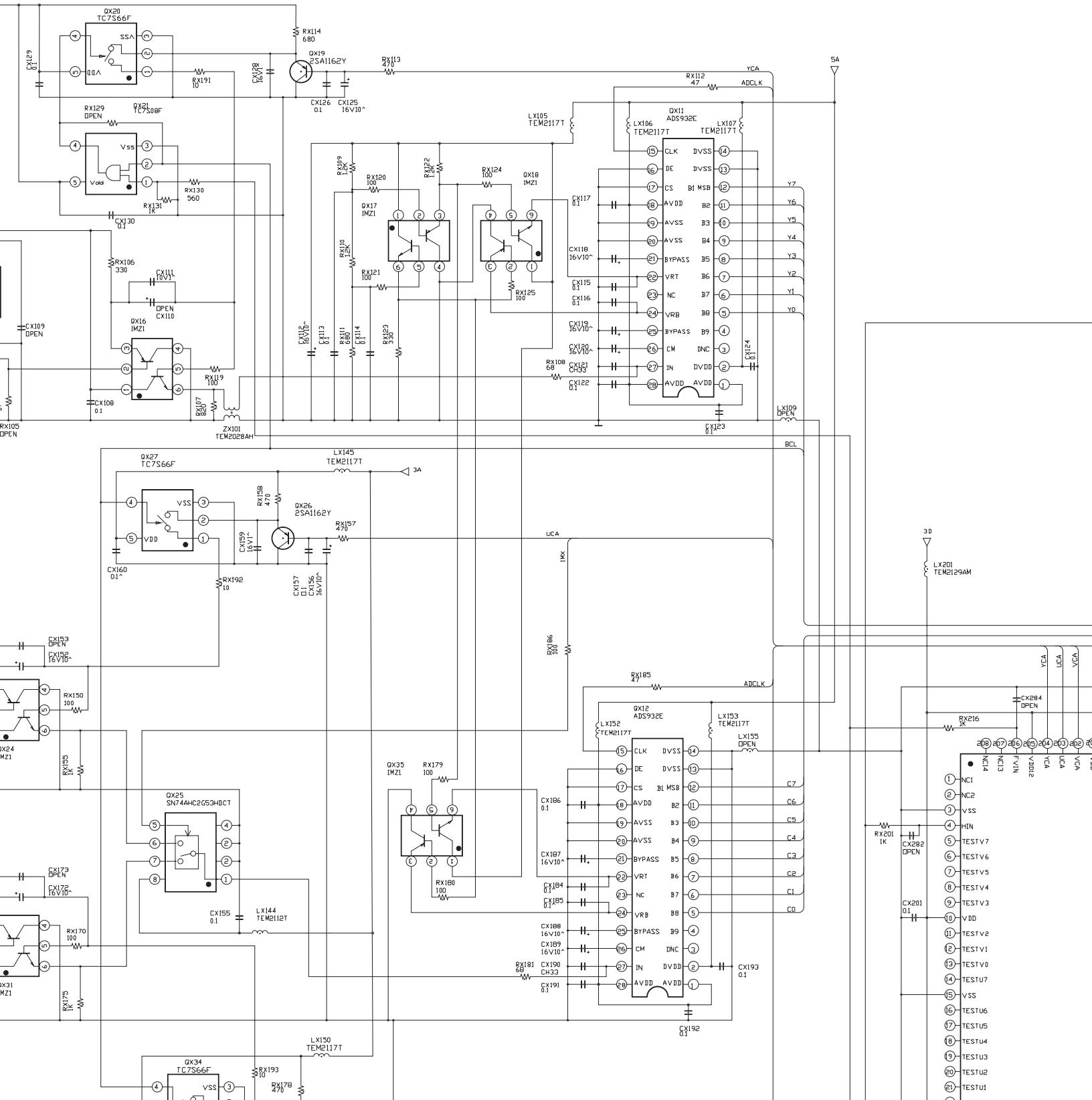
UNIT SN	
DFS	SN:Z3784880
	SN
	SN
	SN

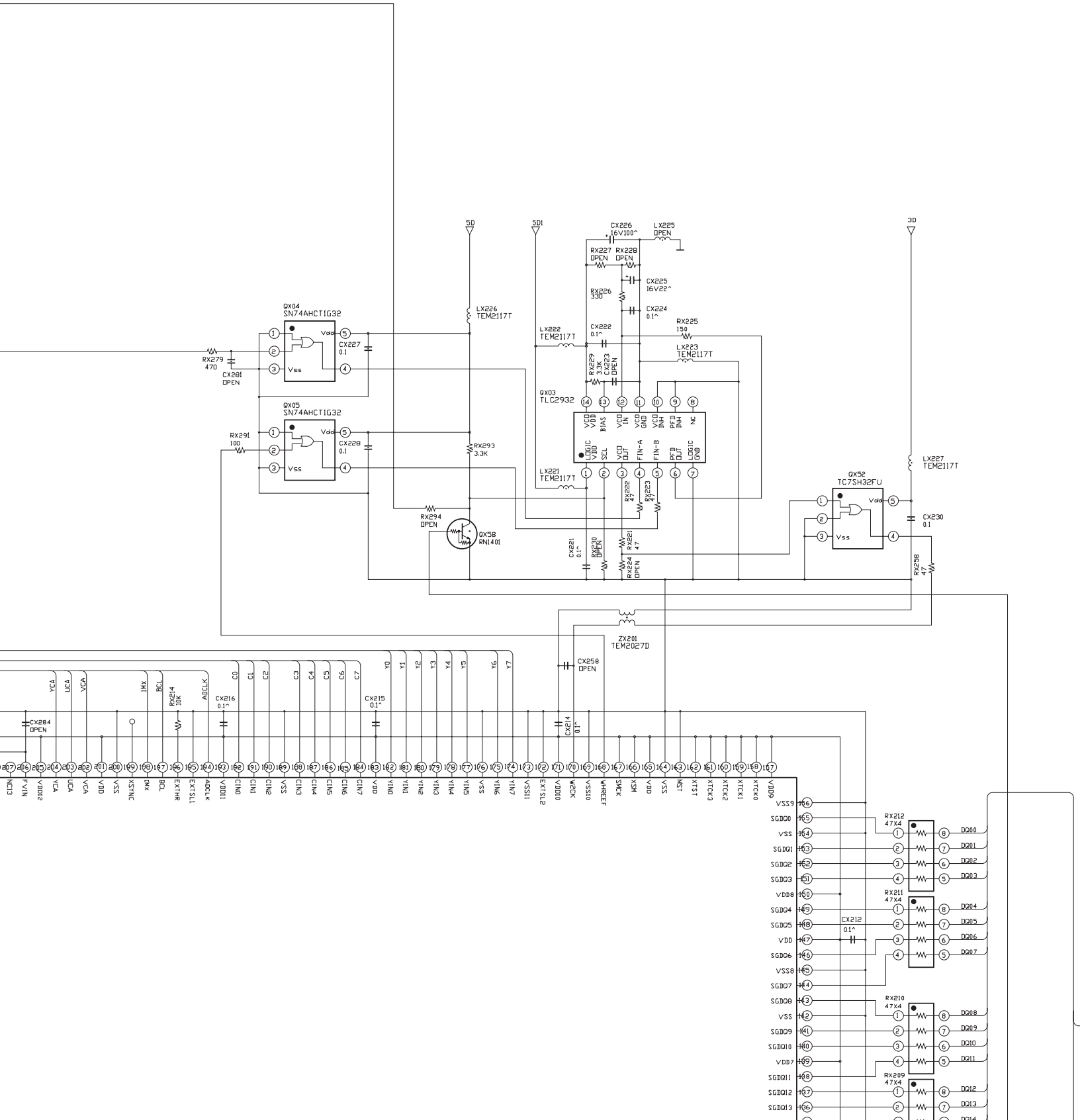
COPPER SIDE PARTS	
	SN
	SN
	SN
	SN

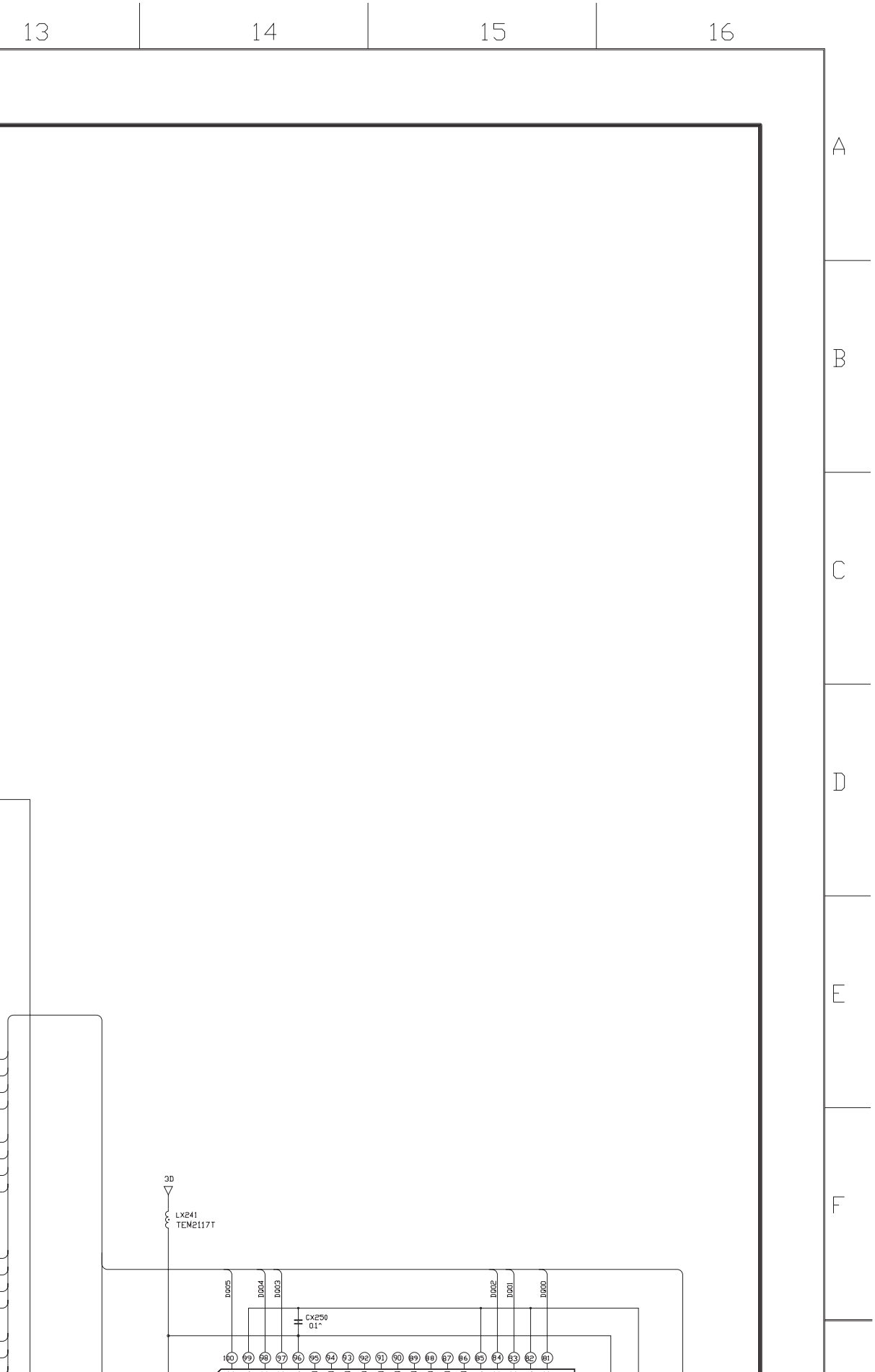
COOS
DFS(Digital Frame Sync)
32ZD08G/32ZD08B/32ZD06B
28ZD06B/32ZD06G/28ZD06G 5/6

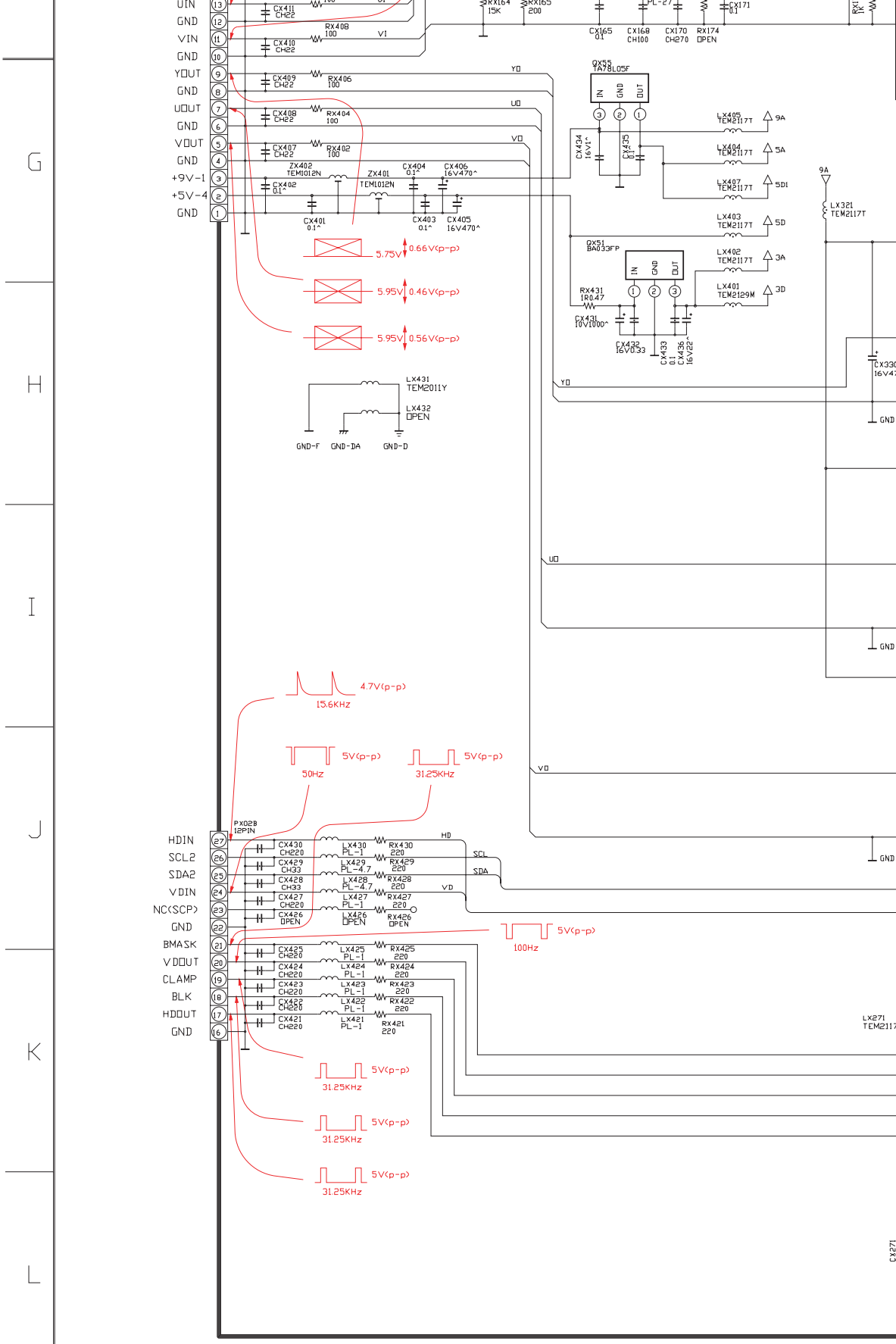

U105 DFS BOARD(Ver4P
LX110 TEM2117T
3A
LX101 TEM2112T
9A
LX103 OPEN
5A
RX101 39K
RX116 680
QX15 IMZ1
QX59 OPEN
Vdd
Vss
CX101 16V47^
CX102 16V NP10^
RX115 100
RX102 15K
RX118 220
RX103 150
RX117 200
CX103 OPEN
CX109 OPEN
CX104 0.1
CX106 CH27
RX104 39K
LX104 PL-5.6
CX107 CH100
CX105 CH150
RX105 OPEN
QX22 IMZ1
RX143 39K
RX147 680
CX143 16V NP10^
CX145 0.1
RX141 100
RX146 220
RX144 15K
RX145 200
RX152 330
CX149 CH47
RX153 OPEN
LX143 PL-27
CX151 0.1
RX156 2K
CX153 OPEN
CX156 16V10^
RX150 100
QX24 IMZ1
RX155 1K
CX148 CH100
CX150 CH270
RX154 OPEN
QX29 IMZ1
RX163 39K
RX167 680
CX163 16VNP10^
RX161 100
RX166 220
RX164 15K
RX165 200
RX172 330
CX169 CH47
RX173 OPEN
LX163 PL-27
CX171 0.1
RX176 2K
CX173 OPEN
CX176 16V10^
RX170 100
QX31 IMZ1
RX175 1K
CX165 0.1
CX168 CH100
CX170 CH270
RX174 OPEN
4.65V 0.56V(p-p)
4.65V 0.46V(p-p)
4.65V 0.66V(p-p)
PX01B 15PIN
YIN
GND
UIN
GND
VIN
GND
YOUT
GND
UOUT
RX412 100
CX412 CH22
RX410 100
CX411 CH22
RX408 100
CX410 CH22
CX409 CH22
RX406 100
QX55 TA78L05F
IN
GND
OUT

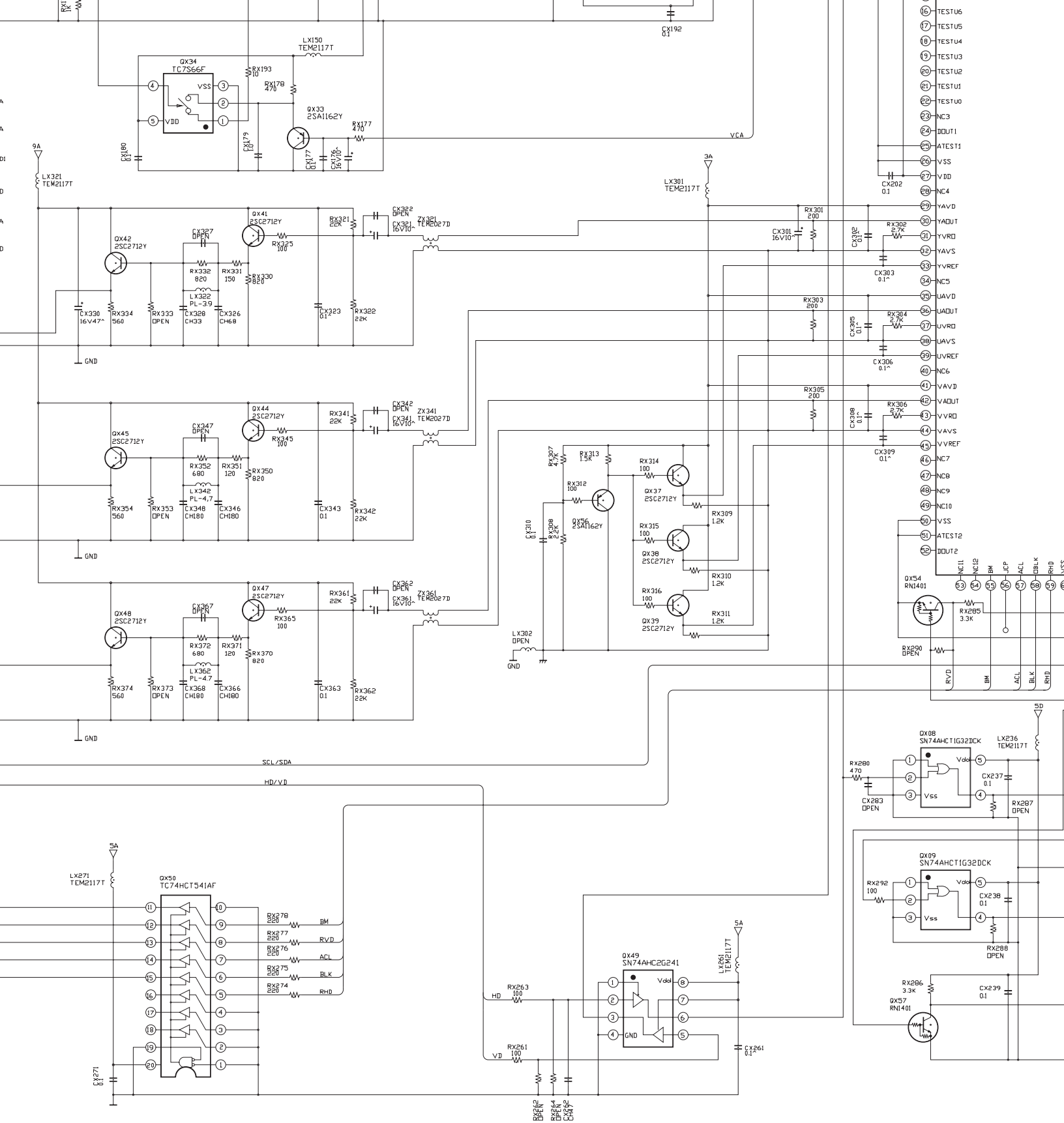
r4PB9512A


QX20 TC7S66F
QX19 2SA1162Y
QX21 TC7S08F
QX11 ADS932E
LX105 TEM2117T
LX106 TEM2117T
LX107 TEM2117T
QX17 IMZ1
QX18 IMZ1
QX16 IMZ1
ZX101 TEM2028AH
QX27 TC7S66F
QX26 2SA1162Y
LX145 TEM2117T
QX12 ADS932E
LX152 TEM2117T
LX153 TEM2117T
LX155 OPEN
QX35 IMZ1
QX25 SN74AHC2G53HDCT
LX144 TEM2112T
QX34 TC7S66F
LX150 TEM2117T
LX201 TEM21294AM
YCA
UCA
VCA
ADCLK
BCL
5A
3A
3D

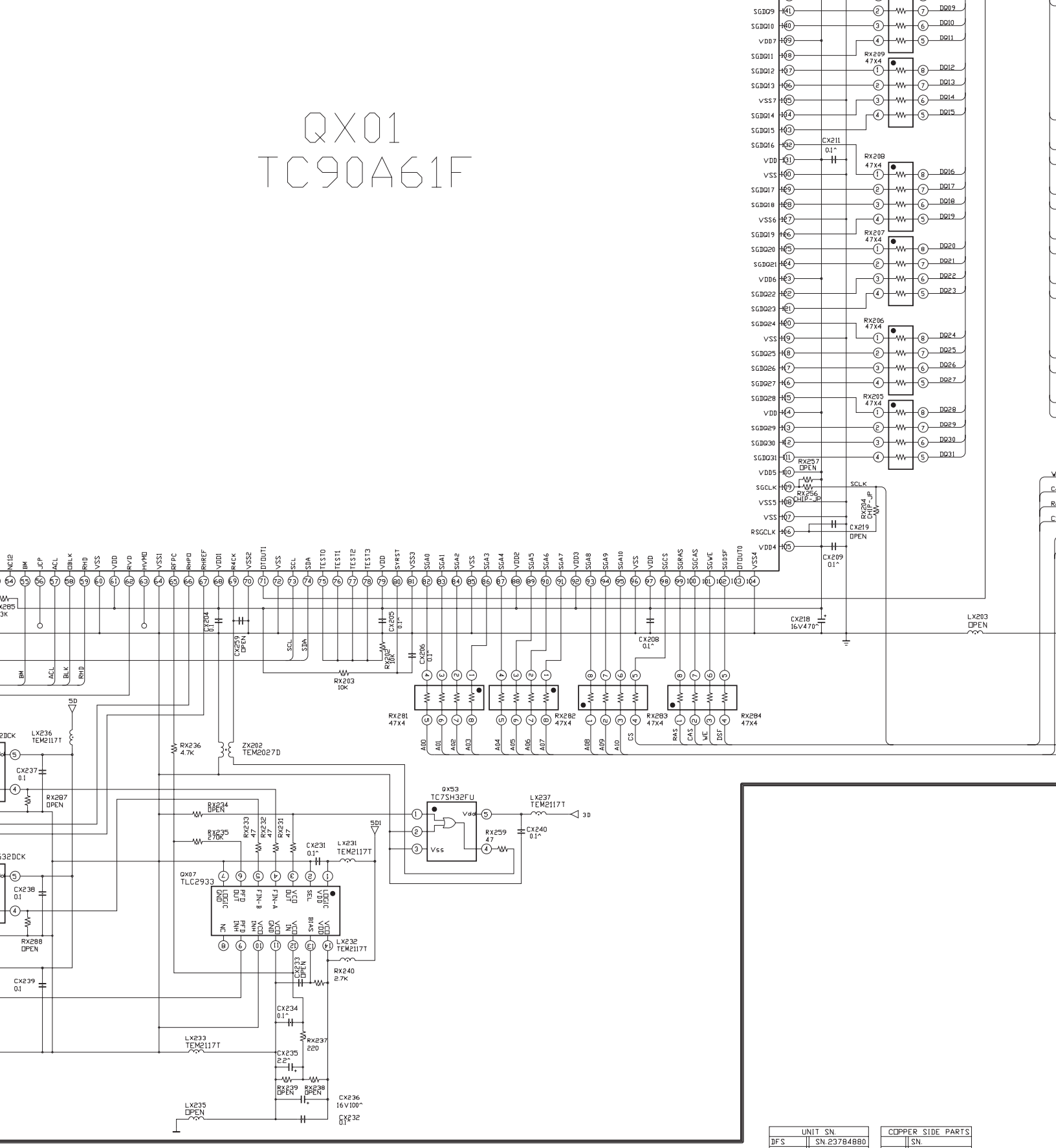

5D
5D1
3D
QX04
SN74AHCT1G32
QX05
SN74AHCT1G32
QX03
TLC2932
QX52
TC7SH32FU
QX58
RN1401
LX226
TEM2117T
LX222
TEM2117T
LX223
TEM2117T
LX221
TEM2117T
LX227
TEM2117T
ZX201
TEM2027D
CX226
16V100^
LX225
OPEN
RX227
OPEN
RX228
OPEN
CX225
16V22^
RX226
330
CX224
0.1^
CX222
0.1^
RX225
150
RX229
3.3K
CX223
OPEN
RX279
470
CX281
OPEN
CX227
0.1
RX291
100
CX228
0.1
RX293
3.3K
RX294
OPEN
CX230
0.1
RX258
47
CX258
OPEN
CX214
0.1^
CX216
0.1^
CX215
0.1^
CX284
OPEN
RX214
10K
CX212
0.1^
RX212
47X4
RX211
47X4
RX210
47X4
RX209
47X4
DQ00
DQ01
DQ02
DQ03
DQ04
DQ05
DQ06
DQ07
DQ08
DQ09
DQ10
DQ11
DQ12
DQ13


13
14
15
16
A
B
C
D
E
F
3D
LX241
TEM2117T
D005
D004
D003
D002
D001
D000
CX250
0.1^
100
99
98
97
96
95
94
93
92
91
90
89
88
87
86
85
84
83
82
81


VIN
GND
VIN
GND
YOUT
GND
UOUT
GND
VOUT
GND
+9V-1
+5V-4
GND
PX028 12P1N
HDIN
SCL2
SDA2
VDIN
NC(SCP)
GND
BMASK
VDOUT
CLAMP
BLK
HDOUT
GND
YD
UD
VD
HD
SCL
SDA
GX55 TA78L05F
GX51 BA033FP
IN
GND
OUT
5.75V 0.66V(p-p)
5.95V 0.46V(p-p)
5.95V 0.56V(p-p)
4.7V(p-p) 15.6KHz
5V(p-p) 50Hz
5V(p-p) 31.25KHz
5V(p-p) 100Hz
5V(p-p) 31.25KHz
5V(p-p) 31.25KHz
5V(p-p) 31.25KHz
LX431 TEM2011Y
LX432 OPEN
GND-F
GND-DA
GND-D
LX321 TEM2117T
LX271 TEM2117
GND

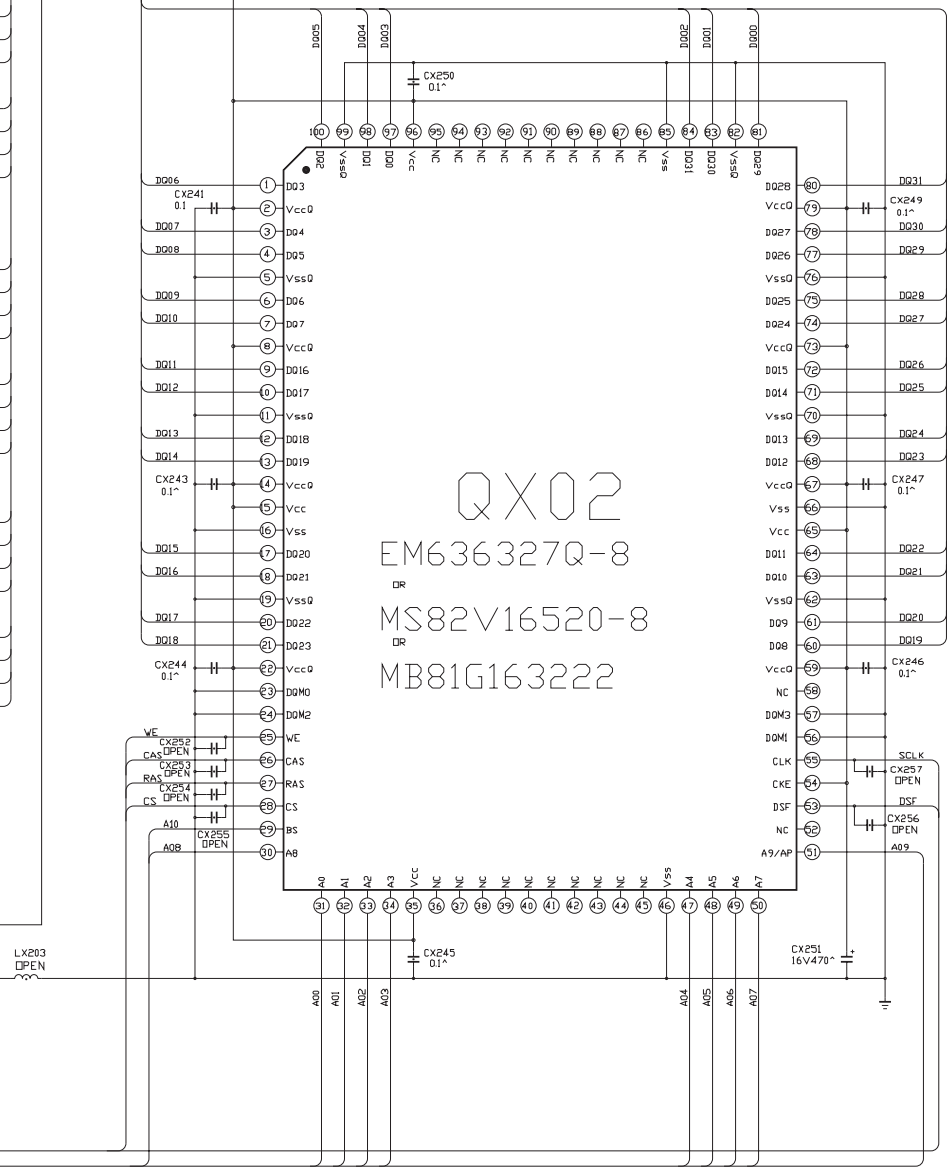

LX150 TEM2117T
QX34 TC7S66F
VSS
VDD
RX193 10
RX178 470
QX33 2SA1162Y
RX177 470
CX180 0.1
CX179 10
CX177 0.1
CX176 16V10
VCA
9A
LX321 TEM2117T
QX41 2SC2712Y
QX42 2SC2712Y
RX321 22K
CX322 OPEN
ZX321 TEM2027D
CX321 16V10
RX325 100
CX327 OPEN
RX332 820
RX331 150
RX330 820
LX322 PL-3.9
CX328 CH33
CX326 CH68
CX330 16V47
RX334 560
RX333 OPEN
CX323 0.1
RX322 22K
GND
QX44 2SC2712Y
QX45 2SC2712Y
RX341 22K
CX342 OPEN
ZX341 TEM2027D
CX341 16V10
RX345 100
CX347 OPEN
RX352 680
RX351 120
RX350 820
LX342 PL-4.7
CX348 CH180
CX346 CH180
RX354 560
RX353 OPEN
CX343 0.1
RX342 22K
GND
QX47 2SC2712Y
QX48 2SC2712Y
RX361 22K
CX362 OPEN
ZX361 TEM2027D
CX361 16V10
RX365 100
CX367 OPEN
RX372 680
RX371 120
RX370 820
LX362 PL-4.7
CX368 CH180
CX366 CH180
RX374 560
RX373 OPEN
CX363 0.1
RX362 22K
GND
SCL/SDA
HD/VD
3A
LX301 TEM2117T
RX301 200
CX301 16V10
RX302 2.7K
CX302 0.1
CX303 0.1
RX303 200
RX304 2.7K
CX305 0.1
CX306 0.1
RX305 200
RX306 2.7K
CX308 0.1
CX309 0.1
TESTU6
TESTU5
TESTU4
TESTU3
TESTU2
TESTU1
TESTU0
NC3
DOUT1
ATEST1
VSS
VDD
NC4
YAVD
YADUT
YVRD
YAVS
YVREF
NC5
UAVD
UADUT
UVRD
UAVS
UVREF
NC6
VAVD
VADUT
VVRD
VAVS
VVREF
NC7
NC8
NC9
NC10
VSS
ATEST2
DOUT2
RX307 2K
RX313 1.5K
RX312 100
QX56 2SA1162Y
CX310 0.1
RX308 2.2K
RX314 100
QX37 2SC2712Y
RX309 1.2K
RX315 100
QX38 2SC2712Y
RX310 1.2K
RX316 100
QX39 2SC2712Y
RX311 1.2K
LX302 OPEN
GND
QX54 RN1401
RX285 3.3K
RX290 OPEN
NC11
NC12
BM
JCP
ACL
BLK
RHD
RVD
5D
QX08 SN74AHCT1G32DCK
LX236 TEM2117T
RX280 470
CX237 0.1
CX283 OPEN
RX287 OPEN
QX09 SN74AHCT1G32DCK
RX292 100
CX238 0.1
RX288 OPEN
RX286 3.3K
CX239 0.1
QX57 RN1401
5A
LX271 TEM2117T
QX50 TC74HCT541AF
RX278 220
RX277 220
RX276 220
RX275 220
RX274 220
BM
RVD
ACL
BLK
RHD
CX271 0.1
QX49 SN74AHC2G241
LX261 TEM2117T
RX263 100
HD
RX261 100
VD
RX262 OPEN
RX264 OPEN
CX262 CH47
CX261 0.1

QX01
TC90A61F



UNIT SN.	
DFS	SN.23784880
	SN.
	SN.
	SN.

COPPER SIDE PARTS	
	SN.
	SN.
	SN.
	SN.
	SN.

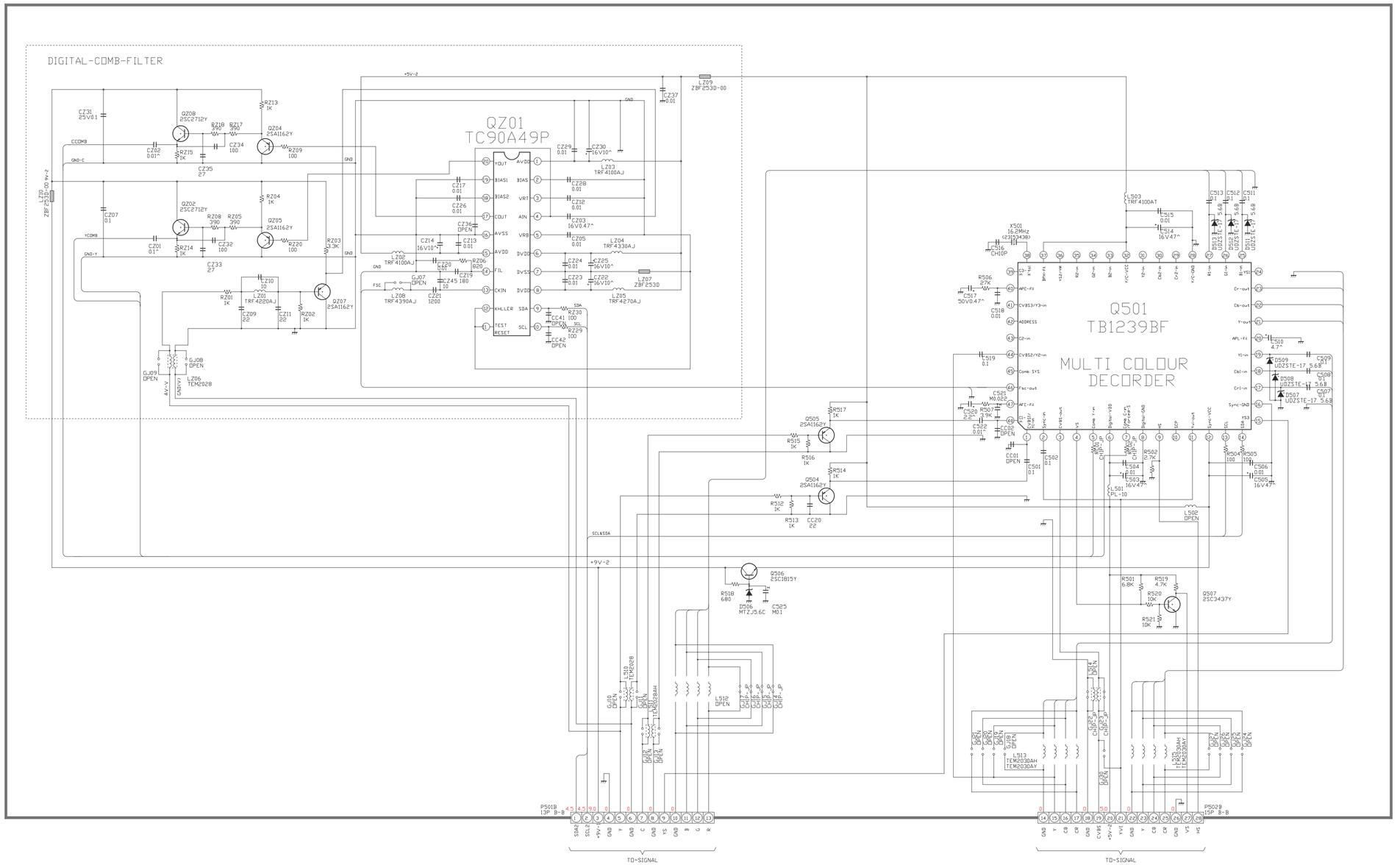


COOS
DFS(Digital Frame System)
32ZD08G/32ZD08B/32ZD06B
28ZD06B/32ZD06G/28ZD06G 5/6

13 14 15 16

U103 D-COMB&MCD BOARD PB 9510A

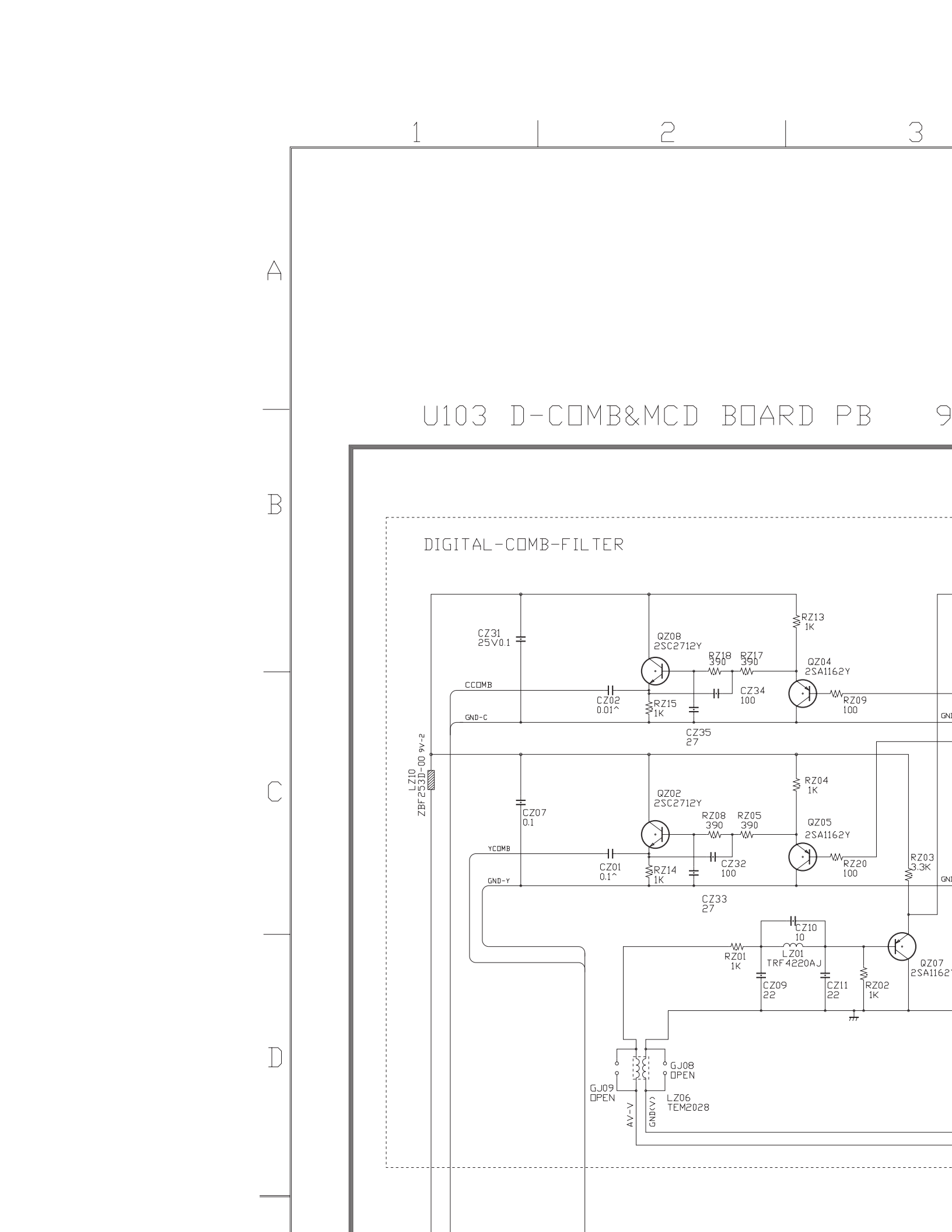
DIGITAL-COMB-FILTER

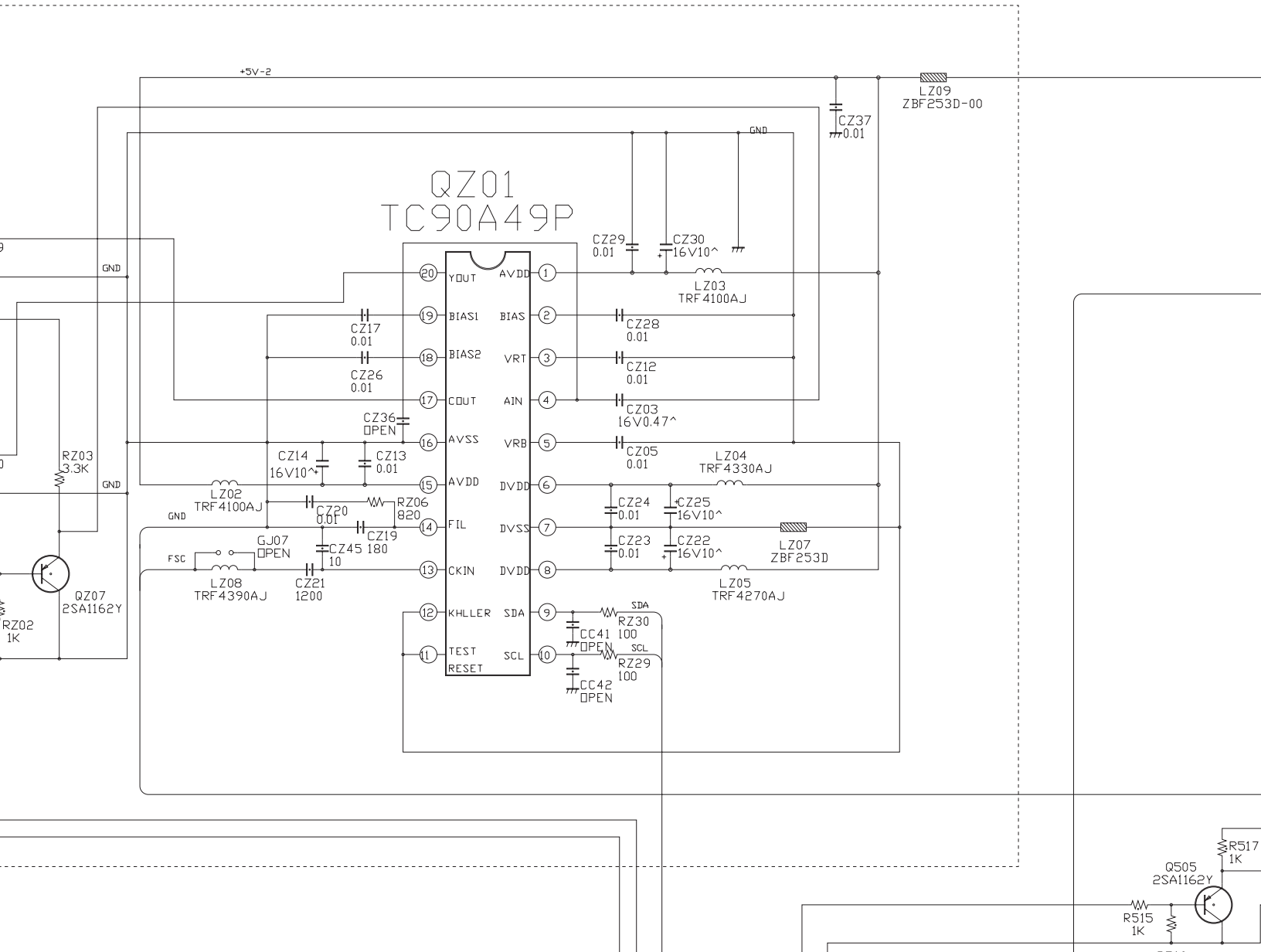


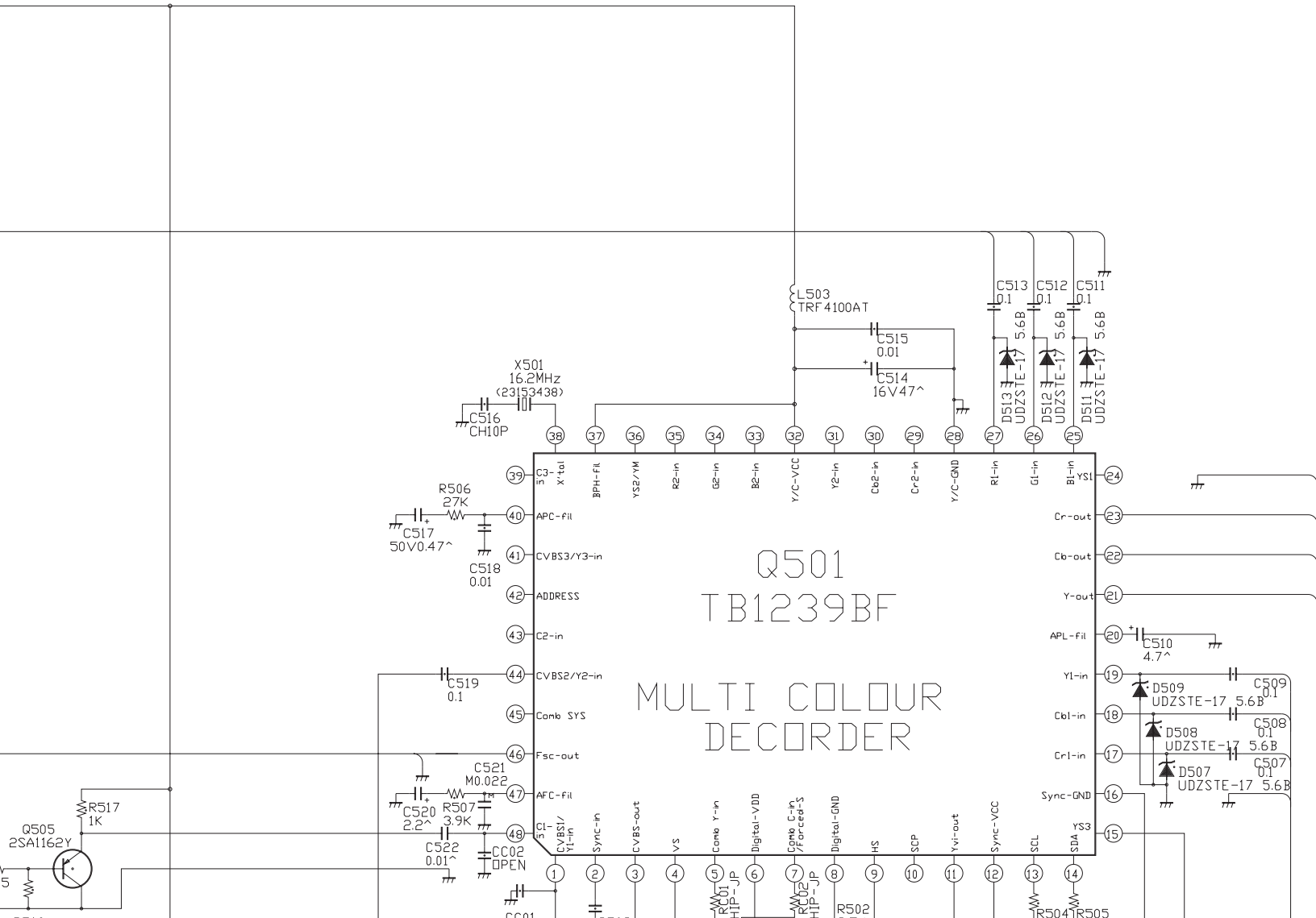
UNIT SN.	
MCD	SN.23784878
	SN.
	SN.
	SN.

COPPER SIDE PARTS	
	SN.
	SN.
	SN.
	SN.
	SN.

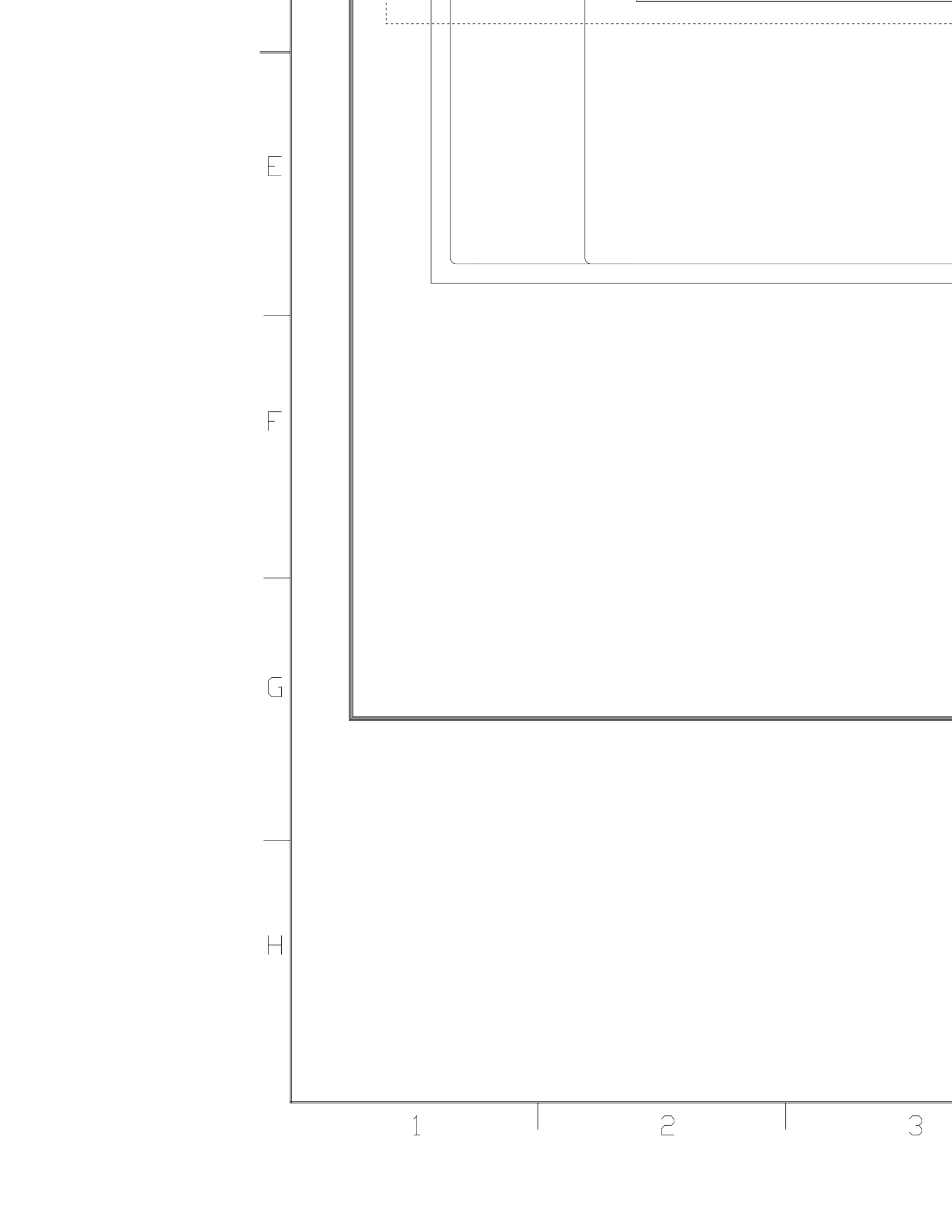
COOS
D-COMB&MCD PART
32ZD08G/32ZD08B/32ZD06B
28ZD06B/32ZD06G/28ZD06G 6/6

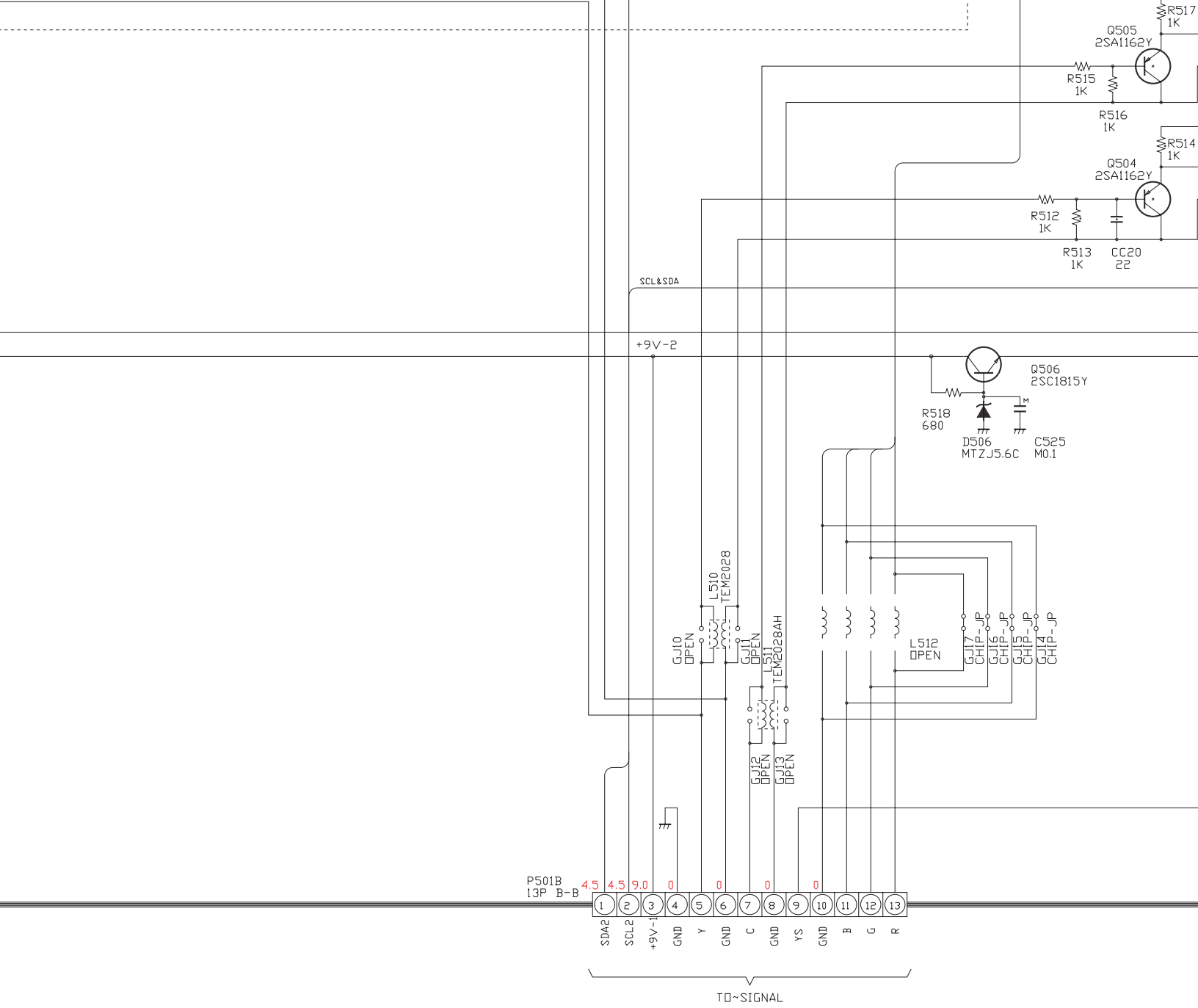

1
2
3
A
B
C
D
U103 D-COMB&MCD BOARD PB
DIGITAL-COMB-FILTER
CZ31
25V0.1
QZ08
2SC2712Y
RZ18
390
RZ17
390
RZ13
1K
QZ04
2SA1162Y
CCOMB
CZ02
0.01^
RZ15
1K
CZ34
100
RZ09
100
GND-C
CZ35
27
LZ10
ZBF253D-00 9v-2
QZ02
2SC2712Y
RZ08
390
RZ05
390
RZ04
1K
QZ05
2SA1162Y
CZ07
0.1
YCOMB
CZ01
0.1^
RZ14
1K
CZ32
100
RZ20
100
RZ03
3.3K
GND-Y
CZ33
27
CZ10
10
LZ01
TRF4220AJ
RZ01
1K
CZ09
22
CZ11
22
RZ02
1K
QZ07
GJ08
OPEN
GJ09
OPEN
LZ06
TEM2028
AV-V
GND(V)

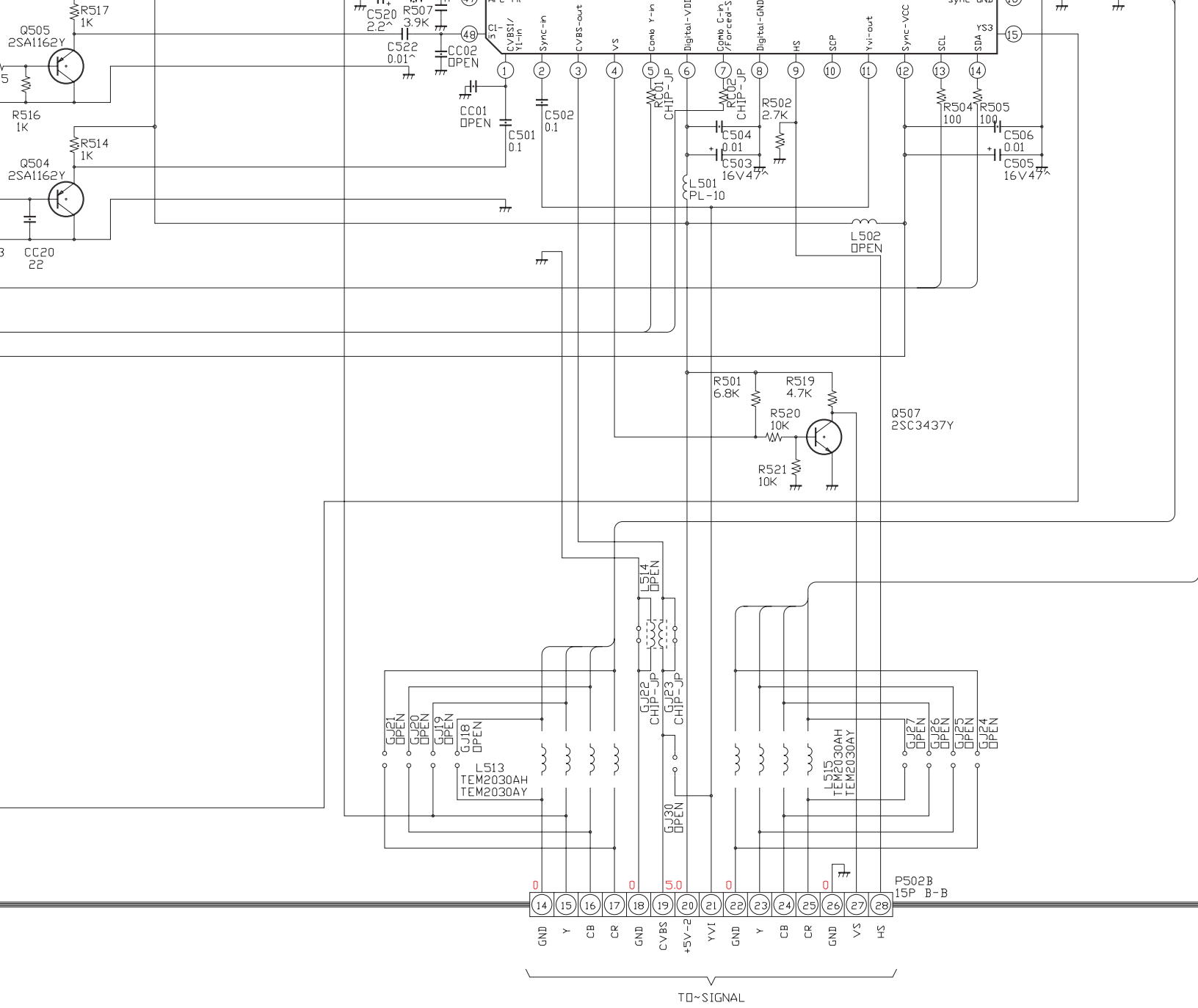

+5V-2
LZ09
ZBF253D-00
CZ37
0.01
GND
QZ01
TC90A49P
CZ29
0.01
CZ30
16V10^
LZ03
TRF4100AJ
YOUT
AVDD
BIAS1
BIAS
BIAS2
VRT
COUT
AIN
AVSS
VRB
AVDD
DVDD
FIL
DVSS
CKIN
DVDD
KHLLER
SDA
TEST
RESET
SCL
CZ17
0.01
CZ26
0.01
CZ28
0.01
CZ12
0.01
CZ03
16V0.47^
CZ36
OPEN
CZ14
16V10^
CZ13
0.01
CZ05
0.01
LZ04
TRF4330AJ
LZ02
TRF4100AJ
CZ20
0.01
RZ06
820
CZ19
CZ45 180
10
GJ07
OPEN
FSC
LZ08
TRF4390AJ
CZ21
1200
CZ24
0.01
CZ25
16V10^
CZ23
0.01
CZ22
16V10^
LZ07
ZBF253D
LZ05
TRF4270AJ
SDA
RZ30
100
CC41
OPEN
SCL
RZ29
100
CC42
OPEN
RZ03
3.3K
QZ07
2SA1162Y
RZ02
1K
R517
1K
Q505
2SA1162Y
R515
1K


Q501
TB1239BF
MULTI COLOUR
DECORDER
X501
16.2MHz
(23153438)
C516
CH10P
L503
TRF4100AT
C515
0.01
C514
16V47^
C513 0.1
C512 0.1
C511 0.1
D513 UDZSTE-17 5.6B
D512 UDZSTE-17 5.6B
D511 UDZSTE-17 5.6B
R506
27K
C517
50V0.47^
C518
0.01
C519
0.1
C521
M0.022
C520
2.2^
R507
3.9K
C522
0.01^
CC02
OPEN
R517
1K
Q505
2SA1162Y
C510
4.7^
D509
UDZSTE-17 5.6B
C509
0.1
D508
UDZSTE-17 5.6B
C508
0.1
D507
UDZSTE-17 5.6B
C507
0.1
R502
R504
R505
C3-
X'tal
BPH-fil
YS2/YM
R2-in
G2-in
B2-in
Y/C-VCC
Y2-in
Cb2-in
Cr2-in
Y/C-GND
R1-in
G1-in
B1-in
YS1
APC-fil
CVBS3/Y3-in
ADDRESS
C2-in
CVBS2/Y2-in
Comb SYS
Fsc-out
AFC-fil
C1-
CVBS1/
Y1-in
Sync-in
CVBS-out
VS
Comb Y-in
Digital-VDD
Comb C-in
/forced-S
Digital-GND
HS
SCP
Yvi-out
Sync-VCC
SCL
SDA
Cr-out
Cb-out
Y-out
APL-fil
Y1-in
Cb1-in
Cr1-in
Sync-GND
YS3


10
11
12
A
B
C
D
C509
0.1
E-17 5.6B
C508
0.1
STE-17 5.6B
C507
0.1
ZSTE-17 5.6B


E
F
G
H
1
2
3


R517
1K
Q505
2SA1162Y
R515
1K
R516
1K
R514
1K
Q504
2SA1162Y
R512
1K
R513
1K
CC20
22
SCL&SDA
+9V-2
Q506
2SC1815Y
R518
680
D506
MTZJ5.6C
C525
M0.1
L510
TEM2028
GJ10
OPEN
GJ11
OPEN
L511
TEM2028AH
GJ12
OPEN
GJ13
OPEN
L512
OPEN
GJ17
CHIP-JP
GJ16
CHIP-JP
GJ15
CHIP-JP
GJ14
CHIP-JP
P501B
13P B-B
4.5
4.5
9.0
0
0
0
0
1
2
3
4
5
6
7
8
9
10
11
12
13
SDA2
SCL2
+9V-1
GND
Y
GND
C
GND
YS
GND
B
G
R
TO~SIGNAL



UNIT SN.	
MCD	SN.23784878
	SN.
	SN.
	SN.

COPPER SIDE PARTS	
	SN.
	SN.
	SN.
	SN.
	SN.

E

F

G

H

COOS
D-COMB&MCD PART
32ZD08G/32ZD08B/32ZD06B
28ZD06B/32ZD06G/28ZD06G 6/6

10 11 12