

JVC

SCHEMATIC DIAGRAMS

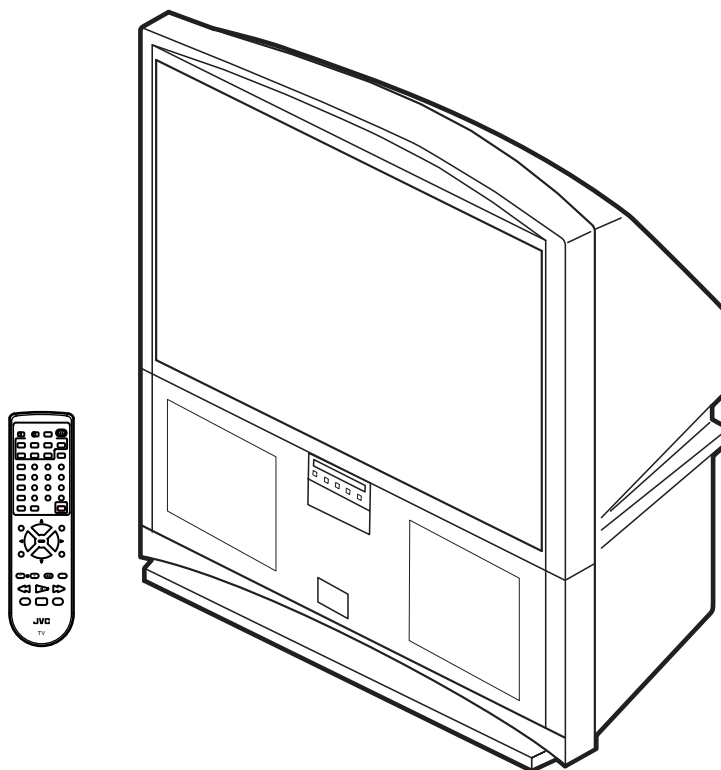
REAR PROJECTION TELEVISION

AV-56WP30

CD-ROM No.SML200206

BASIC CHASSIS

SB2



CONTENTS


■ NOTE ON USING CIRCUIT DIAGRAMS	2-1
■ SEMICONDUCTOR SHAPES	2-2
■ BLOCK DIAGRAM	2-3
■ CIRCUIT DIAGRAMS	2-5
■ PATTERN DIAGRAMS	2-59
■ CHANNEL CHART	2-79

AV-56WP30

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the  symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1)Input signal : Color bar signal
- (2)Setting positions of each knob/button and variable resistor : Original setting position when shipped
- (3)Internal resistance of tester :DC 20k Ω /V
- (4)Oscilloscope sweeping time :H \Rightarrow 20 μ S/div
:V \Rightarrow 5mS/div
:Others \Rightarrow Sweeping time is specified
- (5)Voltage values :All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board :R1209 \rightarrow R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

No unit	: [Ω]
K	: [K Ω]
M	: [M Ω]

● Rated allowable power

No indication	:1/ 16 [W]
Others	:As specified

● Type

No indication	:Carbon resistor
OMR	:Oxide metal film resistor
MFR	:Metal film resistor
MPR	:Metal plate resistor
UNFR	:Uninflammable resistor
FR	:Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

1 or higher	: [pF]
less than 1	: [μ F]

● Withstand voltage

No indication	:DC50[V]
Others	:DC withstand voltage [V]
AC indicated	:AC withstand voltage [V]

* Electrolytic Capacitors

47/50[Example]:Capacitance value [μ F]/withstand voltage[V]

● Type

No indication	:Ceramic capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	: [μ H]
Others	:As specified

(4)Power Supply




	:B1		:B2 (12V)
	:9V		:5V

* Respective voltage values are indicated





(5)Test point

	:Test point		:Only test point display
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

(6)Connecting method

	:Connector		:Wrapping or soldering
	:Receptacle		

(7)Ground symbol

	:LIVE side ground
	:ISOLATED(NEUTRAL) side ground
	:EARTH ground
	:DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : () side GND and the ISOLATED(NEUTRAL) : () side GND. Therefore, care must be taken for the following points.

- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

NOTE


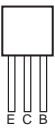
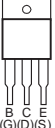
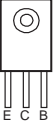
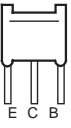

- ◇ Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.
When ordering parts, please use the numbers that appear in the Parts List.

CONTENTS


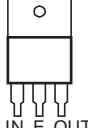
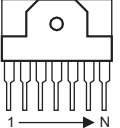
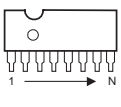
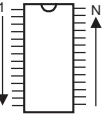
SEMICONDUCTOR SHAPES	2-2
BLOCK DIAGRAM	2-3
CIRCUIT DIAGRAMS	
MAIN PWB CIRCUIT DIAGRAM	2-5
RECEIVER PWB (1/2) CIRCUIT DIAGRAM	2-29
RECEIVER PWB (2/2) & CENTER SPEAKER PWB CIRCUIT DIAGRAM	2-31
POWER & DEF. PWB CIRCUIT DIAGRAM	2-33
DEF OSC PWB CIRCUIT DIAGRAM	2-37
LINE FILTER PWB CIRCUIT DIAGRAM	2-39
CONVERGENCE OSC PWB CIRCUIT DIAGRAM	2-41
CONVERGENCE PWB CIRCUIT DIAGRAM	2-43
FRONT CONTROL PWB CIRCUIT DIAGRAM	2-45
FRONT I/F PWB & REMOCON SENSOR PWB CIRCUIT DIAGRAM	2-47
AV JACK PWB CIRCUIT DIAGRAM	2-49
R/G/B CRT SOCKET PWB CIRCUIT DIAGRAM	2-55
R/G/B VM PWB CIRCUIT DIAGRAM	2-57
PATTERN DIAGRAMS	
POWER & DEF. PWB PATTERN	2-59
MAIN PWB PATTERN	2-61
RECEIVER PWB PATTERN	2-65
AV JACK PWB PATTERN	2-67
R/G/B CRT SOCKET PWB PATTERN	2-69
R/G/B VM PWB PATTERN	2-71
LINE FILTER PWB PATTERN	2-73
DEF OSC PWB PATTERN	2-74
FRONT CONTROL PWB PATTERN	2-75
FRONT I/F PWB PATTERN	2-76
CENTER SPEAKER PWB PATTERN	2-76
REMOCON SENSOR PWB PATTERN	2-76
CONVERGENCE PWB PATTERN	2-77
CONVERGENCE OSD PWB PATTERN	2-77
CHANNEL CHART (US)	2-79
CHANNEL CHART (CA)	2-80

SEMICONDUCTOR SHAPES

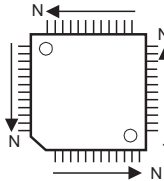
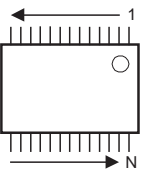
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

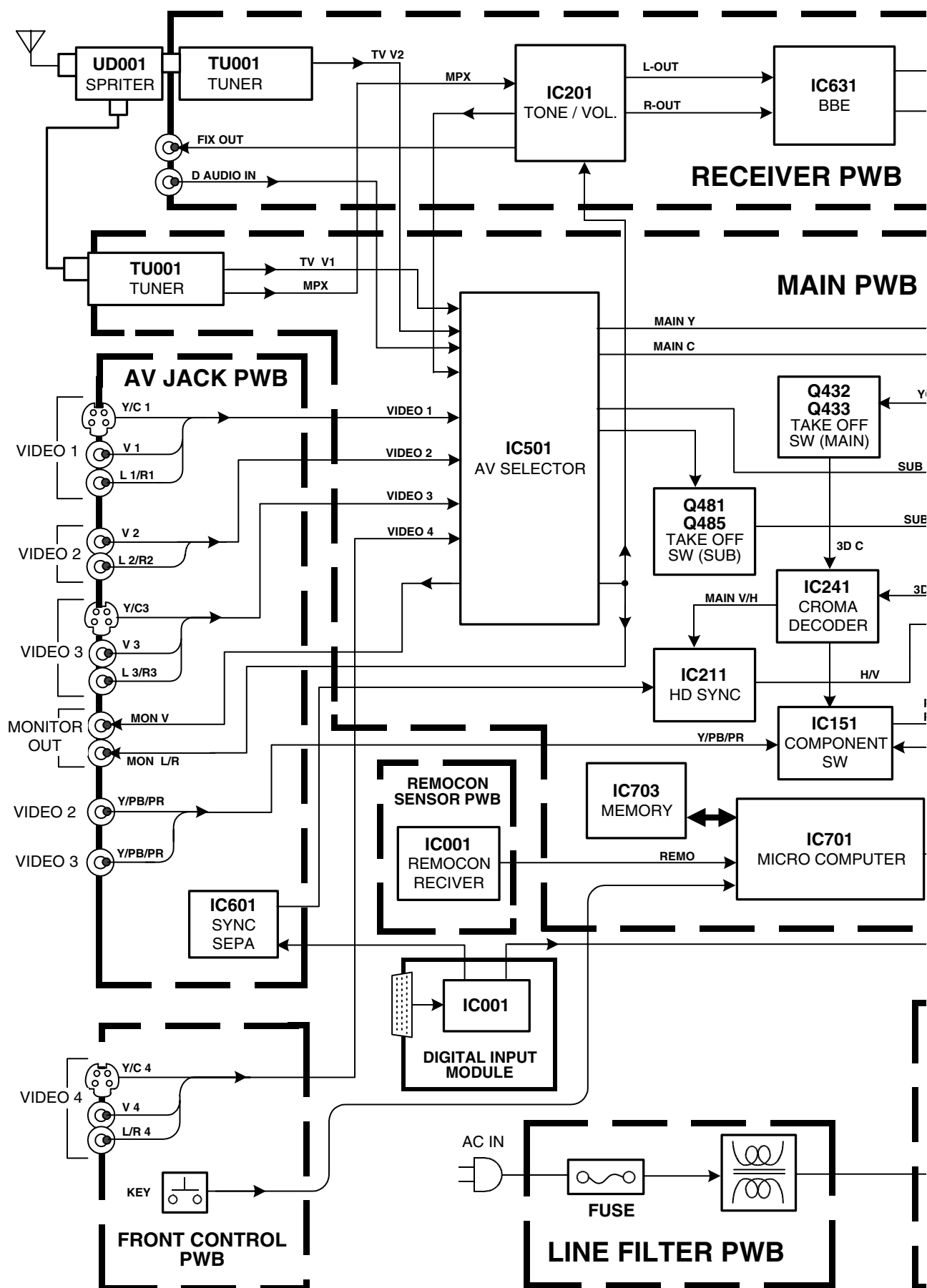
IC

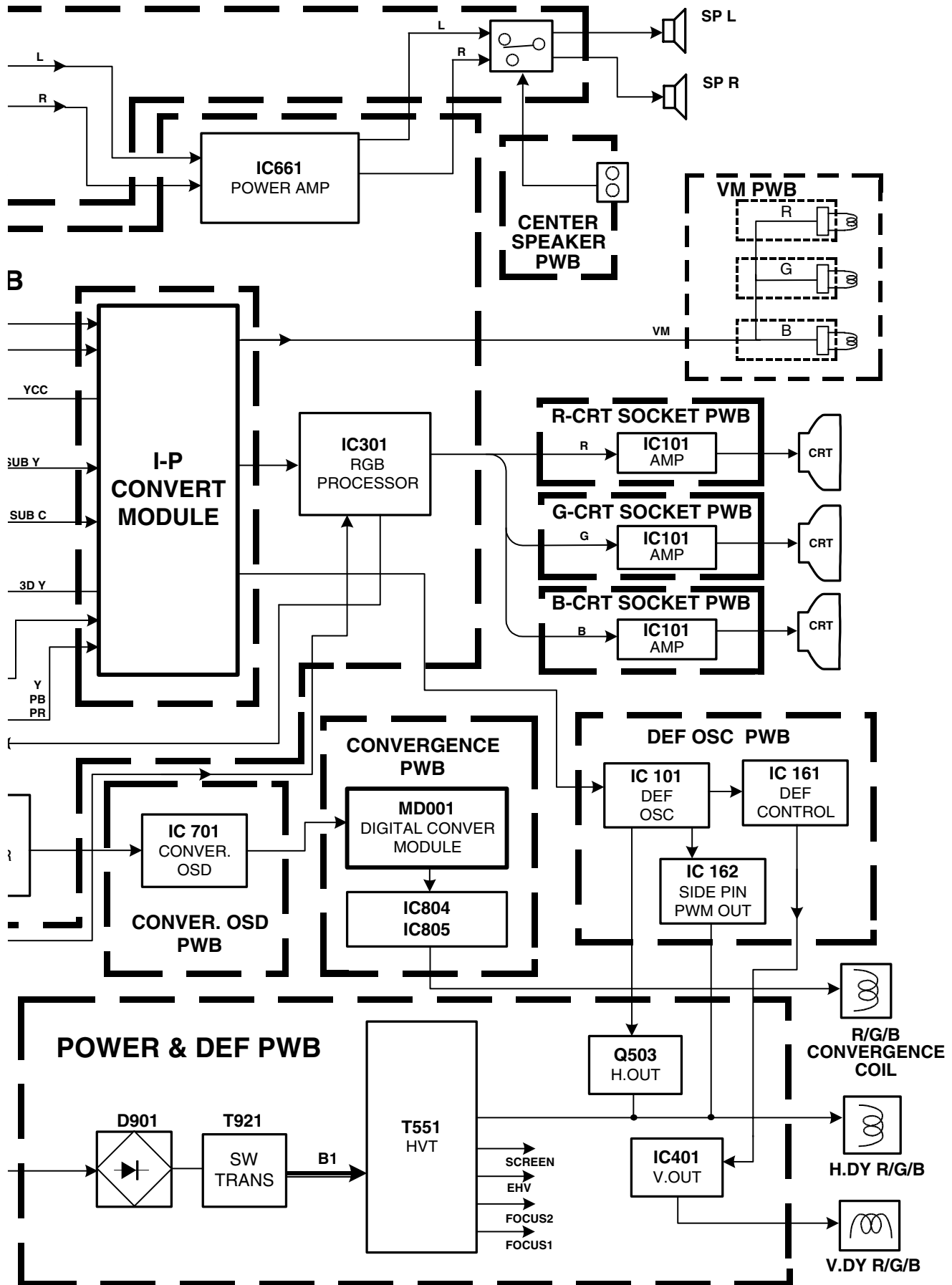
BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

CHIP IC

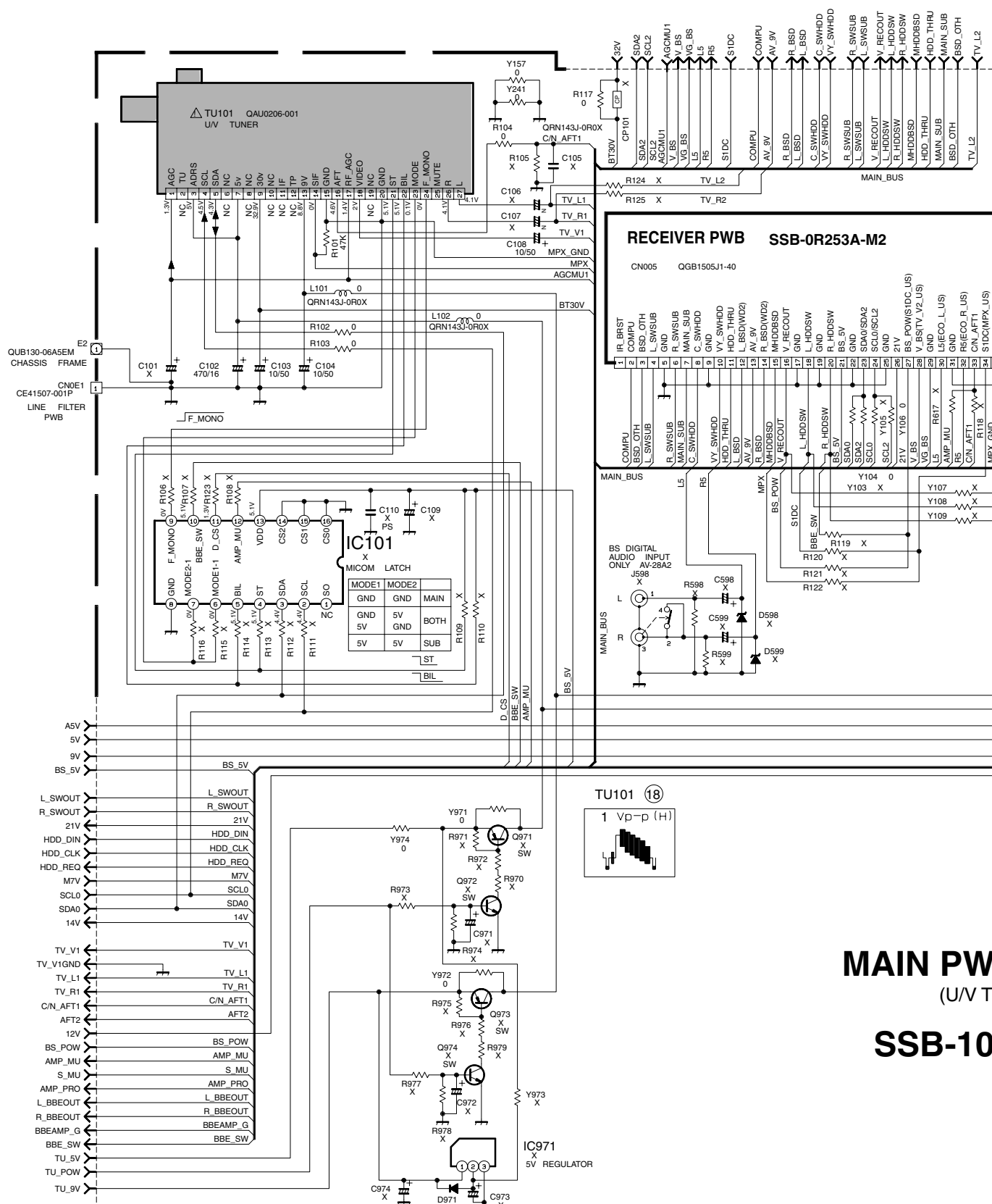
TOP VIEW		
		

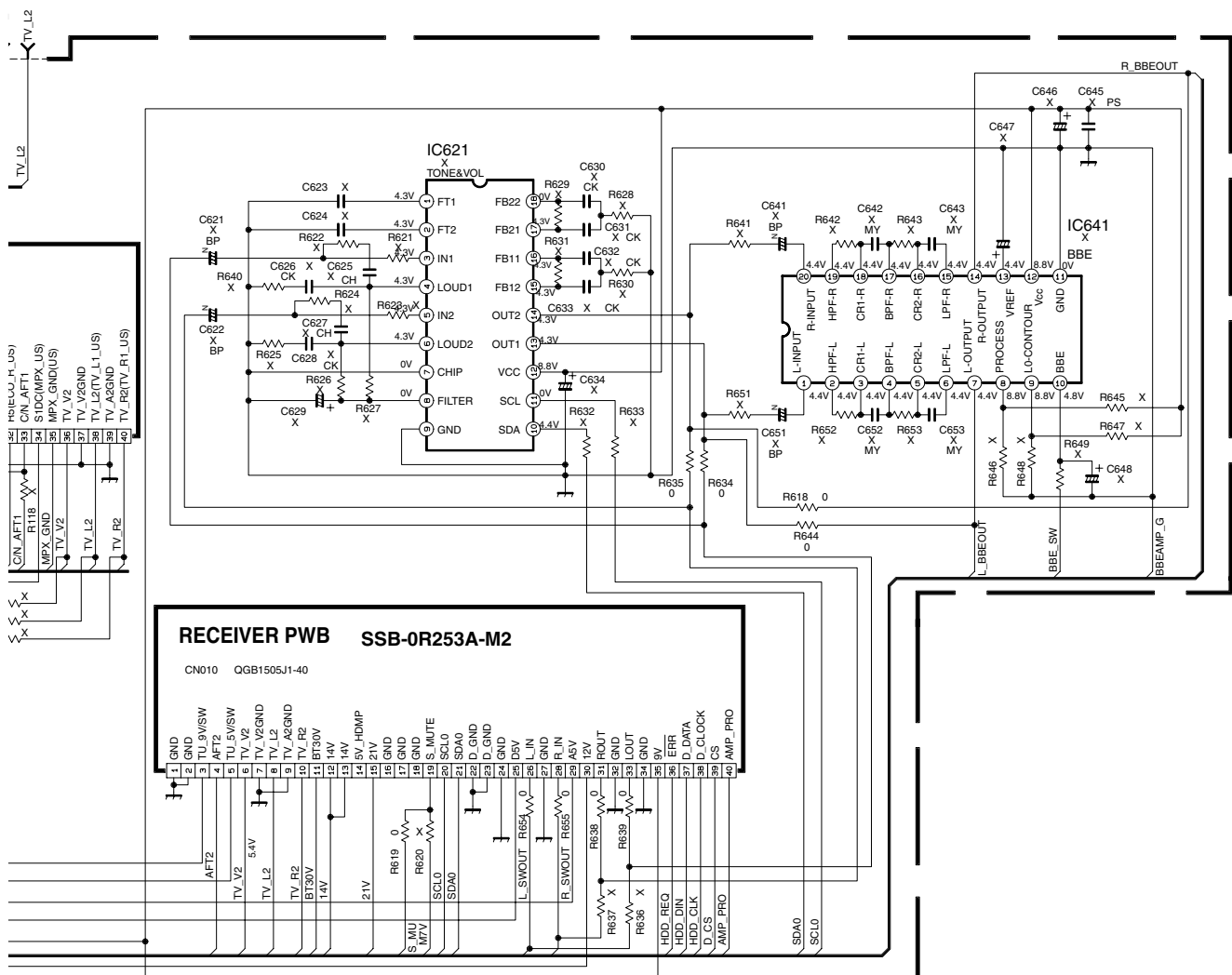
BLOCK DIAGRAM





CIRCUIT DIAGRAMS MAIN PWB CIRCUIT DIAGRAMS [1/12]





NOTE

- *1 : 2SC2412K/QR/-X
*2 : 2SA1037AK/QR/-X
*3 : MA111-X
*6 : MA3062/M/-X
X : NON MOUNT
BW : BUS WIRE

WB (1/12)
(V TUNER/AUDIO)

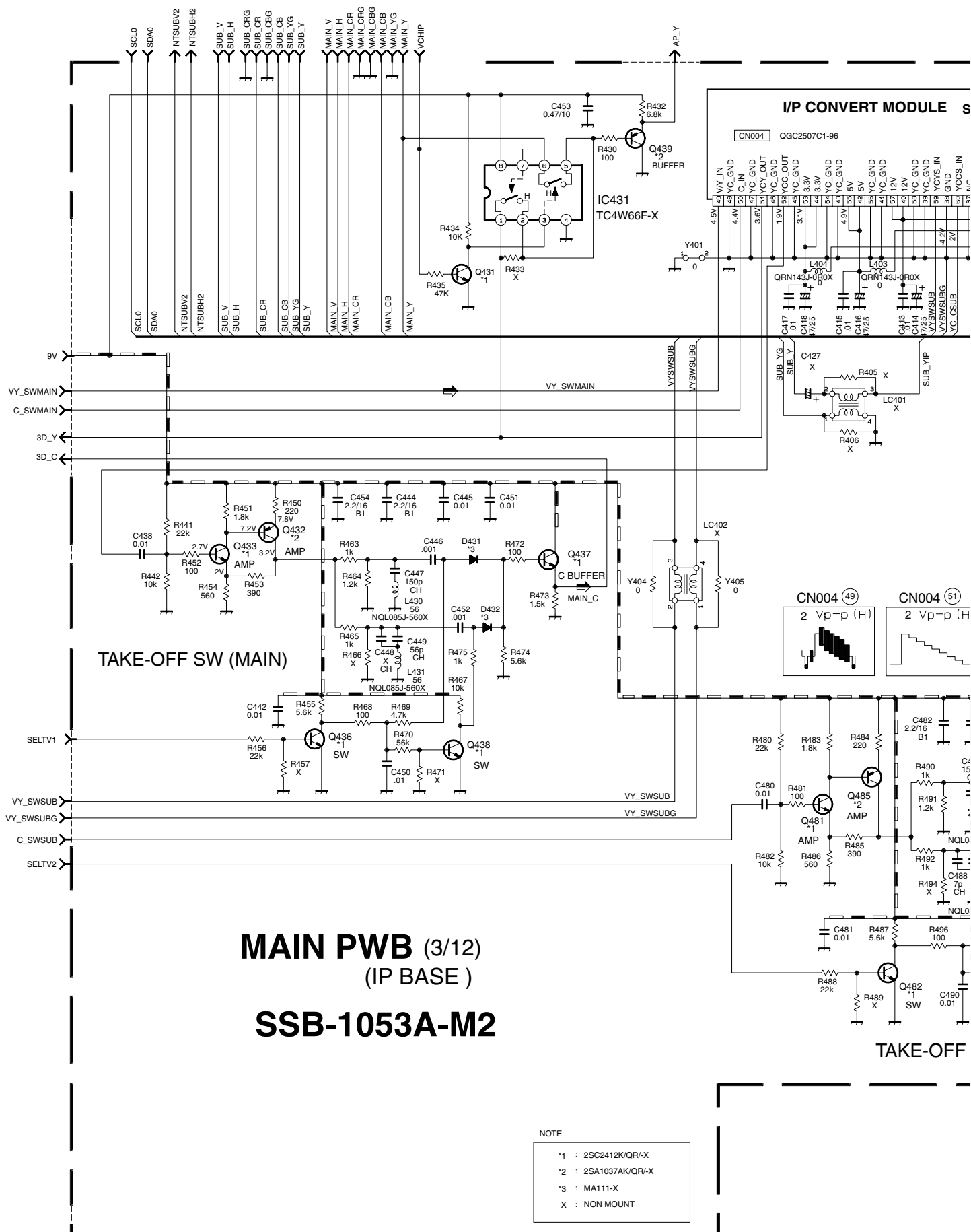
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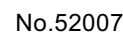


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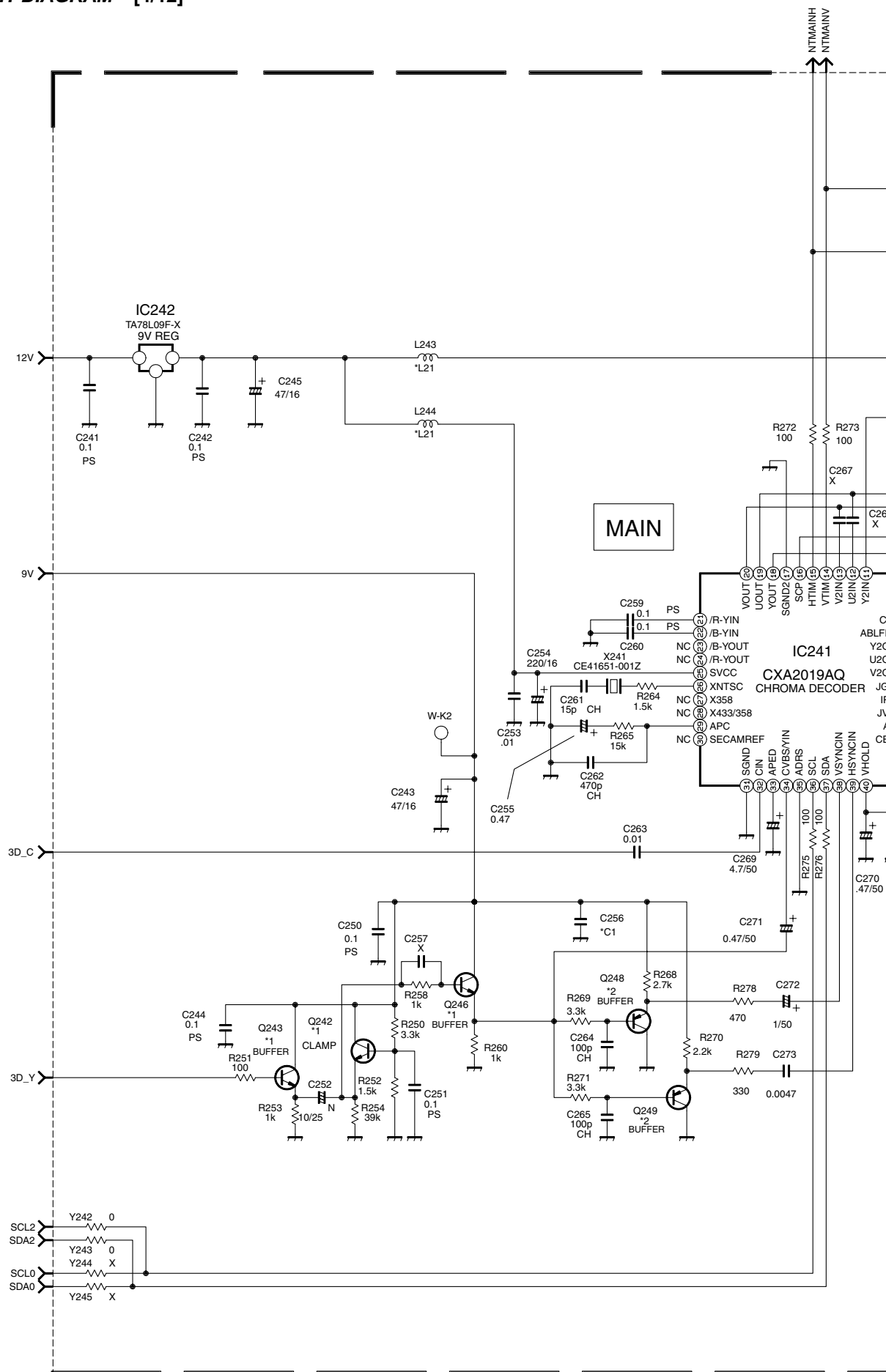


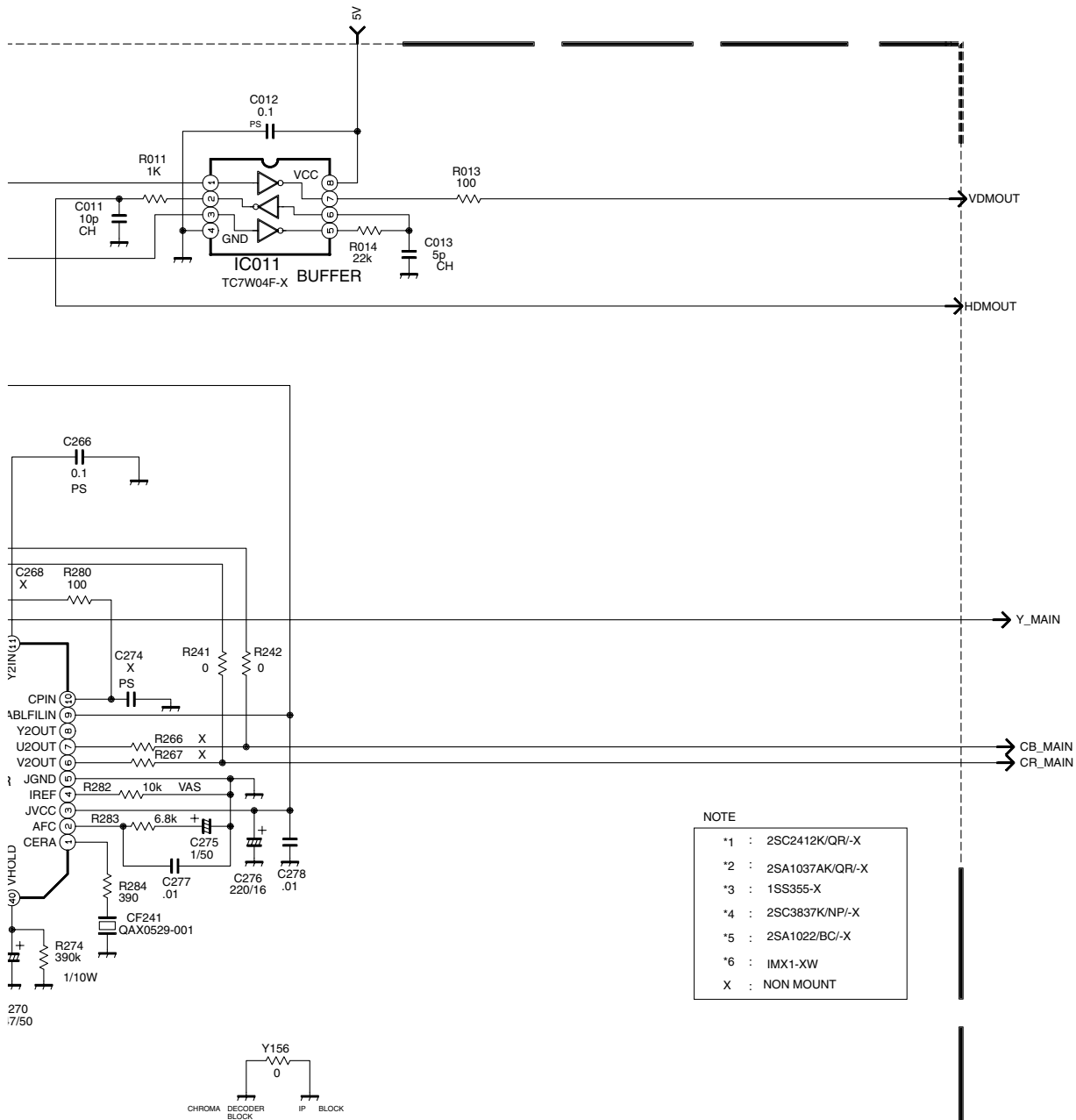
MAIN PWB CIRCUIT DIAGRAM [3/12]





MAIN PWB CIRCUIT DIAGRAM [4/12]

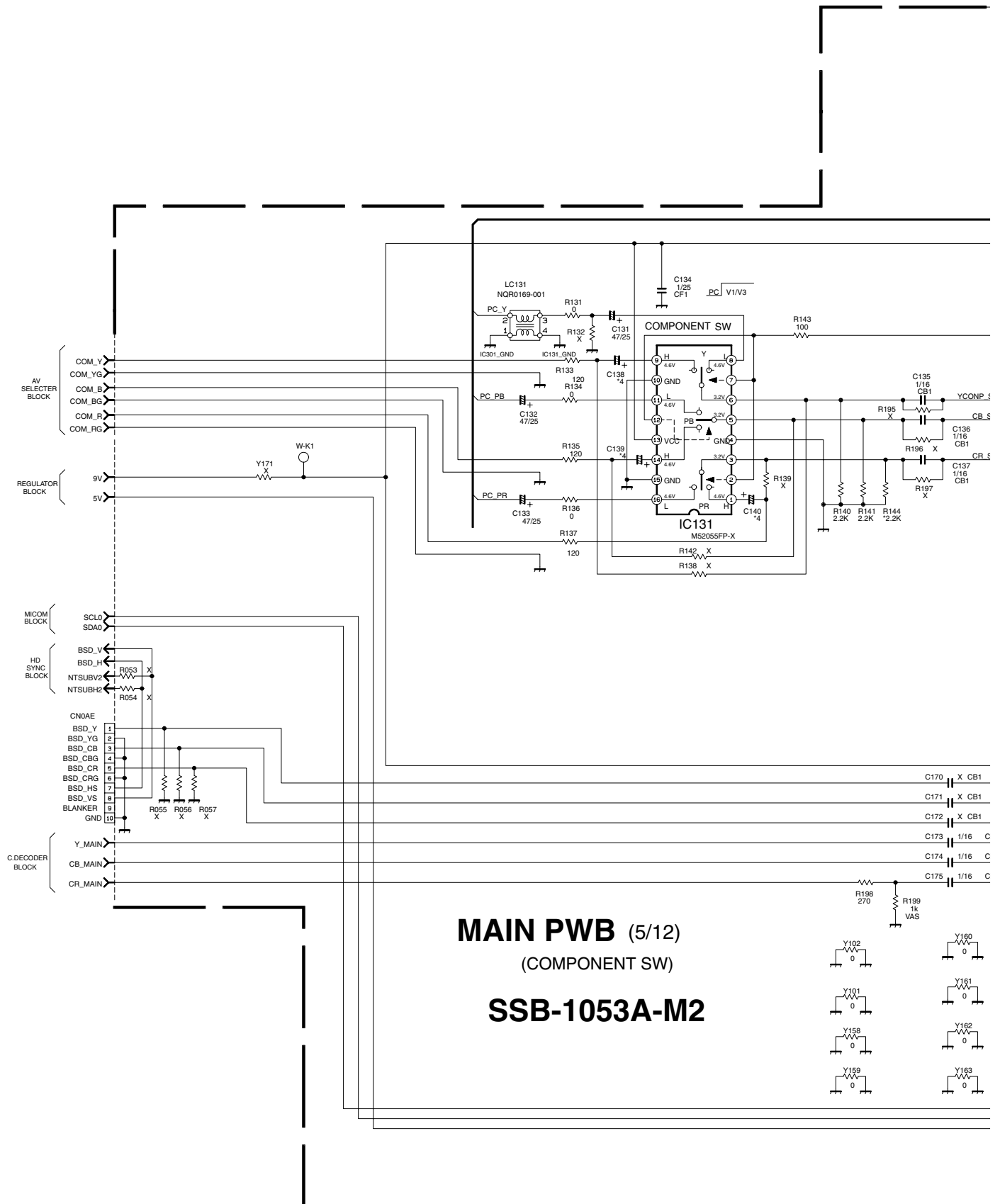


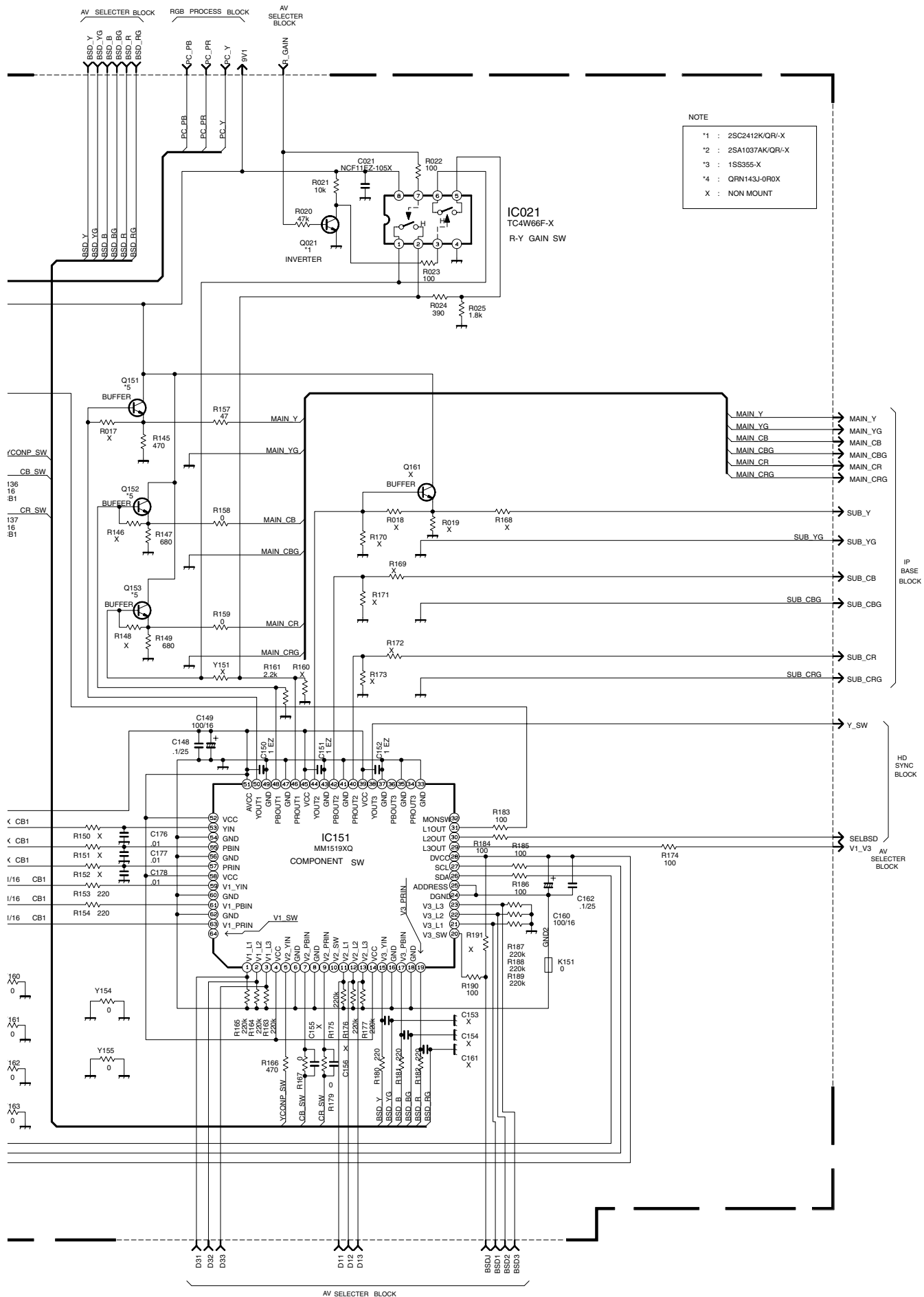


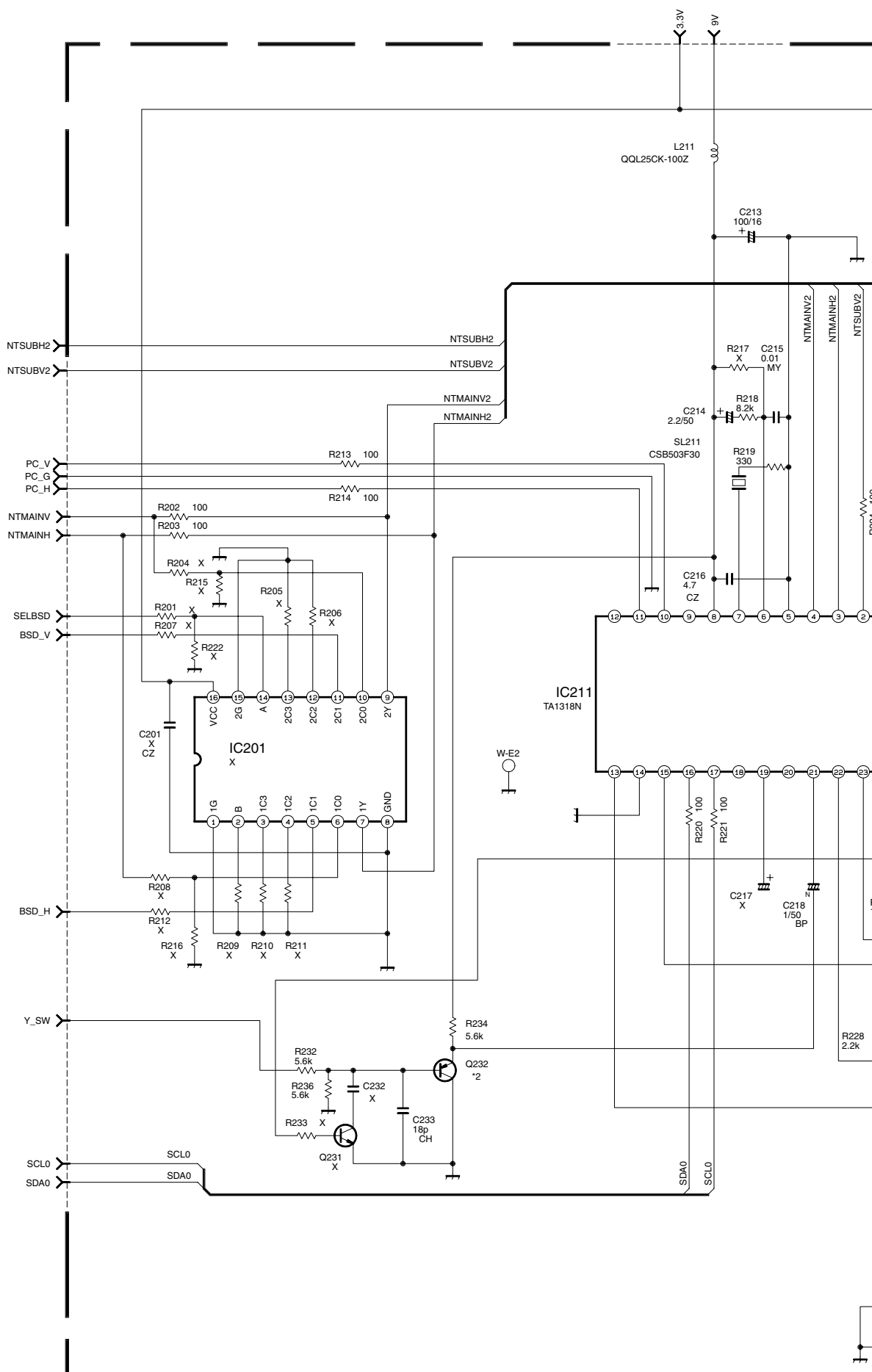
MAIN PWB (4/12)
(CHROMA DECODER)

SSB-1053A-M2

MAIN PWB CIRCUIT DIAGRAM [5/12]







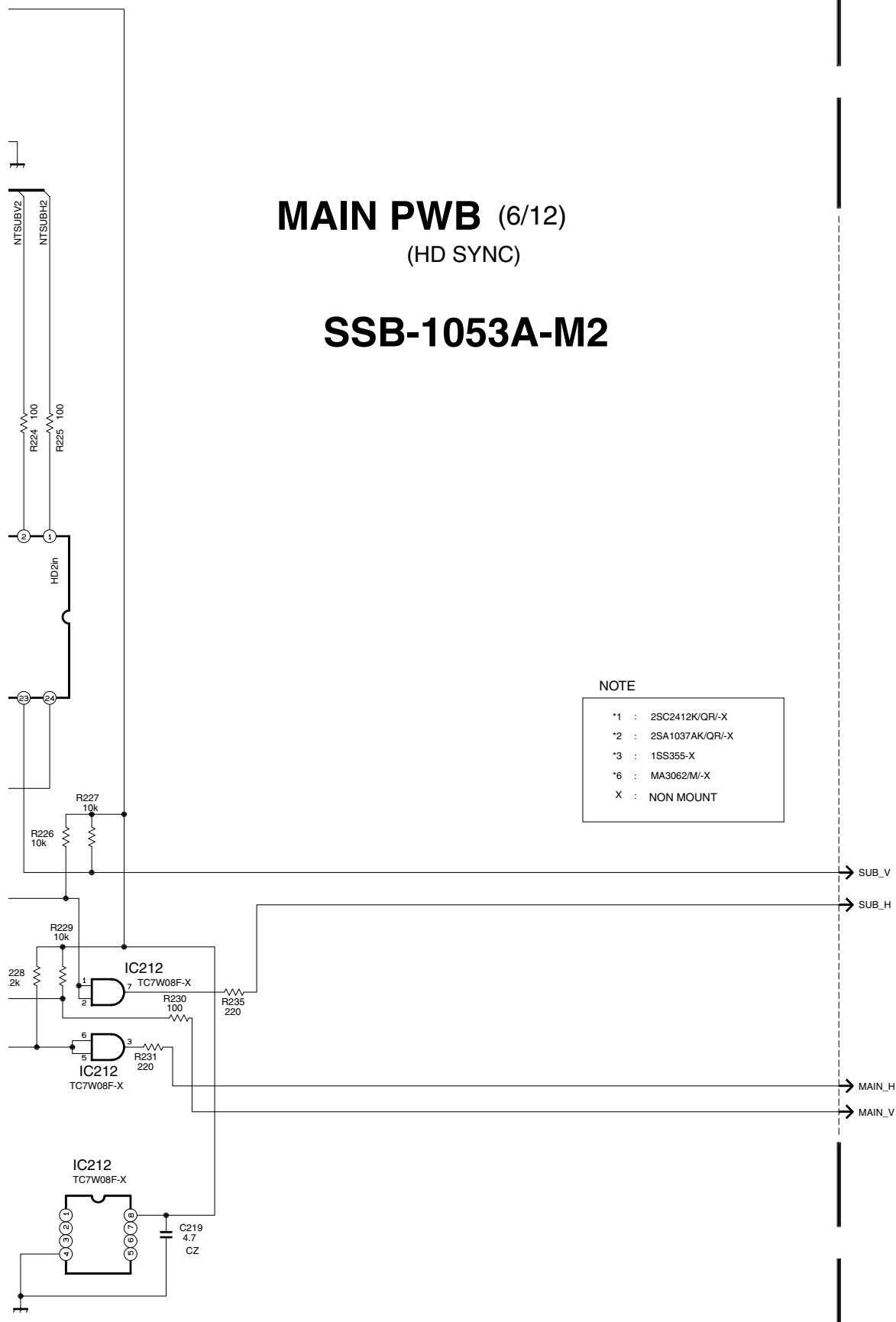
MAIN PWB (6/12)

(HD SYNC)

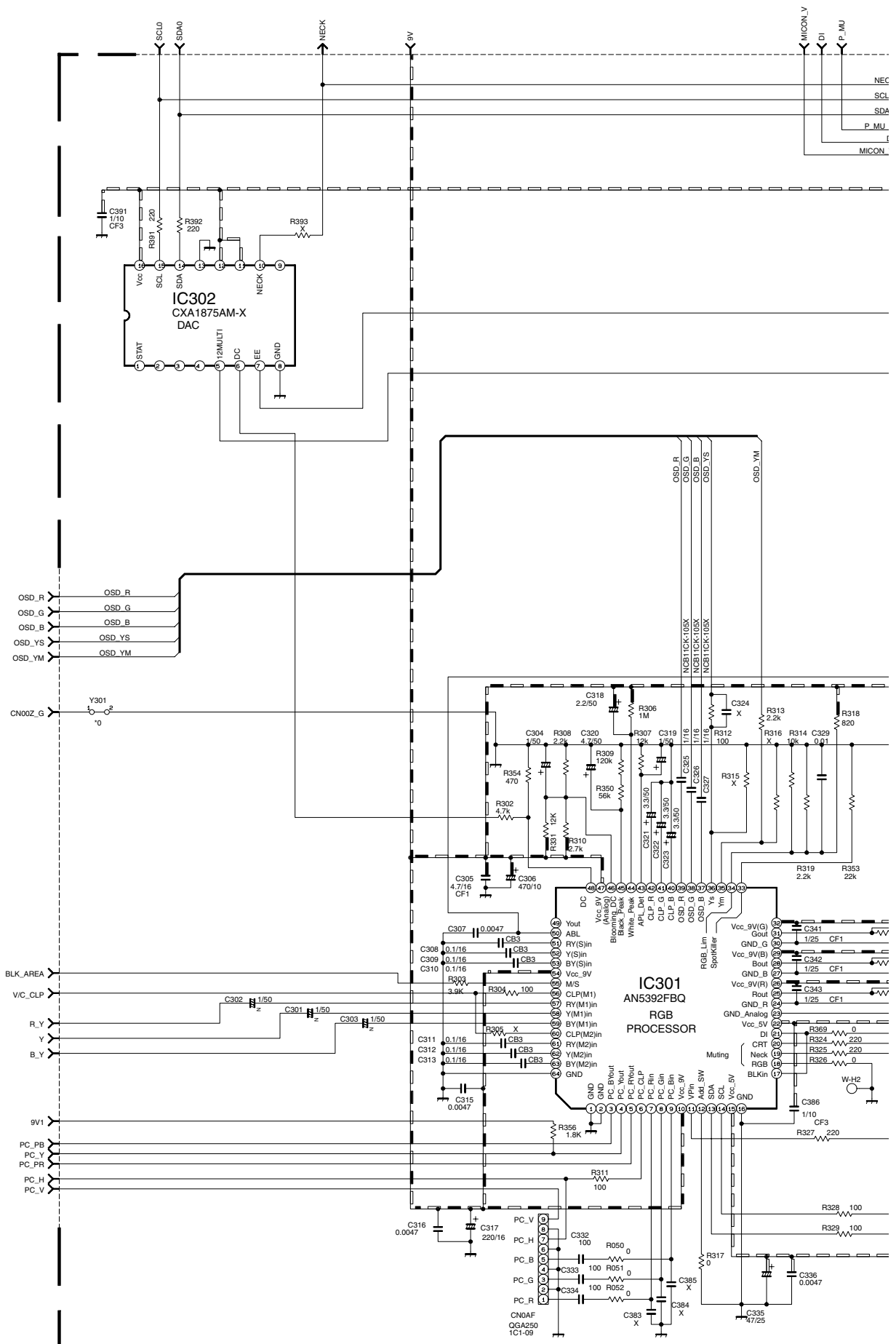
SSB-1053A-M2

NOTE

- *1 : 2SC2412K/QR/-X
- *2 : 2SA1037AK/QR/-X
- *3 : 1SS355-X
- *6 : MA3062/M/-X
- X : NON MOUNT



MAIN PWB CIRCUIT DIAGRAM [7/12]



MAIN PWB CIRCUIT DIAGRAM [8/12]

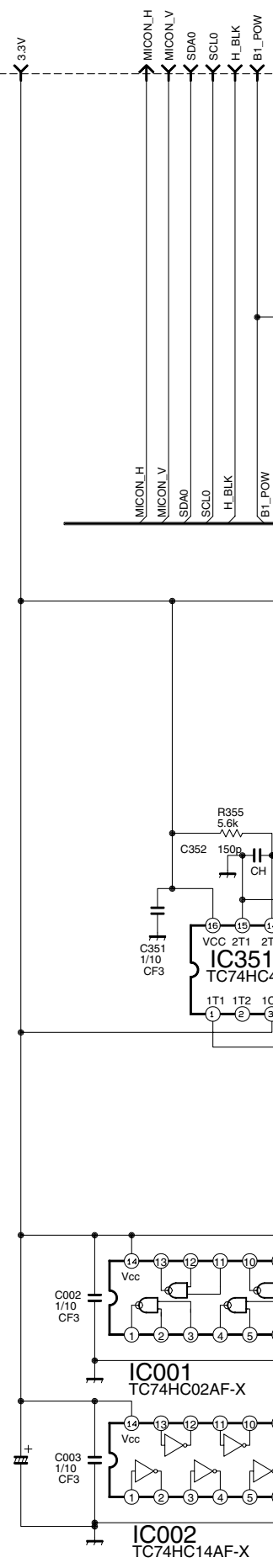
MAIN PWB (8/12)

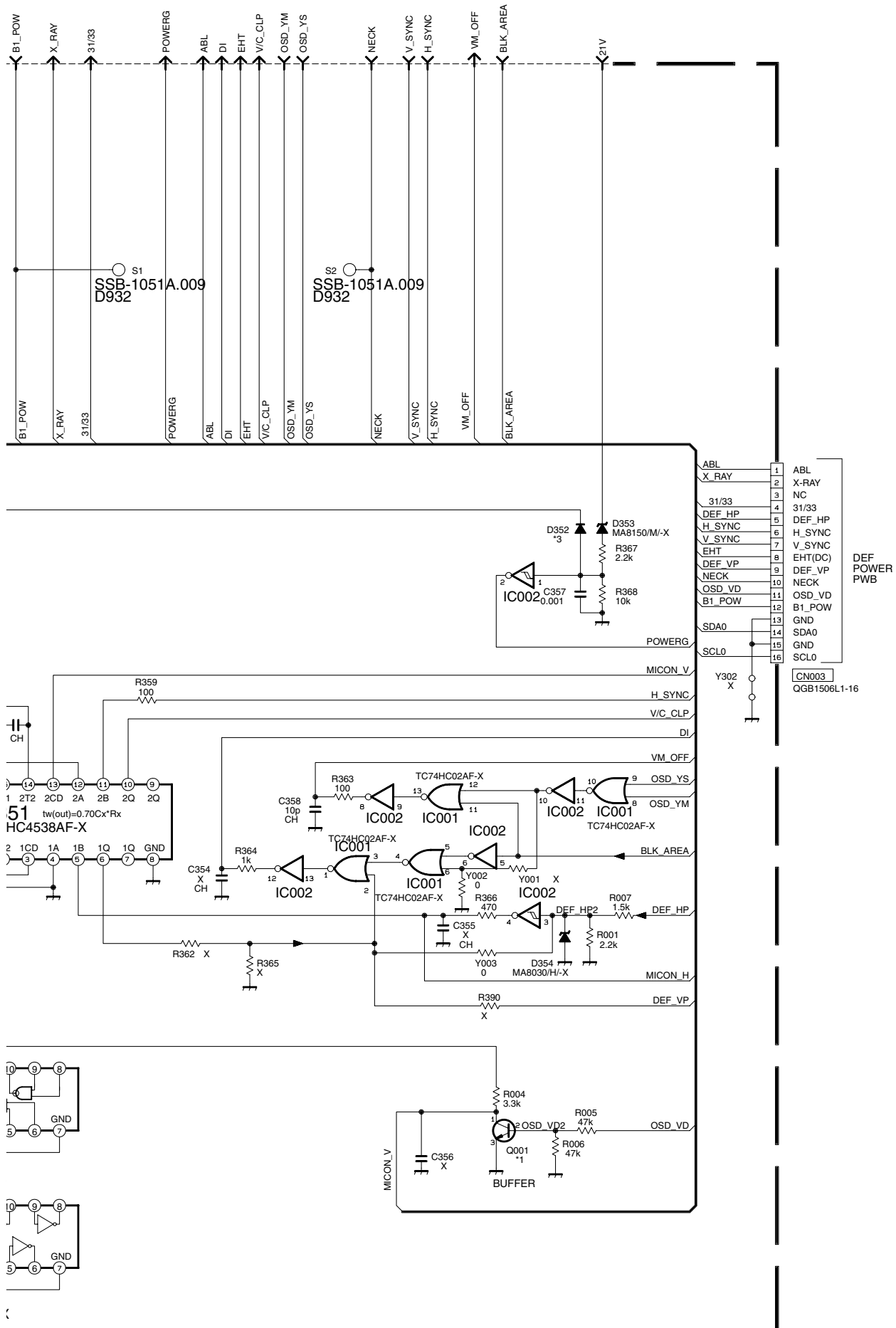
(BLK)

SSB-1053A-M2

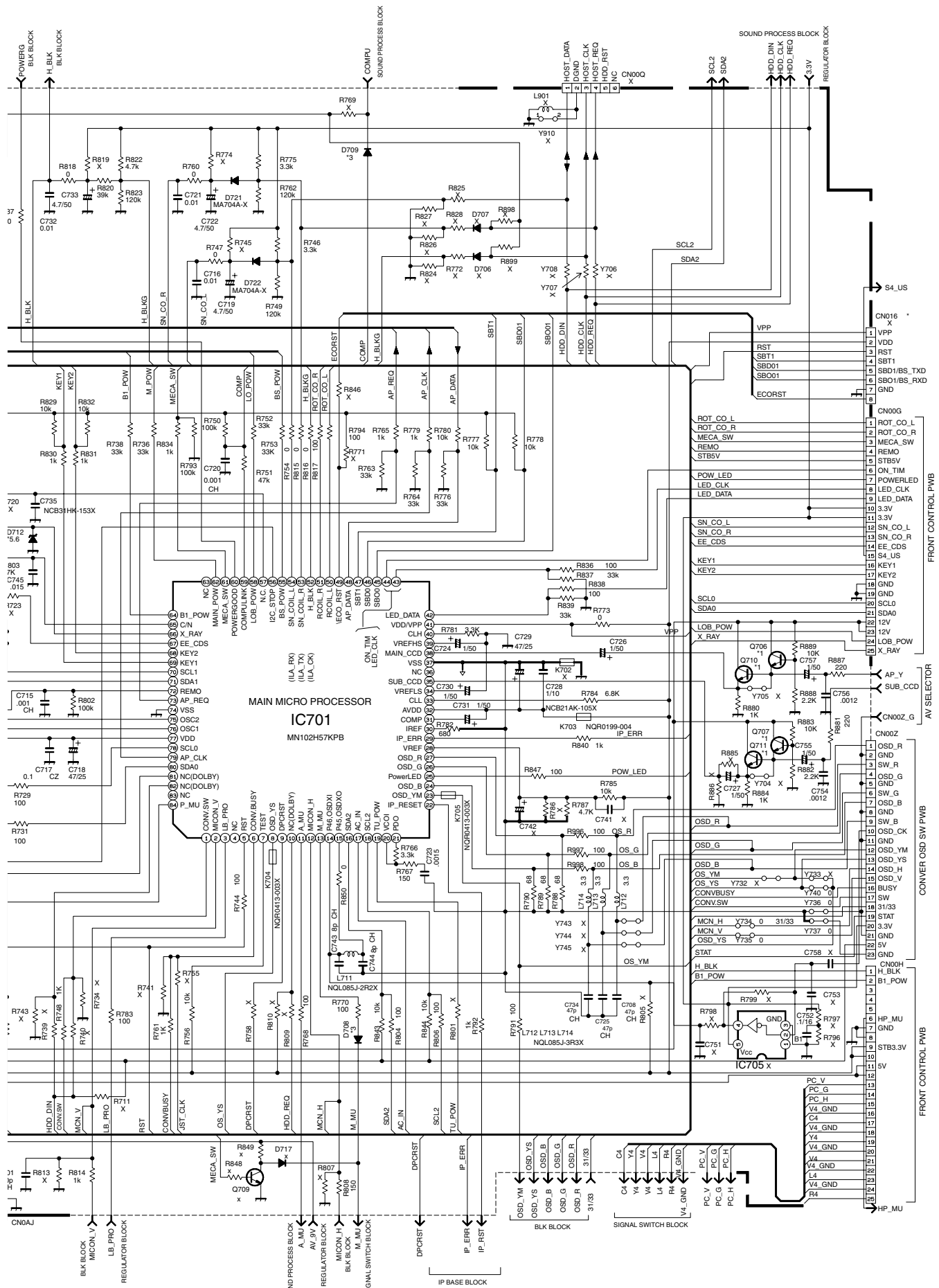
NOTE

- *1 : 2SC2412K/QR/-X
- *2 : 2SA1037AK/QR/-X
- *3 : MA111-X
- X : NON MOUNT







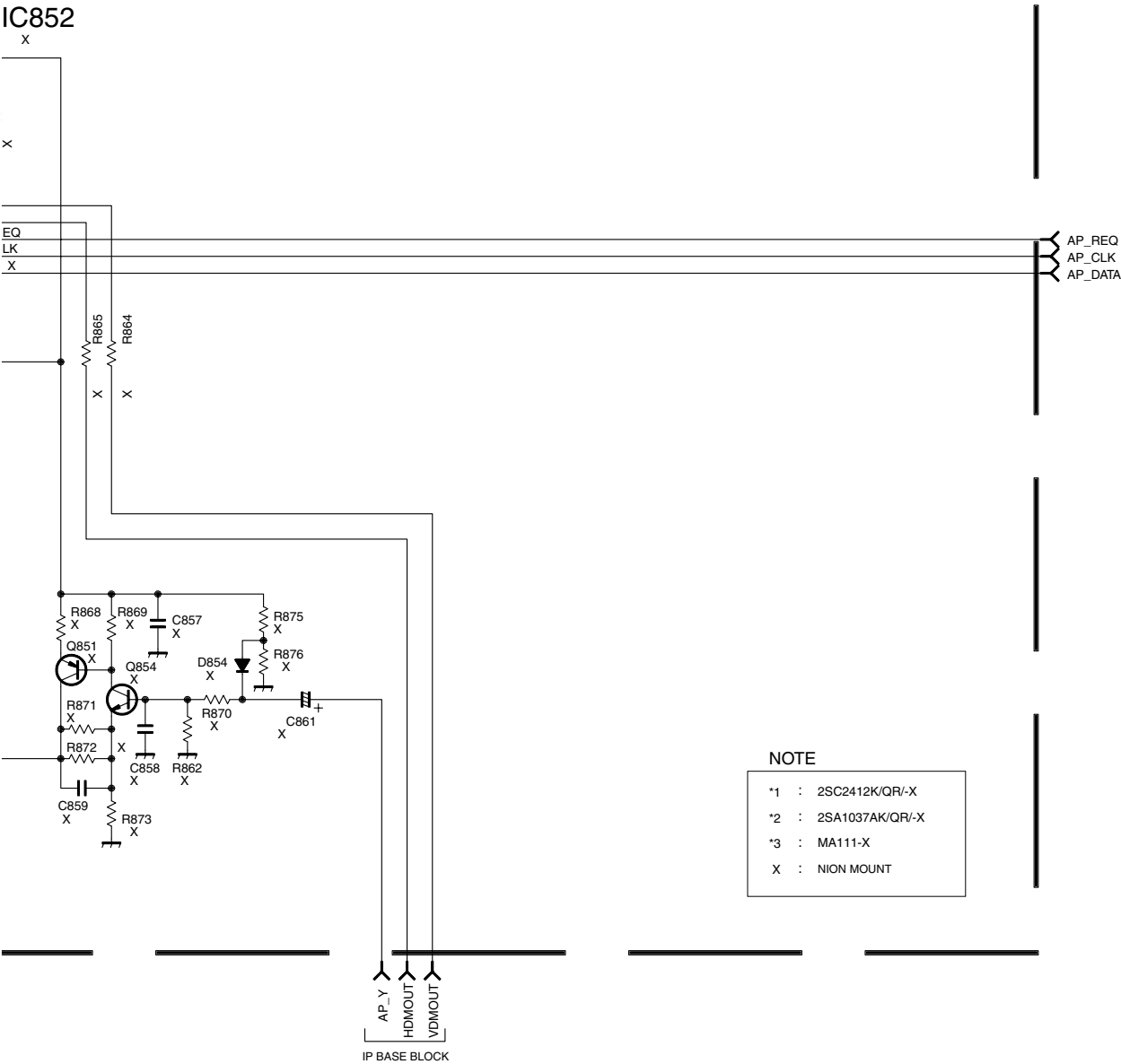




DR BLOCK

MAIN PWB (10/12)
(AUTO WIDE)

SSB-1053A-M2

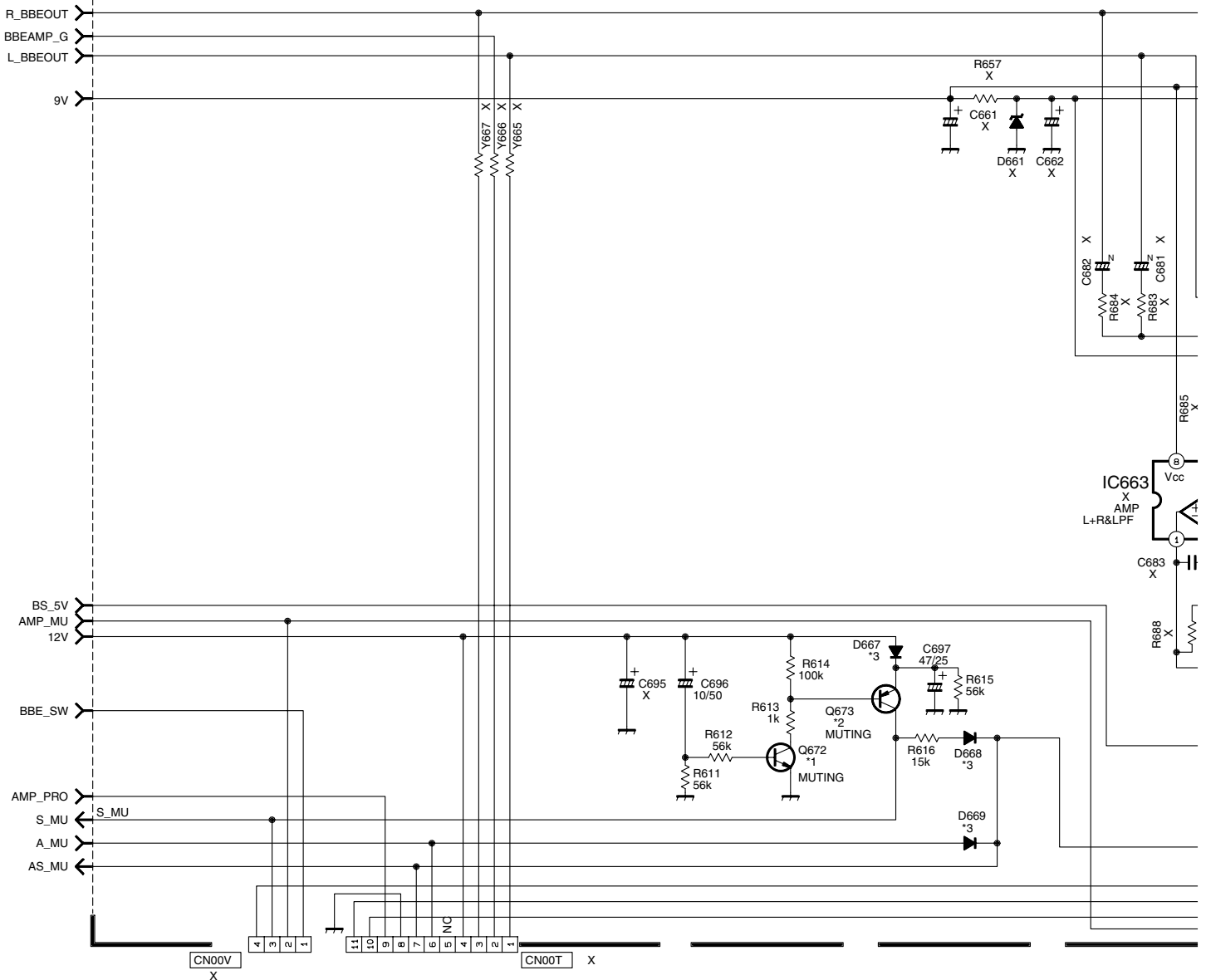


MAIN PWB CIRCUIT DIAGRAM [11/12]

MAIN PWB (11/12)

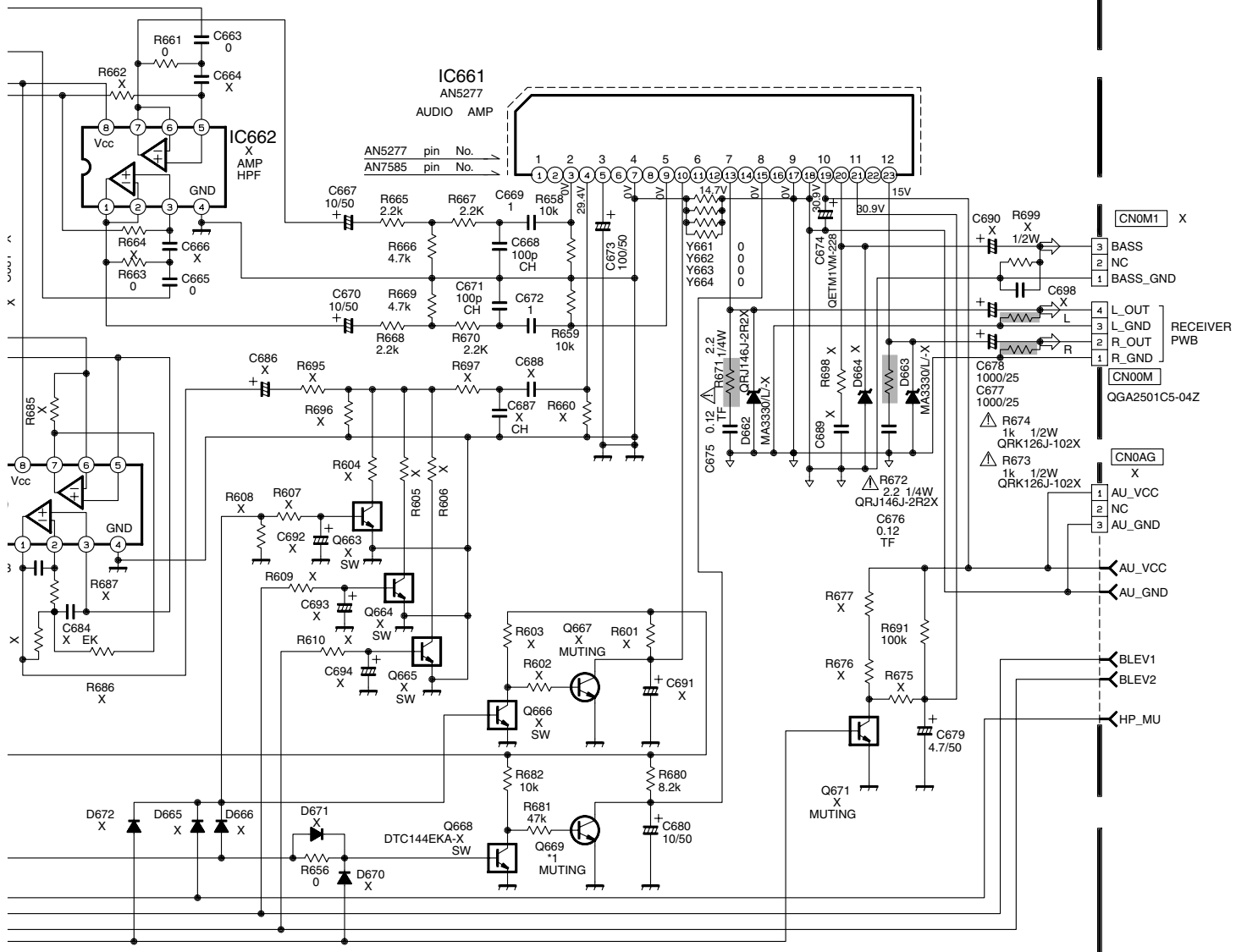
(SOUND PROCESS)

SSB-1053A-M2

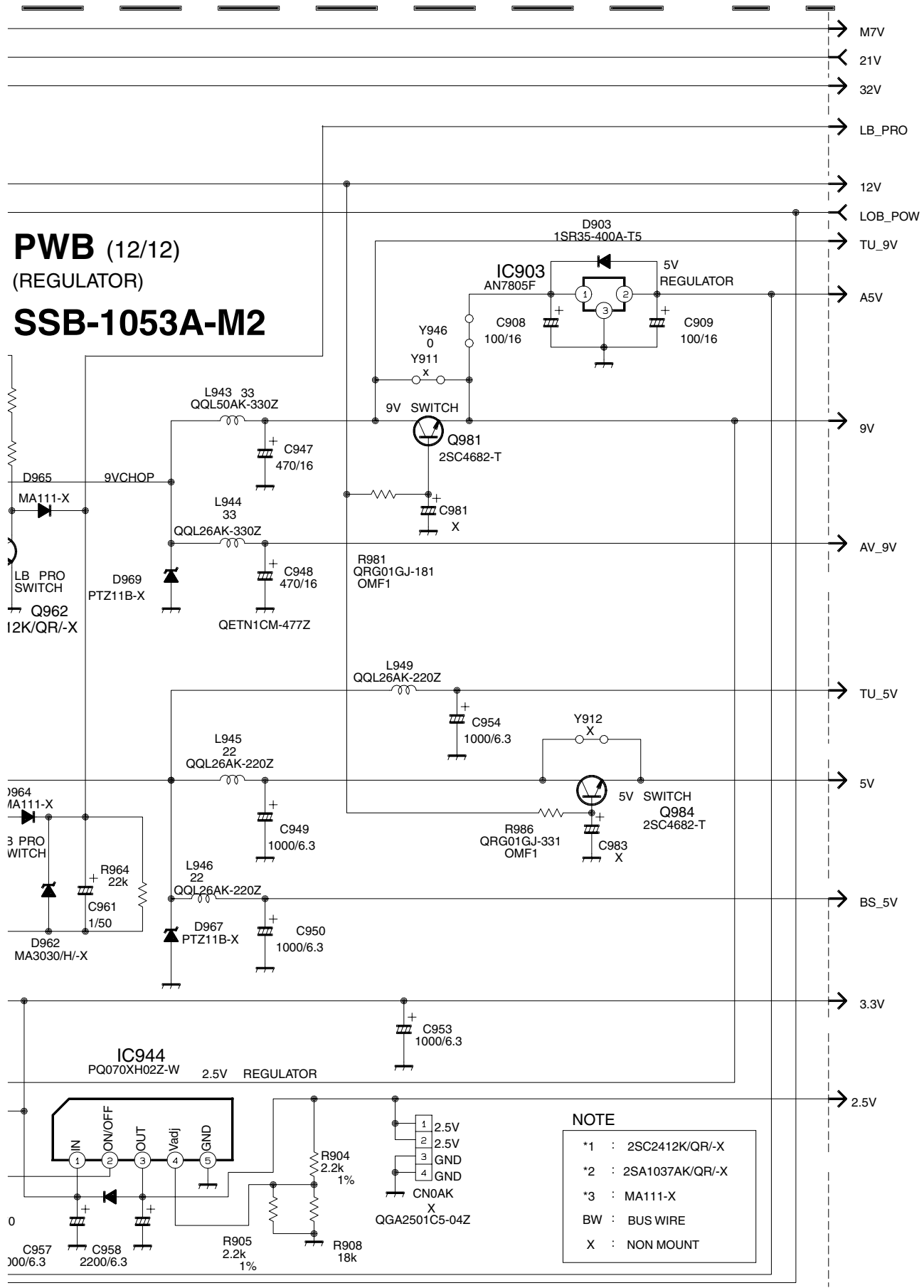


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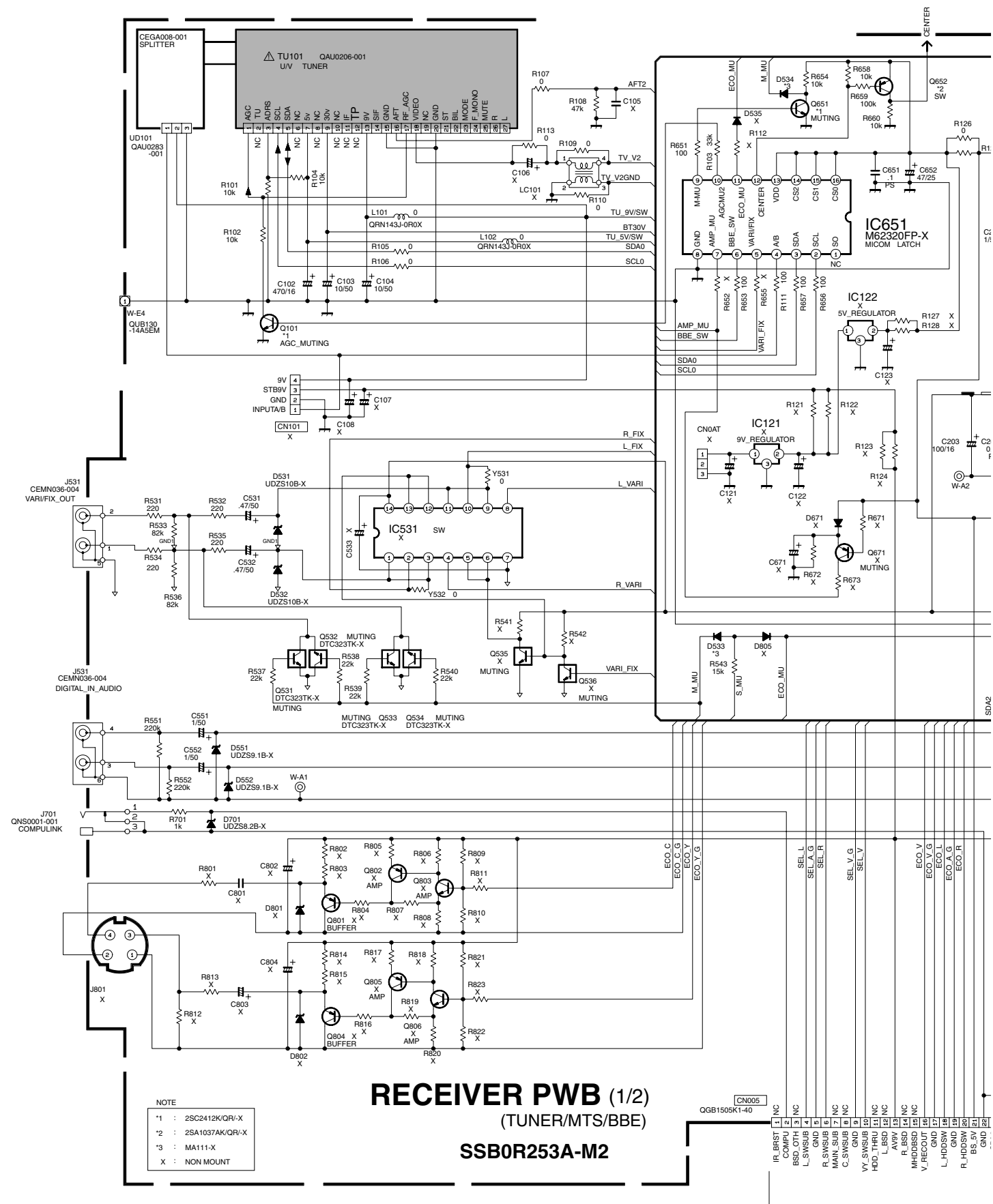
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 *2 : 2SA1037AK/QR/-X
 *3 : MA111-X
 *6 : MA3062/M/-X
 X : NON MOUNT
 BW : BUS WIRE



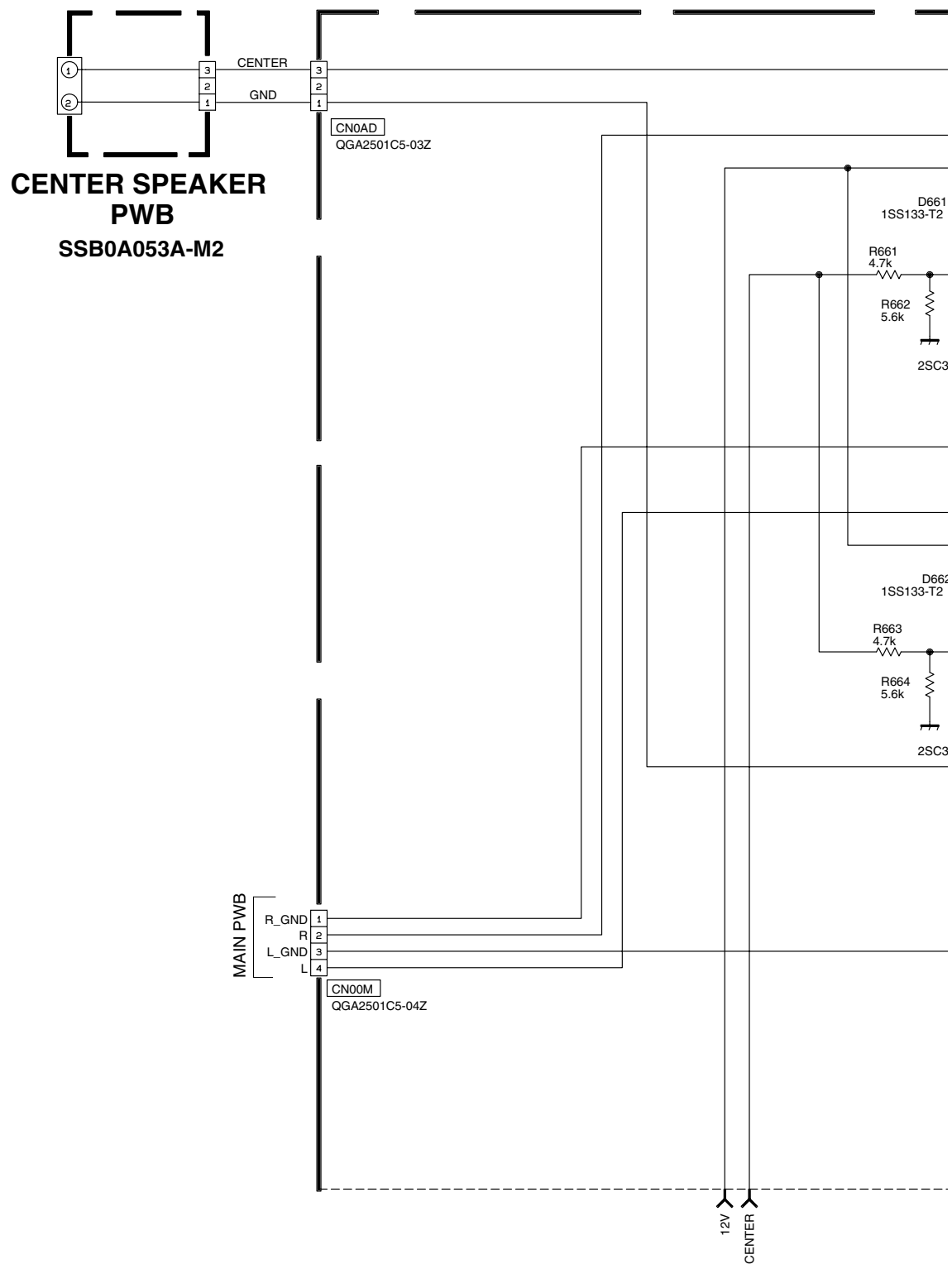


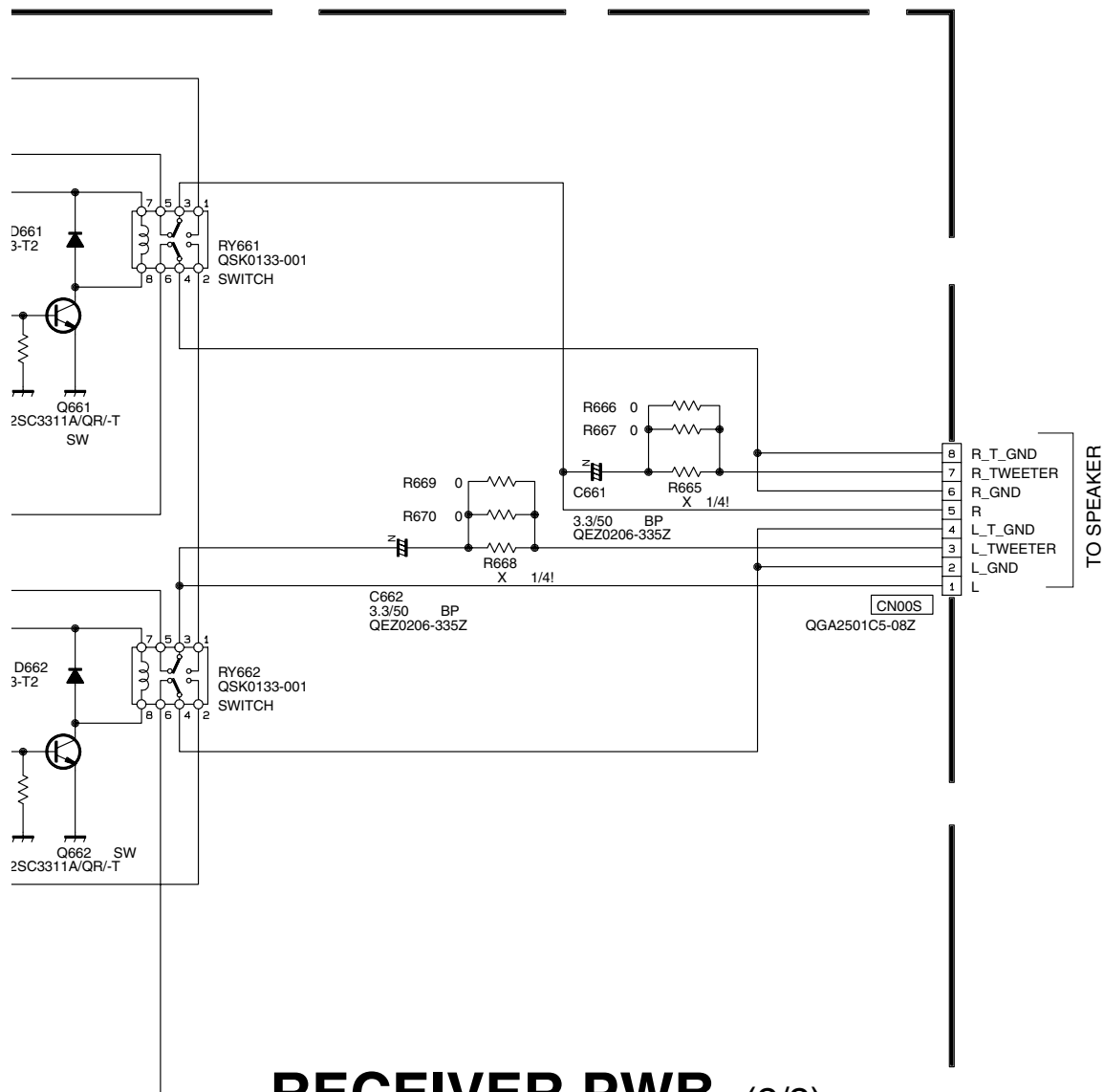


RECEIVER PWB CIRCUIT DIAGRAM [1/2]



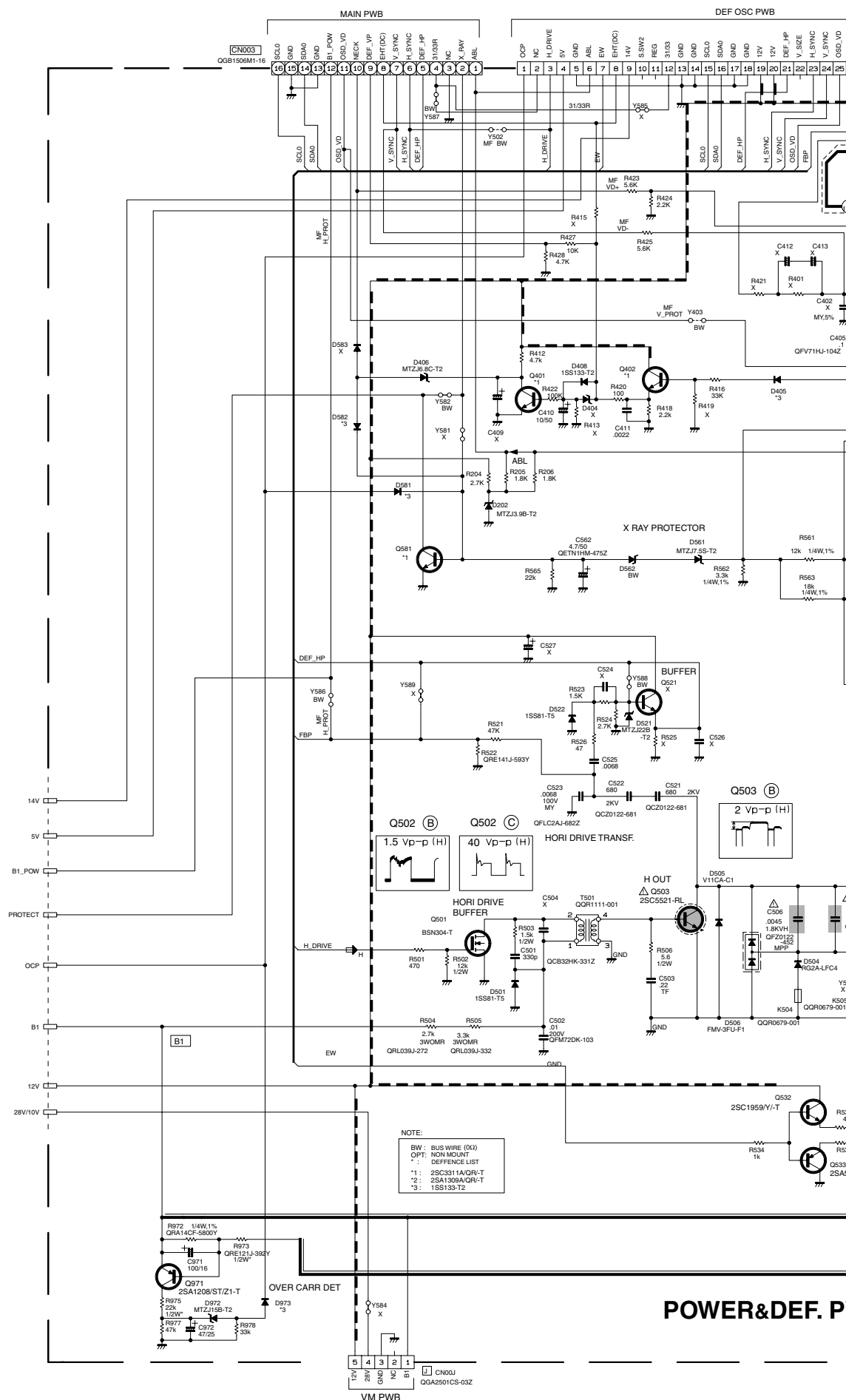
RECEIVER PWB [2/2] & CENTER SPEAKER PWB CIRCUIT DIAGRAM

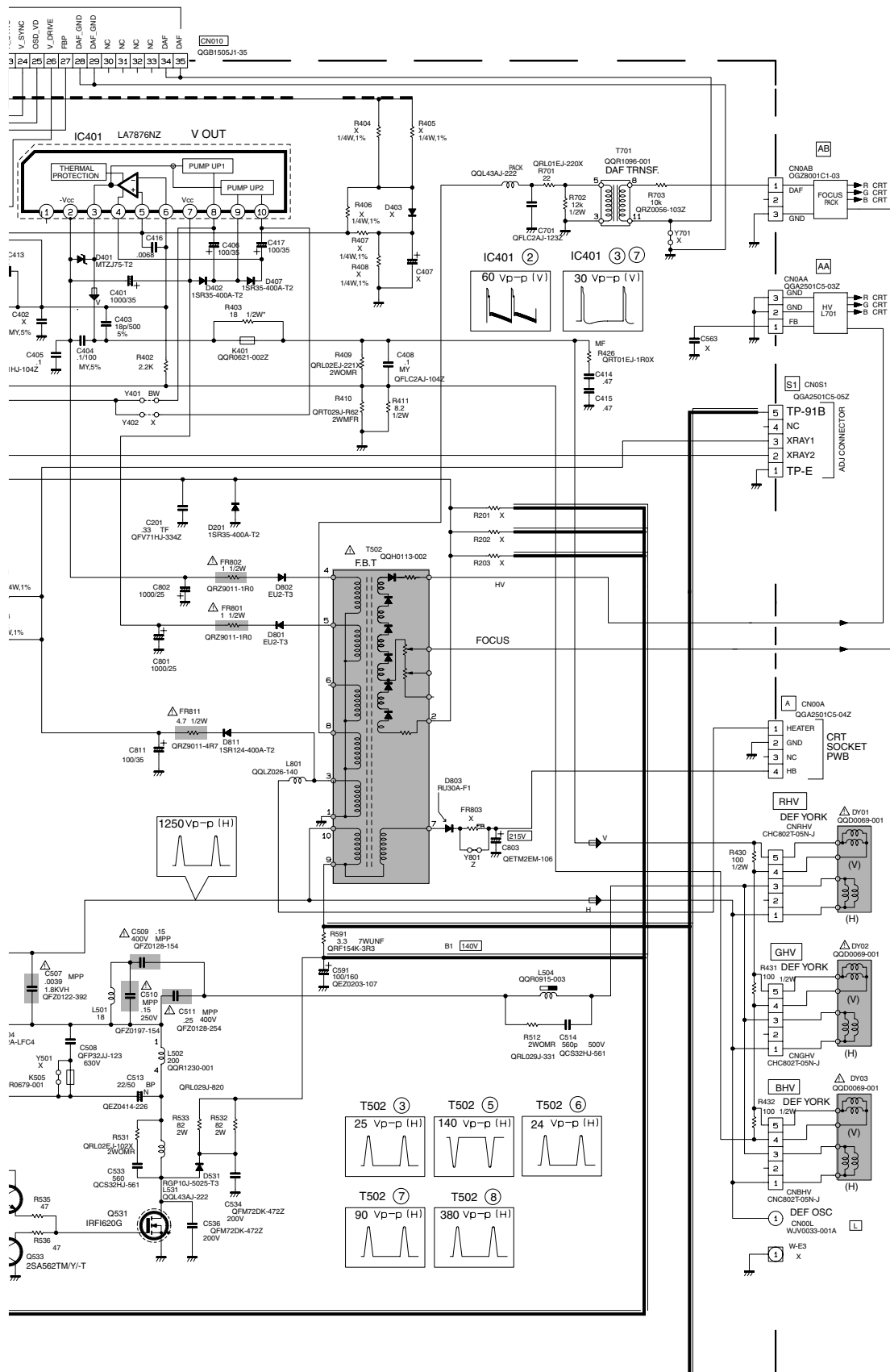




RECEIVER PWB (2/2)

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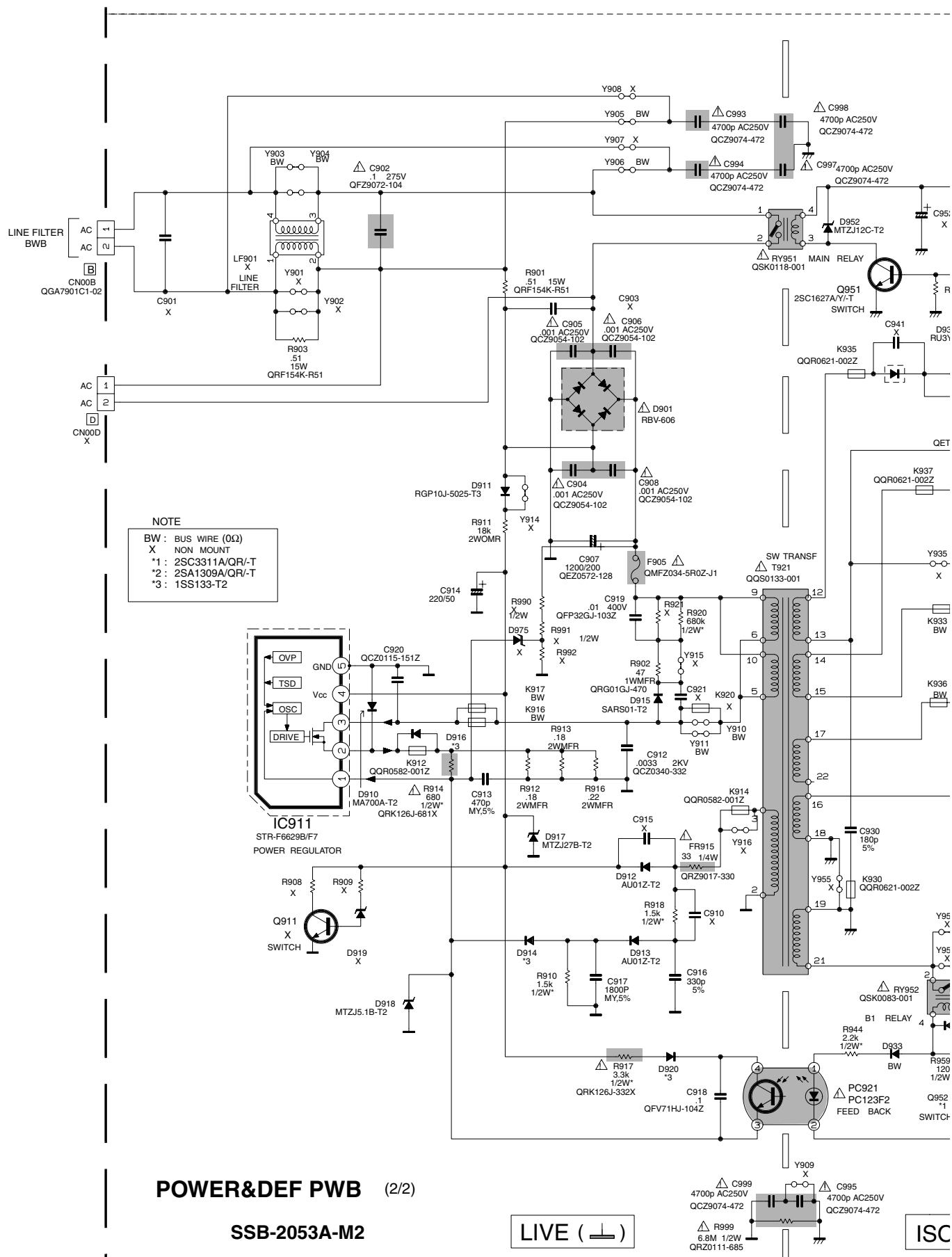


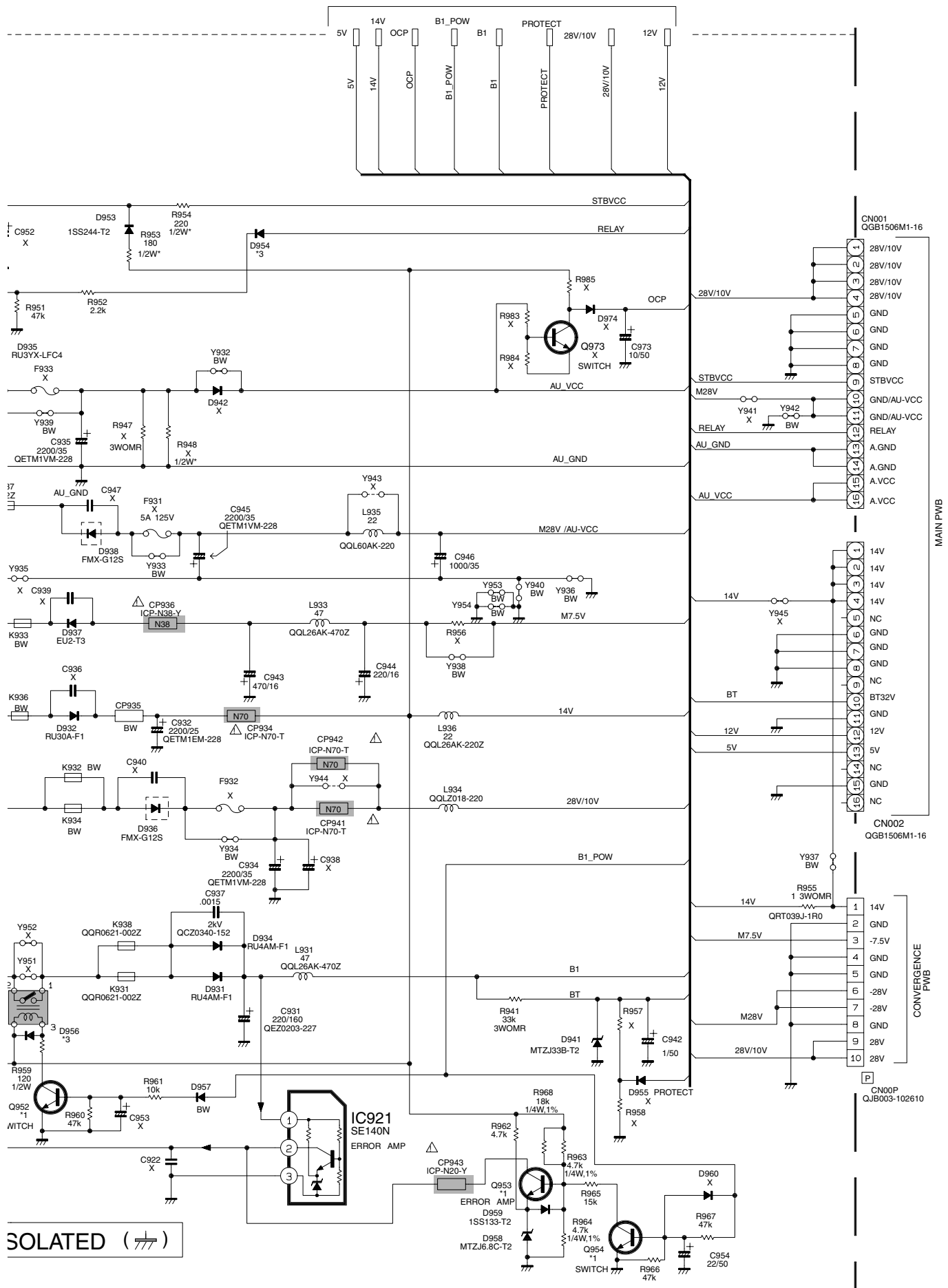


⌚ PWB (1/2)

SSB-2053A-M2

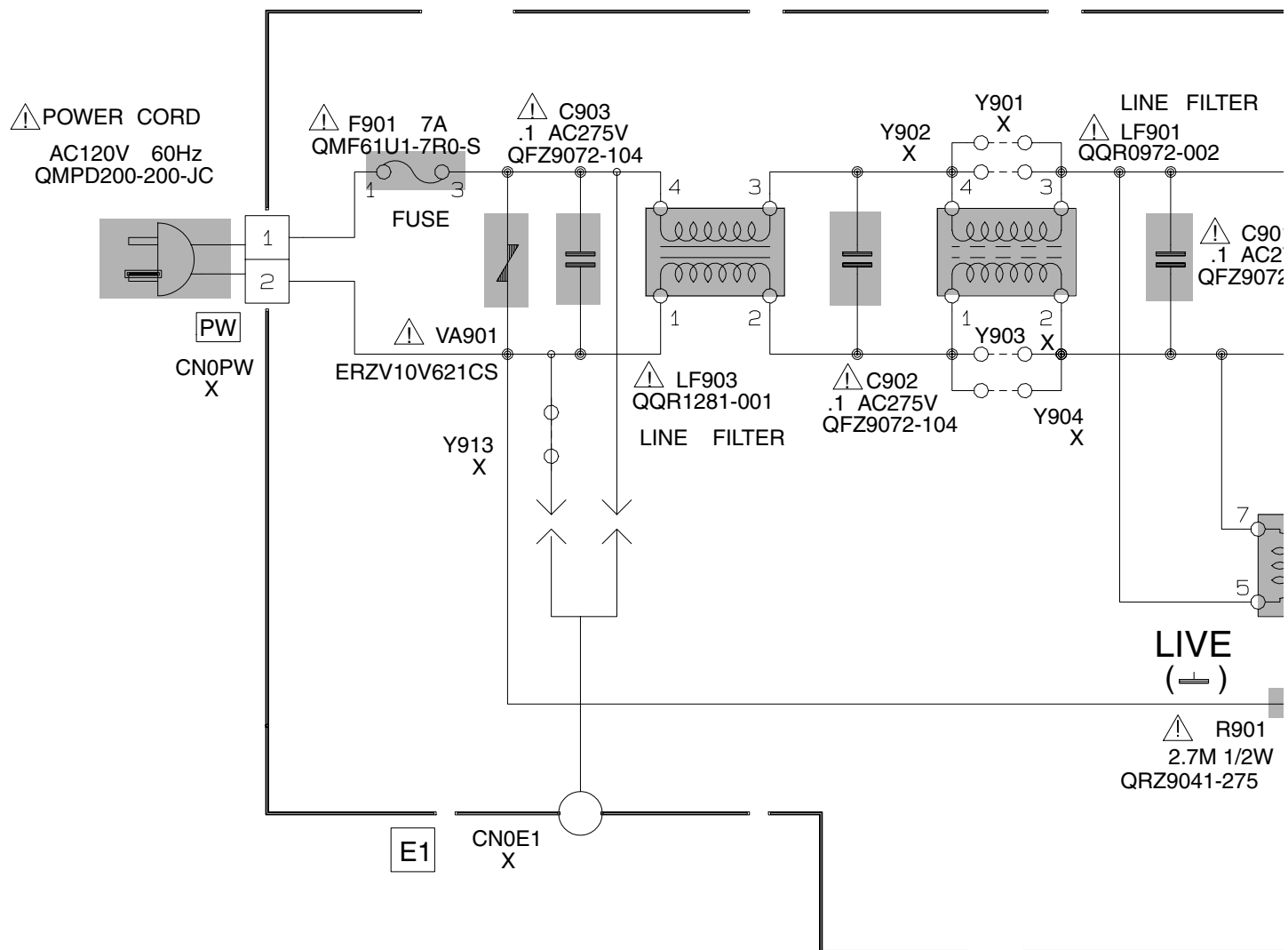
POWER & DEF. PWB CIRCUIT DIAGRAM [2/2]

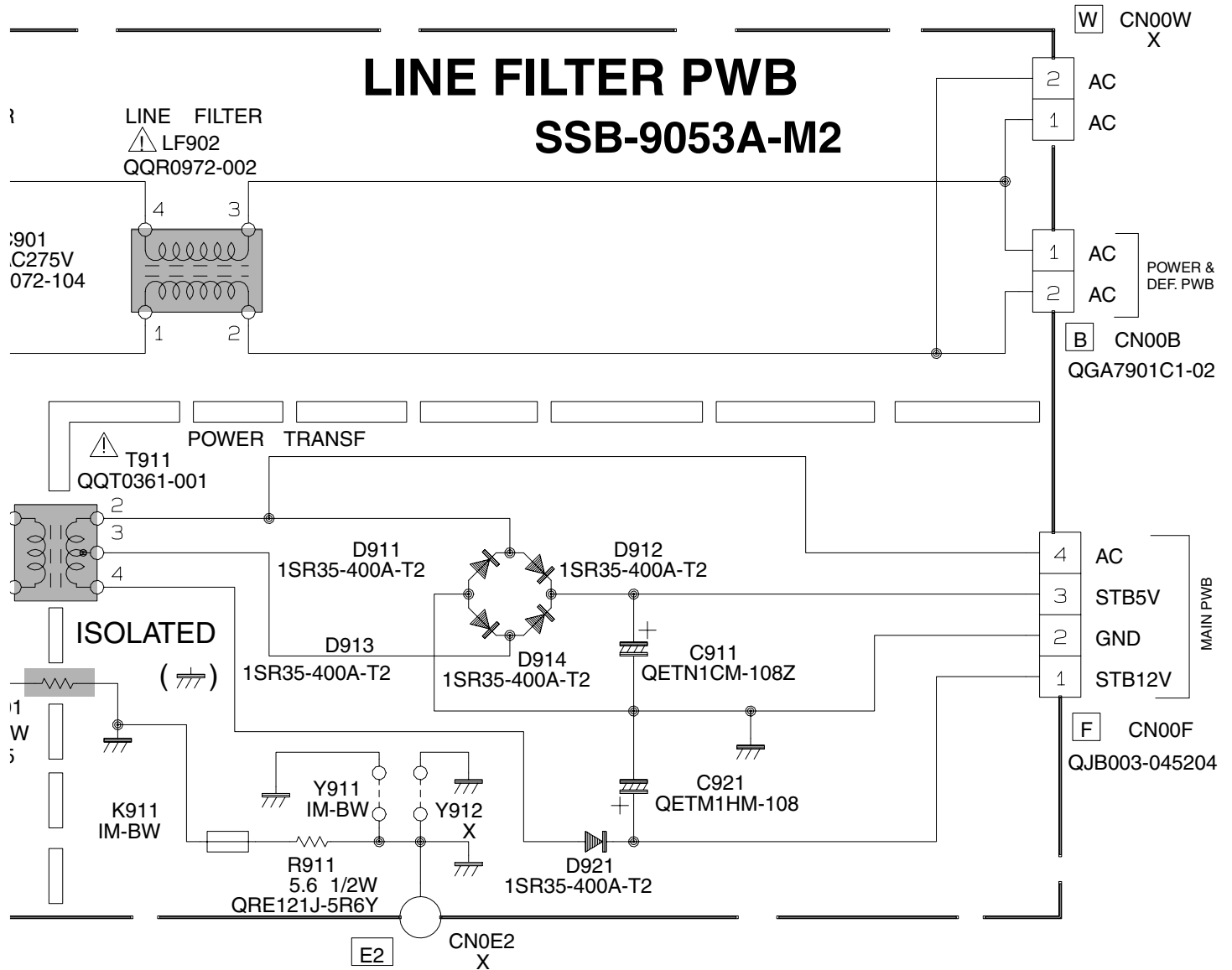






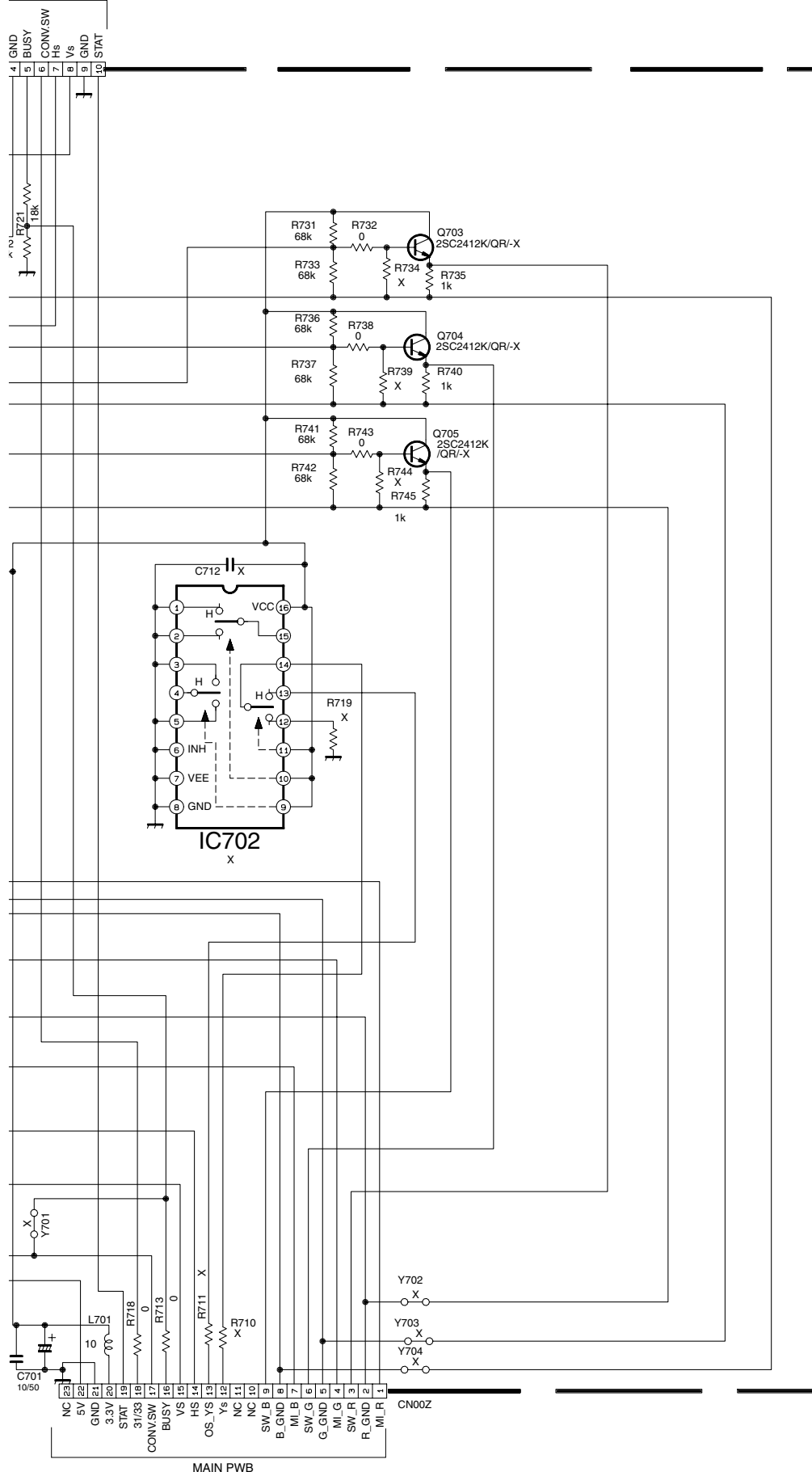
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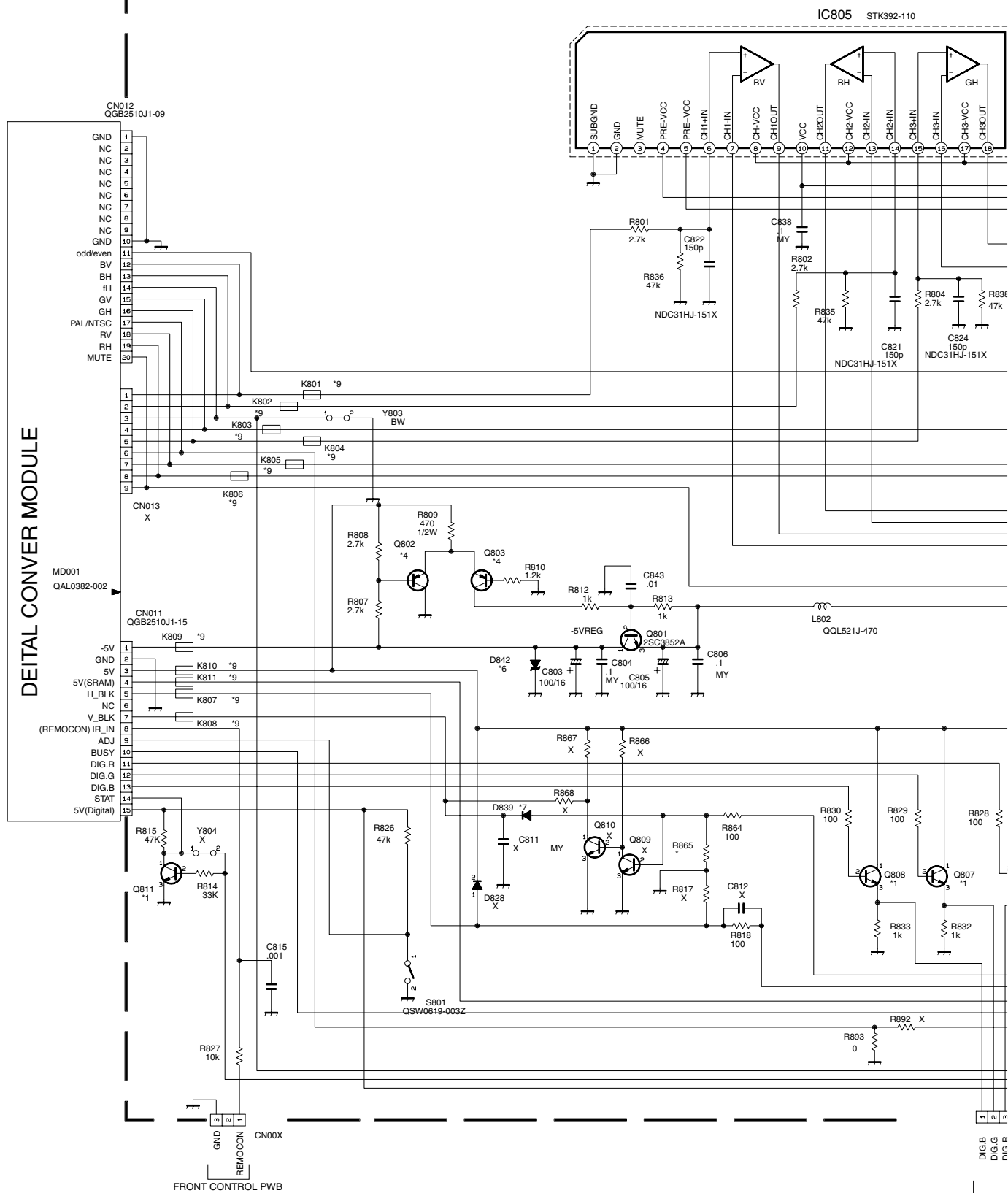
3 GENCE PWB



CONVRGENCE PWB CIRCUIT DIAGRAM

CONVERGENCE PWB

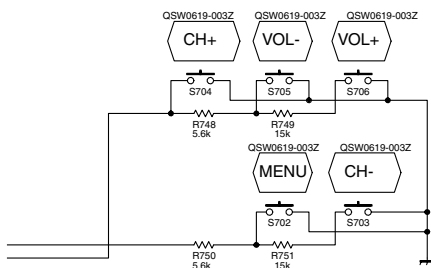
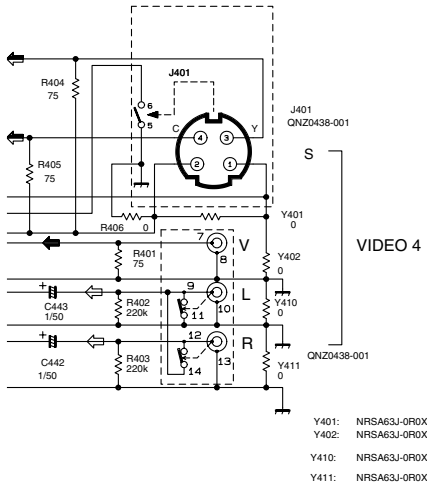
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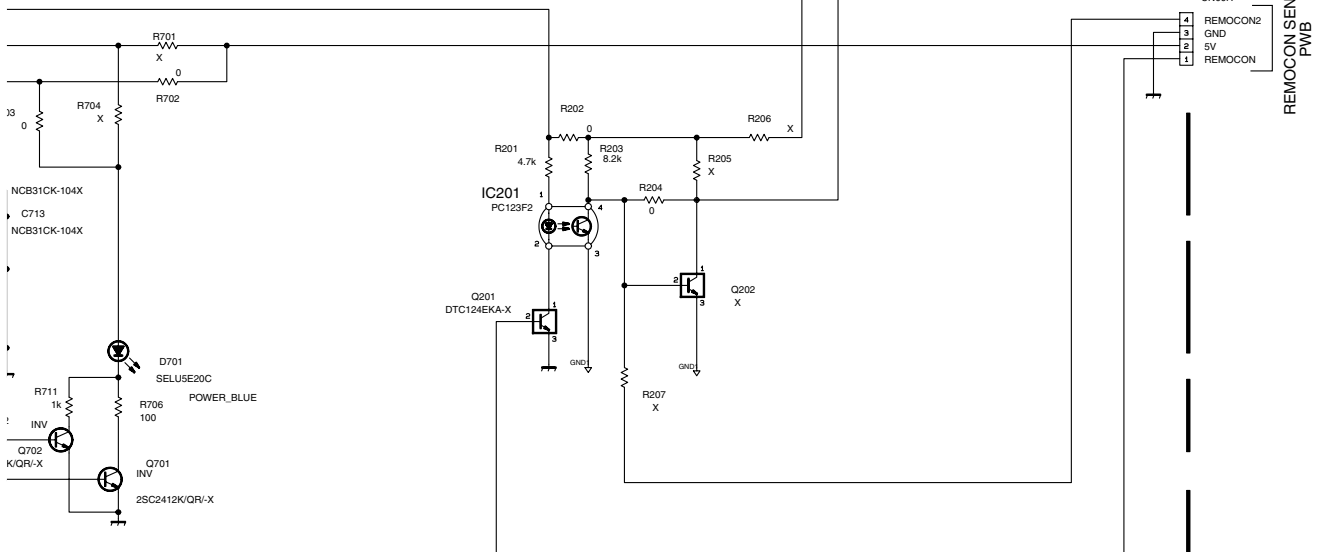
FRONT CONTROL PWB

SSB0L053A-M2

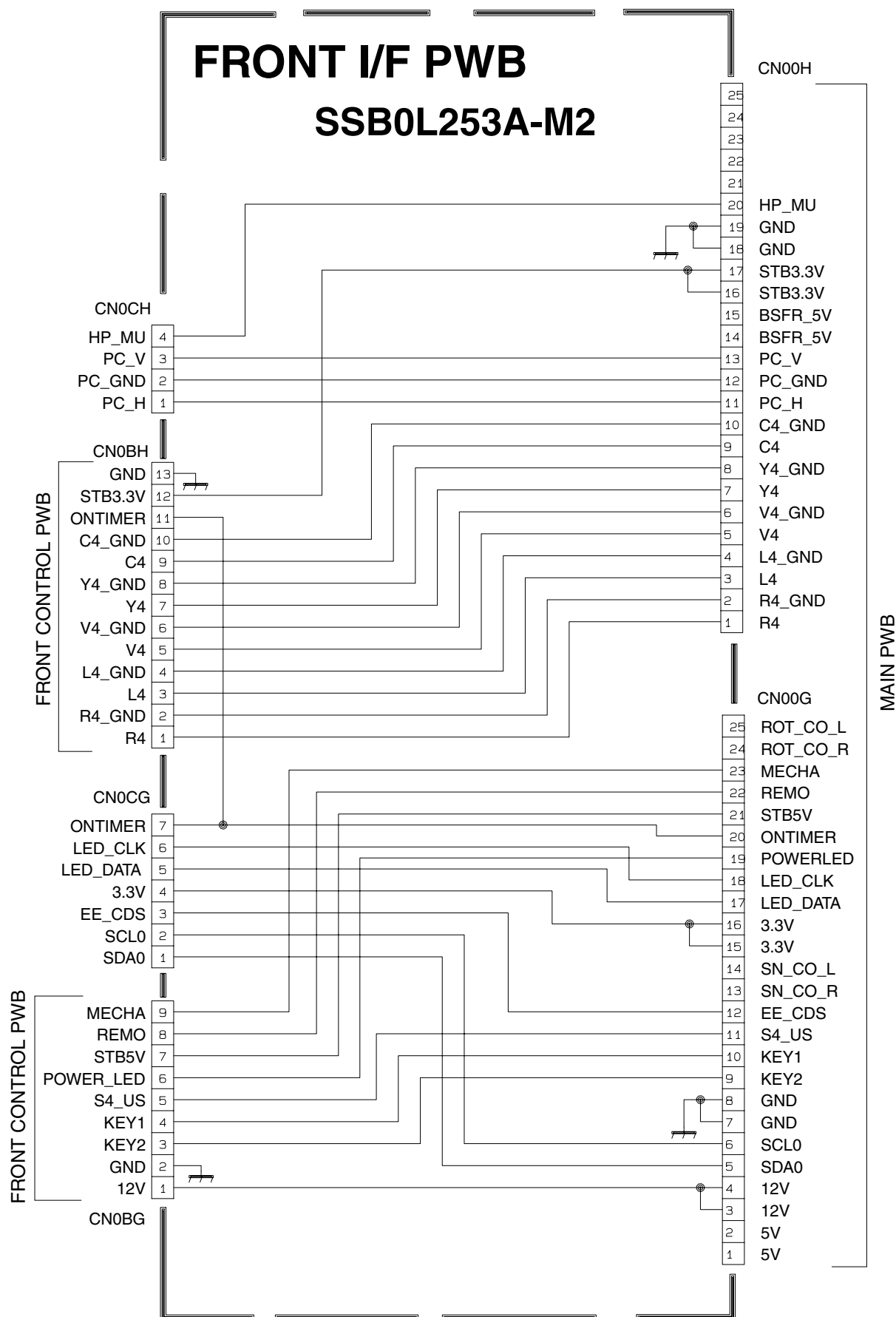


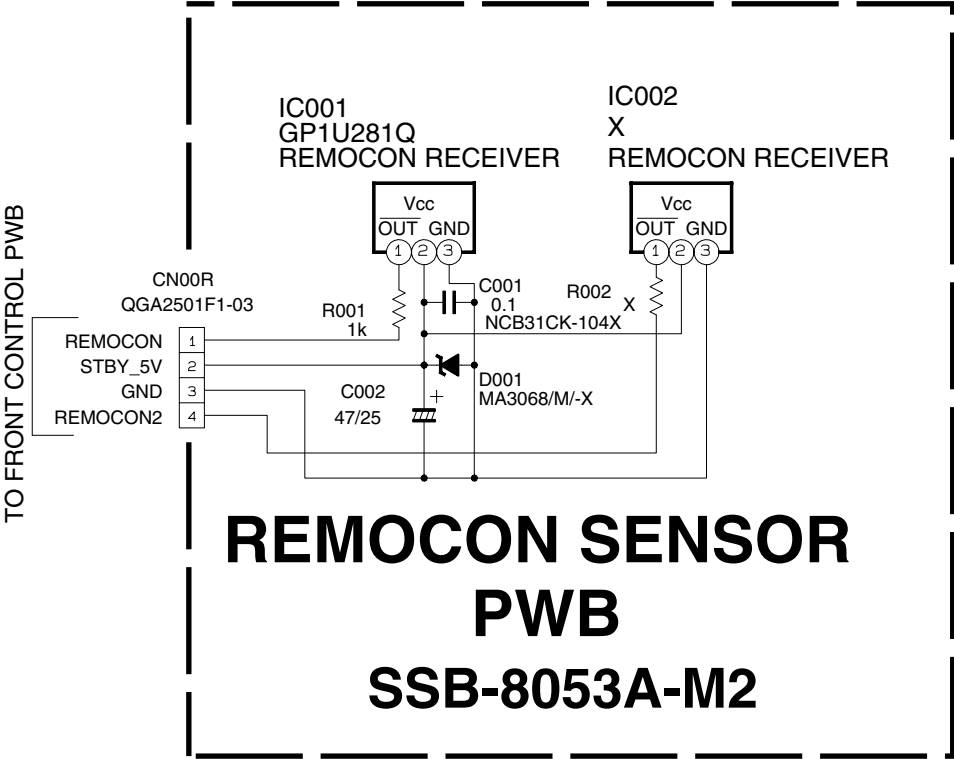
NOTE

- *1 : 2SC2412K/QR/-X
- *2 : 2SA1037AK/QR/-X
- *3 : 1SS355-X
- *4 : DTC144EKA-X
- *5 : MA153A-X
- *9 : 2SA966(OV)-T
- *8 : UDZS8.2B-X
- *10 : UDZS10B-X
- BW : IM-BW
- X : NON MOUNT

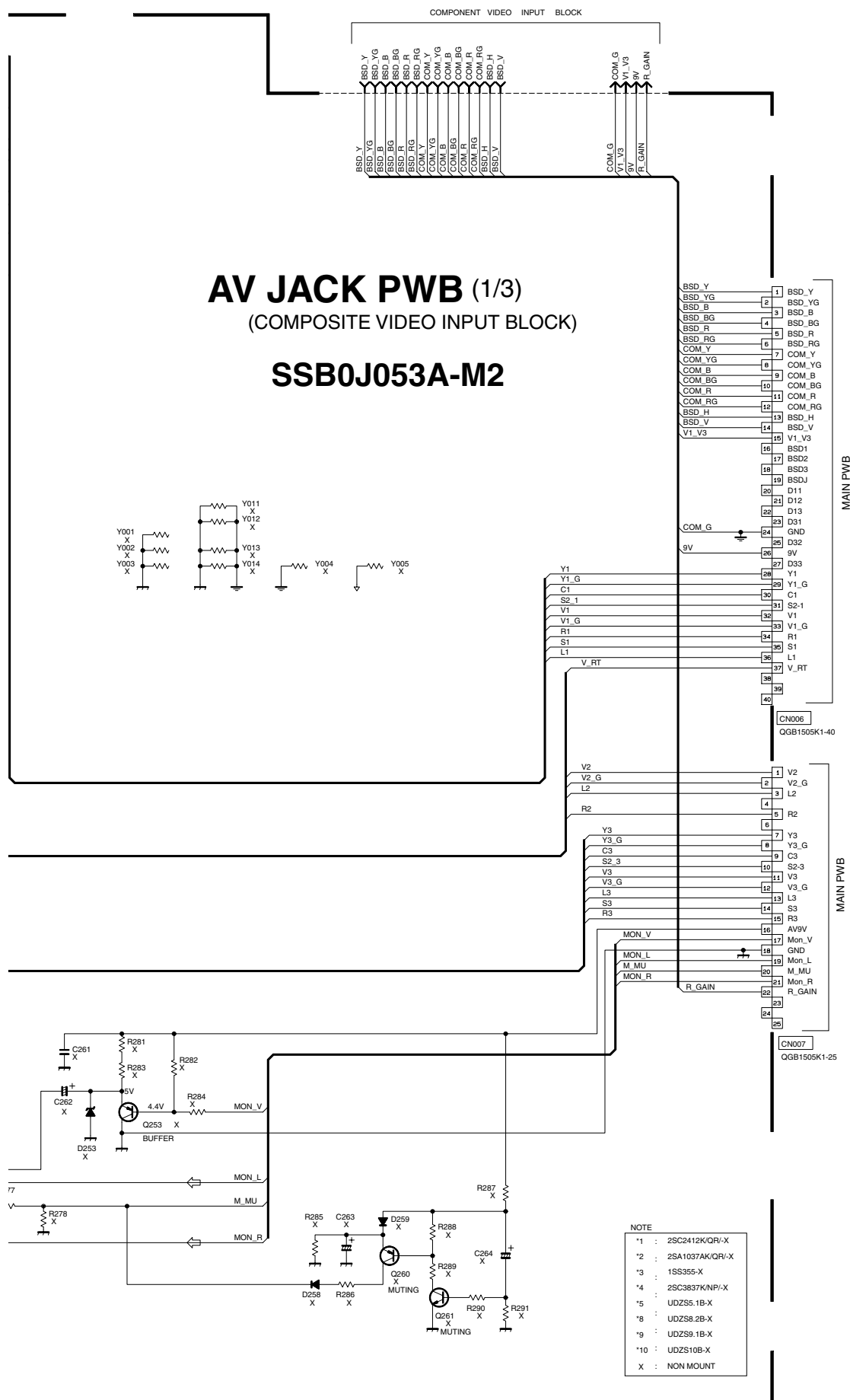


FRONT I/F PWB & REMOCON SENSOR PWB CIRCUIT DIAGRAM

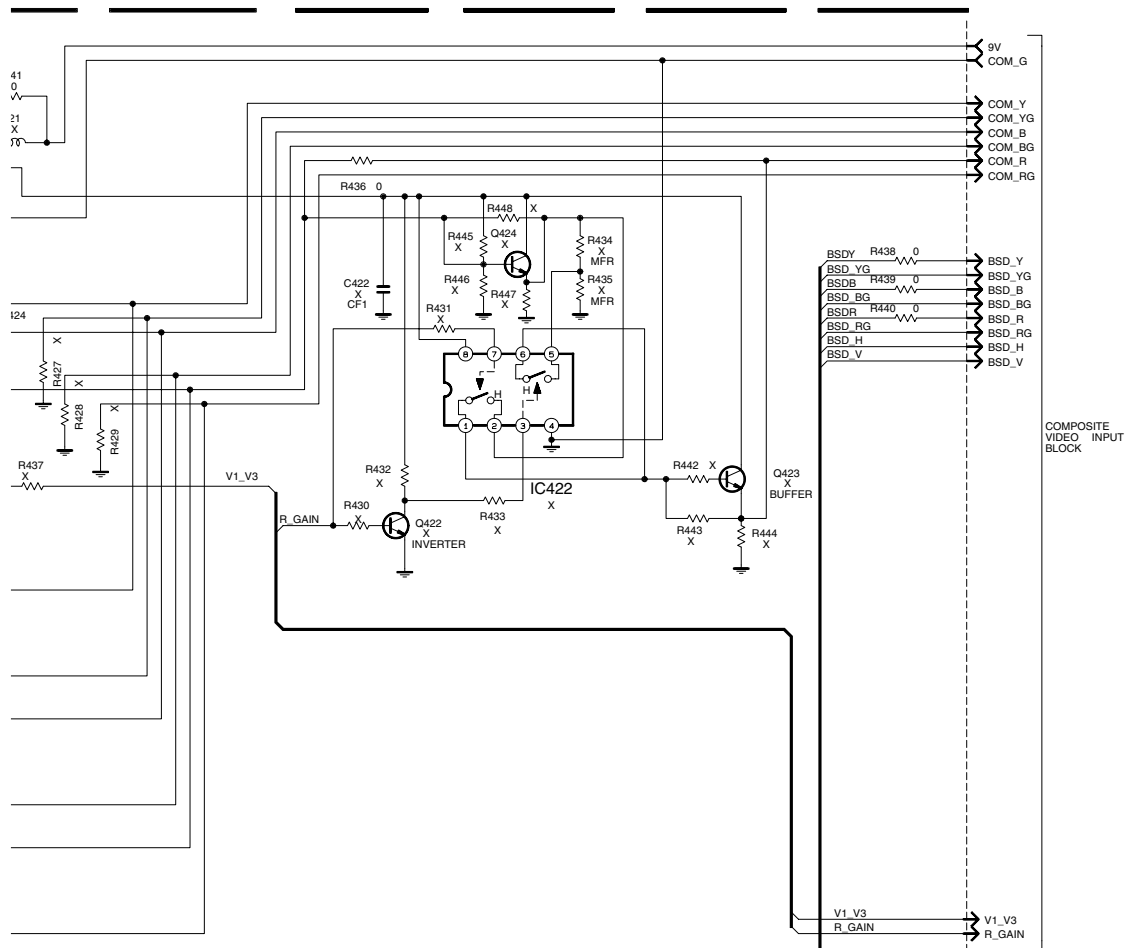












IV JACK PWB (2/3)

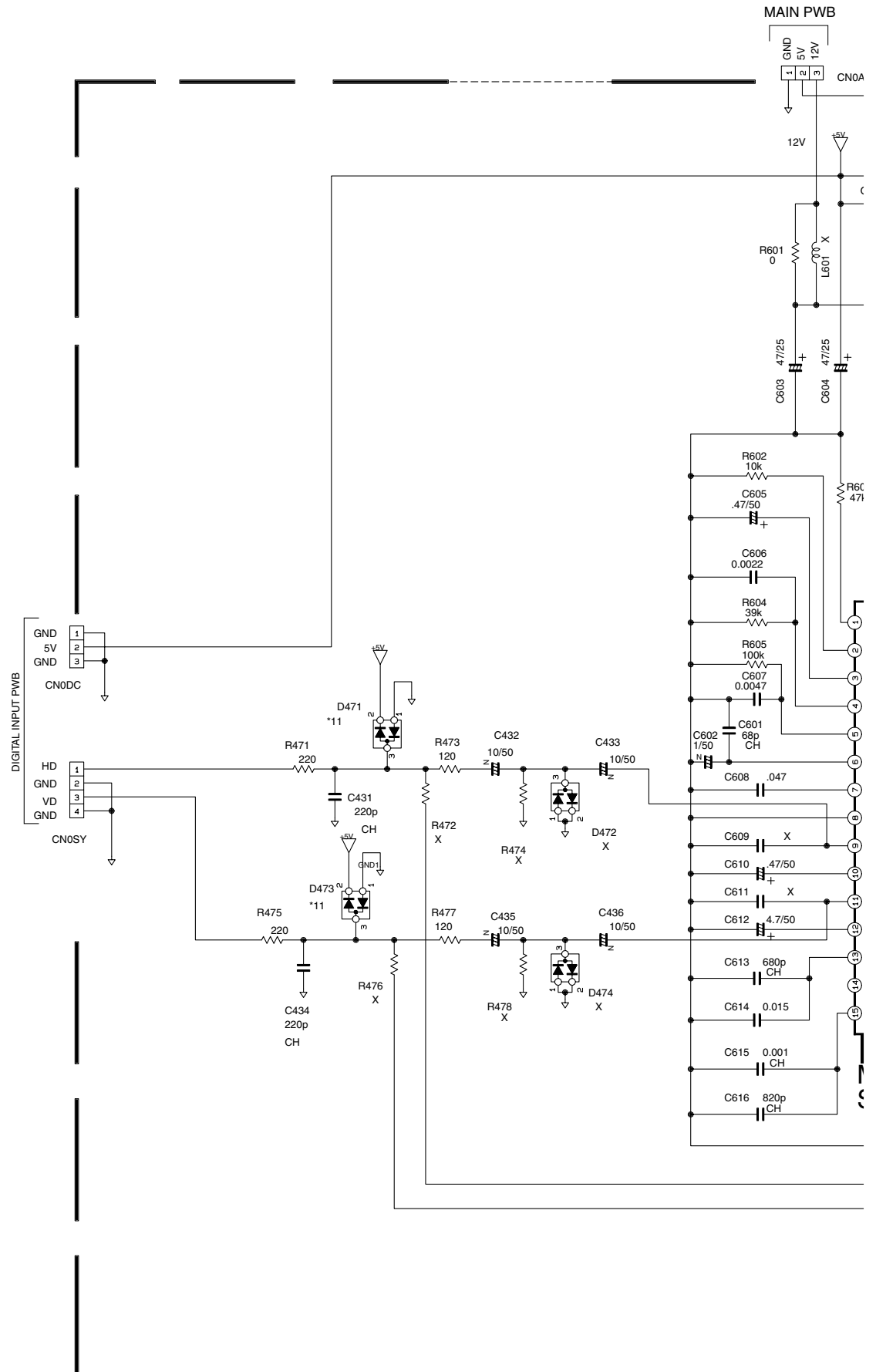
(COMPONENT VIDEO INPUT BLOCK)

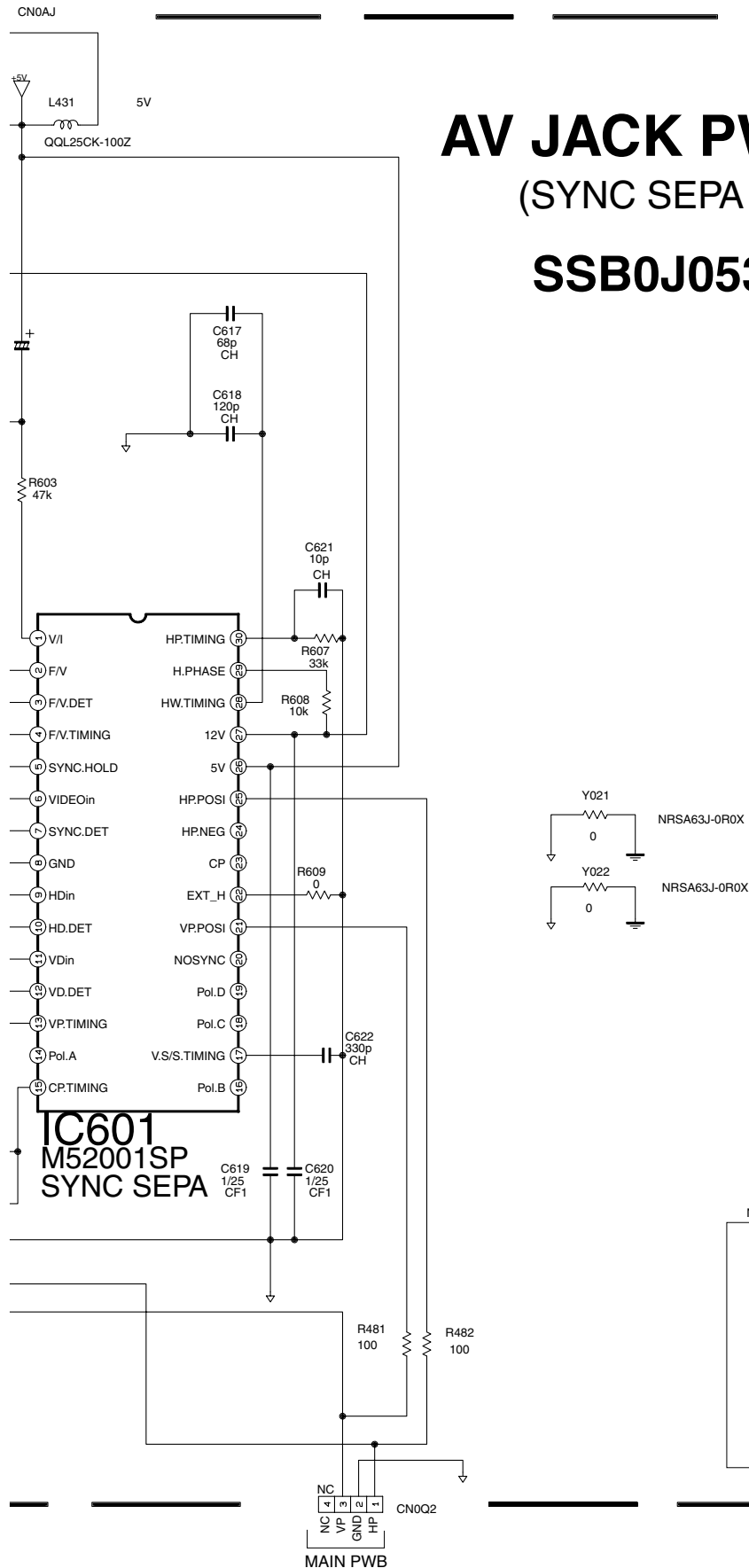
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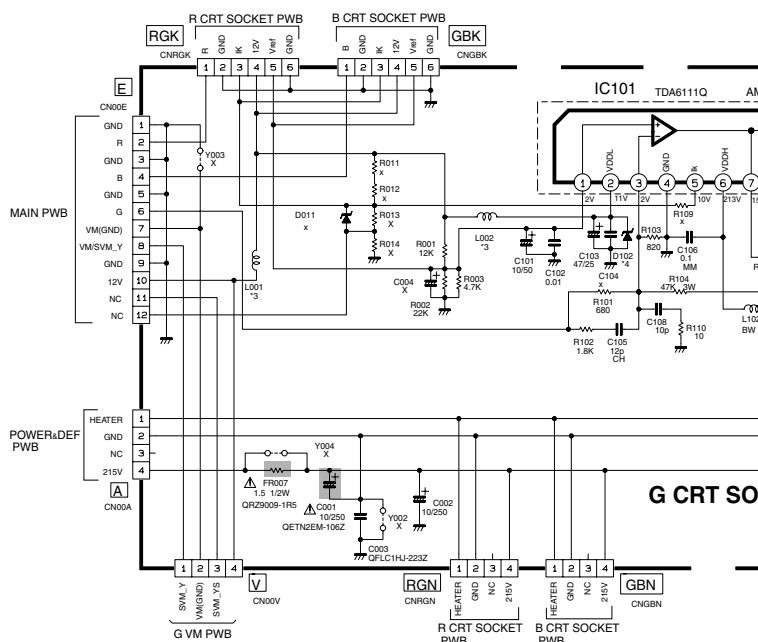
MOTE

*1	: 2SC2412K/OR/-X
*2	: 2SA1037AK/OR/-X
*3	: 1SS355-X
*4	: 2SC3837K/NP/-X
*5	: UDZ55.1B-X
*8	: UDZ58.2B-X
*9	: UDZ59.1B-X
*10	: UDZ510B-X
X	: NON MOUNT

AV JACK PWB CIRCUIT DIAGRAM [3/3]

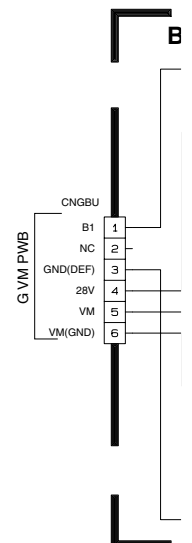
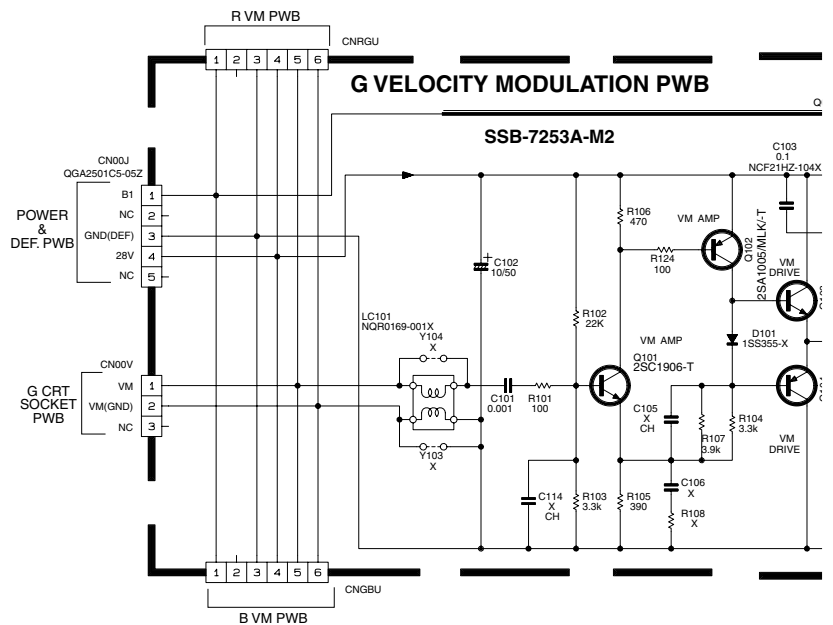
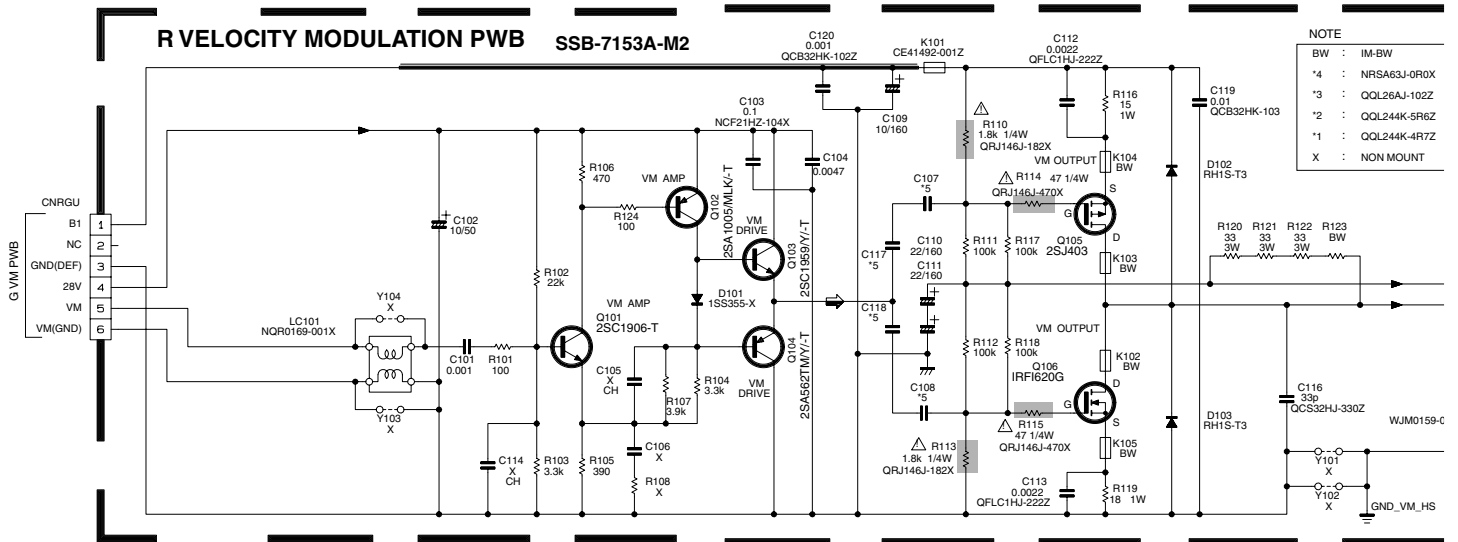


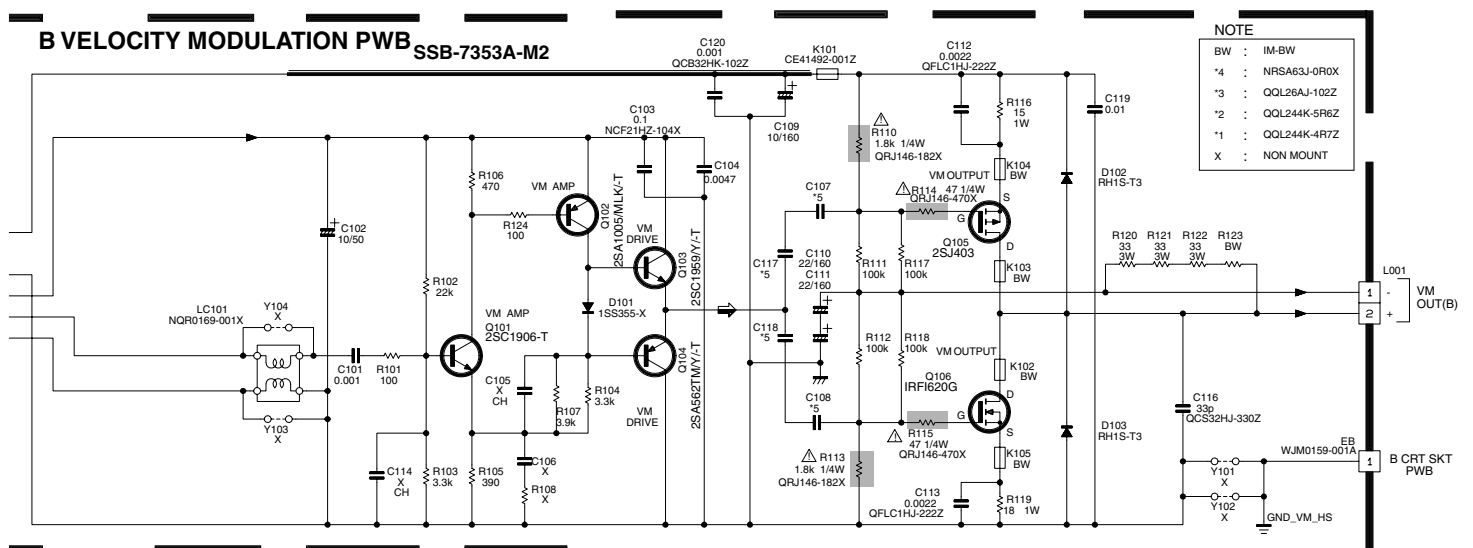
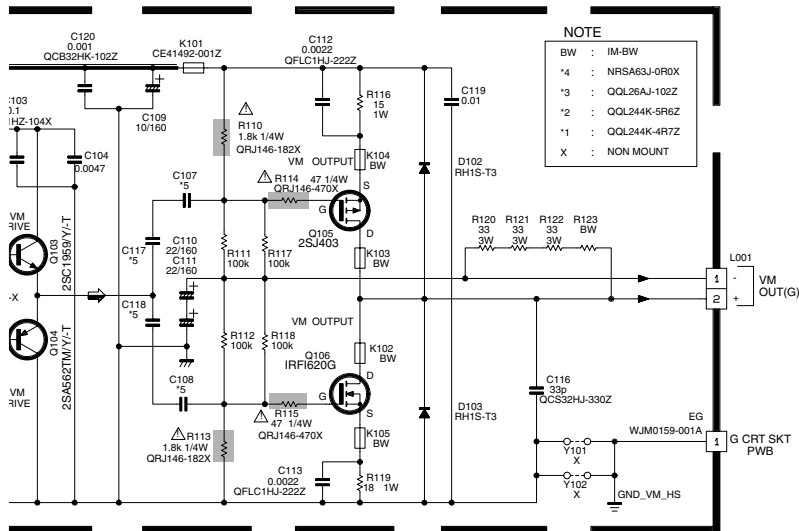
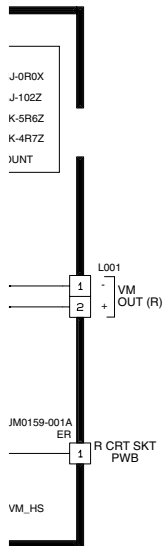




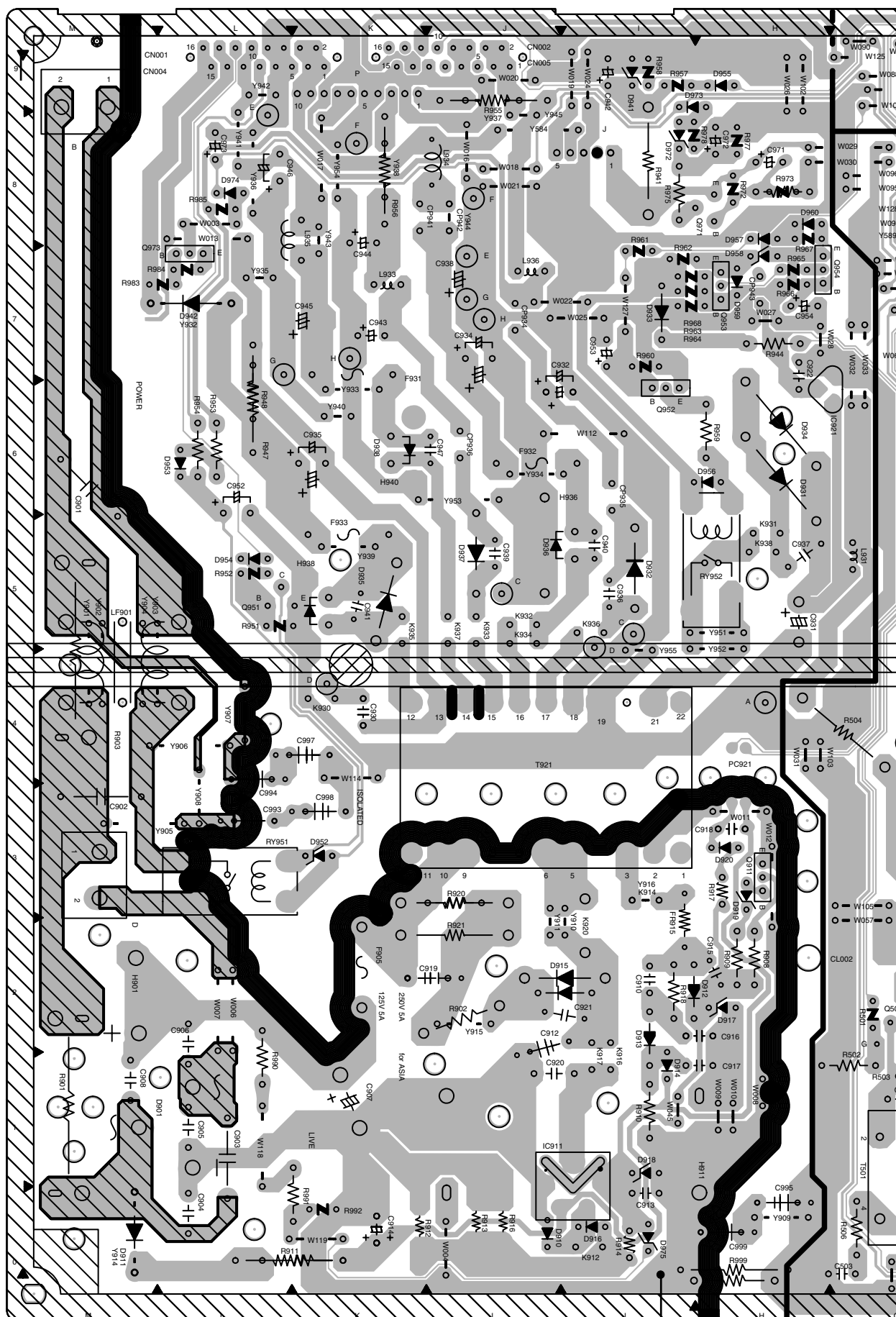


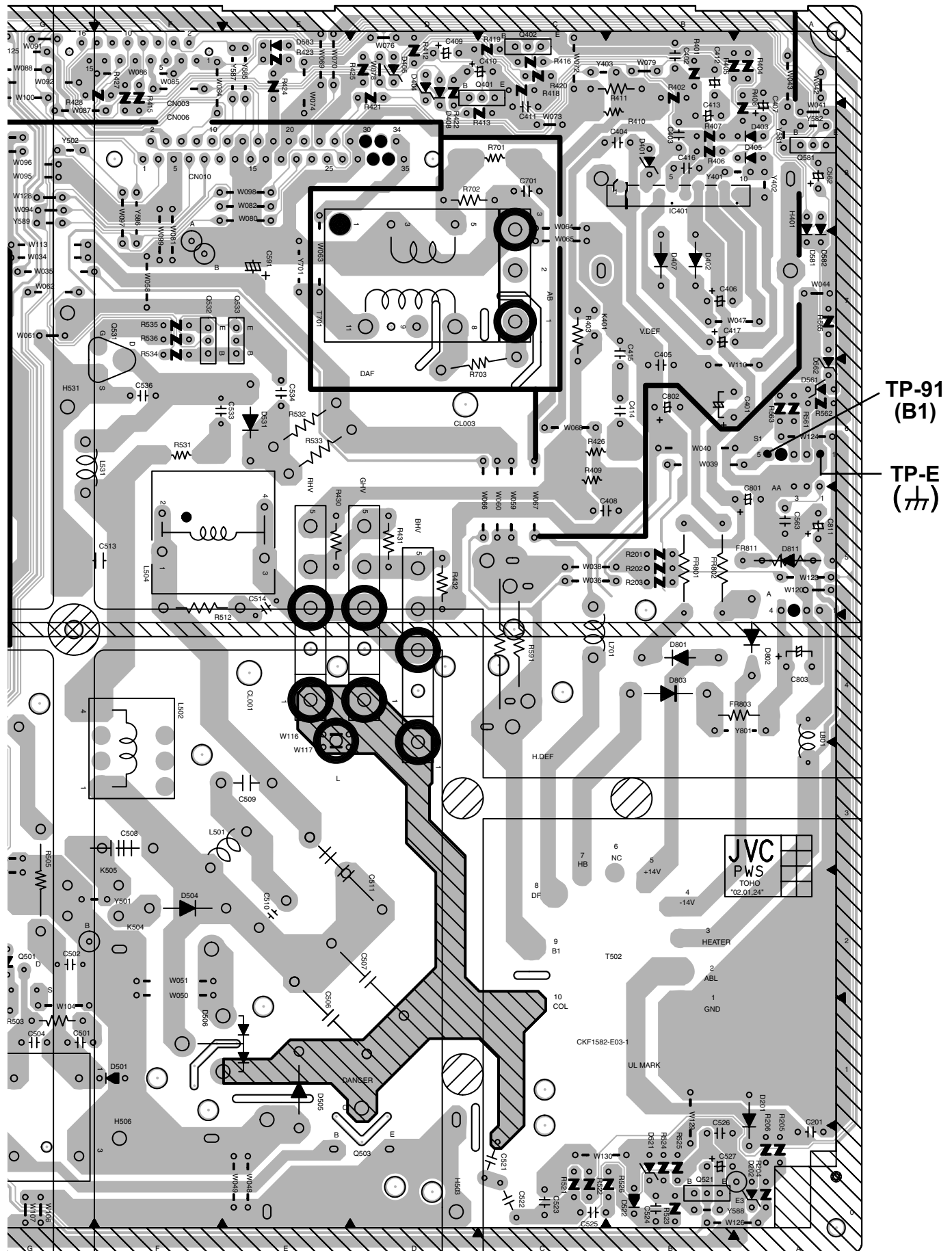
R/G/B VM PWB CIRCUIT DIAGRAM





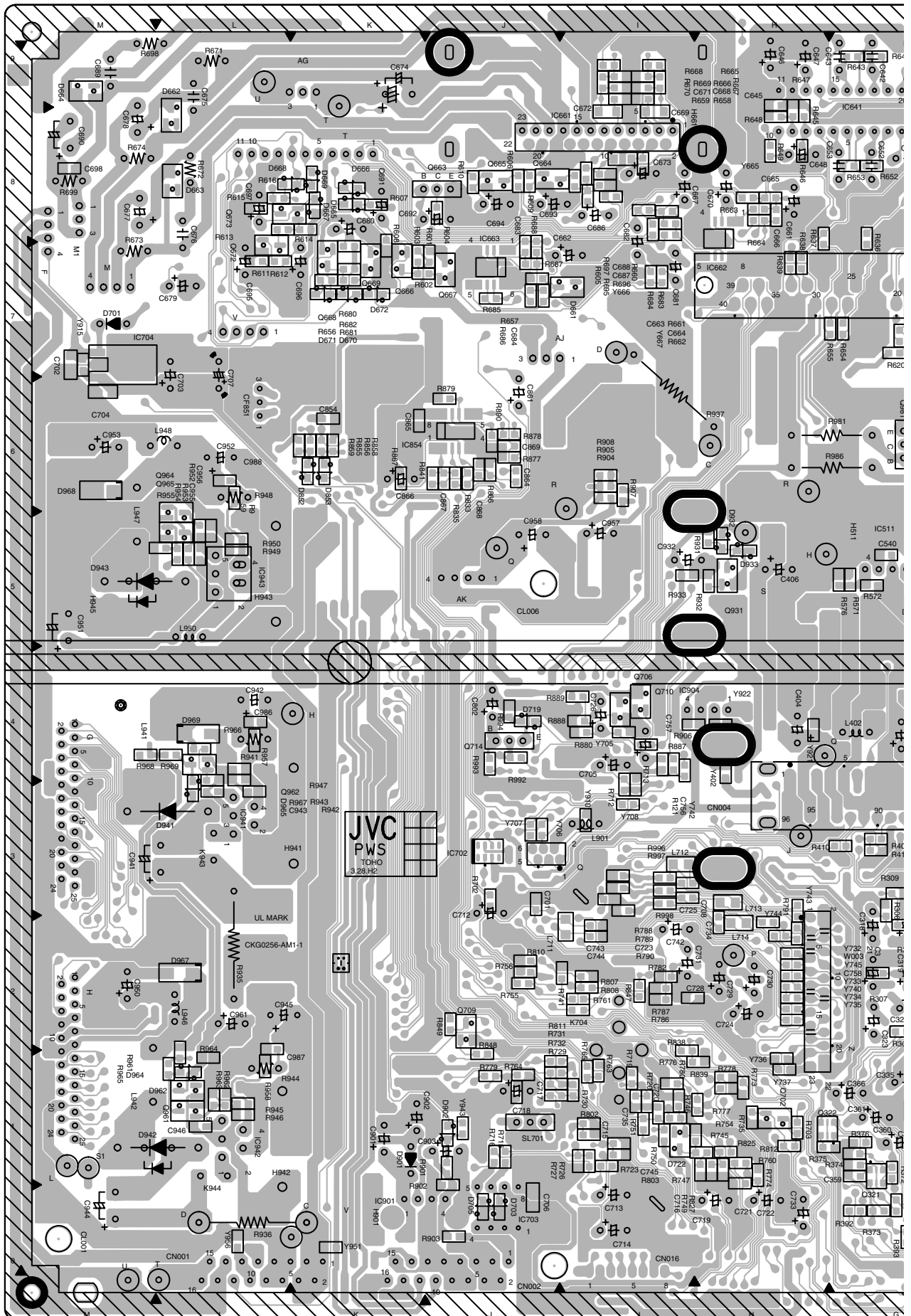
PATTERN DIAGRAMS POWER & DEF. PWB PATTERN

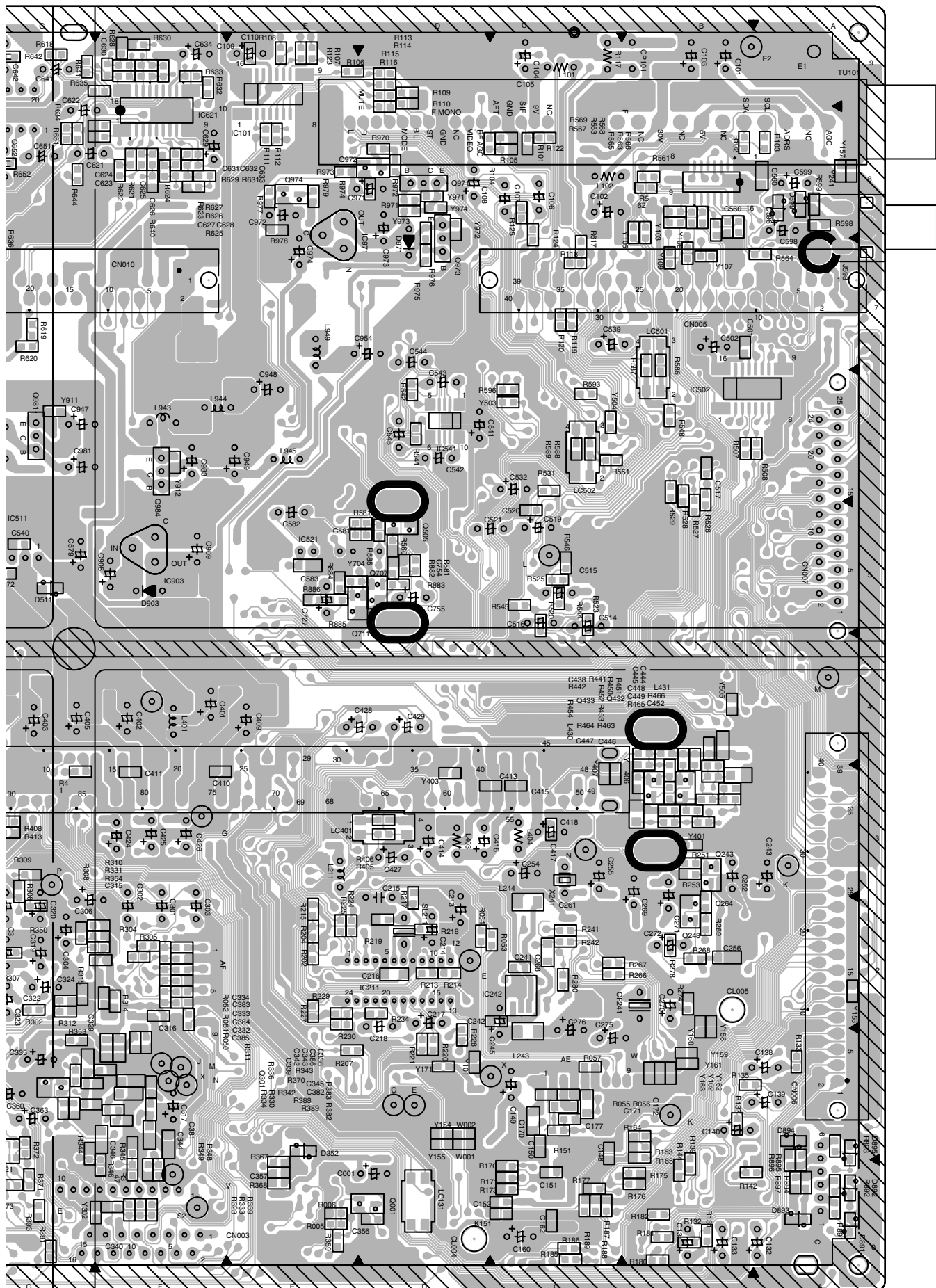
FRONT
↓

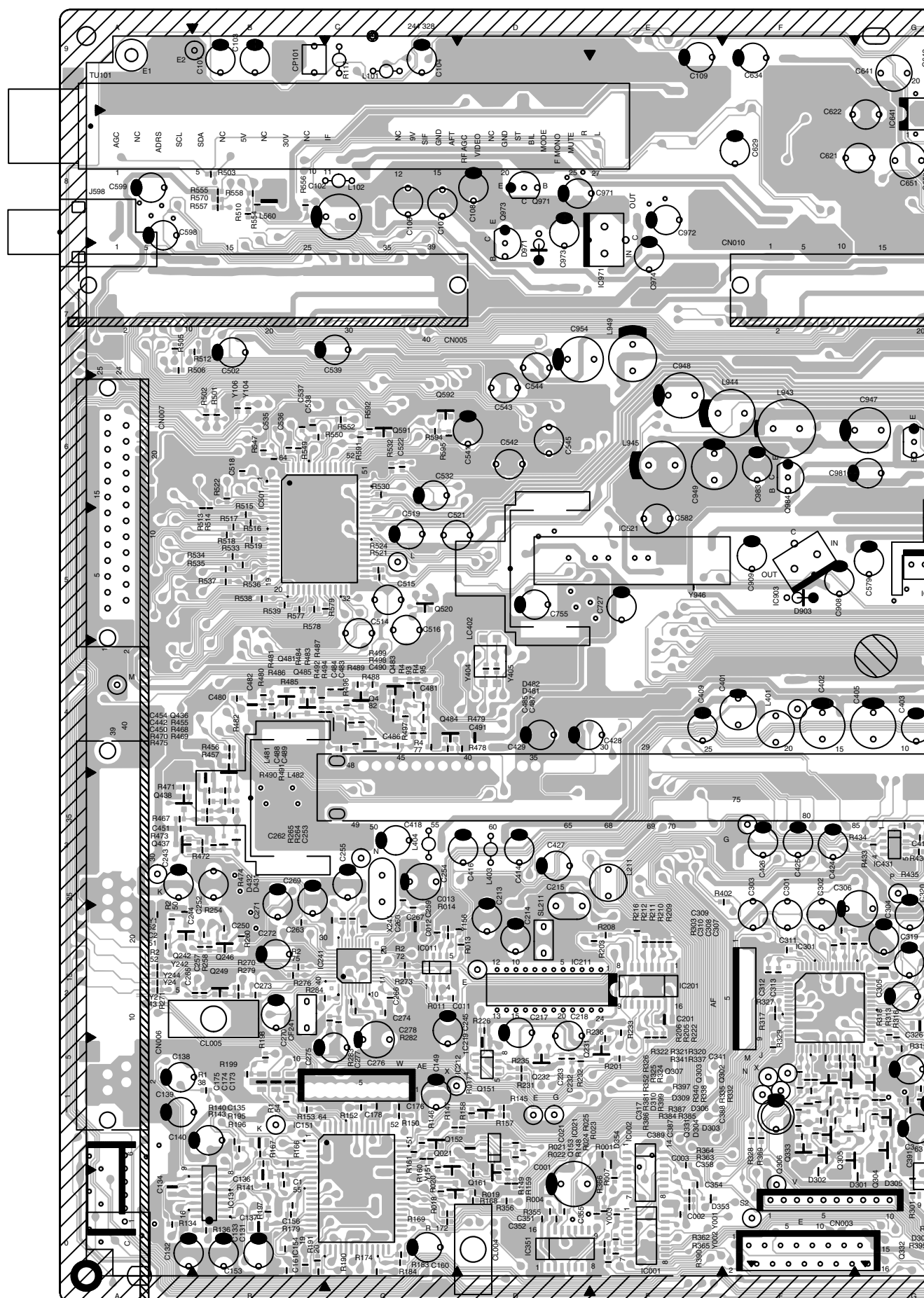


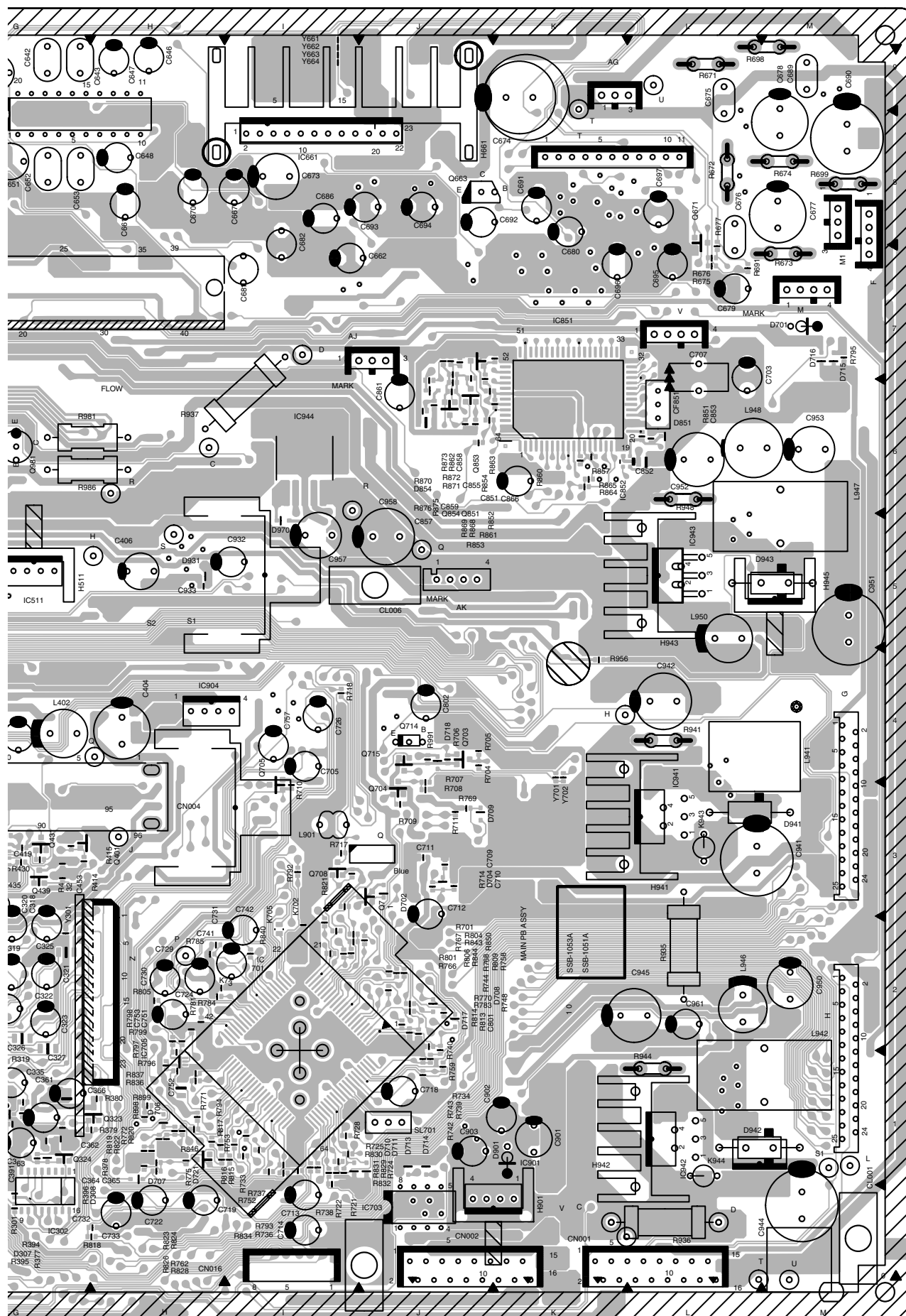
MAIN PWB PATTERN [SOLDER SIDE]

FRONT

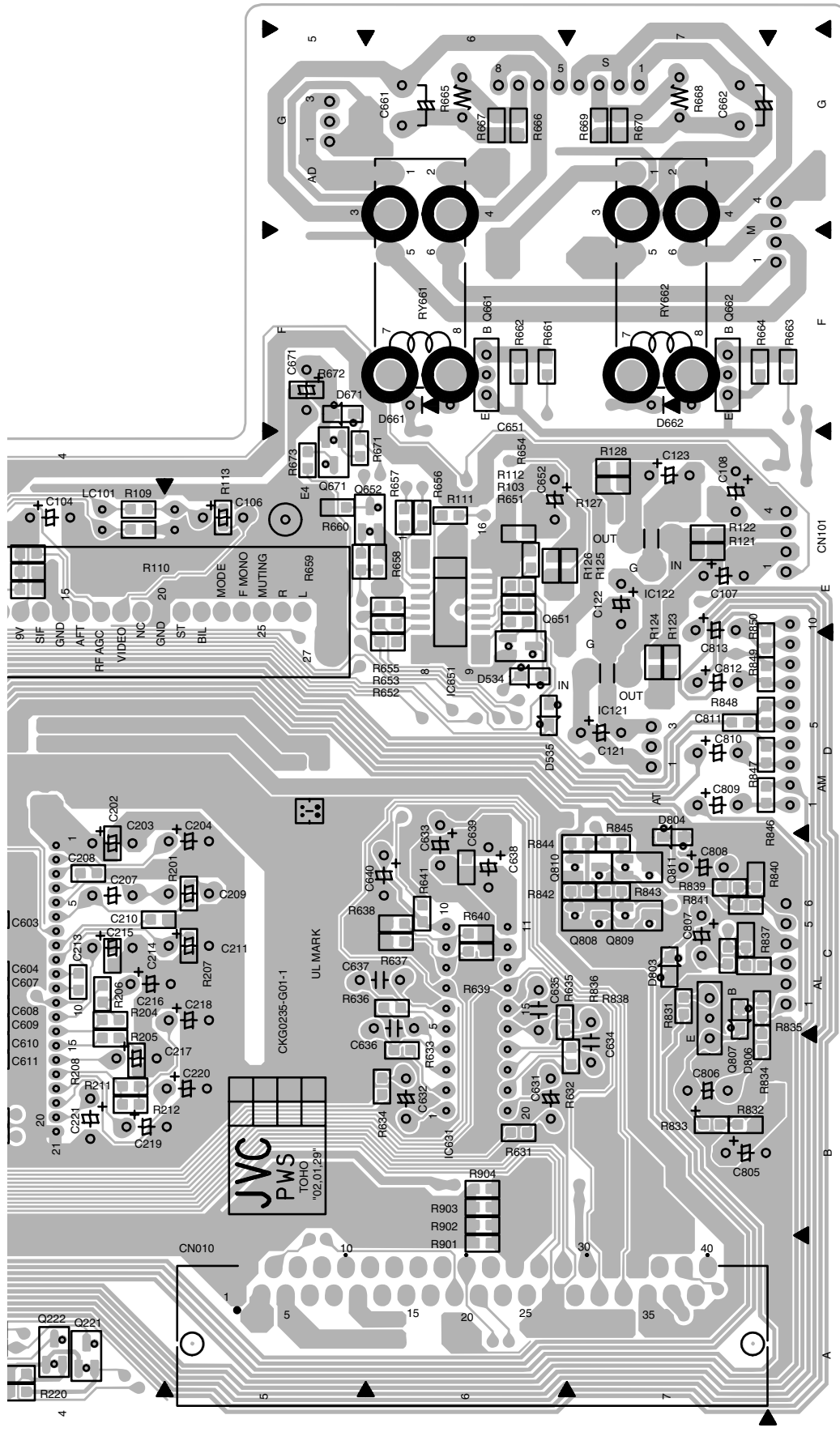


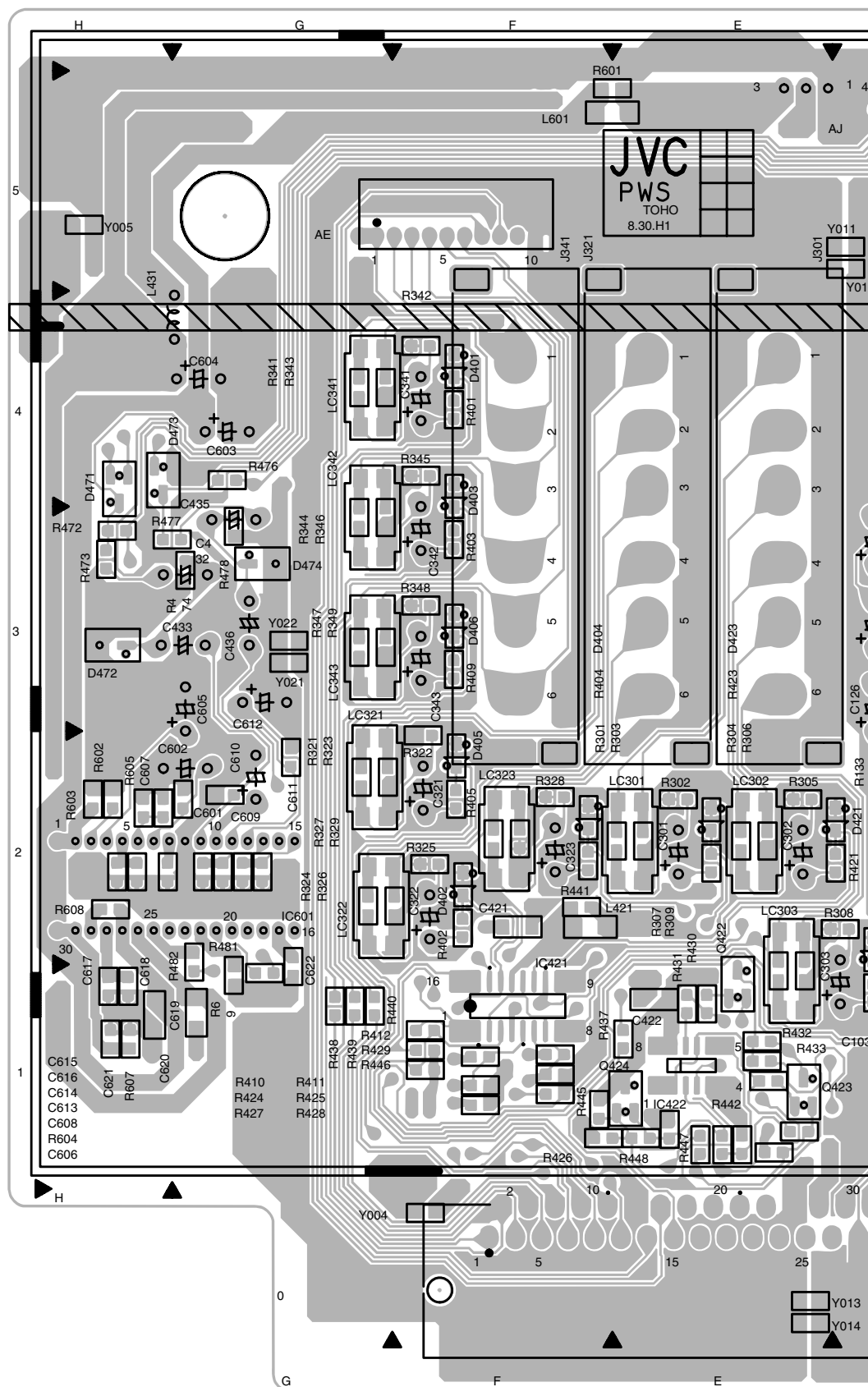




FRONT

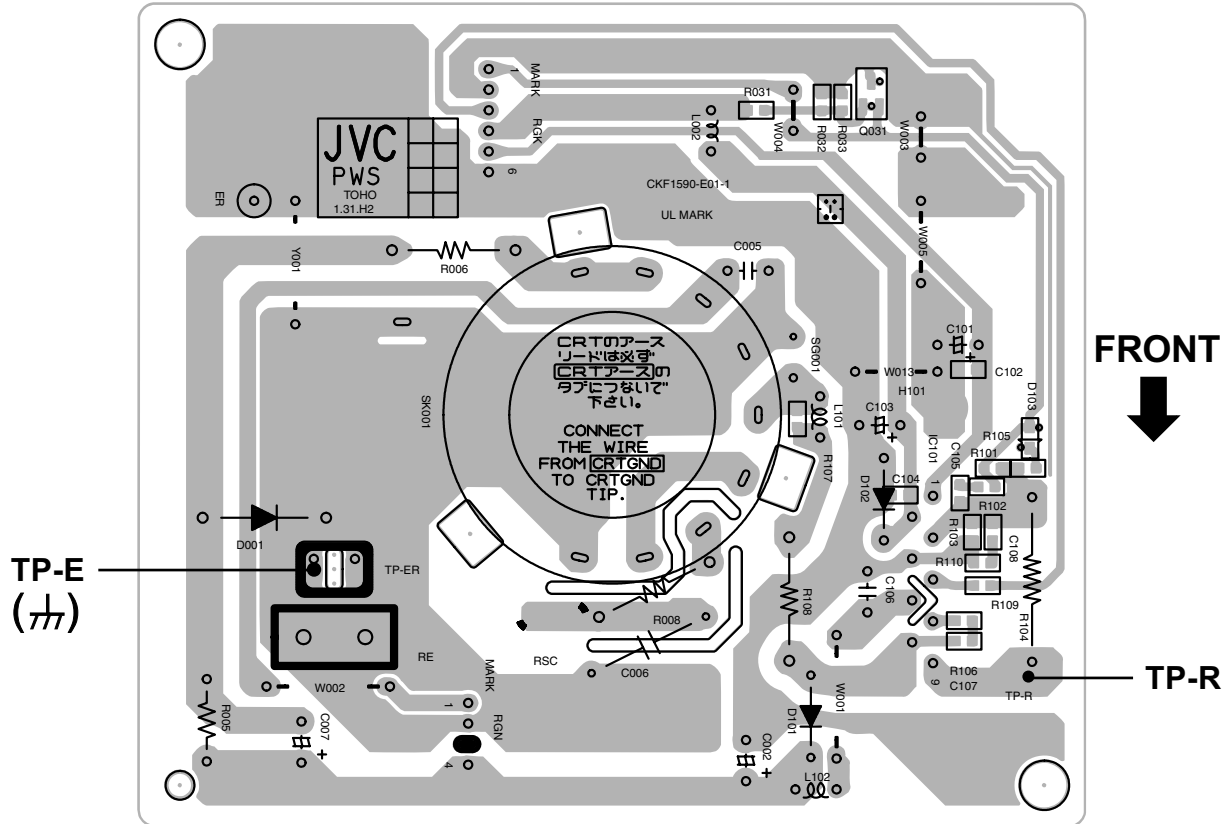




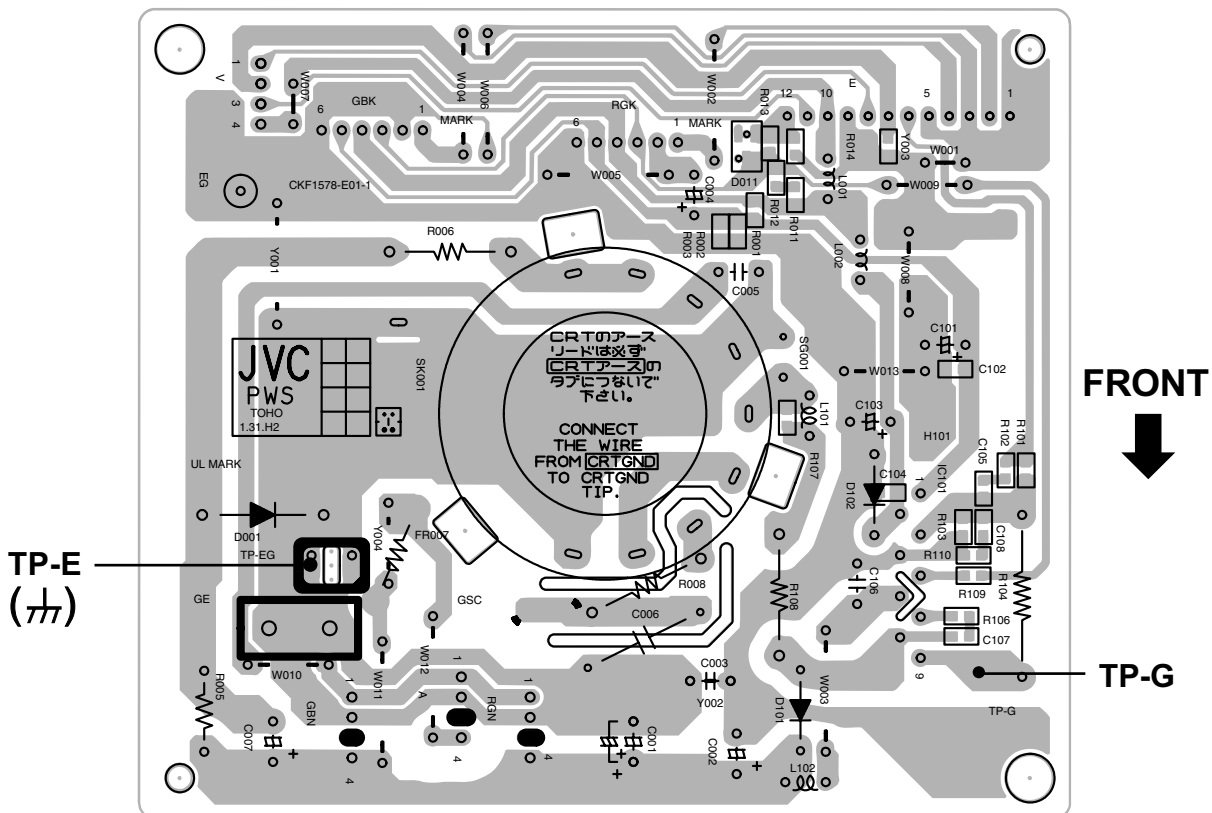


R/G/B CRT SOCKET PWB PATTERN

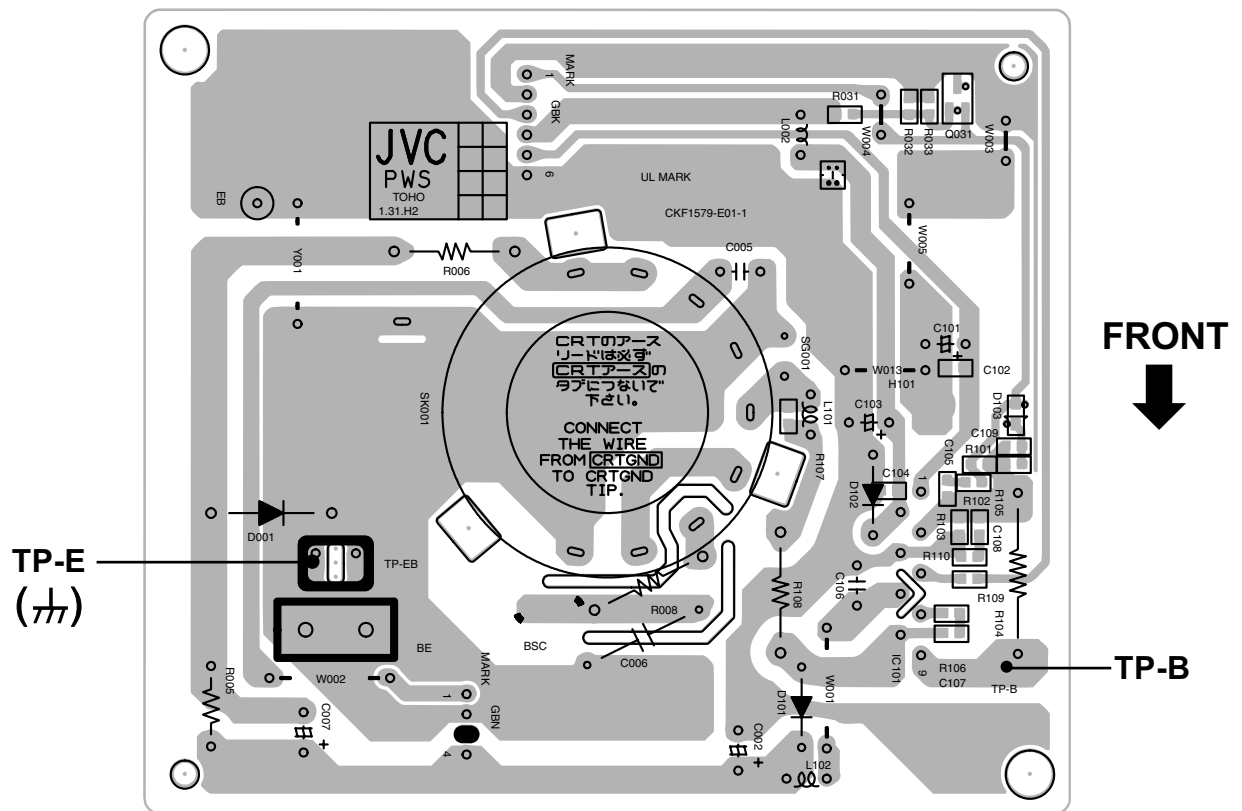
[R CRT SOCKET PWB]



[G CRT SOCKET PWB]



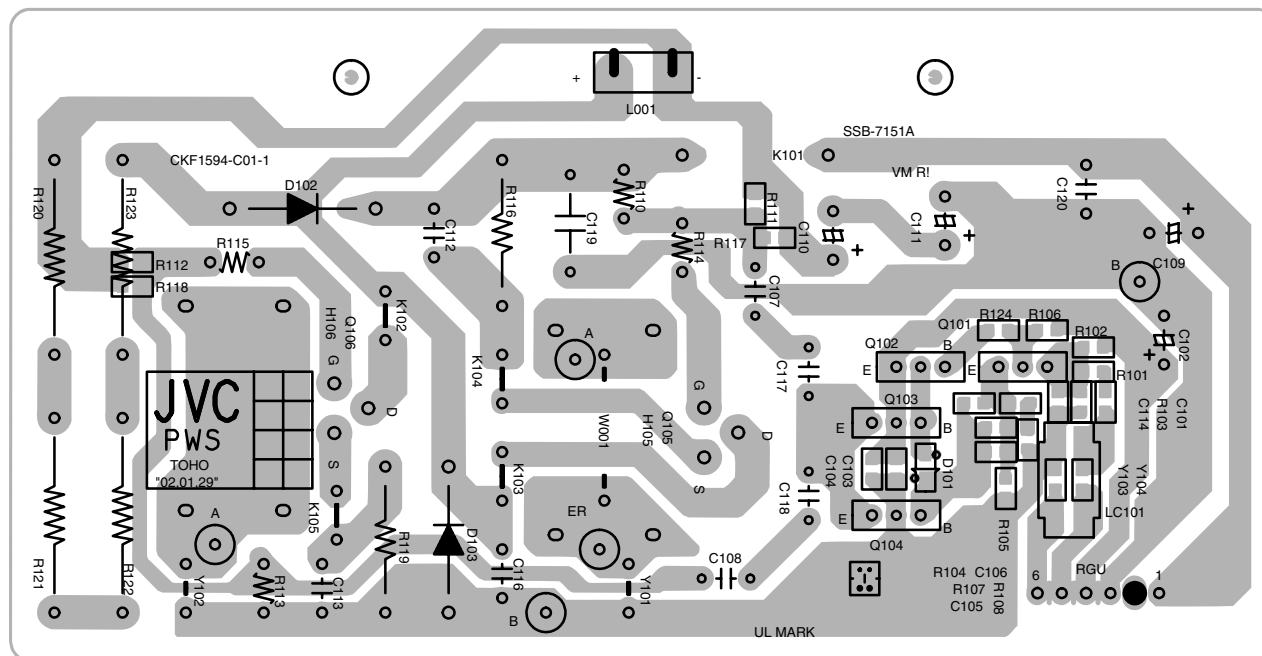
[B CRT SOCKET PWB]



R/G/B VM PWB PATTERN

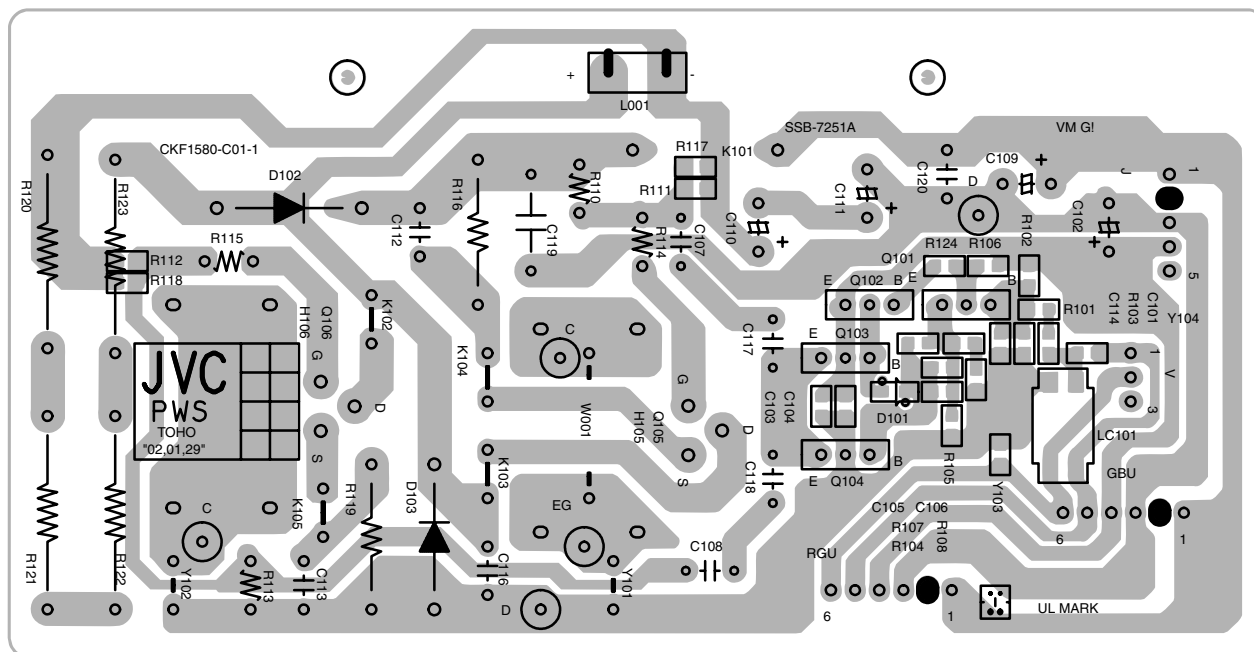
[R VM PWB]

FRONT



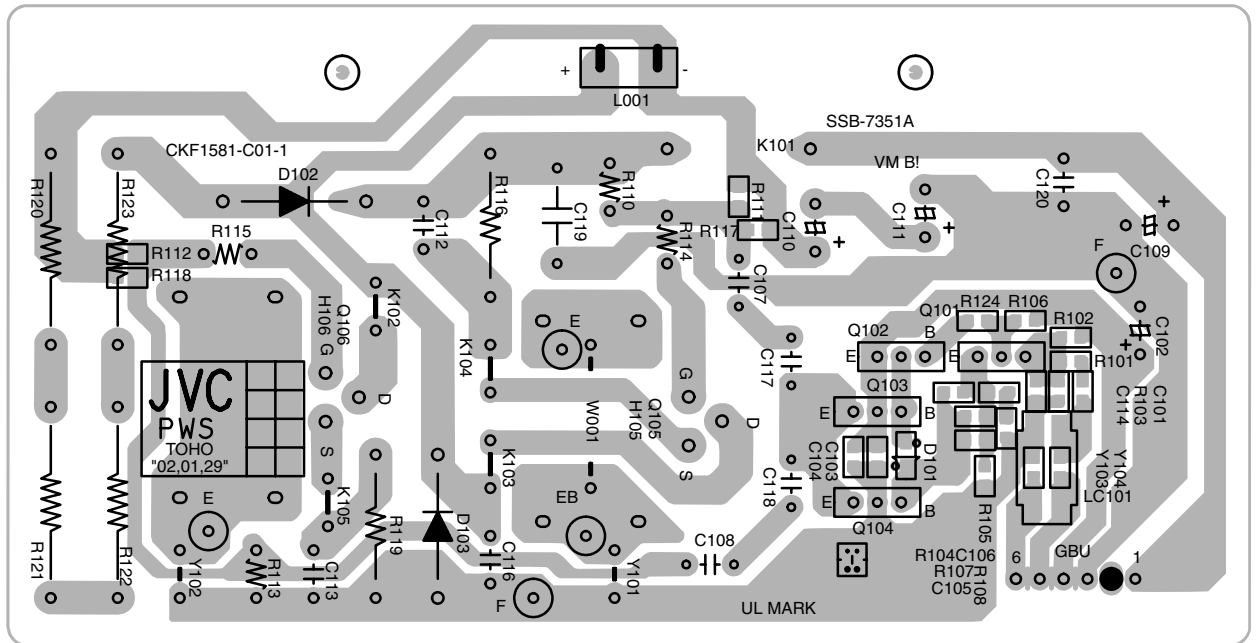
[G VM PWB]

FRONT



[B VM PWB]

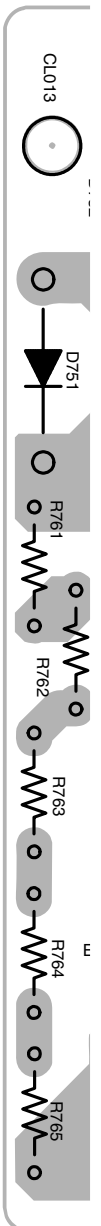
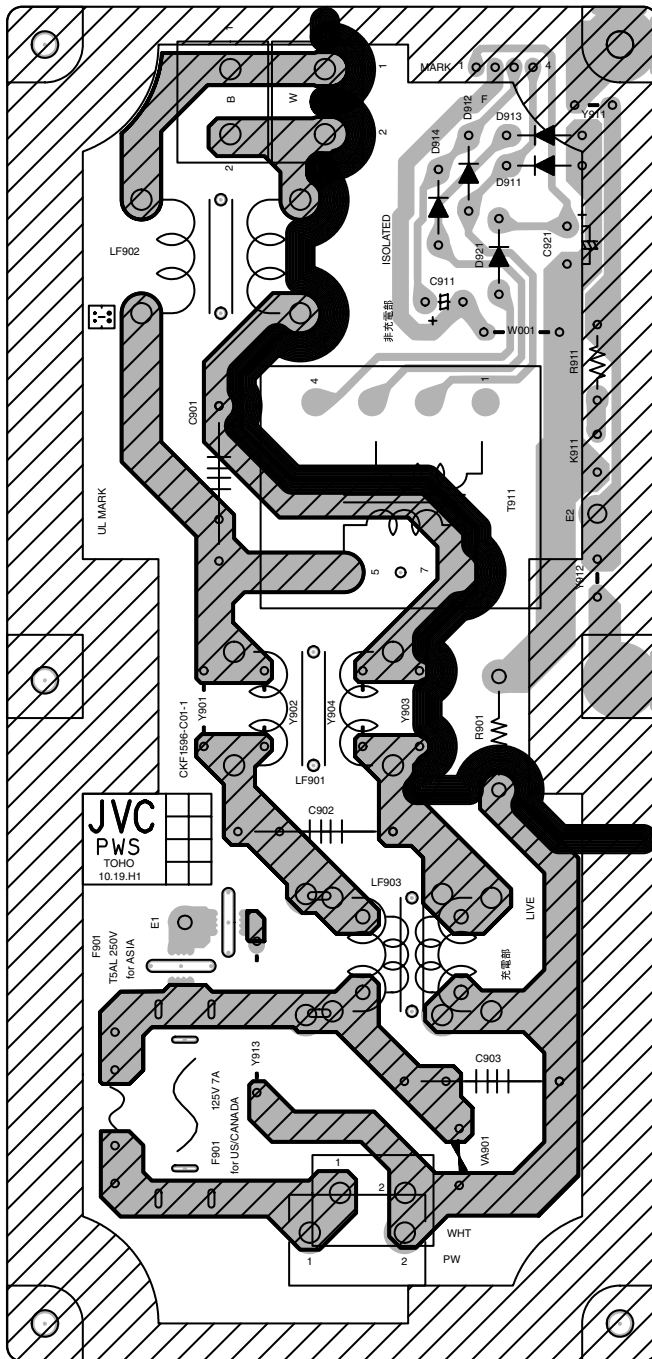
↑
FRONT



LINE FILTER PWB PATTERN

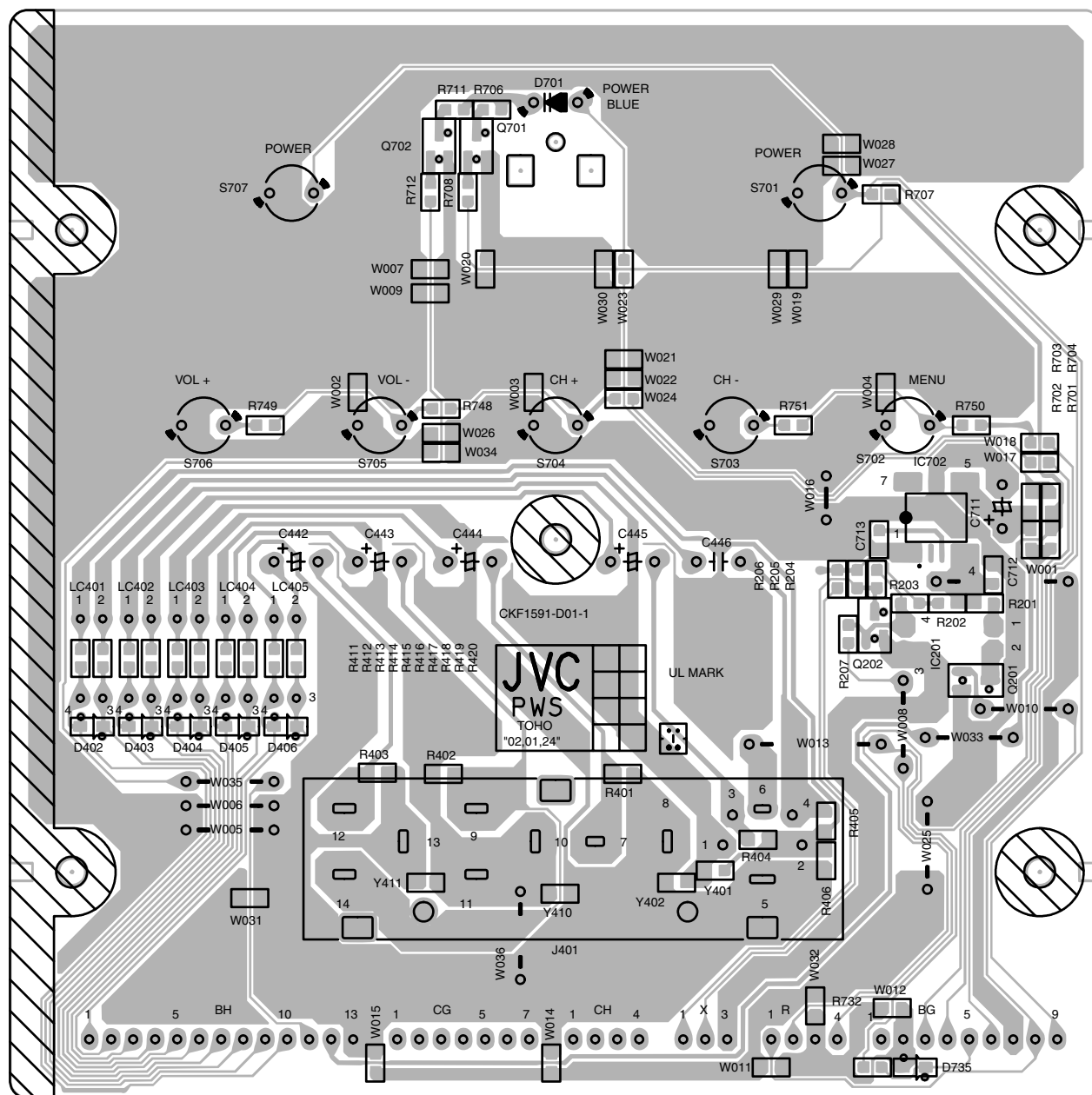
DEF OSC I

↑
TOP

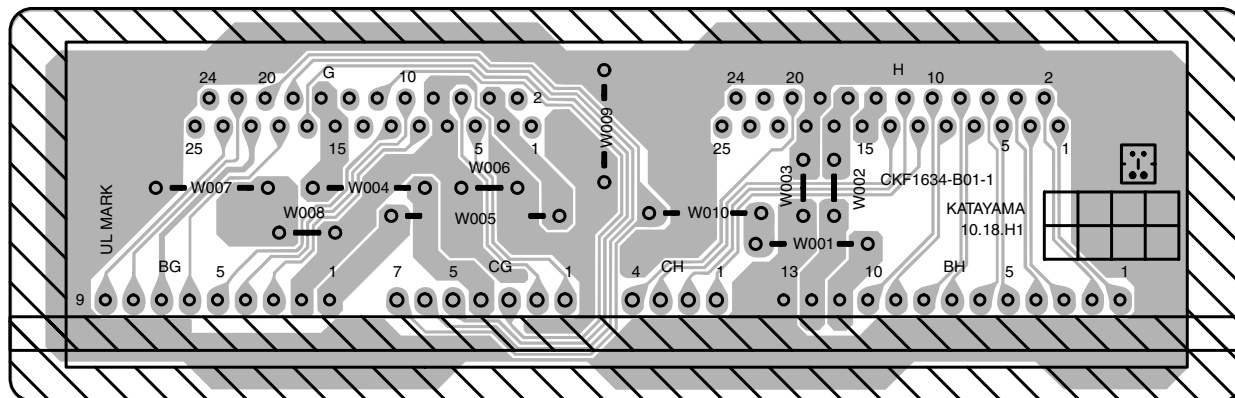


FRONT CONTROL PWB PATTERN

↑
TOP



FRONT I/F PWB PATTERN



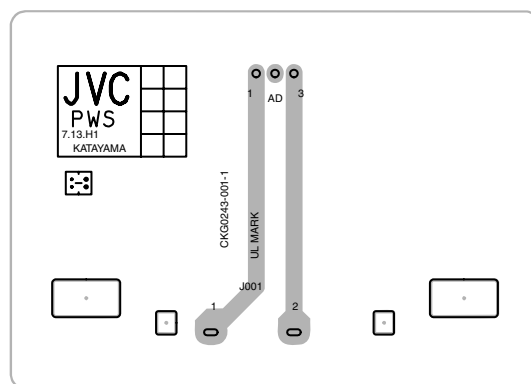
FRONT



CENTER SPEAKER PWB PATTERN



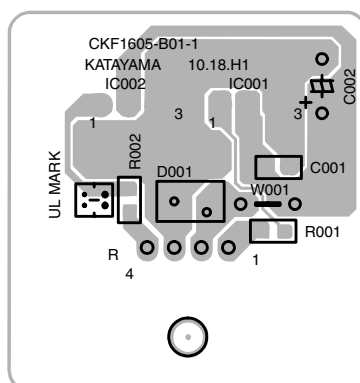
TOP



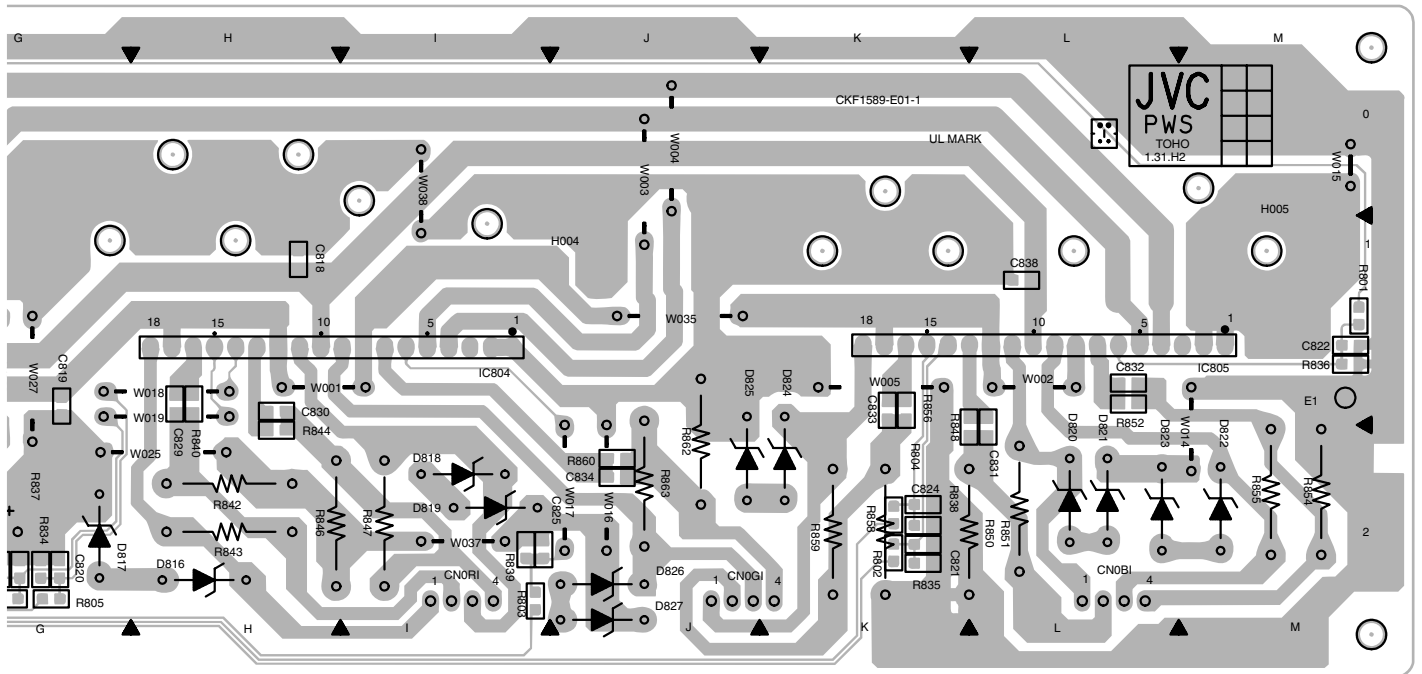
REMOCON SENSOR PWB PATTERN



TOP







FRONT



TOP



CHANNEL CHART (US)

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP.	
○	○	VL	02		I
			03		
			04		
			05		
			06		
		VH	07		II
			08		
			09		
			10		
			11		
			12		
			13		
×	○	MID	A	14	I
			B	15	
			C	16	II
			D	17	
			E	18	
			F	19	
			G	20	
			H	21	
			I	22	
		SUPER	J	23	
			K	24	
			L	25	
			M	26	
			N	27	
			O	28	
			P	29	
			Q	30	
			R	31	
			S	32	
			T	33	
		HYPER	U	34	
			V	35	
			W	36	
			W+1	37	
			W+2	38	
			W+3	39	
			W+4	40	
			W+5	41	
			W+6	42	
			W+7	43	
			W+8	44	
			W+9	45	
			W+10	46	
			W+11	47	
			W+12	48	IV
			W+13	49	
			W+14	50	
			W+15	51	
			W+16	52	
			W+17	53	
			W+18	54	
			W+19	55	
			W+20	56	
			W+21	57	
			W+22	58	
			W+23	59	
			W+24	60	
			W+25	61	
			W+26	62	
			W+27	63	
			W+28	64	
		ULTRA	W+29	65	
			W+30	66	
			W+31	67	
			W+32	68	
			W+33	69	
			W+34	70	

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP.	
×	○	ULTRA	W+35	71	IV
			W+36	72	
			W+37	73	
			W+38	74	
			W+39	75	
			W+40	76	
			W+41	77	
			W+42	78	
			W+43	79	
			W+44	80	
			W+45	81	
			W+46	82	
			W+47	83	
			W+48	84	
			W+49	85	
			W+50	86	
			W+51	87	
			W+52	88	
			W+53	89	
			W+54	90	
			W+55	91	
			W+56	92	
			W+57	93	
			W+58	94	
			W+59	100	
			W+60	101	
			W+61	102	
			W+62	103	
			W+63	104	
			W+64	105	
			W+65	106	
			W+66	107	
			W+67	108	
		W+68	109		
		W+69	110		
		W+70	111		
		W+71	112		
		W+72	113		
		W+73	114		
		W+74	115		
		W+75	116		
		W+76	117		
		W+77	118		
		W+78	119		
		W+79	120		
W+80	121				
W+81	122				
W+82	123				
W+83	124				
W+84	125				
SUB MID	A-8	01	I		
	A-4	96			
	A-3	97			
	A-2	98			
	A-1	99			
○	×	UHF	14 } 69	IV	
TOTAL 180CH { VHF 124CH { UHF 56CH					
NOTE: TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES. SPECIAL ADAPTERS MAY BE REQUIRED.					

CHANNEL CHART (CA)

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP.	
○	○	VL	02		I
			03		
			04		
			05		
			06		
		VH	07		
			08		
			09		
			10		
			11		
			12		
			13		
			×	○	
B	15				
C	16				
D	17				
E	18				
F	19				
G	20				
H	21				
I	22				
SUPER	J	23			
	K	24			
	L	25			
	M	26			
	N	27			
	O	28			
	P	29			
Q	30				
R	31				
S	32				
T	33				
U	34				
V	35				
W	36				
HYPER	W+1	37	III		
	W+2	38			
	W+3	39			
	W+4	40			
	W+5	41			
	W+6	42			
	W+7	43			
	W+8	44			
	W+9	45			
	W+10	46			
	W+11	47			
	W+12	48			
	W+13	49			
	W+14	50			
	W+15	51			
	W+16	52			
	W+17	53			
	W+18	54			
	W+19	55			
	W+20	56			
W+21	57				
W+22	58				
W+23	59				
W+24	60				
W+25	61				
W+26	62				
W+27	63				
W+28	64				
ULTRA	W+29	65	IV		
	W+30	66			
	W+31	67			
	W+32	68			
	W+33	69			
	W+34	70			

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP.	
×	○	ULTRA	W+35	71	IV
			W+36	72	
			W+37	73	
			W+38	74	
			W+39	75	
			W+40	76	
			W+41	77	
			W+42	78	
			W+43	79	
			W+44	80	
			W+45	81	
			W+46	82	
			W+47	83	
			W+48	84	
			W+49	85	
			W+50	86	
			W+51	87	
			W+52	88	
			W+53	89	
			W+54	90	
			W+55	91	
			W+56	92	
			W+57	93	
			W+58	94	
			W+59	100	
			W+60	101	
			W+61	102	
			W+62	103	
			W+63	104	
			W+64	105	
			W+65	106	
			W+66	107	
			W+67	108	
			W+68	109	
			W+69	110	
			W+70	111	
			W+71	112	
			W+72	113	
			W+73	114	
			W+74	115	
			W+75	116	
			W+76	117	
			W+77	118	
			W+78	119	
			W+79	120	
			W+80	121	
			W+81	122	
			W+82	123	
			W+83	124	
			W+84	125	
		SUB MID	A-8	01	I
			A-4	96	
			A-3	97	II
			A-2	98	
			A-1	99	
○	×	UHF	14	69	IV
TOTAL 180CH					
{ VHF 124CH					
{ UHF 56CH					
NOTE:					
TO RECEIVE THE SUBSCRIPTION OR					
PREMIUM PROGRAMMING FROM CERTAIN					
CABLE COMPANIES.					
SPECIAL ADAPTERS MAY BE REQUIRED.					

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