

# JVC

# SCHEMATIC DIAGRAMS

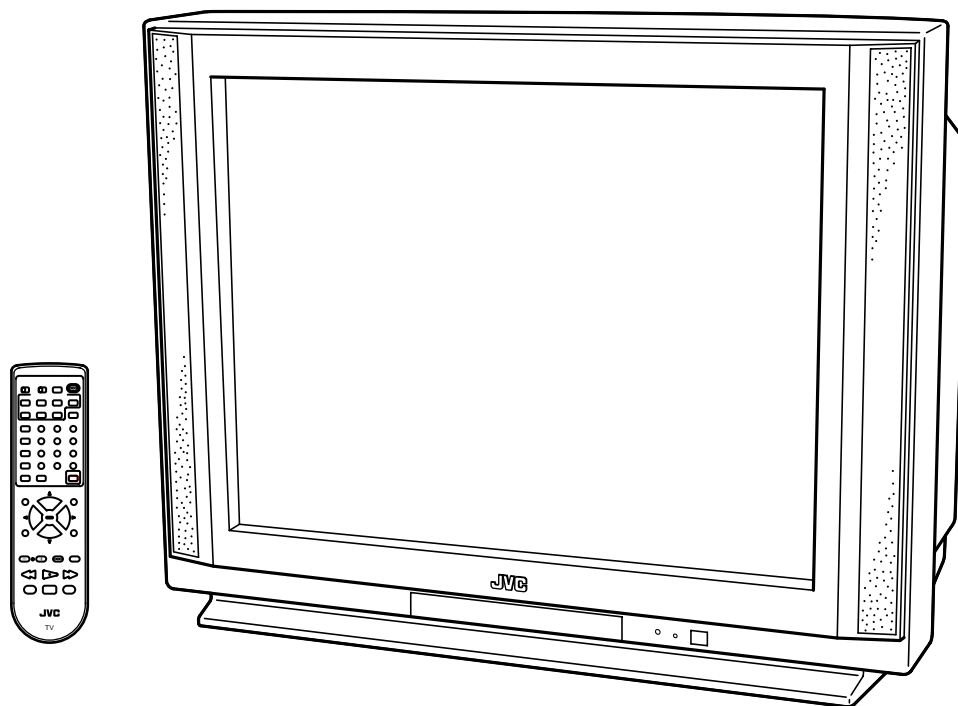
## COLOR TELEVISION

### AV-36P902<sub>TY</sub>

BASIC CHASSIS

SB II

CD-ROM No.SML200110



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### CHANNEL CHART (CA)

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP.	
○	○	VL	02		I
			03		
			04		
			05		
			06		
			07		
		VH	08		II
			09		
			10		
			11		
			12		
			13		
			MID	A	
15					
16					
17					
18					
19					
20					
21					
22					
J	23	II			
	24				
	25				
	26				
	27				
	28				
	SUPER			P	II
				Q	
				30	
31					
32					
33					
34					
35					
36					
×	○	W	III		
				37	
				38	
				39	
				40	
				41	
				42	
				43	
				44	
				45	
				46	
				47	
		48			
		49			
		50			
		51			
		52			
		53			
		54			
		55			
		56			
		57			
		58			
		59			
		60			
		61			
		62			
		63			
64					
HYPER	W+1	III			
	W+2				
	W+3				
	W+4				
	W+5				
	W+6				
ULTRA	W+7	IV			
	W+8				
	W+9				
	W+10				
	W+11				
	W+12				
	W+13				
	W+14				
	W+15				
	W+16				

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	○	ULTRA	W+45	81	IV
			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	○	ULTRA	W+55	91	IV
			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	○	ULTRA	W+65	106	IV
			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	○	ULTRA	W+75	116	IV
			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	○	ULTRA	A-8	01	I
			A-4	96	
			A-3	97	
			A-2	98	
			A-1	99	
○	×	UHF	14	IV	
			69		
TOTAL 180CH { VHF 124CH UHF 56CH					
NOTE: TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES. SPECIAL ADAPTERS MAY BE REQUIRED.					

## STANDARD CIRCUIT DIAGRAM

### NOTE ON USING CIRCUIT DIAGRAMS

#### 1. SAFETY

The components identified by the  $\Delta$  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 $\Omega$ /V
- (4) Oscilloscope sweeping time : H  $\Rightarrow$  20 $\mu$ 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 : [  $\Omega$  ]
- K : [K  $\Omega$  ]
- M : [M  $\Omega$  ]

● 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 : Unflammable 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 : [ $\mu$ 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 [ $\mu$ 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 : [ $\mu$ 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

##### (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 : ( $\perp$ ) side GND and the ISOLATED(NEUTRAL) : ( $\perp$ ) 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 ( 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.

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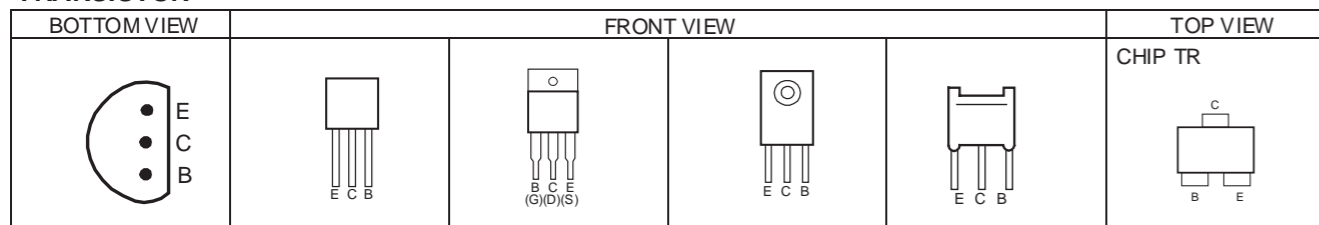
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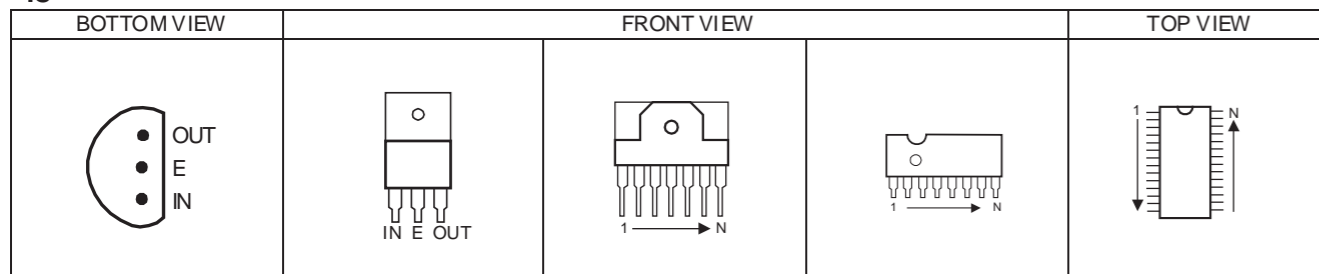
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## SEMICONDUCTOR SHAPES

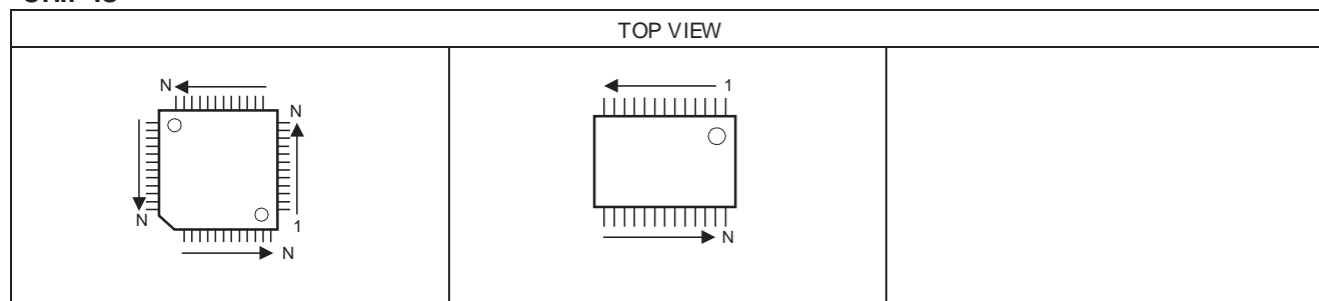
### TRANSISTOR



### IC



### CHIP IC

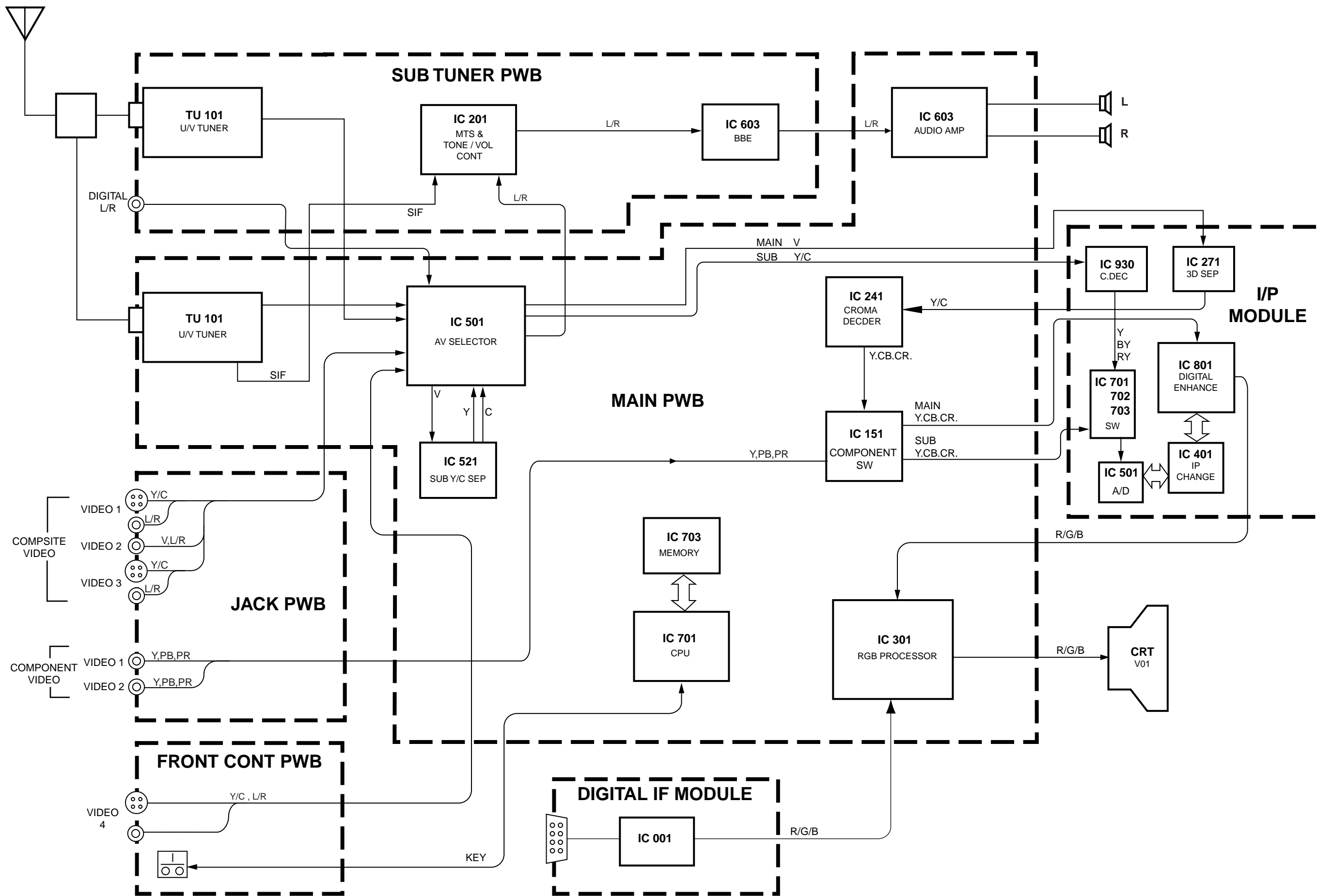


## CHANNEL CHART ( ) MO

DVBE		SANB	CHANNEL		T) NER SANB				
TI	CATI		REAL	BMU					
○	○	VL	02	I					
			03						
			04						
			05						
			06						
			07						
	○	VH	08	II					
			09						
			10						
			11						
			12						
			13						
			x		○	MID	A	14	I
B	15								
C	16								
D	17								
E	18								
F	19								
G	20								
H	21								
I	22								
○	UPSER	J		23		II			
		K		24					
		L		25					
		M		26					
		N		27					
		O		28					
		S		29					
		Q		30					
		R		31					
		U		32					
		T		33					
		P		34					
		V		35					
		W		36					
		○		○	PLTRA		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								
○	○					HYSER	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								
○	○	PLTRA	W+29	65					
			W+30	66					
			W+31	67					
			W+32	68					
			W+33	69					
			W+34	70					

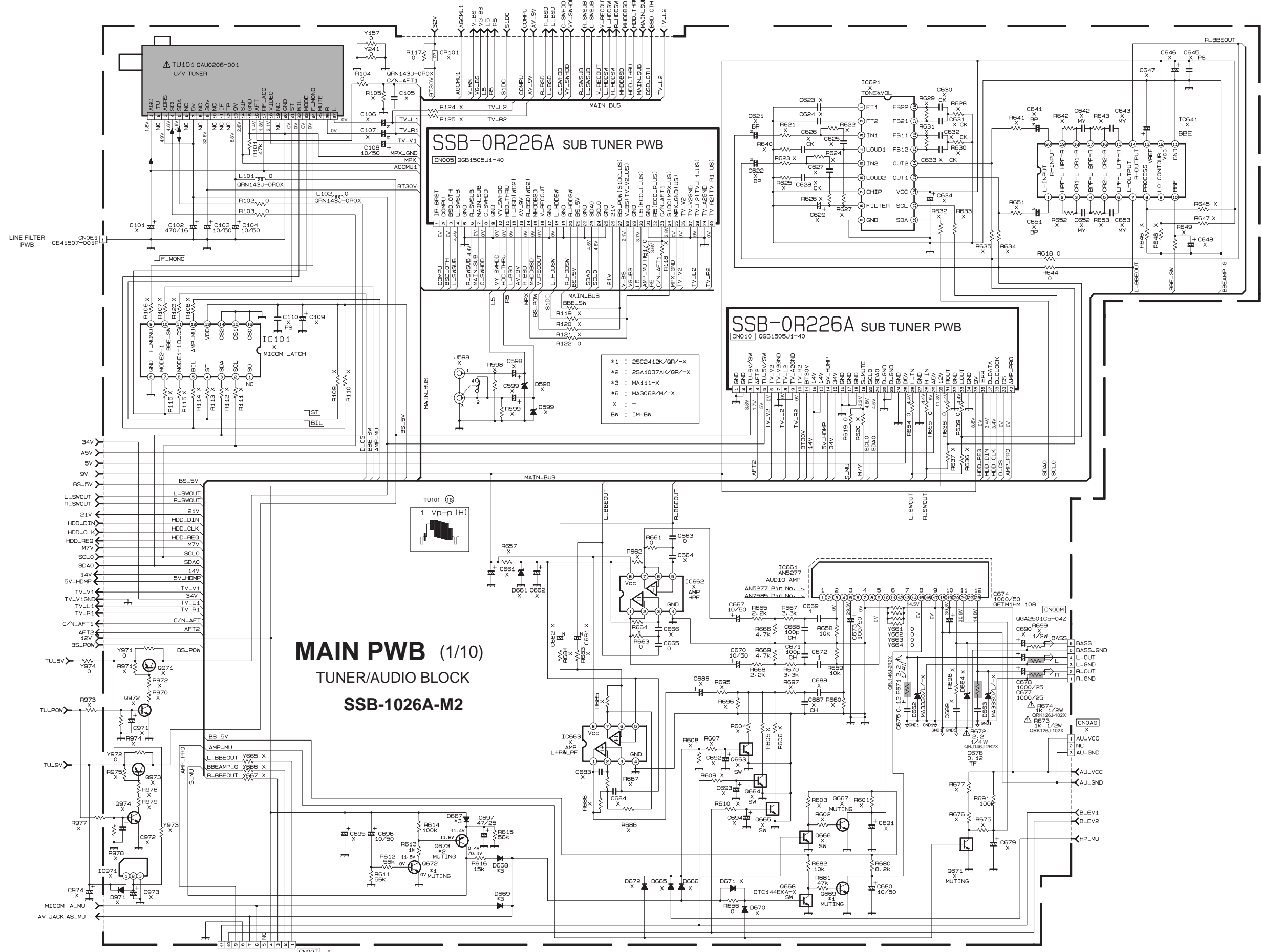
DVBE		SANB	CHANNEL		T) NER SANB				
TI	CATI		REAL	BMU					
x	○	PLTRA	W+35	71	III				
			W+36	72					
			W+37	73					
			W+38	74					
			W+39	75					
			W+40	76					
			W+41	77					
			W+42	78					
			W+43	79					
			W+44	80					
			W+45	81					
			W+46	82					
			W+47	83					
			W+48	84					
			W+49	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					
			○	x		UPB MID	A-8	01	I
							A-4	96	
							A-3	97	
							A-2	98	
							A-1	99	
			○	x		PHF	14 } 69	III	
			TOTAL 180CH { VHF 124CH PHF 56CH						
			NOTE: TO RECEIVE THE UPBUCRISTION OR SREMIPM SROGRAMMING FROM CERTAIN CABLE COMSANIEU. USECIAL ADASTERU MAY BE REQUIRED.						

# BLOCK DIAGRAM

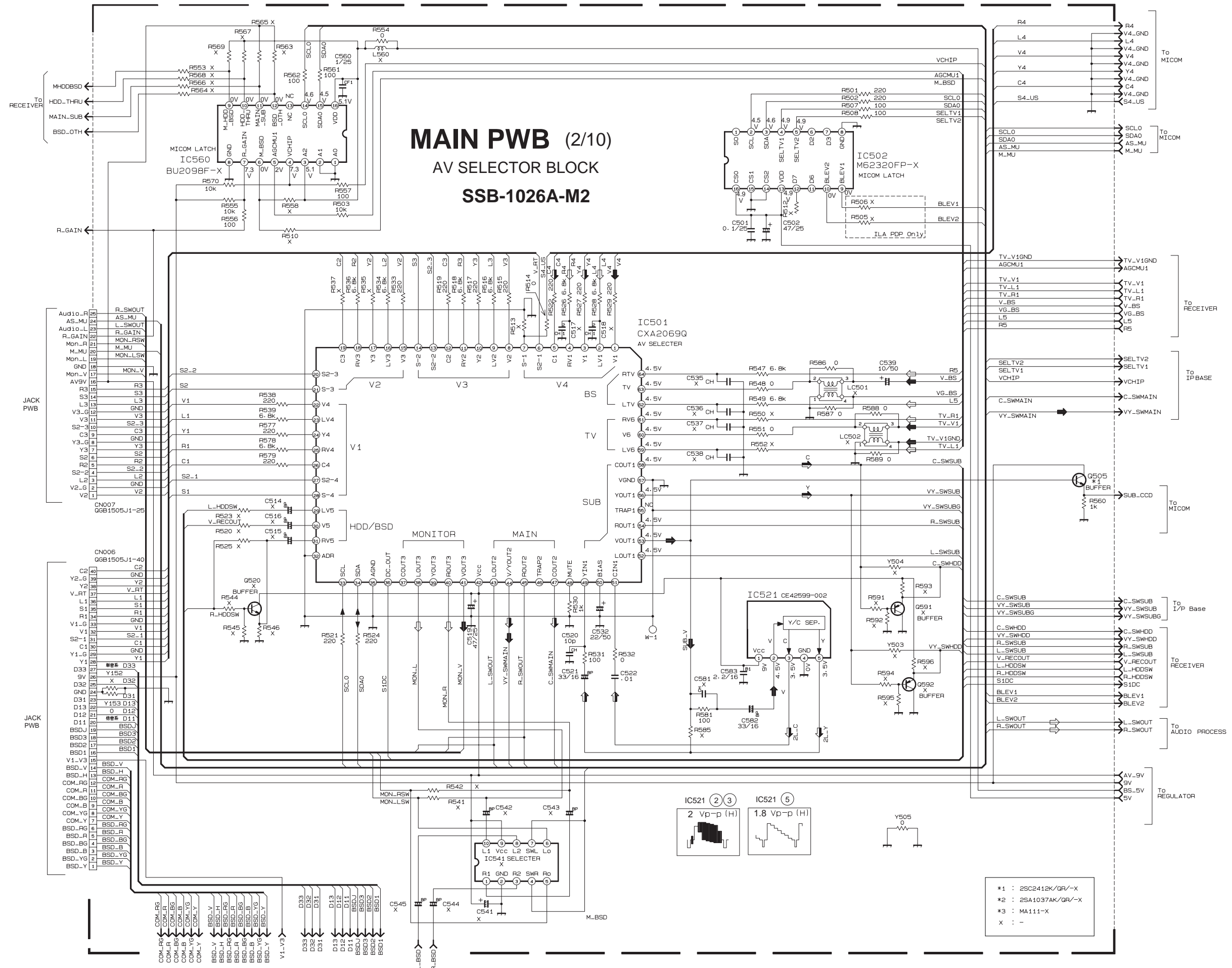


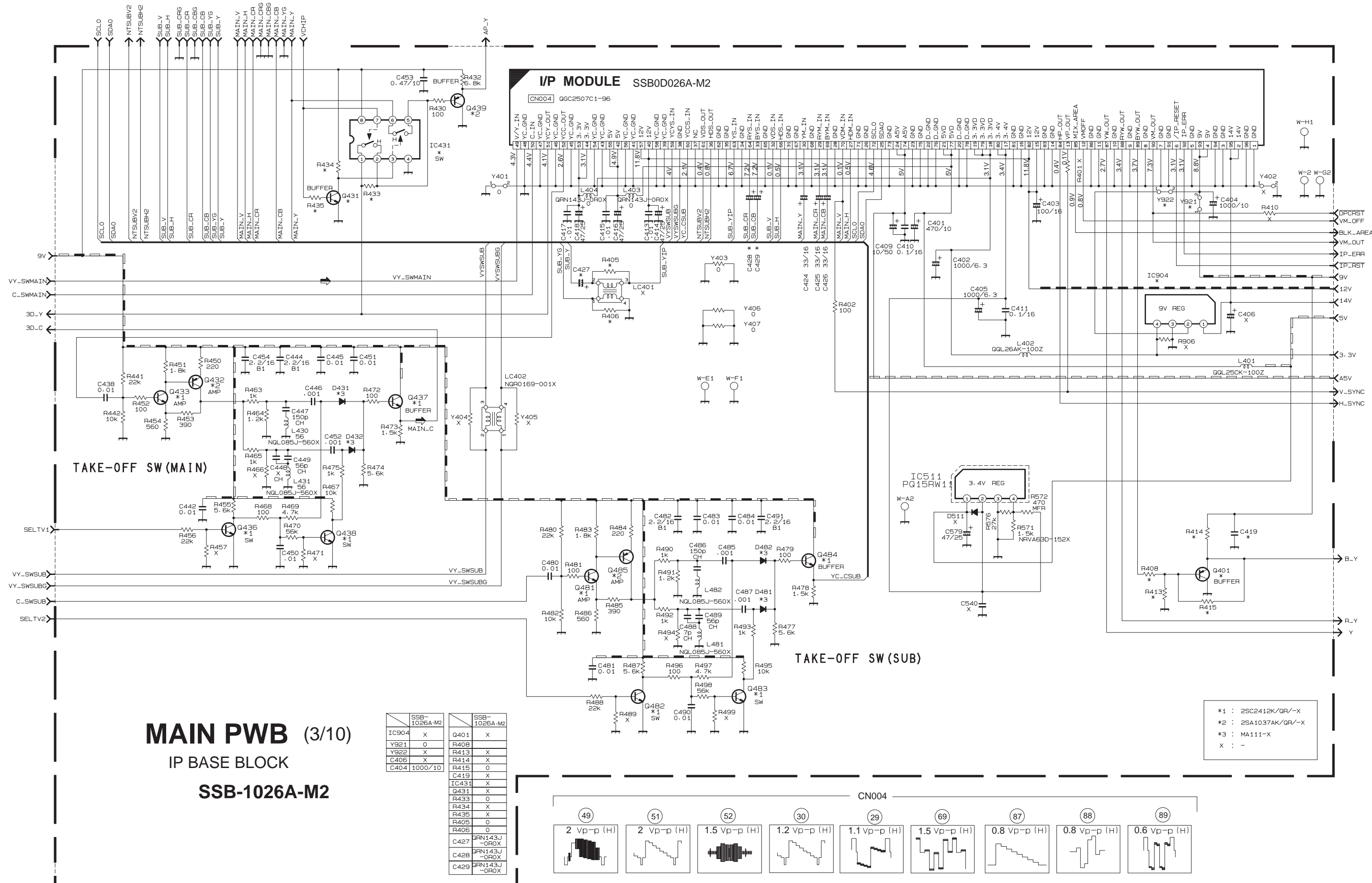


CIRCUIT DIAGRAMS MAIN PWB CIRCUIT DIAGRAMS



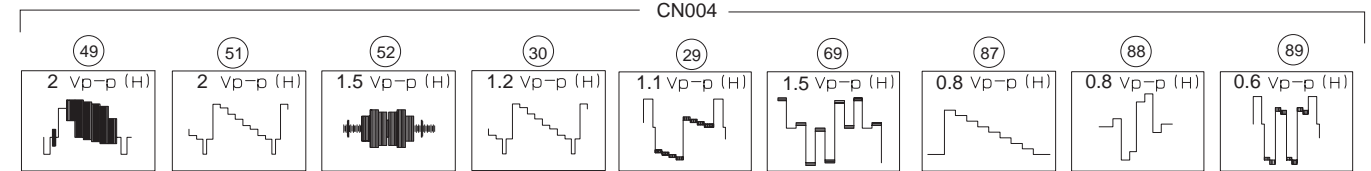
**MAIN PWB (1/10)**  
**TUNER/AUDIO BLOCK**  
**SSB-1026A-M2**

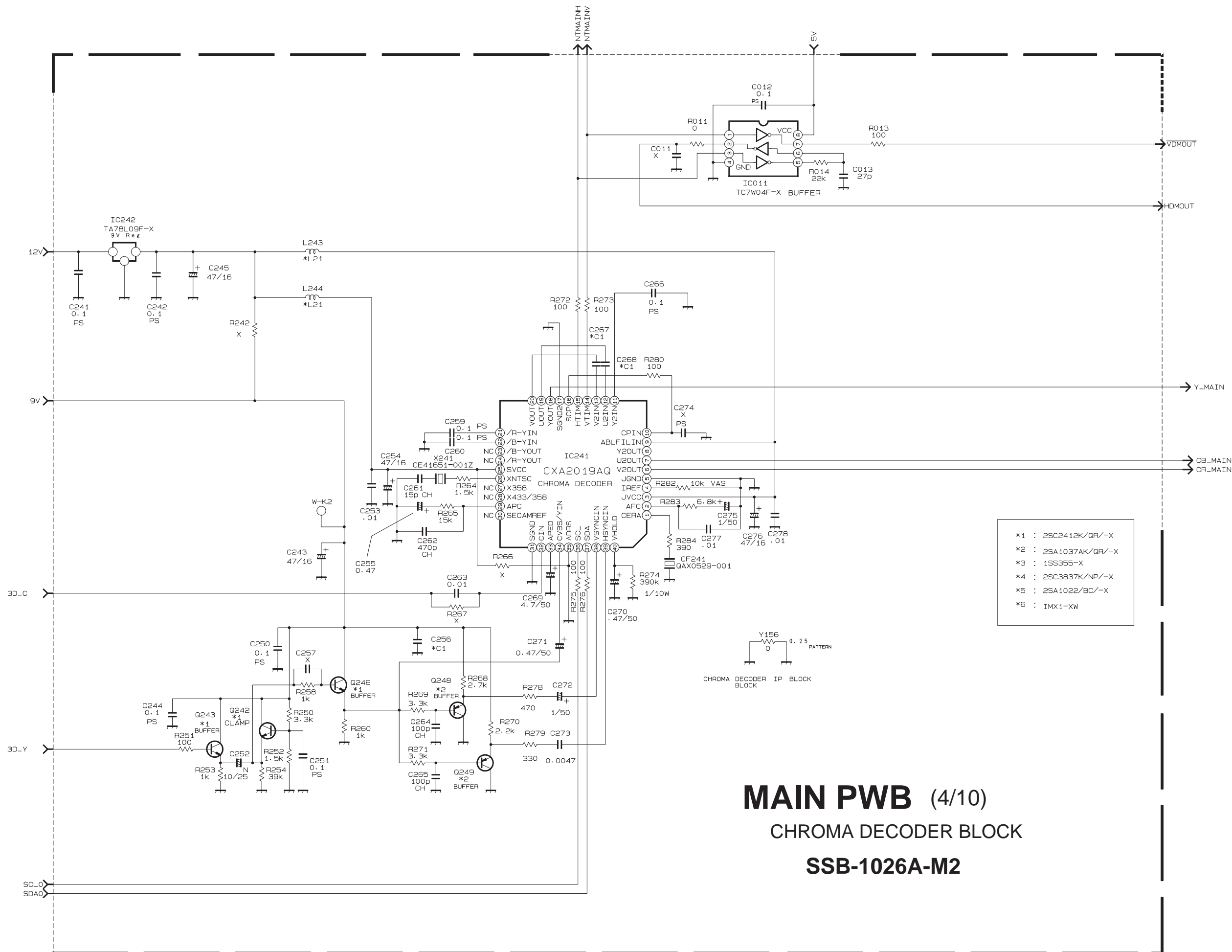




**MAIN PWB (3/10)**  
**IP BASE BLOCK**  
**SSB-1026A-M2**

SSB-1026A-M2	SSB-1026A-M2
IC904	X
Y921	0
Y922	X
C405	X
C404	1000/10
Q401	X
R408	X
R413	X
R414	X
R415	0
C419	X
IC431	X
Q431	X
R433	0
R434	X
R435	X
R405	0
R406	0
C427	GRN143J-OROX
C428	GRN143J-OROX
C429	GRN143J-OROX





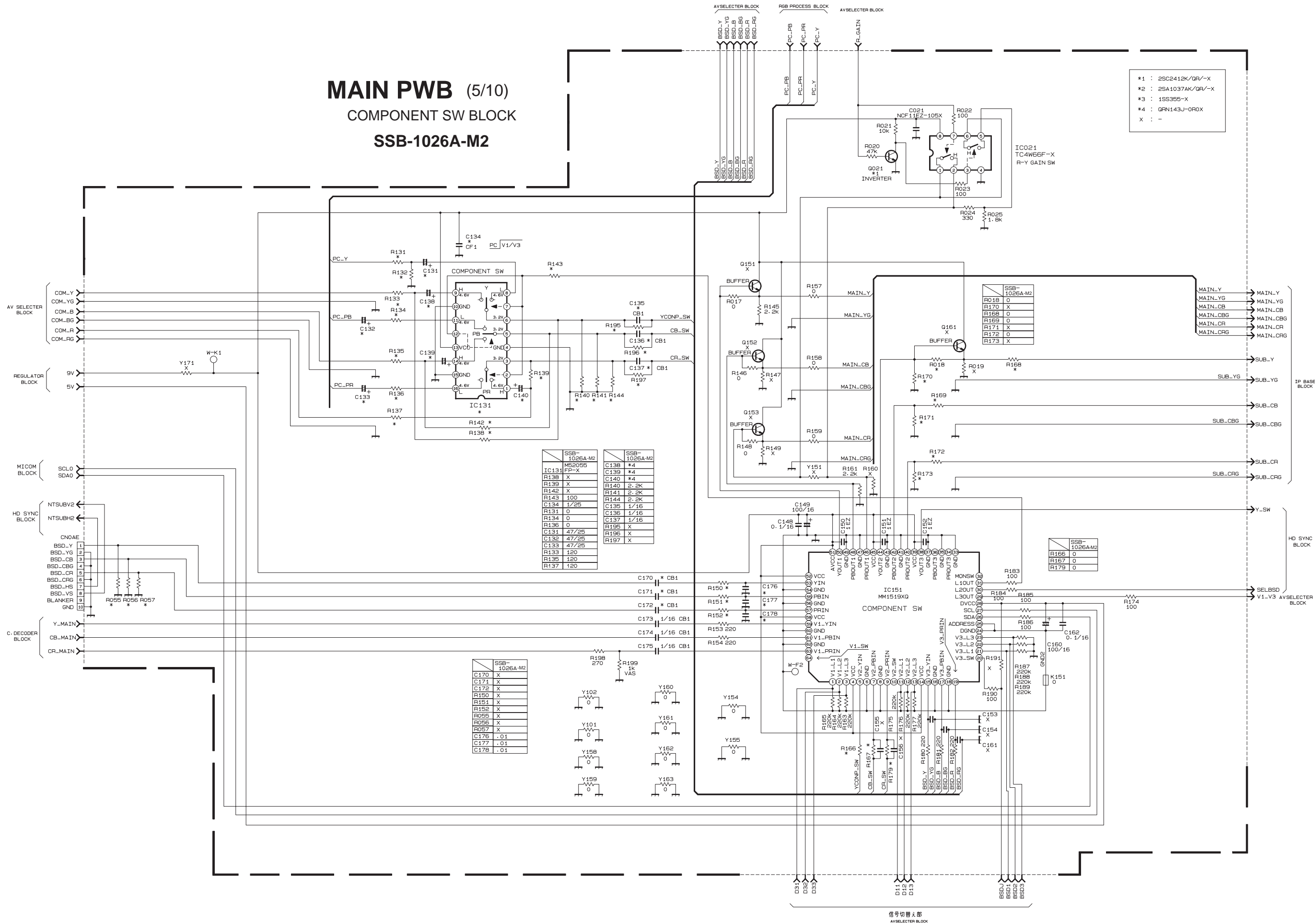
**MAIN PWB (4/10)**  
**CHROMA DECODER BLOCK**  
**SSB-1026A-M2**

# MAIN PWB (5/10)

## COMPONENT SW BLOCK

### SSB-1026A-M2

- \*1 : 2SC2412K/GR/-X
- \*2 : 2SA1037AK/GR/-X
- \*3 : 1SS355-X
- \*4 : GRN143J-OROX
- X : -



SSB-1026A-M2		SSB-1026A-M2	
IC131	M52055	C138	*4
R138	X	C139	*4
R139	X	C140	*4
R142	X	R140	2.2K
R143	100	R141	2.2K
C134	1/25	R144	2.2K
R131	0	C135	1/16
R134	0	C136	1/16
R136	0	C137	1/16
R136	0	R195	X
C131	47/25	R196	X
C132	47/25	R197	X
C133	47/25		
R133	120		
R135	120		
R137	120		

SSB-1026A-M2	
C170	X
C171	X
C172	X
R150	X
R151	X
R152	X
R055	X
R056	X
R057	X
C176	.01
C177	.01
C178	.01

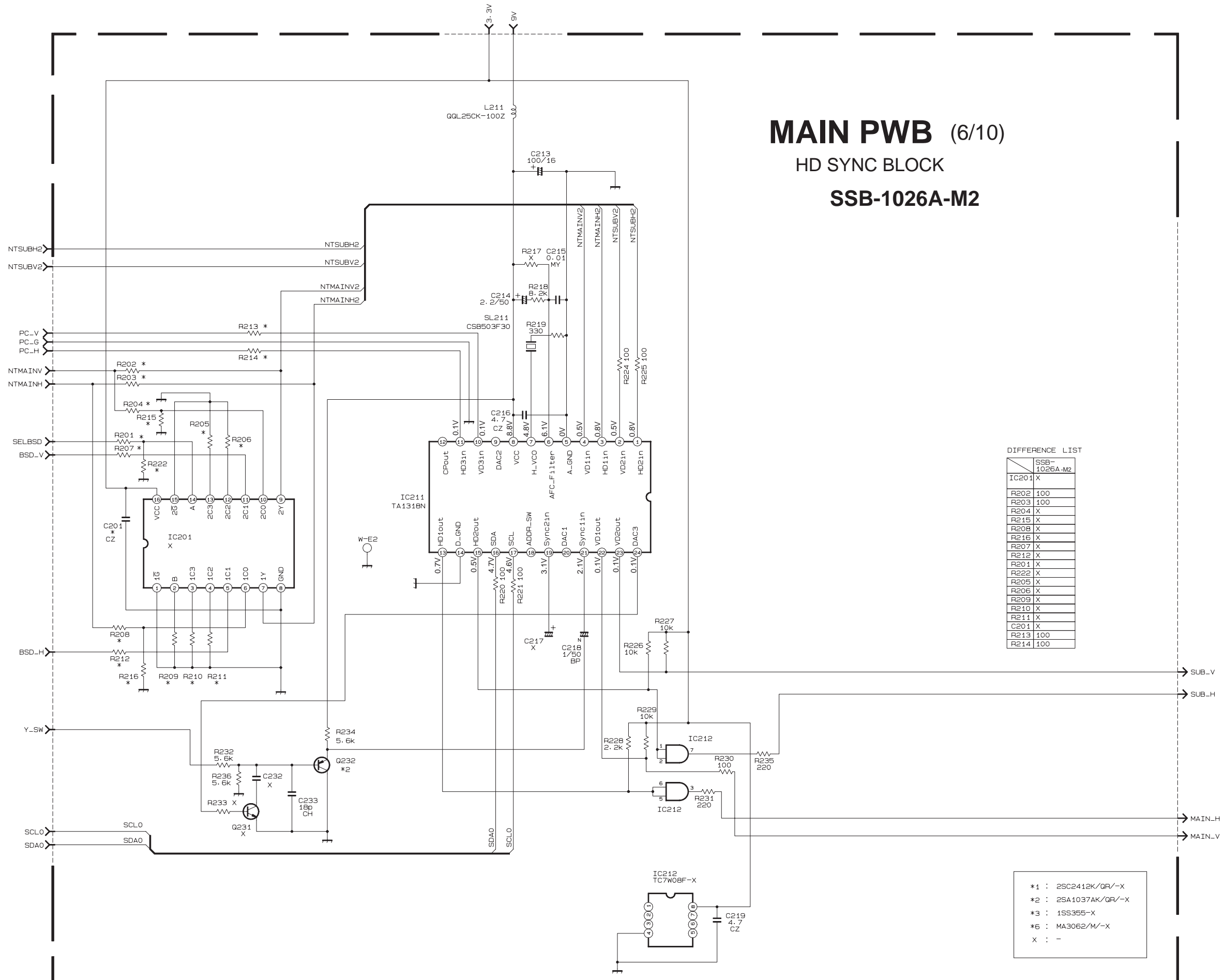
SSB-1026A-M2	
R018	0
R170	X
R168	0
R169	0
R171	X
R172	0
R173	X

SSB-1026A-M2	
R166	0
R167	0
R179	0

# MAIN PWB (6/10)

## HD SYNC BLOCK

### SSB-1026A-M2

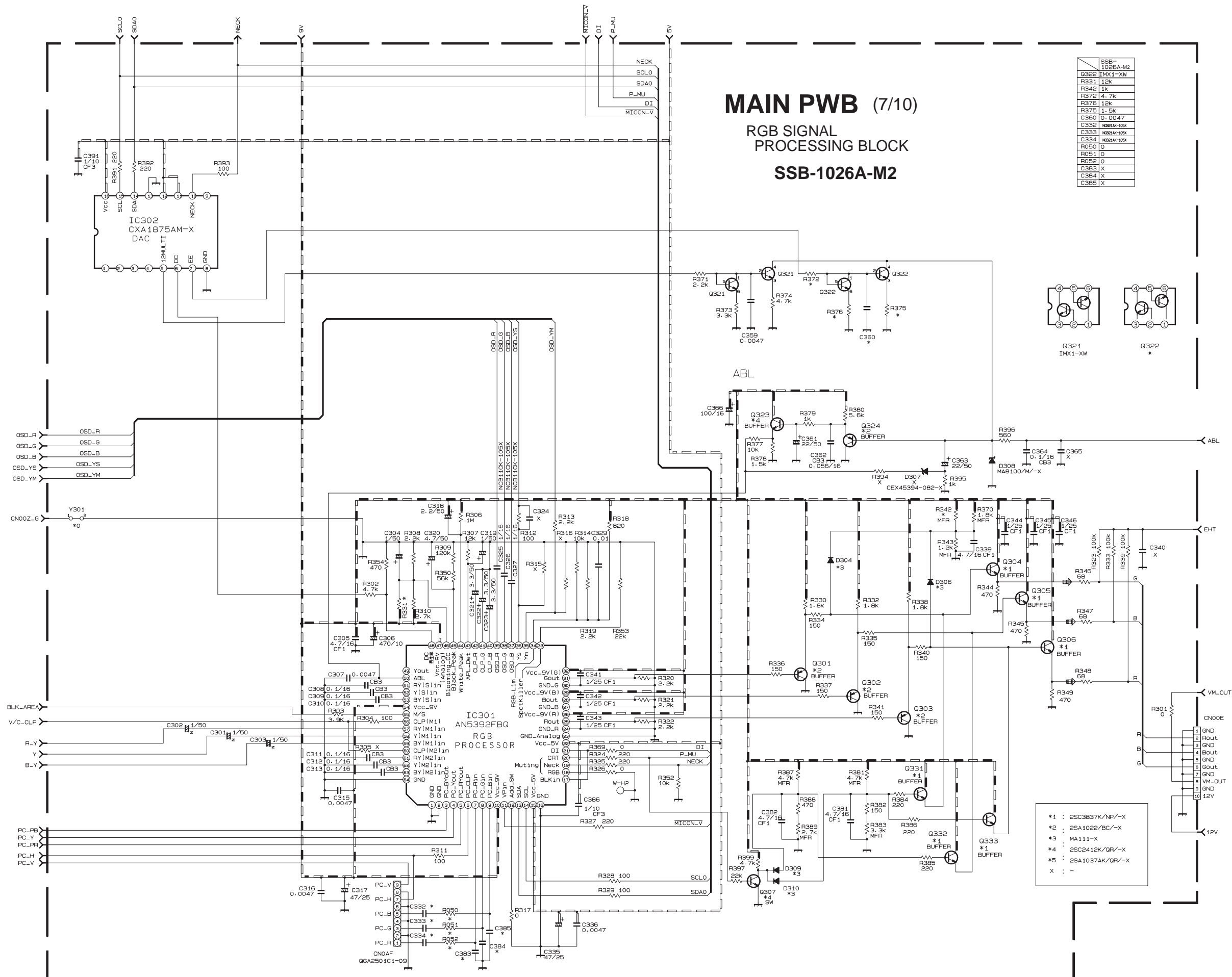


#### DIFFERENCE LIST

	SSB-1026A-M2
IC201	X
R202	100
R203	100
R204	X
R215	X
R208	X
R216	X
R207	X
R212	X
R201	X
R222	X
R205	X
R206	X
R209	X
R210	X
R211	X
C201	X
R213	100
R214	100

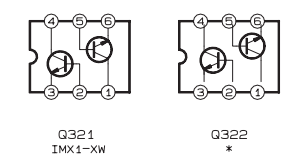
- \*1 : 2SC2412K/QR/-X
- \*2 : 2SA1037AK/QR/-X
- \*3 : 1SS355-X
- \*6 : MA3062/M/-X
- X : -





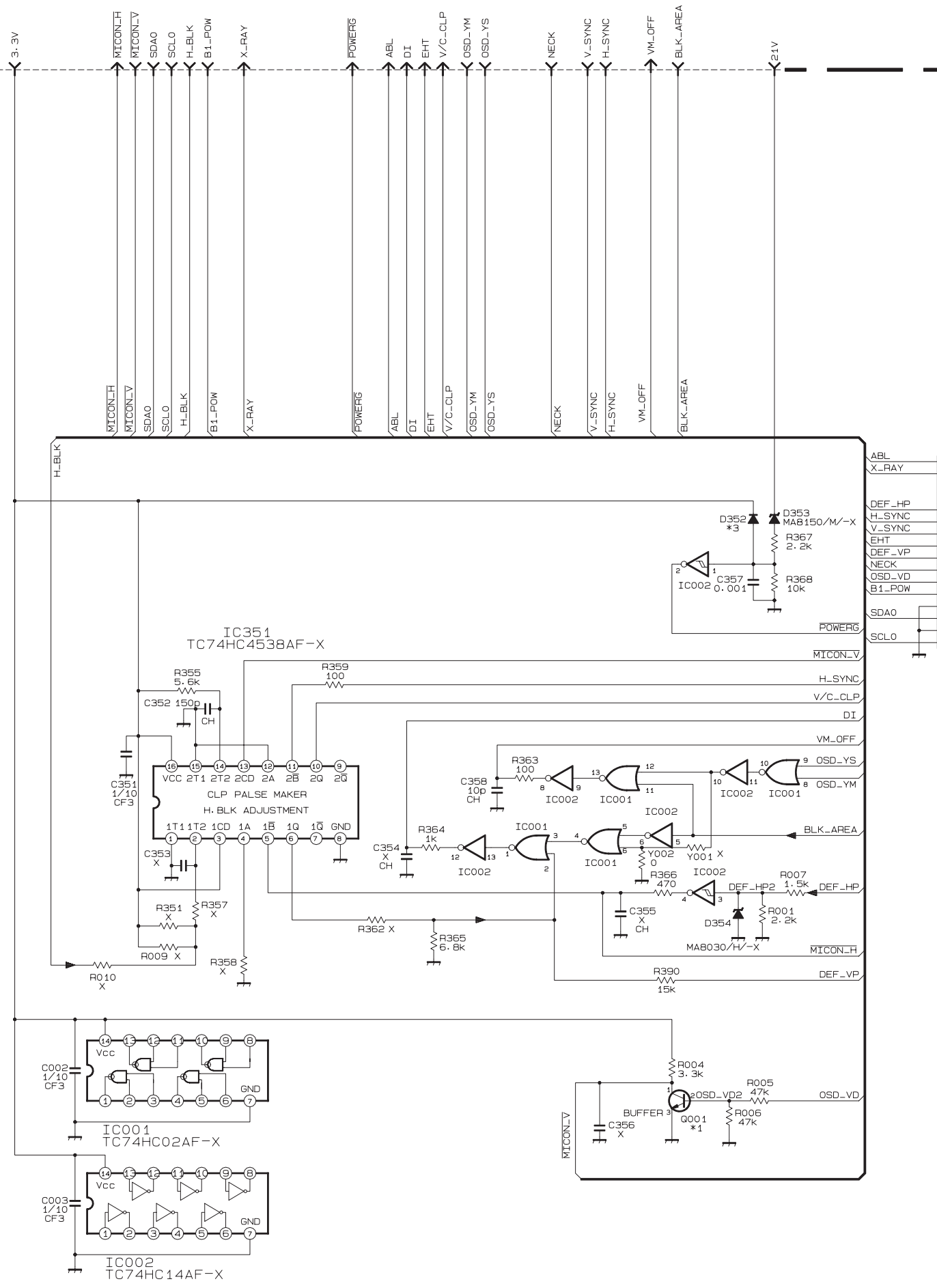
**MAIN PWB (7/10)**  
**RGB SIGNAL**  
**PROCESSING BLOCK**  
**SSB-1026A-M2**

SSB-1026A-M2
Q322 IMX1-XW
R331 12k
R342 1k
R372 4.7k
R376 12k
R375 1.5k
C360 0.0047
C332 N8201AK-105K
C333 N8201AK-105K
C334 N8201AK-105K
R050 0
R051 0
R052 0
C383 X
C384 X
C385 X



- \*1 : 2SC3837K/NP/-X
- \*2 : 2SA1022/BC/-X
- \*3 : MA111-X
- \*4 : 2SC2412K/GR/-X
- \*5 : 2SA1037AK/GR/-X
- X : -

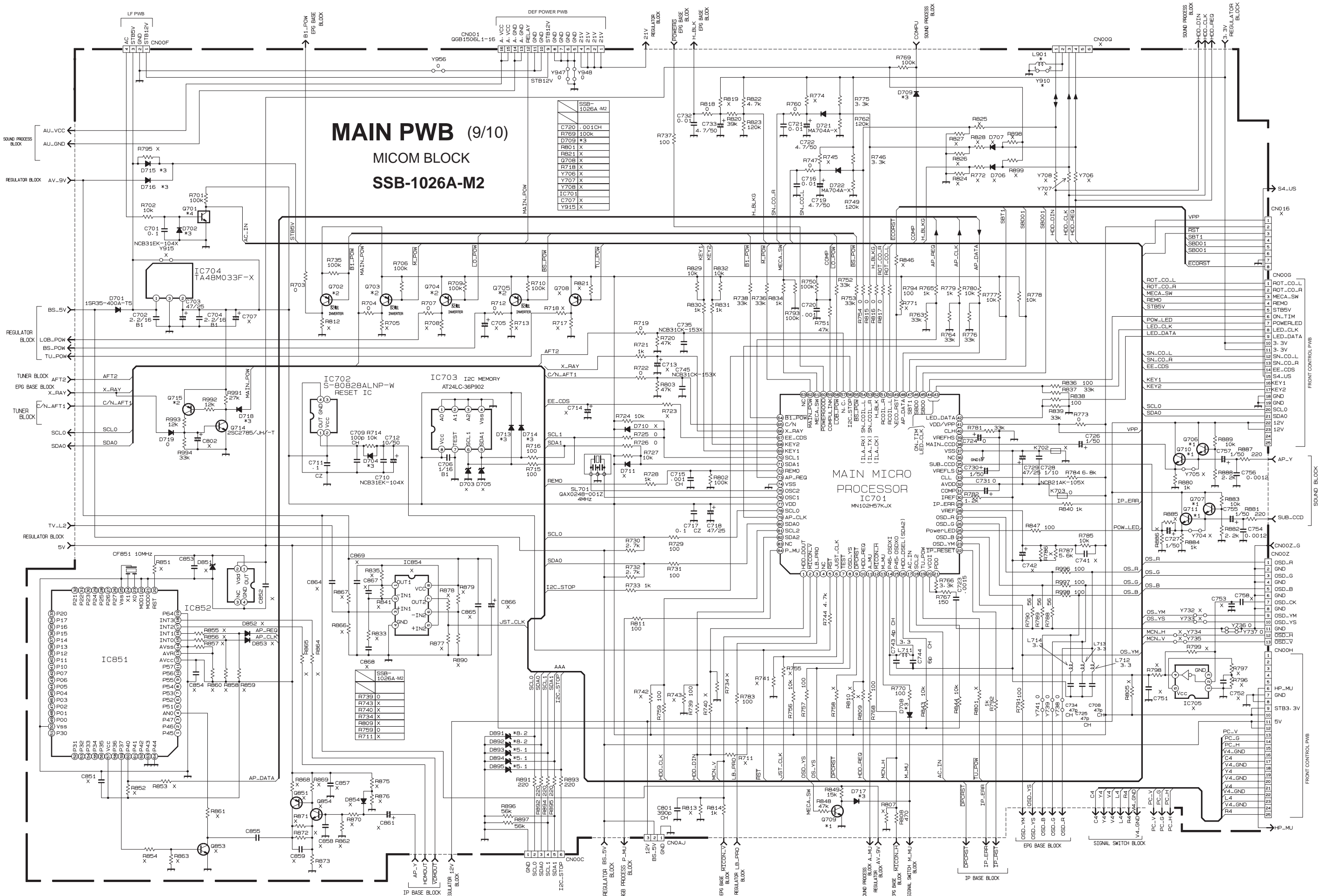
**MAIN PWB (8/10)**  
**BLK BLOCK**  
**SSB-1026A-M2**



1	ABL	ABL
2	X_RAY	X-RAY
3		DEF_RST
4		NC
5	DEF_HP	DEF_HP
6	H_SYNC	H_SYNC
7	V_SYNC	V_SYNC
8	EHT	EHT (DC)
9	DEF_VP	DEF_VP
10	NECK	NECK
11	OSD_VD	OSD_VD
12	B1_POW	B1_POW
13	SDA0	SDA0
14	GND	GND
15	GND	GND
16	SCL0	SCL0

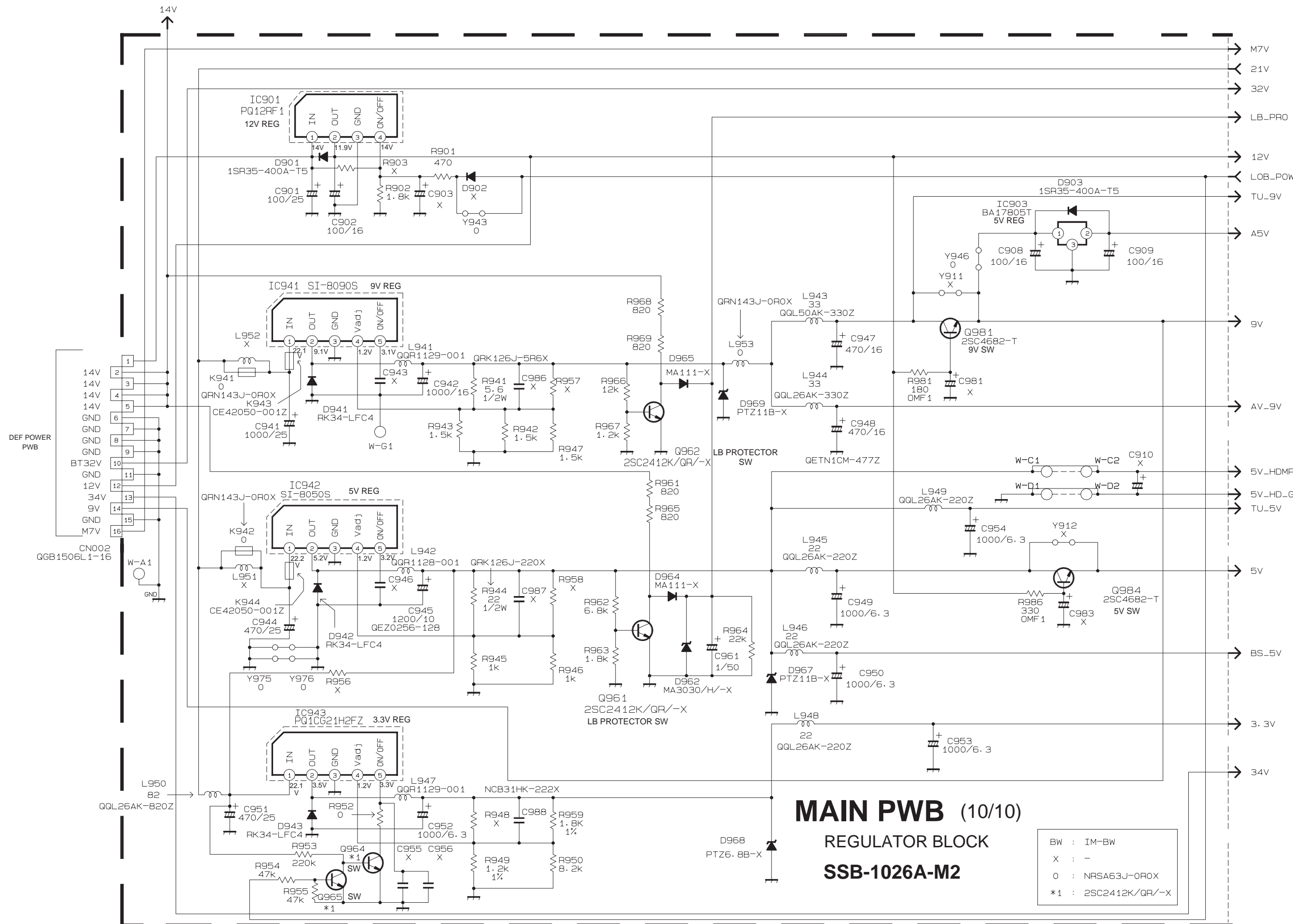
CN003  
QGB1506L1-16

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



**MAIN PWB (9/10)**  
**MICOM BLOCK**  
**SSB-1026A-M2**

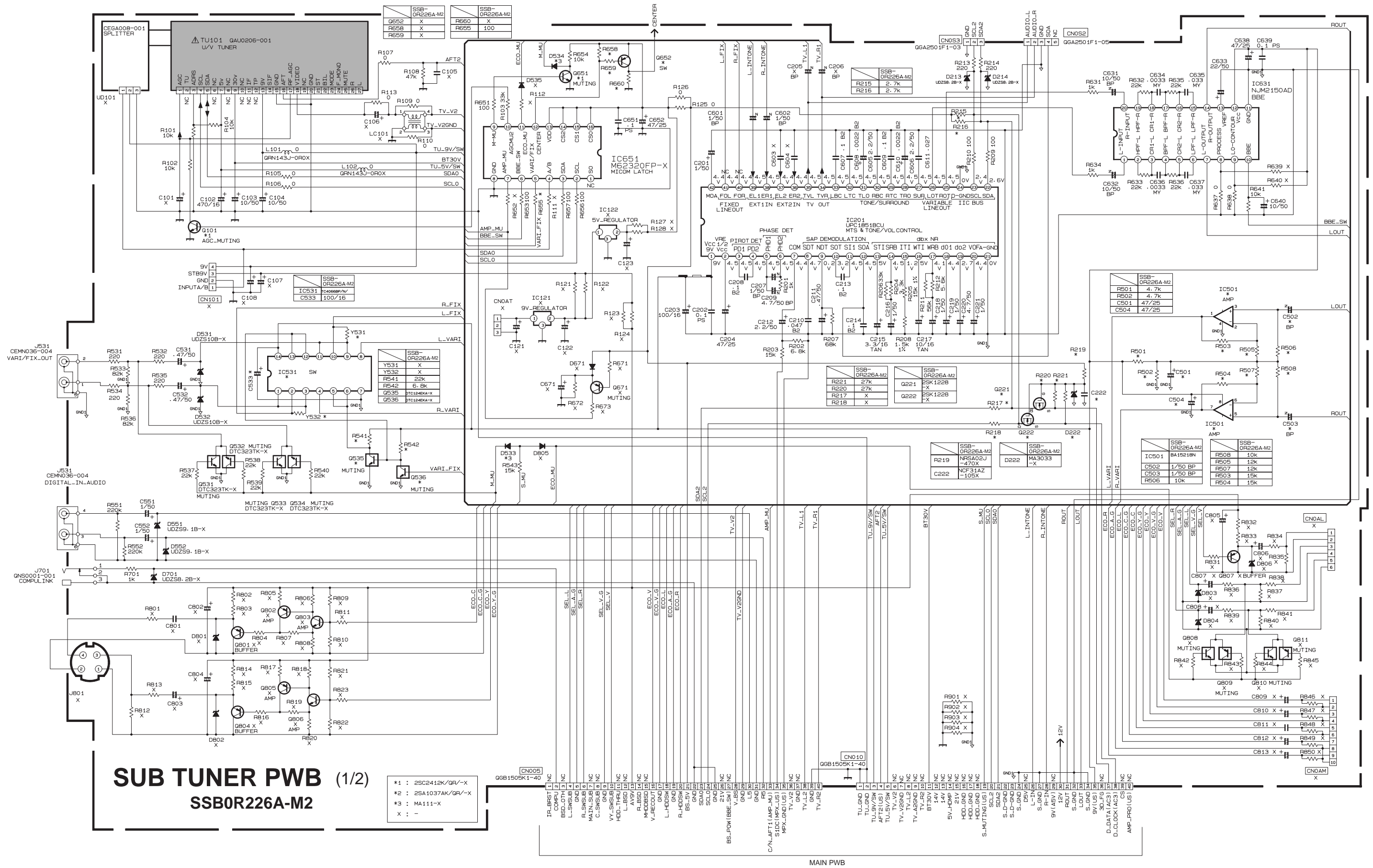
**MAIN MICRO**  
**PROCESSOR**  
**IC701**  
**MN102H57KJX**



**MAIN PWB (10/10)**  
**REGULATOR BLOCK**  
**SSB-1026A-M2**

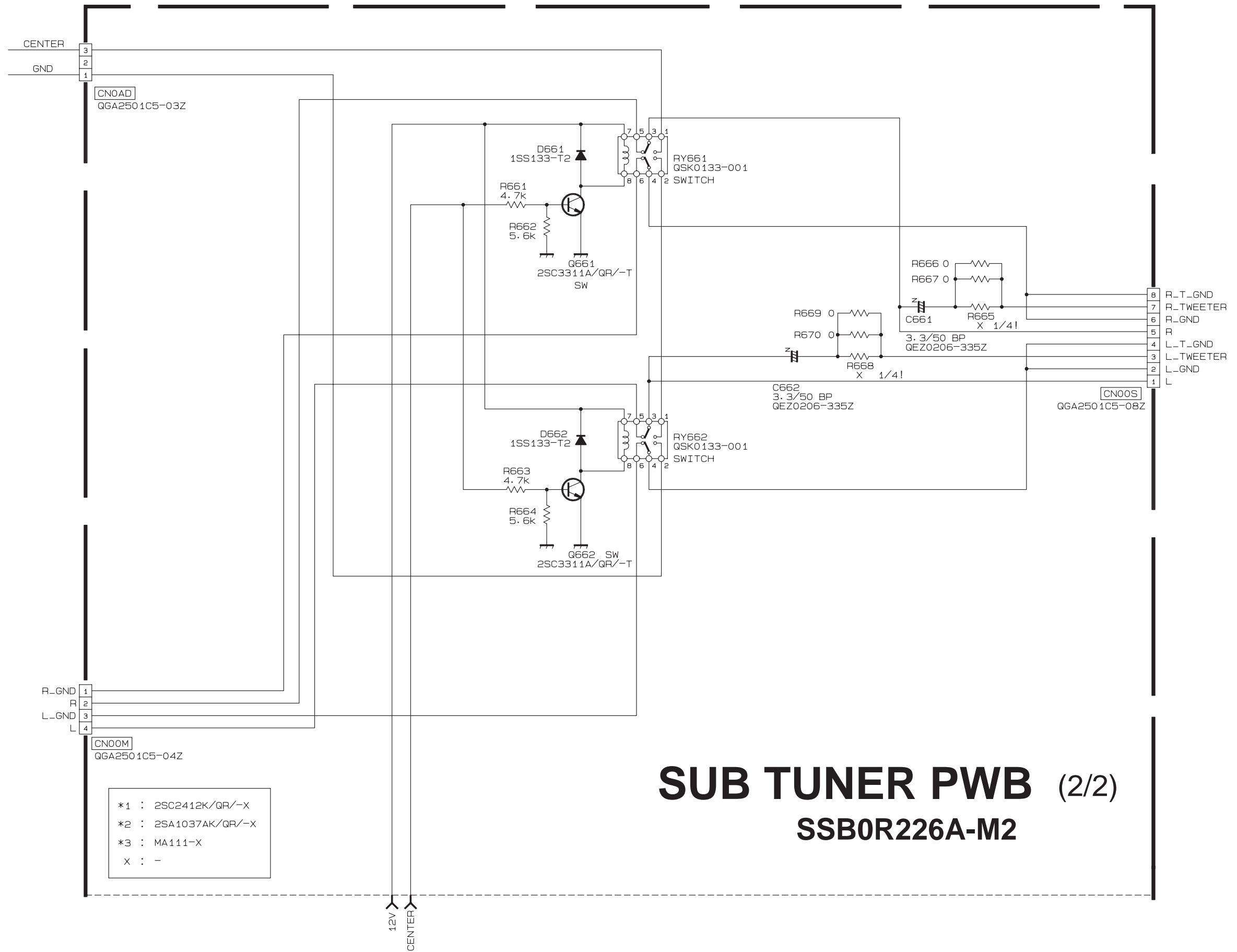
BW : IM-BW  
 X : -  
 0 : NPSA63J-OROX  
 \*1 : 2SC2412K/QR/-X

SUB TUNER (RECEIVER) PWB CIRCUIT DIAGRAMS



SUB TUNER PWB (1/2) SSBOR226A-M2





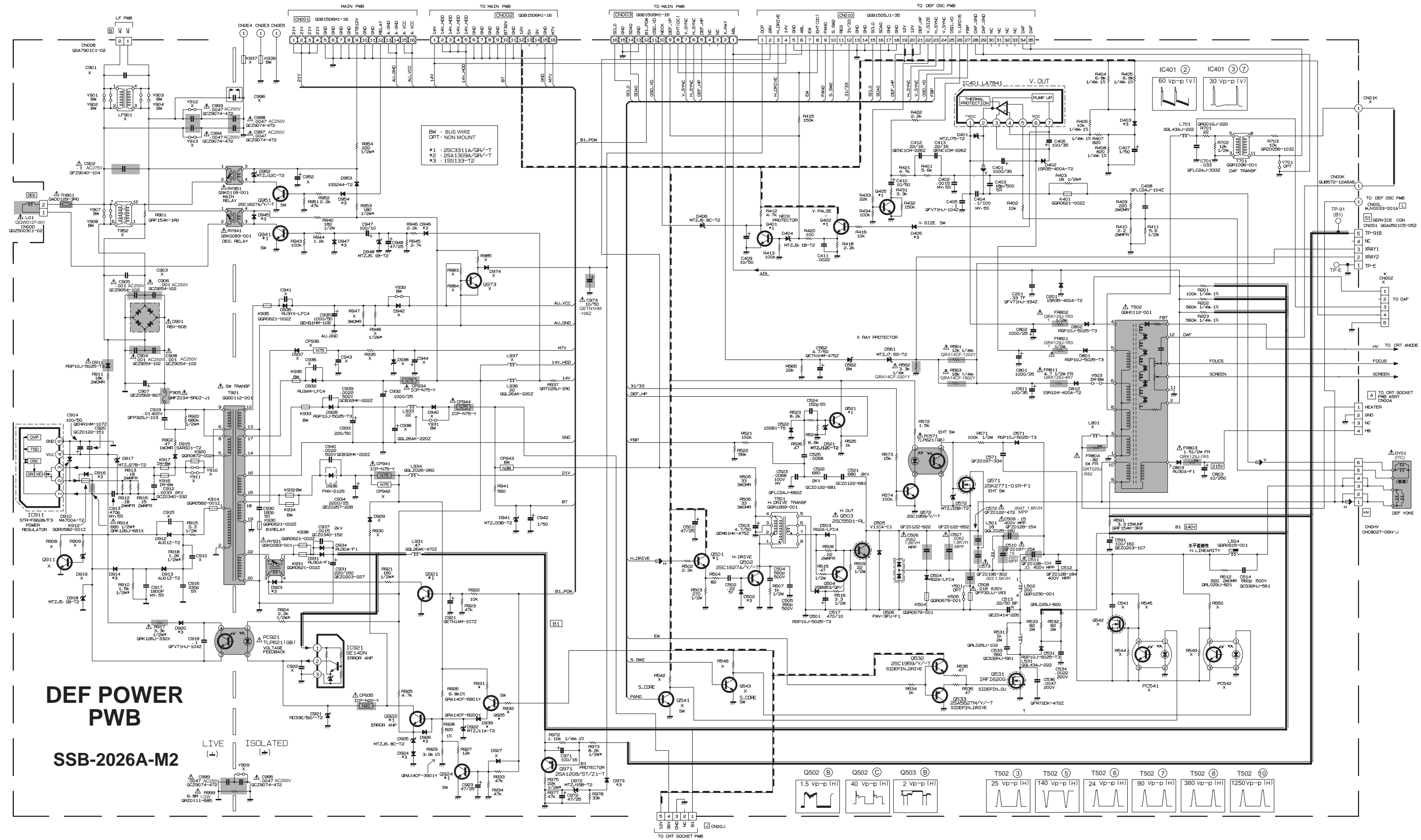
# SUB TUNER PWB (2/2)

## SSB0R226A-M2

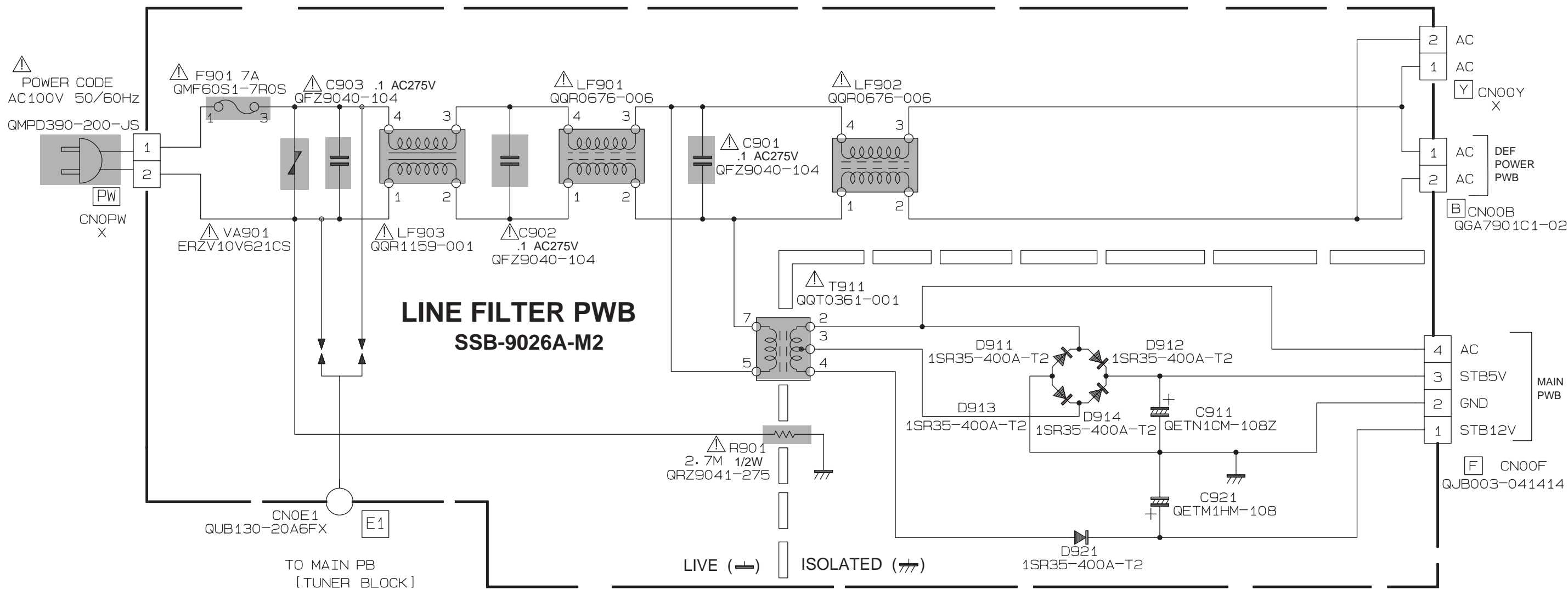
- \*1 : 2SC2412K/QR/-X
- \*2 : 2SA1037AK/QR/-X
- \*3 : MA111-X
- X : -



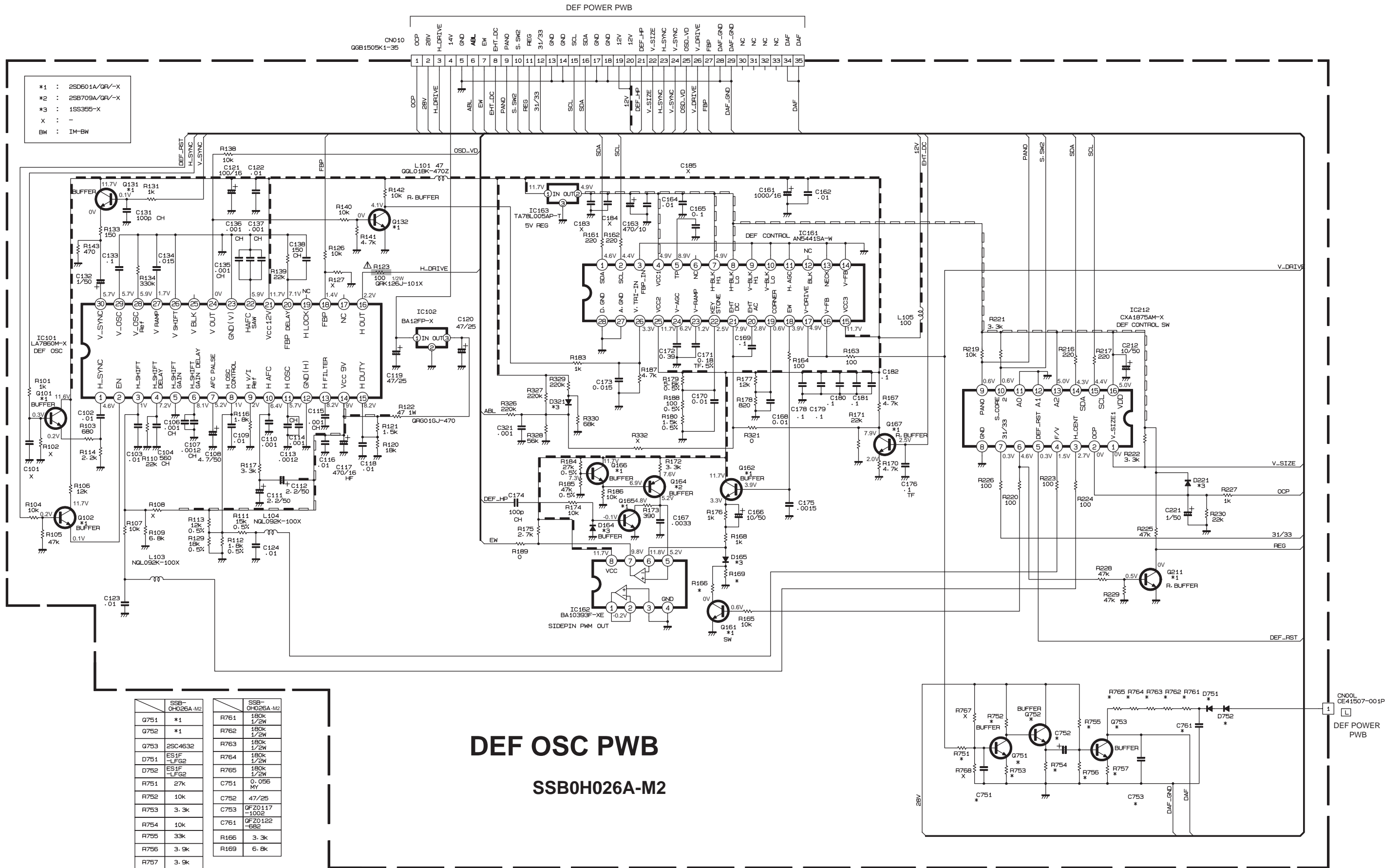
DEF POWER PWB CIRCUIT DIAGRAMS



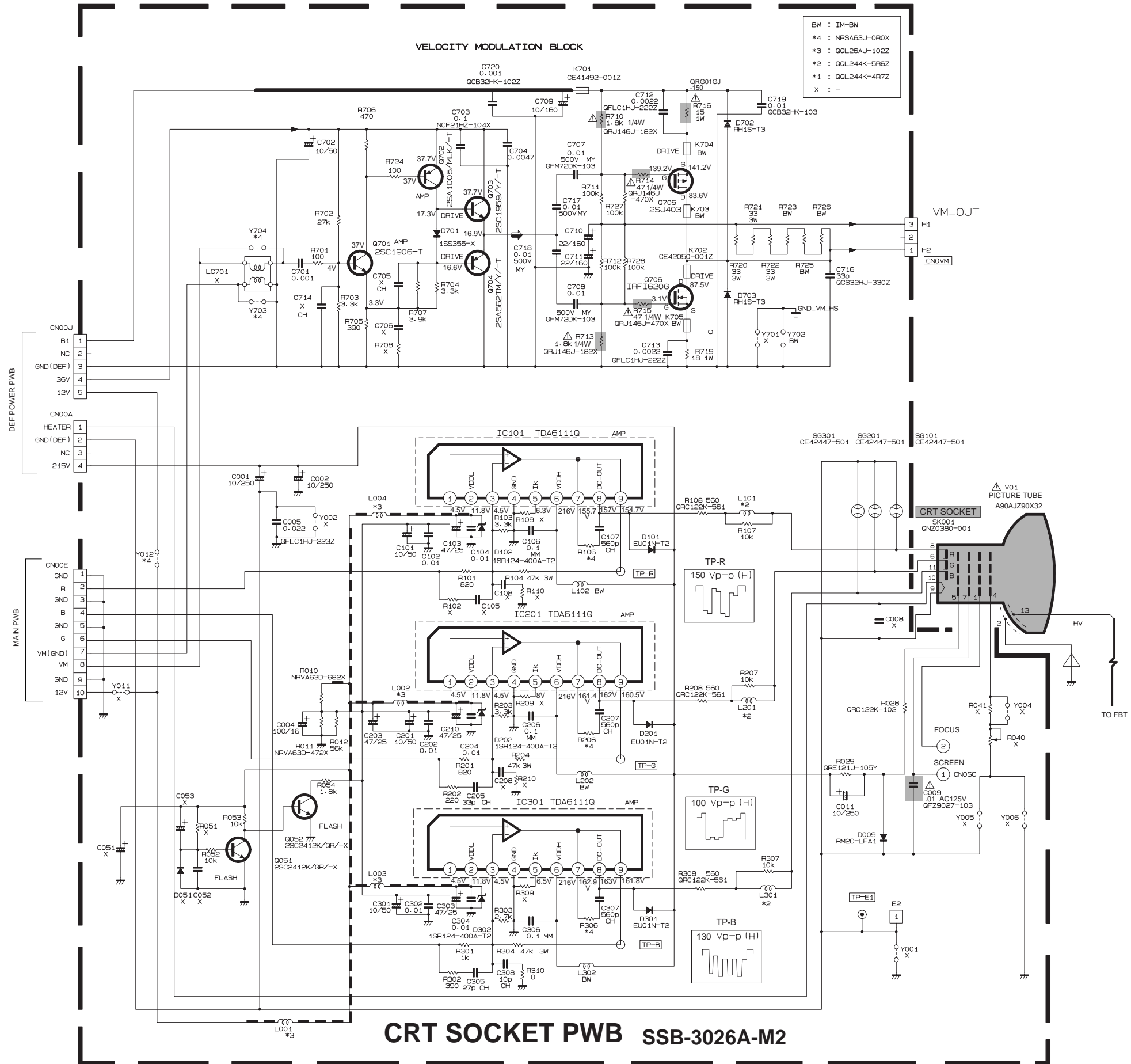
LINE FILTER PWB CIRCUIT DIAGRAMS



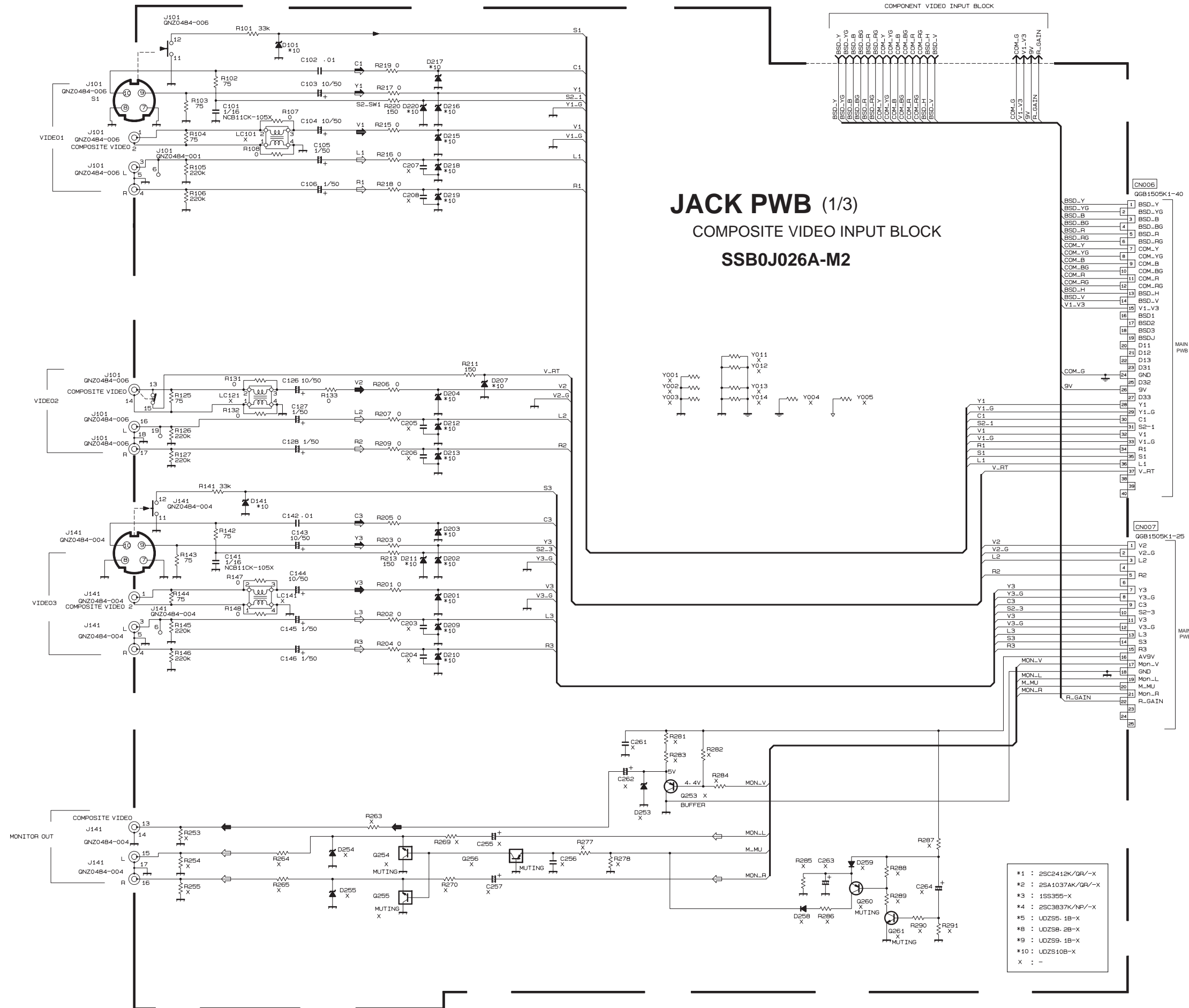
DEF OSC PWB CIRCUIT DIAGRAMS

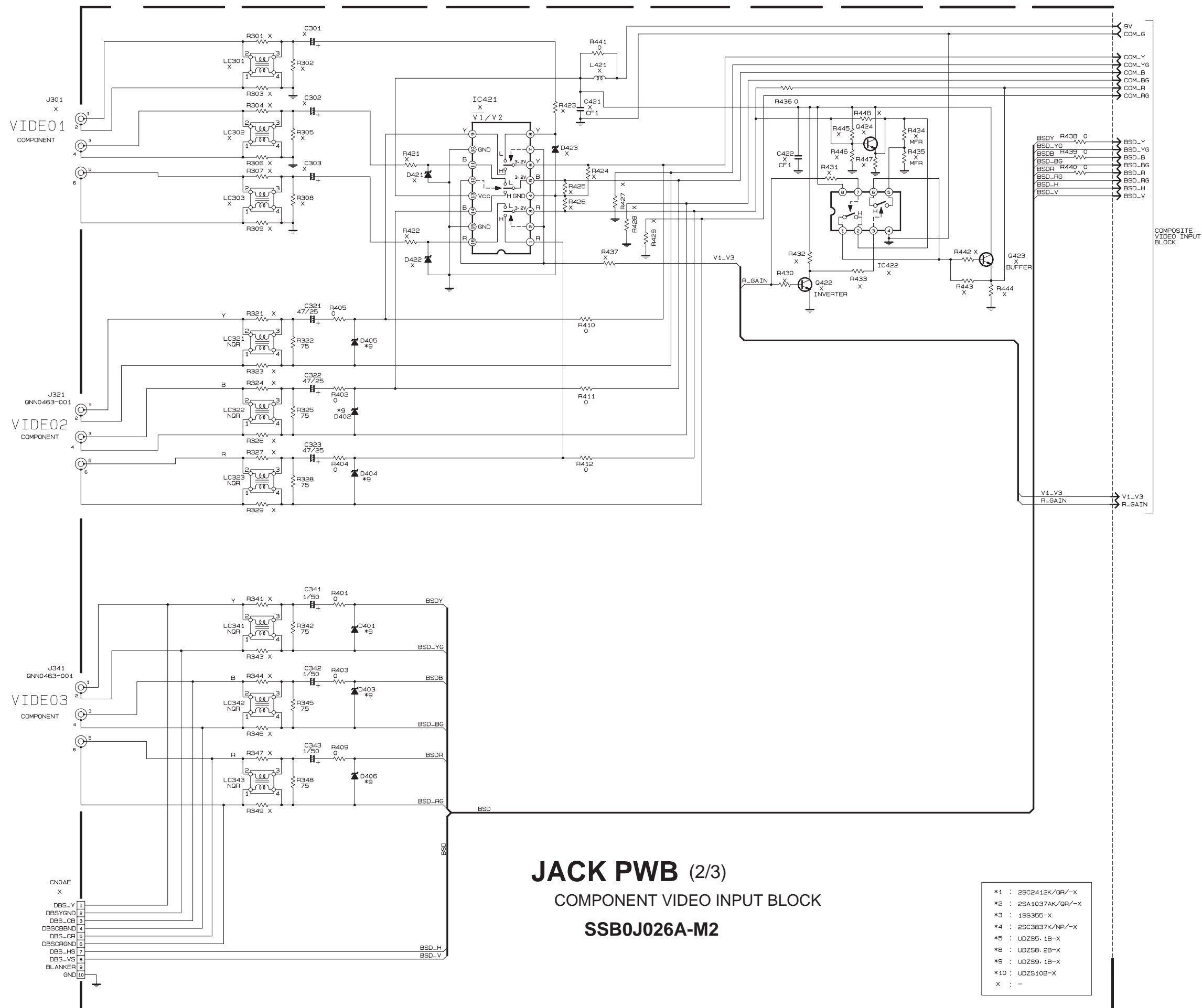


CRT SOCKET PWB CIRCUIT DIAGRAMS



JACK PWB CIRCUIT DIAGRAMS

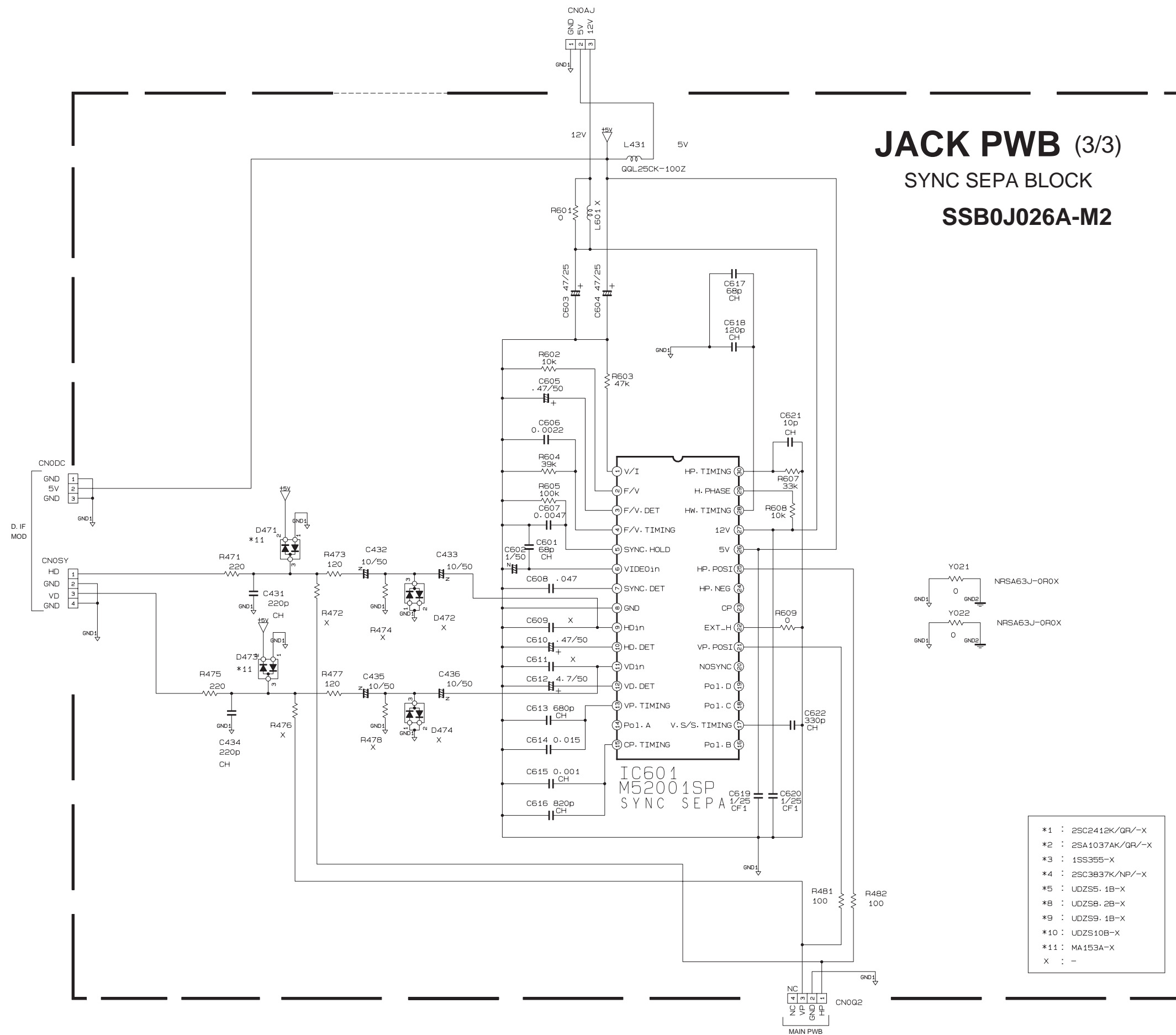




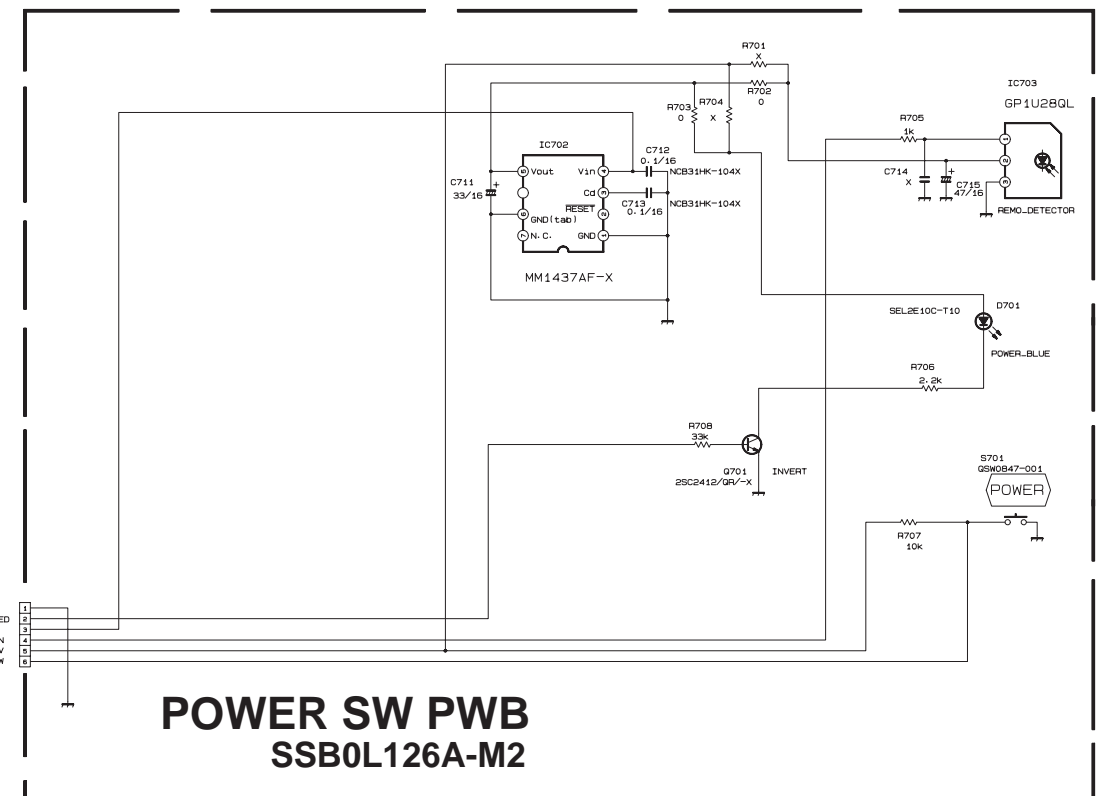
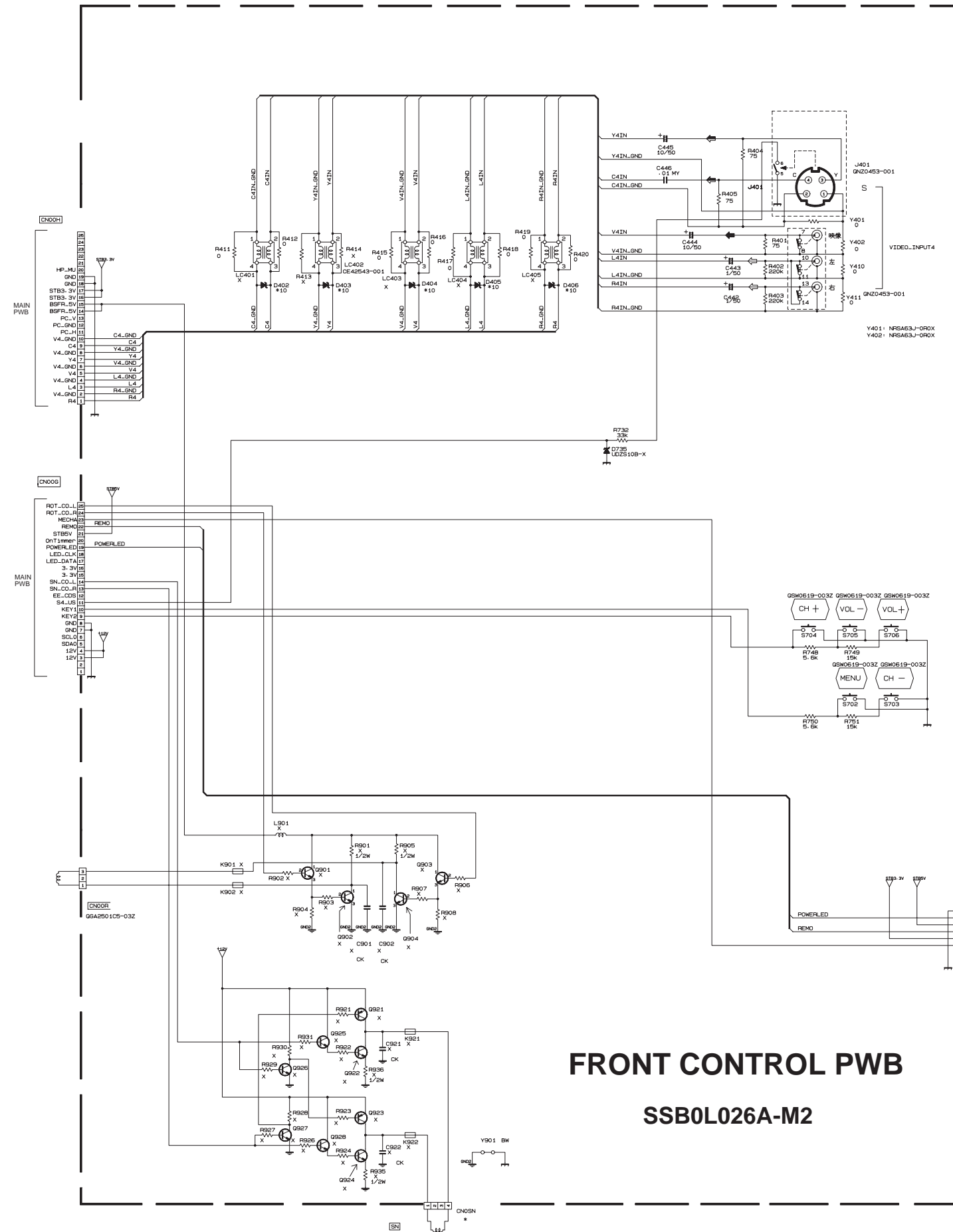
**JACK PWB (2/3)**  
 COMPONENT VIDEO INPUT BLOCK  
**SSB0J026A-M2**

- \*1 : 2SC2412K/GR/-X
- \*2 : 2SA1037AK/GR/-X
- \*3 : 1S355-X
- \*4 : 2SC3837K/NP/-X
- \*5 : UDZ55. 1B-X
- \*6 : UDZ58. 2B-X
- \*9 : UDZ59. 1B-X
- \*10 : UDZ510B-X
- X : -





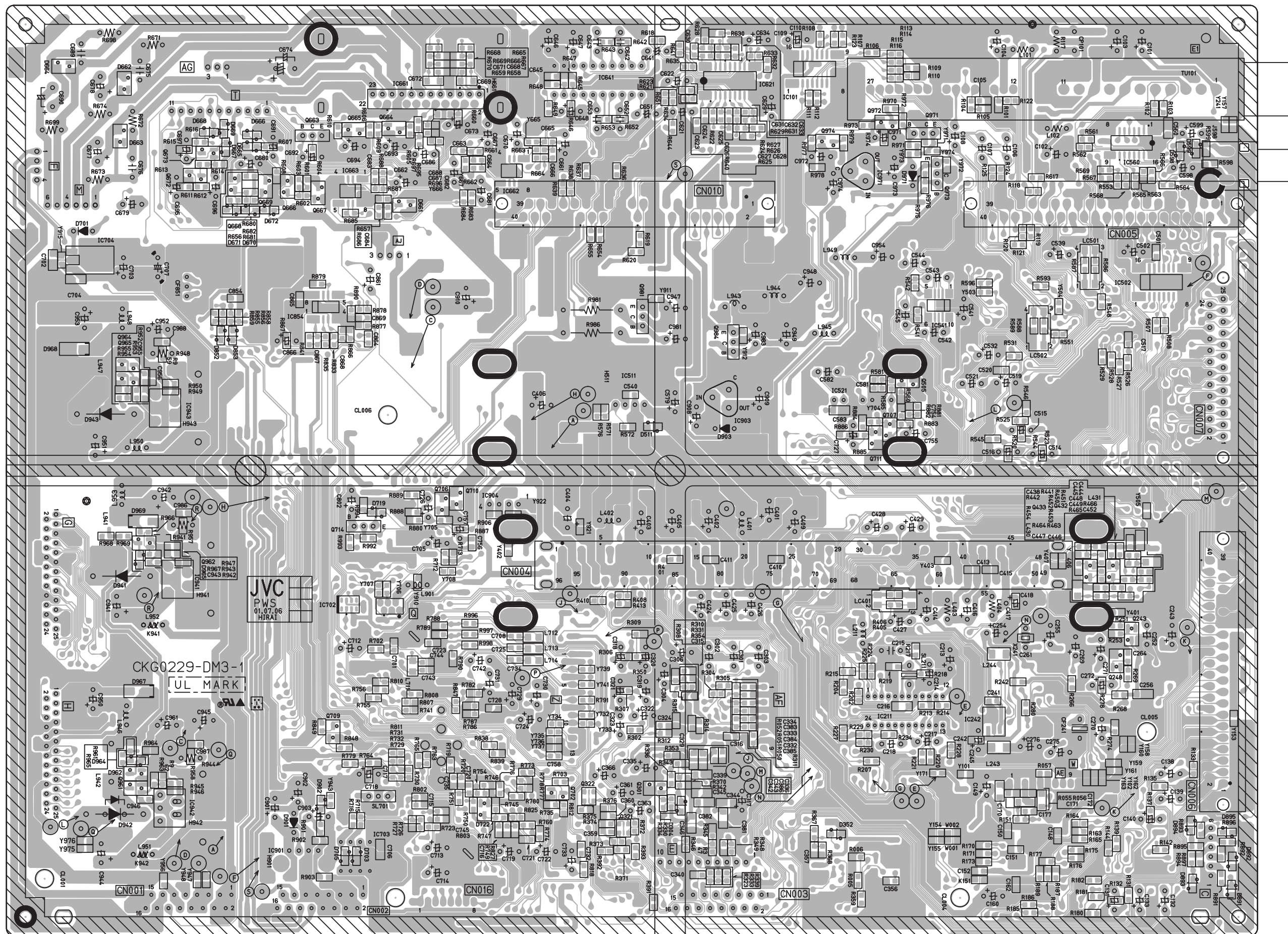
FRONT CONTROL PWB & POWER SW PWB CIRCUIT DIAGRAMS



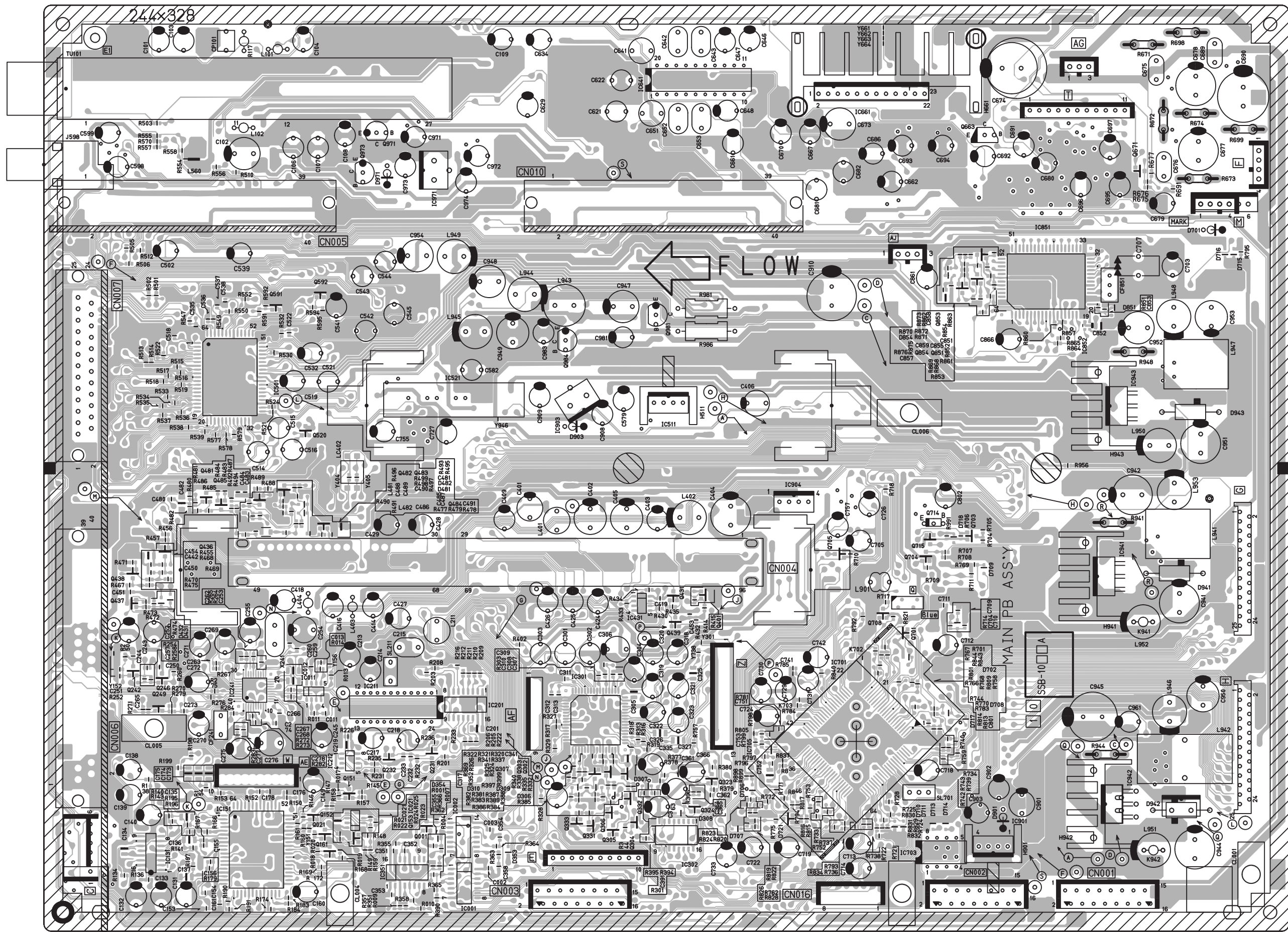
- \*1 : 2SC2412K/QR/-X
- \*2 : 2SA1037AK/QR/-X
- \*3 : 1SS355-X
- \*4 : DTC144EKA-X
- \*5 : MA153A-X
- \*6 : UDZ5B-2B-X
- \*9 : 2SA966(OY)-T
- \*10 : UDZ510B-X
- BW : IM-BW
- X : -

PATTERN DIAGRAMS MAIN PWB PATTERN

FRONT





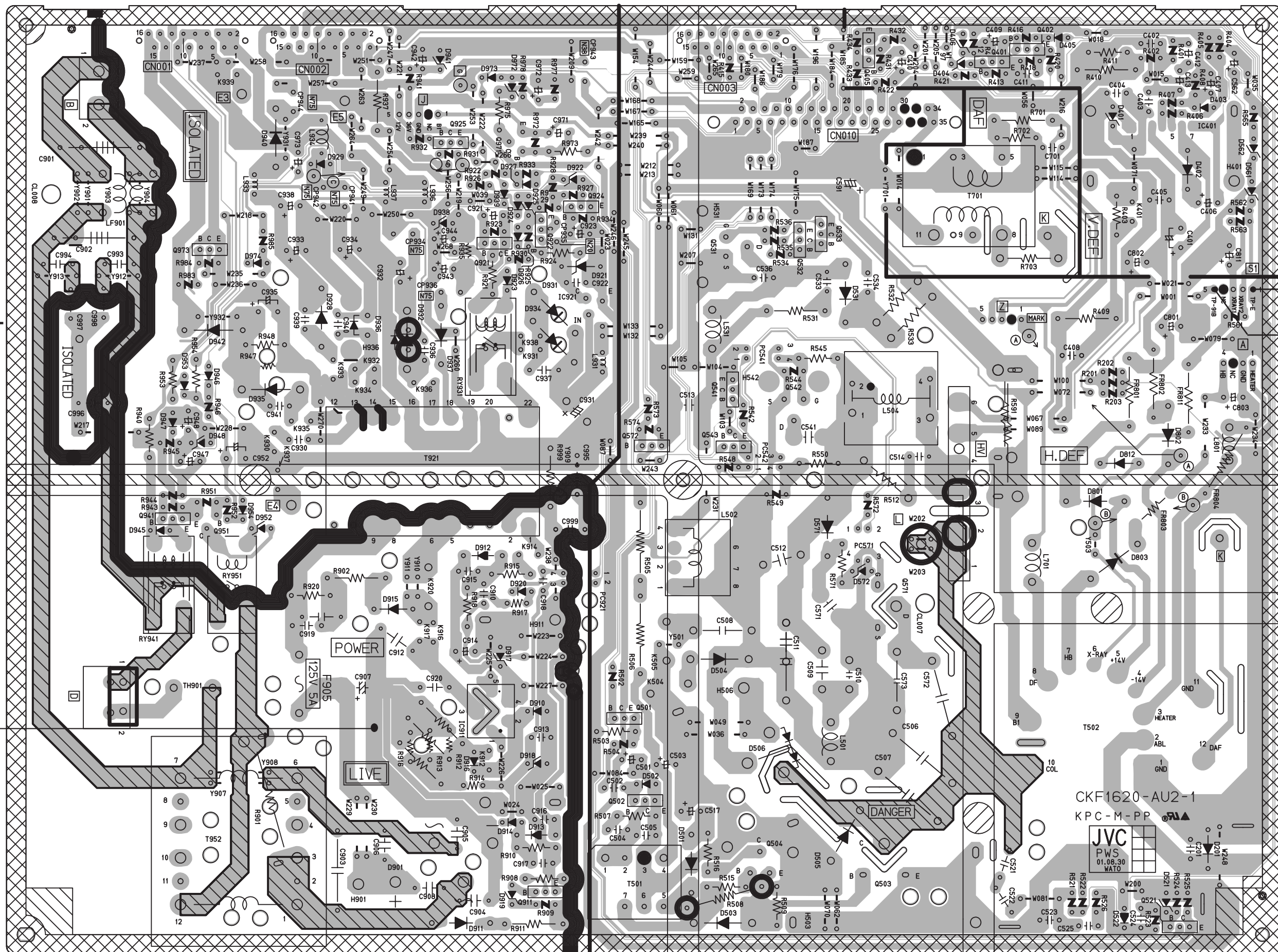




DEF POWER PWB PATTERN

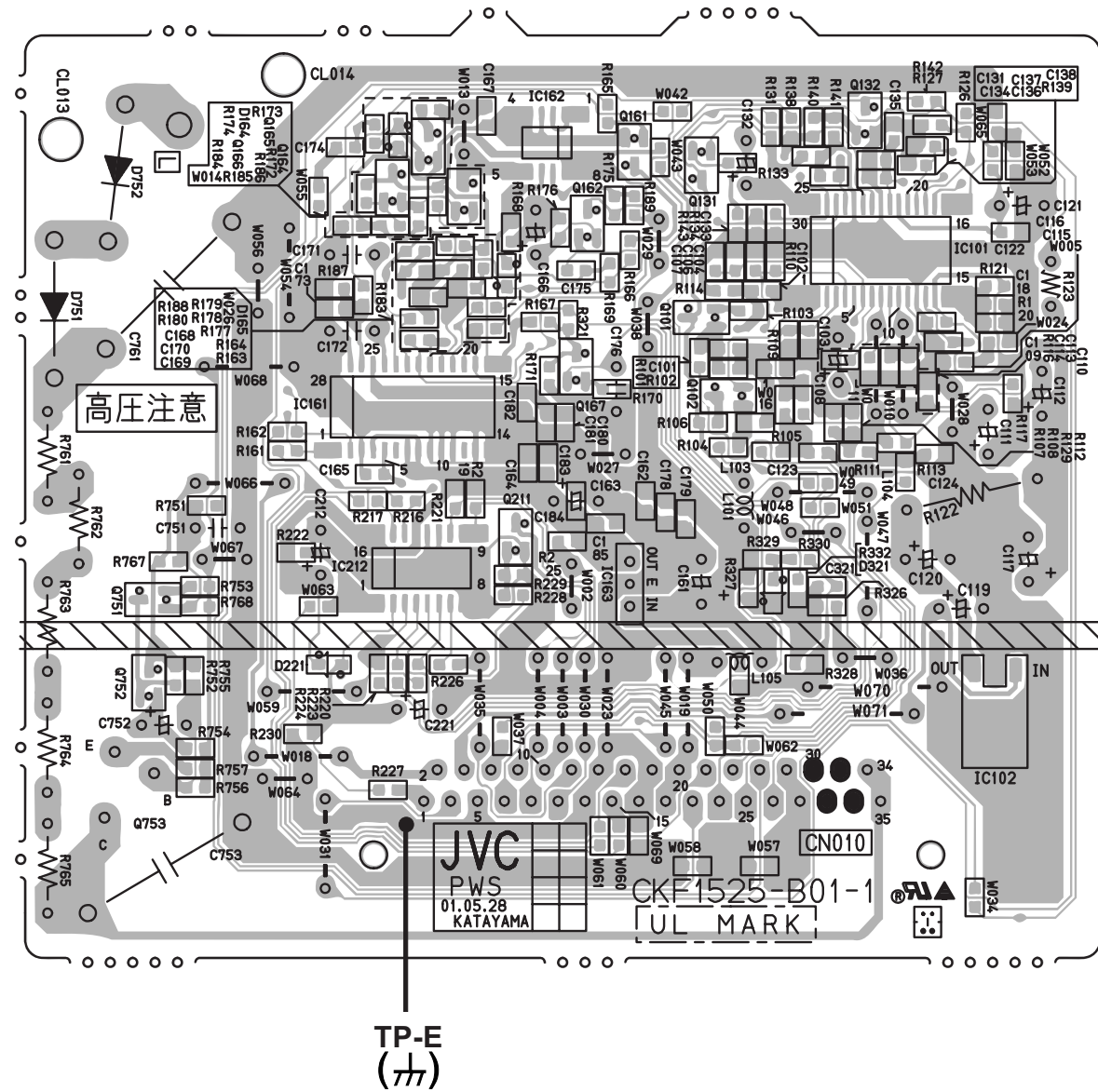
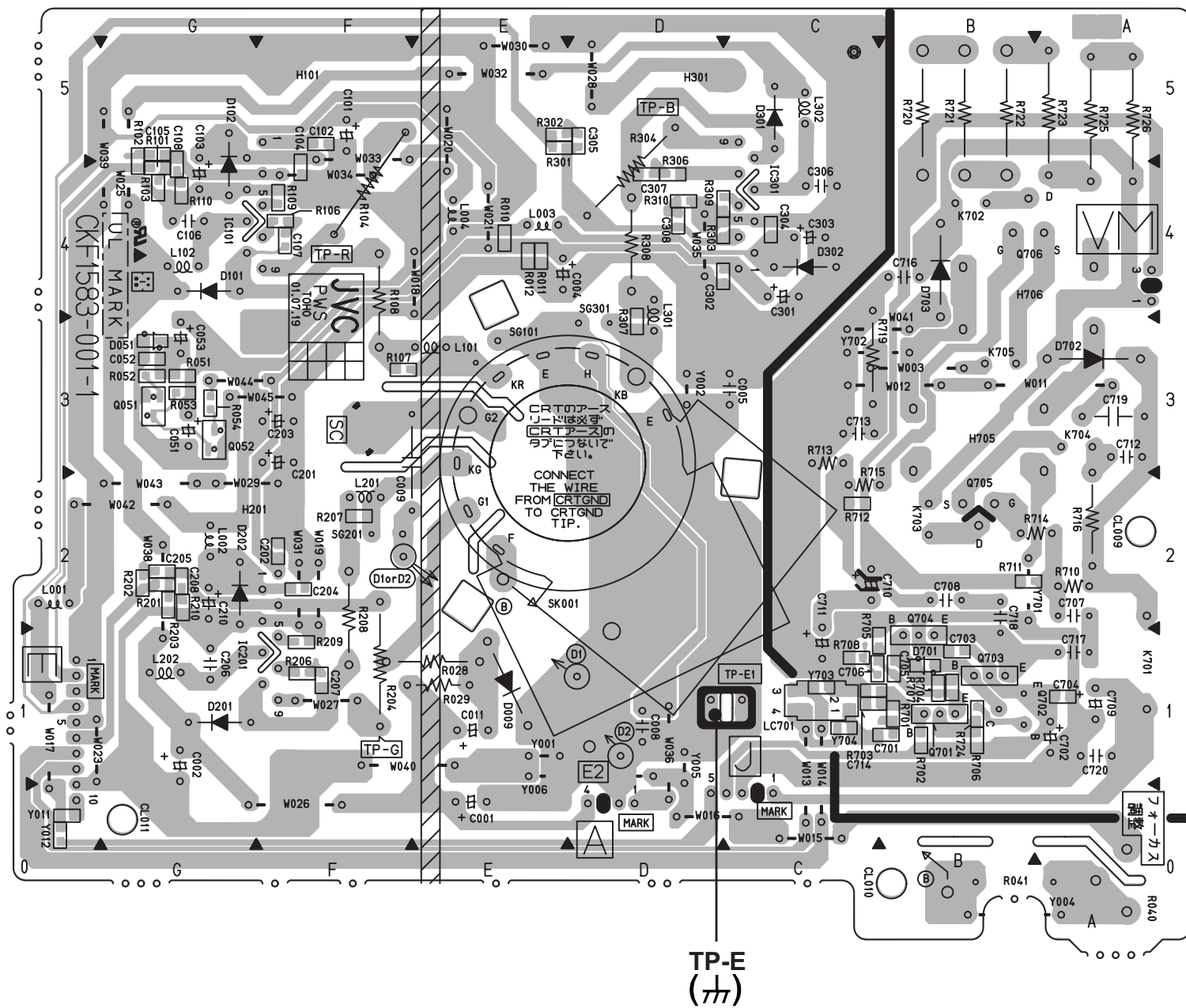
FRONT

TP-E  
(T)  
TP-91  
(B1)



CRT SOCKET PWB PATTERN

DEF OSC PWB PATTERN

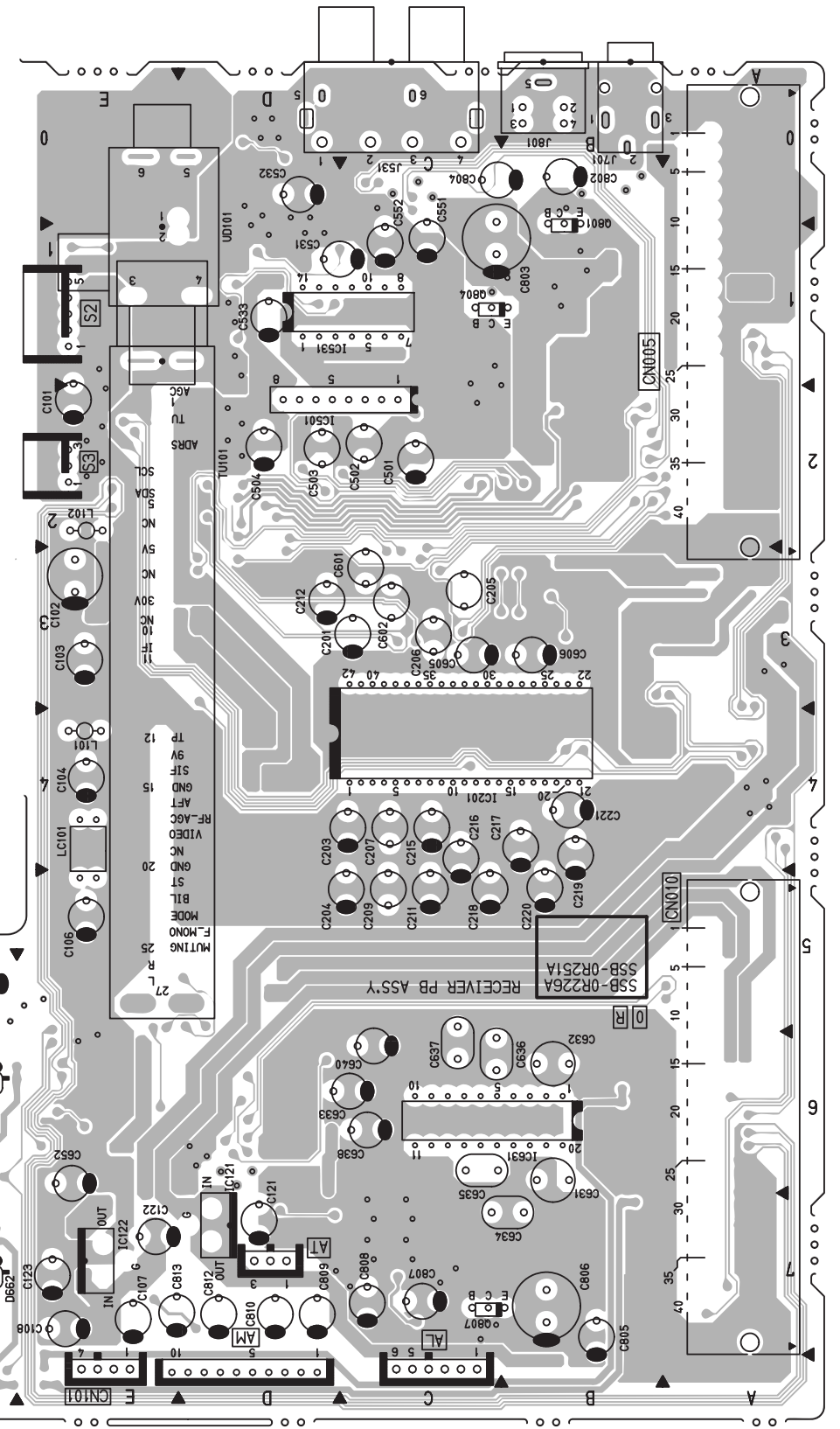
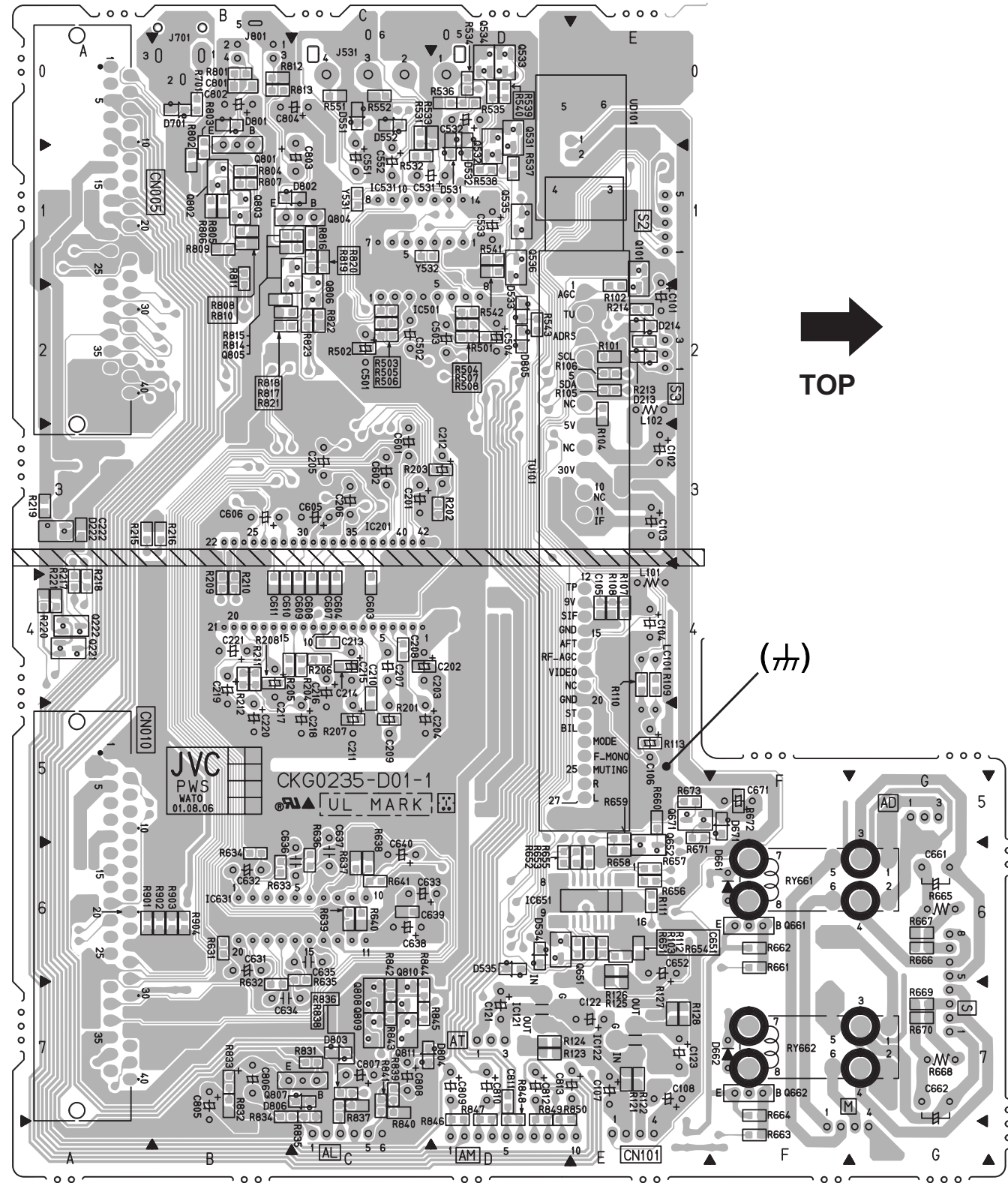




SUB TUNER (RECIEVER) PWB PATTERN

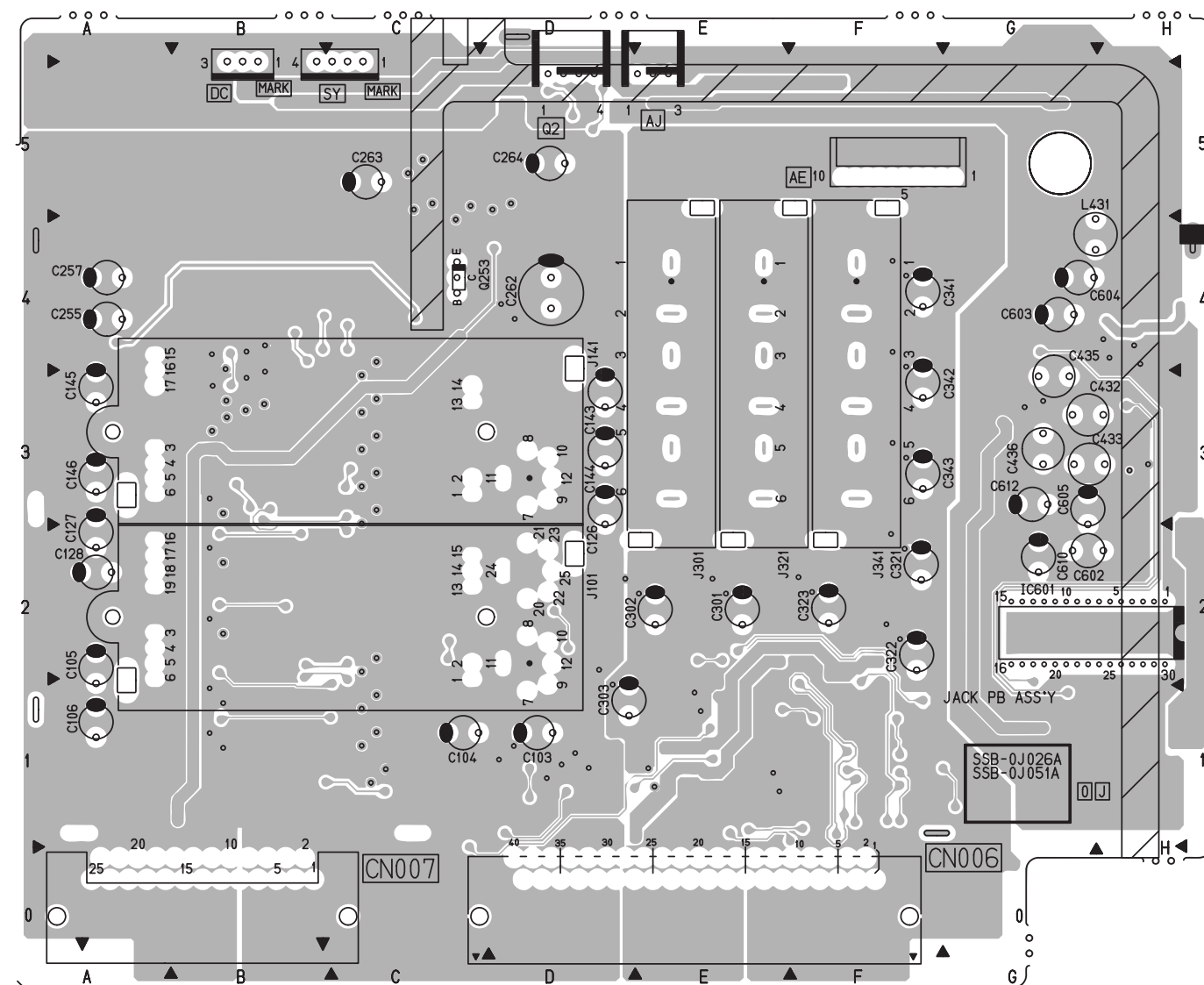
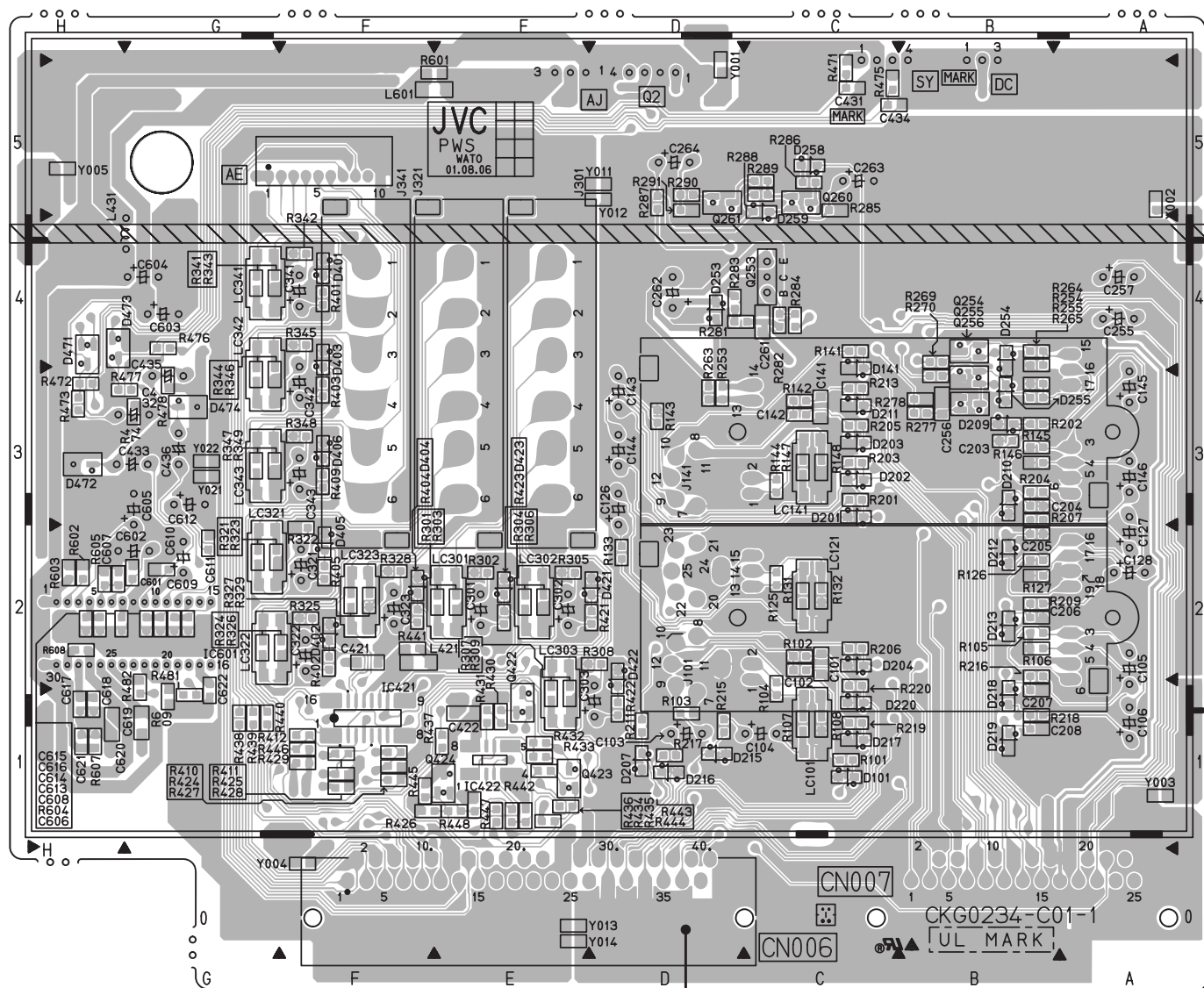
PARTS SIDE

SOLDER SIDE



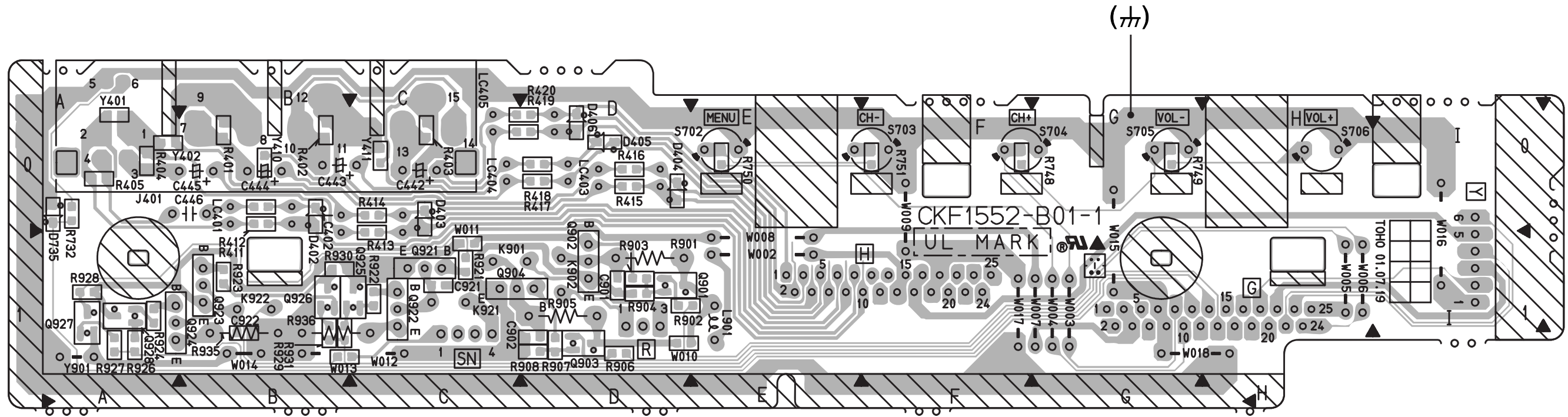
JACK PWB PATTERN SOLDER SIDE

PARTS SIDE

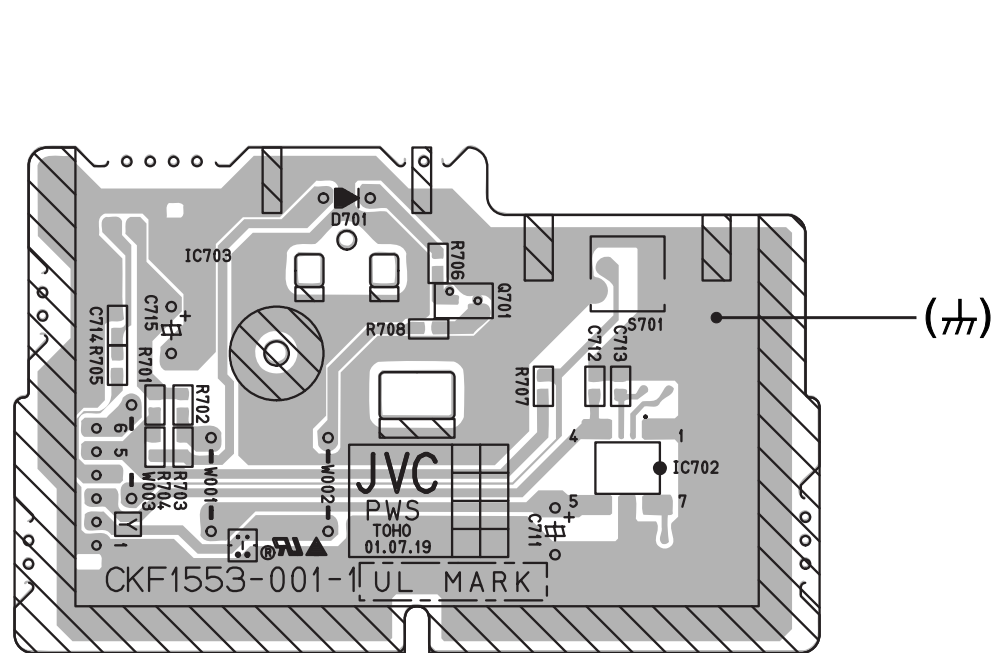




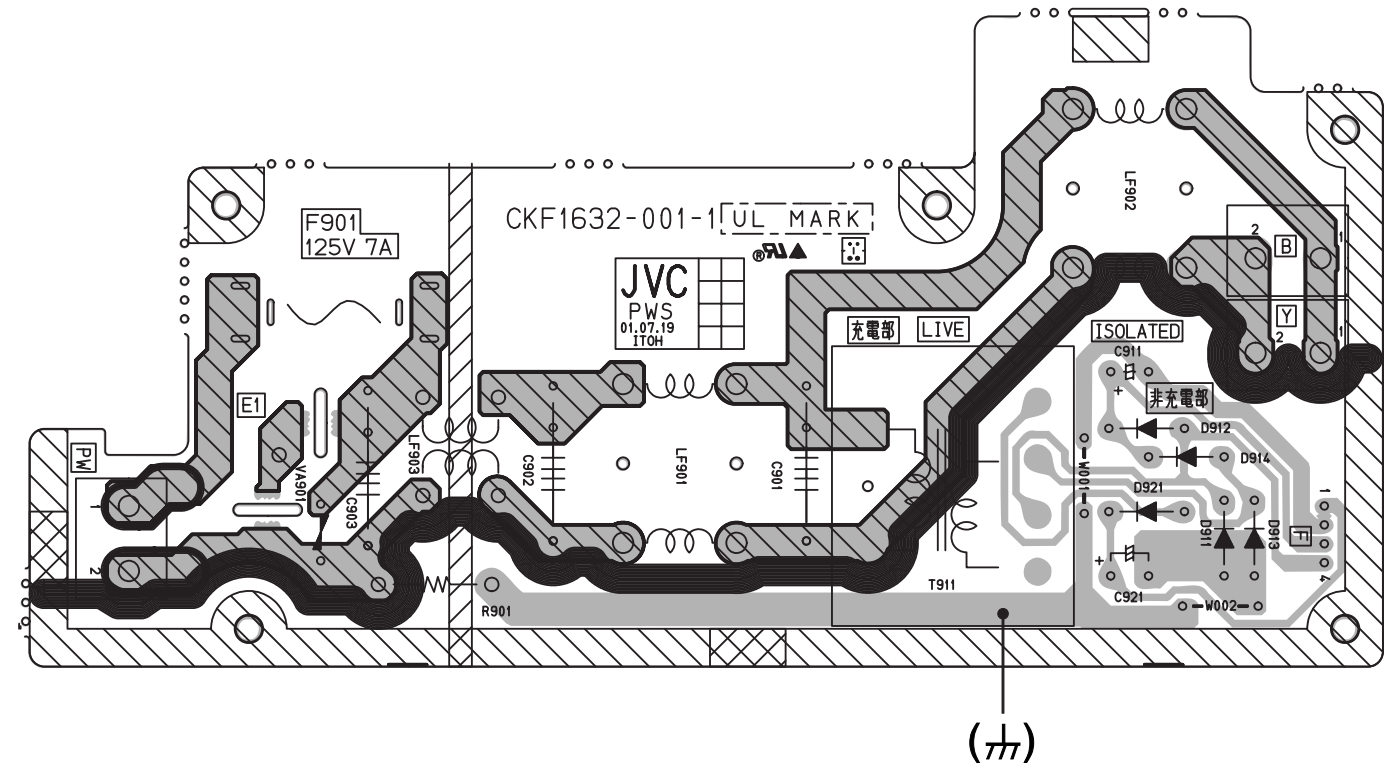
FRONT CONTROL PWB PATTERN



POWER SW PWB PATTERN



LINE FILTER PWB PATTERN



**JVC**

VICTOR COMPANY OF JAPAN, LIMITED

HOME AV NETWORK BUSINESS UNIT. 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama, Kanagawa-prefecture, 221-8528, Japan

