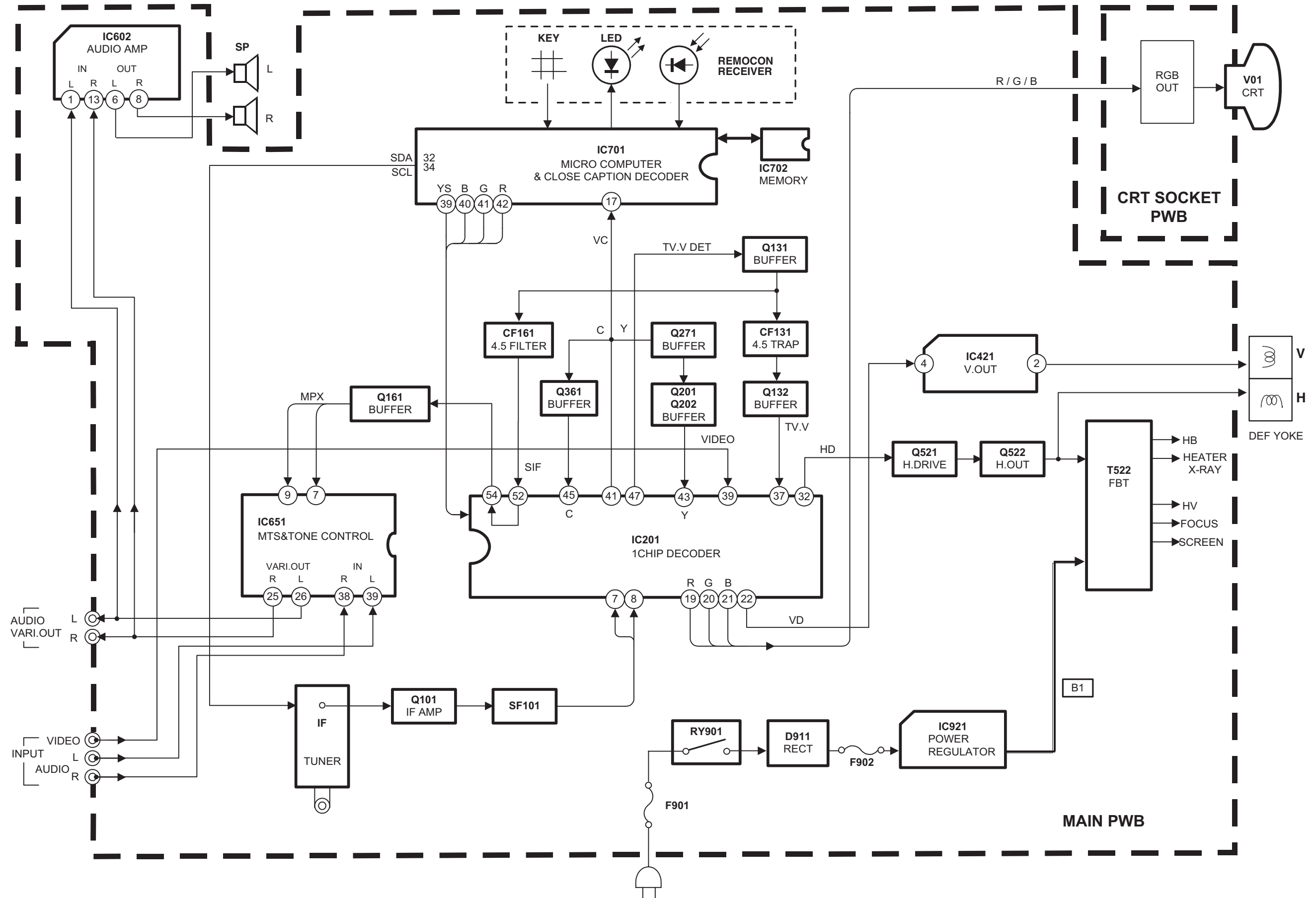


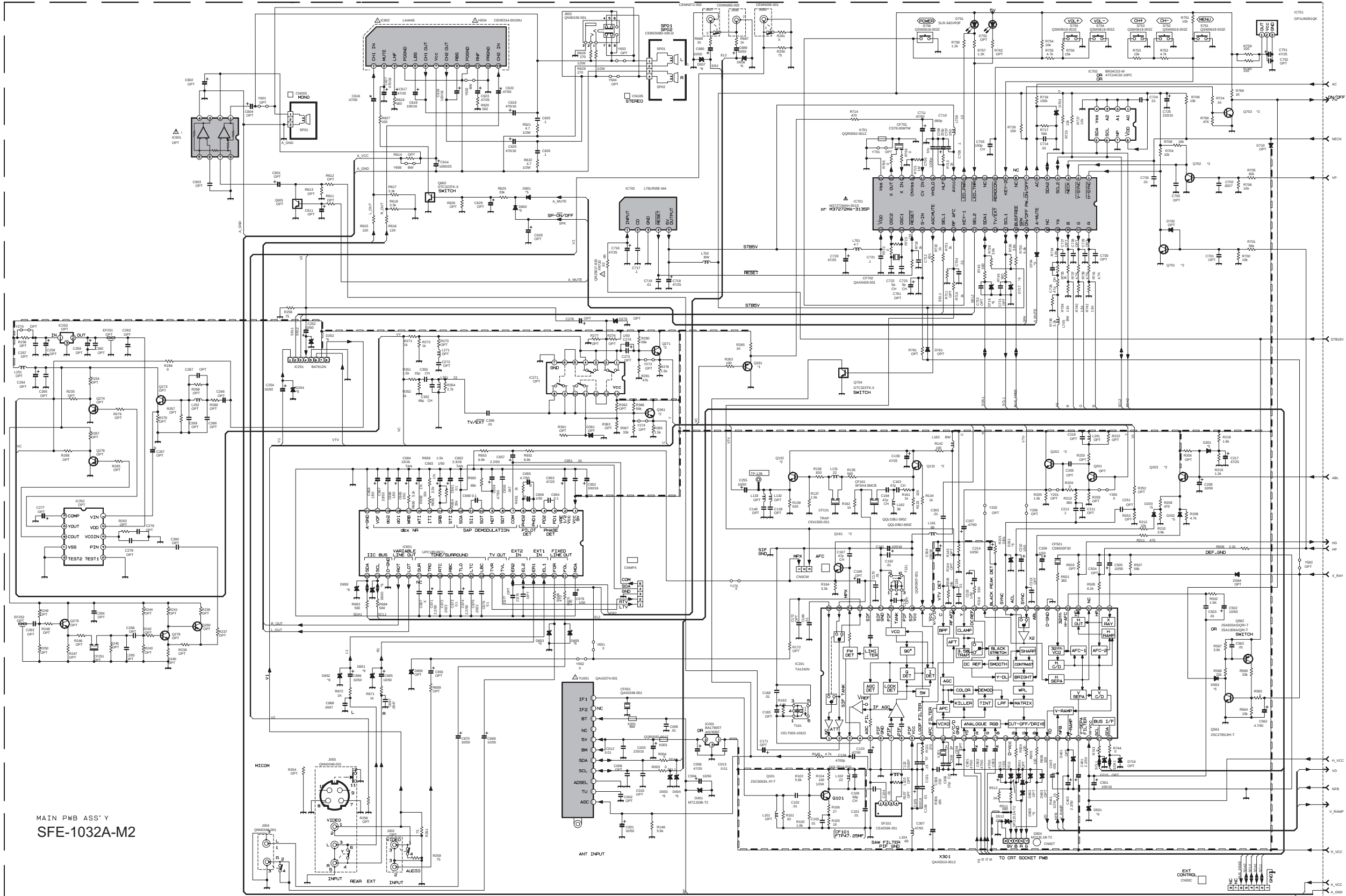
BLOCK DIAGRAM



CIRCUIT DIAGRAMS
MAIN PWB CIRCUIT DIAGRAM (1/2) SHEET 1

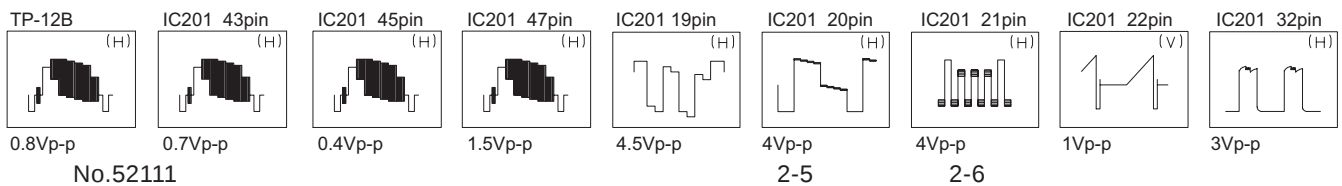
1 ADDITION MODEL NAME
AV-20421SA
SPV-1086A
SPV-1077A
(S-13)(T-13)
Rev. 1.1 1-13-92

PN NO.	VOLTAGE (V)	PN NO.	VOLTAGE (V)
IC001	8.9	8	NC
1	0	9	4.8
2	5	10	4.8
3	0	11	NC
IC201	NC	12	4.8
1	NC	13	0.1
2	3.6	14	4.7
3	2.6	15	1.9
4	3.1	16	0.4
5	4.3	17	1.8
6	0	18	0
7	1.9	19	2
8	1.7	20	2
9	8.8	21	0
10	4.2	22	4.7
11	5.8	23	1.7
12	4.5	24	2.1
13	0	25	6.2
14	0	26	4.8
15	4.5	27	0
16	4.5	28	4.7
17	4.5	29	2.3
18	3.1	30	4.8
19	2.4	31	0
20	2.3	32	3.2
21	2.2	33	4.7
22	0.7	34	3.4
23	4.8	35	0
24	5	36	0
25	6.3	37	4.5
26	8.8	38	NC
27	2.4	39	3.6
28	2.2	40	3.6
29	0	41	0
30	1.3	42	0
31	NC	43	4.8
32	1.1	44	3
IC703	1	45	1.6
1	8.7	46	8.6
2	6.5	47	3.6
3	0	48	1
4	5.2	49	2
5	5.5	50	7.5
IC702	3	51	0
1	0	52	2.6
2	0	53	4.6
3	0	54	2.6
4	0	55	2.6
5	0	56	2.6
IC002	1	57	0
1	0	58	0
2	1.4	59	0
3	0	60	0
4	0	61	0
5	2.2	62	0
6	2.2	63	0
7	9	64	0
8	2.3	65	0
9	2.2	66	0
10	0	67	0
11	2.2	68	0
12	0	69	0
13	0	70	0
14	0	71	0
15	0	72	0
16	0	73	0
17	0	74	0
18	0	75	0
19	0	76	0
20	0	77	0
21	0	78	0
22	0	79	0
23	0	80	0
24	0	81	0
25	0	82	0
26	0	83	0
27	0	84	0
28	0	85	0
29	0	86	0
30	0	87	0
31	0	88	0
32	0	89	0
33	0	90	0
34	0	91	0
35	0	92	0
36	0	93	0
37	0	94	0
38	0	95	0
39	0	96	0
40	0	97	0
41	0	98	0
42	0	99	0
43	0	100	0



MAIN PWB ASS'Y
SFE-1032A-M2

NOTE
#1: CHIP PNP T- 2SA1037AK/GR-VX OR 2SB709A/GR-VX BW: BUS WIRE
#2: CHIP NPN T- 2SC2418K/GR-VX OR 2SD501A/GR-VX OPT: NON-MOUNT (OPEN)
#3: CHIP PNP D-T- 2TA1248KA-X Δ: SAFETY PARTS
#4: CHIP NPN D-T- DTC1248KA-X 0: 0° RESISTOR
#5: SI DIODE 18S133-T2 .: DIFFERENCE PARTS
#6: ZENER DIODE MT2J9-1C-T2
#7: ZENER DIODE MT2J5-6A-T2
#8: SI DIODE 18P10J-9025-T3
#9: SI DIODE 18P35-400A-T2

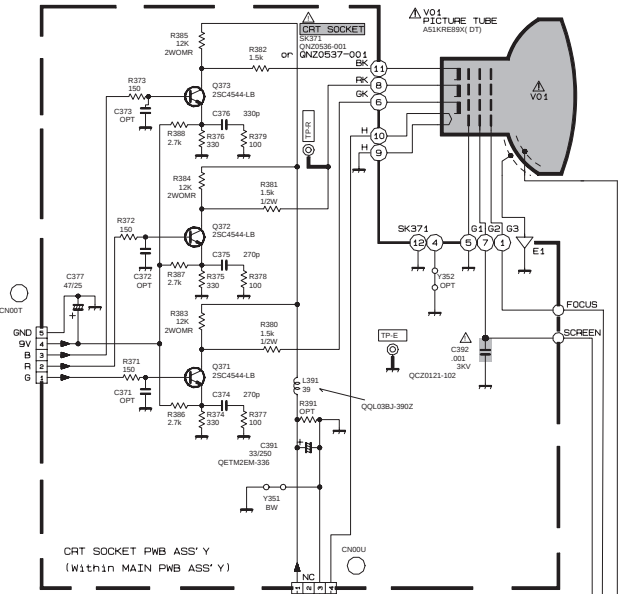
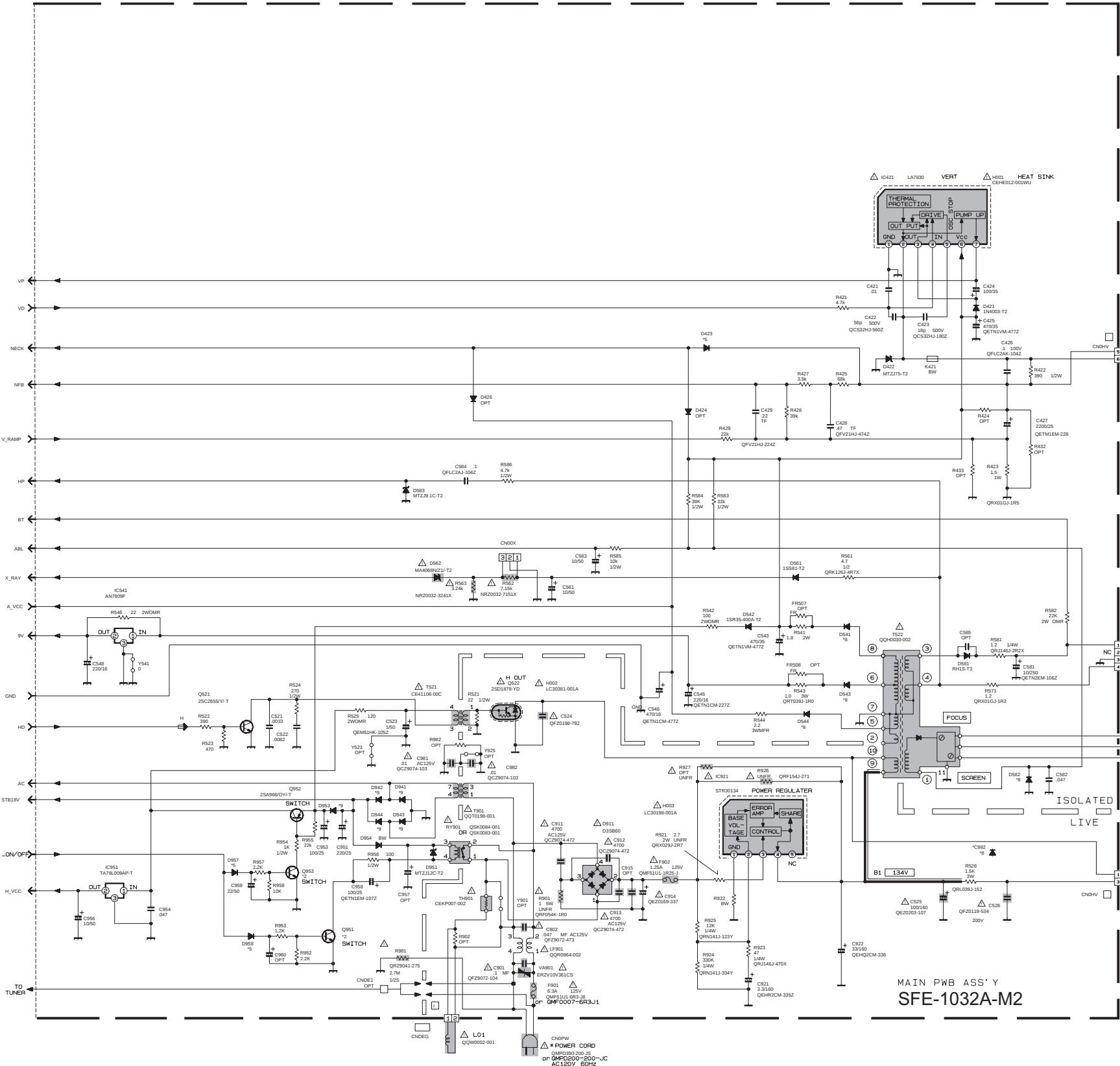


MAIN PWB CIRCUIT DIAGRAM (2/2) SHEET 2

1

ADDITION MODEL NAME
AV-20421SA
AV-20420SA
SPV-1085A
SPV-1087A
(S-131)(T-131)(P-101)(S-101)
Margarita v.03.02.12

PIN NO.	VOLTAGE (V)
IC421	0
1	0
2	14
3	23.3
4	0.7
5	0.8
6	22.3
7	3
IC921	0
1	124.7
2	131
4	123.1
5	NC
6	22.3
7	3
IC541	0
1	12.1
2	9
3	0
IC951	12.1
1	12.1
2	8.8
3	0
Q371	E 1.7
Q372	B 1.8
C	132
B	2.1
Q373	E 1.8
B	129.5
C	129.5
Q521	E 0
C	10.5
B	0.2
Q551	E 0
B	0
Q552	E 12.1
C	12.1
B	11.5
Q553	E 0
C	0
B	0.6



NOTE

#1

: CHIP PNP T_n

25A1037AK/GR/-X

#2

: CHIP NPN T_n

25C2412K/GR/-X

#3

: CHIP PNP D-T_n

DTA124EKA-X

#4

: CHIP NPN D-T_n

DTA124EKA-X

#5

: SI DIODE

15S133-T2

#6

: ZENER DIODE

MTZJ9.1C-T2

#7

: ZENER DIODE

MTZJ5.6A-T2

#8

: SI DIODE

15S10.4-6025-T3

#9

: SI DIODE

15R35-400A-T2

BW

: BUS WIRE

OPT

: NON-MOUNT (OPEN)

Δ

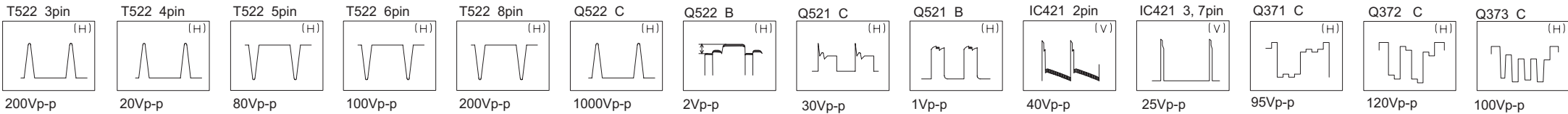
: SAFETY PARTS

0

: 0^Ω RESISTOR

*

: DIFFERENCE PARTS



3.5 BASIC OPERATION OF SERVICE MENU

3.5.1 TOOL OF SERVICE MENU OPERATION

Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

3.5.2 SERVICE MENU ITEMS

With the SERVICE MENU, various adjustments can be made, and they are broadly classified in the following items of settings.

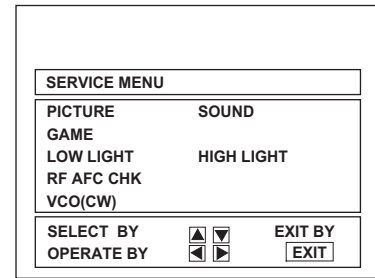
PICTURE	This mode adjusts the VIDEO CHROMA and DEFLECTION control circuit.
SOUND	This mode adjusts the SOUND control circuit.
GAME	This mode adjusts the detailed GAME mode settings.
LOW LIGHT	This mode adjusts the WHITE BALANCE (LOW LIGHT) control circuit.
HIGH LIGHT	This mode adjusts the WHITE BALANCE (HIGH LIGHT) control circuit.
RF AFC CHECK	This is no requirement for adjustment. Do not adjust this mode.
VCO(CW)	This mode adjusts the VCO control circuit.

3.5.3 BASIC OPERATION IN SERVICE MENU

(1) HOW TO ENTER THE SERVICE MENU

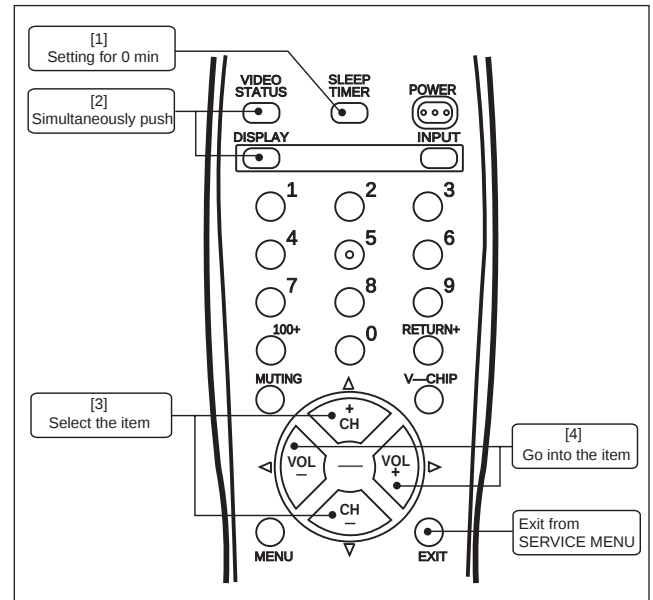
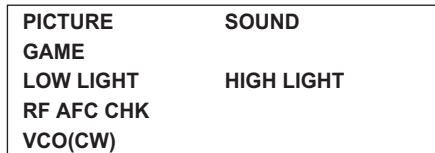
Press the [SLEEP TIMER] key and set the SLEEP TIMER for "0 MIN".

Then press the [DISPLAY] key and [VIDEO STATUS] key of the remote control unit at the same time to enter the SERVICE MENU screen. The SERVICE MENU screen will be shown.



(2) SUB MENU SCREEN SELECTION

Press [CHANNEL (-/+)] keys of the REMOTE CONTROL UNIT, and select the sub menu screen from SERVICE MENU. In SERVICE MENU, press the [CHANNEL (-/+)] key to select any of the sub menu items. The letters of the selected items are displayed in yellow.



(3) SETTING METHOD

[PICTURE AND SOUND ADJUSTMENT MODE]

- (1) If select any of PICTURE or SOUND items, and the [VOLUME (-/+)] key is pressed from SERVICE MENU. The screen [2] will be displayed as shown in figure page later.
- (2) Then [CHANNEL (-/+)] key is pressed, the PICTURE mode screen [3] or the SOUND mode screen [4] will be displayed.
- (3) Press the [CHANNEL (-/+)] keys to select the one of adjustment mode from 1. BRIGHT to 20. OSC SEL, or from 1. IN LEVEL to 10. FIL OFF.
- (4) Press the [VOLUME (-/+)] keys to change the adjustment value. The setting value will be stored automatically when release the REMOTE CONTROL UNIT keys.
It can adjust the items PICTURE and SOUND in the same procedure.

[GAME, LOW LIGHT AND HIGH LIGHT ADJUSTMENT MODE]

If select any of GAME, LOW LIGHT and HIGH LIGHT items, and the [VOLUME (-/+)] key is pressed from SERVICE MENU. The screens [5], [6] or [7] will be displayed as shown in figure page later. Since the key operation in this mode is peculiar, please refer to the clause of the "ADJUSTMENTS PROCEDURE".

[RF AFC CHK ADJUSTMENT MODE]

This is no requirement for adjustment this mode. Don't change these values.

[VCO(CW) ADJUSTMENT MODE]

Since the key operation and screen in this mode is peculiar, please refer to the clause of the "ADJUSTMENTS PROCEDURE".

(4) RELEASE OF SERVICE MENU

When adjustment is completed, press the [EXIT] key twice. Then return to the normal screen.