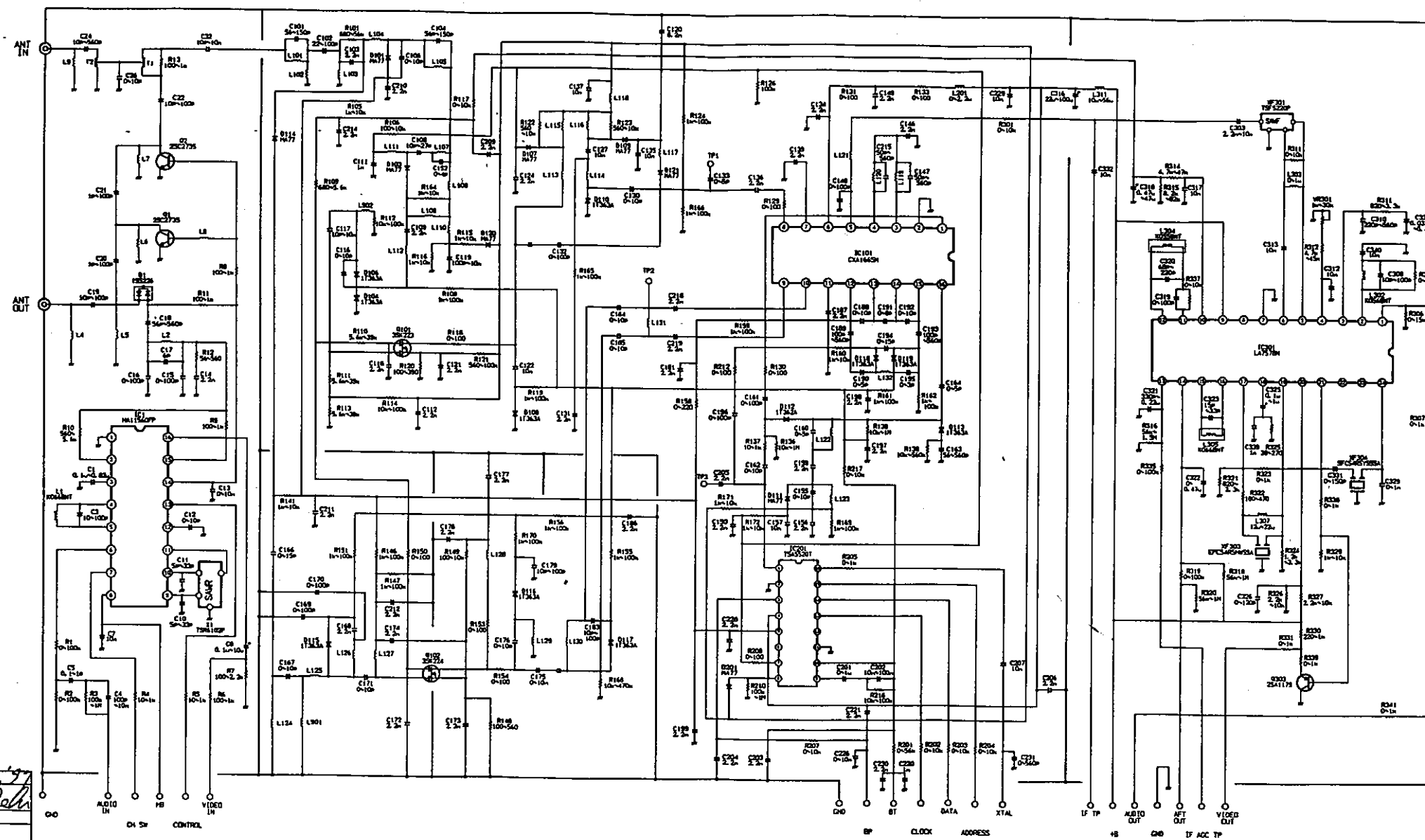


Q1, Q2 : 2SC2735, 2SC4713K
Q101 : 3SK194 , 3SK223, 3SK235, 3SK227, 3SK225
Q102 : 3SK224 , 3SK233, 3SK200, 3SK232
Q201 : 2SC4083
Q202 : 2SC4211, 2SC4081
Q301 : 2SC4269, 2SC3082K
Q303 : 2SA1179, 2SA1037K

B201, B202, B204 : RA1040, DTA114, UNS114
IC1 : HA11560FP, AN3115S
IC101 : CXA1665, CXA1665M-S, CXA1665AM-S
IC201 : TD6380Z, MC44818D, TSA5520T, MC44818D, AN8561S, M64894FP
IC301 : LA7577 , LA7577ST, LA7578, LA7565, MS2342SP

D001 : 1SS226, DCC010
D101, D103, D107, D109, D111, D114, D120, D121 : MA77, HSU277, 1SS314
D104, D106, D108, D110, D113, D115, D116, D117, D118, D119 : HVU200A, MA366F, 1SV232, 1T363A, HVU363
D112 : 1T362A, MA366F, 1SV232

X1 : KAR-61CT, TSR6102, F82SHE
X101 : AT-51, HC-49/U-S
XF301 : TSF1220P, TSF1220U, TSF5220P, TSF5221P, M1659
XF303 : TPS4, SMC8, TPS4, SMC, EFC-S4RSMW5
XF304 : SFSH4, SMD8, SFSL4, SMD8, EFC-S4RSMS5W, EFC-S4RSYS5A
L1, L305 : K0668NT, K0528NT

...p. 12. '97	
...ROVED	
...F. Kakehi	
...D	
...p. 11. '97	
...H. Takaji	
...96. 03. 08	
...IGNED	
...T. N. F. H. M	
...97. 09. 08	
...WN	
...ABE	
...97. 09. 08	
...W. ID	
...(ACSACM)	

MK	DATE	REVISION

SANYO Tuner Industries Co., Ltd.

ORIGINAL MODEL: 1AV4E1EAM0080

PART NAME: TUNER RF/TU/IF

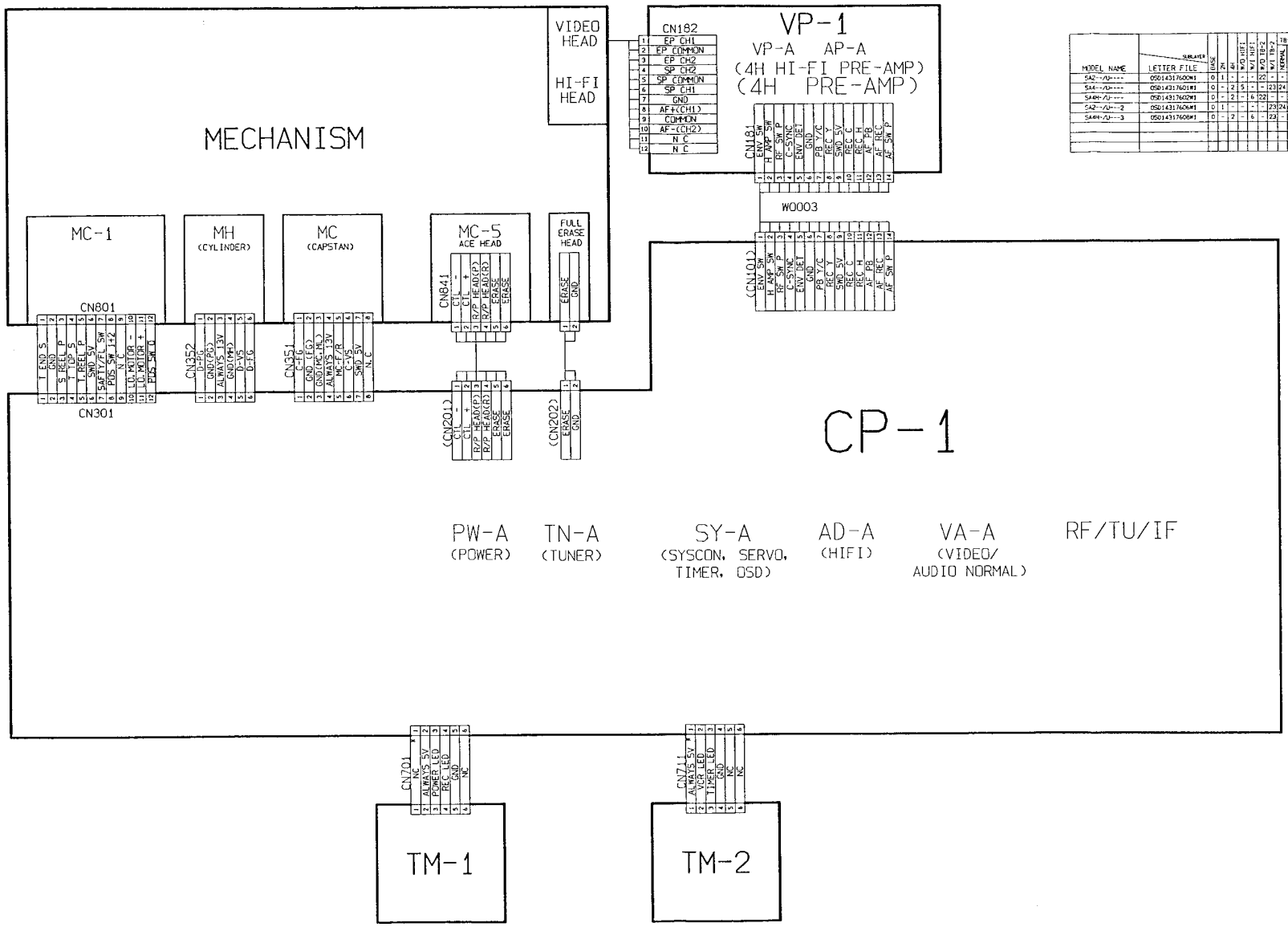
PART CODE: 2AE4E1VA06EACH

Circuit Diagram

Model No. VHR-H518

ILL. No.	Circuit Name	PWB Name	Function
ILL. 1			SD, WIRING
ILL. 2	VP-1	VP-A	PRE-AMP
ILL. 3		PW-A	POWER Circuit
ILL. 4	CP-1	AD-A	AUDIO (HiFi)
ILL. 5		VA-A	VIDEO/NORMAL AUDIO
ILL. 6		SY-A	SYSCON/SERVO/TIMER/OSD
ILL. 7		TN-A	TUNER
ILL. 8			
ILL. 9			
ILL. 10		RF/TU/IF	

The Number 8 and 9 are blank on the ILL No.



NOTE: DO NOT SCALE

MODEL NAME	LETTER FILE	EUROPE	ZA	4U	W/O HIFI	W/I HIFI	W/O TBF2	W/I TBF2	TB-2 NORMAL	TB-2 HIFI		MODEL
SA2--/U----	OSD1431760OW1	0	1	-	-	-	22	-	-	-		120
SA4--/U----	OSD1431760IW1	0	-	2	5	-	-	23	24	-		121
SA4H-/U----	OSD1431760ZW1	0	-	2	-	6	22	-	-	-		122
SA2--/U---2	OSD1431760KW1	0	1	-	-	-	-	23	24	-		123
SA4H-/U---3	OSD1431760BW1	0	-	2	-	6	-	23	-	25		124

発行
1997/12/11
技術部

最終変更日
1998/03/06

APPROVALS

CHKD

CHKD

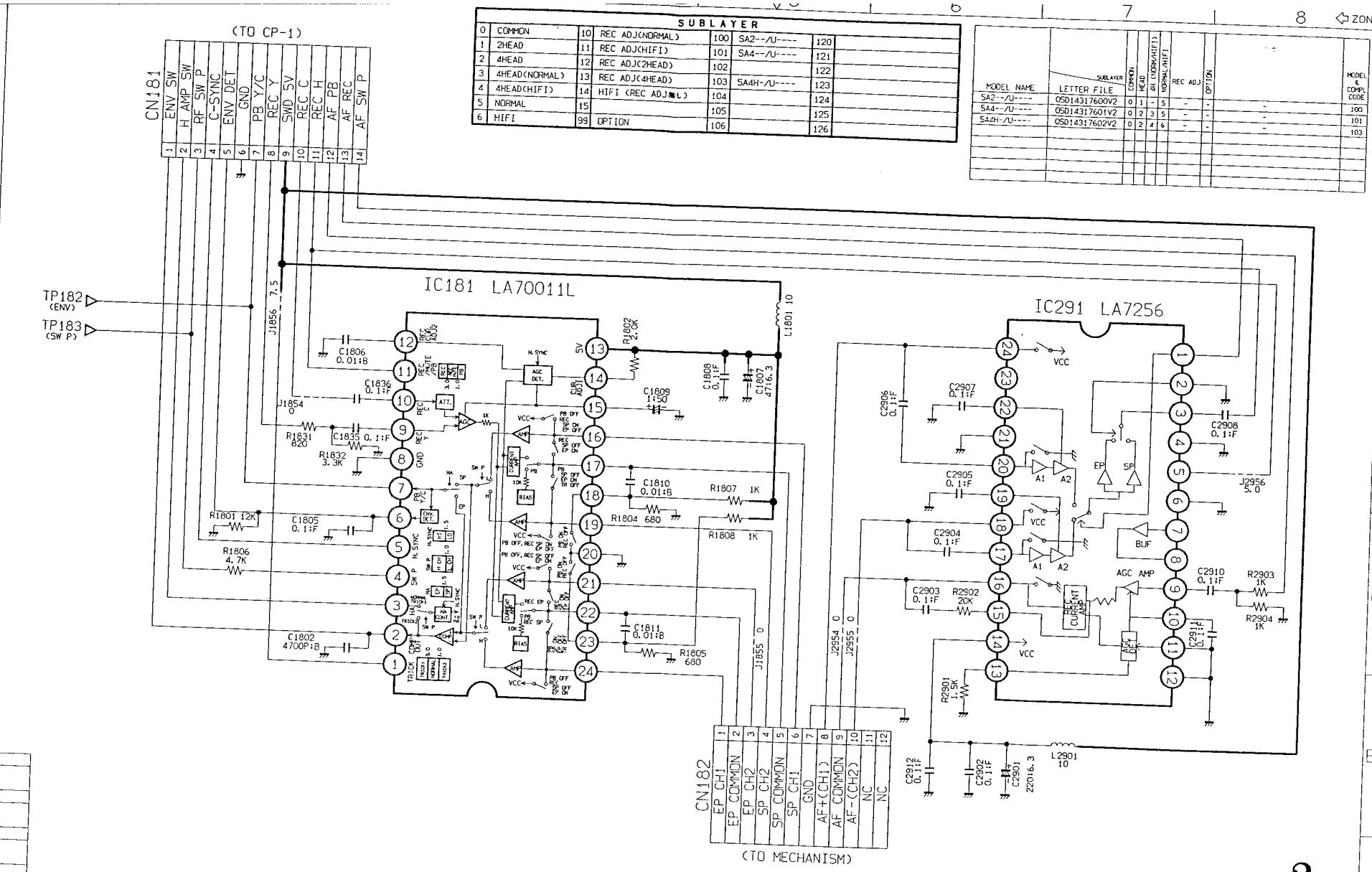
DESIGN ARIS H

DRAWN ARIS H

MK	DATE	REV NO	REVISION	SUB	SEC

ILL 1

BASIC MODEL	SA4H-/U----	CIRCUIT NAME	SD, WIRING
COMMON MODEL	SA4H-/U-F-- SA4H-/CAF-- SA4H-/U---2	PCB NAME	
		SCH CODE	OSD1431760ZW1
		FINISH DATE	
		DRAW ID	
		PLOT DATE	



SUBLAYER							
0	COMMON	10	REC ADJ(NORMAL)	100	SA2--/U----	120	
1	2HEAD	11	REC ADJ(HIFI)	101	SA4--/U----	121	
2	4HEAD	12	REC ADJ(2HEAD)	102		122	
3	4HEAD(NORMAL)	13	REC ADJ(4HEAD)	103	SA4H-/U----	123	
4	4HEAD(HIFI)	14	HIFI (REC ADJ無し)	104		124	
5	NORMAL	15		105		125	
6	HIFI	99	OPTION	106		126	

MODEL NAME	LETTER FILE	COMMON	HEAD	4H (NORM/HIFI)	NORMAL/HIFI	REC ADJ	OPTION			MODEL & COMPL CODE
SA2--/U----	OSD14317600V2	0	1	-	5	-	-		-	100
SA4--/U----	OSD14317601V2	0	2	3	5	-	-		-	101
SA4H-/U----	OSD14317602V2	0	2	4	6	-	-		-	103

発行
97/12/11
技術部
終変更日
98/03/06

APPROVALS	
CHKD	
CHKD	
DESIGN	S. INOUE
DRAWN	S. INOUE
TRACE	10435

MK	DATE	REV NO	REVISION	SUB	SEC

PWB :
DB : nt95a
CELL : 1AC4B10C2100EZ

BASIC MODEL: SA4H-/U----
COMMON MODEL: SA4H-/U--3, SA4H-/U-F--, SA4H-/U-F-2, SA4H-/CAF--, SA4H-/U--2

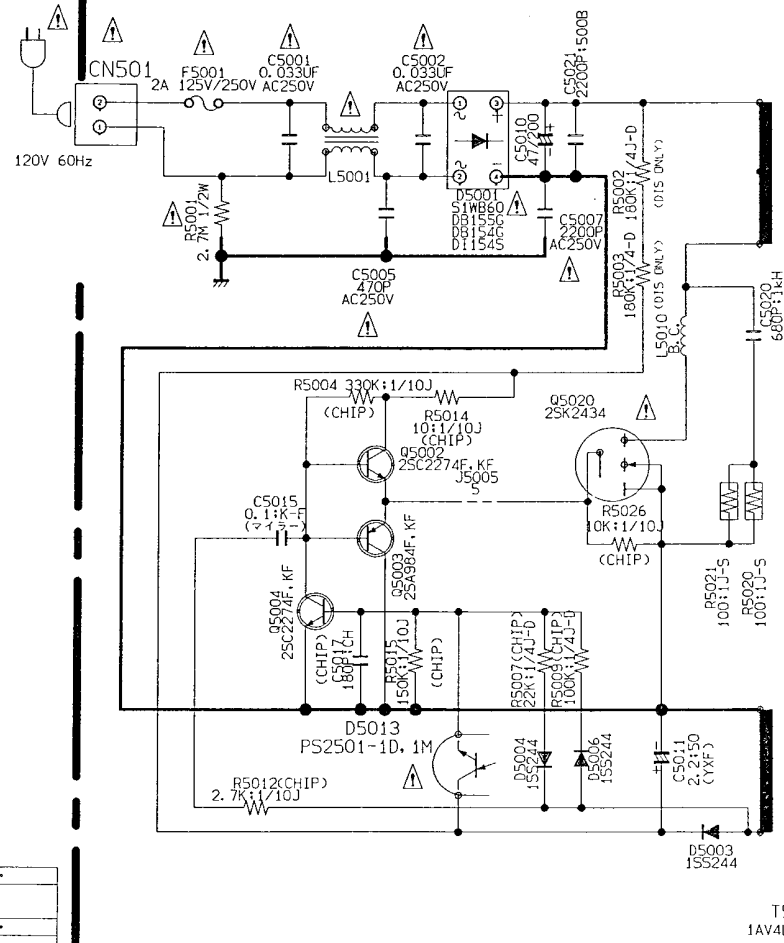
CIRCUIT NAME: COMPL, VP-1 (VIDEO)
PCB NAME: VP-1
SCH CODE: OSD14317602V2
FINISH DATE

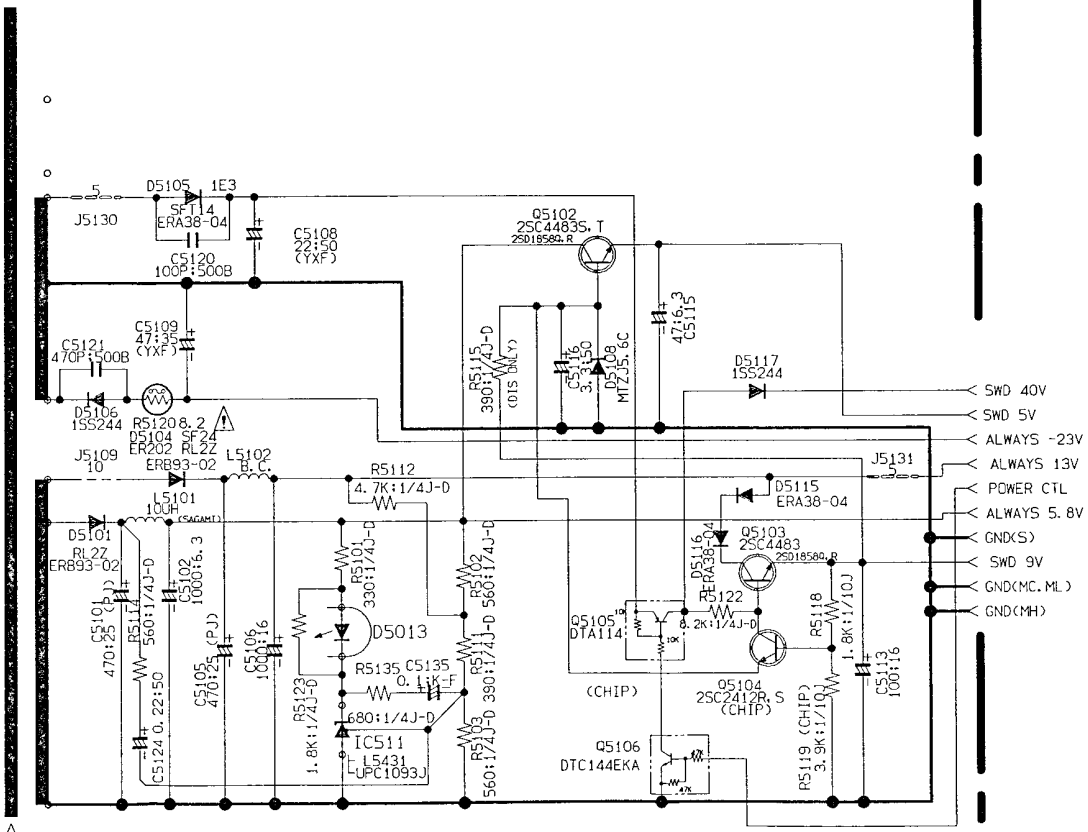
ILL 2

VA6065

NOTE: DO NOT SCALE

機種名	コンプルコード 1AC9BPCC	レターファイル 0SD143-	基本 0	100~120V 50	110~240V 60	UL CSA 1	電取 2	ETC 3	FLDSP 5	機種	一次電解 UL 9	一次電解 PH 12	INLET UL 14	INLET JPN 15	FET TO 19	FET SMT 20		予備 100
SA2/U	2100A	0SD14317600P1	0	50		1				40	9		14			20		





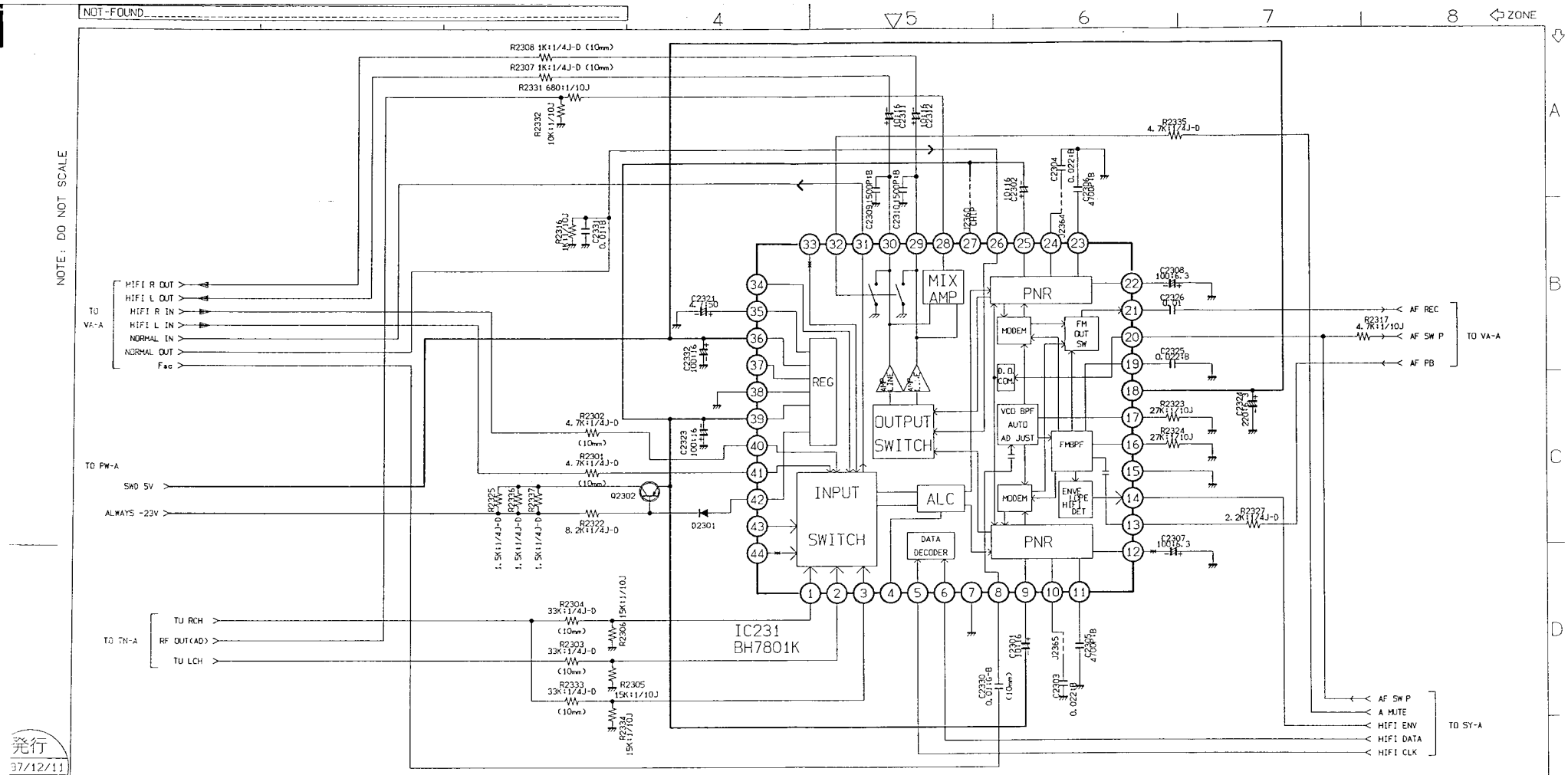
ILL 3

BASIC MODEL	SA2/U
COMMON MODEL	SA4/U SA4H/U
CIRCUIT NAME	SD, POWER(PW-A)
PCB NAME	PW-A
SCH CODE	0SD14317600P1
FINISH DATE	

DB nt95a
CELL 10C2100AZ_PW

発行	97/11/06
技術部	
変更日	98/02/03
APPROVALS	
CHKD	
CHKD	
DESIGN	97・7・3 K.HORIO
DRAWN	97・7・3 K.HORIO

MK	DATE	REV NO	REVISION	SUBSEC



SUBL	
0	COMMON
1	A MUTE
2	QSOUND ON
3	QSOUND OFF
17	FRONT 有り
32 (35)	REAL TIME MODE 有り
33	REAL TIME MODE 無し
63	VA
100	SA4H-/U----
101	SA4H-/U---3
102	
103	

MODEL NAME	LETTER FILE (SUBLAYER)	COMMON	A MUTE	Q SOUND	FRONT	REAL TIME MODE	VA	MODEL
SA4H-/U----	OSD14317602A1	0	1	3	-	33	-	100
SA4H-/U---3	OSD14317608A1	0	1	3	17	33	-	101

PWB :
DB : nt95m
CELL : 10C2100AZ_AD

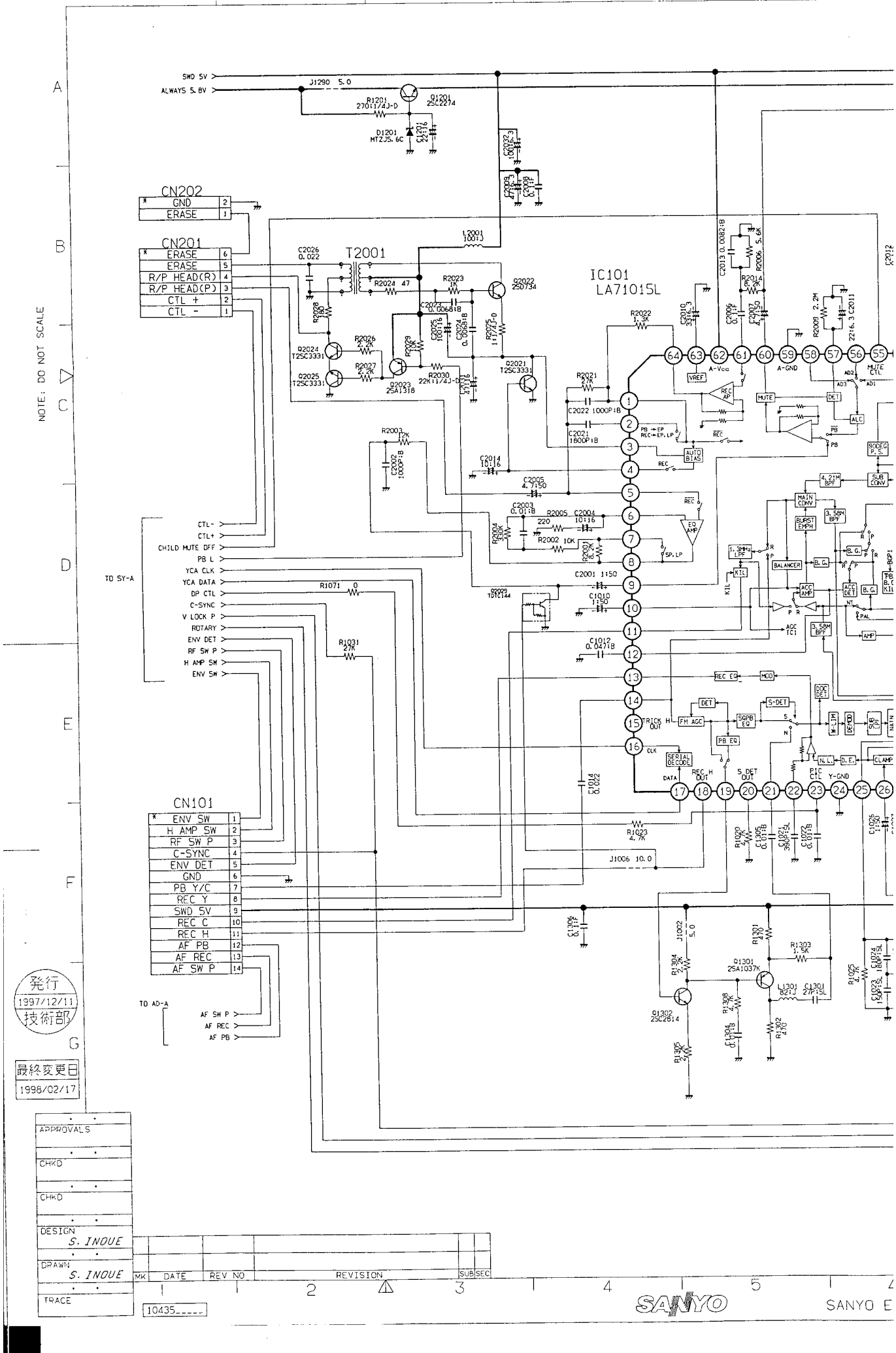
ILL 4

BASIC MODEL: SA4H-/U----	CIRCUIT NAME: COMPL, AD-A (AUDIO HIFI)
COMMON MODEL: SA4H-/U-F-- SA4H-/U---2 SA4H-/CAF--	PCB NAME / SCH CODE: OSD14317602A1
	FINISH DATE

発行 97/12/11
技術部
変更日 98/03/06

APPROVALS
CHKD R. NISHIMURA
CHKD
DESIGN
DRAWN
ARIS H

MK	DATE	REV NO	REVISION	SUB	SEC


SWD 5V
ALWAYS 5.8V
J1290 5.0
Q1201 2SC2274
R1201 270K/1/4J-D
D1201 MTZJ5.6C
C2032 1000P/3
C2003 4.7/16
C2009 0.1/B
CN202
GND
ERASE
CN201
ERASE
ERASE
R/P HEAD(R)
R/P HEAD(P)
CTL +
CTL -
C2026 0.022
T2001
L2001 100μ
R2024 47
R2023 1K
Q2022 2SD734
C2025 100/16
C2024 0.0068/B
R2025 1K/1/4J-D
R2028 180
R2026 2.2K
R2027 2.2K
R2029 10K
R2030 22K/1/4J-D
Q2024 T2SC3331
Q2025 T2SC3331
Q2023 2SA1318
Q2021 T2SC3331
IC101
LA71015L
R2022 1.3K
R2021 27K
C2022 1000P/B
C2021 1600P/B
C2014 10/16
C2005 4.7/50
R2003 12K
C2002 1000P/B
C2003 0.01/B
R2005 220
C2004 10/16
R2004 33K
R2002 10K
R2001 6.8K
C2001 1/50
C1010 1/50
R1071 0
R1031 27K
C1012 0.047/B
R1023 4.7K
J1006 10.0
C1014 0.022
C1306 0.1/F
CN101
ENV SW
H AMP SW
RF SW P
C-SYNC
ENV DET
GND
PB Y/C
REC Y
SWD 5V
REC C
REC H
AF PB
AF REC
AF SW P
TO SY-A
CTL-
CTL+
CHILD MUTE OFF
PB L
YCA CLK
YCA DATA
DP CTL
C-SYNC
V LOCK P
ROTARY
ENV DET
RF SW P
H AMP SW
ENV SW
TO AD-A
AF SW P
AF REC
AF PB
J1002 5.0
R1304 2.2K
Q1302 2SC2814
R1305 2.2K
R1301 470
R1303 1.5K
Q1301 2SA1037K
L1301 82μ
C1301 27P/SL
R1308 4.7K
C1304 0.1/B
R1302 470
R1025 4.7K
C1023 1500P/SL
C1024 1600P/SL
C1026 1/50
C1020 0.1/B
C1021 3900P/SL
C1022 0.1/B
NOTE: DO NOT SCALE
発行
1997/12/11
技術部
最終変更日
1998/02/17
APPROVALS
CHKD
CHKD
DESIGN S. INOUE
DRAWN S. INOUE
TRACE
MK
DATE
REV NO
REVISION
SUB
SEC
10435
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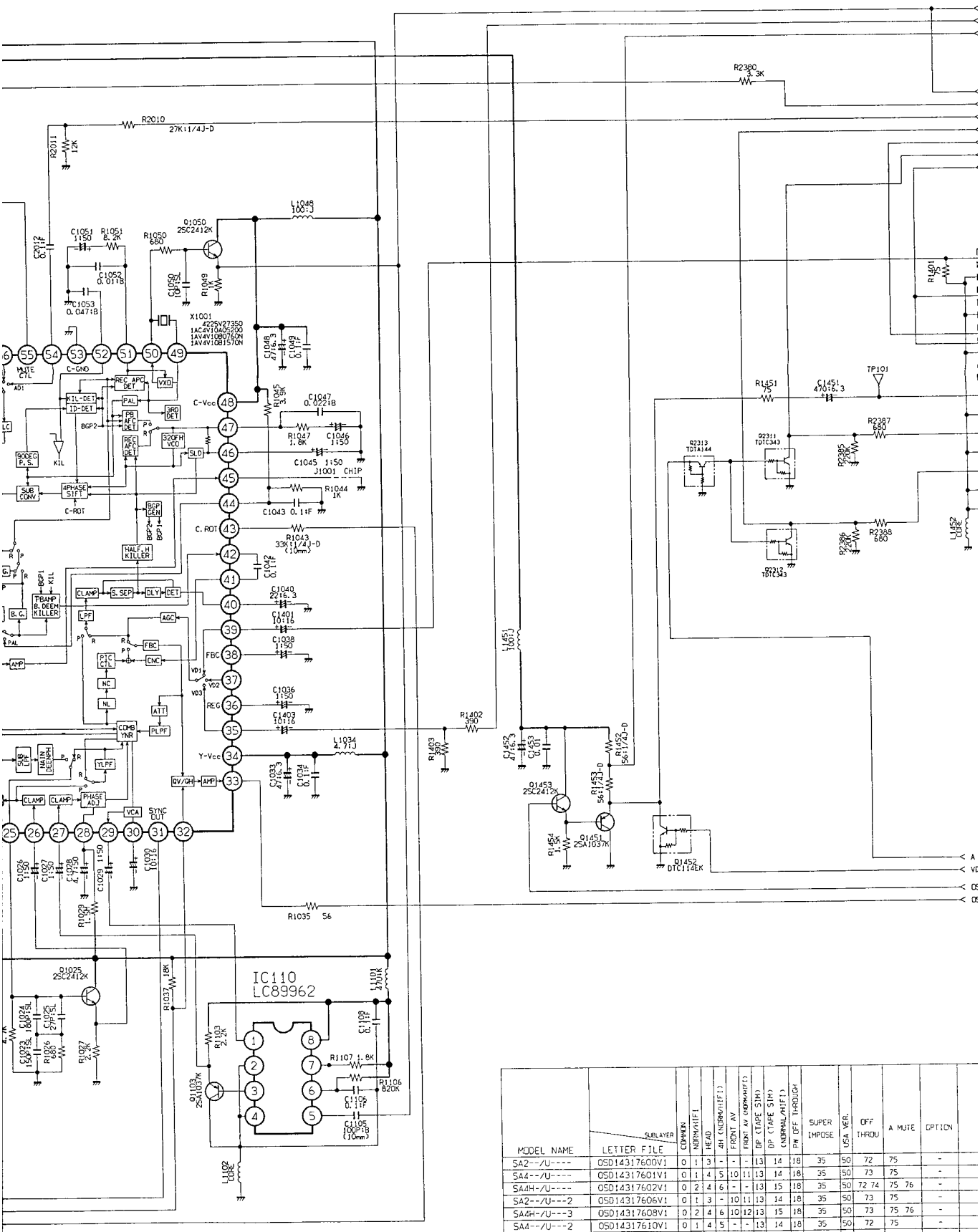


MODEL NAME	LETTER FILE	COMMON	NORMALIFI	HEAD	4H (NORMALIFI)	FRONT AV	FRONT AV (NORMALIFI)	DP (TAPE SIM)	DP (TAPE SIM) (NORMAL_HIFI)	PW OFF THROUGH	SUPER IMPOSE	USA VER.	OFF THROU	A MUTE	OPTION
SA2--/U----	OSD14317600V1	0	1	3	-	-	-	13	14	18	35	50	72	75	-
SA4--/U----	OSD14317601V1	0	1	4	5	10	11	13	14	18	35	50	73	75	-
SA4H-/U----	OSD14317602V1	0	2	4	6	-	-	13	15	18	35	50	72 74	75 76	-
SA2--/U---2	OSD14317606V1	0	1	3	-	10	11	13	14	18	35	50	73	75	-
SA4H-/U---3	OSD14317608V1	0	2	4	6	10	12	13	15	18	35	50	73	75 76	-
SA4--/U---2	OSD14317610V1	0	1	4	5	-	-	13	14	18	35	50	72	75	-

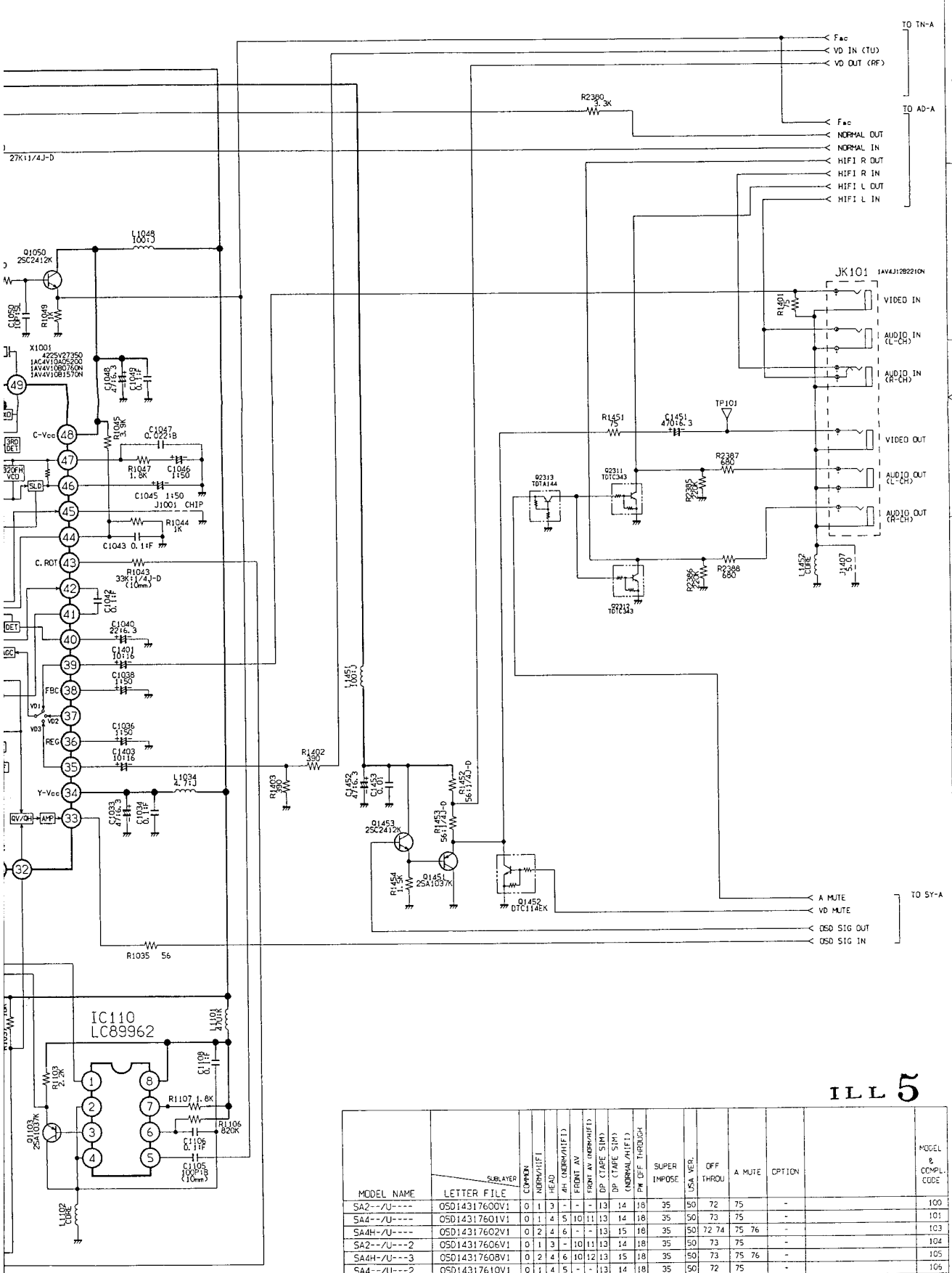
PWB :

DB : nt95a
CELL : 10C2100A_VA

BASIC MODEL	SA4H-/U----
COMMON MODEL	SA4H-/U-F-- SA4H-/CAF--
CIRCUIT NAME	COMPL, VA-A (V
PCB NAME	CP-1
SCH C	OSD
FINISH	
DRAW ID	DB=KA34131 CELL=SA4

YO ELECTRIC CO.,LTD. VIDEO. DIVISION

1989 /3 CADIX



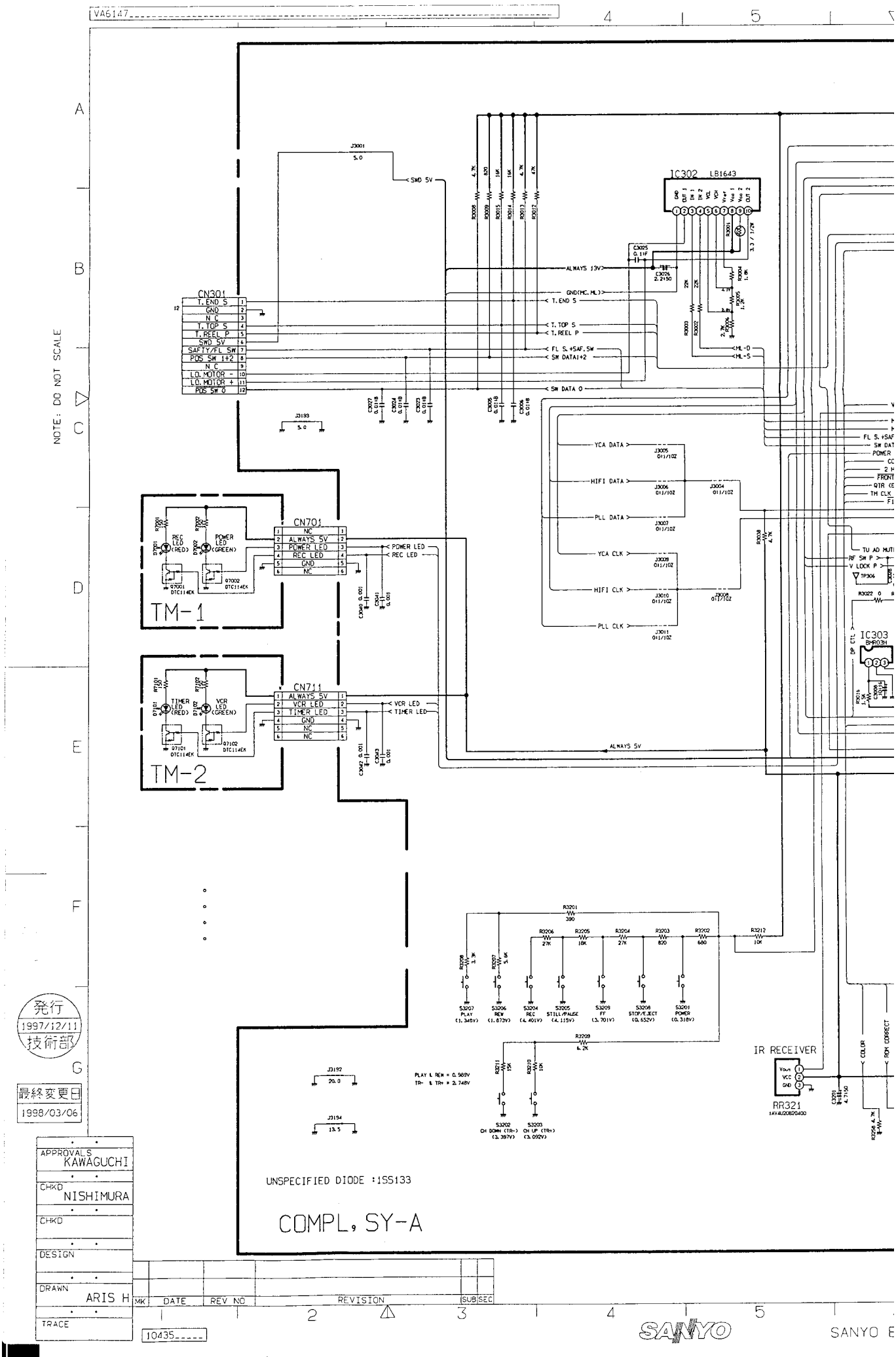
ILL 5

MODEL NAME	LETTER FILE (SUBLAYER)	COMMON	NORM/HIFI	HEAD	4H (NORM/HIFI)	FRONT AV	FRONT AV (NORM/HIFI)	DP (TAPE SIM)	DP (TAPE SIM) (NORMAL/HIFI)	PW OFF THROUGH	SUPER IMPOSE	USA VER.	OFF THROU	A MUTE	OPTION		MODEL & COMPL. CODE
SA2--/U----	OSD14317600V1	0	1	3	-	-	-	13	14	18	35	50	72	75	-		100
SA4--/U----	OSD14317601V1	0	1	4	5	10	11	13	14	18	35	50	73	75	-		101
SA4H-/U----	OSD14317602V1	0	2	4	6	-	-	13	15	18	35	50	72 74	75 76	-		103
SA2--/U---2	OSD14317606V1	0	1	3	-	10	11	13	14	18	35	50	73	75	-		104
SA4H-/U---3	OSD14317608V1	0	2	4	6	10	12	13	15	18	35	50	73	75 76	-		105
SA4--/U---2	OSD14317610V1	0	1	4	5	-	-	13	14	18	35	50	72	75	-		106

PWB :

DB : nt95a
CELL : 10C2100A_VA

BASIC MODEL	SA4H-/U----	CIRCUIT NAME	COMPL. VA-A (VIDEO/NORMAL AUDIO)
COMMON MODEL	SA4H-/U-F-- SA4H-/CAF--	PCB NAME CP-1	SCH CODE OSD14317602V1
		FINISH	
		DRAW ID DB=KA34131 CELL=SA4_VAA	PLOT DATE 98.03.10


VA6147
NOTE : DO NOT SCALE
IC302 LB1643
CN301
T. END S
GND
N.C
T. TOP S
T. REEL P
SWD 5V
SAFTY/FL SW
POS SW 1+2
N.C
LO. MOTOR -
LO. MOTOR +
POS SW 0
CN701
NC
ALWAYS 5V
POWER LED
REC LED
GND
NC
TM-1
CN711
ALWAYS 5V
VCR LED
TIMER LED
GND
NC
NC
TM-2
YCA DATA
HIFI DATA
PLL DATA
YCA CLK
HIFI CLK
PLL CLK
IC303
IR RECEIVER
RR321
UNSPECIFIED DIODE :1SS133
COMPL, SY-A
発行
1997/12/11
技術部
最終変更日
1998/03/06
APPROVALS KAWAGUCHI
CHKD NISHIMURA
CHKD
DESIGN
DRAWN ARIS H
TRACE
MK DATE REV NO REVISION SUB SEC
10435
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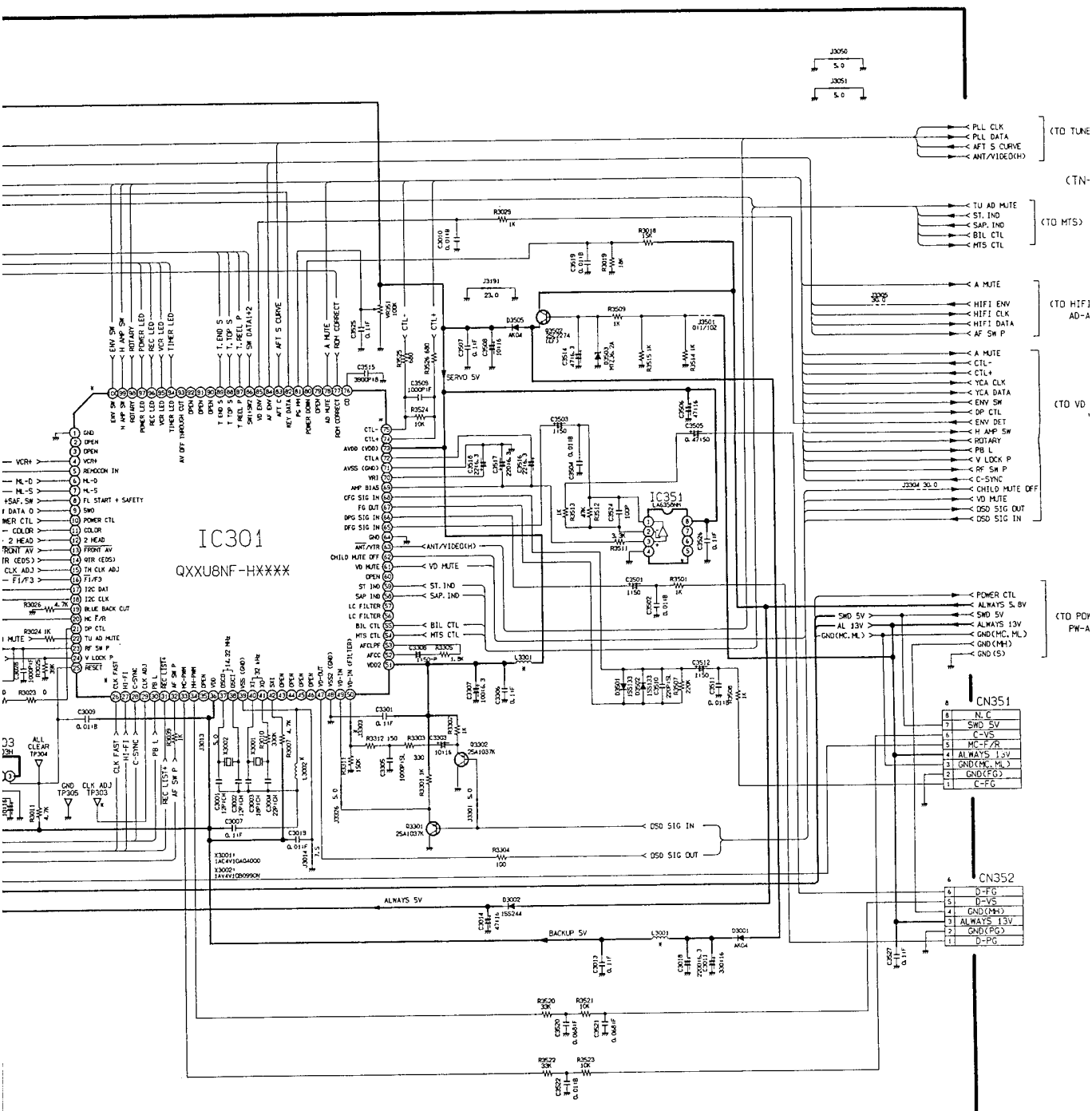
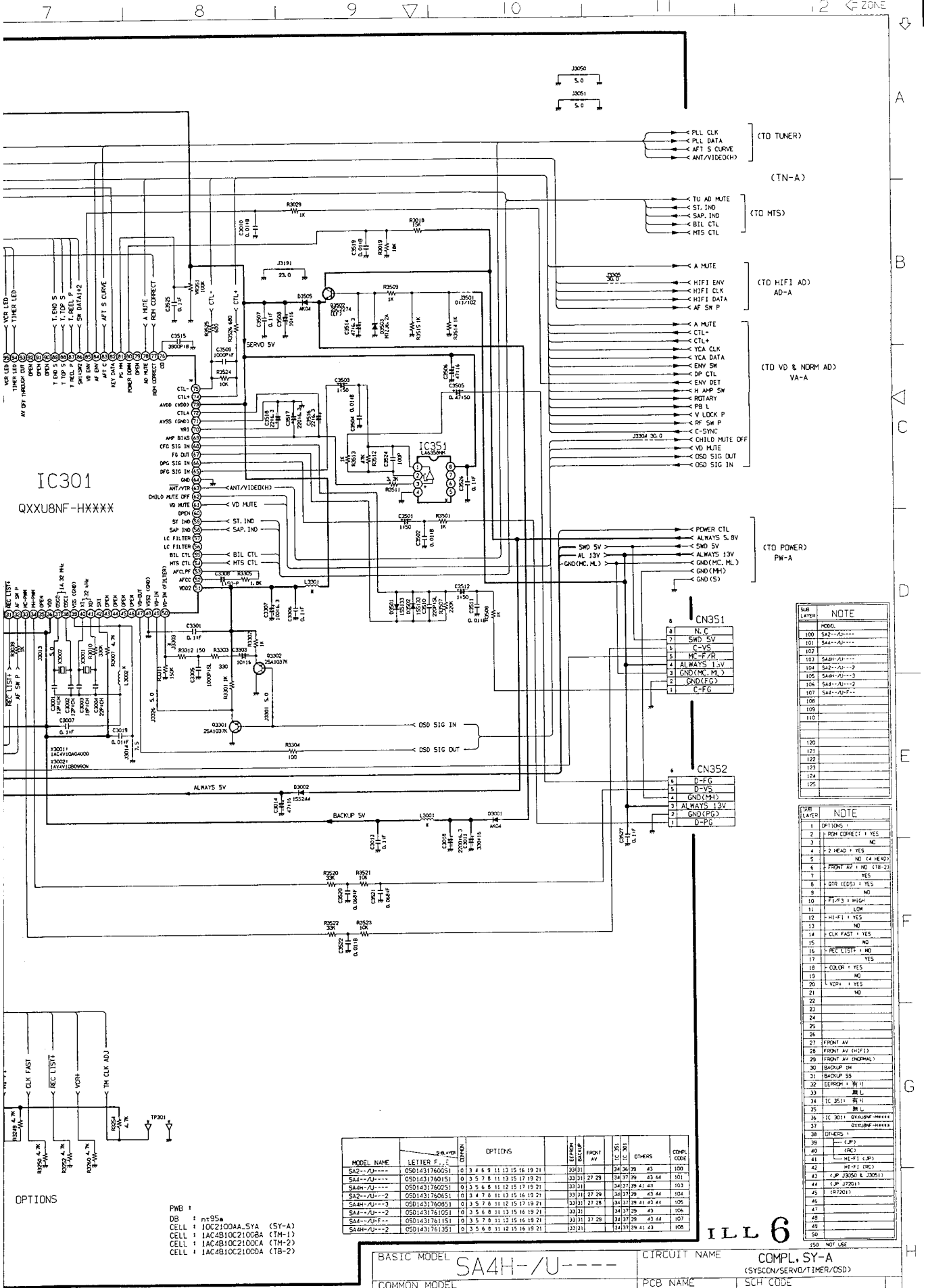


MODEL NAME	LETTER F. E	CHANGE	OPTIONS		EEPROM	BACKUP	FRONT AV	IC 351	IC 301	OTHERS	COMPL CODE
SA2--/U----	0501431760051	0	3 4 6 9 11 13 15 16 19 21		33	31		34	36	39 43	100
SA4--/U----	0501431760151	0	3 5 7 8 11 13 15 17 19 21		33	31	27 29	34	37	39 43 44	101
SA4H-/U----	0501431760251	0	3 5 6 8 11 12 15 17 19 21		33	31		34	37	39 41 43	103
SA2--/U---2	0501431760651	0	3 4 7 8 11 13 15 16 19 21		33	31	27 29	34	37	39 43 44	104
SA4H-/U---3	0501431760851	0	3 5 7 8 11 12 15 17 19 21		33	31	27 28	34	37	39 41 43 44	105
SA4--/U---2	0501431761051	0	3 5 6 8 11 13 15 16 19 21		33	31		34	37	39 43	106
SA4--/U-F--	0501431761151	0	3 5 7 8 11 13 15 16 19 21		33	31	27 29	34	37	39 43 44	107
SA4H-/U---2	0501431761351	0	3 5 6 8 11 12 15 16 19 21		33	31		34	37	39 41 43	108

PWB :
DB : nt95m
CELL : 10C2100AA_5YA (SY-A)
CELL : 1AC4B10C2100BA (TM-1)
CELL : 1AC4B10C2100CA (TM-2)
CELL : 1AC4B10C2100DA (TB-2)

ILL 6

BASIC MODEL	SA4H-/U----	CIRCUIT NAME	COMPI (SYSCON/SEI
COMMON MODEL	SA4H-/U-F-- SA4H-/CAF--	PCB NAME	SCH CODE OSD1/
		FINISH	
		DRAW ID	DB=KA34131 CELL=SA4_



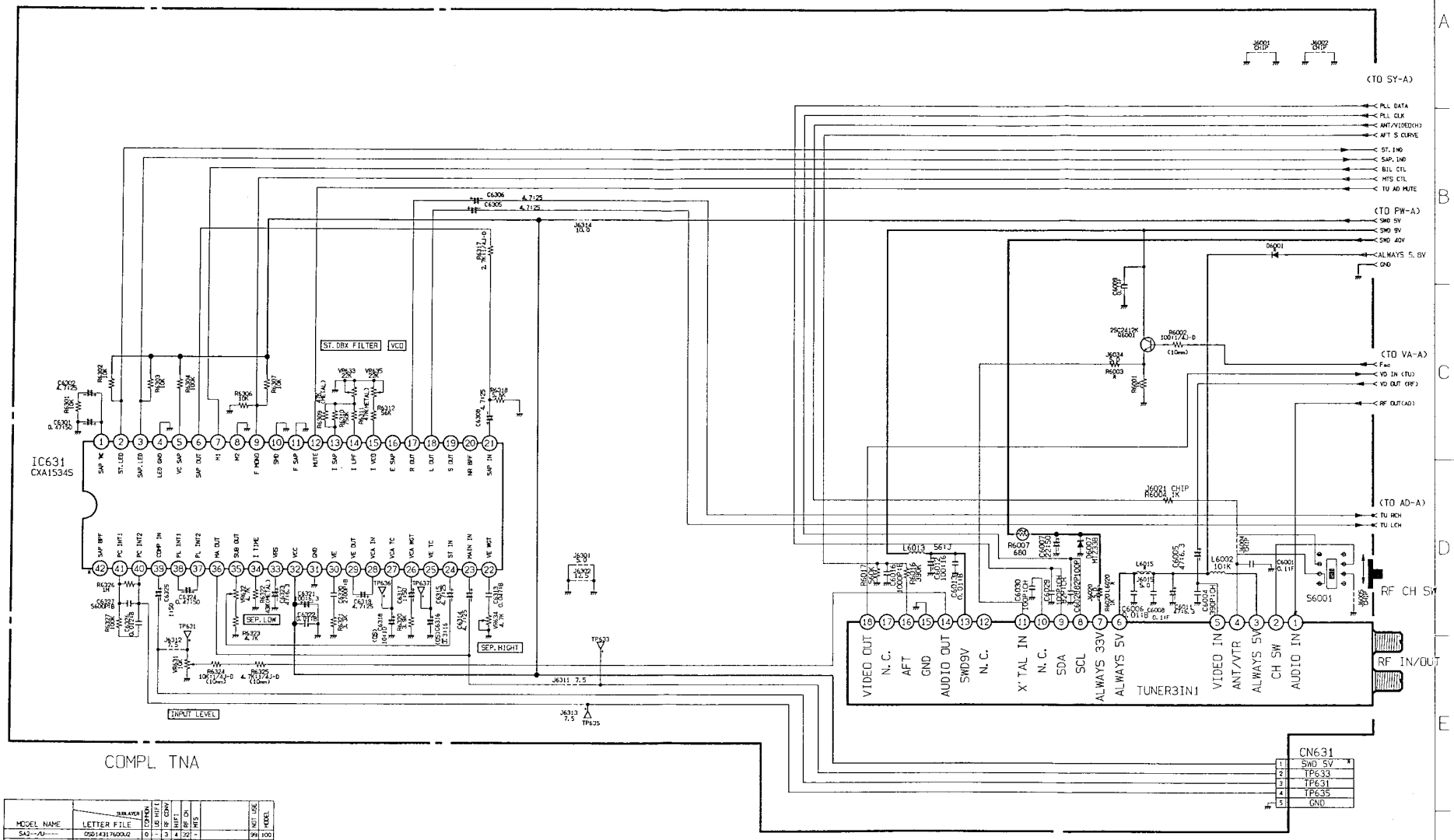
MODEL NAME	LETTER F...	OPTIONS		EEPROM	BACKUP	FRONT AV	IC 351	IC 301	OTHERS	COMPL CODE
SA2--/U----	0501431760GS1	0	3 4 6 9 11 13 15 16 19 21	33	31		34	36 39	43	100
SA4--/U----	0501431760151	0	3 5 7 8 11 13 15 17 19 21	33	31	27 29	34	37 39	43 44	101
SA4H-/U----	0501431760251	0	3 5 6 8 11 12 15 17 19 21	33	31		34	37 39	41 43	103
SA2--/U---2	0501431760651	0	3 4 7 8 11 13 15 16 19 21	33	31	27 29	34	37 39	43 44	104
SA4H-/U---3	0501431760851	0	3 5 7 8 11 12 15 17 19 21	33	31	27 28	34	37 39	41 43 44	105
SA4--/U---2	0501431761051	0	3 5 6 8 11 13 15 16 19 21	33	31		34	37 39	43	106
SA4--/U-F--	0501431761151	0	3 5 7 8 11 12 15 16 19 21	33	31	27 29	34	37 39	43 44	107
SA4H-/U---2	0501431761351	0	3 5 6 8 11 12 15 16 19 21	33	31		34	37 39	41 43	108

SUB LAYER	NOTE
	MODEL
100	SA2--/U----
101	SA4--/U----
102	
103	SA4H-/U----
104	SA2--/U---2
105	SA4H-/U---3
106	SA4--/U---2
107	SA4--/U-F--
108	
109	
110	
120	
121	
122	
123	
124	
125	

SUB LAYER	NOTE
1	OPTIONS :
2	- ROM CORRECT : YES
3	NO
4	- 2 HEAD : YES
5	NO (4 HEAD)
6	- FRONT AV : NO (TB-2)
7	YES
8	- DTR (EDS) : YES
9	NO
10	- FL/93 : HIGH
11	LOW
12	- HI-FI : YES
13	NO
14	- CLK FAST : YES
15	NO
16	- REC LIST : NO
17	YES
18	- COLOR : YES
19	NO
20	- VCR+ : YES
21	NO
22	
23	
24	
25	
26	
27	FRONT AV
28	FRONT AV (HIFI)
29	FRONT AV (NORMAL)
30	BACKUP IM
31	BACKUP SS
32	EEPROM : 有
33	無
34	IC 351 : 有
35	無
36	IC 301 : QXXU8NF-H****
37	QXXU8NF-H****
38	OTHERS :
39	(JP)
40	(RC)
41	HI-FI (JP)
42	HI-FI (RC)
43	(JP J3050 & J3051)
44	(JP J7201)
45	(R7201)
46	
47	
48	
49	
50	NOT USE

BASIC MODEL	SA4H-/U----
COMMON MODEL	SA4H-/U-F-- SA4H-/CAF--
CIRCUIT NAME	COMPL, SY-A (SYSCON/SERVO/TIMER/OSD)
PCB NAME	
SCH CODE	OSD1431760251
FINISH	
DRAW ID	DB=KA34131 CELL=SA4_SYA
PLOT DATE	98.03.10

NOTE: DO NOT SCALE



COMPL TNA

MODEL NAME	LETTER FILE	CHASSIS	LE HIFI	IF	CDV	HIFI	RF	DN	MTS		NCI USE	MODEL
SA2--/U----	OSD14317600U2	0	-	3	4	32	-				99	100
SA4--/U----	OSD14317601U2	0	-	3	4	32	-				99	101
SA4H-/U----	OSD14317602U2	0	1	3	5	32	36				99	103

ILL 7

BASIC MODEL	SA4H-/U----
COMMON MODEL	SA4H-/U---3 SA4H-/U-F-- SA4H-/U-F-2 SA4H-/CAF-- SA4H-/U---2
CIRCUIT NAME	COMPL, TN-A
PCB NAME	
SCH CODE	OSD14317602U2
FINISH DATE	
DRAW ID	DB=KA34131 CELL=SA4_TNA
PLOT DATE	98.03.11

PWB :
DB : nt95a
CELL : 10C2100AZ_TN

APPROVALS
CHKD
CHKD
DESIGN
DRAWN ARIS H
TRACE

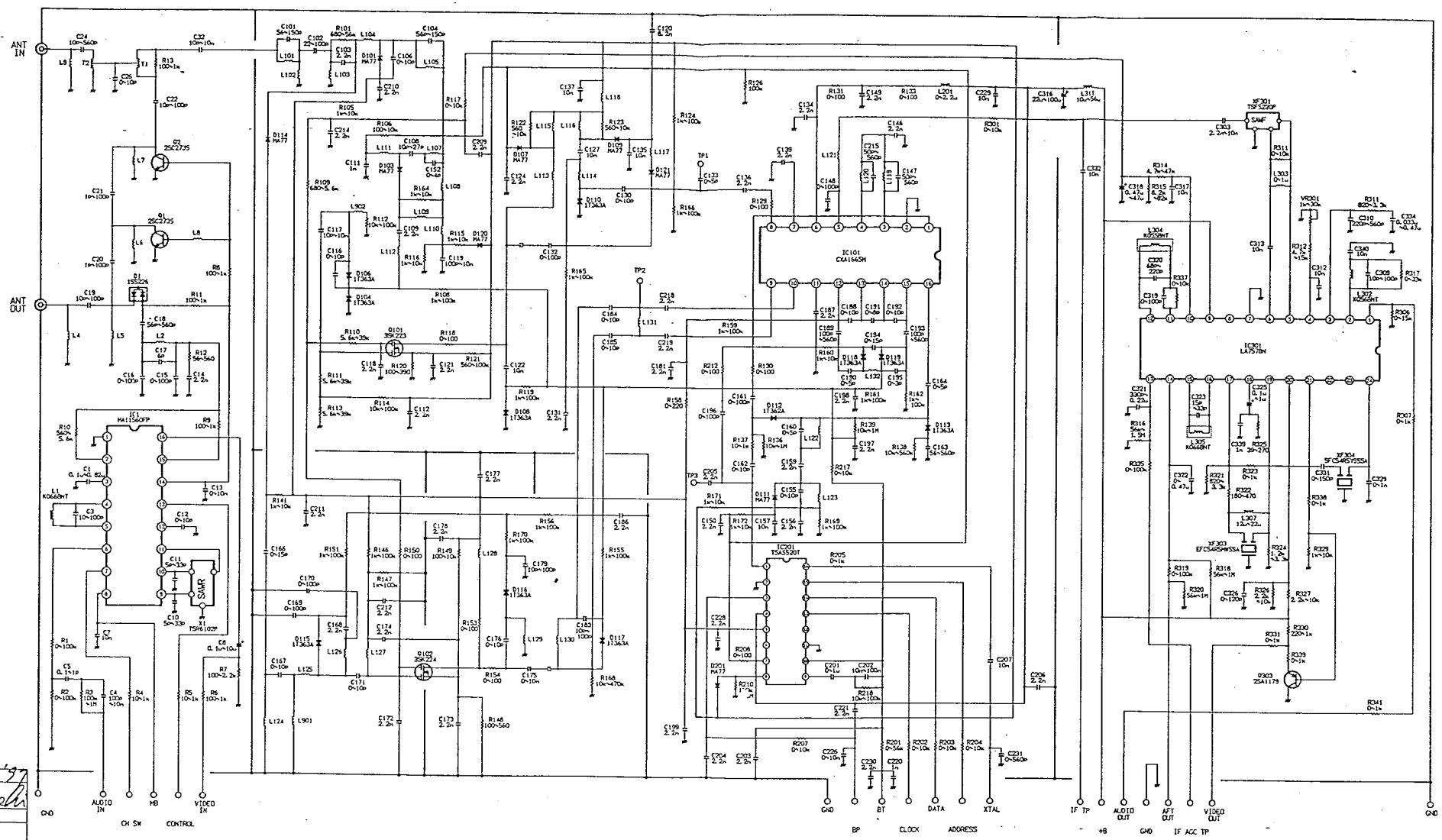
MK	DATE	REV NO	REVISION	SUB	SEC

SANYO

SANYO ELECTRIC CO.,LTD. VIDEO.DIVISION.

1989 /3 CADIX

JIS A3



Q1, Q2 : 2SC2735, 2SC4713K
Q101 : 3SK194 , 3SK223, 3SK235, 3SK227, 3SK225
Q102 : 3SK224 , 3SK233, 3SK200, 3SK232
Q201 : 2SC4083
Q202 : 2SC4211, 2SC4081
Q301 : 2SC4269, 2SC3082K
Q303 : 2SA1179, 2SA1037K

B201, B202, B204 : RA1040, DTA114, UNS114
IC1 : HA11560FP, AN3115S
IC101 : CXA1665, CXA1665M-S, CXA1665AM-S
IC201 : TD6380Z, MC44817D, TSA5520T, MC44818D, AN8561S, M64894FP
IC301 : LA7577 , LA7577ST, LA7578, LA7565, M52342SP

D001 : 1SS226, DCC010
D101, D103, D107, D109, D111, D114, D120, D121 : MA77, HSU277, 1SS314
D104, D106, D108, D110, D113, D115, D116, D117, D118, D119 : HVU200A, MA366F, 1SV232, 1T363A, HVU363
D112 : 1T362A, MA366F, 1SV232

X1 : KAR-61CT, TSR6102, F82SME
X101 : AT-51, HC-49/U-S
XF301 : TSF1220P, TSF1220U, TSF5220P, TSF5221P, M1859
XF303 : TPS4, SMC8, TPS4, SMC, EFC-S4RSMMS
XF304 : SFSH4, SMDB, SFSL4, SMDB, EFC-S4RSHSSW, EFC-S4RSYSSA
L1, L305 : K066BNT, K052BNT

ILL 10

Sep. 12. '97
APPROVED
F. Kakehi
DRKD
Sep. 11. 1997
DRWD.
M. Takagi
1996. 03. 08
DESIGNED
T. N. F. H. M
1997. 09. 08
DRAWN
. ABE
1997. 09. 08
DRAW. ID
_VA65ACM1

MK	DATE	REVISION	SUBSEC

SANYO Tuner Industries Co., Ltd.

ORIGINAL MODEL	PART NAME	PART CODE
1AV4F1FAM0080	TUNER RF/TU/IF	3AE4F1VA065ACM