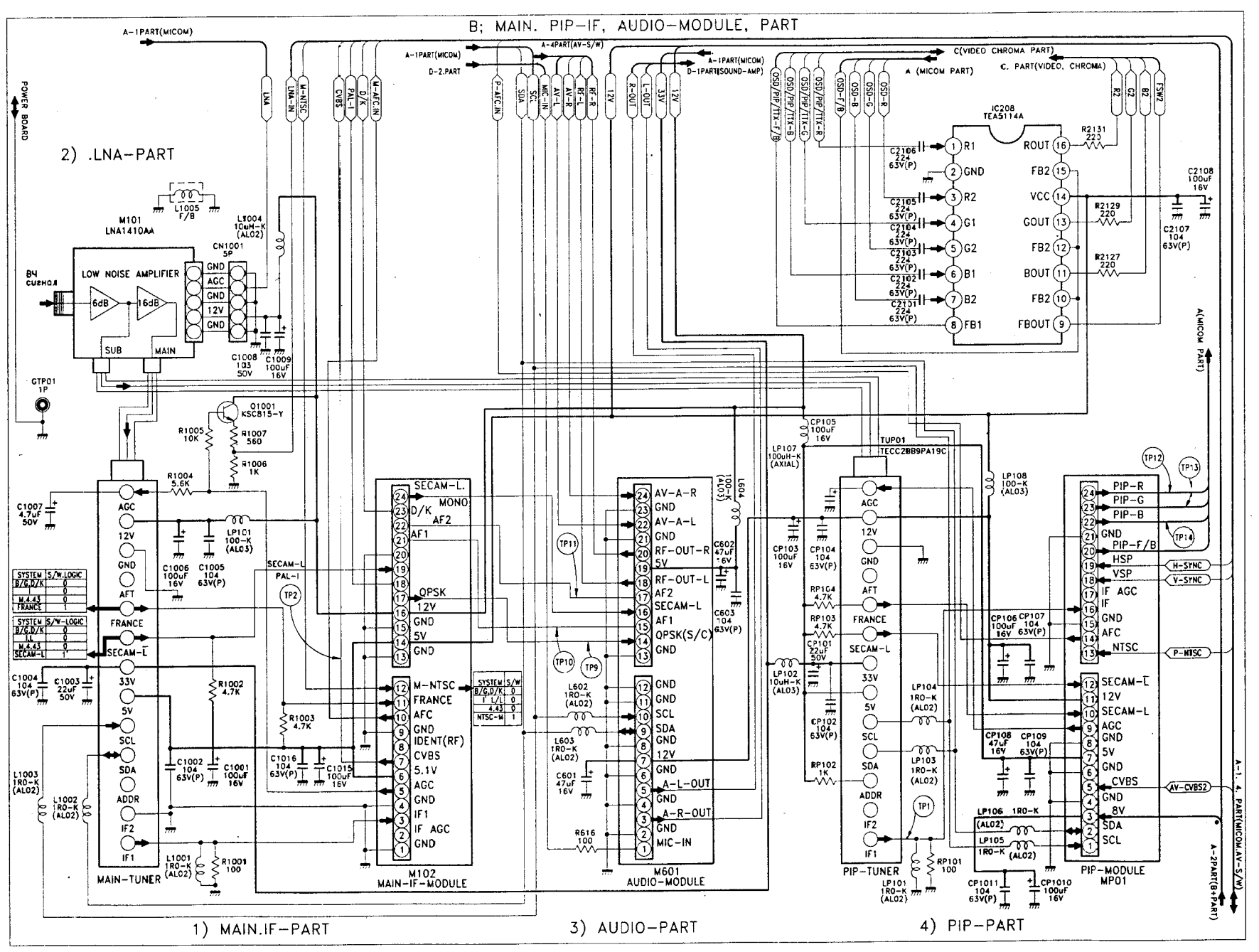
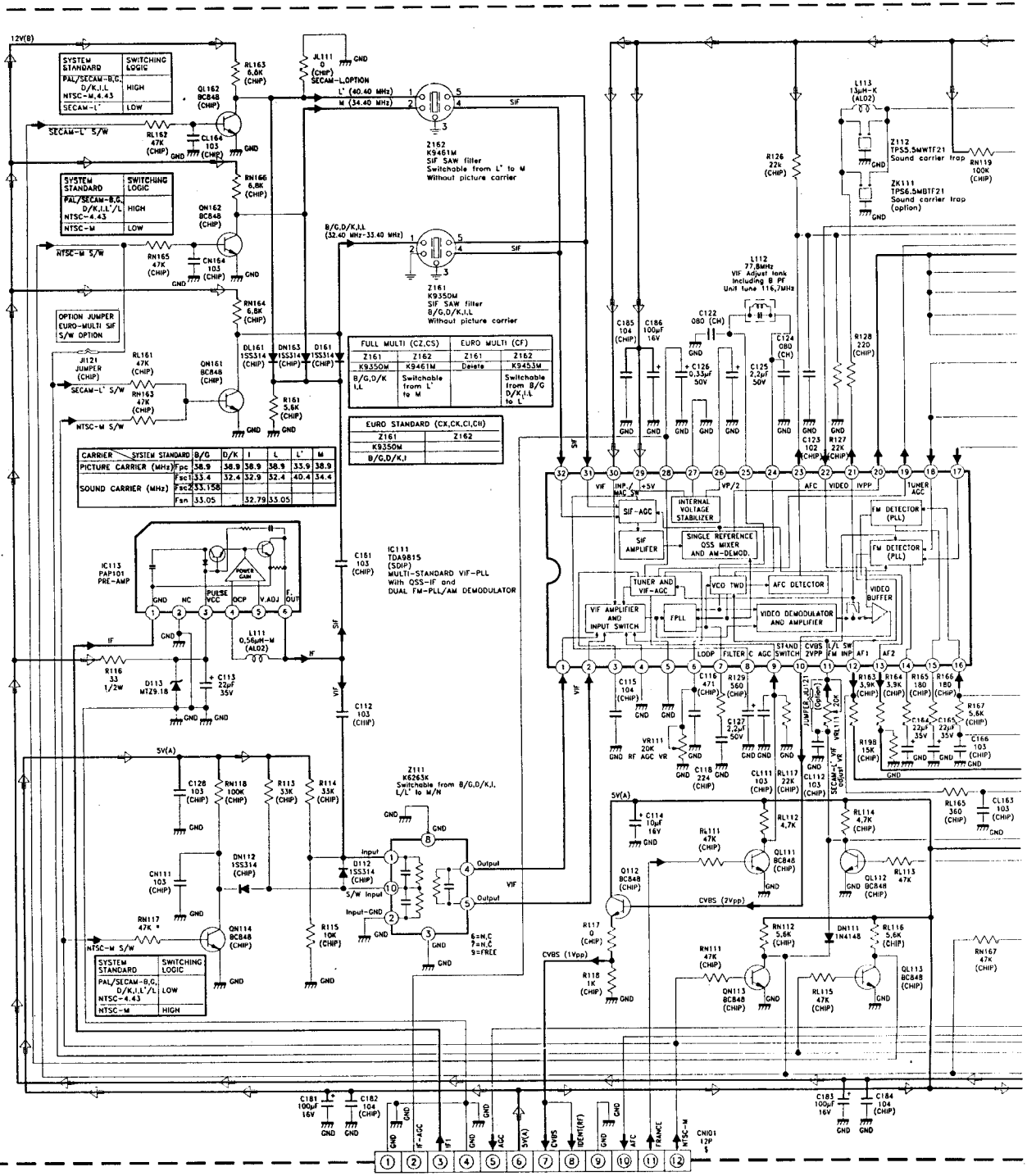
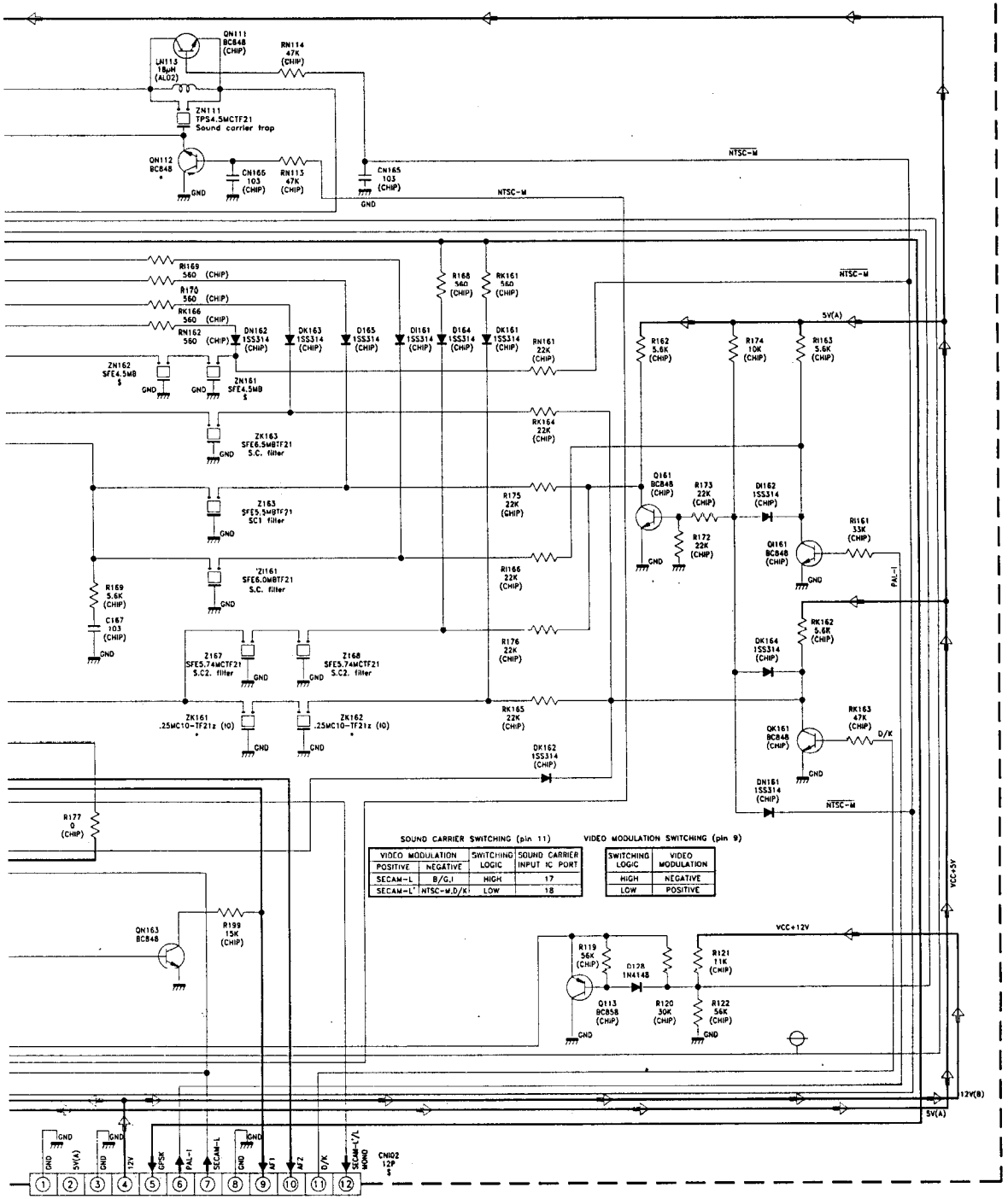

B; MAIN. PIP-IF, AUDIO-MODULE, PART
2) .LNA-PART
1) MAIN.IF-PART
3) AUDIO-PART
4) PIP-PART
POWER BOARD
LOW NOISE AMPLIFIER
6dB
16dB
SUB
MAIN
M101
LNA1410AA
L1005 F/B
LT004 10uH-K (AL02)
CN1001 5P
GND
AGC
GND
12V
GND
C1008 103 50V
C1009 100uF 16V
GTP01 1P
Q1001 KSC815-Y
R1005 10K
R1007 560
R1006 1K
R1004 5.6K
C1007 4.7uF 50V
AGC
12V
GND
AFT
FRANCE
SECAM-L
33V
5V
SCL
SDA
ADDR
IF2
IF1
MAIN-TUNER
LP101 100-K (AL03)
C1006 100uF 16V
C1005 104 63V(P)
SECAM-L
PAL-I
TP2
R1002 4.7K
R1003 4.7K
C1004 104 63V(P)
C1003 22uF 50V
C1002 104 63V(P)
C1001 100uF 16V
C1016 104 63V(P)
C1015 100uF 16V
L1003 1R0-K (AL02)
L1002 1R0-K (AL02)
L1001 1R0-K (AL02)
R1001 100
SECAM-L.
MONO
D/K
AF2
AF1
QPSK
12V
GND
5V
GND
M-NTSC
FRANCE
AFC
GND
IDENT(RF)
CVBS
5.1V
AGC
GND
IF1
IF AGC
GND
M102
MAIN-IF-MODULE
SYSTEM S/W.LOGIC
B/G,D/K 0
M.4.43 0
FRANCE 1
SYSTEM S/W-LOGIC
B/G,D/K 0
I/L 0
M.4.43 0
SECAM-L 1
SYSTEM S/W
B/G,D/K 0
I L/L 0
4.43 0
NTSC-M 1
A-1PART(MICOM)
A-4PART(AV-S/W)
D-2.PART
A-1PART(MICOM)
D-1PART(SOUND-AMP)
C(VIDEO CHROMA PART)
A (MICOM PART)
C. PART(VIDEO, CHROMA)
A(MICOM PART)
IC208 TEA5114A
R1
GND
R2
G1
G2
B1
B2
FB1
ROUT
FB2
VCC
GOUT
FB2
BOUT
FB2
FBOUT
R2131 220
R2129 220
R2127 220
C2108 100uF 16V
C2107 104 63V(P)
C2106 224 63V(P)
C2105 224 63V(P)
C2104 224 63V(P)
C2103 224 63V(P)
C2102 224 63V(P)
C2101 224 63V(P)
AV-A-R
GND
AV-A-L
GND
RF-OUT-R
5V
RF-OUT-L
AF2
SECAM-L
AF1
OPSK(S/C)
GND
GND
GND
SCL
SDA
GND
12V
GND
A-L-OUT
GND
A-R-OUT
GND
MIC-IN
M601
AUDIO-MODULE
L602 1R0-K (AL02)
L603 1R0-K (AL02)
C601 47uF 16V
R616 100
L604 100-K (AL03)
C602 47uF 16V
C603 104 63V(P)
TP11
TP10
TP9
CP105 100uF 16V
LP107 100uH-K (AXIAL)
TUP01 TECC2BB9PA19C
LP108 100-K (AL03)
CP103 100uF 16V
CP104 104 63V(P)
RP104 4.7K
RP103 4.7K
CP101 22uF 50V
CP102 104 63V(P)
RP102 1K
LP102 10uH-K (AL03)
AGC
12V
GND
AFT
FRANCE
SECAM-L
33V
5V
SCL
SDA
ADDR
IF2
IF1
PIP-TUNER
TP1
RP101 100
LP101 1R0-K (AL02)
LP104 1R0-K (AL02)
LP103 1R0-K (AL02)
CP106 100uF 16V
CP107 104 63V(P)
CP108 47uF 16V
CP109 104 63V(P)
LP106 1R0-K (AL02)
LP105 1R0-K (AL02)
CP1011 104 63V(P)
CP1010 100uF 16V
TP12
TP13
TP14
PIP-R
PIP-G
PIP-B
GND
PIP-F/B
HSP
VSP
IF AGC
IF
GND
AFC
NTSC
SECAM-L
12V
SECAM-L
AGC
GND
5V
GND
CVBS
GND
8V
SDA
SCL
PIP-MODULE
MP01
H-SYNC
V-SYNC
P-NTSC
AV-CVBS2
A-1. 4. PART(MICOM.AV-S/W)
A-2PART(B+PART)

IF


12V(B)
SYSTEM STANDARD | SWITCHING LOGIC
PAL/SECAM-B,G, D/K,I,L | HIGH
NTSC-M,4.43 | HIGH
SECAM-L' | LOW
SECAM-L' S/W
RL163 6,8K (CHIP)
RL152 47K (CHIP)
CL164 103 (CHIP)
QL162 BC848 (CHIP)
JL111 0 (CHIP) SECAM-L OPTION
L' (40.40 MHz)
M (34.40 MHz)
SIF
Z162 K9461M SIF SAW filter Switchable from L' to M Without picture carrier
B/G,D/K,I,L (32.40 MHz-33.40 MHz)
Z161 K9350M SIF SAW filter B/G,D/K,I,L Without picture carrier
SYSTEM STANDARD | SWITCHING LOGIC
PAL/SECAM-B,G, D/K,I,L'/L | HIGH
NTSC-4.43 | HIGH
NTSC-M | LOW
NTSC-M S/W
RN166 6,8K (CHIP)
RN165 47K (CHIP)
CN154 103 (CHIP)
QN162 BC848 (CHIP)
RN164 6,8K (CHIP)
OPTION JUMPER EURO-MULTI SIF S/W OPTION
JI121 JUMPER (CHIP)
RL161 47K (CHIP)
RN163 47K (CHIP)
QN161 BC848 (CHIP)
DL161 1SS314 (CHIP)
DN163 1SS314 (CHIP)
DI61 1SS314 (CHIP)
R161 5,6K (CHIP)
FULL MULTI (CZ,CS)
EURO MULTI (CF)
Z161 | Z162 | Z161 | Z162
K9350M | K9461M | Delete | K9453M
B/G,D/K I,L | Switchable from L' to M | | Switchable from B/G D/K,I,L to L'
EURO STANDARD (CX,CK,CI,CH)
Z161 | Z162
K9350M
B/G,D/K,I
CARRIER \ SYSTEM STANDARD | B/G | D/K | I | L | L' | M
PICTURE CARRIER (MHz) | Fpc 38.9 | 38.9 | 38.9 | 38.9 | 33.9 | 38.9
Fsc1 33.4 | 32.4 | 32.9 | 32.4 | 40.4 | 34.4
SOUND CARRIER (MHz) | Fsc2 33.158
Fsn 33.05 | | 32.79 | 33.05
IC113 PAP101 PRE-AMP
POWER GAIN
GND NC PULSE VCC OCP V.ADJ F. OUT
IC111 TDA9815 (SDIP) MULTI-STANDARD VIF-PLL With QSS-IF and DUAL FM-PLL/AM DEMODULATOR
L111 0,56µH-M (AL02)
IF
SIF
VIF
R116 33 1/2W
D113 MTZ9.18
C113 22µF 35V
C161 103 (CHIP)
C112 103 (CHIP)
5V(A)
C126 103 (CHIP)
RN118 100K (CHIP)
R113 33K (CHIP)
R114 33K (CHIP)
Z111 K6263K Switchable from B/G,D/K,I, L/L' to M/N
Input
S/W Input
Input-GND
Output
Output
VIF
6=N.C 7=N.C 9=FREE
CN111 103 (CHIP)
DN112 1SS314 (CHIP)
RN117 47K *
QN114 BC848 (CHIP)
R115 10K (CHIP)
NTSC-M S/W
SYSTEM STANDARD | SWITCHING LOGIC
PAL/SECAM-B,G, D/K,I,L'/L | LOW
NTSC-4.43 | LOW
NTSC-M | HIGH
L113 13µH-K (AL02)
Z112 TPS5.5MWTF21 Sound carrier trap
ZK111 TPS6.5MBTF21 Sound carrier trap (option)
RN119 100K (CHIP)
R126 22k (CHIP)
L112 77,8MHz VIF Adjust tank including B PF Unit tune 116,7MHz
C122 080 (CH)
C124 080 (CH)
C125 2,2µF 50V
C126 0,33µF 50V
C185 104 (CHIP)
C186 100µF 16V
R128 220 (CHIP)
R127 22K (CHIP)
C123 102 (CHIP)
32 VIF
31 INP./MAC SW
30 +5V
29
28
27 VP/2
26
25
24
23 AFC
22 VIDEO
21 IVPP
20
19 TUNER AGC
18
17
SIF-AGC
INTERNAL VOLTAGE STABILIZER
SIF AMPLIFIER
SINGLE REFERENCE QSS MIXER AND AM-DEMOD.
FM DETECTOR (PLL)
TUNER AND VIF-AGC
VCO TWD
AFC DETECTOR
VIDEO BUFFER
VIF AMPLIFIER AND INPUT SWITCH
FPLL
VIDEO DEMODULATOR AND AMPLIFIER
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
LOOP FILTER C AGC STAND SWITCH CVBS 2VPP I/L SW FM INP AF1 AF2
C115 104 (CHIP)
C116 471 (CHIP)
R129 560 (CHIP)
C127 2,2µF 50V
R163 5,6K (CHIP)
R164 5,6K (CHIP)
R165 180 (CHIP)
R166 180 (CHIP)
R167 5,6K (CHIP)
C164 22µF 35V
C165 22µF 35V
C166 103 (CHIP)
VR111 20K RF AGC VR
C118 224 (CHIP)
CL111 103 (CHIP)
RL117 22K (CHIP)
JUMPER_AL021 (Option)
VR112 20K SECAM-L VIDEO LEVEL
C112 103 (CHIP)
RL165 360 (CHIP)
CL163 103 (CHIP)
C114 10µF 16V
RL111 47K (CHIP)
RL112 4,7K
QL111 BC848 (CHIP)
RL114 4,7K (CHIP)
RL113 47K
QL112 BC848 (CHIP)
Q112 BC848 (CHIP)
CVBS (2Vpp)
R117 0 (CHIP)
CVBS (1Vpp)
R118 1K (CHIP)
RN112 5,6K (CHIP)
DN111 1N4148
RL116 5,6K (CHIP)
RN111 47K (CHIP)
QN113 BC848 (CHIP)
RL115 47K (CHIP)
QL113 BC848 (CHIP)
RN167 47K (CHIP)
C181 100µF 16V
C182 104 (CHIP)
C183 100µF 16V
C184 104 (CHIP)
GND IF-AGC IFT GND AGC 5V(A) CVBS IDENT(RF) GND GND AFC FRANCE NTSC-M
CN101 12P
1 2 3 4 5 6 7 8 9 10 11 12
SECAM-L'/L(FRANCE) S/W
SYSTEM STANDARD | SWITCHING LOGIC
PAL/SECAM-B,G, D/K,I, NTSC-M,4.43 | LOW
SECAM-L'/L | HIGH
NTSC-M S/W
SYSTEM STANDARD | SWITCHING LOGIC
PAL/SECAM-B,G, D/K,I,L'/L NTSC-4.43 | LOW
NTSC-M | HIGH



VIDEO MODULATION		SWITCHING LOGIC	SOUND CARRIER INPUT IC PORT
POSITIVE	NEGATIVE		
SECAM-L	B/G,I	HIGH	17
SECAM-L'	NTSC-M,D/K	LOW	18

SWITCHING LOGIC	VIDEO MODULATION
HIGH	NEGATIVE
LOW	POSITIVE

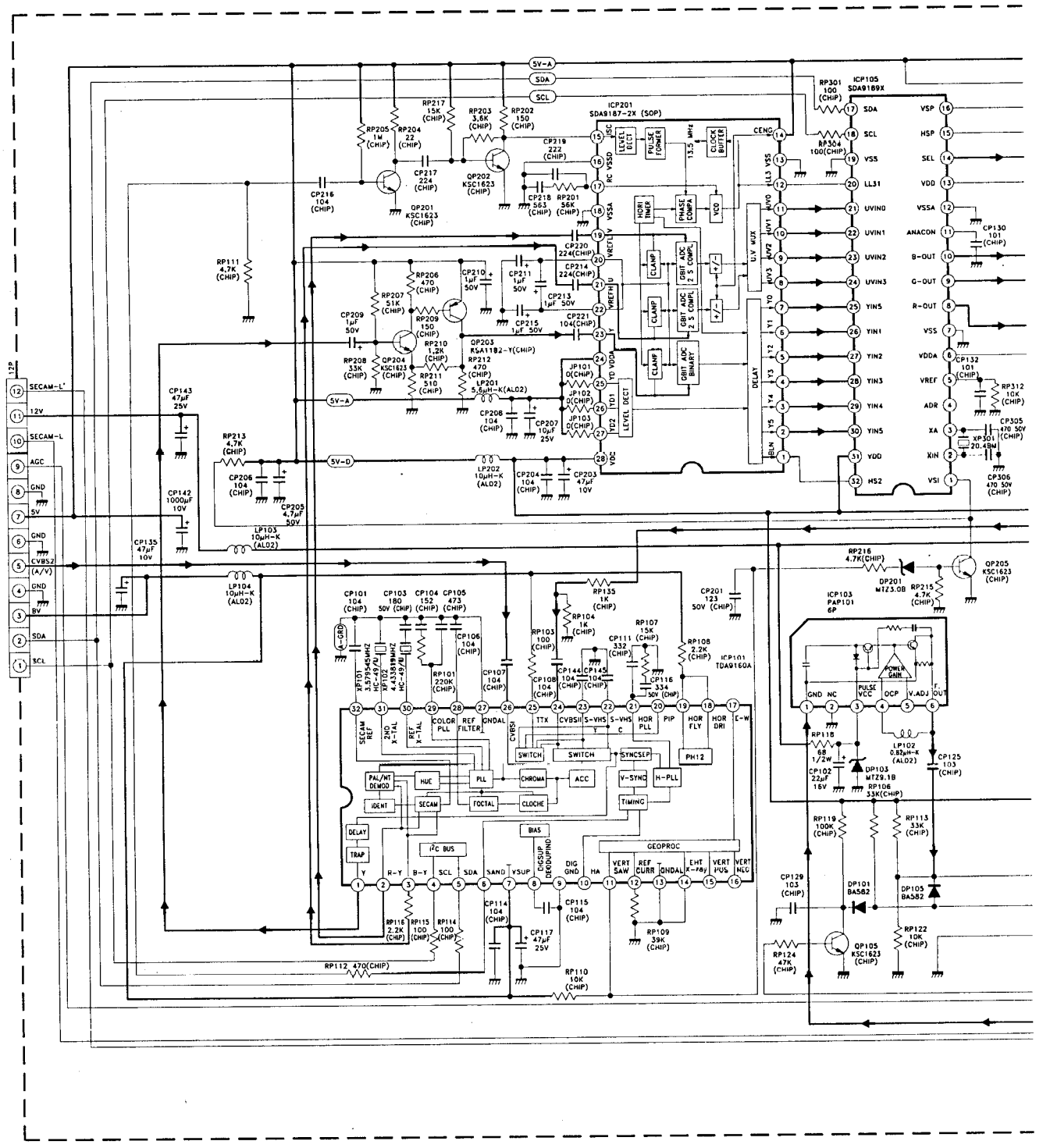
SWITCHING LOGIC

SYSTEM STANDARD	D/K-SW CN102-11PIN	PAL-I S/W CN102-6PIN
PAL/SECAM-B,G, NTSC-M,4.43 SECAM-L,L'	LOW	LOW
D/K	HIGH	LOW
PAL-I	LOW	HIGH

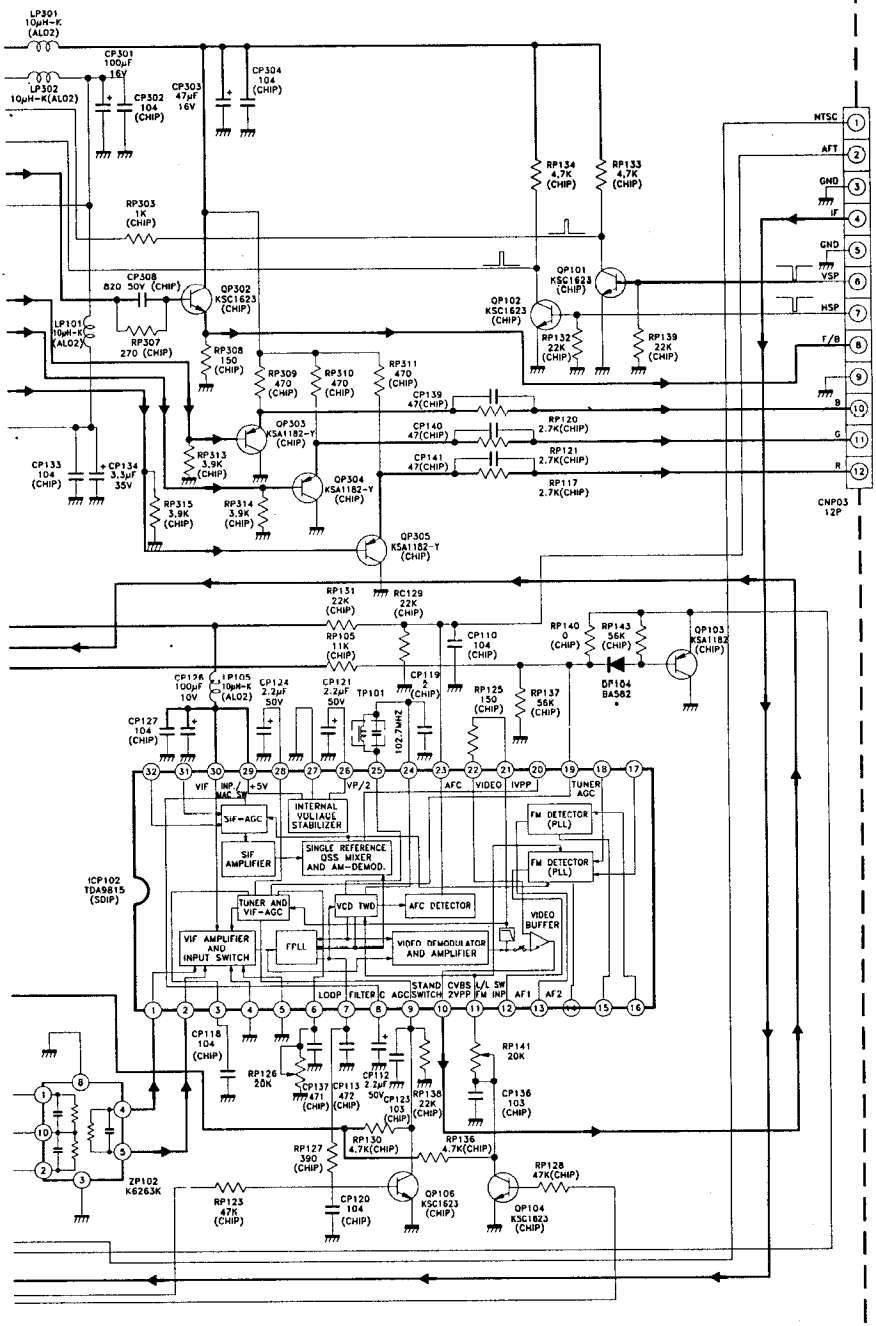
SECAM-L' S/W

SYSTEM STANDARD	SWITCHING LOGIC
PAL/SECAM-B,G, D/K,I,L NTSC-M,4.43	LOW
SECAM-L'	HIGH

PIP

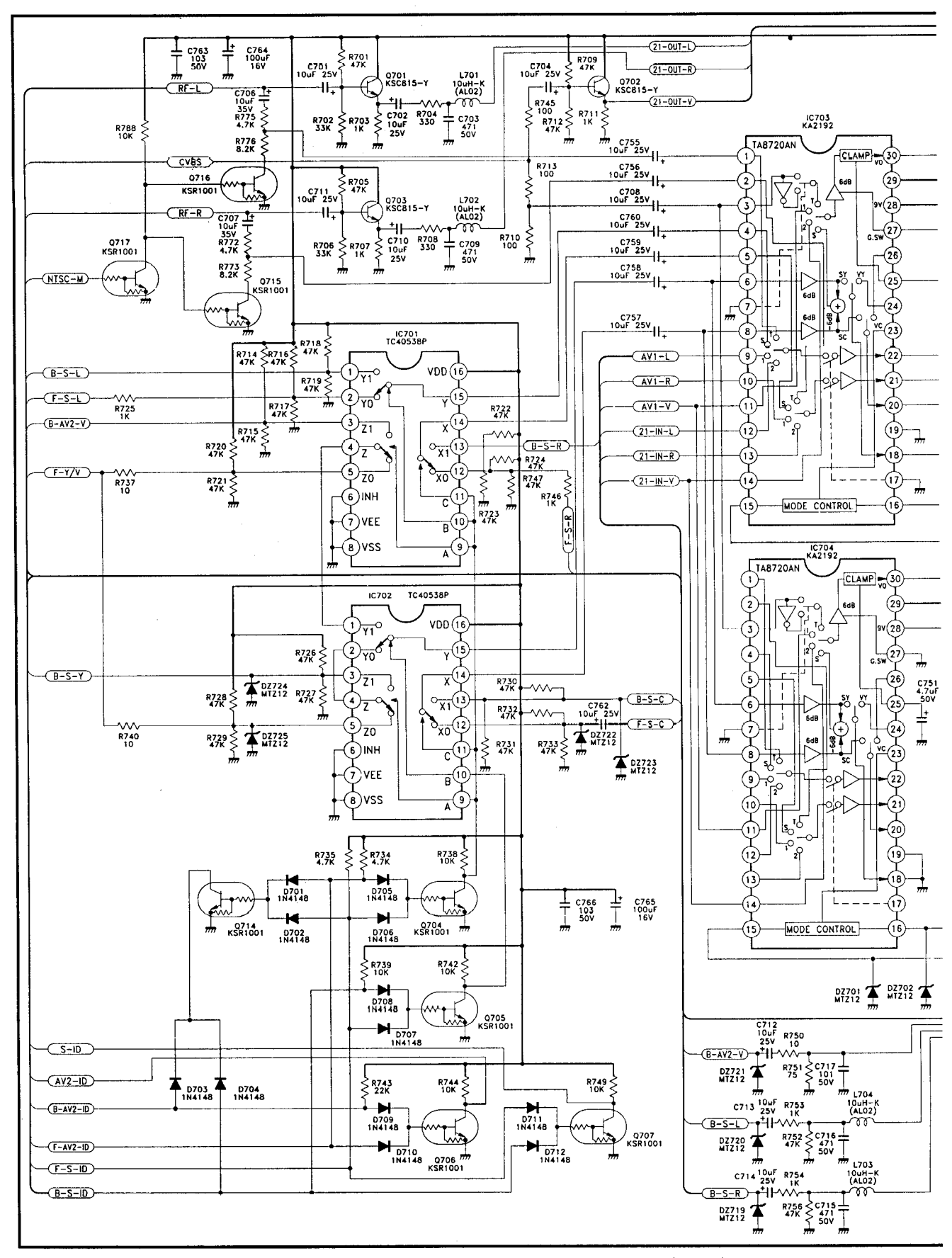


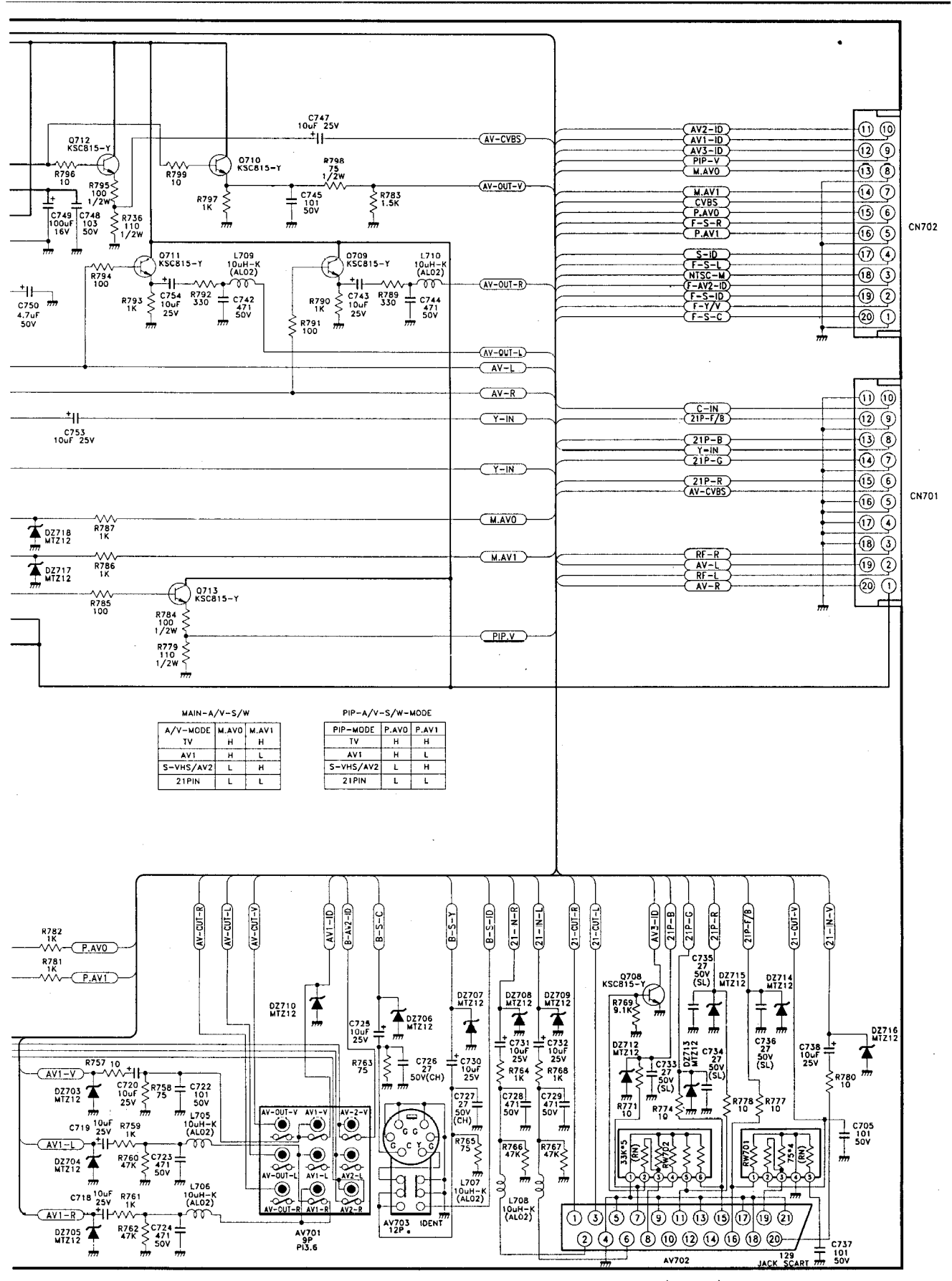
ICP201
SDA9187-2X (SOP)
ICP105
SDA9189X
ICP101
TDA9160A
ICP103
PAP101
6P
QP201
KSC1623
(CHIP)
QP202
KSC1623
(CHIP)
QP203
KSA1182-Y(CHIP)
QP204
KSC1623
(CHIP)
QP205
KSC1623
(CHIP)
QP105
KSC1623
(CHIP)
DP101
BA582
DP105
BA582
DP201
MTZ3.0B
DP103
MTZ9.1B
LP101
5.6μH-K(AL02)
LP102
0.82μH-K
(AL02)
LP103
10μH-K
(AL02)
LP104
10μH-K
(AL02)
LP202
10μH-K
(AL02)
XP101
3.579545MHZ
HC-49/U
XP102
4.433819MHZ
HC-49/U
XP301
20.4BM
SECAM-L'
12V
SECAM-L
AGC
GND
5V
GND
CVBS2
(A/V)
GND
BV
SDA
SCL
5V-A
5V-D



FILE NAME PIP

JOB-N	TEAM	NODE	DESIGN	OPE	EDIT
	PV3	MC4	Y.M.YANG		


IC703
KA2192
TA8720AN
CLAMP
MODE CONTROL
IC704
KA2192
TA8720AN
CLAMP
MODE CONTROL
IC701
TC40538P
IC702
TC40538P
VDD
VSS
VEE
INH
RF-L
RF-R
CVBS
NTSC-M
B-S-L
F-S-L
B-AV2-V
F-Y/V
B-S-Y
B-S-R
F-S-R
B-S-C
F-S-C
AV1-L
AV1-R
AV1-V
21-IN-L
21-IN-R
21-IN-V
21-OUT-L
21-OUT-R
21-OUT-V
S-ID
AV2-ID
B-AV2-ID
F-AV2-ID
F-S-ID
B-S-ID
Q701 KSC815-Y
Q702 KSC815-Y
Q703 KSC815-Y
Q704 KSR1001
Q705 KSR1001
Q706 KSR1001
Q707 KSR1001
Q714 KSR1001
Q715 KSR1001
Q716 KSR1001
Q717 KSR1001
L701 10uH-K (AL02)
L702 10uH-K (AL02)
L703 10uH-K (AL02)
L704 10uH-K (AL02)
D701 1N4148
D702 1N4148
D703 1N4148
D704 1N4148
D705 1N4148
D706 1N4148
D707 1N4148
D708 1N4148
D709 1N4148
D710 1N4148
D711 1N4148
D712 1N4148
DZ701 MTZ12
DZ702 MTZ12
DZ721 MTZ12
DZ722 MTZ12
DZ723 MTZ12
DZ724 MTZ12
DZ725 MTZ12

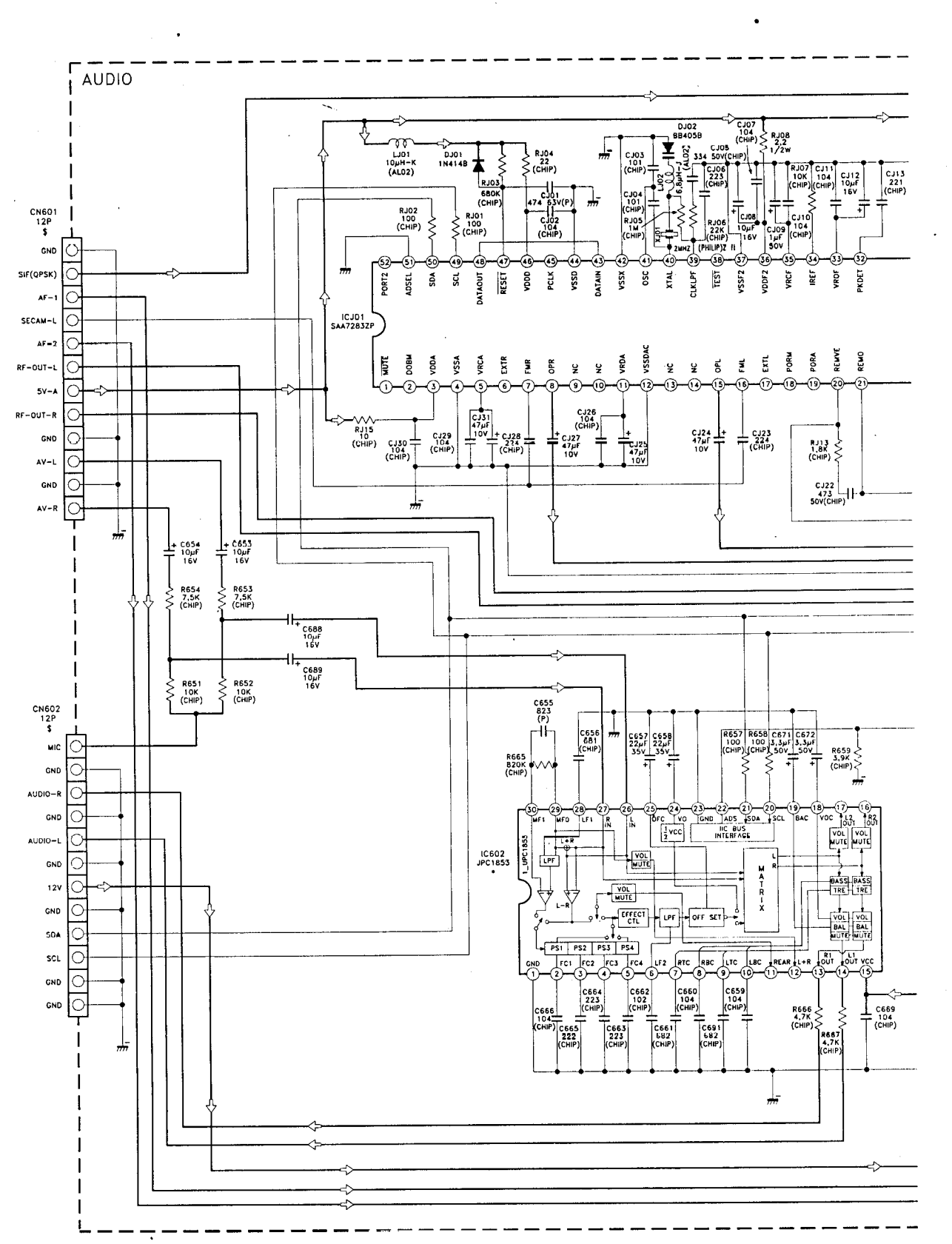


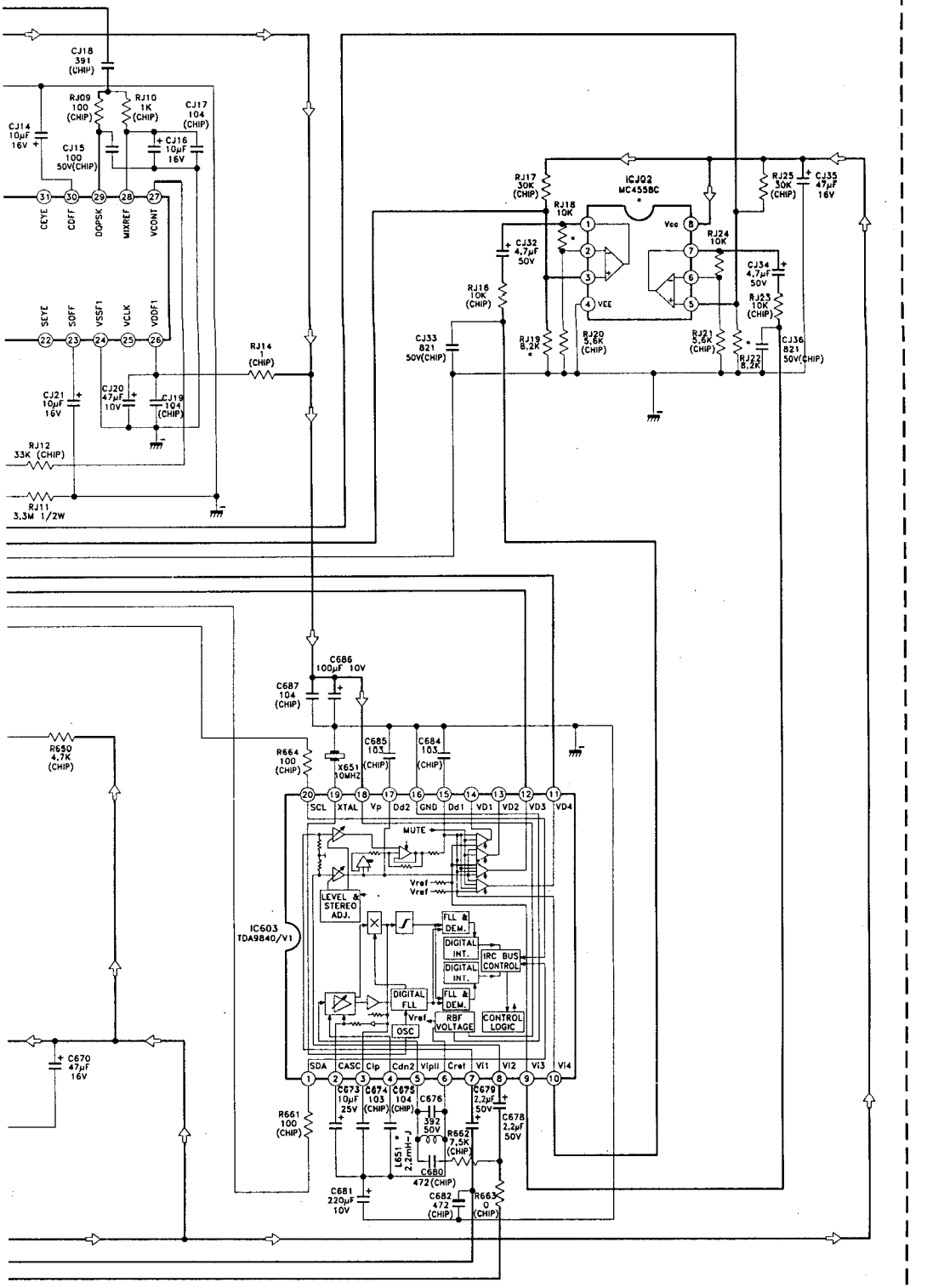
MAIN-A/V-S/W

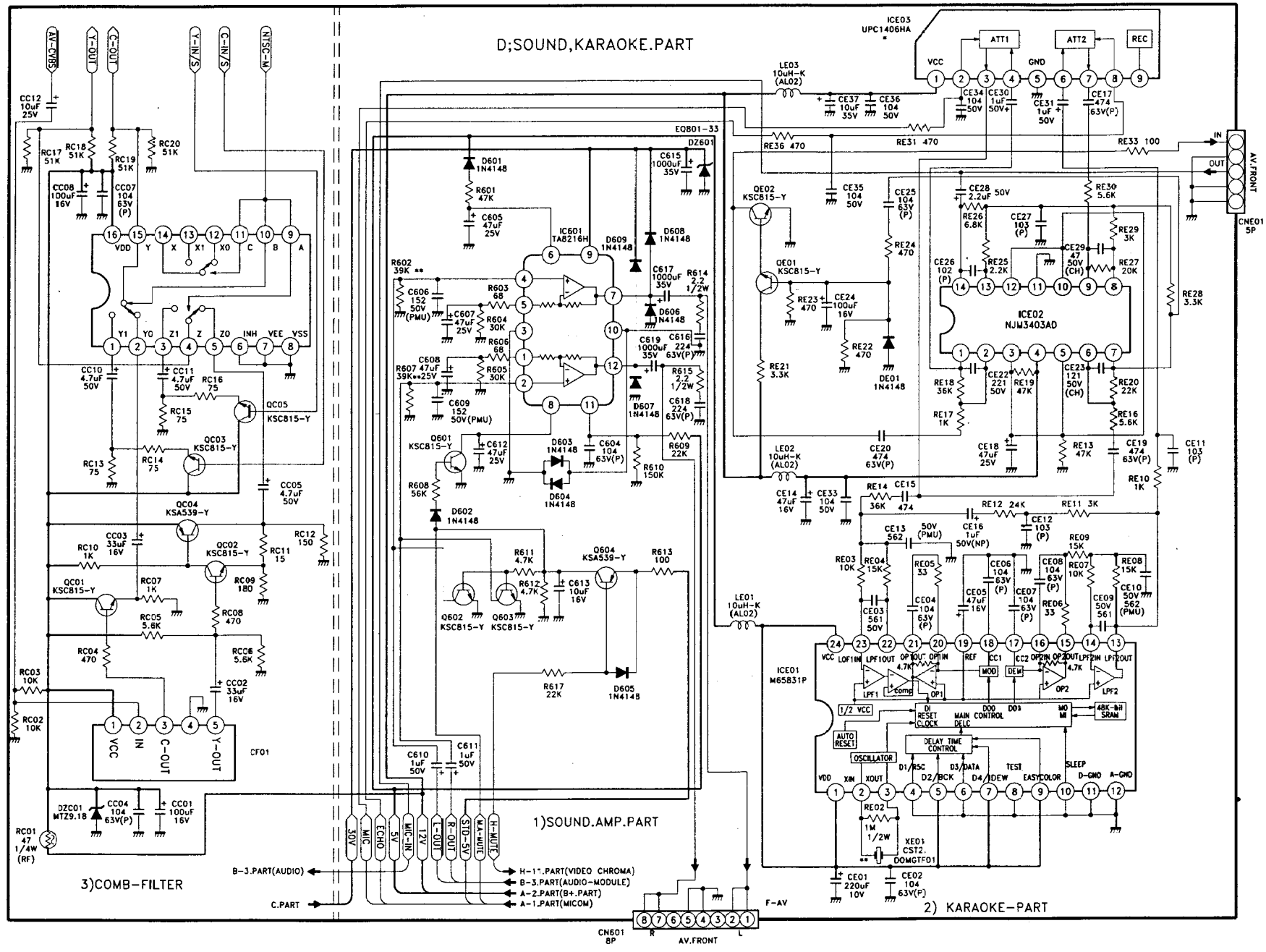
A/V-MODE	M.AV0	M.AV1
TV	H	H
AV1	H	L
S-VHS/AV2	L	H
21PIN	L	L

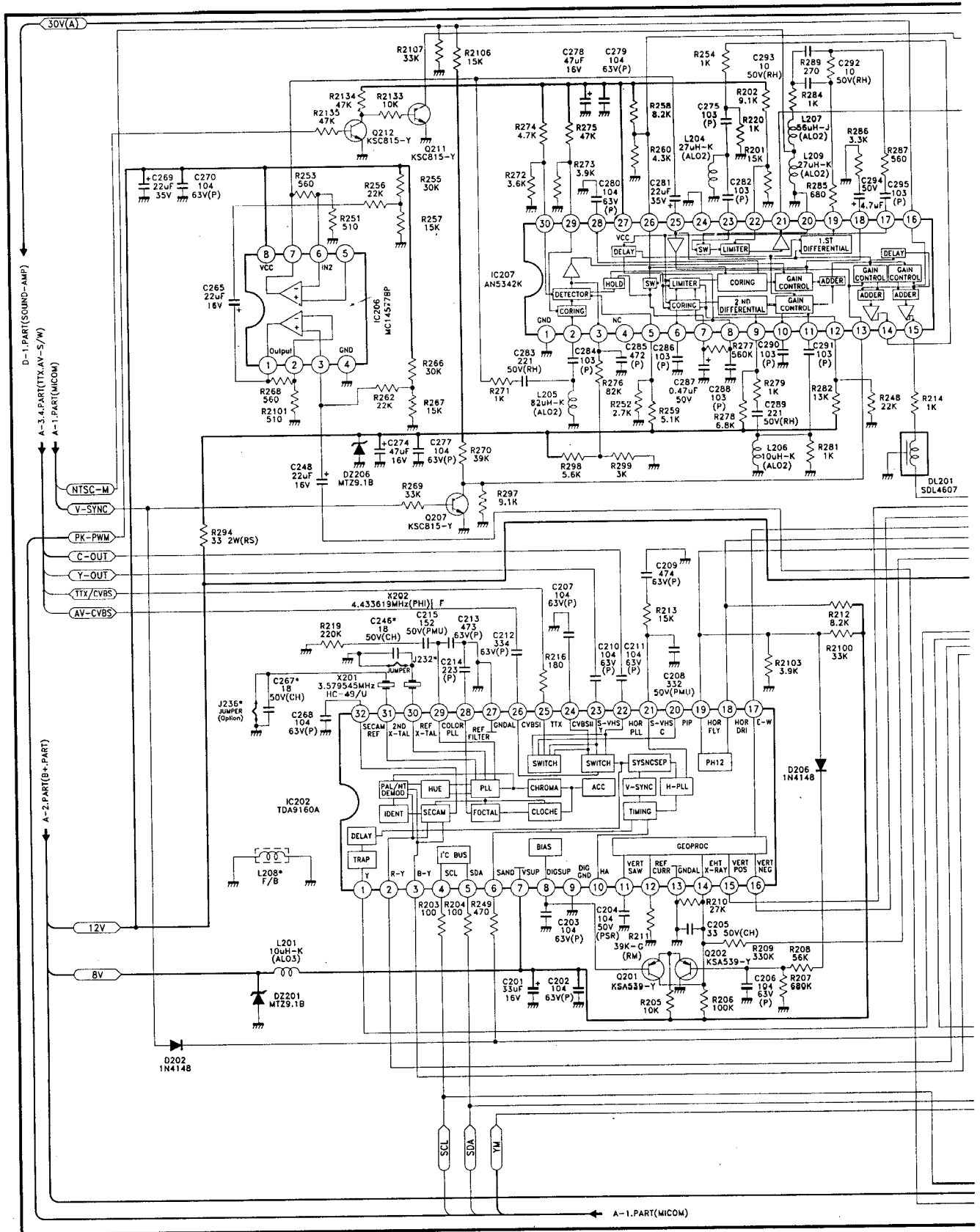
PIP-A/V-S/W-MODE

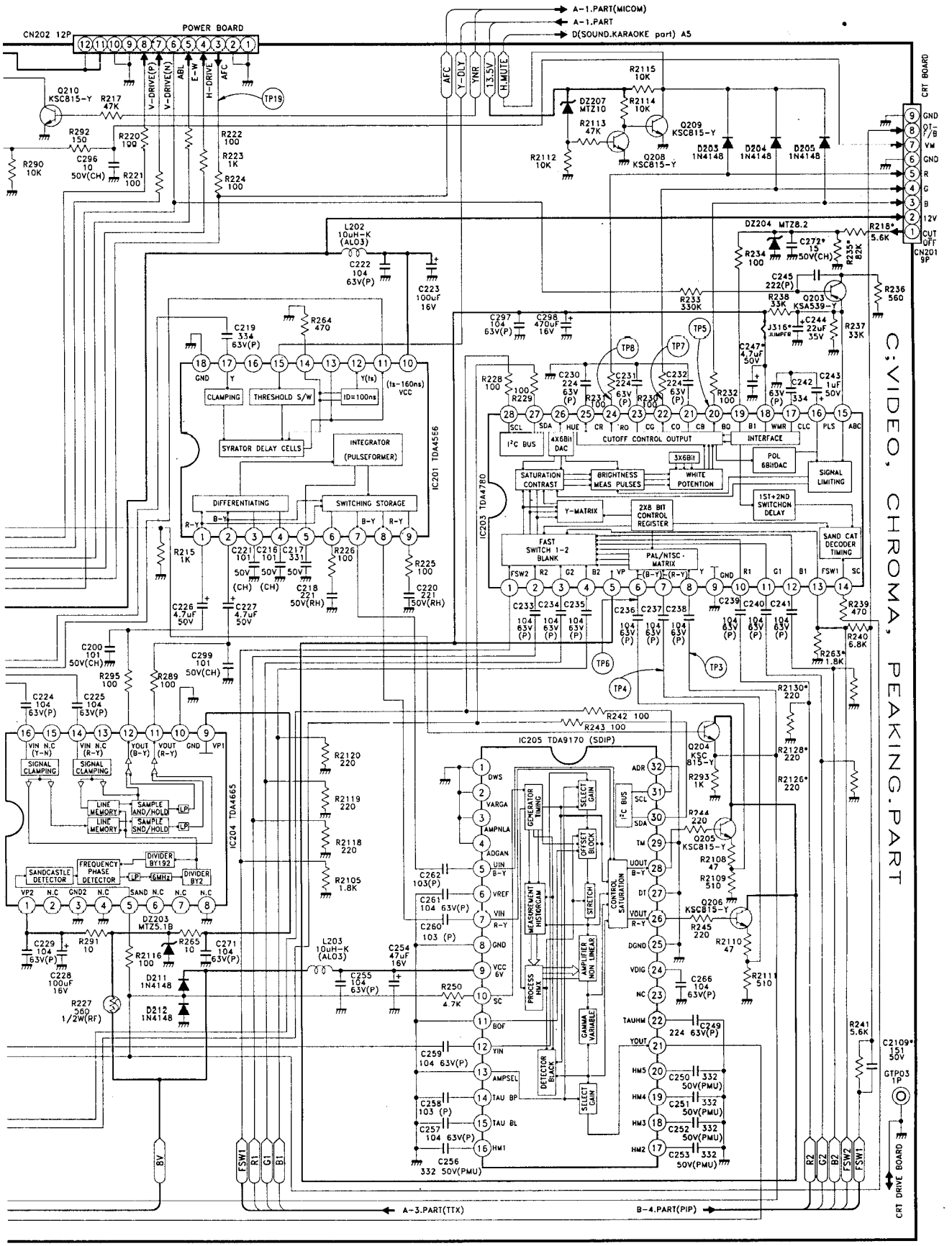
PIP-MODE	P.AV0	P.AV1
TV	H	H
AV1	H	L
S-VHS/AV2	L	H
21PIN	L	L

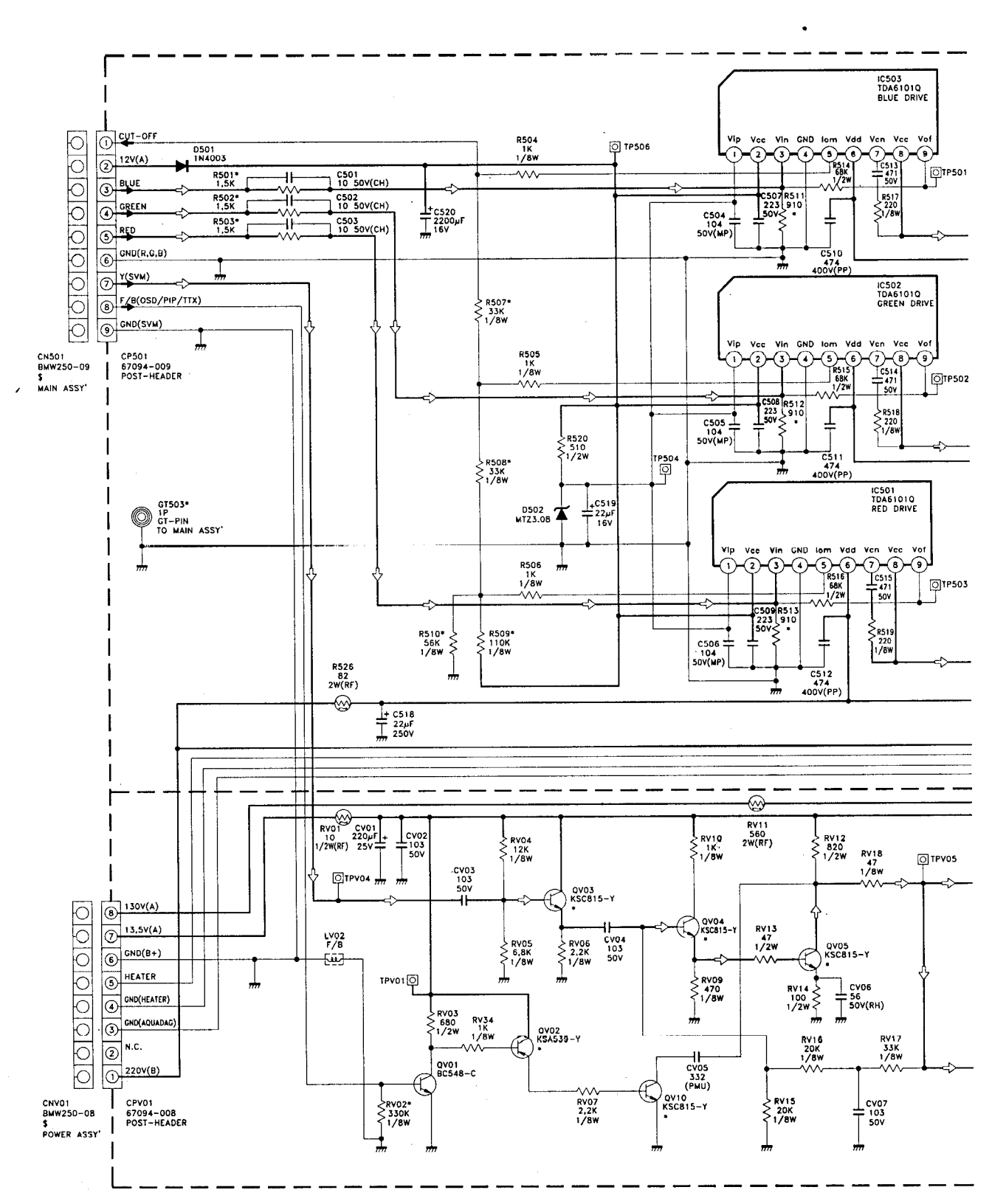

AUDIO
CN601
12P
$
GND
SIF(QPSK)
AF-1
SECAM-L
AF-2
RF-OUT-L
5V-A
RF-OUT-R
GND
AV-L
GND
AV-R
CN602
12P
$
MIC
GND
AUDIO-R
GND
AUDIO-L
GND
12V
GND
SDA
SCL
GND
GND
LJ01
10μH-K
(AL02)
DJ01
1N4148
RJ04
22
(CHIP)
RJ03
680K
(CHIP)
CJ01
474 63V(P)
CJ02
104
(CHIP)
DJ02
BB405B
CJ07
104
(CHIP)
RJ08
2.2
1/2W
CJ03
101
(CHIP)
LJ02
6.8μH-J
(AL02)
CJ08
334 50V(CHIP)
CJ04
101
(CHIP)
RJ05
1M
(CHIP)
X601
2MHZ
CJ06
223
(CHIP)
RJ06
22K
(CHIP)
(PHILIPS)
CJ08
10μF
16V
RJ07
10K
(CHIP)
CJ11
104
(CHIP)
CJ12
10μF
16V
CJ13
221
(CHIP)
RJ02
100
(CHIP)
RJ01
100
(CHIP)
CJ09
1μF
50V
CJ10
104
(CHIP)
ICJ01
SAA7283Z
PORT2
ADSEL
SDA
SCL
DATAOUT
RESET
VDDD
PCLK
VSSD
DATAIN
VSSX
OSC
XTAL
CLKLPF
TEST
VSSF2
VDDF2
VRCF
IREF
VROF
PRDET
MUTE
DOBM
VDDA
VSSA
VRCA
EXTR
FMR
OPR
NC
NC
VRDA
VSSDAC
NC
NC
OPL
FML
EXTL
PORM
PORA
REMVE
REMO
RJ15
10
(CHIP)
CJ30
104
(CHIP)
CJ29
104
(CHIP)
CJ31
47μF
10V
CJ28
224
(CHIP)
CJ27
47μF
10V
CJ26
104
(CHIP)
CJ25
47μF
10V
CJ24
47μF
10V
CJ23
224
(CHIP)
RJ13
1.8K
(CHIP)
CJ22
473
50V(CHIP)
C654
10μF
16V
C653
10μF
16V
R654
7.5K
(CHIP)
R653
7.5K
(CHIP)
C688
10μF
16V
C689
10μF
16V
R651
10K
(CHIP)
R652
10K
(CHIP)
C655
823
(P)
C656
681
(CHIP)
C657
22μF
35V
C658
22μF
35V
R657
100
(CHIP)
R658
100
(CHIP)
C671
3.3μF
50V
C672
3.3μF
50V
R659
3.9K
(CHIP)
R665
820K
(CHIP)
IC602
JPC1853
I_JPC1853
MF1
MFO
LF1
IN
IL
IN
DFC
VO
GND
ADS
SDA
SCL
BAC
VOC
L2
OUT
R2
OUT
1/2 VCC
I²C BUS
INTERFACE
VOL
MUTE
LPF
L+R
L-R
MATRIX
EFFECT
CTL
OFF SET
BASS
TRE
BAL
PS1
PS2
PS3
PS4
GND
FC1
FC2
FC3
FC4
LF2
RTC
RBC
LTC
LBC
REAR
L+R
R1
OUT
L1
OUT
VCC
C666
104
(CHIP)
C665
222
(CHIP)
C664
223
(CHIP)
C663
223
(CHIP)
C662
102
(CHIP)
C661
682
(CHIP)
C650
104
(CHIP)
C691
682
(CHIP)
C659
104
(CHIP)
R666
4.7K
(CHIP)
R667
4.7K
(CHIP)
C669
104
(CHIP)

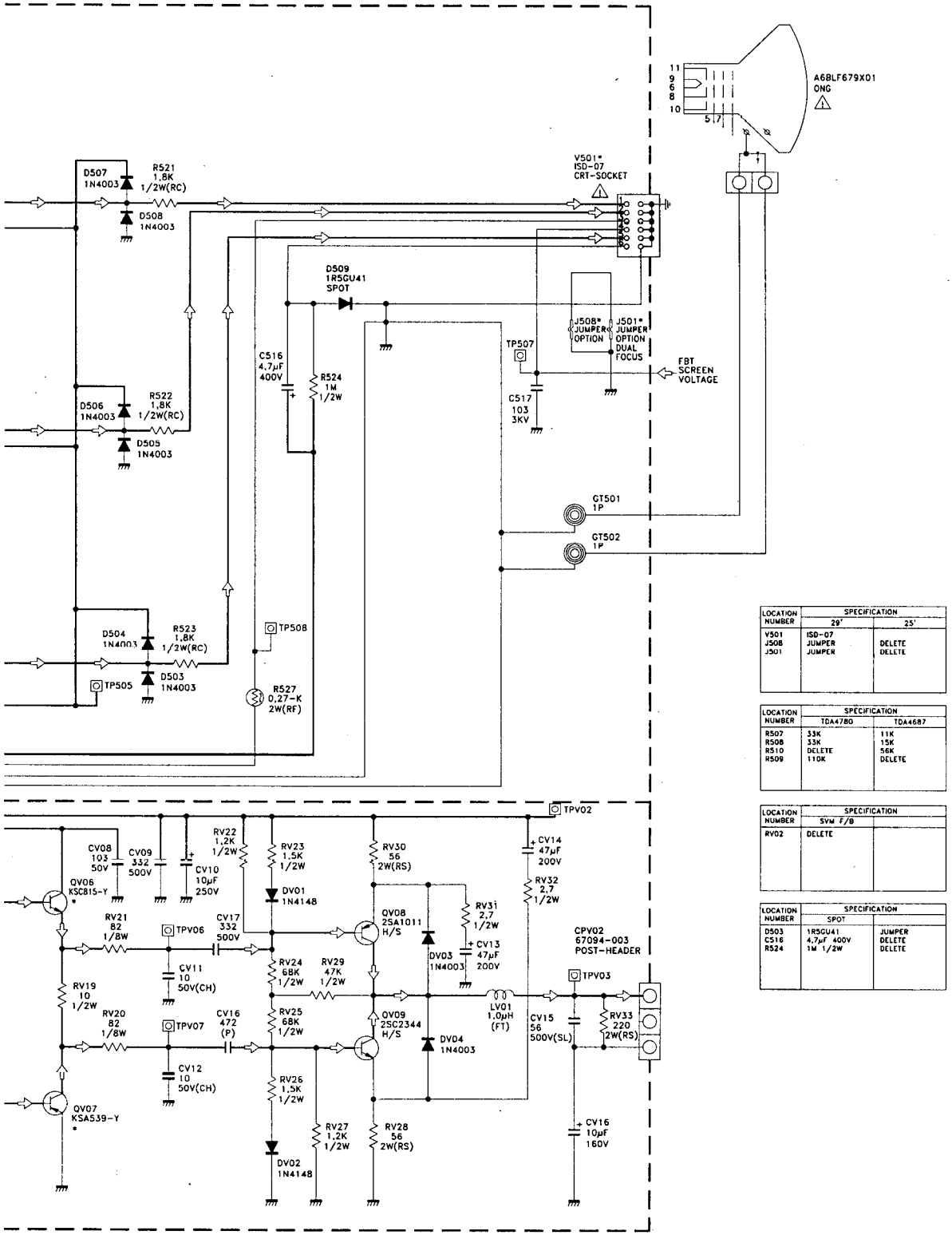

CJ18 391 (CHIP)
RJ09 100 (CHIP)
RJ10 1K (CHIP)
CJ17 104 (CHIP)
CJ14 10µF 16V
CJ15 100 50V(CHIP)
CJ16 10µF 16V
31 CEYE
30 CDFF
29 DOPSK
28 MIXREF
27 VCONT
22 SEYE
23 SOFF
24 VSSF1
25 VCLK
26 VDDF1
RJ14 1 (CHIP)
CJ21 10µF 16V
CJ20 47µF 10V
CJ19 104 (CHIP)
RJ12 33K (CHIP)
RJ11 3.3M 1/2W
IC602 MC4558C
RJ17 30K (CHIP)
RJ18 10K
RJ16 10K (CHIP)
CJ32 4.7µF 50V
CJ33 821 50V(CHIP)
RJ19 8.2K
RJ20 5.6K (CHIP)
RJ21 5.6K (CHIP)
RJ22 8.2K
RJ24 10K
RJ25 30K (CHIP)
CJ35 47µF 16V
CJ34 4.7µF 50V
RJ23 10K (CHIP)
CJ36 821 50V(CHIP)
Vcc
VEE
C686 100µF 10V
C687 104 (CHIP)
R664 100 (CHIP)
X651 10.0MHZ
C685 103 (CHIP)
C684 103 (CHIP)
R650 4.7K (CHIP)
20 SCL
19 XTAL
18 Vp
17 Dd2
16 GND
15 Dd1
14 VD1
13 VD2
12 VD3
11 VD4
MUTE
Vref
Vref
LEVEL & STEREO ADJ.
IC603 TDA9840/V1
FLL & DEM.
DIGITAL INT.
IRC BUS CONTROL
DIGITAL INT.
DIGITAL FLL
FLL & DEM.
Vref
RBF VOLTAGE
CONTROL LOGIC
OSC
C670 47µF 16V
1 SDA
2 CASC
3 Clp
4 Cdn2
5 Vipli
6 Cref
7 VI1
8 VI2
9 VI3
10 VI4
C673 10µF 25V
C674 103 (CHIP)
C675 104 (CHIP)
C676 392 50V
C679 2.2µF 50V
C678 2.2µF 50V
R661 100 (CHIP)
1651 * 2.2mH-J
R662 7.5K (CHIP)
C680 472 (CHIP)
C681 220µF 10V
C682 472 (CHIP)
R663 0 (CHIP)


D;SOUND,KARAOKE.PART
1)SOUND.AMP.PART
2) KARAOKE-PART
3)COMB-FILTER
AV-CVBS
Y-OUT
C-OUT
Y-IN
C-IN
MISC-IN
ICE03
UPC1406HA
ATT1
ATT2
REC
VCC
GND
IN
OUT
AV.FRONT
CNE01
5P
IC601
TA8216H
ICE02
NJW3403AD
ICE01
M65831P
QE01
KSC815-Y
QE02
KSC815-Y
QC01
KSC815-Y
QC02
KSC815-Y
QC03
KSC815-Y
QC04
KSA539-Y
QC05
KSC815-Y
Q601
KSC815-Y
Q602
KSC815-Y
Q603
KSC815-Y
Q604
KSA539-Y
DE01
1N4148
D601
1N4148
D602
1N4148
D603
1N4148
D604
1N4148
D605
1N4148
D606
N4148
D607
1N4148
D608
1N4148
D609
1N4148
DZ601
DZC01
MTZ9.18
CF01
XE01
CST2.
DOMGTF01
CN601
8P
AV.FRONT
F-AV
EQB01-33
B-3.PART(AUDIO)
C.PART
H-11.PART(VIDEO CHROMA)
B-5.PART(AUDIO-MODULE)
A-2.PART(B+.PART)
A-1.PART(MICOM)
30V
MIC
ECHO
5V
MIC-IN
12V
L-OUT
R-OUT
STD-5V
M.A+MUTE
H-MUTE


30V(A)
D-1.PART(SOUND-AMP)
A-3.4.PART(TTX.AV-S/W)
A-1.PART(MICOM)
A-2.PART(B+.PART)
NTSC-M
V-SYNC
PK-PWM
C-OUT
Y-OUT
TTX/CVBS
AV-CVBS
12V
8V
SCL
SDA
YM
A-1.PART(MICOM)
IC207 AN5342K
IC206 MC145278P
IC202 TDA9160A
Q212 KSC815-Y
Q211 KSC815-Y
Q207 KSC815-Y
Q201 KSA539-Y
Q202 KSA539-Y
DZ206 MTZ9.1B
DZ201 MTZ9.1B
D202 1N4148
D206 1N4148
DL201 SDL4607
X202 4.433619MHz(PHI)
X201 3.579545MHz HC-49/U
L201 10uH-K (AL03)
L204 27uH-K (AL02)
L205 82uH-K (AL02)
L206 10uH-K (AL02)
L207 56uH-J (AL02)
L208* F/B
L209 27uH-K (AL02)
J232* JUMPER
J235* JUMPER (Option)


A-1.PART(MICOM)
A-1.PART
D(SOUND.KARAOKE part) A5
POWER BOARD
CN202 12P
CRT BOARD
CN201 9P
C;VIDEO, CHROMA, PEAKING.PART
IC201 TDA4556
IC203 TDA4780
IC204 TDA4665
IC205 TDA9170 (SDIP)
CLAMPING
THRESHOLD S/W
INTEGRATOR (PULSEFORMER)
SYRATOR DELAY CELLS
DIFFERENTIATING
SWITCHING STORAGE
I²C BUS
CUTOFF CONTROL OUTPUT
INTERFACE
SATURATION CONTRAST
BRIGHTNESS MEAS PULSES
WHITE POTENTION
Y-MATRIX
2X8 BIT CONTROL REGISTER
FAST SWITCH 1-2 BLANK
PAL/NTSC-MATRIX
SAND CAT DECODER TIMING
SIGNAL LIMITING
1ST+2ND SWITCHON DELAY
SIGNAL CLAMPING
LINE MEMORY
SAMPLE AND/HOLD
SANDCASTLE DETECTOR
FREQUENCY PHASE DETECTOR
DIVIDER BY192
DIVIDER BY2
GENERATOR TIMING
MEASUREMENT HISTOGRAM
PROCESS HMX
OFFSET BLOCK
STRETCH
AMPLIFIER NON LINEAR
GAMMA VARIABLE
DETECTOR BLACK
SELECT GAIN
CONTROL SATURATION
A-3.PART(TTX)
B-4.PART(PIP)
CRT DRIVE BOARD


CN501
BMW250-09
$
MAIN ASSY'
CP501
67094-009
POST-HEADER
CUT-OFF
12V(A)
BLUE
GREEN
RED
GND(R,G,B)
Y(SVM)
F/B(OSD/PIP/TTX)
GND(SVM)
D501
1N4003
R501* 1,5K
R502* 1,5K
R503* 1,5K
C501 10 50V(CH)
C502 10 50V(CH)
C503 10 50V(CH)
C520 2200µF 16V
R504 1K 1/8W
TP506
R507* 33K 1/8W
R505 1K 1/8W
R508* 33K 1/8W
R520 510 1/2W
TP504
D502 MTZ3.08
C519 22µF 16V
R506 1K 1/8W
R510* 56K 1/8W
R509* 110K 1/8W
GT503* 1P GT-PIN TO MAIN ASSY'
R526 82 2W(RF)
C518 22µF 250V
IC503 TDA6101Q BLUE DRIVE
IC502 TDA6101Q GREEN DRIVE
IC501 TDA6101Q RED DRIVE
Vip Vcc Vin GND Iom Vdd Vcn Vcc Vof
R514 68K 1/2W
C513 471 50V
R517 220 1/8W
TP501
C504 104 50V(MP)
C507 223 50V
R511 910 *
C510 474 400V(PP)
R515 68K 1/2W
C514 471 50V
R518 220 1/8W
TP502
C505 104 50V(MP)
C508 223 50V
R512 910 *
C511 474 400V(PP)
R516 68K 1/2W
C515 471 50V
R519 220 1/8W
TP503
C506 104 50V(MP)
C509 223 50V
R513 910 *
C512 474 400V(PP)
CNV01
BMW250-08
$
POWER ASSY'
CPV01
67094-008
POST-HEADER
130V(A)
13,5V(A)
GND(B+)
HEATER
GND(HEATER)
GND(AQUADAG)
N.C.
220V(B)
RV01 10 1/2W(RF)
CV01 220µF 25V
CV02 103 50V
TPV04
LV02 F/B
CV03 103 50V
RV04 12K 1/8W
QV03 KSC815-Y
RV05 6,8K 1/8W
RV06 2,2K 1/8W
CV04 103 50V
TPV01
RV03 680 1/2W
RV34 1K 1/8W
QV02 KSA539-Y
QV01 BC548-C
RV02* 330K 1/8W
RV07 2,2K 1/8W
QV10 KSC815-Y
CV05 332 (PMU)
RV10 1K 1/8W
QV04 KSC815-Y
RV09 470 1/8W
RV11 560 2W(RF)
RV12 820 1/2W
RV18 47 1/8W
TPV05
RV13 47 1/2W
QV05 KSC815-Y
RV14 100 1/2W
CV06 56 50V(RH)
RV16 20K 1/8W
RV17 33K 1/8W
RV15 20K 1/8W
CV07 103 50V

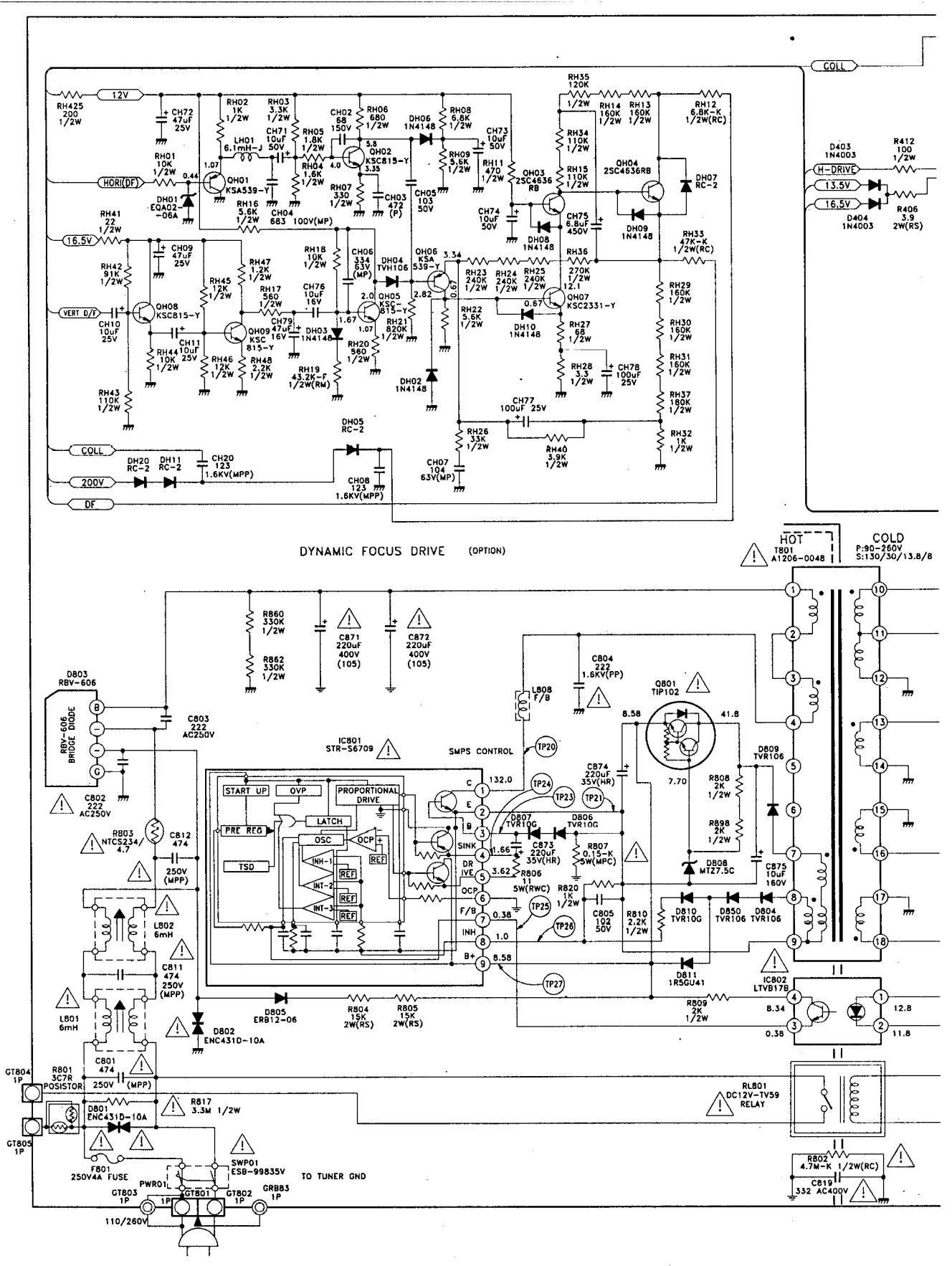


LOCATION NUMBER	SPECIFICATION	
	29'	25'
V501	ISD-07	
J508	JUMPER	DELETE
J501	JUMPER	DELETE

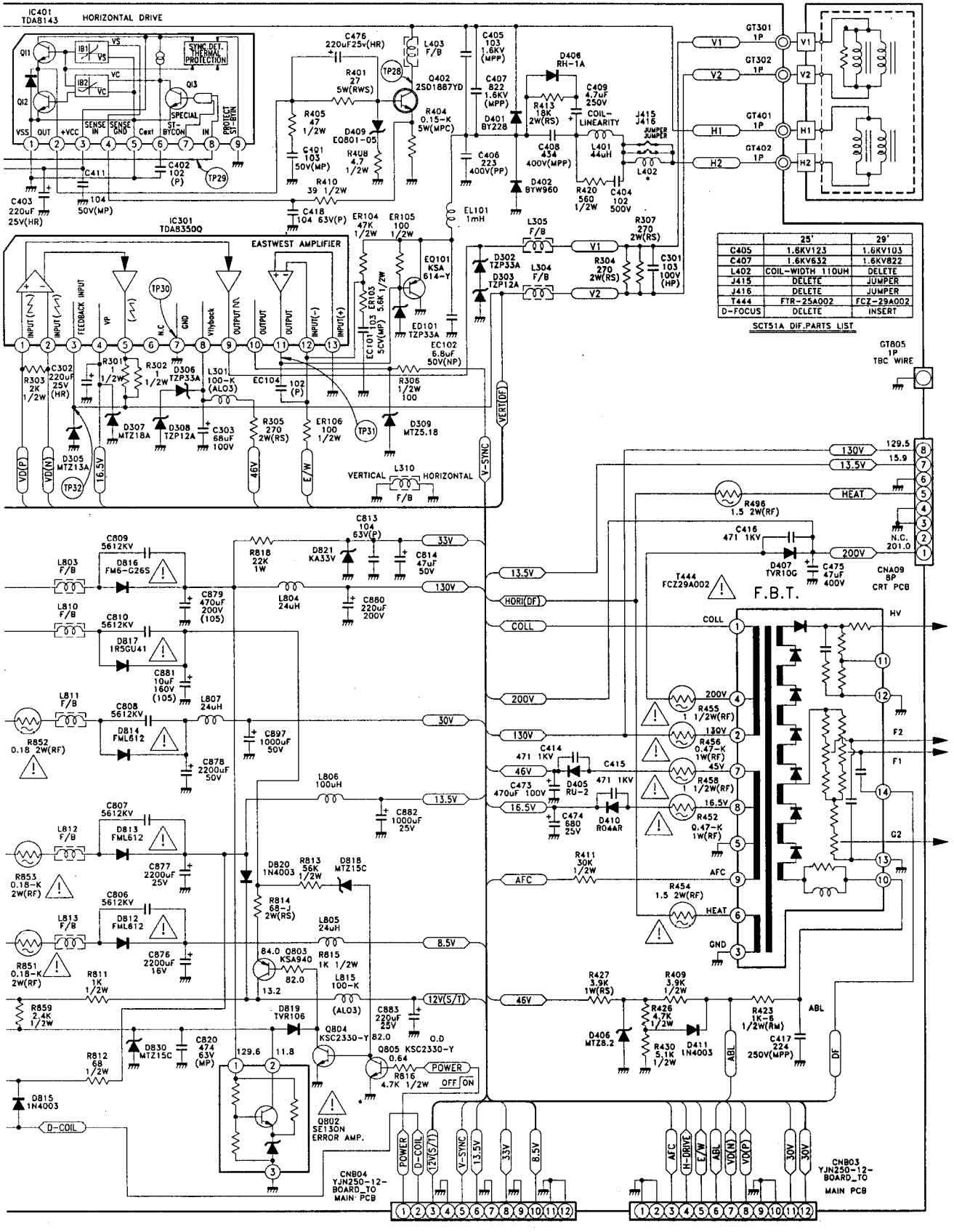
LOCATION NUMBER	SPECIFICATION	
	TDA4780	TDA4687
R507	33K	11K
R508	33K	15K
R510	DELETE	56K
R509	110K	DELETE

LOCATION NUMBER	SPECIFICATION	
	SVM F/B	
RV02	DELETE	

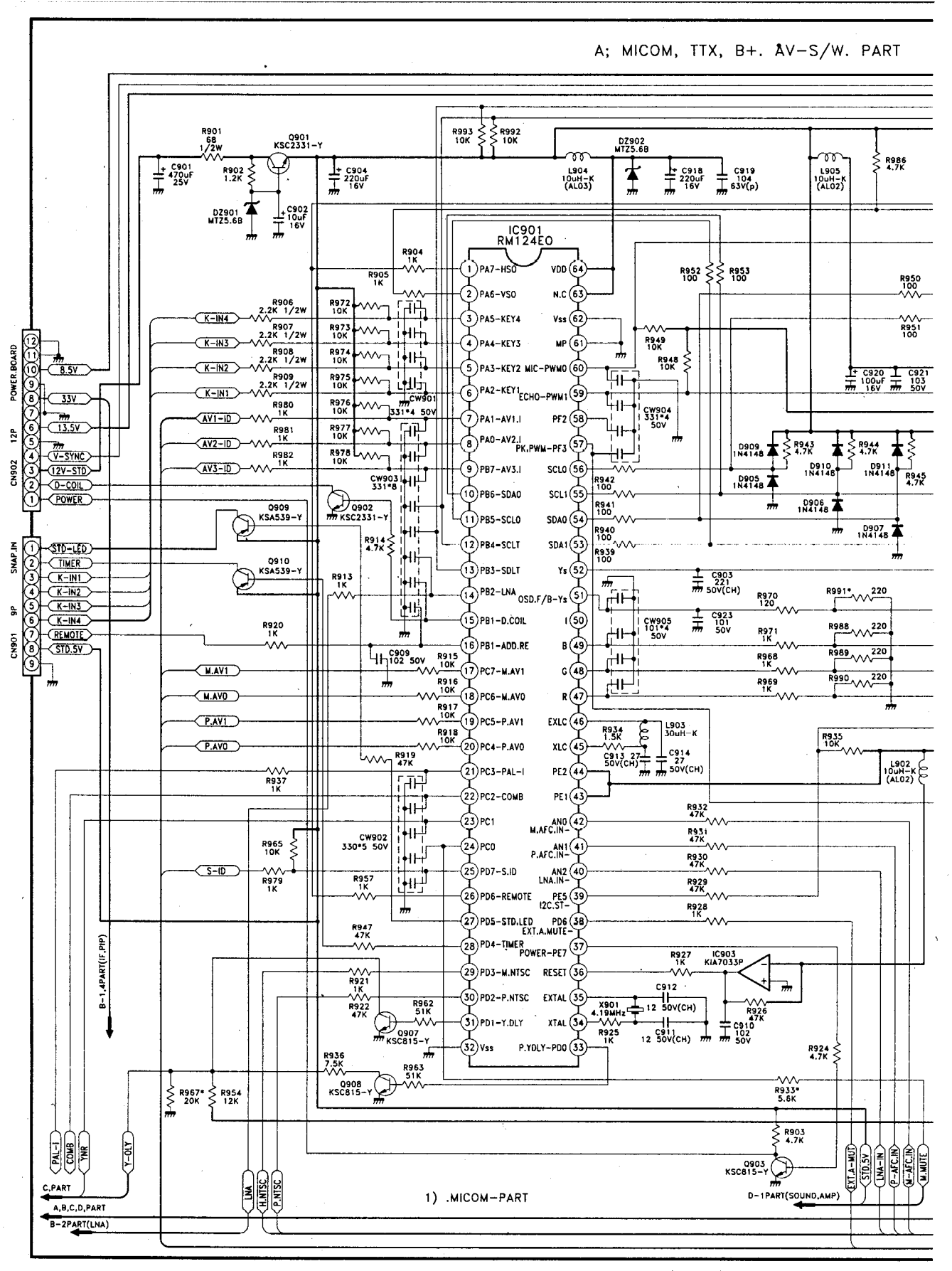
LOCATION NUMBER	SPECIFICATION	
	SPOT	
D503	1R5GU41	JUMPER
C516	4,7μF 400V	DELETE
R524	1M 1/2W	DELETE



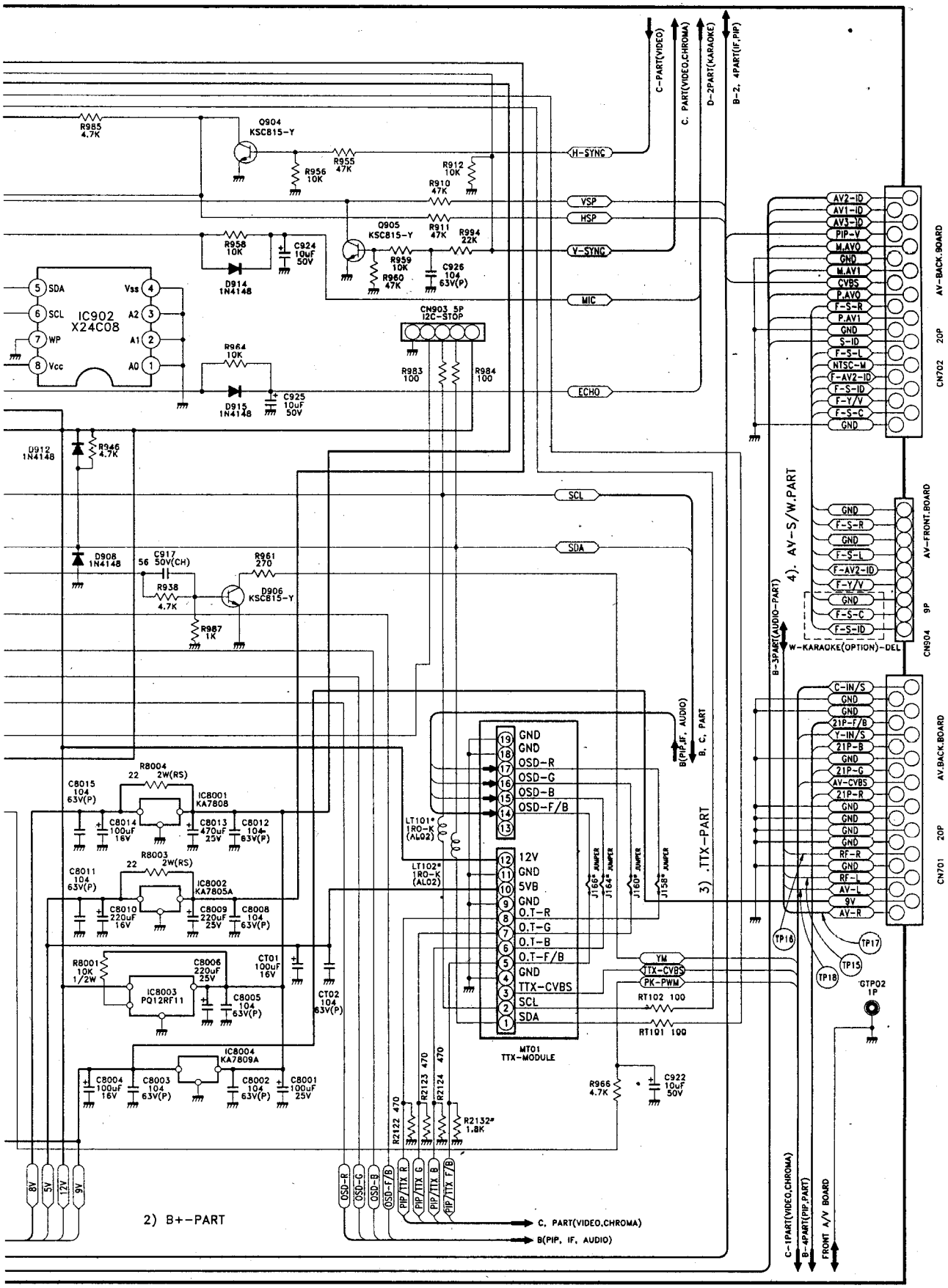
DYNAMIC FOCUS DRIVE (OPTION)
HOT
T801
A1206-0048
COLD
P:90-260V
S:130/30/13.8/8
COLL
12V
HORI(DF)
16.5V
VERT D/F
200V
DF
H-DRIVE
13.5V
16.5V
D403
1N4003
D404
1N4003
R412
100
1/2W
R406
3.9
2W(RS)
RH425
200
1/2W
CH72
47uF
25V
RH01
10K
1/2W
DH01
EQA02-
-06A
RH02
1K
1/2W
RH03
3.3K
1/2W
LH01
6.1mH-J
CH71
10uF
50V
RH05
1.8K
1/2W
RH04
1.6K
1/2W
QH01
KSA539-Y
RH16
5.6K
1/2W
CH04
683 100V(MP)
CH02
68
150V
RH06
680
1/2W
QH02
KSC815-Y
RH07
330
1/2W
CH03
472
(P)
DH06
1N4148
RH08
6.8K
1/2W
RH09
5.6K
1/2W
CH05
103
50V
CH73
10uF
50V
RH11
470
1/2W
QH03
2SC4636
RB
CH74
10uF
50V
DH08
1N4148
RH35
120K
1/2W
RH14
160K
1/2W
RH13
160K
1/2W
RH12
6.8K-K
1/2W(RC)
RH34
110K
1/2W
RH15
110K
1/2W
QH04
2SC4636RB
DH07
RC-2
CH75
6.8uF
450V
DH09
1N4148
RH33
47K-K
1/2W(RC)
RH41
22
1/2W
CH09
47uF
25V
RH42
91K
1/2W
QH08
KSC815-Y
CH10
10uF
25V
RH44
10K
1/2W
CH11
10uF
25V
RH43
110K
1/2W
RH45
12K
1/2W
RH47
1.2K
1/2W
RH46
12K
1/2W
RH48
2.2K
1/2W
QH09
KSC
815-Y
RH17
560
1/2W
CH79
47uF
16V
RH18
10K
1/2W
CH76
10uF
16V
DH03
1N4148
RH19
43.2K-F
1/2W(RM)
CH06
334
63V
(MP)
DH04
TVH106
QH05
KSC-
815-Y
RH20
560
1/2W
RH21
820K
1/2W
DH02
1N4148
QH06
KSA
539-Y
RH23
240K
1/2W
RH24
240K
1/2W
RH25
240K
1/2W
RH22
5.6K
1/2W
DH10
1N4148
RH36
270K
1/2W
QH07
KSC2331-Y
RH27
68
1/2W
RH28
3.3
1/2W
CH78
100uF
25V
RH29
160K
1/2W
RH30
160K
1/2W
RH31
160K
1/2W
RH37
180K
1/2W
RH32
1K
1/2W
CH77
100uF 25V
RH26
33K
1/2W
RH40
3.9K
1/2W
CH07
104
63V(MP)
DH05
RC-2
CH08
123
1.6KV(MPP)
DH20
RC-2
DH11
RC-2
CH20
123
1.6KV(MPP)
R860
330K
1/2W
R862
330K
1/2W
C871
220uF
400V
(105)
C872
220uF
400V
(105)
C804
222
1.6KV(PP)
L808
F/B
Q801
TIP102
8.58
41.8
7.70
D809
TVR106
R808
2K
1/2W
R898
2K
1/2W
D808
MTZ7.5C
C875
10uF
160V
D803
RBV-606
RBV-606
BRIDGE DIODE
C803
222
AC250V
C802
222
AC250V
IC801
STR-S6709
SMPS CONTROL
START UP
OVP
PROPORTIONAL
DRIVE
PRE REG
LATCH
OSC
OCP
TSD
INH-1
INT-2
INT-3
REF
SINK
DRIVE
OCP
F/B
INH
B+
132.0
1.66
3.62
0.38
1.0
8.58
TP20
TP21
TP23
TP24
TP25
TP26
TP27
C874
220uF
35V(HR)
D807
TVR10G
D806
TVR10G
C873
220uF
35V(HR)
R807
0.15-K
5W(MPC)
R806
11
5W(RWC)
R820
1K
1/2W
C805
102
50V
R810
2.2K
1/2W
D810
TVR10G
D850
TVR106
D804
TVR106
D811
1R5GU41
R803
NTCS234/
4.7
C812
474
250V
(MPP)
L802
6mH
C811
474
250V
(MPP)
L801
6mH
D805
ERB12-06
R804
15K
2W(RS)
R805
15K
2W(RS)
D802
ENC431D-10A
R809
2K
1/2W
IC802
LTVB17B
8.34
0.38
12.8
11.8
GT804
1P
R801
3C7R
POSISTOR
C801
474
250V
(MPP)
D801
ENC431D-10A
R817
3.3M 1/2W
GT805
1P
F801
250V4A FUSE
SWP01
ESB-99835V
TO TUNER GND
PWR01
GT803
1P
GT801
1P
GT802
1P
GRB83
1P
110/260V
RL801
DC12V-TV59
RELAY
R802
4.7M-K 1/2W(RC)
C819
332 AC400V


IC401
TDA8143
HORIZONTAL DRIVE
IC301
TDA8350Q
EASTWEST AMPLIFIER
SYNC DET.
THERMAL
PROTECTION
SPECIAL
ST-BYCON
PROTECT
FLYBACK
SENSE IN
SENSE GND
VSS
OUT
+VCC
Cext
IN
INPUT(+)
INPUT(-)
FEEDBACK INPUT
VP
N.C.
GND
Vflyback
OUTPUT
OUTPUT(-)
T444
FCZ29A002
F.B.T.
HV
F2
F1
G2
COLL
HORI(DF)
V-SYNC
VERT(DF)
VERTICAL
HORIZONTAL
F/B
COIL-LINEARITY
JUMPER
SCT51A DIF.PARTS LIST
25'
29'
1.6KV123
1.6KV103
1.6KV632
1.6KV822
COIL-WIDTH 110UH
DELETE
JUMPER
FTR-25A002
FCZ-29A002
INSERT
GT805
1P
TBC WIRE
CNA09
8P
CRT PCB
CNB04
YJN250-12-
BOARD_TO
MAIN PCB
CNB03
YJN250-12-
BOARD_TO
MAIN PCB
POWER
D-COIL
12V(S/T)
V-SYNC
13.5V
33V
8.5V
AFC
H-DRIVE
E/W
ABL
VD(N)
VD(P)
30V
30V
Q802
SE130N
ERROR AMP.
Q803
KSA940
Q804
KSC2330-Y
Q805
KSC2330-Y
Q402
2SD1887YD
D409
EQ801-05
D806
RH-1A
D807
TVR10G
D810
RO4AR
D819
TVR106
D821
KA33V
D101
TZP33A
D302
TZP33A
D303
TZP12A
D306
TZP33A
D307
MTZ18A
D308
TZP12A
D309
MTZ5.18
D305
MTZ13A
D815
1N4003
D816
FM5-G26S
D817
1RSGU41
D812
FML612
D813
FML612
D814
FML612
DB30
MTZ15C
DB820
1N4003
D818
MTZ15C
D406
MTZ8.2
D411
1N4003
D405
RU-2
D401
BY228
D402
BYW960
Q1
Q2
Q3
IB1
IB2
VS
VC
TP28
TP29
TP30
TP31
TP32
L301
100-K
(ALO3)
L815
100-K
(ALO3)
L401
44uH
L402
L403
F/B
L101
1mH
L301
F/B
L302
F/B
L303
F/B
L304
F/B
L305
F/B
L310
F/B
L801
F/B
L802
F/B
L803
F/B
L804
24uH
L805
24uH
L806
100uH
L807
24uH
L808
5612KV
L809
5612KV
L810
F/B
L811
F/B
L812
F/B
L813
F/B
L814
F/B
L815
100-K
(ALO3)
R852
0.18 2W(RF)
R853
0.18-K
2W(RF)
R851
0.18-K
2W(RF)
R496
1.5 2W(RF)
R455
1 1/2W(RF)
R456
0.47-K
1W(RF)
R458
1 1/2W(RF)
R452
0.47-K
1W(RF)
R454
1.5 2W(RF)
R411
30K
1/2W
R427
3.9K
1W(RS)
R409
3.9K
1/2W
R426
4.7K
1/2W
R430
5.1K
1/2W
R423
1K-B
1/2W(RM)
R811
1K
1/2W
R812
68
1/2W
R859
2.4K
1/2W
R818
22K
1W
R814
68-J
2W(RS)
R815
1K 1/2W
R816
4.7K 1/2W
R813
56K
1/2W
R410
39 1/2W
R404
0.15-K
5W(MPC)
R405
47
1/2W
R401
27
5W(RWS)
R408
4.7
1/2W
R409
EQ801-05
R413
18K
2W(RS)
R408
4.7
1/2W
R420
560
1/2W
R307
270
2W(RS)
R304
270
2W(RS)
R306
1/2W
100
R305
270
2W(RS)
R303
2K
1/2W
R302
1
1/2W
R301
1
1/2W
ER104
47K
1/2W
ER105
100
1/2W
ER106
100
1/2W
ER103
5.6K 1/2W
EC101
103
5CV(MP)
EC102
6.8uF
50V(NP)
EC104
102
(P)
C301
103
100V
(HP)
C302
220uF
25V
(HR)
C303
68uF
100V
C401
103
50V(MP)
C402
102
(P)
C403
220uF
25V(HR)
C404
102
500V
C405
103
1.6KV
(MPP)
C406
223
400V(PP)
C407
822
1.6KV
(MPP)
C408
434
400V(MPP)
C409
4.7uF
250V
C410
104
50V(MP)
C411
C413
104
63V(P)
C414
471 1KV
C415
471 1KV
C416
471 1KV
C417
224
250V(MPP)
C418
104 63V(P)
C473
470uF 100V
C474
680
25V
C475
47uF
400V
C476
220uF25V(HR)
C814
47uF
50V
C820
474
63V
(MP)
C876
2200uF
16V
C877
2200uF
25V
C878
2200uF
50V
C879
470uF
200V
(105)
C880
220uF
200V
C881
10uF
160V
(105)
C882
1000uF
25V
C883
220uF
25V
C897
1000uF
50V
33V
130V
200V
30V
13.5V
8.5V
12V(S/T)
46V
16.5V
HEAT
AFC
GND
ABL
DF
D-COIL
VD(P)
VD(N)
16.5V
46V
E/W
V1
V2
H1
H2
GT301
1P
GT302
1P
GT401
1P
GT402
1P
TP29
TP32
129.5
15.9
201.0
N.C.

A; MICOM, TTX, B+. AV-S/W. PART



1) .MICOM-PART


C-PART(VIDEO)
C. PART(VIDEO,CHROMA)
D-2PART(KARAOKE)
B-2. 4PART(IF,PIP)
H-SYNC
VSP
HSP
V-SYNC
MIC
ECHO
Q904 KSC815-Y
Q905 KSC815-Y
R985 4.7K
R956 10K
R955 47K
R912 10K
R910 47K
R911 47K
R994 22K
R958 10K
R959 10K
R960 47K
C924 10uF 50V
C926 104 63V(P)
D914 1N4148
D915 1N4148
R964 10K
C925 10uF 50V
IC902 X24C08
SDA
SCL
WP
Vcc
Vss
A2
A1
A0
CN903 5P I2C-STOP
R983 100
R984 100
AV2-ID
AV1-ID
AV3-ID
PIP-V
M.AVO
GND
M.AV1
CVBS
P.AVO
F-S-R
P.AV1
GND
S-ID
F-S-L
NTSC-M
F-AV2-ID
F-S-ID
F-Y/V
F-S-C
GND
CN702 20P AV-BACK.BOARD
D912 1N4148
R946 4.7K
D908 1N4148
C917 50V(CH)
R938 4.7K
R961 270
D906 KSC815-Y
R987 1K
SCL
SDA
4). AV-S/W.PART
B-3PART(AUDIO-PART)
W-KARAOKE(OPTION)-DEL
CN504 9P AV-FRONT.BOARD
B(PIP,IF, AUDIO)
B. C, PART
3) .TTX-PART
GND
GND
OSD-R
OSD-G
OSD-B
OSD-F/B
12V
GND
5VB
GND
O.T-R
O.T-G
O.T-B
O.T-F/B
GND
TTX-CVBS
SCL
SDA
MT01 TTX-MODULE
LT101* 1RO-K (AL02)
LT102* 1RO-K (AL02)
J168* JUMPER
J164* JUMPER
J160* JUMPER
J158* JUMPER
YM
TX-CVBS
PK-PWM
RT102 100
RT101 100
C-IN/S
GND
GND
21P-F/B
Y-IN/S
21P-B
GND
21P-G
AV-CVBS
21P-R
GND
GND
GND
GND
RF-R
GND
RF-L
AV-L
9V
AV-R
CN701 20P AV.BACK.BOARD
TP16
TP17
TP15
TP18
GTP02 1P
R8004 22 2W(RS)
IC8001 KA7808
C8015 104 63V(P)
C8014 100uF 16V
C8013 470uF 25V
C8012 104 63V(P)
R8003 22 2W(RS)
IC8002 KA7805A
C8011 104 63V(P)
C8010 220uF 16V
C8009 220uF 25V
C8008 104 63V(P)
R8001 10K 1/2W
IC8003 PQ12RF11
C8006 220uF 25V
C8005 104 63V(P)
CT01 100uF 16V
CT02 104 63V(P)
IC8004 KA7809A
C8004 100uF 16V
C8003 104 63V(P)
C8002 104 63V(P)
C8001 100uF 25V
R2122 470
R2123 470
R2124 470
R2132* 1.8K
R966 4.7K
C922 10uF 50V
8V
5V
12V
9V
2) B+-PART
OSD-R
OSD-G
OSD-B
OSD-F/B
PIP/TTX R
PIP/TTX G
PIP/TTX B
PIP/TTX F/B
C. PART(VIDEO,CHROMA)
B(PIP, IF, AUDIO)
C-1PART(VIDEO,CHROMA)
B-4PART(PIP,PART)
FRONT A/V BOARD